

REQ. PER UNIT	USED ON			A-1601
	MODEL	ASS'Y. NO.	DATE	
1	RTF-2	MULT.	12-15-58	

WINDING

3 TURNS (CLOSE WOUND) OF ITEM 2 (20 DSC)
 ALLOW 2" STRIPPED PIG TAILS ON EACH END FOR CONNECTIONS TO LUGS AND FOR ATTACHMENT TO Q METER BOONTON 160 A.

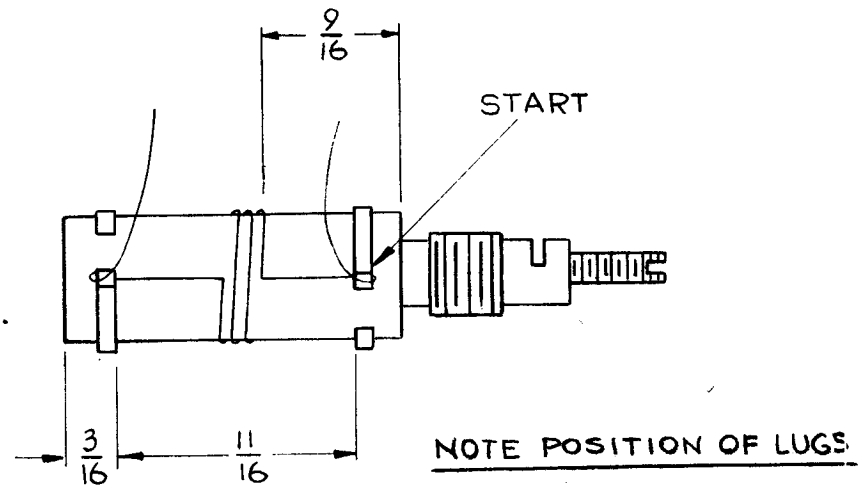
FABRICATION

1. ALIGN LUGS; WIND THE COIL AND STAKE THE ENDS TO COIL FORM WITH ITEM 3.
2. SOLDER LEADS TO LUGS, ALLOWING 2" PIGTAILS.
3. COAT COIL WITH ITEM 4 (GL-104-2).
4. BAKE DRY FOR 1 HOUR AT 270° F.

TEST DATA

L ~ MIN. .185 uhy
 L ~ MAX. .200 uhy
 Q ~ MIN. 100
 F ~ 25 MC

REMOVE TEST LEADS AFTER TESTING.

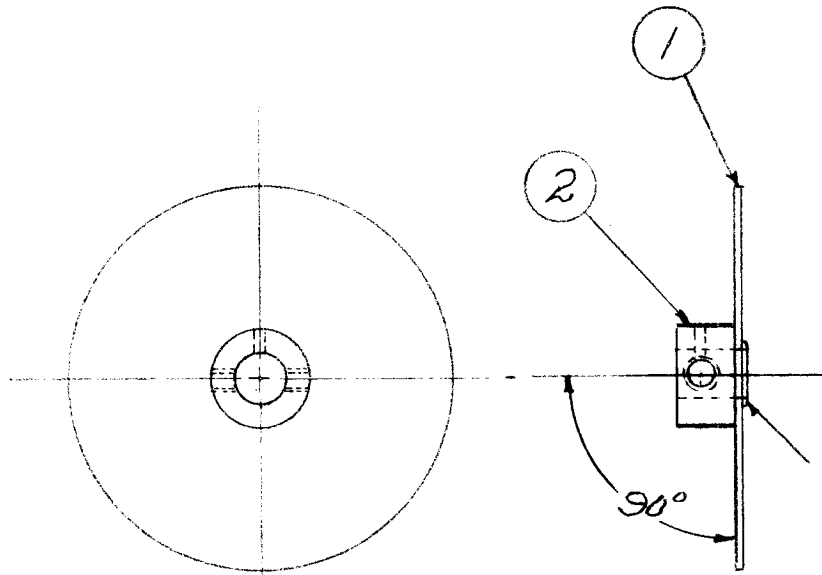


X	5	BS-100	SOLDER, SOFT
X	4	GL-104-2	INSULEX U85
X	3	GL-103	CEMENT
X	2	WI-107-1	WIRE #20 DSC
1	1	CF-107-ZN	COIL FORM

ISSUE	ITEM	CHANGED FROM	DATE	CH. NO.	DRAFTS	CHECKER	ENG. APP.
TOLERANCES			SCALE:				
DEC. DIM. ±			MAXIMUM ALLOWABLE TOLERANCES HAVE BEEN DETERMINED AND ANY DEVIATIONS WILL BE CAUSE FOR REJECTION.				
FRAC. DIM. ±			REMOVE ALL BURRS AND SHARP EDGES				
ANGULAR DIM. ±							

REQ. ITEM	PART NO.	DESCRIPTION	SYMBOL
		THE TECHNICAL MATERIEL CORP. MAMARONECK, NEW YORK	
STOCK SIZE		COIL ASSEMBLY 16-32 MC.	
MATERIAL			
		J.C. BIELE	<i>[Signature]</i>
TYPE & TEMPER	HEAT TREAT. SPEC.	DRAWN	CHECKED
		P.A.	<i>[Signature]</i>
FINISH & SPEC. NO.		ELEC. DES. APP.	MECH. DES. APP.
			A-1601

REQ. PER UNIT	USED ON			A-1603
	M DEL	ASSY. NO.	DATE	
1	RTF-2	POW/AMP	12-9-58	



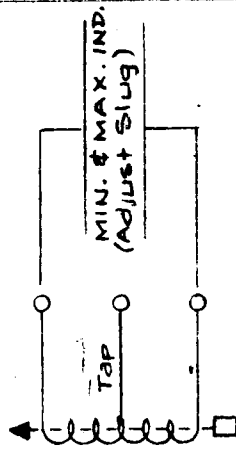
NOTE: PRESS FIT ITEM 1
TO ITEM 2 AND SWEAT SOLDER

1	2	PM-327	HUB					
1	1	MS-1427	PLATE, LOCKING 360°					
REQ.	ITEM	PART NO.	DESCRIPTION		SYMBOL			
		<i>CPO</i>	THE TECHNICAL MATERIEL CORP.					
		STOCK SIZE	MAMARONECK, NEW YORK					
		<i>CPO</i>	LOCK, PLATE ASSEMBLY					
		MATERIAL						
ISSUE	ITEM	CHANGED FROM	DATE	CH. NO.	DRAFTS	CHECKER	ENG. APP.	
TOLERANCES			SCALE: <i>CPO</i>					
DEC. DIM. ±			MAXIMUM ALLOWABLE TOLERANCES HAVE BEEN DETERMINED AND ANY DEVIATIONS WILL BE CAUSE FOR REJECTION.					
FRAC. DIM. ±			REMOVE ALL BURRS AND SHARP EDGES					
ANGULAR DIM. ± 0.5°			TYPE & TEMPER	HEAT TREAT. SPEC.	DRAWN	CHECKED	FINAL APPROVAL	
			CAD. PLATE .0003		<i>AWC</i>	<i>JHL</i>	<i>AWC</i>	
			FINISH & SPEC. NO.	ELEC. DES. APP	MECH. DES. APP	A-1603		

PROCEDURE

1. Force Fit Bushing (item 4) into form (item 1).
2. Secure terminals (item 2) to form with Insulex (item 6).
3. Wind 6 Turns of wire (item 3) on form. Bring out tap at 3 turns from top. Slip Sleeving (item 7) over tap. Solder wire ends to proper terminals.
4. Paint winding with Insulex.
5. Bake for 1/2 hour at 250° F.
6. Insert Core (item 5).
7. Test as shown Below. Use Boonton Q-Meter Model 160A or Equiv.

MIN. IND. MUST BE LESS THAN .32 μhy.
 MAX. IND. MUST BE MORE THAN .40 μhy
 Q AT TEST FREQ. MUST BE MORE THAN 135
 TEST FREQ. 25 MC



OPERATING FREQ. 20-25 MC

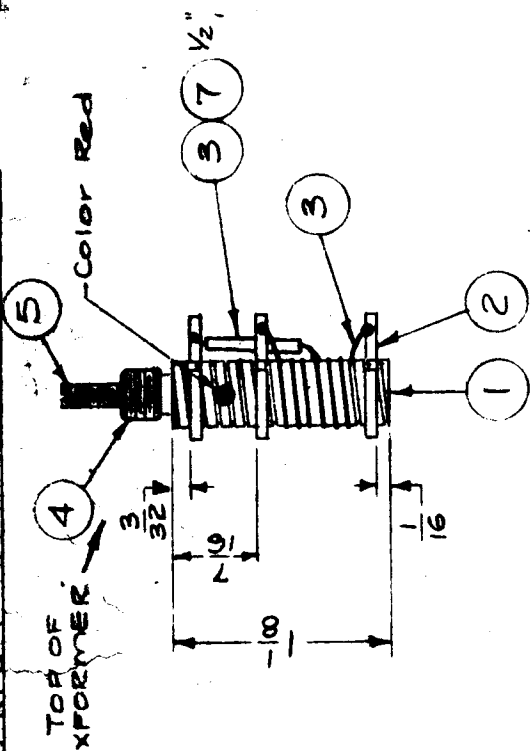
ISSUE ITEM	CHANGED FROM	DATE	CH. NO.	DRAFTS	CHECKER	ENG. APP.
D	Replaced by CL144	6/11/71	20332	00		
C	ITEM 4 DELETED	6-17-60	2503	03	JCB	008
B	ITEM 1 WAS CF-113-1P-12	6/24/59	1127	00	JCB	008
A	ITEM 2 WAS CI-116-2	1/3/59	642	00	JCB	008
	MAX. IND 40 WAS 45					
	Q 135 WAS 130					

