

Teletype Corporation
Chicago, Illinois, U.S.A.

MANUAL 80

Teletype Instruction Manual No. 80MA
October, 1952

INSTRUCTION MANUAL FOR
TELETYPE MODEL 31
TT-30/AGA-1 AIRCRAFT TELETYPEWRITER
TAPE PRINTER

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Printed in U.S.A.

CHANGES AND ADDITIONS
TO BULLETIN 200, ISSUE 1
MODEL 31 TAPE PRINTER
AS SUPPLIED ON
SIGNAL CORPUS CONTRACT W-36-039 SC-29775

Section II, Paragraph 1.d.

Delete the fourth and fifth sentence - indicating lamps not furnished with equipment supplied on this contract.

Section III, Paragraph 2.a.(25)(a)

In fifth line, change "marking position" to "spacing position".

Paragraph 2.a.(25)(c)

Add to this requirement "To adjust, position the selector-magnet adjusting post."

Section IV, Paragraph 3.b.(1)

Change "Ratchet wheel shaft" to read "Ratchet wheel shaft bearing".

Section VI, Delete this section - no spare parts kit supplied on this contract.

Section VII, Substitute Wiring Diagram WD-2501 for WD-2487.

Section VIII, Figure 3 - Substitute Figure 3 attached hereto for the Figure 3 on Page 8-7.

* * *

UPPER CASE	-	?	:	\$	3	!	a	8	'	()	.	,	9	Ø	1	4	,	5	7	;	2	/	6	"														
LOWER CASE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	BLANK	C.R.	L.F.	SPACE	LTR. SHIFT	FIG. SHIFT							
1	●	●	●	●	●					●	●					●	●			●	●	●	●	●	●														
2	●		●				●		●	●	●	●				●	●	●			●	●	●	●															
FEED HOLES	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
3			●		●		●		●	●	●					●	●	●			●	●	●	●															
4	●	●	●		●	●			●	●	●	●	●			●					●	●	●	●															
5	●						●	●			●	●	●	●	●						●																		

FIGURE 3

CORRECTIONS AND ADDITIONS TO
BULLETIN 200, ISSUE 1
MODEL 31 TAPE PRINTER

PAGE 3-2

Section III, Paragraph 2.a.(12)

In the first line at the top of page 3-2, after the word "cam", add the following words: and the armature extension in the marking position-----.

PAGE 3-10

Paragraph 3.a.(4)

Delete the second sentence in paragraph 3.a.(4) which reads -
"The clearance at No. 1 and No. 5 levers should be equal within .005".

* * *

CHANGES AND ADDITIONS
TO BULLETIN 200, ISSUE 1
MODEL 31 TAPE PRINTER

Section II, Paragraph 1.d. Page 2-0

Delete all of this paragraph except the first and second sentence.

Paragraph 1.h. Page 2-1

Delete this paragraph.

Paragraph 2.h. Page 2-4

Delete this paragraph.

Paragraph 2.i. Page 2-4

Delete the second sentence of this paragraph.

Section III, Paragraph 2.a.(25)(a) Page 3-3

In the fifth line, change "marking position" to "spacing position".

Paragraph 2.a.(25)(c) Page 3-3

Add to this requirement "To adjust, position the selector-magnet adjusting post."

Paragraph 2.a.(27) Page 3-3

In the first and second line, change "No. 1 selector lever" to "No. 2 selector lever".

Change the last sentence to read: "It should require from 1/4 to 3/4 oz. to start the numbers 1, 3, 4, 5 selector levers moving."

Paragraph 2.a.(35) Page 3-4

Immediately following this adjustment add: When making this adjustment, the eccentric stud must be in its lowest position for proper operation.

Paragraph 2.a.(69) Page 3-8

Add the following immediately prior to Paragraph 2.a.(69):

(68.1) MOTOR POSITION ADJUSTMENT

There should be a perceptible amount of backlash between the motor pinion and its gear. To adjust, position the motor assembly by means of the motor bracket upper mounting screws.

(68.2) GOVERNOR POSITION ADJUSTMENT

The collector rings should face the brushes. The hub should be positioned 27/64" to 29/64" from the end of the shaft. To adjust, locate the governor on the shaft.

(68.3) MOTOR GOVERNOR BRUSH SPRING ADJUSTMENT

Each brush should rest against the governor ring with a pressure of 2-1/2 to 3-1/2 ozs. To adjust, bend the brush springs. After adjusting, the brushes should lie flat against the rings.

(68.4) FAN POSITION ADJUSTMENT

The fan should be located on the shaft so that the fan hub rests against the governor hub, and so that the line scribed on the periphery of the fan lines up, within 1/16", with the white line on the periphery of the governor. To adjust, locate the fan, and tighten the set screws.

(68.5) SPEED ADJUSTMENT

To adjust the motor speed, turn the governor contact screw which is located inside the hole in the motor fan. Insert a small screw driver through the hole and turn the screw inward to increase the speed, and outward to decrease the speed.

Paragraph 2.a.(70) Page 3-8
Delete this paragraph.

Paragraph 2.b.(1) Page 3-8
Add the following adjustment immediately prior to Paragraph 2.b.(1):

(.1) MOUNTING PLATE ADJUSTMENT - PRELIMINARY

Position the end-of-line indicator plate by means of its three mounting screws so that the feed pawl lever fully engages a tooth of the ratchet wheel. This engagement must occur with the ratchet wheel in its fully returned position and the spacing cam follower on the high part of its cam.

Paragraph 2.b.(2) Page 3-8
Immediately following this adjustment add:

With the CARRIAGE RETURN combination selected, both the check pawl and the feed pawl teeth should clear the teeth of the ratchet wheel by at least .010". See Figure 44.1. To adjust, loosen the end-of-line indicator mounting screws and take up the play in the mounting holes by moving the entire plate toward the front of the printer.

Paragraph 2.b.(13) Page 3-9
Delete paragraph 2.b.(13) and substitute the following therefor:

Position the cam by means of the lock washer and securing nut so the contacts close on the sixty-fifth or sixty-sixth space following a carriage return-line feed selection.

Paragraph 3.a.(4) Page 3-10

Change the last sentence to read as follows: To adjust, remove the locking loop spring and place the locking loop gauge number 120436* between the locking loop blade and the locking levers. Bring the locking loop blade down to meet the locking loop gauge and tighten the screws.

Replace the spring and make sure that there is from .008" to .015" clearance between the locking loop blade and the locking levers.

*Gauge should be ordered separately; it is not included in any set of parts.

Paragraph 3.a.(10) Page 3-10

Substitute this adjustment with the following: There should not be less than .140" travel for the number 5 code bar and the universal bar. To adjust, depress the letter "Q" key lever and hold it in position.

There should be some clearance, not more than .020" between the side of the key lever and the vertical sections of the number 5 code bar and universal bar. Position the left code bar guide roller bracket to obtain this clearance, while viewing the keyboard from the bottom.

To adjust the right-hand code bar guide roller bracket, depress the letter "L" key lever and measure the clearance in the manner outlined above.

Paragraph 3.a.(11) Page 3-10

Change this requirement from "1-3/4 to 2-1/2 ozs." to read: 1-1/4 to 2 ozs.

Paragraph 3.a.(12) Page 3-11

Delete this paragraph.

Paragraph 3.a.(14) Page 3-11

Add the following paragraph immediately after this paragraph:

(14.1) REAR KEY LEVER GUIDE ADJUSTMENT

There should be no interference between either the spacing bar key lever or the blank key lever and the left and right code bar guides. Check this clearance between the small guiding buttons on the code bar guide bracket and the adjacent key lever. To adjust, position the rear key lever guide or the rear key lever guide bracket.

Section IV, Paragraph 3.b.(1) Page 4-1

Change "Ratchet wheel shaft" to read: Ratchet wheel shaft bearing.

Section V, 3. Motor speed failure: Page 5-1

Delete the third sentence.

Section VI, Pages 6-1 to 6-3

Delete this section.

Section VII, Pages 7-1,2

Substitute Wiring Diagram WD-2591 for WD-2487.

Section VIII, Figure 3 Page 8-7

Substitute Figure 3 attached hereto for the Figure 3 on Page 8-7.

Figure 5 Page 8-8

Delete the .040" to .060" clearance.

Insert Figure 5.1 attached, immediately after Figure 5.

Figure 30 Page 8-19

Change the sixth item in the left-hand column from "1/2 to 1 ozs."
to read: 1/2 to 1 oz. for No. 2
1/4 to 3/4 oz. for Nos. 1, 3, 4, 5

Figure 44 Page 8-25

Insert Figure 44.1 immediately after this figure.

* * *

UPPER CASE	-	?	:	\$	3	a	#	8	BELL	()	•%	'	9	0	1	4	7	5	7	;	2	/	6	"		,	.	#	SPACE	LTR. SHIFT	FIG. SHIFT		
LOWER CASE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	BLANK	•C.R.	L.F.	#	SPACE	LTR. SHIFT	FIG. SHIFT
1	•	•		•	•				•	•					•		•		•		•	•	•	•	•					•	•	•	
2	•		•				•		•	•	•	•			•	•	•		•		•	•	•	•	•					•	•	•	
FEED HOLES	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o
3			•		•		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•					•	•	•	
4	•	•	•	•	•				•	•		•	•	•	•		•				•	•	•	•							•	•	•
5	•						•	•				•	•	•	•			•			•	•	•	•	•					•	•	•	

FIGURE 3

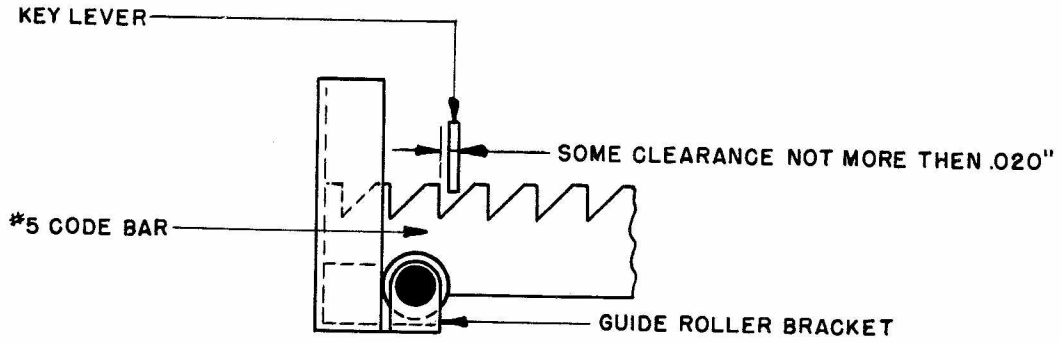


FIGURE 5.1

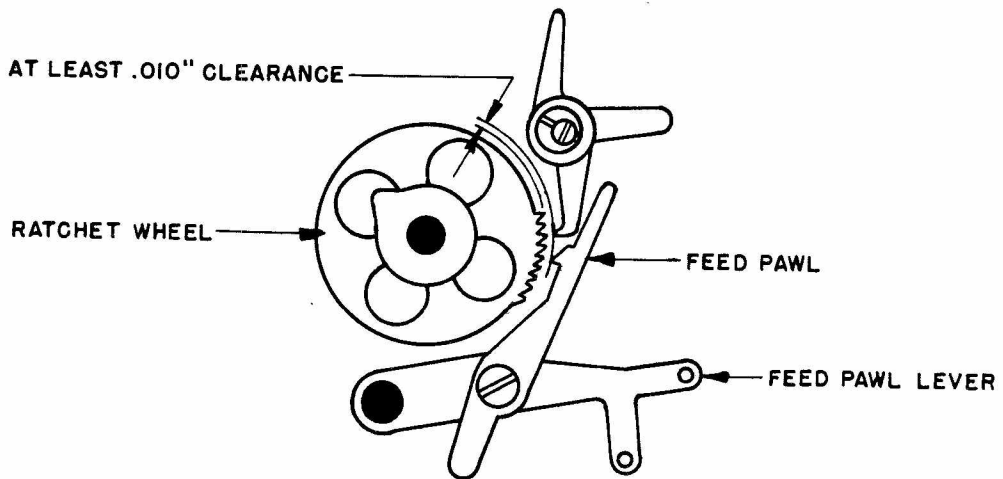


FIGURE 44.1

CHANGES AND ADDITIONS
TO BULLETIN 200, ISSUE 1
MODEL 31 TAPE PRINTER
AS SUPPLIED ON
NAVY CONTRACT NOa(S) 9217

SECTION III, Paragraph 2.a.(25)(a), Page 3-3

In the fifth line, change the word "marking" to read: spacing.

Paragraph 2.a.(25)(c), Page 3-3

Add to this requirement "To adjust, position the selector-magnet adjusting post."

Paragraph 2.a.(27), Page 3-3

In the first and second lines, change the "No. 1" to read: No. 2.

Delete the last sentence and substitute the following therefor: It should require from 1/4 to 3/4 oz. to start the numbers 1, 3, 4, 5 selector levers moving.

