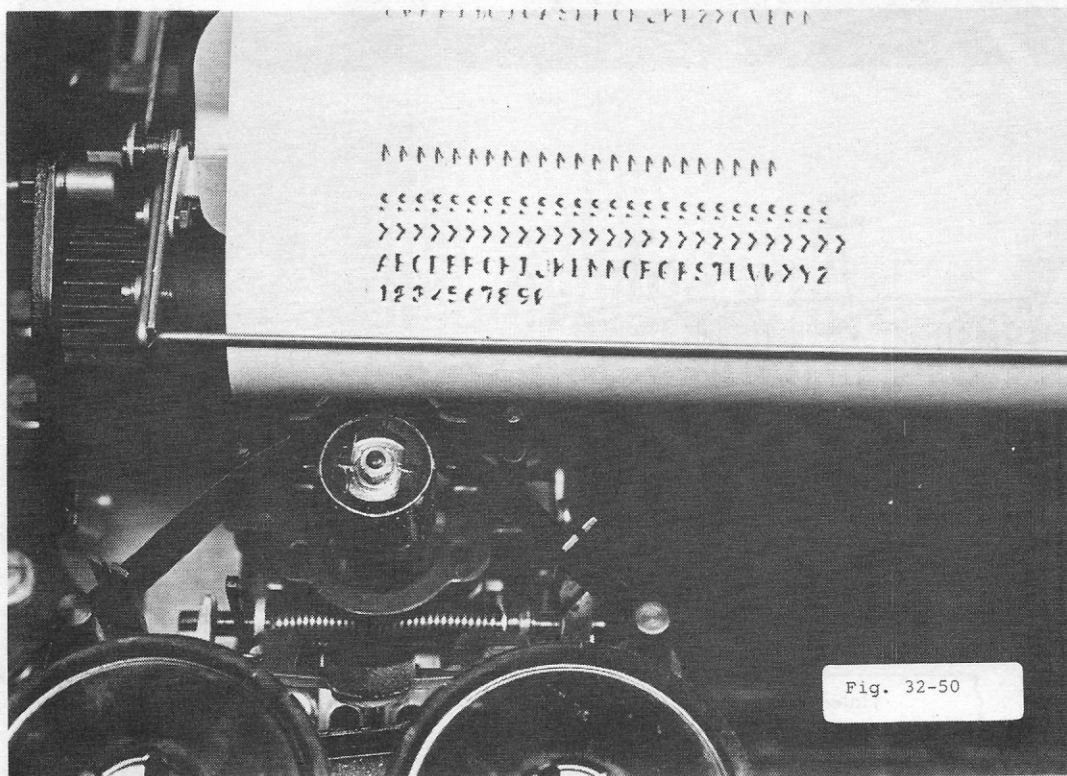


G. ADJUSTING UNIFORMITY OF PRINTED CHARACTERS

1. Fig. 32-50 shows that the printed characters are not uniform.
2. Use tool #180588 to adjust typewheel according to Fig. 32-51. Tighten and try a few printed letters and check. Several attempts may be required to achieve desired results.
3. If steps 1 and 2 above do not achieve desired results, refer to Fig. 32-52 for adjustment instructions and to Fig. 32-53 for location of adjustment points.



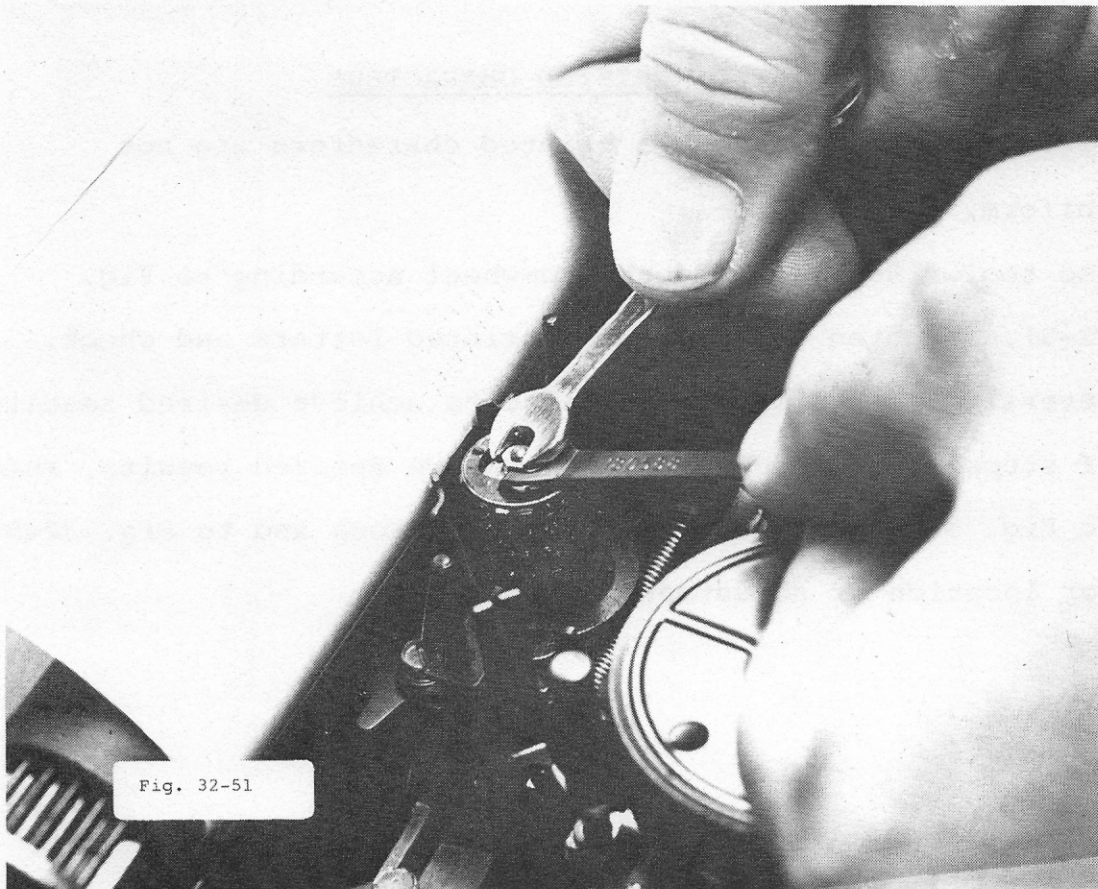
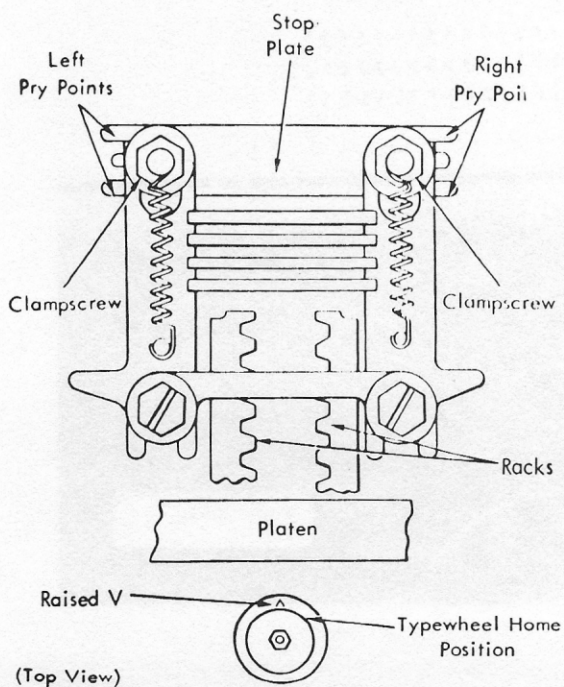


Fig. 32-51



Printed characters should be of uniform density.

To Adjust

With clampscrow friction tight:

- (1) If printing is light on LEFT (WUT) move left pry points REARWARD. Refine, if necessary, by moving right pry points FORWARD.
- (2) If printing is light on RIGHT (MNH) move left pry points FORWARD. Refine, if necessary, by moving right pry points REARWARD.

(Courtesy of Teletype Corp.)

Fig. 32-52



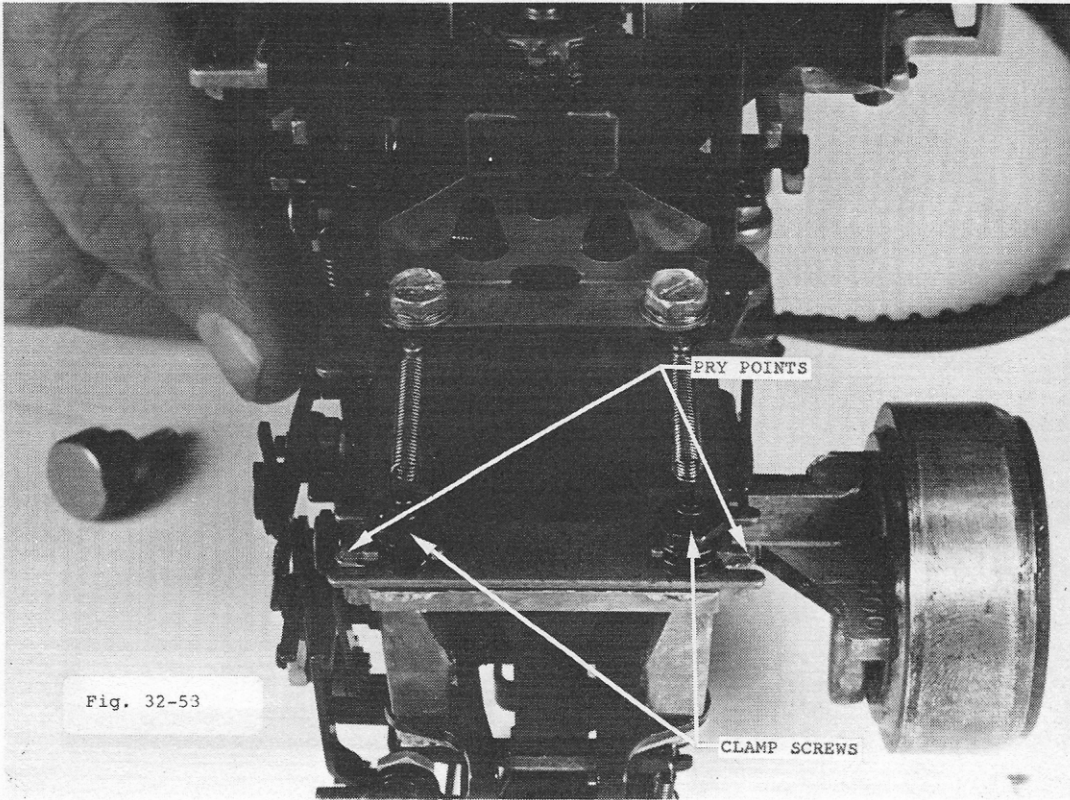
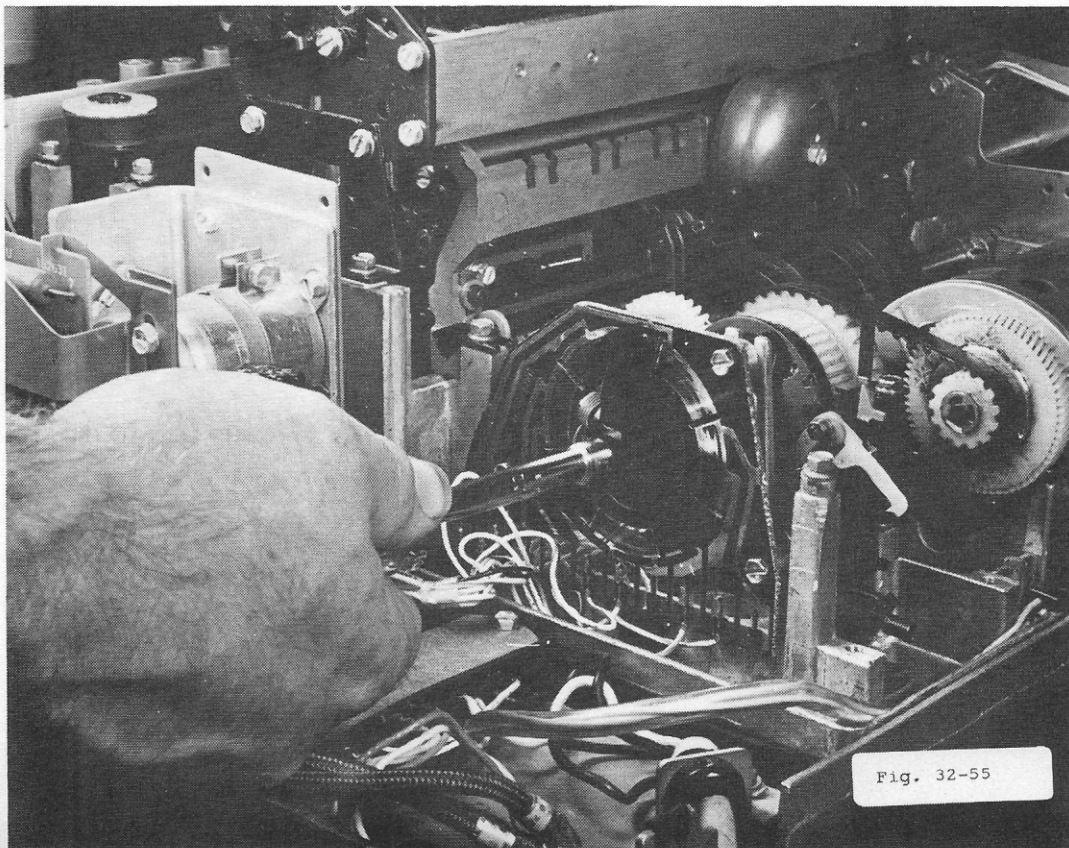
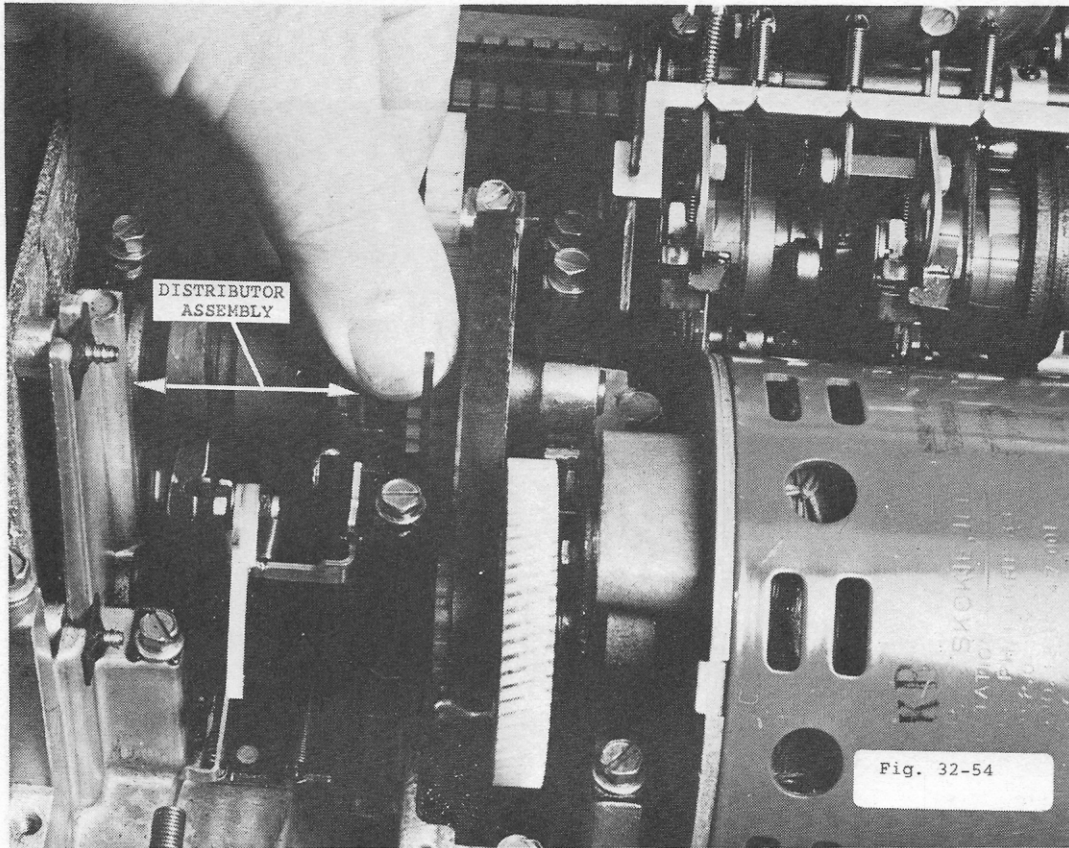


Fig. 32-53





H. REMOVING THE DISTRIBUTOR ASSEMBLY

1. Fig. 32-54 shows the assembly. Shake the assembly for tightness of fit.
2. Looseness of fit indicates worn bearings. They should be replaced.
3. Remove the trip shaft according to Fig. 32-32.
4. Remove the distributor brush holder according to Fig. 32-55.
5. Remove the distributor face from its mount by removing the three mounting screws according to Fig. 32-56.
6. Remove the bearing clamp according to Fig. 32-57.
7. Pull out the distributor shaft assembly according to Fig. 32-58.
8. Disengage the drum from the clutch. First, pinch the latchlever and the stoplug together to make drum come off easily. Refer to Fig. 32-59.
9. Replace bearings, gears, or clutch assembly parts as needed.
10. Replace distributor assembly parts. When remounting the distributor brush holder, make sure that pointer is in line with locating mark. See Fig. 32-60. Note that the distributor clutch must be latched. To latch it, push nylon driven gear down (as in Fig. 32-14) until clutch is latched.
11. More details about the clutch is given in Fig. 32-61.