TOLERANCES

SCALE: FULL
 MAXIMUM ALLOWABLE TOLERANCES HAVE BEEN DETERMINED AND ANY DEVIATIONS WILL BE CAUSE FOR REJECTION. REMOVE ALL BURRS AND SHARP EDGES

A-1609 1D

DATE	12-19-58
APPROVED	[Signature]
REVISION	1
REC'D	12-28-60



SUPERSEDED DIRECTLY REPLACED BY CL144

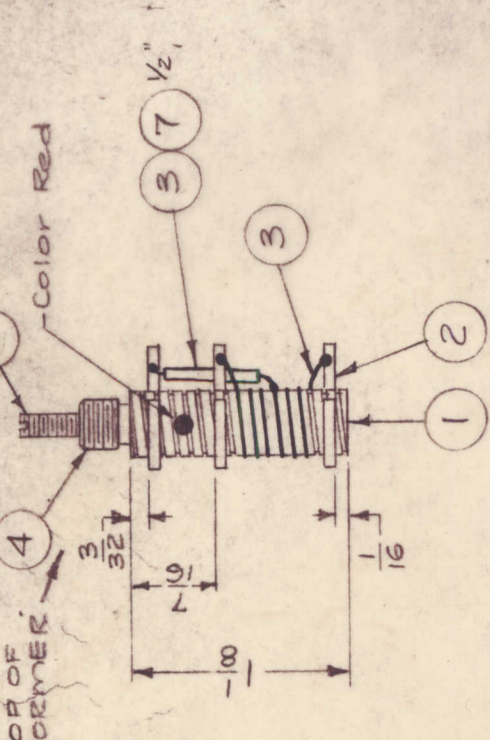
REG. ITEM	PART NO.	DESCRIPTION	SYMBOL
X 8	BS-100	Solder, Soft	
1/2"	PX-100-1-034	Insulation, Sleeving (Size 20)	BIK
X 6	GL-104-2	Insulex, U85	
1	CI-109-10	Core, Tuning, Blue	
4	Deleted		
X 3	WL-100-6	Wire, Buss (Size 22)	
3	TE-153-2	Terminal, Ring Type	
1	CF-128-1	Coil Form, Grooved	

REG. ITEM	PART NO.	DESCRIPTION	SYMBOL
THE TECHNICAL MATERIAL CORP. MAMARONECK, NEW YORK			
RF COIL ASSY, TUNED			
20-25 MC (CL-144)			
DATE		16 ^{12/19/58}	[Signature]
DRAWN		[Signature]	[Signature]
CHECKED		[Signature]	[Signature]
TYPE & TEMPER			
HEAT TREAT. SPEC.			
FINISH & SPEC. NO.			A-1609 1D

REQ. PER UNIT	MODEL	ASSY. NO.	DATE
1	RFB-1	GPT-10K	12-19-58
	RFC-		11-22-60

USED ON
A-1609

D

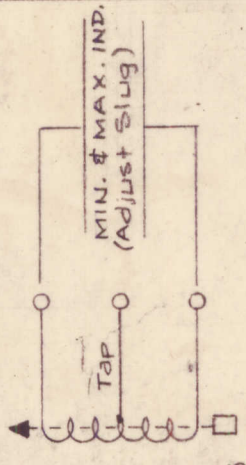


SUPERSEDED
DIRECTLY REPLACED
BY CL 144

REQ. ITEM	PART NO.	DESCRIPTION	SYMBOL
X 8	BS-100	Solder, Soft	
1/2"	PX-100-1-034	Insulation, Sleeving (Size 20) BIK.	
X 6	GL-104-2	Insulex, U85	
1	CI-109-10	Core, Tuning, Blue	
#	Deleted		#
X 3	WL-100-6	Wire, Buss (Size 20)	
3	TE-153-2	Terminal, Ring Type	
1	CF-128-1	Coil Form, Grooved	

THE TECHNICAL MATERIEL CORP. MAMARONECK, NEW YORK	RF COIL ASSY, TUNED (CL-144)
20-28 MC	16 12/19/58
	FILE
	CHECKED
	DRAWN
	AB
	ENG. DES. APP MECH. DES. APP
	FINISH & SPEC. NO.
	A-1609
	D

- PROCEDURE**
- Force Fit Bushing (item 4) into form (item 1).
 - Secure terminals (item 2) to form with Insulex (item 6).
 - Wind 6 Turns of wire (item 3) on form. Bring out tap at 3 turns from top. Slip sleeving (item 7) over tap. Solder wire ends to proper terminals.
 - Paint Winding with Insulex.
 - Bake for 1/2 hour at 250° F.
 - Insert Core (item 5).
 - Test as shown Below. Use Boonton Q-Meter Model 160A or EQUIV.



MIN. IND. MUST BE LESS THAN .32 μhy.
MAX. IND. MUST BE MORE THAN .40 μhy
Q AT TEST FREQ. MUST BE MORE THAN 135
TEST FREQ. 25 MC
OPERATING FREQ. 20-28 MC

ISSUE ITEM	CHANGED FROM	DATE	CH. NO.	DRAFTS	CHECKER	ENG. APP.
D	Replaced by CL 144	6/1/71	20332	W	JCB	W
C	ITEM 4 DELETED ITEM 1 WAS CF-125-1P.12	6-17-60	2503	W	JCB	W
B	ITEM 2 WAS CI-116-2	6/24/59	1127	W	JCB	W
A	1 MAX. IND 40 WAS 45 2 Q 135 WAS 130	1/3/59	642	W	JCB	W

SCALE: FULL

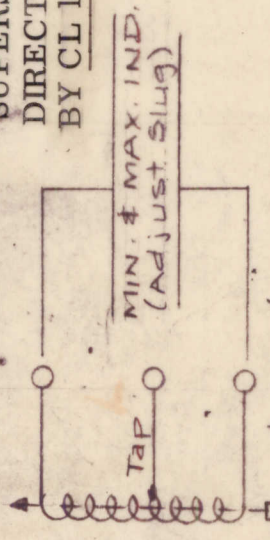
TOLERANCES
MAXIMUM ALLOWABLE TOLERANCES HAVE BEEN DETERMINED AND ANY DEVIATIONS WILL BE CAUSE FOR REJECTION.
REMOVE ALL BURRS AND SHARP EDGES

DEC. DIM. ±
FRAC. DIM. ±
ANGULAR DIM. ±

PROCEDURE

- Force fit Bushing (item 4) into form (item 1)
- Secure terminals (item 2) to form with Insulex (item 6)
- Wind $9\frac{1}{4}$ Turns of wire (item 3) on form. Bring out tap at 5 turns from top. Slip sleeving (item 7) over tap. Solder wire ends to proper terminals.
- Paint Winding with Insulex.
- Bake for $\frac{1}{2}$ hour at 250°F .
- Insert Core (item 5).
- Test as shown Below. Use Beonton Q-meter Model 160A or Equiv.

**SUPERSEDED
DIRECTLY REPLACED
BY CL 145**



MIN. IND. MUST BE LESS THAN - .51 μhy
 MAX. IND. MUST BE MORE THAN - .86 μhy
 Q AT 25 MC MUST BE MORE THAN - 150
 TEST FREQ. - 25 MC
 OPERATING FREQ. - 16-20 MC

ISSUE ITEM	CHANGED FROM	DATE	CH. NO.	DRAFTS	CHECKER	ENG. APP.
D	REPLACED BY CL 145	6-1-71	20392	CU		
C	IT 5 WAS CI 116-2	1-16-67	17683	WKO		
B	DIM 1/8 WAS 3/32	6/7/61	5052	DRM		
A	DIM 3/8 WAS 7/16	6/17/60	2503	WY		
	ITEM 1 WAS CF-125-2 PL-12	11/3/59	641	WY		
	ITEM 4 DELETED					
	7/16 WAS 3/32					

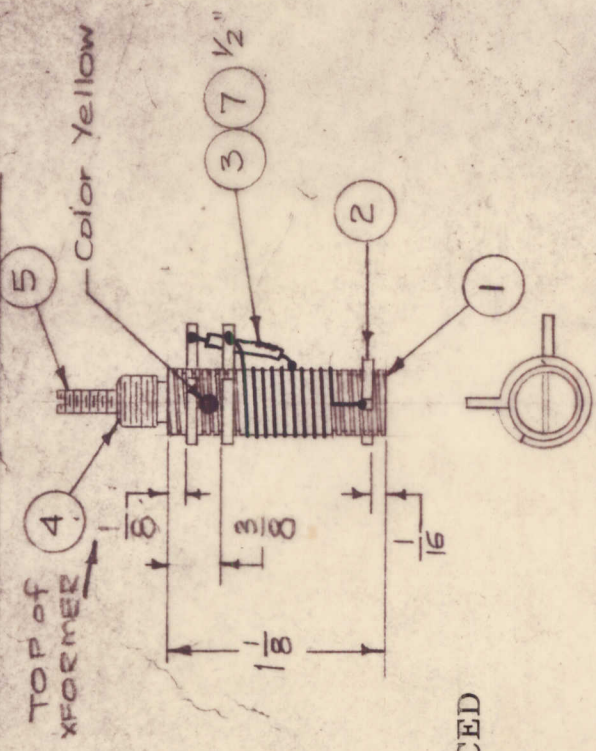
TOLERANCES

DEC. DIM. \pm
 FRAC. DIM. \pm
 ANGULAR DIM. \pm

SCALE: FULL

MAXIMUM ALLOWABLE TOLERANCES HAVE BEEN DETERMINED AND ANY DEVIATIONS WILL BE CAUSE FOR REJECTION. REMOVE ALL BURRS AND SHARP EDGES

