

BULLETIN 312B
NAVSHIPS 0967-173-6030
VOLUME 3
(of 3 Volumes)

TECHNICAL MANUAL
28 AUTOMATIC SEND-RECEIVE (ASR)
TELETYPEWRITER SETS



TELETYPE[®]
CORPORATION
5555 TOUHY AVENUE, SKOKIE, ILLINOIS



INTRODUCTION

This manual contains three (3) volumes of literature for the 28 Automatic Send-Receive Teletypewriter Sets as follows:

Volume 1, NAVSHIPS 0967-173-6010, provides cross reference material, description and principles of operation, installation, operating test, disassembly and reassembly of the set, and component wiring diagrams.

Volume 2, NAVSHIPS 0967-173-6020, provides adjusting information, lubrication, and disassembly and reassembly of components.

Volume 3, NAVSHIPS 0967-173-6030, provides parts ordering information.

Each volume is made up of a group of appropriate independent sections. The sections are complete within themselves; they are separately identified by title and section number and the pages of each section are numbered consecutively, independent of other sections.

The identifying number of a section, a 9-digit number, appears at the top of each page of the section, in the left corner of left-hand pages and the right corner of right-hand pages.

To locate specific information, refer to the table of contents. The name of the involved component, the title of the section, and the 9-digit section number may then be found. The sections are arranged in the order shown in the table of contents. Turn to page one of the section indicated where the contents of the section will be found (except where a section is small and does not require a listing of contents).



VOLUME 3

TABLE OF CONTENTS

PARTS

<u>Title</u>	<u>Section</u>	<u>Issue</u>
Maintenance Tools	570-005-800TC	1
Motor Unit (MU, LMU, YMU)	570-220-800TC	*3
Paper Winder (LPW)	570-301-802TC	1
28 and 29 Typing Unit (LP)	573-115-800TC	2
28 Automatic Send-Receive Keyboard (LAK)	573-117-800TC	2
28 Typing Reperforator (LPR) and 28 Tape Printer (LTP)	573-118-800TC	1
28 Receiving-Only Reperforator or Tape Printer Base (LRB) and 28 Receiving-Only Multiple Reperforator Base (LMRB)	573-121-800TC	2
28 Transmitter (LX) and 28 Transmitter Distributor (LXD) Unit	573-127-801TC	1
28 Transmitter Distributor Base (LCXB)	573-128-800TC	*2
28 Electrical Service Unit (LESU) Reperforator	573-133-801TC	*2
28 Electrical Service Unit (LESU) for Automatic Send-Receive Set	573-133-802TC	2
28 Automatic Send-Receive Cabinet (LAAC)	573-134-802TC	*3
28 Perforator, Non-Typing (LPE) and Typing (LTPE)	573-139-800TC	*2

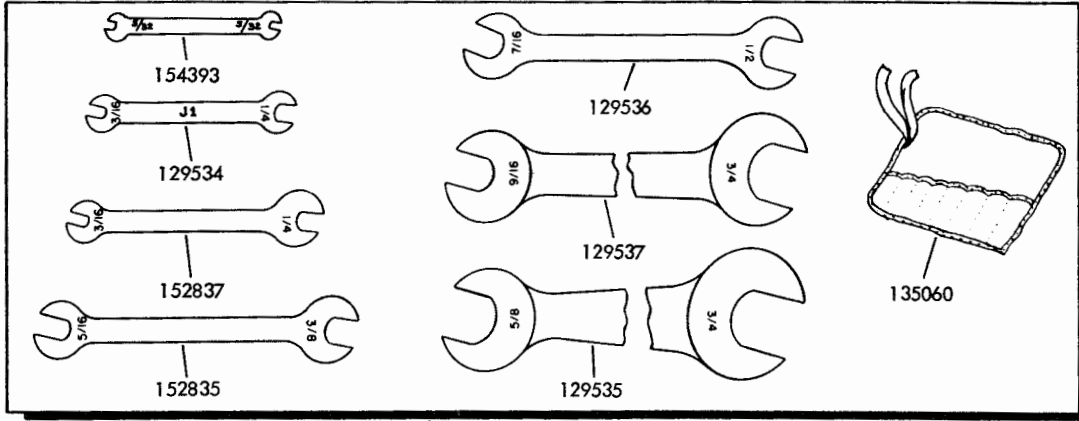
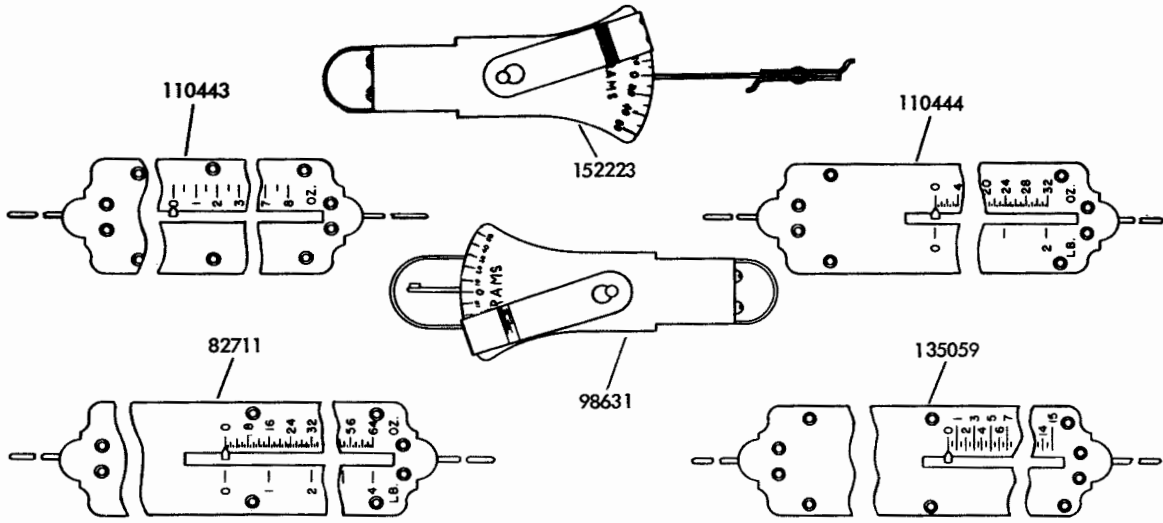
*Indicates revised sections



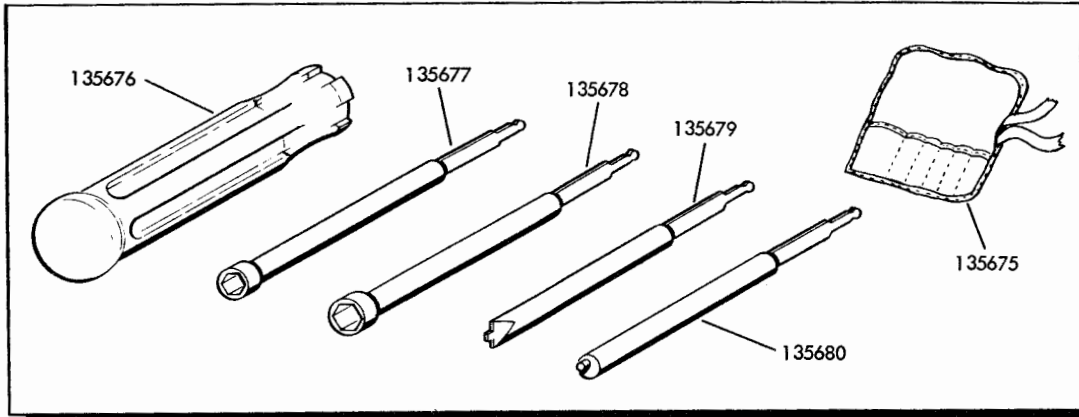
TELETYPE CORPORATION
Skokie, Illinois, U.S.A.

SECTION 570-005-800TC
Issue 1, December, 1966
Supersedes Bulletin 1124B

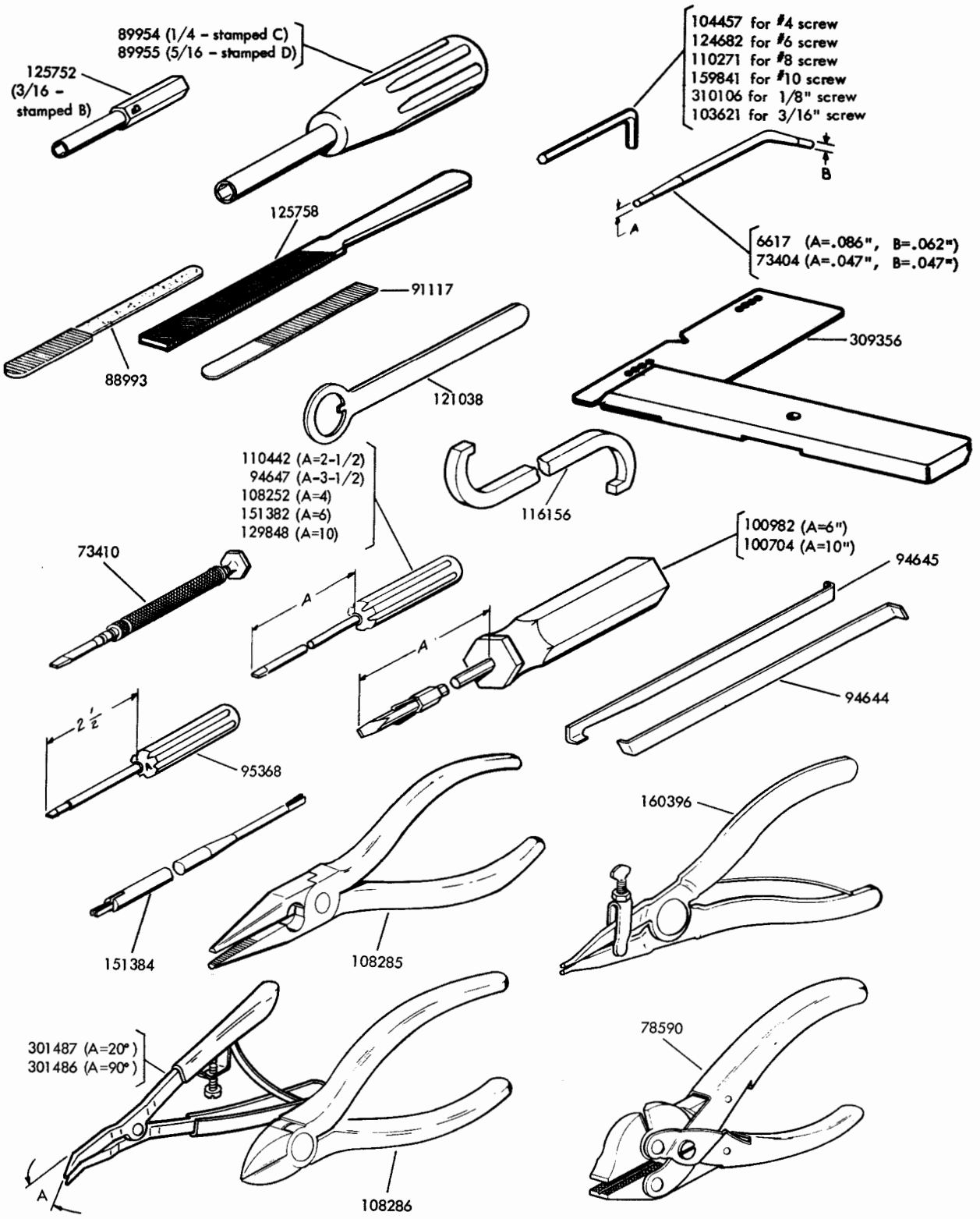
MAINTENANCE TOOLS

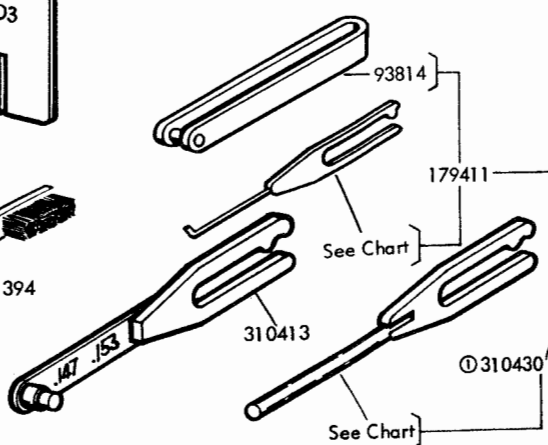
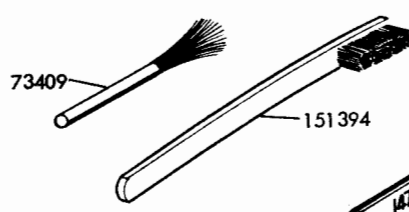
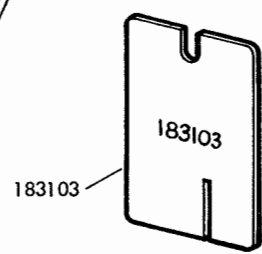
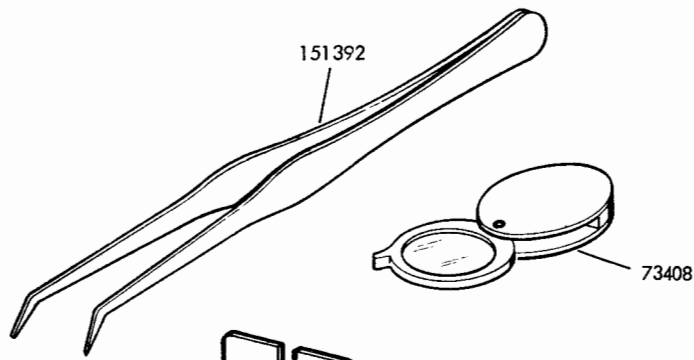
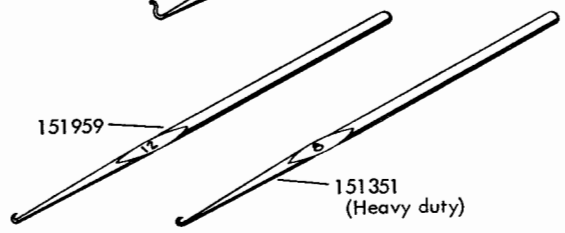
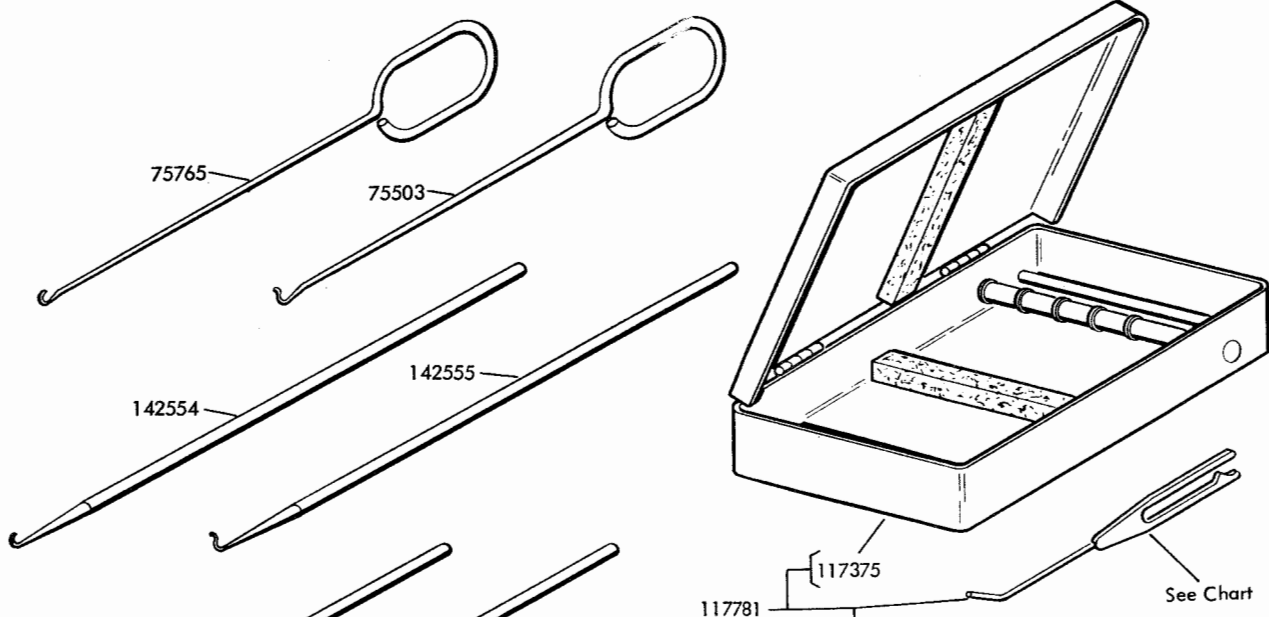


113756



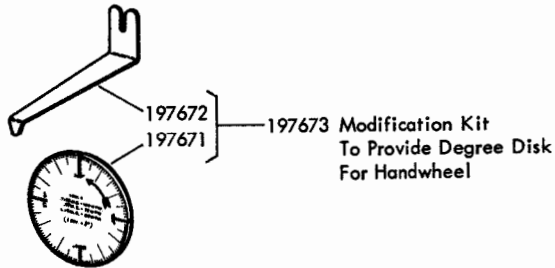
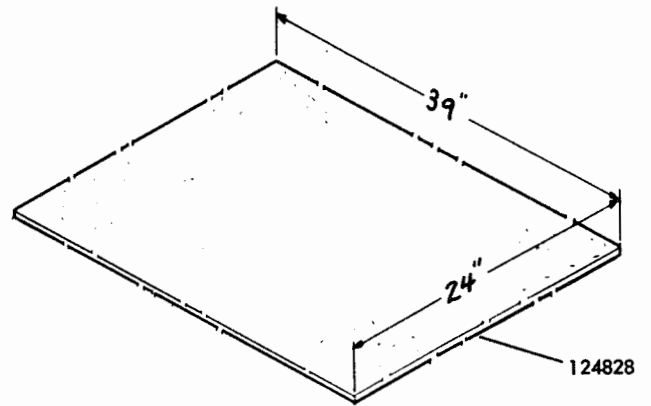
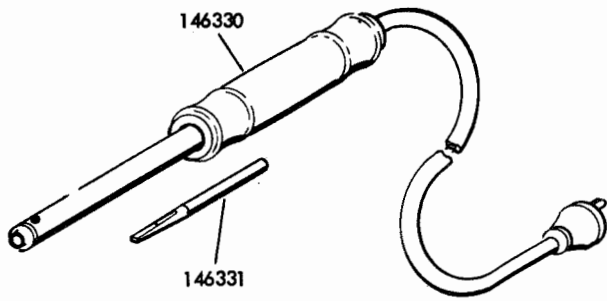
113777



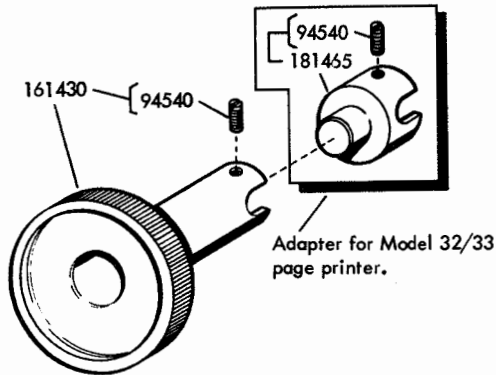


Gauge Chart		
Thickness	Shape	Part Number
.002	Flat	96356
.002	Flat-Brass	96358
.003	Flat	93833
.004	Flat	93822
.005	Flat	93823
.006	Flat	96360
.006	Round	96369
.007	Flat - Phos. Bronze	96362
.008	Round	96371
.010	Round	96373
.010	Flat	96364
.012	Round	93828
.015	Round	96375
.018	Round	93824
.020	Round	96377
.025	Round	93825
.027	Round	96352
.030	Round	93811
.035	Round	96383
.037	Round	98136
.040	Round	96385
.045	Round	96389
.050	Round	96391
.055	Round	93827
.060	Round	96393
.065	Round	96399
.070	Round	96401
.075	Round	96403
.080	Round	96405
.090	Round	179407
.100	Round	179408
.110	Round	179409
.120	Round	179410
.130	Round	310420
.135	Round	310421
.140	Round	310422
.145	Round	310423
.147	Round	310413
& .153	Round	310413
.150	Round	310424
.280	Round	310425
.320	Round	310426

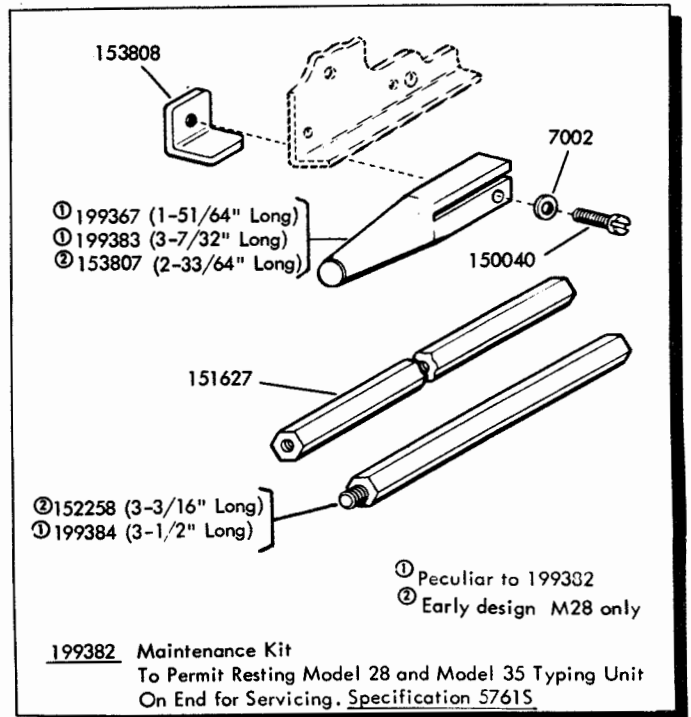
Ⓢ Includes 117375 Case



197673 Modification Kit
To Provide Degree Disk
For Handwheel

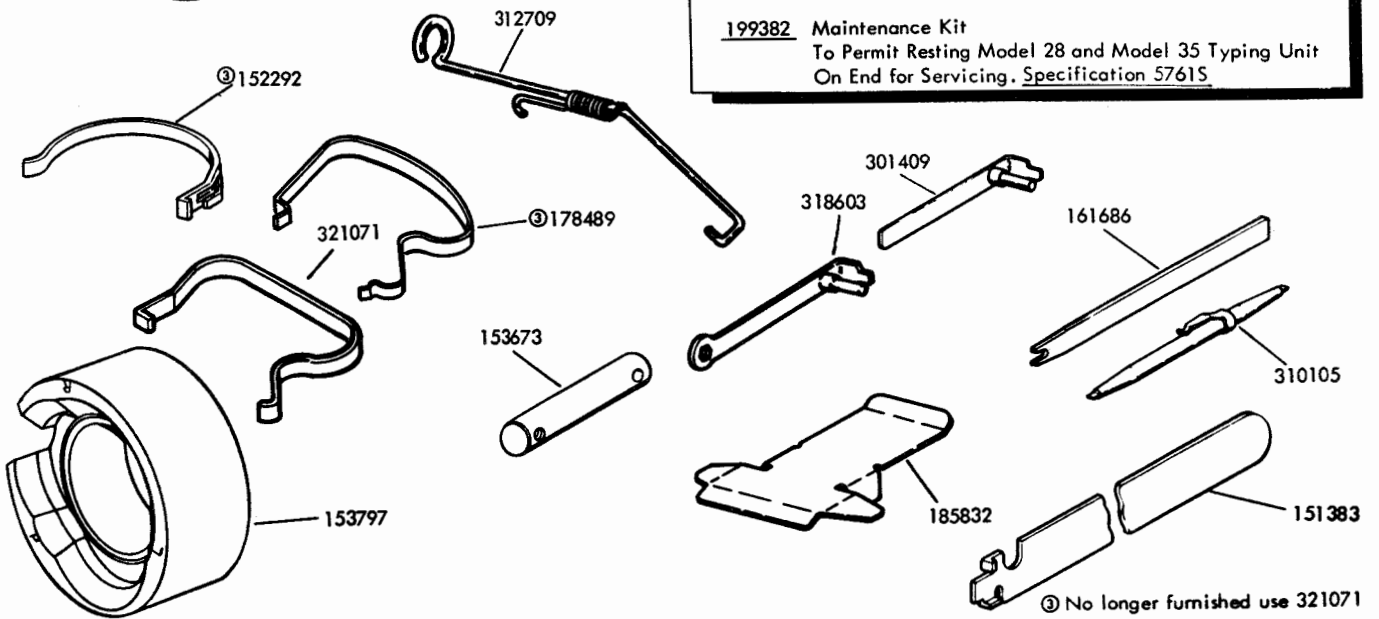


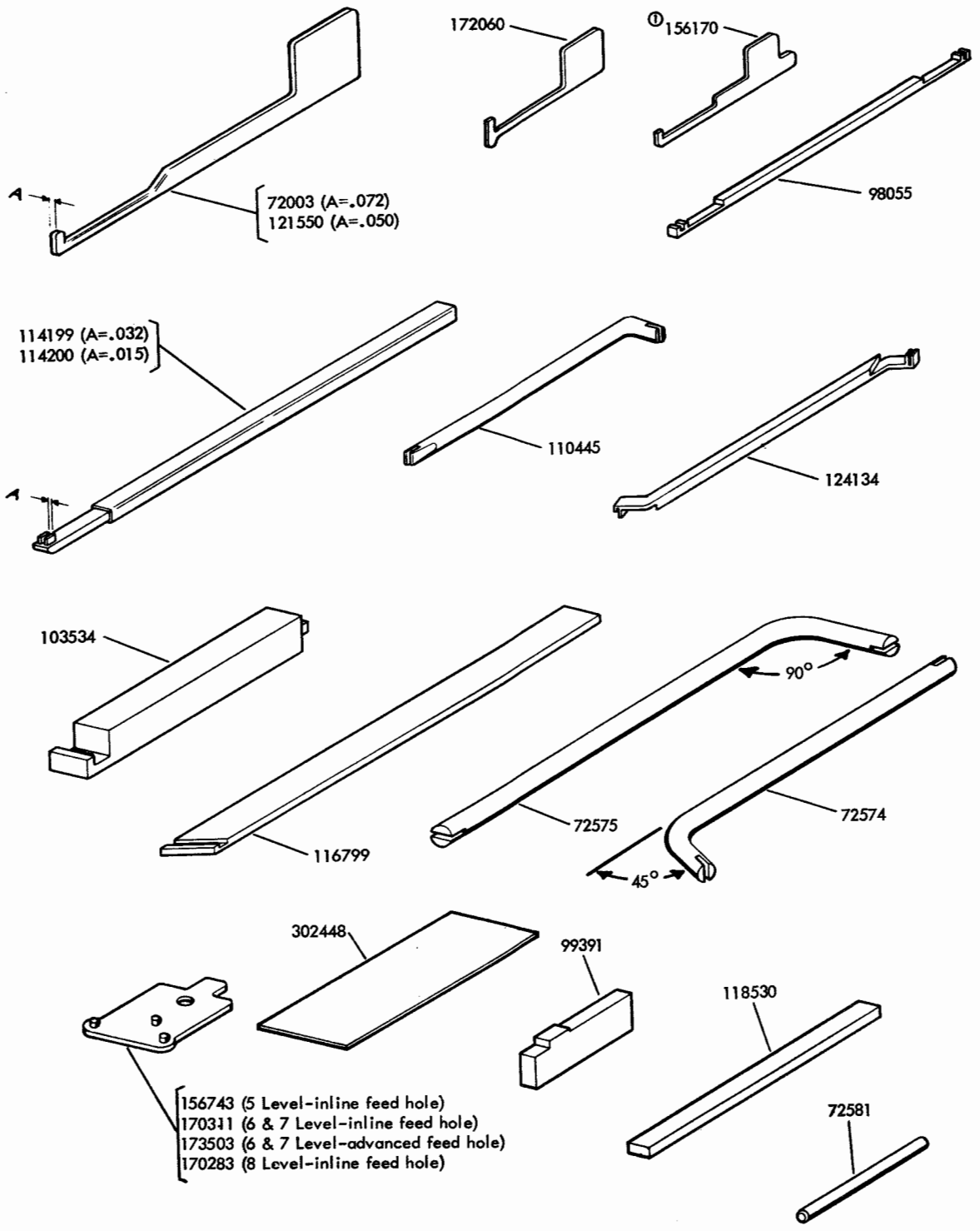
Adapter for Model 32/33
page printer.



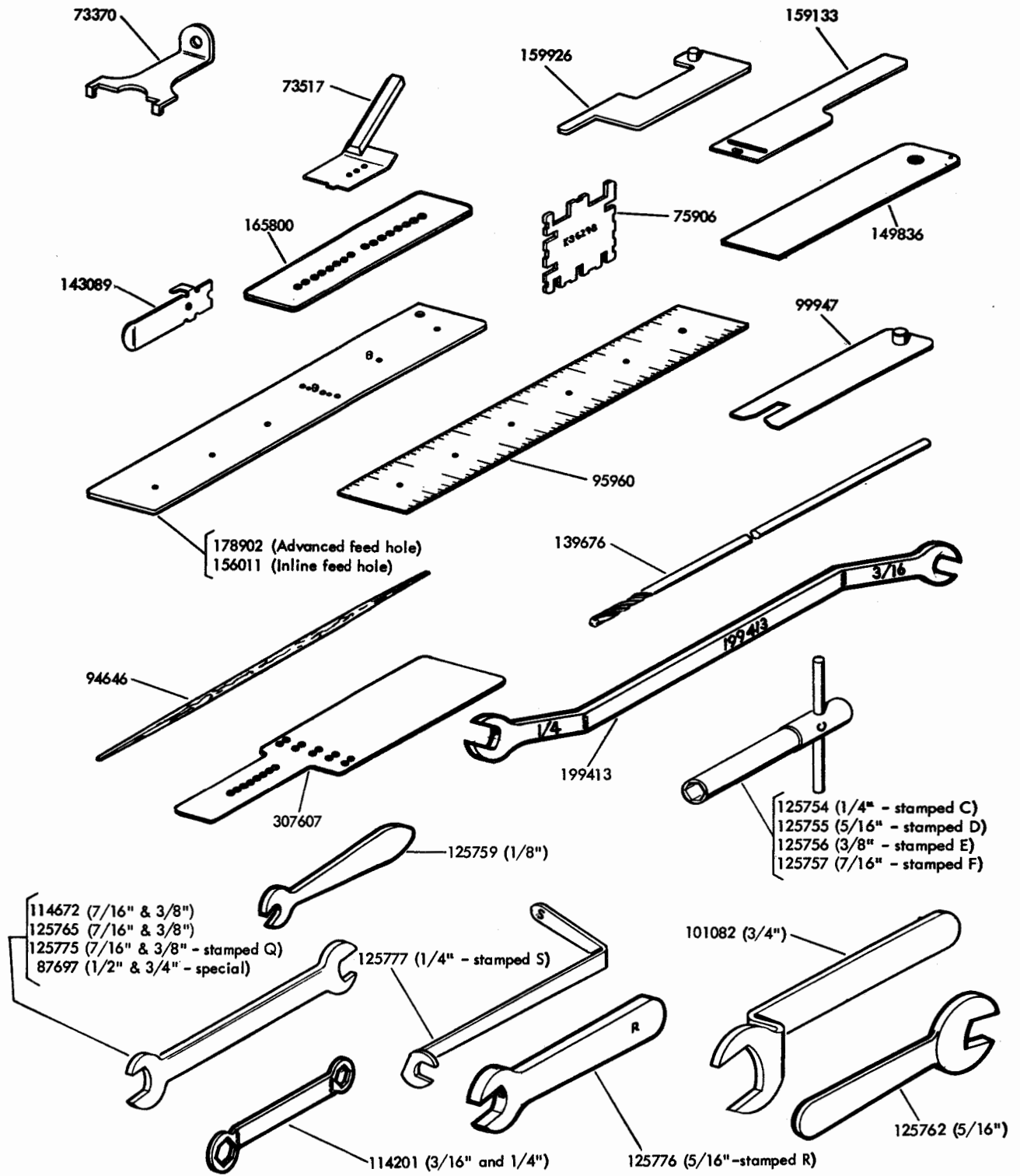
- ① Peculiar to 199302
- ② Early design M28 only

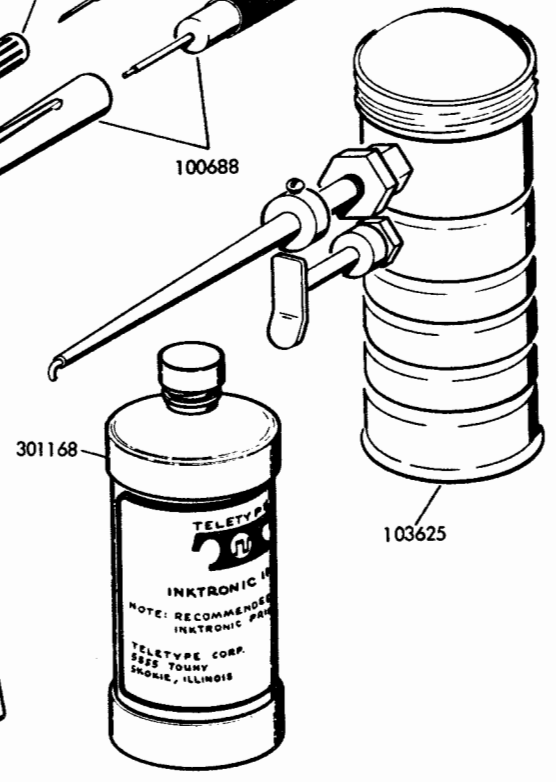
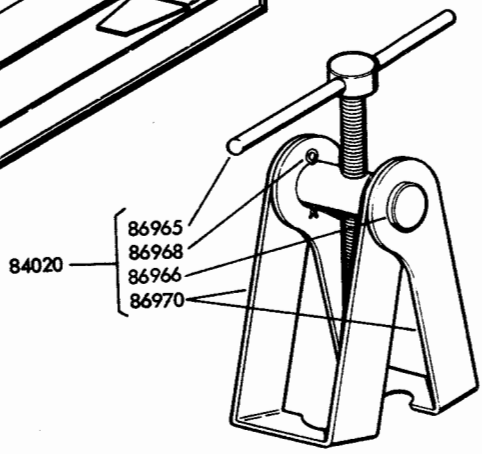
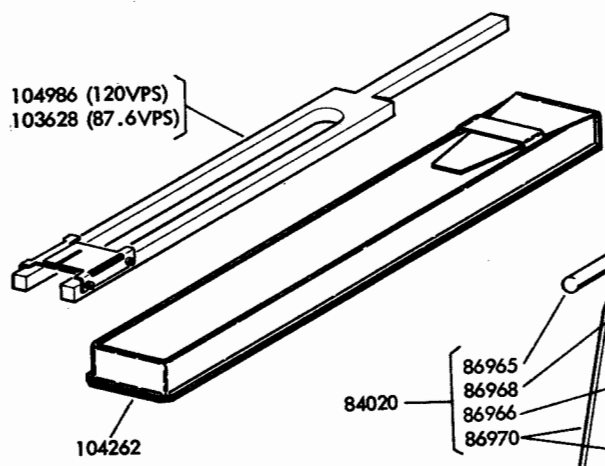
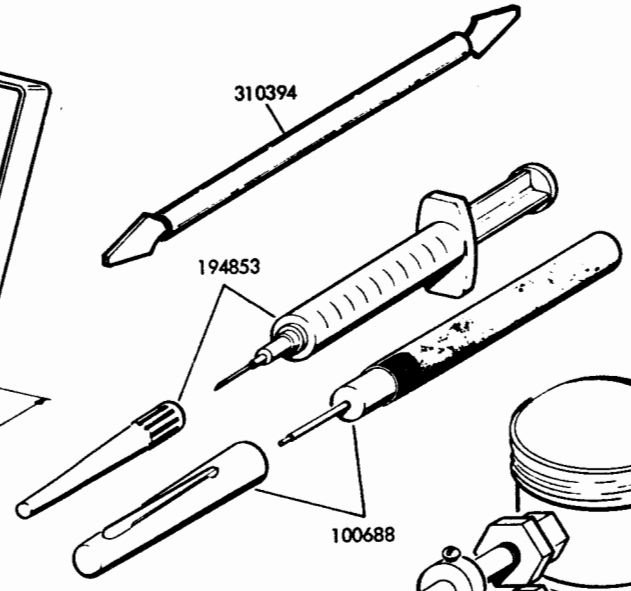
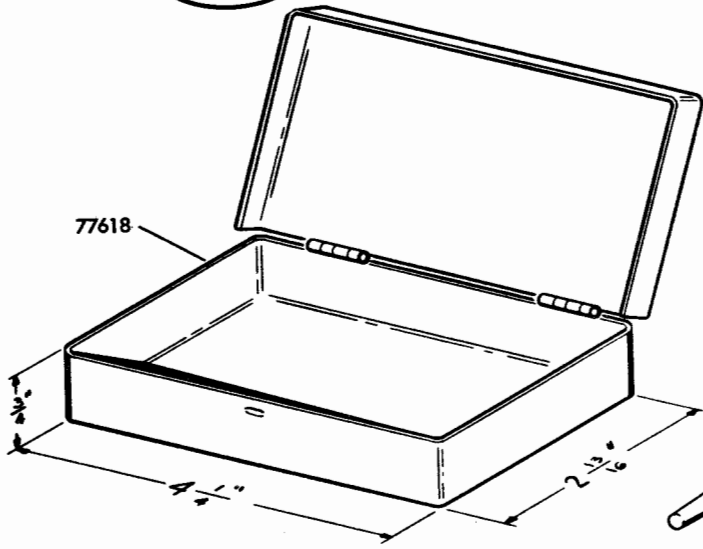
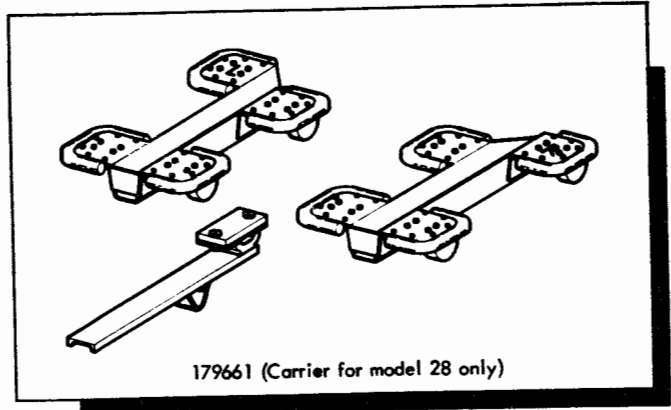
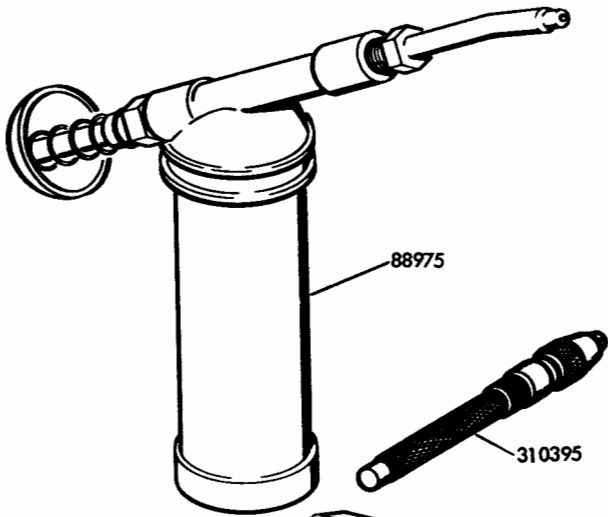
199382 Maintenance Kit
To Permit Resting Model 28 and Model 35 Typing Unit
On End for Servicing. Specification 5761S

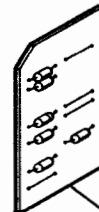
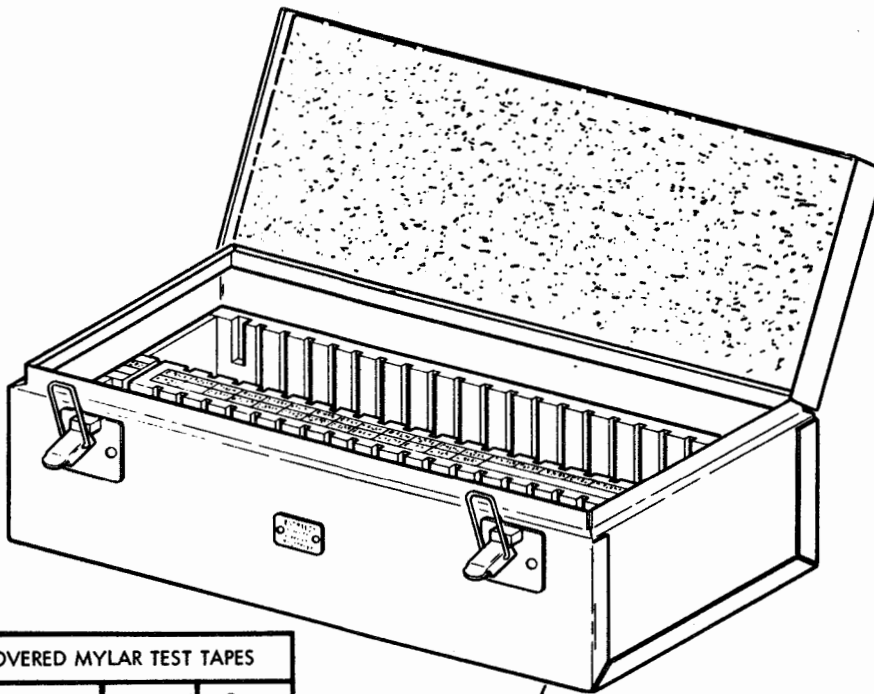




① No longer furnished use 172060







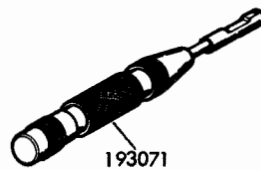
Circuit Card
See Chart

PAPER COVERED MYLAR TEST TAPES		
Description	Code	Part Number
27 Repititions of 14 Character Patterns	5 Level	146605
27 Repititions of 14 Character Pattern	8 Level	146606
27 Repititions of 14 Character Pattern	6 Level	146861
78 Repititions of 14 Character Pattern	5 Level	148101
78 Repititions of 14 Character Pattern	8 Level	148102
189 Repititions of 2 Character Pattern	8 Level	148554
"Brown Fox" Sequence	5 Level	305734
	8 Level	305735
17" of repeated letters Character Pattern	5 level	320279

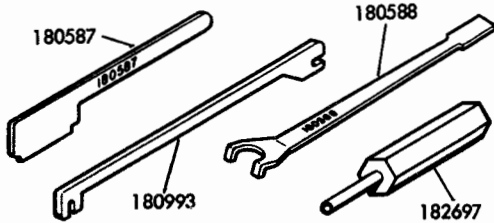
146540 } 146538

146539 Spare Circuit Card Kit			
Designation	Part Number	Designation	Part Number
EC321	172321	EC374	172374
EC322	172322	EC375	172375
EC323	172323	EC385	172385
EC324	172324	EC394	172394
EC325	172325	EC395	172395
EC326	172326	EC396	172396
EC333	172333	EC401	172401
EC347	172347	EC420	172420
EC351	172351	EC431	172431
EC352	172352	EC469	172469
EC355	172355	EC473	172473
EC359	172359	EC475	172475
EC361	172361	EC490	172490
EC363	172363	EC520	146520
EC365	172365	EC521	146521

172450 Extension Card Assembly (15 Pin)
148454 Extension Card Assembly (36 Pin)



193071

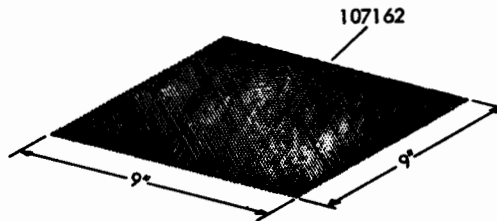


180587

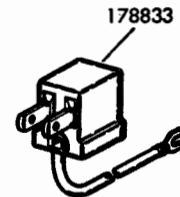
180588

180993

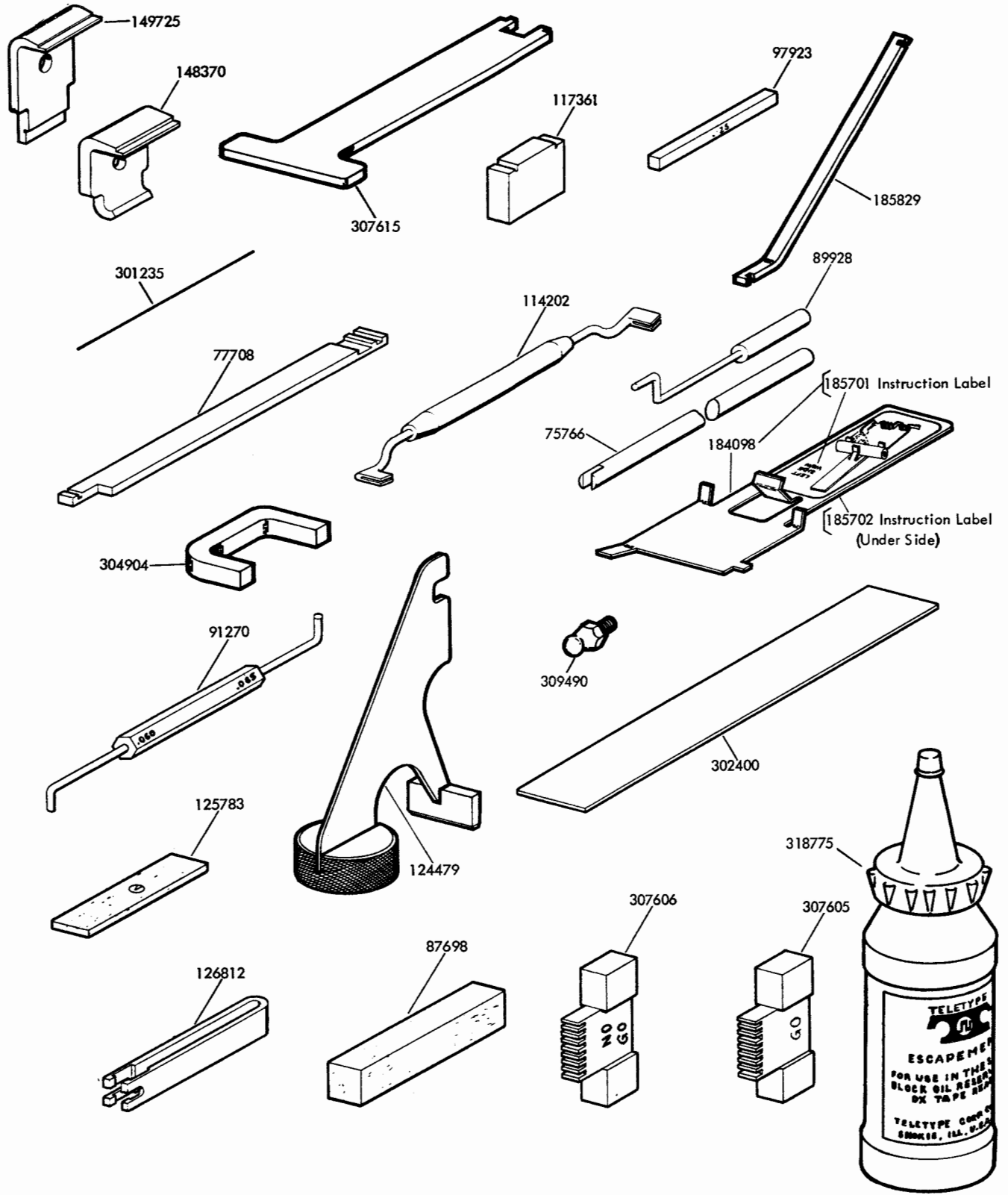
182697

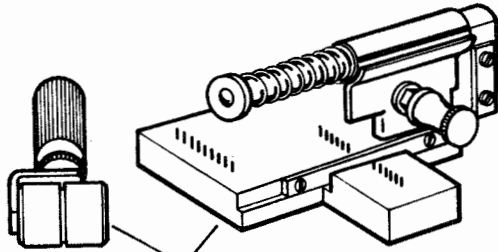


107162



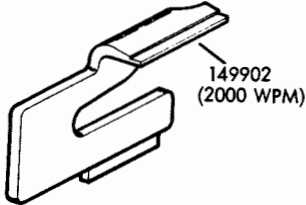
178833



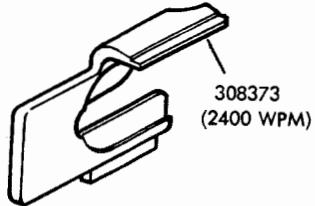


317212 (Bell System Code 2A)

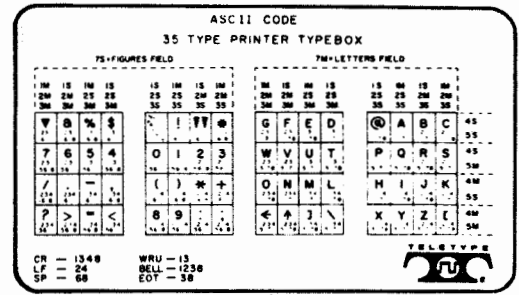
SPLICING PATCHES				
CODE LEVELS	TELETYPE PART NO.	COLOR CODE	FEED HOLES	PATCH WIDTH
5	317325	BLUE	IN LINE	11/16
6	317326	RED	ADVANCED	7/8
7	317327	LAVENDER	IN LINE	7/8
8	317328	GREEN	IN LINE	1"



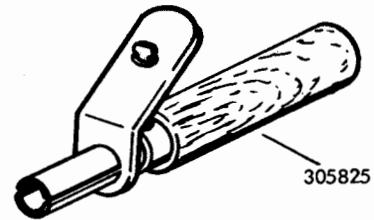
149902
(2000 WPM)



308373
(2400 WPM)



321942



305825

TOUCH UP PAINT - 1 PINT								
Air Dry Brush Enamel						Air Dry Brush Lacquer		
Smooth Finish			Wrinkle Finish			Smooth Vinyl		
Color	Teletype Code	Part Number	Color	Teletype Code	Part Number	Color	Teletype Code	Part Number
Black High Gloss	BA	143431	Black	AA	120820	Light Olive Gray	HF	304364
Black Semi-Gloss	BB	143432	Gray Green	AB	120821			
Light Gray (Coast Guard)	BH	143433	Light Brown	AC	120822			
Light Gray (Navy)	BU	143435	Dark Brown	AD	120823			
Light Gray	BR	143435						
Charcoal Gray	BZ	143436						
Navy Ocean Gray	ED	143437						
Gray Green	BK	143434						

LUBRICANTS							
Grease				Oil			
Part Number	Quantity	Brand Name	Bell System Code	Application	Quantity	Part Number	Bell System Code
88973	1 lb.		KS 7471	General	1 Qt.	88970	KS 7470
97116	4 oz.				1 Gal.	88971	
108805	2 oz.	Lubriplate 105					
143484	1 lb.	Mobil #2					
145867	4 oz.	Mobil #2					
195298	1 lb.	Beacon #325					
301313	1-3/4 oz.	Aero Lubriplate					

ADHESIVE		
Quantity	Application	Part Number
5 Oz.	Felt Pads	143285
1 Pint	Rubber Pads And Insulators	163584
1 Pint	Air Filter	175379

CLEANING CONCENTRATE	
Quantity	Part Number
1 Gal. Can	321052
5 Gal. Can	321078

GASKET MATERIAL	
Description	Part Number
Self-Adhesive Polyurethane 50 Ft. Roll	305713

SHOP TOWELS	
Description	Part Number
Masslinn 12" x 17" Open Size Packed Folded (8-1/2" x 6") in 100 per Cardboard Box Dispenser	310397

TOOL KITS

113778 Universal Tool Kit contains the following:

Part Number	Description	Page Number	Part Number	Description	Page Number
6617	Wrench, Tommy	3	110443	Scale, 8 oz. Spring	2
72003	Bender, Contact Spring	6	110444	Scale, 32 oz. Spring	2
72574	Tool, Holding	6	113756	Wrench Set	2
72575	Tool, Finger Bending	6	113777	Tool Kit	2
72581	Pin, Gauge	6	116156	Wrench, Spanner	3
73370	Gauge, Locating	7	117781	Gauge Set, Feeler	4
73404	Wrench, Tommy	3	124134	Bender, Contact Spring	6
73408	Magnifier	4	124682	Wrench, Hex Key	3
75503	Hook, Push Spring	4	125752	Wrench, 3/16" Socket	3
75765	Hook, Pull Spring	4	129848	Screwdriver	3
77618	Box, Tool	8	135059	Scale, 15 lb. Spring	2
82711	Scale, 64 oz. Spring	2	142554	Hook, Pull Spring	4
87698	Stone, Carborundum	10	142555	Hook, Push Spring	4
88993	Burnisher, Contact	3	151351	Hook, Pull Spring	4
91117	File, Contact	3	151384	Holder, Screw	3
94644	Screwdriver, 30° Offset	3	151392	Tweezers	4
94645	Screwdriver, 90° Offset	3	151959	Hook, Pull Spring	4
95368	Screwdriver	3	152223	Scale, 70 gram Spring	2
95960	Gauge, Tape	7	321071	Clip, Armature	5
99947	Tool, Punch Block Cleaning	7	159841	Wrench, Hex Key	3
104457	Wrench, Hex Key	3	161686	Tool, Tine	5
110271	Wrench, Hex Key	3	179411	Gauge Set, Feeler	4

TOOL KITS (Continued)

146642 Special Tool Kit (To Supplement The 113778 Tool Kit) contains the following:

Part Number	Description	Page Number	Part Number	Description	Page Number
110445	Bender, Contact Spring	6	145867	Grease, 4 oz. Tube	12
143089	Clip, Armature	7	172060	Bender, Contact Spring	6

151940 Special Tool Kit (Model 28 Page Printer Set) contains the following:

Part Number	Description	Page Number	Part Number	Description	Page Number
73408	Magnifier	4	151392	Tweezers	4
100982	Screwdriver w/Clip	3	151394	Brush, Type Cleaning	4
151351	Hook, Pull Spring	4	151959	Hook, Pull Spring	4
151382	Screwdriver	3	152835	Wrench, 5/16" & 3/8" Cpen End	2
151383	Tool, Keylever Remover	5	152837	Wrench, 3/16" & 1/4" Cpen End	2
151384	Holder, Screw	3	161430	Handwheel	5

159114 Tool Kit (Model 28 Equipment) contains the following:

Part Number	Description	Page Number	Part Number	Description	Page Number
104457	Wrench, Hex Key	3	159841	Wrench, Hex Key	3
129537	Wrench, 9/16" & 3/4" Cpen End	2	159926	Gauge w/Pin, Punch Bail Arm	7
156011	Gauge, Tape	7	160396	Pliers, Retaining Ring	3
156743	Gauge, Tape Lid	6	172060	Bender, Contact Spring	6
159133	Gauge	7			

171312 Tool Kit (High Speed Tape Punch and Tape Reader) contains the following:

Part Number	Description	Page Number	Part Number	Description	Page Number
82711	Scale, 64 oz. Spring	2	110443	Scale, 8 oz. Spring	2
88970	Oil, 1 qt.	12	110444	Scale, 32 oz. Spring	2
88993	Burnisher, Contact	3	110445	Bender, Contact Spring	6
89954	Wrench, 1/4" Socket	3	113756	Wrench Set	2
89955	Wrench, 5/16" Socket	3	117781	Gauge Set, Feeler	4
94644	Screwdriver, 30° Offset	3	129534	Wrench, 3/16" & 1/4" Cpend End	2
94645	Screwdriver, 90° Offset	3	142554	Hook, Pull Spring	4
94646	Stick, Orangewood	7	142555	Hook, Push Spring	4
94647	Screwdriver, 3-1/2" Blade	3	143089	Clip, Armature	7
95960	Gauge, Tape	7	143484	Grease, 1 lb.	12
99947	Tool, Punch Block Cleaning	7	151384	Holder, Screw	3
100704	Screwdriver w/Clip	3	151392	Tweezers	4
103625	Can, Oil	8	152223	Scale, 70 gram Spring	2
104457	Wrench, Hex Key	3	159841	Wrench, Hex Key	3
110442	Screwdriver	3	172060	Bender, Contact Spring	6

185830 Tool Kit (Model 32 and 33 Equipment) contains the following:

Part Number	Description	Page Number	Part Number	Description	Page Number
104457	Wrench, Hex Key	3	180588	Tool, Typewheel Adjusting	9
110445	Bender, Contact Spring	6	180993	Bender, Contact Spring	9
124682	Wrench, Hex Key	3	181465	Adapter, Handwheel	5
125752	Wrench, 3/16" Socket	3	182697	Extractor, Terminal	9
156011	Gauge, Tape	7	183103	Gauge, Tape Reader	4
159841	Wrench, Hex Key	3	184098	Tool, Selector Cam Removal	10
160396	Pliers, Retaining Ring	3	185829	Bender, Contact Spring	10
180587	Tool, Carriage Adjusting	9	199413	Wrench, 3/16" & 1/4" Offset	7

TOOL KITS (Continued)

307523 Tool Kit (High Speed Send/Receive Set) contains the following:

Part Number	Description	Page Number	Part Number	Description	Page Number
95960	Gauge, Tape	7	301235	Probe, Nozzle	10
100982	Screwdriver w/Clip	3	301313	Grease, 1-3/4 oz	12
103625	Can, Oil	8	301409	Tool, Magnet Adjusting	5
110443	Scale, 8 oz Spring	2	301486	Pliers, Gripping	3
124682	Wrench, Hex Key	3	301487	Pliers, Gripping	3
129534	Wrench, 3/16" & 1/4" Open End	2	302400	Gauge, Tape Chute	10
129536	Wrench, 7/16" & 1/2" Open End	2	302448	Gauge, Verifier	6
135676	Handle	2	307605	Gauge, (GO) Contact	10
135677	Wrench, 1/4" Socket	2	307606	Gauge, (NO - GO) Contact	10
135678	Wrench, 5/16" Socket	2	307607	Gauge, Contact Alignment	7
142555	Hook, Push Spring	4	310105	Screwdriver, Potentiometer Adjusting	5
145867	Grease, 4 oz. Tube	12	310106	Wrench, 1/8" Hex Key	3
149725	Gauge, Punch Pin Penetration	10	310394	Wiper, Nozzle	8
149836	Cleaner, Punch Block	7	310395	Vise, Pin	8
152835	Wrench, 5/16" & 3/8" Open End	2	310397	Towels, Shop	12
301168	Ink, 12 oz Special	8			

315783 Tool Kit (Self-Contained DRPE Set) contains the following:

Part Number	Description	Page Number	Part Number	Description	Page Number
82711	Scale, 64 oz. Spring	2	110445	Bender, Contact Spring	6
88970	Oil, 1 qt	12	117781	Gauge Set	4
88993	Burnisher, Contact	3	124682	Wrench, Hex Key	3
89954	Wrench, 1/4" Socket	3	129534	Wrench, 3/16" & 1/4" Open End	2
89955	Wrench, 5/16" Socket	3	129536	Wrench, 7/16" & 1/2" Open End	2
94644	Screwdriver, 30° Offset	3	135060	Tool, Roll	2
94645	Screwdriver, 90° Offset	3	142554	Hook, Pull Spring	4
94646	Stick, Orangewood	7	145867	Grease, 4 oz. Tube	12, 13
95960	Gauge, Tape	7	151384	Holder, Screw	3
100982	Screwdriver w/Clip	3	151392	Tweezers	4
103625	Can, Oil	8	152223	Scale, 70 Gram Spring	2
104457	Wrench, Hex Key	3	152835	Wrench, 5/16" & 3/8" Open End	2
108285	Pliers, Long Nose	3	152837	Wrench, 3/16" & 1/4" Open End	2
110442	Screwdriver	3	302448	Gauge, Verifier	6
110443	Scale, 8 oz. Spring	2	308373	Gauge, Punch Pin Penetration	11
110444	Scale, 32 oz. Spring	2			

NUMERICAL INDEX

Part Number	Description and Page Number	Part Number	Description and Page Number	Part Number	Description and Page Number
6617	Wrench, Tommy 3, 12	96373	Gauge, .010" 4	125752	Wrench, 3/16" Socket 3, 12, 13
7002	Washer, Flat 5	96375	Gauge, .015" 4	125754	Wrench, 1/4" Socket 7
72003	Bender, Contact Spring 6, 12	96377	Gauge, .020" 4	125755	Wrench, 5/16" Socket 7
72574	Tool, Holding 6, 12	96383	Gauge, .035" 4	125756	Wrench, 3/8" Socket 7
72575	Tool, Finger Bending 6, 12	96385	Gauge, .040" 4	125757	Wrench, 7/16" Socket 7
72581	Pin, Gauge 6, 12	96389	Gauge, .045" 4	125758	File, 5-1/4" Contact 3
73370	Gauge, Locating 7, 12	96391	Gauge, .050" 4	125759	Wrench, 1/8" Open End 7
73404	Wrench, Tommy 3, 12	96393	Gauge, .060" 4	125762	Wrench, 5/16" Open End 7
73408	Magnifier 4, 12, 13	96399	Gauge, .065" 4	125765	Wrench, 7/16" & 3/8" Open End 7
73409	Brush, Camel Hair 4	96401	Gauge, .070" 4	125775	Wrench, 3/8" & 7/16" Open End 7
73410	Screwdriver 3	96403	Gauge, .075" 4	125776	Wrench, 5/16" Open End 7
73517	Gauge 7	96405	Gauge, .080" 4	125777	Wrench, 1/4" Open End 7
75503	Hook, Push Spring 4, 12	97116	Grease, 4 Oz 12	125783	Stone, Carborundum 10
75765	Hook, Pull Spring 4, 12	97923	Gauge, .125" 10	126812	Tool, Extracting 10
75766	Tool, Special 10	98055	Bender, Contact Spring 6	129534	Wrench, 3/16" & 1/4" Open End 2, 13, 14
75906	Tool, Local Test 7	98136	Gauge, .037" 4	129535	Wrench, 5/8" & 3/4" Open End 2
77618	Box, Tool 8, 12	98631	Case Assembly 2	129536	Wrench, 7/16" & 1/2" Open End 2, 14
77708	Bender, Contact Spring 10	99391	Gauge 6	129537	Wrench, 9/16" & 3/4" Open End 2, 13
78590	Pliers, Parallel 3	99947	Tool, Punch Block Cleaning 7, 12, 13	129848	Screwdriver 3, 12
82711	Scale, 64 Oz Spring 2, 12, 13, 14	100688	Oiler 8	135059	Scale, 15 Lb Spring 2, 12
84020	Puller, Bearing 8	100704	Screwdriver w/Clip 3, 13	135060	Roll, Tool 2, 14
86965	Handle 8	100982	Screwdriver w/Clip 3, 13, 14	135675	Roll, Tool 2
86966	Shaft, Bearing Puller 8	101082	Wrench, 3/4" Open End 7	135676	Handle 2, 14
86968	Pin, Cotter 8	103534	Tool, Bending 6	135677	Wrench, 1/4" Socket 2, 14
86970	Jaw, Bearing Puller 8	103621	Wrench, Hex Key 3	135678	Wrench, 5/16" Socket 2, 14
87697	Wrench, 1/2" & 3/4" Open End 7	103625	Can, Oil 8, 13, 14	135679	Blade, Adjusting 2
87698	Stone, Carborundum 10, 12	103628	Fork, Tuning 8	135680	Blade, Adjusting 2
88970	Oil, 1 Qt 12, 13, 14	104262	Case, Tuning Fork 8	139676	Drill 7
88971	Cil, 1 Gal 12	104457	Wrench, Hex Key 3, 12, 13, 14	142554	Hook, Pull Spring 4, 12, 13, 14
88973	Grease, 1 Lb 12	104986	Fork, Tuning 8	142555	Hook, Push Spring 4, 12, 13, 14
88975	Gun, Grease 8	107162	Cloth, Twill Jean 9	143089	Clip, Armature 7, 13
88993	Burnisher, Contact 3, 12, 13, 14	108252	Screwdriver 3	143285	Adhesive, 5 Oz Tube 12
89928	Tool, Relay Adjusting 10	108285	Pliers, Long-Nose 3, 14	143431	Paint, 1 Pint 12
89954	Wrench, 1/4" Socket 3, 13, 14	108286	Pliers, Cutting 3	143432	Paint, 1 Pint 12
89955	Wrench, 5/16" Socket 3, 13, 14	108805	Lubriplate, 2 Oz Tube 12	143433	Paint, 1 Pint 12
91117	File, Contact 3, 12	110271	Wrench, Hex Key 3, 12	143434	Paint, 1 Pint 12
91270	Gauge, .060" & .065" 10	110442	Screwdriver 3, 13, 14	143435	Paint, 1 Pint 12
93811	Gauge, .030" 4	110443	Scale, 8 Oz Spring 2, 12, 13, 14	143436	Paint, 1 Pint 12
93814	Holder, Gauge 4	110444	Scale, 32 Oz Spring 2, 12, 13, 14	143437	Paint, 1 Pint 12
93822	Gauge, .004" 4	110445	Bender, Contact Spring 6, 13, 14	143484	Grease, 1 Lb 12, 13
93823	Gauge, .005" 4	113756	Wrench Set 2, 12, 13	145867	Grease, 4 Oz Tube 12, 13, 14
93824	Gauge, .018" 4	113777	Tool Kit 2, 12	146330	Iron, Soldering 5
93825	Gauge, .025" 4	113778	Tool Kit 12	146331	Tip, Soldering Iron 5
93827	Gauge, .055" 4	114199	Bender, Contact Spring 6	146520	Card, EC520 Circuit 9
93828	Gauge, .012" 4	114200	Bender, Contact Spring 6	146521	Card, EC521 Circuit 9
93833	Gauge, .003" 4	114201	Wrench, Closed Offset 7	146538	Case, Circuit Card Carrying 9
94540	Screw, 10-24 Set 5	114202	Bender, Contact Spring 10	146539	Kit, Circuit Card 9
94644	Screwdriver, 30 Deg. Offset 3, 12, 13, 14	114672	Wrench, 3/8" & 7/16" Open End 7	146540	Kit w/Case, Circuit Card 9
94645	Screwdriver, 90 Deg. Offset 3, 12, 13, 14	116156	Wrench, Spanner 3, 12	146605	Tape, 5 Level Test 9
94646	Stick, Orangewood 7, 13, 14	116799	Tool, Bending 6	146606	Tape, 8 Level Test 9
94647	Screwdriver, 3-1/2" Blade 3, 13	117361	Gauge, Contact Adjusting 10	146642	Tool Kit 13
95368	Screwdriver 3, 12	117375	Case, Gauge 4	146861	Tape, 6 Level Test 9
95960	Gauge, Tape 7, 12, 13, 14	117781	Gauge Set, Feeler 4, 12, 13, 14	148101	Tape, 5 Level Test 9
96352	Gauge, .027" 4	118530	Gauge 6	148102	Tape, 8 Level Test 9
96356	Gauge, .002" 4	120820	Paint, 1 Pint 12	148370	Gauge, Punch Pin Penetration 10
96358	Gauge, .002" 4	120821	Paint, 1 Pint 12	148454	Card Assembly, Extension 9
96360	Gauge, .006" 4	120822	Paint, 1 Pint 12	148554	Tape, 8 Level Test 9
96362	Gauge, .007" 4	120823	Paint, 1 Pint 12	149725	Gauge, Punch Pin Penetration 10, 14
96364	Gauge, .010" 4	121038	Wrench, Closed Spanner 3		
96369	Gauge, .006" 4	121550	Bender, Contact Spring 6		
96371	Gauge, .008" 4	124134	Bender, Contact Spring 6, 12		
		124479	Gauge, Locating 10		
		124682	Wrench, Hex Key 3, 12, 13, 14		
		124828	Pad 5		

NUMERICAL INDEX (Continued)

Part Number	Description and Page Number	Part Number	Description and Page Number	Part Number	Description and Page Number
149836	Cleaner, Punch Block 7, 14	172361	Card, EC361 Circuit 9	301235	Probe, Nozzle 10, 14
149902	Gauge, Punch Pin Penetration 11	172363	Card, EC363 Circuit 9	301313	Grease, 1-3/4 Oz 12, 14
150040	Screw, 6-40 x 5/8 Fil 5	172365	Card, EC365 Circuit 9	301409	Tool, Magnet Adjusting 5, 14
151351	Hook, Pull Spring 4, 12, 13	172374	Card, EC374 Circuit 9	301486	Pliers, Gripping 3, 14
151382	Screwdriver 3, 13	172375	Card, EC375 Circuit 9	301487	Pliers, Gripping 3, 14
151383	Tool, Keylever Remover 5, 13	172385	Card, EC385 Circuit 9	302400	Gauge, Tape Chute 10, 14
151384	Holder, Screw 3, 12, 13, 14	172394	Card, EC394 Circuit 9	302448	Gauge, Verifier 6, 14
151392	Tweezers 4, 12, 13, 14	172395	Card, EC395 Circuit 9	304364	Paint, 1 Pint 12
151394	Brush, Type Cleaning 4, 13	172396	Card, EC396 Circuit 9	304904	Staple, Carrier 10
151627	Rod 5	172401	Card, EC401 Circuit 9	305713	Strip, 50 Ft Roll Foam 12
151940	Tool Set 13	172420	Card, EC420 Circuit 9	305734	Tape, 5 Level Test 9
151959	Hook, Pull Spring 4, 12, 13	172431	Card, EC431 Circuit 9	305735	Tape, 8 Level Test 9
152223	Scale, 70 Gram Spring 2, 12, 13, 14	172450	Card Assembly, Extension 9	305825	Tool, Lamp Extractor 11
152258	Post, 3-3/16" Lg 5	172469	Card, EC469 Circuit 9	307523	Tool Kit 14
152292	Clip, Armature 5	172473	Card, EC473 Circuit 9	307605	Gauge, Go Contact 10, 14
152835	Wrench, 5/16" & 3/8" Open End 2, 13, 14	172475	Card, EC475 Circuit 9	307606	Gauge, No Go Contact 10, 14
152837	Wrench, 3/16" & 1/4" Open End 2, 13, 14	172490	Card, EC490 Circuit 9	307607	Gauge, Contact Alignment 7, 14
153673	Shaft 5	173503	Gauge, Tape Lid 6	307615	Eccentric, Adjusting Tool 10
153797	Depressor, Sprocket Pin 5	175379	Adhesive, 1 Pint 12	308373	Gauge, Punch Pin Penetration 11, 14
153807	Post, 2-33/64" Lg 5	178489	Clip, Armature 5	309356	Gauge, Feedwheel 3
153808	Clamp 5	178833	Connector, Adapter 3 Pt Plug 9	309490	Stud 10
154393	Wrench, 5/32" Open End 2	178902	Gauge, Tape 7	310105	Screwdriver, Potentiometer Adjusting 5, 14
156011	Gauge, Tape 7, 13	179407	Gauge, .090" 4	310106	Wrench, 1/8" Hex Key 3, 14
156170	Bender, Contact Spring 6	179408	Gauge, .100" 4	310394	Wiper, Nozzle 8, 14
156743	Gauge, Tape Lid 6, 13	179409	Gauge, .110" 4	310395	Vise, Pin 8, 14
159114	Tool Kit 13	179410	Gauge, .120" 4	310397	Towels, Shop 12, 14
159133	Gauge 7, 13	179411	Gauge Set, Feeler 4, 12	310413	Gauge, .147" & .153" 4
159841	Wrench, Hex Key 3, 12, 13	179661	Carrier Set 8	310420	Gauge, .130" 4
159926	Gauge w/Pin, Punch Bail Arm 7, 13	180587	Tool, Carriage Adjusting 9, 13	310421	Gauge, .135" 4
160396	Pliers, Retaining Ring 3, 13	180588	Tool, Typewheel Adjusting 9, 13	310422	Gauge, .140" 4
161430	Handwheel 5, 13	180993	Bender, Contact Spring 9, 13	310423	Gauge, .145" 4
161686	Tool, Tine 5, 12	181465	Adapter, Handwheel 5, 13	310424	Gauge, .150" 4
163584	Adhesive, 1 Pint 12	182697	Extractor, Terminal 9, 13	310425	Gauge, .280" 4
165800	Gauge, Tape 7	183103	Gauge, Tape Reader 4, 13	310426	Gauge, .320" 4
170283	Gauge, Tape Lid 6	184098	Tool, Selector Cam Removal 10, 13	310430	Gauge Set, Feeler 4
170311	Gauge, Tape Lid 6	185701	Label, Instruction 10	312709	Clip, Armature 5
171312	Tool Kit 13	185702	Label, Instruction 10	315783	Tool Kit 14
172060	Bender, Contact Spring 6, 13	185829	Bender, Contact Spring 10, 13	317212	Splicer w/Roller, Tape 11
172321	Card, EC321 Circuit 9	185830	Tool Kit 13	317325	Patch, Blue Splicing 11
172322	Card, EC322 Circuit 9	185832	Clip, Armature 5	317326	Patch, Red Splicing 11
172323	Card, EC323 Circuit 9	193071	Tool, Terminal Insertion 9	317327	Patch, Lavender Splicing 11
172324	Card, EC324 Circuit 9	194853	Injector, Oil 8	317328	Patch, Green Splicing 11
172325	Card, EC325 Circuit 9	195298	Grease, 1 Lb 12	318603	Tool, Adjusting 5
172326	Card, EC326 Circuit 9	197671	Disk, Indicator 5	318775	Oil, 4 Oz Bottle 10
172333	Card, EC333 Circuit 9	197672	Pointer 5	320279	Tape, 5 Level Test 9
172347	Card, EC347 Circuit 9	197673	Modification Kit 5	321052	Concentrate, 1 Gal Cleaning 12
172351	Card, EC351 Circuit 9	199367	Post, 1-51/64" Lg 5	321071	Clip, Armature 5, 12
172352	Card, EC352 Circuit 9	199382	Maintenance Kit 5	321078	Concentrate, 5 Gal Cleaning 12
172355	Card, EC355 Circuit 9	199383	Post, 3-7/32" Lg 5	321942	Chart, Code 11
172359	Card, EC359 Circuit 9	199384	Post, 3-1/2" Lg 5		
		199413	Wrench, 3/16" & 1/4" Offset Open End 7, 13		
		301168	Ink, 12 Oz Special 8, 14		

MOTOR UNIT (MU, LMU AND YMU)
PARTS

FIGURE	CONTENTS	PAGE
1	Motor Unit Application Chart	2
2	Synchronous Motor Cross-Reference Chart	3
3	Synchronous Motor Assemblies (Standard or Heavy Duty)	4
4	Relay and Capacitor Mounting (Synchronous)	5
5	Relay and Capacitor Mounting (Synchronous)	6
6	Relay and Capacitor Mounting	7
7	Relay and Capacitor Mounting (Synchronous)	8
8	Relay and Capacitor Mounting (Synchronous)	9
9	Synchronous Motor Assemblies (Miniature)	10
10	Relay and Capacitor Mounting (Synchronous)	11
11	Relay, Capacitor Mounting and Bracket (Synchronous)	12
12	Synchronous Motor Mounting with Centrifugal Switch Assembly	13
13	Relay and Capacitor Mounting (Synchronous)	14
14	Series Motor Cross-Reference Chart	15
15	Series Motor Assemblies	16
16	Brush Assemblies	17
17	150845 Governor Assembly	18
18	154628 Governor Assembly	19
19	Series Motor Mounting Parts	20
20	Series Motor Mounting Parts with RF Suppression	21
21	Series Motor Mounting Parts with RF Suppression	22
22	Series Motor Mounting Parts	23
23	Series Motor Mounting Parts with RF Suppression	24
24	Series Motor Mounting Parts with RF Suppression	25
25	174546 Modification Kit to Provide Motor Running Contacts	26
26	174551 (less cable) 175198 (with cable) Modification Kits to Provide Motor Running Contacts	26
	Modification Kits	27
	Modification Kits (Continued)	28
	Numerical Index	29

MOTOR UNIT APPLICATION CHART

Units Covered	Operating Characteristics	General Usage	ASR Set	RT Set	High Speed Punch	High Speed Reader	Miniature Trans-Dist.	Miniature Repert.	Miniature Rec. Selector	Compact Page Printer	Tape Printer (Ticker)	Multiple Mounted Units	Variable Speed	Stack Mounted	Wall Mounted	37 Type
Teletype Code																
LMU3 LMU4 LMU6 ①LMU10	AC Synchronous, 1/20 HP, 115V/60 Hertz/3600RPM Series, 1/20 HP, 115V/60 Hertz/3600 RPM, RF Sup. Series, 1/20 HP, 115V/60 Hertz/3600 RPM Series, 1/20 HP, 115V/60 Hertz/3600 RPM, RF Sup.	X X X										X				
LMU11 LMU12 LMU13 LMU14	AC Synchronous, 1/12 HP, 115V/60 Hertz/3600 RPM AC Synchronous, 1/12 HP, 115V/60 Hertz/3600 RPM Series, 1/15 HP, 115V/60 Hertz/3600 RPM Series, 1/15 HP, 115V/60 Hertz/3600 RPM, RF Sup.		X	X							X		X			
LMU15 LMV19 LMU20 LMU21	AC Synchronous, 1/20 HP, 115V/60 Hertz/3600 RPM AC Synchronous, 25 MHP, 115V/60 Hertz/3600 RPM AC Synchronous, 25 MHP, 115V/60 Hertz/3600 RPM AC Synchronous, 1/20 HP, 115V/60 Hertz/3600 RPM	X					X	X						X		
LMU23 LMU24 LMU26 LMU27	DC Series, 1/15 HP, 48V/3600 RPM AC Synchronous, 25 MHP, 115V/60 Hertz/3600 RPM AC Synchronous, 25 MHP, 115V/60 Hertz/3600 RPM AC Synchronous, 1/20 HP, 115V/60 Hertz/3600 RPM			X				X	X	X					X	
LMU28 LMU29 LMU30 LMU31	Series, 1/20 HP, 115V/60 Hertz/3600 RPM DC Series, 1/15 HP, 48V/3600 RPM AC Synchronous, 1/20 HP, 115V/60 Hertz/3600 RPM AC Synchronous, 25 MHP, 115V/60 Hertz/3600 RPM	X		X					X					X		
LMU32 LMU33 LMU35 LMU36	Series, 1/15 HP, 115V/60 Hertz/3600 RPM, RF Sup. AC Synchronous, 1/20 HP, 115V/50 Hertz/3000 RPM AC Synchronous, 25 MPH, 115V/50 Hertz/3000 RPM AC Synchronous, 1/20 HP, 115V/50 Hertz/3000 RPM			X	X	X		X								
LMU37 LMU38 LMU39 LMU41	AC Synchronous, 1/20 HP, 115V/60 Hertz/3600 RPM AC Synchronous, 1/20 HP, 115V/50 Hertz/3000 RPM Series, 1/15 HP, 115V/60 Hertz/3600 RPM, RF Sup. Series, 1/20 HP, 115V/60 Hertz/3600 RPM, RF Sup.	X	X						X			X				
LMU42 MU43 LMU45 LMU46	AC Synchronous, 1/20 HP, 115V/60 Hertz/3600 RPM AC Synchronous, 25 MHP, 115V/60 Hertz/3600 RPM AC Synchronous, 25 MHP, 115V/60 Hertz/3600 RPM AC Synchronous, 1/20 HP, 115V/60 Hertz/3600 RPM				X	X					X					
①LMU47 LMU49 LMU50 LMU51	Series, 1/20 HP, 115V/60 Hertz/3600 RPM, RF Sup. AC Synchronous, 1/20 HP, 115V/60 Hertz/3600 RPM AC Synchronous, 1/12 HP, 115V/50 Hertz/3000 RPM AC Synchronous, 1/20 HP, 115V/50 Hertz/3000 RPM	X	X							X		X				
LMU52 LMU55 LMU56 YMU2	AC Synchronous, 1/20 HP, 115V/50 Hertz/3000 RPM AC Synchronous, 1/20 HP, 230V/50 Hertz/3000 RPM AC Synchronous, 25 MPH, 115V/60 Hertz/3600 RPM AC Synchronous, 1/20 HP, 115V/60 Hertz/3600 RPM	X					X	X					X			X

① Requires 173518 Mod. Kit for special variable speed application.

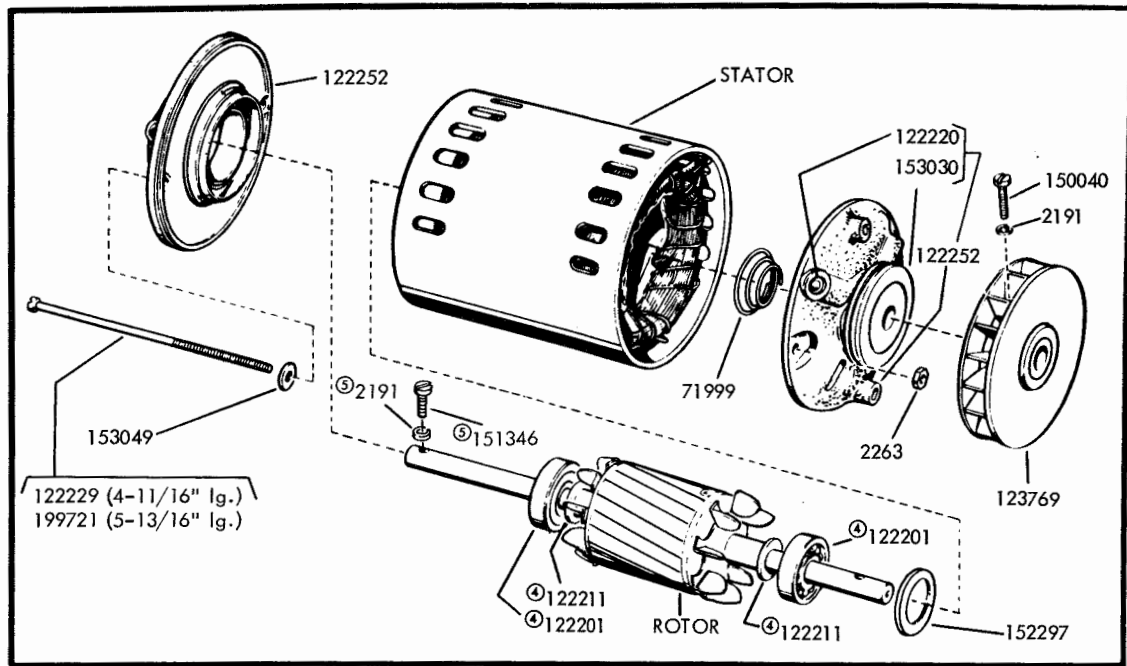
FIGURE 1. MOTOR UNIT APPLICATION CHART

SYNCHRONOUS MOTOR UNITS

Teletype Code	Motor Assembly	Motor Bracket	Mounting Plate	Thermostatic Switch	Fixed Capacitor	Spring or Clamp	Relay	Relay Insulator	Spring or Clamp	Cable Assembly	Jumper
LMU3	151795	305661	305660	122249	122245	305658	151923	305659	305658	151927	96264R (5" lg. Red)
LMU11	155595	305661	305660	160304	160299	305658	160303	305659	305658	151927	96264R (5" lg. Red)
LMU12	159739	305661	305660	160304	160299	305658	160303	305659	305658	151927	96264R (5" lg. Red)
LMU15	170764	305661	305660	122249	122245	305658	151923	305659	305658	151927	96264R (5" lg. Red)
LMU19	161984	142589		174471	162072	151922	173425	162196	151925	161099	96264R (5" lg. Red)
LMU20	161984	142589		174471	162072	151922	173425	162910	160302	162911	96264R (5" lg. Red)
LMU21	151795	164612		122249	122245	151922	151923	164603	151925	151927	96264R (5" lg. Red)
LMU24 and LMU56	310295	142589		fused	162072	151922	173425	162196	151925		176137 (9-1/4" lg. Black w/151626 Terminal) 96264R (5" lg. Red)
LMU26	161984	142589		174471	162072	151922	173425	162910	160302	162911	96264R (5" lg. Red)
LMU27		176948	176947	122249	122245	151922	151923	151924	151925		
LMU30	178500	305661	305660	122249	122245	305658	151923	305659	305658	151927	96264R (5" lg. Red)
LMU31	161984	142589		174471	162072	151922	173425	162196	151925	179016	96274R (10" lg Red)
LMU33	170764	305661	305660	①193781	122245	305658	151923	305659	305658	151927	96264R (5" lg. Red)
② LMU35	194924	171749		fused	①195172	171702	①195173	171704	171703	195178	
LMU36	178500	305661	305660	①193781	122245	305658	151923	305659	305658	151927	96264R (5" lg. Red)
LMU37	151795	194897		122249	122245	151922	151923	310341	151925	194899	96264R (5" lg. Red)
LMU38	151795	305661	305660	①193781	122245	305658	151923	305659	305658	151927	96264R (5" lg. Red)
LMU42	196830	196839		122249	122245	151922	151923	196794	151925	151927	96264R (5" lg. Red)
MU43	161984	171749		174471	162072	171702	173425	171704	171703	171810	96264R (5" lg. Red)
LMU45	161984	171749		174471	162072	171702	173425	171704	171703	193181	
LMU46	151795	305661	305660	122249	122245	305658	151923	305659	305658	193236	96264R (5" lg. Red)
LMU49	170764	172795	151920	122249	122245	151922	151923	151924	151925	151927	96264R (5" lg. Red)
③ LMU50	199718	304538	151920	307281	304793	151922	304792		304537	151927	312573 (6" lg. Red w/82474 Terminal) 312574 (6" lg. Black w/82474 Terminal)
LMU51	151795	194897		①193781	122245	151922	151923	310341	151925	194899	96264R (5" lg. Red)
LMU52	151795	164612		①193781	122245	151922	151923	164603	151925	151927	96264R (5" lg. Red)
LMU55	306063	305661	305660	320269	320270	305658	320271	305659	305658	151927	96264R (5" Lg. Red)
YMU2	151795	312979		122249	122245	151922	151923	312977	151925	306320	96262R (4" lg Red)

FIGURE 2. SYNCHRONOUS MOTOR CROSS — REFERENCE CHART

- ① For use with motor unit operating on 50 Hertz current
- ② See page 10 for parts peculiar to LMU35
- ③ See page 6 for parts peculiar to LMU50



SYNCHRONOUS MOTOR ASSEMBLY - STANDARD OR HEAVY DUTY

SYNCHRONOUS MOTORS - Standard or Heavy Duty				
DUTY	MOTOR ASSEMBLY	STATOR	ROTOR	MOTOR DATA
Standard	151795	122251	128874	AC Synchronous, 1/20 HP, 115V: 50/60 Hertz, 3000/3600 RPM
Heavy	155595	①160306	160305	AC Synchronous, 1/12 HP, 115V: 60 Hertz, 3600 RPM
Heavy	159739	160306	160305	AC Synchronous, 1/12 HP, 115V: 60 Hertz, 3600 RPM
Standard	①170764	122251	128874	AC Synchronous, 1/20 HP, 115V: 50/60 Hertz, 3000/3600 RPM
Standard	178500	③122251	128874	AC Synchronous, 1/20 HP, 115V: 60 Hertz, 3600 RPM
Standard	②196830	196831	128874	AC Synchronous, 1/20 HP, 115V: 60 Hertz, 3600 RPM
Heavy	199718	199720	199719	AC Synchronous, 1/12 HP, 115V: 50 Hertz, 3000 RPM
Standard	306063	320272	128874	AC Synchronous, 1/20 HP, 230V: 50/60 Hertz, 3000/3600 RPM

- ① Without fan
- ② CW rotation (all others CCW rotation)
- ③ Arranged for inverted mounting
- ④ Common to all rotors
- ⑤ Not part of motor assemblies

FIGURE 3. SYNCHRONOUS MOTOR ASSEMBLIES (STANDARD OR HEAVY DUTY)

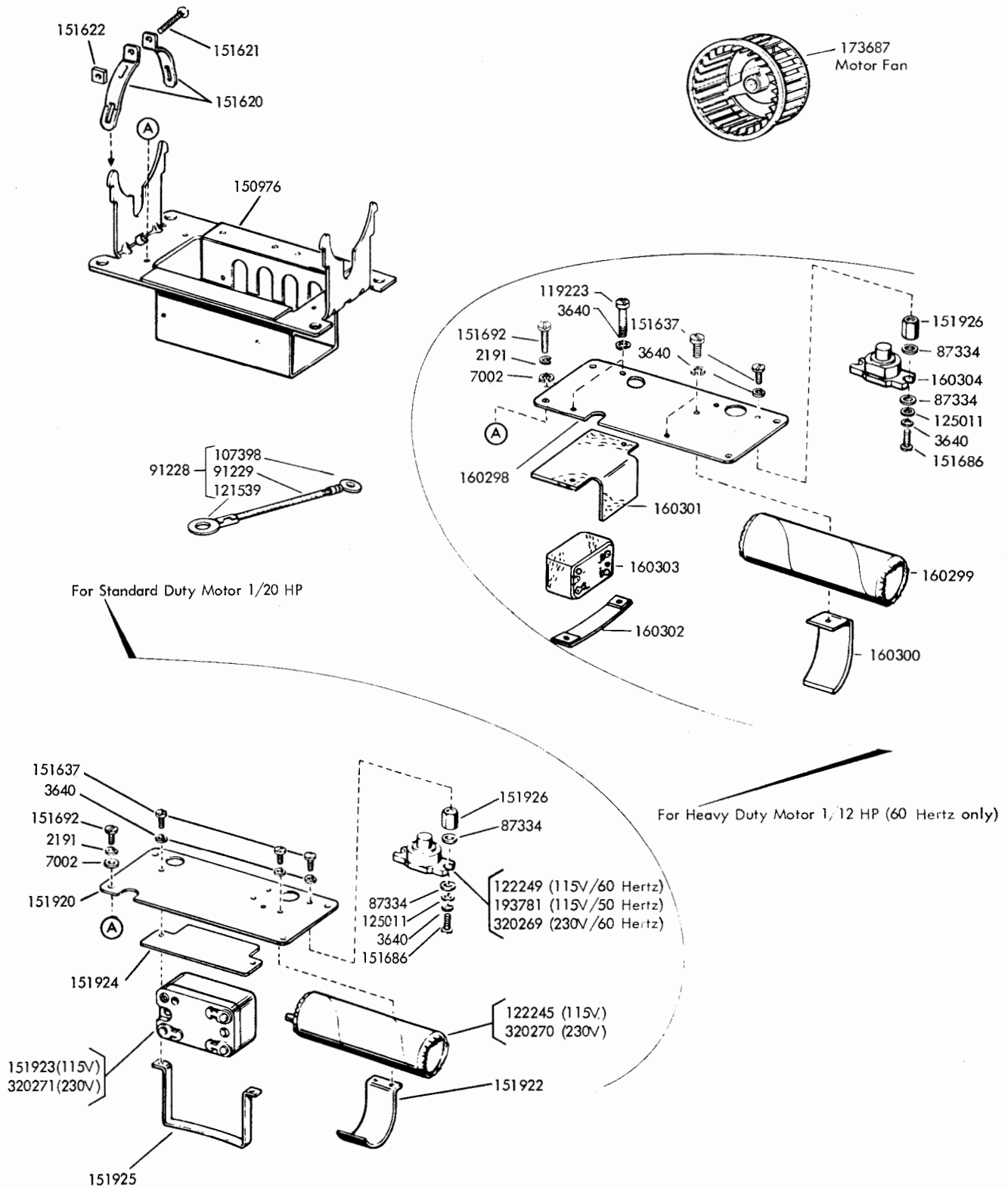


FIGURE 4. RELAY AND CAPACITOR MOUNTING (SYNCHRONOUS)

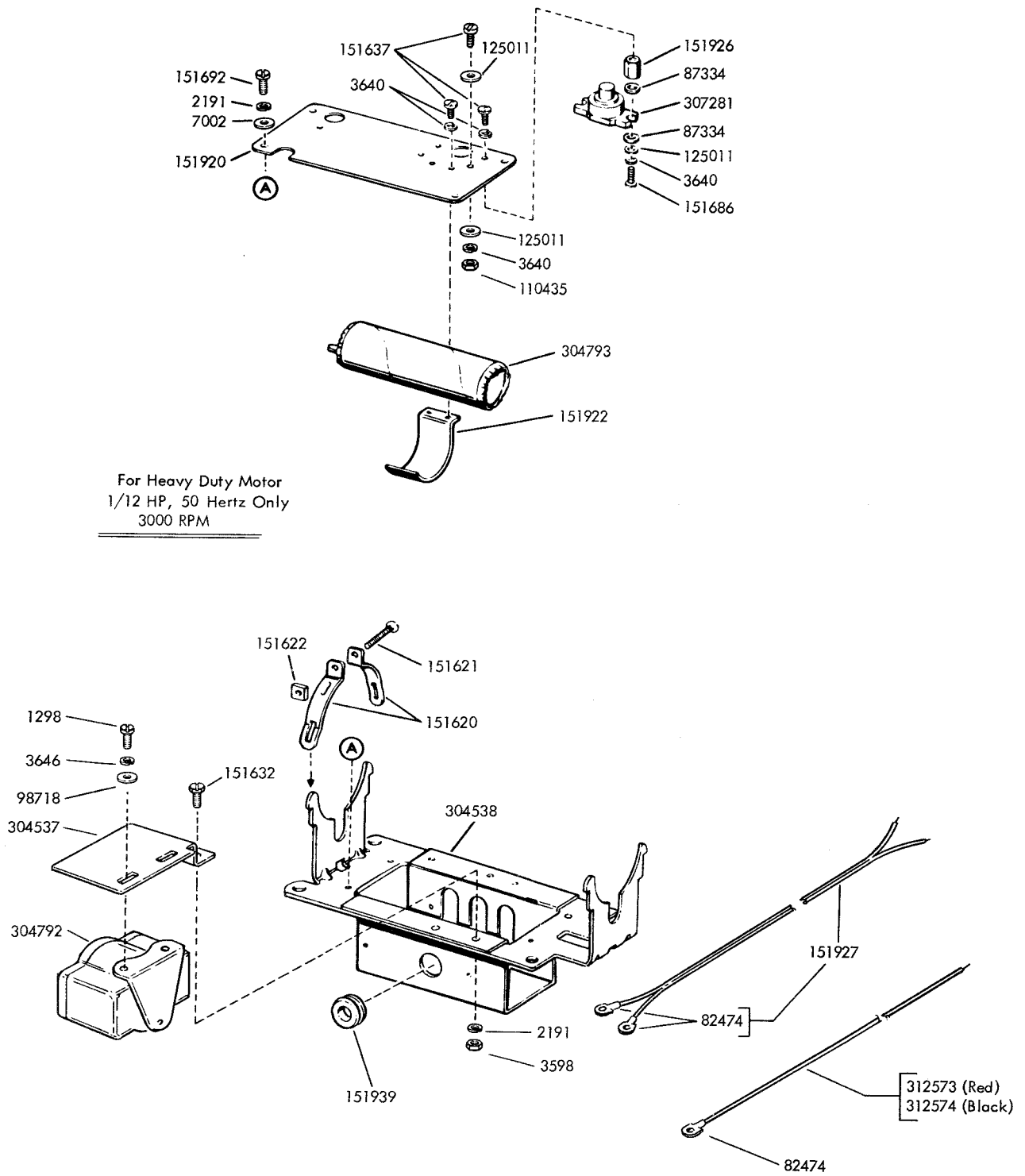


FIGURE 5. RELAY AND CAPACITOR MOUNTING (SYNCHRONOUS)

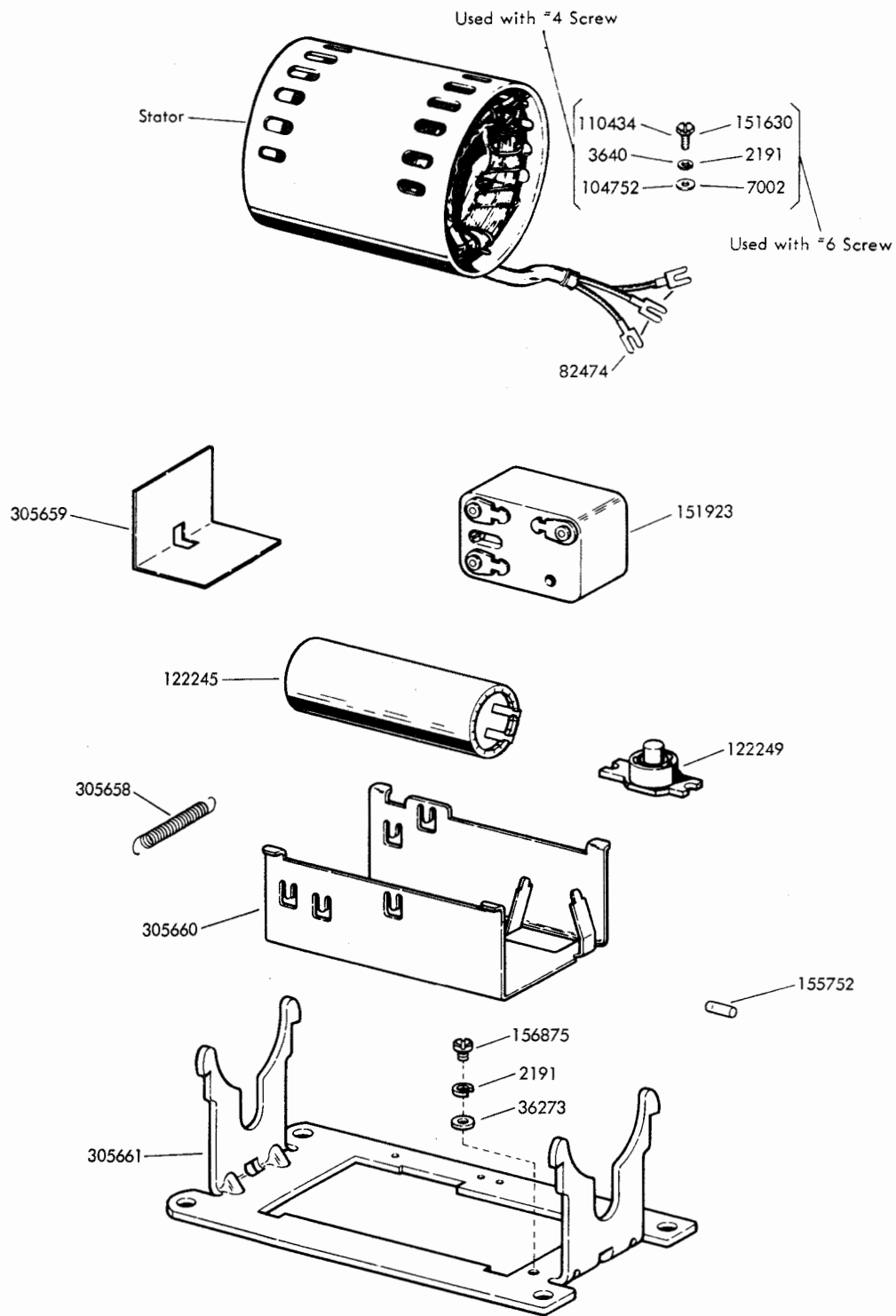


FIGURE 6. RELAY AND CAPACITOR MOUNTING

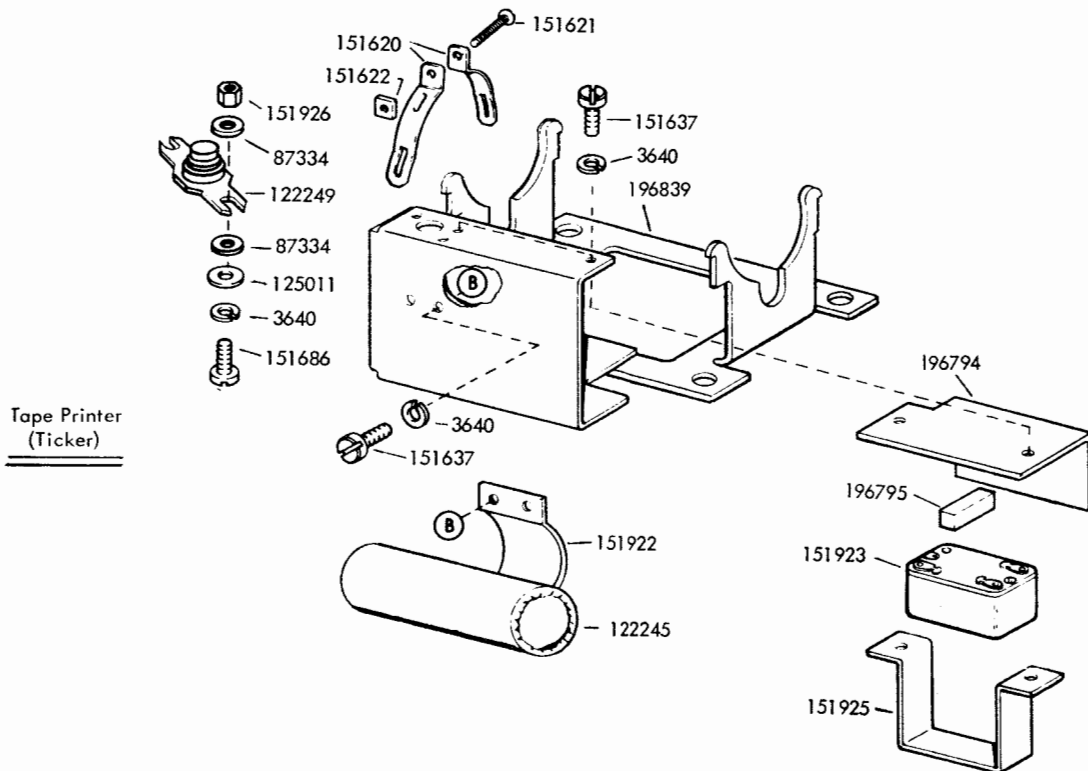
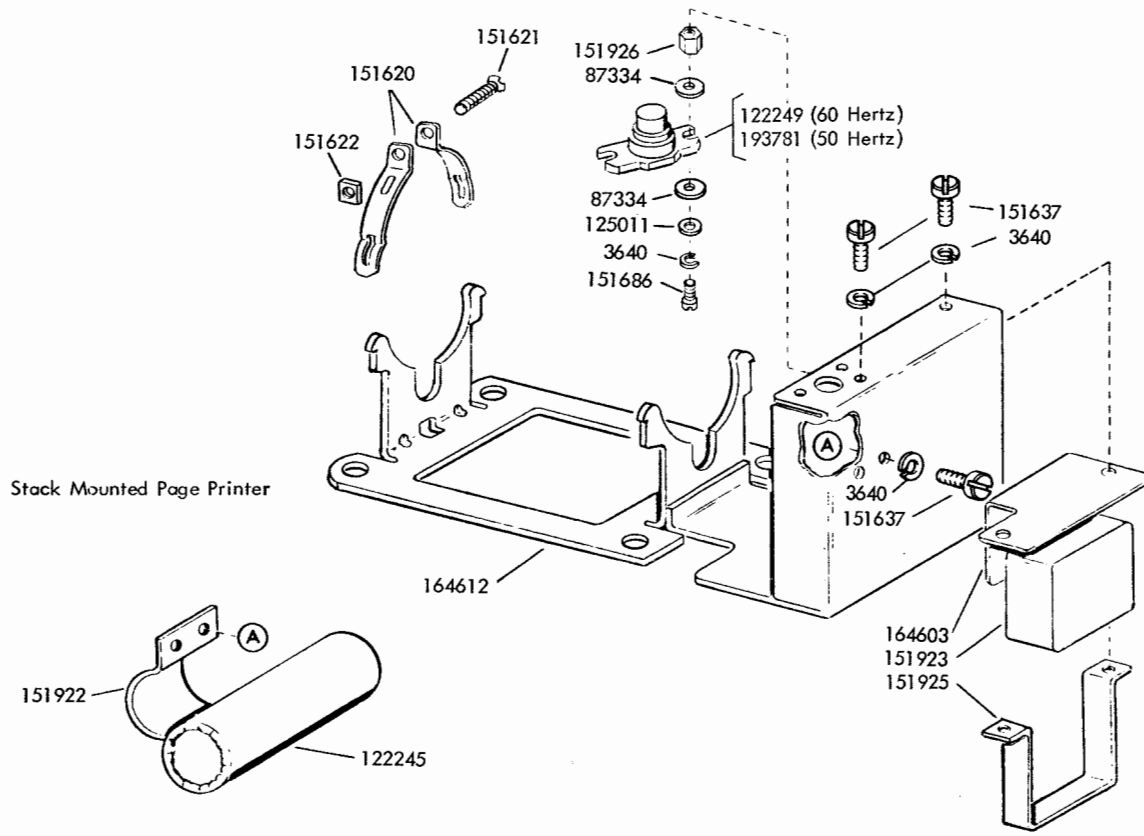


FIGURE 7. RELAY AND CAPACITOR MOUNTING (SYNCHRONOUS)

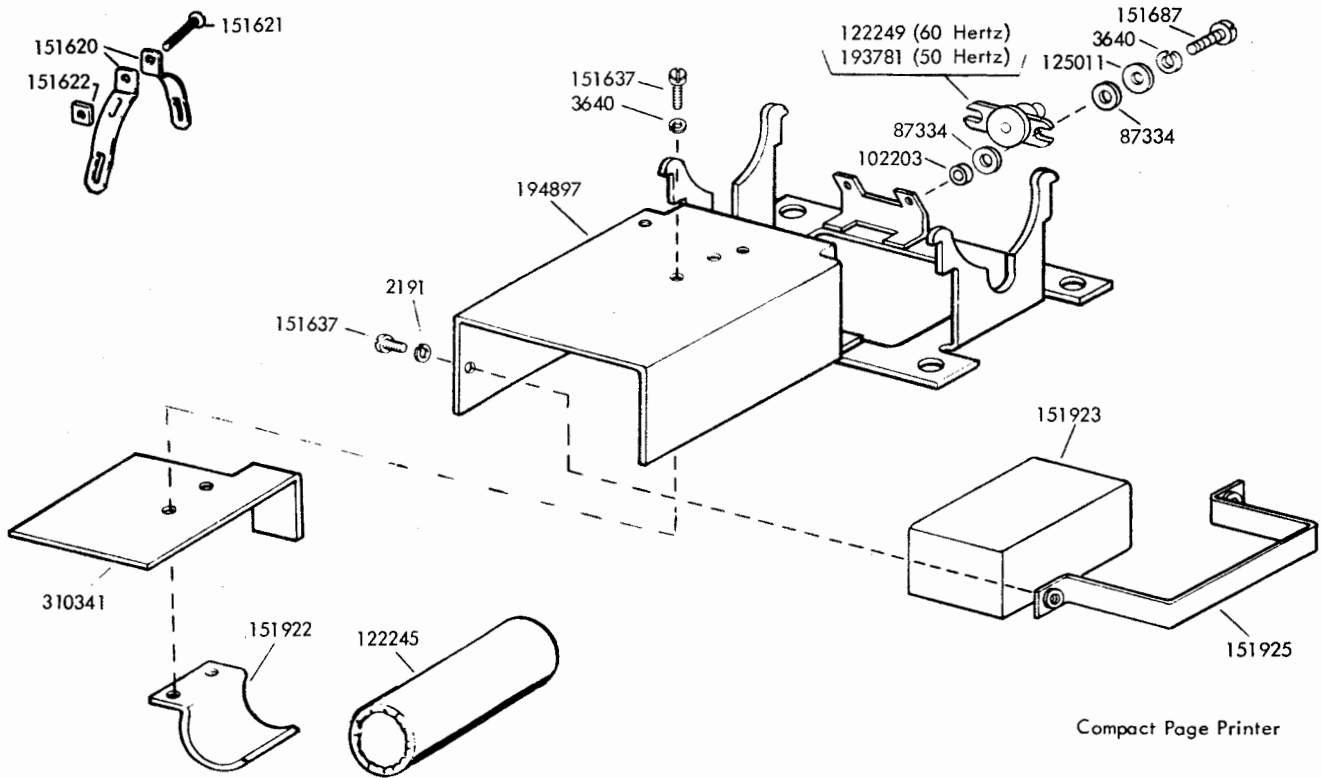
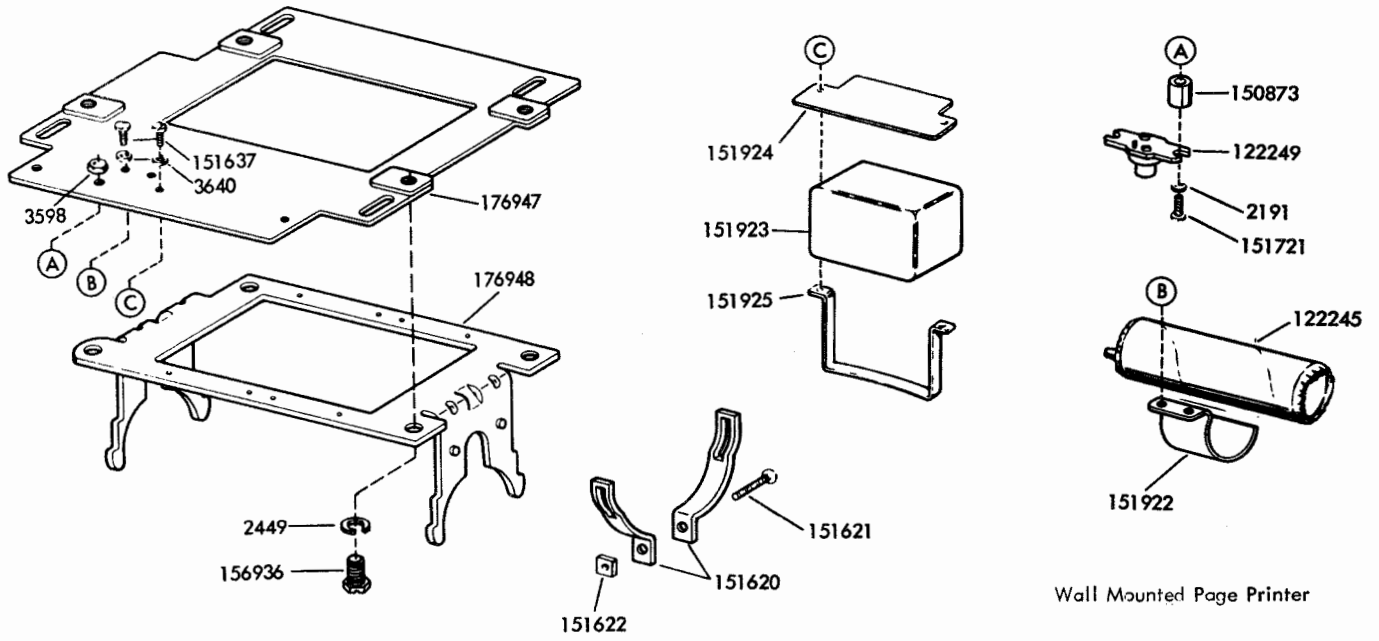
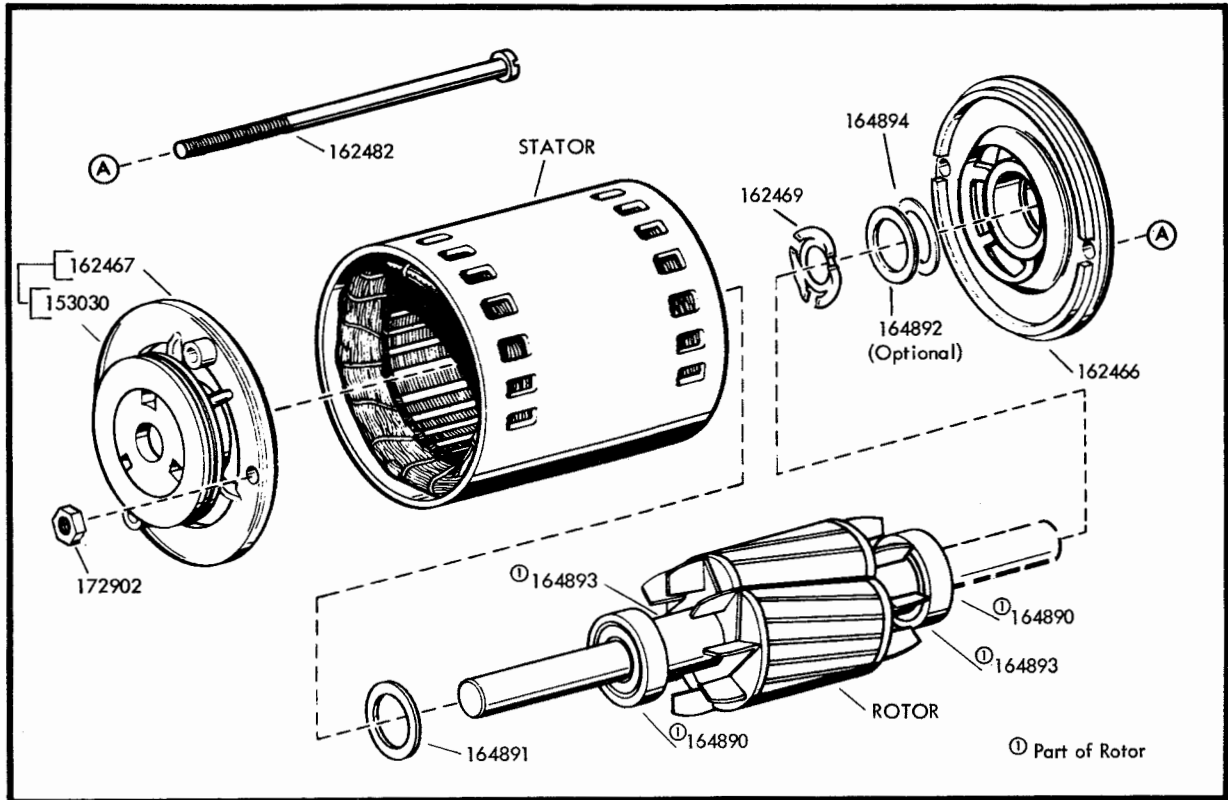


FIGURE 8. RELAY AND CAPACITOR MOUNTING (SYNCHRONOUS)



MINIATURE MOTOR ASSEMBLY

SYNCHRONOUS MOTORS - Miniature			
MOTOR ASSEMBLY	STATOR	ROTOR	MOTOR DATA
161984	162464	330564	AC Synchronous, 25 MHP, 115V: 60 Hertz, 3600 RPM
194924	195214	337564	AC Synchronous, 25 MHP, 115V: 50 Hertz, 3000 RPM
310295	162464	② 330565	AC Synchronous, 25 MHP, 115V: 60 Hertz, 3600 RPM

② Has double shaft extension

FIGURE 9. SYNCHRONOUS MOTOR ASSEMBLIES (MINIATURE)

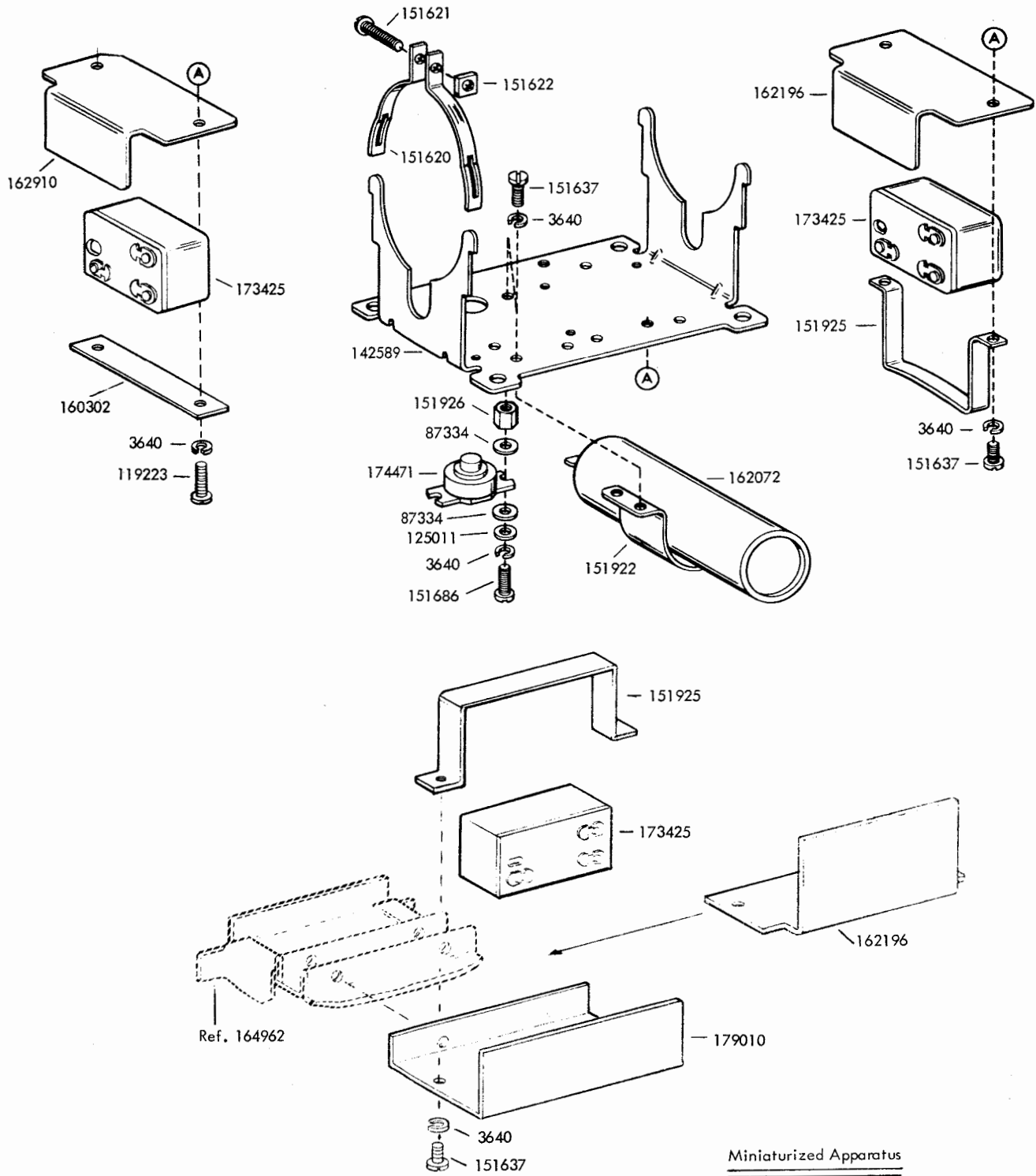


FIGURE 10. RELAY AND CAPACITOR MOUNTING (SYNCHRONOUS)

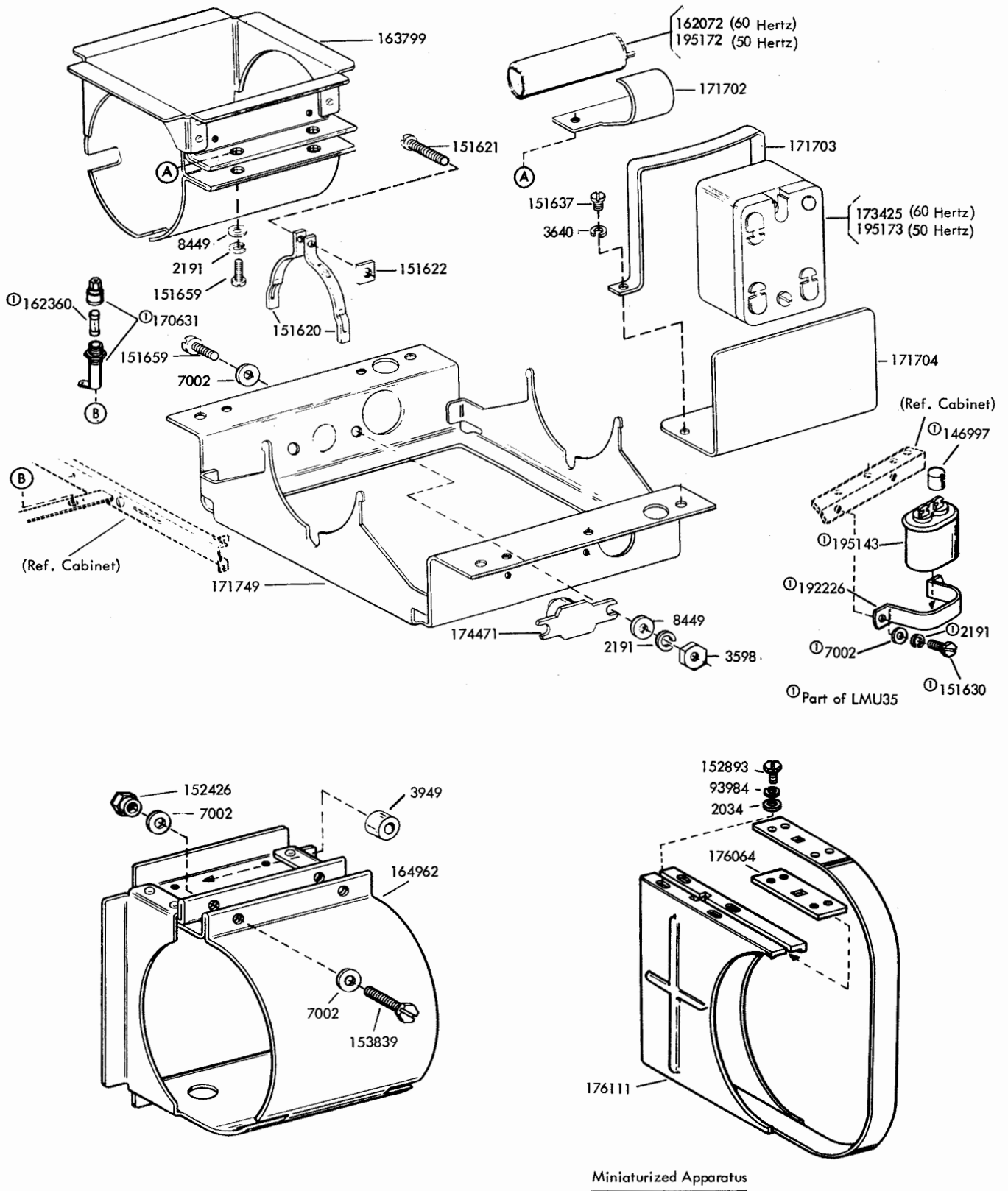
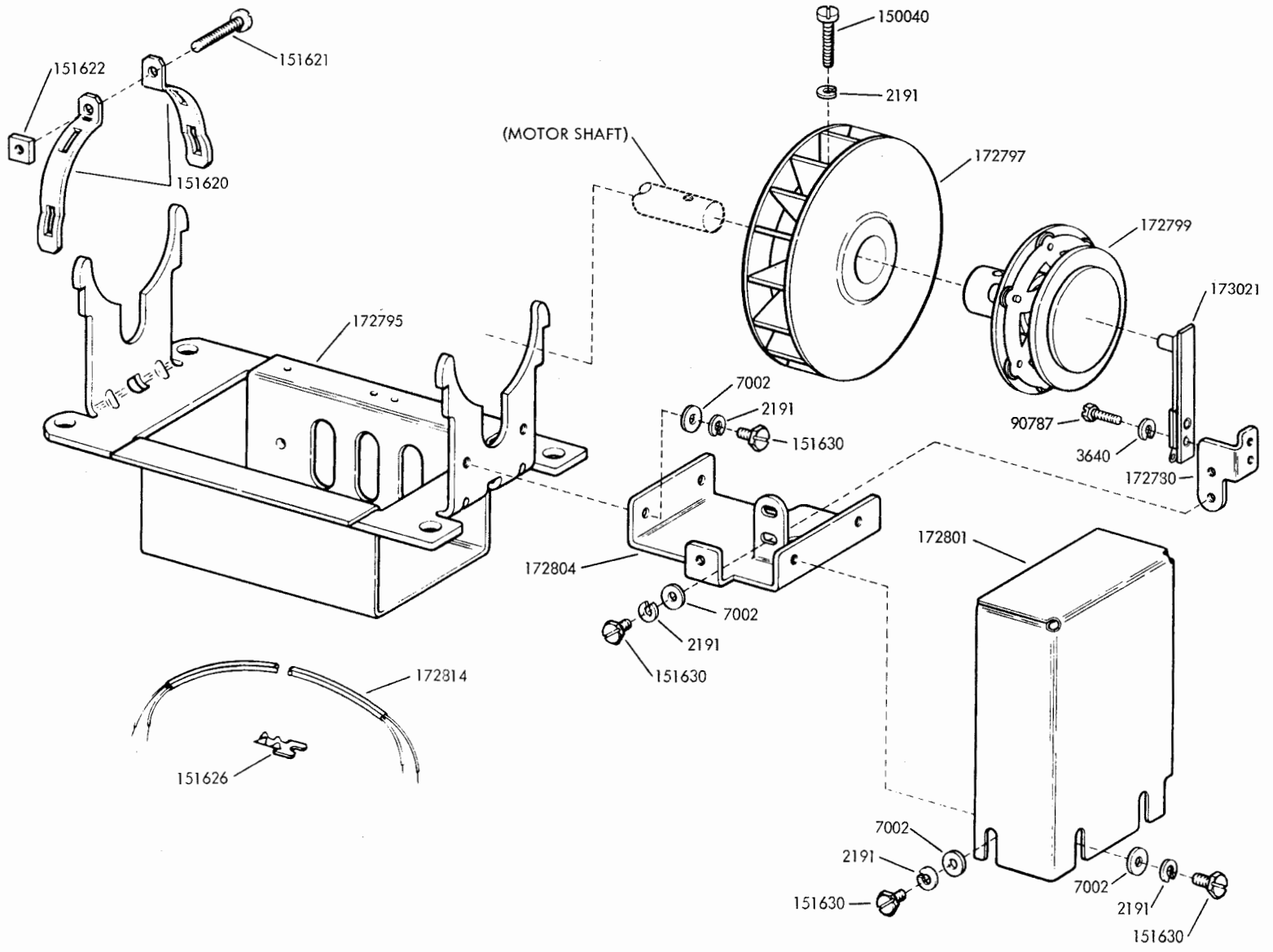


FIGURE 11. RELAY, CAPACITOR MOUNTING AND BRACKET (SYNCHRONOUS)

FIGURE 12. SYNCHRONOUS MOTOR MOUNTING WITH CENTRIFUGAL SWITCH ASSEMBLY



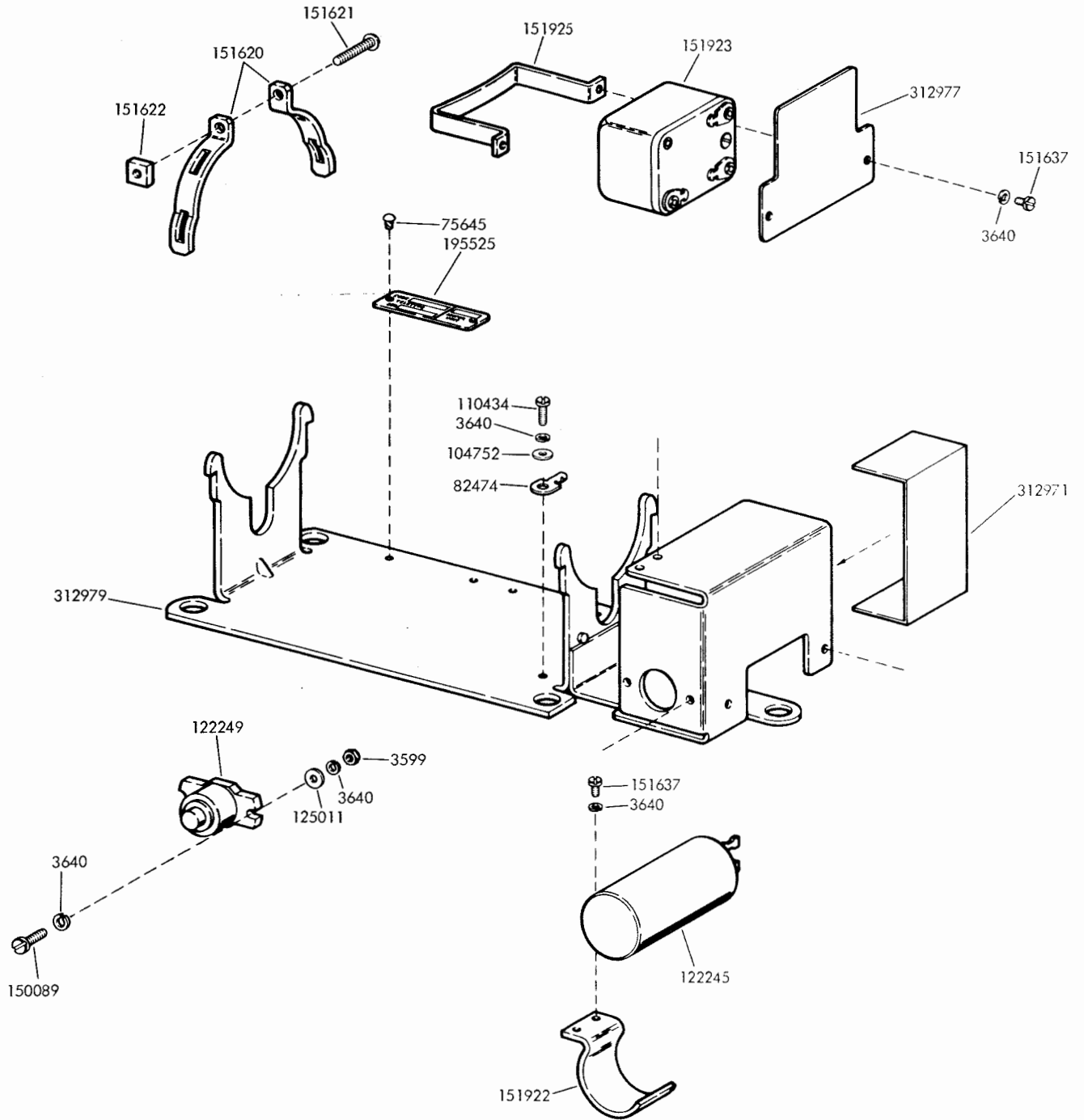
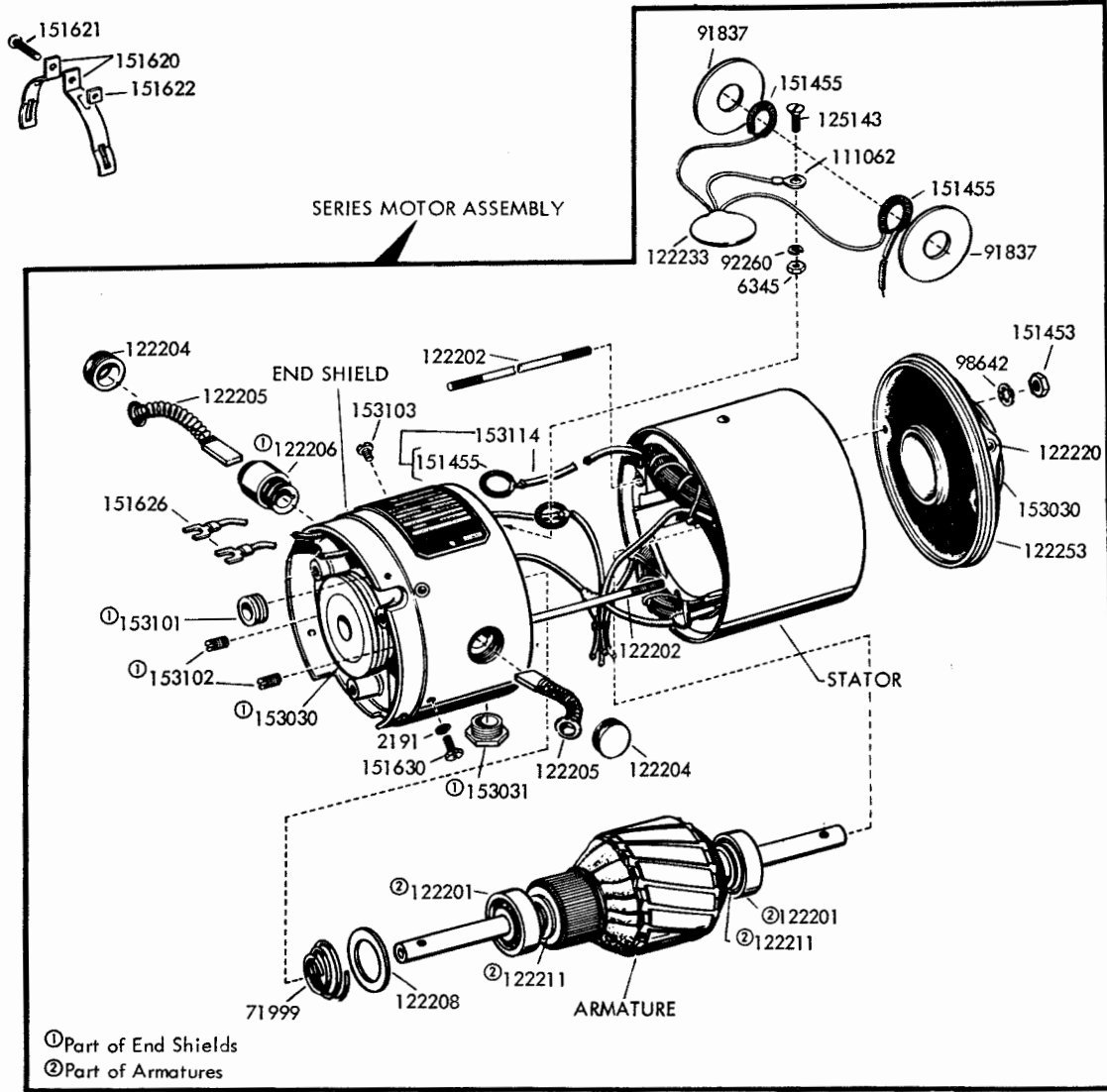


FIGURE 13. RELAY AND CAPACITOR MOUNTING (SYNCHRONOUS)

SERIES MOTOR UNITS

Teletype Code	Motor Assembly	Motor Bracket	Container	Lid	Nipple	Capacitor	Resistor	Electrical Noise Suppressor	Cable Assembly	Jumper
LMU4	150701	152046	152039	152040	152067	161579	161580	161578	152059	91228 (2-1/2" lg. w/107398 and 121539 Terminals) 162684 (2-3/4" lg. w/164479 Terminal) 162685 (4" lg. w/164479 Terminal)
LMU6	150701	150976				161579	161580			91228 (2-1/2" lg. w/107398 and 121539 Terminals) 162684 (2-3/4" lg. w/164479 Terminal) 163268 (6-1/2" lg. White w/164479 Terminal) 163269 (2" lg. w/164479 Terminal)
LMU10	150701	152046	152039	152040	152067	161579	161580	161578	152059	91228 (2-1/2" lg. w/107398 and 121539 Terminals) 162684 (2-3/4" lg. w/164479 Terminal) 162685 (4" lg. w/164479 Terminal)
LMU13	163272	150976				161579	161580			91228 (2-1/2" lg. w/107398 and 121539 Terminals) 162684 (2-3/4" lg. w/164479 Terminal) 163268 (6-1/2" lg. White w/164479 Terminal) 163269 (2" lg. w/164479 Terminal)
LMU14	161577	152046	152039	152040	152067	161579	161580	161578	152059	91228 (2-1/2" lg. w/107398 and 121539 Terminals) 162684 (2-3/4" lg. w/164479 Terminal) 162685 (4" lg. w/164479 Terminal)
LMU23	164758	173751				173003	173004			91228 (2-1/2" lg. w/107398 and 121539 Terminals)
LMU28	179100	152046	179105	179106	179282	161579	179103	161578	179283	91228 (2-1/2" lg. w/107398 and 121539 Terminals)
LMU29	179190	152046	179420	179424	152067	179421	173004	179422	152059	91228 (2-1/2" lg. w/107398 and 121539 Terminals)
LMU32	194060	152046	194057	179424	194063	161579	179103	161578	152059	91228 (2-1/2" lg. w/107398 and 121539 Terminals)
LMU39	161577	152046	179420	179424	152067	161579	179103	161578	152059	91228 (2-1/2" lg. w/107398 and 121539 Terminals)
LMU41	150701	152046	179420	179424	152067	161579	179103	161578	152059	91228 (2-1/2" lg. w/107398 and 121539 Terminals)
LMU47	150701	152046	179420	179424	152067	161579	179103		152059	91228 (2-1/2" lg. w/107398 and 121539 Terminals)

FIGURE 14. SERIES MOTOR CROSS-REFERENCE CHART



SERIES MOTORS STANDARD OR HEAVY DUTY					MOTOR DATA
	MOTOR ASSEMBLY	STATOR	ARMATURE	END SHIELD	
Standard	150701	122221	122210	122200	Series, 1/20 HP, 115V: 60 Hertz, 3600 RPM
Heavy	161577	161576	161575	122200	Series, 1/15 HP, 115V: 60 Hertz, 3600 RPM
Heavy	③163272	161576	161575	163273	Series, 1/15 HP, 115V: 60 Hertz, 3600 RPM
Heavy	③164758	164756	164757	163273	DC Series, 1/15 HP, 48V: 3600 RPM
Standard	179100	122221	122210	179101	Series, 1/20 HP, 115V: 60 Hertz, 3600 RPM
Heavy	179190	164756	164757	122200	DC Series, 1/15 HP, 48V: 3600 RPM
Heavy	③194060	161576	161575	194062	Series, 1/15 HP, 115V: 60 Hertz, 3600 RPM

③ Arranged for Inverted Mounting

FIGURE 15. SERIES MOTOR ASSEMBLIES

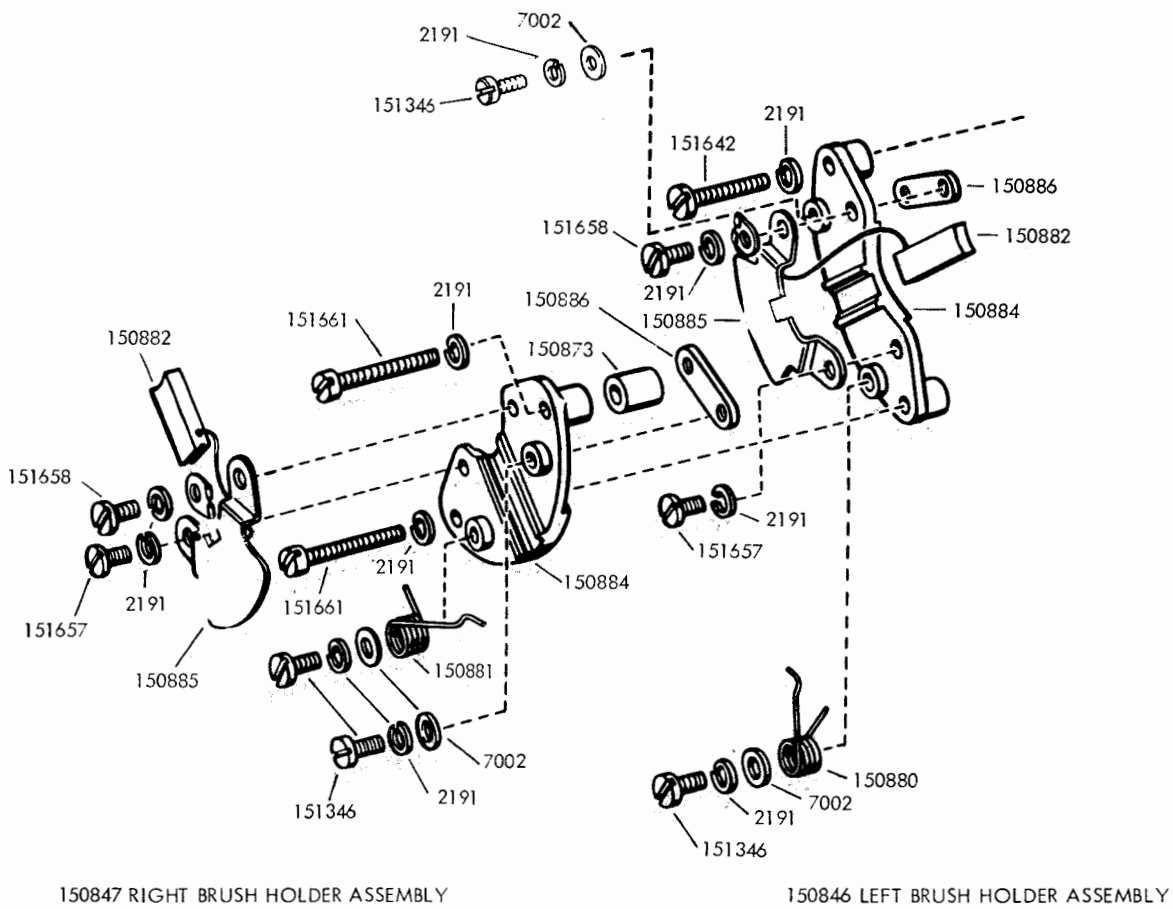


FIGURE 16. BRUSH ASSEMBLIES

FIGURE 17. 150845 GOVERNOR ASSEMBLY

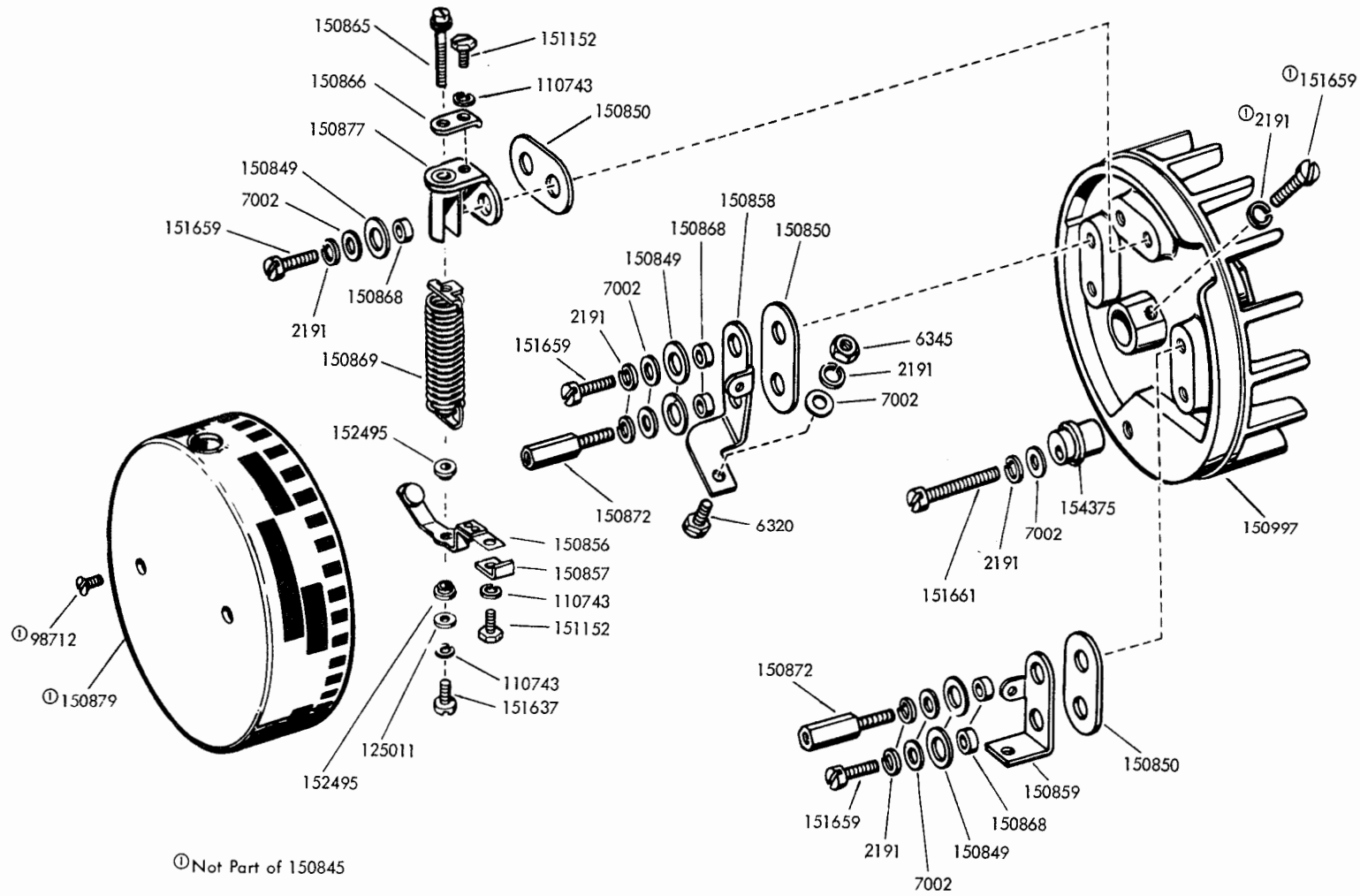
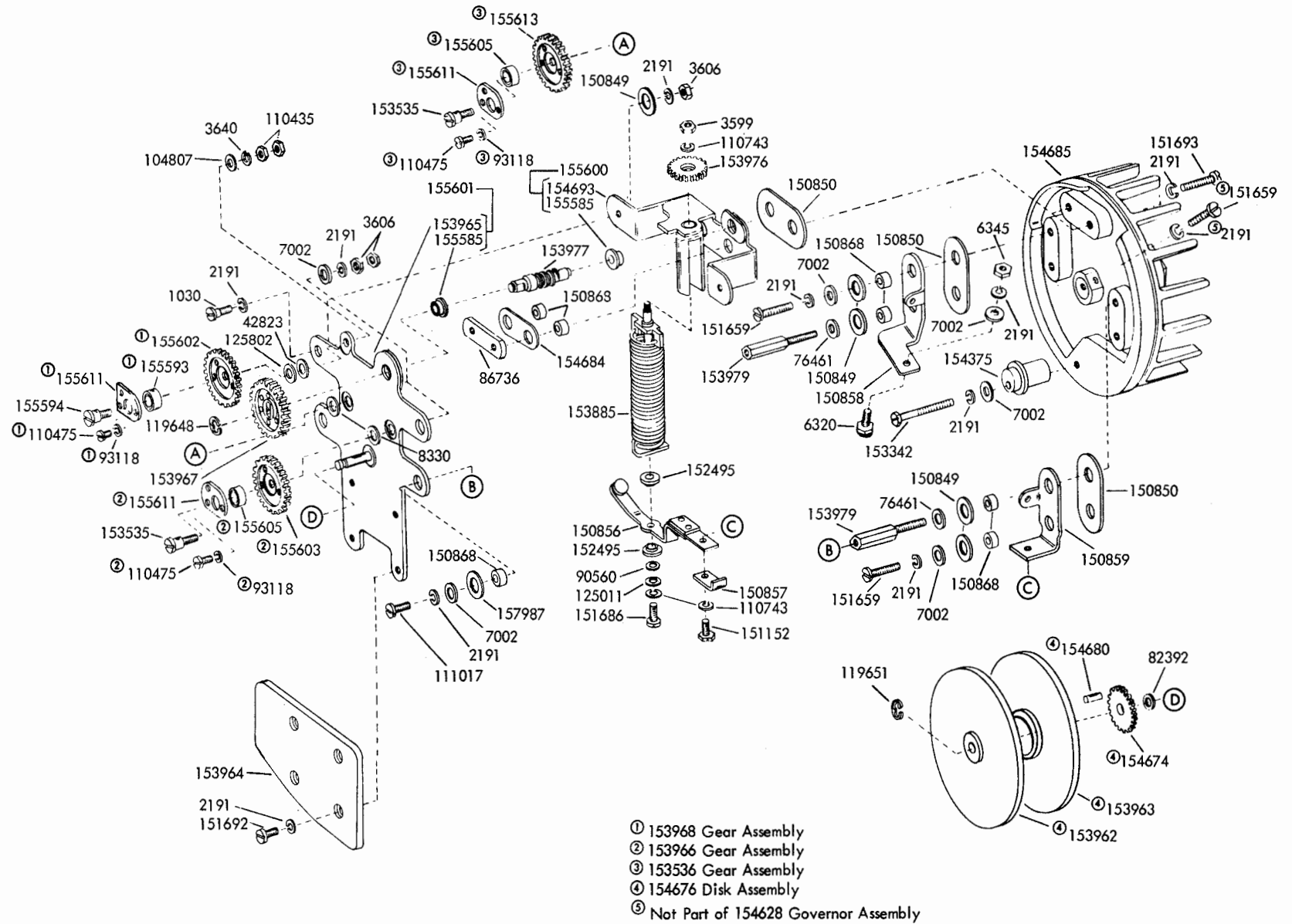


FIGURE 18. 154628 GOVERNOR ASSEMBLY



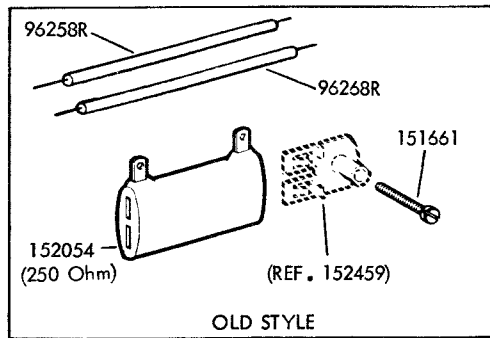
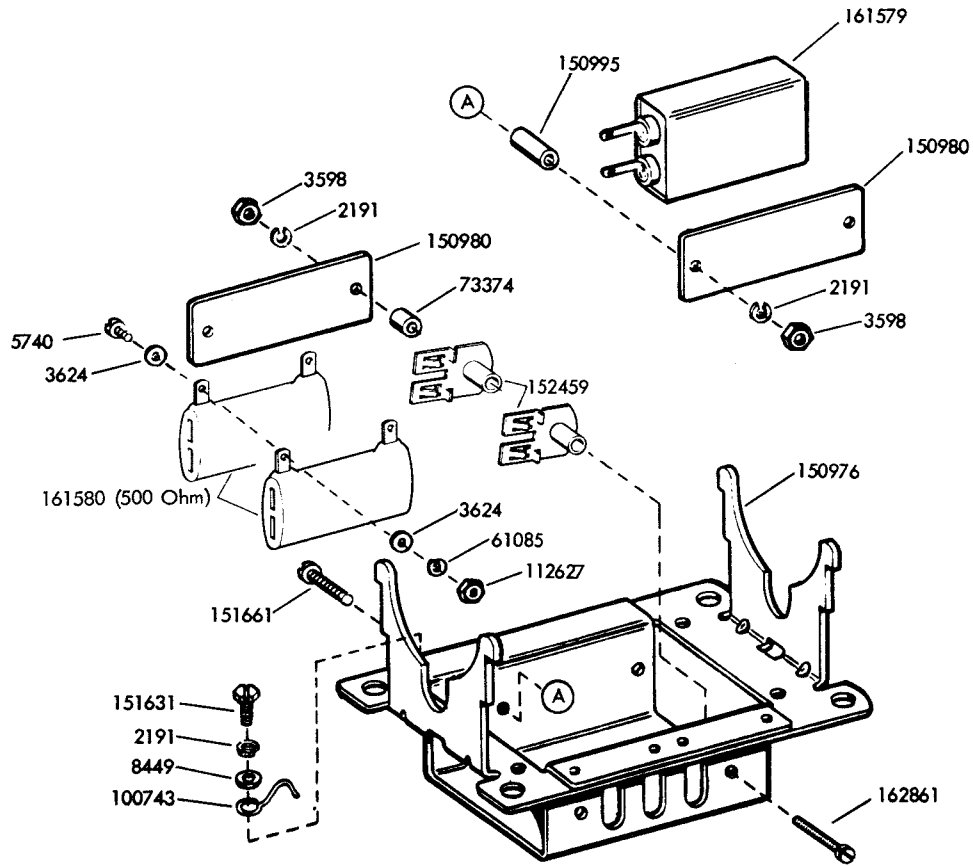
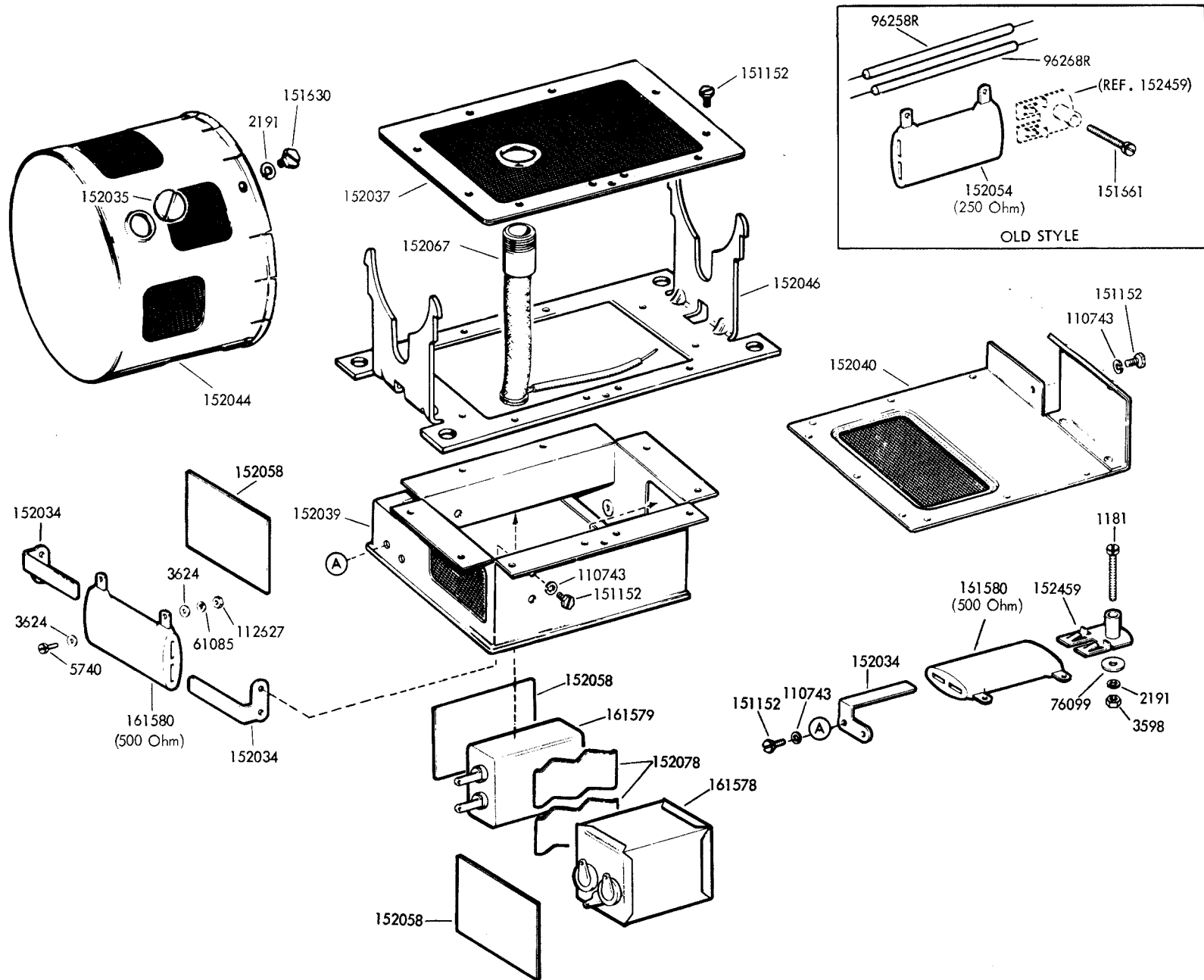


FIGURE 19. SERIES MOTOR MOUNTING PARTS

FIGURE 20. SERIES MOTOR MOUNTING PARTS WITH RF SUPPRESSION



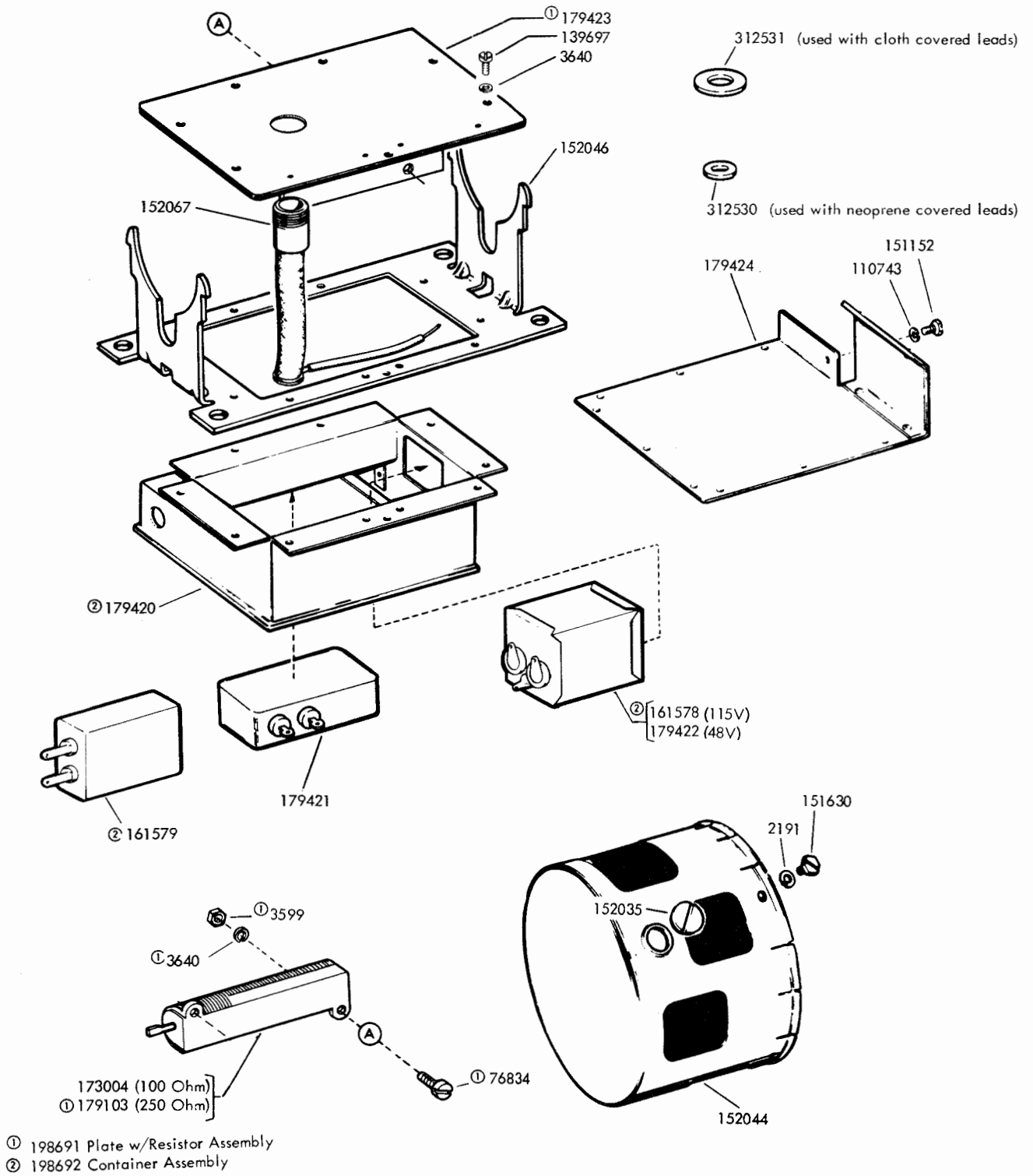


FIGURE 21. SERIES MOTOR MOUNTING PARTS WITH RF SUPPRESSION

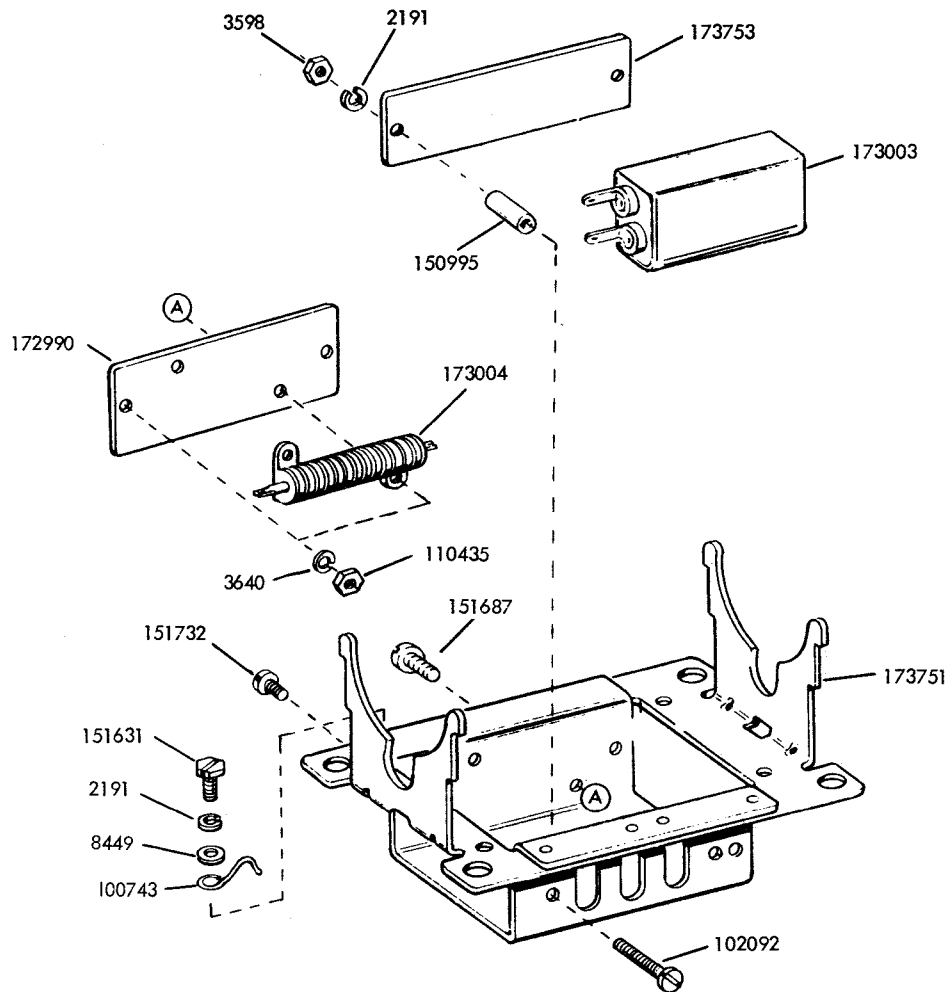
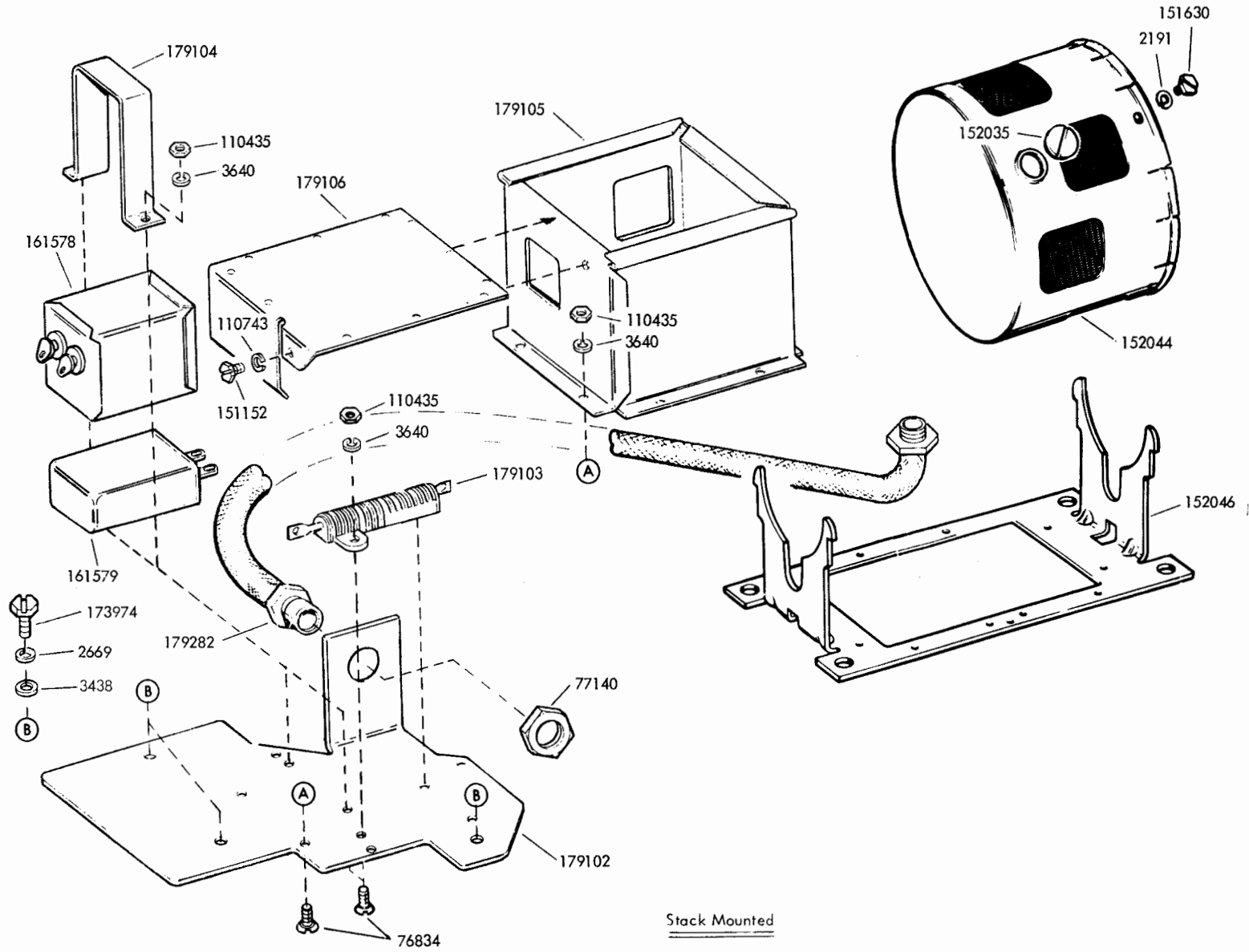


FIGURE 22. SERIES MOTOR MOUNTING PARTS

FIGURE 23. SERIES MOTOR MOUNTING PARTS WITH RF SUPPRESSION



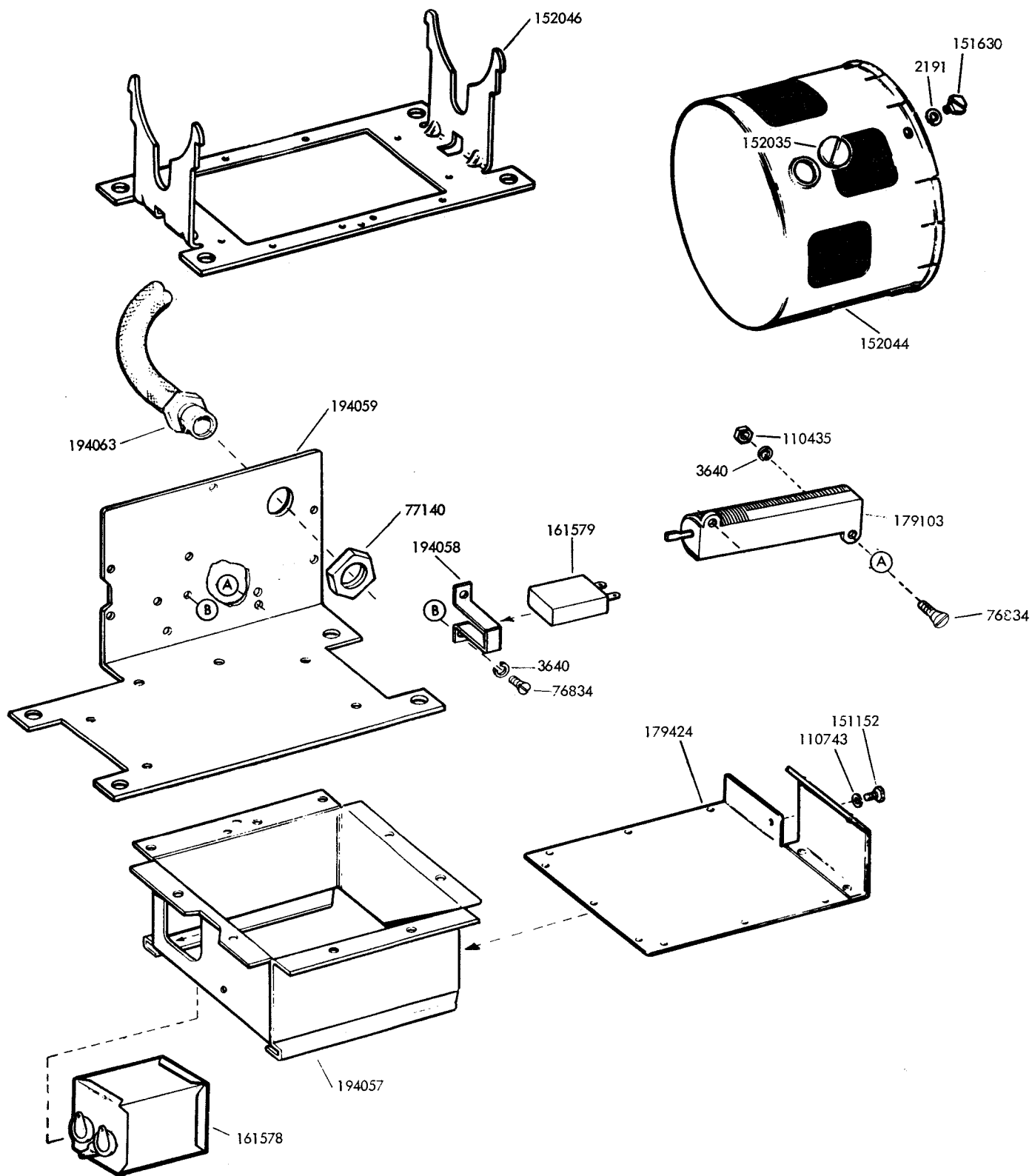


FIGURE 24. SERIES MOTOR MOUNTING PARTS WITH RF SUPPRESSION

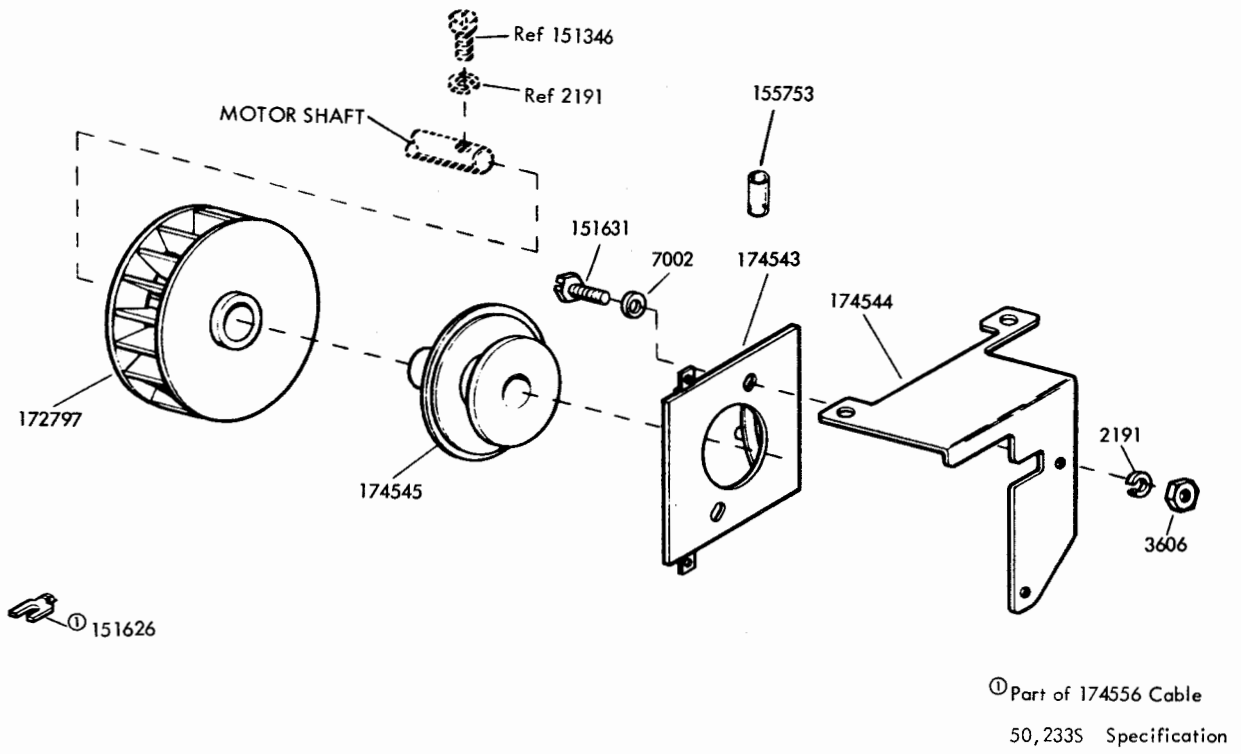


FIGURE 25. 174546 MODIFICATION KIT TO PROVIDE MOTOR RUNNING CONTACTS

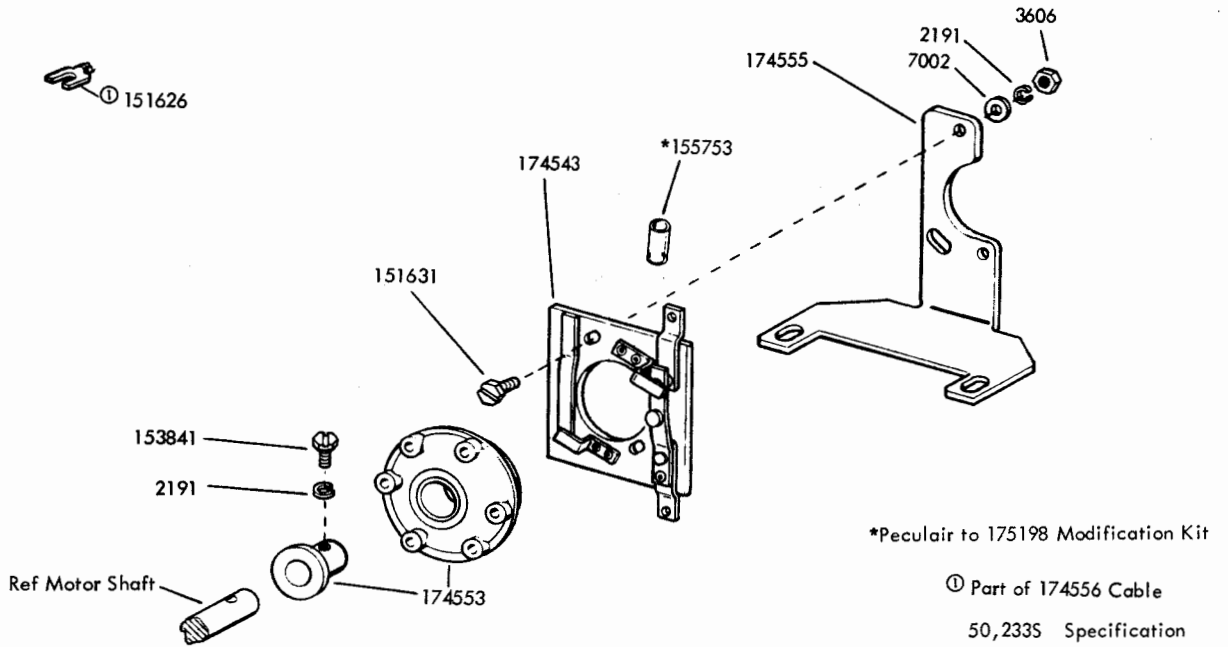


FIGURE 26. 174551 (LESS CABLE) 175198 (WITH CABLE) MODIFICATION KITS TO PROVIDE MOTOR RUNNING CONTACTS

MODIFICATION KITS
(Parts are illustrated on the pages indicated)

Modification Kit-Number	Part Number	Description	Quantity	Figure Number	Specification Number
198693	Modification Kit to Convert and LMU14 to and LMU39.				50,3765
	3640	Washer, Lock	7	19	
	75646	Screw, Drive	4		
	122233	Capacitor Assembly	1	13	
	139697	Screw, 4-40 x 9/32 Fil	7	19	
	151626	Terminal	1	13	
	152067	Nipple	1	19	
	161576	Stator, Motor	1	13	
	179424	Lid w/Insulator	1	19	
	198691	Plate w/Resistor Assembly	1	19	
	198692	Container Assembly	1	19	
	309431	Plate, Code (LMU39X)	1		
	312530	Washer, Textolite	1	19	
	312531	Washer, Fiber	1	19	
304739	Modification Kit to Convert an LMU46 to an LMU41.				50,3765
	2191	Washer, Lock	4	19	
	3640	Washer, Lock	8	19	
	75646	Screw, Drive	4		
	110743	Washer, Lock	1	19	
	122221	Stator, Motor	1	13	
	122233	Capacitor Assembly	1	13	
	139697	Screw, 4-40 x 9/32 Fil	7	19	
	151152	Screw, 4-40 x 3/16 Hex	1	19	
	151626	Terminal	1	13	
	151630	Screw, 6-40 x 1/4 Hex	4	19	
	152035	Plug	1	19	
	152044	Cover	1	19	
	152046	Bracket w/Cradle, Motor	1	19	
	152067	Nipple	1	19	
	179424	Lid w/Insulator	1	19	
	198691	Plate w/Resistor Assembly	1	19	
	198692	Container Assembly	1	19	
	309432	Plate, Code (LMU41X)	1		
	312530	Washer, Textolite	1	19	
	312531	Washer, Fiber	1	19	
306708	Modification Kit to Conver an LMU10 to an LMU47.				50,3765
	3640	Washer, Lock	7	19	
	75646	Screw, Drive	4		
	122221	Stator, Motor	1	13	
	122233	Capacitor Assembly	1	13	
	139697	Screw, 4-40 x 9/32 Fil	7	19	
	151626	Terminal	1	13	
	152067	Nipple	1	19	
	179424	Lid w/Insulator	1	19	
	198691	Plate w/Resistor Assembly	1	19	
	198692	Container Assembly	1	19	
	309433	Plate, Code (LMU47X)	1		
	312530	Washer, Textolite	1	19	
	312531	Washer, Fiber	1	19	
306709	Modification Kit to Convert an LMU4 to an LMU41.				50,3765
	3640	Washer, Lock	7	19	
	75646	Screw, Drive	4		
	122221	Stator, Motor	1	13	
	122233	Capacitor Assembly	1	13	
	139697	Screw, 4-40 x 9/32 Fil	7	19	
	151626	Terminal	1	13	
	152067	Nipple	1	19	
	179424	Lid w/Insulator	1	19	

MODIFICATION KITS (Continued)
(Parts are illustrated on the pages indicated)

Modification Kit-Number	Part Number	Description	Quantity	Figure Number	Specification Number
	198691	Plate w/Resistor Assembly	1	19	
	198692	Container Assembly	1	19	
	309432	Plate, Code (LMU41X)	1		
	312530	Washer, Textolite	1	19	
	312531	Washer, Fiber	1	19	

NUMERICAL INDEX

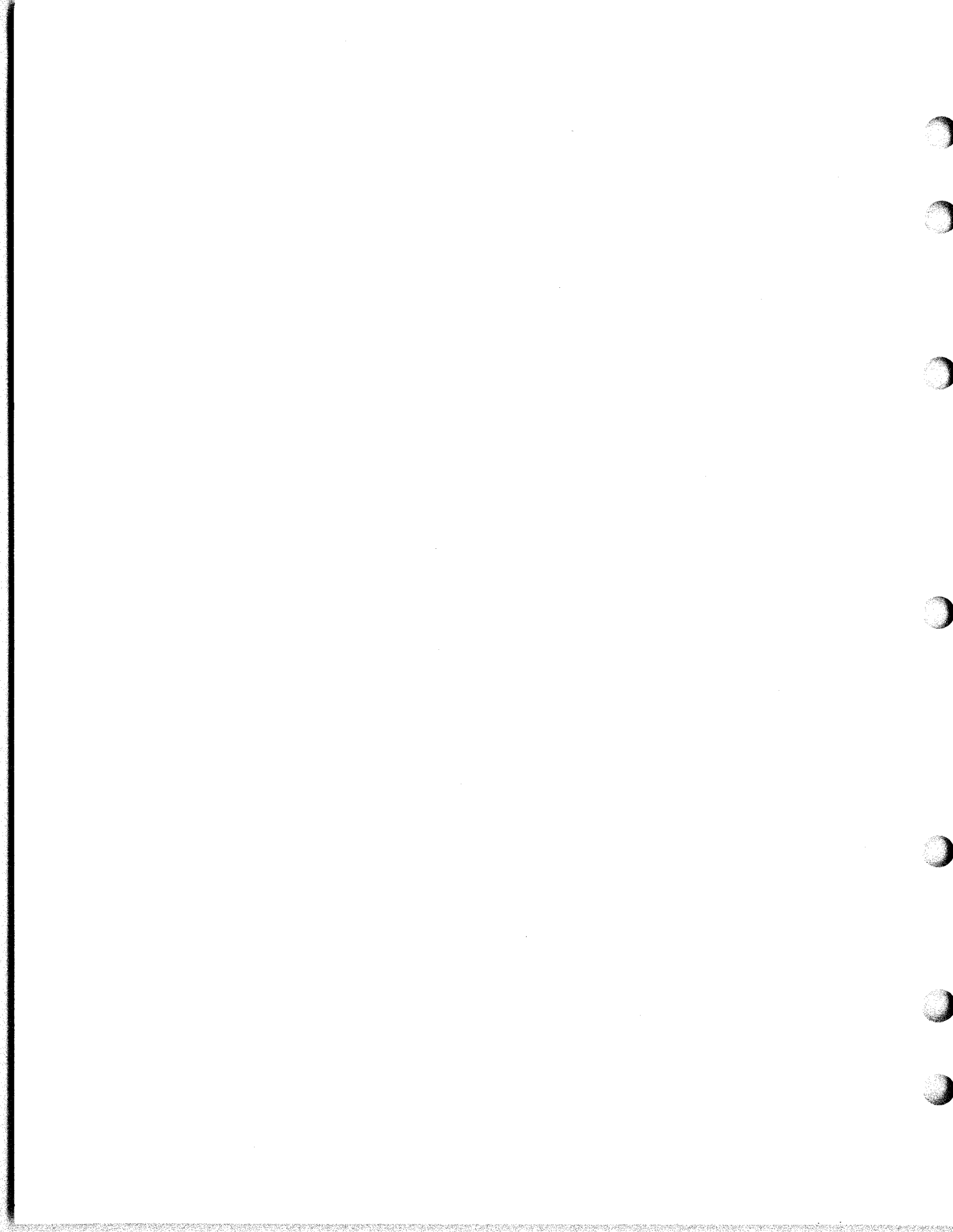
Part Number	Description and Page Number	Part Number	Description and Page Number	Part Number	Description and Page Number
1030	Screw, Shoulder 6-40 19	110435	Nut, 4-40 Hex 6, 19, 23, 24, 25	150980	Plate, Clamping 20
1181	Screw, 6-40 x 11/16 Fil 21	110475	Screw, 2-64 x 5/64 Rd 19	150995	Bushing 20, 23
1298	Screw, 8-32 x 1/4 Fil 6	110743	Washer, Lock 18, 19, 21, 22, 24, 25, 27	150997	Fan, Governor 18
2034	Washer, Flat 12			151152	Screw, 4-40 x 3/16 Hex 18, 19, 21, 22, 24, 25, 27
2191	Washer, Lock 4, 5, 6, 7, 9, 12, 13, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27	111017	Screw, 6-40 x 5/16 Fil 19	151346	Screw, 6-40 x 3/8 Fil 4, 17, 26
2263	Nut, 8-32 Hex 4	111062	Terminal 16	151453	Nut, 10-32 Hex 16
2449	Washer, Lock 9	112627	Nut, 2-56 Hex 20, 21	151455	Spring, Helical Clip 16
2669	Washer, Lock 24	119223	Screw, 4-40 x 1-15/32 Fil 5, 11	151620	Strap, Motor Mounting 5, 6, 8, 9, 11, 12, 13, 14, 16
3438	Washer, Flat 24	119648	Ring, Retaining 19	151621	Screw, 6-32 x 3/4 Rd 5, 6, 8, 9, 11, 12, 13, 14, 16
3598	Nut, 6-40 Hex 6, 9, 12, 20, 21, 23	119651	Ring, Retaining 19	151622	Nut, 6-32 Sq 5, 6, 8, 9, 11, 12, 13, 14, 16
3599	Nut, 4-40 Hex 14, 19, 22	121539	Terminal 5, 15	151626	Terminal 3, 13, 16, 26, 27
3606	Nut, 6-40 Hex 19, 26	122200	Shield Assembly, End 16	151630	Screw, 6-40 x 1/4 Hex 7, 12, 13, 16, 21, 22, 24, 25, 27
3624	Washer, Flat 20, 21	122201	Rearing, Ball 4, 16	151631	Screw, 6-40 x 5/16 Hex 20, 23, 26
3640	Washer, Lock 5, 6, 7, 8, 9, 11, 12, 13, 14, 19, 22, 23, 24, 25, 27,	122202	Stud 16	151632	Screw, 6-40 x 3/8 Hex 6
3646	Washer, Lock 6	122204	Cap, Brush 16	151637	Screw, 4-40 x 1/4 Fil 5, 6, 8, 9, 11, 12, 14, 18
3949	Spacer, .160" Thk 12	122205	Brush w/Spring 16	151642	Screw, 6-40 x 3/4 Fil 17
5740	Screw, 2-56 x 1/4 Fil 20, 21	122206	Holder, Brush 16	151657	Screw, 6-40 x 1/4 Fil 17
6320	Screw, 6-32 Contact 18, 19	122208	Washer, Flat 16	151658	Screw, 6-40 x 5/16 Fil 17
6345	Nut, 6-32 Hex 16, 18, 19	122210	Armature, Motor 16	151659	Screw, 6-40 x 1/2 Fil 12, 18, 19
7002	Washer, Flat 5, 6, 7, 12, 13, 17, 18, 19, 26	122211	Washer, Pull 4, 16	151661	Screw, 6-40 x 1" Fil 17, 18, 20, 21
8330	Washer, Flat 19	122220	Oiler, Ball 4, 16	151686	Screw, 4-40 x 3/8 Fil 5, 6, 8, 11, 19
8449	Spacer, .094" Thk 12, 20, 23	122221	Stator 16, 27	151687	Screw, 4-40 x 7/16 Fil 9, 23
36273	Washer, Flat 7	122229	Bolt, 8-32 x 4-11/16 Fil 4	151692	Screw, 6-40 x 3/16 Fil 5, 6, 19
42823	Washer, Flat 19	122233	Capacitor Assembly 16, 27	151693	Screw, 6-40 x 9/16 Fil 19
61085	Washer, Lock 20, 21	122245	Capacitor, 43 to 48 Mfd 3, 5, 7, 8, 9, 14	151721	Screw, 6-40 x 3/4 Hex 9
71999	Spring, Motor Thrust 4, 16	122249	Switch, Thermosiotic 3, 5, 7, 8, 9, 14	151732	Screw, 4-40 x 11/32 Fil 23
73374	Spacer, .250" 20	122251	Stator, Motor 4	151795	Motor, Synchronous 3, 4
75645	Screw, #0 x 1/8 Drive 14	122252	Shield Assembly, End 4	151920	Plate, Mounting 3, 5, 6
75646	Screw, #0 x 3/16 Drive 27	122253	Shield Assembly, End 16	151922	Clamp 3, 5, 6, 8, 9, 11, 14
76099	Washer, Flat 21	123769	Fan, Motor 4	151923	Relay, Motor Starting 3, 5, 7, 8, 9, 14
76461	Washer, Flat 19	125011	Washer, Flat 5, 6, 8, 9, 11, 14, 18, 19	151924	Insulator, .031" Thk 3, 5, 9
76834	Screw, 4-40 x 3/8 Flat 22, 24, 25	125143	Screw, 6-32 x 3/8 Flat 16	151925	Clamp 3, 5, 8, 9, 11, 14
77140	Nut, Lock 9/16 - 32 Hex 24, 25	125082	Washer, Flat 19	151926	Nut, 4-40 Spl 5, 6, 8, 11
82392	Shim, .004" Thk 19	128874	Rotor, Motor 4	151927	Cable w/Terminals 3, 6
82474	Terminal 3, 6, 7, 14	139697	Screw, 4-40 x 9/32 Fil 22, 27	151939	Grommet, Rubber 6
86736	Plate, Clamping 19	142589	Bracket w/Cradle, Motor 3, 11	152034	Bracket, Resistor 21
87334	Washer, Insulating 5, 6, 8, 9, 11	146997	Cap, Bushing 12	152035	Plug 21, 22, 24, 25, 27
90560	Washer, Flat 19	150040	Screw, 6-40 x 5/8 Fil 4, 13	152037	Cover 21
90787	Screw, 4-40 x 3/8 Hex 13	150089	Screw, 4-40 x 1/2 Fil 14	152039	Container 15, 21
91228	Strap, 2-1/2" Braided 5, 15	150701	Motor, 115V AC Series 15, 16	152040	Lid 15, 21
91229	Strap, 2" Braided 5	150845	Governor Assembly 1, 18	152044	Cover 21, 22, 24, 25, 27
91837	Washer, Insulating 16	150846	Holder Assembly, Left Brush 17	152046	Bracket w/Cradle, Motor 15, 21, 22, 24, 25, 27
92260	Washer, Lock 16	150847	Holder Assembly, Right Brush 17	152054	Resistor, 250 Ohm 20, 21
93118	Washer, Lock 19	150849	Washer, Insulating 18, 19	152058	Separator 21
93984	Washer, Lock 12	150850	Insulator, .031" Thk 18, 19	152059	Cable w/Terminals 15
96258R	Jumper, 3" Red 20, 21	150856	Arm, Contact 18, 19	152067	Nipple 15, 21, 22, 27
96262R	Jumper, 4" Red 3	150857	Clamp 18, 19	152078	Spring, Separator 21
96264R	Jumper, 5" Red 3	150858	Bracket, Contact 18, 19	152297	Washer, Bearing 4
96268R	Jumper, 7" Red 20, 21	150859	Bracket, Mounting 18, 19	152426	Nut, 6-40 Hex Self-Locking 12
96274R	Jumper, 10" Red 3	150865	Screw, 4-40 Clamping 18	152459	Bracket, Mounting 20, 21
98642	Washer, Lock 16	150866	Clamp 18	152495	Bushing 18, 19
98712	Screw, 4-40 x 1/4 Flat 18	150868	Bushing, Insulating 18, 19	152893	Screw, 4-40 x 1/4 Hex 12
98718	Washer, Flat 6	150869	Spring 18	153030	Mount, Vibration 4, 10, 16
100743	Clamp, Cable 20, 23	150872	Stud 18	153031	Bushing, Lead 16
102092	Screw, 6-40 x 1-17/32 Rd 23	150873	Collar 9, 17	153049	Washer, Insulating 4
102203	Bushing 9	150877	Bracket, Guide 18	153101	Grommet, Rubber 16
104752	Washer, Flat 7, 14	150879	Cover, Governor 18		
104807	Washer, Flat 19	150880	Spring, Governor Brush 17		
107398	Terminal 5, 15	150881	Spring, Governor Brush 17		
110434	Screw, 4-40 x 3/16 Fil 7, 14	150882	Brush, Contact 17		
		150884	Mounting, Brush 17		
		150885	Plate, Brush 17		
		150886	Plate, Clamp 17		
		150976	Bracket w/Cradle, Motor 5, 15, 20		

NUMERICAL INDEX (Continued)

Part Number	Description and Page Number	Part Number	Description and Page Number	Part Number	Description and Page Number
153102	Screw, Set 8-32 16	162360	Fuse, SL-BL .8 Amp 12	176948	Bracket w/Cradle, Motor 3, 9
153103	Screw, 4-40 Self-Tapping 16	162464	Stator, Motor 10	178500	Motor, AC Synchronous 3, 4
153114	Jumper, 8-1/2" Black 16	162466	Shield, Rear End 10	179010	Bracket, Relay 11
153342	Screw, 6-40 x 15/16 Hex 19	162467	Shield, Front End 10	179016	Cable w/Terminal 3
153535	Screw, 6-40 Shoulder 19	162469	Washer, Spring 10	179100	Motor, 115V AC Series 15, 16
153536	Gear Assembly 19	162482	Bolt, 6-32 x 3-1/2 Fil 10	179101	Shield Assembly, End 16
153839	Screw, 6-40 x 5/8 Hex 12	162684	Jumper, 2-3/4" White 15	179102	Plate, Mounting 24
153841	Screw, 6-40 x 9/16 Hex 26	162685	Jumper, 4" White 15	179103	Resistor, 250 Ohm 15, 22, 24, 25
153885	Spring Assembly 19	162861	Screw, 6-40 x 1-7/16 Fil 20	179104	Bracket, Clamp 24
153962	Disk 19	162910	Insulator 3, 11	179105	Container 15, 24
153963	Disk 19	162911	Cable w/Terminals 3	179106	Lid w/Insulator 15, 24
153964	Counterweight 19	163268	Jumper, 6-1/2" White 15	179190	Motor, 48V DC Series 15, 16
153965	Bracket 19	163269	Jumper, 2" White 15	179282	Nipple 15, 24
153966	Gear Assembly 19	163272	Motor, 115V AC Series 15, 16	179283	Cable w/Terminals 15
153967	Gear, 28 T 19	163273	Shield Assembly, End 16	179420	Container 15, 22
153968	Gear Assembly 19	163799	Bracket 12	179421	Capacitor, 1 MFD 15, 22
153976	Gear, 32 T 19	164479	Terminal 15	179422	Suppressor, Noise 15, 22
153977	Worm 19	164603	Insulator 3, 8	179423	Plate w/Bracket 22
153979	Post 19	164612	Bracket w/Cradle, Motor 3, 8	179424	Lid w/Insulator 15, 22, 25, 27
154375	Backstop 18, 19	164756	Stator, Motor 16	192226	Bracket, Capacitor Mounting 12
154628	Governor Assembly 1, 19	164757	Armature, Motor 16	193181	Cable w/Terminals 3
154674	Gear, 20 T 19	164758	Motor, 48V DC Series 15, 16	193236	Cable w/Terminals 3
154676	Disk Assembly 19	164890	Bearing, Ball 10	193781	Switch, Thermostatic 3, 5, 8, 9
154680	Bearing, Roller 19	164891	Shim, .032" Thk 10	194057	Container 15, 25
154684	Insulator 19	164892	Shim, .018" Thk 10	194058	Clamp 25
154685	Fan Assembly 19	164893	Collar, Thrust 10	194059	Bracket 25
154693	Bracket 19	164894	Shim, .018" Thk 10	194060	Motor, 115V AC Series 15, 16
155585	Bearing, Ball 19	164962	Bracket 11, 12	194062	Shield Assembly, End 16
155593	Bearing, Ball 19	170631	Holder, Fuse 12	194063	Nipple 15, 25
155594	Screw, 4-40 Shoulder 19	170764	Motor, AC Synchronous 3, 4	194897	Bracket w/Cradle, Motor 3, 9
155595	Motor, Synchronous 3, 4	171702	Clamp 3, 12	194899	Cable w/Terminals 3
155600	Bracket 19	171703	Clamp 3, 12	194924	Motor, 115V AC Synchronous 3, 10
155601	Plate, Gear Train 19	171704	Insulator 3, 12	195143	Capacitor, 7 MFD 12
155602	Gear, 28 T 19	171749	Bracket, w/Cradle, Motor 3, 12	195172	Capacitor, Motor Start 64 to 77 MFD 3, 12
155603	Gear, 28 T 19	171810	Cable w/Terminals 3	195173	Relay 3, 12
155605	Bearing, Ball 19	172780	Bracket, Contact Mounting 13	195178	Cable w/Terminals 3
155611	Ring, Bearing 19	172795	Bracket w/Cradle, Motor 3, 13	195214	Stator 10
155613	Gear, 28 T 19	172797	Fan 13, 26	195525	Plate, Identification 14
155752	Sleeve, 5/64 ID x 1/2 Lg Insulating 7	172799	Switch, Centrifugal 13	196794	Insulator 3, 8
155753	Sleeve, 1/8 ID x 1/2" Lg Insulating 26	172801	Cover, Switch 13	196795	Block, Mounting 8
156875	Screw, 6-40 x 5/32 Fil 7	172804	Plate, Adapter 13	196830	Motor, Synchronous 3, 4
156936	Screw, 1/4-32 x 5/16 Hex 9	172814	Cable w/Terminals 13	196831	Stator, Motor 4
157987	Washer, Insulating 19	172902	Nut, 6-32 Hex 10	196839	Bracket w/Cradle, Motor 3, 8
159739	Motor, Synchronous 3, 4	172990	Plate 23	198691	Plate w/Resistor Assembly 22, 27, 28
160298	Plate, Mounting 5	173003	Capacitor, 1 MFD 15, 23	198692	Container Assembly 22, 27, 28
160299	Capacitor, 226 MFD 3, 5	173004	Resistor, 100 Ohm 15, 22, 23	198693	Modification Kit 27
160300	Clamp 5	173021	Contact, Spring 13	199718	Motor, 115V AC 50 Hertz Synchronous 3, 4
160301	Plate, Insulating 5	173425	Relay, Motor Starting 3, 11, 12	199719	Rotor, Motor 4
160302	Plate, Nut 3, 5, 11	173518	Modification Kit 2	199720	Stator, Motor 4
160303	Relay 3, 5	173687	Fan, Motor 5	199721	Bolt, 8-32 x 5-13/16 Fil 4
160304	Switch, Thermostatic 3, 5	173751	Bracket w/Cradle, Motor 15, 23	304537	Bracket 3, 6
160305	Rotor, Motor 4	173753	Plate 23	304538	Bracket 3, 6
160306	Stator, Motor 4	173974	Screw, 10-32 x 5/16 Hex 24	304739	Modification Kit 27
161099	Cable w/Terminals 3	174471	Switch, Thermostatic 3, 11, 12	304792	Relay 3, 6
161575	Armature, Motor 16	174543	Switch 26	304793	Capacitor, 161 to 193 MFD 3, 6
161576	Stator, Motor 16, 27	174544	Bracket 26	305658	Spring 3, 7
161577	Motor, 115V AC Series 15, 16	174545	Rotor 26	305659	Insulator 3, 7
161578	Suppressor, Noise 15, 21, 22, 24, 25	174546	Modification Kit 1, 26	305660	Plate, Mounting 3, 7
161579	Capacitor, .5 MFD 15, 20, 21, 22, 24, 25	174551	Modification Kit 1, 26	305661	Bracket w/Cradle, Motor 3, 7
161580	Resistor, 500 Ohm 15, 20, 21	174553	Rotor 26	306063	Motor, 230V AC Synchronous 3, 9
161984	Motor, AC Synchronous 3, 10	174555	Bracket, Switch 26	306320	Cable Assembly 3
162072	Capacitor, 88 to 108 MFD 3, 11, 12	174556	Cable w/Terminals 26	306708	Modification Kit 27
162196	Insulator 3, 11	175198	Modification Kit 1, 26		
		176064	Plate, Nut 12		
		176111	Duct 12		
		176137	Jumper, 9-1/4" Black 3		
		176947	Plate w/Pads 3, 9		

NUMERICAL INDEX (Continued)

Part Number	Description and Page Number	Part Number	Description and Page Number	Part Number	Description and Page Number
306709	Modification Kit 27	310341	Insulator 3, 9	312979	Bracket w/Cradle, Motor 3, 14
307281	Switch, Thermostatic 3, 6	312530	Washer, Textolite 22, 27, 28	320269	Switch, Thermostatic 3, 5
309431	Plate, Code 27	312531	Washer, Fiber 22, 27, 28	320270	Capacitor, 15 to 18 MFD 3, 5
309432	Plate, Code 27, 28	312573	Jumper, 6" Red 3, 6	320271	Relay, Motor Starting 3, 5
309433	Plate, Code 27	312574	Jumper, 6" Black 3, 6	320272	Stator 4
310295	Motor, Synchronous 3, 10	312971	Shield 14	330564	Rotor 10
		312977	Insulator 3, 14	330565	Rotor 10



PAPER WINDER (LPW)

FIGURE	CONTENTS	PAGE
1	Paper Winder Mechanism	2
2	Copy Display Racks	3
	Numerical Index	4

PAINT FINISH COLOR CODE CHART									
(for parts and assemblies requiring a paint finish)									
Color	Finish Suffixes				Color	Finish Suffixes			
	Wrinkle Finish	Smooth Finish	Textured Vinyl	Smooth Vinyl		Wrinkle Finish	Smooth Finish	Textured Vinyl	Smooth Vinyl
Beige		ET			Gray, Federal		BV	GG	
Beige, Light		EL		HC	Gray, Green	AB (40)	BK	GA (45)	
Beige, Rose		ER			Gray, Light		EJ		HB (68)
Black	AA (37)				Gray, Covert				HE
Black, High Gloss		BA (34)			Gray, Olive		EW	GE	HF (46)
Black, Semi Gloss		BB			Gray, Maritime Deck	AJ	BJ		
Blue, Aqua		EK			Gray, Oxford		EP		
Blue, Brussels Light		EC			Green, Gray	AB (40)	BK	GA (45)	
Blue, Medium		ES			Green, Moss		EN		HD
Brown, Dark	AD (38)			HG	Ivory		EM		
Brown, Light	AC (39)				Pink, Rose		EU		
Fawn					Turquoise		EV		
Gray, Beige			GC		White		EH		
Gray, Charcoal	AL	BZ	GF	HA	Yellow, Pastel		EG		
Gray, Dark			GB						

The double asterisk (**) denotes a painted part. Suffix to be applied following the part number.
Number in parentheses indicates Bell System code

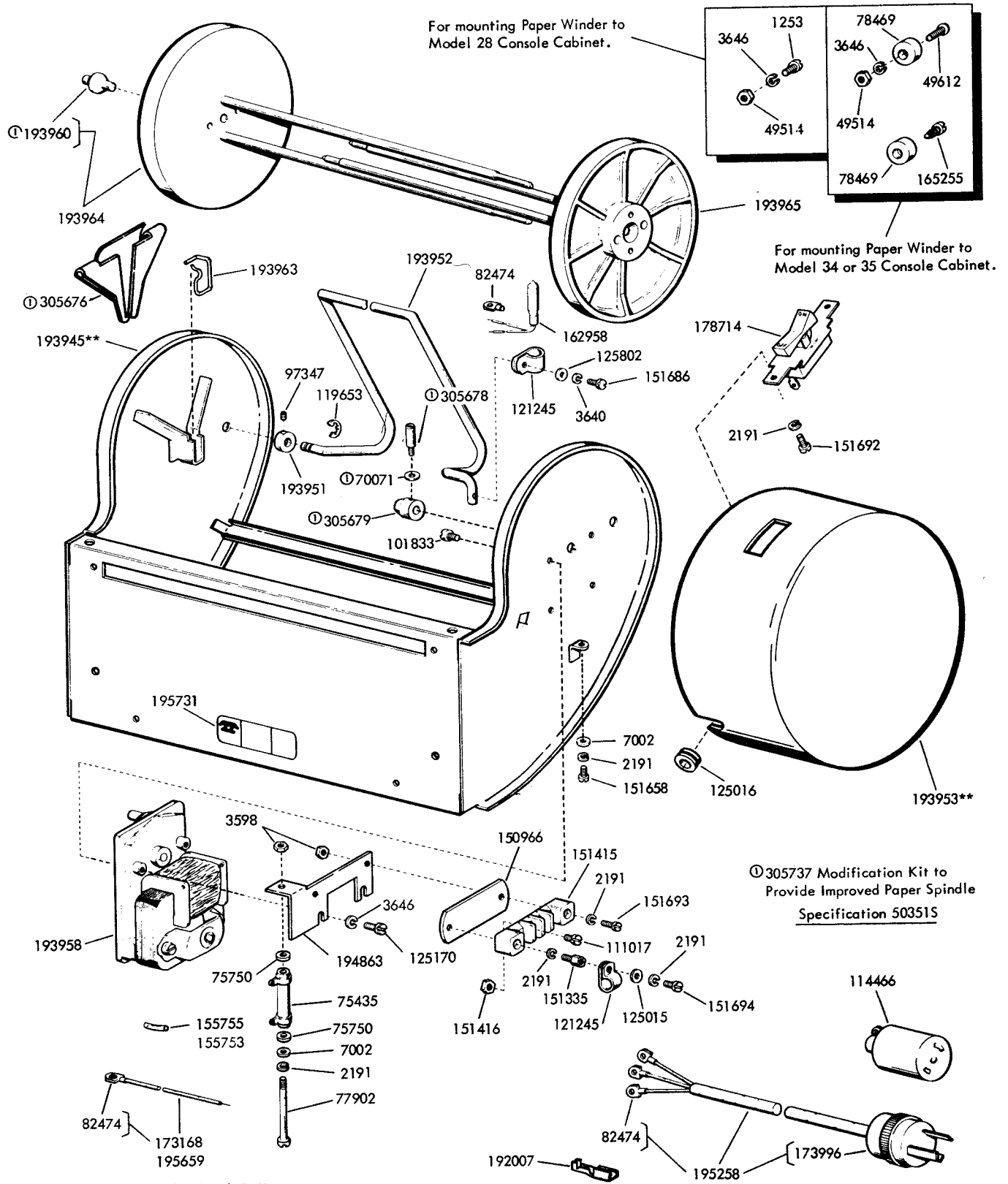
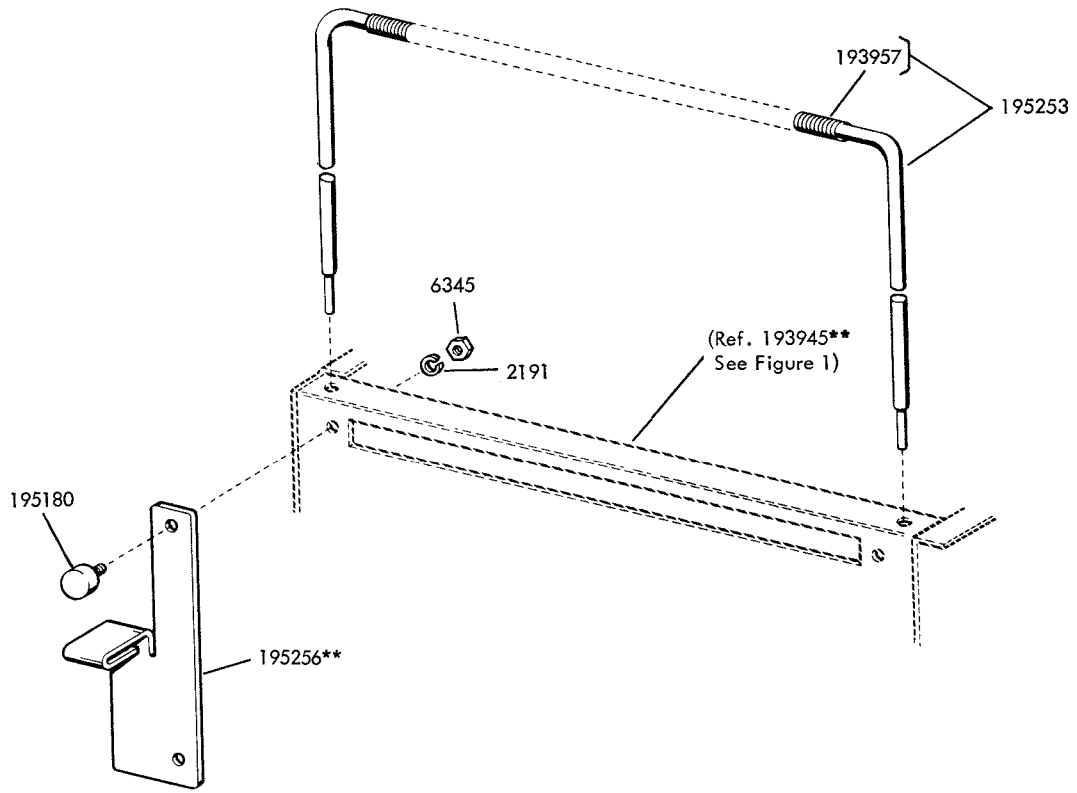
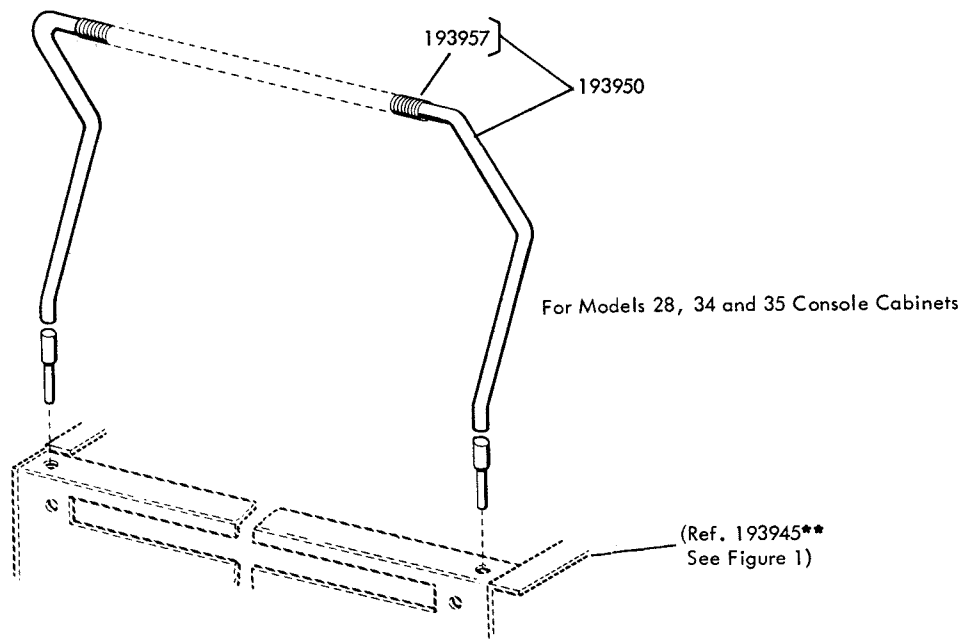


FIGURE 1. PAPER WINDER MECHANISM



195259** Modification Kit to provide copy display for Models 32 and 33 Page Printers

Specification 501435



**Refer to Page 1 for Finish Suffix

Specification 501435

FIGURE 2. COPY DISPLAY RACKS

NUMERICAL INDEX - SECTION 2

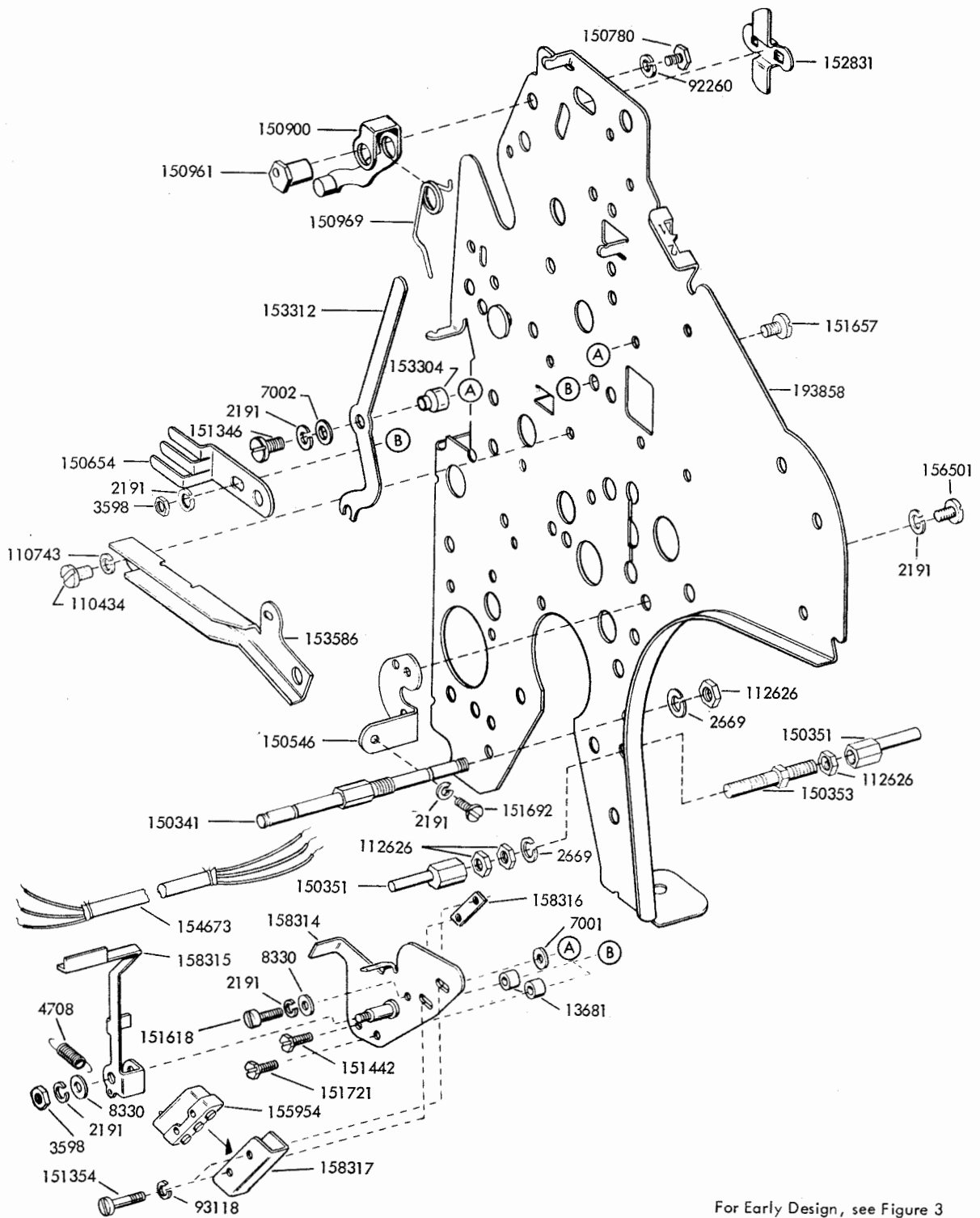
Part Number	Description and Page Number	Part Number	Description and Page Number	Part Number	Description and Page Number
1253	Screw (8-32 x 5/16 Fil) 2	125015	Washer, Flat 2	193950	Rack Assembly, Display 3
2191	Washer, Lock 2,3	125016	Grommet 2	193951	Guide, Paper 2
3598	Nut (6-40 Hex) 2	125170	Screw (8-32 x 5/16 Fil) 2	193952	Bail, Paper Slack 2
3640	Washer, Lock 2	125802	Washer, Flat 2	193953**	Housing, Motor 2
3646	Washer, Lock 2	150966	Insulator 2	193957	Spring 3
6345	Nut (6-32 Hex) 3	151335	Post 2	193958	Motor: 115V, 50/60Cycle, AC 2
7002	Washer, Flat 2	151415	Block, Terminal 2	193960	Pilot 2
45815	Washer, Lock 2	151416	Nut (6-40 Hex) 2	193963	Clip, Spring 2
49514	Nut (8-32 Hex) 2	151658	Screw (6-40 x 5/16 Fil) 2	193964	Flange, Right 2
49612	Screw (8-32 x 9/16 Rd) 2	151686	Screw (4-40 x 3/8 Fil) 2	193965	Flange, Left 2
70071	Washer, Lock 2	151692	Screw (6-40 x 3/16 Fil) 2	194863	Bracket 2
75435	Resistor (600 Ohms) 2	151693	Screw (6-40 x 9/16 Fil) 2	195180	Bumper 3
75750	Washer, Insulating 2	151694	Screw (6-40 x 11/32 Fil) 2	195253	Rack Assembly, Display 3
77902	Screw (6-40 x 2-3/8 Rd) 2	155753	Sleeve, Insulating (1/8x1/2) 2	195256**	Hanger 3
78469	Foot, Rubber 2	155755	Sleeve, Insulating (11/64 x 5/8) 2	195258	Cable Assembly 2
82474	Terminal 2	162958	Switch, Mercury 2	195259**	Modification Kit 3
97347	Screw, Set (4-40 x 1/8) 2	165255	Screw, Sheet Metal (#8) 2	195659	Jumper (3" Black) 2
101833	Screw (8-32 x 5/16 Fil) 2	173168	Jumper (4-1/2" Black) 2	195731	Plate, Identification 2
111017	Screw (6-40 x 5/16 Fil) 2	173996	Connector, Plug (3 Pt) 2	305676	Retainer 2
114466	Connector, Receptacle (3 Pt) 2	178714	Switch (On-Off) 2	305678	Post 2
119653	Ring, Retaining 2	192007	Terminal, Tab Type 2	305679	Bearing 2
121245	Clamp, Cable (5/16" ID) 2	193945**	Bracket 2	305737	Modification Kit 2

**Refer to Page 1 for Finish Suffix

28 and 29 TYPING UNIT (LP)
PARTS

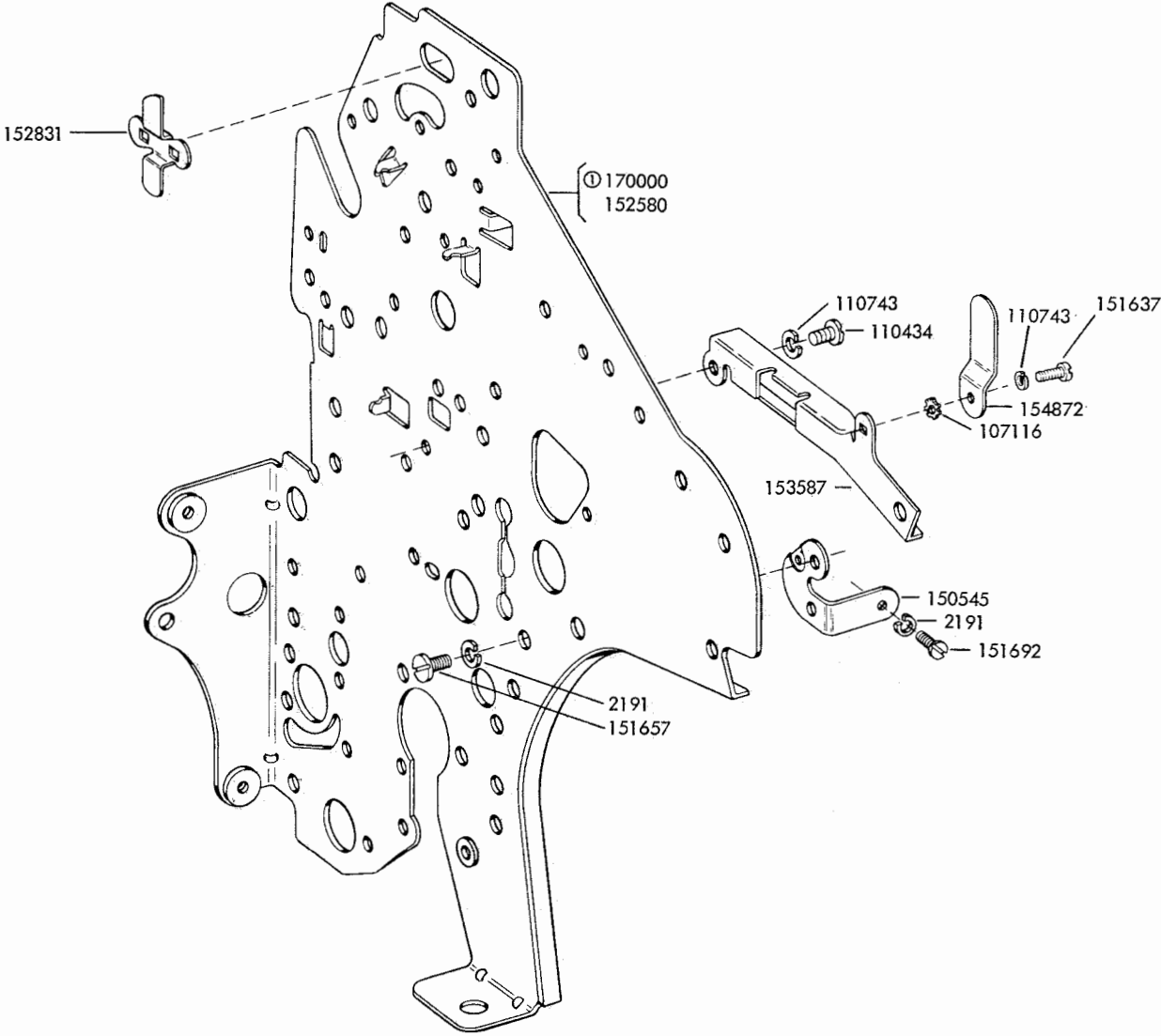
FIGURE	CONTENTS	PAGE	FIGURE	CONTENTS	PAGE
1	Left Side Frame Mechanism	4	50	Type Box and Pallets	53
2	Right Side Frame Mechanism	5	51	Type Box and Pallets	54
3	Left and Right Side Frame Mechanism	6	52	Typepallet Chart	55
4	Left and Right Side Frame Mechanism	7	53	Typepallet Charts	56
5	Left and Right Side Frames (Wall Mounted)	8	54	Typepallet Charts	57
6	Pressure Roller Mechanism	9	55	Stunt Box - Major Components	58
7	Pressure Roller Mechanism	10	56	Stunt Box - Major Components	59
8	Space Suppression Mechanism	11	57	Shift Mechanism Components	60
9	Space Suppression, Stunt Shift Control and Code Bar Suppression Mechanism (8 Level)	12	58	Function Levers	61
10	Space Suppression Mechanism	13	59	Switch Assemblies and Components	62
11	Print Suppression Mechanism	14	60	Switch Assemblies and Components	63
12	Electrically Operated Letters Shift Mechanism	15	61	Cable Assemblies	64
13	Page Feed-Out and Form Starter Mechanism	16	62	Function Bars	65
14	Paper Spindle and Reset Bail Mechanism	17	63	Function Bar Condition Chart	66
15	Paper Spindle and Reset Bail Mechanism	18	64	Function Bar Condition Chart	67
16	Reset Bail Mechanism	19	65	152302 (Sprocket Feed) and 155763 (Friction Feed) Modification Kits to Provide Page Feed-Out on Upper Case "Z"	68
17	Sprocket Feed Mechanism	20	66	152303 and 176821 Modification Kits to Provide Page Feed-Out Transmitter Control	69
18	Line Feed and Platen Mechanism	21	67	154780, 164476 and 178141 Modification Kits to Provide Horizontal Tabulator XD Control	69
19	Left Side Linkage and Rocker Shaft Mechanism	22	68	Page Feed-Out Form Length Gear and Disk Modification Kits	70
20	Left Side Linkage and Stripper Blade Mechanism	23	69	152304 Modification Kit to Provide Horizontal Tabulation (Continued on next page)	71
21	Right Side Linkage and Type Box Carriage Mechanism	24	70	152304 Modification Kit to Provide Horizontal Tabulation (Continued from preceding page)	72
22	Right Side Linkage and Type Box Carriage Mechanism	25	71	159362 Modification Kit to Provide Spacers for Centering Narrow Paper Roll on Spindle	73
23	Main Shaft Mechanism	26	72	151799 Modification Kit to Provide Latches for Paper Spindle	73
24	Main Shaft Mechanism	27	73	152315 and 154743 Modification Kits to Provide Manual Selection of Stunt Box Operation	73
25	Line Feed Clutch and Function Clutch Mechanism	28	74	154727 Modification Kit to Provide Auxiliary Connector	74
26	Trip Shaft Mechanism	29	75	152317 Modification Kit to Provide Horizontal Tabulator XD Control	74
27	Trip Shaft Mechanism	30	76	152337, 157509 and 173283 Modification Kits to Provide On-Line Stunt Shift Control	75
28	Carriage Return and Spacing Drum Mechanism	31	77	153912 Modification Kit to Provide Figs-Ltrs Code Bar Manual Shifting	76
29	Carriage Return and Spacing Drum Mechanism	32	78	152312 Modification Kit to Convert Printer for Use with Lightweight Set	76
30	Front Plate Mechanism	33	79	160886 and 194093 Modification Kits to Provide Local Form Feed-Out (Receiving Only Base)	76
31	Front Plate Mechanism	34	80	152340 Modification Kit to Provide Multi-Copy Paper Handling	77
32	Front Plate Mechanism	35			
33	Front Plate Mechanism (8 Level)	36			
34	Front Plate Mechanism	37			
35	Front Plate Mechanism	38			
36	Code Bar Positioning Mechanism	39			
37	Code Bar Positioning Mechanism (8 Level)	40			
38	Code Bar Positioning Mechanism	41			
39	Selector Mechanism	42			
40	Selector Mechanism (8 Level)	43			
41	Selector Knob Mechanism	44			
42	Selector Magnet Mechanism	45			
43	Selector Magnet Mechanism (8 Level)	46			
44	Selector Magnet Mechanism	47			
45	Right Ribbon Feed Mechanism	48			
46	Left Ribbon Feed Mechanism	49			
47	Code Bar Mechanism	50			
48	Code Bar Mechanism	51			
49	150036 Printing Carriage Assembly	52			

FIGURE	CONTENTS	PAGE	FIGURE	CONTENTS	PAGE
81	153910 Modification Kit to Provide Function Suppression for "AZ" Stunt Box	77	105	152917 and 157510 Modification Kits to Provide Local Back Space	95
82	152345 Modification Kit to Provide Off-Line Stunt Shift Control	78	106	161280 Modification Kit to Provide On-Line Reverse Line Feed	96
83	152350 Modification Kit to Provide Keyboard Lock	79	107	163183 Modification Kit to Provide D.C. Magnet Operated Print Suppression	97
84	153919 Modification Kit to Provide Auxiliary Connector	79	108	163947 Modification Kit to Provide Improved Manual Platen Line Feed	98
85	152915 and 157511 Modification Kits to Provide Local Reverse Line Feed	80	109	163535 and 178301 Modification Kits to Provide Transmitter Control for the Vertical Tabulator	98
86	Sprocket Feed Paper Handling Modification Kits (Typing Unit and Cabinet)	81	110	164270 Modification Kit to Provide Copy Display	99
87	Sprocket Feed Paper Handling Modification Kits (Wall Mounted Typing Unit and Cabinet)	82	111	157514 Modification Kit to Provide Automatic Carriage Return and Line Feed	100
88	153911 Modification Kit to Provide Continuous Spacing (Continued on next page)	83	112	172181 Modification Kit to Provide Copy Display	100
89	153911 Modification Kit to Provide Continuous Spacing (Continued from preceding page)	84	113	163146 Modification Kit to Provide Universal Contact	101
90	152348 Automatic Carriage Return and Line Feed and 153945 "O" Code Bar and Bellcrank Modification Kits	85	114	159366 Modification Kit to Provide a Friction Feed Printer with Paper-Out Alarm	102
91	154742 Modification Kit to Provide Four Lines Per Inch	85	115	179369 Modification Kit to Provide Copy Display	103
92	155051 Auxiliary Cable Assembly	86	116	Selective Calling Function Lever Modification Kits	104
93	154753 Modification Kit to Provide Auxiliary Connector	86	117	179724 Modification Kit to Provide Two Color Ribbon Printing - Right Side (Continued on next page)	105
94	154755 Modification Kit to Provide 5 Spaces Per Inch Horizontally	87	118	179724 Modification Kit to Provide Two Color Ribbon Printing - Left Side (Continued from preceding page)	106
95	159395 Modification Kit to Provide 6 Spaces Per Inch Horizontally	87	119	194995 and 199245 Modification Kits to Provide Paper Jam Alarm	107
96	163292 Modification Kit to Provide 8 Spaces Per Inch Horizontally	87	120	174043 Modification Kit to Provide Paper Feed Failure Indicator	108
97	154792 Modification Kit to Provide 12 Spaces Per Inch Horizontally	87	121	198394 Modification Kit to Provide Universal Contacts	109
98	Vertical Tabulation Modification Kits	88	122	176420 Modification Kit to Provide Selector with Timing Contacts	110
99	154770 Modification Kit to Provide Vertical Tabulation on Upper Case "J" and "Z" (Includes the 163535 Modification Kit in Figure 109)	89	123	154798 Modification Kit to Provide Superfold Friction Feed Paper Handling	111
100	154778 Modification Kit to Provide External Pulse Shift Feature (Continued on next page)	90	124	194092 Modification Kit to Provide Paper Motion Alarm	112
101	154778 Modification Kit to Provide External Pulse Shift Feature (Continued from preceding page)	91	125	194324 Modification Kit to Provide a Paper-Out Alarm Switch	113
102	154785 Modification Kit to Provide Universal Contacts	92	126	305035, 305036 and 307065 Modification Kits to Provide Improved Manual Platen Line Feed	114
103	157508 and 163180 Modification Kits to Provide Horizontal Tabulation (Continued on next page)	93		Notes of Explanation	115
104	157508 and 163180 Modification Kits to Provide Horizontal Tabulation (Continued from preceding page)	94		Notes of Explanation (Continued)	116
				Numerical Index	117



For Early Design, see Figure 3

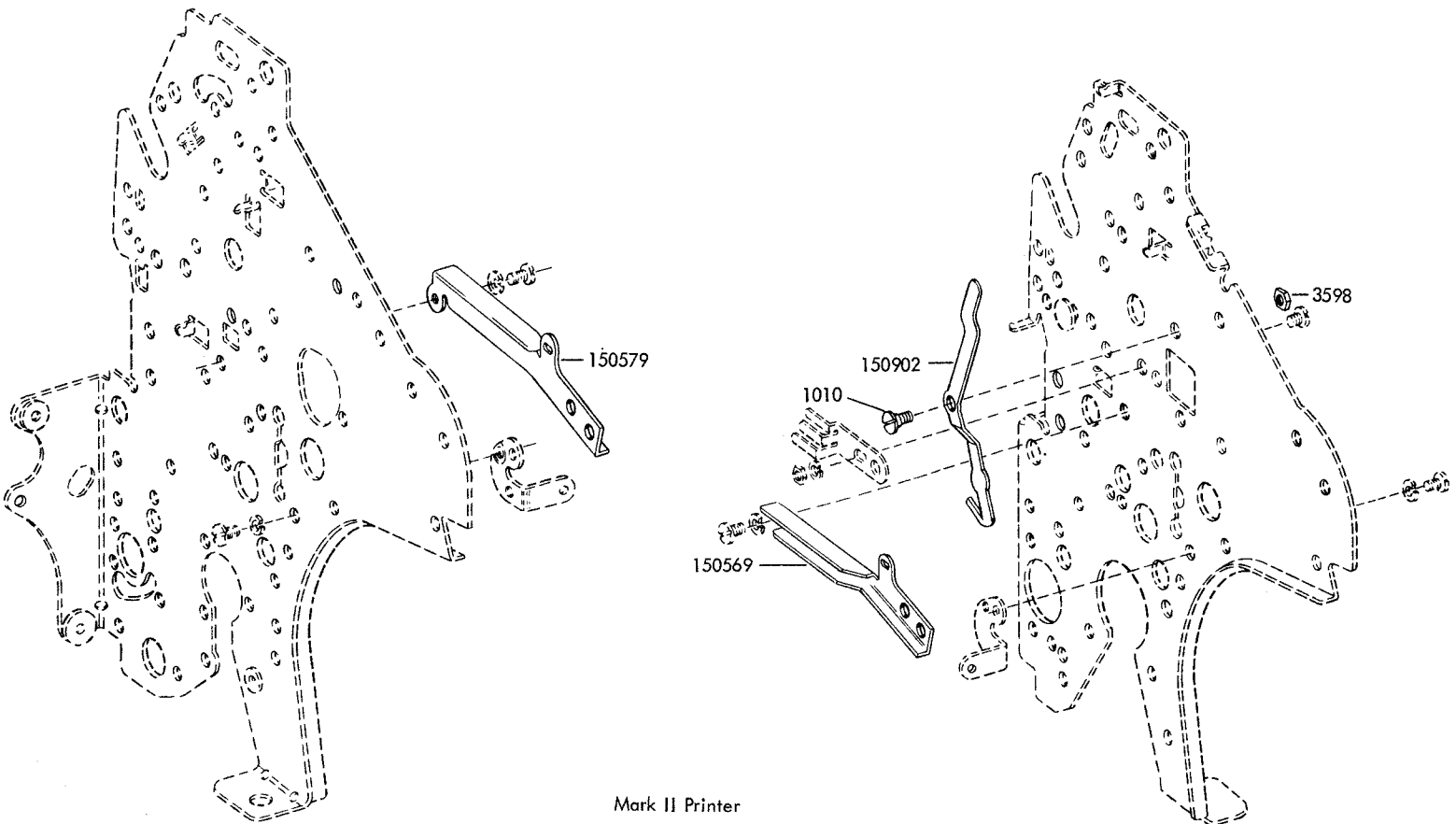
FIGURE 1. LEFT SIDE FRAME MECHANISM



① Peculiar to 8 Level Units

For Early Design, see Figure 3

FIGURE 2. RIGHT SIDE FRAME MECHANISM



Mark II Printer

Early Design Parts

FIGURE 3. LEFT AND RIGHT SIDE FRAME MECHANISM

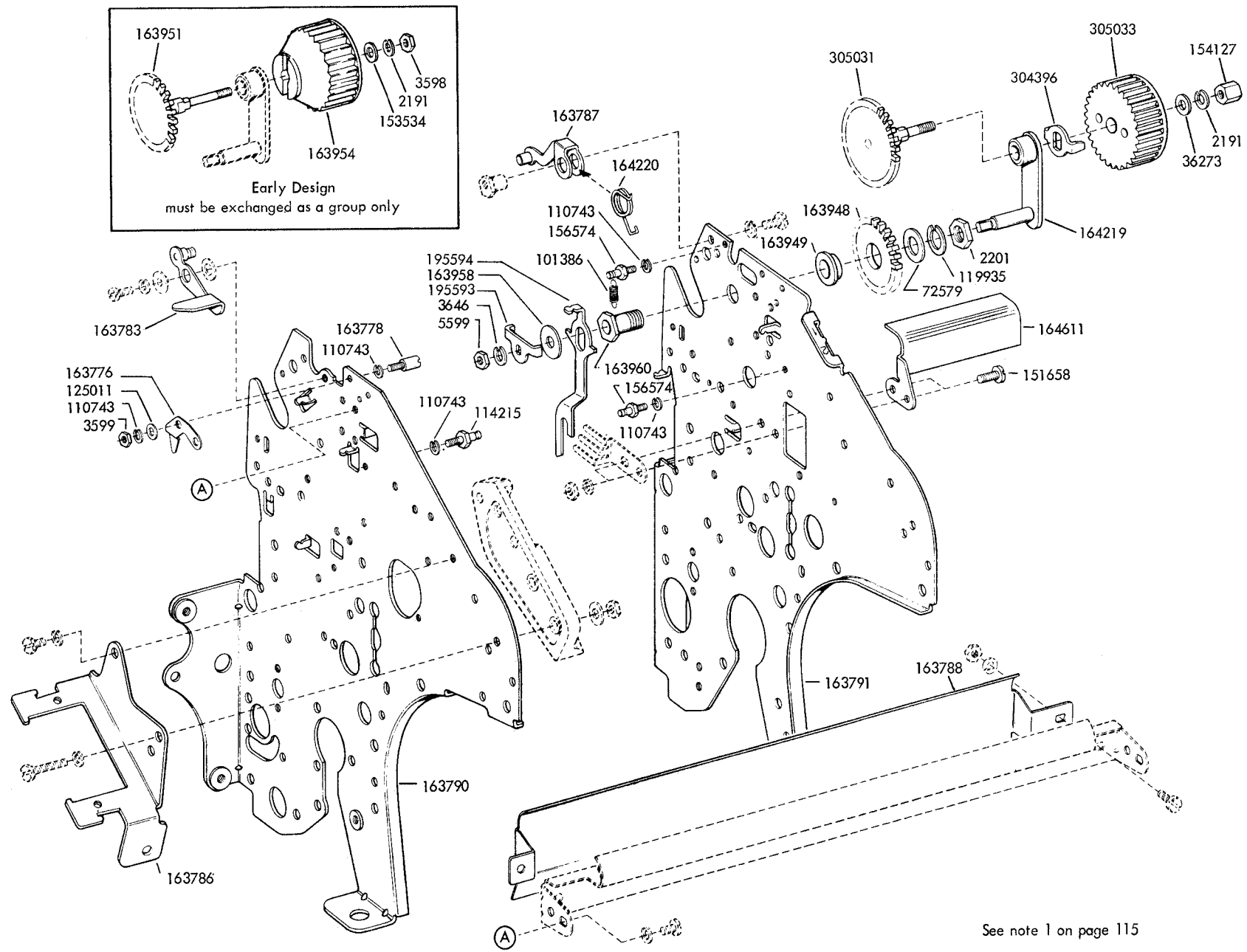


FIGURE 4. LEFT AND RIGHT SIDE FRAME MECHANISM

See note 1 on page 115

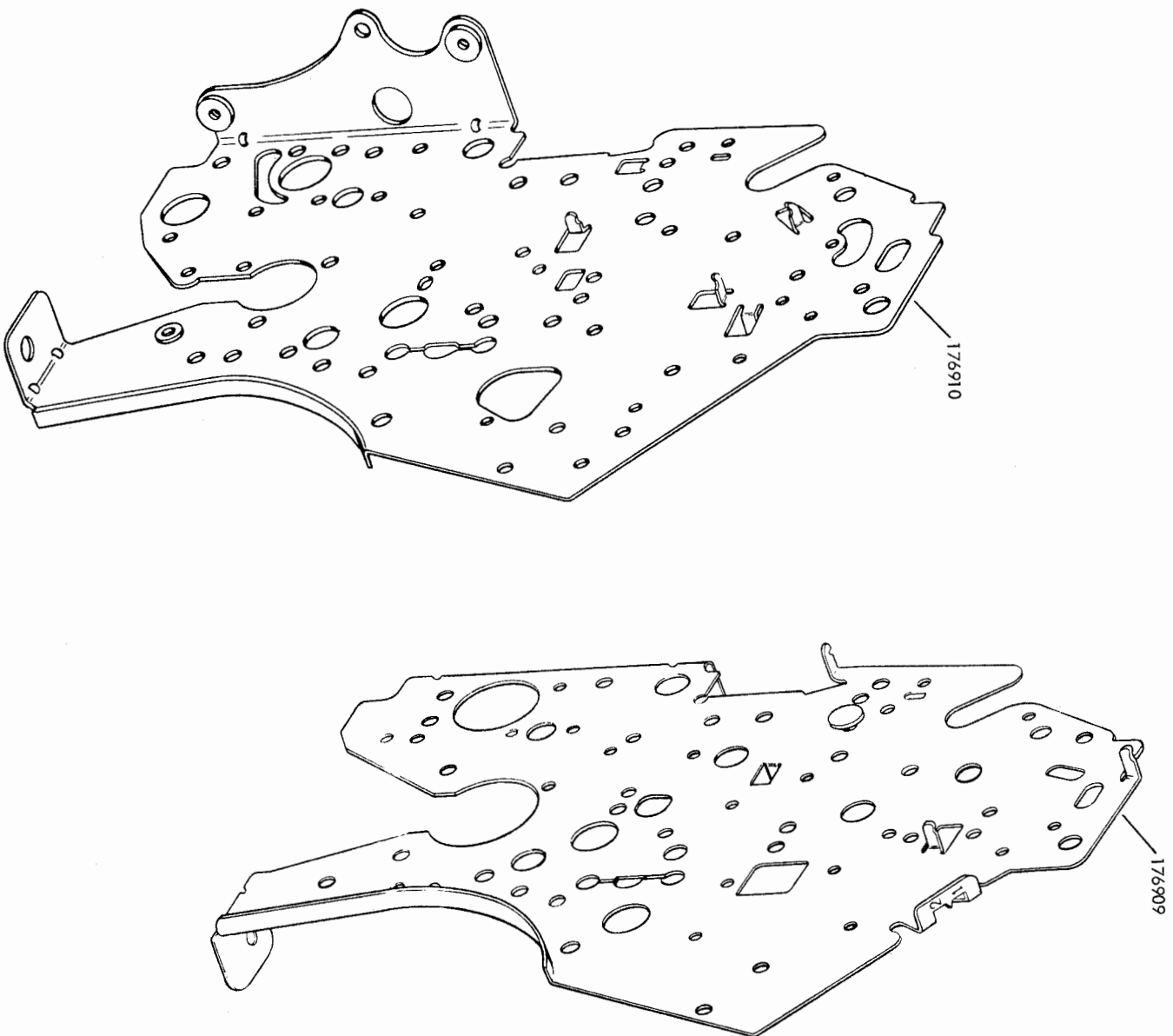
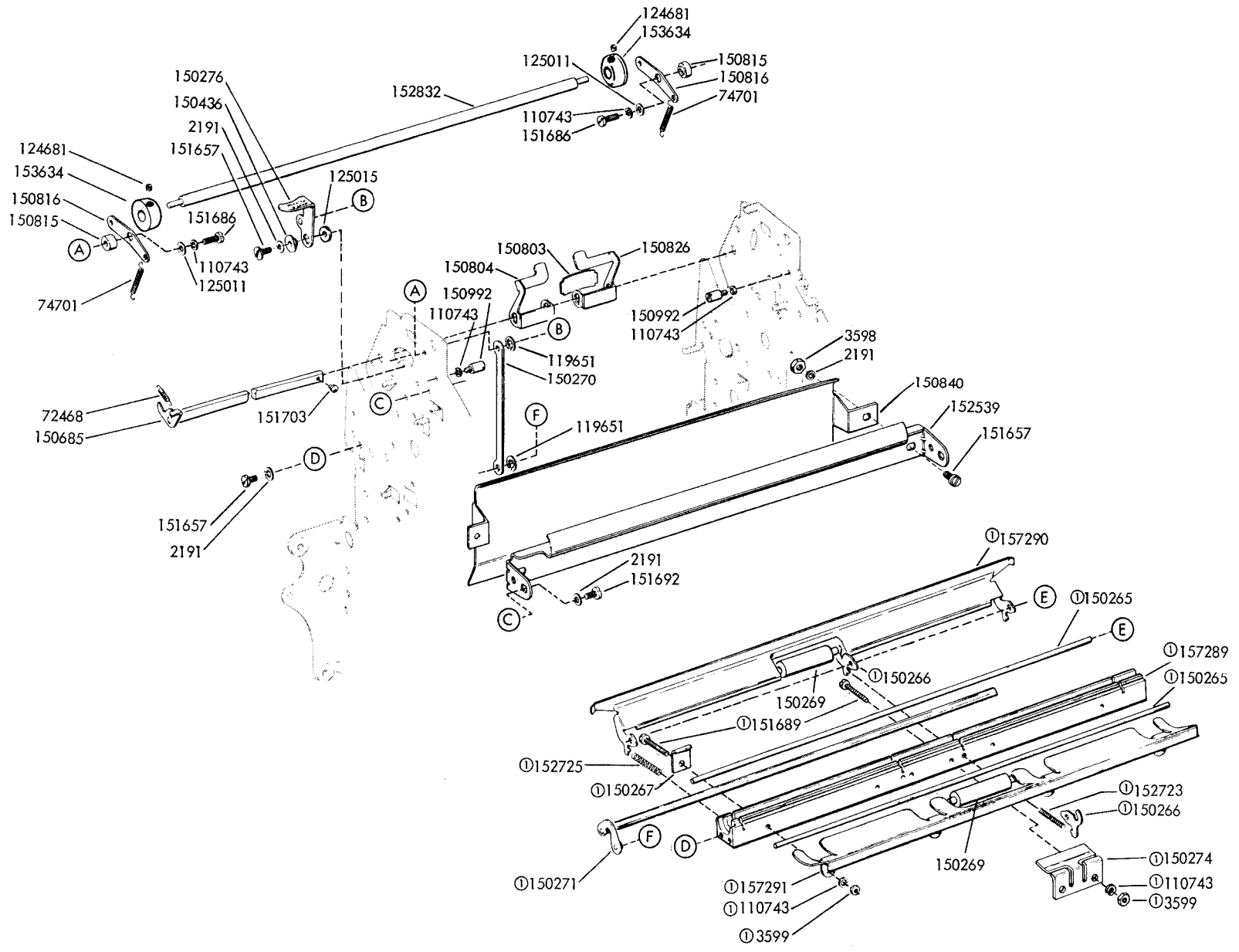


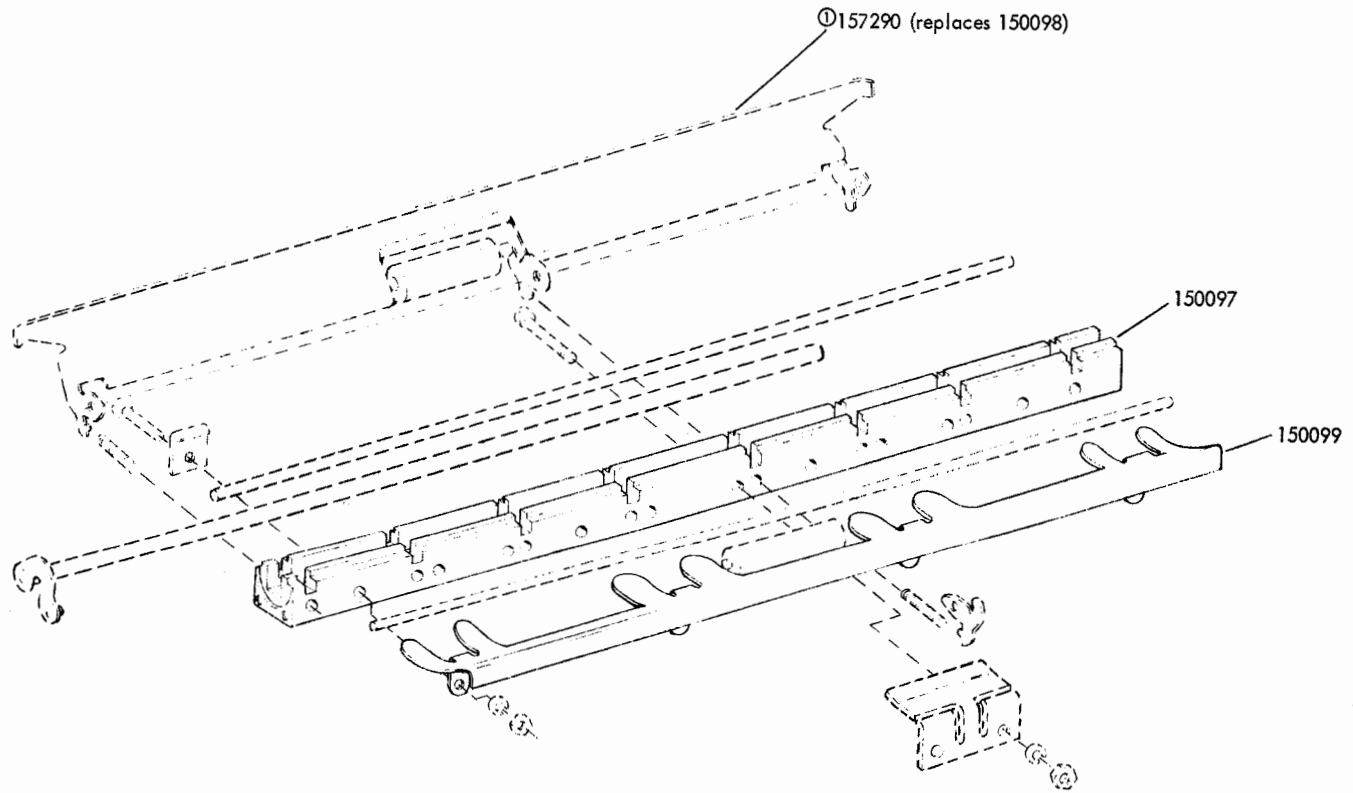
FIGURE 5. LEFT AND RIGHT SIDE FRAMES (WALL MOUNTED)

FIGURE 6. PRESSURE ROLLER MECHANISM



① 150096 Pressure Roller Assembly
For Early Design, see Figure 7

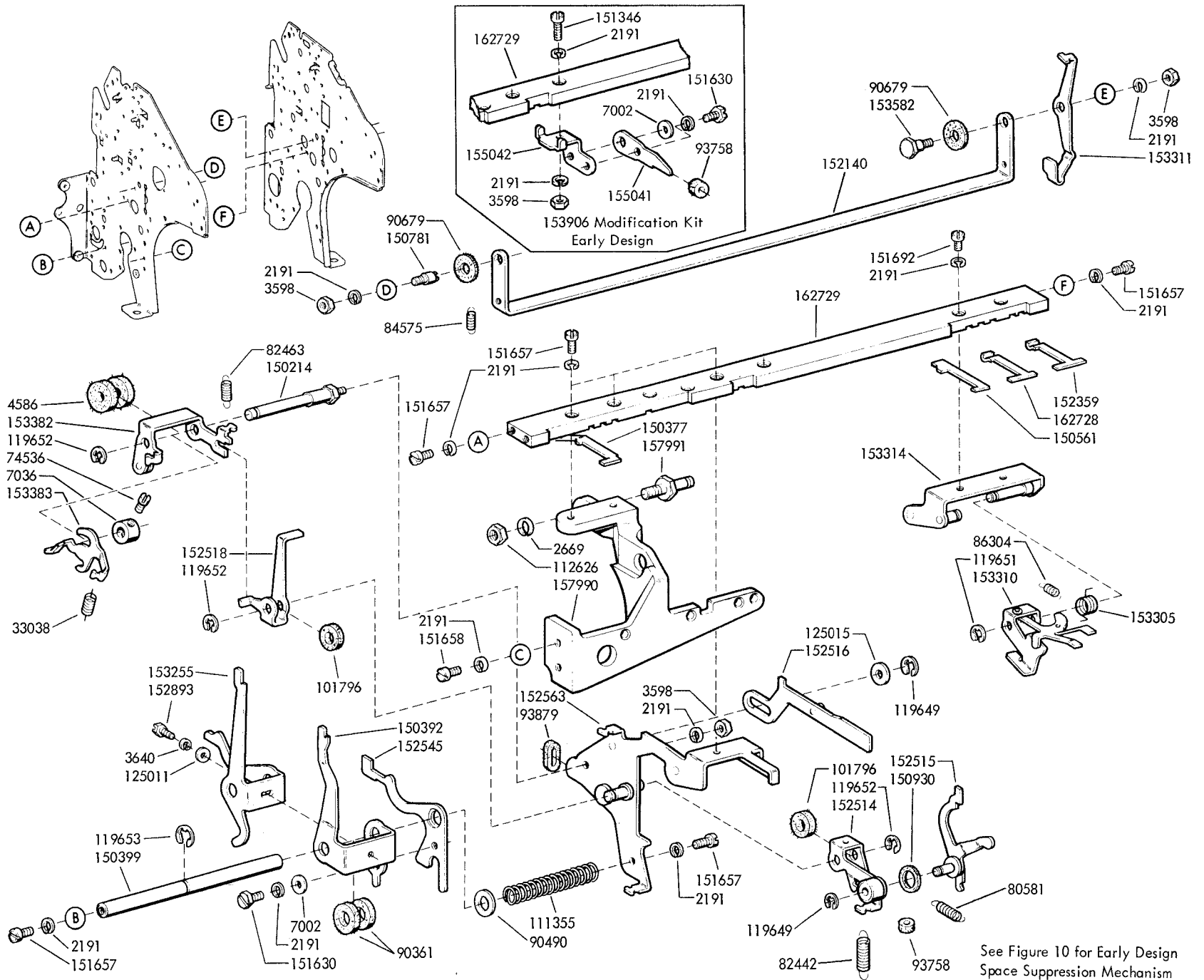
FIGURE 7. PRESSURE ROLLER MECHANISM



Early Design Parts

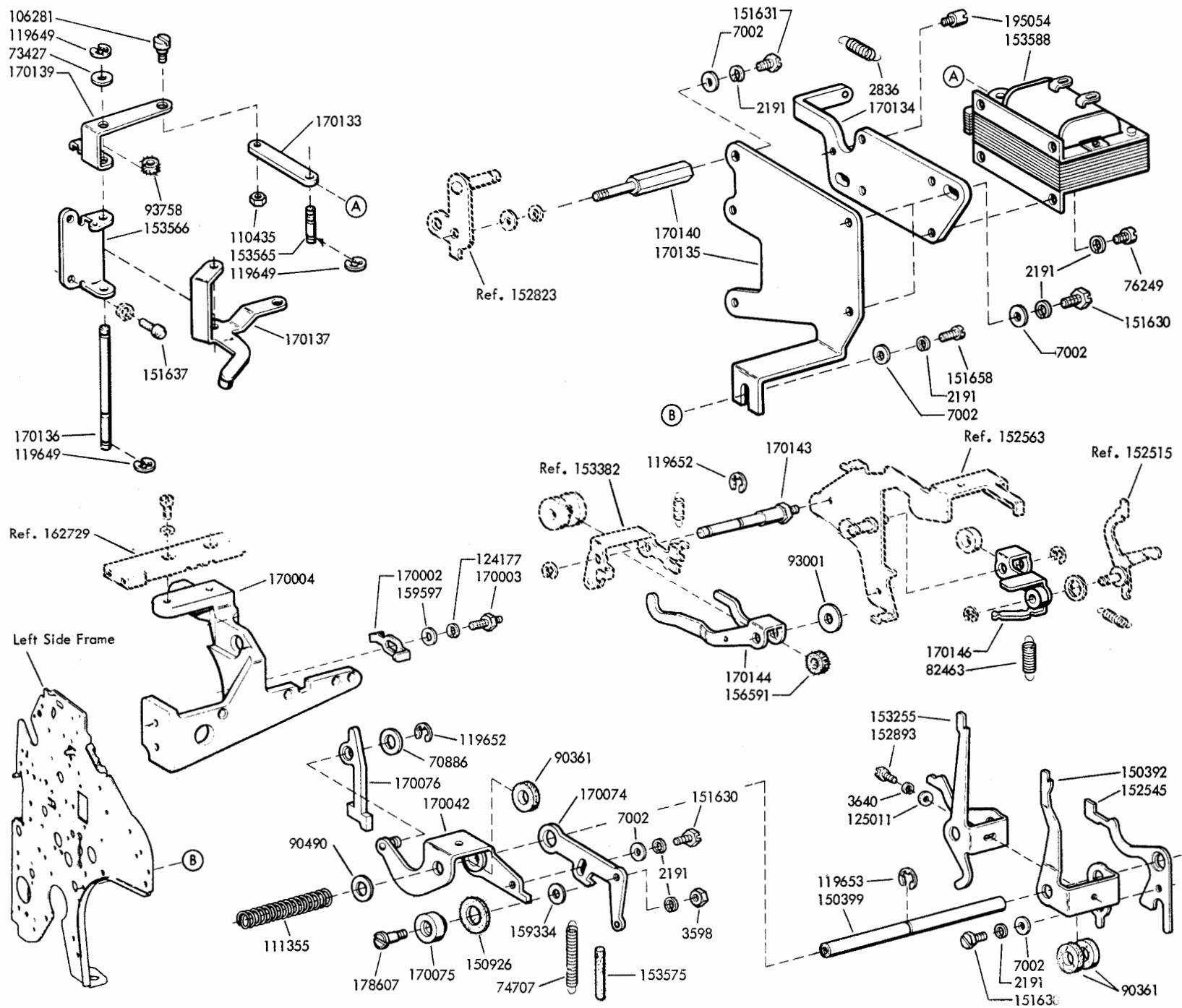
See note 2 on page 115

FIGURE 8. SPACE SUPPRESSION MECHANISM



See Figure 10 for Early Design Space Suppression Mechanism

FIGURE 9. SPACE SUPPRESSION, STUNT SHIFT CONTROL AND CODE BAR SUPPRESSION MECHANISM (8 LEVEL)



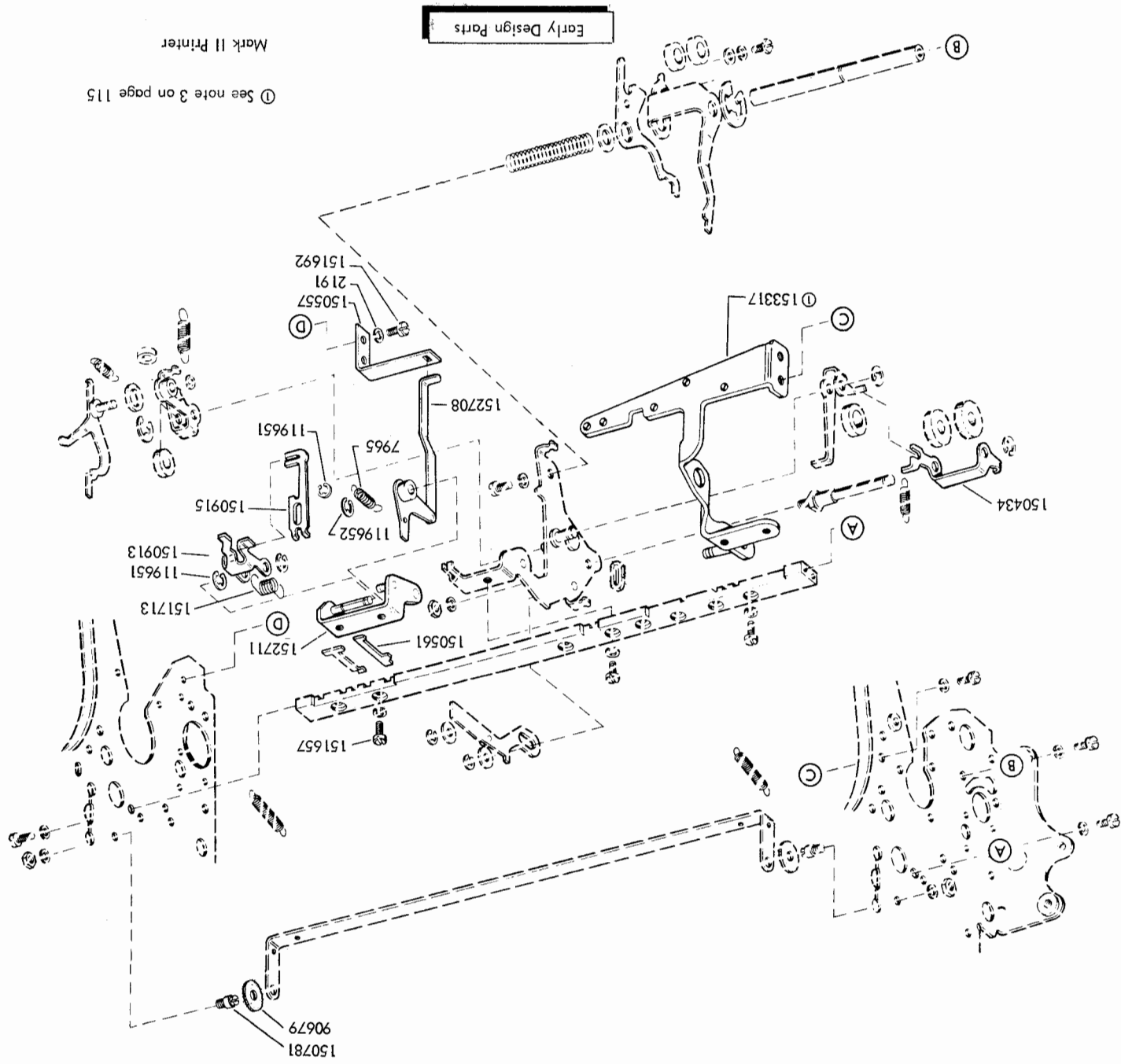
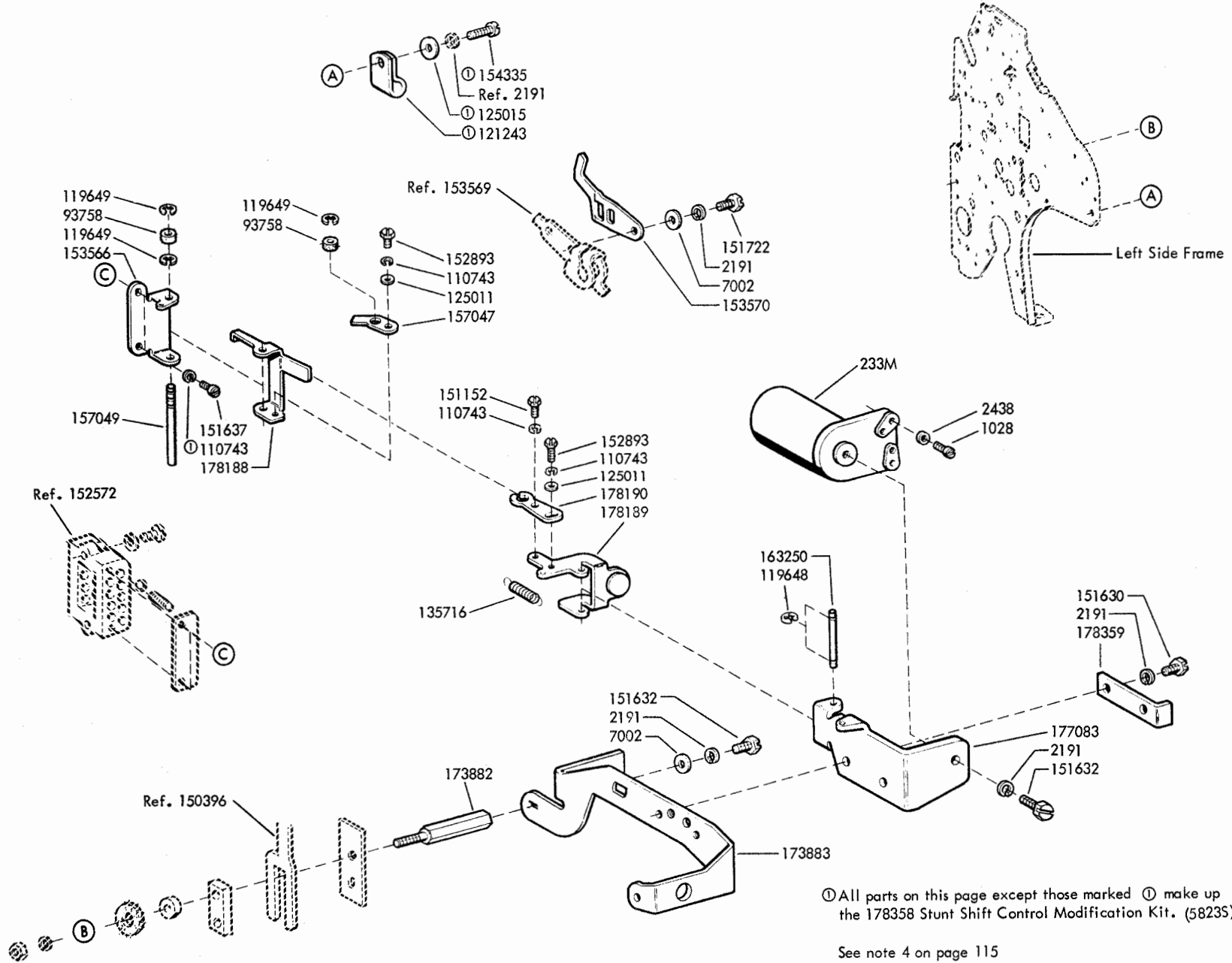


FIGURE 10. SPACE SUPPRESSION MECHANISM

FIGURE 11. PRINT SUPPRESSION MECHANISM



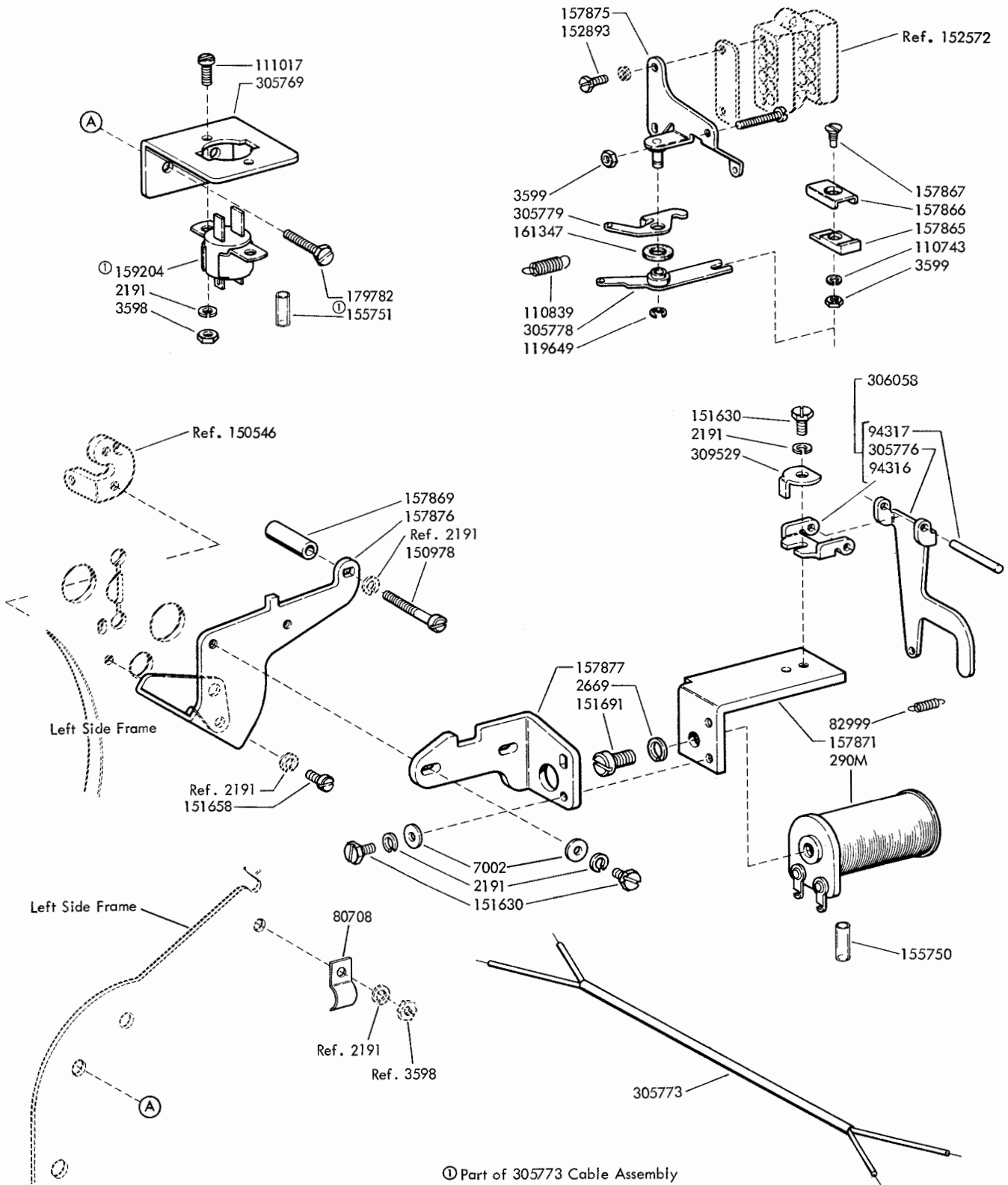
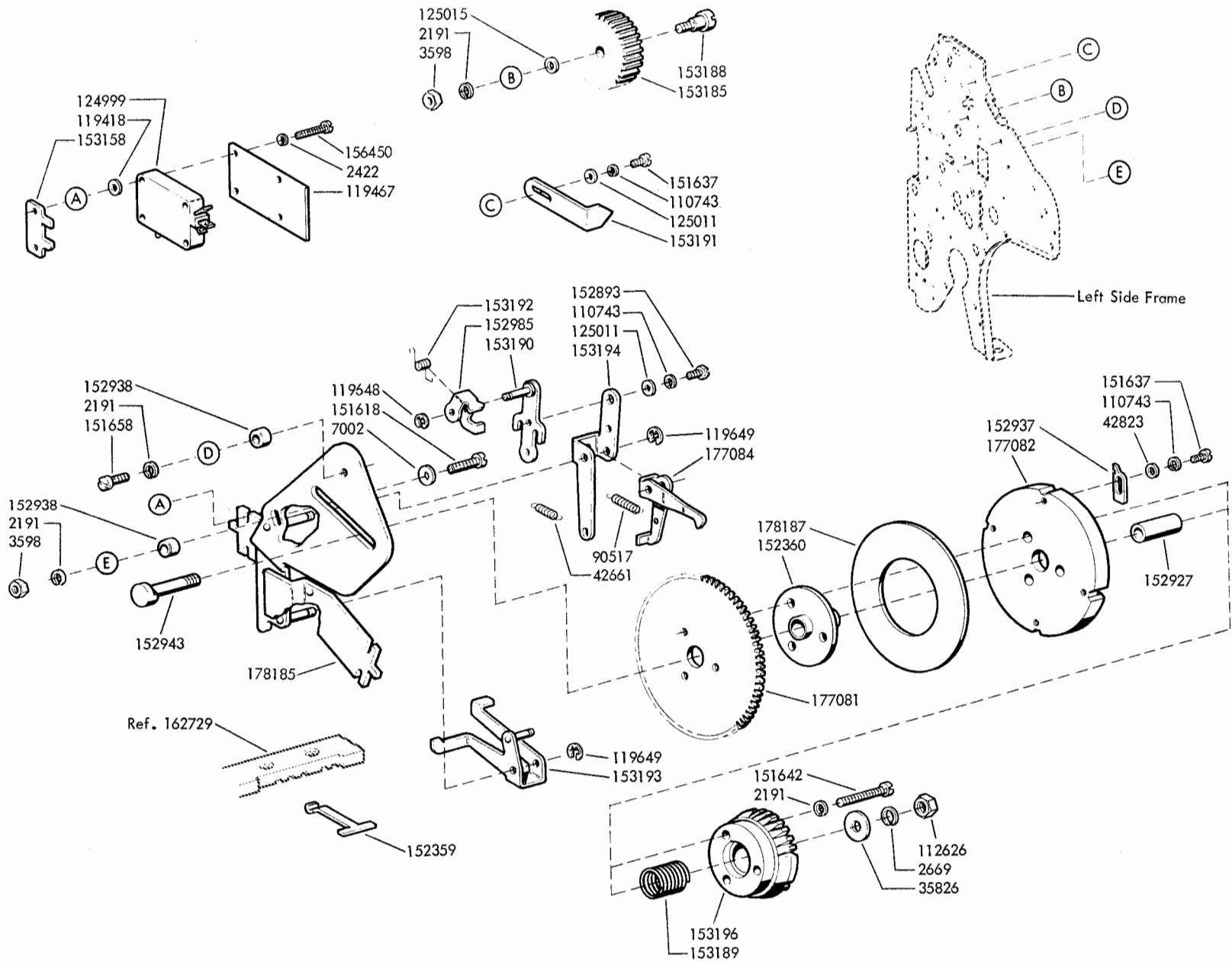


FIGURE 12. ELECTRICALLY OPERATED LETTERS SHIFT MECHANISM

FIGURE 13. PAGE FEED-OUT AND FORM STARTER MECHANISM



See note 4 on page 115

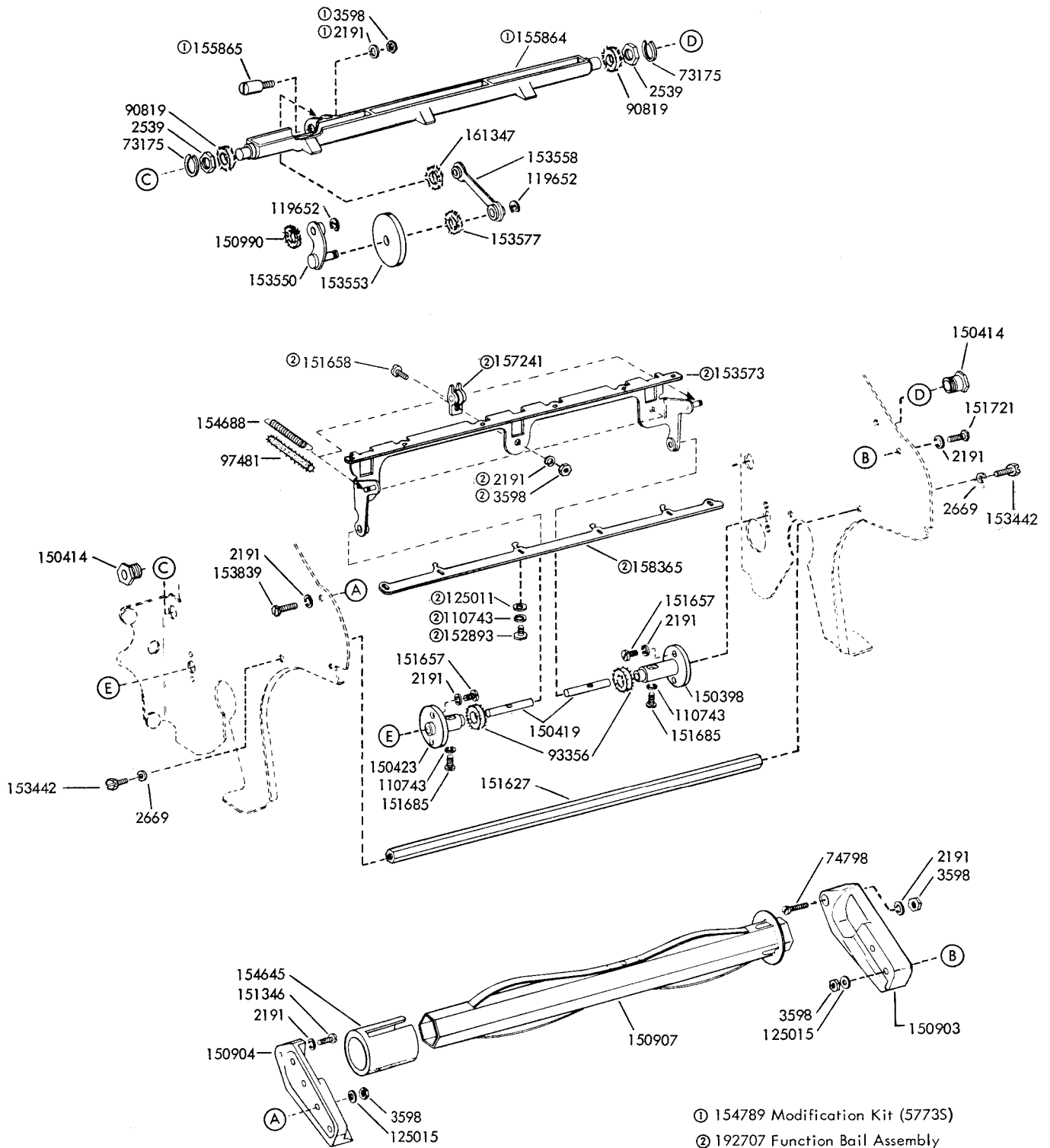
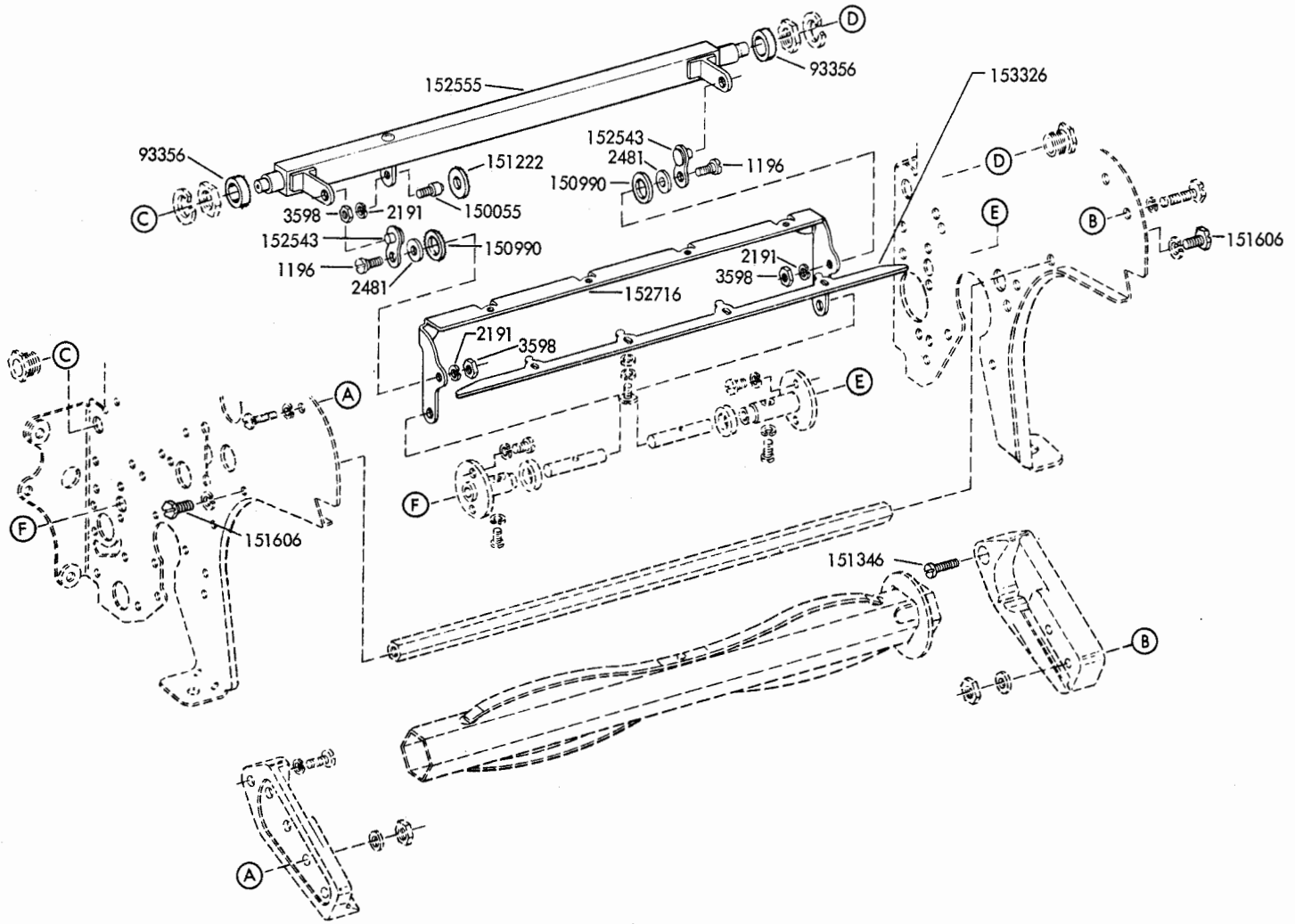


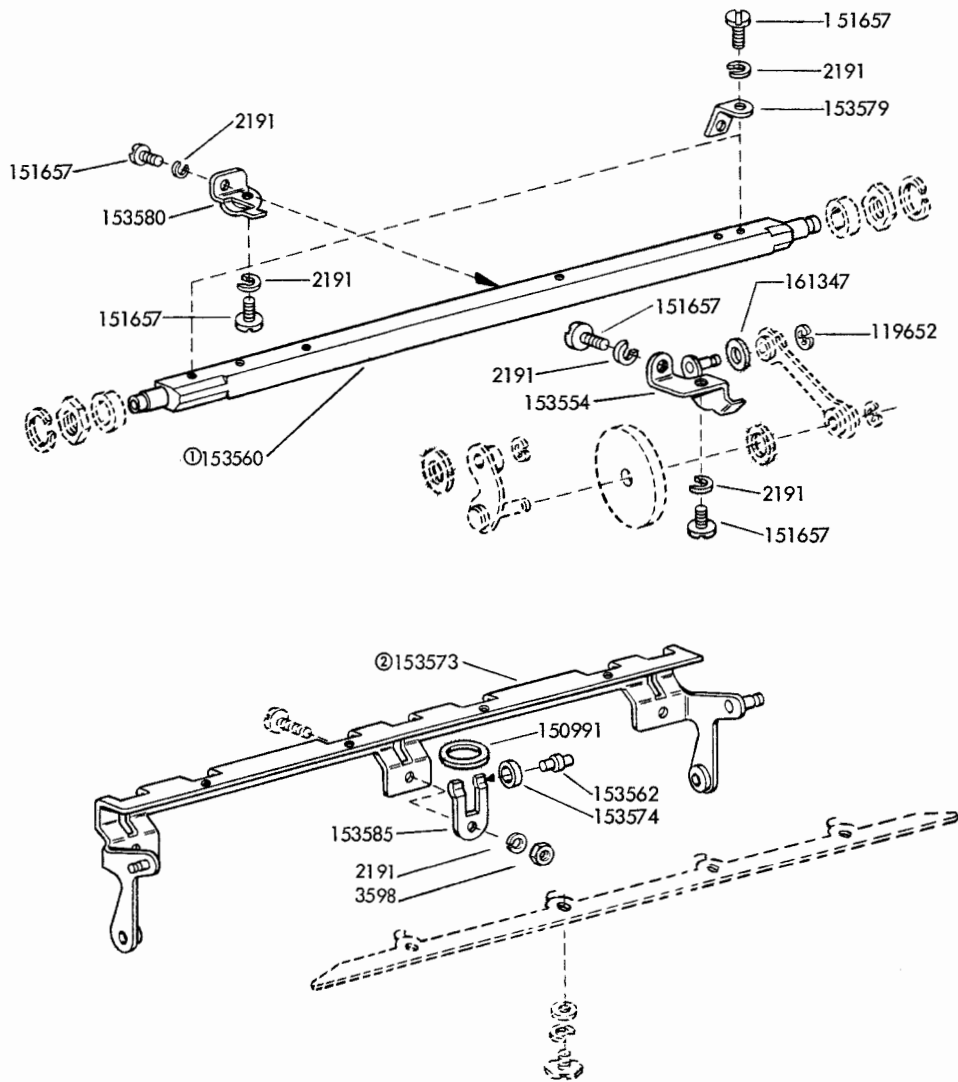
FIGURE 14. PAPER SPINDLE AND RESET BAIL MECHANISM

FIGURE 15. PAPER SPINDLE AND RESET BALL MECHANISM



Mark II Printer

Early Design Parts

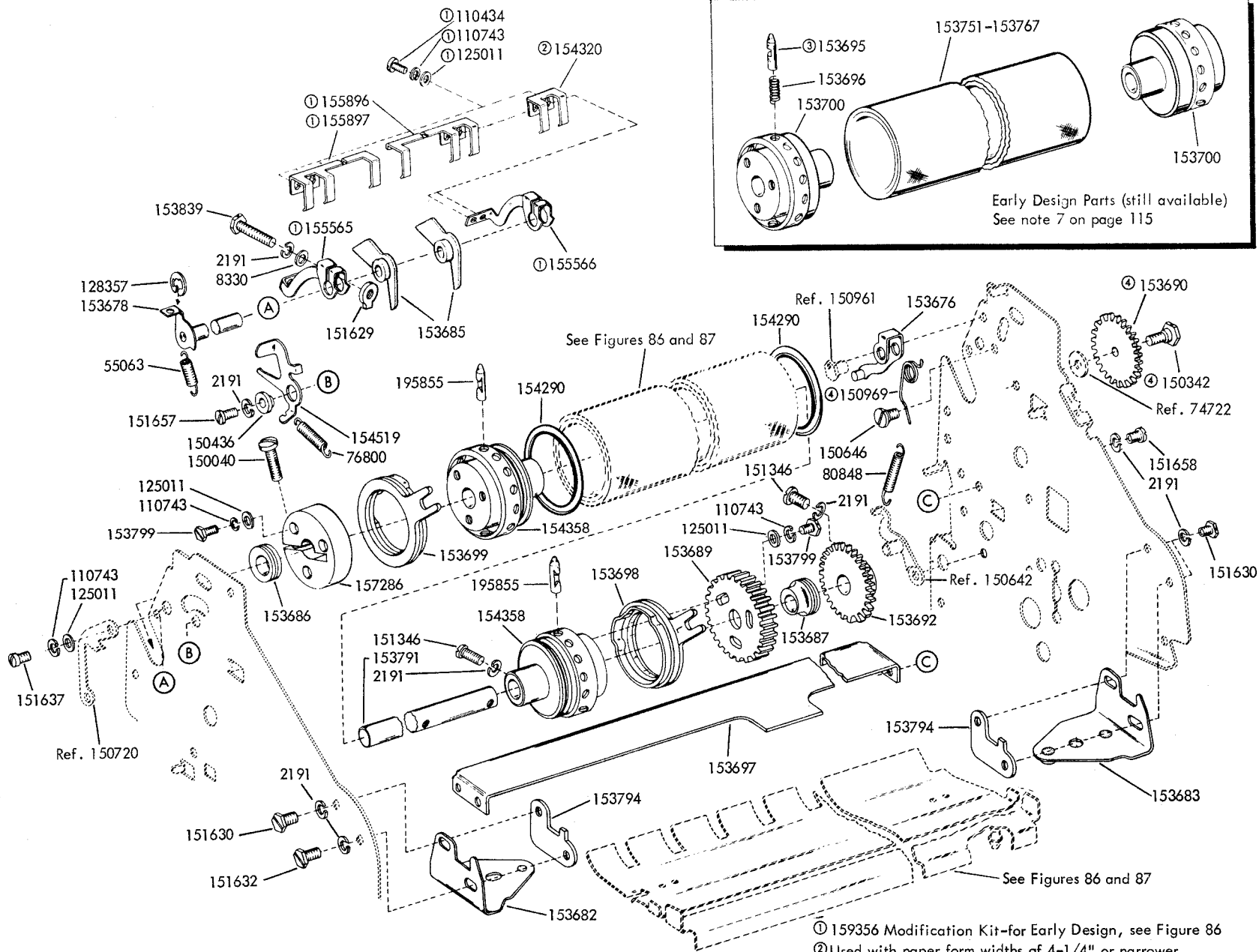


Early Design Parts

- ① See note 5 on page 115
- ② See note 6 on page 115

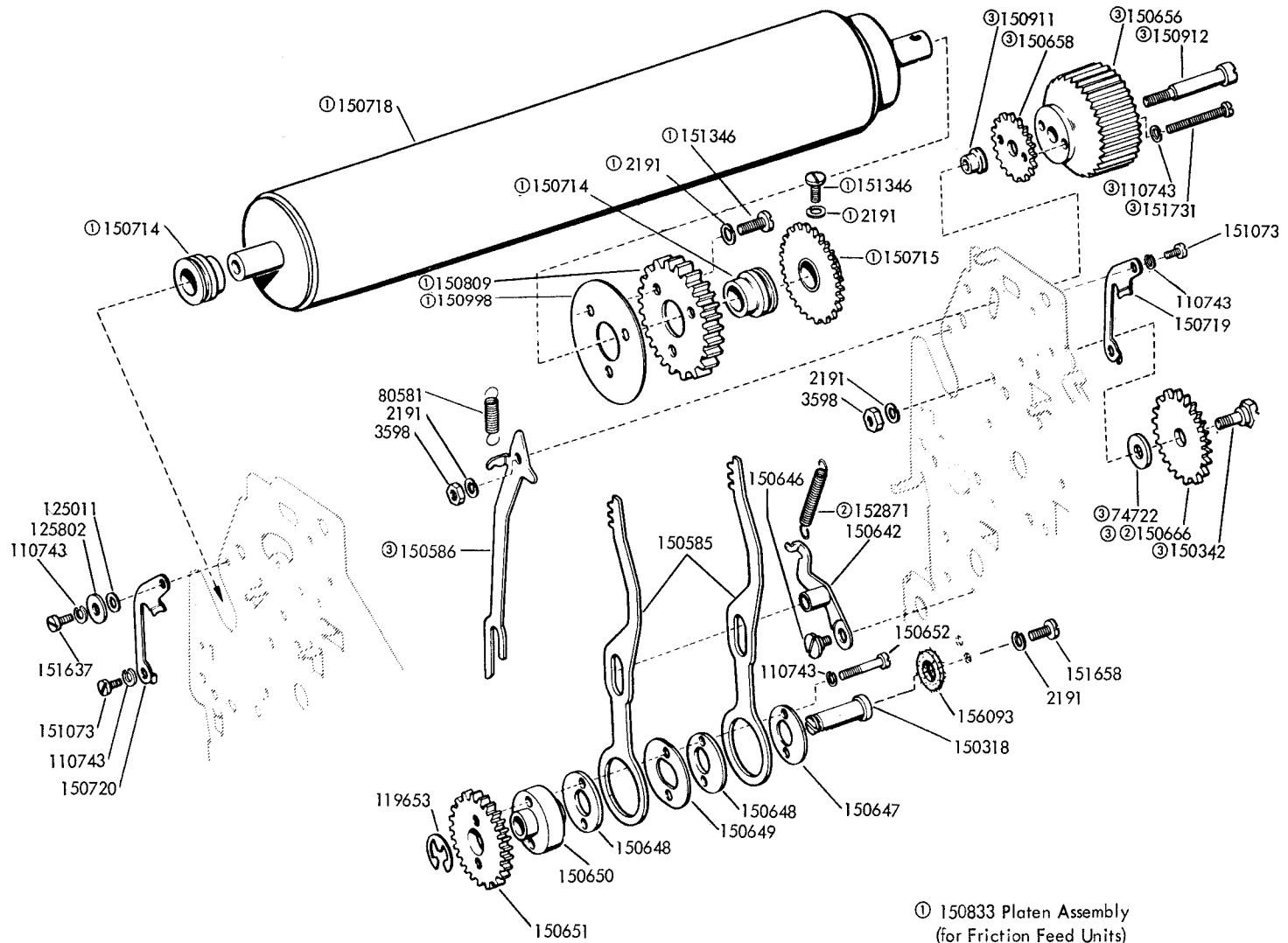
FIGURE 16. RESET BAIL MECHANISM

FIGURE 17. SPROCKET FEED MECHANISM

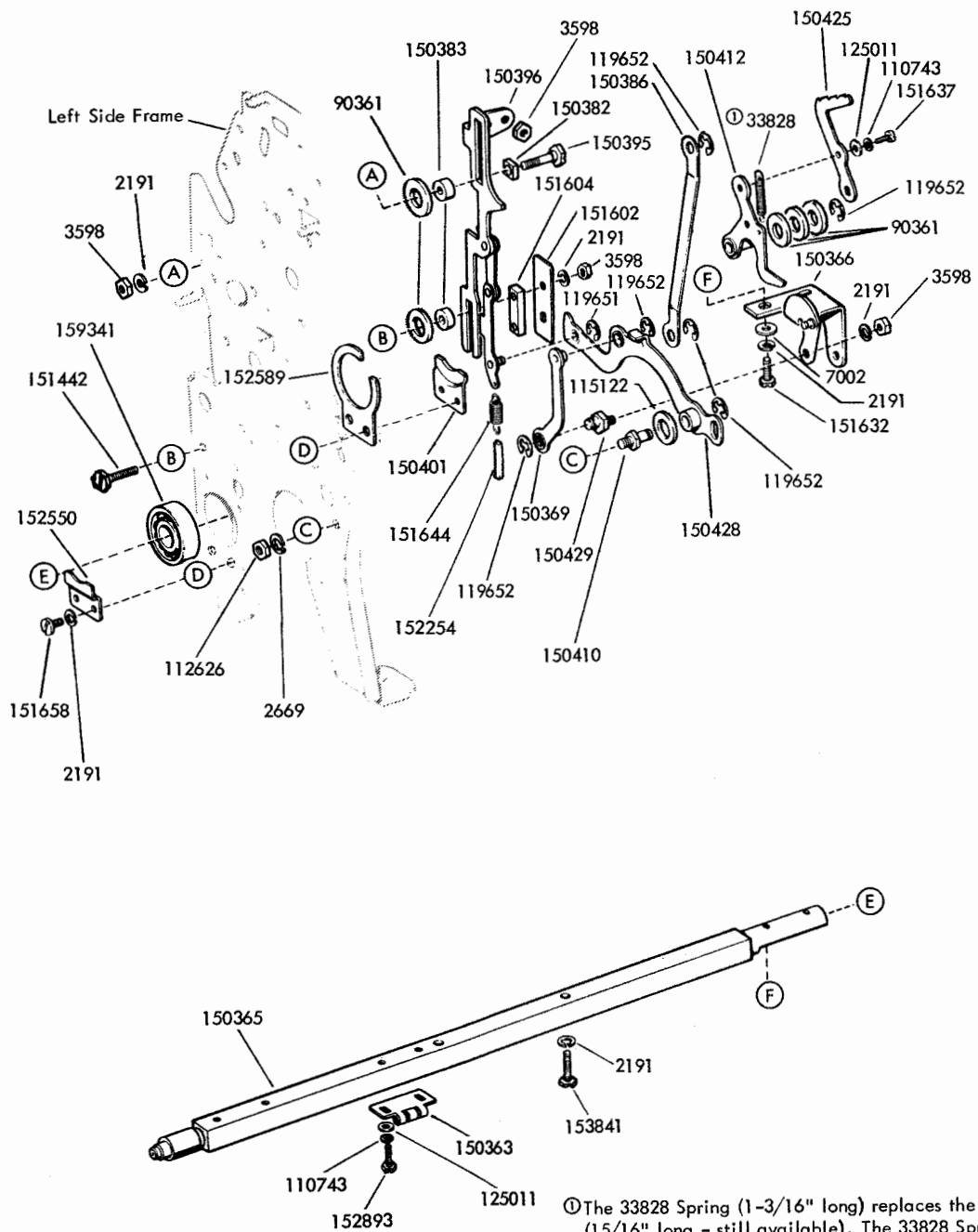


- ① 159356 Modification Kit—for Early Design, see Figure 86
- ② Used with paper form widths of 4-1/4" or narrower
- ③ The 153695 Pin (steel) is no longer available. It has been replaced with a 195855 Pin (plastic)
- ④ For Late Design, see 305035 Modification Kit in Figure 126

FIGURE 18. LINE FEED AND PLATEN MECHANISM



- ① 150833 Platen Assembly
(for Friction Feed Units)
- ② Peculiar to Friction Feed Units
- ③ For Late Design, see 305036 Modification
Kit in Figure 126



Ⓞ The 33828 Spring (1-3/16" long) replaces the 76379 Spring (15/16" long - still available). The 33828 Spring and the 76379 Spring are not individually replaceable. They must be replaced in sets of two for the Left and Right Side Linkage Mechanisms. (see Figure 21)

For Early Design, see Figure 20

FIGURE 19. LEFT SIDE LINKAGE AND ROCKER SHAFT MECHANISM

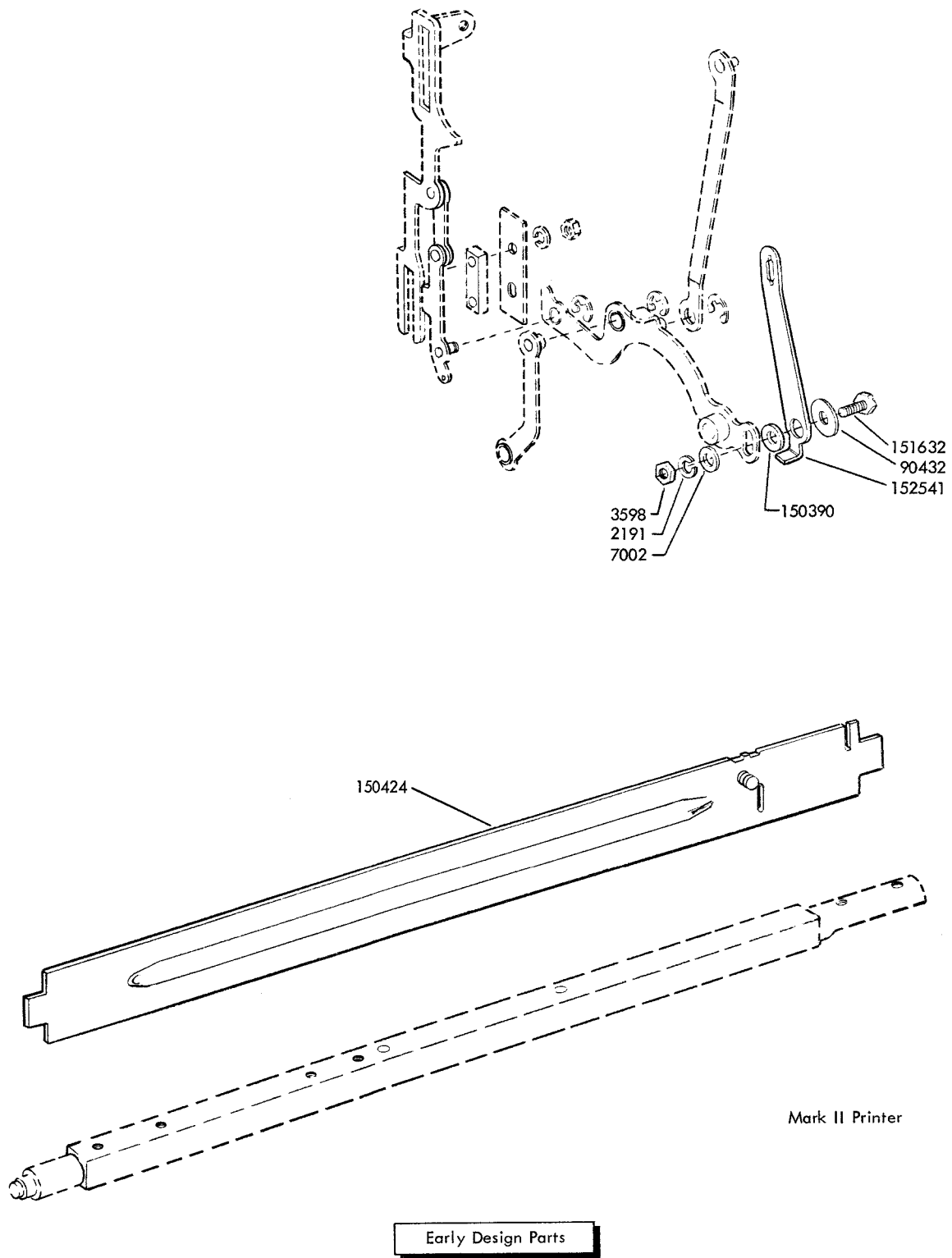
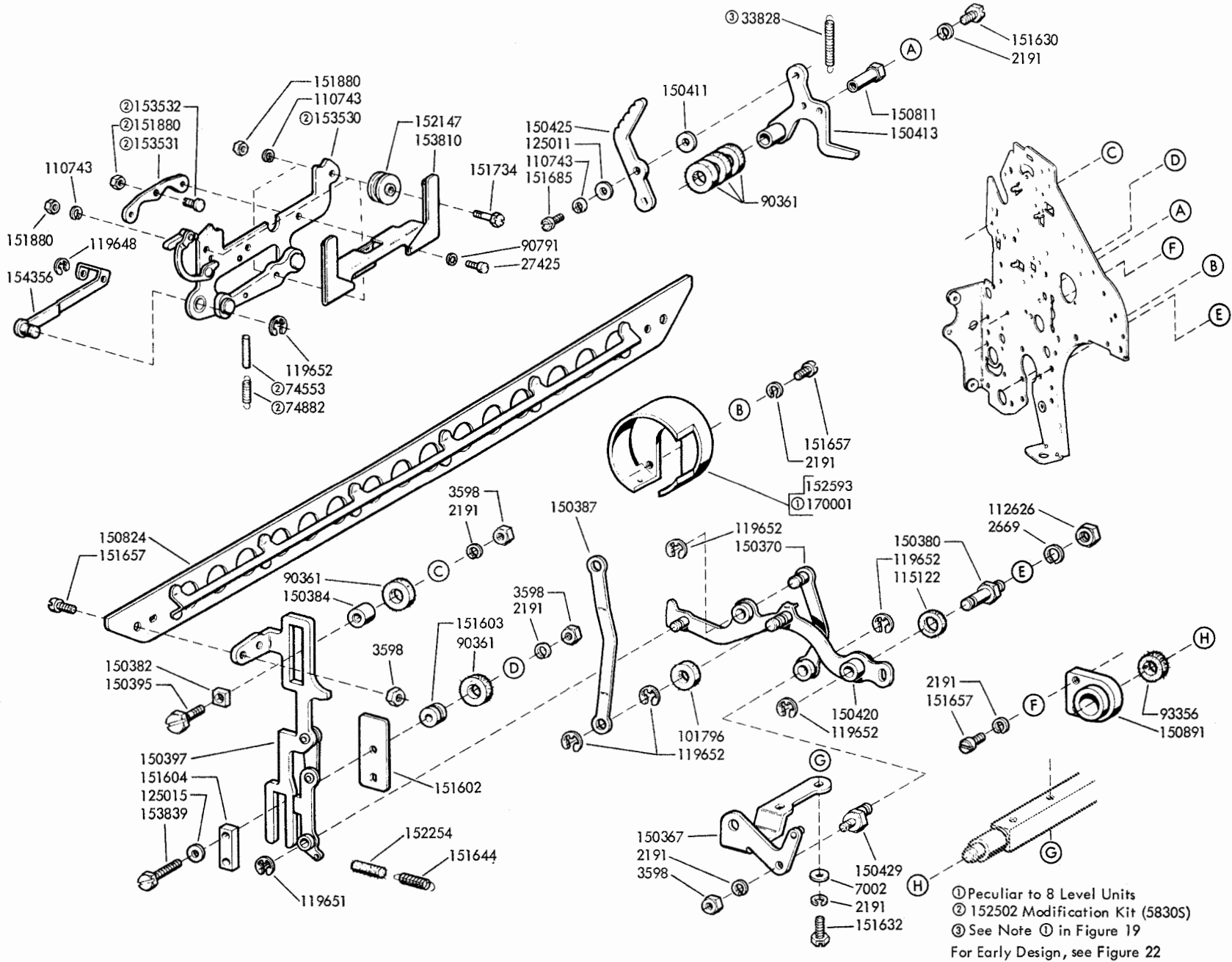
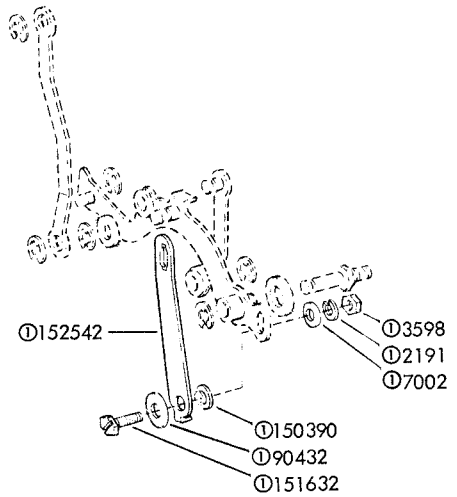
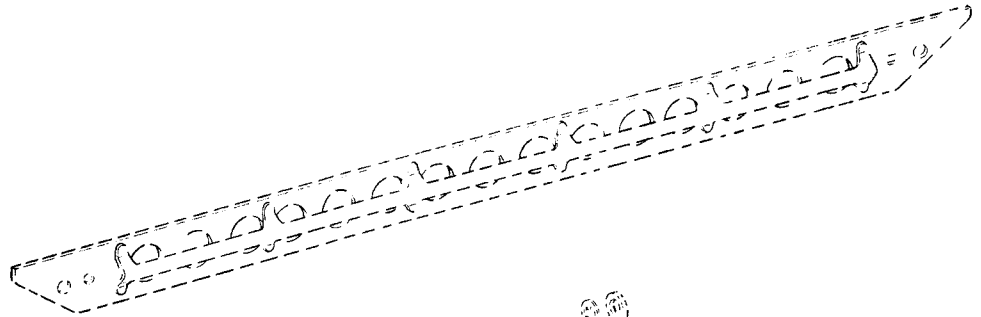
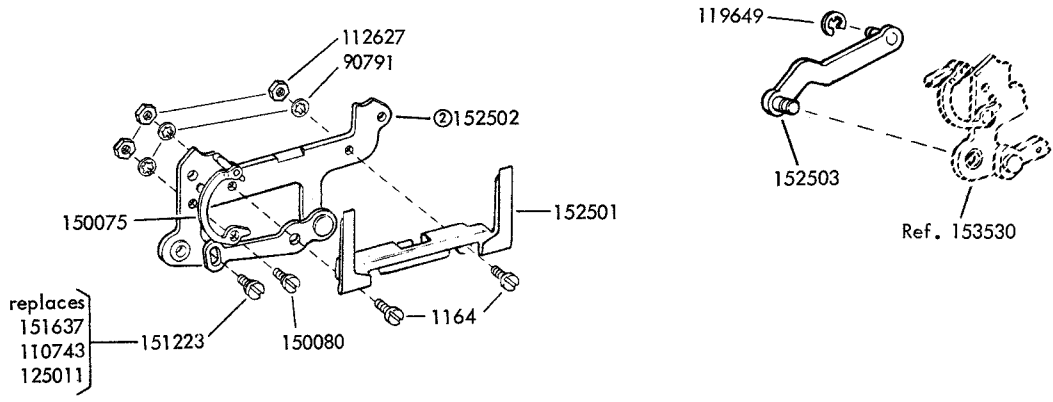


FIGURE 20. LEFT SIDE LINKAGE AND STRIPPER BLADE MECHANISM

FIGURE 21. RIGHT SIDE LINKAGE AND TYPE BOX CARRIAGE MECHANISM



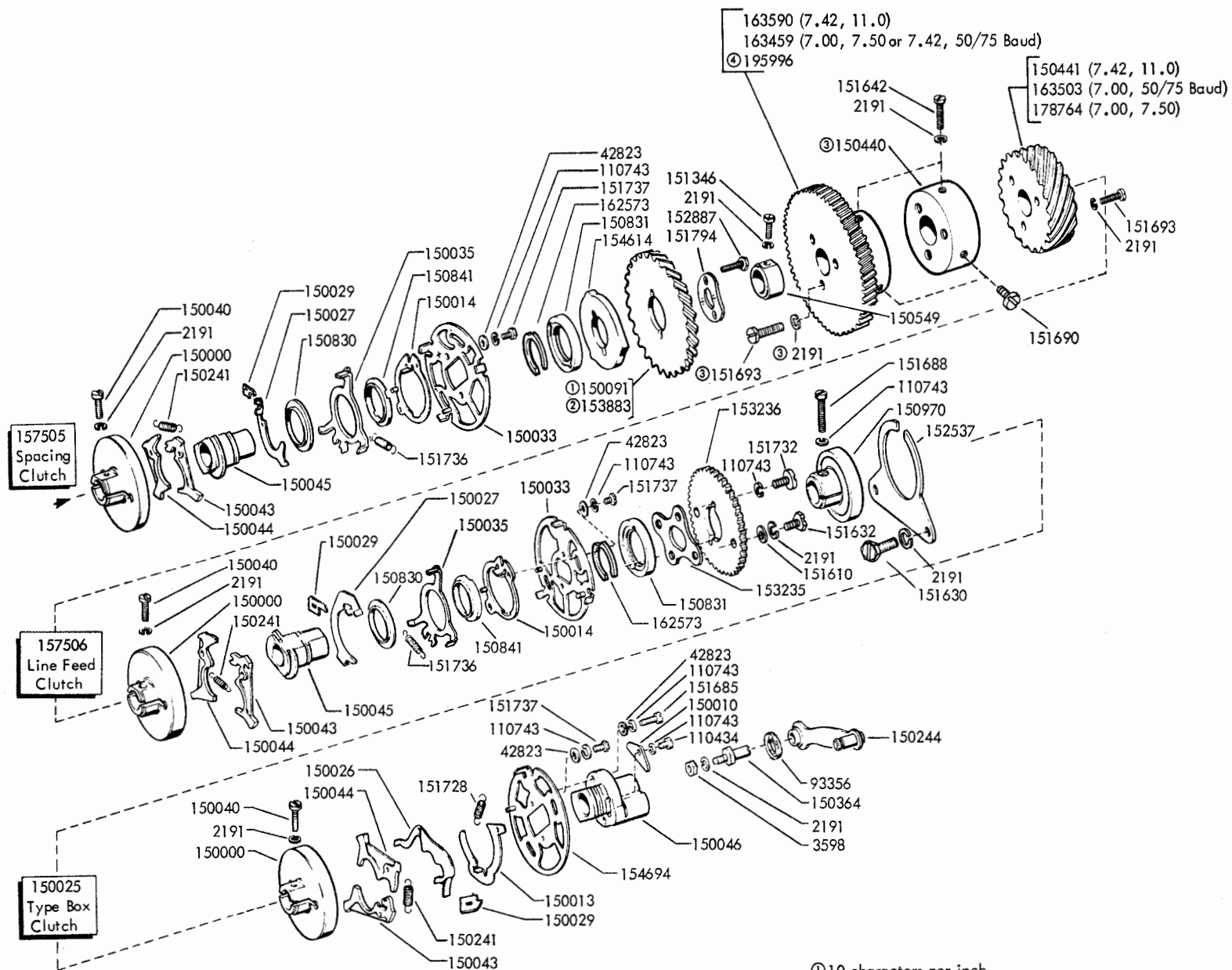


Early Design Parts

- ① Mark II Printer
- ② See note 8 on page 115

FIGURE 22. RIGHT SIDE LINKAGE AND TYPE BOX CARRIAGE MECHANISM

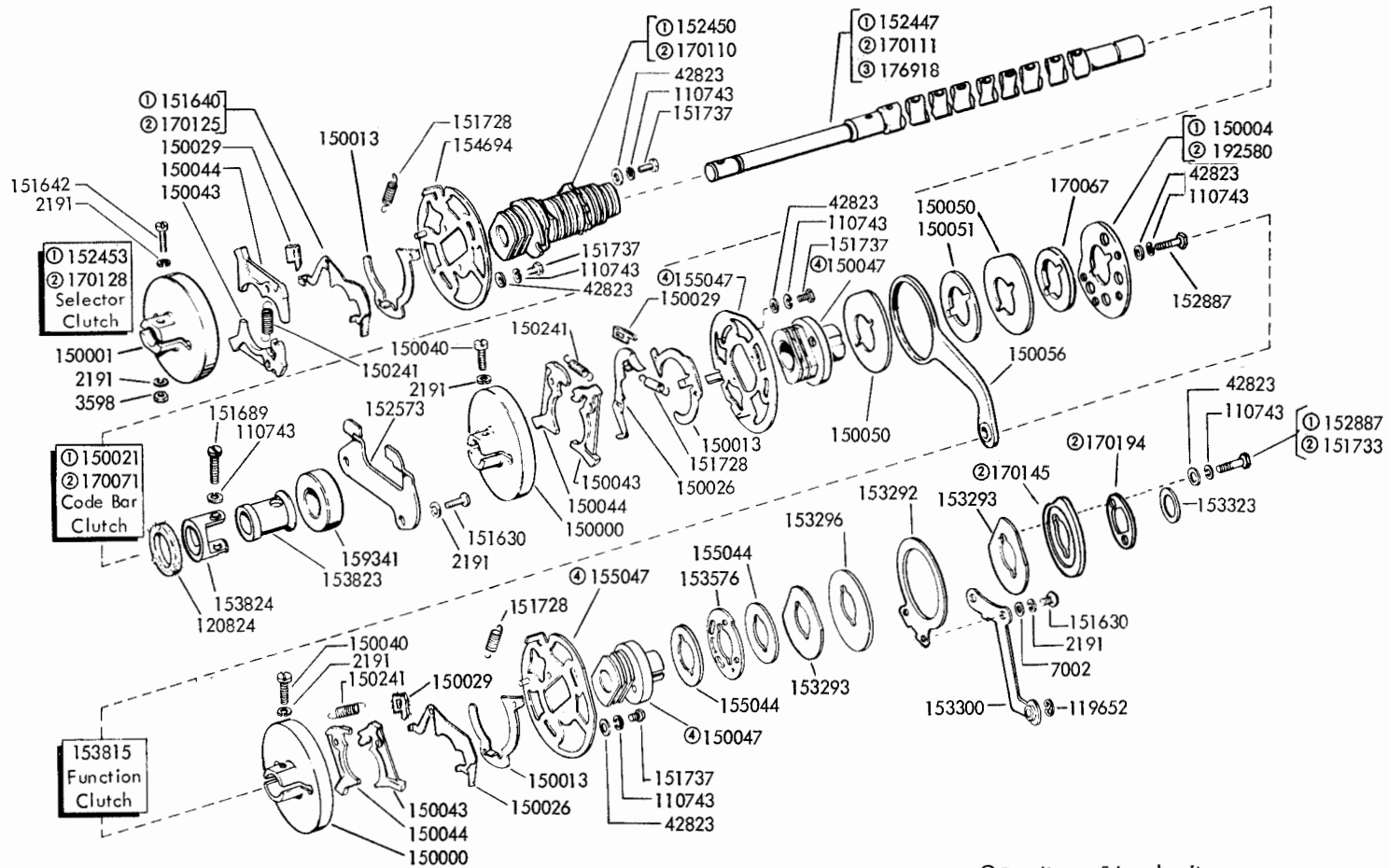
FIGURE 23. MAIN SHAFT MECHANISM



For Early Design, see Figure 25

- ① 10 characters per inch
- ② 5 characters per inch
- ③ Used when the Driven Gear does not have a hub
- ④ Peculiar to Wall Mounted Units (7.42)

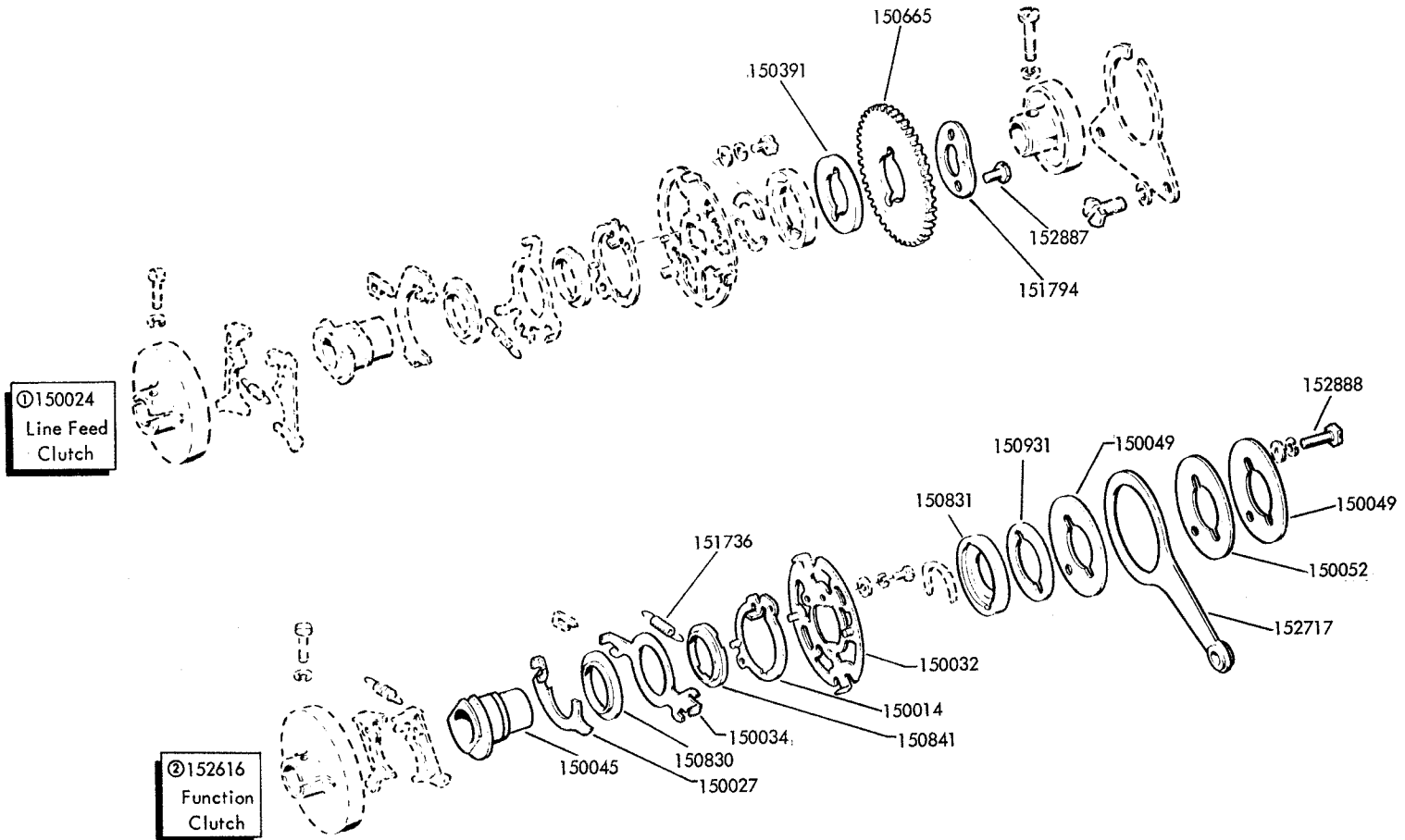
FIGURE 24. MAIN SHAFT MECHANISM



- ① Peculiar to 5 Level units
- ② Peculiar to 8 Level units
- ③ Peculiar to Wall Mounted units
- ④ When replacing an Early Design 155047 Disk without hubs with a Late Design Disk with hubs, a Late Design 150047 Bearing with countersunk mounting holes should also be used.