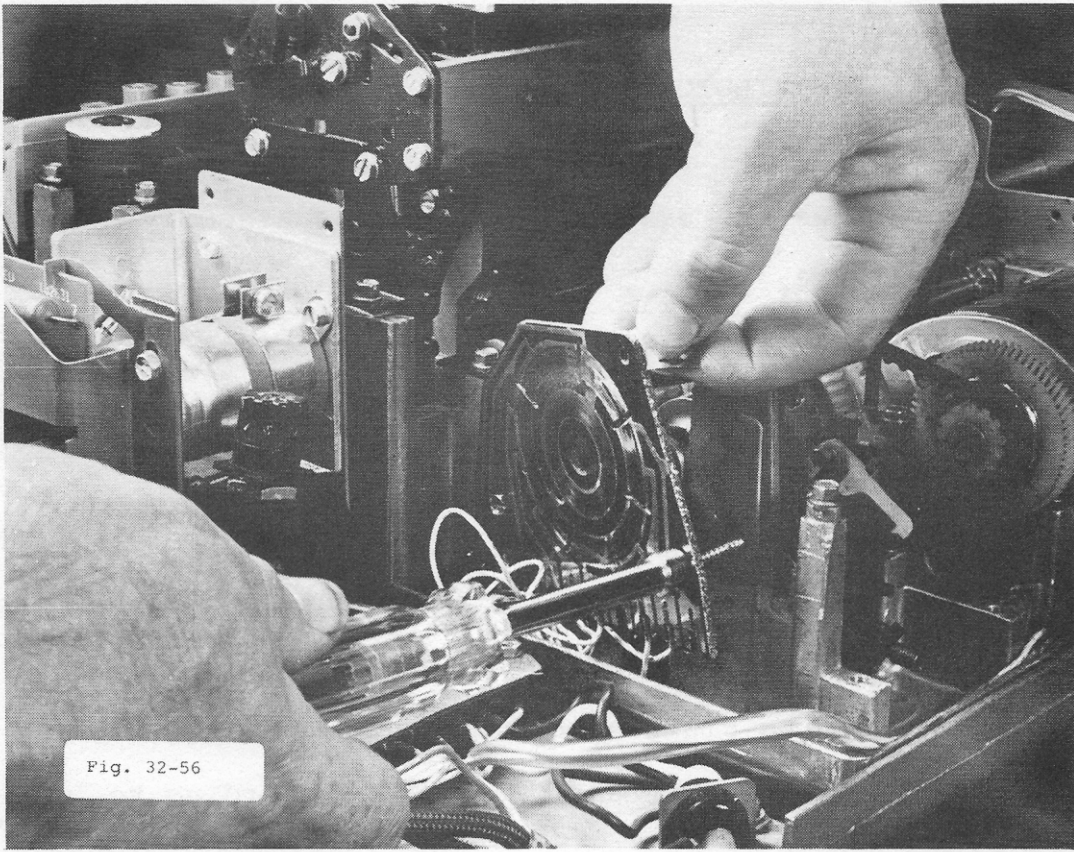


Fig. 32-56

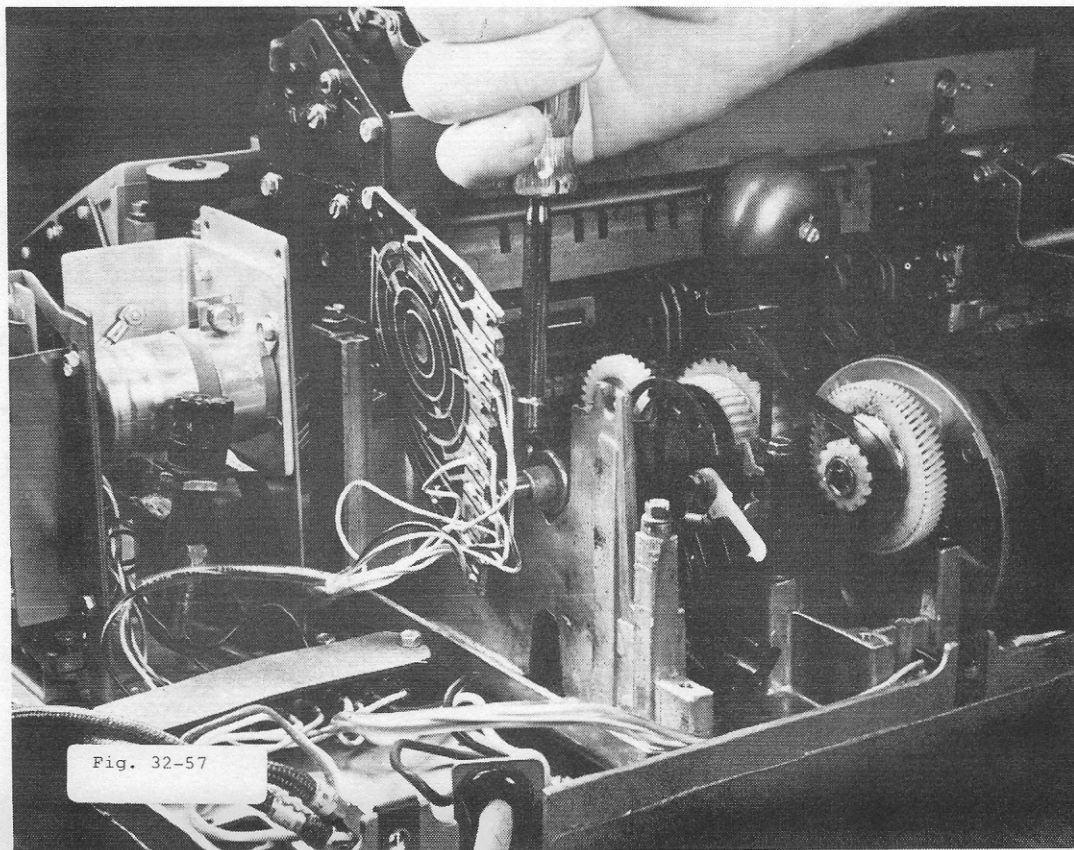


Fig. 32-57



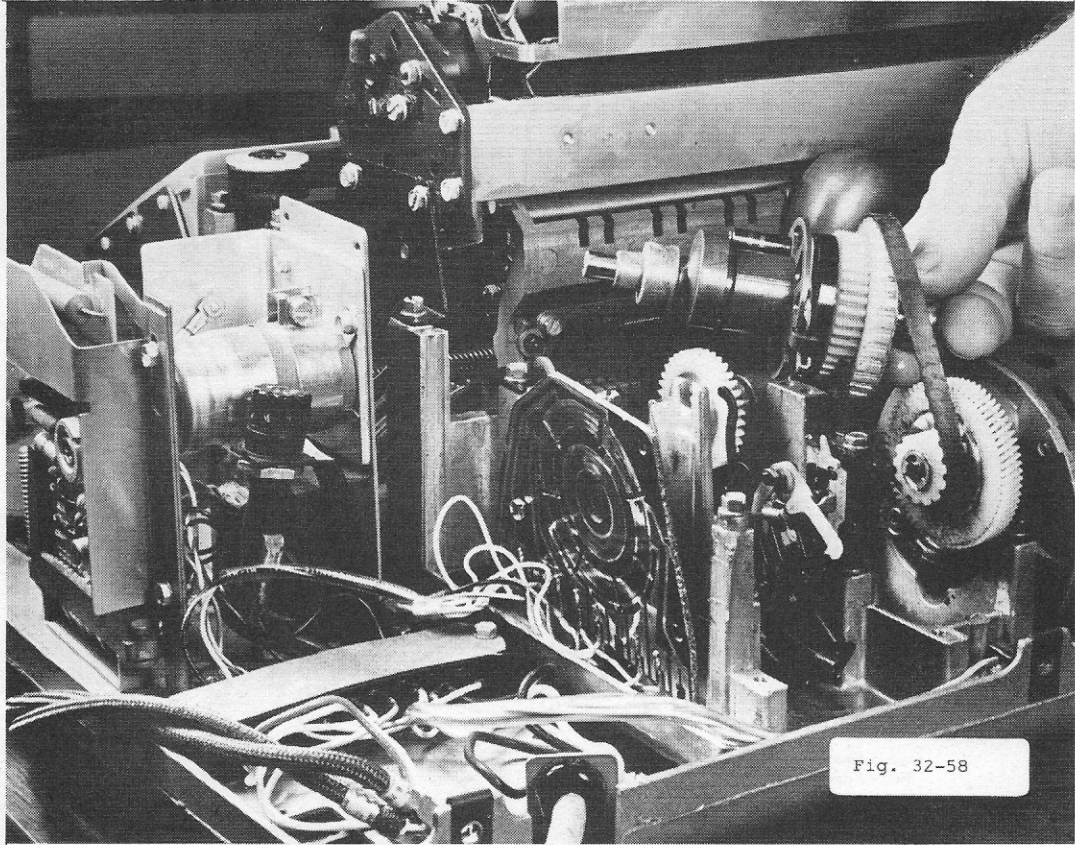
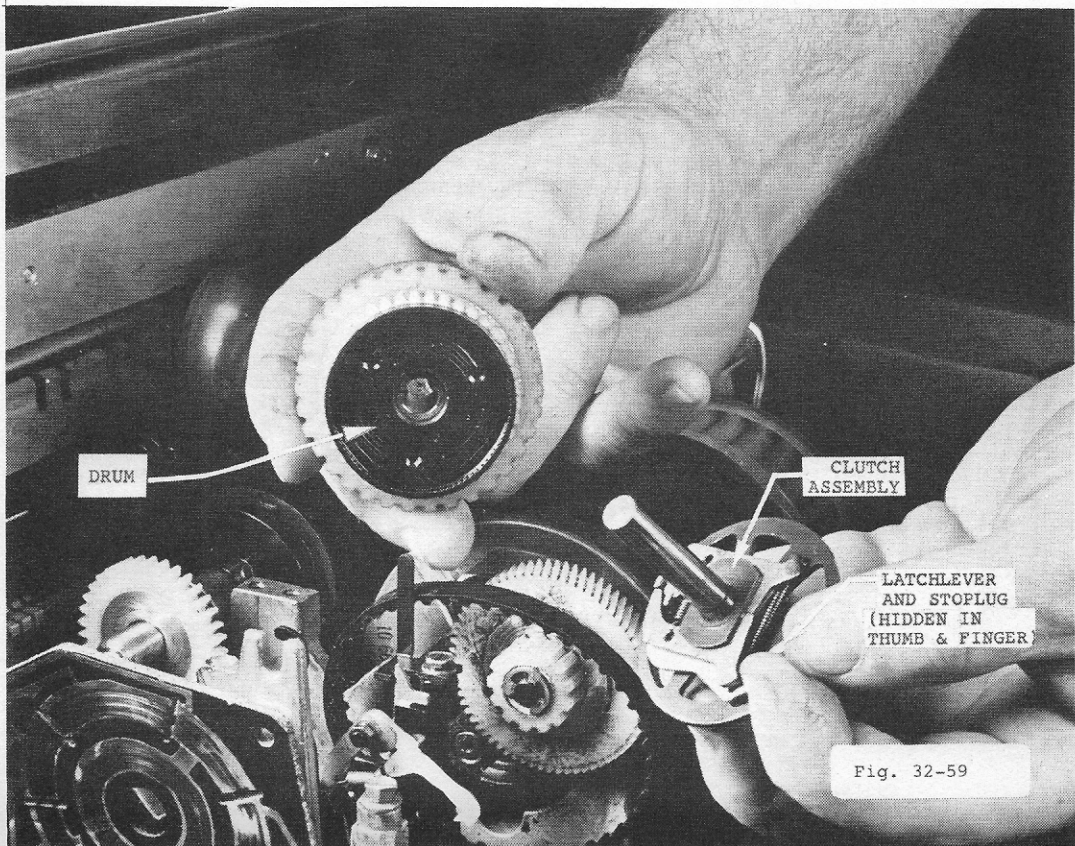


Fig. 32-58



DRUM

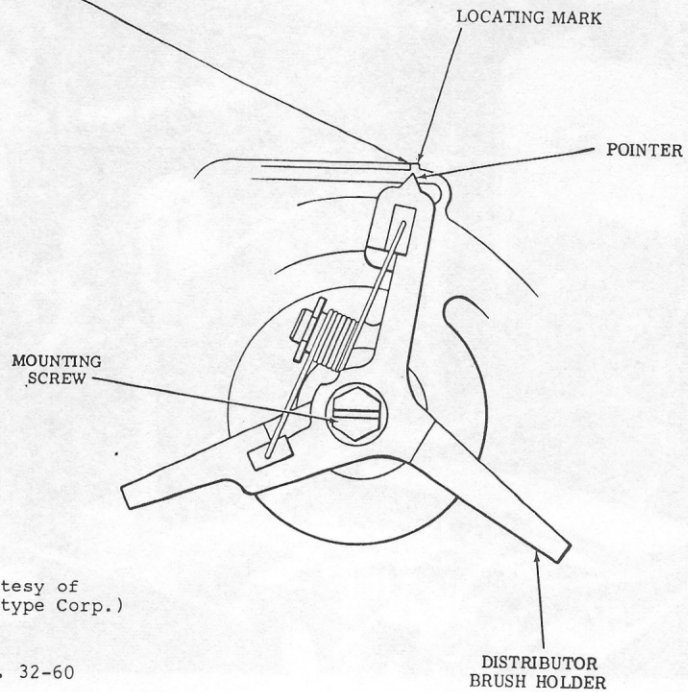
CLUTCH ASSEMBLY

LATCHLEVER AND STOPPLUG (HIDDEN IN THUMB & FINGER)

Fig. 32-59

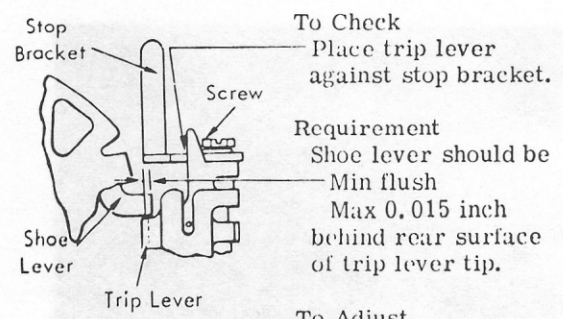
*SPM BCC*

With distributor clutch disengaged (latched), pointer shall be within locating mark.  
 To Adjust Position distributor brush holder with mounting screws loosened.



(Courtesy of Teletype Corp.)

Fig. 32-60

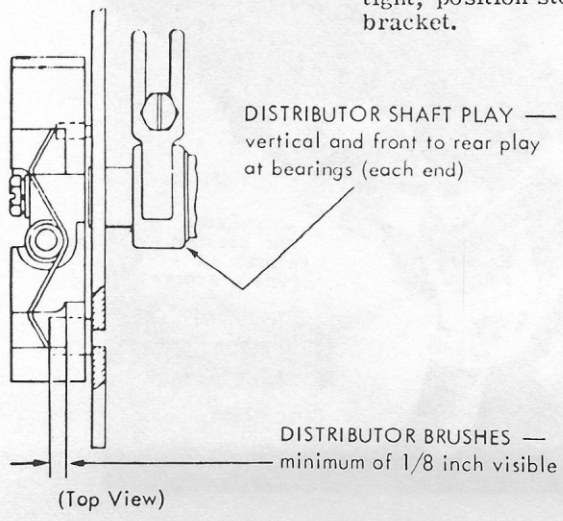


To Check Place trip lever against stop bracket.

Requirement Shoe lever should be Min flush Max 0.015 inch behind rear surface of trip lever tip.

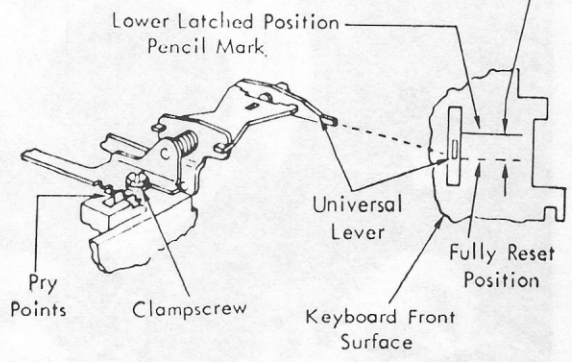
To Adjust With screw friction tight, position stop bracket.

(Right Side View)



To Check Manually place universal lever in its lower latched position — pencil mark lever position. Rotate distributor clutch until universal lever is fully reset.

Requirement Min 0.010 inch---Max 0.035 inch movement of universal lever from its latched to its reset position, as gauged by eye.



To Adjust Loosen clampscrew. Using pry points, position linkage.

Affected Adjustment Trip Lever Engagement

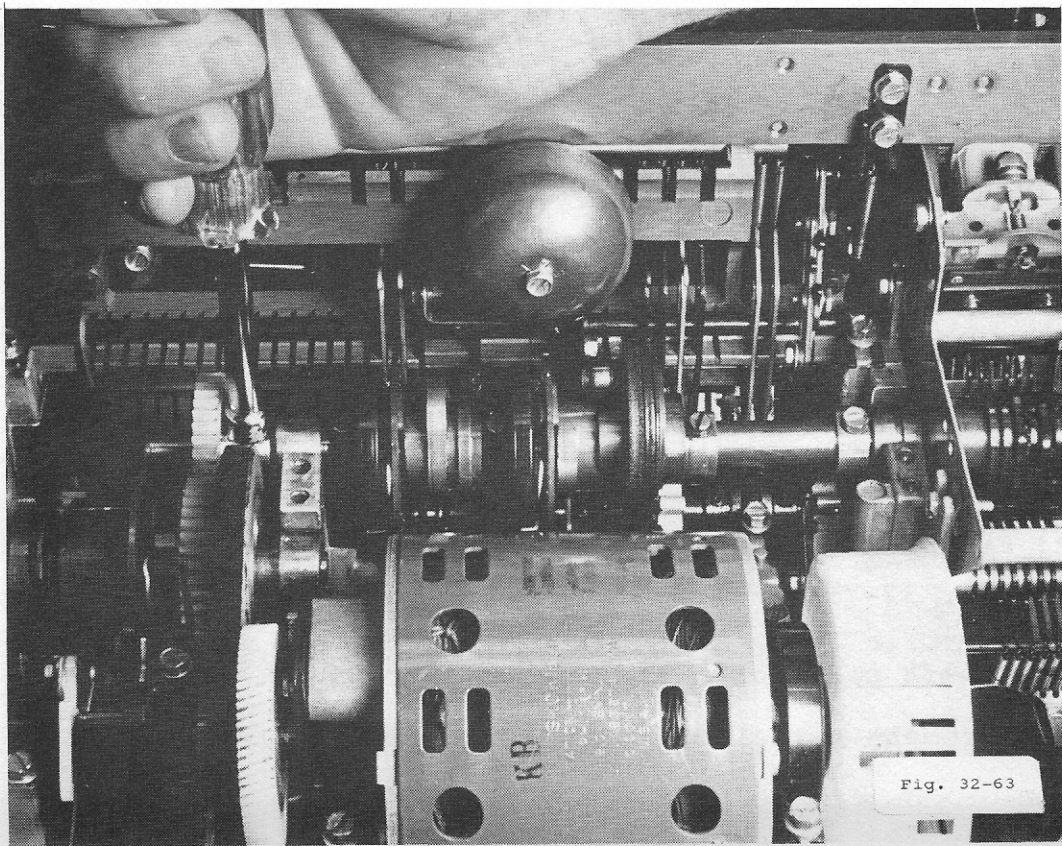
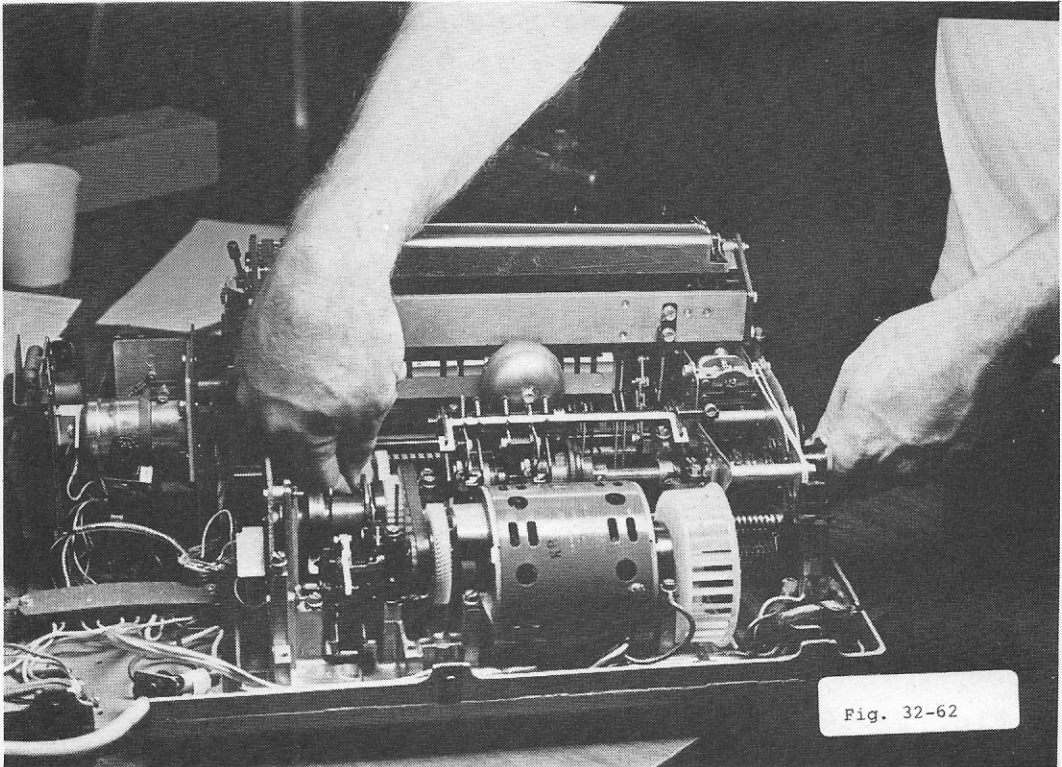
(Courtesy of Teletype Corp.)