Paragraph 2.a.(35), Page 3-4

Immediately following this adjustment add: When making this adjustment, the eccentric stud must be in its lowest position for proper operation.

Paragraph 2.a.(69), Page 3-8

Delete this paragraph.

Paragraph 2.a.(70), Page 3-8

Delete this paragraph.

Paragraph 2.b., Page 3-8

Insert the following adjustment between paragraph 2.b. and paragraph 2.b.(1):

(.1) MOUNTING PLATE ADJUSTMENT - PRELIMINARY

Position the end-of-line indicator plate by means of its three mounting screws so that the feed pawl lever fully engages a tooth of the ratchet wheel. This engagement must occur with the ratchet wheel in its fully returned position and the spacing cam follower on the high part of its cam.

Paragraph 2.b.(2), Page 3-8

Immediately following this adjustment add:

With the CARRIAGE RETURN combination selected, both the check pawl and the feed pawl teeth should clear the teeth of the ratchet wheel by at least .010". See Figure 44.1. To adjust, loosen the end-of-line indicator mounting screws and take up the play in the mounting holes by moving the entire plate toward the front of the printer.

Paragraph 2.b.(13), Page 3-9

Delete paragraph 2.b.(13) and substitute the following therefor: Position the cam by means of the lock washer and securing nut so the contacts close on the sixty-fifth or sixty-sixth space following a carriage return-line feed selection.

Paragraph 3, Page 3-10

Insert the following instructions between paragraph 3 and paragraph 3.a:

ASSEMBLY INSTRUCTIONS FOR MOUNTING VIBRATION MOUNT ASSEMBLY TO MODEL 31
KEYBOARD UNIT

Remove the right and left vibration mount skids from the assembly by loosening the wing nuts and the securing bushings. Dismount the clamping bars from the skids and lay them in the troughs of the base plate so that the mounting holes align with the holes in the base. Place the skids underneath the base plate and fasten them to the clamping bars with the four hexagonal screws. (Caution: Do not interchange right and left vibration mount skids.) After both skids have been assembled to the base plate, place the keyboard unit on the vibration mount assembly and position it with respect to the backstop pins.

Place the securing bushings over the forward extensions on the skids and draw them tight with the wing nuts. Make sure that the backstop pins engage the holes in the skids before tightening the wing nuts. Tighten the wing nuts until the lower lips on the shock mount skids rest securely against the right angle guide rails on the vibration mount assembly.

Paragraph 3.a.(4), Page 3-10

Change the last sentence to read as follows: To adjust, remove the locking loop spring and place the locking loop gauge number 120436* between the locking loop blade and the locking levers. Bring the locking loop blade down to meet the locking loop gauge and tighten the screws. Replace the spring and make sure that there is from .008" to .015" clearance between the locking loop blade and the locking levers.

*Gauge should be ordered separately; it is not included in any set of parts.

Paragraph 3.a.(10), Page 3-10

Substitute this adjustment with the following: There should not be less than .140" travel for the number 5 code bar and the universal bar. To adjust, depress the letter "Q" key lever and hold it in position.

There should be some clearance, not more than .020" between the side of the key lever and the vertical sections of the number 5 code bar and universal bar. Position the left code bar guide roller bracket to obtain this clearance, while viewing the keyboard from the bottom.

To adjust the right-hand code bar guide roller bracket, depress the letter "L" key lever and measure the clearance in the manner outlined above.

Paragraph 3.a.(11), Page 3-10

Change this requirement from "1-3/4 to 2-1/2 ozs." to read: 1-1/4 to 2 ozs.

Paragraph 3.a.(12), Page 3-11

Change the second sentence to read: Check by depressing the space bar at its midpoint.

Add the following paragraph to the end of paragraph 3.a.(12):

The release pawl should release the driving pawl when the space bar is depressed at its extreme ends.

Paragraph 3.a.(14), Page 3-11

Add the following after paragraph 3.a.(14):

(14.1) REAR KEY LEVER GUIDE ADJUSTMENT

There should be no interference between either the spacing bar key lever or the blank key lever and the left and right code bar guides. Check this clearance between the small guiding buttons on the code bar guide bracket and the adjacent key lever. To adjust, position the rear key lever guide or the rear key lever guide bracket.

Paragraph 3.a.(15), Page 3-11

Add the following after paragraph 3.a.(15):

4. DYNAMOTOR UNIT

a. PRELIMINARY ADJUSTING PROCEDURE

(1) MOTOR GOVERNOR BRUSH SPRING ADJUSTMENT

Each brush should rest against the governor ring with a pressure of 2-1/2 to 3-1/2 ozs. To adjust, bend the off-set portion of the brush springs. After adjustment, the brushes should lie flat against the rings. See Figure 49.

(2) GOVERNOR POSITION ADJUSTMENT

The position of the centrifugal governor assembly should be 27/64" to 29/64" from the end bell of the motor. Adjust by means of the two set screws. See Figure 49.

(3) FAN POSITION ADJUSTMENT

The scribed line on the motor fan should line up with the white line on the circumference of the governor assembly. To adjust, locate the fan and tighten the two set screws in the hub of the fan. See Figure 50.

(4) SLIDING TERMINAL POSITION

The sliding terminal of the 100 ohm variable resistor, located on the right side of the dynamotor speed control unit, should be positioned as close to the wired terminal of the resistor as possible. This is a

position of minimum or zero resistance. To adjust, position the sliding terminal. See Figure 51.

(5) MOTOR POSITION ADJUSTMENT

There should be a perceptible amount of backlash between the motor pinion and its gear. Check throughout one complete revolution of the larger gear. To adjust, position the motor mounting bracket by means of its four mounting screws. See Figure 2.

(6) INSERTING THE MILLIAMMETER

If a tube adapter type plug is not available break the plate lead of the 25L6GT tube. Then insert a milliammeter.

b. CLUTCH TORQUE, LINE, AND DYNAMOTOR LOAD ADJUSTMENTS

(1) Connect line cord to 115V D.C. supply and adjust to .020 amperes.

(2) Connect .070 ampere load to dynamotor output using terminals 3 and 1. A suitable load would be a variable resistor 3-4000 ohms having a power rating of at least 25 watts.

CAUTION

Terminal 3 has +250 volts.

(3) Connect the power cords to (26-1/2 volts) and allow the motor to warm up.

(4) With the main shaft running at least 10 minutes, hook a 32 oz. scale over the tip of the projection on the stop disc at a right angle to the radius. It should require 18 to 22 ozs. to hold the stop disc stationary. Adjust by means of the clutch spring adjusting nuts. This adjustment should be checked repeatedly throughout the speed setting of the motor.

c. SETTING OF DYNAMOTOR SPEED

(1) After the input voltage, clutch torque, load and line current have been checked, adjust the speed.

(a) Recheck the input voltage and adjust it to 26-1/2 volts \pm .25 volt. The motor should rotate at 7008 r.p.m. as viewed with an 87.6 VPM fork with indicated plate current of .017 to .020 amperes and the selector armature in the marking position. Under this condition the three black spots on the fan will appear stationary. To obtain correct speed, insert a small screwdriver through a hole in the periphery of the fan and adjust the governor contact adjusting screw. To increase the speed, turn the screw clockwise. To decrease the speed, turn the screw counterclockwise. See Figure 50.

(b) If the value of plate current is high, adjust the taps on the 3/4 ohm resistor to add the necessary resistance. First, cut the strap on the resistor. This will insert .25 ohms. If this is not sufficient

resistance, unsolder the green lead and refasten it at the extreme end of the resistor. This will insert .50 ohm. The full 3/4 ohm resistor may be added by unsoldering the white lead and refastening it to the position originally occupied by the green lead. See Figure 51.

(c) If the value of the plate current is low, adjust the slider on the 100 ohm resistor toward the unwired terminal. Recheck the input voltage load, and then measure the output voltage. The output voltage should be 250 volts. See Figure 51.

(d) The speed of the dynamotor should be within $\pm 1\%$ of 7008 r.p.m. under the following conditions: CAUTION: Do not reset .070 ampere load when operating at either voltage extreme.

1. Input voltage lowered to 25 volts $\pm .25$ volt and the selector armature in the MARKING position.

2. Input voltage raised to 29-1/2 volts $\pm .25$ volt and the selector armature in the SPACING position.

3. If these two conditions cannot be met, position the variable 100 ohm resistor. Move the slider toward the unwired terminal to increase speed and toward the wired terminal to decrease speed. Whenever an adjustment of this resistor is made a recheck of the governor setting must be made at 26-1/2 volts $\pm .25$ volt. Then go back to either the high or low voltage setting and recheck the speed.

(e) If speed checks are made at other than normal or room temperatures lubricate the parts in accordance with SECTION IV.

5. TAPE REEL ADJUSTMENT Figure 48

With the tape reel plate fully detented, there should be some clearance between the lip of the tape reel clip and the outside diameter of the tape roll. To adjust, loosen the two plate holding screws and detent the tape reel plate in the clip. Position the tape reel clip so that the tape reel plate edge closest to the cover is 1/2" to 5/8" from the inner wall of the cover. Measure this requirement while viewing the detented portion of the tape reel plate from the bottom of the cover. Slide the tape reel clip towards the rear wall of the cover as far as possible. Recheck previous adjustment and then tighten plate holding screws.

SECTION IV, Paragraph 3.b.(1), Page 4-1

Change "Ratchet wheel shaft" to read: Ratchet wheel shaft bearing.

SECTION VI, Pages 6-1 to 6-3, inclusive

Substitute the 116500 spare parts list attached hereto for the 106949 spare parts list.

SECTION VII, Pages 7-1,2

Substitute Wiring Diagram WD-2584 attached hereto for WD-2487.

SECTION VIII, Figure 3, Page 8-7

Substitute Figure 3 attached hereto for the Figure 3 on Page 8-7.

Figure 5, Page 8-8

Delete the .040" to .060" clearance.

Insert Figure 5.1 attached hereto immediately after Figure 5.

Figure 30, Page 8-19

Change the sixth item in the left-hand column from "1/2 to 1 oz."
to read: 1/2 to 1 oz. for No. 2

1/4 to 3/4 oz. for Nos. 1, 3, 4, 5

Figure 44, Page 8-25

Insert Figure 44.1 attached hereto immediately after Figure 44.

Figure 47, Page 8-26

Add Figures 48, 49, 50, and 51 attached hereto immediately after
Figure 47.

* * *

(EE-675)

116500 SPARE PARTS KIT FOR
MODEL 31 TAPE PRINTER

<u>Quantity</u>	<u>Part Number</u>	<u>Description</u>
1	36-73	Pin
1	138-34	Wrench - 1/4" open
1	138-55	8 oz. Scale
1	138-58	2 lb. Scale
2	M-243	Coil - Selector
3	1026	Screw 6-40 x 3/8 Fil.
3	1160	Screw 6-40 x 5/16 Fil. HD.
9	2191	Lock Washer
1	3598	Nut 6-40 Hex.
1	3608	Spring - Tension
1	7002	Washer
2	8543	Screw 6-40 x 1/4 Fil.
4	41733	Insulator
1	72003	Contact Bender
1	75503	Spring Hook - Push
1	75765	Spring Hook - Pull
4	78398	Bushing
1	82711	4 lb. Scale
1	88993	Contact Burnisher
1	91117	Contact File
1	95936	Choke Coil 1.1 Ohm
1	95937	Condenser .01 mf.
1	95938	Condenser 1 mf.
1	97116	KS-7470 Grease
1	109034	Screw - Shoulder
1	116404	Gear 50T
1	116406	Gear 25T
1	116407	Gear 48T - 60 WPM
1	116409	Gear 47T
1	116410	Pinion 11T
1	116629	Type Sector
1	116667	Governor - Lee
1	116668	Cap - Green
1	116669	Cap - Red
2	116698	Lamp - 6V Mazda #47
1	116699	Lamp - Neon NE-51
1	117781	Gauge Kit
4	119777	Dynamotor Brush - 26.5 V
4	119778	Dynamotor Brush - 250 V
4	120372	Governor Brush
1	120384-G	Electron Tube