For Early Design, see Figure 25

FIGURE 25. LINE FEED CLUTCH AND FUNCTION CLUTCH MECHANISM



① 150024
Line Feed
Clutch

② 152616
Function
Clutch

- ① Mark II Printer
- ② Two-Stop Function Clutch

Early Design Parts

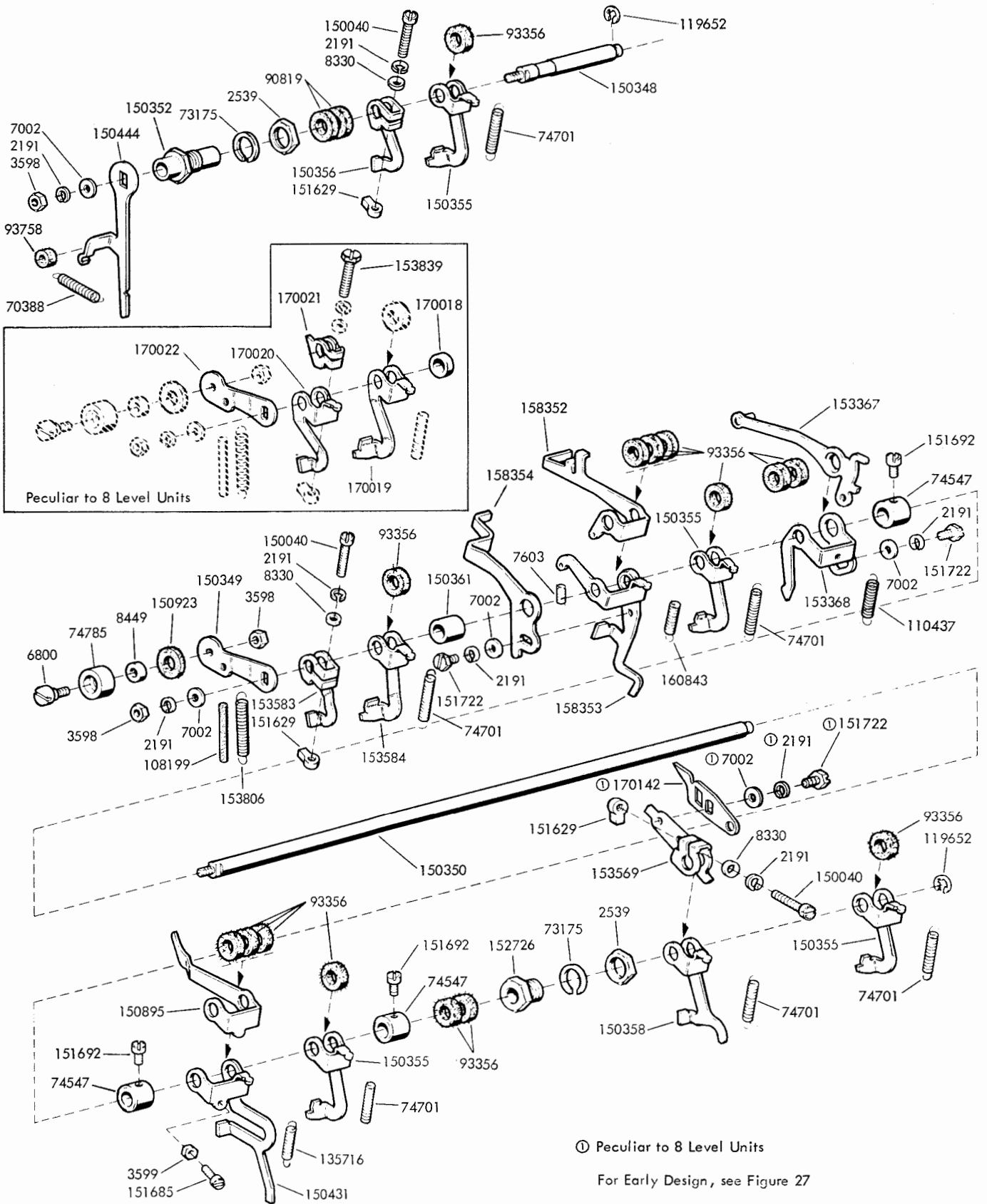
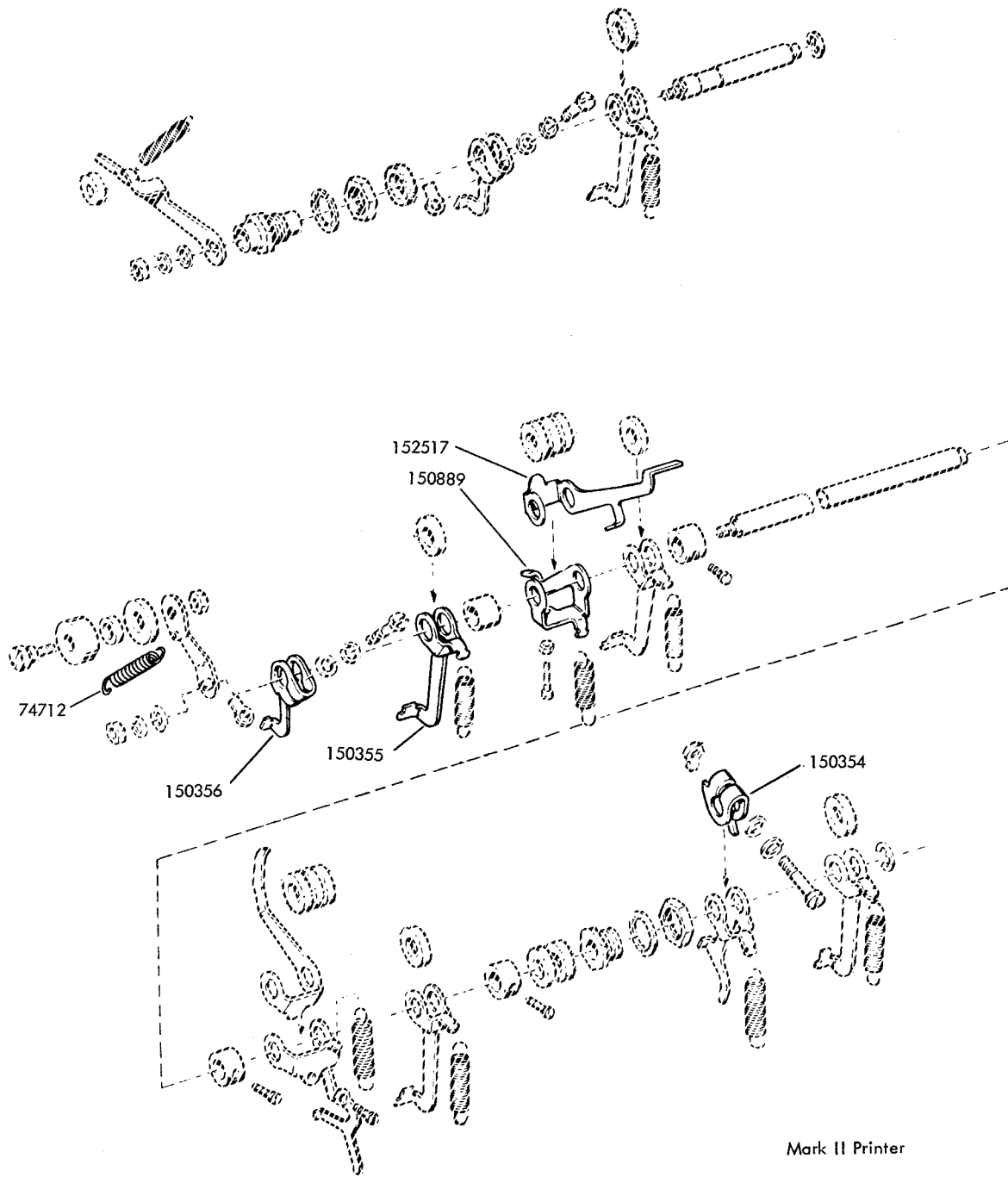


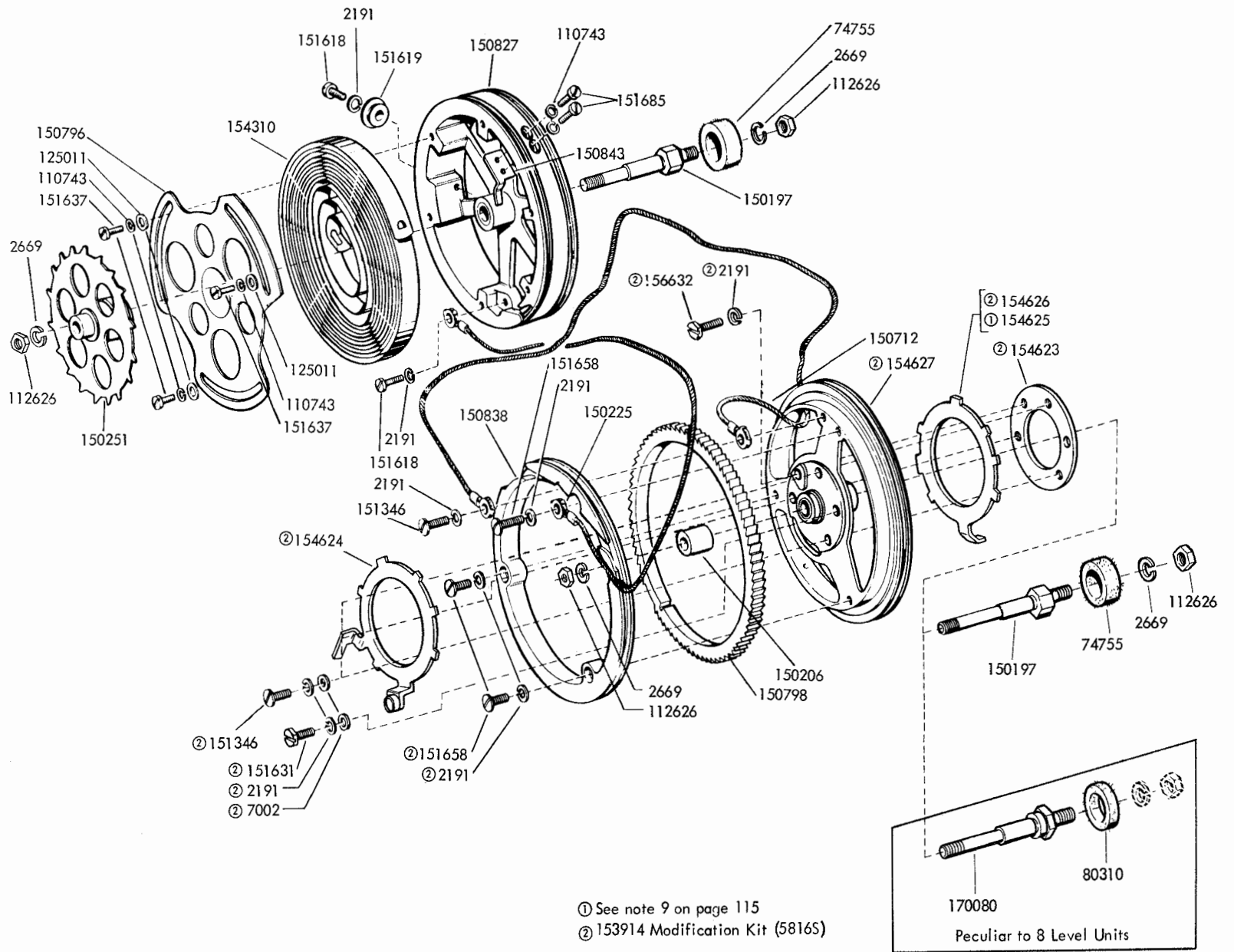
FIGURE 26. TRIP SHAFT MECHANISM



Early Design Parts

FIGURE 27. TRIP SHAFT MECHANISM

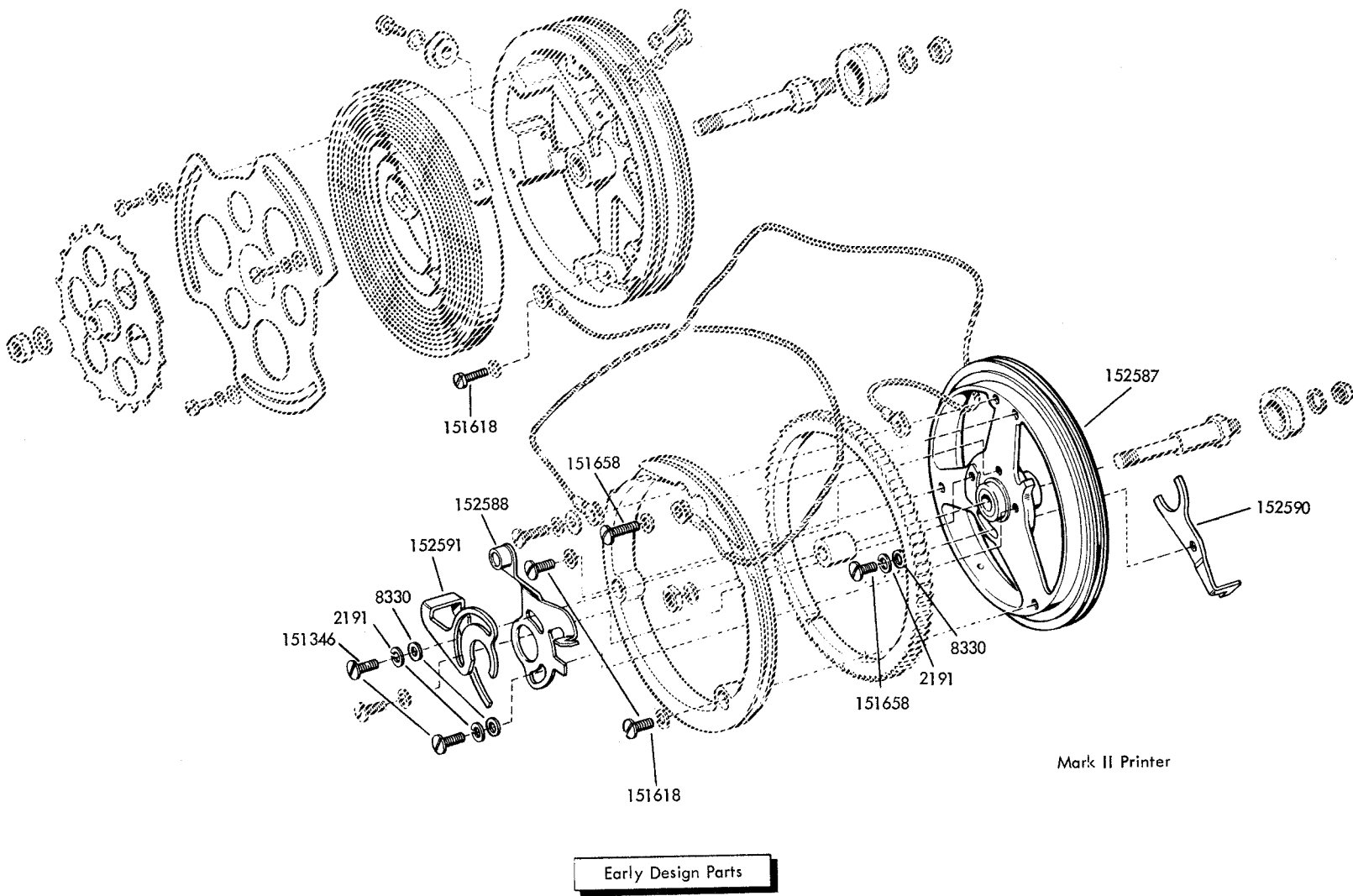
FIGURE 28. CARRIAGE RETURN AND SPACING DRUM MECHANISM



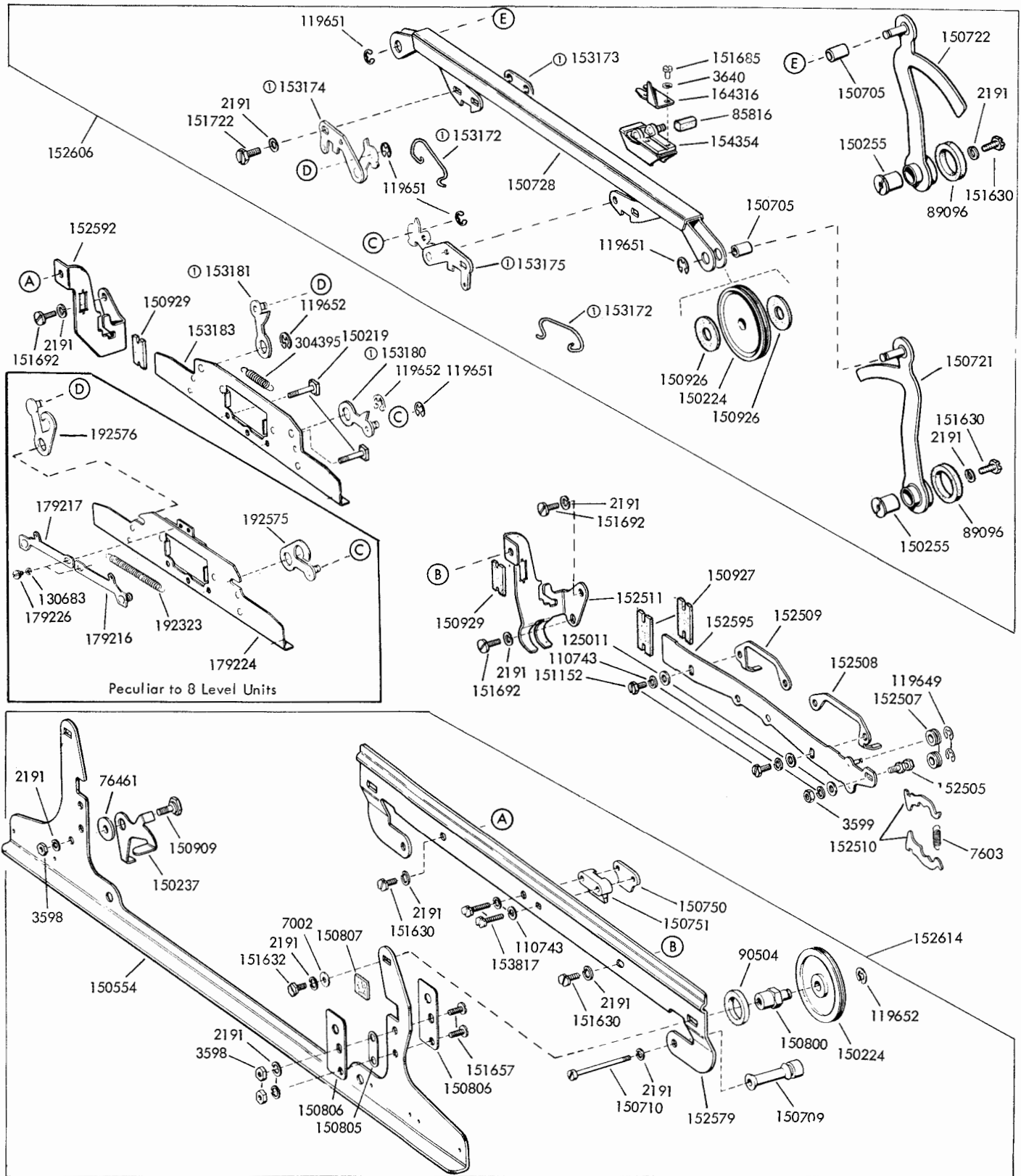
① See note 9 on page 115
 ② 153914 Modification Kit (58165)

For Early Design, see Figure 29

FIGURE 29. CARRIAGE RETURN AND SPACING DRUM MECHANISM

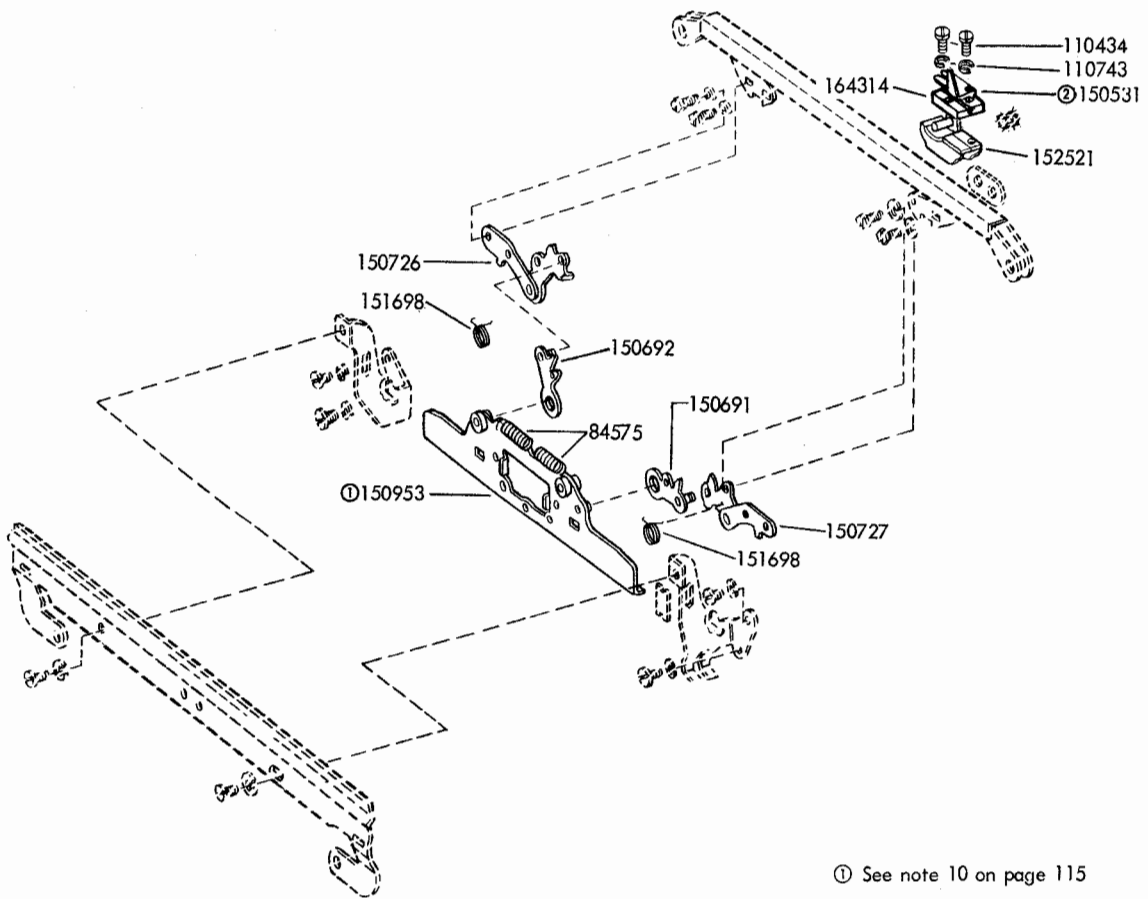


Mark II Printer



Ⓢ 153947 Modification Kit (58105)
 For Early Design, see Figure 31

FIGURE 30. FRONT PLATE MECHANISM

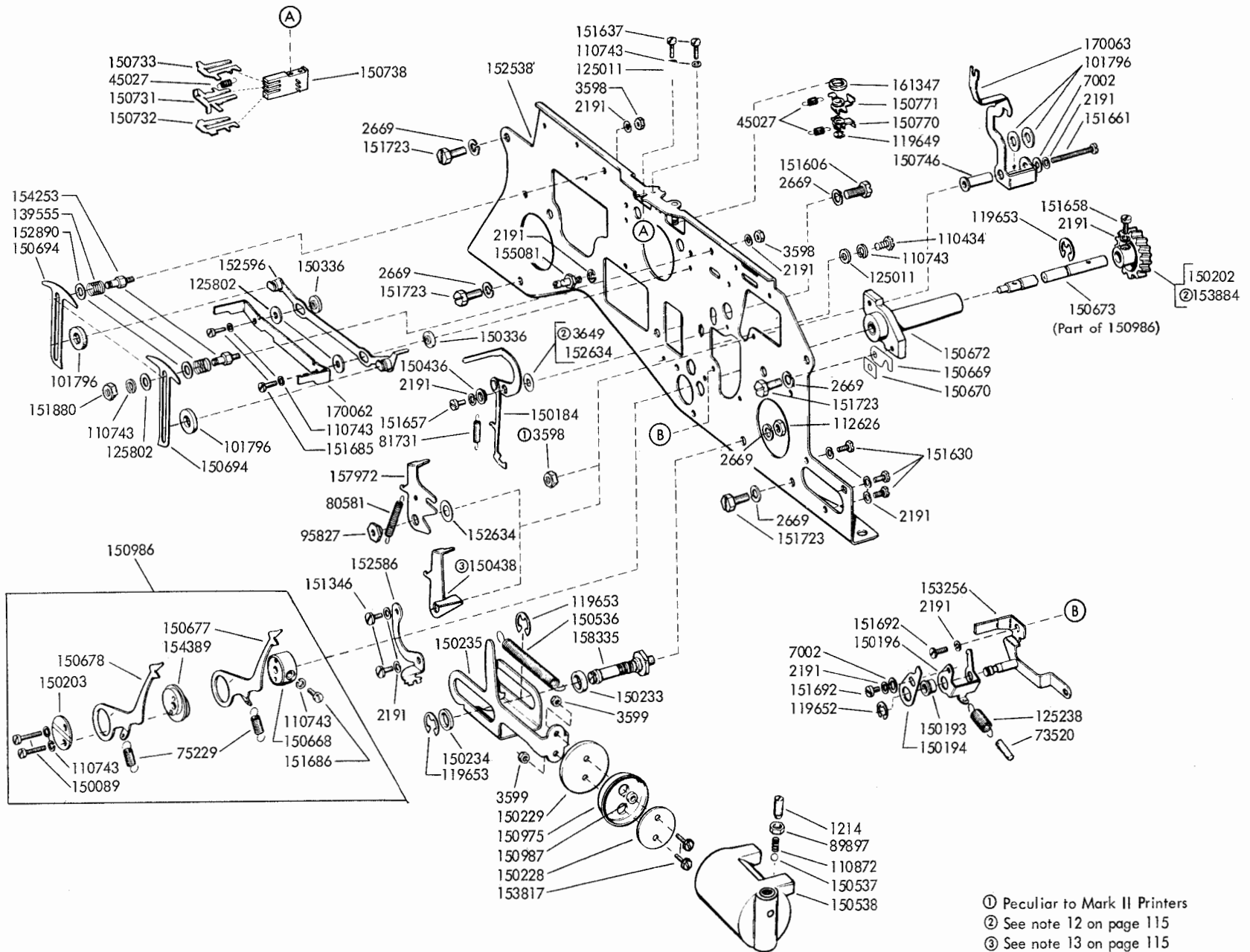


- ① See note 10 on page 115
- ② See note 11 on page 115

Early Design Parts

FIGURE 31. FRONT PLATE MECHANISM

FIGURE 32. FRONT PLATE MECHANISM



① Peculiar to Mark II Printers
 ② See note 12 on page 115
 ③ See note 13 on page 115

FIGURE 33. FRONT PLATE MECHANISM (8 LEVEL)

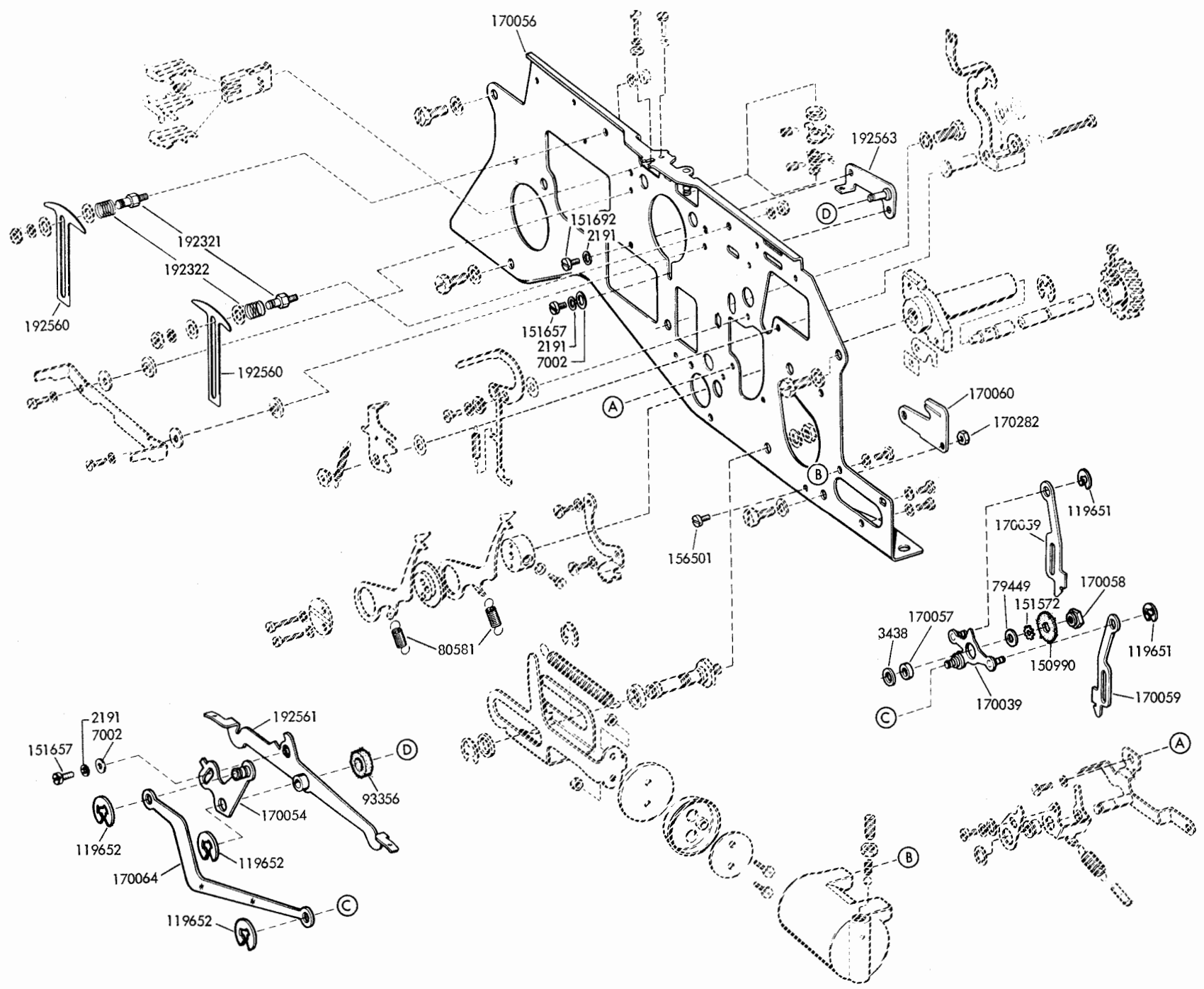
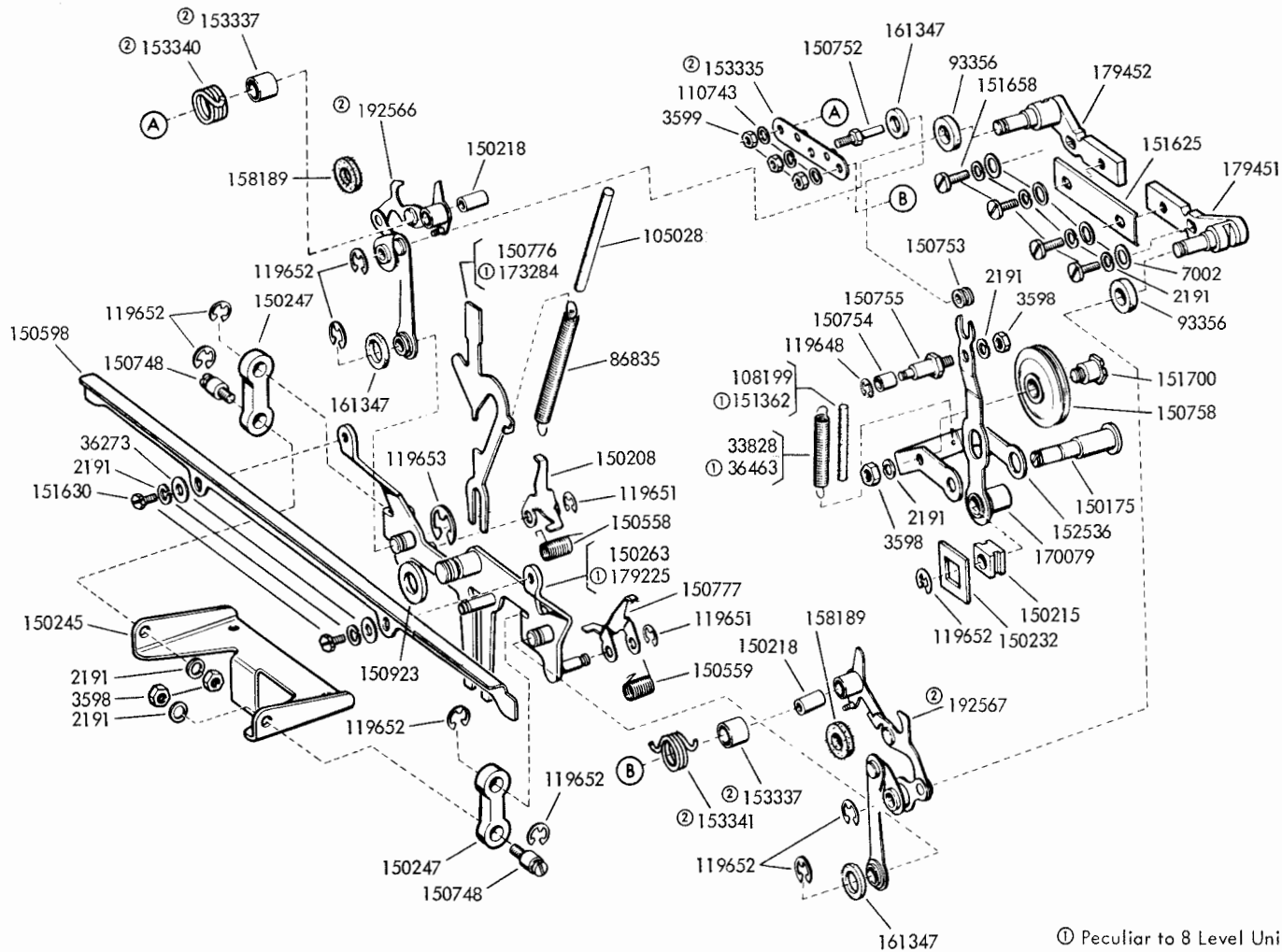
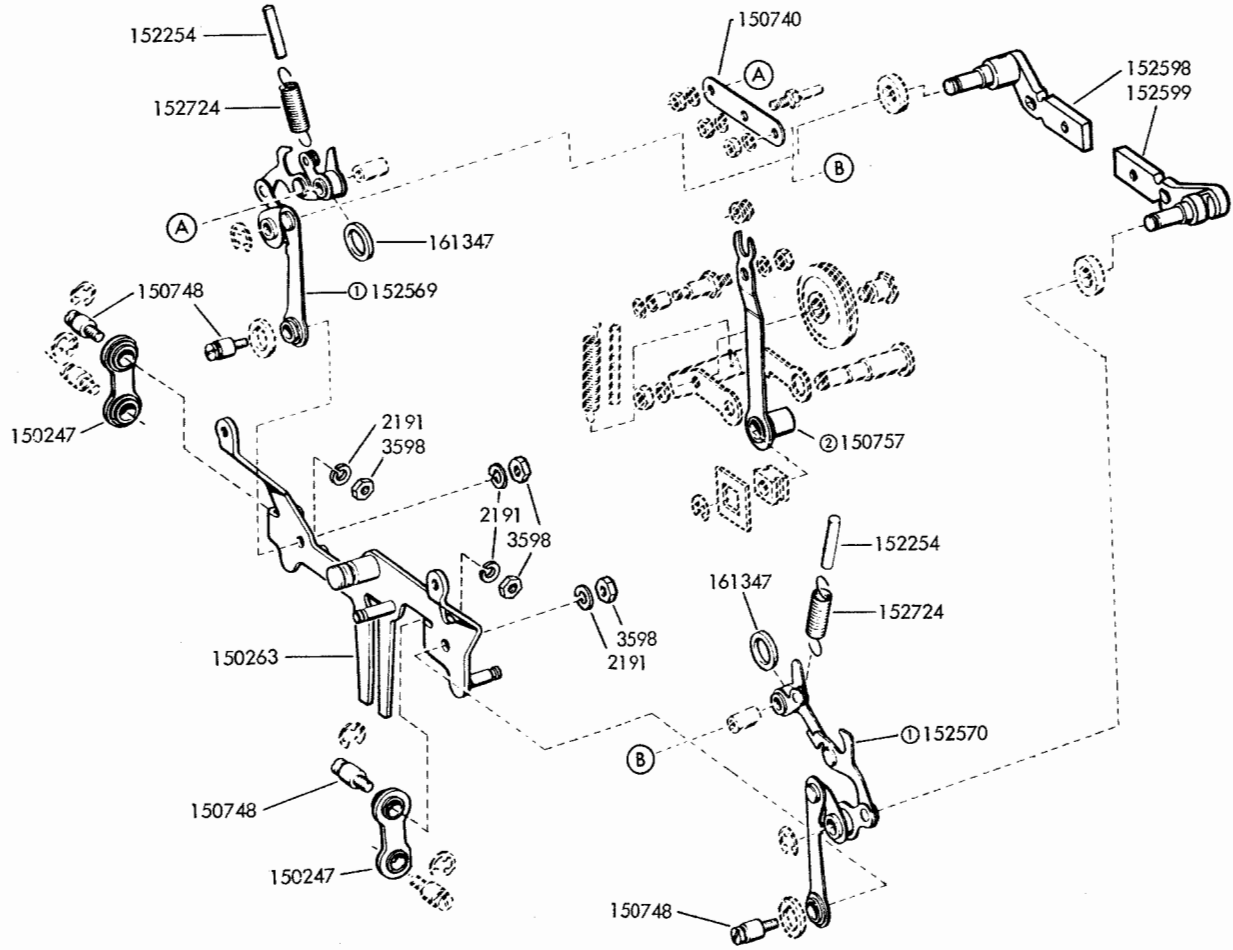


FIGURE 34. FRONT PLATE MECHANISM



① Peculiar to 8 Level Units
 ② 153946 Modification Kit (58075)
 For Early Design, see Figure 35



Early Design Parts

① See note 14 on page 115

② See note 15 on page 115

FIGURE 35. FRONT PLATE MECHANISM

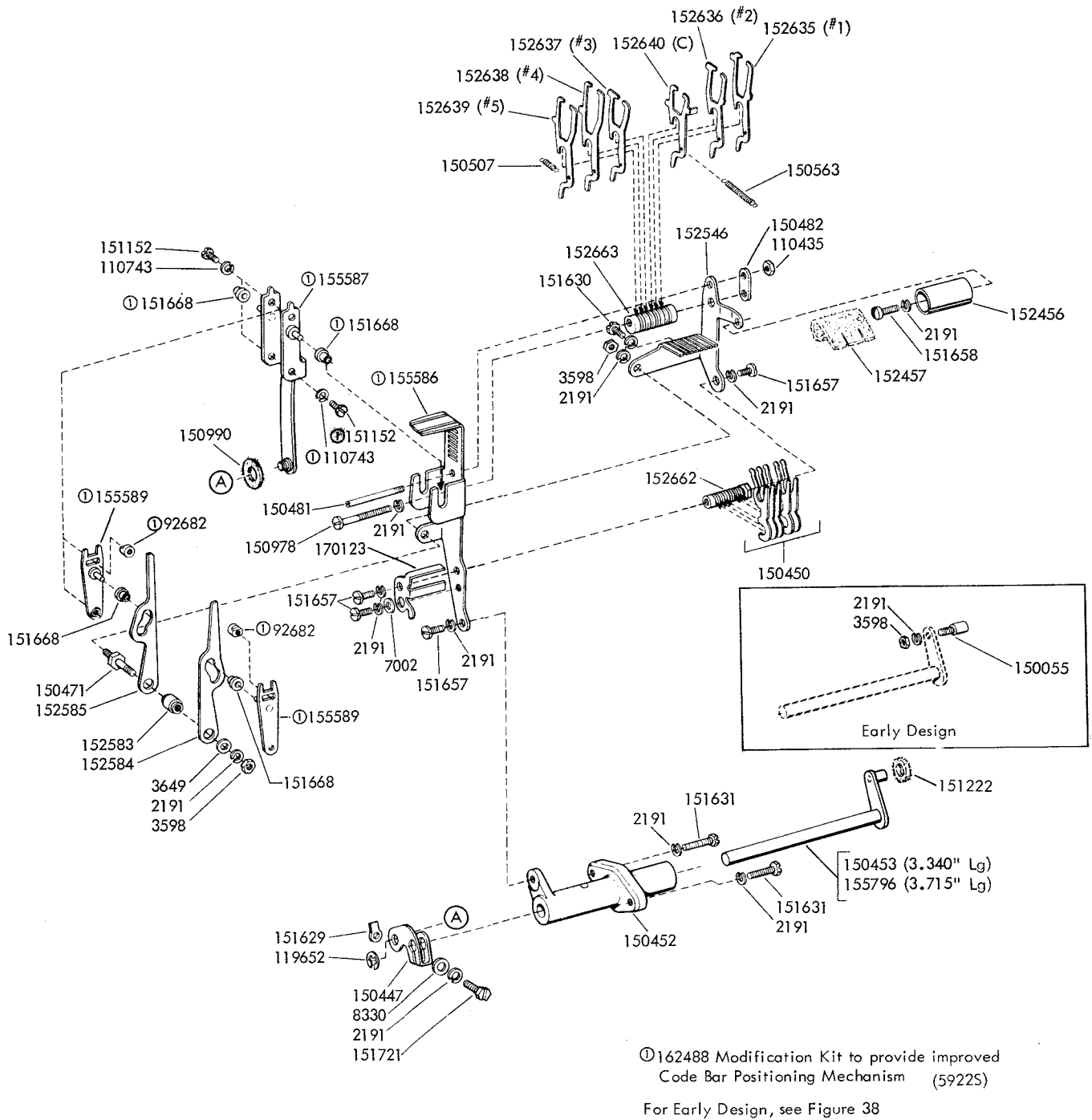


FIGURE 36. CODE BAR POSITIONING MECHANISM

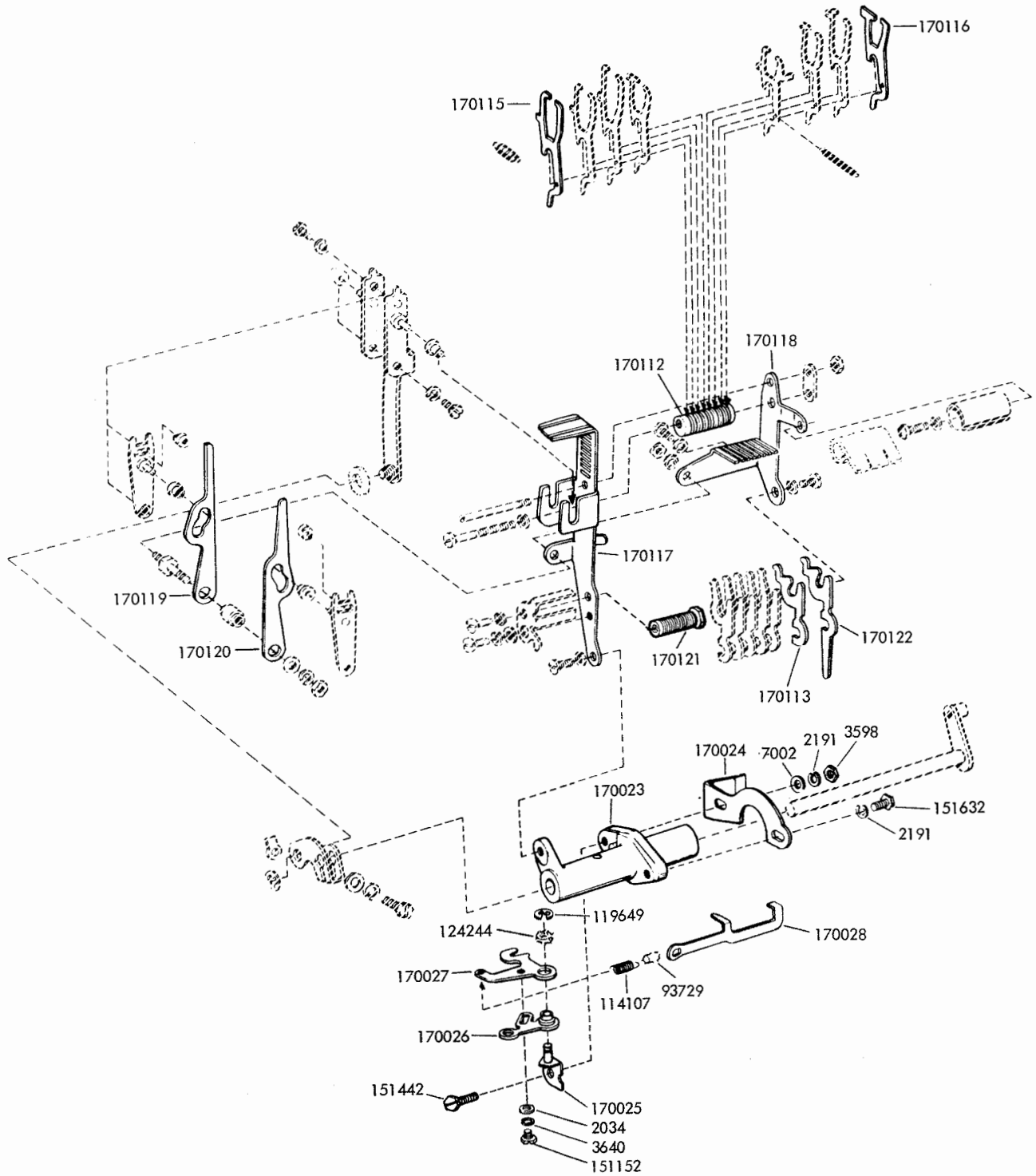
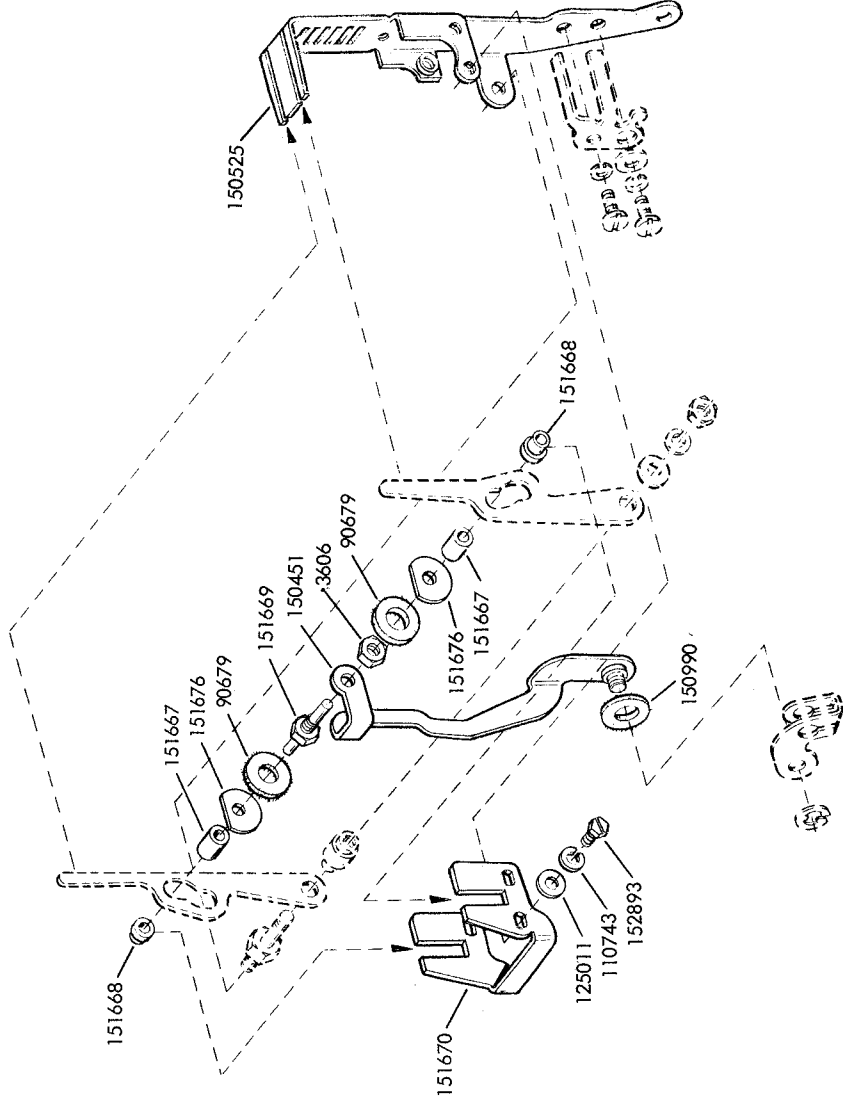


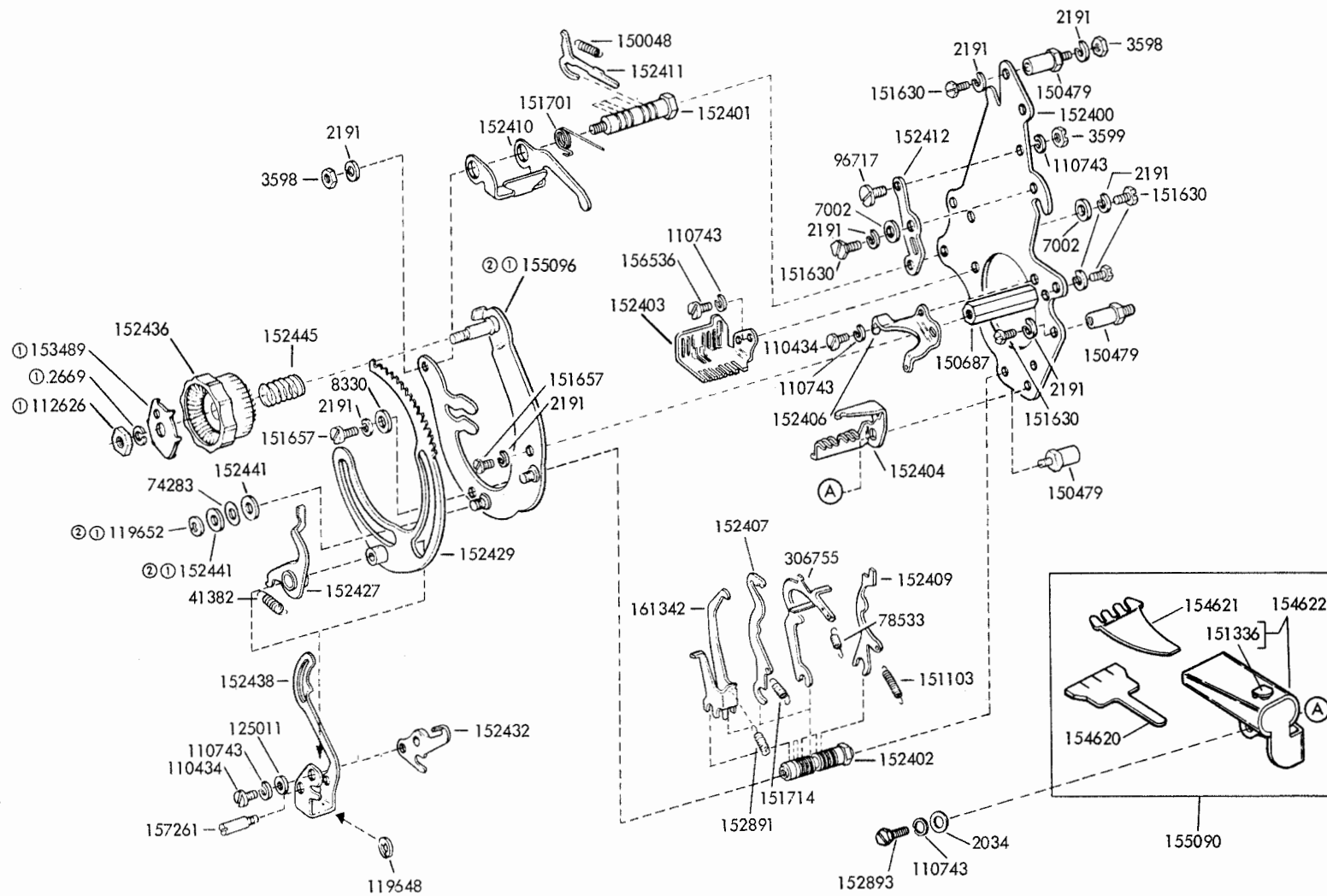
FIGURE 37. CODE BAR POSITIONING MECHANISM (8 LEVEL)



Early Design Parts

FIGURE 38. CODE BAR POSITIONING MECHANISM

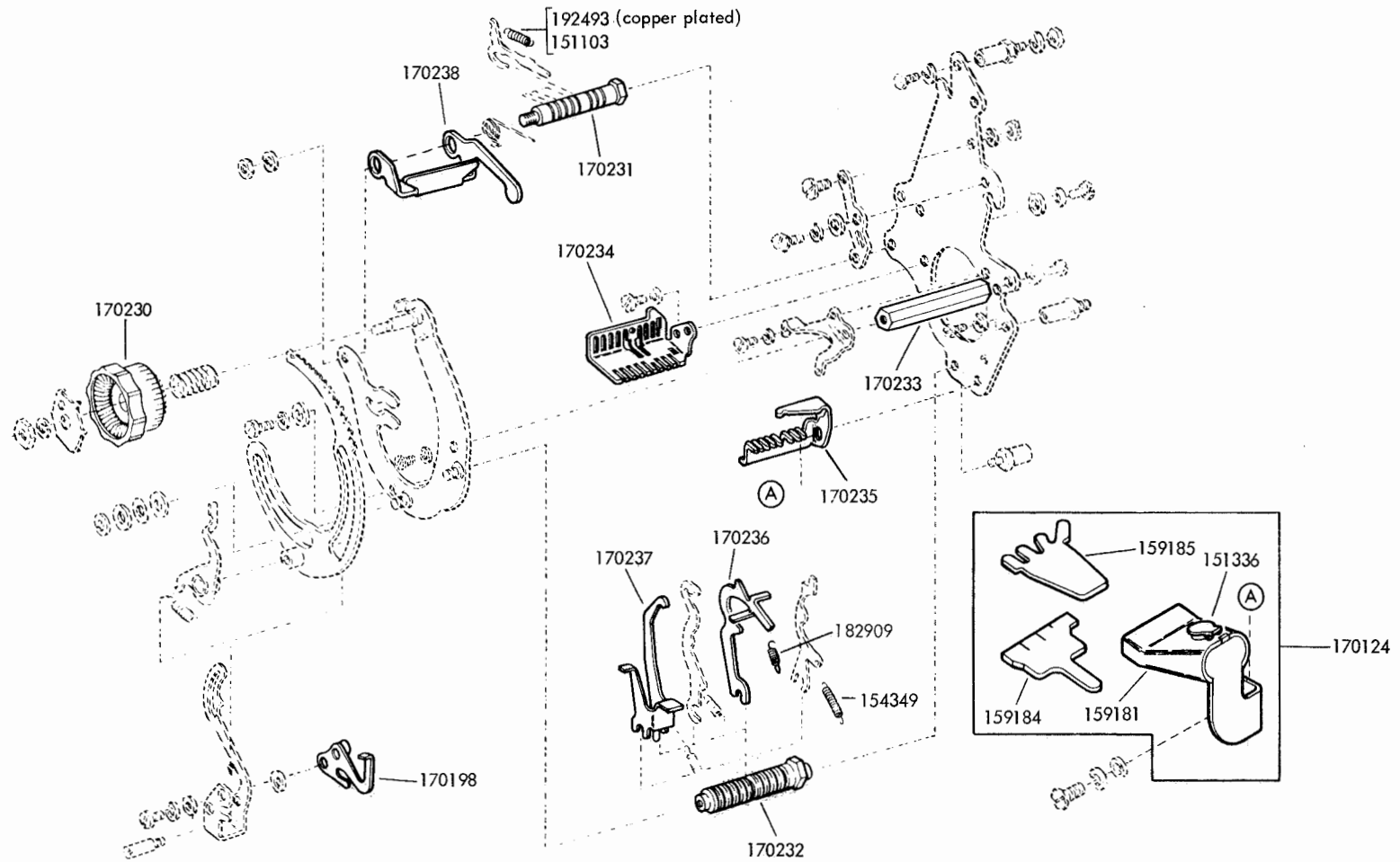
FIGURE 39. SELECTOR MECHANISM

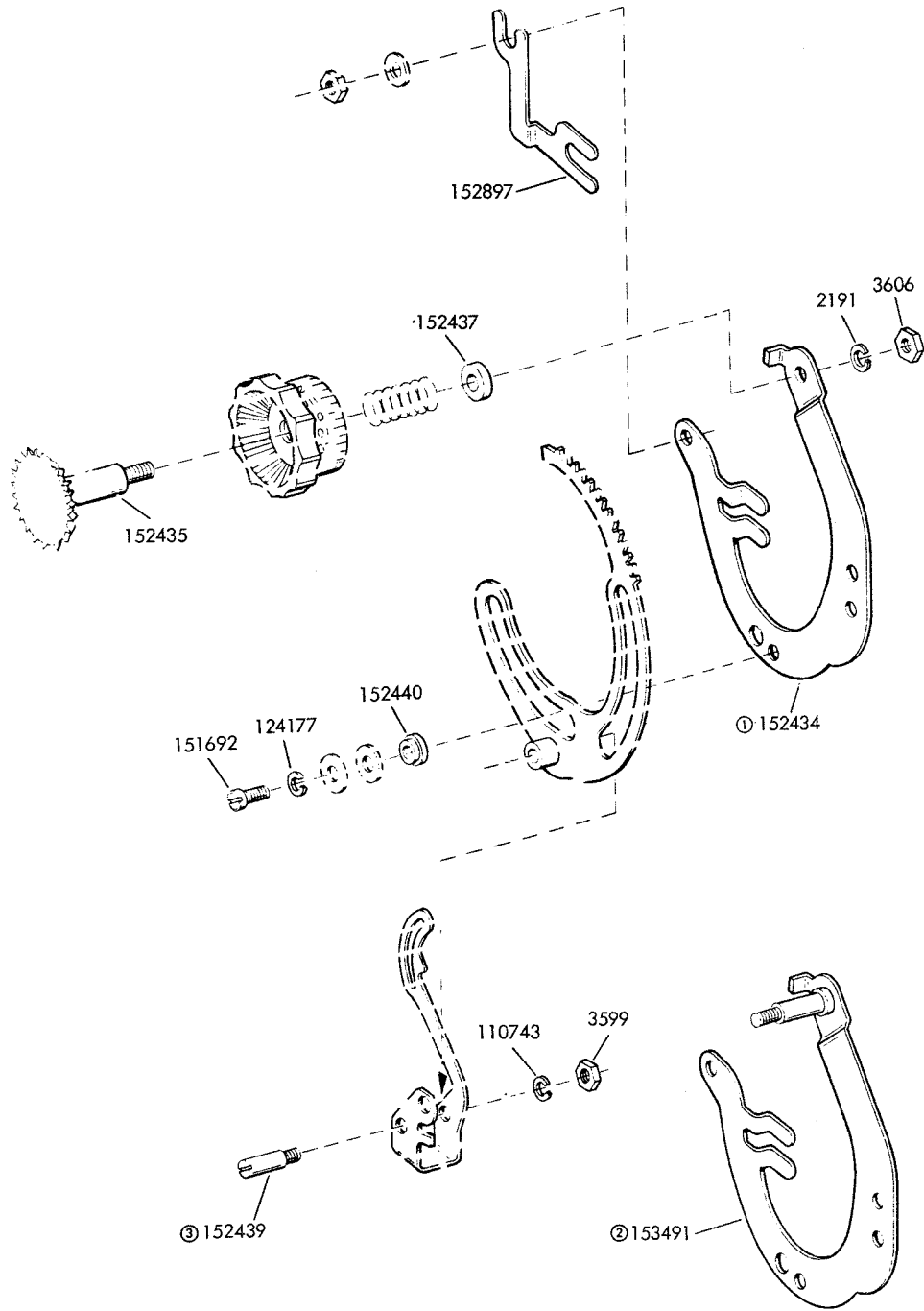


- ① 153904 Modification Kit (5843S)
- ② 154723 Modification Kit (5843S)

For Early Design, see Figure 41

FIGURE 40. SELECTOR MECHANISM (8 LEVEL)

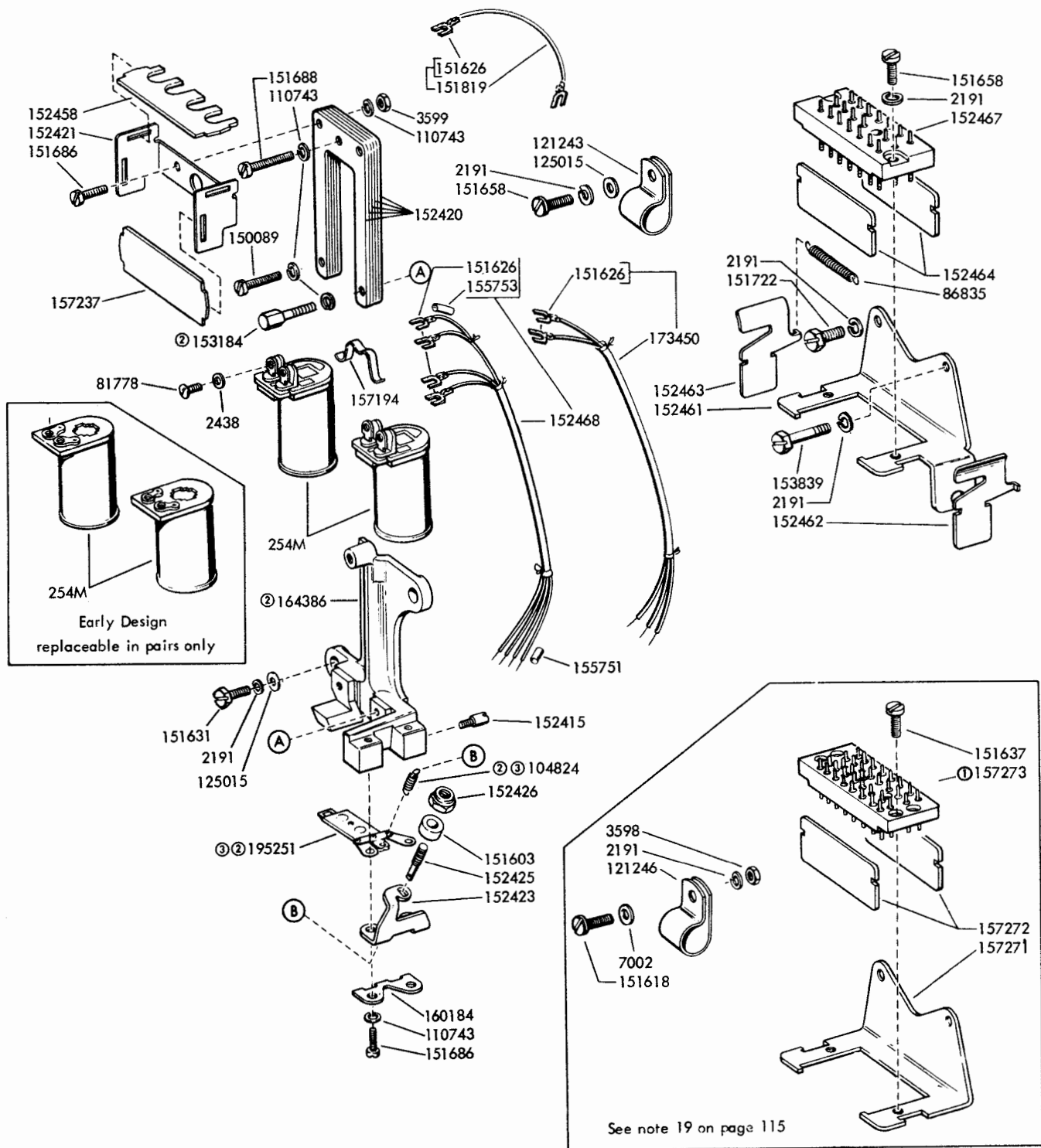




- ① See note 16 on page 115
- ② See note 17 on page 115
- ③ See note 18 on page 115

Early Design Parts

FIGURE 41. SELECTOR KNOB MECHANISM



- ① Part of 173698 Cable Assembly (see Figure 61)
- ② 153949 Modification Kit 57885
- ③ 195634 Modification Kit to Provide Quick Release Armature 501655 For Early Design, see Figure 44

FIGURE 42. SELECTOR MAGNET MECHANISM

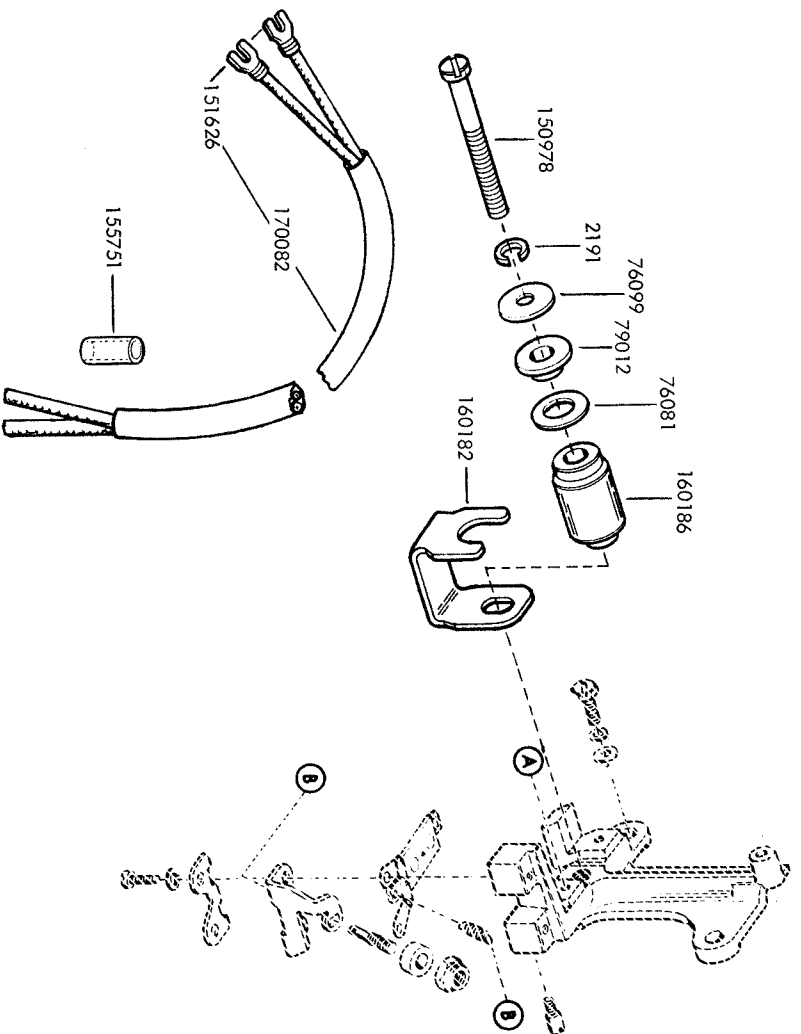
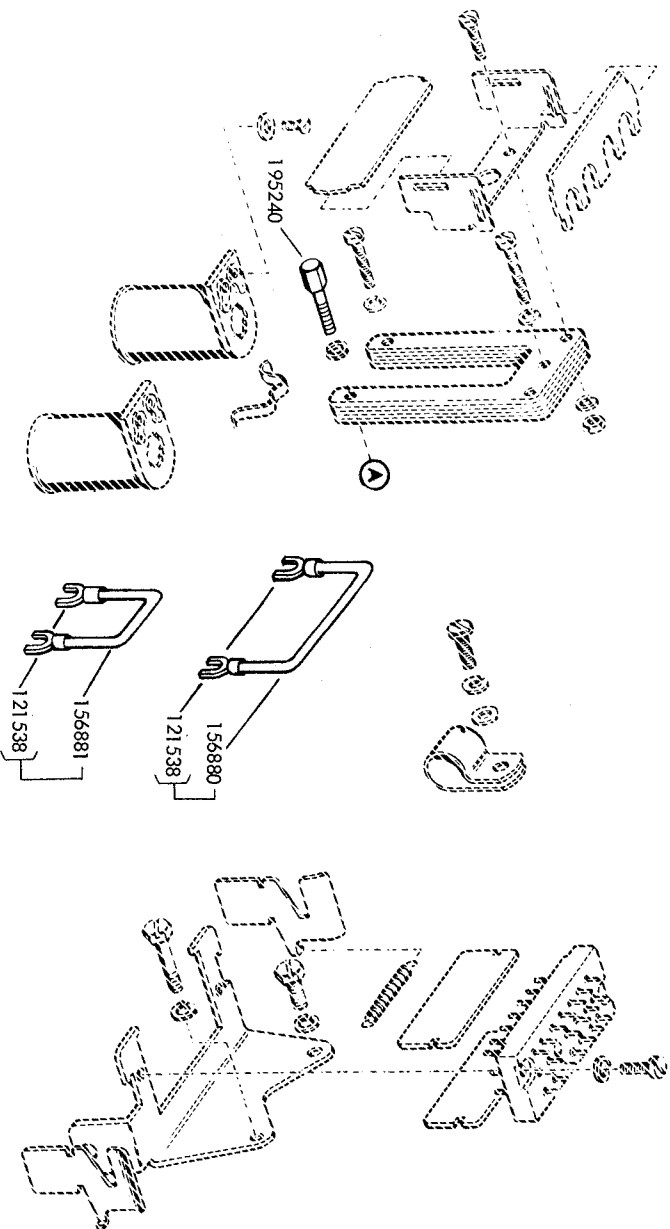
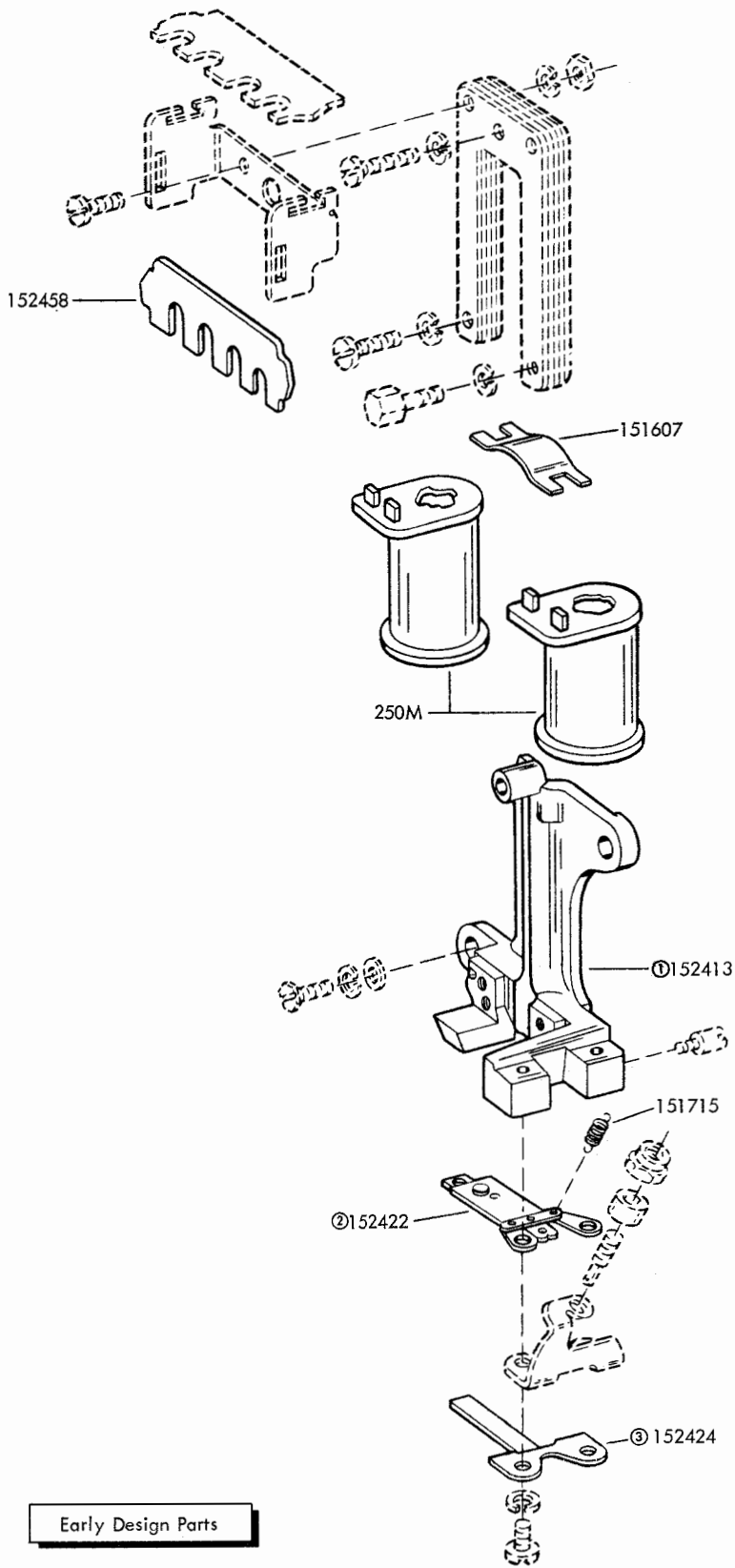
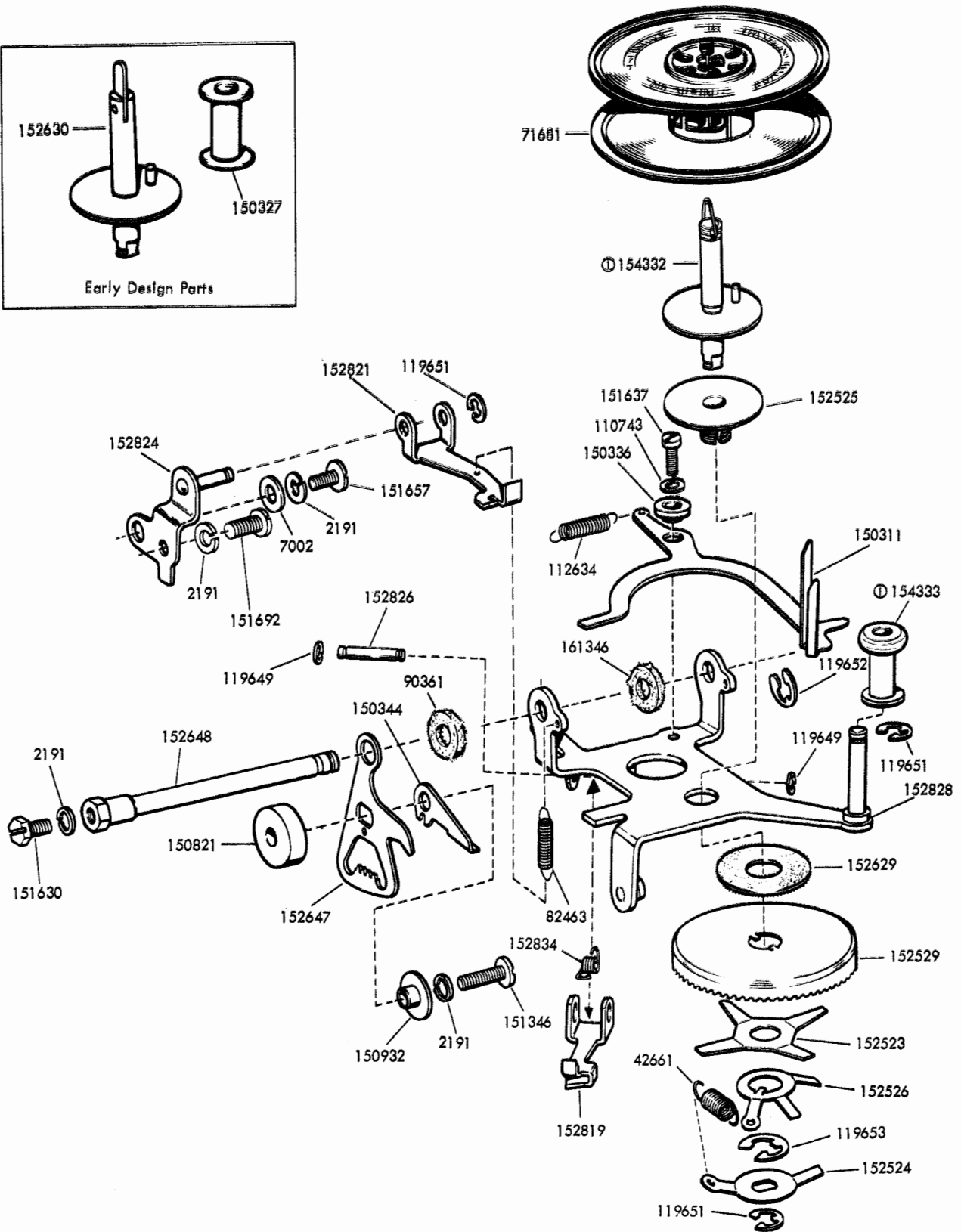
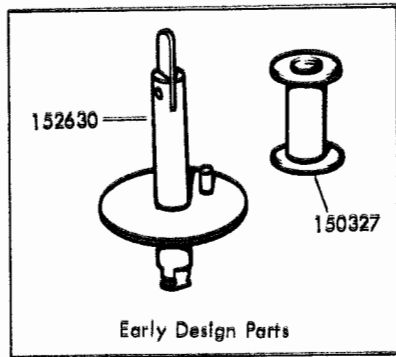


FIGURE 43. SELECTOR MAGNET MECHANISM (8 LEVEL)



- ① See note 20 on page 115
- ② See note 21 on page 115
- ③ See note 22 on page 115

FIGURE 44. SELECTOR MAGNET MECHANISM



⓪ 154334 Modification Kit (58725)

FIGURE 45. RIGHT RIBBON FEED MECHANISM

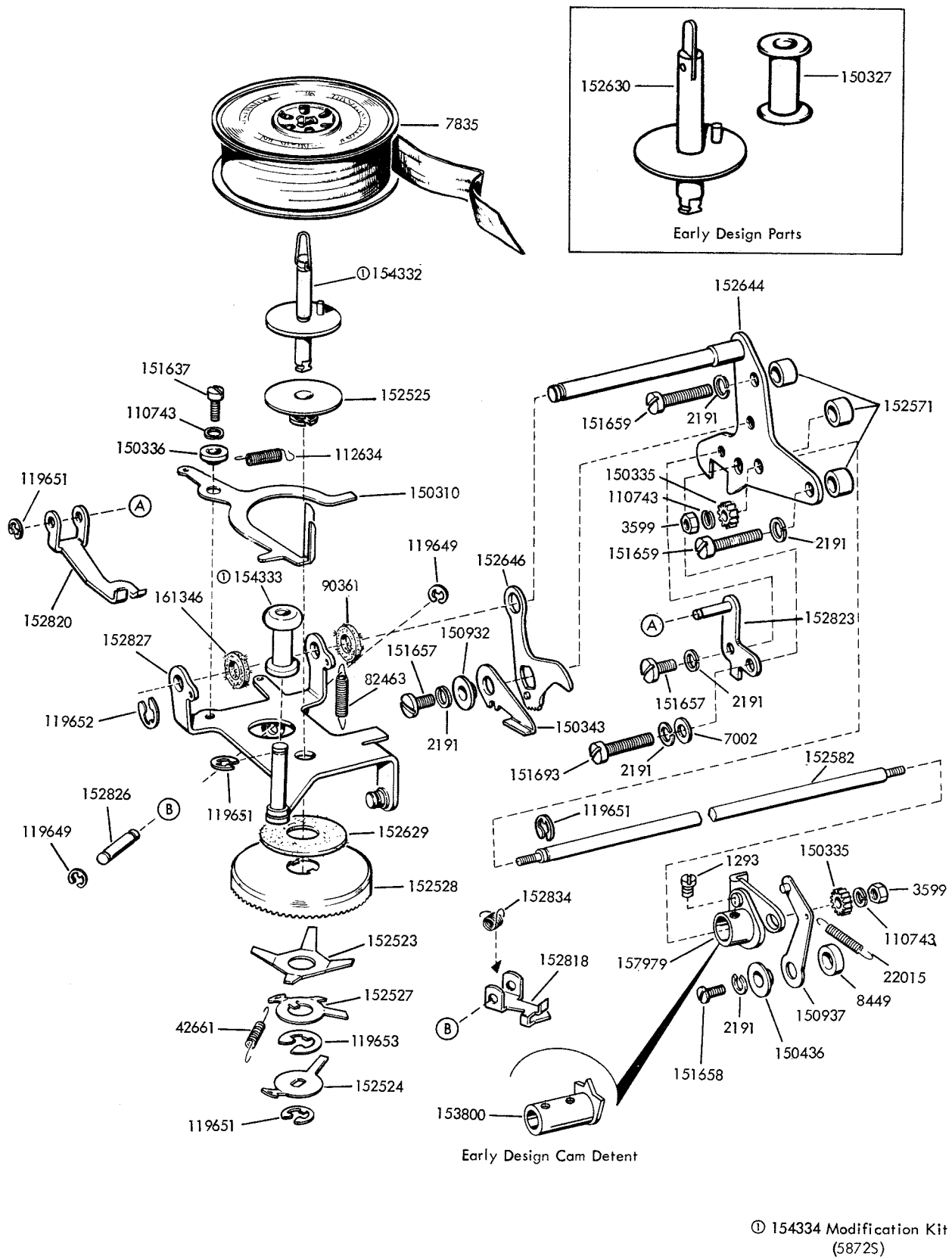
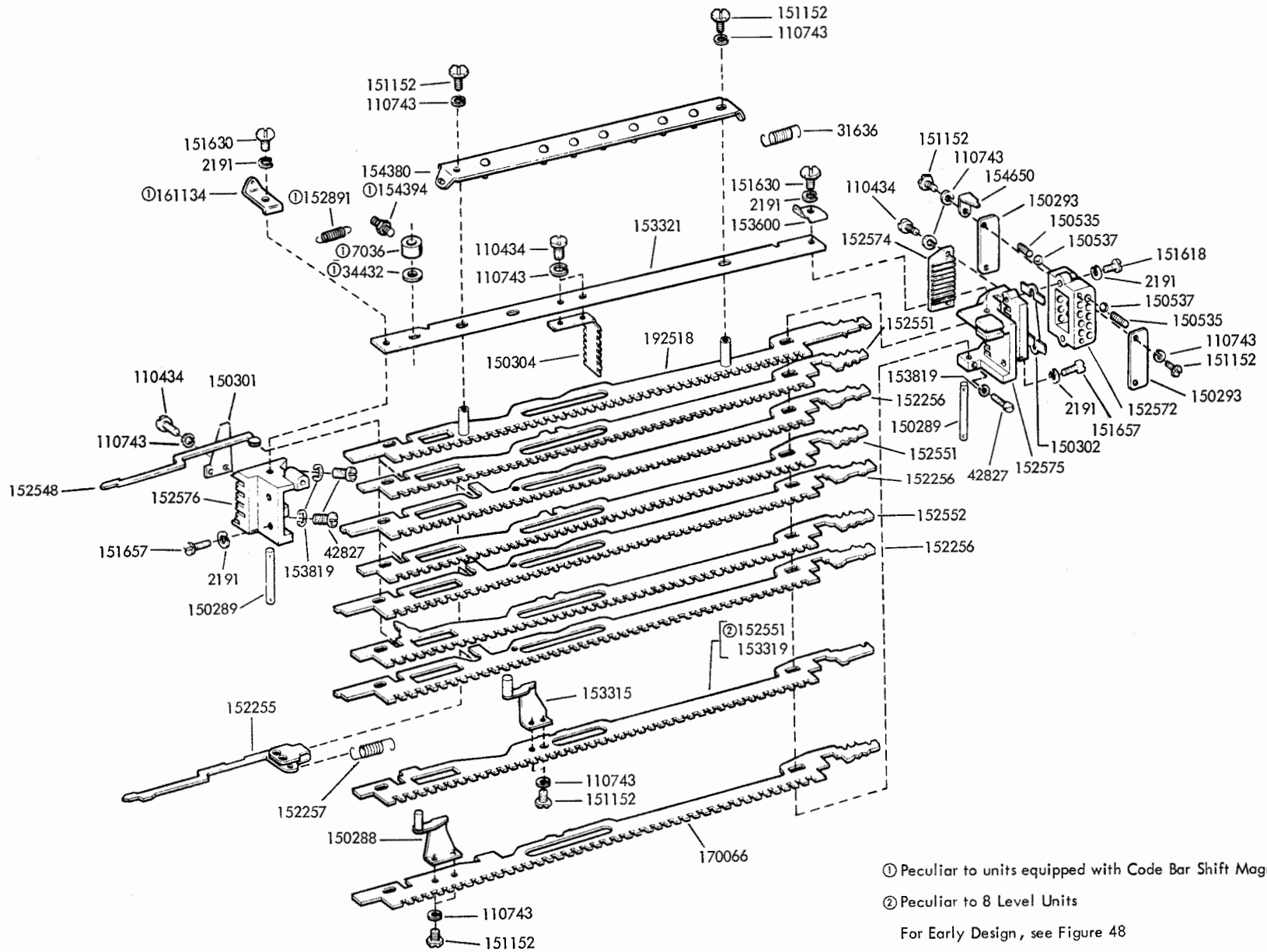


FIGURE 46. LEFT RIBBON FEED MECHANISM

FIGURE 47. CODE BAR MECHANISM



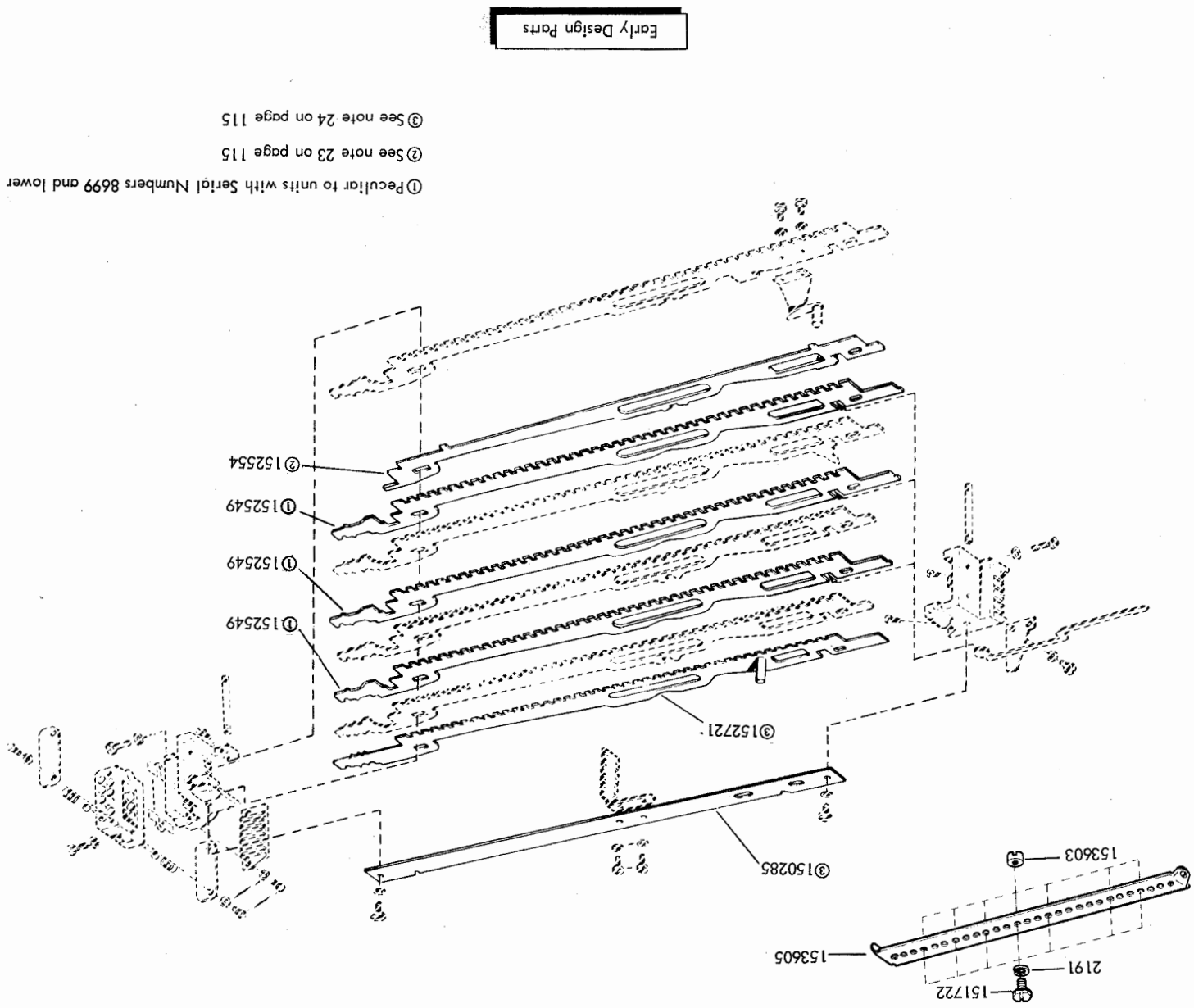


FIGURE 48. CODE BAR MECHANISM

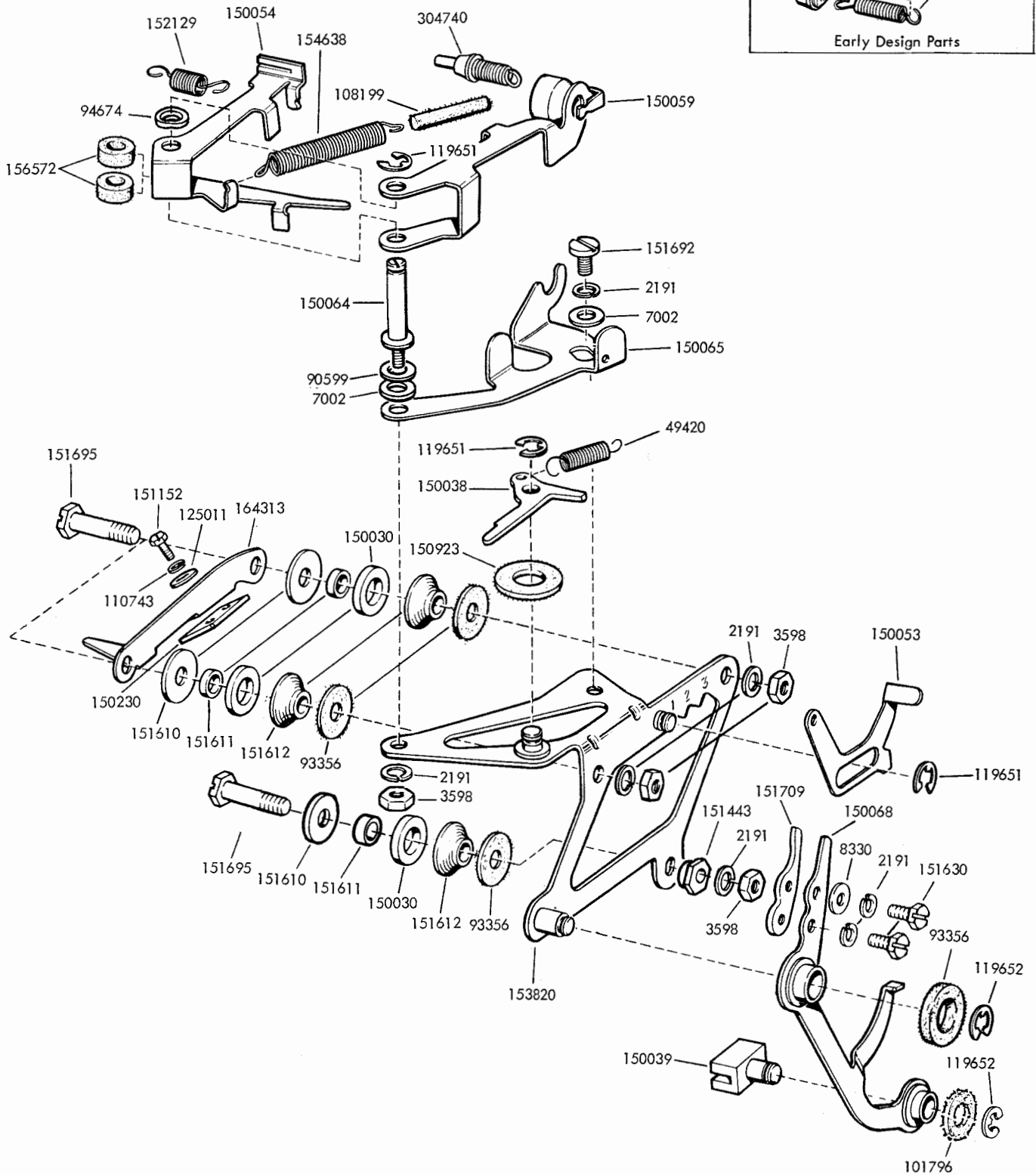
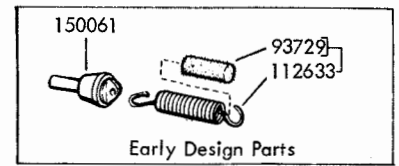
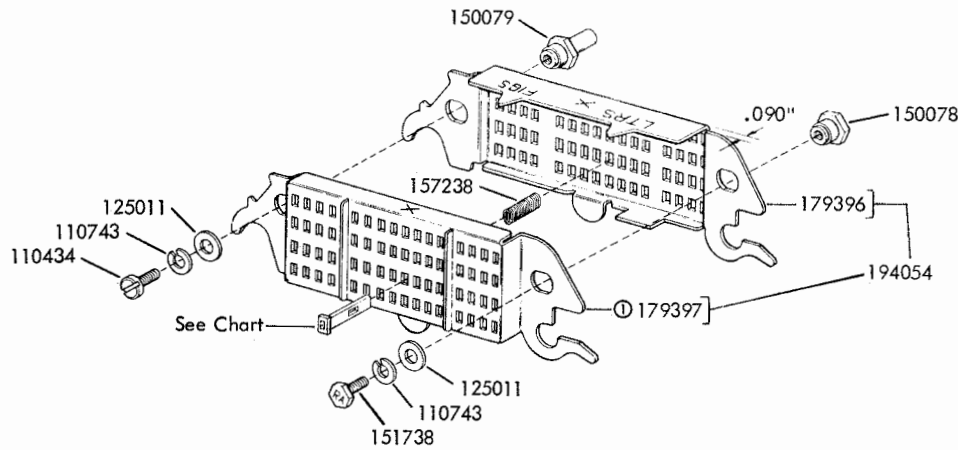
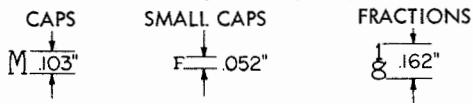


FIGURE 49. 150036 PRINTING CARRIAGE ASSEMBLY



Murray Style Pallets
(10 characters per inch spacing)



Note: Part number of 151738 Identification Screw to include two letter suffix of type box arrangement.

MURRAY STYLE PALLETS

PALLET	NUMBER	PALLET	NUMBER	PALLET	NUMBER	PALLET	NUMBER	PALLET	NUMBER	PALLET	NUMBER	PALLET	NUMBER
A	157600	F	157605	K	157610	P	157615	U	157620	Z	157625	5	157630
B	157601	G	157606	L	157611	Q	157616	V	157621	1	157626	6	157631
C	157602	H	157607	M	157612	R	157617	W	157622	2	157627	7	157632
D	157603	I	157608	N	157613	S	157618	X	157623	3	157628	8	157633
E	157604	J	157609	O	157614	T	157619	Y	157624	4	157629	9	157634

The above pallets are common to all Murray Style Arrangements

ADDITIONAL MURRAY STYLE PALLETS

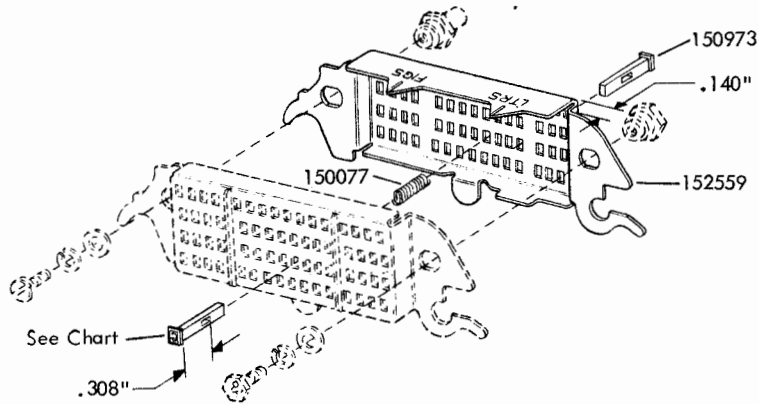
PALLET	NUMBER	PALLET	NUMBER	PALLET	NUMBER	PALLET	NUMBER	PALLET	NUMBER	PALLET	NUMBER	PALLET	NUMBER
CS	155880	H	155868	n	157785	z	157788	¢	157658	≡	155870	⊞	157721
c	157780	J	157796	OZ	155879	3	157805	@	157726	■	155873	⊞	157722
DZ	157801	j	157783	o	157725	/16	155874	△	157807	◀	155877	||	157727
E	155869	K	157797	g	157794	/32	155875	o	157728	▶	155878	-	157642
EA	157799	κ	157784	s	157786	...	155876	±	157806	~	155871		
F	157795	L	157803	t	157787	-	157804	=	157678	^	155872		
f	157781	N	157716	YD	157800	%	157660	x	157715	⊗	157719		
g	157782	N	157798	Yd	157802	£	157650	∞	157661	□	157720		

① See note 25 on page 115

See Figures 52, 53 and 54 for pallet arrangements

For Early Design, see Figure 51

FIGURE 50. TYPE BOX AND PALLETS



MURRAY STYLE PALLETS

PALLET	NUMBER	PALLET	NUMBER	PALLET	NUMBER	PALLET	NUMBER
A	150100	X	150123	!	150146	↘	151947
B	150101	Y	150124	&	150147	↙	151948
C	150102	Z	150125	;	150148	+	151949
D	150103	1	150126	/	150149	○	151950
E	150104	2	150127	▼	150150	⊙	151951
F	150105	3	150128	⋮	150151	⊕	151952
G	150106	4	150129	⋮	150152	⊕	151953
H	150107	5	150130	⋮	150153	x	154536
I	150108	6	150131	⋮	150154	ñ	154537
J	150109	7	150132	⋮	150155	∞	154538
K	150110	8	150133	⋮	150156	Δ	154539
L	150111	9	150134	⋮	150157	⊕	154540
M	150112	-	150143	⋮	150158	□	154541
N	150113	.	150135	⋮	150159	⊕	154542
O	150114	,	150136	⋮	150160	⊕	154543
P	150115	"	150137	⋮	150161	∧	154544
Q	150116	(	150138	⋮	150162	∇	154545
R	150117	?	150139	⋮	151941	⊙	154546
S	150118	∅	150140	⋮	151942	@	154547
T	150119	)	150141	⋮	151943	||	154548
U	150120	⌘	150142	⋮	151944	•	154549
V	150121	\$	150144	⋮	151945	BLANK	150973
W	150122	:	150145	⋮	151946		

See note 26 on page 115

Early Design Parts

FIGURE 51. TYPE BOX AND PALLETS

GOTHIC STYLE PALLETS ① (12-TO-INCH SPACING)										The Pallets listed below are common to 12-to-inch Gothic Style Arrangements		LARGE GOTHIC STYLE PALLETS ②										The Pallets listed below are common to all large Gothic Style Arrangements		
PALLET	NUMBER	155705 "XD"	155706 "XE"	155707 "XF"	161362 "XR"	161363 "XS"	161364 "XT"	161365 "XU"	162056 "XZ"			179057 "YV"	PALLET	NUMBER	154643 "RV"	153518 "WA"	160755 "XM"	160999 "XP"	163295 "YC"	161081 "YG"	164218 "YJ"			164348 "YK"	PALLET	NUMBER
&	155467	X	X		X	X	X		X	X	A	155432	∅	157764	X	X				X		A	157729	
\$	155468	X	X	X	X	X	X		X	X	B	155433	•	157766	X	X	X	X	X	X	X		B	157730
%	155470			X					X		C	155434	"	157767	X	X	X	X	X	X	X		C	157731
1	155471		X	X		X	X				D	155435	'	157768	X	X				X	X	X	D	157732
2			X	X		X	X					E	155436	:	157769	X	X			X	X		E	157733
1	155472		X	X		X	X				F	155437	-	157770	X	X				X	X		F	157734
4			X	X		X	X					G	155438	?	157771	X	X		X	X	X	X	G	157735
#	155473	X	X		X	X			X	X	H	155439	(	157772	X	X			X	X		H	157736
7	155474		X			X	X				I	155440	)	157773	X	X			X	X		I	157737
8			X				X	X				J	155441	!	157774	X	X			X	X		J	157738
5	155475		X			X	X				K	155442	#	157775	X	X				X		K	157739	
8			X				X	X				L	155443	1	157776	X	X			X		L	157740	
1	155476		X			X	X				M	155444	8	157777	X	X				X		M	157741	
8			X				X	X				N	155445	∅	157778							N	157742	
3	155477		X			X	X				O	155446	1	157779		X	X	X		X	X	O	157743	
8			X				X	X				P	155447	8	157823			X	X			P	157744	
3	155478		X			X	X				Q	155448	1	157824			X	X				Q	157745	
4			X				X	X				R	155449	8	157825			X	X				R	157746
+	155479							X			S	155450	1	157826			X	X				S	157747	
∅	155483								X		T	155451	2	157827			X	X				T	157748	
"		M	M	M	M	M	M		M	M	U	155452	3	157828			X	X				U	157749	
'		M			M	M			M	M	V	155453	7	157829			X	X				V	157750	
:		M		M	M				M	M	W	155454	1	157830								W	157751	
?		M		M	M				M	M	X	155455	2	157831			X	X				X	157752	
)		M		M					M	M	Y	155456	5	157832			X	X				Y	157753	
(		M		M	M				M	M	Z	155457	8	157833			X	X				Z	157754
!				M					M		1	155458	3	157834			X	X				1	157755	
,		M	M	M	M		M		M	M	2	155459	4	157835			X	X				2	157756	
←	161366							X			3	155460	7	157836			X	X				3	157757	
→	161367							X			4	155461	8	157837			X	X				4	157758	
↓	161368							X			5	155462	1	163308					X		X	5	157759	
↑	161369							X			6	155463	1	163309					X		X	6	157760	
↖	161370							X			7	155464	4	163310					X		X	7	157761	
↗	161371							X			8	155465	3	163311					X		X	8	157762	
↘	161372							X			9	155466	1	163312					X		X	9	157763	
↙	161373							X			/	155469	2	163313					X		X	/	157765	
○	161374							X			-	157642	5	163314					X		X	-	157772	
⊙	161375							X					8						X		X	⊙	157777	
⊕	161376							X											X		X	⊕	157778	
⊗	161377							X											X		X			

M = Murray Typepallet

Gothic Style Pallets
(10 or 12 characters per inch spacing)



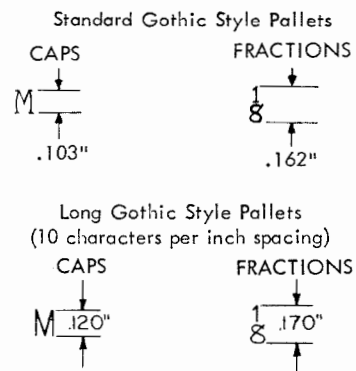
Large Gothic Style Pallets
(5, 6 or 8 characters per inch spacing)



FIGURE 53. TYPEPALLET CHARTS

LONG GOTHIC STYLE PALLETS								The Pallets listed below are common to all long Gothic Style Arrangements
PALLET	NUMBER	155693 "WP"	155709 "XH"	162058 "YA"	194026 "AC"	194027 "AD"	194929 "AE"		195461 "AH"
:	155654	X	X				X	
(	155657	X	X				X	
)	155658	X	X				X	
	155660	X						
○	155661	X						
○	155662	X						
→	155663	X						
*	155664	X						
∞	155665	X						
\$	155667		X	X				
?	155668		X				X	
!	155669		X					
;	155670		X					
,	155671		X				X	
.	155672		X	X	X	X	X	X
"	155673		X	X		X		
7	155885			X				
8				X				
5	155886			X				
8				X				
1	155887			X				
4				X				
3	155888			X				
4				X				
1	155889			X				
8				X				
3	155890			X				
8				X				
1	155891			X				
2				X				
-	155655	X	X	X			X	X
△	155884				X			
∅	155895							X
±	194018				X	X		
+	194019				X		X	X
→	194020					X		M
=	194021						X	
↖	194035				X	X		M
↑	194036				X	X		M
↓	194037				X			M
↙	194038					X		M
←	194039					X		M
(I)	195486							X
(II)	195487							X
⊕	195488							X
↗ ↘ ○								M
⊗ ⊠ ⊡ ⊢								M

STANDARD GOTHIC STYLE PALLETS						The Pallets listed below are common to all standard Gothic Style Arrangements
PALLET	NUMBER	178852 "YU"	193803 "AB"	195009 "AF"	199898 "AL"	
.		M	M	M	M	A 159752
,		M	M		M	B 159753
"		M		M	M	C 159754
·		M	M	M	M	D 159755
;		M				E 159756
:		M	M		M	F 159757
-		M	M	M	M	G 159758
/		M	M	M	M	H 159759
?		M	M		M	I 159760
)		M	M	M		J 159761
(		M	M	M	M	K 159762
!		M			M	L 159763
\$		M		M	M	M 159764
&		M			M	N 159765
+			M		M	O 159766
#		M		M	M	P 159767
=			M			Q 159768
⊗			M			R 159769
□			M			S 159770
⊞			M			T 159771
⊚			M			U 159772



M = Murray Typepallet

FIGURE 54. TYPEPALLET CHARTS

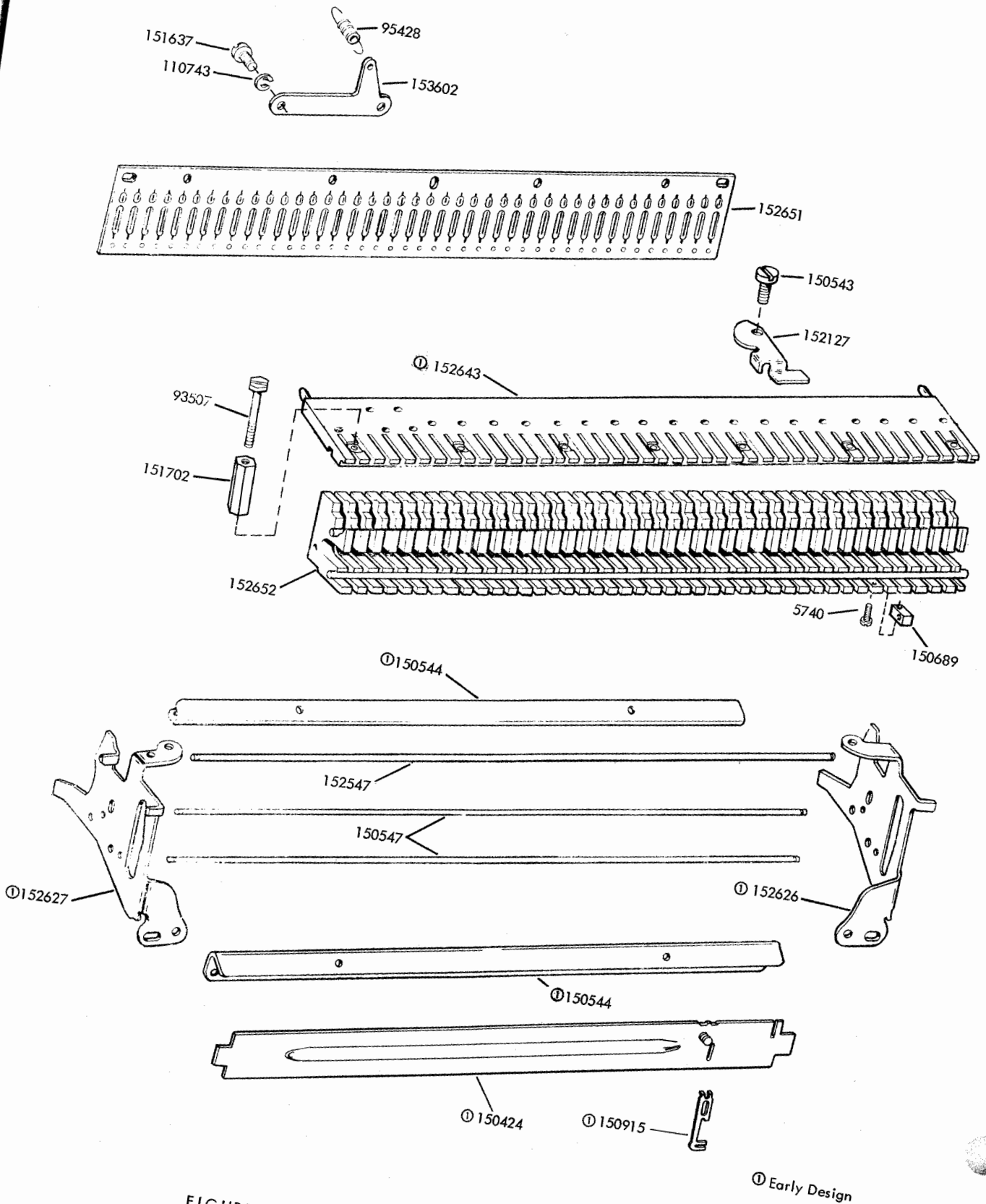


FIGURE 55. STUNT BOX - MAJOR COMPONENTS

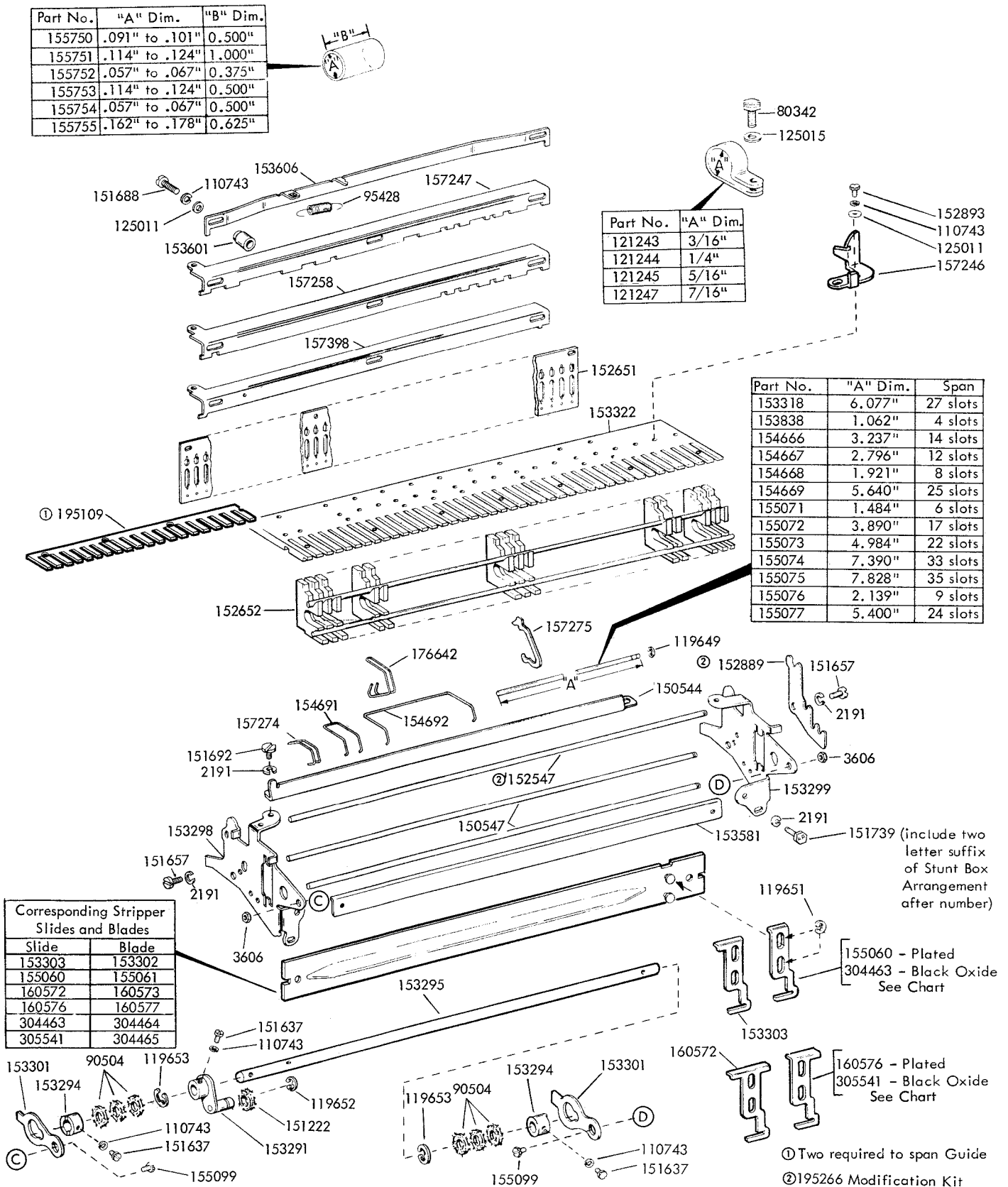


FIGURE 56. STUNT BOX - MAJOR COMPONENTS

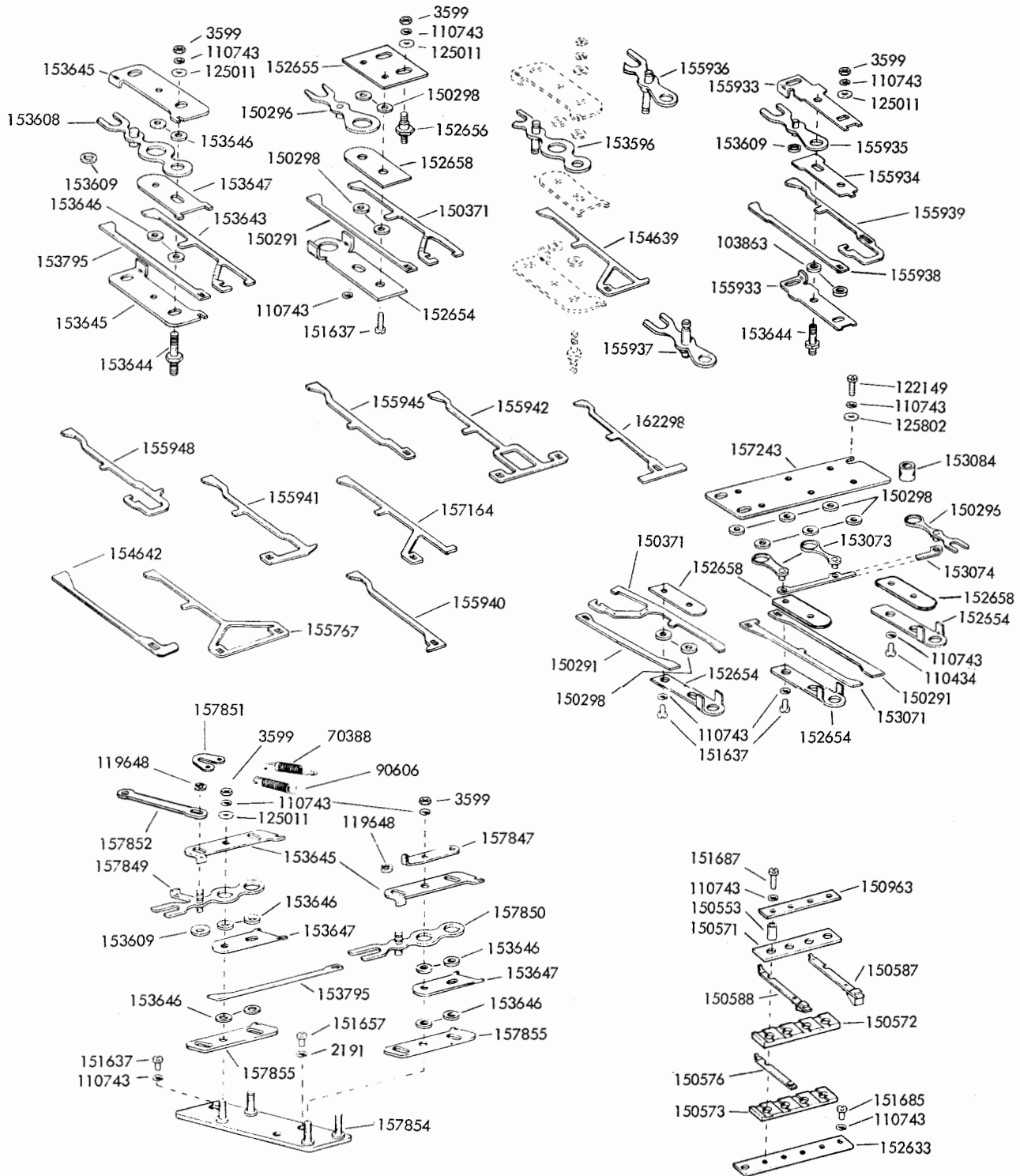
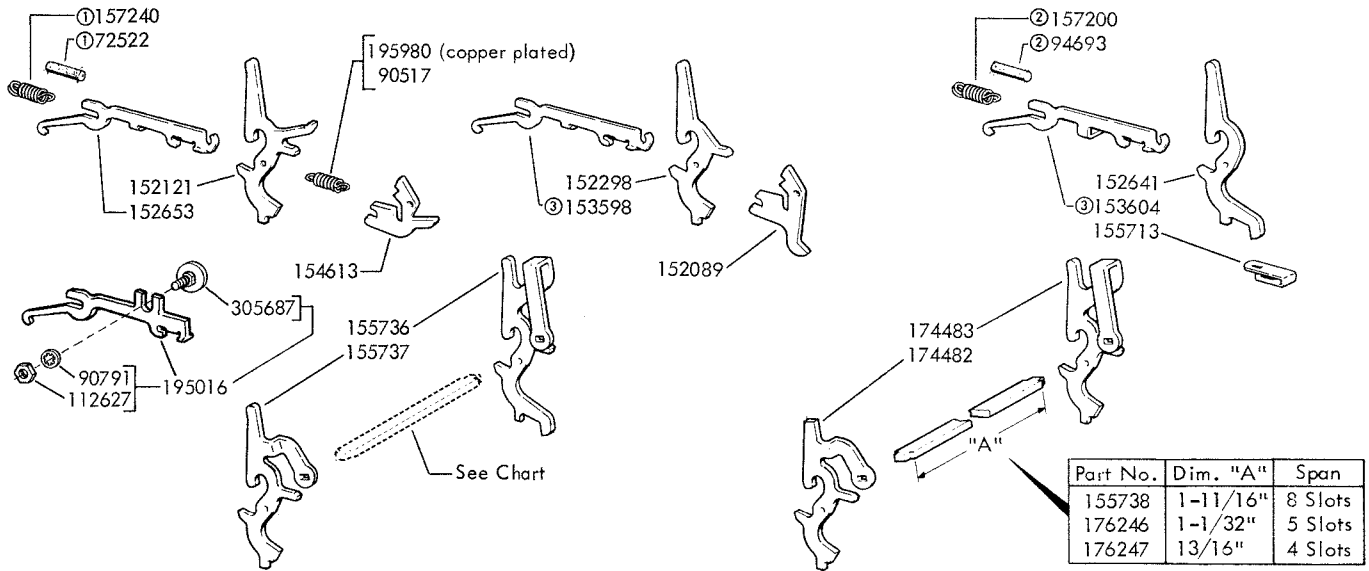


FIGURE 57. SHIFT MECHANISM COMPONENTS

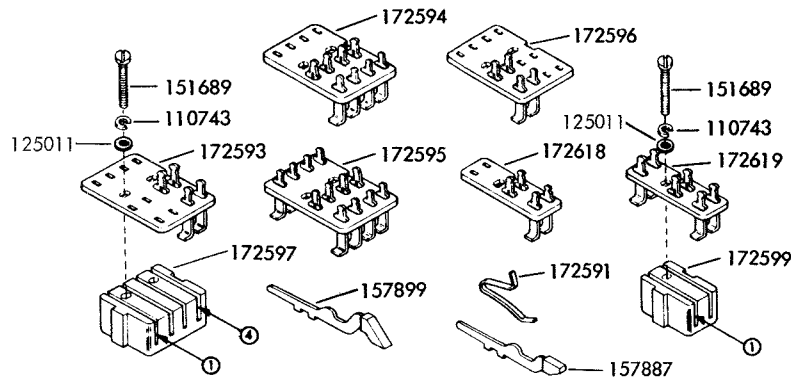


 152642	 152659	 157206	 157207	 161649	 162059	 163943
 152357 110743 3599 173141	 174484		 154646	 162484	 193655	 194414
 152299	 153670	 154647	 157205	 163271	 163944	 164311

① Used on units equipped with One-Stop and Three-Stop Clutches
 ② Used on units equipped with Two-Stop Clutches

③ Not used with Early Design 195109 Stop Plate. Early and Late Design Stop Plates may be identified by their widths. (Early Design width 15/32" - Late Design width 17/32")

FIGURE 58. FUNCTION LEVERS

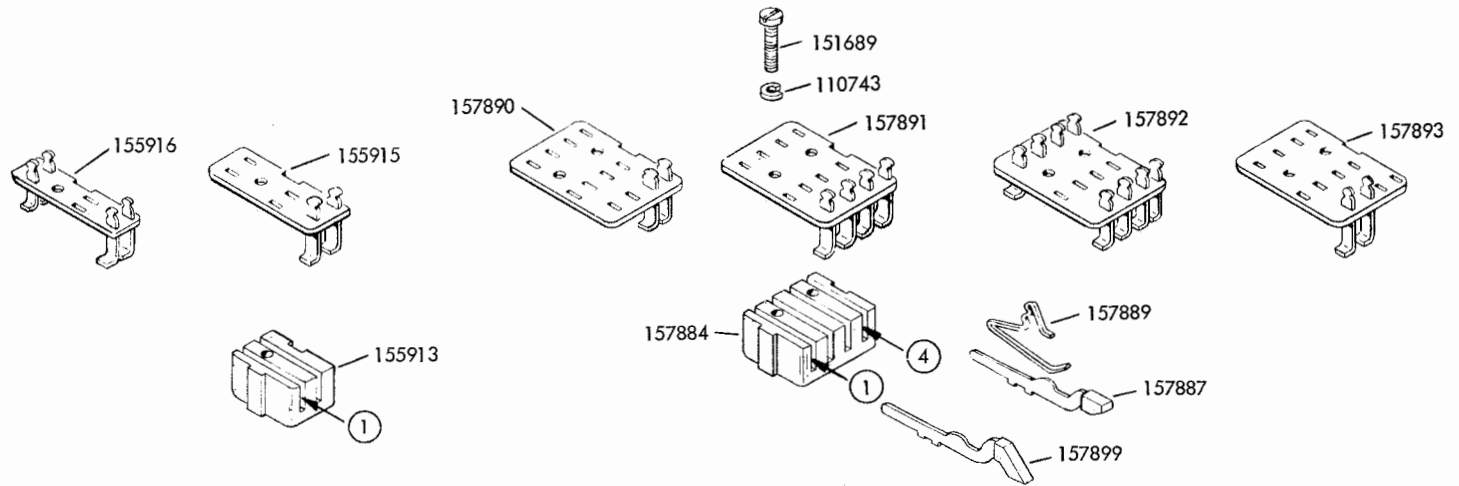


SWITCH ASSEMBLY NO.	CONTACT PLATE NO.	CONTACT ARM POSITION			
		1	2	3	4
172500	172593			157887	157887
172501	172593			157887	
172502	172593				157887
172503	172594	157887	157899	157899	157887
172504	172594	157887			
172505	172594	157899			157899
172506	172594		157887		
172507	172594	157899			
172508	172594	157887	157899		
172509	172594	157899		157899	
172510	172594	157899			157887
172511	172594	157899	157899	157899	157899
172512	172594	157887	157887	157899	
172513	172593			157899	
172514	172594	157887	157887	157887	157887
172515	172594	157887	157887	157887	
172516	172594		157887		157887
172517	172594	157899	157887	157899	157887
172518	172594		157887	157899	157887
172519	172594	157899		157887	
172520	172594	157899		157887	157899
172521	172593			157899	
172522	172594	157887	157899	157887	157887
172523	172594	157899	157887	157887	157899
172524	172594	157887		157887	
172525	172595	157887	157887	157887	157887
172526	172596		157887		
172527	172595			157887	
172528	172595	157887		157887	
172529	172595			157887	157887
172530	172595	157887	157887	157887	
172531	172595	157887		157887	157887
172532	172595	157887			
172533	172595	157887	157887		
172534	172594		157899	157887	
172535	172594			157899	157887
172536	172594	157899	157887	157899	
172538	172595		157887	157887	157887
172539	172595		157887		157887
172540	172594		157899	157887	157887
172541	172594	157899	157887	157887	157887
172542	172594	157887	157899	157887	157887
172543	172594	157899		157887	
172544	172595		157899		157887
172545	172595	157899		157899	
172546	172595	157899		157887	
172547	172595	157887	157899	157887	
172548	172596		157899		
172549	172595				157887
172550	172595	157899			157899
172551	172594		157887	157887	157887
172552	172594	157899		157887	157887
172553	172595		157887	157899	
172554	172594		157899		157899
172555	172595	157899	157887	157899	157899
172556	172595	157887	157887		157887
172557	172594	157887		157887	157887
172558	172595	157899			
172559	172594	157899	157887		
172560	172595	157899	157899	157887	157887
172561	172594		157887	157899	
172562	172594		157887	157899	157899
172563	172594	157887	157899	157887	157899
172564	172594	157899	157887		157899
172565	172595	157899	157887		
172566	172595		157899		
172567	172595		157887		157899
172568	172595	157887			157887
172569	172595		157887	157887	
172570	172595		157887		
172571	172594	157887	157887		157887
172572	172593			157899	157899
172573	172595	157899	157899	157899	157887
172574	172595	157899		157899	157887
172575	172595	157899	157899		
172576	172595	157899	157899	157899	157899
172577	172595	157899	157899	157899	157899
172578	172595		157899	157899	
172579	172595		157899	157887	
172580	172595	157899		157899	157899
172581	172595		157899		157899
172582	172595	157887	157899	157899	157899
172583	172595			157887	157899
172584	172595		157899	157899	157899
172585	172595	157887	157887		157899
172586	172595			157899	157899
172587	172595			157899	
172588	172595	157887		157899	
172589	172595				157899
172590	172595	⓪	⓪	⓪	⓪
172600	172618	157887			
172601	172618		157887		
172602	172618	157887	157887		
172603	172619	157887			
172604	172619		157887		
172605	172619	157887	157887		
172606	172618	157899			
172607	172618	157899	157899		
172608	172619	157899			

⓪172591 Contact Arm Spring included in slot
For Early Design, see Figure 60

FIGURE 59. SWITCH ASSEMBLIES AND COMPONENTS

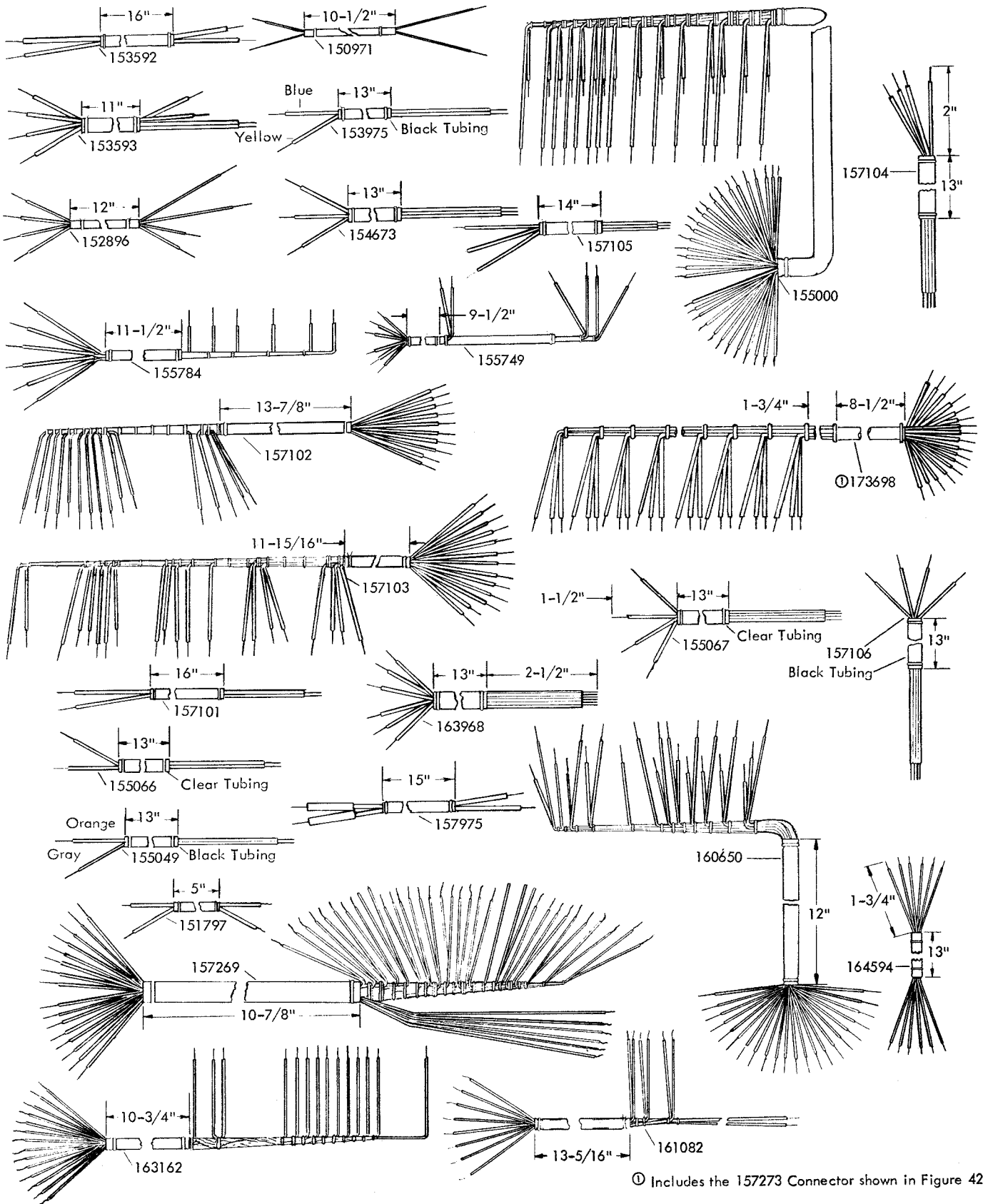
FIGURE 60. SWITCH ASSEMBLIES AND COMPONENTS



SWITCH ASSEMBLY NO.	CONTACT PLATE NO.	CONTACT ARM POSITION		SWITCH ASSEMBLY NO.	CONTACT PLATE NO.	CONTACT ARM POSITION				SWITCH ASSEMBLY NO.	CONTACT PLATE NO.	CONTACT ARM POSITION			
		1	2			1	2	3	4			1	2	3	4
155917	155915	157887		157070	157890			157887	157887	160192	157892	157887		157887	157887
155918	155915		157887	157071	157890			157887		160193	157892	157887			
155919	155915	157887	157887	157072	157890				157887	160194	157892	157887	157887		
155920	155916	157887		157073	157891	157887	157899	157899	157887	160195	157891		157899	157887	
155921	155916		157887	157074	157891	157887				160196	157891			157899	157887
155922	155916	157887	157887	157075	157891	157899			157899	160197	157891	157899	157887	157899	
155923	155915	157899		157076	157891		157887			160198	157891		157899	157887	
155924	155915	157899	157899	157077	157891	157899				160199	157892		157887	157887	157887
155925	155915	157899		157078	157891	157887	157899			160200	157892		157887		157887
				157079	157891	157899		157899		160201	157891		157899	157887	157887
				157080	157891	157899		157899	157887	160202	157891	157899	157887	157887	157887
				157081	157891	157899	157899	157899	157899	160203	157891	157887	157899	157887	157887
				157082	157891	157887	157887	157899		160204	157891	157899	157887		
				157083	157890			157899		160205	157892		157899		157887
				157084	157891	157887	157887	157887	157887	160206	157892	157899		157899	
				157085	157891	157887	157887	157887		160207	157892	157899		157887	
				157086	157891		157887		157887	160208	157892	157887	157899	157887	
				157087	157891	157899	157887	157899	157887	160209	157893		157899		
				157088	157891		157887	157899	157887	160210	157892				157887
				157089	157891	157899			157887	160211	157892	157899			157899
				157090	157891	157899		157887	157899	160212	157891		157887	157887	157887
				157091	157890				157899	160213	157891	157899		157887	157887
				157092	157891	157887	157899		157887	160214	157892		157887	157899	
				157093	157891	157899	157887	157887	157899	160215	157891		157899		157899
				157094	157891	157887			157887	160216	157892	157899	157887	157899	157899
				157095	157892	157887	157887	157887	157887	160217	157892	157887	157887		157887
				157096	157893		157887			160218	157891	157887		157887	157887
				157097	157892			157887		160219	157892	157899	157899	157887	157887
				157098	157892	157887		157887		160220	157891	157899	157887		
				157099	157892			157887	157887						
				157100	157892	157887	157887	157887							

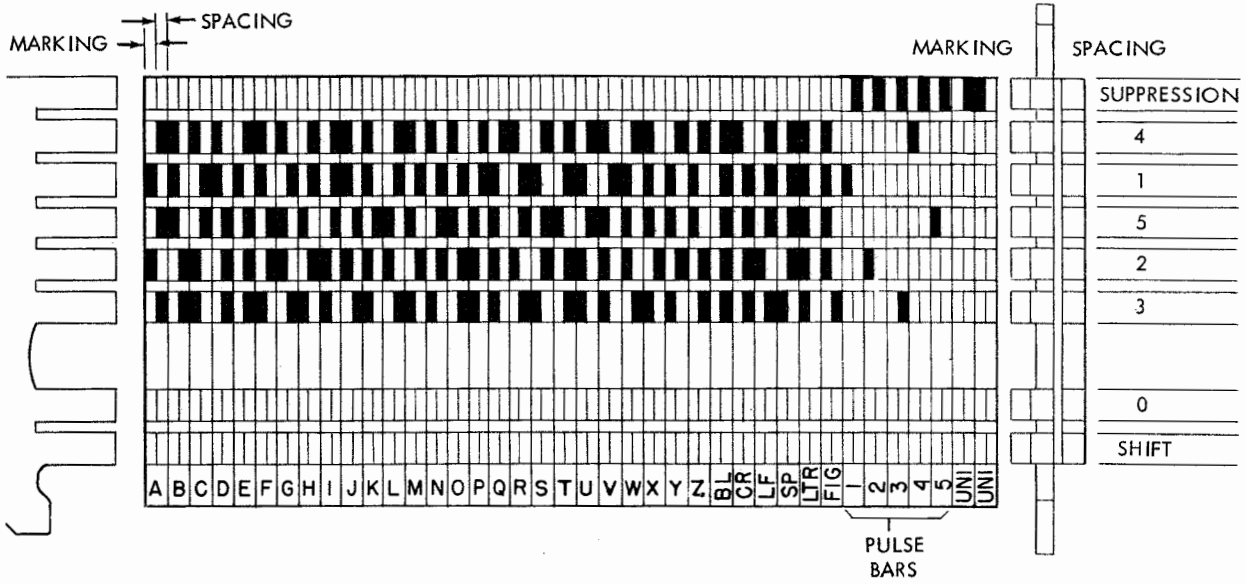
Early Design Parts

See note 27 on page 116



Ⓞ Includes the 157273 Connector shown in Figure 42

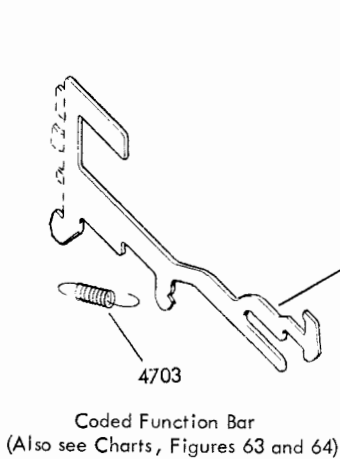
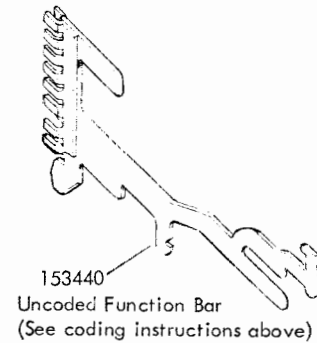
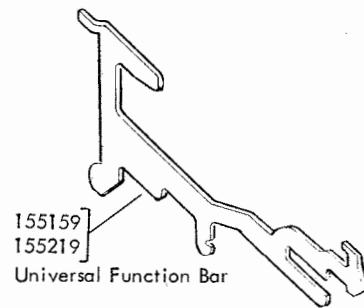
FIGURE 61. CABLE ASSEMBLIES



Blank squares indicate the Tines that should be removed to code the 153440 Function Bar.

Additional levels at which the Function Bar can be controlled.

SUPPRESSION TINES	MARKING SPACING	NON-PRINT PRINT	These terms apply only to Selective Calling.
0 TINES	MARKING SPACING	SELECT NON-SELECT	
SHIFT TINES	MARKING SPACING	UPPER CASE LOWER CASE	



- 152665 — THROUGH — 152704
- 153160 — THROUGH — 153169
- 153409 — THROUGH — 153438
- 153520 — THROUGH — 153528
- 155100 — THROUGH — 155135
- 155141 — THROUGH — 155145
- 155176 — THROUGH — 155180
- 155191 — THROUGH — 155218
- 155246 — THROUGH — 155250
- 155286 — THROUGH — 155290
- 155294 —
- 155296 — THROUGH — 155300
- 155306 — THROUGH — 155307
- 155311 — THROUGH — 155315
- 155326 — THROUGH — 155330
- 155336 — THROUGH — 155340
- 155366 — THROUGH — 155370
- 162636 — THROUGH — 162640

Note: For removing Tines, use 161686 Tine Tool.

FIGURE 62. FUNCTION BARS

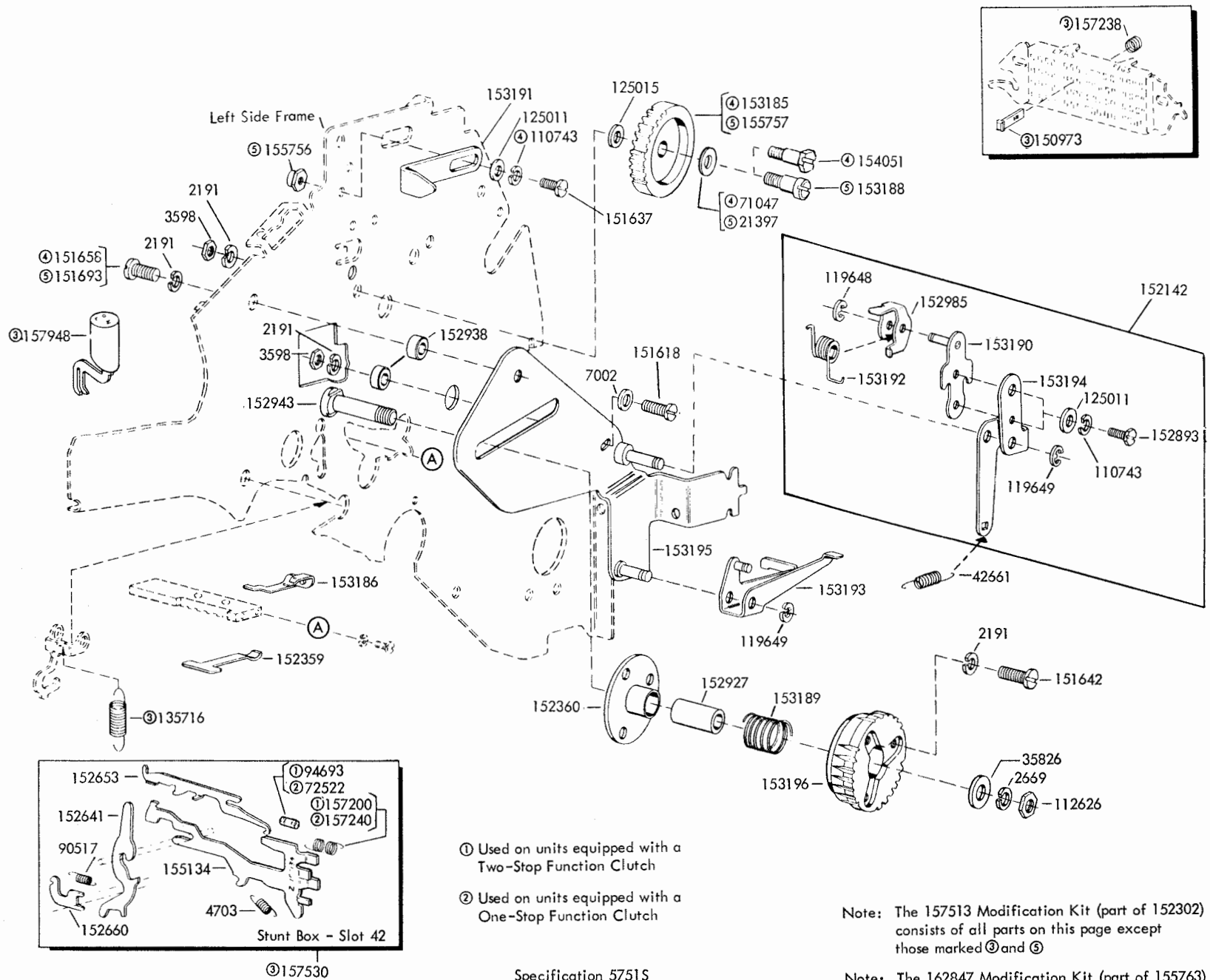
FIGURE 63. FUNCTION BAR CONDITION CHART

CONDITION OF TYPING UNIT FOR FUNCTION BAR SELECTION		NO RESTRICTION	UPPER CASE	LOWER CASE	SELECT	NON-SELECT	PRINT	NON-PRINT	CONDITION OF TYPING UNIT FOR FUNCTION BAR SELECTION
CHARACTER OR FUNCTION 153440 UNCODED FUNCTION BAR IS AVAILABLE FOR USE ON ANY CHARACTER OR FUNCTION BY REMOVING TINES	A	152676			155100	153409	155191		A
	B	152677	153526		155101	153410	155192		B
	C	152678	153520		155102	153411	155193		C
	D	152679	153521		155103	153412	155194		D
	E	152680	153166		155104	153413	155195		E
	F	152681	153160	155326	155105	153414	155196	155286	F
	G	152682	153162	155327	155106	153415	155197	155287	G
	H	152683	152673	155328	155107	153416	155198	155288	H
	I	152684	155249	155329	155108	153417	155199	155289	I
	J	152685	152694	155330	155109	153418	155200	155290	J
	K	152686	153529		155110	153419	155201		K
	L	152687	153522		155111	153420	155202		L
	M	152688	152674		155112	153421	155203		M
	N	152689	153523		155113	153422	155204	155294	N
	O	152690	153528		155114	153423	155205		O
	P	152691	155250	155336	155115	153424	155206	155296	P
	Q	152692	153165	155337	155116	153425	155207	155297	Q
	R	152695	153167	155338	155117	153426	155208	155298	R
	S	152696	152672	155339	155118	153427	155209	155299	S
	T	152697	153524	153169	155119	153428	155210	155300	T
	U	152698	155248	155340	155120	153429	155211		U
	V	152699	153164		155121	153430	155212		V
	W	152700	153163		155122	153431	155213		W
	X	152701	153525		155123	153432	155214		X
	Y	152702	153527		155124	153433	155215		Y
	Z	152703	153161		155125	153434	155216	155306	Z
BLANK LETTERS FIGURES SPACE CARRIAGE-RETURN LINE FEED ANY CHARACTER OR FUNCTION M & N M & V		152669	152693	152675	155125		155217	155307	BLANK LETTERS
		152665			155313		153438		FIGURES
		152666							SPACE
		155129			155314	152670			CARRIAGE-RETURN
		152667			155128	199519	155127		LINE FEED
		152668			155315		153435	155130	ANY CHARACTER OR FUNCTION
		152704	153168		155311	152671			M & N
					155132				M & V
		199518			155218				PULSE #1
							162636		" 2
						162637		" 3	
						162638		" 4	
						162639		" 5	
						162640		UNIV.	
						155159	155219		
POSITION OF FUNCTION BAR TINES	SUPPRESSION LEVEL ZERO LEVEL SHIFT LEVEL		MARKING	SPACING	MARK-ING	SPACING	MARKING		SUPPRESSION LEVEL ZERO LEVEL SHIFT LEVEL

FIGURE 64. FUNCTION BAR CONDITION CHART

CONDITION OF TYPING UNIT FOR FUNCTION BAR SELECTION		PRINT NON-SELECT	PRINT UPPER CASE	PRINT SELECT	SELECT LOWER CASE	PRINT LOWER CASE	SELECT UPPER CASE	NON-SELECT LOWER CASE	CONDITION OF TYPING UNIT FOR FUNCTION BAR SELECTION	
CHARACTER OR FUNCTION	A								A	
	B								B	
	C								C	
	D								D	
	E								E	
	F		155141						F	
	G		155135						G	
	H		155142		155133				H	
	I		155143						I	
	J		155131						J	
	K		155144						K	
	L		155145						L	
	M								M	
	N								N	
	O								O	
	P						155176		155366	P
	Q						155177		155367	Q
	R						155178		155368	R
	S		153437				155179		155369	S
	T						155180		155370	T
	U									U
	V									V
	W									W
	X									X
	Y									Y
	Z		155134					155246		Z
	BLANK							155247		BLANK
	LETTERS									LETTERS
FIGURES									FIGURES	
SPACE									SPACE	
CARRIAGE-RETURN									CARRIAGE-RETURN	
LINE FEED									LINE FEED	
ANY CHARACTER OR FUNCTION		153436		155126					ANY CHARACTER OR FUNCTION	
M & N									M & N	
M & V									M & V	
PULSE #1									PULSE #1	
" 2									" 2	
" 3									" 3	
" 4									" 4	
" 5									" 5	
UNIV.									UNIV.	
POSITION OF FUNCTION BAR TINES	SUPPRESSION LEVEL ZERO LEVEL SHIFT LEVEL	SPACING SPACING	SPACING MARKING	SPACING MARKING	MARKING SPACING	SPACING SPACING	MARKING MARKING	SPACING SPACING	SUPPRESSION LEVEL ZERO LEVEL SHIFT LEVEL	

FIGURE 65. 152302 (SPROCKET FEED) AND 155763 (FRICTION FEED) MODIFICATION KITS TO PROVIDE PAGE FEED-OUT ON UPPER CASE "Z"



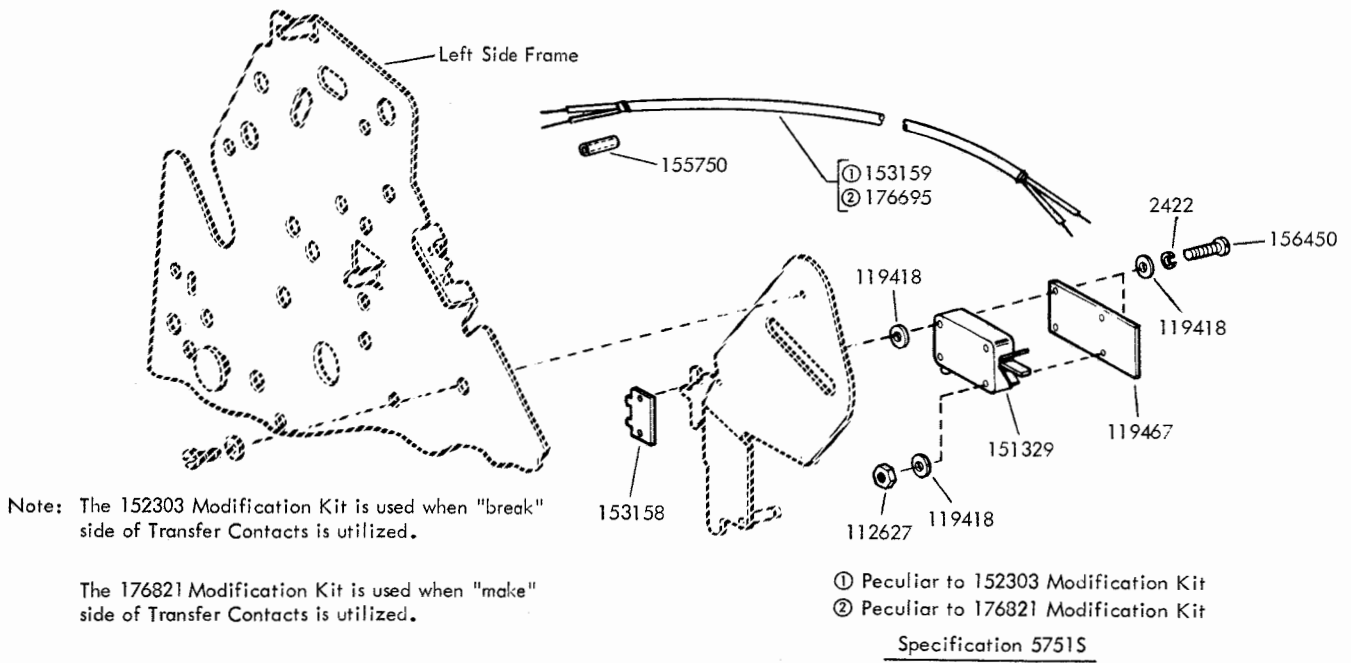


FIGURE 66. 152303 AND 176821 MCDIFICATION KITS TO PROVIDE PAGE FEED-CUT TRANSMITTER CONTROL

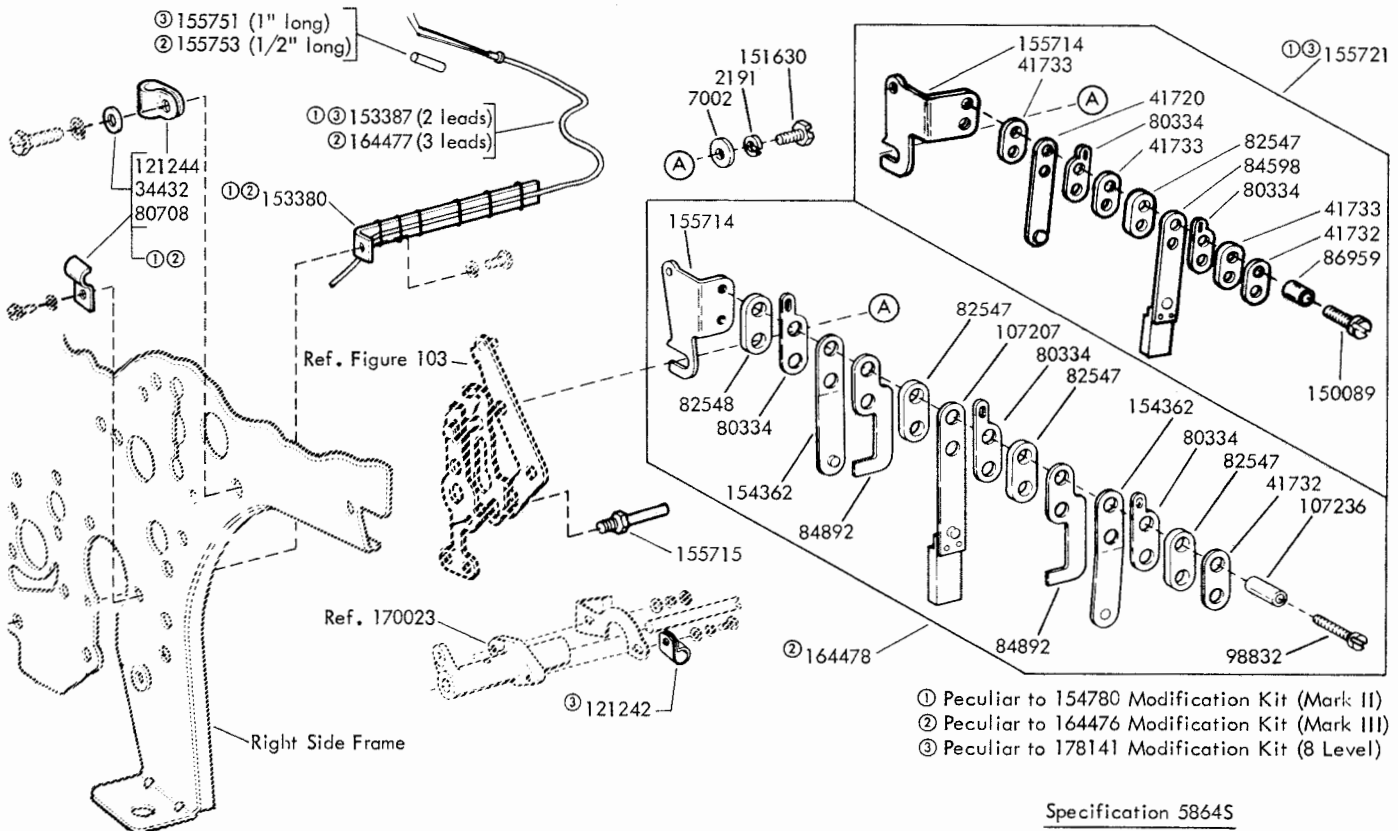
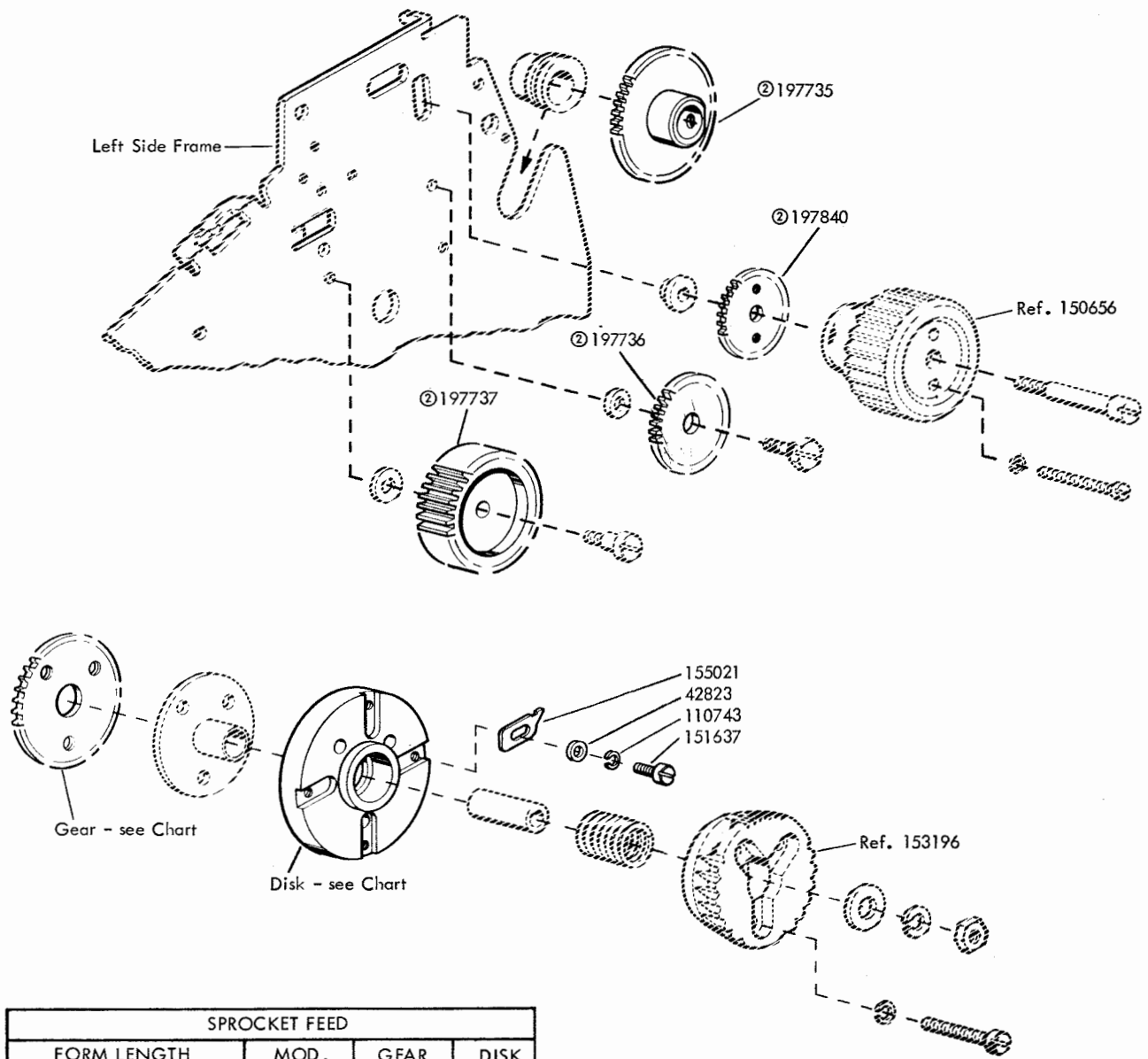


FIGURE 67. 154780, 164476 AND 178141 MCDIFICATION KITS TO PROVIDE HORIZONTAL TABULATOR XD CONTROL



SPROCKET FEED			
FORM LENGTH IN INCHES	MOD. KIT	GEAR NO.	DISK NO.
7-1/2, 15	153927	153207	153217
3-1/2, 7, 14	153928	153206	153216
6-1/2, 13	153929	153205	153215
3, 6, 12	153930	153204	153214
5-1/2, 11	153931	153203	153213
5, 10	153932	153202	153212
9-1/2	153933	153201	153211
4-1/2, 9	153934	153200	153210
8-1/2	153935	153199	153209
2, 4, 8	153936	153198	153208
3-2/3, 7-1/3, 14-2/3	161140	161250	161260
3-1/4, 6-1/2, 13	①197847	197732	197730
4-1/4	①197848	197731	197729

FRICTION FEED			
FORM LENGTH IN INCHES	MOD. KIT	GEAR NO.	DISK NO.
5-1/2, 11	155765	155758	153213
2, 4, 8	161767	155759	153208

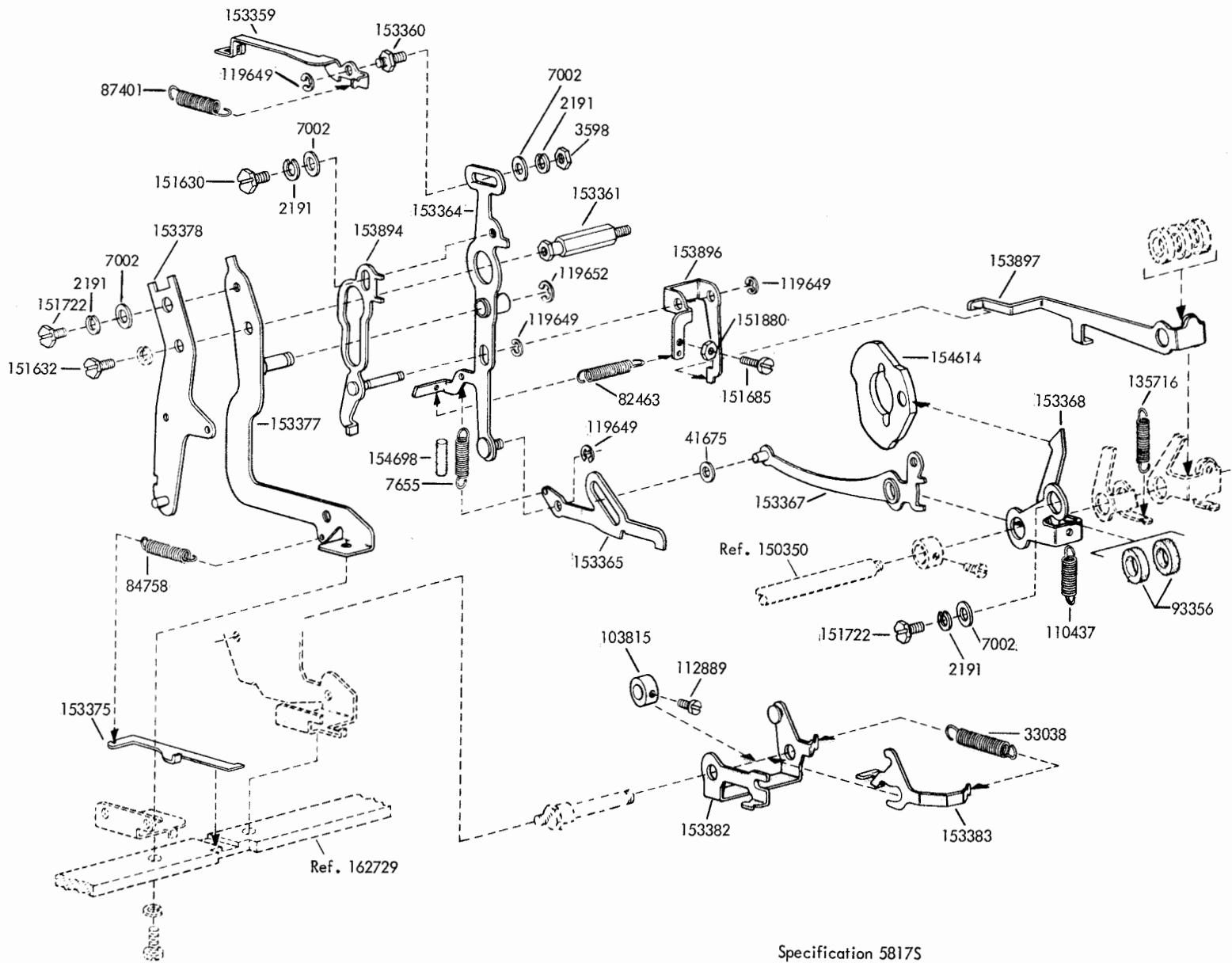
① The 197847 and 197848 Modification Kits can only be used with the 154742 Modification Kit (4 lines per inch)

② Part of 197847 and 197848 Modification Kits only

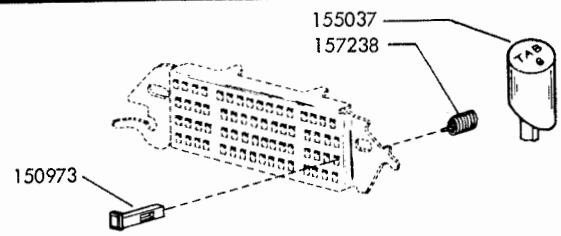
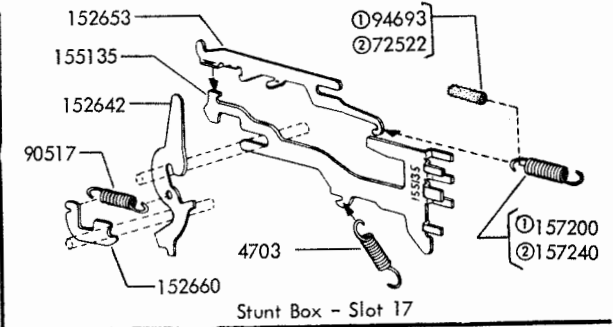
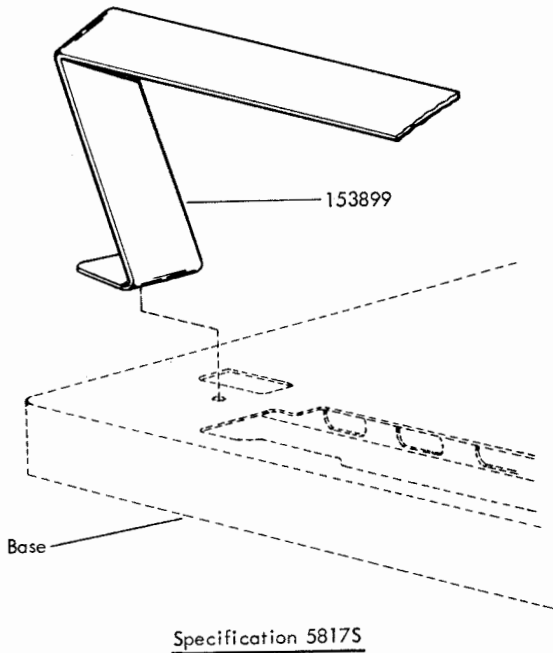
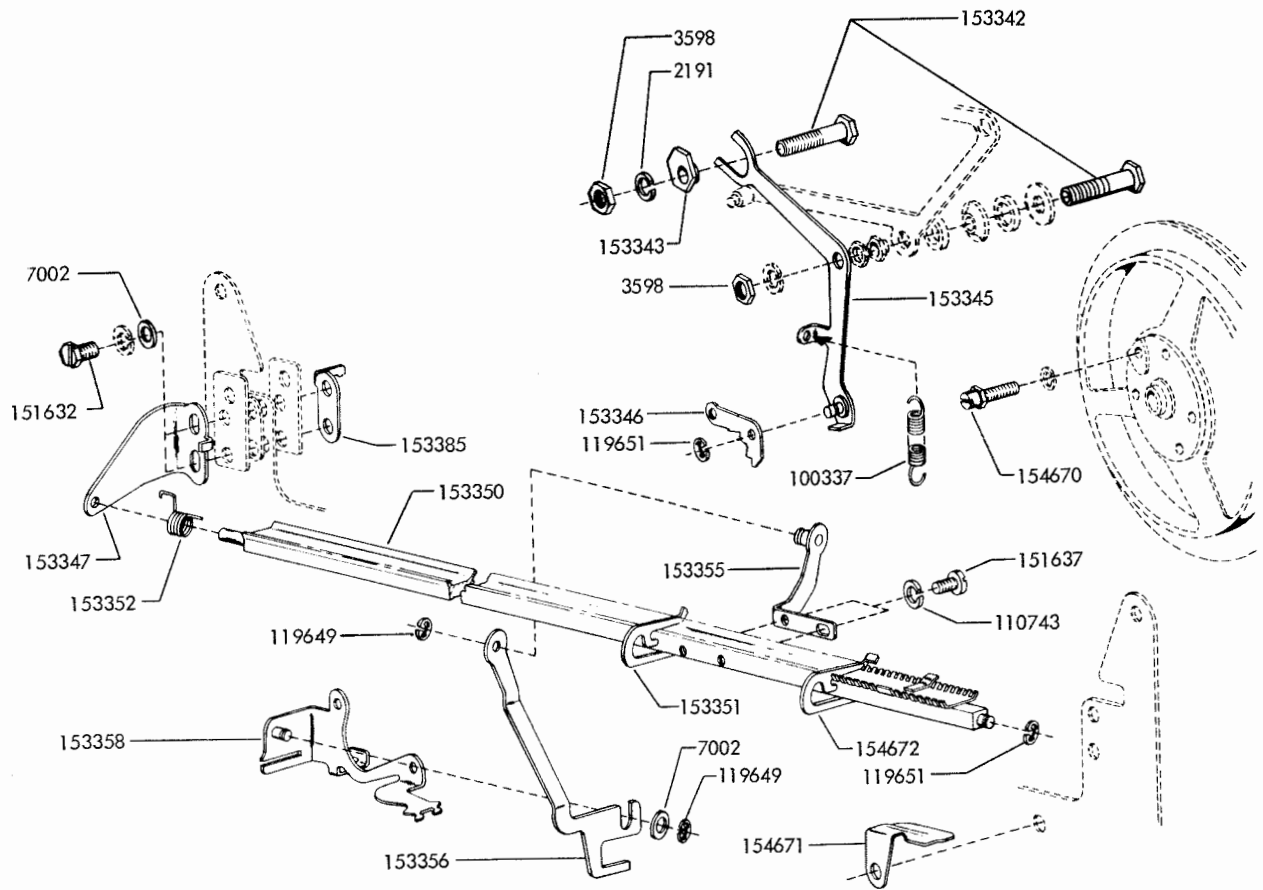
Specification 57515

FIGURE 68. PAGE FEED-OUT FORM LENGTH GEAR AND DISK MODIFICATION KITS

FIGURE 69. 152304 MODIFICATION KIT TO PROVIDE HORIZONTAL TABULATION
(CONTINUED ON NEXT PAGE)

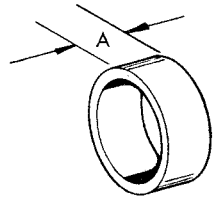


Specification 58175



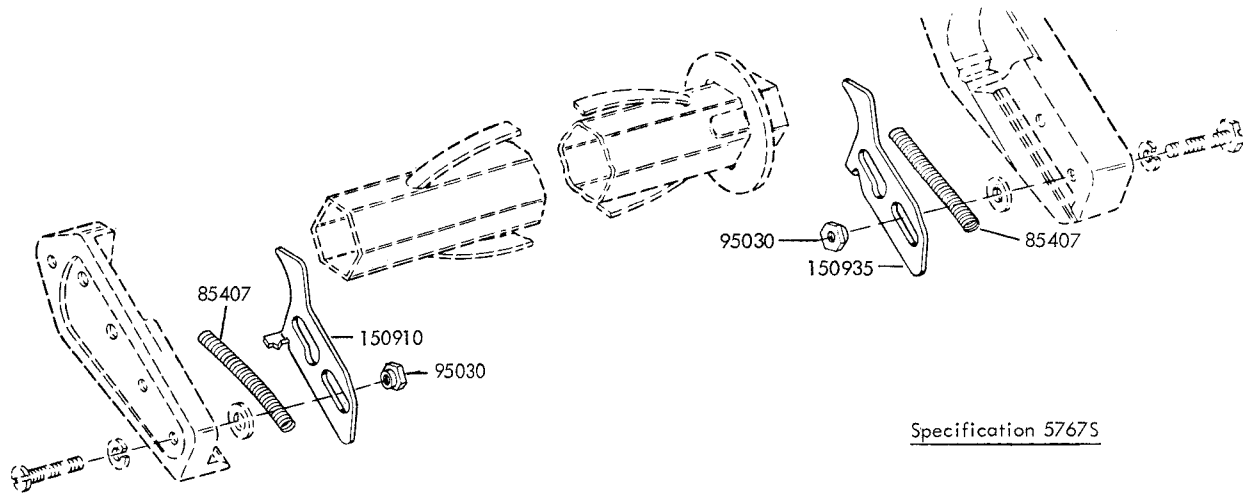
- ① Used on units equipped with a Two-Stop Function Clutch
- ② Used on units equipped with a One-Stop Function Clutch

FIGURE 70. 152304 MODIFICATION KIT TO PROVIDE HORIZONTAL TABULATION
(CONTINUED FROM PRECEDING PAGE)



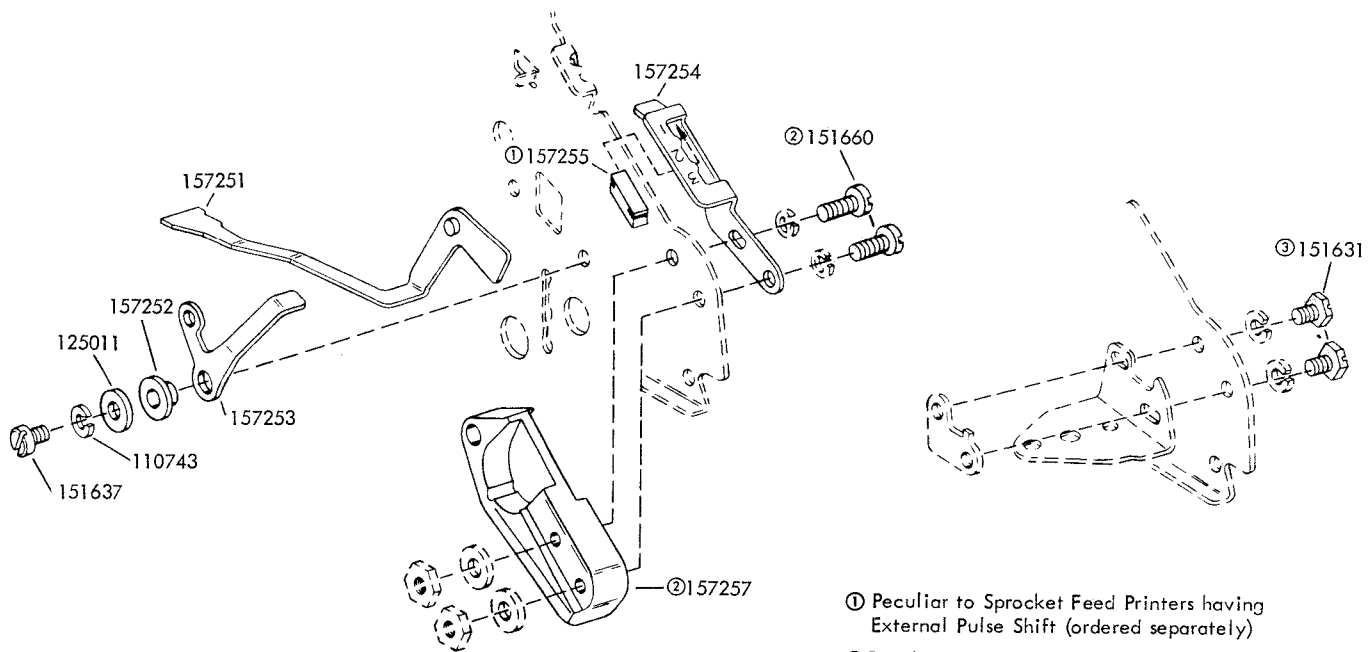
Part No.	Dim. "A"
155581	.250
155582	.500
155583	1.000
155584	2.000

FIGURE 71. 159362 MODIFICATION KIT TO PROVIDE SPACERS FOR CENTERING NARROW PAPER ROLL ON SPINDLE



Specification 57675

FIGURE 72. 151799 MODIFICATION KIT TO PROVIDE LATCHES FOR PAPER SPINDLE



- ① Peculiar to Sprocket Feed Printers having External Pulse Shift (ordered separately)
- ② Peculiar to 154743 - Friction Feed
- ③ Peculiar to 152315 - Sprocket Feed

Specification 58005

FIGURE 73. 152315 AND 154743 MODIFICATION KITS TO PROVIDE MANUAL SELECTION OF STUNT BOX OPERATION

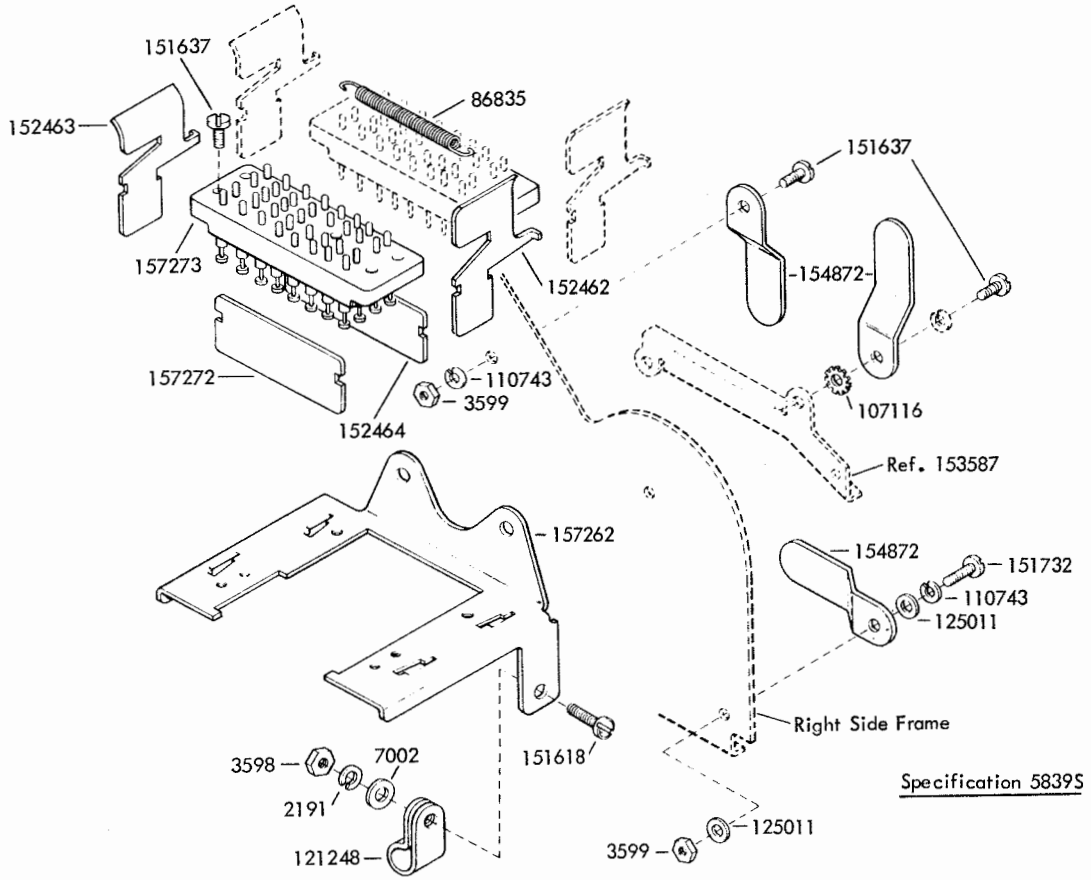


FIGURE 74. 154727 MODIFICATION KIT TO PROVIDE AUXILIARY CONNECTOR

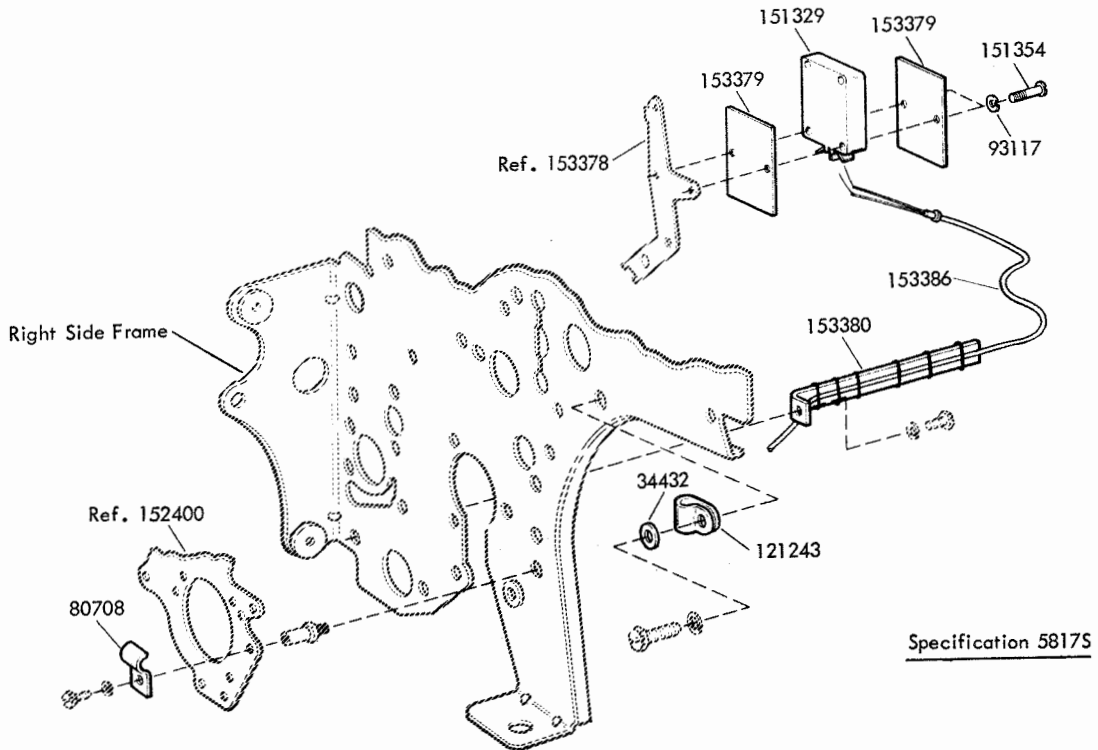
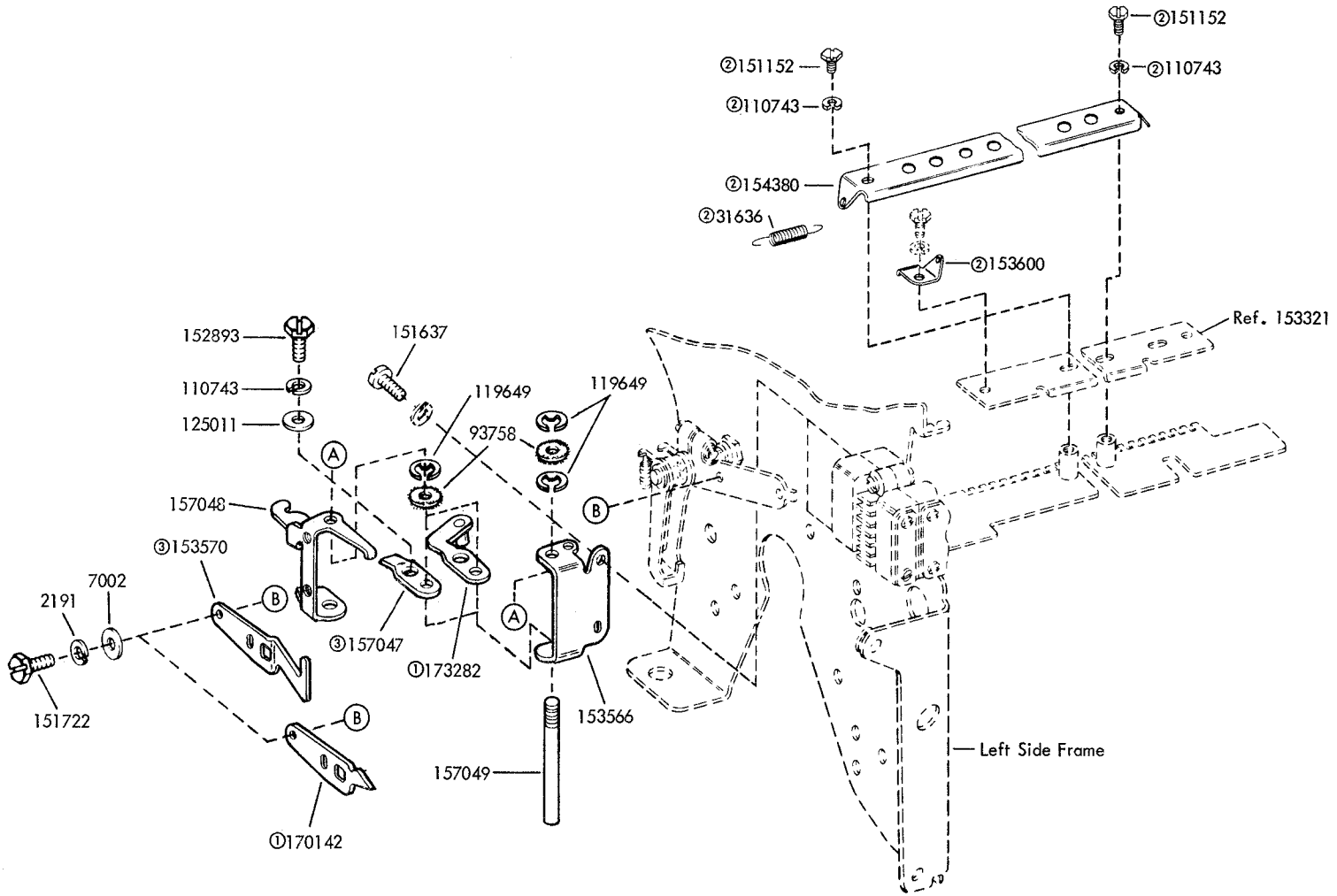


FIGURE 75. 152317 MODIFICATION KIT TO PROVIDE HORIZONTAL TABULATOR XD CONTROL

FIGURE 76. 152337, 157509 AND 173283 MODIFICATION KITS TO PROVIDE
ON-LINE STUNT SHIFT CONTROL



Specification 58235

- ① Part of 173283 Modification Kit (8 Level)
- ② Part of 152337 (Mark II) and 173283 (8 Level) Modification Kits
- ③ Part of 152337 (Mark II) and 157509 (Mark III) Modification Kits

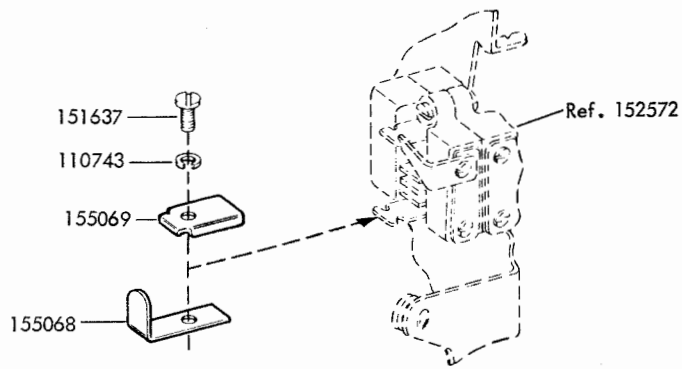
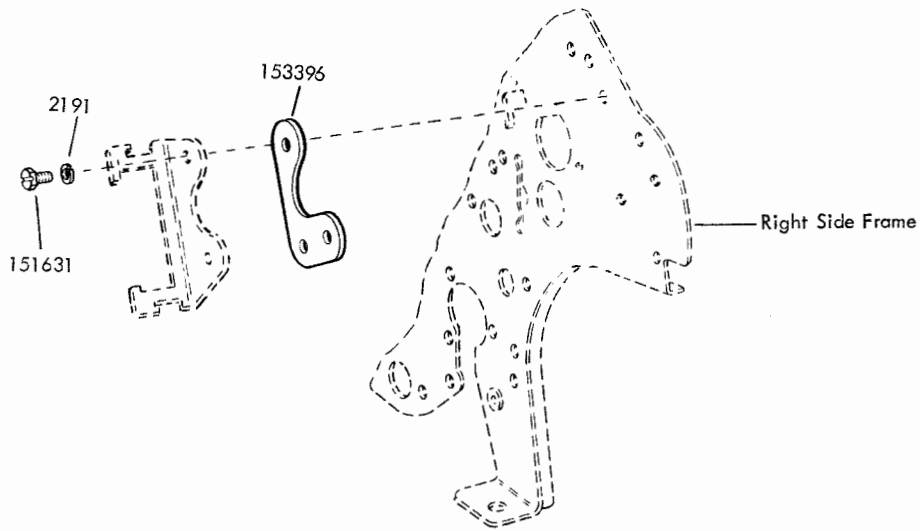
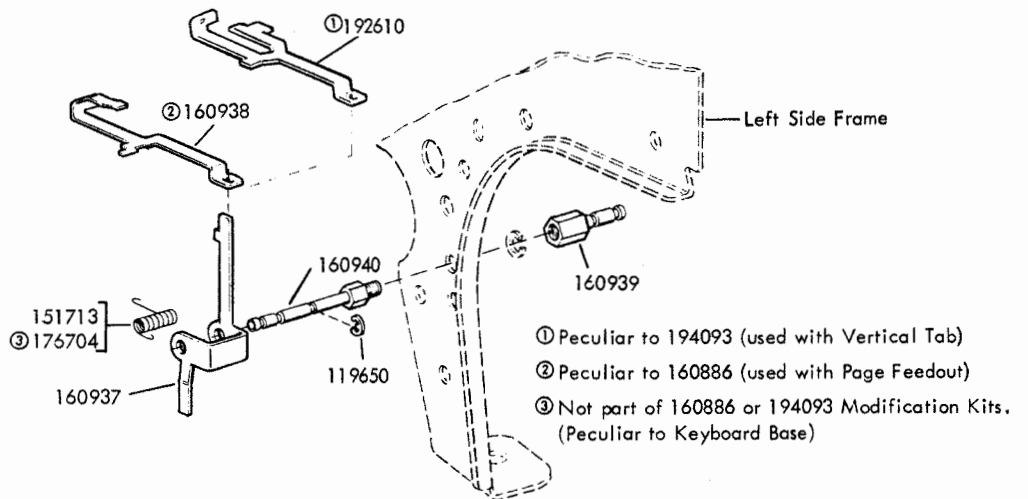


FIGURE 77. 153912 MODIFICATION KIT TO PROVIDE FIGS-LTRS CODE BAR MANUAL SHIFTING



Specification 5793S

FIGURE 78. 152312 MODIFICATION KIT TO CONVERT PRINTER FOR USE WITH LIGHTWEIGHT SET



Specification 5890S

FIGURE 79. 160886 AND 194093 MODIFICATION KITS TO PROVIDE LOCAL FORM FEED-OUT (RECEIVING ONLY BASE)

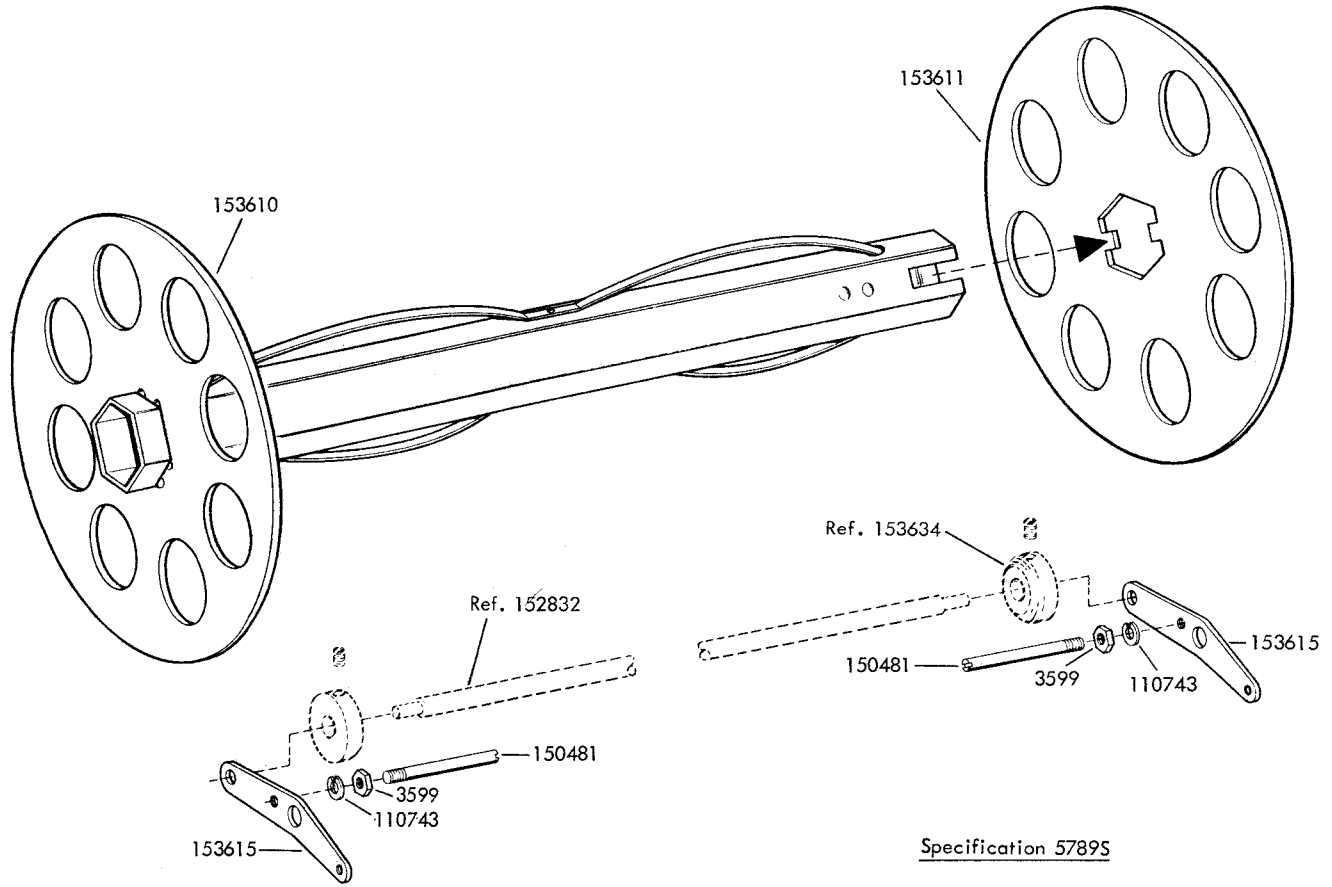


FIGURE 80. 152340 MODIFICATION KIT TO PROVIDE MULTI-COPY PAPER HANDLING

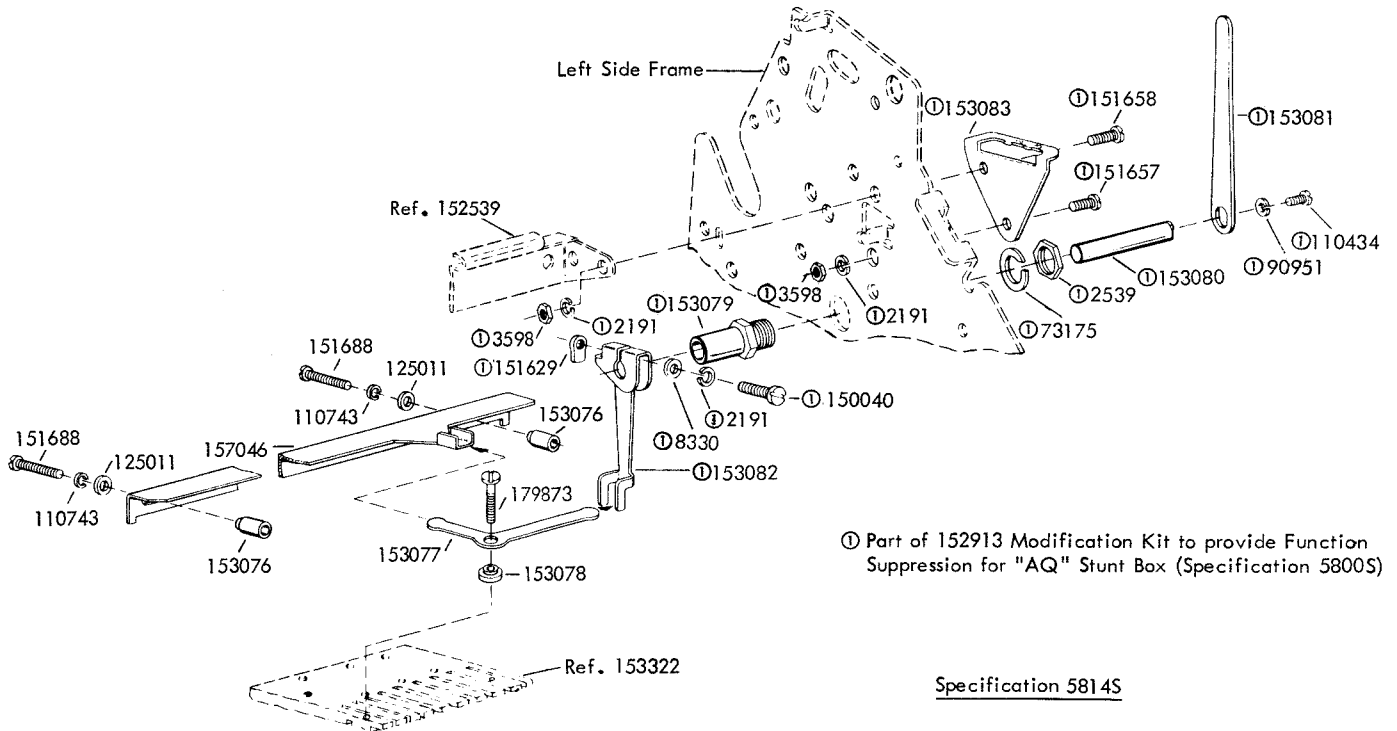
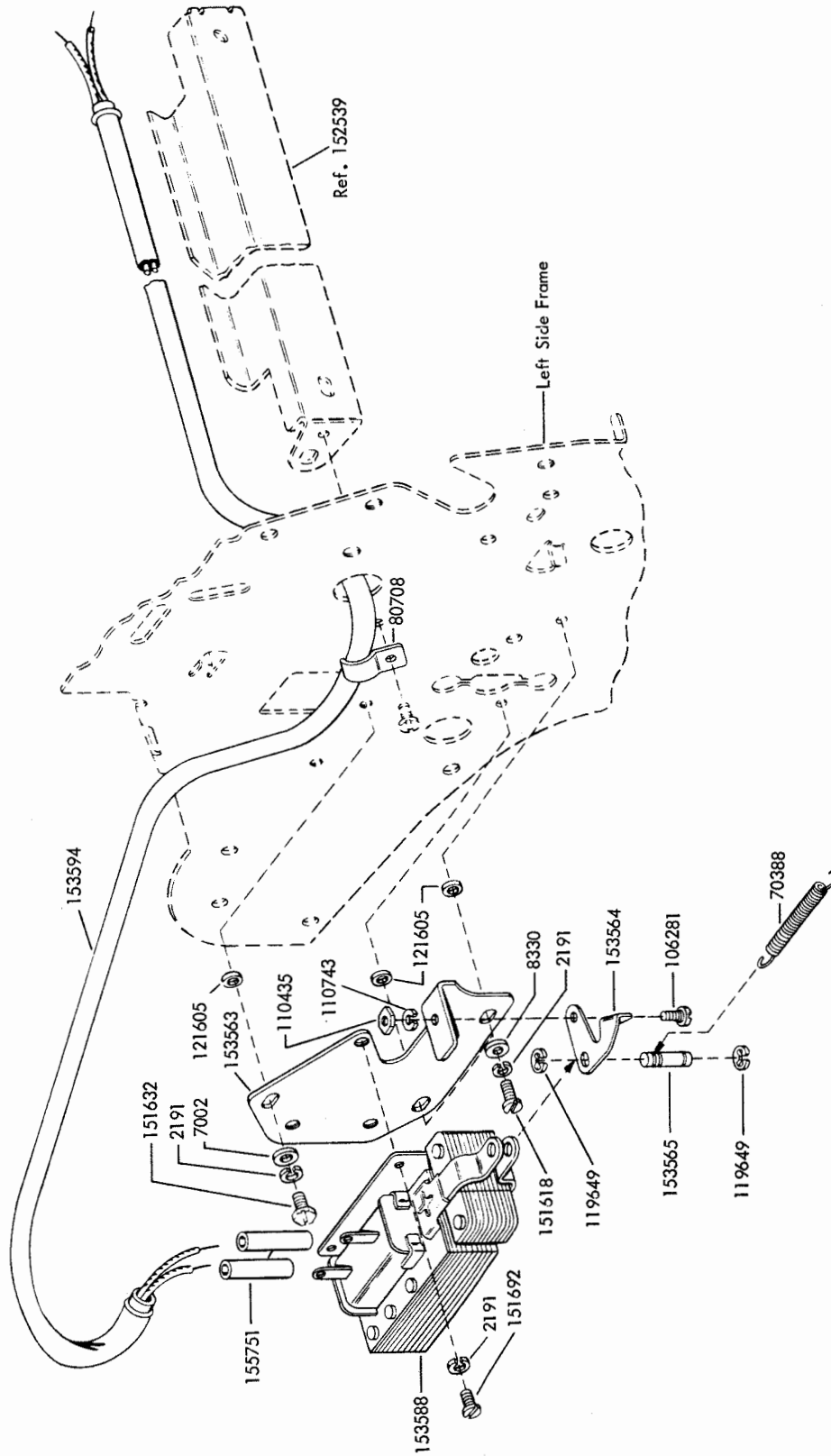


FIGURE 81. 153910 MODIFICATION KIT TO PROVIDE FUNCTION SUPPRESSION FOR "AZ" STUNT BOX



Specification 58235

FIGURE 82. 152345 MODIFICATION KIT TO PROVIDE OFF-LINE STUNT SHIFT CONTROL

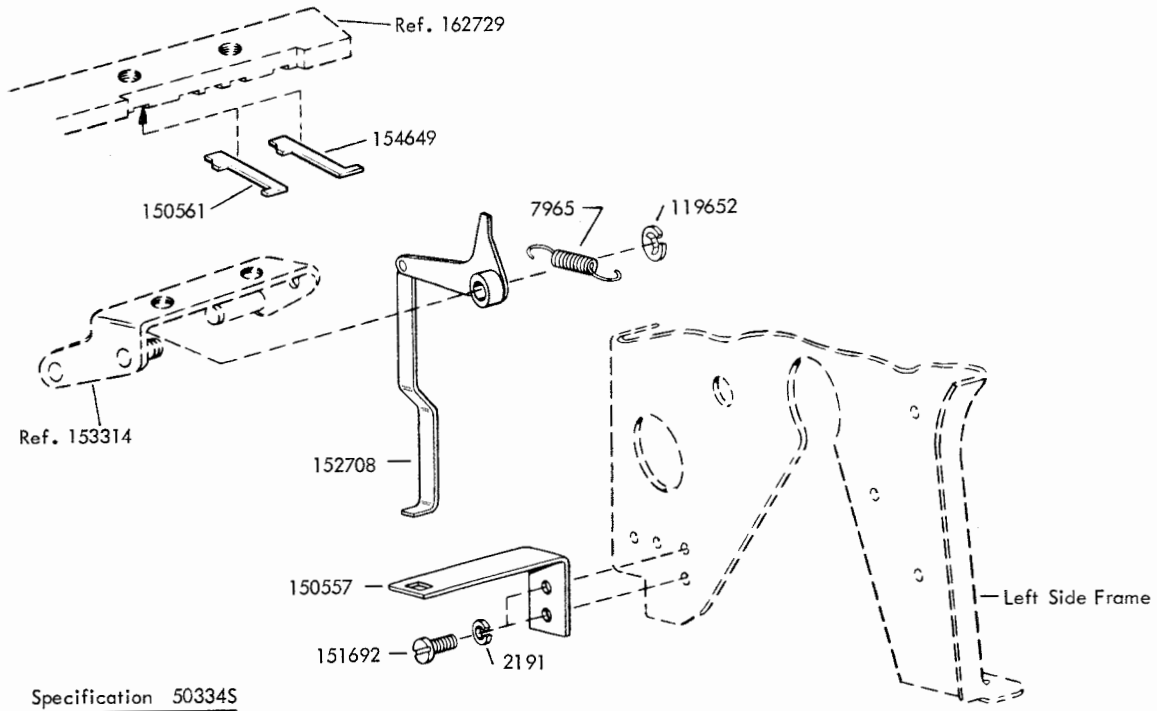


FIGURE 83. 152350 MODIFICATION KIT TO PROVIDE KEYBOARD LOC

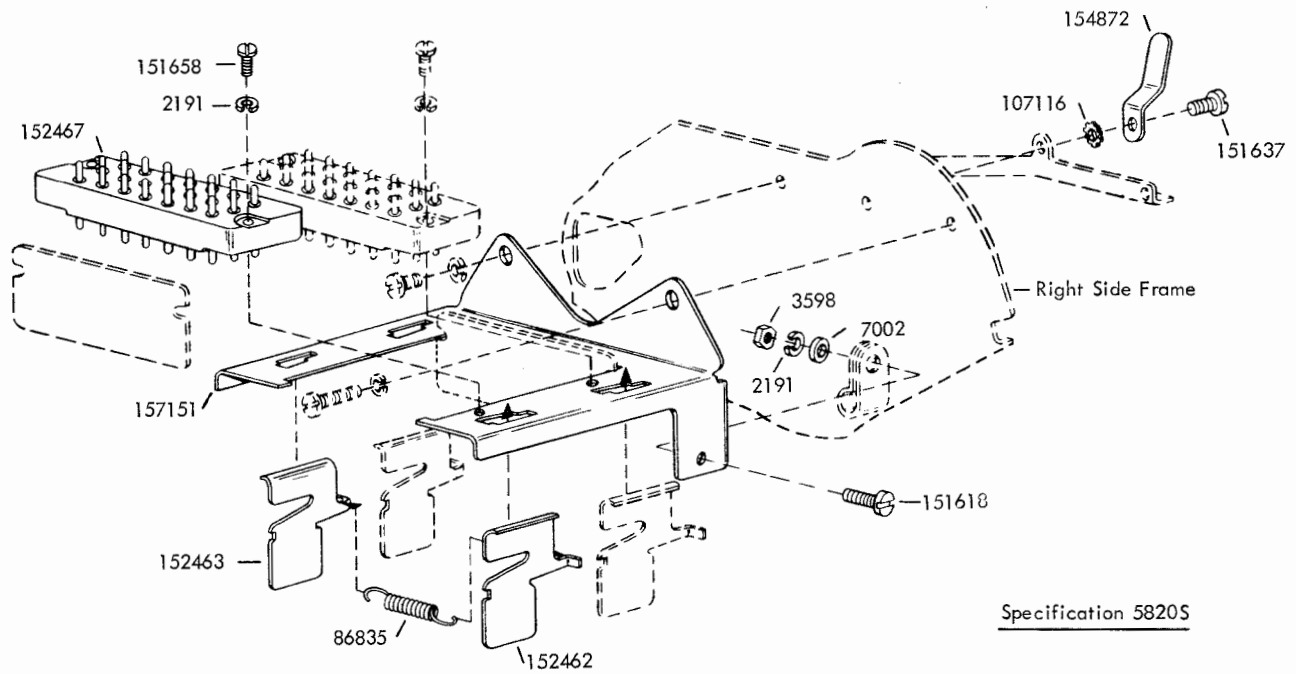


FIGURE 84. 153919 MODIFICATION KIT TO PROVIDE AUXILIARY CONNECTOR

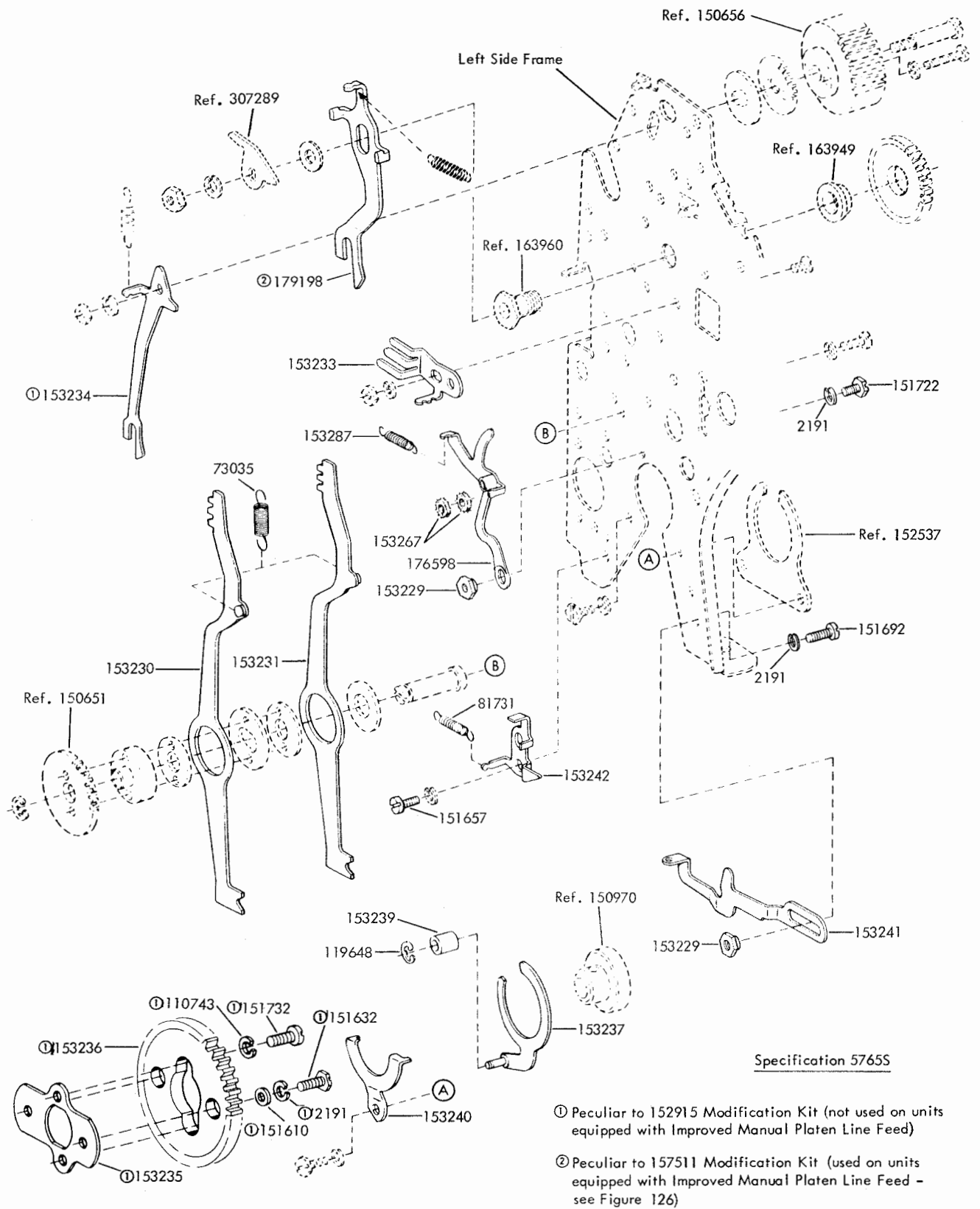
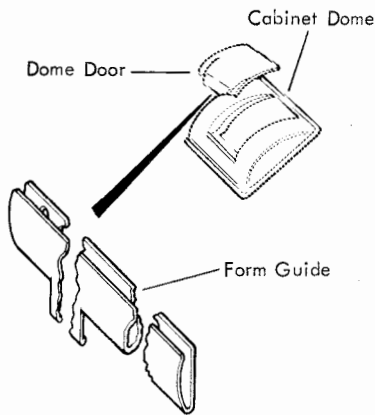
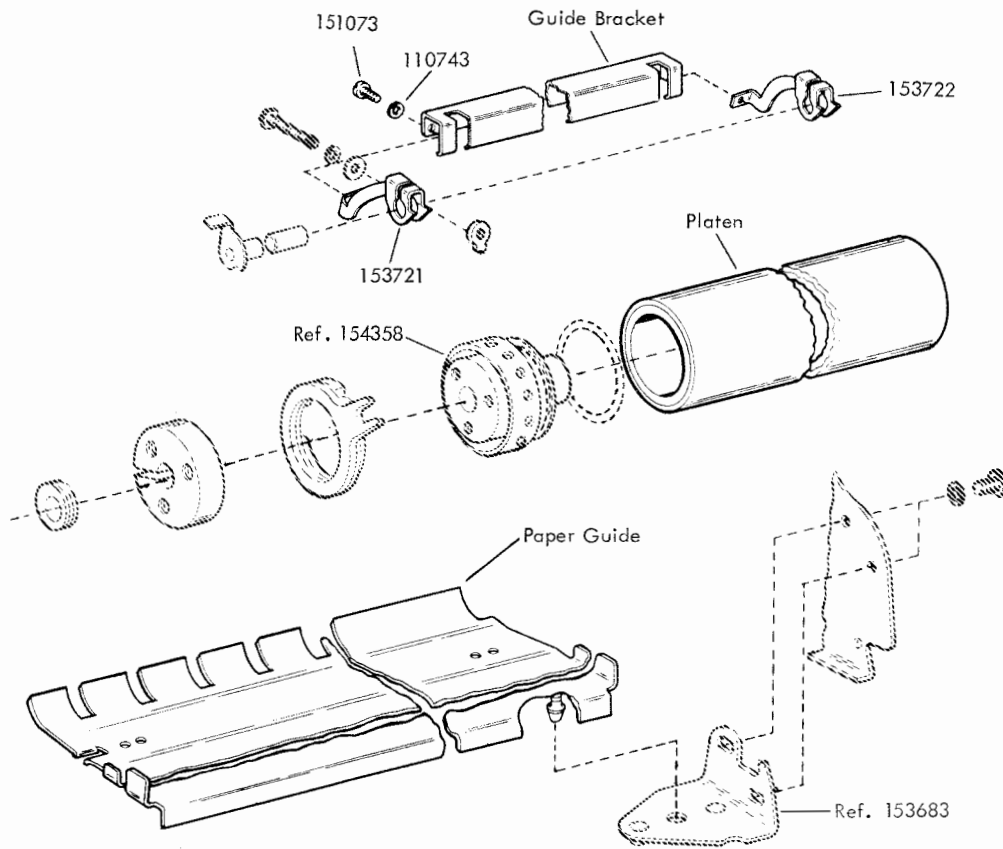


FIGURE 85. 152915 AND 157511 MODIFICATION KITS TO PROVIDE LOCAL REVERSE LINE FEED



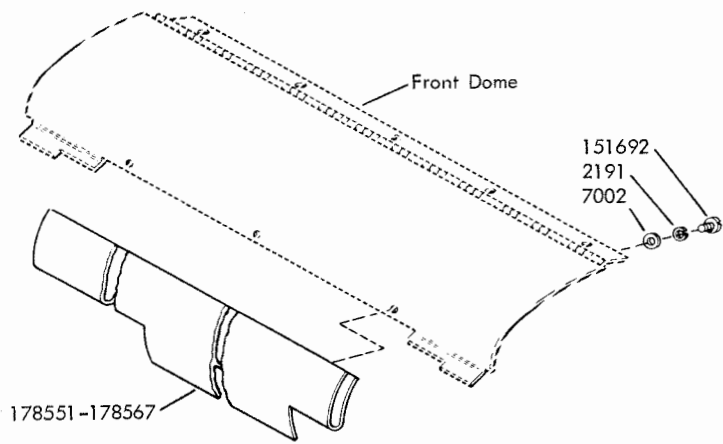
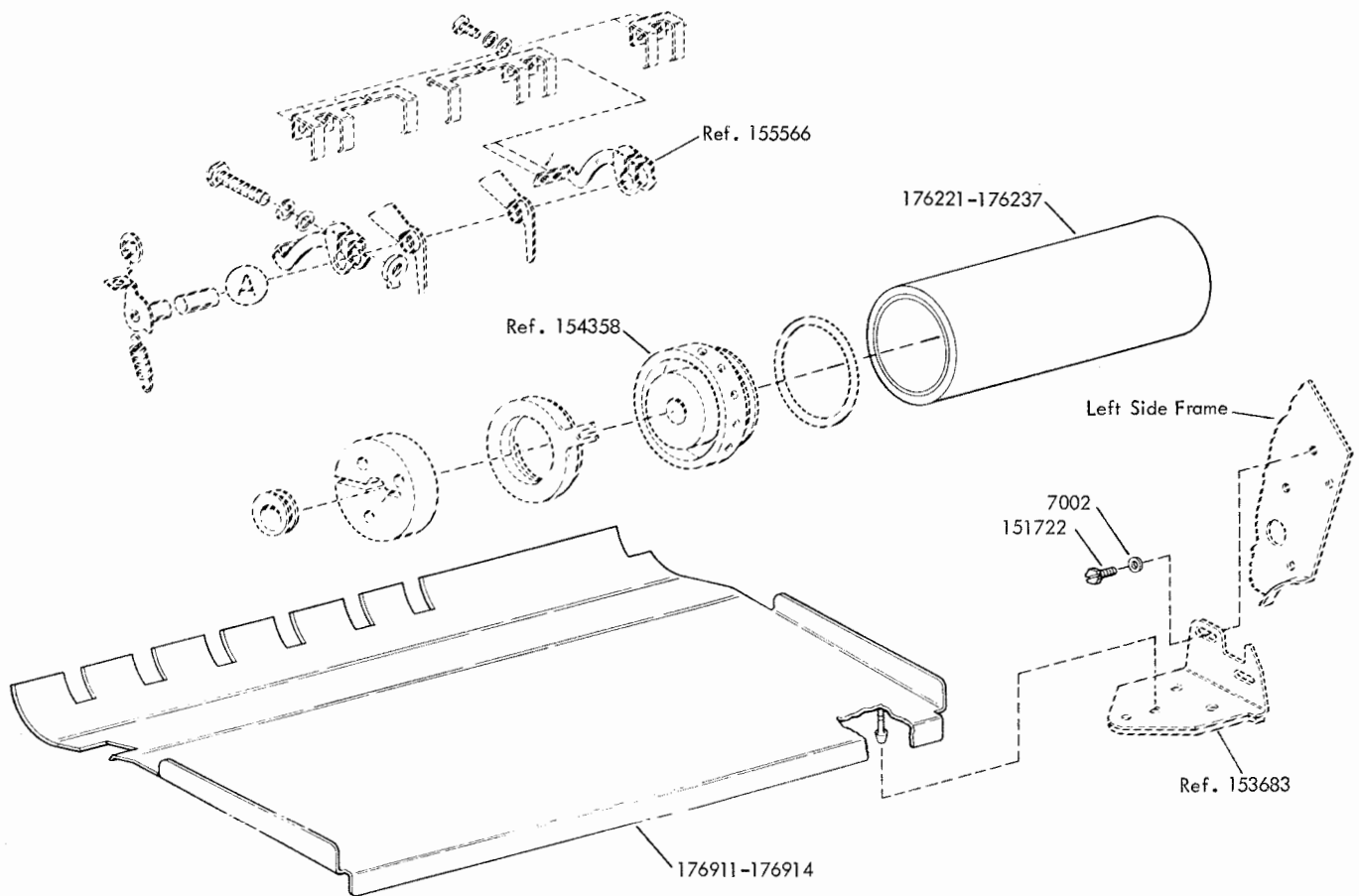
See note 28 on page 116

Specification 57925

① PAPER WIDTHS	PAPER GUIDE	GUIDE BRACKET	MOD. KIT: PAPER HANDLING PARTS		
			KIT. NO.	PLATEN	FORM GUIDE
9-1/2"	305028	305771	310733	176238	305059
9"	304773	153771	176181	176221	153652
8-1/2"	304772	153772	176182	176222	153653
8"	304773	153773	176183	176223	153654
7-1/2"	304772	153774	176184	176224	153655
7"	304773	153775	176185	176225	153656
6-1/2"	304772	153776	176186	176226	153657
6-3/8"	304774	153777	176187	176227	153658
6-1/4"	304775	153778	176188	176228	153659
6"	304773	153779	176189	176229	153660
5-3/4"	304774	153780	176190	176230	153661
5-1/2"	304772	153781	176191	176231	153662
5"	304773	153782	176192	176232	153663
4-1/2"	304772	153783	176193	176233	153664
4-5/16"	304775	153784	176194	176234	153665
4-1/4"	304774	153785	176195	176235	153665
4"	304773	153786	176196	176236	153666
3-5/8"	304772	153787	176197	176237	153667

① The width shown is the overall dimension of the paper, and the distance between Sprocket Pin holes is 1/2" less.

FIGURE 86. SPROCKET FEED PAPER HANDLING MODIFICATION KITS (TYPING UNIT AND CABINET)

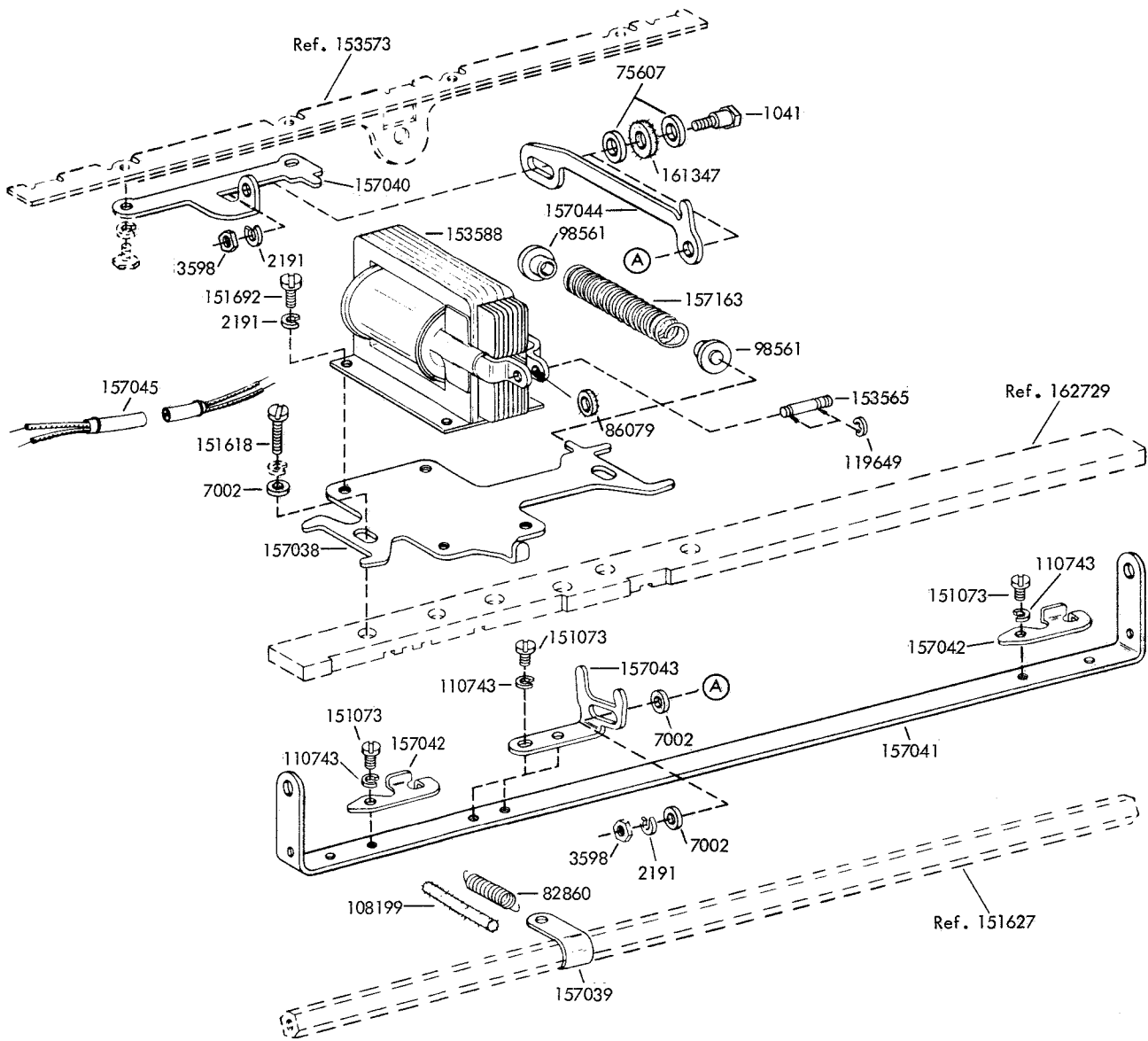


② Paper Widths	Paper Guide	Mod. Kit Paper Handling Parts		
		Kit No.	Platen	Form Guide
9"	176912	178568	175221	178551
8-1/2"	176911	178559	176222	178552
8"	176912	178570	176223	178553
7-1/2"	176911	178571	176224	178554
7"	176912	178572	176225	178555
6-1/2"	176911	178573	176226	178556
6-3/8"	176913	178574	176227	178557
6-1/4"	176914	178575	176228	178558
6"	176912	178576	176229	178559
5-3/4"	176913	178577	176230	178560
5-1/2"	176911	178578	176231	178561
5"	176912	178579	176232	178562
4-1/2"	176911	178580	176233	178563
4-5/16"	176914	178581	176234	178564
4-1/4"	176913	178582	176235	178565
4"	176912	178583	176236	178566
3-5/8"	176911	178584	176237	178567

② The width shown is the overall dimension of the paper, and the distance between Sprocket Pin holes is 1/2" less.

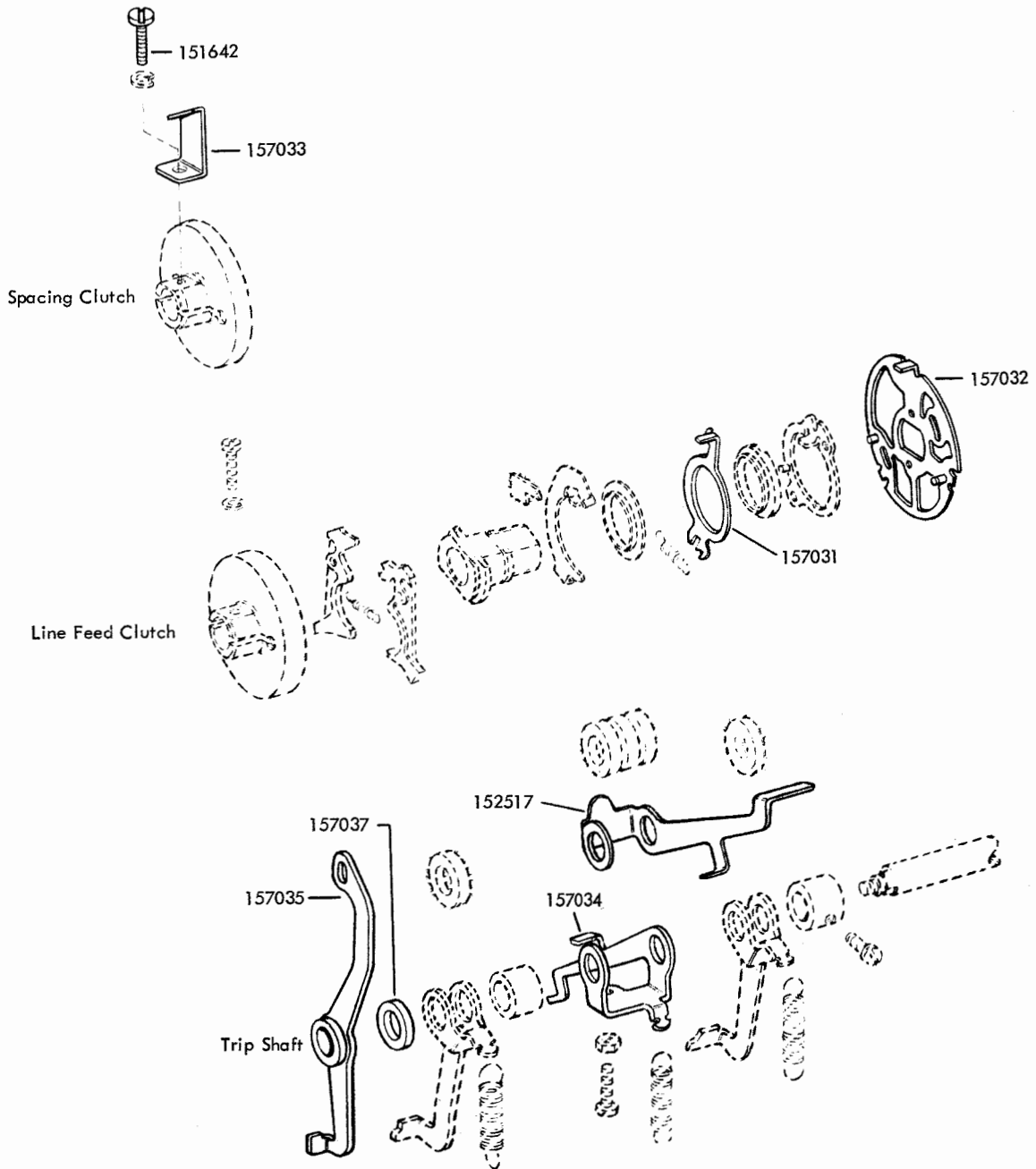
Specification 5792S

FIGURE 87. SPROCKET FEED PAPER HANDLING MODIFICATION KITS (WALL MOUNTED TYPING UNIT AND CABINET)



Specification 5775

FIGURE 88. 153911 MODIFICATION KIT TO PROVIDE CONTINUOUS SPACING
(CONTINUED ON NEXT PAGE)



Specification 5777S

FIGURE 89. 153911 MODIFICATION KIT TO PROVIDE CONTINUOUS SPACING
(CONTINUED FROM PRECEDING PAGE)

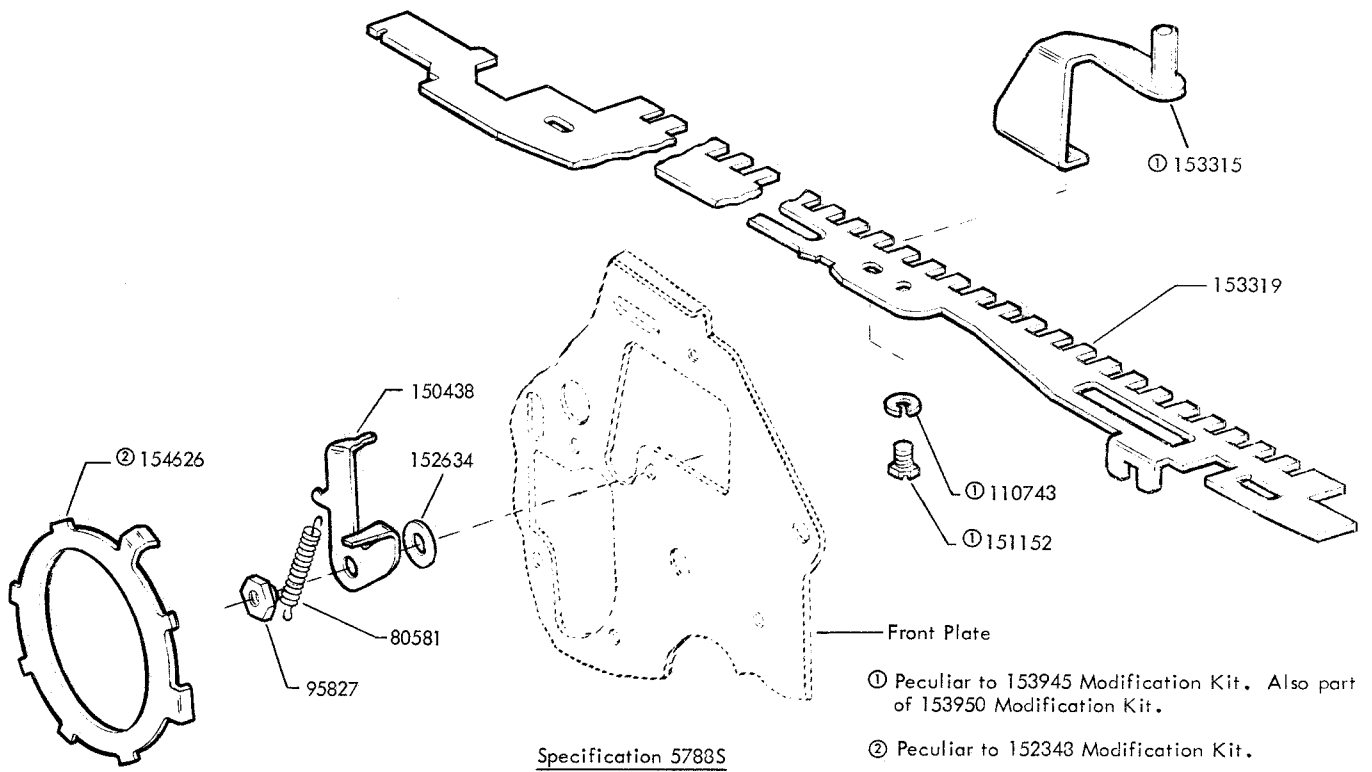


FIGURE 90. 152348 AUTOMATIC CARRIAGE RETURN AND LINE FEED AND 153945 "O" CODE BAR AND BELLCRANK MODIFICATION KITS

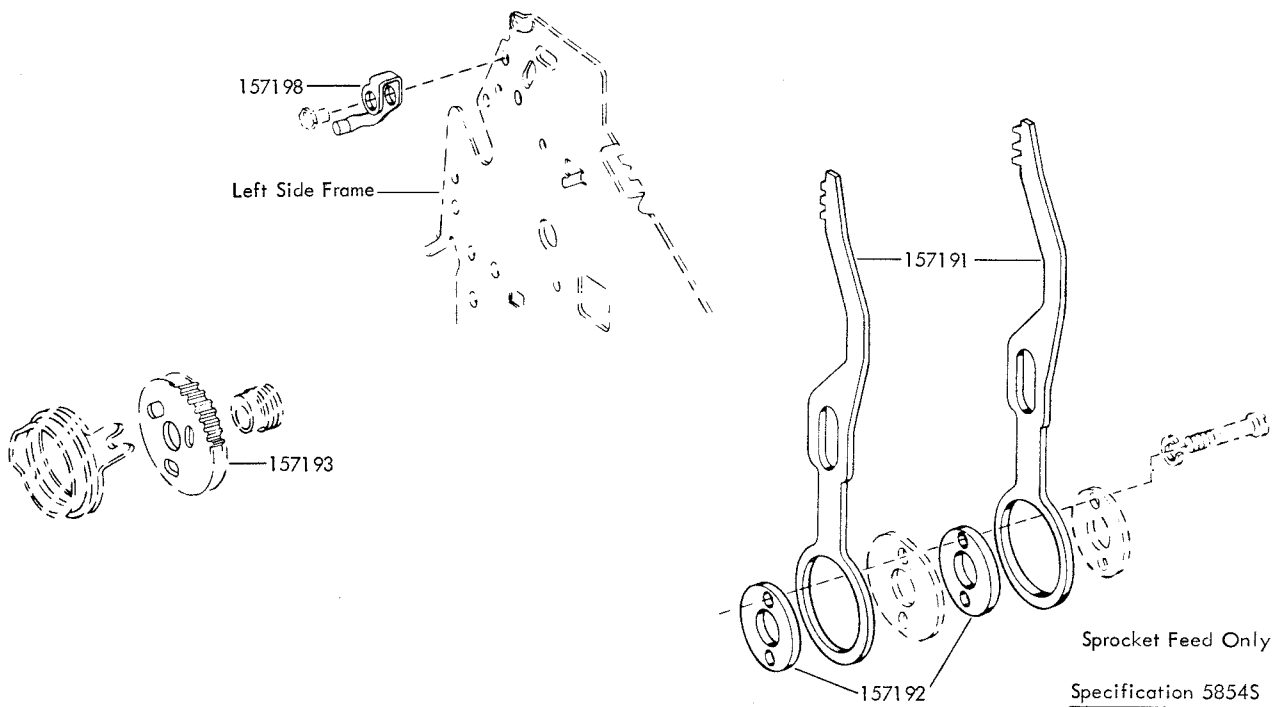


FIGURE 91. 154742 MODIFICATION KIT TO PROVIDE FOUR LINES PER INCH

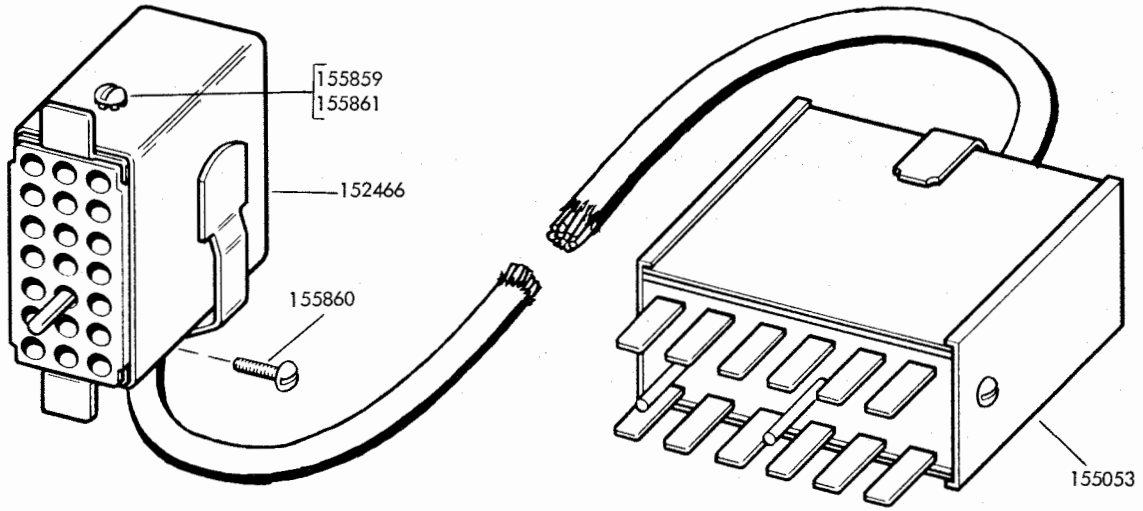


FIGURE 92. 155051 AUXILIARY CABLE ASSEMBLY

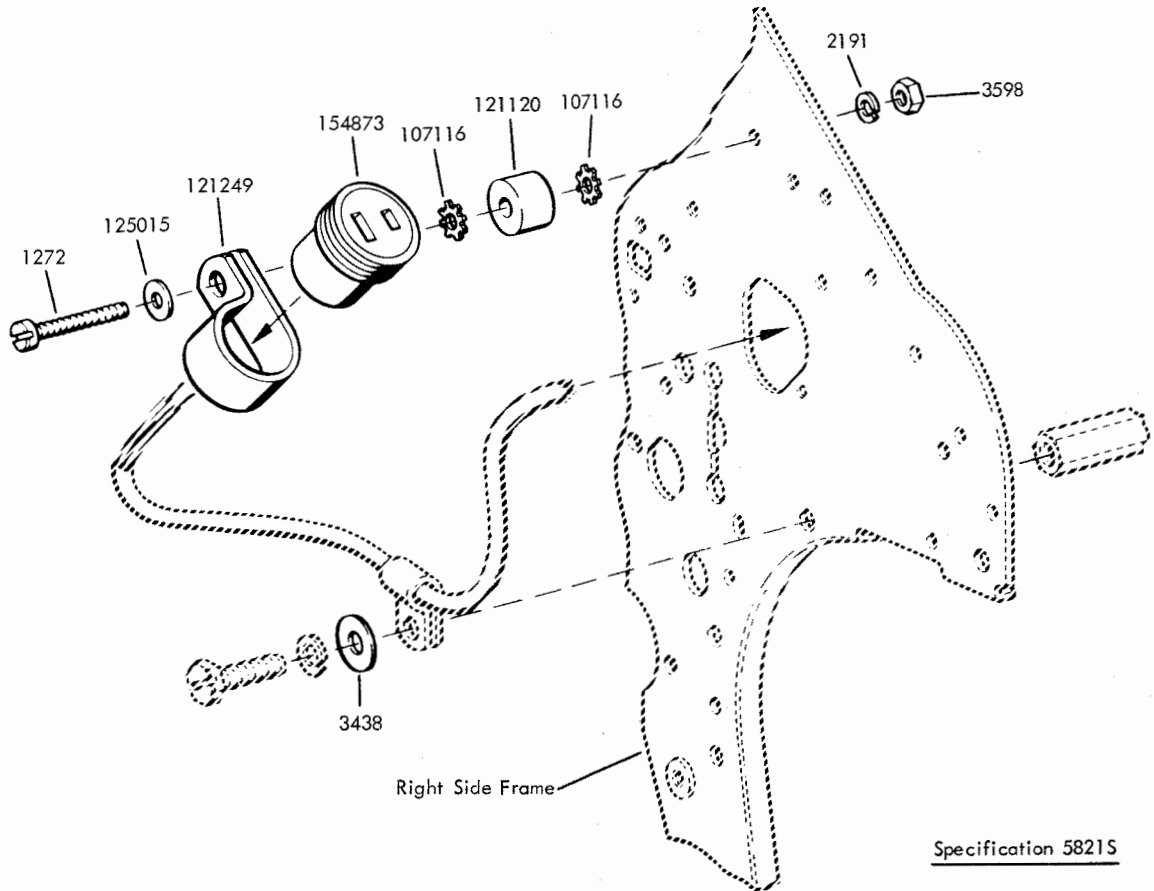


FIGURE 93. 154753 MODIFICATION KIT TO PROVIDE AUXILIARY CONNECTOR

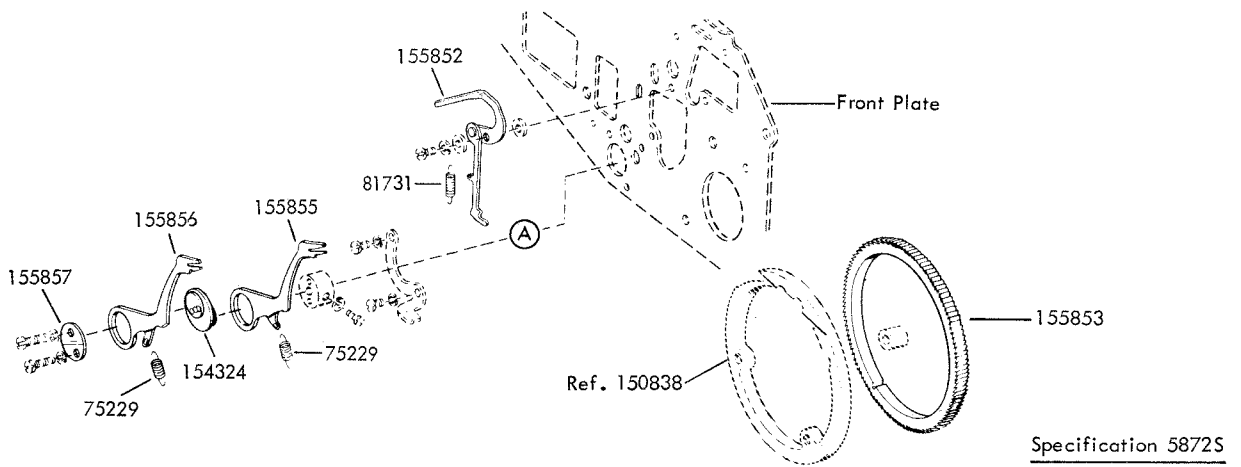


FIGURE 94. 154755 MODIFICATION KIT TO PROVIDE 5 SPACES PER INCH HORIZONTALLY

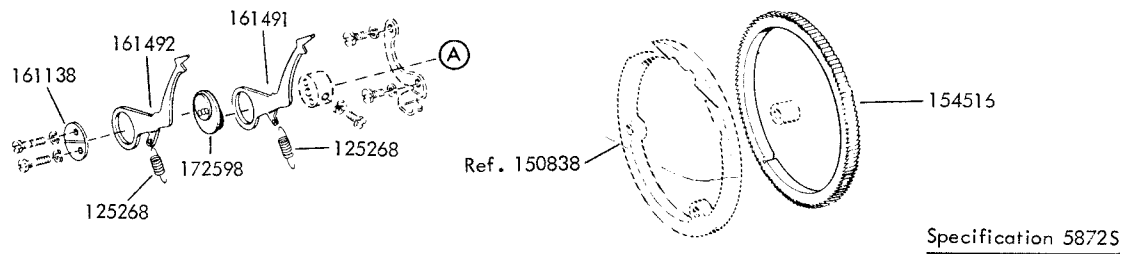


FIGURE 95. 159395 MODIFICATION KIT TO PROVIDE 6 SPACES PER INCH HORIZONTALLY

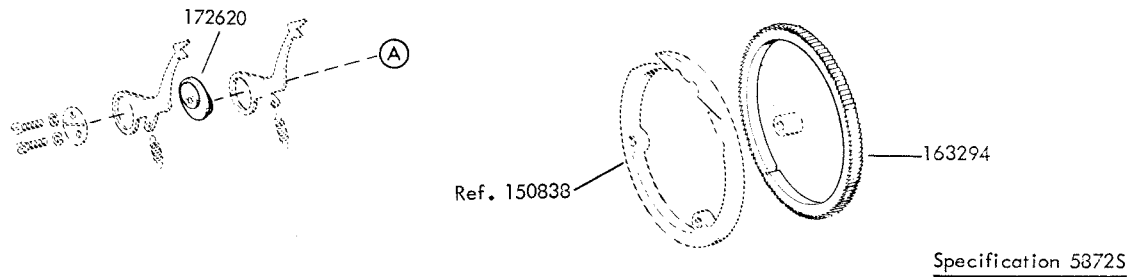


FIGURE 96. 163292 MODIFICATION KIT TO PROVIDE 8 SPACES PER INCH HORIZONTALLY

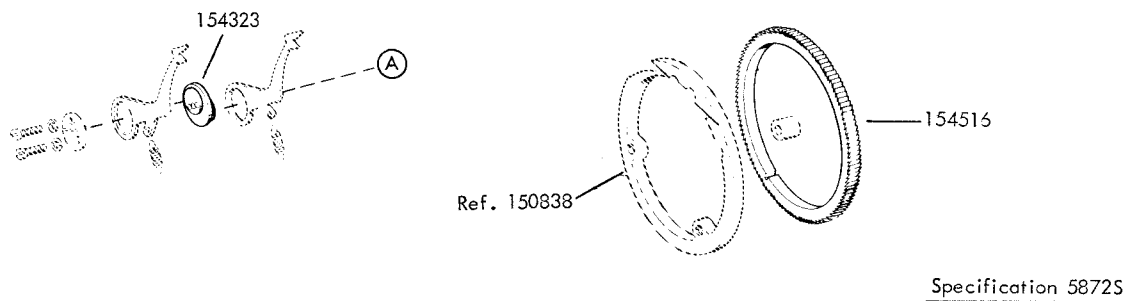
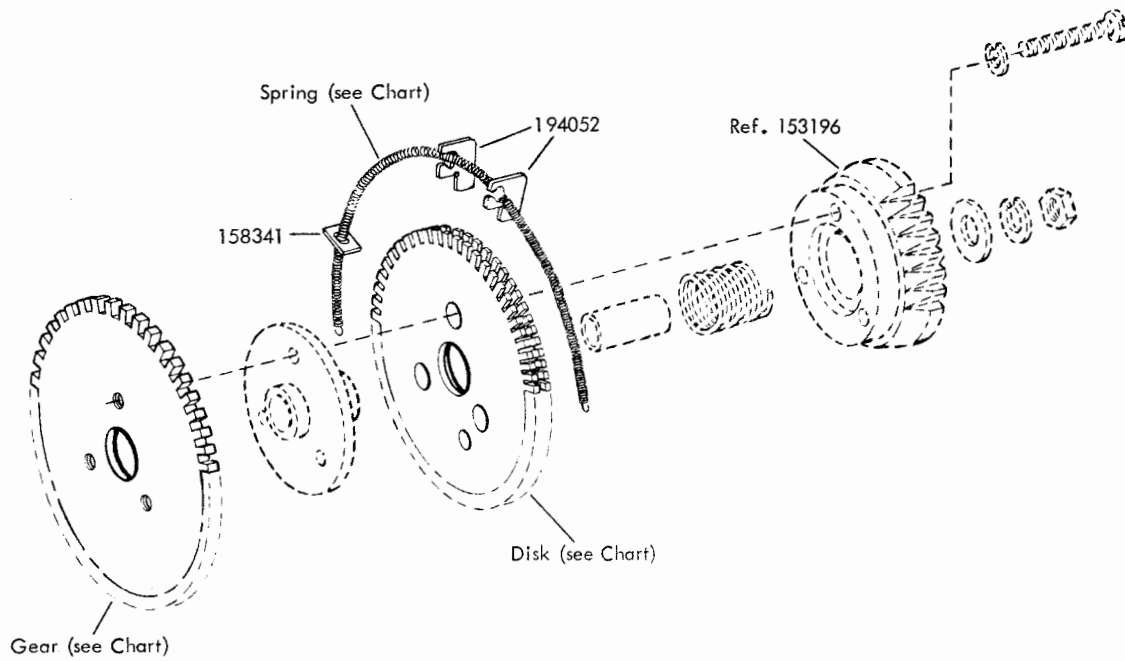


FIGURE 97. 154792 MODIFICATION KIT TO PROVIDE 12 SPACES PER INCH HORIZONTALLY



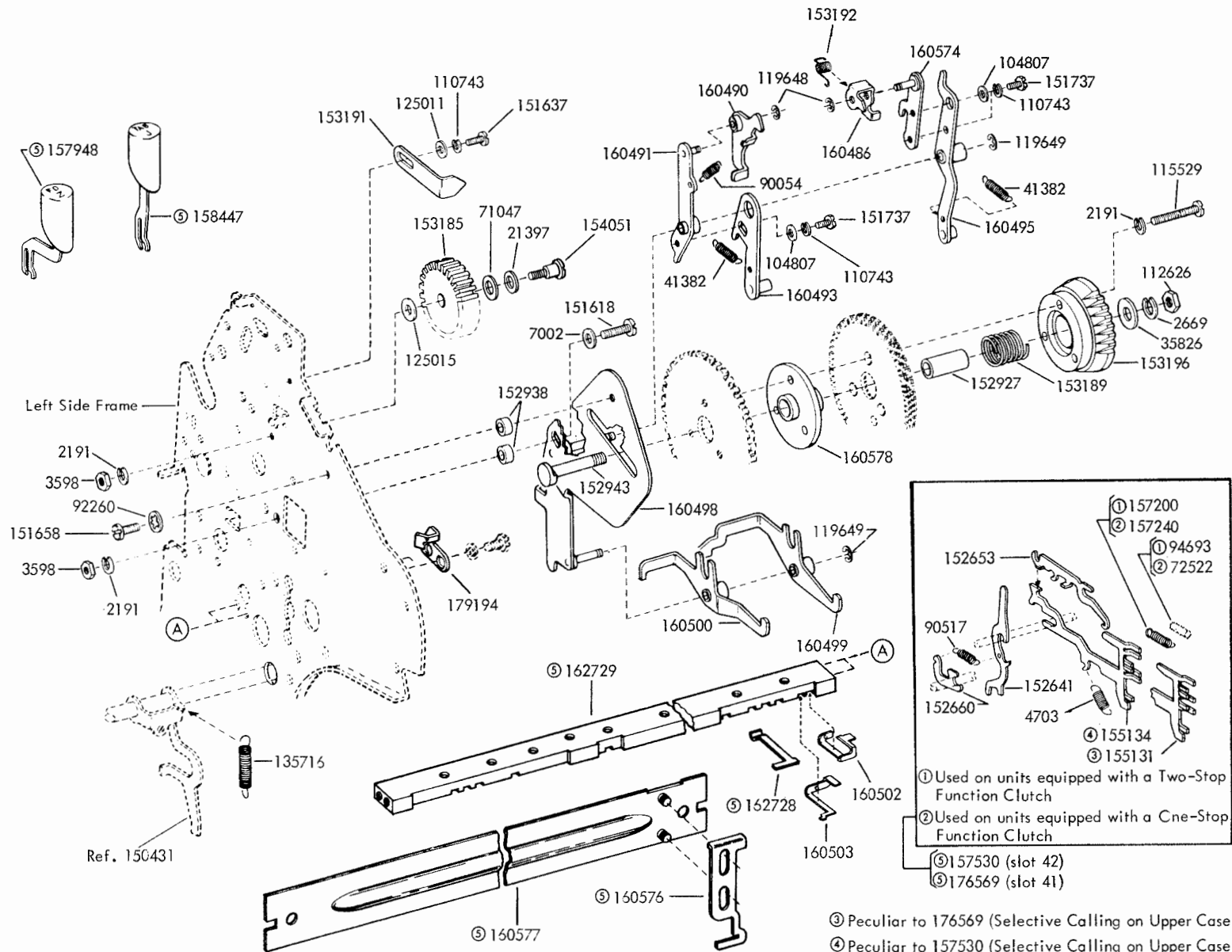
FORM LENGTH IN INCHES	MOD KIT	GEAR NO.	DISK NO.	SPRING NO.	NO. OF STOPS
8, 4, 2	154760	153198	160505	160527	47
8-1/2	154761	153199	160506	160528	10
9, 4-1/2	154762	153200	160507	160529	10
9-1/2	154763	153201	160508	160530	11
10, 5	154764	153202	160509	160531	12
11, 5-1/2	154765	153203	160510	160532	14
12, 6, 3	154766	153204	160511	160533	15
13, 6-1/2	154767	153205	160512	160534	16
14, 7, 3-1/2	154768	153206	160513	160535	17
15, 7-1/2	154769	153207	160514	160536	18
14-2/3, 7-1/3, 3-2/3	192706	161250	192704	160536	16
13, 6-1/2, 3-1/4	⓪197849	197732	197734	160534	14
4-1/4	⓪197850	197731	197733	160528	10
14, 7, 3-1/2	305079	305071	305075	160536	16

Specification 500045

⓪ The 197849 and 197850 Modification Kits can only be used with the 154742 Modification Kit (4 lines per inch). The 197849 and 197850 Modification Kits also include the 197735, 197736, 197737 and 197840 Spur Gears shown in their respective positions in Figure 68.

FIGURE 93. VERTICAL TABULATION MODIFICATION KITS

FIGURE 99. 154770 MODIFICATION KIT TO PROVIDE VERTICAL TABULATION ON UPPER CASE "J" AND "Z" (INCLUDES THE 163535 MODIFICATION KIT IN FIGURE 109)



① 157200
 ② 157240
 ① 94693
 ② 72522
 ④ 155134
 ③ 155131
 ① Used on units equipped with a Two-Stop Function Clutch
 ② Used on units equipped with a One-Stop Function Clutch
 ③ 157530 (slot 42)
 ⑤ 176569 (slot 41)

- ③ Peculiar to 176569 (Selective Calling on Upper Case "J")
- ④ Peculiar to 157530 (Selective Calling on Upper Case "Z")

The 154771 Modification Kit to Provide Vertical Tabulation consists of all parts on this page except those marked ⑤

Specification 500045

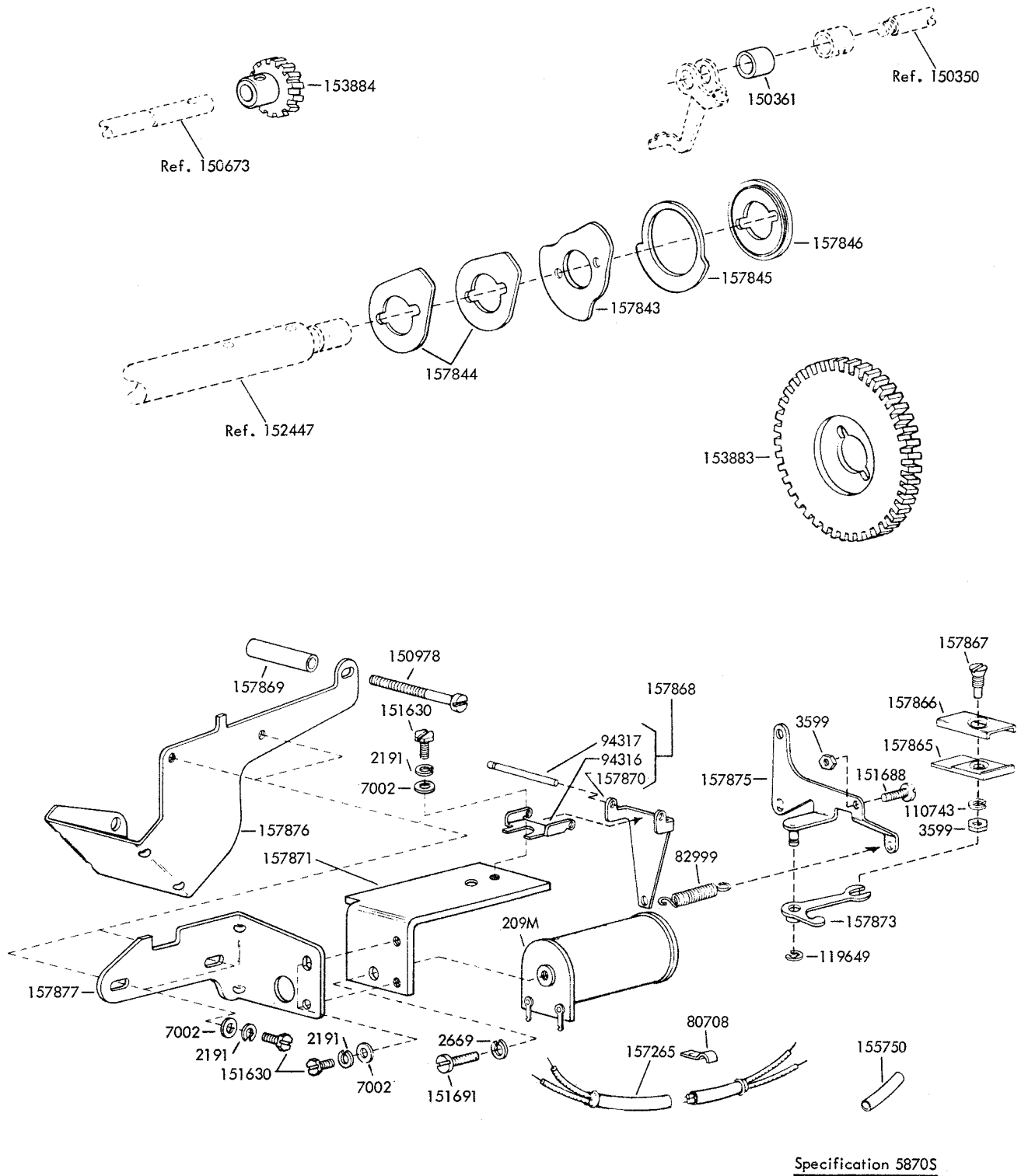
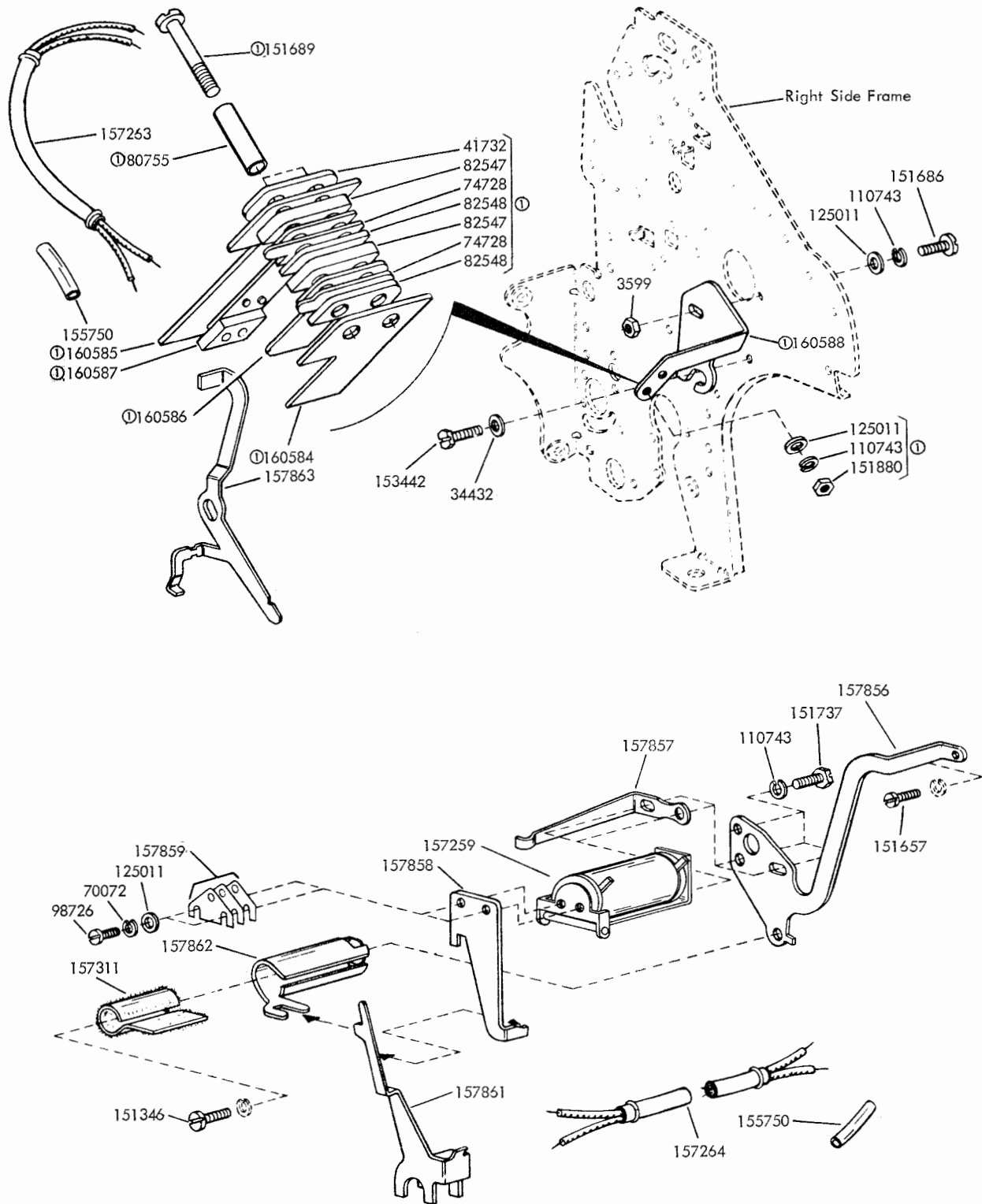


FIGURE 100. 154778 MODIFICATION KIT TO PROVIDE EXTERNAL PULSE SHIFT FEATURE
(CONTINUED ON NEXT PAGE)

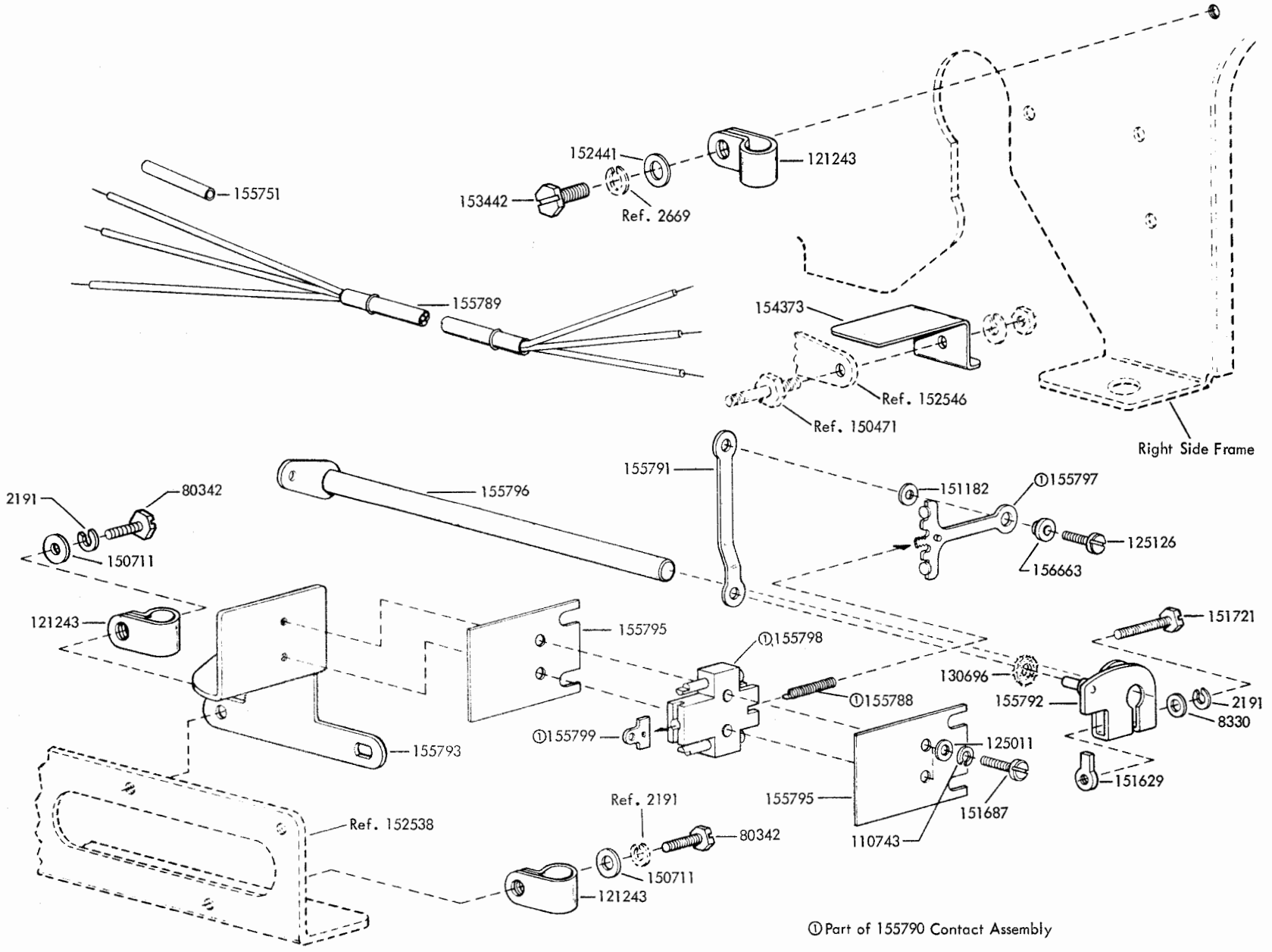


Specification 5870S

Ⓛ Part of 160589 Contact Assembly

FIGURE 101. 154778 MODIFICATION KIT TO PROVIDE EXTERNAL PULSE SHIFT FEATURE
(CONTINUED FROM PRECEDING PAGE)

FIGURE 102. 154785 MODIFICATION KIT TO PROVIDE UNIVERSAL CONTACTS



ⓐ Part of 155790 Contact Assembly

Specification 58045

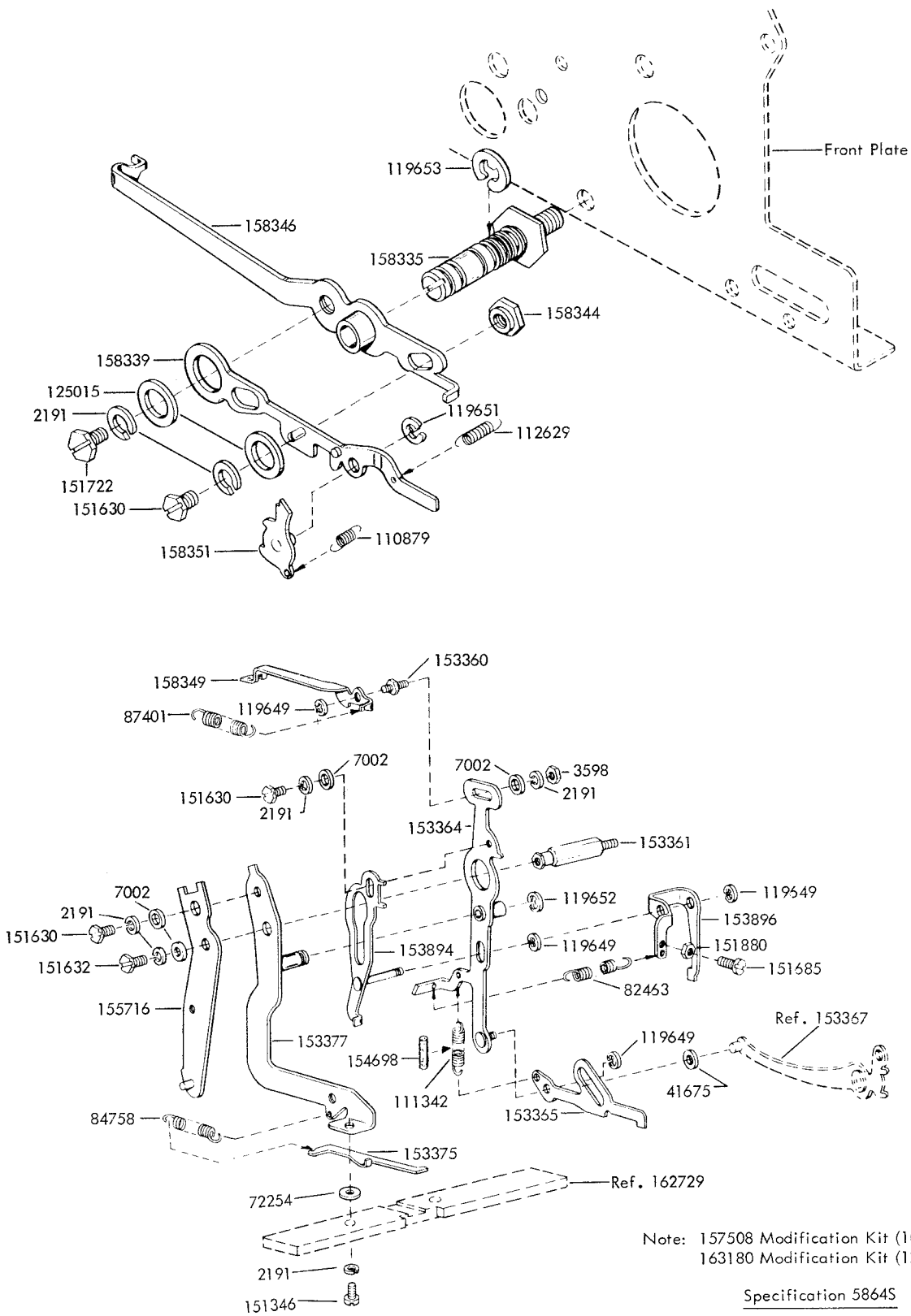
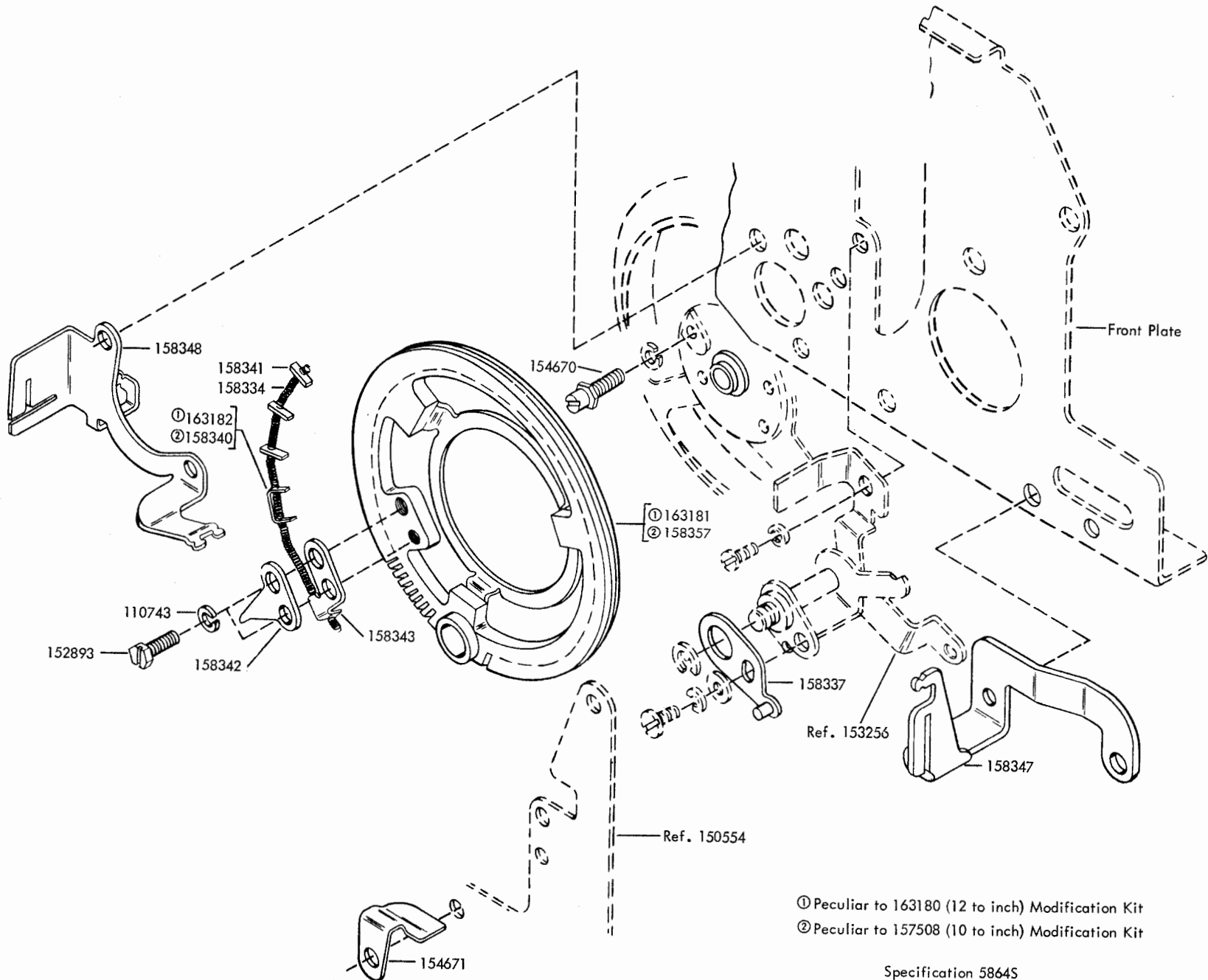


FIGURE 103. 157508 AND 163180 MCDIFICATION KITS TO PROVIDE HORIZONTAL TABULATICN
(CONTINUED ON NEXT PAGE)

FIGURE 104. 157508 AND 163180 MODIFICATION KITS TO PROVIDE HORIZONTAL TABULATION
(CONTINUED FROM PRECEDING PAGE)



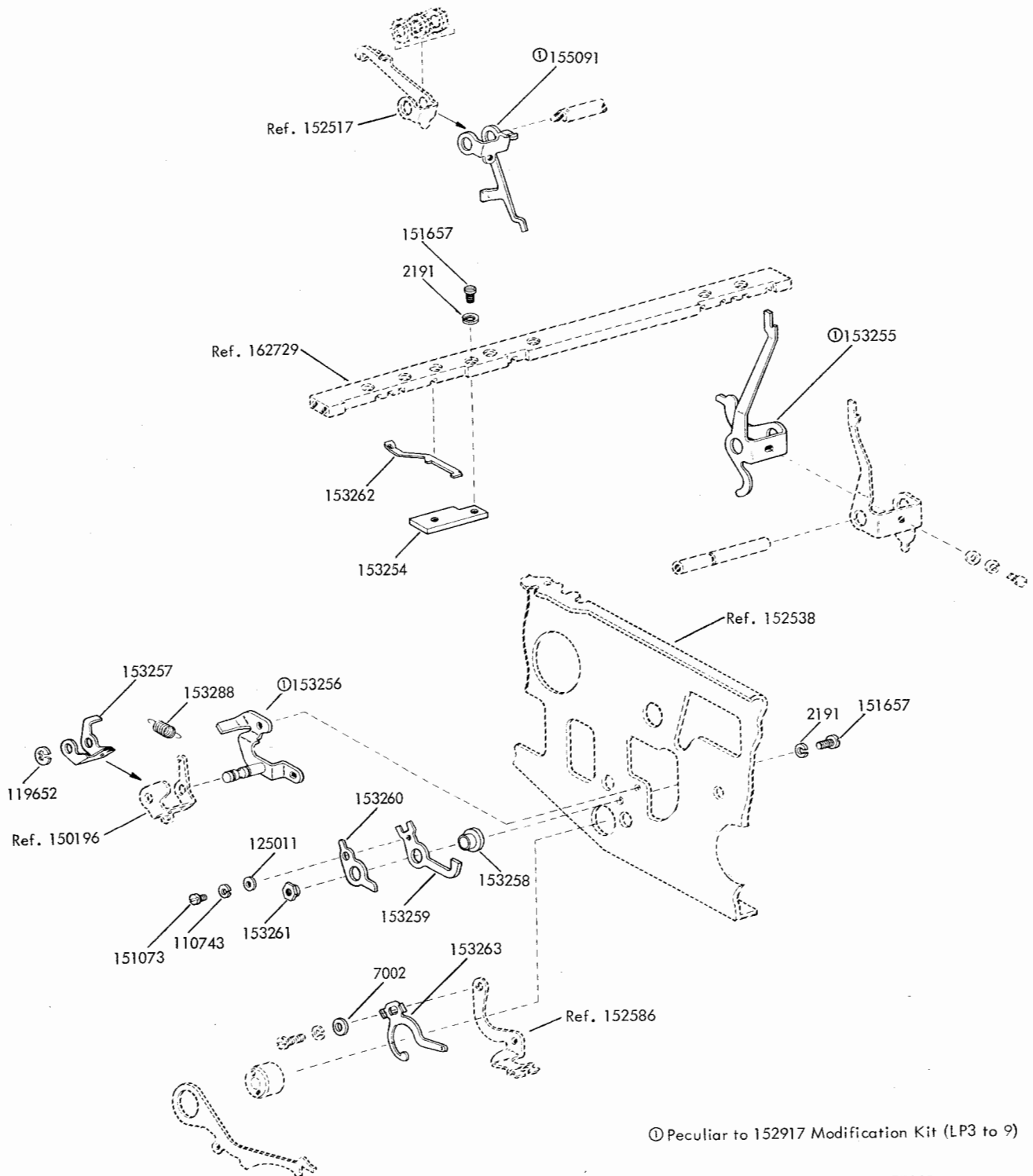
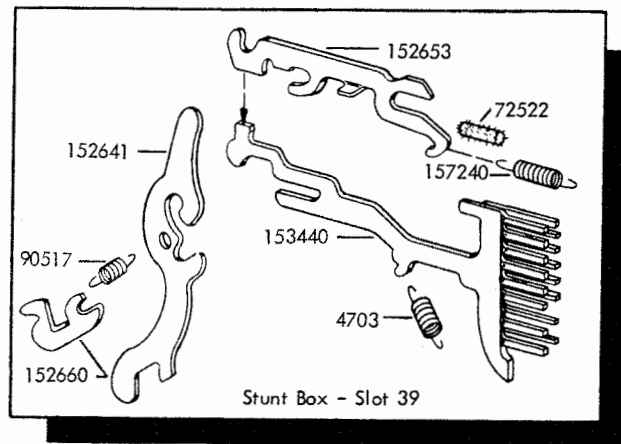
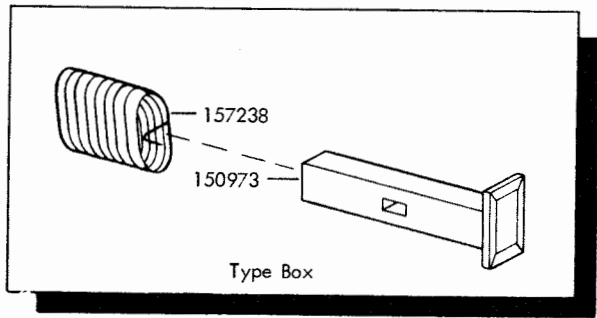
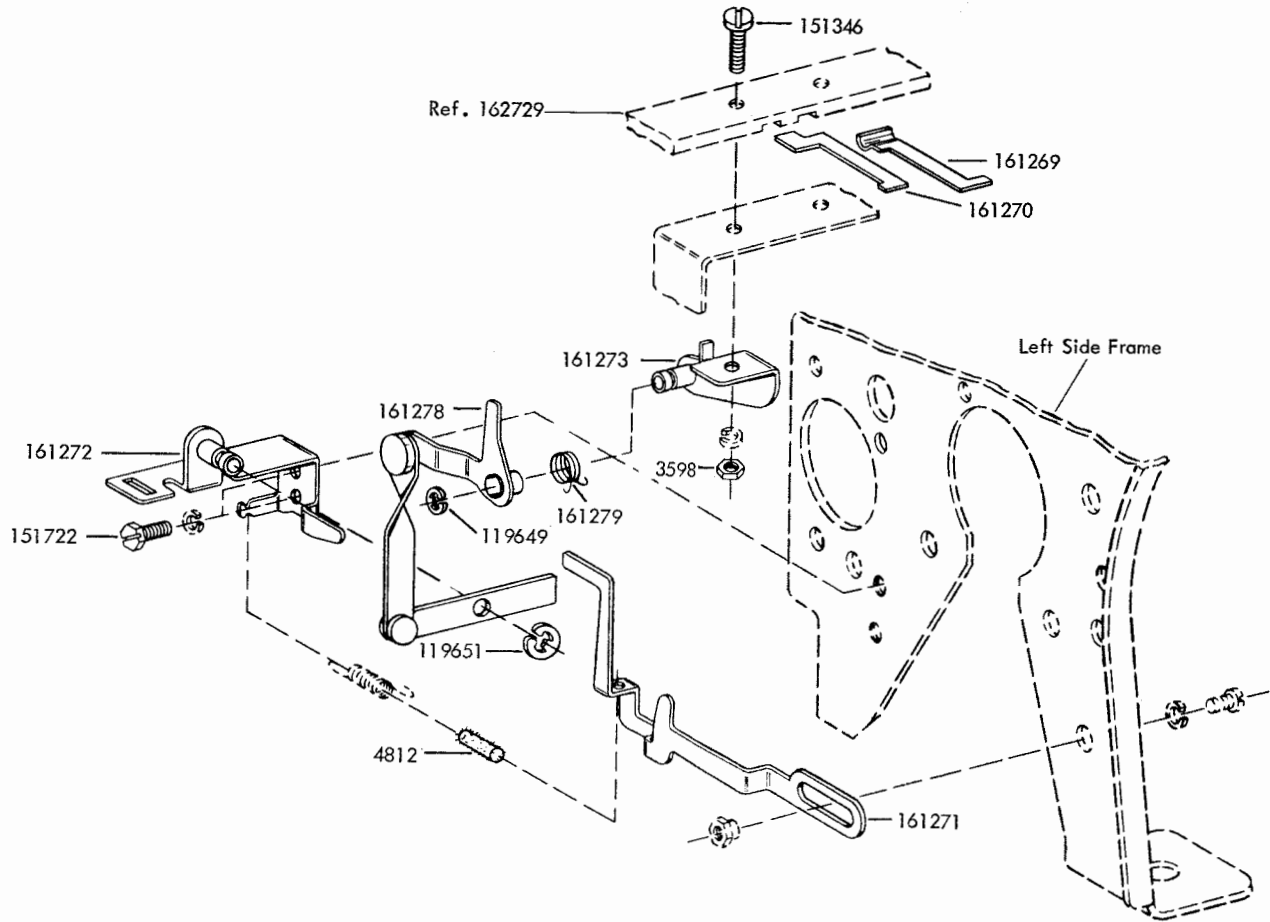


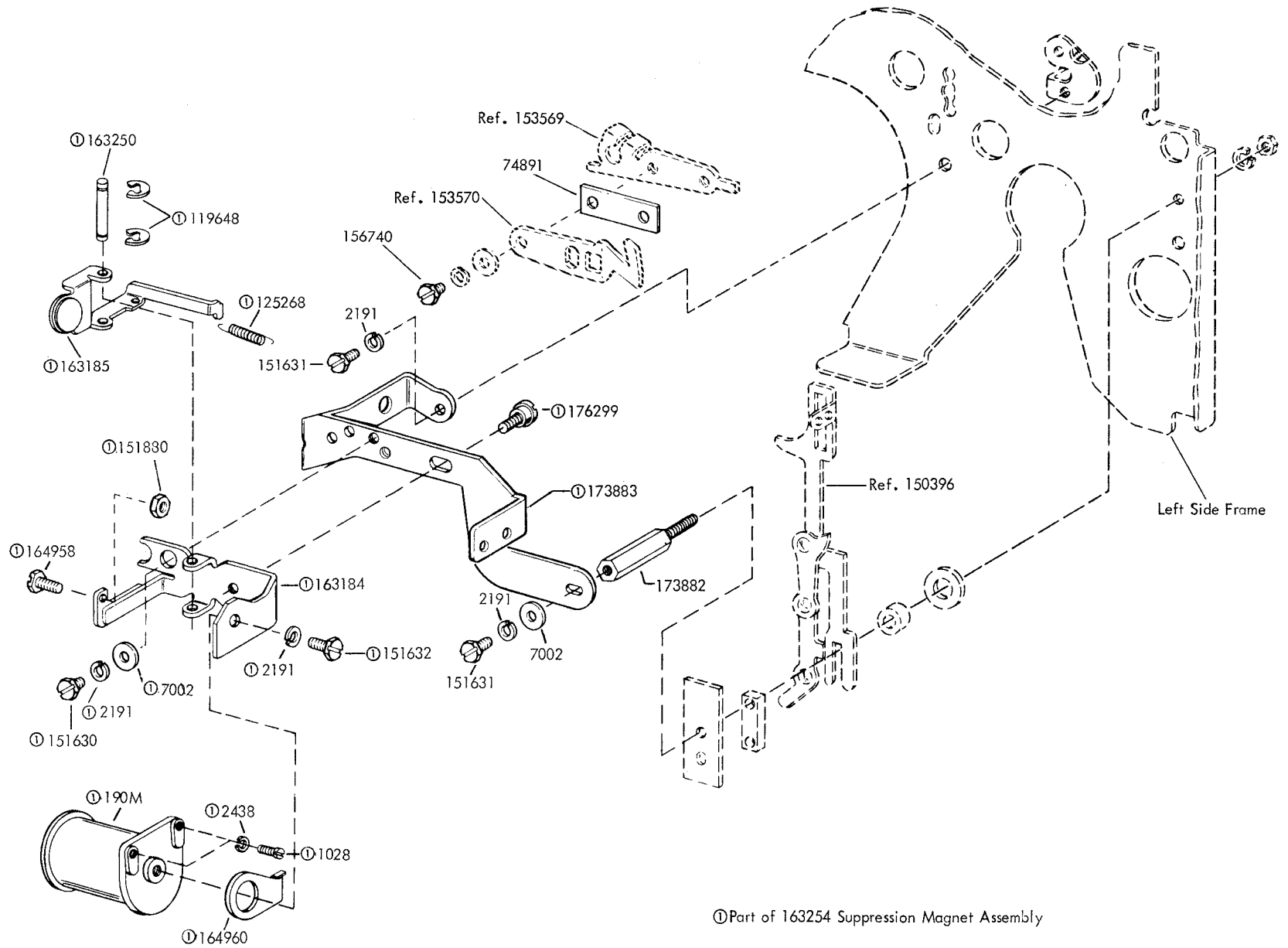
FIGURE 105. 152917 AND 157510 MODIFICATION KITS TO PROVIDE LOCAL BACK SPACE



Specification 58985

FIGURE 106. 161280 MODIFICATION KIT TO PROVIDE ON-LINE REVERSE LINE FEED

FIGURE 107. 163183 MODIFICATION KIT TO PROVIDE D.C. MAGNET OPERATED PRINT SUPPRESSION



Specification 59465

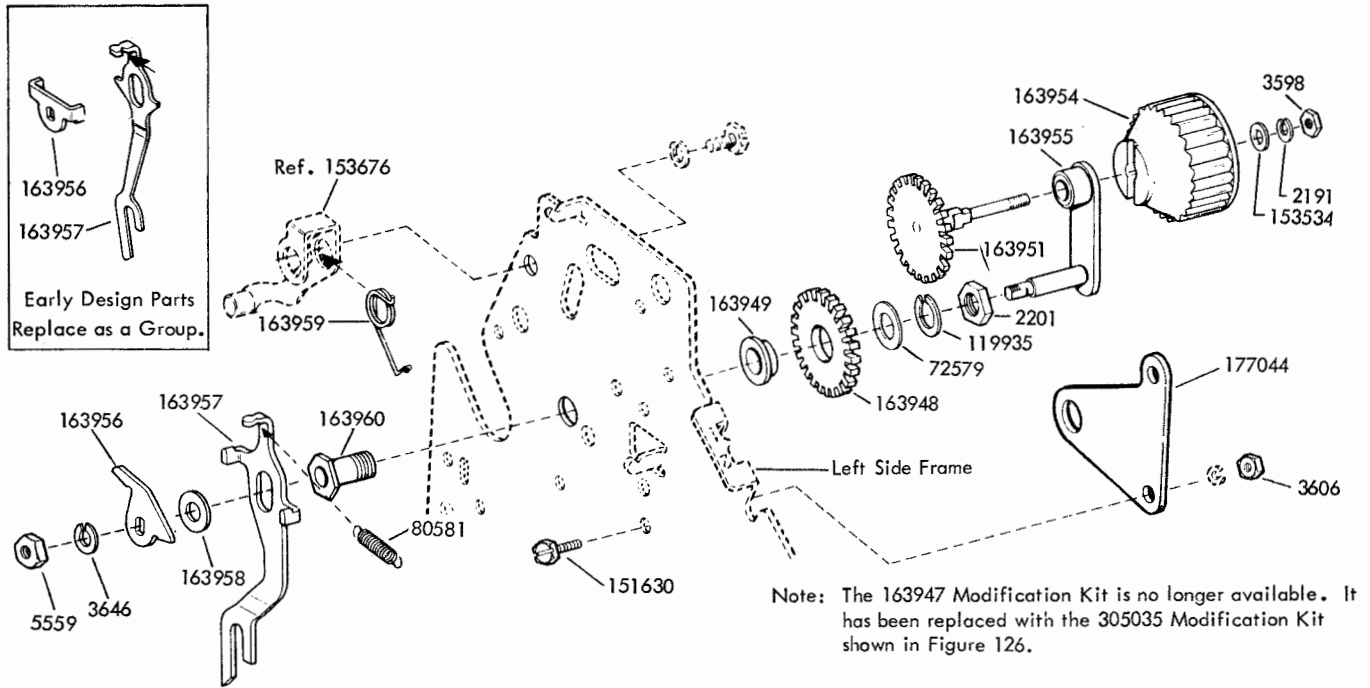


FIGURE 108. 163947 MODIFICATION KIT TO PROVIDE IMPROVED MANUAL PLATEN LINE FEED

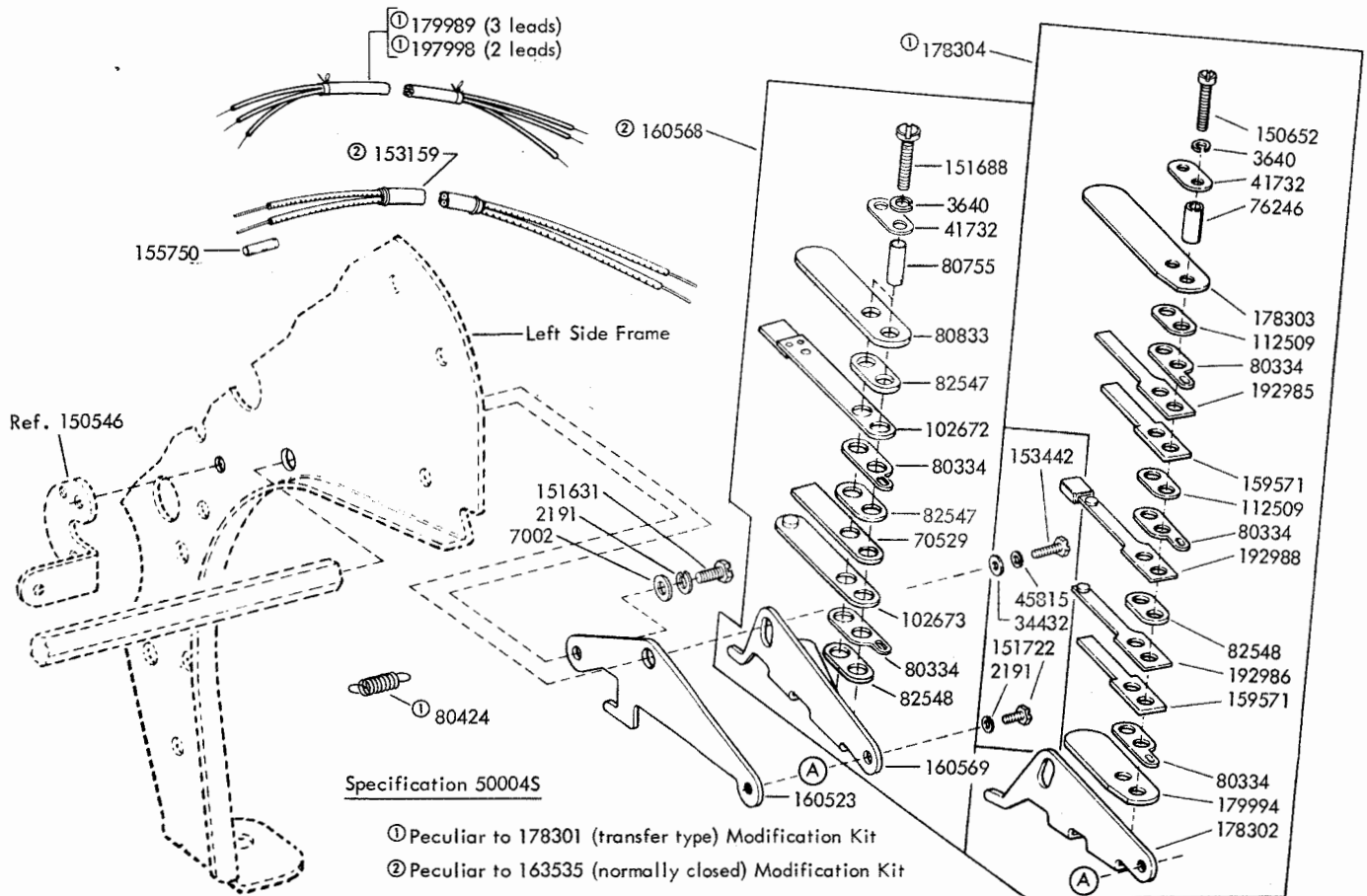
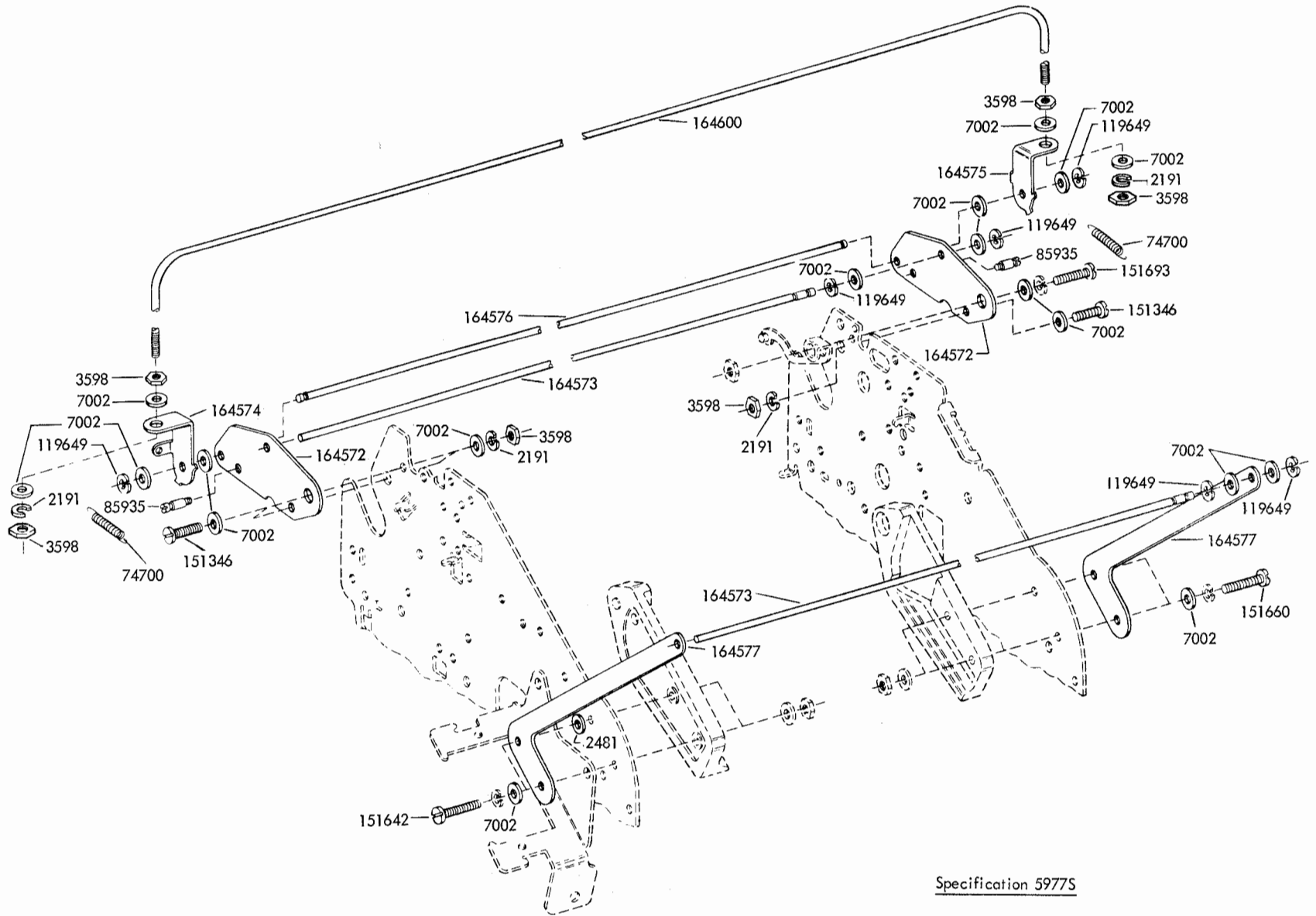


FIGURE 109. 163535 AND 178301 MODIFICATION KITS TO PROVIDE TRANSMITTER CONTROL FOR THE VERTICAL TABULATOR

FIGURE 110. 164270 MODIFICATION KIT TO PROVIDE COPY DISPLAY



Specification 5977S

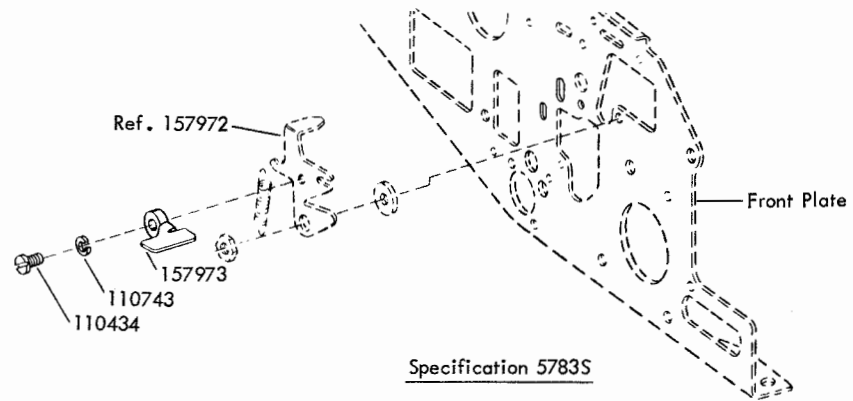


FIGURE 111. 157514 MODIFICATION KIT TO PROVIDE AUTOMATIC CARRIAGE RETURN AND LINE FEED

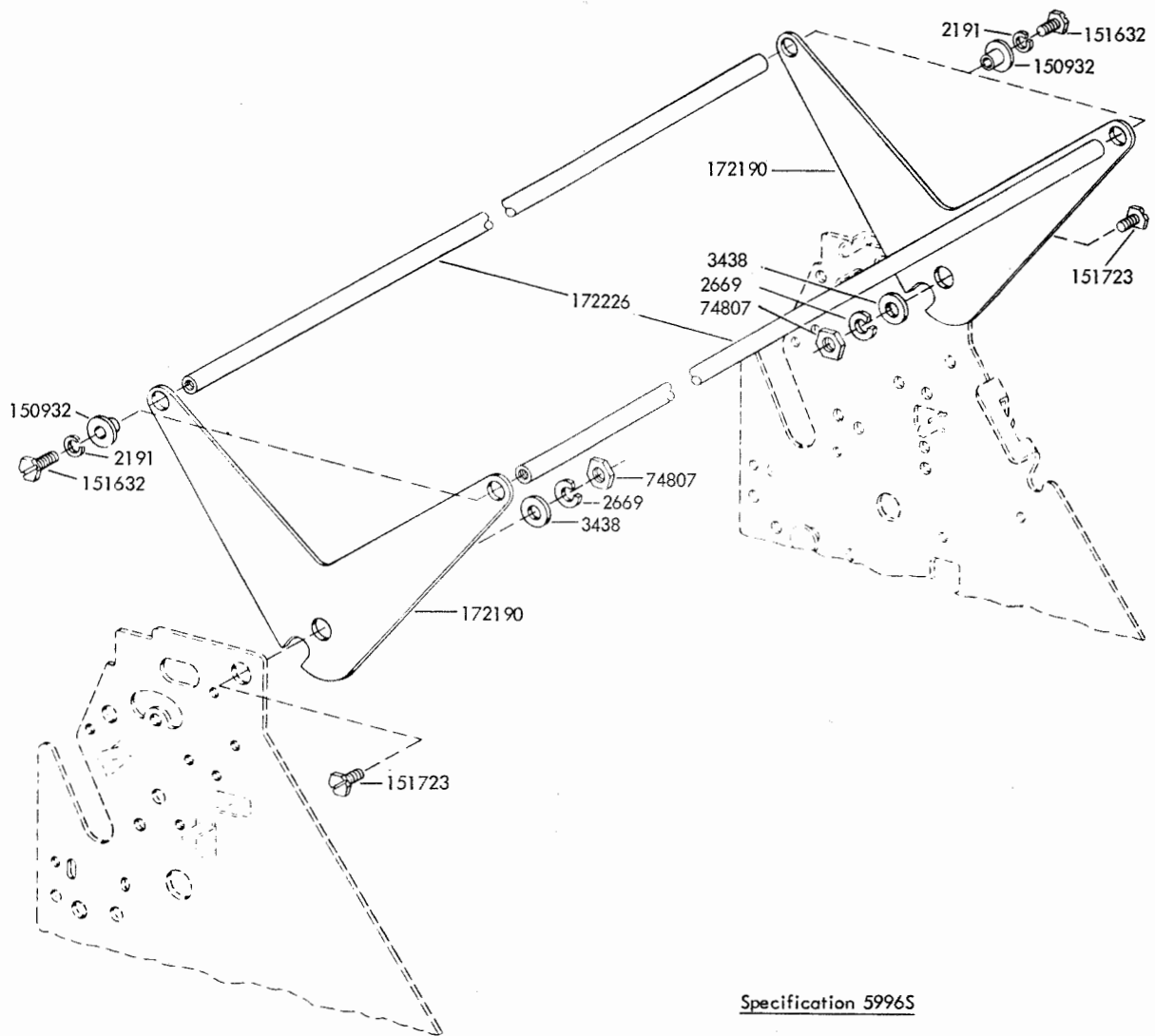
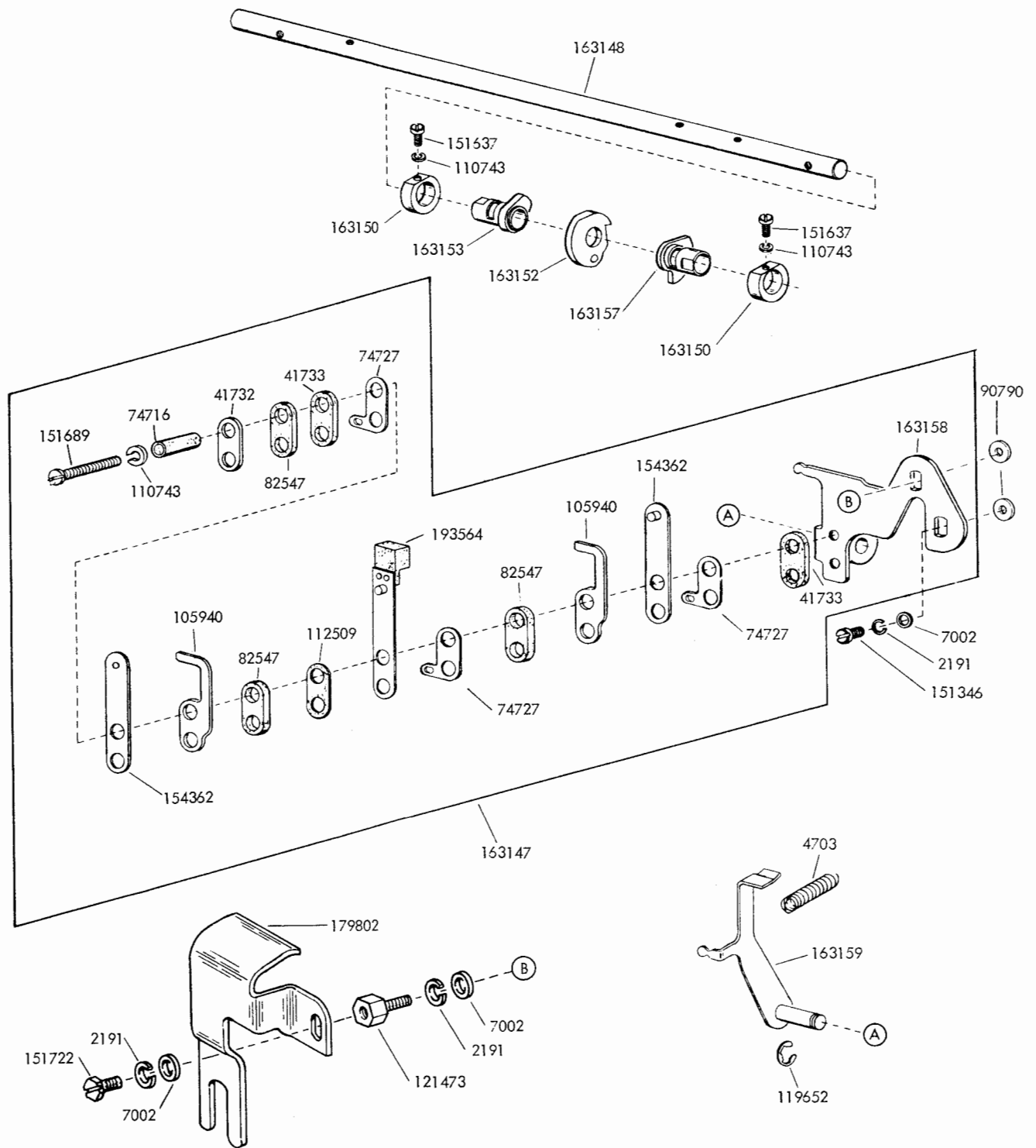


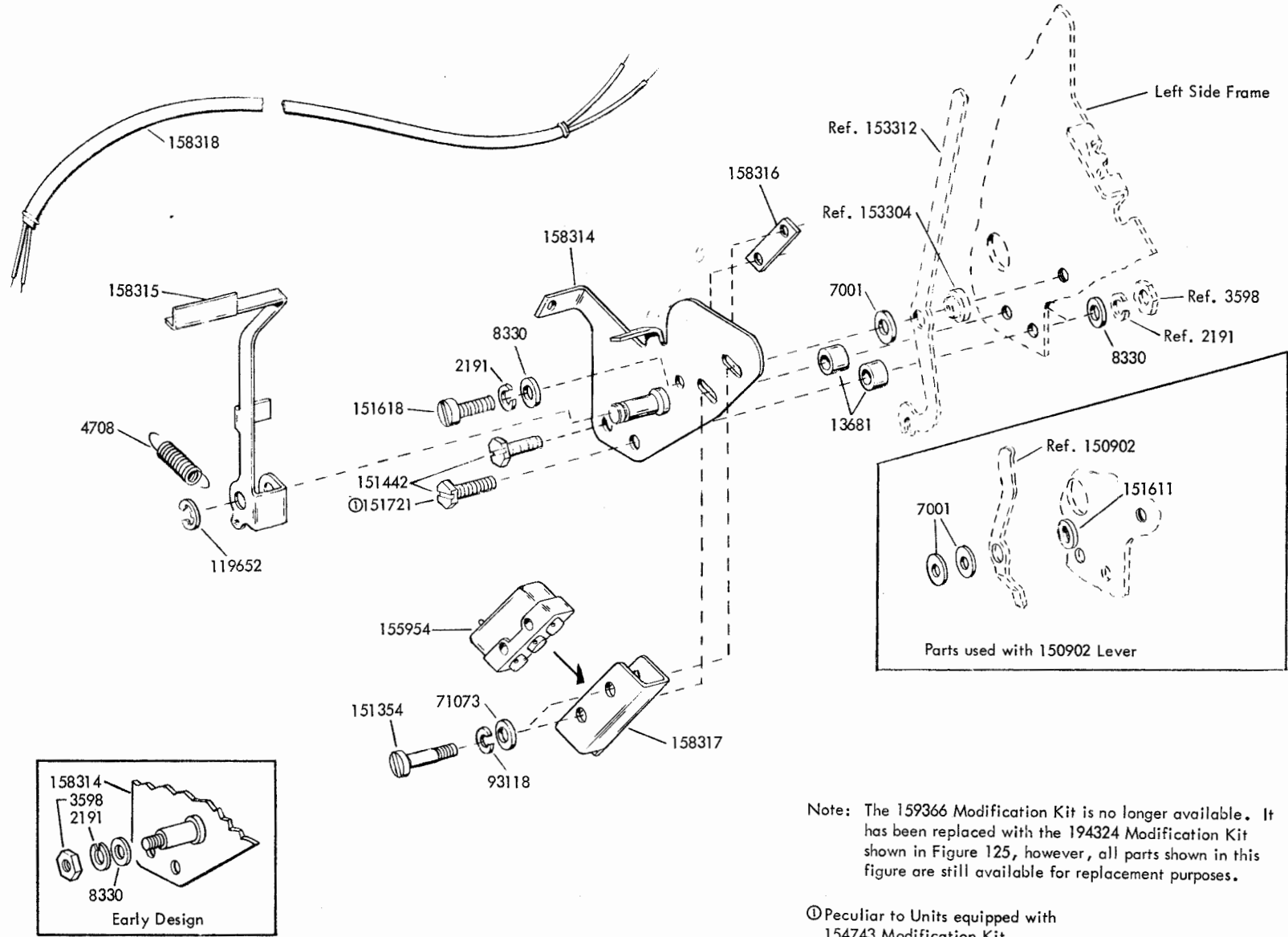
FIGURE 112. 172181 MODIFICATION KIT TO PROVIDE COPY DISPLAY



Specification 58045

FIGURE 113. 163146 MODIFICATION KIT TO PROVIDE UNIVERSAL CONTACT

FIGURE 114. 159366 MODIFICATION KIT TO PROVIDE A FRICTION FEED
PRINTER WITH PAPER-OUT ALARM

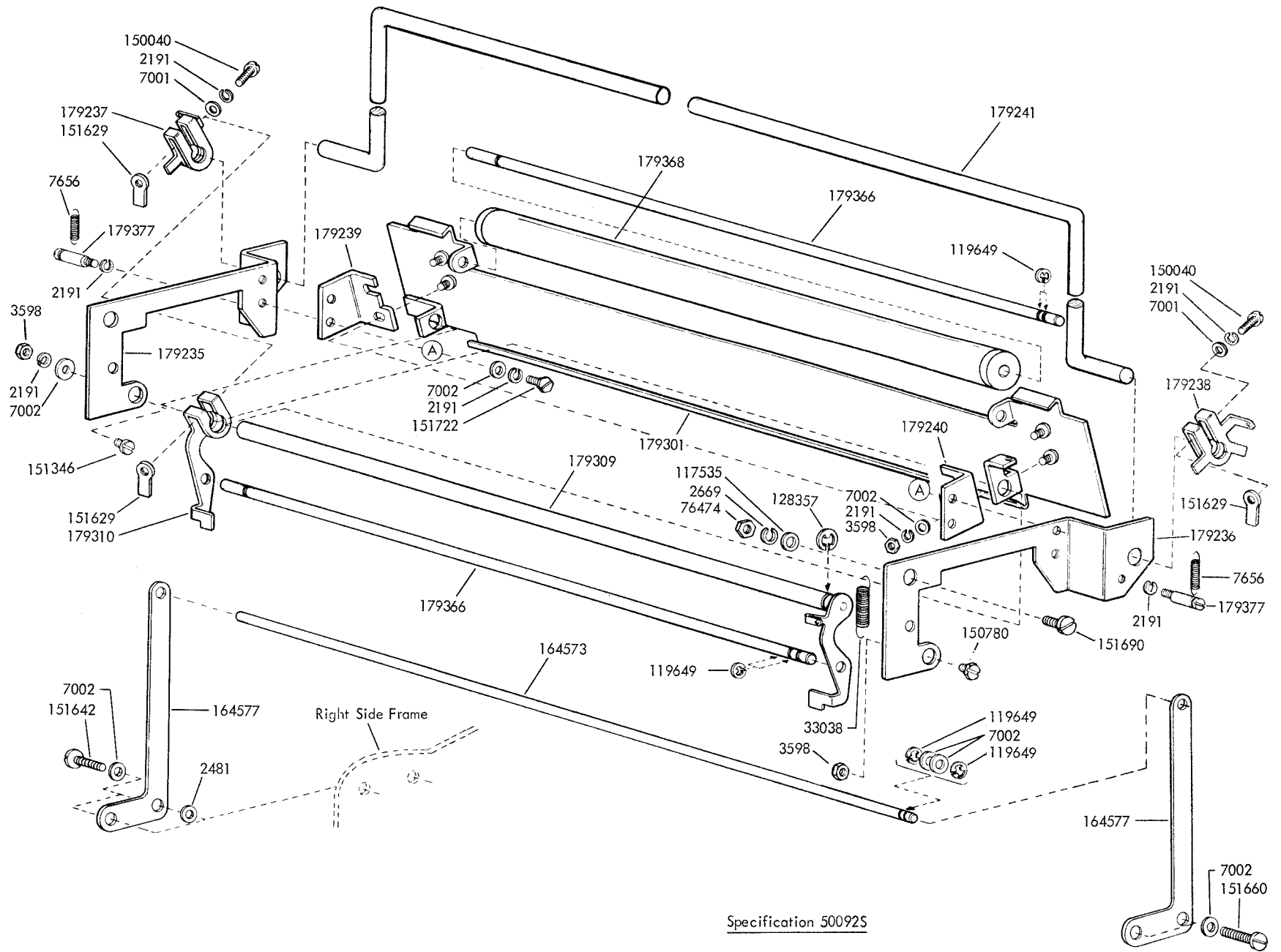


Note: The 159366 Modification Kit is no longer available. It has been replaced with the 194324 Modification Kit shown in Figure 125, however, all parts shown in this figure are still available for replacement purposes.