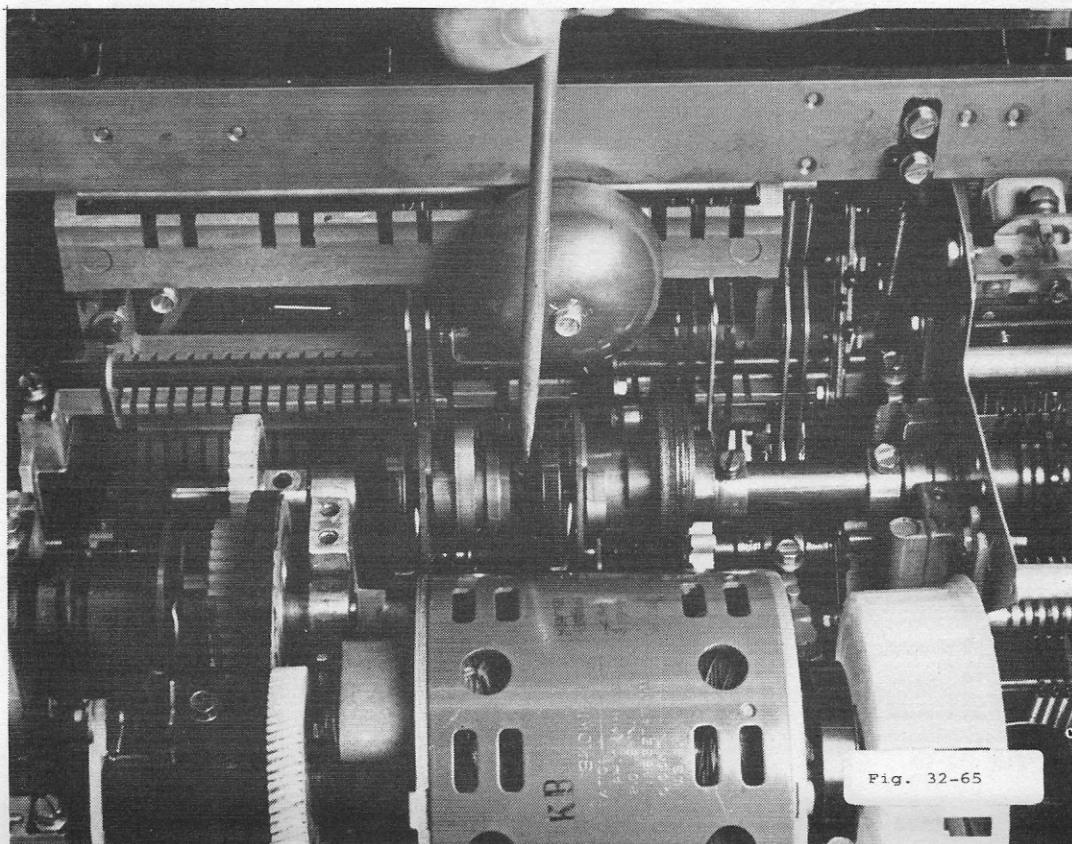
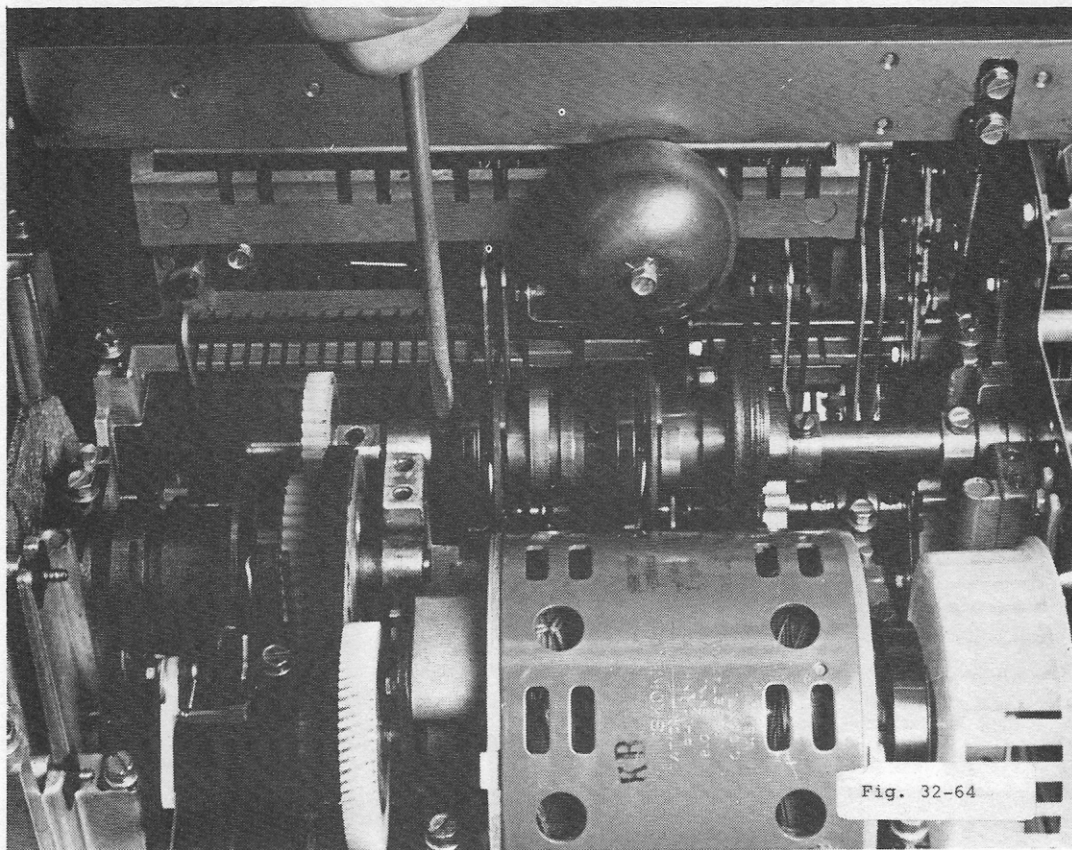
## MODEL 32

### I. REMOVING THE MAINSHAFT

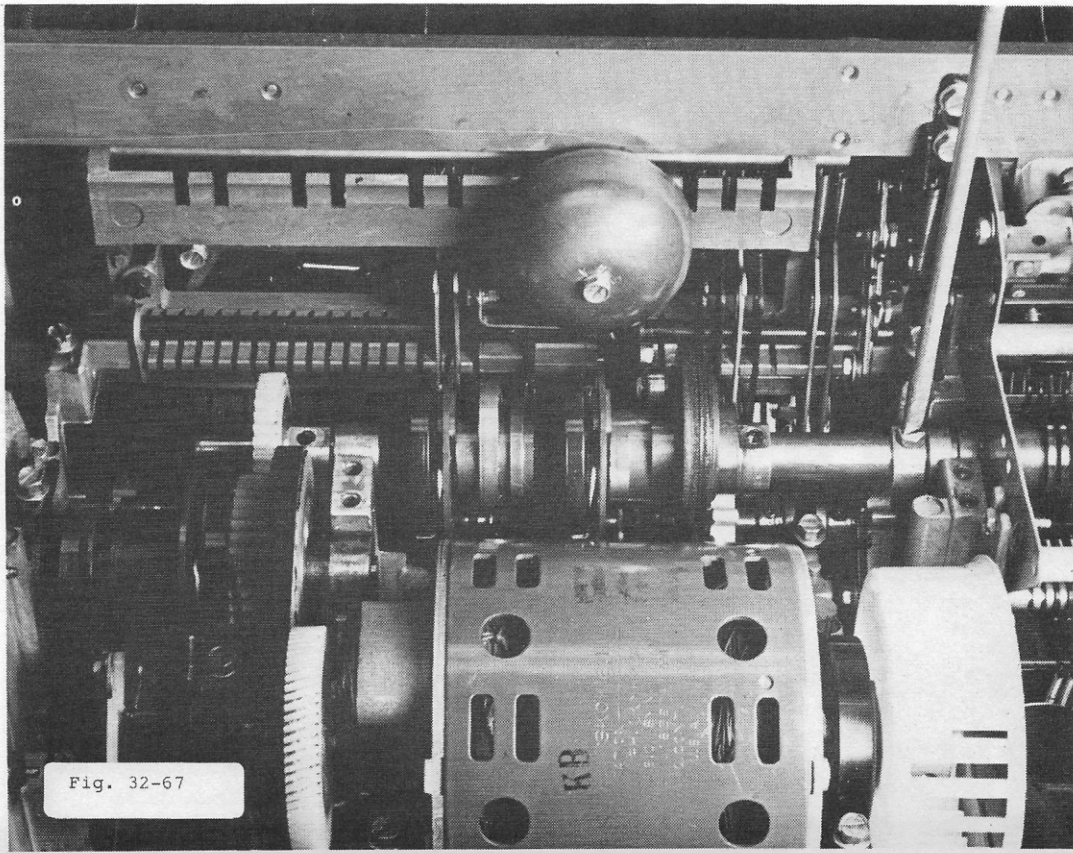
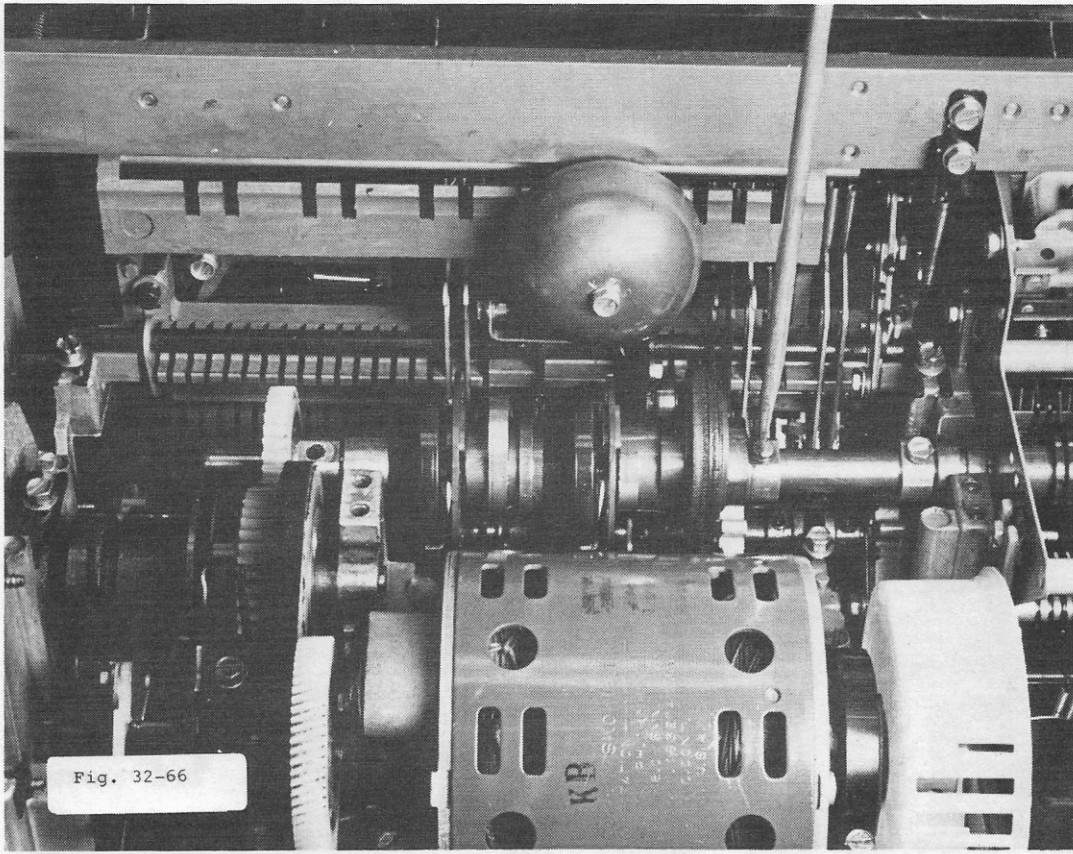
1. A bad mainshaft or its bearings can be responsible for all kinds of problems.
2. Refer to Fig. 32-62. Shake mainshaft at ends to test for tightness of fit.
3. Remove trip shaft according to Fig. 32-32.
4. Remove screws according to the following figures in order:
  - a) Fig. 32-63
  - b) Fig. 32-64
  - c) Fig. 32-65
  - d) Fig. 32-66
  - e) Fig. 32-67
  - f) Fig. 32-68
5. Push mainshaft to the right according to Fig. 32-69. Hold selector clutch drum (Fig. 32-75) while pushing mainshaft. The following figures show the sequences that occur when pulling the mainshaft.
  - a) Fig. 32-69
  - b) Fig. 32-70
  - c) Fig. 32-71
  - d) Fig. 32-72
  - e) Fig. 32-73
  - f) Fig. 32-74
  - g) Fig. 32-75
6. Mainshaft parts are laid out in Fig. 32-76. Most likely replacement parts are the main shaft and the bearings.



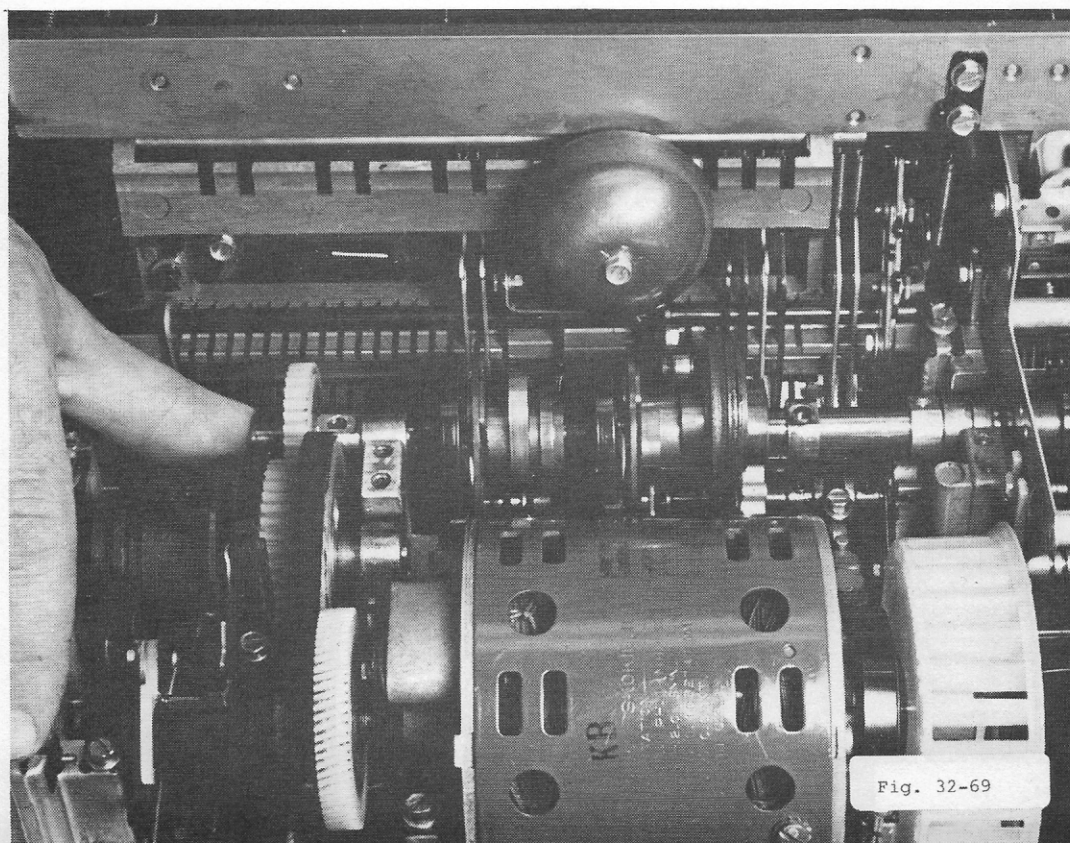
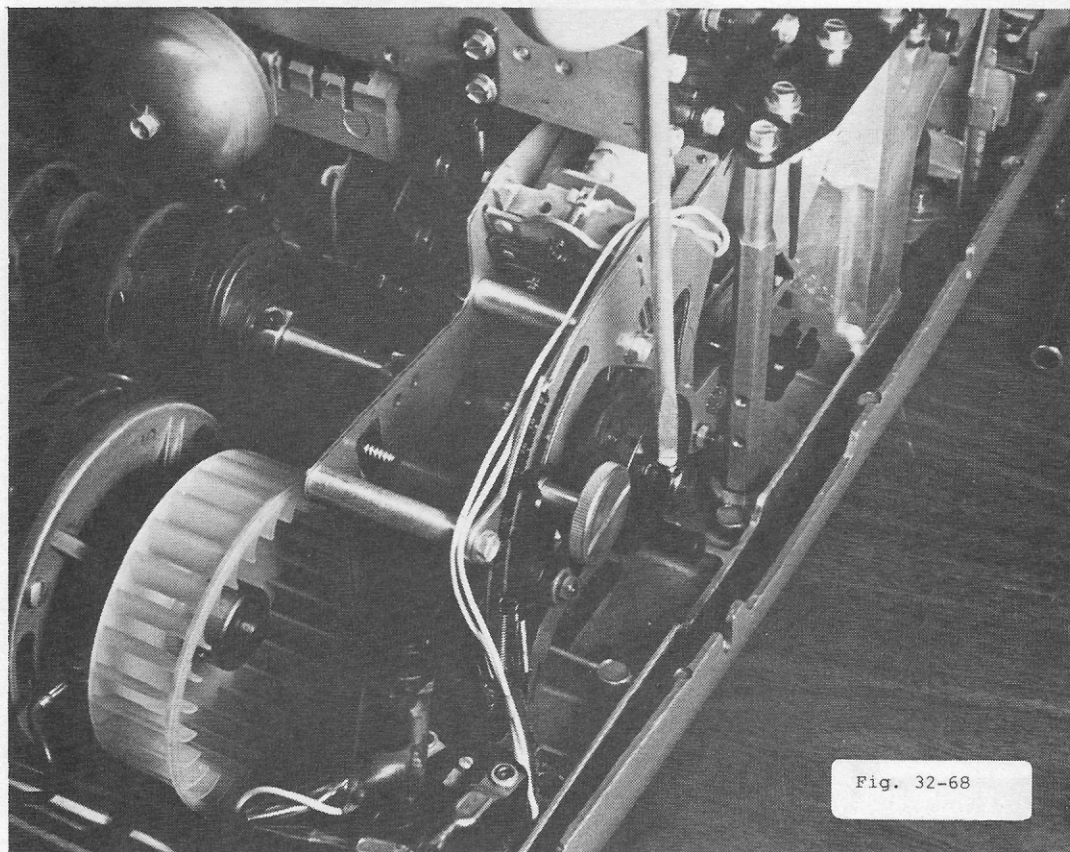