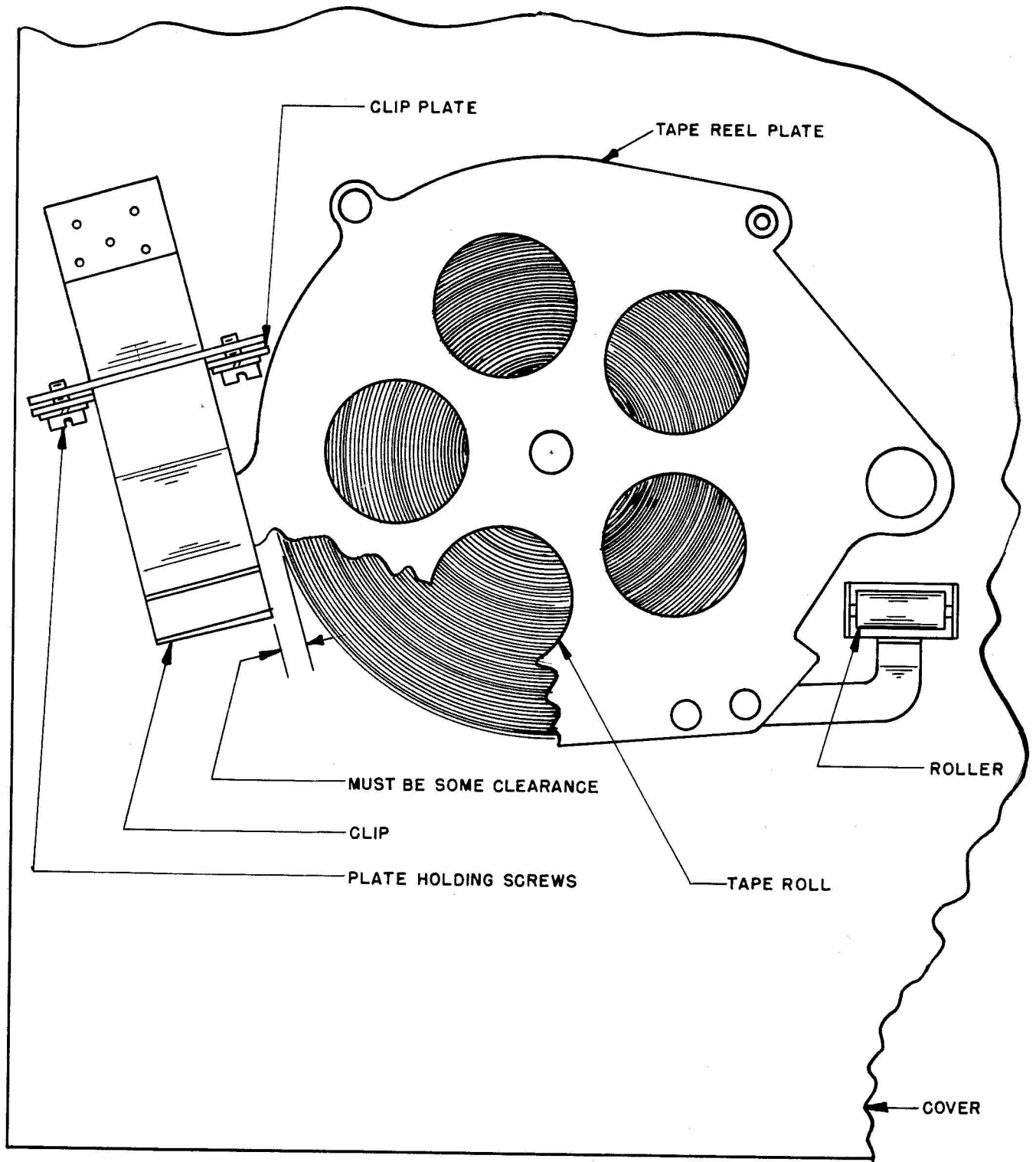


FIGURE 48

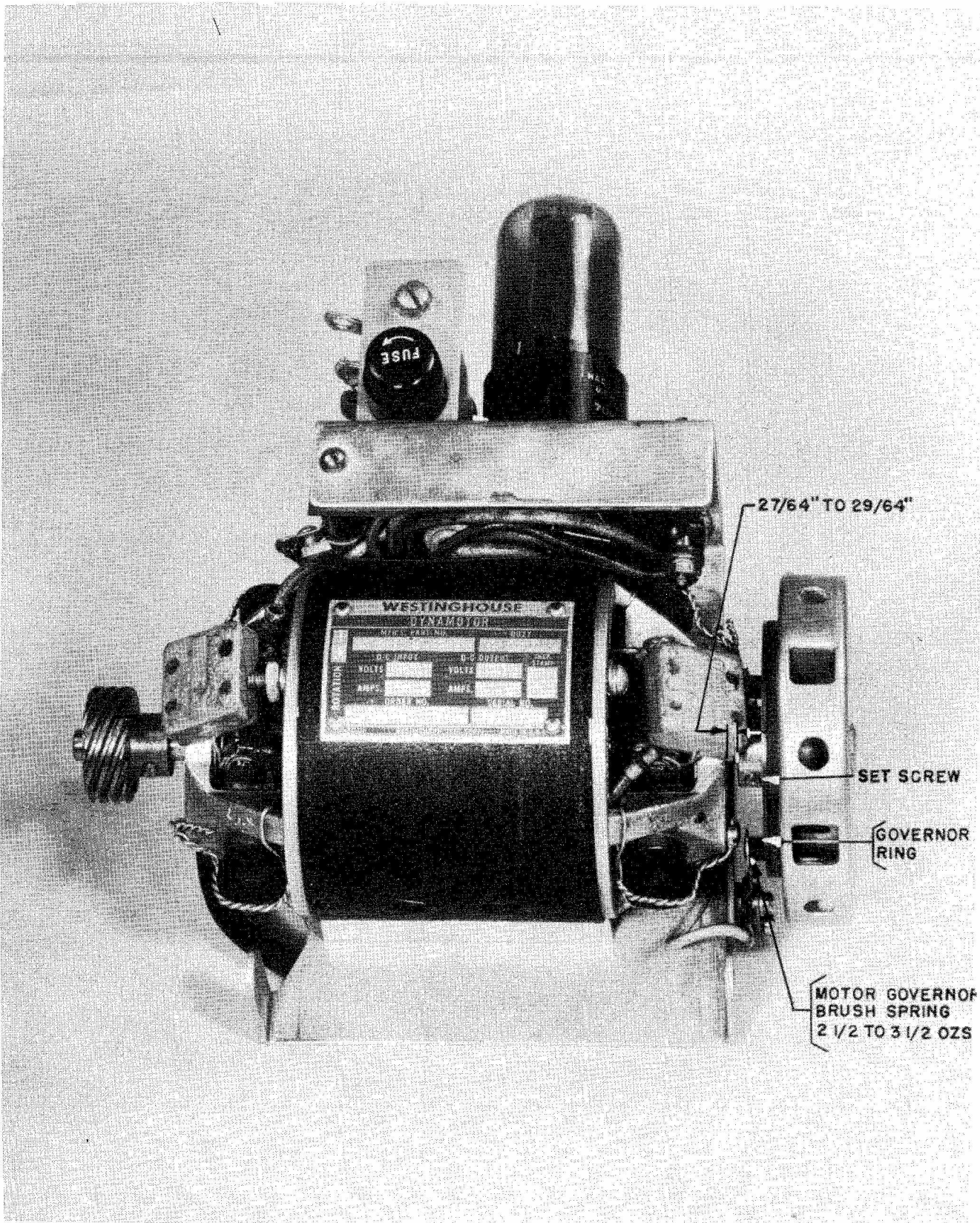


FIGURE 49

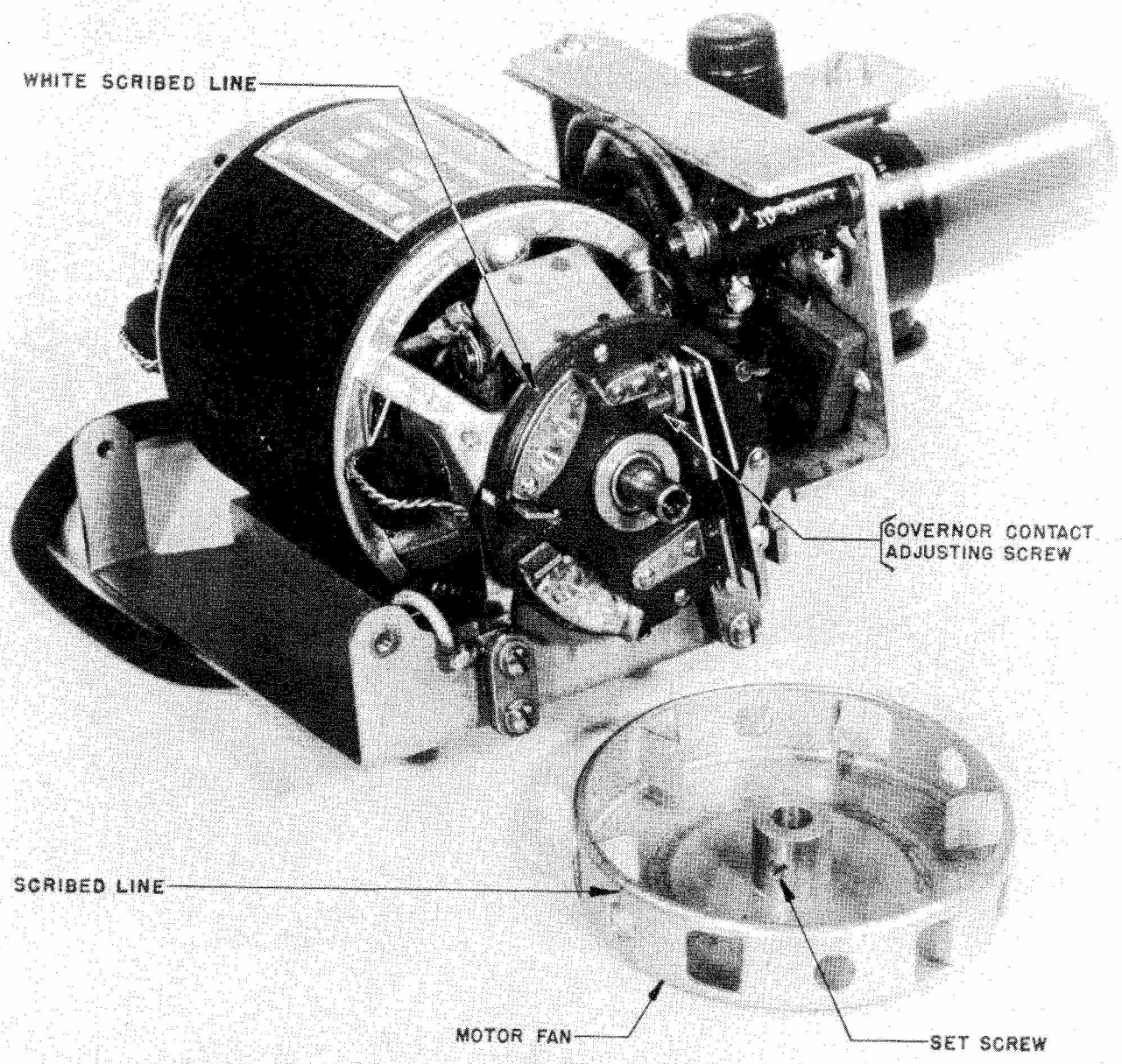


FIGURE 50

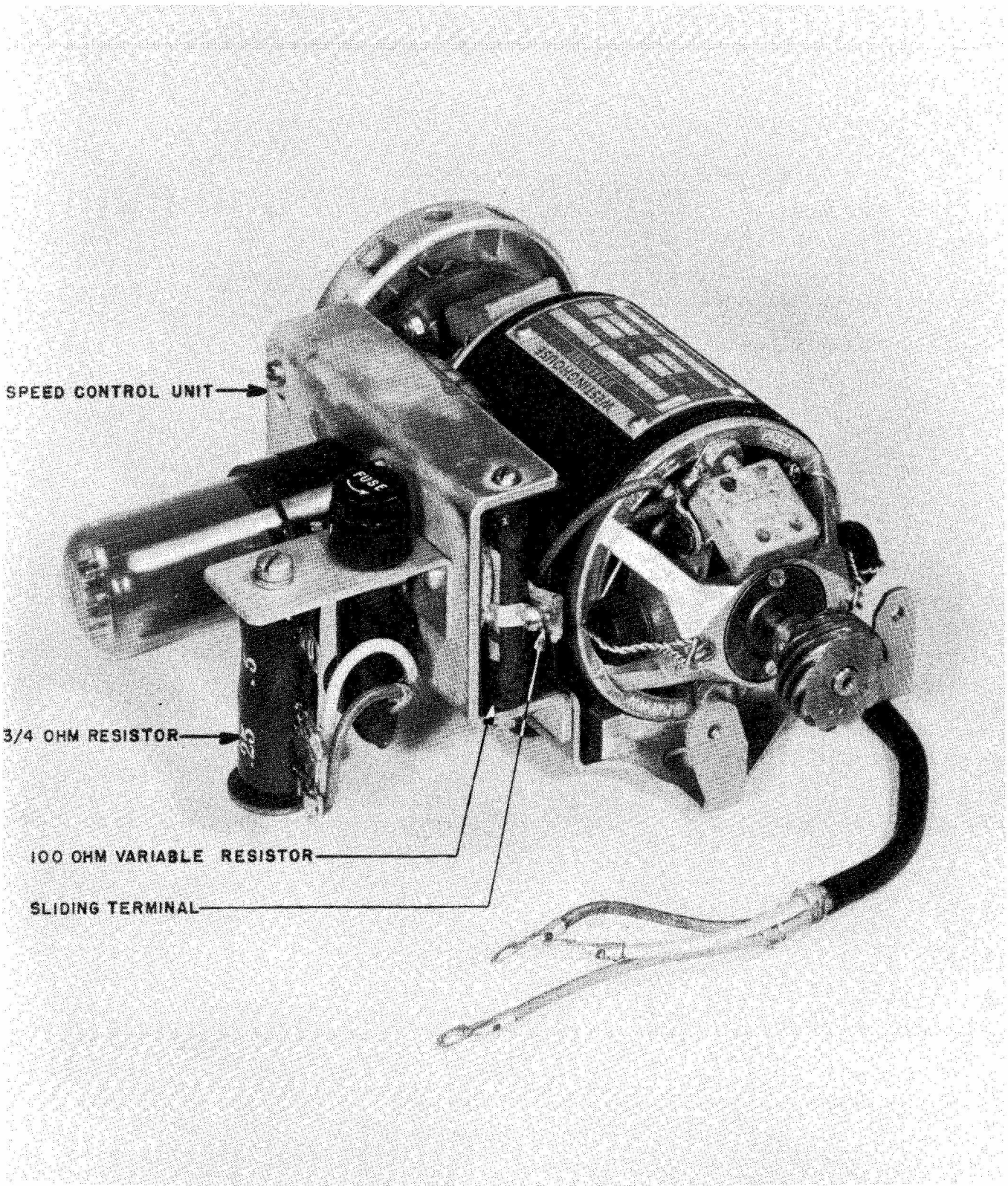
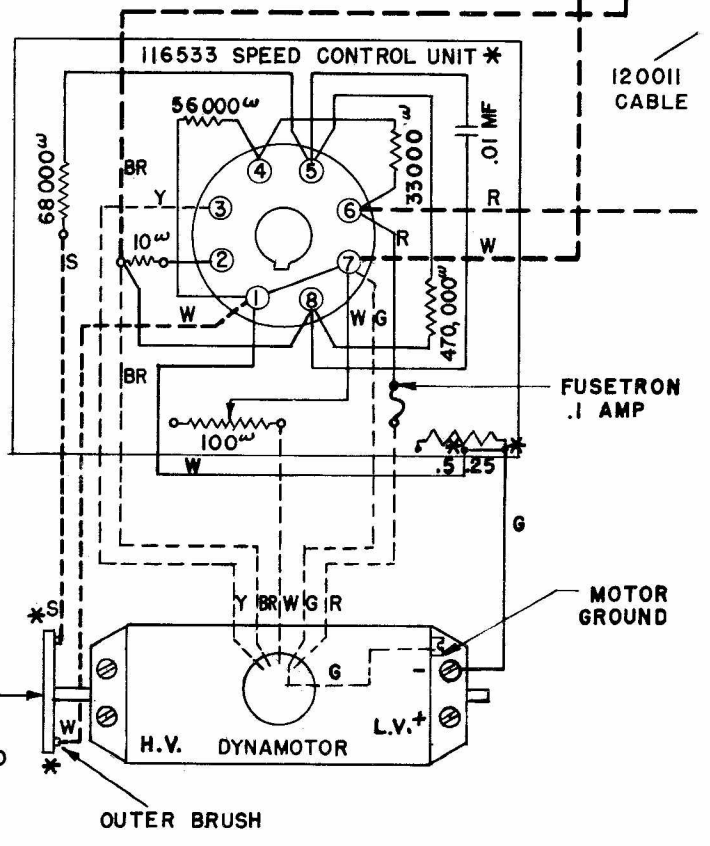
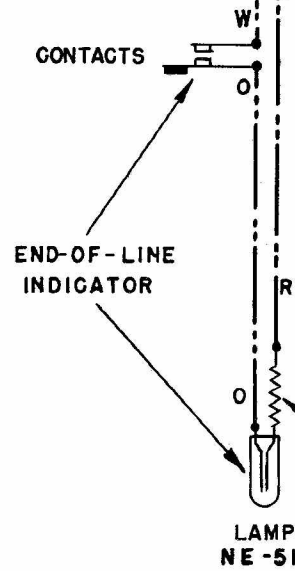
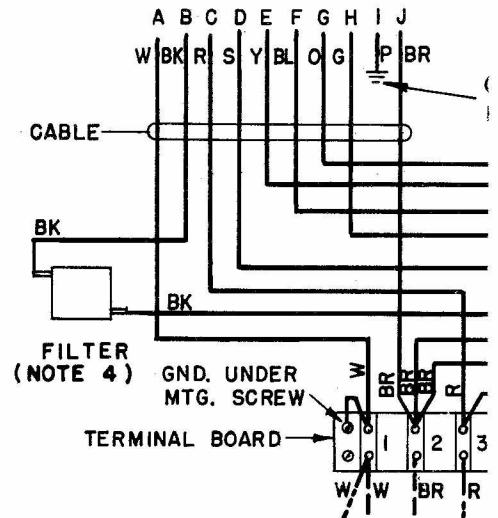
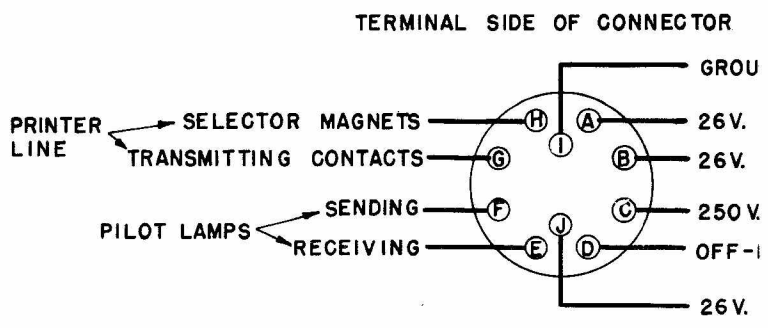


FIGURE 51

NO.	NOTES										
1.	<p>WIRE COLOR CODE & SYMBOLS MAY BE SOLID COLOR OR TRACERS IN WHITE WIRE:</p> <table border="0"> <tr> <td>Y YELLOW</td> <td>W WHITE</td> </tr> <tr> <td>G GREEN</td> <td>O ORANGE</td> </tr> <tr> <td>BR BROWN</td> <td>S SLATE</td> </tr> <tr> <td>P PURPLE (RED AND R BLUE TRACER)</td> <td>BK BLACK</td> </tr> <tr> <td></td> <td>BL BLUE</td> </tr> </table> <p>— * — DENOTES: SPLICE & TAPE WIRE.</p>	Y YELLOW	W WHITE	G GREEN	O ORANGE	BR BROWN	S SLATE	P PURPLE (RED AND R BLUE TRACER)	BK BLACK		BL BLUE
Y YELLOW	W WHITE										
G GREEN	O ORANGE										
BR BROWN	S SLATE										
P PURPLE (RED AND R BLUE TRACER)	BK BLACK										
	BL BLUE										