Ⓞ Peculiar to Units equipped with 154743 Modification Kit

Specification 58885

FIGURE 115. 179369 MODIFICATION KIT TO PROVIDE COPY DISPLAY



Specification 500925

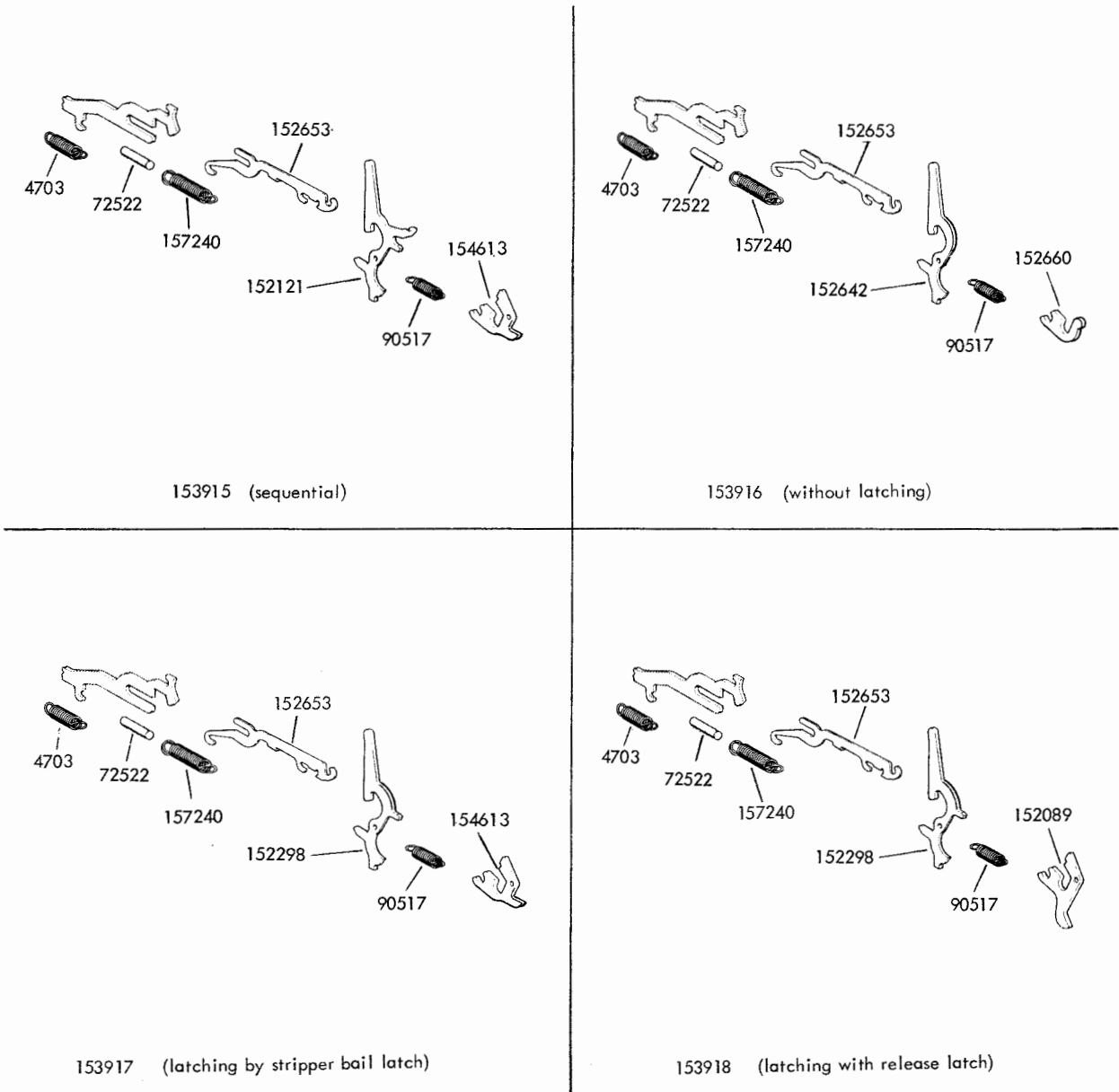


FIGURE 116. SELECTIVE CALLING FUNCTION LEVER MODIFICATION KITS

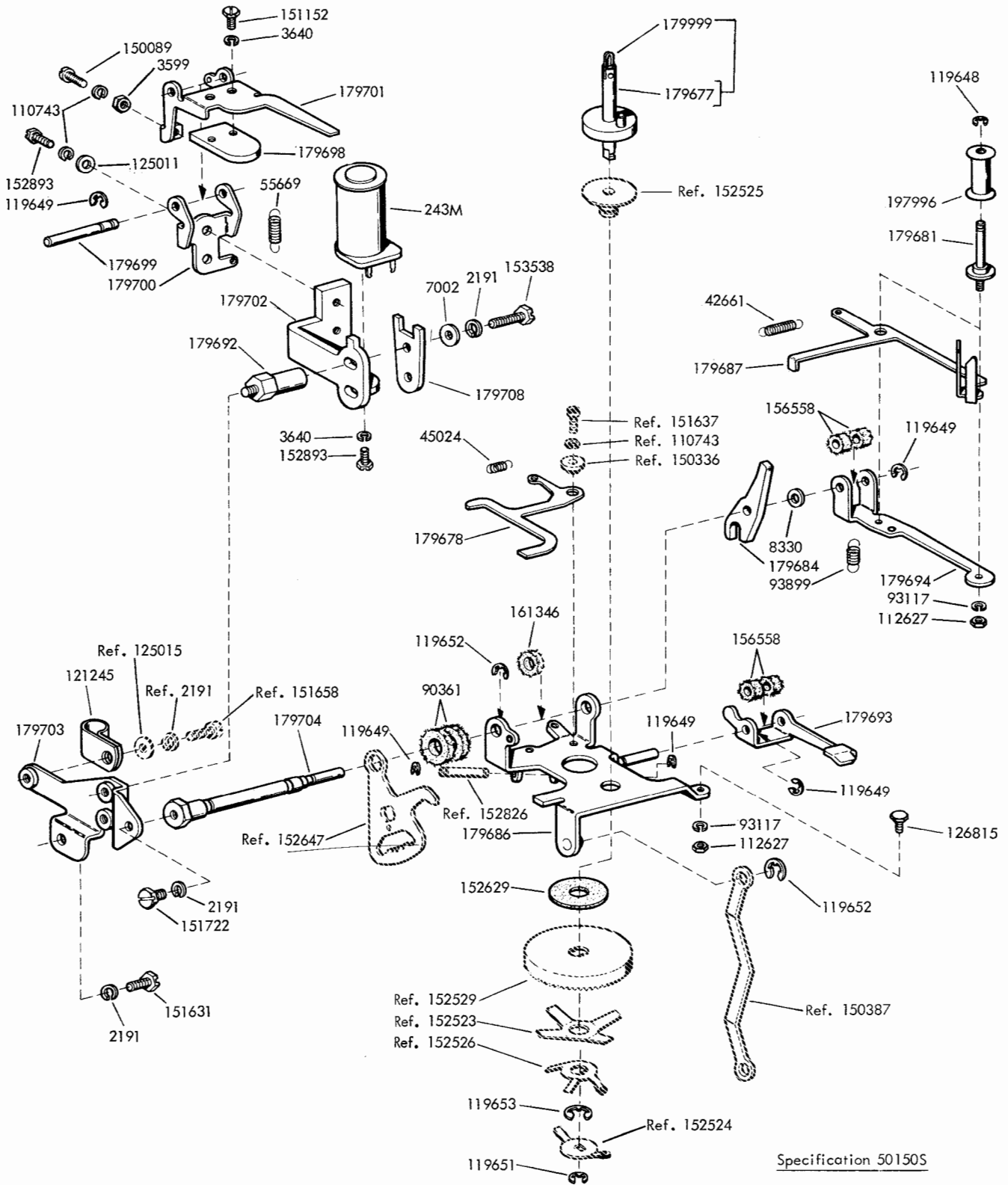
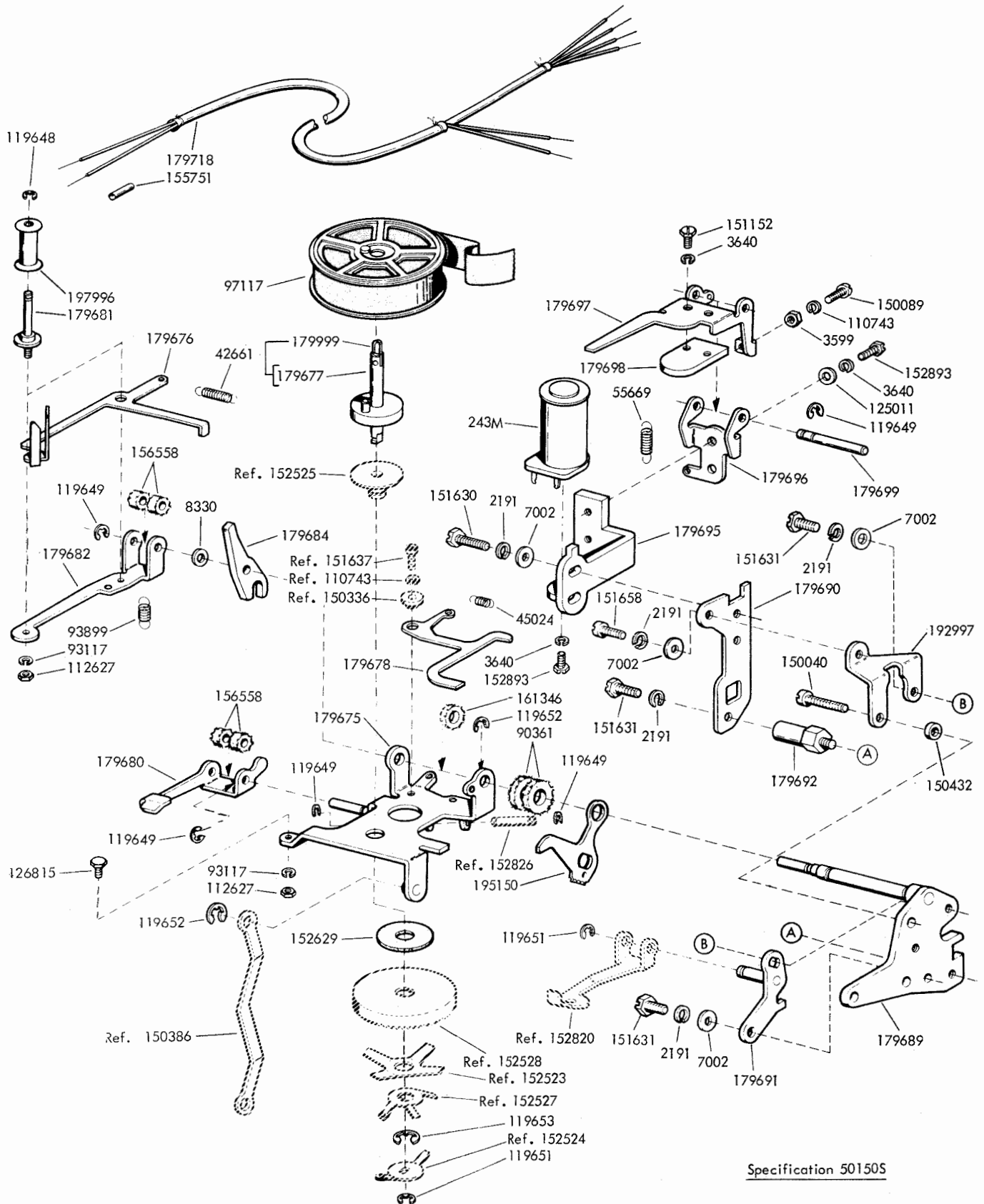


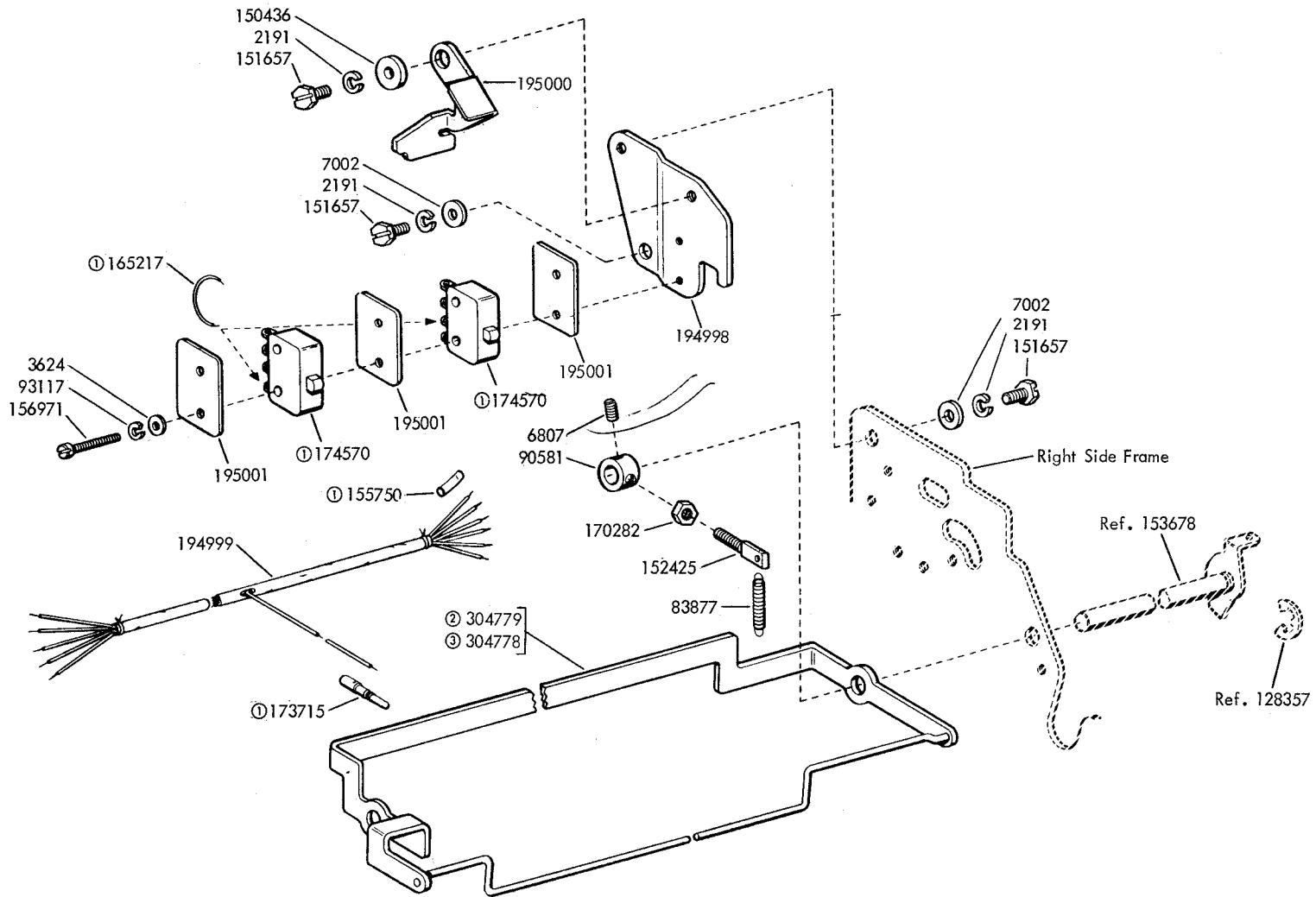
FIGURE 117. 179724 MODIFICATION KIT TO PROVIDE TWO COLOR RIBBON PRINTING - RIGHT SIDE (CONTINUED ON NEXT PAGE)



Specification 50150S

FIGURE 118. 179724 MODIFICATION KIT TO PROVIDE TWO COLOR RIBBON PRINTING - LEFT SIDE (CONTINUED FROM PRECEDING PAGE)

FIGURE 119. 194995 AND 199245 MODIFICATION KITS TO PROVIDE PAPER JAM ALARM



- ① Part of 194999 Cable Assembly
- ② Peculiar to 194995 Modification Kit (8-1/2" wide paper)
- ③ Peculiar to 199245 Modification Kit (6-1/4" wide paper)

Specification 501355

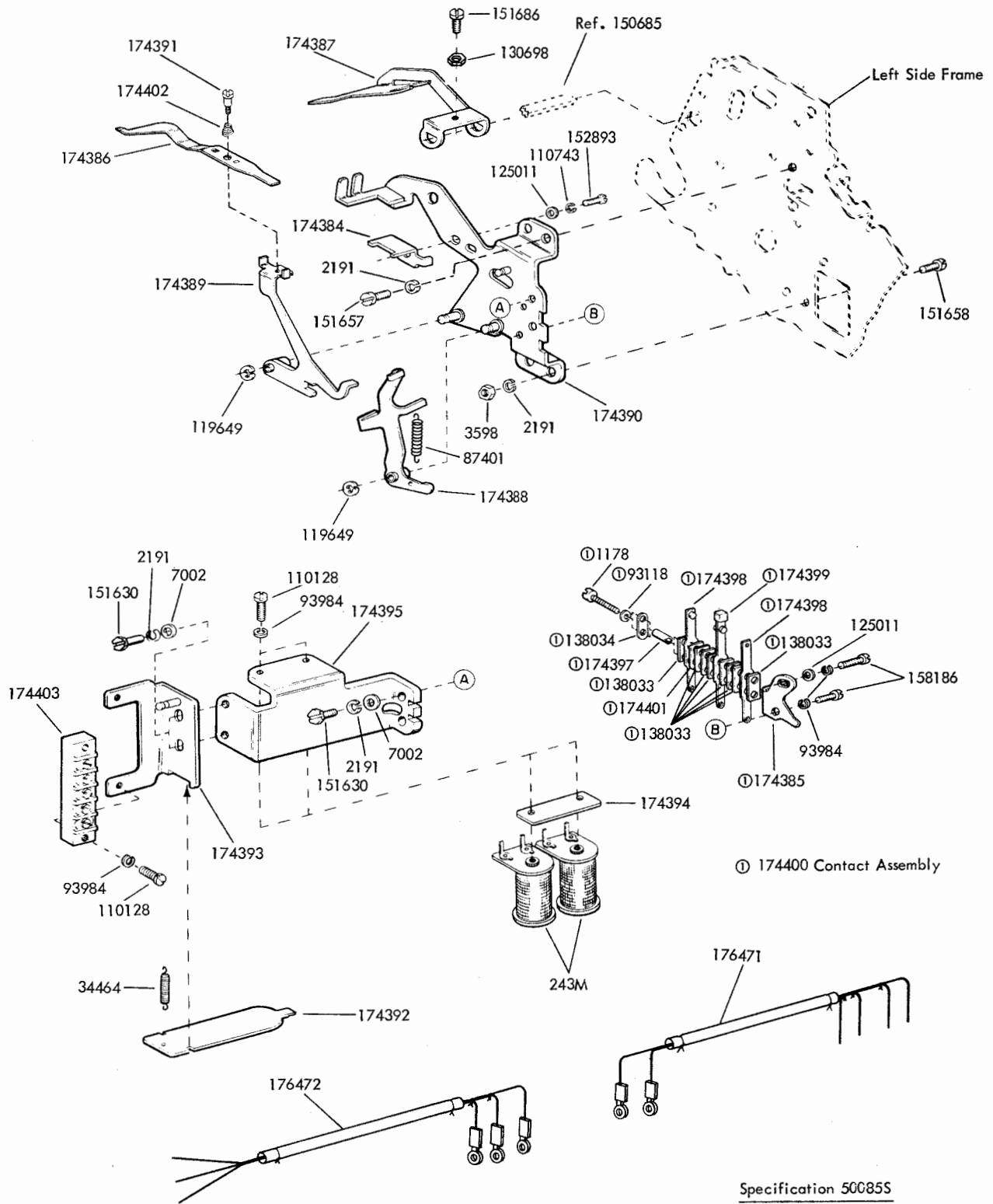
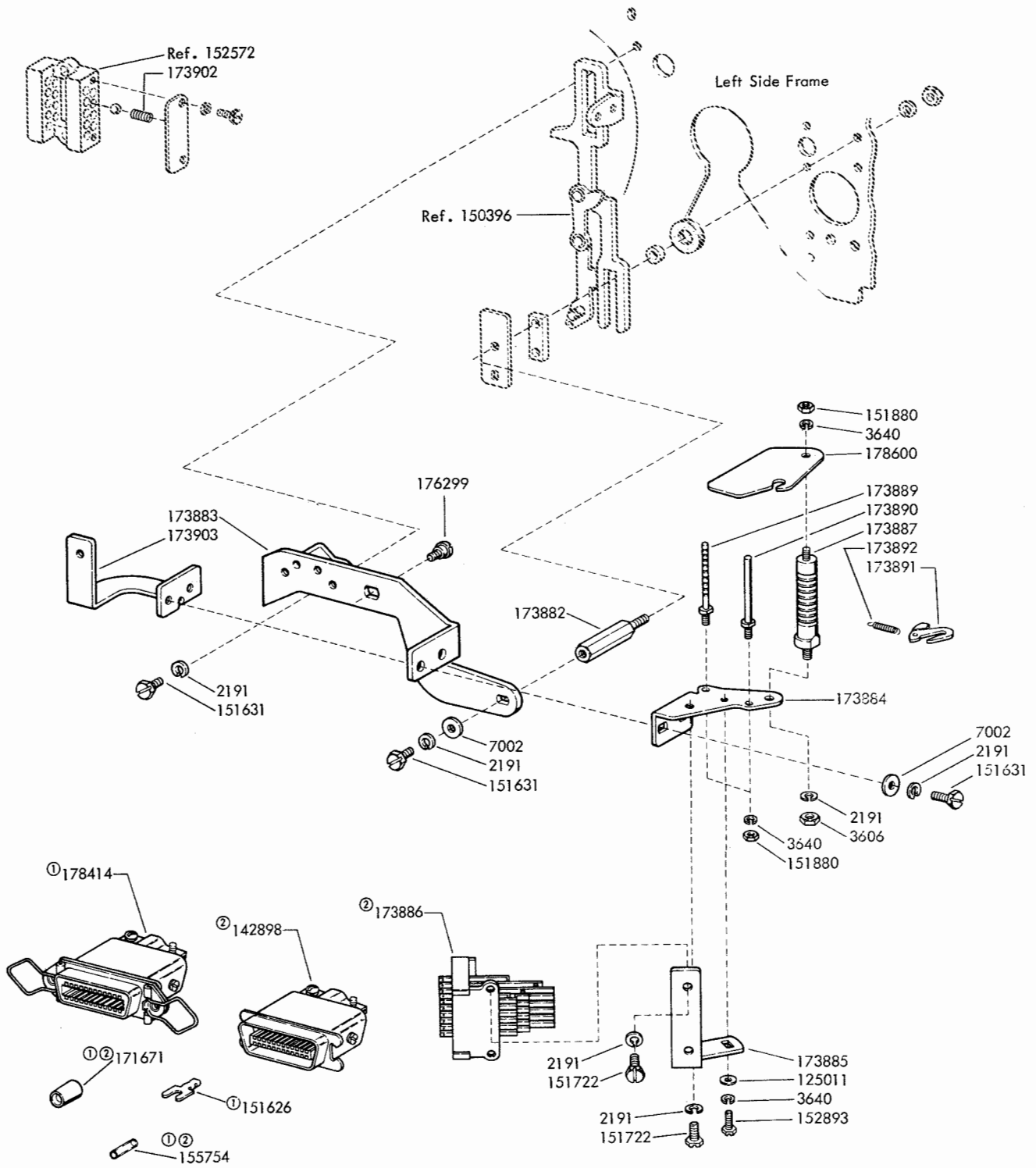


FIGURE 120. 174043 MODIFICATION KIT TO PROVIDE PAPER FEED FAILURE INDICATOR

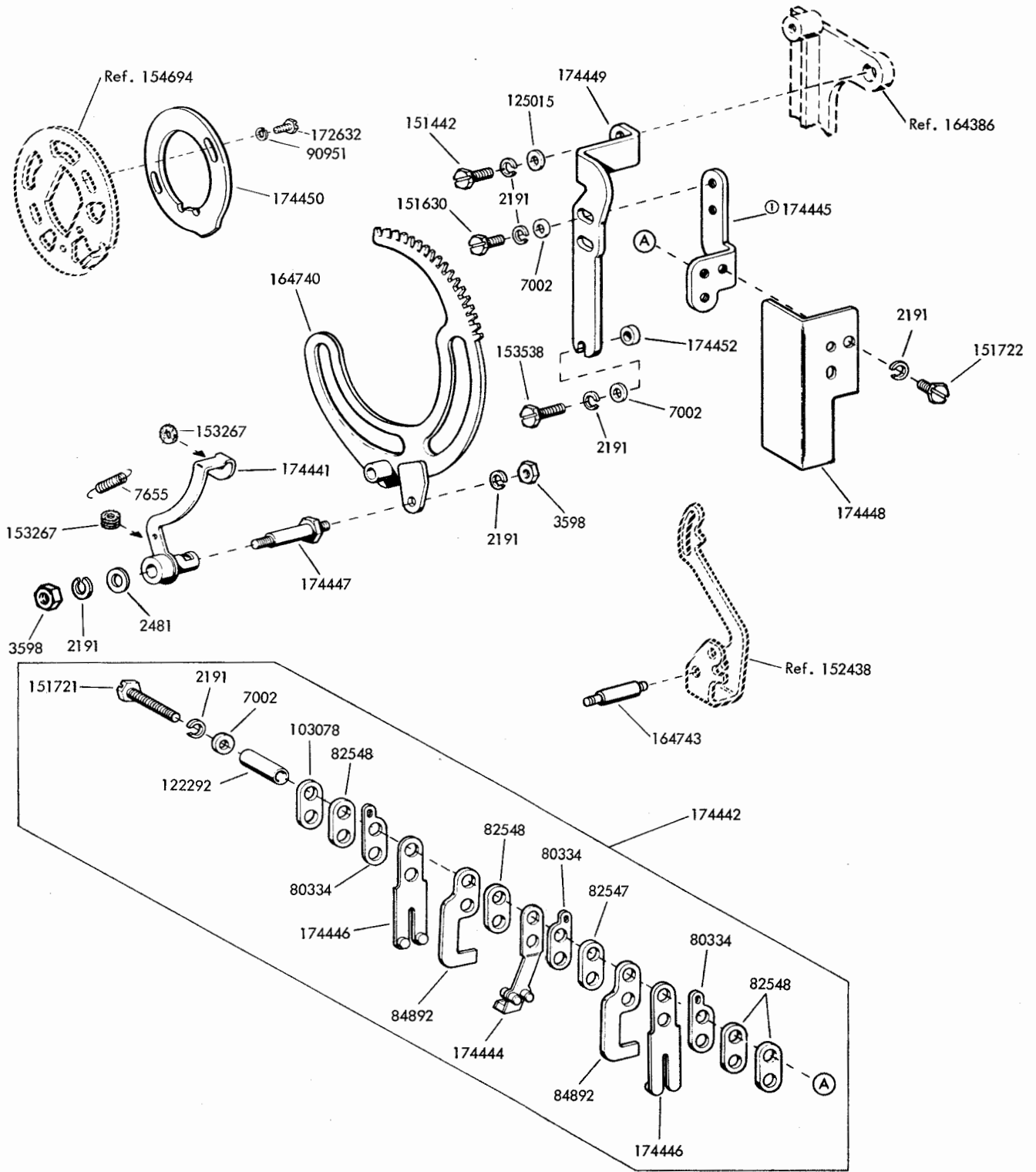


Note: The 198394 Modification Kit also includes the 163146 Modification Kit shown in Figure 113 and the 192566 and 192567 Link Assemblies shown in Figure 34.

Specification 500695

- ① Part of 198655 Cable Assembly
- ② Part of 198656 Cable Assembly

FIGURE 121. 198394 MODIFICATION KIT TO PROVIDE UNIVERSAL CONTACTS



Specification 500415

① Part of 174442 Contact Assembly

FIGURE 122. 176420 MODIFICATION KIT TO PROVIDE SELECTOR WITH TIMING CONTACTS

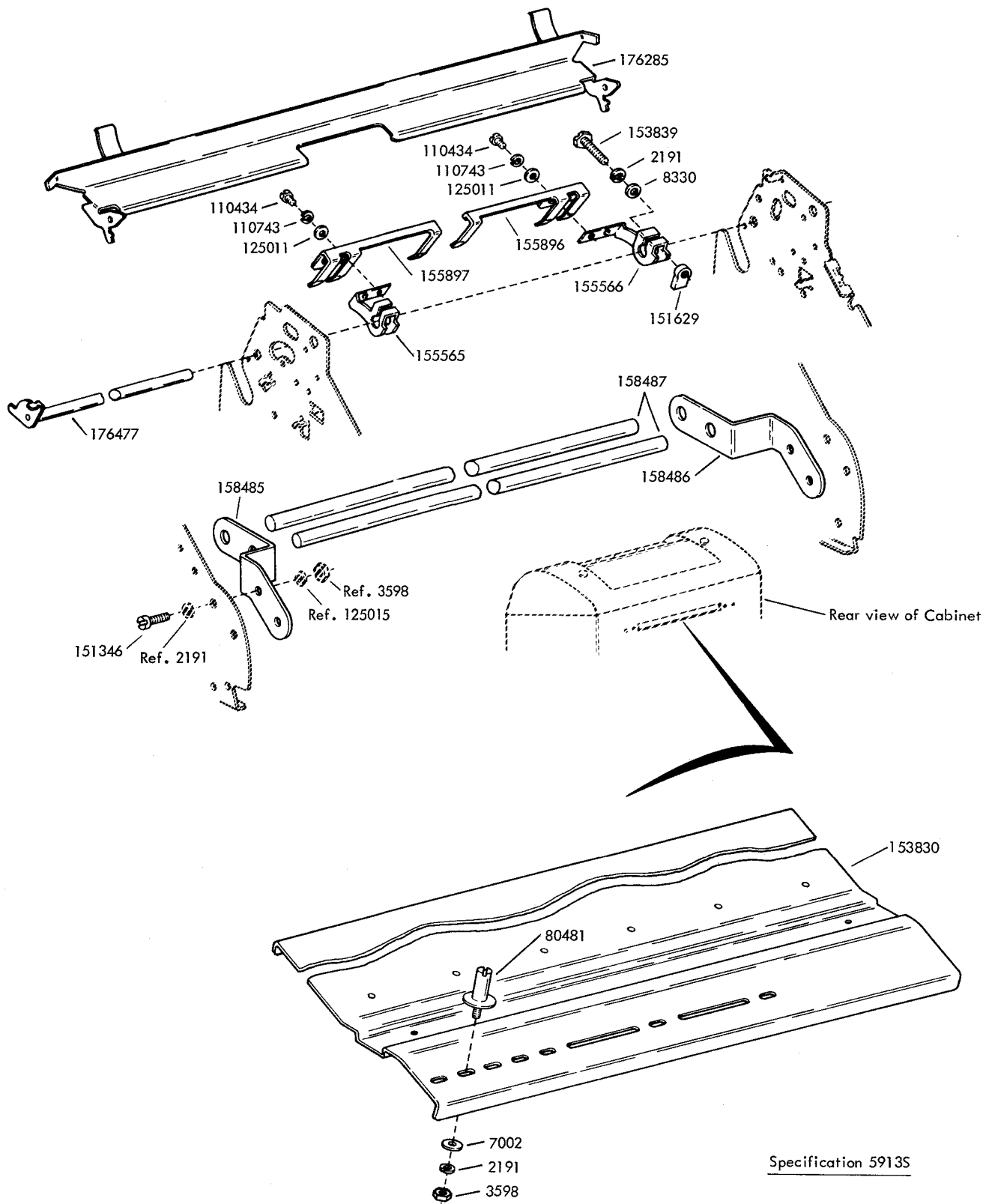


FIGURE 123. 154798 MODIFICATION KIT TO PROVIDE SUPERFOLD FRICTION FEED PAPER HANDLING

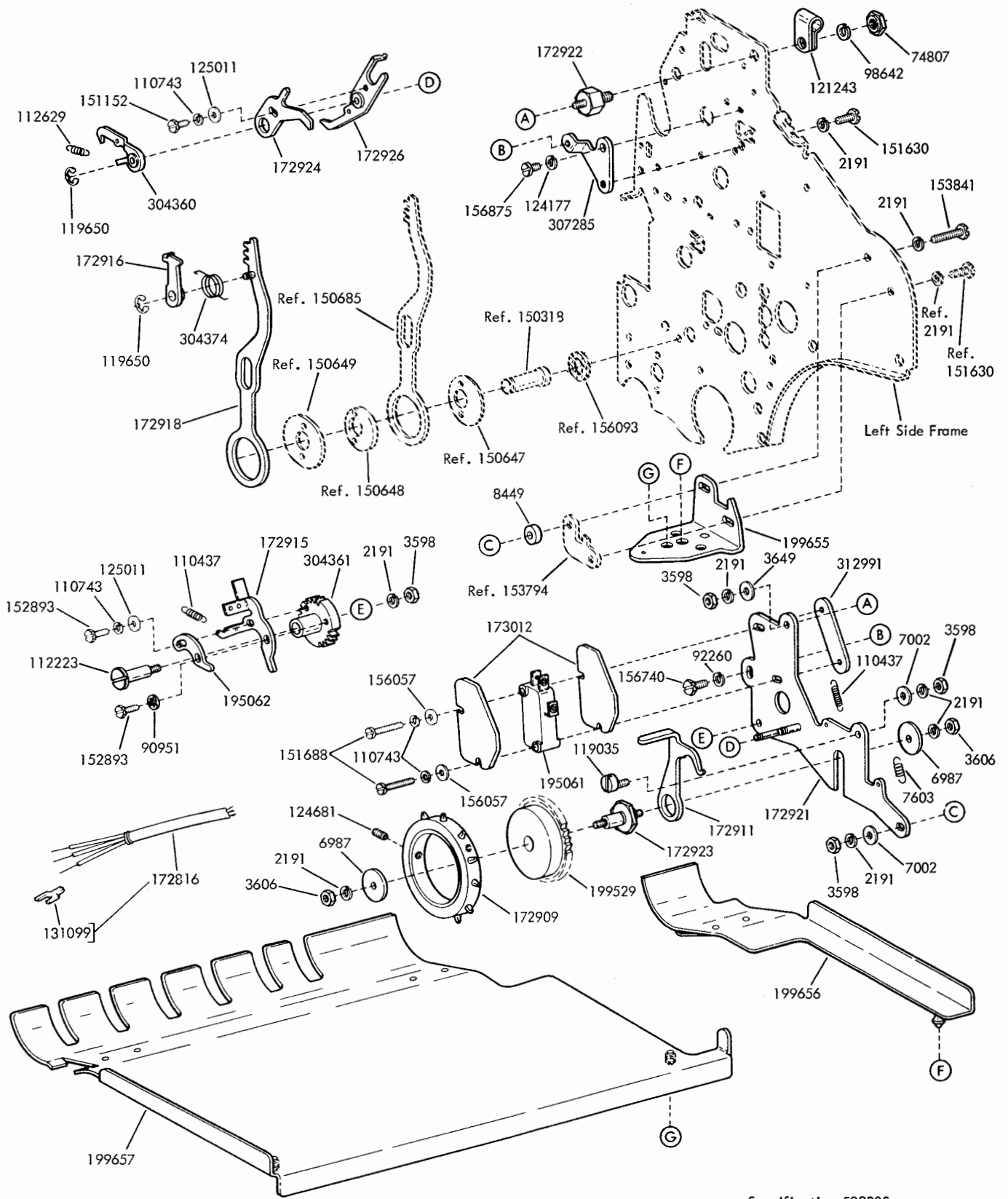
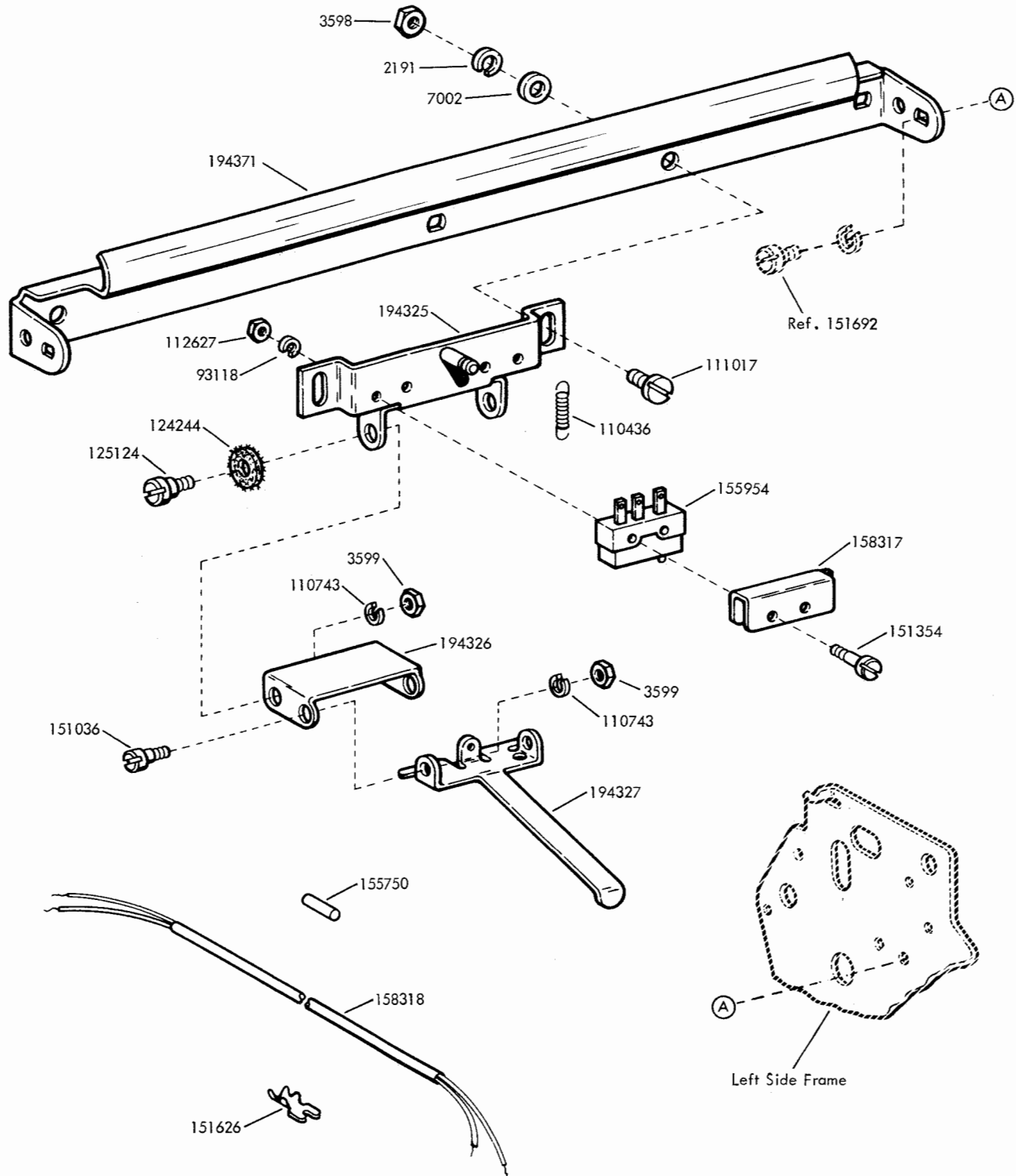


FIGURE 124. 194092 MODIFICATION KIT TO PROVIDE PAPER MOTION ALARM



Specification 58885

FIGURE 125. 194324 MODIFICATION KIT TO PROVIDE A PAPER-OUT ALARM SWITCH

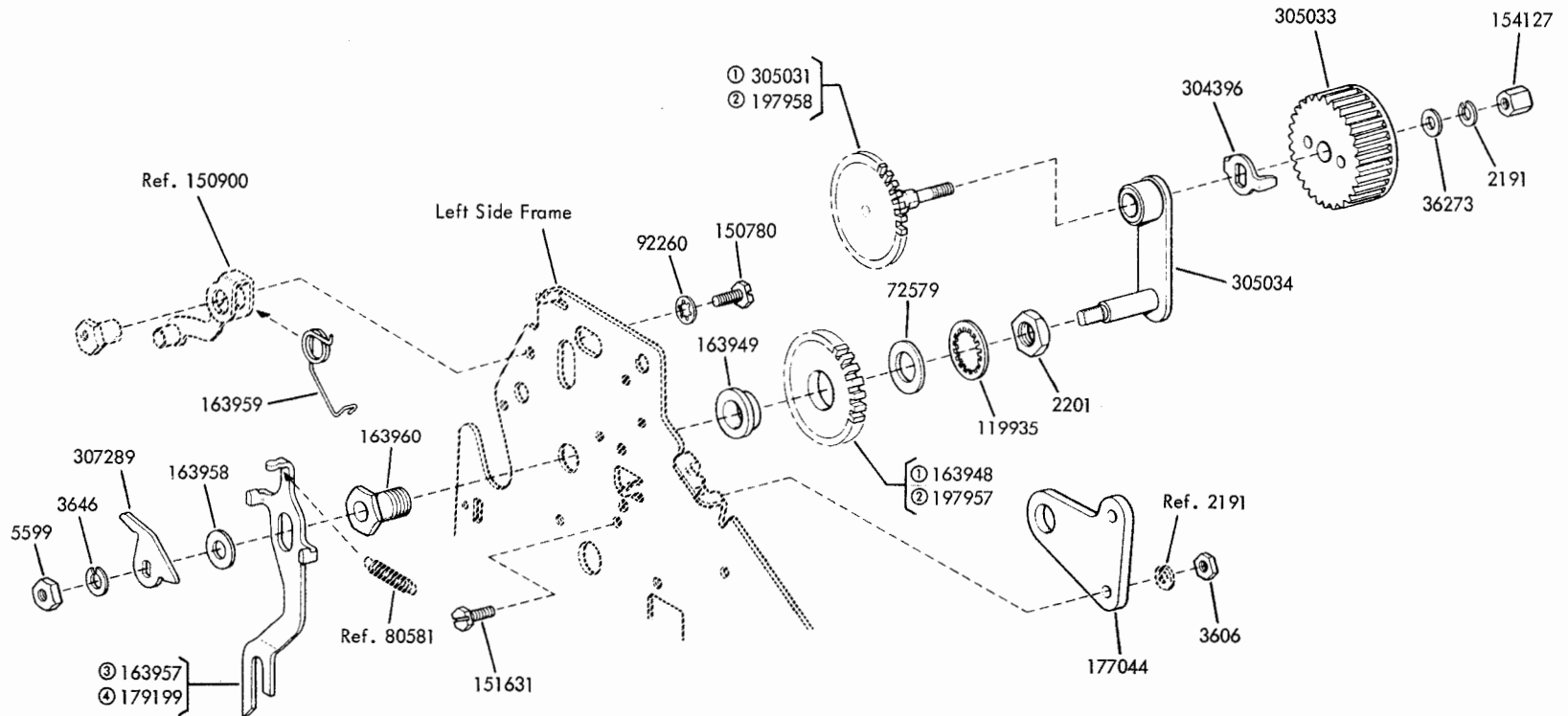


FIGURE 126. 305035, 305036 AND 307065 MODIFICATION KITS TO PROVIDE IMPROVED MANUAL PLATEN LINE FEED

- ① Part of 305035 and 305036 Modification Kits (3 or 6 line feeds per inch)
- ② Part of 307065 Modification Kit (4 or 8 line feeds per inch)
- ③ Black oxide coated - part of 305035 and 307065 Modification Kits (for Sprocket Feed Printers)
- ④ Nickel plated - part of 305036 Modification Kit (for Friction Feed Printers)

Specification 5949S

NOTES OF EXPLANATION

- Note 1: (Figure 4) Parts shown in Figure 4 are peculiar to LP68.
- Note 2: (Figure 7) The 150098 Pressure Bail is no longer available. It has been replaced by a 157290 Pressure Bail. When replacing the 150098 with the 157290 Pressure Bail, two 150269 Rollers and four 150266 Guide Levers are removed. All other parts are available for maintenance.
- Note 3: (Figure 10) The 153317 Bearing Bracket is no longer available. It has been replaced by a 157990 Bearing Bracket, a 157991 Stud, a 2669 Lock Washer and a 112626 Screw.
- Note 4: (Figures 11 and 13) Parts shown in Figures 11 and 13 are peculiar to LP98.
- Note 5: (Figure 16) The 153560 Cam Shaft is no longer available. It has been replaced by a 154789 Modification Kit to replace the 153560 Cam Shaft and associated parts (see Figure 14 for components).
- Note 6: (Figure 16) The 153573 Bail has been redesigned but retains its original number (see Figure 14 for late design).
- Note 7: (Figure 17) The 153700 Platen Hub has been replaced by a new 154358 Platen Hub. The 153751 through 153767 Rubber Platens have been replaced by new 176221 through 176237 Rubber Platens. The new platen hub may be identified by ① a rectangular groove in the platen locating diameter of the hub (for a neoprene "O" ring) and ② a shoulder to act as a stop for the platen. The early design rubber platen has ① formed lugs to position the platen against the hub and ② the inside diameter is increased at each end to fit the platen hub. The new rubber platen has no positioning lugs and the inside diameter is uniform from end to end. The old style rubber platens can be used with the new hubs, but the new rubber platens cannot be used with the old style hubs.
- Note 8: (Figure 22) Since the type box alignment cannot be adjusted, the 152502 Type Box Carriage Plate is no longer available. It has been replaced by a 152502 Modification Kit to provide Type Box Alignment (See Figure 21 for components).
- Note 9: (Figure 28) The 154625 Space Suppression Ring is used on LP6, LP7, LP8 and LP9.
- Note 10: (Figure 31) The 150953 Slide Assembly is no longer available. It has been replaced by a 153183 Slide Assembly and a 153946 Modification Kit to provide improved Horizontal Positioning Knee Link Assembly (see Figures 30 and 34 for components).
- Note 11: (Figure 31) The 150531 Clamp Plate is no longer available. It has been replaced by a 164316 Clamp Plate (shown in Figure 30).
- Note 12: (Figure 32) The 3649 Flat Washer and 153884 Gear are used on LP8.
- Note 13: (Figure 32) The 150438 Bellcrank is used on LP3 and LP8.
- Note 14: (Figure 35) The 152569 and 152570 Shift Slide Drive Linkages are no longer available. They are replaced by a 153946 Modification Kit to provide improved Horizontal Positioning Knee Link Assembly (see Figure 34 for components).
- Note 15: (Figure 35) The 150757 Arm is no longer available. It has been replaced by a 170079 Arm.
- Note 16: (Figure 41) The 152434 Plate is no longer available. It has been replaced by a 153904 Modification Kit to provide improved Range Scale Sector Mounting (see Figure 39 for components).
- Note 17: (Figure 41) The 153491 Plate is no longer available. It has been replaced by a 154723 Modification Kit to provide improved Range Scale Sector Mounting (see Figure 39 for components).
- Note 18: (Figure 41) The 152439 Shaft is no longer available. It has been replaced by a 157261 Shaft and a 119648 Retaining Ring.
- Note 19: (Figure 42) Parts shown enclosed are peculiar to LP94.
- Note 20: (Figure 44) The 152413 Magnet Bracket is no longer available. It has been replaced by a 164386 Magnet Bracket.
- Note 21: (Figure 44) The 152422 Armature is no longer available. It has been replaced by a 160180 Armature.
- Note 22: (Figure 44) The 152424 Stop Plate is no longer available. It has been replaced by a 160184 Stop Plate.
- Note 23: (Figure 48) The 152554 Code Bar is used on LP3.
- Note 24: (Figure 48) The 150285 Tie Bar and the 152721 Code Bar are used on LP3, LP4, LP5 and LP7.
- Note 25: (Figure 50) The old 152560 Pallet Box Rear Plate previously shown is no longer available. It is replaced by the 194054 Set of Parts consisting of a Front Plate and Rear Plate shown in Figure 50. The new plates are identified by a letter "X" stamped in the top center of each plate between the "LTRS" and "FIGS" stamping. The "X" is omitted on the old plates. New and old style plates are interchangeable in pairs only. The old 154616 Pallet Box Front Plate previously shown is still available for replacement purposes.
- Note 26: (Figure 51) The old and new style type boxes may be identified by the depth of the Pallet Box Front Plate (new style being shallower). The old style pallets cannot be used in the new style type boxes. New style pallets can be used in either new or old style type boxes. The old style 150077 Pallet Spring is no longer available and is replaced by a new style 157238 Pallet Spring. Only the new style spring can be used universally with either the new or old style typepallets and typeboxes. However, the old style springs can be used with the new style pallets in an old style type box. The old and new style pallets may be identified by the length of the shank from the rear of the pallet head to the far end of the elongated hole. (The old style being the longer — See Figures 50 and 51).
- Note 27: (Figure 60) The switch assemblies shown in Figure 60 are no longer available. They have been replaced by new style switch assemblies shown in Figure 59. The replacements are as follows: The 155917 through 155924 Switch Assemblies have been replaced by 172600 through 172608 Switch Assemblies respectively. The 157070 through 157100 Switch Assemblies have been replaced by 172500 through 172530 Switch Assemblies respectively. The 160192 through 160197

NOTES OF EXPLANATION (continued)

Switch Assemblies have been replaced by 172531 through 172536 Switch Assemblies respectively. The 160198 Switch Assembly has been replaced by a 172534 Switch Assembly. The 160199 through 160218 Switch Assemblies have been replaced by 172538 through 172557 Switch Assemblies respectively. The 160219 Switch Assembly has been replaced by a 172560 Switch Assembly. The 160220 Switch Assembly has been replaced by a 172559 Switch Assembly.

Note 28: (Figure 86) The 153701 through 153717 Modification Kits are no longer available. They have been replaced by 176181 through 176197 Modification Kits respectively; However, the parts remain the same with the exception of the 153751 through 153767 Platens which have been replaced by the new 176221 through 176237 Platens respectively. The old style 153751 through 153767 Platens are still available for replacement purposes (see Figure 17 and Note 7).

NUMERICAL INDEX

Part Number	Description and Page Number	Part Number	Description and Page Number	Part Number	Description and Page Number
190M	Coil, Magnet 97	7603	Spring 29, 33, 112	74882	Spring 24
209M	Coil, Magnet 90	7655	Spring 71, 110	74891	Shim (.004" Thk) 97
233M	Coil, Magnet 14	7656	Spring 103	75229	Spring 35, 87
243M	Coil, Magnet 105, 106, 108	7835	Ribbon w/Spool (Black) 49	75607	Washer, Flat 83
250M	Coil, Magnet 47	7965	Spring 13, 79	76081	Washer, Flat 46
254M	Coil, Magnet 45	8330	Washer, Flat 4, 20, 29, 32, 39, 42, 52, 77, 78, 92, 102, 105, 106, 111	76099	Washer, Flat 46
290M	Coil, Magnet 15			76246	Bushing, Insulating 98
1010	Screw, Shoulder (6-40) 6			76249	Screw (6-40 x 1/8 Fil) 12
1028	Screw (4-40 x 1/4 Fil) 14, 97	8449	Spacer (.094" Thk) 29, 49, 112	76379	Spring 22
1041	Screw, Shoulder (6-40) 83	13681	Spacer (.187" Thk) 4, 102	76461	Washer, Flat 33
1164	Screw (2-56 x 3/16 Fil) 25	21397	Washer, Spring 68, 89	76474	Nut (10-32 Hex) 103
1178	Screw (2-56 x 7/16 Fil) 108	22015	Spring 49	76800	Spring 20
1196	Screw, Shoulder (6-40) 18	27425	Screw (2-56 x 5/32 Fil) 24	78533	Spring 42
1214	Screw, Set (10-32) 35	31636	Spring 50, 75	79012	Insulator 46
1272	Screw (6-40 x 11/16 Fil) 86	33038	Spring 11, 71, 103	79449	Shim (.008" Thk) 36
1293	Screw (4-40 x 1/8 Fil) 49	33828	Spring 22, 24, 37	80310	Washer, Felt 31
2034	Washer, Flat 40, 42	34432	Washer, Flat 50, 69, 74, 91, 98	80334	Terminal, Contact 69, 98, 110
2191	Washer, Lock 4, 5, 7, 9, 11 to 27, 29, 31, 32, 33, 35 to 40, 42, 44, 45, 46, 48 to 52, 59, 60, 68, 69, 71, 72, 74 to 80, 82, 83, 86, 89, 90, 92, 93, 95, 97 to 103, 105 to 114	34464	Spring 108	80342	Screw (6-40 x 23/64 Hex) 59, 92
2201	Nut (5/16-32 Hex) 7, 98, 114	35826	Washer, Flat 16, 68, 89	80424	Spring 98
2422	Washer, Lock 16, 69	36273	Washer, Flat 7, 37, 114	80481	Screw (6-40 Spl) 111
2438	Washer, Flat 14, 45, 97	36463	Spring 37	80581	Spring 11, 21, 35, 36, 85, 98, 114
2481	Washer, Flat 18, 99, 103, 110	41382	Spring 42, 89	80708	Clamp, Cable 15, 69, 74, 78, 90
2539	Nut (3/8-32 Hex) 17, 29, 77	41675	Washer, Flat 71, 93	80755	Bushing, Insulating 91, 98
2669	Washer, Lock 4, 11, 15, 16, 17, 22, 24, 31, 35, 42, 68, 89, 90, 92, 100, 103, 115	41720	Spring, Contact 69	80833	Guard, Contact Spring 98
2836	Spring 12	41732	Plate, Clamp 69, 91, 98, 101	80848	Spring 20
3438	Washer, Flat 36, 86, 100	41733	Insulator (.062" Thk) 69, 101	81731	Spring 35, 80, 87
3598	Nut (6-40 Hex) 4, 6, 7, 9, 11, 12, 15 to 19, 21 to 27, 29, 33, 35 37 to 40, 42, 45, 52, 68, 71, 72, 74, 77, 79, 83, 86, 89, 93, 96, 98, 99, 102, 103, 108, 110 to 113	42661	Spring 16, 48, 49, 68, 105, 106	81778	Screw (4-40 x 3/16 Fil) 45
3599	Nut (4-40 Hex) 7, 9, 15, 29, 33, 35, 37, 42, 44, 45, 49, 60, 61, 74, 77, 90, 91, 105, 106, 113	42823	Washer, Flat 16, 26, 27, 70	82442	Spring 11
3606	Nut (6-40 Hex) 41, 44, 59, 98, 109, 112, 114	42827	Screw (3-48 x 1/4 Fil) 50	82463	Spring 11, 12, 48, 49, 71, 93
3624	Washer, Flat 107	45024	Spring 105, 106	82547	Insulator (.094" Thk) 69, 91, 98 101, 110
3640	Washer, Lock 11, 12, 33, 40, 98, 105, 106, 109	45027	Spring 35	82548	Insulator (.062" Thk) 69, 91, 98, 110
3646	Washer, Lock .7, 98, 114	45815	Washer, Lock 98	82860	Spring 83
3649	Washer, Flat 35, 39, 112, 115	49420	Spring 52	82999	Spring 15, 90
4586	Washer, Felt 11	55063	Spring 20	83877	Spring 107
4703	Spring 65, 68, 72, 89, 96, 101, 104	55669	Spring 105, 106	84575	Spring 11, 34
4708	Spring 4, 102	70072	Washer, Lock 91	84598	Spring, Contact 69
4812	Wick, Felt 96	70388	Spring 29, 60, 78	84758	Spring 71, 93
5599	Nut (8-32 Hex) 7, 98, 114	70529	Stiffener 98	84892	Stiffener 69, 110
5740	Screw (2-56 x 1/4 Fil) 58	70886	Washer, Flat 12	85407	Spring, Compression 73
6800	Screw, Shoulder (6-40) 29	71047	Washer, Flat 68, 89	85816	Wick, Felt 33
6807	Screw, Set (6-40) 107	71073	Washer, Flat 102	85935	Post, Spring 99
6987	Washer, Flat 112	71681	Spool, Ribbon 48	86079	Washer, Felt 83
7001	Washer, Flat 4, 102, 103	72254	Washer, Flat 93	86304	Spring 11
7002	Washer, Flat 4, 11, 12, 14, 15, 16, 22 to 25, 27, 29, 31, 33, 35, 36, 37, 39, 40, 42, 45, 48, 49, 52, 68, 69, 71, 72, 74, 75, 78, 79, 82, 83, 89, 90, 93, 95, 97 98, 99, 101, 103, 105 to 113	72468	Spring 9	86835	Spring 37, 45, 74, 79
7036	Collar, Locking 11, 50	72522	Wick, Felt 61, 68, 72, 89, 96, 104	86959	Bushing, Insulating 69
		72579	Washer, Flat 7, 98, 114	87401	Spring 71, 93, 108
		73035	Spring 80	89096	Washer, Felt 33
		73175	Washer, Lock 17, 29, 77	89897	Nut (10-32 Hex) 35
		73427	Washer, Flat 12	90054	Spring 89
		73520	Wick, Felt 35	90361	Washer, Felt 11, 12, 22, 24, 48, 49, 105, 106
		74283	Washer, Spring 42	90432	Washer, Flat 23, 25
		74536	Screw, Set (6-40) 11	90490	Shim (.005" Thk) 11, 12
		74547	Collar 29	90504	Washer, Felt 33, 59
		74553	Wick, Felt 24	90517	Spring 16, 61, 68, 72, 89, 96, 104
		74700	Spring 99	90581	Collar 107
		74701	Spring 9, 29	90599	Shim (.008" Thk) 52
		74707	Spring 12	90606	Spring 60
		74712	Spring 30	90679	Washer, Felt 11, 13, 41
		74716	Bushing 101	90790	Washer, Flat 101
		74722	Washer, Flat 20, 21	90791	Washer, Lock 24, 25, 61
		74727	Terminal, Contact 101	90819	Washer, Felt 17, 29
		74728	Terminal, Contact 91	90951	Washer, Lock 77, 110, 112
		74755	Washer, Felt 31	92260	Washer, Lock 4, 89, 112, 114
		74785	Roller 29		
		74798	Screw (6-40 x 31/64 Fil) 17		
		74807	Nut (10-32 Hex) 100, 112		

NUMERICAL INDEX (Continued)

Part Number	Description and Page Number	Part Number	Description and Page Number	Part Number	Description and Page Number
92682	Nut (4-40 Spl) 39	112627	Nut (2-56 Hex) 25, 61, 69, 105, 106, 113	128357	Ring, Retaining 20, 103, 107
93001	Washer, Flat 12	112629	Spring 93, 112	130683	Washer, Lock 33
93117	Washer, Lock 74, 105, 106, 107	112633	Spring w/Wick 52	130696	Washer, Felt 92
93118	Washer, Lock 4, 102, 108, 113	112634	Spring 48, 49	130698	Nut (4-40 Hex) 108
93356	Washer, Felt 17, 18, 24, 26, 29, 36, 37, 52, 71	112889	Screw (4-40 x 1/8 Fil) 71	131099	Terminal (5/8" Lg) 112
93507	Screw (4-40 x 3/4 Hex) 58	114107	Spring 40	135716	Spring 14, 29, 68, 71, 89
93729	Wick, Felt 40, 52	114215	Post, Spring 7	138033	Insulator (.031" Thk) 108
93758	washer, Felt 11, 12, 14, 29, 75	115122	Washer, Felt 22, 24	138034	Plate, Clamp 108
93879	Oiler, Felt 11	115529	Screw (6-40 x 11/16 Fil) 89	139555	Spring 35
93899	Spring 105, 106	117535	Washer, Flat 103	142898	Connector, Plug (24 Pt) 109
93984	Washer, Lock 108	119035	Screw, Eccentric (6-40) 112	145301	Latch 61
94316	Yoke 15, 90	119418	Washer, Flat 16, 69	150000	Drum, Clutch 26, 27
94317	Shaft 15, 90	119467	Insulator (.032" Thk) 16, 69	150001	Drum, Clutch 27
94674	Washer, Cup 52	119648	Ring, Retaining 14, 16, 24, 37, 42, 60, 68, 80, 89, 97, 105, 106, 115	150004	Cam, Code Bar Clutch 27
94693	Wick, Felt 61, 68, 72, 89	119649	Ring, Retaining 11, 12, 14, 15, 16, 25, 33, 35, 40, 48, 49, 59, 68, 71, 72, 75, 78, 83, 89, 90, 93, 96, 99, 103, 105, 106, 108	150010	Plate, Retaining 26
95030	Nut, Shoulder (6-40 Hex) 73	119650	Ring, Retaining 76, 112	150013	Disk, Adjusting 26, 27
95428	Spring 58, 59	119651	Ring, Retaining 9, 11, 13, 22, 24, 33, 36, 37, 48, 49, 52, 59, 72, 93, 96, 105, 106	150014	Disk, Adjusting 26, 28
95827	Bushing 35, 85	119652	Ring, Retaining 11, 12, 13, 17, 19, 22, 24, 27, 29, 33, 35, 36, 37, 39, 42, 48, 49, 52, 59, 71, 79, 93, 95, 101, 102, 105, 106	150021	Clutch Assembly, Code Bar 27
96717	Screw, Shoulder (4-40) 42	119653	Ring, Retaining 11, 12, 21, 35, 37, 48, 49, 59, 93, 105, 106	150024	Clutch Assembly, Line Feed 28
97117	Ribbon w/Spool (Red-Black) 106	119935	Washer, Lock 7, 98, 114	150025	Clutch Assembly, Type Box 26
97481	Wick, Felt 17	120824	Washer, Felt 27	150026	Lever, Shoe, Release 26, 27
98561	Bushing 83	121120	Collar 86	150027	Lever, Shoe, Release 26, 28
98642	Washer, Lock 112	121242	Clamp, Cable (1/8" ID) 69	150029	Wick, Felt 26, 27
98726	Screw (3-48 x 1/4 Fil) 91	121243	Clamp, Cable (3/16" ID) 14, 45, 59, 74, 92, 112	150030	Roller, Bearing 52
98832	Screw (4-40 x 11/16 Fil) 69	121244	Clamp, Cable (1/4" ID) 59, 69	150032	Disk, Clutch Cam (2 Stop) 28
100337	Spring 72	121245	Clamp, Cable (5/16" ID) 59, 105	150033	Disk (3 Stop) 26
101386	Spring 7	121246	Clamp, Cable (3/8" ID) 45	150034	Disk (2 Stop) 28
101796	Washer, Felt 11, 24, 35, 52	121247	Clamp, Cable (7/16" ID) 59	150035	Disk (3 Stop) 26
102672	Spring, Contact 98	121248	Clamp, Cable (1/2" ID) 74	150036	Carriage Assembly 2, 52
102673	Spring, Contact 98	121249	Clamp, Cable (5/8" ID) 86	150038	Latch 52
103078	Plate 110	121473	Post 101	150039	Slide, Printing Arm 52
103815	Collar 71	121538	Terminal 46	150040	Screw (6-40 x 5/8 Fil) 20, 26, 27, 29, 77, 103, 106
103863	Spacer (.055" Thk) 60	121605	Bushing 78	150043	Shoe, Secondary Clutch 26, 27
104807	Washer, Flat 89	122149	Screw, (4-40 Spl) 60	150044	Shoe, Primary Clutch 26, 27
104824	Spring 45	122292	Bushing, Insulating 110	150045	Bearing, Clutch Sleeve 26, 28
105028	Wick, Felt 37	124177	Washer, Lock 12, 44, 112	150046	Bearing, Type Box Clutch 26
105940	Stiffener 101	124244	Washer, Felt 40, 113	150047	Bearing, Code Bar Clutch 27
106281	Screw, Shoulder (4-40) 12, 78	124681	Screw, Set (6-40) 9, 112	150048	Spring 42
107116	Washer, Lock 5, 74, 79, 86	124999	Switch, Sensitive 16	150049	Spacer, Clutch 28
107207	Spring, Contact 69	125011	Washer, Flat 7, 9, 11, 12, 14, 17, 20, 21, 22, 24, 25, 31, 35, 41, 42, 52, 53, 59, 60, 62, 68, 73, 74, 75, 77, 89, 91, 92, 95, 105, 106, 108, 109, 111, 112	150050	Spacer, Clutch 27
107236	Bushing 69	125015	Washer, Flat 9, 11, 14, 16, 17, 24, 45, 59, 68, 86, 89, 93, 105, 110, 111	150051	Cam, Eccentric 27
108199	Wick, Felt 29, 37, 52, 83	125124	Screw, Shoulder (4-40) 113	150052	Cam, Eccentric 28
110128	Screw (4-40 x 3/8 Fil) 108	125126	Screw (2-56 x 9/32 Fil) 92	150053	Bracket 52
110434	Screw (4-40 x 3/16 Fil) 4, 5, 20, 26, 34, 35, 42, 50, 53, 60, 77, 100, 111	125238	Spring 35	150054	Bail w/Roller 52
110435	Nut (4-40 Hex) 12, 39, 78	125268	Spring 87, 97	150055	Stud 18, 39
110436	Spring 113	125802	Washer, Flat 21, 35, 60	150056	Arm 27
110437	Spring 29, 71, 112	126815	Screw (2-56 x 15/64 Hex) 105, 106	150059	Bail 52
110743	Washer, Lock 4, 5, 7, 9, 14 to 17, 20, 21, 22, 24 to 27, 31, 33, 34, 35, 37, 39, 41, 42, 44, 45, 48, 49, 50, 52, 53, 58 to 63, 68, 70, 72 to 78, 80, 81, 83, 85, 89 to 92, 94, 95, 100, 101, 105, 106, 108, 111, 112, 113			150061	Head, Print Hammer 52
110839	Spring 15			150064	Stud 52
110872	Spring, Compression 35			150065	Bracket, Stop 52
110879	Spring 93			150068	Arm 52
111017	Screw (6-40 x 5/16 Fil) 15, 113			150075	Latch, Type Box 25
111342	Spring 93			150077	Spring 54, 115
111355	Spring, Compression 11, 12			150078	Nut, Shoulder (4-40 Hex) 53
112223	Screw, Shoulder (6-40) 112			150079	Stud 53
112509	Insulator (.031" Thk) 98, 101			150080	Screw, Shoulder (2-56) 25
112626	Nut (10-32 Hex) 4, 11, 16, 22, 24, 31, 35, 42, 68, 89, 115			150089	Screw (4-40 x 1/2 Fil) 35, 45, 69, 105, 106

NUMERICAL INDEX (Continued)

Part Number	Description and Page Number	Part Number	Description and Page Number	Part Number	Description and Page Number
150175	Stud 37	150356	Lever, Trip 29, 30	150547	Shaft 58, 59
150184	Link 35	150358	Lever, Trip 29	150549	Collar 26
150193	Hub 35	150361	Spacer (.277" Thk) 29, 90	150553	Bushing, Insulating 60
150194	Plate 35	150363	Plate 22	150554	Plate 33, 94
150196	Bail 35, 95	150364	Stud, Eccentric 26	150557	Bracket 13, 79
150197	Stud 31	150365	Shaft, Rocker 22	150558	Spring, Torsion 37
150202	Gear (18T) 35	150366	Bracket 22	150559	Spring, Torsion 37
150203	Retainer 35	150367	Bracket 24	150561	Arm 11, 13, 79
150206	Spacer (.412" Thk) 31	150369	Link, Left 22	150563	Spring 39
150208	Bail, Left 37	150370	Link, Right 24	150569	Guide, Left 6
150214	Stud, Bearing 11	150371	Slide 60	150571	Plate, Spacing 60
150215	Block, Guide 37	150377	Arm 11	150572	Separator (.105" Thk) 60
150218	Bushing 37	150380	Stud 24	150573	Separator (.075" Thk) 60
150219	Screw (4-40 x 1/2 Sq) 33	150382	Block, Guide 22, 24	150576	Spring, Contact 60
150224	Pulley 33	150383	Spacer (.149" Thk) 22	150579	Guide, Right 6
150225	Rope, Draw Wire 31	150384	Spacer (.245" Thk) 24	150585	Bar, Line Feed 21
150228	Spacer (.035" Thk) 35	150386	Link, Left Ribbon Drive 22, 106	150586	Lever 21
150229	Retainer 35	150387	Link, Right Ribbon Drive 24, 105	150587	Spring, Contact 60
150230	Plate 52	150390	Bushing 23, 25	150588	Spring, Contact 60
150232	Retainer, Oil 37	150391	Spacer (.095" Thk) 28	150598	Track, Printing 37
150233	Roller 35	150392	Bail 11, 12	150642	Bellcrank 20, 21
150234	Roller 35	150395	Screw, Shoulder (6-40) 22, 24	150646	Screw, Shoulder (6-40) 180
150235	Slide, Transfer 35	150396	Lever, Left 14, 22, 97, 109	150647	Eccentric 21, 112
150237	Lever, Escapement 33	150397	Lever, Right 24	150648	Eccentric 21, 112
150241	Spring 26, 27	150398	Stud, Pivot 17	150649	Washer, Spacing 21, 112
150244	Link 26	150399	Shaft 11, 12	150650	Bushing 21
150245	Bracket 37	150401	Clamp 22	150651	Gear (28T) 21, 80
150247	Link 37, 38	150410	Stud 22	150652	Screw (4-40 x 37/64 Fil) 21, 98
150251	Wheel, Ratchet 31	150411	Washer, Flat 24	150654	Guide 4
150255	Bushing 33	150412	Arm, Left Follower 22	150656	Handwheel 21, 70 80
150263	Bail 37, 38	150413	Arm, Right Follower 24	150658	Gear (21T) 21
150265	Shaft 9	150414	Bushing 17	150665	Gear (42T) 28
150266	Lever, Guide 9, 115	150419	Shaft 17	150666	Gear (28T) 21
150267	Clamp 9	150420	Lever, Right 24	150668	Collar, Spacing 35
150269	Roller, Pressure 9, 115	150423	Stud, Pivot 17	150669	Shim (.002" Thk) 35
150270	Link 9	150424	Blade, Stripper 23, 58	150670	Shim (.004" Thk) 35
150271	Arm, Release 9	150425	Lever, Lock 22, 24	150672	Bearing 35
150274	Bracket, Clamp 9	150428	Lever, Left 22	150673	Shaft 35, 90
150276	Lever 9	150429	Stud, Eccentric 22, 24	150677	Pawl, Feed 35
150285	Bar, Tie 51, 115	150431	Lever, Trip 29, 89	150678	Pawl, Feed 35
150288	Bracket 50	150432	Washer, Flat 106	150685	Plate 9, 108, 112
150289	Stud 50	150434	Bail, Transfer 13	150687	Stud 42
150291	Slide 60	150436	Bushing 9, 20, 35, 49, 107	150689	Block, Guide 58
150293	Plate, Retaining 50	150438	Bellcrank 35, 85, 115	150691	Link 34
150296	Fork, Code Bar 60	150440	Hub 26	150692	Link 34
150298	Bushing 60	150441	Gear (21T) 26	150694	Slide 35
150301	Plate, Retaining 50	150444	Lever, Trip Shaft 29	150705	Bushing 33
150302	Shim (.006" Thk) 50	150447	Arm 39	150709	Spacer 33
150304	Bracket, Guide 50	150450	Arm 39	150710	Screw (6-40 x 1-1/4 Fil) 33
150310	Lever, Ribbon 49	150451	Link 41	150711	Washer, Flat 92
150311	Lever, Ribbon 48	150452	Bearing 39	150712	Rope, Draw Wire 31
150318	Stud 21, 112	150453	Shaft 39	150714	Bearing, Sleeve 21
150327	Roller, Ribbon 48, 49	150471	Stud 39, 92	150715	Gear (32T) 21
150335	Gear (12T) 49	150479	Stud 42	150718	Platen 21
150336	Bushing 35, 48, 49, 105, 106	150481	Shaft 39, 77	150719	Retainer 21
150341	Post, Spring 4	150482	Plate 39	150720	Retainer 20, 21
150342	Screw, Shoulder (6-40) 20, 21	150507	Spring 39	150721	Arm 33
150343	Lever 49	150525	Bracket 41	150722	Arm 33
150344	Lever 48	150531	Plate, Clamp 34, 115	150726	Link, Left 34
150348	Shaft 29	150535	Spring, Compression 50	150727	Link, Right 35
150349	Arm, Follower 29	150536	Spring 35	150728	Rail 33
150350	Shaft 29, 71, 90	150537	Ball, Bearing 35, 50	150731	Slide 35
150351	Stud, Eccentric 4	150538	Cylinder, Dashpot 35	150732	Slide, Bottom 35
150352	Bushing 29	150543	Screw (3-48 x 13/32 Fil) 58	150733	Slide, Top 35
150353	Stud 4	150544	Handle 58, 59	150738	Guide 35
150354	Arm, Trip 30	150545	Bracket, Right 5	150740	Plate 38
150355	Lever, Latch 29, 30	150546	Bracket, Left 4, 15, 98	150746	Bushing 35

NUMERICAL INDEX (Continued)

Part Number	Description and Page Number	Part Number	Description and Page Number	Part Number	Description and Page Number
150748	Stud 37, 38	150973	Pallet, Dummy 54, 68, 72, 96	151657	Screw (6-40 x 1/4 Fil) 4, 5, 9, 11, 13, 17, 19, 20, 24, 33, 35, 36
150750	Plate 33	150975	Cup, Dashpot 35	151658	Screw (6-40 x 5/16 Fil) 7, 11, 12, 15, 16, 17, 20, 21, 22, 31, 32, 35, 37, 39, 45, 49, 68, 77, 79, 89, 105, 106, 108
150751	Block, Guide 33	150978	Screw (6-40 x 1-1/8 Fil) 15, 39, 46, 90	151659	Screw (6-40 x 1/2 Fil) 49
150752	Stud 37	150986	Pawl Assembly, Spacing 35	151660	Screw (6-40 x 7/8 Fil) 73, 99, 103
150753	Roller 37	150987	Spacer (.090" Thk) 35	151661	Screw (6-40 x 1 Fil) 35
150754	Roller 37	150990	Washer, Felt 17, 18, 36, 39, 41	151667	Roller 41
150755	Stud 37	150991	Washer, Felt 19	151668	Roller 39, 41
150757	Arm 38, 115	150992	Stud 9	151669	Stud 41
150758	Pulley 37	150998	Spacer (.020" Thk) 21	151670	Bracket 41
150770	Bellcrank 35	151036	Screw, Shoulder (4-40) 113	151676	Shim (.010" Thk) 41
150771	Bellcrank 35	151073	Screw (4-40 x 5/32 Fil) 21, 81, 83, 95	151683	Box Assembly, Type (RE) 55
150776	Lever, Lock 37	151103	Spring 42, 43	151685	Screw (4-40 x 5/16 Fil) 17, 24, 26, 29, 31, 33, 35, 60, 71, 93
150777	Bail, Right 37	151152	Screw (4-40 x 3/16 Hex) 14, 33, 39, 40, 50, 52, 75, 85, 105, 106, 112	151686	Screw (4-40 x 3/8 Fil) 9, 35, 45, 91, 108
150780	Screw (6-40 Spl) 4, 103, 114	151182	Washer, Insulating 92	151687	Screw (4-40 x 7/16 Fil) 60, 92
150781	Stud 11, 13	151222	Washer, Felt 18, 39, 59	151688	Screw (4-40 x 5/8 Fil) 26, 45, 59, 77, 90, 98, 112
150796	Disk 31	151223	Screw, Shoulder (4-40) 25	151689	Screw (4-40 x 3/4 Fil) 9, 27, 62, 63, 91, 101
150798	Ratchet 31	151329	Switch, Sensitive 69, 74	151690	Screw (10-32 x 5/16 Fil) 26, 103
150800	Stud 33	151336	Oiler 42, 43	151691	Screw (10-32 x 3/8 Fil) 15, 90
150803	Spring, Flat 9	151346	Screw (6-40 x 3/8 Fil) 4, 11, 17, 18, 20, 21, 26, 31, 32, 35, 48, 91, 93, 96, 99, 101, 103, 111	151692	Screw (6-40 x 3/16 Fil) 4, 5, 9, 11, 13, 29, 33, 35, 36, 44, 48, 52, 59, 78, 79, 80, 82, 83, 113
150804	Finger, Right Paper 9	151354	Screw (2-56 x 15/32 Fil) 4, 74, 102, 113	151693	Screw (6-40 x 9/16 Fil) 26, 49, 68, 99
150805	Shim (.012" Thk) 33	151362	Wick, Felt 37	151695	Screw (6-40 x 5/8 Hex) 52
150806	Plate 33	151442	Screw (6-40 x 1/2 Hex) 4, 22, 40, 102, 110	151698	Spring, Torsion 34
150807	Oiler, Felt 33	151443	Eccentric 52	151700	Screw, Shoulder (6-40) 37
150809	Gear (32T) 21	151572	Washer, Lock 36	151701	Spring, Torsion 42
150811	Stud 24	151602	Plate 22, 24	151702	Nut (4-40 Hex) 58
150815	Bushing 9	151603	Spacer 24, 45	151703	Pin 9
150816	Lever 9	151604	Block, Guide 22, 24	151709	Arm 52
150821	Spacer (.156" Thk) 48	151606	Screw (10-32 x 1/4 Hex) 18, 35	151713	Spring, Torsion 13, 76
150824	Track 24	151607	Retainer, Spring 47	151714	Spring 42
150826	Guide, Left Paper 9	151610	Washer, Flat 26, 52, 80	151715	Spring 47
150827	Drum, Spring 31	151611	Bushing 52, 102	151721	Screw (6-40 x 3/4 Hex) 4, 17, 39, 92, 102, 110
150830	Bushing, Shoulder 26, 28	151612	Spacer 52	151722	Screw (6-40 x 3/16 Hex) 14, 29, 33, 45, 51, 71, 75, 80, 82, 93, 96, 98, 101, 103, 105, 109, 110
150831	Ring, Retaining 26, 28	151618	Screw (6-40 x 7/16 Fil) 4, 16, 31, 32, 45, 50, 68, 74, 78, 79, 83, 89, 102	151723	Screw (10-32 x 3/8 Hex) 35, 100
150833	Platen Assembly 21	151619	Bushing 31	151728	Spring 26, 27
150838	Ring, Retaining 31, 87	151625	Strip 37	151731	Screw (4-40 x 7/8 Fil) 21
150840	Bracket, Guide 9	151626	Terminal 45, 46, 109, 113	151732	Screw (4-40 x 11/32 Fil) 26, 74, 80
150841	Bearing 26, 28	151627	Rod 17, 83	151733	Screw (4-40 x 9/16 Fil) 27
150843	Plate, Hook 31	151629	Nut (6-40 Lug) 20, 29, 39, 77, 92, 103, 111	151734	Screw (4-40 x 3/8 Hex) 24
150889	Lever, Trip 30	151630	Screw (6-40 x 1/4 Hex) 11, 12, 14, 15, 20, 24, 26, 27, 33, 35, 37, 39, 42, 48, 50, 52, 69, 71, 90, 93, 97, 98, 106, 108, 110, 112	151736	Spring 26, 28
150891	Block 24	151631	Screw (6-40 x 5/16 Hex) 12, 31, 39, 45, 73, 76, 97, 98, 105, 106, 109, 114	151737	Screw (4-40 x 11/64 Hex) 26, 27, 89, 91
150895	Arm, Trip 29	151632	Screw (6-40 x 3/8 Hex) 14, 20, 22, 23, 24, 25, 26, 33, 40, 71, 72, 78, 80, 93, 97, 100	151738	Screw, Identification (4-40) 53
150900	Bail, Detent 4, 114	151637	Screw (4-40 x 1/4 Fil) 4, 12, 14, 16, 20, 21, 22, 25, 31, 35, 45, 48, 49, 58, 59, 68, 70, 72, 73, 74, 75, 76, 79, 89, 101, 105, 106	151739	Screw, Identification (6-40) 59
150902	Lever 6, 102	151640	Lever, Shoe, Release 27	151794	Washer, Spring 26, 28
150903	Block, Left Paper Spindle 17	151642	Screw (6-40 x 3/4 Fil) 16, 26, 27, 68, 84, 99, 103	151797	Cable 64
150904	Block, Right Paper Spindle 17	151644	Spring 22, 24	151799	Modification Kit 2, 73
150907	Spindle, Paper 17				
150909	Screw, Shoulder (6-40) 33				
150910	Latch, Right 73				
150911	Bushing, Shoulder 21				
150912	Screw, Shoulder (6-40) 21				
150913	Bail 13				
150915	Blade, Stripper 13, 58				
150923	Washer, Felt 29, 37, 52				
150926	Washer, Felt 12, 33				
150927	Oiler, Felt 33				
150929	Oiler, Felt 33				
150930	Washer, Felt 11				
150931	Spacer (.040" Thk) 28				
150932	Bushing, Shoulder 48, 49, 100				
150935	Latch 73				
150937	Lever 49				
150953	Slide Assembly 34, 115				
150961	Bushing, Eccentric 4, 20				
150963	Plate, Retaining 60				
150969	Spring, Torsion 4, 20				
150970	Bearing, Ball 26, 80				
150971	Cable 64				

NUMERICAL INDEX (Continued)

Part Number	Description and Page Number	Part Number	Description and Page Number	Part Number	Description and Page Number
151819	Jumper (3" Black) 45	152441	Washer, Flat 42, 92	152579	Track 33
151880	Nut (4-40 Hex) 24, 35, 71, 91, 93, 97, 109	152445	Spring ,Compression 42	152580	Frame, Right Side 5
151930	Box Assembly, Type (RA) 55	152447	Shaft 27, 90	152582	Shaft 49
151931	Box Assembly, Type (RC) 55	152450	Cam, Selector 27	152583	Bearing, Sleeve 39
151937	Box Assembly, Type (RD) 55	152453	Clutch Asm, Selector Cam 27	152584	Lever 39
151938	Box Assembly, Type (RN) 55	152456	Holder, Wick 39	152585	Lever 39
151941	thru	152457	Wick, Felt 39	152586	Bracket 35, 95
151953	Pallet, Type 54	152458	Shield ,Terminal 45, 47	152587	Drum, Spacing 32
152089	Latch 61, 104	152461	Bracket 45	152588	Arm 32
152121	Lever, Function 61, 104	152462	Latch, Right 45, 74, 79	152589	Clamp 22
152127	Clip 58	152463	Latch, Left 45, 74, 79	152590	Lever, Cutout 32
152129	Spring 52	152464	Insulator (.062" Thk) 45, 74	152591	Arm, Automatic CR & LF 32
152140	Bail 11	152466	Connector, Receptacle (20 Pt) 86	152592	Guide 33
152142	Lever Assembly 68	152467	Connector, Plug (20 Pt) 45, 79	152593	Housing, Bearing 24
152147	Bearing, Ball 24	152468	Cable W/Terminals 45	152595	Slide 33
152254	Wick, Felt 22, 24, 38	152501	Guide, Ribbon 25	152596	Slide, Shift 35
152255	Bar w/Retainer 50	152502	Modification Kit To provide a Type Box Alignment Adjustment 24, 25, 115	152598	Plate, Left 38
152256	Bar, Code 50	152503	Link 25	152599	Plate, Right 38
152257	Spring 50	152505	Stud 33	152606	Rail Assembly, Oscillating 33
152298	Lever, Function 61, 104	152507	Roller, Detent 33	152614	Track Assembly 33
152299	Lever, Function 61	152508	Bracket ,Right 33	152616	Clutch Assembly, Function 28
152302	Modification Kit 2, 68	152509	Bracket ,Left 33	152626	Bracket ,Left 58
152303	Modification Kit 2, 69	152510	Lever, Detent 33	152627	Bracket ,Right 58
152304	Modification Kit 2, 71, 72	152511	Guide 33	152629	Washer, Friction 48, 49, 105, 106
152312	Modification Kit 2, 76	152514	Bail 11	152630	Shaft, Ribbon Spool 48, 49
152315	Modification Kit 2, 73	152515	Lever, Space Trip 11, 12	152633	Plate, Mounting 60
152317	Modification Kit 2, 74	152516	Slide 11	152634	Washer, Flat 35, 85
152337	Modification Kit 2, 75	152517	Arm, Trip Lever 30, 84, 95	152635	Lever, Transfer (#1) 39
152340	Modification Kit 2, 77	152518	Bail 11	152636	Lever, Transfer (#2) 39
152345	Modification Kit 3, 78	152521	Slide 34	152637	Lever, Transfer (#3) 39
152348	Modification Kit 3, 85	152523	Spring 48, 49, 105, 106	152638	Lever, Transfer (#4) 39
152350	Modification Kit 3, 79	152524	Bracket 48, 49, 105, 106	152639	Lever, Transfer (#5) 39
152357	Stud 61	152525	Hub 48, 49, 105, 106	152640	Lever, Transfer (#C) 39
152359	Arm 11, 16, 68	152526	Plate, Right 48, 105	152641	Lever, Function 61, 68, 89, 96
152360	Sleeve 16, 68	152527	Plate, Left 49, 106	152642	Lever, Function 61, 72, 104
152400	Plate ,Selector Mounting 42, 74	152528	Ratchet, Left Ribbon 49, 106	152643	Guide 58
152401	Guide 42	152529	Ratchet, Right Ribbon 48, 105	152644	Bracket 49
152402	Guide ,Selector Lever 42	152536	Bail 37	152646	Lever, Left Reversing 49
152403	Bracket ,Guide 42	152537	Clamp 26, 80	152647	Lever, Right Reversing 48, 105
152404	Bracket ,Spring 42	152538	Plate, Front 35, 92, 95	162648	Stud 48
152406	Bracket ,Spring 42	152539	Guide 9, 77, 78	152651	Plate, Guide 58, 59
152407	Lever, Spacing Lock 42	153541	Arm ,Left 23	152652	Bar, Guide 58, 59
152409	Lever, Selecting 42	152542	Arm ,Right 25	152653	Pawl, Function 61, 68, 72, 89, 96, 104
152410	Bail, Reset 42	152543	Link 18	152654	Plate, Guide 60
152411	Lever, Push 42	152545	Lever 11, 12	152655	Plate, Adjusting 60
152412	Link 42	152546	Lever 11, 12	152656	Stud 60
152413	Bracket 47, 115	152547	Bracket 39, 92	152658	Plate 60
152415	Stud ,Adjusting 45	152547	Shaft 58, 59	152659	Lever, Function 61
152420	Lamination ,Magnet 45	152548	Bar, Shift 50	152660	Plate, Spring 61, 68, 72, 89, 96, 104
152421	Bracket ,Shield Mounting 45	152549	Bar, Code 51	152662	Shaft 39
152422	Armature 47, 115	152550	Clamp 22	152663	Guide 39
152423	Bracket ,Armature Stop Mounting 45	152551	Bar, #4 & #5 Code 50	152665	thru
152424	Plate, Stop 47, 115	152552	Bar, #3 Code 50	152704	Bar, Function 65, 66
152425	Post, Spring 45, 107	152554	Bar, Auto LF & CR Code 51, 115	152708	Lever, Keyboard Lock 13, 79
152426	Nut, Self-Locking (6-40 Hex) 45	152555	Shaft 18	152711	Bracket 13
152427	Latch w/Hub 42	152559	Plate, Front Pallet Box 54	152716	Bail 18
152429	Rack, Sector 42	152560	Plate, Rear Pallet Box 115	152717	Arm 28
152432	Arm, Stop 42	152563	Bracket 11, 12	152721	Bar, Code 51, 115
152434	Plate 44, 115	152569	Linkage 38, 115	152723	Spring 9
152435	Stud 44	152570	Linkage 38, 115	152724	Spring 38
152436	Knob ,Range Scale 42	152571	Spacer (.250" Thk) 49	152725	Spring 9
152437	Spacer (.125" Thk) 44	152572	Bracket 14, 15, 50, 76, 109	152726	Bushing 26, 29
152438	Bail, Stop Arm 42, 110	152573	Retainer 27	152742	Box Assembly, Type (RG) 55
152439	Shaft 44, 115	152574	Plate 50	152752	Box Assembly, Type (RH) 55
152440	Bushing 44	152575	Bracket 50		
		152576	Bracket 50		

NUMERICAL INDEX (Continued)

Part Number	Description and Page Number	Part Number	Description and Page Number	Part Number	Description and Page Number
152818	Lever, Left Detent 49	153193	Lever 16, 68	153326	Blade 18
152819	Lever, Right Detent 48	153194	Bail 16, 68	153335	Plate 37
152820	Lever, Left Feed 49, 106	153195	Plate 68	153337	Bushing 37
152821	Lever, Right Feed 48	153196	Handwheel 16, 68, 70, 88, 89	153340	Spring ,Left Torsion 37
152823	Bracket ,Left 12, 49	153198	Gear (48T) 70, 88	153341	Spring ,Right Torsion 37
152824	Bracket ,Right 48	153199	Gear (51T) 70, 88	153342	Screw (6-40 x 15/16 Hex) 72
152826	Pin, Detent 48, 49, 105, 106	153200	Gear (54T) 70, 88	153343	Bushing, Eccentric 72
152827	Bracket, Left Spool 49	153201	Gear (57T) 70, 88	153345	Arm w/Stud 72
152828	Bracket, Right Spool 48	153202	Gear (60T) 70, 88	153346	Pawl 72
152831	Clip 4, 5	153203	Gear (66T) 70, 88	153347	Bracket 72
152832	Shaft 9, 77	153204	Gear (72T) 70, 88	153350	Shaft 72
152834	Spring ,Torsion 48, 49	153205	Gear (78T) 70, 88	153351	Clip, Stop 72
152871	Spring 21	153206	Gear (84T) 70, 88	153352	Spring ,Torsion 72
152881	Box Assembly, Type (RB) 55	153207	Gear (90T) 70, 88	153355	Bracket 72
152887	Screw (4-40 x 1/2 Hex) 26, 27, 28	153208	thru	153356	Arm 72
152888	Screw (4-40 x 7/16 Hex) 28	153217	Disk 70	153358	Bracket w/Stud 72
152889	Plate, Retaining 59	153229	Bushing, Shoulder 80	153359	Arm, Slide 71
152890	Washer, Flat 35	153230	Bar, Line Feed 80	153360	Stud 71, 93
152891	Spring 42, 50	153231	Bar, Line Feed 80	153361	Post 71, 93
152893	Screw (4-40 x 1/4 Hex) 11, 12, 14, 15, 16, 17, 22, 41, 42, 59, 68, 75, 94, 105, 106, 108, 109, 112	153233	Guide 80	153364	Lever W/Bushing 71, 93
152896	Cable 64	153234	Lever 80	153365	Arm ,Cam 71, 93
152897	Guide ,Bail Lever 44	153235	Plate 26, 80	153367	Arm 29, 71, 93
152913	Modification Kit 77	153236	Gear (42T) 26, 80	153368	Bail, Follower 29, 71
152915	Modification Kit 3, 80	153237	Arm 80	153375	Arm, Slide 71, 93
152917	Modification Kit 3, 95	153239	Roller 80	153377	Bracket w/Studs 71, 93
152927	Bushing 16, 68, 89	153240	Retainer, Bearing 80	153378	Plate w/Pin 71, 74
152937	Plate 16	153241	Link 80	153379	Plate, Insulating 74
152938	Spacer (.125" Thk) 16, 68, 89	153242	Bracket 80	153380	Bracket 69, 74
152943	Screw, Special (10-32) 16, 68, 89	153244	Bracket 95	153382	Bail, Transfer 11, 12, 71
152985	Bail 16, 68	153255	Bail 11, 12, 95	153383	Arm ,Bail Extension 11, 71
153071	Slide 60	153256	Bracket 35, 94, 95	153385	Plate 72
152073	Link 60	153257	Bail 95	153386	Cable 74
153074	Link 60	153258	Bushing 95	153387	Cable 69
153076	Bushing, Shoulder 77	153259	Arm 95	153396	Plate 76
153077	Bellcrank 77	153260	Plate 95	153409	thru
153078	Bushing, Shoulder 77	153261	Bushing, Threaded 95	153435	Bar, Function 65, 66
153079	Bushing, Bearing 77	153262	Arm 95	153436	Bar, Function 65, 67
153080	Shaft 77	153263	Arm, Stop 95	153437	Bar, Function 65, 67
153081	Lever 77	153267	Washer, Felt 80, 110	153438	Bar, Function 65, 66
153082	Lever 77	153287	Spring 80	153440	Bar, Function 65, 66, 96
153083	Bracket 77	153288	Spring 95	153442	Screw (10-32 x 1/2 Hex) 17, 91, 92, 98
153084	Spacer (.260" Thk) 60	153291	Arm 59	153489	Detent 42
153139	Box Assembly, Type (RJ) 55	153292	Plate 27	153491	Plate 44, 115
153158	Plate, Nut 16, 69	153293	Spacer ,Clutch 27	153508	Box Assembly, Type (RS) 55
153159	Cable Assembly 69, 98	153294	Cam 59	153510	Box Assembly, Type (RU) 55
153160	thru	153295	Shaft 59	153513	Box Assembly, Type (RW) 55
153169	Bar, Function 65, 66	153296	Eccentric 27	153514	Box Assembly, Type (RY) 55
153172	Spring 33	153298	Bracket, Right 59	153516	Box Assembly, Type (RZ) 55
153173	Plate, Clamp 33	153299	Bracket, Left 59	153518	Box Assembly, Type (WA) 56
153174	Link ,Left 33	153300	Arm 27	153520	thru
153175	Link ,Right 33	153301	Arm 59	153528	Bar, Function 65, 66
153180	Link ,Right 33	153302	Blade, Stripper 59	153529	Bar, Function 66
153181	Link ,Left 33	153303	Slide, Stripper 59	153530	Plate 24, 25
153183	Slide 33, 115	153304	Bushing, Shoulder 4, 102	153531	Plate, Adjusting 24
153184	Post 45	153305	Spring ,Torsion 11	153532	Screw, Adjusting (4-40) 24
153185	Gear (30T) 16, 68, 89	153310	Bail 11	153534	Washer, Flat 7, 98
153186	Arm, Slide 68	153311	Arm 11	153538	Screw (6-40 x 7/16 Hex) 105, 110
153188	Screw, Shoulder (6-40) 16, 68	153312	Lever 4, 102	153550	Link 17
153189	Spring, Compression 16, 68, 89	153314	Bracket 11, 79	153553	Roller 17
153190	Arm 16, 68	153315	Bracket 50, 85	153554	Bracket w/Stud 19
153191	Pointer 16, 68, 89	153317	Bracket 13, 115	153558	Link 17
153192	Spring ,Torsion 16, 68, 89	153318	Shaft 59	153560	Shaft 19, 115
		153319	Bar, Code 50, 85	153562	Shaft 19
		153321	Bracket, Tie 50, 75		
		153322	Guide 59, 77		
		153323	Ring ,Spacer 27		

NUMERICAL INDEX (Continued)

Part Number	Description and Page Number	Part Number	Description and Page Number	Part Number	Description and Page Number
153563	Bracket 78	153721	Arm 81	154253	Stud 35
153564	Lever 78	153722	Arm 81	154290	Ring, "O" 20
153565	Pin 12, 78, 83	153751	thru	154310	Spring 31
153566	Bracket 12, 14, 75	153767	Platen, Rubber 20, 115, 116	154320	Finger, Left Paper 20
153569	Arm, Trip 14, 29, 97	153771	thru	154323	Cam, Eccentric 87
153570	Arm, Suppression 14, 75, 97	153787	Bracket, Guide 81	154324	Cam, Eccentric 87
153573	Bail 17, 19, 83, 115	153791	Shaft 20	154332	Shaft 48, 49
153574	Roller 19	153794	Plate, Adjusting 20, 112	154333	Roller 48, 49
153575	Wick, Felt 12	153795	Slide 60	154334	Modification Kit To Provide Increased Ribbon Height 48, 49
153576	Cam, Function 27	153799	Screw (4-40 x 21/64 Hex) 20	154335	Screw (6-40 x 9/32 Fil) 14
153577	Washer, Felt 17	153800	Cam 49	154349	Spring 43
153579	Bracket, Spring 19	153806	Spring 29	154354	Slide 33
153580	Cam 19	153810	Guide, Ribbon 24	154356	Bail, 24
153581	Handle 59	153815	Clutch Assembly, Function 27	154358	Hub Platen 20, 81, 82, 115
153582	Screw, Shoulder (6-40) 11	153817	Screw (4-40 x 3/8 Hex) 33, 35	154362	Spring, Contact 69, 101
153583	Lever, Trip 29	153819	Washer, Lock 50	154373	Shield, Oil 92
153584	Lever, Latch 29	153820	Frame, Printing Carriage 52	154380	Bracket w/Post 50, 75
153585	Clamp 19	153823	Collar 27	154389	Cam, Eccentric 35
153586	Guide 4	153824	Clamp 27	154394	Post, Spring 50
153587	Guide 5, 74	153830	Guide, Rear 111	154516	Ratchet 87
153588	Solenoid 12, 78, 83	153838	Shaft 59	154519	Lever, Latch 20
153592	Cable 64	153839	Screw (6-40 x 5/8 Hex) 17, 20, 24, 29, 45, 111	154536	thru
153593	Cable 64	153841	Screw (6-40 x 9/16 Hex) 22, 112	154549	Pallet, Type 54
153594	Cable Assembly 78	153883	Gear (33T) 26, 90	154613	Latch 61, 104
153596	Fork w/Post 60	153884	Gear (11T) 35, 90, 115	154614	Cam, Spacing 26, 71
153598	Pawl, Function 61	153894	Plate 71, 93	154616	Plate, Front Pallet Box 115
153600	Bracket, Spring 50, 75	153896	Bail, Latch 71, 93	154620	Wick, Lubricating 42
153601	Bushing, Shoulder 59	153897	Arm, Trip 71	154621	Retainer, Wick 42
153602	Plate 58	153899	Bracket, Guard 72	154622	Lubricator 42
153603	Nut (6-40 Spl) 51	153899	Modification Kit: To Provide Parts for Improved Range Scale Sector Mounting 42, 115	154623	Ring, Retaining 31
153604	Pawl, Function 61	153904	Modification Kit To Add Trip Shaft Support Bracket 11	154624	Ring w/Roller 31
153605	Bracket 51	153906	Modification Kit To Add Trip Shaft Support Bracket 11	154625	Ring 31, 115
153606	Slide, Blocking 59	153910	Modification Kit 3, 77	154626	Ring 31, 85
153608	Fork 60	153911	Modification Kit 3, 83, 84	154627	Drum, Spacing 31
153609	Roller 60	153912	Modification Kit 2, 76	154638	Spring 50
153610	Spindle, Paper 77	153914	Modification Kit To Add Universal Spacing Drum with Automatic Carriage Return and Line Feed 31	154639	Slide 60
153611	Disk, Paper Spindle 77	153915	Modification Kit 104	154642	Slide 60
153615	Lever 77	153916	Modification Kit 104	154643	Box Assembly, Type (RV) 56
153634	Collar 9, 77	153917	Modification Kit 104	154645	Spacer 17
153643	Slide 60	153918	Modification Kit 104	154646	Lever, Function 61
153644	Stud 60	153919	Modification Kit 3, 79	154647	Lever, Function 61
153645	Plate, Guide 60	153927	thru	154649	Arm 79
153646	Bushing 60	153936	Modification Kit 70	154650	Clip 50
153647	Plate 60	153945	Modification Kit 3, 85	154666	thru
153652	thru	153946	Modification Kit To Add an Improved Oscillator Shift Knee Link Assembly 37, 115	154669	Shaft 59
153667	Guide, Form 81	153947	Modification Kit To Add an Improved Oscillator Shift Knee Link Assembly 33	154670	Screw (6-40 Spl) 72, 94
153670	Lever, Function 61	153949	Modification Kit To Add an Improved Magnet Bracket 45	154671	Bracket 72, 94
153676	Bail, Detent 20, 98	153950	Modification Kit To Add Bracket to "O" Code Bar 85	154672	Bracket, Clip Stop 72
153678	Bracket w/Shaft 20, 107	153975	Cable 64	154673	Cable 4, 64
153682	Bracket, Right 20	154051	Screw, Shoulder (6-40) 68, 89	154688	Spring 17
153683	Bracket, Left 20, 81, 82	154127	Nut (6-40 Hex) 7, 114	154691	Clip 59
153685	Arm w/Hub 20			154692	Clip 59
153686	Bearing, Right 20			154694	Disk, Clutch Cam 26, 27, 110
153687	Bearing, Left 20			154698	Wick, Felt 71, 93
153689	Gear (33T) 20			154723	Modification Kit To Provide Parts for Improved Range Scale Sector Mounting 42, 115
153690	Gear (28T) 20			154727	Modification Kit 2, 74
153692	Gear (33T) 20			154742	Modification Kit 3, 70, 85, 88
153695	Pin 20			154743	Modification Kit 2, 73, 102
153696	Spring 20			154753	Modification Kit 3, 86
153697	Bracket 20			154755	Modification Kit 3, 56, 87
153698	Cam, Feed 20			154760	thru
153699	Cam, Feed 20			154769	Modification Kit 88
153700	Hub, Platen 20, 115				
153701	thru				
153717	Modification Kits 116				

NUMERICAL INDEX (Continued)

Part Number	Description and Page Number	Part Number	Description and Page Number	Part Number	Description and Page Number
154770	Modification Kit 3, 89	155296	thru	155755	Sleeve, Insulating (11/64 ID x 5/8" Lg) 59
154771	Modification Kit 89	155300	Bar, Function 65, 66	155756	Nut (4-40 Spl) 68
154778	Modification Kit 3, 90, 91	155306	thru	155757	Gear (28T) 68
154780	Modification Kit 2, 69	155307	Bar, Function 65, 66	155758	Gear (66T) 70
154785	Modification Kit 3, 92	155311	thru	155759	Gear (48T) 70
154789	Modification Kit To Provide Replacement Parts for the 153560 Shaft and Associated Parts 17, 115	155315	Bar, Function 65, 66	155763	Modification Kit 2, 68
154792	Modification Kit 3, 56, 87	155326	thru	155765	Modification Kit 70
154798	Modification Kit 3, 111	155330	Bar, Function 65, 66	155767	Slide 60
154872	Bracket 5, 74, 79	155336	thru	155784	Cable 64
154873	Connector, Receptacle (2 Pt) 86	155340	Bar, Function 65, 66	155788	Spring 92
155000	Cable 64	155366	thru	155789	Cable Assembly 92
155021	Plate 70	155370	Bar, Function 65, 67	155790	Contact Assembly 92
155037	Keylever Assembly 72	155432	thru	155791	Link 92
155041	Plate 11	155479	Pallet, Type 56	155792	Arm w/Stud 92
155042	Bracket 11	155483	Pallet, Type 56	155793	Bracket, Mounting 92
155044	Spacer 27	155497	Box Assembly, Type (XK) 55	155795	Insulator (.031" Thk) 92
155047	Disk 27	155565	Arm, Right 20, 111	155796	Shaft 39, 92
155049	Cable 64	155566	Arm, Left 20, 82, 111	155797	Arm, Contact 92
155051	Cable Assembly 3, 86	155581	thru	155798	Block, Terminal 92
155053	Connector, Plug (12 Pt) 86	155584	Spacer 73	155799	Terminal, Plate 92
155060	Slide, Stripper 59	155586	Bracket 39	155852	Arm w/Link 87
155061	Blade, Stripper 59	155587	Link w/Stud 39	155853	Ratchet 87
155066	Cable 64	155589	Plate w/Stud 39	155855	Pawl, Spacing 87
155067	Cable 64	155618	thru	155856	Pawl, Spacing 87
155068	Bracket 76	155673	Pallet, Type 57	155857	Retainer 87
155069	Bracket 76	155693	Box Assembly, Type (WP) 57	155859	Screw (4-40 Spl) 86
155071	thru	155697	Box Assembly, Type (WV) 55	155860	Screw (4-40 x 3/8 Rd) 86
155077	Shaft 59	155699	Box Assembly, Type (WX) 55	155861	Washer, Lock 86
155081	Post, Spring 35	155701	Box Assembly, Type (WY) 55	155864	Shaft, Cam 17
155090	Lubricator Assembly 42	155703	Box Assembly, Type (XA) 55	155865	Stud 17
155091	Lever, Trip 95	155704	Box Assembly, Type (XC) 55	155868	thru
155096	Plate, Range Finder Mtg 42	155705	Box Assembly, Type (XD) 56	155870	Pallet, Type 53, 55
155099	Screw, Shoulder (6-40) 59	155706	Box Assembly, Type (XE) 56	155871	thru
155100	thru	155707	Box Assembly, Type (XF) 56	155876	Pallet, Type 53
155125	Bar, Function 65, 66	155708	Box Assembly, Type (XG) 55	155877	Pallet, Type 53, 55
155126	Bar, Function 65, 67	155709	Box Assembly, Type (XH) 57	155878	Pallet, Type 53, 55
155127	thru	155710	Box Assembly, Type (XJ) 55	155879	Pallet, Type 53
155130	Bar, Function 65, 66	155713	Clip 61	155880	Pallet, Type 53
155131	Bar, Function 65, 67, 89	155714	Bracket 69	155884	thru
155132	Bar, Function 65, 66	155715	Stud 69	155891	Pallet, Type 57
155133	Bar, Function 65, 67	155716	Plate w/Pin 93	155895	Pallet, Type 57
155134	Bar, Function 65, 67, 68, 89	155721	Contact Assembly 69	155896	Finger, Left Paper 20, 111
155135	Bar, Function 65, 67, 72	155736	Lever, Function 61	155897	Finger, Right Paper 20, 111
155141	thru	155737	Lever, Function 61	155913	Block, Contact 63
155145	Bar, Function 65, 67	155738	Bail, Blocking 61	155915	Plate, Contact 63
155159	Bar, Function 65, 66	155749	Cable 64	155916	Plate, Contact 63
155176	thru	155750	Sleeve, Insulating (3/32 ID x 1/2" Lg) 15, 59, 69, 90, 91, 98, 107, 113	155917	thru
155180	Bar, Function 65, 67	155751	Sleeve, Insulating (1/8 ID x 1" Lg) 15, 45, 46, 59, 69, 78, 92, 106	155925	Switch Assembly 63, 115
155191	thru	155752	Sleeve, Insulating (5/64 ID x 1/2" Lg) 59	155933	Plate, Guide 60
155218	Bar, Function 65, 66	155753	Sleeve, Insulating (1/8 ID x 1/2" Lg) 45, 59, 69	155934	Plate 60
155219	Bar, Function 65, 66	155754	Sleeve, Insulating (1/16 ID x 1/2" Lg) 59, 109	155935	Fork w/Post 60
155246	Bar, Function 65, 67			155936	Fork w/Post 60
155247	Bar, Function 65, 67			155937	Fork w/Post 60
155248	thru			155938	Slide 60
155250	Bar, Function 65, 66			155939	Slide 60
155286	thru			155940	Slide 60
155290	Bar, Function 65, 66			155941	Slide 60
155294	Bar, Function 65, 66			155942	Slide 60
				155946	Slide 60
				155948	Slide 60
				155954	Switch, Sensitive 4, 102, 113
				156057	Washer, Flat 112

NUMERICAL INDEX (Continued)

Part Number	Description and Page Number	Part Number	Description and Page Number	Part Number	Description and Page Number
156093	Washer, Felt 21, 112	157241	Bracket, Roller 17	157723	Pallet, Type 55
156450	Screw (2-56 x 1/2 Fil) 16, 69	157243	Plate 60	157724	Pallet, Type 55
156501	Screw (6-40 x 7/32 Fil) 4, 36	157246	Bracket 59	157725	Pallet, Type 53
156536	Screw (4-40 x 1/8 Fil) 42	157247	Bar W/Post 59	157726	Pallet, Type 53, 55
156558	Washer, Felt 105, 106	157251	Arm w/Pin 73	157727	Pallet, Type 53, 55
156572	Washer, Felt 52	157252	Bushing 73	157728	Pallet, Type 53, 55
156574	Post, Spring 7	157253	Lever 73	157729	thru
156591	Washer, Felt 12	157254	Bracket 73	157779	Pallet, Type 56
156632	Screw (6-40 x 13/32 Hex) 31	157255	Block 73	157780	thru
156663	Bushing, Insulating 92	157257	Block, Left Paper Spindle 73	157788	Pallet, Type 53
156740	Screw (6-40 x 7/32 Hex) 97, 112	157258	Bar w/Post 59	157790	thru
156875	Screw (6-40 x 5/32 Fil) 112	157259	Relay 91	157792	Pallet, Type 55
156880	Jumper (2-3/8" Black) 46	157261	Shaft, Stop Arm 42, 115	157794	thru
156881	Jumper (1-1/2" Black) 46	157262	Bracket, Double Connector 74	157807	Pallet, Type 53
156971	Screw (2-56 x 3/4 Fil) 107	157263	Cable 91	157823	thru
157000	Box Assembly, Type (WB) 55	157264	Cable 91	157829	Pallet, Type 56
157001	Box Assembly, Type (WC) 55	157265	Cable 90	157843	Cam 90
157002	Box Assembly, Type (WD) 55	157269	Cable 64	157844	Plate, Spacer 90
157003	Box Assembly, Type (WE) 55	157271	Bracket 45	157845	Plate 90
157004	Box Assembly, Type (WF) 55	157272	Insulator (.062" Thk) 45, 74	157846	Spacer, Shoulder 90
157007	Box Assembly, Type (WG) 55	157273	Connector, Plug (35 Pt) 45, 64, 74	157847	Bracket, Spring 60
157009	Box Assembly, Type (WH) 55	157274	Clip 59	157849	Lever 60
157011	Box Assembly, Type (WJ) 55	157275	Clip, Spring 59	157850	Lever 60
157013	Box Assembly, Type (WK) 55	157286	Clamp, Platen 20	157851	Plate, Spring 60
157015	Box Assembly, Type (WL) 55	157289	Bar, Cross 9	157852	Arm 60
157017	Box Assembly, Type (WM) 55	157290	Bail, Pressure 9, 10, 115	157854	Plate 60
157018	Box Assembly, Type (WN) 55	157291	Guide, Rear Paper 9	157855	Plate, Guide 60
157030	Box Assembly, Type (WT) 55	157311	Wick, Felt 91	157856	Bracket 91
157031	Disk 84	157398	Bar W/Post 59	157857	Spring, Flat 91
157032	Disk 84	157505	Clutch Assembly, Spacing 26	157858	Extension, Armature 91
157033	Plate, Cam 84	157506	Clutch Assembly, Line Feed 26	157859	Shim (.006" Thk) 91
157034	Lever, Trip 84	157508	Modification Kit 3, 93, 94	157861	Lever, Start 91
157035	Lever, Trip 84	157509	Modification Kit 2, 75	157862	Bracket, Guide 91
157037	Spacer 84	157510	Modification Kit 3, 95	157863	Lever 91
157038	Plate, Mounting 83	157511	Modification Kit 3, 80	157865	Plate 15, 90
157039	Clip, Spring 83	157513	Modification Kit 68	157866	Bracket 15, 90
157040	Bracket 83	157514	Modification Kit 3, 100	157867	Screw, Pilot (4-40) 15, 90
157041	Bail 83	157530	Modification Kit 68, 89	157868	Armature 90
157042	Bracket 83	157600	thru	157869	Spacer (.824" Thk) 15, 90
157043	Bracket, Adjusting 83	157634	Pallet, Type 53	157870	Armature 90
157044	Link 83	157635	Pallet, Type 55	157871	Bracket 15, 90
157045	Cable 83	157636	Pallet, Type 55, 56	157873	Lever 90
157046	Bar 77	157637	thru	157875	Bracket 15, 90
157047	Lever 14, 75	157641	Pallet, Type 55	157876	Bracket 15, 90
157048	Lever 75	157642	Pallet, Type 53, 55, 56	157877	Bracket 15, 90
157049	Pin 14, 75	157643	thru	157884	Block, Contact 63
157070	thru	157649	Pallet, Type 55	157887	Arm, Contact (NO) 62, 63
157100	Switch Assembly 63, 115	157650	Pallet, Type 53, 55	157889	Spring, Contact (NO) 62, 63
157101	thru	157651	thru	157890	thru
157106	Cable 64	157657	Pallet, Type 55	157893	Plate, Contact 63
157151	Bracket 79	157658	Pallet, Type 53	157899	Arm, Contact (NC) 62, 63
157163	Spring, Compression 83	157659	Pallet, Type 55	157948	Keylever Assembly 68, 89
157164	Slide 60	157660	Pallet, Type 53, 55	157972	Bellcrank 35, 100
157191	Bar, Line Feed 85	157661	Pallet, Type 53	157973	Extension, Transfer 100
157192	Eccentric 85	157662	thru	157975	Cable 64
157193	Gear (44T) 85	157675	Pallet, Type 55	157979	Link, Toggle 49
157194	Retainer, Spring 45	157678	Pallet, Type 53, 55	157990	Bracket W/Bearing 11, 115
157198	Bail, Detent 85	157715	Pallet, Type 53	157991	Stud 11, 115
157200	Spring 61, 68, 72, 89	157716	Pallet, Type 53, 55	158186	Screw (4-40 x 7/32 Fil) 108
157205	Lever, Function 61	157717	Pallet, Type 55	158189	Washer, Felt 37
157206	Lever, Function 61	157718	Pallet, Type 55	158314	Bracket W/Stud 4, 102
157207	Lever, Function 61	157719	thru	158315	Follower, Bellcrank 4, 102
157237	Shield, Terminal 45	157722	Pallet, Type 53, 55	158316	Plate, Nut 4, 102
157238	Spring 53, 68, 72, 96, 115				
157240	Spring 61, 68, 72, 89, 96, 104				

NUMERICAL INDEX (Continued)

Part Number	Description and Page Number	Part Number	Description and Page Number	Part Number	Description and Page Number
158317	Insulator, Switch 4, 102, 113	160568	Contact Assembly 98	162573	Retainer 26
158318	Cable 102, 113	160569	Bracket 98	162605	Box Assembly, Type (YF) 55
158334	Spring, Tension 94	160572	Slide, Stripper 59	162636	thru
158335	Stud 35, 93	160573	Blade, Stripper 59	162640	Bar, Function 65, 66
158337	Plate w/Pin 94	160574	Arm w/Stud 89	162728	Arm 11, 89
158339	Arm w/Pin 93	160576	Slide, Stripper 59, 89	162729	Bar, Guide 11, 12, 16, 71, 79, 83, 89, 93, 95, 96
158340	Bracket, Stop 94	160577	Blade, Stripper 59, 89	162847	Modification Kit 68
158341	Plate, Stop 88, 94	160578	Sleeve, Pinion 89	163146	Modification Kit 3, 101, 109
158342	Arm 94	160584	Shield, Insulating 91	163147	Contact Assembly 101
158343	Bracket, Spring 94	160585	Shield, Insulating 91	163148	Shaft 101
158344	Nut, Shoulder (6-40) 93	160586	Spring, Contact 91	163150	Collar 101
158346	Lever W/Hub 93	160587	Spring, Contact 91	163152	Cam W/Stud 101
158347	Bracket 94	160588	Bracket, Contact 91	163153	Cam, Trip 101
158348	Bracket 94	160589	Contact Assembly 91	163157	Cam, Drive 101
158349	Arm, Slide 93	160650	Cable 64	163158	Bracket W/Hub 101
158351	Pawl W/Stud 93	160751	Pallet, Type 55	163159	Lever 101
158352	Bail, Trip 29	160755	Box Assembly, Type (XM) 56	163162	Cable 64
158353	Bail, Stop 29	160843	Spring 29	163180	Modification Kit 3, 93, 94
158354	Arm, Extension 29	160844	Box Assembly, Type (XN) 55	163181	Wheel, Horizontal Tab 94
158357	Wheel, Horizontal Tab 94	160886	Modification Kit 2, 76	163182	Bracket, Stop 94
158365	Blade, Reset 17	160937	Bail 76	163183	Modification Kit 3, 97
158447	Keylever Assembly 89	160938	Arm, Slide 76	163184	Bracket, Magnet 97
158485	Bracket, Left 111	160939	Post, Spring 76	163185	Armature 97
158486	Bracket, Right 111	160940	Post 76	163197	Pallet, Type 55
158487	Shaft 111	160999	Box Assembly, Type (XP) 56	163198	Pallet, Type 55
159181	Lubricator 43	161081	Box Assembly, Type (YG) 56	163250	Pin 14, 97
159184	Wick, Lubricating 43	161082	Cable 64	163254	Magnet Assembly 97
159185	Retainer, Wick 43	161134	Bracket, Spring 50	163271	Lever, Function 61
159204	Connector, Plug (2 Pt) 15	161138	Retainer 87	163292	Modification Kit 3, 56, 87
159334	Washer, Insulating 12	161140	Modification Kit 70	163294	Ratchet (81T) 87
159341	Bearing, Ball 22, 27	161250	Gear (88T) 70, 88	163295	Box Assembly, Type (YC) 56
159356	Modification Kit To Replace Old Style Guide Bracket 20	161260	Disk 70	163308	thru
159362	Modification Kit 2, 73	161269	Arm, Slide (L.F.) 96	163314	Pallet, Type 56
159366	Modification Kit 3, 102	161270	Arm, Slide (Reverse L.F.) 96	163459	Gear (66T) 26
159395	Modification Kit 3, 56, 87	161271	Link 96	163503	Gear (26T) 26
159571	Stiffener 98	161272	Bracket W/Stud 96	163535	Modification Kit 3, 89, 98
159597	Washer, Flat 12	161273	Bracket W/Stud 96	163590	Gear (60T) 26
159752	thru	161278	Lever 96	163776	Stop 7
159787	Pallet, Type 57	161279	Spring, Torsion 96	163778	Stud 7
160180	Armature W/Extension 115	161280	Modification Kit 3, 96	163783	Lever W/Stud 7
160182	Bracket w/Button 46	161308	thru	163786	Bracket 7
160184	Plate, Stop 45, 115	161317	Pallet, Type 55	163787	Bail, Detent 7
160186	Bushing, Shoulder 46	161342	Lever, Start 42	163788	Bracket, Guide 7
160192	thru	161346	Washer, Felt 48, 49, 105, 106	163790	Frame, Right 7
160197	Switch Assembly 63, 115	161347	Washer, Felt 15, 17, 19, 35, 37, 38, 83	163791	Frame, Left 7
160198	thru	161362	Box Assembly, Type (XR) 56	163943	Lever w/Pin, Function 61
160220	Switch Assembly 63, 116	161363	Box Assembly, Type (XS) 56	163944	Lever, Function 61
160486	Bail 89	161364	Box Assembly, Type (XT) 56	163947	Modification Kit 3, 98
160490	Pawl 89	161365	Box Assembly, Type (XU) 56	163948	Gear (28T) 7, 98, 114
160491	Plate W/Stud 89	161366	thru	163949	Bushing 7, 80, 98, 114
160493	Plate, Adjusting 89	161377	Pallet, Type 56	163951	Gear w/Shaft (28T) 7, 98
160495	Plate W/Stud 89	161491	Pawl, Feed 87	163954	Handwheel 7, 98
160498	Plate, Mounting 89	161492	Pawl, Feed 87	163955	Arm W/Hub & Stud 98
160499	Lever, Blocking 89	161649	Lever, Function 61	163956	Lever 98
160500	Lever, Blocking 89	161686	Tool, Tine 65	163957	Lever 98, 114
160502	Slide, Form Out 89	161767	Modification Kit 70	163958	Washer, Flat 7, 98, 114
160503	Slide, Tab 89	161769	Box Assembly, Type (XW) 55	163959	Spring, Torsion 98, 114
160505	thru	162056	Box Assembly, Type (XZ) 56	163960	Bushing 7, 80, 98, 114
160514	Disk, Retaining 88	162058	Box Assembly, Type (YA) 57	163968	Cable 64
160523	Plate, Mounting 98	162059	Lever, Function 61	164218	Box Assembly, Type (YJ) 56
160527	thru	162298	Slide 60	164219	Arm W/Hub 7
160536	Spring 88	162484	Lever, Function 61	164220	Spring, Torsion 7
		162488	Modification Kit 39	164270	Modification Kit 3, 99
		162539	Box Assembly, Type (YB) 55	164311	Lever, Function 61

NUMERICAL INDEX (Continued)

Part Number	Description and Page Number	Part Number	Description and Page Number	Part Number	Description and Page Number
164313	Bracket 52	170118	Bracket 40	172723	Box Assembly, Type (YM) 55
164314	Plate 34	170119	Lever 40	172816	Cable w/Terminals 112
164316	Plate, Clamp 33, 115	170120	Lever 40	172909	Sprocket 112
164348	Box Assembly, Type (YK) 56	170121	Shaft 40	172911	Lever, Latch 112
164386	Bracket, Magnet 45, 110, 115	170122	Lever 40	172912	Ratchet 112
164476	Modification Kit 2, 69	170123	Bracket, Retaining 39	172915	Lever, Switch Actuating 112
164477	Cable 69	170124	Lubricator Assembly 43	172916	Pawl w/Bushing 112
164478	Contact Assembly 69	170125	Lever, Shoe Release 27	172918	Bar, Line Feed 112
164498	Box Assembly, Type (YL) 55	170128	Clutch Asm, Selector Cam 27	172921	Plate, Mounting 112
164572	Plate, Mounting 99	170133	Link 12	172922	Post, Upper Mounting 112
164573	Rod 99, 103	170134	Plate 12	172923	Post, Sprocket Mounting 112
164574	Bracket, Right 99	170135	Bracket 12	172924	Lever, Reset 112
164575	Bracket, Left 99	170136	Shaft 12	172926	Lever, Ratchet Release 112
164576	Rod 99	170137	Bail W/Post 12	173012	Insulator 112
164577	Bracket 99, 103	170139	Bail 12	173141	Lever, Function 61
164586	Box Assembly, Type (YE) 55	170140	Stud 12	173282	Bail W/Post 75
164594	Cable 64	170142	Arm, Suppression 29, 75	173283	Modification Kit 2, 75
164600	Holder, Paper 99	170143	Stud, Bearing 12	173284	Lever, Lock 37
164611	Guard 7	170144	Bail 12	173450	Cable w/Terminals 45
164740	Rack, Range Finder 110	170145	Cam 27	173698	Cable Assembly 45, 64
164743	Shaft 110	170146	Bail W/Hub 12	173715	Terminal, Plug Type 107
164958	Screw (4-40 x 1/2 Hex) 97	170164	Box Assembly, Type (TA) 55	173882	Stud 14, 97, 109
164960	Insulator (.015" Thk) 97	170194	Washer, Spring 27	173883	Bracket, Mounting 14, 97, 109
165217	Jumper (1-1/2" Green) 107	170198	Arm, Stop 43	173884	Plate, Mounting 109
170000	Frame, Right Side 5	170230	Knob 43	173885	Bracket, Mounting 109
170001	Housing, Bearing 24	170231	Guide, Upper 43	173886	Contact Assembly 109
170002	Bracket W/Bushing 12	170232	Guide, Lower 43	173887	Post, Pivot 109
170003	Post, Anchor 12	170233	Stud 43	173889	Post, Spring 109
170004	Bracket W/Bushing 12	170234	Bracket, Guide 43	173890	Pin, Stop 109
170018	Bushing 29	170235	Bracket, Spring 43	173891	Bellcrank 109
170019	Lever, Latch 29	170236	Lever 43	173892	Spring 109
170020	Lever, Trip 29	170237	Lever, Start 43	173902	Spring, Compression 109
170021	Arm, Clamp 29	170238	Bail, Reset 43	173903	Bracket 109
170022	Arm, Cam 29	170282	Nut (6-40 Hex) 36, 107	174043	Modification Kit 3, 108
170023	Bearing 40, 69	171671	Connector, Blue Insulated 109	174086	Box Assembly, Type (TB) 55
170024	Bracket 40	172181	Modification Kit 3, 100	174384	Guide 108
170025	Bracket W/Stud 40	172190	Bracket 100	174385	Bracket 108
170026	Bellcrank W/Bushing 40	172226	Rod, Copy Holder 100	174386	Knife 108
170027	Bellcrank 40	172500	thru	174387	Finger, Paper 108
170028	Link 40	172530	Switch Assembly 62, 115	174388	Lever W/Hub 108
170039	Bellcrank W/Posts 36	172531	thru	174389	Lever W/Hub 108
170042	Bail W/Bushing 12	172536	Switch Assembly 62, 116	174390	Bracket W/Posts 108
170054	Arm W/Post 36	172538	thru	174391	Screw, Shoulder (2-56) 108
170056	Plate W/Stud 36	172557	Switch Assembly 62, 116	174392	Armature 108
170057	Bearing 36	172558	Switch Assembly 62	174393	Bracket W/Posts 108
170058	Nut, Shoulder (10-32 Hex) 36	172559	Switch Assembly 62, 116	174394	Yoke 108
170059	Pawl, Drive 36	172560	thru	174395	Bracket 108
170060	Plate, Guide 36	172590	Switch Assembly 62	174397	Bushing 108
170062	Bail 35	172591	Spring, Contact Arm 62	174398	Spring, Contact 108
170063	Lever 35	172593	Plate, Contact 62	174399	Spring, Contact 108
170064	Link, Drive 36	172594	Plate, Contact 62	174400	Contact Assembly 108
170066	Bar, Code 50	172595	Plate, Contact 62	174401	Insulator (.015" Thk) 108
170067	Washer, Spacing 27	172596	Plate, Contact 62	174402	Spring, Compression 108
170071	Clutch Assembly, Code Bar 27	172597	Block, Contact 62	174403	Strip, Terminal 108
170074	Arm 12	172598	Cam, Eccentric 87	174441	Lever w/Bushing 110
170075	Roller 12	172599	Block, Contact 62	174442	Contact Assembly 110
170076	Pawl 12	172600	thru	174444	Spring, Contact 110
170079	Arm W/Hub 37, 115	172608	Switch Assembly 62, 115	174445	Bracket, Contact Mounting 110
170080	Stud 31	172618	Plate, Contact 62	174446	Spring, Contact 110
170082	Cable W/Terminals 46	172619	Plate, Contact 62	174447	Post 110
170110	Cam, Selector 27	172620	Cam, Eccentric 87	174448	Guard 110
170111	Shaft 27	172632	Screw (4-40 x 3/16 Hex) 110	174449	Bracket 110
170112	Guide 40			174450	Cam 110
170113	Arm 40			174452	Spacer (.085" Thk) 110
170115	Lever, Transfer (#7) 40			174482	Lever 61
170116	Lever, Transfer (#0) 40			174483	Lever 61
170117	Bracket 40			174484	Lever 61

NUMERICAL INDEX (Continued)

Part Number	Description and Page Number	Part Number	Description and Page Number	Part Number	Description and Page Number
174570	Switch 107	179224	Slide Assembly 33	192566	Link, Left Drive 37, 109
176181		179225	Bail W/Studs 37	192567	Link, Right Drive 37, 109
thru		179226	Screw, Shoulder (4-40) 33	192575	Link, Right 33
176197	Modification Kit 81, 116	179235	Bracket, Right Mounting 103	192576	Link, Left 33
176221		179236	Bracket, Left Mounting 103	192580	Cam 27
thru		179237	Clamp, Left 103	192610	Arm, Slide 76
176237	Platen, Rubber 81, 82, 115, 116	179238	Clamp, Right 103	192704	Disk, Retaining 88
176238	Platen, Rubber 81	179239	Bracket, Right Mounting 103	192706	Modification Kit 88
176246	Bail, Blocking 61	179240	Bracket, Left Mounting 103	192707	Bail Assembly, Function 17
176247	Bail, Blocking 61	179241	Rack, Copy Display 103	192985	Spring, Contact 98
176285	Bail, Pressure 111	179301	Plate, Paper Guide 103	192986	Spring, Contact 98
176299	Screw, Shoulder (6-40) 97, 109	179309	Finger, Left Paper 103	192988	Spring, Contact 98
176420	Modification Kit 3, 110	179310	Finger, Right Paper 103	192997	Bracket 106
176471	Cable W/Terminals 108	179366	Shaft 103	193564	Spring, Contact 101
176472	Cable W/Terminals 108	179368	Roller, Paper Guide 103	193578	Box Assembly, Type (YZ) 55
176477	Plate 111	179369	Modification Kit 3, 103	193655	Lever, Function 61
176569	Modification Kit 89	179377	Post 103	193803	Box Assembly, Type (AB) 57
176598	Bellcrank 80	179396	Plate, Front Type Box 53	193858	Frame, Left Side 4
176642	Clip, Spring 59	179397	Plate, Rear Type Box 53	194018	
176651	Box Assembly, Type (YP) 55	179451	Plate, Right 37	thru	
176695	Cable 69	179452	Plate, Left 37	194021	Pallet, Type 57
176704	Spring, Torsion 76	179666	Box Assembly, Type (YW) 55	194026	Box Assembly, Type (AC) 57
176821	Modification Kit 2, 69	179675	Bracket, 106	194027	Box Assembly, Type (AD) 57
176909	Frame, Left Side 8	179676	Lever Left Guide 106	194035	
176910	Frame, Right Side 8	179677	Shaft, Ribbon Spool 105, 106	thru	
176911		179678	Lever 105, 106	194039	Pallet, Type 57
thru		179680	Bail, Left Lifter 106	194052	Plate, Form Stop 88
176914	Guide W/Pins, Paper 82	179681	Post 105, 106	194054	Modification Kit 53, 115
176918	Shaft 27	179682	Bail, Left Roller 106	194092	Modification Kit 3, 112
177044	Template 98, 114	179684	Lever 105, 106	194093	Modification Kit 2, 76
177081	Gear (68T) 16	179686	Bracket, Right 105	194324	Modification Kit 3, 102, 113
177082	Disk 16	179687	Lever, Right Guide 105	194325	Bracket w/Post 113
177083	Yoke 14	179689	Bracket, Left 106	194326	Bracket, Switch 113
177084	Lever 16	179690	Plate 106	194327	Lever 113
177089	Box Assembly, Type (YR) 55	179691	Bracket, Left 106	194371	Guide 113
178141	Modification Kit 2, 69	179692	Spacer 105, 106	194414	Lever 61
178185	Bracket W/Studs 16	179693	Bail, Right Lifter 105	194929	Box Assembly, Type (AE) 57
178187	Disk 16	179694	Bail, Right Roller 105	194995	Modification Kit 3, 107
178188	Lever 14	179695	Bracket, Left Magnet 106	194998	Plate, Mounting 107
178189	Armature 14	179696	Bracket, Left Hinge 106	194999	Cable Assembly 107
178190	Extension, Armature 14	179697	Lever, Left Stop 106	195000	Lever, Operating 107
178301	Modification Kit 3, 98	179698	Armature 105, 106	195001	Insulator (.032" Thk) 107
178302	Bracket, Mounting 98	179699	Shaft 105, 106	195009	Box Assembly, Type (AF) 57
178303	Guard, Contact Spring 98	179700	Bracket, Right Hinge 105	195016	Pawl Assembly 61
178304	Contact Assembly 98	179701	Lever, Right Stop 105	195054	Stud 12
178358	Modification Kit 14	179702	Bracket, Right Magnet 105	195061	Switch (DT-SP) 112
178359	Bracket 14	179703	Bracket 105	195062	Arm, Stop 112
178414	Connector, Receptacle (24 Pt) 109	179704	Shaft, Right 105	195109	Plate, Stop 59, 61
178551		179708	Plate, Adjusting 105	195150	Lever, Reversing 106
thru		179718	Cable 106	195218	Box Assembly, Type (AG) 55
178567	Guide, Form 82	179724	Modification Kit 3, 105, 106	195240	Post 46
178568		179782	Screw (6-40 x 7/8 Hex) 15	195251	Armature, Selector 45
thru		179802	Cover 101	195266	Modification Kit To Add Shaft and Retainer 59
178584	Modification Kit 82	179814	Box Assembly, Type (TD) 55	195461	Box Assembly, Type (AH) 57
178600	Cover 109	179873	Screw (3-48 x 5/8 Fil) 77	195486	
178607	Stud, Cam Follower 12	179989	Cable 98	thru	
178724	Box Assembly, Type (YS) 55	179994	Guard, Contact Spring 98	195488	Pallet, Type 57
178764	Gear (26T) 26	179999	Bail, Spring 105, 106	195593	Lever 7
178809	Box Assembly, Type (YT) 55	182909	Spring 43	195594	Lever 7
178852	Box Assembly, Type (YU) 57	192321	Stud 36	195634	Modification Kit 45
179057	Box Assembly, Type (YV) 56	192322	Spring, Compression 36	195855	Pin, Sprocket Feed 20
179088	Pallet, Type 55	192323	Spring 33	195980	Spring 61
179194	Bracket 89	192493	Spring 43	195996	Gear (63T) 26
179198	Lever 80	192518	Bar, Suppression Code 50	197713	Box Assembly, Type (AK) 55
179199	Lever 114	192560	Slide 36	197729	Disk 70
179216	Arm, Right Side 33	192561	Bar W/Hub 36	197730	Disk 70
179217	Arm, Left Side 33	192563	Bracket W/Stud 36		

NUMERICAL INDEX (Continued)

Part Number	Description and Page Number	Part Number	Description and Page Number	Part Number	Description and Page Number
197731	Gear (68T) 70, 88	199655	Bracket, Left 112	305035	Modification Kit 3, 20, 98, 114
197732	Gear (104T) 70, 88	199656	Guide, Left Paper 112	305036	Modification Kit 3, 21, 114
197733	Disk, Retaining 88	199657	Guide, Right Paper 112	305059	Guide, Form (9-1/2") 81
197734	Disk, Retaining 88	199898	Box Assembly, Type (AL) 57	305071	Gear (112T) 88
197735	Gear (44T) 70, 88	304360	Pawl, Check 112	305075	Disk, Retainer 88
197736	Gear (34T) 70, 88	304361	Ratchet 112	305079	Modification Kit 88
197737	Gear (40T) 70, 88	304374	Spring, Torsion 112	305541	Slide, Stripper 59
197840	Gear (31T) 70, 88	304395	Spring 33	305687	Stud 61
197847	Modification Kit 70	304396	Plate, Stop 7, 114	305769	Bracket 15
197848	Modification Kit 70	304463	Slide, Stripper 59	305771	Bracket, Guide 81
197849	Modification Kit 88	304464	Blade w/Stud 59	305773	Cable Assembly 15
197850	Modification Kit 88	304465	Blade, Stripper 59	305776	Armature 15
197957	Gear (34T) 114	304740	Head, Print Hammer 52	305778	Lever, Shift 15
197958	Gear w/Shaft (37T) 114	304772	thru	305779	Bellcrank 15
197996	Roller, Front 105, 106	304775	Guide, Paper 81	306058	Armature Assembly 15
197998	Cable 98	304778	Bail W/Wire 107	306755	Lever, Marking Lock 42
198394	Modification Kit 3, 109	304779	Bail W/Wire 107	307065	Modification Kit 3, 114
198655	Cable Assembly 109	305028	Guide, Paper 81	307285	Plate, Mounting 112
198656	Cable Assembly 109	305031	Gear W/Shaft(28T) 7, 114	307289	Lever 80, 114
199245	Modification Kit 3, 107	305033	Handwheel 7, 114	309529	Washer, Clamp 15
199518	Bar, Function 66	305034	Arm w/Hub 114	310733	Modification Kit 81
199519	Bar, Function 66			312991	Plate, Nut 112
199529	Cam, Restoring (33T) 112				



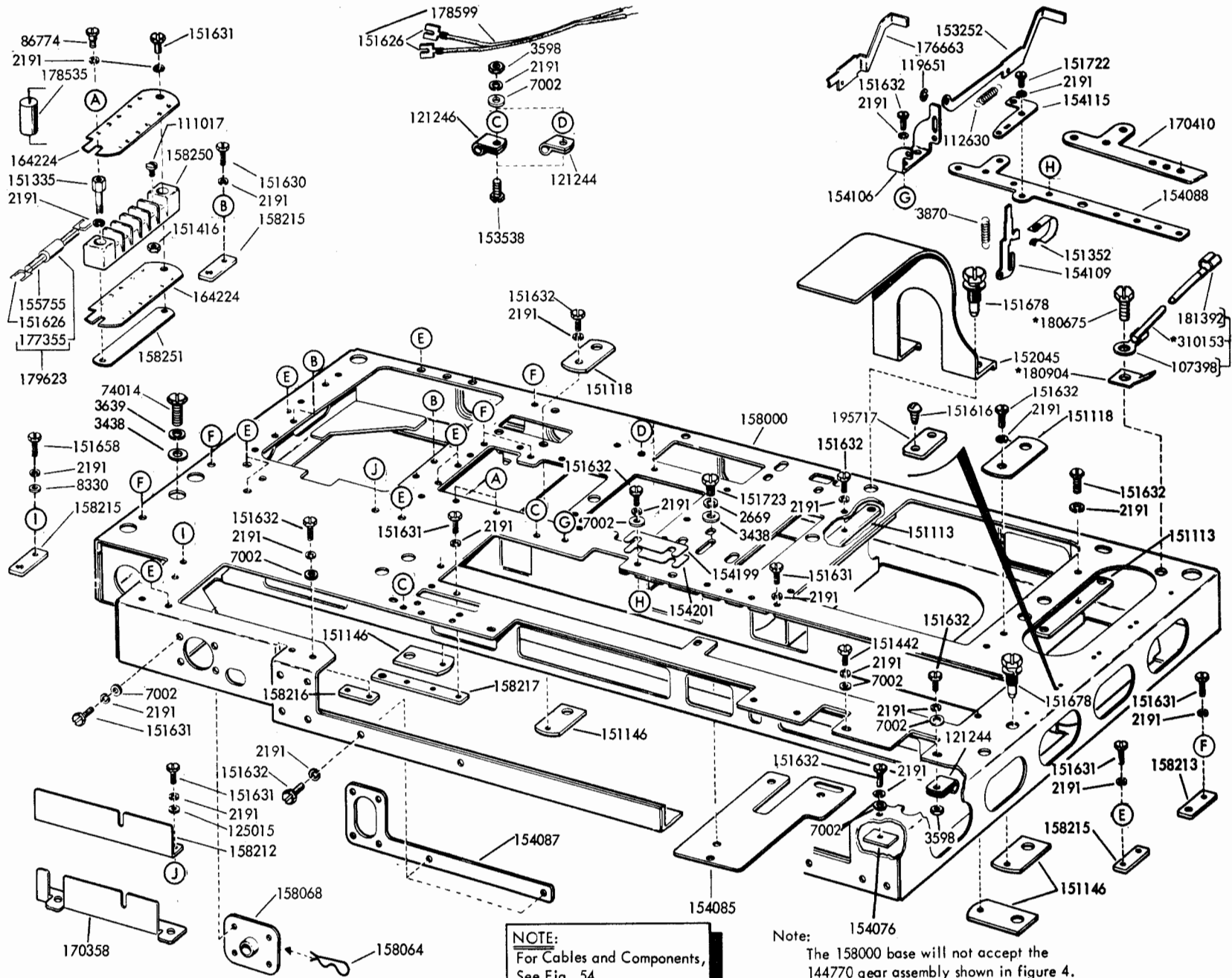
28 AND 29 AUTOMATIC SEND-RECEIVE KEYBOARD (LAK)

PARTS

SECTION 573-117-800TC

FIGURE	CONTENTS	PAGE	FIGURE	CONTENTS	PAGE
1	Keyboard Base Parts	3	35	178346 Modification Kit to Equip Keyboard with Answer-Back Control	33
2	Keyboard Base Parts	4	36	164659 (100 MA) and 194425 (50 MA) Modification Kits to Provide Synchronous Pulsed Transmission	34
3	154224 and 164234 Intermediate Gear Assemblies	5	37	154147 Modification Kit to Provide Local Paper Feed-out Motor Starting Mechanism	35
4	144770 Intermediate Gear Assembly (Noise Reduction)	5	38	154141 Modification Kit to Provide Electrical Signal Line Break Mechanism	35
5	Bearing Bracket Mechanism (Early Design)	6	39	176405 Modification Kit to Add Tape Backspace Button	36
6	144749 and 305634 Bearing Bracket Assemblies	7	40	163775 Modification Kit to Provide Repeat on Space Mechanism	36
7	Function Bail Mechanism	8	41	162731 Modification Kit to Provide Keyboard with Time Delay Mechanism	37
8	Local Reverse Line Feed Mechanism (8 Level)	9	42	164502 (End of Message Generator) and 172945 (Answer-Back) Modification Kits - See Figs. 43, 44 and 45	38
9	154146 Modification Kit to Provide Local Backspace Mechanism (5 Level)	9	43	164502 (End of Message Generator) and 172945 (Answer-Back) Modification Kits - See Figs. 42, 44 and 45	39
10	Keylever Guide Plates	10	44	164500 Resistor Assembly (Part of 164502 Modification Kit - See Figs. 42 and 43)	40
11	Keyboard Mechanism	11	45	172948 Resistor Assembly (Part of 172945 Modification Kit - See Figs. 42 and 43)	40
12	Keyboard Top Plates and Panel Assemblies	12	46	164426 Modification Kit to Add Horizontal Tab Disabler	41
13	Keyboard Hood and Mounting Parts	13	47	Coding the Keyboard Answer-Back Drum Blade	42
14	Code Bar Mechanism (5 Level)	14	48	176395 Modification Kit to Provide Lock Bar Reset to Answer-Back	43
15	Code Bar Mechanism (6 and 8 Level)	15	49	Remote Control Speed Shift Gear Mechanism (60 - 100 WPM, 7.42 Unit Code)	44
16	Contact Assemblies	16	50	195154 and 317202 (60-67-100 WPM, 7.42 Unit Code) and 311676 and 317349 (65-71-107 WPM, 7.00 Unit Code) Modification Kits to Add Three Speed Gear Shift to Keyboard	45
17	154151 and 170332 Universal Bail Assemblies	17	51	149896 and 154145 Modification Kits to Provide Local Reverse Line Feed Mechanism (Mark III)	46
18	154152 (5 Level), 170331 (6 and 8 Level) and 192550 (5 Level) Lock Bar Assemblies	17	52	309511 Modification Kit to Provide Universal Keyboard Switch on (Mark III) Keyboards	46
19	Signal Generator Frame Mechanism	18	53	Gear Sets	47
20	Signal Generator Shaft Assemblies	19	54	Keyboard Cable Components	48
21	Signal Generator Front Plate Mechanism	20	55	Time Delay Reset Mechanism	49
22	Signal Generator Rear Plate Mechanism	21	56	Character Counter Stepping Switch	49
23	154165 (w/Arc Suppression) 154225 (w/RF Suppression) - Neutral Transmission and 162892 (w/RF Suppression - Polar Transmission) Contact Box Assemblies	22	57	Tape Container Control Components	50
24	174410 Contact Box Assemblies w/RF Suppression - Polar Transmission (Shielded Signal Lines)	23	58	199070 Contact Box Assembly	51
25	Code Bar Extension Basket Mechanism	24		Numerical Index	52
26	Cam Follower Mechanism and Margin Indicator Assemblies	25			
27	Auxiliary Switch Mechanism	26			
28	Keyboard Switch Assemblies	27			
29	144708 (Function Magnet Contact) and 144710 (Code Reading Contacts) Modification Kits	28			
30	144997 Figures - Letters Contact Assembly	29			
31	158007, 170349 and 176709 Tape Container Assemblies	30			
32	158009 (Two Wire) Tape-out Switch Assembly	31			
33	163531 (Three Wire) and 311438 (Two Wire) Tape-out Switch Assemblies	31			
34	155990 Character Counter Assembly	32			

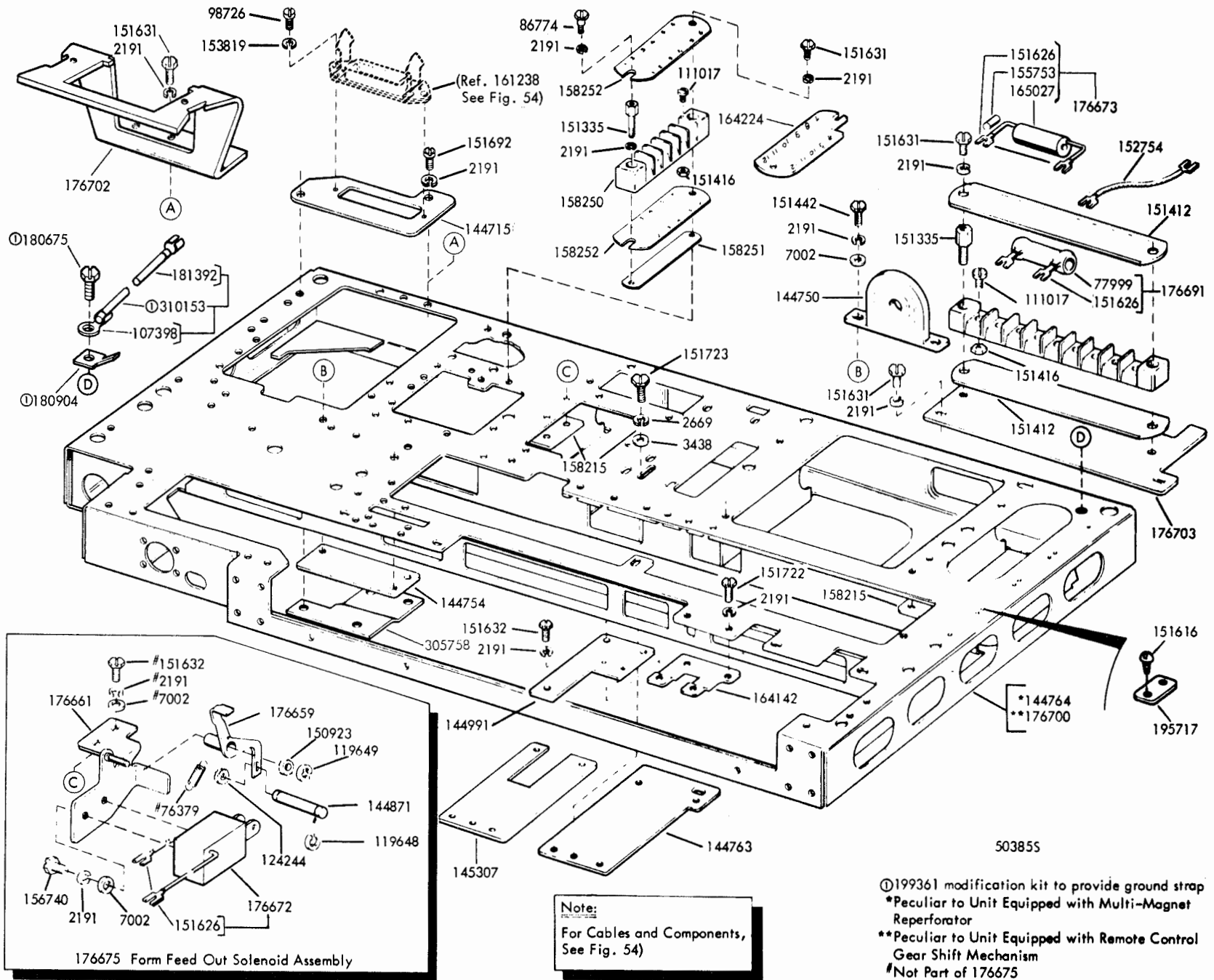
FIGURE 1. KEYBOARD BASE PARTS



NOTE:
For Cables and Components,
See Fig. 54.

Note:
The 158000 base will not accept the
144770 gear assembly shown in figure 4.
*199361 modification kit to provide ground strap
503855

FIGURE 2. KEYBOARD BASE PARTS



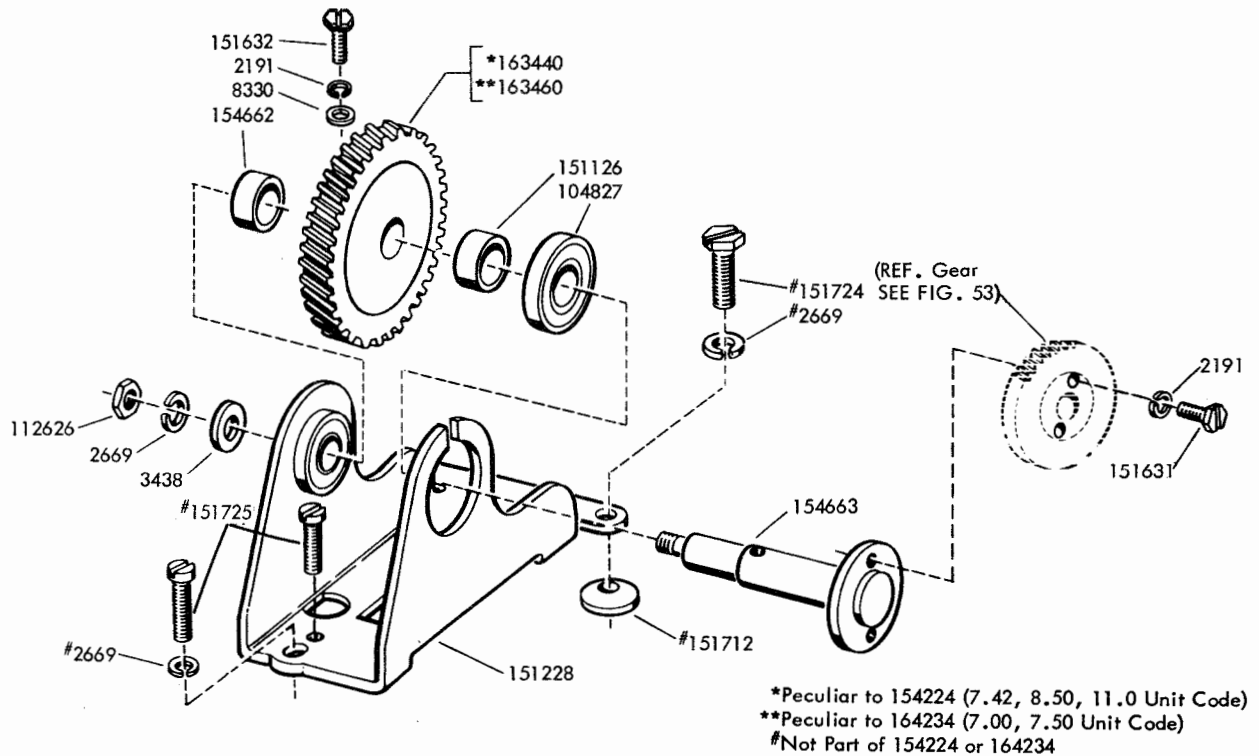


FIGURE 3. 154224 AND 164234 INTERMEDIATE GEAR ASSEMBLIES

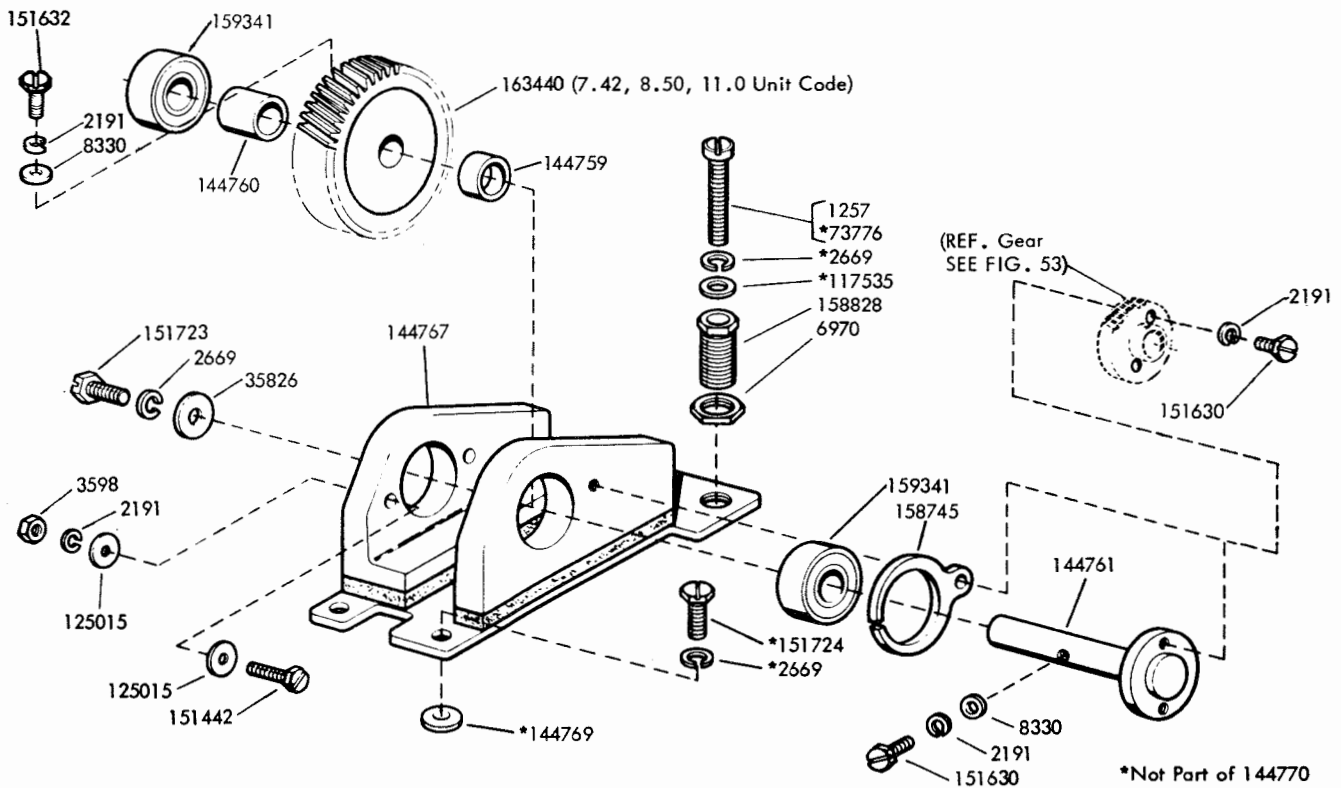
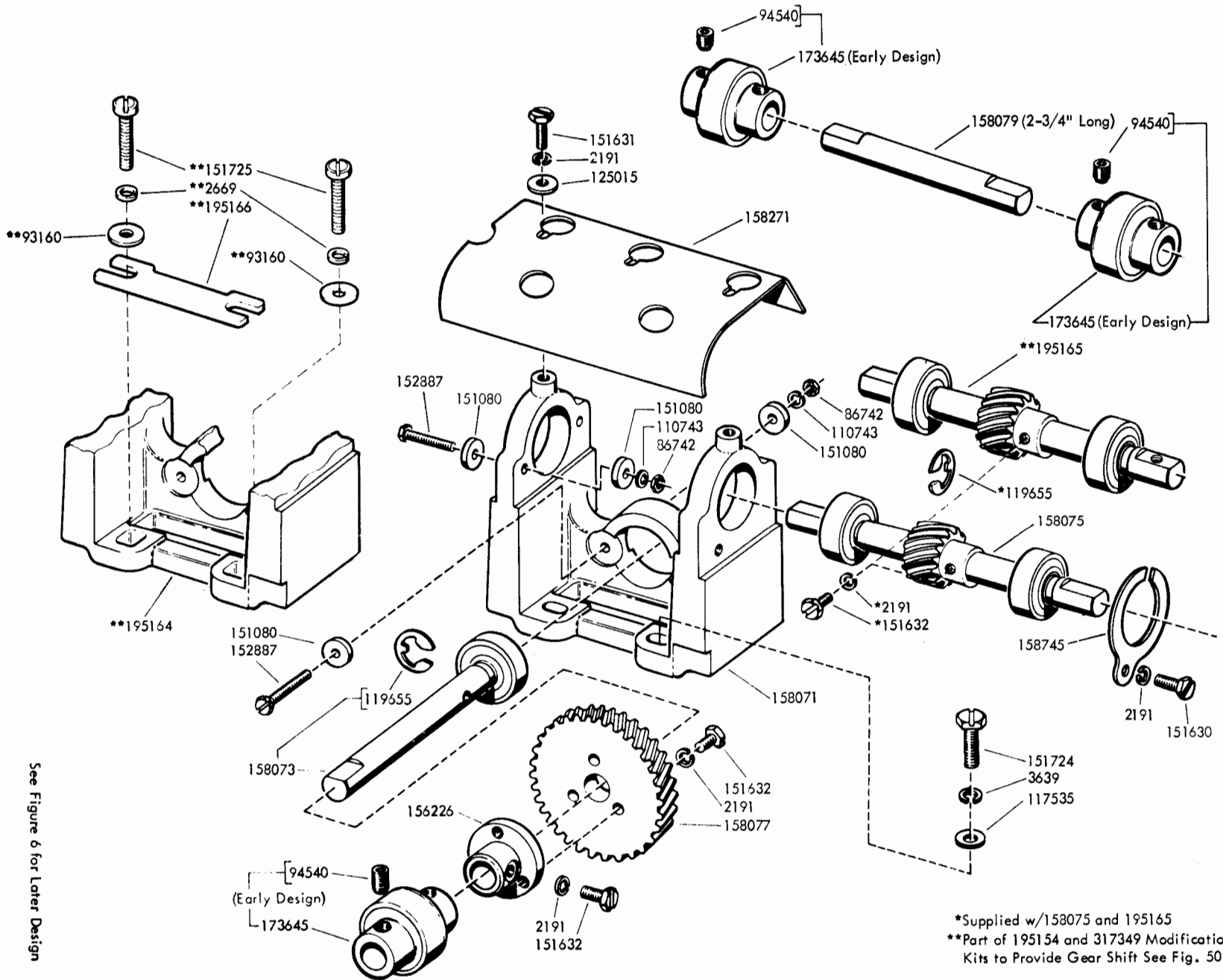


FIGURE 4. 144770 INTERMEDIATE GEAR ASSEMBLY (NOISE REDUCTION)

FIGURE 5. BEARING BRACKET MECHANISM (EARLY DESIGN)



See Figure 6 for Later Design

- ① 144749 for units operating on 60 cycle current (motor speed 3600 rpm)
- ② Not part of 144749 and 305634 Bearing Bracket Assemblies
- ③ 305634 for units operating on 50 cycle current (motor speed 3000 rpm)
- ④ Part of 311676 and 317202 Modification Kits to Provide Gear Shift (See Fig. 50)

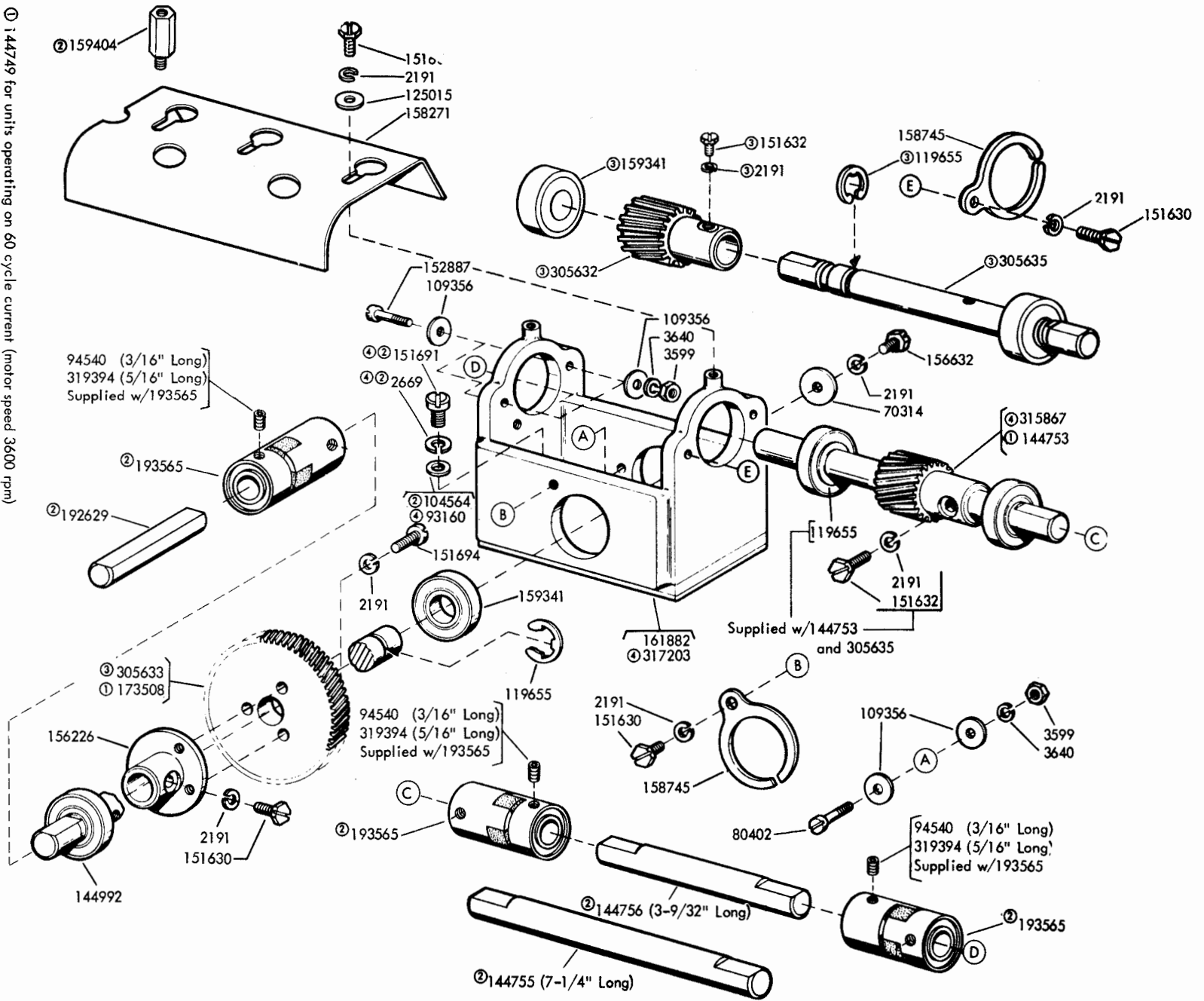


FIGURE 6. 144/49 and 305634 BEARING BRACKET ASSEMBLIES

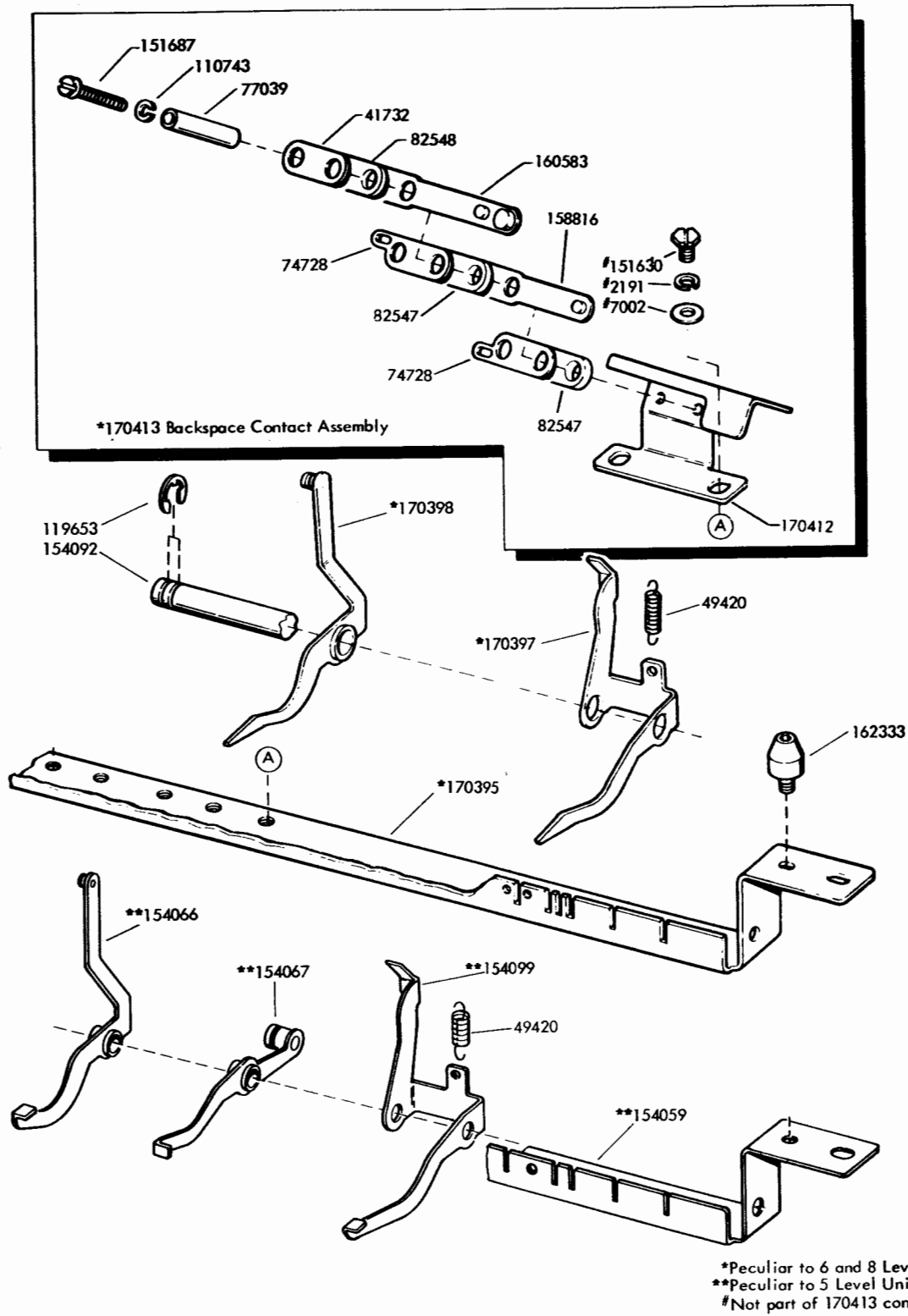
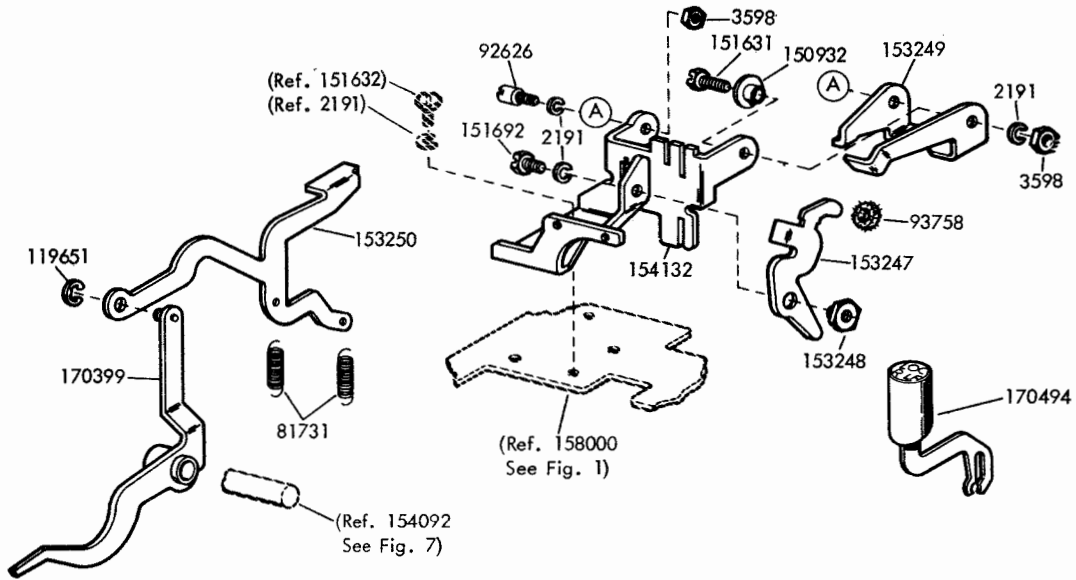
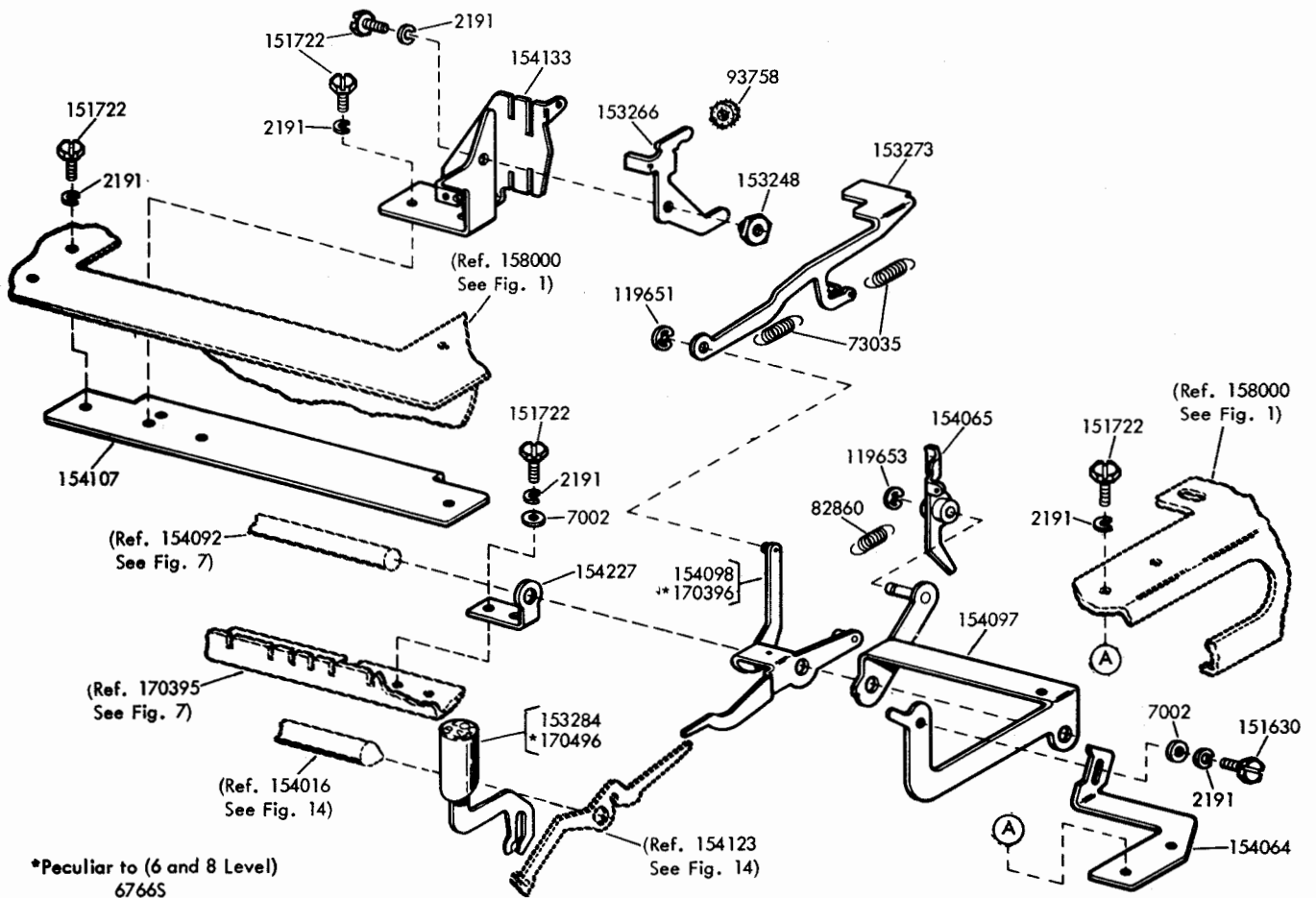


FIGURE 7. FUNCTION BAIL MECHANISM



57655

FIGURE 8. LOCAL REVERSE LINE FEED MECHANISM (8 LEVEL)



*Peculiar to (6 and 8 Level)
67665

FIGURE 9. 154146 MODIFICATION KIT TO PROVIDE LOCAL BACKSPACE MECHANISM (5 LEVEL)

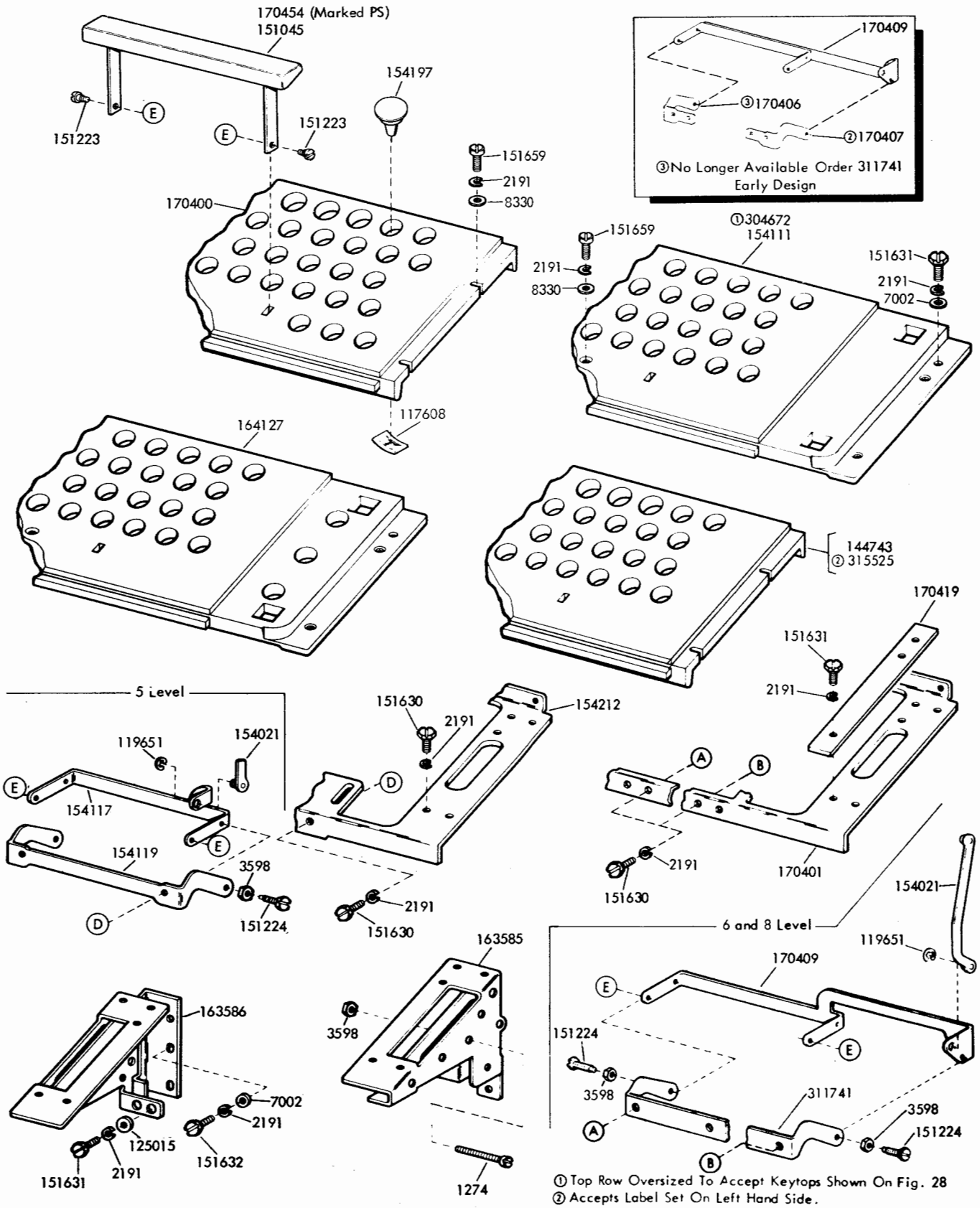


FIGURE 10. KEYLEVER GUIDE PLATES

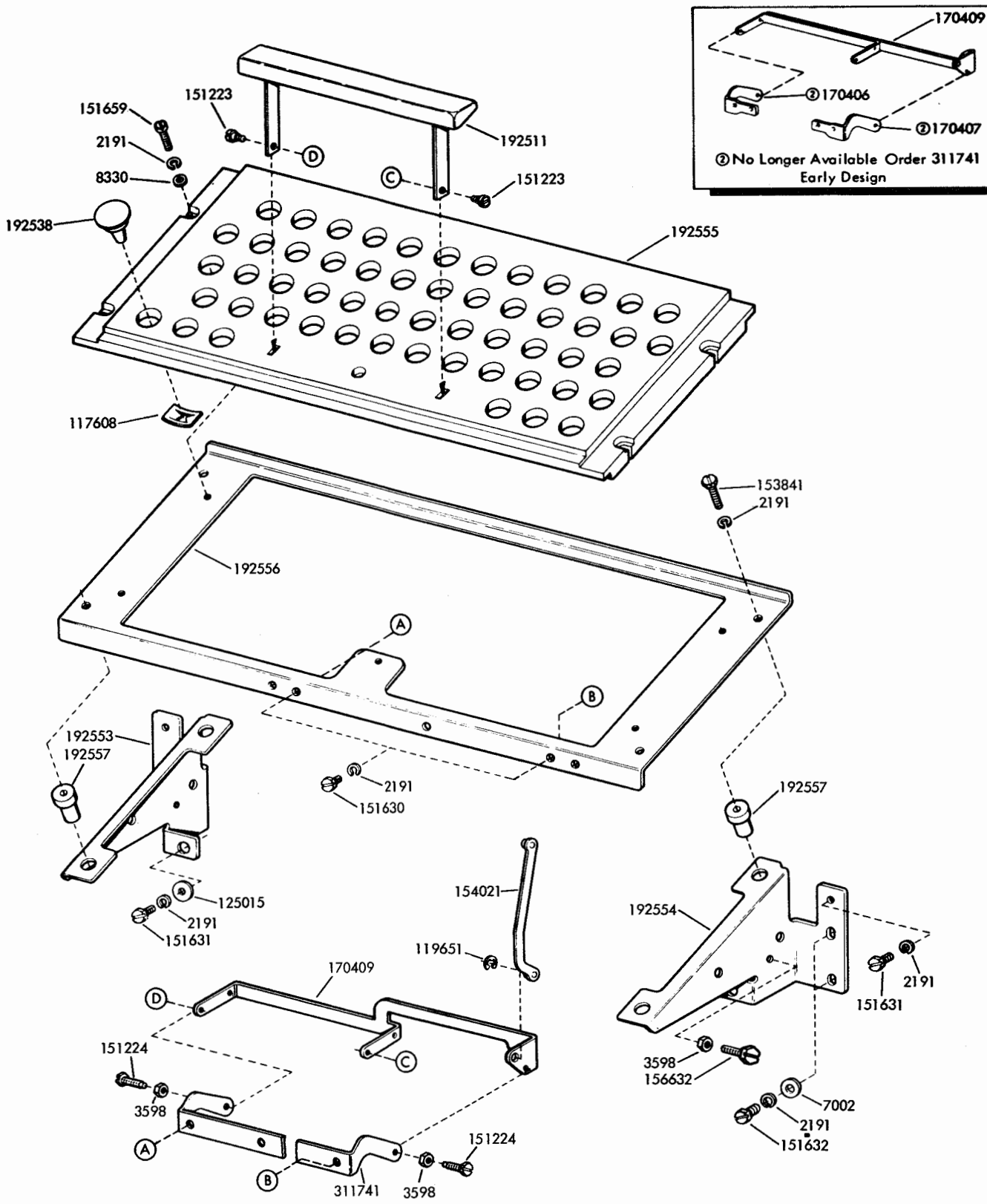


FIGURE 11. KEYBOARD MECHANISM

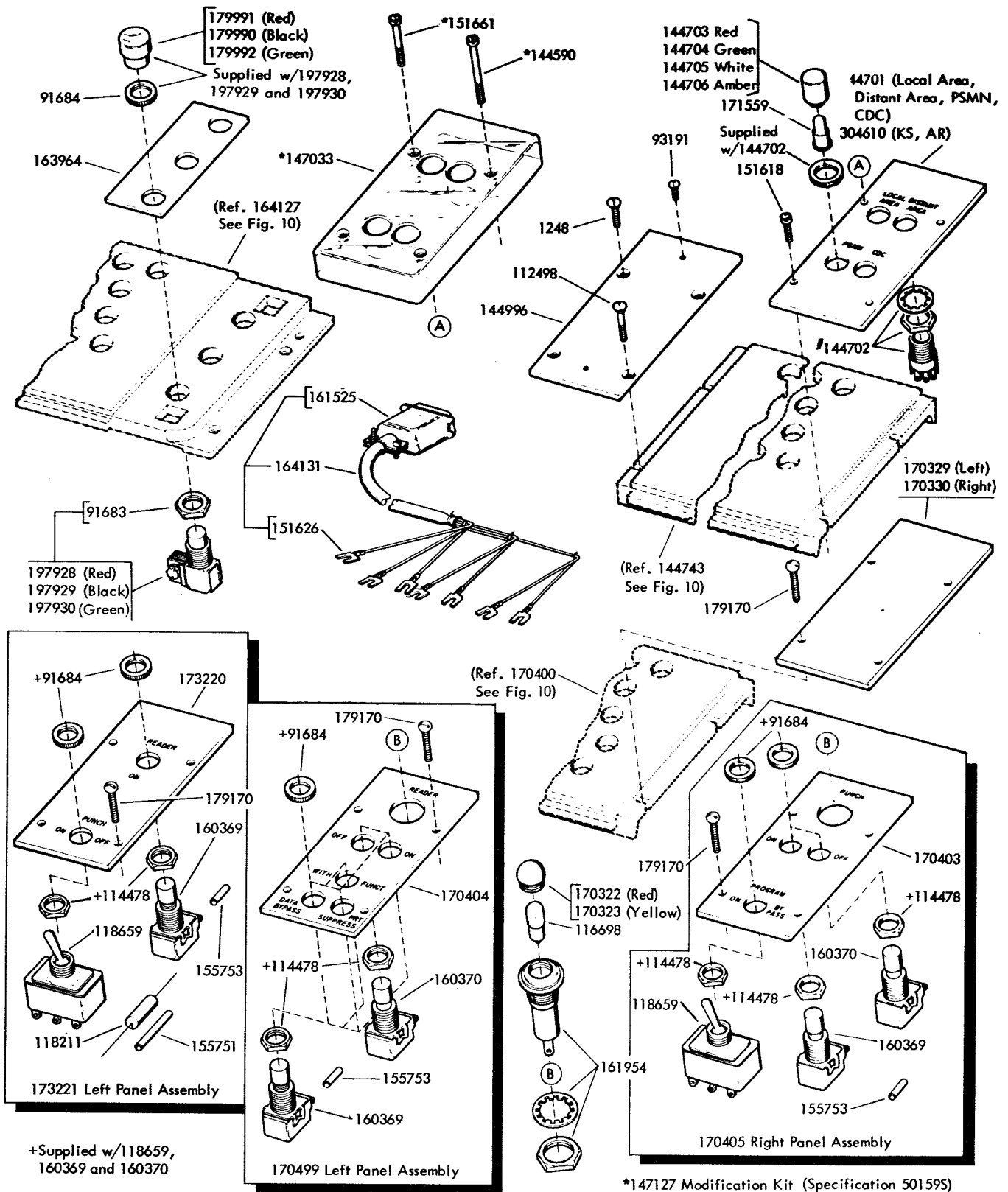


FIGURE 12 KEYBOARD TOP PLATES AND PANEL ASSEMBLIES

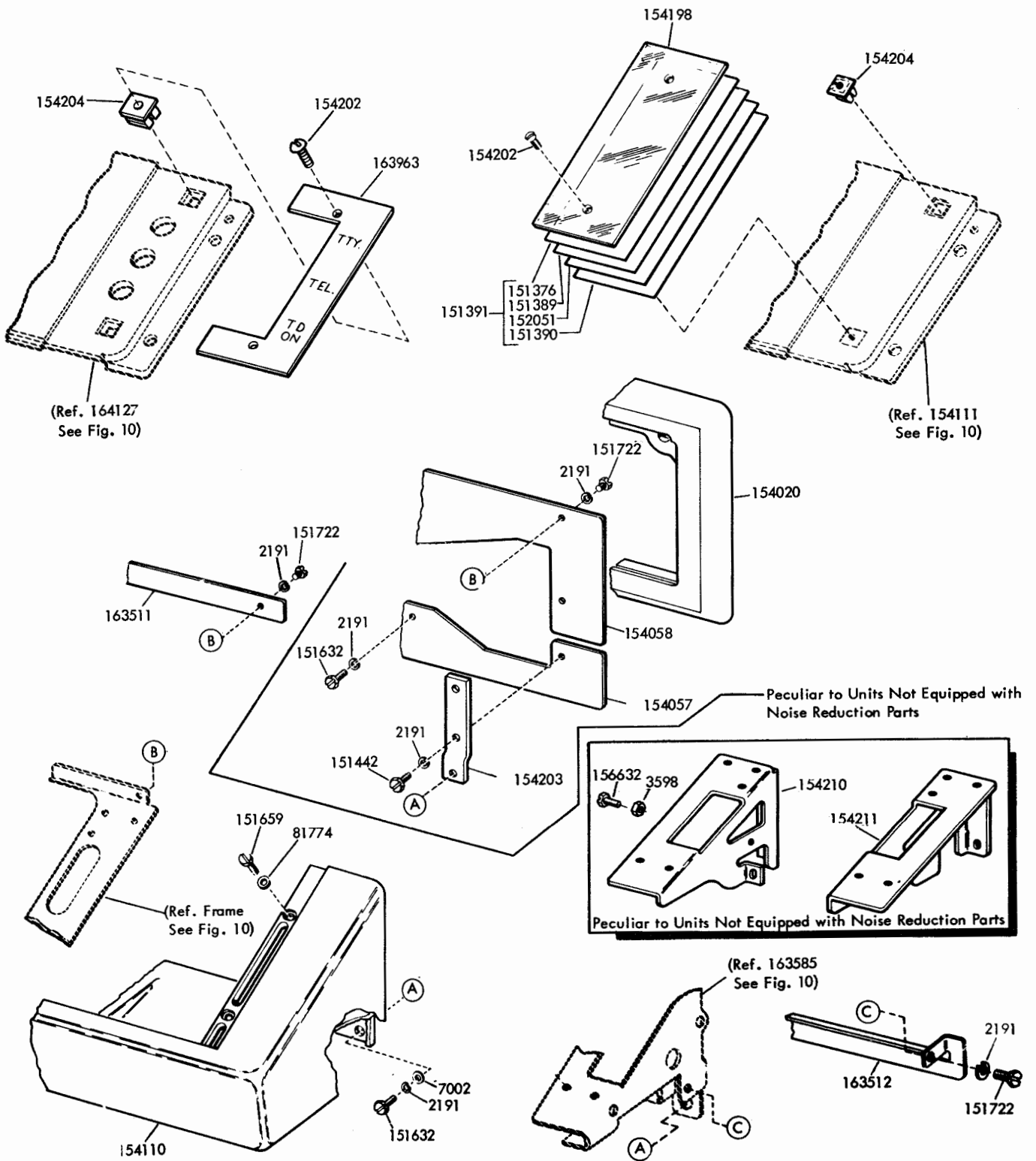


FIGURE 13. KEYBOARD HOOD AND MOUNTING PARTS

FIGURE 14. CODE BAR MECHANISM (3 LEVEL)

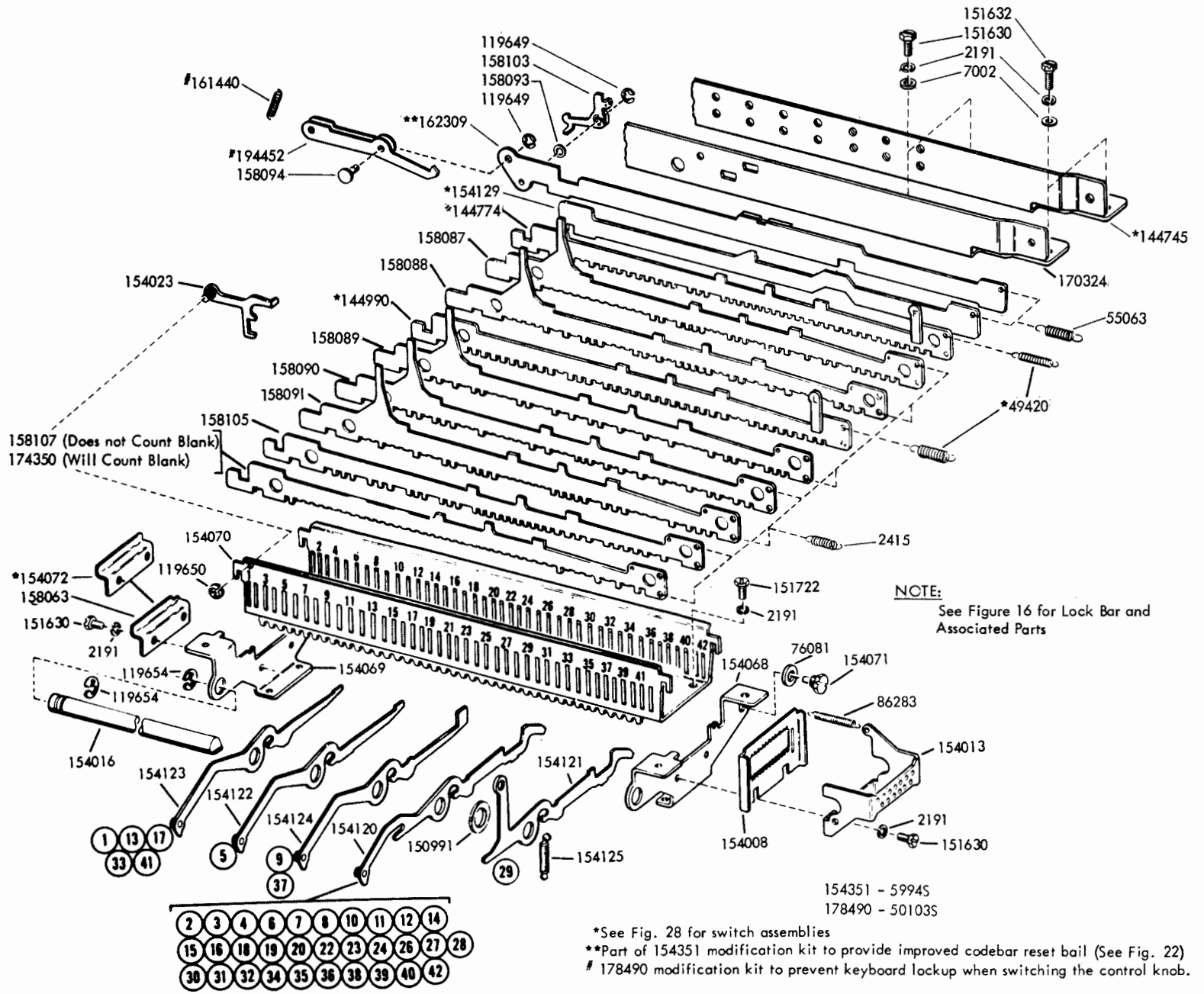
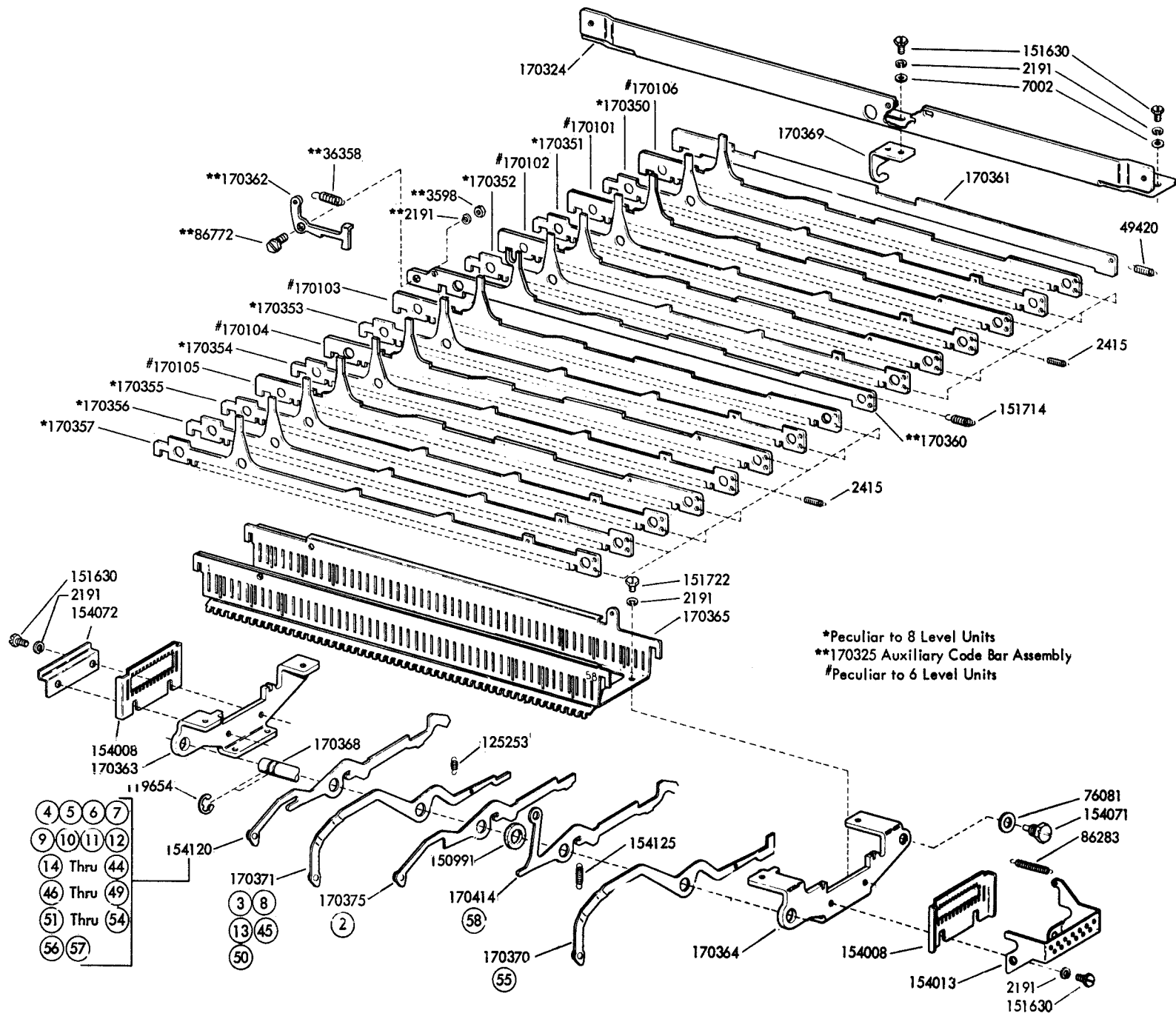


FIGURE 15. CODE BAR MECHANISM (6 AND 8 LEVEL)



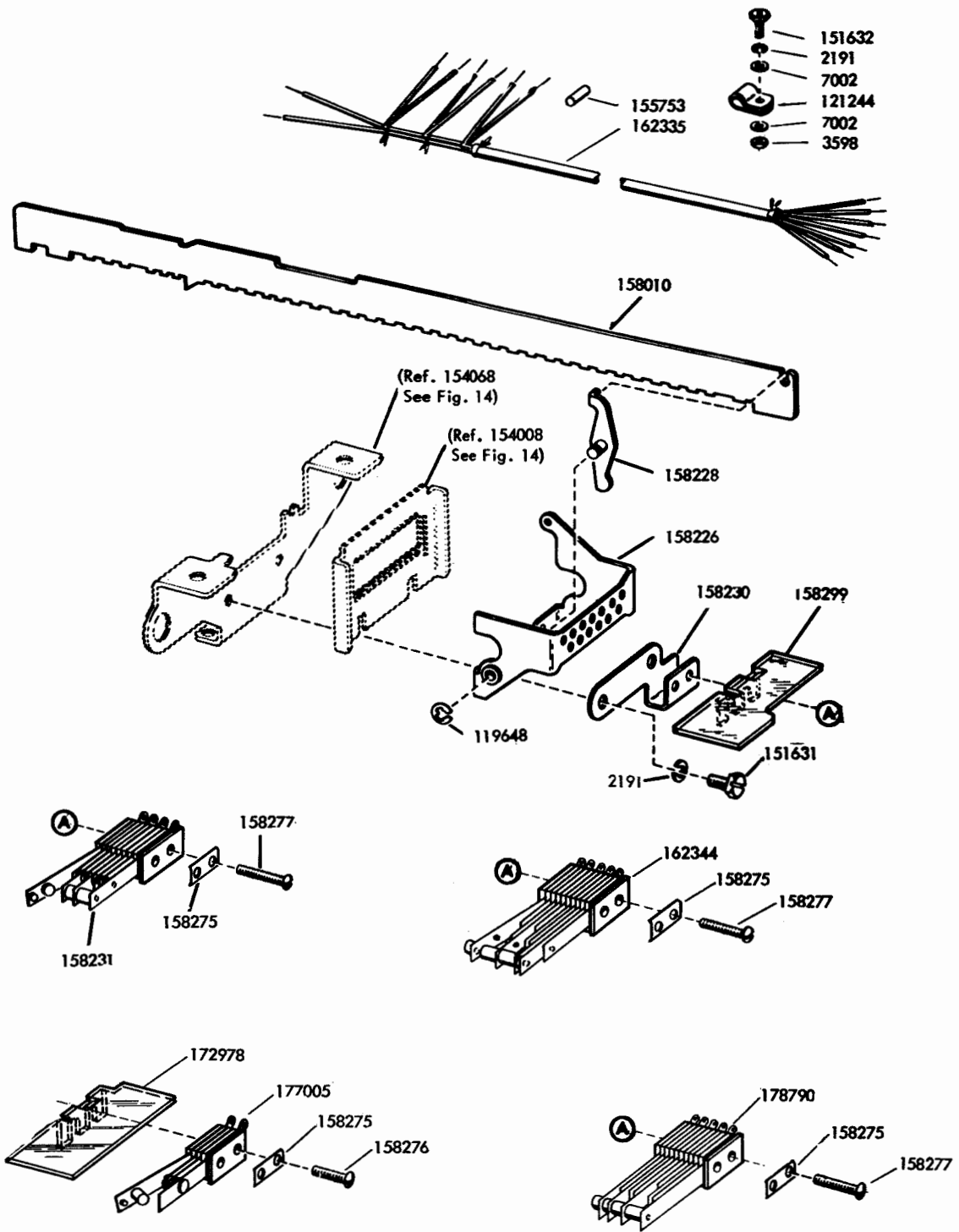
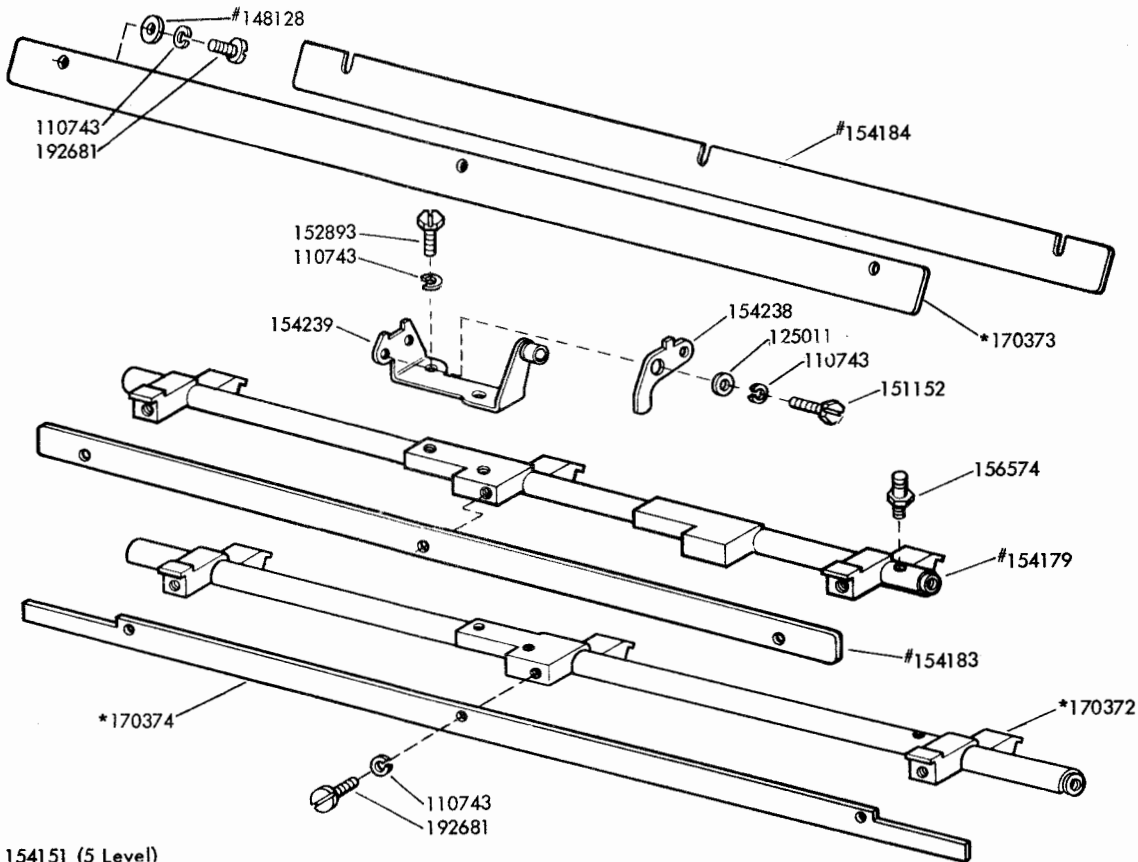
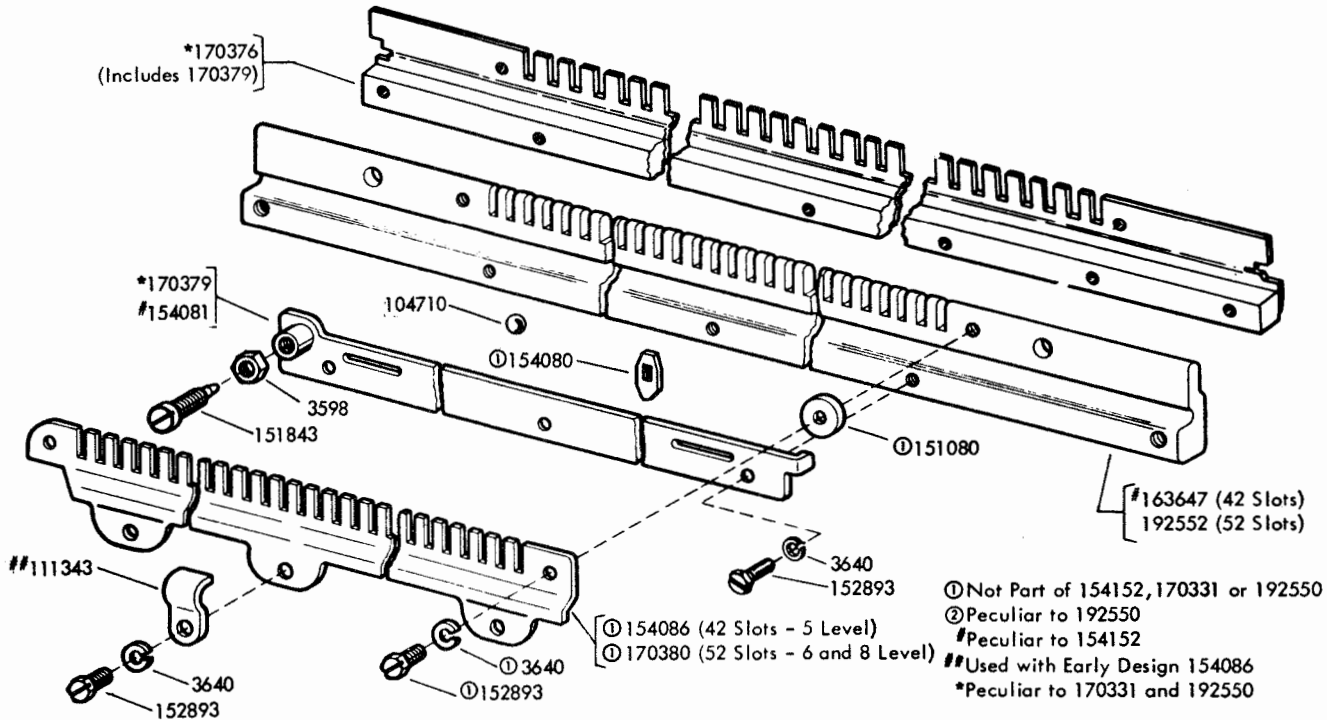


FIGURE 16. CONTACT ASSEMBLIES



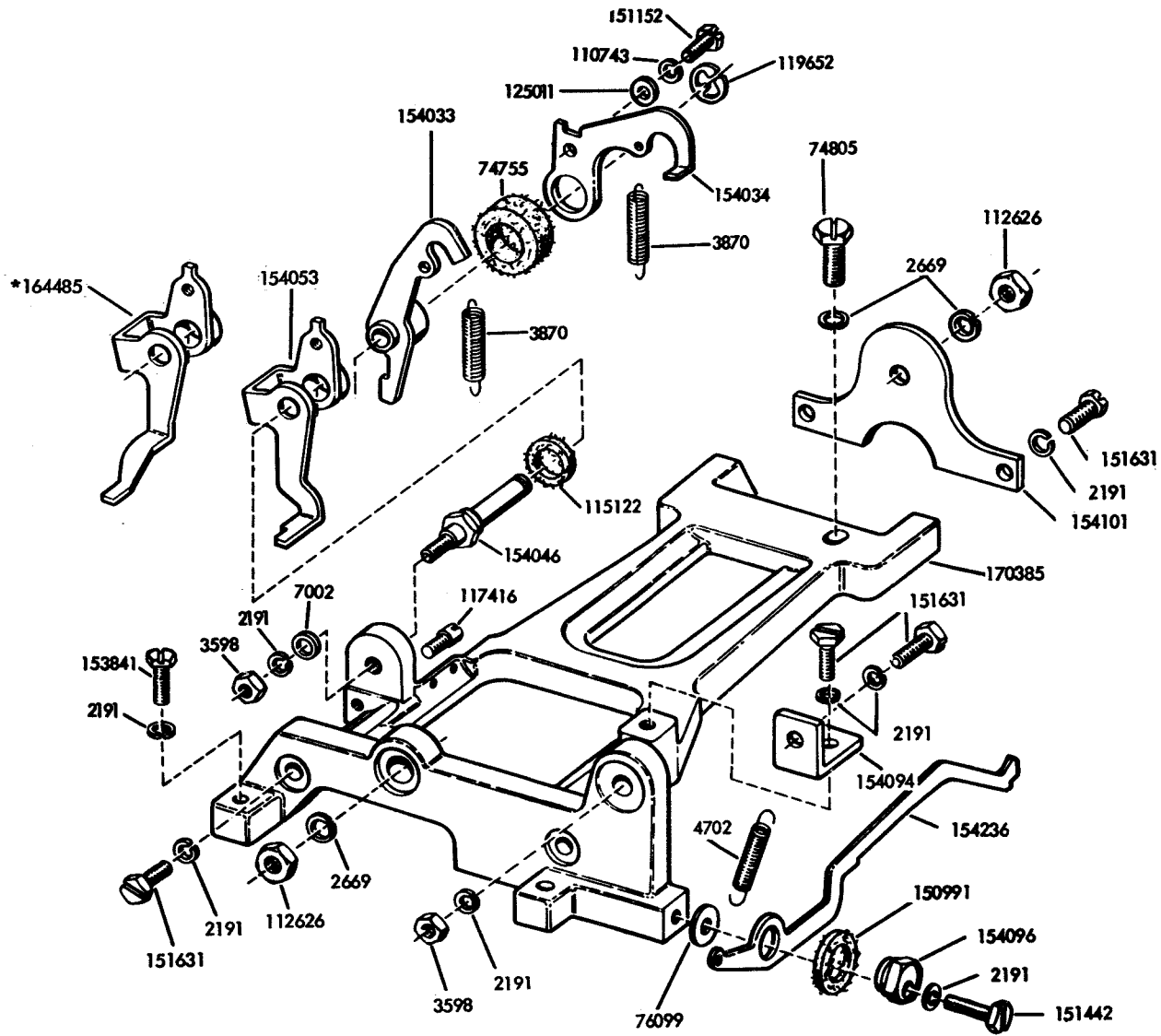
#Peculiar to 154151 (5 Level)
 *Peculiar to 170332 (6 and 8 Level)

FIGURE 17. 154151 AND 170332 UNIVERSAL BAIL ASSEMBLIES



① Not Part of 154152, 170331 or 192550
 ② Peculiar to 192550
 # Peculiar to 154152
 ## Used with Early Design 154086
 * Peculiar to 170331 and 192550

FIGURE 18. 154152 (5 LEVEL), 170331 (6 AND 8 LEVEL) AND 192550 (5 LEVEL) LOCK BAR ASSEMBLIES

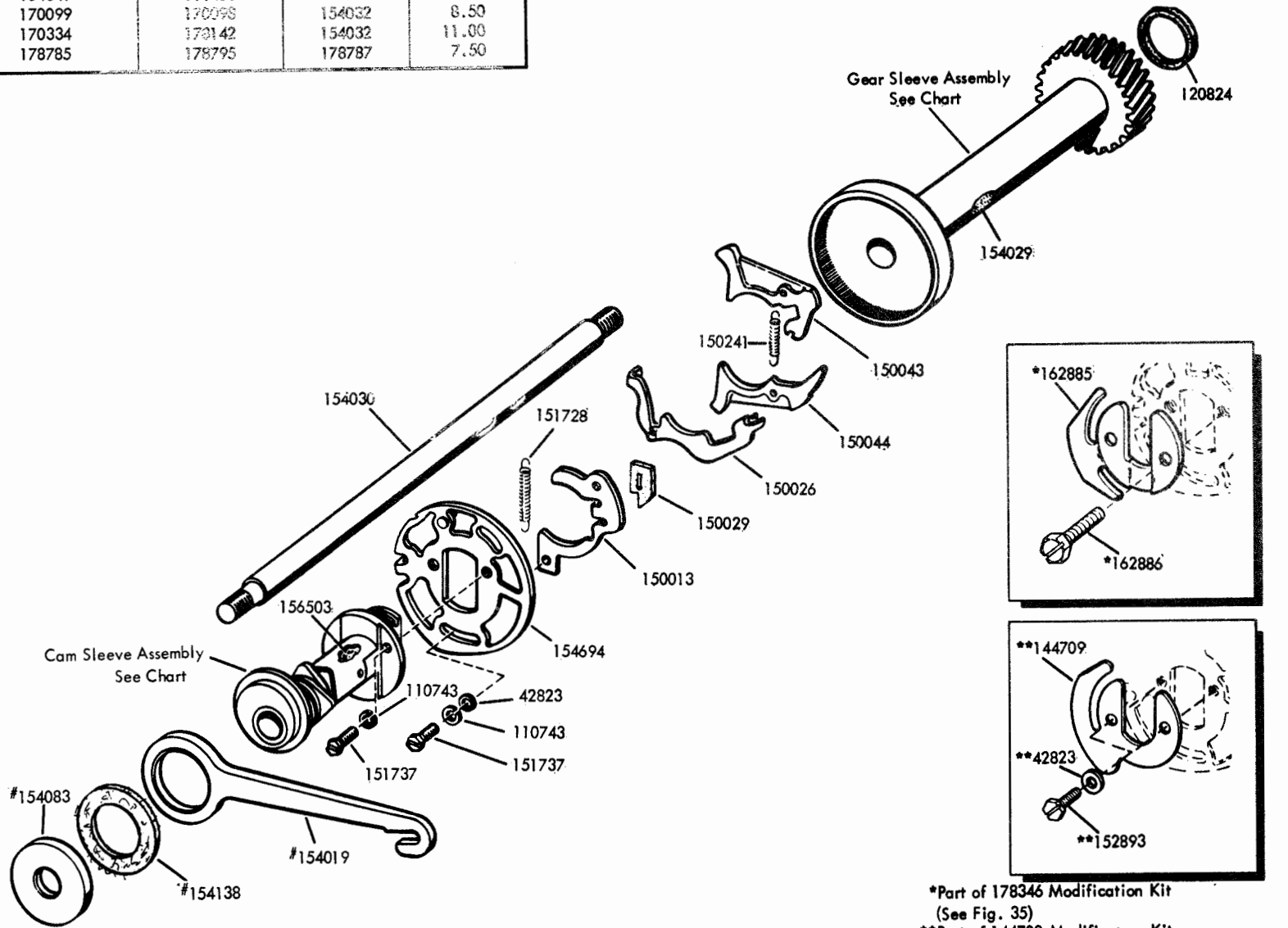


*Peculiar to Units Equipped with Synchronous Pulsed Transmission (See Fig. 36)

FIGURE 19. SIGNAL GENERATOR FRAME MECHANISM

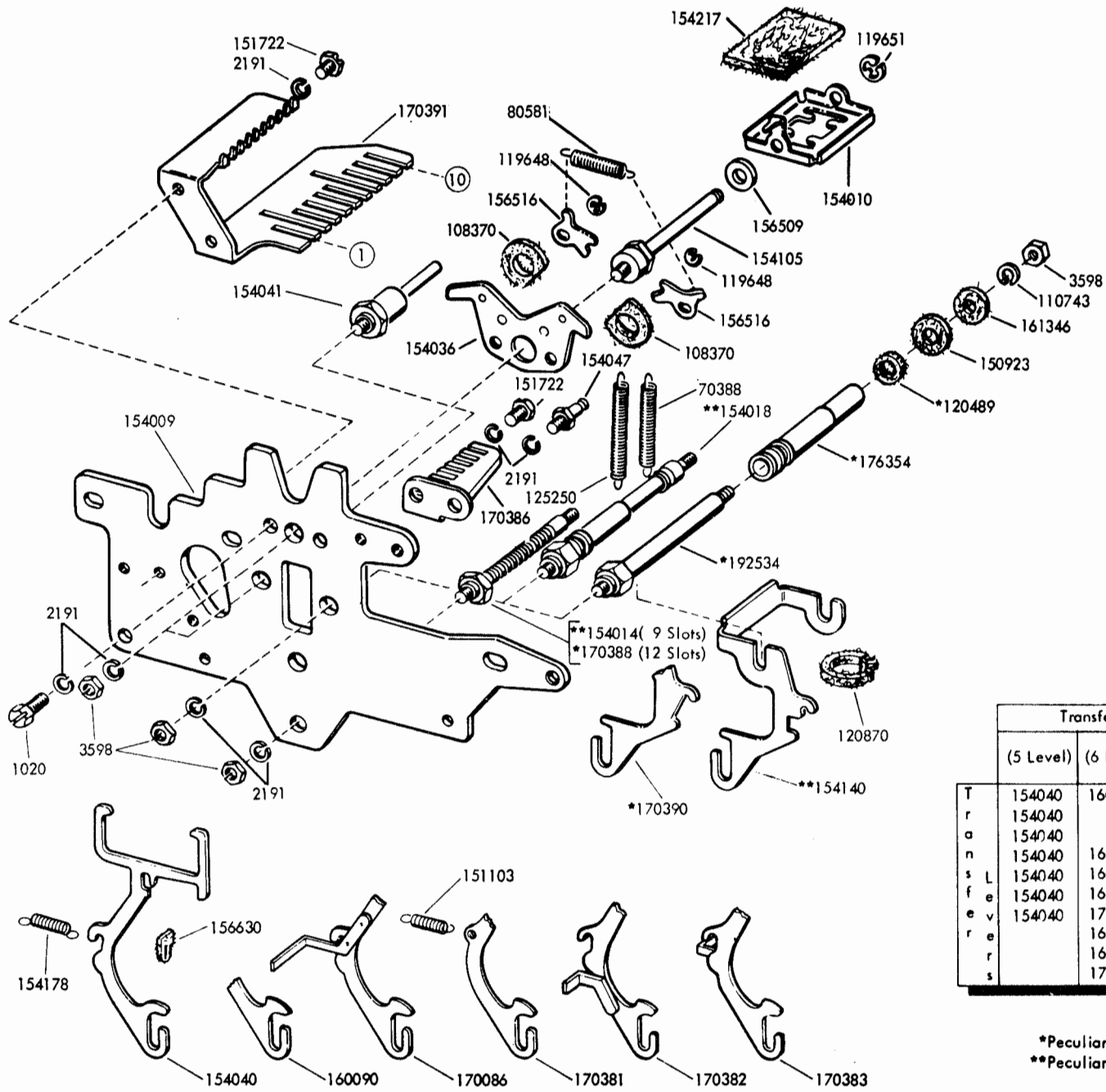
SIGNAL GENERATOR SHAFT ASSEMBLY	CAM SLEEVE ASSEMBLY	GEAR SLEEVE ASSEMBLY	UNIT CODE
154163	154154	154032	7.42
164349	311451	163519	7.00
170099	170098	154032	8.50
170334	170142	154032	11.00
178785	178795	178787	7.50

FIGURE 20. SIGNAL GENERATOR SHAFT ASSEMBLIES



*Part of 178346 Modification Kit
(See Fig. 35)
**Part of 144708 Modification Kit
(See Fig. 29)
#Not Part of Signal Generator Shaft Assemblies

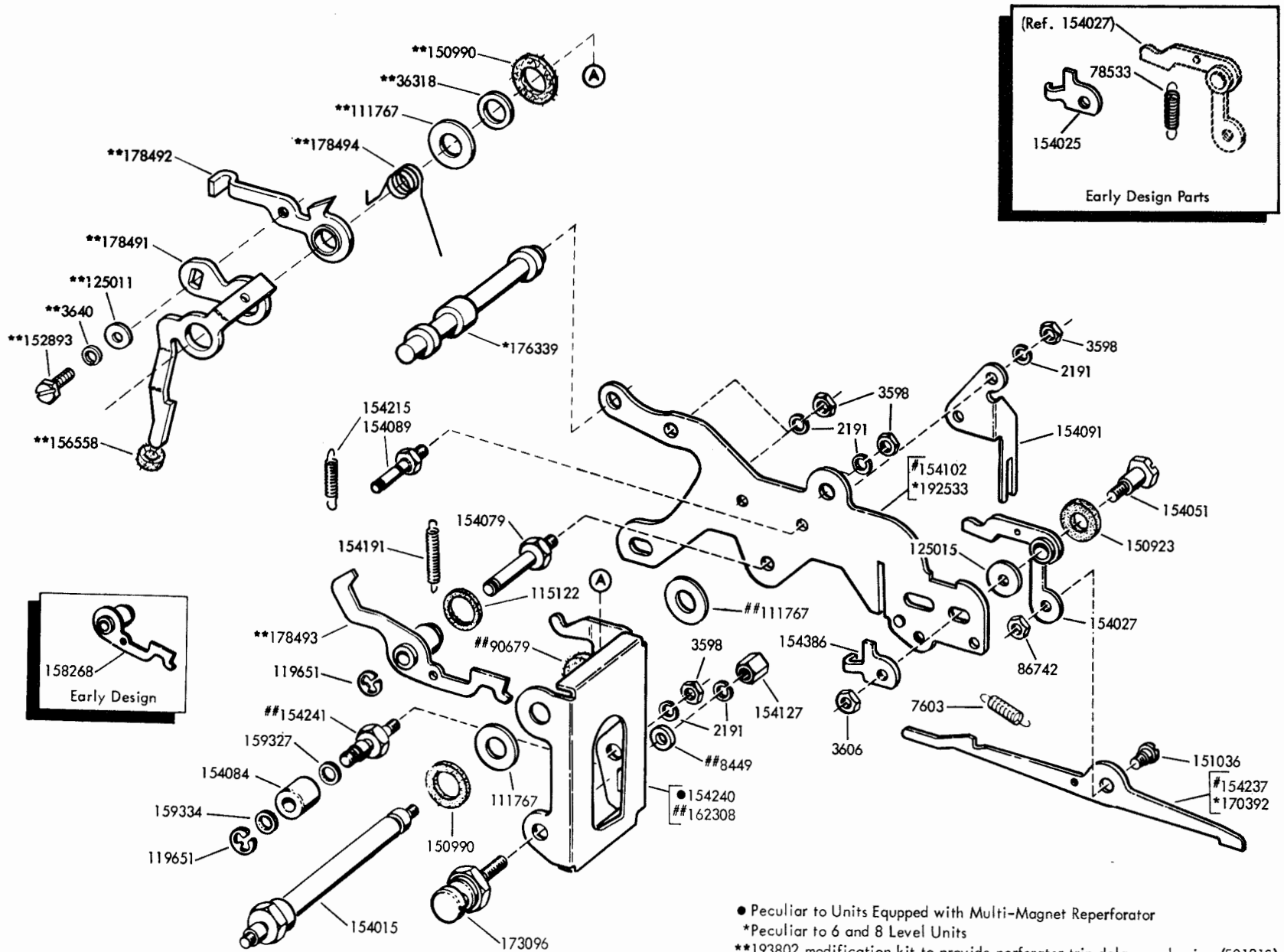
FIGURE 21. SIGNAL GENERATOR FRONT PLATE MECHANISM



	Transfer Levers			Slot No.
	(5 Level)	(6 Level)	(8 Level)	
T	154040	160090	160090	1
r	154040		160090	2
a	154040		160090	3
n	154040	160090	160090	4
s	154040	160090	160090	5
L	154040	160090	160090	5
f	154040	160090	170383	6
e	154040	170381	170381	7
v		160090	170382	8
r		160090	160090	9
r		170086	160090	10

*Peculiar to 6 and 8 Level Units Only
 **Peculiar to 5 Level Units Only

FIGURE 22. SIGNAL GENERATOR REAR PLATE MECHANISM



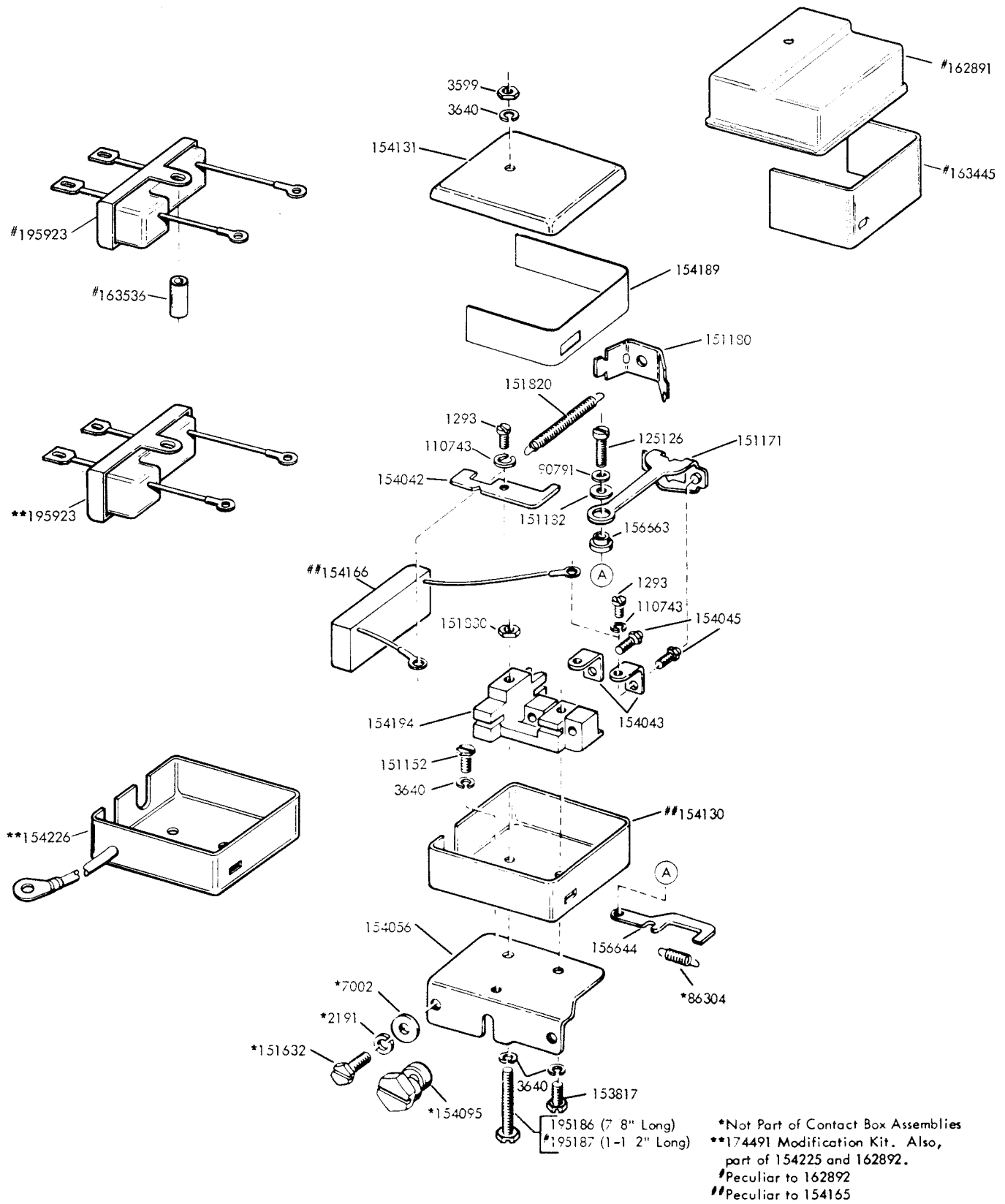
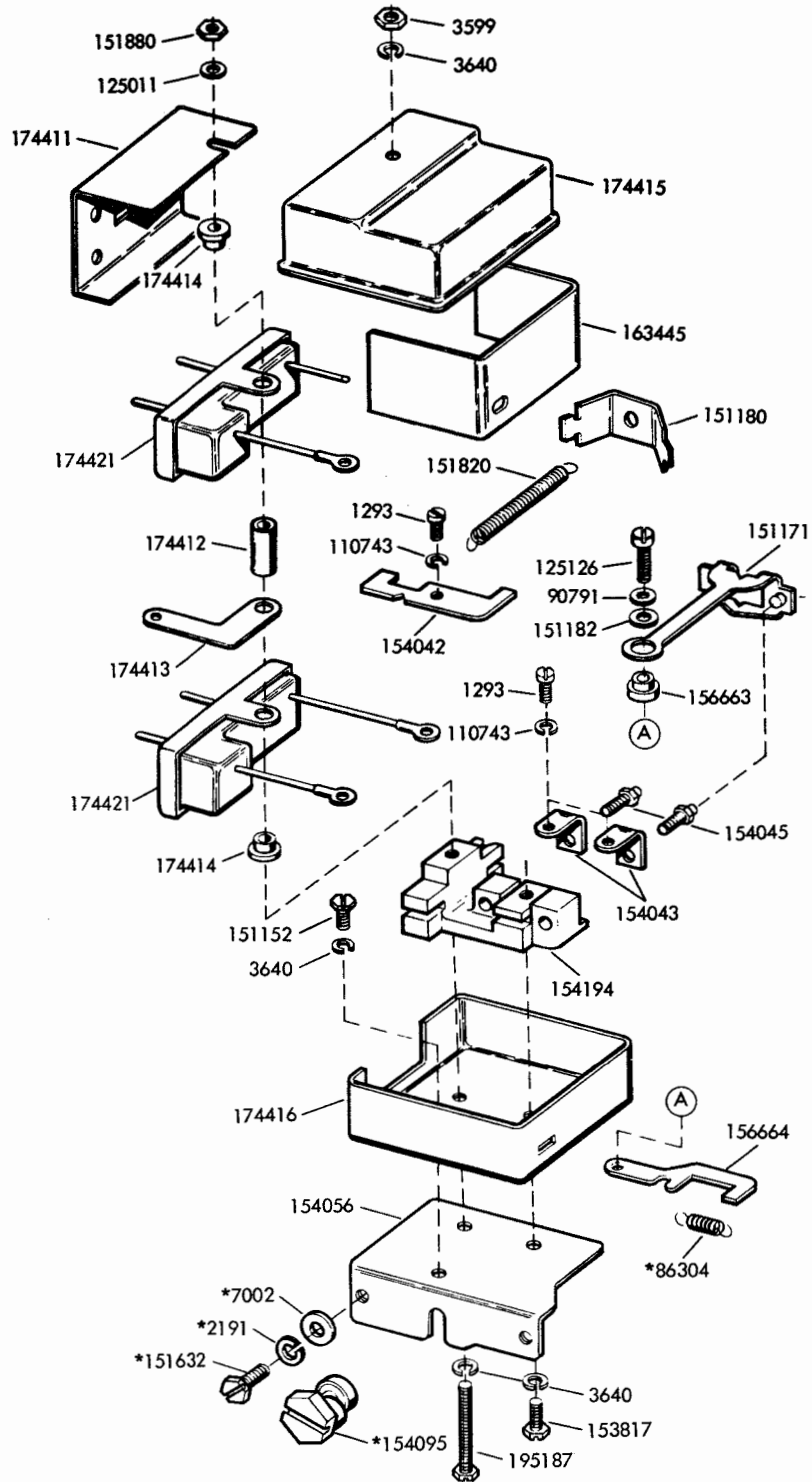


FIGURE 23. 154165 (W, ARC SUPPRESSION) 154225 (W, RF SUPPRESSION) - NEUTRAL TRANSMISSION AND 162892 (W, RF SUPPRESSION - POLAR TRANSMISSION) CONTACT BOX ASSEMBLIES



*Not Part of 174410

FIGURE 24. 174410 CONTACT BOX ASSEMBLY W/RF SUPPRESSION - POLAR TRANSMISSION (SHIELDED SIGNAL LINES)

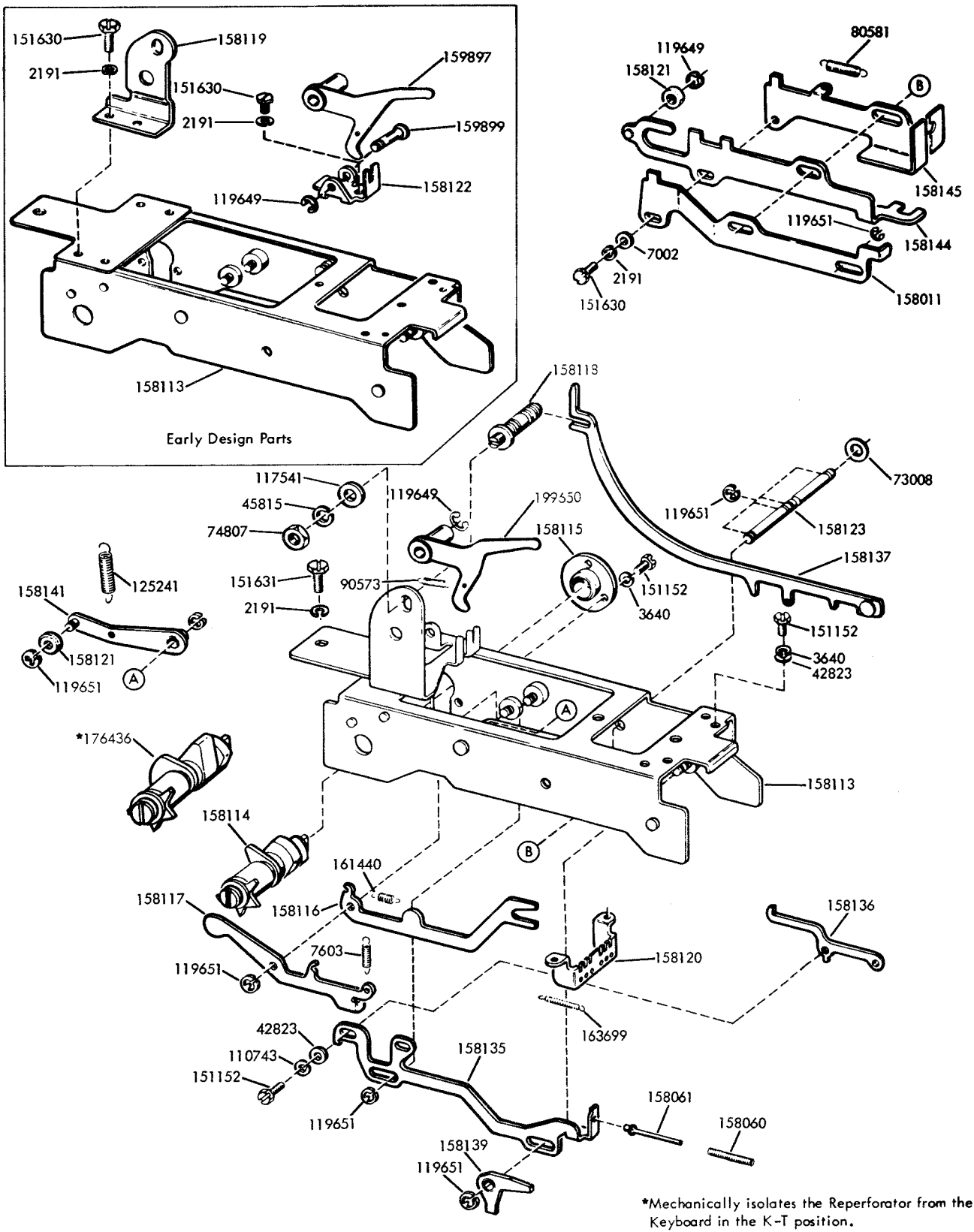


FIGURE 25. CODE BAR EXTENSION BASKET MECHANISM

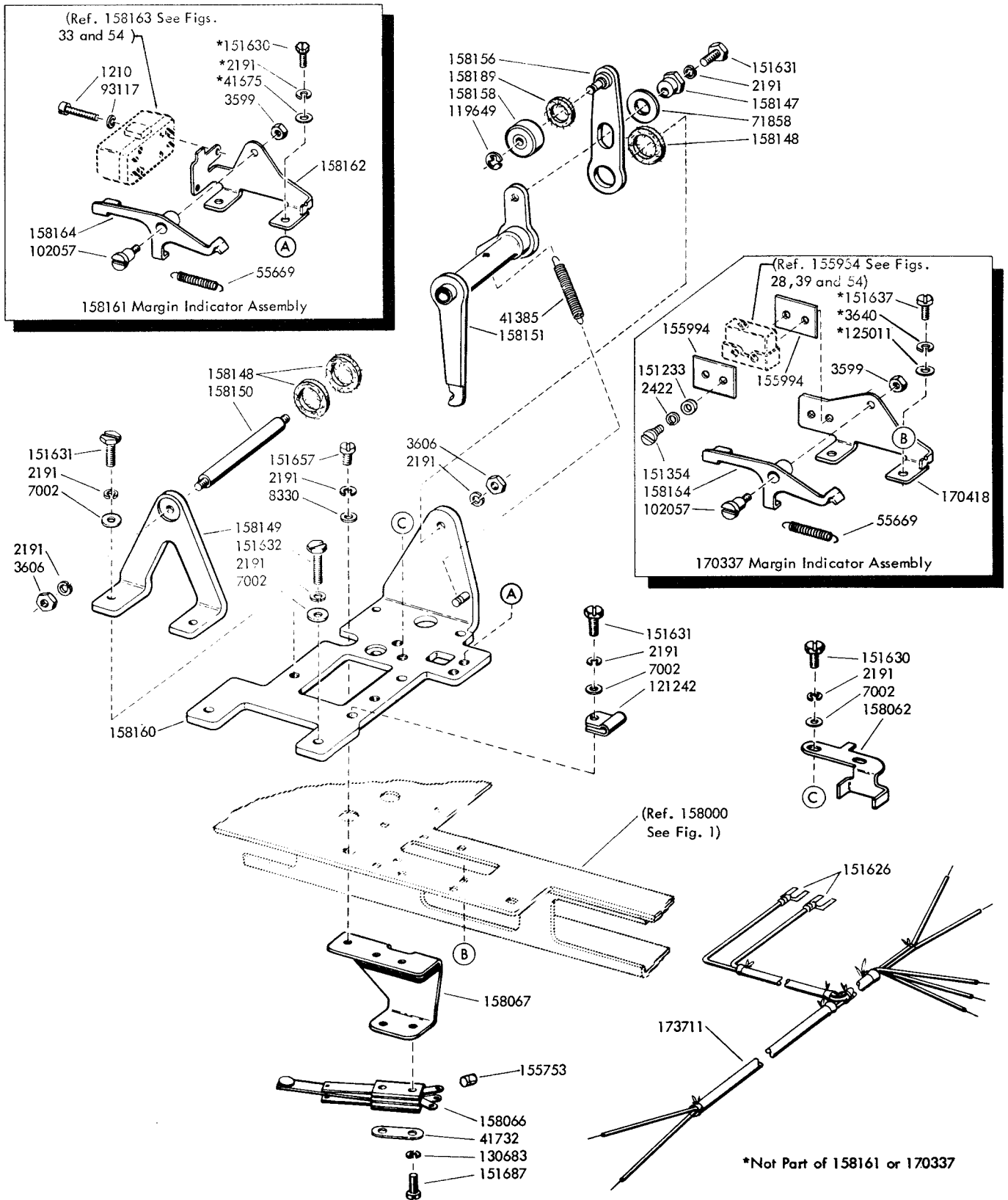


FIGURE 26. CAM FOLLOWER MECHANISM AND MARGIN INDICATOR ASSEMBLIES

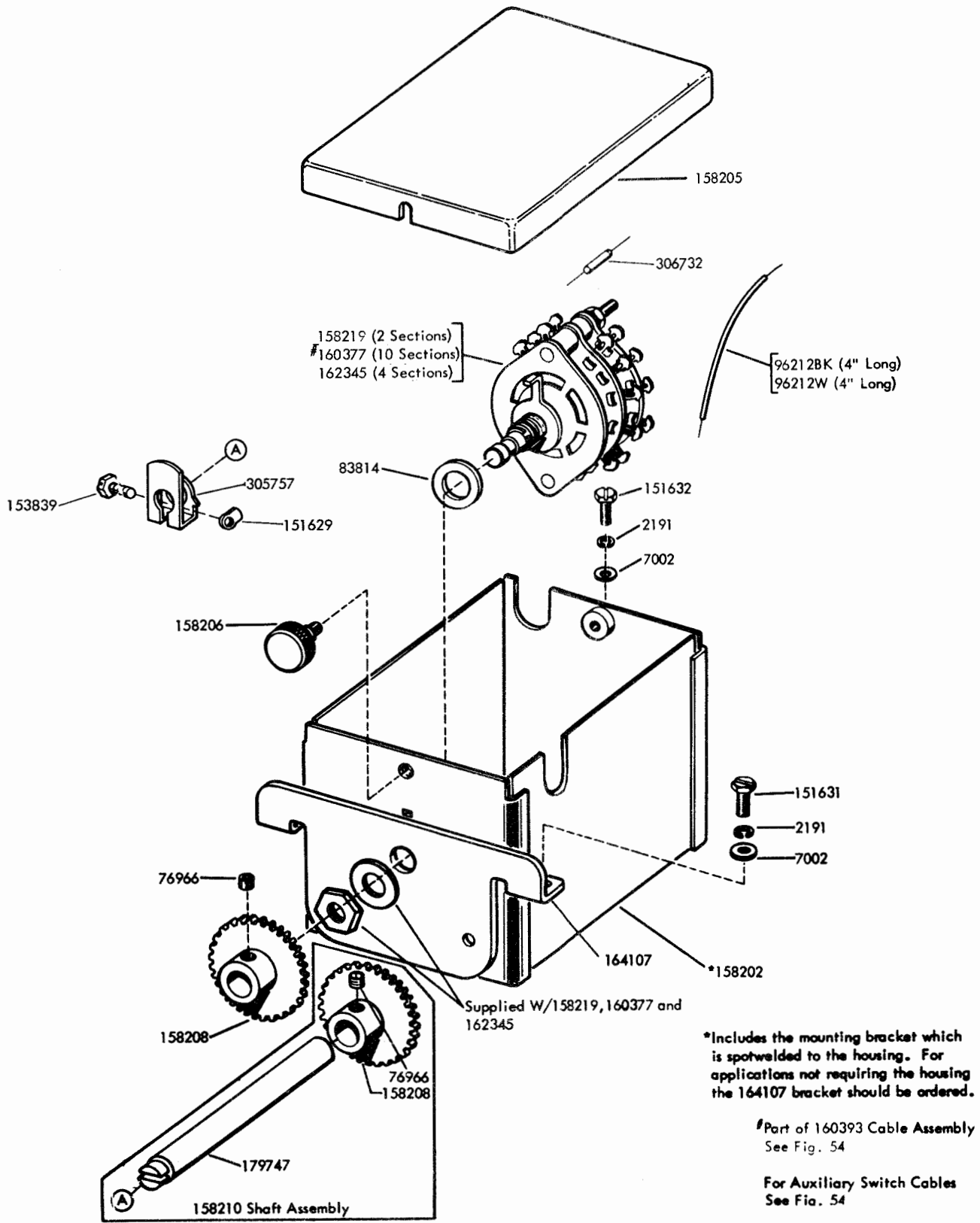
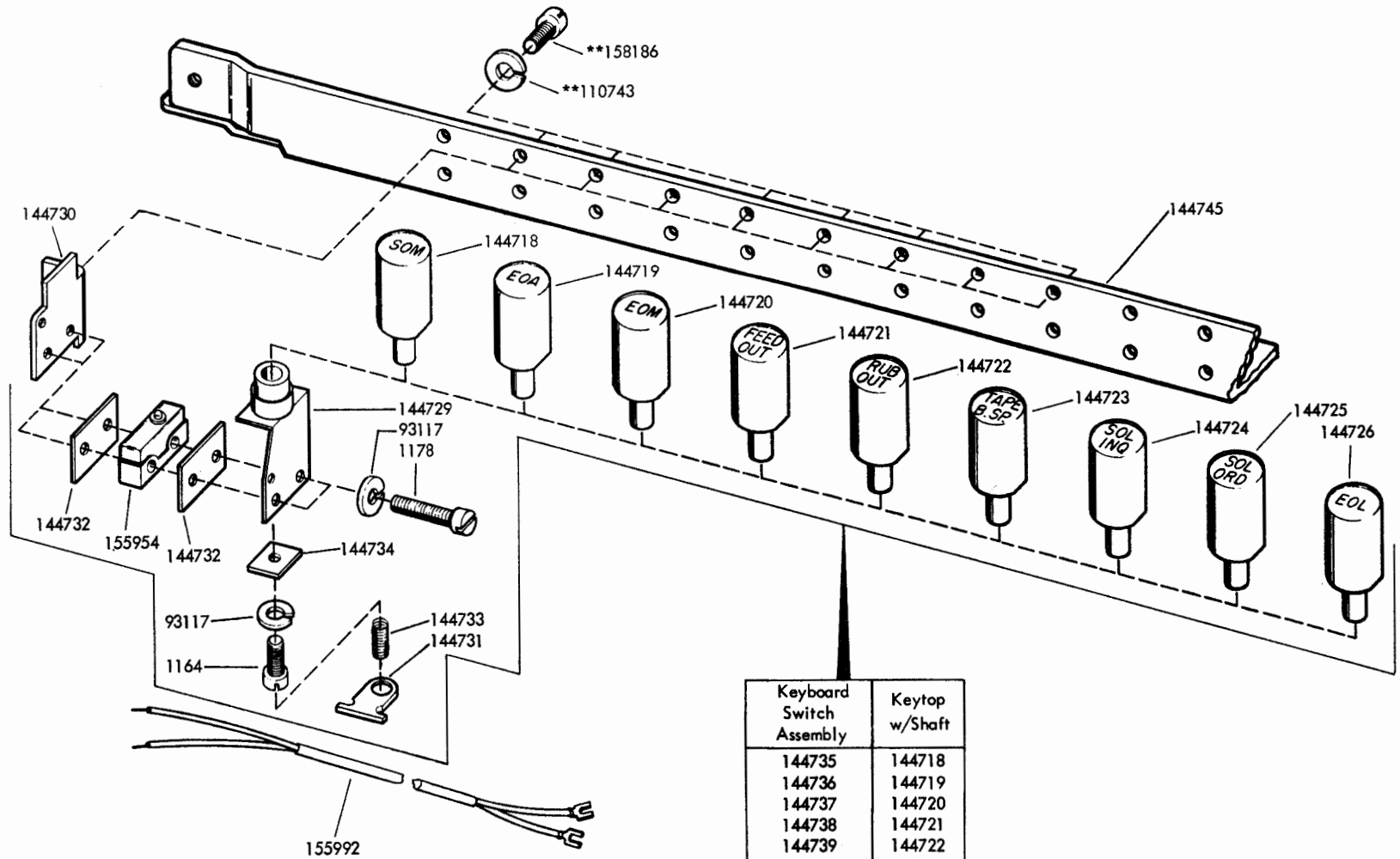


FIGURE 27. AUXILIARY SWITCH MECHANISM

FIGURE 28. KEYBOARD SWITCH ASSEMBLIES



Keyboard Switch Assembly	Keytop w/Shaft
144735	144718
144736	144719
144737	144720
144738	144721
144739	144722
*144740	144723
***147069	144724
***147070	144725
***147071	144726
	199100
	199101
	199102
	199103

*Also Includes 155992 Cable Assembly
 **Not Part Of Keyboard Switch Assemblies
 ***No Longer Available

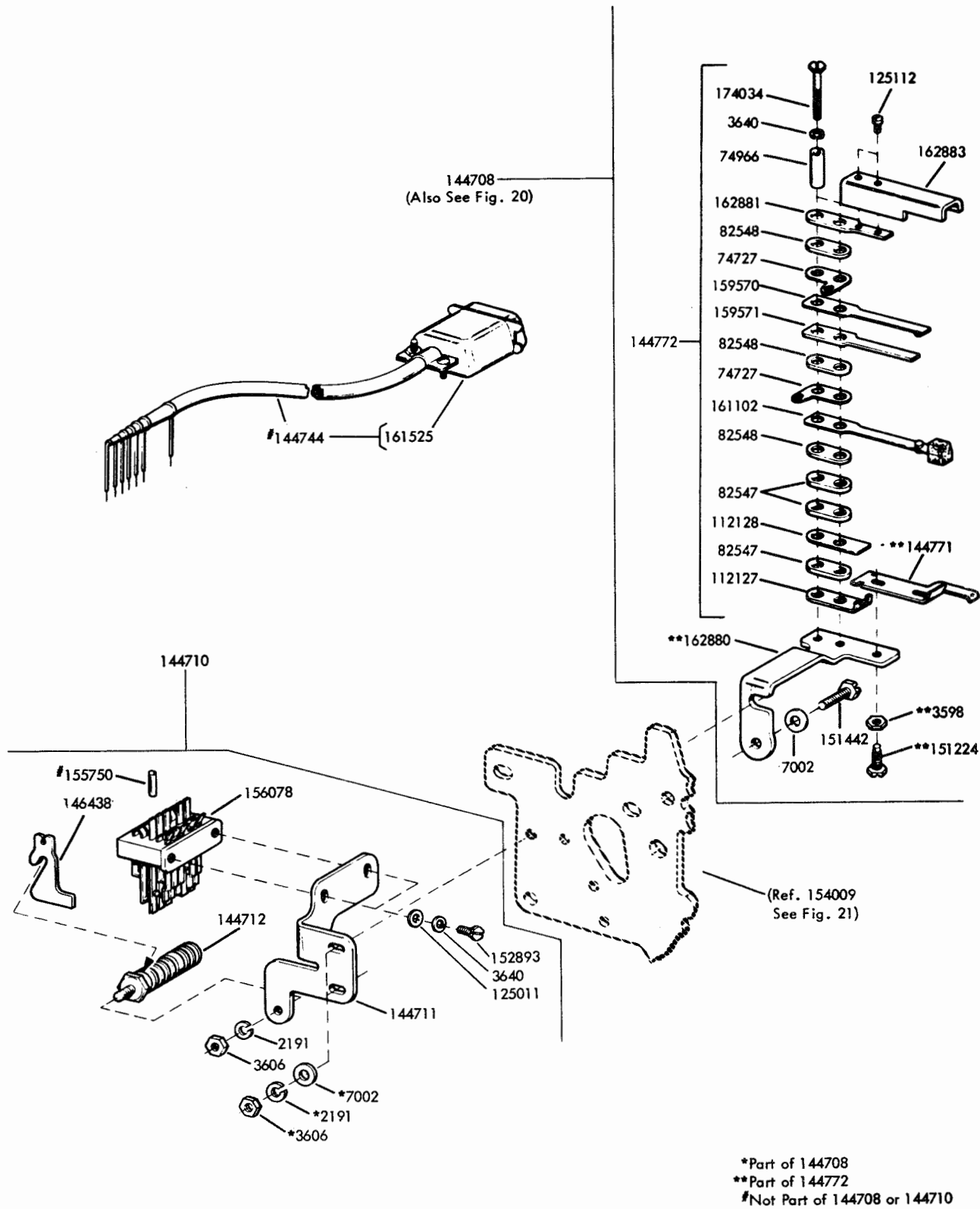
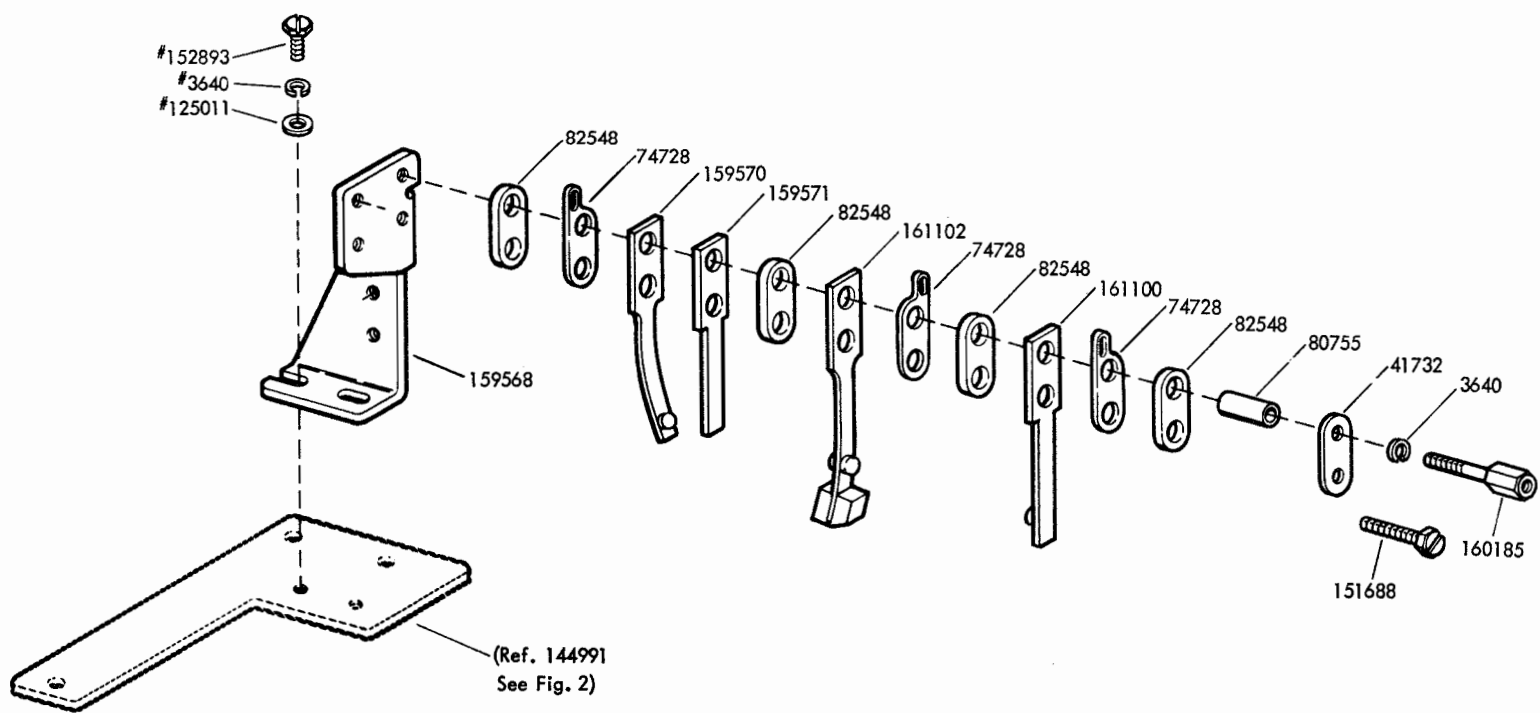
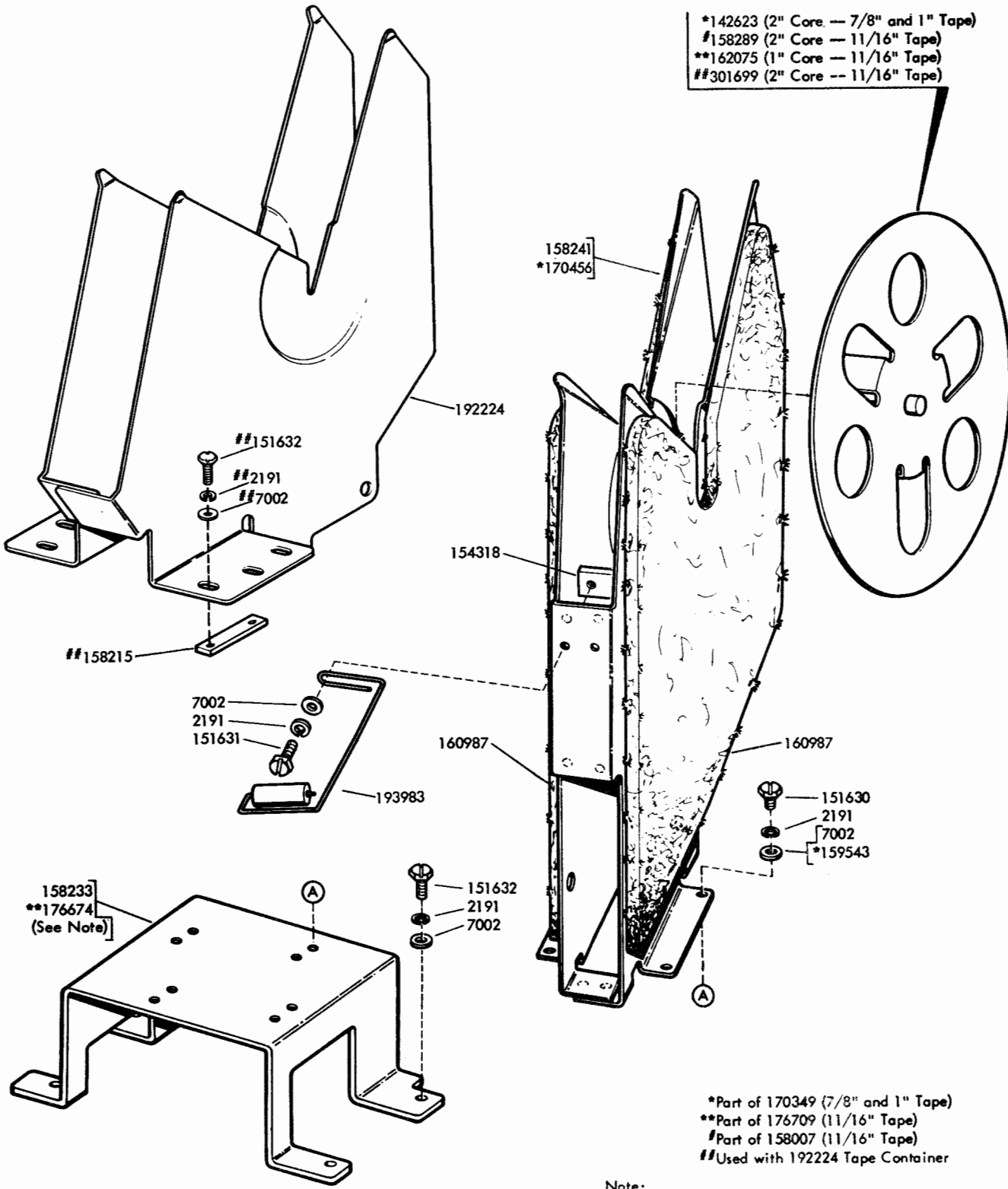


FIGURE 29. 144708 (FUNCTION MAGNET CONTACT) AND 144710 (CODE READING CONTACTS) MODIFICATION KITS

FIGURE 30. 144997 FIGURES - LETTERS CONTACT ASSEMBLY





*142623 (2" Core -- 7/8" and 1" Tape)
 #158289 (2" Core -- 11/16" Tape)
 **162075 (1" Core -- 11/16" Tape)
 ##301699 (2" Core -- 11/16" Tape)

*Part of 170349 (7/8" and 1" Tape)
 **Part of 176709 (11/16" Tape)
 #Part of 158007 (11/16" Tape)
 ##Used with 192224 Tape Container

Note:
 The 176674 bracket is used to mount the
 tape container when a perforator is motorized.