3345







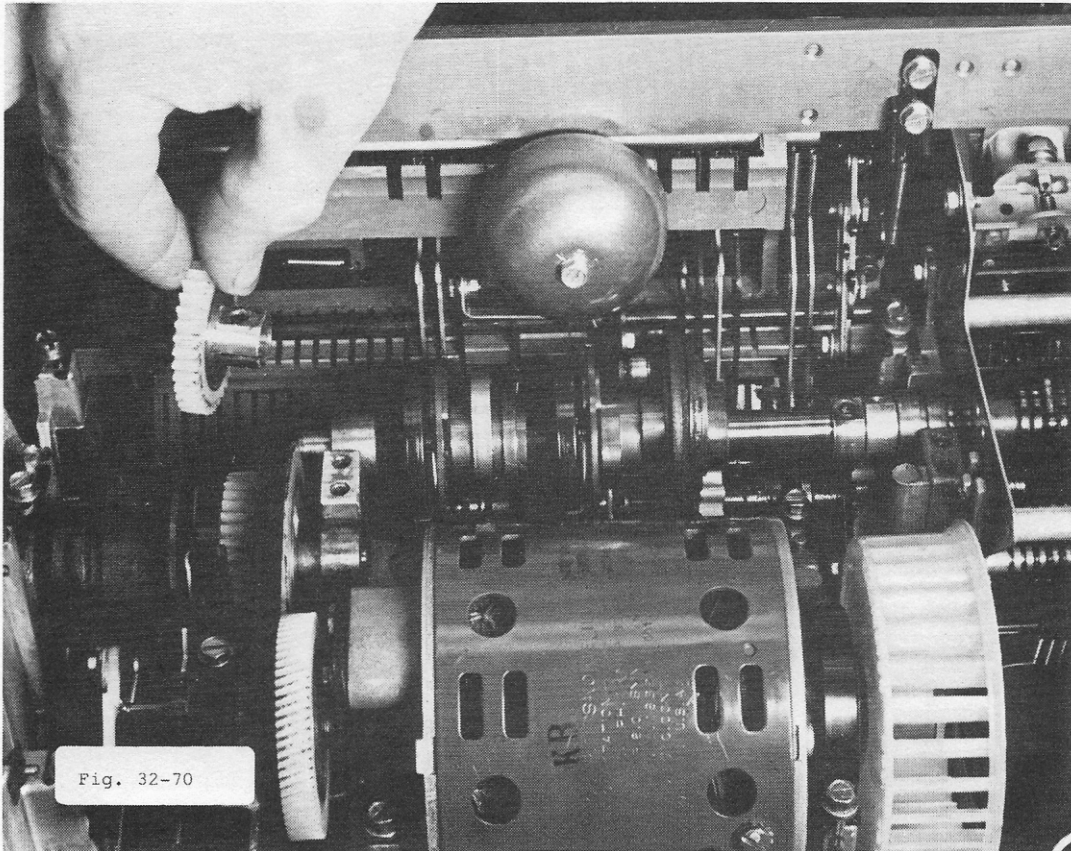


Fig. 32-70

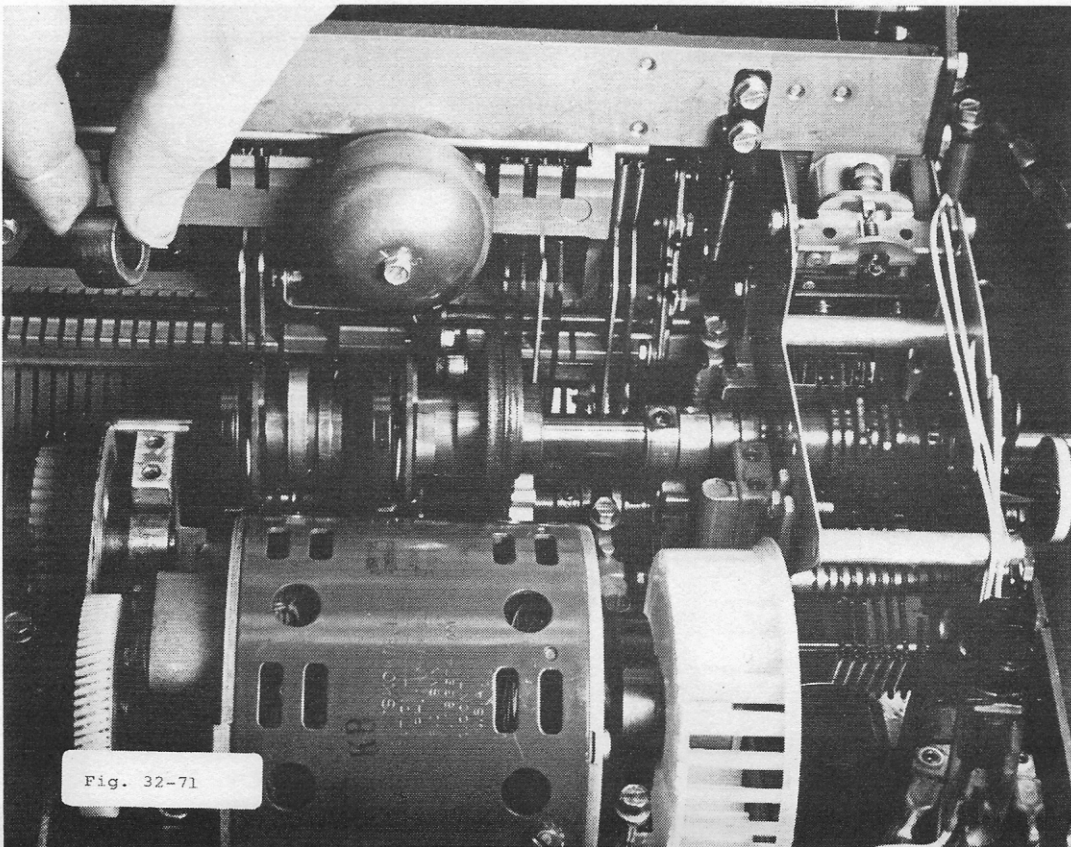
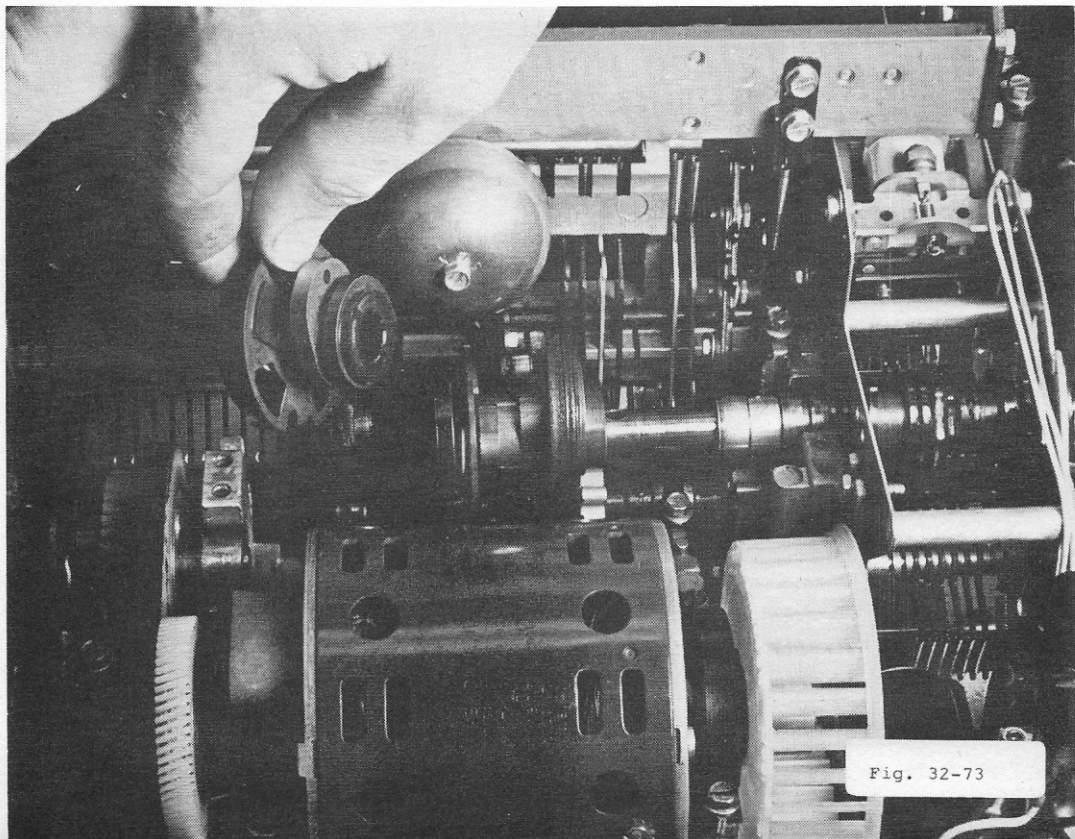
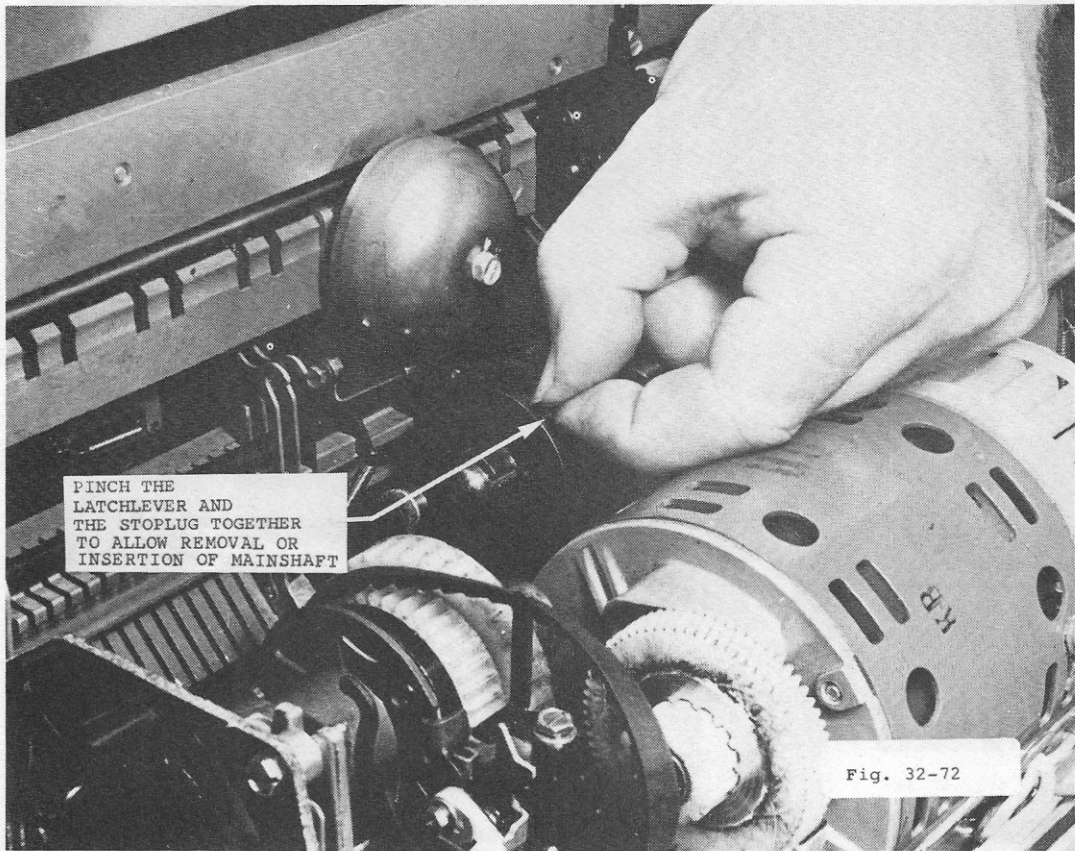
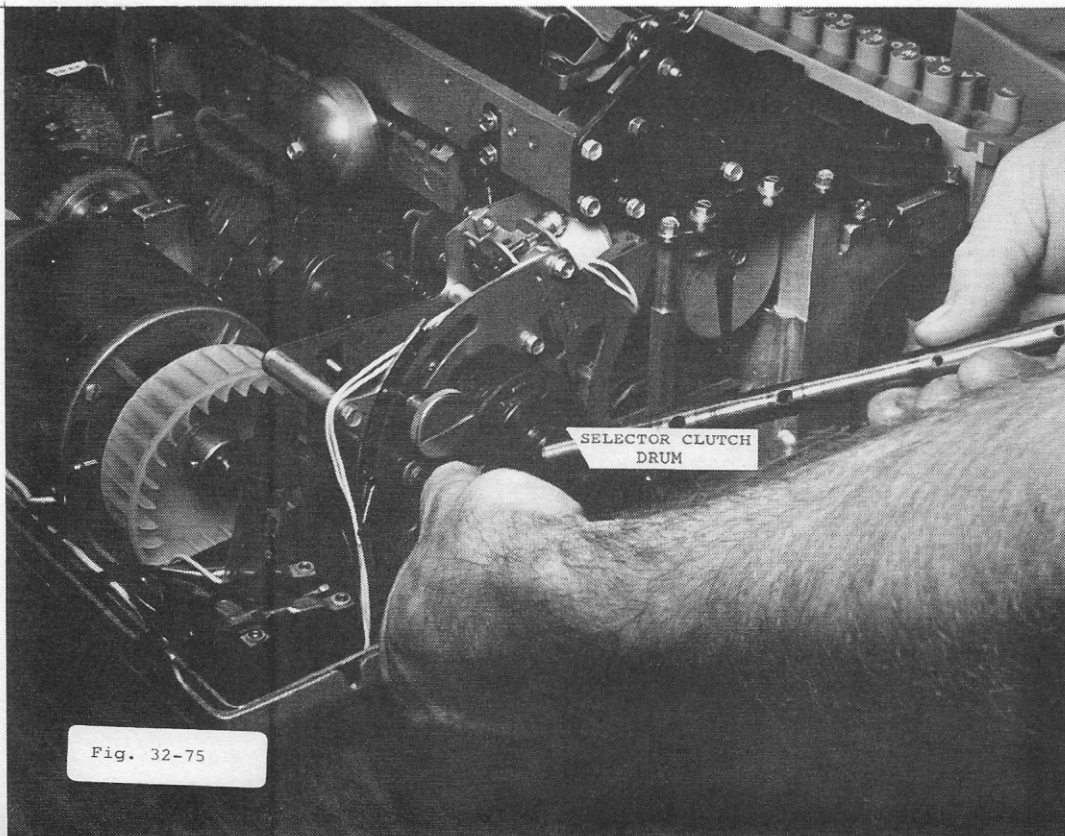
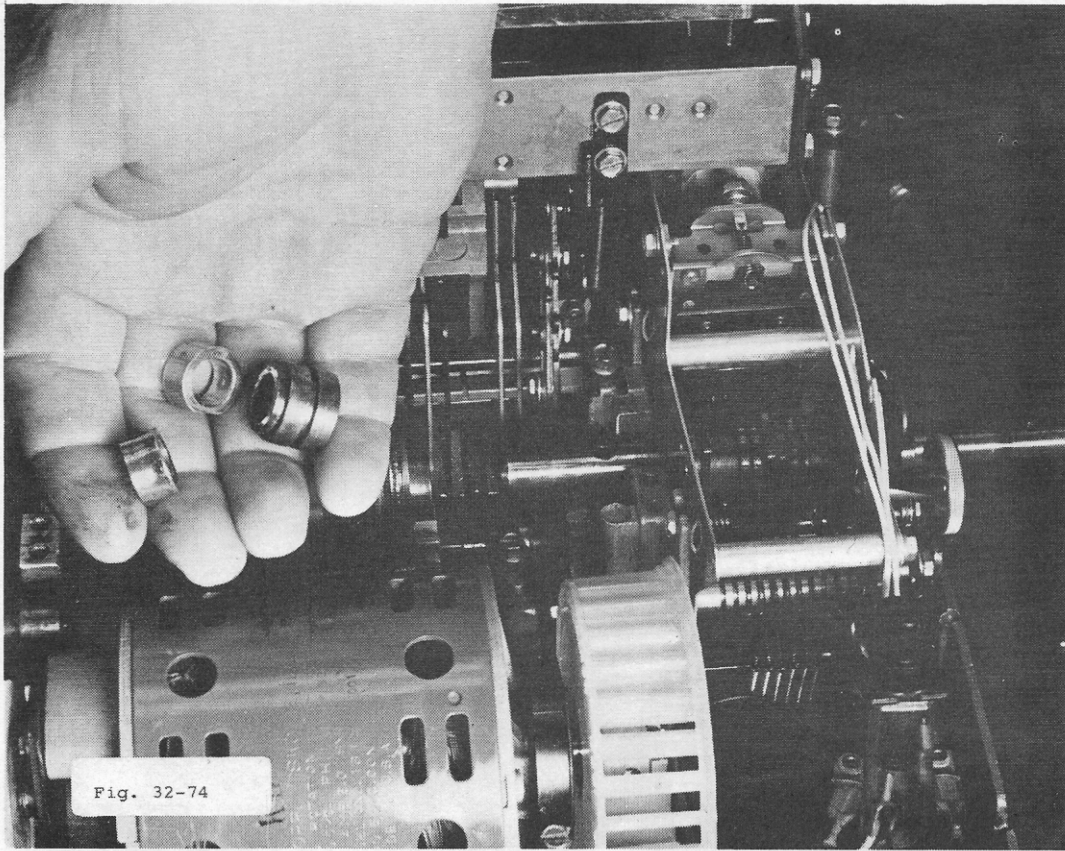