2.	<p>ASSOCIATED CABLES:</p> <table border="0"> <tr> <td>—————</td> <td>120008 KEYBOARD</td> </tr> <tr> <td>-----</td> <td>120009 MOTOR</td> </tr> <tr> <td>- - - - -</td> <td>120010 END-OF-LINE INDICATOR</td> </tr> <tr> <td>-----</td> <td>120011 SELECTOR MAGNET</td> </tr> </table>	—————	120008 KEYBOARD	-----	120009 MOTOR	- - - - -	120010 END-OF-LINE INDICATOR	-----	120011 SELECTOR MAGNET		
—————	120008 KEYBOARD										
-----	120009 MOTOR										
- - - - -	120010 END-OF-LINE INDICATOR										
-----	120011 SELECTOR MAGNET										
3.	<p>SELECTOR COILS</p> <table border="1"> <thead> <tr> <th>CURRENT- AMPS.</th> <th>RESISTANCE-OHMS</th> </tr> </thead> <tbody> <tr> <td>.020</td> <td>950 EACH</td> </tr> </tbody> </table>	CURRENT- AMPS.	RESISTANCE-OHMS	.020	950 EACH						
CURRENT- AMPS.	RESISTANCE-OHMS										
.020	950 EACH										
4.	<p>5.8 MICROHENRIES 0.028 OHMS 1.5 MFD.</p>										

* PLACE VINYL TUBING OVER ALL TERMINALS WITH ASTERISK.



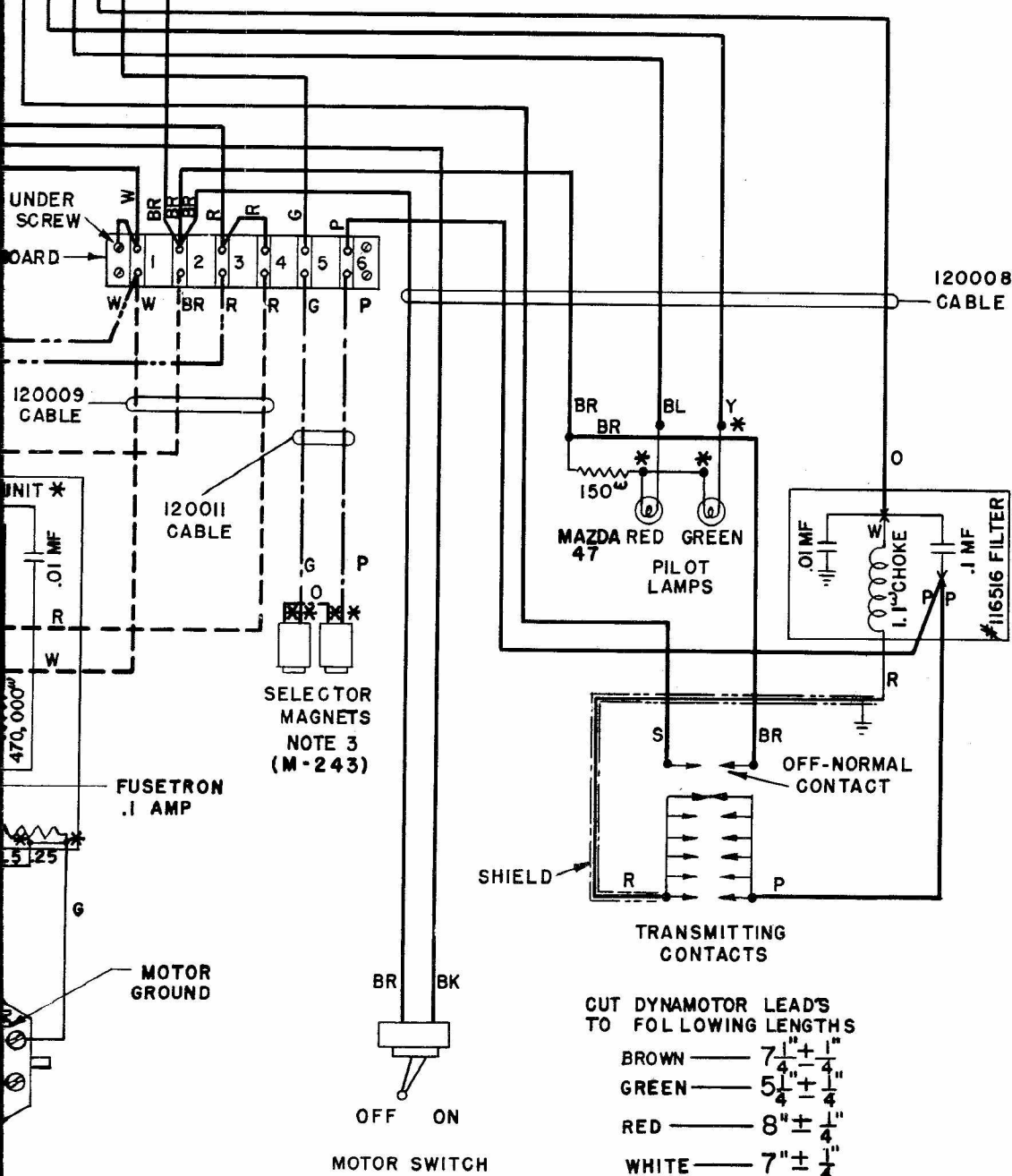
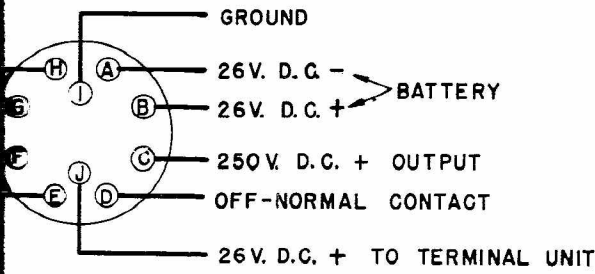
* SEE DRAWING 116533 FOR MANUFACTURING RESTRICTION.