FIGURE 31. 158007, 170349 AND 176709 TAPE CONTAINER ASSEMBLIES

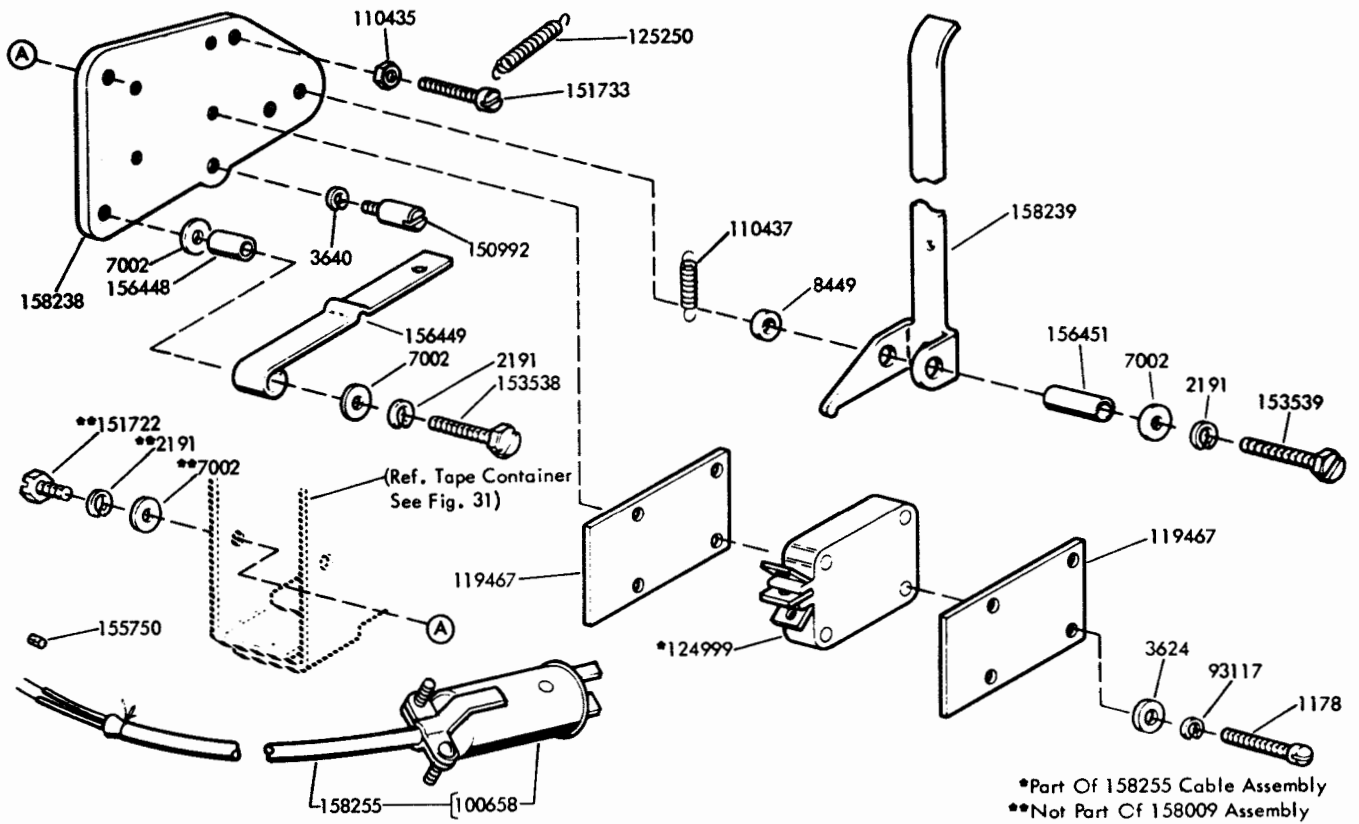


FIGURE 32. 158009 (TWO WIRE) TAPE-OUT SWITCH ASSEMBLY

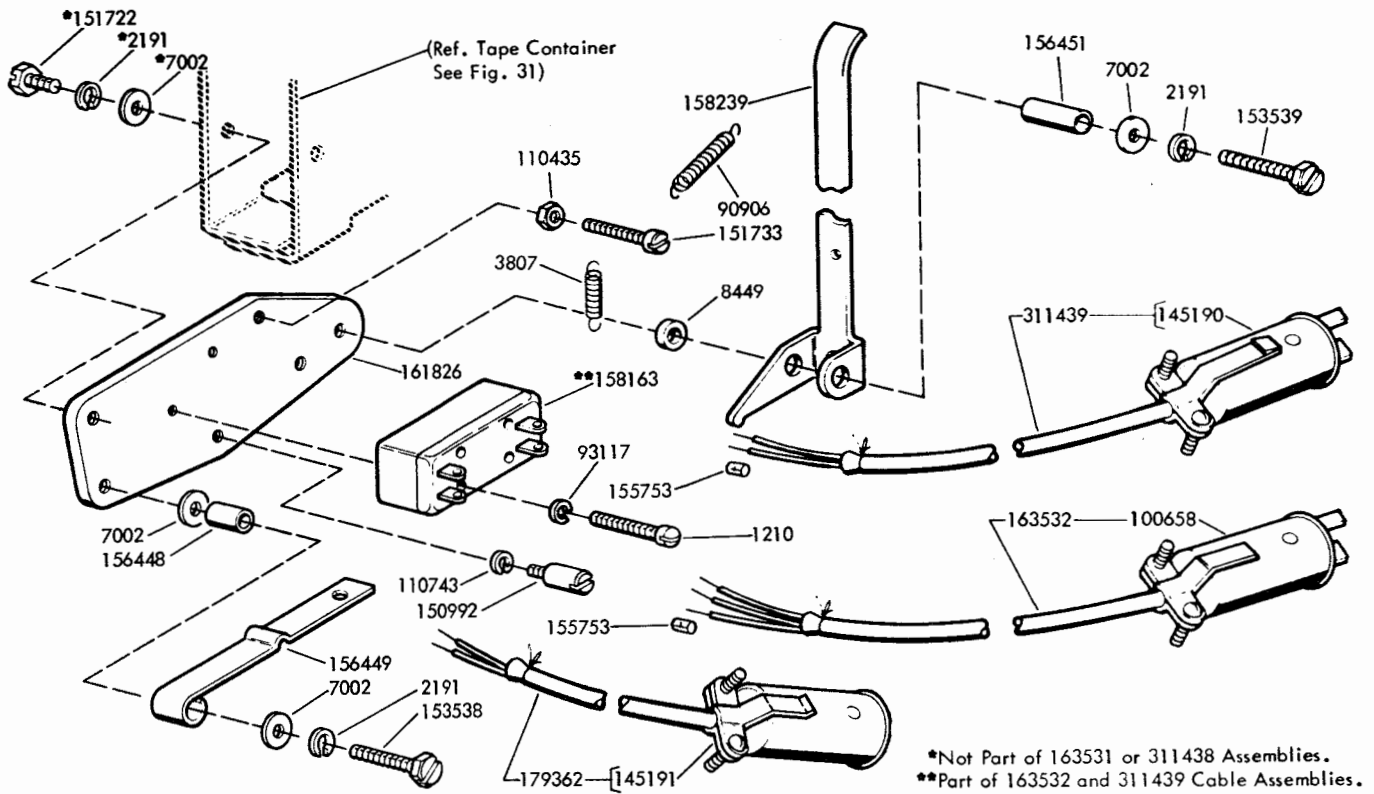


FIGURE 33. 163531 (THREE WIRE) AND 311438 (TWO WIRE) TAPE-OUT SWITCH ASSEMBLIES

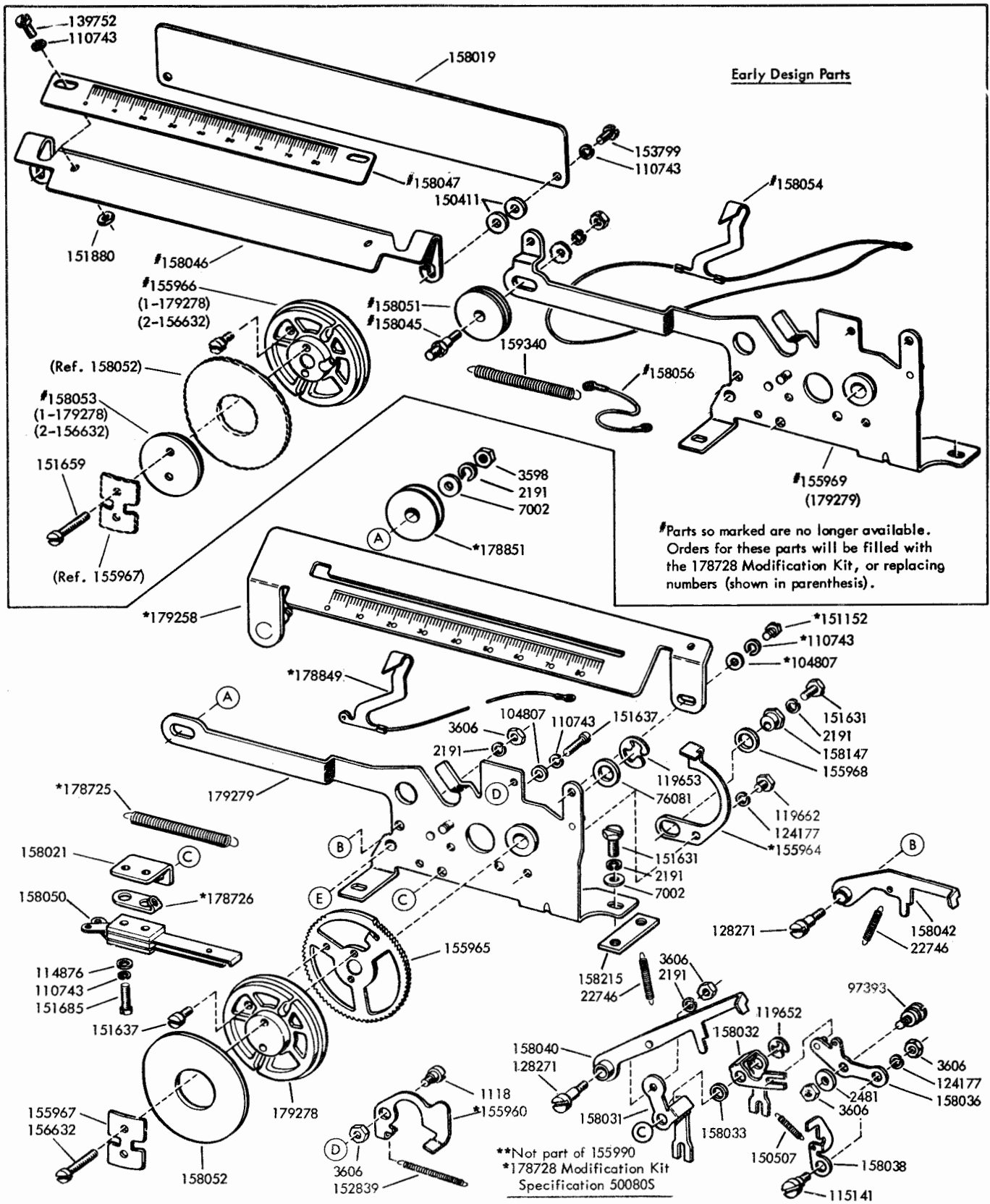


FIGURE 34. 155990 CHARACTER COUNTER ASSEMBLY

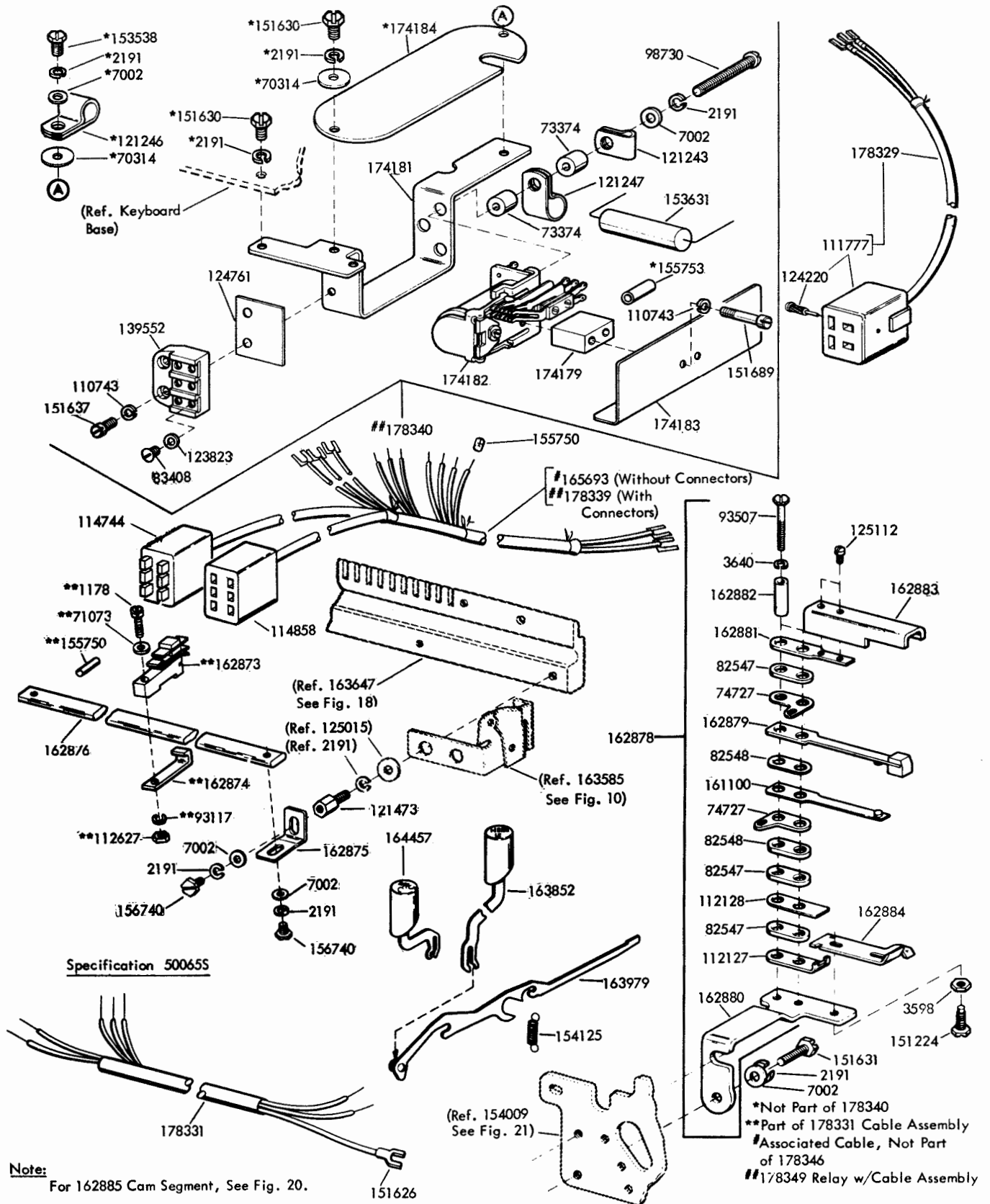


FIGURE 35. 178346 MODIFICATION KIT TO EQUIP KEYBOARD WITH ANSWER-BACK CONTROL

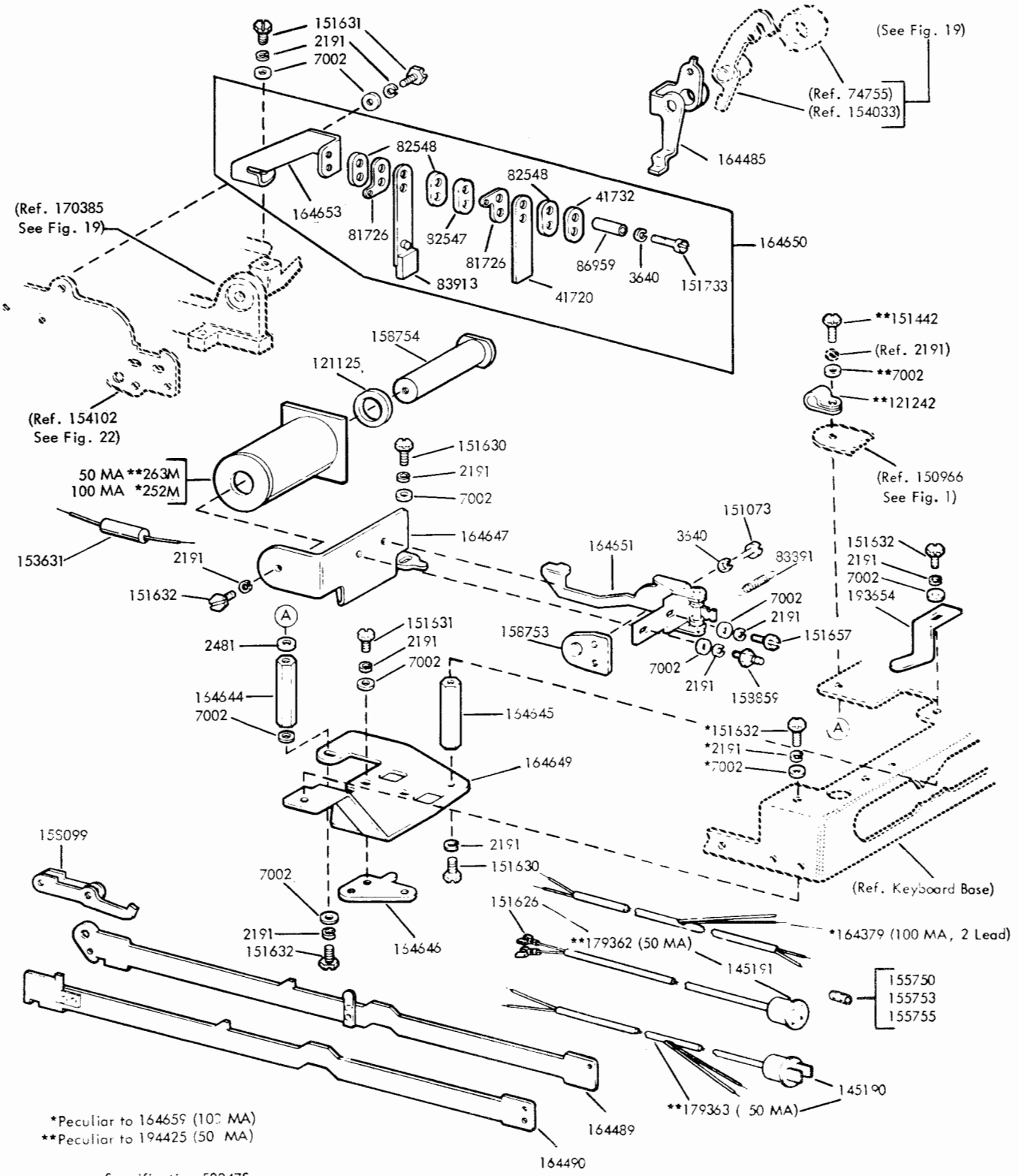


FIGURE 36. 164659 (100 MA) AND 194425 (50 MA) MODIFICATION KITS TO PROVIDE SYNCHRONOUS PULSED TRANSMISSION

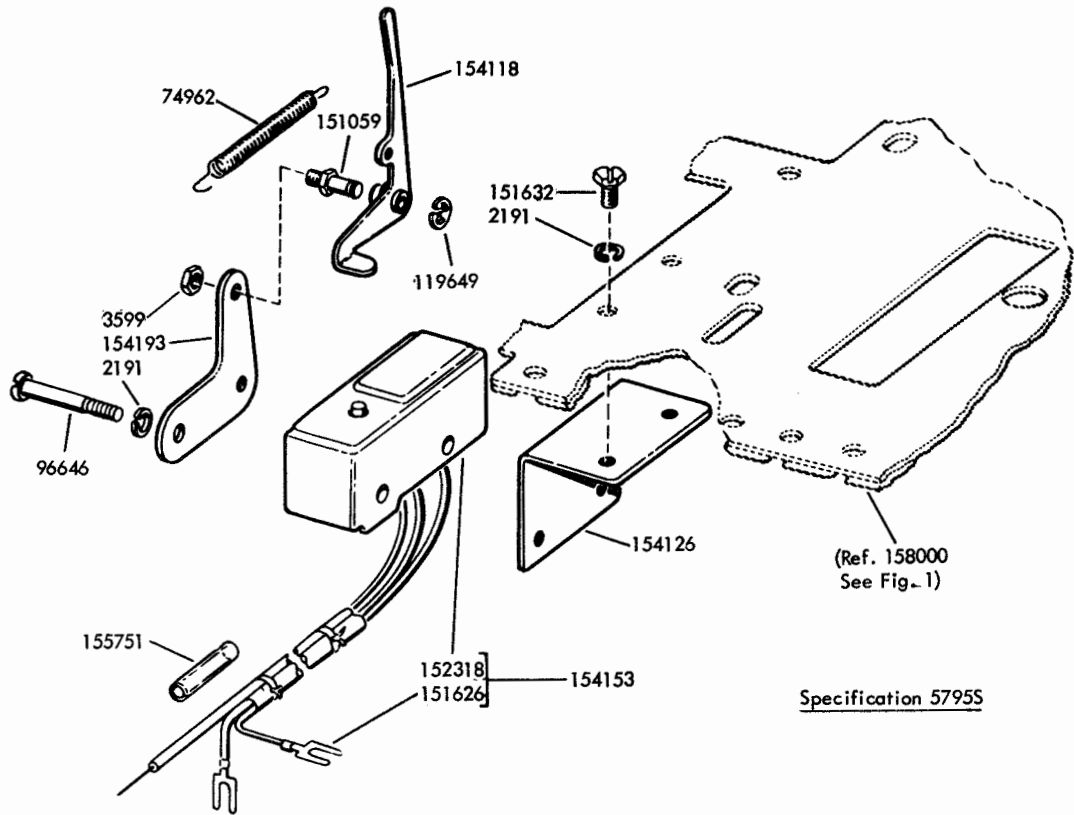


FIGURE 37. 154147 MODIFICATION KIT TO PROVIDE LOCAL PAPER FEED-OUT MOTOR STARTING MECHANISM

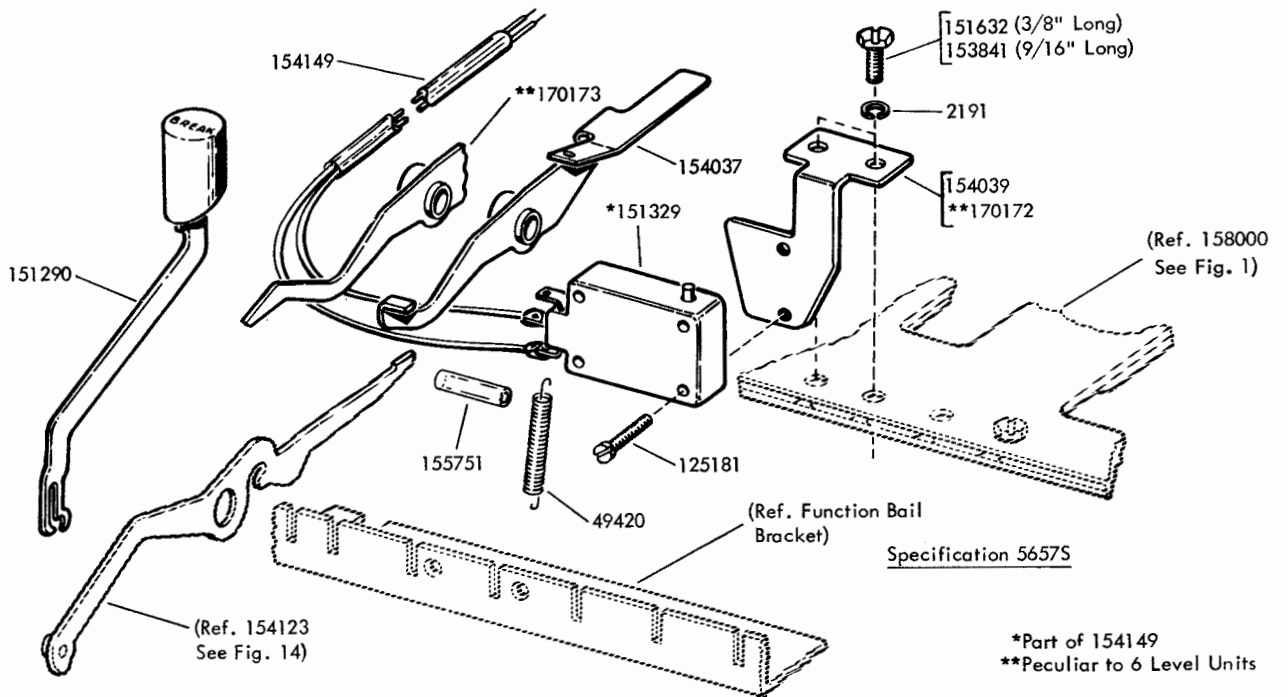


FIGURE 38. 154141 MODIFICATION KIT TO PROVIDE ELECTRICAL SIGNAL LINE BREAK MECHANISM

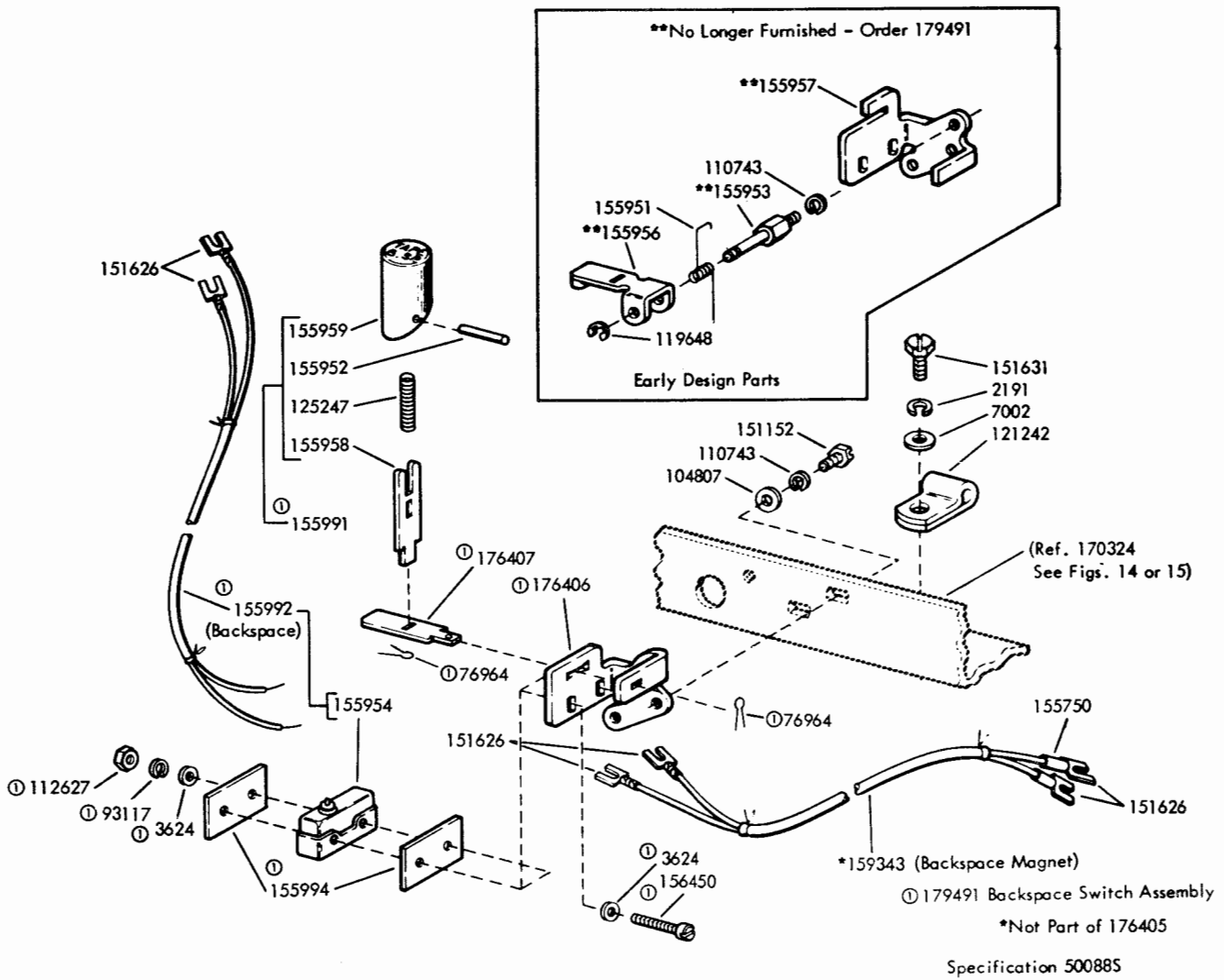


FIGURE 39. 176405 MODIFICATION KIT TO ADD TAPE BACKSPACE BUTTON

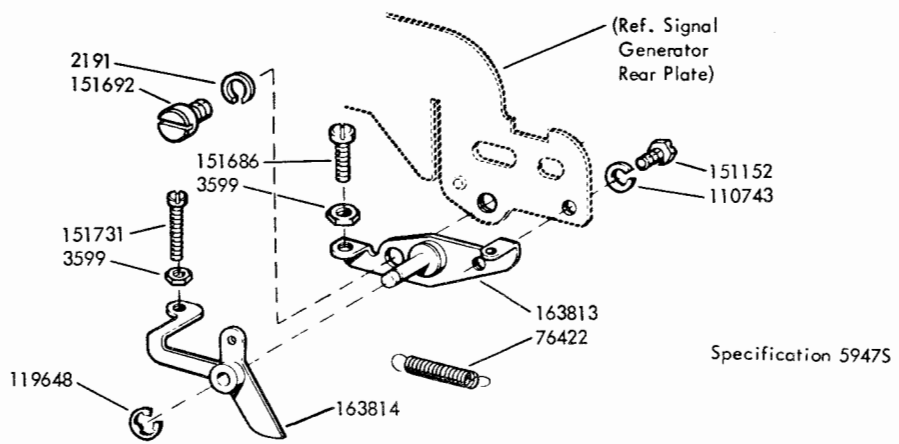
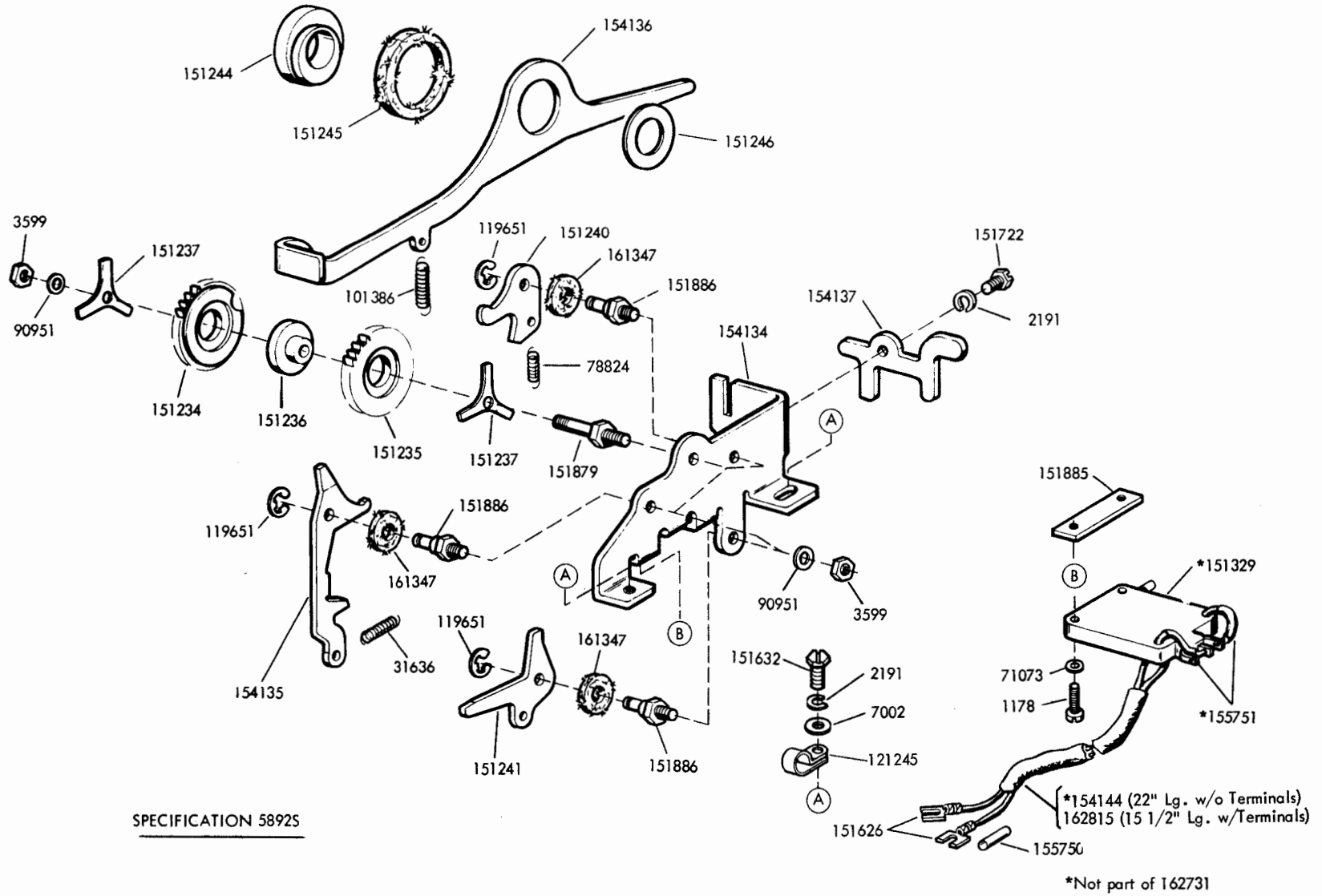
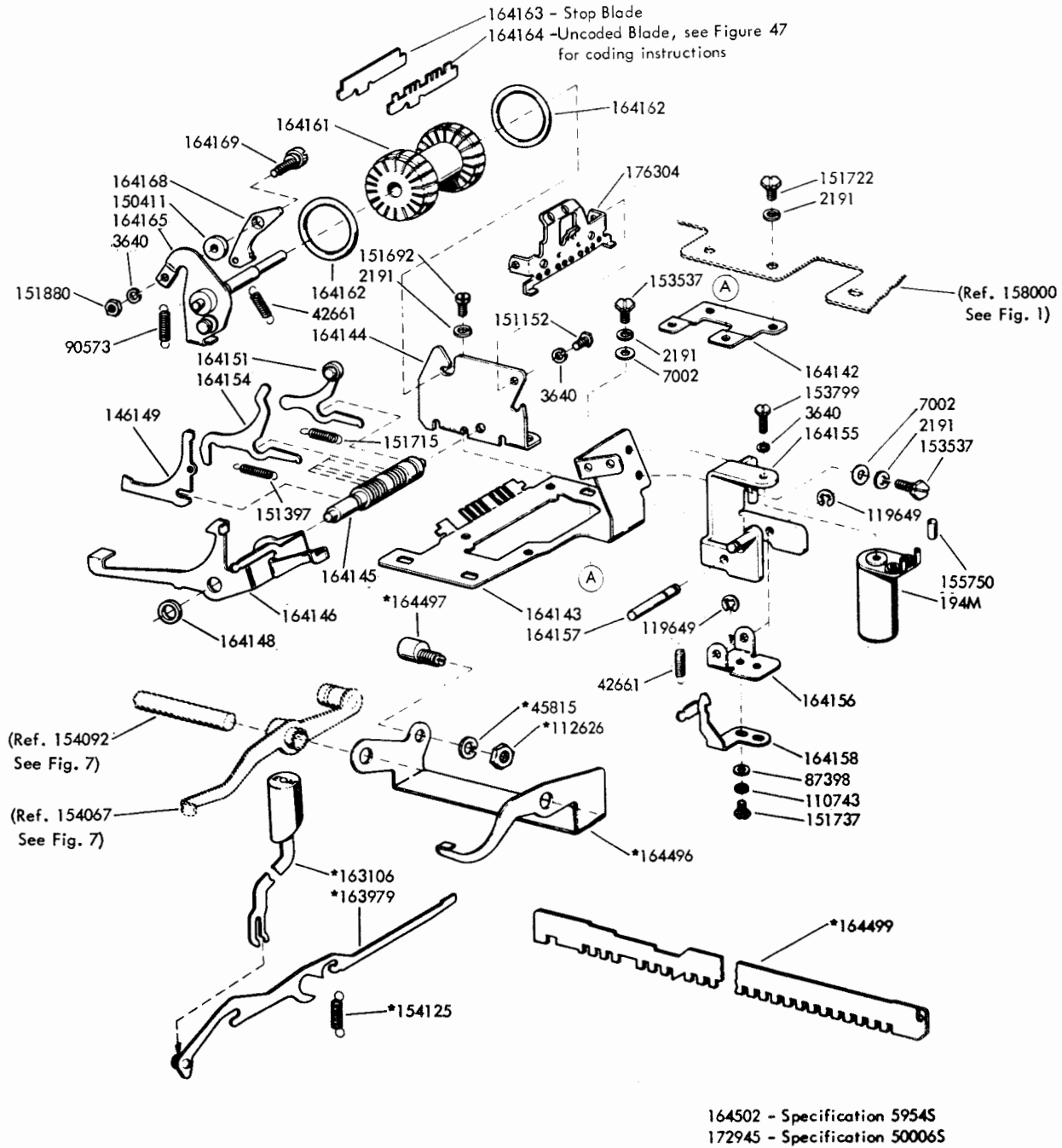


FIGURE 40. 163775 MODIFICATION KIT TO PROVIDE REPEAT ON SPACE MECHANISM

FIGURE 41. 162731 MODIFICATION KIT TO PROVIDE KEYBOARD WITH TIME
DELAY MECHANISM





*Peculiar to 164502 Only

FIGURE 42. 164502 (END OF MESSAGE GENERATOR) AND 172945 (ANSWER-BACK) MODIFICATION KITS - SEE FIGS. 43, 44 AND 45

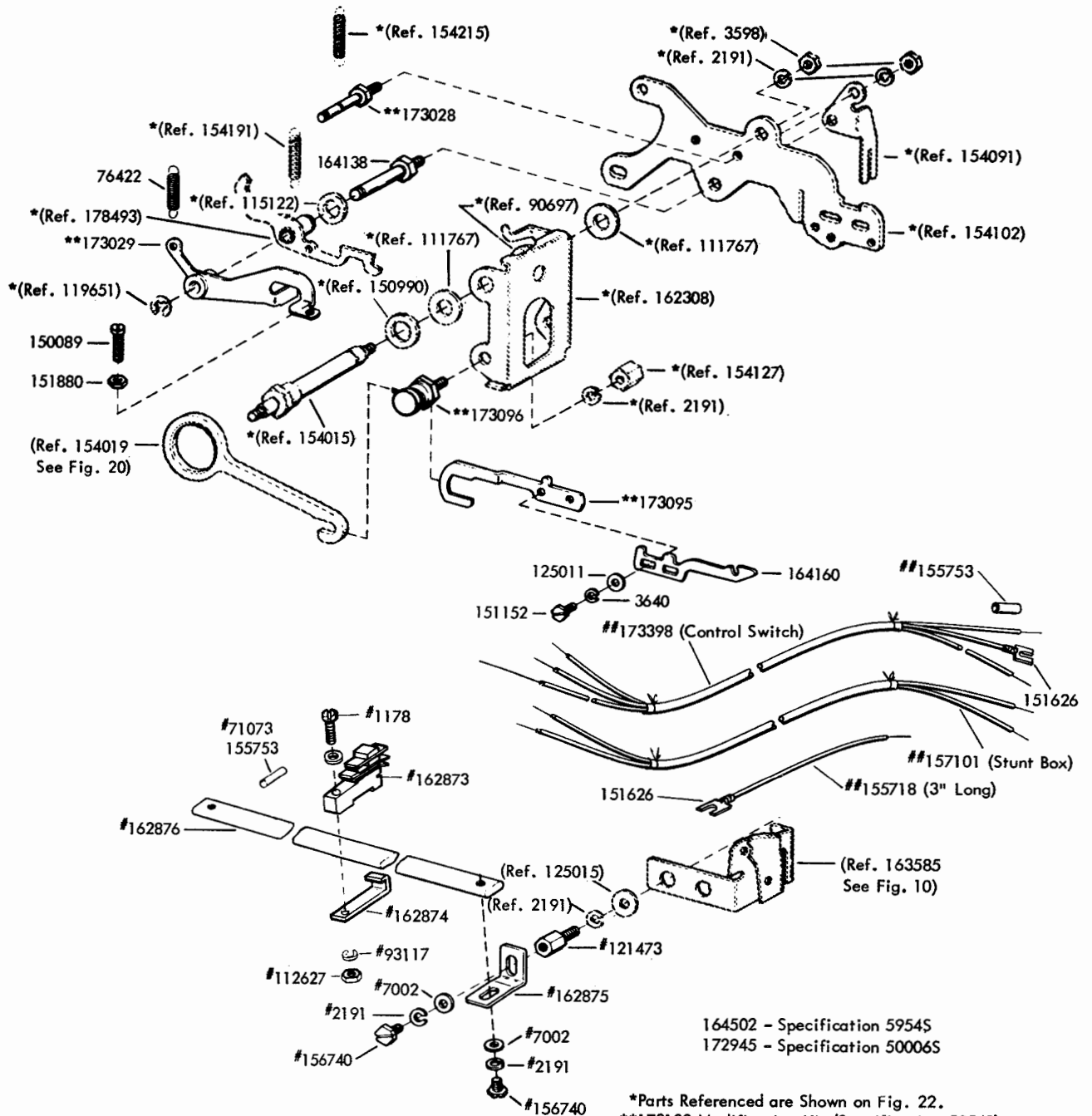


FIGURE 43. 164502 (END OF MESSAGE GENERATOR) AND 172945 (ANSWER-BACK) MODIFICATION KITS - SEE FIGS. 42, 44 AND 45.

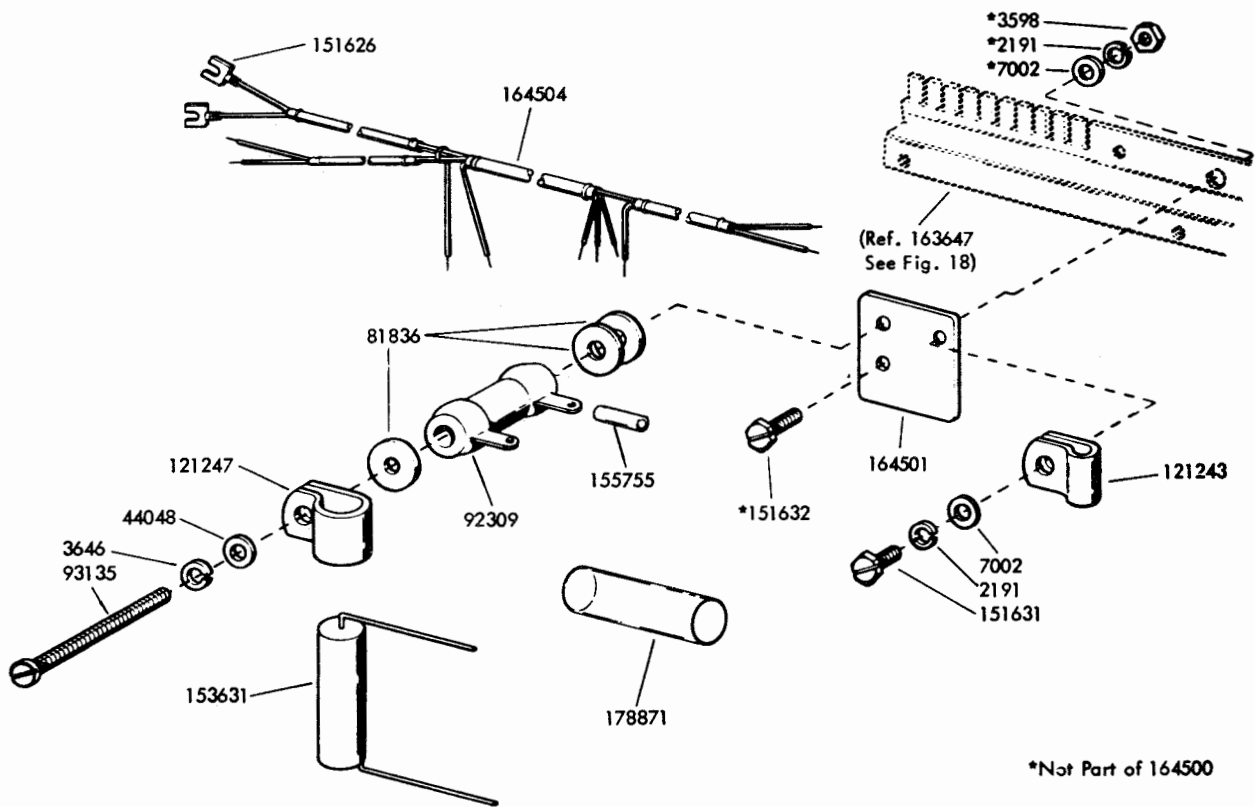


FIGURE 44. 164500 RESISTOR ASSEMBLY (PART OF 164502 MODIFICATION KIT - SEE FIGS. 42 AND 43)

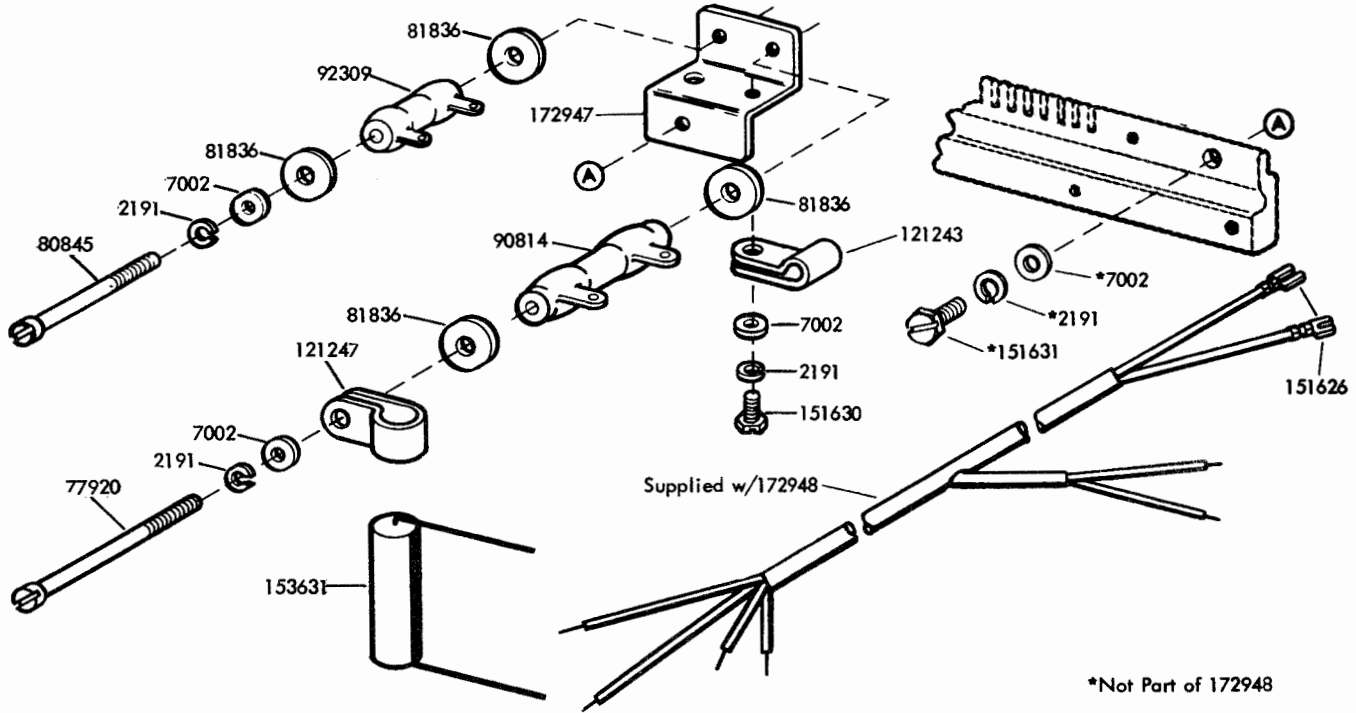


FIGURE 45. 172948 RESISTOR ASSEMBLY (PART OF 172945 MODIFICATION KIT SEE FIGS. 42 AND 43)

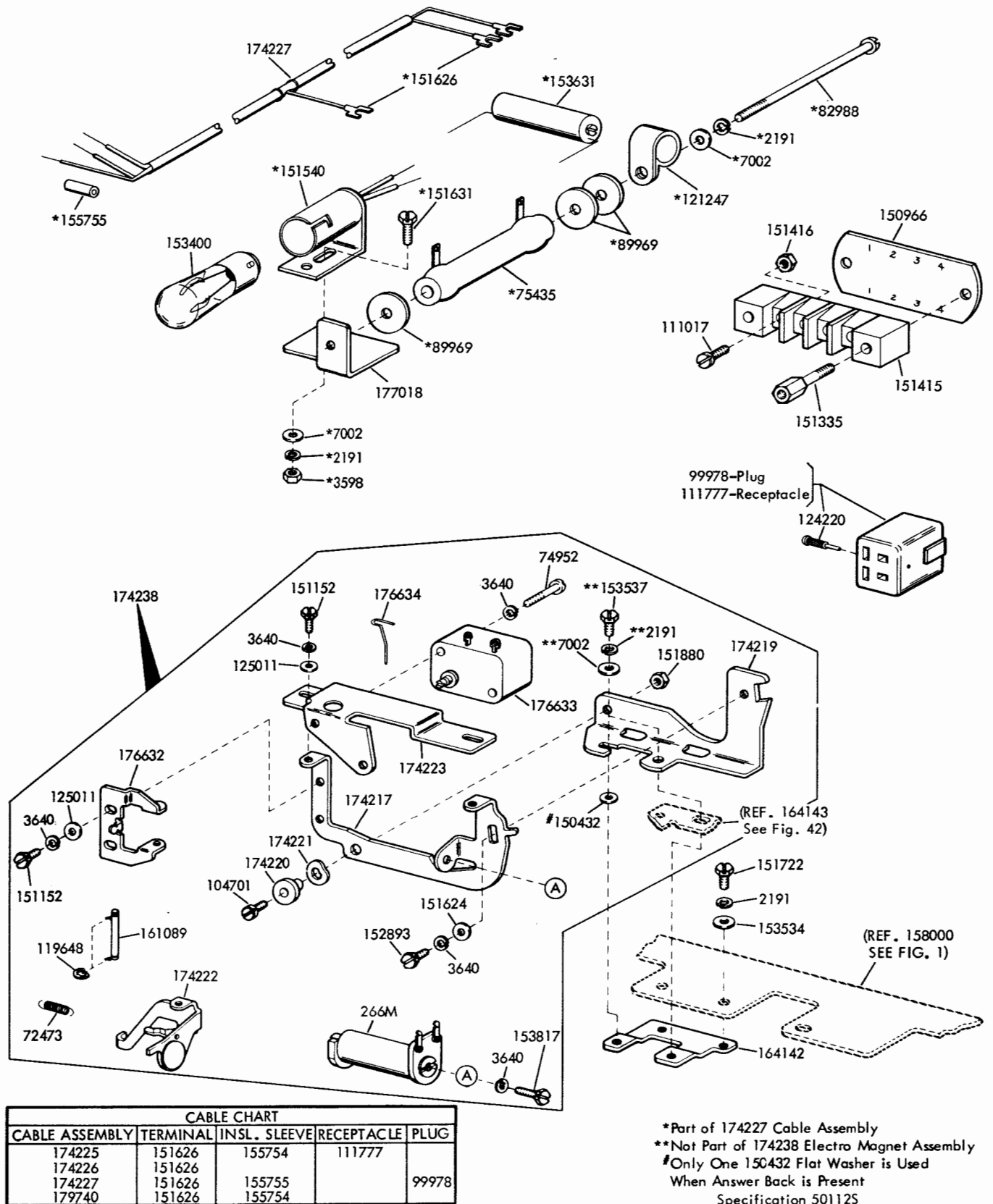
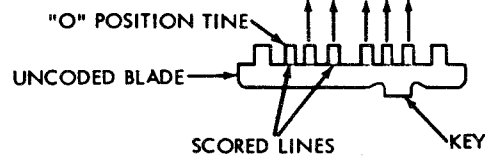


FIGURE 46. 164426 MODIFICATION KIT TO ADD HORIZONTAL TAB DISABLER

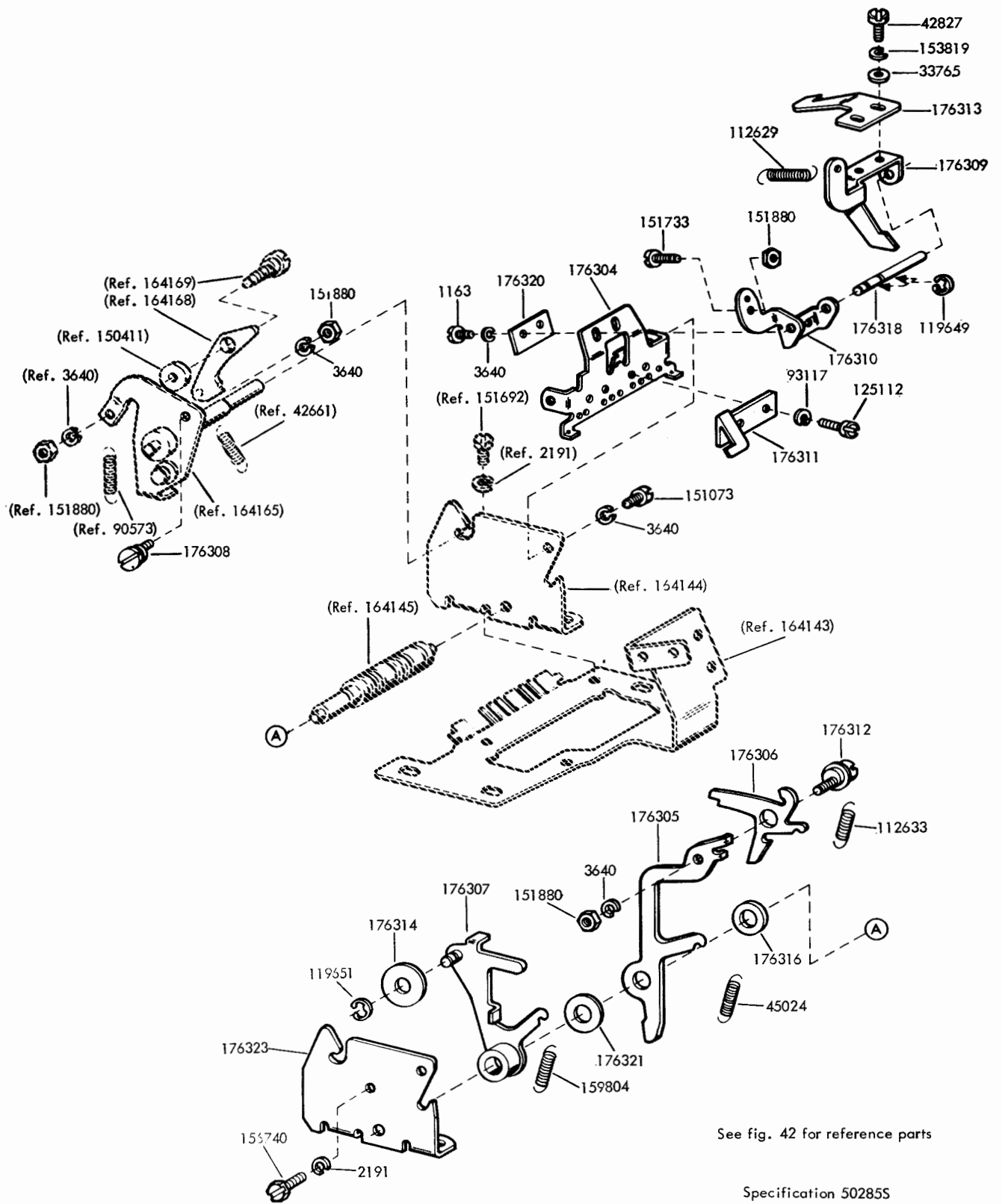
CHARACTER	CODE				
	1	2	3	4	5
A	X	X			
B	X			X	X
C		X	X	X	
D	X			X	
E	X				
F	X		X	X	
G		X		X	X
H			X		X
I		X	X		
J	X	X		X	
K	X	X	X	X	
L		X			X
M			X	X	X
N				X	X
O				X	X
P		X	X		X
Q	X	X	X	X	
R		X		X	
S	X		X		
T					X
U	X	X	X		
V		X	X	X	X
W	X	X			X
X	X		X	X	X
Y	X		X		X
Z	X				X
CARRIAGE RETURN				X	
LINE FEED		X			
LETTERS SHIFT	X	X	X	X	X
FIGURES SHIFT	X	X		X	X
SPACE			X		
BLANK					

— LEAVE TINE
 — REMOVE TINE



Coding Instructions for the Code Blades used in the Answer Back Feature on an LAK Keyboard Base.

FIGURE 47. CODING THE KEYBOARD ANSWER-BACK DRUM BLADE



See fig. 42 for reference parts

Specification 502855

FIGURE 48. 176395 MODIFICATION KIT TO PROVIDE LOCK BAR RESET TO ANSWER-BACK

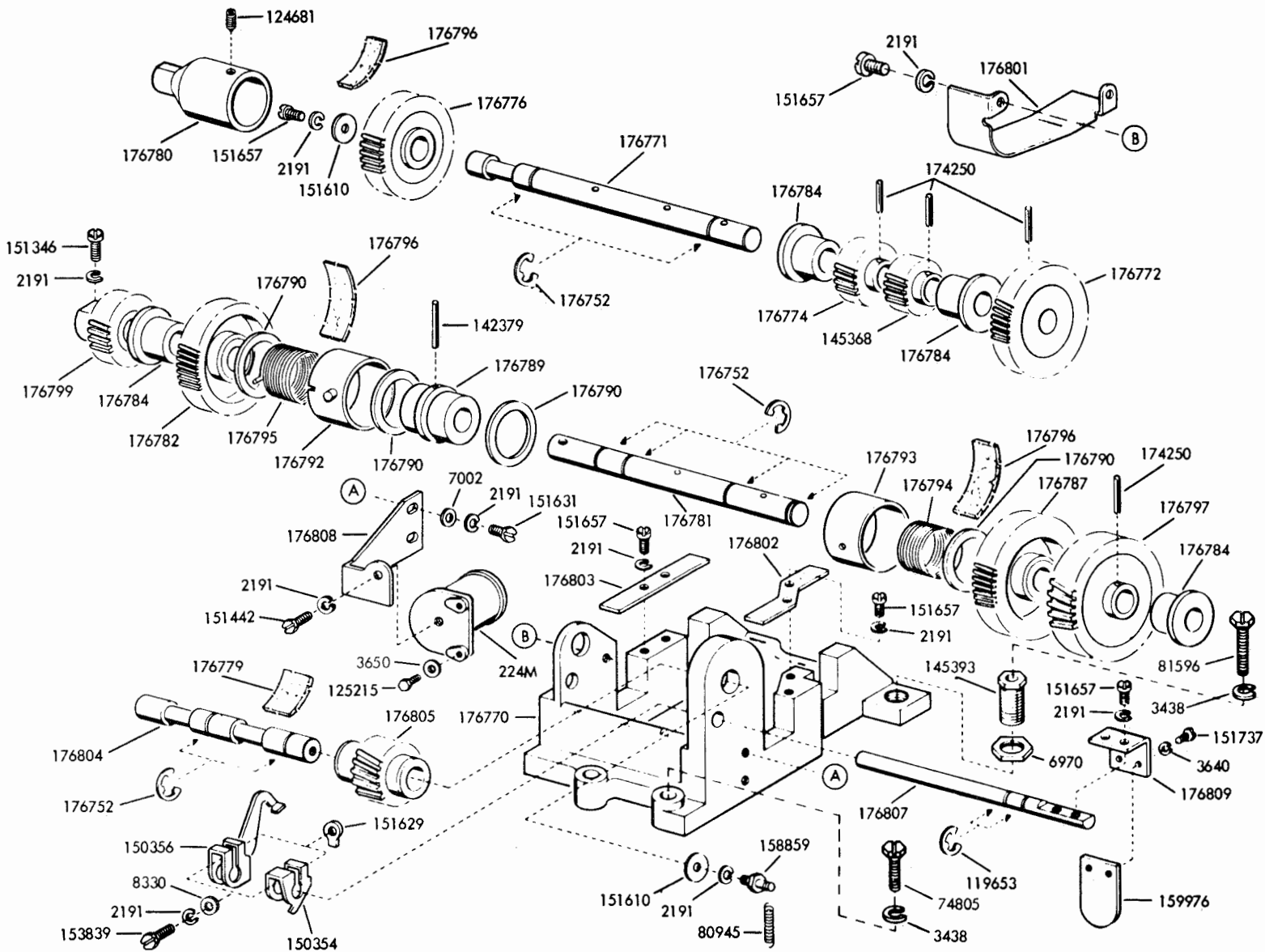


FIGURE 49. REMOTE CONTROL SPEED SHIFT GEAR MECHANISM
(60 - 100 WPM, 7.42 UNIT CODE)

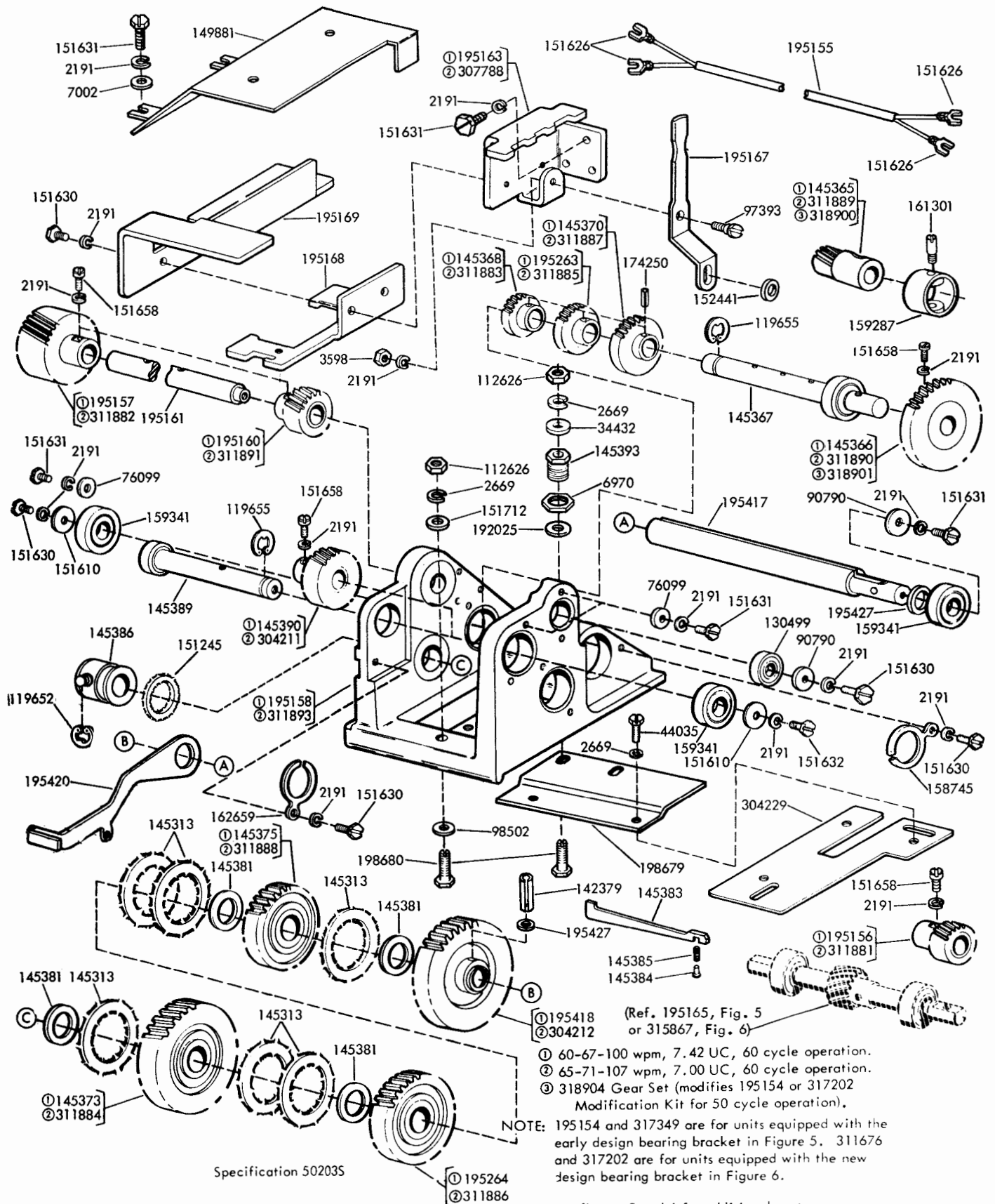


FIGURE 50. 195154 AND 317202 (60-67-100 WPM, 7.42 UNIT CODE) AND 311676 AND 317349 (65-71-107 WPM, 7.00 UNIT CODE) MODIFICATION KITS TO ADD THREE SPEED GEAR SHIFT TO KEYBOARD

See figures 5 and 6 for additional parts

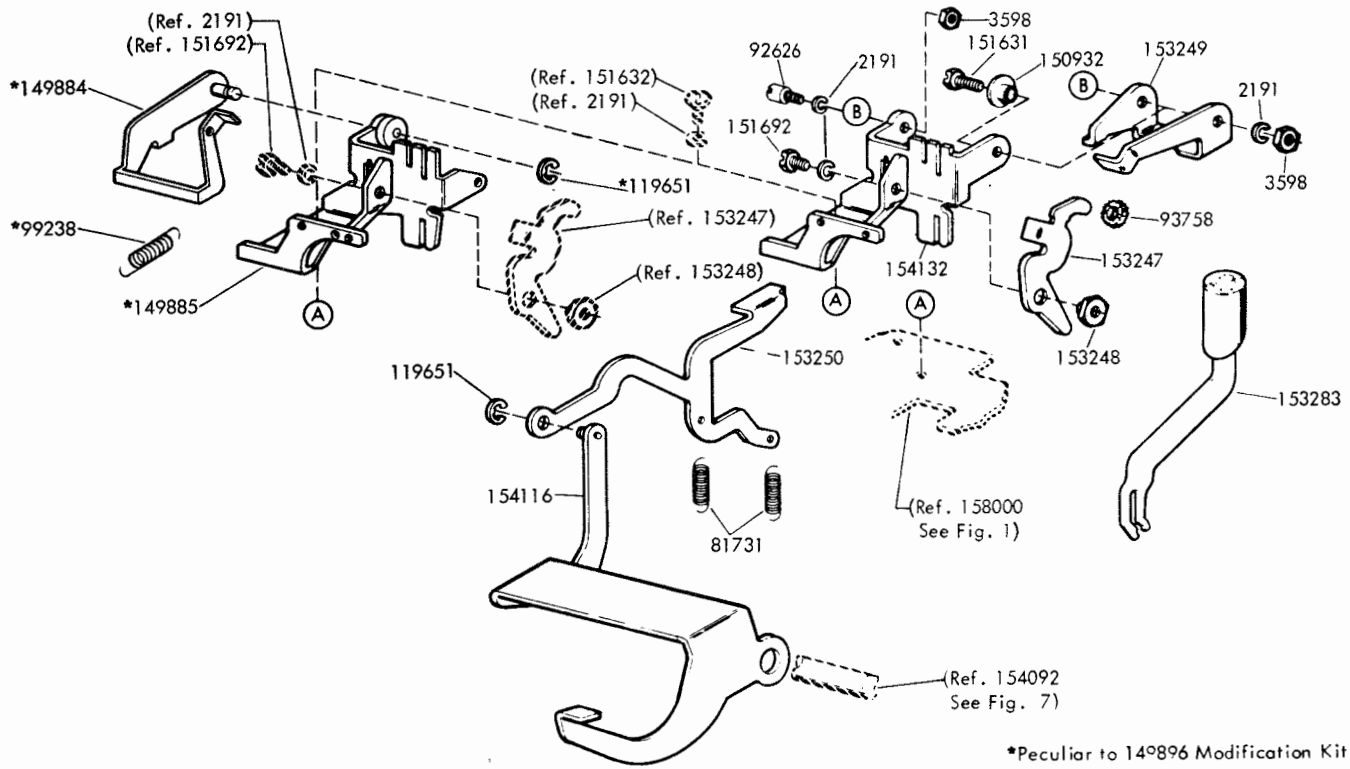


FIGURE 51. 14986 AND 154145 MCDIFICATION KITS TO PRVIDE LOCAL REVERSE LINE FEED MECHANISM (MARK III)

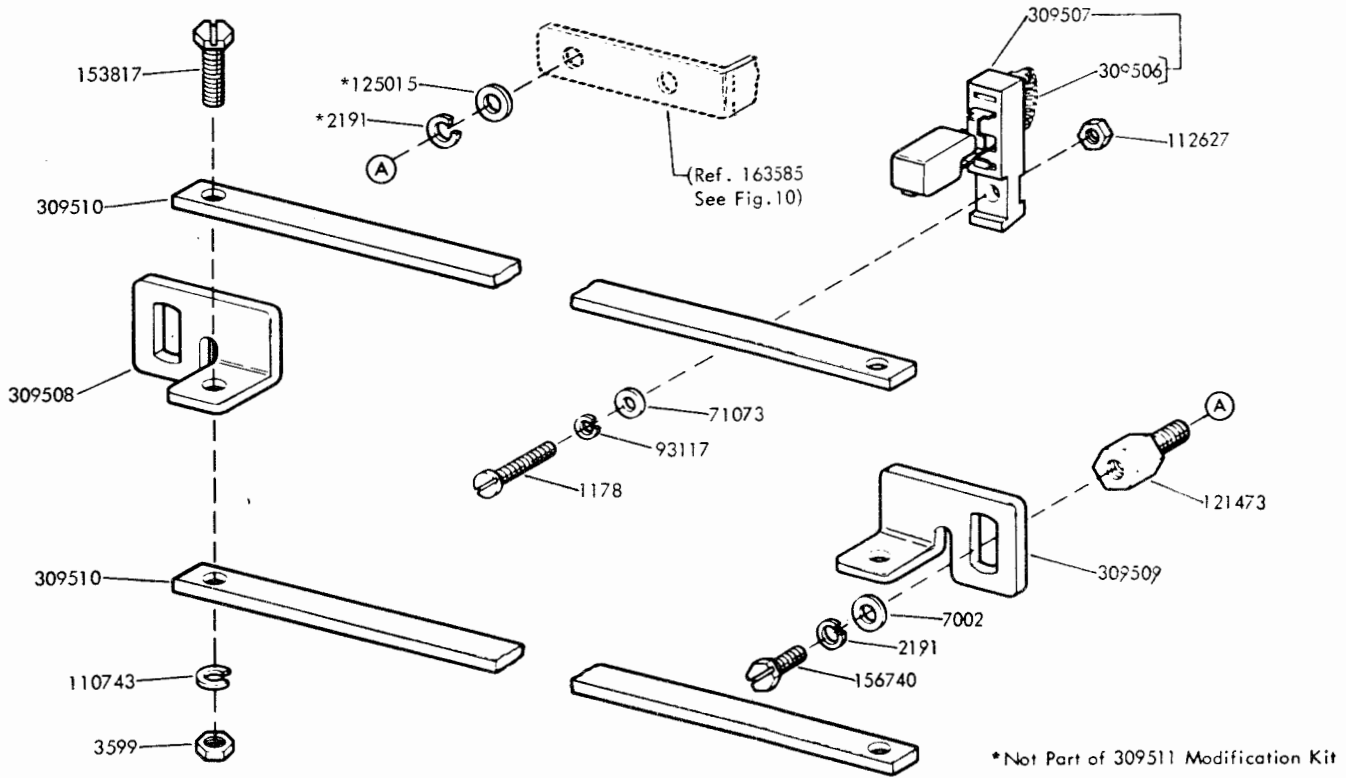
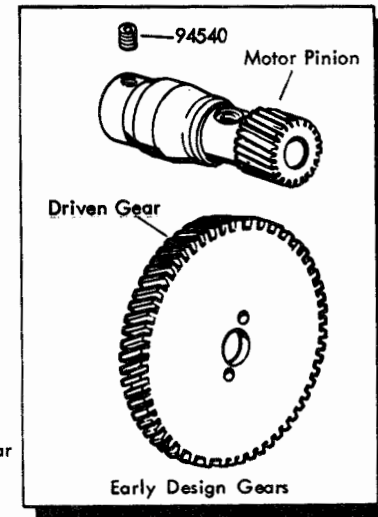
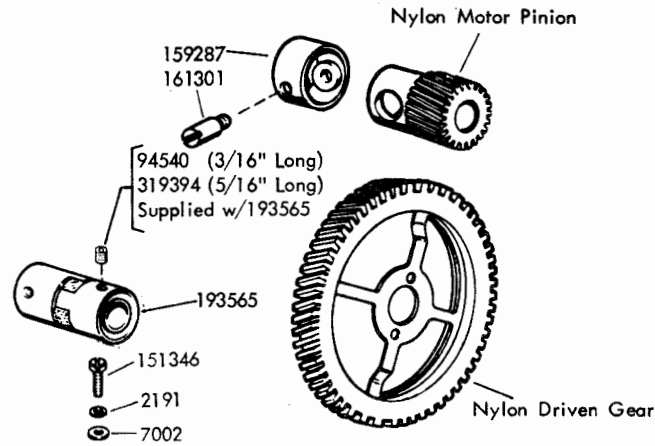
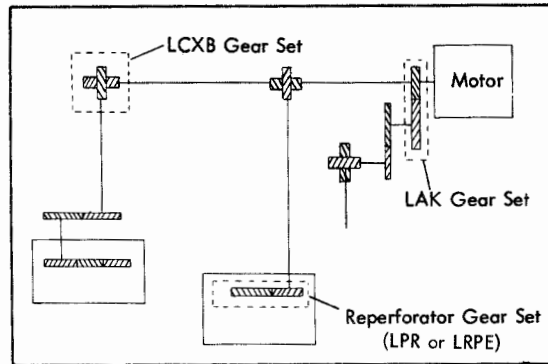


FIGURE 52. 309511 MCDIFICATION KIT TO PROVIDE UNIVERSAL KEYBCARD SWITCH ON (MARK III) KEYBOARDS

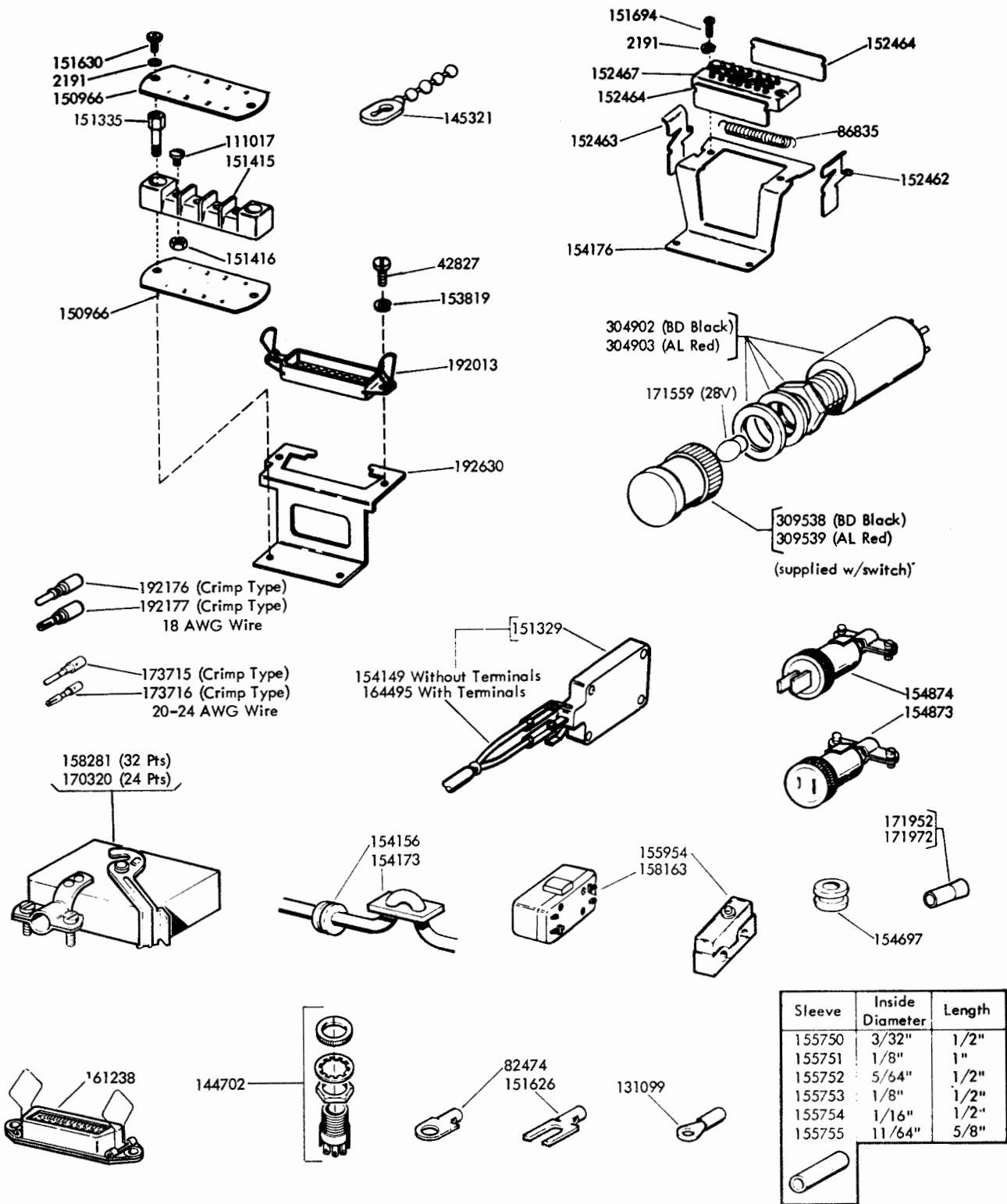


+Gears For Motors Operating on 50 Cycle Current at 3000 RPM.
 *Includes keyboard and single TD gear sets only.
 **Modification Kit including keyboard and single TD gear sets and the 193565 coupling (required when replacing an early style gear set).
 #Includes keyboard, single TD base and reperforator gear sets.
 ##Includes keyboard, dual TD base and reperforator gear sets.

Mounts Steel Pinion
 To Motor Shaft

FIGURE 53. GEAR SETS

WPM/OPM Baud Unit Code	65/390 45.5 7.00	71/428 50 7.00	81/488 56.9 7.00	106/636 74.2 7.00	107/643 75 7.00	60/368 45.5 7.42	67/404 50 7.42	75/460 56.88 7.42	100/600 74.2 110 7.42 11.0	61/364 45.5 7.50	66/400 50 7.50	100/600 75 7.50	88/529 75 8.50
Keyboard (LAK) Gear Set includes: Isolator Post (2)	173795 173794-14T 173793-100T 159287 161301	163504 163461-18T 163462-117T 159287 161301	198050 198051-17T 198052-97T 159287 161301	198053 198054-21T 198055-92T 159287 161301	163505 163463-24T 163464-104T 159287 161301	161293 159278-14T 159279-96T 159287 161301	194927 194925-13T 194926-81T 159287 161301	161294 159281-17T 159282-93T 159287 161301	161295 159284-20T 159285-84T 159287 161301	173795 173794-14T 173793-100T 159287 161301	163504 163461-18T 163462-117T 159287 161301	163505 163463-24T 163464-104T 159287 161301	170089 170185-25T 170186-119T 159287 161301
Single TD Base (LCXB) Gear Set includes:	159882 155996-13T 155997-60T	161357 161333-10T 161332-42T	198056 198057-19T 198058-70T	159883 155998-12T 155999-34T	163454 163452-20T 163453-56T	158029 158005-9T 158006-44T	161356 161331-11T 161330-49T	158028 158003-12T 158004-47T	158027 158002-11T 158001-33T	178775 178776-17T 178777-56T	178772 178773-20T 178774-60T	178769 178770-23T 178771-46T	
Dual TD Base (LCXB) Gear Set includes:					199090-20T 199091-56T		195146 195144-11T 195145-49T		170293-11T 170297-33T				170189-15T 170190-51T
Reperforator (LPR or Gear Set LRPE) includes:	173992 173993-14T 173994-40T	163457 163455-20T 163456-52T			163502 163501-30T 163506-52T	163023 163021-28T 163022-80T	195184 195182-20T 195183-52T	163024 163019-21T 163020-48T	163025 163015-28T 163018-49T				170187-30T 170188-59T
ASR Gear Set (w/Single TD)						*161859 **164583	#194928 **163302	*161860 **164584	*161861 **164585				
ASR Gear Set (w/Dual TD)							##195147		##170100				##170088
Keyboard (LAK) Gear Set Includes: (Motor Speed 3000 RPM)					*312705 312691-26T 312692-94T	+307850 307844-10T 307845-57T	+307851 307848-15T 307849-78T		+307852 307846-20T 307847-70T				
Single TD Base (LCXB) Gear Set Includes: (Motor Speed 3000 RPM)	+319911 319909-13T 319910-50T	+319914 319912-10T 319913-35T			+319917 319915-24T 319916-56T	+305579 305573-13T 305574-53T	+305578 305571-14T 305572-52T		+305577 305569-22T 305570-55T				



Sleeve	Inside Diameter	Length
155750	3/32"	1/2"
155751	1/8"	1"
155752	5/64"	1/2"
155753	1/8"	1/2"
155754	1/16"	1/2"
155755	11/64"	5/8"

FIGURE 54. KEYBOARD CABLE COMPONENTS

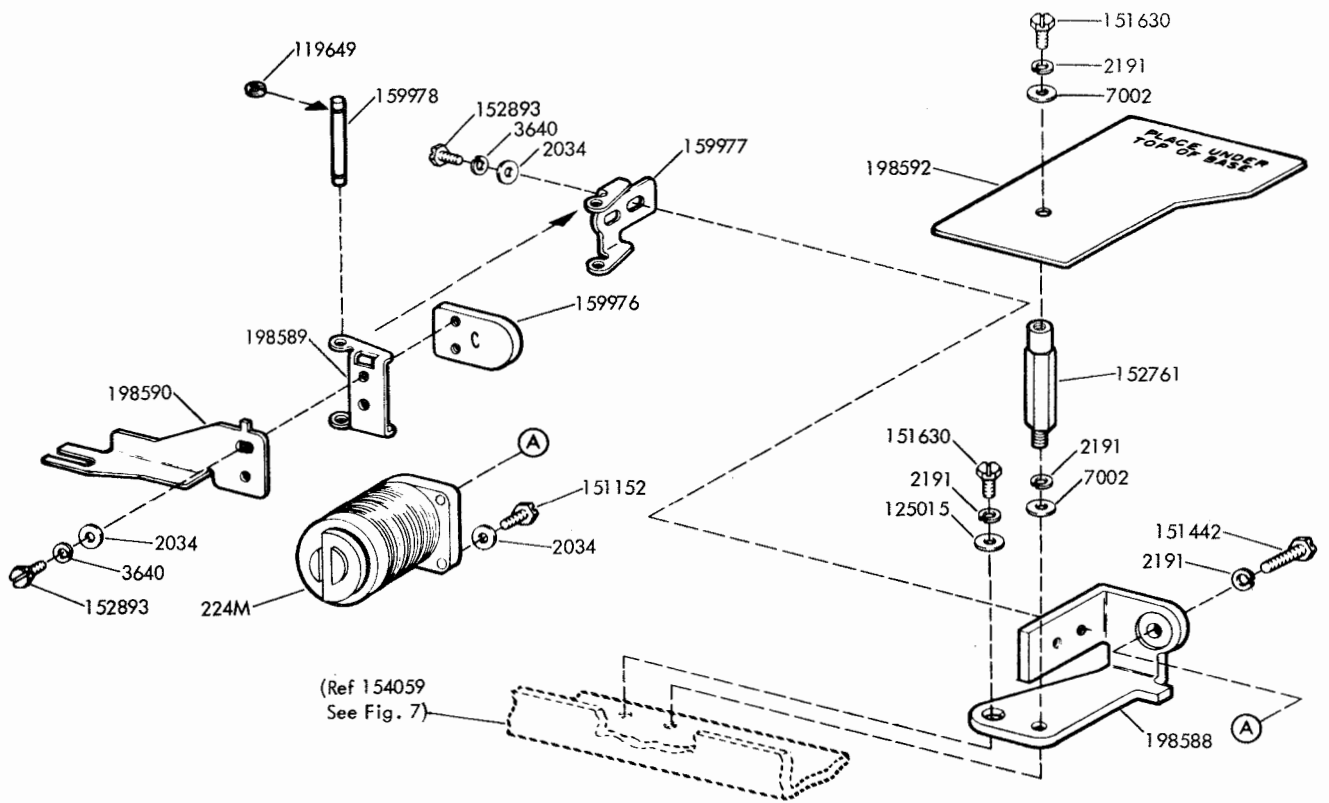


FIGURE 55 . TIME DELAY RESET MECHANISM

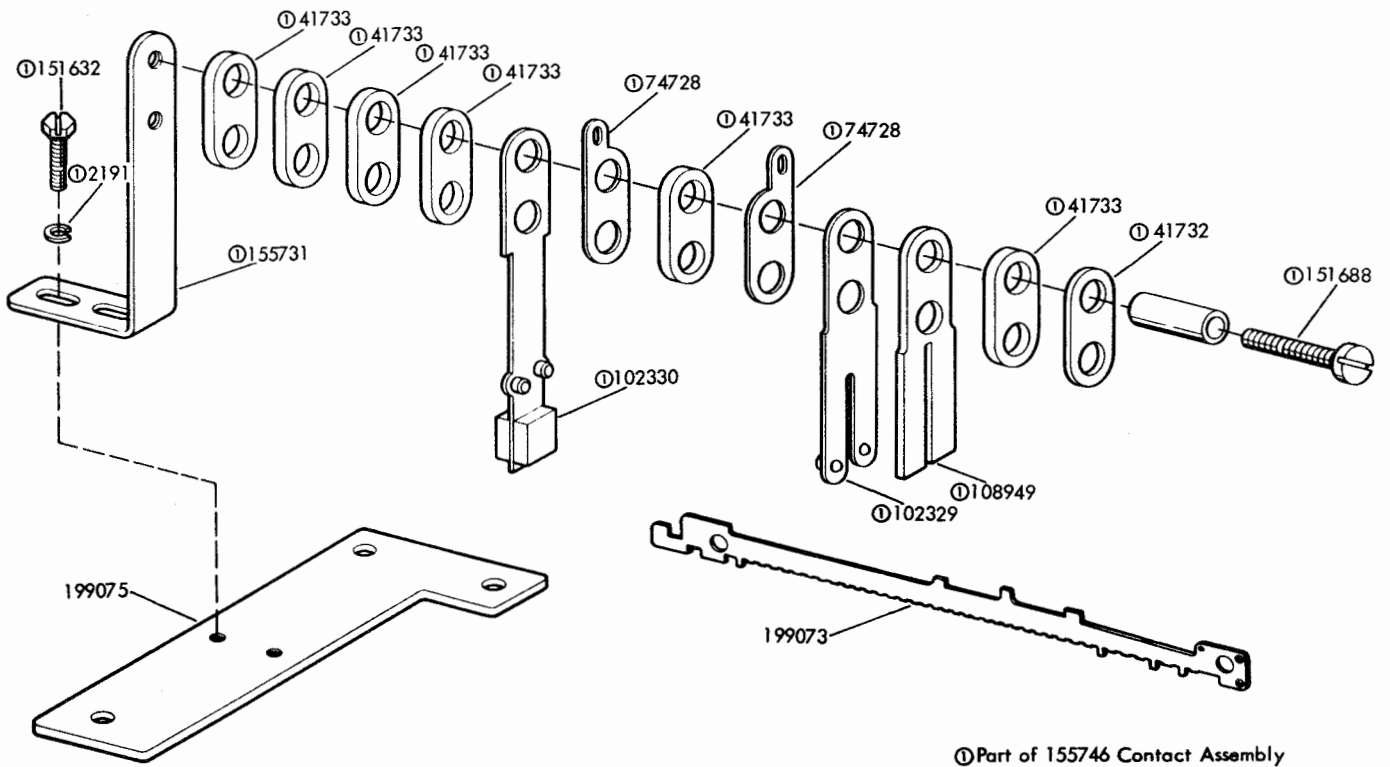


FIGURE 56. CHARACTER COUNTER STEPPING SWITCH

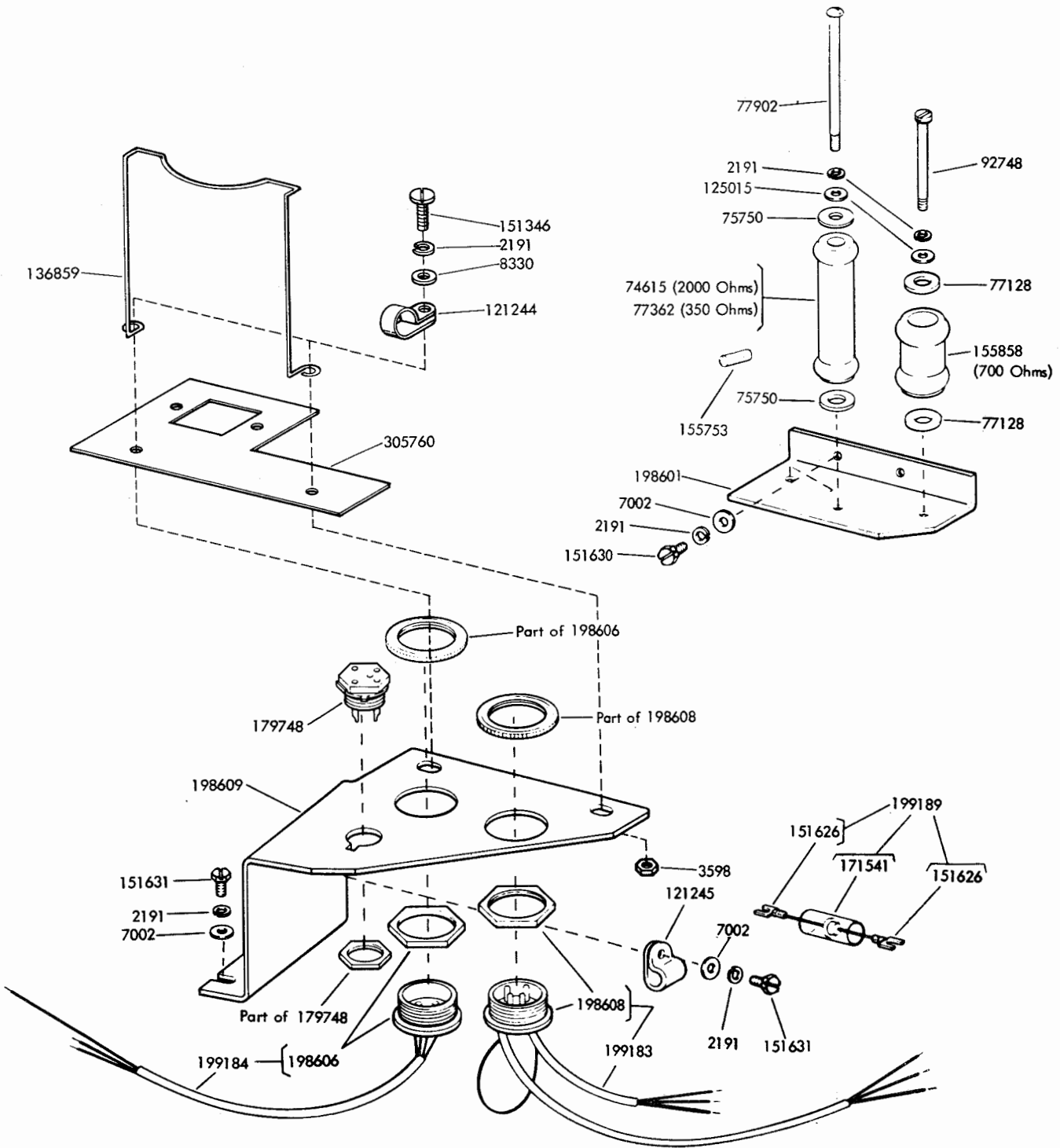


FIGURE 57. TAPE CONTAINER CONTROL COMPONENTS

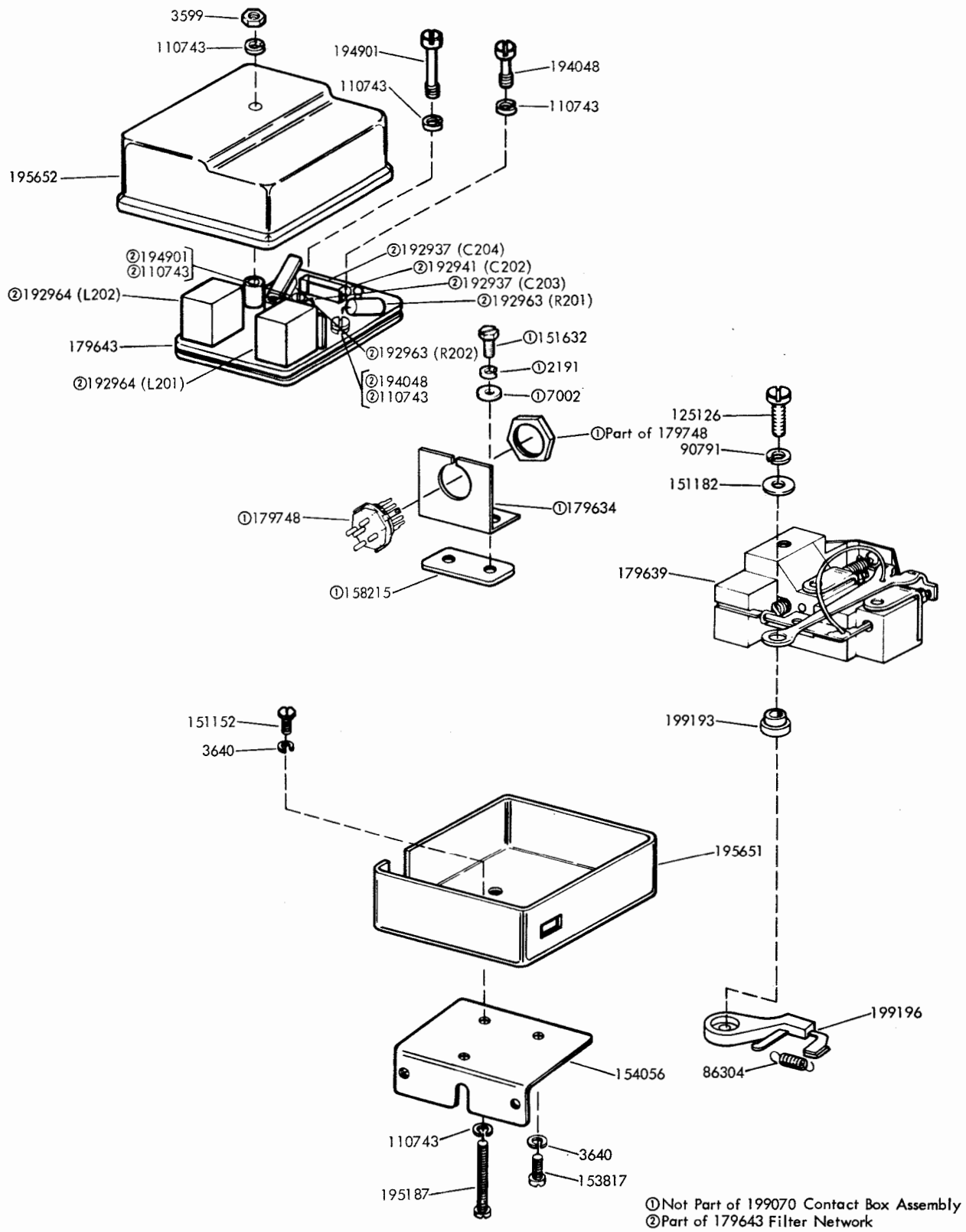


FIGURE 58. 199070 CONTACT BOX ASSEMBLY

NUMERICAL INDEX

Part Number	Description and Page Number	Part Number	Description and Page Number	Part Number	Description and Page Number
194M	Coil, Magnet 38	49420	Spring 8, 14, 15, 35	89969	Washer, Insulating 41
224M	Coil, Magnet 44, 49	55063	Spring 14	90573	Spring 24, 38, 43
252M	Coil, Magnet 34	55669	Spring 25	90679	Washer, Felt 21
263M	Coil, Magnet 34	70314	Washer, Flat 7, 33	90697	Screw, 10-32 Pivot 39
266M	Coil, Magnet 41	70388	Spring 20	90790	Washer, Flat 45
1020	Screw, 6-40 x 1/4 Hex 20	71073	Washer, Flat 33, 37, 39, 46	90791	Washer, Lock 22, 23, 51
1118	Screw, 6-40 Shoulder 32	71858	Washer, Flat 25	90814	Resistor, 1,000 Ohm 40
1163	Screw, 4-40 x 3/16 Fil 43	72473	Spring 41	90906	Knob 31
1164	Screw, 2-56 x 3/16 Fil 27	73008	Washer, Flat 24	90951	Washer, Lock 37
1178	Screw, 2-56 x 7/16 Fil 27, 31, 33, 37, 39, 46	73035	Spring 9	91683	Nut, 15/32-32 Hex 12
1210	Screw, 2-56 x 5/8 Fil 25, 31	73374	Spacer, .250" Thk 33	91684	Nut, 15/32-32 Ring 12
1248	Screw, 6-40 x 1/2 Flat 12	73776	Screw, 3/16-32 x 1-3/16 Fil 5	92309	Resistor, 400 Ohm 40
1257	Screw, 10-32 x 1-1/8 Fil 5	74014	Screw, 10-32 x 3/4 Hex 3	92626	Stud 9, 46
1274	Screw, 6-40 x 1-1/8 Fil 10	74615	Resistor, 2,000 Ohm 50	92748	Screw, 6-40 x 1-7/16 Fil 50
1293	Screw, 4-40 x 1/8 Fil 22, 23	74727	Terminal, Contact 28, 33	93117	Washer, Lock 25, 27, 31, 33, 36, 39, 43, 46
2034	Washer, Flat 49	74728	Terminal, Contact 8, 29, 49		
2191	Washer, Lock 3 to 11, 13 to 16, 18, 20 to 26, 28, 30 to 41, 43 to 51	74755	Washer, Felt 18, 34	93135	Screw, 8-32 x 1-3/4 Fil 40
2415	Spring 14, 15	74805	Screw, 10-32 x 3/4 Hex 18, 44	93160	Washer, Flat 6, 7
2422	Washer, Lock 25	74807	Nut, 10-32 Shoulder Hex 24	93191	Screw, 4-40 x 5/16 Flat 12
2481	Washer, Flat 32, 34	74952	Screw, 4-40 x 5/8 Fil 41	93507	Screw, 4-40 x 3/4 Hex 33
2669	Washer, Lock 3 to 7, 18, 45	74962	Spring 35	93758	Washer, Felt 9, 46
3438	Washer, Flat 3, 4, 5, 44	74966	Bushing, Insulating 28	94540	Screw, 10-24 Set 6, 7, 47
3598	Nut, 6-40 Hex 3, 5, 9, 10, 11, 13, 15 to 18, 20, 21, 28, 32, 33, 39, 40, 41, 45, 46, 50	75435	Resistor, 600 Ohm 41	96212BK	Jumper, 4" Black 26
3599	Nut, 4-40 Hex 7, 22, 23, 25, 35, 36, 37, 46, 51	75750	Washer, Insulating 50	96212W	Jumper, 4" White 26
3606	Nut, 6-40 Hex 21, 25, 28, 32	76081	Washer, Flat 14, 15, 32	96646	Screw, 6-40 x 1-3/64 Fil 35
3624	Washer, Flat 31, 36	76099	Washer, Flat 18, 45	97393	Screw, 6-40 Shoulder 32, 45
3639	Washer, Lock 3, 6	76379	Spring 4	98502	Washer, Flat 45
3640	Washer, Lock 7, 17, 21 to 25, 28, 29, 31, 33, 34, 38, 39, 41, 43, 44, 49, 51	76422	Spring 36, 39	98726	Screw, 3-48 x 1/4 Fil 4
3646	Washer, Lock 40	76964	Pin, Cotter 36	98730	Screw, 6-32 x 1-1/4 Rd 33
3650	Washer, Flat 44	76966	Screw, 10-32 Set 26	99238	Spring 46
3807	Spring 31	77039	Bushing, Insulating 8	99978	Connector, 4 Pt Plug 41
3870	Spring 3, 18	77128	Washer, Insulating 50	100658	Connector, 2 Pt Plug 31
4702	Spring 18	77362	Resistor, 350 Ohm 50	101386	Spring 37
6970	Nut, 3/8-32 Hex 5, 44, 45	77902	Screw, 6-40 x 2-3/8 Rd 50	102057	Screw, 4-40 Shoulder 25
7002	Washer, Flat 3, 4, 8 to 11, 13 to 16, 18, 22 to 26, 28, 30 to 34, 36 to 41, 44 to 47, 49 to 51	77920	Screw, 6-40 x 1-15/16 Fil 40	102329	Spring, Contact 49
7603	Spring 21, 24	77999	Resistor, 500 Ohm 4	102330	Spring, Contact 49
8330	Washer, Flat 3, 5, 10, 11, 25, 44, 50	78533	Spring 21	104564	Washer, Flat 7
8449	Spacer, .094" Thk 21, 31	78824	Spring 37	104701	Screw, 4-40 x 9/32 Fil 41
22746	Spring 32	80402	Screw, 4-40 x 15/32 Fil 7	104710	Ball, Bearing 17
31636	Spring 37	80581	Spring 20, 24	104807	Washer, Flat 32, 36
33765	Washer, Flat 43	80755	Bushing, Insulating 29	104827	Bearing, Ball 5
34432	Washer, Flat 45	80845	Screw, 10-32 x 1-7/8 Fil 40	107398	Terminal 3, 4
35826	Washer, Flat 5	80945	Spring 44	108370	Washer, Felt 20
36318	Washer, Flat 21	81596	Screw, 10-32 x 1-3/8 Hex 44	108949	Stiffener 49
36358	Spring 15	81726	Terminal 34	109356	Washer, Flat 7
41385	Spring 25	81731	Spring 9, 46	110435	Nut, 4-40 Hex 31
41675	Washer, Flat 25	81774	Washer, Flat 13	110437	Spring 31
41720	Spring, Contact 34	81836	Washer, Insulating 40	110743	Washer, Lock 6, 8, 17 to 20, 22, 23, 24, 27, 31, 32, 33, 36, 38, 46, 51
41732	Plate, Clamp 8, 25, 29, 34, 49	82474	Terminal 48		
41733	Insulator, .062" Thk 49	82547	Insulator, .094" Thk 8, 28, 33, 34	111017	Screw, 6-40 x 5/16 Fil 3, 4, 41, 48
42661	Spring 38, 43	82548	Insulator, .062" Thk 8, 28, 29, 33, 34		
42823	Washer, Flat 19, 24	82860	Spring 9	111343	Clamp, Retaining 17
42827	Screw, 3-48 x 1/4 Fil 43, 48	82988	Screw, 6-40 x 2-1/2 Rd 41	111767	Washer, Flat 21, 39
44035	Screw, 10-32 x 9/16 Hex 45	83408	Screw, 4-40 x 2-1/6 Rd 33	111777	Connector, 4 Pt Receptacle 33, 41
44048	Washer, Flat 40	83814	Washer, Flat 26		
45024	Spring 43	83913	Spring, Contact 34	112127	Hinge 28, 33
45815	Washer, Lock 24, 38	86283	Spring 14, 15	112128	Retainer 28, 33
		86304	Spring 22, 23, 51	112498	Screw, 6-40 x 3/4 Flat 12
		86742	Nut, 4-40 Hex 6, 21	112626	Nut, 10-32 Hex 5, 18, 38, 45
		86772	Screw, 6-40 Eccentric Shoulder 15	112627	Nut, 2-56 Hex 33, 36, 39, 46
		86774	Screw, 6-40 Shoulder 3, 4	112629	Spring 43
		86835	Spring 48	112630	Spring 3
		86959	Bushing, Insulating 34	112633	Spring w/Wick 43
		87398	Washer, Flat 38	114478	Nut, 15/32-32 Hex 12
		88891	Spring 34	114744	Connector, 6 Pt Plug 33
				114858	Connector, 6 Pt Receptacle 33

NUMERICAL INDEX (Continued)

Part Number	Description and Page Number	Part Number	Description and Page Number	Part Number	Description and Page Number
114876	Washer, Flat 32	144703	Cap, Red Lens 12	145367	Shaft, Drive 45
115122	Washer, Felt 18, 21, 39	144704	Cap, Green Lens 12	145368	Gear, 27T 44, 45
115141	Screw, 6-40 Shoulder 32	144705	Cap, White Lens 12	145370	Gear, 42T 45
116698	Lamp, 6V 12	144706	Cap, Amber Lens 12	145373	Gear, 66T 45
117416	Post 18	144708	Modification Kit 2, 19, 28	145375	Gear, 63T 45
117535	Washer, Flat 5, 6	144709	Segment, Cam 19	145381	Washer, Thrust 45
117541	Washer, Flat 24	144710	Modification Kit 2, 28	145383	Key 45
117608	Nut, Speed 10, 11	144711	Bracket, Code Contact 28	145384	Pin, Guide 45
118211	Resistor, 10,000 Ohm 12	144712	Post, Guide 28	145385	Spring, Compression 45
118659	Switch, Toggle 12	144715	Bracket, Connector 4	145386	Sleeve 45
119467	Insulator, .032" Thk 31	144718	Keypot w/Shaft, SOM 27	145389	Shaft, Idler 45
119648	Ring, Retaining 4, 16, 20, 36, 41	144719	Keypot w/Shaft, EOA 27	145390	Pinion, 25T 45
119649	Ring, Retaining 4, 14, 24, 25, 35, 38, 43, 49	144720	Keypot w/Shaft, EOM 27	145393	Bushing 44, 45
119650	Ring, Retaining 14	144721	Keypot w/Shaft, Feed-Out 27	146149	Plate, Base 38
119651	Ring, Retaining 3, 9, 10, 11, 20, 21, 24, 37, 39, 43, 46	144722	Keypot w/Shaft, Rub-Out 27	146438	Bellcrank 28
119652	Ring, Retaining 18, 32, 45	144723	Keypot w/Shaft, Tape B. Sp. 27	147033	Shield 12
119653	Ring, Retaining 8, 9, 32, 44	144724	Keypot w/Shaft, SOL INQ 27	147069	Switch 27
119654	Ring, Retaining 14, 15	144725	Keypot w/Shaft, SOL ORD 27	147070	Switch 27
119655	Ring, Retaining 6, 7, 45	144726	Keypot w/Shaft, EOL 27	147071	Switch 27
119662	Screw, 6-40 Spl 32	144729	Bracket 27	147127	Modification Kit 12
120489	Spacer, .052" Thk 20	144730	Bracket, Switch 27	148128	Washer, Flat 17
120824	Washer, Felt 19	144731	Plate, Switch Actuator 27	149881	Cover, Gear 45
120870	Wick, Felt 20	144732	Insulator 27	149884	Bail, Transfer 46
121125	Washer, Spring 34	144733	Spring, Compression 27	149885	Bracket 46
121242	Clamp, 1/8 ID Cable 25, 34, 36	144734	Plate, Retaining 27	149896	Modification Kit 2, 46
121243	Clamp, 3/16 ID Cable 33, 40	144735	Switch Assembly, SOM 27	150013	Disk, Adjusting 19
121244	Clamp, 1/4 ID Cable 3, 16, 50	144736	Switch Assembly, EOA 27	150026	Lever, Shoe Release 19
121245	Clamp, 5/16 ID Cable 37, 50	144737	Switch Assembly, EOM 27	150029	Wick, Felt 19
121246	Clamp, 3/8 ID Cable 3, 33	144738	Switch Assembly, Feed-Out 27	150043	Shoe, Secondary Clutch 19
121247	Clamp, 7/16 ID Cable 33, 40, 41	144739	Switch Assembly, Rub-Out 27	150044	Shoe, Primary Clutch 19
121473	Post 33, 39, 46	144740	Switch Assembly, Tape B. Sp. 27	150089	Screw, 4-40 x 1/2 Fil 39
123823	Washer, Flat 33	144741	Cable Assembly 12	150241	Spring 19
124177	Washer, Lock 32	144743	Plate, Keypot Guide 10, 12	150354	Arm, Trip 44
124220	Pin, Drive 33, 41	144744	Cable Assembly 28	150356	Lever, Trip 44
124244	Washer, Felt 4	144745	Bracket, Front 14, 27	150411	Washer, Flat 32, 38, 43
124681	Screw, 6-40 Set 44	144749	Bracket Assembly, Bearing 2, 7	150432	Washer, Flat 41
124761	Plate, Insulating 33	144750	Housing w/Ball Bearing 4	150507	Spring 32
124999	Switch, Sensitive 31	144753	Shaft w/Bearings 7	150923	Washer, Felt 4, 20, 21
125011	Washer, Flat 17, 18, 21, 23, 25, 28, 29, 39, 41	144754	Plate, Nut 4	150932	Bushing, Shoulder 9, 46
125015	Washer, Flat 3, 5, 6, 7, 10, 11, 21, 33, 39, 46, 49, 50	144755	Shaft, 7-1/4" Lg 7	150966	Insulator, Terminal Block 34, 41, 48
125112	Screw, 2-56 x 1/8 Fil 28, 33, 43	144756	Shaft, 3-9/32" Lg 7	150990	Washer, Felt 21, 39
125126	Screw, 2-56 x 9/32 Fil 22, 23, 51	144759	Spacer, .187" Thk 5	150991	Washer, Felt 14, 15, 18
125181	Screw, 2-56 x 3/8 Fil 35	144760	Spacer, .400" Thk 5	150992	Stud 31
125215	Screw, 4-40 x 3/16 Hex 44	144761	Shaft 5	151036	Screw, 4-40 Shoulder 21
125241	Spring 24	144763	Plate, Nut 4	151045	Bar, Spacing 10
125247	Spring, Compression 36	144764	Base 4	151059	Stud 35
125250	Spring 20, 31	144767	Plate w/Bracket, Bearing 5	151073	Screw, 4-40 x 5/32 Fil 34, 43
125253	Spring 15	144769	Button, Pivot 5	151080	Washer, Flat 6, 17
128271	Screw, 6-40 Shoulder 32	144770	Gear Assembly, Intermediate 2, 3, 5	151103	Spring 20
130499	Bearing, Ball 45	144771	Follower, Cam 28	151113	Strip, Mounting 3
130683	Washer, Lock 25	144772	Contact Assembly, Intermediate 28	151118	Plate, Spacing 3
131099	Terminal, 5/8" Lg 48	144774	Bar, FIGS Code 14	151126	Spacer, .250" Thk 5
136859	Holder, Plug 50	144871	Shaft, Solenoid Plunger 4	151146	Strap, Mounting 3
139552	Block, Terminal 33	144990	Bar, LTRS Code 14	151152	Screw, 4-40 x 3/16 Hex 17, 18, 22, 23, 24, 32, 36, 38, 39, 41, 49, 51
139752	Screw, 4-40 x 11/64 Fil 32	144991	Bracket, Contact 4, 29	151171	Toggle, Contact 22, 23
142379	Pin, Roll 44, 45	144992	Shaft w/Bearing 7	151180	Link, Toggle 22, 23
142623	Reel, Tape 30	144996	Plate, Left 12	151182	Washer, Insulating 22, 23, 51
144590	Screw, 6-40 x 1-3/8 Fil 12	144997	Contact Assembly 2, 29	151223	Screw, 4-40 Shoulder 10, 11
144701	Plate, Right Switch 12	145190	Connector, 2 Pt Plug 31, 34	151224	Screw, 6-40 Pilot 10, 11, 28, 33
144702	Switch, Push Button 12, 48	145191	Connector, 2 Pt Receptacle 31, 34	151228	Bracket w/Bearing 5
		145307	Plate, Nut 4	151233	Spacer, .065" Thk 25
		145313	Washer, Felt 45	151234	Ratchet, 27T 37
		145321	Tie, Cable 48	151235	Ratchet, 28T 37
		145365	Pinion, 20T 45	151236	Hub 37
		145366	Gear, 56T 45		

NUMERICAL INDEX (Continued)

Part Number	Description and Page Number	Part Number	Description and Page Number	Part Number	Description and Page Number
151237	Spring, Flat 37	151731	Screw, 4-40 x 7/8 Fil 36	154032	Sleeve, Gear 19
151240	Pawl, Latch 37	151733	Screw, 4-40 x 9/16 Fil 31, 34, 43	154033	Lever, Clutch Latch 18, 34
151241	Lever, Latching 37	151737	Screw, 4-40 x 11/64 Hex 19, 38, 44	154034	Lever, Clutch Stop 18
151244	Bushing, Eccentric 37	151820	Spring, Contact 22, 23	154036	Plate, Detent 20
151245	Washer, Felt 37, 45	151843	Screw, 6-40 Adjusting 17	154037	Lever 35
151246	Washer, Flat 37	151879	Stud 37	154039	Bracket 35
151290	Keylever Assembly 35	151880	Nut, 4-40 Hex 22, 23, 32, 38, 39, 41, 43	154040	Lever, Transfer 20
151329	Switch, Sensitive 35, 37, 48	151885	Plate, Nut 37	154041	Post, Stop 20
151335	Stud 3, 4, 41, 48	151886	Stud 37	154042	Terminal 22, 23
151346	Screw, 6-40 x 3/8 Fil 44, 47, 50	152045	Guard, Gear 3	154043	Terminal 22, 23
151352	Spring, Flat 3	152051	Tissue 13	154045	Screw, 6-40 Spl 22, 23
151354	Screw, 2-56 x 15/32 Fil 25	152318	Switch, Magnetic 35	154046	Stud 18
151376	Label, Instruction 13	152441	Washer, Flat 45	154047	Post, Spring 20
151389	Paper, Carbon 13	152462	Latch, Right 48	154051	Screw, 6-40 Shoulder 18
151390	Label, Blank 13	152463	Latch, Left 48	154053	Bail, Clutch Trip 18
151391	Label Set 13	152464	Insulator, .062" Thk 48	154056	Bracket, Contact Box 22, 23, 51
151397	Spring 38	152467	Connector, 20 Pt Plug 48	154057	Plate 13
151412	Insulator, Terminal 4	152754	Jumper, 4-1/2" Red 4	154058	Plate 13
151415	Block, Terminal 41, 48	152761	Stud 49	154059	Bracket, Function Bail 8, 49
151416	Nut, 6-40 Hex 3, 4, 41, 48	152839	Spring, Latch 32	154064	Bracket, Adjusting 9
151442	Screw, 6-40 x 1/2 Hex 3, 4, 5, 13, 18, 28, 34, 44, 49	152887	Screw, 4-40 x 1/2 Hex 6, 7	154065	Lever w/Hub 9
151540	Lampholder 41	152893	Screw, 4-40 x 1/4 Hex 17, 19, 21, 28, 29, 41, 49	154066	Lever, LOC-LF 8
151610	Washer, Flat 44, 45	153247	Lever, Trip 9, 46	154067	Lever 8, 38
151616	Screw, #2 Self-Tapping 3, 4	153248	Bushing, 6-40 Shoulder 9, 46	154068	Bracket, Right Guide 14, 16
151618	Screw, 6-40 x 7/16 Fil 12	153249	Bail, Transfer 9, 46	154069	Bracket, Left Guide 14
151624	Spacer, .072" Thk 41	153250	Link 9, 46	154070	Guide, Code Lever 14
151626	Terminal 3, 4, 12, 25, 33 to 37, 39, 40, 41, 45, 48, 50	153252	Link 3	154071	Screw, 1/4-32 Pilot 14, 15
151629	Nut, 6-40 Lug 26, 44	153266	Lever, Trip 9	154072	Bracket, Stop 14, 15
151630	Screw, 6-40 x 1/4 Hex 3, 5 to 11, 14, 15, 24, 25, 30, 33, 34, 40, 45, 48, 49, 50	153273	Link 9	154076	Plate, Nut 3
151631	Screw, 6-40 x 5/16 Hex 3 to 7, 9, 10, 11, 16, 18, 24, 25, 26, 30, 32, 33, 34, 36, 40, 41, 44, 45, 46, 50	153283	Keylever Assembly 46	154079	Stud 21
151632	Screw, 6-40 x 3/8 Hex 3 to 7, 9, 10, 11, 13, 14, 16, 22, 23, 25, 26, 30, 34, 35, 37, 40, 45, 46, 49, 51	153284	Keylever Assembly 9	154080	Lock, Wedge 17
151637	Screw, 4-40 x 1/4 Fil 25, 32, 33	153400	Lamp, 60V Incandescent 41	154081	Plate, Retainer 17
151657	Screw, 6-40 x 1/4 Fil 25, 34, 44	153534	Washer, Flat 41	154083	Spacer, Cam 19
151658	Screw, 6-40 x 5/16 Fil 3, 45	153537	Screw, 6-40 x 9/32 Hex 38, 41	154084	Bearing, Needle 21
151659	Screw, 6-40 x 1/2 Fil 10, 11, 13, 32	153538	Screw, 6-40 x 7/16 Hex 3, 31, 33	154085	Plate 3
151661	Screw, 6-40 x 1 Fil 12	153539	Screw, 6-40 x 11/16 Hex 31	154086	Retainer, Wedge 17
151678	Screw, 1/4-32 Pilot 3	153631	Network, Spark Suppression 33, 34, 40, 41	154087	Plate, Nut 3
151685	Screw, 4-40 x 5/16 Fil 32	153799	Screw, 4-40 x 21/64 Hex 32, 38	154088	Plate, Nut 3
151686	Screw, 4-40 x 3/8 Fil 36	153817	Screw, 4-40 x 3/8 Hex 22, 23, 41, 46, 51	154089	Post, Spring 21
151687	Screw, 4-40 x 7/16 Fil 8, 25	153819	Washer, Lock 4, 43, 48	154091	Guide, Non-Repeat Lever 21, 39
151688	Screw, 4-40 x 5/8 Fil 29, 49	153839	Screw, 6-40 x 5/8 Hex 26, 44	154092	Shaft, Function 8, 9, 38, 46
151689	Screw, 4-40 x 3/4 Fil 33	153841	Screw, 6-40 x 9/16 Hex 11, 18, 35	154094	Clamp 18
151691	Screw, 10-32 x 3/8 Fil 7	154008	Guide, Code Bar 14, 15, 16	154095	Eccentric, Contact Box 22, 23
151692	Screw, 6-40 x 3/16 Fil 4, 9, 36, 38, 43, 46	154009	Plate, Front 20, 28, 33	154096	Bushing, Eccentric 18
151694	Screw, 6-40 x 11/32 Fil 7, 48	154010	Bail, Transfer 20	154097	Bail 9
151712	Button, Pivot 5, 45	154013	Bracket, Spring 14, 15	154098	Bail 9
151714	Spring 15	154014	Post, Guide 20	154099	Bail, LOC-CR Function 8
151715	Spring 38	154015	Post 21, 39	154101	Plate, Rear 18
151722	Screw, 6-40 x 3/16 Hex 3, 4, 9, 13, 14, 15, 20, 31, 37, 38, 41	154016	Shaft 9, 14	154102	Plate, Rear 21, 34, 39
151723	Screw, 10-32 x 3/8 Hex 3, 4, 5	154018	Post, Locking Bail 20	154105	Post, Transfer Bail 20
151724	Screw, 10-32 x 5/8 Hex 5, 6	154019	Follower, Eccentric 19, 39	154106	Bracket 3
151725	Screw, 10-32 x 3/4 Fil 5, 6	154020	Seal, Front 13	154107	Bracket 9
151728	Spring 19	154021	Link 10, 11	154109	Plunger 3
		154023	Latch, Lock Bar 14	154110	Hood, Keyboard 13
		154025	Plate, Adjusting 21	154111	Plate, Keypad Guide 10, 13
		154027	Bellcrank 21	154115	Plate, Guide 3
		154029	Wick, Felt 19	154116	Bail 46
		154030	Shaft, Signal Generator 19	154117	Bail, Space Bar 10
				154118	Lever w/Hub 35
				154119	Bracket, Space Bar 10
				154120	Lever, Code Bar 14, 15
				154121	Lever, Space Code Bar 14
				154122	Lever, Keyboard Lock Function 14
				154123	Lever, Function 9, 14, 35
				154124	Lever, Keyboard Repeat & Unlock 14

NUMERICAL INDEX (Continued)

Part Number	Description and Page Number	Part Number	Description and Page Number	Part Number	Description and Page Number
154125	Spring 14, 15, 33, 38	154873	Connector, 2 Pt Receptacle 48	158003	Pinion, 12T 47
154126	Bracket 35	154874	Connector, 2 Pt Plug 48	158004	Gear, 47T 47
154127	Nut, 6-40 Hex 21, 39	155718	Jumper, 3" Black 39	158005	Pinion, 9T 47
154129	Bar, Clutch Trip 14	155731	Bracket, Contact 49	158006	Gear, 44T 47
154130	Box, Contact 22	155746	Contact Assembly 49	158007	Container Assembly 2, 30
154131	Cover, Contact 22	155750	Sleeve, 3/32 ID x 1/2 Lg	158009	Switch Assembly, Tape-Out 2, 31
154132	Bracket 9, 46		Insulating 28, 31, 33, 34, 36, 37, 38, 48	158010	Bar, Locking 16
154133	Bracket 9	155751	Sleeve, 1/8 ID x 1 Lg Insulating 12, 35, 37, 48	158011	Lever, Blocking 24
154134	Bracket 37			158019	Baffle 32
154135	Pawl 37	155752	Sleeve, 5/64 ID x 1/2 Lg Insulating 48	158021	Bracket, Switch 32
154136	Pawl 37			158027	Gear Set, 100 WPM 47
154137	Lever, Adjusting 37	155753	Sleeve, 1/8 ID x 1/2 Lg Insulating 4, 12, 16, 25, 31, 33, 34, 39, 48, 50	158028	Gear Set, 75 WPM 47
154138	Washer, Felt 19			158029	Gear Set, 60 WPM 47
154140	Bail, Locking 20	155754	Sleeve, 1/16 ID x 1/2 Lg Insulating 41, 48	158031	Bail, Feed 32
154141	Modification Kit 2, 35			158032	Bail, Reset 32
154144	Cable Assembly 37	155755	Sleeve, 11/64 ID x 5/8 Lg Insulating 3, 34, 40, 41, 48	158033	Spacer, .055" Thk 32
154145	Modification Kit 2, 46			158036	Lever, Reset 32
154146	Modification Kit 2, 9	155858	Resistor, 700 Ohm 50	158038	Lever 32
154147	Modification Kit 2, 35	155951	Spring, Torsion 36	158040	Lever, Ratchet Drive 32
154149	Cable Assembly 35, 48	155952	Pin 36	158042	Lever, Latch 32
154151	Bail Assembly, Universal 2, 17	155953	Stud 36	158045	Stud 32-
154152	Bar Assembly, Bail Lock 2, 17	155954	Switch, Sensitive 25, 27, 36, 48	158046	Bracket 32
154153	Cable Assembly 35	155956	Bail 36	158047	Scale 32
154154	Cam, Signal Generator 19	155957	Bracket 36	158050	Switch, Contact 32
154156	Grommet, Rubber 48	155958	Keylever 36	158051	Pulley 32
154163	Shaft Assembly, Clutch Cam 19	155959	Keypop 36	158052	Cam, Switch 32
154165	Box Assembly, Contact 2, 22	155960	Latch 32	158053	Clamp 32
154166	Suppressor, Arc 22	155964	Lever, Stop 32	158054	Cord Assembly 32
154173	Plate 48	155965	Ratchet, 88T 32	158056	Cord 32
154176	Bracket 48	155966	Drum 32	158060	Spring 24
154178	Spring 20	155967	Washer, Spring 32	158061	Pin 24
154179	Bail, Universal 17	155968	Washer, Flat 32	158062	Stop 25
154183	Blade, Front 17	155969	Bracket 32	158063	Bracket, Stop 14
154184	Blade, Rear 17	155990	Counter Assembly, Character 2, 32	158064	Clip, Spring 3
154189	Insulator 21	155991	Keypop Assembly 36	158066	Switch 25
154191	Spring 22, 39	155992	Cable Assembly 27, 36	158067	Bracket 25
154193	Plate 35	155994	Insulator, .015" Thk 25, 36	158068	Plate 3
154194	Base 22, 23	155996	Pinion, 13T 47	158071	Bracket, Bearing 6
154197	Plug, Button 10	155997	Gear, 60T 47	158073	Shaft w/Bearing 6
154198	Window, Plastic 13	155998	Pinion, 12T 47	158075	Shaft w/Gears 6
154199	Shim, .005" Thk 3	155999	Gear, 34T 47	158077	Gear, 33T 6
154201	Shim, .014" Thk 3	156078	Contact Assembly 28	158079	Shaft, Motor Coupler 6
154202	Screw, #4 Spl 13	156226	Hub 6, 7	158087	Bar, #1 Code 14
154203	Bracket 13	156448	Bushing 31	158088	Bar, #2 Code 14
154204	Grommet, Plastic 13	156449	Lever, Switch 31	158089	Bar, #3 Code 14
154210	Bracket, Left 13	156450	Screw, 2-56 x 1/2 Fil 36	158090	Bar, #4 Code 14
154211	Bracket, Right 13	156451	Bushing 31	158091	Bar, #5 Code 14
154212	Frame, Front 10	156503	Wick, Felt 19	158093	Spacer, .047" Thk 14
154215	Spring 21, 39	156509	Washer, Flat 20	158094	Stud 14
154217	Wick, Leather 20	156516	Latch 20	158099	Lever 34
154224	Gear Assembly, Intermediate 2, 5	156558	Washer, Felt 21	158103	Latch w/Hub 14
154225	Box Assembly, Contact 2, 22	156574	Post, Spring 17	158105	Bar, Carriage Return Code 14
154226	Box w/Strap 22	156630	Washer, Felt 20	158107	Bar, Character Counter Code 14
154227	Bracket, Support 9	156632	Screw, 6-40 x 13/32 Hex 7, 11, 13, 32	158113	Frame 24
154236	Lever, Latch 18	156644	Link, Drive 22	158114	Cam, Control 24
154237	Lever, Non-Repeat 21	156663	Bushing, Insulating 22, 23	158115	Bushing 24
154238	Extension 17	156664	Sleeve 23	158116	Lever, Reset 24
154239	Extension w/Post 17	156740	Screw, 6-40 x 7/32 Hex 4, 33, 39, 43, 46	158117	Follower, Reset Cam 24
154240	Bail, Code Bar 21			158118	Guide 24
154241	Stud 21	157101	Cable 39	158119	Bracket 24
154318	Plate 30	158000	Base 3, 9, 25, 35, 38, 41, 46	158120	Bracket 24
154351	Modification Kit 14, 21	158001	Gear, 33T 47	158121	Roller 24
154386	Plate, Adjusting 21	158002	Pinion, 11T 47	158122	Bracket 24
154662	Spacer 5			158123	Shaft 24
154663	Shaft 5			158135	Link 24
154694	Disk, Clutch Cam 19			158136	Latch 24
154697	Grommet, Rubber 48				

NUMERICAL INDEX (Continued)

Part Number	Description and Page Number	Part Number	Description and Page Number	Part Number	Description and Page Number
158137	Extension, Code Bar 24	159343	Cable w/Terminals 36	162883	Cover, Insulating 28, 33
158139	Bellcrank 24	159404	Post 7	162884	Arm 33
158141	Lever w/Hub 24	159543	Washer, Flat 30	162885	Segment, Cam 19, 33
158144	Slide w/Stud 24	159568	Bracket, Contact 29	162886	Screw, 4-40 x 7 32 Hex 19
158145	Extension 24	159570	Spring, Contact 28, 29	162891	Cover, Contact Box 22
158147	Bushing, Eccentric 25, 32	159571	Stiffener 28, 29	162892	Box Assembly, Contact 2, 22
158148	Washer, Felt 25	159804	Spring 43	163015	Pinion, 28T 47
158149	Bracket 25	159882	Gear Set, 65 WPM 47	163018	Gear, 49T 47
158150	Shaft 25	159883	Gear Set, 106 WPM 47	163019	Pinion, 21T 47
158151	Arm 25	159897	Arm 24	163020	Gear, 48T 47
158156	Lever w/Stud 25	159899	Pin 24	163021	Pinion, 28T 47
158158	Roller 25	159976	Armature 44, 49	163022	Gear, 80T 47
158160	Bracket 25	159977	Hinge 49	163023	Gear Set, 60 WPM 47
158161	Indicator Assembly 25	159978	Shaft 49	163024	Gear Set, 75 WPM 47
158162	Bracket 25	160090	Lever, Transfer 20	163025	Gear Set, 100 WPM 47
158163	Switch, Sensitive 25, 31, 48	160185	Post 29	163106	Keylever Assembly 38
158164	Lever w/Hub 25	160369	Switch, NO Push Button 12	163302	Gear Set, 67 WPM 47
158186	Screw, 4-40 x 7/32 Fil 27	160370	Switch, NC Push Button 12	163440	Gear, 48T 5
158189	Washer, Felt 25	160377	Switch, Rotary 26	163445	Insulator, Strip 22, 23
158202	Housing, Switch 26	160393	Cable Assembly 26	163452	Pinion, 20T 47
158205	Cover 26	160583	Spring, Contact 8	163453	Gear, 56T 47
158206	Screw, 6-32 Thumb 26	160987	Pad, Tape Container 30	163454	Gear Set, 107 WPM 47
158208	Gear, 43T 26	161089	Shaft 41	163455	Pinion, 20T 47
158210	Shaft Assembly 26	161100	Spring, Contact 29, 33	163456	Gear, 52T 47
158212	Bracket 3	161102	Spring, Contact 28, 29	163457	Gear Set, 71 WPM 47
158213	Plate, Nut 3	161238	Connector, 36 Pt Receptacle 4, 48	163460	Gear, 55T 5
158215	Plate, Nut 3, 4, 30, 32, 51	161293	Gear Set, 60 WPM 47	163461	Pinion, 18T 47
158216	Plate, Nut 3	161294	Gear Set, 75 WPM 47	163462	Gear, 117T 47
158217	Plate, Nut 3	161295	Gear Set, 100 WPM 47	163463	Pinion, 24T 47
158219	Switch, Rotary 26	161301	Post 45, 47	163464	Gear, 104T 47
158226	Bracket w/Bushing 16	161301	Post 45, 47	163500	Gear, 52T 47
158228	Lever w/Stud 16	161330	Gear, 49T 47	163501	Pinion, 30T 47
158230	Bracket, Contact 16	161331	Pinion, 11T 47	163502	Gear Set, 107 WPM 47
158231	Contact, Lock Bar 16	161332	Gear, 42T 47	163504	Gear Set, 71 WPM 47
158233	Bracket 30	161333	Pinion, 10T 47	163505	Gear Set, 107 WPM 47
158238	Plate 31	161346	Washer, Felt 20	163511	Plate 13
158239	Lever, Tape 31	161347	Washer, Felt 37	163512	Bracket 13
158241	Container, Tape 30	161356	Gear Set, 67 WPM 47	163519	Sleeve, Gear 19
158250	Block, Terminal 3, 4	161357	Gear Set, 71 WPM 47	163531	Switch Assembly, Tape-Out 2, 31
158251	Plate, Mounting 3, 4	161440	Spring 14, 24	163532	Cable Assembly 31
158252	Insulator, Terminal Block 4	161525	Connector, 14 Pt Plug 12, 28	163536	Spacer, .562" Thk 22
158255	Cable Assembly 31	161826	Plate 31	163585	Bracket, Right 10, 13, 33, 39, 46
158268	Latch w/Hub 21	161859	Gear Set, 60 WPM 47	163586	Bracket, Left 10
158271	Guard, Gear 6, 7	161860	Gear Set, 75 WPM 47	163647	Channel, Ball 17, 33, 40
158275	Plate, Clamp 16	161861	Gear Set, 100 WPM 47	163699	Spring 24
158276	Screw, 3-48 x 11/16 Rd 16	161882	Plate w/Bracket 7	163775	Modification Kit 2, 36
158277	Screw, 3-48 x 1 Rd 16	161954	Socket, Lamp 12	163813	Plate 36
158281	Connector, 32 Pt Plug 48	162075	Reel, Tape 30	163814	Lever w/Hub 36
158289	Reel, Tape 30	162308	Bail, Code Bar 21, 39	163852	Keylever Assembly 33
158299	Cover, Contact 16	162309	Bar, Clutch 14	163963	Plate 13
158745	Clamp, Bearing 5, 6, 7, 45	162333	Stud, Locating 8	163964	Plate 12
158753	Armature, Magnet 34	162335	Cable 16	163979	Lever, Code Bar 33, 38
158754	Core, Magnet 34	162344	Contact Assembly 16	164005	Modification Kit 39
158816	Spring, Contact 8	162345	Switch, Rotary 26	164107	Bracket 26
158828	Bushing, Mounting 5	162659	Retainer 45	164127	Plate, Keytop Guide 10, 12, 13
158859	Post, Spring 34, 44	162731	Modification Kit 2, 37	164131	Cable Assembly 12
159278	Pinion, 14T 47	162815	Cable Assembly 37	164138	Stud 39
159279	Gear, 96T 47	162873	Contact Assembly, Universal 33, 39	164142	Bracket 4, 38, 41
159281	Pinion, 17T 47	162874	Clamp 33, 39	164143	Plate, Mounting 38, 41, 43
159282	Gear, 93T 47	162875	Bracket 33, 39	164144	Plate, Side 38, 43
159284	Pinion, 20T 47	162876	Bar, Retainer 33, 39	164145	Pivot, Lever 38, 43
159285	Gear, 84T 47	162878	Contact Assembly 33	164146	Lever, Stop 38
159287	Retainer, Pinion 45, 47	162879	Spring, Contact 33	164148	Spacer, Stop Arm 38
159327	Washer, Flat 21	162880	Bracket 28, 33	164151	Lever, Detent 38
159334	Washer, Insulating 21	162881	Plate 28, 33	164154	Lever, Sensing 38
159340	Spring, Return 32	162882	Bushing, Insulating 33		
159341	Bearing, Ball 5, 7, 45				

NUMERICAL INDEX (Continued)

Part Number	Description and Page Number	Part Number	Description and Page Number	Part Number	Description and Page Number
164155	Yoke, Magnet 38	170323	Lens, Yellow Pilot Light 12	170496	Keylever Assembly, LOC B SP 9
164156	Armature 38	170324	Bracket, Front 14, 15, 36	170499	Panel Assembly, Left 12
164157	Shaft 38	170325	Bar, Auxiliary Code 15	171541	Diode 50
164158	Latch 38	170329	Plate, Left 12	171559	Lamp, 28V Incandescent 12, 48
164160	Link 39	170330	Plate, Right 12	171952	Connector, Green Shielding 48
164161	Drum, Message 38	170331	Bar Assembly 2, 17	171972	Connector, Green Insulated 48
164162	Ring "O" 38	170332	Bail Assembly, Universal 2, 17	172945	Modification Kit 2, 38, 39, 40
164163	Blade, Stop 38	170334	Shaft Assembly, Clutch Cam 19	172947	Plate, Mounting 40
164164	Blade, Code 38	170337	Indicator Assembly 25	172948	Cable Assembly, Resistor Mounting 2, 40
164165	Plate, Drive 38, 43	170349	Container Assembly 2, 30	172978	Cover, Contact 16
164168	Pawl, Stepping 38, 43	170350	Bar, #0 Code 15	173028	Post, Spring 39
164169	Stud, Eccentric 38, 43	170351	Bar, #1 Code 15	173029	Lever, Latch 39
164224	Insulator 3, 4	170352	Bar, #2 Code 15	173095	Link 39
164234	Gear Assembly, Intermediate 2, 5	170353	Bar, #3 Code 15	173096	Stud, Eccentric 21, 39
164349	Shaft Assembly, Clutch Cam 19	170354	Bar, #4 Code 15	173122	Modification Kit 39
164379	Cable 34	170355	Bar, #5 Code 15	173220	Plate, Left 12
164426	Modification Kit 2, 41	170356	Bar, #6 Code 15	173221	Panel Assembly, Left 12
164457	Keylever Assembly 33	170357	Bar, #7 Code 15	173398	Cable w/Terminal 39
164485	Bail w/Hub 18, 34	170358	Bracket 3	173508	Gear, 66T 7
164489	Bar, Universal 34	170360	Bar, Auxiliary Code 15	173645	Coupling 6
164490	Bar, Clutch Trip 34	170361	Bar, Clutch Trip 15	173711	Cable Assembly 25
164495	Cable Assembly 48	170362	Latch, Auxiliary 15	173715	Terminal, Plug Type 48
164496	Bail 38	170363	Bracket, Left 15	173716	Terminal, Receptacle Type 48
164497	Eccentric 38	170364	Bracket, Right 15	173793	Gear, 100T 47
164499	Bar, Locking 38	170365	Guide, Code Lever 15	173794	Pinion, 14T 47
164500	Resistor Assembly 2, 40	170368	Shaft 15	173795	Gear Set, 65 WPM 47
164501	Plate, Mounting 40	170369	Bracket, Support 15	173992	Gear Set, 65 WPM 47
164502	Modification Kit 2, 38, 39, 40	170370	Lever, Function 15	173993	Pinion, 14T 47
164504	Cable w/Terminals 40	170371	Lever, Function 15	173994	Gear, 40T 47
164583	Modification Kit 47	170372	Bail, Universal 17	174034	Screw, 4-40 x 13/16 Hex 28
164584	Modification Kit 47	170373	Blade, Rear 17	174179	Spacer, .578" Thk 33
164585	Modification Kit 47	170374	Blade, Front 17	174181	Bracket, Rear Mounting 33
164644	Post 34	170375	Lever, Auxiliary 15	174182	Relay, 550 Ohm 33
164645	Post 34	170376	Channel Assembly, Ball 17	174183	Guard 33
164646	Plate, Nut 34	170379	Retainer, Ball 17	174184	Plate, Cover 33
164647	Bracket 34	170380	Retainer, Wedge 17	174217	Frame 41
164649	Plate, Mounting 34	170381	Lever, Start 20	174219	Bracket 41
164650	Contact Assembly 34	170382	Lever, #2 Selector 20	174220	Bushing 41
164651	Bail, Armature 34	170383	Lever, #3 Selector 20	174221	Washer, Spring 41
164653	Bracket 34	170385	Frame w/Bushing 18, 34	174222	Armature 41
164659	Modification Kit 2, 34	170386	Guide, Transfer Lever 20	174223	Cover 41
165027	Network, Spark Suppression 4	170388	Post, Guide 20	174225	Cable Assembly 41
165693	Cable w/Terminals 33	170390	Bail, Locking 20	174226	Cable w/Terminals 41
170086	Lever, Selector 20	170391	Guide, Transfer Lever 20	174227	Cable Assembly 41
170088	Gear Set, 88 WPM 47	170392	Lever, Non-Repeat 21	174238	Magnet Assembly 41
170089	Gear Set, 88 WPM 47	170395	Bracket, Function Bail 8, 9	174250	Pin, Roll 44, 45
170098	Camsleeve 19	170396	Bail, L. B. S. 9	174350	Bar, Code 14
170099	Shaft Assembly, Clutch Cam 19	170397	Bail, L.C.R. 8	174410	Box Assembly, Contact 2, 23
170100	Gear Set, 100 WPM 47	170398	Lever, L.L.F. 8	174411	Insulator 23
170101	Bar, #1 Code 15	170399	Lever 9	174412	Spacer, .531" Thk 23
170102	Bar, #2 Code 15	170400	Plate, Keypop Guide 10, 12	174413	Terminal 23
170103	Bar, #3 Code 15	170401	Frame, Front 10	174414	Bushing 23
170104	Bar, #4 Code 15	170403	Plate, Right 12	174415	Cover, Contact Box 23
170105	Bar, #5 Code 15	170404	Plate, Left 12	174416	Box, Contact 23
170106	Bar, #0 Code 15	170405	Panel Assembly, Right 12	174421	Filter, R. F. 23
170172	Bracket 35	170406	Bracket, Left Space Bar 10, 11	174491	Modification Kit 22
170173	Lever w/Hub 35	170407	Bracket, Right Space Bar 10, 11	176304	Bracket 38, 43
170185	Pinion, 25T 47	170409	Bail, Space Bar 10, 11	176305	Lever, Reset 43
170186	Gear, 119T 47	170410	Plate, Nut 3	176306	Pawl 43
170187	Pinion, 30T 47	170412	Bracket, Switch Mounting 8	176307	Arm, Drive 43
170188	Gear, 59T 47	170413	Contact Assembly 8	176308	Screw, 4-40 Eccentric 43
170189	Pinion, 15T 47	170414	Lever, Function 15	176309	Finger 43
170190	Gear, 51T 47	170418	Bracket 25	176310	Bracket 43
170293	Pinion, 11T 47	170419	Spacer 10	176311	Pawl, Release Lug 43
170297	Gear, 33T 47	170454	Bar, Space 10	176312	Screw, 4-40 Eccentric 43
170320	Connector, 24 Pt Receptacle 48	170456	Container, Tape 30	176313	Latch, Drive Pawl 43
170322	Lens, Red Pilot Light 12	170494	Keylever Assembly 9	176314	Roller 43

NUMERICAL INDEX (Continued)

Part Number	Description and Page Number	Part Number	Description and Page Number	Part Number	Description and Page Number
176316	Spacer, Reset Lever 43	178491	Bail 21	192941	Capacitor, 1,500 MFD 51
176318	Shaft 43	178492	Lever 21	192963	Resistor, 33,200 Ohm 51
176320	Plate 43	178493	Latch w/Hub 21, 39	192964	Inductor, 1,700 Ohm 51
176321	Shim, .010" Thk 43	178494	Spring, Torsion 21	193565	Coupling, Flexible 7, 47
176323	Plate, Side 43	178535	Suppressor, Spark 3	193654	Clamp, Armature 34
176339	Post, Stop 21	178599	Cable w/Terminal 3	193802	Modification Kit 21
176354	Sleeve 20	178725	Spring 32	193983	Guide, Tape 30
176395	Modification Kit 2, 43	178726	Bracket, Spring 32	194048	Screw, 4-40 Spl 51
176405	Modification Kit 2, 36	178728	Modification Kit 32	194425	Modification Kit 2, 34
176406	Bracket 36	178769	Gear Set, 100 WPM 47	194452	Lever 14
176407	Lever 36	178770	Pinion, 23T 47	194901	Screw, 4-40 Spl 51
176436	Cam, Control 23	178771	Gear, 46T 47	194925	Pinion, 13T 47
176632	Bracket 41	178772	Gear Set, 66 WPM 47	194926	Gear, 81T 47
176633	Switch, Rotary 41	178773	Pinion, 20T 47	194927	Gear Set, 67 WPM 47
176634	Lever, Actuator 41	178774	Gear, 60T 47	194928	Gear Set, 67 WPM 47
176659	Lever, Trip 4	178775	Gear Set, 61WPM 47	195144	Pinion, 11T 47
176661	Bracket w/Post 4	178776	Pinion, 17T 47	195145	Gear, 49T 47
176663	Link 3	178777	Gear, 56T 47	195146	Gear Set, 67 WPM 47
176672	Solenoid 4	178785	Shaft Assembly 19	195147	Gear Set, 67 WPM 47
176673	Suppressor, Spark 4	178787	Sleeve, Gear 19	195154	Modification Kit 2,6,45
176674	Bracket 30	178790	Contact Assembly 16	195155	Cable w/Terminals 45
176675	Solenoid Assembly 4	178795	Camsleeve 19	195156	Pinion, 28T 45
176691	Resistor w/Terminals, 5 Ohm 4	178849	Cord Assembly, Indicator 32	195157	Gear, 49T 45
176700	Base 4	178851	Pulley 32	195158	Bracket w/Bearings 45
176702	Bracket 4	178871	Sleeve, 7/16 ID x 1-1/8 Lg Insulating 40	195160	Pinion, 20T 45
176703	Plate, Mounting 4	179170	Screw, 6-40 x 3/4 Rd 12	195161	Shaft 45
176709	Container Assembly 2, 30	179258	Bracket, Scale 32	195163	Bracket 45
176752	Ring, Retaining 44	179278	Drum, Ratchet 32	195164	Bracket, Bearing 6
176770	Bracket 44	179279	Bracket w/Posts 32	195165	Shaft w/Bearing 6, 45
176771	Shaft, Driver 44	179362	Cable Assembly 31, 34	195166	Plate 6
176772	Gear, 56T 44	179363	Cable Assembly 34	195167	Lever 45
176774	Gear, 42T 44	179491	Switch Assembly, Back Space 36	195168	Bracket 45
176776	Gear, 50T 44	179623	Resistor, 3,920 Ohm 3	195169	Bracket 45
176779	Wick, Felt 44	179634	Bracket, Connector Mounting 51	195182	Pinion, 20T 47
176780	Hub 44	179639	Contact Assembly 51	195183	Gear, 52T 47
176781	Shaft, Clutch 44	179643	Network, Filter 51	195184	Gear Set, 67 WPM 47
176782	Gear, 63T 44	179740	Cable Assembly 41	195186	Screw, 4-40 x 7/8 Hex 22
176784	Bearing, Flange 44	179747	Shaft 26	195187	Screw, 4-40 x 1-1/2 Hex 22, 23, 51
176787	Gear, 66T 44	179748	Connector, 5 Pt Plug 50, 51	195263	Pinion, 22T 45
176789	Hub 44	179990	Button, Black 12	195264	Gear, 49T 45
176790	Washer, Bearing 44	179991	Button, Red 12	195417	Shaft, Driven 45
176792	Sleeve w/Stud 44	179992	Button, Green 12	195418	Gear, 48T 45
176793	Sleeve 44	180675	Screw, #6 Self-Tapping 3, 4	195420	Pawl 45
176794	Spring, Right Clutch 44	180904	Tab, Terminal 3, 4	195427	Washer, Flat 45
176795	Spring, Left Clutch 44	181392	Terminal, Tab Type 3, 4	195651	Box, Contact 51
176796	Wick, Felt 44	192013	Connector, 50 Pt Plug Type 48	195652	Cover, Contact Box 51
176797	Gear, 48T 44	192025	Washer, Flat 45	195717	Plate, Identification 3, 4
176799	Gear, 35T 44	192176	Terminal, Plug Type 48	195923	Filter, R. F. 22
176801	Guard, Gear 44	192177	Terminal, Receptacle Type 48	197928	Switch, Red Pushbutton 12
176802	Plate, Right Bearing 44	192224	Panel, Tape Container 30	197929	Switch, Black Pushbutton 12
176803	Plate, Left Bearing 44	192511	Bar, Space 11	197930	Switch, Green Pushbutton 12
176804	Shaft, Idler 44	192533	Plate, Rear 21	198050	Gear Set, 81 WPM 47
176805	Gear, 25T 44	192534	Post, Locking Bail 20	198051	Pinion, 17T 47
176807	Shaft, Trip 44	192538	Plug, Button 11	198052	Gear, 97T 47
176808	Bracket 44	192550	Bar Assembly, Ball Lock 2, 17	198053	Gear Set, 106 WPM 47
176809	Bracket 44	192552	Channel, Ball 17	198054	Pinion, 21T 47
177005	Contact Assembly 16	192553	Bracket, Left Mounting 11	198055	Gear, 92T 47
177018	Bracket 41	192554	Bracket, Right Mounting 11	198056	Gear Set, 81 WPM 47
177355	Resistor, 4,000 Ohm 3	192555	Plate, Keytop Guide 11	198057	Pinion, 19T 47
178142	Camsleeve 19	192556	Frame 11	198058	Gear, 70T 47
178329	Cable Assembly 33	192557	Grommet, Rubber 11	198588	Bracket 49
178331	Cable Assembly 33	192629	Shaft 7	198589	Hinge 49
178339	Cable Assembly 33	192630	Bracket 48	198590	Fork 49
178340	Relay Assembly, Control 33	192681	Screw, 4-40 Spl 17	198592	Cover 49
178346	Modification Kit 2, 19, 33	192937	Capacitor, .068 MFD 51	198601	Bracket 50
178349	Cable Assembly 33				
178490	Modification Kit 14				

NUMERICAL INDEX (Continued)

Part Number	Description and Page Number	Part Number	Description and Page Number	Part Number	Description and Page Number
198606	Connector, 4 Pt Receptacle 50	305574	Gear, 53T 47	311676	Modification Kit 2,7,45
198608	Connector, 4 Pt Plug 50	305577	Gear Set, 100 WPM 47	311741	Bracket, Space Bar 10, 11
198609	Bracket, Mounting 50	305578	Gear Set, 67 WPM 47	311881	Pinion, 15T 45
198679	Bracket, Bolt Retaining 45	305579	Gear Set, 60 WPM 47	311882	Gear, 26T 45
198680	Screw, 10-32 Spl 45	305632	Pinion, 22T 7	311883	Gear, 21T 45
199070	Box Assembly, Contact 2, 51	305633	Gear, 55T 7	311884	Gear, 50T 45
199073	Bar, Counter 49	305634	Bracket Assembly, Bearing 2, 7	311885	Gear, 24T 45
199075	Plate, Contact Mounting 49	305635	Shaft w/Bearings 7	311886	Gear, 52T 45
199090	Pinion, 20T 47	305757	Lever, Switch 26	311887	Gear, 36T 45
199091	Gear, 56T 47	305758	Bracket 4	311888	Gear, 52T 45
199100	Keytop w/Shaft, FO 27	305760	Bracket, Connector 50	311889	Pinion, 18T 45
199101	Keytop w/Shaft, H-ON 27	306732	Resistor, 1.5 Meg Ohm 26	311890	Gear, 54T 45
199102	Keytop w/Shaft, D-ON 27	307788	Bracket 45	311891	Gear, 22T 45
199103	Keytop w/Shaft, FLD 27	307844	Pinion, 10T 47	311893	Bracket w/Bearings 45
199183	Cable Assembly 50	307845	Gear, 57T 47	312691	Pinion, 26T 47
199184	Cable Assembly 50	307846	Pinion, 20T 47	312692	Gear, 94T 45
199189	Diode Assembly 50	307847	Gear, 70T 47	312705	Gear Set, 107 WPM 47
199193	Bushing, Insulating 51	307848	Pinion, 15T 47	315525	Plate, Keytop Guide 10
199196	Link 51	307849	Gear, 78T 47	315867	Shaft w/Bearing 7, 45
199361	Modification Kit 3, 4	307850	Gear Set, 60 WPM 47	317202	Modification Kit 2,7,45
199650	Arm w/Stud 24	307851	Gear Set, 67 WPM 47	317203	Plate w/Bracket 7
301699	Reel, Tape 30	307852	Gear Set, 100 WPM 47	317349	Modification Kit 2,6,45
304211	Gear, 26T 45	309506	Spring, Gold Plated 46	318900	Pinion, 24T 45
304212	Gear, 55T 45	309507	Contact 46	318901	Gear, 56T 45
304229	Plate 45	309508	Bracket, Left 46	318904	Gear Set 45
304610	Plate, Right Switch 12	309509	Bracket, Right 46	319394	Screw, 10-24 Set 7, 47
304672	Plate, Keytop Guide 10	309510	Bar, Retaining 46	319909	Pinion, 13T 47
304902	Switch, Pushbutton 48	309511	Modification Kit 2, 46	319910	Gear, 50T 47
304903	Switch, Pushbutton 48	309538	Cap, Pushbutton 48	319911	Gear Set, 65 WPM 47
305569	Pinion, 22T 47	309539	Cap, Pushbutton 48	319912	Pinion, 10T 47
305570	Gear, 55T 47	310153	Jumper, 15" Green 3, 4	319913	Gear, 35T 47
305571	Pinion, 14T 47	311438	Switch Assembly, Tape-Out 2, 31	319914	Gear Set, 71 WPM 47
305572	Gear, 52T 47	311439	Cable Assembly 31	319915	Pinion, 24T 47
305573	Pinion, 13T 47	311451	Camsleeve 19	319916	Gear, 56T 47
				319917	Gear Set, 107 WPM 47



28 TYPING REPERFORATOR (LPR)
and
28 TAPE PRINTER (LTP)
PARTS

FIGURE	CONTENTS	PAGE
1	Frame Mechanism	3
2	Frame Mechanism	4
3	Main Shaft Mechanism	5
4	Punch Rear Plate Mechanism	6
5	Punch Front Plate Mechanism	7
6	Punch Bail Mechanism	8
7	Rotary Positioning Mechanism	9
8	Rotary Positioning Mechanism	10
9	Axial Positioning Mechanism	11
10	Axial Positioning Mechanism	12
11	Function Box Mechanism	13
12	Range Finder Mechanism	14
13	Selecting Mechanism	15
14	Selecting Magnet Mechanism	16
15	Transfer Mechanism	17
16	Early Design Ribbon Feed Mechanism	18
17	Typing Mechanism	19

(CONTENTS continued on Page 2)

FIGURE	CONTENTS (continued)	PAGE
18	159351 and 162434 Modification Kits to Add Non-Interfering Blank Tape Feed-Out	20
19	159351 and 162434 Modification Kits to Add Non-Interfering Blank Tape Feed-Out	21
20	159351 and 162434 Modification Kits to Add Non-Interfering Blank Tape Feed-Out	22
21	Modification Kits to add Timing Contacts	23
22	Modification Kits to Add Code Reading Contacts	23
23	Cables	24
24	159360 and 162242 Modification Kits to Add Signal Bell Contact	25
25	160881 Modification Kit to Add Guard for Backspace Mechanism (Printing on Edge of Tape)	25
26	161340 Modification Kit to Add Manual Interfering Letters Tape Feed-Out	26
27	161341 and 162432 Modification Kits to Add Solenoid Operations to Letters Feed-Out	26
28	Two-Shaft Mechanism	27
29	159363 and 172640 Modification Kits to Add Manual Backspace (Printing on Edge of Tape)	28
30	161304 and 162245 Modification Kits to Add Power Drive to Backspace Mechanism	29
31	Cables	30
32	161321 and 162247 Letters - Figures Contact Assembly	31
33	162379 and 163347 Modification Kits to Add Automatic Non-Interfering Letters Tape Feed-Out	32
34	162379 (Automatic Letters), 162380 (Remote Control Blank), 163347 (Automatic Letters), 173443 (Remote Control Letters) and 176628 (Remote Control Letters) Modification Kits to Add Non-Interfering Tape Feed-Out	33
35	162379 (Automatic Letters), 162380 (Remote Control Blank), 163347 (Automatic Letters), 173443 (Remote Control Letters) and 176628 (Remote Control Letters) Modification Kits to Add Non-Interfering Tape Feed-Out	34
36	162380 (Blank), 173443 (Letters) and 176628 (Letters) Modification Kits to Add Remote Control Non- Non-Interfering Tape Feed-Out	35
37	162380 (Blank), 173443 (Letters) and 176628 (Letters) Modification Kits to Add Remote Control Non-Interfering Tape Feed-Out	36
38	Modification Kits to Provide Unshift Function	37
39	161828 Modification Kit to Make Tape Backspace and Blank Feed-Out Compatible	37
40	176621 Modification Kit to Provide End of Feed-Out Timing Contact for 176628 Letters Tape Feed-Out	38
41	176420 and 176421 Modification Kits to Add Timing Contacts to Selector	39
42	Early Design Main Shaft Mechanisms	40
43	Punch Box Assemblies	41
44	Ribbon Feed Mechanism	42
45	Uncoded Function Blades	43
46	173961 and 179133 Modification Kits to Provide Blank Delete for Typing Reperforator	44
47	173961 and 179133 Modification Kits to Provide Blank Delete for Typing Reperforator	45
48	173135 Tape Absent Contact Bracket Assembly	46
49	164948 Modification Kit to Equip Reperforator with Combination Tape Chute and Knife Tearing Edge When Mounted in an Universal Cabinet	46
50	164506 Modification Kit to Add Multiple Mounted Function Blade Operated Contacts	47
51	Modification Kits to Equip a Reperforator with an Auxiliary Contact Assembly and Function Blades	47
52	178917 Modification Kit to Provide Backspace Mechanism for Fully Perforator Tape and Printing Between Feed Holes	48
53	178918 Modification Kit to Provide Guard for Backspace Mechanism (Fully Perforated Tape, Printing Between Feed Holes)	48
54	179275 Modification Kit to Provide Positive Engagement of Punch Slides with the Latch Levers	49
55	174475 Modification Kit to Provide Print Suppression on Functions	49
56	Motor Control Mechanism	50
57	Code Reading Contact Cables	51
58	Typewheel Chart	52
	Numerical Index	53

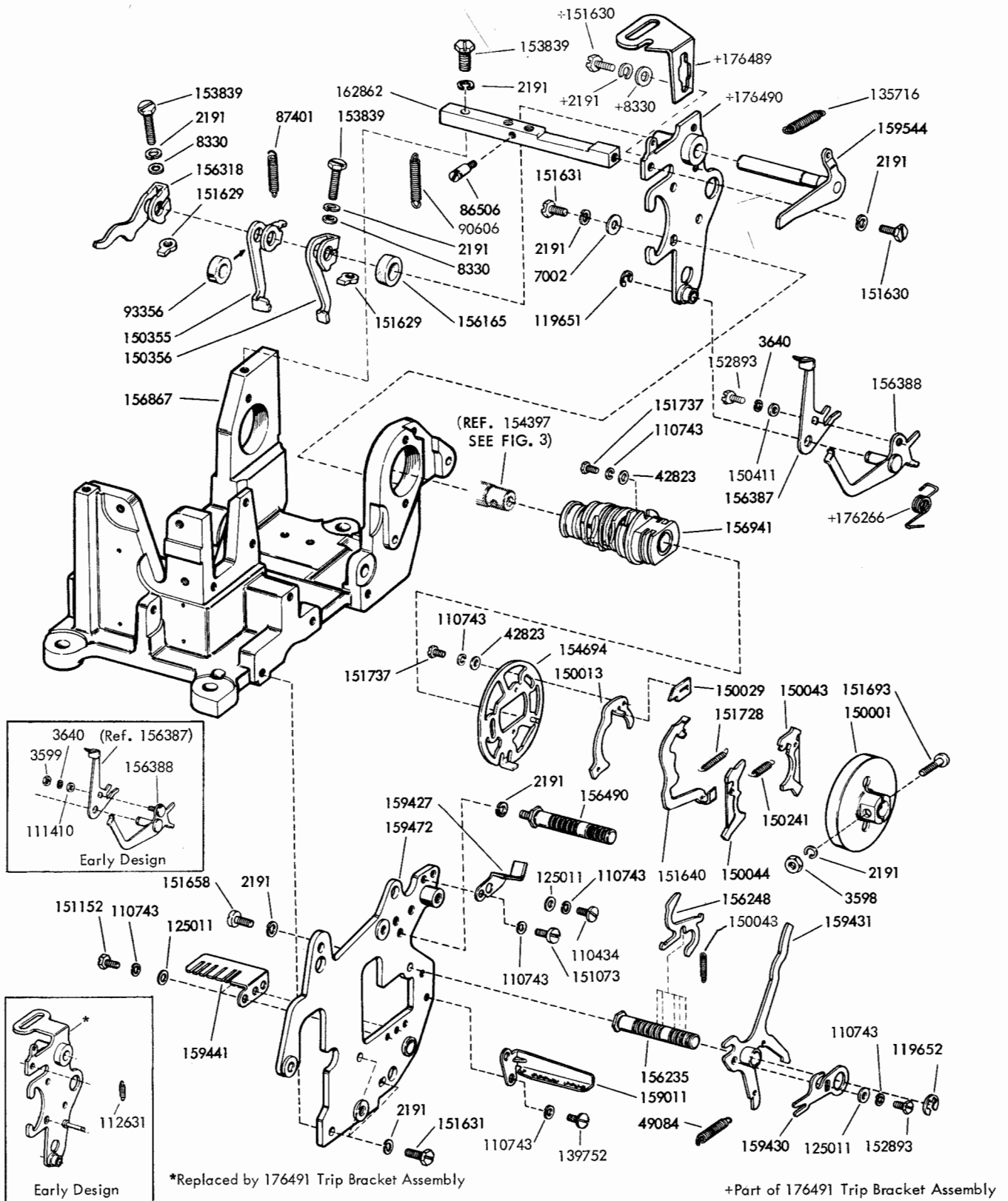


FIGURE 1. FRAME MECHANISM

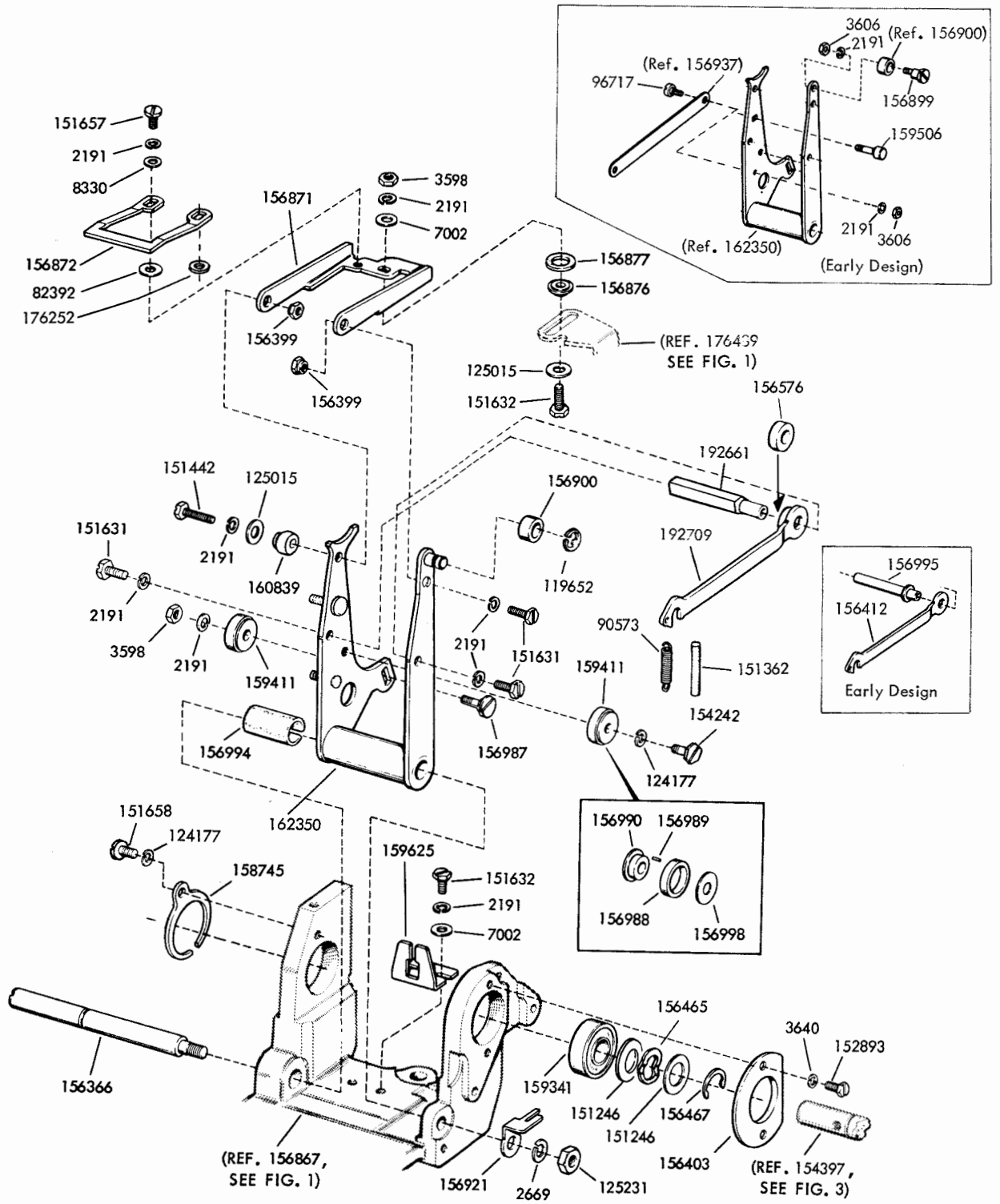
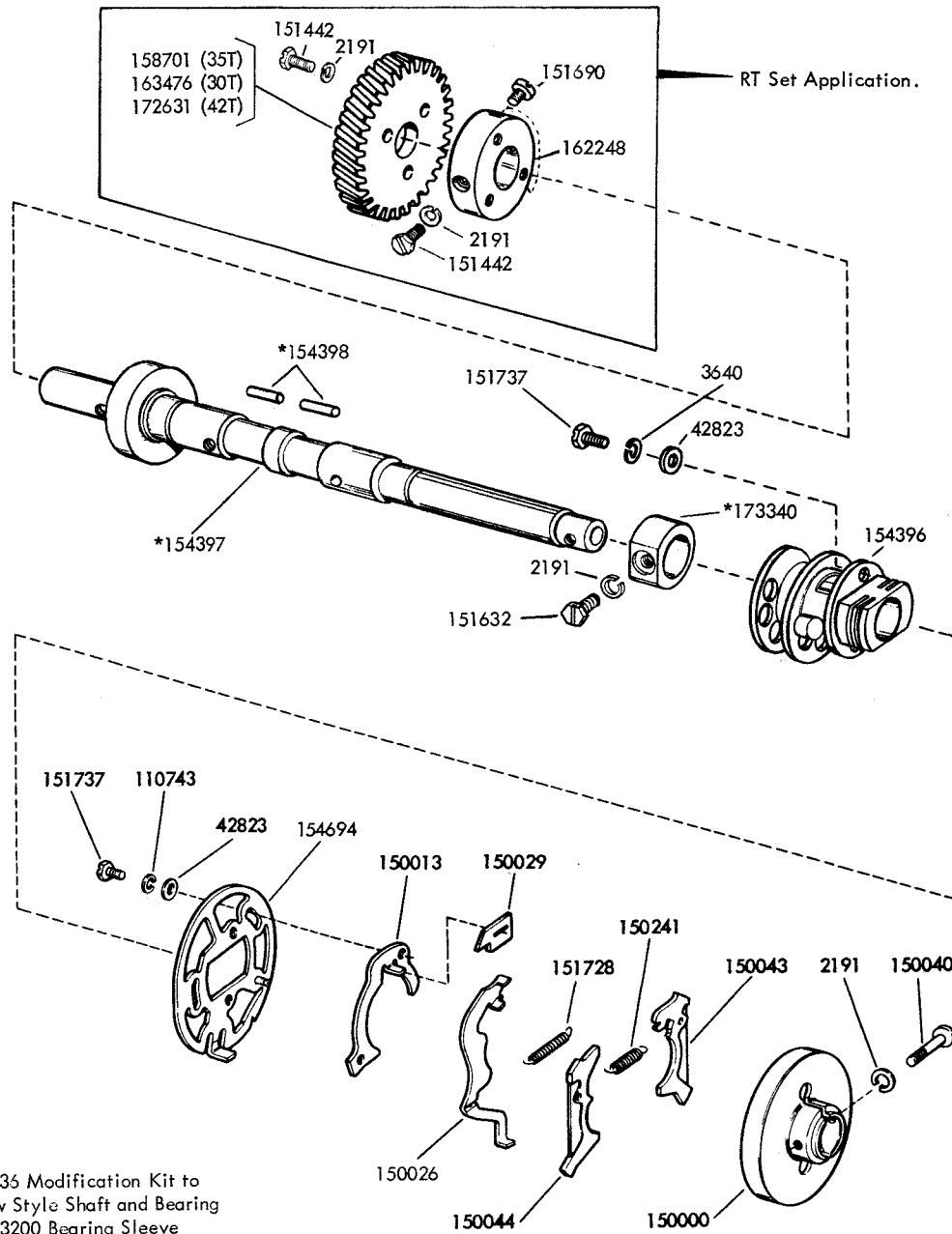


FIGURE 2. FRAME MECHANISM



*Part of 173336 Modification Kit to Provide New Style Shaft and Bearing (Includes 173200 Bearing Sleeve Shown on Figure 42).

173336 - Specification 59795

FIGURE 3. MAIN SHAFT MECHANISM

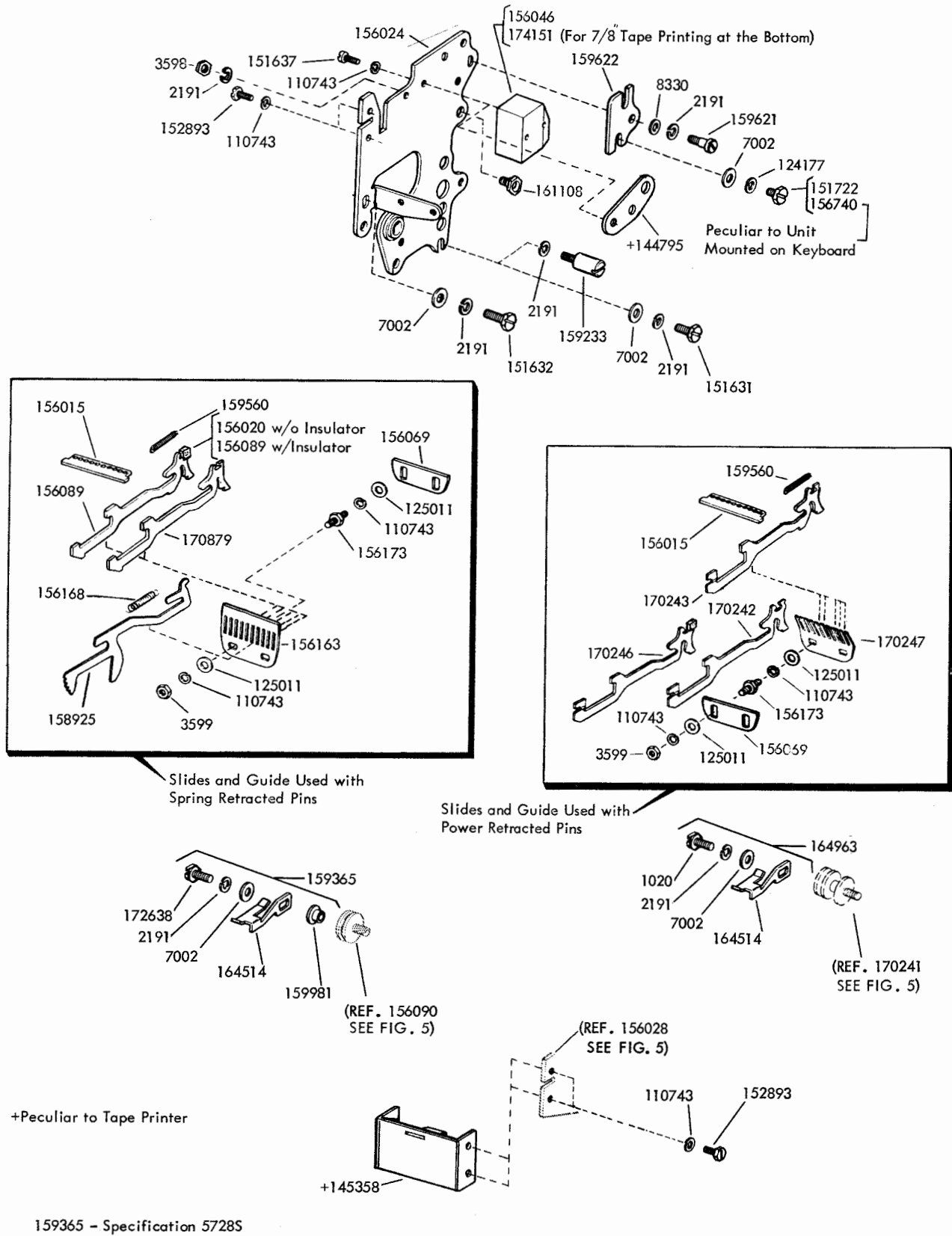
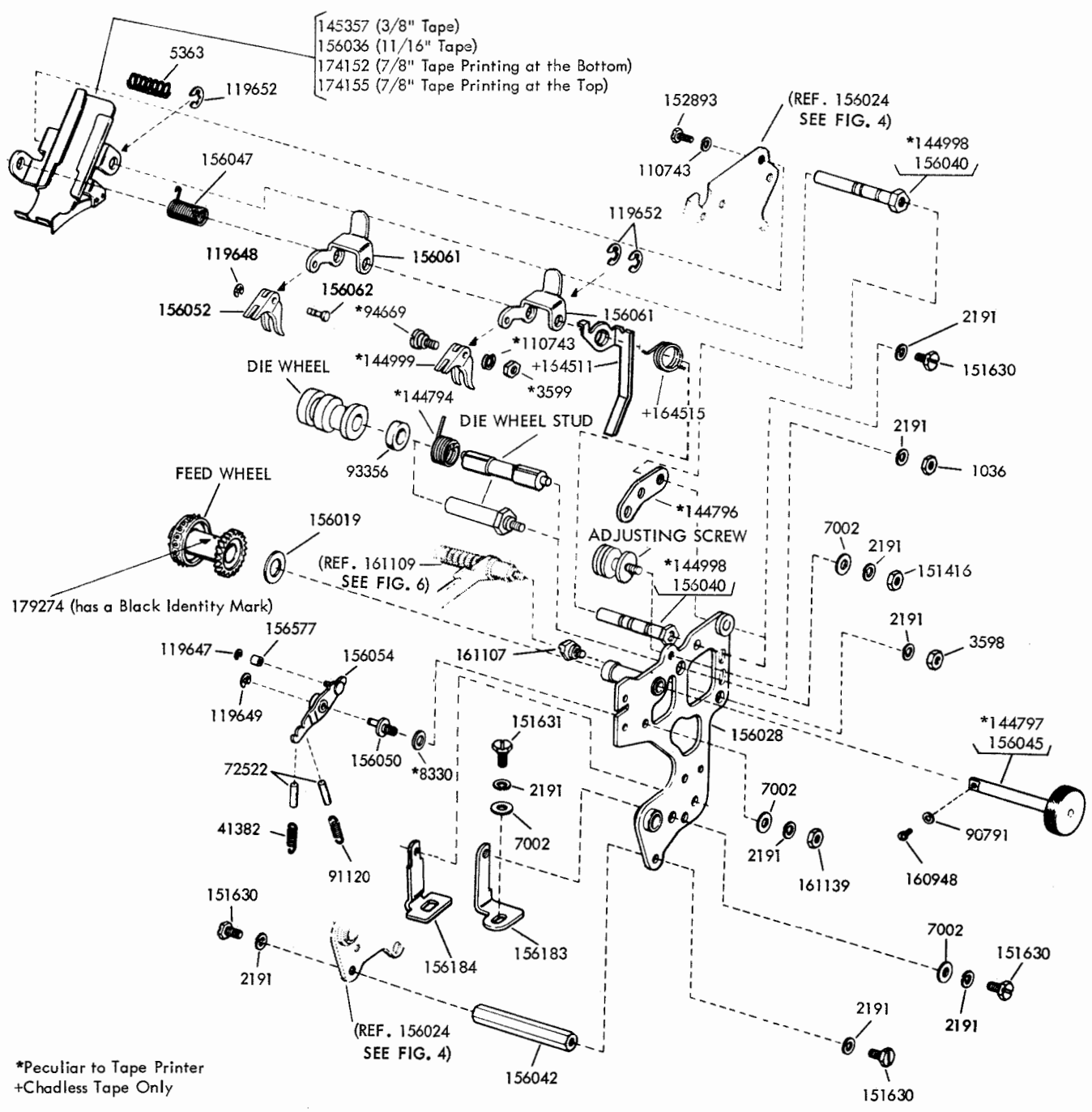


FIGURE 4. PUNCH REAR PLATE MECHANISM



Type of Punch	Typing Reperforators - 5 Level			Tape Printer
	Chadless w/Spring Ret. Pins	Fully Perforated w/Spring Ret. Pins	Fully Perforated w/Power Ret. Pins	
Die Wheel	156055	170788	170788	145353
Feed Wheel	See Fig. 2-43 for Punch Block and Feed Wheel Combinations			145356
Die Wheel Stud	156044	170219	170219	144793
Adjusting Screw	156090	170241	170241	170241

FIGURE 5. PUNCH FRONT PLATE MECHANISM

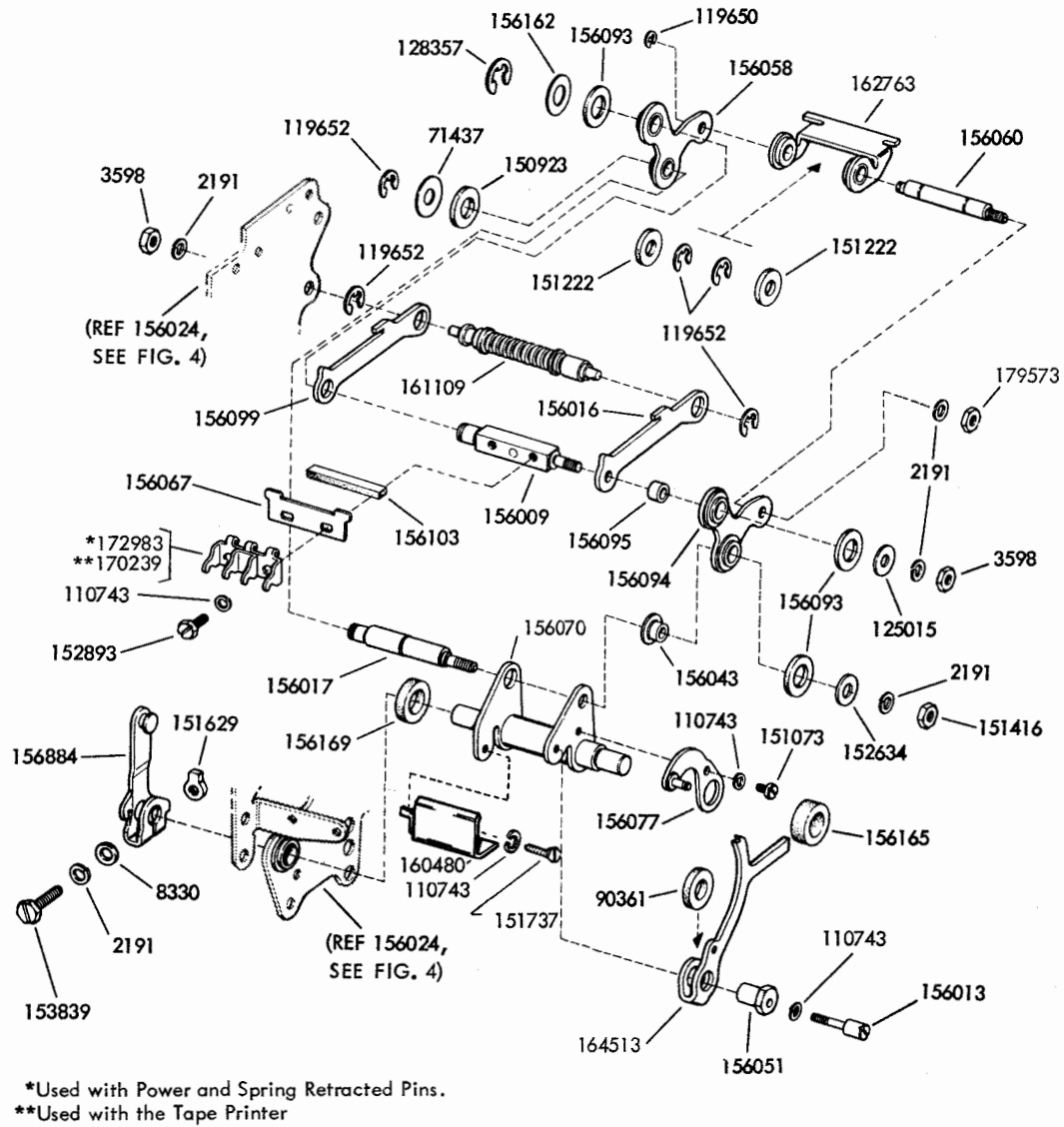


FIGURE 6. PUNCH BAIL MECHANISM

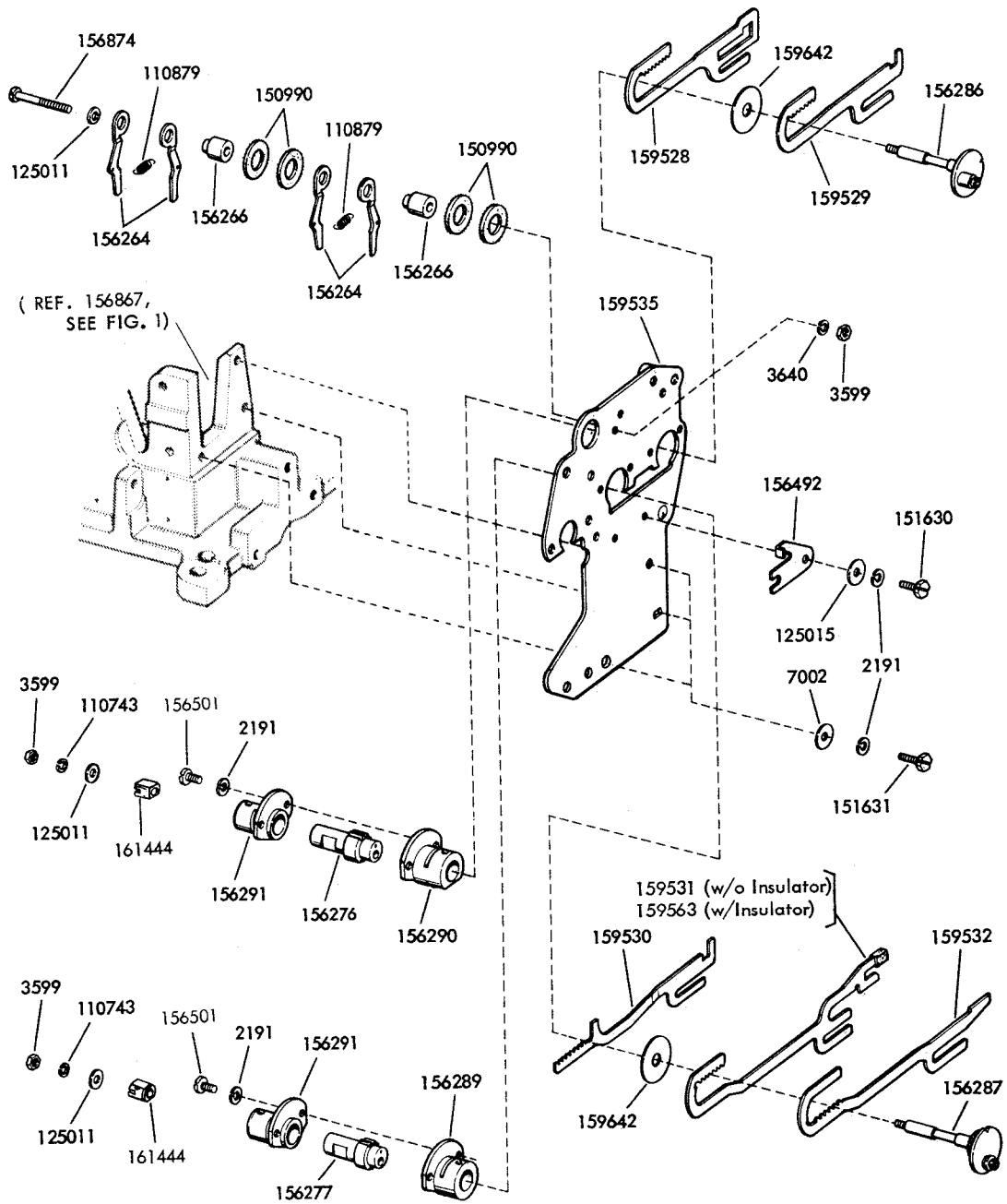
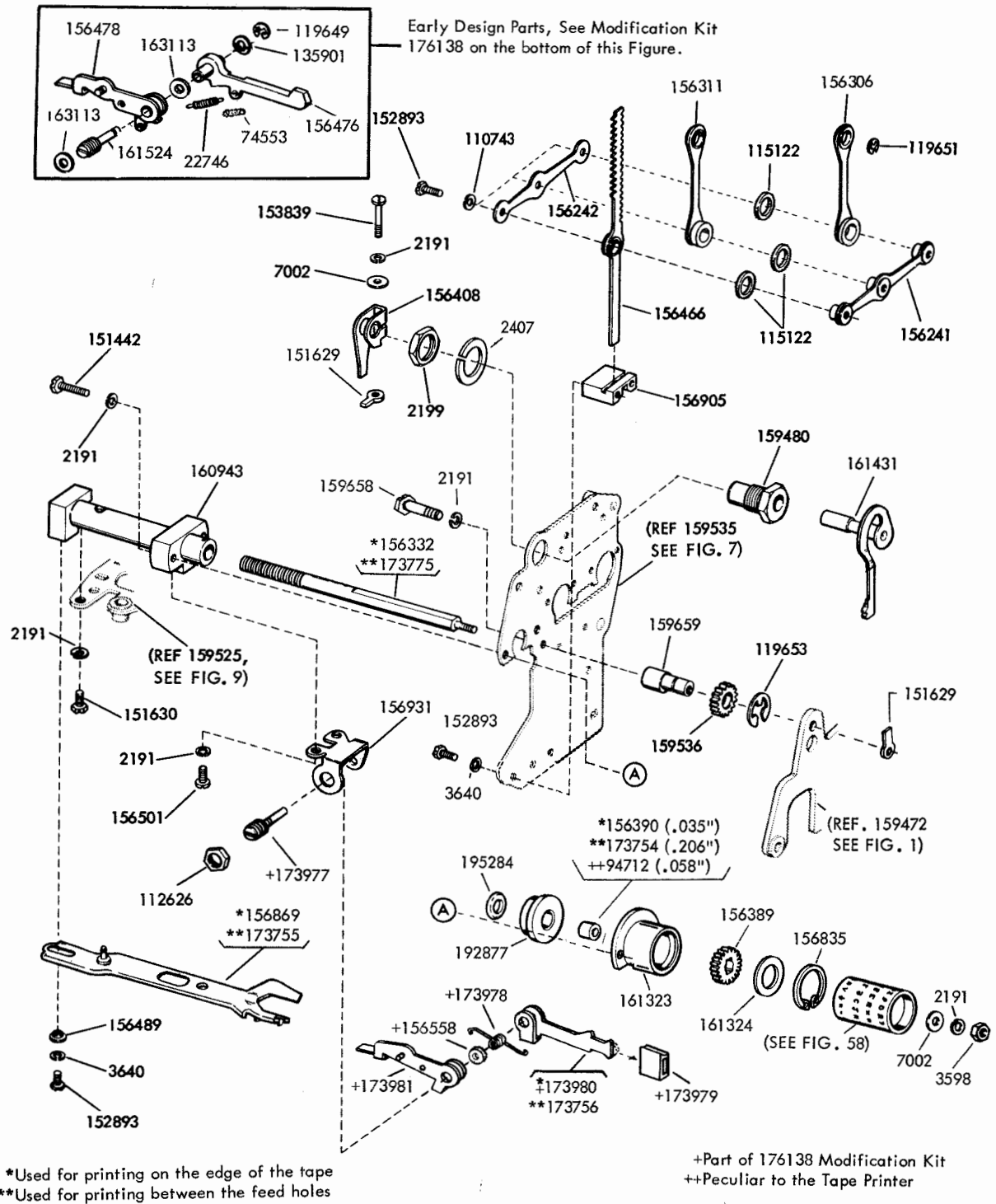
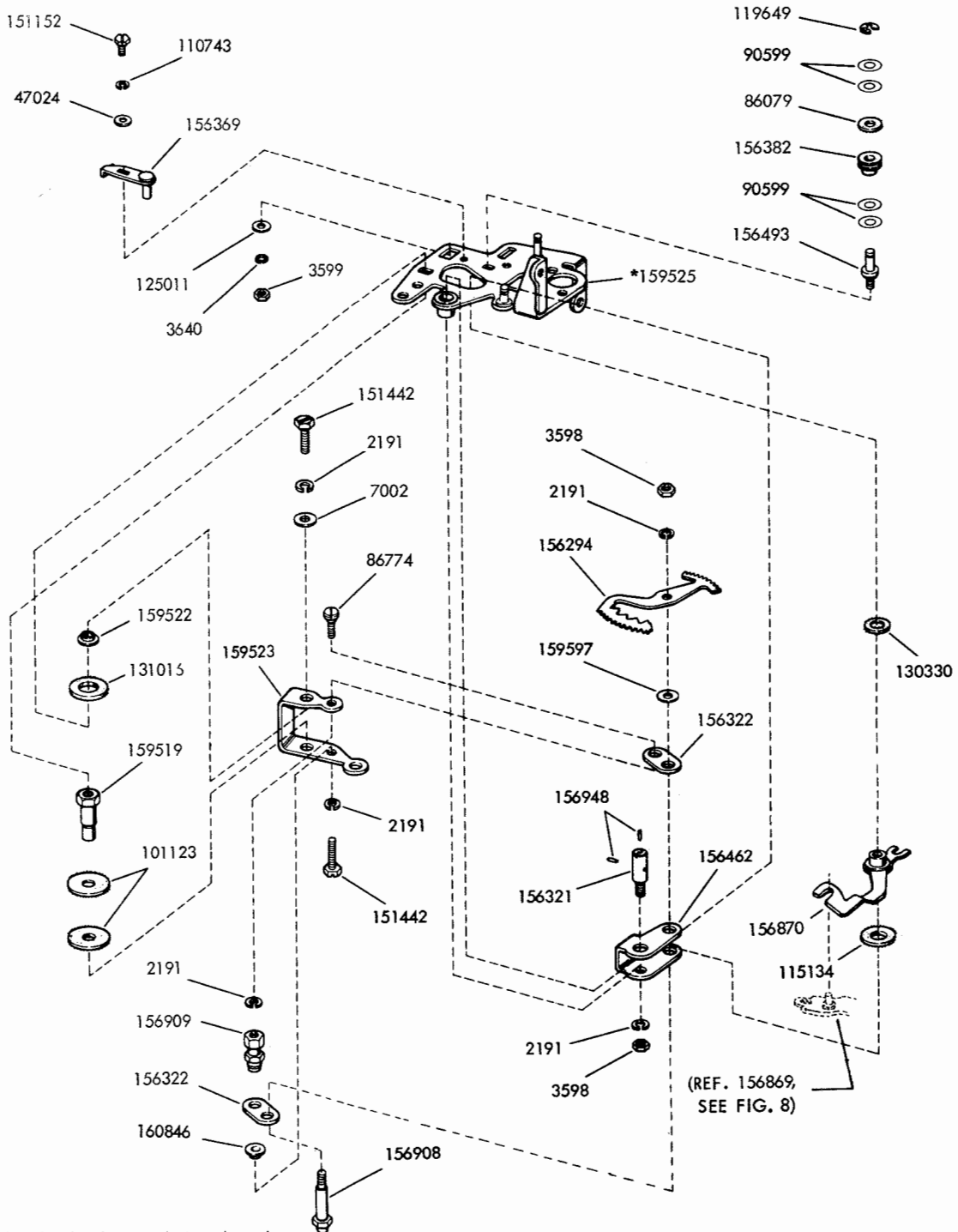


FIGURE 7. ROTARY POSITIONING MECHANISM



176138 - Specification 500295

FIGURE 8. ROTARY POSITIONING MECHANISM



*The 159525 bracket has been redesigned, and now includes the axial correction plate mounting post. The 156397 post, 2191 lock washer and 154244 shoulder nut will be supplied for maintenance.

FIGURE 9. AXIAL POSITIONING MECHANISM

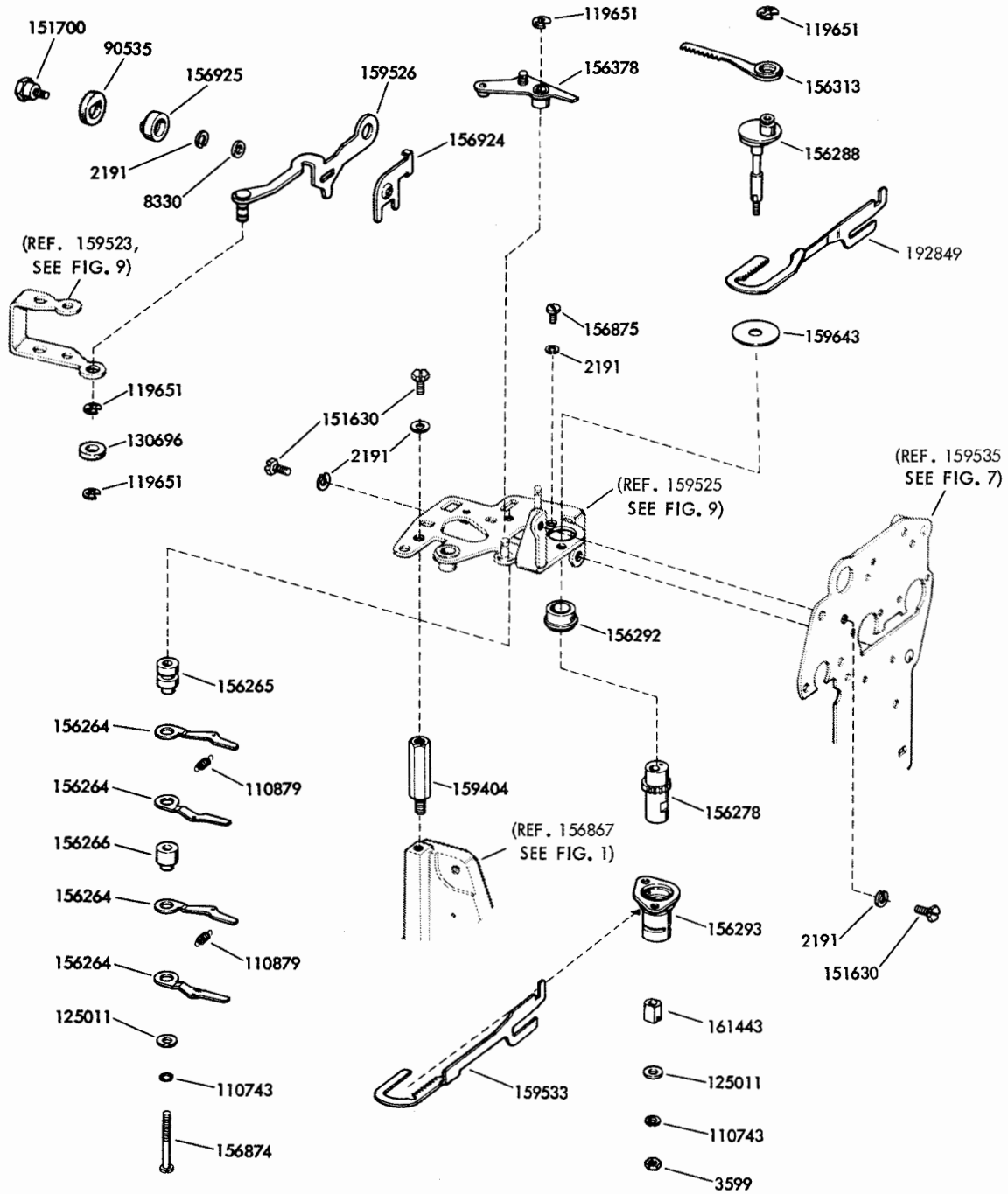


FIGURE 10. AXIAL POSITIONING MECHANISM

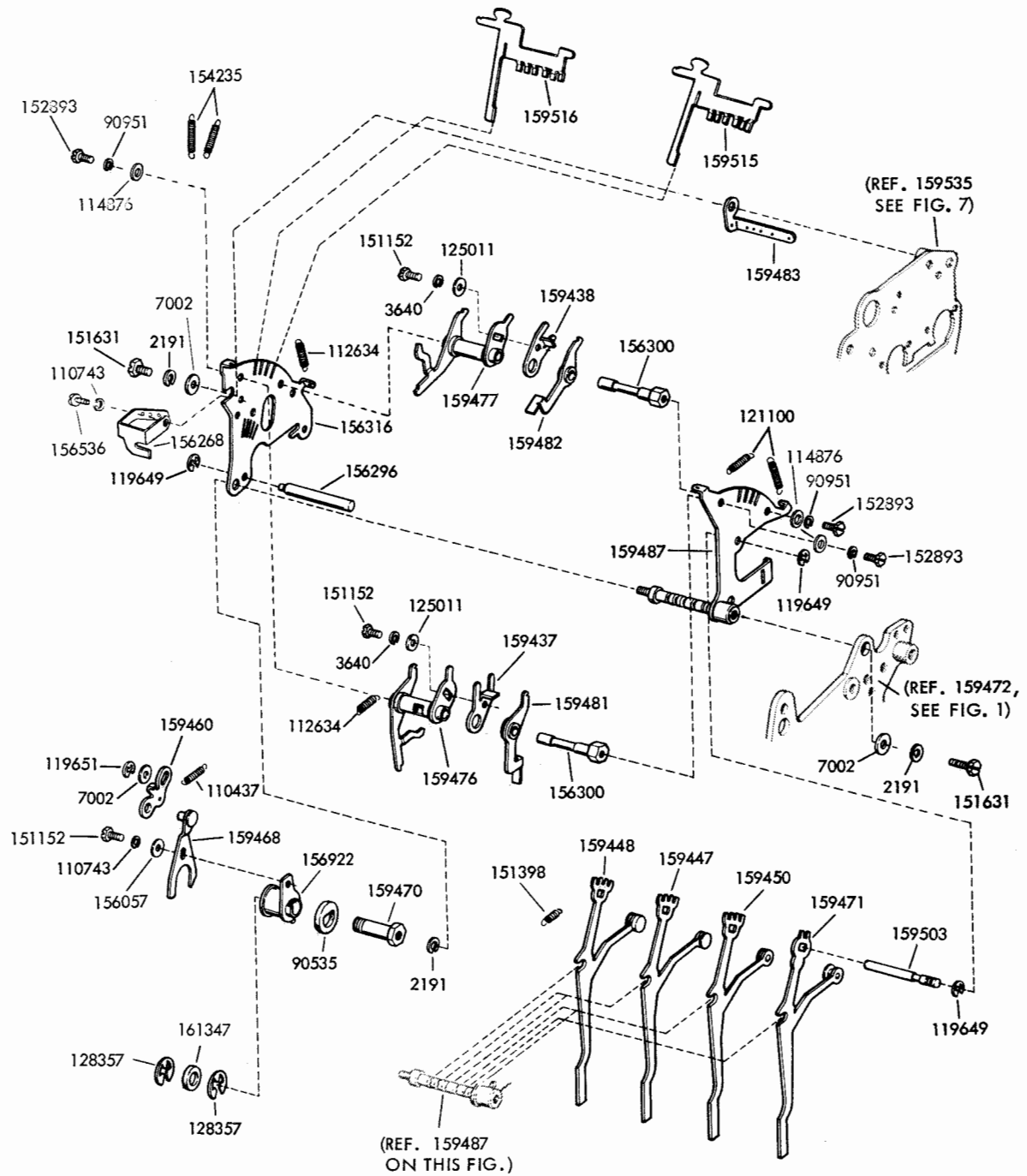


FIGURE 11. FUNCTION BOX MECHANISM

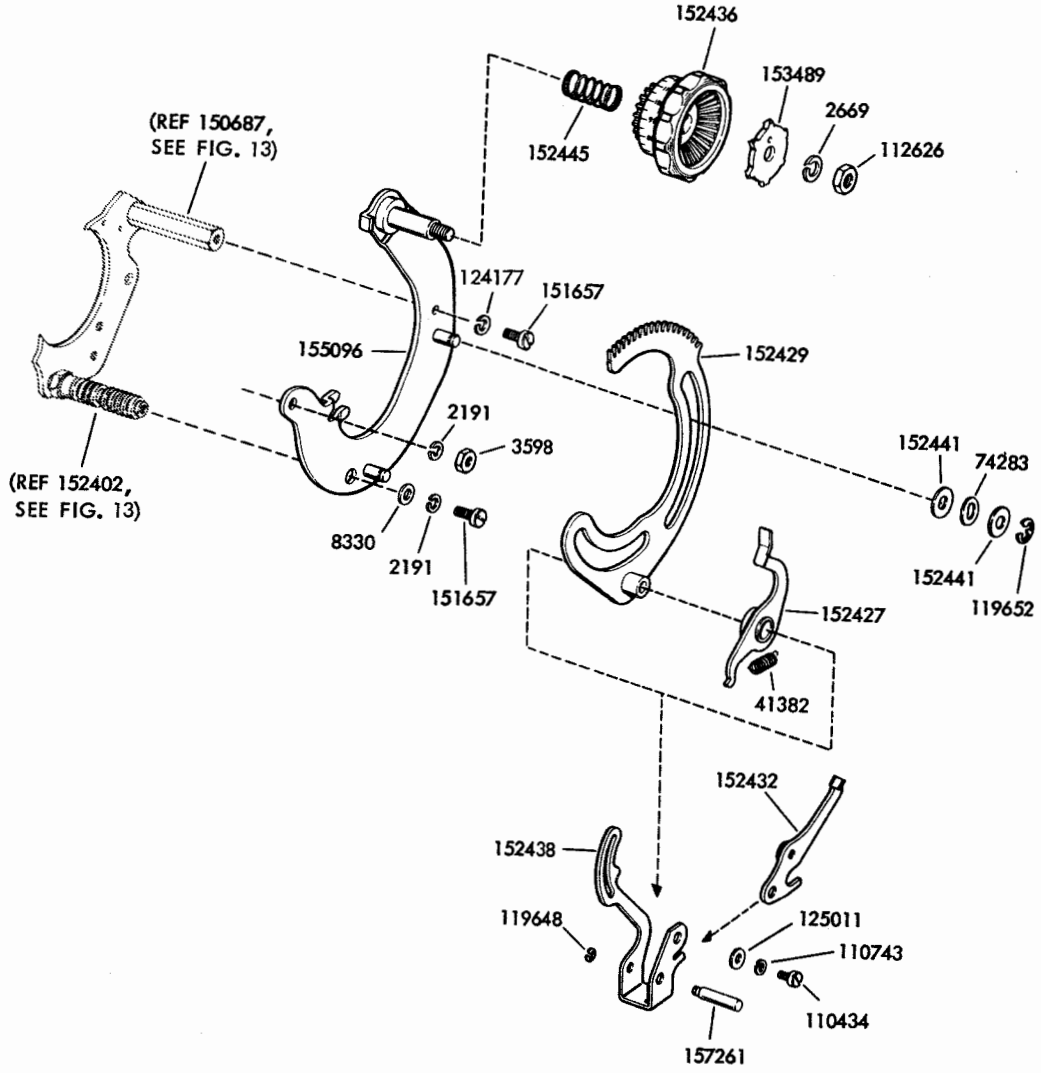


FIGURE 12. RANGE FINDER MECHANISM

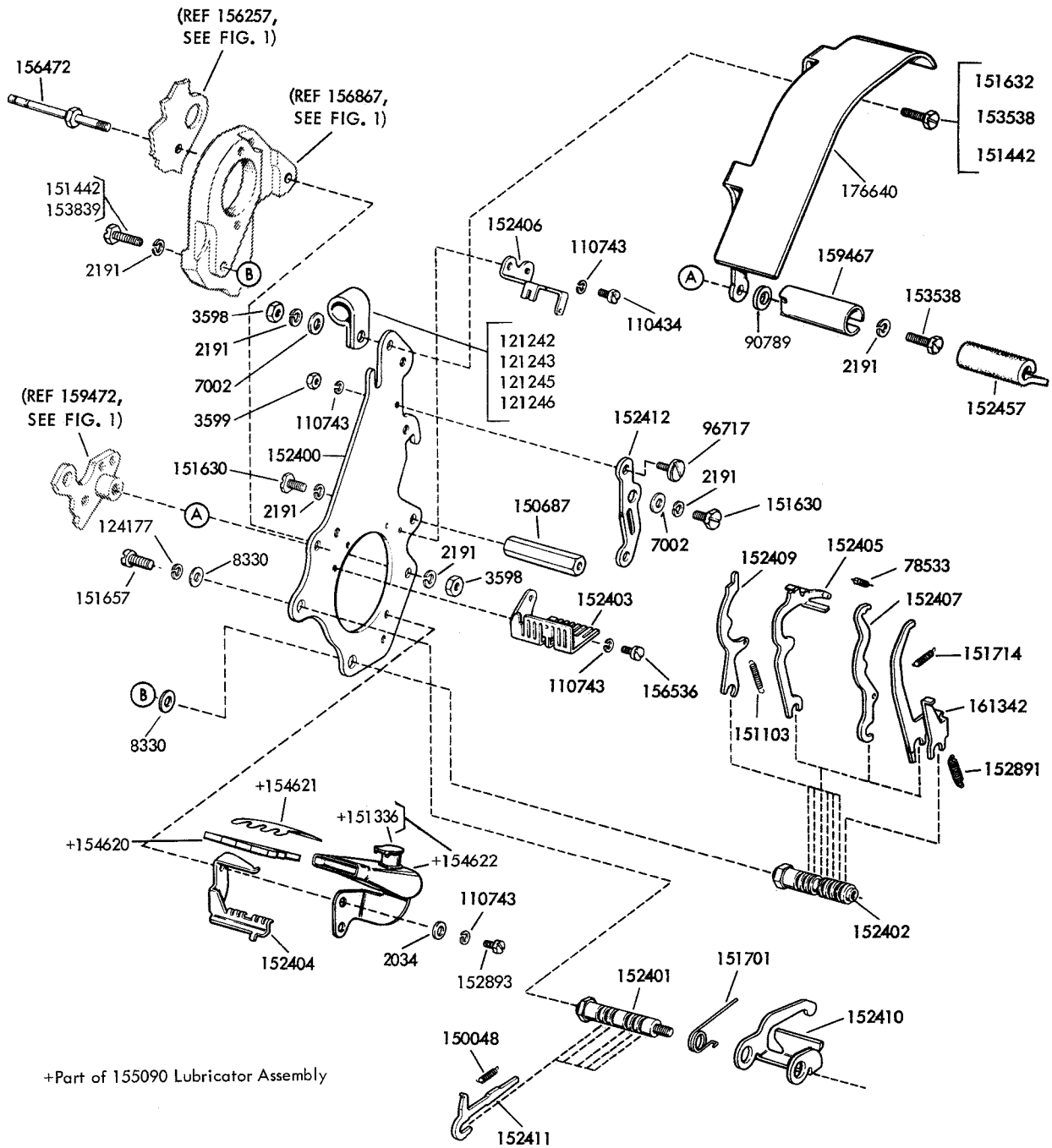
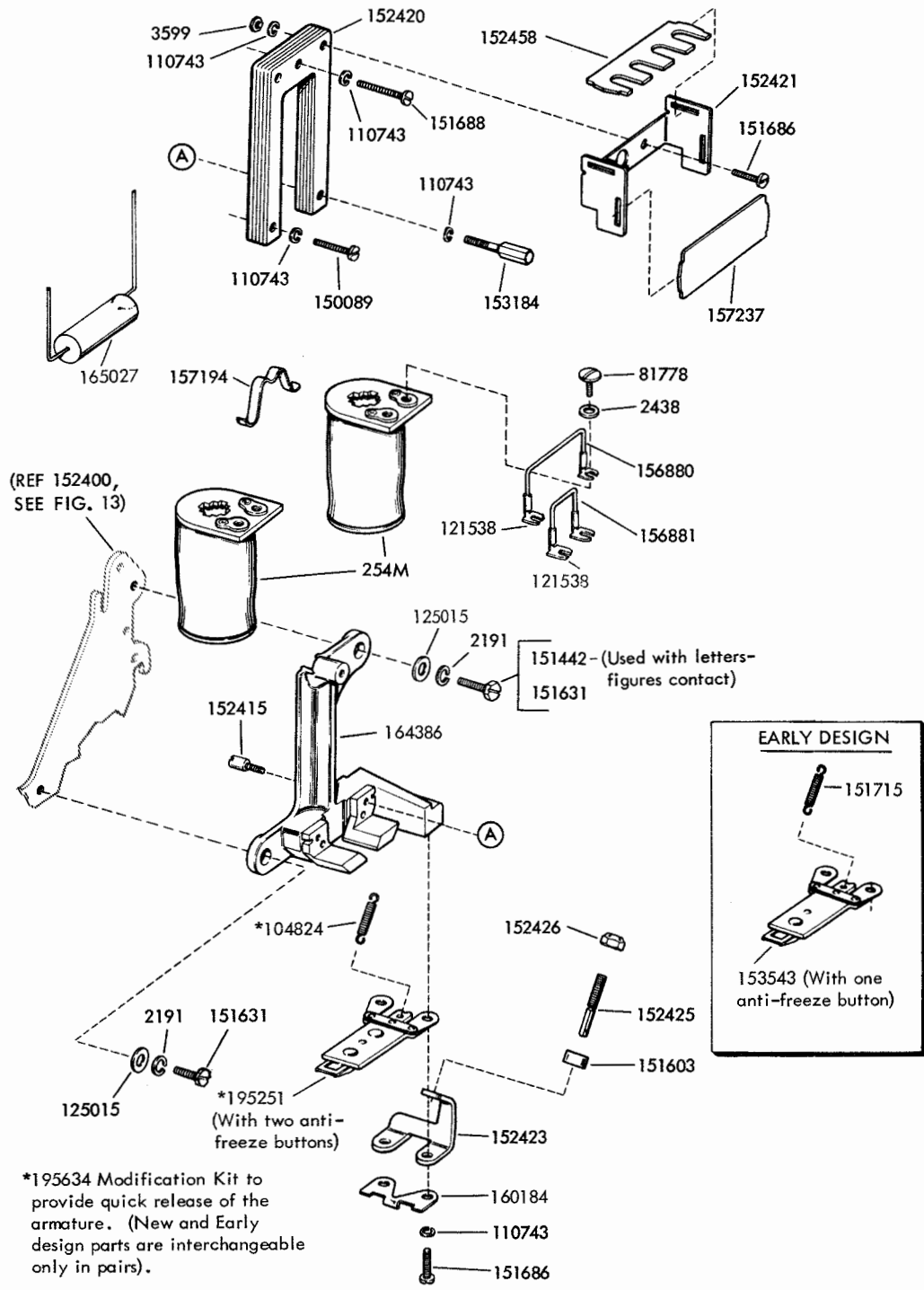


FIGURE 13. SELECTING MECHANISM



195634 - Specification 501655

FIGURE 14. SELECTING MAGNET MECHANISM

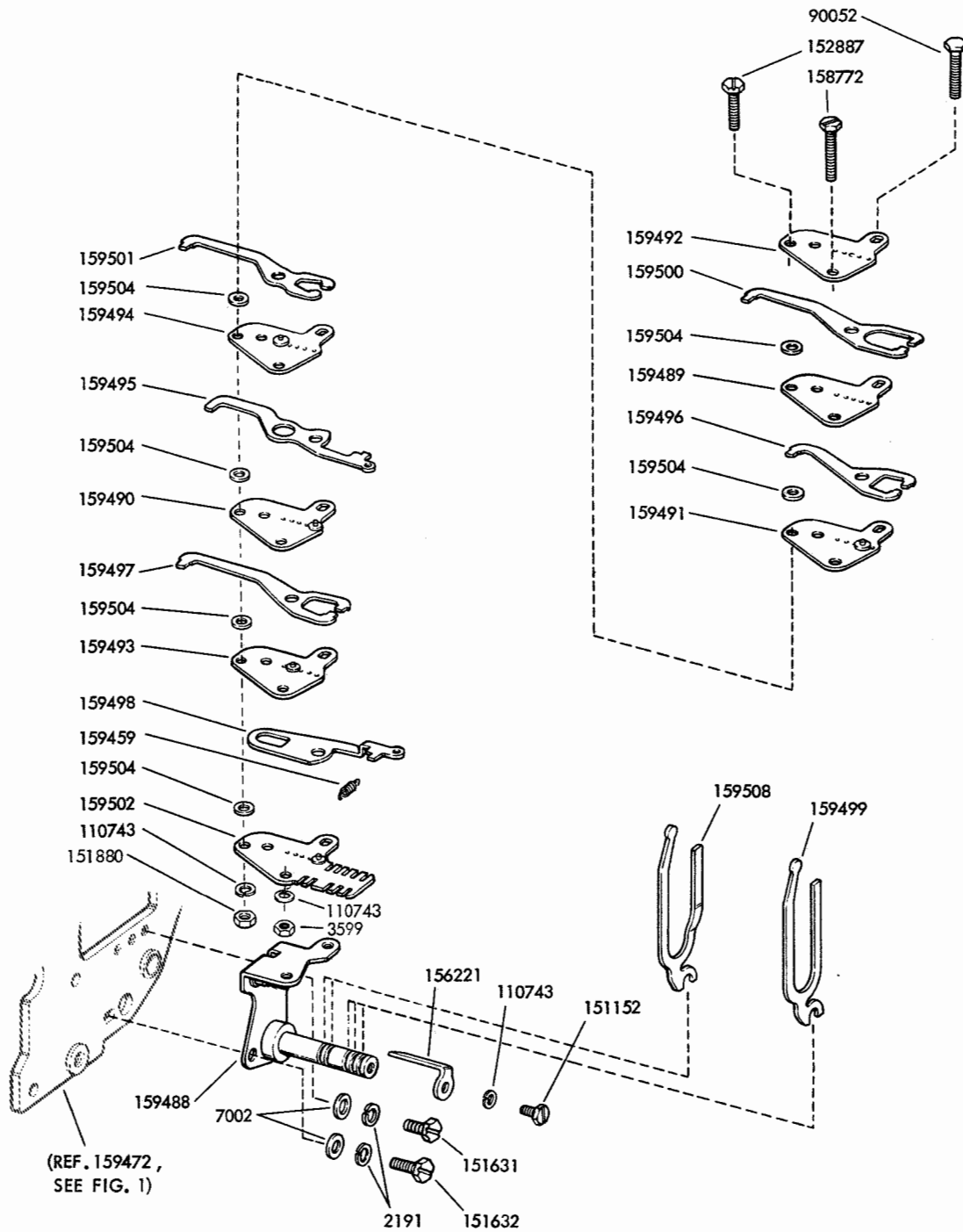
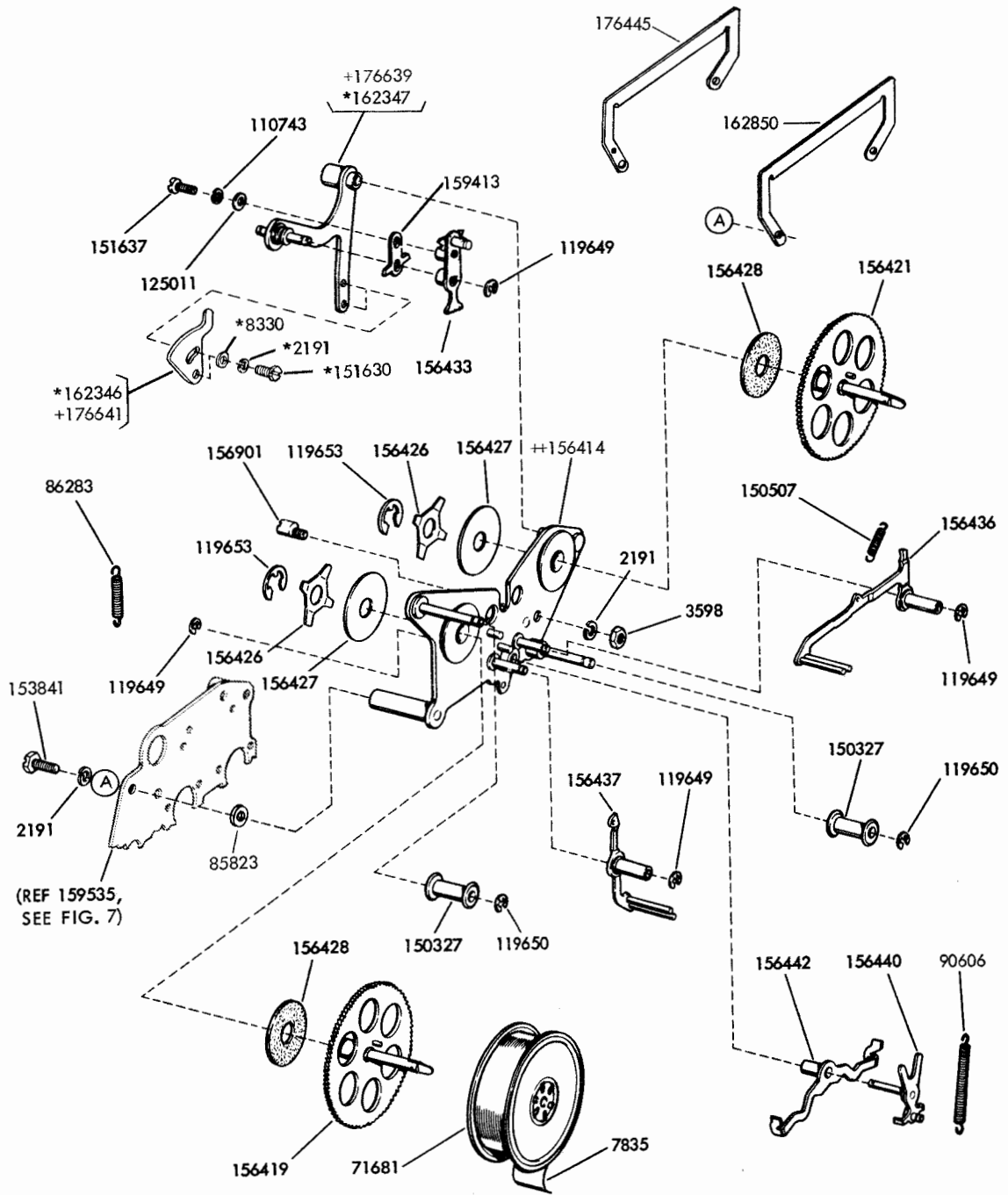


FIGURE 15. TRANSFER MECHANISM



For Latest Design Ribbon Feed Mechanism See Figure 44)

*The ribbon drive arm (formerly 156431) has been redesigned and assigned part number 162347. When it is necessary to replace an old style ribbon drive arm, a 154325 modification kit to provide an adjustable drive arm (includes all parts marked with an asterisk) should be ordered.

++The 156414 mounting plate has been redesigned and now includes the drive arm spring mounting post. The post replaced the 159993 spring bracket which is still available for maintenance.

154325 - Specification 59615

+Peculiar to units printing between feed holes

FIGURE 16. EARLY DESIGN RIBBON FEED MECHANISM

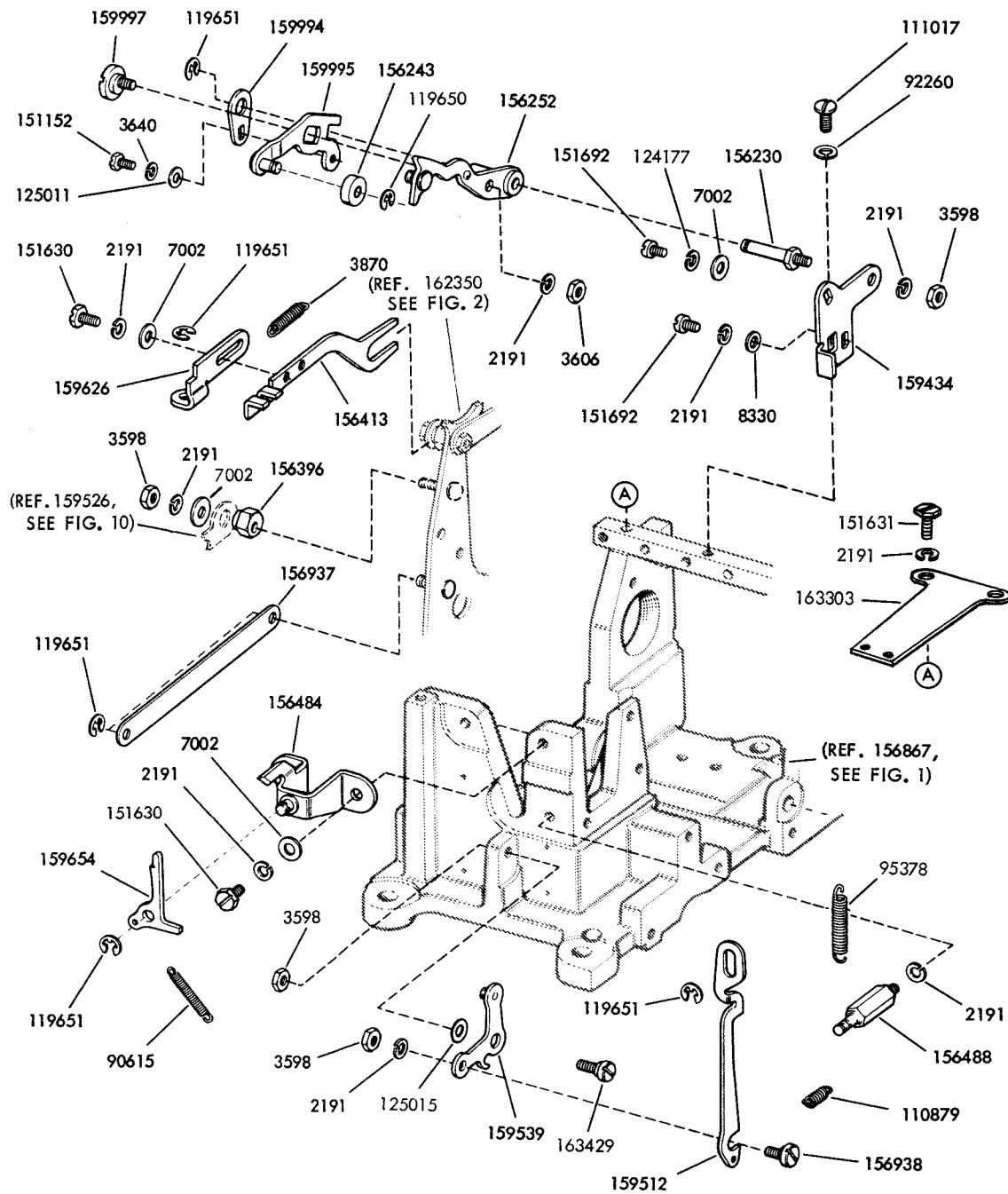


FIGURE 17. TYPING MECHANISM

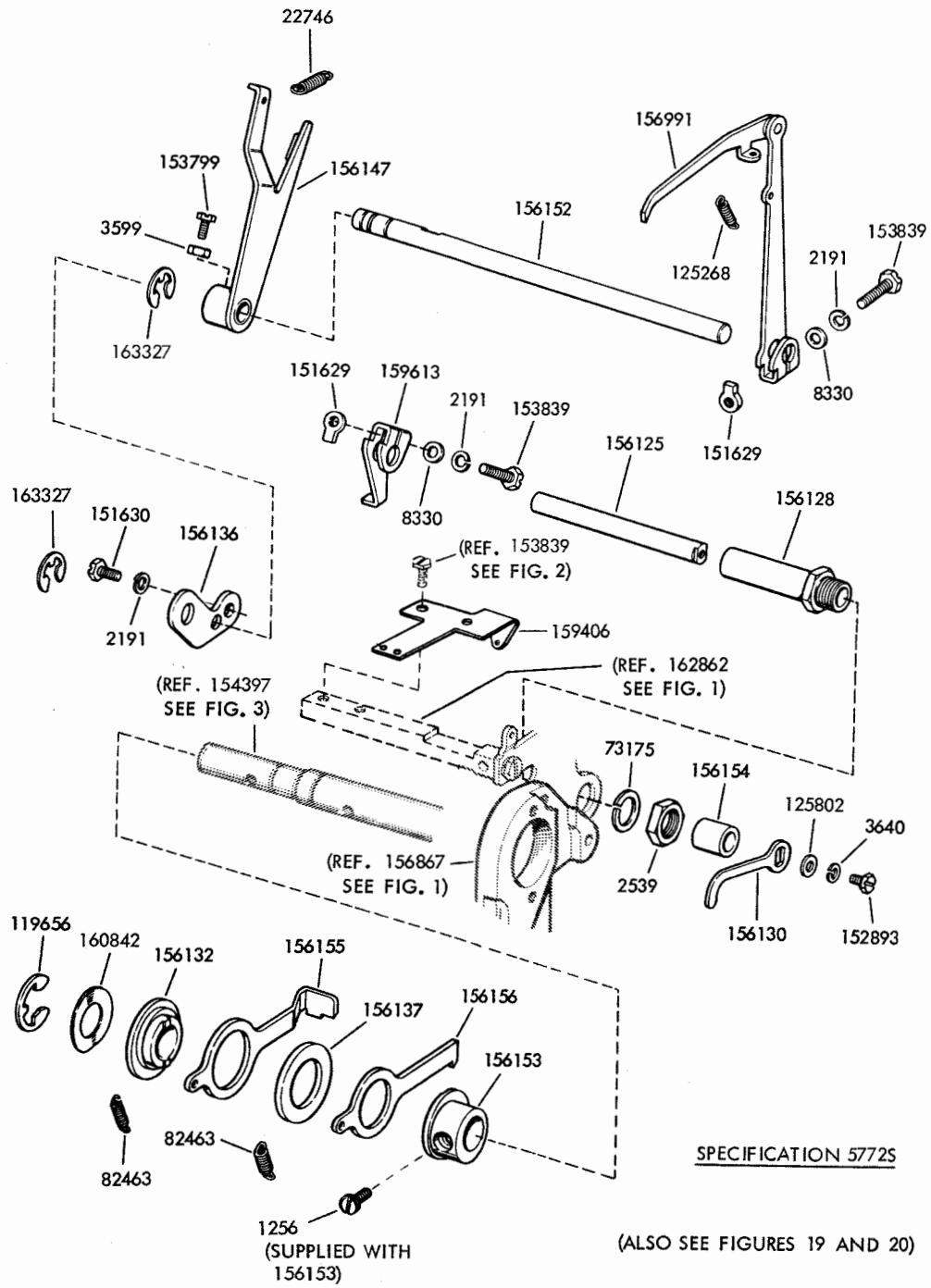
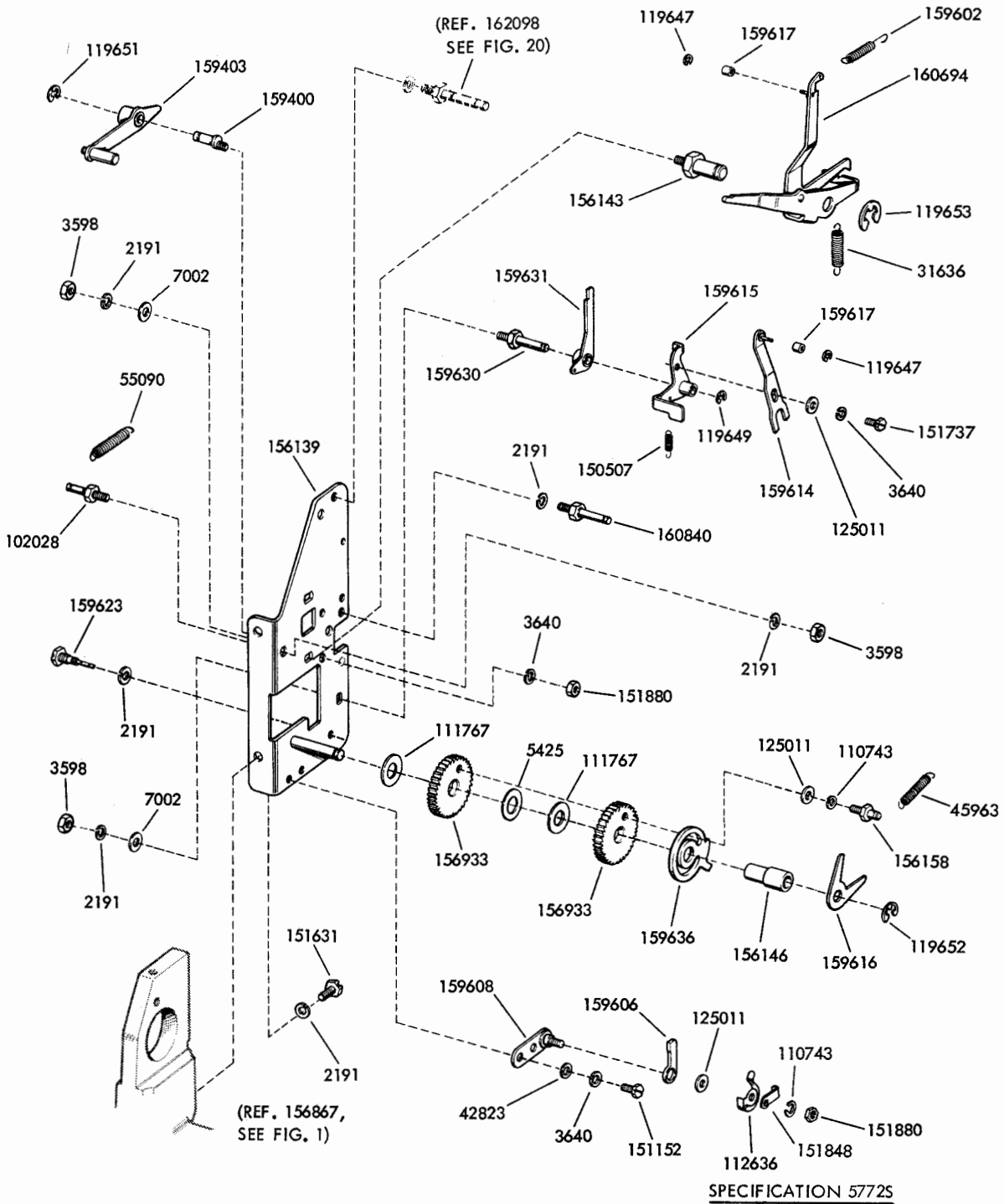
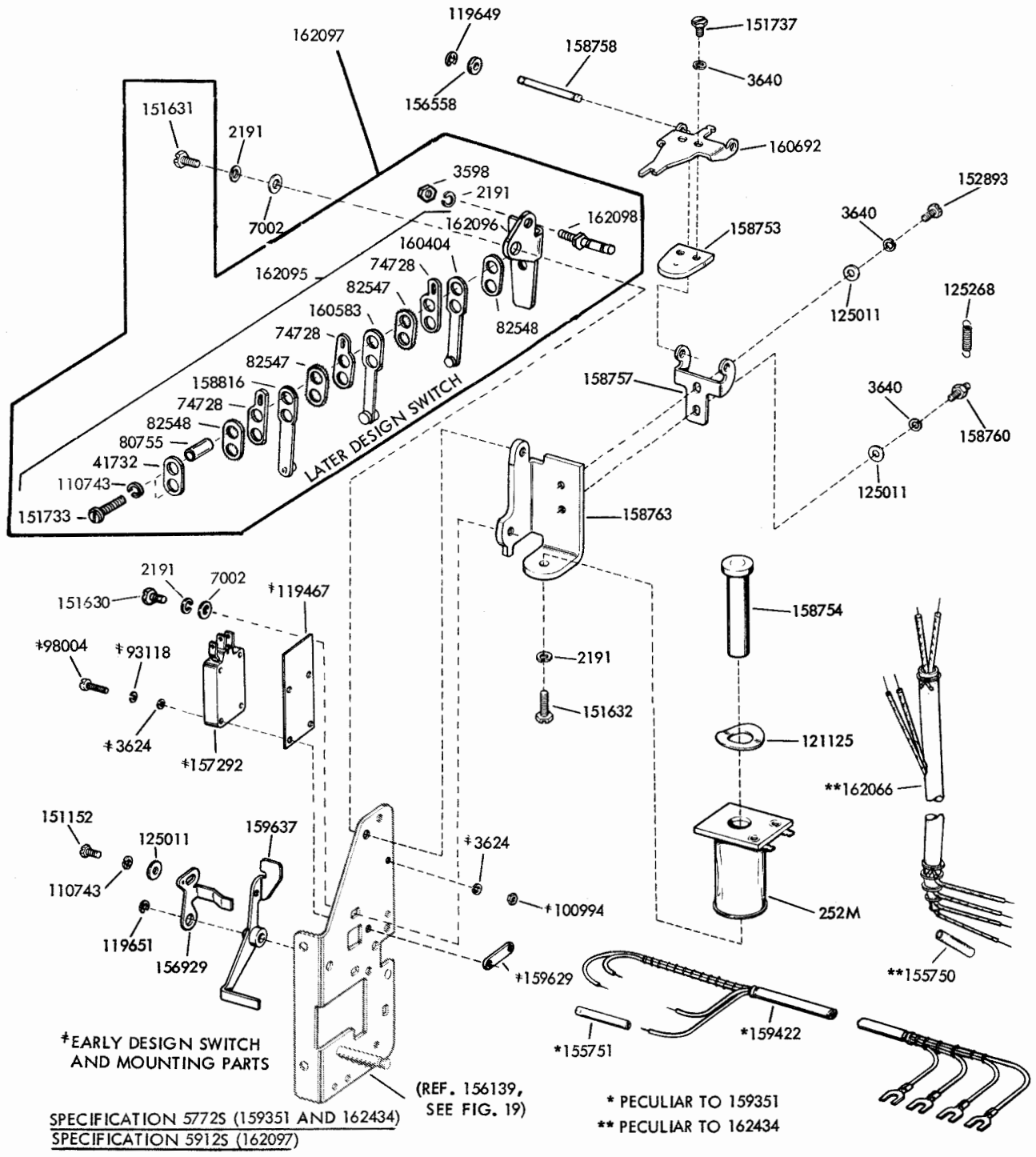


FIGURE 18. 159351 AND 162434 MODIFICATION KITS TO ADD NON-INTERFERING BLANK TAPE FEED-OUT



(ALSO SEE FIGURES 18 AND 20)

FIGURE 19. 159351 AND 162434 MODIFICATION KITS TO ADD NON-INTERFERING BLANK TAPE FEED-OUT



(ALSO SEE FIGURES 18 AND 19)

FIGURE 20. 159351 AND 162434 MODIFICATION KITS TO ADD NON-INTERFERING BLANK TAPE FEED-OUT

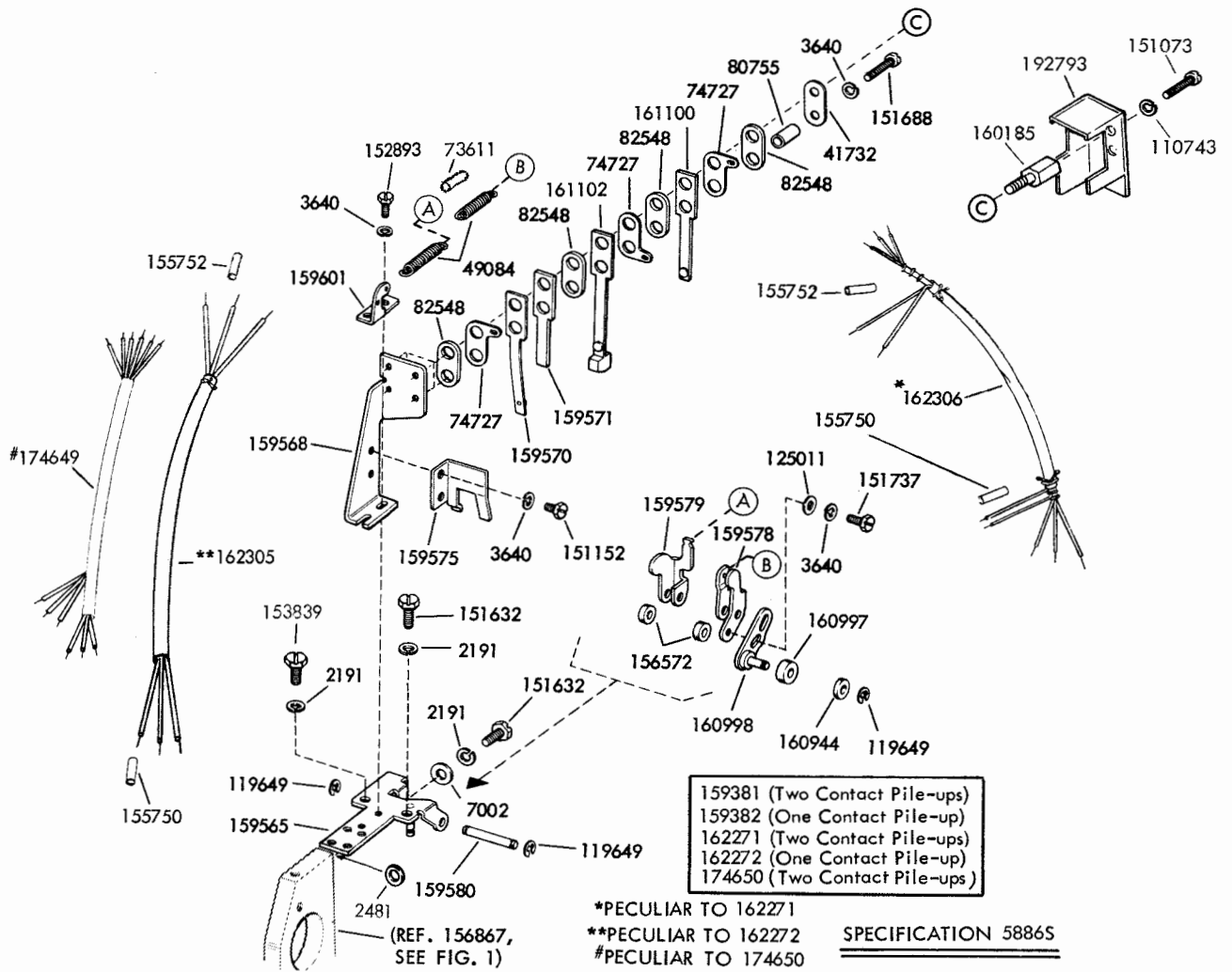


FIGURE 21. MODIFICATION KITS TO ADD TIMING CONTACTS

MODIFICATION KIT	CONTACT ASSEMBLY		CABLE*
	TRANSFER	MAKE-ONLY	
159379		158950	
159380	156078		
162273	156078		162304
162274		158950	162303
163945	156078		163946

*CABLES ILLUSTRATED ON FIGURE 57.

SPECIFICATION 58865

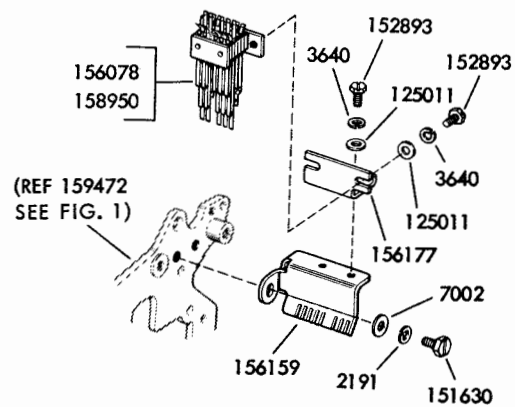
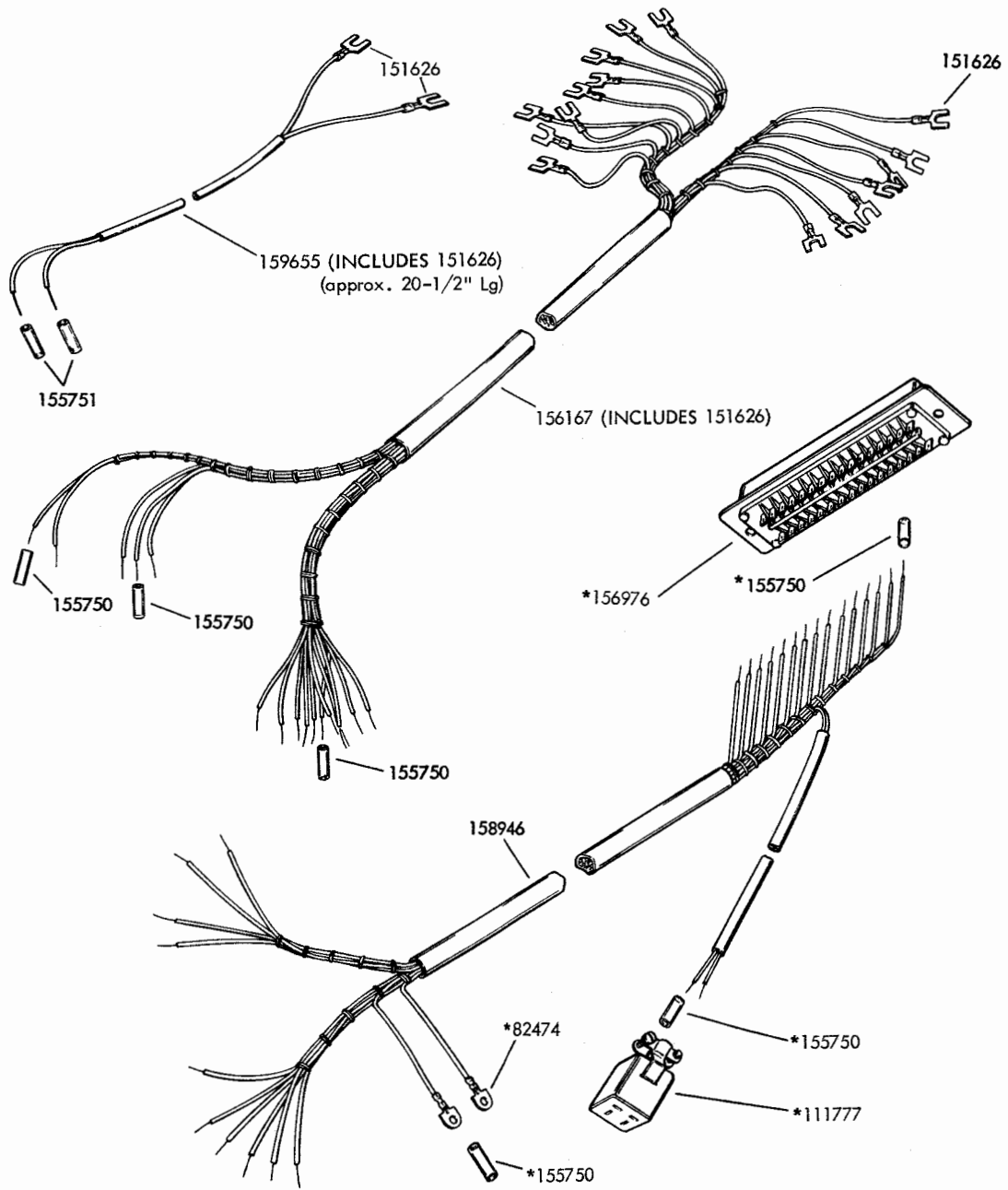


FIGURE 22. MODIFICATION KITS TO ADD CODE READING CONTACTS



*Peculiar to 158946

FIGURE 23. CABLES

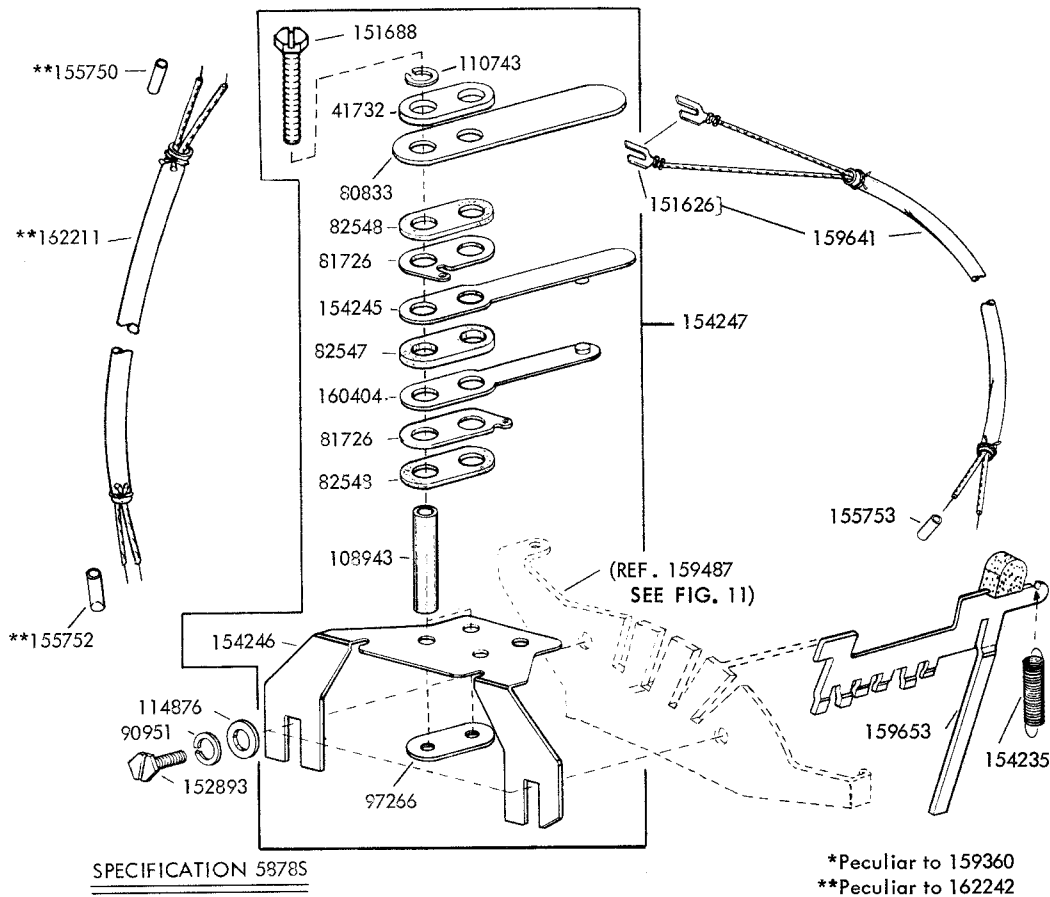


FIGURE 24. 159360 AND 162242 MODIFICATION KITS TO ADD SIGNAL BELL CONTACT

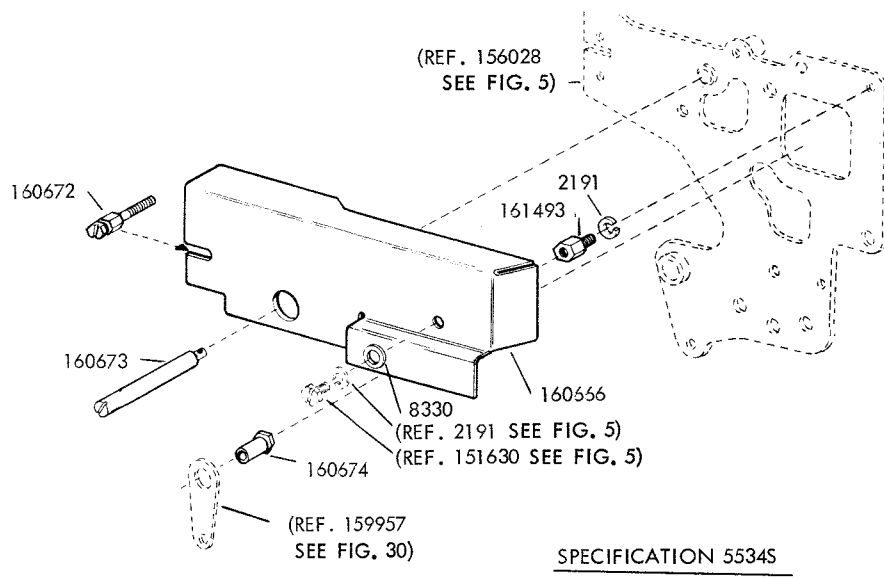


FIGURE 25. 160881 MODIFICATION KIT TO ADD GUARD FOR BACKSPACE MECHANISM (PRINTING ON EDGE OF TAPE)

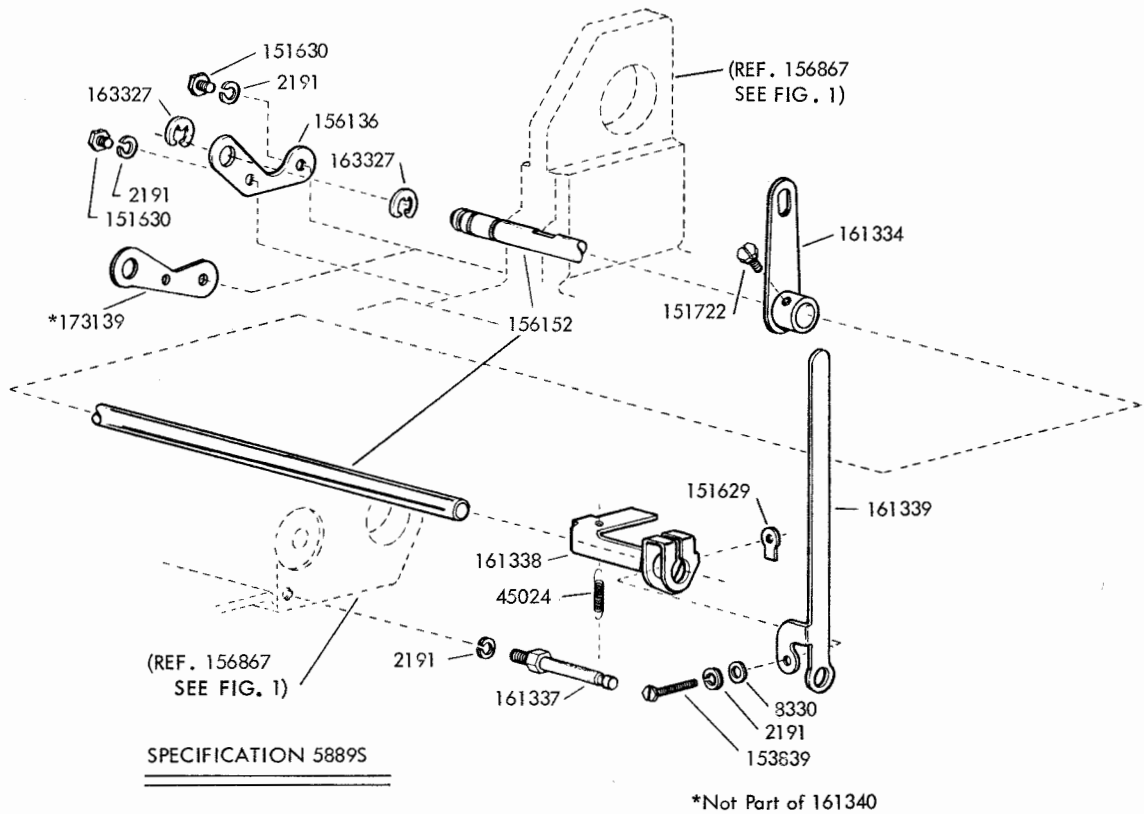


FIGURE 26. 161340 MODIFICATION KIT TO ADD MANUAL INTERFERING LETTERS TAPE FEED-OUT

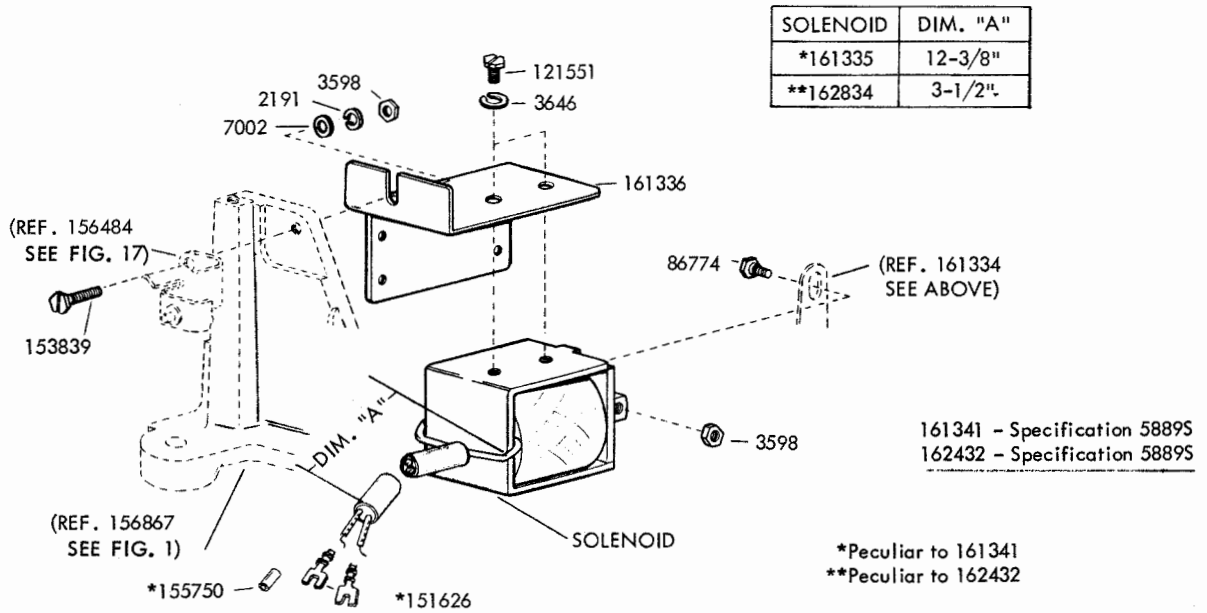


FIGURE 27. 161341 AND 162432 MODIFICATION KITS TO ADD SOLENOID OPERATIONS TO LETTERS FEED-OUT

ASR GEAR SETS - 5 LEVEL CODE								
Set Number	Pinion	Teeth	Driven Gear	Teeth	Speed			
					7.00 Unit Code		7.42 Unit Code	
					WPM	Baud	WPM	Baud
163023	159894 (S)	28	159895 (F)	80	---	---	60	45.45
	163021 (N)								163022 (N)
163024	159891 (S)	21	159892 (F)	48	---	---	75	56.88
	163019 (N)								163020 (N)
163025	159888 (S)	28	159889 (F)	49	---	---	100	74.2
	163015 (N)							
163457	163455 (S)	20	163456 (F)	52	71	50	---	---
163502	163501 (S)	30	163500 (F)	52	107	75	---	---
173992	173993 (S)	14	173994 (F)	40	65	45.45	---	---
195184	195182 (N)	20	195183 (N)	52	---	---	67	50

(S) = Steel
(F) = Fiber
(N) = Nylon

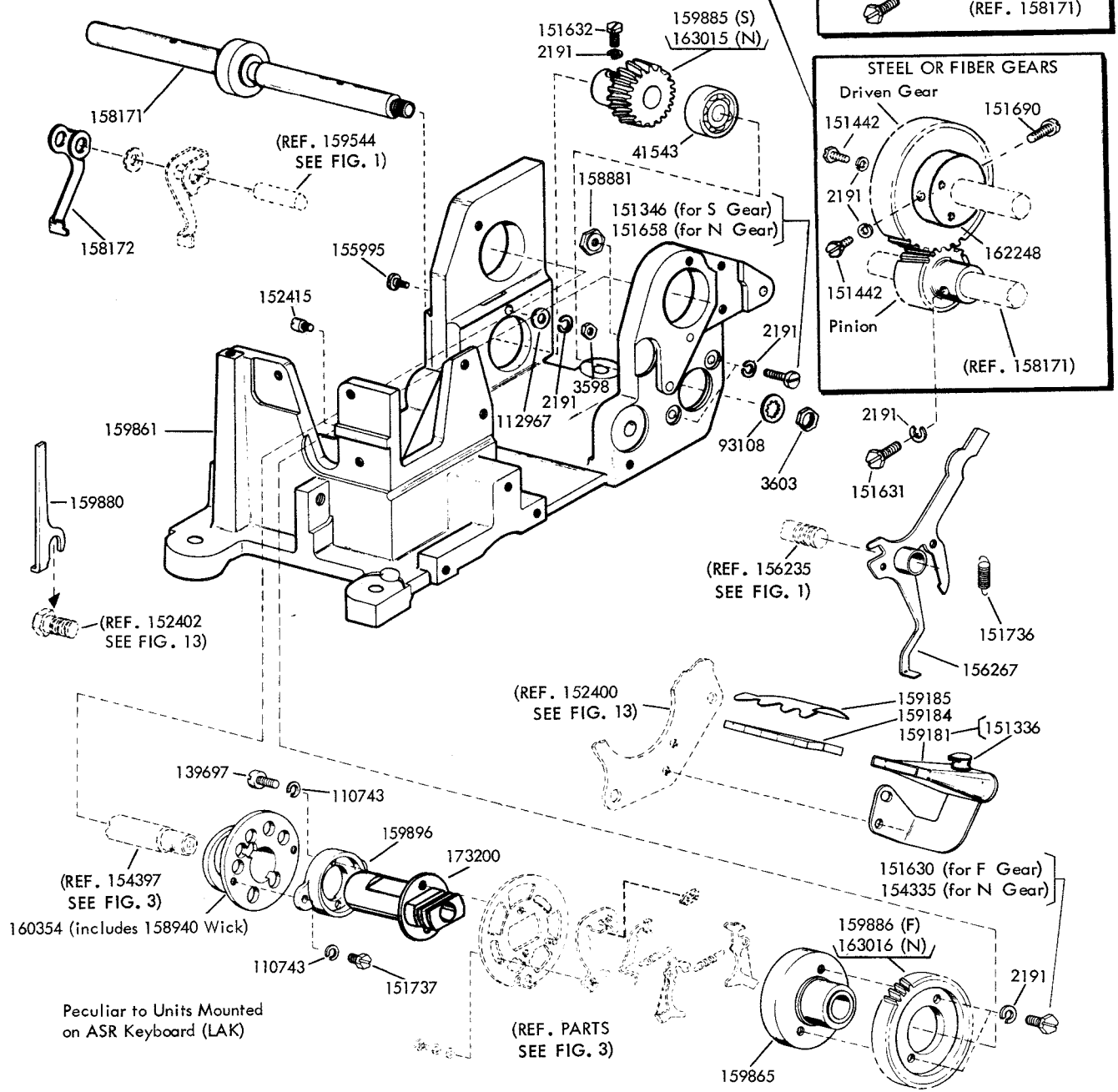
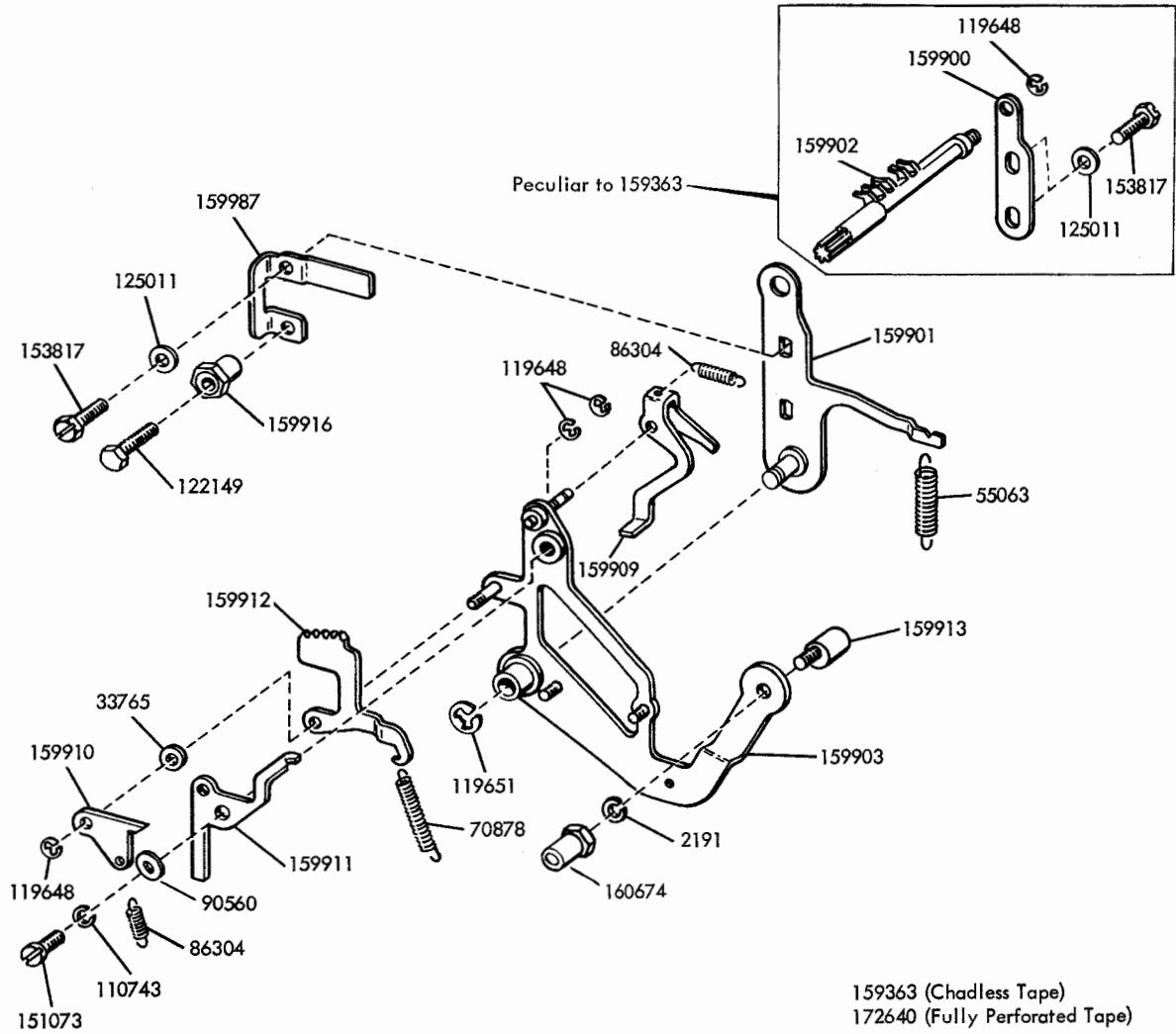


FIGURE 28. TWO-SHAFT MECHANISM



159363 (Chadless Tape)
172640 (Fully Perforated Tape)

159363 - Specification 5534S
172640 - Specification 5534S

FIGURE 29. 159363 AND 172640 MODIFICATION KITS TO ADD MANUAL BACKSPACE (PRINTING ON EDGE OF TAPE)

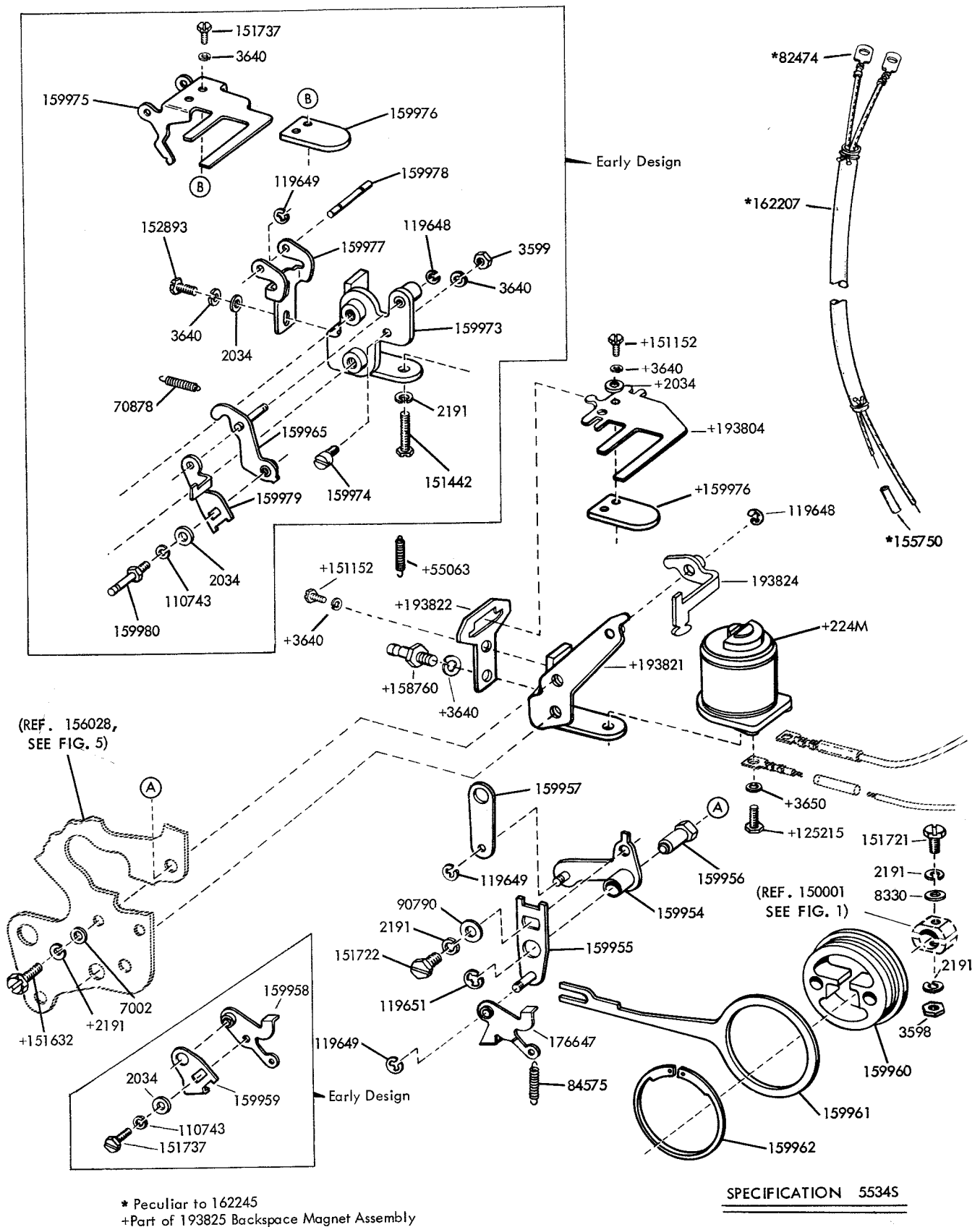


FIGURE 30. 161304 AND 162245 MODIFICATION KITS TO ADD POWER DRIVE TO BACKSPACE MECHANISMS

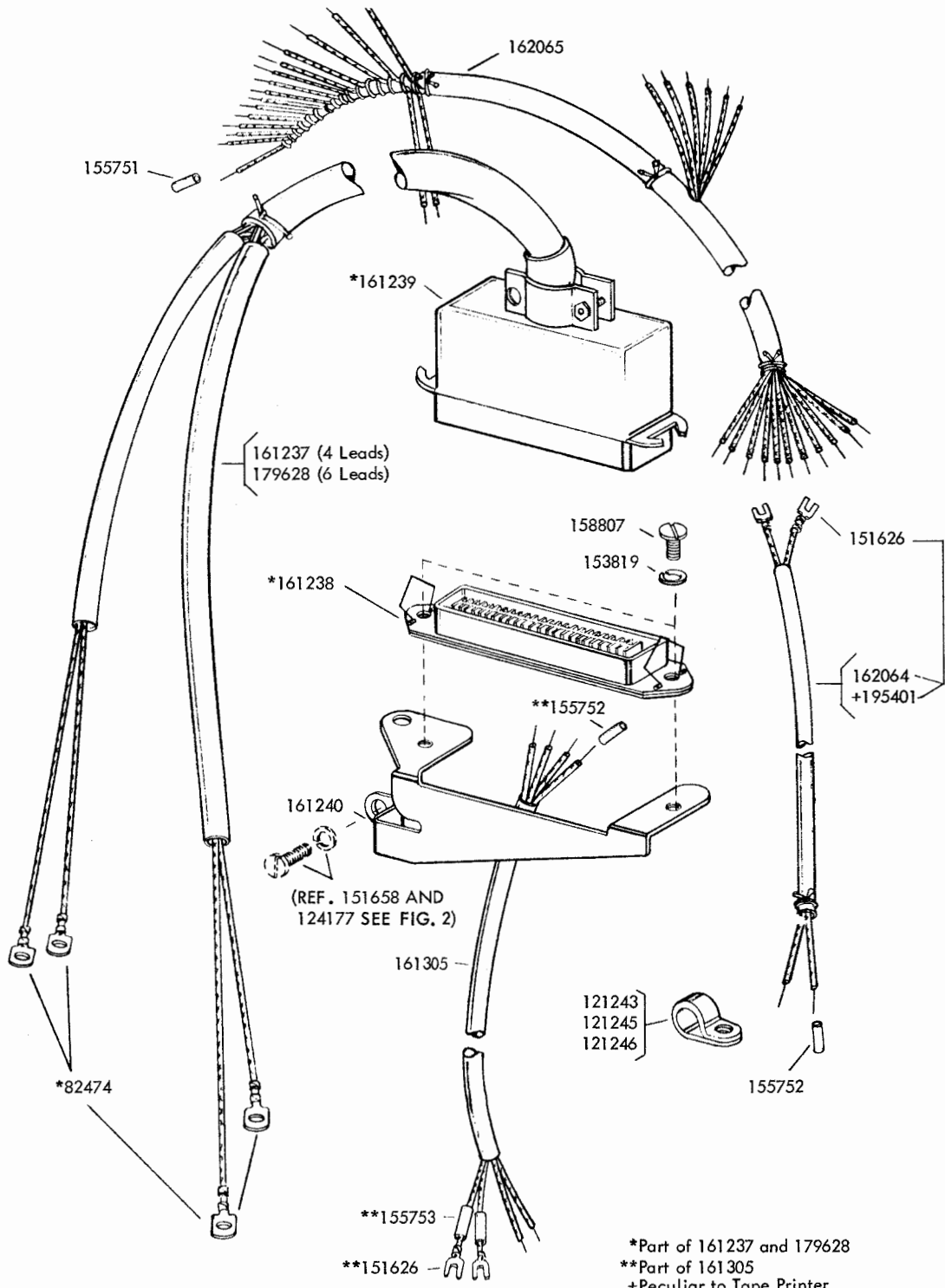
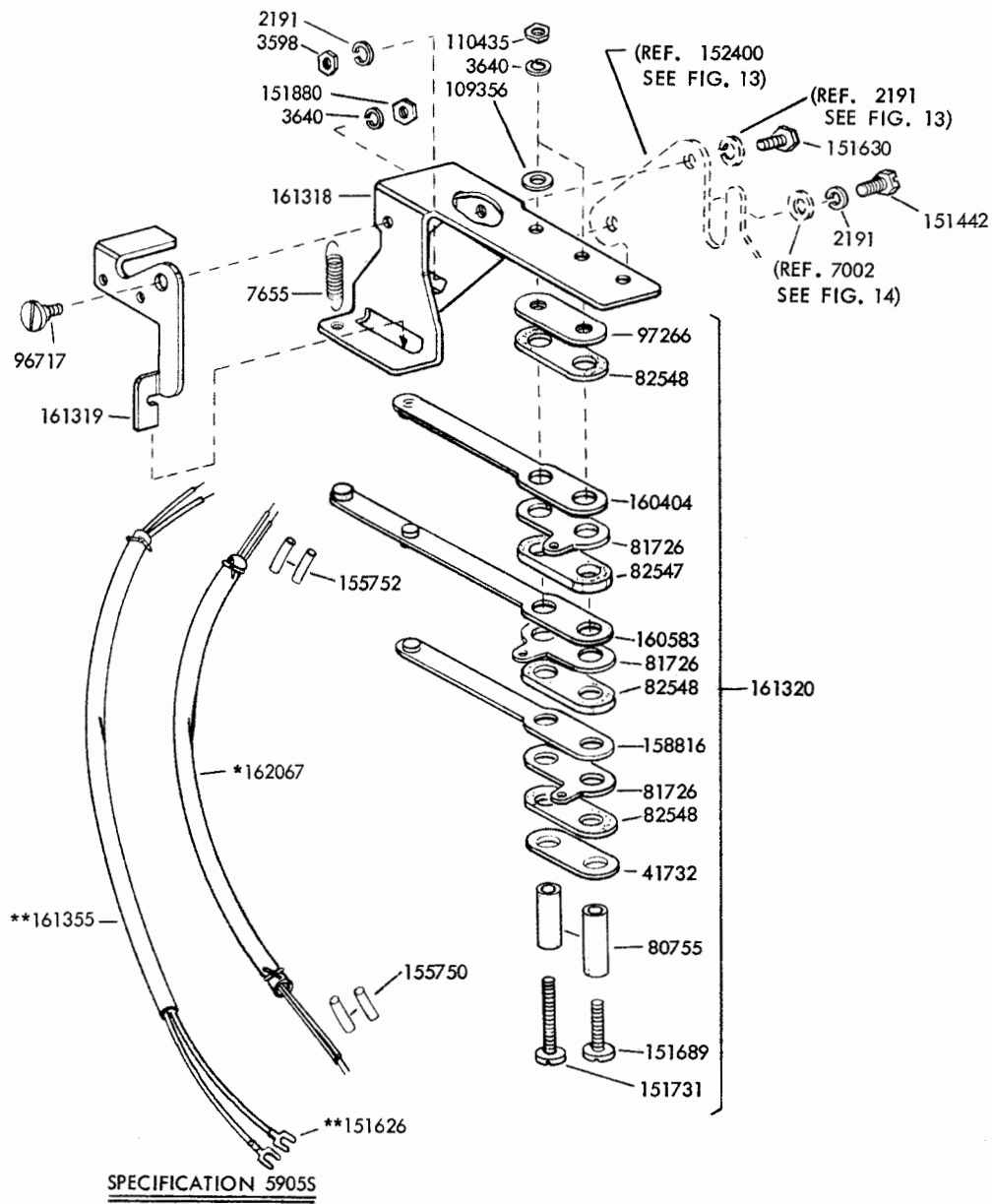
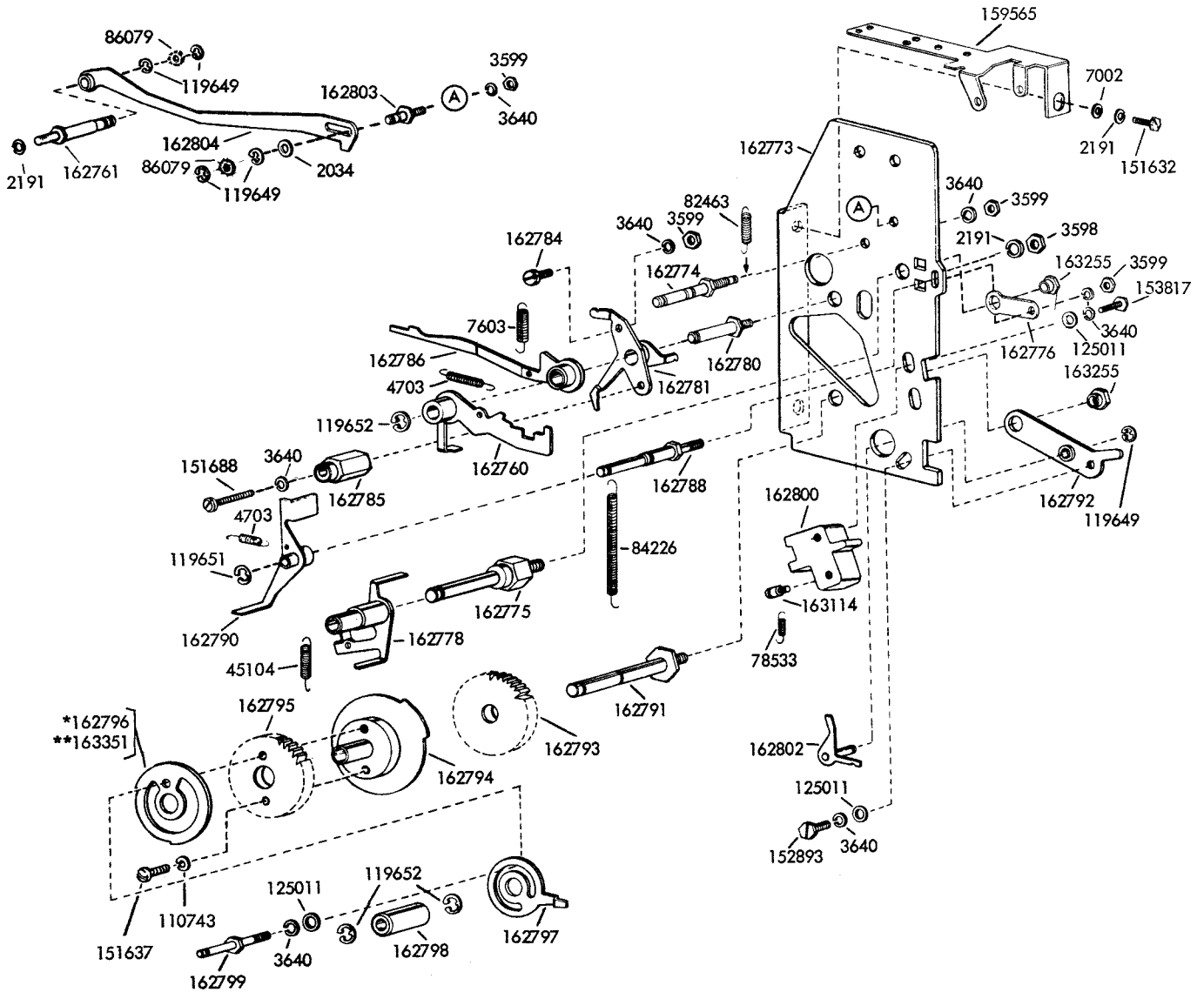


FIGURE 31. CABLES



*Peculiar to 162247 - for Units Equipped with Connector .
 **Peculiar to 161321 - for Units not Equipped with Connector .

FIGURE 32. 161321 AND 162247 LETTERS - FIGURES CONTACT ASSEMBLY



*162796
**163351

*Peculiar to 162379 (4 Second Time Delay at 100 WPM)
**Peculiar to 163347 (16 Second Time Delay at 100 WPM)

(ALSO SEE FIGURES 34 AND 35)

162379 - Specification 59455
163347 - Specification 59455

FIGURE 33. 162379 AND 163347 MODIFICATION KITS TO ADD AUTOMATIC NON-INTERFERING LETTERS TAPE FEED-OUT

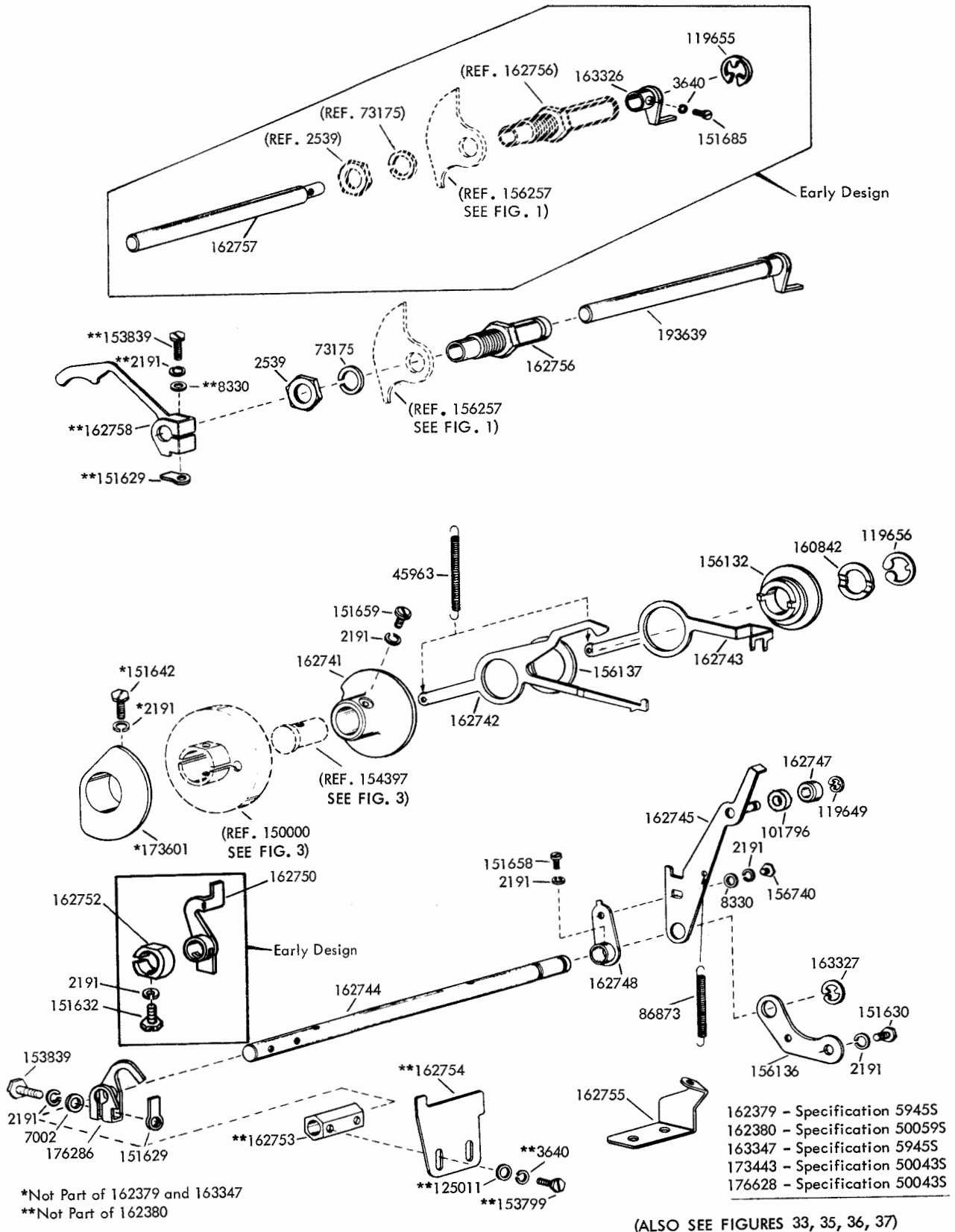
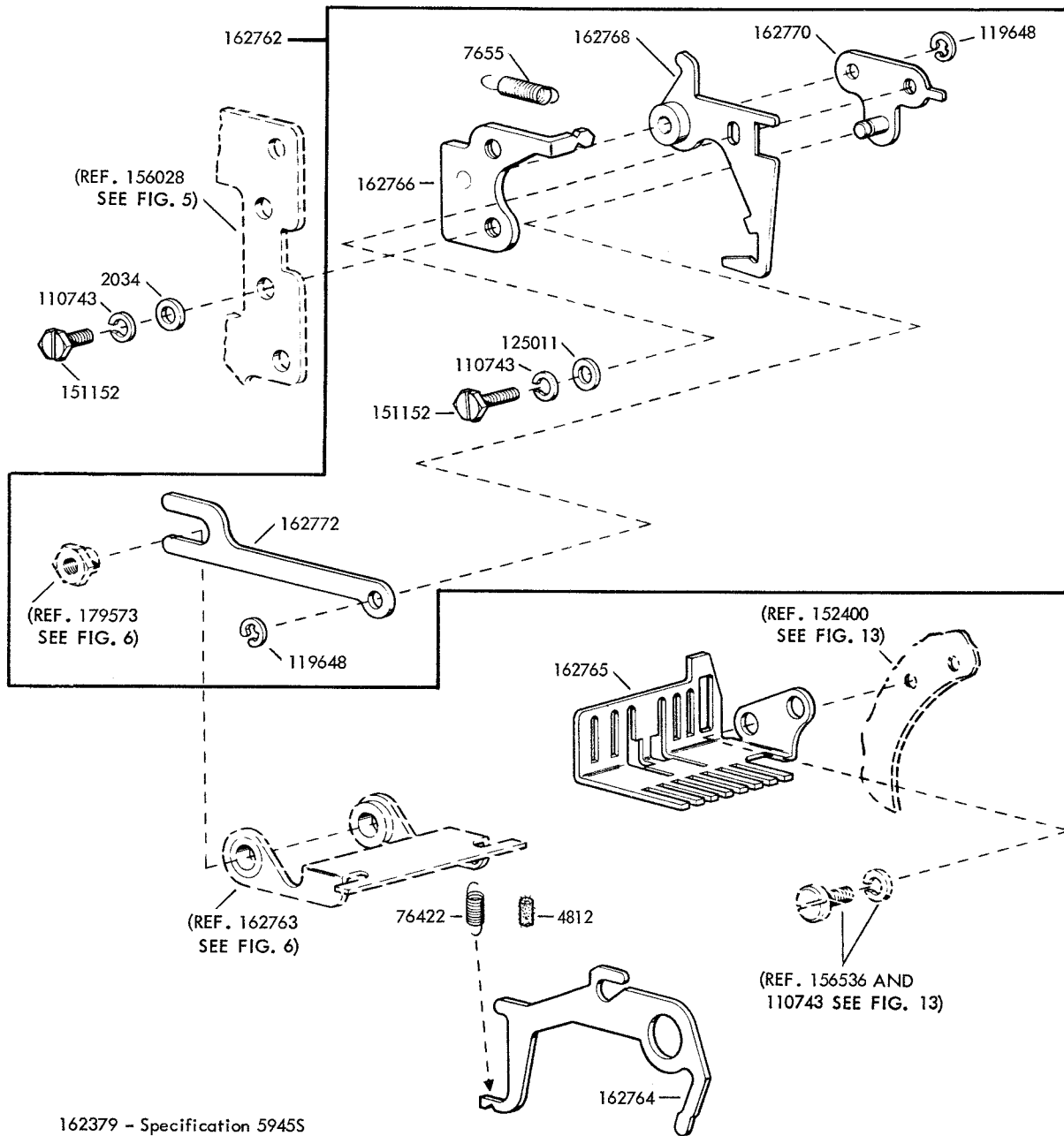


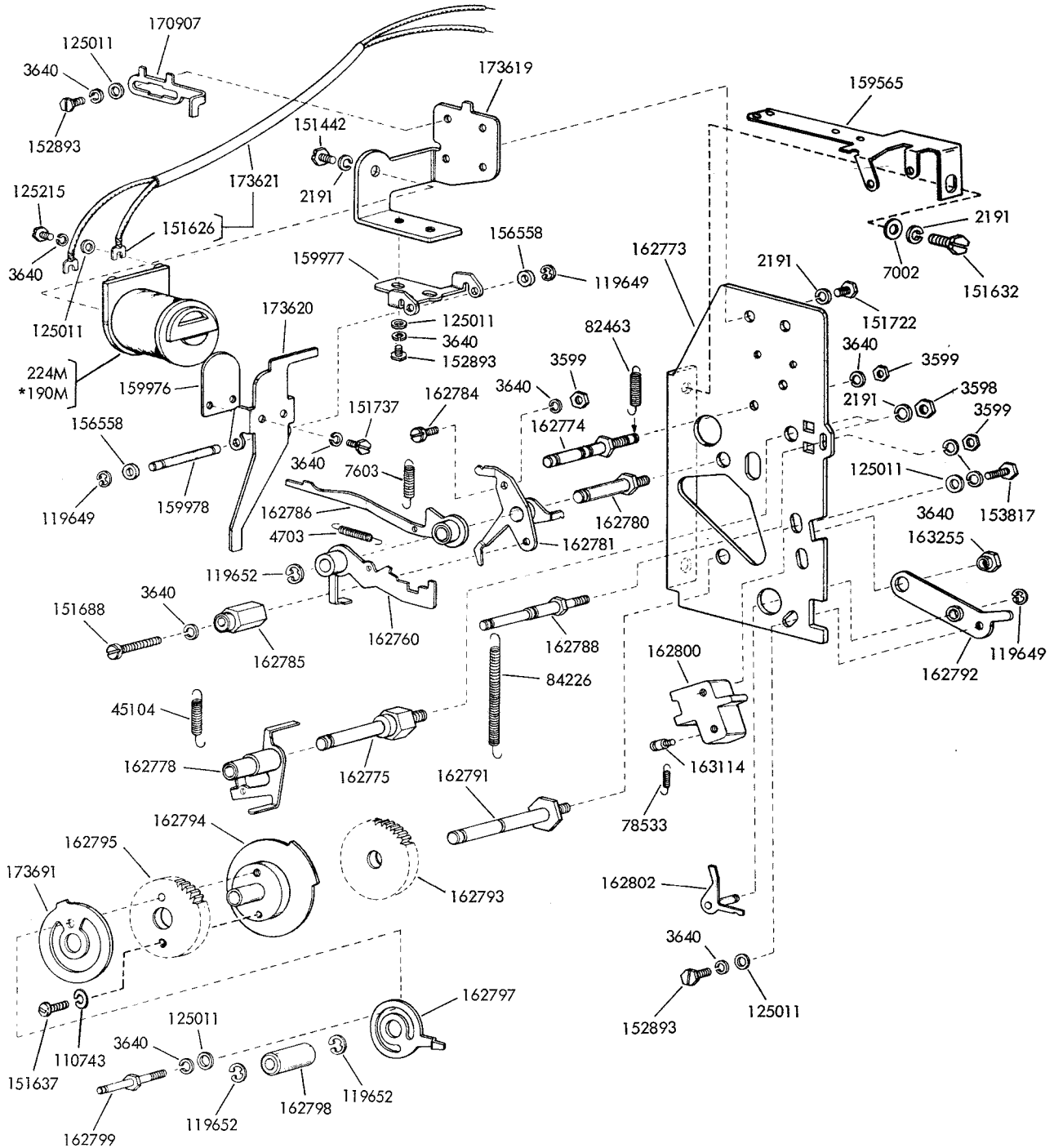
FIGURE 34. 162379 (AUTOMATIC LETTERS), 162380 (REMOTE CONTROL BLANK), 163347 (AUTOMATIC LETTERS), 173443 (REMOTE CONTROL LETTERS) AND 176628 (REMOTE CONTROL LETTERS) MODIFICATION KITS TO ADD NON-INTERFERING TAPE FEED-OUT



- 162379 - Specification 5945S
- 162380 - Specification 50059S
- 163347 - Specification 5945S
- 173443 - Specification 50043S
- 176628 - Specification 50043S

(ALSO SEE FIGURES 33, 34, 36, 37)

FIGURE 35. 162379 (AUTOMATIC LETTERS), 162380 (REMOTE CONTROL BLANK), 163347 (AUTOMATIC LETTERS), 173443 (REMOTE CONTROL LETTERS) AND 176628 (REMOTE CONTROL LETTERS) MODIFICATION KITS TO ADD NON-INTERFERING TAPE FEED-OUT

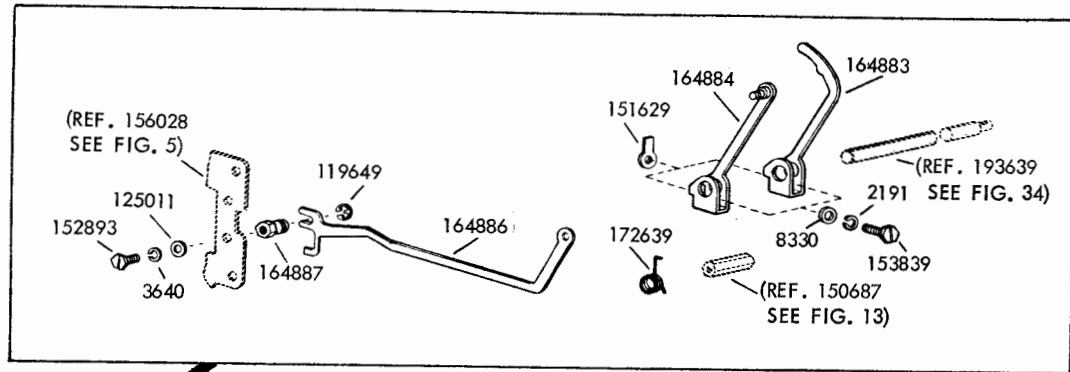


162380 - Specification 50059S
 173443 - Specification 50043S
 176628 - Specification 50043S

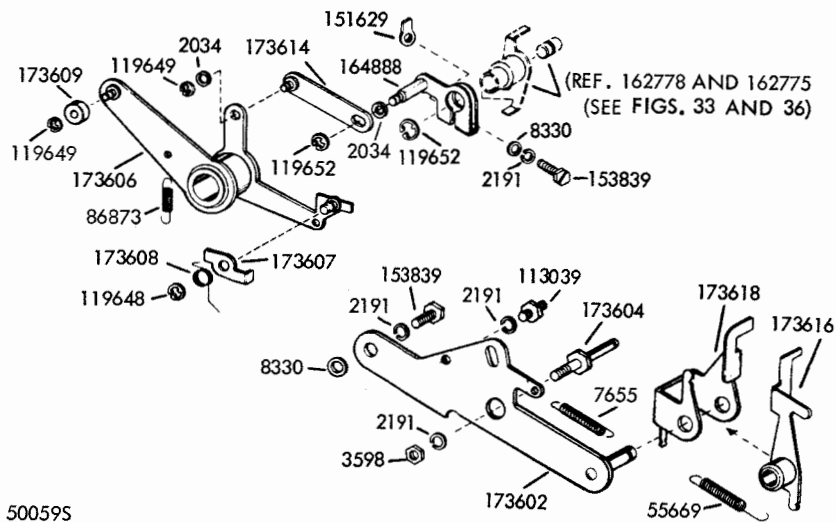
*Peculiar to 176628

(ALSO SEE FIGURES 34, 35, 37)

FIGURE 36. 162380 (BLANK), 173443 (LETTERS) AND 176628 (LETTERS) MODIFICATION KITS TO ADD REMOTE CONTROL NON-INTERFERING TAPE FEED-OUT



PECULIAR TO 162380 MODIFICATION KIT



- 162380 - Specification 50059S
- 173443 - Specification 50043S
- 176628 - Specification 50043S

(ALSO SEE FIGURES 34, 35, 36)

FIGURE 37. 162380 (BLANK), 173443 (LETTERS) AND 176628 (LETTERS) MODIFICATION KITS TO ADD REMOTE CONTROL NON-INTERFERING TAPE FEED-OUT

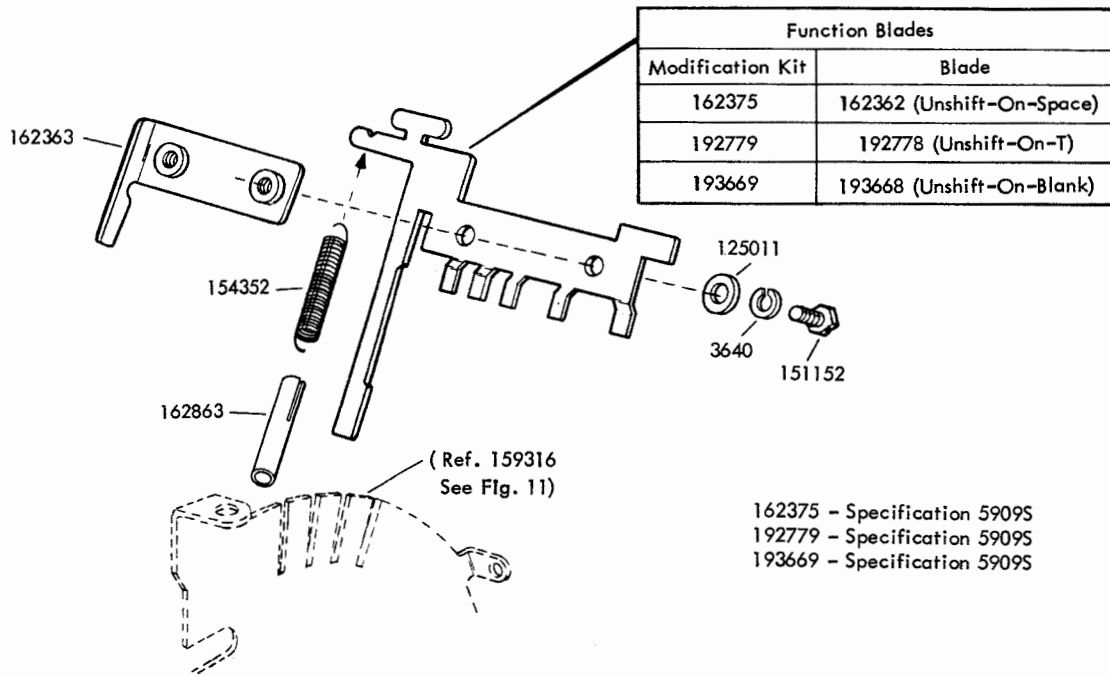
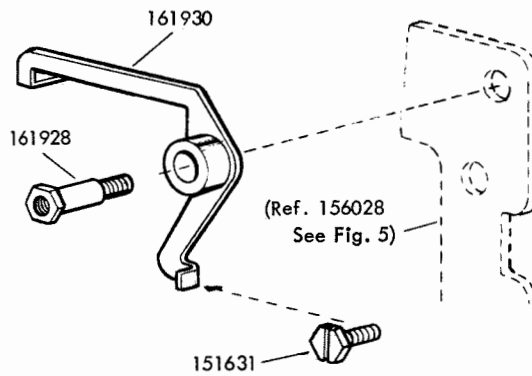


FIGURE 38. MODIFICATION KITS TO PROVIDE UNSHIFT FUNCTION



161828 - Specification 55345

FIGURE 39. 161828 MODIFICATION KIT TO MAKE TAPE BACKSPACE AND BLANK FEED-OUT COMPATIBLE

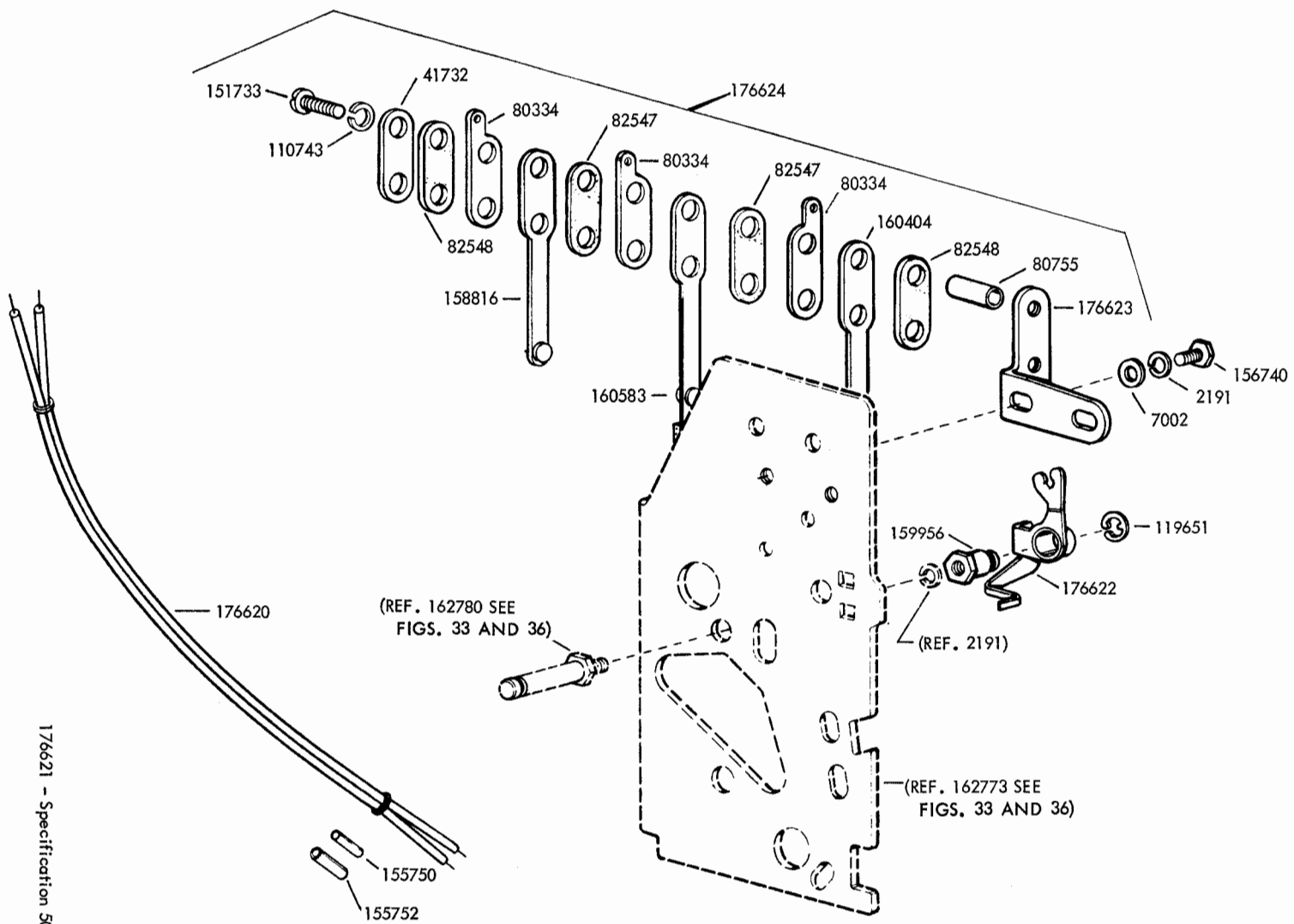
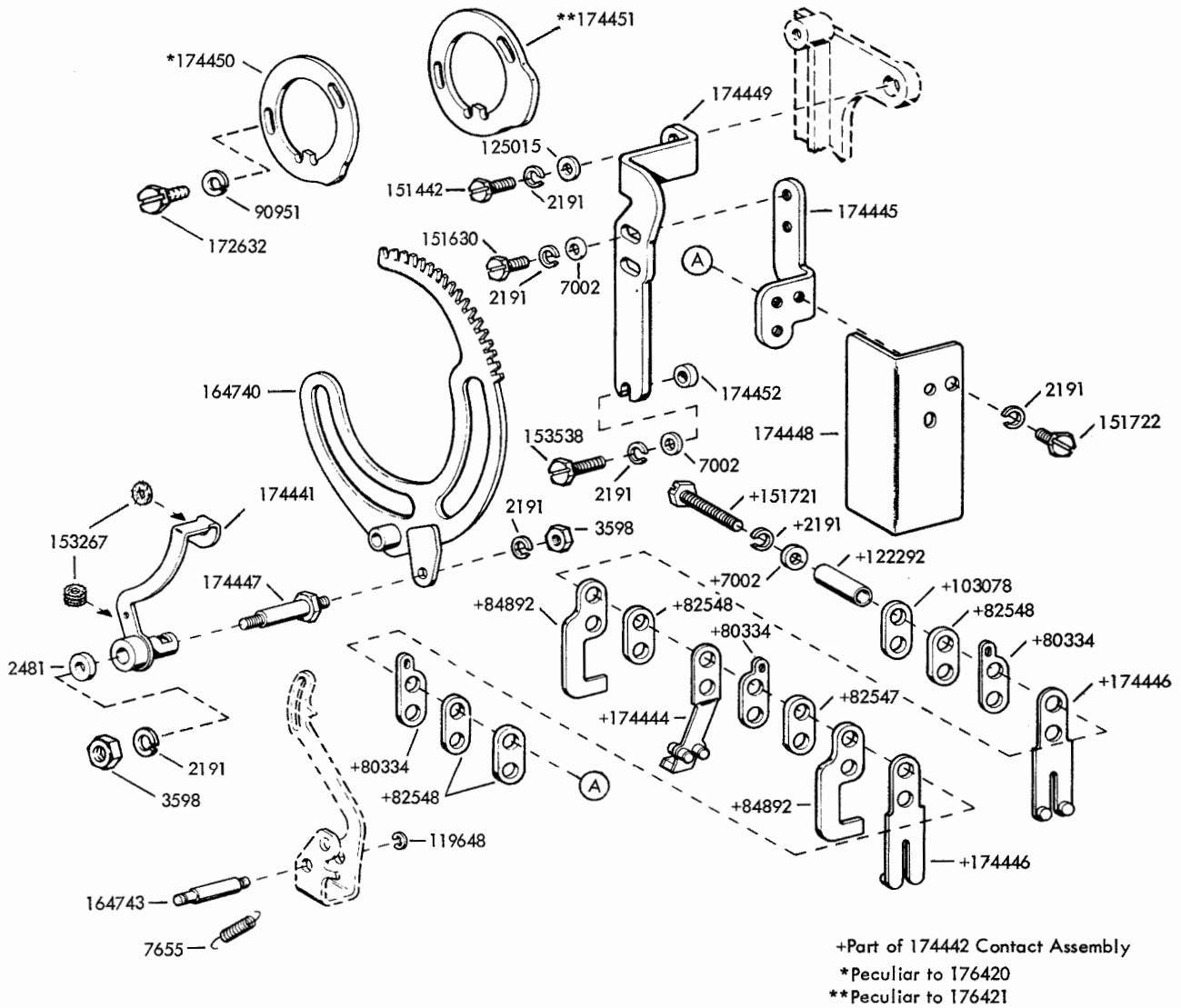


FIGURE 40. 176621 MODIFICATION KIT TO PROVIDE END OF FEED-OUT TIMING CONTACT FOR 176628 LETTERS TAPE FEED-OUT

176621 - Specification 500545



176420 - Specification 500415
 176421 - Specification 500415

FIGURE 41. 176420 AND 176421 MODIFICATION KITS TO ADD TIMING CONTACTS TO SELECTOR

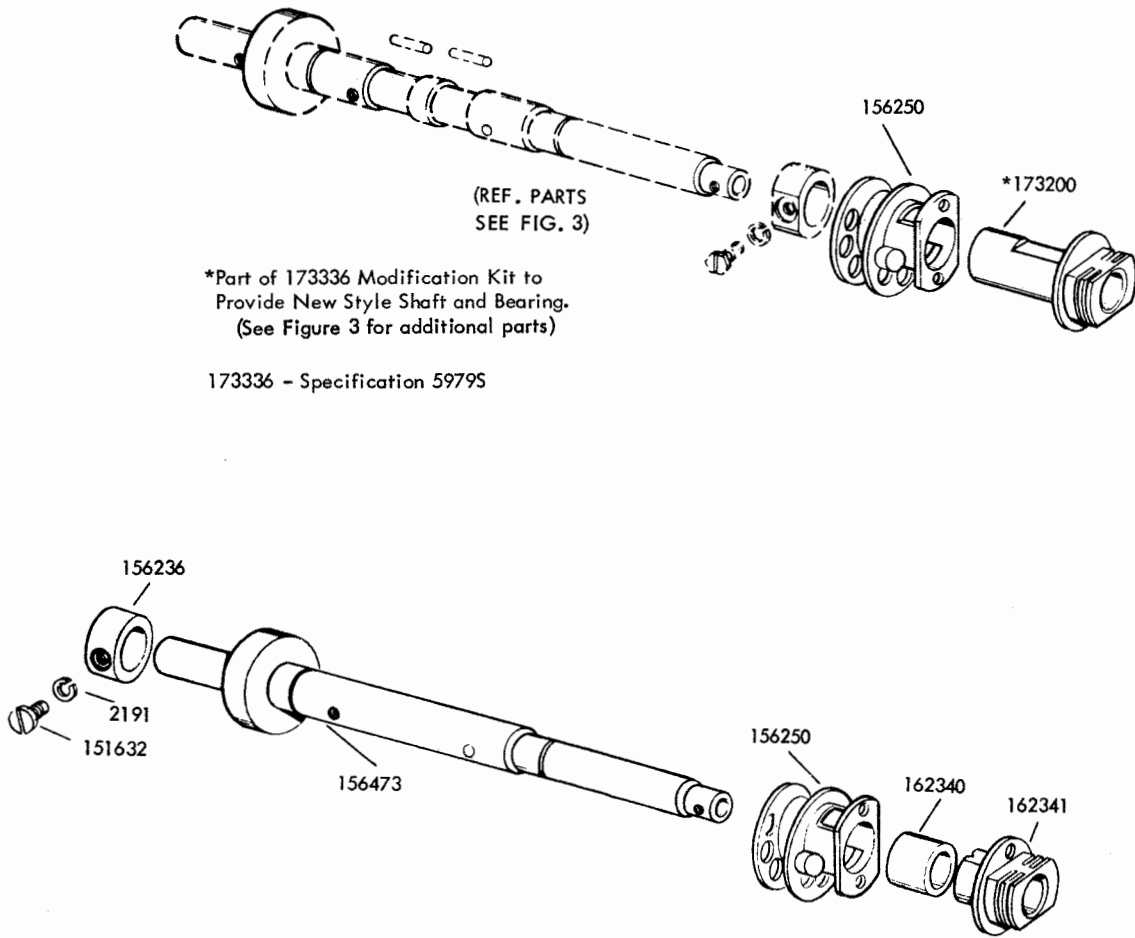


FIGURE 42. EARLY DESIGN MAIN SHAFT MECHANISMS

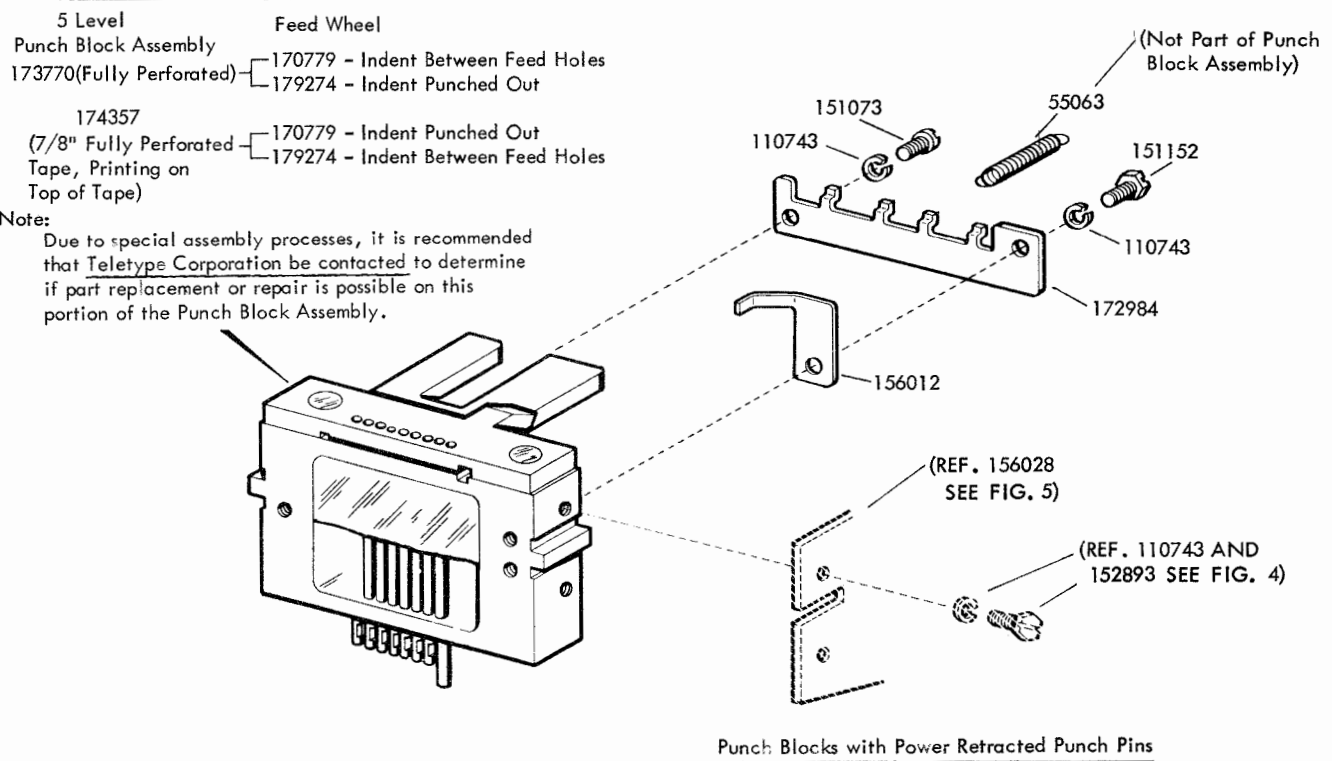
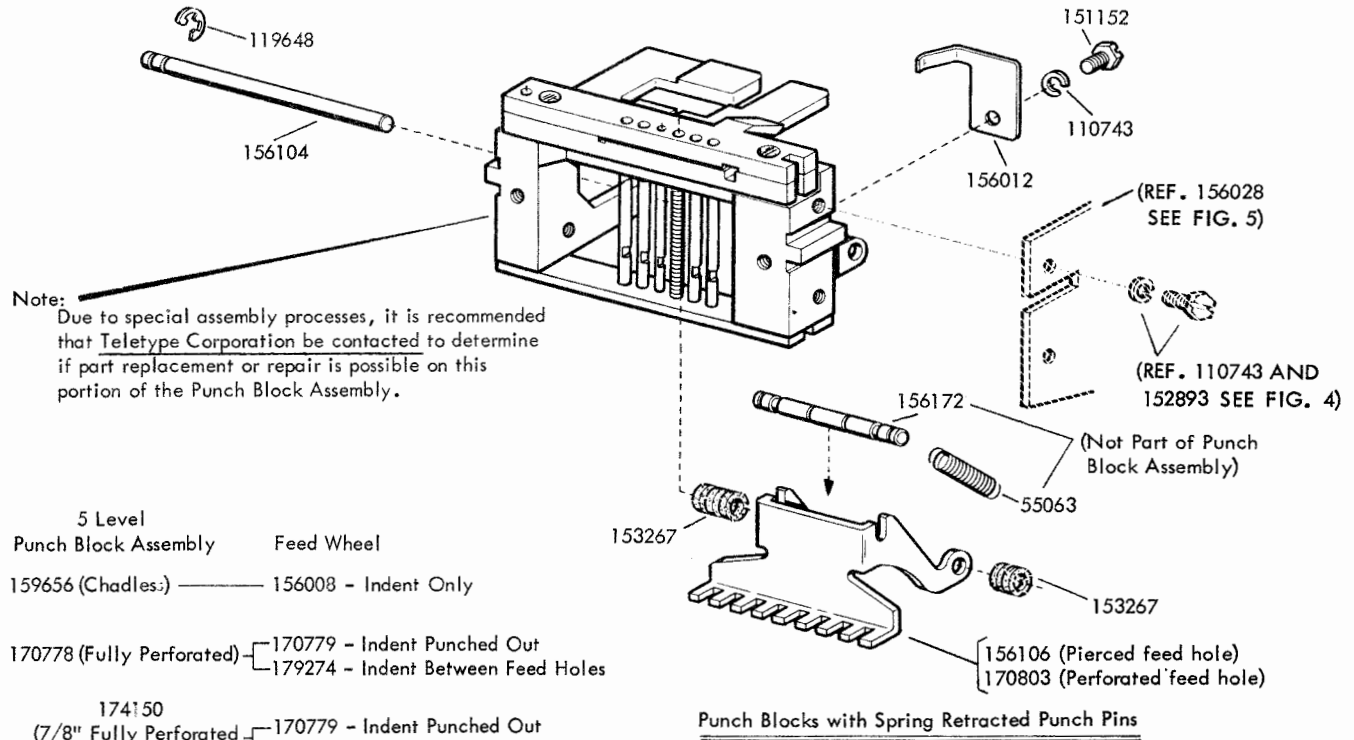
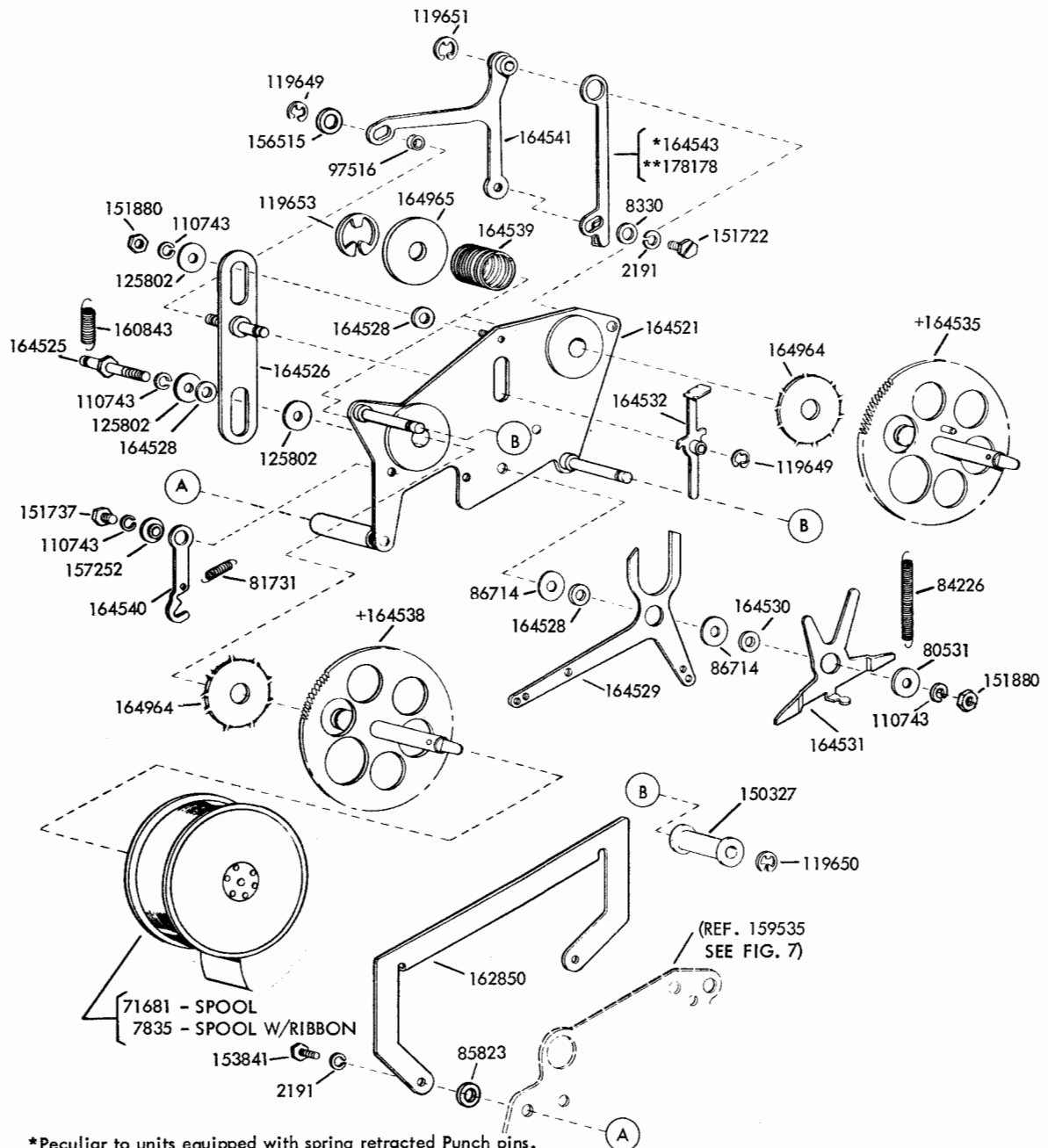


FIGURE 43. PUNCH BLOCK ASSEMBLIES



*Peculiar to units equipped with spring retracted Punch pins.
 **Peculiar to units equipped with power retracted Punch pins.
 +A 179579 Decalcomania which shows direction of "Ribbon to Roller" is available.

For Early Design Ribbon Feed Mechanism See Figure 16)

FIGURE 44. RIBBON FEED MECHANISM

☒ indicates tines that are left after the blade has been coded.