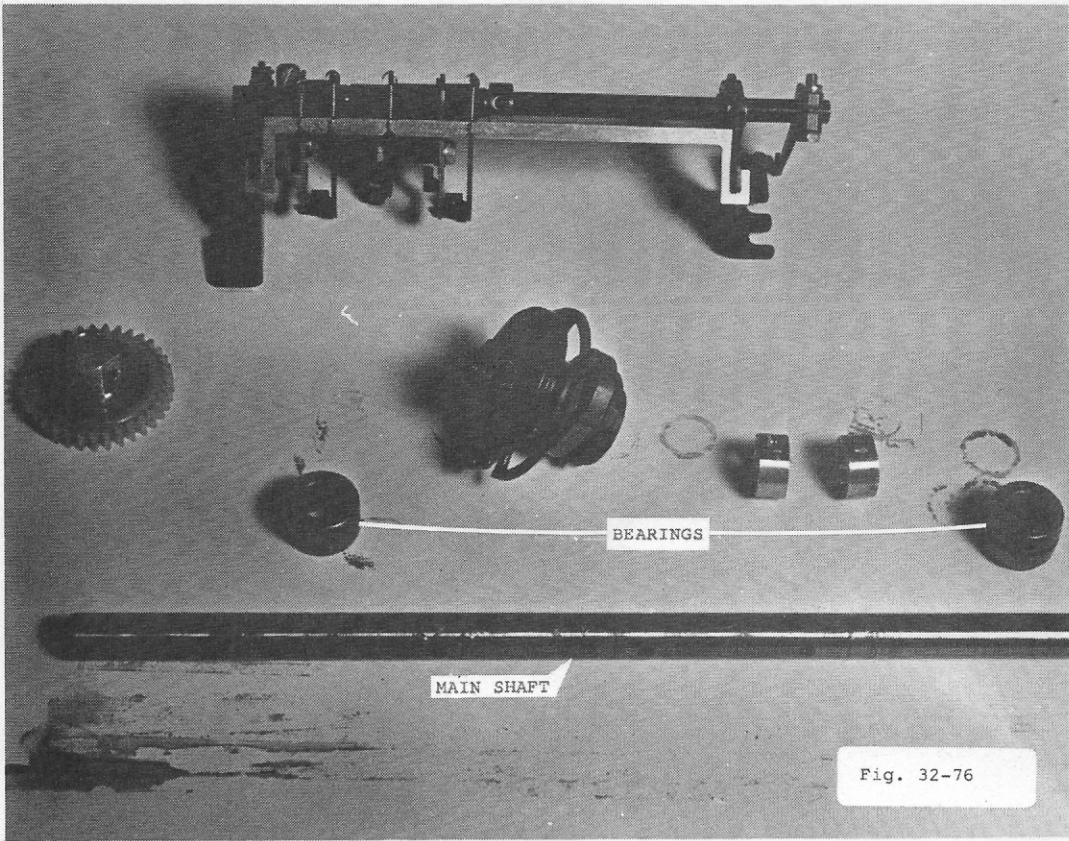
Fig. 32-71











CLUTCH ASSEMBLY  
(SHOES POSITIONED  
INCORRECTLY)

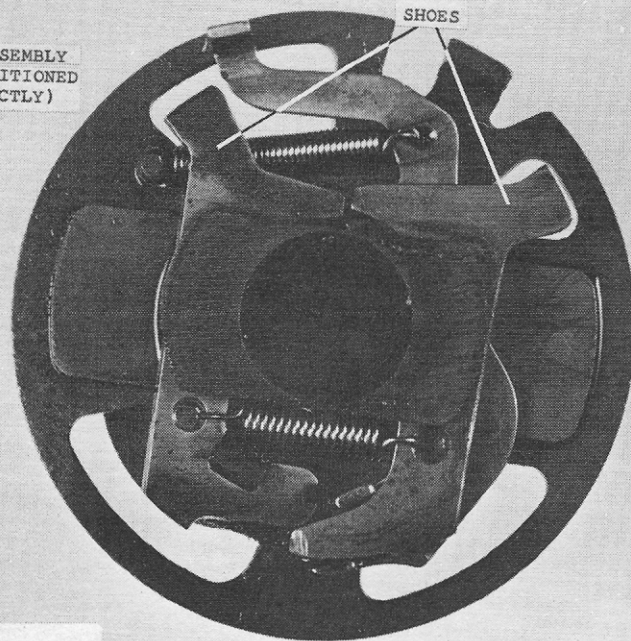


Fig. 32-77

CLUTCH ASSEMBLY  
(SHOES POSITIONED CORRECTLY)

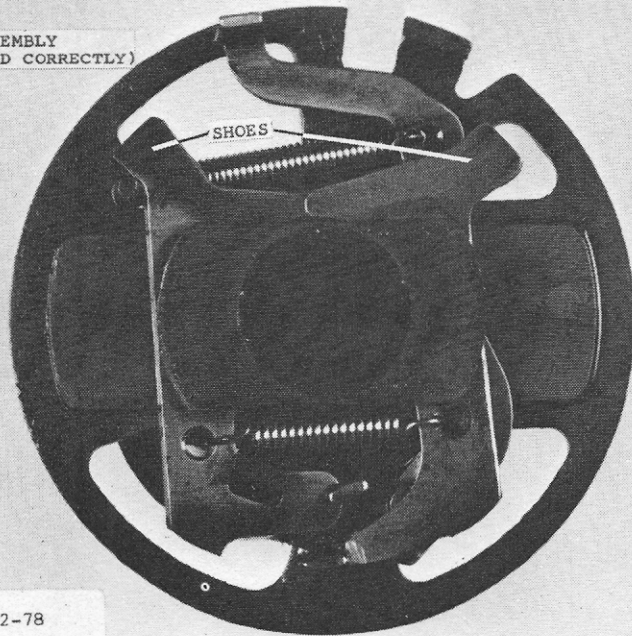


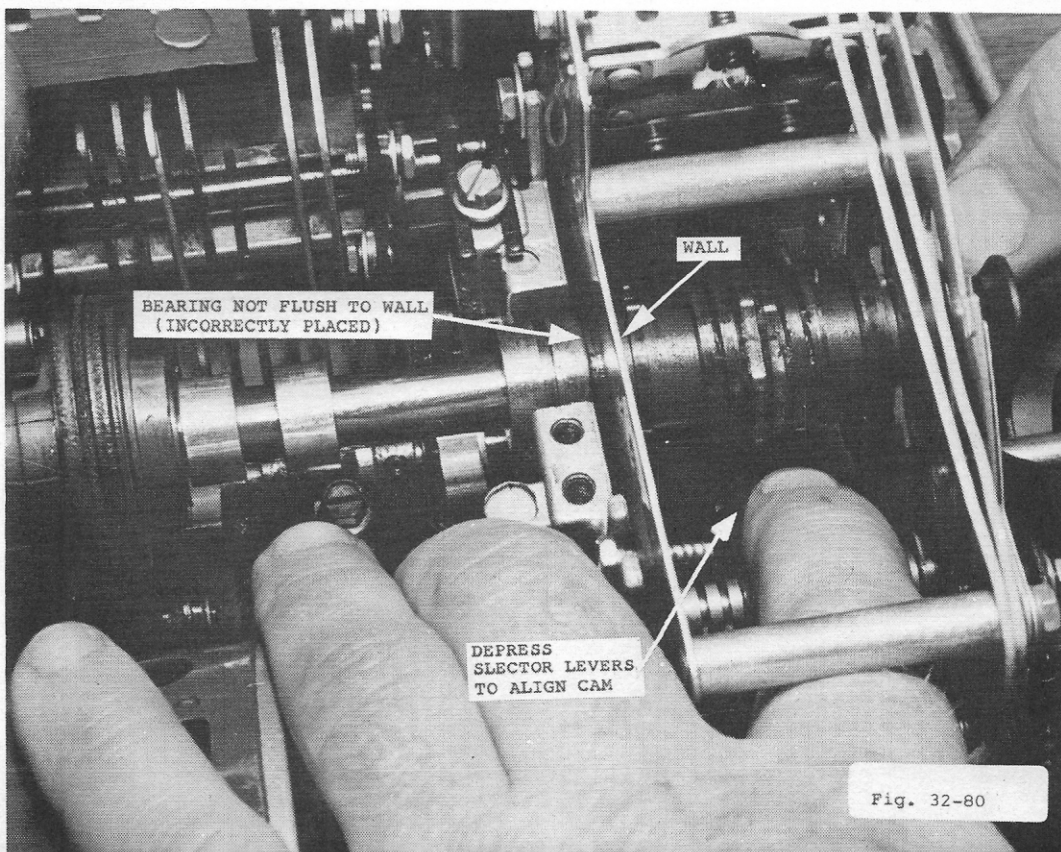
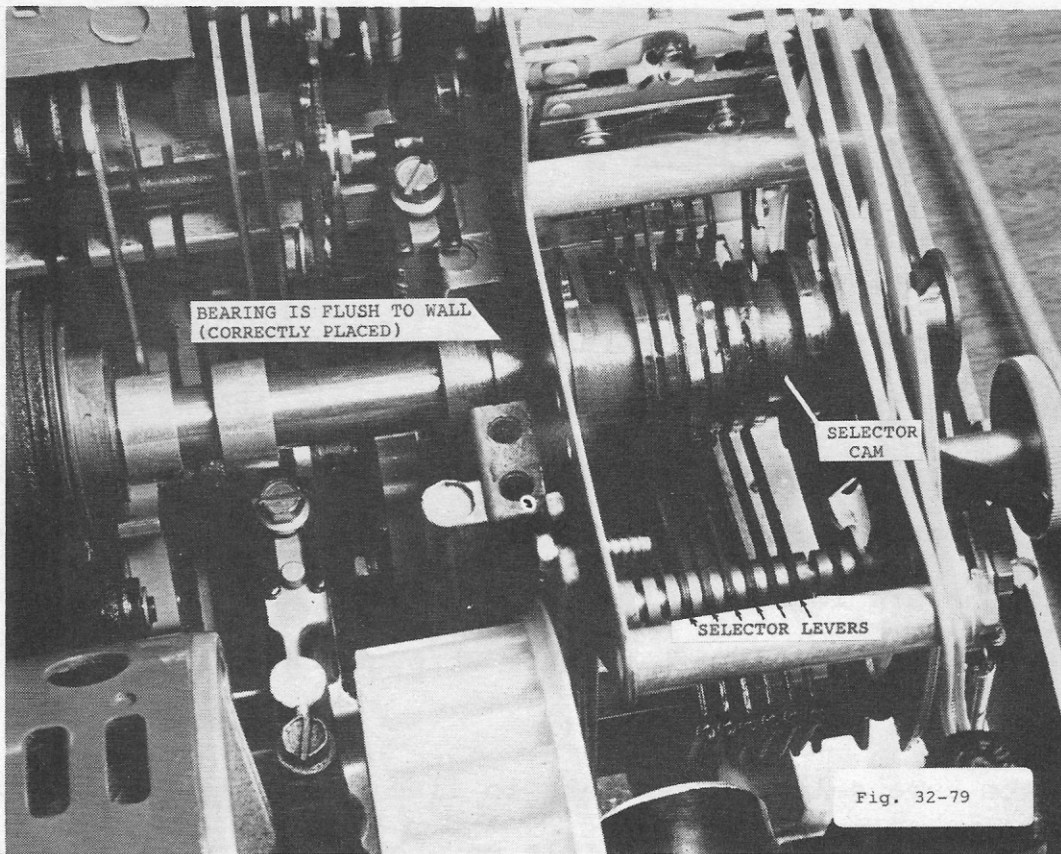
Fig. 32-78



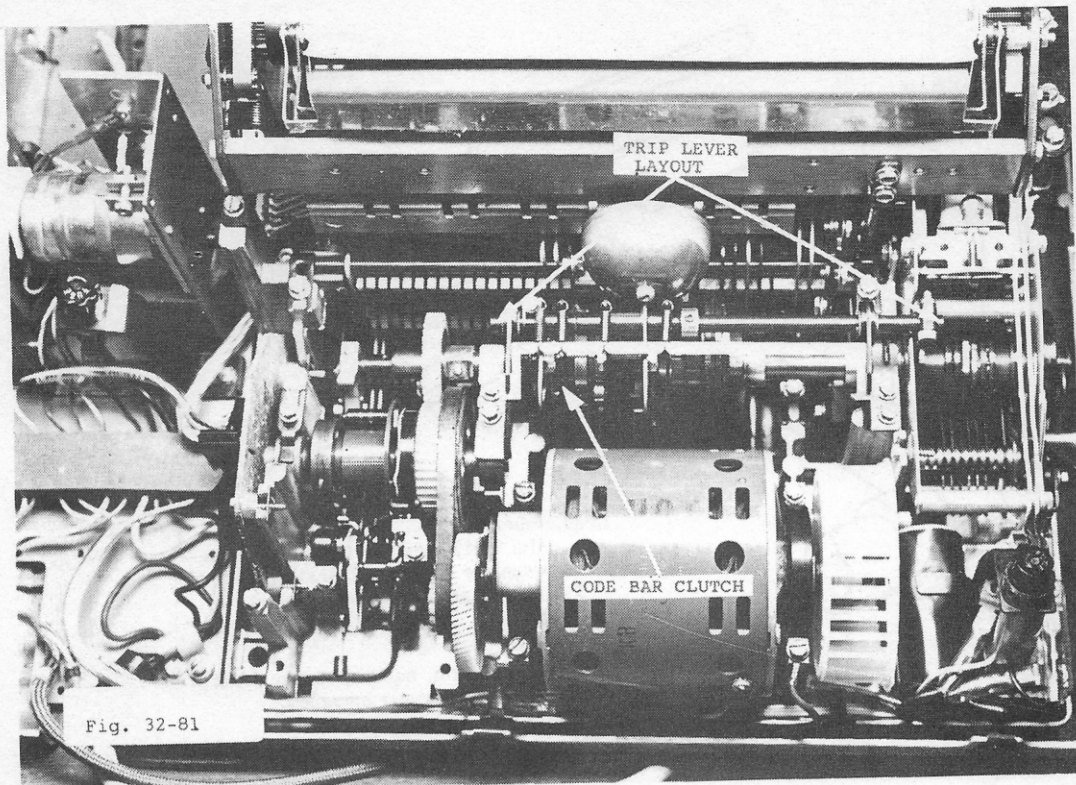
J. REINSTALLING THE MAINSHAFT

1. Be sure to pinch the latchlever and the stoplug together (Fig. 32-72) to let the mainshaft through the clutch assembly. The clutch assembly is a delicate thing and if the drum is separated from the clutch, the shoes may separate and get out of alignment. Refer to Fig. 32-77. Proper shoe positions are found in Fig. 32-78. Incorrectly placed shoes will not allow mainshaft to pass through the clutch assembly.
2. Alignment of mainshaft parts:
  - a) Make sure selector cams are in line with selector levers according to Fig. 32-79. It may be necessary to depress selector levers with your finger in order to align the cam. See Fig. 32-80.
  - b) Make sure bearing is correctly placed and flush to wall according to Fig. 32-79. Example of bearing not flush to wall is in Fig. 32-80.
3. Reinstallation of Trip Lever:

Refer to Fig. 32-81 for trip lever layout and to Fig. 32-82 for line-up instructions.







CODEBAR CLUTCH TRIP LEVER LINE-UP

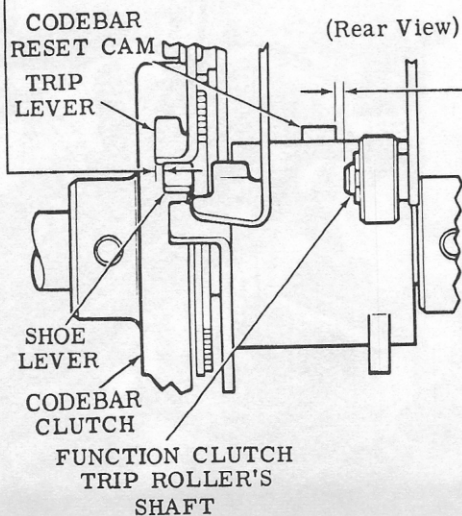
(1) Requirement

As gauged by eye, codebar clutch trip lever approximately aligned with shoe lever

within 0.030 inch.