NOTE: COVER KE FORMED REAR TR

REVISIONS

A	12-27-48	46304
B	1-25-49	46560
C	2-22-49	46819
D	3-30-49	47077
E	4-29-49	47359

SIDE OF CONNECTOR



CUT DYNAMOTOR LEADS TO FOLLOWING LENGTHS

- BROWN — $7\frac{1}{4} \pm \frac{1}{4}$ "
- GREEN — $5\frac{1}{4} \pm \frac{1}{4}$ "
- RED — $8 \pm \frac{1}{4}$ "
- WHITE — $7 \pm \frac{1}{4}$ "
- YELLOW — $6 \pm \frac{1}{4}$ "

NOTE: COVER KEYBOARD CABLE WITH PLASTIC TAPE WHENEVER FORMED AROUND METAL EDGES AND LACE CABLE TO REAR TRANSMITTING SHIELD POST.

WD-2584-E
12-1-48

WIRING DIAGRAM
MODEL 31 PRINTER
TYPING UNIT: KP 3
KEYBOARD: KK 201
MOTOR ARRANGEMENT: JB

DRAWN: G.A.R. APPROVED:

ENG'R'D: *JBL* *FK*

CHECKED: *JK* *BW*

FILE: 1-30.87AA

TELETYPE CORPORATION

CHANGES AND ADDITIONS TO BULLETIN 1140 (ISSUE 1)
PARTS - TAPE PRINTER (MODEL 31)

PAGE 1

Typing Unit Frame & Printing Mechanism (Front View)

In the lower right-hand portion of this illustration the 116533 Screw has been replaced by a 89305 Screw.

Front Plate & Associated Parts (Front View)

In the lower left-hand portion of this illustration the 2191 Lock Washer listed below the 1160 Screw, has been replaced by a 3640 Lock Washer.

PAGE 2

Type Sector Centralizer (Assem.) - (Right Side View)

The 1159 Screw has been replaced by a 1168 Screw.

The 76412 Lock Washer has been replaced by a 119935 Lock Washer.

PAGE 3

Front Plate & Associated Parts (Rear View)

In the upper right-hand portion of this illustration the 86742 Nut has been replaced by a 3599 Nut.

The 34-56 Nut & 3640 Lock Washer have been replaced by a 82742 Nut & 110743 Lock Washer respectively.

PAGE 4

Spacing Mechanism (Left Side View)

The mounting arrangement of the 109101 Tape Feed Pawl has been changed as indicated on Page 3 of this correction sheet.

PAGE 6

End-of-Line Indicator (Assem.) - Front View

The End-of-Line Indicator illustration shown on this page has been changed as indicated on Page 3 of this correction sheet.

PAGE 9

Keyboard Mechanism (Bottom View)

Located inside the keyboard housing add a 8308 Cable Clamp, 80342 Screw, 70509 Lock Washer, 74722 Washer and a 100926 Nut shown on Page 3 of this correction sheet.

The 94009 Toggle Switch is replaced by a 116499 Toggle Switch.

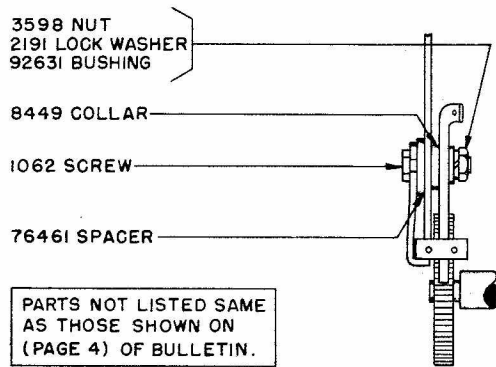
PAGE 12

Transmitter Clutch (Rear View)

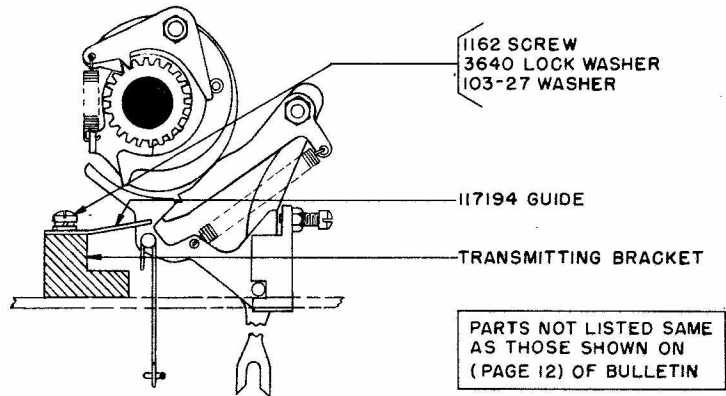
A Guide has been added to this illustration as indicated on Page 3 of this correction sheet.

Transmitting Mechanism (Top View)

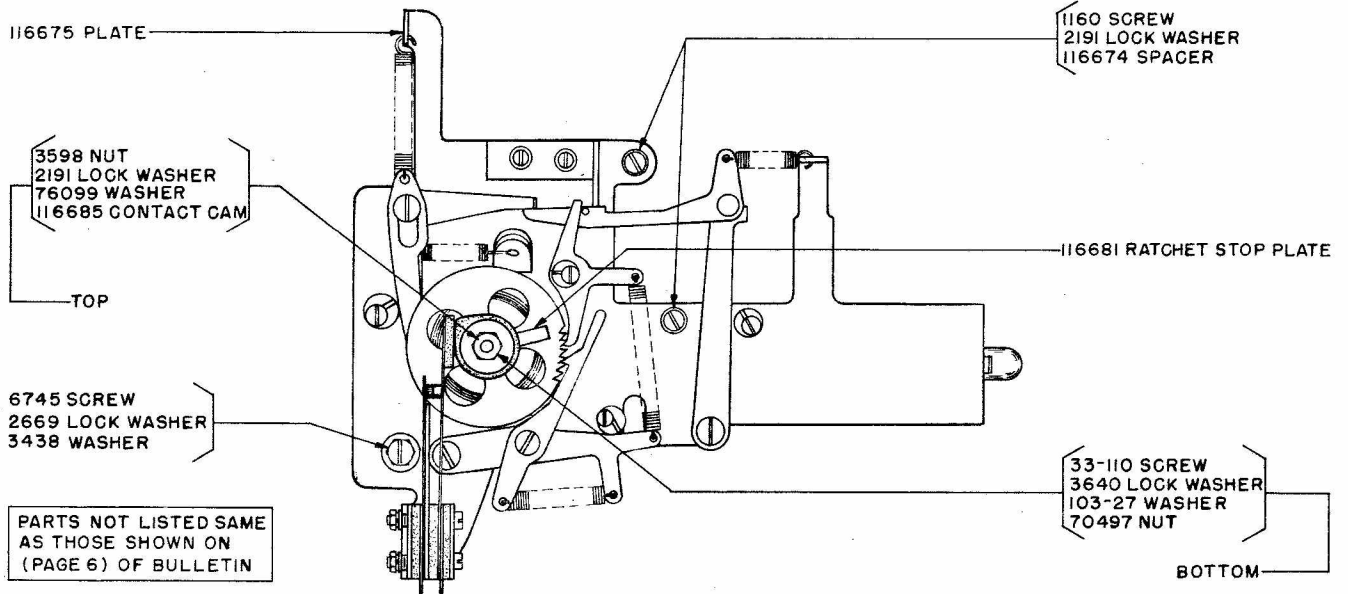
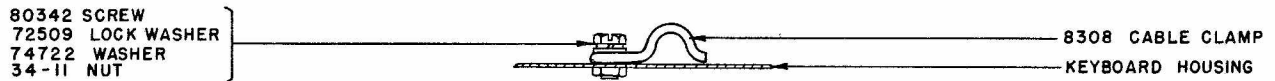
The 116530 Oil Wick - Felt has been replaced by a 72522 Oil Wick - Felt. The 2403 Pin has been replaced by a 36-73 Pin. The 116584 Oil Wick - Felt has been replaced by a 4809 Oil Wick - Felt.



SPACING MECHANISM
(LEFT SIDE VIEW)



TRANSMITTING CLUTCH
(REAR VIEW)



END-OF-LINE INDICATOR (ASSEM.)
(FRONT VIEW)

CHANGES AND ADDITIONS
TO BULLETIN 1140 (ISSUE 1)
PARTS - TAPE PRINTER (MODEL 31)

PAGE 2

Delete the 116628 Type Sector and substitute therefor: 116629 Type Sector.

PAGE 8

Delete all parts shown on page 8 and substitute therefor: page 2 of this correction sheet.

PAGE 9

Delete the 116540 Set of Keytops shown on page 9 and substitute therefor: the 116492 Set of Keytops shown on page 3 of this correction sheet.

PAGE 10

Delete the 33-226 Screw, 2422 Lock Washer and the 34-11 Nut and substitute therefor: 103697 Screw, 3640 Lock Washer and 3599 Nut.

PAGE 11

Delete the Signal Lamp (Assem.) & Power Filter shown on page 11 and substitute therefor: the Signal Lamp (Assem.) & Power Filter shown on page 3 of this correction sheet.

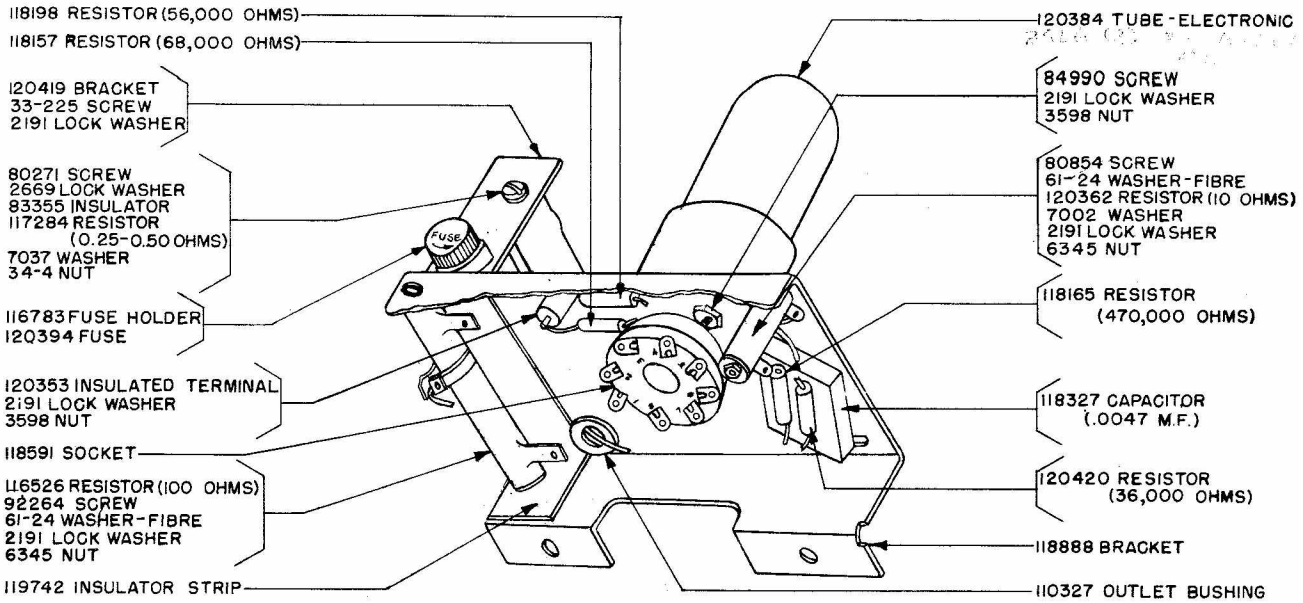
PAGE 13

Delete 116600 Cover (Black Wrinkle) - Navy on page 13 and substitute therefor: KPC201AA (Black Wrinkle) - Navy.

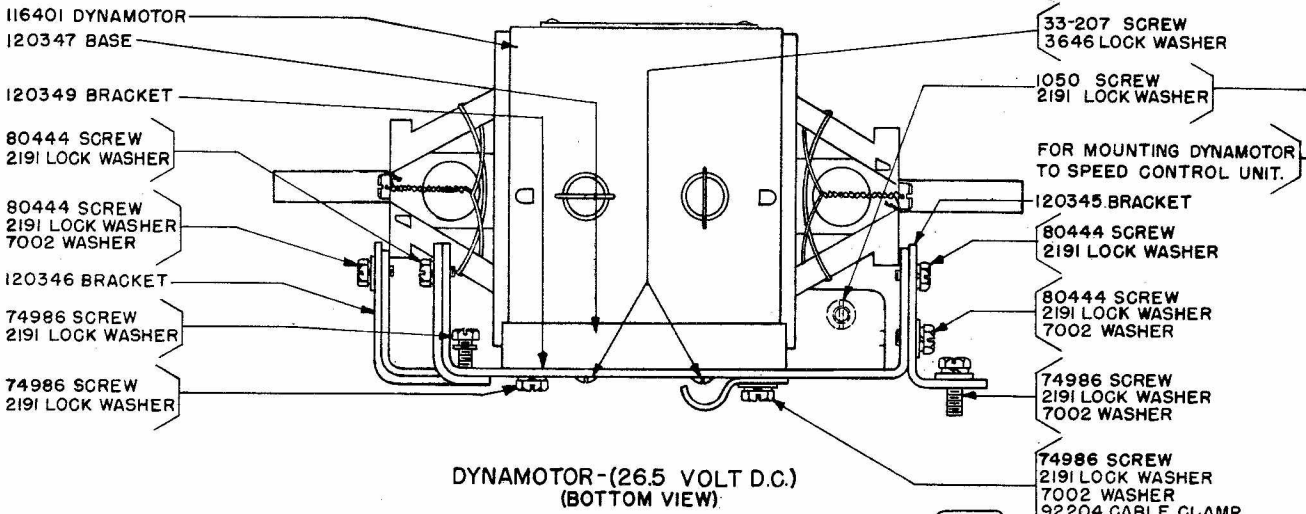
In the left-hand column delete 1118 Screw and substitute therefor: 86774 Screw.