REQ. PER UNIT	1
MODEL	RFB-1
ASSY. NO.	GPT10K
DATE	1P 22-60
USED ON	A-1610



REQ. ITEM	PART NO.	DESCRIPTION	SYMBOL
X 8	BS-100	Solder, Soft	
1/2"	PX-100-1-034	Insulation, Sleeving (size 20)	BIK
X 6	GL-104-2	Insulex, U-85	
1	CI109-2	Core, Tuning, Red	
#	Deleted		#
X 3	WL-100-6	Wire, Buss (Size 20)	
3	TE-153-2	Terminal, Ring Type	
1	CF-128-2	Coil Form, Grooved	

THE TECHNICAL MATERIEL CORP.
 MAMARONECK, NEW YORK

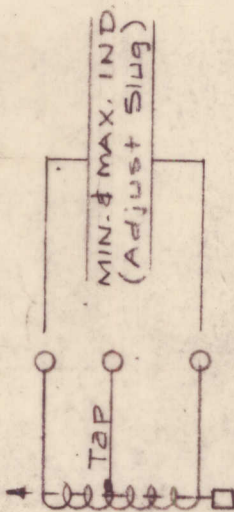
CL-145 ASSY

(RF COIL TUNED) (16-20 MC)

16 ^{12/19/58}	16 ^{12/19/58}	16 ^{12/19/58}
ATB	ATB	ATB
DRWN	CHECKED	FINAL APPROVAL
		A-1610
		E

PROCEDURE

1. Slip two terminal rings (item 2) on form (item 1) as shown. (marked "A" & "B").
2. Force fit outer form (item 3) onto inner form (item 1) and cement with Insulex (item 6).
3. Slip terminal ring marked "C" on inner form.
4. Cement all rings to inner form.
5. Wind 9 turns of wire (item 4) on outer form. Bring out tap at 7-1/2 turns from top. Slip sleeving (item 7) over tap. Solder all wire ends to proper terminals.
6. Paint Winding with Insulex.
7. Bake for 1/2 hour at 250°F.
8. Insert Core (item 5).
9. Test as shown below. Use Boonton Q-Meter Model 160A or Equiv.



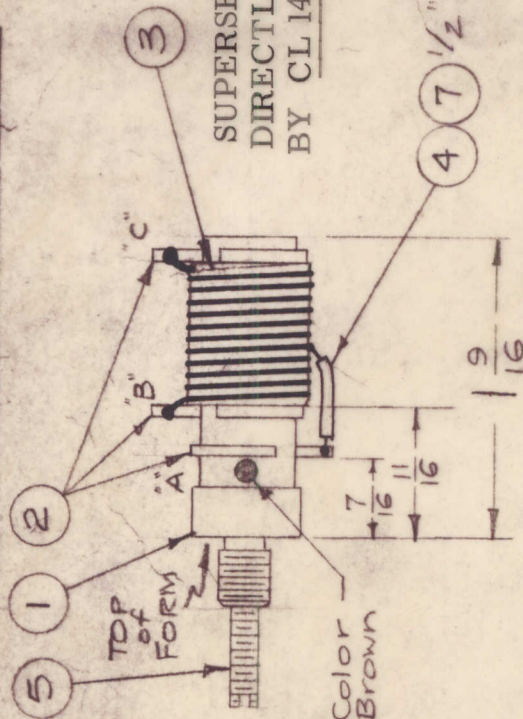
ASSY #	L-MAX	L-MIN	Q	TEST FREQ	CORE	COLOR	PART #	OPER. RANGE
A1611-1	>1.3µh	<1.1µh	>130	7.9 MC	CI109-19	RED	CL146	8-16 MC
A1611-2	>2µh	<1.3µh	>80	7.9 MC	CI03D7B5	GREEN	CL146-2	6.3-12.3 MC

ISSUE ITEM	CHANGED FROM	DATE	CH. NO.	DRAFTS	CHECKER	ENG. APP.
E	Replaced by CL146	6/11/59	20332	00		
D	EL. SPECS REV. CHART ADD. IT. 5 WAS CI-109-19, RED	6.12.64	11553		ATB	ATB
C	MIN. MAX. IND. ADDED "Q" SPEC. WAS 135	8-14-62	7066		G.S.	ATB
B	ITEM 5 WAS CI-116-10	6/27/59	1123		ATB	ATB
A	Test Q was 150 Winding changed	4/1/59			J.C.B.	ATB

DEC. DIM. ±	FRAC. DIM. ±	ANGULAR DIM. ±
	± 1/64	

ISSUE ITEM	CHANGED FROM	DATE	CH. NO.	DRAFTS	CHECKER	ENG. APP.
TOLERANCES						
SCALE: FULL						
MAXIMUM ALLOWABLE TOLERANCES HAVE BEEN DETERMINED AND ANY DEVIATIONS WILL BE CAUSE FOR REJECTION. REMOVE ALL BURRS AND SHARP EDGES						

REQ. PER UNIT	MODEL	ASSY. NO.	DATE
1	RFB-1	GPT-10K	12-19-58
1	RFD-1	PALIK	10-22-60
1	RFC-1		11-22-60



SUPERSEDED
DIRECTLY REPLACED
BY CL 146

REQ.	ITEM	PART NO.	DESCRIPTION	SYMBOL
X	8	BS-100	Solder, Soft	
1/2"	7	PX-100-1-.042	Insulation, Sleeving (Size 18)	BK
X	6	GL-104-2	Insulex, UBS	
1	5	SEE CHART	Core, Tuning,	
X	4	WL-100-5	Wire, Buss (Size 18)	
1	3	CF-125-3PO.75	Coil Form, Grooved	
3	2	TE-153-3	Terminal, Ring Type	
1	1	CF-119-1.562	Coil Form, w/Bushing	

STOCK SIZE	MATERIAL	DESCRIPTION
		THE TECHNICAL MATERIEL CORP. MAMARONECK, NEW YORK
		RF COIL ASSY, TUNED (CL-146)

TYPE & TEMPER	HEATTREAT. SPEC.	FINISH & SPEC. NO.

DATE	DRAWN	CHECKED	FINAL APPROVAL
6/17/19/58	ATB	ATB	OMB

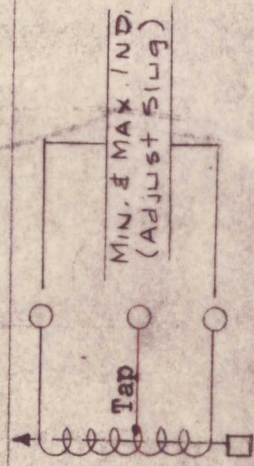
ELEC. DES. APP.	MECH. DES. APP.

A-1611

A-1611

PROCEDURE

1. Slip two terminal rings (item 2) on form (item 1) as shown. (Marked "A" and "B").
2. Force fit outer form (item 3) onto inner form (item 1) and cement with Insulex (item 6).
3. Slip terminal ring marked "C" on inner form.
4. Cement all rings to inner form.
5. Wind 6 turns of wire (item 4) on outer form. Bring out tap at $4\frac{1}{2}$ turns from top. Slip Sleaving (item 7) over tap. Solder all wire ends to proper terminals.
6. Paint winding with Insulex.
7. Bake for 1/2 hour at 250°F.
8. Insert core (item 5).
9. Test as shown below. Use Boonton Q - Meter Model 160A or Equivalent.



Minimum inductance must be less than -.60 uhy.
 Maximum inductance must be more than -.78 uhy.
 Q at 25 Mc must be more than - 140
 Test frequency - 25 Mc.
 Operating frequency - 16-20 Mc.

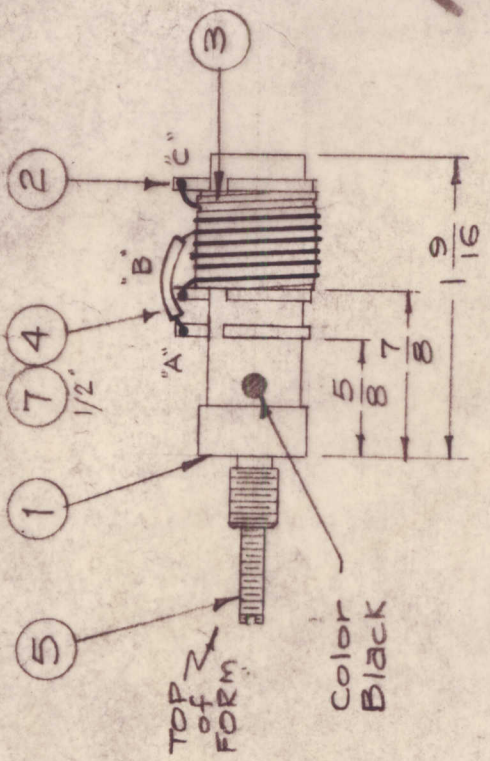
ISSUE ITEM	CHANGED FROM	DATE	CH. NO.	DRAFTS	CHECKER	ENG. APP.
E	Replaced by CL147	6/1/51	20332	01	Hde	W
D	MIN & MAX INDUCTANCE ADDED Q SPEC WAS 130	8-14-62	7066	95	Hde	W
C	ITEM B WAS CI-116-10	6/23/59	1124	Hde	J.C.B.	W
B	TEST Q WAS 145	4/1/59		abc	Hde	W
A	Winding & wiring changed .60 uhy was .71 .78 uhy was 1.0 1.5 was 1.80	1/5/59	643	abc	Hde	W

SCALE: FULL

TOLERANCES
 DEC. DIM. ±
 FRAC. DIM. ± 1/64
 ANGULAR DIM. ±

MAXIMUM ALLOWABLE TOLERANCES HAVE BEEN DETERMINED AND ANY DEVIATIONS WILL BE CAUSE FOR REJECTION. REMOVE ALL BURRS AND SHARP EDGES!