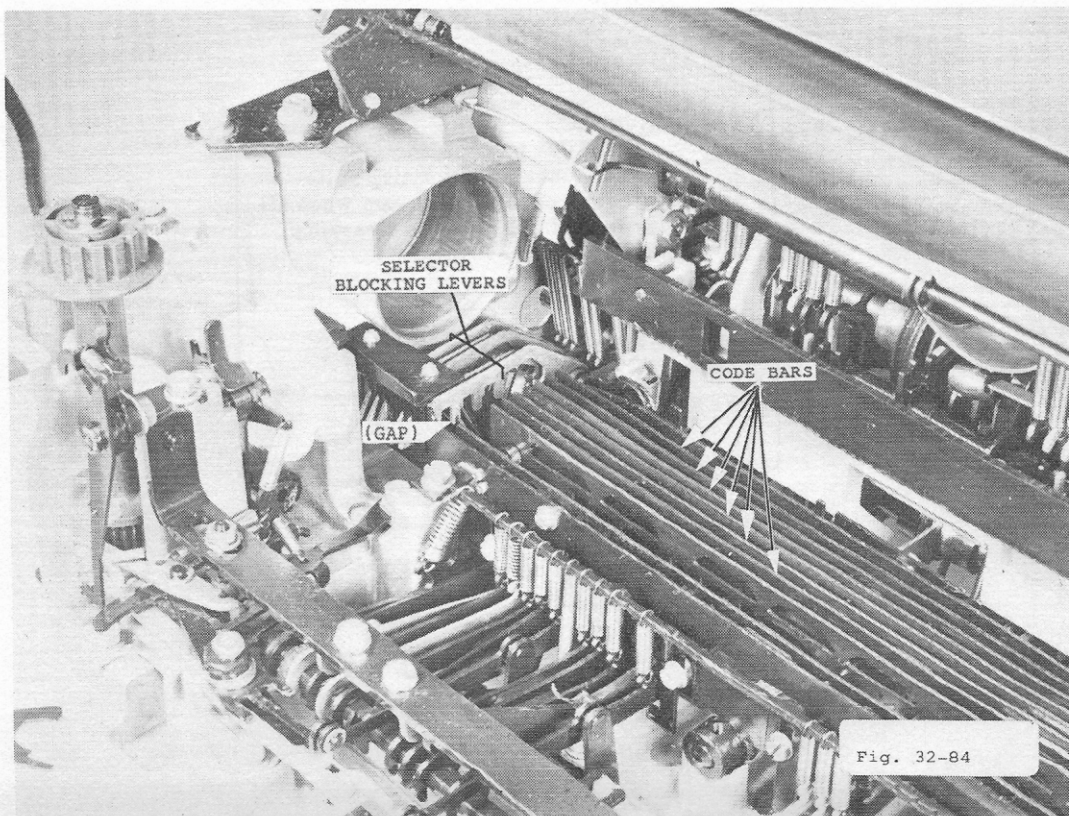
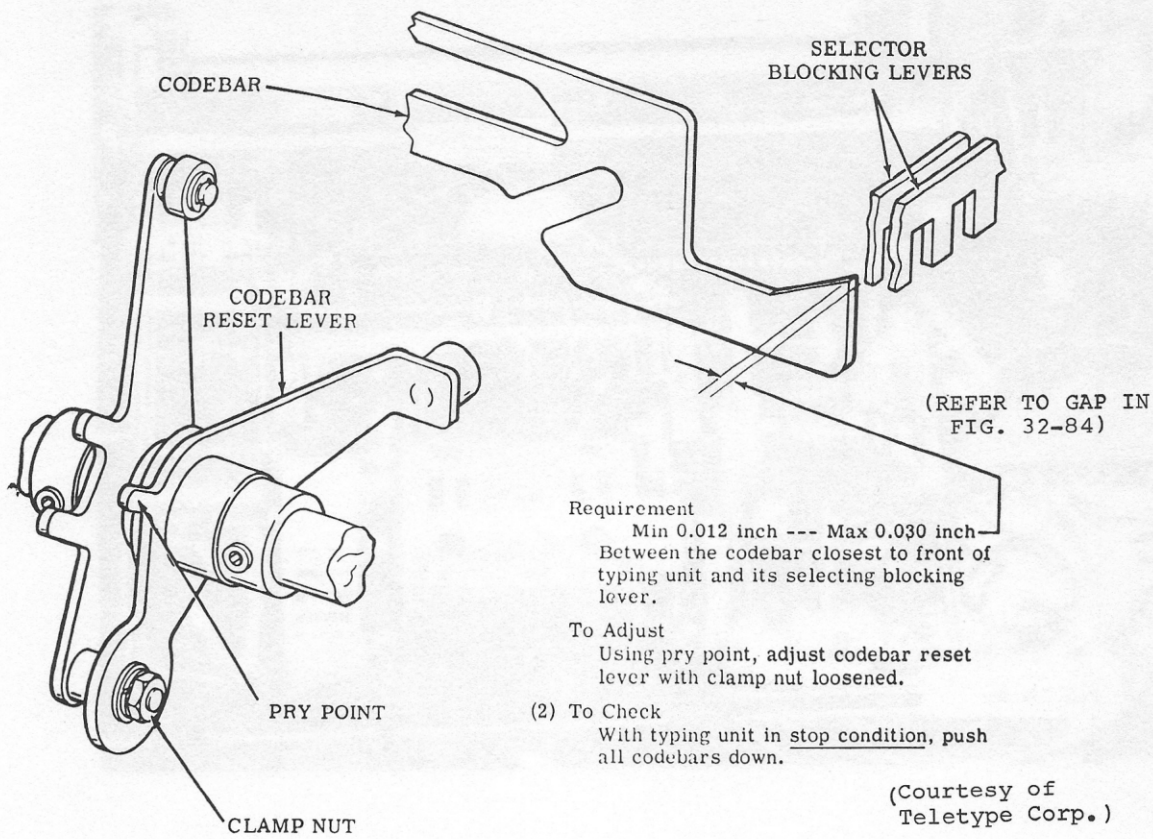
(2) Requirement

Min 0.005 inch between function clutch trip roller's shaft and codebar reset cam when all play is taken up to make clearance minimum.



(Courtesy of Teletype Corp.)

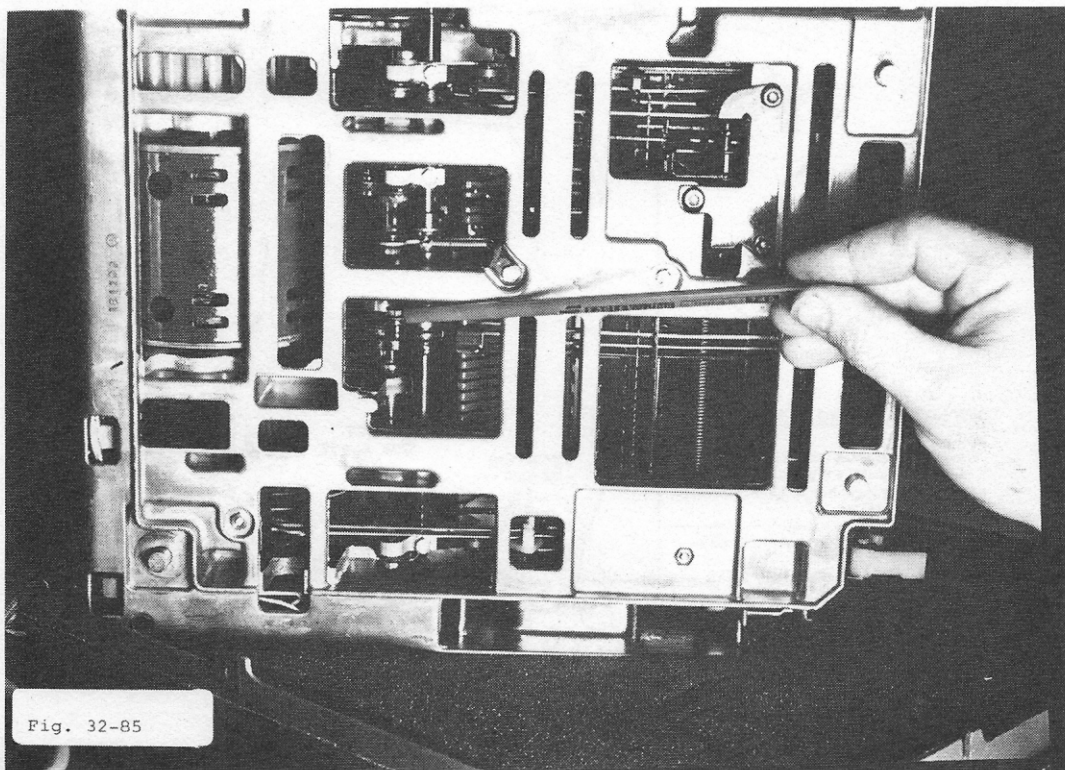
Fig. 32-82

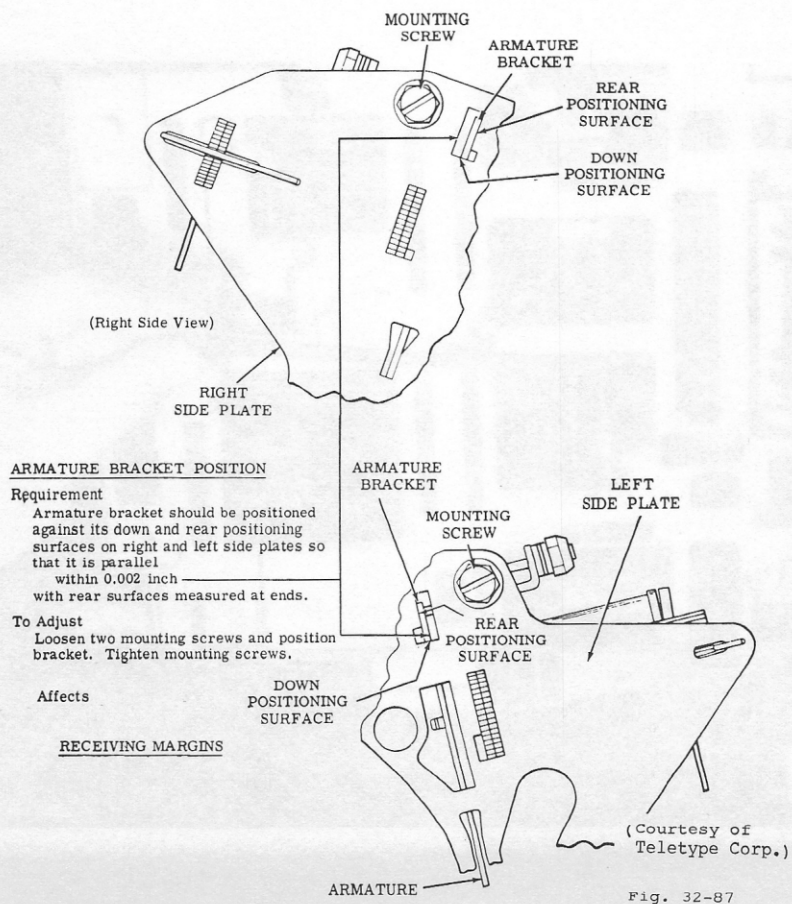
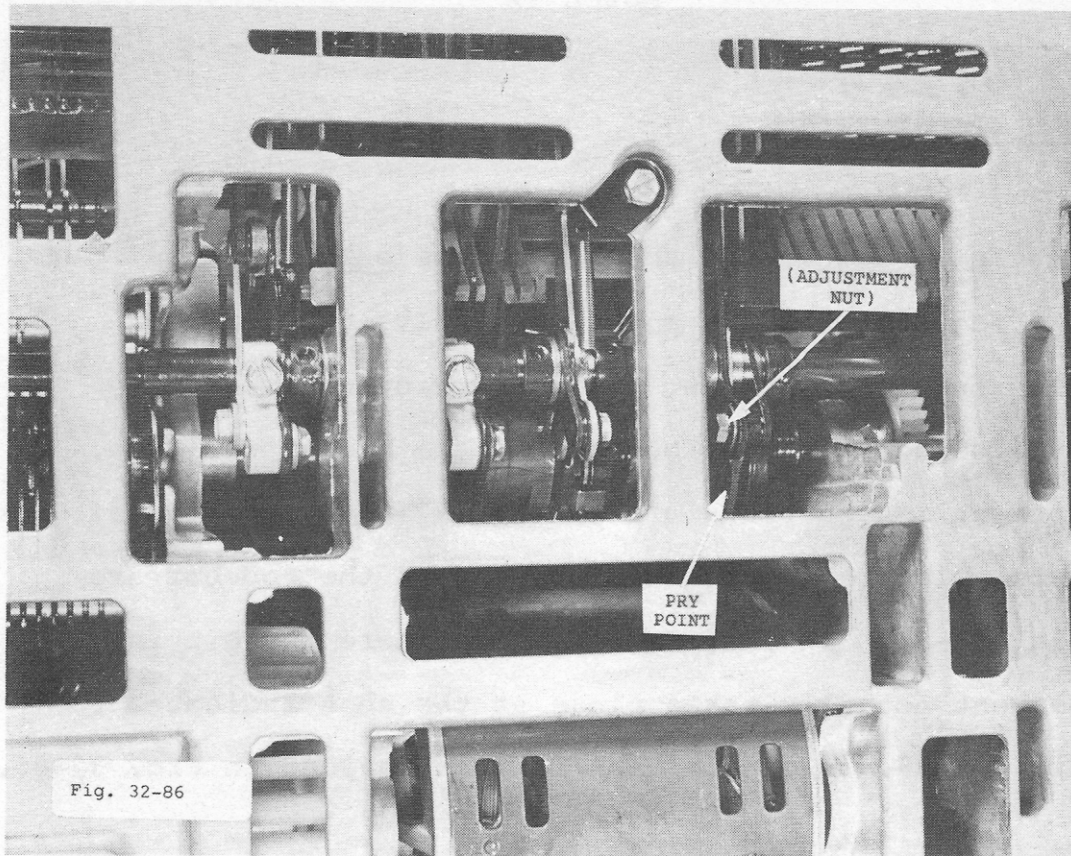




K. CODEBAR ADJUSTMENTS

1. This type of adjustment should be done only when the simple adjustments have not helped solve the problem of misprinted characters. Such misprinting is usually not the continuous type but rather the occasional type.
2. Adjustment instructions are in Fig. 32-83. Location of selector blocking levers and the end of the codebar are in Fig. 32-84. In that figure, note where the gap is. Adjustment actually takes place at the spot indicated by Fig. 32-85. A closer look can be provided in Fig. 32-86.

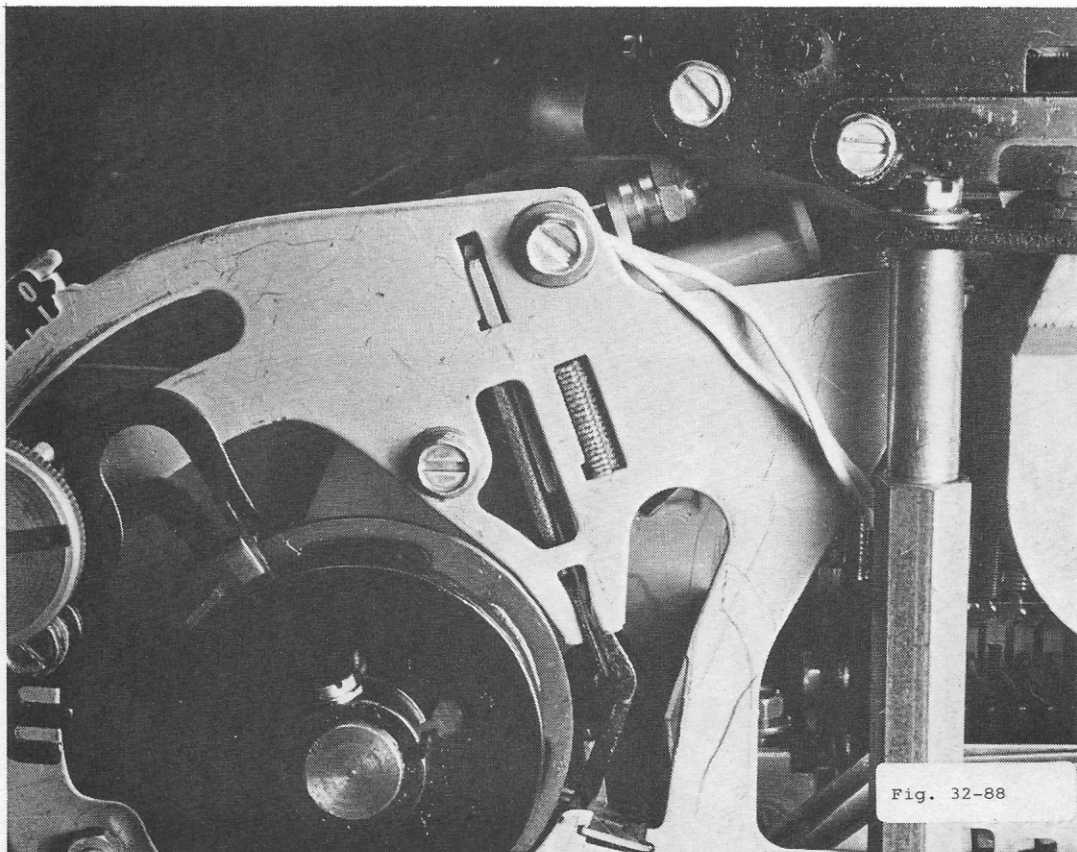






L. ARMATURE BRACKET ADJUSTMENT

1. Occasional misprinting could be caused by armature bracket misalignment but not too likely. This is a very simple adjustment procedure.
2. Refer to Fig. 32-87 for adjustment information and Fig. 32-88 for location.

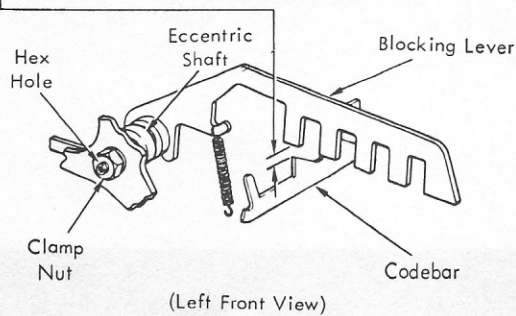


- (1) With rangefinder set at 80, selector in all marking condition and clutch disengaged, manually trip codebar clutch and rotate main shaft to position codebars flush with left edge of blocking levers.

Min 0.006 inch---Max 0.050 inch  
between no. 1 (leftmost) blocking lever  
and codebar.

Min 0.003 inch  
between remaining blocking levers and  
codebars.

- (2) With all clutches latched, trip and rotate selector clutch (selector conditioned all marking). As clutch shoe lever travels between the 12 and 3 o'clock positions, there should be no vertical motion of the no. 1 or no. 2 blocking levers.



(Courtesy of  
Teletype Corp.)

**To Adjust**

Loosen clamp nut and use hex wrench to position eccentric shaft — keep shafts chamfered right shoulder to the rear.