In the right-hand column delete 100-90 Lock Washer and substitute therefor: 70072 Lock Washer.

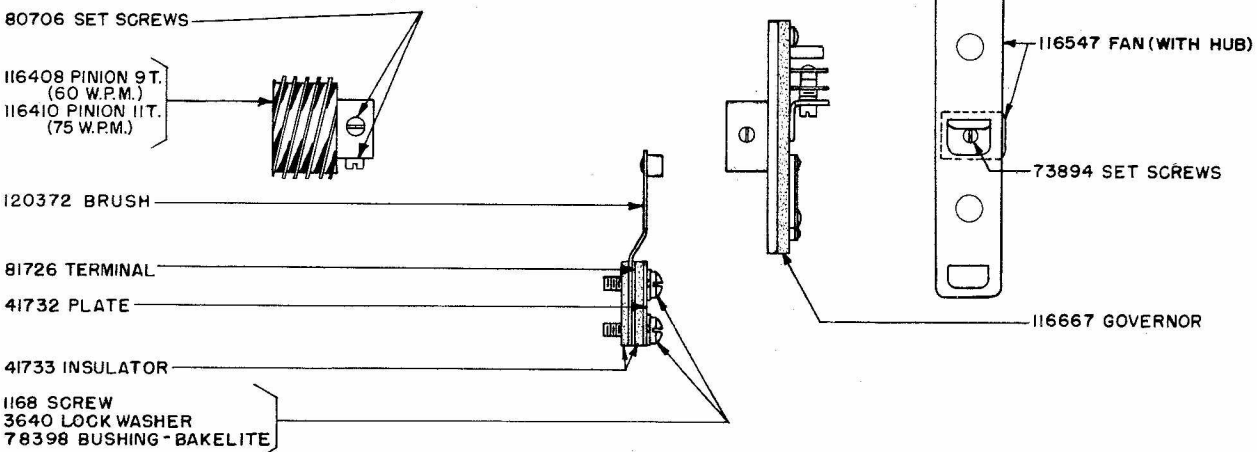
At the bottom of the page delete the Base (Black Wrinkle) and substitute therefor: the Base - Right Side View and 116664 Vibration Mount (Assem.) shown on page 3 of this correction sheet.



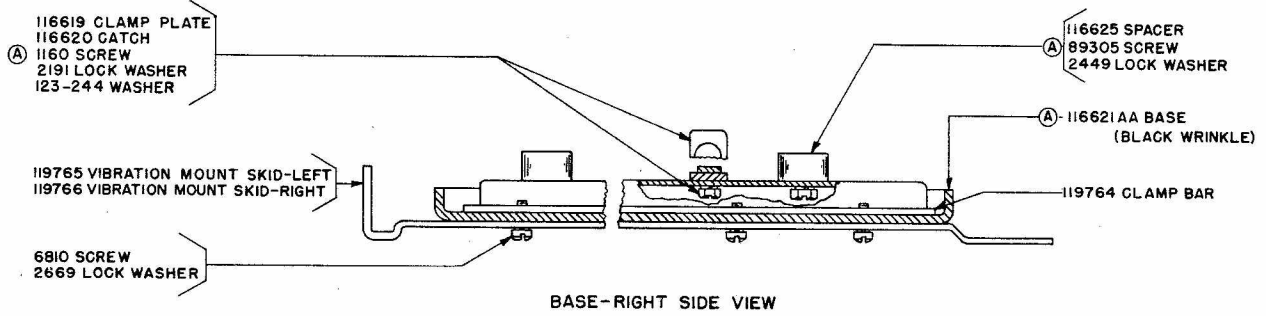
116533 SPEED CONTROL UNIT



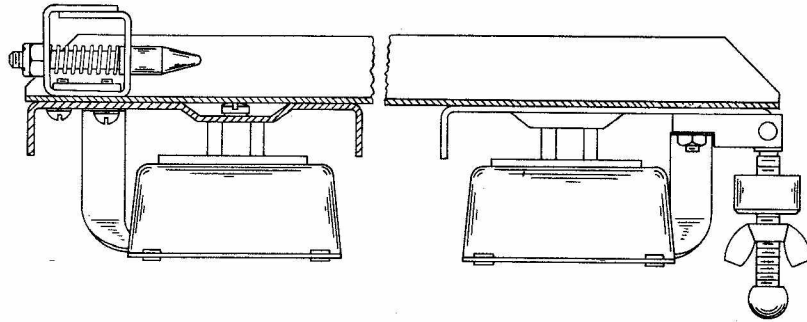
DYNAMOTOR-(26.5 VOLT D.C.)
(BOTTOM VIEW)



116627 MOTOR ARRANGEMENT "J.B." (26.5 VOLT DYNAMOTOR)



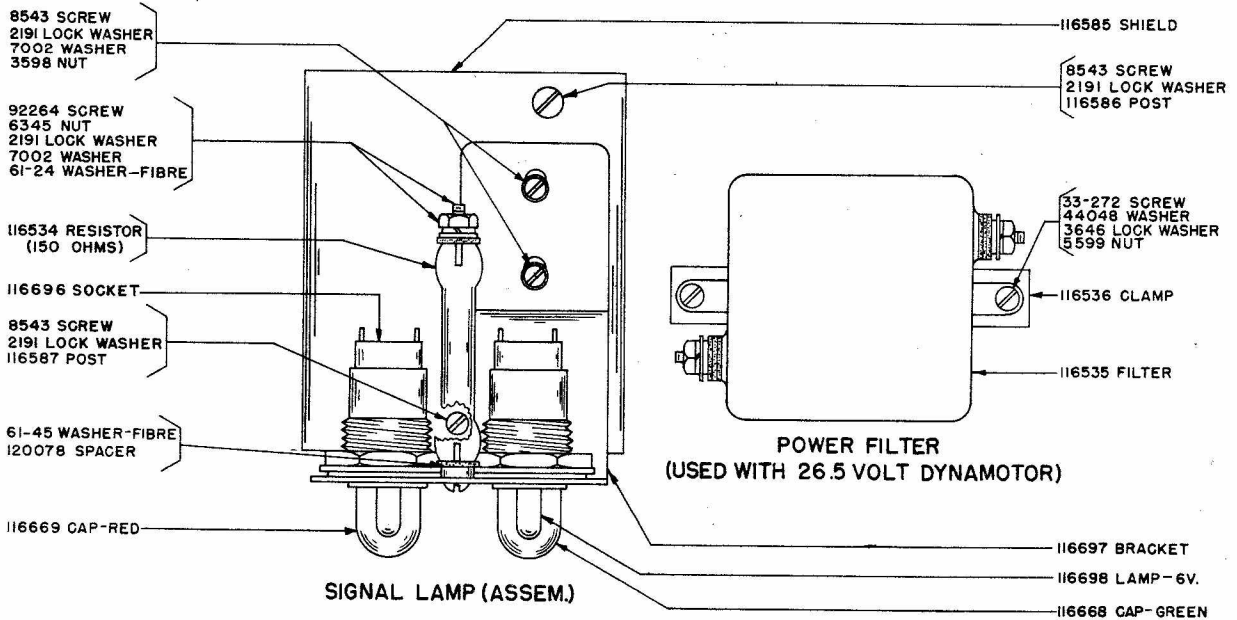
BASE-RIGHT SIDE VIEW



116664 VIBRATION MOUNT (ASSEM.)
(RIGHT SIDE VIEW)-EXCLUDES PARTS MARKED (A)

116492 SET OF KEYPADS

CHARACTER	A -	B ?	C :	D \$	E 3	F !	G &	H #	I 8	J ,	K (
PART NO.	117335	117350	117348	117337	117327	117338	117339	117340	117332	117341	117342
CHARACTER	L)	M .	N	O 9	P φ	Q I	R 4	S v	T 5	U 7	V ;
PART NO.	117343	117352	117351	117333	117334	117325	117328	117336	117329	117331	117349
CHARACTER	W 2	X /	Y 6	Z v v	FIGS.	LTRS.	LINE FEED	CAR. RET.	BLANK		
PART NO.	117326	117347	117330	117346	117345	117353	117354	117344	117355		



SIGNAL LAMP (ASSEM.)

POWER FILTER
(USED WITH 26.5 VOLT DYNAMOTOR)

CHANGES IN TELETYPE
PART AND ASSEMBLY NUMBERS

In order to facilitate the use of automatic business machines in the conduct of its business, Teletype Corporation finds it necessary to eliminate all of its present part and assembly numbers containing dashes and/or letter prefixes. Such numbers have been replaced by others having 3 to 6 digits which may have a one-letter or a two-letter suffix.

The prefixes used with magnet, packing material, raw material such as wire in bulk, Teletype literature and wiring diagram numbers have been changed to suffixes, and in the case of bulletins and instruction manuals a suffix has been added to identify the items without reference to descriptions as shown in the following illustrations:

<u>Old Designation</u>	<u>New Designation</u>	<u>Description</u>
M121	121M	Magnet
PK10718	10718PK	Carton
RM31571	31571RM	Wire
121	121B	Bulletin
EE121	121EE	Correction Sheet
121	121MA	Instruction Manual
WD2186	2186WD	Wiring Diagram
S5037	5037S	Specification
S5333A	5333SA	Specification
S5333B	5333SB	Specification

All Teletype parts bulletins and price lists will eventually be changed to show the new as well as the old numbers for the convenience of Teletype Corporation customers.

*When an item is ordered under an old number, the new number will be substituted for the old one and the old number will be shown immediately after the description of the items on all shipping papers and invoices.

Attached are two conversion lists of the active numbers involved; one with the old numbers and descriptions arranged numerically and the other with the new numbers arranged numerically. It is to be noted that some of the new numbers have already been used in Teletype parts catalogs.

**Many numbers containing dashes cover parts considered obsolete and are not included in the attached lists. Occasionally one of these parts is reinstated, in which case the part will be shipped under the new number with the dash number shown immediately after the description. It is not intended to add such numbers to the correction sheet lists unless the part is to be commonly used.