REQ. PER UNIT	MODEL	USED ON ASSY. NO.	DATE
1	RFB-1 RFC-1	GPT-10K	12-19-58
			11-22-60



SUPERSEDED
 DIRECTLY REPLACED
 BY CL147

REQ. ITEM	PART NO.	DESCRIPTION	SYMBOL
X 8	BS-100	Solder, Soft	
1/2"	PX-100-1-.042	Insulation, Sleaving (Size 18)	Blk
X 6	GL-104-2	Insulex, U85	
1 5	CI-109-19	Core, Tuning, Red	
X 4	WL-100-5	Wire, Buss (Size 18)	
1 3	CF-125-3P0.50	Coil Form, Grooved	
3 2	TE-153-3	Terminal, Ring Type	
1 1	CF-119-1.562	Coil Form, W/Bushing	

THE TECHNICAL MATERIEL CORP.
 MAMARONECK, NEW YORK

RF COIL ASSY, TUNED
 16-20 MC (CL-147)

16^{12/19/58}
 Hde

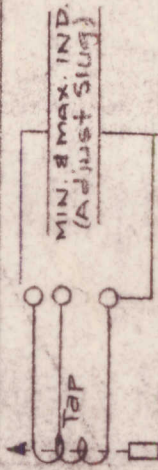
ATB
 ELEC. DES. APP MECH DES. APP

FINAL APPROVAL
 OMB
 A-1612

A-1612

PROCEDURE

1. Slip two terminal rings (item 2) on form (item 1) as shown. (Marked "A" and "B").
2. Force fit outer form (item 3) onto inner form (item 1) and cement with Insulex (item 6).
3. Slip terminal ring marked "C" on inner form.
4. Cement all rings to inner form.
5. Wind 4 turns of wire (item 4) on outer form. Bring out tap at 2 1/4 turns from top. Slip Sleevings (item 7) over tap. Solder all wire ends to proper terminals.
6. Paint Winding with Insulex.
7. Bake for 1/2 hour at 250°F.
8. Insert Core (item 5).
9. Test as shown below. Use Boonton Q - Meter Model 160A or Equivalent.



Minimum Inductance must be less than .36 why.
 Maximum Inductance must be more than .45 why.
 Q at 2.5 Mc must be more than 140
 Test frequency 25 Mc.
 Operating frequency = 20-28 Mc.

ISSUE ITEM	CHANGED FROM	DATE	CH. NO.	DRAFTS	CHECKER	ENG. APP.
F	Replaced by CL148	6/1/71	20332	00		
E	3 TOL. WAS ± 1/64 IND. VALUES ADDED PRO. 5 WAS 2 1/2 TURNS	9/16/61	5557	XL	WLB	RK
D	ITEM 5 WAS CL-119-10	6/24/59	1125	JCB	JCB	JCB
C	TEST Q WAS 160 Winding changed	4/1/59	669	JCB	JCB	JCB
B	COMPLETELY REVISITED	1/14/59	640	JCB	JCB	JCB
A	ORIGINAL DIMENSIONS 1/2 1 1/2 WAS 1 1/2 ADDED	11/1/59	640	JCB	JCB	JCB

TOLERANCES

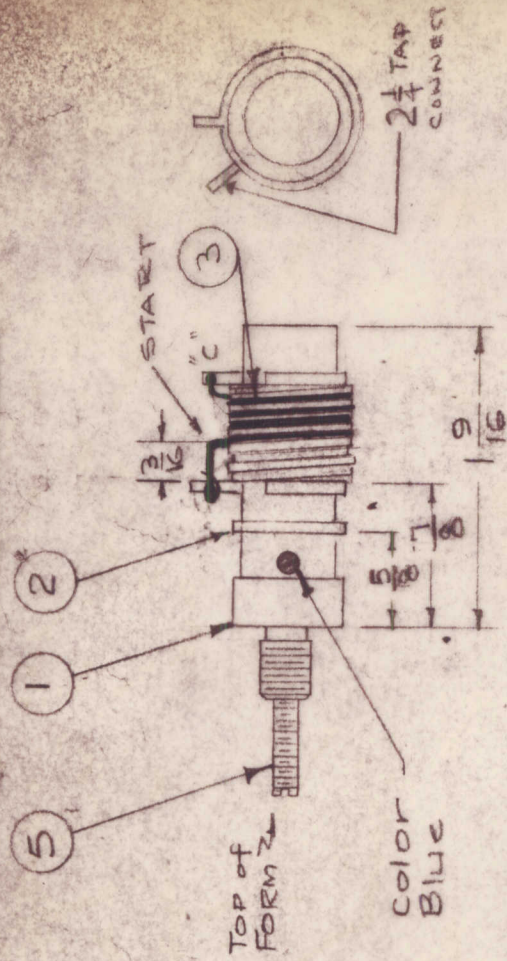
DEC. DIM. ±
 FRAC. DIM. ± 1/32
 ANGULAR DIM. ±

SCALE: 1/8"

MAXIMUM ALLOWABLE TOLERANCES HAVE BEEN DETERMINED AND ANY DEVIATIONS WILL BE CAUSE FOR REJECTION. REMOVE ALL BURRS AND SHARP EDGES

REQ. PER UNIT	1
MODEL	RFB-1
ASSY. NO.	GPT-10K
DATE	12-22-58
USED ON	RFC-1
	11-22-60

A-1613 F



SUPERSEDED
 DIRECTLY REPLACED
 BY CL148

REQ. ITEM	PART NO.	DESCRIPTION	SYMBOL
X 8	BS-100	Solder, Soft	
1/2"	PX-100-1-.053	Insulation, Sleeving (Size 16)	Blk
X 6	GL-104-2	Insulex, 085	
1	CI-109-19	Core, Tuning, Red	
X 4	WL-100-5	Wire, Buss (Size 18)	
1	CF-125-3P0.50	Coil Form, Grooved	
3	TE-153-3	Terminal, Ring Type	
1	CF-119-1.562	Coil Form, w/Bushing	
STOCK SIZE			
MATERIAL			
THE TECHNICAL MATERIEL CORP. MAMARONECK, NEW YORK			
RF COIL ASSY, TUNED (CL-148)			
20-28 MC			
16 1/2 x 5 1/2			
TYPE & TEMPER		HEAT TREAT. SPEC.	CHECKED
FINISH & SPEC. NO.		DRAWN	APPROVAL
		ATB	JCB
			CLAS
			A-1613 F
			ELEC. DES. APP. MECH. DES. APP.

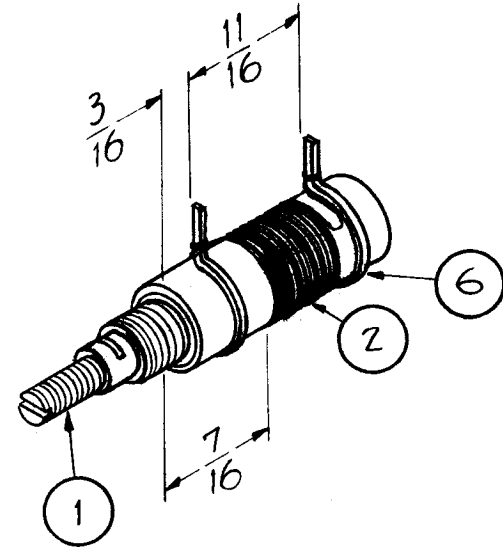
REQ. PER. UNIT	USED ON			A-1626	A
	MODEL	ASS'Y. N.	DATE		
1	RTE-2	MULT.	3-18-59		

WINDING

30 TURNS, CLOSE WOUND OF (ITEM 2)
 (# 30 DSC).

FABRICATION

- 1- STAKE COIL ENDS TO FORM (ITEM 1) WITH CEMENT (ITEM 3).
- 2-COAT COIL WITH (ITEM 4).
- 3-BAKE 1 HOUR AT 270°F
- 4-SOLDER LEADS AS SHOWN



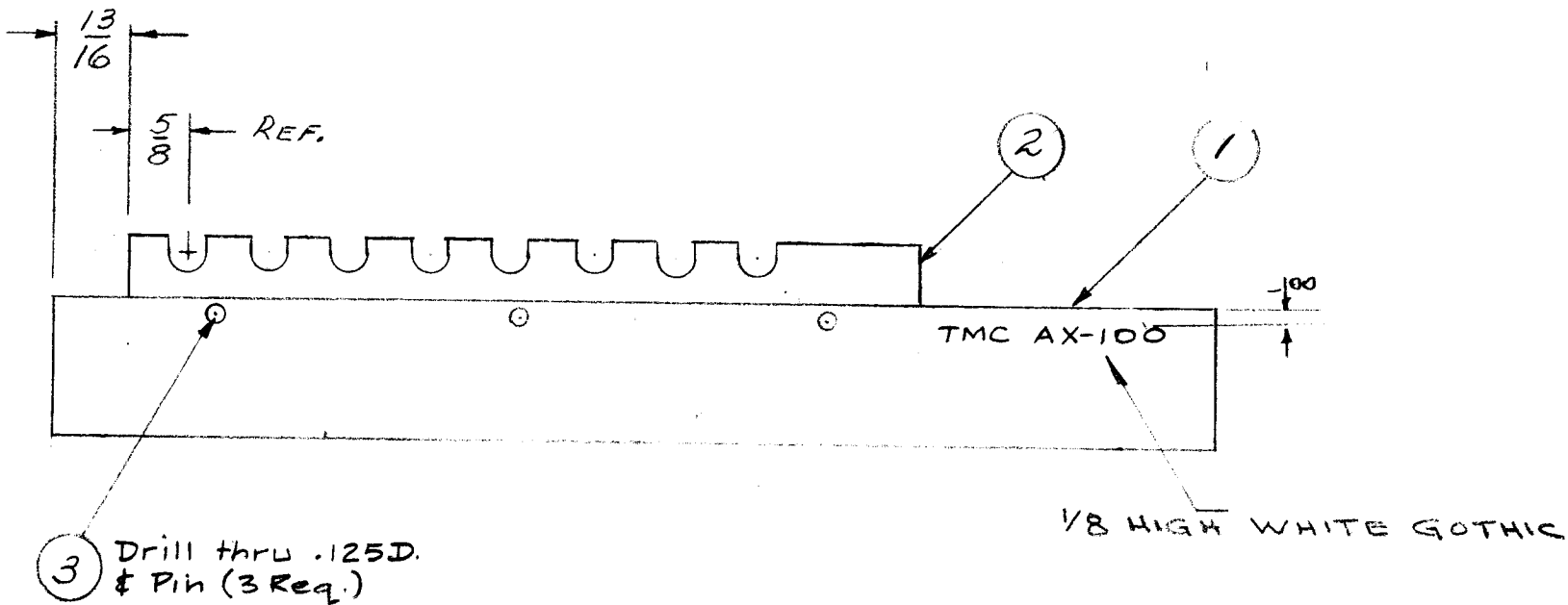
TEST DATA

L-MIN. 7.0uhy
 L-MAX. 9.5uhy
 Q-60 OR GREATER AT 9.5 MC
 F-7.9 MC

2	6	TE-153-2	TERMINAL, RING TYPE
X	5	BS 100	SOLDER, SOFT
X	4	GL 104-2	INSULEX U85
X	3	GL 103	CEMENT
X	2	WI 107-11	WIRE # 30 DSC
1	1	CF 107-2N	COIL FORM