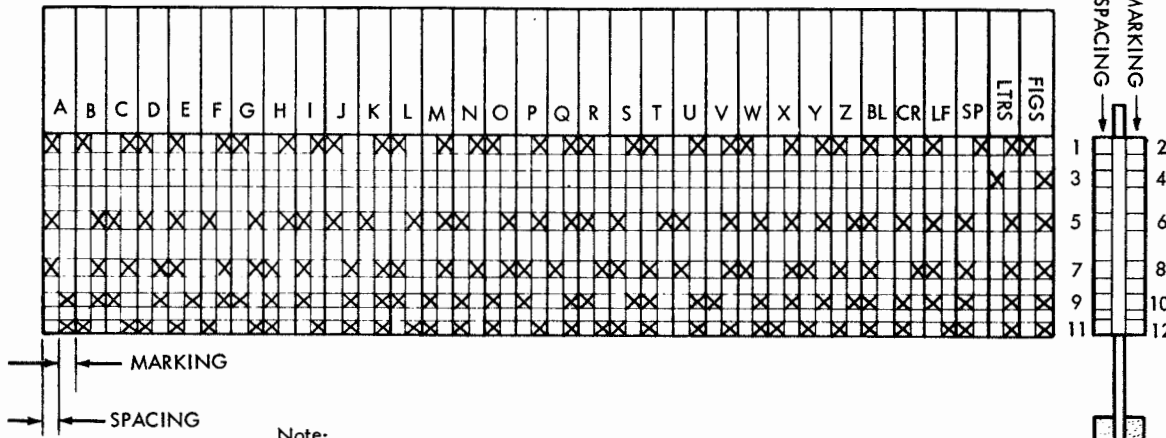
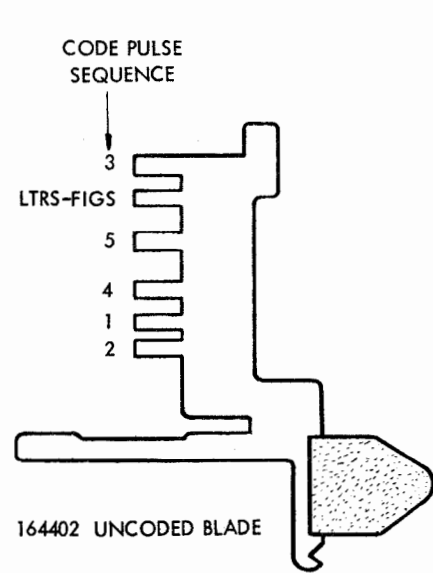


FIGURE 45. UNCODED FUNCTION BLADES

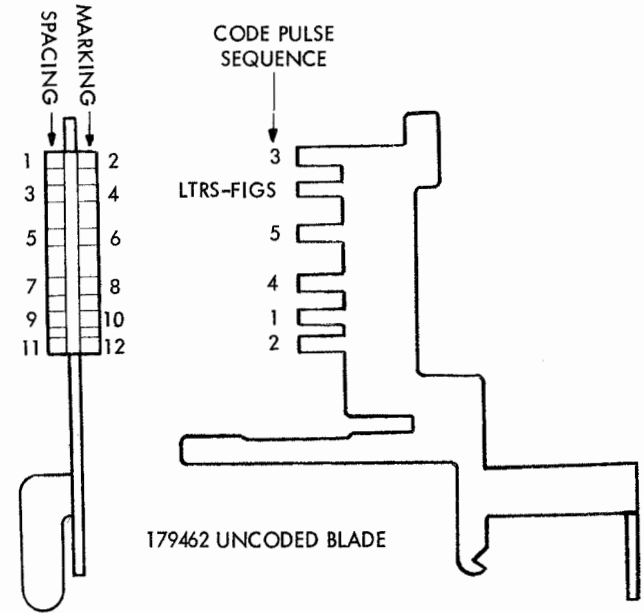
Note:

In addition to removing the tines for a desired character, the LTRS-FIGS shift tines should also be coded according to the following:

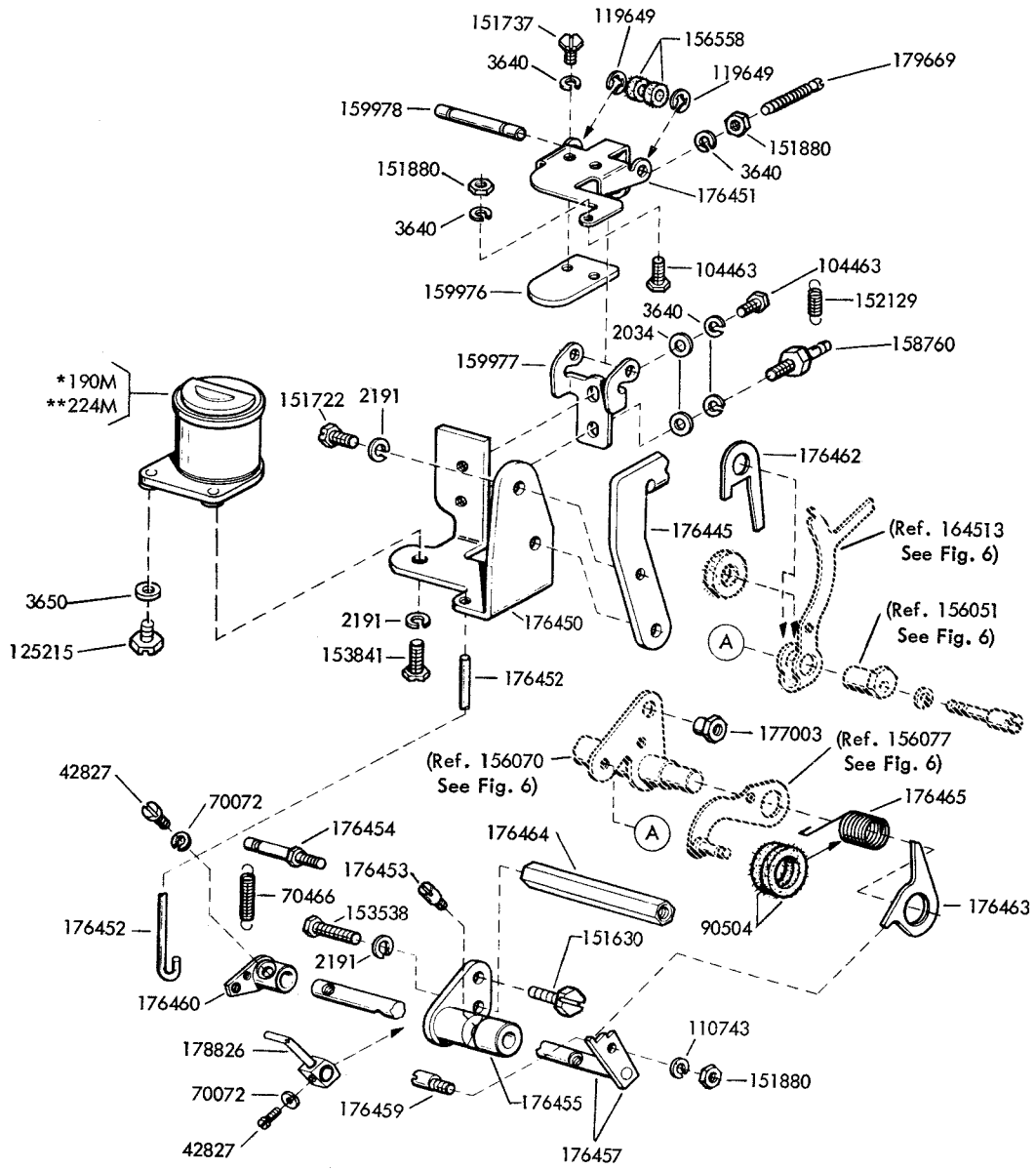
- (1) To respond only in the FIGS position, remove tine 3.
- (2) To respond only in the LTRS position, remove tine 4.
- (3) To respond in FIGS and LTRS position, remove tines 3 and 4.



164402 UNCODED BLADE



179462 UNCODED BLADE

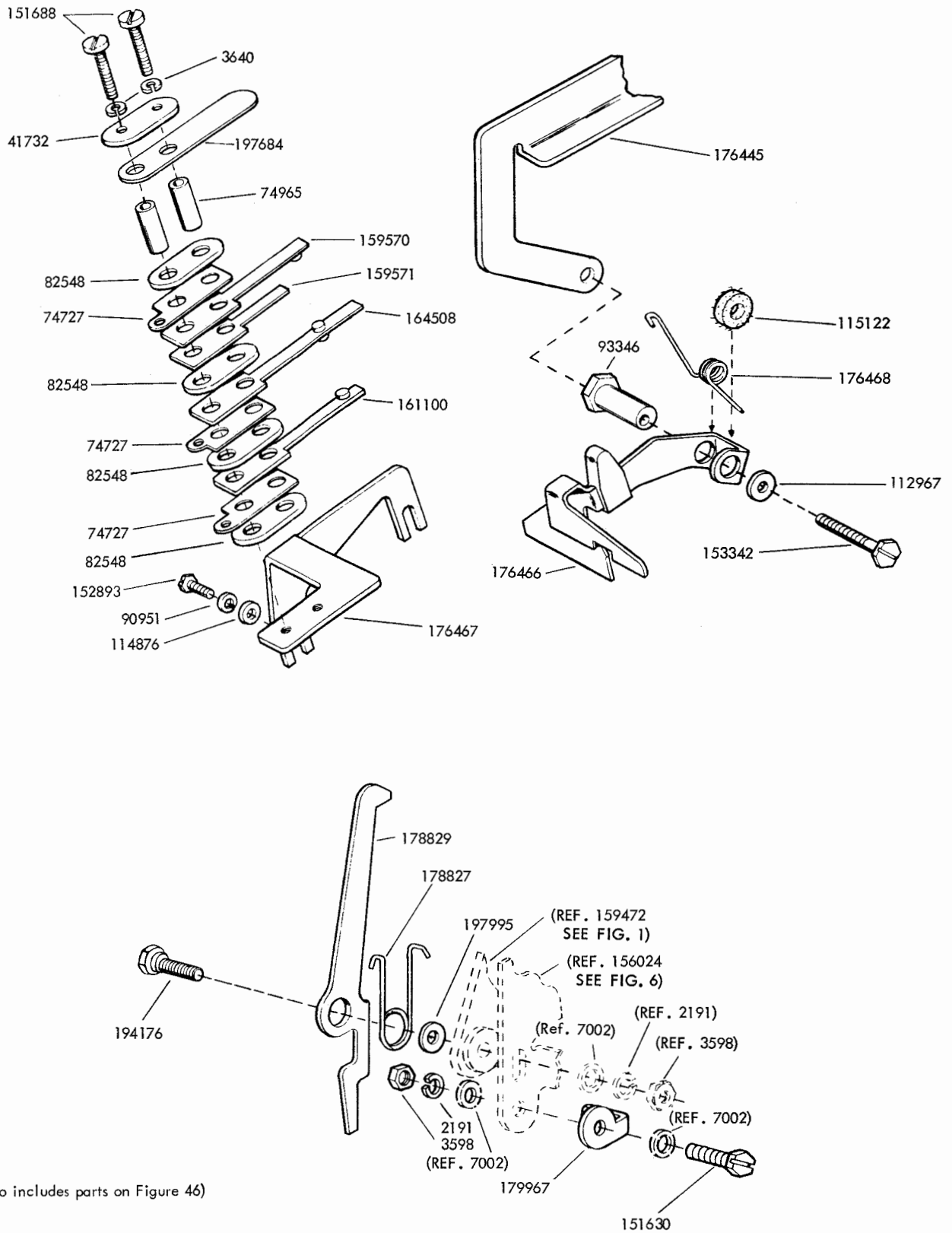


*Peculiar to 173961
 **Peculiar to 179133

173961 - Specification 500585
 179133 - Specification 500585

(Also includes parts on Figure 47)

FIGURE 46. 173961 AND 179133 MODIFICATION KITS TO PROVIDE BLANK DELETE FOR TYPING REPERFORATOR



(Also includes parts on Figure 46)

FIGURE 47. 173961 AND 179133 MODIFICATION KITS TO PROVIDE BLANK DELETE FOR TYPING REPERFORATOR

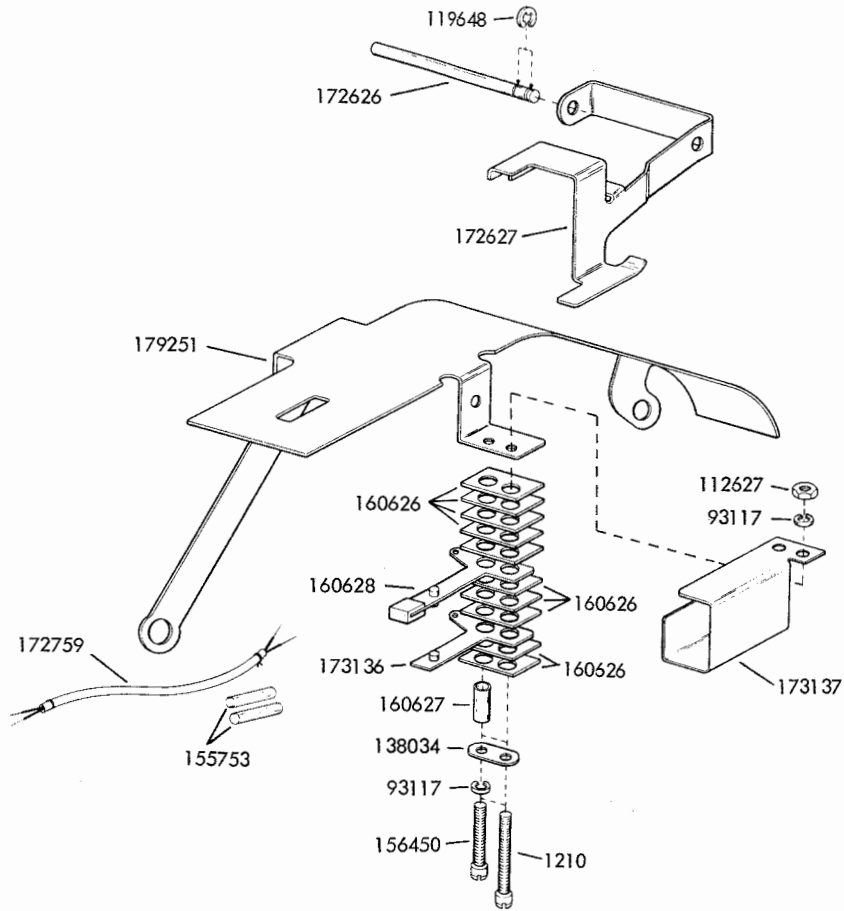


FIGURE 48. 173135 TAPE ABSENT CONTACT BRACKET ASSEMBLY

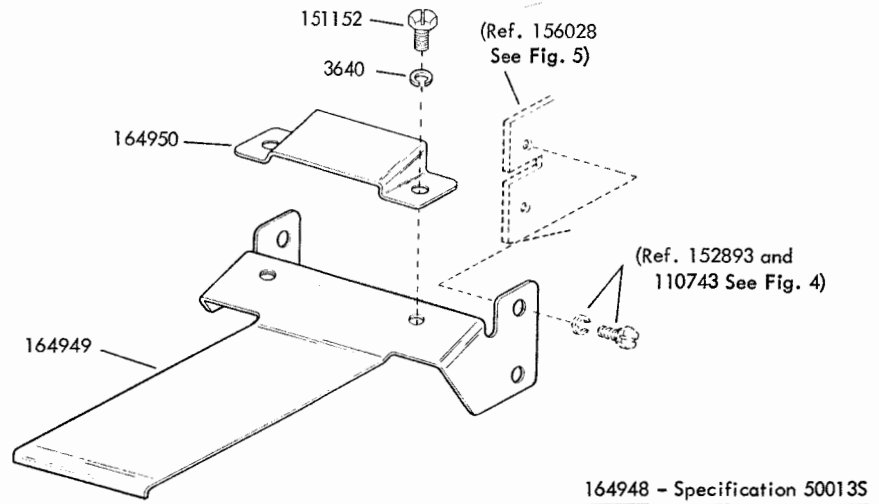
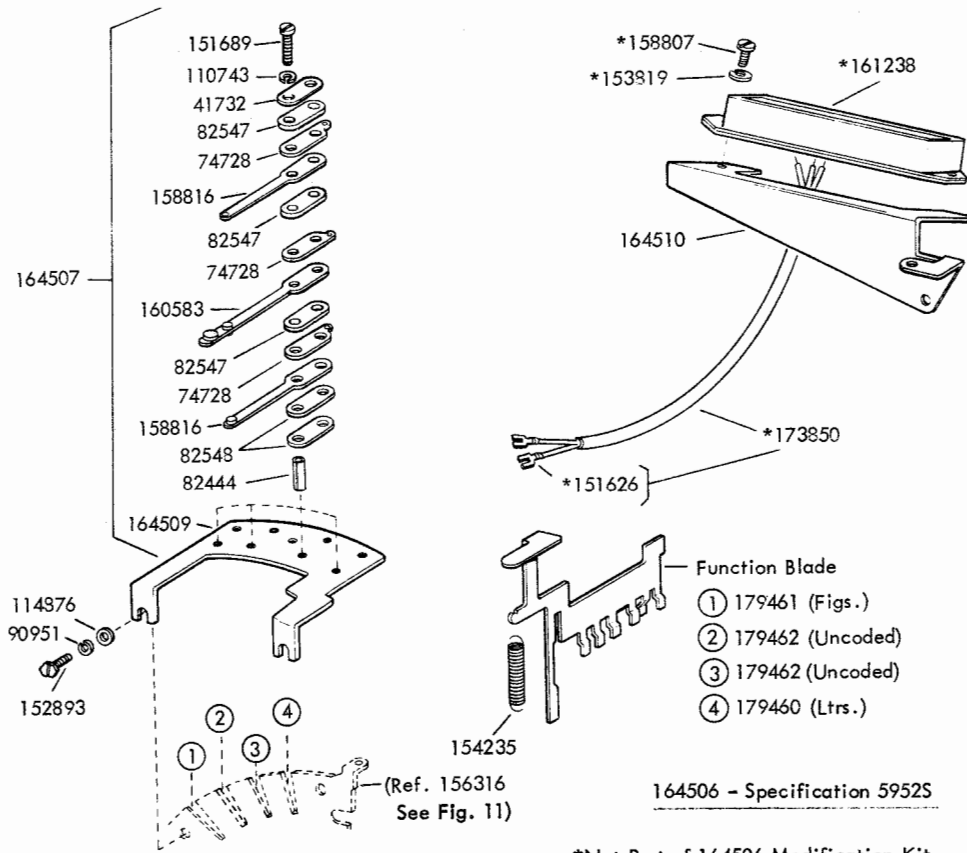


FIGURE 49. 164948 MODIFICATION KIT TO EQUIP REPERFORATOR WITH COMBINATION TAPE CHUTE AND KNIFE TEARING EDGE WHEN MOUNTED IN A UNIVERSAL CABINET



164506 - Specification 59525

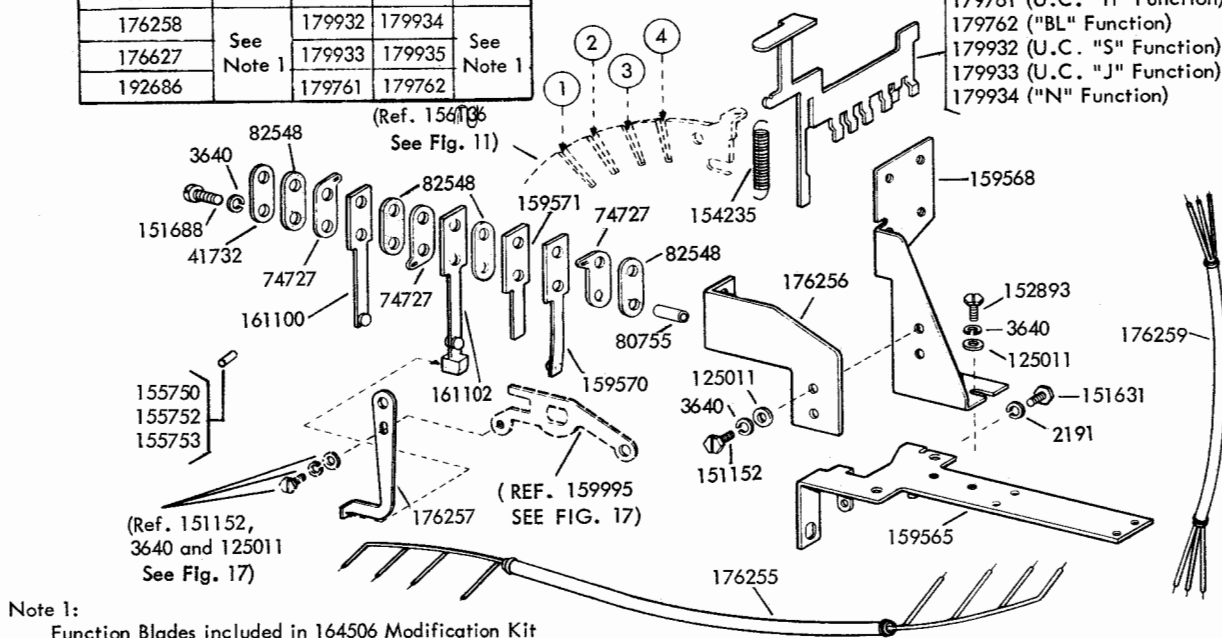
*Not Part of 164506 Modification Kit

FIGURE 50. 164506 MODIFICATION KIT TO ADD MULTIPLE MOUNTED FUNCTION BLADE OPERATED CONTACTS

FUNCTION BLADES				
Modification Kit	①	②	③	④
176258	See Note 1	179932	179934	See Note 1
176627	See Note 1	179933	179935	See Note 1
192686		179761	179762	

176258 - Specification 501115
 176627 - Specification 501115
 192686 - Specification 501115

Function Blade
 179761 (U.C. "H" Function)
 179762 ("BL" Function)
 179932 (U.C. "S" Function)
 179933 (U.C. "J" Function)
 179934 ("N" Function)



Note 1:
 Function Blades included in 164506 Modification Kit

FIGURE 51. MODIFICATION KITS TO EQUIP A REPERFORATOR WITH AN AUXILIARY CONTACT ASSEMBLY AND FUNCTION BLADES

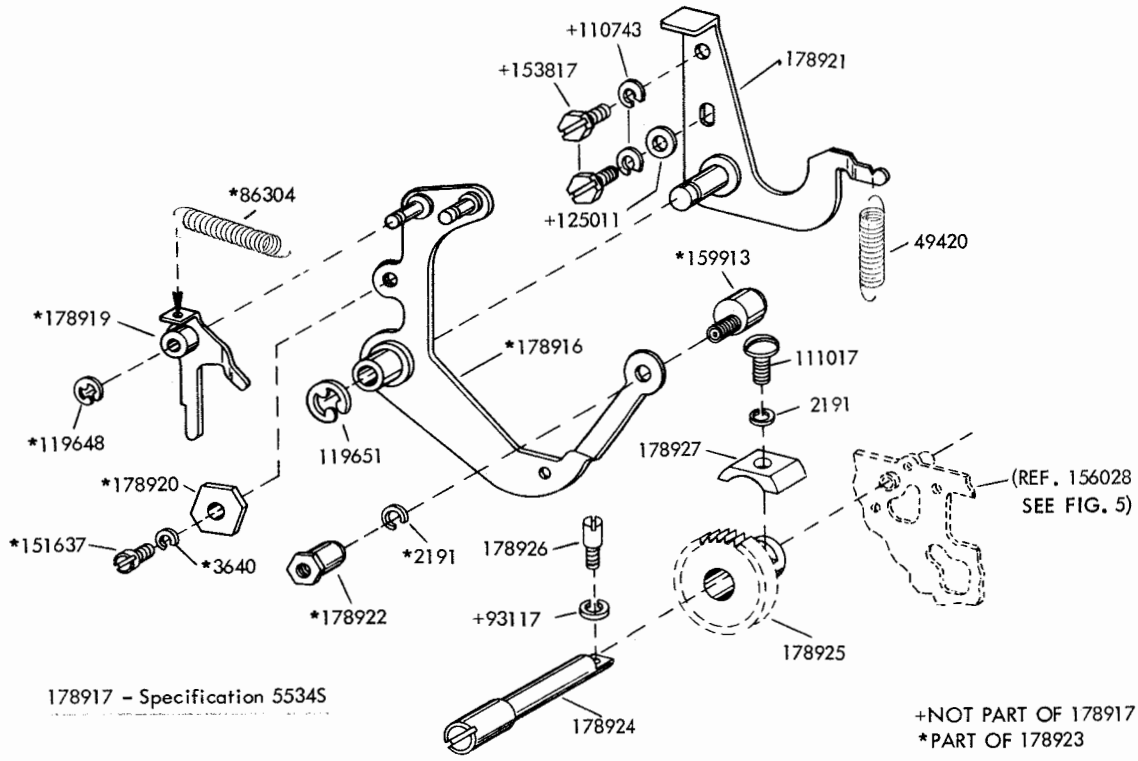


FIGURE 52. 178917 MODIFICATION KIT TO PROVIDE BACKSPACE MECHANISM FOR FULLY PERFORATED TAPE AND PRINTING BETWEEN FEED HOLES

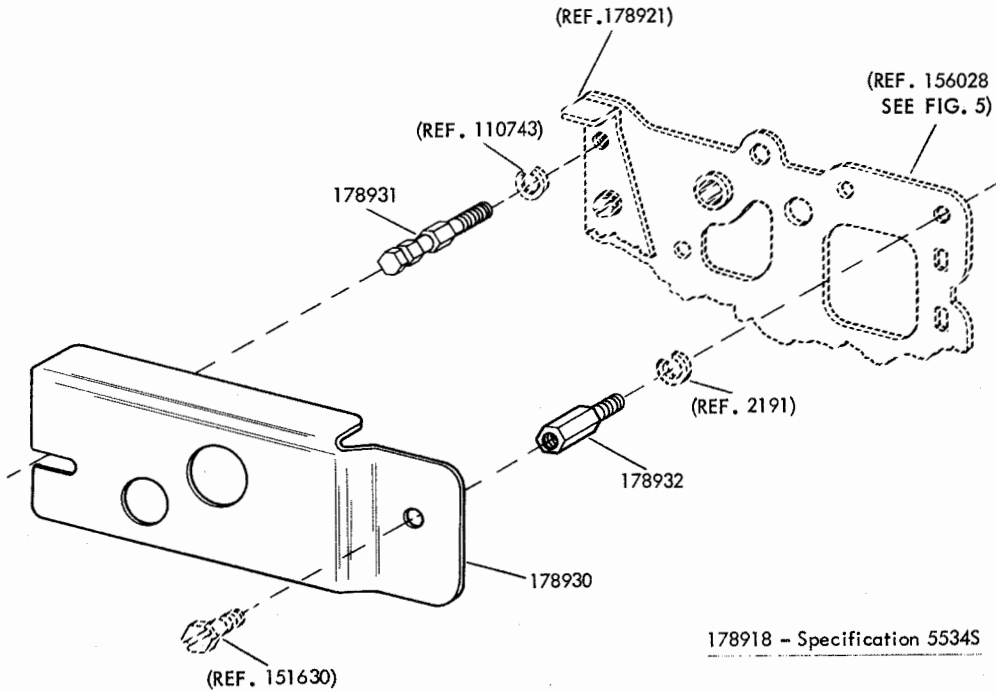


FIGURE 53. 178918 MODIFICATION KIT TO PROVIDE GUARD FOR BACKSPACE MECHANISM (FULLY PERFORATED TAPE, PRINTING BETWEEN FEED HOLES)

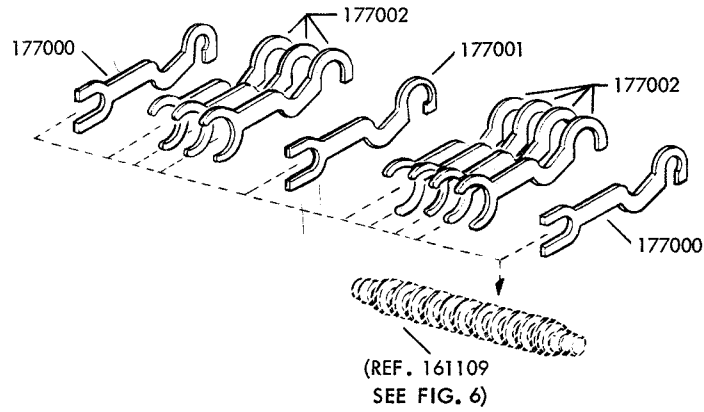
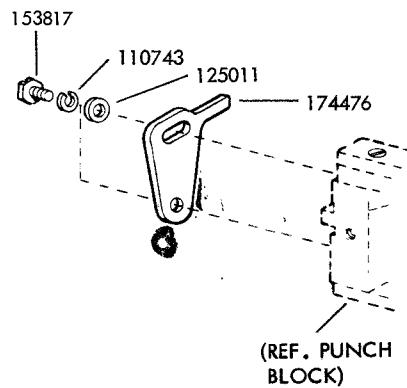


FIGURE 54. 179275 MODIFICATION KIT TO PROVIDE POSITIVE ENGAGEMENT OF PUNCH SLIDES WITH THE LATCH LEVERS



174475 - Specification 50034S

FIGURE 55. 174475 MODIFICATION KIT TO PROVIDE PRINT SUPPRESSION ON FUNCTIONS

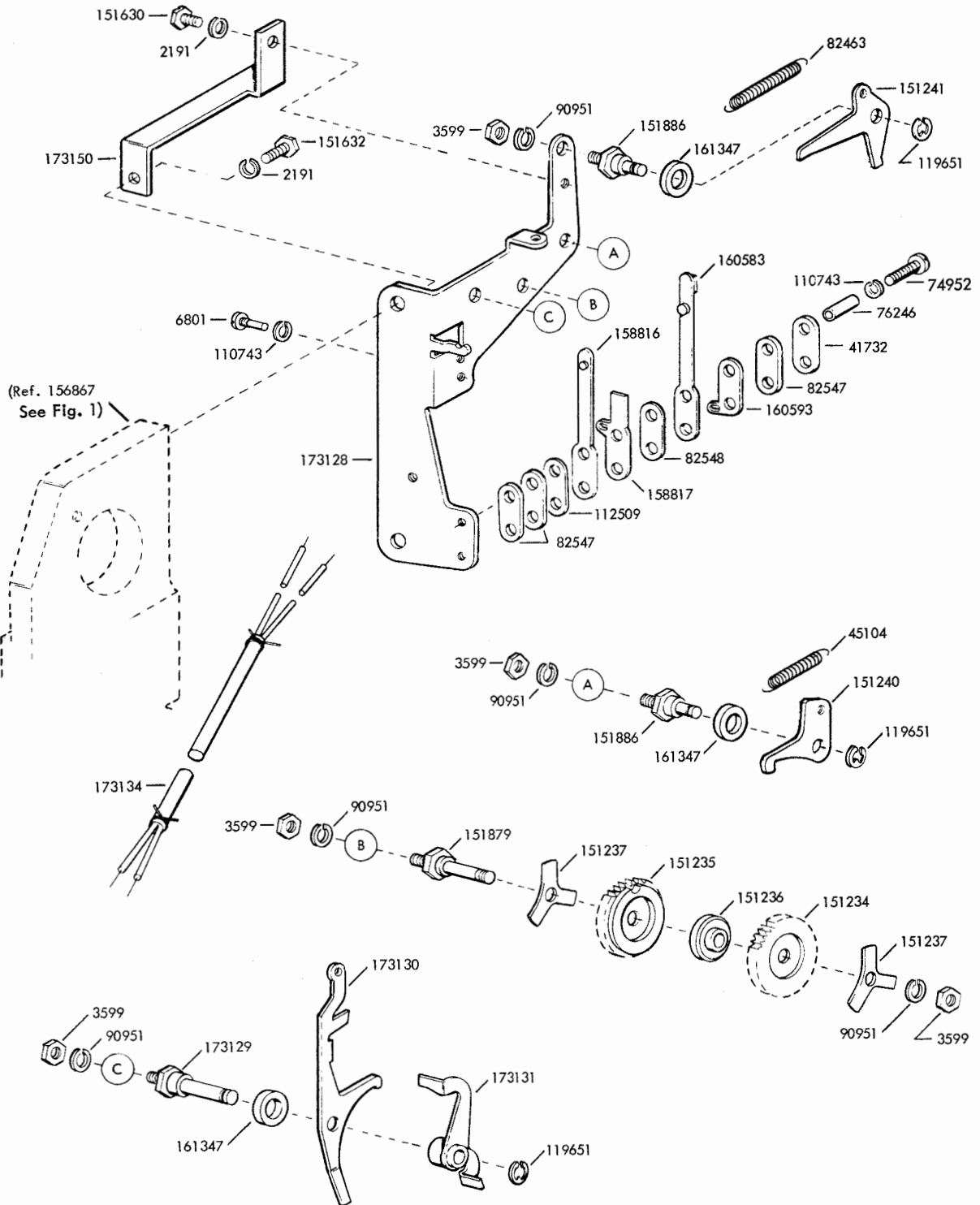


FIGURE 56. MOTOR CONTROL MECHANISM

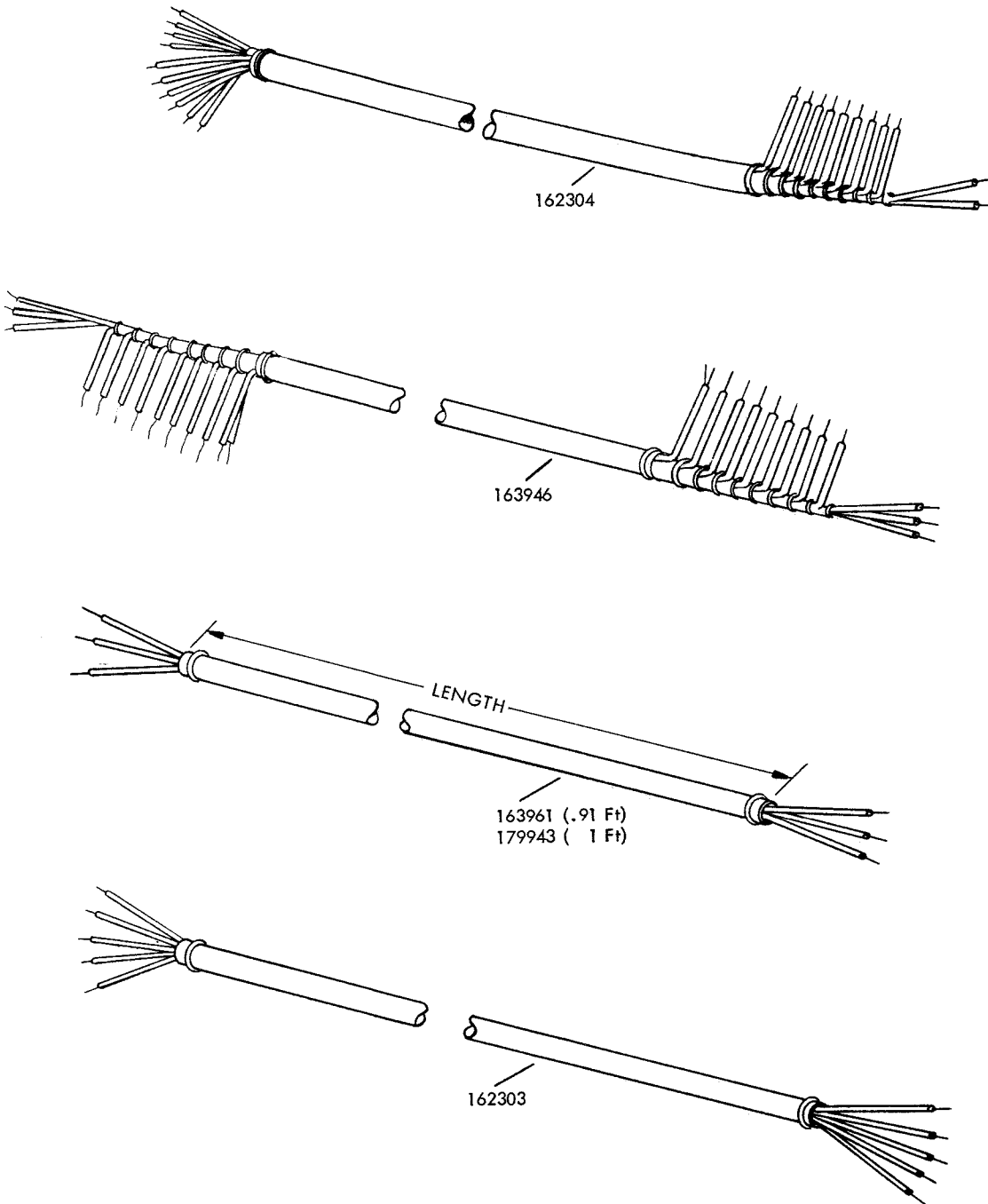
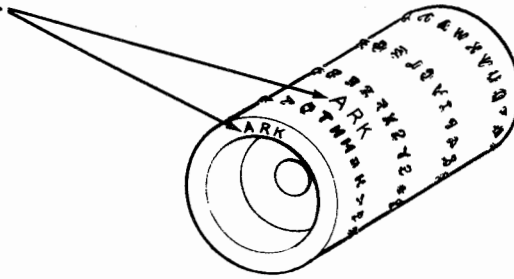


FIGURE 57. CODE READING CONTACT CABLES

Typewheel Code may be found in either of two locations.



- ① Bell System Arrangement A
- ② Bell System Arrangement B
- ③ Bell System Arrangement C
- ④ Bell System Arrangement D

TYPEWHEEL CODE CHART							
Code	Part Number	Matching Arrangements		Code	Part Number	Matching Arrangements	
		Typebox	Keypad			Typebox	Keypad
Printing on Edge of Tape				Printing Between Feed-Holes			
ABW	175604			BRH	175707		
ACA	175608			BRL	175710		
ACF	175612			BRM ③	175711		
ADC	175632			BRP	175713		
ARA ①	173965	RA	ARK	BWA ①	173757	WY	BRJ
ARC ③	173971	RC	ARL	BWB	173769		
ARE ④	173970	RE	ARE	BRB ②	175701		
ARG	173966	RG	ARG				
ARJ	173968	RJ	ARW				
ARL	163676						
ARK	163675						
ARM	163677		BRT				
ARS	173969	RS	ARM				
ARW	163683	YM	BRU				
ARX	163682						
ARY	163681	YE	BRQ				
ARZ	163679	RZ	ARU				
AWA	173967	WY	BRJ				
AWB	163685						
AWD	163687						
AWE	163688						
AWF	163690						
AWS	175580						
AWU	175582						
AWX	175583						
AWY	175584						
AXW	175519						
AXZ	175521						
AYB	175523						
AYX	175546						
AYZ	175547						
AZG	175554						
AZJ	175556						
AZM	175559						
AZT	175565						
AZW	175568						

Note:
Typewheels not appearing on this page may be ordered by Code letters.

FIGURE 58. TYPEWHEEL CHART

NUMERICAL INDEX

Part Number	Description and Page Number	Part Number	Description and Page Number	Part Number	Description and Page Number
190M	Coil, Magnet 35, 44	70072	Washer, Lock 44	94712	Spacer 10
224M	Coil, Magnet 29, 35, 44	70466	Spring 44	95378	Spring 19
252M	Coil, Magnet 22	70878	Spring 28, 29	96717	Screw, Shoulder (4-40) 4, 15, 31
254M	Coil, Magnet 16	71437	Washer, Flat 8	97266	Plate, Contact 10
1020	Screw (6-40 x 1/4 Hex) 6	71681	Spool, Ribbon 18, 42	97516	Bushing 42
1036	Nut (6-40 Hex) 7	72522	Wick, Felt 7	98004	Screw (2-56 x 11/16 Hex) 22
1210	Screw (2-56 x 5/8 Fil) 46	73175	Washer, Lock 20, 33	100994	Nut (2-56 Hex) 22
1256	Screw, Set (6-40) 20	73611	Wick, Felt 23	101123	Washer, Felt 11
2034	Washer, Flat 15, 29, 32, 34, 36, 44	74283	Washer, Spring 14	101796	Washer, Felt 33
2191	Washer, Lock 3 To 23, 25, 26, 27, 28, 29, 31, 32, 33, 35, 36, 38, 39, 40, 42, 44, 45, 47, 48, 50	74553	Wick, Felt 10	102028	Post, Spring 21
2199	Nut (7/16-32 Hex) 10	74727	Terminal, Contact 23, 45, 47	103078	Plate 39
2407	Washer, Lock 10	74728	Terminal, Contact 22, 47	104463	Screw (4-40 x 1/4 Hex) 44
2438	Washer, Flat 16	74952	Screw (4-40 x 5/8 Fil) 50	104824	Spring 16
2481	Washer, Flat 23, 39	74965	Bushing, Insulating 45	108943	Bushing 25
2539	Nut (3/8-32 Hex) 20, 33	76246	Bushing, Insulating 50	109356	Washer, Flat 31
2669	Washer, Lock 4, 14	76422	Spring 34	110434	Screw (4-40 x 3/16 Fil) 3, 14, 15
3598	Nut (6-40 Hex) 3, 4, 6, 7, 8, 10, 11, 14, 15, 18, 19, 21, 22, 26, 27, 29, 31, 32, 35, 36, 39, 45	78533	Spring 15, 32, 35	110435	Nut (4-40 Hex) 31
3599	Nut (4-40 Hex) 6, 7, 9, 11, 12, 15, 16, 17, 20, 29, 32, 35, 50	80334	Terminal, Contact 38, 39	110437	Spring 13
3606	Nut (6-40 Hex) 4, 19, 27	80531	Washer, Flat 42	110743	Washer, Lock 3, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 21, 22, 23, 25, 27, 28, 29, 32, 34, 35, 38, 41, 42, 44, 47, 48, 49, 50
3624	Washer, Flat 22	80755	Bushing, Insulating 22, 23, 31, 38, 47	110879	Spring 9, 12, 19
3640	Washer, Lock 3, 4, 5, 9, 10, 11, 13, 19, 20, 21, 22, 23, 29, 31, 32, 33, 35, 36, 37, 44, 45, 46, 47, 48	80833	Guard, Contact Spring 25	111017	Screw (6-40 x 5/16 Fil) 19, 48
3646	Washer, Lock 26	81726	Terminal 25, 31	111767	Washer, Flat 21
3650	Washer, Flat 29, 44	81731	Spring 42	111777	Connector, Receptacle (4 Pt) 24
3870	Spring 19	81778	Screw (4-40 x 3/16 Fil) 16	112509	Insulator (.031") 50
4703	Spring 32, 35	82392	Shim (.004") 4	112626	Nut (10-32 Hex) 10, 14
4812	Wick, Felt 34	82444	Bushing, Insulating 47	112627	Nut (2-56 Hex) 46
5363	Spring 7	82463	Spring 20, 32, 35, 50	112634	Spring 13
5425	Shim (.010") 21	82474	Terminal 29	112636	Spring, Feed Pawl 21
6801	Screw, Pilot (4-40) 50	82547	Insulator (.094") 22, 24, 25, 30, 31, 38, 39, 47, 50	112967	Washer, Flat 27, 45
7002	Washer, Flat 3, 4, 6, 7, 9, 10, 11, 13, 15, 17, 19, 21, 22, 23, 26, 29, 32, 33, 35, 38, 39	82548	Insulator (.062") 22, 23, 25, 31, 38, 39, 45, 47, 50	113039	Post, Spring 36
7603	Spring 32, 35	84226	Spring 32, 35, 42	114876	Washer, Flat 13, 25, 45, 47
7655	Spring 31, 34, 36, 39	84575	Spring 29	115122	Washer, Felt 10, 45
7835	Ribbon W/Spool (Black) 18, 42	84892	Stiffener 39	115134	Washer, Felt 11
8330	Washer, Flat 3, 4, 6, 7, 8, 12, 14, 15, 18, 19, 20, 25, 26, 29, 33, 36, 42	85823	Spacer 18, 42	119467	Insulator (.032") 22
22746	Spring 10, 20	86079	Washer, Felt 11, 32	119647	Ring, Retaining 7, 21
31636	Spring 21	86283	Spring 18	119648	Ring, Retaining 7, 14, 28, 29, 34, 36, 39, 41, 46, 48
33765	Washer, Flat 28	86304	Spring 27, 28, 48	119649	Ring, Retaining 7, 10, 11, 13, 18, 21, 22, 23, 29, 32, 33, 35, 36, 42, 44
41382	Spring 7, 14	86506	Post, Spring 3	119650	Ring, Retaining 8, 18, 19, 42
41543	Bearing, Ball 27	86714	Washer, Flat 42	119651	Ring, Retaining 3, 10, 12, 13, 19, 21, 22, 28, 29, 32, 36, 38, 42, 48, 50
41732	Plate, Clamp 22, 23, 25, 31, 38, 45, 47, 50	86774	Screw, Shoulder (6-40) 11, 26	119652	Ring, Retaining 3, 4, 7, 8, 14, 18, 21, 32, 35, 36
42823	Washer, Flat 3, 5, 21	86873	Spring 33, 36	119653	Ring, Retaining 10, 18, 21, 42
42827	Screw (3-48 x 1/4 Fil) 44	87401	Spring 3	119655	Ring, Retaining 33
45024	Spring 26	90052	Screw (4-40 x 5/8 Hex) 17	119656	Ring, Retaining 20, 33
45104	Spring 32, 35, 50	90361	Washer, Felt 8	121100	Spring 13
45963	Spring 21, 33	90504	Washer, Felt 44	121125	Washer, Spring 22
47024	Washer, Flat 11	90535	Washer, Felt 12, 13	121242	Clamp, Cable (1/8" ID) 15
49084	Spring 3, 23	90560	Washer, Flat 28	121243	Clamp, Cable (3/16" ID) 15, 30
49420	Spring 48	90573	Spring 4	121245	Clamp, Cable (5/16" ID) 15, 30
55063	Spring 28, 29, 41	90599	Shim (.008") 11	121246	Clamp, Cable (3/8" ID) 15, 30
55090	Spring 21	90606	Spring 3, 18	121538	Terminal 16
55669	Spring 36	90615	Spring 19	121551	Screw (8-32 x 1/4 Hex) 26
		90789	Washer, Flat 15	122149	Screw (4-40 Spl) 28
		90790	Washer, Flat 29	122292	Bushing 39
		90791	Washer, Lock 7	124177	Washer, Lock 4, 6, 14, 15, 19
		90951	Washer, Lock 13, 25, 39, 45, 47, 50	125011	Washer, Flat 3, 6, 9, 11, 12, 13, 14, 18, 19, 21, 22, 23, 28, 32, 33, 34, 35, 36, 37, 47, 48, 49
		91120	Spring 7		
		92260	Washer, Lock 19		
		93108	Washer, Lock 27		
		93117	Washer, Lock 46, 48		
		93118	Washer, Lock 22		
		93346	Bushing, Eccentric 45		
		93356	Washer, Felt 3, 7		
		94669	Screw, Shoulder (4-40) 7		

NUMERICAL INDEX (Continued)

Part Number	Description and Page Number	Part Number	Description and Page Number	Part Number	Description and Page Number
125015	Washer, Flat 4, 8, 9, 16, 19, 39	151629	Nut (6-40 Spl) 3, 8, 10, 20, 26, 33, 36	152429	Rack, Sector 14
125215	Screw (4-40 x 3/16 Hex) 29, 35, 44	151630	Screw (6-40 x 1/4 Hex) 3, 7, 9, 10, 12, 15, 18, 19, 20, 22, 23, 26, 27, 31, 33, 37, 39, 44, 45, 50	152432	Arm, Stop 14
125231	Nut (10-32 Hex) 4	151631	Screw (6-40 x 5/16 Hex) 3, 4, 6, 7, 9, 13, 16, 17, 19, 21, 22, 27, 47	152436	Knob, Range Scale 14
125268	Spring 20, 22	151632	Screw (6-40 x 3/8 Hex) 4, 5, 6, 15, 17, 22, 23, 27, 29, 32, 33, 35, 40, 50	152438	Bail, Stop Arm 14
125802	Washer, Flat 20, 42	151637	Screw (4-40 x 1/4 Fil) 6, 18, 32, 35, 48	152441	Washer, Flat 14
128357	Ring, Retaining 8, 13	151640	Lever, Clutch Shoe 3	152445	Spring 14
130330	Washer, Felt 11	151642	Screw (6-40 x 3/4 Fil) 33	152457	Wick, Felt 15
130696	Washer, Felt 12	151657	Screw (6-40 x 1/4 Fil) 4, 14, 15	152458	Shield, Terminal 16
131016	Washer, Felt 11	151658	Screw (6-40 x 5/16 Fil) 3, 4, 27, 33	152634	Washer, Flat 8
135716	Spring 3	151659	Screw (6-40 x 1/2 Fil) 33	152887	Screw (4-40 x 1/2 Hex) 17
135901	Washer, Cup 10	151685	Screw (4-40 x 5/16 Fil) 33	152891	Spring 15
138034	Plate, Clamp 46	151686	Screw (4-40 x 3/8 Fil) 16	152893	Screw (4-40 x 1/4 Hex) 3, 4, 6, 7, 8, 10, 13, 15, 20, 22, 23, 25, 29, 32, 35, 36, 45, 47
139697	Screw (4-40 x 9/32 Fil) 27	151688	Screw (4-40 x 5/8 Fil) 16, 23, 25, 32, 35, 45, 47	153184	Post 16
139752	Screw (4-40 x 11/64 Fil) 3	151689	Screw (4-40 x 3/4 Fil) 31, 47	153267	Washer, Felt 39, 41
144793	Spacer 7	151690	Screw (10-32 x 5/16 Fil) 5, 27	153342	Screw (6-40 x 15/16 Hex) 45
144794	Spring, Torsion 7	151692	Screw (6-40 x 3/16 Fil) 19	153489	Detent 14
144795	Plate, Rear 6	151693	Screw (6-40 x 9/16 Fil) 3	153538	Screw (6-40 x 7/16 Hex) 15, 39, 44
144796	Plate, Front 7	151700	Screw, Shoulder (6-40) 12	153543	Armature, Selector 16
144797	Shaft, Feed Wheel 7	151701	Spring, Torsion 15	153799	Screw (4-40 x 21/64 Hex) 20, 33
144998	Post 7	151714	Spring 15	153817	Screw (4-40 x 3/8 Hex) 28, 32, 35, 48, 49
144999	Shoe, Tape 7	151715	Spring 16	153819	Washer, Lock 47
145353	Wheel, Pressure 7	151721	Screw (6-40 x 3/4 Hex) 29, 39	153839	Screw (6-40 x 5/8 Hex) 3, 8, 10, 15, 20, 23, 26, 30, 33, 36
145356	Wheel, Feed 7	151722	Screw (6-40 x 3/16 Hex) 6, 26, 29, 35, 39, 42, 44	153841	Screw (6-40 x 9/16 Hex) 18, 42, 44
145357	Guide, Tape 7	151728	Spring 3, 5	154235	Spring 13, 25, 47
145358	Bracket, Tape Guide 6	151731	Screw (4-40 x 7/8 Fil) 31	154242	Screw (6-40 x 5/16 Hex) 4
150000	Drum, Clutch 5	151733	Screw (4-40 x 9/16 Fil) 22, 38	154244	Nut, Shoulder (6-40) 11
150001	Drum, Clutch 3	151736	Spring 27	154245	Spring, Contact 25
150013	Disk, Adjusting 3, 5	151737	Screw (4-40 x 11/64 Hex) 3, 5, 8, 21, 22, 23, 27, 29, 35, 42, 44	154246	Bracket, Contact 25
150026	Lever, Shoe Release 5	151848	Lock 21	154247	Contact Assembly 25
150029	Wick, Felt 3, 5	151879	Stud 50	154325	Modification Kit 18
150040	Screw (6-40 x 5/8 Fil) 5	151880	Nut (4-40 Hex) 17, 21, 31, 42, 44	154335	Screw (6-40 x 9/32 Fil) 27
150043	Shoe, Secondary Clutch 3, 5	151886	Stud 50	154352	Spring 37
150044	Shoe, Primary Clutch 3, 5	152129	Spring 44	154396	Cam W/Pin 5
150048	Spring 3, 15	152400	Plate, Selector Mounting 15	154397	Shaft W/Bearing 5
150089	Screw (4-40 x 1/2 Fil) 16	152401	Guide 15	154398	Bearing, Needle 5
150241	Spring 3, 5	152402	Guide, Selector Lever 15	154620	Wick, Leather 15
150327	Roller, Ribbon 18, 42	152403	Bracket, Guide 15	154621	Retainer, Wick 15
150355	Lever, Latch 3	152404	Bracket, Spring 15	154622	Lubricator 15
150356	Lever, Trip 3	152405	Lever, Marking Lock 15	154694	Disk, Clutch Cam 3, 5
150411	Washer, Flat 3	152406	Bracket, Spring 15	155096	Plate, Range Finder Mounting 14
150507	Spring 18, 21	152407	Lever, Spacing Lock 15	155750	Sleeve, Insulating (3/32 ID x 1/2" Lg) 22, 23, 24, 25, 26, 29, 31, 38, 47
150687	Stud 15	152409	Lever, Selecting 15	155751	Sleeve, Insulating (1/8 ID x 1" Lg) 22, 24, 30
150923	Washer, Felt 8	152410	Bail, Reset 15	155752	Sleeve, Insulating (5/64 ID x 1/2" Lg) 23, 25, 30, 31, 38, 47
150990	Washer, Felt 9	152411	Lever, Push 15	155753	Sleeve, Insulating (1/8 ID x 1/2" Lg) 25, 30, 46, 47
151073	Screw (4-40 x 5/32 Fil) 3, 8, 23, 28, 41	152412	Link 15	155995	Screw, Shoulder (6-40) 27
151103	Spring 15	152415	Stud, Adjusting 16, 27	156008	Wheel, Feed 41
151152	Screw (4-40 x 3/16 Hex) 3, 11, 13, 17, 19, 21, 22, 23, 29, 34, 37, 41, 46, 47	152420	Lamination, Magnet 16	156009	Post, Slide 8
151222	Washer, Felt 8	152421	Bracket, Shield Mounting 16	156012	Spring, Punch Block 41
151234	Ratchet (27 T) 50	152423	Bracket, Armature Stop Mounting 16	156013	Screw (4-40 Spl) 8
151235	Ratchet (28 T) 50	152425	Post, Spring 16	156015	Plate, Spring 6
151236	Hub 50	152426	Nut, Self-Locking (6-40) 16	156016	Link, Front Drag 8
151237	Spring, Flat 50	152427	Latch W/Hub 14	156017	Shaft, Eccentric 8
151240	Pawl 50			156019	Washer, Felt 7
151241	Lever, Latching 50			156020	Slide 6
151246	Washer, Flat 4			156024	Plate, Rear 6
151336	Oiler 15, 27				
151346	Screw (6-40 x 3/8 Fil) 27				
151416	Nut (6-40 Hex) 7, 8				
151442	Screw (6-40 x 1/2 Hex) 4, 5, 10, 11, 15, 16, 27, 29, 31, 35, 39				
151603	Spacer 16				
151626	Terminal 24, 25, 26, 30, 31, 35, 47				

NUMERICAL INDEX (Continued)

Part Number	Description and Page Number	Part Number	Description and Page Number	Part Number	Description and Page Number
156028	Plate, Front 7	156243	Roller, Lifter Arm 19	156488	Post, Spring 19
156036	Guide, Tape 7	156248	Latch 3	156489	Bushing 10
156040	Post 7	156250	Cam 40	156490	Post, Guide 3
156042	Post 7	156252	Lifter, Function Blade 19	156492	Bracket, Guide 9
156043	Bushing 8	156264	Lever, Detent 9, 12	156493	Stud 11
156044	Stud, Die Wheel 7	156265	Bushing, Shoulder 12	156501	Screw (6-40 x 7/32 Fil) 9, 10
156045	Shaft, Feed Wheel 7	156266	Bushing, Shoulder 9, 12	156515	Washer, Felt 42
156046	Block, Tape Guide 6	156267	Lever, Trip 27	156536	Screw (4-40 x 1/8 Fil) 13, 15
156047	Spring, Torsion 7	156268	Bracket, Spring 13	156558	Washer, Felt 10, 22, 35, 44
156050	Stud, Eccentric 7	156276	Eccentric, Right Rotary 9	156572	Washer, Felt 23
156051	Bushing, Eccentric 8	156277	Eccentric, Left Rotary 9	156576	Washer, Felt 4
156052	Shoe, Tape 7	156278	Eccentric 12	156577	Roller, Detent Lever 7
156054	Lever, Detent 7	156286	Shaft, Right Eccentric 9	156740	Screw (6-40 x 7/32 Hex) 6, 33, 38
156055	Wheel, Die 7	156287	Shaft, Left Eccentric 9		
156057	Washer, Flat 13	156288	Shaft, Axial Eccentric 12	156835	Ring, Retaining 10
156058	Link, Rear 8	156289	Bearing, Left Front 9	156867	Frame, Main 3
156060	Shaft, Eccentric 8	156290	Bearing, Right Front 9	156869	Guide, Ribbon 10
156061	Arm, Tape Shoe 7	156291	Bearing, Rear 9	156870	Lever, Ribbon Oscillating 11
156062	Post, Pivot 7	156292	Housing, Upper Axial 12	156871	Bail, Operating Blade 4
156067	Guide, Slide Post 8	156293	Housing, Lower Axial 12	156872	Blade, Operating 4
156069	Plate 6	156294	Sector, Axial 11	156874	Screw (4-40 x 15/16 Fil) 9, 12
156070	Bail, Toggle 8	156296	Post, Retainer 13	156875	Screw (6-40 x 5/32 Fil) 12
156077	Plate W/Post 8	156300	Shaft 13	156876	Bushing 4
156078	Contact Assembly 23	156306	Rod, Right Connecting 10	156877	Washer, Felt 4
156089	Slide W/Insulator 6	156311	Rod, Left Connecting 10	156880	Jumper (2-3/8" Black) 16
156090	Screw, Adjusting (6-40) 7	156313	Rack, Axial Output 12	156881	Jumper (1-1/2" Black) 16
156093	Washer, Felt 8	156316	Plate, Rear 13	156884	Arm, Rocker 8
156094	Link, Front 8	156318	Lever, Reset 3	156899	Stud, Eccentric 4
156095	Bushing 8	156321	Shaft, Oscillating 11	156900	Roller 4
156099	Link, Rear Drag 8	156322	Link, Axial Toggle 11	156901	Post, Eccentric 18
156103	Strip, Felt 8	156332	Shaft, Typewheel 10	156905	Block, Guide 10
156104	Shaft 41	156366	Shaft, Rocker Bail 4	156908	Post, Sector Pivot 11
156106	Bail 41	156369	Lever W/Post 11	156909	Post, Toggle Link 11
156125	Shaft 20	156378	Plate, Axial Positioning 12	156921	Guide, Adjusting Lever 4
156128	Bushing 20	156382	Roller, Guide 11	156922	Arm, Lock Release 13
156130	Lever 20	156387	Lever, Trip 3	156924	Plate, Drive Link 12
156132	Bearing, Eccentric 20, 33	156388	Lever, Adjusting 3	156925	Roller 12
156136	Bracket, Shaft Mounting 20, 26, 33	156389	Gear (16 T) 10	156929	Bracket 22
		156390	Washer, Flat 10	156931	Bracket 10
156137	Washer, Flat 20, 33	156396	Eccentric 19	156933	Ratchet (36 T) 21
156139	Frame 21	156397	Post 11	156937	Link, Printing Drive 19
156143	Shaft 21	156399	Nut, Shoulder (6-40 Hex) 4	156938	Screw, Eccentric Shoulder (6-40) 19
156146	Spacer 21	156403	Disk, Bearing 4		
156147	Arm, Drive 20	156408	Arm 10	156941	Cam, Selector 3
156152	Shaft 20, 26	156412	Link, Drive 4	156948	Wick, Felt 11
156153	Collar, Eccentric 20	156413	Link, Drive 19	156976	Connector, Plug (32 Pt) 24
156154	Collar 20	156414	Plate, Ribbon Feed Mounting 18	156987	Screw (6-40 Spl) 4
156155	Pawl, Feed 20	156419	Shaft, Left Ribbon Ratchet 18	156988	Race, Outer 4
156156	Pawl, Check 20	156421	Shaft, Right Ribbon Ratchet 18	156989	Roller, Bearing 4
156158	Post, Spring 21	156426	Washer, Spring 18	156991	Pawl, Feed 20
156159	Bracket 23	156427	Disk, Friction 18	156994	Strip, Felt 4
156162	Washer, Flat 8	156428	Washer, Felt 18	156995	Post 4
156165	Washer, Felt 3, 8	156433	Pawl, Ribbon Feed 18	156998	Retainer 4
156167	Cable 24	156436	Arm, Front Reversing 18	157194	Retainer, Spring 16
156168	Spring 6	156437	Arm, Rear Reversing 18	157237	Shield, Terminal 16
156169	Washer, Felt 8	156440	Lever, Reversing 18	157252	Bushing 42
156172	Rod 41	156442	Pawl, Retaining 18	157261	Shaft, Stop Arm 14
156173	Stud 6	156450	Screw (2-56 x 1/2 Fil) 46	157292	Switch, Tape Out Sensitive 22
156177	Bracket, Contact 23	156462	Bail, Oscillating 11	158171	Shaft W/Bearing 27
156183	Bracket, Anchor 7	156465	Washer, Spring 4	158172	Lever, Latch 27
156184	Bracket, Anchor 7	156466	Rack, Typewheel 10	158701	Gear (35 T) 5
156221	Lock 17	156467	Ring, Retaining 4	158745	Clamp, Bearing 4
156230	Stud, Lifter Pivot 19	156472	Post, Spring 15	158753	Armature 22
156235	Post, Guide 3	156473	Shaft 40	158754	Core, Magnet 22
156236	Collar 40	156476	Hammer, Print 10	158757	Hinge, Mounting 22
156241	Link, Front 10	156478	Accelerator, Hammer 10	158758	Shaft 22
156242	Link, Rear 10	156484	Bracket 19	158760	Post, Spring 22, 29, 44

NUMERICAL INDEX (Continued)

Part Number	Description and Page Number	Part Number	Description and Page Number	Part Number	Description and Page Number
158763	Bracket 22	159498	Lever, Pulse (#5) 17	159885	Gear (28 T) 27
158772	Screw (4-40 x 5/8 Hex) 17	159499	Lever, Transfer (#3, 4 & 5) 17	159886	Gear (49 T) 27
158807	Screw (3-48 x 11/64 Fil) 30, 47	159500	Beam, Pulse (#4) 17	159888	Pinion (28 T) 27
158816	Spring, Contact 22, 31, 38, 47, 50	159501	Beam, Pulse (#1) 17	159889	Gear (49 T) 27
158817	Stiffener 50	159502	Guide 17	159891	Pinion (21 T) 27
158881	Nut, Shoulder (6-40 Hex) 27	159503	Shaft 13	159892	Gear (48 T) 27
158925	Slide, Tape Depressor 6	159504	Spacer 17	159894	Pinion (14 T) 27
158940	Wick, Felt 27	159506	Post 4	159895	Gear (40 T) 27
158946	Cable Assembly 24	159508	Lever, Transfer (#1 & 2) 17	159896	Collar 27
158950	Contact Assembly, Code Reading 23	159512	Link, Printing Trip 19	159900	Plate 28
159011	Bracket, Spring 3	159515	Blade, Function (FIGS) 13	159901	Plate 28
159181	Lubricator 27	159516	Blade, Function (LTRS) 13	159902	Shaft, Rake 28
159184	Wick, Lubricator 27	159519	Bushing 11	159903	Bellcrank 28
159185	Retainer, Wick 27	159522	Bushing, Shoulder 11	159909	Pawl, Feed 28
159233	Stud 6	159523	Bail, Oscillating Drive 11	159910	Latch, Return 28
159341	Bearing, Ball 4	159525	Bracket, Axial 11	159911	Plate 28
159351	Modification Kit 20, 21, 22	159526	Link, Oscillating 12	159912	Gear, Segment 28
159360	Modification Kit 25	159528	Bar, Push (#5) 9	159913	Screw, Eccentric (6-40) 28, 48
159363	Modification Kit 28	159529	Bar, Push (#3) 9	159916	Eccentric 28
159365	Modification Kit 6	159530	Bar, Push (#4) 9	159954	Link W/Stud 29
159379	Modification Kit 23	159531	Bar, Push (LTRS) 9	159955	Link, Drive 29
159380	Modification Kit 23	159532	Bar, Push (FIGS) 9	159956	Post 29, 38
159381	Modification Kit 23	159533	Bar, Push (#1) 12	159957	Link 29
159382	Modification Kit 23	159535	Plate, Front 9	159958	Latch 29
159400	Shaft, Eccentric 21	159536	Gear (15 T) 10	159959	Extension, Latch 29
159403	Lever 21	159539	Arm, Printing Pivot 19	159960	Eccentric 29
159404	Post 12	159544	Release, Clutch 3	159961	Arm, Eccentric 29
159406	Bracket, Spring 20	159560	Spring 6	159962	Ring, Retaining 29
159411	Bearing Assembly 4	159563	Bar, Push (LTRS) 9	159965	Arm 29
159413	Plate, Reversing 18	159565	Bracket 23, 41, 47	159973	Bracket 29
159422	Cable Assembly 22	159568	Bracket, Contact 23, 32, 47	159974	Eccentric 29
159427	Bracket, Stop 3	159570	Spring, Contact 23, 45, 47	159975	Bail 29
159430	Lever, Slide Trip 3	159571	Stiffener 23, 45, 47	159976	Armature 29, 35, 44
159431	Lever, Main Trip 3	159575	Bracket, Stop 23	159977	Hinge 29, 35, 44
159434	Plate, Lifter Mounting 19	159578	Bail, Contact 23	159978	Shaft 29, 35, 44
159437	Arm, Left Yield (FIGS) 13	159579	Bail 23	159979	Arm 29
159438	Arm, Right Yield (LTRS) 13	159580	Shaft 23	159980	Post, Spring 29
159441	Guide, Bellcrank 3	159597	Washer, Flat 11	159981	Spacer 6
159447	Bellcrank (#1 & 4) 13	159601	Bracket, Spring 23	159987	Bracket, Guide 28
159448	Bellcrank (#2) 13	159602	Spring 21	159994	Plate, Lifter Arm 19
159450	Bellcrank (#3 & 5) 13	159606	Pawl 21	159995	Arm, Lifter 19
159459	Spring 17	159608	Plate 21	159997	Screw, Eccentric (6-40) 19
159460	Link, Toggle 13	159613	Arm, Clamp 20	160184	Plate, Armature Stop 16
159467	Holder, Wick 15	159614	Arm, Kick-Out 21	160185	Post 23
159468	Arm, Lock 13	159615	Arm, Release 21	160354	Cam 27
159470	Shaft, Lock Arm 13	159616	Lever, Intermediate 21	160404	Spring, Contact 22, 25, 31, 38
159471	Bellcrank (LTRS-FIGS) 13	159617	Roller 21	160480	Pusher, Tape 8
159472	Plate 3	159622	Clamp, Adjusting 6	160583	Spring, Contact 21, 31, 38, 47, 50
159476	Arm (Figures) 13	159623	Post, Spring 21	160593	Terminal 50
159477	Arm (Letters) 13	159625	Bracket, Guide 4	160626	Insulator (.031") 46
159480	Bushing, Eccentric 10	159626	Extension, Drive Link 19	160627	Bushing, Insulating 46
159481	Arm, Extension (FIGS) 13	159629	Plate, Nut 22	160628	Spring, Contact 46
159482	Arm, Extension (LTRS) 12	159630	Shaft 21	160666	Guard 25
159483	Bracket, Spring 13	159631	Latch 21	160672	Stud 25
159487	Plate, Front 13	159636	Plate, Adjusting 21	160673	Shaft 25
159488	Bracket, Transfer Mounting 17	159637	Lever, Switch 22	160674	Nut, Shoulder (6-40) 25, 28
159489	Plate (#1) 17	159641	Cable W/Terminals 25	160692	Bail, Armature 22
159490	Plate (#4) 17	159642	Shim (.008") 9	160694	Latch 21
159491	Plate (#2) 17	159643	Shim (.008") 12	160839	Spacer, Shoulder 4
159492	Plate (#3) 17	159653	Blade, Function 25	160840	Post, Anchor 21
159493	Plate (#5) 17	159654	Latch, Printing 19	160842	Washer, Spring 20, 33
159495	Beam, Pulse (#5) 17	159656	Block Assembly, Punch 41	160843	Spring 42
159496	Beam, Pulse (#3) 17	159655	Cable 24	160846	Bushing, Shoulder 11
159497	Beam, Pulse (#2) 17	159658	Screw (6-40 x 1-3/32 Hex) 10	160881	Modification Kit 25
		159659	Shaft, Eccentric 10	160943	Housing, Typewheel Shaft 10
		159861	Frame, Main 27	160944	Washer, Felt 23
		159865	Drum, Clutch 27		
		159880	Slide 27		

NUMERICAL INDEX (Continued)

Part Number	Description and Page Number	Part Number	Description and Page Number	Part Number	Description and Page Number
160948	Screw (2-56 Spl) 7	162341	Bearing 40	163020	Gear (48 T) 27
160997	Roller 23	162346	Extension, Adjustable 18	163021	Pinion (28 T) 27
160998	Arm 23	162347	Arm, Ribbon Drive 18	163022	Gear (80 T) 27
161100	Spring, Contact 23, 45, 47	162363	Stripper 37	163023	Gear Set (60 WPM) 27
161102	Spring, Contact 23, 47	162375	Modification Kit 37	163024	Gear Set (75 WPM) 27
161107	Stud 7	162379	Modification Kit 32, 33, 34	163025	Gear Set (100 WPM) 27
161108	Stud 6	162380	Modification Kit 33, 34, 35, 36	163113	Washer, Flat 10
161109	Post, Guide 8	162432	Modification Kit 26	163114	Post, Spring 32, 35
161139	Nut (6-40 Hex) 7	162434	Modification Kit 20, 21, 22	163255	Nut, Shoulder (6-40) 32, 35
161237	Cable Assembly 30	162741	Cam 33	163303	Bracket, Spring 19
161238	Connector, Receptacle (36 Pt) 30, 47	162742	Pawl, Detent 33	163326	Lever W/Hub 33
161239	Connector, Plug (36 Pt) 30	162743	Pawl, Feed 33	163327	Ring, Retaining 20, 26, 33
161240	Bracket, Connector 30	162744	Shaft 33	163347	Modification Kit 32, 33, 34
161304	Modification Kit 29	162745	Lever, Cam Follower 33	163351	Cam 32
161305	Cable Assembly 30	162747	Roller 33	163429	Screw, Shoulder (6-40) 19
161318	Bracket 31	162748	Lever 33	163455	Pinion (20 T) 27
161319	Lever 31	162750	Lever 33	163456	Gear (52 T) 27
161320	Contact Assembly 31	162752	Collar 33	163457	Gear Set (71 WPM) 27
161321	Contact Assembly (LTRS-FIGS) 31	162753	Spacer 33	163476	Gear (42 T) 5
161323	Housing, Gear 10	162754	Plate 33	163500	Gear (52 T) 27
161324	Washer, Flat 10	162755	Bracket, Spring 33	163501	Pinion (30 T) 27
161334	Lever, Stop 26	162756	Bushing 33	163502	Gear Set (107 WPM) 27
161335	Solenoid Assembly, Feed-Out 26	162757	Shaft 33	163675	Typewheel 52
161336	Bracket 26	162758	Lever, Cam Follower 33	163676	Typewheel 52
161337	Post, Stop 26	162760	Latch 32, 35	163677	Typewheel 52
161338	Lever, Trip 26	162761	Post 32	163679	Typewheel 52
161339	Lever, Hand 26	162762	Storage Assembly, Slide 34	163681	Typewheel 52
161340	Modification Kit 26	162763	Bail, Reset 8	163682	Typewheel 52
161341	Modification Kit 26	162764	Lever, Slide Trip 34	163683	Typewheel 52
161342	Lever, Start 15	162765	Bracket 34	163685	Typewheel 52
161347	Washer, Felt 13, 50	162766	Plate W/Post 34	163687	Typewheel 52
161355	Cable 31	162768	Latch 34	163688	Typewheel 52
161431	Lever, Rotary Correcting 10	162770	Plate W/Stud 34	163690	Typewheel 52
161443	Detent, Axial Shaft 12	162772	Link 34	163945	Modification Kit 23
161444	Detent, Rotary Shaft 9	162773	Plate, Main 32, 35	163946	Cable 23, 51
161493	Post, Supporting 25	162774	Post, Spring 32, 35	163961	Cable 51
161524	Shaft, Hammer 10	162775	Shaft 32, 35	164386	Bracket, Magnet Mounting 16
161828	Modification Kit 37	162776	Plate 32	164402	Blade, Function (Uncoded) 43
161928	Post, Supporting 37	162778	Lever 32, 35	164506	Modification Kit 47
161930	Lever 37	162780	Shaft 32, 35	164507	Contact Assembly 47
162064	Cable W/Terminal 30	162781	Lever 32, 35	164508	Spring, Contact 45
162065	Cable 30	162784	Screw, Eccentric (4-40) 32, 35	164509	Bracket, Contact 47
162066	Cable 22	162785	Bushing, Eccentric 32, 35	164510	Bracket, Connector 47
162067	Cable 31	162786	Arm, Blocking 32, 35	164511	Lever 7
162095	Contact Assembly 22	162788	Post 32, 35	164513	Pawl, Feed 8
162096	Bracket, Switch Mounting 22	162790	Lever W/Hub 32	164514	Guide, Tape 6
162097	Modification Kit 22	162791	Shaft 32, 35	164515	Spring, Torsion 7
162098	Post, Spring 22	162792	Arm, Detent 32, 35	164521	Plate 42
162207	Cable W/Terminals 29	162793	Ratchet (42 T) 32, 35	164525	Post, Spring 42
162211	Cable, Bell Contact 25	162794	Hub, Back Stop 32, 35	164526	Slide W/Post 42
162242	Modification Kit 25	162795	Ratchet (42 T) 32, 35	164528	Bushing 42
162245	Modification Kit 29	162796	Cam 32	164529	Lever, Ribbon Reverse 42
162247	Contact Assembly (LTRS-FIGS) 31	162797	Plate, Adjusting 32, 35	164530	Bushing 42
162248	Hub 5, 27	162798	Roller 32, 35	164531	Pawl, Check 42
162271	Modification Kit 23	162799	Post, Spring 32, 35	164532	Pawl, Feed 42
162272	Modification Kit 23	162800	Block, Stop 32, 35	164535	Shaft, Right Ribbon Ratchet 42
162273	Modification Kit 23	162802	Pawl, Detent 32, 35	164538	Shaft, Left Ribbon Ratchet 42
162274	Modification Kit 23	162803	Post, Drive Link 32	164539	Spring, Ratchet 42
162303	Cable 23, 51	162804	Link, Drive 32	164540	Detent 42
162304	Cable 23, 51	162834	Solenoid, Feed-Out 26	164541	Arm, Ribbon Drive 42
162305	Cable 23	162850	Handle 18, 42	164543	Lever, Adjusting Extension 42
162306	Cable 23	162862	Bar, Mounting 3	164740	Rack, Range Finder 39
162340	Sleeve 40	162863	Sleeve, Blocking 37	164743	Shaft 39
		163015	Gear (28 T) 27	164883	Lever, Cam Follower 36
		163016	Gear (49 T) 27	164884	Lever W/Stud 36
		163018	Gear (49 T) 27	164886	Link 36
		163019	Pinion (21 T) 27	164887	Post 36

NUMERICAL INDEX (Continued)

Part Number	Description and Page Number	Part Number	Description and Page Number	Part Number	Description and Page Number
164888	Lever W/Post 36	173965	Typewheel 52	176420	Modification Kit 39
164948	Modification Kit 46	173966	Typewheel 52	176421	Modification Kit 39
164949	Bracket, Tape Guide 46	173967	Typewheel 52	176445	Handle 18, 44, 45
164950	Knife, Tape 46	173968	Typewheel 52	176450	Bracket 44
164963	Modification Kit 6	173969	Typewheel 52	176451	Bail 44
164964	Washer, Felt 42	173970	Typewheel 52	176452	Rod 44
164965	Washer, Flat 42	173971	Typewheel 52	176453	Screw, Shoulder (3-48) 44
165027	Network, Spark Suppression 16	173977	Shaft, Hammer 10	176454	Post, Spring 44
170219	Stud, Die Wheel 7	173978	Spring, Torsion 10	176455	Plate 44
170239	Bracket, Spring 8	173979	Head, Hammer 10	176457	Lever, Blocking 44
170241	Screw, Adjusting (6-40) 7	173980	Lever, Print Hammer 10	176459	Stud, Eccentric 44
170242	Slide, Feed Hole Punch 6	173981	Accelerator, Hammer 10	176460	Arm 44
170243	Slide, Code Hole Punch 6	173992	Gear Set 27	176462	Extension, Feed Pawl 44
170246	Slide W/Insulator 6	173993	Pinion (14 T) 27	176463	Latch 44
170247	Guide 6	173994	Gear (40 T) 27	176464	Post 44
170778	Block Assembly, Punch 41	174150	Block Assembly, Punch 41	176465	Spring, Torsion 44
170779	Wheel, Feed 41	174151	Guide, Tape (7/8" Tape) 6	176466	Blade W/Insulator, Function (Blank) 45
170788	Wheel, Die 7	174152	Guide, Tape 7	176467	Bracket 45
170803	Bail, Retractor 41	174155	Guide, Tape 7	176468	Spring, Torsion 45
170879	Slide, Feed Hole Punch 6	174357	Block Assembly, Punch 41	176489	Guide 3
170907	Plate, Adjusting 35	174441	Lever 39	176490	Bracket 3
172626	Shaft 46	174442	Contact Assembly 39	176620	Cable 38
172627	Bail, Sensing 46	174444	Spring, Contact 39	176621	Modification Kit 38
172631	Gear (42 T) 5	174445	Bracket, Contact Mounting 39	176622	Bail 38
172632	Screw (4-40 x 3/16 Hex) 39	174446	Spring Contact 39	176623	Bracket, Mounting 38
172638	Screw (6-40 x 9/32 Hex) 6	174447	Post 39	176624	Contact Assembly 38
172639	Spring, Torsion 36	174448	Guard 39	176627	Modification Kit 47
172640	Modification Kit 28	174449	Bracket 39	176628	Modification Kit 33, 34, 35, 36
172759	Cable 46	174450	Cam 39	176639	Arm, Ribbon Drive 18
172983	Bracket, Spring 8	174451	Cam 39	176640	Guard, Tape 15
172984	Bracket, Spring 41	174452	Spacer 39	176641	Arm, Adjustable 18
173128	Bracket, Mounting 50	174475	Modification Kit 49	176647	Latch 29
173129	Stud 50	174476	Stop, Print Hammer 49	177000	Retainer 49
173130	Pawl, Contact 50	174649	Cable 23	177001	Spacer 49
173131	Bellcrank 50	174650	Modification Kit 23	177002	Plate 49
173134	Cable Assembly 50	175519	Typewheel 52	177003	Nut, Shoulder (6-40) 44
173135	Bracket Assembly 46	175521	Typewheel 52	178826	Arm 44
173136	Spring, Contact 46	175523	Typewheel 52	178827	Spring, Torsion 45
173137	Guard, Contact 46	175546	Typewheel 52	178829	Arm, Blocking 45
173139	Bracket 26	175547	Typewheel 52	178916	Bellcrank 48
173150	Bracket, Support 50	175554	Typewheel 52	178917	Modification Kit 48
173200	Sleeve, Bearing 5, 27, 40	175556	Typewheel 52	178918	Modification Kit to Equip Backspace Mechanism with Guard 48
173336	Modification Kit 5, 40	175559	Typewheel 52	178919	Pawl, Backspace 48
173340	Collar 5	175565	Typewheel 52	178920	Post, Eccentric 48
173443	Modification Kit 33, 34, 35, 36	175568	Typewheel 52	178921	Plate 48
173601	Cam 33	175580	Typewheel 52	178922	Nut, Shoulder (6-40) 48
173602	Plate 36	175582	Typewheel 52	178923	Bellcrank Assembly 48
173604	Post, Spring 36	175583	Typewheel 52	178924	Shaft 48
173606	Bail 36	175584	Typewheel 52	178925	Ratchet (24 T) 48
173607	Lever 36	175604	Typewheel 52	178926	Screw (2-56 Spl) 48
173608	Spring, Torsion 36	175608	Typewheel 52	178927	Clamp, Adjusting 48
173609	Roller 36	175612	Typewheel 52	178930	Guard 48
173616	Lever 36	175632	Typewheel 52	178931	Post 48
173618	Bail 36	175701	Typewheel 52	178932	Post, Supporting 48
173619	Bracket, Magnet 35	175707	Typewheel 52	179133	Modification Kit 44, 45
173620	Bail, Armature 35	175710	Typewheel 52	179251	Guard, Tape 46
173621	Cable W/Terminals 35	175711	Typewheel 52	179274	Wheel, Feed 7, 41
173691	Cam 35	175713	Typewheel 52	179275	Modification Kit 49
173754	Spacer, Typewheel 10	176138	Modification Kit 10	179460	Blade, Function (LTRS) 47
173755	Guide, Ribbon 10	176252	Washer, Flat 4	179461	Blade, Function (FIGS) 47
173756	Lever, Print Hammer 10	176255	Cable 47	179462	Blade, Function (Uncoded) 43,47
173757	Typewheel 52	176256	Bracket, Mounting 47	179573	Nut (6-40 Hex) 8
173769	Typewheel 52	176257	Lever 47	179579	Decalcomania 42
173770	Block Assembly, Punch 41	176258	Modification Kit 47	179628	Cable Assembly 30
173775	Shaft, Typewheel 10	176259	Cable 47	179669	Screw (4-40 Spl) 44
173850	Cable W/Terminals 47	176266	Spring, Torsion 3		
173961	Modification Kit 44, 45	176286	Lever, Adjusting 33		

NUMERICAL INDEX (Continued)

Part Number	Description and Page Number	Part Number	Description and Page Number	Part Number	Description and Page Number
179761	Blade, Function (UC H) 47	192709	Link 4	193824	Latch 29
179762	Blade, Function (Blank) 47	192778	Blade, Function (T) 37	193825	Magnet Assembly, Back Space 29
179932	Blade, Function (UC S) 47	192779	Modification Kit 37	194176	Screw, Eccentric Shoulder (6-40) 45
179933	Blade, Function (UC J) 47	192793	Guard 23	195182	Gear (20 T) 27
179934	Blade, Function (N) 47	192849	Bar, Push (#2) 12	195183	Gear (52 T) 27
179935	Blade, Function (CR) 47	192877	Bushing, Guide 10	195184	Gear Set 27
179943	Cable 51	193639	Lever W/Shaft 33	195251	Armature, Selector 16
179967	Stop 45	193668	Blade, Function (Unshift-on-Blank) 37	195284	Ring, "O" 10
192661	Post 4	193669	Modification Kit 37	195401	Cable W/Terminals 30
192686	Modification Kit: (UC "H" & "BL") 47	193804	Armature 29	195634	Modification Kit 16
		193821	Bracket 29	197684	Guard 45
		193822	Clamp 29	197995	Washer, Flat 45



28 RECEIVING-ONLY REPERFORATOR OR TAPE PRINTER BASE (LRB)

and

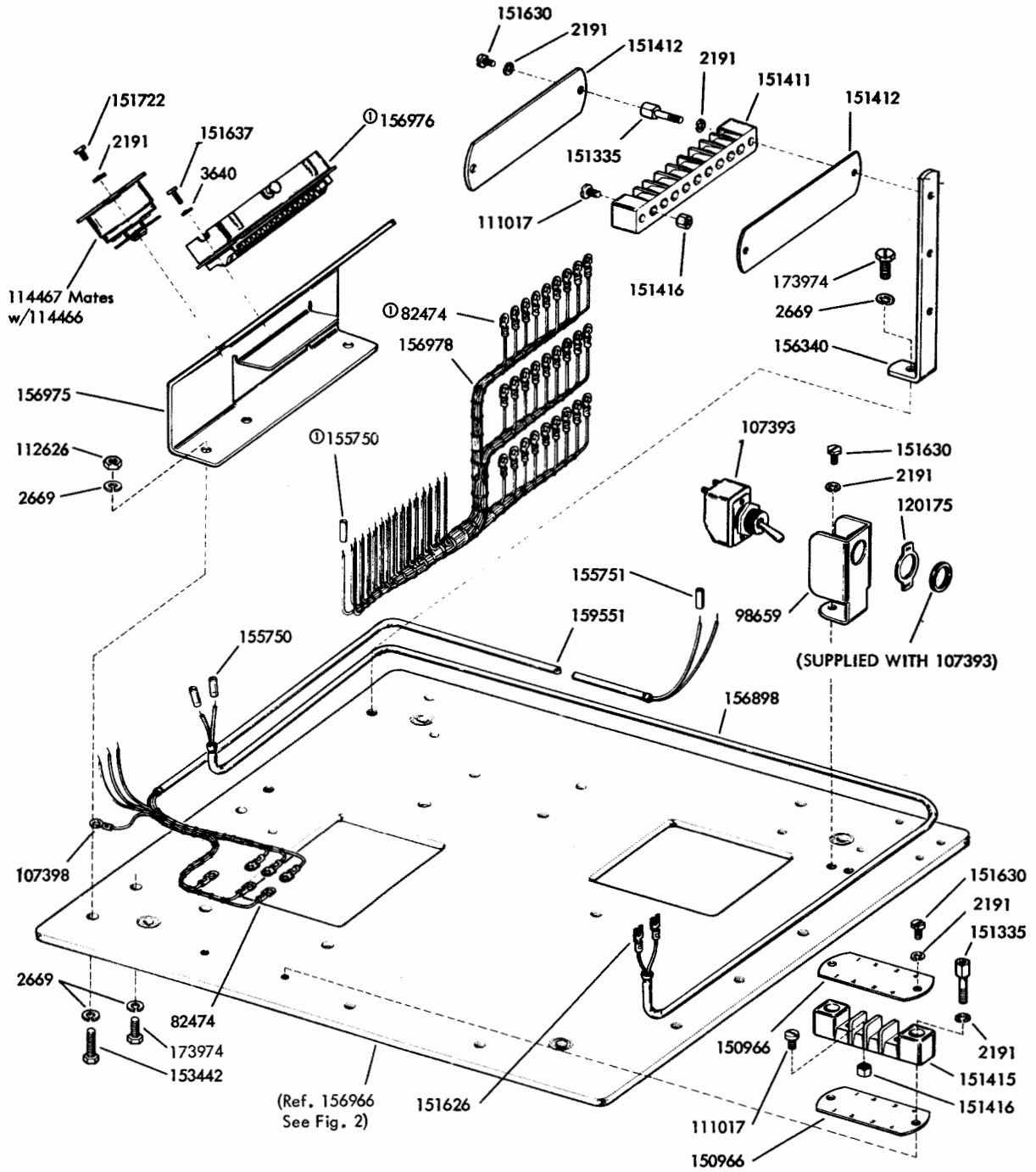
28 RECEIVING-ONLY MULTIPLE REPERFORATOR BASE (LMRB)

PAINT FINISH COLOR CODE CHART																					
(for parts and assemblies requiring a paint finish)																					
Color	Finish Suffixes				Color	Finish Suffixes															
	Wrinkle Finish	Smooth Finish	Textured Vinyl	Smooth Vinyl		Wrinkle Finish	Smooth Finish	Textured Vinyl	Smooth Vinyl												
Beige	AA (37)	ET		HC	Gray, Federal	AB (40)	BV	GG	HB (68)												
Beige, Light		EL			Gray, Green		BK	GA (45)													
Beige, Rose		ER			Gray, Light		EJ	HE													
Black		BA (34)			Gray, Covert		EW	GE		HF (46)											
Black, High Gloss					BB			Gray, Olive		AJ	BJ										
Black, Semi Gloss					EK			Gray, Maritime Deck				AB (40)	BK								
Blue, Aqua					EC			Gray, Oxford						EN	GA (45)						
Blue, Brussels Light		ES			Green, Gray		EM	HD													
Blue, Medium		BL			Green, Moss					EU											
Brown, Dark		AD (38)			BL						HG	EV									
Brown, Light	AC (39)			HA		EH															
Fawn		AL			BZ		GC	GF	EG												
Gray, Beige	GB		BR							HA			EG								
Gray, Charcoal											BR										
Gray, Dark																					
Gray, Navy Light																					

The double asterisk (**) denotes a painted part. Suffix to be applied following the part number.
Number in parentheses indicates Bell System code.

FIGURE	CONTENTS	PAGE
1	Reperforator Base (Single Plate)	3
2	Reperforator Base (Single Plate)	4
3	159377 Modification Kit to Provide Single Speed Drive	5
4	Reperforator Base (Double Plate)	6
5	Reperforator Base (Double Plate)	7
6	Tape Container	8
7	Modification Kits to Provide Variable Speed Drive	9
8	Modification Kits to Provide Variable Speed Drive	10
9	Multiple Reperforator Base (With Cross-Shaft)	11
10	Cross-Shaft Mechanism for Multiple Reperforator Base	12
11	Multiple Reperforator Base (With Cross-Shaft and Intermediate-Shaft)	13
12	Cross-Shaft and Intermediate Shaft Mechanism for Multiple Reperforator Base	14
13	161527 Tape Container Assembly	15
14	161678 Modification Kit to Install a Multiple Reperforator Base (LMRB) in a Model 28 Cabinet (LBAC)	16
15	Auxiliary Reperforator Base	17
16	Gear Bracket Mechanism	18
17	Auxiliary Reperforator Base Gearing Mechanism	19
18	161815, 176287 and 179492 Modification Kits to Mount an Auxiliary Typing Reperforator Base	20
19	Miniaturized Receiving Only Reperforator Base	21
20	174492 Tape Container Assembly	22
21	174459 Modification Kit to Provide a Sliding Base	23
22	176100 Variable Speed Mechanism Assembly	24
23	176100 Variable Speed Mechanism Assembly	25
24	Miniaturized Base	26
25	Miniaturized Base	27
26	164873** (7/8") and 193794** (1") Tape Container Assemblies with Tape-Out Switch	28
27	162957** Tape Winder Assembly	29
28	Typing Reperforator Base with Extension	30
29	Electrical Components	31
30	195388 Modification Kit to Relocate Power Switch from the Rear to the Front	32
31	173484 Modification Kit to Provide Power Factor Correction for (LMRB) Base	32
32	164341 and 176542 Modification Kits to Provide Chad Disposal on Multiple Reperforator Bases	33
33	Modification Kits to Provide Chad Disposal	34
34	193667 Modification Kit to Provide a Sprocket Guard for Multiple Reperforator Bases	35
35	Gear Chart for Self-Contained Non-typing Reperforator	35
36	Tape Printer Base (Miniaturized)	36
37	Tape Printer Base - continued (Miniaturized)	37
38	Cable Components	38
39	178838 Modification Kit to Relocate Power Switch from Auxiliary Base to Outside of Cabinet	39
	Numerical Index	40

**Refer to page 1 for finish suffix.



© 156978 Cable Assembly

FIGURE 1. REPERFORATOR BASE (Single Plate)

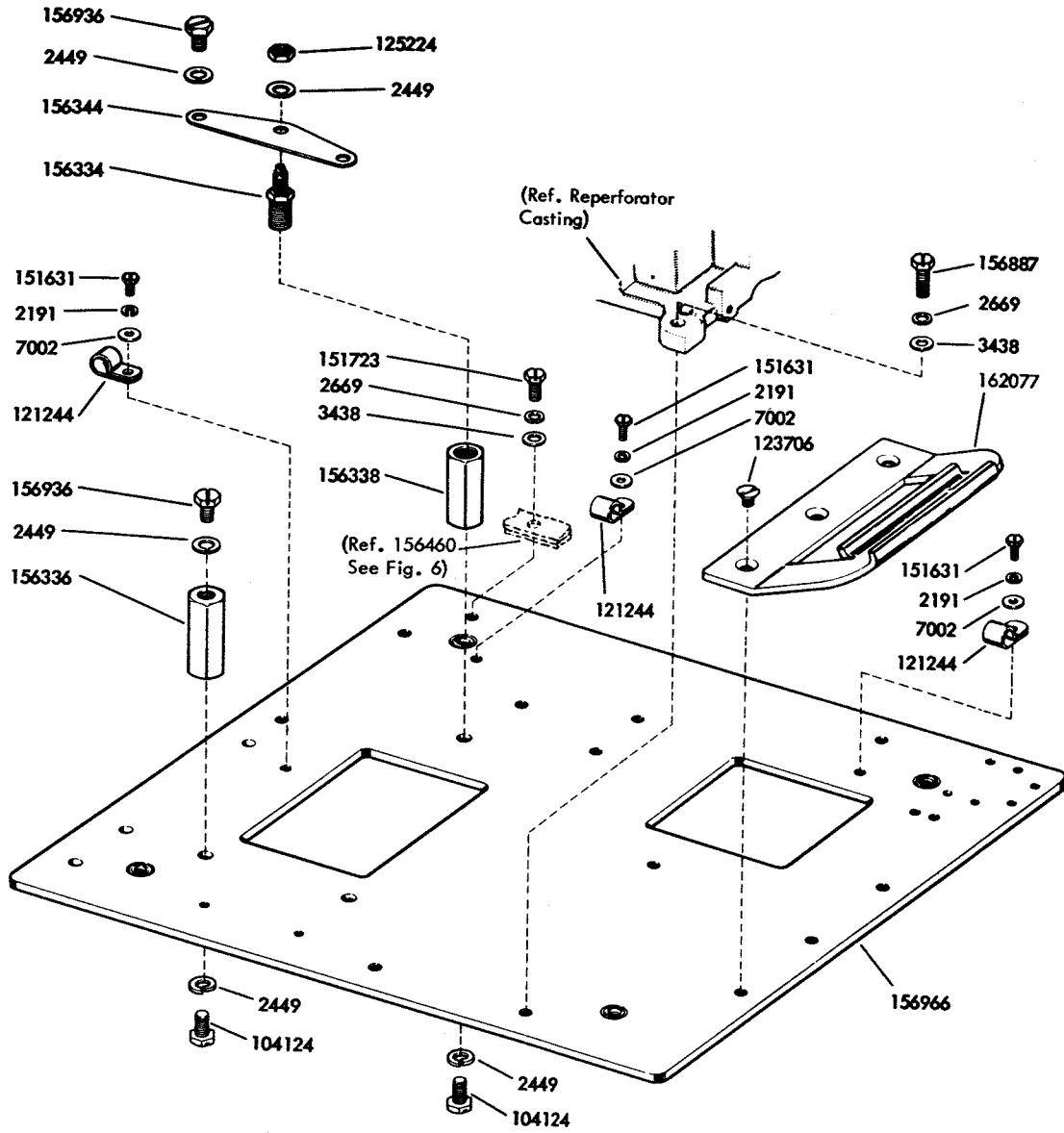


FIGURE 2. REPERFORATOR BASE (Single Plate)

Speed Change Gears for Self-Contained Sprocket Driven Units (Order Separately)						
Set Number	Pinion	Driven Gear	Approx. O.P.M. (Receiving)	Approx. W.P.M.	Unit Code	Baud
161519	161104 (11T)	161103 (49T)	461.7	67	7.42	50
161654	156982 (9T)	156981(44T)	420	60	7.42	45.45
161655	156984(12T)	156983(47T)	525.7	75	7.42	56.88
161656	156986(14T)	156985(42T)	685	100	7.42	74.2
①176295	176296(15T)	176297(43T)	692	107	7.00	75
②311283	311272 (14T)	311273 (52T)	461.7	67	7.42	50

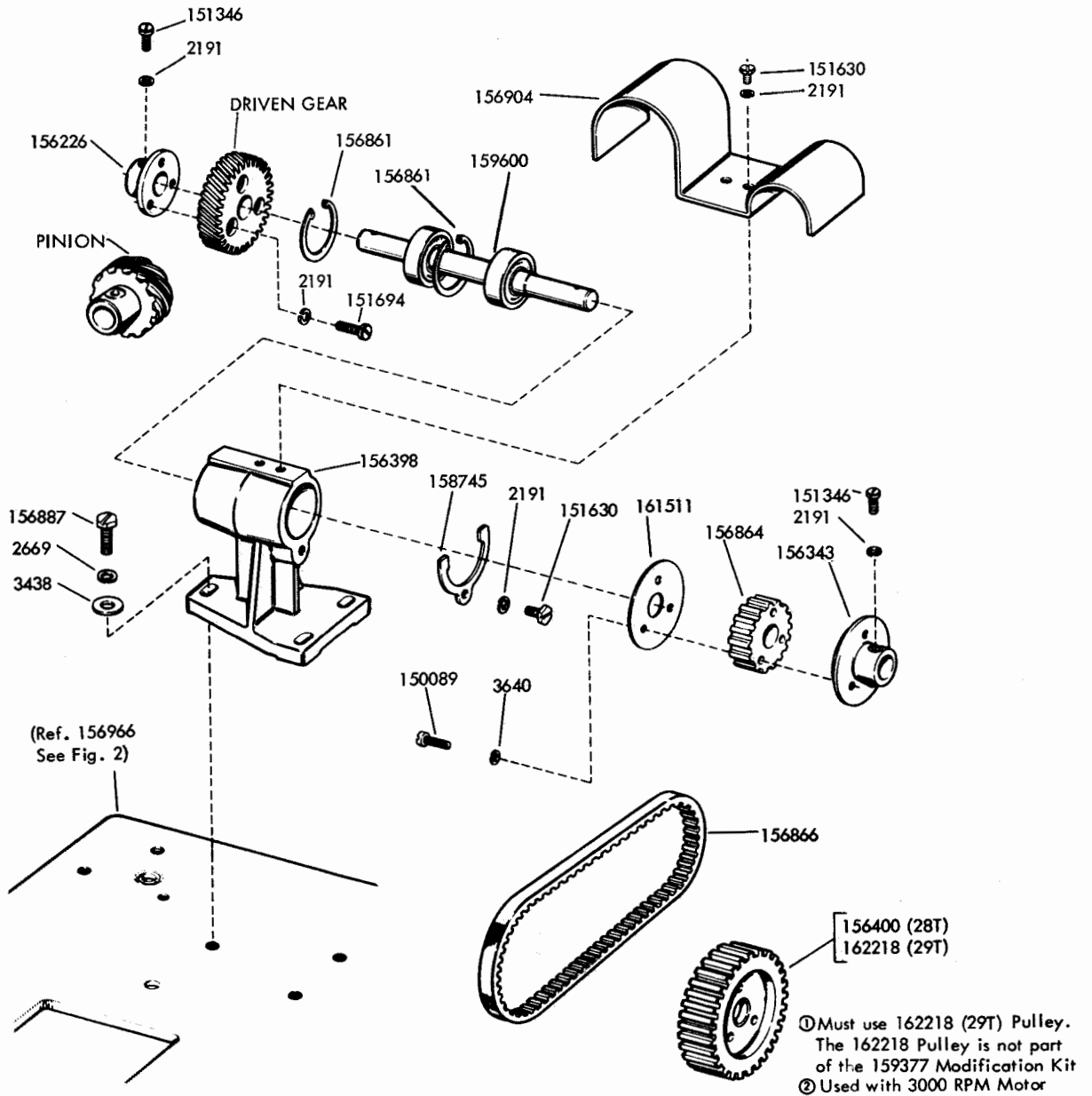


FIGURE 3. 159377 MODIFICATION KIT TO PROVIDE SINGLE SPEED DRIVE

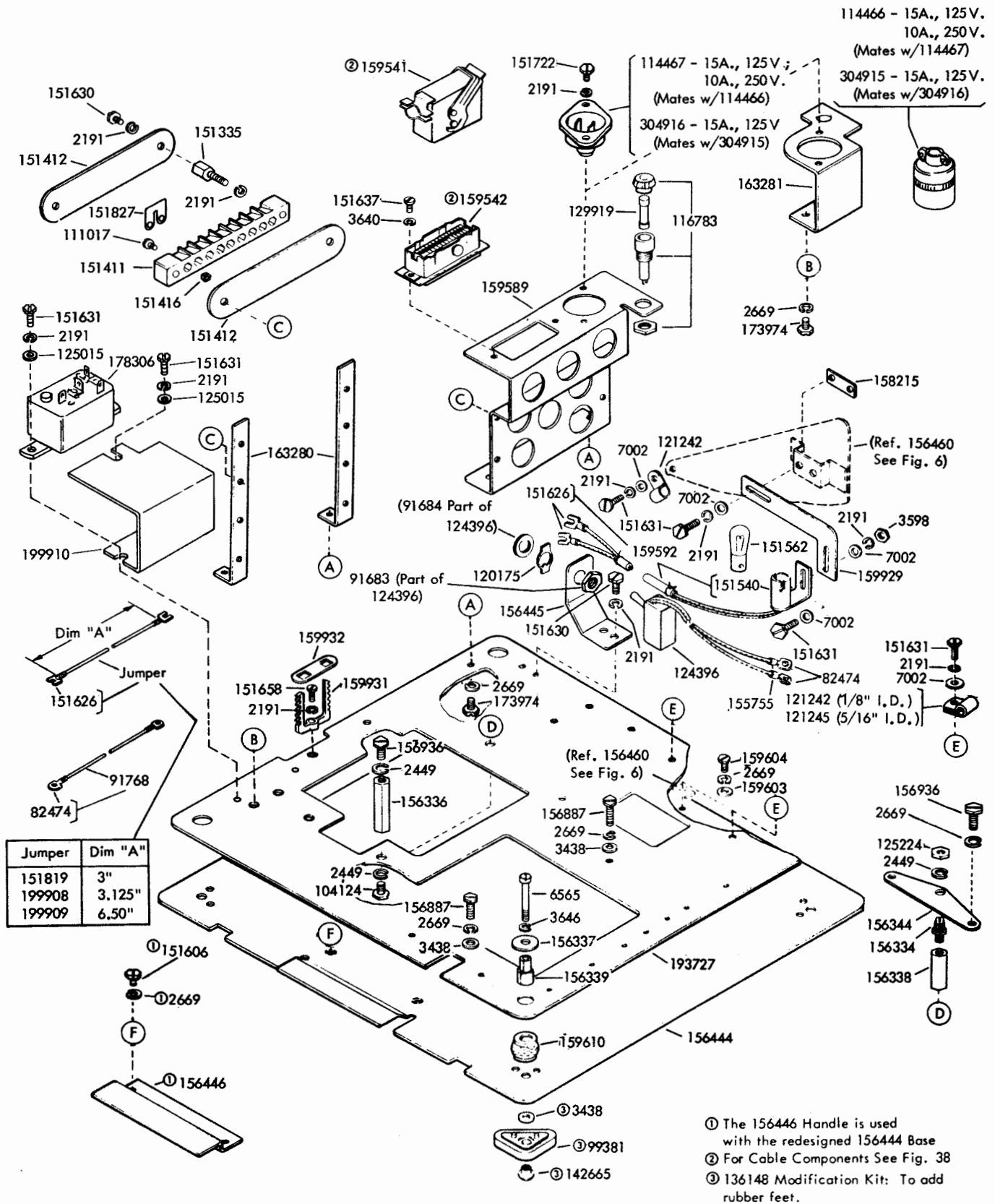
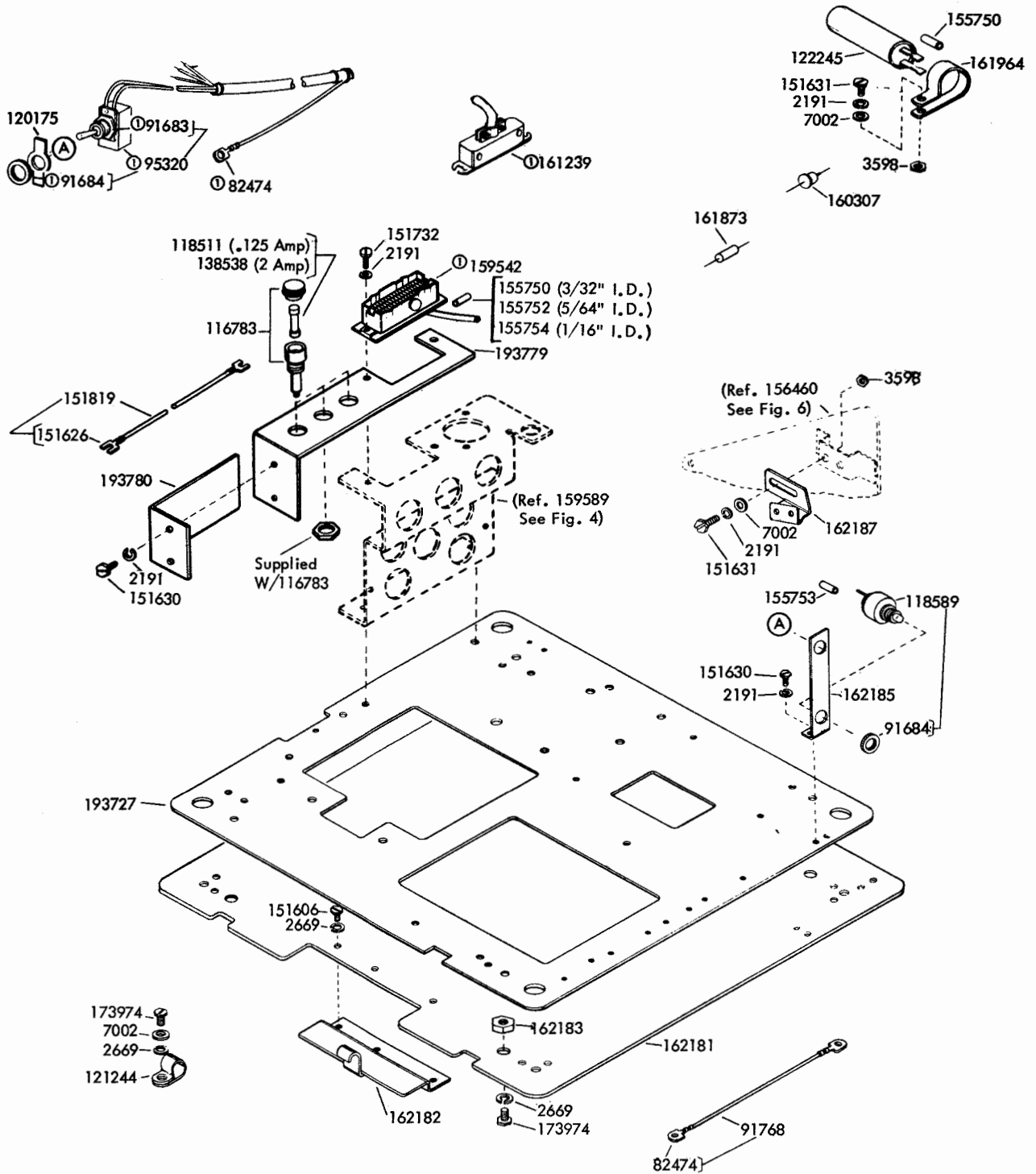


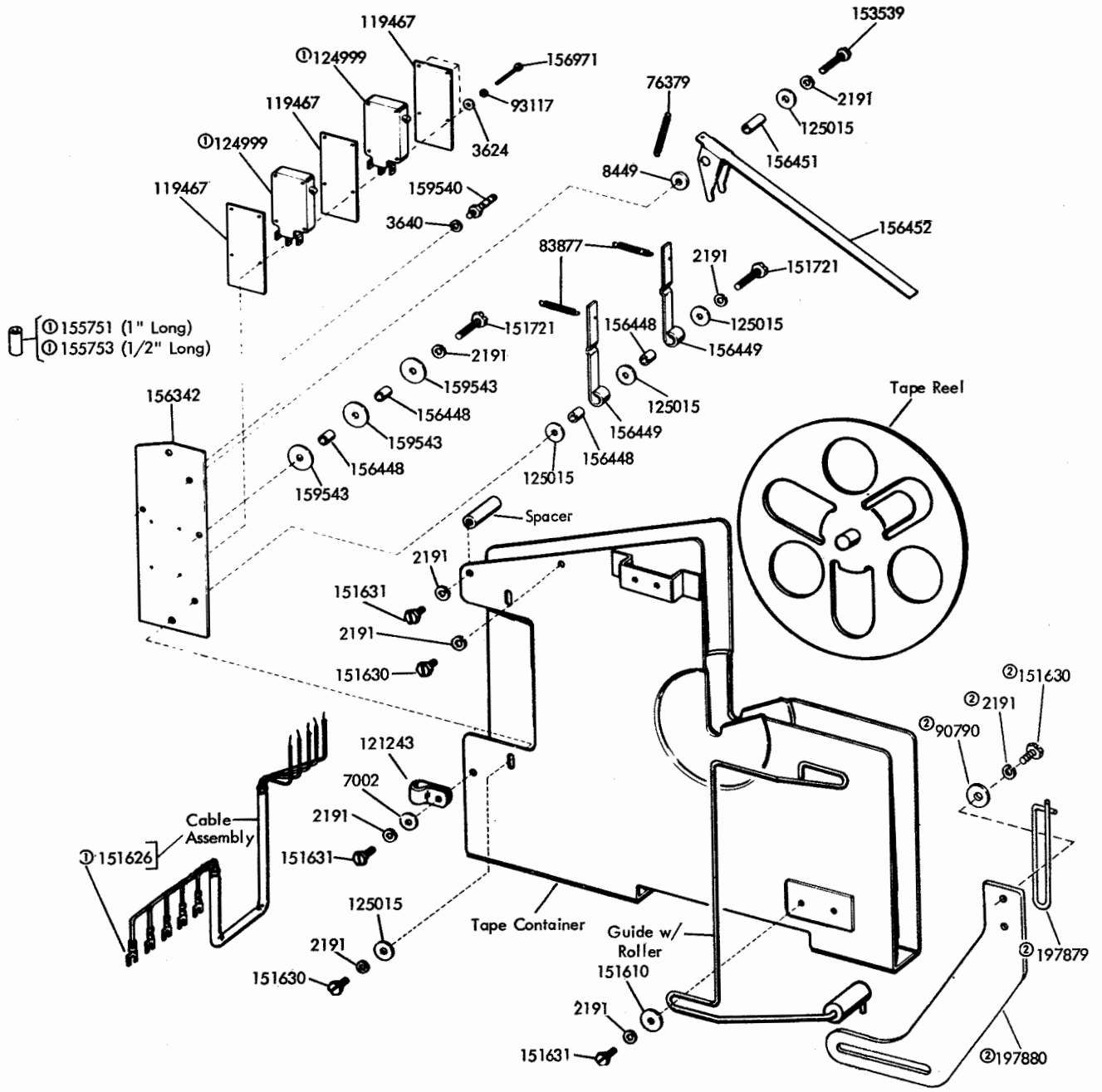
FIGURE 4. REPERFORATOR BASE (Double Plate)



Ⓞ Part of 162574 and 193778 Cable Assemblies

FIGURE 5. REPERFORATOR BASE (Double Plate)

Tape Container Assembly	Tape Container	Guide w/ Roller	Spacer	Tape Reel	Cable Assembly	Tape Width
156974	156460	195658	207223WU	158289 (2")	156972	11/16"
162079	156460	156470	207223WU	162075 (1")	162373	11/16"
192867	192865	193837	192868	192864 (2")	194221	1"



① Part of 156972, 162373 and 194221 Cable Assemblies
 ② 195658 Tape Guide Assembly

FIGURE 6. TAPE CONTAINER

Modification Kit	Frame	Shaft	Gear A	Gear B	Gear C	Pinion D	Guide Plate	Unit Code
159417 (60, 75, 100 WPM)	156965	156967	156949	158712	158732	156964	156968	7.42
163256 (60, 67, 75 WPM)	156965	163264	163260	163261	158732	156964	163328	7.42
179965 (45.5, 50, 75 Baud)	192685	156967	163260	179963	178870	156964	179969	7.00
319262 (60, 67, 100 WPM) (50 Hz, 3000 WPM)	156965	156967	319260	158712	178870	319259	199814	7.42
199812 (60, 67, 100 WPM) (60 Hz, 3600 WPM)	156965	156967	156949	158712	178870	156964	199814	7.42

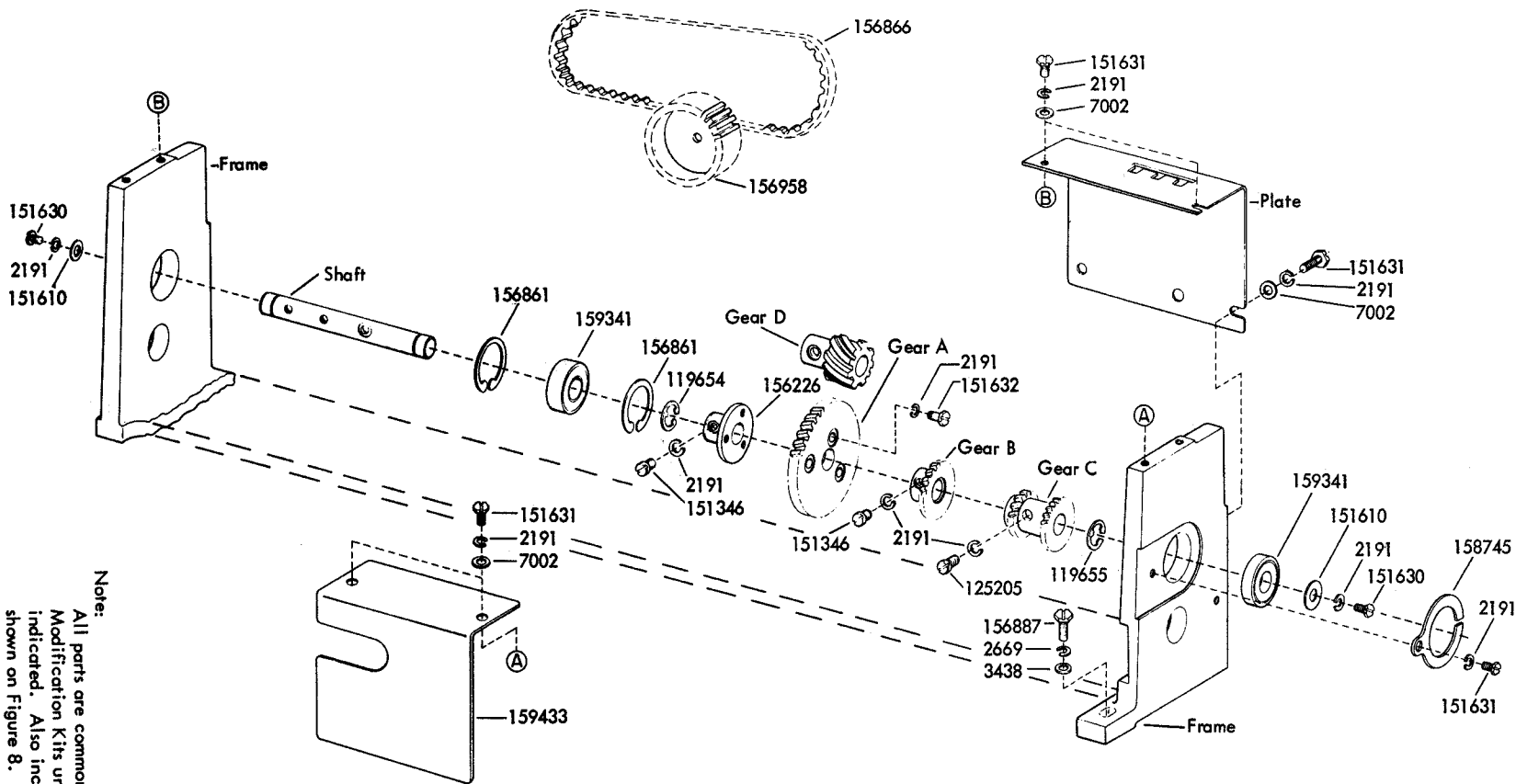
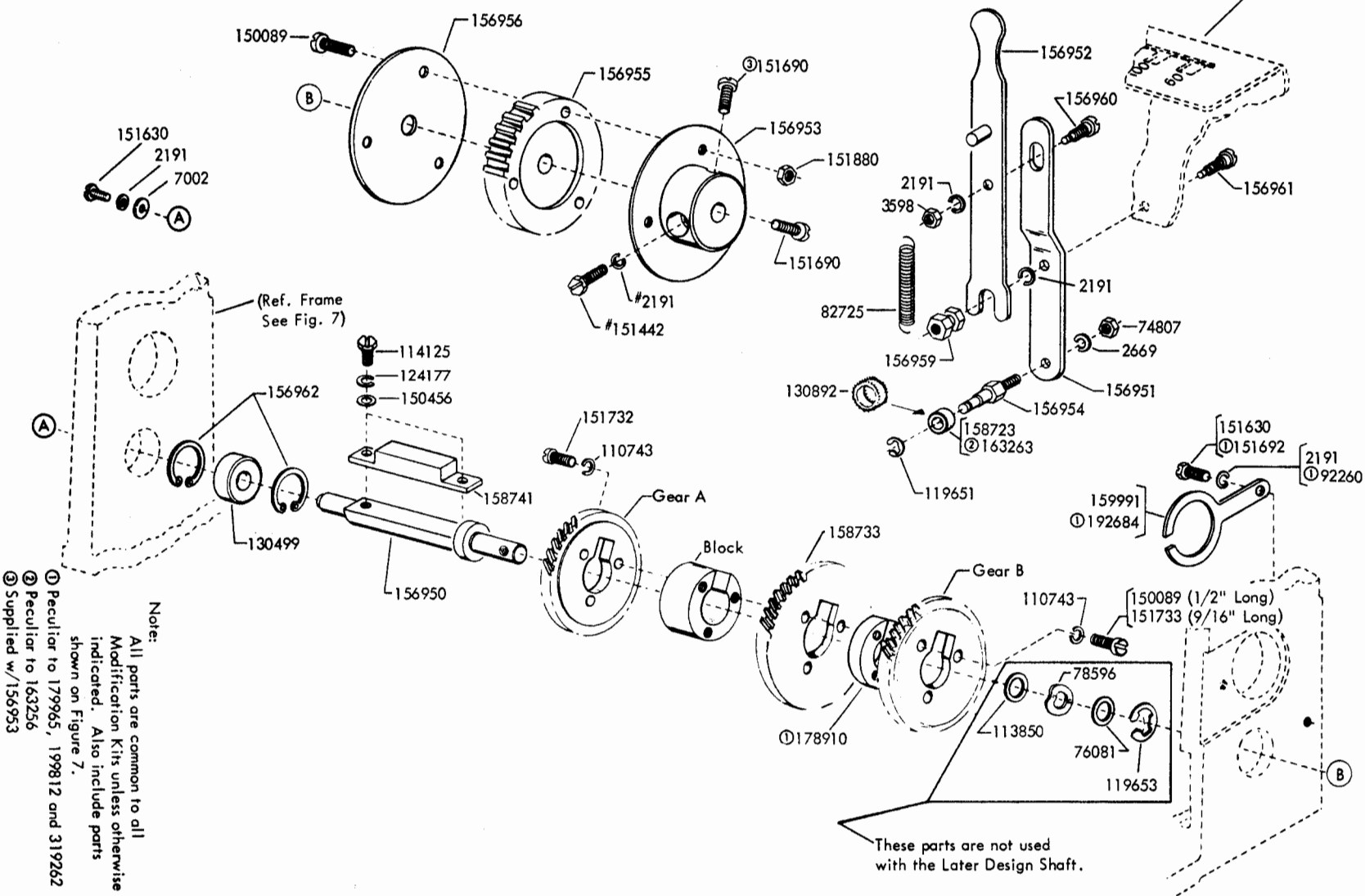


FIGURE 7. MODIFICATION KITS TO PROVIDE VARIABLE SPEED DRIVE

Modification Kit	Gear A	Gear B	Block
159417 (60, 75, 100 WPM)	158716	158734	158740
163256 (60, 67, 75 WPM)	163262	158734	163265
179965 (45.5, 50, 75 Baud)	179962	163262	158740
199812 (60, 67, 100 WPM) (60 Cycle, 3600 RPM)	158716	163262	158740
319262 (60, 67, 100 WPM) (50 Cycle, 3000 RPM)	158716	163262	158740



Note:
 All parts are common to all Modification Kits unless otherwise indicated. Also include parts shown on Figure 7.
 ① Peculiar to 179965, 199812 and 319262
 ② Peculiar to 163256
 ③ Supplied w/156953

FIGURE 8. MODIFICATION KITS TO PROVIDE VARIABLE SPEED DRIVE

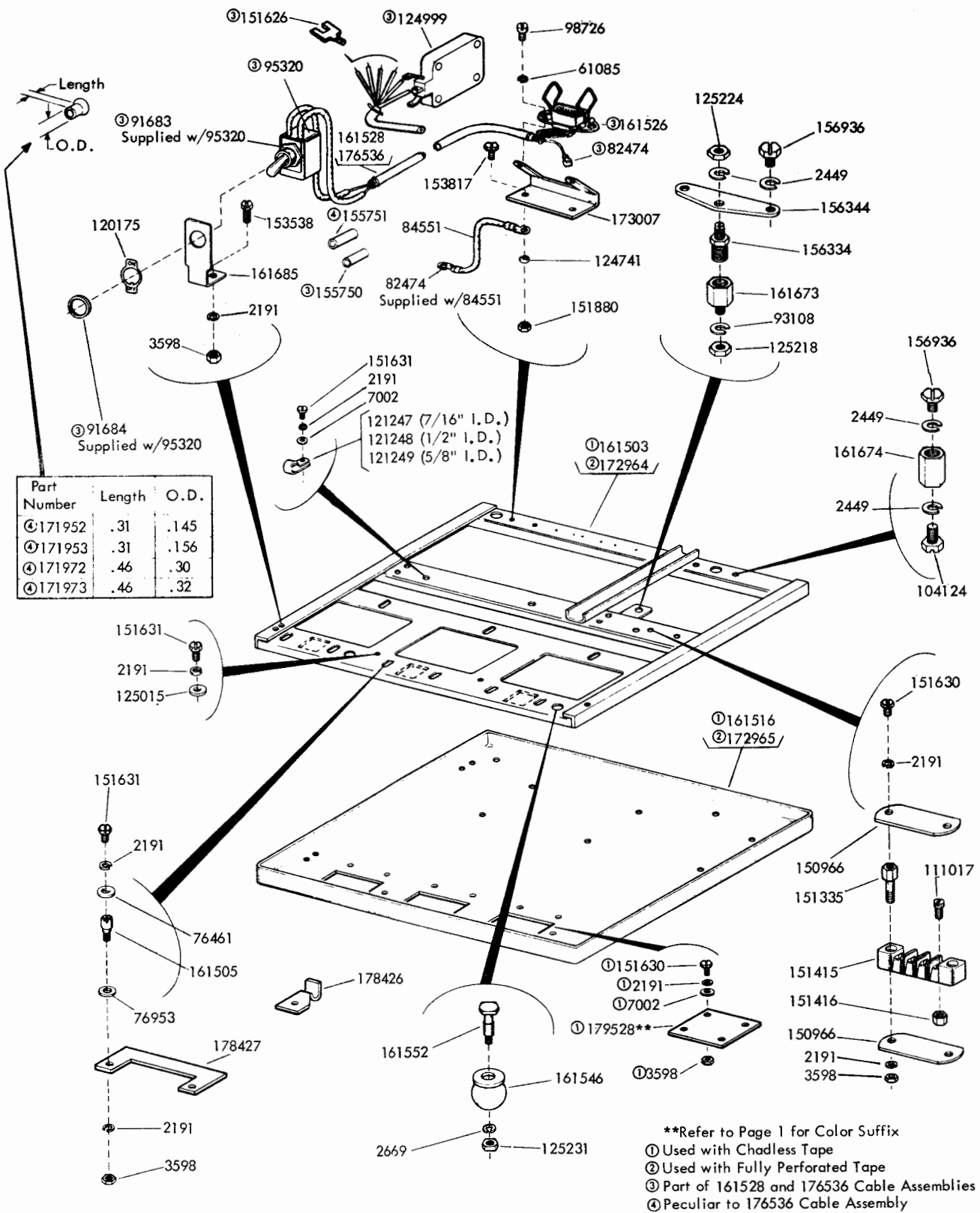


FIGURE 9. MULTIPLE REPERFORATOR BASE (With Cross-Shaft)

Gear Arrangements for Multiple Mounted Reperforators Driven at Common Speed						
Unit Code	7.42			7.00		
WPM (Nominal)	60	75	100	65	71	107
Baud	45.45	56.88	74.2	45.45	50	75
Motor Gear Set	161530	161533	161536			
Pinion	161532 - 9T	161535 - 12T	161538 - 14T	②164339 - 10T	②164337 - 9T	②164339 - 10T
Gear	161531 - 44T	161534 - 47T	161537 - 42T	②164340 - 37T	②164338 - 40T	②164340 - 37T
Mod. Kit at Each Reperforator	161680			#173584	161680	162213

Gear Arrangements for Multiple Mounted Reperforators Driven at Independent Speeds							
Unit Code	7.42			7.00			
WPM (Nominal)	60	75	100	65	71	107	121
Baud	45.45	56.88	74.2	45.45	50	75	84.7
Mod Kit at Each Reperforator	161680:	162213:	162217:	④173584:	161680:	162213:	③173023:
Hub	161509	162215	162220	161509	161509	162215	162220
Cross-Shaft Sprocket	161510 - 16T	162214 - 20T	162219 - 27T	161510 - 16T	161510 - 16T	162214 - 20T	162219 - 27T
Retainer	161511	162216	162221	161511	161511	162216	162221
Belt	161520	161520	162222	162222	161520	161520	162222
Reperforator Sprocket	156400 - 28T	156400 - 28T	162218 - 29T	173583 - 37T	156400 - 28T	156400 - 28T	⑤156400 - 28T
Motor Gear Sets	161530			②164339 - 10T ②164340 - 37T	②164337 - 9T ②164338 - 40T	②164339 - 10T ②164340 - 37T	②164337 - 9T ②164338 - 40T

- ② Motor gear set numbers not assigned
- ③ Non-Typing reperforators only
- ④ Modification Kit contains sprocket and belt drive part for 3 reperforators
- ⑤ Order separately

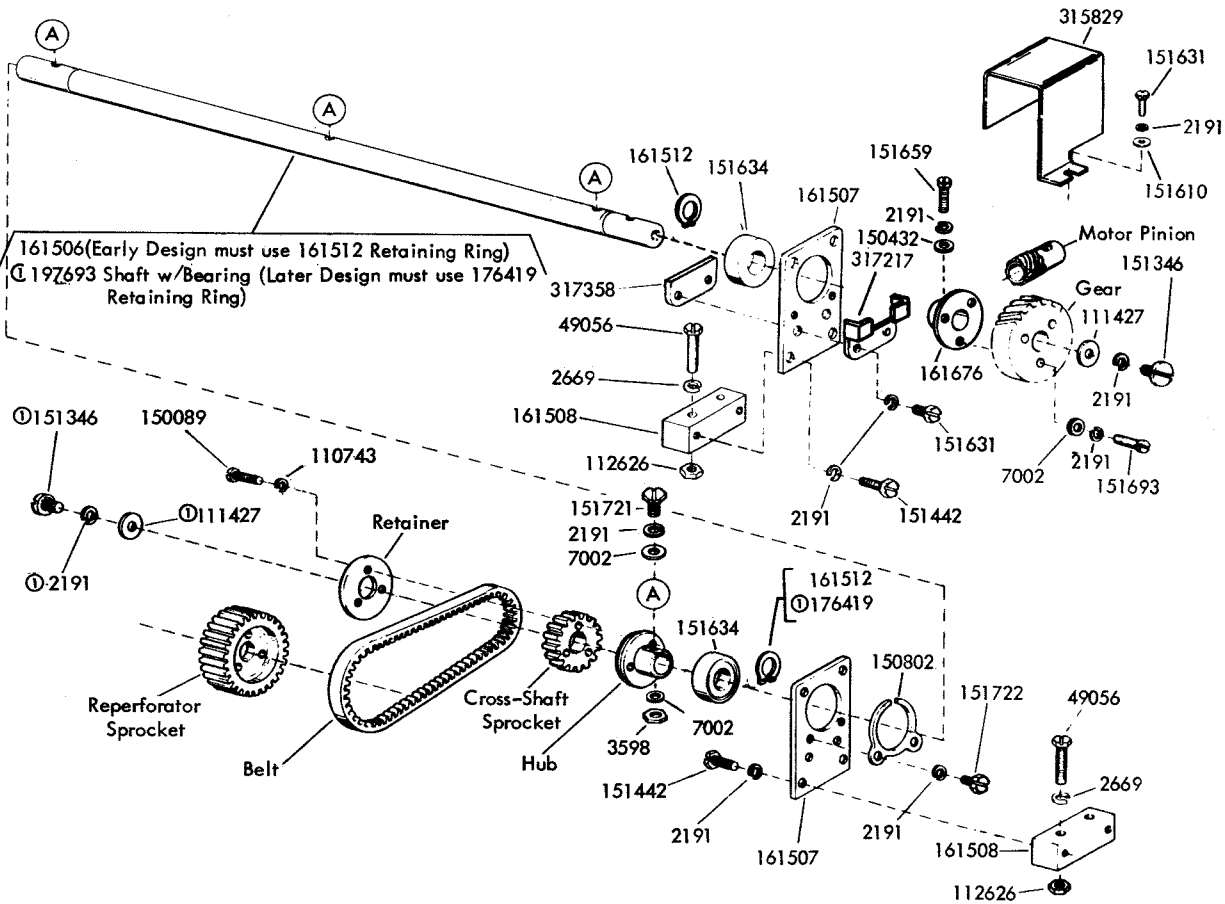
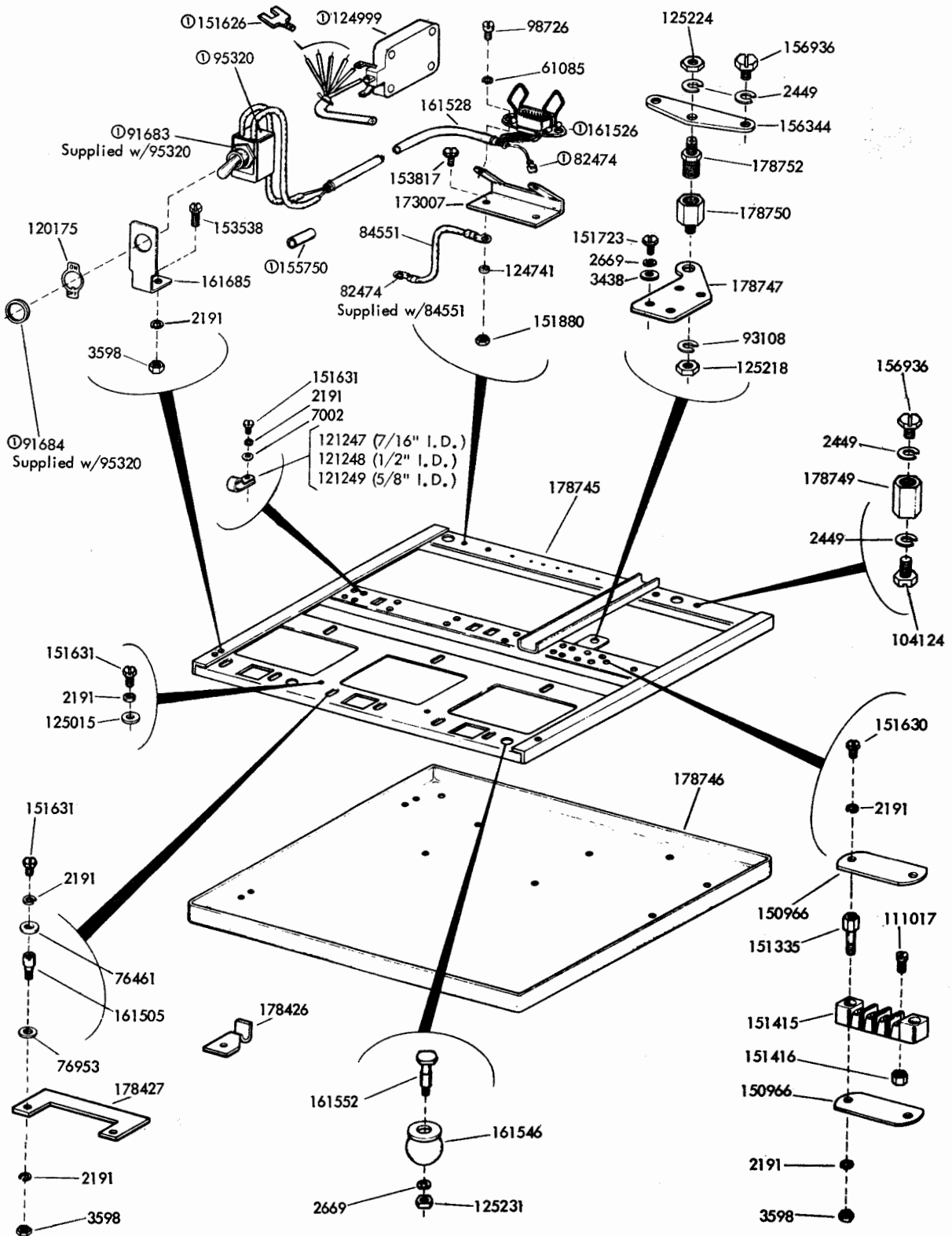


FIGURE 10. CROSS-SHAFT MECHANISM FOR MULTIPLE REPERFORATOR BASE



Ⓞ Part of 161528 Cable Assembly

FIGURE 11. MULTIPLE REPERFORATOR BASE (With Cross-Shaft and Intermediate-Shaft)

Gear Chart					
Gear Set Number	Cross Shaft Pinion	Gear	Unit Code	WPM (Nominal)	Baud
178798	178799 - 45T	178800 - 53T	7.00	107	75
178801	178802 - 33T	178803 - 49T	7.00	71	50
			7.50	66	50
178804	178810 - 30T	178811 - 49T	7.00	65	45.45
178813	178814 - 37T	178815 - 37T	7.00	106	74.2

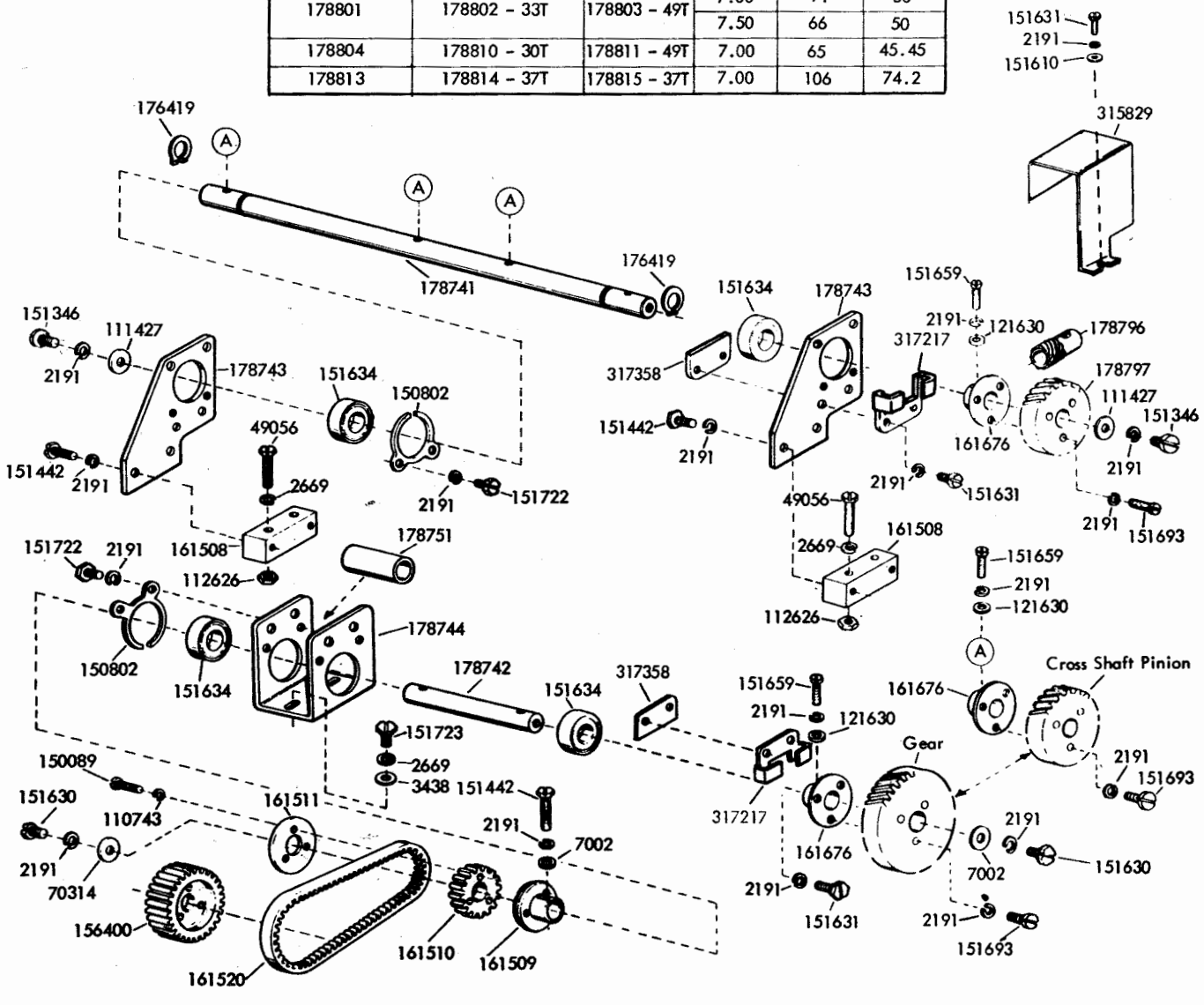
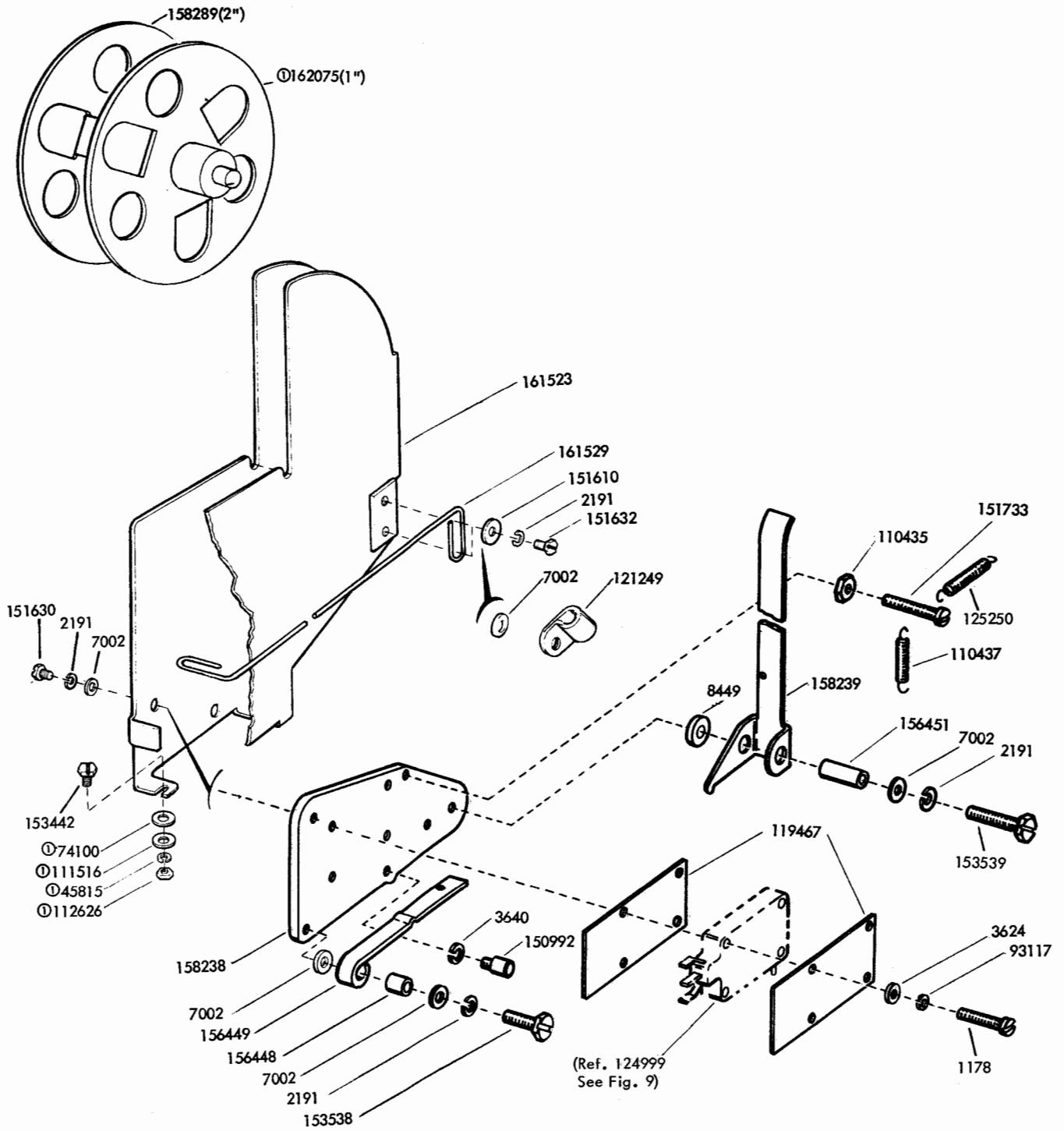


FIGURE 12. CROSS-SHAFT AND INTERMEDIATE SHAFT MECHANISM FOR MULTIPLE REPERFORATOR BASE



⓪ Not part of the 161527

FIGURE 13. 161527 TAPE CONTAINER ASSEMBLY

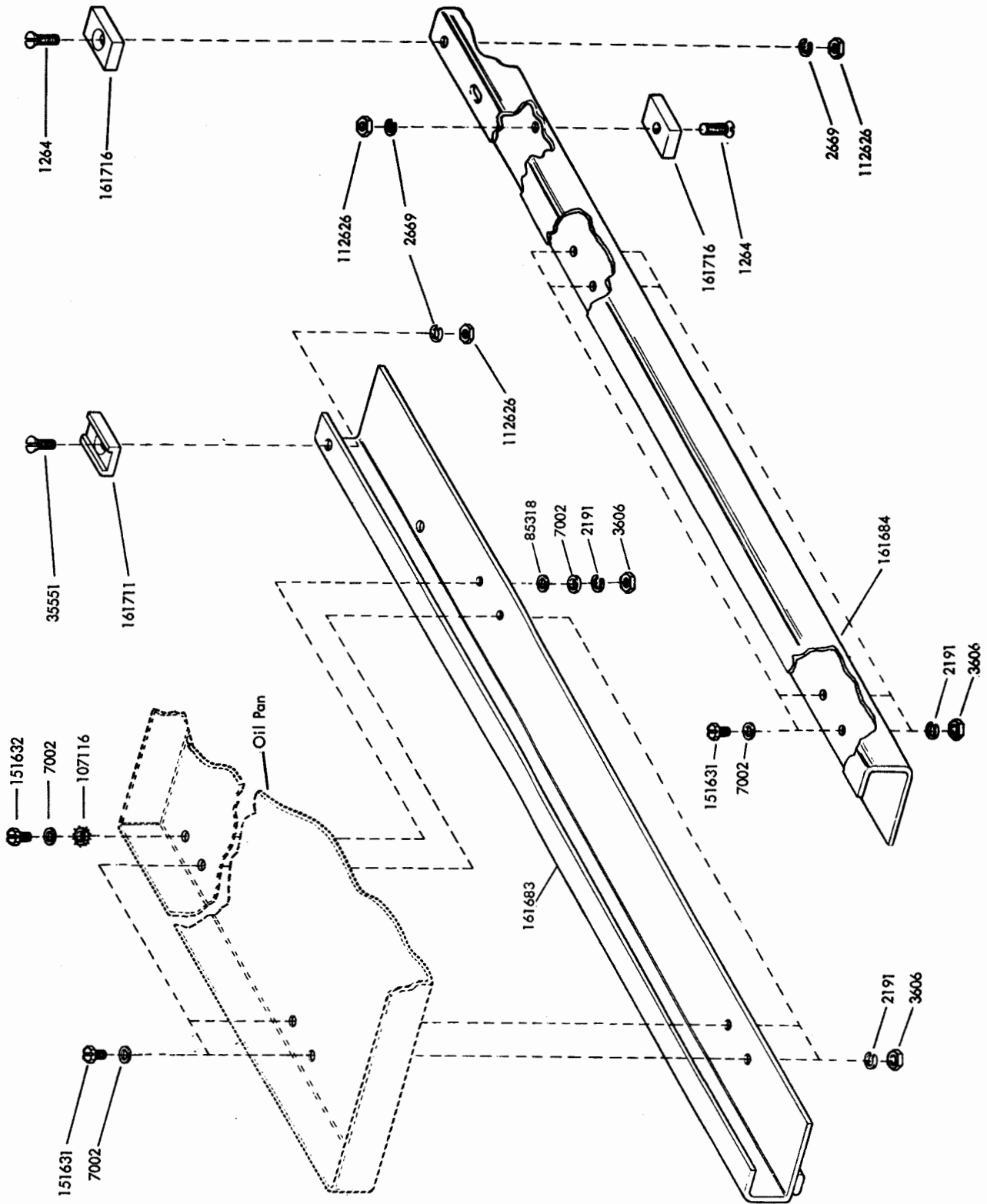


FIGURE 14. 161678 MODIFICATION KIT TO INSTALL A MULTIPLE REPERFORATOR BASE (LMRB) IN A MODEL 28 CABINET (LBAC)

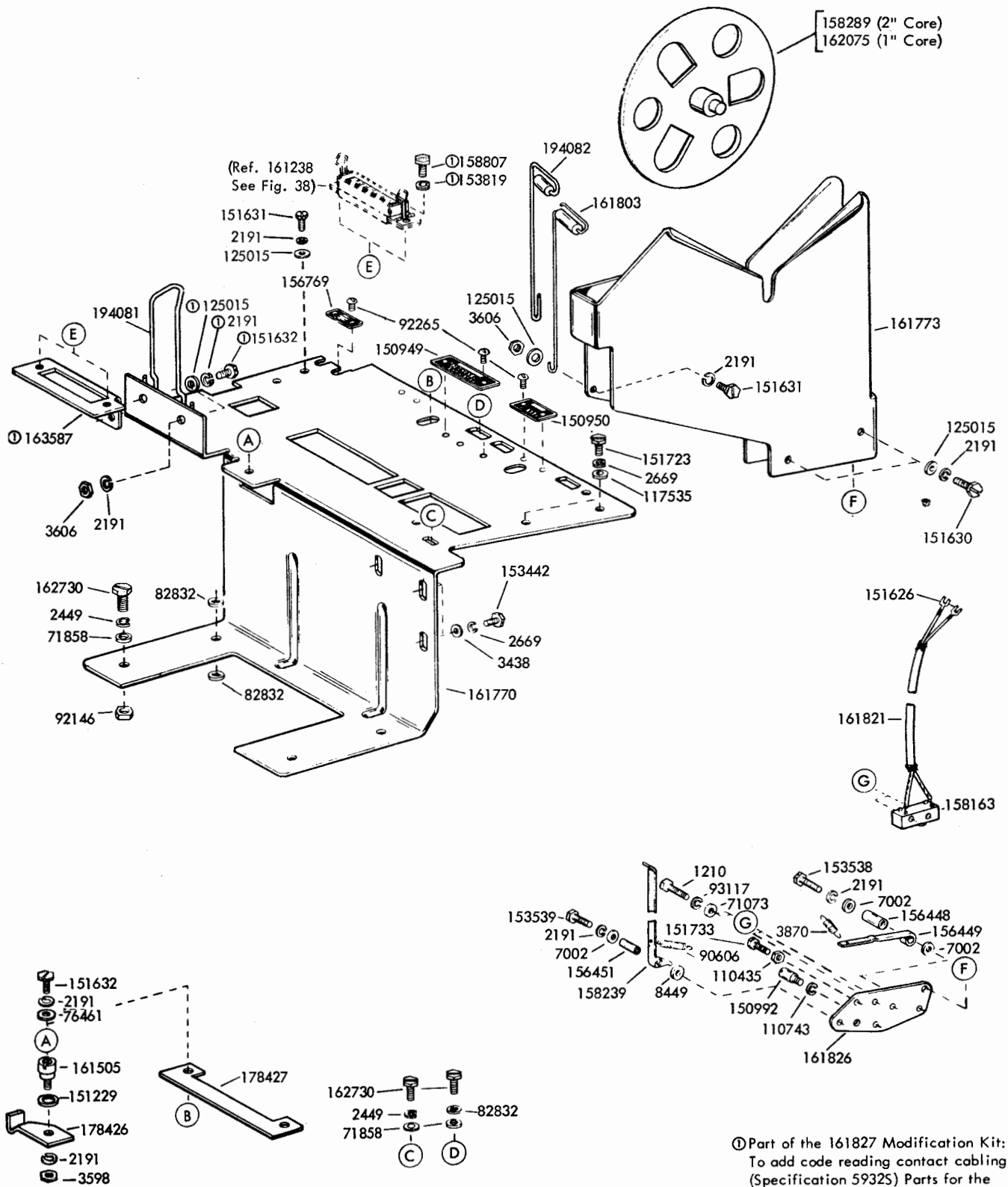


FIGURE 15. AUXILIARY REPERFORATOR BASE

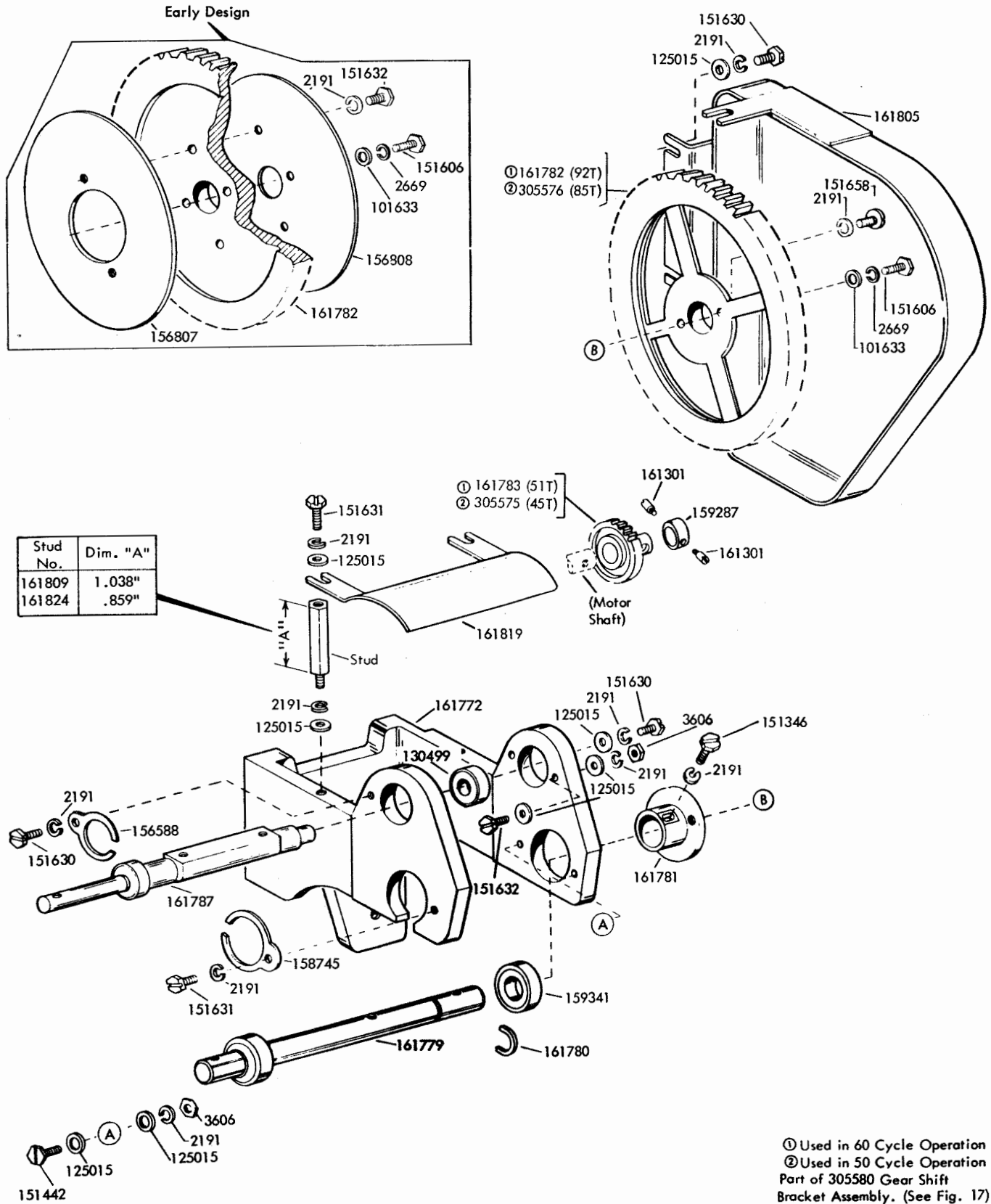
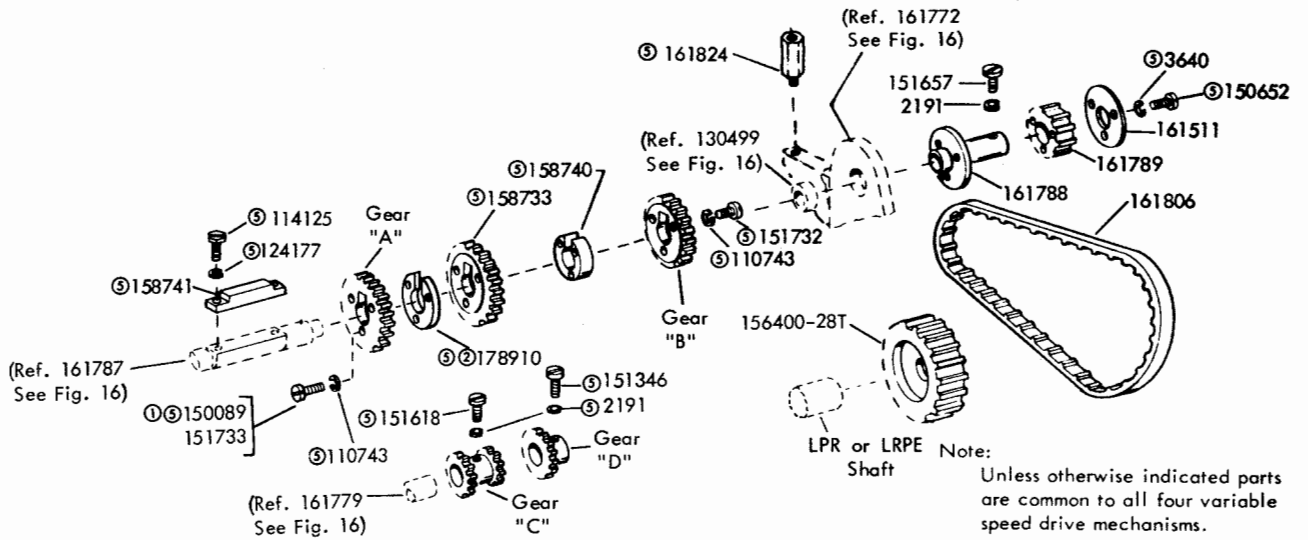
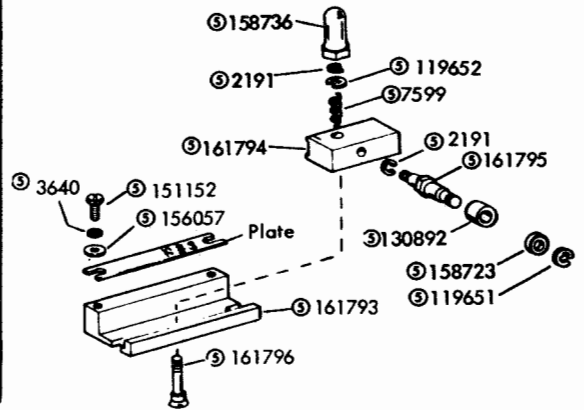
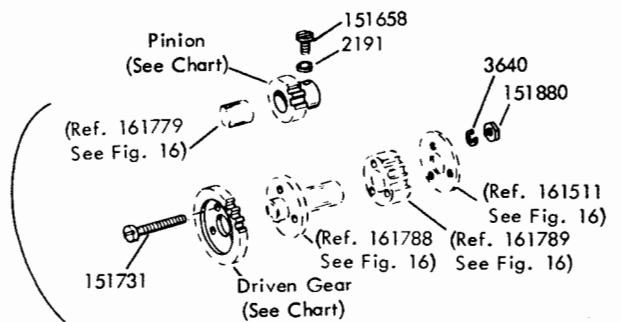


FIGURE 16. GEAR BRACKET MECHANISM

VARIABLE SPEED DRIVE ASSEMBLIES							
Assembly No.	W.P.M. or Baud	Motor Operation	Gear "A"	Gear "B"	Gear "C"	Gear "D"	Plate
161807	(WPM) 60-75-100	60 Cycle	158734	158716	158732	158712	161797
178869	(WPM) 60-67-100	60 Cycle	163262	158716	178870	158712	178885
192678	(BAUD) 45.5-50-75	60 Cycle	163262	179962	178870	179963	192680
③ 305580	(BAUD) 45.5-50-74.2	50 Cycle	163262	158716	178870	158712	178885
315536	(BAUD) 45.5-50-75	50 Cycle	⑤ 163262	⑤ 176071	⑤ 178870	⑤ 176072	⑤ 192680

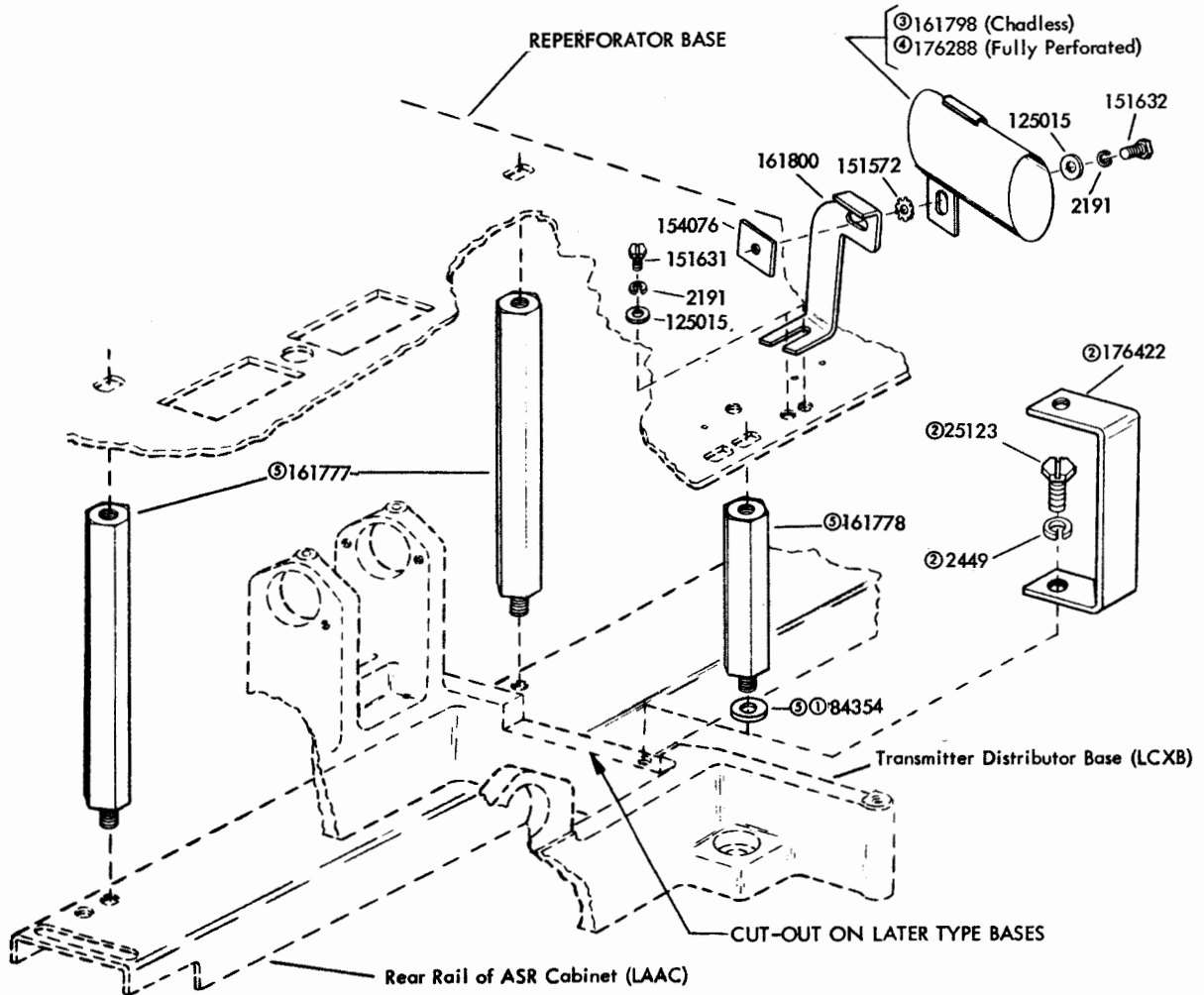


Single Speed Drive Gear Sets for Auxiliary Mounted LPR Sets					
Gear Set No.	Driven Gear	Pinion	Unit Code	W.P.M. (Nominal)	Baud
161811	161790-44T	161784-18T	7.42	60	45.45
161812	161791-47T	161785-24T	7.42	75	56.88
161813	161792-39T	161786-26T	7.42	100	74.2
173820	173822-49T	173821-20T	7.00	65	45.45
163448	163447-49T	163446-22T	7.00	71	50
163451	163450-40T	163449-27T	7.00	107	75
④ 319920	319919-51T	319918-25T	7.00	65	45.5
④ 319923	319922-52T	319921-28T	7.00	71	50
④ 319926	319925-26T	319924-21T	7.00	107	75



- ① Peculiar to the 161807
- ② Not used on the 161807
- ③ The 305580 is shown in part on Fig. 16
- ④ Used with 3600 RPM Motor
- ⑤ 315536 Modification Kit to provide Three speed gear shift

FIGURE 17. AUXILIARY REPERFORATOR BASE GEARING MECHANISM



- ① Not required when unit is equipped with base isolation parts.
- ② Used on bases with cut-out
- ③ Peculiar to 161815
- ④ Peculiar to 176287
- ⑤ Part of the 179492 Specification 59295

FIGURE 18. 161815, 176287 AND 179492 MODIFICATION KITS TO MOUNT AN AUXILIARY TYPING REPERFORATOR BASE

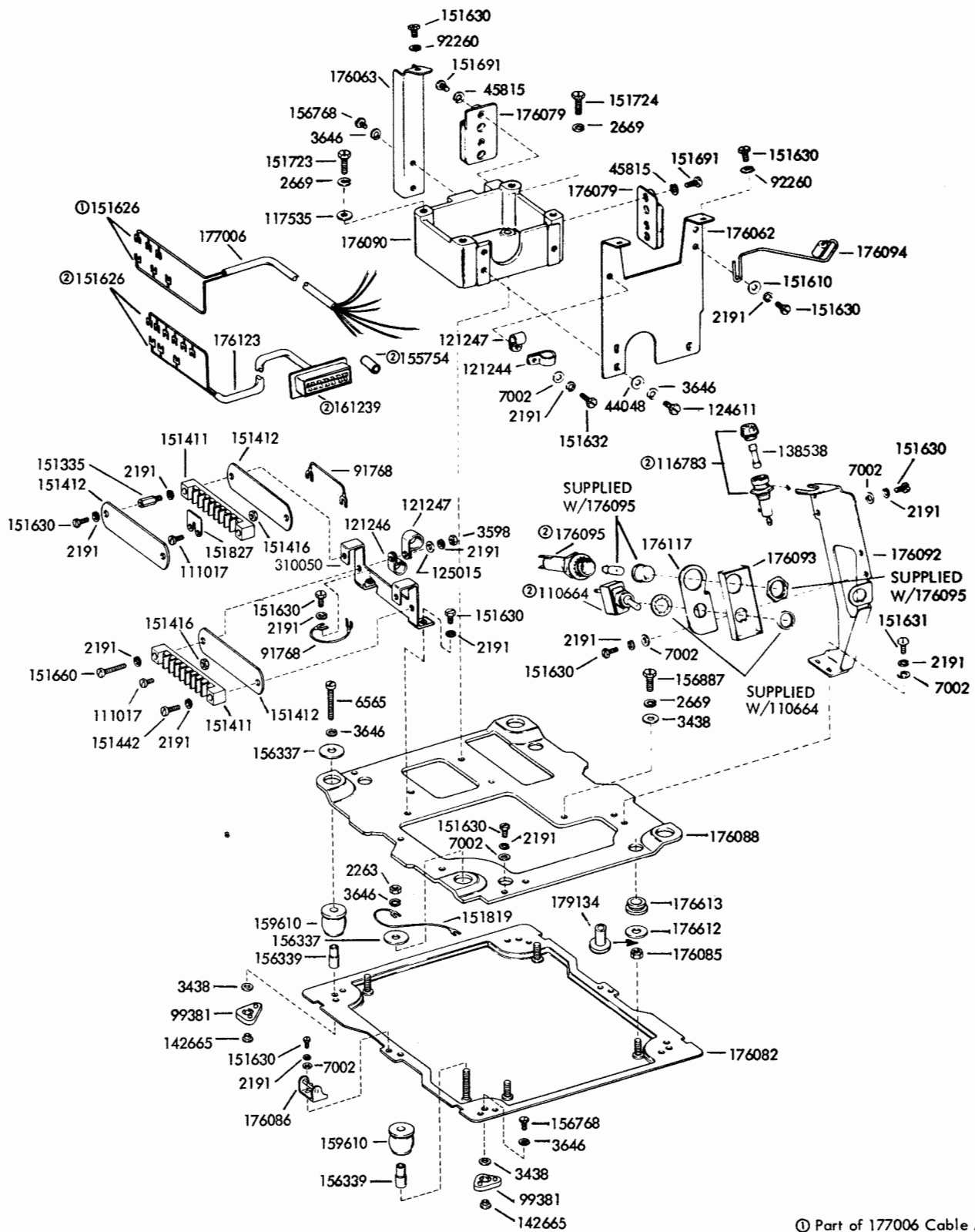
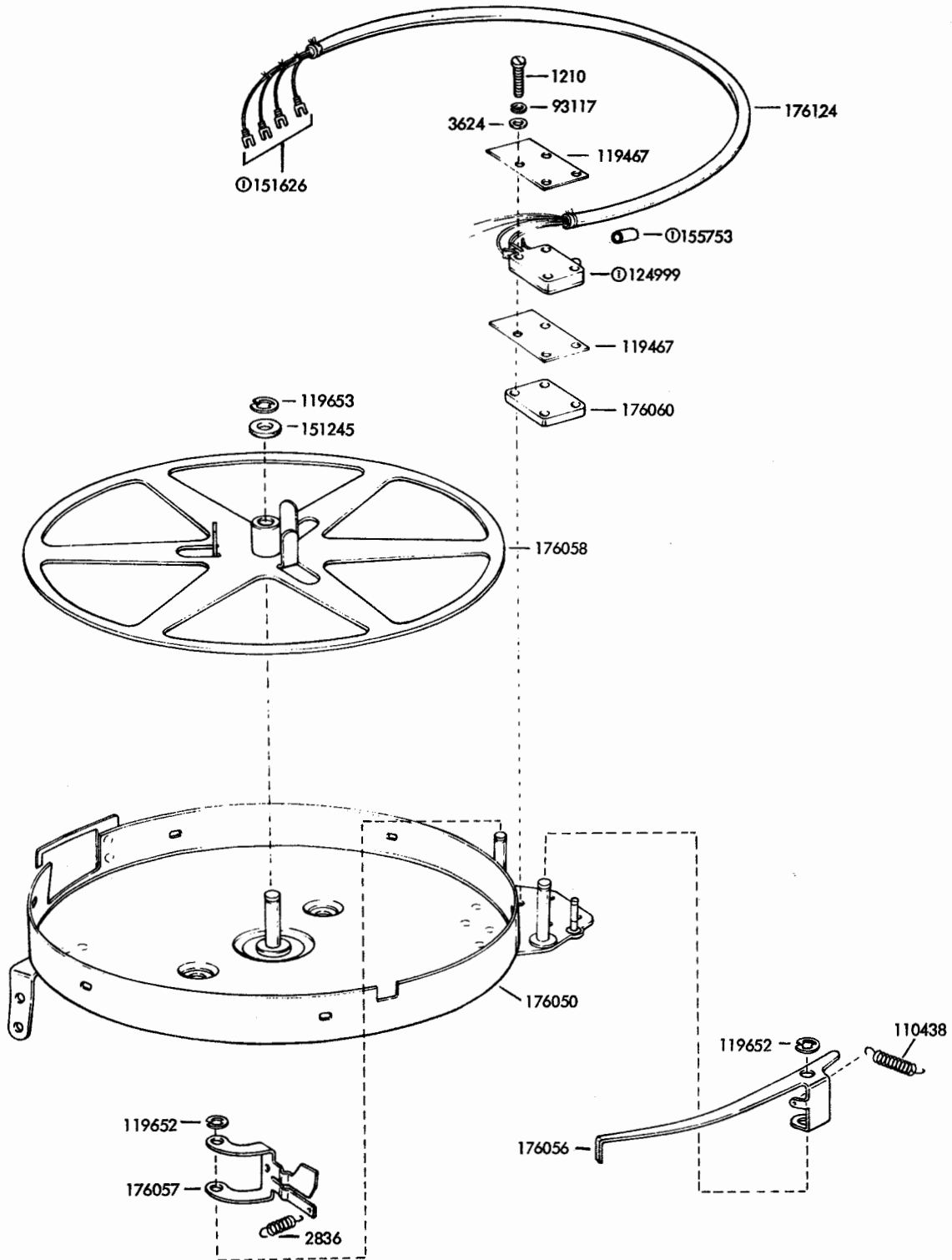


FIGURE 19. MINIATURIZED RECEIVING ONLY REPERFORATOR BASE



© PART OF 176124

FIGURE 20. 174492 TAPE CONTAINER ASSEMBLY

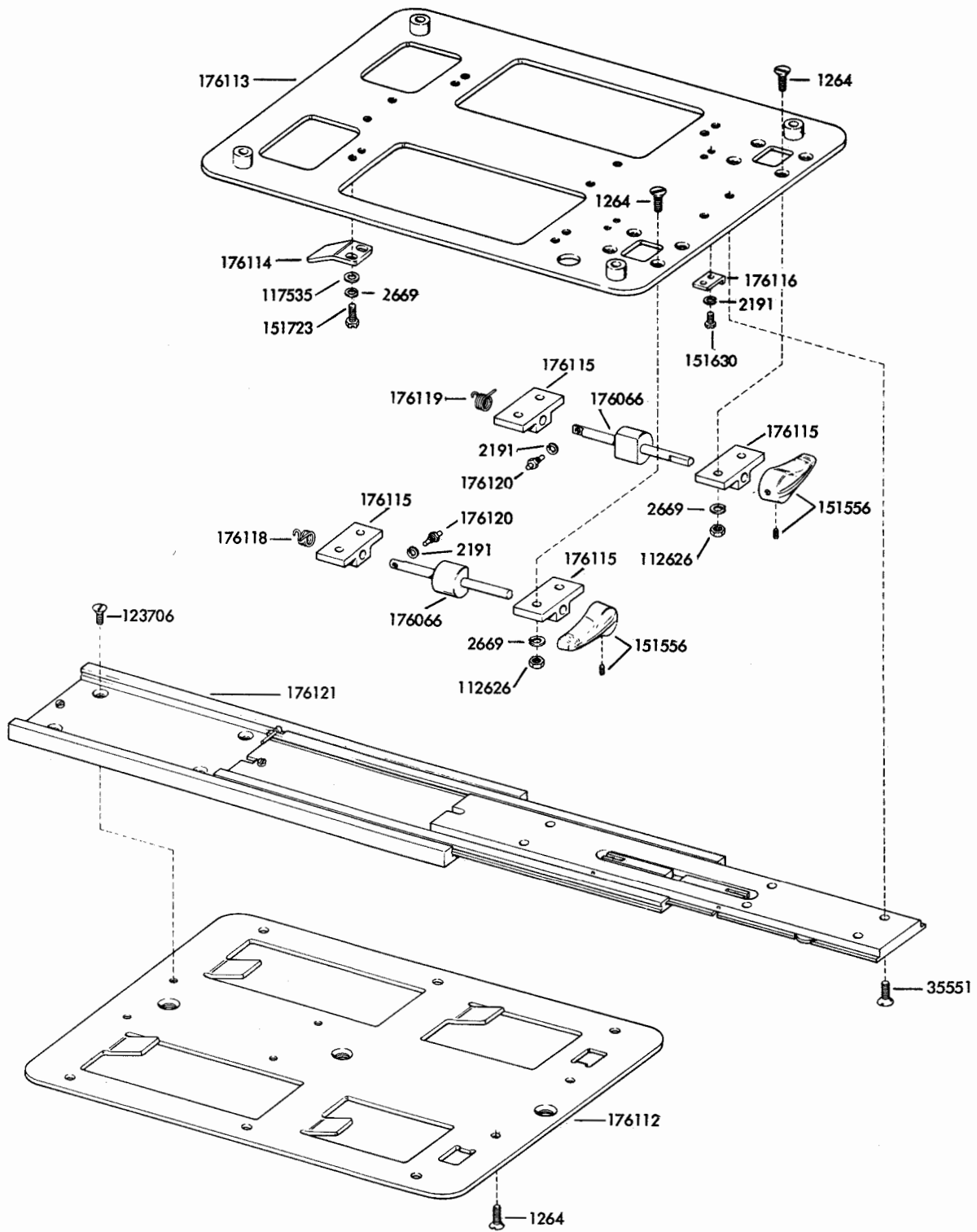


FIGURE 21. 174459 MODIFICATION KIT TO PROVIDE A SLIDING BASE

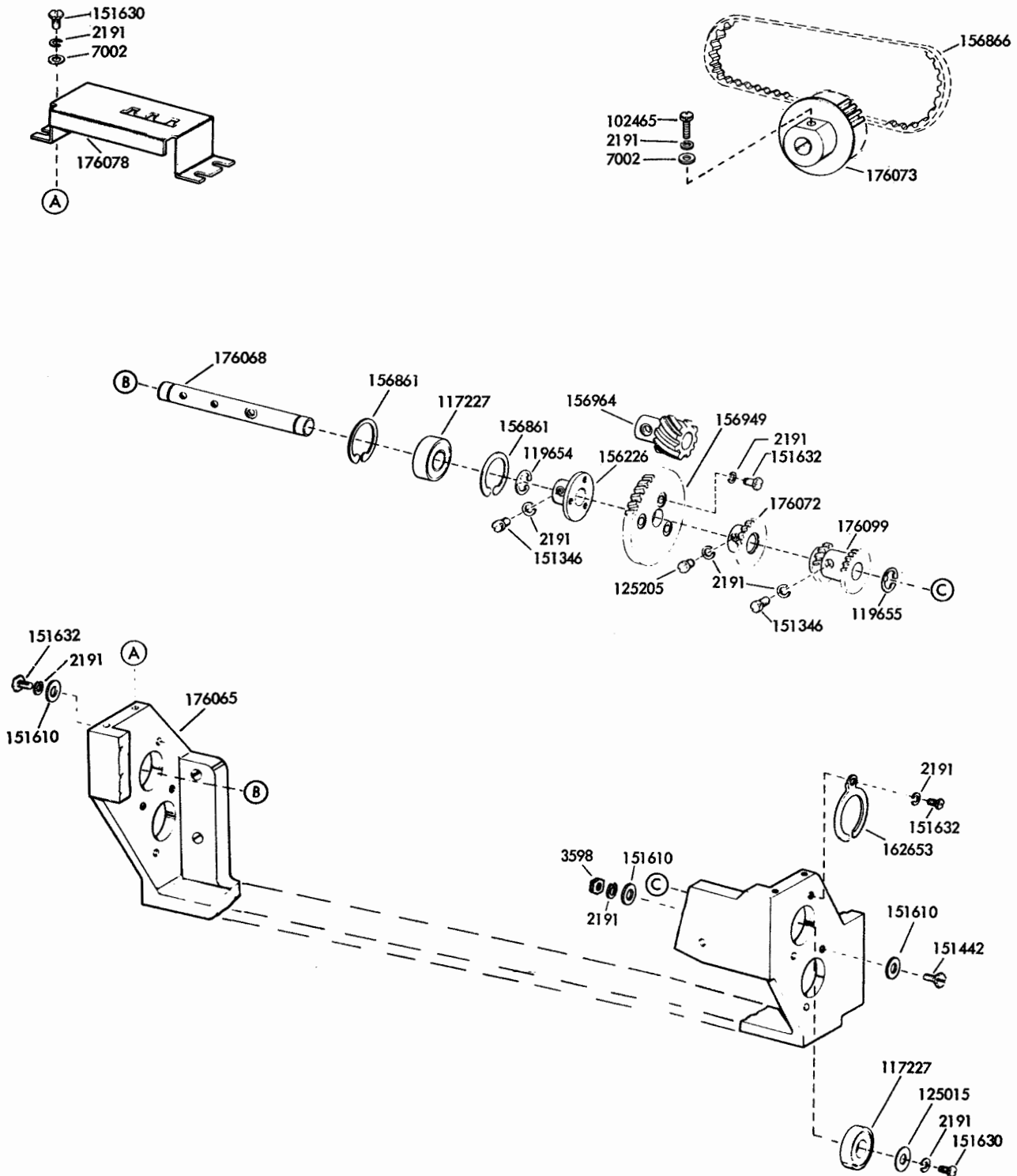


FIGURE 22. 176100 VARIABLE SPEED MECHANISM ASSEMBLY

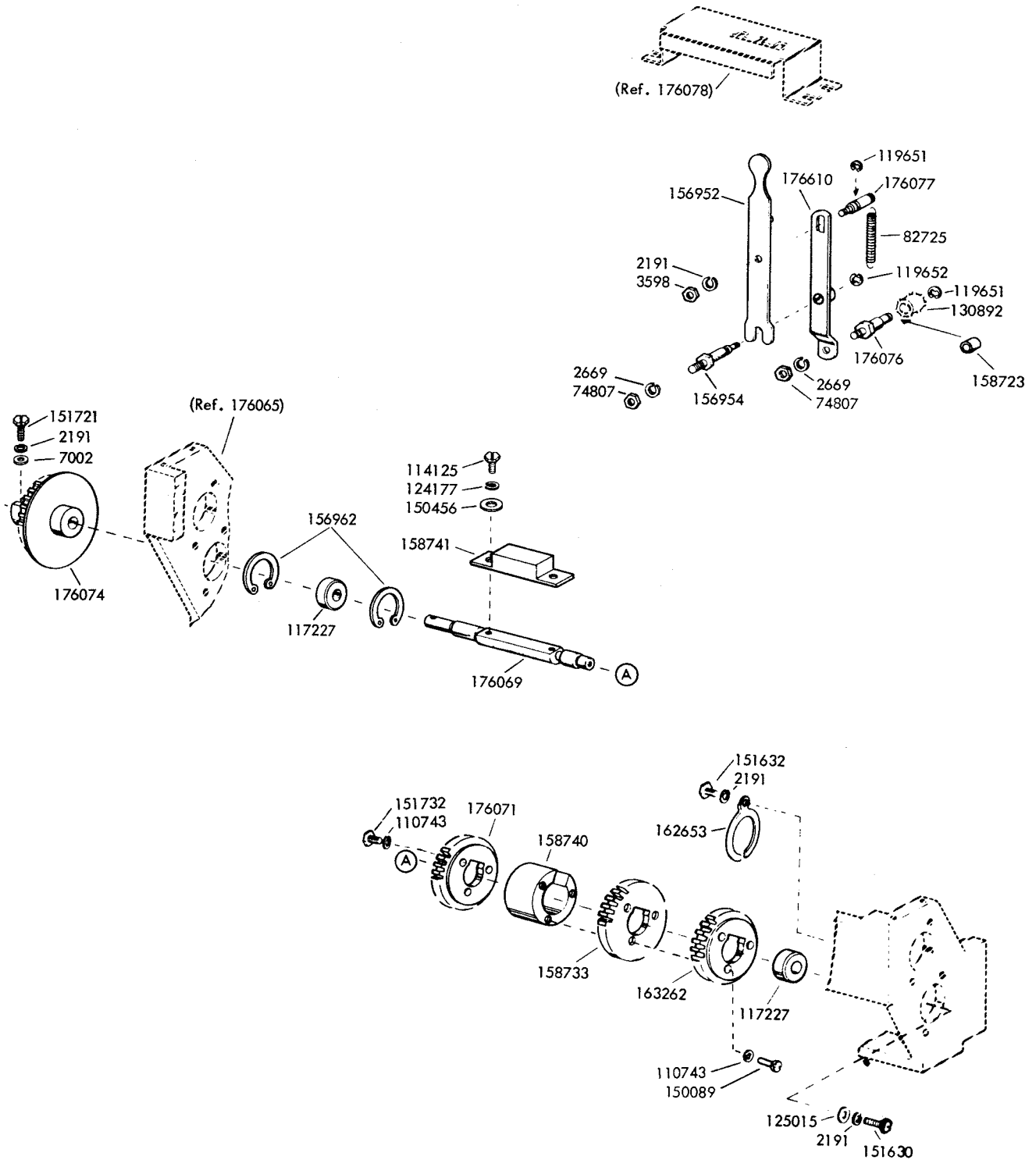
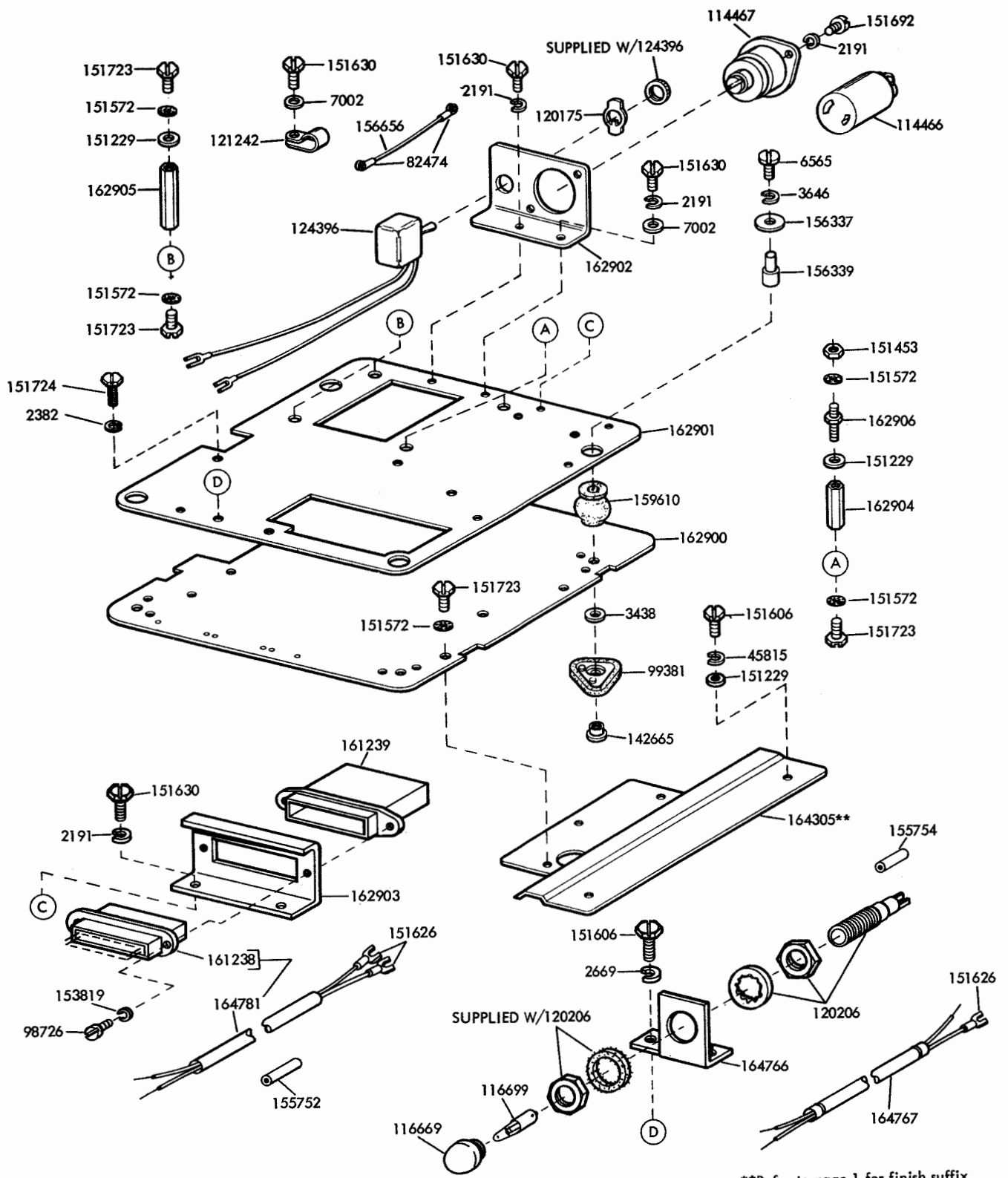
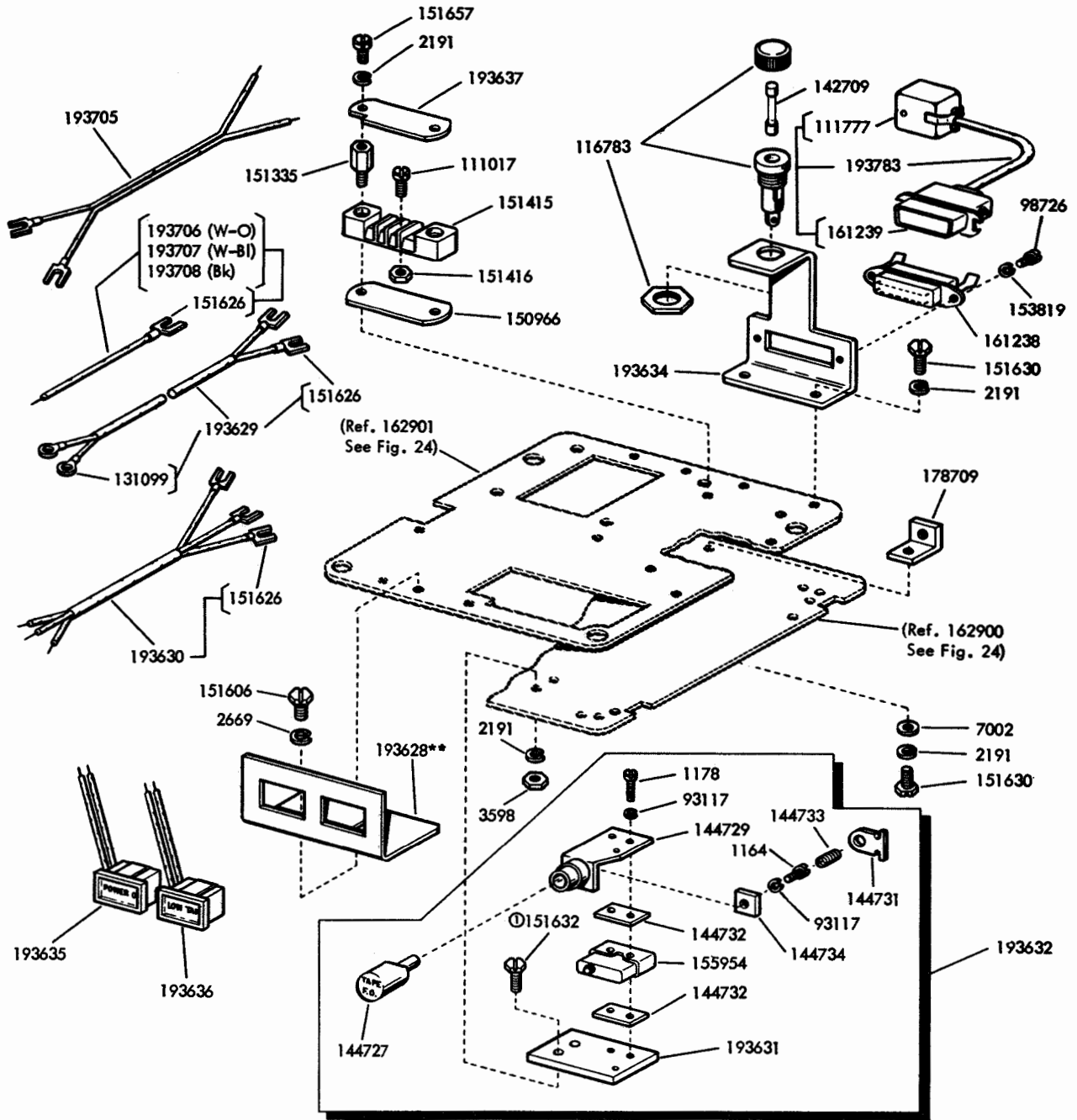


FIGURE 23. 176100 VARIABLE SPEED MECHANISM ASSEMBLY



**Refer to page 1 for finish suffix

FIGURE 24. MINIATURIZED BASE



⓪ Not Part of 193632

**Refer to page 1 for finish suffix

FIGURE 25. MINIATURIZED BASE

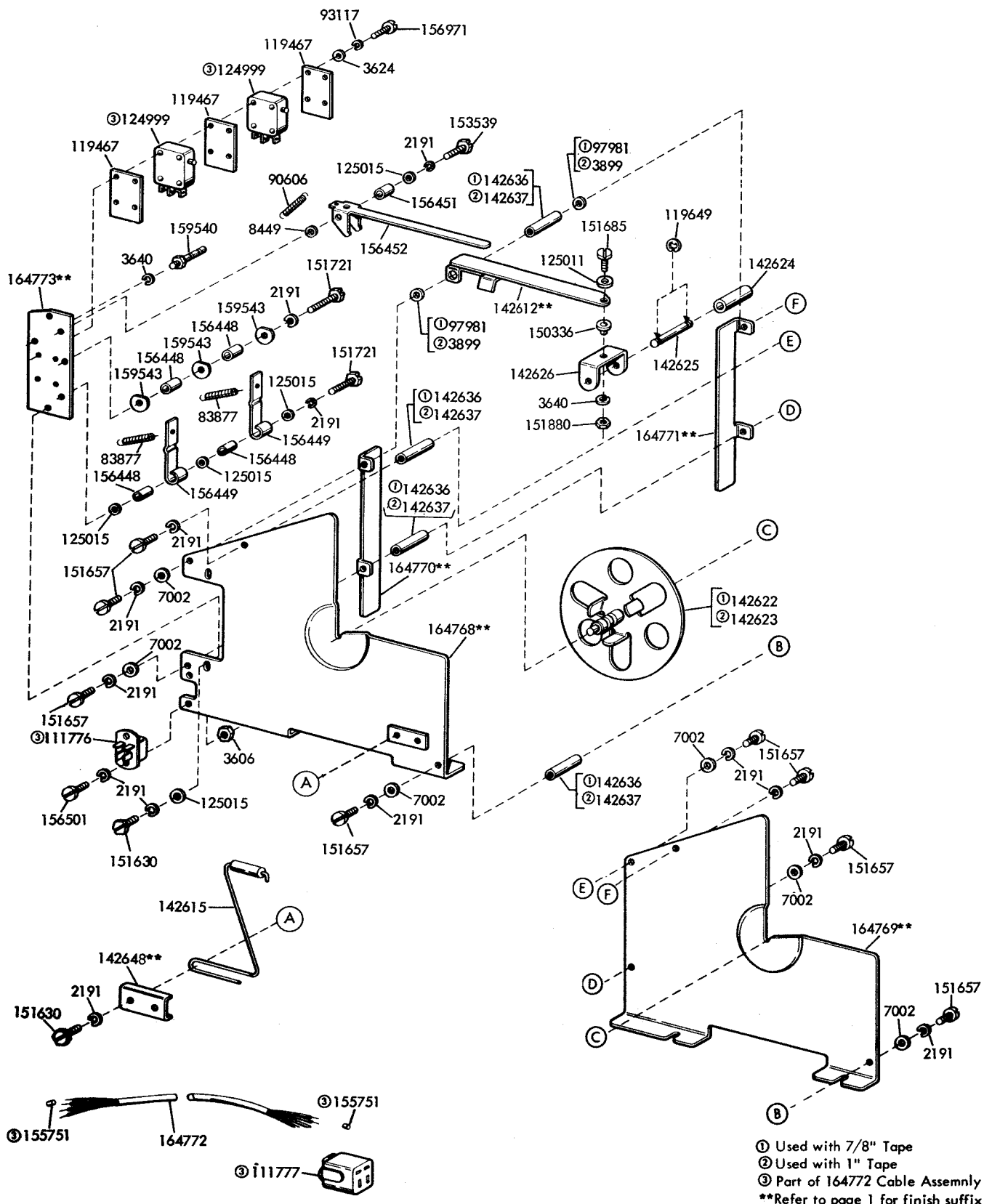
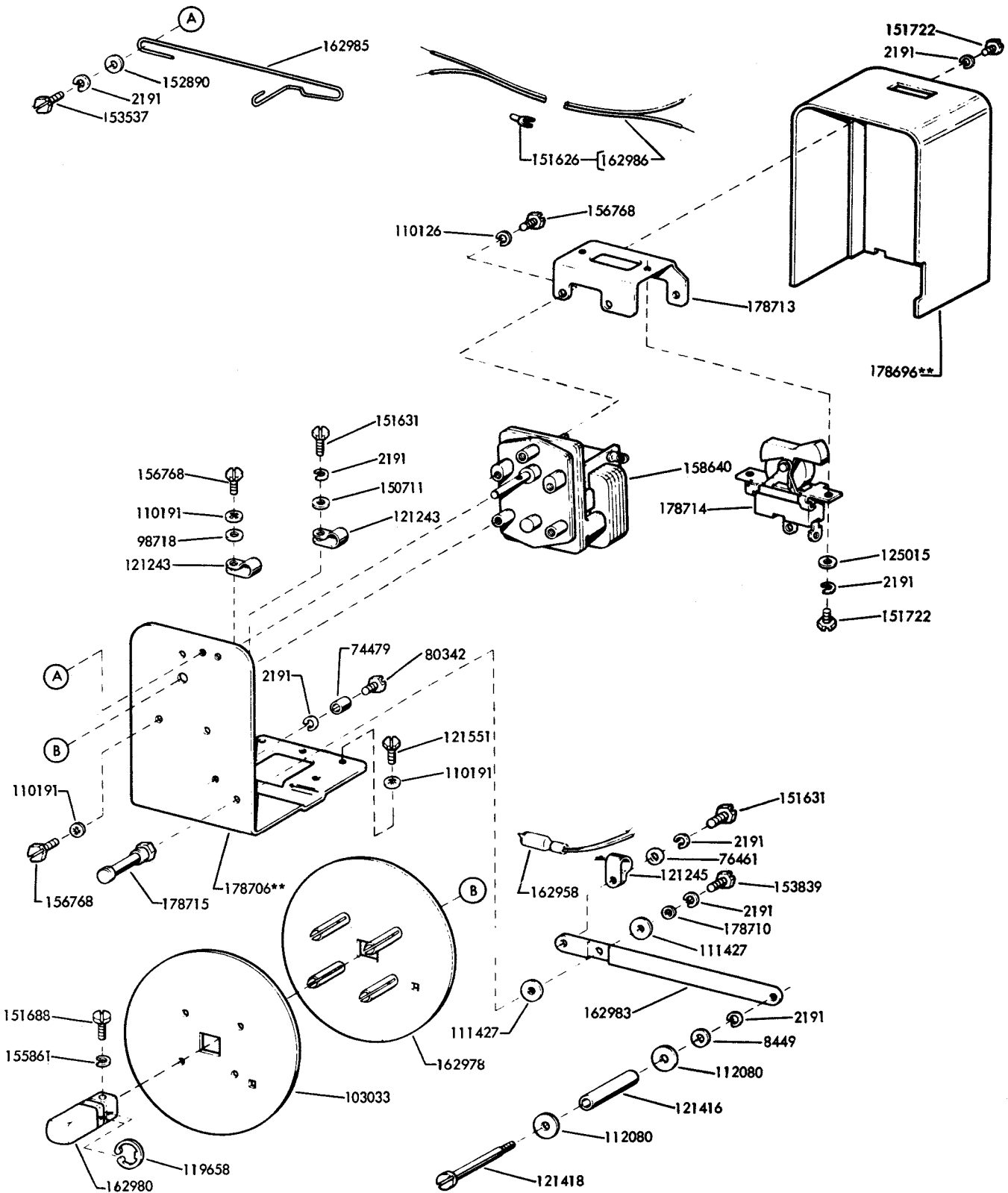
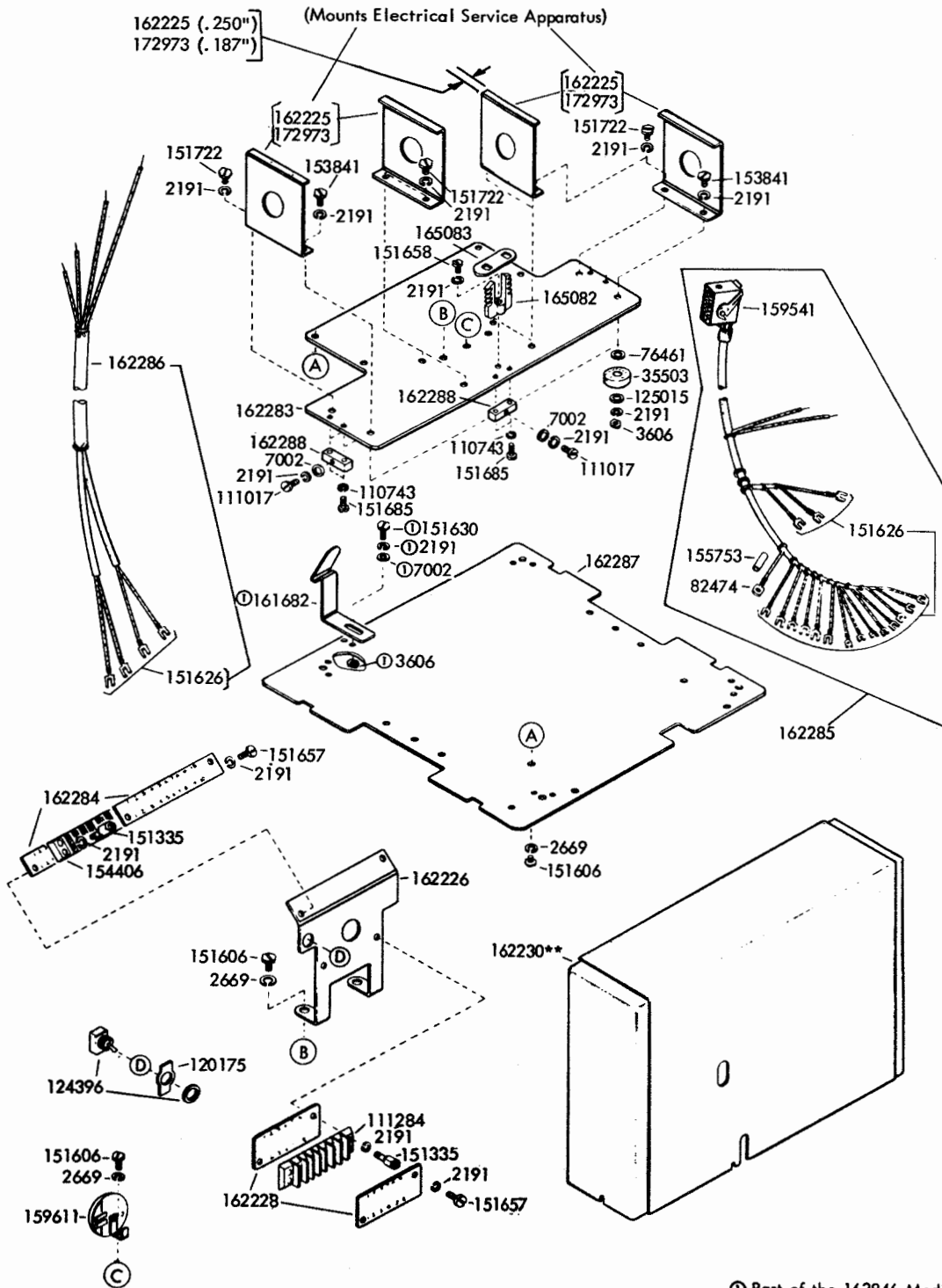


FIGURE 26. 164873** (7/8") AND 193794** (1") TAPE CONTAINER ASSEMBLIES WITH TAPE-OUT SWITCH



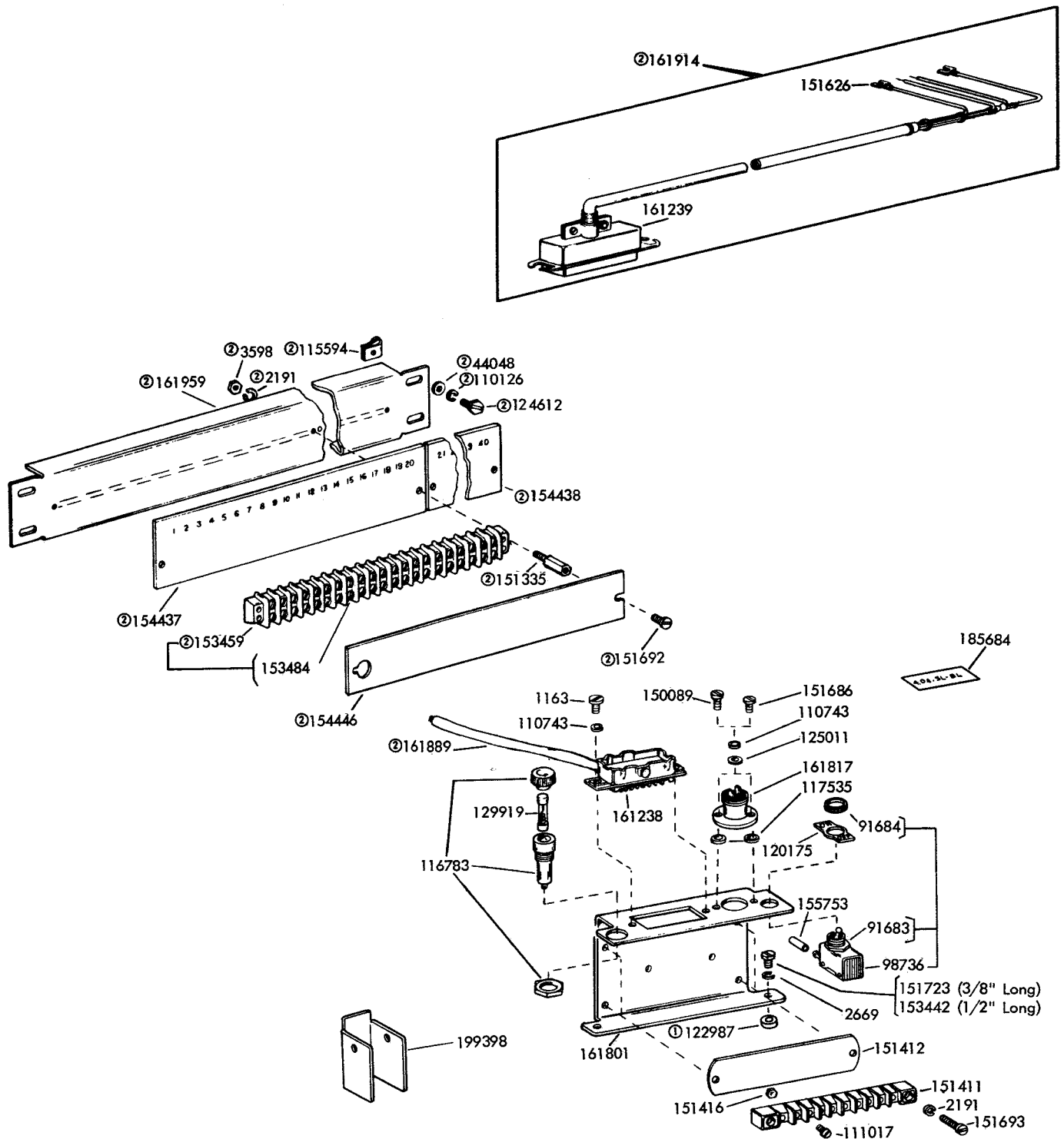
**Refer to page 1 for finish suffix

FIGURE 27. 162957** TAPE WINDER ASSEMBLY



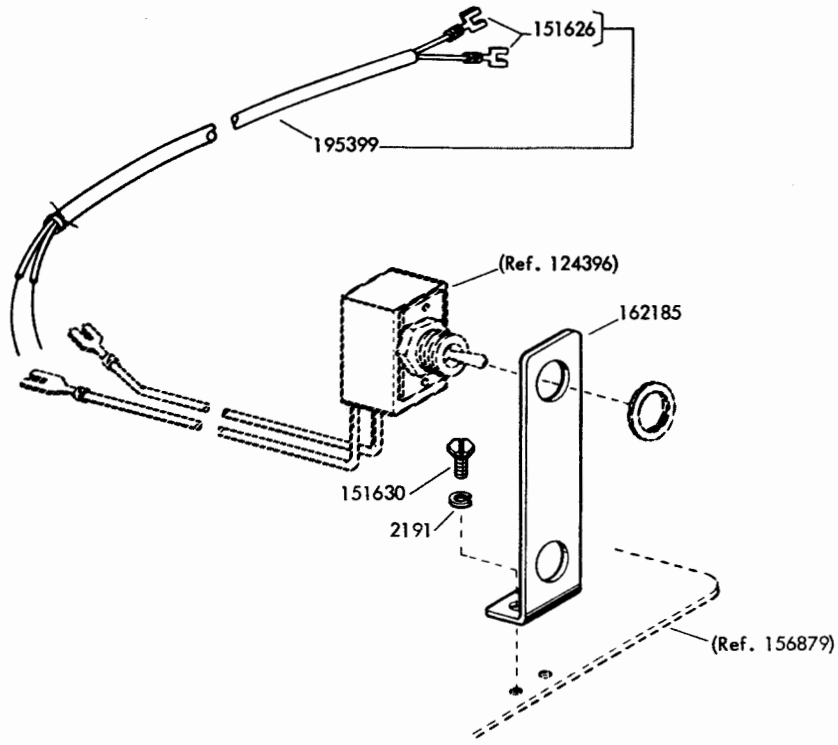
Ⓛ Part of the 162846 Modification Kit:
To provide a cover clip.
**Refer to page 1 for finish suffix

FIGURE 28. TYPING REPERFORATOR BASE WITH EXTENSION



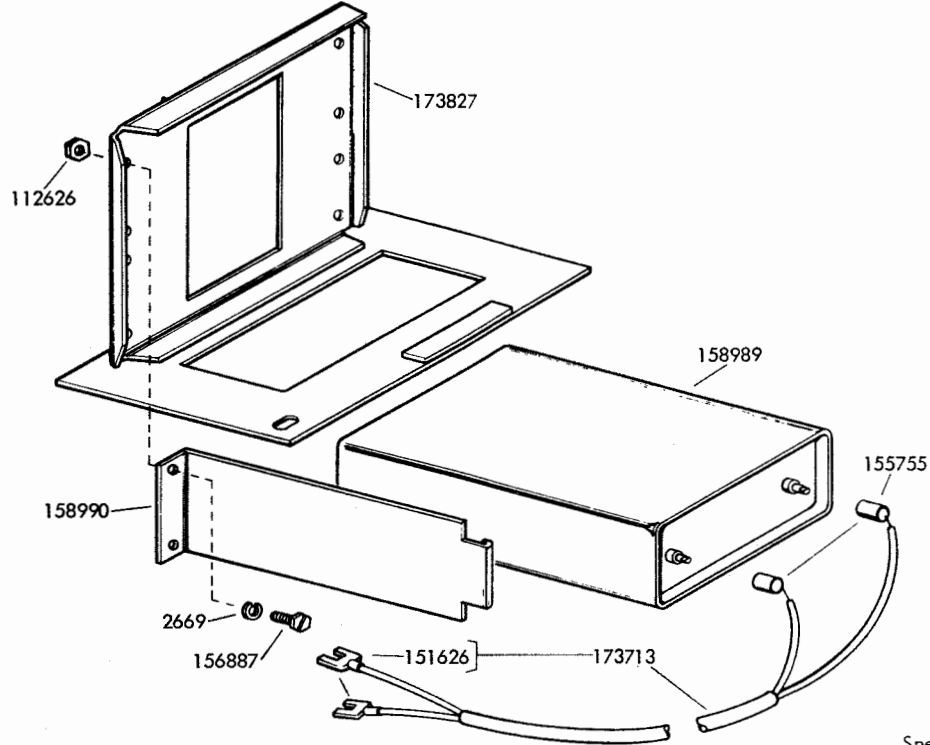
- ① Used with the 153442 Screw
- ② Part of the 161827 Modification Kit:
To add code reading contact cabling.
(Specification 59325) Parts for the
161827 are also shown on Fig. 15.

FIGURE 29. ELECTRICAL COMPONENTS



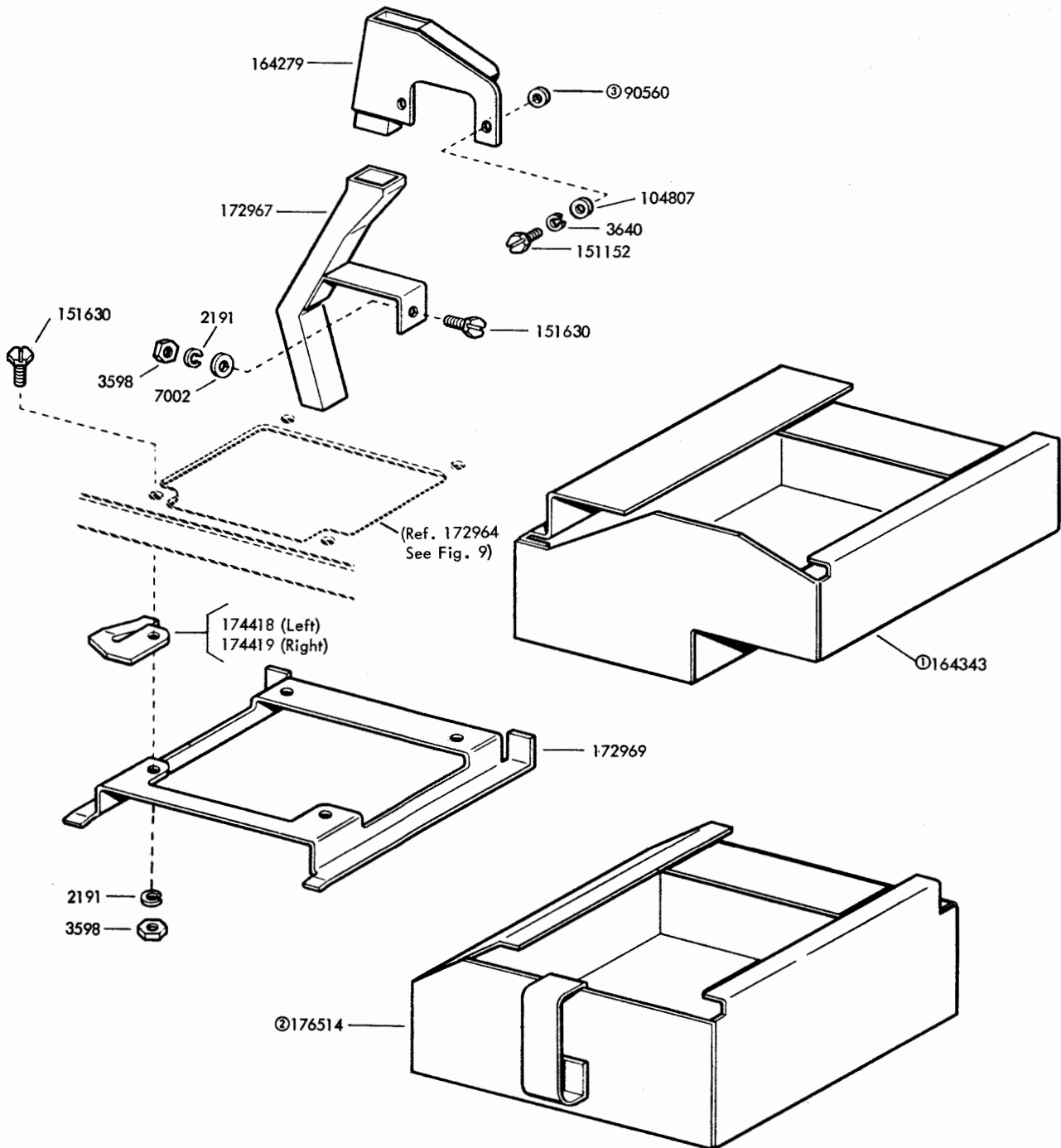
Specification 501555

FIGURE 30. 195388 MODIFICATION KIT TO RELOCATE POWER SWITCH FROM THE REAR TO THE FRONT



Specification 50,0575

FIGURE 31. 173484 MODIFICATION KIT TO PROVIDE POWER FACTOR CORRECTION FOR (LMRB) BASE



- ① Peculiar to 164341
- ② Peculiar to 176542
- ③ Discard if Punch Block face is flat.

Specification 50,0865

FIGURE 32. 164341 AND 176542 MODIFICATION KITS TO PROVIDE CHAD DISPOSAL ON MULTIPLE REPERFORATOR BASES

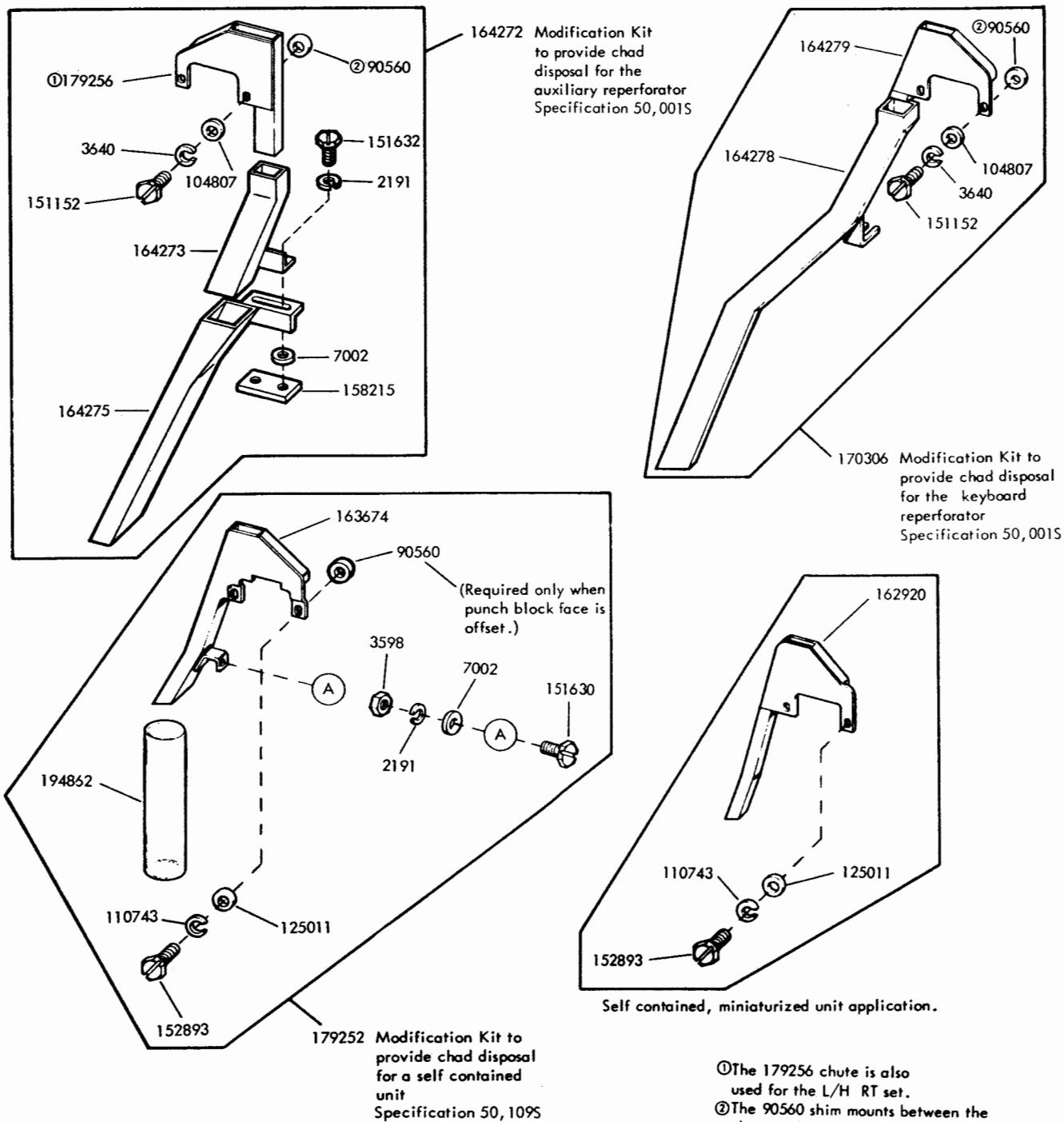
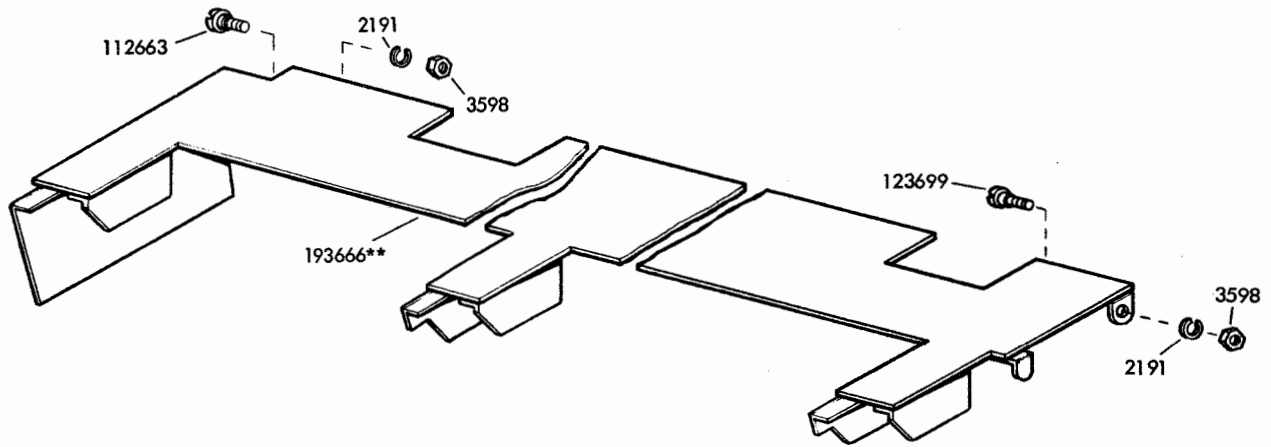
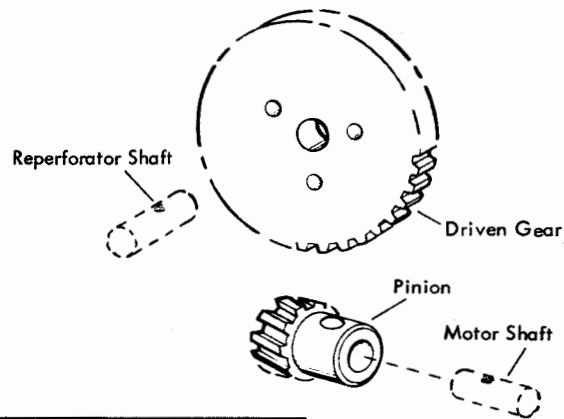


FIGURE 33. MODIFICATION KITS TO PROVIDE CHAD DISPOSAL



Specification 50, 1915

FIGURE 34. 193667 MODIFICATION KIT TO PROVIDE A SPROCKET GUARD FOR MULTIPLE REPERFORATOR BASES



Speed Change Gear Sets for Non-typing Reperforator					
Set Number	Pinion	Driven Gear	(Nominal) WPM	Unit Code	Baud
①164784	164782-6T	164783-52T	120	8.5	102.9
②193620	192791-5T	192790-49T	53	8.61	46.15
②193621	192789-6T	192788-47T	66	8.61	57.69
②193643	193641-6T	193642-40T	78.7	8.00	67.8
②193678	193677-8T	193676-42T	100	11.0	110
②193681	193680-5T	193679-39T	67	11.0	73.7
③199896	199894-13T	199895-68T	100	8.5	85
② ③308197	308195-10T	308196-41T	60	8.5	50
② ③308206	308204-15T	308205-67T	67	8.5	56.86

- ① Reperforator clutch must be 2 cycle design
- ② Reperforator clutch must be 1 cycle design
- ③ Used with 50 cycle-3000 RPM Motor

FIGURE 35. GEAR CHART FOR SELF-CONTAINED NON-TYPING REPERFORATOR

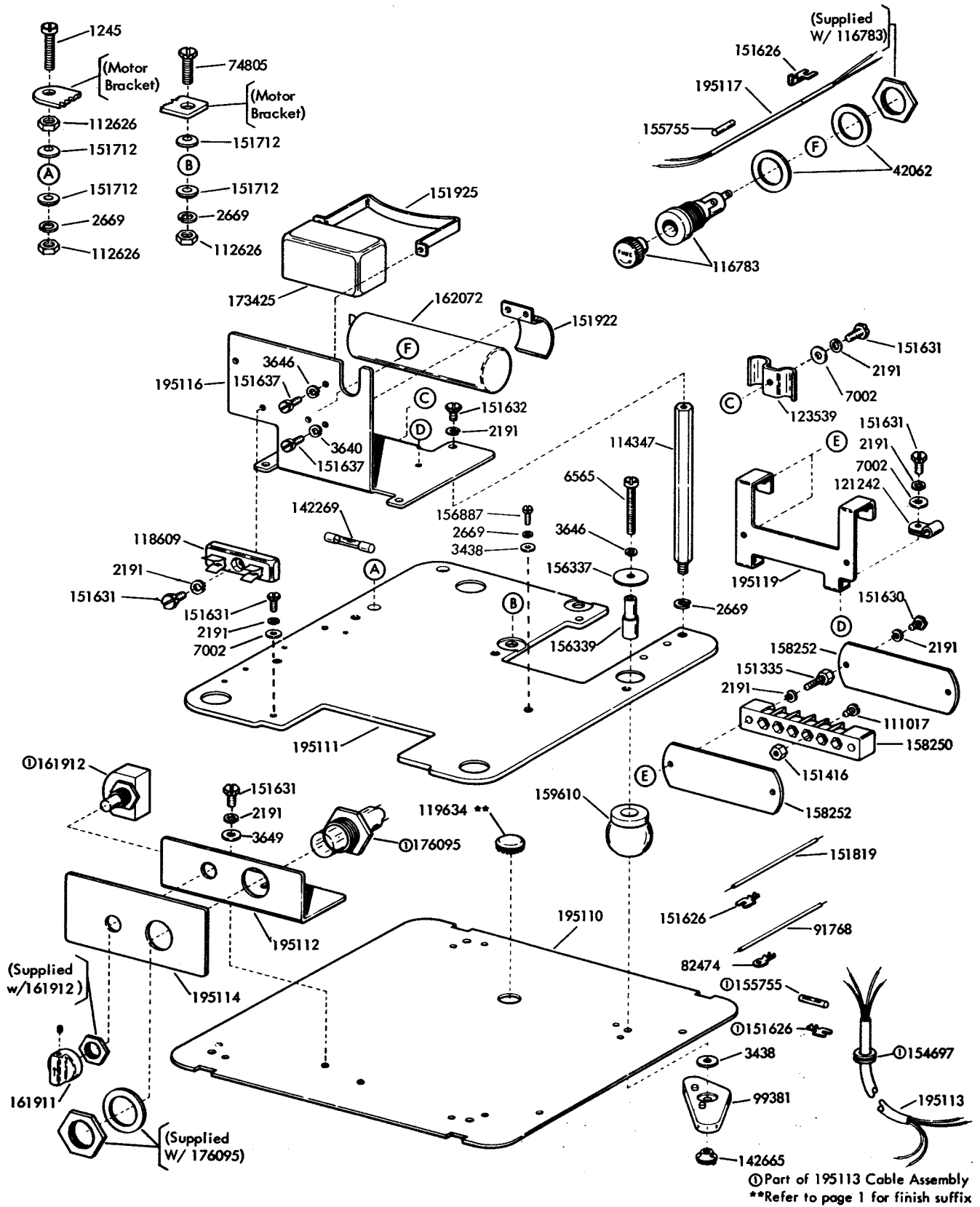


FIGURE 36. TAPE PRINTER BASE (Miniaturized)

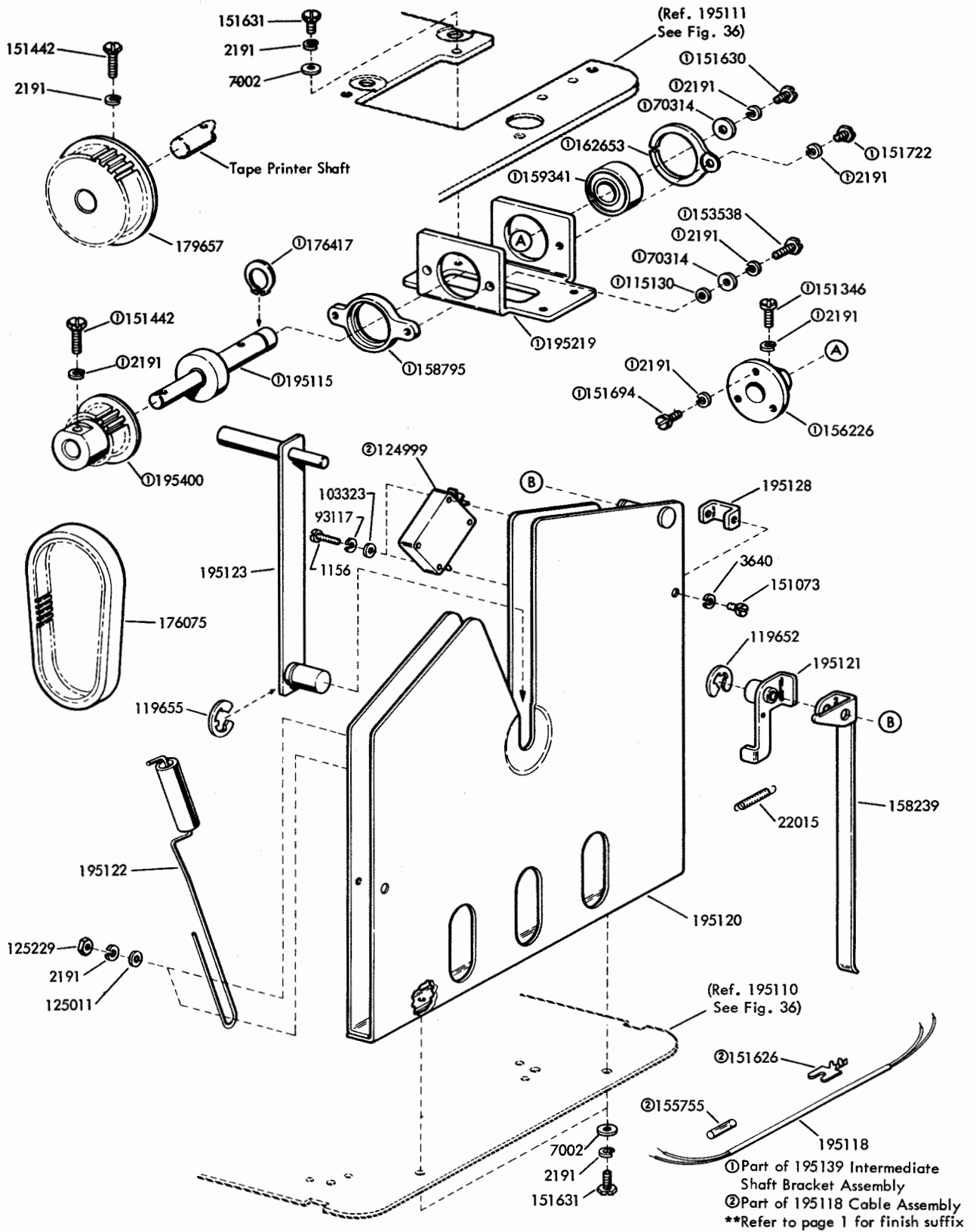


FIGURE 37. TAPE PRINTER BASE-CONTINUED (Miniaturized)

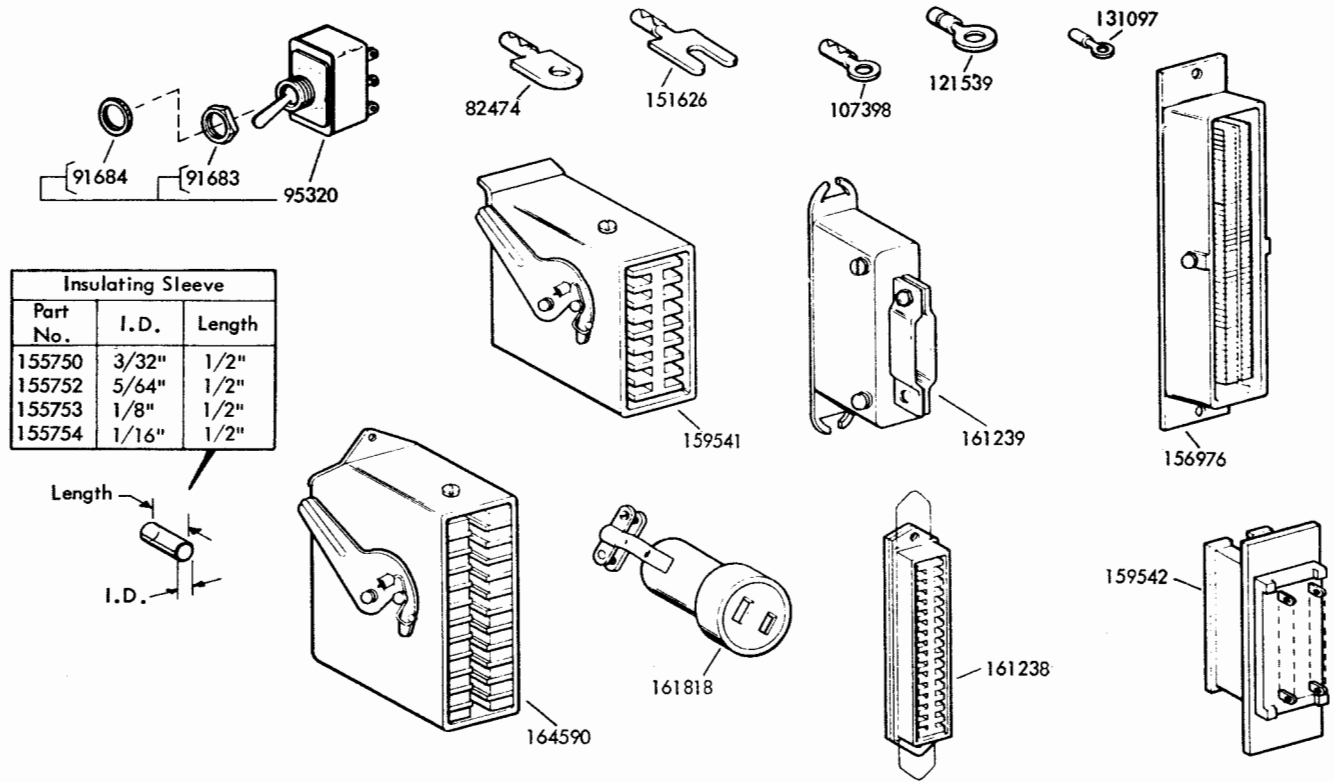


FIGURE 38. CABLE COMPONENTS

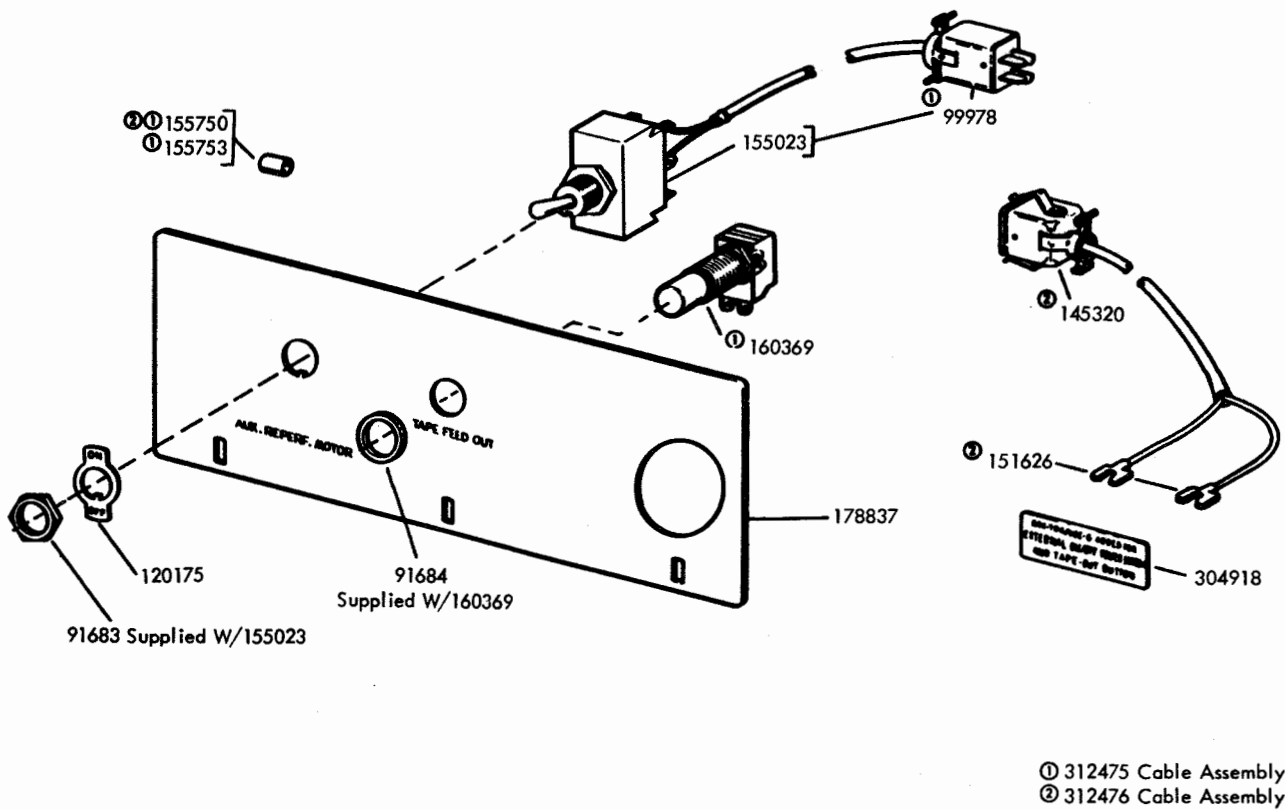


FIGURE 39. 178838 MODIFICATION KIT TO RELOCATE POWER SWITCH FROM AUXILIARY BASE TO OUTSIDE OF CABINET

NUMERICAL INDEX

Part Number	Description and Page Number	Part Number	Description and Page Number	Part Number	Description and Page Number
1156	Screw, 2-56 x 9/16 Fil 37	84354	Washer, Flat 20	116699	Lamp, 1/25 Watt Neon 26
1163	Screw, 4-40 x 3/16 Fil 31	84551	Jumper, 5-1/4" Black 11, 13	116783	Holder, Fuse 6, 7, 21, 27, 31, 36
1164	Screw, 2-56 x 3/16 Fil 27	85318	Washer, Leather 16	117227	Bearing, Ball 24, 25
1178	Screw, 2-56 x 7/16 Fil 15, 27	90560	Washer, Flat 33, 34	117535	Washer, Flat 17, 21, 23, 31
1210	Screw, 2-56 x 5/8 Fil 17, 22	90606	Spring 17, 28	118511	Fuse, 1/8 Amp 7
1245	Screw, 10-32 x 1" Fil 36	90790	Washer, Flat 8	118589	Switch, Black Pushbutton 7
1264	Screw, 10-32 x 1/2 Flat 16, 23	91683	Nut, 15/32-32 Hex 6, 7, 11, 13, 31, 38, 39	118609	Holder, Fuse 36
2191	Washer, Lock 3 to 21, 23 to 37	91684	Nut, 15/32-32 Ring 6, 7, 11, 13, 31, 38, 39	119467	Insulator .032" Thk 8, 15, 22, 28
2263	Nut, 8-32 Hex 21	91768	Jumper, 3-1/2" Black 6, 7, 21, 36	119634**	Button, Plug 36
2382	Washer, Lock 26	92146	Nut, 1/4-20 Hex 17	119649	Ring, Retaining 28
2449	Washer, Lock 4, 6, 11, 13, 17, 20	92260	Washer, Lock 10, 21	119651	Ring, Retaining 10, 19, 25
2669	Washer, Lock 3 to 7, 9 to 14, 16, 17, 18, 21, 23, 25 to 27, 30, 31, 32, 36	92265	Screw, 2-56 x 1/8 Rd 17	119652	Ring, Retaining 19, 22, 25, 37
2836	Spring 22	93108	Washer, Lock 11, 13	119653	Ring, Retaining 10, 22
3438	Washer, Flat 4, 5, 6, 9, 13, 14, 17, 21, 26, 36	93117	Washer, Lock 8, 15, 17, 22, 27, 28, 37	119654	Ring, Retaining 9, 24
3598	Nut, 6-40 Hex 6, 7, 10 to 13, 17, 21, 24, 25, 27, 31, 33 to 35	95320	Switch, SP-ST Toggle 7, 11, 13, 38	119655	Ring, Retaining 9, 24, 37
3606	Nut, 6-40 Hex 16, 17, 18, 28, 30	97981	Spacer 28	119658	Ring, Retaining 29
3624	Washer, Flat 8, 15, 22, 28	98659	Bracket, Switch 3	120175	Plate, ON-OFF 3, 6, 7, 11, 13, 26, 30, 31, 39
3640	Washer, Lock 3, 5, 6, 8, 15, 19, 28, 33, 34, 36, 37	98718	Washer, Flat 29	120206	Socket, Lamp 26
3646	Washer, Lock 6, 21, 26, 36	98726	Screw, 3-48 x 1/4 Fil 11, 13, 26, 27	121242	Clamp, 1/8 ID Cable 6, 26, 36
3649	Washer, Flat 36	98736	Switch, SP-ST Toggle 31	121243	Clamp, 3/16 ID Cable 8, 29
3870	Spring 17	99381	Foot, Rubber 6, 21, 26, 36	121244	Clamp, 1/4 ID Cable 4, 7, 21
3899	Spacer, .188" Thk 28	99978	Connector, 4 Pt Plug 39	121245	Clamp, 5/16 ID Cable 6, 29
6565	Screw, 8-32 x 1-1/4 Fil 6, 21, 26, 36	101633	Washer, Flat 18	121246	Clamp, 3/8 ID Cable 21
7002	Washer, Flat 4, 6 to 17, 21, 24 to 28, 30, 33, 34, 36, 37	102465	Screw, 6-40 x 37/64 Fil 24	121247	Clamp, 7/16 ID Cable 11, 13, 21
7599	Spring, Compression 19	103033	Lid, Tape Reel 29	121248	Clamp, 1/2 ID Cable 11, 13
8449	Spacer, .094" Thk 8, 15, 17, 28, 29	103323	Washer, Flat 37	121249	Clamp, 5/8 ID Cable 11, 13, 15
22015	Spring 37	104124	Screw, 1/4-32 x 11/32 Hex 4, 6, 11, 13	121416	Roller 29
25123	Screw, 1/4-32 x 7/16 Hex 20	104807	Washer, Flat 33, 34	121418	Screw, 6-40 Shoulder 29
35503	Foot, Rubber 30	107116	Washer, Lock 16	121539	Terminal 38
35551	Screw, 10-32 x 3/8 Flat 16, 23	107393	Switch, SP-ST Toggle 3	121551	Screw, 8-32 x 1/4 Hex 29
42062	Washer, Flat 36	107398	Terminal 3, 38	121630	Washer, Flat 14
44048	Washer, Flat 21, 31	110126	Washer, Lock 29, 31	122245	Capacitor, 43 to 48 MFD 7
45815	Washer, Lock 15, 21, 26	110191	Washer, Lock 29	122987	Spacer 31
49056	Screw, 10-32 x 7/8 Hex 12, 14	110435	Nut, 4-40 Hex 15, 17	123539	Clamp, Cable 36
61085	Washer, Lock 11, 13	110437	Spring 15	123699	Screw, 6-40 Shoulder 35
70314	Washer, Flat 14, 37	110438	Spring 22	123706	Screw, 10-32 x 1/4 Flat 4, 23
71073	Washer, Flat 17	110664	Switch, SP-ST Toggle 21	124177	Washer, Lock 10, 19, 25
71858	Washer, Flat 17	110743	Washer, Lock 10, 12, 14, 17, 19, 25, 30, 31, 34	124396	Switch Assembly 6, 26, 30, 32
74100	Washer, Leather 15	111017	Screw, 6-40 x 5/16 Fil 3, 6, 11, 13, 21, 27, 30, 31, 36	124611	Screw, 8-32 x 3/8 Hex 21
74479	Bushing 29	111284	Block, Terminal 30	124612	Screw, 8-32 x 1/2 Hex 31
74805	Screw, 10-32 x 3/4 Hex 36	111427	Washer, Flat 12, 14, 29	124741	Washer, Lock 11, 13
74807	Nut, 10-32 Shoulder Hex 10, 25	111516	Washer, Flat 15	124999	Switch, Sensitive 8, 11, 13, 15, 22, 28, 37
76081	Washer, Flat 10	111776	Connector, 4 Pt Plug 28	125011	Washer, Flat 28, 31, 34, 37
76379	Spring 8	111777	Connector, 4 Pt Receptacle 27, 28	125015	Washer, Flat 6, 8, 11, 13, 17, 18, 20, 21, 24, 25, 28, 29, 30, 31,
76461	Washer, Flat 11, 13, 17, 29, 30	112080	Washer, Flat 29	125205	Screw, 6-40 x 7/16 Fil 9, 24
76953	Washer, Flat 11, 13	112626	Nut, 10-32 Hex 3, 12, 14, 15, 16, 23, 32, 36	125218	Nut, 1/4-32 Hex 11, 13
78596	Washer, Friction 10	112663	Screw, 6-40 Shoulder 35	125224	Nut, 1/4-32 Hex 4, 6, 11, 13
80342	Screw, 6-40 x 23/64 Hex 29	113850	Washer, Flat 10	125229	Nut, 6-32 Hex 37
82474	Terminal 3, 6, 7, 11, 13, 26, 30, 36, 38	114125	Screw, 6-40 x 3/8 Hex 10, 19, 25	125231	Nut, 10-32 Hex 11, 13
82725	Spring 10, 25	114347	Post 36	125250	Spring 15
82832	Washer, Lock 17	114466	Connector, 3 Pt Receptacle 3, 6, 26	129919	Fuse, 4 Amp SL-BL 6, 31
83877	Spring 8, 28	114467	Connector, 3 Pt Plug 3, 6, 26	130499	Bearing, Ball 10, 18, 19
		115130	Spacer, .062" Thk 37	130892	Washer, Felt 10, 19, 25
		115594	Nut, Speed 31	131097	Terminal, 21/32" Lg 38
		116669	Lens, Red 26	131099	Terminal, 5/8" Lg 27
				136148	Modification Kit 6
				138538	Fuse, 2 Amp SL-BL 7, 21
				142269	Fuse, 3 Amp SL-BL 36
				142612**	Guide 28
				142615	Guide, Tape 28

**Refer to page 1 for finish suffix

NUMERICAL INDEX (Continued)

Part Number	Description and Page Number	Part Number	Description and Page Number	Part Number	Description and Page Number
142622	Reel, Tape 28	151632	Screw, 6-40 x 3/8 Hex 9, 15 to 18, 20, 21, 24, 25, 27, 34, 36	155753	Sleeve, 1/8 ID x 1/2" Lg Insulating 7, 8, 22, 30, 31, 38, 39
142623	Reel, Tape 28	151634	Bearing, Ball 12, 14	155754	Sleeve, 1/16 ID x 1/2" Lg Insulating 7, 21, 26, 38
142624	Roller 28	151637	Screw, 4-40 x 1/4 Fil 3, 6, 36	155755	Sleeve, 11/64 ID x 5/8" Lg Insulating 6, 32, 36, 37
142625	Shaft 28	151657	Screw, 6-40 x 1/4 Fil 19, 27, 28, 30	155861	Washer, Lock 29
142626	Bracket 28	151658	Screw, 6-40 x 5/16 Fil 6, 18, 19, 30	155954	Switch, Sensitive 27
142636	Spacer, 1.078" Thk 28	151659	Screw, 6-40 x 1/2 Fil 12, 14	156057	Washer, Flat 19
142637	Spacer, 1.203" Thk 28	151660	Screw, 6-40 x 7/8 Fil 21	156226	Hub 5, 9, 24, 37
142648**	Retainer 28	151685	Screw, 4-40 x 5/16 Fil 28, 30	156334	Stud 4, 6, 11
142665	Nut, 8-32 Spl 6, 21, 26, 36	151686	Screw, 4-40 x 3/8 Fil 31	156336	Post 4, 6
142709	Fuse, 2 Amp 27	151688	Screw, 4-40 x 5/8 Fil 29	156337	Washer, Flat 6, 21, 26, 36
144727	Keytop w/Shaft 27	151690	Screw, 10-32 x 5/16 Fil 10	156338	Post 4, 6
144729	Bracket 27	151691	Screw, 10-32 x 3/8 Fil 21	156339	Bushing 6, 21, 26, 36
144731	Plate, Switch Actuator 27	151692	Screw, 6-40 x 3/16 Fil 10, 26, 31	156340	Bracket 3
144732	Insulator 27	151693	Screw, 6-40 x 9/16 Fil 12, 14, 31	156342	Plate 8
144733	Spring, Compression 27	151694	Screw, 6-40 x 11/32 Fil 5, 37	156343	Hub 5
144734	Plate, Retaining 27	151712	Button, Pivot 36	156344	Bracket, Adjusting 4, 6, 11, 13
145320	Connector, 4 Pt Receptacle 39	151721	Screw, 6-40 x 3/4 Hex 8, 12, 25, 28	156398	Holder, Bearing 5
150089	Screw, 4-40 x 1/2 Fil 5, 10, 12, 14, 19, 25, 31	151722	Screw, 6-40 x 3/16 Hex 3, 6, 12, 14, 29, 30, 37	156400	Pulley, 28T 5, 12, 14, 19
150336	Bushing 28	151723	Screw, 10-32 x 3/8 Hex 4, 13, 14, 17, 21, 23, 26, 31	156444	Plate, Lower Base 6
150432	Washer, Flat 12	151724	Screw, 10-32 x 5/8 Hex 21, 26	156445	Bracket, Switch 6
150456	Spacer, .050" Thk 10, 25	151731	Screw, 4-40 x 7/8 Fil 19	156446	Handle 6
150652	Screw, 4-40 x 37/64 Fil 19	151732	Screw, 4-40 x 11/32 Fil 7, 10, 19, 25	156448	Bushing 8, 15, 17, 28
150711	Washer, Flat 29	151733	Screw, 4-40 x 9/16 Fil 10, 15, 17, 19	156449	Lever, Switch 8, 15, 17, 28
150802	Clamp 12, 14	151819	Jumper, 3" Black 6, 7, 21, 36	156451	Bushing 8, 15, 17, 28
150949	Plate, Serial 17	151827	Strap, Terminal 6, 21	156452	Lever, Tape 8, 28
150950	Plate, Code 17	151880	Nut, 4-40 Hex 10, 11, 13, 19, 28	156460	Container, Tape 4, 6 to 8
150966	Insulator, Terminal 3, 11, 13, 27	151922	Clamp 36	156470	Guide, Tape 8
150992	Stud 15, 17	151925	Clamp 36	156501	Screw, 6-40 x 7/32 Fil 28
151073	Screw, 4-40 x 5/32 Fil 37	152890	Washer, Flat 29	156588	Ring, Retaining 18
151152	Screw, 4-40 x 3/16 Hex 19, 33, 34	152893	Screw, 4-40 x 1/4 Hex 34	156656	Jumper, 2-3/4" Black 26
151229	Washer, Flat 17, 26	153442	Screw, 10-32 x 1/4 Hex 3, 15, 17, 31	156768	Screw, 8-32 x 9/32 Hex 21, 29
151245	Washer, Felt 22	153459	Block, Terminal 31	156769	Plate, Teletype Identification 17
151335	Stud 3, 6, 11, 13, 21, 27, 30, 31, 36	153484	Screw, 6-32 Spl 31	156807	Disk 18
151346	Screw, 6-40 x 3/8 Fil 5, 9, 12, 14, 18, 19, 24, 37	153537	Screw, 6-40 x 9/32 Hex 29	156808	Disk 18
151411	Block, Terminal 3, 6, 21, 31	153538	Screw, 6-40 x 7/16 Hex 11, 13, 15, 17, 37	156861	Ring, Retaining 5, 9, 24
151412	Insulator 3, 6, 21, 31	153539	Screw, 6-40 x 11/16 Hex 8, 15, 17, 28	156864	Pulley, 16T 5
151415	Block, Terminal 3, 11, 13, 27	153817	Screw, 4-40 x 3/8 Hex 11, 13	156866	Belt, 55T 5, 9, 24
151416	Nut, 6-40 Hex 3, 6, 11, 13, 21, 27, 31, 36	153819	Washer, Lock 17, 26, 27	156879	Plate, Upper Base 32
151442	Screw, 6-40 x 1/2 Hex 6, 10, 12, 14, 18, 21, 24, 37	153839	Screw, 6-40 x 5/8 Hex 29	156887	Screw, 10-32 x 9/16 Hex 4, 5, 6, 9, 21, 32, 36
151453	Nut, 10-32 Hex 26	153841	Screw, 6-40 x 9/16 Hex 30	156898	Cable w/Terminals 3
151540	Lampholder 6	154076	Plate, Nut 20	156904	Guard 5
151556	Knob w/Set Screw 23	154406	Block, Terminal 30	156936	Screw, 1/4-32 x 5/16 Hex 4, 6, 11, 13
151562	Lamp, 115 V Incandescent 6	154437	Insulator, Terminal 31	156949	Gear, 36T 9, 24
151572	Washer, Lock 20, 26	154438	Insulator, Terminal 31	156950	Shaft w/Bearing 10
151606	Screw, 10-32 x 1/4 Hex 6, 7, 18, 26, 27, 30	154446	Cover 31	156951	Link 10
151610	Washer, Flat 8, 9, 12, 14, 15, 21, 24	154697	Grommet, Rubber 36	156952	Lever, Guide 10, 25
151618	Screw, 6-40 x 7/16 Fil 19	155023	Switch, DP-DT Toggle 39	156953	Hub, Sprocket 10
151626	Terminal 3, 6, 7, 8, 11, 13, 17, 21, 22, 26, 27, 29 to 32, 36 to 39	155750	Sleeve, 3/32 ID x 1/2" Lg Insulating 3, 7, 11, 13, 38, 39	156954	Stud 10, 25
151630	Screw, 6-40 x 1/4 Hex 3, 5, 6 to 11, 13, 14, 15, 17, 18, 21, 23 to 28, 30, 32, 33, 34, 36, 37	155751	Sleeve, 1/8 ID x 1" Lg Insulating 3, 8, 11, 28	156955	Pulley, 24T 10
151631	Screw, 6-40 x 5/16 Hex 4, 6, 7 to 9, 11 to 14, 16, 17, 18, 20, 21, 29, 36, 37	155752	Sleeve, 5/64 ID x 1/2" Lg Insulating 7, 26, 38	156956	Retainer, Belt 10
				156958	Pulley, 21T 9
				156959	Bushing 10
				156960	Screw, 6-40 Shoulder 10
				156961	Screw, 6-40 Shoulder 10
				156962	Ring, Retaining 10, 25
				156964	Gear, 9T 9, 24
				156965	Frame, Gear Shift 9
				156966	Plate, Base 3 to 5
				156967	Shaft, Drive 9

**Refer to page 1 for finish suffix

NUMERICAL INDEX (Continued)

Part Number	Description and Page Number	Part Number	Description and Page Number	Part Number	Description and Page Number
156968	Plate, Guide 9	161505	Stud 11, 13, 17	161801	Bracket, Mounting 31
156971	Screw, 2-56 x 3/4 Fil 8, 28	161506	Shaft 12	161803	Guide, Tape 17
156972	Cable Assembly 8	161507	Plate, Bearing Mounting 12	161805	Guard, Gear 18
156974	Container Assembly, Tape 8	161508	Bar, Mounting Plate 12, 14	161806	Belt, 48T 19
156975	Bracket, Connector Mounting 3	161509	Hub, Sprocket 12, 14	161807	Shift Assembly, Gear 19
156976	Connector, 32 Pt Plug 3, 38	161510	Pulley, 16T 12, 14	161809	Stud 18
156978	Cable Assembly 3	161511	Retainer, Belt 5, 12, 14, 19	161811	Gear Set, 60 WPM 19
156981	Gear, 44T 5	161512	Retainer 12	161812	Gear Set, 75 WPM 19
156982	Pinion, 9T 5	161516	Pan, Oil 11	161813	Gear Set, 100 WPM 19
156983	Gear, 47T 5	161519	Gear Set, 67 WPM 5	161815	Modification Kit 2, 20
156984	Pinion, 12T 5	161520	Belt, 64T 12, 14	161817	Connector, 2 Pt Plug 31
156985	Gear, 42T 5	161523	Panel 15	161818	Connector, 2 Pt Receptacle 38
156986	Pinion, 14T 5	161526	Connector, 14 Pt Receptacle 11, 13	161819	Guard, Gear 18
158163	Switch, Sensitive 17	161527	Container Assembly, Tape 2, 15	161821	Cable Assembly 17
158215	Plate, Nut 6, 34	161528	Cable Assembly 11, 13	161824	Stud 18, 19
158238	Plate 15	161529	Guide, Tape 15	161826	Plate 17
158239	Lever, Tape 15, 17, 37	161530	Gear Set, 60 WPM 12	161827	Modification Kit 17, 31
158250	Block, Terminal 36	161531	Gear, 44T 12	161873	Resistor, 5,000 Ohm 7
158252	Insulator, Terminal 36	161532	Pinion, 9T 12	161889	Cable Assembly 31
158289	Reel, Tape 8, 15, 17	161533	Gear Set, 75 WPM 12	161911	Knob, Black 36
158640	Motor, 115 V AC Shaded Pole 29	161534	Gear, 47T 12	161912	Switch, SP-ST 36
158712	Gear, 26T 9, 19	161535	Pinion, 12T 12	161914	Cable Assembly 31
158716	Gear, 39T 10, 19	161536	Gear Set, 100 WPM 12	161959	Plate, Mounting 31
158723	Roller 10, 19, 25	161537	Gear, 42T 12	161964	Clamp, Tube 7
158732	Gear, 24T & 18T 9, 19	161538	Pinion, 14T 12	162072	Capacitor 88 to 108 MFD 36
158733	Gear, 44T 10, 19, 25	161546	Mount, Vibration 11, 13	162075	Reel, Tape 8, 15, 17
158734	Gear, 47T 10, 19	161552	Screw, 10-32 Spl 11, 13	162077	Handle, Base 4
158736	Nut, 6-40 Cap 19	161654	Gear Set, 60 WPM 5	162079	Container Assembly, Tape 8
158740	Block 10, 19, 25	161655	Gear Set, 75 WPM 5	162181	Plate, Lower Base 7
158741	Bar 10, 19, 25	161656	Gear Set, 100 WPM 5	162182	Handle w/Strike 7
158745	Clamp, Bearing 5, 9, 18	161673	Post 11	162183	Bushing 7
158795	Plate 37	161674	Post 11	162185	Bracket, Switch 7, 32
158807	Screw, 3-48 x 11/64 Fil 17	161676	Hub, Gear 12, 14	162187	Bracket, Lamp Holder 7
158989	Capacitor, 20 MFD 32	161678	Modification Kit 2, 16	162213	Modification Kit 12
158990	Bracket, Mounting 32	161680	Modification Kit 12	162214	Pulley, 20T 12
159287	Retainer, Pinion 18	161682	Clip, Cover 30	162215	Hub 12
159341	Bearing, Ball 9, 18, 37	161683	Channel w/Rail 16	162216	Retainer, Belt 12
159377	Modification Kit 2, 5	161684	Channel, Right 16	162217	Modification Kit 12
159417	Modification Kit 9, 10	161685	Bracket, Switch 11, 13	162218	Pulley, 29T 5, 12
159433	Plate, Grease Retainer 9	161711	Block, Guide 16	162219	Pulley, 27T 12
159540	Post, Spring 8, 28	161716	Block, Support 16	162220	Hub 12
159541	Connector, 16 Pt Plug 6, 30, 38	161770	Bracket, Mounting 17	162221	Retainer, Belt 12
159542	Connector, 16 Pt Receptacle 6, 7, 38	161772	Bracket 18, 19	162222	Belt, 69T 12
159543	Washer, Flat 8, 28	161773	Container, Tape 17	162225	Bracket, Mounting 30
159551	Cable w/Terminals 3	161777	Stud, Mounting 20	162226	Bracket, Terminal Strip 30
159589	Bracket, Mounting 6, 7	161778	Stud, Mounting 20	162228	Insulator, Terminal 30
159592	Cable Assembly 6	161779	Shaft w/Bearing 18, 19	162230**	Cover, Service Assembly 30
159600	Shaft w/Bearing 5	161780	Retainer 18	162283	Plate, Lower Base 30
159603	Washer, Captive 6	161781	Hub 18	162284	Insulator, Terminal 30
159604	Screw, 10-32 x 1/2 Hex 6	161782	Gear, 90T 18	162285	Cable Assembly 30
159610	Mount, Vibration 6, 21, 26, 36	161783	Gear, 45T 18	162286	Cable, Rectifier 30
159611	Bell 30	161784	Gear, 18T 19	162287	Plate, Lower Base 30
159929	Bracket, Light Mounting 6	161785	Gear, 24T 19	162288	Bar, Cover 30
159931	Clamp 6	161786	Gear, 26T 19	162373	Cable Assembly 8
159932	Keeper 6	161787	Shaft w/Bearing 18, 19	162574	Cable Assembly, Control 7
159991	Plate, Clamp 10	161788	Hub 19	162653	Retainer 24, 25, 37
160307	Diode 7	161789	Pulley, 16T 19	162730	Screw, 1/4-20 x 7/16 Hex 17
160369	Switch, NO Pushbutton 39	161790	Gear, 44T 19	162846	Modification Kit 30
161103	Gear, 49T 5	161791	Gear, 47T 19	162900	Plate, Lower Base 26, 27
161104	Pinion, 11T 5	161792	Gear, 39T 19	162901	Plate, Upper Base 26, 27
161238	Connector, 36T Receptacle 17, 26, 27, 31, 38	161793	Block 19	162902	Bracket, Switch 26
161239	Connector, 36T Plug 7, 21, 26, 27, 31, 38	161794	Block, Slide 19	162903	Bracket, Connector 26
161301	Post 18	161795	Stud 19	162904	Post 26
161503	Base 11	161796	Stud 19	162905	Post 26
		161797	Plate, Index 19	162906	Stud 26
		161798	Guide w/Bracket 20	162920	Chute, Chad 34
		161800	Bracket 20	162957**	Winder Assembly, Tape 2, 29

**Refer to page 1 for finish suffix

NUMERICAL INDEX (Continued)

Part Number	Description and Page Number	Part Number	Description and Page Number	Part Number	Description and Page Number
162958	Switch, Mercury 29	173584	Modification Kit 12	176613	Grommet, Rubber 21
162978	Disk, Tape Reel 29	173713	Cable w/Terminals 32	177006	Cable Assembly 21
162980	Hub w/Balls 29	173820	Gear Set, 65 WPM 19	178306	Relay, Power 6
162983	Arm, Tape Tension 29	173821	Pinion, 20T 19	178426	Plate, Nut 11, 13, 17
162985	Arm, Tape Guide 29	173822	Gear, 49T 19	178427	Plate, Nut 11, 13, 17
162986	Cable 29	173827	Plate, Mounting 32	178696**	Cover, Tape Winder 29
163256	Modification Kit 9, 10	173974	Screw, 10-32 x 5/16 Hex 3, 6, 7	178706**	Bracket, Mounting 29
163260	Gear, 36T 9	174418	Detent, Left 33	178709	Bracket, Locking Cover 27
163261	Gear, 22T 9	174419	Detent, Right 33	178710	Spacer, Tape Arm 29
163262	Gear, 49T 10, 19, 25	174459	Modification Kit 2, 23	178713	Bracket, Switch 29
163263	Roller 10	174492	Container Assembly, Tape 2, 22	178714	Switch, Rocker Type 29
163264	Shaft, Gear Shift 9	176050	Container, Tape 22	178715	Stud, Tape 29
163265	Block 10	176056	Bail, Tape Sensing 22	178741	Shaft, Cross 14
163280	Bracket, Mounting 6	176057	Bail, Switch Actuating 22	178742	Shaft, Intermediate 14
163281	Bracket 6	176058	Reel, Tape 22	178743	Plate, Bearing Mounting 14
163328	Plate, Guide 9	176060	Spacer 22	178744	Bracket, Bearing Mounting 14
163446	Pinion, 22T 19	176062	Bracket, Front 21	178745	Base w/Fasteners 13
163447	Gear, 49T 19	176063	Bracket, Rear 21	178746	Pan, Oil 13
163448	Gear Set 19	176065	Bracket 24, 25	178747	Plate, Front 13
163449	Pinion, 27T 19	176066	Cylinder, Locking 23	178749	Post 13
163450	Gear, 40T 19	176068	Shaft 24	178750	Post 13
163451	Gear Set, 71 WPM 19	176069	Shaft 25	178751	Bushing 14
163587	Bracket, Mounting 17	176071	Gear, 52T 19, 25	178752	Stud, Motor Mounting 13
163674	Chute, Chad 34	176072	Gear, 35T 19, 24	178796	Gear, 14T 14
164272	Modification Kit 34	176073	Pulley, 21T 24	178797	Gear, 42T 14
164273	Chute, Chad 34	176074	Pulley, 24T 25	178798	Gear Set, 107 WPM 14
164275	Chute, Chad 34	176075	Belt, 40T 37	178799	Gear, 54T 14
164278	Chute, Chad 34	176076	Stud 25	178800	Gear, 53T 14
164279	Chute, Chad 33, 34	176077	Stud 25	178801	Gear Set 14
164305**	Plate 26	176078	Bracket, Guide 24, 25	178802	Gear, 33T 14
164337	Pinion, 9T 12	176079	Isolator, Vibration 21	178803	Gear, 49T 14
164338	Gear, 40T 12	176082	Plate, Lower Base 21	178804	Gear Set, 65 WPM 14
164339	Pinion, 10T 12	176085	Nut, 10-32 Self-Locking 21	178810	Gear, 30T 14
164340	Gear, 37T 12	176086	Bracket 21	178811	Gear, 49T 14
164341	Modification Kit 2, 33	176088	Plate, Upper Base 21	178813	Gear Set, 100 WPM 14
164343	Container, Chad 33	176090	Bracket 21	178814	Gear, 37T 14
164590	Connector, 24 Pt Plug 38	176092	Bracket 21	178815	Gear, 37T 14
164766	Bracket, Lamp Socket 26	176093	Plate 21	178837	Plate, Control 39
164767	Cable w/Terminal 26	176094	Guide, Tape 21	178838	Modification Kit 2, 39
164768**	Panel, Left 28	176095	Lamp, Red Tape Out 21, 36	178869	Shift Assembly, Gear 19
164769**	Panel, Right 28	176099	Gear, 22T & 18T 24	178870	Gear, 22T & 18T 9, 19
164770**	Plate, Left 28	176100	Modification Kit 2, 24, 25	178885	Plate, Index 19
164771**	Plate, Right 28	176112	Plate w/Spacer 23	178910	Spacer 10, 19
164772	Cable Assembly 28	176113	Plate, Top 23	179134	Bushing 21
164773**	Plate, Mounting 28	176114	Plate, Stop 23	179252	Modification Kit 34
164782	Pinion, 6T 35	176115	Block 23	179256	Chute, Chad 34
164781	Cable Assembly 26	176116	Bracket, Stop 23	179492	Modification Kit 2, 20
164783	Gear, 52T 35	176117	Bracket 21	179528**	Plate, Oil Pan 11
164784	Gear Set, 120 WPM 35	176118	Spring, Left Torsion 23	179657	Pulley, 28T 37
164873**	Container Assembly, Tape 2, 28	176119	Spring, Right Torsion 23	179962	Gear, 40T 10, 19
165082	Clamp, Cable 30	176120	Post 23	179963	Gear, 27T 9, 19
165083	Keeper, Clamp 30	176121	Slide 23	179965	Modification Kit 9, 10
170306	Modification Kit 34	176123	Cable Assembly 21	179969	Plate, Gear Shift Guide 9
171952	Connector, Green Shielding 11	176124	Cable Assembly 22	185684	Plate, Identification 31
171953	Connector, Orange Shielding 11	176287	Modification Kit 2, 20	192678	Shift Assembly, Gear 19
171972	Connector, Green Insulated 11	176288	Guide, Tape 20	192680	Plate, Index 19
171973	Connector, Black Insulated 11	176295	Gear Set, 107WPM 5	192684	Plate, Clamp 10
172964	Base 11, 33	176296	Pinion, 15T 5	192685	Frame, Gear Shift 9
172965	Pan, Oil 11	176297	Gear, 43T 5	192788	Gear, 47T 35
172967	Chute, Chad 33	176417	Ring, Retaining 37	192789	Pinion, 6T 35
172969	Bracket, Container 33	176419	Ring, Retaining 12, 14	192790	Gear, 49T 35
172973	Bracket, Mounting 30	176422	Bracket, Mounting 20	192791	Pinion, 5T 35
173007	Bracket, Connector Mounting 11, 13	176514	Container, Chad 33	192864	Reel, Tape 8
173023	Modification Kit 12	176536	Cable Assembly 11	192865	Container, Tape 8
173425	Relay, Motor Starting 36	176542	Modification Kit 2, 33	192867	Container Assembly, Tape 8
173484	Modification Kit 2, 32	176610	Lever 25	192868	Spacer 1.197" Lg 8
173583	Pulley, 37T Toothed 12	176612	Washer, Flat 21	193620	Gear Set, 53 WPM 35

NUMERICAL INDEX (Continued)

Part Number	Description and Page Number	Part Number	Description and Page Number	Part Number	Description and Page Number
193621	Gear Set, 66 WPM 35	195110	Plate, Lower Base 36, 37	304915	Connector, 2 Pt Receptacle 6
193628**	Bracket, Lamp Holder 27	195111	Plate, Upper Base 36, 37	304916	Connector, 2 Pt Plug 6
193629	Cable w/Terminals 27	195112	Bracket 36	304918	Plate, Identification 39
193630	Cable w/Terminals 27	195113	Cable Assembly 36	305575	Pinion, 51T 18
193631	Bracket 27	195114	Plate, Identification 36	305576	Gear, 85T 18
193632	Switch Assembly 27	195115	Shaft w/Bearing 37	305580	Bracket Assembly, Gear Shift 18, 19
193634	Bracket, Fuse 27	195116	Bracket 36	308195	Pinion, 10T 35
193635	Indicator, Neon 27	195117	Cable Assembly 36	308196	Gear, 41T 35
193636	Indicator, Neon 27	195118	Cable Assembly 37	308197	Gear Set, 60 WPM 35
193637	Insulator, Terminal 27	195119	Bracket 36	308204	Pinion, 15T 35
193641	Pinion, 6T 35	195120	Container, Tape 37	308205	Gear, 67T 35
193642	Gear, 40T 35	195121	Lever w/Hub 37	308206	Gear Set, 67 WPM 35
193643	Gear Set, 77.7 WPM 35	195122	Guide, Tape 37	310050	Bracket 21
193666**	Guard, Sprocket 35	195123	Handle w/Post 37	311272	Pinion, 14T 5
193667	Modification Kit 2, 35	195128	Brace 37	311273	Gear, 52T 5
193676	Gear, 42T 35	195139	Bracket Assembly, Intermediate Shaft 37	311283	Gear Set, 67 WPM 5
193677	Pinion, 8T 35	195219	Bracket 37	312475	Cable Assembly 39
193678	Gear Set, 100 WPM 35	195388	Modification Kit 2, 32	312476	Cable Assembly 39
193679	Gear, 39T 35	195399	Cable w/Terminals 32	315536	Modification Kit 19
193680	Pinion, 5T 35	195400	Pulley, 16T 37	315829	Guard, Gear 12, 14
193681	Gear Set, 67 WPM 35	195658	Guide, Assembly, Tape 8	317217	Clamp 12, 14
193705	Cable w/Terminals 27	197693	Shaft w/Bearing 12	317358	Plate 12, 14
193706	Jumper, 3" White-Orange 27	197699	Modification Kit 12	319259	Pinion, 12T 9
193707	Jumper, 3" White-Blue 27	197879	Guide, Tape 8	319260	Gear, 40T 9
193708	Jumper, 3" Black 27	197880	Bracket, Tape Guide 8	319262	Modification Kit 9, 10
193727	Plate, Upper Base 6, 7	199398	Insulator 31	319918	Pinion, 25T 19
193778	Cable Assembly 7	199812	Modification Kit 9, 10	319919	Gear, 51T 19
193779	Bracket, Fuse Mounting 7	199814	Plate, Guide 9	319920	Gear Set, 65 WPM 19
193780	Shield, Fuse 7	199894	Pinion, 13T 35	319921	Pinion, 28T 19
193783	Cable Assembly 27	199895	Gear, 68T 35	319922	Gear, 52T 19
193794**	Container Assembly, Tape 2, 28	199896	Gear Set, 100 WPM 35	319923	Gear Set, 71 WPM 19
193837	Guide, Tape 8	199908	Jumper, 3-1/2" White 6	319924	Pinion, 21T 19
194081	Guide, Tape 17	199909	Jumper, 6-7/8" Black 6	319925	Gear, 26T 19
194082	Guide w/Roller, Tape 17	199910	Insulator 6	319926	Gear Set, 107 WPM 19
194221	Cable Assembly 8	207223WU	Spacer, .937" Lg 8		
194862	Extension 34				

**Refer to page 1 for finish suffix

28 TRANSMITTER (LX) AND 28 TRANSMITTER DISTRIBUTOR (LXD) UNIT

PARTS

FIGURE	CONTENTS	PAGE	FIGURE	CONTENTS	PAGE
1	Front Plate Mechanism	2	14	Tape Guide Plate Mechanisms	15
2	Front Plate Mechanism	3	15	Tape Guide Plate Mechanisms	16
3	162490 Modification Kit to Provide Multiple Wire Output on Transmitter-Distributor	4	16	Cover and Top Plates	17
4	Front Plate Mechanism (For 6,7 and 8 Level Code Units)	5	17	174195 Modification Kit to Provide Start-Stop Contacts	18
5	Front Plate Mechanism (With Tape Feed Assurance Contact)	6	18	174211 Modification Kit to Provide Magnet Release Contacts	18
6	Center Plate and Timing Mechanism	7	19	Cable Components	19
7	Rear Plate Mechanism	8	20	197920, 198610, 199505 and 305008 Contact Box Assemblies with Gold Plated Contacts	20
8	Clutch Trip Magnet Mechanism	9	21	179603 Modification Kit to Add Tape Withhold Mechanism to Transmitter-Distributor	21
9	156648 and 162997 Contact Box Assemblies	10	22	Tape-out Mechanism for Mechanically Coupled Dual Transmitter Distributor	22
10	174420 Contact Box Assembly	11		Numerical Index	23
11	Main Shaft Mechanism - 1 Cycle	12			
12	Main Shaft Mechanism - 2 Cycle	13			
13	Tape Guide Plate Mechanisms	14			

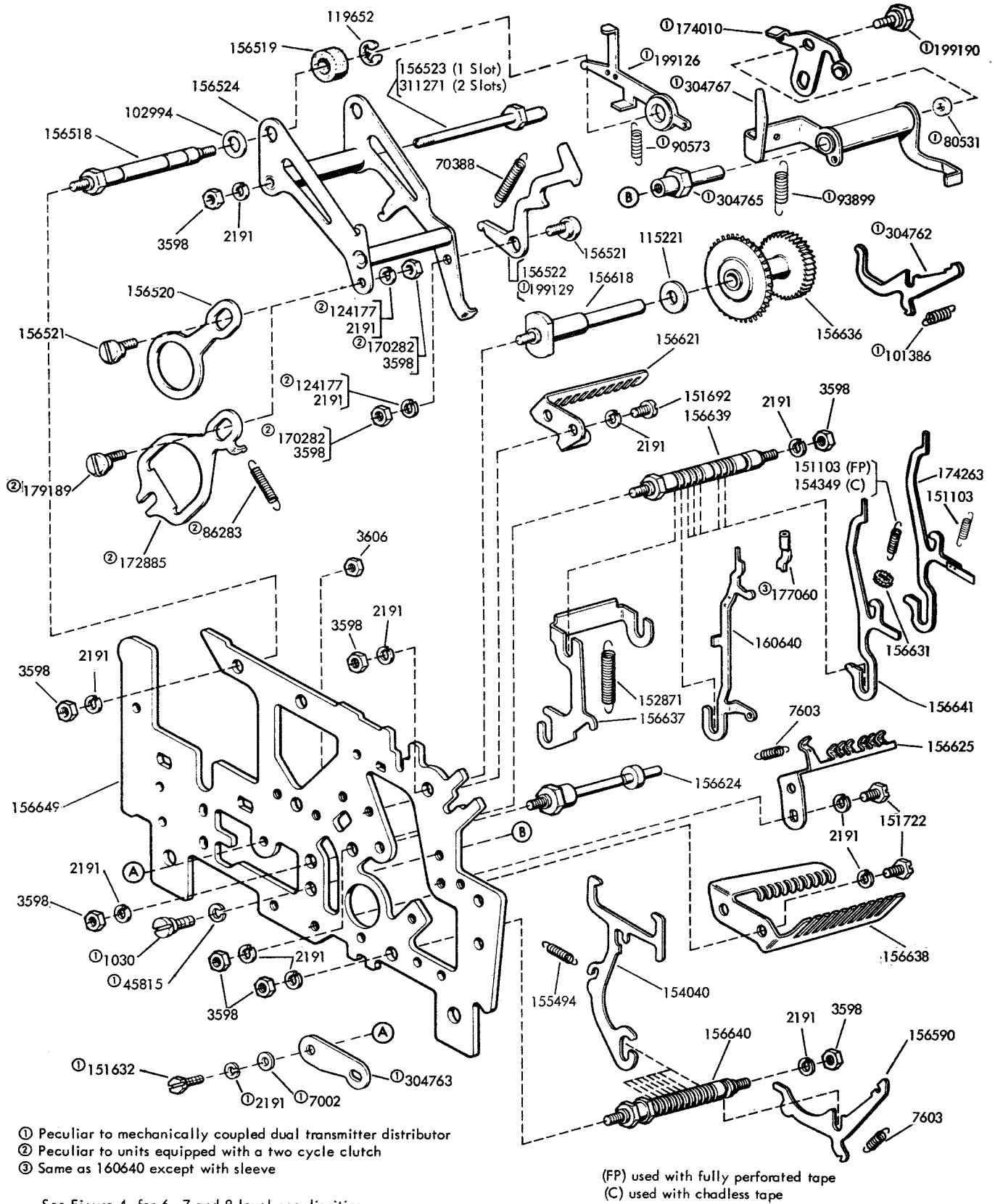
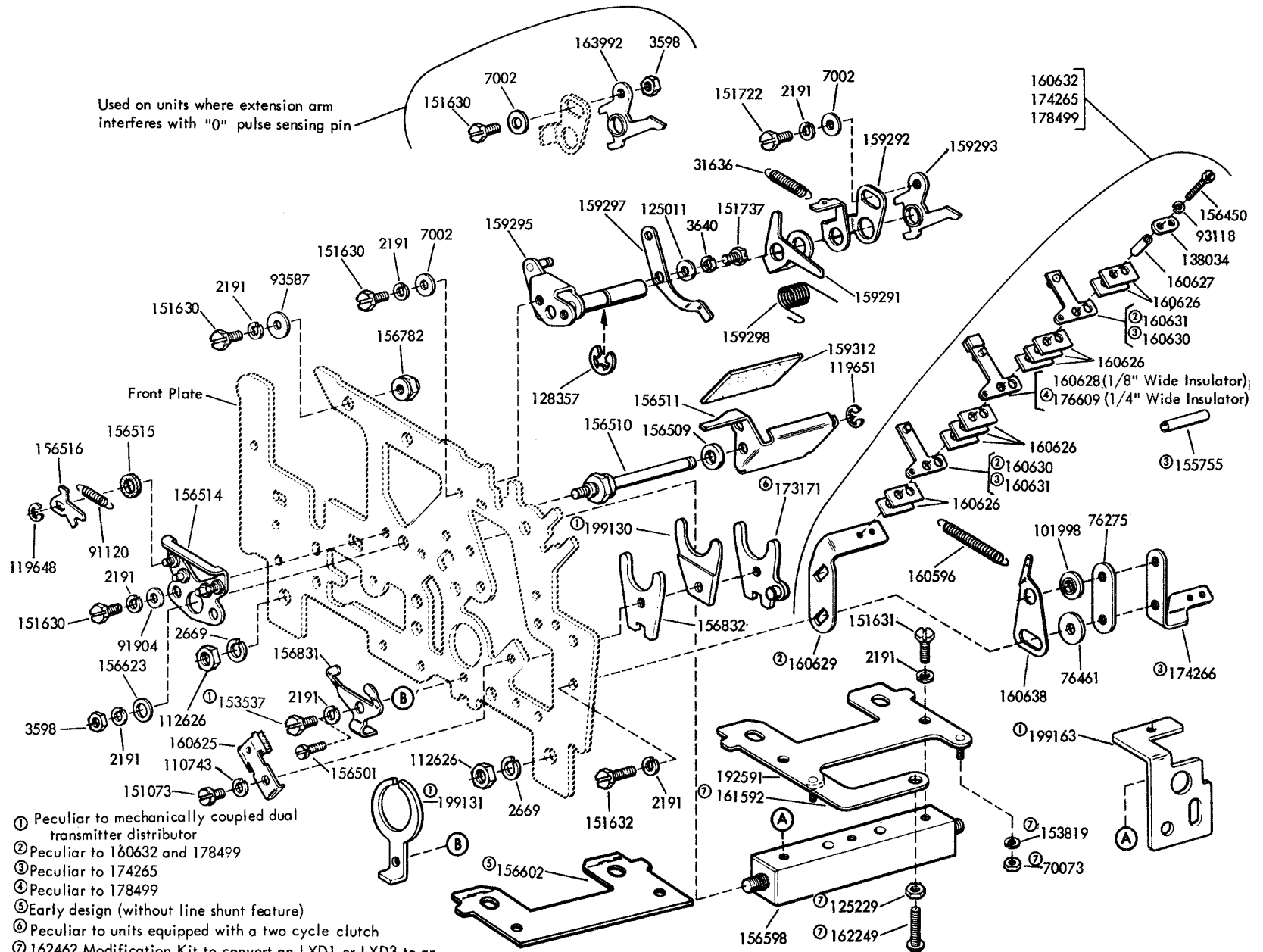


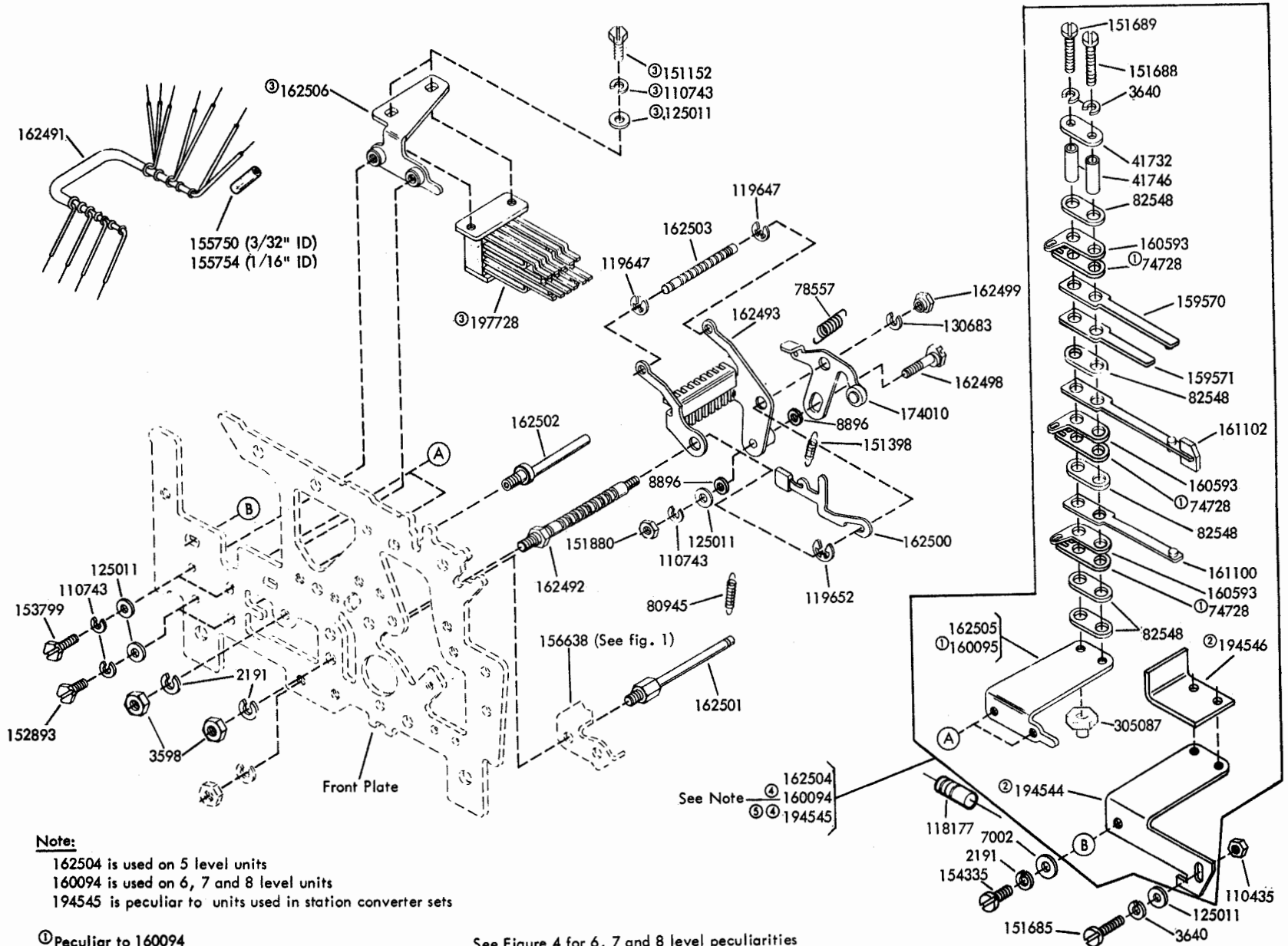
FIGURE 1. FRONT PLATE MECHANISM

FIGURE 2. FRONT PLATE MECHANISM



- ① Peculiar to mechanically coupled dual transmitter distributor
- ② Peculiar to 160632 and 178499
- ③ Peculiar to 174265
- ④ Peculiar to 178499
- ⑤ Early design (without line shunt feature)
- ⑥ Peculiar to units equipped with a two cycle clutch
- ⑦ 162462 Modification Kit to convert an LXD1 or LXD3 to an LXD4 transmitter distributor unit. Includes a 161591 cable. (Specification 58945)

FIGURE 3. 162490 MODIFICATION KIT TO PROVIDE MULTIPLE WIRE OUTPUT ON TRANSMITTER-DISTRIBUTOR



Note:

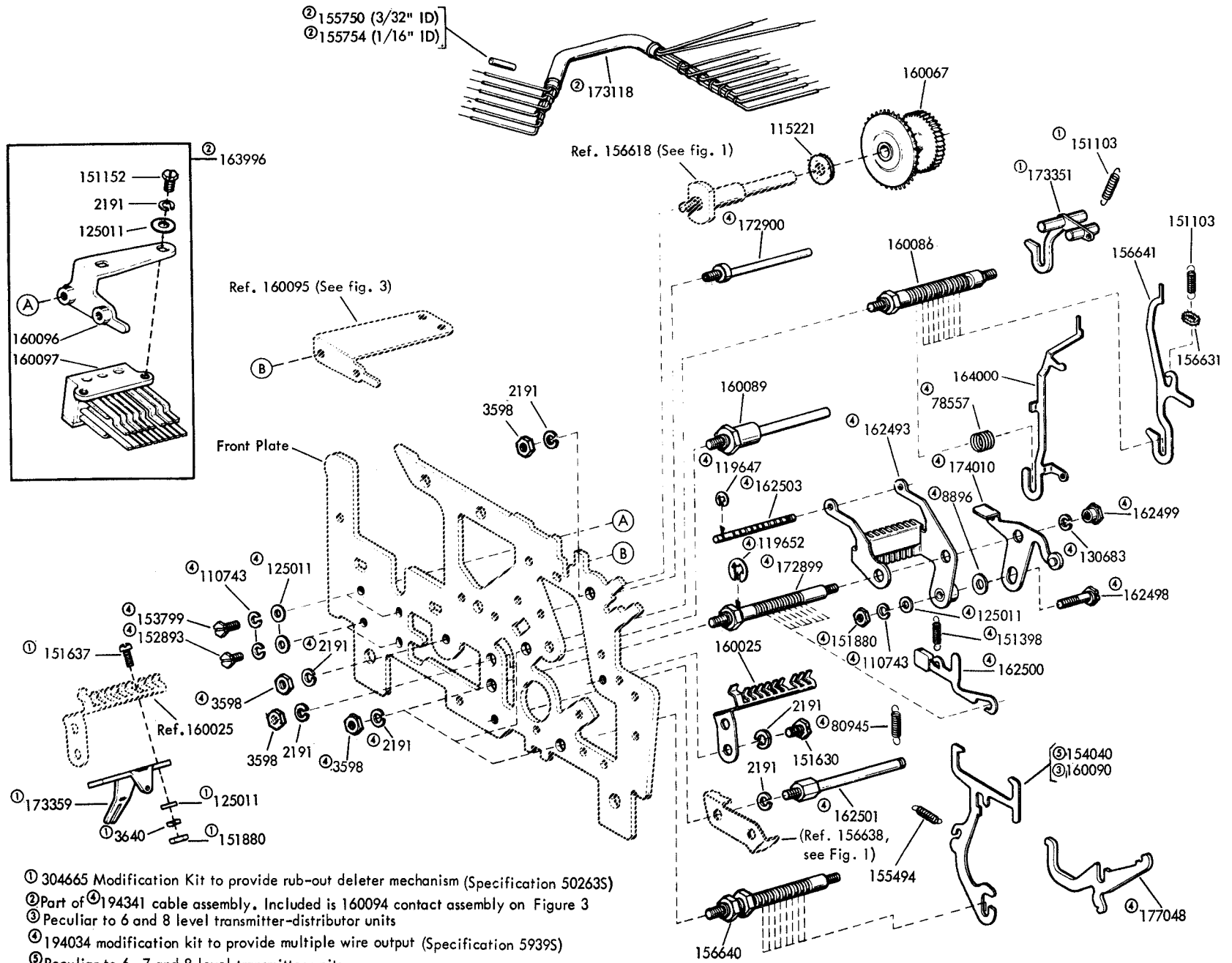
- 162504 is used on 5 level units
- 160094 is used on 6, 7 and 8 level units
- 194545 is peculiar to units used in station converter sets

- ① Peculiar to 160094
- ② Peculiar to 194545
- ③ 194344 Contact Assembly (5 Level)
- ④ Not part of 162490 modification kit
- ⑤ Part of 194341 cable assembly. See fig. 4

See Figure 4 for 6, 7 and 8 level peculiarities

Specification 5939S

FIGURE 4. FRONT PLATE MECHANISM (FOR 6, 7 AND 8 LEVEL CODE UNITS)



- ① 304665 Modification Kit to provide rub-out deleter mechanism (Specification 502635)
- ② Part of ①194341 cable assembly. Included is 160094 contact assembly on Figure 3
- ③ Peculiar to 6 and 8 level transmitter-distributor units
- ④ 194034 modification kit to provide multiple wire output (Specification 59395)
- ⑤ Peculiar to 6, 7 and 8 level transmitter units

FIGURE 5. FRONT PLATE MECHANISM (WITH TAPE FEED ASSURANCE CONTACT)

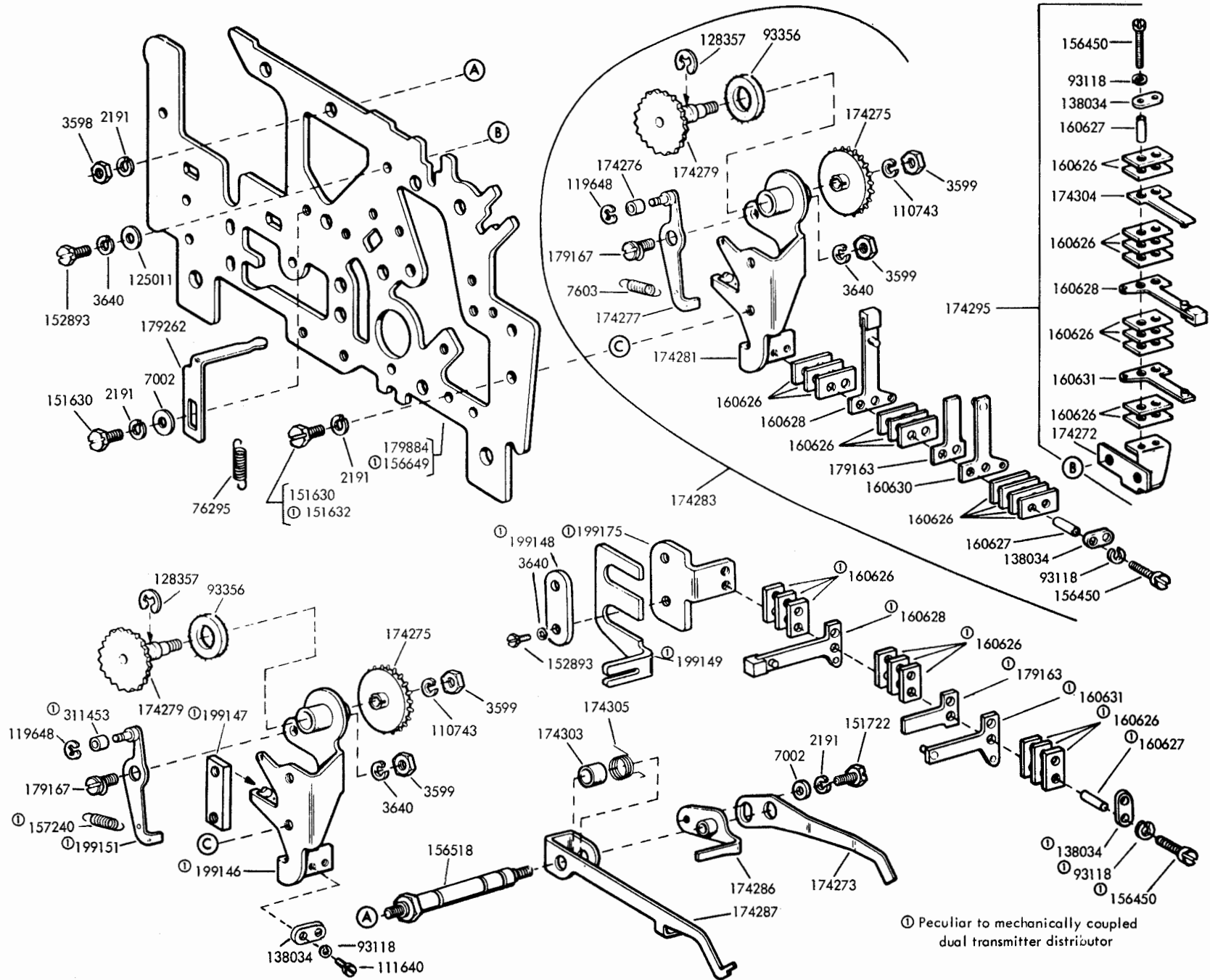
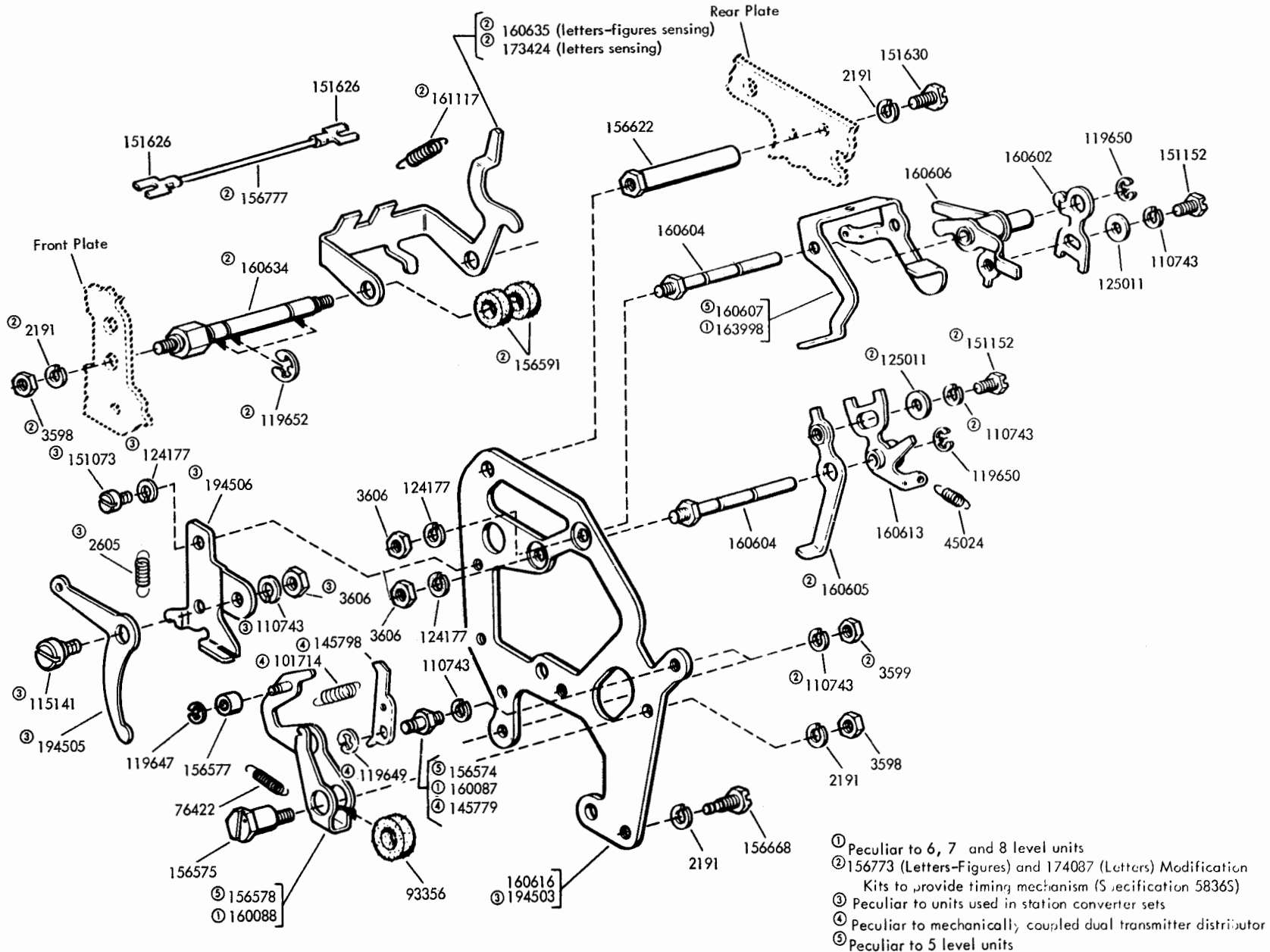


FIGURE 6. CENTER PLATE AND TIMING MECHANISMS



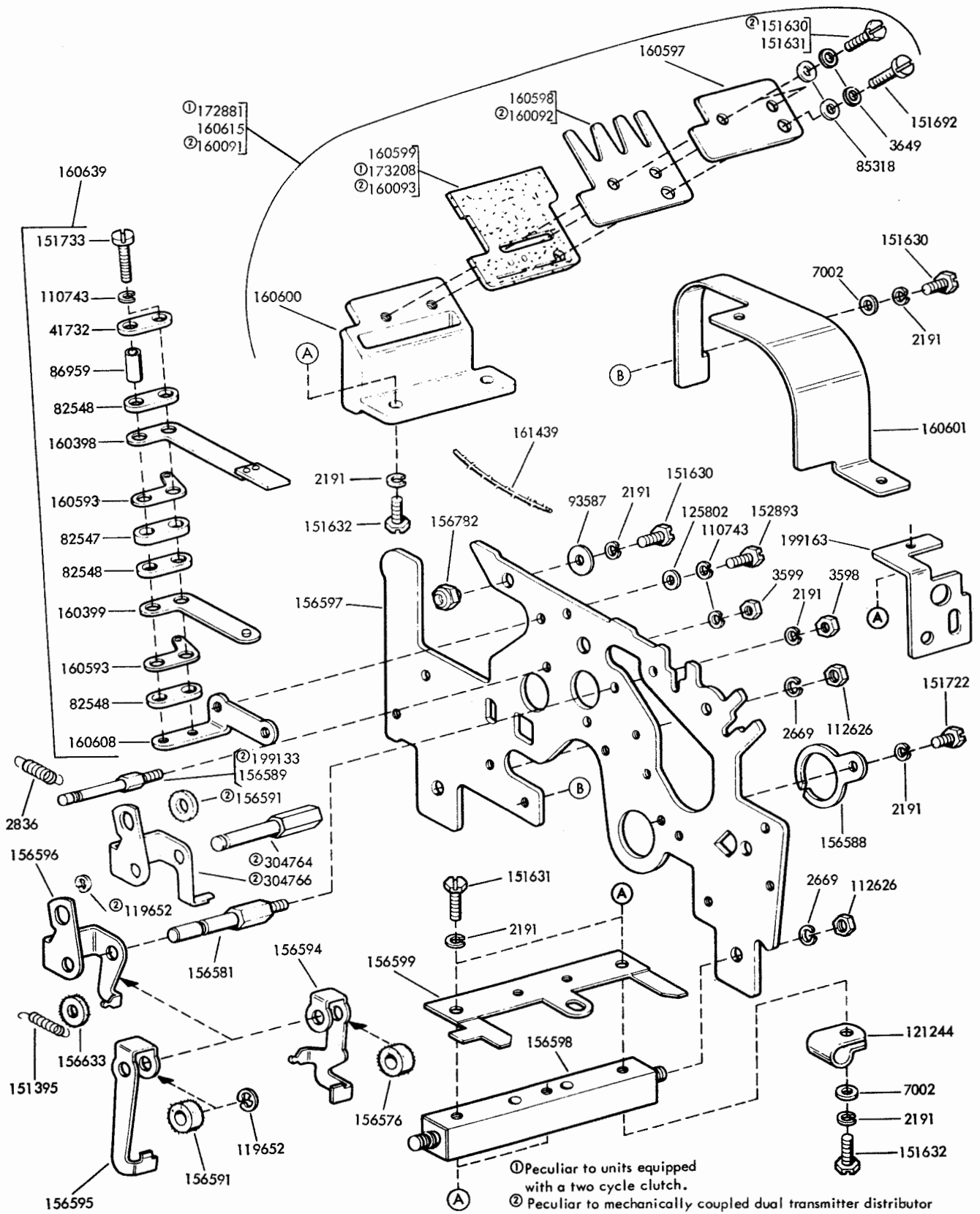
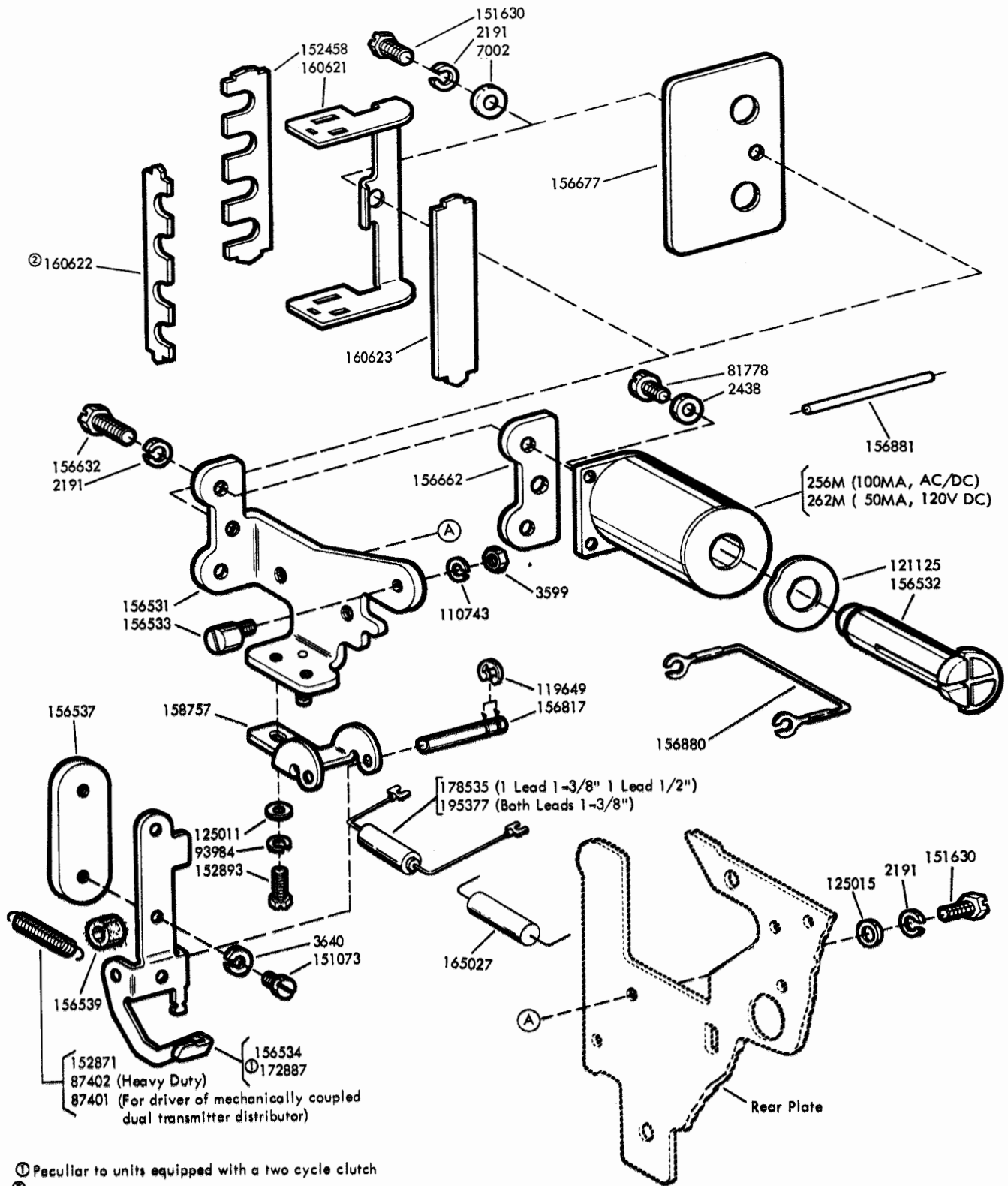
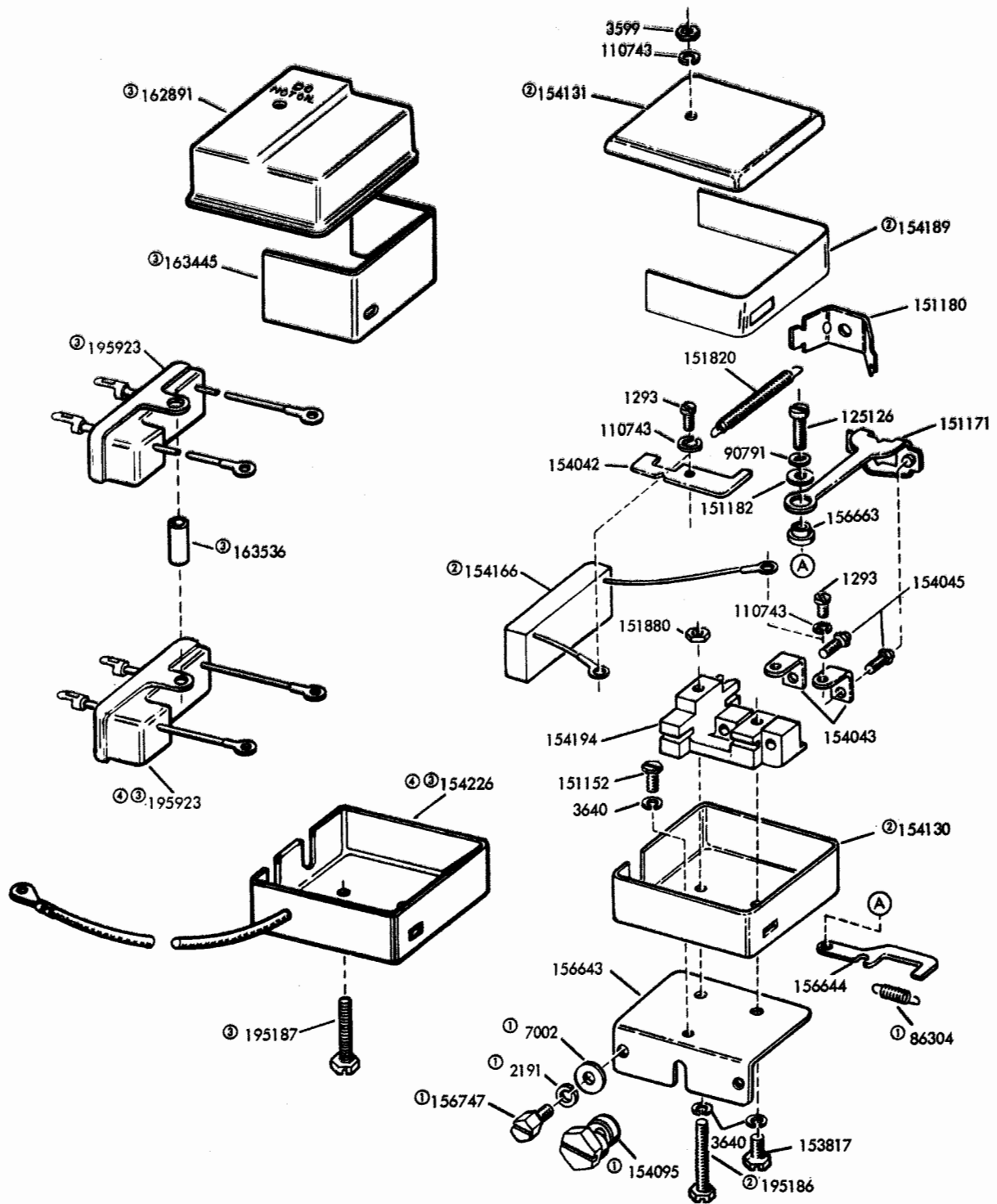


FIGURE 7. REAR PLATE MECHANISM



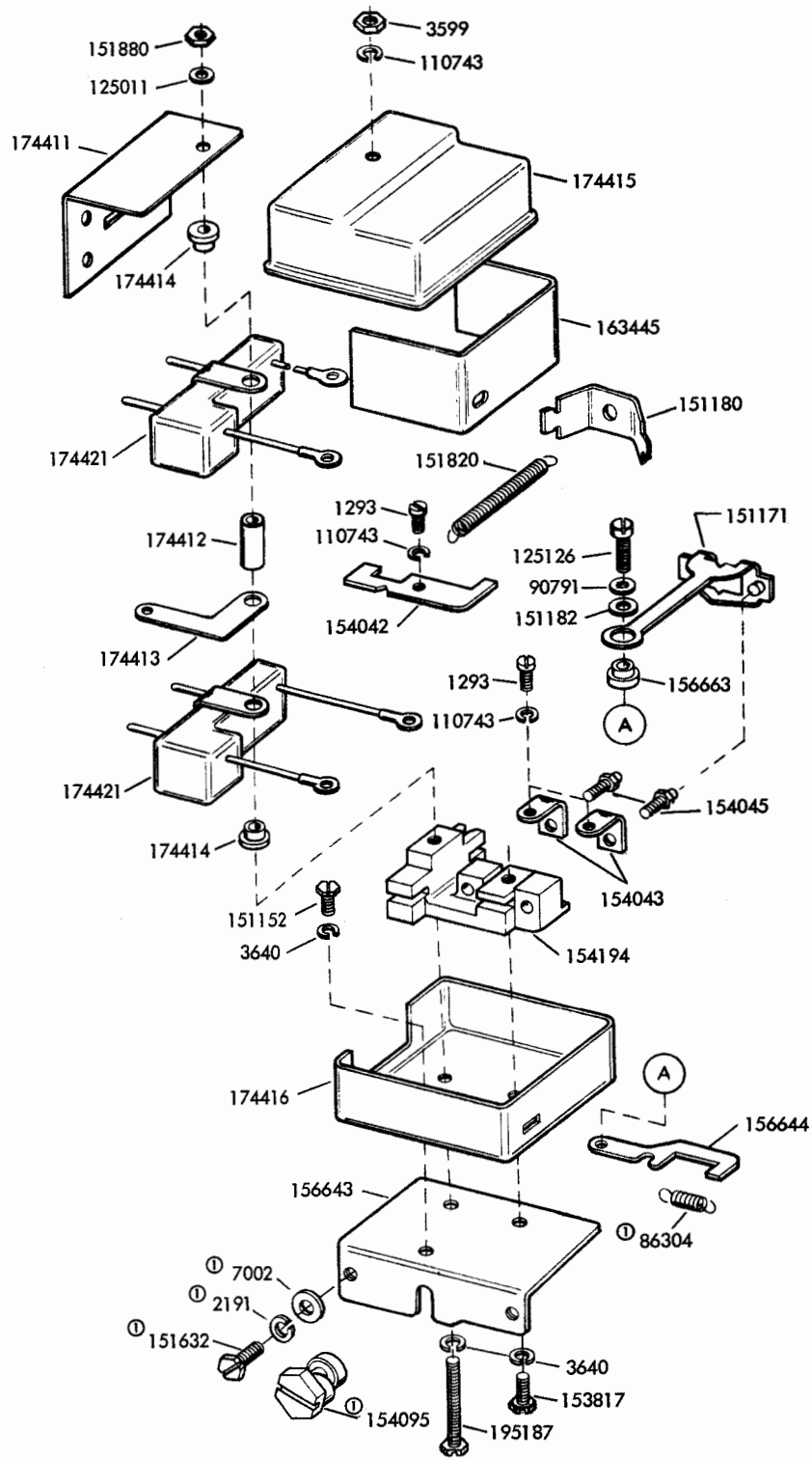
- ① Peculiar to units equipped with a two cycle clutch
- ② Not required if unit is equipped with new style magnet coil with insulated terminals.