*Indicates change
**Indicates addition

OLD TO NEW NUMBER CONVERSION LIST

Old No.	New No.	Description	Old No.	New No.	Description	Old No.	New No.	Description
4-8	74879	Stud	33-224	125178	Screw	35-33	112632	Spring
23-8	125105	Terminal	33-225	125179	Screw	35-34	125243	Spring
33-1	1157	Screw	33-227	125180	Screw	35-40	125244	Spring
33-2	125108	Screw	33-234	1177	Screw	35-42	110436	Spring
33-3	1158	Screw	33-238	1179	Screw	35-47	125246	Spring
33-4	1263	Screw	33-240	86850	Screw	35-52	4702	Spring
33-5	1159	Screw	33-252	125189	Screw	35-53	125248	Spring
33-6	1160	Screw	33-253	125190	Screw	35-54	112633	Spring
33-7	1161	Screw	33-254	125191	Screw	35-58	3608	Spring
33-8	125109	Screw	33-255	125192	Screw	35-68	125250	Spring
33-9	125110	Screw	33-257	125193	Screw	35-69	125251	Spring
33-10	1162	Screw	33-270	87636	Screw	35-70	110437	Spring
33-11	1163	Screw	33-271	125195	Screw	35-71	125252	Spring
33-12	125111	Screw	33-276	125197	Screw	35-72	125253	Spring
33-13	5740	Screw	33-278	125199	Screw	35-78	125254	Spring
33-14	1164	Screw	33-280	125005	Screw	35-80	125255	Spring
33-15	125112	Screw	33-282	125200	Screw	35-85	125257	Spring
33-16	1165	Screw	33-283	125201	Screw	35-86	4703	Spring
33-17	1166	Screw	33-296	125205	Screw	35-87	4708	Spring
33-18	125113	Screw	33-333	125006	Screw	35-88	110438	Spring
33-21	112620	Screw	33-334	112622	Screw	35-89	112634	Spring
33-22	125114	Screw	33-335	112623	Screw	35-99	125258	Spring
33-29	125116	Screw	33-336	125206	Screw	35-116	125262	Spring
33-32	125117	Screw	33-337	112624	Screw	35-126	3610	Spring
33-35	1168	Screw	33-341	125209	Screw	35-132	125267	Spring
33-37	1169	Screw	33-344	125211	Screw	35-133	125268	Spring
33-38	125119	Screw	33-346	125212	Screw	35-134	4705	Spring
33-39	1222	Screw	33-348	125213	Screw	35-137	112635	Spring
33-41	125120	Screw	33-350	125215	Screw	*35-140	112636	Spring
33-43	125122	Screw	33-360	1181	Screw	36-24	125272	Pin
33-49	1170	Screw	33-362	125217	Screw	36-28	125273	Pin
33-50	125124	Screw	34-1	125218	Nut	36-39	125276	Pin
33-53	1171	Screw	34-2	3595	Nut	36-45	125277	Pin
33-54	1172	Screw	34-4	112626	Nut	36-51	125278	Pin
33-57	125126	Screw	34-5	5475	Nut	36-56	3614	Pin
33-58	125127	Screw	34-6	3597	Nut	36-73	125280	Pin
33-63	125130	Screw	34-7	70073	Nut	36-80	125281	Pin
33-64	1173	Screw	34-8	3598	Nut	36-110	125288	Pin
33-65	125131	Screw	34-9	3599	Nut	36-114	125290	Pin
33-69	1223	Screw	34-10	125220	Nut	36-120	125269	Pin
33-70	125132	Screw	34-11	112627	Nut	*36-131	125092	Dowel
33-85	125138	Screw	*34-12	55257	Nut	36-132	125292	Pin
33-86	125139	Screw	34-13	125221	Nut	36-137	3614	Pin
33-89	125141	Screw	34-14	5815	Nut	36-147	125296	Pin
33-98	125142	Screw	34-16	125222	Nut	36-150	125297	Pin
33-101	125143	Screw	34-19	125223	Nut	36-153	110440	Pin
33-110	110434	Screw	34-24	125224	Nut	36-164	125300	Pin
33-111	49054	Screw	34-25	3600	Nut	43-10	125306	Stop
33-114	125146	Screw	34-27	125225	Nut	*43-12	71047	Washer
33-130	125149	Screw	34-28	3602	Nut	46-3	125307	Washer
33-132	125001	Screw	34-29	3603	Nut	61-7	3618	Insulator
33-153	125154	Screw	34-39	125227	Nut	61-10	125314	Screw
33-156	1162	Screw	34-41	125228	Nut	61-24	125010	Washer
33-157	1174	Screw	34-48	125229	Nut	61-25	125317	Insulator
33-158	125155	Screw	34-50	3604	Nut	100-74	5816	Washer
33-163	125157	Screw	*34-51	1036	Nut	100-75	3620	Washer
33-168	125159	Screw	34-55	3606	Nut	100-80	125328	Bushing
33-170	112621	Screw	34-56	110435	Nut	100-84	125330	Screw
33-179	125002	Screw	34-58	125231	Nut	100-85	3621	Terminal
33-180	125162	Screw	34-59	125009	Nut	100-96	110441	Shim
33-185	125163	Screw	34-61	125233	Nut	100-108	3624	Washer
33-193	125164	Screw	34-64	112628	Nut	100-112	125339	Terminal
33-194	125165	Screw	34-66	125235	Nut	100-120	125341	Bushing
33-195	1176	Screw	35-1	112629	Spring	103-27	125011	Washer
33-197	125167	Screw	35-2	112630	Spring	112-7	125373	Screw
33-198	125168	Screw	35-8	112631	Spring	122-5	125379	Post
33-206	125003	Screw	35-13	125236	Spring	122-11	125380	Chute
33-207	125170	Screw	35-24	125239	Spring	122-12	125381	Stud
33-208	125171	Screw	35-27	125241	Spring	122-18	125382	Cable
33-213	125176	Screw	35-28	125242	Spring	S-122-19	125383	Bracket
						S-122-20	125384	Bracket
						S-122-21	125385	Bracket

*Indicates change

Old No.	New No.	Description	Old No.	New No.	Description	Old No.	New No.	Description
S-122-22	125386	Bracket	122-194	125463	Disk	122-511	125594	Guide Assem.
S-122-23	125387	Bracket	122-195	125464	Disk	122-528	125596	Key Lever Assem.
S-122-24	125388	Bracket	122-196	125465	Bezel	122-529	125597	Key Lever Assem.
122-25	125389	Bracket	S-122-234	3627	Bar	122-530	125598	Key Lever Assem.
122-26	125390	Washer	122-242	125467	Lever Assem.	122-531	125599	Key Lever Assem.
122-27	125391	Shaft	122-244	125468	Post	122-532	125600	Key Lever Assem.
122-28	125392	Stop	122-245	125469	Pawl	122-533	125601	Key Lever Assem.
122-29	125393	Pin	122-246	125470	Post	122-534	125602	Key Lever Assem.
122-35	125394	Plate	122-247	125471	Disk Assem.	122-535	125603	Key Lever Assem.
122-36	125395	Pin	122-249	125472	Stud	122-536	125604	Key Lever Assem.
S-122-37	125396	Guide	122-259	125479	Disk	122-537	125605	Key Lever Assem.
S-122-38	125397	Bar	122-275	125481	Bracket	122-538	125606	Key Lever Assem.
S-122-39	3625	Shaft	122-276	125013	Plate	122-539	125607	Key Lever Assem.
S-122-40	125398	Bracket	122-350	125487	Tape Reel	122-540	125608	Key Lever Assem.
122-42	125400	Gear	122-357	125488	Spacer	122-541	125609	Key Lever Assem.
122-43	125401	Gear	122-359	125490	Ratchet	122-542	125610	Key Lever Assem.
122-46	125402	Post	122-364	125492	Bracket	122-543	125611	Key Lever Assem.
122-48	125012	Socket	122-365	125493	Punch Pin	122-544	125612	Key Lever Assem.
122-49	125403	Fitting	122-366	125494	Punch Pin	122-545	125613	Key Lever Assem.
122-50	125404	Lamp	122-369	125495	Guide Plate	122-546	125614	Key Lever Assem.
122-51	125405	Bell Crank	122-374	125499	Punch Bar	122-547	125615	Key Lever Assem.
122-52	125406	Bell Crank	122-375	125500	Punch Bar	122-548	125616	Key Lever Assem.
122-53	125407	Bell Crank	122-376	125501	Punch Bar	122-549	125617	Key Lever Assem.
122-54	125408	Bell Crank	122-377	125502	Punch Bar	122-550	125618	Key Lever Assem.
122-55	125409	Bell Crank	122-378	125503	Punch Bar	122-551	125619	Key Lever Assem.
122-56	125410	Bushing	122-380	125504	Lever	122-552	125620	Key Lever Assem.
122-57	125411	Bushing	122-381	125505	Contact	122-553	125621	Key Lever Assem.
122-58	125412	Stud	122-382	125506	Bail	122-554	125622	Key Lever Assem.
122-60	125413	Ratchet	122-383	125507	Key Lever	122-555	125623	Key Lever Assem.
122-61	125414	Post	122-384	112640	Die Block	122-556	125624	Key Lever Assem.
122-62	125415	Pin	122-386	125508	Bail Assem.	122-557	125198	Key Lever Assem.
122-63	125416	Post	122-389	125511	Pawl Assem.	122-558	125625	Key Lever Assem.
122-65	125417	Stud	122-390	125512	Contact Assem.	122-559	125626	Key Lever Assem.
122-67	125418	Post	122-396	125514	Hammer Assem.	122-567	125631	Hammer Assem.
122-68	3626	Foot	122-431	125548	Paper Keytop	122-571	125633	Guide Plate
S-122-69	125419	Stop	122-432	125549	Paper Keytop	122-575	111019	Block
122-84	125421	Pin	122-433	125550	Paper Keytop	122-576	125636	Plate Assem.
122-86	125422	Pin	122-434	125551	Paper Keytop	122-577	125637	Ratchet Assem.
122-88	125423	Solenoid Assem.	122-435	125552	Paper Keytop	122-580	125638	Paper Keytop
122-89	125424	Bracket	122-438	125555	Head	122-581	125639	Paper Keytop
122-94	125425	Terminal Brd.	122-451	125560	Lever Assem.	122-582	125640	Paper Keytop
122-95	125426	Insulator	122-452	125561	Lever Assem.	122-586	125642	Bracket Assem.
122-97	125427	Bushing	122-453	125562	Cable Assem.	122-589	125643	Washer
122-100	125428	Plate	122-454	125563	Cable	122-592	125645	Guide
122-101	125429	Head	122-459	125565	Paper Keytop	122-593	125646	Plate
122-102	125430	Post	122-460	125566	Paper Keytop	122-594	125647	Plate
122-106	125431	Bracket Assem.	122-461	125567	Paper Keytop	122-596	125648	Key Lever
122-107	125433	Bracket	122-462	125568	Paper Keytop	122-597	125649	Key Lever
122-108	125434	Bushing	122-463	125569	Paper Keytop	122-598	125650	Key Lever
122-113	9575	Screw	122-464	125570	Paper Keytop	122-599	125651	Key Lever
122-116	125438	Lever Assem.	122-465	125571	Paper Keytop	122-600	125652	Key Lever
122-117	125439	Lever	122-466	125572	Paper Keytop	122-601	125653	Key Lever
122-118	125440	Terminal	122-467	125573	Paper Keytop	122-602	125654	Key Lever
122-119	125441	Contact Assem.	122-468	125574	Paper Keytop	122-603	125655	Key Lever
122-121	125443	Contact	122-469	125575	Paper Keytop	122-604	125656	Key Lever
122-124	125444	Spring	122-470	125576	Paper Keytop	122-605	125657	Key Lever
122-126	125445	Insulator	122-471	125577	Paper Keytop	122-606	125658	Key Lever
122-127	125446	Stud	122-472	125578	Paper Keytop	122-607	125659	Key Lever
122-128	125447	Bracket Assem.	122-473	125579	Paper Keytop	122-608	125660	Key Lever
122-129	125448	Bracket	122-474	125580	Paper Keytop	122-609	125661	Key Lever
S-122-130	125449	Lever Assem.	122-475	125581	Paper Keytop	122-610	125662	Key Lever
122-133	125450	Post	122-476	125582	Paper Keytop	122-611	125663	Key Lever
S-122-134	125451	Bell Crank	122-477	125583	Paper Keytop	122-612	125664	Key Lever
122-135	125452	Washer	122-478	125584	Paper Keytop	122-613	125665	Key Lever
S-122-136	125453	Bracket	122-479	125585	Paper Keytop	122-614	125666	Key Lever
122-137	125454	Gear Assem.	122-480	125586	Paper Keytop	122-615	125667	Key Lever
122-140	125456	Stud	122-481	125587	Paper Keytop	122-616	125668	Key Lever
122-143	125457	Connector	122-482	125588	Paper Keytop	122-617	125669	Key Lever
122-146	125458	Bearing	122-483	125589	Paper Keytop	122-618	125670	Key Lever
122-147	125459	Bushing	122-484	125590	Paper Keytop	122-619	125671	Key Lever