ISSUE	ITEM	CHANGED FROM	DATE	CH. NO.	DRAFTS	CHECKER	ENG. APP.	REQ.	ITEM	PART NO.	DESCRIPTION	SYMBOL				
A	1	"L" MIN WAS 6.0uhy	4-18-61	4697	M.A.F.	JCB	[Signature]				THE TECHNICAL MATERIEL CORP. MAMARONECK, NEW YORK					
STOCK SIZE											COIL ASS'Y 4-8 MC					
MATERIAL											L205					
TOLERANCES											J.C. BIELE	[Signature]				
SCALE:											DRAWN	CHECKED	FINAL APPROVAL			
DEC. DIM. ± FRAC. DIM. ± ANGULAR DIM. ±											TYPE & TEMPER	HEATTREAT. SPEC.	M.H.O.	[Signature]	A-1626	A
MAXIMUM ALLOWABLE TOLERANCES HAVE BEEN DETERMINED AND ANY DEVIATIONS WILL BE CAUSE FOR REJECTION. REMOVE ALL BURRS AND SHARP EDGES											FINISH & SPEC. NO.	ELEC. DES. APP	MECH. DES. APP			

REQ. PER UNIT	USED ON			A-1636	B
	MODEL	ASS'Y. NO.	DATE		
1	GPT-10K	AS-102	1-31-59		

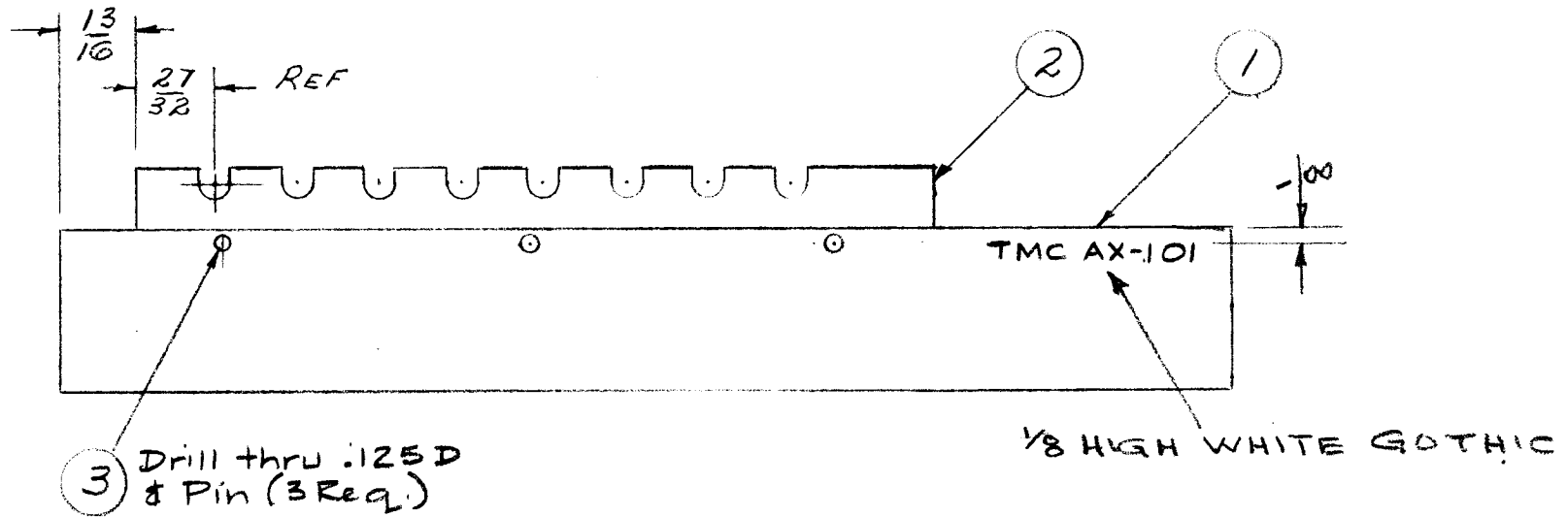


3	3	PN 99-125-16	PIN, SPRING	
1	2	PX-430	INSULATOR	
1	1	PX-429	COIL SUPPORT, RF	

B	1	Drill Note Added	9/26/59	1237	16	JR	AMB
A	1	Part No was AA-100	3/18/59	880	16	JR	AMB
ISSUE	ITEM	CHANGED FROM	DATE	CH. NO.	DRAFTS	CHECKER	ENG. APP.
TOLERANCES			SCALE:				
DEC. DIM. ±			MAXIMUM ALLOWABLE TOLERANCES HAVE BEEN DETERMINED AND ANY DEVIATIONS WILL BE CAUSE FOR REJECTION: REMOVE ALL BURRS AND SHARP EDGES				
FRAC. DIM. ± 1/64							
ANGULAR DIM. ±							

REQ.	ITEM	PART NO.	DESCRIPTION	SYMBOL
THE TECHNICAL MATERIEL CORP. MAMARONECK, NEW YORK.				
AX-100 ASSY. (COIL SUPPORT NO. 1)				
MATERIAL			amb	JR
TYPE & TEMPER			HEAT TREAT. SPEC.	DRAWN
FINISH & SPEC. N.			ELEC. DES. APP	MECH. DES. APP
			checked	FINAL APPR VAL
			AMB	A-1636

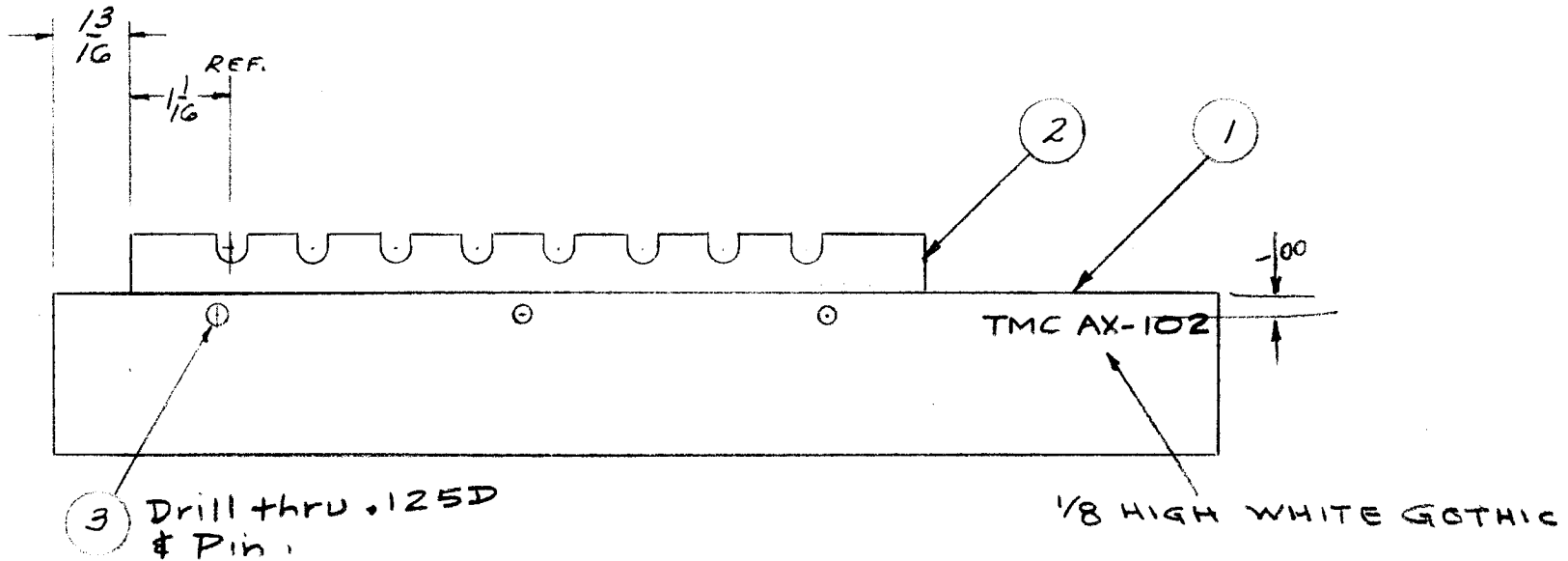
REQ. PER UNIT	USED ON			A-1637	B
	MODEL	ASS'Y. NO.	DATE		
1	GPT-10K	AS-102	1-31-59		



