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# TAPE WINDER

DESCRIPTION ADJUSTMENTS AND REPLACEMENT PARTS MANUAL



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#### DESCRIPTION

The Tape Winder is powered by a 105-125 v 60 cps. motor. When the run of tape being wound becomes taut, it opens a mercury switch, cutting off motor power. When the tape becomes slack the switch closes again.

The tape is threaded around several posts whose function is to develop a suitable winding tension and thus develop a firm roll of wound tape, while pulling very gently on the perforator or transmitter which is delivering tape to the winder. Figure 1 illustrates the tape threading path. The tape retainer may be rotated clockwise to facilitate threading and then restored to retain tape in the threaded path. One of the tape guide posts is movable in a slot, to adjust winding tension. See "Tape Tension Adjustment" Figure 1.

When the tape arm is pushed down as far as it will go, and moved slightly to the left, it will latch in a free-wheeling position. This disengages gears in the motor drive train, allowing easy manual turning of the tape reel. A handle is provided in the outer tape reel flange to spin the reel.

The tape reel is retained on its drive pulley by permanent magnets. To remove the tape reel, pull it off axially.

Tape may be removed from the reel as follows: Twist the inner flange counterclockwise, and lift off the inner flange. Then turn over the outer flange (with the tape on it) and the tape roll will drop off.

To reassemble the tape reel, enter the three pins in the larger openings of the twist lock and then turn the inner flange clockwise.

When starting to wind tape, the free end may be simply inserted between the posts of the tape reel. Alternatively, a tape roll core may be pressed over the pins prior to assembling the tape reel. The tape end can be attached to this core by pressure-sensitive tape. The latter method is sometimes preferred if the core is useful in storing rolls of tape.

The posts in the tape path are cut to fit particular tape widths. The model equipped with posts for 5 level tape is called TW5, the model for 6 level tape is TW6, and so forth, through TW7 and TW8. Posts may be replaced to convert a winder from one tape width to another.

Sets of parts are available to mount the basic tape winder in various ways. The "A" set of parts will mount the TW5 Tape Winder on the Teletype 28 Type Console. Thus such a winder would be designated TW-5A. The "B" set of parts will mount the winder on the Teletype 19 Set (TW-5B). The "C" set of parts will mount a winder on the Teletype 14 Type Table (TW-5C) or on the Teletypesetter Reperforator Table (TW-6C).

The 12 inch reel will hold more than 1,300 feet of chadless tape, or more than 2,000 feet of chad tape.

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#### **ADJUSTMENTS**

#### 1. Mercury Switch Adjustment. Fig. 1

The Tape Winder motor should start as the Tape Lever moves upward. At the instant of starting the clearance between the Tape Lever and its Upper Stop should be 1/4" to 1/2". To adjust, loosen the Switch Bracket Mounting Screw and rotate the Bracket. Tighten the screw.

#### 2. Clutch Lever Stud Adjustment. Fig. 1

When the Tape Lever is latched in the free wheeling position (down) the motor gears should be disengaged and there should be some clearance, not more than 1/16", betwen the Motor Shaft and the Motor Shaft Return Lever. This clearance may be observed from below the machine with the motor cover removed, or by viewing thru the hole in the base plate. To adjust, loosen the nut on the clutch lever stud and reposition it. Tighten the nut.

#### 3. Tape Lever Spring Tension. Fig. 1

With the Tape Lever against the Upper Stop, hook a 32 oz. spring balance in the spring hole on the Tape Lever, and pull in line with the spring. It should require 9 to 11 ozs. to just start the tape lever moving away from the stop.

#### 4. Clutch Lever Spring Tension. Fig. 1

With power disconnected, push the Tape Lever to its lowermost position and then raise it to rest against the Upper Stop. This disengages the motor gears and allows the edge of the Motor Shaft Return Lever to bear against the Motor Shaft. Hook an 8 oz. spring balance in the spring hole and pull in line with the Clutch Lever Spring. It should require 1 1/2 to 3 ozs. to just start the Motor Shaft Return moving. Belt must be removed.