Old No.	New No.	Description	Old No.	New No.	Description	Old No.	New No.	Description
122-620	125672	Key Lever	138-44	126243	Gauge	400-3	125903	Brush
122-621	125673	Key Lever	138-55	110443	Scale	400-218	125914	Terminal
122-622	125674	Key Lever	138-58	110444	Scale	500-205	125935	Spring
122-623	125675	Key Lever	138-100	88993	Burnisher	700-55	125947	Screw
122-624	125676	Key Lever	138-125	126245	Gauge	700-59	125948	Screw
122-625	125677	Key Lever	138-126	126246	Gauge	700-71	3650	Washer
122-626	125678	Key Lever	138-127	125775	Wrench	W-1238	126234	Pin
122-697	125683	Bushing	138-128	125776	Wrench	* 55083-1	126096	"T" Bar
122-698	125684	Lever Assem.	138-129	125777	Wrench	* 55083-2	126097	"T" Bar
122-699	125685	Stud	138-137	110445	Tool	* 55083-3	126098	"T" Bar
122-700	125686	Lever Assem.	138-139	125783	Stone	* 55083-4	126099	"T" Bar
122-702	125687	Bushing	200-20	3639	Washer	* 55083-5	126100	"T" Bar
122-703	125688	Bracket Assem.	200-153	3640	Washer	* 55083-6	126101	"T" Bar
122-704	125689	Paper Keytop	200-214	125789	Shim	* 55083-7	126102	"T" Bar
122-705	125690	Paper Keytop	200-1032	3646	Washer	* 55083-8	126103	"T" Bar
122-706	125691	Paper Keytop	200-1134	125793	Pin	* 55083-9	126104	"T" Bar
122-707	125692	Paper Keytop	200-1139	3647	Insulator	* 55083-10	126105	"T" Bar
122-708	125693	Paper Keytop	200-1177	126251	Insulator	* 55083-11	126106	"T" Bar
122-709	125694	Paper Keytop	200-1348	125802	Washer	* 55083-12	126107	"T" Bar
122-710	125695	Paper Keytop	200-2212	3649	Washer	* 55083-13	126108	"T" Bar
123-7	3628	Bushing	300-106	125814	Guide	* 55083-14	126109	"T" Bar
123-8	71444	Bushing	300-107	125815	Contact Assem.	* 55083-15	126110	"T" Bar
123-36	3630	Bushing	300-108	125816	Mounting Bar	* 55083-16	126111	"T" Bar
123-37	125696	Post	300-109	125817	Mounting Bar	* 55083-17	126112	"T" Bar
123-164	3633	Bushing	300-110	125818	Insulator	* 55083-18	126113	"T" Bar
123-165	3634	Bushing	300-113	125820	Disk	* 55083-20	126114	"T" Bar
123-166	3635	Washer	300-121	125828	Shaft	* 55083-21	126115	"T" Bar
123-167	3636	Washer	300-128	125829	Lever	55084-A2	126156	Bar
123-244	125015	Washer	300-137	125833	Lever Guide	55084-A4	126157	Bar
123-308	125703	Terminal	300-152	125844	Adj. Lever	55084-A6	126158	Bar
125-9	3638	Condenser	300-170	125848	Cont. Lever	55084-A8	126159	Bar
125-176	125716	Switch Box	300-171	125849	Cont. Lever	55084-A10	126160	Bar
125-197	125097	Nipple	300-172	125850	Cont. Lever	55084-A12	126161	Bar
125-198	125098	Nut	300-173	125851	Cont. Lever	55084-A14	126162	Bar
125-208	125719	Nipple	300-174	125852	Cont. Lever	55084-A16	126163	Bar
125-209	125720	Nut	300-178	125855	Terminal	55084-A18	126164	Bar
125-237	125723	Fuse	300-179	125856	Terminal Block	55084-A20	126165	Bar
125-238	125724	Fuse	300-181	125858	Feed Pawl	55084-B1	126166	Bar
126-123	125016	Grommet	300-201	125860	End Bracket	55084-B3	126167	Bar
138-22	110442	Screw Driver	300-301	5556	Top Plate	55084-B5	126168	Bar
138-23	125752	Wrench	300-302	125861	Feed Wheel	55084-B7	126169	Bar
138-25	125754	Wrench	*300-303	125862	Bearing	55084-B9	126170	Bar
138-26	125755	Wrench	300-312	125867	Bracket	55084-B11	126171	Bar
138-27	125756	Wrench	300-314	125868	Detent Assem.	55084-B13	126172	Bar
138-28	125757	Wrench	300-319	125871	Bracket	55084-B15	126173	Bar
138-30	125758	File	300-320	125872	Shaft	55084-B17	126174	Bar
138-33	125760	Wrench	300-322	125873	Latch			
138-34	125761	Wrench	300-400	125874	End Bracket			
138-36	125763	Wrench	300-506	4707	Washer			
138-43	126242	Gauge	300-510	125882	Terminal			

NEW TO OLD NUMBER CONVERSION LIST

New No.	Old No.	New No.	Old No.	New No.	Old No.	New No.	Old No.
*1036	34-51	9575	122-113	125138	33-85	125258	35-99
1157	33-1	49054	33-111	125139	33-86	125262	35-116
1158	33-3	*55257	34-12	125141	33-89	125267	35-132
1159	33-5	70073	34-7	125142	33-98	125268	35-133
1160	33-6	*71047	43-12	125143	33-101	125269	36-120
		71444	123-8				
1161	33-7	74879	4-8	125146	33-114	125272	36-24
1162	(33-10)	86850	33-240	125149	33-130	125273	36-28
	(33-156)	87636	33-270	125154	33-153	125276	36-39
1163	33-11	88993	138-100	125155	33-158	125277	36-45
1164	33-14	110434	33-110	125157	33-163	125278	36-51
1165	33-16	110435	34-56	125159	33-168	125280	36-73
1166	33-17	110436	35-42	125162	33-180	125281	36-80
1168	33-35	110437	35-70	125163	33-185	125288	36-110
1169	33-37	110438	35-88	125164	33-193	125290	36-114
1170	33-49	110440	36-153	125165	33-194	125292	36-132
1171	33-53	110441	100-96	125167	33-197	125296	36-147
1172	33-54	110442	138-22	125168	33-198	125297	36-150
1173	33-64	110443	138-55	125170	33-207	125300	36-164
1174	33-157	110444	138-58	125171	33-208	125306	43-10
1176	33-195	110445	138-137	125176	33-213	125307	46-3
1177	33-234	111019	122-575	125178	33-224	125314	61-10
1179	33-238	112620	33-21	125179	33-225	125317	61-25
1181	33-360	112621	33-170	125180	33-227	125328	100-80
1222	33-39	112622	33-334	125189	33-252	125330	100-84
1223	33-69	112623	33-335	125190	33-253	125339	100-112
1263	33-4	112624	33-337	125191	33-254	125341	100-120
3595	34-2	112626	34-4	125192	33-255	125373	112-7
3597	34-6	112627	34-11	125193	33-257	125379	122-5
3598	34-8	112628	34-64	125195	33-271	125380	122-11
3599	34-9	112629	35-1	125197	33-276	125381	122-12
3600	34-25	112630	35-2	125198	122-557	125382	122-18
3602	34-28	112631	35-8	125199	33-278	125383	S-122-19
3603	34-29	112632	35-33	125200	33-282	125384	S-122-20
3604	34-50	112633	35-54	125201	33-283	125385	S-122-21
3606	34-55	112634	35-89	125205	33-296	125386	S-122-22
3608	35-58	112635	35-137	125206	33-336	125387	S-122-23
3610	35-126	*112636	35-140	125209	33-341	125388	S-122-24
	(36-56)	112640	122-384	125211	33-344	125389	122-25
3614	(36-137)	125001	33-132	125212	33-346	125390	122-26
		125002	33-179	125213	33-348	125391	122-27
		125003	33-206				
3618	61-7	125005	33-280	125215	33-350	125392	122-28
3620	100-75	125006	33-333	125217	33-362	125393	122-29
3621	100-85	125009	34-59	125218	34-1	125394	122-35
3624	100-108	125010	61-24	125220	34-10	125395	122-36
3625	S-122-39	125011	103-27	125221	34-13	125396	S-122-37
3626	122-68	125012	122-48	125222	34-16	125397	S-122-38
3627	S-122-234	125013	122-276	125223	34-19	125398	S-122-40
3628	123-7	125015	123-244	125224	34-24	125400	122-42
3630	123-36	125016	126-123	125225	34-27	125401	122-43
3633	123-164	*125092	36-131	125227	34-39	125402	122-46
		125097	125-197				
3634	123-165	125098	125-198	125228	34-41	125403	122-49
3635	123-166	125105	23-8	125229	34-48	125404	122-50
3636	123-167	125108	33-2	125231	34-58	125405	122-51
3638	125-9	125109	33-8	125233	34-61	125406	122-52
3639	200-20	125110	33-9	125235	34-66	125407	122-53
3640	200-153	125111	33-12	125236	35-13	125408	122-54
3646	200-1032	125112	33-15	125239	35-24	125409	122-55
3647	200-1139	125113	33-18	125241	35-27	125410	122-56
3649	200-2212	125114	33-22	125242	35-28	125411	122-57
3650	700-71	125116	33-29	125243	35-34	125412	122-58
4702	35-52	125117	33-32	125244	35-40	125413	122-60
4703	35-86	125119	33-38	125246	35-47	125414	122-61
4705	35-134	125120	33-41	125248	35-53	125415	122-62
4707	300-506	125122	33-43	125250	35-68	125416	122-63
4708	35-87	125124	33-50	125251	35-69	125417	122-65
5475	34-5	125126	33-57	125252	35-71	125418	122-67
5556	300-301	125127	33-58	125253	35-72	125419	S-122-69
5740	33-13	125130	33-63	125254	35-78	125421	122-84
5815	34-14	125131	33-65	125255	35-80	125422	122-86
5816	100-74	125132	33-70	125257	35-85	125423	122-88

*Indicates change

New No.	Old No.	New No.	Old No.	New No.	Old No.	New No.	Old No.
125424	122-89	125566	122-460	125651	122-599	125833	300-137
125425	122-94	125567	122-461	125652	122-600	125844	300-152
125426	122-95	125568	122-462	125653	122-601	125848	300-170
125427	122-97	125569	122-463	125654	122-602	125849	300-171
125428	122-100	125570	122-464	125655	122-603	125850	300-172
125429	122-101	125571	122-465	125656	122-604	125851	300-173
125430	122-102	125572	122-466	125657	122-605	125852	300-174
125431	122-106	125573	122-467	125658	122-606	125855	300-178
125433	122-107	125574	122-468	125659	122-607	125856	300-179
125434	122-108	125575	122-469	125660	122-608	125858	300-181
125438	122-116	125576	122-470	125661	122-609	125860	300-201
125439	122-117	125577	122-471	125662	122-610	125861	300-302
125440	122-118	125578	122-472	125663	122-611	125862	300-303
125441	122-119	125579	122-473	125664	122-612	125867	300-312
125443	122-121	125580	122-474	125665	122-613	125868	300-314
125444	122-124	125581	122-475	125666	122-614	125871	300-319
125445	122-126	125582	122-476	125667	122-615	125872	300-320
125446	122-127	125583	122-477	125668	122-616	125873	300-322
125447	122-128	125584	122-478	125669	122-617	125874	300-400
125448	122-129	125585	122-479	125670	122-618	125882	300-510
125449	S-122-130	125586	122-480	125671	122-619	125903	400-3
125450	122-133	125587	122-481	125672	122-620	125914	400-218
125451	S-122-134	125588	122-482	125673	122-621	125935	500-205
125452	122-135	125589	122-483	125674	122-622	125947	700-55
125453	S-122-136	125590	122-484	125675	122-623	125948	700-59
125454	122-137	125594	122-511	125676	122-624	126096	55083-1
125456	122-140	125596	122-528	125677	122-625	126097	55083-2
125457	122-143	125597	122-529	125678	122-626	126098	55083-3
125458	122-146	125598	122-530	125683	122-697	126099	55083-4
125459	122-147	125599	122-531	125684	122-698	126100	55083-5
125463	122-194	125600	122-532	125685	122-699	126101	55083-6
125464	122-195	125601	122-533	125686	122-700	126102	55083-7
125465	122-196	125602	122-534	125687	122-702	126103	55083-8
125467	122-242	125603	122-535	125688	122-703	126104	55083-9
125468	122-244	125604	122-536	125689	122-704	126105	55083-10
125469	122-245	125605	122-537	125690	122-705	126106	55083-11
125470	122-246	125606	122-538	125691	122-706	126107	55083-12
125471	122-247	125607	122-539	125692	122-707	126108	55083-13
125472	122-249	125608	122-540	125693	122-708	126109	55083-14
125479	122-259	125609	122-541	125694	122-709	126110	55083-15
125481	122-275	125610	122-542	125695	122-710	126111	55083-16
125487	122-350	125611	122-543	125696	123-37	126112	55083-17
125488	122-357	125612	122-544	125703	123-308	126113	55083-18
125490	122-359	125613	122-545	125716	125-176	126114	55083-20
125492	122-364	125614	122-546	125719	125-208	126115	55083-21
125493	122-365	125615	122-547	125720	125-209	126156	55084-A2
125494	122-366	125616	122-548	125723	125-237	126157	55084-A4
125495	122-369	125617	122-549	125724	125-238	126158	55084-A6
125499	122-374	125618	122-550	125752	138-23	126159	55084-A8
125500	122-375	125619	122-551	125754	138-25	126160	55084-A10
125501	122-376	125620	122-552	125755	138-26	126161	55084-A12
125502	122-377	125621	122-553	125756	138-27	126162	55084-A14
125503	122-378	125622	122-554	125757	138-28	126163	55084-A16
125504	122-380	125623	122-555	125758	138-30	126164	55084-A18
125505	122-381	125624	122-556	125760	138-33	126165	55084-A20
125506	122-382	125625	122-558	125761	138-34	126166	55084-B1
125507	122-383	125626	122-559	125763	138-36	126167	55084-B3
125508	122-386	125631	122-567	125775	138-127	126168	55084-B5
125511	122-389	125633	122-571	125776	138-128	126169	55084-B7
125512	122-390	125636	122-576	125777	138-129	126170	55084-B9
125514	122-396	125637	122-577	125783	138-139	126171	55084-B11
125548	122-431	125638	122-580	125789	200-214	126172	55084-B13
125549	122-432	125639	122-581	125793	200-1134	126173	55084-B15
125550	122-433	125640	122-582	125802	200-1348	126174	55084-B17
125551	122-434	125642	122-586	125814	300-106	126234	W-1238
125552	122-435	125643	122-589	125815	300-107	126242	138-43
125555	122-438	125645	122-592	125816	300-108	126243	138-44
125560	122-451	125646	122-593	125817	300-109	126245	138-125
125561	122-452	125647	122-594	125818	300-110	126246	138-126
125562	122-453	125648	122-596	125820	300-113	126251	200-1177
125563	122-454	125649	122-597	125828	300-121		
125565	122-459	125650	122-598	125829	300-128		