3	3	PN99-125-16	PIN, SPRING	
1	2	PX-431	INSULATOR	
1	1	PX-429	COIL SUPPORT, RF	
REQ.	ITEM	PART NO.	DESCRIPTION	SYMBOL
STOCK SIZE			THE TECHNICAL MATERIEL CORP. MAMARONECK, NEW YORK	
MATERIAL			AX-101 ASS'Y. (COIL SUPPORT NO. 2)	
TYPE & TEMPER		HEAT TREAT. SPEC.	DRAWN	CHECKED
FINISH & SPEC. NO.		ELEC. DES. APP.	MECH. DES. APP.	FINAL APPR VAL

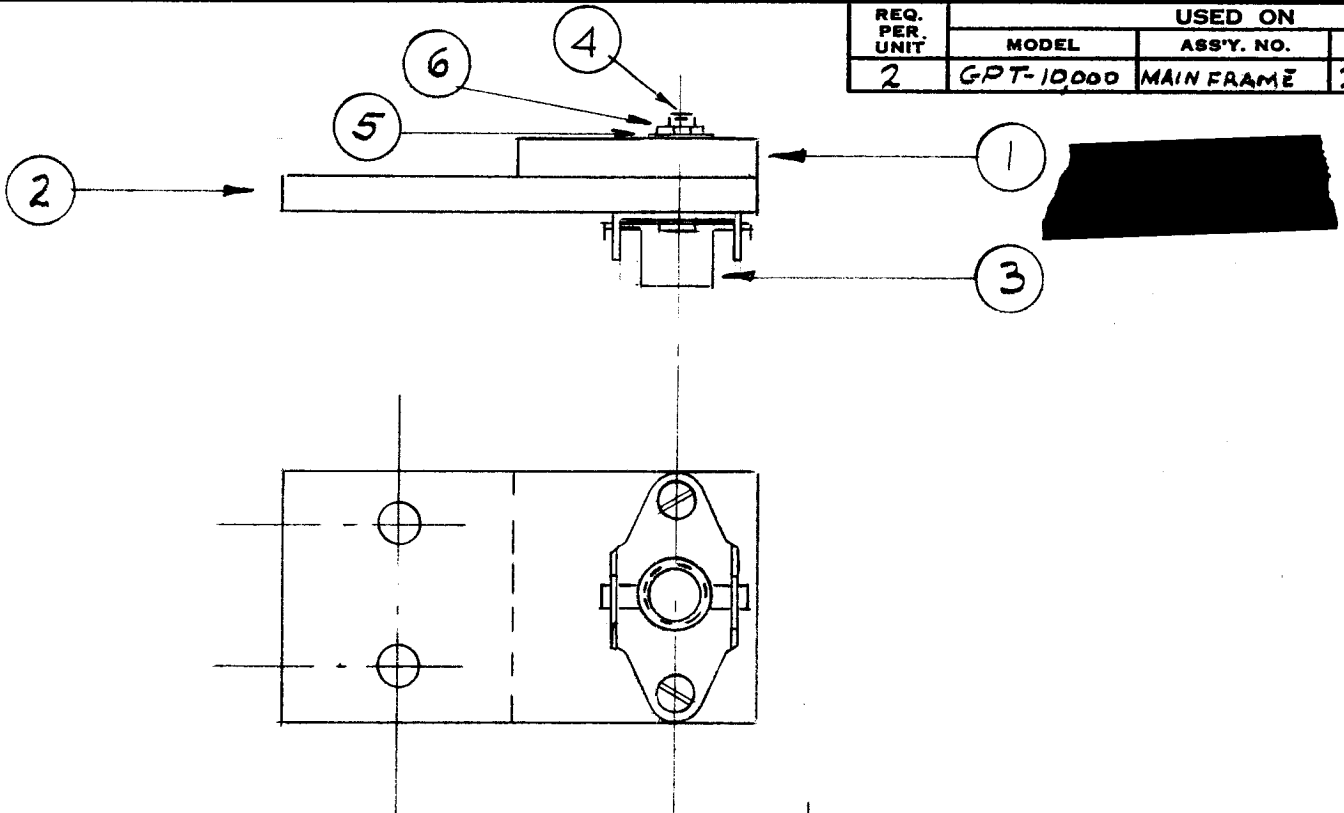
B	1	Drill Note Added	8/26/59	1237	16	JR	JR
A	1	Part # was AA-101	3/18/59	880	10	JR	JR
ISSUE	ITEM	CHANGED FROM	DATE	CH. NO.	DRAFTS	CHECKER	ENG. APP.
TOLERANCES			SCALE:				
DEC. DIM. ± FRAC. DIM. ± ANGULAR DIM. ±			MAXIMUM ALLOWABLE TOLERANCES HAVE BEEN DETERMINED AND ANY DEVIATIONS WILL BE CAUSE FOR REJECTION. REMOVE ALL BURRS AND SHARP ED ES				

REQ. PER UNIT	USED ON			A-1638	B
	MODEL	ASSY. NO.	DATE		
1	GPT-10K	AS-102	1-31-59		



3	3	PN 99-125-16	PIN, SPRING	
1	2	PX-432	INSULATOR	
1	1	PX-429	COIL SUPPORT, RF	
REQ.	ITEM	PART NO.	DESCRIPTION	SYMBOL
STOCK SIZE			THE TECHNICAL MATERIEL CORP. MAMARONECK, NEW YORK	
MATERIAL			AX-102 ASSY. (COIL SUPPORT No. 3)	
TOLERANCES		SCALE:	DRWN	FINAL APPROVAL
DEC. DIM. ±		MAXIMUM ALLOWABLE TOLERANCES HAVE BEEN DETERMINED AND ANY DEVIATIONS WILL BE CAUSE FOR REJECTION. REMOVE ALL BURRS AND SHARP EDGES	CHECKED	A-1638 B
FRAC. DIM. ±				
ANGULAR DIM. ±			FINISH & SPEC. NO.	ELEC. DES. APP MECH. DES. APP

REQ. PER. UNIT	USED ON			A-1643
	MODEL	ASSY. NO.	DATE	
2	GPT-10000	MAIN FRAME	2-20-59	



2	6	NTH 0440 BNB	NUT, HEX.
2	5	LWE-04-MRN	LOCK-WASHER
2	4	SCBS 0440BN10	SCREW
2	3	NT-117-3/24-B	NUT FLOATING, ANCHOR
2	2	PM-555	MOUNTING BRACKET, LATCH
2	1	PM-556	SHIM, PANEL, LOCK

ISSUE	ITEM	CHANGED FROM	DATE	CH. NO.	DRAFTS	CHECKER	ENG. APP.
TOLERANCES			SCALE:				
DEC. DIM. ± FRAC. DIM. ± ANGULAR DIM. ±			MAXIMUM ALLOWABLE TOLERANCES HAVE BEEN DETERMINED AND ANY DEVIATIONS WILL BE CAUSE FOR REJECTION. REMOVE ALL BURRS AND SHARP EDGES				

REQ.	ITEM	PART NO.	DESCRIPTION	SYMBOL
STOCK SIZE			THE TECHNICAL MATERIEL CORP. MAMARONECK, NEW YORK	
MATERIAL			PANEL LATCH GPT-10K (H.V.R.)	
TYPE & TEMPER		HEATTREAT. SPEC.	DRAWN	CHECKED
FINISH & SPEC. NO.		ELEC. DES. APP	MECH. DES. APP	

TORILLO
 J.D.
 A.P.B.
 A-1643

WINDING MACHINE DATA

Load Turns - 200 (Approx.)
6" Load Ring

WINDING (in accordance WITH TMC SPEC. S-337)

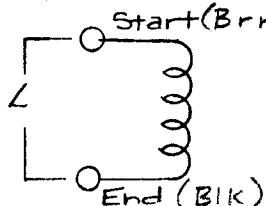
1. Wind 2500 turns of wire (item 2) onto core (item 1).
2. Bake for 1/2 hour at 215° F.
3. Submerge hot coil in GL-110 (item 3)
4. Test and resonate as per Spec. S-418

Fr. = 1Kc

L = .95 Hy (Approx.)

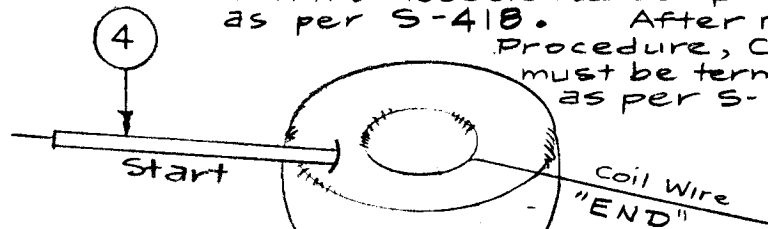
Q = 150 or greater
DC Res. = 125- Ω or greater

See S337
for Use of
these items



REQ. PER. UNIT	USED ON			A-1648	B
	MODEL	ASSY. NO.	DATE		
1	FX-157		2-25-59		

NOTE - "Coil Wire END" must extend as shown until coil is properly resonated with its Associated Components, as per S-418. After resonating Procedure, Coil "END" must be terminated as per S-337.(Steps)



NOTE - Leads Must Extend 2" from Coil

SUPERSEDED

DIRECTLY REPLACED BY..CL157

X	8	BS-100	SOLDER, SOFT	
X	7	TA-102-2	TAPE, PAPER	
X	6	PX-104-1-.022	SLEEVING	Blk.
X	5	LWC28(7)U0	CABLE, INSULATED (End)	Blk.
X	4	LWC28(7)U1	CABLE, INSULATED (start)	Brn.
X	3	GL-110	COMPOUND, POTTING	
X	2	WI-123-36	WIRE (#36)	
1	1	CI-103-8	CORE	

B	SUPERSEDED		6-4-71	20369	RJ	Q	PEB
A	1	COMPLETE REVISION	2/24/59	-	16	RWB	OND
ISSUE	ITEM	CHANGED FROM	DATE	CH. NO.	DRAFTS	CHECKER	ENG. APP.
TOLERANCES			SCALE:				
DEC. DIM. \pm FRAC. DIM. \pm ANGULAR DIM. \pm			MAXIMUM ALLOWABLE TOLERANCES HAVE BEEN DETERMINED AND ANY DEVIATIONS WILL BE CAUSE FOR REJECTION. REMOVE ALL BURRS AND SHARP EDGES				