5. Tape Tension Adjustment. Fig. 1

One of the Tape Posts is mounted in a slot in the base plate. If this Post is at the top of the slot, maximum tape tension results. Lowering the Post in the slot reduces tape tension. In general, chadless tape requires greater winding tension than fully perforated tape. Also, there are individual preferences on tightness of winding.

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### LIST OF PARTS

PART NO.	NAME	QTY. REQ.
20W100	Base (w/sprg.post) Assem.	1
14W101	Cover Mounting Bracket	2
35W100	Screw	4
38W100	L.W.	4
14W100	Motor Shaft Return Lever	
11W114	Clutch Lever Bearing	a and Souther 1 statutes
14W106	Clutch Lever Spacer	1
35W100	Screw	
38W101	Washer	1
38 <b>W</b> 100	L. W.	1
20W101	Motor w/pulley Assem.	1
35W101	Screw	2
11W108	Spacer	2
14W103	Term. Mtg. Bracket	1
38W100	L.W.	2
39W100	Nut	2
1000101	The second read on the second	al an of the last
18W101	lerm. Strip	
19W100	Hook-Up wire	1
35W102	Screw .	2
38W101	Washer	2
20W100	L. W.	2
39 11 100	Nut	2
20W107	Mercury Switch	1
28W100	Cable Clamp (underneath)	1
14W104	Spring Tab	1
35W100	Screw	1
38W100	L.W.	1
27W101	Clutch Lever Spring	7
14W111	Tape Lever	1
11W100	Tape guide Post	and the 1 offers the
35W103	Screw	1
0011100		
14W110	Switch Lever	1
35W110	Screw	2
38W100	LW.	2



FIG. 2

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List of Parts .....Continued

PART NO.	NAME	QTY. REQ.	
11W116	Clutch Lever Stud		
38W101	Washer	1	
38W100	I. W	1	
39 <b>W</b> 100	Nut	1	1
20W102	Bracket w/Switch Mount Clip Assem		1
35W100	Screw	1	
38W101	Washer	1	
38W100	L. W.	1	
35W104	Screw		
14W105	Tape Lever Spacer	1	1
11W113	Tape Lever Bushing	1	
14W108	Tape Lever Stop	•	
11W107	Tape Lever Stop Spacer	1	
35W105	Screw	2	
38W100	L.W.	2	
27 <b>W</b> 100	Tape Lever Spring	1	
28 <b>W</b> 102	Pulley		
42W102	Magnet	1	
35W106	Screw (Brass)	3	
11W100	Reel Stud	3	
35W103	Screw	1	
17W102	Pulley Belt	1	
11W111	Tape Guide Post (See Note)	-	
11W101	Tape Adj. Stud	3	
35 <b>W</b> 103	Screw	1	
11W112	Tape Retainer Post (See Note)		
35 <b>W</b> 103	Screw		
14W112	Tape Retainer		
11W104	Tape Ret. Bushing	1	-
38W102	Spring Washer	1	
35W102	Screw	1	
38W100	L.W.	1	
20W103	Power Cord Assem.	1	
28W101	Cable Clamp		1
42W103	Special Washer	1	2
35W100	Screw	1	
38W100	L.W.	1	



#### List of Parts ..... Continued

PART NO.	NAME	QTY. REQ.
20 <b>W</b> 104	Cover Assem.	1
35W100	Screw	2
38W100	L.W.	. 2
42W105	Foot	2
35 <b>W</b> 108	Screw	2
20 <b>W</b> 105	Tape reel Rear Flange Assem.	1
11W103	Tape Reel Spacer Stud	3
35W100	Screw	3
38W100	L. W.	3
20W106	Front Reel Flange Assem.	• 1
11 <b>W</b> 102	Tape Reel Locking Stud	3
35W100	Screw	3
38 <b>W</b> 100	L. W.	3

Note: Posts shown for 5 level tape; when ordering specify whether for 5, 6, 7, or 8 level tape.

#### Table and Console Mounting Parts

50W102 Set of Parts "A" for Mounting Tape Winder on Teletype 28 Type Consoles.<sup>3</sup>
50W101 Set of Parts "B" for Mounting Tape Winder on Teletype 19 Type Table.
50W100 Set of Parts "C" for Mounting Tape Winder on Teletypesetter Reperforator Table or Teletype 14 Type Table.

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