FIGURE 8. CLUTCH TRIP MAGNET MECHANISM



- ① Not supplied with Contact Box
- ② Peculiar to 156648 (ARC suppression-neutral transmission)
- ③ Peculiar to 162997 (RF suppression-polar transmission)
- ④ 174491 Modification Kit to Provide R.F. Filter for Signal Generator Contacts. (Specification 500155)

FIGURE 9. 156648 AND 162997 CONTACT BOX ASSEMBLIES

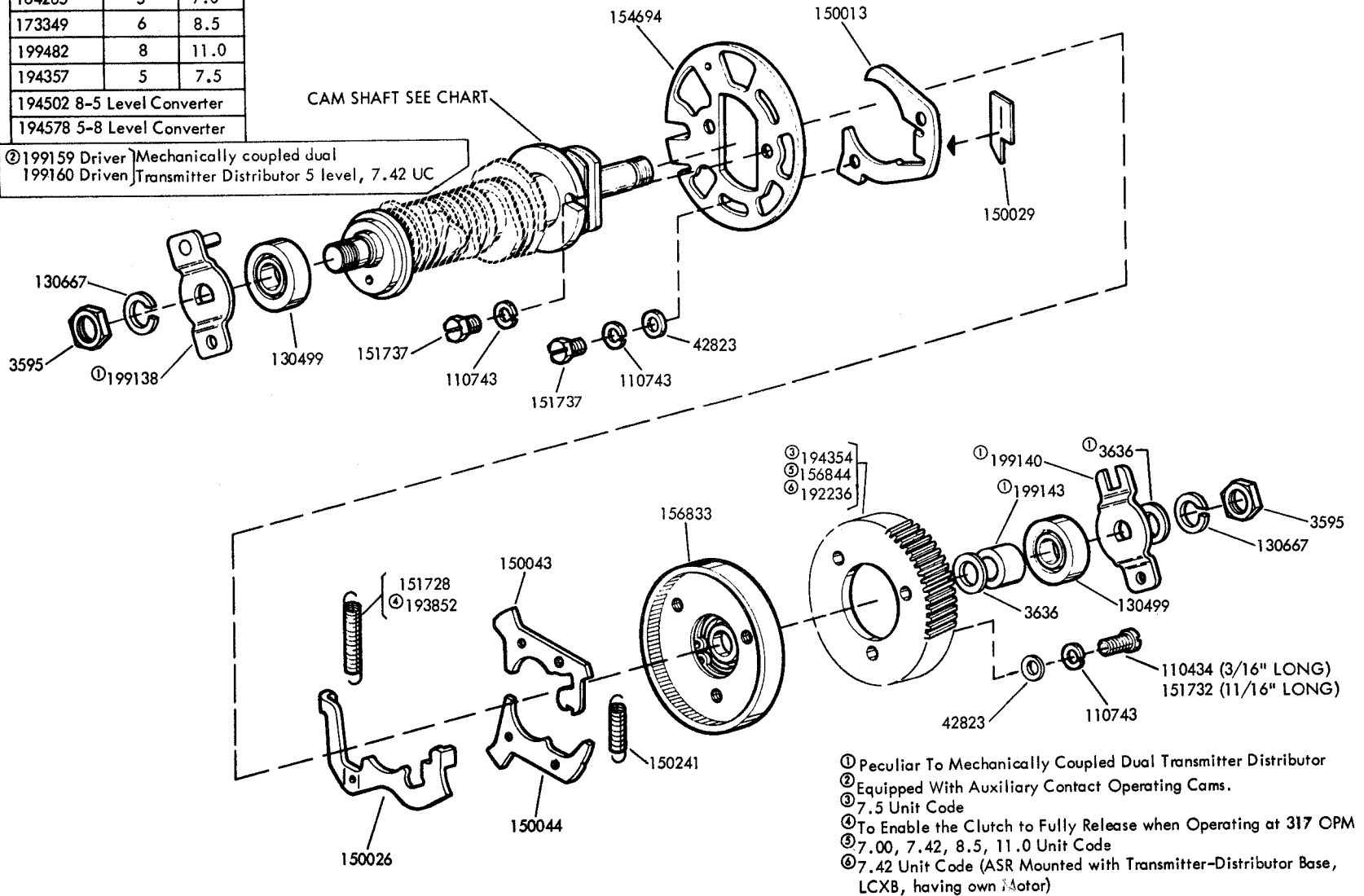


ⓐ Not Part of Contact Box Assembly

FIGURE 10. 174420 CONTACT BOX ASSEMBLY

CAMSHAFTS		
PART NO.	LEVEL	CODE
156836	5	7.42
160016	6	8.5
164285	5	7.0
173349	6	8.5
199482	8	11.0
194357	5	7.5
194502 8-5 Level Converter		
194578 5-8 Level Converter		

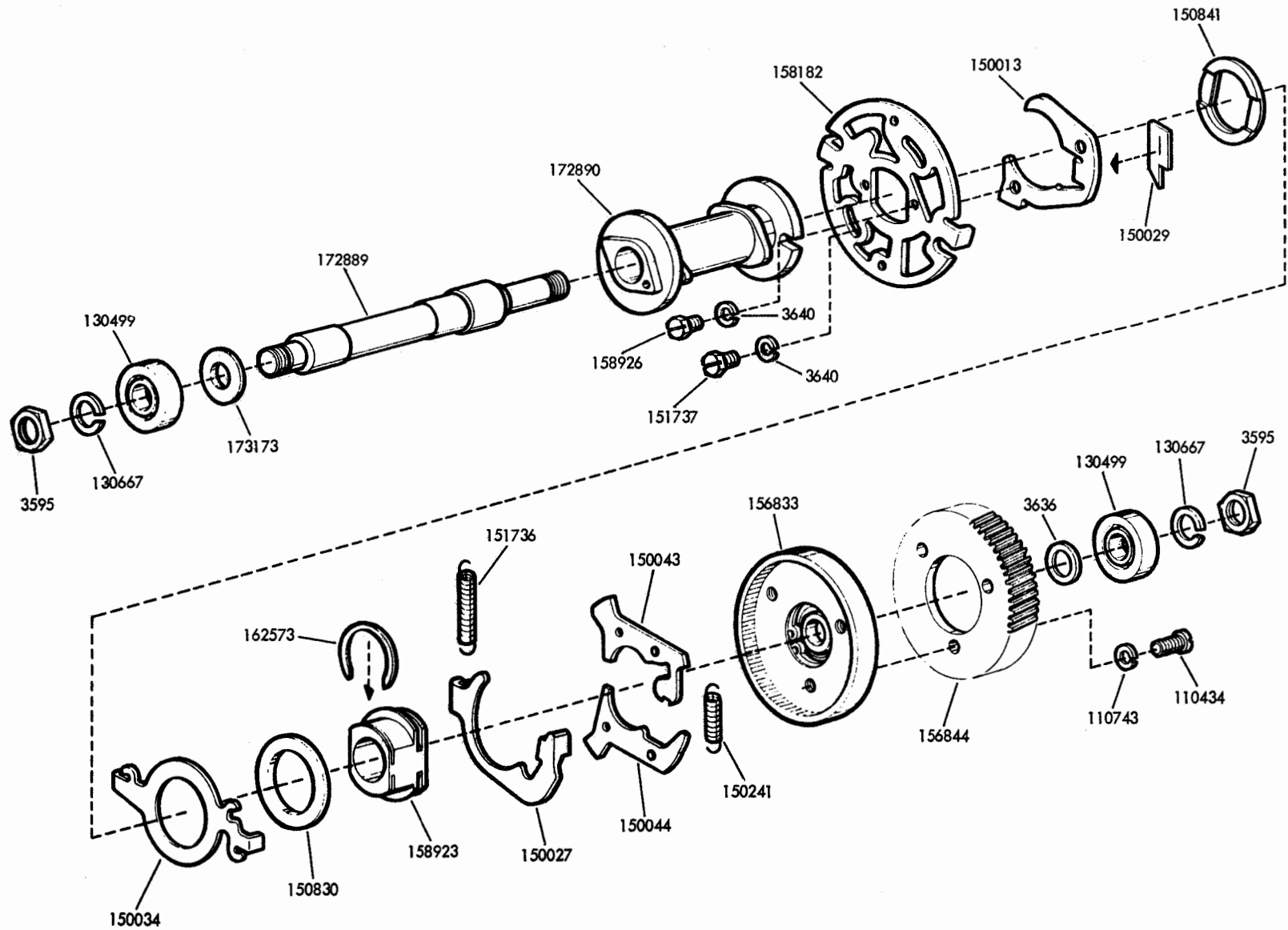
② 199159 Driver } Mechanically coupled dual
 199160 Driven } Transmitter Distributor 5 level, 7.42 UC



- ① Peculiar To Mechanically Coupled Dual Transmitter Distributor
- ② Equipped With Auxiliary Contact Operating Cams.
- ③ 7.5 Unit Code
- ④ To Enable the Clutch to Fully Release when Operating at 317 OPM
- ⑤ 7.00, 7.42, 8.5, 11.0 Unit Code
- ⑥ 7.42 Unit Code (ASR Mounted with Transmitter-Distributor Base, LCXB, having own Motor)

FIGURE 11. MAIN SHAFT MECHANISM-1 CYCLE

FIGURE 12. MAIN SHAFT MECHANISM-2 CYCLE



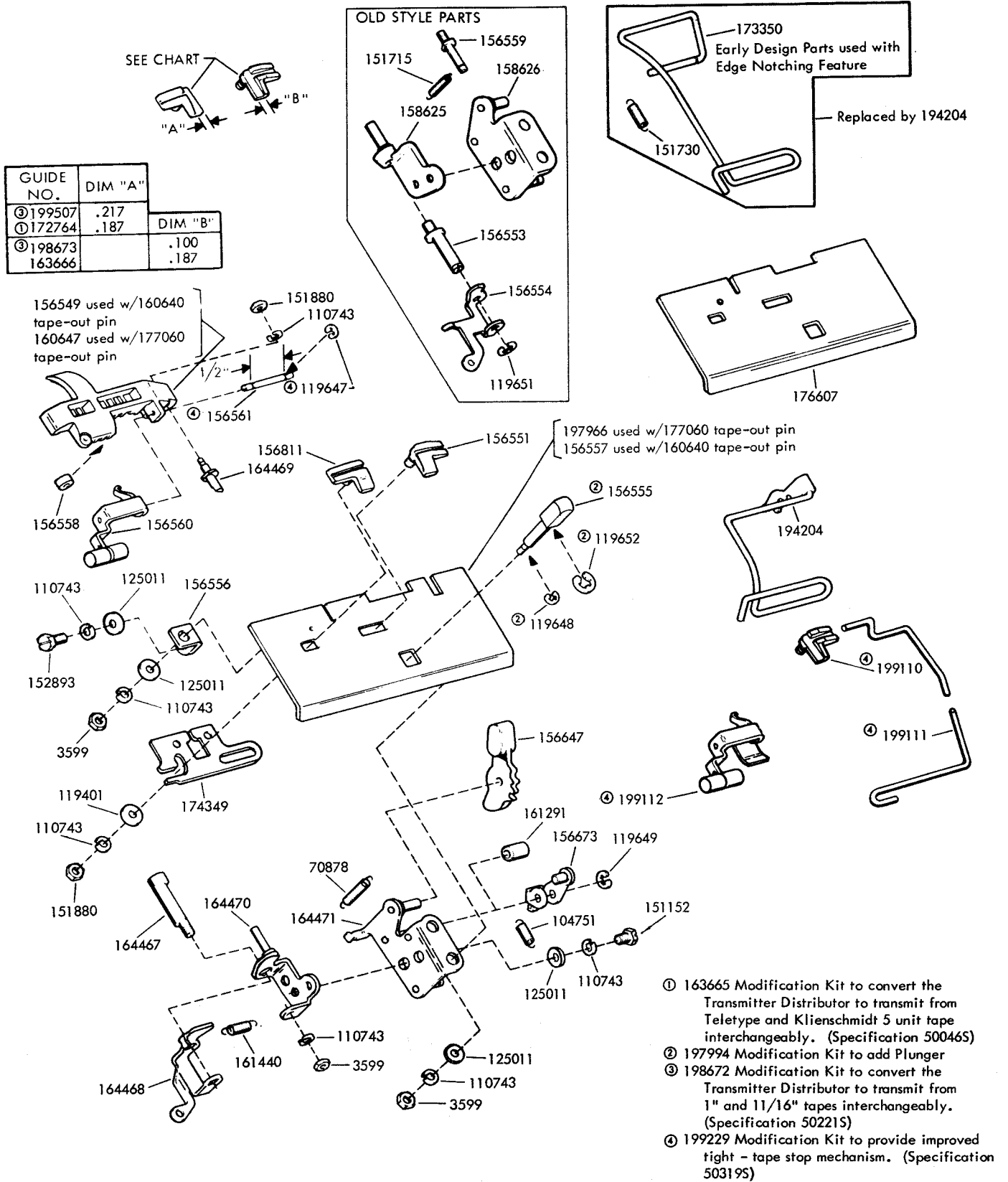
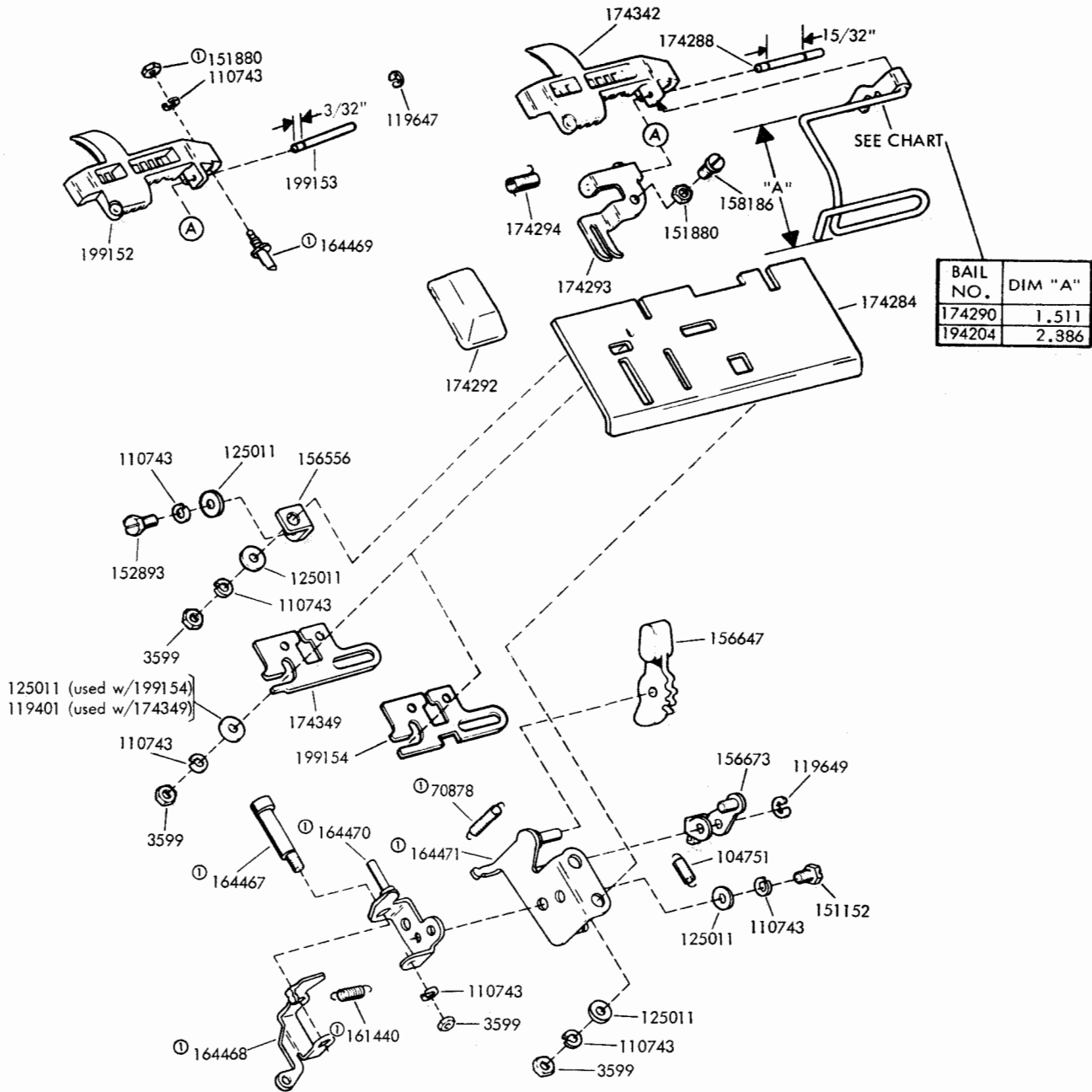


FIGURE 13. TAPE GUIDE PLATE MECHANISMS



① 164472 Modification Kit to equip transmitter distributors with improved tape lid latch mechanism. (Specification 500455)

FIGURE 14. TAPE GUIDE PLATE MECHANISMS

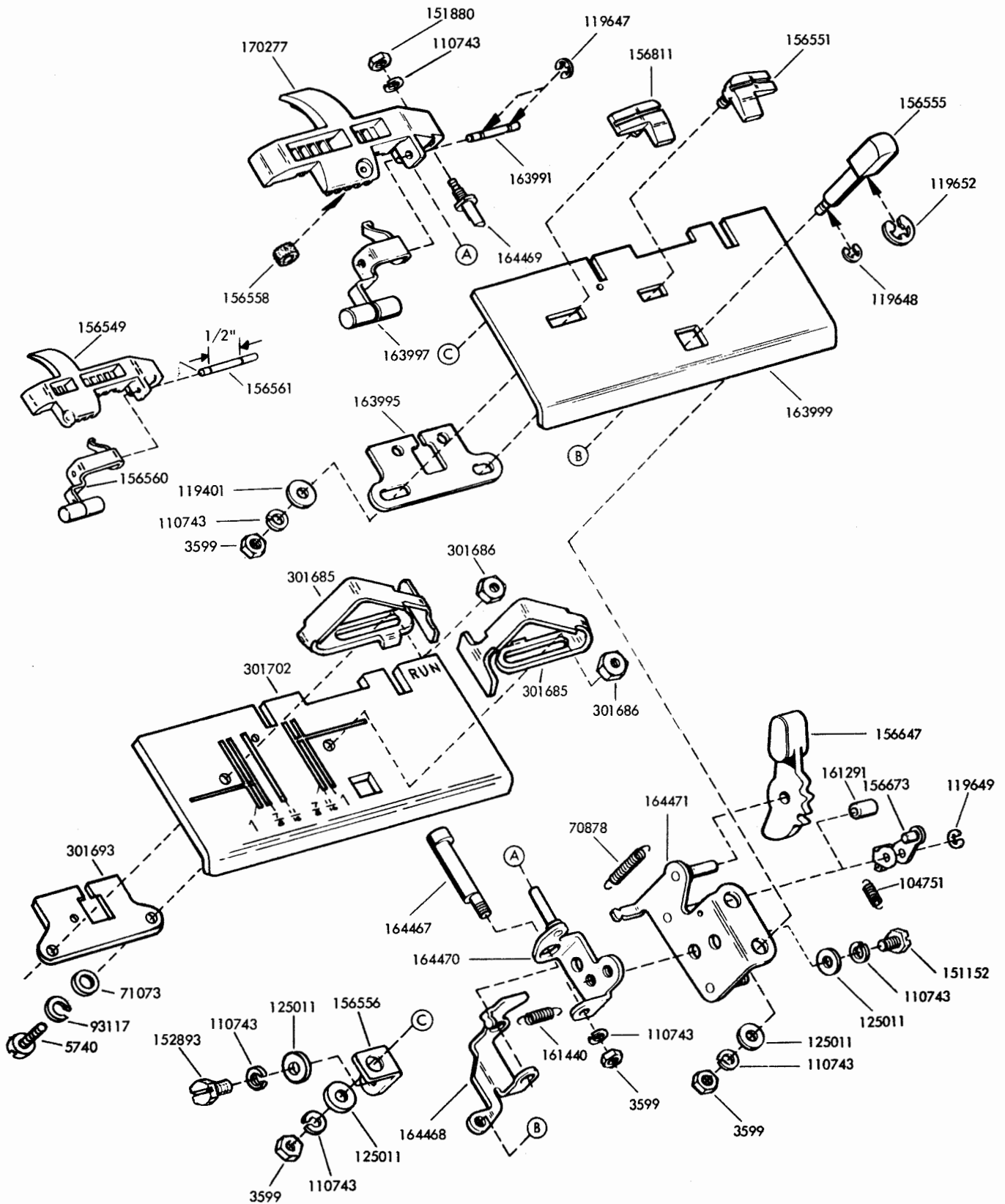
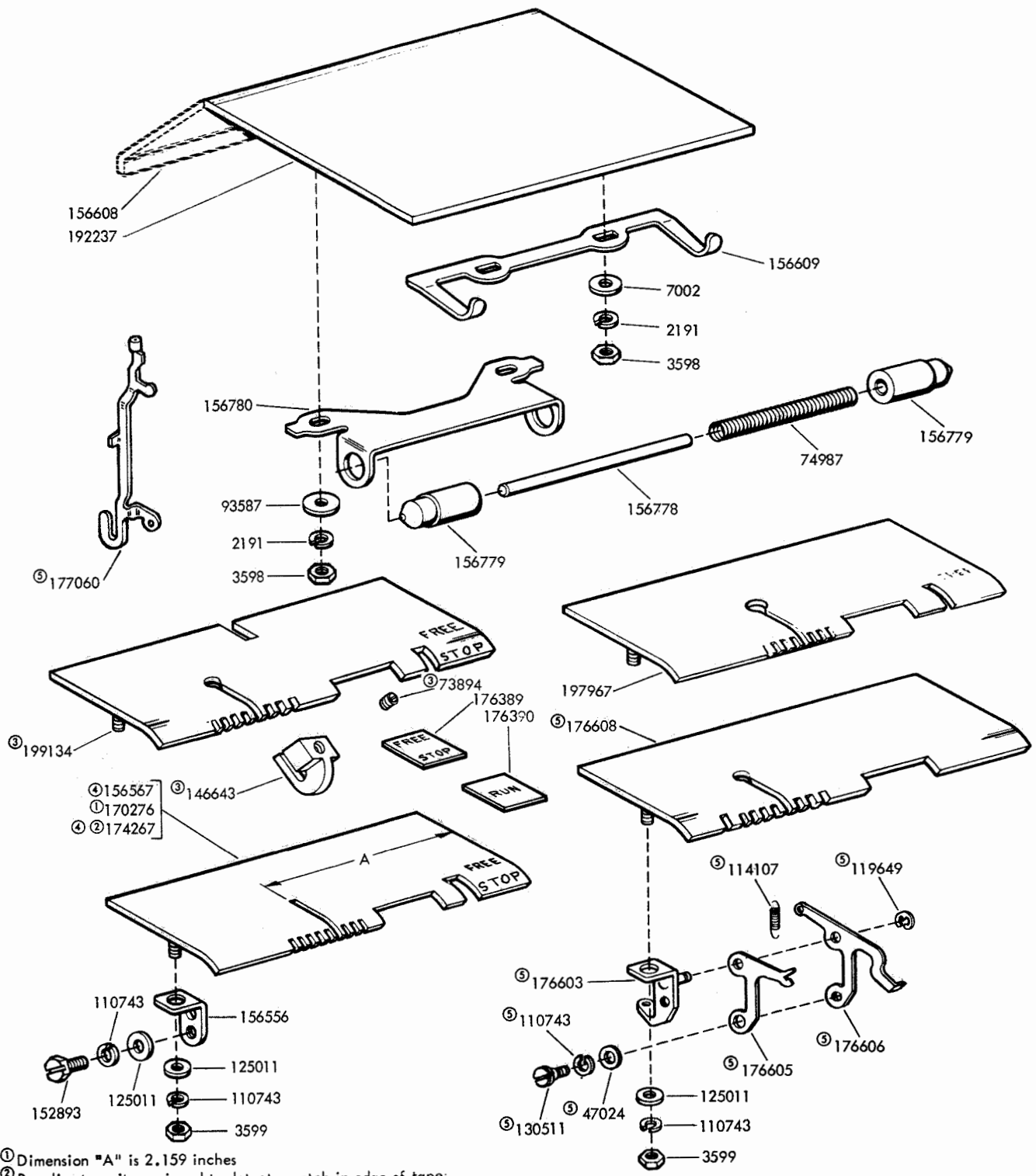


FIGURE 15. TAPE GUIDE PLATE MECHANISMS



- ① Dimension "A" is 2.159 inches
- ② Peculiar to units equipped to detect a notch in edge of tape
- ③ Peculiar to mechanically coupled dual transmitter distributor
- ④ Dimension "A" is 2.359 inches
- ⑤ 174309 Modification Kit to convert an LXD4 to an LXD15. Also includes 176607, 174349 and 160647 as shown on Figure 13. (Specification 500875)

FIGURE 16. COVER AND TOP PLATES

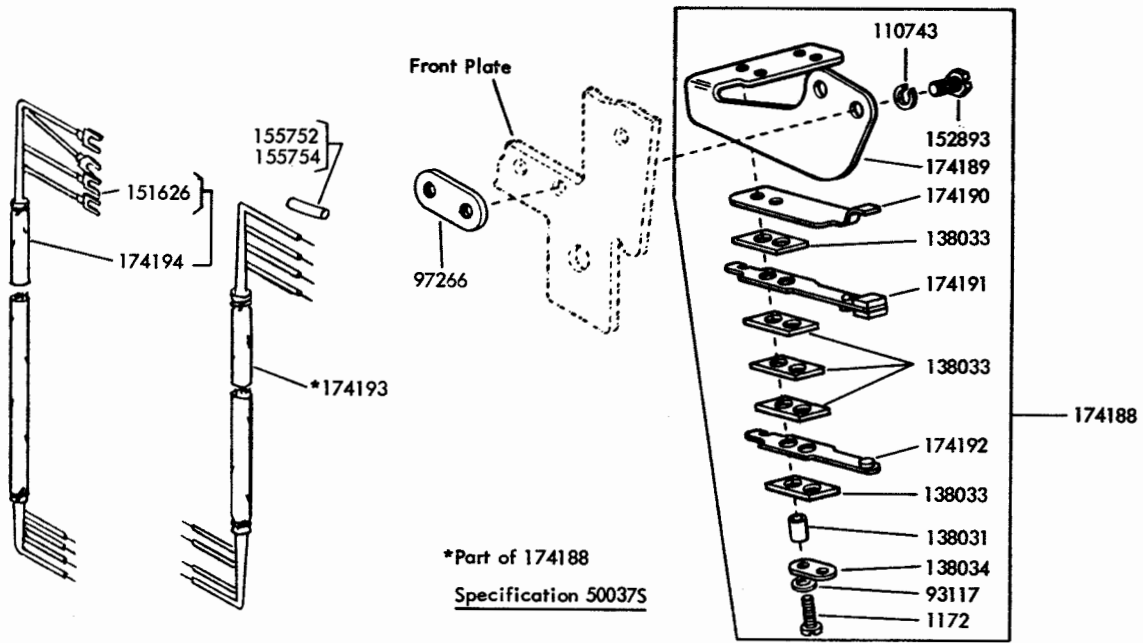


FIGURE 17. 174195 MODIFICATION KIT TO PROVIDE START-STOP CONTACTS

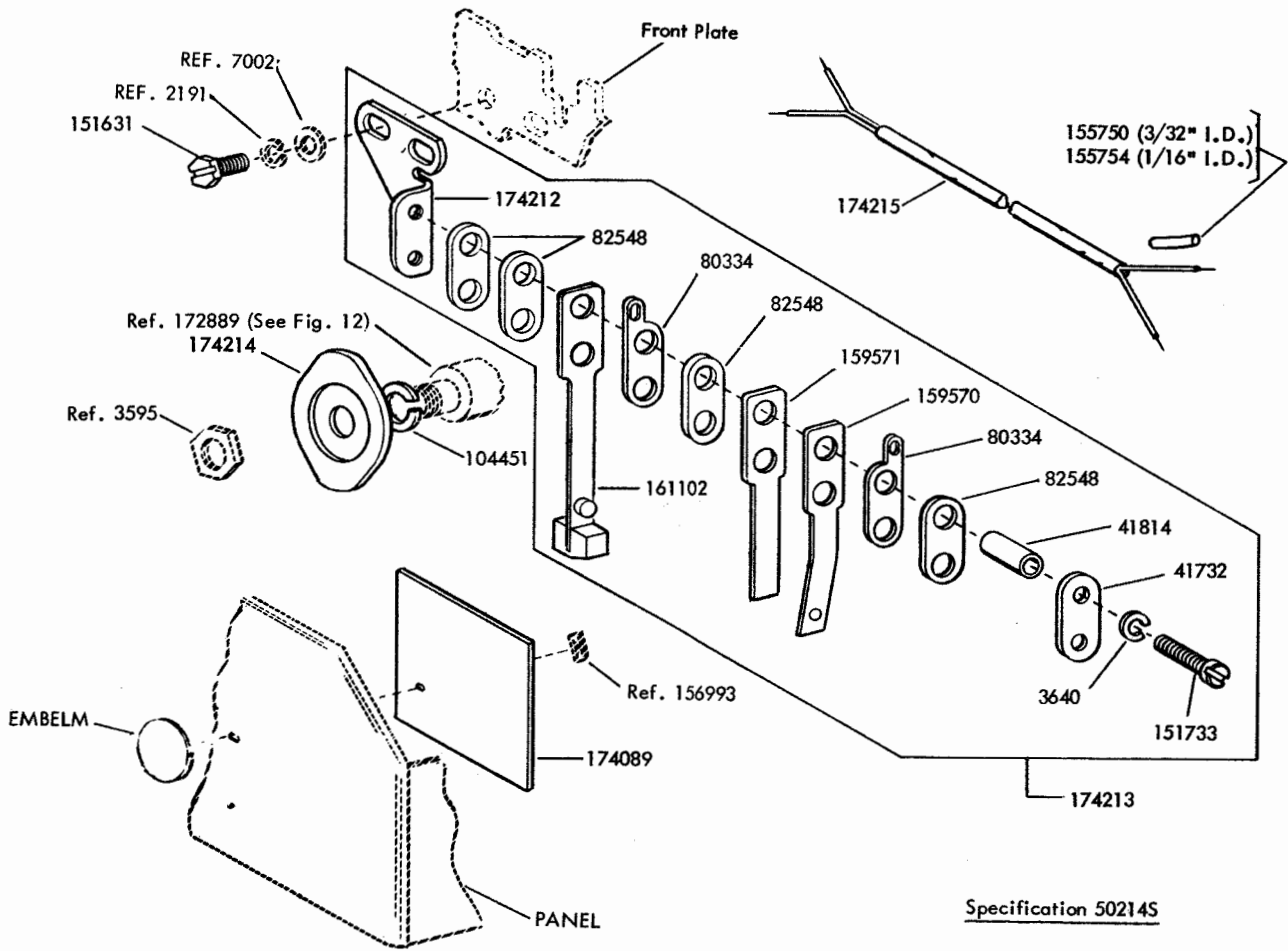


FIGURE 18. 174211 MODIFICATION KIT TO PROVIDE MAGNET RELEASE CONTACTS

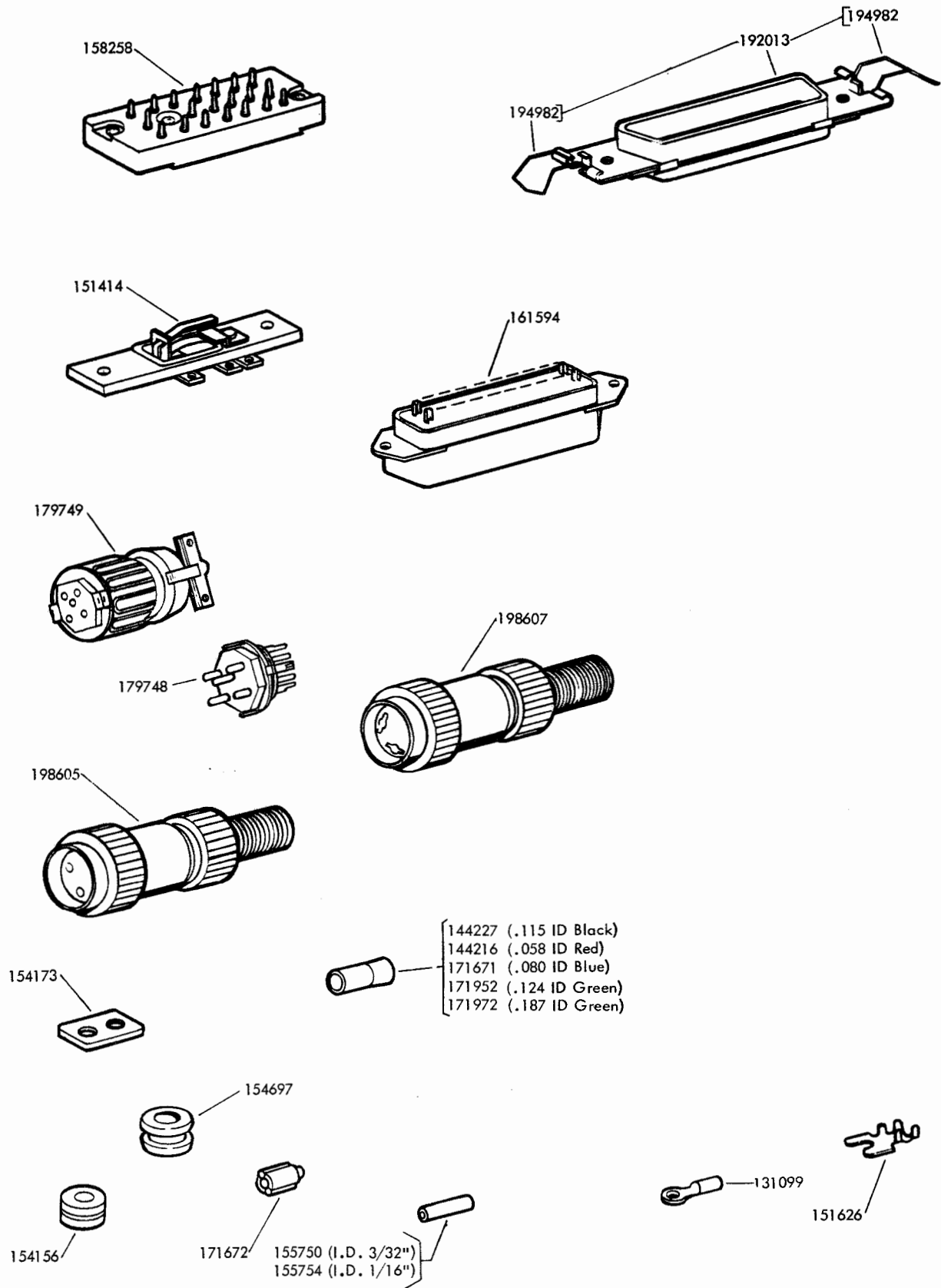


FIGURE 19. CABLE COMPONENTS

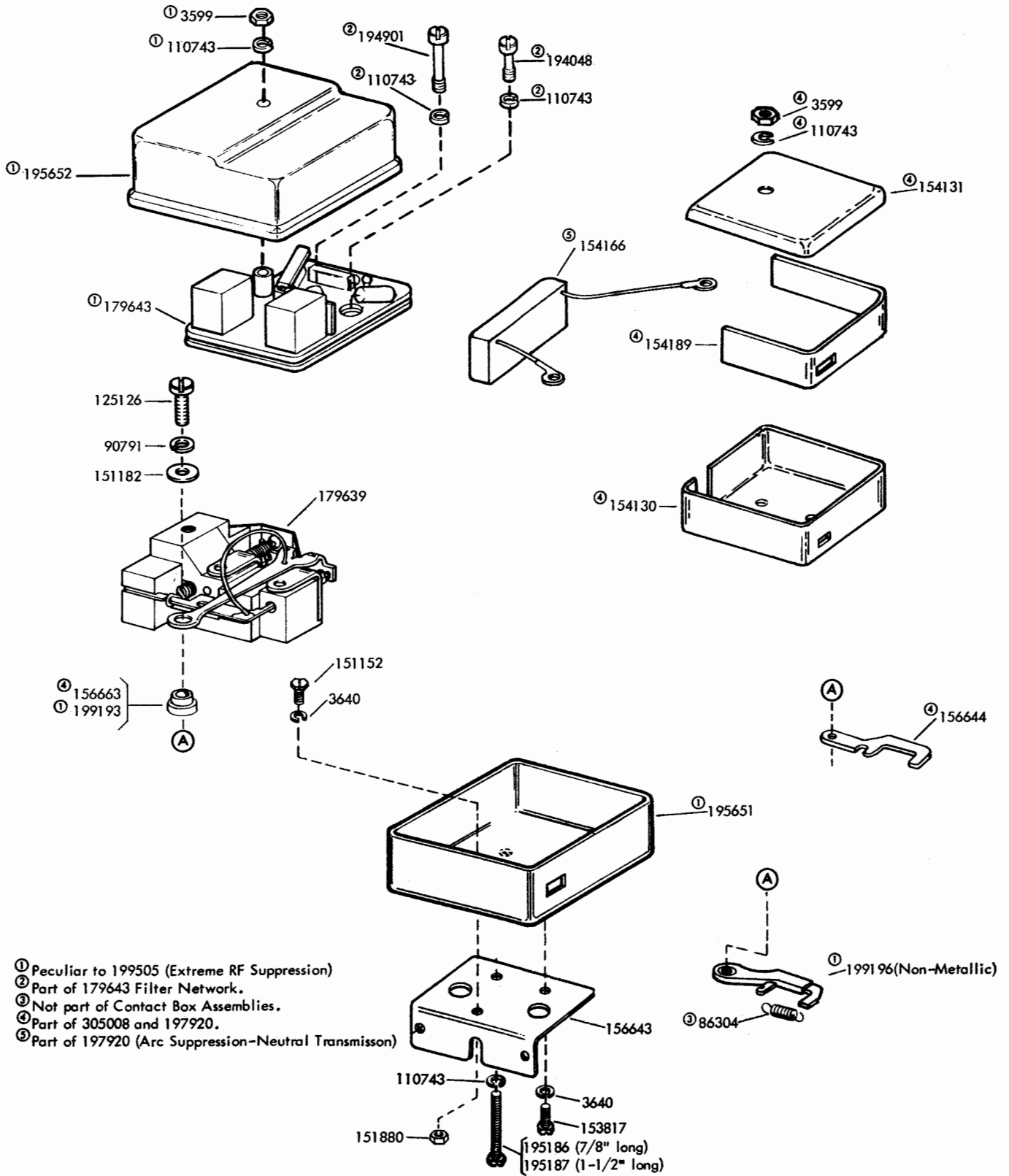


FIGURE 20. 197920, 198610, 199505 AND 305008 CONTACT BOX ASSEMBLIES WITH GOLD PLATED CONTACTS

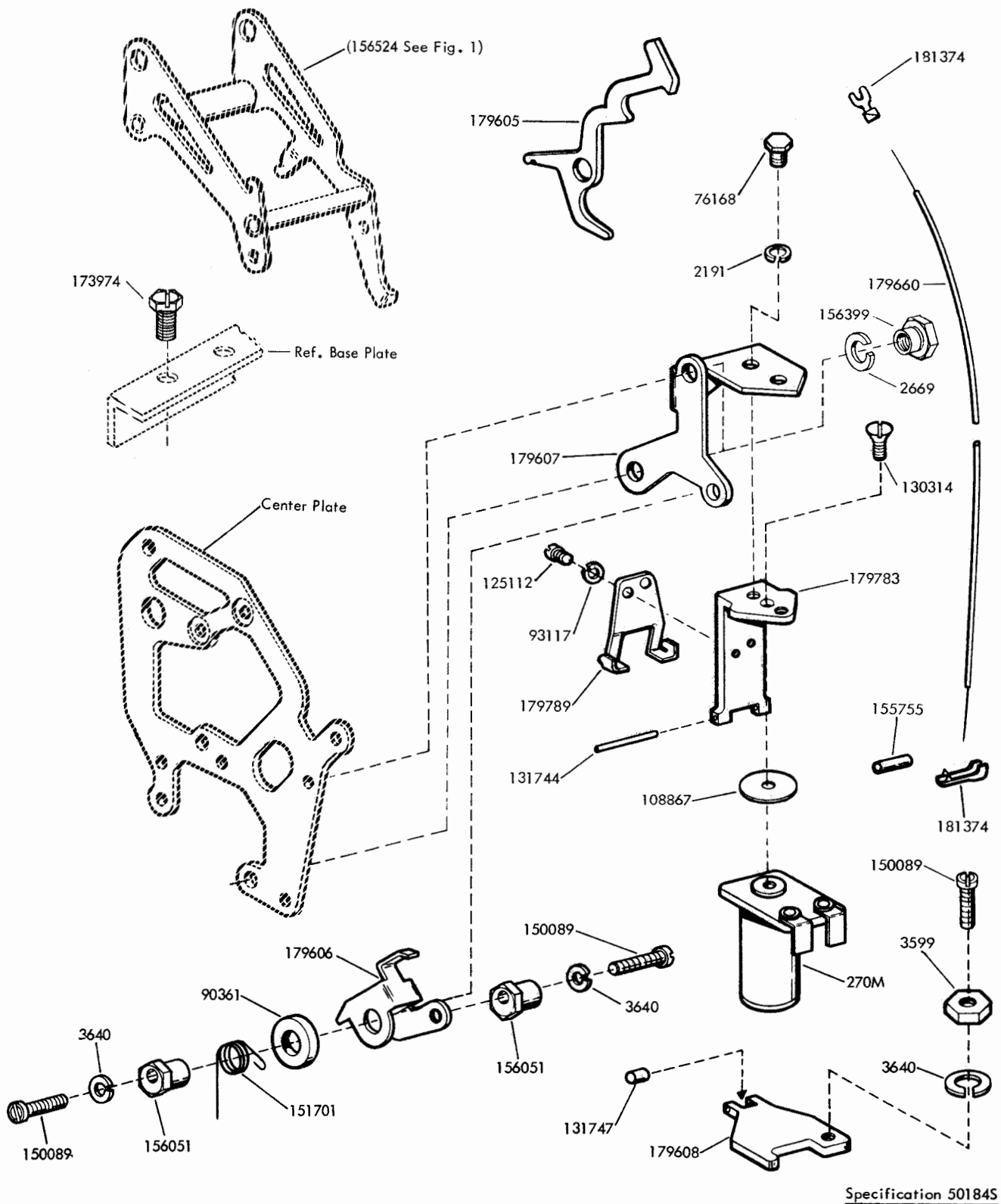


FIGURE 21. 179603 MODIFICATION KIT TO ADD TAPE WITHHOLD MECHANISM TO TRANSMITTER-DISTRIBUTOR

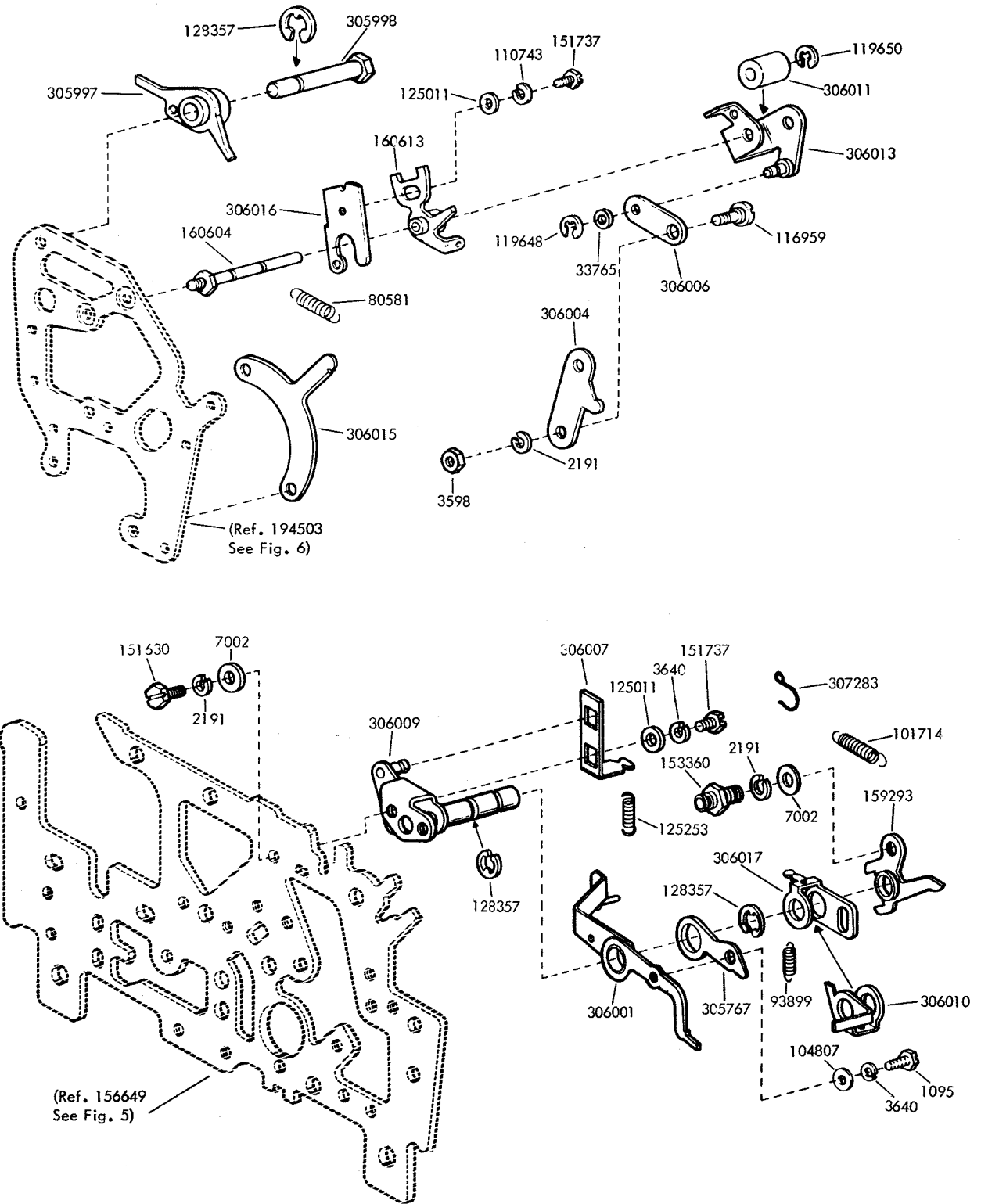


FIGURE 22. TAPE-OUT MECHANISM FOR MECHANICALLY COUPLED DUAL TRANSMITTER DISTRIBUTOR

NUMERICAL INDEX

Part Number	Description and Page Number	Part Number	Description and Page Number	Part Number	Description and Page Number
256M	Coil, Magnet 9	91904	Washer, Flat 3	146643	Block, Stop 17
262M	Coil, Magnet 9	93117	Washer, Lock 16, 18, 21	150013	Disk, Adjusting 12, 13
270M	Coil, Magnet 21	93118	Washer, Lock 3, 6	150026	Lever, Shoe Release 12
1030	Screw, Shoulder (6-40) 2	93356	Washer, Felt 6, 7	150027	Lever, Shoe Release 13
1095	Screw (4-40 x 5/32 Hex) 22	93587	Washer, Flat 3, 8, 17	150029	Wick, Felt 12, 13
1172	Screw (2-56 x 5/16 Fil) 18	93899	Spring 2, 22	150034	Disk, Clutch (2 Stop) 13
1293	Screw (4-40 x 1/8 Fil) 10, 11	93984	Washer, Lock 9	150043	Shoe, Secondary Clutch 12, 13
2191	Washer, Lock 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 17, 21, 22	97266	Plate, Clamp 18	150044	Shoe, Primary Clutch 12, 13
2438	Washer, Flat 9	101386	Spring 2	150089	Screw (4-40 x 1/2 Fil) 21
2605	Spring 7	101714	Spring 7, 22	150241	Spring 12, 13
2669	Washer, Lock 3, 8, 21	101998	Bushing, Shoulder 3	150830	Bushing, Shoulder 13
2836	Spring 8	102994	Washer, Flat 2	150841	Bearing 13
3595	Nut (1/4-32 Hex) 12, 13	104451	Washer, Lock 18	151073	Screw (4-40 x 5/32 Fil) 3, 7, 9
3598	Nut (6-40 Hex) 2, 3, 4, 5, 6, 7, 8, 17, 22	104751	Spring 14, 15, 16	151103	Spring 2, 5
3599	Nut (4-40 Hex) 6, 7, 8, 9, 10, 11, 14, 15, 16, 17, 20, 21	104807	Washer, Flat 22	151152	Screw (4-40 x 3/16 Hex) 4, 5, 7, 10, 11, 14, 15, 16, 20
3606	Nut (6-40 Hex) 2, 7	108867	Shim (.002" Thk) 21	151171	Toggle, Contact 10, 11
3636	Washer, Flat 12, 13	110434	Screw (4-40 x 3/16 Fil) 12, 13	151180	Link, Toggle 10, 11
3640	Washer, Lock 3, 4, 5, 6, 9, 10, 11, 13, 18, 20, 21, 22	110435	Nut (4-40 Hex) 4	151182	Washer, Insulating 10, 11, 20
3649	Washer, Flat 8	110743	Washer, Lock 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 20, 22	151395	Spring 8
5740	Screw (2-56 x 1/4 Fil) 16	111640	Screw (2-56 x 7/32 Fil) 6	151398	Spring 4, 5
7002	Washer, Flat 2, 3, 4, 6, 8, 9, 10, 11, 17, 22	112626	Nut (10-32 Hex) 3, 8	151414	Switch, Sensitive 19
7603	Spring 2, 6	114107	Spring 17	151626	Terminal 7, 18, 19
8896	Shim (.004" Thk) 4, 5	115141	Screw, Shoulder (6-40) 7	151630	Screw (6-40 x 1/4 Hex) 3, 5, 6, 7, 8, 9, 22
31636	Spring 3	115221	Washer, Felt 2, 5	151631	Screw (6-40 x 5/16 Hex) 3, 8, 18
33765	Washer, Flat 22	116959	Screw, Eccentric Shoulder (6-40) 22	151632	Screw (6-40 x 3/8 Hex) 2, 3, 6, 8, 11
41732	Plate, Clamp 4, 8, 18	118177	Resistor 4	151637	Screw (4-40 x 1/4 Fil) 5
41746	Bushing, Insulating 4	119401	Washer, Flat 14, 15, 16	151685	Screw (4-40 x 5/16 Fil) 4
41814	Bushing, Insulating 18	119647	Ring, Retaining 4, 5, 7, 14, 15, 16	151688	Screw (4-40 x 5/8 Fil) 4
42823	Washer, Flat 12	119648	Ring, Retaining 3, 6, 14, 16, 22	151689	Screw (4-40 x 3/4 Fil) 4
45024	Spring 7	119649	Ring, Retaining 7, 9, 14, 15, 16, 17	151692	Screw (6-40 x 3/16 Fil) 2, 8
45815	Washer, Lock 2	119650	Ring, Retaining 7, 22	151701	Spring, Torsion 21
47024	Washer, Flat 17	119651	Ring, Retaining 3, 14	151715	Spring 14
70073	Nut (3-48 Hex) 3	119652	Ring, Retaining 2, 4, 5, 7, 8, 14, 16	151722	Screw (6-40 x 3/16 Hex) 2, 3, 6, 8
70388	Spring 2	121125	Washer, Spring 9	151728	Spring 12
70878	Spring 14, 15, 16	121244	Clamp, Cable (1/4" ID) 8	151730	Spring 14
71073	Washer, Flat 16	124177	Washer, Lock 2, 7	151732	Screw (4-40 x 11/32 Fil) 12
73894	Screw (6-40 Set) 17	125011	Washer, Flat 3, 4, 5, 6, 7, 9, 11, 14, 15, 16, 17, 22	151733	Screw (4-40 x 9/16 Fil) 8, 18
74728	Terminal, Contact 4	125015	Washer, Flat 9	151736	Spring 13
74987	Spring, Compression 17	125112	Screw (2-56 x 1/8 Fil) 21	151737	Screw (4-40 x 11/64 Hex) 3, 12, 13, 22
76168	Screw (6-40 x 3/16 Hex) 21	125126	Screw (2-56 x 9/32 Fil) 10, 11, 20	151820	Spring, Contact 10, 11
76275	Plate, Nut 3	125229	Nut (6-32 Hex) 3	151880	Nut (4-40 Hex) 4, 5, 10, 11, 14, 15, 16, 20
76295	Spring 6	125253	Spring 22	152458	Shield, Terminal 9
76422	Spring 7	125802	Washer, Flat 8	152871	Spring 2, 9
76461	Washer, Flat 3	128357	Ring, Retaining 3, 6, 22	152893	Screw (4-40 x 1/4 Hex) 4, 5, 6, 8, 9, 14, 15, 16, 17, 18
78557	Spring 4, 5	130314	Screw (6-40 x 21/64 Flat) 21	153360	Stud 22
80334	Terminal, Contact 18	130499	Bearing, Ball 12, 13	153537	Screw (6-40 x 9/32 Hex) 3
80531	Washer, Flat 2	130511	Screw (4-40 x 11/64 Fil) 17	153799	Screw (4-40 x 21/64 Hex) 4, 5
80581	Spring 22	130667	Washer, Lock 12, 13	153817	Screw (4-40 x 3/8 Hex) 10, 11, 20
80945	Spring 4, 5	130683	Washer, Lock 4, 5	153819	Washer, Lock 3
81778	Screw (4-40 x 3/16 Fil) 9	131099	Terminal 19	154040	Lever, Transfer 2, 5
82547	Insulator (.094" Thk) 8	131744	Pin 21	154042	Terminal 10, 11
82548	Insulator (.062" Thk) 4, 8, 18	138031	Wick, Felt 21	154043	Terminal 10, 11
85318	Washer, Leather 8	138033	Bushing, Insulating 18	154045	Screw (6-40 Spl) 10, 11
86283	Spring 2	138034	Insulator (.031" Thk) 18	154095	Eccentric, Contact Box 10, 11
86304	Spring 10, 11, 20	144216	Plate, Clamp 3, 6, 18	154130	Box, Contact 10, 20
86959	Bushing, Insulating 8	144227	Connector, Insulated (Red) 19	154131	Cover, Contact 10, 20
87401	Spring 9	145779	Connector, Insulated (Black) 19	154156	Grommet, Rubber 19
87402	Spring 9	145798	Post, Spring 7	154166	Suppressor, Arc 10, 20
90361	Washer, Felt 21		Pawl 7		
90573	Spring 2				
90791	Washer, Lock 10, 11, 20				
91120	Spring 3				

NUMERICAL INDEX (Continued)

Part Number	Description and Page Number	Part Number	Description and Page Number	Part Number	Description and Page Number
154173	Plate 19	156598	Post 3, 8	160086	Post, Guide 5
154189	Insulator 10, 20	156599	Plate 8	160087	Post, Spring 7
154194	Base 10, 11	156602	Plate 3	160088	Bail w/Stud 7
154226	Box w/Strap 10	156608	Plate, Cover 17	160089	Post, Stop 5
154335	Screw (6-40 x 9/32 Fil) 4	156609	Plate, Spring 17	160090	Lever, Transfer 5
154349	Spring 2	156618	Post 2	160091	Reservoir Assembly, Oil 8
154694	Disk, Clutch Cam 12	156621	Guide, Transfer Lever 2	160092	Stiffener 8
154697	Grommet, Rubber 19	156622	Post 7	160093	Wick, Leather 8
155494	Spring 25	156623	Washer, Flat 3	160094	Contact Assembly, Auxiliary 4, 5
155750	Sleeve, Insulating (3/32 ID x 1/2" Lg) 4, 5, 18, 19	156624	Post 2	160095	Bracket 4
155752	Sleeve, Insulating (5/64 ID x 1/2" Lg) 18	156625	Bracket 2	160096	Bracket w/Bushing 5
155754	Sleeve, Insulating (1/16 ID x 1/2" Lg) 4, 5, 18, 19	156631	Washer, Felt 2, 5	160097	Contact Assembl', 5
155755	Sleeve, Insulating (11/64 ID x 5/8" Lg) 3, 21	156632	Screw (6-40 x 13/32 Hex) 9	160398	Spring, Contact 8
156051	Bushing, Eccentric 21	156633	Washer, Felt 8	160399	Spring, Contact 8
156399	Nut, Shoulder (6-40 Hex) 21	156636	Wheel, Feed 2	160593	Terminal 4, 8
156450	Screw (2-56 x 1/2 Fil) 3, 6	156637	Bail 2	160596	Spring 3
156501	Screw (6-40 x 7/32 Fil) 3	156638	Guide, Transfer Lever 2	160597	Plate 8
156509	Washer, Flat 3	156639	Post 2	160598	Stiffener 8
156510	Post 3	156640	Post 2, 5	160599	Wick, Leather 8
156511	Bail 3	156641	Pin, Sensing 2, 5	160600	Reservoir, Oil 8
156514	Plate w/Studs 3	156644	Bracket 10, 11, 20	160601	Guard 8
156515	Washer, Felt 3	156644	Link, Drive 10, 11, 20	160602	Arm 7
156516	Latch 3	156647	Lever, Start-Stop 14, 15, 16	160604	Post 7, 22
156518	Post 2, 6	156648	Box Assembly, Contact 10	160605	Arm 7
156519	Washer, Felt 2	156649	Plate, Front 2, 6	160606	Arm w/Spring Post 7
156520	Arm 2	156662	Plate 9	160607	Bail 7
156521	Screw, Eccentric Shoulder (4-40) 2	156663	Insulator 10, 11, 20	160608	Bracket, Contact 8
156522	Pawl 2	156668	Screw (6-40 Spl) 7	160613	Arm w/Tub 7, 22
156523	Stud, Eccentric 2	156673	Bail w/Stud 14, 15, 16	160615	Reservoir Assembly 8
156524	Bail 2	156677	Plate, Insulator 9	160616	Plate 7
156531	Bracket w/Post 9	156747	Screw (6-40 x 19/64 Hex) 10	160621	Bracket 9
156532	Core 9	156773	Modification Kit 7	160622	Guide 9
156533	Screw, Eccentric (4-40) 9	156777	Jumper (2" Black) 7	160623	Shield 9
156534	Bail 2, 9	156778	Rod 17	160625	Clip w/Wick 3
156537	Armature 9	156779	Plunger 17	160626	Insulator (.031" Thk) 3, 6
156539	Washer, Felt 9	156780	Bracket, Detent 17	160627	Bushing, Insulating 3, 6
156549	Lid, Tape 14, 16	156782	Nut (6-40 Spl) 3, 8	160628	Spring, Contact 3, 6
156551	Guide, Right 14, 16	156811	Guide, Left 14, 16	160629	Bracket, Contact 3
156553	Post, Eccentric 14	156817	Shaft 9	160630	Spring, Contact 3, 6
156554	Bail 14	156831	Clamp 3	160631	Spring, Contact 3, 6
156555	Plunger, Tape Lid 14, 16	156832	Plate 3	160632	Contact Assembly 3
156556	Bracket 14, 15, 16, 17	156833	Drum Assembly, Clutch 12, 13	160634	Post 7
156557	Plate, Tape Guide 14	156836	Camshaft 12	160635	Bail 7
156558	Washer, Felt 14, 16	156844	Gear (40T) 12, 13	160638	Bracket, Spring 3
156559	Post 14	156880	Jumper (2-3/8" Black) 9	160639	Contact Assembly 8
156560	Bail 14, 16	156881	Jumper (1-1/2" Black) 9	160640	Pin, Tape Out Sensing 2, 14
156561	Shaft 14, 16	157240	Spring 6	160647	Lid, Tape 14, 17
156567	Plate, Top 17	158182	Disk, Clutch Cam 13	161100	Spring, Contact 4
156574	Post, Spring 7	158186	Screw (4-40 x 7/32 Fil) 15	161102	Spring, Contact 4, 18
156575	Screw, Eccentric Shoulder (6-40) 7	158258	Connector, Plug (20 Pt) 19	161117	Spring 7
156576	Washer, Felt 8	158625	Bracket w/Stud 14	161291	Bushing 14, 16
156577	Roller, Detent Lever 7	158626	Bracket w/Studs 14	161439	Wick, Felt 8
156578	Bail w/Stud 7	158757	Hinge, Mounting 9	161440	Spring, 14, 15, 16
156581	Stud 8	158923	Bearing, Sleeve 13	161591	Cable Assembly 3
156588	Ring, Retaining 8	158926	Screw (4-40 x 7/32 Hex) 13	161592	Plate w/Studs 3
156589	Post, Spring 8	159291	Bail 3	161594	Connector, Plug (36 Pt) 19
156590	Latch 2	159292	Bail 3	162249	Screw, Insulating (6-32) 3
156591	Washer, Felt 7, 8	159293	Arm, Extension 3, 22	162462	Modification Kit 3
156594	Lever, Trip 8	159295	Bracket w/Posts 3	162490	Modification Kit 4
156595	Lever, Latch 8	159297	Arm, Stop 3	162491	Cable 4
156596	Bail 8	159298	Spring, Torsion 3	162492	Post, Guide 4
156597	Plate, Rear 8	159312	Wick, Leather 3	162493	Bail 4, 5
		159570	Spring, Contact 4, 18	162498	Screw, Eccentric (4-40) 4, 5
		159571	Stiffener 4, 18	162499	Nut, Shoulder (4-40) 4, 5
		160016	Camshaft 12	162500	Arm, Sensing 4, 5
		160025	Bracket 5	162501	Post, Spring 4, 5
		160067	Wheel, Feed 5	162502	Post, Stop 4

NUMERICAL INDEX (Continued)

Part Number	Description and Page Number	Part Number	Description and Page Number	Part Number	Description and Page Number
162503	Shaft, Spring 4, 5	174214	Cam 18	179749	Connector, Receptacle (5 Pt) 19
162504	Contact Assembly, Auxiliary 4	174215	Cable 18	179783	Yoke 21
162505	Bracket, Contact 4	174263	Pin, Tape Editing 2	179789	Retainer, Armature Pin 21
162506	Bracket w/Bushing 4	174265	Contact Assembly 3	179884	Plate, Front 6
162573	Retainer 13	174266	Bracket, Contact 3	181374	Terminal, Tab Type 21
162891	Cover, Contact Box 10	174267	Plate w/Studs 17	192013	Connector, Plug Type (50 Pt) 19
162997	Box Assembly, Contact 10	174272	Bracket, Contact 6	192236	Gear (60 T) 12
163445	Insulator, Strip 10, 11	174273	Arm, Extension 6	192237	Plate, Cover 17
163536	Spacer (.562" Thk) 10	174275	Feedwheel 6	192591	Plate w/Studs 3
163665	Modification Kit 14	174276	Roller 6	193852	Spring 12
163666	Guide, Right 14	174277	Lever w/Stud 6	194034	Modification Kit 5
163991	Shaft 16	174279	Ratchet w/Shaft 6	194048	Screw (4-40 Spl) 20
163992	Arm, Extension 3	174281	Bracket w/Bushing 6	194204	Guide, Tape 14, 15
163995	Plate 16	174283	Contact Assembly, Tape Motion 6	194341	Cable Assembly 4, 5
163996	Contact Assembly 5			194344	Contact Assembly 4
163997	Bail 16	174284	Plate, Tape Guide 15	194354	Gear (45T) 12
163998	Bail 7	174286	Bail w/Spacer 6	194357	Camshaft 12
163999	Plate, Tape Guide 16	174287	Pin, Tape Out 6	194502	Camshaft 12
164000	Pin, Tape Out 5	174288	Shaft 15	194503	Plate, Center 7
164285	Camshaft 12	174290	Guide, Tape w/Bail 15	194505	Follower, Cam 7
164467	Post, Eccentric 14, 15, 16	174292	Guide, Left 15	194506	Bracket, Cam Follower Guide 7
164468	Bail 14, 15, 16	174293	Bail 15	194544	Bracket, Contact Assembly 4
164469	Post 14, 15, 16	174294	Spring, Torsion 15	194545	Contact Assembly, Auxiliary 4
164470	Bracket w/Stud 14, 15, 16	174295	Contact Assembly, Tape Out 6	194546	Insulator 4
164471	Bracket w/Studs 14, 15, 16	174303	Sleeve 6	194578	Camshaft 12
164472	Modification Kit 15	174304	Spring, Contact 6	194901	Screw (4-40 Spl) 20
165027	Network, Spark Suppression 9	174305	Spring, Torsion 6	194982	Clip, Connector 19
170276	Plate, Cover 17	174309	Modification Kit 17	195186	Screw (4-40 x 7/8 Hex) 10, 20
170277	Lid, Tape 16	174342	Lid, Tape 15	195187	Screw (4-40 x 1-1/2 Hex) 10, 11, 20
170282	Nut (6-40 Hex) 2	174349	Plate 14, 15, 17		
171671	Connector, Insulated (Blue) 19	174411	Insulator 11	195377	Network, Spark Suppression 9
171672	Connector (Red) 19	174412	Spacer (.531" Thk) 11	195651	Box, Contact 20
171952	Connector, Shielding (Green) 19	174413	Terminal 11	195652	Cover, Contact Box 20
171972	Connector, Insulated (Green) 19	174414	Bushing 11	195923	Filter, R.F. 10
172764	Guide, Left 14	174415	Cover, Contact Box 11	197728	Contact Assembly 4
172881	Reservoir Assembly, Oil 8	174416	Box, Contact 11	197920	Box Assembly, Contact 20
172885	Arm, Cam Follower 2	174420	Box Assembly, Contact 11	197966	Plate w/Stud 14
172887	Bail 9	174421	Filter, RF 11	197967	Plate w/Stud 17
172889	Shaft, Main 13	174491	Modification Kit 10	197994	Modification Kit 14
172890	Camsleeve 13	176389	Label (Free-Stop) 17	198605	Connector, Plug (4 Pt) 19
172899	Post, Guide 5	176390	Label (Run) 17	198607	Connector, Receptacle (4 Pt) 19
172900	Post, Stop 5	176603	Bracket w/Stud 17	198610	Box Assembly, Contact 20
173118	Cable 5	176605	Lever, Sensing 17	198672	Modification Kit 14
173171	Plate w/Stud 3	176606	Lever, Switch Actuating 17	198673	Guide, Right 14
173173	Disk 13	176607	Plate w/Studs 14, 17	199110	Guide, Right 14
173208	Wick, Leather 8	176608	Plate w/Studs 17	199111	Lever, Tight Tape 14
173349	Camshaft 12	176609	Spring, Contact 3	199112	Bail 14
173350	Guide, Tape 14	177048	Latch 5	199126	Lever, Tape Advance 2
173351	Finger w/Posts 5	177060	Pin w/Sleeve, Sensing 2, 14, 17	199129	Pawl, Feed 2
173359	Guide 5	178499	Contact Assembly 3	199130	Plate 3
173424	Bail, Sensing 7	178535	Suppressor, Spark 9	199131	Plate, Clamp 3
173974	Screw (10-32 x 5/16 Hex) 21	179163	Stiffener 6	199133	Post 8
174010	Plate 2, 4, 5	179167	Screw, Eccentric Shoulder (4-40) 6	199134	Plate w/Stud 17
174087	Modification Kit 7			199138	Link, Drive 12
174089	Insulator (.015" Thk) 18	179189	Screw, Eccentric Shoulder (6-40) 2	199140	Link, Driven 12
174188	Contact Assembly 18	179262	Bracket, Spring 6	199143	Spacer (.316" Thk) 12
174189	Bracket, Contact 18	179603	Modification Kit 21	199146	Bracket w/Bushing 6
174190	Follower 18	179605	Pawl 21	199147	Plate, Nut 6
174191	Spring, Contact 18	179606	Bail, Blocking 21	199148	Clamp 6
174192	Spring, Contact 18	179607	Bracket, Magnet 21	199149	Bracket 6
174193	Cable w/Terminals 18	179608	Armature 21	199151	Lever 6
174194	Cable w/Terminals 18	179609	Contact Assembly 20	199152	Lid, Tape 15
174195	Modification Kit 18	179643	Network, Filter 20	199153	Shaft 15
174211	Modification Kit 18	179660	Cable w/Terminal 21	199154	Plate 15
174212	Bracket 18	179748	Connector, Plug (5 Pt) 19	199159	Camshaft 12
174213	Contact Assembly, Magnet Release 18			199160	Camshaft 12

NUMERICAL INDEX (Continued)

Part Number	Description and Page Number	Part Number	Description and Page Number	Part Number	Description and Page Number
199163	Bracket 3, 8	304665	Modification Kit 5	306004	Lever, Reset 22
199175	Bracket 6	304762	Latch 2	306006	Link, Reset 22
199190	Screw, Shoulder (4-40) 2	304763	Plate, Wear 2	306007	Bracket, Spring 22
199193	Bushing 20	304764	Post 8	306009	Bracket 22
199196	Link 20	304765	Post, Eccentric 2	306010	Bail, Depressor 22
199229	Modification Kit 14	304766	Bail, Operating 8	306011	Sleeve, Stop 22
199482	Camshaft 12	304767	Bail, Trip 2	306013	Bail, Reset 22
199505	Box Assembly, Contact 20	305008	Box Assembly, Contact 20	306015	Bracket, Spring 22
199507	Guide, Left 14	305087	Post 4	306016	Latch 22
301685	Guide, Tape 16	305767	Arm, Stop 22	306017	Bail, Adjusting 22
301686	Nut, Shoulder (2-56) 16	305997	Lever, Trip 22	307283	Anchor, Spring 22
301693	Plate 16	305998	Post 22	311271	Stud, Eccentric 2
301702	Plate w/Studs 16	306001	Pin, Tape Out 22	311453	Roller 6

28 TRANSMITTER DISTRIBUTOR BASE (LCXB)
PARTS

FIGURE	CONTENTS	PAGE
1	Transmitter Distributor Base	2
2	Transmitter Distributor Base	3
3	Transmitter Distributor Base	4
4	Transmitter Distributor Base	5
5	Transmitter Distributor Base	6
6	Transmitter Distributor Base	7
7	Transmitter Distributor Base	8
8	Gear Sets	9
9	Transmitter Distributor Base with Answer-Back Feature	10
10	Transmitter Distributor Base with Answer-Back Feature(Continued)	11
11	178316 Modification Kit to Provide Answer Back Feature for the Transmitter Distributor Base (Includes Figures 12 through 15)	12
12	178316 Modification Kit to Provide Answer Back Feature for the Transmitter Distributor Base (Includes Figures 11 through 15)	13
13	178316 Modification Kit to Provide Answer Back Feature for the Transmitter Distributor Base (Includes Figures 11 through 15)	14
14	178316 Modification Kit to Provide Answer Back Feature for the Transmitter Distributor Base (Includes Figures 11 through 15)	15
15	178316 Modification Kit to Provide Answer Back Feature for the Transmitter Distributor Base (Includes Figures 11 through 14)	16
16	Uncoded Stop and Code Blades	17
17	Transmitter Distributor Base	18
18	161921 Modification Kit to Convert an LCXB7 Base to Accept an LBXD7 Transmitter Distributor	19
19	161833 Modification Kit to Convert an LCXB1 to an LCXB8 Transmitter Distributor Base	20
20	173343 Modification Kit for Multiple Wire Output Facilities on LCXB8 Base	21
	Numerical Index	22

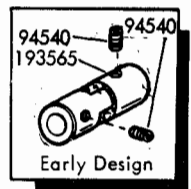
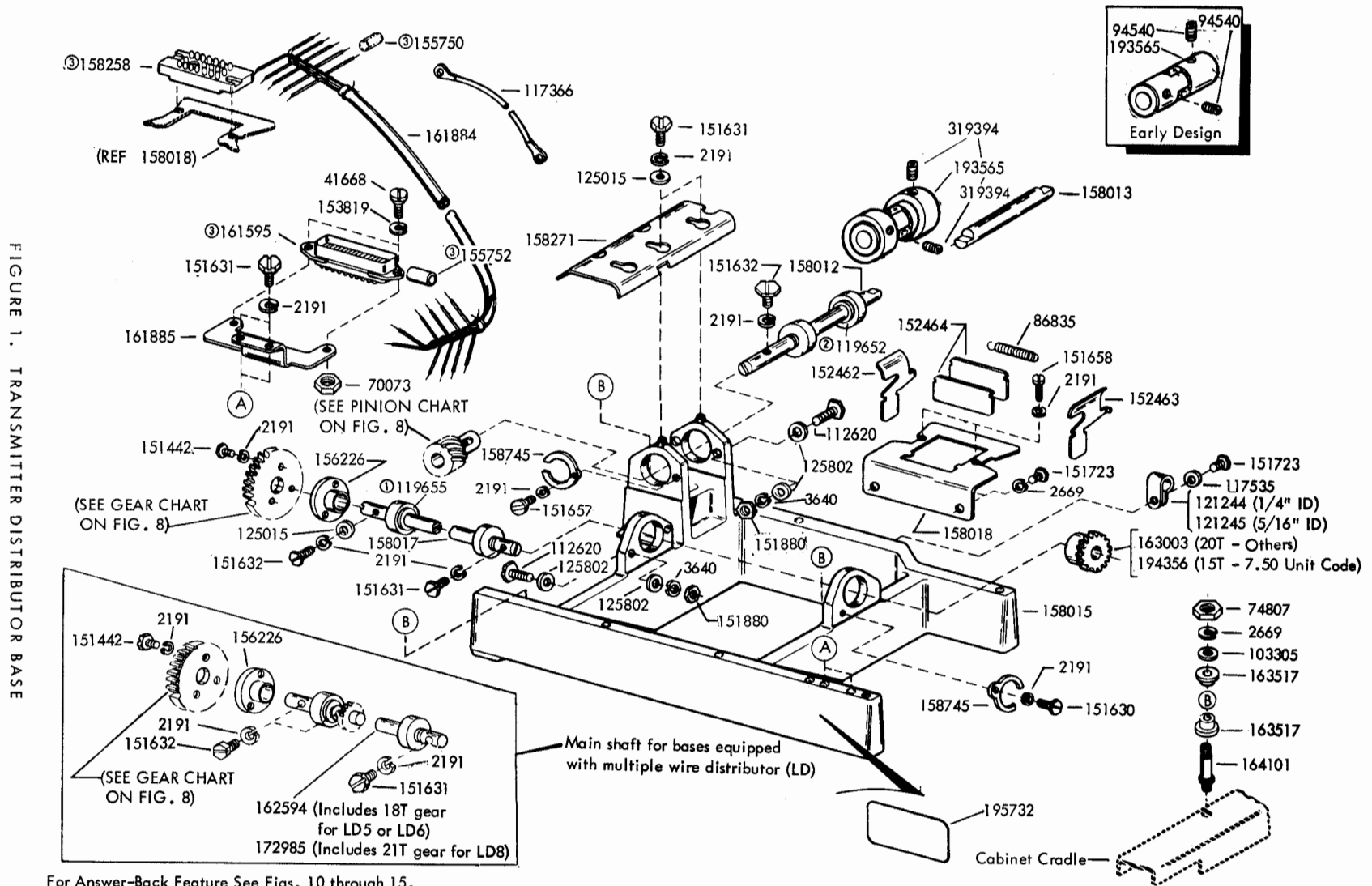
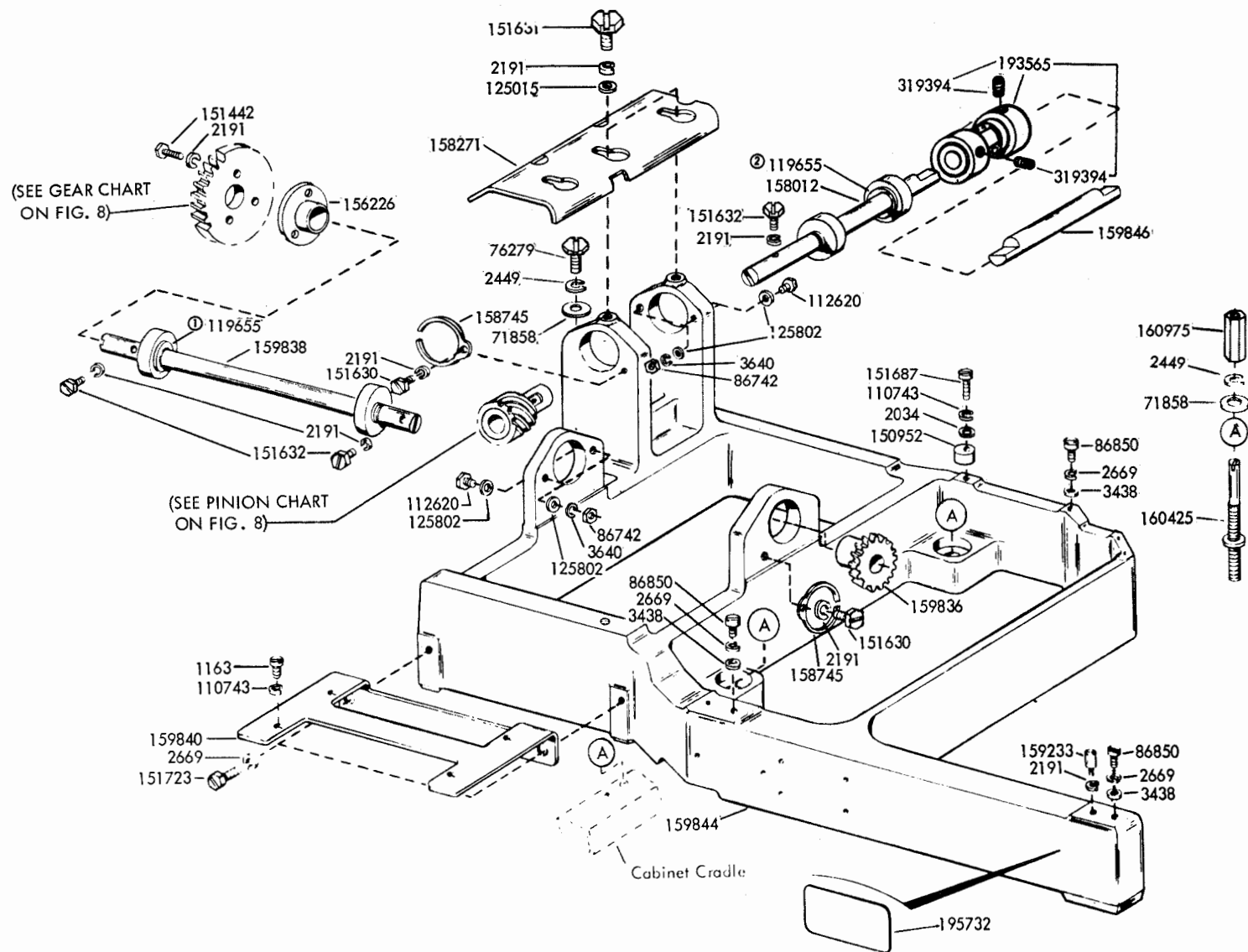


FIGURE 1. TRANSMITTER DISTRIBUTOR BASE

For Answer-Back Feature See Figs. 10 through 15.
 ① Part of 158017 ② Part of 158012
 ③ Part of 161884 Cable Assembly

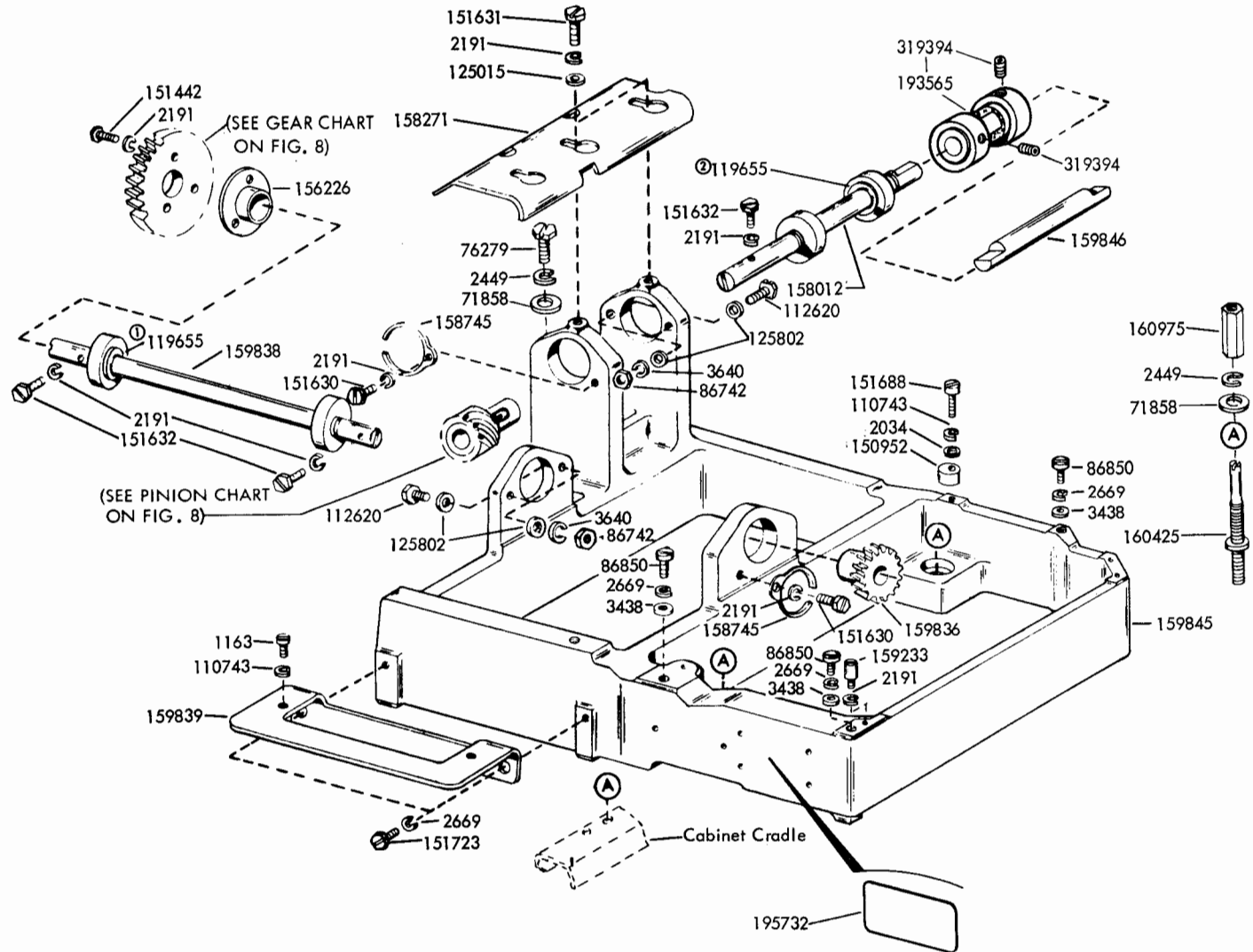
Used with LX D Type Transmitter Distributor Unit

FIGURE 2. TRANSMITTER DISTRIBUTOR BASE



- ② Part of 158012
- ① Part of 159838
- Used with LCXD Type (Pivoted and Fixed Heads)
- Transmitter Distributor Unit

FIGURE 3. TRANSMITTER DISTRIBUTOR BASE

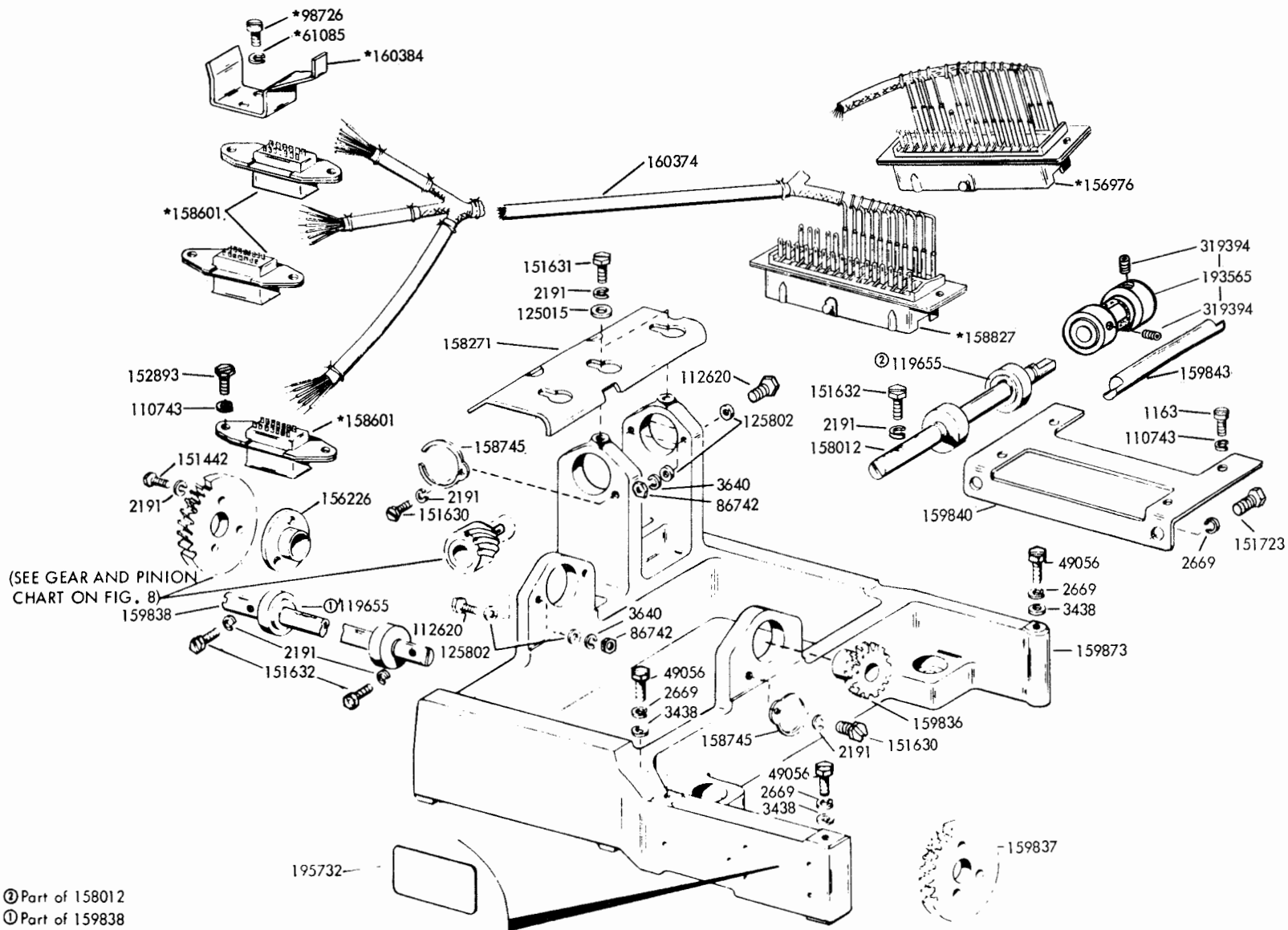


② Part of 158012

① Part of 159838

Used with LAXD Type (Pivoted Head, Multi-Contact)
Transmitter Distributor Unit

FIGURE 4. TRANSMITTER DISTRIBUTOR BASE

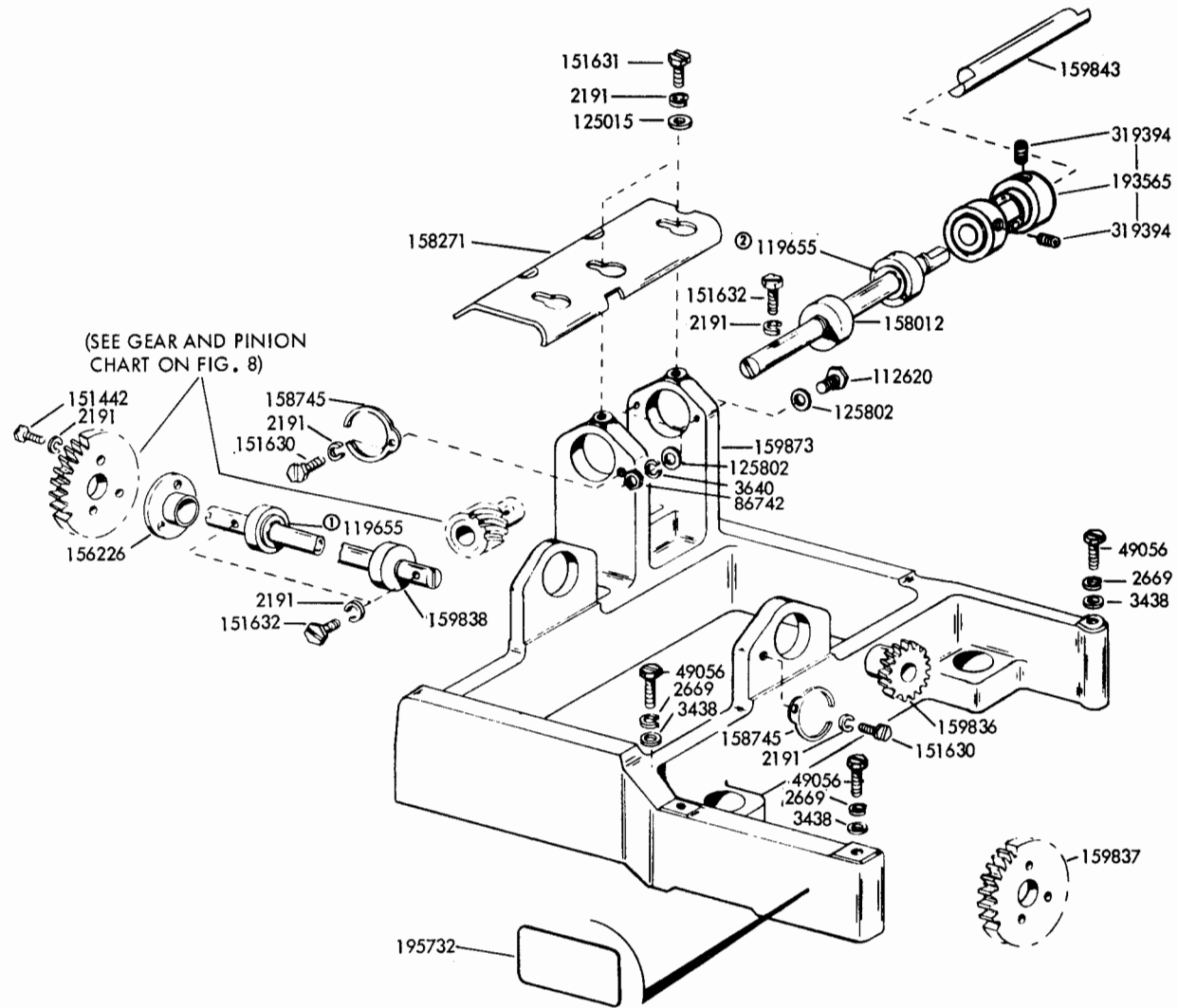


(SEE GEAR AND PINION CHART ON FIG. 8)

- Ⓢ Part of 158012
- Ⓢ Part of 159838

*Part of 160374 Cable Asm
Used with LBXD Type (Fixed Head, Multi-Contact)
Transmitter Distributor Unit

FIGURE 5. TRANSMITTER DISTRIBUTOR BASE

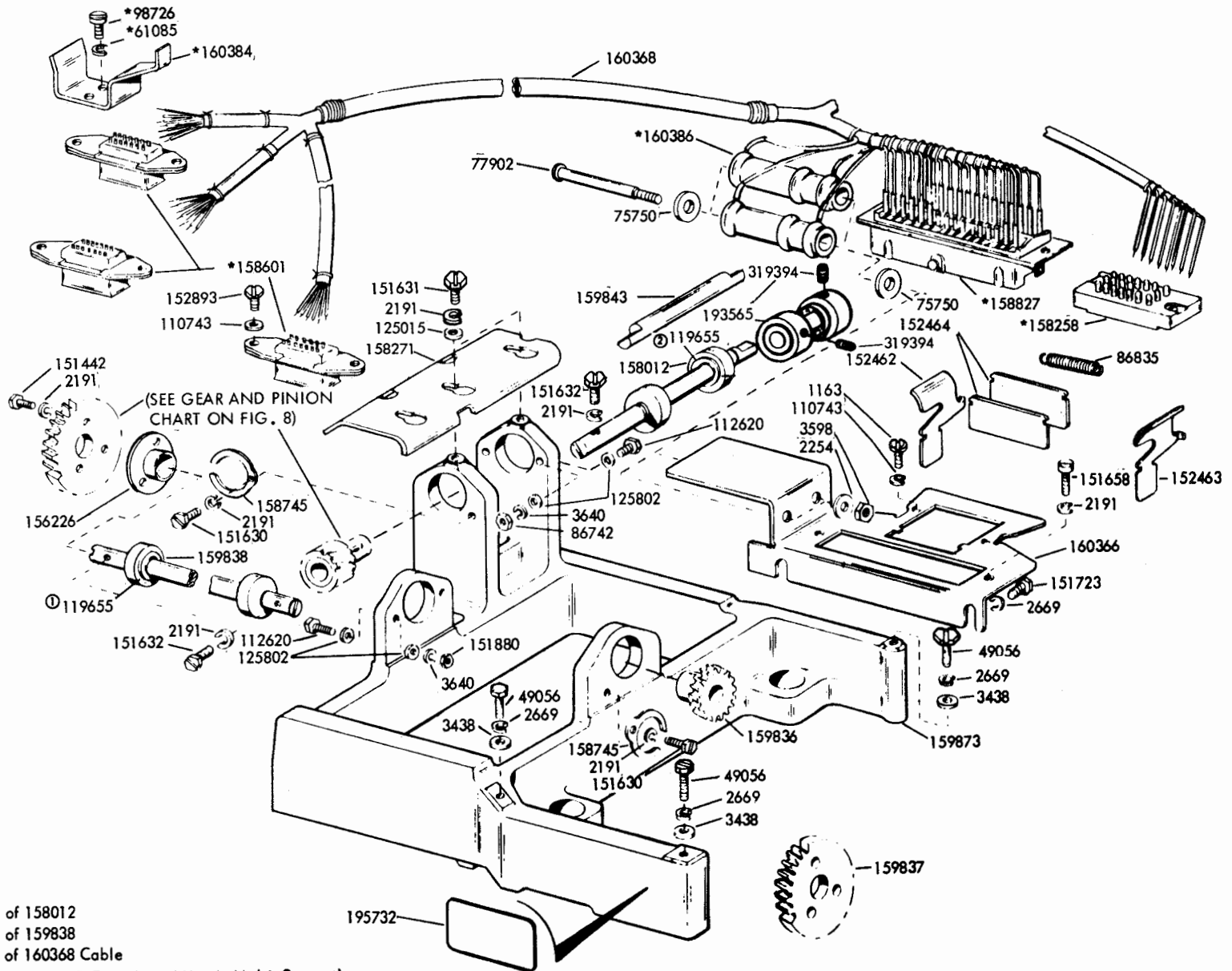


② Part of 158012

① Part of 159838

Used with LBXD Type (Fixed Head, Multi-Contact)
Transmitter Distributor Unit

FIGURE 6. TRANSMITTER DISTRIBUTOR BASE



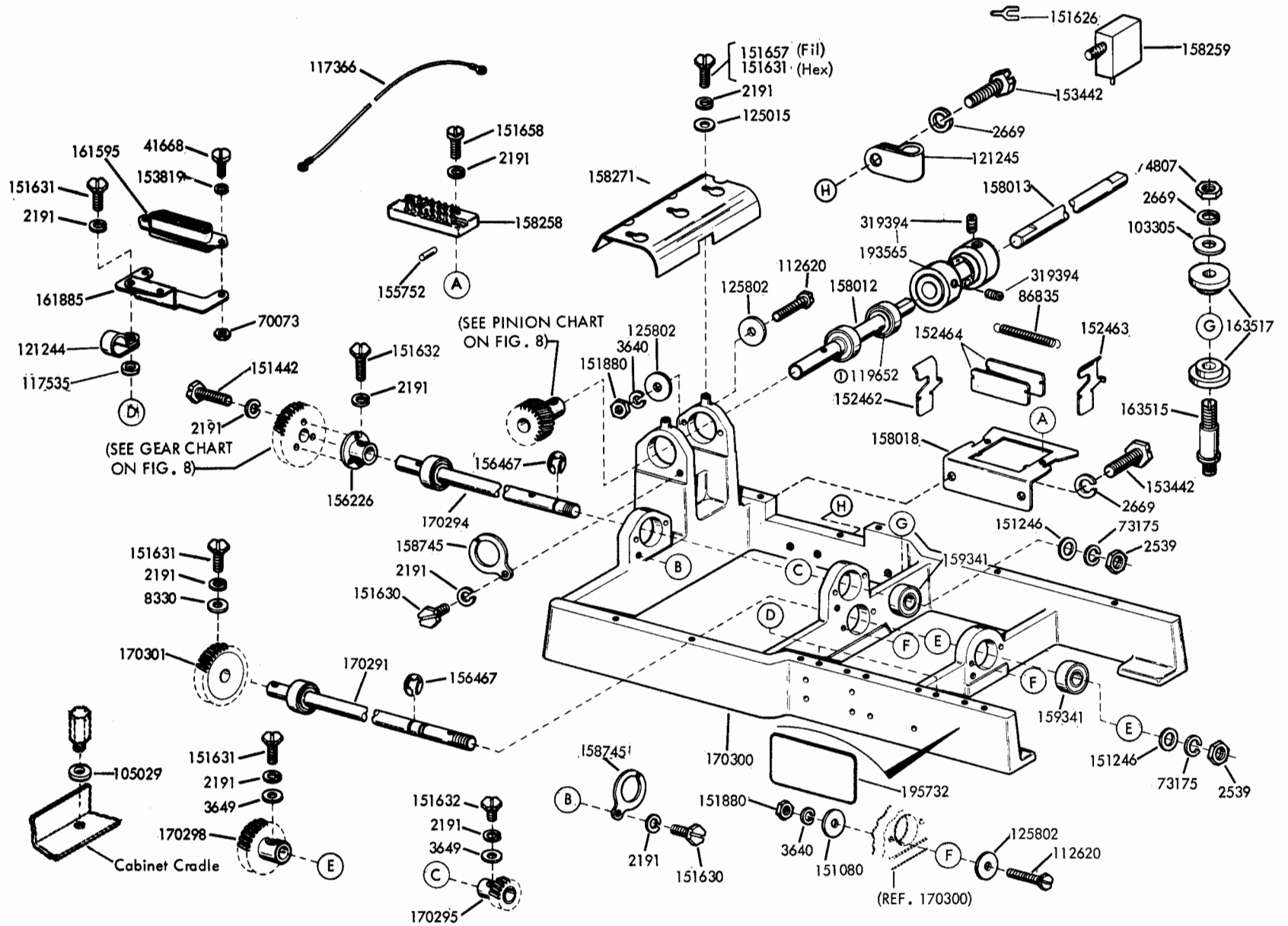
⊙ Part of 158012

⊙ Part of 159838

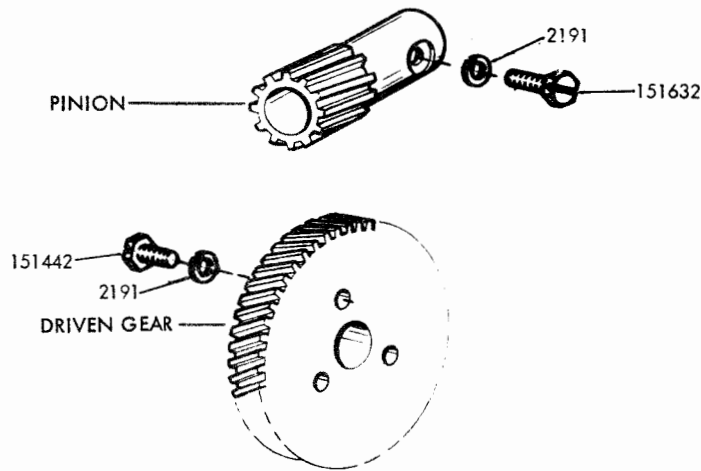
*Part of 160368 Cable

Used with LBXD Type (Fixed Head, Multi-Contact)
Transmitter Distributor Unit

FIGURE 7. TRANSMITTER DISTRIBUTOR BASE



Used with Dual LX Type (Fixed Head, Multiple Wire Output)
or LX D Type (Fixed Head, Single Contact)
Transmitter Distributor Unit



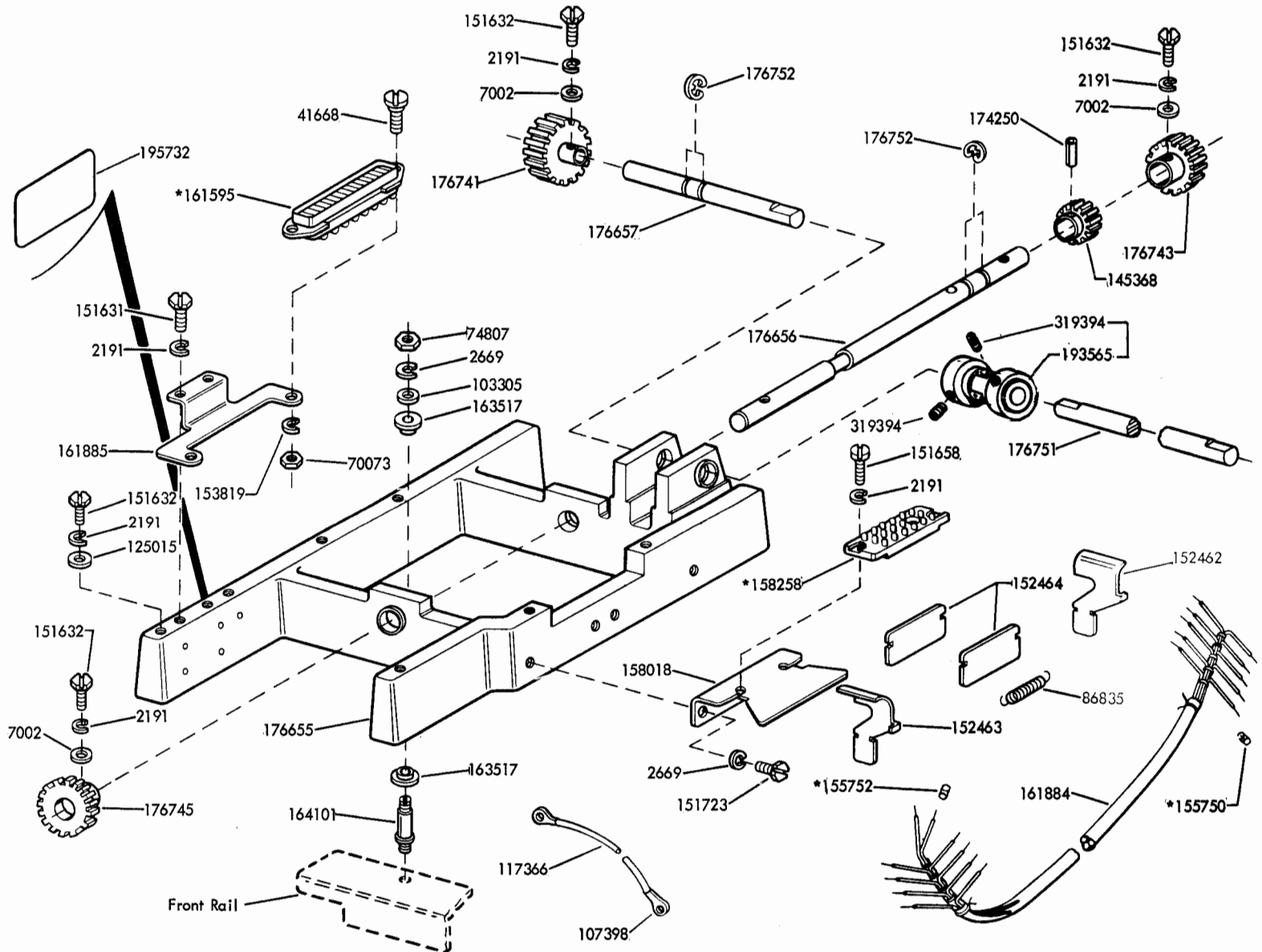
SINGLE TRANSMITTER-DISTRIBUTOR BASE GEAR SETS					
GEAR SET	DRIVEN GEAR	PINION	WPM	UNIT CODE	BAUD
159882	155997 (60T)	155996 (13T)	65	7.00	45.5
173776	173819 (60T)	173818 (13T)	65	7.00	45.5
161357	161332 (42T)	161333 (10T)	71	7.00	50
163499	163498 (63T)	163497 (15T)	71	7.00	50
198056	198058 (70T)	198057 (19T)	81	7.00	56.9
159883	155999 (34T)	155998 (12T)	106	7.00	74.2
163454	163453 (56T)	163452 (20T)	107	7.00	75
158029	158006 (44T)	158005 (9T)	60	7.42	45.5
161356	161330 (49T)	161331 (11T)	67	7.42	50
158028	158004 (47T)	158003 (12T)	75	7.42	56.8
158027	158001 (33T)	158002 (11T)	100	7.42-11.0	74.2-110
178775	178777 (56T)	178776 (17T)	61	7.50	45.5
178772	178774 (60T)	178773 (20T)	66	7.50	50
178769	178771 (46T)	178770 (23T)	100	7.50	75
*305577	305570 (55T)	305569 (22T)	100	7.42	74.2
*305578	305572 (52T)	305571 (14T)	67	7.42	50
*305579	305574 (53T)	305573 (13T)	60	7.42	45.5

DUAL TRANSMITTER-DISTRIBUTOR BASE GEAR SETS					
GEAR SET	DRIVEN GEAR	PINION	WPM	UNIT CODE	BAUD
	199091 (56T)	199090 (20T)	107	7.00	75
	170190 (51T)	170189 (15T)	88	8.50	75
195146	195145 (49T)	195144 (11T)	67	7.42	50
	170297 (33T)	170293 (11T)	100	7.42-11.0	74.2-110

*Motor speed 3000 rpm (50 cycle operation), all others 3600 rpm (60 cycle operation).

FIGURE 8. GEAR SETS

FIGURE 9. TRANSMITTER DISTRIBUTOR BASE WITH ANSWER-BACK FEATURE



*Part of 161884 Cable Assembly
 Note:
 This base is used with a Fixed Head, Single Contact
 Type 28 Transmitter Distributor Unit.

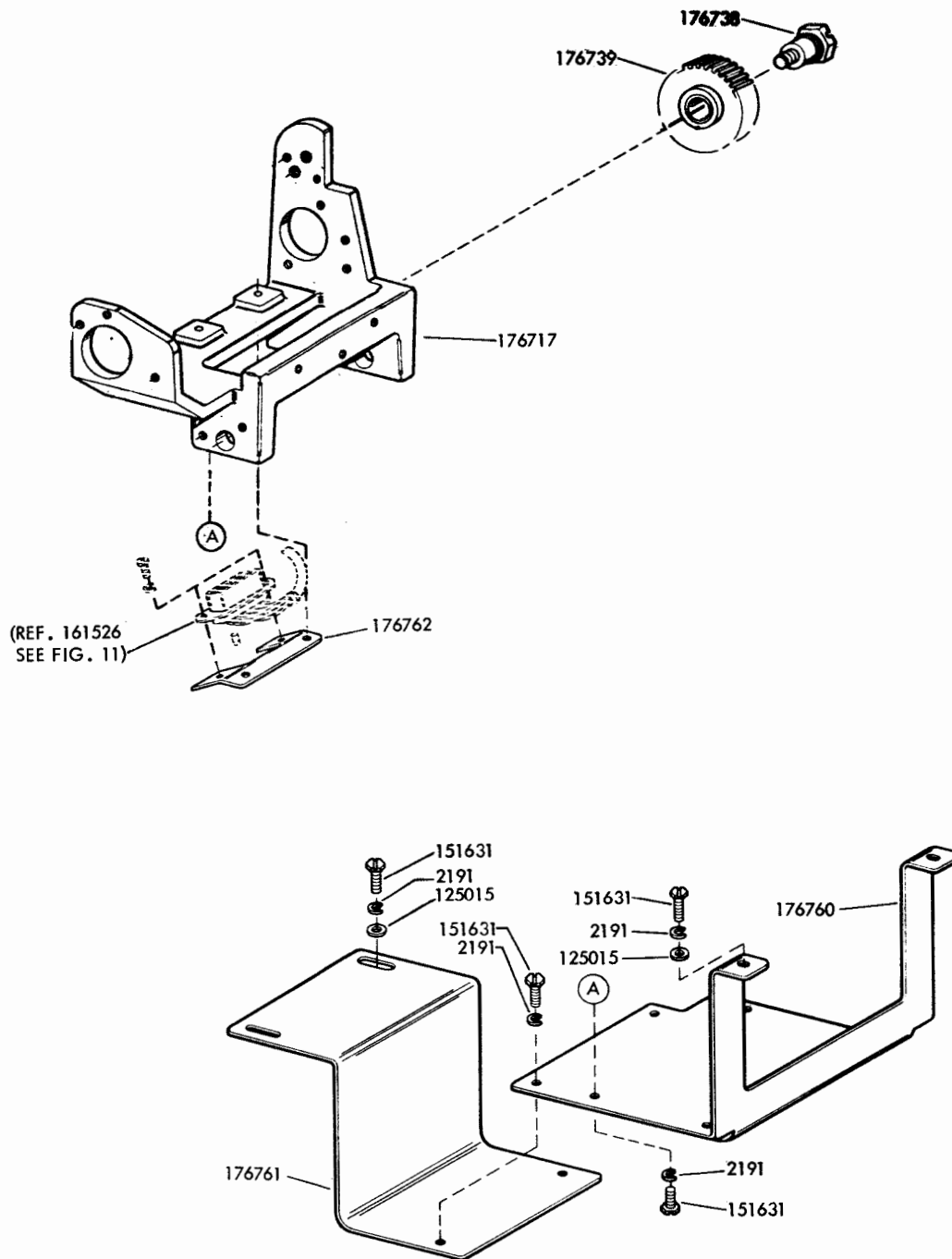
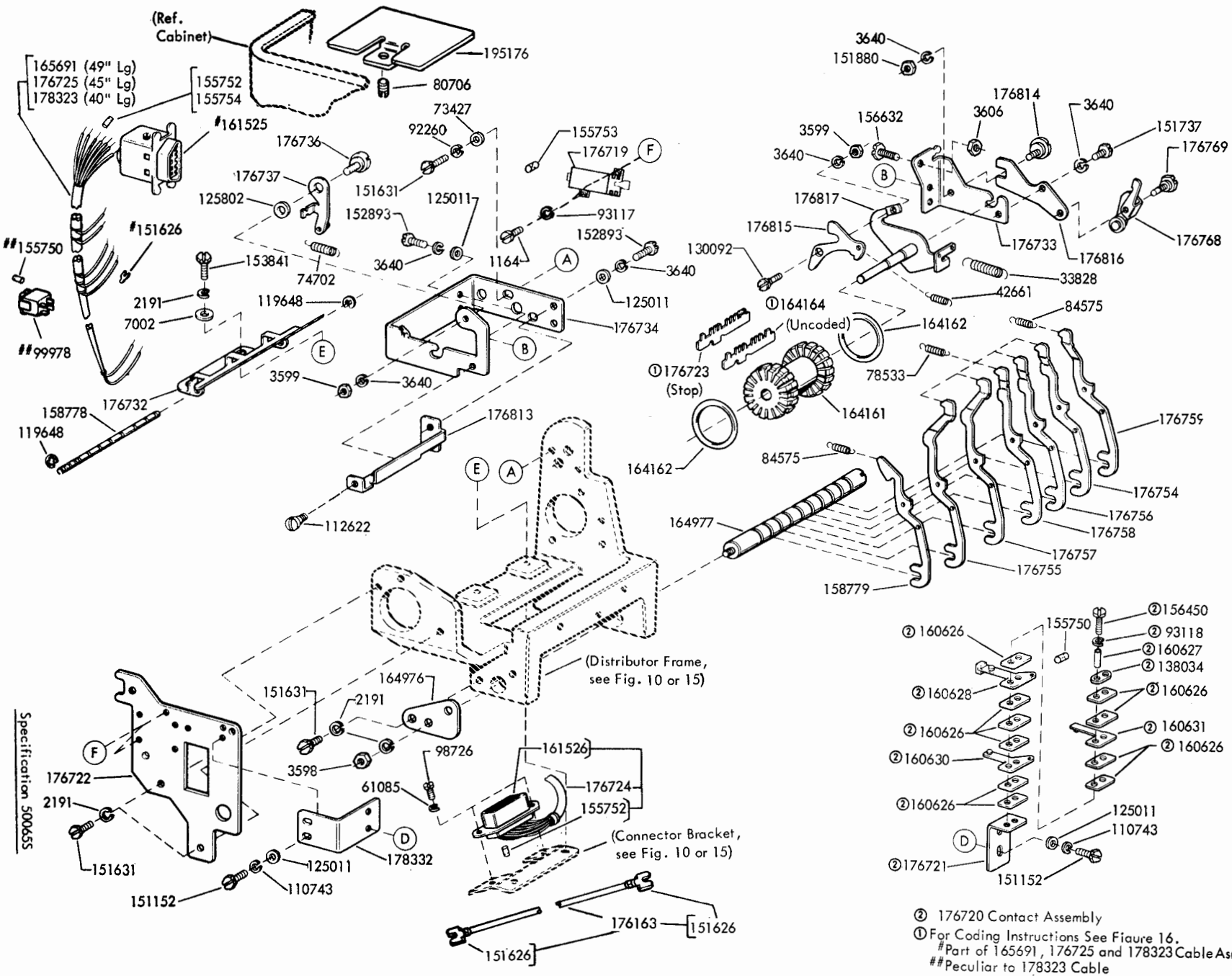
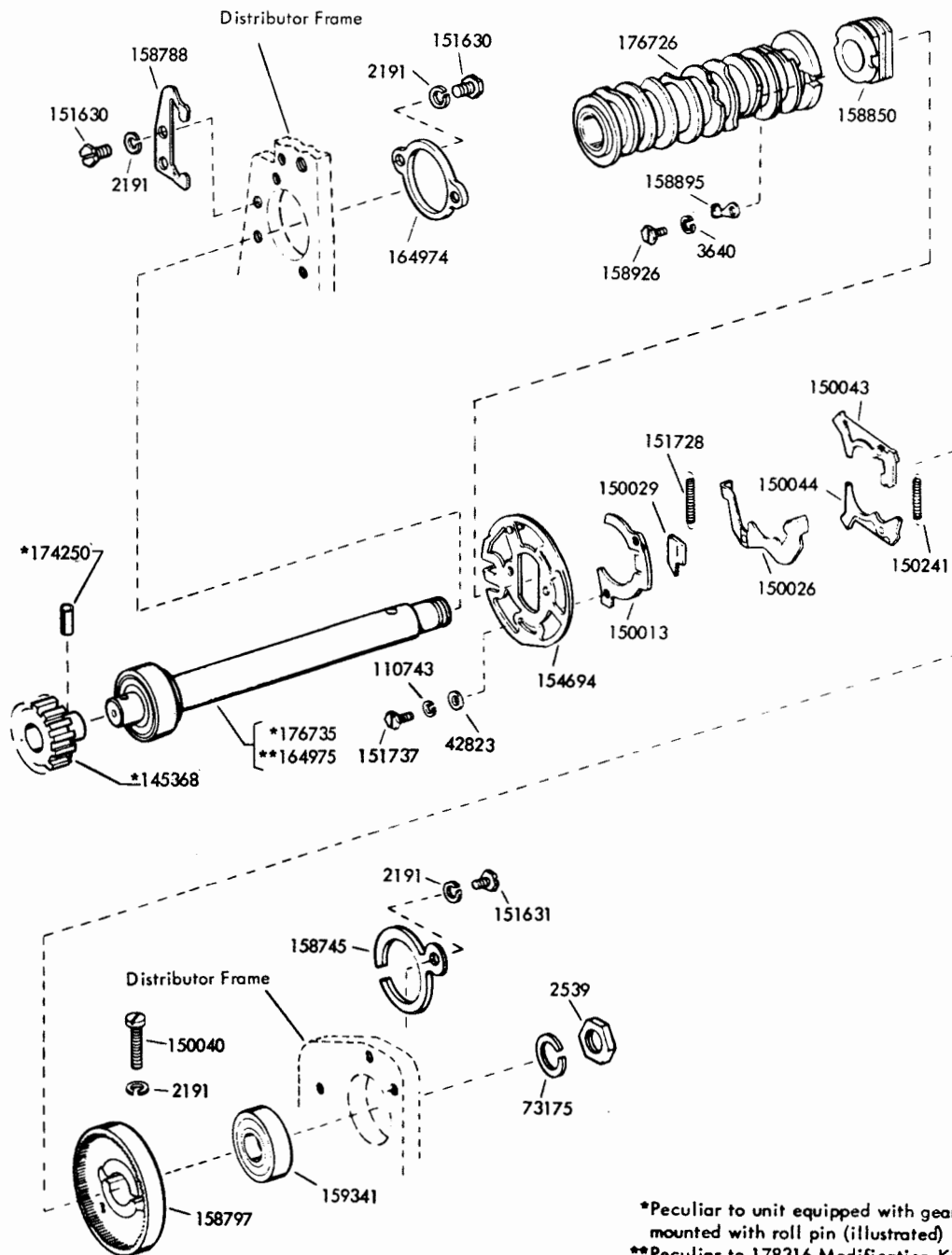


FIGURE 10. TRANSMITTER DISTRIBUTOR BASE WITH ANSWER-BACK FEATURE (Continued)

FIGURE 11. 178316 MODIFICATION KIT TO PROVIDE ANSWER BACK FEATURE FOR THE TRANSMITTER DISTRIBUTOR BASE (INCLUDES FIGURES 12 THROUGH 15)



Specification 500655



*Peculiar to unit equipped with gear mounted with roll pin (illustrated)
 **Peculiar to 178316 Modification Kit or unit equipped with gear mounted to hub (See Fig. 15).

FIGURE 12. 178316 MODIFICATION KIT TO PROVIDE ANSWER BACK FEATURE FOR THE TRANSMITTER DISTRIBUTOR BASE (INCLUDES FIGURES 11 THROUGH 15)

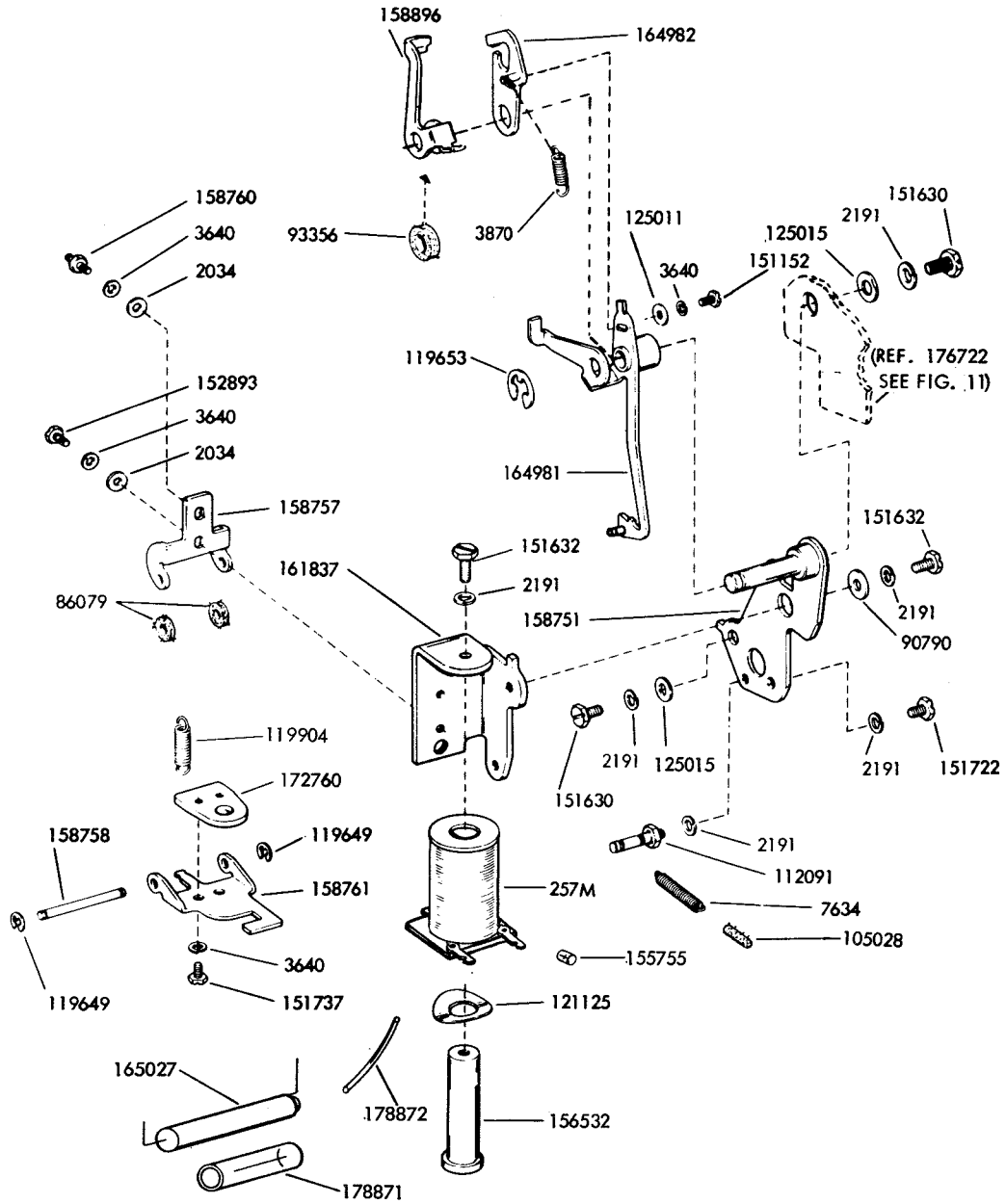


FIGURE 13. 178316 MODIFICATION KIT TO PROVIDE ANSWER BACK FEATURE FOR THE TRANSMITTER DISTRIBUTOR BASE (INCLUDES FIGURES 11 THROUGH 15)

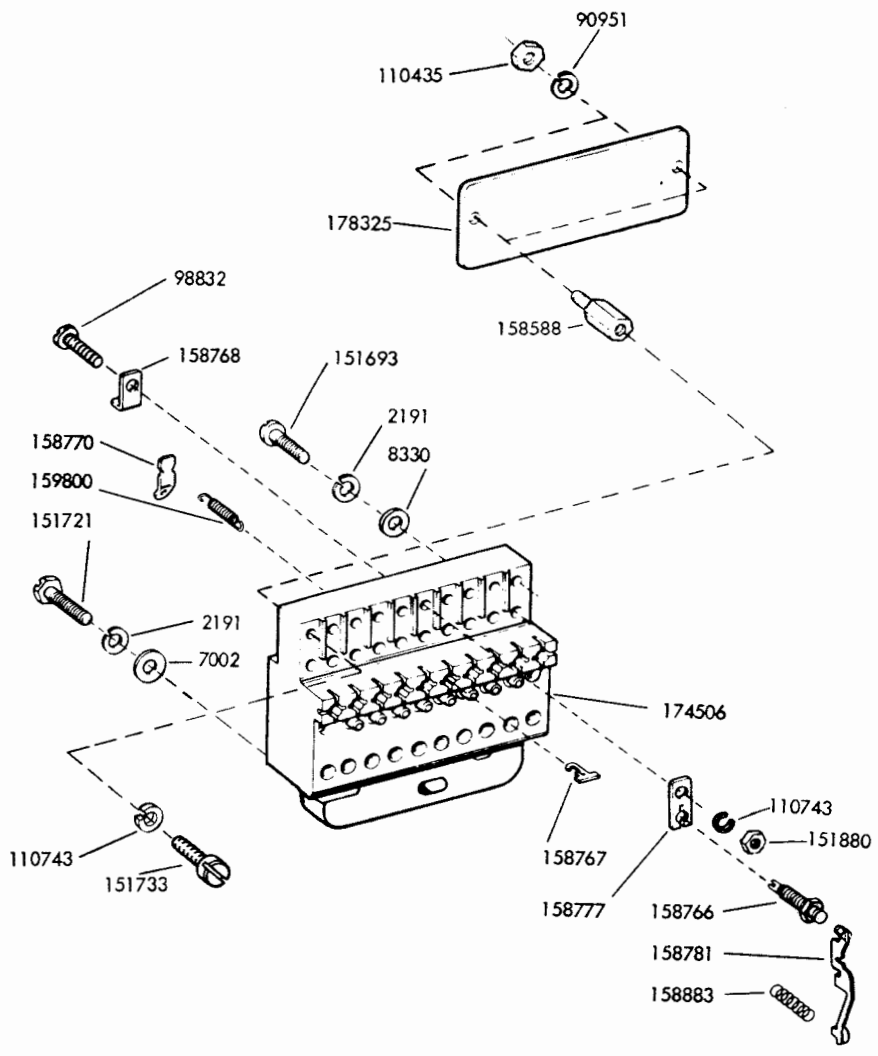


FIGURE 14. 178316 MODIFICATION KIT TO PROVIDE ANSWER BACK FEATURE FOR THE TRANSMITTER DISTRIBUTOR BASE (INCLUDES FIGURES 11 THROUGH 15)

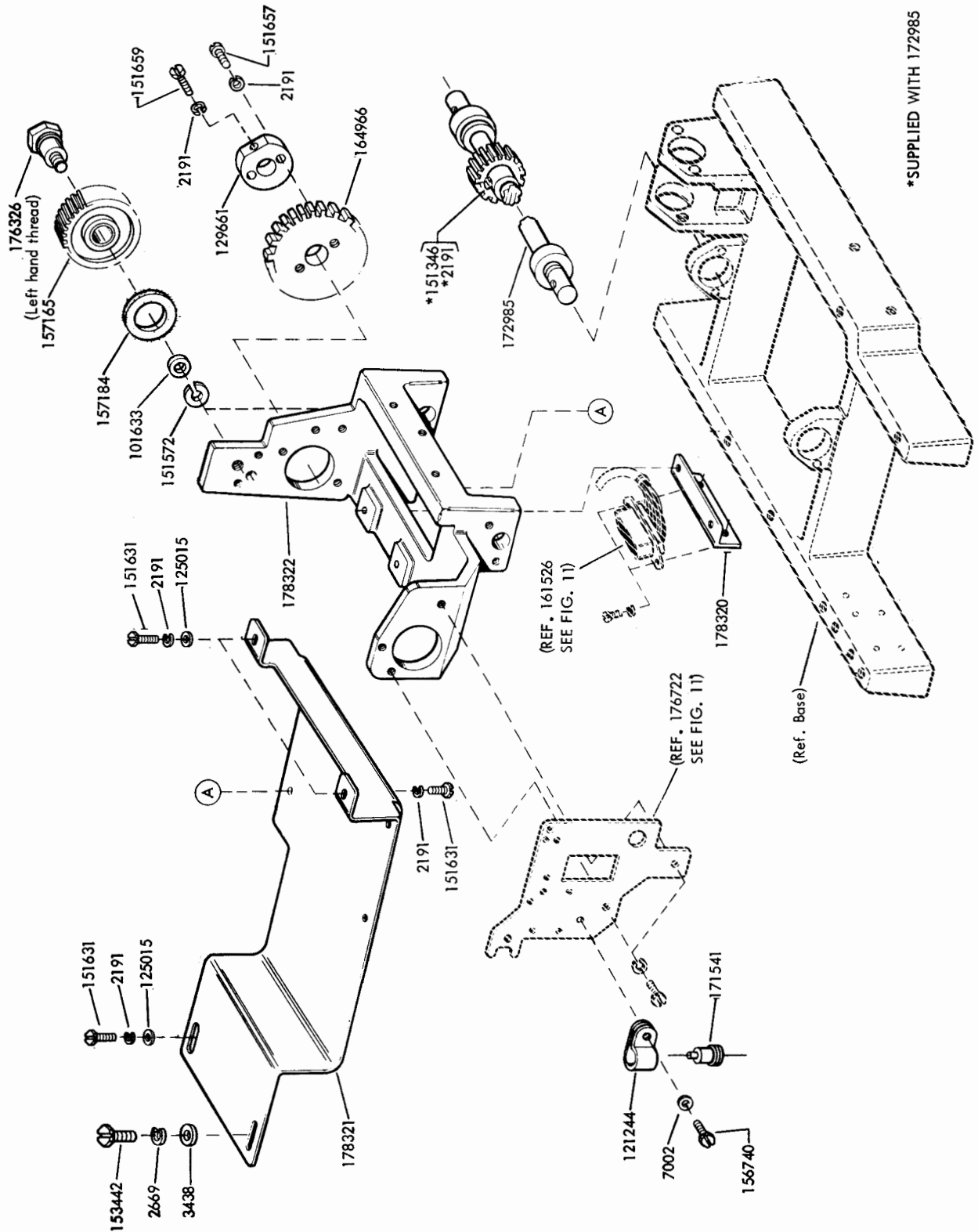
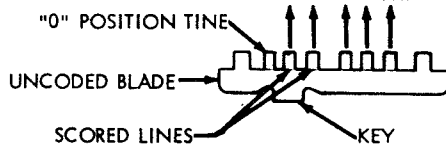


FIGURE 15. 178316 MODIFICATION KIT TO PROVIDE ANSWER BACK FEATURE FOR THE TRANSMITTER DISTRIBUTOR BASE (INCLUDES FIGURES 11 THROUGH 14)

CHARACTER	CODE				
	1	2	3	4	5
A		X	X	X	X
B		X	X		
C	X				X
D		X	X		X
E		X	X	X	X
F		X			X
G	X		X		
H	X	X		X	
I	X			X	X
J			X		X
K					X
L	X		X	X	
M	X	X			
N	X	X			X
O	X	X	X		
P	X			X	
Q				X	
R	X		X		X
S		X		X	X
T	X	X	X	X	
U				X	X
V	X				
W			X	X	
X		X			
Y		X		X	
Z		X	X	X	
CARRIAGE RETURN	X	X	X		X
LINE FEED	X		X	X	X
LETTERS SHIFT					
FIGURES SHIFT			X		
SPACE	X	X		X	X
BLANK	X	X	X	X	X

— LEAVE TINE
 — REMOVE TINE

NOTE:
 Remove the "0" position tine
 on all code and stop blades.

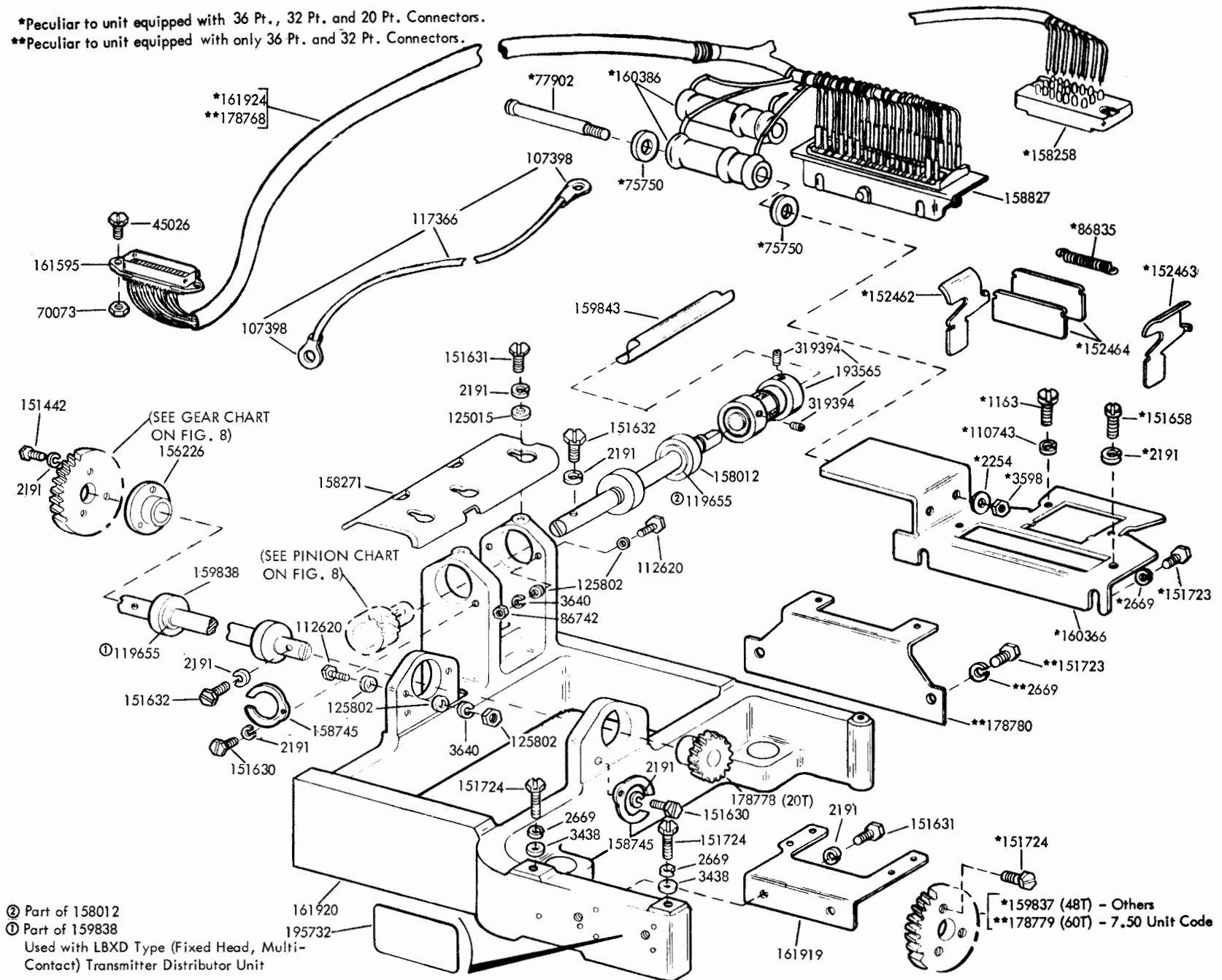


Coding Instructions for the Stop and Code Blades used in
 the Answer Back Feature on an LCXB Transmitter Distributor Base.

FIGURE 16. UNCODED STOP AND CODE BLADES

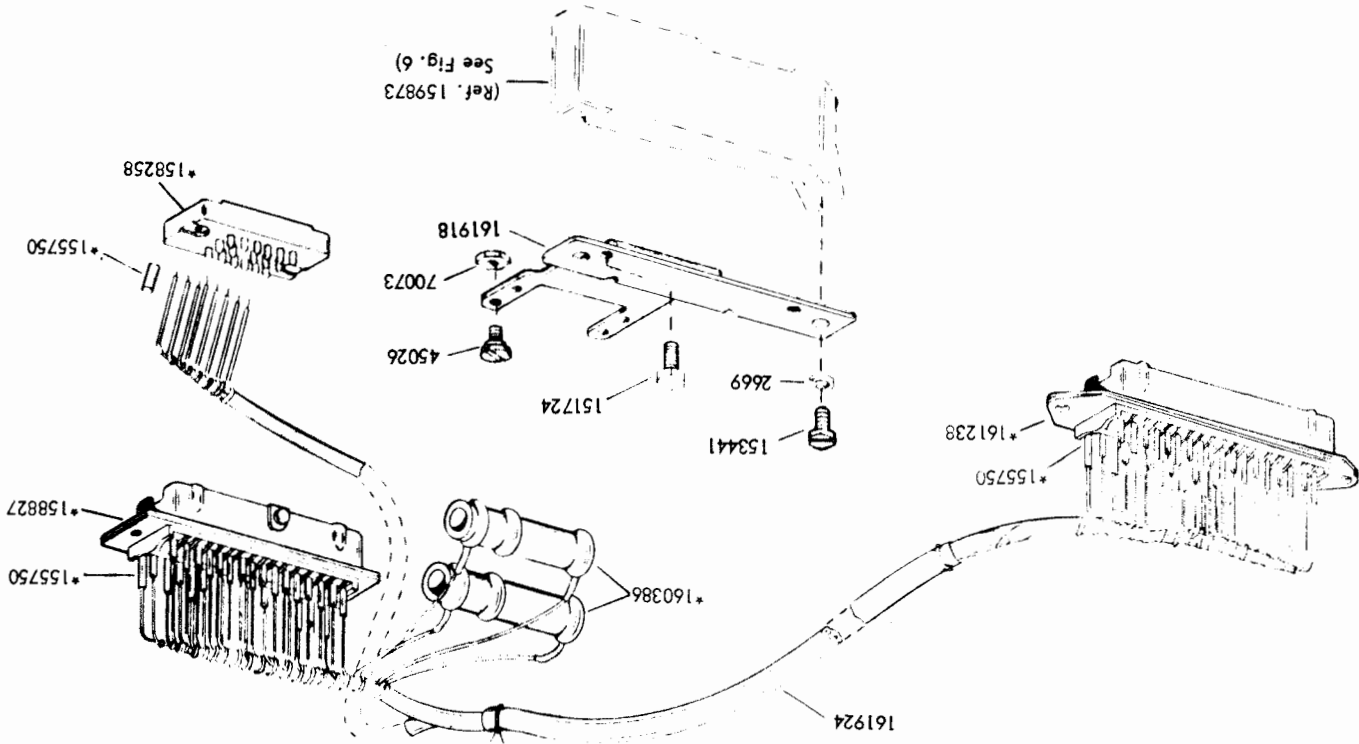
*Peculiar to unit equipped with 36 Pt., 32 Pt. and 20 Pt. Connectors.
 **Peculiar to unit equipped with only 36 Pt. and 32 Pt. Connectors.

FIGURE 17. TRANSMITTER DISTRIBUTOR BASE



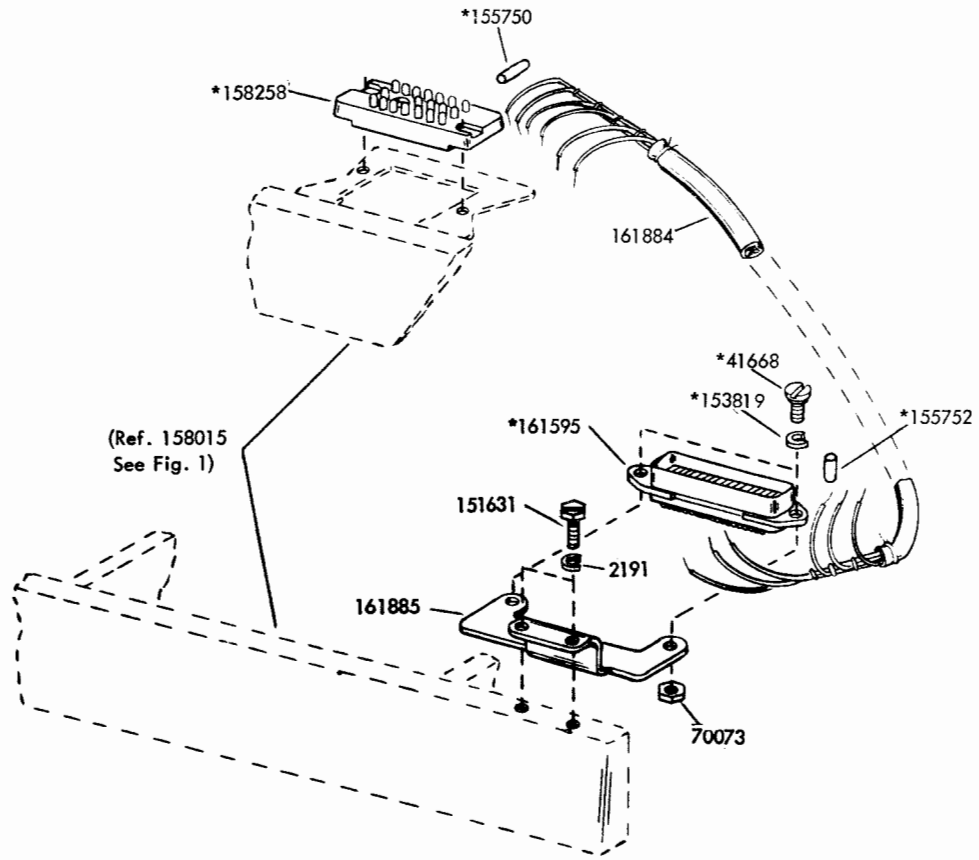
② Part of 158012
 ① Part of 159838
 Used with LBXD Type (Fixed Head, Multi-Contact) Transmitter Distributor Unit

*15937 (48T) - Others
 **17879 (60T) - 7.50 Unit Code



Specification 59275
*Part of 161924 Cable

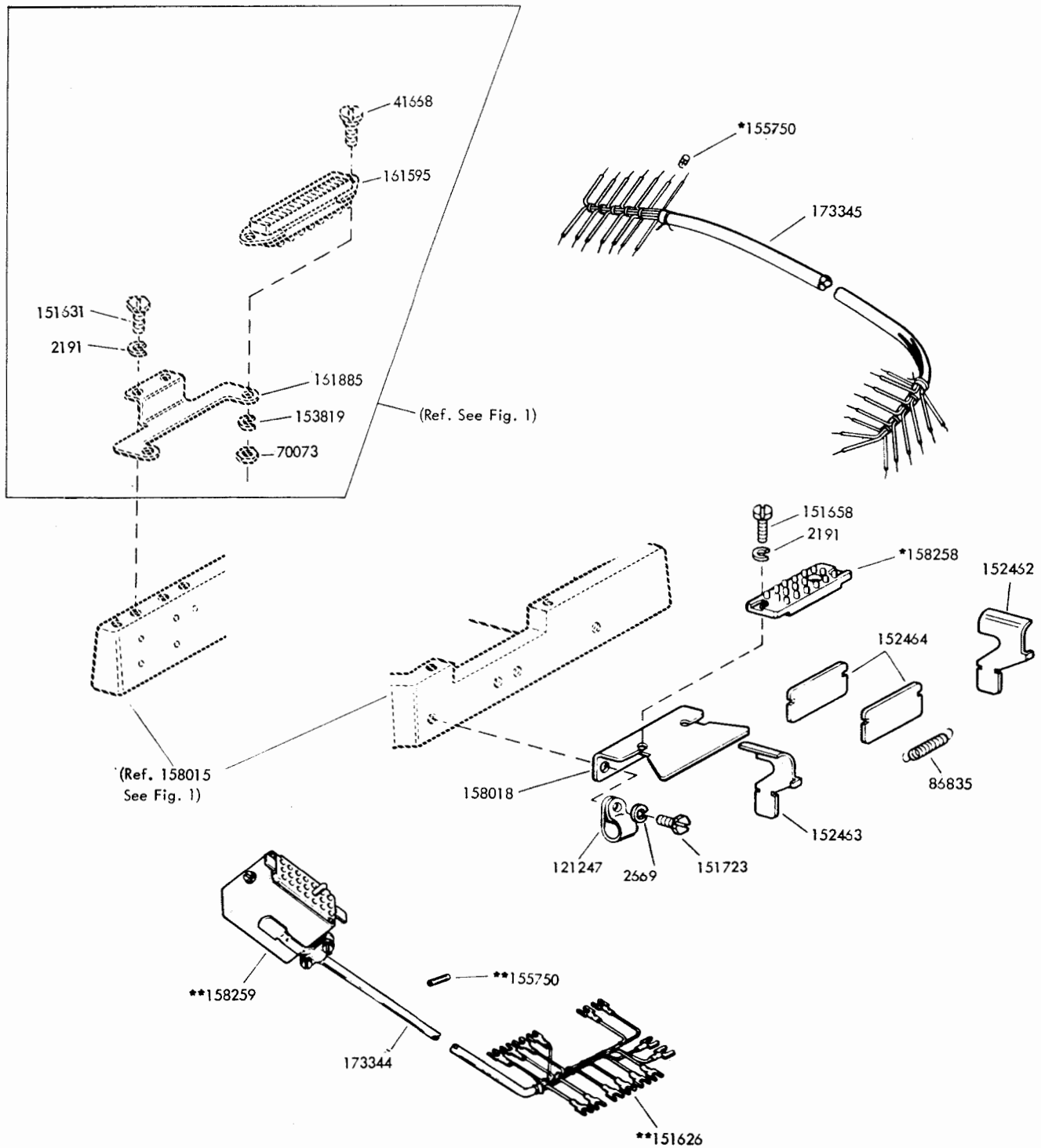
FIGURE 18. 161921 MODIFICATION KIT TO CONVERT AN LCXB7 BASE TO ACCEPT AN LBXD7 TRANSMITTER DISTRIBUTOR



Specification 59275

*Part of 161884 Cable

FIGURE 19. 161833 MODIFICATION KIT TO CONVERT AN LCXB1 TO AN LCXB8 TRANSMITTER DISTRIBUTOR BASE



Specification 501745

**Part of 173344 Cable
 *Part of 173345 Cable

FIGURE 20. 173343 MODIFICATION KIT FOR MULTIPLE WIRE OUTPUT FACILITIES ON LCX88 BASE

NUMERICAL INDEX

Part Number	Description and Page Number	Part Number	Description and Page Number	Part Number	Description and Page Number
257M	Coil, Magnet 14	112620	Screw (4-40 x 1/2 Hex) 2 to 8, 18	153441	Screw (10-32 x 7/16 Hex) 19
1163	Screw (4-40 x 3/16 Fil) 3, 4, 5, 7, 18	112622	Screw, Shoulder (4-40) 12	153442	Screw (10-32 x 1/2 Hex) 8, 16
1164	Screw (2-56 x 3/16 Fil) 12	117366	Jumper (8-1/2" Green) 2, 8, 10, 18	153819	Washer, Lock 2, 8, 10, 20, 21
2034	Washer, Flat 3, 4, 14	117535	Washer, Flat 2, 8	153841	Screw (6-40 x 9/16 Hex) 12
2191	Washer, Lock 2 to 16, 18, 20, 21	119648	Ring, Retaining 12	154694	Disk, Clutch Cam 13
2254	Washer, Flat 7, 18	119649	Ring, Retaining 14	155750	Sleeve, Insulating (3/32 ID x 1/2" Lg) 2, 10, 12, 19, 20, 21
2449	Washer, Lock 3, 4	119652	Ring, Retaining 2, 8	155752	Sleeve, Insulating (5/64 ID x 1/2" Lg) 2, 8, 10, 12, 20
2539	Nut (3/8-32 Hex) 8, 13	119653	Ring, Retaining 14	155753	Sleeve, Insulating (1/8 ID x 1/2" Lg) 12
2669	Washer, Lock 2 to 8, 10, 16, 18, 19, 21	119655	Ring, Retaining 2 to 7, 18	155754	Sleeve, Insulating (1/16 ID x 1/2" Lg) 12
3438	Washer, Flat 3 to 7, 16, 18	119904	Spring 14	155755	Sleeve, Insulating (11/64 ID x 5/8" Lg) 14
3598	Nut (6-40 Hex) 7, 12, 18	121125	Washer, Spring 14	155996	Pinion (13 T) 9
3599	Nut (4-40 Hex) 12	121244	Clamp, Cable (1/4" ID) 2, 8, 16	155997	Gear (60 T) 9
3606	Nut (6-40 Hex) 12	121245	Clamp, Cable (5/16" ID) 2, 8	155998	Pinion (12 T) 9
3640	Washer, Lock 2 to 8, 12, 13, 14, 18	121247	Clamp, Cable (7/16" ID) 21	155999	Gear (34 T) 9
3649	Washer, Flat 8	125011	Washer, Flat 12, 14	156226	Hub 2 to 8, 18
3870	Spring 14	125015	Washer, Flat 2 to 8, 10, 11, 14, 16, 18	156450	Screw (2-56 x 1/2 Fil) 12
7002	Washer, Flat 10, 12, 15, 16	125802	Washer, Flat 2 to 8, 12, 18	156467	Ring, Retaining 8
7634	Spring 14	129661	Hub 16	156532	Core 14
8330	Washer, Flat 8, 15	130092	Screw, Shoulder (4-40) 12	156632	Screw (6-40 x 13/32 Hex) 12
33828	Spring 12	138034	Plate, Clamp 12	156740	Screw (6-40 x 7/32 Hex) 16
41668	Screw, Shoulder (3-48) 2, 8, 10, 20, 21	145368	Gear (27 T) 10, 13	156976	Connector, Plug (32 Pt) 5
42661	Spring 12	150013	Disk, Adjusting 13	157165	Gear (35 T) 16
42823	Washer, Flat 13	150026	Lever, Shoe Release 13	157184	Washer, Felt 16
45026	Screw, Shoulder (3-48) 18, 19	150029	Wick, Felt 13	158001	Gear (33 T) 9
49056	Screw (10-32 x 7/8 Hex) 5, 6, 7	150040	Screw (6-40 x 5/8 Fil) 13	158002	Pinion (11 T) 9
61085	Washer, Lock 5, 7, 12	150043	Shoe, Secondary Clutch 13	158003	Pinion (12 T) 9
70073	Nut (3-48 Hex) 2, 8, 10, 18, 19, 20, 21	150044	Shoe, Primary Clutch 13	158004	Gear (47 T) 9
71858	Washer, Flat 3, 4	150241	Spring 13	158005	Pinion (9 T) 9
73175	Washer, Lock 8, 13	150952	Eccentric 3, 4	158006	Gear (44 T) 9
73427	Washer, Flat 12	151080	Washer, Flat 8	158012	Shaft w/Bearing 2 to 8, 18
74702	Spring 12	151152	Screw (4-40 x 3/16 Hex) 12, 14	158013	Shaft, Coupling 2, 8
74807	Nut (10-32 Hex) 2, 8, 10	151246	Washer, Flat 8	158015	Base 2
75750	Washer, Insulating 7, 18	151346	Screw (6-40 x 3/8 Fil) 16	158017	Shaft w/Bearing 2
76279	Screw (1/4-32 x 5/8 Hex) 3, 4	151442	Screw (6-40 x 1/2 Hex) 2, 3, 4, 5, 6, 7, 8, 9, 18	158018	Bracket 2, 8, 10, 21
77902	Screw (6-40 x 2-3/8 Rd) 7, 18	151572	Washer, Lock 16	158027	Gear Set (100 WPM) 9
78533	Spring 12	151626	Terminal 8, 12, 21	158028	Gear Set (75 WPM) 9
80706	Screw, Set (6-40) 12	151630	Screw (6-40 x 1/4 Hex) 2 to 8, 13, 14, 18	158029	Gear Set (60 WPM) 9
84575	Spring 12	151631	Screw (6-40 x 5/16 Hex) 2 to 8, 10 to 13, 16, 18, 20, 21	158258	Connector, Plug (20 Pt) 2, 7, 8, 10, 18, 19, 20, 21
86079	Washer, Felt 14	151632	Screw (6-40 x 3/8 Hex) 2 to 10, 14, 18	158259	Connector, Receptacle (20 Pt) 8, 21
86742	Nut (4-40 Hex) 3 to 7, 18	151657	Screw (6-40 x 1/4 Fil) 2, 8, 16	158271	Guard, Gear 2 to 8, 18
86835	Spring 2, 7, 8, 10, 18, 21	151658	Screw (6-40 x 5/16 Fil) 2, 7, 8, 10, 18, 21	158588	Post 15
86850	Screw (10-32 x 1-1/4 Fil) 3, 4	151659	Screw (6-40 x 1/2 Fil) 16	158601	Connector, Plug (14 Pt) 5, 7
90790	Washer, Flat 14	151687	Screw (4-40 x 7/16 Fil) 3	158745	Clamp, Bearing 2 to 8, 13, 18
90951	Washer, Lock 15	151688	Screw (4-40 x 5/8 Fil) 4	158751	Plate, Clutch Trip 14
92260	Washer, Lock 12	151693	Screw (6-40 x 9/16 Fil) 15	158757	Hinge, Mounting 14
93117	Washer, Lock 12	151721	Screw (6-40 x 3/4 Hex) 15	158758	Shaft 14
93118	Washer, Lock 12	151722	Screw (6-40 x 3/16 Hex) 14	158760	Post, Spring 14
93356	Washer, Felt 14	151723	Screw (10-32 x 3/8 Hex) 2, 3, 4, 5, 7, 10, 18, 21	158761	Bail, Armature 14
94540	Screw, Set (10-24) 2	151724	Screw (10-32 x 5/8 Hex) 18, 19	158766	Screw, Contact (6-40) 15
98726	Screw (3-48 x 1/4 Fil) 5, 7, 12	151728	Spring 13	158767	Guide, Lever 15
98832	Screw (4-40 x 11/16 Fil) 15	151733	Screw (4-40 x 9/16 Fil) 15	158768	Terminal 15
99978	Connector, Plug (4 Pt) 12	151737	Screw (4-40 x 11/64 Hex) 12, 13, 14	158770	Terminal, Spring Holder 15
101633	Washer, Flat 16	151880	Nut (4-40 Hex) 2, 7, 8, 12, 15	158777	Holder, Screw 15
103305	Washer, Flat 2, 8, 10	152462	Latch, Right 2, 7, 8, 10, 18, 21	158778	Post, Spring 12, 18
105028	Wick, Felt 14	152463	Latch, Left 2, 7, 8, 10, 18, 21	158779	Lever, Cam Follower 12
105029	Washer, Flat 8	152464	Insulator (.062") 2, 7, 8, 10, 18, 21	158781	Rocker, Contact 15
107398	Terminal 10, 18	152893	Screw (4-40 x 1/4 Hex) 5, 7, 12, 14	158788	Clamp, Bearing 13
110435	Nut (4-40 Hex) 15			158797	Drum, Clutch 13
110743	Washer, Lock 3, 4, 5, 7, 12, 13, 15, 18			158827	Connector, Receptacle (32 Pt) 5, 7, 18, 19
112091	Post, Spring 14				

NUMERICAL INDEX (Continued)

Part Number	Description and Page Number	Part Number	Description and Page Number	Part Number	Description and Page Number
158850	Bearing, Sleeve 13	164101	Stud, Shoulder 2, 10	176755	Lever, Cam Follower (#5) 12
158883	Spring, Compression 15	164161	Drum, Message 12	176756	Lever, Cam Follower (#2) 12
158895	Clip 13	164162	Ring, "O" 12	176757	Lever, Cam Follower (#4) 12
158896	Lever, Latch 14	164164	Blade, Code 12	176758	Lever, Cam Follower (#3) 12
158926	Screw (4-40 x 7/32 Hex) 13	164966	Gear (42 T) 16	176759	Lever 12
159233	Stud 3, 4	164974	Plate 13	176760	Bracket, Mounting 11
159341	Bearing, Ball 8, 13	164975	Shaft w/Bearing 13	176761	Bracket 11
159800	Spring 15	164976	Plate 12	176762	Bracket, Connector 11
159836	Gear (24 T) 3 to 7	164977	Shaft, Lever 12	176768	Lever, Drive 12
159837	Gear (48 T) 5, 6, 7, 18	164981	Lever, Trip 14	176769	Screw, Pilot (6-40) 12
159838	Shaft 3 to 7, 18	164982	Lever, Trip 14	176813	Guide 12
159839	Bracket, Plug Mounting 4	165027	Network, Spark Suppression 14	176814	Screw, Eccentric Shoulder (4-40) 12
159840	Bracket, Mounting 3, 5	165691	Cable Assembly 12	176815	Pawl, Stepping 12
159843	Shaft, Coupling 5, 6, 7, 18	170189	Pinion (15 T) 9	176816	Plate 12
159844	Base 3	170190	Gear (51 T) 9	176817	Plate, Drive 12
159845	Base 4	170291	Shaft, Idler 8	178316	Modification Kit 12 to 16
159846	Shaft, Coupler 3, 4	170293	Pinion (11 T) 9	178320	Bracket, Connector 16
159873	Base 5, 6, 7	170294	Shaft w/Bearings 8	178321	Plate, Mounting 16
159882	Gear Set (65 WPM) 9	170295	Gear (25 T) 8	178322	Frame, Distributor 16
159883	Gear Set (106 WPM) 9	170297	Gear (33 T) 9	178323	Cable Assembly 12
160366	Bracket 7, 18	170298	Gear (40 T) 8	178325	Cover, Insulator 15
160368	Cable Assembly 7	170300	Base 8	178332	Bracket 12
160374	Cable Assembly 5	170301	Gear (50 T) 8	178768	Cable Assembly 18
160384	Bracket 5, 7	171541	Diode 16	178769	Gear Set (100 WPM) 9
160386	Resistor (1000 Ohm) 7, 18, 19	172760	Armature 14	178770	Pinion (23 T) 9
160425	Stud, Adjusting (1/4-32) 3, 4	172985	Shaft w/Bearings & Gear 2, 16	178771	Gear (46 T) 9
160626	Insulator (.031") 12	173343	Modification Kit 21	178772	Gear Set (66 WPM) 9
160627	Bushing, Insulating 12	173344	Cable Assembly 21	178773	Pinion (20 T) 9
160628	Spring, Contact 12	173345	Cable Assembly 21	178774	Gear (60 T) 9
160630	Spring, Contact 12	173776	Gear Set (65 WPM) 9	178775	Gear Set (61 WPM) 9
160631	Spring, Contact 12	173818	Pinion (13 T) 9	178776	Pinion (17 T) 9
160975	Nut (1/4-32 Hex) 3, 4	173819	Gear (60 T) 9	178777	Gear (56 T) 9
161238	Connector, Receptacle (36 Pt) 19	174250	Pin, Roll 10, 13	178778	Pinion (20T) 18
161330	Gear (49 T) 9	174506	Block, Contact 15	178779	Gear (60 T) 18
161331	Pinion (11 T) 9	176163	Jumper (18" Black) 12	178780	Bracket, Connector 18
161332	Gear (42 T) 9	176326	Screw, Shoulder (10-32) 16	178871	Sleeve, Insulating (7/16 ID x 1-1/8" Lg) 14
161333	Pinion (10 T) 9	176655	Base w/Bearings 10	178872	Sleeve, Insulating (1/16 ID x 1-1/4" Lg) 14
161356	Gear Set (67 WPM) 9	176656	Shaft 10	193565	Coupling 2 to 8, 10, 18
161357	Gear Set (71 WPM) 9	176657	Shaft 10	194356	Pinion (15 T) 2
161525	Connector, Plug (14 Pt) 12	176717	Frame, Distributor 11	195144	Pinion (11 T) 9
161526	Connector, Receptacle (14 Pt) 12	176719	Resistor (1000 Ohm) 12	195145	Gear (49 T) 9
161595	Connector, Receptacle (36 Pt) 2, 8, 10, 18, 20, 21	176720	Contact Assembly 12	195146	Gear Set (67 WPM) 9
161833	Modification Kit 20	176721	Bracket, Contact 12	195176	Guard, Contact 12
161837	Bracket 14	176722	Plate, Mounting 12	195732	Plate, Identification 2 to 8, 10, 18
161884	Cable Assembly 2, 10, 20	176723	Blade, Stop 12	198056	Gear Set (81 WPM) 9
161885	Bracket, Connector 2, 8, 10, 20, 21	176724	Cable Assembly 12	198057	Pinion (19 T) 9
161918	Bracket, Connector 19	176725	Cable Assembly 12	198058	Gear (70 T) 9
161919	Bracket, Connector 18	176726	Camsleeve 13	199090	Pinion (20 T) 9
161920	Base 18	176732	Guide 12	199091	Gear (56 T) 9
161921	Modification Kit 19	176733	Bracket 12	305569	Pinion (22 T) 9
161924	Cable Assembly 18, 19	176734	Bracket 12	305570	Gear (55 T) 9
162594	Shaft 2	176735	Shaft w/Bearing 13	305571	Pinion (14 T) 9
163003	Gear (20 T) 2	176736	Screw, Eccentric Shoulder (4-40) 12	305572	Gear (52 T) 9
163452	Pinion (20 T) 9	176737	Lever, Detent 12	305573	Pinion (13 T) 9
163453	Gear (56 T) 9	176738	Screw, Shoulder (10-32) 11	305574	Gear (53 T) 9
163454	Gear Set (107 WPM) 9	176739	Gear (45 T) 11	305577	Gear Set (100 WPM) 9
163497	Gear (15 T) 9	176741	Gear (33 T) 10	305578	Gear Set (67 WPM) 9
163498	Gear (63 T) 9	176743	Gear (33 T) 10	305579	Gear Set (60 WPM) 9
163499	Gear Set (71 WPM) 9	176745	Gear (40 T) 10	319394	Screw (10-24 Set) 2 to 8, 10, 18
163515	Stud, Shoulder 8	176751	Shaft 10		
163517	Bushing, Rubber 2, 8, 10	176752	Ring, Retaining 10		
		176754	Lever, Cam Follower (#1) 12		



28 ELECTRICAL SERVICE UNIT (LESU)
for
REPERFORATORS
PARTS

FIGURE	CONTENTS	PAGE
1	Electrical Service Unit (LESU)	2
2	152623 Line Relay Mounting Assembly	3
3	152950 and 162361 Rectifier Assemblies	4
4	153251 Motor Control Assembly	5
5	176448 Relay Motor Control Assembly	6
6	177010 Selector Magnet Driver Assembly	7
7	Early Design LESU Parts	8
8	179426 Plate Assembly	8
9	176694 Motor Control Assembly	9
10	Cables	9
	Numerical Index	10

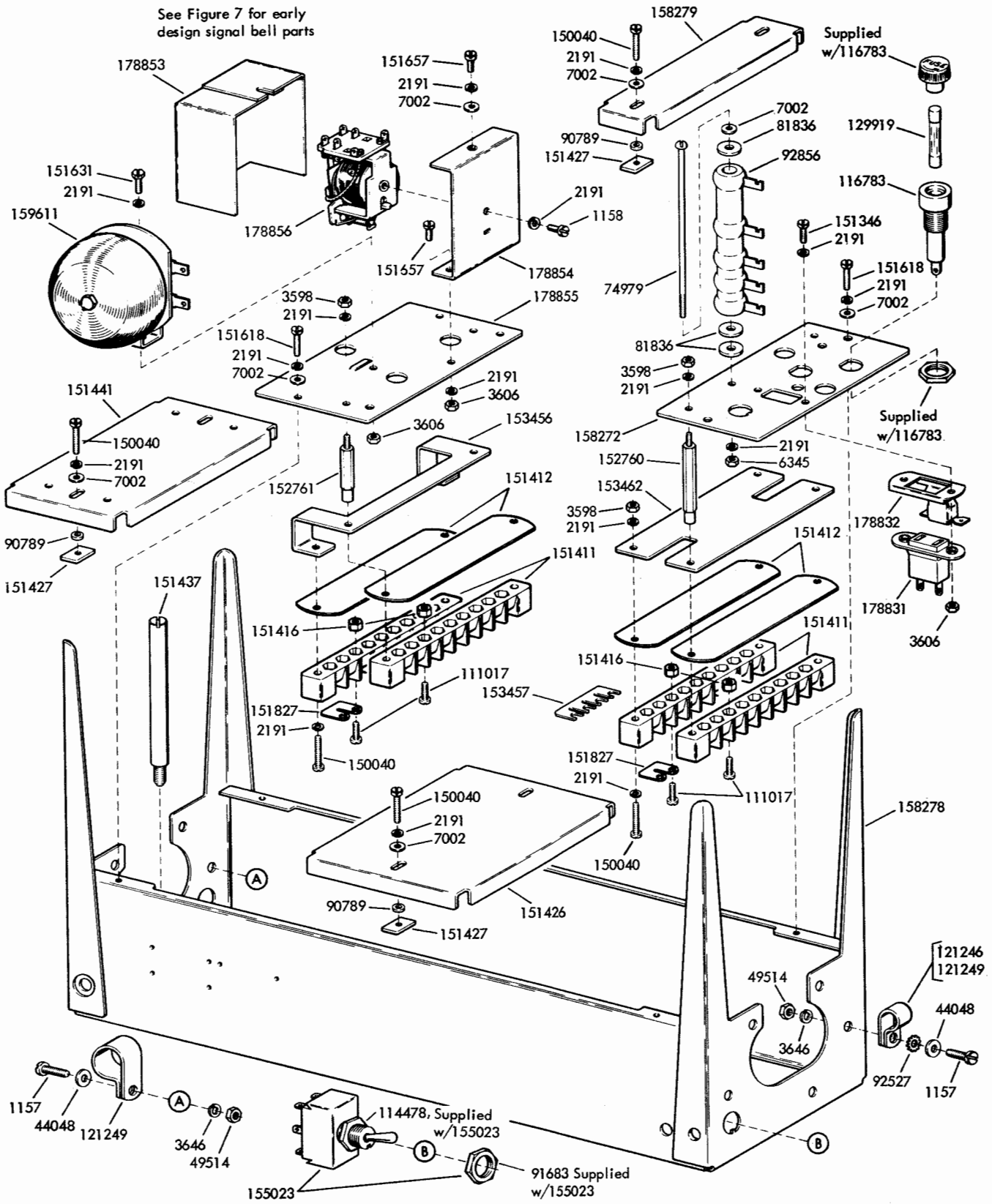


FIGURE 1. ELECTRICAL SERVICE UNIT (LESU)

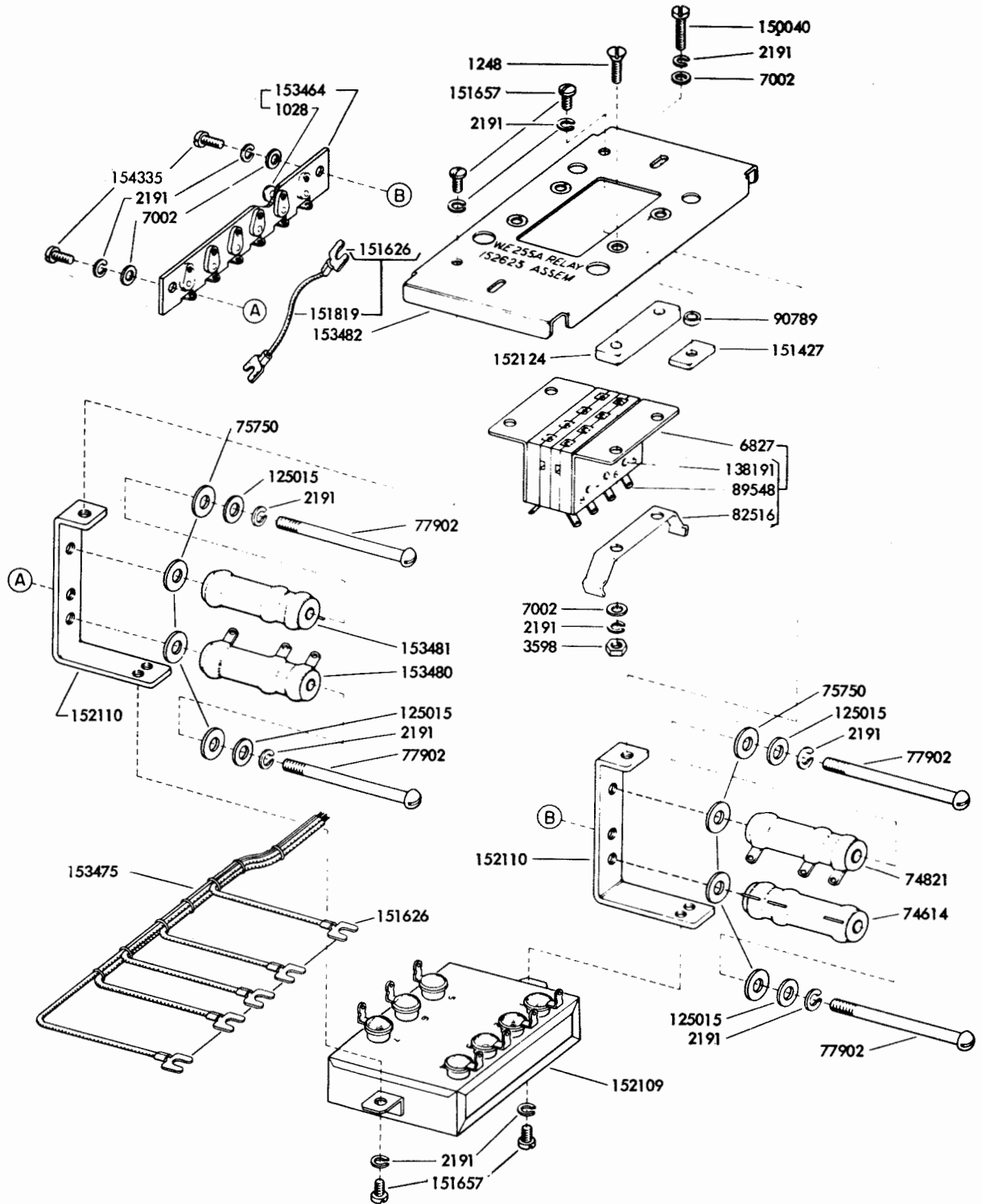


FIGURE 2. 152623 LINE RELAY MOUNTING ASSEMBLY

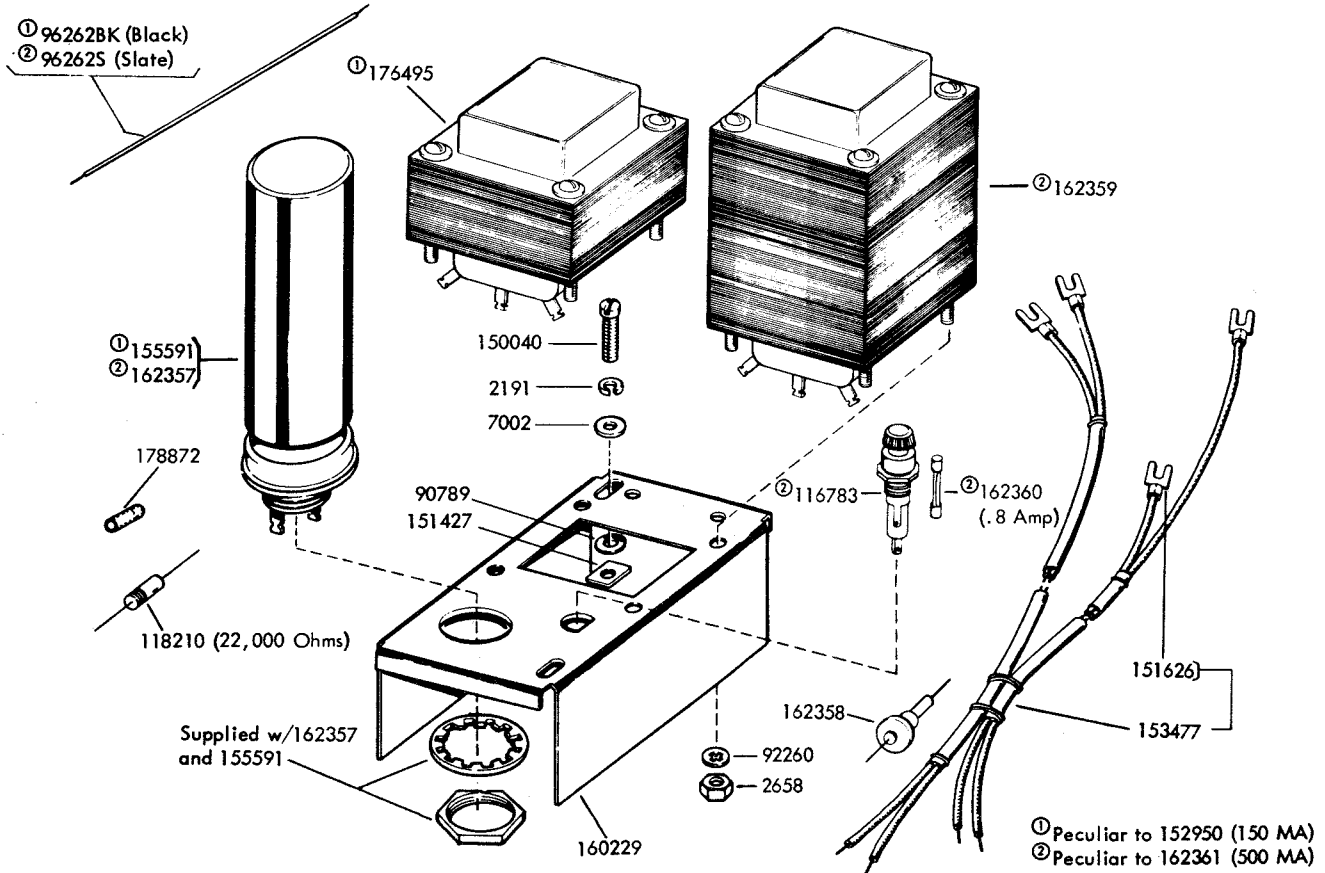
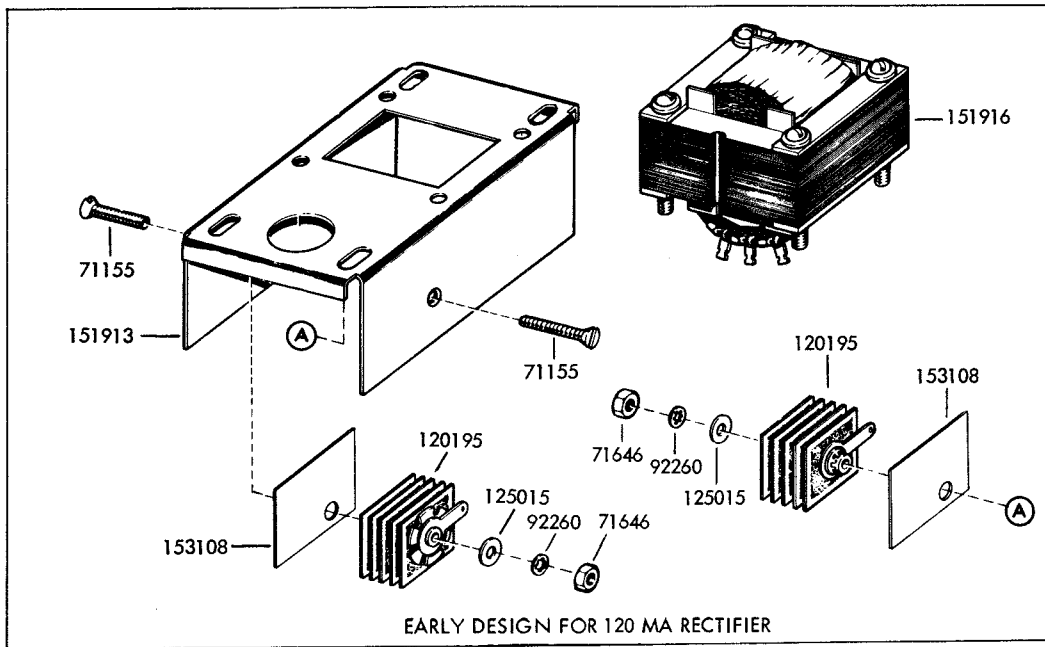


FIGURE 3. 152950 AND 162361 RECTIFIER ASSEMBLIES

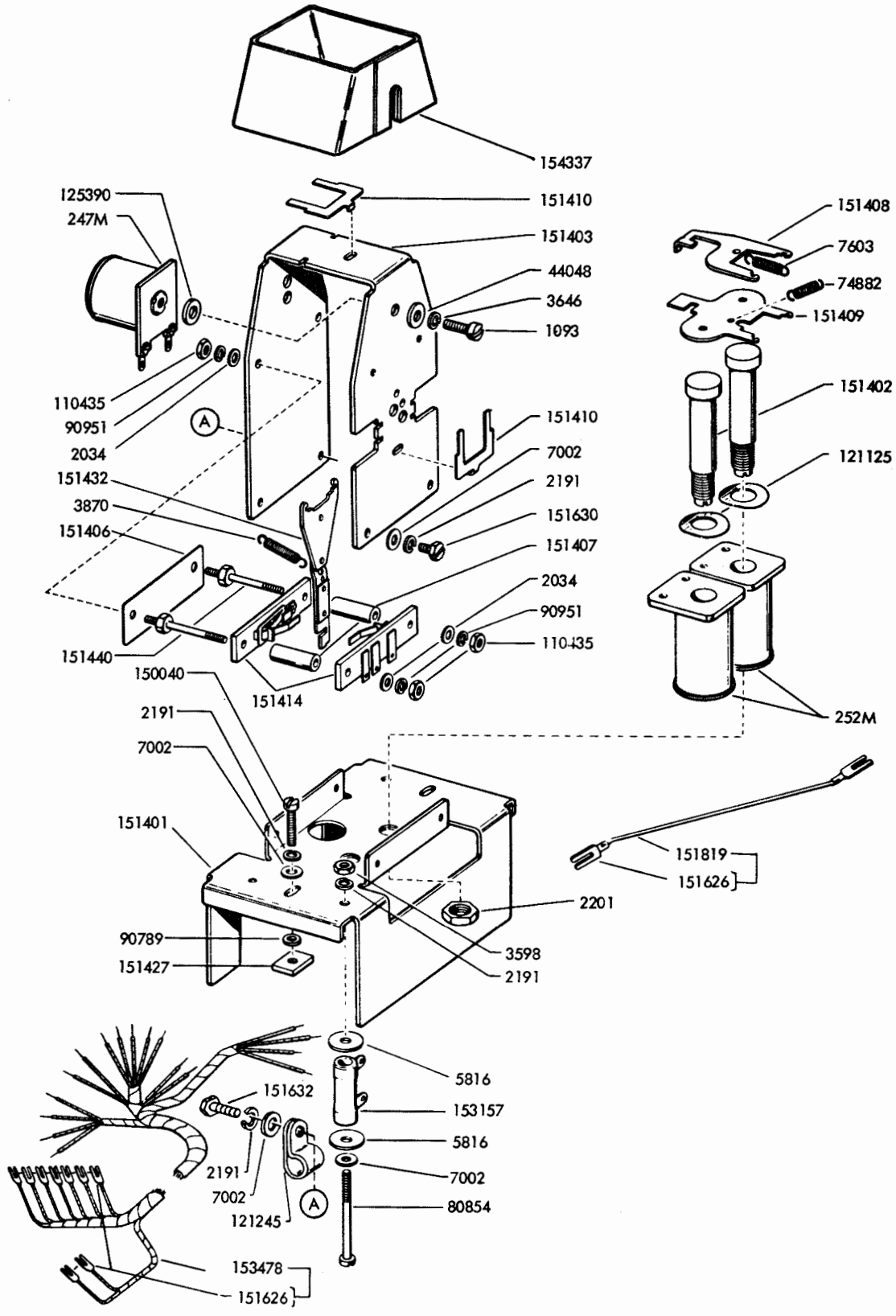


FIGURE 4. 153251 MOTOR CONTROL ASSEMBLY

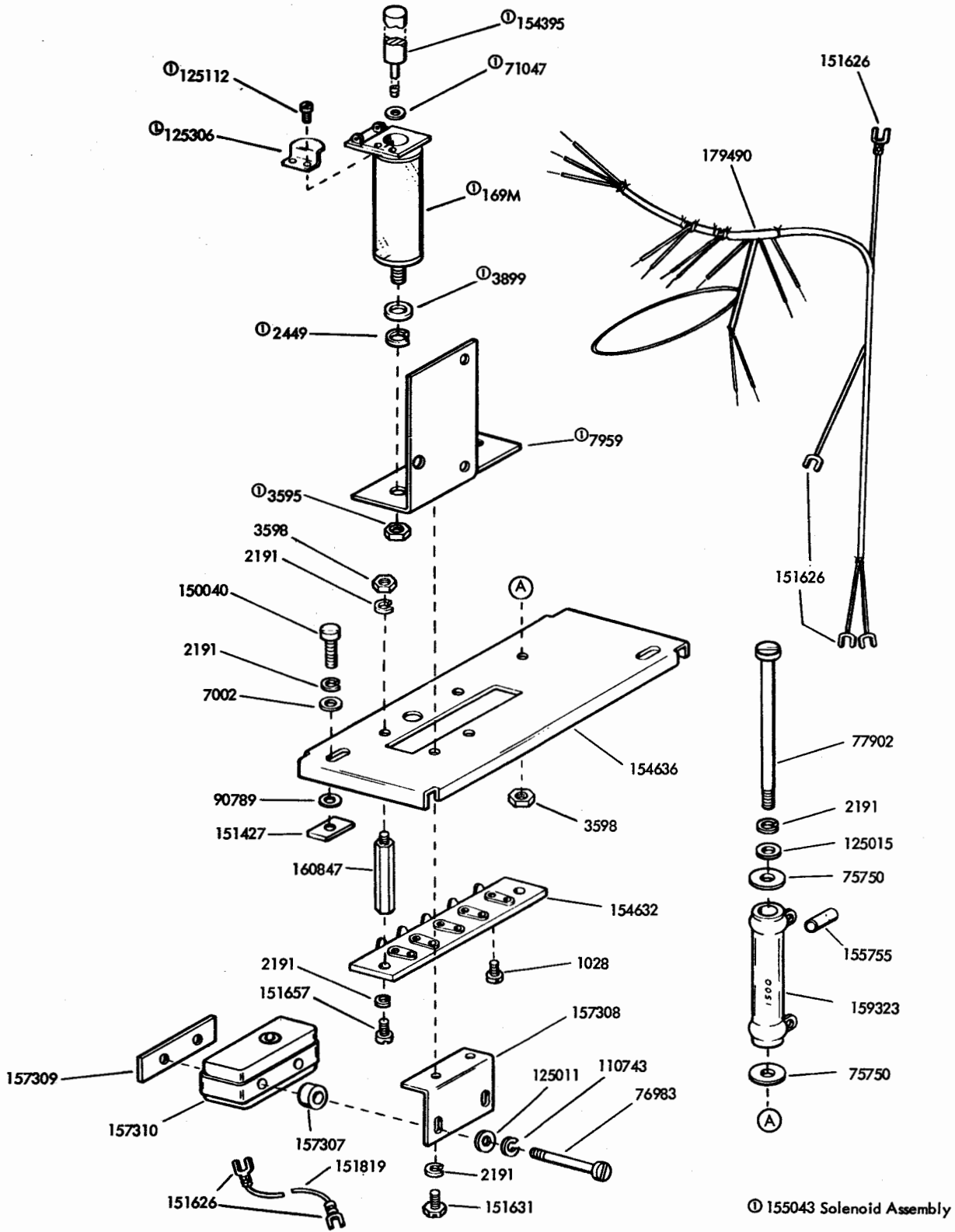


FIGURE 5. 176448 RELAY MOTOR CONTROL ASSEMBLY

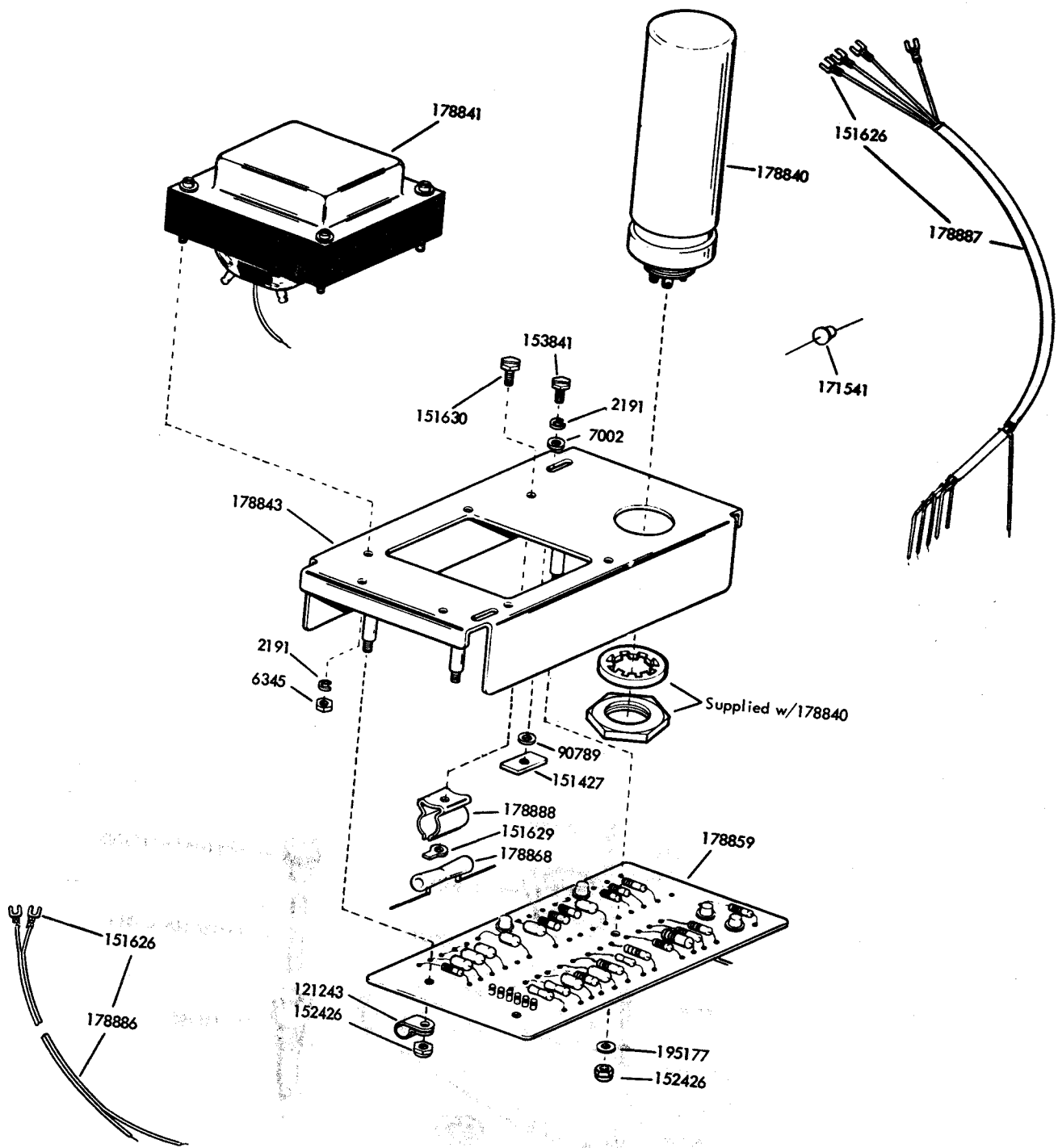


FIGURE 6. 177010 SELECTOR MAGNET DRIVER ASSEMBLY

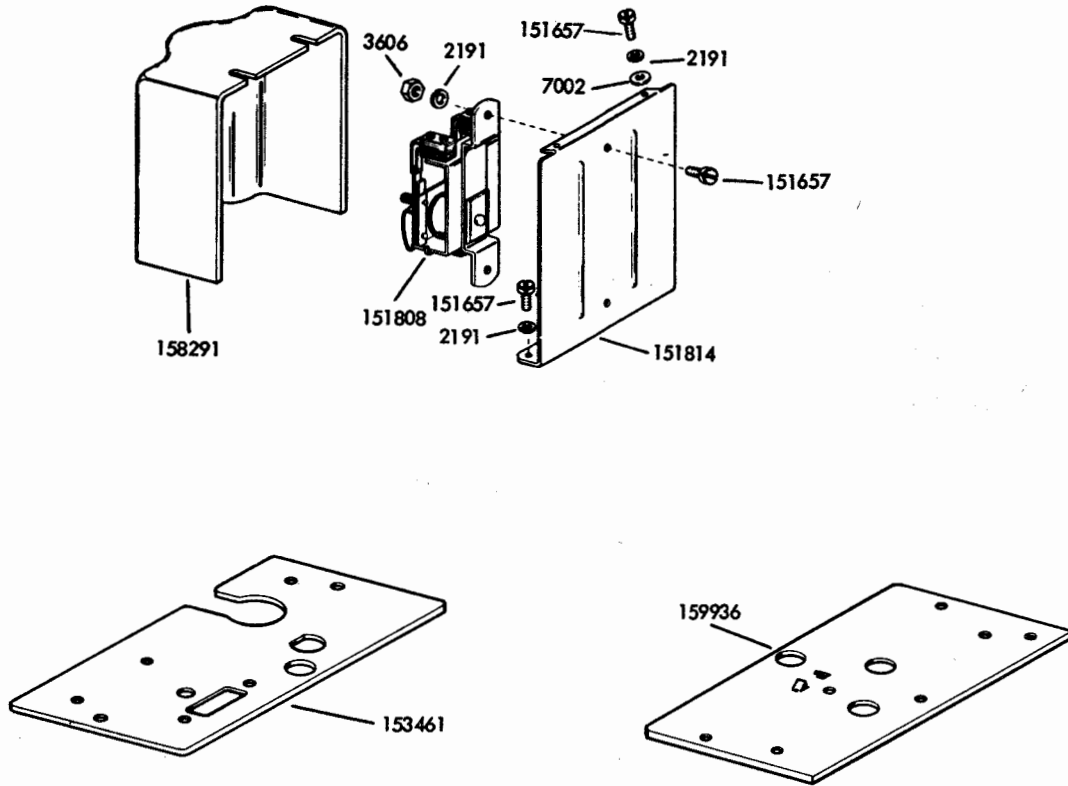


FIGURE 7. EARLY DESIGN LESU PARTS

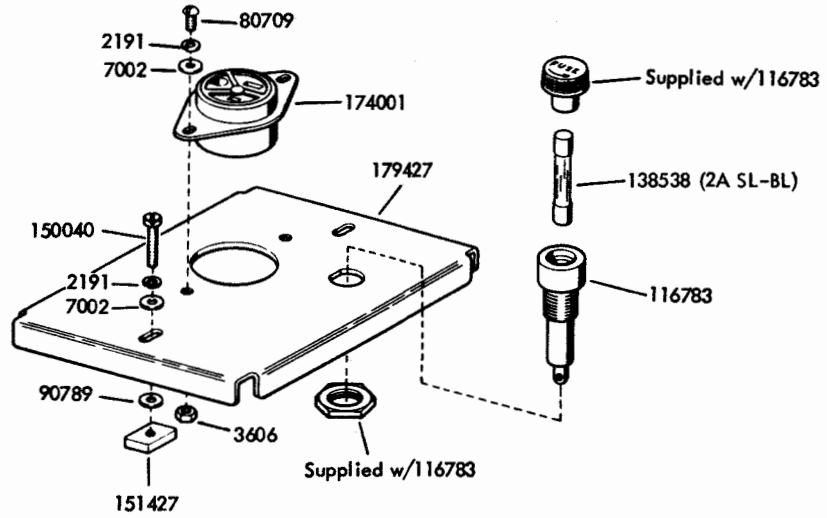


FIGURE 8. 179426 PLATE ASSEMBLY

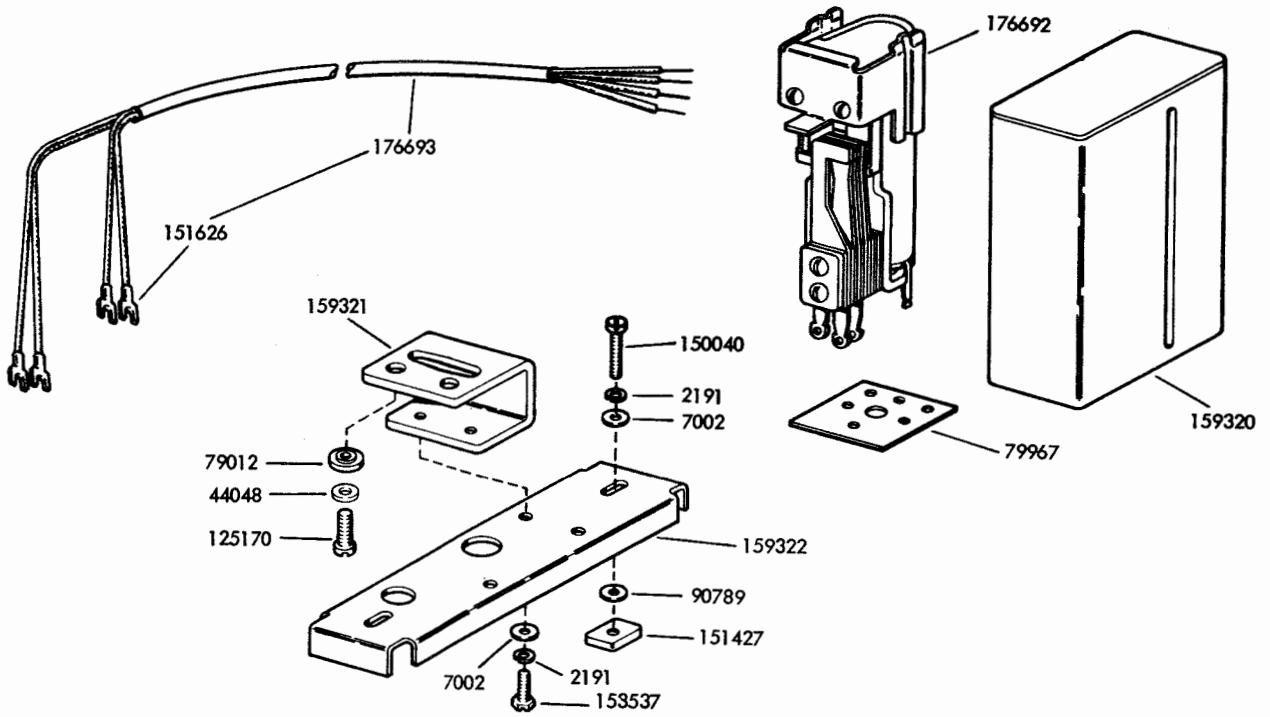


FIGURE 9. 176694 MOTOR CONTROL ASSEMBLY

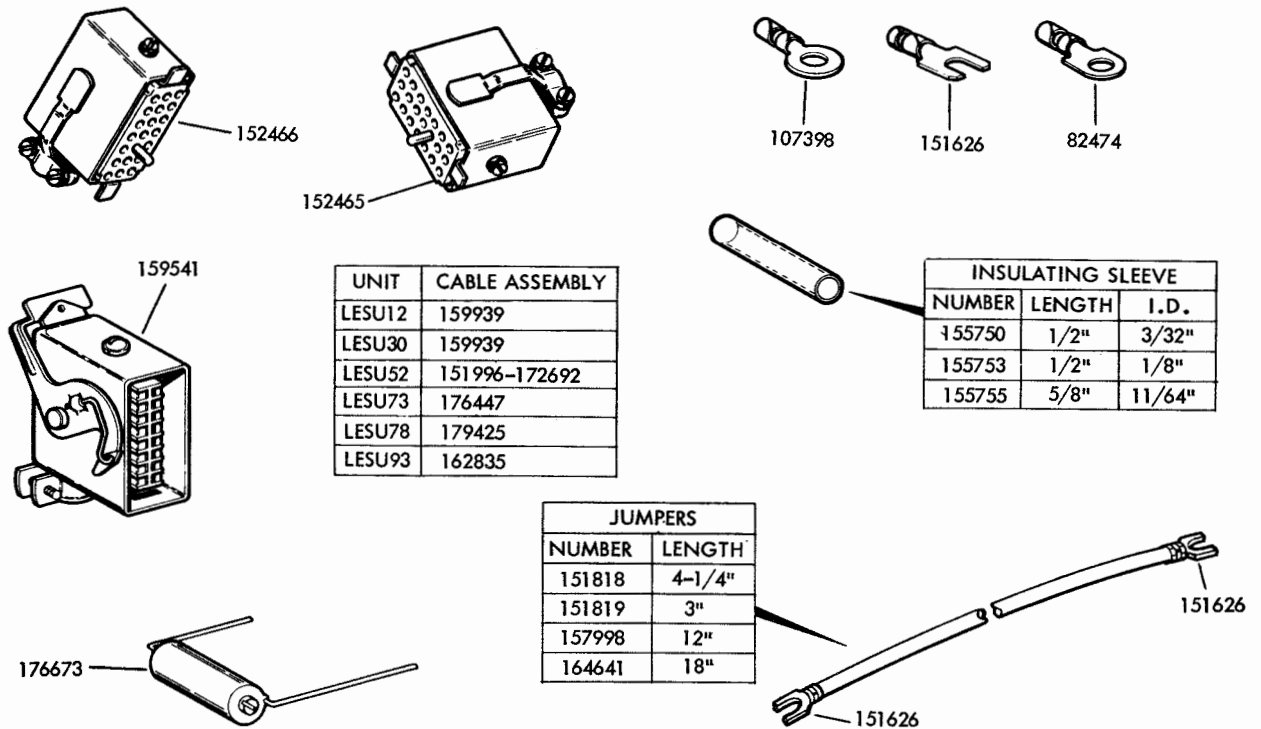


FIGURE 10. CABLES

NUMERICAL INDEX

Part Number	Description and Page Number	Part Number	Description and Page Number	Part Number	Description and Page Number
169M	Coil, Magnet 6	125015	Washer, Flat 3, 4, 6	153482	Plate, Relay 3
247M	Coil, Magnet 5	125112	Screw, 2-56 x 1/8 Fil 6	153537	Screw, 6-40 x 9/32 Hex 9
252M	Coil, Magnet 5	125170	Screw, 8-32 x 5/16 Fil 9	153841	Screw, 6-40 x 9/16 Hex 7
1028	Screw, 4-40 x 1/4 Fil 3, 6	125306	Stop, Magnet Plunger 6	154335	Screw, 6-40 x 9/32 Fil 3
1093	Screw, 8-32 x 7/16 Fil 5	125390	Washer, Flat 5	154337	Cover 5
1157	Screw, 8-32 x 1/2 Fil 2	129919	Fuse, 4 Amp 2	154395	Plunger, Solenoid 6
1158	Screw, 6-32 x 5/16 Fil 2	138191	Screw, 3-48 x 1 Rd 3	154632	Block, Terminal 6
1248	Screw, 6-40 x 1/2 Flat 3	138538	Fuse, 2 Amp SL-BL 8	154636	Plate 6
2034	Washer, Flat 5	150040	Screw, 6-40 x 5/8 Fil 2 to 6, 8, 9	155023	Switch, DP-DT Toggle 2
2191	Washer, Lock 2 to 9	151346	Screw, 6-40 x 3/8 Fil 2	155043	Solenoid Assembly 6
2201	Nut, 5/16-32 Hex 5	151401	Base 5	155591	Capacitor, 220 MFD 4
2449	Washer, Lock 6	151402	Core 5	155750	Sleeve, 3/32 ID x 1/2" Lg
2658	Nut, 6-32 Hex 4	151403	Frame 5		Insulating 9
3595	Nut, 1/4-32 Hex 6	151406	Plate, Insulating 5	155753	Sleeve, 1/8 ID x 1/2" Lg
3598	Nut, 6-40 Hex 2, 3, 5, 6	151407	Collar, Spacing 5		Insulating 9
3606	Nut, 6-40 Hex 2, 8	151408	Lever 5	155755	Sleeve, 11/64 ID x 5/8" Lg
3646	Washer, Lock 2, 5	151409	Armature 5		Insulating 6, 9
3870	Spring 5	151410	Clip, Retaining 5	157307	Spacer 6
3899	Spacer, .188" Thk 6	151411	Block, Terminal 2	157308	Bracket 6
5816	Washer, Insulating 5	151412	Insulator 2	157309	Plate, Nut 6
6345	Nut, 6-32 Hex 2, 7	151414	Switch, Sensitive 5	157310	Switch, Sensitive 6
6827	Block 3	151416	Nut, 6-40 Hex 2	157998	Jumper, 12" Lg Black 9
7002	Washer, Flat 2 to 9	151426	Plate, 3-3/4 Blank 2	158272	Plate, Right Mounting 2
7603	Spring 5	151427	Plate, Clamp 2 to 9	158278	Container 2
7959	Bracket, Magnet 6	151432	Armature 5	158279	Plate, 1-5/16 Blank 2
44048	Washer, Flat 2, 5, 9	151437	Stud 2	158291	Cover, Relay 8
49514	Nut, 8-32 Hex 2	151440	Stud 5	159320	Cover, Relay 9
71047	Washer, Flat 6	151441	Plate, 2-3/4 Blank 2	159321	Bracket, Relay 9
71155	Screw, 6-32 x 1-1/4 Flat 4	151618	Screw, 6-40 x 7/16 Fil 2	159322	Plate, Relay 9
71646	Nut, 6-32 Hex 4	151626	Terminal 3 to 7, 9	159323	Resistor, 1500 Ohm 6
74614	Resistor, 2600 Ohm 3	151629	Nut, 6-40 Lug 7	159541	Connector, 16 Pt Plug 9
74821	Resistor, 2810 Ohm 3	151630	Screw, 6-40 x 1/4 Hex 5, 7	159611	Bell 2
74882	Spring 5	151631	Screw, 6-40 x 5/16 Hex 2, 6	159936	Plate, Left Mounting 8
74979	Screw, 6-32 x 3-3/4 Rd 2	151632	Screw, 6-40 x 3/8 Hex 5	159939	Cable Assembly 9
75750	Washer, Insulating 3, 6	151657	Screw, 6-40 x 1/4 Fil 2, 3, 6, 8	160229	Plate, Mounting 4
76983	Screw, 4-40 x 1-1/4 Fil 6	151808	Relay 8	160847	Stud 6
77902	Screw, 6-40 x 2-3/8 Rd 3, 6	151814	Bracket, Relay Mounting 8	162357	Capacitor, 500 MFD 4
79012	Insulator 9	151818	Jumper, 4-1/4" Lg Black 9	162358	Diode 4
79967	Insulator 9	151819	Jumper, 3" Lg Black 3, 5, 6, 9	162359	Transformer, Power 4
80709	Screw, 6-40 x 1/4 Rd 8	151827	Strap, Terminal 2	162360	Fuse, .8 Amp 4
80854	Screw, 6-40 x 1-7/16 Fil 5	151913	Plate, Mounting 4	162361	Rectifier Assembly, 500 MA 1, 4
81836	Washer, Insulating 2	151916	Transformer 4	162835	Cable Assembly 9
82474	Terminal 9	151996	Cable w/Terminals 9	164641	Jumper, 18" Black 9
82516	Spring, Retaining 3	152109	Filter 3	171541	Diode 7
89548	Spring, Contact 3	152110	Bracket, Resistor Mounting 3	172692	Cable Assembly 9
90789	Washer, Flat 2 to 9	152124	Spacer 3	174001	Connector, 3 Pt Receptacle 8
90951	Washer, Lock 5	152426	Nut 7	176447	Cable 9
91683	Nut, 15/32-32 Hex 2	152465	Connector, 20 Pt Receptacle 9	176448	Control Assembly, Relay Motor 1, 6
92260	Washer, Lock 4	152466	Connector, 20 Pt Receptacle 9		
92527	Washer, Lock 2	152623	Mounting Assembly, Line Relay 1, 3	176495	Transformer, Power 4
92856	Resistor, 1500 Ohm 2			176673	Suppressor, Spark 9
96262BK	Jumper, 4" Lg Black 4	152760	Stud 2	176692	Relay 9
96262S	Jumper, 4" Lg Slate 4	152761	Stud 2	176693	Cable w/Terminal 9
107398	Terminal 9	152950	Rectifier Assembly, 150 MA 1, 4	176694	Control Assembly, Motor 1, 9
110435	Nut, 4-40 Hex 5	153108	Insulator, .031" Thk 4	177010	Driver Assembly, Selector Magnet 1, 7
110743	Washer, Lock 6	153157	Resistor, 400 Ohm 5		
111017	Screw, 6-40 x 5/16 Fil 2	153251	Control Assembly, Motor 1, 5	178831	Connector 2
114478	Nut, 15/32-32 Hex 2	153456	Bracket 2	178832	Plate, Adapter 2
116783	Holder, Fuse 2, 4, 8	153457	Strap, Terminal 2	178840	Capacitor, 400 MFD 7
118210	Resistor, 22,000 Ohm 4	153461	Plate, Right Mounting 8	178841	Transformer 7
120195	Rectifier 4	153462	Plate 2	178843	Plate, Mounting 7
121125	Washer, Spring 5	153464	Block, Terminal 3	178853	Cover, Relay 2
121243	Clamp, 3/16 ID Cable 7	153475	Cable w/Terminals 3	178854	Bracket, Relay 2
121245	Clamp, 5/16 ID Cable 5	153477	Cable w/Terminals 4	178855	Plate, Left 2
121246	Clamp, 3/8 ID Cable 2	153478	Cable w/Terminals 5	178856	Relay 2
121249	Clamp, 5/8 ID Cable 2	153480	Resistor, 6750 Ohm 3	178859	Card, Circuit 7
125011	Washer, Flat 6	153481	Resistor, 5800 Ohm 3	178868	Resistor, 700 Ohm 7

NUMERICAL INDEX (Continued)

Part Number	Description and Page Number	Part Number	Description and Page Number	Part Number	Description and Page Number
178872	Sleeve, 1/16 ID x 1-1/4" Lg Insulating 4	178888	Clip 7	179427	Plate, Cover 8
178886	Cable w/Terminals 7	179425	Cable Assembly 9	179490	Cable w/Terminals 6
178887	Cable 7	179426	Plate Assembly 1, 8	195177	Washer, Insulating 7



28 ELECTRICAL SERVICE UNIT (LESU)
for
AUTOMATIC SEND-RECEIVE SETS
PARTS

Figure	Contents	Page	Figure	Contents	Page
1	Container	3	24	Line Test Key Control	18
2	Line Shunt Relays and Mountings Plates	4	25	173452 Electronic Keyer Assembly	19
3	Plates and Resistors	5	26	146652 Modification Kit to Add Wave Shaping Inductor	19
4	153251 Motor Control Assembly	6	27	Line Jack Assembly	20
5	152950 Rectifier and Cable Assembly (150 MA)	7	28	154747 Modification Kit to Add Continuous Spacing	20
6	162361 and 310275 Rectifiers and Cable Assemblies (500 MA)	7	29	164868 Modification Kit to Provide a Cabinet with an Auxiliary Electrical Service Unit	21
7	146901 and 170573 Rectifier Assemblies	8	30	Auxiliary Electrical Service Unit	22
8	305631 Rectifier Assembly	9	31	Components to Provide for AC and DC Power Distribution	23
9	177010 and 178601 Selector Magnet Driver Assemblies 179560 Selector Magnet Driver Assembly with Open Line Detector	10	32	Components to Provide Line Relays and Selector Battery	24
10	Line Relay Mounting	11	33	161829 Modification Kit for Mounting an Electrical Service Unit on Relay Rack Brackets	25
11	170285 and 173281 Resistor Assemblies	12	34	179139 and 195036 Auxiliary Reporator Line Relay Assembly	25
12	178138 Slow Release Relay Assembly (Non-Contention)	12	35	160422 Modification Kit to Equip Cabinet with Rectifier	25
13	Quick Acting Relay (10 MS) Mechanism	13	36	192750 Rectifier Assembly	26
14	159318 Slow Release Relay Assembly	13	37	179610 and 179611 Modification Kits to Reduce Radio Frequency Noise on ASR Set (Includes Parts on this Figure and Figure 38)	27
15	176810 Answer-Back Control Relay Assembly	14	38	179610 and 179611 Modification Kits to Reduce Radio Frequency Noise on ASR Set (Includes Parts on this Figure and Figure 37)	27
16	176694 (Motor Control) and 176698 (Slow Release) Relay Assemblies	14	39	Rectifier-130V DC-20V AC	29
17	152332 and 176448 Relay Motor Control Assemblies	15	40	162483 Call Directing Relay Unit	30
18	155558 D. C. Control Relay Assembly	15	41	179472 Modification Kit to Provide a Transmitter Control Device	31
19	178345 Modification Kit and 178608 Relay Assembly to provide motor control and answer back relays	16	42	Cable Components	32
20	165650 Motor Control and Answer-Back Relay Assembly	16		Numerical Index	33
21	178307 Motor Control Relay Assembly	17			
22	160420 and 195038 Auxiliary Line Shunt Relay Assembly 179444 and 173239 Auxiliary Reader Control Relay Assemblies	17			
23	158293, 164232, 173252 and 194492 Line Test Key Assemblies	18			

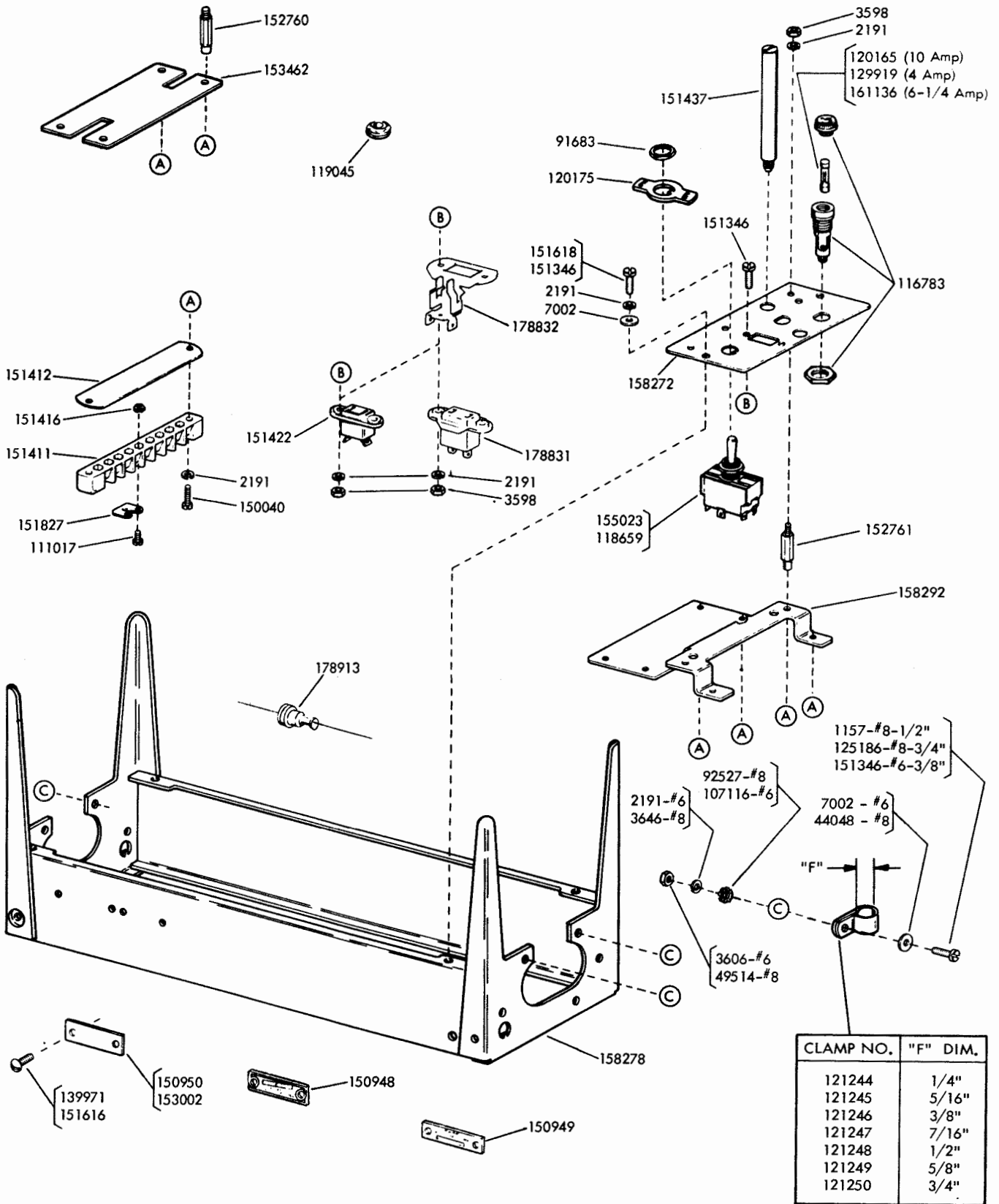


FIGURE 1. CONTAINER

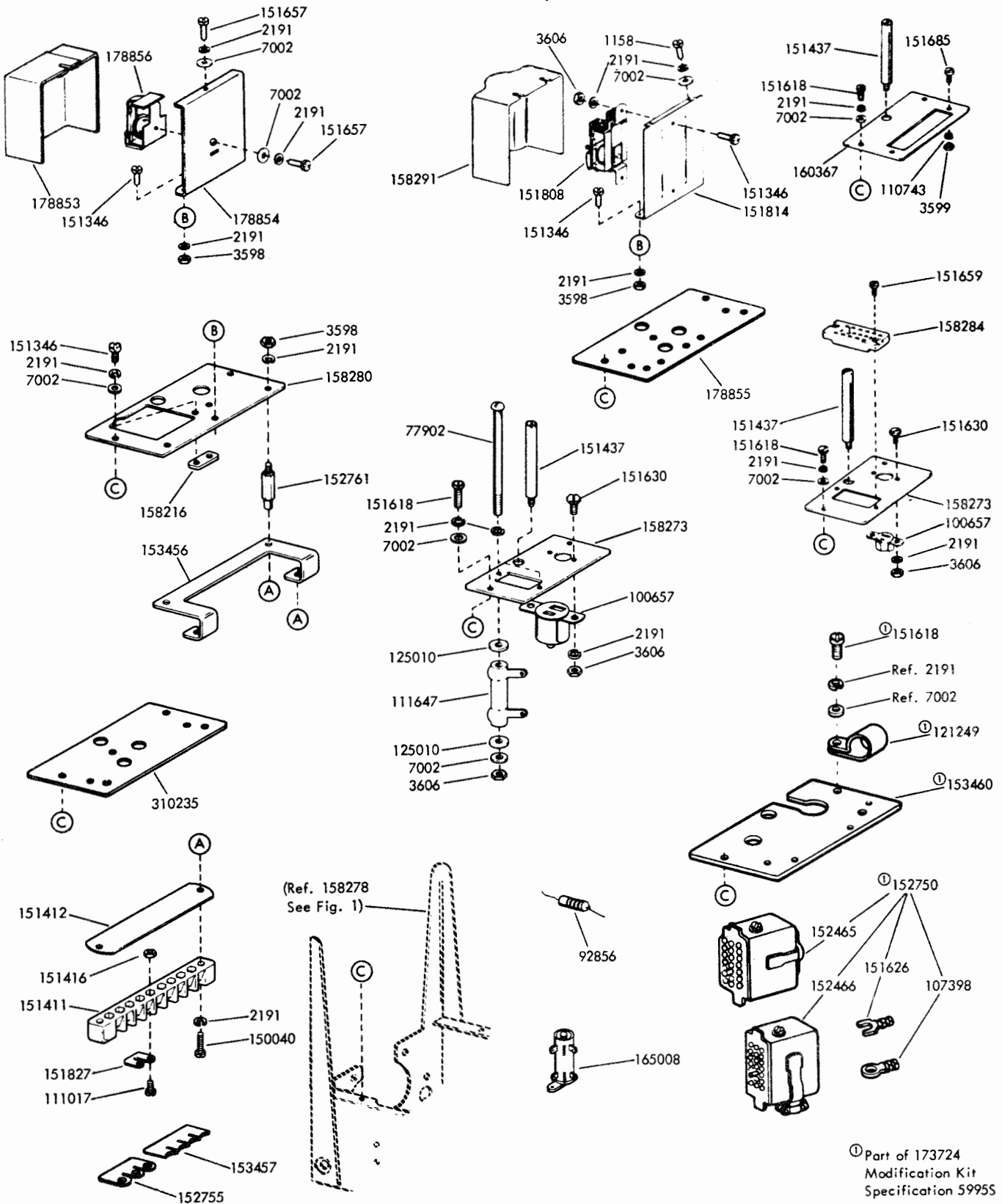
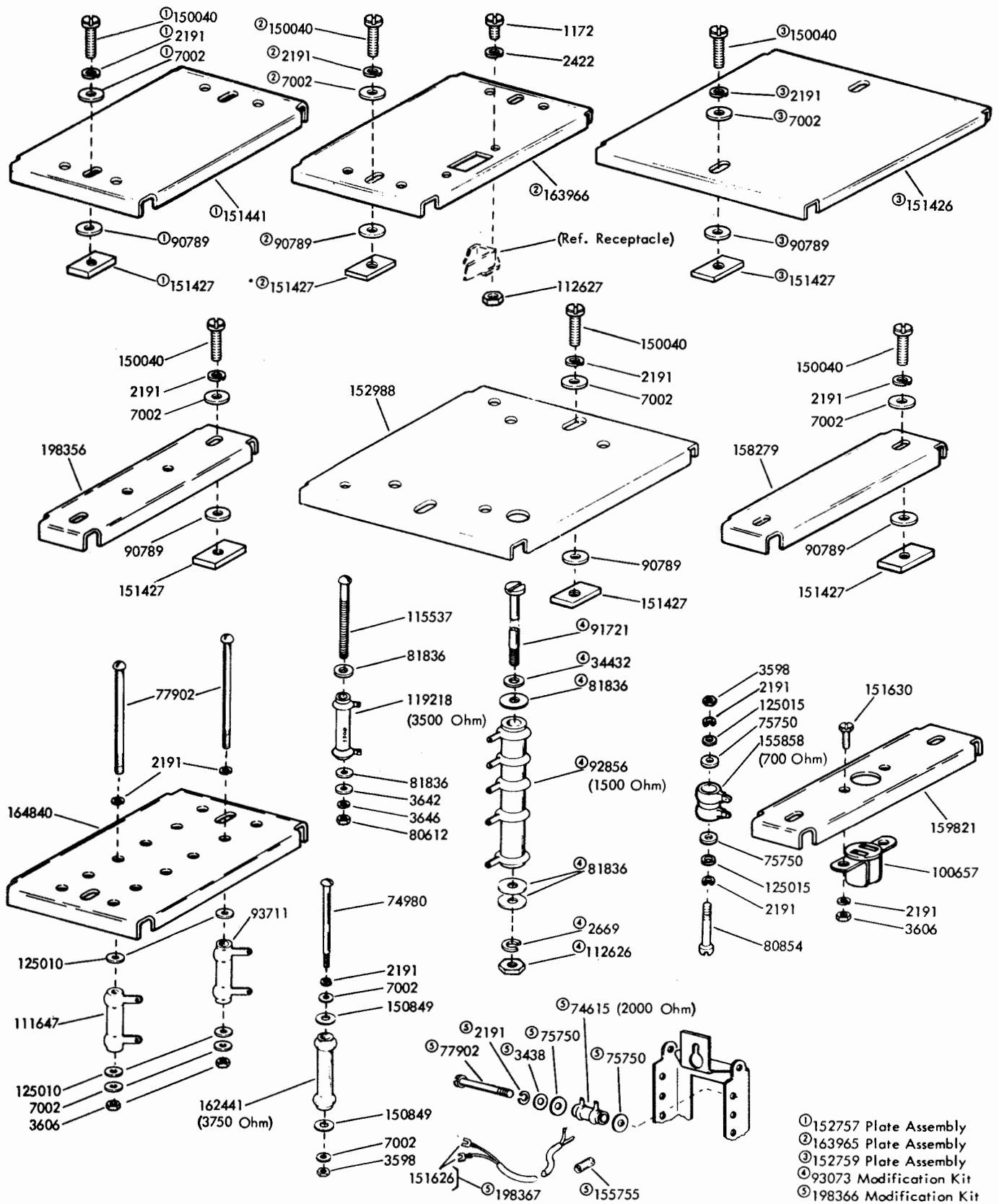


FIGURE 2. LINE SHUNT RELAYS AND MOUNTING PLATES



- ① 152757 Plate Assembly
- ② 163965 Plate Assembly
- ③ 152759 Plate Assembly
- ④ 93073 Modification Kit
- ⑤ 198366 Modification Kit

FIGURE 3. PLATES AND RESISTORS

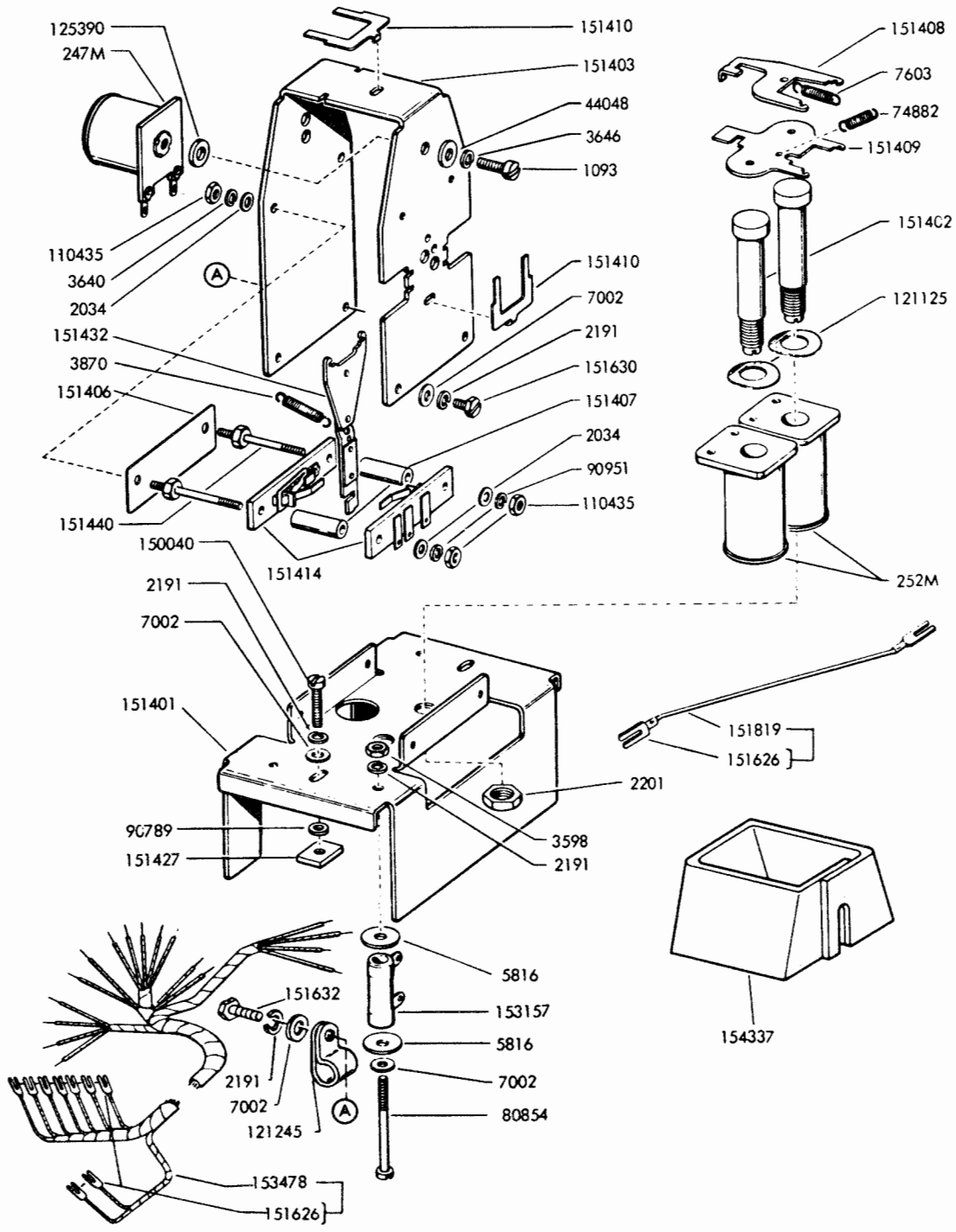


FIGURE 4. 153251 MOTOR CONTROL ASSEMBLY

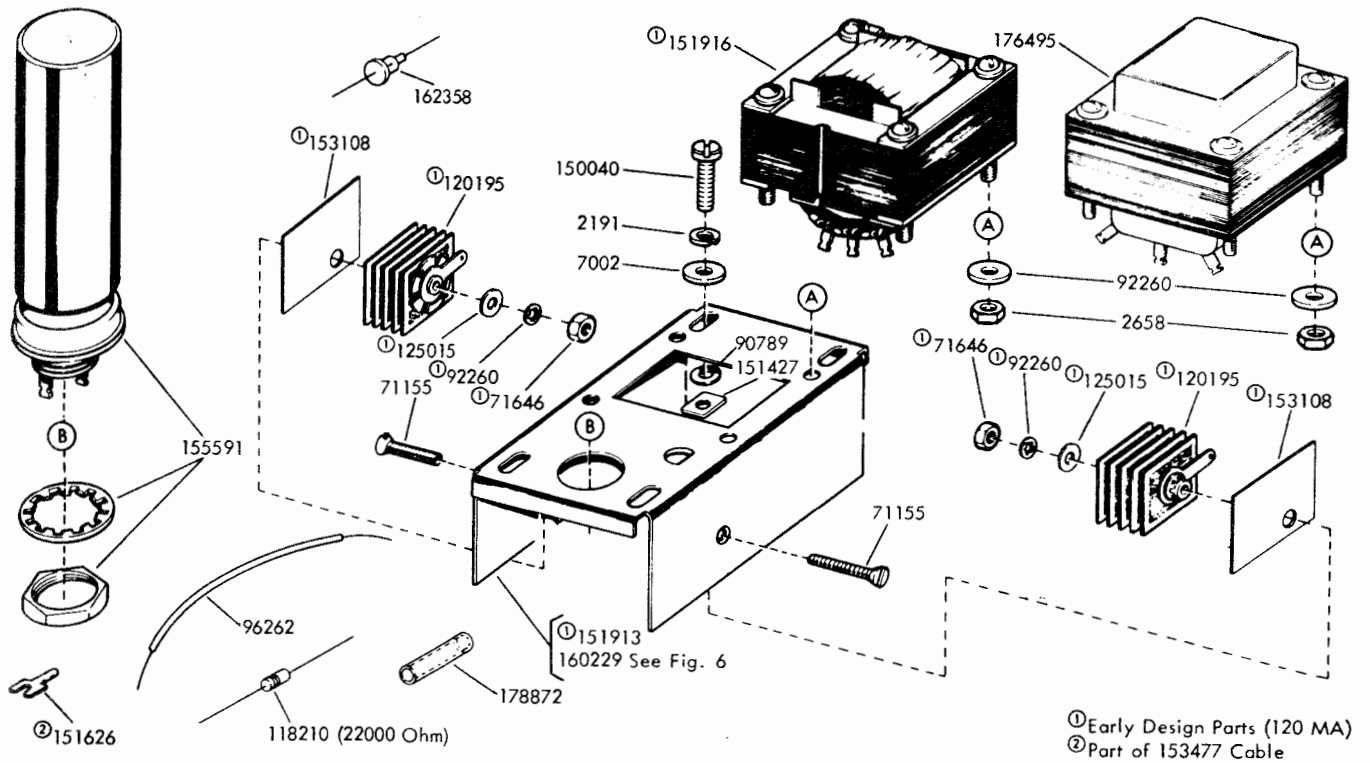


FIGURE 5. 152950 RECTIFIER AND CABLE ASSEMBLY (150 MA)

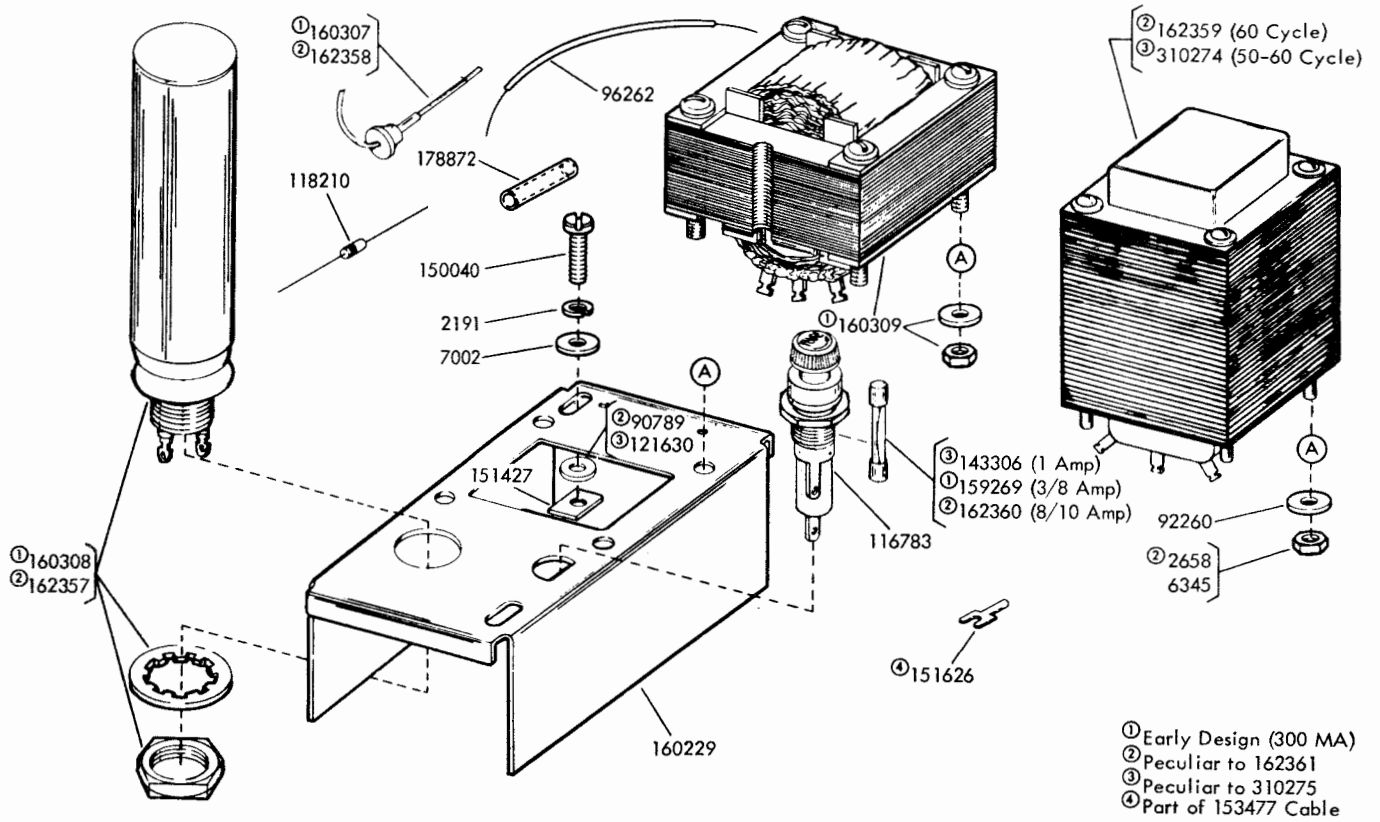


FIGURE 6. 162361 AND 310275 RECTIFIERS AND CABLE ASSEMBLIES (500 MA)

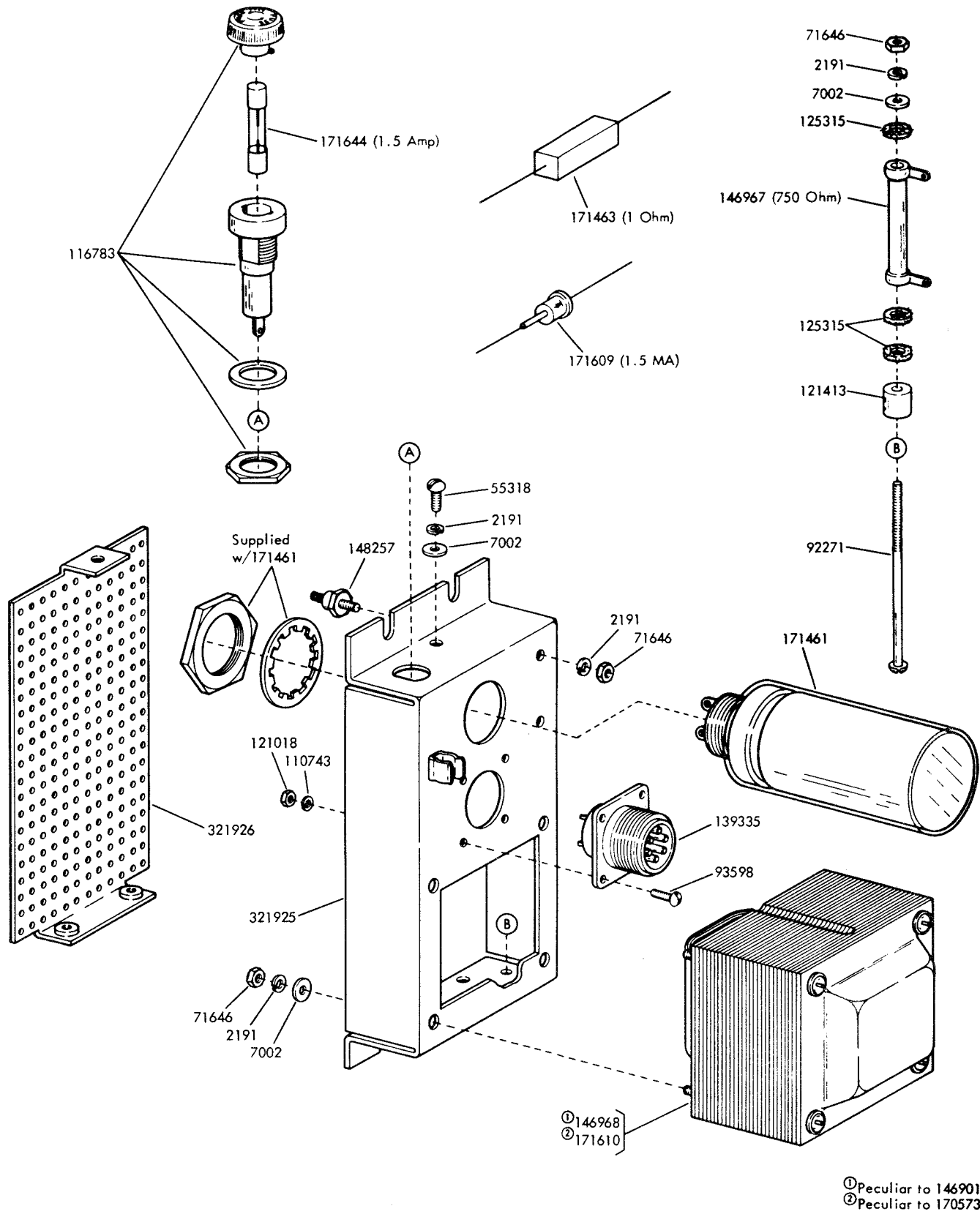
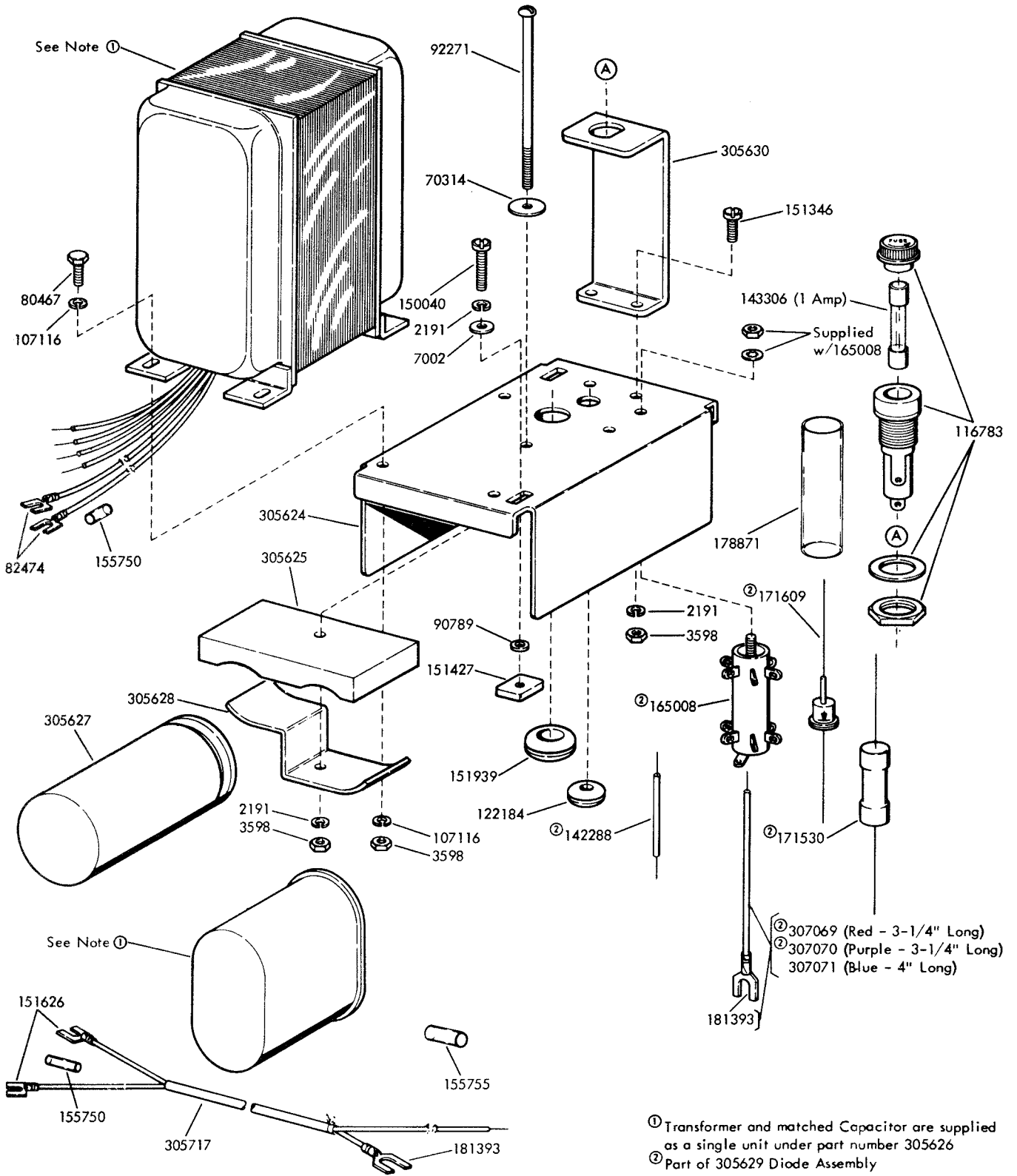


FIGURE 7. 146901 AND 170573 RECTIFIER ASSEMBLIES



- ① Transformer and matched Capacitor are supplied as a single unit under part number 305626
- ② Part of 305629 Diode Assembly

FIGURE 8. 305631 RECTIFIER ASSEMBLY

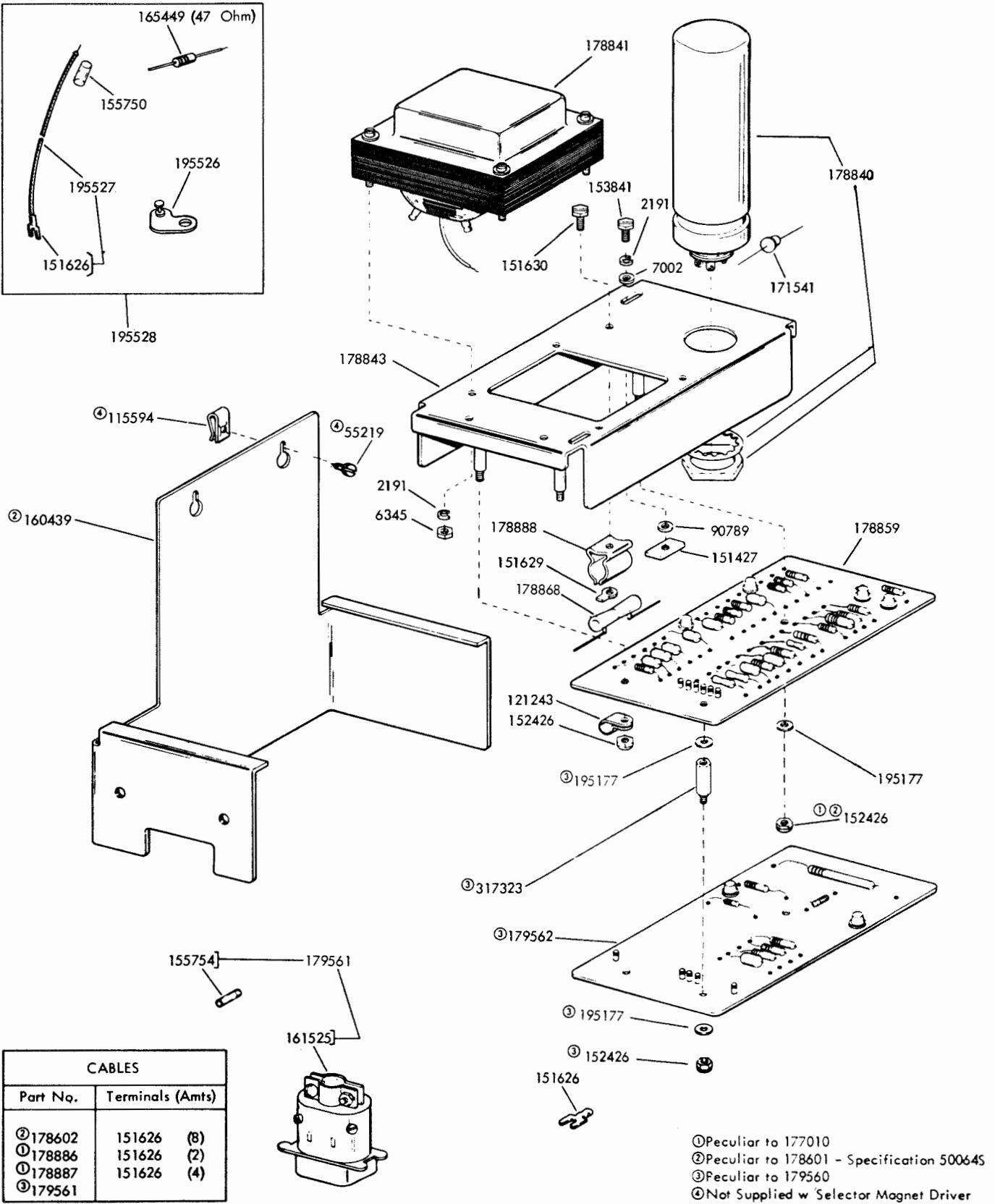


FIGURE 9. 177010 AND 178601 SELECTOR MAGNET DRIVER ASSEMBLIES
 179560 SELECTOR MAGNET DRIVER ASSEMBLY WITH OPEN LINE DETECTOR

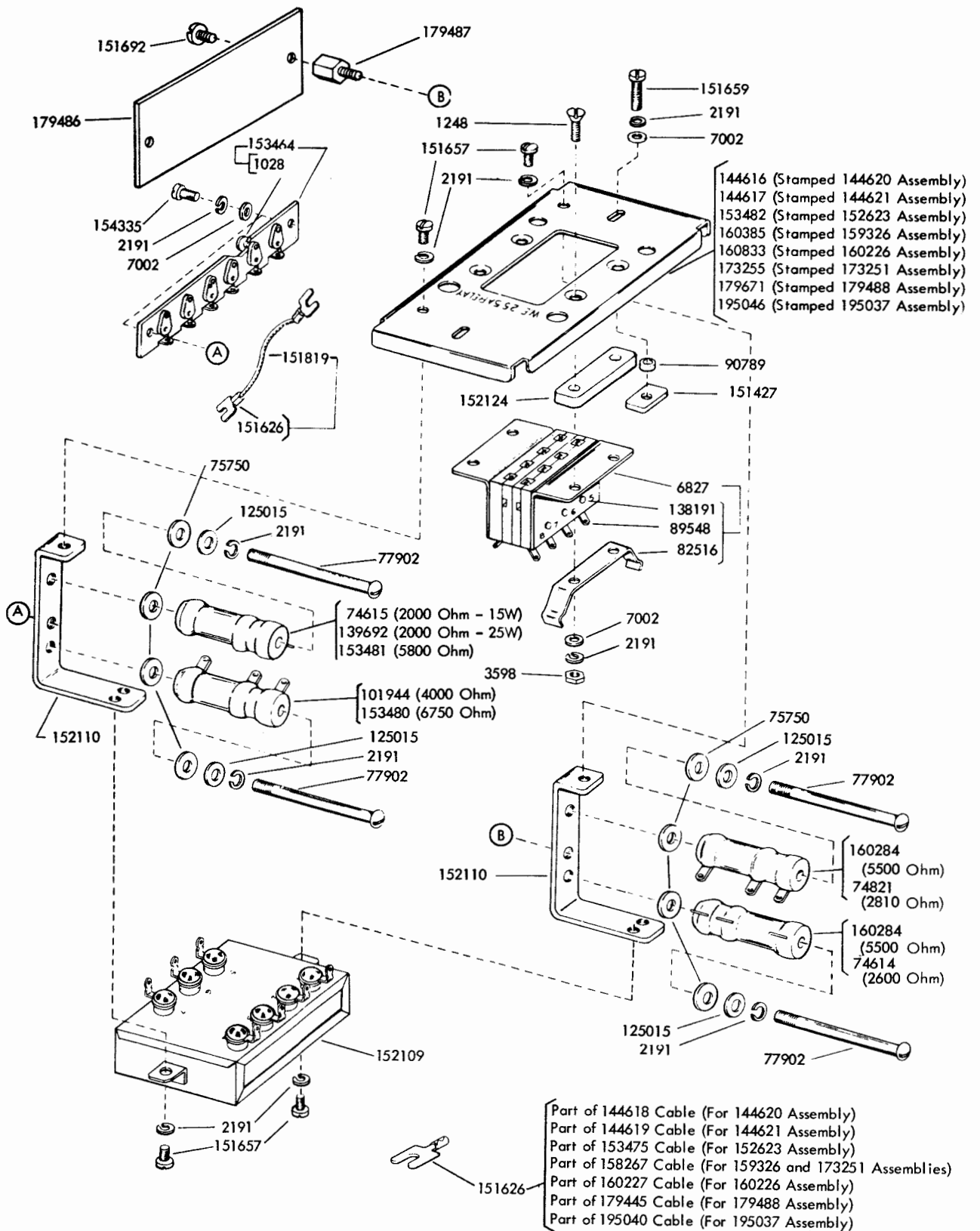


FIGURE 10. LINE RELAY MOUNTING

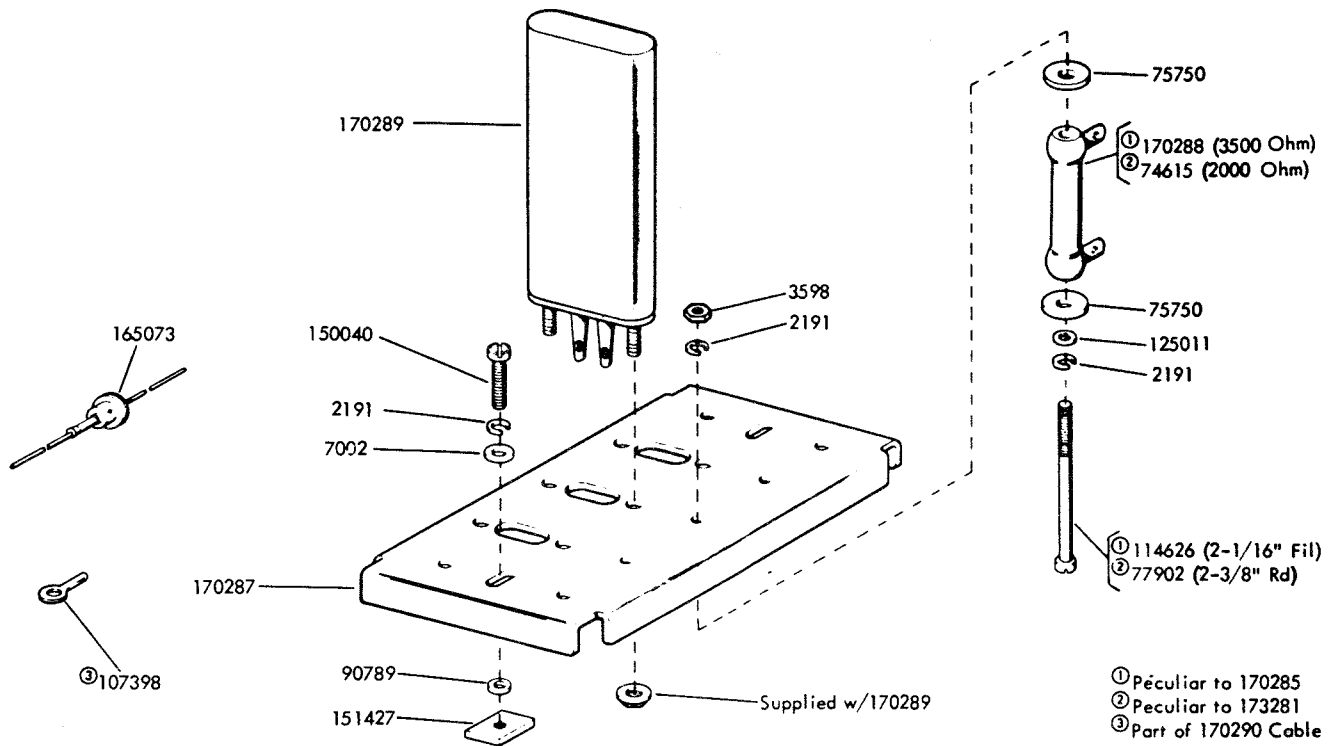


FIGURE 11. 170285 AND 173281 RESISTOR ASSEMBLIES

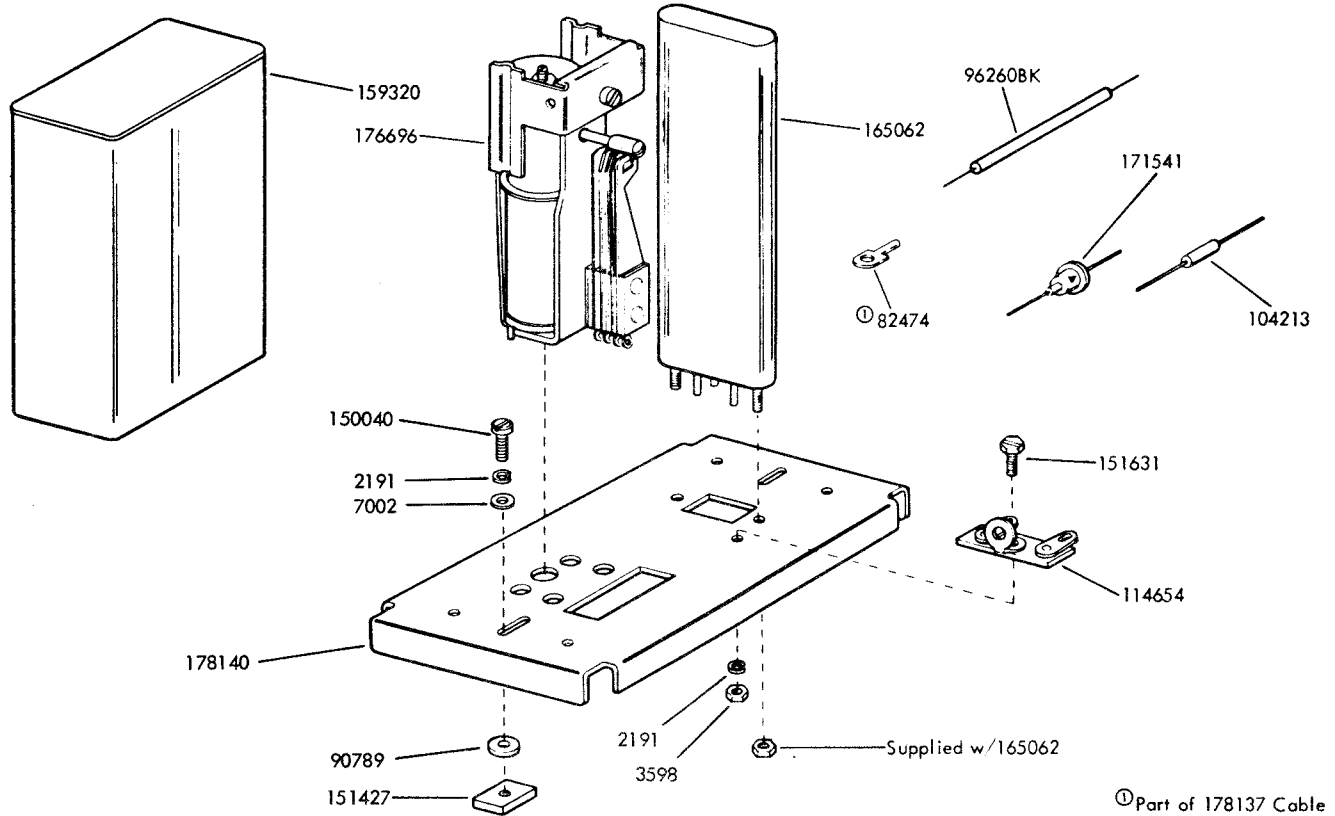


FIGURE 12. 178138 SLOW RELEASE RELAY ASSEMBLY (NON-CONTENTION)

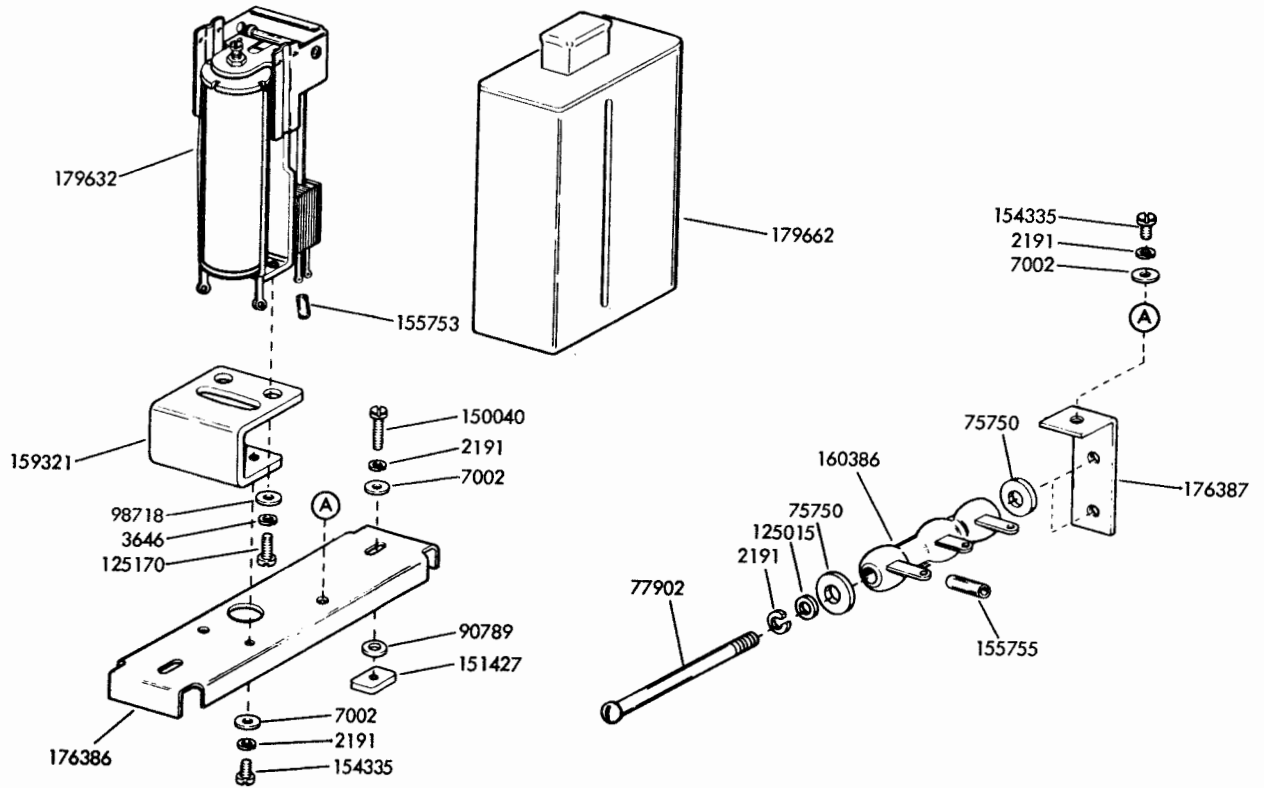


FIGURE 13. QUICK ACTING RELAY (10 MS) MECHANISM

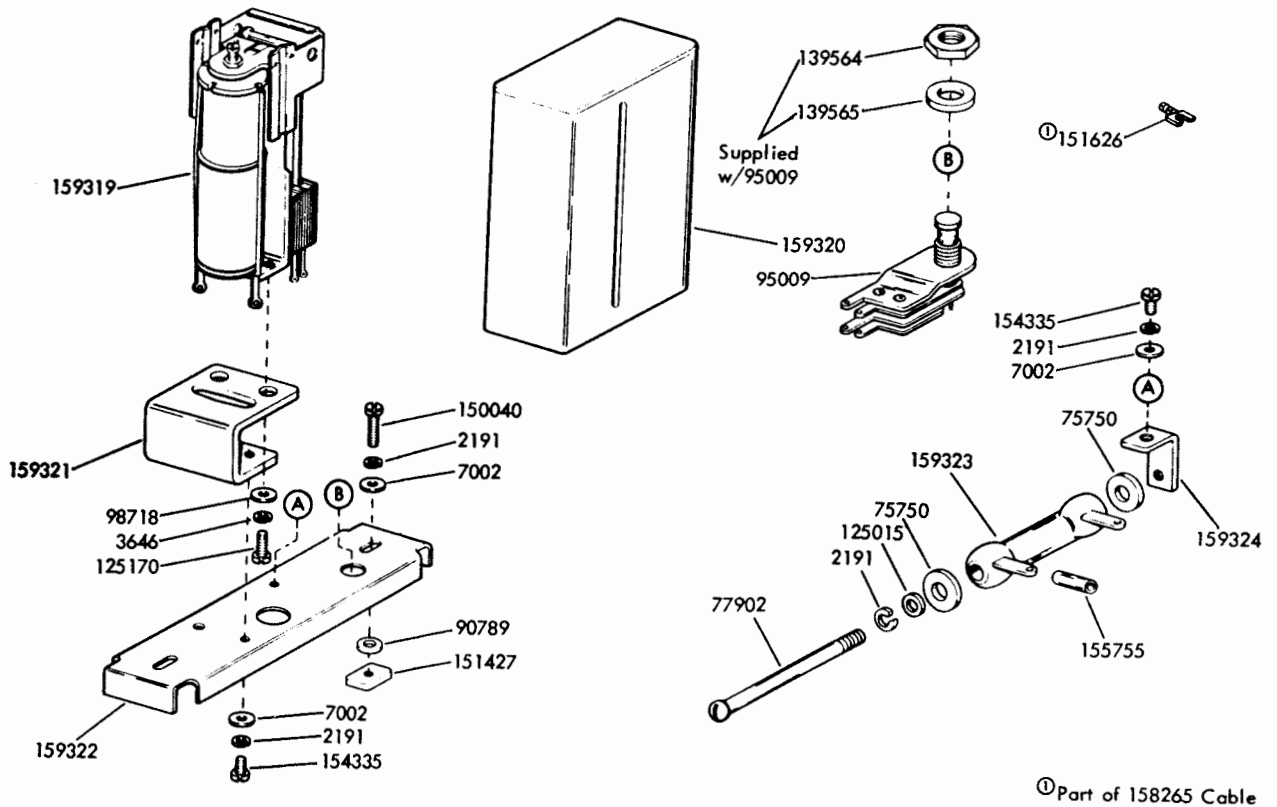


FIGURE 14. 159318 SLOW RELEASE RELAY ASSEMBLY

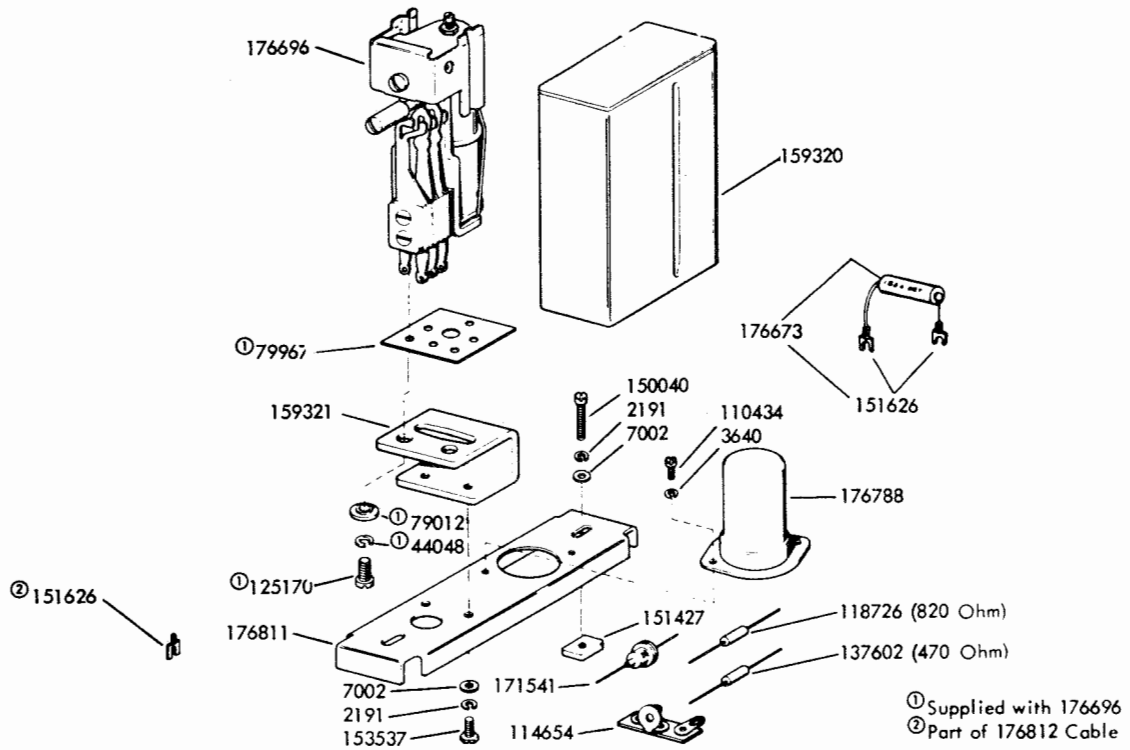


FIGURE 15. 176810 ANSWER-BACK CONTROL RELAY ASSEMBLY

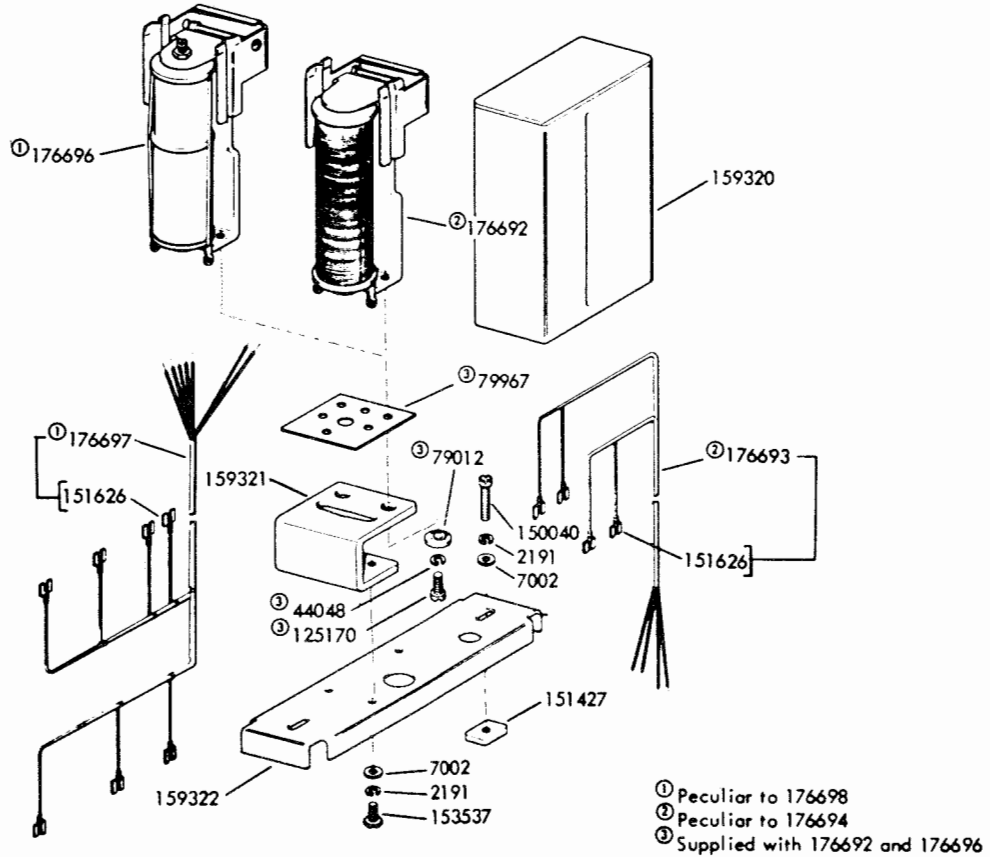


FIGURE 16. 176694 (MOTOR CONTROL) AND 176698 (SLOW RELEASE) RELAY ASSEMBLIES

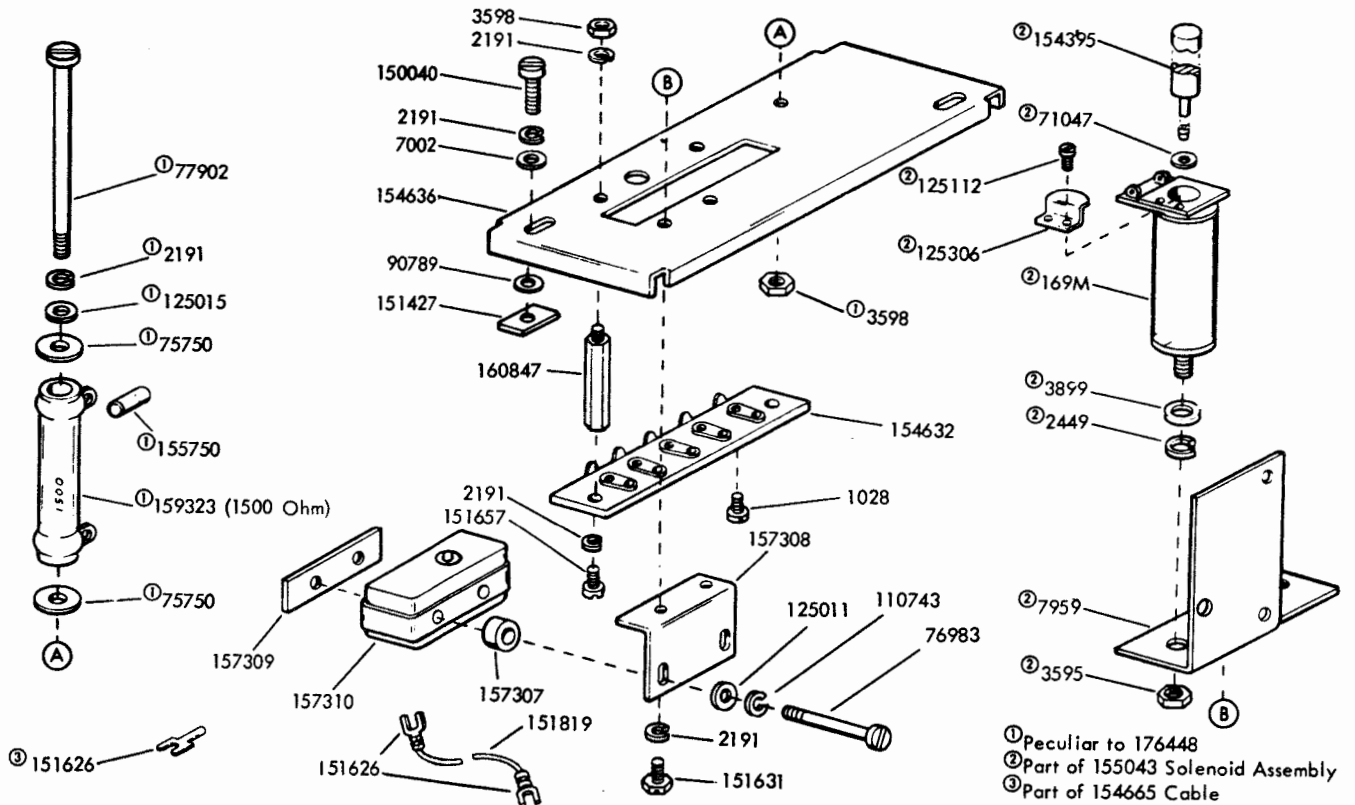
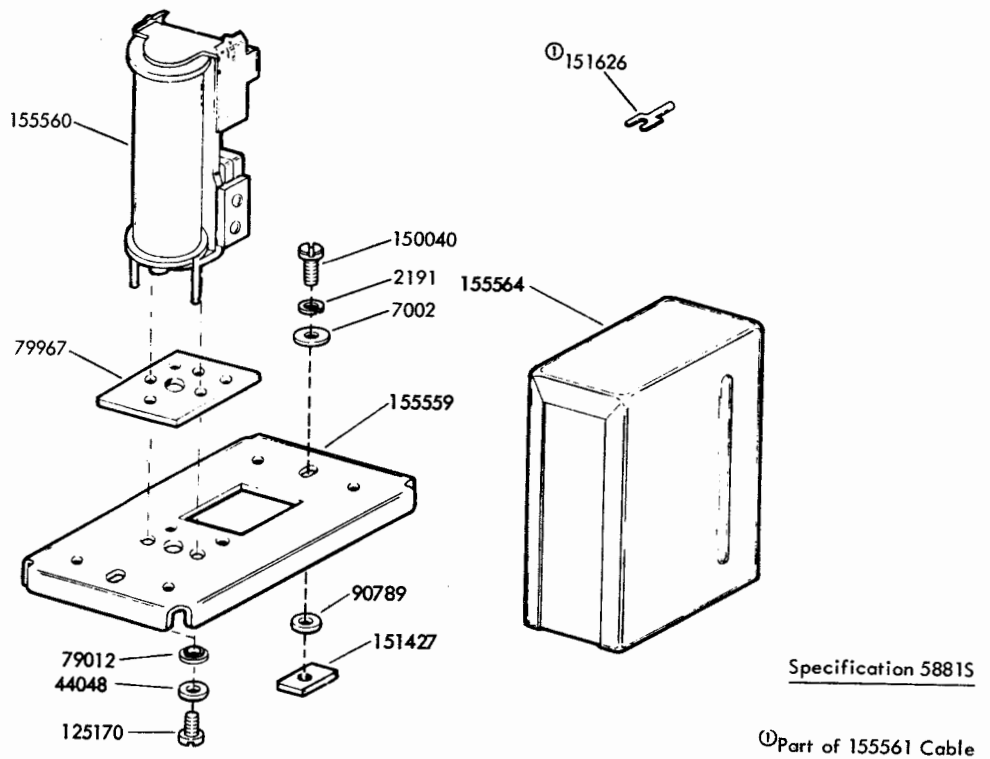


FIGURE 17. 152332 AND 176448 RELAY MOTOR CONTROL ASSEMBLIES



Specification 5881S

FIGURE 18. 15558 D.C. CONTROL RELAY ASSEMBLY

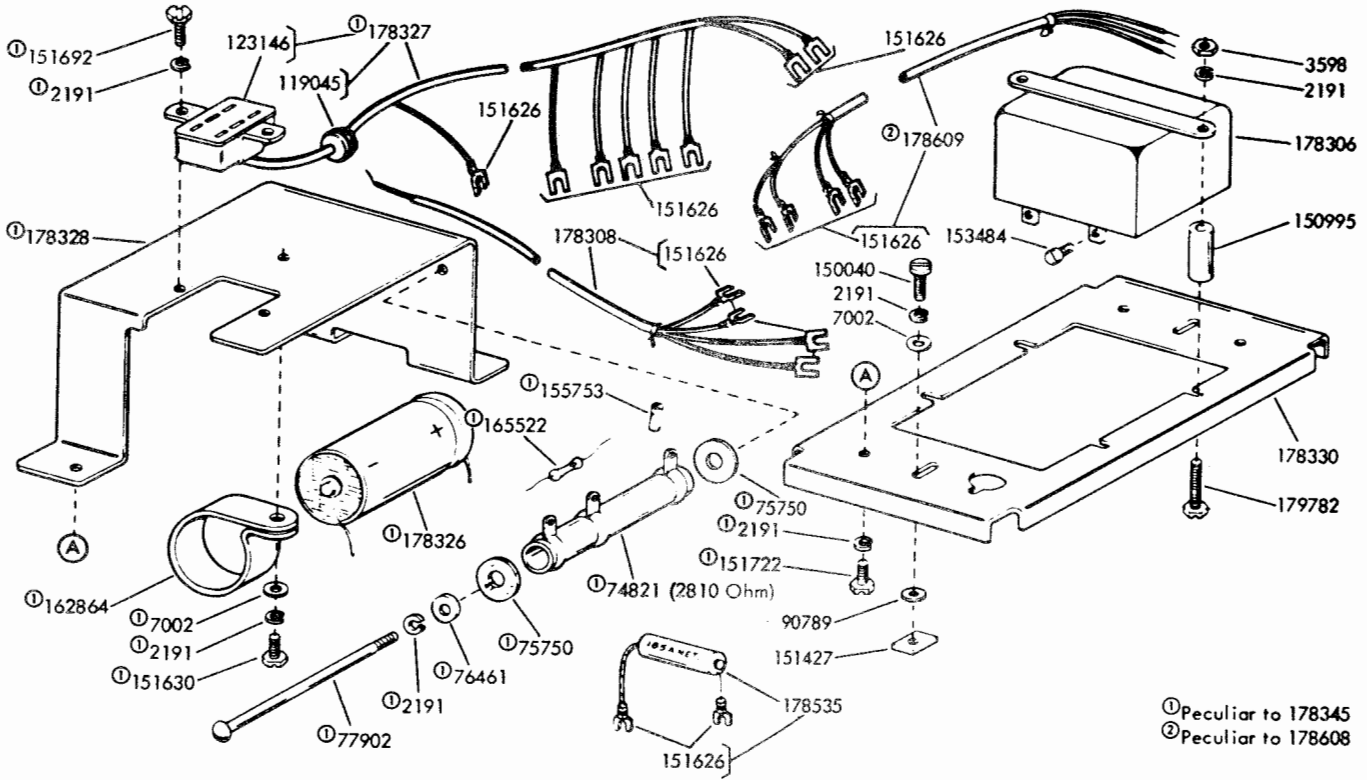


FIGURE 19. 178345 MODIFICATION KIT AND 178608 RELAY ASSEMBLY TO PROVIDE MOTOR CONTROL AND ANSWER BACK RELAYS

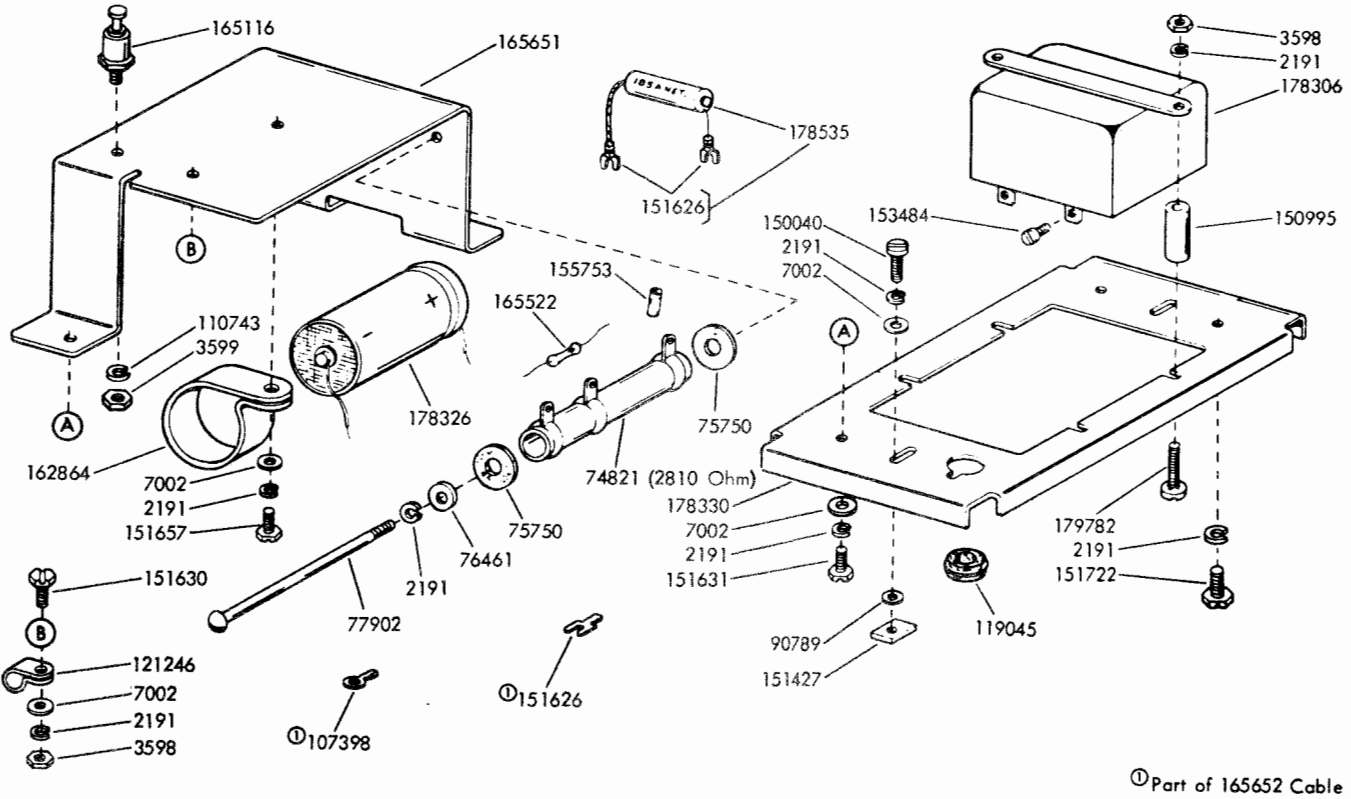


FIGURE 20. 165650 MOTOR CONTROL AND ANSWER BACK RELAY ASSEMBLY

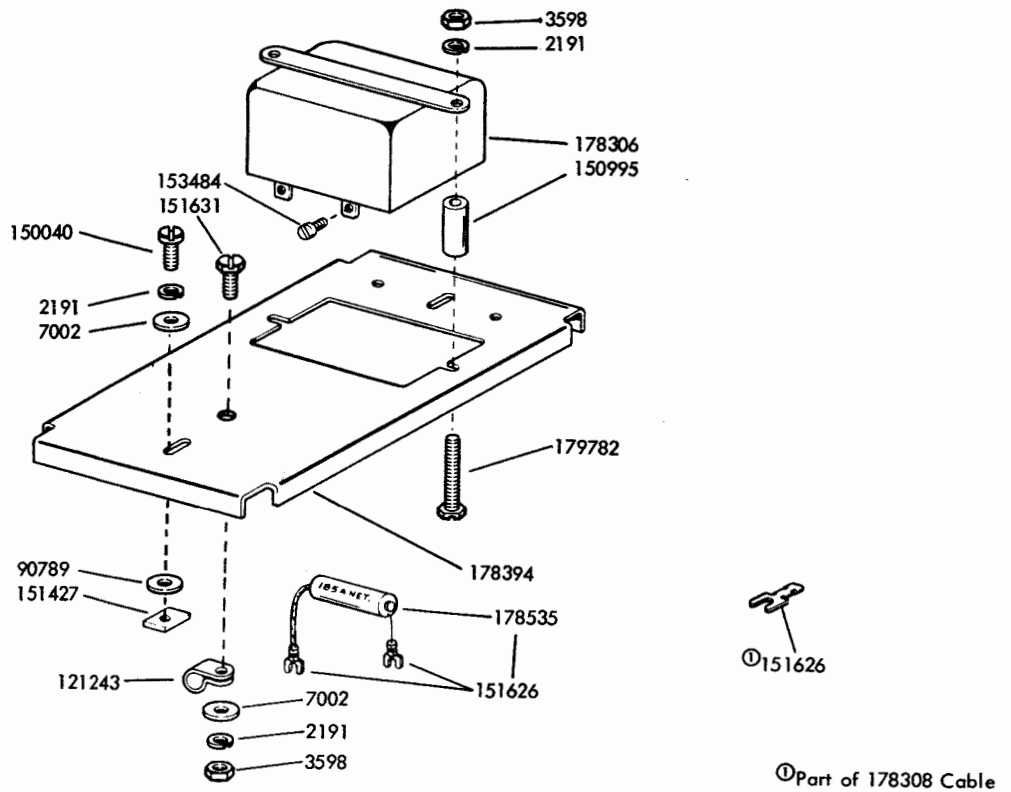


FIGURE 21. 178307 MOTOR CONTROL RELAY ASSEMBLY

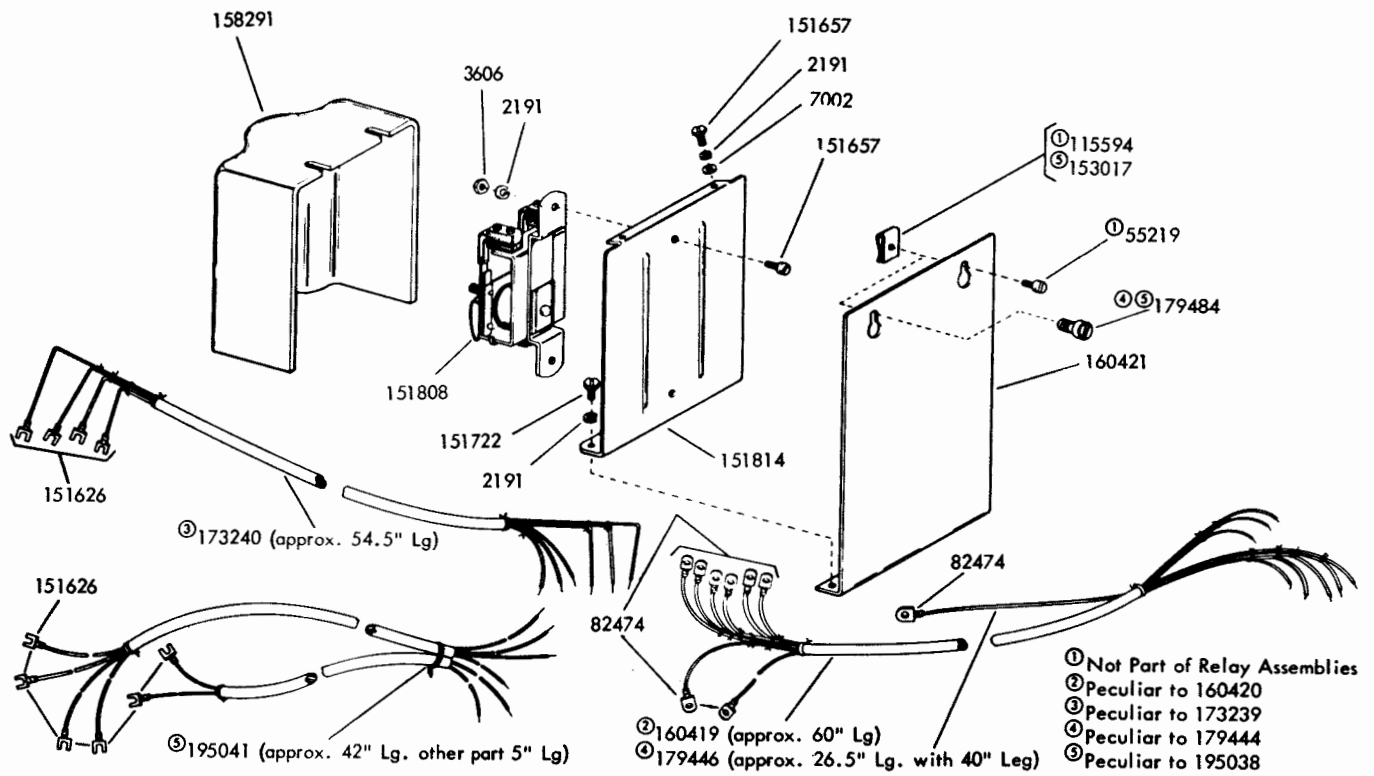


FIGURE 22. 160420 AND 195038 AUXILIARY LINE SHUNT RELAY ASSEMBLY
 179444 AND 173239 AUXILIARY READER CONTROL RELAY ASSEMBLIES

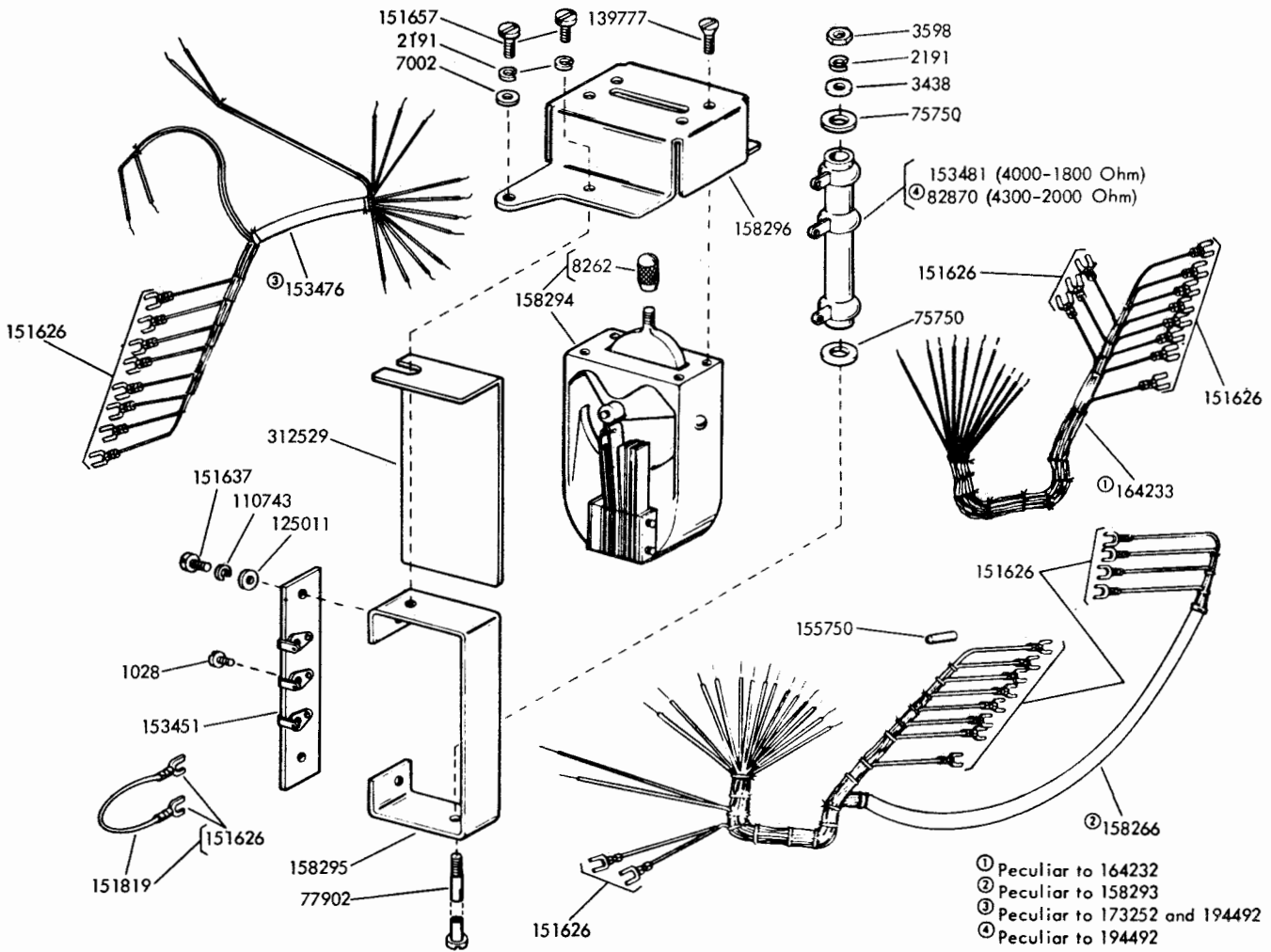


FIGURE 23. 158293, 164232, 173252 AND 194492 LINE TEST KEY ASSEMBLIES

② No longer available, furnish
162630 Modification Kit

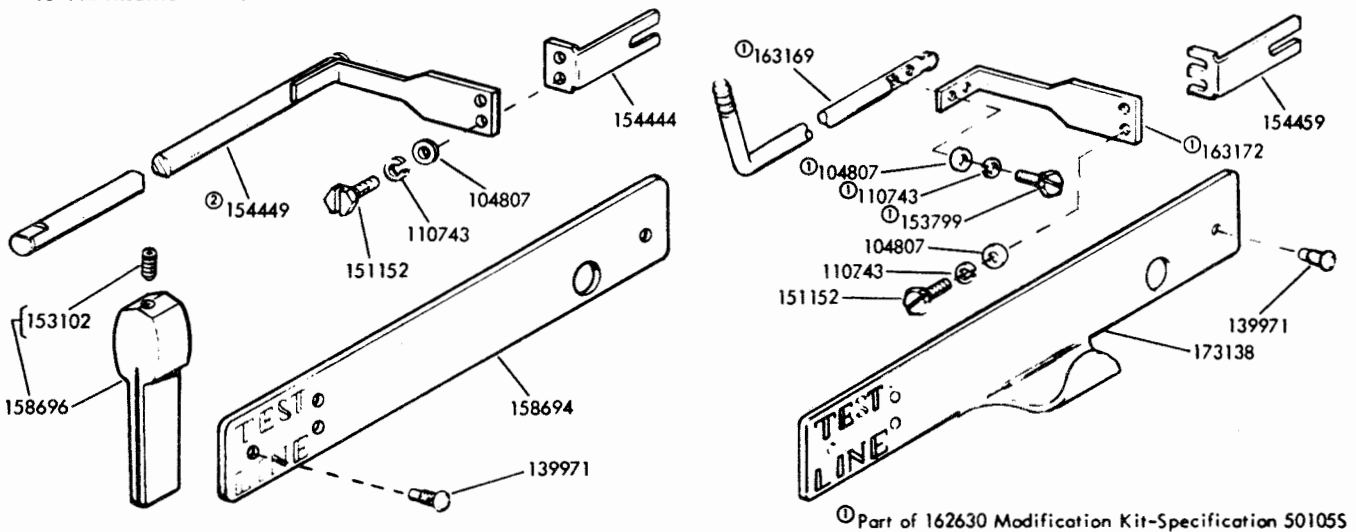


FIGURE 24. LINE TEST KEY CONTROL

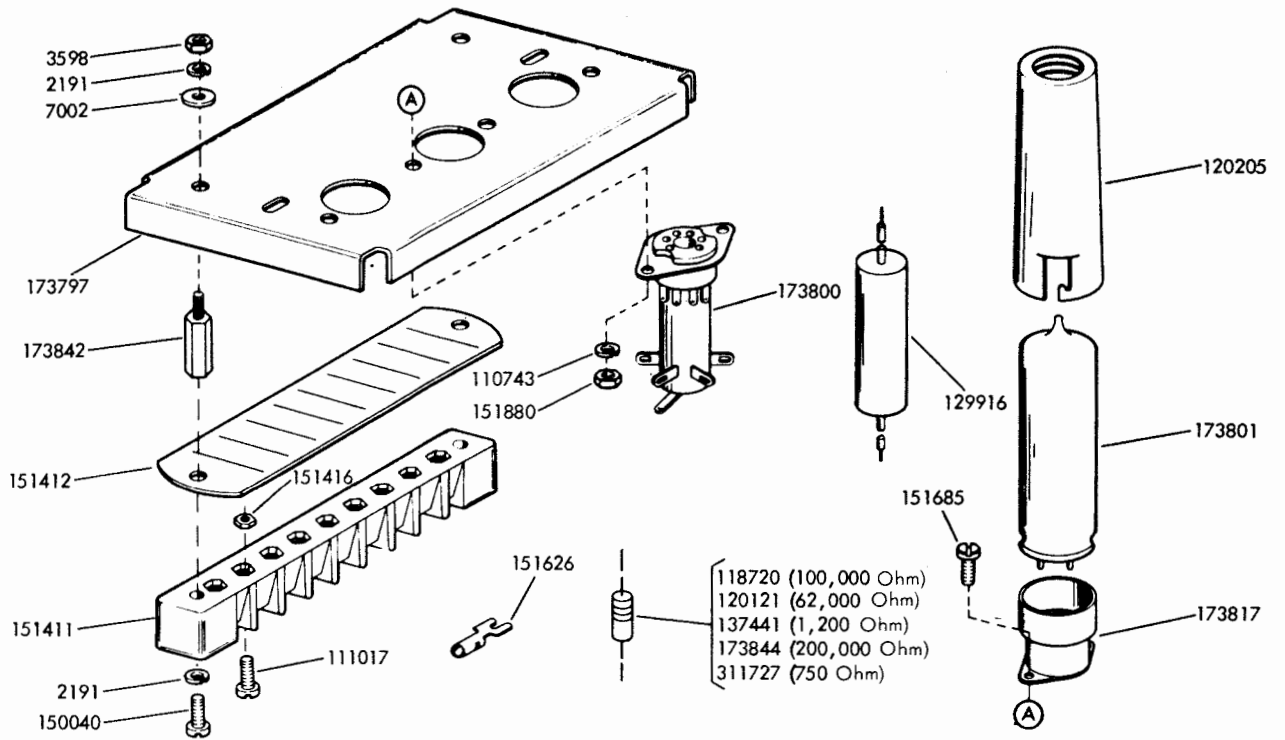


FIGURE 25. 173452 ELECTRONIC KEYSER ASSEMBLY

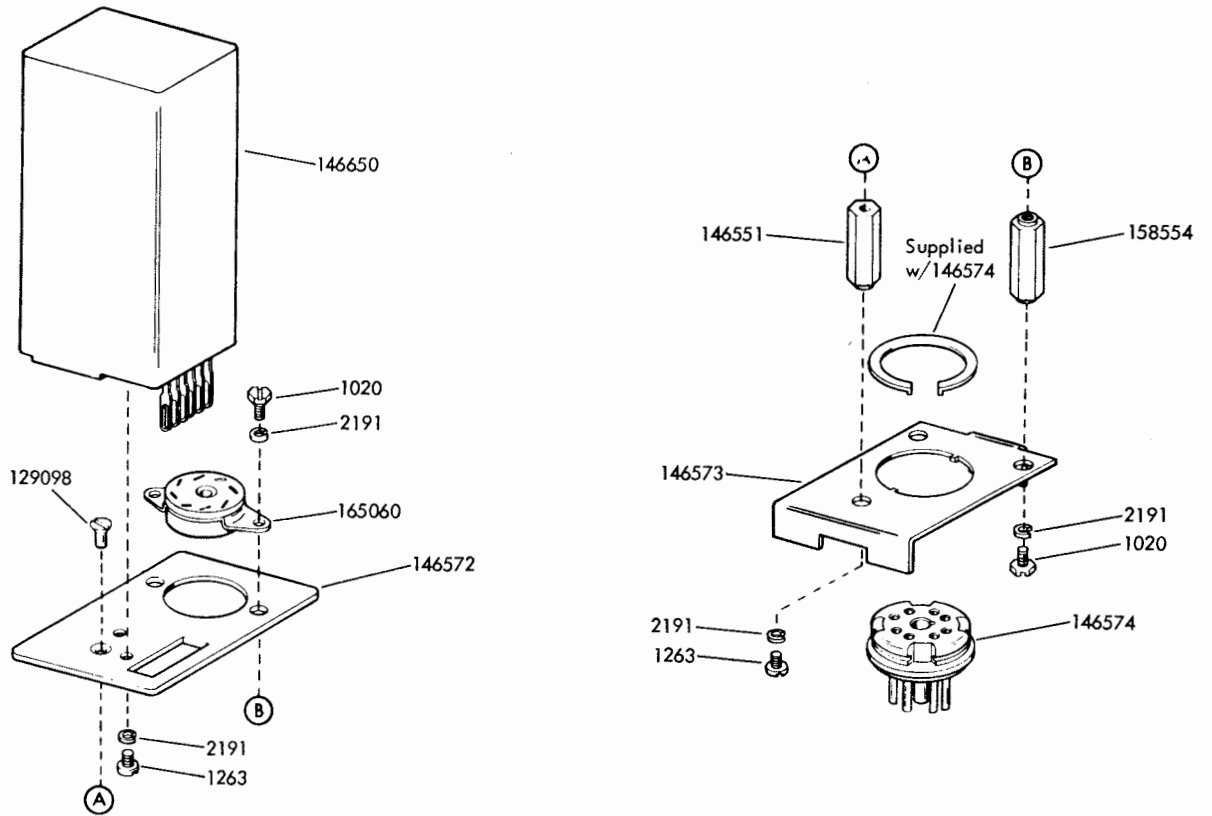


FIGURE 26. 146652 MODIFICATION KIT TO ADD WAVE SHAPING INDUCTOR

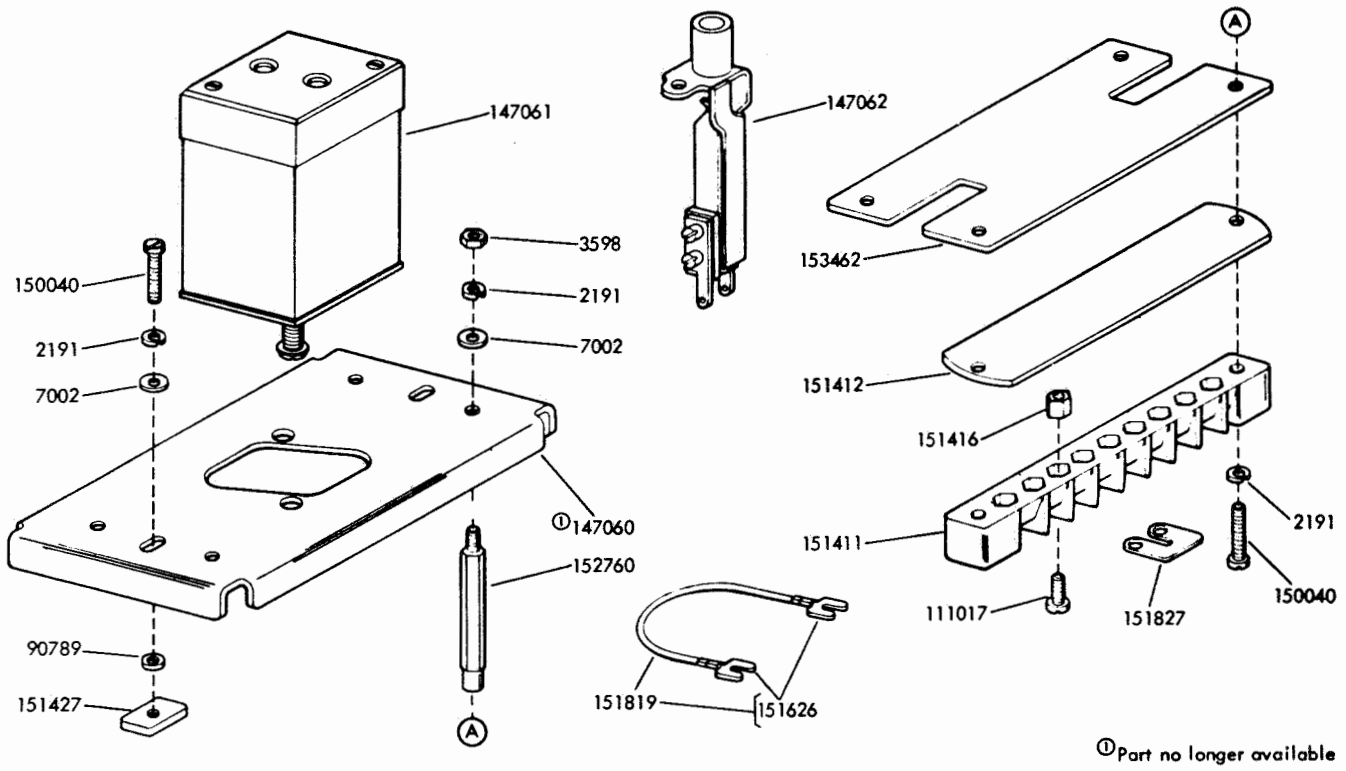


FIGURE 27. LINE JACK ASSEMBLY

PART NUMBER	"A" DIMENSION	PARTS REQUIRED
151819	3"	151626 (2)
157231	8"	151626 (2)
157232	9 1/4"	151626 (2)