Fig. 32-89

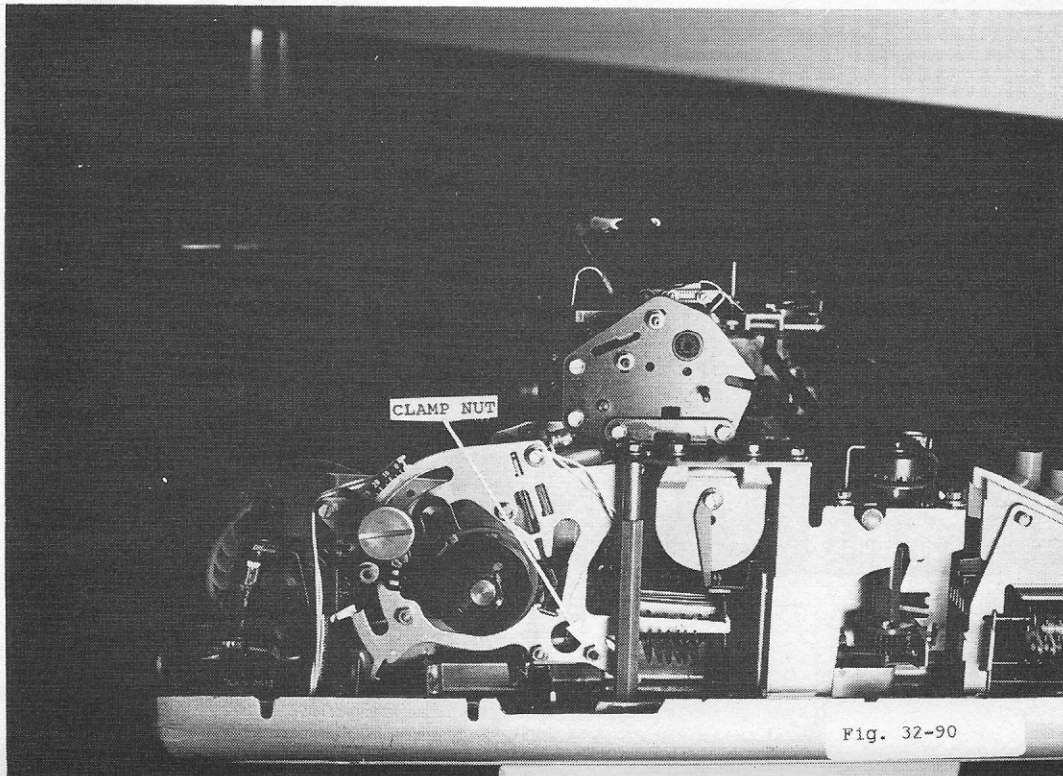


Fig. 32-90



M. BLOCKING LEVER POSITION ADJUSTMENT

1. Occasional misprinting could be caused by the blocking lever slightly out of position.
2. Refer to Fig. 32-89 for adjustment information and Fig. 32-90 for location of adjustment point.

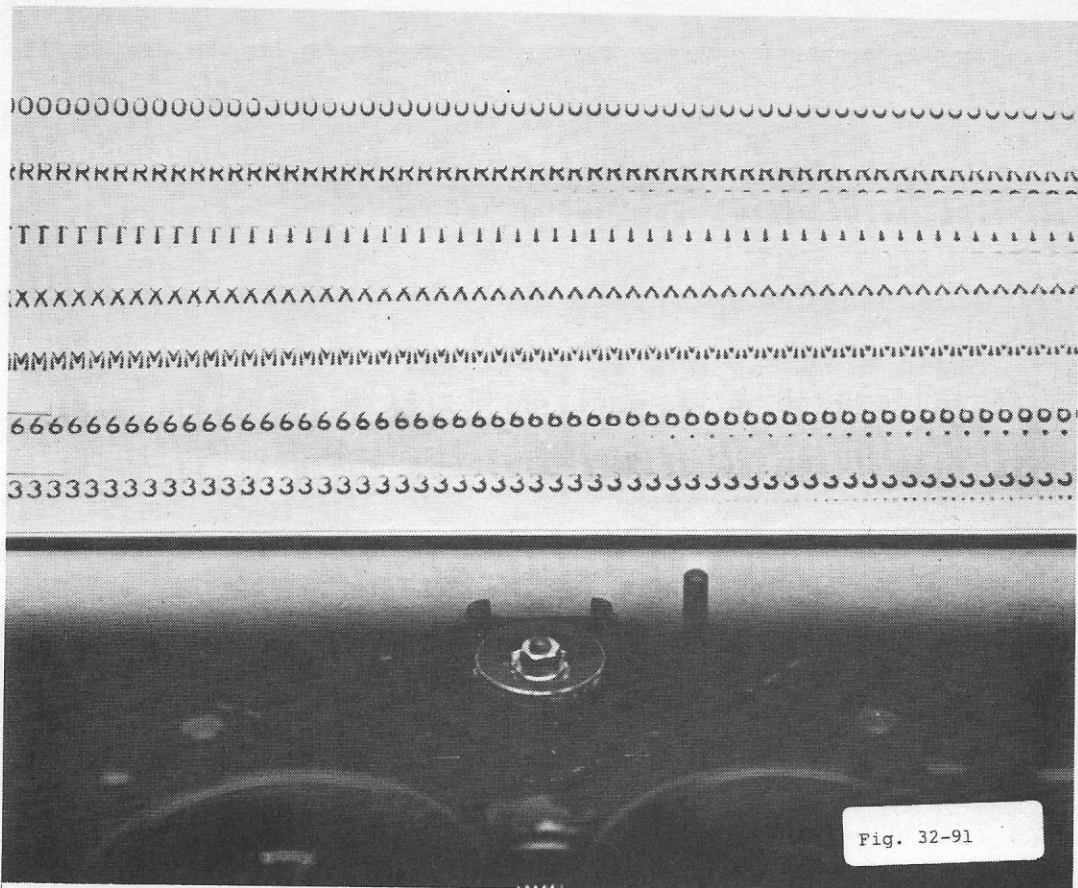
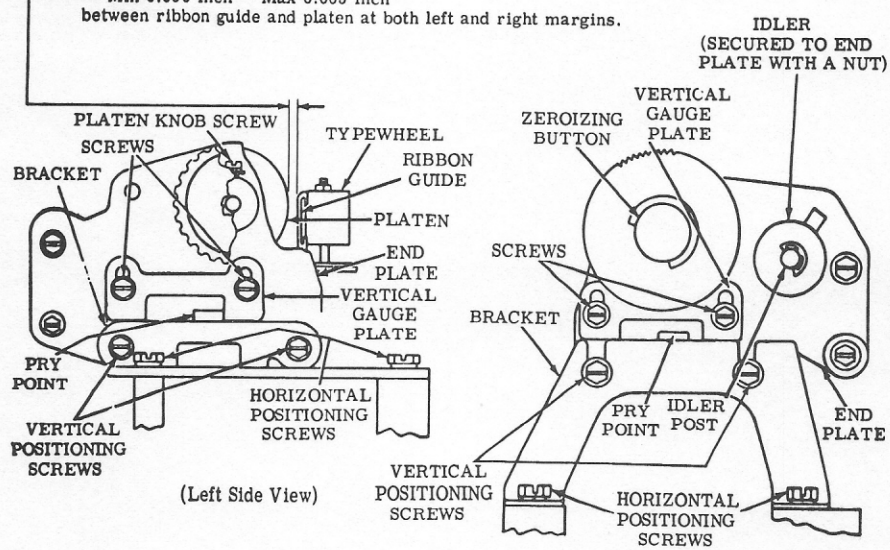
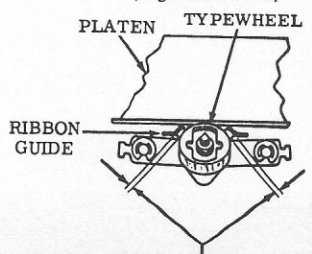


Fig. 32-91

**Requirement**  
 Min 0.050 inch---Max 0.065 inch  
 between ribbon guide and platen at both left and right margins.



- (2) To Check  
 Place carriage to center of platen and rotate platen until maximum clearance is obtained between platen and ribbon guide. Set up E code combination (1-3---78) in the selector. Rotate main shaft until carriage drive ball is in its rearmost position. Push typewheel to the rear until it just touches the platen.



(Courtesy of Teletype Corp.)

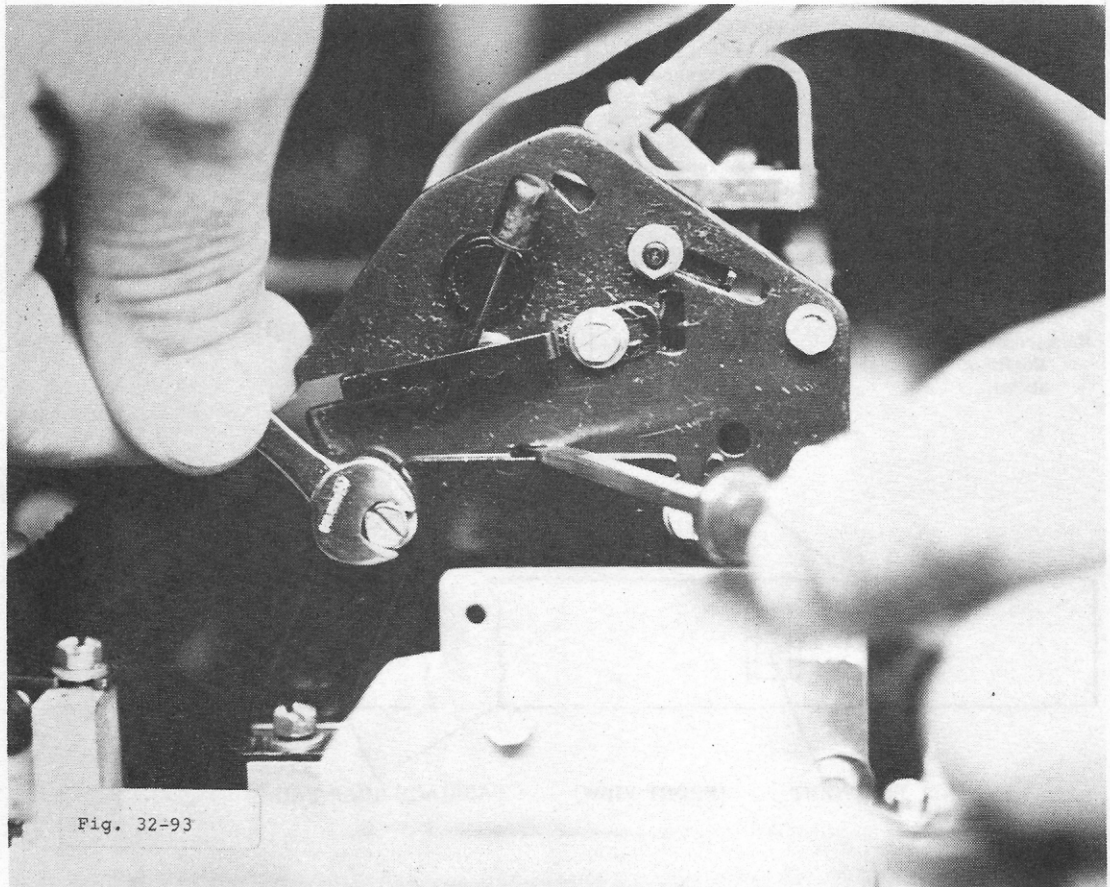
**Requirement**  
 Typewheel should not touch inside of either ribbon guide.

Fig. 32-92



N. PLATEN ADJUSTMENTS

1. Misalignment of platen can result in poorly printed characters such as those in Fig. 32-91.
2. Fig. 32-92 describes alignment instructions and Fig. 32-93 shows location of alignment points.



**REAR RAIL**

(1) To Check  
Position the carriage on the left side of the typing unit with the center of the typewheel 2-7/8 inches from the platen left mounting plate. Manually operate the typing unit until the codebars fully rise. Depress the letters blocking lever.

Continue to rotate the main shaft until the shift slide barely comes to rest on the stop plate.

**Requirement**

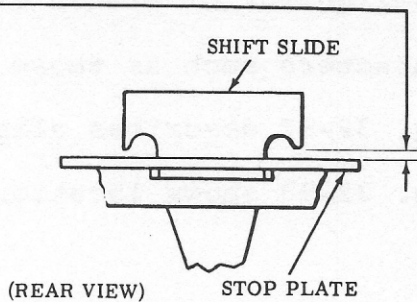
With all play in shift slide taken up in the downward direction  
Min 0.028 inch --- Max 0.042 inch ---  
between bottom edge of shift slide and top edge of stop plate. Record the measurement.

(2) To Check

Position the carriage to the right side of the typing unit with the center of the typewheel 1/2 inch from the right-hand margin. Manually operate the typing unit until the codebars fully rise. Depress the letters blocking lever (see above note). Continue to rotate the main shaft until the shift slide barely comes to rest on the stop plate.

**Requirement**

Perform "Requirement" in "(1) To Check" above.



(REAR VIEW)

(3) To Check  
Calculate the difference between the recorded measurements in "(1) To Check" and "(2) To Check" above.

**Requirement**

Max 0.010 inch  
difference between recorded measurements.

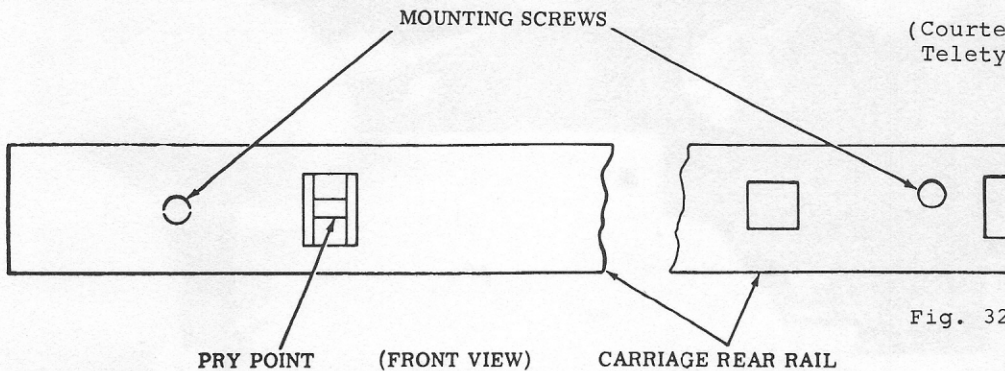
**To Adjust**

With two carriage rear rail mounting screws friction tight, position carriage rear rail using pry point.

**Related Adjustments**

**Affects**

- REAR ROLLER
- RESET LEVER
- PULSE LEVER
- DRIVE BAIL
- PLATEN-VERTICAL
- PRINT RESET ARM
- PRINT DRIVE LEVER



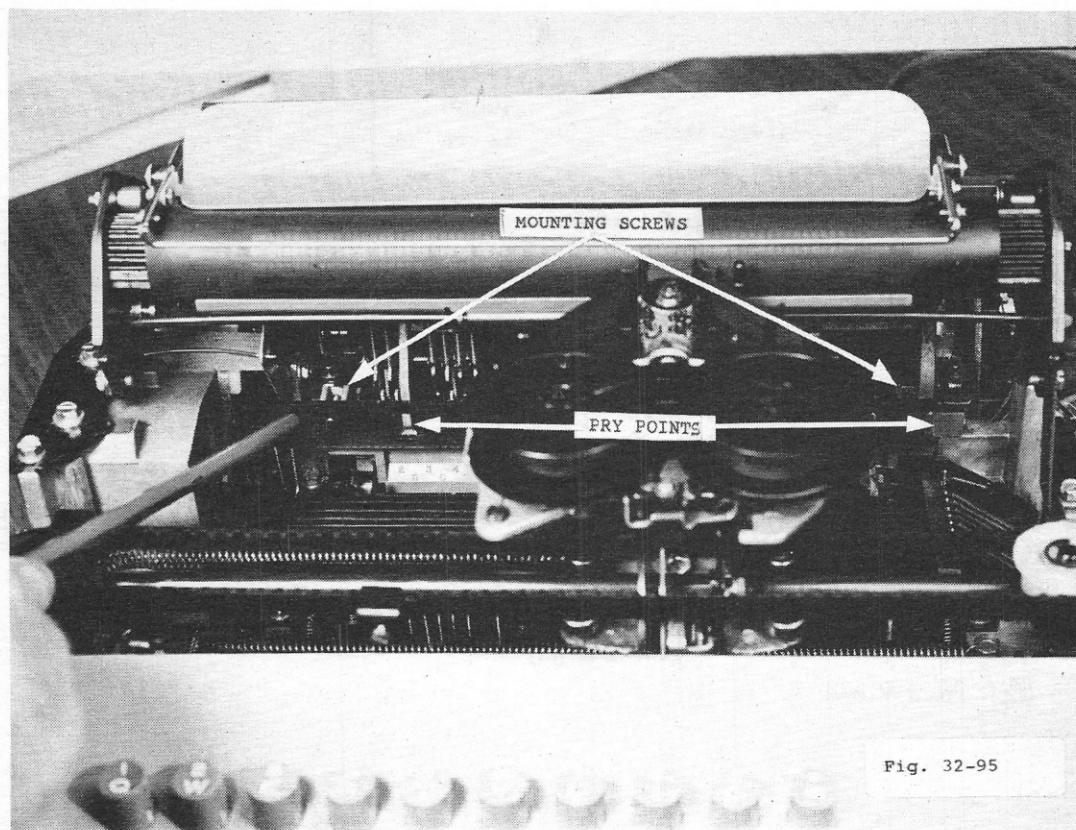
(Courtesy of Teletype Corp.)

Fig. 32-94



O. CARRIAGE REAR RAIL ALIGNMENT

1. Misalignment of the rear rail will result in incorrect printing only on a part of the full 72 character line.
2. Alignment instructions are given in Fig. 32-94. Location of alignment points are shown in Fig. 32-95.



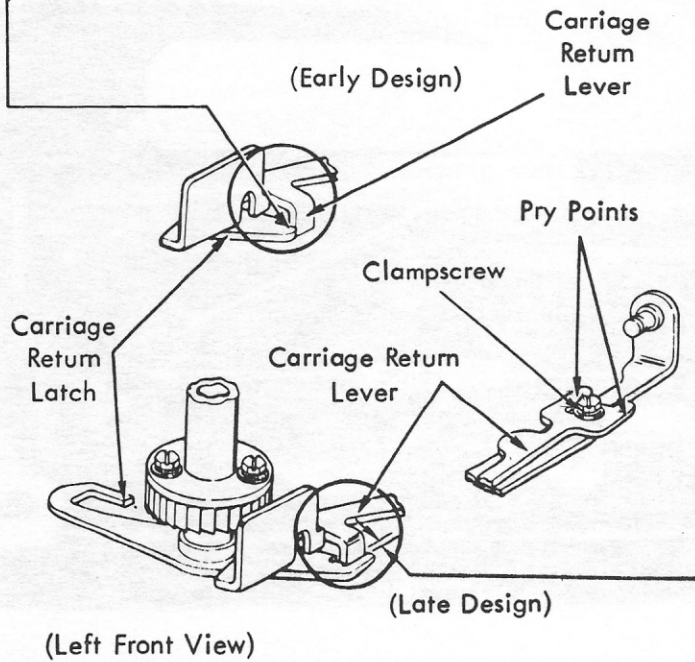
**Requirement**

With carriage return code in selector, rotate main shaft until function bail reaches lowest point of travel.

- (1) **Early Design**  
Carriage return lever should be flush with carriage return latch within 0.005 inch.
- (2) **Late Design**  
Min some---Max 0.030 inch  
between carriage return lever and carriage return latch.

**To Adjust**

With clampscrew loosened, use pry points to position carriage return lever.