REQ.	ITEM	PART NO.	DESCRIPTION	SYMBOL
THE TECHNICAL MATERIEL CORP. MAMARONECK, NEW YORK				
COIL, AF, 2805 cps BANDPASS FILTER (CL-157)				
MATERIAL			DRAWN	
TYPE & TEMPER			HEATTREAT. SPEC.	CHECKED
FINISH & SPEC. NO.			ELEC. DES. APP	MECH. DES. APP
			A-1648	B

WINDING MACHINE DATA

- 2 Loads Required
- 6" Load Ring
- Load #1 - Approx. 250 Turns
- Load #2 - Approx. 235 Turns

WINDING (in accordance) WITH TMC SPEC. S-337)

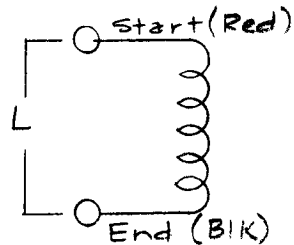
1. Wind 3600 turns from Load 1 onto core. Splice Load #2 wire to Load #1 wire.
2. Wind 2600 turns from Load 2 onto core. (Total turns, 6200).
3. Bake for 1/2 hour at 215° F.
4. Submerge hot coil in GL-110 (item 3).
5. Test and resonate as per spec. S-417

L = 4.8 Hy (Approx.)

Q = 150 or greater

DC Res. - 360 Ω or Greater

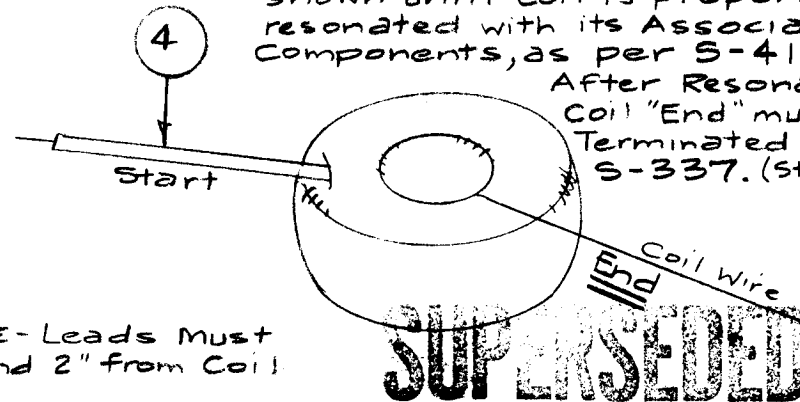
Fr. = 1 Kc



See S337 for Use of These Items

REQ. PER. UNIT	USED ON			A-1649	B.
	MODEL	ASSY. NO.	DATE		
1	FX-156		2-25-59		

NOTE - "Coil Wire END" must extend as shown until Coil is properly resonated with its Associated Components, as per S-417. After Resonating Prog. Coil "End" must be Terminated as per S-337. (step C)



NOTE - Leads Must Extend 2" from Coil

DIRECTLY REPLACED BY CL156

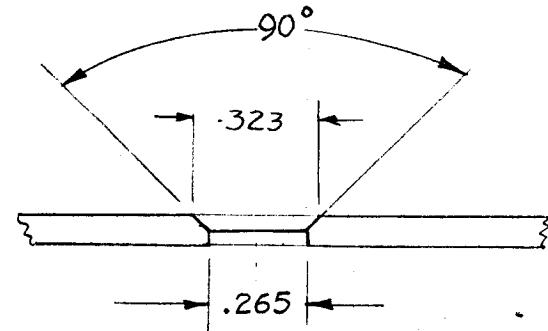
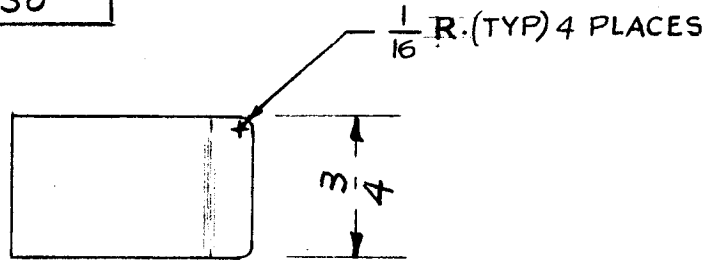
X	8	BS-100	SOLDER, SOFT	
X	7	TA-102-2	TAPE, PAPER	
X	6	PX-104-1-.022	SLEEVING	BIK.
X	5	LWC28(7)U0	CABLE, INSULATED (End)	BIK.
X	4	LWC28(7)U2	CABLE, INSULATED (Start)	Red.
X	3	GL-110	COMPOUND, POTTING	
X	2	WI-123-36	WIRE (#36)	
1	1	CI-103-11	CORE	

B	SUPERSEDED		6-4-71	20369	RJ	W	P.E.B.
A	1	COMPLETE REVISION	2/26/59	-	16	RWB	MD
ISSUE	ITEM	CHANGED FROM	DATE	CH. NO.	DRAFTS	CHECKER	ENG. APP.
TOLERANCES			SCALE:				
DEC. DIM. ±			MAXIMUM ALLOWABLE TOLERANCES HAVE BEEN DETERMINED AND ANY DEVIATIONS WILL BE CAUSE FOR REJECTION. REMOVE ALL BURRS AND SHARP EDGES				
FRAC. DIM. ±							
AN ULAR DIM. ±							

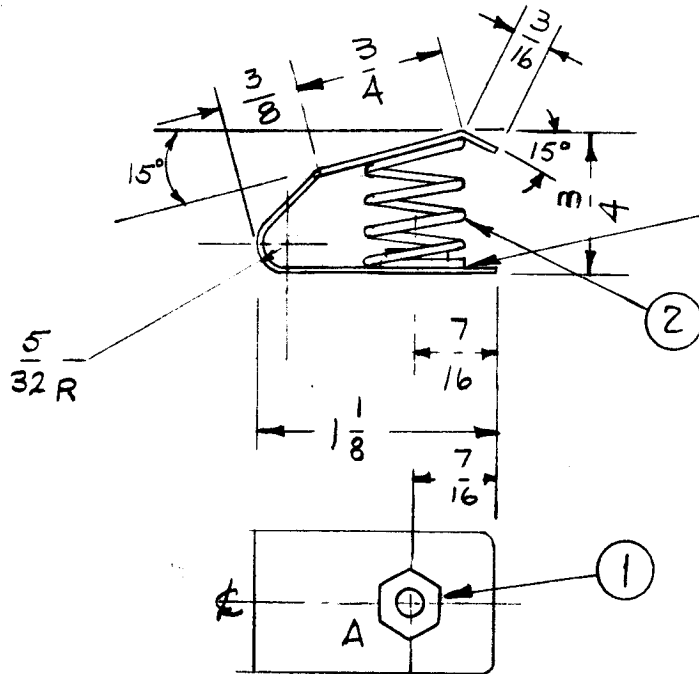
REQ.	ITEM	PART NO.	DESCRIPTION	SYMBOL
STOCK SIZE			THE TECHNICAL MATERIEL CORP. MAMARONECK, NEW YORK	
MATERIAL			COIL, AF, 935 cps BANDPASS FILTER (CL-156)	
TYPE & TEMPER		HEAT TREAT. SPEC.	DRAWN	CHECKED
FINISH & SPEC. NO.		ELEC. DES. APP.		MECH. DES. APP.
		16 ^{25/59}		ARB
		RWB		MD
		A-1649		B

TMC P/N	ITEM 2	THICKNESS
A1654	SP128	.040
A1654-2	SP128-3	.030

REQ. PER. UNIT	USED ON			A-1654	D
	MODEL	ASSY. NO.	DATE		
1	AX-154	9PT-101K			



DETAIL "A" — 1 REQ.



3 SOLDER ALL AROUND FIRST TURN OF SPRING

NOTICE TO PERSONS RECEIVING THIS DRAWING

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Property of:

THE TECHNICAL MATERIEL CORPORATION

MAMARONECK, NEW YORK

X	3	BS-100	SOLDER, SOFT	
1	2	SEE CHART	SPRING FRICTION DRIVE	
1	1	SM-107-51	INSERT HEX	

ISSUE	ITEM	CHANGED FROM	DATE	CH. NO.	DRAFTS	CHECKER	ENG. APP.
D		ADDED P/N CHART	2.27.68	18786	HR	MM	FB
C	1	1/16 R. (TYP) 4 PL. ADDED	6-22-64	11634	A.M.	SR	OS
B	1	ITEM 3 ADDED TO BUILDUP & PICT.	12/4/63	10574		SR	OS
A	2	DIM. 5/8 & ② DETAIL ADDED	6-27-61	5144	G.D.L.	RU	JM
	1	ITEM ① WAS NT-129-1032-3					

REQ.	ITEM	PART NO.	DESCRIPTION	SYMBOL
			THE TECHNICAL MATERIEL CORP.	
			MAMARONECK, NEW YORK	
			AX-154 Ass'y	
			CONTACT, RF	
			39739	
			ISRI/EE	
			OKB	
			A-1654	D

TOLERANCES		SCALE:
DEC. DIM. ±		MAXIMUM ALLOWABLE TOLERANCES HAVE BEEN DETERMINED AND ANY DEVIATIONS WILL BE CAUSE FOR REJECTION. REMOVE ALL BURRS AND SHARP EDGES
FRAC. DIM. ±		
ANGULAR DIM. ±		

PROCEDURE

- 1~ SECURE TERMINAL RINGS (ITEM 2) TO FORM (ITEM 1) WITH INSULEX (ITEM 5).
- 2~ WIND 20 TURNS OF WIRE (ITEM 3) ON FORM. TAP AT 16TH TURN.
- 3~ SOLDER WIRE ENDS TO PROPER TERMINALS.
- 4~ PAINT WINDING WITH INSULEX.
- 5~ BAKE 1/2 HR. AT 210°F.
- 6~ TEST AS SHOWN BELOW. USE BOONTON Q METER, MODEL 160 A OR EQUIV.