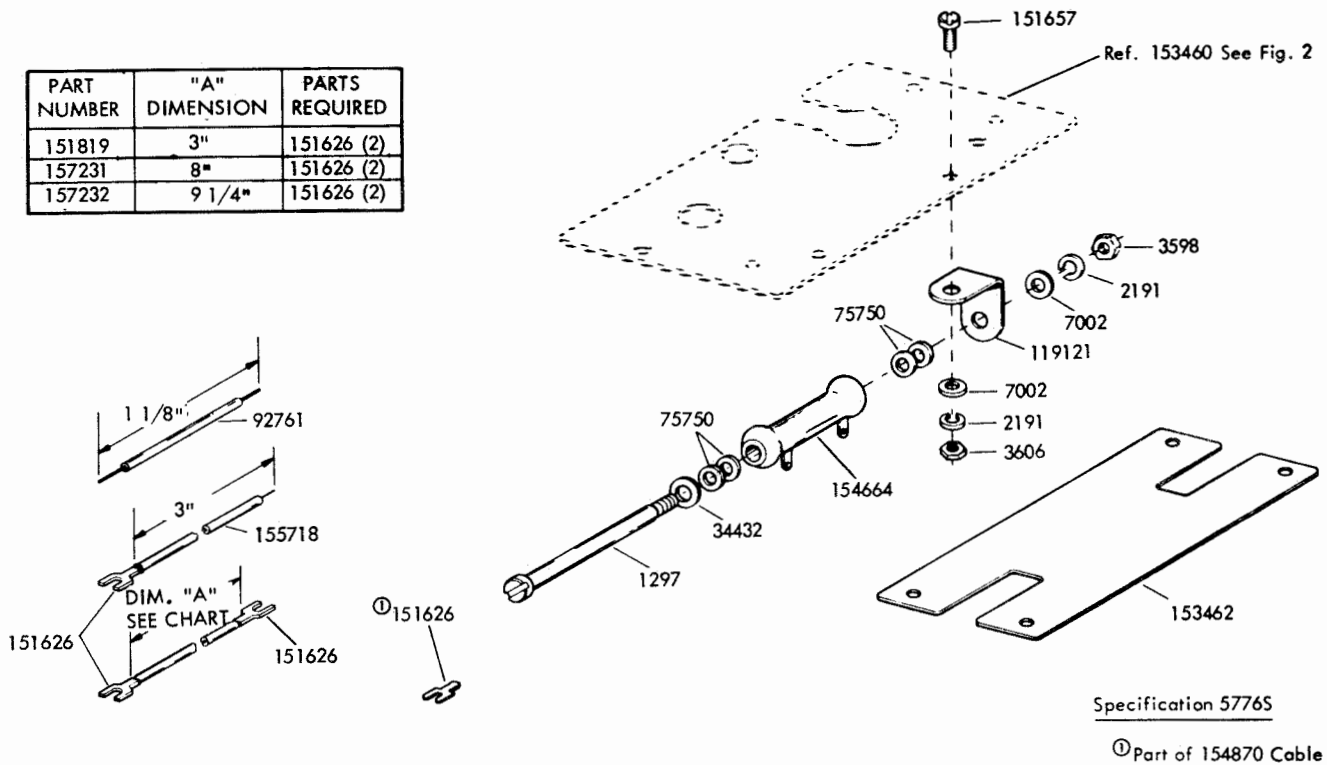


FIGURE 28. 154747 MODIFICATION KIT TO ADD CONTINUOUS SPACING

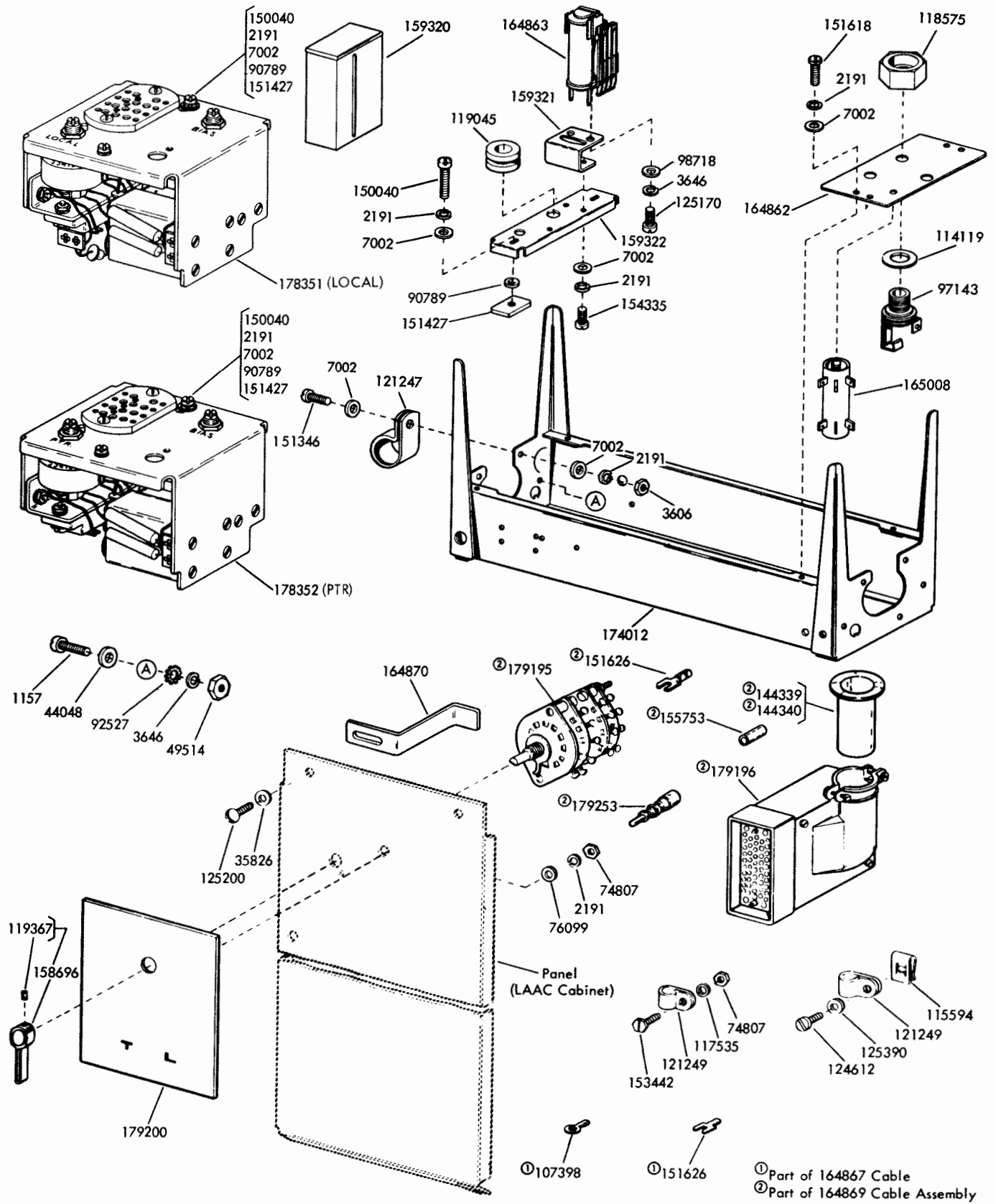


FIGURE 29. 164868 MODIFICATION KIT TO PROVIDE A CABINET WITH AN AUXILIARY ELECTRICAL SERVICE UNIT

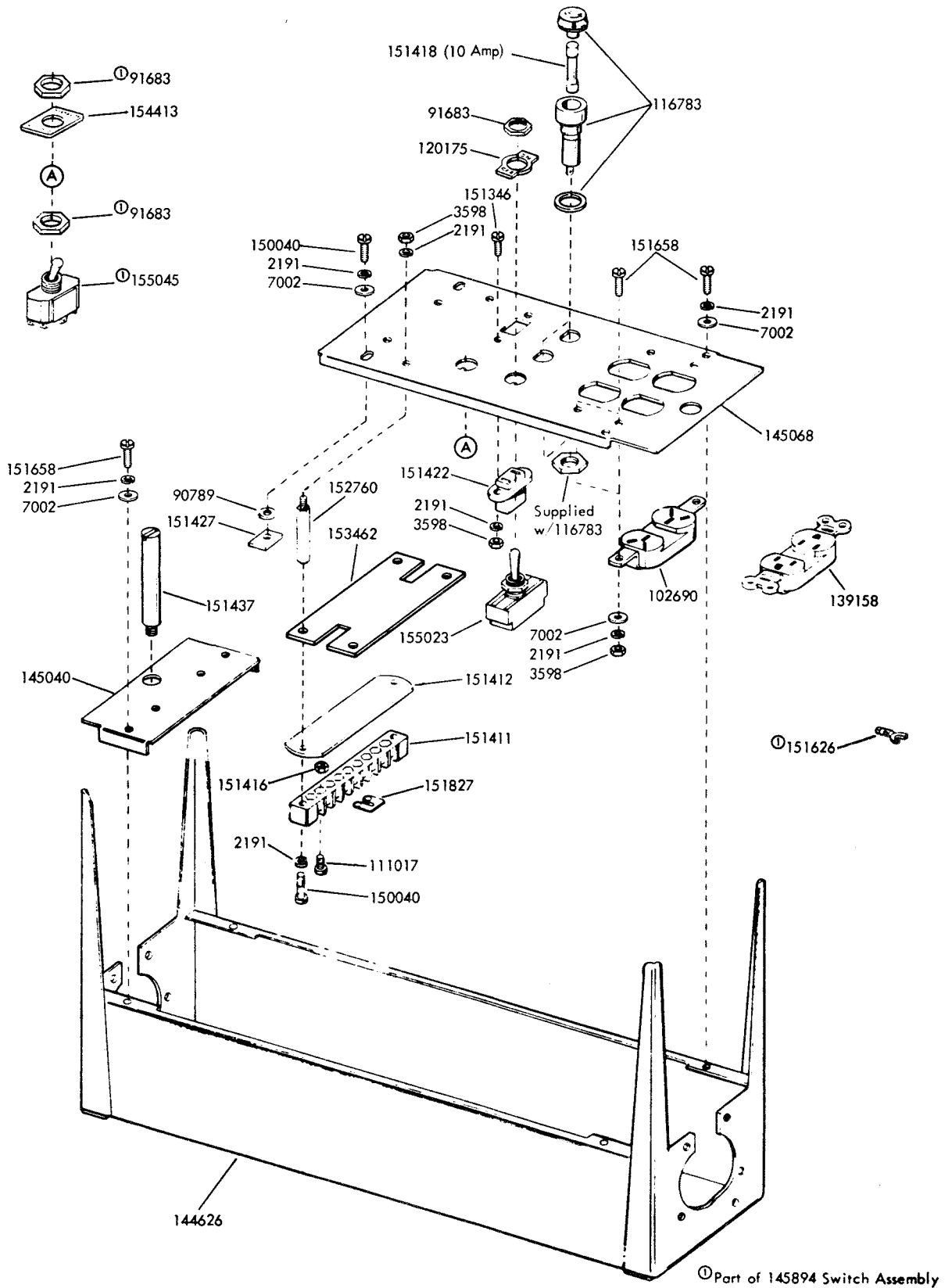


FIGURE 30. AUXILIARY ELECTRICAL SERVICE UNIT

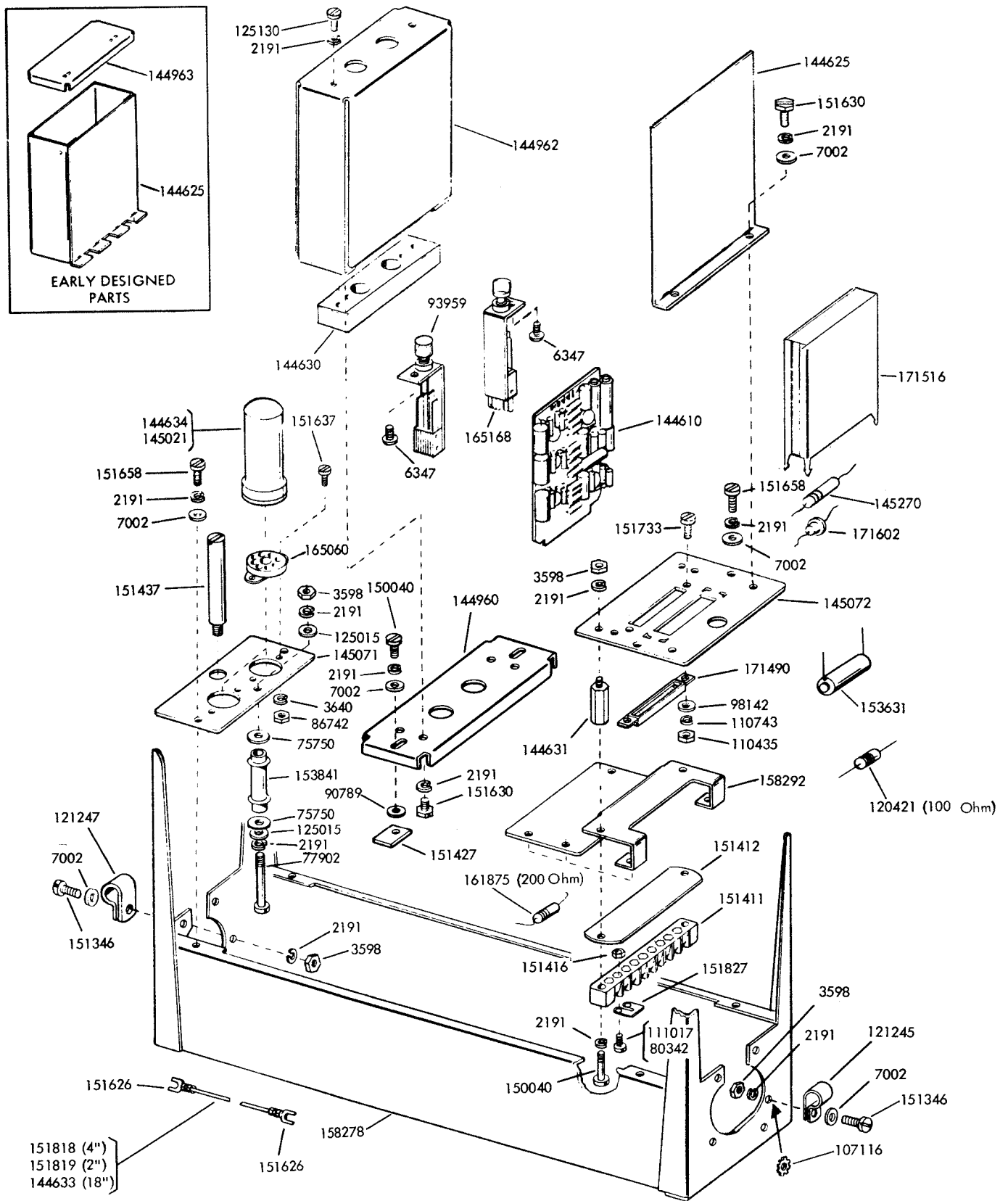


FIGURE 31. COMPONENTS TO PROVIDE FOR AC AND DC POWER DISTRIBUTION

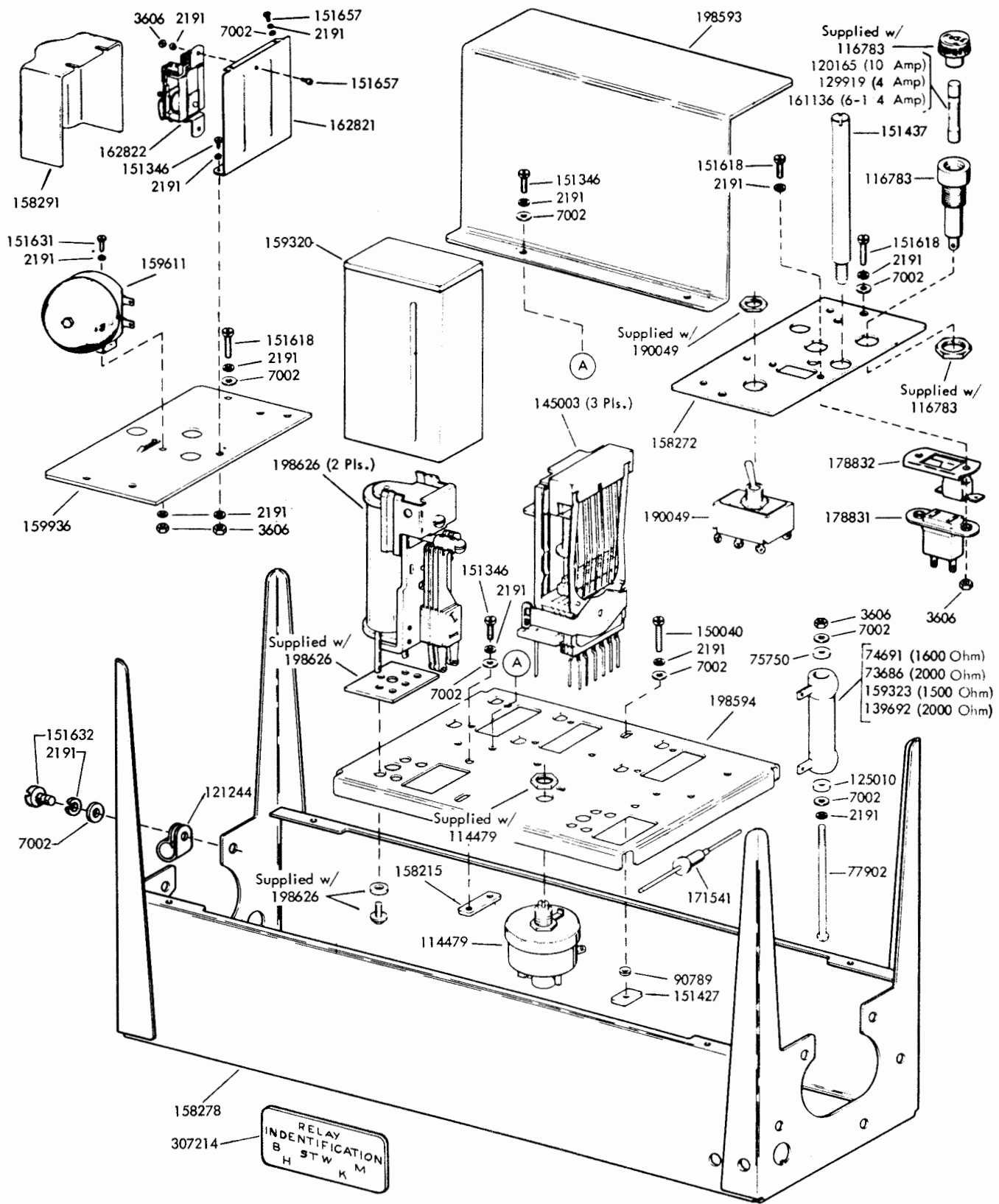


FIGURE 32. COMPONENTS TO PROVIDE LINE RELAYS AND SELECTOR BATTERY

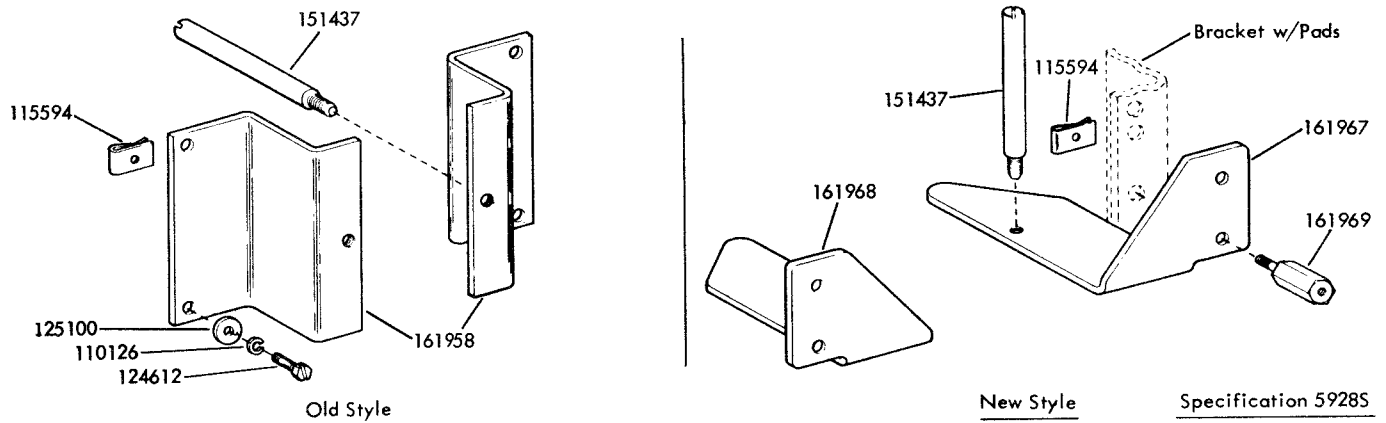


FIGURE 33. 161829 MODIFICATION KIT FOR MOUNTING AN ELECTRICAL SERVICE UNIT ON RELAY RACK BRACKETS

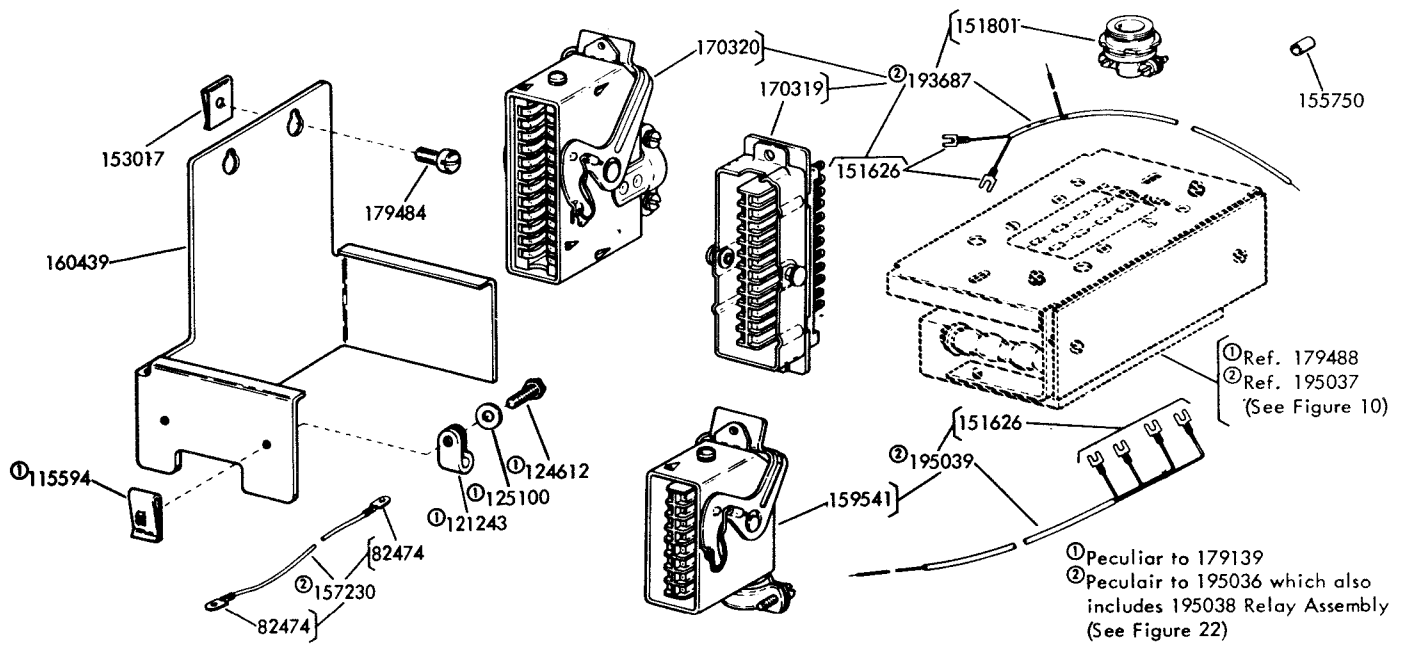


FIGURE 34. 179139 AND 195036 AUXILIARY REPERFORATOR LINE RELAY ASSEMBLY

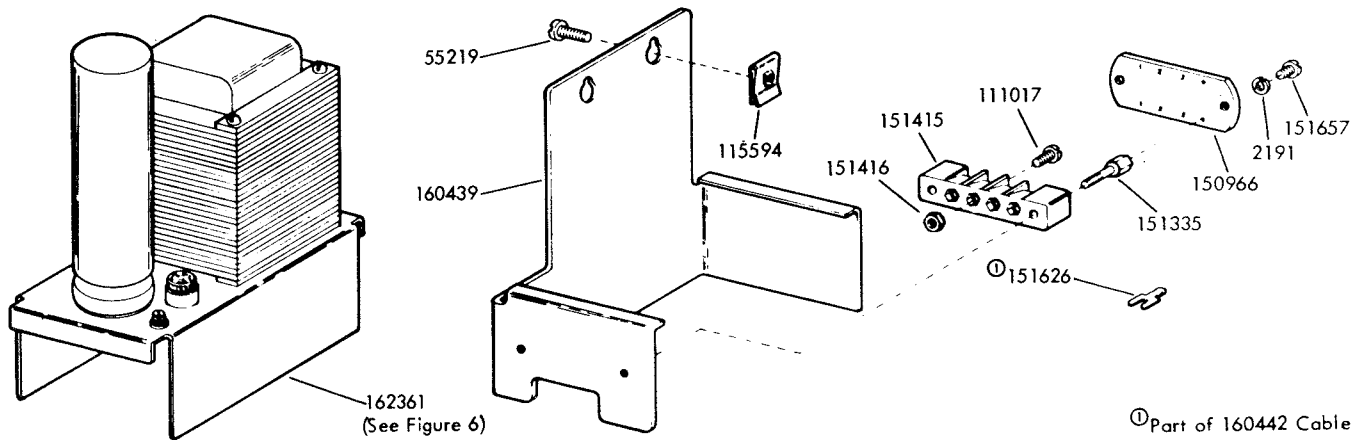


FIGURE 35. 160422 MODIFICATION KIT TO EQUIP CABINET WITH RECTIFIER

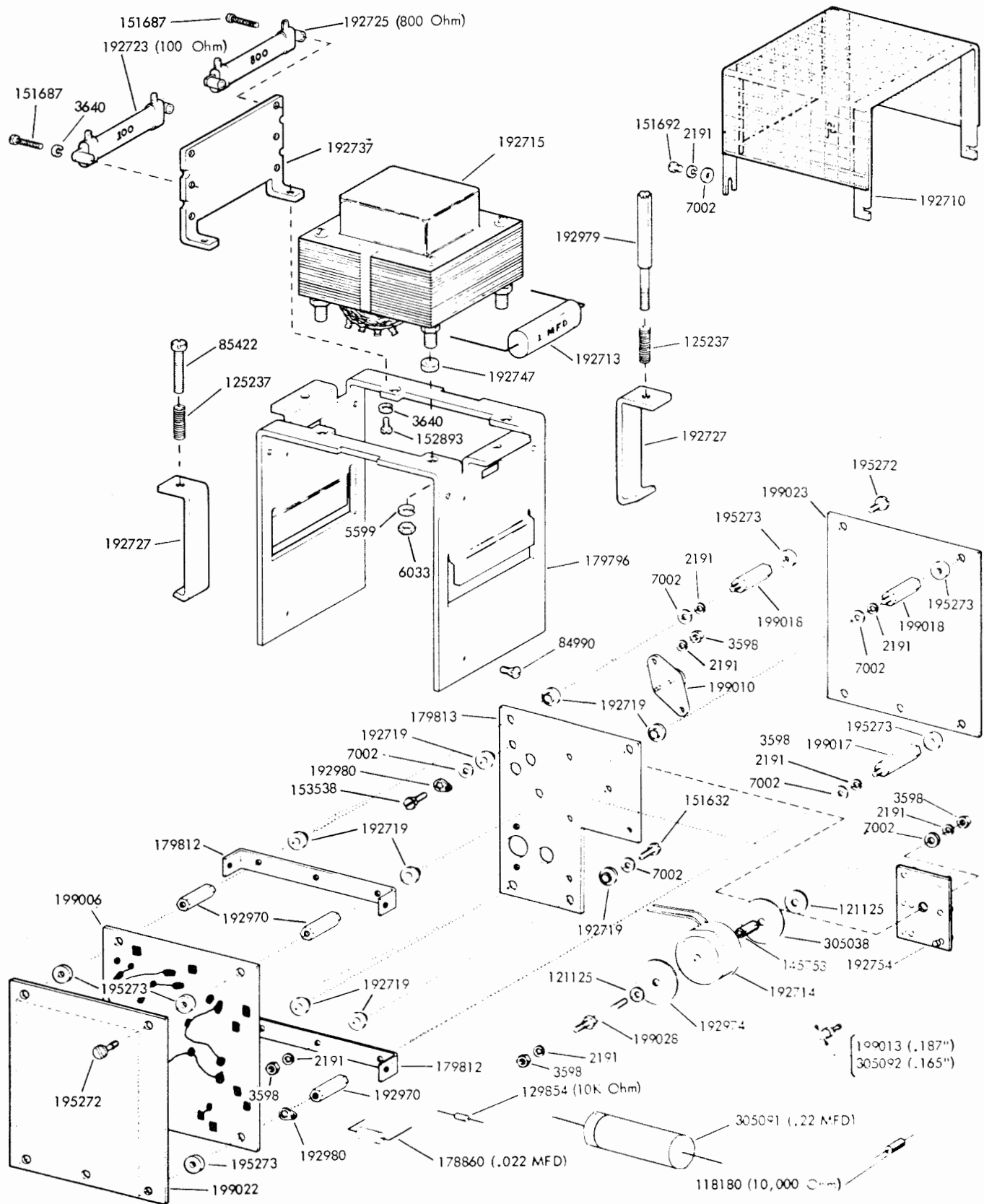
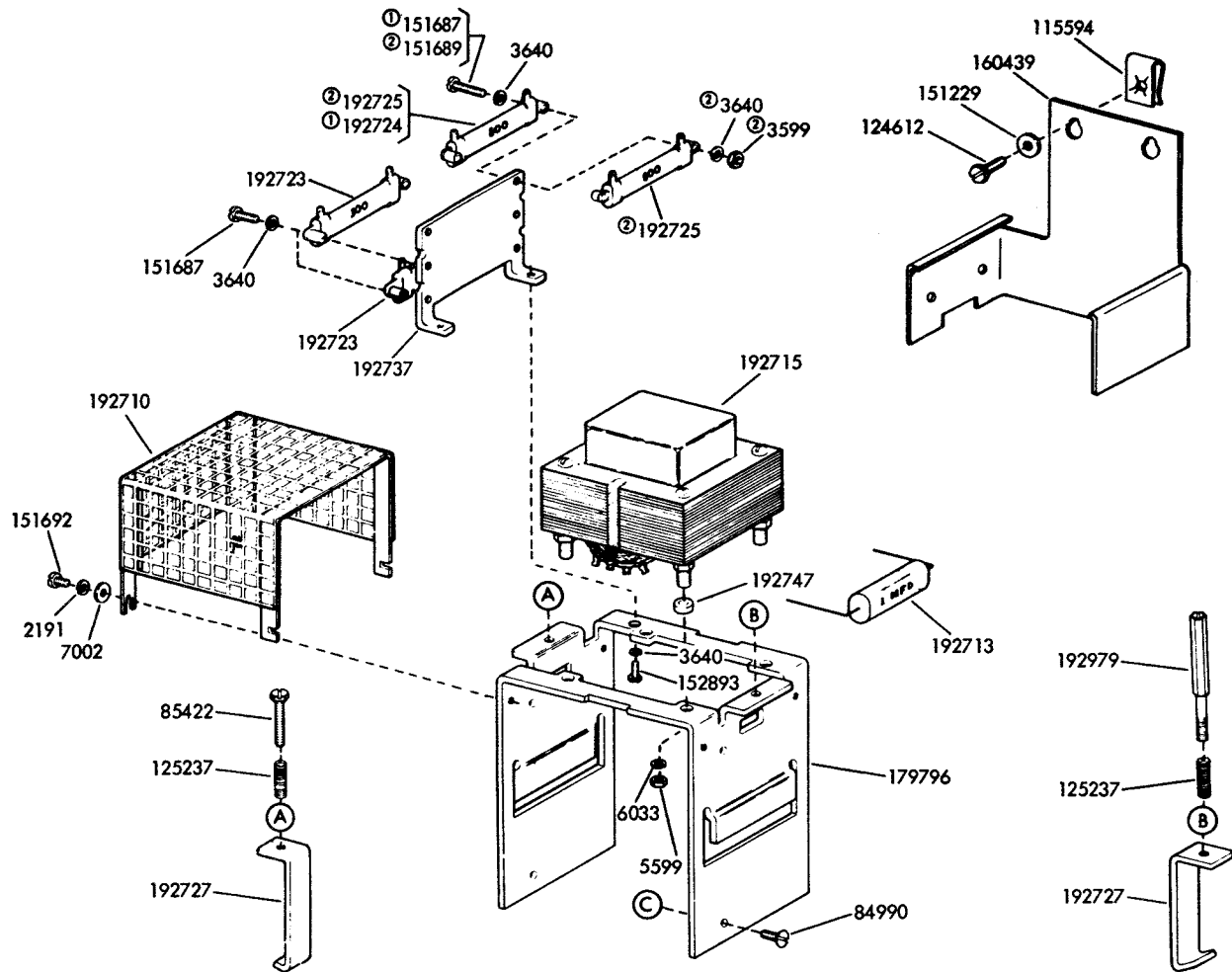
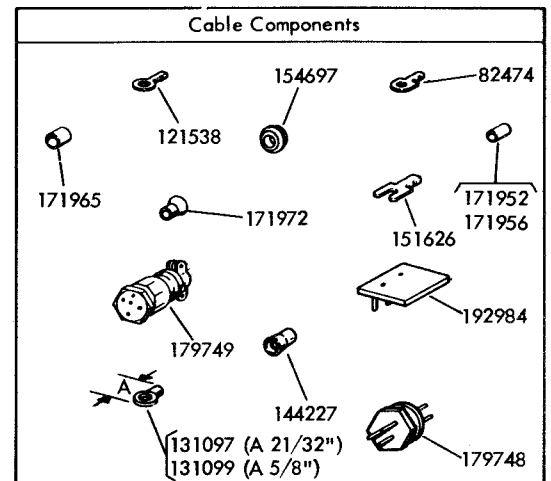


FIGURE 36. 19250 RECTIFIER ASSEMBLY



Jumpers			
Part No.	Color	Terminals	Length
151819	Black	151626 (2)	3-1/16"
156880	Black	121538 (2)	6-1/4"
157230	Black	151626 (2)	9-1/4"
157232	Black	151626 (2)	3-1/2"
195269	Green	82474 (1)	3-1/2"
195270	Green	131099 (1)	3-1/2"
305019	Brown		2"
305020	Purple		2"



- ① Peculiar to 192730 Selector Magnet Driver Assembly
- ② Peculiar to 192740 Low Level Keyer Assembly

FIGURE 37. 179610 AND 179611 MODIFICATION KITS TO REDUCE RADIO FREQUENCY NOISE ON ASR SET (Includes Parts on This Figure and Figure 38)

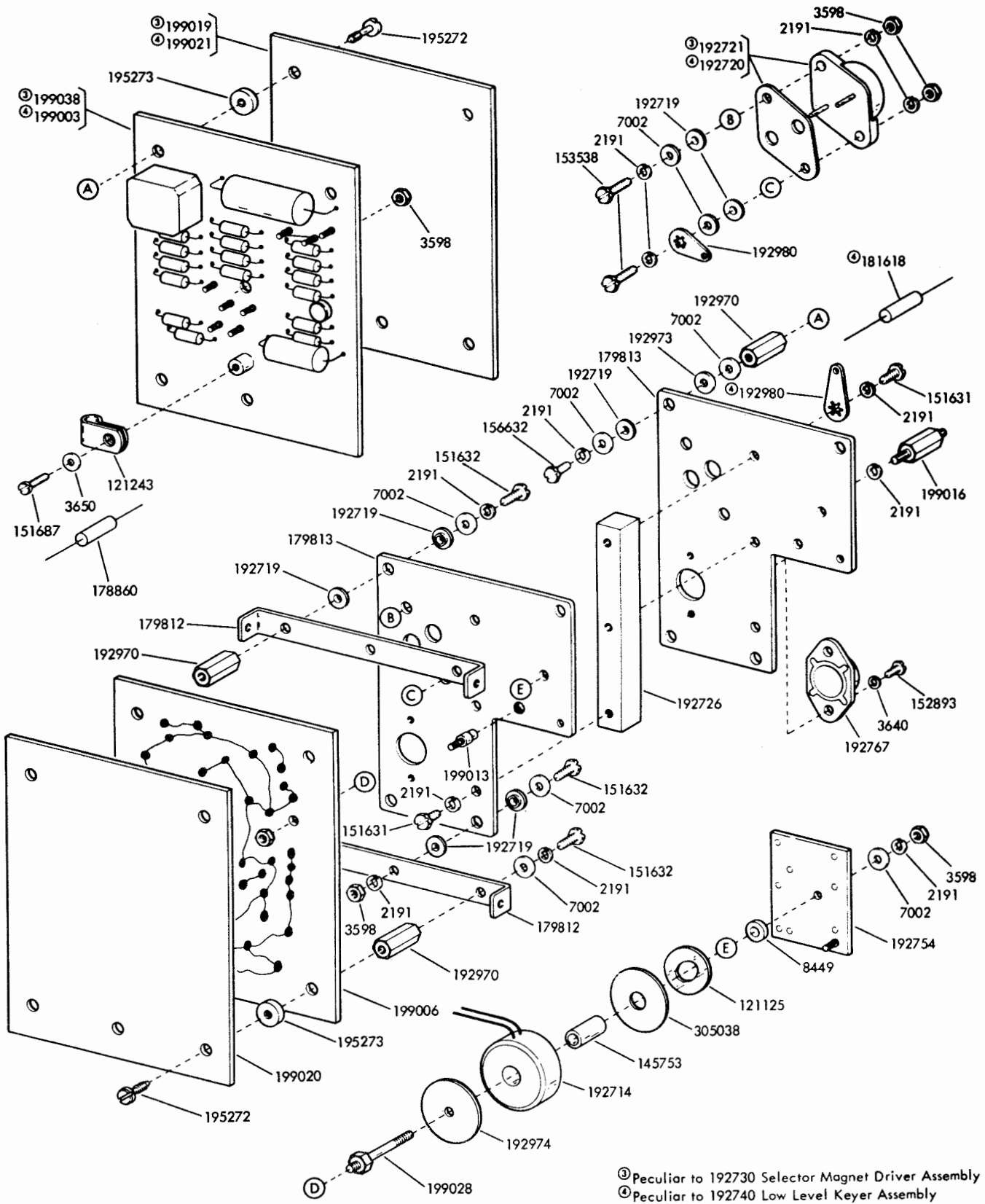
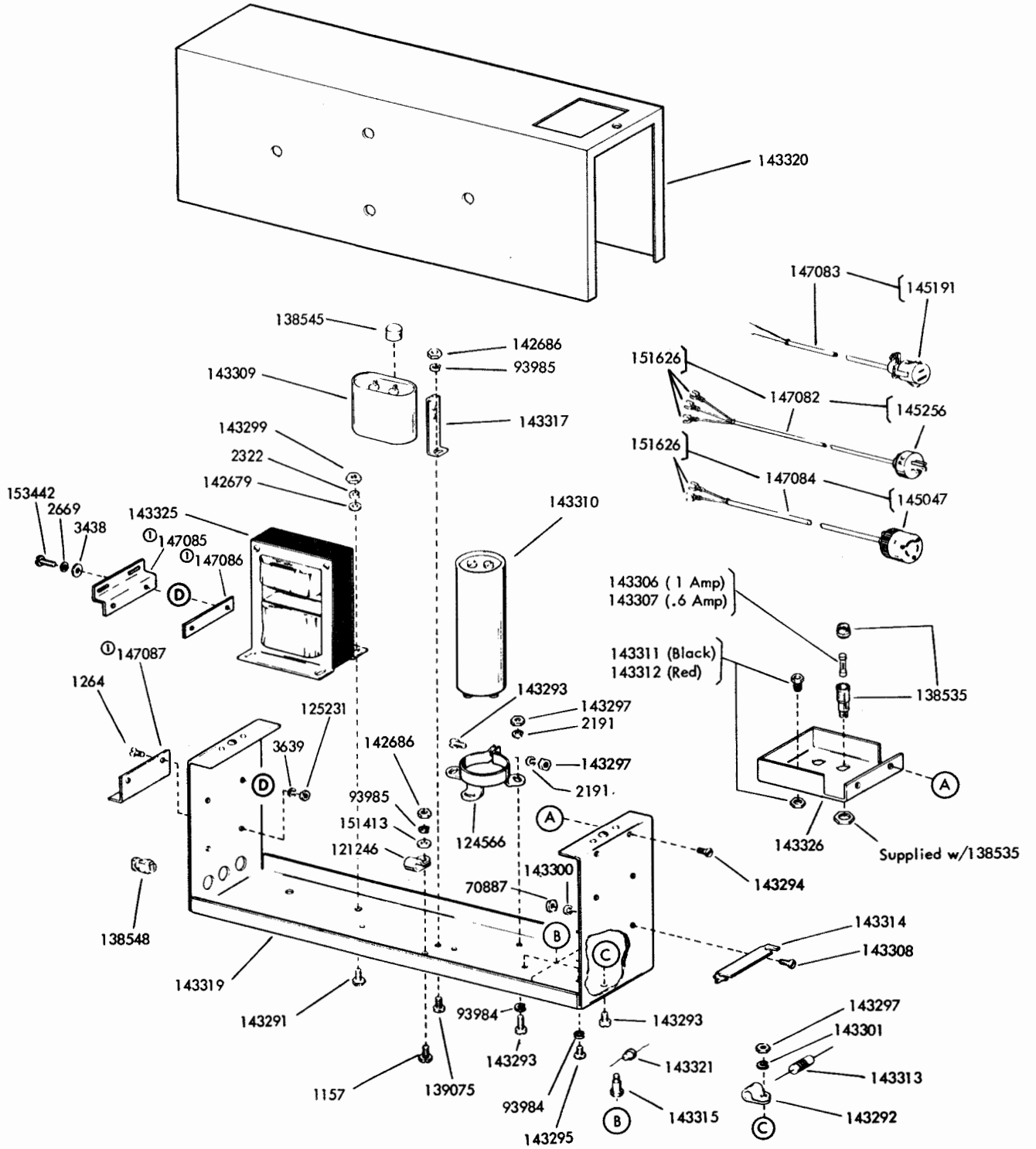


FIGURE 38. 179610 AND 179611 MODIFICATION KITS TO REDUCE RADIO FREQUENCY NOISE ON ASR SET (Includes Parts on This Figure and Figure 37)



Ⓛ Parts no longer available

FIGURE 39. RECTIFIER - 130V DC - 20V AC

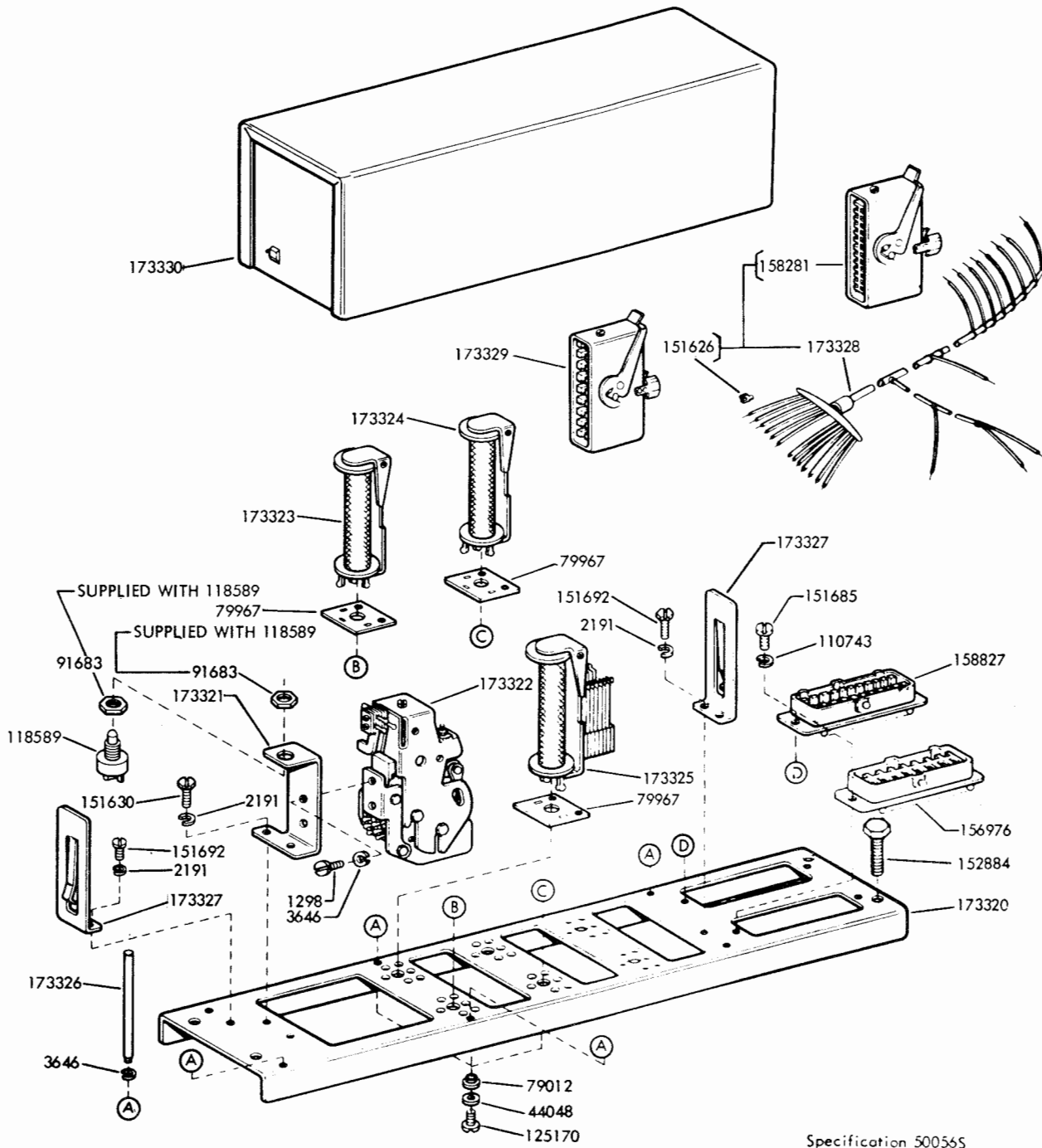
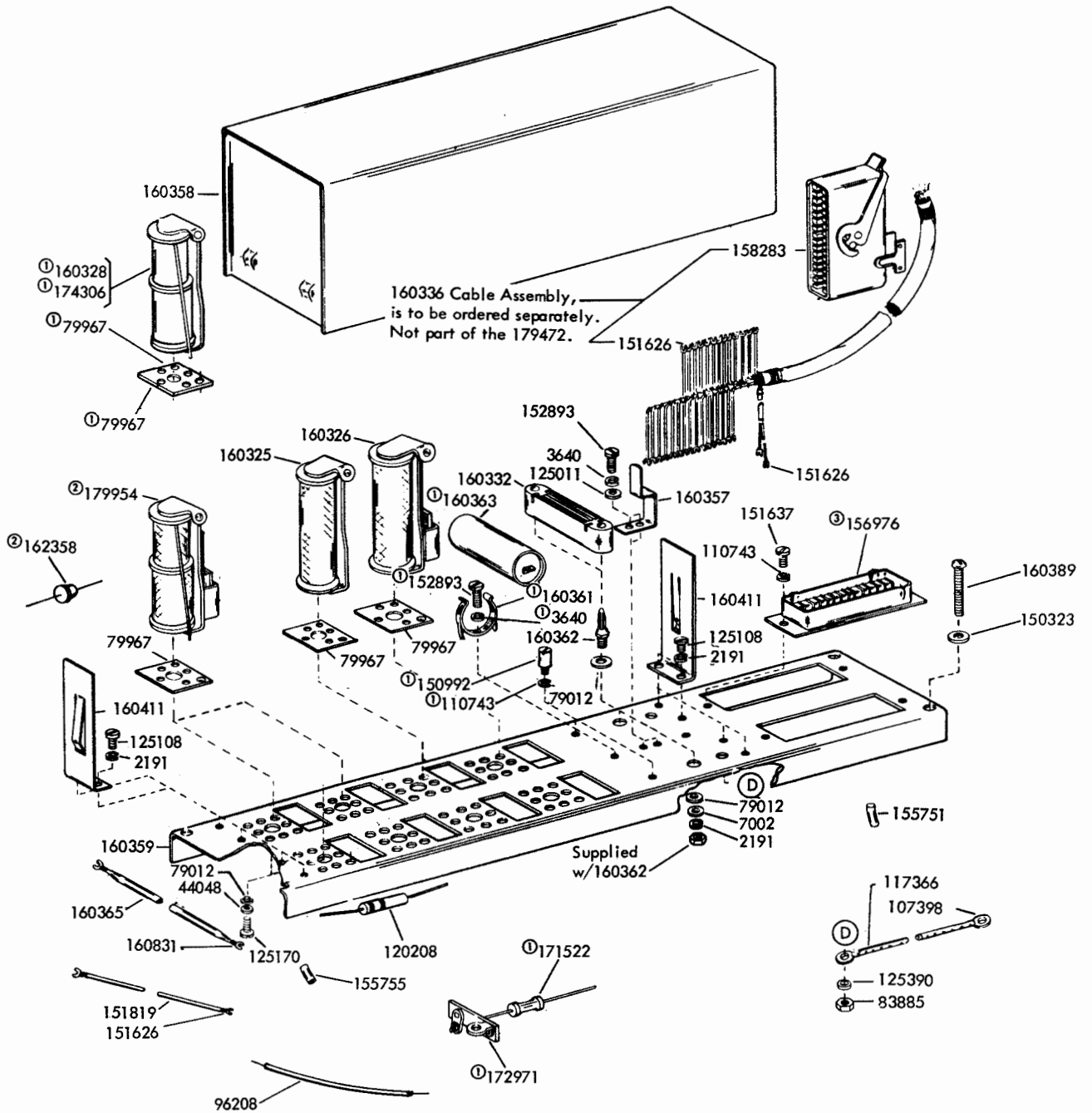
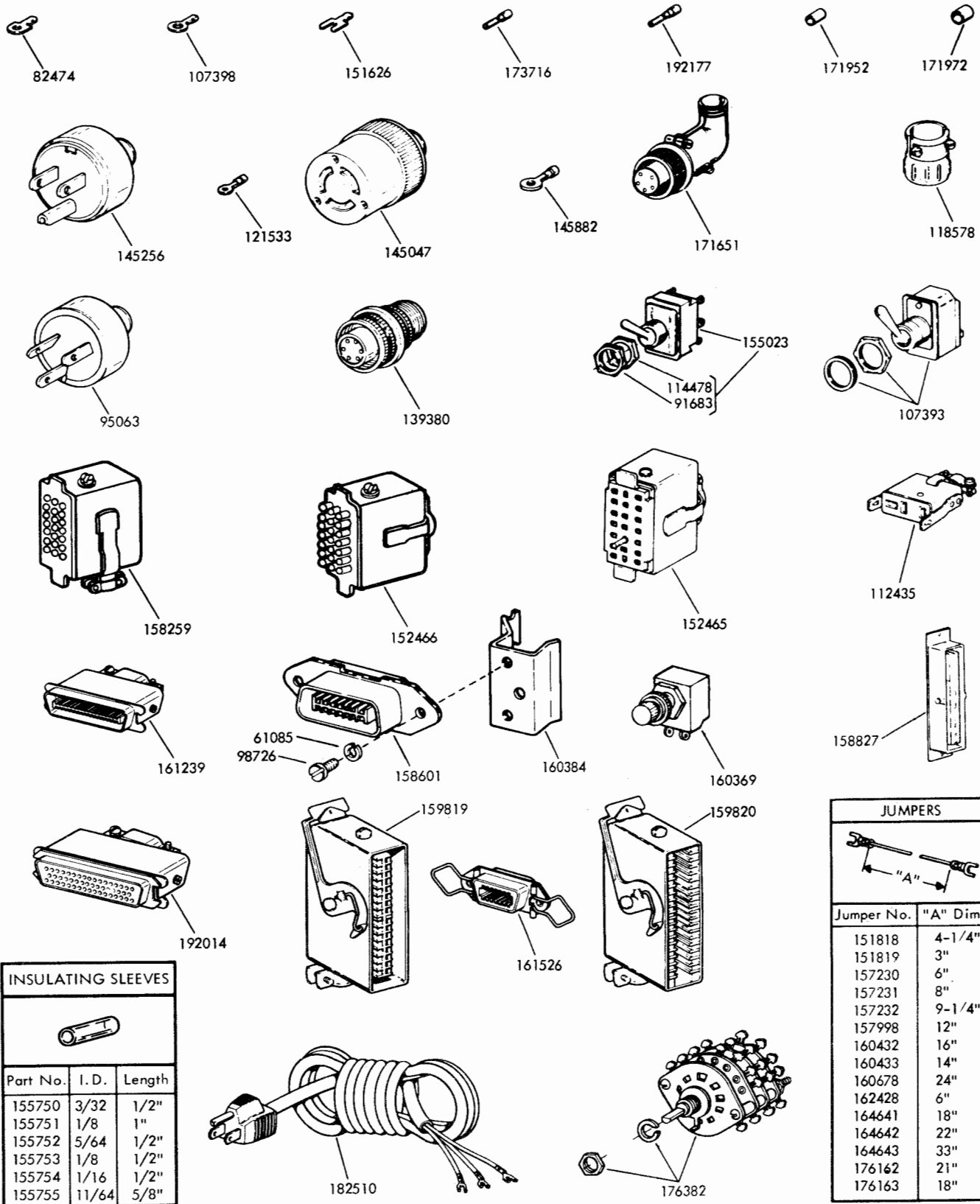



FIGURE 40. 162483 CALL DIRECTING RELAY UNIT



- ①Peculiar to Early Design 160334 Modification Kit.
This feature no longer furnished - Specification 58875
- ②Also part of 179953 Modification Kit to convert early design 160334 Central Device to a 179472.
Specification 501525
- ③Part of 179956 Cable Assembly

FIGURE 41. 179472 MODIFICATION KIT TO PROVIDE A TRANSMITTER CONTROL DEVICE



INSULATING SLEEVES		
		
Part No.	I. D.	Length
155750	3/32	1/2"
155751	1/8	1"
155752	5/64	1/2"
155753	1/8	1/2"
155754	1/16	1/2"
155755	11/64	5/8"

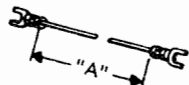
JUMPERS	
	
Jumper No.	"A" Dim.
151818	4-1/4"
151819	3"
157230	6"
157231	8"
157232	9-1/4"
157998	12"
160432	16"
160433	14"
160678	24"
162428	6"
164641	18"
164642	22"
164643	33"
176162	21"
176163	18"

FIGURE 42. CABLE COMPONENTS

NUMERICAL INDEX¹

Part Number	Description and Page Number	Part Number	Description and Page Number	Part Number	Description and Page Number
169M	Coil, Magnet 15	74615	Resistor, 2,000 Ohm 5, 11, 12	110434	Screw, 4-40 x 3/16 Fil 14
247M	Coil, Magnet 6	74691	Resistor, 1,600 Ohm 24	110435	Nut, 4-40 Hex 6, 23
252M	Coil, Magnet 6	74807	Nut, 10-32 Shoulder Hex 21	110743	Washer, Lock 4, 8, 15, 16, 18, 19, 23, 30, 31
1020	Screw, 6-40 x 1/4 Hex 19	74821	Resistor, 2,810 Ohm 11, 16	111017	Screw, 6-40 x 5/16 Fil 3, 4, 19, 20, 22, 23, 25
1028	Screw, 4-40 x 1/4 Fil 11, 15, 18	74882	Spring 6	111647	Resistor, 1,000 Ohm 4, 5
1093	Screw, 8-32 x 7/16 Fil 6	74980	Screw, 6-40 x 1-13/16 Rd 5	112435	Socket 32
1157	Screw, 8-32 x 1/2 Fil 3, 21, 29	75750	Washer, Insulating 5, 11, 12, 13, 15, 16, 18, 20, 23, 24	112626	Nut, 10-32 Hex 5
1158	Screw, 6-32 x 5/16 Fil 4	76099	Washer, Flat 21	112627	Nut, 2-56 Hex 5
1172	Screw, 2-56 x 5/16 Fil 5	76461	Washer, Flat 16	114119	Washer, Insulating 21
1248	Screw, 6-40 x 1/2 Flat 11	76983	Screw, 4-40 x 1-1/4 Fil 15	114478	Nut, 15/32-32 Hex 32
1263	Screw, 6-32 x 1/4 Fil 19	77902	Screw, 6-40 x 2-3/8 Rd 4, 5, 9, 11, 12, 13, 15, 16, 18, 23, 24	114479	Rheostat, 1,500 Ohm 24
1264	Screw, 10-32 x 1/2 Flat 29	79012	Insulator 14, 15, 30, 31	114626	Screw, 6-40 x 2-1/16 Fil 12
1297	Screw, 6-40 x 2-7/16 Fil 20	79967	Insulator 14, 15, 30, 31	114654	Strip, Terminal 12, 14
1298	Screw, 8-32 x 1/4 Fil 30	80342	Screw, 6-40 x 23/64 Hex 23	115537	Screw, 8-32 x 2-1/4 Rd 5
2034	Washer, Flat 6	80467	Screw, 6-40 x 3/8 Hex 9	115594	Nut, Speed 10, 17, 21, 25, 27
2191	Washer, Lock 3 to 31	80612	Nut, 8-32 Hex 5	116783	Holder, Fuse 3, 7, 8, 9, 22, 24, 29
2201	Nut, 5/16-32 Hex 6	80854	Screw, 6-40 x 1-7/16 Fil 5, 6	117366	Jumper, 8-1/2" Green 31
2322	Washer, Lock 29	81836	Washer, Insulating 5	117535	Washer, Flat 21
2422	Washer, Lock 5	82474	Terminal 9, 12, 17, 25, 27, 32	118180	Resistor, 10,000 Ohm 26
2449	Washer, Lock 15	82516	Spring, Retaining 11	118210	Resistor, 22,000 Ohm 7
2658	Nut, 6-32 Hex 7	82870	Resistor, 6,300 Ohm 18	118575	Nut, 3/8-32 Insulating 21
2669	Washer, Lock 5, 29	83885	Nut, 6-32 Hex 31	118578	Clamp, 3/4 ID Cable 32
3438	Washer, Flat 5, 18, 29	84990	Screw, 6-40 x 1/4 Flat 26, 27	118589	Switch, Black Pushbutton 30
3595	Nut, 1/4-32 Hex 15	85422	Screw, 10-32 x 15/16 Hex 26, 27	118659	Switch, Toggle 3
3598	Nut, 6-40 Hex 3 to 6, 9, 11, 12, 15 to 20, 22, 23, 26, 28	86742	Nut, 4-40 Hex 23	118720	Resistor, 100K Ohm 19
3599	Nut, 4-40 Hex 4, 16, 27	89548	Spring, Contact 11	118726	Resistor, 820 Ohm 14
3606	Nut, 6-40 Hex 3, 4, 5, 17, 20, 21, 24	90789	Washer, Flat 5, 6, 7, 10, 11, 12, 13, 15, 16, 17, 20 to 24	119045	Grommet, Rubber 3, 16, 21
3639	Washer, Lock 29	90951	Washer, Lock 6	119121	Bracket 20
3640	Washer, Lock 6, 14, 23, 26, 27, 28, 31	91683	Nut, 15/32-32 Hex 3, 22, 30, 32	119218	Resistor, 3,500 Ohm 5
3642	Washer, Flat 5	91721	Screw, 10-32 x 2-3/4 Fil 5	119367	Screw, 8-32 Set 21
3646	Washer, Lock 3, 5, 6, 13, 21, 30	92260	Washer, Lock 7	120121	Resistor, 62,00 Ohm 19
3650	Washer, Flat 28	92271	Screw 6-32 x 2-3/4 Rd 8	120165	Fuse, 10 Amp 3, 24
3870	Spring 6	92527	Washer, Lock 3, 21	120175	Plate, Off-On 3, 22
3899	Spacer, .188" Thk 15	92761	Jumper, 1-1/2" Black 20	120195	Rectifier 7
5599	Nut, 8-32 Hex 26, 27	92856	Resistor, 1,500 Ohm 4, 5	120205	Shield, Tube 19
5816	Washer, Insulating 6	93073	Modification Kit 5	120208	Resistor, 22 Ohm 31
6033	Washer, Lock 26, 27	93598	Screw, 4-40 x 5/16 Rd 8	120421	Resistor, 100 Ohm 23
6345	Nut, 6-32 Hex 7, 10	93711	Resistor, 200 Ohm 5	121018	Nut, 4-40 Hex 8
6347	Screw, 6-32 x 3/8 Rd 23	93959	Key 23	121125	Washer, Spring 6, 26, 28
6827	Block 11	93984	Washer, Lock 29	121243	Clamp, 3/16" ID Cable 10, 17, 25, 28
7002	Washer, Flat 3 to 24, 26, 27, 28, 31	93985	Washer, Lock 29	121244	Clamp 1/4" ID Cable 3, 24
7603	Spring 6	95009	Switch, Push Button 13	121245	Clamp 5/16" ID Cable 3, 6, 23
7959	Bracket, Magnet 15	95063	Connector, 3 Pt Plug 32	121246	Clamp, 3/8" ID Cable 3, 16, 29
8262	Knob 18	96208BK	Jumper, 3" Lg Black 31	121247	Clamp, 7/16" ID Cable 3, 21, 23
8449	Spacer, .094" Thk 28	96260BK	Jumper, 3-1/2" Black 12	121248	Clamp, 1/2" ID Cable 3
34432	Washer, Flat 5, 20	96262BK	Jumper, 4" Lg Black 7	121249	Clamp, 5/8" ID Cable 3, 4, 21
35826	Washer, Flat 21	96262S	Jumper, 4" Lg Slate 7	121250	Clamp, 3/4" ID Cable 3
44048	Washer, Flat 3, 6, 14, 15, 21, 30, 31	97143	Jack 21	121413	Spacer, .344" Thk 8
49514	Nut, 8-32 Hex 3, 21	98142	Washer, Flat 23	121533	Terminal 32
55219	Screw, 8-32 x 3/8 Fil 10, 17, 25	98718	Washer, Flat 13, 21	121538	Terminal w/Insulator 27
55318	Screw, 6-32 x 1/4 Rd 8	98726	Screw, 3-48 x 1/4 Fil 32	121630	Washer, Flat 7
61085	Washer, Lock 32	100657	Connector, 2 Pt Receptacle 4, 5	122184	Grommet 9
70314	Washer, Flat 9	101944	Resistor, 4,000 Ohm 11	123146	Socket, 6 Pt 16
70887	Nut, 10-24 Hex 29	102690	Connector, Duplex Receptacle 22	124566	Clamp, Capacity 29
71047	Washer, Flat 15	104213	Resistor, 300 Ohm 12	124612	Screw, 8-32 x 1 2 Hex 21, 25, 27
71155	Screw, 6-32 x 1-1/4 Flat 7	104807	Washer, Flat 18	125010	Washer, Insulating 4, 5, 24
71646	Nut, 6-32 Hex 7, 8	107116	Washer, Lock 3, 9, 23	125011	Washer, Flat 12, 15, 18, 31
73686	Resistor, 2,000 Ohm 24	107393	Switch, SP-ST Toggle 32	125015	Washer, Flat 5, 7, 11, 13, 15, 23
74614	Resistor, 2,600 Ohm 11	107398	Terminal 4, 12, 16, 21, 31, 32		
		110126	Washer, Lock 25		

NUMERICAL INDEX (Continued)

Part Number	Description and Page Number	Part Number	Description and Page Number	Part Number	Description and Page Number
125100	Washer, Flat 25	144618	Cable w/Terminals 11	151407	Collar, Spacing 6
125108	Screw, 6-32 x 3/8 Fil 31	144619	Cable w/Terminals 11	151408	Lever 6
125112	Screw, 2-56 x 1/8 Fil 15	144620	Mounting Assembly, Line Relay 11	151409	Armature 6
125130	Screw, 6-32 x 1/2 Fil 23			151410	Clip, Retaining 6
125170	Screw, 8-32 x 5/16 Fil 13, 14, 15, 21, 30, 31	144621	Mounting Assembly, Line Relay 11	151411	Block, Terminal 3, 4, 19, 20, 22, 23
125186	Screw, 8-32 x 3/4 Fil 3	144625	Guard 23	151412	Insulator, Terminal 3, 4, 19, 20, 22, 23
125200	Screw, 10-32 x 1/2 Rd 21	144626	Container 22	151413	Washer, Flat 9, 29
125231	Nut, 10-32 Hex 29	144630	Block, Mounting 23	151414	Switch, Sensitive 6
125237	Spring, Compression 26, 27	144631	Post, Mounting 23	151415	Block, Terminal 25
125306	Stop, Magnet Plunger 15	144633	Jumper, 18" Black 23	151416	Nut, 6-40 Hex 3, 4, 19, 20, 22, 23, 25
125315	Washer, Insulating 8	144634	Relay, 90 Ohm 23	151418	Fuse, 10 Amp 22
125390	Washer, Flat 6, 21, 31	144960	Plate, Mounting 23	151422	Connector 2 Pt Receptacle 3, 22
129098	Screw, 6-40 x 11/32 Flat 19	144962	Bracket, Mounting 23	151426	Plate, 3-3/4 Wide Blank 5
129854	Resistor, 10,000 Ohm 26	144963	Cover 23	151427	Plate, Clamp 5, 6, 7, 10 to 17, 20 to 24
129916	Capacitor, .1 MFD 19	145003	Relay 24	151432	Armature 6
129919	Fuse, 4 Amp SL-BL 3, 24	145021	Relay 23	151437	Stud 3, 4, 22, 23, 24, 25
131097	Terminal, 21/32" Lg 27	145040	Plate, Mounting 22	151440	Stud 6
131099	Terminal 5/8" Lg 27	145047	Connector, 3 Pt Receptacle 29, 32	151441	Plate, 2-3/4 Wide Blank 5
137441	Resistor, 1,200 Ohm 19			151616	Screw, #2 Self-Tapping 3
137602	Resistor, 470 Ohm 14	145068	Plate, Mounting 22	151618	Screw, 6-40 x 7/16 Fil 3, 4, 21, 24
138191	Screw, 3-48 x 1 Rd 11	145071	Plate, Mounting 23	151626	Terminal 4 to 7, 9, 10, 11, 13 to 23, 25, 27, 29, 30, 31, 32
138545	Cap, Insulator 29	145072	Plate, Mounting 23	151629	Nut, 6-40 Lug 10
138548	Connector, Cord 29	145191	Connector, 2 Pt Receptacle 29	151630	Screw, 6-40 x 1/4 Hex 4, 5, 6, 10, 16, 23, 30
139075	Screw, 8-32 x 1/4 Fil 29	145256	Connector, 3 Pt Plug 29, 32	151631	Screw, 6-40 x 5/16 Hex 12, 15, 16, 17, 24, 28
139158	Connector, Duplex Receptacle 22	145270	Capacitor, 1 MFD 23	151632	Screw, 6-40 x 3/8 Hex 6, 24, 26, 28
139335	Connector, 6 Pt Plug 8	145753	Bushing 26, 28	151637	Screw, 4-40 x 1/4 Fil 18, 23, 31
139380	Connector, 6 Pt Receptacle 32	145882	Terminal 32	151657	Screw, 6-40 x 1/4 Fil 4, 11, 15, 16, 17, 18, 20, 24, 25
139564	Nut, 3/8-32 Hex 13	145894	Switch 22	151658	Screw, 6-40 x 5/16 Fil 22, 23
139565	Washer, Flat 13	146551	Resistor, 47,500 Ohm 19	151659	Screw, 6-40 x 1/2 Fil 4, 11
139692	Resistor, 2,000 Ohm 11, 24	146572	Plate, Top Mounting 19	151685	Screw, 4-40 x 5/16 Fil 4, 19, 30
139777	Screw, 3-56 x 1/4 Flat 18	146573	Plate, Lower Mounting 19	151687	Screw, 4-40 x 7/16 Fil 26, 27, 28
139971	Screw, 2-56 Self-Tapping 3, 18	146574	Connector, 8 Pt Plug 19	151689	Screw, 4-40 x 3/4 Fil 27
142288	Jumper, 2" Black 9	146650	Inductor 19	151692	Screw, 6-40 x 3/16 Fil 11, 16, 26, 27, 30
142679	Washer, Flat 29	146652	Modification Kit 2, 19	151722	Screw, 6-40 x 3/16 Hex 16, 17
142686	Nut, 8-32 Hex 29	146901	Rectifier Assembly 2, 8	151733	Screw, 4-40 x 9/16 Fil 23
143291	Screw, 1/4-20 x 5/8 Hex 29	146967	Resistor, 750 Ohm 8	151801	Bushing, Clamp 25
143292	Clamp, Cable 29	146968	Transformer 8	151808	Relay 4, 17
143293	Screw, 6-32 x 1/2 Spl 29	147060	Plate 20	151814	Bracket, Relay Mounting 4, 17
143294	Screw, 8-32 x 3/8 Flat 29	147061	Mount, Jack 20	151818	Jumper, 4-1/4" Black 23, 32
143295	Screw, 4-40 x 1/4 Rd 29	147062	Jack, Line 20	151819	Jumper, 3" Black 6, 11, 15, 18, 20, 23, 27, 31, 32
143297	Nut, 6-32 Hex 29	147082	Cable Assembly 29	151827	Strap, Terminal 3, 4, 20, 22, 23
143299	Nut, 1/4-20 Hex 29	147083	Cable Assembly 29	151880	Nut, 4-40 Hex 19
143306	Fuse, 1 Amp SL-BL 7, 9, 29	147084	Cable Assembly 29	151913	Plate, Mounting 7
143307	Fuse, .6 Amp 29	147085	Plate, Upper Adapter 29	151916	Transformer 7
143308	Screw, 10-24 x 5/8 Flat 29	147086	Plate, Nut 29	151939	Grommet, Rubber 9
143309	Capacitor, 2.75 MFD 29	147087	Bracket, Lower 29	152109	Filter 11
143310	Capacitor, 1250 MFD 29	148257	Terminal, Insulated 8	152110	Bracket, Resistor Mounting 11
143311	Jack, Black 29	150040	Screw, 6-40 x 5/8 Fil 3, 4, 5, 6, 7, 9, 12 to 17, 19 to 24	152124	Spacer 11
143312	Jack, Red 29	150323	Washer, Flat 31	152332	Control Assembly, Motor 2, 15
143313	Resistor, 6,000 Ohm 29	150849	Washer, Insulating 5	152426	Nut, 6-40 Self-Locking 10
143314	Bracket, Mounting 29	150948	Plate 3		
143315	Terminal, Insulating 29	150949	Plate, Serial 3		
143317	Bracket 29	150950	Plate, Code 3		
143319	Chassis 29	150966	Insulator, Terminal 25		
143320	Cover 29	150992	Stud 31		
143321	Diode 29	150995	Bushing 16, 17		
143325	Regulator 29	151152	Screw, 4-40 x 3/16 Hex 18		
143326	Bracket, Fuse Jack 29	151229	Washer, Flat 27		
144227	Connector, Black Insulated 27	151335	Stud 25		
144339	Bushing, 2" Lg 21	151346	Screw, 6-40 x 3/8 Fil 3, 4, 9, 21, 22, 23, 24		
144340	Bushing, 2-1/8" Lg 21	151401	Base 6		
144610	Card, EC610 Circuit 23	151402	Core 6		
144616	Plate, Relay 11	151403	Frame 6		
144617	Plate, Relay 11	151406	Plate, Insulating 6		

NUMERICAL INDEX (Continued)

Part Number	Description and Page Number	Part Number	Description and Page Number	Part Number	Description and Page Number
152465	Connector, 20 Pt Receptacle 4, 32	155559	Plate 15	159541	Connector, 16 Pt Plug 25
152466	Connector, 20 Pt Receptacle 4, 32	155560	Relay 15	159611	Bell 24
152623	Mounting Assembly, Line Relay 11	155561	Cable w/Terminals 15	159819	Connector, 32 Pt Plug 32
152750	Cable Assembly 4	155564	Cover, Relay 15	159820	Connector, 32 Pt Receptacle 32
152755	Strap, Terminal 4	155591	Capacitor, 220 MFD 7	159821	Plate, Tape Out Connector 5
152757	Plate Assembly, Blank 5	155718	Jumper, 3" Black 20	159936	Plate, Left Mounting 24
152759	Plate Assembly 5	155750	Sleeve, 3/32 ID x 1/2 Lg Insulating 9, 10, 15, 18, 25, 32	160226	Mounting Assembly, Line Relay 11
152760	Stud 3, 20, 22	155751	Sleeve, 1/8 ID x 1" Lg Insulating 31, 32	160227	Cable w/Terminals 11
152761	Stud 3, 4	155752	Sleeve, 5/64 ID x 1/2" Lg Insulating 32	160229	Plate, Mounting 7
152884	Screw, 12-24 x 1 Hex 30	155753	Sleeve, 1/8 ID x 1/2" Lg Insulating 13, 16, 21, 32	160284	Resistor, 5,500 Ohm 11
152893	Screw, 4-40 x 1/4 Hex 26, 27, 28, 31	155754	Sleeve, 1/16 ID x 1/2" Lg Insulating 10, 32	160307	Diode 7
152950	Rectifier Assembly 2, 7	155755	Sleeve, 11/64 ID x 5/8" Lg Insulating 5, 9, 13, 31, 32	160308	Capacitor, 300 MFD 7
152988	Plate, Cover 5	155858	Resistor, 700 Ohm 5	160309	Transformer 7
153002	Plate, Bell Identification 3	156632	Screw, 6-40 x 13/32 Hex 28	160325	Relay, Quick Acting 31
153017	Nut, Speed 17, 25	156880	Jumper, 2-3/8" Black 27	160326	Relay, Quick Acting 31
153102	Screw, 8-32 Set 18	156976	Connector, 32 Pt Plug 30, 31	160328	Relay, 2,000 Ohm 31
153108	Insulator, .031" Thk 7	157230	Jumper, 6" Black 25, 27, 32	160332	Flasher, Thermal 31
153157	Resistor, 400 Ohm 6	157231	Jumper, 8" Black 20, 32	160334	Modification Kit 31
153251	Control Assembly, Motor 2, 6	157232	Jumper, 9-1/4" Black 20, 27, 32	160336	Cable Assembly 31
153442	Screw, 10-32 x 1/2 Hex 21, 29	157307	Spacer 15	160357	Clip, Spring 31
153451	Block, Terminal 18	157308	Bracket 15	160358	Cover 31
153456	Bracket 4	157309	Plate, Nut 15	160359	Plate, Relay Mounting 31
153457	Strap, Terminal 4	157310	Switch, Sensitive 15	160361	Clip 31
153460	Plate, Left Mounting 4, 20	157998	Jumper, 12" Black 32	160362	Plug, Banana 31
153462	Plate 3, 20, 22	158215	Plate, Nut 24	160363	Capacitor, 6 MFD 31
153464	Block Terminal 11	158216	Plate, Nut 4	160365	Jumper, 28" Braided 11
153475	Cable w/Terminal 11	158259	Connector, 20 Pt Receptacle 32	160367	Plate, Left Mounting 4
153476	Cable w/Terminals 18	158265	Cable Assembly 13	160369	Switch, NO Pushbutton 32
153477	Cable w/Terminals 7	158266	Cable w/Terminals 18	160384	Bracket 32
153478	Cable w/Terminals 6	158267	Cable w/Terminals 11	160385	Plate, Relay 11
153480	Resistor, 6,750 Ohm 11	158272	Plate, Right Mounting 3, 24	160386	Resistor, 1,000 Ohm 13
153481	Resistor, 5,800 Ohm 11, 18	158273	Plate, Left Mounting 4	160389	Screw, 12-34 x 1-1/4 Rd 31
153482	Plate, Relay 11	158278	Container 3, 4, 23, 24	160411	Bracket, Cover Guide 31
153484	Screw, 6-32 Spl 16, 17	158279	Plate, 1-5/16 Wide Blank 5	160419	Cable w/Terminals 17
153537	Screw, 6-40 x 9/32 Hex 14	158280	Plate, Left Mounting 4	160420	Relay Assembly, Line Shunt 2, 17
153538	Screw, 6-40 x 7/16 Hex 26, 28	158281	Connector, 32 Pt Plug 30	160421	Bracket 17
153631	Network, Spark Suppression 23	158283	Connector, 32 Pt Receptacle 31	160422	Modification Kit 2, 25
153799	Screw, 4-40 x 21/64 Hex 18	158284	Connector, 20 Pt Receptacle 4	160432	Jumper, 16" Black 32
153841	Screw, 6-40 x 9/16 Hex 10, 23	158291	Cover, Relay 4, 17, 24	160433	Jumper, 14" Black 32
154335	Screw, 6-40 x 9/32 Fil 11, 13, 21	158292	Bracket, Terminal 3, 23	160439	Bracket 10, 25, 27
154337	Cover 6	158293	Key Assembly, Line Test 2, 18	160442	Cable w/Terminals 25
154395	Plunger, Solenoid 15	158294	Key, Line Test 18	160678	Jumper, 24" Black 32
154413	Plate, Switch 22	158295	Bracket, Resistor 18	160831	Terminal 31
154444	Fork 18	158296	Bracket, Test Key 18	160833	Plate, Relay 11
154449	Shaft 18	158554	Post, Pilot 19	160847	Stud 15
154459	Fork 18	158601	Connector, 14 Pt Plug 32	161136	Fuse, 6-1/4 Amp SL-BL 3, 24
154632	Block, Terminal 15	158694	Plate, Designation 18	161239	Connector, 36 Pt Plug 32
154636	Plate 15	158696	Knob 18, 21	161525	Connector, 14 Pt Plug 10
154664	Resistor, 2,000 Ohm 20	158827	Connector, 32 Pt Receptacle 30, 32	161526	Connector, 14 Pt Receptacle 32
154665	Cable w/Terminals 15	159269	Fuse, 3/8 Amp 7	161829	Modification Kit 2, 25
154697	Grommet, Rubber 27	159318	Relay Assembly 2, 13	161875	Resistor, 2,000 Ohm 23
154747	Modification Kit 2, 20	159319	Relay 13	161958	Bracket, Mounting 25
154870	Cable w/Terminals 20	159320	Cover, Relay 12, 13, 14, 21, 24	161967	Bracket, Right 25
155023	Switch, DP-DT Toggle 3, 22, 32	159321	Bracket, Relay 13, 14, 21	161968	Bracket, Left 25
155043	Solenoid Assembly 15	159322	Plate, Relay 13, 14, 21	161969	Stud 25
155045	Switch, SP-DT Toggle 22	159323	Resistor, 1,500 Ohm 13, 15, 24	162357	Capacitor, 500 MFD 7
155558	Relay Assembly 2, 15	159324	Bracket, Resistor 13	162358	Diode 7, 31
		159326	Mounting Assembly, Line Relay 11	162359	Transformer, Power 7
				162360	Fuse, .8 Amp SL-BL 7
				162361	Rectifier Assembly 2, 7, 25
				162428	Jumper, 6" Black 32
				162441	Resistor, 3,750 Ohm 5
				162483	Relay Assembly 2, 30
				162630	Modification Kit 18
				162821	Bracket 24
				162822	Relay 24

NUMERICAL INDEX (Continued)

Part Number	Description and Page Number	Part Number	Description and Page Number	Part Number	Description and Page Number
162864	Clamp, 7/8" ID Cable 16	173281	Resistor Assembly 2, 12	178602	Cable w Terminals 10
163169	Shaft, Control 18	173320	Plate, Relay Mounting 30	178608	Relay Assembly, Motor Control 2, 16
163172	Bracket, Arm 18	173321	Bracket, Mounting 30	178609	Cable w Terminals 16
163965	Plate Assembly 5	173322	Switch, Stepping 30	178631	Connector, 2 Pt Receptacle 3, 24
163966	Plate 5	173323	Relay 30	178832	Plate, Adapter 3, 24
164232	Key Assembly, Line Test 2, 18	173324	Relay, Delay 30	178840	Capacitor, 400 MFD 10
164233	Cable w/Terminals 18	173325	Relay 30	178841	Transformer 10
164641	Jumper, 18" Lg Black 32	173326	Post, Guide 30	178843	Plate, Mounting 10
164642	Jumper, 22" Black 32	173327	Bracket, Cover Guide 30	178853	Cover, Relay 4
164643	Jumper, 33" Black 32	173328	Cable Assembly 30	178854	Bracket, Relay 4
164840	Plate, Mounting 5	173329	Connector, 32 Pt Receptacle 30	178855	Plate, Left 4
164862	Plate, Right and Left Mounting 21	173330	Cover, Relay Plate 30	178856	Relay, Line Shunt 4
164863	Relay, 3,300 Ohm 21	173452	Keyer Assembly, Electronic 2, 19	178859	Card, Circuit 10
164867	Cable w Terminals 21	173716	Terminal, Receptacle Type 32	178860	Capacitor, .022 MFD 26, 28
164868	Modification Kit 2, 21	173724	Modification Kit 4	178868	Resistor, 700 Ohm 10
164869	Cable Assembly 21	173797	Plate 19	178871	Sleeve, 1/2 ID x 1-1 8" Lg Insulating 9
164870	Bracket, Mounting 21	173800	Turret, Socket 19	178872	Sleeve, 1 1/2 ID x 1-1 4" Lg Insulating 7
165008	Turret, Terminal 4, 9, 21	173801	Tube, Vacuum 19	178886	Cable w/Terminals 10
165060	Socket, Tube 19, 23	173817	Base, Tube Shield 19	178887	Cable w/Terminals 10
165062	Capacitor, 2 MFD 12	173842	Stud 19	178888	Clip 10
165073	Diode 12	173844	Resistor, 200,000 Ohm 19	178913	Diode 3
165116	Terminal 16	174012	Container, Electrical 21	179139	Relay Assembly, Line 2, 25
165168	Key 23	174306	Relay 31	179195	Switch, Rotary 21
165449	Resistor, 47 Ohm 10	176162	Jumper, 21" Lg Black 32	179196	Connector, 75 Pt Plug 21
165522	Diode 16	176163	Jumper, 18" Lg Black 32	179200	Plate, Designation 21
165650	Relay Assembly 2, 16	176382	Switch, Rotary 32	179253	Terminal 21
165651	Bracket, Mounting 16	176386	Plate 13	179444	Relay Assembly 2, 17
165652	Cable w/Terminals 16	176387	Bracket, Mounting 13	179445	Cable w/Terminals 11
170285	Resistor Assembly 2, 12	176448	Control Assembly, Relay Motor 2, 15	179446	Cable w/Terminals 17
170287	Plate, Mounting Resistor 12	176495	Transformer, Power 7	179472	Modification Kit 2, 31
170288	Resistor, 3,500 Ohm 12	176673	Suppressor, Spark 14	179484	Screw, 12-24 Spl 17, 25
170289	Capacitor, 1.3 - 1.6 MFD 12	176692	Relay, 4,000 Ohm 14	179486	Cover, Insulator 11
170290	Cable w/Terminals 12	176693	Cable w/Terminals 14	179487	Stud 11
170319	Connector, 24 Pt Plug 25	176694	Relay Assembly, Motor Control 2, 14	179488	Mounting Assembly, Line Relay 11, 25
170320	Connector, 24 Pt Receptacle 25	176696	Relay, Slow Release 12, 14	179560	Driver Assembly, Selector Magnet 2, 10
170573	Rectifier Assembly 2, 8	176697	Cable w/Terminals 14	179561	Cable Assembly 10
171461	Capacitor, 900 MFD 8	176698	Relay Assembly 2, 14	179562	Card, Circuit 10
171463	Resistor, 1 Ohm 8	176788	Capacitor, 60 MFD 14	179610	Modification Kit 2, 27, 28
171490	Connector, 15 Pt Circuit Card 23	176810	Relay Assembly 2, 14	179611	Modification Kit 2, 27, 28
171516	Relay 23	176811	Plate, Mounting 14	179632	Relay, Quick Acting 13
171522	Resistor, 400 Ohm 31	176812	Cable w/Terminals 14	179662	Cover, Relay 13
171530	Resistor, 2,000 Ohm 9	177010	Driver Assembly, Selector Magnet 2, 10	179671	Plate, Relay 11
171541	Diode 10, 12, 14, 24	178137	Cable w/Terminals 12	179748	Connector, 5 Pt Plug 27
171602	Diode 23	178138	Relay Assembly, Slow Release 2, 12	179749	Connector, 5 Pt Receptacle 27
171609	Diode 8, 9	178140	Plate, Mounting 12	179782	Screw, 6-40 x 7 5/8 Hex 16, 17
171610	Transformer 8	178306	Relay, Power 16, 17	179796	Chassis 26, 27
171644	Fuse, 1.5 Amp 8	178307	Relay Assembly, Motor Control 2, 17	179812	Bracket, Mounting 26, 28
171651	Connector, 6 Pt Receptacle 32	178308	Cable w/Terminals 16, 17	179813	Dissipator, Heat 26, 28
171952	Connector, Green Shielding 27, 32	178326	Capacitor, 20 MFD 16	179953	Modification Kit 31
171956	Connector, Green Shielding 27	178327	Cable Assembly 16	179954	Relay, 2,000 Ohm 31
171965	Connector, Yellow Shielding 27	178328	Bracket, Mounting 16	179956	Cable Assembly 31
171972	Connector, Green Insulated 27, 32	178330	Plate 16	181393	Terminal 9
172971	Board, Terminal 31	178345	Modification Kit 2, 16	181618	Capacitor, .01 MFD 28
173138	Plate, Designation 18	178351	Relay Assembly, Line 21	182510	Card, Power 32
173239	Relay Assembly 2, 17	178352	Relay Assembly, Line 21	190049	Switch, DT-DP Toggle 24
173240	Cable w/Terminals 17	178394	Plate 17	192014	Connector, 50 Pt Receptacle Type 32
173251	Mounting Assembly, Line Relay 11	178535	Suppressor, Spark 16, 17	192177	Terminal, Receptacle Type 32
173252	Key Assembly, Line Test 2, 18	178601	Driver Assembly, Selector Magnet 2, 10		
173255	Plate, Relay 11				

Part Number	Description and Page Number	Part Number	Description and Page Number	Part Number	Description and Page Number
192710	Cover 26, 27	195038	Relay Assembly, Line Shunt 2, 17, 25	199021	Cover 28
192713	Capacitor, 1 MFD 26, 27	195039	Cable Assembly 25	199022	Cover 26
192714	Choke, .70 Ohm 26, 28	195040	Cable w/Terminals 11	199023	Cover 26
192715	Transformer 26, 27	195041	Cable w/Terminals 17	199028	Post 26, 28
192719	Bushing, Shoulder 26, 28	195046	Plate, Relay 11	199038	Card, Circuit 28
192720	Diode 28	195177	Washer, Insulating 10	199445	Clamp, Capacitor 9
192721	Diode 28	195269	Jumper, 3-1/2" Lg Green 27	305019	Jumper, 2" Brown 27
192723	Resistor, 100 Ohm 26, 27	195270	Jumper, 3-1/2" Lg Green 27	305020	Jumper, 2" Purple 27
192724	Resistor, 600 Ohm 27	195272	Screw, 6-40 Spl 26, 28	305038	Washer, Insulating 26, 28
192725	Resistor, 800 Ohm 26, 27	195273	Bushing 26, 28	305091	Capacitor, .22 MFD 26
192726	Block 28	195526	Board w/Terminal 10	305092	Post White Insulated 26
192727	Clamp 26, 27	195527	Jumper, 12" Slate 10	305624	Plate, Mounting 9
192730	Driver Assembly, Selector Magnet 27, 28	195528	Modification Kit 10	305627	Capacitor, 1,500 MFD 9
192737	Bracket, Resistor 26, 27	198356	Plate 5	305629	Diode Assembly 9
192740	Keyer Assembly, Low Level 27, 28	198366	Modification Kit 5	305630	Bracket, Fuse 9
192747	Spacer, .125" Thk 26, 27	198367	Cable w/Terminals 5	305631	Rectifier Assembly 2, 9
192750	Rectifier Assembly 2, 26	198593	Shield 24	305717	Cable w/Terminals 9
192754	Varistor Assembly 26, 28	198594	Plate, Mounting 24	307069	Jumper, 2-1/4" Lg Red 9
192767	Transistor 28	198626	Relay 24	307070	Jumper, 3-1/4" Lg Purple 9
192970	Post 26, 28	199003	Card, Circuit 28	307071	Jumper, 4" Lg Blue 9
192973	Washer, Insulating 28	199006	Card, Circuit 26, 28	307126	Transformer 9
192974	Washer, Insulating 26, 28	199010	Diode 26	307214	Plate, Identification 24
192979	Stud 26, 27	199013	Post, White Insulated 26, 28	307737	Bracket 9
192980	Terminal, Lug 26, 28	199016	Post 28	310235	Plate, Left 4
192984	Socket, 3 Pt 27	199017	Post 26	310274	Transformer 7
193687	Cable Assembly 25	199018	Post 26	310275	Rectifier Assembly 2, 7
194492	Key Assembly, Line Test 2, 18	199019	Cover 28	311727	Resistor, 750 Ohm 19
195036	Relay Assembly, Line 2, 25	199020	Cover 28	312529	Cover 18
195037	Mounting Assembly, Line Relay 11, 25			317323	Post 10
				321925	Cover, Rectifier 8
				321926	Cover 8



28 AUTOMATIC SEND-RECEIVE CABINET (LAAC)

PARTS

PAINT FINISH COLOR CODE CHART											
(for parts and assemblies requiring a paint finish)											
Color	Finish Suffixes				Color	Finish Suffixes					
	Wrinkle Finish	Smooth Finish	Textured Vinyl	Smooth Vinyl		Wrinkle Finish	Smooth Finish	Textured Vinyl	Smooth Vinyl		
Beige	AA	ET			Gray, Federal	AB	BV	GG	HB		
Beige, Light		EL		HC	Gray, Green		BK	GA			
Beige, Rose		ER			Gray, Light		EJ			HE	
Black					Gray, Covert					HF	
Black, High Gloss		BA			Gray, Olive		EW	GE			
Black, Semi Gloss		BB			Gray, Maritime						
Blue, Aqua		EK			Deck		AJ	BJ			
Blue, Brussels Light		EC			Gray, Oxford		AB	EP		GA	HD
Blue, Medium		ES			Green, Gray			BK			
Brown, Dark					Green, Moss			EN			
Brown, Light	AD			Ivory	EM						
Fawn	AC		HG	Pink, Rose	EU						
Gray, Beige				Turquoise	EV						
Gray, Charcoal	AL	BZ	GC	HA	White	EH					
Gray, Dark			GF		Yellow, Pastel	EG					
Gray, Navy Light		BR	GB								

The double asterisk (**) denotes a painted part. Suffix to be applied following the part number.

FIGURE	CONTENTS	PAGE	FIGURE	CONTENTS	PAGE
1	Cabinets	4	29	145898** Modification Kit to Provide a Tape Bin For Stored Tape of a Message in Transmission	24
2	Cabinet Base Parts	5	30	164024** (For Floor Model) and 173400** (For Table Model) Modification Kits to Provide Offset Copyholder	25
3	Cabinet Base Parts (Continued)	6	31	178897** Modification Kit to Provide A Pivoted Offset Copyholder For Floor Model Cabinet	26
4	Cabinet Base to Accommodate Pull-Back Transmitter	7	32	153901** Modification Kit to Provide a Shelf for Mounting a Paper Winder to Cabinet	27
5	Cabinet Dome, Latches and Doors	8	33	174458** Modification Kit to Provide Cabinet with a Paper Tearing Plate	27
6	Cabinet Dome To Accommodate Pull-Back Transmitter	9	34	194859** Modification Kit to Provide Shelf for Tape Winder or Tape Unwinder	28
7	Cradle Assembly	10	35	194857** Modification Kit to Provide Shelf for Single Reel Tape Winder	28
8	Receptacle Connectors and Outlet Box	11	36	173097** (Left) and 196909** (Right) Modification Kits to Provide Mounting Shelf for Left and Right Side of Cabinet	29
9	151560 Signal Bell Assembly	11	37	163796** Modification Kit to Provide Telephone Mounting Shelf	29
10	Modification Kits to Add Copyholder, Ready Light, Busy Lamp and Resistance to Cabinets	12	38	152910** and 179601** Modification Kit to Add Directory Holder or Message File Holder	30
11	Terminal Blocks	13	39	176713 Modification Kit to Provide Low Paper and Paper-Out Alarm	30
12	159396 Modification Kit to Add Auxiliary Terminal Blocks - Top Row Left Rear	14	40	164272 (For Auxiliary Reperforator) and 170306 (For Keyboard Reperforator) Modification Kits to Provide Chad Disposal	31
13	159384 Modification Kit to Add Auxiliary Terminal Blocks - Top Row Right Rear	14	41	164405** Modification Kit to Provide Chad Container For the Auxiliary Reperforator and/or Keyboard Reperforator	31
14	159393 Modification Kit and 179470 Assembly to Add Auxiliary Terminal Block - Right Side	15	42	178387 Modification Kit to Provide High Voltage Static Eliminator to Neutralize Electrostatic Charge on Page Copy	32
15	157152, 158680, 159394 and 179469 Modification Kits to Add Terminal Boards	15	43	160468** (Pivoted Head Transmitter) and 160470** (Fixed Head Transmitter) Modification Kits to Provide Tape Basket	33
16	Transmitter and Transmitter Distributor Housings	16	44	154756 Modification Kit to Provide Form-Out Alarm	33
17	170272** Modification Kit to Provide Dual Transmitter Distributor Housing	17	45	193675 Modification Kit to Provide Cabinet with two Hinged Panels in Lower Cavity	34
18	Cabinet Dome Variable Features	17	46	161814 Modification Kit to Mount an Auxiliary Typing Reperforator Base and Provide Tape Guide	34
19	198364 Relay Assembly	18			
20	160335 Modification Kit to Provide Control Panel For Transmitter Distributor	18			
21	Control Panels	19			
22	176300 Modification Kit to Provide Auxiliary Reperforator Motor Control Panel	20			
23	164838 Control Panel Assembly	20			
24	178838 Modification Kit to Relocate Power Switch From Auxiliary Base to Outside of Cabinet	21			
25	194861 Modification Kit to Provide Tape Guide	21			
26	164197** Modification Kit to Provide Control Panel	22			
27	164120** Modification Kit to Provide Control Panel	22			
28	158630** and 162243** Tape Bin Assemblies	23			

**Refer to page 1 for finish suffix

FIGURE	CONTENTS	PAGE	FIGURE	CONTENTS	PAGE
47	154651 Modification Kit to Add Signal Line Electrical Noise Suppressor (D. C.)	35	68	173707 Modification Kit to Add Power Factor Correction to Auxiliary Reperforator in Cabinet (LAAC)	55
48	151988 Modification Kit to Add Power Line Electrical Noise Suppressor	35	69	309537 Control Panel Assembly	55
49	173520, 176540 and 315543 Numbering Module Assemblies (Also Includes Parts on Figure 50)	36	70	161302 Modification Kit to Add Automatic Character Feed-Out Circuit to an ASR Set	56
50	173580 and 176561 Numbering Assemblies	37	71	164633 and 164640 Modification Kits to Permit LCXD1 and LAXD3 Transmitter Distributors to Operate with LESU13 and LESU15	57
51	Cable Components	38	72	145100 Tape Preparation Panel Assembly - Rear View	58
52	Fan, Tape Reel and Rectifier Mounting Components (Lower Cabinet)	39	73	145100 Tape Preparation Panel Assembly - Front View	59
53	Control Panel, Tape Guide and Left Side Shelf	40	74	146140 Modification Kit to Add Copylights and Guard Lamps	60
54	145000 Distributor Panel Assembly	41	75	192245** Chad Container w/Lens	60
55	145200 Key & Lamp Panel Assembly	42	76	195391** Modification Kit to Add Chad Container For the Auxiliary and/or Keyboard Reperforator	61
56	145050 Message Processing Panel Assembly - Front View	43	77	195837** Modification Kit to Provide Paper Supply Accumulating Shelf	62
57	145050 Message Processing Panel Assembly - Rear View	44	78	Modification Kits to Provide Mounting Shelf For Single, Double or Three Real Rim Driven Tape Winder	63
58	145225 Translator Panel Assembly - Front View	45	79	145897** (w/chad Box) 194084** Modification Kits to Add Tape Bin to Cabinet (For Chad Box, See Figure 80)	64
59	145225 Translator Panel Assembly - Rear View	46	80	146660** Chad Box Assembly (Part of 145897** See Figure 79)	65
60	145250 Alarm Panel Assembly - Front View	47	81	179385** and 305983** Tape Winder - Module Unit Door Assembly	66
61	145250 Alarm Panel Assembly - Rear View	48	82	179416 Modification Kit For Mounting Numbering Module	67
62	145350 Intercept Panel Assembly - Front View	49	83	312719** Modification Kit to Provide Forced Ventilation For Cabinet	68
63	145350 Intercept Panel Assembly - Rear View	50		Numerical Index	69
64	145204 48V D. C. Power Supply	51			
65	160387 and 160388 Modification Kits to Provide Relay Rack Brackets	52			
66	170271 and 194490 Modification Kits to Tape Programmed Relay Control	53			
67	173706 Modification Kit for Power Factor Correction in Cabinet (LAAC)	54			

**Refer to page 1 for finish suffix

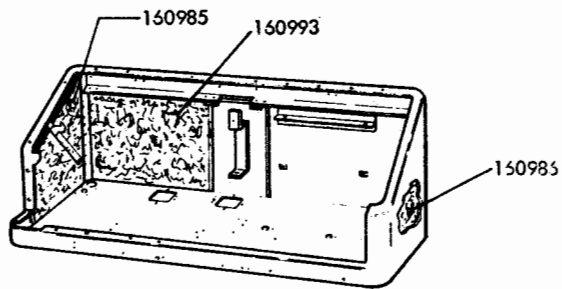
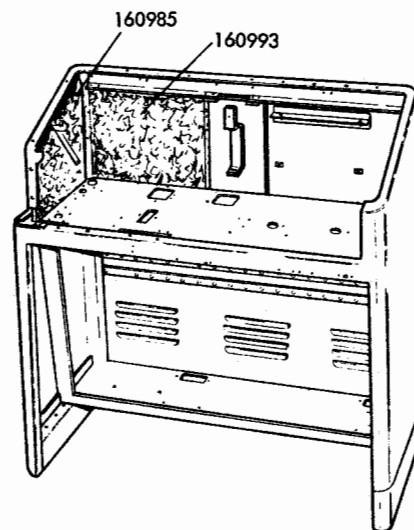


TABLE MODEL CABINET

CABINET TYPES	
General Purpose	Special Purpose
Accommodates Fixed Head Transmitters & Transmitter Distributors	Accommodates Pivoted Head Transmitter Distributors
<ul style="list-style-type: none"> ● LX ● LXD ● LBXD 	<ul style="list-style-type: none"> ● LAXD ● LCXD ● LFXD



FLOOR MODEL CABINET

FIGURE 1. CABINETS

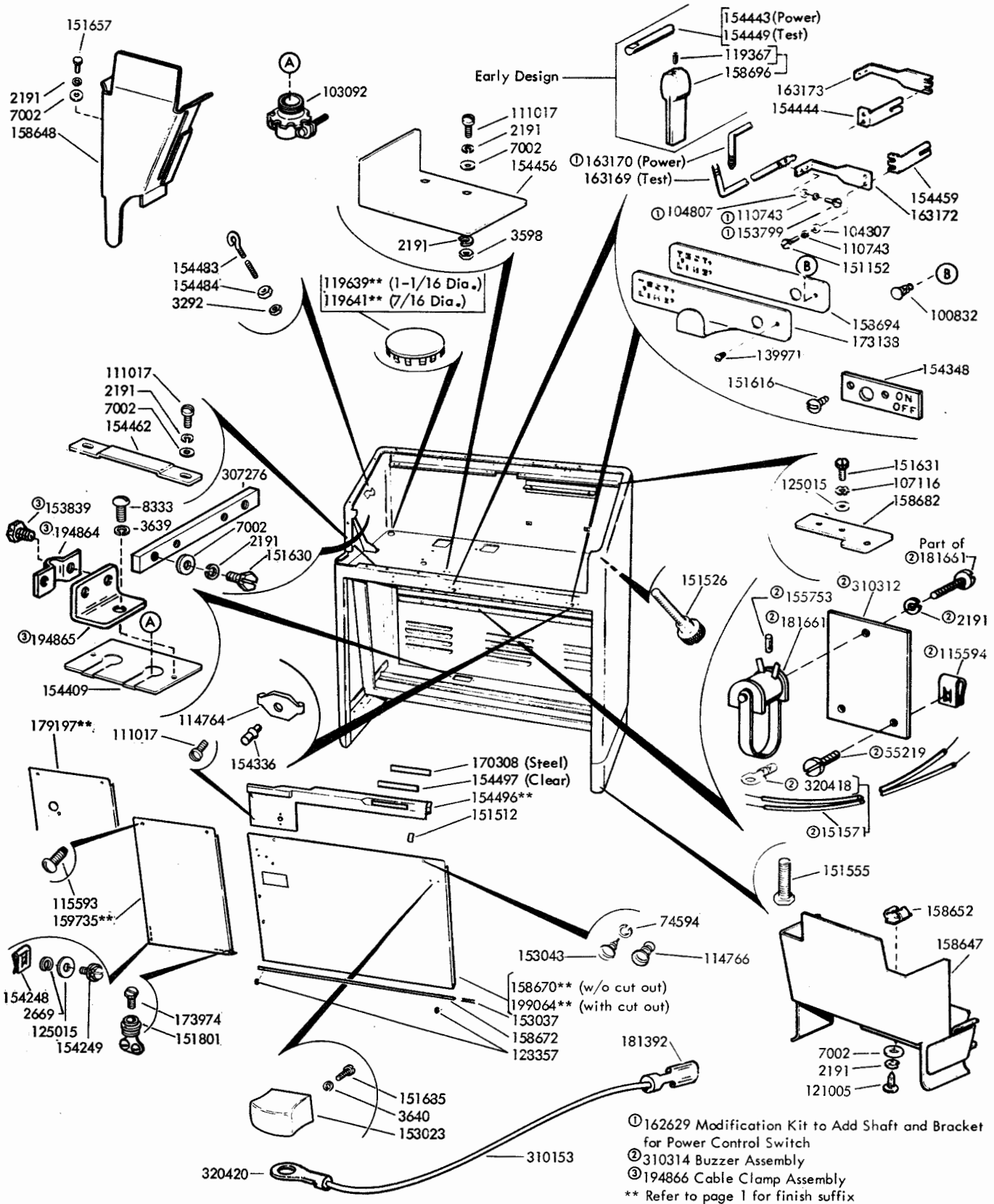


FIGURE 2. CABINET BASE PARTS

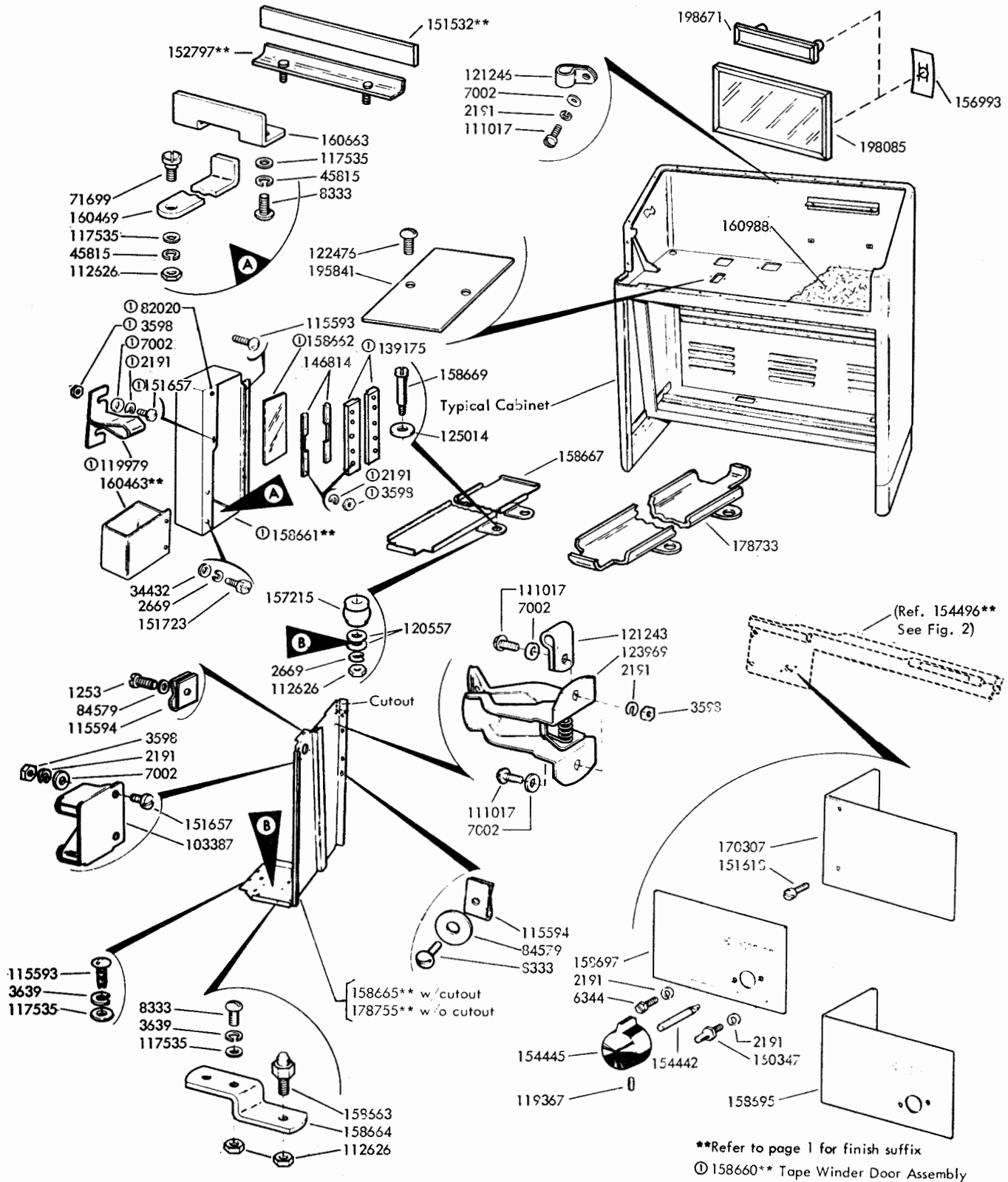


FIGURE 3. CABINET BASE PARTS (Continued)

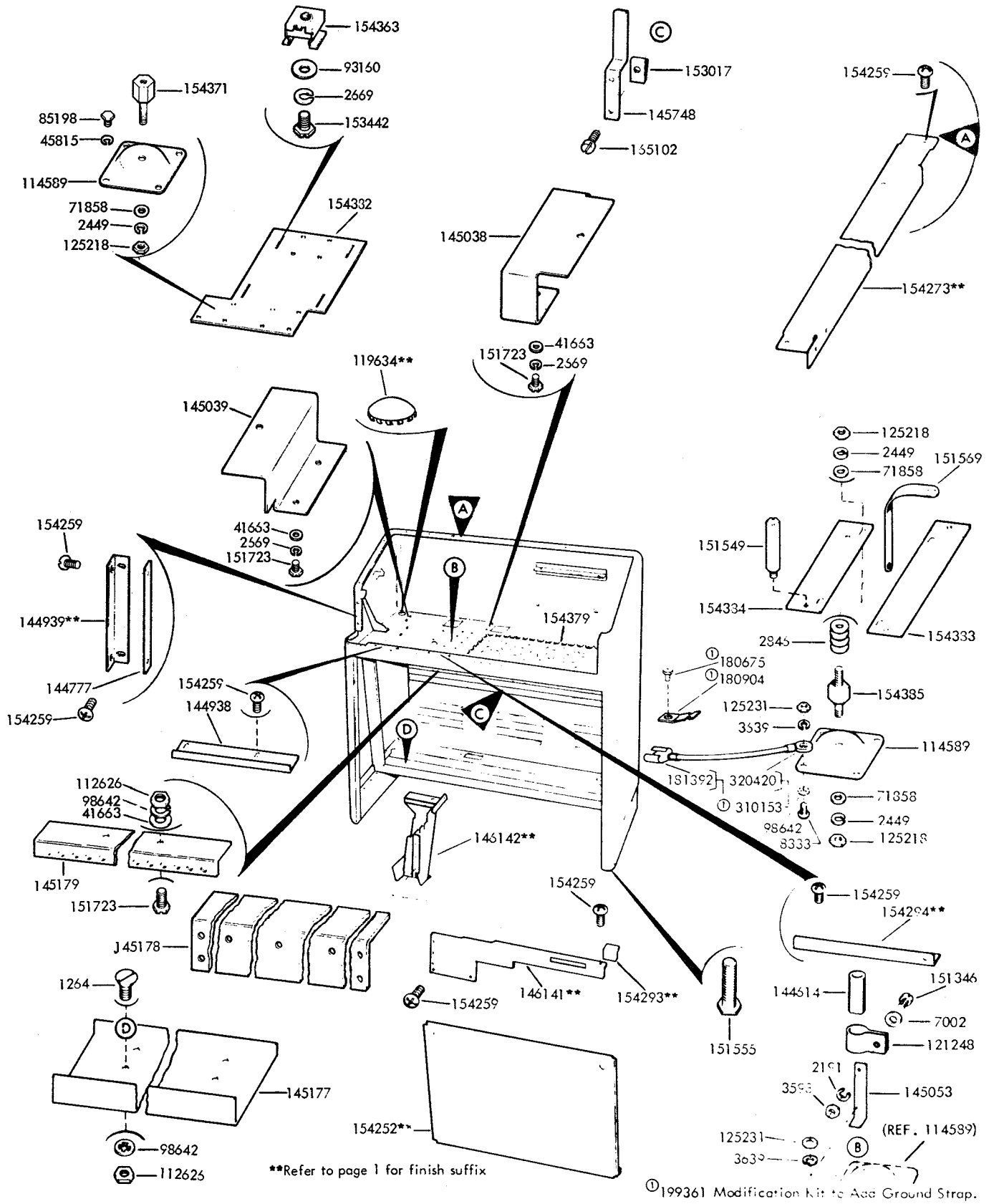
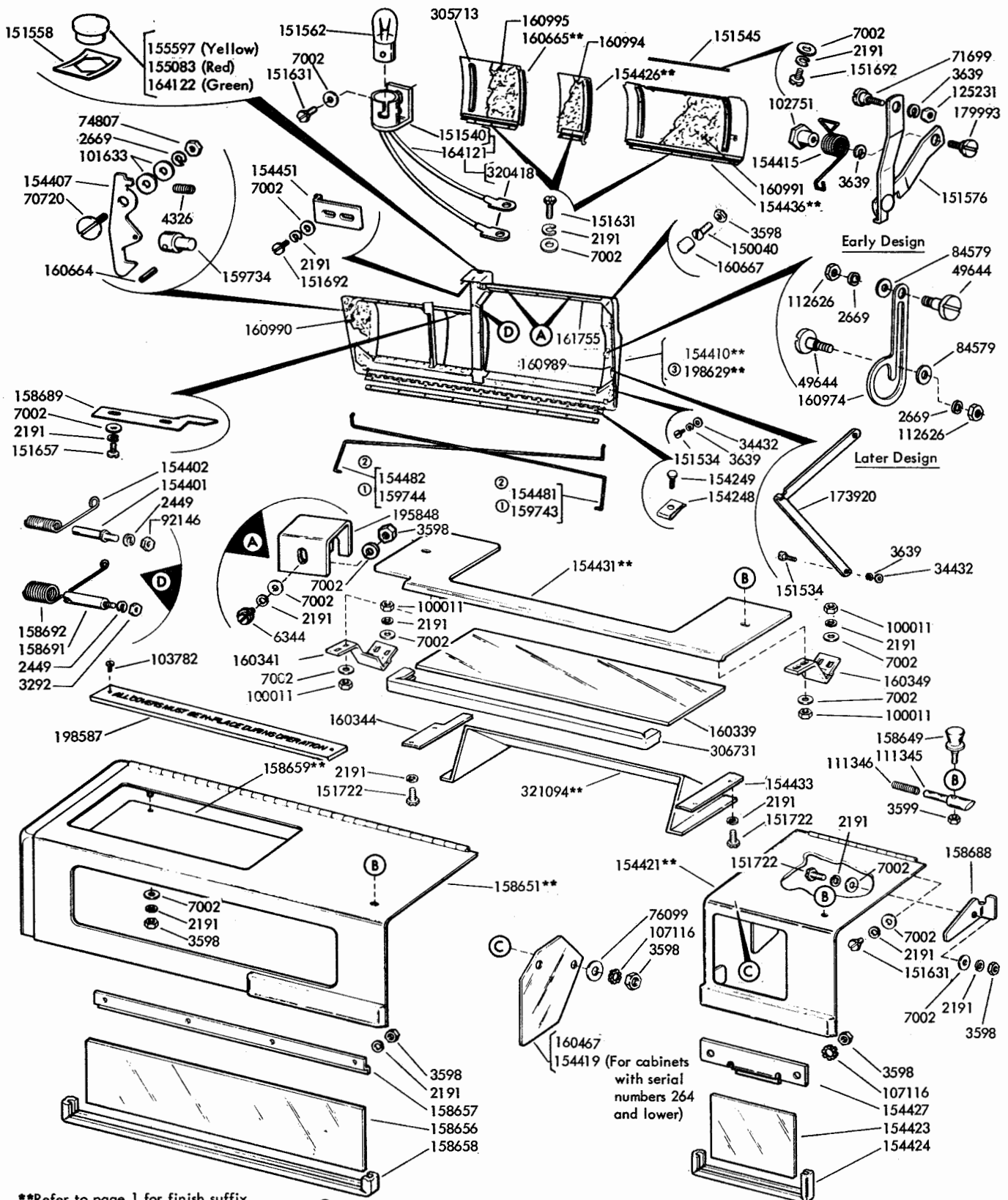


FIGURE 4. CABINET BASE TO ACCOMMODATE PULL-BACK TRANSMITTER



**Refer to page 1 for finish suffix
 ① Peculiar to Special Purpose Cabinets ② Peculiar to General Purpose Cabinets ③ Has Provision for Mounting 198598 Guide (See Fig 53)

FIGURE 5. CABINET DOME, LATCHES AND DOORS

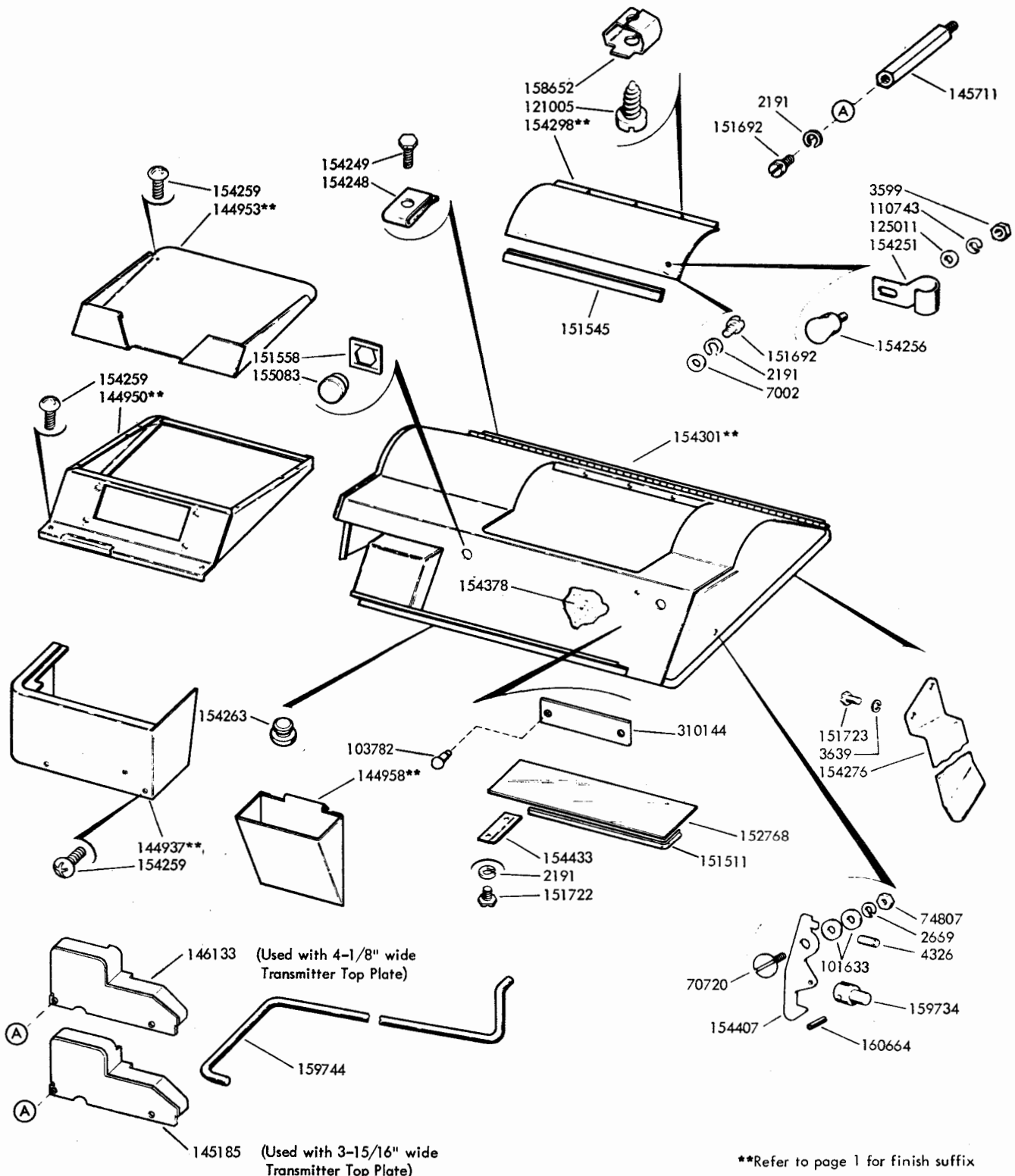
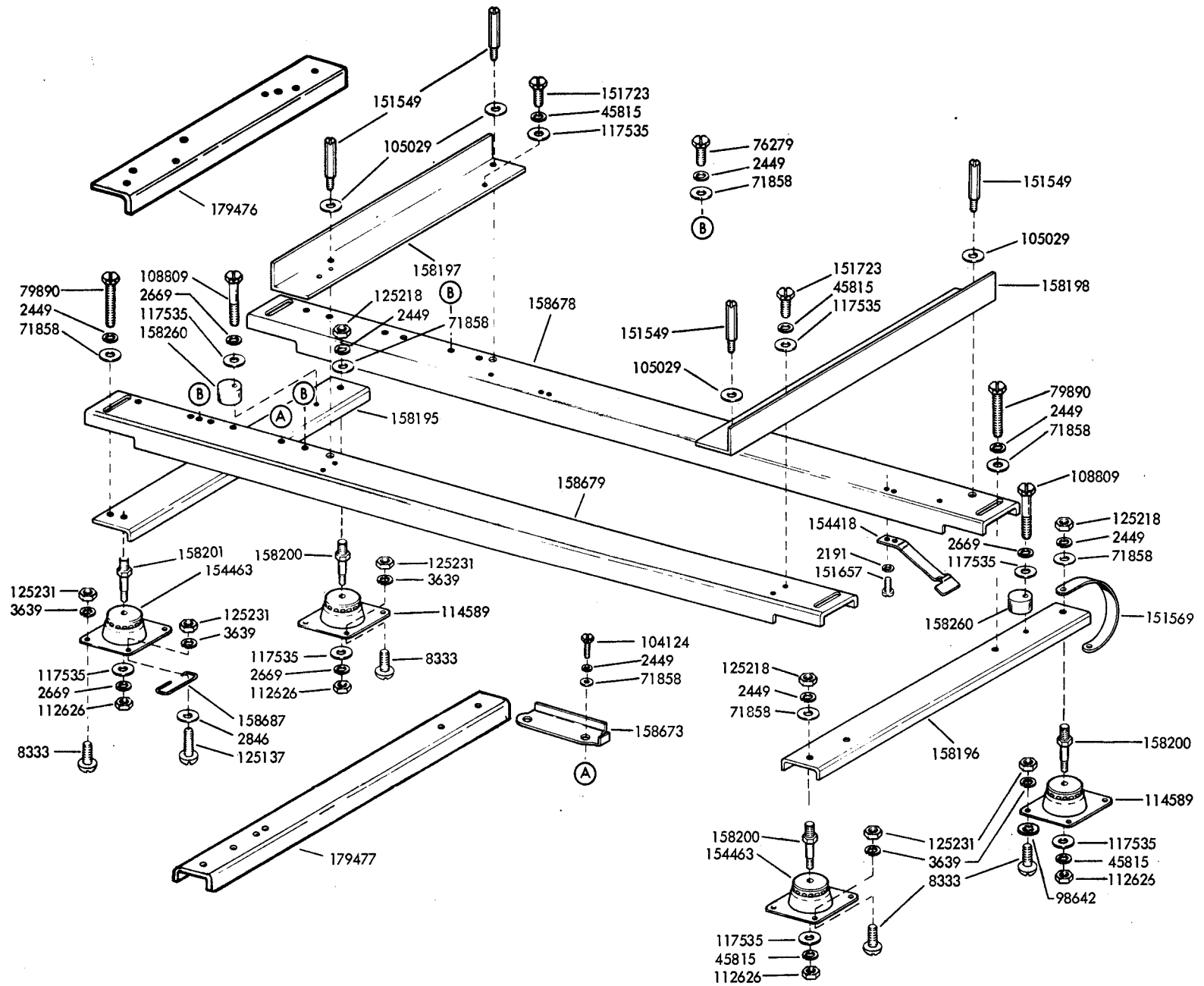
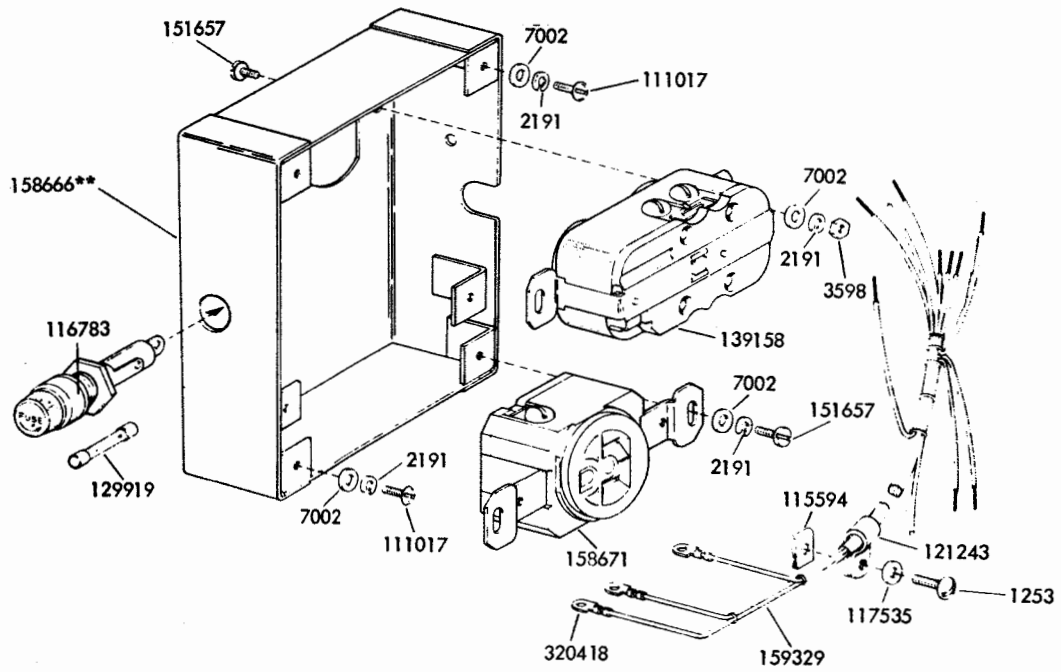


FIGURE 6. CABINET DOME TO ACCOMMODATE PULL-BACK TRANSMITTER

FIGURE 7. CRADLE ASSEMBLY





**Refer to page 1 for finish suffix

FIGURE 8. RECEPTACLE CONNECTORS AND OUTLET BOX

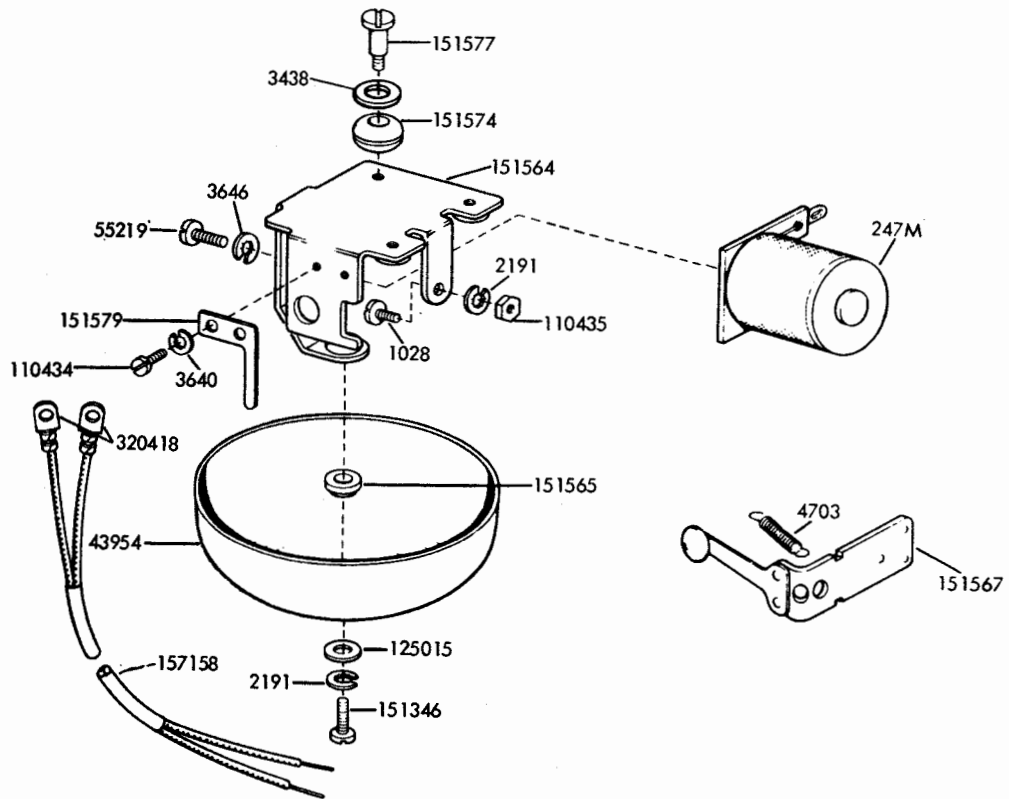
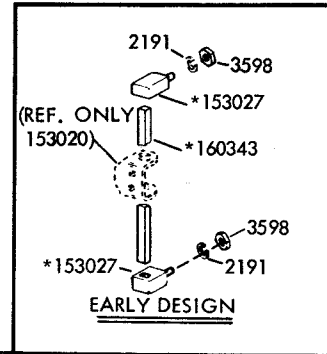
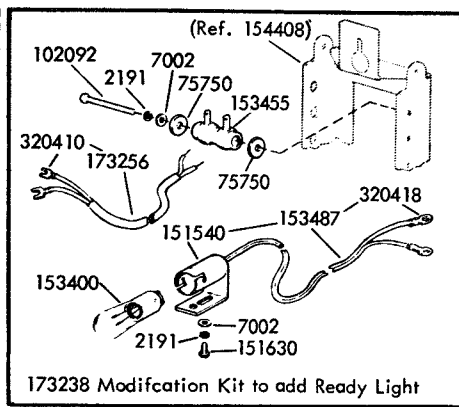
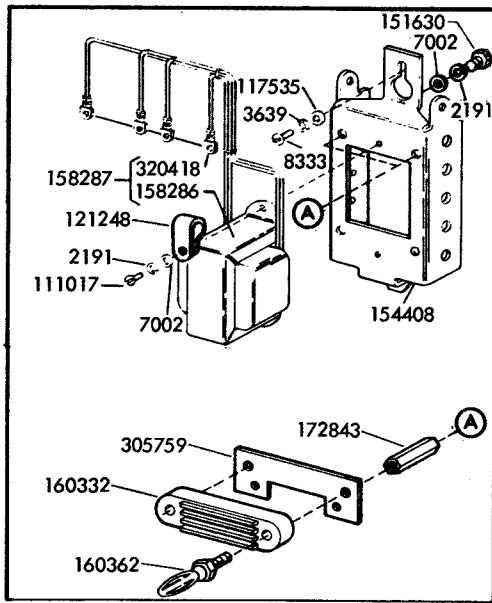


FIGURE 9. 151560 SIGNAL BELL ASSEMBLY



NOTE:
Parts marked with an asterisk (*) are no longer available. When it is necessary to replace any of these parts a 161307 Modification Kit should be ordered instead.

ⓐ Part of 161307 Modification Kit to provide copyholder with a formed line guide sheet

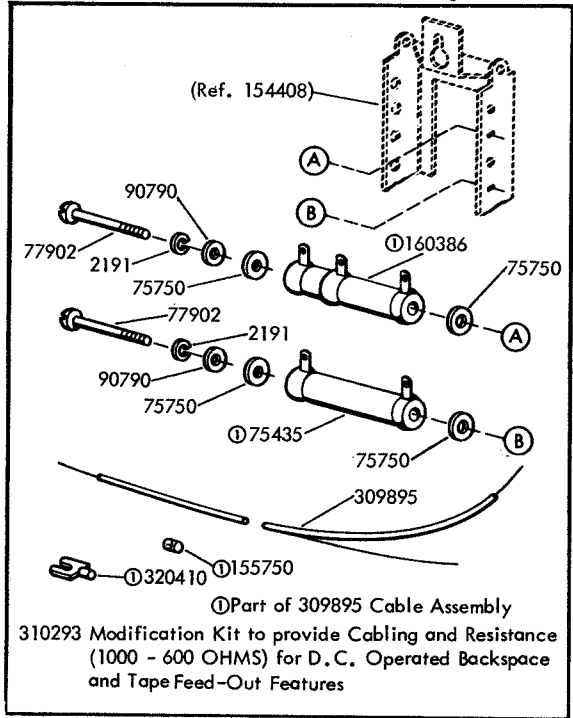
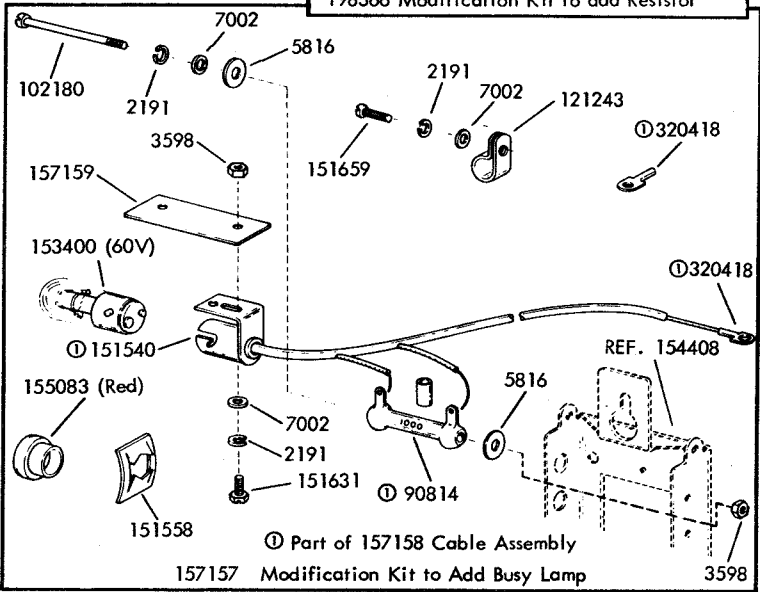
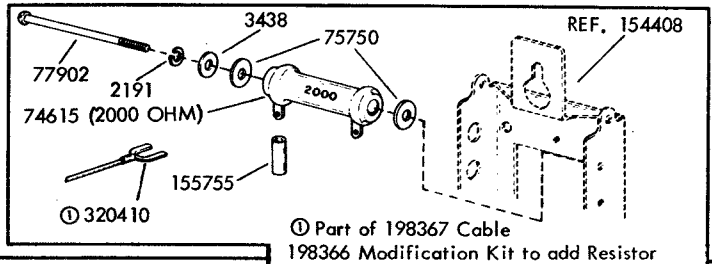


FIGURE 10. MODIFICATION KITS TO ADD COPYHOLDER, READY LIGHT, BUSY LAMP AND RESISTANCE TO CABINETS

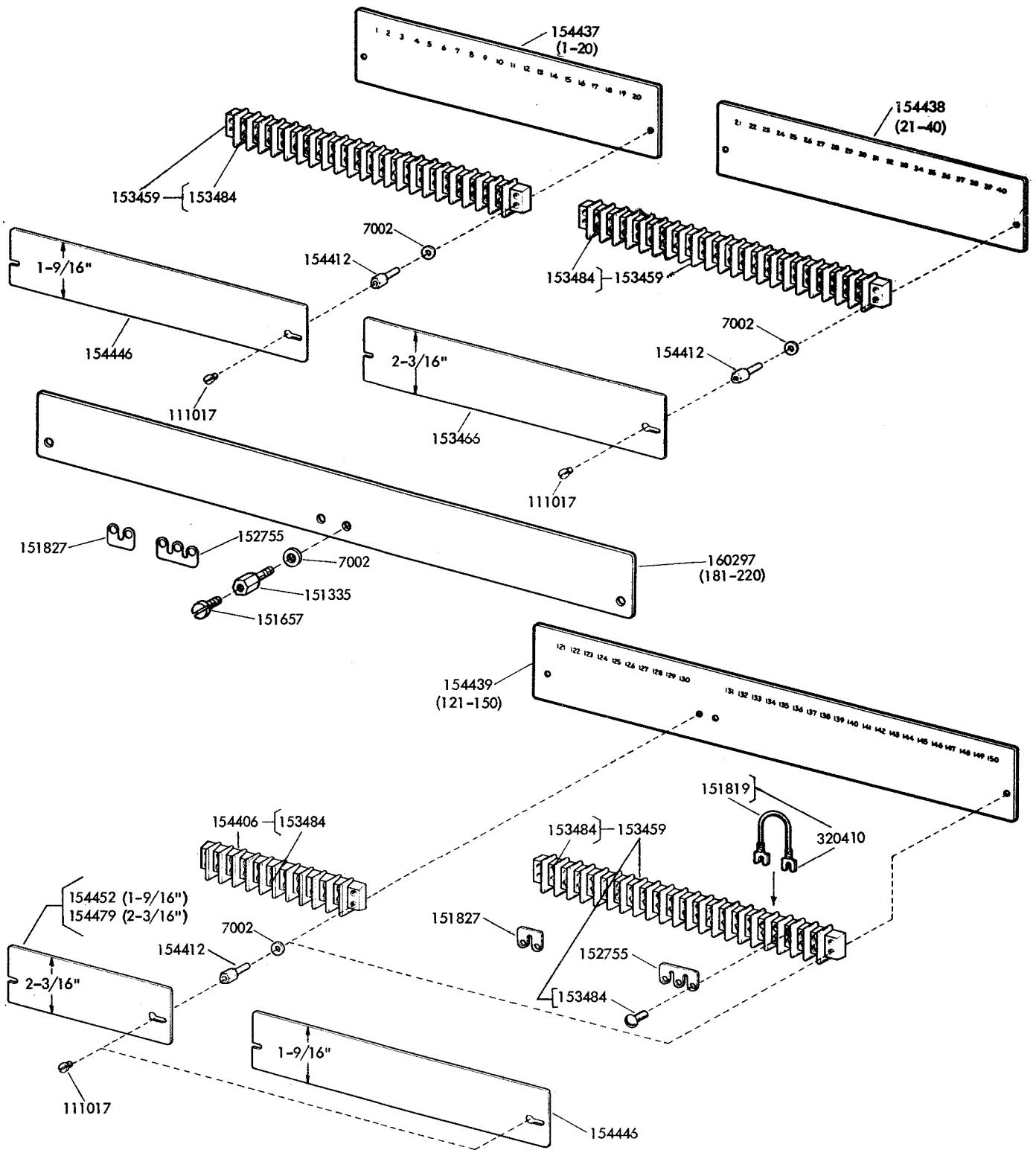


FIGURE 11. TERMINAL BLOCKS

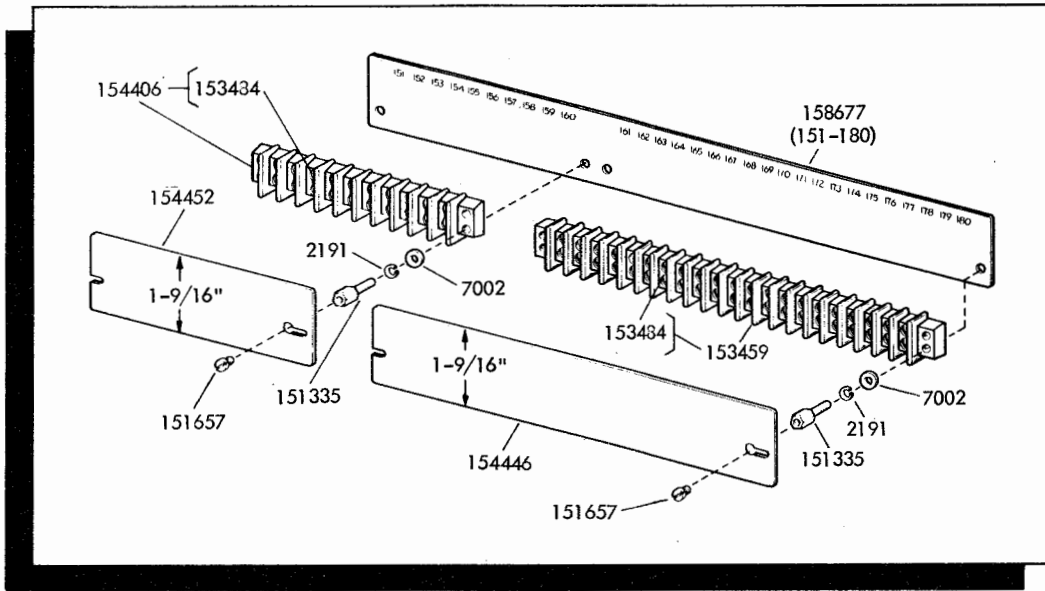


FIGURE 12. 159396 MODIFICATION KIT TO ADD AUXILIARY TERMINAL BLOCKS - TOP ROW LEFT REAR

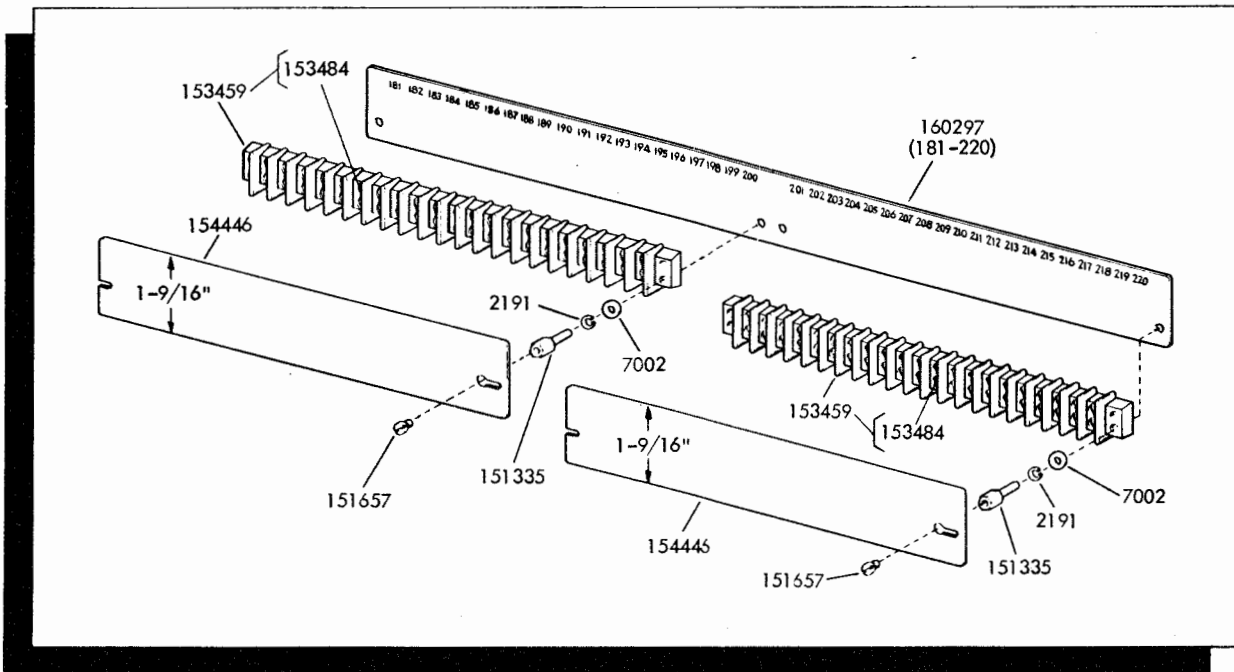


FIGURE 13. 159384 MODIFICATION KIT TO ADD AUXILIARY TERMINAL BLOCKS - TOP ROW RIGHT REAR

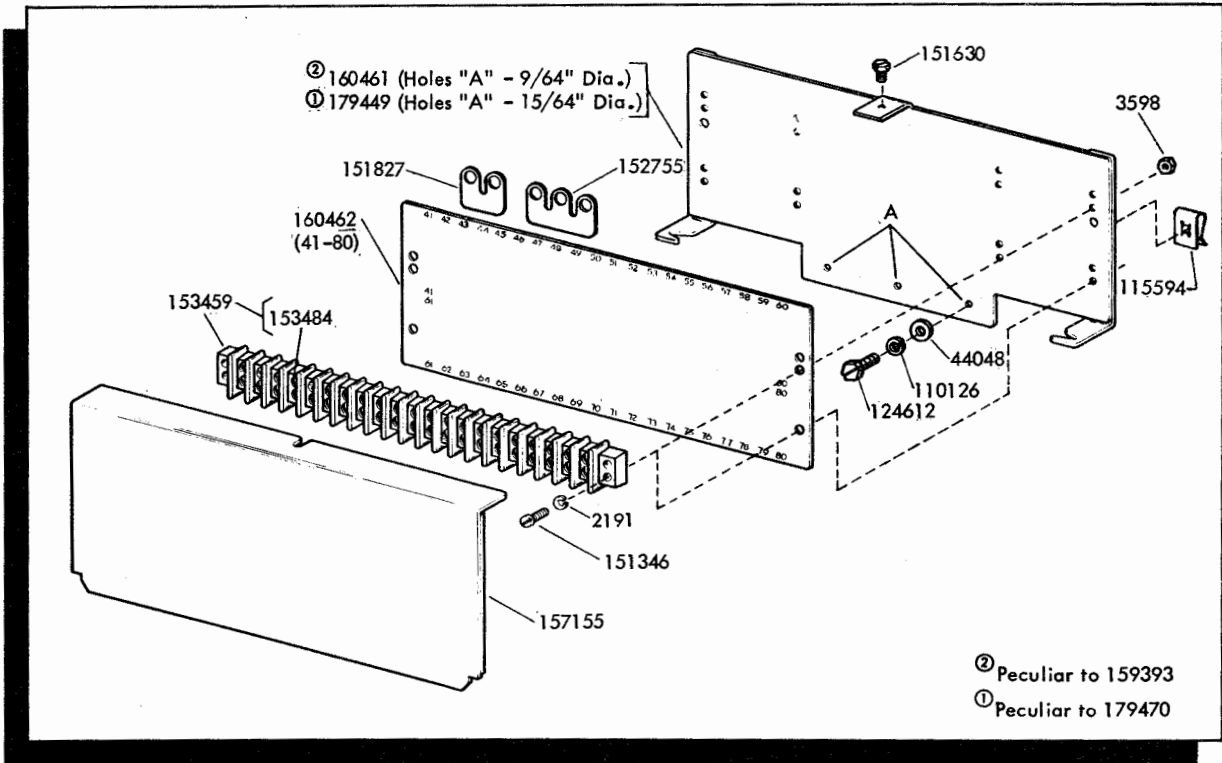


FIGURE 14. 159393 MODIFICATION KIT AND 179470 ASSEMBLY TO ADD AUXILIARY TERMINAL BLOCK - RIGHT SIDE

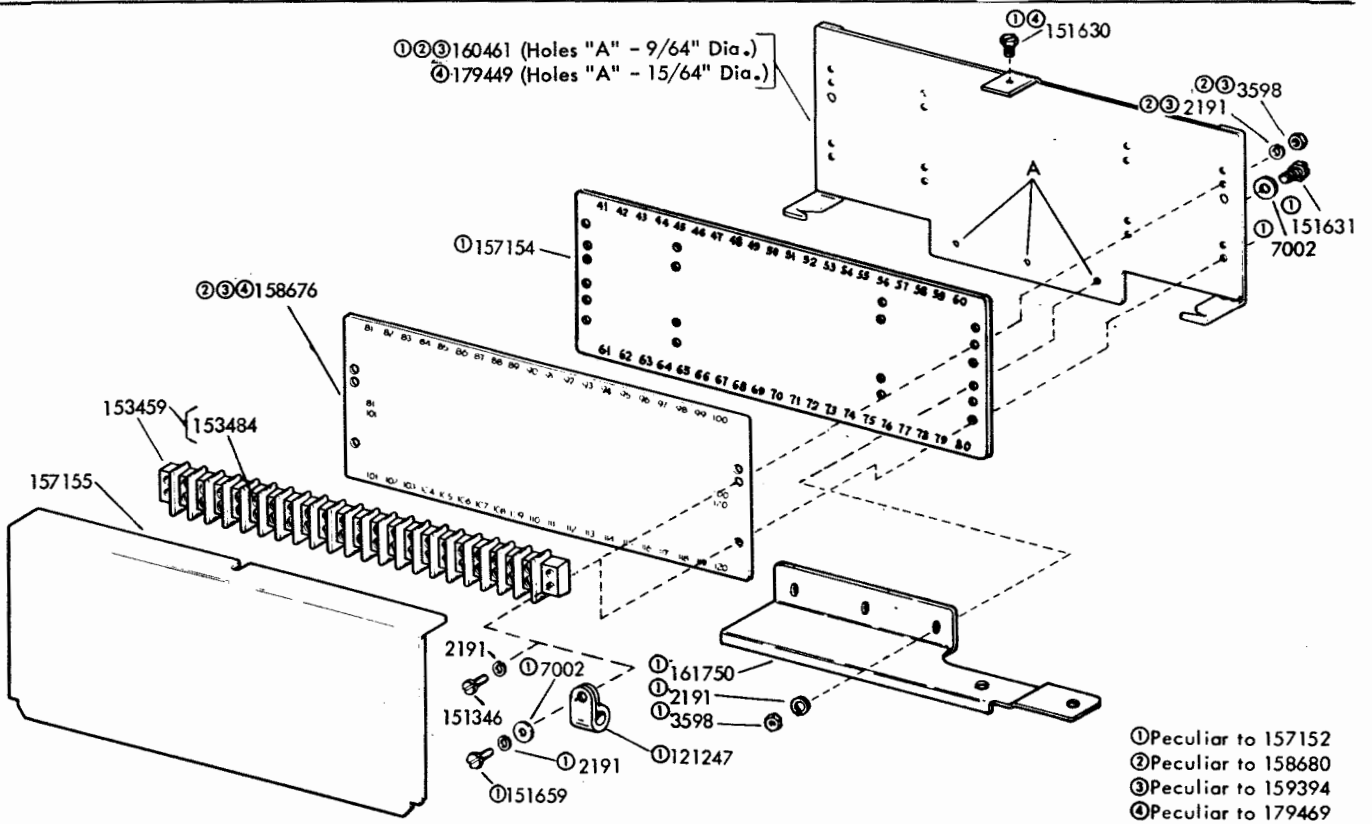
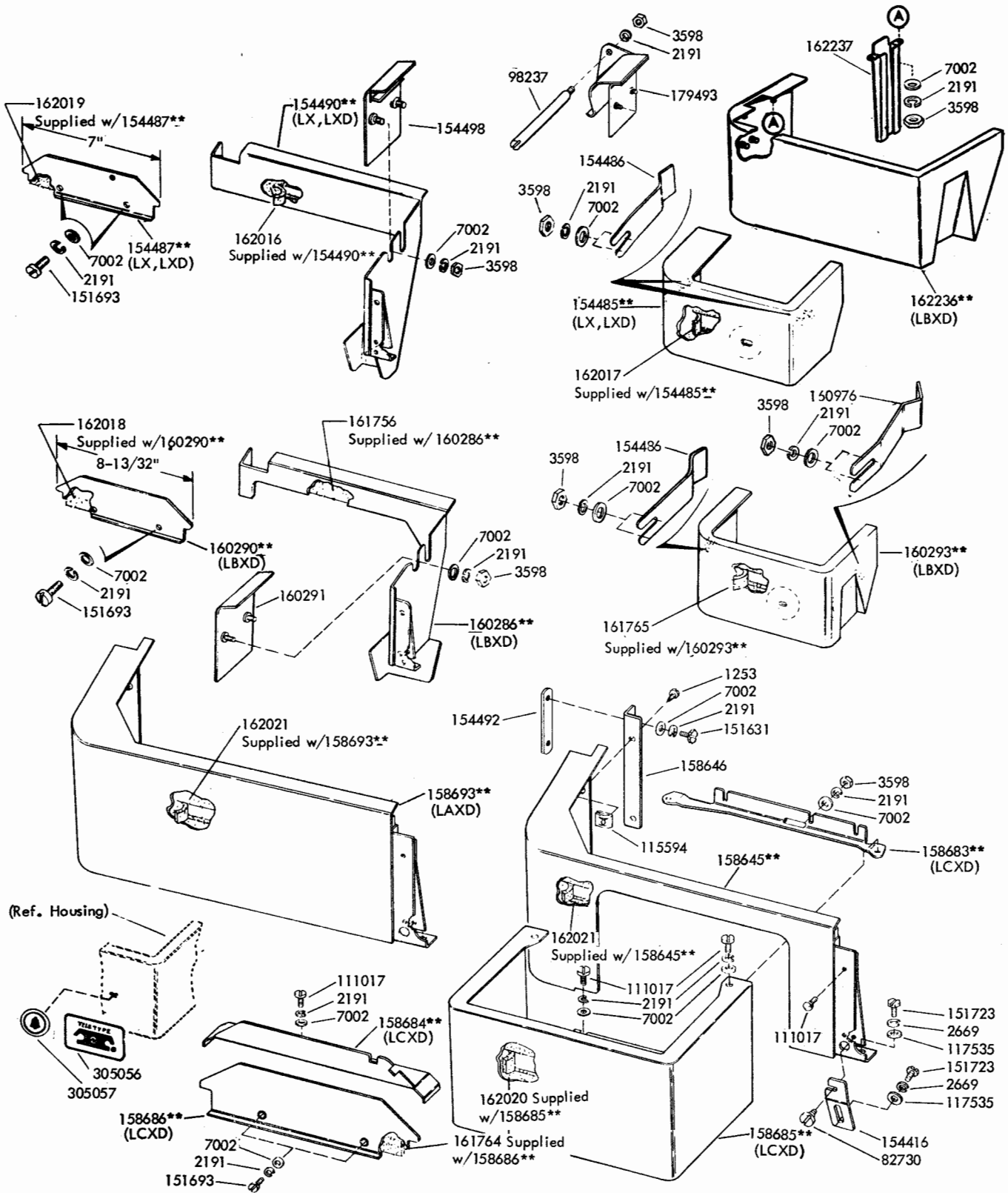


FIGURE 15. 157152, 158680, 159394 AND 179469 MODIFICATION KITS TO ADD TERMINAL BOARDS



**Refer to page 1 for finish suffix

FIGURE 16. TRANSMITTER AND TRANSMITTER DISTRIBUTOR HOUSINGS

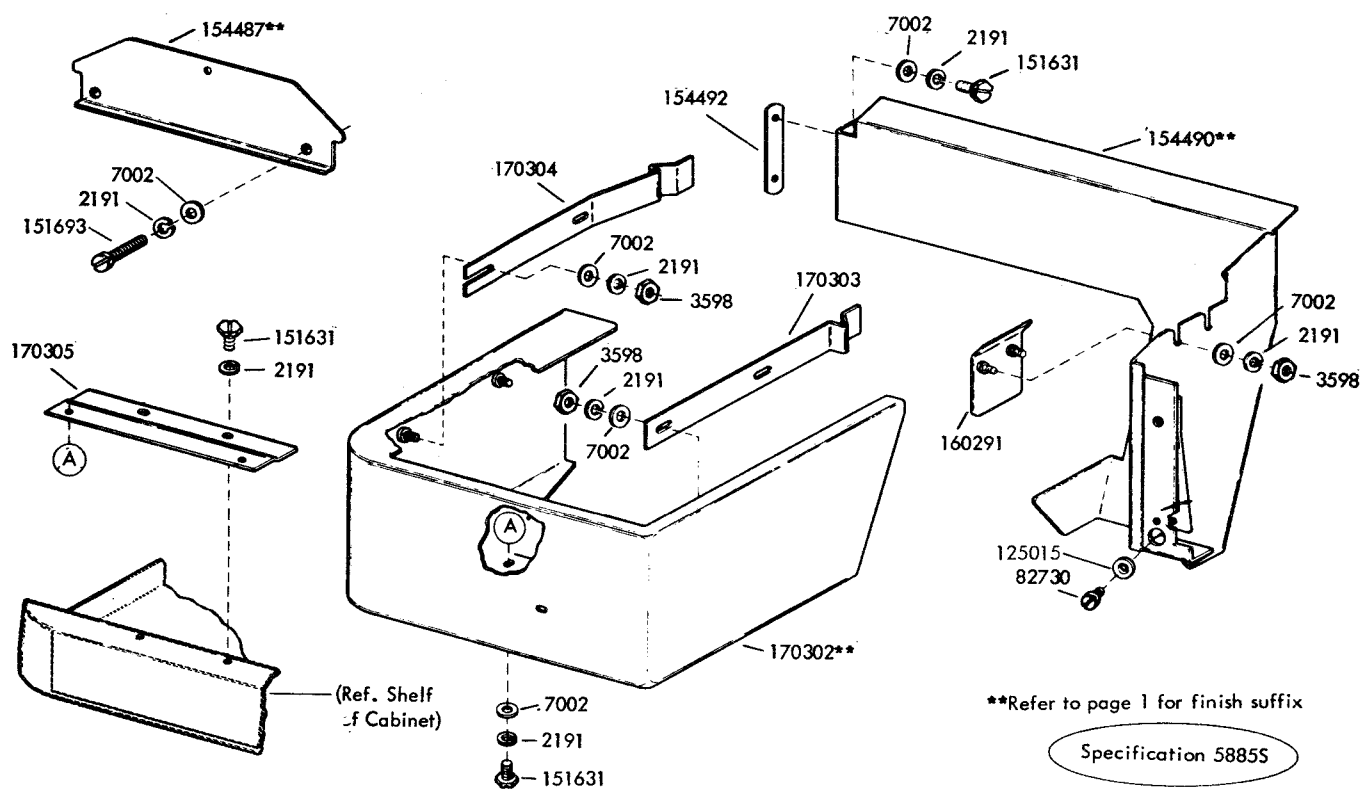


FIGURE 17. 170272** MODIFICATION KIT TO PROVIDE DUAL TRANSMITTER DISTRIBUTOR HOUSING

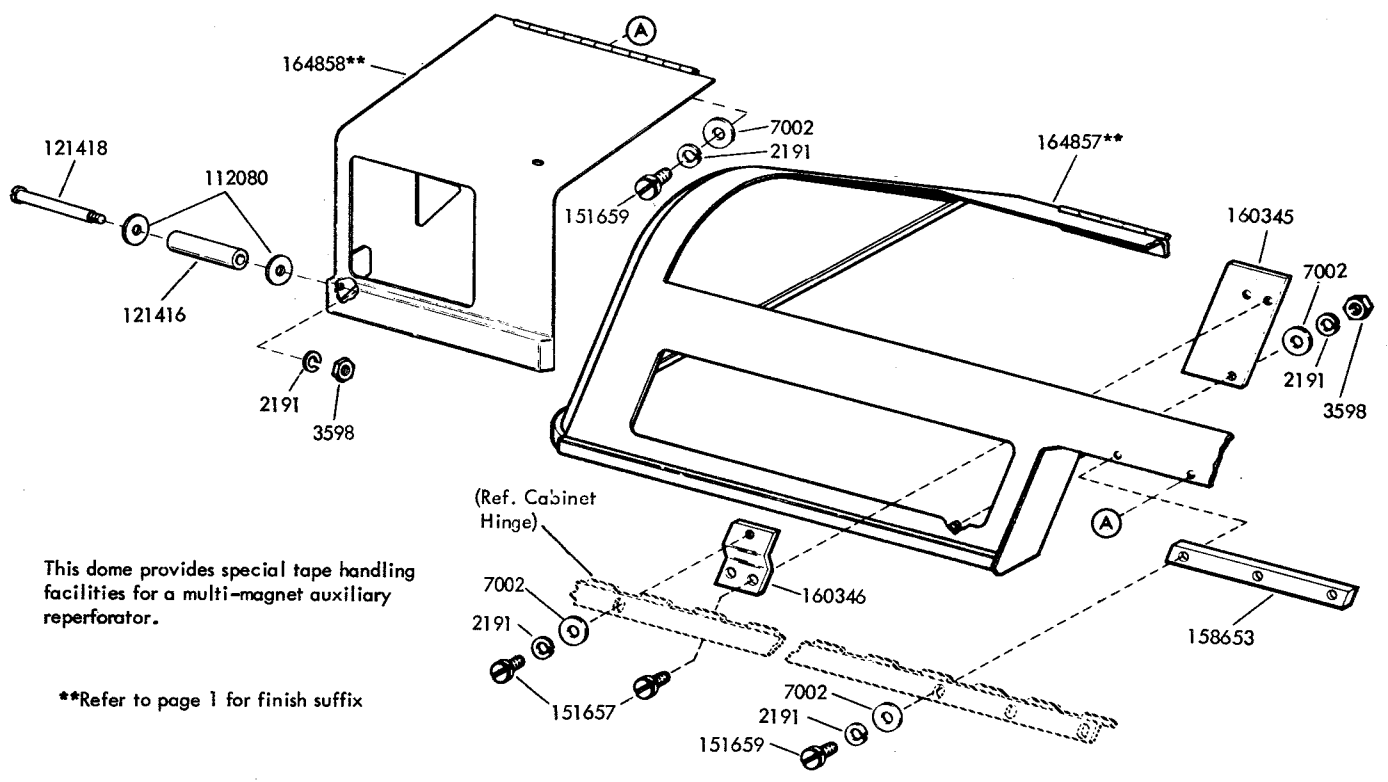


FIGURE 18. CABINET DOME VARIABLE FEATURES

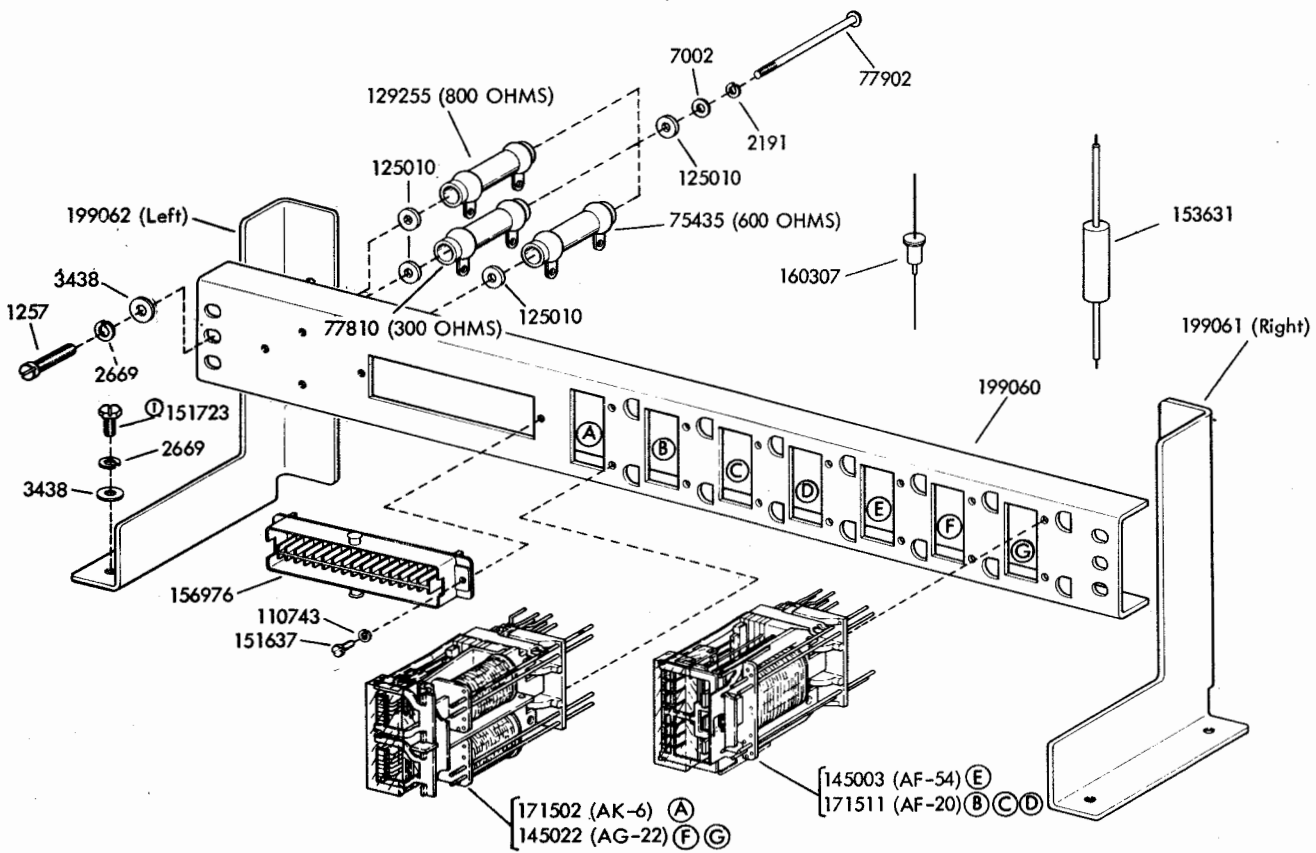


FIGURE 19. 198364 RELAY ASSEMBLY

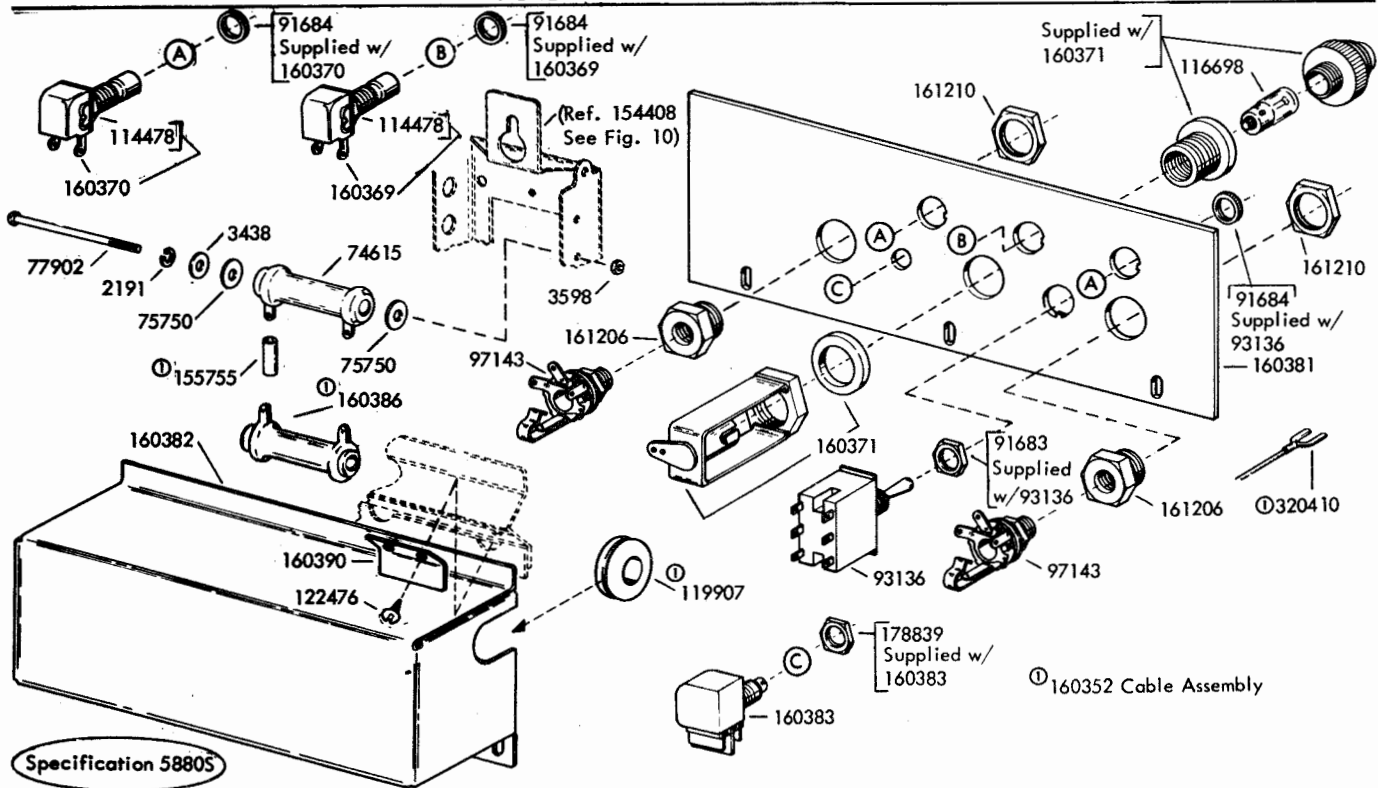
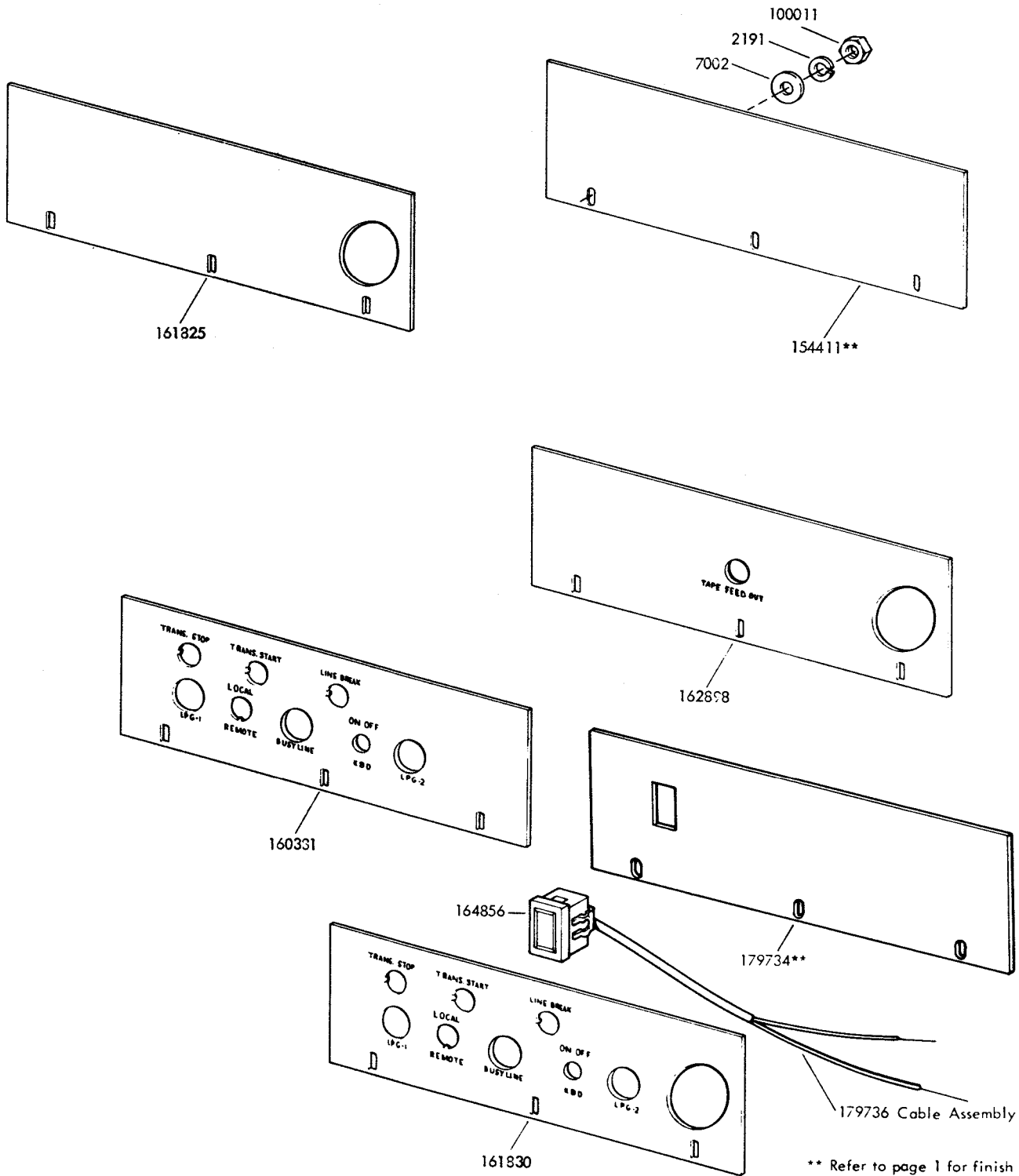


FIGURE 20. 160335 MODIFICATION KIT TO PROVIDE CONTROL PANEL FOR TRANSMITTER DISTRIBUTOR



** Refer to page 1 for finish suffix

FIGURE 21. CONTROL PANELS

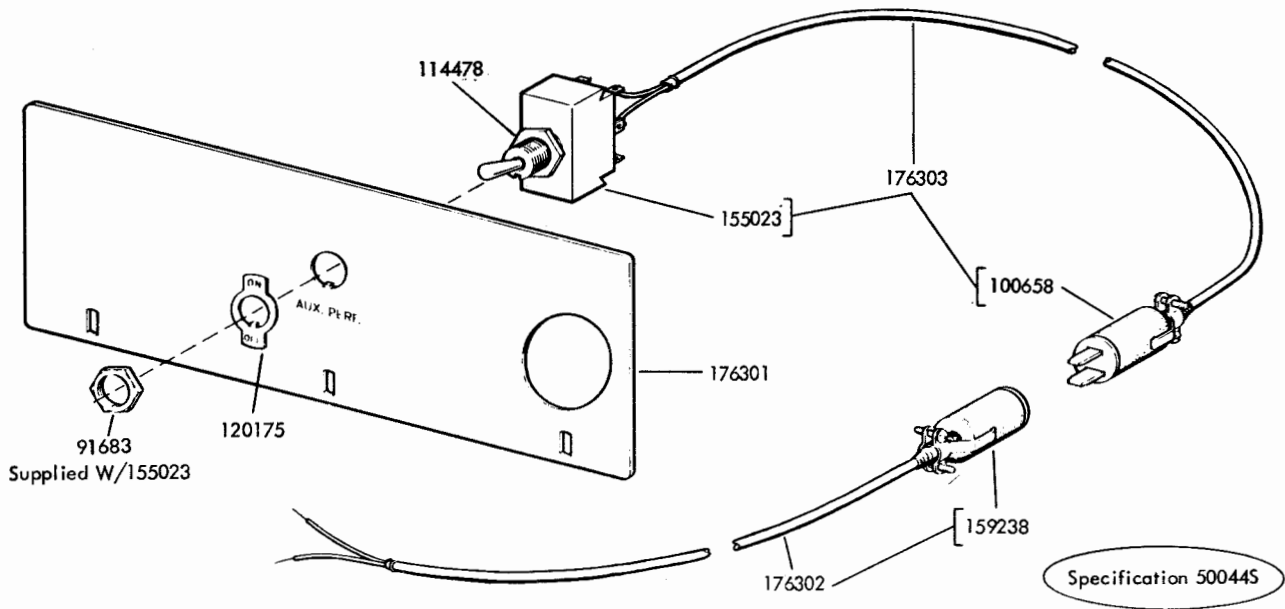


FIGURE 22. 176300 MODIFICATION KIT TO PROVIDE AUXILIARY REPERFORATOR MOTOR CONTROL PANEL

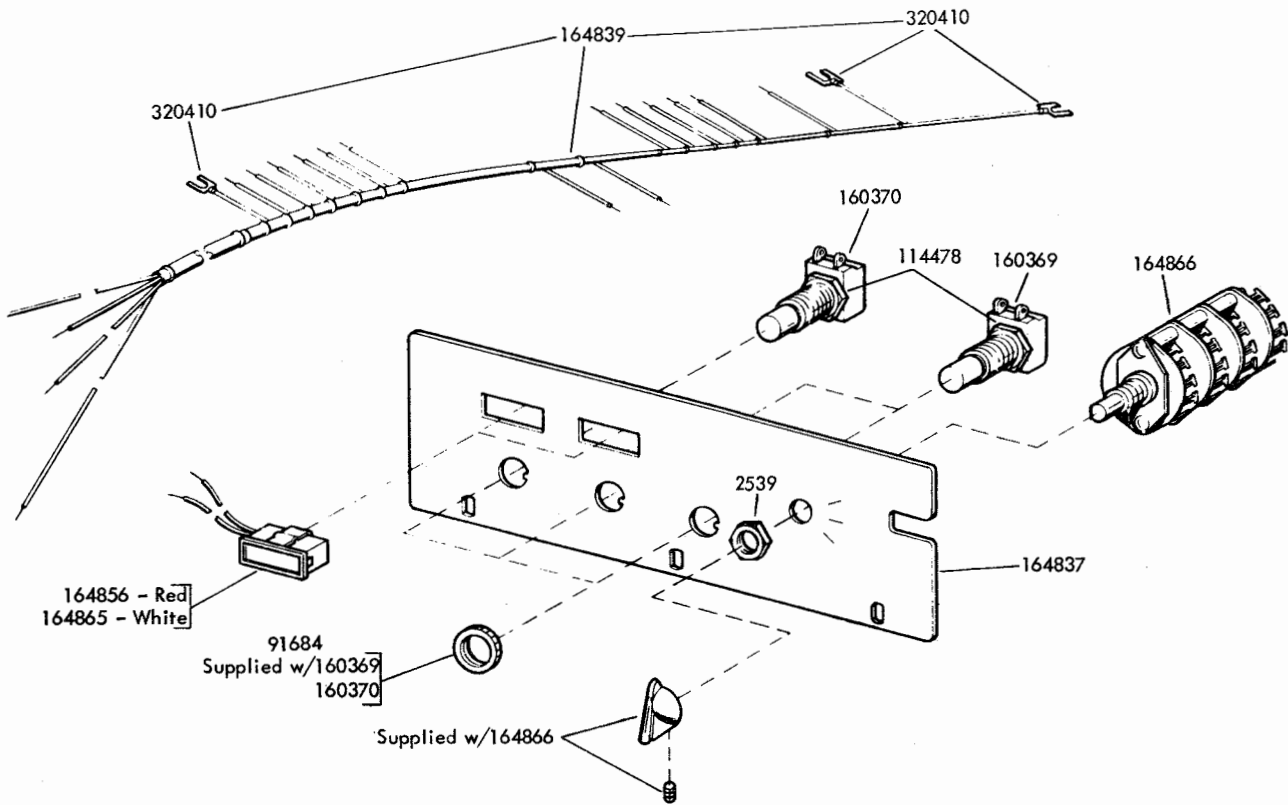


FIGURE 23. 164838 CONTROL PANEL ASSEMBLY

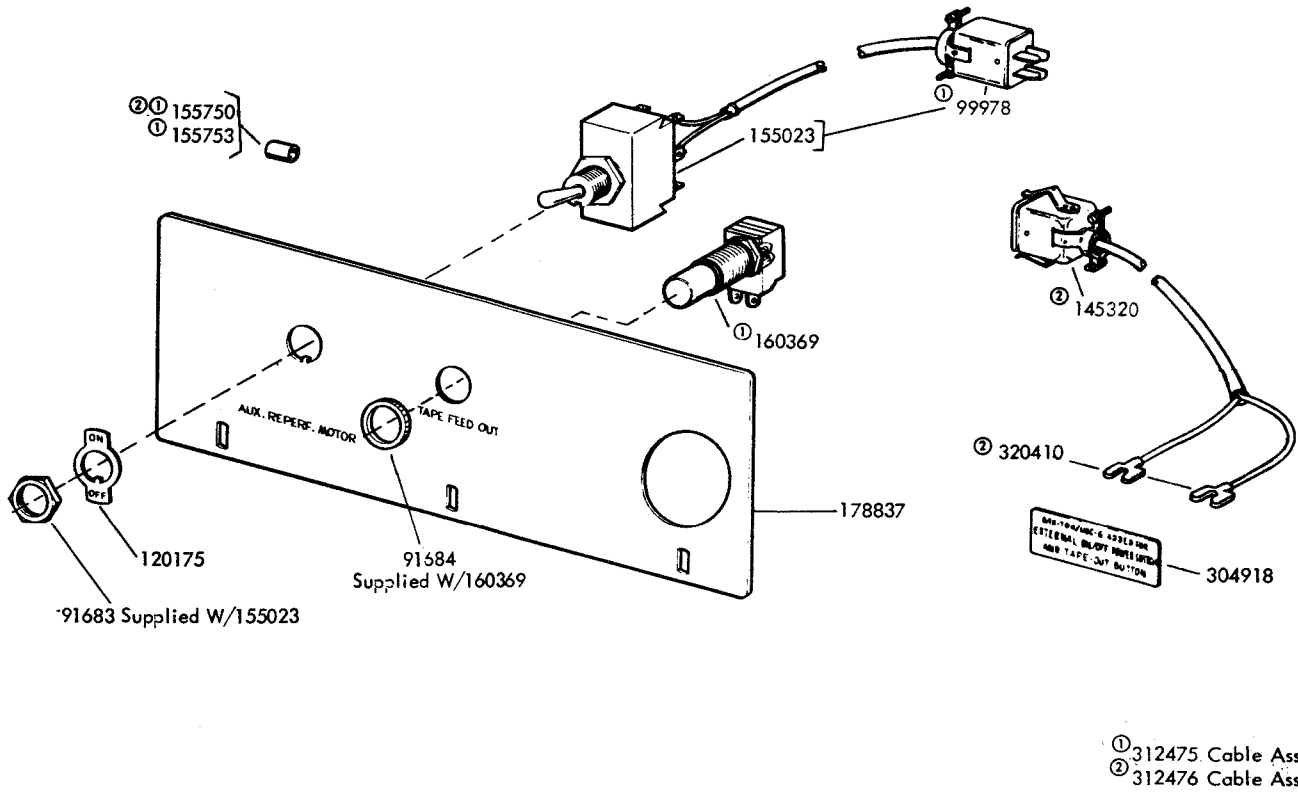


FIGURE 24. 178838 MODIFICATION KIT TO RELOCATE POWER SWITCH FROM AUXILIARY BASE TO OUTSIDE OF CABINET

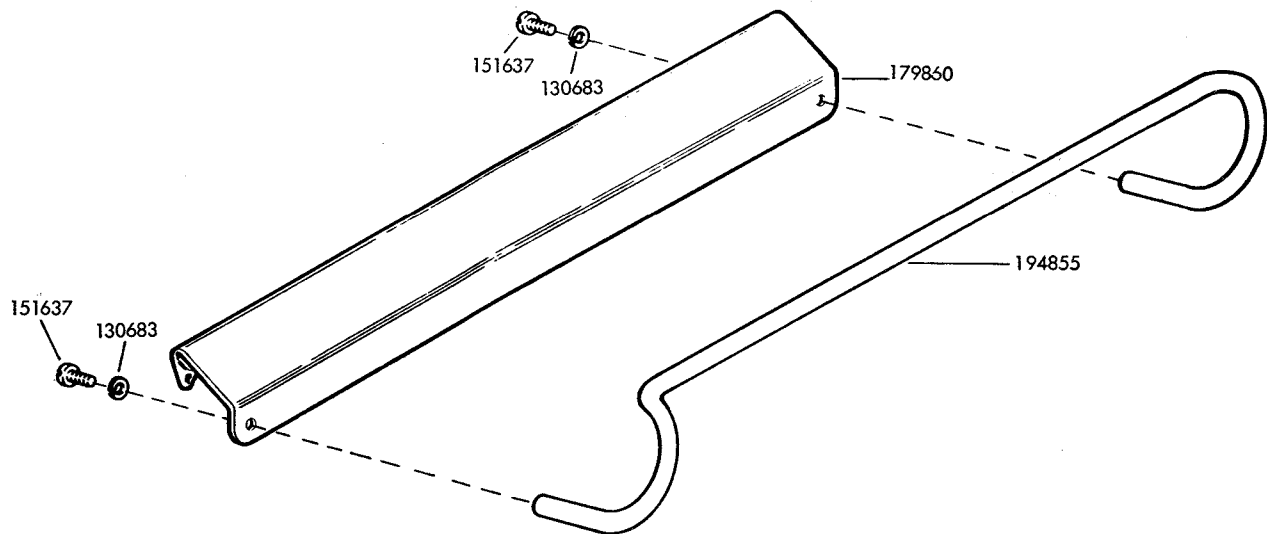


FIGURE 25. 194861 MODIFICATION KIT TO PROVIDE TAPE GUIDE

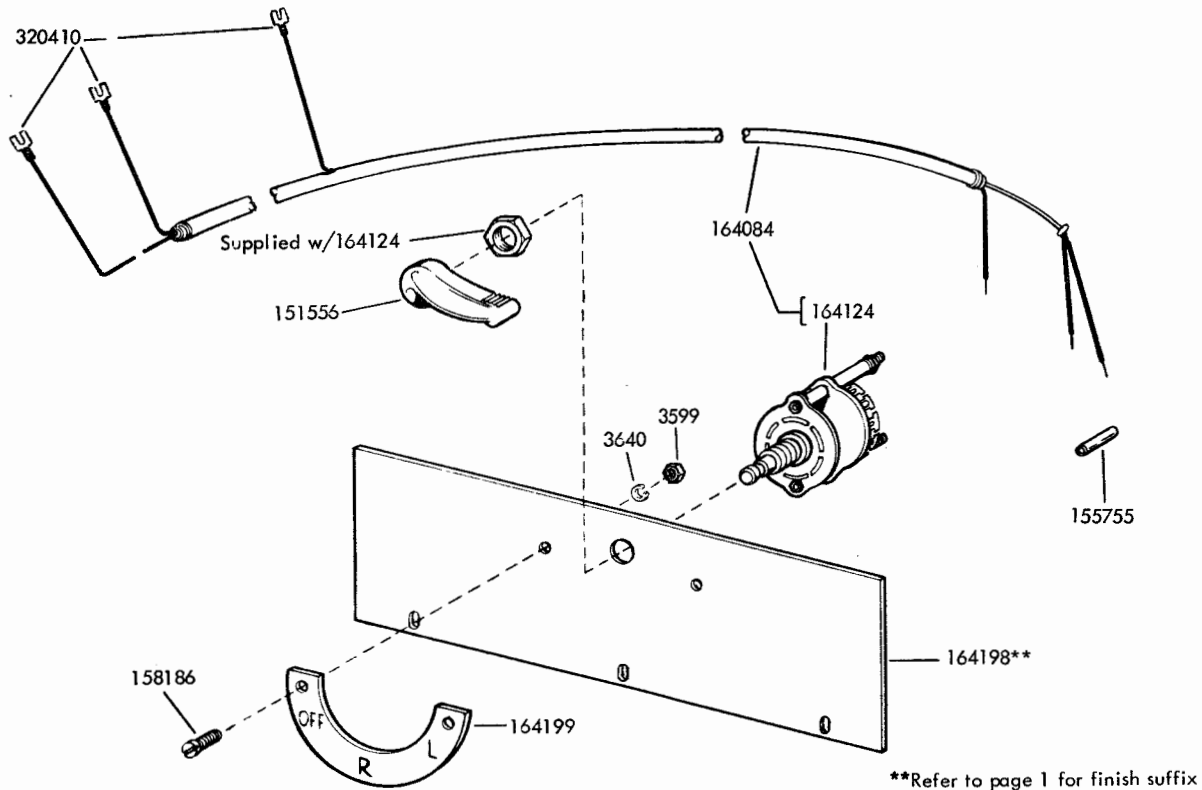


FIGURE 26. 164197** MODIFICATION KIT TO PROVIDE CONTROL PANEL

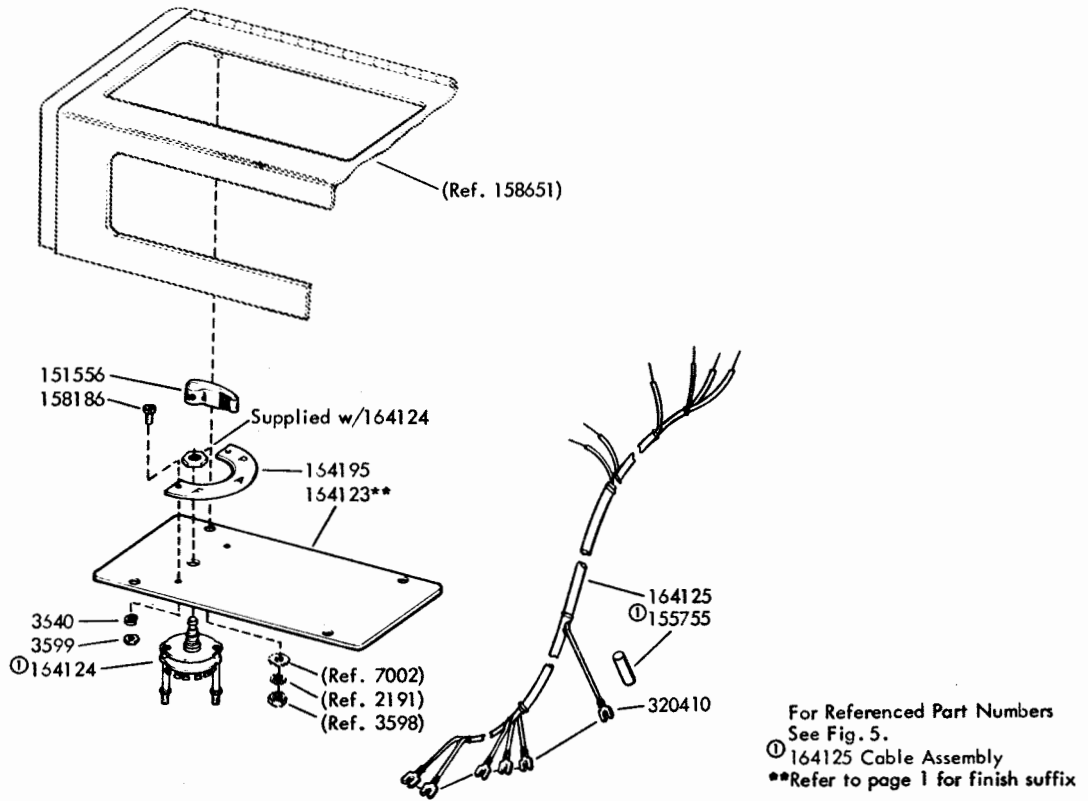


FIGURE 27. 164120** MODIFICATION KIT TO PROVIDE CONTROL PANEL

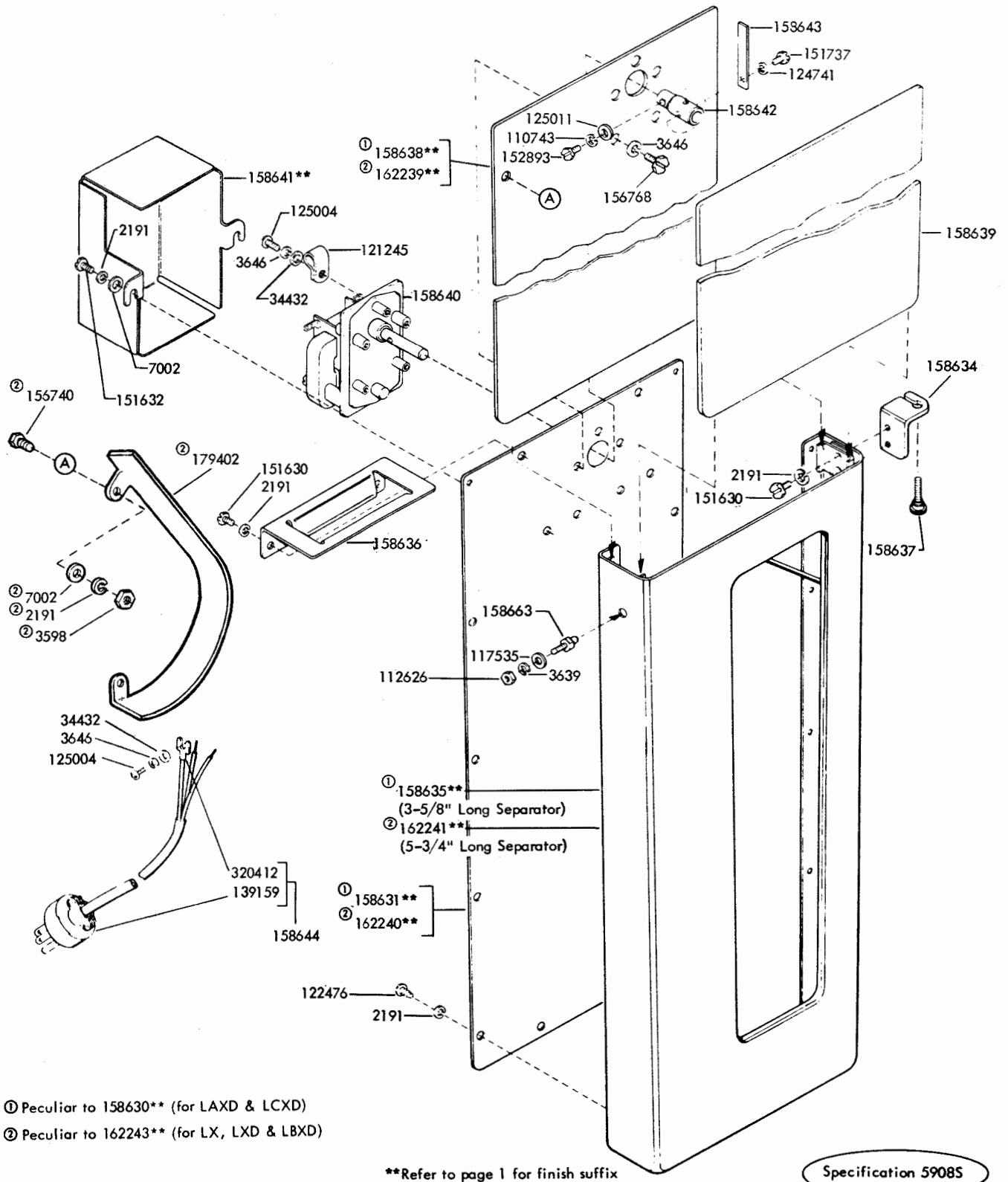
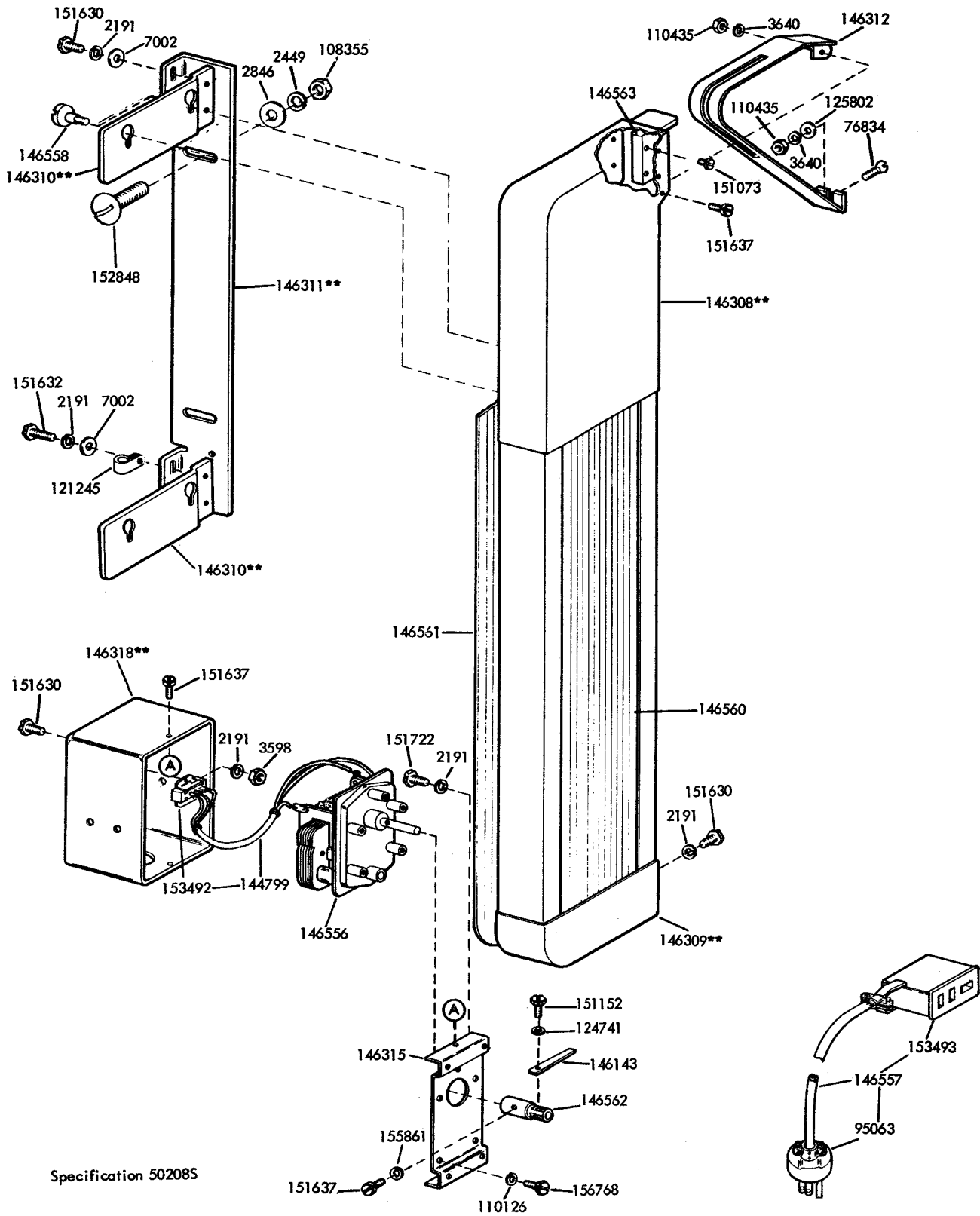


FIGURE 28. 158630** AND 162243** TAPE BIN ASSEMBLIES



**Refer to page 1 for finish suffix.

FIGURE 29. 145898** MODIFICATION KIT TO PROVIDE A TAPE BIN FOR STORED TAPE OF A MESSAGE IN TRANSMISSION

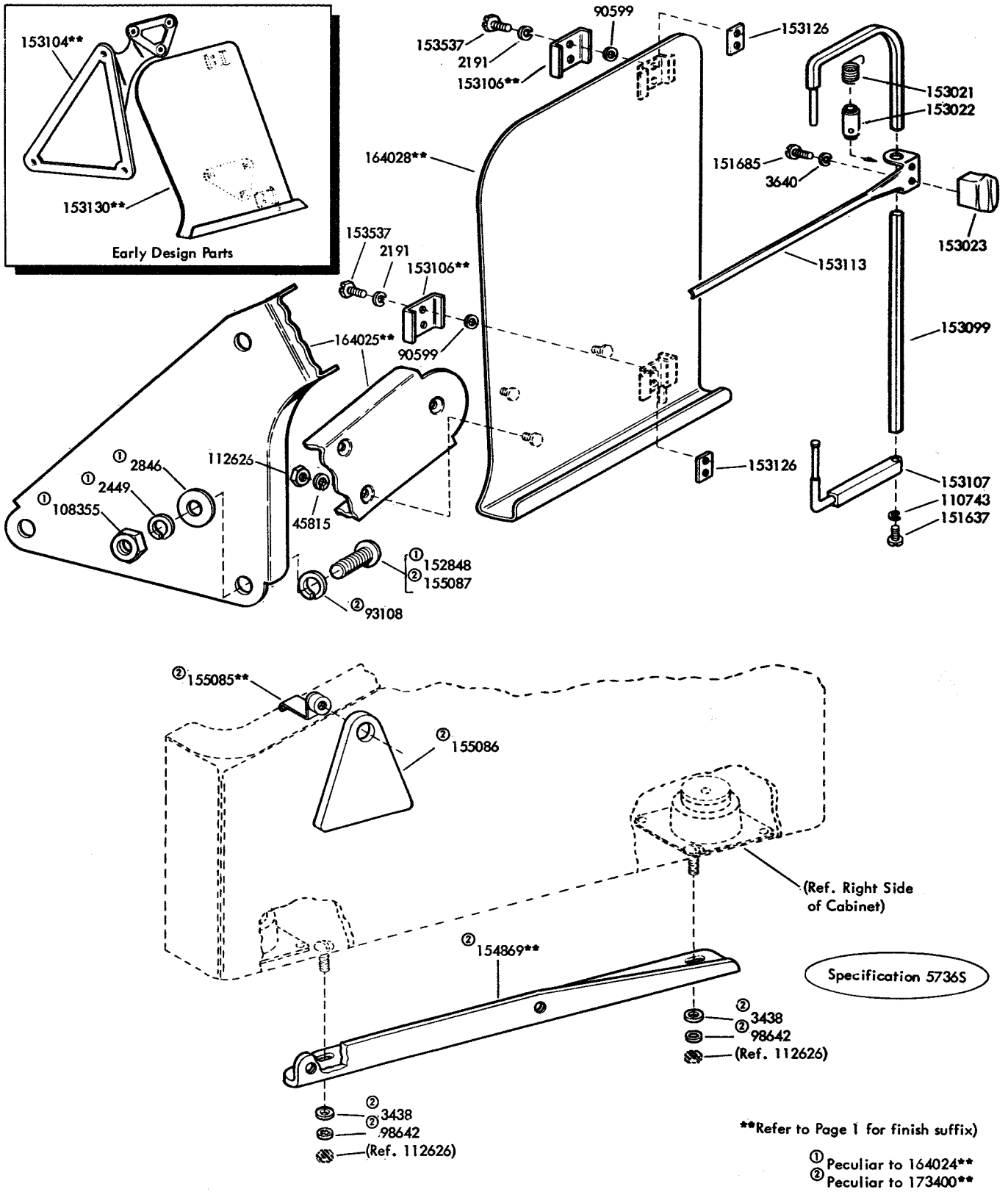
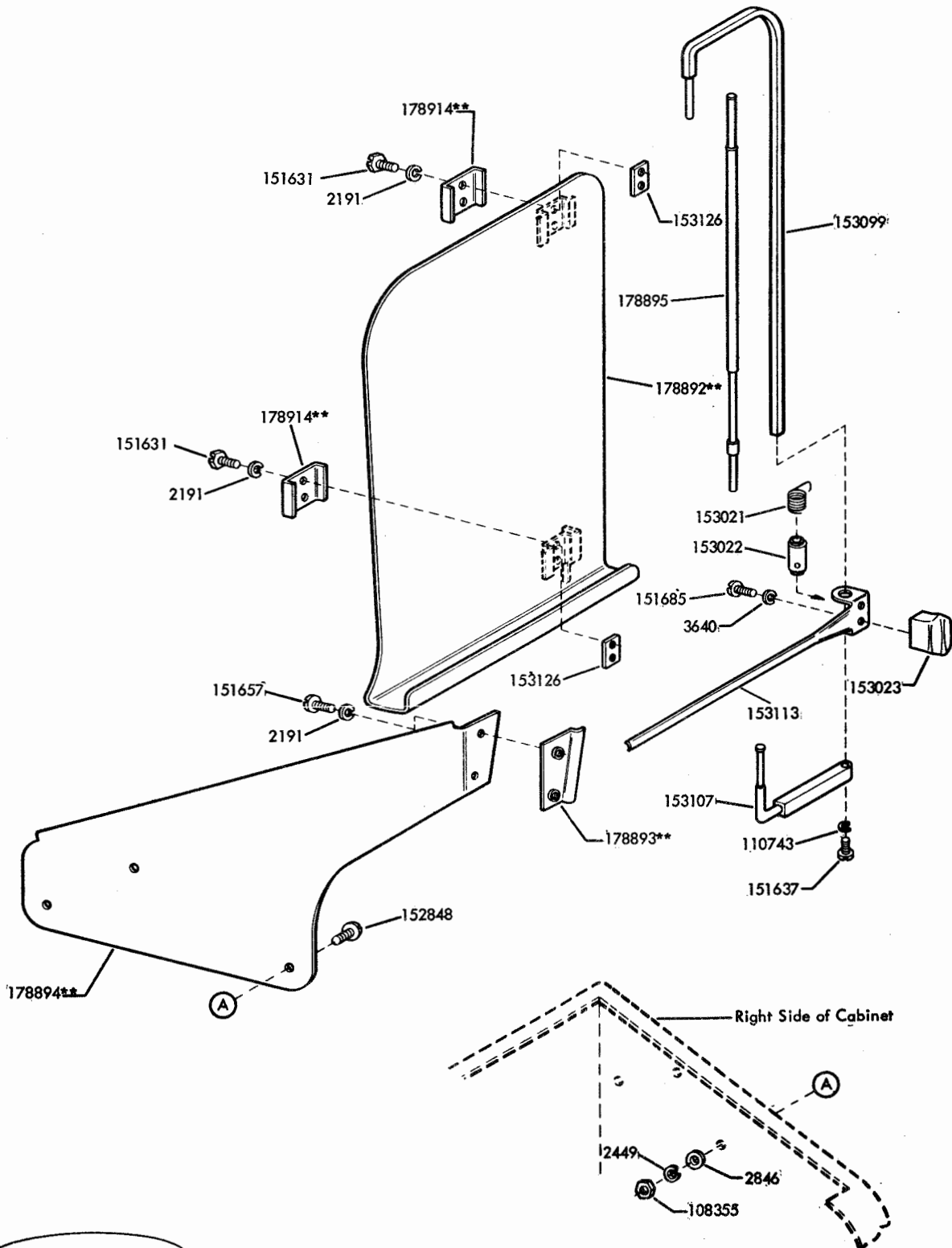


FIGURE 30. 164024** (FOR FLOOR MODEL) AND 173400** (FOR TABLE MODEL) MODIFICATION KITS TO PROVIDE OFFSET COPYHOLDER



Specification 57365

**Refer to page 1 for finish suffix

FIGURE 31. 178897** MODIFICATION KIT TO PROVIDE A PIVOTED OFFSET COPYHOLDER FOR FLOOR MODEL CABINET

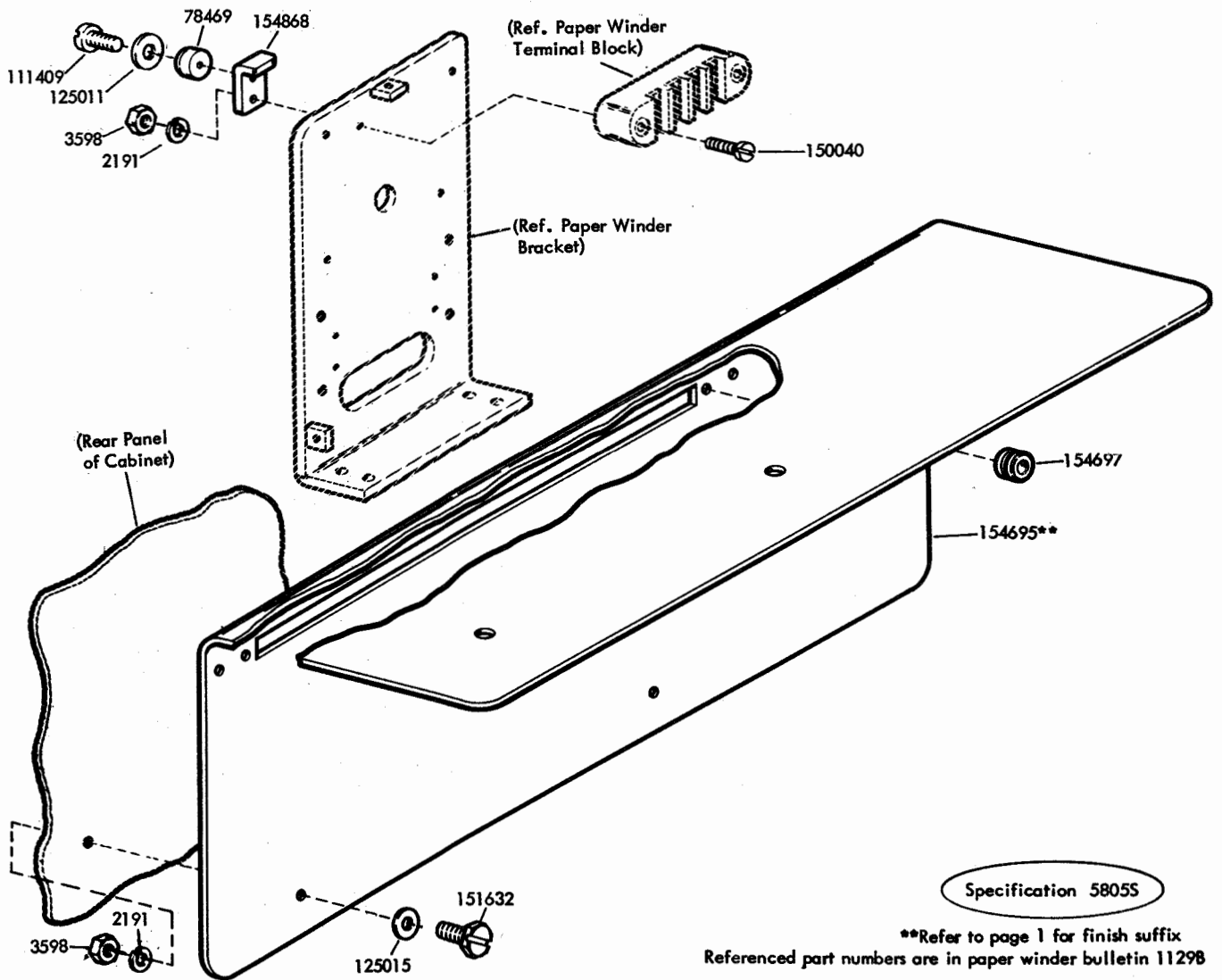


FIGURE 32. 153901** MODIFICATION KIT TO PROVIDE A SHELF FOR MOUNTING A PAPER WINDER TO CABINET

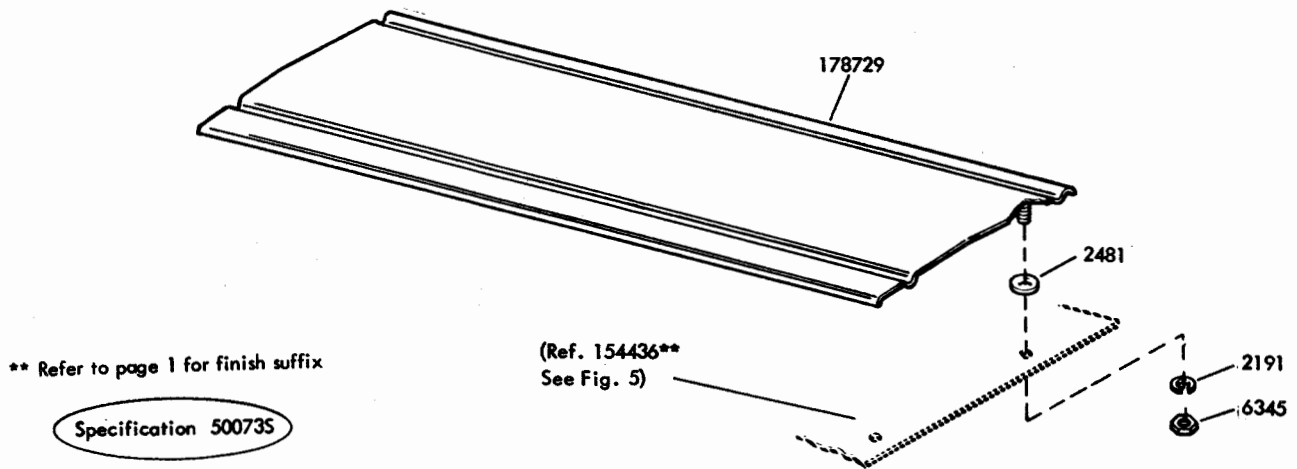
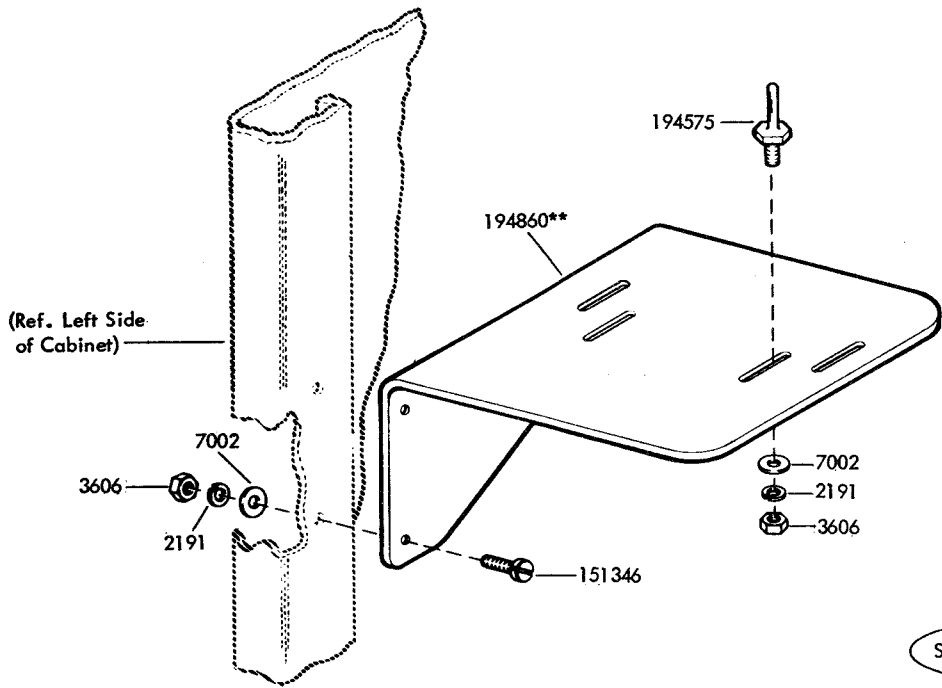
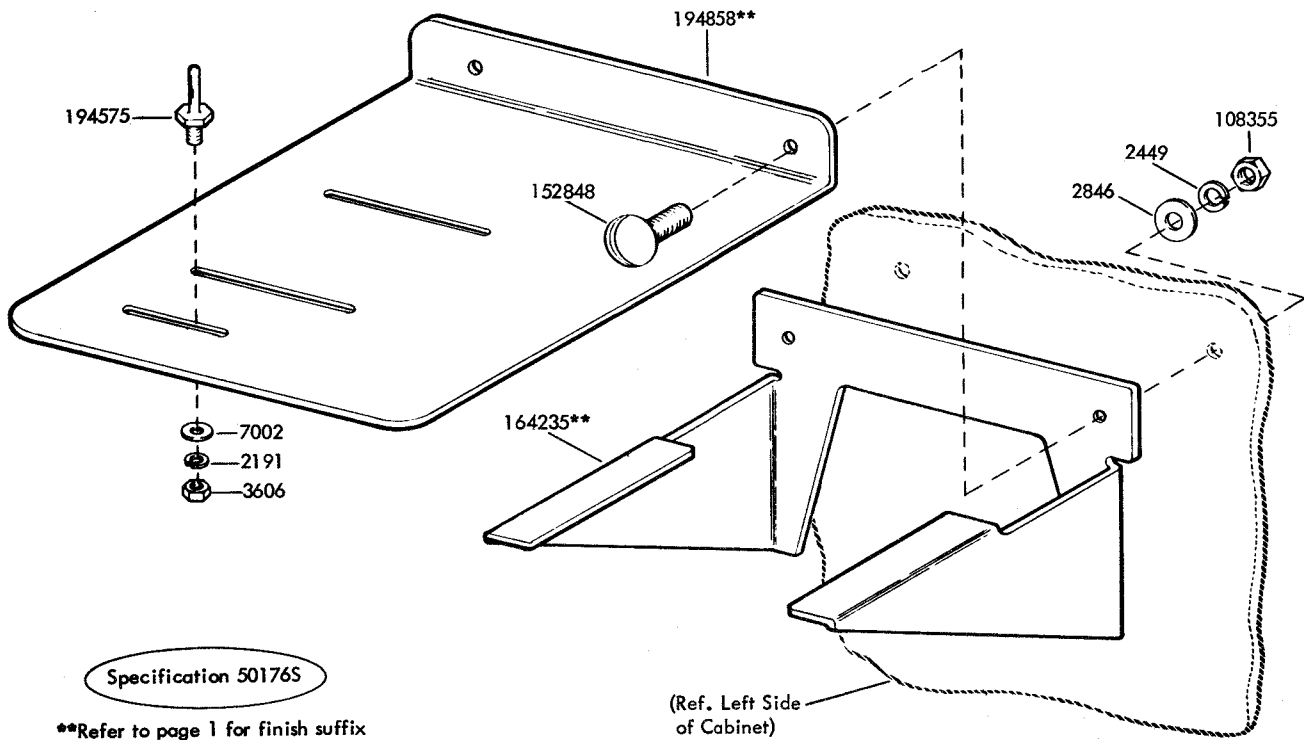


FIGURE 33. 174458** MODIFICATION KIT TO PROVIDE CABINET WITH A PAPER TEARING PLATE



**Refer to page 1 for finish suffix

FIGURE 34. 194859** MODIFICATION KIT TO PROVIDE SHELF FOR TAPE WINDER OR TAPE UNWINDER



**Refer to page 1 for finish suffix

FIGURE 35. 194857** MODIFICATION KIT TO PROVIDE SHELF FOR SINGLE REEL TAPE WINDER

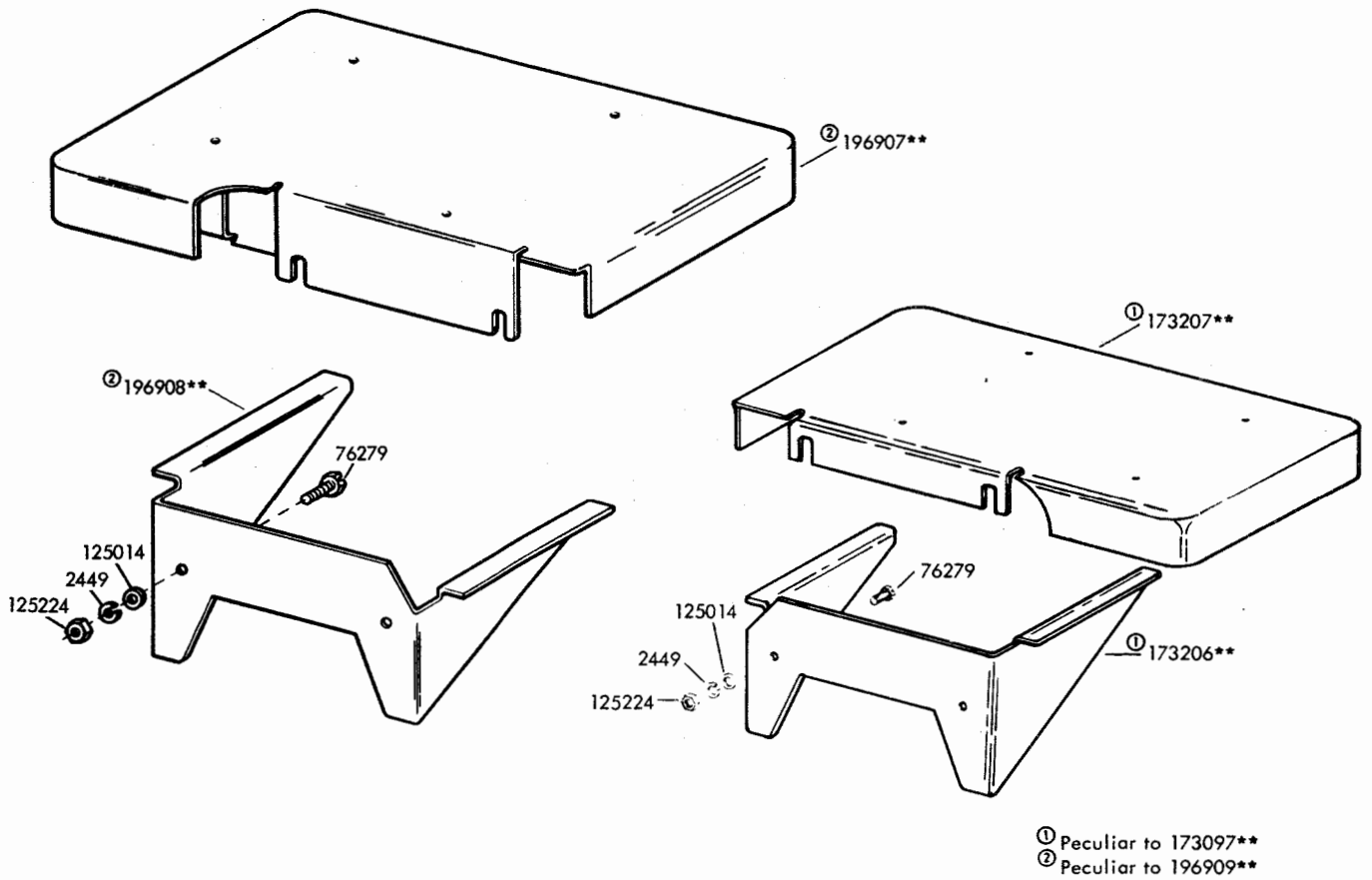
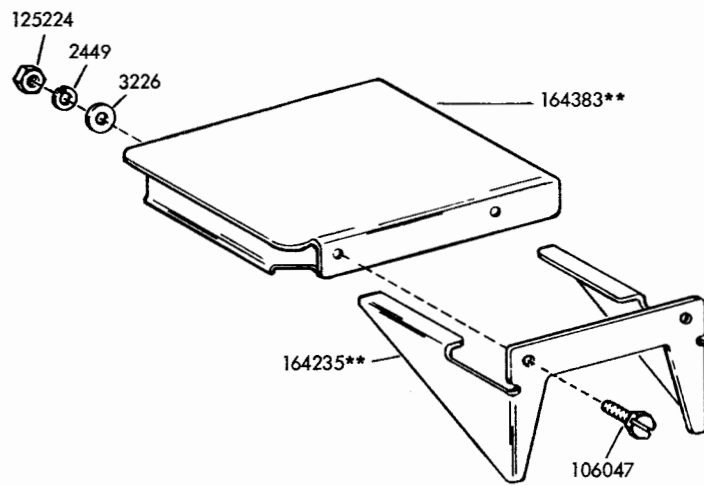


FIGURE 36. 173097** (LEFT) AND 196909** (RIGHT) MODIFICATION KITS TO PROVIDE MOUNTING SHELF FOR LEFT AND RIGHT SIDE OF CABINET

**Refer to Page 1 for Finish Suffix



**Refer to Page 1 for Finish Suffix

FIGURE 37. 163796** MODIFICATION KIT TO PROVIDE TELEPHONE MOUNTING SHELF

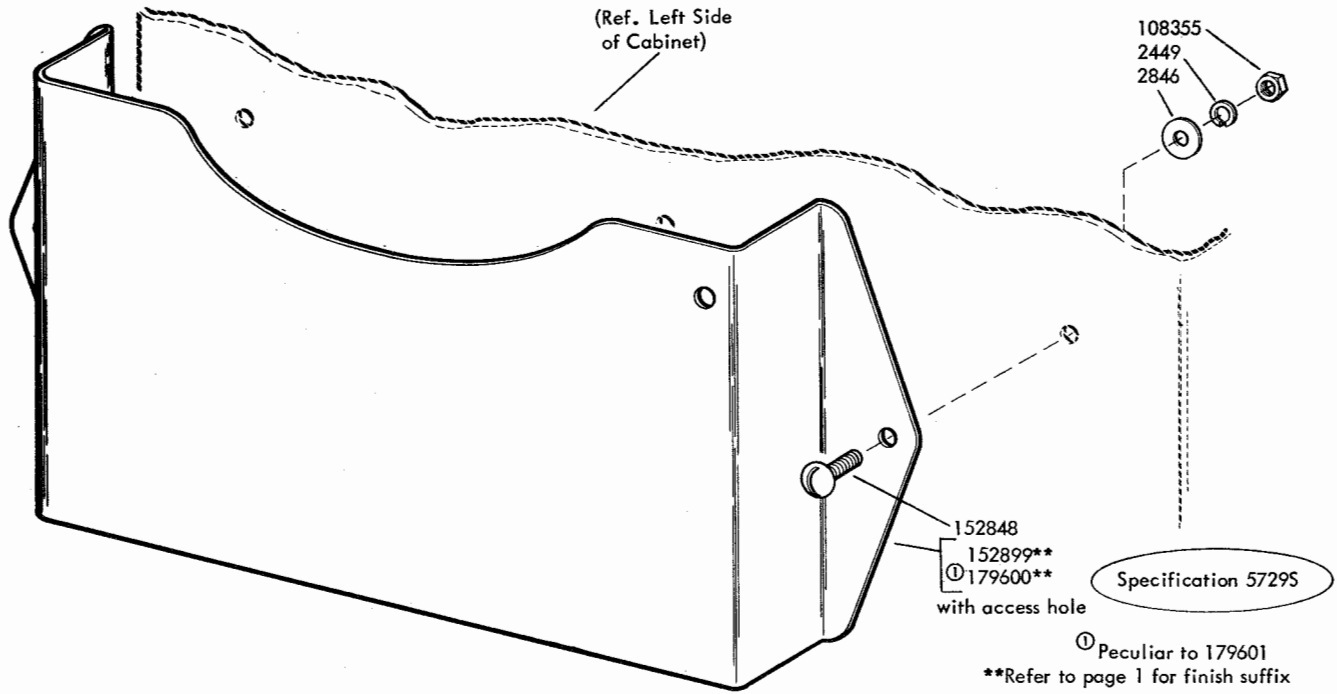


FIGURE 38. 152910** and 179601** MODIFICATION KIT TO ADD DIRECTORY HOLDER OR MESSAGE FILE HOLDER

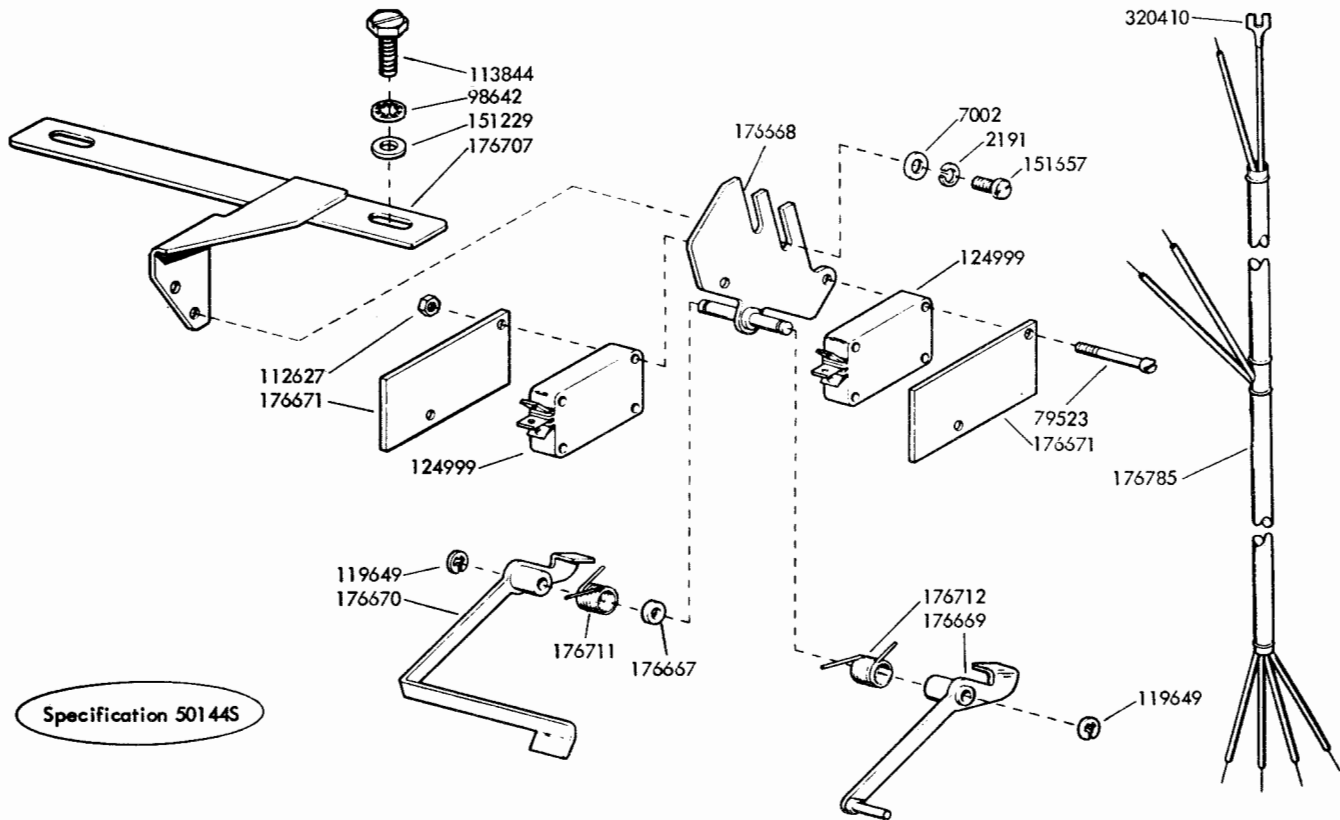


FIGURE 39. 176713 MODIFICATION KIT TO PROVIDE LOW PAPER AND PAPER-OUT ALARM

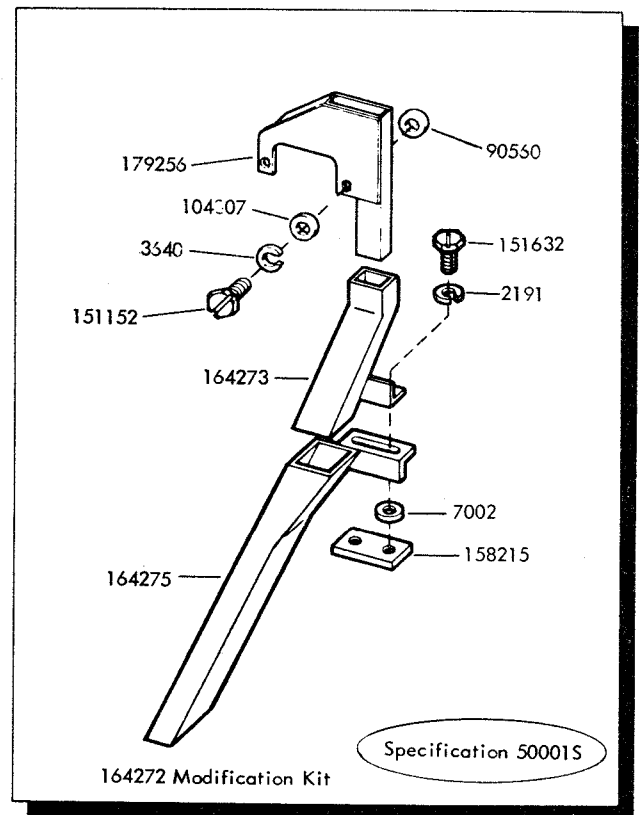
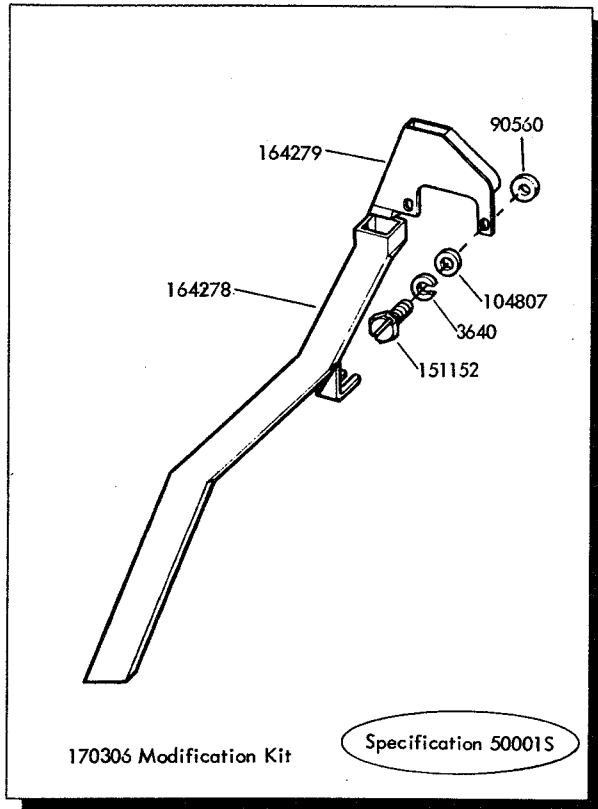
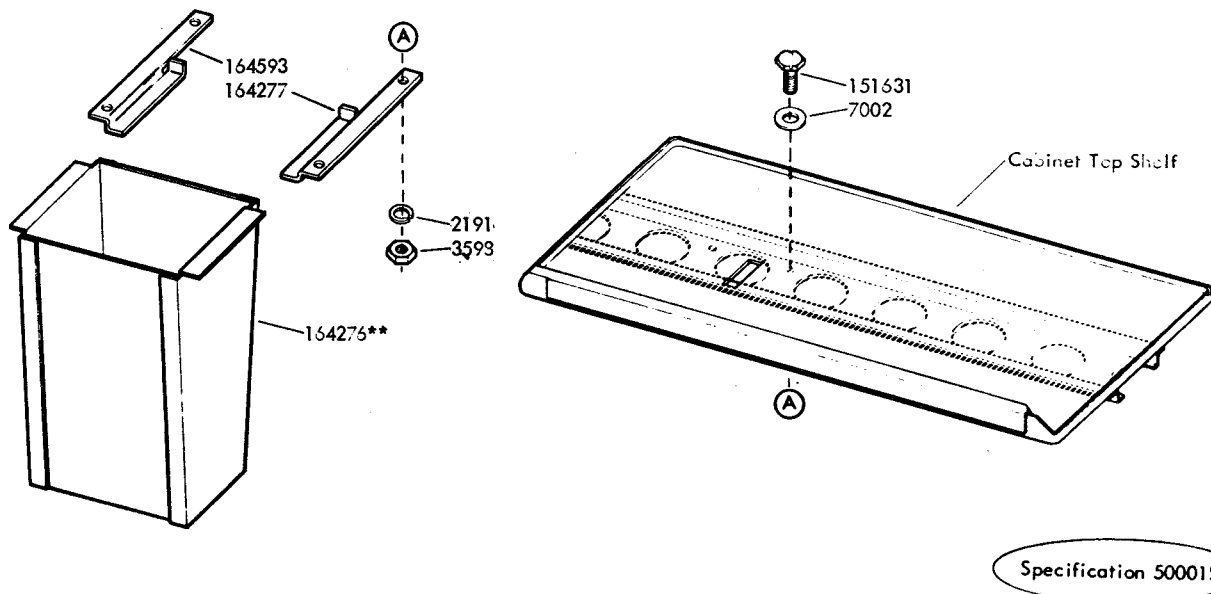
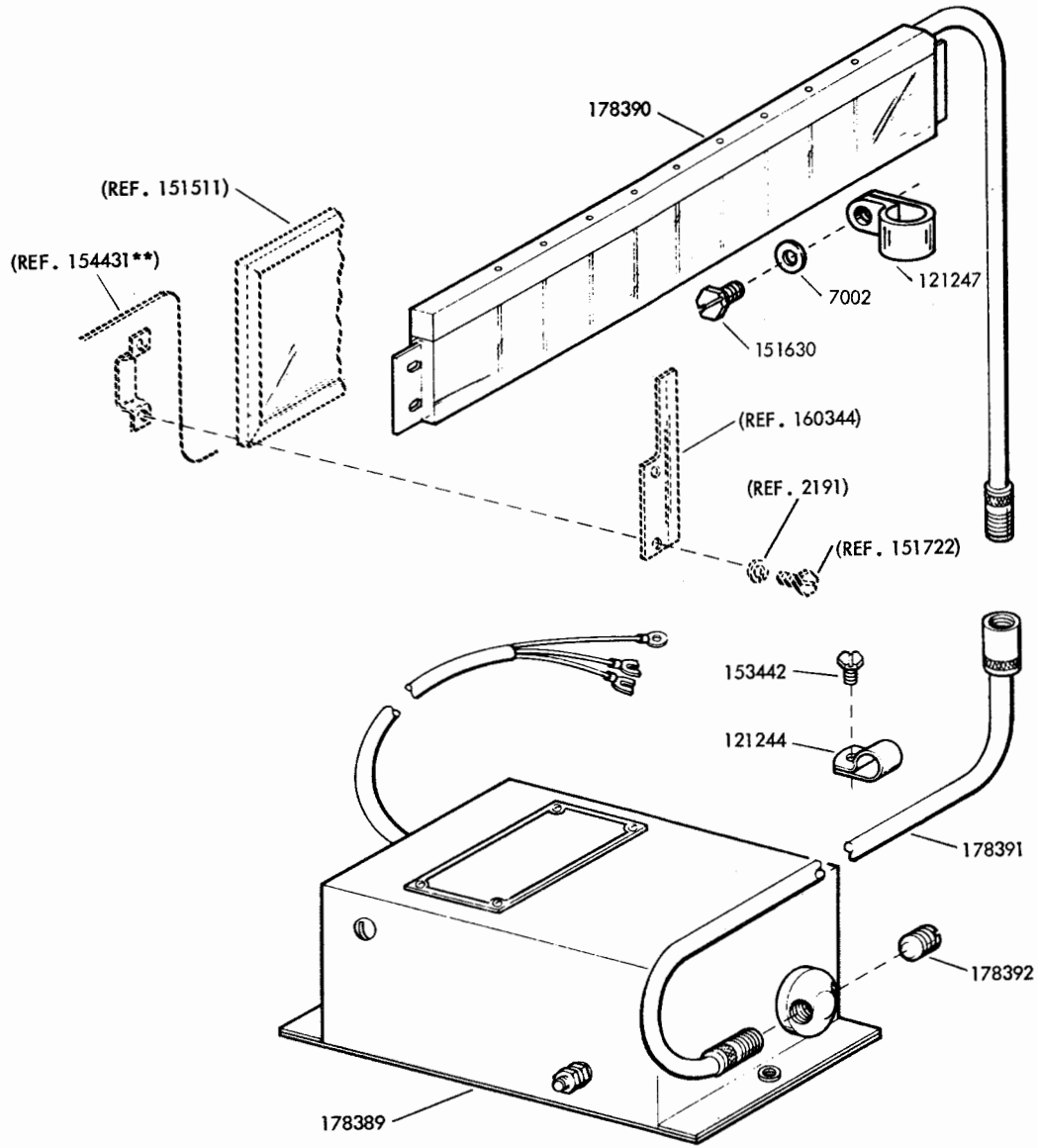


FIGURE 40. 164272 (FOR AUXILIARY REPERFORATOR) AND 170306 (FOR KEYBOARD REPERFORATOR) MODIFICATION KITS TO PROVIDE CHAD DISPOSAL



**Refer to page 1 for finish suffix

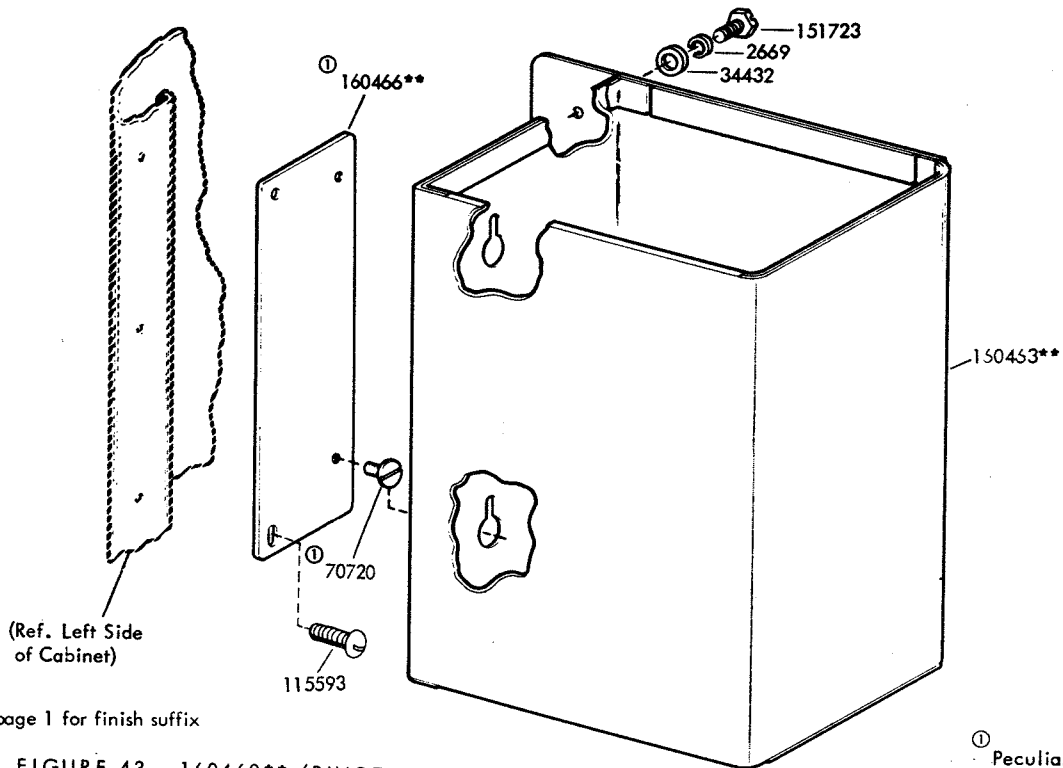
FIGURE 41. 164405** MODIFICATION KIT TO PROVIDE CHAD CONTAINER FOR THE AUXILIARY REPERFORATOR AND/OR KEYBOARD REPERFORATOR



NOTE:
For referenced part numbers
See Fig. 5.

** Refer to page 1 for finish suffix

FIGURE 42. 178387 MODIFICATION KIT TO PROVIDE HIGH VOLTAGE STATIC
ELIMINATOR TO NEUTRALIZE ELECTROSTATIC CHARGE ON PAGE COPY



**Refer to page 1 for finish suffix

FIGURE 43. 160468** (PIVOTED HEAD TRANSMITTER) AND 160470** (FIXED HEAD TRANSMITTER) MODIFICATION KITS TO PROVIDE TAPE BASKET

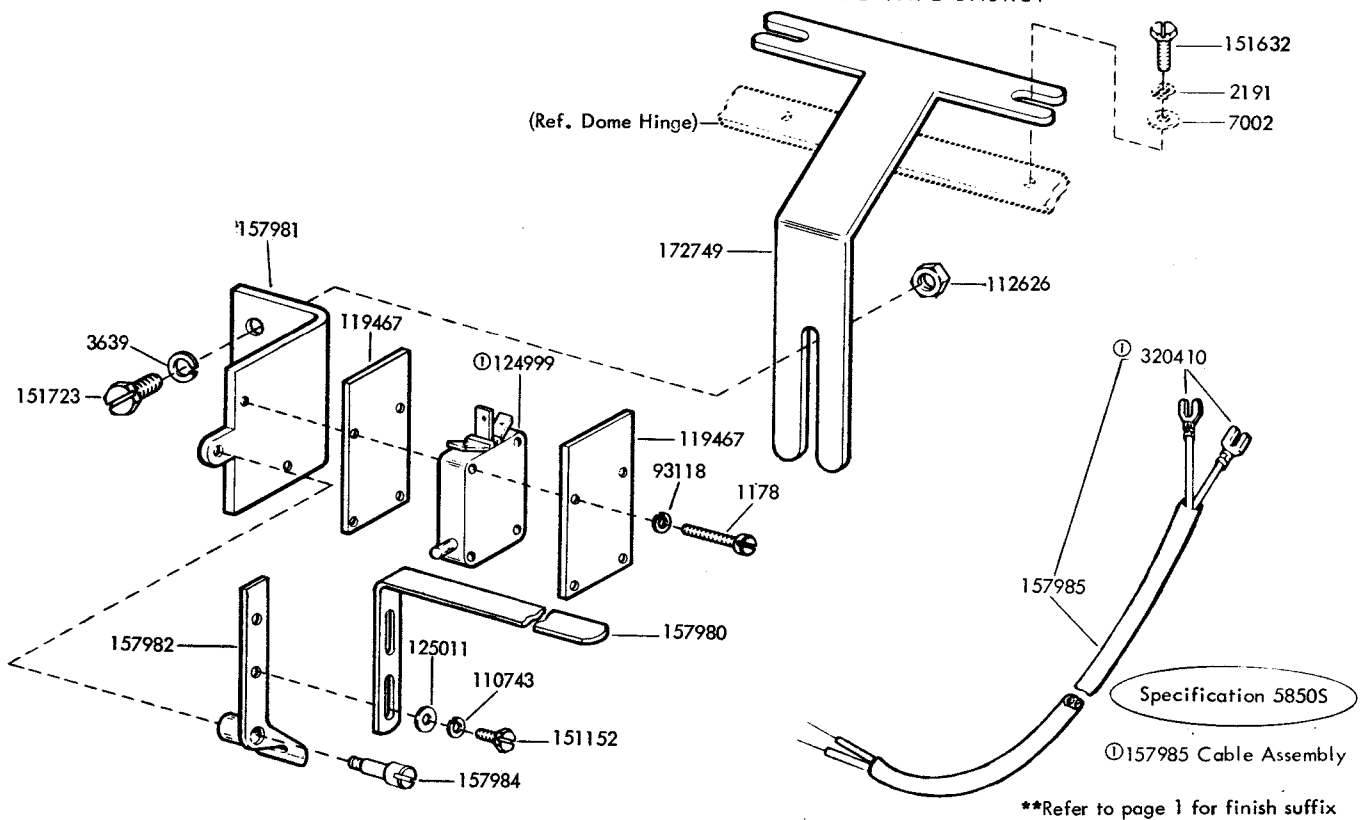
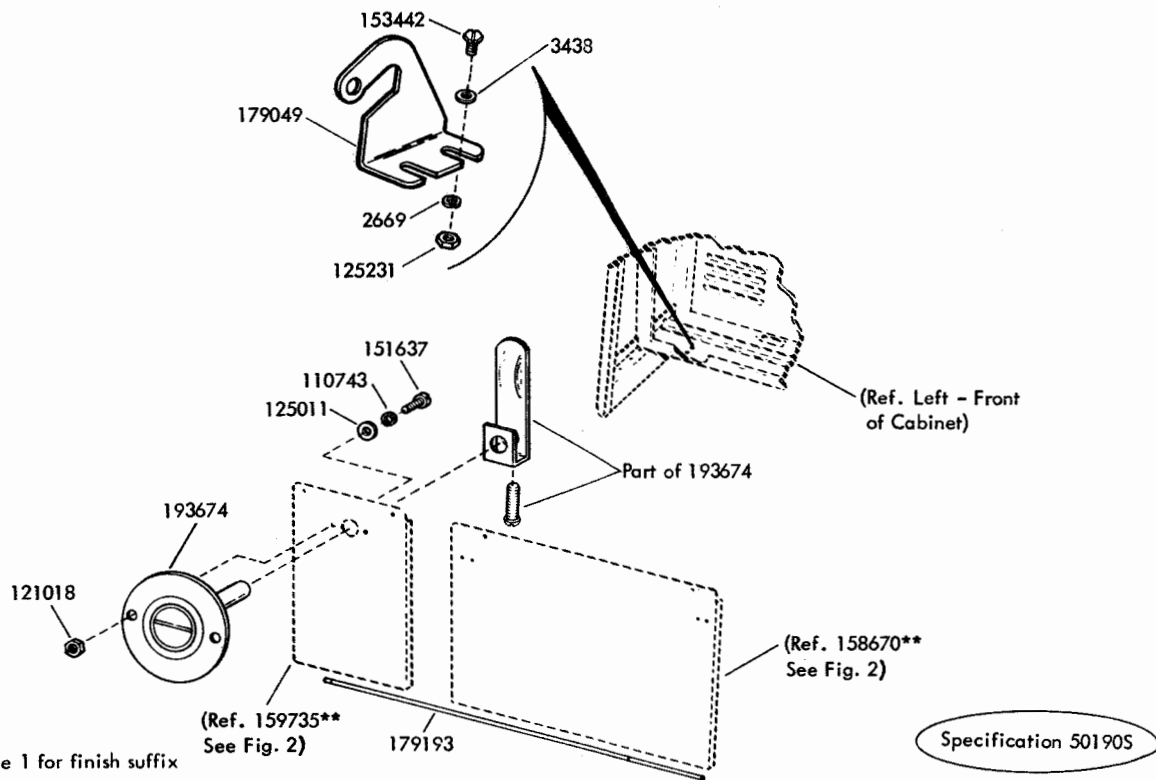


FIGURE 44. 154756 MODIFICATION KIT TO PROVIDE FORM-OUT ALARM



** Refer to page 1 for finish suffix

FIGURE 45. 193675 MODIFICATION KIT TO PROVIDE CABINET WITH TWO HINGED PANELS IN LOWER CAVITY

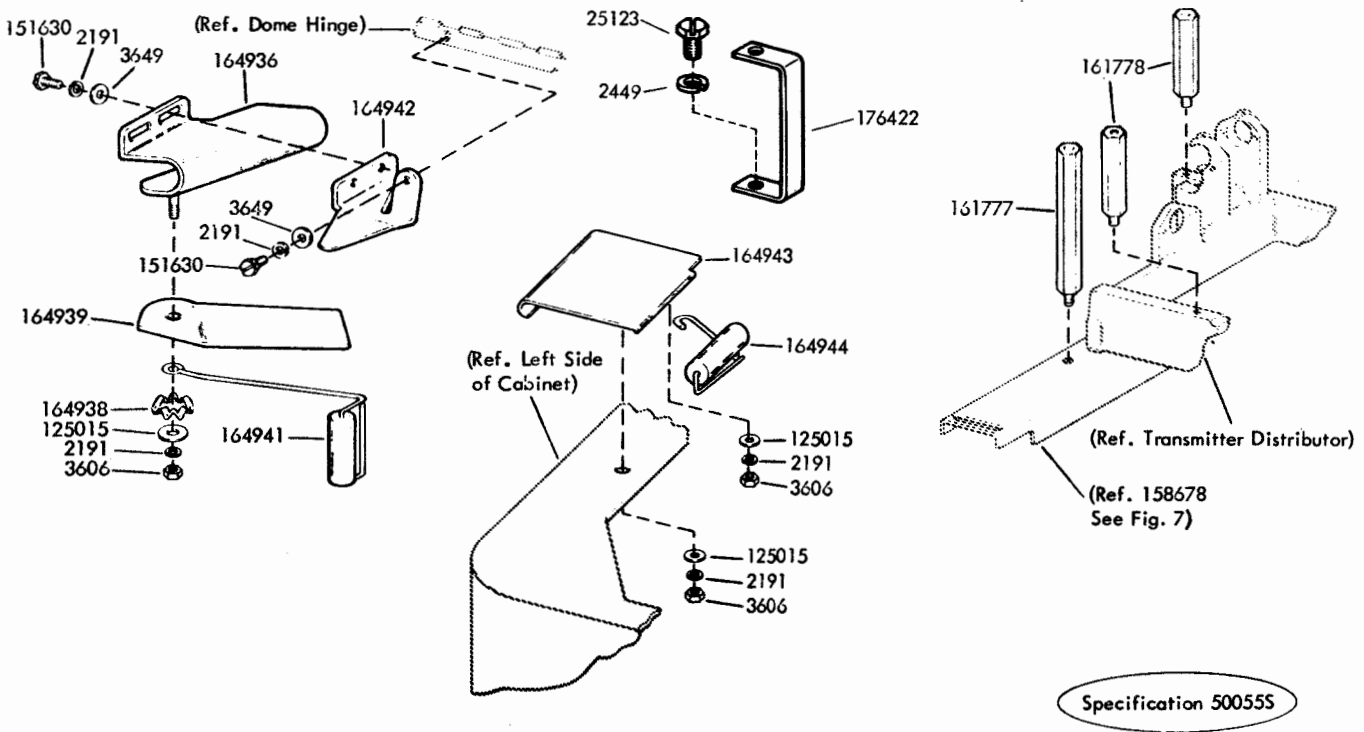


FIGURE 46. 161814 MODIFICATION KIT TO MOUNT AN AUXILIARY TYPING REPERFORATOR BASE AND PROVIDE TAPE GUIDE

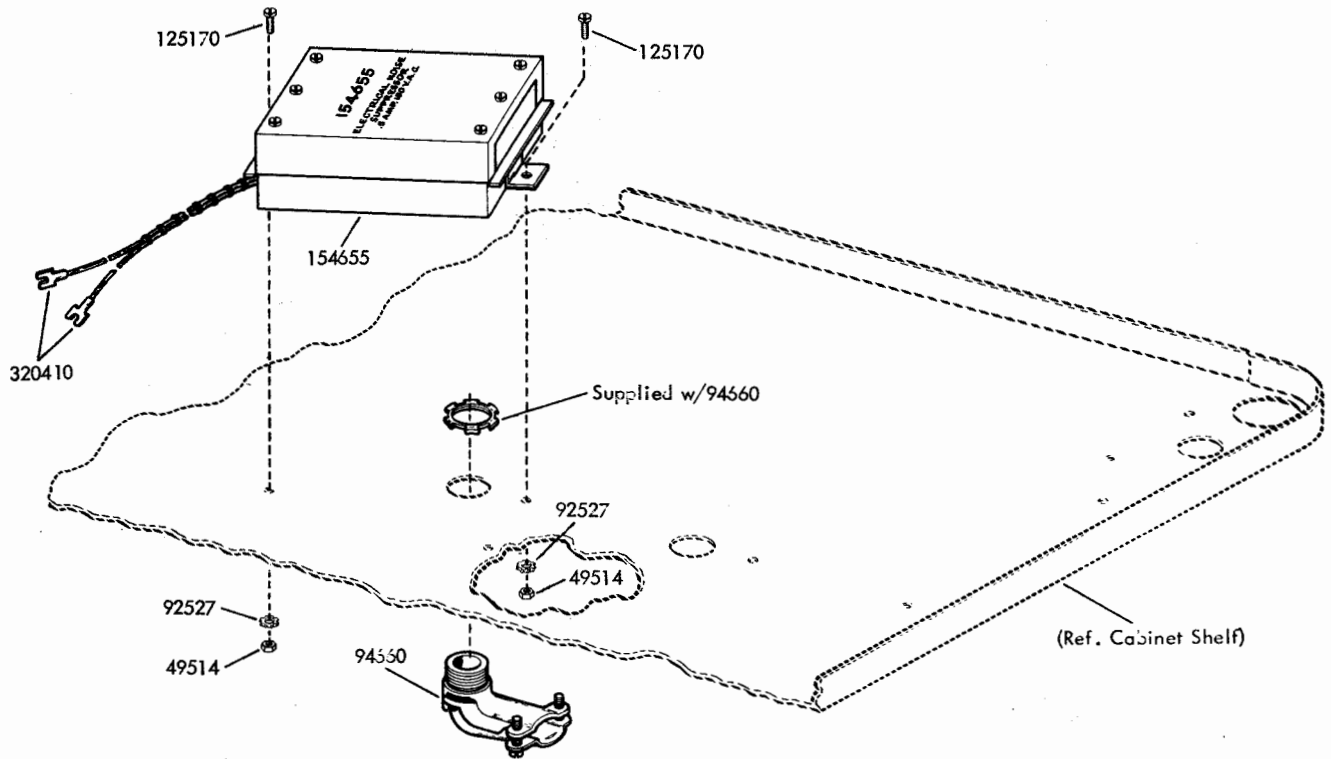


FIGURE 47. 154651 MODIFICATION KIT TO ADD SIGNAL LINE ELECTRICAL NOISE SUPPRESSOR (D. C.)

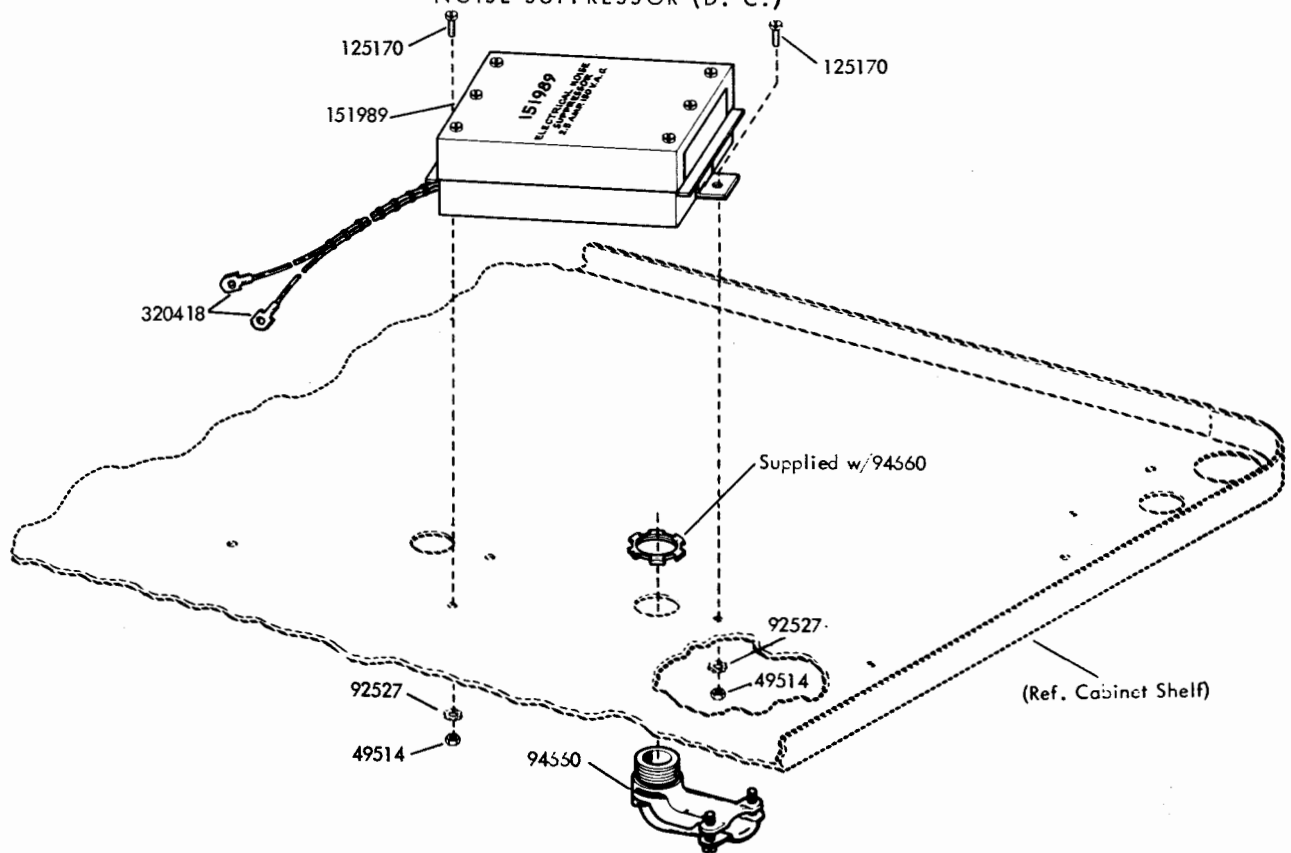


FIGURE 48. 151988 MODIFICATION KIT TO ADD POWER LINE ELECTRICAL NOISE SUPPRESSOR

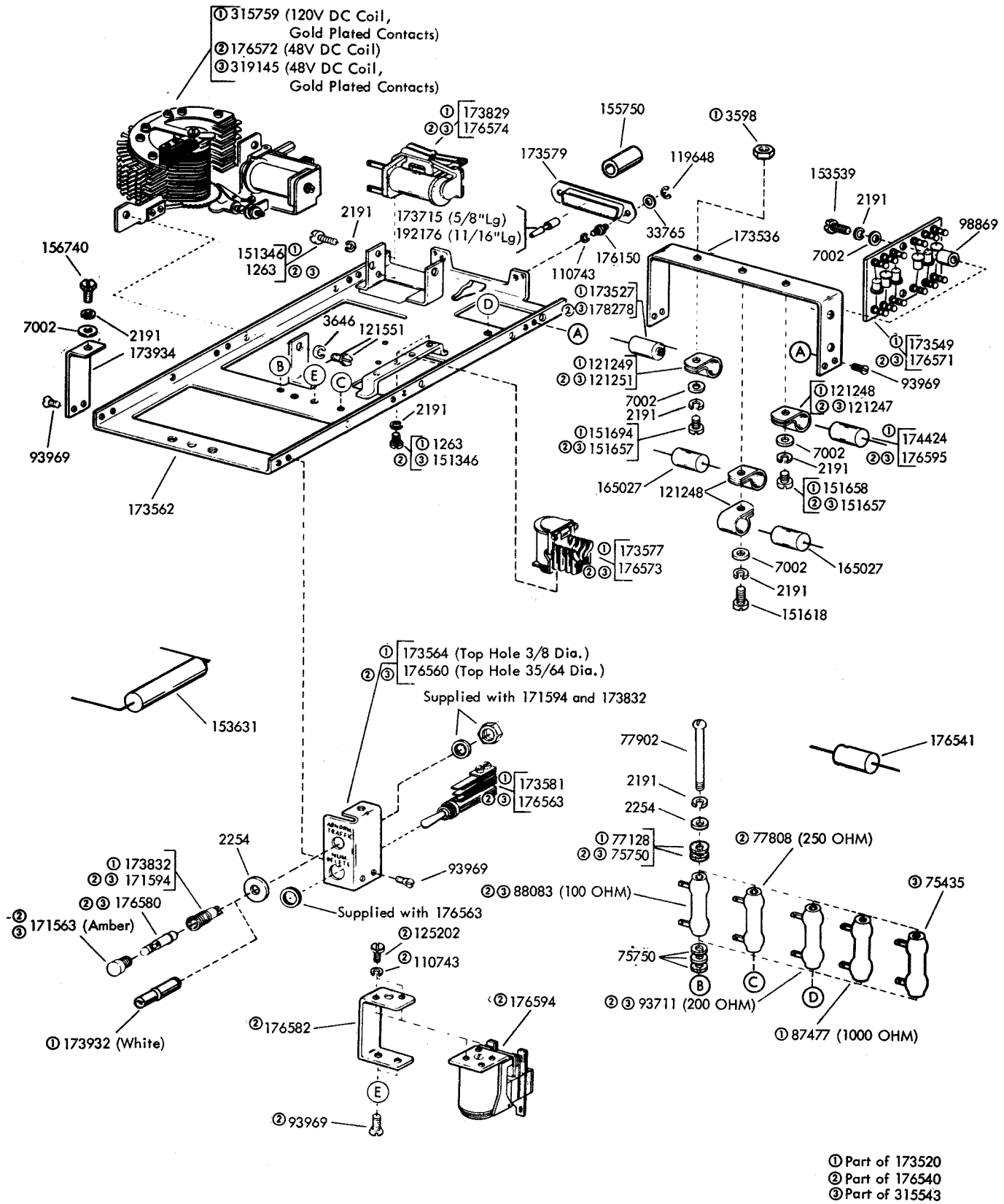


FIGURE 49. 173520, 176540 AND 315543 NUMBERING MODULE ASSEMBLIES
 (ALSO INCLUDES PARTS ON FIGURE 50)

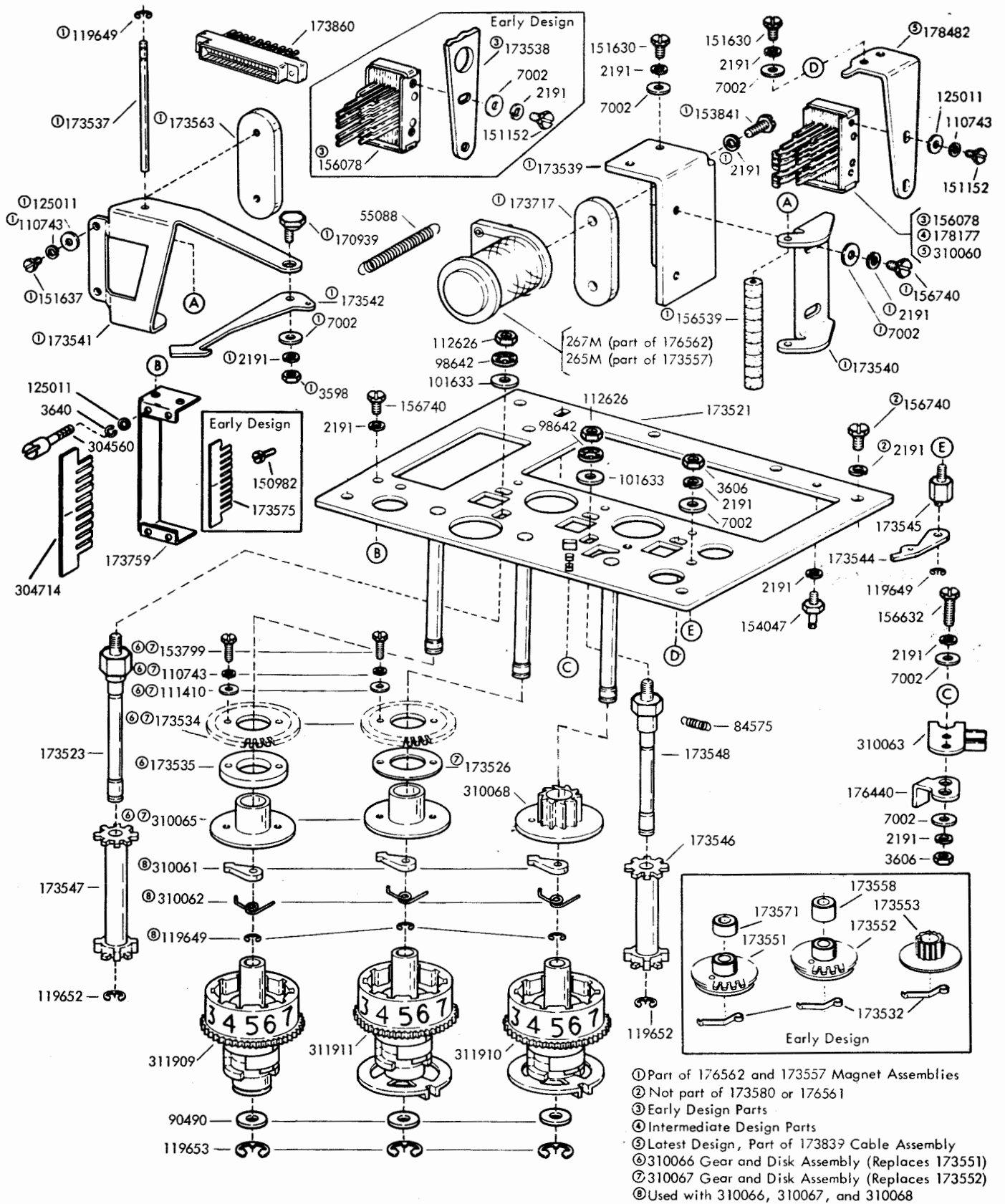


FIGURE 50. 173580 AND 176561 NUMBERING ASSEMBLIES

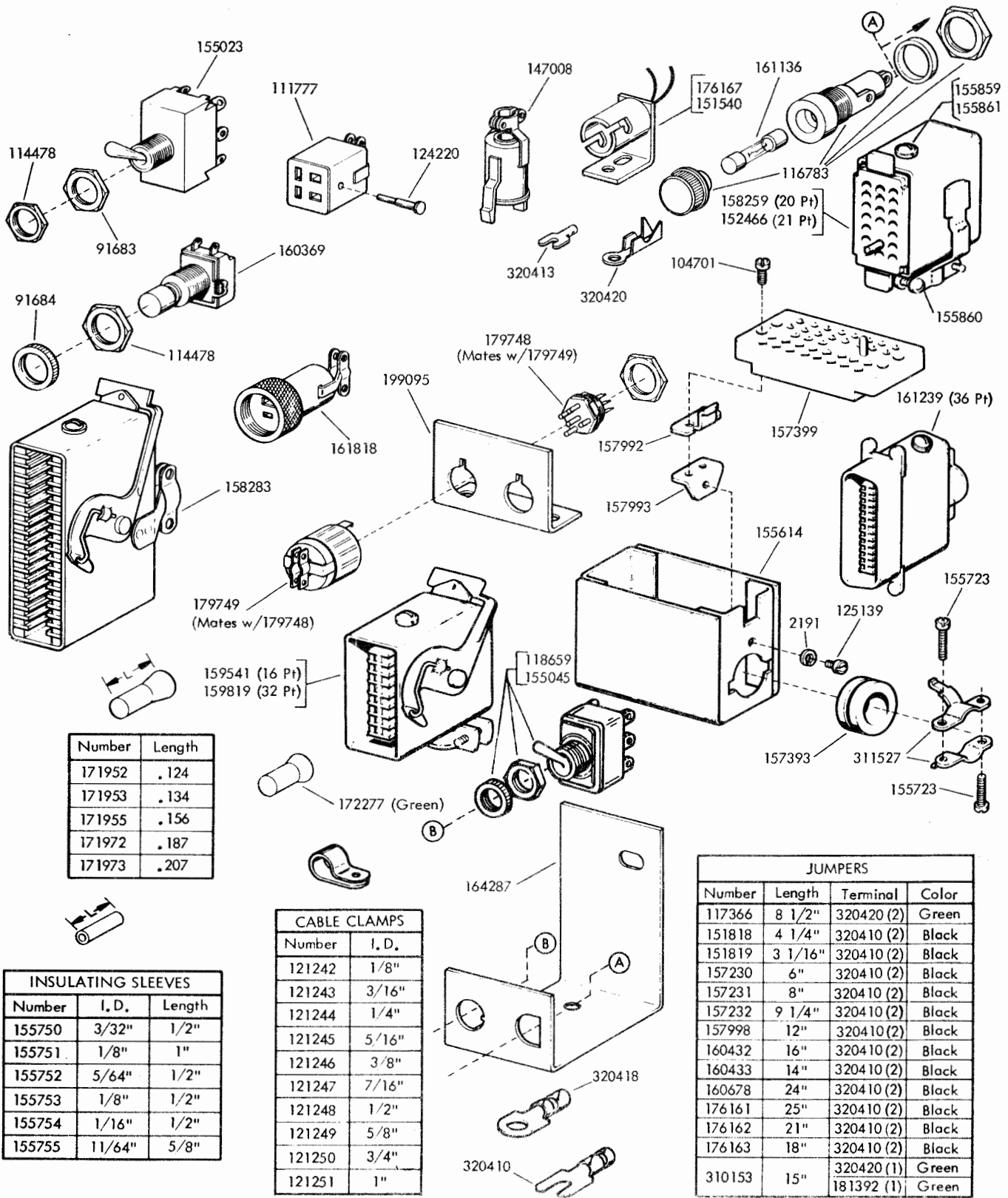
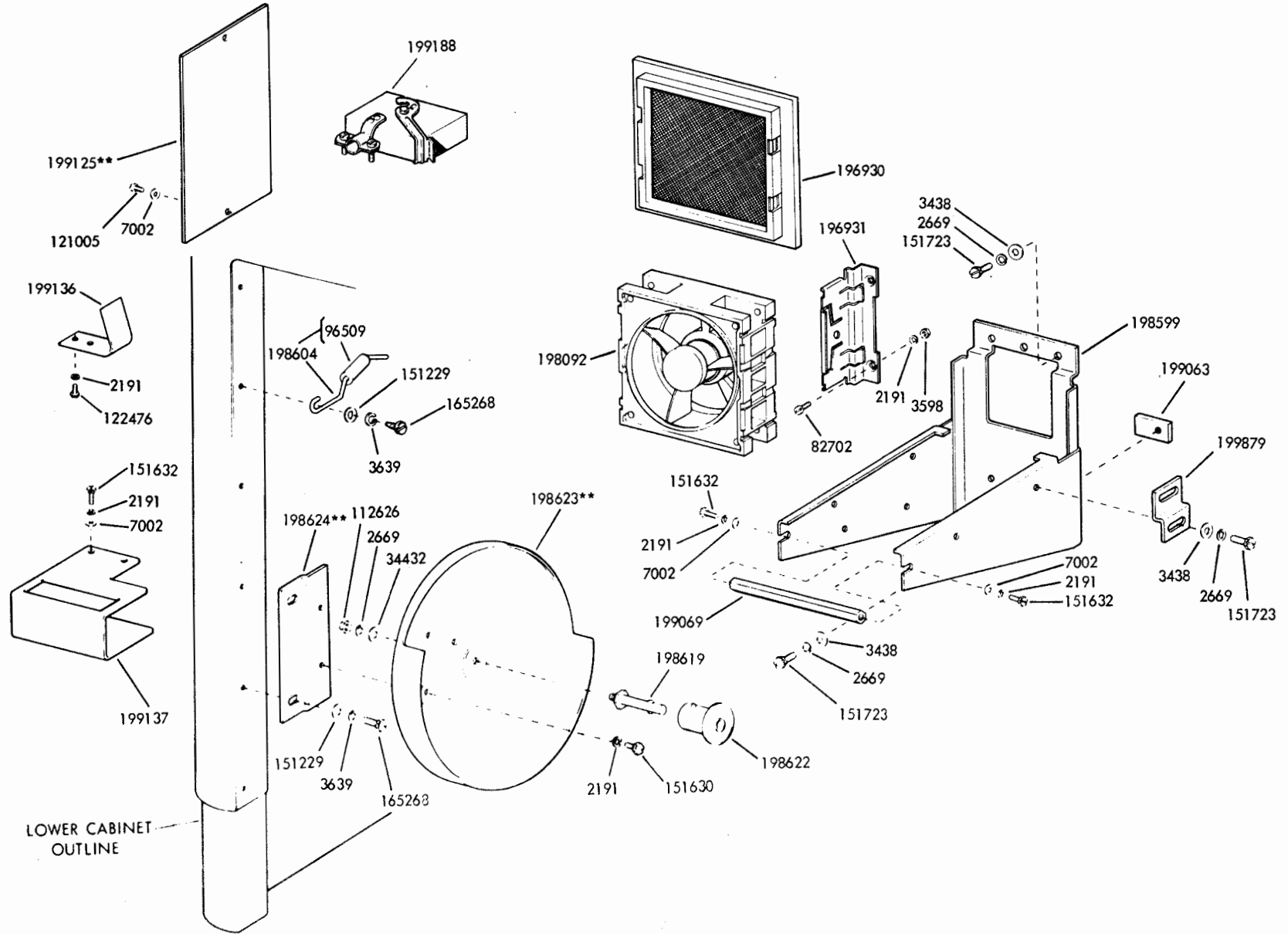
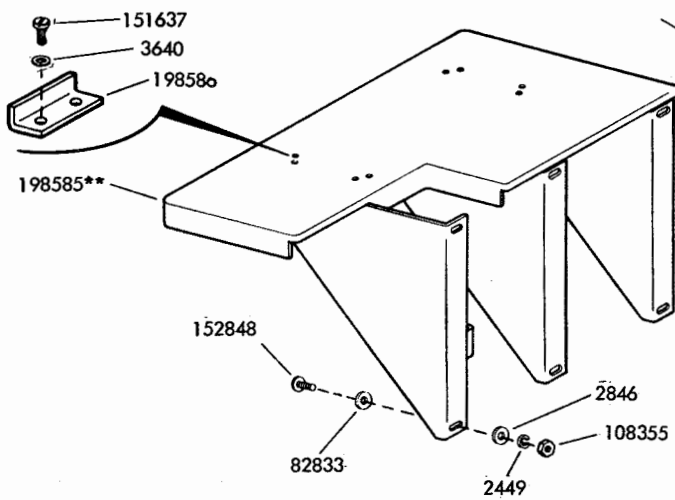
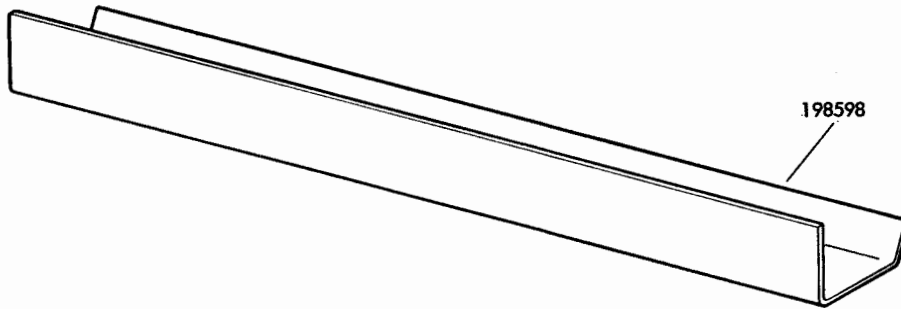
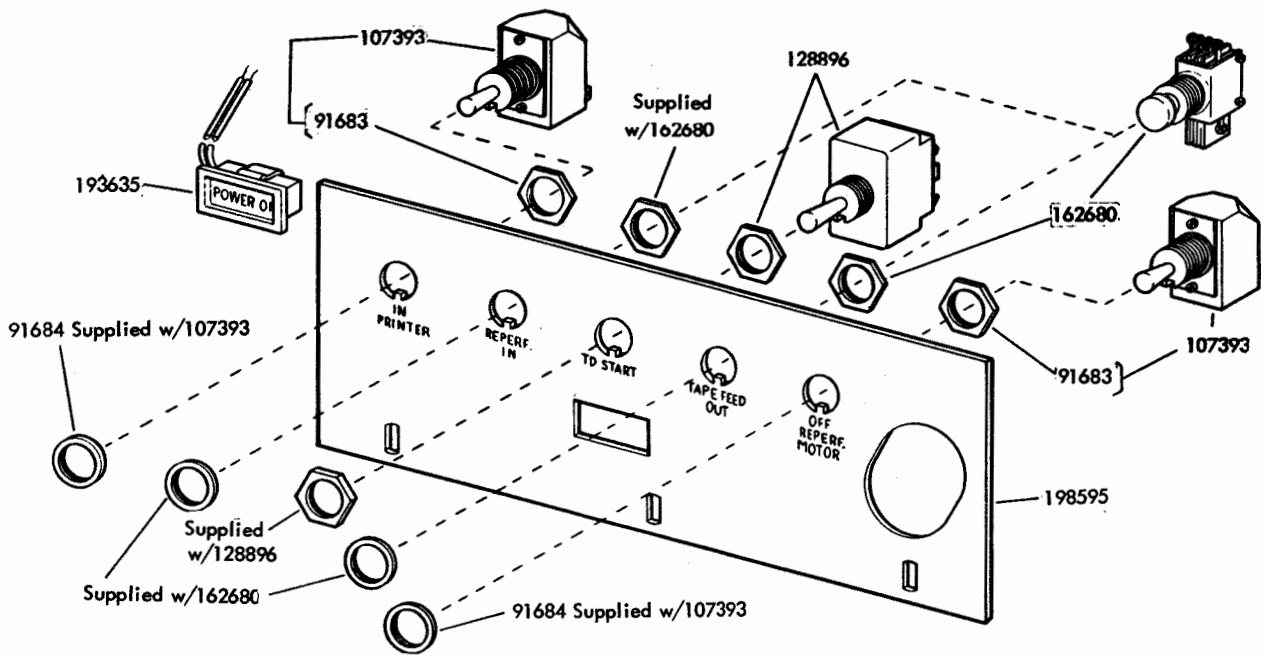


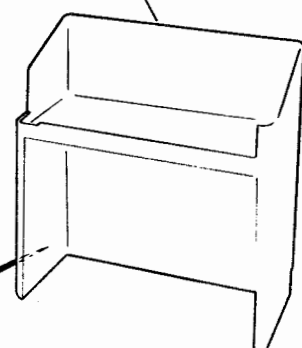
FIGURE 51. CABLE COMPONENTS

FIGURE 52. FAN, TAPE REEL AND RECTIFIER MOUNTING COMPONENTS
(LOWER CABINET)



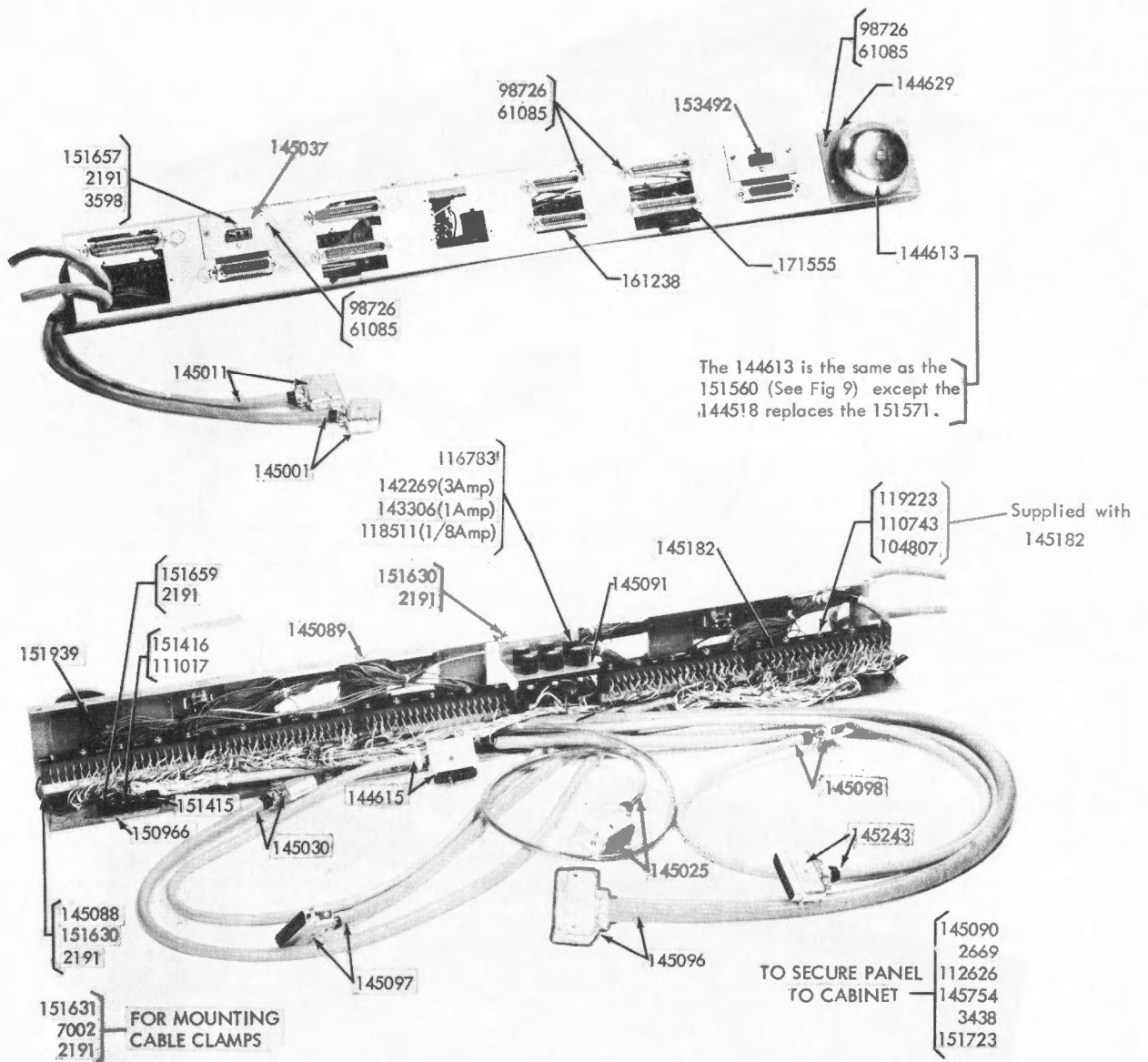


ASR Cabinet Outline



**Refer to page 1 for finish suffix

FIGURE 53. CONTROL PANEL, TAPE GUIDE AND LEFT SIDE SHELF



CABLE CLAMP	CABLE	CLAMP SIZE (ID)
121243	145025 - R	3/16
121246	144615 - S	3/8
121247	145218 - A-A	7/16
121248	145097 - X	1/2
121248	145030 - U	1/2
121248	145098 - Y	1/2
121248	145243 - M	1/2
121249	145001 - V	5/8
121249	145011 - N	5/8
	145096 - W	

FIGURE 54. 145000 DISTRIBUTOR PANEL ASSEMBLY

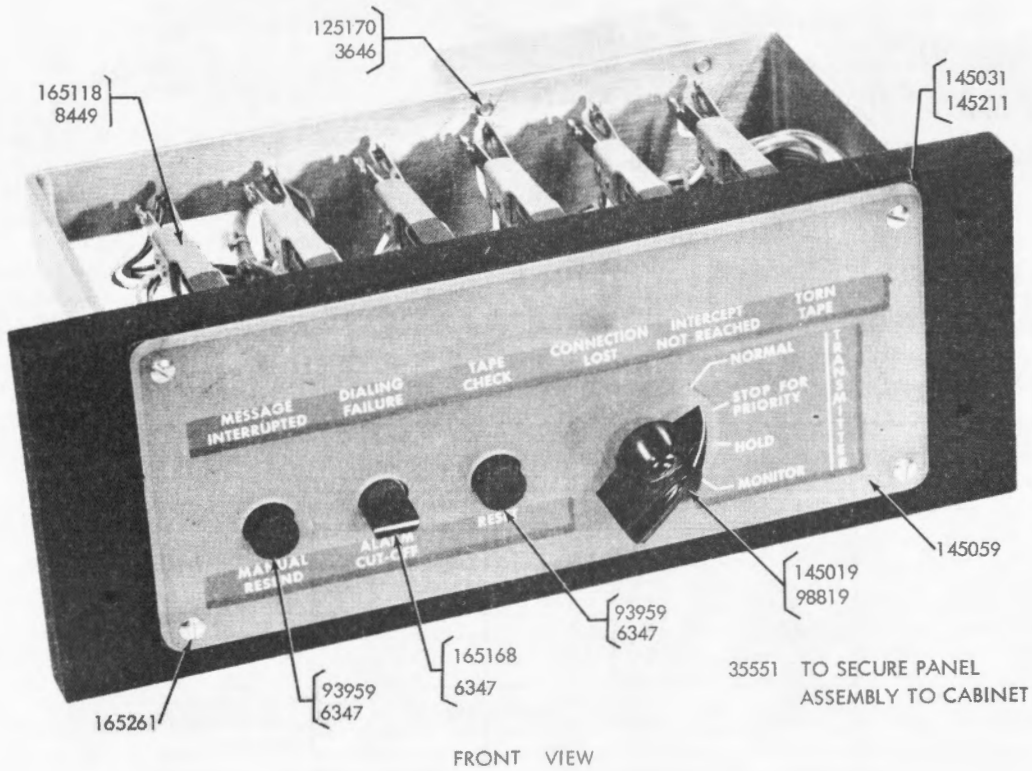
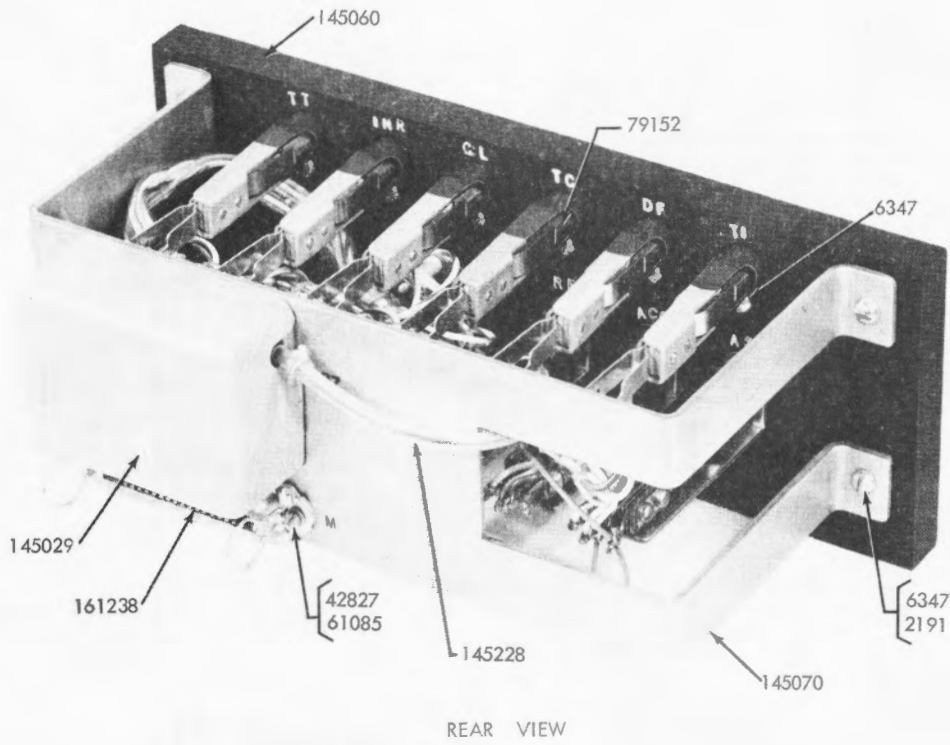


FIGURE 55. 145200 KEY AND LAMP PANEL ASSEMBLY

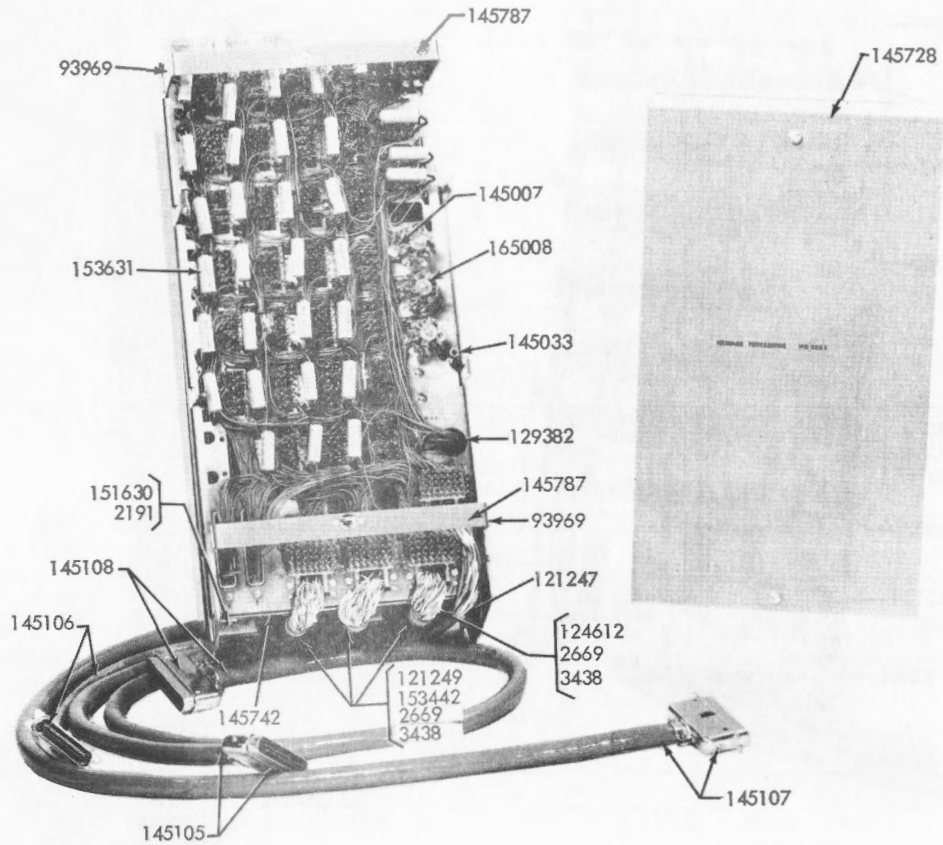
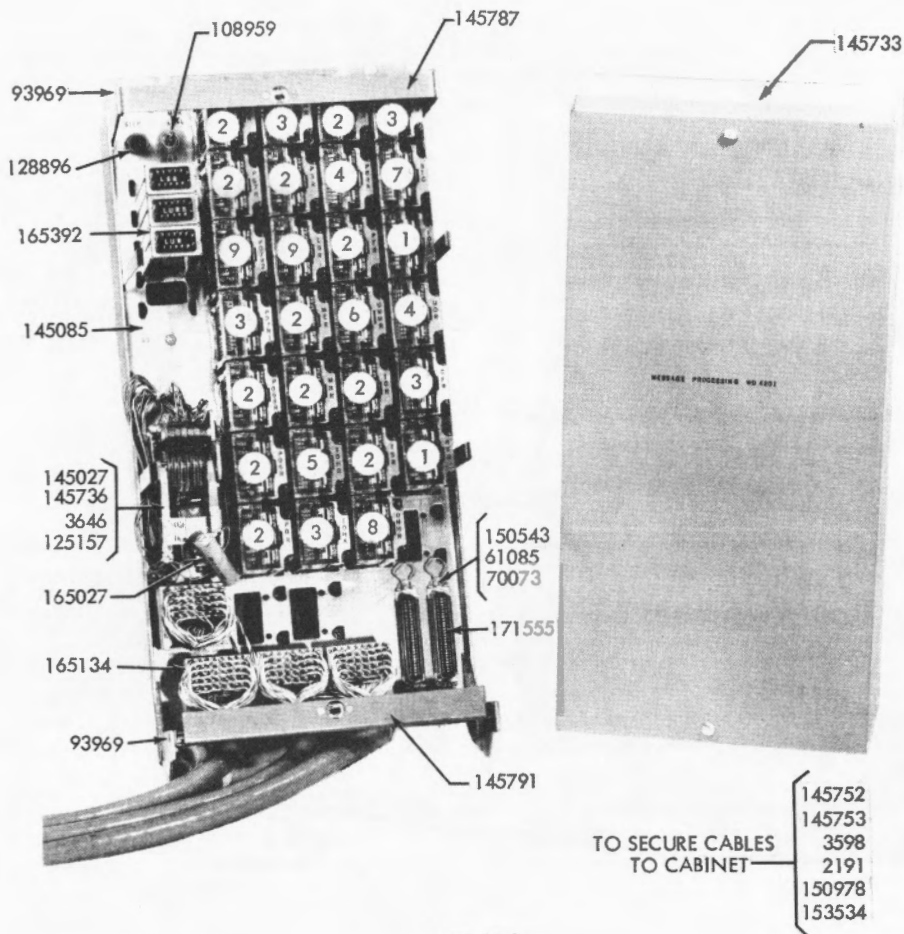


FIGURE 56. 145050 MESSAGE PROCESSING PANEL ASSEMBLY - FRONT VIEW



RELAYS

- | | |
|-----------|-----------|
| 1. 145002 | 5. 145092 |
| 2. 145003 | 6. 145093 |
| 3. 145008 | 7. 171507 |
| 4. 165021 | 8. 165051 |
| | 9. 145349 |

FIGURE 57. 145050 MESSAGE PROCESSING PANEL ASSEMBLY - REAR VIEW

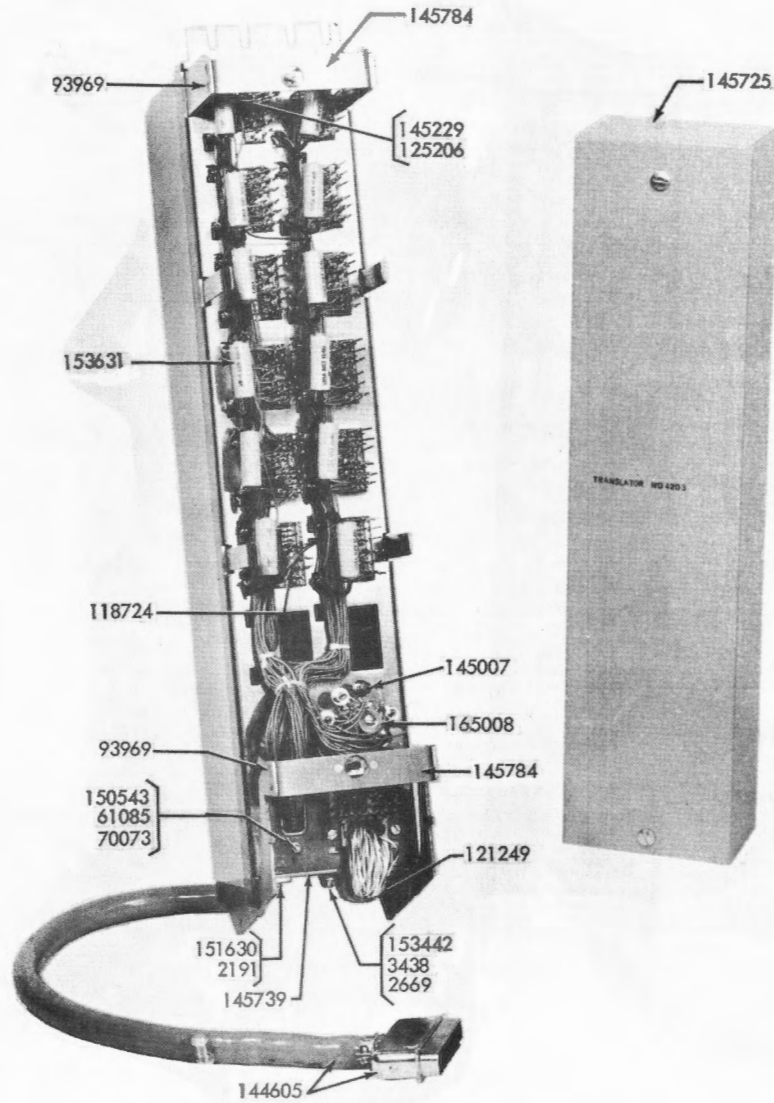
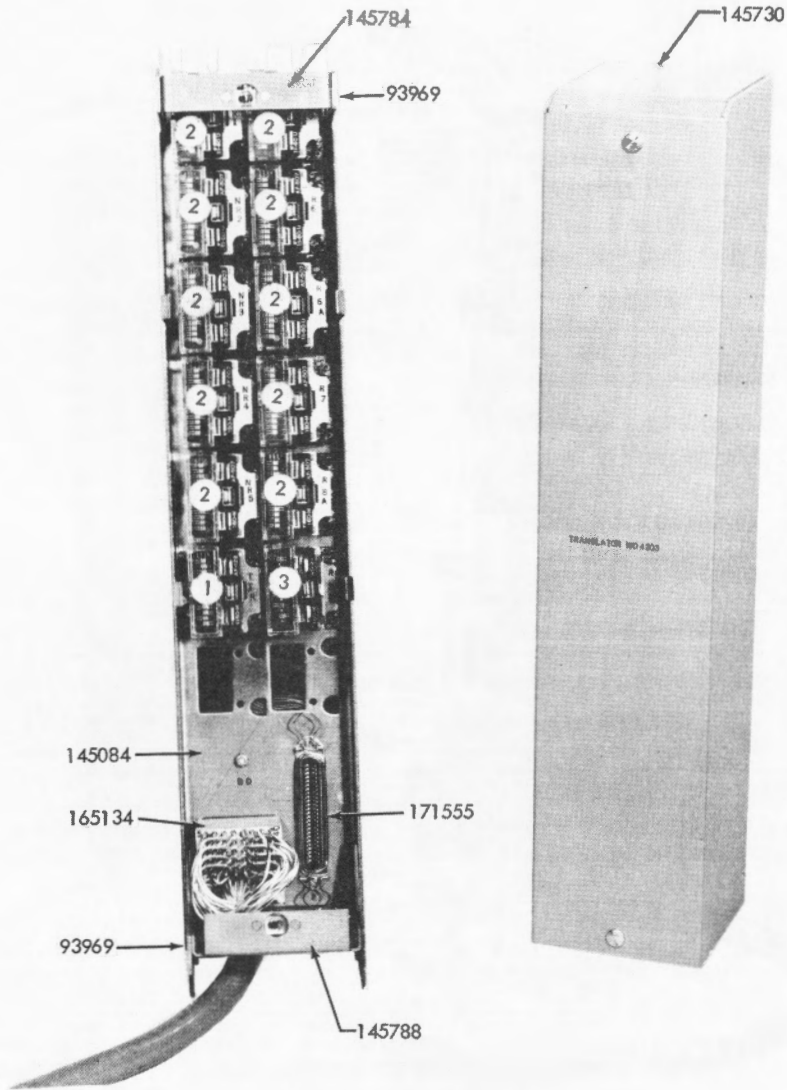


FIGURE 58. 145225 TRANSLATOR PANEL ASSEMBLY - FRONT VIEW



RELAYS

- 1. 145002
- 2. 145008
- 3. 145022

FIGURE 59. 145225 TRANSLATOR PANEL ASSEMBLY - REAR VIEW

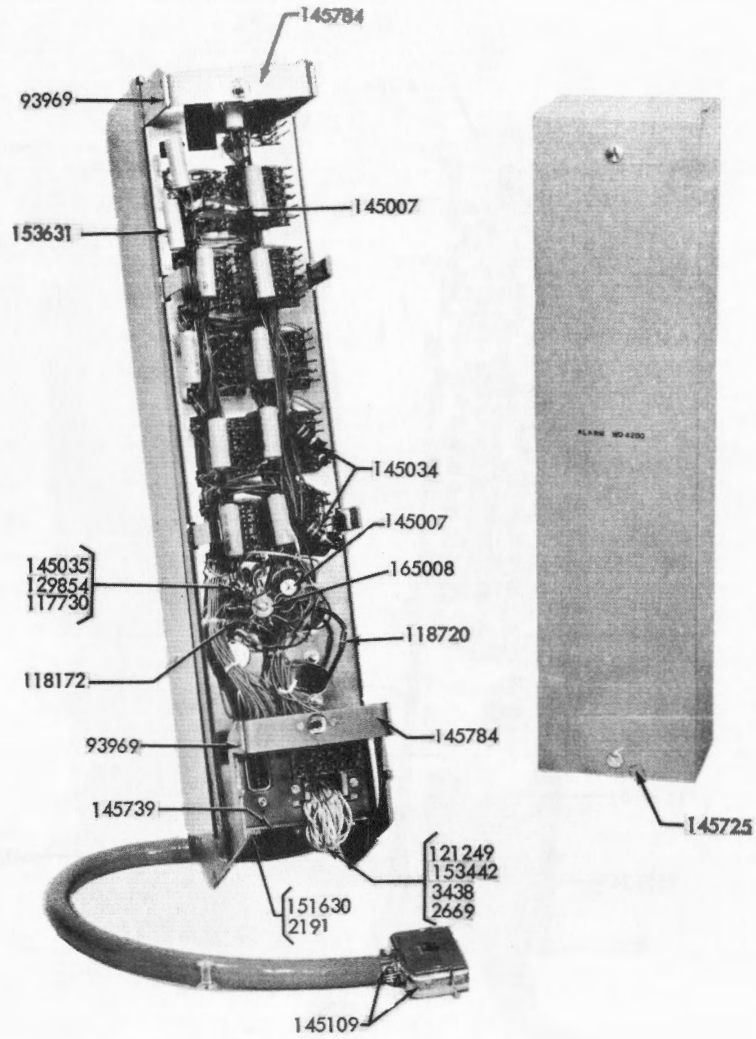


FIGURE 60. 145250 ALARM PANEL ASSEMBLY - FRONT VIEW

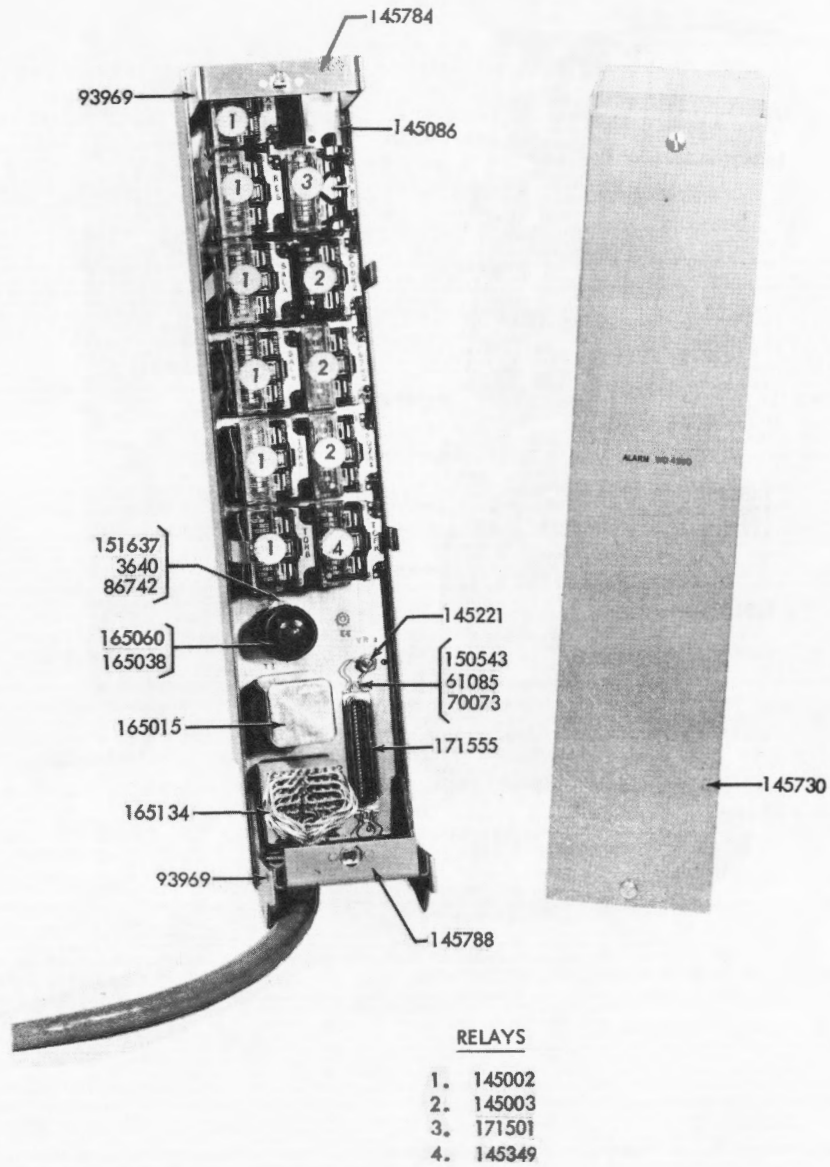


FIGURE 61. 145250 ALARM PANEL ASSEMBLY - REAR VIEW

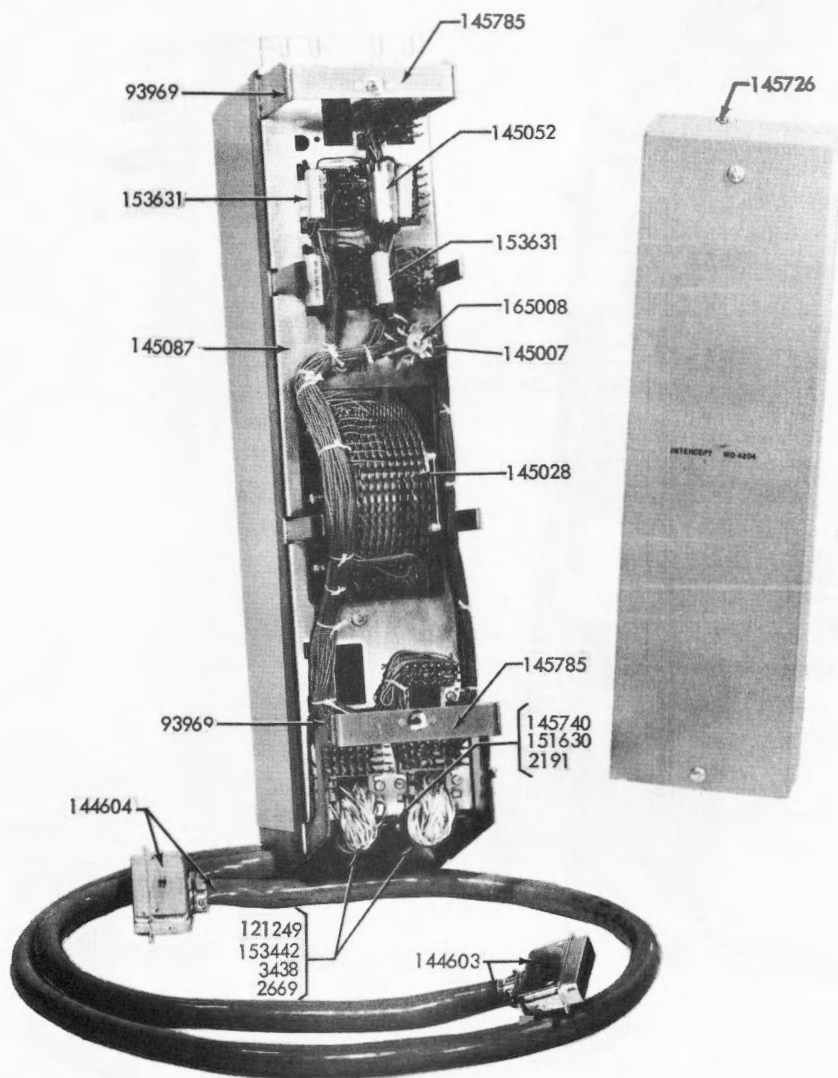
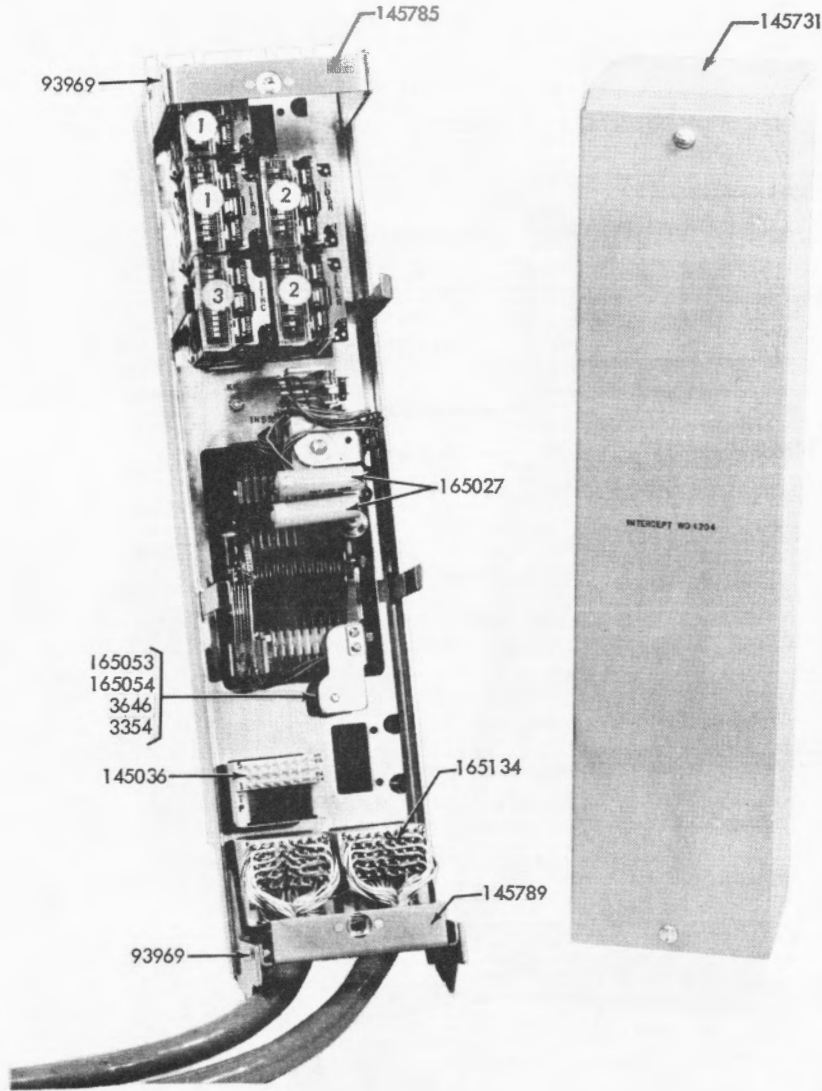


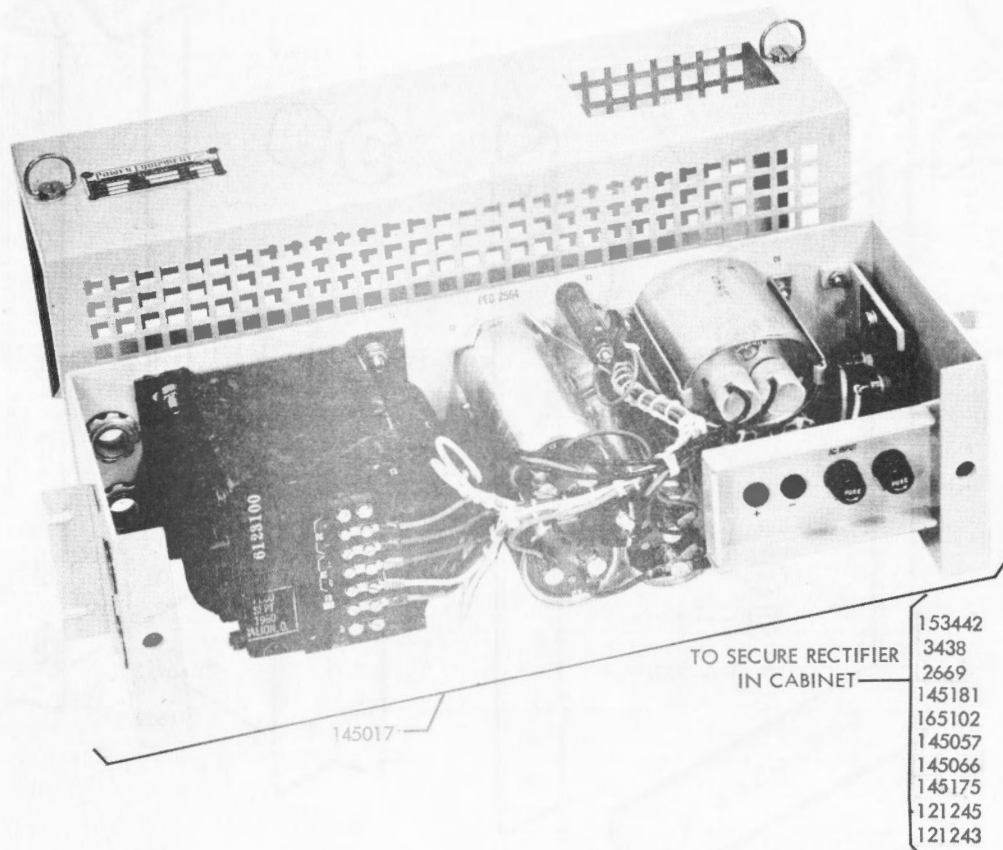
FIGURE 62. 145350 INTERCEPT PANEL ASSEMBLY - FRONT VIEW



RELAYS

- 1. 145002
- 2. 145003
- 3. 145008

FIGURE 63. 145350 INTERCEPT PANEL ASSEMBLY - REAR VIEW



- TO SECURE RECTIFIER
IN CABINET
- 153442
 - 3438
 - 2669
 - 145181
 - 165102
 - 145057
 - 145066
 - 145175
 - 121245
 - 121243

145017

FIGURE 64. 145204 48V D.C. POWER SUPPLY

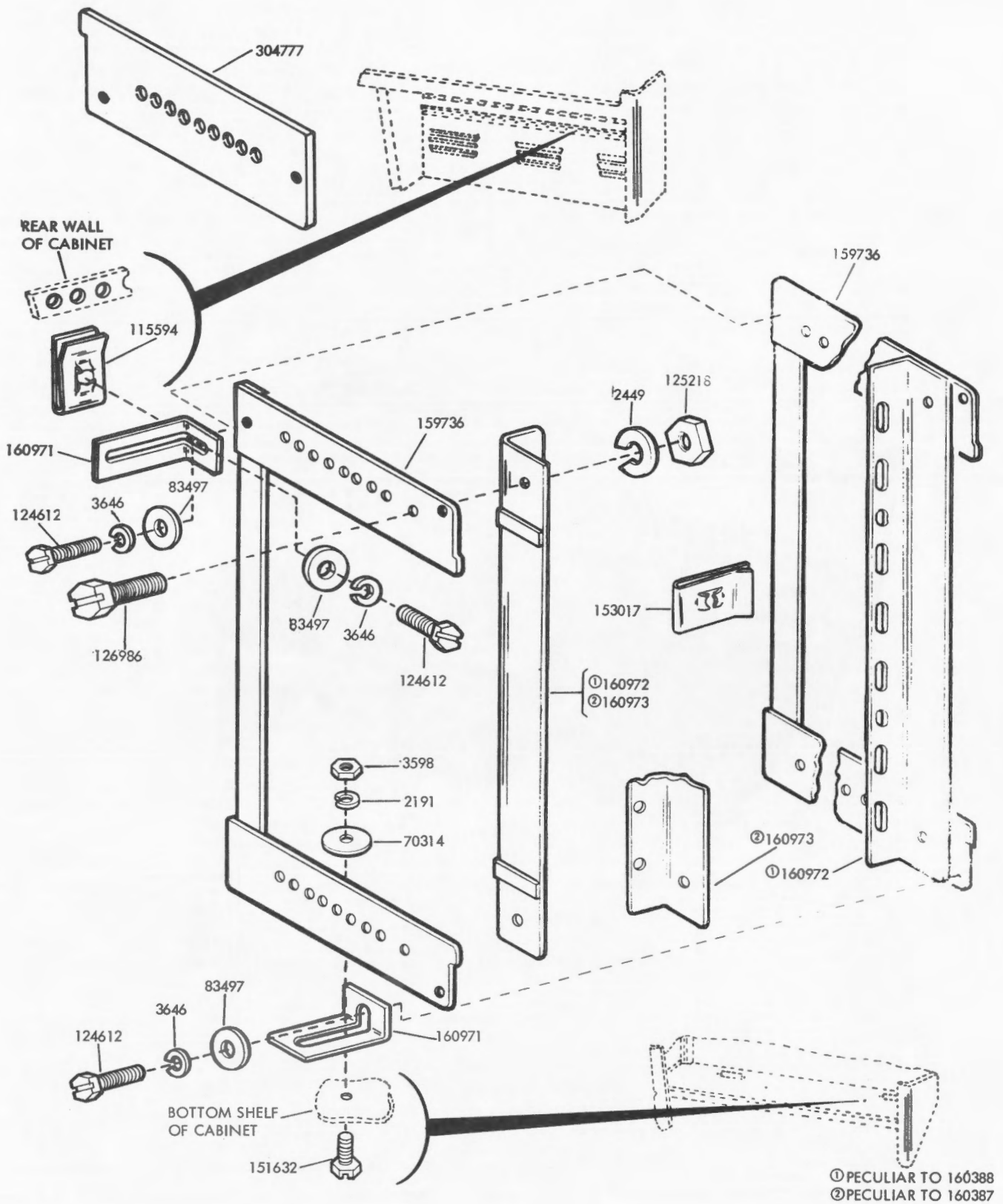
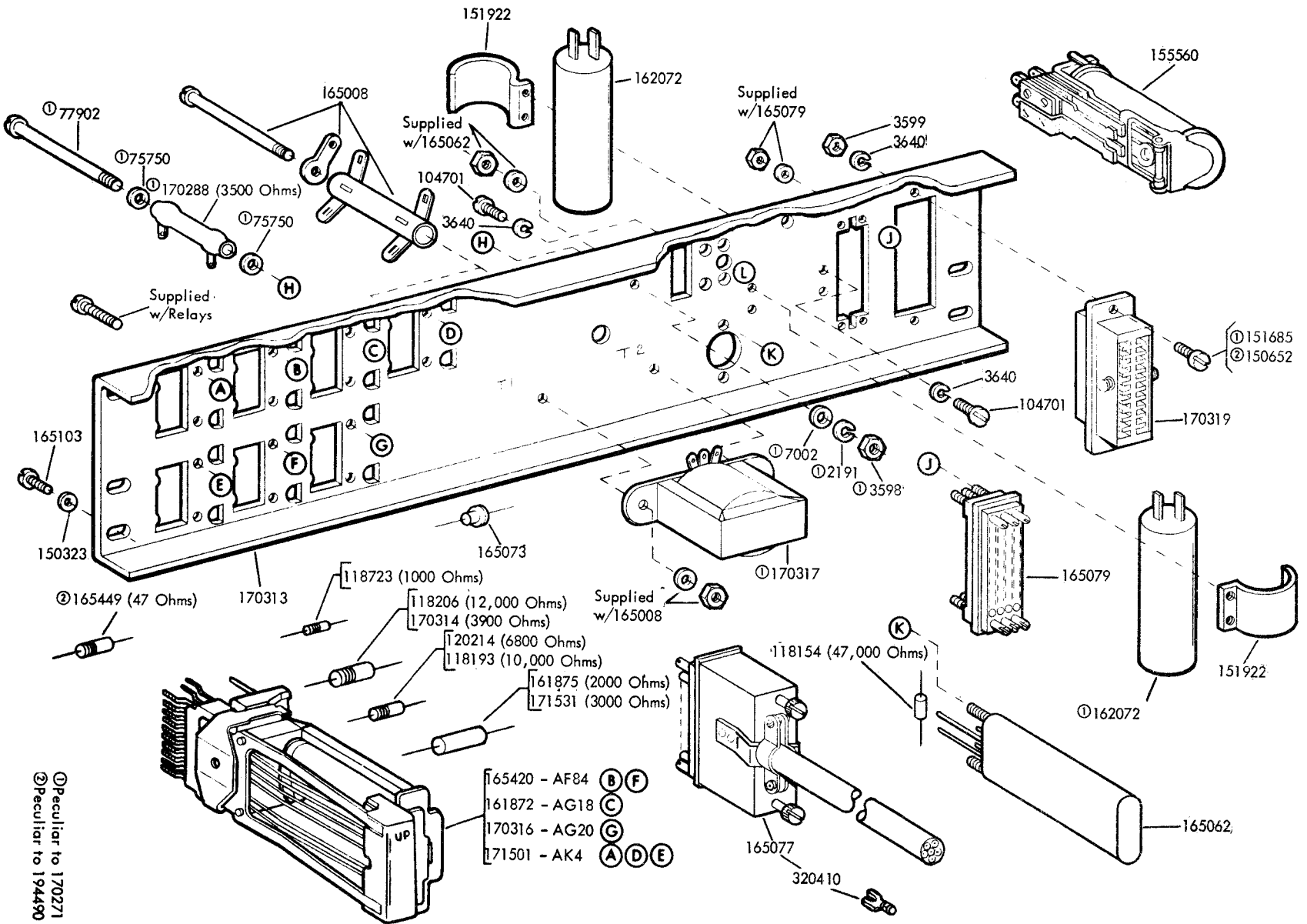


FIGURE 65. 160387 AND 160388 MODIFICATION KITS TO PROVIDE RELAY RACK BRACKETS

FIGURE 66. 170271 AND 194490 MODIFICATION KITS TO TAPE PROGRAMMED RELAY CONTROL



ⓐRegular to 170271
 ⓑRegular to 194490

- ⓐ165420 - AF84 (B, F)
- ⓑ161872 - AG18 (C, G)
- ⓒ170316 - AG20 (C, G)
- ⓓ171501 - AK4 (A, D, E)

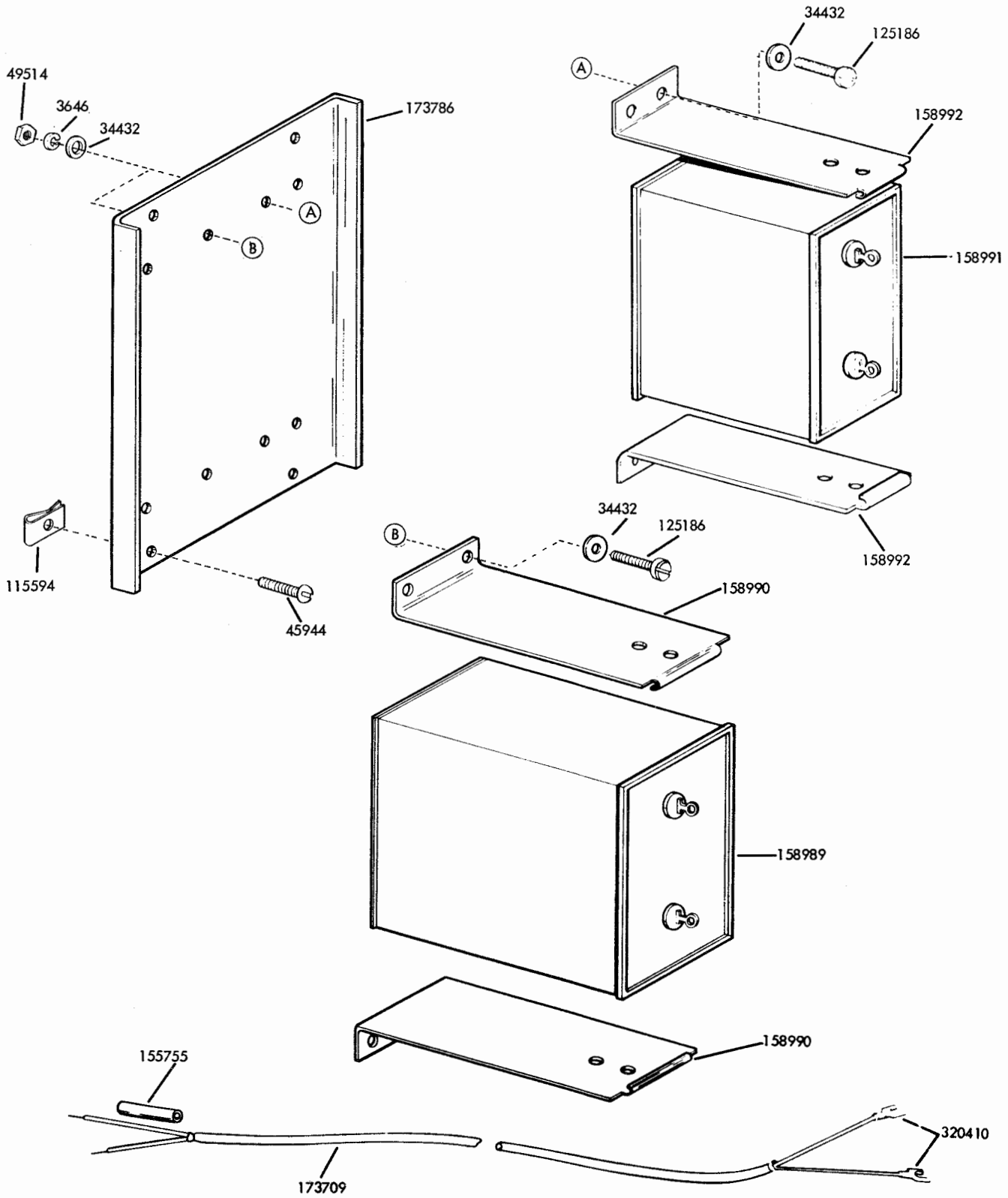


FIGURE 67. 173706 MODIFICATION KIT FOR POWER FACTOR CORRECTION IN CABINET (LAAC)

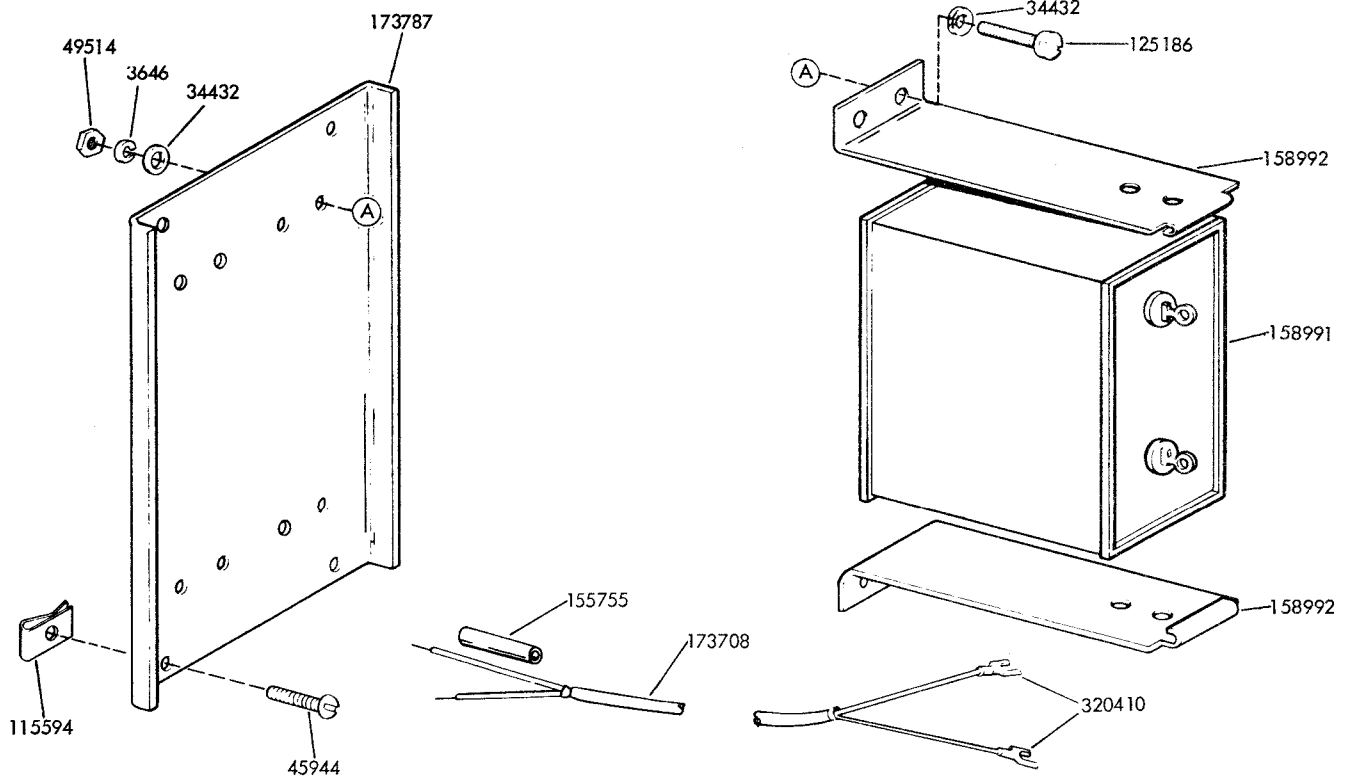


FIGURE 68. 173707 MODIFICATION KIT TO ADD POWER FACTOR CORRECTION TO AUXILIARY REPERFORATOR IN CABINET (LAAC)

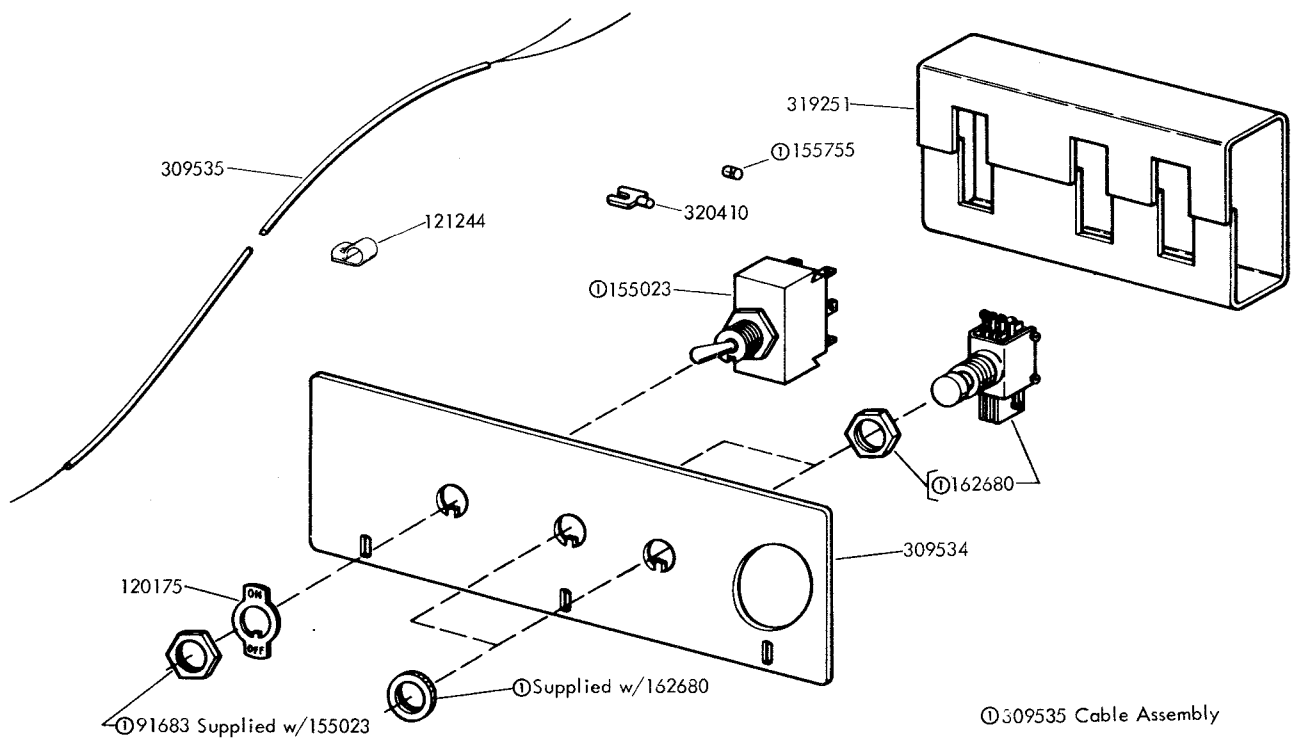
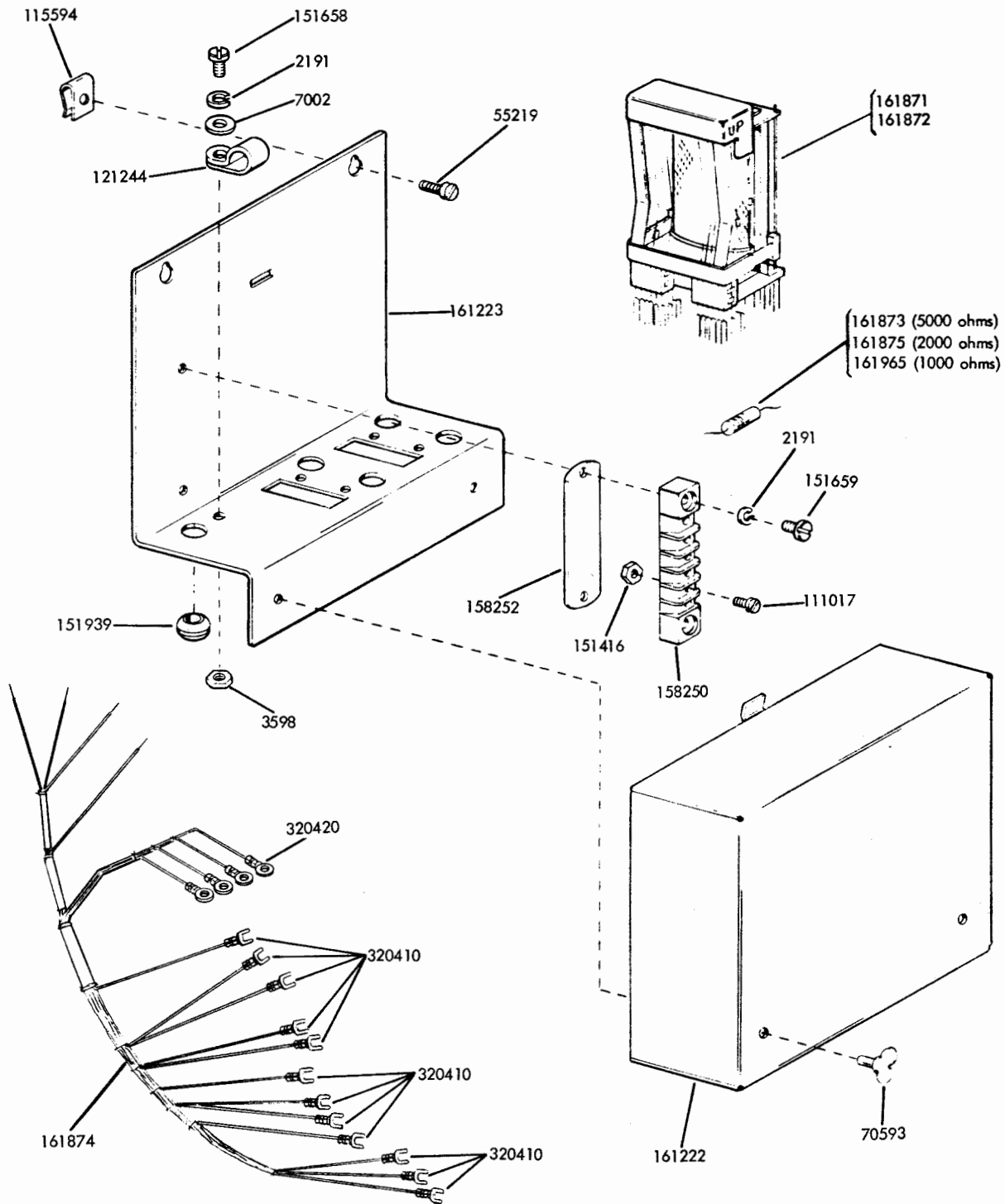


FIGURE 69. 309537 CONTROL PANEL ASSEMBLY



SPECIFICATION 5900S

FIGURE 70. 161302 MODIFICATION KIT TO ADD AUTOMATIC CHARACTER FEED-OUT CIRCUIT TO AN ASR SET

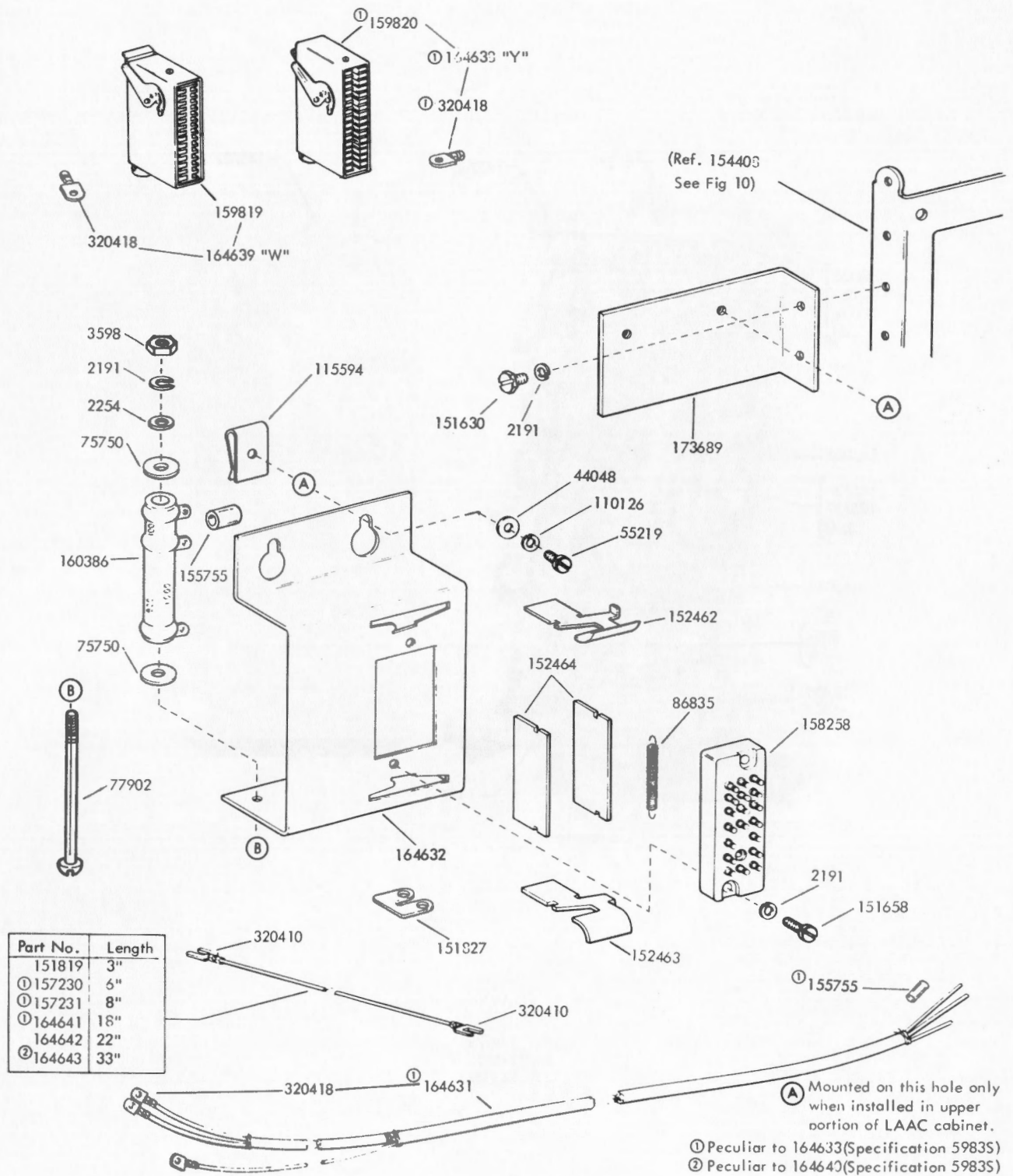
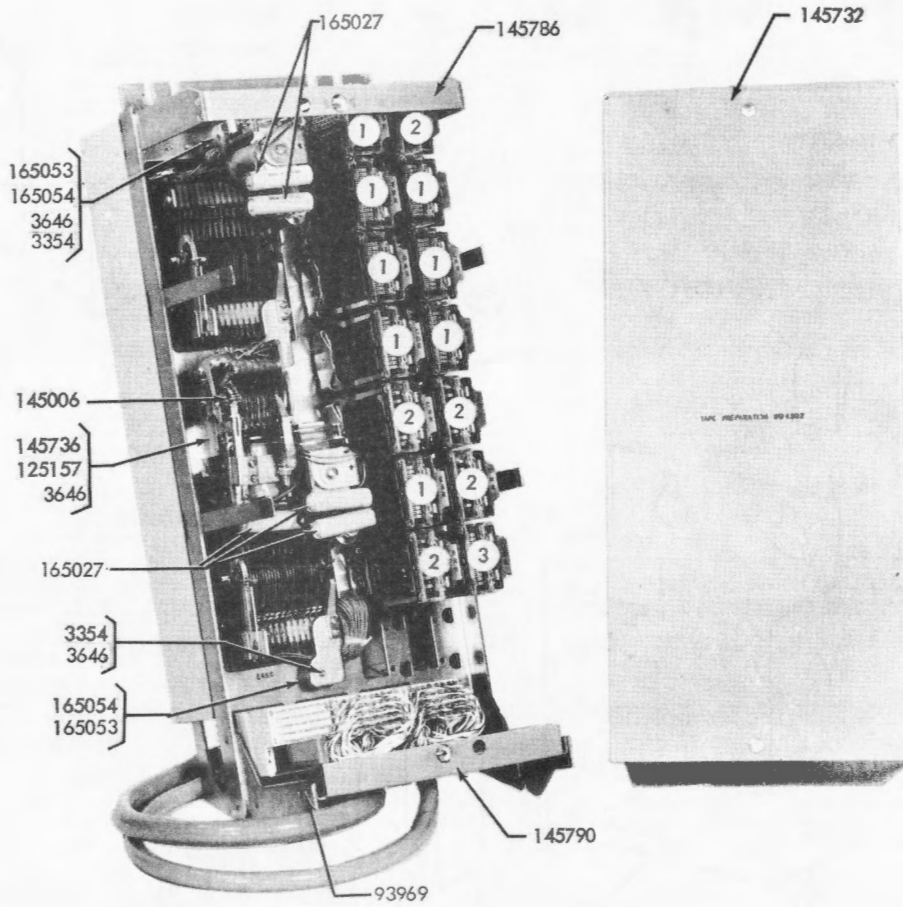


FIGURE 71. 164633 AND 164640 MODIFICATION KITS TO PERMIT LCXD1 AND LAXD3 TRANSMITTER DISTRIBUTORS TO OPERATE WITH LESU13 OR LESU15



RELAYS

- 1. 144979
- 2. 145003
- 3. 145004

FIGURE 72. 145100 TAPE PREPARATION PANEL ASSEMBLY-REAR VIEW

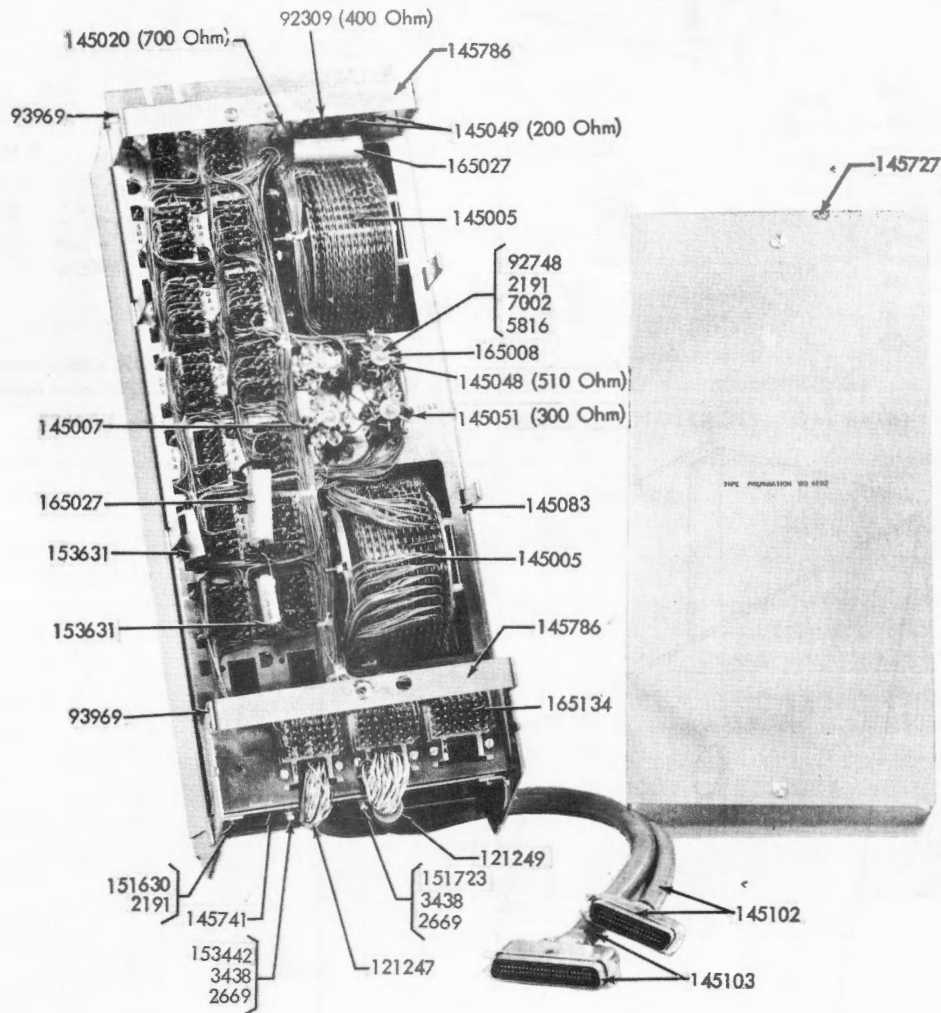


FIGURE 73. 145100 TAPE PREPARATION PANEL ASSEMBLY-FRONT VIEW

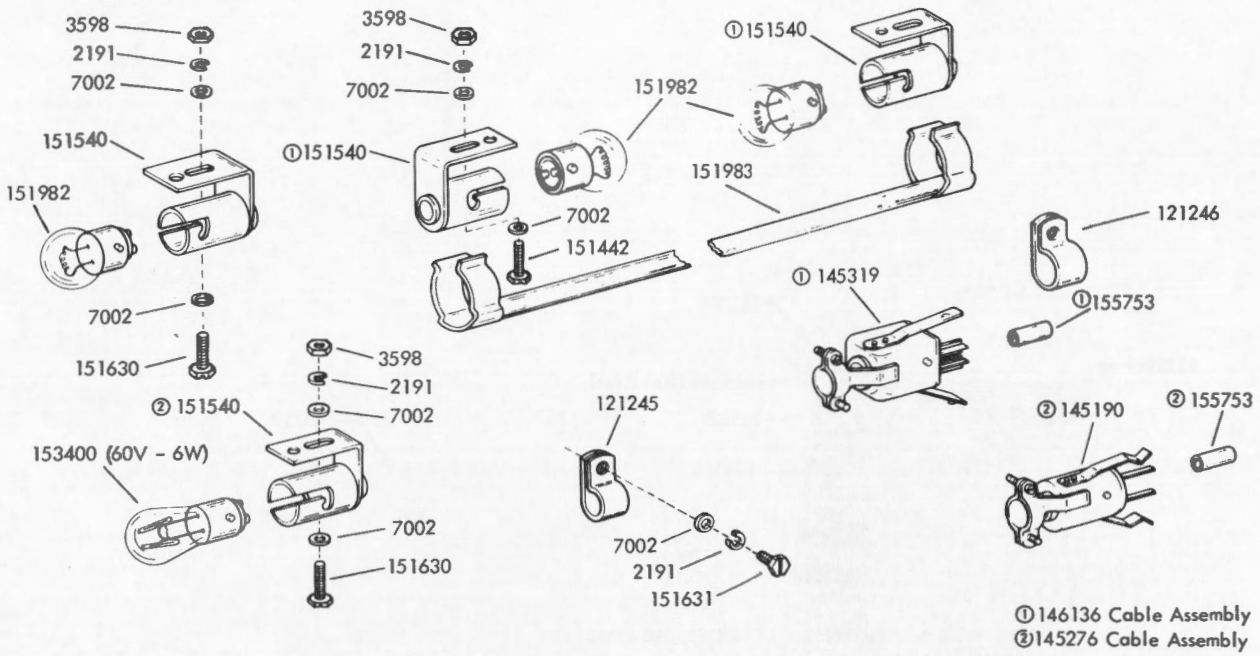


FIGURE 74. 146140 MODIFICATION KIT TO ADD COPYLIGHTS AND GUARD LAMPS

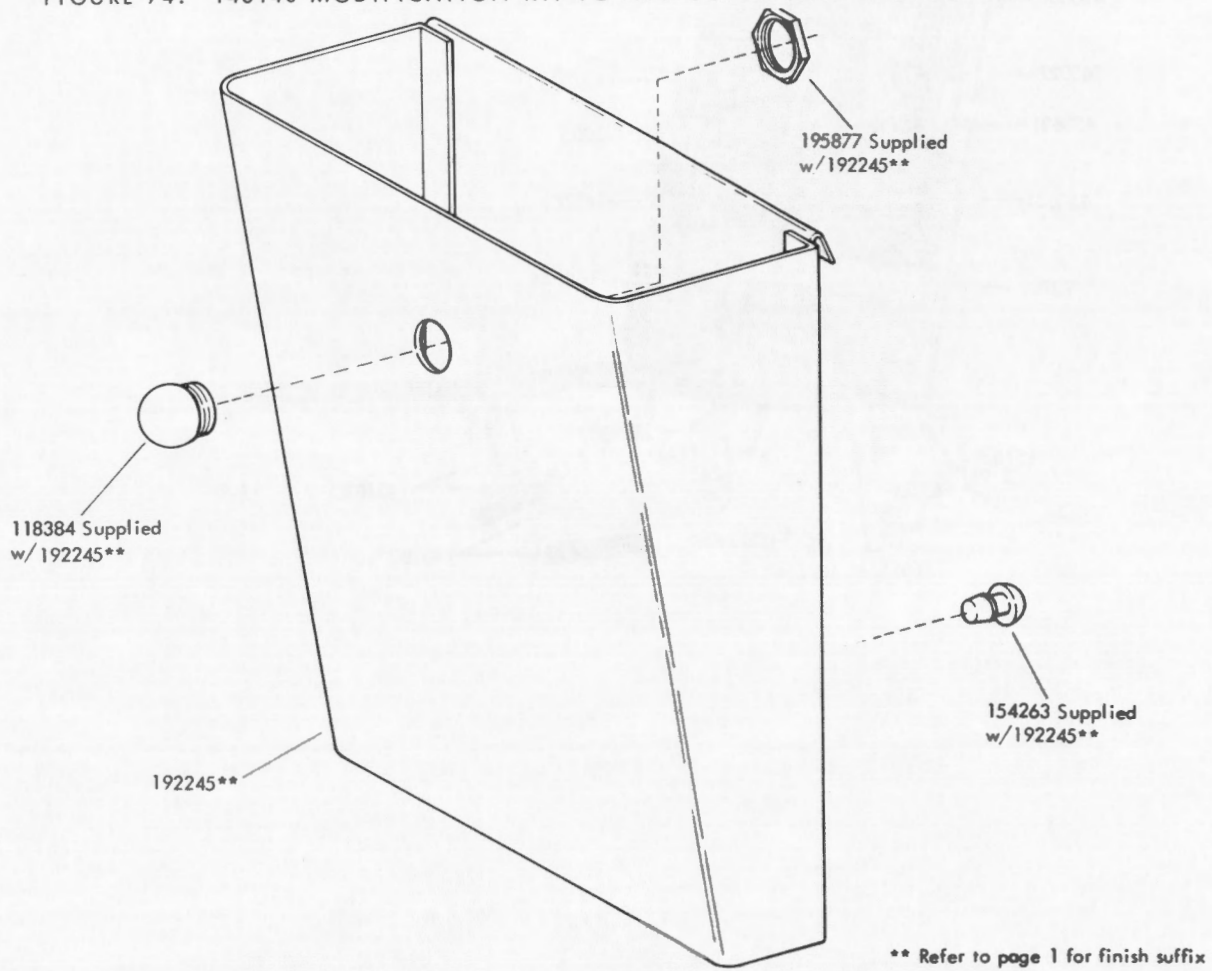
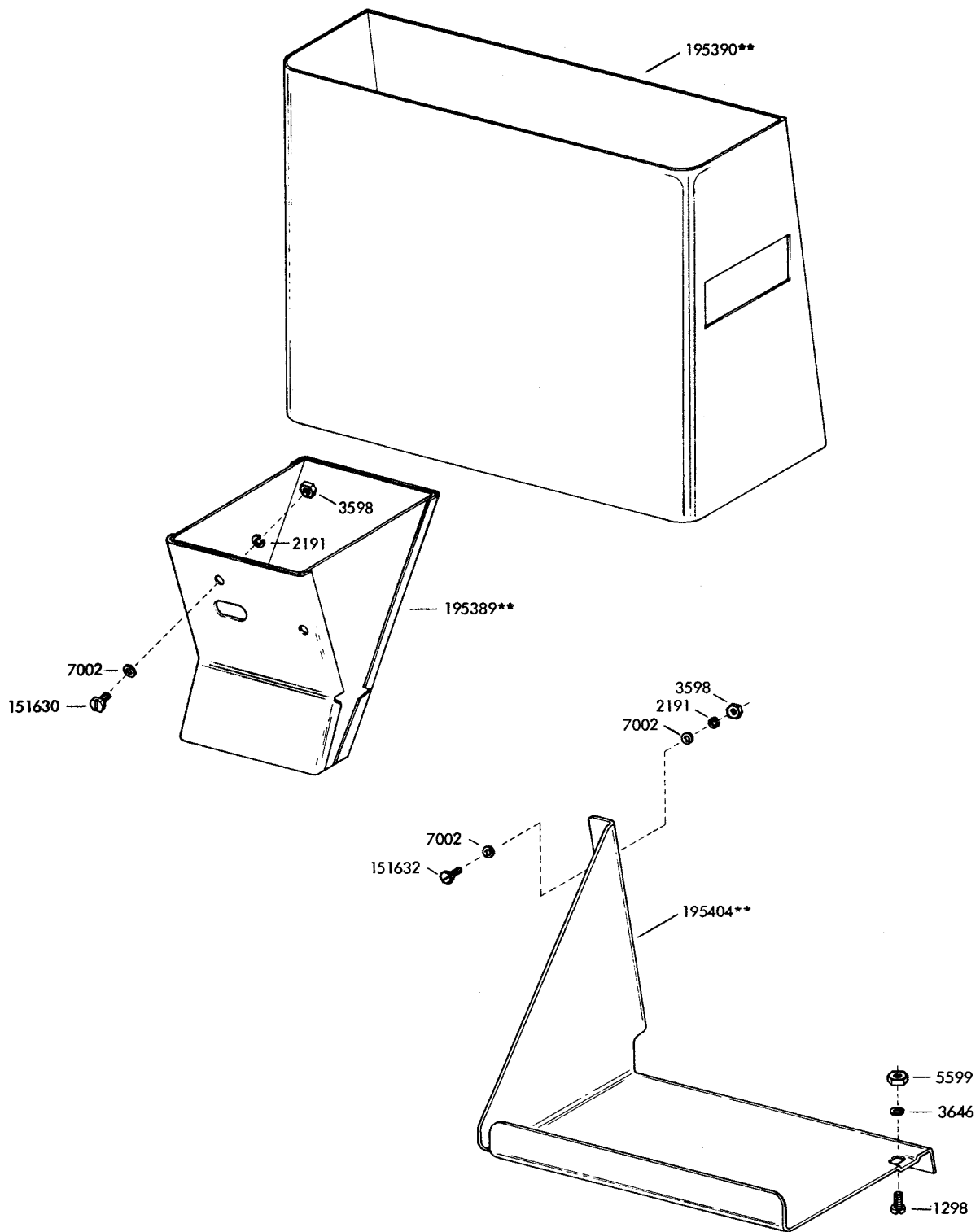


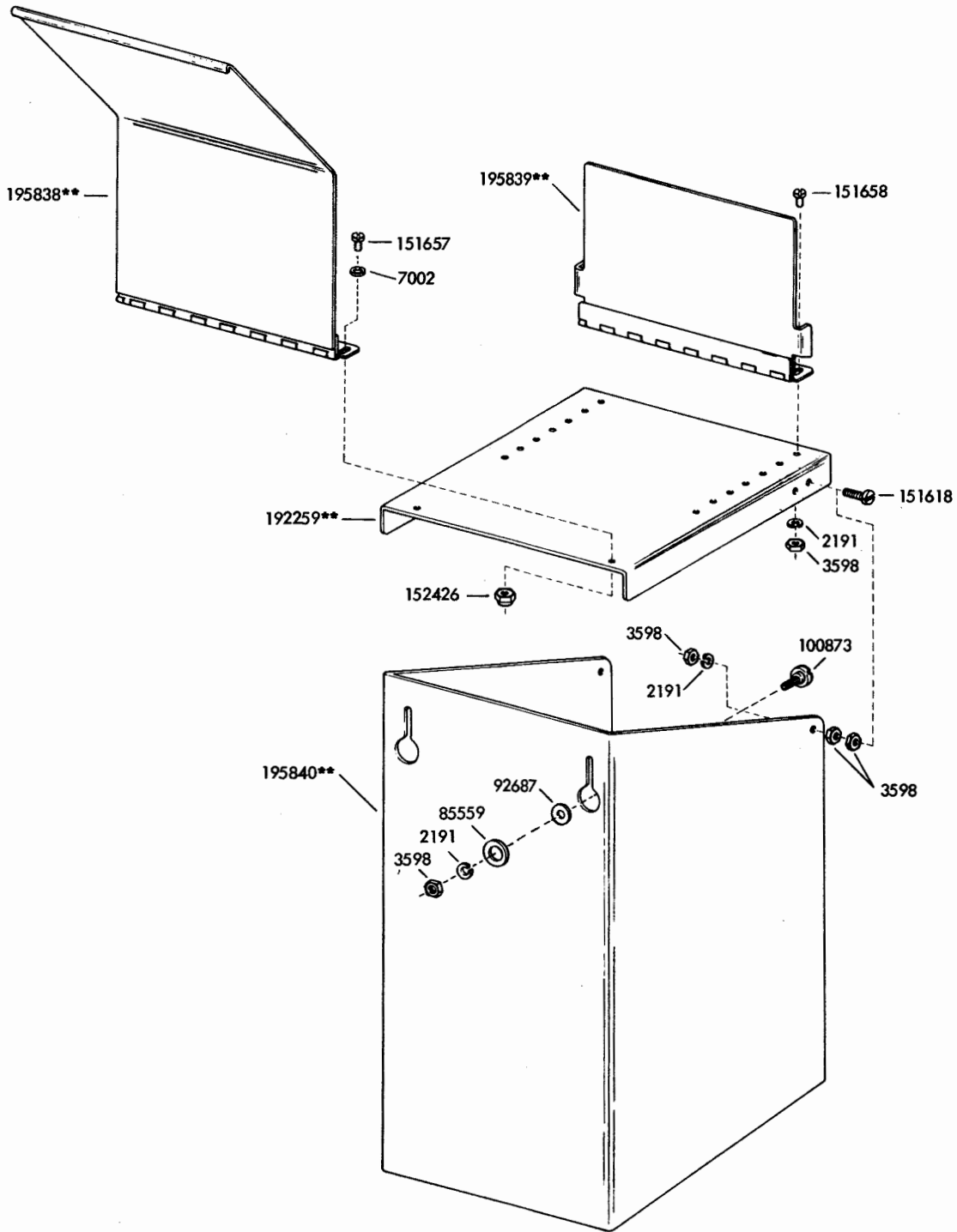
FIGURE 75. 192245** CHAD CONTAINER W/LENS



Specification 500015

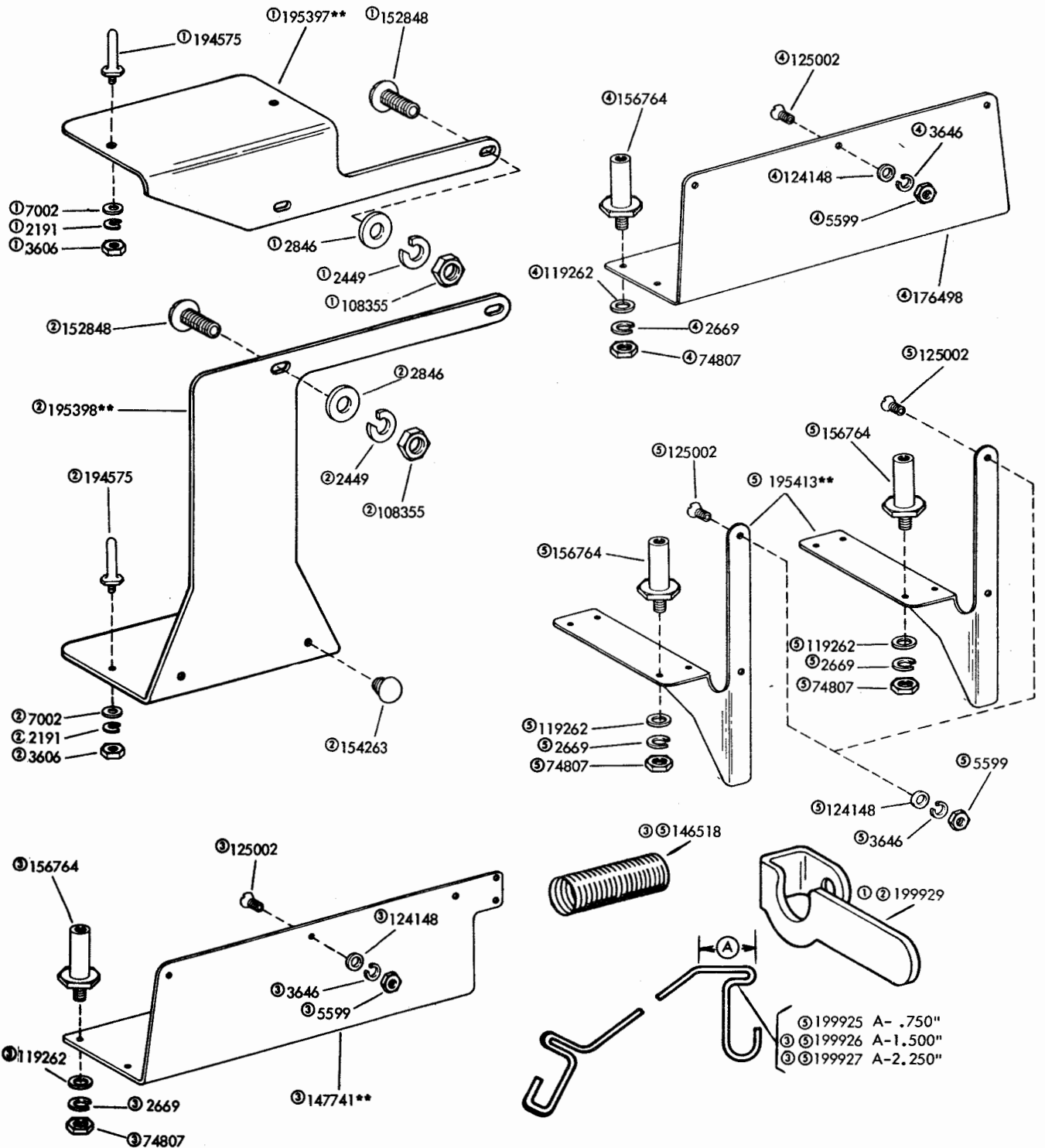
** Refer to page 1 for finish suffix

FIGURE 76. 195391** MODIFICATION KIT TO ADD CHAD CONTAINER FOR THE AUXILIARY AND/OR KEYBOARD REPERFORATOR



** Refer to page 1 for finish suffix

FIGURE 77. 195837** MODIFICATION KIT TO PROVIDE PAPER SUPPLY ACCUMULATING SHELF



**Refer to page 1 for finish suffix

- ① 195104** Modification Kit (Single Reel) Specification 503145
- ② 195107 Modification Kit (Single Reel) Specification 503235
- ③ 147720** Modification Kit (Double Reel) Specification 504155
- ④ 194856 Modification Kit (Single Reel) Specification 502105
- ⑤ 195106 Modification Kit (Three Reel) Specification 502725

FIGURE 78. MODIFICATION KITS TO PROVIDE MOUNTING SHELF FOR SINGLE, DOUBLE OR THREE REEL RIM DRIVEN TAPE WINDER

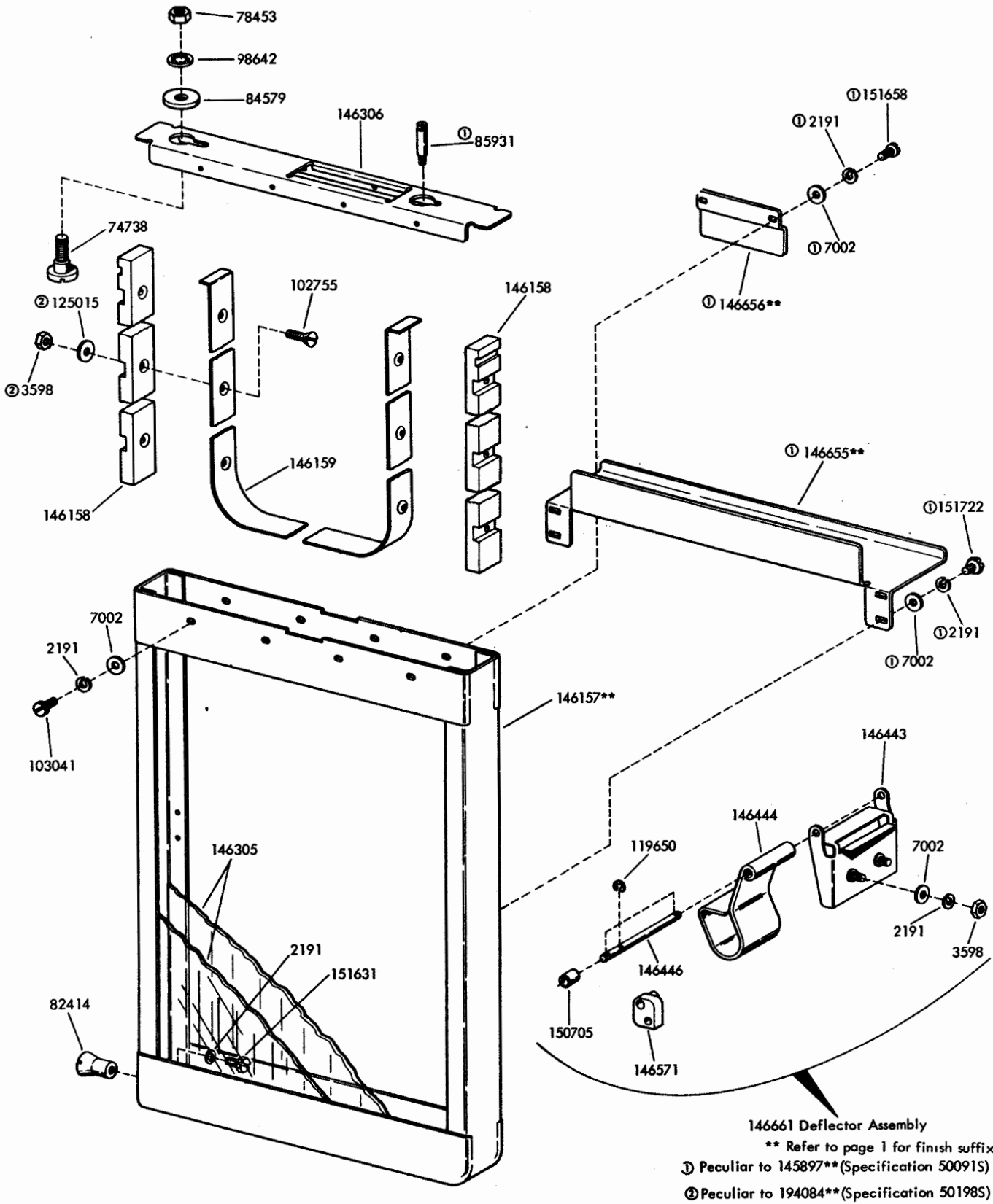
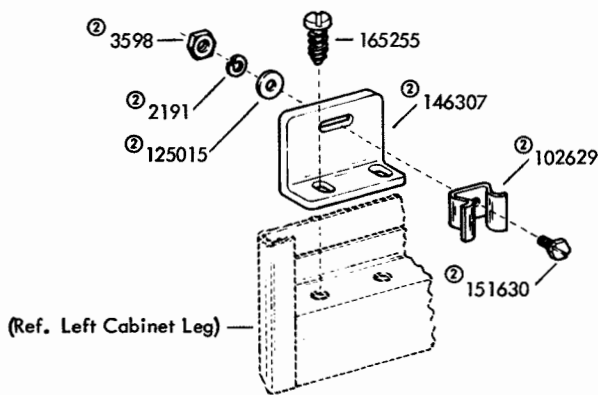
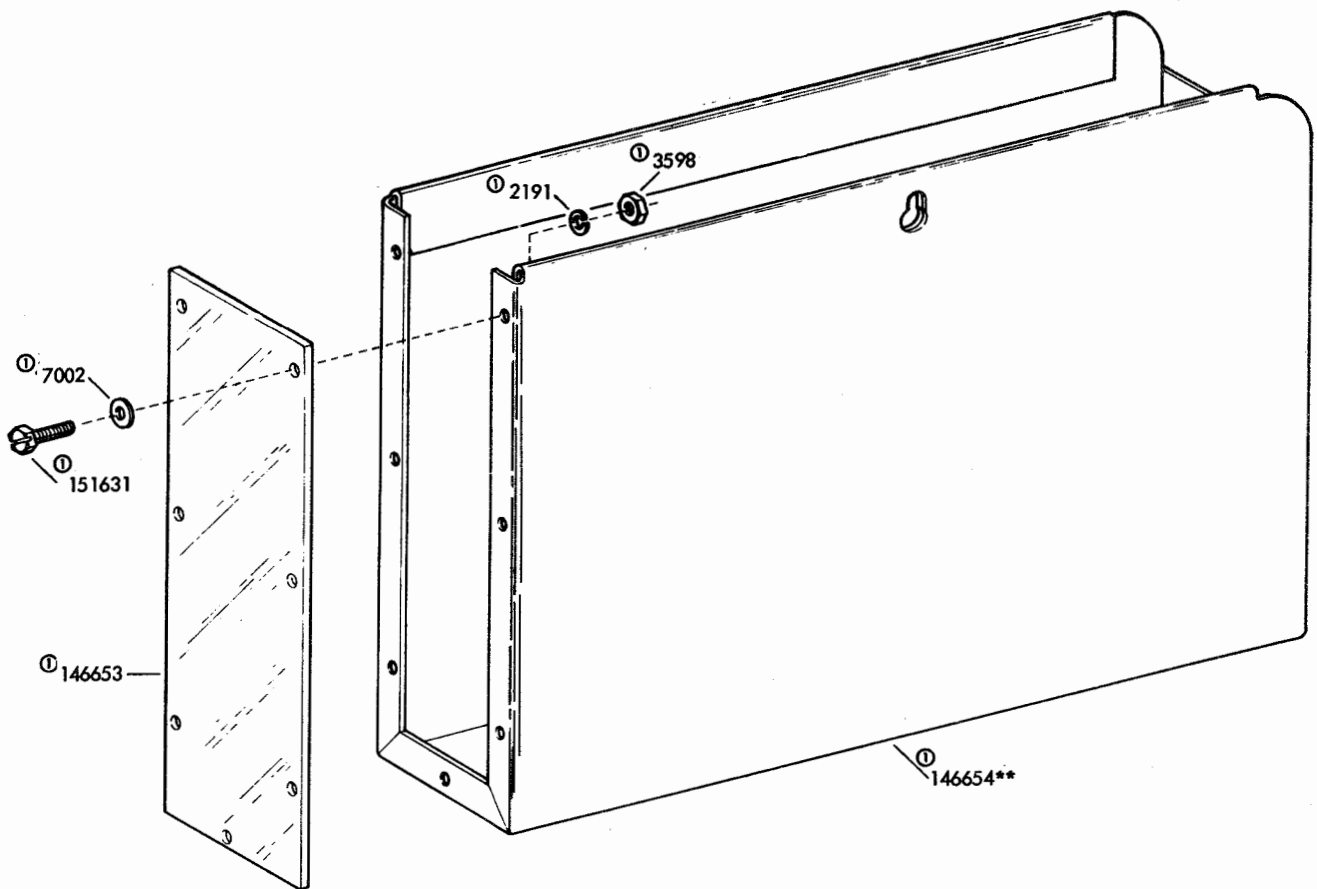


FIGURE 79. 145897** (W/CHAD BOX) AND 194084** MODIFICATION KITS TO ADD TAPE BIN TO CABINET (FOR CHAD BOX, SEE FIGURE 80)



- ① 146660** Chad Box Assembly
- ② 146659 Bracket Assembly

** Refer to page 1 for finish suffix

FIGURE 80. 146660** CHAD BOX ASSEMBLY (PART OF 145897** SEE FIGURE 79.)

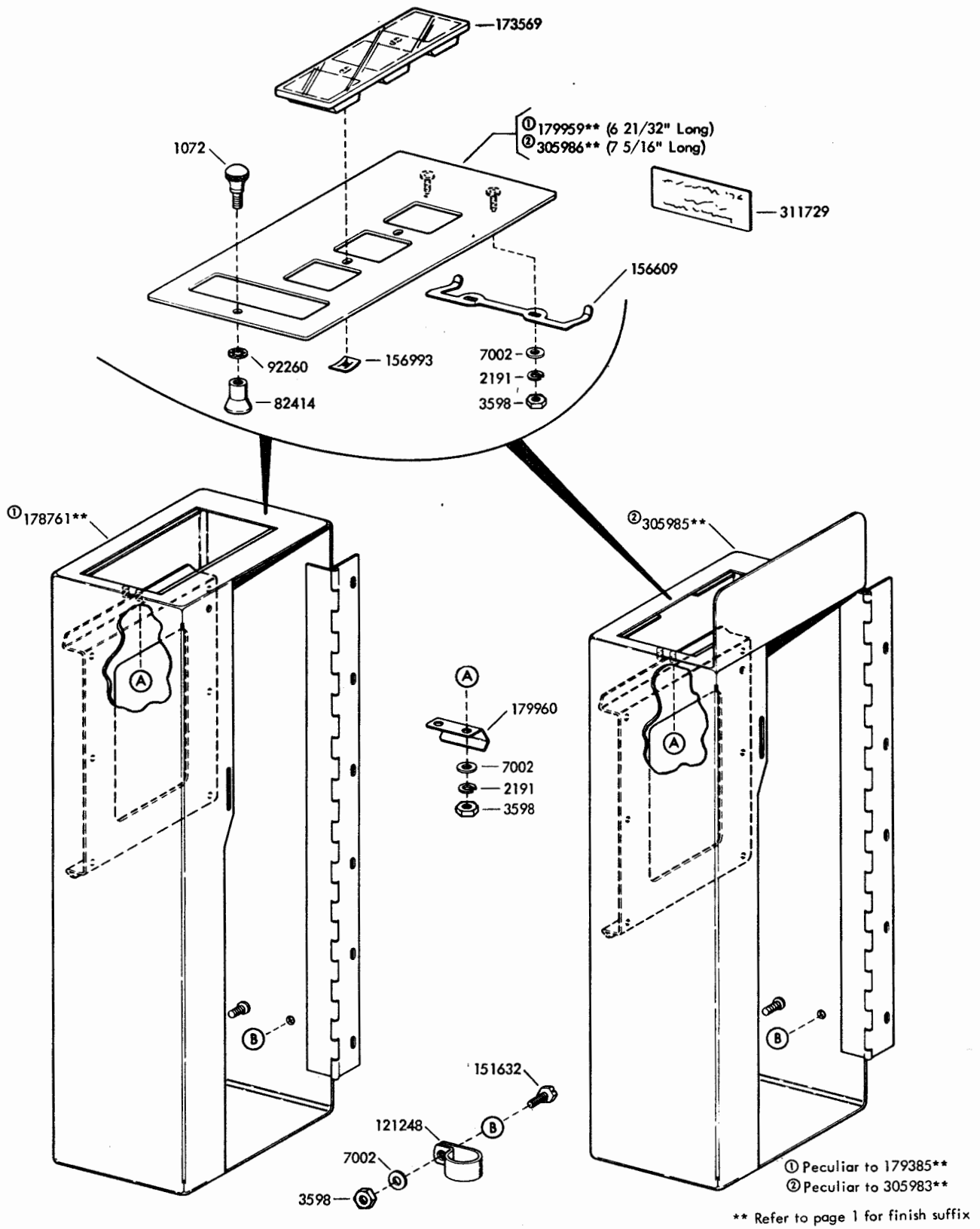


FIGURE 81. 179385** AND 305983** TAPE WINDER-MODULE UNIT DOOR ASSEMBLY

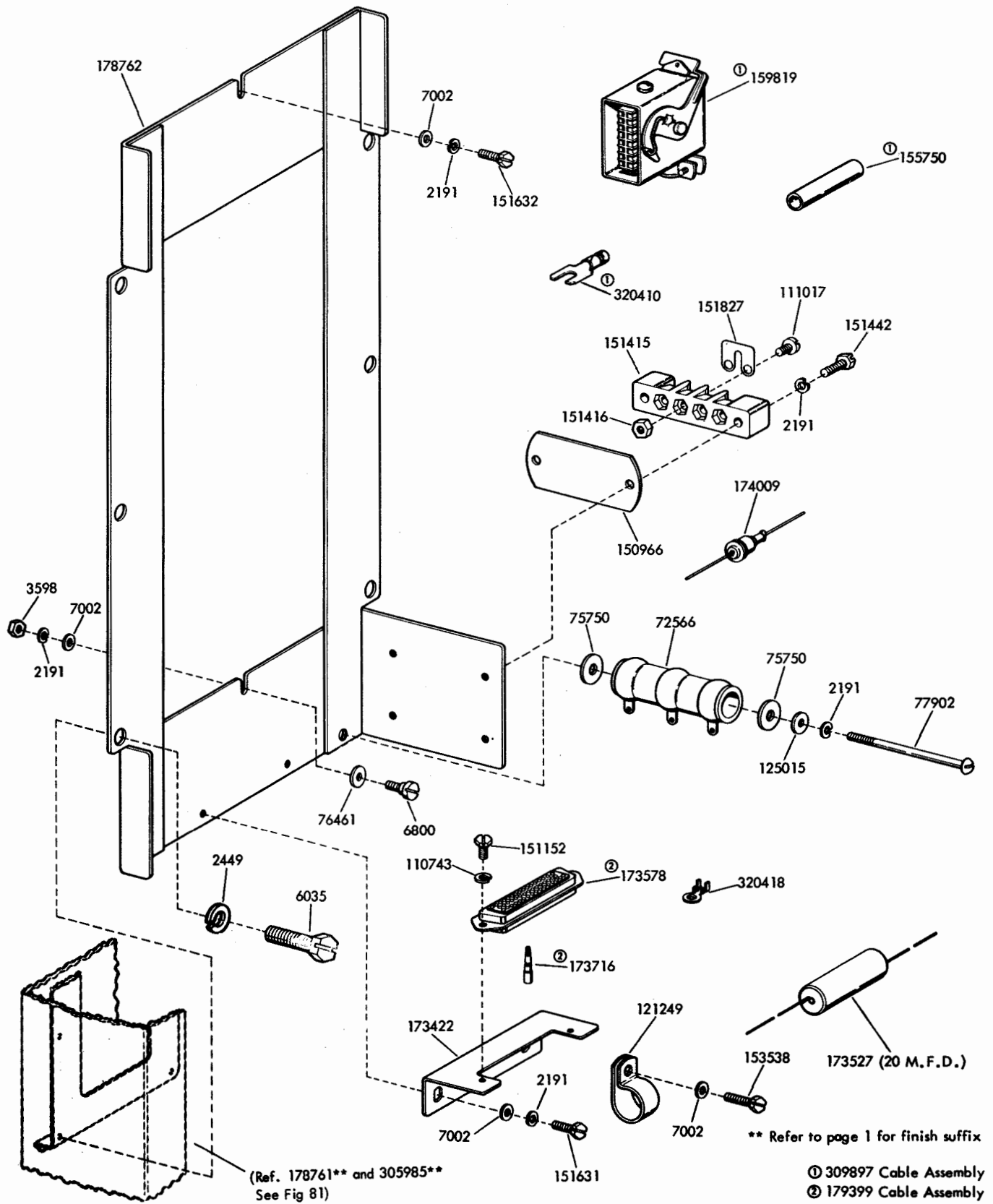


FIGURE 82. 179416 MODIFICATION KIT FOR MOUNTING NUMBERING MODULE

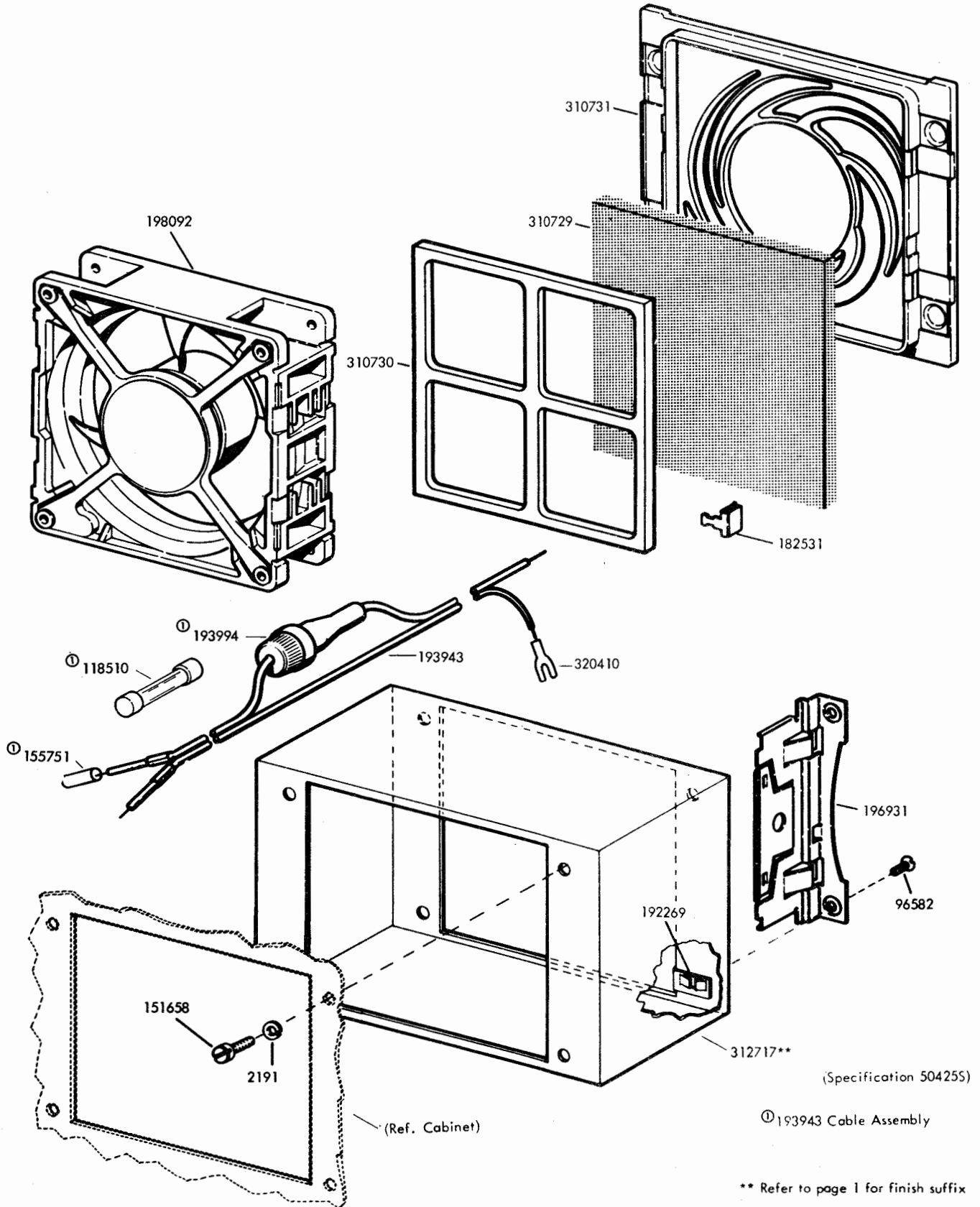


FIGURE 83. 312719** MODIFICATION KIT TO PROVIDE FORCED VENTILATION FOR CABINET

MODIFICATION KITS

MODIFICATION KIT NUMBER	PART NUMBER	DESCRIPTION	QUANTITY	FIGURE NUMBER	SPECIFICATION NUMBER
160887**		MODIFICATION KIT TO ADAPT A MODEL 28 CABINET (LAAC209**) FOR USE WITH A TRANSMITTER DISTRIBUTOR (LXD)			5885S
	2191	Washer, Lock	10	16	
	3598	Nut, 6-40 Hex	6	16	
	7002	Washer, Flat	10	16	
	82730	Screw, 10-32 Shoulder	1	16	
	151631	Screw, 6-40 x 5/16 Hex	2	16	
	151693	Screw, 6-40 x 9/16 Fil	2	16	
	154485**	Housing	1	16	
	154486	Spring, Detent	2	16	
	154487**	Plate	1	16	
	154490**	Bar, Left Side Cross	1	16	
	154492	Plate, Nut	1	16	
	160291	Plate	1	16	
160888**		MODIFICATION KIT TO ADAPT A MODEL 28 CABINET (LAAC209**) FOR USE WITH A TRANSMITTER DISTRIBUTOR (LBXD)			5885S
	2191	Washer, Lock	10	16	
	3598	Nut, 6-40 Hex	6	16	
	7002	Washer, Flat	10	16	
	82730	Screw, 10-32 Shoulder	1	16	
	151631	Screw, 6-40 x 5/16 Hex	2	16	
	151693	Screw, 6-40 x 9/16 Fil	2	16	
	151827	Strap, Terminal	9	15	
	154486	Spring, Detent	1	16	
	154492	Plate, Nut	1	16	
	159394	Modification Kit	1	15	
	160286**	Bar, Cross	1	16	
	160290**	Plate	1	16	
	160291	Plate	1	16	
	160293**	Cover	1	16	
	160372	Cable Assembly	1		
	160976	Spring, Detent	1	16	
160889**		MODIFICATION KIT TO ADAPT A MODEL 28 CABINET (LAAC210**) FOR USE WITH A TRANSMITTER DISTRIBUTOR (LCXD)			5885S
	1253	Screw, 8-32 x 3/8 RD	2	16	
	2191	Washer, Lock	15	2, 3, 16	
	3598	Nut, 6-40 Hex	3	16	
	6344	Screw, 6-32 x 11/32 Hex	2	3	
	7002	Washer, Flat	13	2, 16	
	82730	Screw, 10-32 Shoulder	1	16	
	111017	Screw, 6-40 x 5/16 Fil	4	16	
	115594	Nut, Speed	2	16	
	151631	Screw, 6-40 x 5/16 Hex	2	16	
	151657	Screw, 6-40 x 1/4 Fil	2	2	
	151693	Screw, 6-40 x 9/16 Fil	2	16	
	154492	Plate, Nut	1	16	
	158645**	Bar, Cross	1	16	
	158646	Bracket, Mounting	1	16	
	158648	Chute, Tape	1	2	
	158683**	Bracket, Housing	1	16	
	158684**	Cover	1	16	
	158685**	Housing	1	16	
	158686**	Plate	1	16	
	158697	Plate, Designation	1	3	

**Refer to page 1 for finish suffix

MODIFICATION KITS (Continued)

MODIFICATION KIT NUMBER	PART NUMBER	DESCRIPTION	QUANTITY	FIGURE NUMBER	SPECIFICATION NUMBER
160890**		MODIFICATION KIT TO ADAPT A MODEL 28 CABINET (LAAC310**) FOR USE WITH A TRANSMITTER DISTRIBUTOR (LAXD)			5885S
	1253	Screw, 8-32 x 3/8 RD	2	16	
	2191	Washer, Lock	6	2, 3, 16	
	6344	Screw, 6-32 x 11/32 Hex	2	3	
	7002	Washer, Flat	4	2, 16	
	82730	Screw, 10-32 Shoulder	1	16	
	115594	Nut, Speed	2	16	
	151631	Screw, 6-40 x 5/16 Hex	2	16	
	151657	Screw, 6-40 x 1/4 Fil	2	2	
	154492	Plate, Nut	1	16	
	158646	Bracket Mounting	1	16	
	158648	Chute, Tape	1	2	
	158693**	Bar, Cross	1	16	
	158697	Plate, Designation	1	3	
162234**		MODIFICATION KIT TO ADD TAPE STORAGE AND TAPE WINDING FACILITIES TO LAAC209** CABINET			5908S
	1253	Screw, 8-32 x 3/8 RD	9	3, 8	
	2191	Washer, Lock	14	2, 3, 8	
	2669	Washer, Lock	4	3	
	3598	Nut, 6-40 Hex	6	3, 8	
	3639	Washer, Lock	10	3, 28	
	7002	Washer, Flat	14	2, 3, 8	
	8333	Screw, 10-32 x 3/8 RD	4	3	
	84579	Washer, Flat	4	3	
	103387	Catch	1	3	
	111017	Screw 6-40 x 5/16 Fil	6	3, 8	
	112626	Nut, 16-32 Hex	12	3, 28	
	115593	Screw, 10-32 Self-Tapping	9	3	
	115594	Nut, Speed	5	3, 8	
	116783	Holder, Fuse	1	8	
	117535	Washer, Flat	11	3, 8, 28	
	120557	Washer, Flat	9	3	
	121005	Screw, #6 x 3/8 Self-Tapping	2	2	
	121243	Clamp, 3/16 ID Cable	4	3, 8	
	123969	Holder, Cable	1	3	
	125014	Washer, Flat	4	3	
	139158	Connector, Duplex Receptacle	1	8	
	151572	Washer, Lock	1		
	151657	Screw, 6-40 x 1/4 Fil	7	3, 8	
	157215	Mount, Vibration	4	3	
	158637	Screw, 10-32 Thumb	1	28	
	158652	Nut, Speed	2	2	
	158660**	Door Assembly, Tapewinder	1	3	
	158663	Stud	2	3, 28	
	158664	Bracket	1	3	
	158665**	Partition	1	3	
	158666**	Box, Outlet	1	8	
	158667	Tray, Tapewinder	1	3	
	158669	Stud	4	3	
	158671	Connector, 3PT Receptacle	1	8	
	159329	Cable	1	8	
	162243**	Bin Assembly, Tape	1	28	

**Refer to page 1 for finish suffix

MODIFICATION KITS (Continued)

MODIFICATION KIT NUMBER	PART NUMBER	DESCRIPTION	QUANTITY	FIGURE NUMBER	SPECIFICATION NUMBER
162235**		MODIFICATION KIT TO ADAPT A MODEL 28 CABINET (LAAC209**) FOR USE WITH A TRANSMITTER DISTRIBUTOR			59085
	2191	Washer, Lock	13	16	
	3598	Nut, 6-40 Hex	9	16	
	7002	Washer, Flat	12	16	
	82730	Screw, 10-32 Shoulder	1	16	
	98237	Pin, Long	1	16	
	151631	Screw, 6-40 x 5/16 Hex	2	16	
	151693	Screw, 6-40 x 9/16 Fil	2	16	
	151827	Strap, Terminal	9	14	
	154457	Guide, Tape	1		
	154486	Spring, Detent	1	16	
	154492	Plate, Nut	1	16	
	159394	Modification Kit	1	15	
	160286**	Bar Cross	1	16	
	160290**	Plate	1	16	
	160372	Cable Assembly	1		
	160976	Spring, Detent	1	16	
	162236**	Cover w/Studs	1	16	
	162237	Chute, Tape	1	16	
	179493	Guide, Tape	1	16	
179417**		MODIFICATION KIT TO ADAPT A MODEL 28 CABINET (LAAC232**) FOR USE WITH A TRANSMITTER DISTRIBUTOR (LBXD)			58855
	2191	Washer, Lock	10	16	
	3598	Nut, 6-40 Hex	6	16	
	7002	Washer, Flat	10	16	
	82730	Screw 10-32 Shoulder	1	16	
	151631	Screw, 6-40 x 5/16 Hex	2	16	
	151693	Screw, 6-40 x 9/16 Fil	2	16	
	154486	Spring, Detent	1	16	
	154492	Plate, Nut	1	16	
	160286**	Bar, Cross	1	16	
	160290**	Plate	1	16	
	160291	Plate	1	16	
	160293**	Cover	1	16	
	160976	Spring, Detent	1	16	
162244**		MODIFICATION KIT TO CONVERT LAAC209** CABINET FOR TAPE WINDING AND TAPE STORAGE CONSISTS OF 162234** AND 162235** MODIFICATION KITS			

**Refer to page 1 for finish suffix

NUMERICAL INDEX

Part Number	Description and Page Number	Part Number	Description and Page Number	Part Number	Description and Page Number
247M	Coil, Magnet 11	44048	Washer, Flat 15, 57	92260	Washer, Lock 66
265M	Coil, Magnet 37	45815	Washer, Lock 6, 7, 10, 25	92309	Resistor, 400 Ohm 59
267M	Coil, Magnet 37	45944	Screw, 8-32 x 5/8 Rd 54, 55	92527	Washer, Lock 35
1028	Screw, 4-40 x 1/4 Fil 11	49514	Nut, 8-32 Hex 35, 54, 55	92687	Washer, Flat 62
1072	Screw, 6-40 Thumb 66	49644	Screw, 10-32 Shoulder 8	92748	Screw, 6-40 x 1-7/16 Fil 59
1178	Screw, 2-56 x 7/16 Fil 33	55088	Spring 37	93108	Washer, Lock 25
1253	Screw, 8-32 x 3/8 Rd 6, 11, 16, 69, 70	55219	Screw, 8-32 x 3/8 Fil 5, 11, 56, 57	93118	Washer, Lock 33
1257	Screw, 10-32 x 1-1/8 Fil 18	61085	Washer, Lock 41, 42, 44, 45, 48	93136	Switch, DP-DT Toggle 18
1263	Screw, 6-32 x 1/4 Fil 36	70073	Nut, 3-48 Hex 44, 45, 48	93160	Washer, Flat 7
1264	Screw, 10-32 x 1/2 Flat 7	70314	Washer, Flat 52	93711	Resistor, 200 Ohm 36
1298	Screw, 8-32 x 1/4 Fil 61	70593	Screw, 6-40 Thumb 56	93959	Key 42
2191	Washer, Lock 5 to 12, 14 to 19, 22 to 28, 30 to 34, 36 to 39, 41 to 45, 47, 49, 52, 53, 56, 57, 59 to 71	70720	Screw, 10-32 Shoulder 8, 9, 33	93969	Screw, 4-40 x 3/16 Flat 36, 43, 44 to 50, 58, 59
2254	Washer, Flat 36, 57	71699	Screw, 10-32 Shoulder 6, 8	94660	Connector 35
2449	Washer, Lock 7, 8, 10, 24 to 26, 28 to 30, 34, 40, 52, 63, 67	71858	Washer, Flat 7, 10	95063	Connector, 3 Pt Plug 24
2481	Washer, Flat 27	72566	Resistor, 200 Ohm 67	96509	Roller 39
2539	Nut, 3/8-32 Hex 20	74479	Bushing 12	96582	Screw, 6-32 x 3/8 Flat 68
2669	Washer, Lock 5 to 10, 16, 18, 33, 34, 39, 41, 43, 45, 47, 49, 51, 59, 63, 70	74594	Ring, Retaining 5	97143	Jack 18
2846	Washer, Flat 7, 10, 24, 25, 26, 28, 30, 40, 63	74615	Resistor, 2,000 Ohm 12, 18	98237	Pin, Long 16, 71
3226	Washer, Flat 29	74738	Screw, 10-32 Shoulder 64	98642	Washer, Lock 7, 10, 25, 30, 37, 64
3292	Nut, 1/4-20 Hex 5, 8	74807	Nut, 10-32 Shoulder Hex 8, 9, 63	98726	Screw, 3-48 x 1/4 Fil 41
3354	Nut, 8-32 Hex 50, 58	75435	Resistor, 600 Ohm 12, 18, 36	98819	Knob 42
3438	Washer, Flat 11, 12, 18, 25, 34, 39, 41, 43, 45, 47, 49, 51, 59	75750	Washer, Insulating 12, 18, 36, 53, 57, 67	98869	Spacer 36
3598	Nut, 6-40 Hex 5 to 8, 11, 12, 15 to 18, 22, 23, 24, 27, 31, 36, 37, 39, 41, 44, 52, 53, 56, 57, 60, 61, 62, 64, 65, 66, 67, 69, 70, 71	76099	Washer, Flat 8	99978	Connector, 4 Pt. Plug 21
3599	Nut, 4-40 Hex 8, 9, 22, 53	76279	Screw, 1/4-32 x 5/8 Hex 10, 29	100011	Nut, 6-40 Hex 8, 12, 19
3606	Nut, 6-40 Hex 28, 34, 37, 63	76461	Washer, Flat 67	100658	Connector, 2 Pt. Plug 20
3639	Washer, Lock 5 to 10, 12, 23, 33, 39, 70	76834	Screw, 4-40 x 3/8 Flat 24	100832	Screw, #0 x 3/16 Drive 5
3640	Washer, Lock 5, 11, 12, 22, 24, 25, 26, 31, 37, 40, 48, 53	77128	Washer, Insulating 36	100873	Screw, 6-40 Shoulder 62
3646	Washer, Lock 11, 23, 36, 42, 44, 50, 52, 54, 55, 58, 61, 63	77808	Resistor, 250 Ohm 36	101633	Washer, Flat 8, 9, 37
3649	Washer, Flat 34	77810	Resistor, 300 Ohm 18	102092	Screw, 6-40 x 1-17/32 Rd 12
4326	Spring, Compression 8, 9	77902	Screw, 6-40 x 2-3/8 Rd 12, 18, 36, 53, 57, 67	102180	Screw, 6-40 x 1-15/16 Fil 12
4703	Spring 11	78453	Nut, 10-32 Hex 64	102629	Spring, Detent 65
5599	Nut, 8-32 Hex 61, 63	78469	Foot, Rubber 27	102751	Nut, 10-32 Shoulder Hex 8
5816	Washer, Insulating 12, 59	79152	Lamp, 48V 42	102755	Screw, 6-40 x 7/16 Flat 64
6035	Screw, 1/4-20 x 5/8 Hex 67	79523	Screw, 2-56 x 25/32 Fil 30	103041	Screw, 6-40 x 1/4 Fil 64
6344	Screw, 6-32 x 11/32 Hex 6, 8, 69, 70	79890	Screw, 1/4-32 x 7/8 Hex 10	103092	Connector, Cord 5
6345	Nut, 6-32 Hex 27	82020	Bumper 6	103387	Catch 6, 70
6347	Screw, 6-32 x 3/8 Rd 42	82414	Knob, Detent 64, 66	103782	Screw, #2 x 1/8 Drive 8, 9
6800	Screw, 6-40 Shoulder 67	82702	Screw, 6-40 x 9/32 Flat 39	104124	Screw, 1/4-32 x 11/32 Hex 10
7002	Washer, Flat 5 to 9, 11 to 19, 22, 23, 24, 28, 30, 31, 32, 33, 36, 37, 39, 41, 53, 56, 59, 60 to 67, 69, 70, 71	82730	Screw, 10-32 Shoulder 16, 17, 69, 70, 71	104701	Screw, 4-40 x 9/32 Fil 38, 53
8333	Screw, 10-32 x 3/8 Rd 5, 6, 7, 10, 12, 70	82833	Washer, Flat 40	104807	Washer, Flat 5, 31, 41
8449	Spacer, .094" Thk 42	83497	Washer, Flat 52	105029	Washer, Flat 10
25123	Screw, 1/4-32 x 7/16 Hex 34	84575	Spring 37	106047	Screw, 1/4-32 x 1/2 Hex 29
33765	Washer, Flat 36	84579	Washer, Flat 6, 8, 64, 70	107116	Washer, Lock 5, 8, 12
34432	Washer, Flat 6, 8, 23, 33, 39, 54, 55	85198	Screw, 10-32 x 3/16 Hex 7	107393	Switch, SP-ST Toggle 40
35551	Screw, 10-32 x 3/8 Flat 42	85559	Washer, Flat 62	108355	Nut, 1/4-20 Hex 24, 25, 26, 28, 30, 40, 63
41663	Washer, Flat 7	85931	Post, Spring 64	108809	Screw, 10-32 x 27/32 Hex 10
42827	Screw, 3-48 x 1/4 Fil 42	86742	Nut, 4-40 Hex 48	108959	Switch, DP-ST Toggle 44
43954	Bell 11	86835	Spring 57	110126	Washer, Lock 15, 24, 57
		87477	Resistor, 1,000 Ohm 36	110434	Screw, 4-40 x 3/16 Fil 11
		88083	Resistor, 100 Ohm 36	110435	Nut, 4-40 Hex 11, 24
		90490	Shim, .005" Thk 37	110743	Washer, Lock 5, 9, 18, 23, 25, 26, 33, 34, 36, 37, 41, 67
		90560	Washer, Flat 31	111017	Screw, 6-40 x 5/16 Fil 5, 6, 11, 12, 13, 16, 41, 56, 67, 69, 70
		90599	Shim, .008" Thk 25	111345	Bolt 8
		90790	Washer, Flat 12	111346	Spring, Compression 8
		90814	Resistor, 1,000 Ohm 12	111409	Screw, 4-40 x 7/32 Fil 27
		91683	Nut, 5/32-32 Hex 18, 20, 21, 38, 40, 55	111410	Washer, Flat 37
		91684	Nut, 15/32-32 Ring 18, 20, 21, 38, 40	111777	Connector, 4 Pt Receptacle 38
		92146	Nut, 1/4-20 Hex 8	112080	Washer, Flat 17
				112626	Nut, 10-32 Hex 6, 7, 8, 10, 23, 25, 33, 37, 39, 41, 70
				112627	Nut, 2-56 Hex 30

NUMERICAL INDEX (Continued)

Part Number	Description and Page Number	Part Number	Description and Page Number	Part Number	Description and Page Number
113844	Screw, 10-32 x 17/32 Hex 30	122476	Screw, #6 Self-Tapping 6, 18, 23, 39	145007	Diode 43, 45, 47, 49, 59
114478	Nut, 15/32-32 Hex 18, 20, 38	123969	Holder, Cable 6,70	145008	Relay 44, 46, 50
114589	Mount, Vibration 7, 10	124148	Washer, Flat 63	145011	Cable Assembly 41
114764	Fastener, Spring 5	124220	Pin, Drive 38	145017	Rectifier 51
114766	Stud 5	124612	Screw, 8-32 x 1/2 Hex 15, 43, 52	145019	Switch, Wafer 42
115593	Screw, 10-32 Self-Tapping 5, 6, 33,70	124741	Washer, Lock 23, 24	145020	Resistor, 700 Ohm 59
115594	Nut, Speed 5, 6, 11, 15, 16, 52, 54, 55, 56, 57,69,70	124999	Switch, Sensitive 30, 33	145022	Relay 18, 46
116698	Lamp, 6V 18	125002	Screw, 8-32 x 3/8 Flat 63	145025	Cable Assembly 41
116783	Holder, Fuse 11, 38, 41,70	125004	Screw, 8-32 x 1/4 Rd 23	145027	Switch, Stepping 44
117366	Jumper, 8-1/2" Green 38	125010	Washer, Insulating 18	145028	Switch, Stepping 49
117535	Washer, Flat 6, 10, 11, 12, 16, 23,70	125011	Washer, Flat 9, 23, 27, 33, 34, 37	145029	Buzzer 42
117730	Resistor, 10 Meg Ohm 47	125014	Washer, Flat 6, 29,70	145030	Cable Assembly 41
118154	Resistor, 47,000 Ohm 53	125015	Washer, Flat 5, 11, 17, 27, 34, 64, 65, 67	145031	Plate, Designation 42
118172	Resistor, 2.2 Meg Ohm 47	125137	Screw, 10-32 x 1/2 Rd 10	145033	Resistor, 500 Ohm 43
118193	Resistor, 10,000 Ohm 53	125139	Screw, 4-40 x 1/8 Fil 38	145034	Resistor, 3,300 Ohm 47
118206	Resistor, 12,000 Ohm 53	125157	Screw, 8-32 x 7/8 Fil 44, 58	145035	Capacitor, .001 MFD 47
118384	Lens, Clear Indicator Light 60	125170	Screw, 8-32 x 5/16 Fil 35, 42	145036	Board, Terminal 50
118510	Fuse, 1/4 Amp 68	125186	Screw, 8-32 x 3/4 Fil 54, 55	145037	Plate, Adapter 41
118511	Fuse, 1/8 Amp 41	125202	Screw, 3-48 x 1/8 Fil 36	145038	Bracket, Mounting 7
118659	Switch, Toggle 38	125206	Screw, 6-32 x 5/8 Fil 45	145039	Bracket, Mounting 7
118720	Resistor, 100K Ohm 47	125218	Nut, 1/4-32 Hex 7, 10, 52	145048	Resistor, 510 Ohm 59
118723	Resistor, 1,000 Ohm 53	125224	Nut, 1/4-32 Hex 29	145049	Resistor, 200 Ohm 59
118724	Resistor, 220 Ohm 45	125231	Nut, 10-32 Hex 7, 8, 10, 34	145050	Panel Assembly, Relay 3, 43, 44
119223	Screw, 4-40 x 1-15/32 Fil 41	125802	Washer, Flat 24	145051	Resistor, 300 Ohm 59
119262	Washer, Flat 63	126986	Screw, 1/4-32 x 19/32 Hex 52	145052	Capacitor, 1 MFD 49
119367	Screw, 8-32 Set 5, 6	128357	Ring, Retaining 5	145053	Bracket, Chad Chute 7
119467	Insulator, .032" Thk 33	128896	Switch, Toggle 40, 44	145057	Cable Assembly 51
119634**	Button, Plug 7	129255	Resistor, 800 Ohm 18	145059	Panel, Plastic 42
119639**	Button, Plug 5	129382	Grommet, Rubber 43	145060	Panel, Rubber 42
119641**	Button, Plug 5	129854	Resistor, 10,000 Ohm 47	145066	Cable Assembly 51
119648	Ring, Retaining 36	129919	Fuse, SL-BL 4 Amp 11	145070	Shield, Key & Lamp 42
119649	Ring, Retaining 30, 37	130683	Washer, Lock 21	145083	Plate 59
119650	Ring, Retaining 64	139158	Connector, Duplex Receptacle 11, 70	145084	Plate 46
119652	Ring, Retaining 37	139159	Connector, 3 Pt Plug 23	145085	Plate 44
119653	Ring, Retaining 37	139175	Clamp, Window 6	145086	Plate 48
119907	Grommet, Rubber 18	139971	Screw, 2-56 Self-Tapping 5	145087	Plate 49
119979	Strike, Fastener 6	142269	Fuse, SL-BL 3 Amp 41	145088	Bracket, Mounting 41
120175	Plate, On-Off 20, 21, 55	143306	Fuse, SL-BL 1 Amp 41	145089	Bracket, Mounting 41
120214	Resistor, 6,800 Ohm 53	144518	Cable 41	145090	Strap 41
120557	Washer, Flat 6,70	144603	Cable Assembly 49	145091	Plate, Fuse 41
121005	Screw, #6 x 3/8 Self-Tapping 5, 9, 39,70	144604	Cable Assembly 49	145092	Relay 44
121018	Nut, 4-40 Hex 34	144605	Cable Assembly 45	145093	Relay 44
121242	Clamp, 1/8 ID Cable 38	144613	Bell Assembly, Signal 41	145096	Cable Assembly 41
121243	Clamp, 3/16 ID Cable 6, 11, 12, 38, 41, 51,70	144614	Chute, Chad 7	145097	Cable Assembly 41
121244	Clamp, 1/4 ID Cable 32, 38, 55, 56	144615	Cable Assembly 41	145098	Cable Assembly 41
121245	Clamp, 5/16 ID Cable 23, 24, 38, 51, 60	144629	Plate, Adapter 41	145100	Panel Assembly, Relay 3, 58, 59
121246	Clamp, 3/8 ID Cable 6, 38, 41, 60	144777	Plate, Nut 7	145102	Cable Assembly 59
121247	Clamp, 7/16 ID Cable 15, 32, 36, 38, 41, 43, 59	144799	Cable Assembly 24	145103	Cable Assembly 59
121248	Clamp, 1/2 ID Cable 7, 12, 36, 38, 41, 66	144937**	Housing 9	145105	Cable Assembly 43
121249	Clamp, 5/8 ID Cable 36, 38, 41, 43, 45, 47, 49, 59, 67	144938	Bracket, Mounting 7	145106	Cable Assembly 43
121250	Clamp, 3/4 ID Cable 38	144939**	Bracket, Mounting 7	145107	Cable Assembly 43
121251	Clamp, 1 ID Cable 36, 38	144950**	Housing, Key & Lamp 9	145108	Cable Assembly 43
121416	Roller 17	144953**	Tray, Message 9	145109	Cable Assembly 47
121418	Screw, 6-40 Shoulder 17	144958**	Container, Chad 9	145175	Plate, Adapter 51
121551	Screw, 8-32 x 1/4 Hex 36	144979	Relay, 700 Ohm 58	145177	Channel 7
		145000	Panel Assembly 3, 41	145178	Angle, Support 7
		145001	Cable Assembly 41	145179	Bracket 7
		145002	Relay 44, 46, 48, 50	145181	Plate, Nut 51
		145003	Relay 18, 44, 48, 50, 58	145182	Strip Assembly, Terminal 41
		145004	Relay 58	145185	Cover 9
		145005	Switch, Stepping 59	145190	Connector, 2 Pt Plug 60
		145006	Switch, Stepping 58	145200	Panel Assembly, Key & Lamp 3, 42
				145204	Power Supply, 48V DC 3, 51
				145211	Panel, Red Plastic 42
				145218	Cable Assembly 41
				145221	Resistor, 2.5 Meg Ohm 48

**Refer to page 1 for finish suffix

NUMERICAL INDEX (Continued)

Part Number	Description and Page Number	Part Number	Description and Page Number	Part Number	Description and Page Number
145225	Panel Assembly, Relay 3, 45, 46	146561	Panel, Rear 24	151632	Screw, 6-40 x 3 8 Hex 23, 24, 27, 31, 33, 39, 52, 61, 66, 67
145228	Cable w/Terminal 42	146562	Hub 24	151637	Screw, 4-40 x 1 4 Fil 18, 21, 24, 25, 26, 34, 37, 40, 48
145229	Terminal 45	146563	Guide 24	151657	Screw, 6-40 x 1 4 Fil 5, 6, 8, 10, 11, 13, 14, 17, 26, 30, 36, 41, 62, 69, 70
145243	Cable Assembly 41	146571	Latch, Deflector 64	151658	Screw, 6-40 x 5 16 Fil 12, 36, 56, 57, 62, 64, 68
145250	Panel Assembly, Alarm Relay 3, 47, 48	146653	Window 65	151659	Screw, 6-40 x 1 2 Fil 12, 15, 17, 41, 56
145276	Cable Assembly 60	146654**	Box, Chad 65	151685	Screw, 4-40 x 5 16 Fil 5, 12, 25, 26, 53
145319	Receptacle, 4 Pt Plug 60	146655**	Bracket 64	151692	Screw, 6-40 x 3 16 Fil 8, 9
145320	Receptacle, 4 Pt Connector 21	146656**	Bracket 64	151693	Screw, 6-40 x 9 16 Fil 16, 17, 69, 71
145349	Relay 44, 48	146659	Bracket Assembly 65	151694	Screw, 6-40 x 11 32 Fil 36
145350	Panel Assembly, Intercept Relay 3, 49, 50	146660**	Box Assembly, Chad 3, 65	151722	Screw, 6-40 x 3 16 Hex 8, 9, 12, 24, 32, 64
145711	Stud 9	146661	Deflector Assembly 64	151723	Screw, 10-32 x 3 8 Hex 6, 7, 9, 10, 16, 18, 33, 39, 41, 59
145725	Cover, Front 45, 47	146814	Clamp, Window 6	151737	Screw, 4-40 x 11 64 Hex 23
145726	Cover, Front 49	147008	Connector, 2 Pt Receptacle 38	151801	Bushing, Clamp 5
145727	Cover, Front 59	147720**	Modification Kit 63	151818	Jumper, 4-1 4" Black 38
145728	Cover, Front 43	147741**	Shelf, Mounting 63	151819	Jumper, 3" Black 13, 38, 57
145730	Cover, Rear 46, 48	150040	Screw, 6-40 x 5/8 Fil 8, 27	151827	Strap, Terminal 13, 15, 57, 67, 69, 71
145731	Cover, Rear 50	150323	Washer, Flat 53	151922	Clamp 53
145732	Cover, Rear 58	150543	Screw, 3-48 x 13/32 Fil 44, 45, 48	151939	Grommet, Rubber 41, 56
145733	Cover, Rear 44	150652	Screw, 4-40 x 37/64 Fil 53	151982	Lamp, 6V Incandescent 60
145736	Block, Mounting 44, 58	150705	Bushing 64	151983	Shield, Light 60
145739	Bracket, Tie 45, 47	150966	Insulator, Terminal Block 41, 67	151988	Modification Kit 3, 35
145740	Bracket, Tie 49	150978	Screw, 6-40 x 1-1/8 Fil 44	151989	Suppressor, Electrical Noise 35
145741	Bracket, Tie 59	150982	Screw, 4-40 x 7/16 Fil 37	152426	Nut, 6-40 Self-Locking 62
145742	Bracket, Tie 43	151073	Screw, 4-40 x 5/32 Fil 24	152562	Latch, Right 57
145748	Bracket, Cable 7	151152	Screw, 4-40 x 3/16 Hex 5, 24, 31, 33, 37, 67	152463	Latch, Left 57
145752	Clamp, Cable 44	151229	Washer, Flat 30, 39	152464	Insulator, .062" Thk 57
145753	Bushing 44	151335	Stud 13, 14	152466	Connector, 20 Pt Receptacle 38
145754	Plug, Dummy 41	151346	Screw, 6-40 x 3/8 Fil 7, 11, 15, 28, 36	152755	Strap, Terminal 13, 15
145784	Strap, Tie 45, 46, 47, 48	151415	Block, Terminal 41, 67	152768	Window, Glass 9
145785	Strap, Tie 49, 50	151416	Nut, 6-40 Hex 41, 56, 67	152797**	Plate, Retaining 6
145786	Strap, Tie 58, 59	151442	Screw, 6-40 x 1/2 Hex 12, 60, 67	152848	Screw, 1 4-20 x 3 4 Rd 24, 25, 26, 28, 30, 40, 63
145787	Strap, Tie 43, 44	151511	Gasket 9, 32	152893	Screw, 4-40 x 1 4 Hex 23
145788	Bracket, Tie 46, 48	151512	Seal, Noise 5	152899**	Holder 30
145789	Bracket, Tie 50	151526	Screw, 10-32 Thumb 5	152910**	Modification Kit 2, 30
145790	Bracket, Tie 58	151532**	Cover, Form Slot 6	153017	Nut, Speed 7, 52
145791	Bracket, Tie 44	151534	Screw, 10-32 Shoulder 8	153020	Guide, Line 12
145897**	Modification Kit 3, 64, 65	151540	Lampholder 8, 12, 38, 60	153021	Spring, Torsion 12, 25, 26
145898**	Modification Kit 2, 24	151545	Guide, Paper 8, 9	153022	Bushing 12, 25, 26
146133	Cover w/Post 9	151549	Post 7, 10	153023	Handle 5, 12, 25, 26
146136	Cable Assembly 60	151555	Foot, Mounting 5, 7	153027	Post 12
146140	Modification Kit 3, 60	151556	Knob w/Set Screw 22	153037	Spring 5
146141**	Panel, Right Front 7	151558	Nut, Speed 8, 9, 12	153048	Stud, Wing Head 5
146142**	Panel, Left Front 7	151560	Bell Assembly, Remote 2, 11, 41	153099	Arm, Pivot 25, 26
146143	Blade 24	151562	Lamp, 115V Incandescent 8	153104**	Bracket 25
146157**	Frame, Tape Bin 64	151564	Bracket 11	153106**	Plate, Bearing 25
146158	Separator, Panel 64	151565	Bushing, Shoulder 11	153107	Arm 25, 26
146159	Liner 64	151567	Armature w/Clapper 11	153113	Guide, Line 25, 26
146305	Panel 64	151569	Strap 7, 10	153126	Plate, Nut 25, 26
146306	Cover, Tape Bin 64	151571	Cable w/Terminals 5, 41	153130**	Copyholder 25
146307	Bracket, Mounting 65	151572	Washer, Lock 70	153400	Lamp, 60V Incandescent 12, 60
146308**	Frame, Tape Bin 24	151574	Grommet, Rubber 11	153442	Screw, 10-32 x 1 2 Hex 7, 32, 34, 43, 45, 47, 49, 51, 59
146309**	Cover, Tape Bin 24	151576	Arm, Stop 8	153455	Resistor, 600 Ohm 12
146310**	Plate 24	151577	Screw, 6-40 Shoulder 11	153459	Block, Terminal 13, 14, 15
146311**	Bracket, Mounting 24	151579	Plate, Retaining 11	153466	Cover 13
146312	Guide, Tape 24	151616	Screw, #2 Self-Tapping 5		
146315	Bracket, Motor 24	151618	Screw, 6-40 x 7/16 Fil 6, 36, 62		
146318**	Housing, Motor 24	151630	Screw, 6-40 x 1/4 Hex 5, 12, 15, 23, 24, 32, 34, 37, 39, 41, 43, 45, 47, 49, 57, 59, 60, 61, 65		
146443	Bracket 64				
146444	Deflector, Tape 64				
146446	Shaft 64				
146518	Roller, Spring 63				
146556	Motor 24	151631	Screw, 6-40 x 5/16 Hex 5, 8, 12, 15, 16, 17, 26, 31, 41, 60, 64, 65, 67, 69, 70, 71		
146557	Cable Assembly 24				
146558	Screw, 6-40 Shoulder 24				
146560	Panel, Front 24				

**Refer to page 1 for finish suffix

NUMERICAL INDEX (Continued)

Part Number	Description and Page Number	Part Number	Description and Page Number	Part Number	Description and Page Number
153484	Screw, 6-32 Spl 13, 14, 15	154446	Cover 13, 14	157152	Modification Kit 2, 15
153487	Cable Assembly 12	154449	Shaft 5	157154	Insulator, Terminal Block 15
153492	Connector, 3 Pt Plug 24, 41	154451	Bracket, Latch 8	157155	Cover 15
153493	Connector, 3 Pt Receptacle 24	154452	Cover 13, 14	157157	Modification Kit 12
153534	Washer, Flat 44	154456	Plate, Cover 5	157158	Cable Assembly 11, 12
153537	Screw, 6-40 x 9/32 Hex 25	154457	Guide, Tape 71	157159	Plate 12
153538	Screw, 6-40 x 7/16 Hex 67	154459	Fork 5	157215	Mount, Vibration 6, 70
153539	Screw, 6-40 x 11/16 Hex 36	154462	Bracket 5	157230	Jumper, 6" Black 38, 57
153631	Network, Spark Suppression 18, 36, 43, 45, 47, 49, 59	154463	Mount, Vibration 10	157231	Jumper, 8" Black 38, 57
153799	Screw, 4-40 x 21/64 Hex 5, 37	154479	Cover 13	157232	Jumper, 9-1/4" Black 38
153839	Screw, 6-40 x 5/8 Hex 5	154481	Bar, Left Torsion 8	157393	Grommet, Rubber 38
153841	Screw, 6-40 x 9/16 Hex 37	154482	Bar, Right Torsion 8	157399	Connector, 35 Pt Receptacle 38
15C901**	Modification Kit 2, 27	154483	Bolt, 1/4-20 Eye 5	157980	Extension 35
154047	Post, Spring 37	154484	Nut, 1/4 20 Shoulder 5	157981	Bracket 33
154248	Nut, Speed 5, 8, 9	154485**	Housing 16, 69	157982	Lever w/Hub 33
154249	Screw, #8B Self-Tapping 5, 8, 9	154486	Spring, Detent 16, 69, 71	157984	Screw, 4-40 Shoulder 33
154251	Latch 9	154487**	Plate 16, 17, 69	157985	Cable Assembly 33
154252**	Panel, Lower Door 7	154490**	Bar, Left Side Cross 16, 17, 69	157992	Bracket 38
154256	Screw, 4-40 Thumb 9	154492	Plate, Nut 16, 17, 69, 70, 71	157993	Bracket 38
154259	Screw, #6Z Self-Tapping 7, 9	154496**	Panel, Front 5, 6	157998	Jumper, 12" Black 38
154263	Bumper, Rubber 9, 60, 63	154497	Window, Plastic 5	158186	Screw, 4-40 x 7-3/4 Fil 22
154273**	Bar, Tie 7	154498	Plate 16	158195	Rail, Left Base 10
154276	Stop, Dome 9	154651	Modification Kit 3, 35	158196	Rail, Right Base 10
154293**	Plate 7	154655	Suppressor, Electrical Noise 35	158197	Angle, Left Base 10
154294**	Bracket, Mounting 7	154695**	Bracket 27	158198	Angle, Right Base 10
154298**	Door 9	154697	Grommet, Rubber 27	158200	Stud 10
154301**	Dome 9	154756	Modification Kit 2, 33	158201	Stud 10
154336	Rivet, Drive 5	154868	Plate 27	158215	Plate, Nut 31
154348	Plate, On-Off Instruction 5	154869**	Bracket 25	158250	Block, Terminal 56
154363	Nut, Speed 7	155023	Switch, DP-DT Toggle 20, 38, 55	158252	Insulator, Terminal Block 56
154371	Post 7	155045	Switch, SP-DT Toggle 38	158258	Connector, 20 Pt Plug 57
154378	Pad, Dome 9	155083	Lens, Red Indicator Light 8, 9, 12	158259	Connector, 20 Pt Receptacle 38
154379	Pad, Base 7	155085**	Bracket 25	158260	Eccentric 10
154382	Plate, Mounting 7	155086	Pad, Rubber 25	158283	Connector, 32 Pt Receptacle 38
154383	Plate, Left Side 7	155087	Screw, 1/4-20 x 7/16 Rd 25	158286	Transformer 12
154384	Plate, Right Side 7	155560	Relay 53	153287	Transformer Assembly 12
154385	Post 7	155597	Lens, Yellow Indicator Light 8	158630**	Bin Assembly, Tape 2, 23
154401	Stud 8	155614	Cover 38	158631**	Plate, Rear 23
154402	Spring, Torsion 8	155723	Screw, 4-48 x 1/2 Fil 38	158634	Bracket 23
154404	Tray, Copyholder 12	155750	Sleeve, 3/32 ID x 1/2" Lg	158635**	Bin, Tape 23
154406	Block, Terminal 13, 14	155751	Insulating 12, 21, 36, 38, 67	158636	Funnel, Tape 23
154407	Latch 8, 9	155752	Sleeve, 1/3 ID x 1" Lg Insulating 38, 68	158637	Screw, 10-32 Thumb 23, 70
154408	Bracket 12, 18, 57	155753	Sleeve, 5/64 ID x 1/2" Lg Insulating 38	158638**	Plate 23
154409	Plate 5	155754	Sleeve, 1/16 ID x 1/2" Lg Insulating 38	158639	Window, Plastic 23
154410**	Dome 8	155755	Sleeve, 11/64 ID x 5/8" Lg Insulating 12, 18, 22, 38, 54, 55, 57	158640	Motor, 115V AC Shaded Pole 23
154411**	Panel, Control 19	155859	Screw, 4-40 Spl 38	158641**	Cover 23
154412	Stud 13	155860	Screw, 4-40 x 3/8 Rd 38	158642	Hub 23
154415	Spring, Torsion 8	155861	Washer, Lock 24, 38	158643	Blade 23
154416	Plate, Adjusting 16	156078	Contact Assembly 37	158644	Cable Assembly 23
154418	Spring, Flat 10	156539	Washer, Felt 37	158645**	Bar, Cross 16, 69
154419	Window, Plastic 8	156609	Plate, Spring 66	158646	Bracket, Mounting 16, 69, 70
154421**	Door, Left Front 8	156632	Screw, 6-40 x 13/32 Hex 37	158647	Chute, Tape 5
154423	Window, Glass 8	156740	Screw, 6-40 x 7/32 Hex 23, 36, 37	158648	Chute, Tape 5, 69, 70
154424	Gasket 8	156764	Stud 63	158649	Screw, 4-40 Thumb 8
154426**	Door 8	156768	Screw, 8-32 x 9/32 Hex 23, 24	158651**	Door 8, 22
154427	Clamp 8	156976	Connector, 32 Pt Plug 18	158652	Nut, Speed 5, 9, 70
154431**	Door, Right Front 8, 32	156993	Nut, Speed 6, 66	158653	Spacer 17
154433	Clamp 8, 9			158656	Window, Glass 8
154436**	Door, Right Top 8, 27			158657	Clamp 8
154437	Insulator, Terminal Block 13			158658	Gasket 8
154438	Insulator, Terminal Block 13			158659**	Plate 8
154439	Insulator, Terminal Block 13			158660**	Door Assembly, Tape Winder 6, 70
154442	Shaft 6			158661**	Door, Tape Winder 6
154443	Shaft 5			158662	Window, Glass 6
154444	Fork 5			158663	Stud 6, 23, 70
154445	Knob 6			158664	Bracket 6, 70

**Refer to Page 1 for Finish Suffix

NUMERICAL INDEX (Continued)

Part Number	Description and Page Number	Part Number	Description and Page Number	Part Number	Description and Page Number
158665**	Partition 6, 70	160370	Switch, NC Pushbutton 18, 20	161874	Cable w/Terminals 56
158666**	Box, Outlet 11, 70	160371	Light, Pilot 18	161875	Resistor, 2,000 Ohm 53, 56
158667	Tray, Tape Winder 6, 70	160372	Cable Assembly 69, 71	161965	Resistor, 1,000 Ohm 56
158669	Stud 6, 70	160381	Panel, Control 18, 19	162016	Pad, Left Cross Bar 16
158670**	Panel, Right Lower 5, 34	160382	Cover 18	162017	Pad, Felt 16
158671	Connector, 3 Pt Receptacle 11, 70	160383	Switch, SP-ST 18	162018	Pad, Felt 16
158672	Shaft 5	160386	Resistor, 1,000 Ohm 12, 18, 57	162019	Pad, Felt 16
158673	Bracket, Locating 10	160387	Modification Kit 3, 52	162020	Pad, Felt 16
158676	Insulator, Terminal Block 15	160388	Modification Kit 3, 52	162021	Pad, Felt 16
158677	Insulator, Terminal Block 14	160390	Bracket 18	162072	Capacitor, 88 to 108 MFD 53
158678	Rail, Rear Base 10, 34	160432	Jumper, 16" Black 38	162234**	Modification Kit 70, 71
158679	Rail, Front Base 10	160433	Jumper, 14" Black 38	162235**	Modification Kit 71
158680	Modification Kit 2, 15	160461	Bracket 15	162236**	Cover w/Studs 16, 71
158682	Plate, Ground 5	160462	Insulator, Terminal Block 15	162237	Chute, Tape 16, 71
158683**	Bracket, Housing 16, 69	160463**	Basket, Tape 6, 33	162239**	Plate 23
158684**	Cover 16, 69	160466**	Plate 33	162240**	Plate, Rear 23
158685**	Housing 16, 69	160467	Window, Plastic 8	162241**	Bin, Tape 23
158686**	Plate 16, 69	160468**	Modification Kit 2, 33	162243**	Bin Assembly, Tape 2, 23, 70
158687	Arm, Tape 10, 69	160469	Stop 6	162244**	Modification Kit 71
158688	Guide, Stop 8	160470**	Modification Kit 2, 33	162591	Shaft 12
158689	Guide 8	160663	Bracket 6	162629	Modification Kit 5
158691	Stud 8	160664	Pin, Roll 8, 9	162680	Switch, Pushbutton 40, 55
158692	Spring, Torsion 8	160665**	Door Assembly, Left Top 8	162898	Panel, Control 19
158693**	Bar, Cross 16, 70	160667	Bumper, Rubber 8	163169	Shaft, Control 5
158694	Plate, Designation 5	160678	Jumper, 24" Black 38	163170	Shaft, Control 5
158695	Plate, Designation 6	160887**	Modification Kit 69	163172	Bracket, Arm 5
158696	Knob 5	160888**	Modification Kit 69	163173	Bracket, Arm 5
158697	Plate, Designation 6, 69, 70	160889**	Modification Kit 69	163796**	Modification Kit 2, 29
158989	Capacitor, 20 MFD 54	160890**	Modification Kit 70	164124**	Modification Kit 2, 29
158990	Bracket, Mounting 54	160971	Bracket, Mounting 52	164025**	Bracket 25
158991	Capacitor, 15 MFD 54, 55	160972	Bracket w/Pads 52	164028**	Copyholder 25
158992	Bracket, Mounting 54, 55	160973	Bracket w/Pads 52	164084	Cable Assembly 22
159238	Connector, 2 Pt Receptacle 20	160974	Arm, Stop 8	164120**	Modification Kit 2, 22
159329	Cable 11, 70	160976	Spring, Detent 16, 69, 71	164121	Cable Assembly 8
159384	Modification Kit 2, 14	160985	Pad, Left Side 4	164122	Lens, Green 8
159393	Modification Kit 2, 15	160986	Pad, Right Side 4	164123**	Panel 22
159394	Modification Kit 2, 15, 69, 71	160988	Pad, Base 6	164124	Switch, Rotary 22
159396	Modification Kit 2, 14	160989	Pad, Left Side Dome 8	164125	Cable Assembly 22
159541	Connector, 16 Pt Plug 38	160990	Pad, Right Side Dome 8	164195	Plate, Switch 22
159734	Button 8, 9	160991	Pad, Right Top Door 8	164197**	Modification Kit 2, 22
159735**	Panel 5, 34	160993	Pad, Left Rear Back 4	164198**	Panel, Control 22
159736	Bracket w/Tie Bar 52	160994	Pad, Top Middle Door 8	164199	Plate, Switch 22
159743	Bar, Left Torsion 8	160995	Pad, Top Left 8	164235**	Bracket 28, 29
159744	Bar, Right Torsion 8, 9	161136	Fuse, SL BL 6-1/4 Amp 38	164272	Modification Kit 2, 31
159819	Connector, 32 Pt Plug 38, 57, 67	161206	Bushing, Insulating 18	164273	Chute, Chad 31
159820	Connector, 32 Pt Receptacle 57	161210	Nut, 11/16 x 32 Hex 18	164275	Chute, Chad 31
160286**	Bar, Cross 16, 69, 71	161222	Cover 56	164276**	Container, Chad 31
160290**	Plate 16, 69, 71	161223	Bracket, Relay 56	164277	Plate, Right Side 31
160291	Plate 16, 17, 69, 71	161238	Connector, 36 Pt Receptacle 41, 42	164278	Chute, Chad 31
160293**	Cover 16, 69, 71	161239	Connector, 36 Pt Plug 38	164279	Chute, Chad 31
160297	Insulator, Terminal Block 13, 14	161302	Modification Kit 3, 56	164287	Plate, Switch Mounting 38
160307	Diode 18	161307	Modification Kit 12	164383**	Shelf 29
160332	Flasher, Thermal 12	161750	Bracket 15	164405**	Modification Kit 2, 31
160335	Modification Kit 2, 18	161755	Pad, Right Front 8	164593	Plate, Left Side 31
160339	Window, Glass 8	161756	Pad, Left Cross Bar 16	164631	Cable w/Terminals 57
160341	Hinge, Left 8	161764	Pad, Felt 16	164632	Bracket, Resistor 57
160343	Shaft 12	161765	Pad, Felt 16	164633	Modification Kit 3, 57
160344	Clamp, Left 8, 32	161777	Stud, Mounting 34	164638	Cable Assembly 57
160345	Plate 17	161778	Stud, Mounting 34	164639	Cable Assembly 57
160346	Bracket 17	161814	Modification Kit 2, 34	164640	Modification Kit 3, 57
160347	Stud 6	161818	Connector, 2 Pt Receptacle 38	164641	Jumper 18" Black 57
160349	Hinge, Right 8	161825	Panel, Control 19	164642	Jumper, 22" Black 57
160352	Cable Assembly 18	161830	Panel, Control 19	164643	Jumper, 33" Black 57
160362	Plug, Banana 12	161871	Relay 56	164837	Panel, Control 20
160369	Switch, NO Pushbutton 18, 20, 21, 38	161872	Relay 53, 56	164838	Panel Assembly, Control 2, 20
		161873	Resistor, 5,000 Ohm 56	164839	Cable w/Terminals 20
				164856	Indicator, Red Neon 19, 20

**Refer to page 1 for finish suffix

NUMERICAL INDEX (Continued)

Part Number	Description and Page Number	Part Number	Description and Page Number	Part Number	Description and Page Number
164857**	Dome 17	171973	Connector, Black Insulated 38	173934	Bracket 36
164858**	Door Assembly, Left Front 17	172277	Connector, Green Insulated 38	173974	Screw, 10-32 x 5/16 Hex 5
164865	Indicator, White Neon 20	172749	Bracket 33	174009	Diode 67
164866	Switch, Wafer 20	172843	Post 12	174424	Capacitor, .03 MFD 36
164936	Guide, Tape 34	173097**	Modification Kit 2, 29	174458	Modification Kit 2, 27
164938	Washer, Spring 34	173138	Plate, Designation 5	174150	Post 36
164939	Guide w/Bushing 34	173206**	Bracket, Left Shelf 29	174161	Jumper, 25" Black 38
164941	Guide, Tape 34	173207**	Shelf, Left 29	176162	Jumper, 21" Black 38
164942	Bracket 34	173238	Modification Kit 12	176163	Jumper, 18" Black 38
164943	Plate w/Studs 34	173256	Cable Assembly 12	176167	Holder, Lamp 38
164944	Guide, Tape 34	173400**	Modification Kit 2, 25	176300	Modification Kit 2, 20
165008	Turret, Terminal 43, 45, 47, 49, 53, 59	173422	Bracket, Connector 67	176301	Panel, Control 20
165015	Capacitor, 4.28 MFD 48	173520	Module Assembly 3, 36	176302	Cable Assembly 20
165021	Relay, 2,250 Ohm 44	173521	Plate w/Posts 37	176303	Cable Assembly 20
165027	Network, Spark Suppression 36, 44, 50, 58, 59	173523	Shaft 37	176422	Bracket, Mounting 34
165038	Tube, Electronic 48	173526	Spacer, .032" Thk 37	176440	Bracket, Stop 37
165051	Relay, 945 Ohm 44	173527	Capacitor, 20 MFD 36, 67	176498	Plate, Mounting 63
165053	Cushion, Red Rubber 50, 58	173532	Spring, Torsion 37	176540	Module Assembly 3, 36
165054	Cushion, Black Rubber 50, 58	173534	Gear, 20T 37	176541	Capacitor, 3 MFD 36
165060	Socket, Tube 48	173535	Spacer, .125" Thk 37	176560	Bracket, Switch 36
165062	Capacitor, 2 MFD 53	173536	Bracket, Guard 36	176561	Module Assembly 3, 37
165073	Diode 53	173537	Shaft 37	176562	Magnet Assembly 37
165077	Connector, 50 Pt Plug 53	173538	Bracket, Mounting 37	176563	Switch, Lever 36
165079	Connector, 50 Pt Receptacle 53	173539	Bracket, Magnet Mounting 37	176571	Board Assembly, Diode 36
165102	Screw, 12-24 x 3/8 Rd 7, 51	173540	Hinge 37	176572	Switch, Stepping 36
165103	Screw, 12-24 x 5/8 Rd 53	173541	Bail, Armature 37	176573	Relay, 1,000 Ohm 36
165118	Socket, Lamp 42	173542	Pawl, Feed 37	176574	Relay, 1,300 Ohm 36
165134	Board, Terminal 44, 46, 48, 50, 59	173544	Pawl, Check 37	176580	Lamp, 6V Incandescent 36
165168	Key 42	173545	Post, Eccentric 37	176582	Bracket, Relay Mounting 36
165255	Screw, #8 Spl 65	173546	Gear, 8T 37	176594	Relay, 1,000 Ohm 36
165261	Screw, 4-40 x 3/8 Oval 42	173547	Gear, 8T 37	176595	Capacitor, .22 MFD 36
165268	Screw, 10-32 Self-Tapping 39	173548	Shaft 37	176667	Spacer, .063" Thk 30
165392	Relay, 525 Ohm 44	173549	Board Assembly, Diode 36	176668	Bracket w/Stud 30
165420	Relay 53	173551	Gear w/Disk, 20T 37	176669	Lever w/Hub 30
165449	Resistor, 47 Ohm 53	173552	Gear w/Disk, 20T 37	176670	Lever w/Hub 30
170271	Modification Kit 3, 53	173553	Disk w/Ratchet 37	176671	Insulator, .047" Thk 30
170272**	Modification Kit 2, 17	173557	Magnet Assembly 37	176707	Bracket, Switch 30
170288	Resistor, 3,500 Ohm 53	173558	Spacer, .320" Thk 37	176711	Spring, Torsion 30
170302**	Housing, Dual 17	173562	Base, Module 36	176712	Spring, Torsion 30
170303	Clip, Right 17	173563	Armature, Magnet 37	176713	Modification Kit 2, 30
170304	Clip, Left 17	173564	Bracket, Switch 36	176785	Cable w/Terminals 30
170305	Plate 17	173569	Window, Numbering 66	178177	Contact Assembly 37
170306	Modification Kit 2, 31	173571	Spacer, .226" Thk 37	178278	Capacitor, 60 MFD 36
170307	Plate, Trim 6	173575	Card, Universal Code 37	178387	Modification Kit 2, 32
170308	Filler, Window 5	173577	Relay, 6,000 Ohm 36	178389	Power Unit 32
170313	Plate, Mounting 53	173578	Connector, 50 Pt Receptacle Type 67	178390	Bar, Static Eliminator 32
170314	Resistor, 3,900 Ohm 53	173579	Connector, 50 Pt Plug Type 36	178391	Cable, Inductor 32
170316	Relay 53	173580	Numbering Assembly 37	178392	Plug, Outlet 32
170317	Coil, Choke 53	173581	Switch, Lever 36	178482	Bracket 37
170319	Connector, 24 Pt Plug 53	173689	Bracket w/Bushings 57	178729	Plate, Tear 27
170939	Screw, 6-40 Eccentric 37	173706	Modification Kit 3, 54	178733	Tray 6
171501	Relay 48, 53	173707	Modification Kit 3, 55	178755**	Partition 6
171502	Relay 18	173708	Cable w/Terminals 55	178761**	Door 66, 67
171507	Relay 44	173709	Cable w/Terminals 54	178762	Frame, Mounting 67
171511	Relay 18	173715	Terminal, Plug Type 36	178837	Plate, Control 21
171531	Resistor, 3,000 Ohm 53	173716	Terminal, Receptacle Type 67	178838	Modification Kit 2, 21
171555	Connector, 50 Pt Receptacle 41, 44, 46, 48	173717	Plate, Magnet 37	178839	Nut, 11/32-32 Hex 18
171563	Lens, Amber Lamp 36	173759	Bracket 37	178892**	Copyholder 26
171594	Holder, Lamp 36	173786	Plate, Mounting 54	178893**	Plate 26
171952	Connector, Green Shielding 38	173787	Plate, Mounting 55	178894**	Bracket 26
171953	Connector, Orange Shielding 38	173829	Relay, 6,000 Ohm 36	178895	Shaft 26
171955	Connector, Red Shielding 38	173832	Holder, Lamp 36	178897**	Modification Kit 2, 26
171972	Connector, Green Insulated 38	173839	Cable Assembly 37	178914**	Plate, Bearing 26
		173860	Connector, 10 Pt Circuit Card 37	179049	Bracket, Support 34
		173920	Arm, Stop 8	179193	Shaft 34
		173932	Lamp, White Neon 36	179197**	Panel 5
				179256	Chute, Chad 31

**Refer to page 1 for finish suffix

NUMERICAL INDEX (Continued)

Part Number	Description and Page Number	Part Number	Description and Page Number	Part Number	Description and Page Number
179385**	Door Assembly 3, 66	195391**	Modification Kit 3, 61	304714	Card, Universal Code 37
179399	Cable Assembly 67	195397**	Bracket, Mounting 63	304777	Bracket 52
179402	Deflector, Tape 23	195398**	Bracket, Mounting 63	304918	Plate, Instruction 21
179416	Modification Kit 3, 67	195404**	Shelf, Chad Bin 61	305056	Plate, Identification 16
179417**	Modification Kit 71	195413**	Bracket, Mounting 63	305057	Plate, Bell Identification 16
179449	Bracket 15	195837**	Modification Kit 3, 62	305713	Strip, 50 Ft Roll Foam 8
179469	Modification Kit 2, 15	195838**	Plate, Deflector 62	305759	Bracket 12
179470	Block Assembly, Terminal 2, 15	195839**	Bracket, Backstop 62	305983**	Door Assembly 3, 66
179476	Rail, Left 10	195840**	Shelf 62	305985**	Door 66, 67
179477	Rail, Right 10	195841	Plate, Cover 6	305986**	Plate, Cover 66
179493	Guide, Tape 16, 71	195848	Bracket, Nylon 8	306731	Gasket 8
179600**	Holder 30	195877	Nut, 9/16-27 Hex 60	307276	Plate, Nut 5
179601**	Modification Kit 2, 30	196907**	Shelf, Right 29	309534	Panel, Control 55
179734**	Panel, Control 19	196908**	Bracket, Right Shelf 29	309535	Cable Assembly 55
179736	Cable Assembly 19	196909**	Modification Kit 2, 29	309537	Panel Assembly 3, 55
179748	Connector, 5 Pt Plug 38	196930	Grille 39	309895	Cable Assembly 12
179749	Connector, 5 Pt Receptacle 38	196931	Clip 39, 68	309897	Cable Assembly 67
179860	Plate, Mounting 21	198085	Holder, Card 6	310060	Contact Assembly 37
179959**	Plate, Cover 66	198092	Fan 39, 68	310061	Pawl 37
179960	Spring, Detent 66	198364	Relay Assembly 2, 18	310062	Spring, Torsion 37
179993	Screw, 10-32 Shoulder 8	198366	Modification Kit 12	310063	Bracket, Guide 37
180675	Screw, #6 Self-Tapping 7	198367	Cable w/Terminals 12	310065	Disk w/Post 37
180904	Tab, Terminal 7	198585**	Shelf 40	310066	Disk Assembly 37
181392	Terminal, Tab Type 5, 7, 38	198586	Bracket, Locating 40	310067	Disk Arm 37
181661	Buzzer, 115V AC 5	198587	Plate, Instruction 8	310068	Disk w/Ratchet 37
182531	Clip, Speed 68	198595	Panel, Control 40	310144	Plate, Identification 9
192176	Terminal, Plug Type 36	198598	Guide, Tape 8, 40	310153	Jumper, 15" Green 5, 7, 38
192245**	Container, Chad 3, 60	198599	Bracket, Mounting 39	310293	Modification Kit 12
192259**	Shelf, Paper 62	198604	Guide, Tape 39	310312	Bracket 5
192269	Nut, Speed 68	198619	Post 39	310314	Buzzer Assembly 5
193635	Indicator, Neon 40	198622	Hub 39	310729	Filter, Air 68
193674	Latch, Fastener 34	198623**	Container, Tape 39	310730	Support, Filter 68
193675	Modification Kit 2, 34	198624**	Bracket, Mounting 39	310731	Grille 68
193943	Cable Assembly 68	198629**	Dome 8	311527	Clamp, Cable 38
193994	Holder Assembly, Fuse 68	198671	Holder, Card 6	311729	Plate, Identification 66
194084**	Modification Kit 3, 64	199060	Plate, Mounting 18	311909	Drum 37
194490	Modification Kit 3, 53	199061	Bracket, Right 18	311910	Drum 37
194575	Post, Locating 28, 63	199062	Bracket, Left 18	311911	Drum 37
194855	Guide, Tape 21	199063	Plate, Nut 39	312475	Cable Assembly 21
194856	Modification Kit 63	199064**	Panel, Lower Right 5	312476	Cable Assembly 21
194857**	Modification Kit 2, 28	199069	Bar, Spacing 39	312717**	Extension 68
194858**	Plate, Mounting 28	199095	Bracket, Connector 38	312719**	Modification Kit 3, 68
194859**	Modification Kit 2, 28	199125**	Plate 39	315543	Module Assembly 3, 36
194860**	Plate, Mounting 28	199136	Plate, Wear 39	315759	Switch, Stepping 36
194861	Modification Kit 2, 21	199137	Container, Tape 39	318937	Tray, Copyholder 12
194864	Clamp 5	199188	Plug Assembly, Blinding 39	319145	Switch, Stepping 36
194865	Bracket, Clamp 5	199361	Modification Kit 7	319251	Insulator 55
194866	Clamp Assembly, Cable 5	199879	Bracket 39	320410	Terminal, Spade Type 12, 13, 18, 20, 22, 30, 33, 35, 38, 53 to 57, 67, 68
195104**	Modification Kit 63	199925	Guide, Tape 63	320412	Terminal, Spade Type 23
195106	Modification Kit 63	199926	Guide, Tape 63	320413	Terminal, Spade Type 38
195107	Modification Kit 63	199927	Guide, Tape 63	320418	Terminal, Ring Type 5, 8, 11, 12, 35, 38, 57, 67
195389**	Chute, Chad 61	199929	Guide, Tape 63	320420	Terminal, Ring Type 5, 7, 38, 56
195390**	Bin, Chad 61	304560	Post 37	321094**	Shield, Anti-glare 8

**Refer to page 1 for finish suffix

28 PERFORATOR, NON-TYPING (LPE) AND TYPING (LTPE)

PARTS

FIGURE	CONTENTS	PAGE	FIGURE	CONTENTS	PAGE
1	Frame Mechanism (Typing Perforator)	2	21	Typing Mechanism	21
2	Frame Mechanism (Typing Perforator)	3	22	Tape Depressor Mechanism	22
3	Frame Mechanism (Non-Typing Perforator)	4	23	159364 Modification Kit to Add Power Drive to Backspace	23
4	Frame Mechanism (Non-Typing Perforator)	5	24	159379 Modification Kit to Add "Make Only" Code Reading Contacts	24
5	Frame and Motor Mounting Parts (Non-Typing Perforator)	6	25	160881 Modification Kit to Add Guard to Cover Backspace Mechanism	24
6	Main Shaft Mechanism (Typing Perforator)	7	26	178917 Modification Kit to Provide Backspace Mechanism for Fully Perforated Tape and Printing Between Feed Holes	25
7	Main Shaft Mechanism (Non-Typing Perforator)	8	27	178918 Modification Kit to Provide Guard for Backspace Mechanism	25
8	Punch Rear Plate Mechanism	9	28	159381 and 159382 Modification Kits to Add Auxiliary Timing Contacts	26
9	159363 and 172640 Modification Kit to Add Manual Backspace	9	29	161340 Modification Kit to Add Manual Interfering Letters Tape Feed-Out	27
10	Punch Block Assemblies	10	30	161341 Modification Kit to Add Solenoid Operation to Letters Feed-Out	27
11	Punch Front Plate Mechanism	11	31	159360 Modification Kit to Add Signal Bell Contact (On Upper Case "S")	28
12	Punch Bail Mechanism	12	32	162375 Modification Kit to Add "Unshift on Space"	28
13	Rotary Positioning Mechanism	13	33	Typewheel	29
14	Rotary Positioning Mechanism	14		Numerical Index	30
15	Axial Positioning Mechanism	15			
16	Axial Positioning Mechanism	16			
17	Function Box Mechanism	17			
18	Transfer Mechanism	18			
19	Ribbon Feed Mechanism (Early Design)	19			
20	Ribbon Feed Mechanism (Later Design)	20			

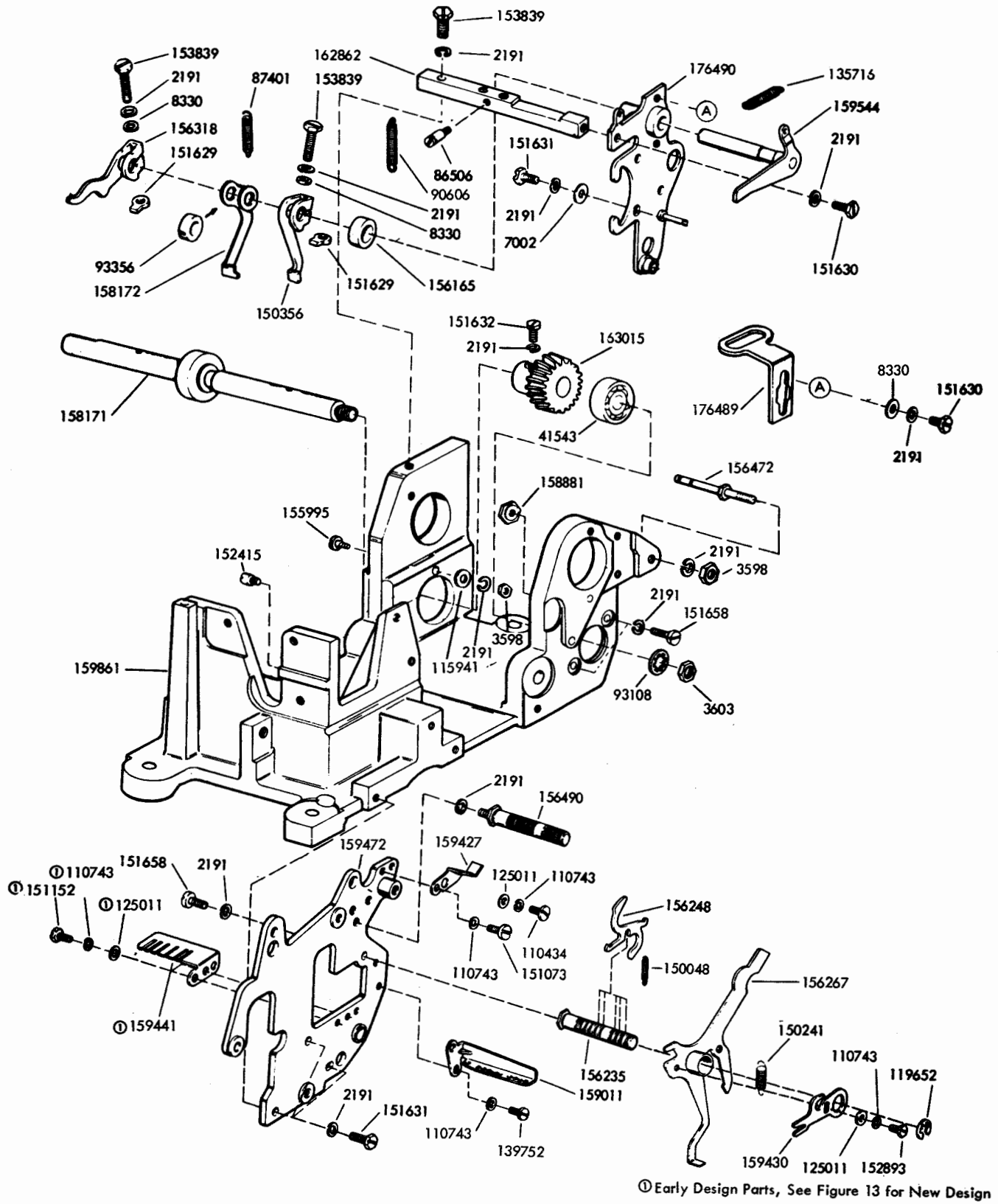
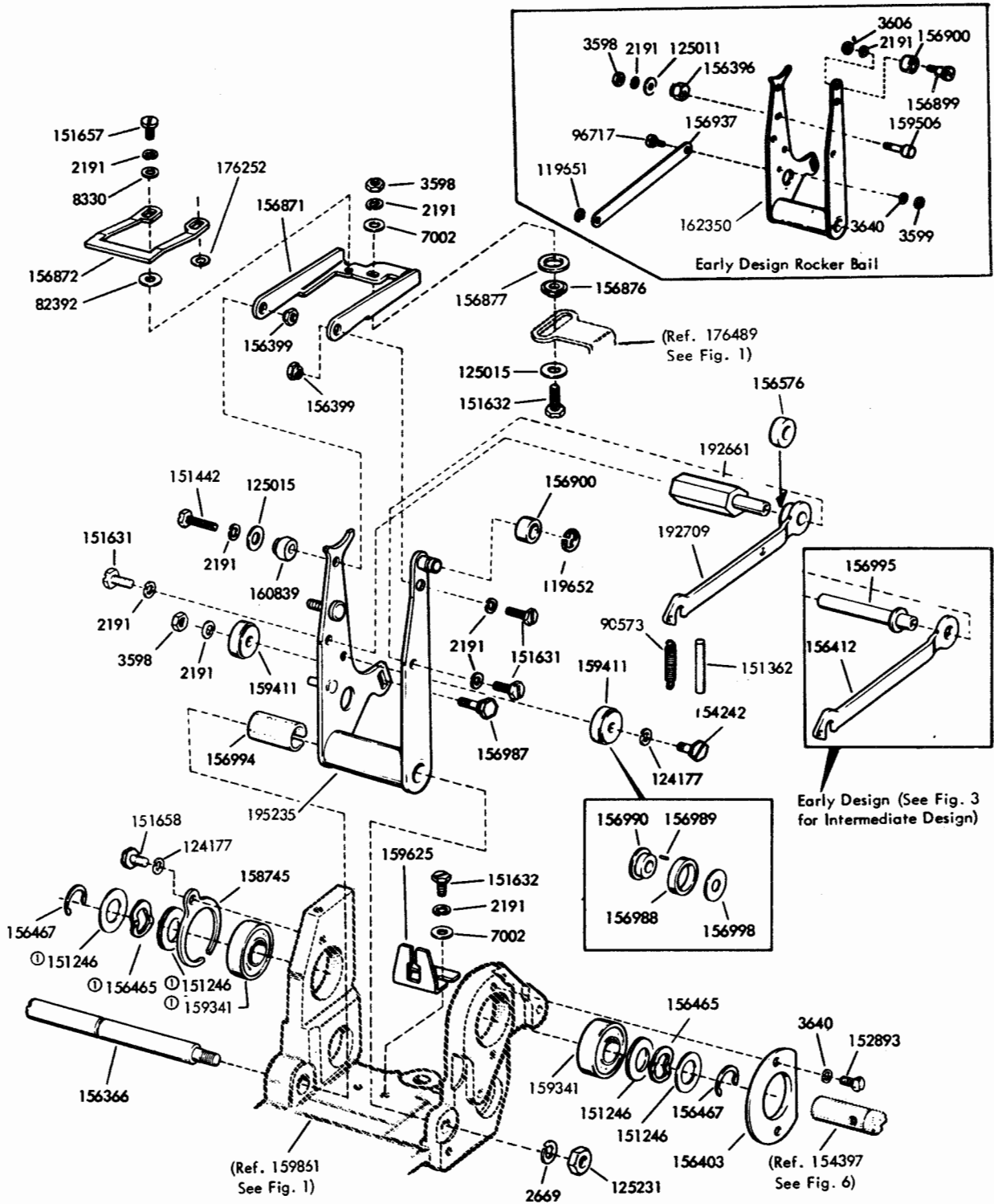


FIGURE 1. FRAME MECHANISM (TYPING PERFORATOR)



⓪ These parts are not required with the later design shaft (154397). See Figure 6.

FIGURE 2. FRAME MECHANISM (TYPING PERFORATOR)

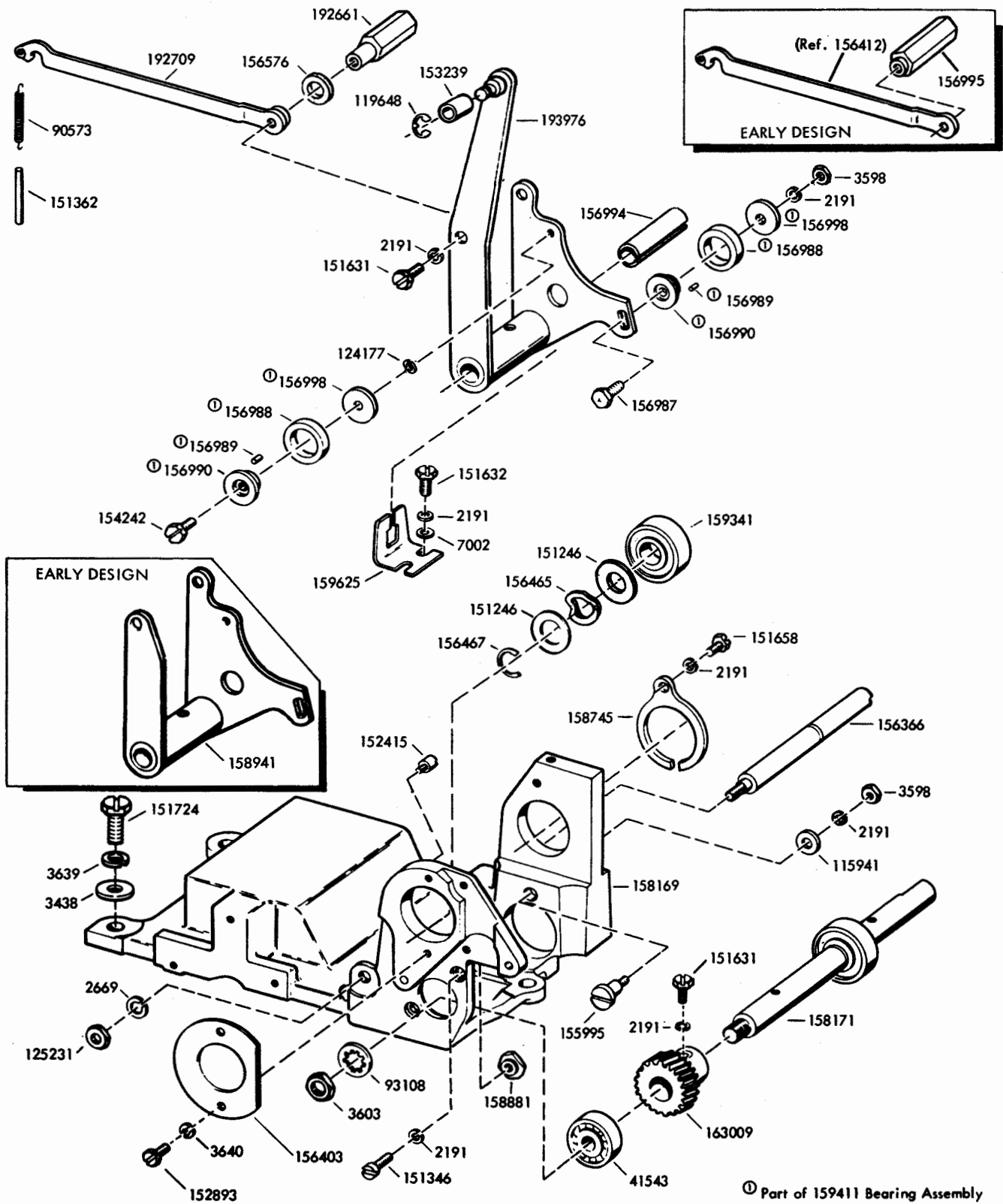


FIGURE 3. FRAME MECHANISM (NON-TYPING PERFORATOR)

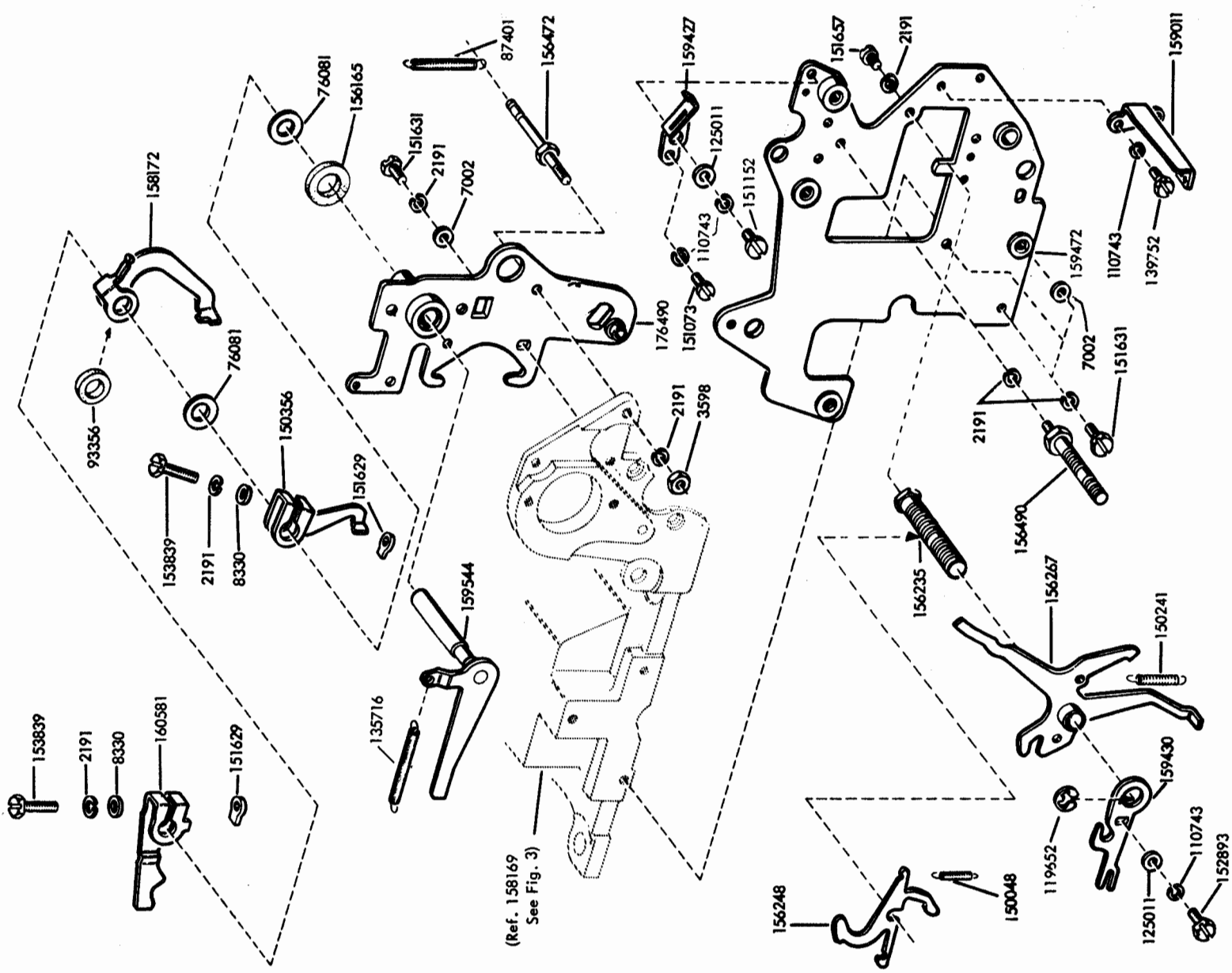
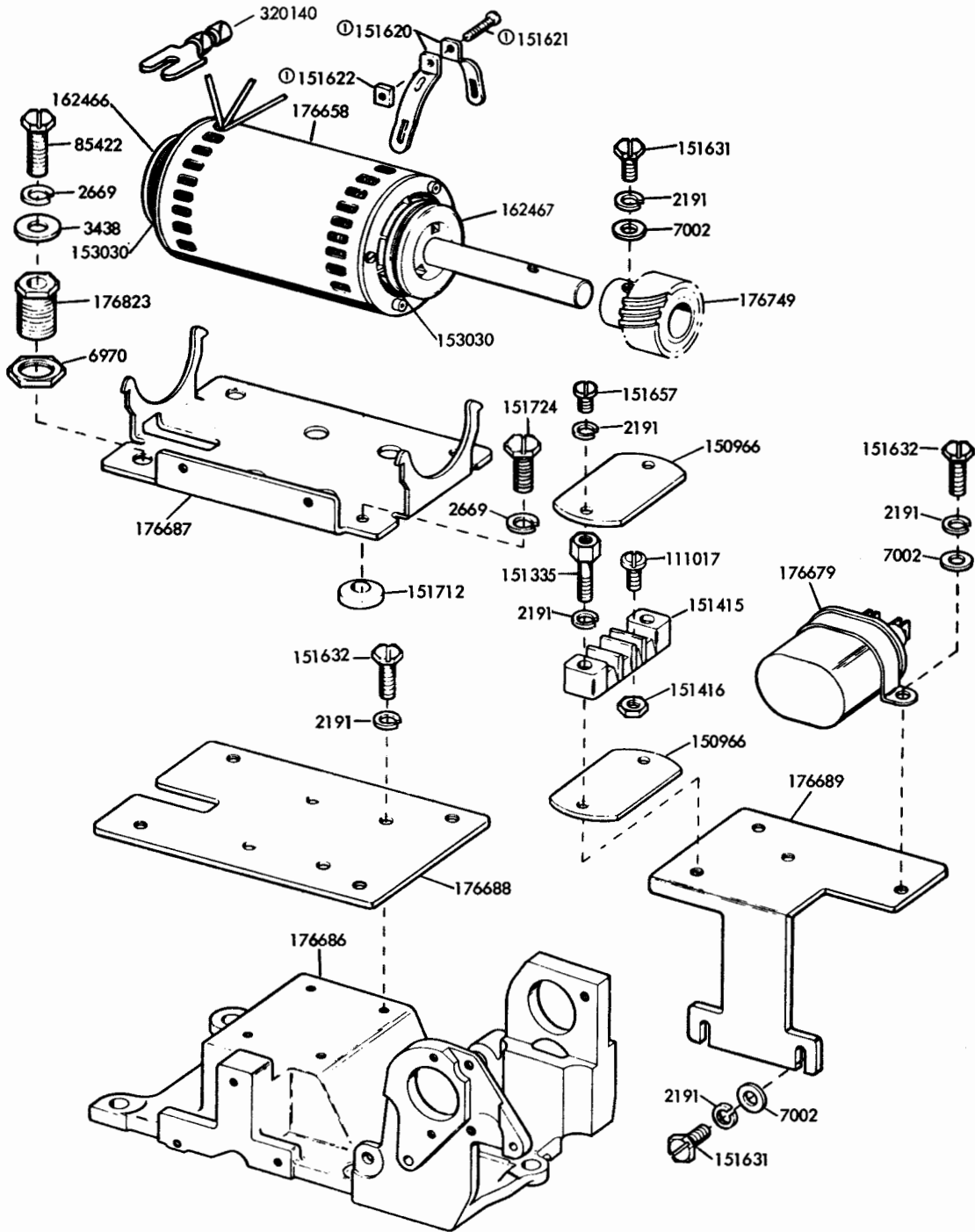


FIGURE 4. FRAME MECHANISM (NON-TYPING PERFORMER)



Ⓢ122207 Strap Assembly

FIGURE 5. FRAME AND MOTOR MOUNTING PARTS (NON-TYPING PERFORATOR)

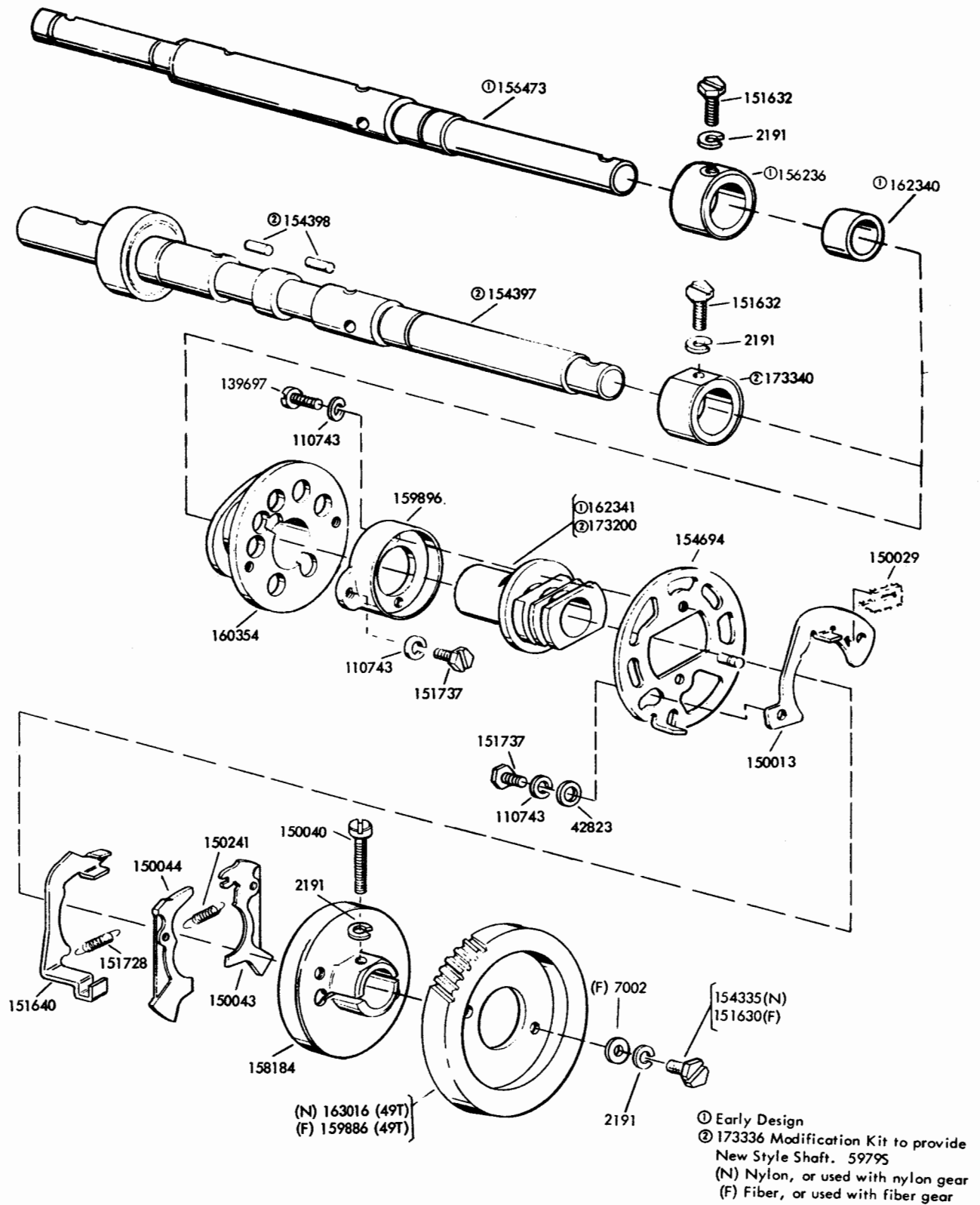


FIGURE 6. MAIN SHAFT MECHANISM (TYPING PERFORATOR)

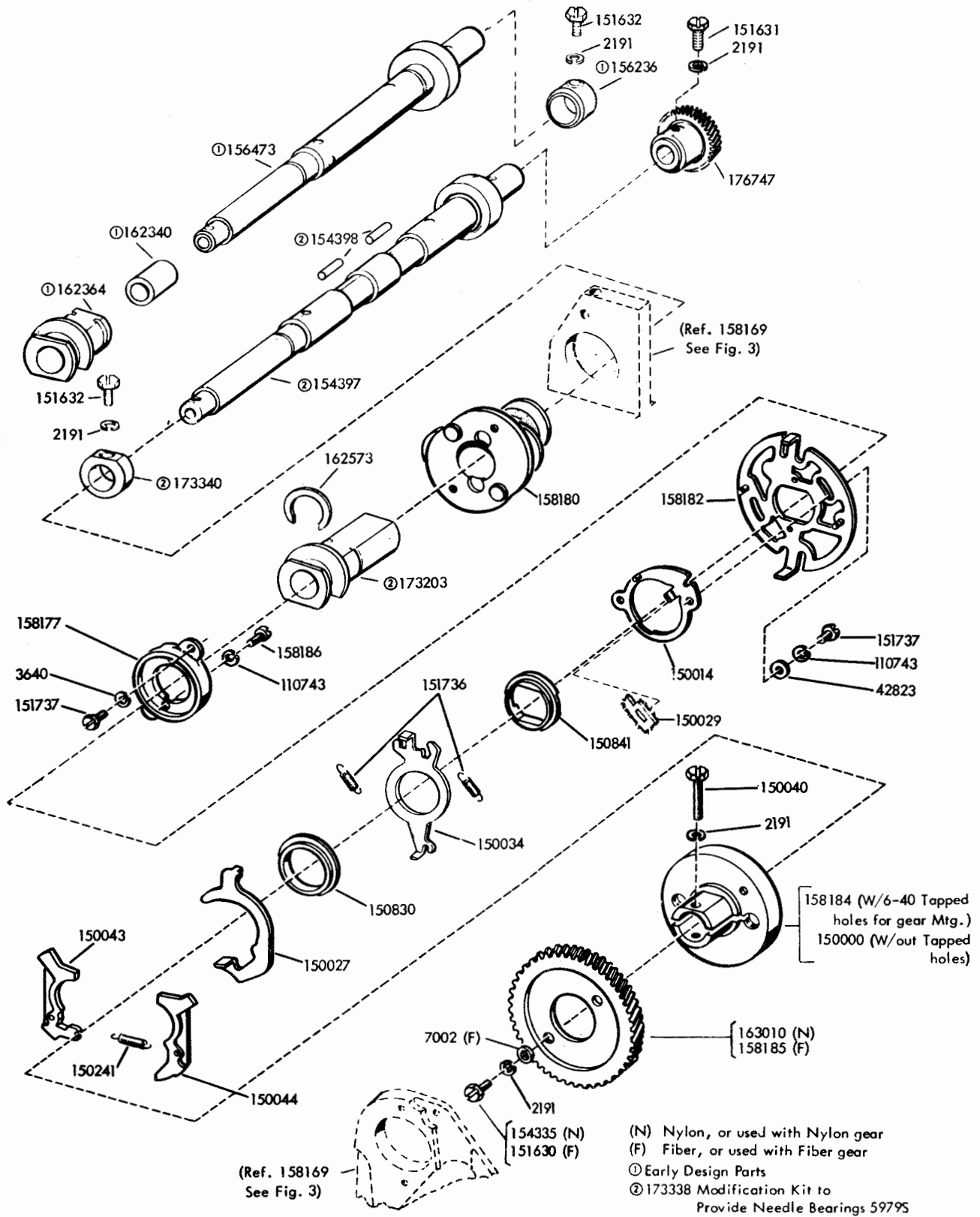


FIGURE 7. MAIN SHAFT MECHANISM (NON-TYPING PERFORATOR)

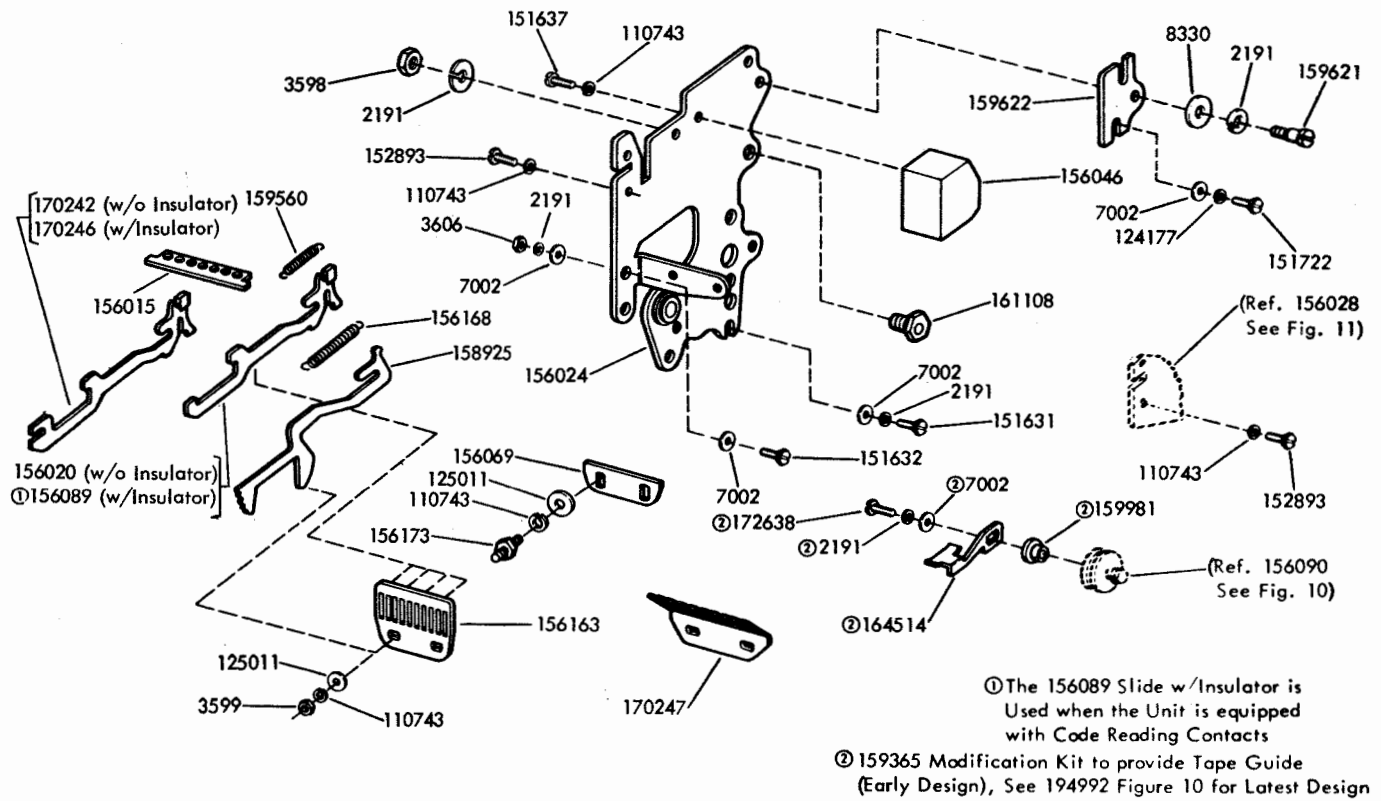


FIGURE 8. PUNCH REAR PLATE MECHANISM

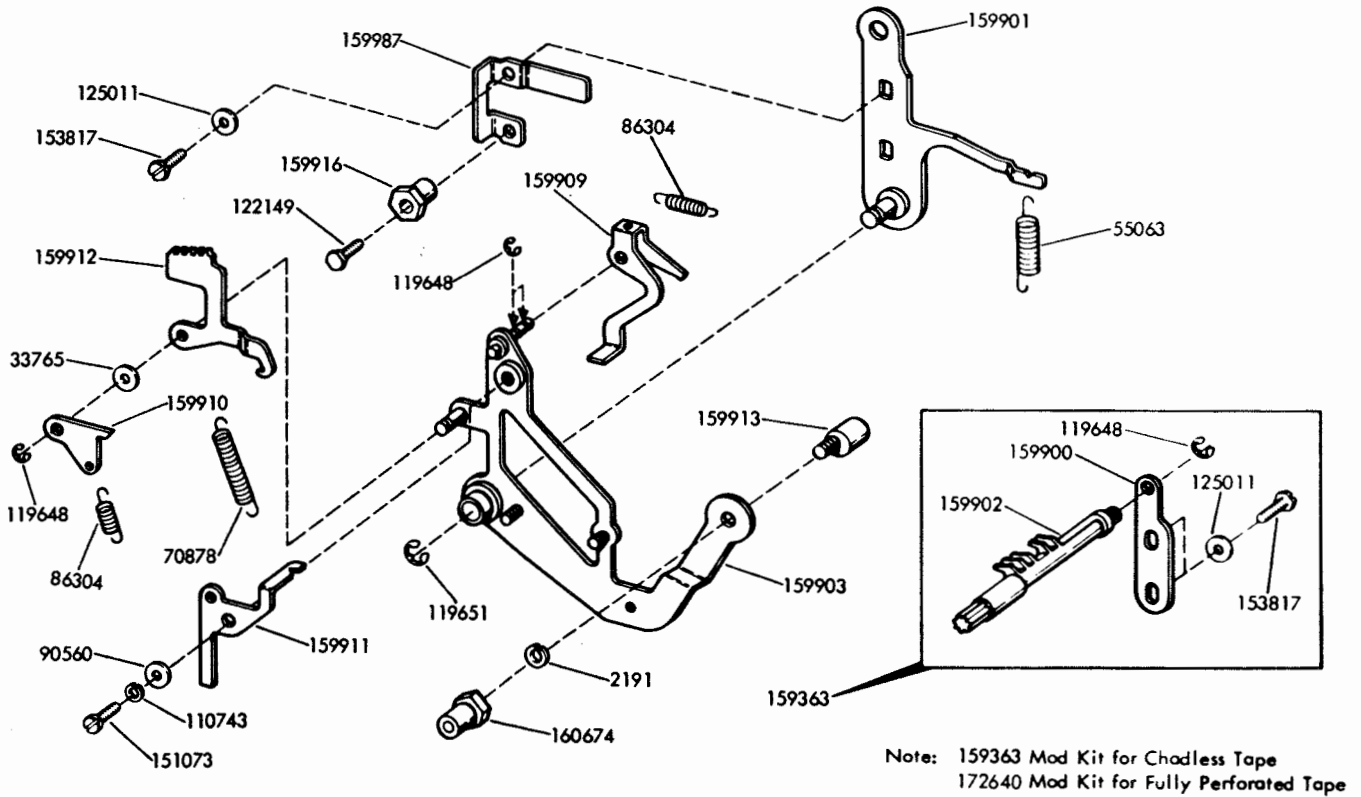
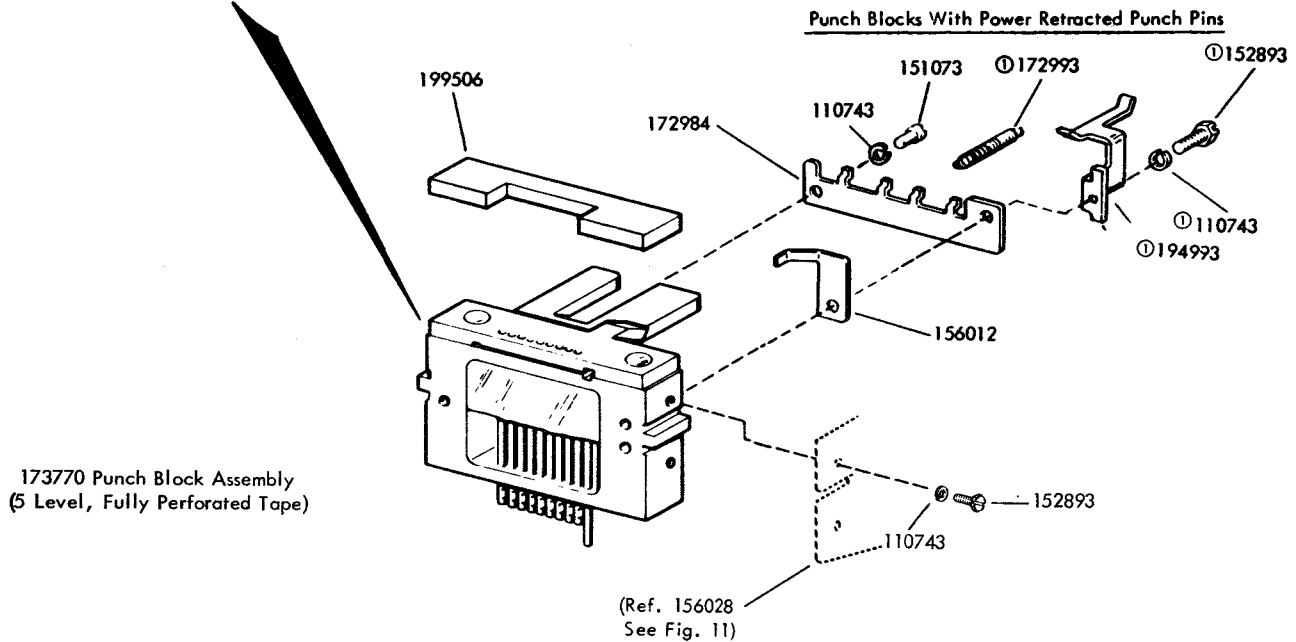
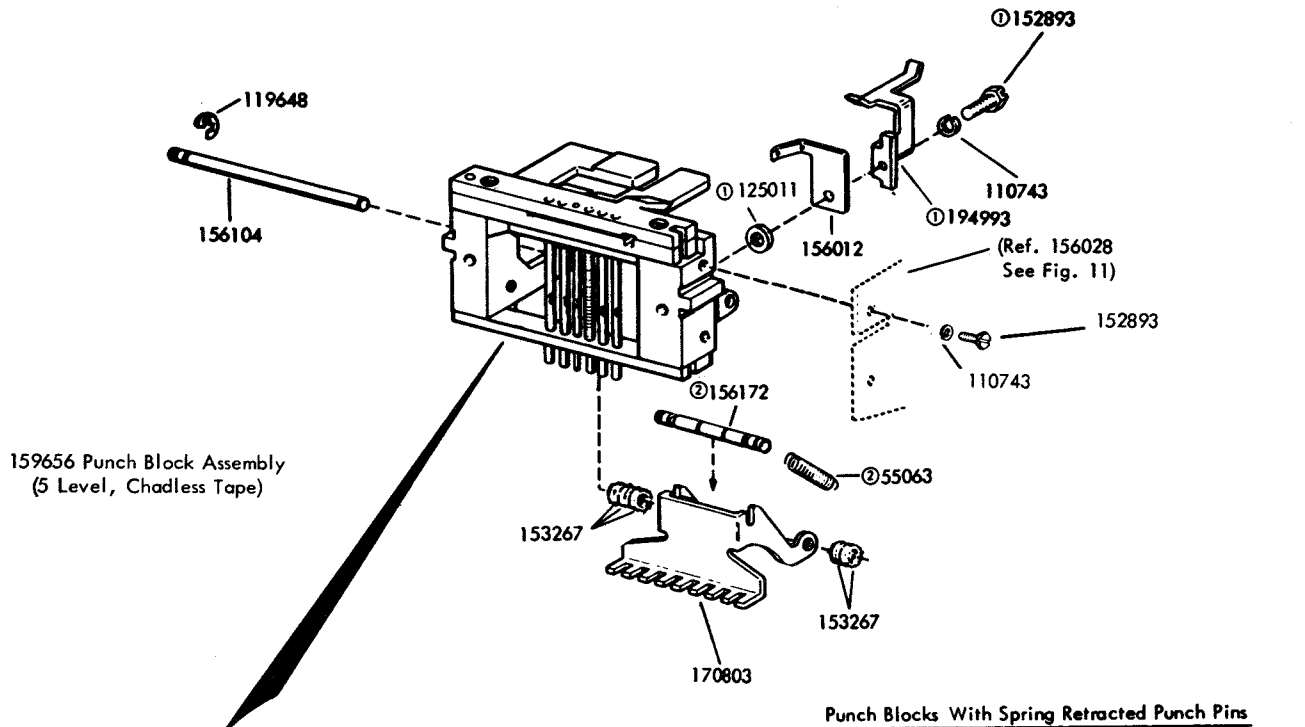
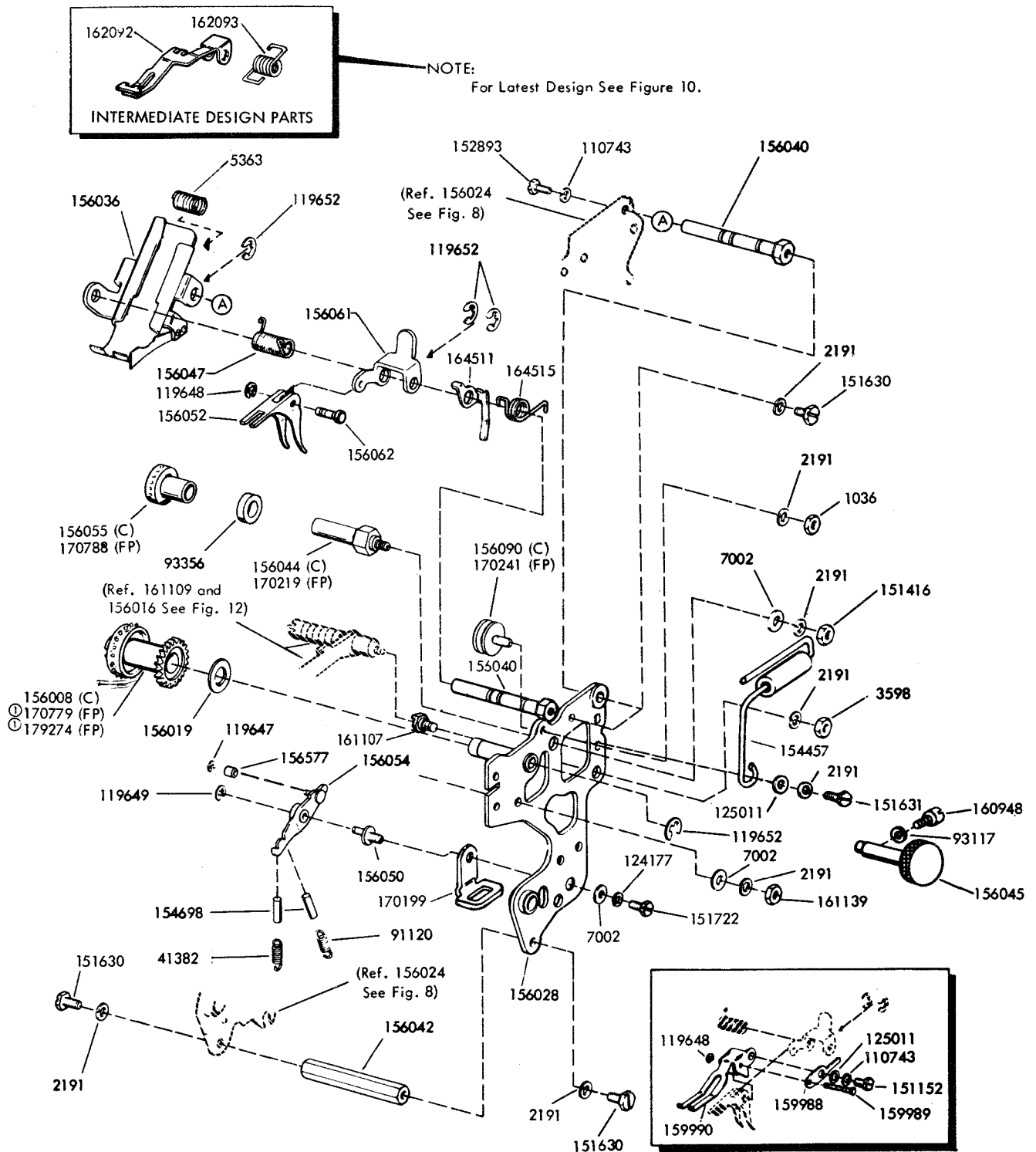


FIGURE 9. 159363 AND 172640 MODIFICATION KIT TO ADD MANUAL BACKSPACE



① 194992 Modification Kit to provide Tape Guide, Specification 50, 1885
② Not Part of Punch Block Assemblies

FIGURE 10. PUNCH BLOCK ASSEMBLIES



① When used with the 170778 punch block assembly the 170779 feed wheel produces tape with the feed hole indent punched out. The 179274 feed wheel places the indent between the feed holes and is identified by a black dot on the shank.

(C) Chadless Tape
(FP) Fully Perforated Tape

FIGURE 11. PUNCH FRONT PLATE MECHANISM

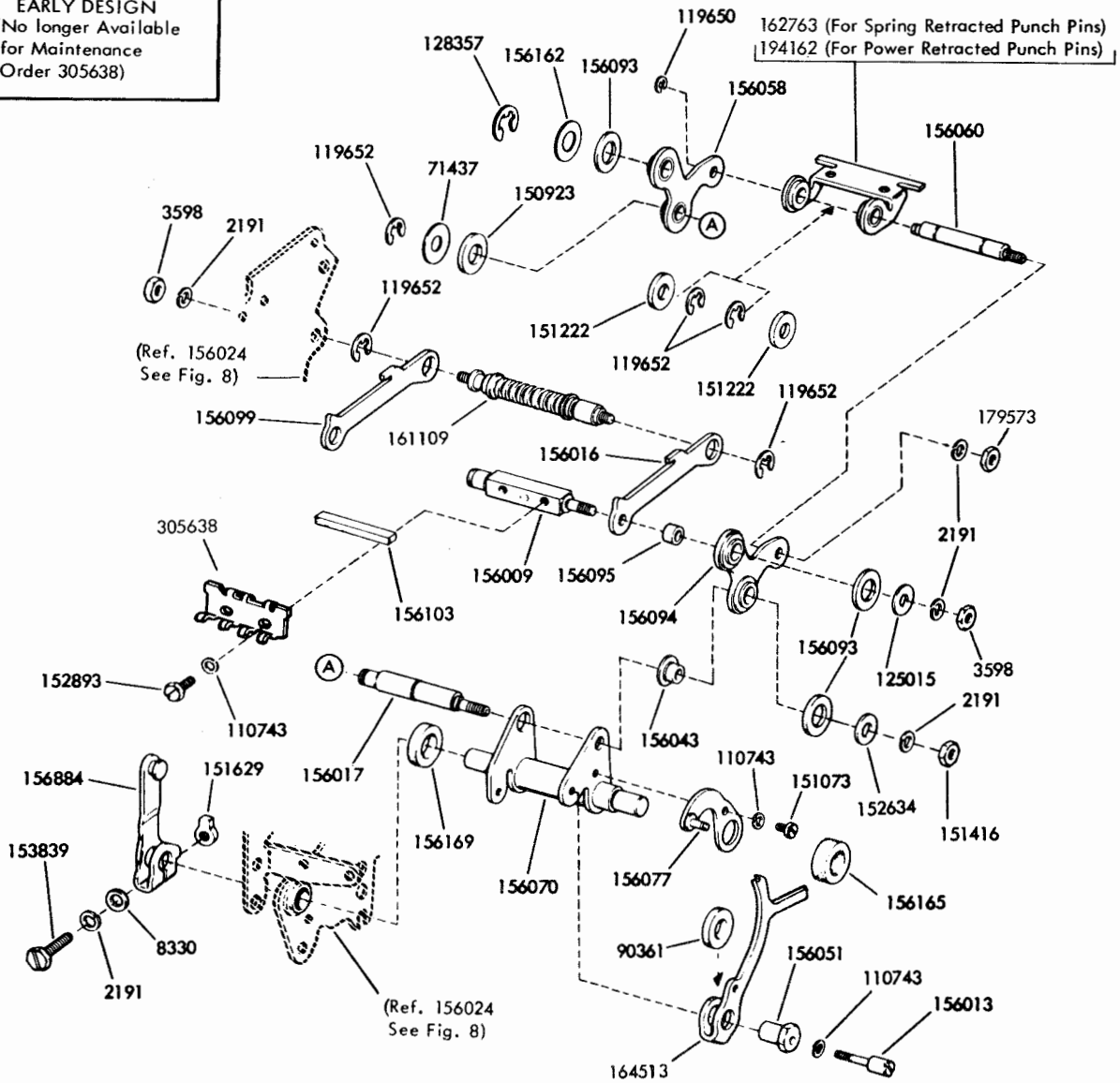
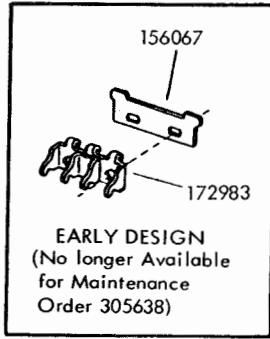
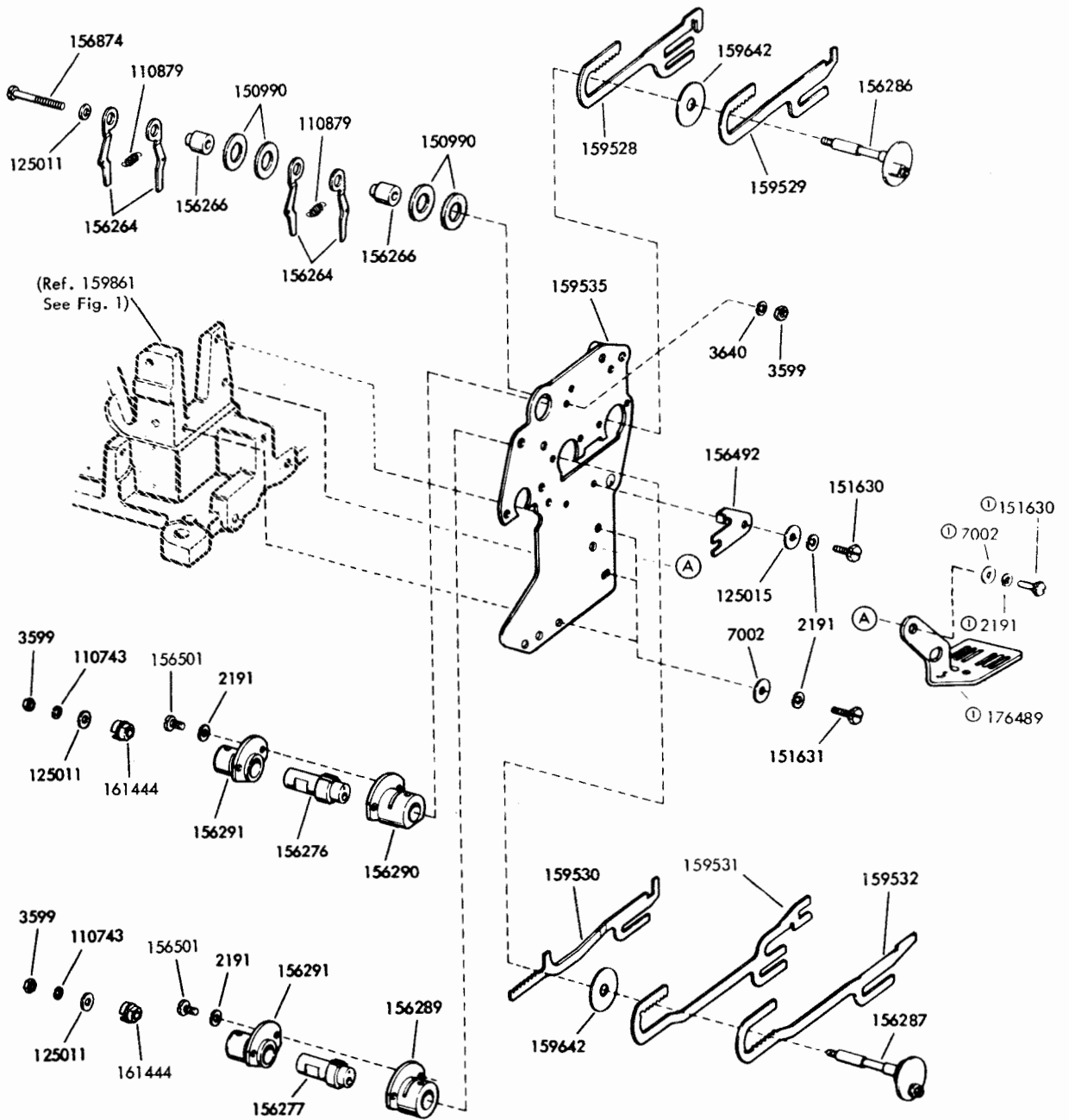


FIGURE 12. PUNCH BAIL MECHANISM



ⓐ New Design Parts, See Figure 1 for Early Design

FIGURE 13. ROTARY POSITIONING MECHANISM

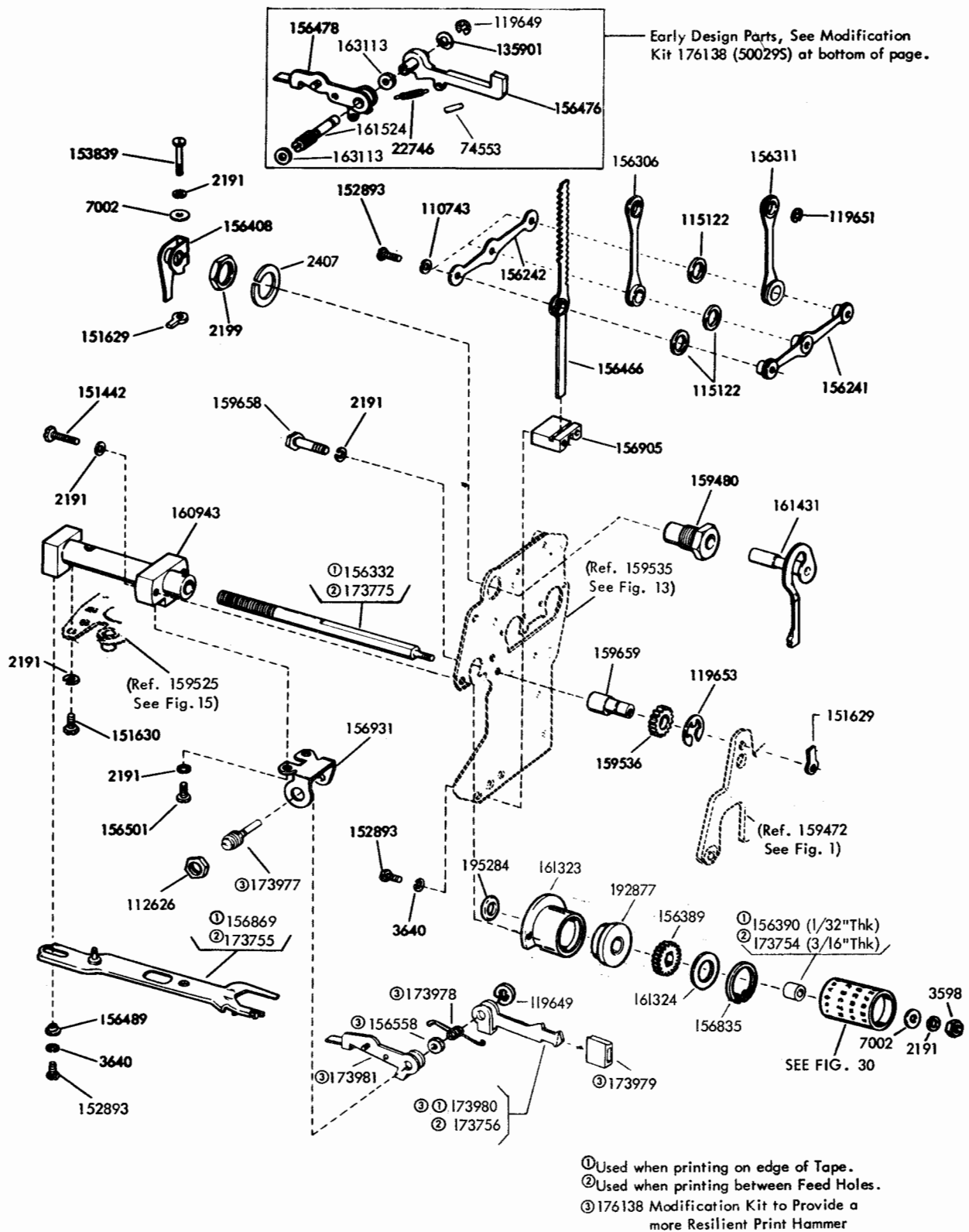


FIGURE 14. ROTARY POSITIONING MECHANISM

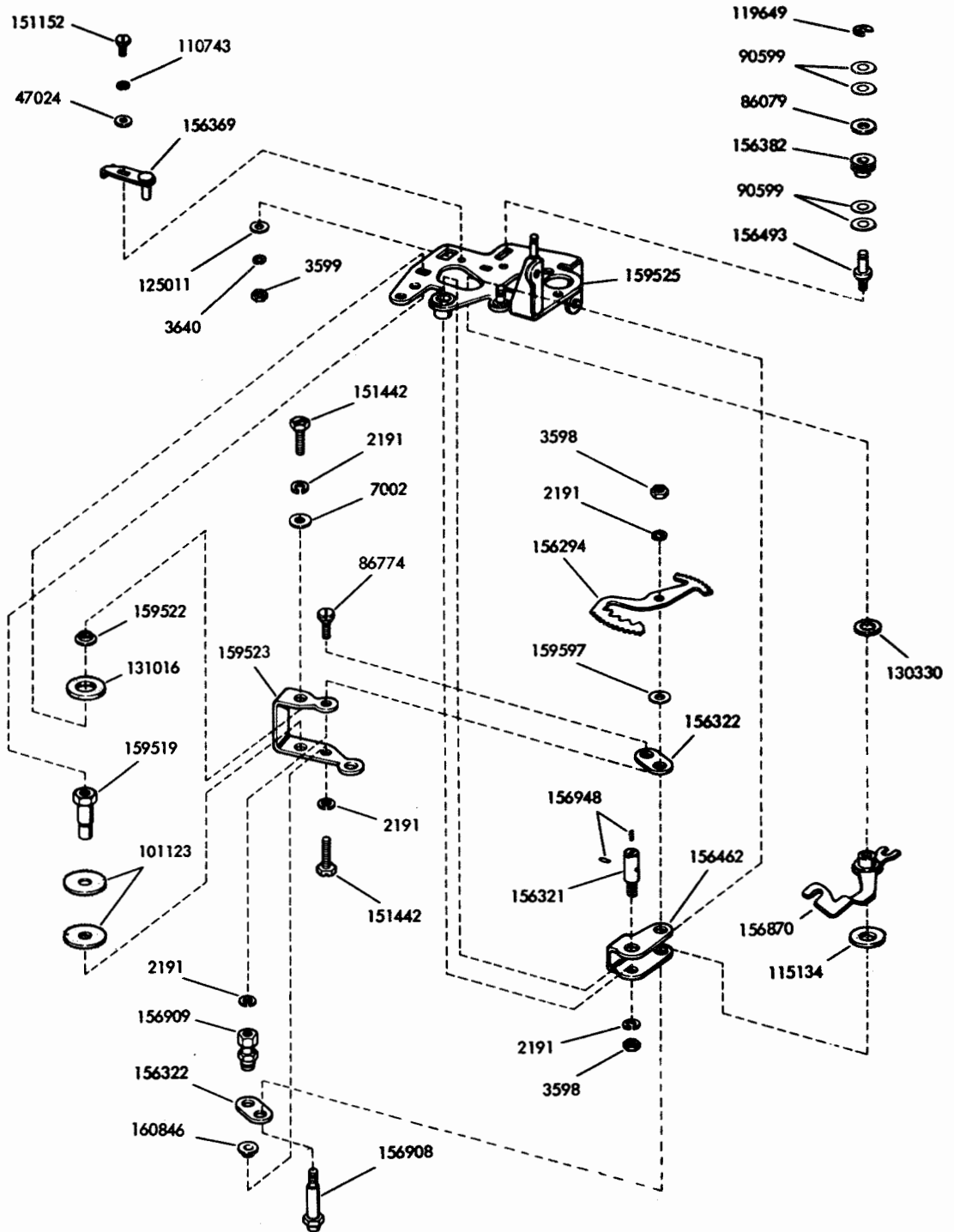
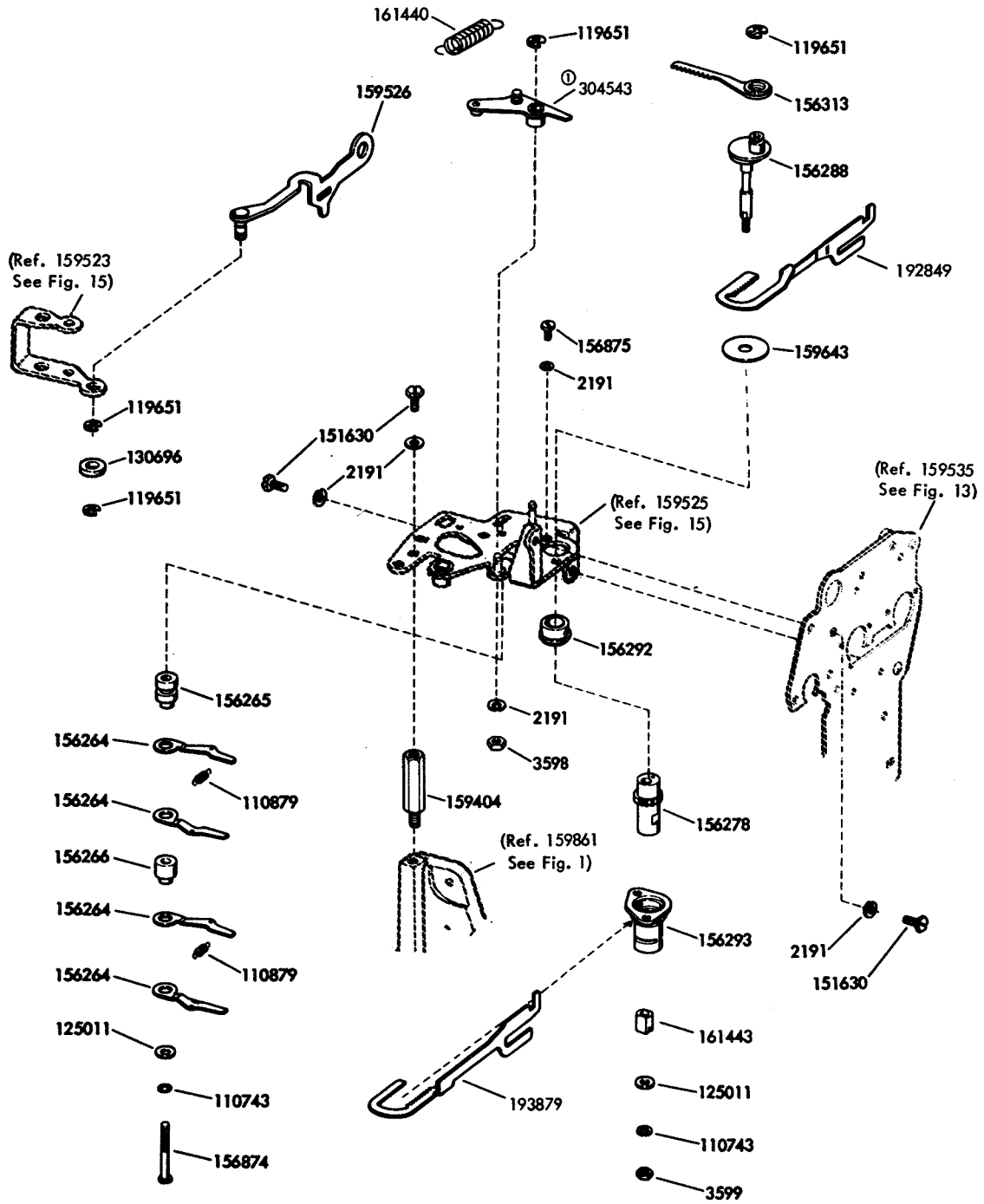


FIGURE 15. AXIAL POSITIONING MECHANISM



Ⓞ Early Design Parts

FIGURE 16. AXIAL POSITIONING MECHANISM

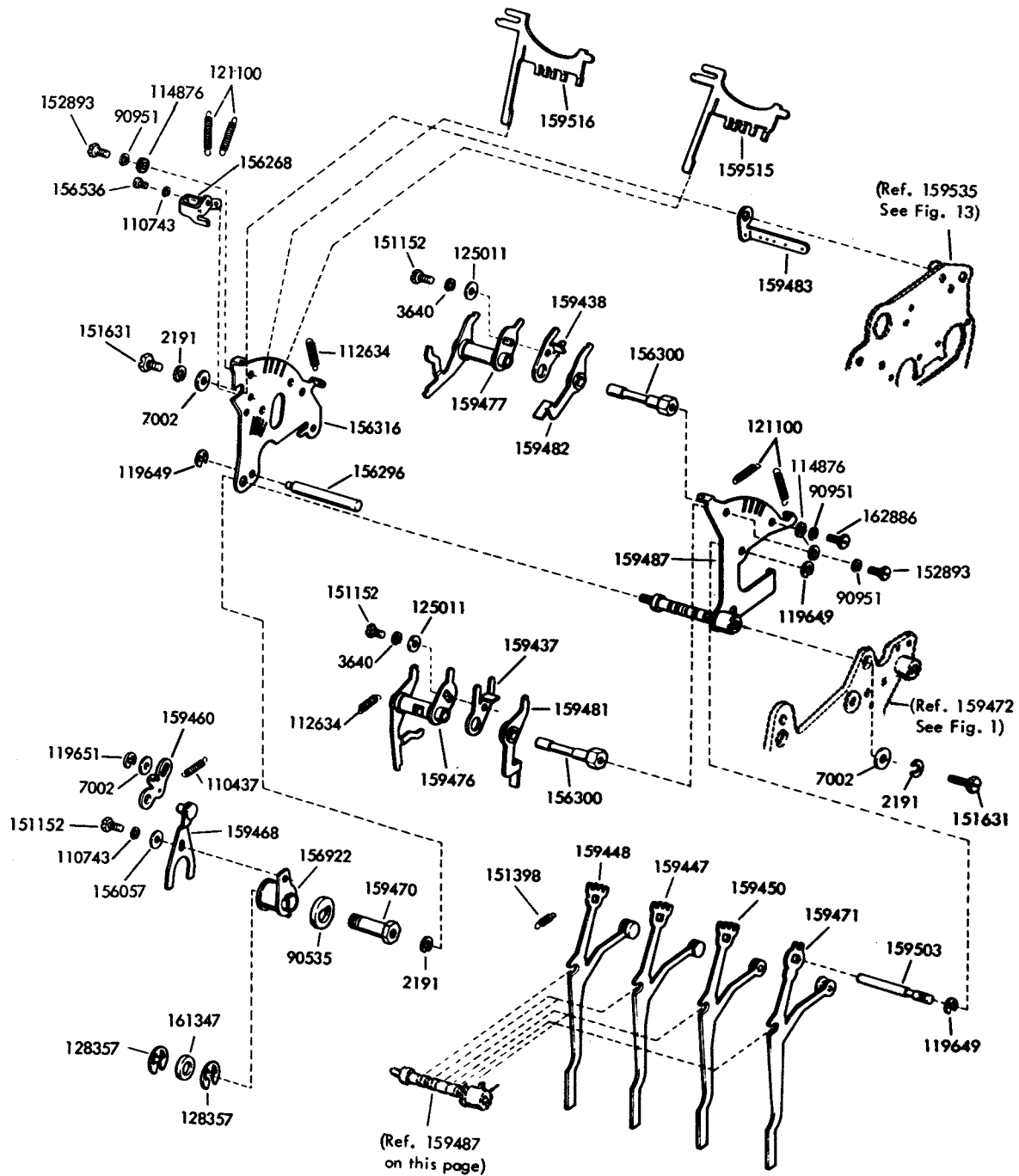


FIGURE 17. FUNCTION BOX MECHANISM

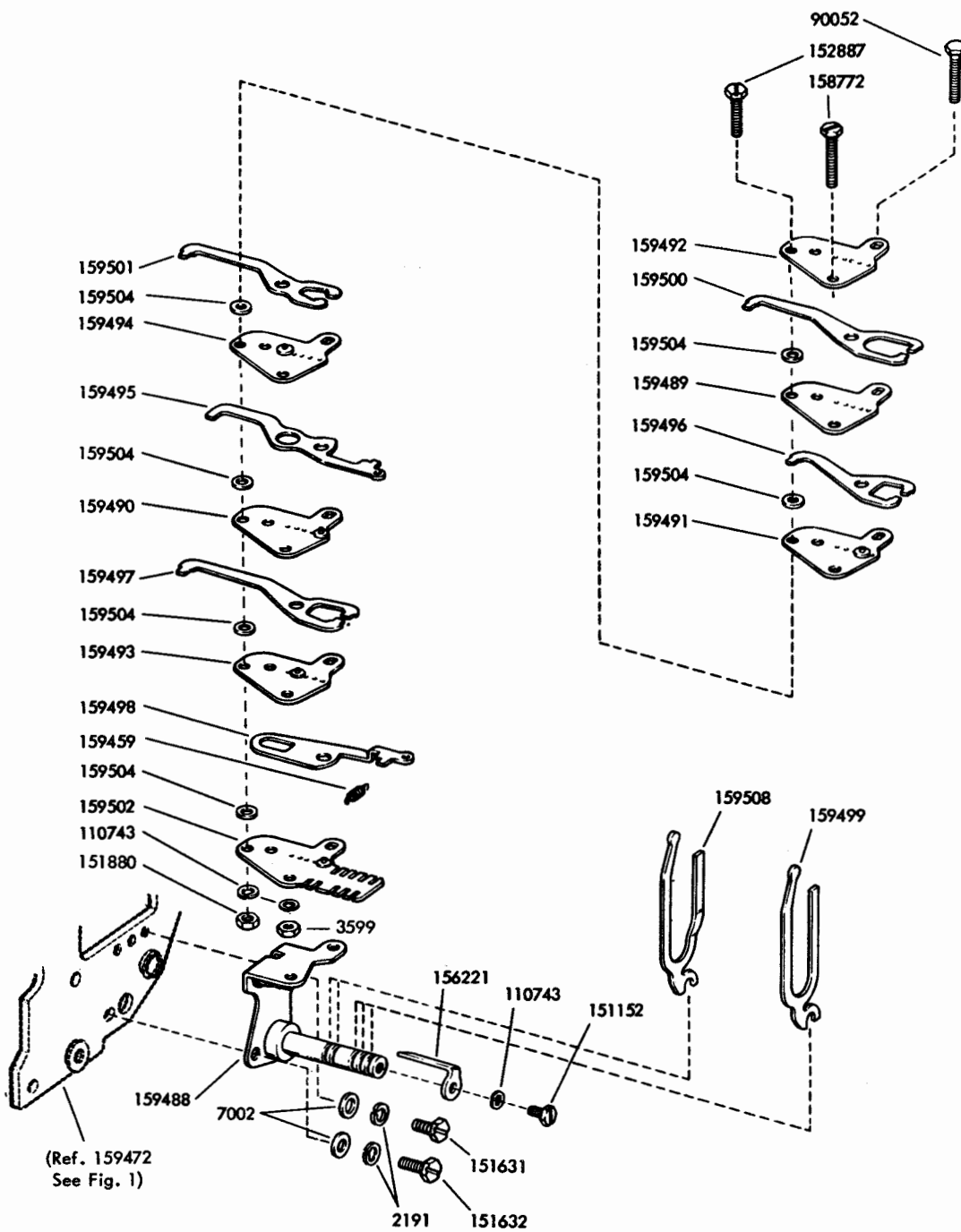
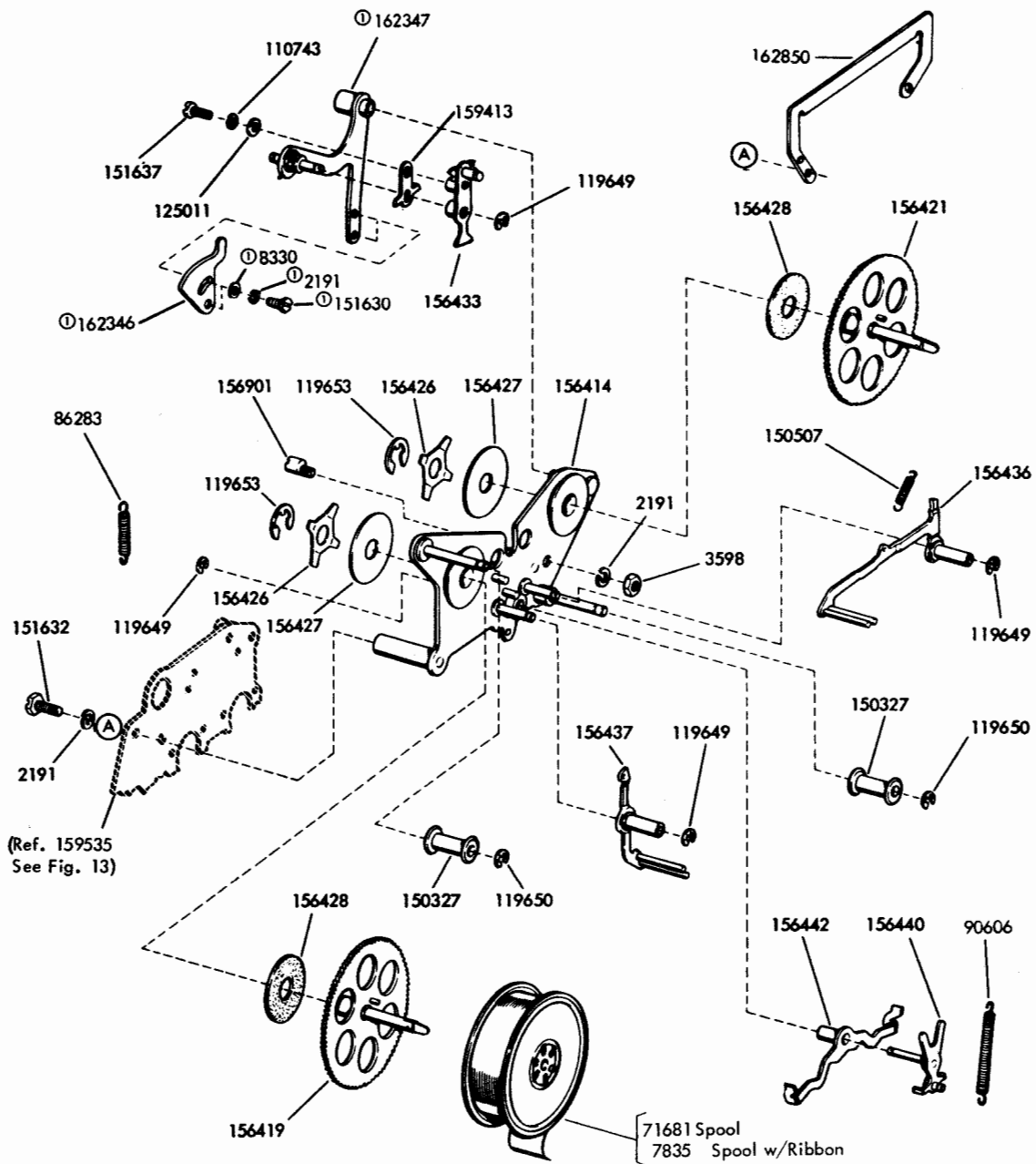


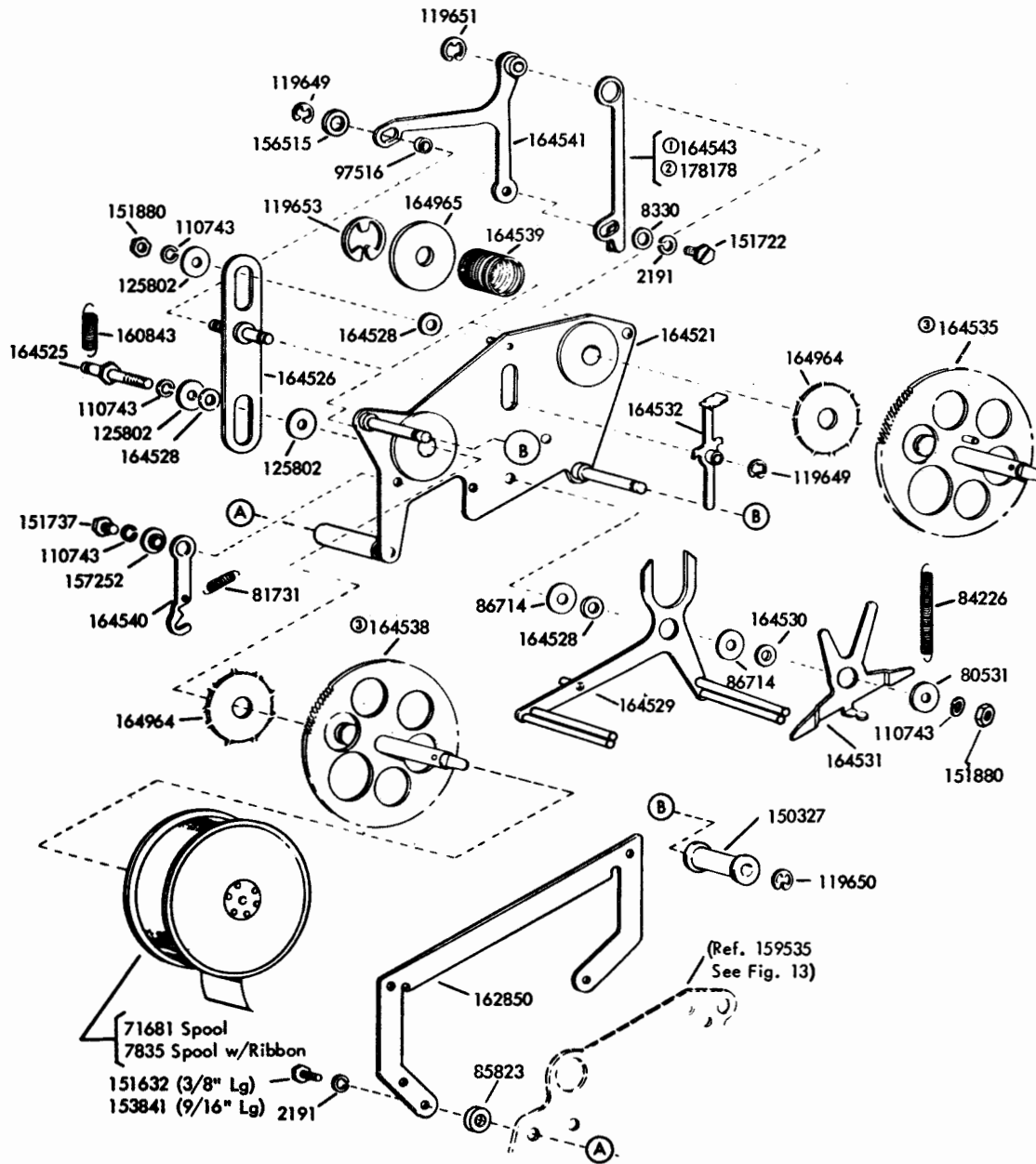
FIGURE 18. TRANSFER MECHANISM



Note:
For Latest Design Ribbon Feed Mechanism See Figure 20.

Ⓞ 154325 Modification Kit to provide
LPR with Adjustable Ribbon Drive Arm

FIGURE 19. RIBBON FEED MECHANISM (EARLY DESIGN)



For Early Design Ribbon Feed Mechanism See Figure 19.

- ① Peculiar to units equipped with spring retracted Punch pins
- ② Peculiar to units equipped with power retracted Punch pins
- ③ 179579 Decalcomania which shows direction of "Ribbon to Roller" is available.

FIGURE 20. RIBBON FEED MECHANISM (LATER DESIGN)

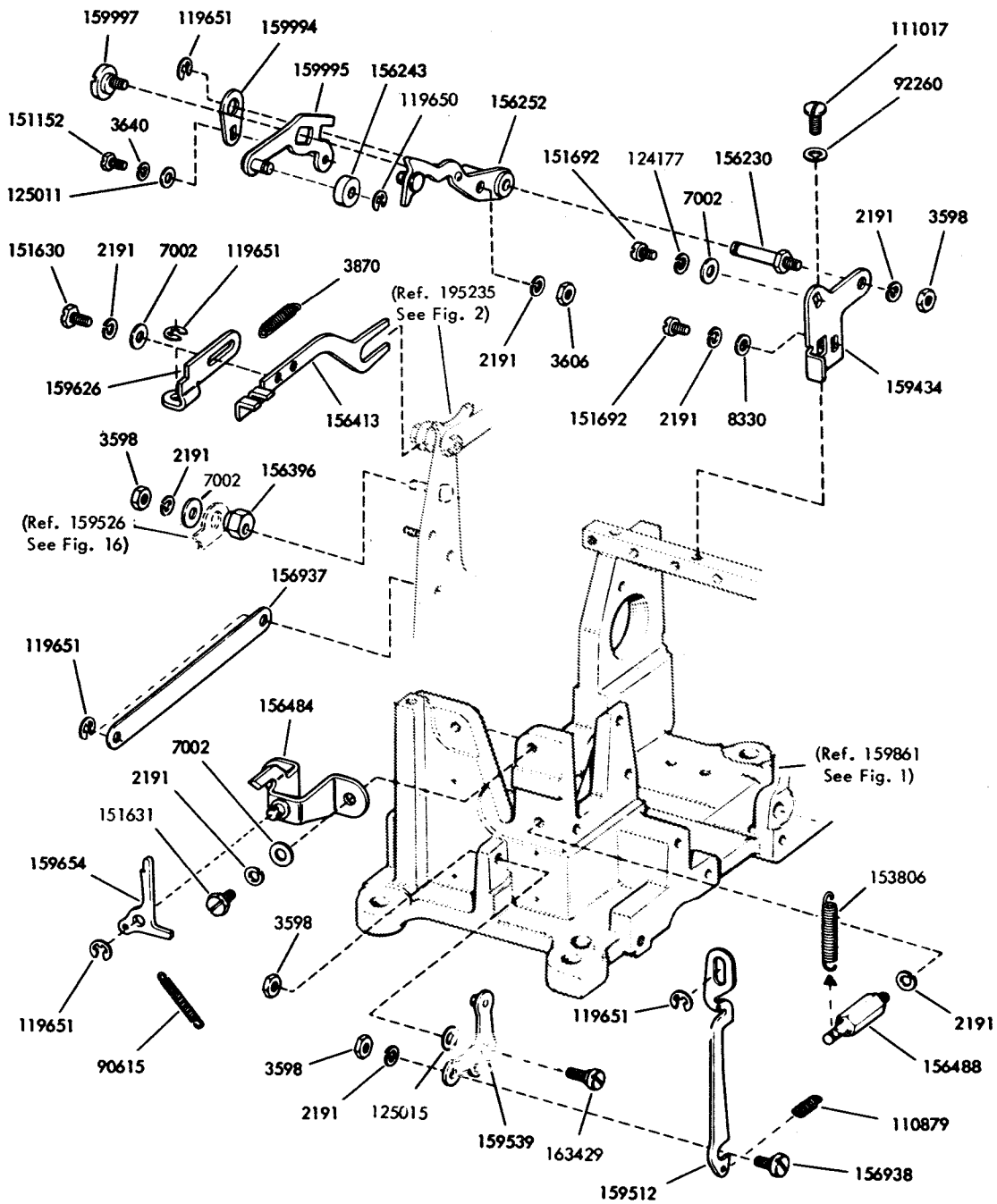


FIGURE 21. TYPING MECHANISM

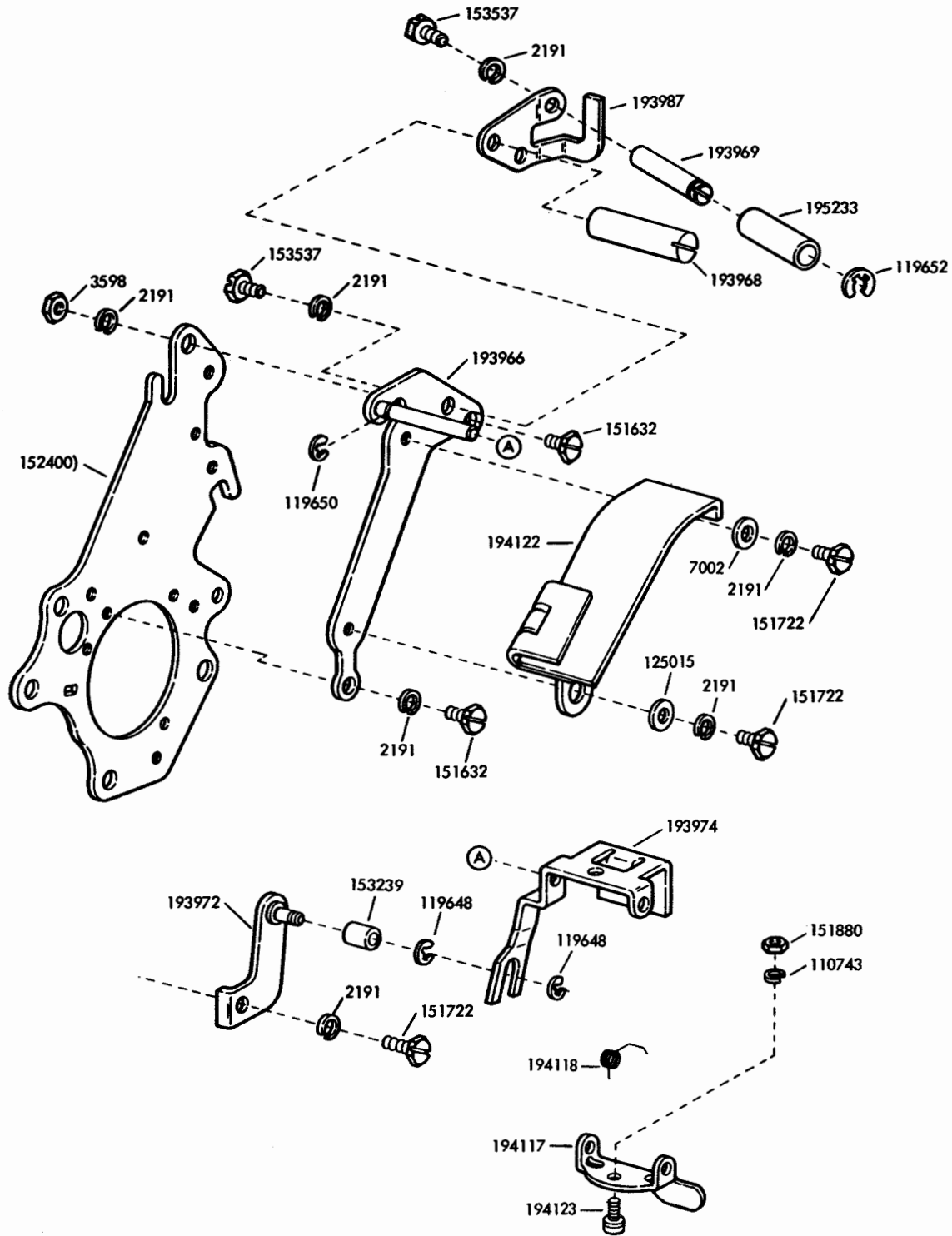


FIGURE 22. TAPE DEPRESSOR MECHANISM

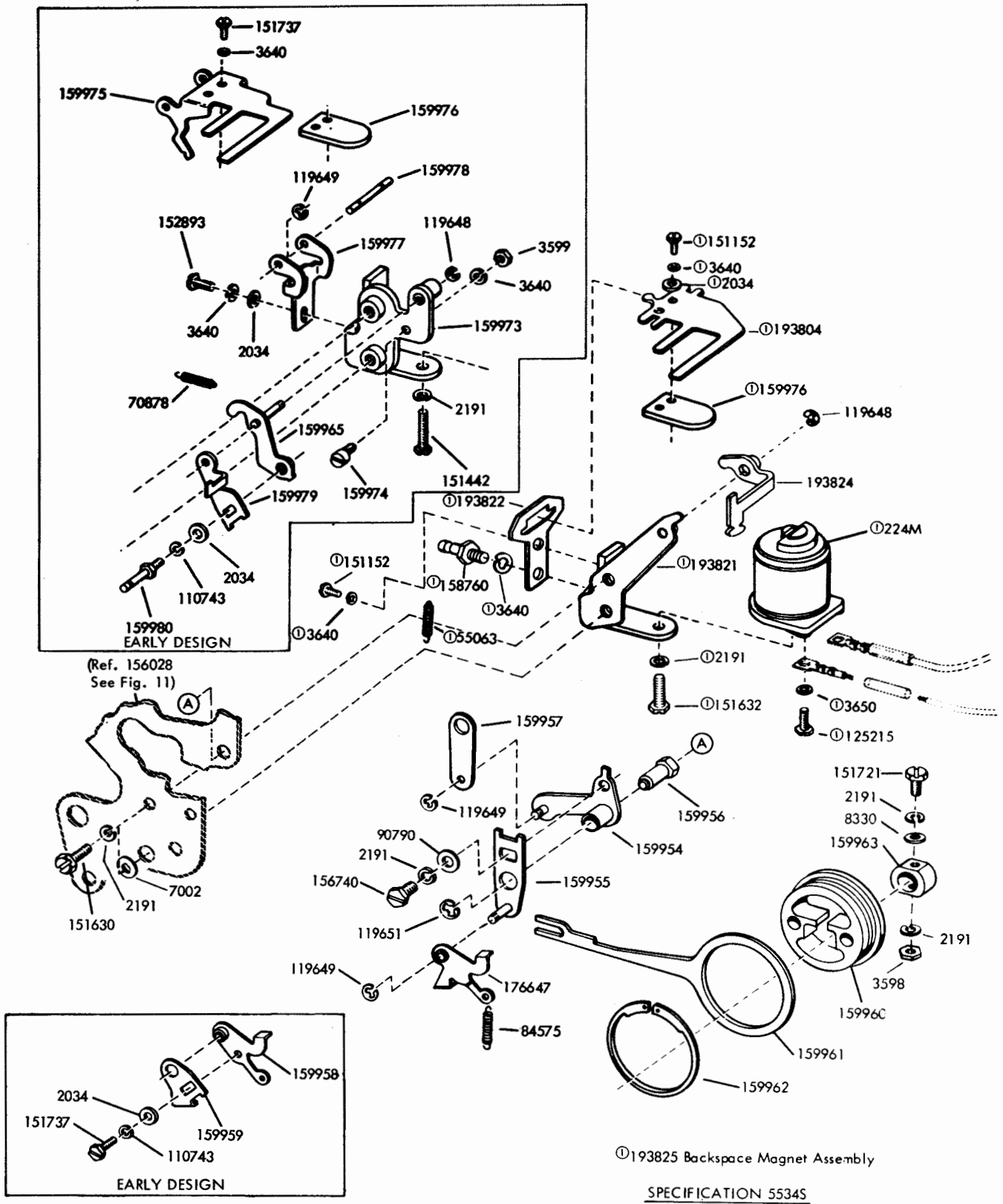


FIGURE 23. 159364 MODIFICATION KIT TO ADD POWER DRIVE TO BACKSPACE

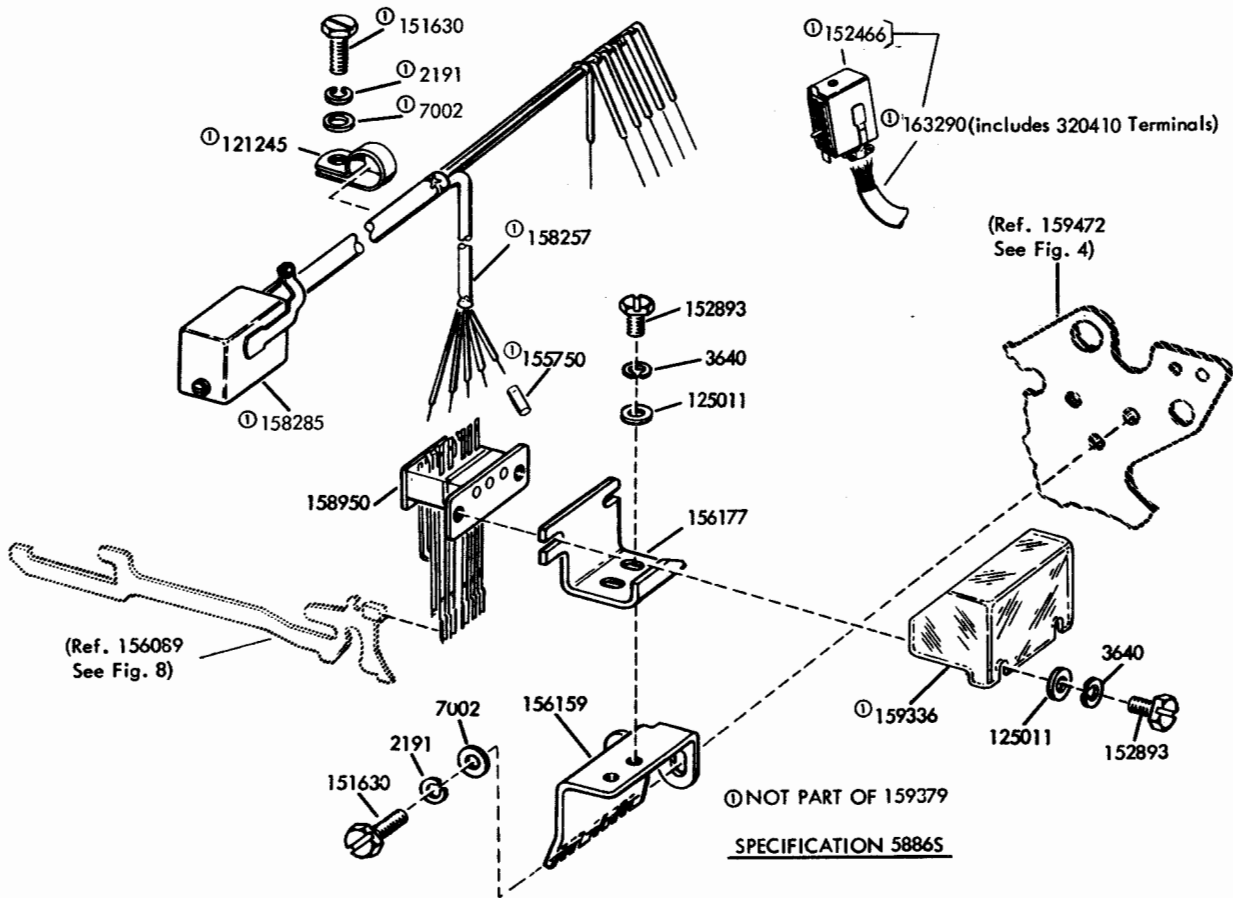


FIGURE 24. 159379 MODIFICATION KIT TO ADD "MAKE ONLY" CODE READING CONTACTS

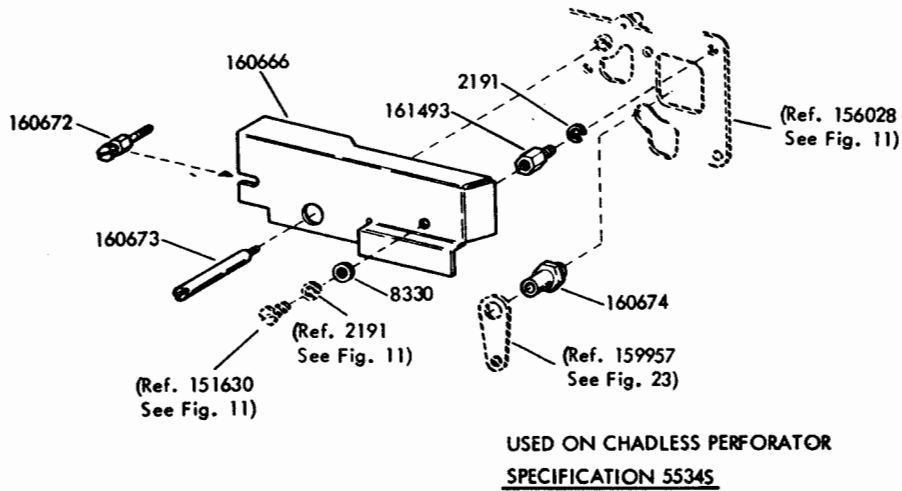


FIGURE 25. 160881 MODIFICATION KIT TO ADD GUARD TO COVER BACKSPACE MECHANISM

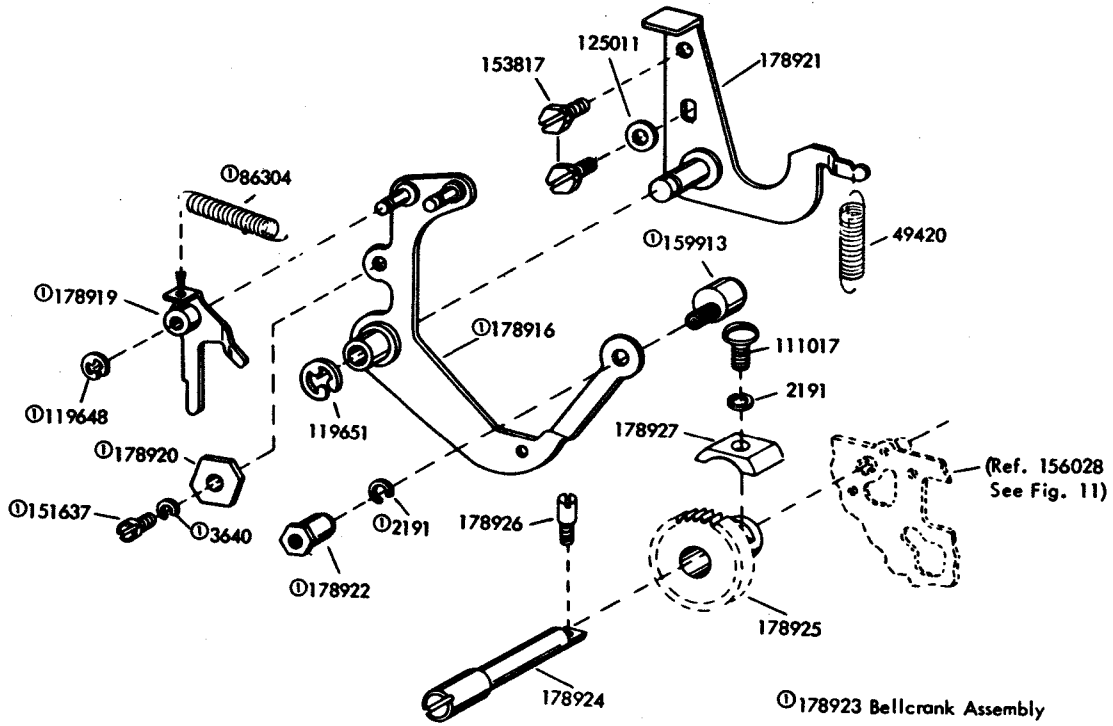


FIGURE 26. 178917 MODIFICATION KIT TO PROVIDE BACKSPACE MECHANISM FOR FULLY PERFORATED TAPE AND PRINTING BETWEEN FEED HOLES

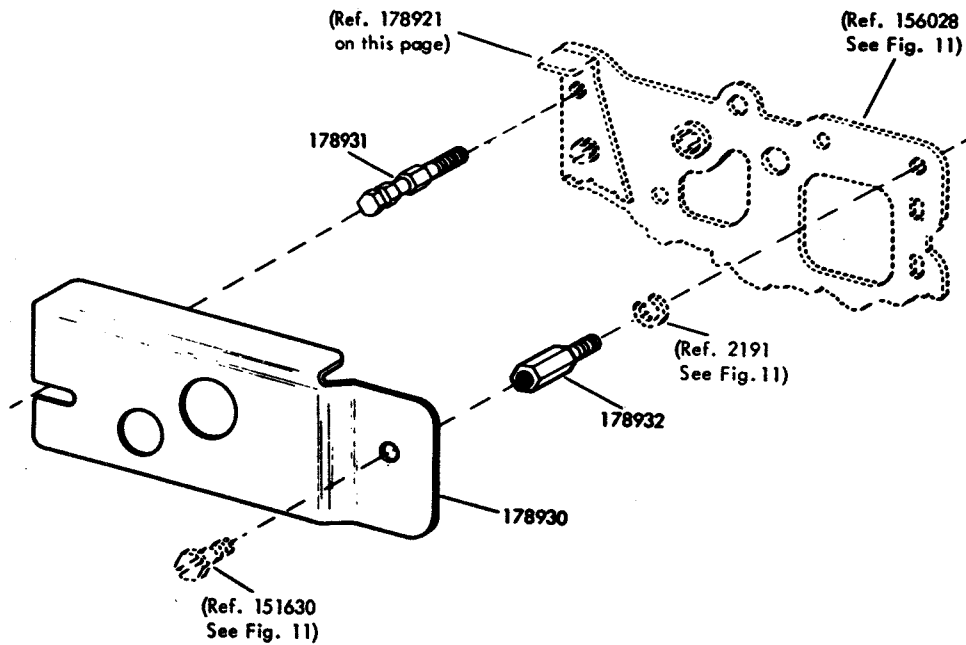
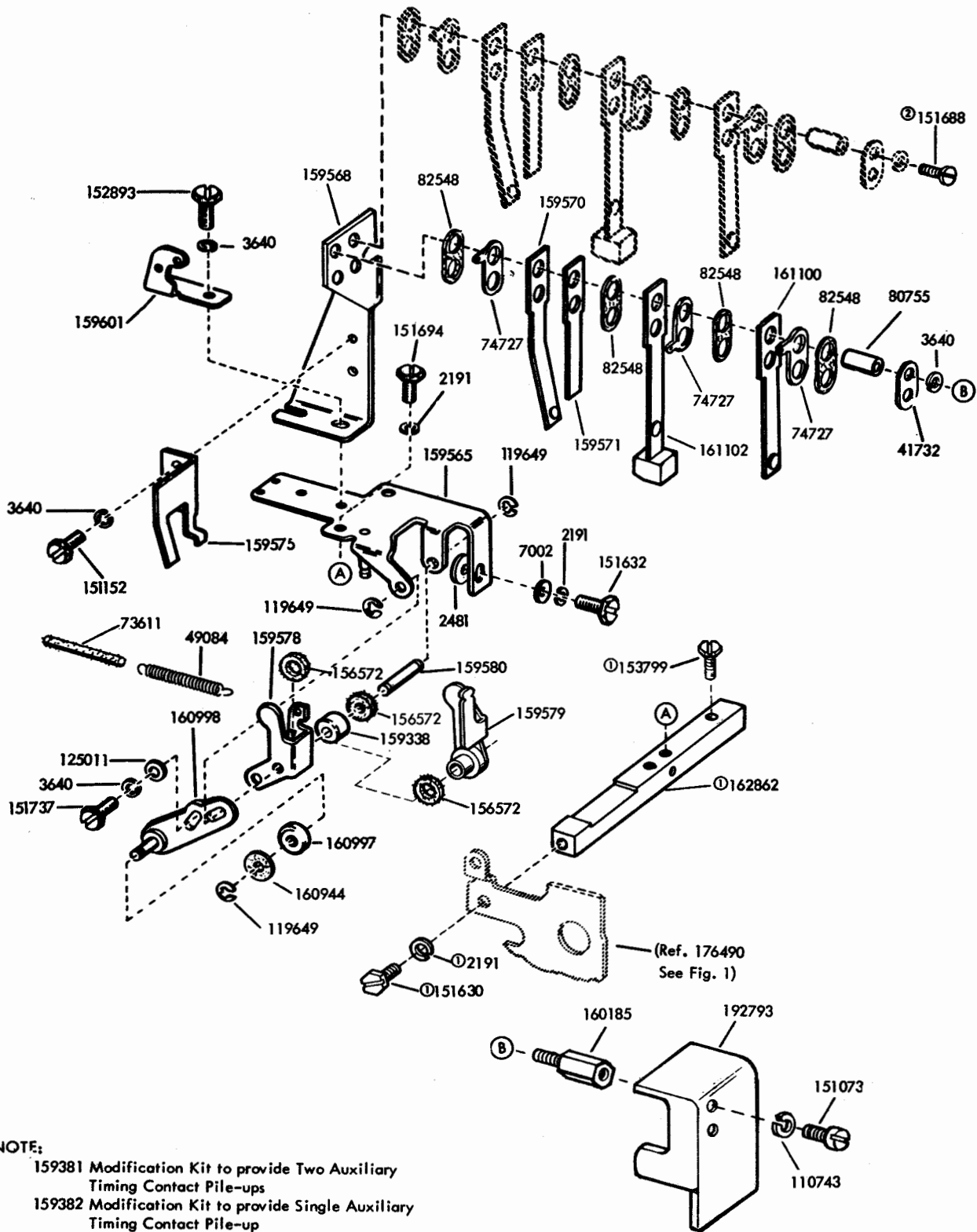


FIGURE 27. 178918 MODIFICATION KIT TO PROVIDE GUARD FOR BACKSPACE MECHANISM



NOTE:
 159381 Modification Kit to provide Two Auxiliary Timing Contact Pile-ups
 159382 Modification Kit to provide Single Auxiliary Timing Contact Pile-up

SPECIFICATION 58865

ⓐ Not Part of 159381 or 159382 Modification Kits
 ⓑ Used with only the 159381 Modification Kit

FIGURE 28. 159381 AND 159382 MODIFICATION KITS TO ADD AUXILIARY TIMING CONTACT

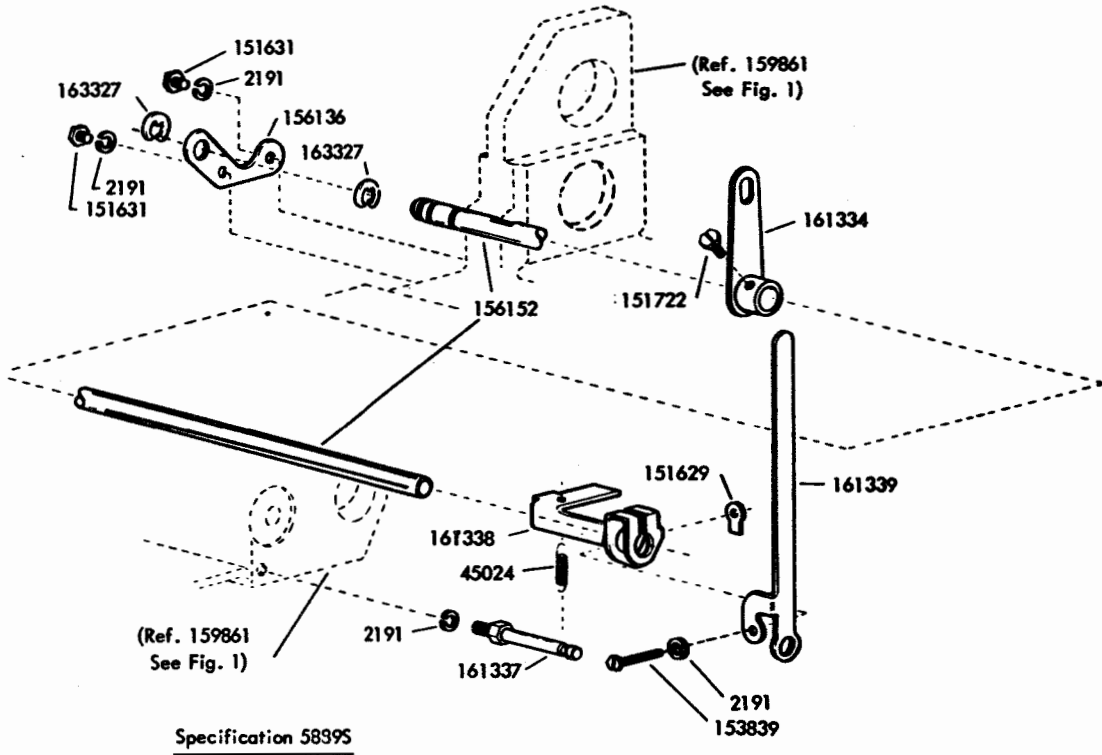


FIGURE 29. 161340 MODIFICATION KIT TO ADD MANUAL INTERFERING LETTERS TAPE FEED-OUT

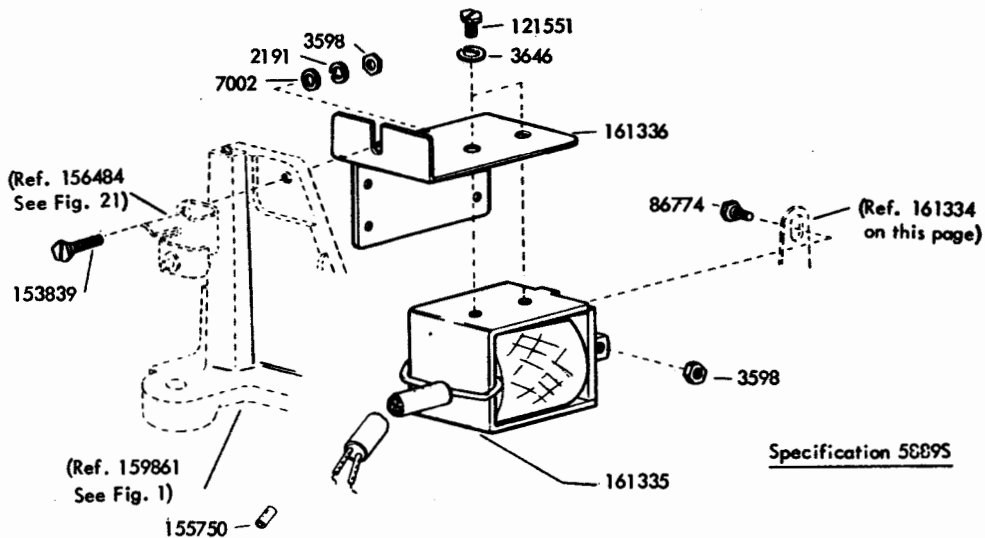


FIGURE 30. 161341 MODIFICATION KIT TO ADD SOLENOID OPERATION TO LETTERS FEED-OUT

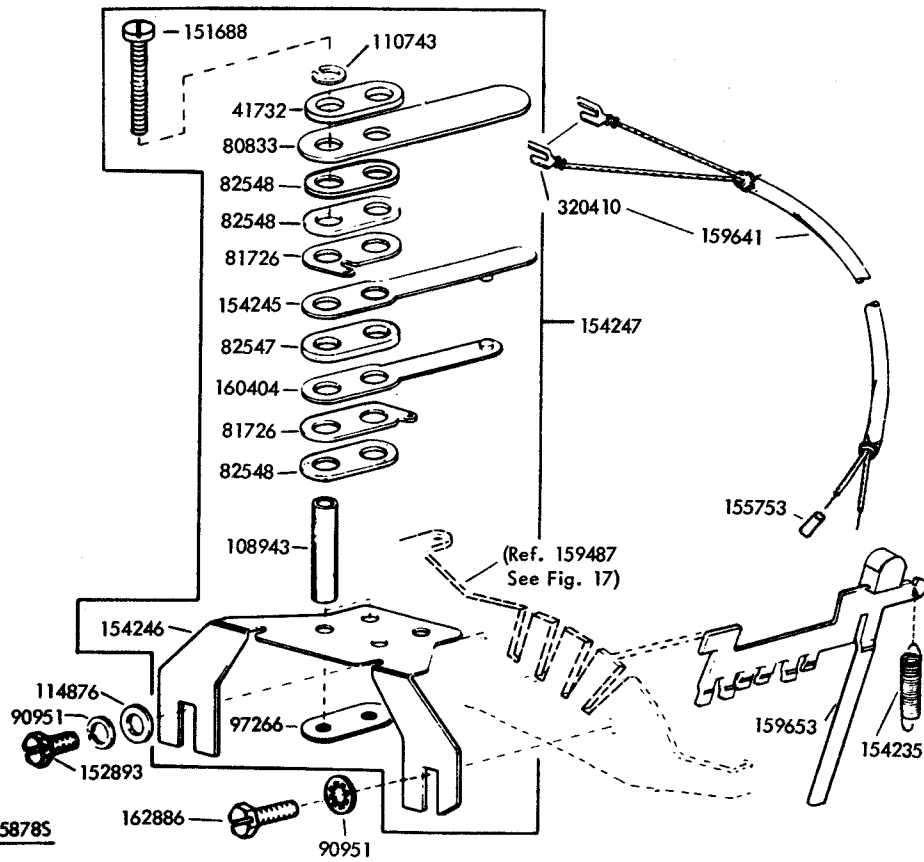


FIGURE 31. 159360 MODIFICATION KIT TO ADD SIGNAL BELL CONTACT (ON UPPER CASE "S")

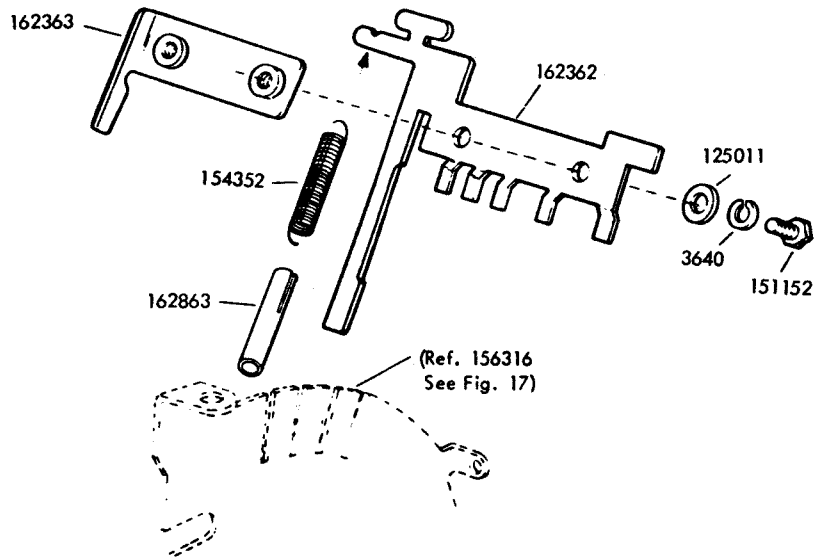
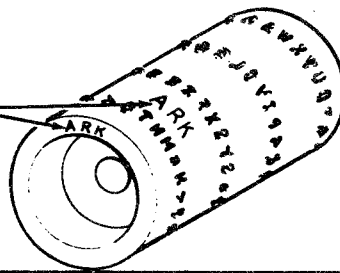


FIGURE 32. 162375 MODIFICATION KIT TO ADD "UNSHIFT ON SPACE"

Typewheel Code may be found in either of two locations.



TYPEWHEEL ARRANGEMENT													
COMMUNICATION		COMMUNICATION		COMMUNICATION		FRACTION		FRACTION		FRACTION		WEATHER	
CODE	PART NUMBER	CODE	PART NUMBER	CODE	PART NUMBER	CODE	PART NUMBER	CODE	PART NUMBER	CODE	PART NUMBER	CODE	PART NUMBER
AWA	173967	AFU	175690	AWJ	175573	ABA	175586	AGM	307306	AXY	175520	ARE	173970
ABD	175588	AFV	175691	AWM	175576	ABC	175587	AGP	307308	AXZ	175521	ABZ	175607
ABE	175589	AFW	175692	AWU	175582	ABG	175591	AGT	307311	AYB	175523	ADH	175636
ABF	175590	AFX	175693	AXE	175504	ABM	175596	AGU	307312	AYE	175526	ADR	175643
ABH	175592	AFY	175694	AXG	175506	ABN	175597	AGW	307314	AYG	175528	AGS	307310
ABJ	175593	AGA	175696	AXH	175507	ABR	175599	AGX	307315	AYL	175532	AHT	307333
ABL	175595	AGE	307300	AXP	175513	ABU	175602	AGY	307316	AYP	175535	AJG	307346
ABP	175598	AGK	307304	AXR	175514	ABV	175603	AGZ	307317	AYS	175537	AJK	307348
ABS	175600	AGN	307307	AXU	175517	ABX	175605	AHB	307319	AYT	175538	AJM	307350
ABT	175601	AGR	307309	AYC	175524	ABY	175606	AHE	307322	AYV	175544	AJR	307353
ABW	175604	AHA	307318	AYF	175527	ACB	175609	AHK	307326	AZE	175552	AKD	307364
ACA	175608	AHC	307320	AYH	175529	ACE	175611	AHL	307327	AZG	175554	ARM	163677
ACD	175610	AHD	307321	AYK	175531	ACG	175613	AHM	307328	AZM	175559	ARW	163683
ACF	175612	AHF	307323	AYM	175533	ACH	175614	AHR	307331	AZN	175561	AWB	163685
ACL	175617	AHN	307329	AYR	175536	ACJ	175615	AHV	307335	AZV	175567	AWE	163688
ACM	175618	AHP	307330	AYU	175543	ACK	175616	AJB	307341	BRB	175701	AWP	175578
ACN	175619	AHS	307332	AZC	175550	ACR	175621	AJD	307343	BRG	175706	AWY	175584
ACP	175620	AHU	307334	AZH	175555	ACS	175622	AJE	307344	BRJ	175708	AWZ	175585
ACT	175623	AHW	307336	AZJ	175556	ACZ	175629	AJH	307347	BRW	175719	AXA	175500
ACU	175624	AHX	307337	AZK	175557	ADA	175630	AJL	307349	BRX	175720	AXC	175502
ACV	175625	AHY	307338	AZP	175560	ADC	175632	AJP	307351	BWD	175723	AXD	175503
ACW	175626	AJA	307340	AZQ	175562	ADE	175633	AJT	307355	BWM	175731	AXF	175505
ACX	175627	AJC	307342	AZT	175565	ADF	175634	AJW	307357	BWY	175740	AXS	175515
ACY	175628	AJF	307345	AZU	175566	ADK	175638	AJX	307358	BXB	175743	AYA	175522
ADB	175631	AJS	307354	AZW	175568	ADM	175640	AKA	307361	BXD	175745	AYD	175525
ADJ	175637	AJU	307356	AZX	175569	ADP	175642	AKB	307362	BXK	175751	AYJ	175539
ADL	175639	AJZ	307360	AZY	175570	ADS	175644	AKC	307363			AYN	175534
ADT	175645	AKF	307366	BRL	175710	ADV	175647	AKE	307365			AYX	175546
ADU	175646	AKG	307367	BRN	175712	ADX	175649	AKH	307368			AYZ	175547
ADW	175648	AKJ	307369	BRP	175713	ADY	175650	AKS	307375			AZF	175553
AED	175655	AKL	307370	BRQ	175714	ADZ	175651	AKT	307376			AZL	175558
AEF	175656	AKM	307371	BRT	175716	AEA	175652	AKV	307378			AZR	175563
AEG	175657	AKN	307372	BWC	175700	AEB	175653	AKX	307380			AZS	175564
AEH	175658	AKP	307373	BWH	175727	ABJ	175659	ALB	307384			BRF	175705
AEK	175660	AKR	307374	BWJ	175728	AEP	175664	ARC	173971			BRH	175707
AEL	175661	AKU	307377	BWK	175729	AER	175665	ARJ	173968			BRK	175709
AEM	175662	AKW	307379	BWL	175730	AET	175667	ARP	163678			BRS	175715
AEN	175663	AKY	307381	BWN	175732	AFA	175674	ART	163680			BRV	175718
AES	175666	AKZ	307382	BWP	175733	AFD	175677	ARU	163689			BRY	175721
AEV	175669	ALA	307383	BWR	175734	AFE	175678	AWD	163687			BRZ	175722
AEW	175670	ARA	173965	BWS	175735	AFH	175680	AWK	175574			BWE	175724
AEX	175671	ARK	163675	BWT	175736	AFK	175682	AWN	175577				
AEY	175672	ARL	163676	BWX	175739	AFL	175683	AWR	175579				
AFB	175675	ARS	173969	BWZ	175741	AFN	175685	AWT	175581				
AFC	175676	ARV	163684	BXA	175742	AFZ	175695	AWX	175583				
AFG	175679	ARX	163682	BXC	175744	AGB	175697	AXB	175501				
AFJ	175681	ARY	163681	BXE	175746	AGC	175698	AXL	175510				
AFM	175684	ARZ	163679	BXF	175747	AGD	175699	AXM	175511				
AFP	175686	AWC	163686	BXG	175748	AGF	307301	AXN	175512				
AFR	175687	AWF	163690	BXH	175749	AGH	307302	AXT	175516				
AFS	175688	AWG	175571	BXJ	175750	AGJ	307303	AXV	175518				
AFT	175689	AWH	175572	BXL	175752	AGL	307305	AXW	175519				

FIGURE 33. TYPEWHEELS

NUMERICAL INDEX

Part Number	Description and Page Number	Part Number	Description and Page Number	Part Number	Description and Page Number
224M	Coil, Magnet 23	90535	Washer, Felt 17	150034	Disk, 2 Stop Clutch 8
1036	Nut, 6-40 Hex 11	90560	Washer, Flat 9	150040	Screw, 6-40 x 5/8 Fil 7, 8
2034	Washer, Flat 23	90573	Spring 3, 4	150043	Shoe, Secondary Clutch 7, 8
2191	Washer, Lock 2 to 9, 11 to 27	90599	Shim, .008" Thk 15	150044	Shoe, Primary Clutch 7, 8
2199	Nut, 7/16-32 Hex 14	90606	Spring 2, 19	150048	Spring 2, 5
2407	Washer, Lock 14	90615	Spring 21	150241	Spring 2, 5, 7, 8
2481	Washer, Flat 26	90790	Washer, Flat 23	150327	Roller, Ribbon 19, 20
2669	Washer, Lock 3, 4, 6	90951	Washer, Lock 17, 28	150356	Lever, Trip 2, 5
3438	Washer, Flat 4, 6	91120	Spring 11	150507	Spring 19
3598	Nut, 6-40 Hex 2, 3, 4, 5, 9, 11, 12, 14, 15, 16, 19, 21, 22, 23, 27	92260	Washer, Lock 21	150830	Bushing, Shoulder 8
3599	Nut, 4-40 Hex 3, 9, 13, 15, 16, 18, 23	93108	Washer, Lock 2, 4	150841	Bearing 8
3603	Nut, 1/4-32 Hex 2, 4	93117	Washer, Lock 11	150923	Washer, Felt 12
3606	Nut, 6-40 Hex 3, 9, 21	93356	Washer, Felt 2, 5, 11	150966	Insulator, Terminal Block 6
3639	Washer, Lock 4	96717	Screw, 4-40 Shoulder 3	150990	Washer, Felt 13
3640	Washer, Lock 3, 4, 8, 13, 14, 15, 17, 21, 23, 24, 25, 26, 28	97266	Plate, Clamp 28	151073	Screw, 4-40 x 5/32 Fil 2, 5, 9, 10, 12, 26
3646	Washer, Lock 27	97516	Bushing 20	151152	Screw, 4-40 x 3/16 Hex 2, 5, 11, 15, 17, 18, 21, 23, 26, 28
3650	Washer, Flat 23	101123	Washer, Felt 15	151222	Washer, Felt 12
3870	Spring 21	108943	Bushing 28	151246	Washer, Flat 3, 4
5363	Spring, Compression 11	110434	Screw, 4-40 x 3/16 Fil 2	151335	Stud 6
6970	Nut, 3/8-32 Hex 6	110437	Spring 17	151346	Screw, 6-40 x 3/8 Fil 4
7002	Washer, Flat 2 to 9, 11, 13, 14, 15, 17, 18, 21 to 24, 26, 27	110743	Washer, Lock 2, 5, 7 to 20, 22, 23, 26, 28	151362	Wick, Felt 3, 4
7835	Ribbon w/Spool, Black 19, 20	110879	Spring 13, 16, 21	151398	Spring 17
8330	Washer, Flat 2, 3, 5, 9, 12, 19, 20, 21, 23, 24	111017	Screw, 6-40 x 5/16 Fil 6, 21, 25	151415	Block, Terminal 6
22746	Spring 14	112626	Nut, 10-32 Hex 14	151416	Nut, 6-40 Hex 6, 11, 12
33765	Washer, Flat 9	112634	Spring 17	151442	Screw, 6-40 x 1/2 Hex 3, 14, 15, 23
41382	Spring 11	114876	Washer, Flat 17, 28	151620	Strap, Motor Mounting 6
41543	Bearing, Ball 2, 4	115122	Washer, Felt 14	151621	Screw, 6-32 x 3/4 Rd 6
41732	Plate, Clamp 26, 28	115134	Washer, Felt 15	151622	Nut, 6-32 Sq 6
42823	Washer, Flat 7, 8	115941	Washer, Flat 2, 4	151629	Nut, 6-40 Lug 2, 5, 12, 14, 27
45024	Spring 27	119647	Ring, Retaining 11	151630	Screw, 6-40 x 1/4 Hex 2, 7, 8, 11, 13, 14, 16, 19, 21, 23, 24, 25, 26
47024	Washer, Flat 15	119648	Ring, Retaining 4, 9, 10, 11, 22, 23, 25	151631	Screw, 6-40 x 5/16 Hex 2 to 6, 8, 9, 11, 13, 17, 18, 21, 27
49084	Spring 26	119649	Ring, Retaining 11, 14, 15, 17, 19, 20, 23, 26	151632	Screw, 6-40 x 3/8 Hex 2, 3, 4, 6 to 9, 18, 19, 20, 22, 23, 26
49420	Spring 25	119650	Ring, Retaining 12, 19 to 22	151637	Screw, 4-40 x 1/4 Fil 9, 19, 25
55063	Spring 9, 10, 23	119651	Ring, Retaining 3, 9, 14, 16, 17, 20, 21, 23, 25	151640	Lever, Shoe Release 7
70878	Spring 9, 23	119652	Ring, Retaining 2, 3, 5, 11, 12, 22	151657	Screw, 6-40 x 1/4 Fil 3, 5, 6
71437	Washer, Flat 12	119653	Ring, Retaining 14, 19, 20	151658	Screw, 6-40 x 5/16 Fil 2, 3, 4
71681	Spool, Ribbon 19, 20	121100	Spring 17	151688	Screw, 4-40 x 5/8 Fil 26, 28
73611	Wick, Felt 26	121245	Clamp, 5/16 ID Cable 24	151692	Screw, 6-40 x 3/16 Fil 21
74553	Wick, Felt 14	121551	Screw, 8-32 x 1/4 Hex 27	151694	Screw, 6-40 x 11/32 Fil 26
74727	Terminal, Contact 26	122149	Screw, 4-40 Spl 9	151712	Button, Pivot 6
76081	Washer, Flat 5	122207	Strap Assembly 6	151721	Screw, 6-40 x 3/4 Hex 23
80531	Washer, Flat 20	124177	Washer, Lock 3, 4, 9, 11, 21	151722	Screw, 6-40 x 3/16 Hex 9, 11, 20, 22, 27
80755	Bushing, Insulating 26	125011	Washer, Flat 2, 3, 5, 9, 10, 11, 13, 15, 16, 17, 19, 21, 24, 25, 26, 28	151724	Screw, 10-32 x 5/8 Hex 4, 6
80833	Guard, Contact Spring 28	125015	Washer, Flat 3, 12, 13, 21, 22	151728	Spring 7
81726	Terminal 28	125215	Screw, 4-40 x 3/16 Hex 23	151736	Spring 8
81731	Spring 20	125231	Nut, 10-32 Hex 3, 4	151737	Screw, 4-40 x 11/64 Hex 7, 8, 20, 23, 26
82392	Shim, .004" Thk 3	125802	Washer, Flat 20	151880	Nut, 4-40 Hex 18, 20, 22
82547	Insulator, .094" Thk 28	128357	Ring, Retaining 12, 17	152400	Plate, Selector Mounting 22
82548	Insulator, .062" Thk 26, 28	130330	Washer, Felt 15	152415	Stud, Adjusting 2, 4
84226	Spring 20	130696	Washer, Felt 16	152466	Connector, 20 Pt Receptacle 24
84575	Spring 23	131016	Washer, Felt 15	152634	Washer, Flat 12
85422	Screw, 10-32 x 15/16 Hex 6	135716	Spring 2, 5	152887	Screw, 4-40 x 1/2 Hex 18
85823	Spacer, .188" Thk 20	135901	Washer, Cup 14	152893	Screw, 4-40 x 1/4 Hex 2 to 5, 9 to 12, 14, 17, 23, 24, 26, 28
86079	Washer, Felt 15	139697	Screw, 4-40 x 9/32 Fil 7	153030	Mount, Vibration 6
86283	Spring 19	139752	Screw, 4-40 x 11/64 Fil 2, 5	153239	Roller 4, 22
86304	Spring 9, 25	150000	Drum, Clutch 8	153267	Washer, Felt 10
86506	Post, Spring 2	150013	Disk, Adjusting 7		
86714	Washer, Flat 20	150014	Disk, Adjusting 8		
86774	Screw, 6-40 Shoulder 15, 26	150027	Lever, Shoe Release 8		
87401	Spring 2, 5	150029	Wick, Felt 7, 8		
90052	Screw, 4-40 x 5/8 Hex 18				
90361	Washer, Felt 12				

NUMERICAL INDEX (Continued)

Part Number	Description and Page Number	Part Number	Description and Page Number	Part Number	Description and Page Number
153537	Screw, 6-40 x 9/32 Hex 22	156104	Shaft 10	156436	Arm, Front Ribbon Reversing 19
153799	Screw, 4-40 x 21/64 Hex 26	156136	Bracket, Shaft Mounting 27	156437	Arm, Rear Ribbon Reversing 19
153806	Spring 21	156152	Shaft, Feed-out Drive 27	156440	Lever, Ribbon Reversing 19
153817	Screw, 4-40 x 3/8 Hex 9, 25	156159	Bracket 24	156442	Pawl, Ribbon Reversing 19
153839	Screw, 6-40 x 5/8 Hex 2, 5, 12, 14, 27	156162	Washer, Flat 12	156462	Bail, Oscillating 15
153841	Screw, 6-40 x 9/16 Hex 20	156163	Guide 9	156465	Washer, Spring 3, 4
154235	Spring 28	156165	Washer, Felt 2, 5, 12	156466	Rack, Typewheel 14
154242	Screw, 6-40 x 5/16 Hex 3, 4	156168	Spring 9	156472	Ring, Retaining 3, 4
154245	Spring, Contact 28	156169	Washer, Felt 12	156473	Post, Spring 2, 5
154246	Bracket, Contact 28	156172	Rod 10	156476	Shaft, Main 7
154247	Contact Assembly 28	156173	Stud 9	156478	Hammer, Print 14
154325	Modification Kit to Provide an Adjustable Ribbon Drive Arm 19	156177	Bracket, Contact 24	156478	Accelerator, Hammer 14
154335	Screw, 6-40 x 9/32 Fil 7, 8	156221	Lock 18	156484	Bracket 21, 27
154352	Spring 28	156230	Stud, Lifter Pivot 21	156488	Post, Spring 21
154397	Shaft w/Bearing 3, 7, 8	156235	Post, Guide 2, 5	156489	Bushing, Ribbon Guide 14
154398	Bearing, Needle 7, 8	156236	Collar 7, 8	156490	Post, Guide 2, 5
154457	Guide, Tape 11	156241	Link, Front 14	156492	Bracket, Guide 13
154694	Disk, Clutch Cam 7	156242	Link, Rear 14	156493	Stud 15
154698	Wick, Felt 11	156243	Roller, Lifter Arm 21	156501	Screw, 6-40 x 7/32 Fil 13, 14
155750	Sleeve, 3/32 ID x 1/2" Lg Insulating 24, 27	156248	Latch 2, 5	156515	Washer, Felt 20
155753	Sleeve, 1/8 ID x 1/2" Lg Insulating 28	156252	Lifter, Function Blade 21	156536	Screw, 4-40 x 1/8 Fil 17
155995	Screw, 6-40 Shoulder 2, 4	156264	Lever, Detent 13, 16	156558	Washer, Felt 14
156008	Wheel, Feed 11	156265	Bushing, Shoulder 16	156572	Washer, Felt 26
156009	Post, Slide 12	156266	Bushing, Shoulder 13, 16	156576	Washer, Felt 3, 4
156012	Spring, Punch Block 10	156267	Lever, Trip 2, 5	156577	Roller, Detent Lever 11
156013	Screw, 4-40 Spl 12	156268	Bracket, Spring 17	156740	Screw, 6-40 x 7/32 Hex 23
156015	Plate, Spring 9	156276	Eccentric, Right Rotary 13	156835	Ring, Retaining 14
156016	Link, Front Drag 11, 12	156277	Eccentric, Left Rotary 13	156869	Guide, Ribbon 14
156017	Shaft, Eccentric 12	156278	Eccentric 16	156870	Lever, Ribbon Oscillating 15
156019	Washer, Felt 11	156286	Shaft, Right Eccentric 13	156871	Bail, Operating Blade 3
156020	Slide 9	156287	Shaft, Left Eccentric 13	156872	Blade, Operating 3
156024	Plate, Rear 9, 11, 12	156288	Shaft, Axial Eccentric 16	156874	Screw, 4-40 x 15/16 Fil 13, 16
156028	Plate, Front 9, 10, 11, 23, 24, 25	156289	Bearing, Left Front 13	156875	Screw, 6-40 x 5/32 Fil 16
156036	Guide, Tape 11	156290	Bearing, Right Front 13	156876	Bushing 3
156040	Post 11	156291	Bearing, Rear 13	156877	Washer, Felt 3
156042	Post, Spacing 11	156292	Housing, Upper Axial 16	156884	Arm, Rocker 12
156043	Bushing 12	156293	Housing, Lower Axial 16	156899	Stud, Eccentric 3
156044	Stud, Die Wheel 11	156294	Sector, Axial 15	156900	Roller 3
156045	Shaft, Feed Wheel 11	156296	Post, Retaining 17	156901	Post, Eccentric 19
156046	Block, Tape Guide 9	156300	Shaft 17	156905	Block, Rack Guide 14
156047	Spring, Torsion 11	156306	Rod, Right Connecting 14	156908	Post, Sector Pivot 15
156050	Stud, Eccentric 11	156311	Rod, Left Connecting 14	156909	Post, Toggle Link 15
156051	Bushing, Eccentric 12	156313	Rack, Axial Output 16	156922	Arm, Lock Release 17
156052	Shoe, Tape 11	156316	Plate, Rear 17, 28	156931	Bracket, Hammer Mounting 14
156054	Lever, Detent 11	156318	Lever, Reset 2	156937	Link, Printing Drive 3, 21
156055	Wheel, Die 11	156321	Shaft, Oscillating 15	156938	Screw, 6-40 Eccentric Shoulder 21
156057	Washer, Flat 17	156322	Link, Axial Toggle 15	156948	Wick, Felt 15
156058	Link, Rear 12	156332	Shaft, Typewheel 14	156987	Screw, 6-40 Spl 3, 4
156060	Shaft, Eccentric 12	156366	Shaft, Rocker Bail 3, 4	156988	Race, Outer 3, 4
156061	Arm, Tape Shoe 11	156369	Lever, Adjusting 15	156989	Bearing 3, 4
156062	Post, Pivot 11	156382	Roller, Guide 15	156990	Race, Inner 3, 4
156067	Guide, Slide Post 12	156389	Gear, 16T 14	156994	Strip, Felt 3, 4
156069	Plate 9	156390	Washer, Flat 14	156995	Post 3, 4
156070	Bail, Toggle 12	156396	Eccentric 3, 21	156998	Retainer, Roller 3, 4
156077	Plate w/Post 12	156399	Nut, 6-40 Shoulder 3	157252	Bushing 20
156089	Slide w/Insulator 9, 24	156403	Disk, Bearing 3, 4	158169	Frame 4, 5, 8
156090	Screw, 6-40 Adjusting 9, 11	156408	Arm, Clamp 14	158171	Shaft w/Bearing 2, 4
156093	Washer, Felt 12	156412	Link, Drive 3, 4	158172	Lever, Latch 2, 5
156094	Link, Front 12	156413	Link, Drive 21	158177	Collar 8
156095	Bushing 12	156414	Plate, Ribbon Feed Mounting 19	158180	Cam w/Pins 8
156099	Link, Rear Drag 12	156419	Shaft, Left Ribbon Ratchet 19	158182	Disk, Clutch Cam 8
156103	Strip, Felt 12	156426	Shaft, Right Ribbon Ratchet 19	158184	Drum, Function Clutch 7, 8
		156427	Washer, Spring 19	158185	Gear, 49T 8
		156428	Disk, Friction 19	158186	Screw, 4-40 x 7/32 Fil 8
		156433	Washer, Felt 19	158257	Cable Assembly 24
			Pawl, Ribbon Feed 19		

NUMERICAL INDEX (Continued)

Part Number	Description and Page Number	Part Number	Description and Page Number	Part Number	Description and Page Number
158285	Connector, 20 Pt Plug 24	159519	Bushing, Drive Bail 15	159976	Armature 23
158745	Clamp, Bearing 3, 4	159522	Bushing, Drive Bail 15	159977	Hinge 23
158760	Post, Spring 23	159523	Bail, Oscillating Drive 15, 16	159978	Shaft 23
158772	Screw, 4-40 x 5/8 Hex 18	159525	Bracket, Axial Mounting 14 to 16	159979	Arm, Non-Repeat 23
158881	Nut, 6-40 Shoulder 2, 4	159526	Link, Oscillating 16, 21	159980	Post, Spring 23
158925	Slide, Tape Depressor 9	159528	Bar, #5 Push 13	159981	Spacer, .109" Thk 9
158941	Bail, Rocker 4	159529	Bar, #3 Push 13	159987	Bracket, Guide 9
158950	Contact Assembly, Code Reading 24	159530	Bar, #4 Push 13	159988	Plate, Adjusting 11
159011	Bracket, Spring 2, 5	159531	Bar, LTRS Push 13	159989	Post, Shoe Pivot 11
159336	Shield, Contact 24	159532	Bar, FIGS Push 13	159990	Bail, Guide 11
159338	Spacer, .250" Thk 26	159535	Plate, Front 13, 14, 16, 17, 19, 20	159994	Plate, Lifter Arm Lock 21
159341	Bearing, Ball 3, 4	159536	Gear, 15T 14	159995	Arm, Lifter 21
159360	Modification Kit 1, 28	159539	Arm, Printing Pivot 21	159997	Screw, 6-40 Eccentric 21
159363	Modification Kit 1, 9	159544	Release, Clutch 2, 5	160185	Post 26
159364	Modification Kit 1, 23	159560	Spring 9	160354	Cam, Function 7
159365	Modification Kit 9	159565	Bracket w/Post 26	160404	Spring, Contact 28
159379	Modification Kit 1, 24	159568	Bracket, Contact 26	160581	Lever, Upper Reset 5
159381	Modification Kit 1, 26	159570	Spring, Contact 26	160666	Guard, Backspace 24
159382	Modification Kit 1, 26	159571	Stiffener 26	160672	Stud 24
159404	Post 16	159575	Bracket, Stop 26	160673	Shaft, Feedwheel 24
159411	Bearing Assembly 3, 4	159578	Bail, Front Contact 26	160674	Nut, 6-40 Shoulder 9, 24
159413	Plate, Ribbon Reversing 19	159579	Bail, Rear Contact 26	160839	Spacer, Shoulder 3
159427	Bracket, Stop 2, 5	159580	Shaft, Actuating Bail 26	160843	Spring 20
159430	Lever, Slide Trip 2, 5	159597	Washer, Flat 15	160846	Bushing, Shoulder 15
159434	Plate, Lifter Mounting 21	159601	Bracket, Spring 26	160881	Modification Kit 1, 24
159437	Arm, FIGS Yield 17	159621	Screw, 6-40 Shoulder 9	160943	Housing, Typewheel Shaft 14
159438	Arm, LTRS Yield 17	159622	Clamp, Adjusting 9	160944	Washer, Felt 26
159441	Guide, Bellcrank 2	159625	Bracket, Bail Guide 3, 4	160948	Screw, 2-56 Spl 11
159447	Bellcrank, #1 and #4 17	159626	Extension, Drive Link 21	160997	Roller 26
159448	Bellcrank, #2 17	159641	Cable w/Terminals 28	160998	Arm 26
159450	Bellcrank, #3 and #5 17	159642	Shim, .008" Thk 13	161100	Spring, Contact 26
159459	Spring 18	159643	Shim, .008" Thk 16	161102	Spring, Contact 26
159460	Link, Toggle 17	159653	Blade, Signal Bell Function 28	161107	Stud 11
159468	Arm, Lock 17	159654	Latch, Printing 21	161108	Stud 9
159470	Shaft, Lock Arm 17	159656	Block Assembly, Punch 10	161109	Post, Guide 11, 12
159471	Bellcrank, LTRS-FIGS 17	159658	Screw, 6-40 x 1-3/32 Hex 14	161139	Nut, 6-40 Hex 11
159472	Plate, Main 2, 5, 14, 17, 18, 24	159659	Shaft, Eccentric 14	161323	Housing, Gear 14
159476	Arm, FIGS 17	159861	Frame, Main 2, 3, 13, 16, 21, 27	161324	Washer, Flat 14
159477	Arm, LTRS 17	159886	Gear, 49T 7	161334	Lever, Stop 27
159480	Bushing, Eccentric 14	159896	Collar 7	161335	Solenoid Assembly 27
159481	Arm, FIGS Extension 17	159900	Plate 9	161336	Bracket 27
159482	Arm, LTRS Extension 17	159901	Plate w/Post 9	161337	Post, Stop 27
159483	Bracket, Spring 17	159902	Shaft, Rake 9	161338	Lever, Trip 27
159487	Plate, Function Box Front 17, 28	159903	Bellcrank 9	161339	Lever, Hand 27
159488	Bracket, Transfer Mounting 18	159909	Pawl, Feed 9	161340	Modification Kit 1, 27
159489	Plate, #1 18	159910	Latch, Return 9	161341	Modification Kit 1, 27
159490	Plate, #4 18	159911	Plate 9	161347	Washer, Felt 17
159491	Plate, #2 18	159912	Gear, Segment 9	161431	Lever, Rotary Correcting 14
159492	Plate, #0 18	159913	Screw, 6-40 Eccentric 9, 25	161440	Spring 16
159493	Plate, #5 18	159916	Eccentric 9	161443	Detent, Axial Shaft 16
159494	Plate, #3 18	159954	Link, Adjusting 23	161444	Detent, Rotary Shaft 13
159495	Beam, #5 Pulse 18	159955	Link, Drive 23	161493	Post, Supporting 24
159496	Beam, #3 Pulse 18	159956	Post 23	161524	Shaft, Hammer 14
159497	Beam, #2 Pulse 18	159957	Link 23, 24	162092	Bail, Tape Guide 11
159498	Lever, #5 Pulse 18	159958	Latch 23	162093	Spring, Torsion 11
159499	Lever, #3, #4 and #5 Transfer 18	159959	Extension 23	162340	Sleeve 7, 8
159500	Beam, #4 Pulse 18	159960	Eccentric 23	162341	Bearing 7
159501	Beam, #1 Pulse 18	159961	Arm, Eccentric 23	162346	Extension, Adjustable 19
159502	Guide, Transfer Lever 18	159962	Ring, Retaining 23	162347	Arm, Ribbon Drive 19
159503	Shaft 17	159963	Hub 23	162350	Bail, Rocker 3
159504	Spacer, .037" Thk 18	159965	Arm, Adjusting 23	162362	Blade, Space Function 28
159506	Post 3	159973	Bracket w/Bushing 23	162363	Stripper 28
159508	Lever, #1 and #2 Transfer 18	159974	Eccentric 23	162364	Bearing 8
159512	Link, Printing Trip 21	159975	Bail, Armature 23	162375	Modification Kit 1, 28
159515	Blade, FIGS Function 17			162466	Shield, Rear End 6
159516	Blade, LTRS Function 17			162467	Shield, Front End 6
				162573	Retainer 8

NUMERICAL INDEX (Continued)

Part Number	Description and Page Number	Part Number	Description and Page Number	Part Number	Description and Page Number
162763	Bail, Reset 12	173338	Modification Kit 8	175712	
162850	Handle 19, 20	173340	Collar 7, 8	thru	
162862	Bar, Mounting 2, 26	173754	Spacer 14	175716	Typewheel 29
162863	Sleeve, Blocking 28	173755	Guide, Ribbon 14	175718	
162886	Screw, 4-40 x 7/32 Hex 17, 28	173756	Lever, Print Hammer 14	thru	
163009	Pinion, 21T 4	173770	Block Assembly, Punch 10	175724	Typewheel 29
163010	Gear, 49T 8	173775	Shaft, Typewheel 14	175727	
163015	Pinion, 28T 2	173965	Typewheel, ARA 29	thru	
163016	Gear, 49T 7	173967	Typewheel, AWA 29	175736	Typewheel 29
163113	Washer, Flat 14	173968	Typewheel, ARJ 29	175739	
163290	Cable Assembly 24	173969	Typewheel, ARS 29	thru	
163327	Ring, Retaining 27	173970	Typewheel, ARE 29	175752	Typewheel 29
163429	Screw, 6-40 Shoulder 21	173971	Typewheel, ARC 29	176138	Modification Kit 14
163675	Typewheel, ARK 29	173977	Shaft, Print Hammer 14	176252	Washer, Flat 3
163676	Typewheel, ARL 29	173978	Spring, Torsion 14	176489	Guide 2, 3, 13
163677	Typewheel, ARM 29	173979	Head, Hammer 14	176490	Bracket w/Hubs 2, 5, 26
163678	Typewheel, ARP 29	173980	Lever, Print Hammer 14	176647	Latch w/Hub 23
163679	Typewheel, ARZ 29	173981	Accelerator, Hammer 14	176658	Motor, 115V. 60 Cycle, AC 6
163680	Typewheel, ART 29	175500		176679	Capacitor, 3.3 MFD 6
163681	Typewheel, ARY 29	thru		176686	Frame 6
163682	Typewheel, ARX 29	175507	Typewheel 29	176687	Bracket, Motor 6
163683	Typewheel, ARW 29	175510		176688	Plate, Mounting 6
163684	Typewheel, ARV 29	thru		176689	Bracket, Mounting 6
163685	Typewheel, AWB 29	175518	Typewheel 29	176747	Gear, 42T 8
163686	Typewheel, AWC 29	175519	Typewheel, AXW 29	176749	Gear, 14T 6
163687	Typewheel, AWD 29	175520		176823	Bushing 6
163688	Typewheel, AWE 29	thru		178178	Lever, Adjusting 20
163689	Typewheel, ARU 29	175529	Typewheel 29	178916	Bellcrank 25
163690	Typewheel, AWF 29	175531		178917	Modification Kit 1, 25
164511	Lever w/Hub 11	thru		178918	Modification Kit 1, 25
164513	Pawl, Feed 12	175539	Typewheel 29	178919	Pawl, Backspace 25
164514	Guide, Tape 9	175543	Typewheel 29	178920	Post, Eccentric 25
164515	Spring, Torsion 11	175544	Typewheel 29	178921	Plate w/Post 25
164521	Plate w/Studs 20	175546	Typewheel, AYX 29	178922	Nut, 6-40 Shoulder 25
164525	Post, Spring 20	175547	Typewheel, AYZ 29	178923	Bellcrank Assembly 25
164526	Slide w/Post 20	175550	Typewheel 29	178924	Shaft 25
164528	Bushing 20	175552		178925	Ratchet, 24T 25
164529	Lever, Ribbon Reverse 20	thru		178926	Screw, 2-56 Spl 25
164530	Bushing 20	175574	Typewheel 29	178927	Clamp, Adjusting 25
164531	Pawl, Check 20	175576	Typewheel 29	178930	Guard 25
164532	Pawl, Feed 20	175577	Typewheel 29	178931	Post 25
164535	Shaft, Right Ribbon Ratchet 20	175578	Typewheel 29	178932	Post, Supporting 25
164538	Shaft, Left Ribbon Ratchet 20	175579	Typewheel 29	179274	Wheel, Feed 11
164539	Spring, Ratchet 20	175581		179573	Nut, 6-40 Hex 12
164540	Detent 20	thru		179579	Decalcomania, Arrow 20
164541	Arm, Ribbon Drive 20	175593	Typewheel 29	192661	Post 3, 4
164543	Lever, Adjustable Extension 20	175595		192709	Link w/Hub 3, 4
164964	Washer, Felt 20	thru		192793	Guard 26
164965	Washer, Flat 20	175634	Typewheel 29	192849	Bar, #2 Push 16
170199	Bracket, Anchor 11	175636		192877	Bushing, Guide 14
170219	Stud, Die Wheel 11	thru		193804	Armature 23
170241	Screw, 6-40 Adjusting 11	175640	Typewheel 29	193821	Bracket w/Post 23
170242	Slide, Feed Hole Punch 9	175642		193822	Clamp 23
170246	Slide w/Insulator 9	thru		193824	Latch w/Hub 23
170247	Guide 9	175653	Typewheel 29	193825	Magnet Assembly, Backspace 23
170778	Block Assembly, Punch 11	175655		193879	Bar, #1 Push 16
170779	Wheel, Feed 11	thru		193966	Bracket w/Stud 22
170788	Wheel, Die 11	175667	Typewheel 29	193968	Post 22
170803	Bail, Retractor 10	175669		193969	Post 22
172638	Screw, 6-40 x 9/32 Hex 9	thru		193972	Extension w/Stud 22
172640	Modification Kit 1, 9	175672	Typewheel 29	193974	Depressor, Tape 22
172983	Bracket, Spring 12	175674		193976	Bail, Rocker 4
172984	Bracket, Spring 10	thru		193987	Bracket, Roller 22
172993	Spring 10	175701	Typewheel 29	194117	Plate, Clamp 22
173200	Sleeve, Bearing 7	175705		194118	Spring, Torsion 22
173203	Sleeve, Bearing 8	thru		194122	Platform w/Guide, Tape 22
173336	Modification Kit 7	175710	Typewheel 29		

NUMERICAL INDEX (Continued)

Part Number	Description and Page Number	Part Number	Description and Page Number	Part Number	Description and Page Number
194123	Screw, 4-40 Spl 22	305638	Bracket, Guide 12	307340	
194162	Bail, Reset 12	307300		thru	
194992	Modification Kit 9, 10	thru		307351	Typewheel 29
194993	Guide, Tape 10	307312	Typewheel 29	307353	
195233	Roller 22	307314		thru	
195235	Bail, Rocker 3, 21	thru		307358	Typewheel 29
195284	Ring, "O" 14	307323	Typewheel 29	307360	
199506	Gasket 10	307326		thru	
304543	Plate, Corrector 16	thru		307384	Typewheel 29
		307338	Typewheel 29	320410	Terminal, Spade Type 6, 24, 28