TEST DATA

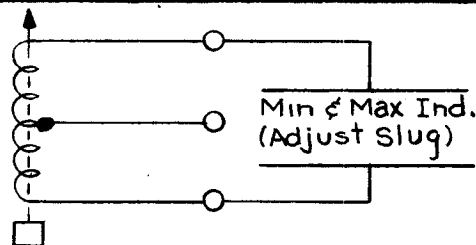
MIN. IND. MUST BE LESS THAN 4.5 .

MAX. IND. MUST BE MORE THAN 7.2 .

Q-AT 7.9 MC > 70

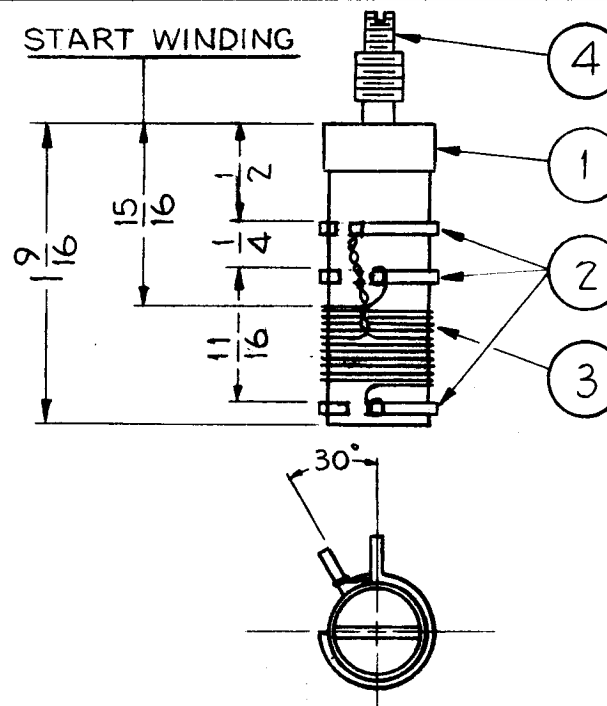
TEST FREQ. ~ 7.9 MC

OPERATING FREQ. ~ 4-8 MC



REQ. PER. UNIT	USED ON		
	MODEL	ASS'Y. NO.	DATE
1	GPT-10K	IPA	4-2-59

A-1657 B



X	6	BS-100	SOLDER, SOFT
X	5	GL-104-2	INSULEX, U85
1	4	CI-109-13	CORE, TUNING RED
X	3	WI-123-25	WIRE, (# 25 FORMVAR)
3	2	TE-153-3	TERMINAL, RING TYPE
1	1	CF-119-1.562	COIL FORM W/ BUSHING

ISSUE	ITEM	CHANGED FROM	DATE	CH. NO.	DRAFTS	CHECKER	ENG. APP.
B		IT4 WAS C116-10	1-16-67	17683	WHD	JFB	JFB
A	1	ON TEST DATA Q=70 ADD.	8.26.64	12213	JFB	JFB	JFB
TOLERANCES			SCALE:				
DEC. DIM. ±			MAXIMUM ALLOWABLE TOLERANCES HAVE BEEN DETERMINED AND ANY DEVIATIONS WILL BE CAUSE FOR REJECTION. REMOVE ALL BURRS AND SHARP EDGES				
FRAC. DIM. ±							
ANGULAR DIM. ±							

REQ. ITEM	PART NO.	DESCRIPTION	SYMBOL
THE TECHNICAL MATERIEL CORP. MAMARONECK, NEW YORK CL-159 ASS'Y. (COIL, RF, TUNED, 4-8 MC)			
MATERIAL		J.C. BIELE	JFB
TYPE & TEMPER		HEAT TREAT. SPEC.	FINAL APPROVAL
FINISH & SPEC. NO.		ELEC. DES. APP	MECH. DES. APP

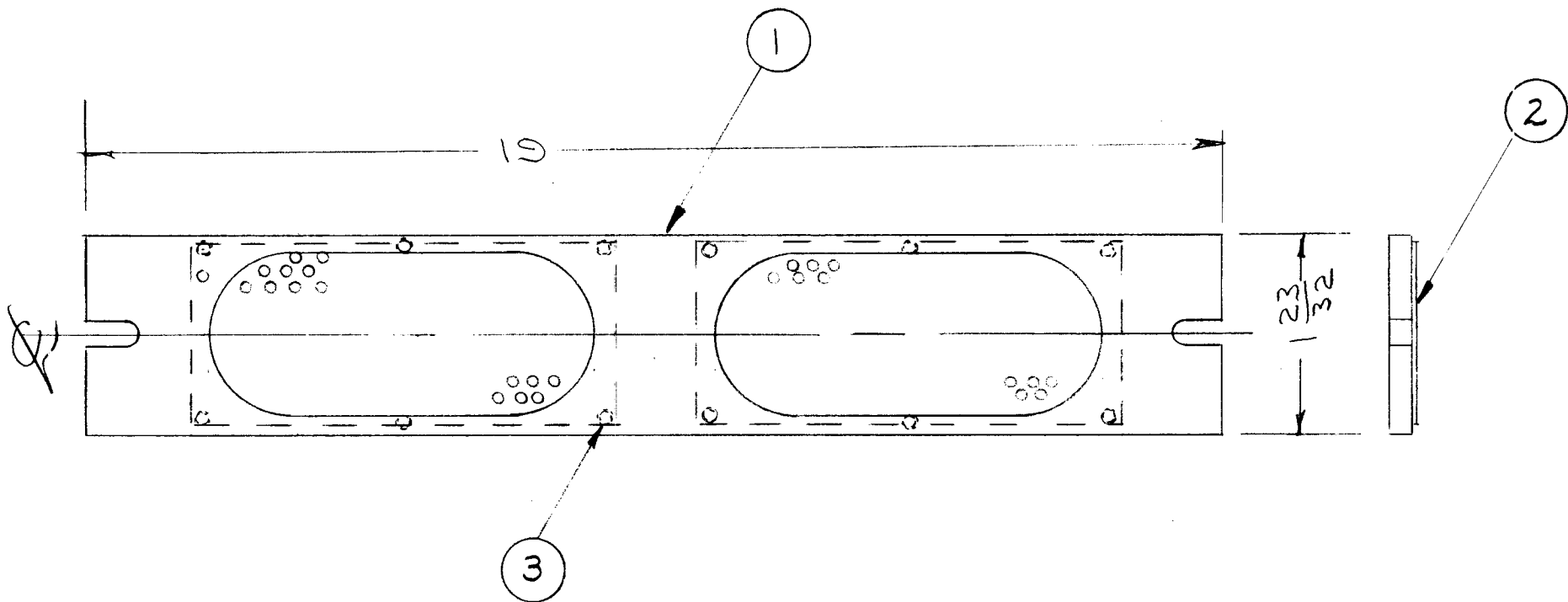
REQ. PER. UNIT	USED ON			A-1666
	MODEL	ASS'Y. NO.	DATE	
1	GPT-1DK	AX-110	11-13-59	

NOTE:

For necessary manufacturing information,
See drawing #AX-110 (8 size) and NPL-AX-110

REQ.	ITEM	PART NO.	DESCRIPTION				SYMBOL
			THE TECHNICAL MATERIEL CORP. MAMARONECK, NEW YORK				
			AX-110 ASS'Y.				
			(CENTER SHIELD ASS'Y.)				
ISSUE	ITEM	CHANGED FROM	DATE	CH. NO.	DRAFTS	CHECKER	ENG. APP.
TOLERANCES			SCALE:				
DEC. DIM. ± FRAC. DIM. ± ANGULAR DIM. ±			MAXIMUM ALLOWABLE TOLERANCES HAVE BEEN DETERMINED AND ANY DEVIATIONS WILL BE CAUSE FOR REJECTION. REMOVE ALL BURRS AND SHARP EDGES				
		STOCK SIZE			MATERIAL		
					16 1/4/59		
					DRAWN		
					CHECKED		
					FINAL APPROVAL		
					A-1666		
					ELEC. DES. APP		
					MECH. DES. APP		
					FINISH & SPEC. NO.		

REQ. PER. UNIT	USED ON			A-1685
	MODEL	ASS'Y. NO.	DATE	
			5-1-59	



AX119

12	3	SCBS0440 BN 3	SCREW MACHINE	
2	2	MS- 1310	VENT	
1	1	MS- 1728	PANEL, FRONT VENT	
REQ.	ITEM	PART NO.	DESCRIPTION	SYMBOL
STOCK SIZE			THE TECHNICAL MATERIEL CORP. MAMARONECK, NEW YORK	
MATERIAL			VENT PANEL ASS'Y	
TYPE & TEMPER		HEAT TREAT. SPEC.	DRAWN	CHECKED
FINISH & SPEC. NO.		ELEC. DES. APP.	MECH. DES. APP.	

ISSUE	ITEM	CHANGED FROM	DATE	CH. NO.	DRAFTS	CHECKER	ENG. APP.
TOLERANCES			SCALE:				
DEC. DIM. ±			MAXIMUM ALLOWABLE TOLERANCES HAVE BEEN DETERMINED AND ANY DEVIATIONS WILL BE CAUSE FOR REJECTION.				
FRAC. DIM. ±			REMOVE ALL BURRS AND SHARP EDGES				
ANGULAR DIM. ±							

10/11/59
[Signature]
[Signature]
 A-1685