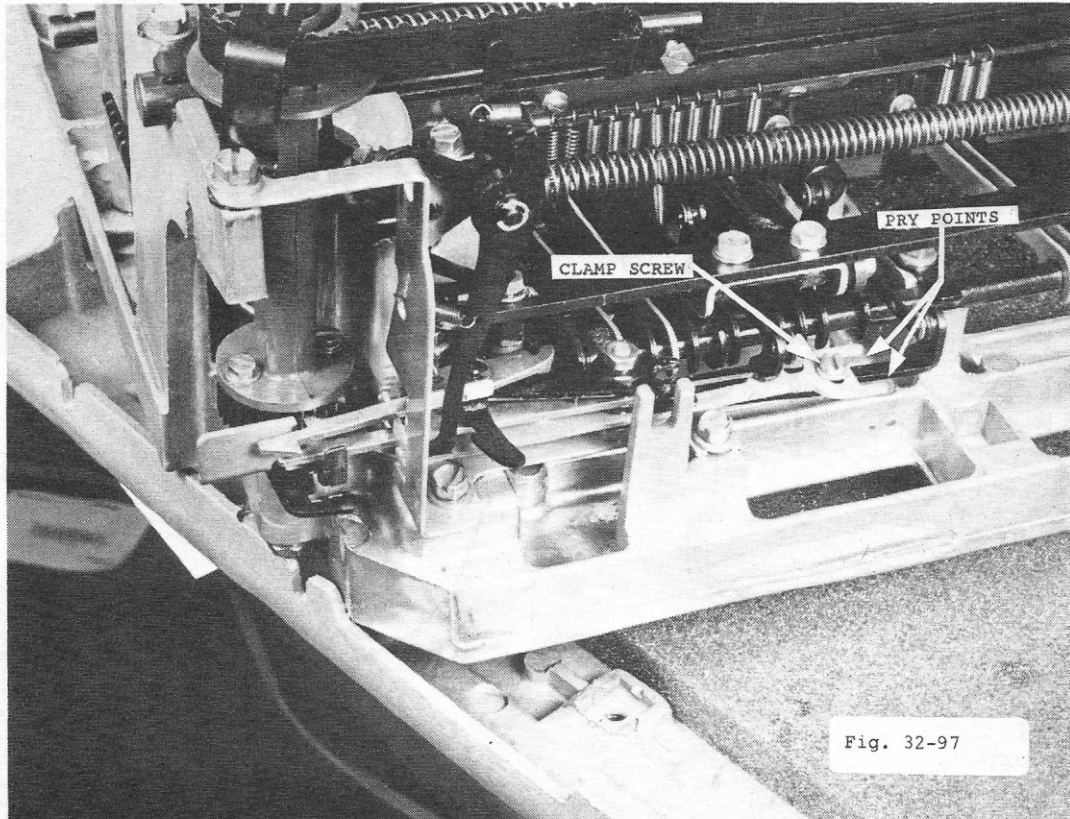
(Courtesy of Teletype Corp.)

Fig. 32-96



P. CARRIAGE RETURN ADJUSTMENTS

1. This adjustment is needed when carriage return misses occasionally.
2. Adjustment instructions are given in Fig. 32-96. Location of adjustment points are shown in Fig. 32-97.



### LEFT ROCKER DRIVE ARM

#### To Check

Set up "carriage return" code combination (---4-) or (1-34---8) in selector. Rotate main shaft until function bail is at highest point of travel.

#### Requirement

Min 0.020 inch---Max 0.040 inch between carriage return function lever and its function pawl.

#### To Adjust

Using pry point, adjust left rocker drive arm with clampscrew loosened.

#### Related Adjustments

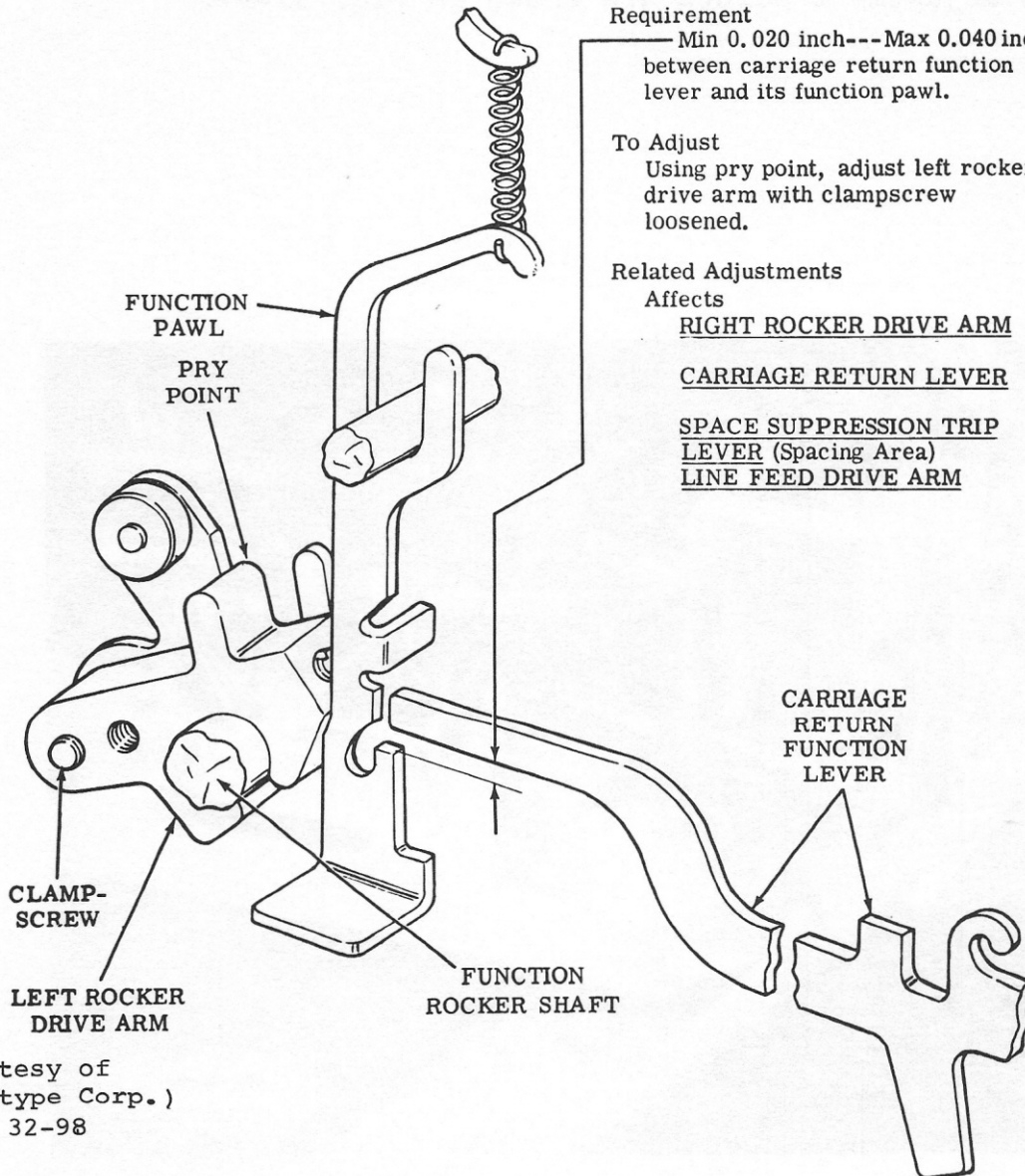
Affects

RIGHT ROCKER DRIVE ARM

CARRIAGE RETURN LEVER

SPACE SUPPRESSION TRIP LEVER (Spacing Area)

LINE FEED DRIVE ARM



(Courtesy of  
Teletype Corp.)  
Fig. 32-98



Q. LEFT AND RIGHT ROCKER ARM ALIGNMENTS

1. Misalignment of either rocker arm results in misalignment of function pawls. This means that carriage return, line feed, and space suppression may not function properly.
2. Figure 32-20 shows location of rocker arms and pry points. Refer to Figs. 32-98 and 32-99 for left and right alignment instructions.

RIGHT ROCKER DRIVE ARM

To Check

Set up answer-back character "WRU" (-234-) or (1-3---8) code combination in selector. Rotate main shaft until function bail is at its highest point. Make sure that distributor clutch has not been tripped.

Min 0.015 inch --- Max 0.050 inch

To Adjust

Using pry point, adjust right rocker drive arm with clampscrew loosened

Related Adjustments

Affects

CARRIAGE RETURN LEVER

LINE FEED DRIVE ARM

LINE FEED STRIP LEVER

SPACE SUPPRESSION TRIP LEVER

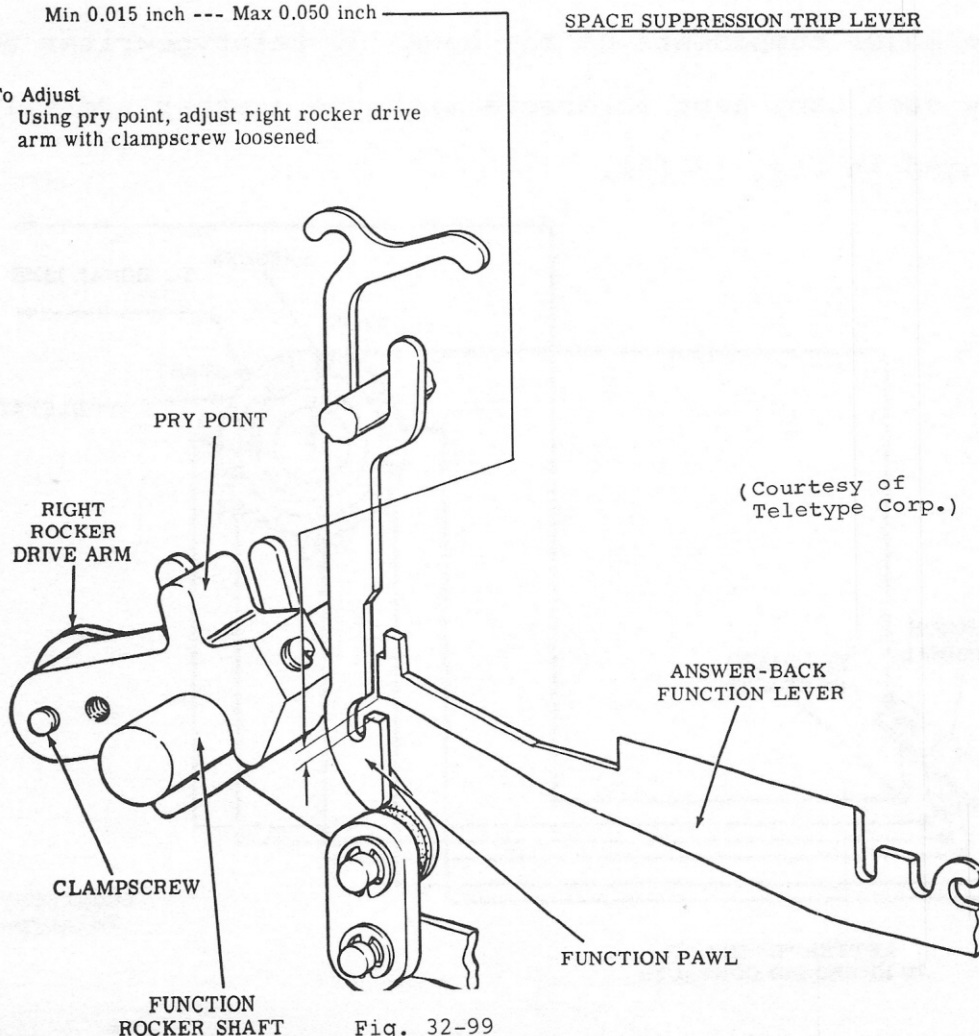
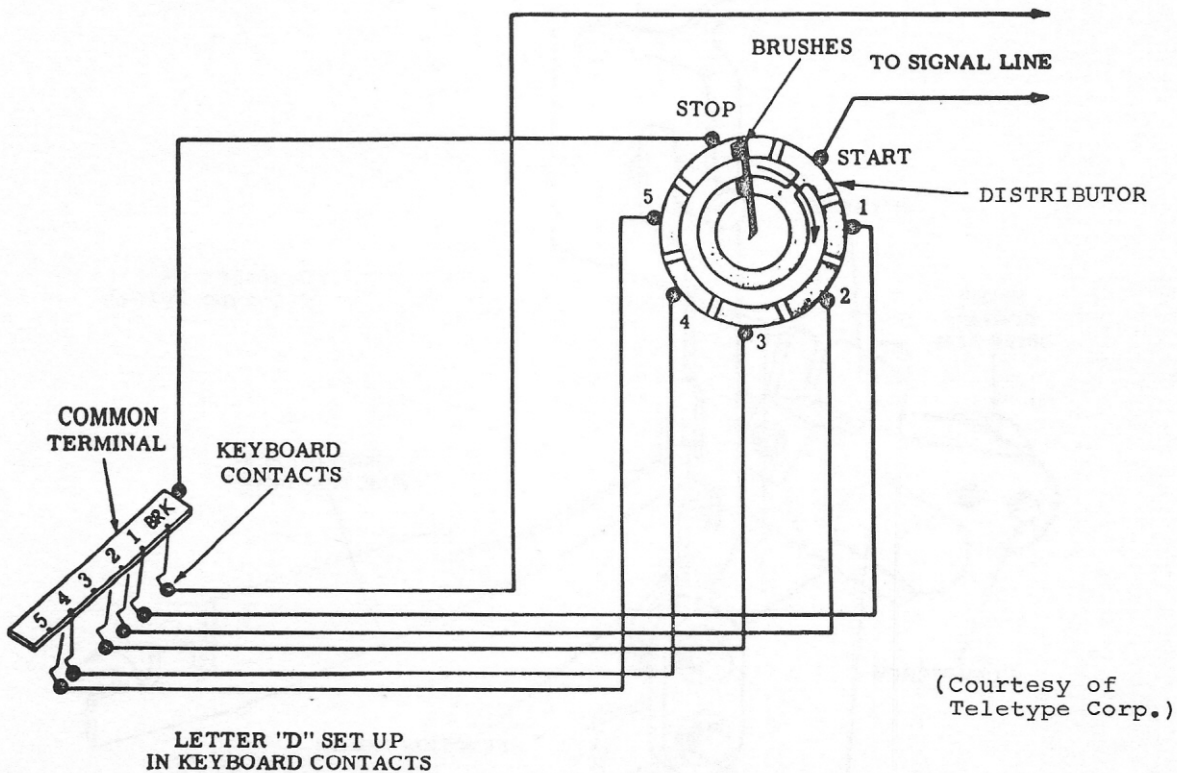


Fig. 32-99

R. MISCELLANEOUS MODEL 32 INFORMATION

1. The keyboard contacts are set up for parallel operation; that is, the individual contacts operate at the same time either in MARK or SPACE position. The timing of the MARK and SPACE pulses are provided by the distributor. It is interesting to note that the configuration of the keyboard contacts of the M15, 28, and 32 teletypewriters are quite different from each other; yet, they generate the same signal pattern. Figure 32-100 shows the configuration of the Model 32 keyboard contacts and how they are connected to the distributor.
  
2. The major components of the Model 32 teletypewriter and how each component interacts with one another are illustrated in Fig. 32-101.



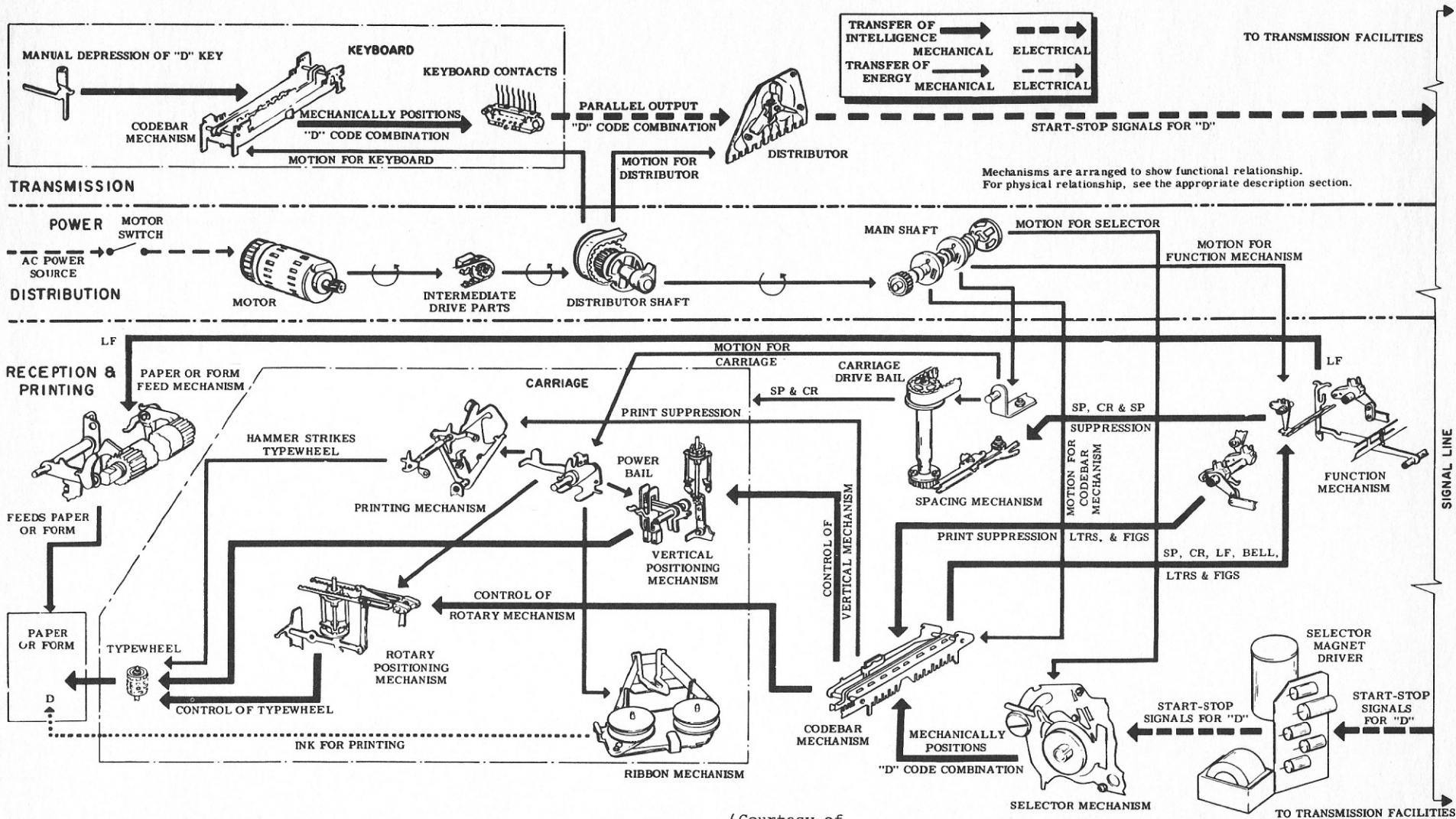
(Courtesy of Teletype Corp.)

- Signal Wiring - 32 Keyboard Contacts

Fig. 32-100



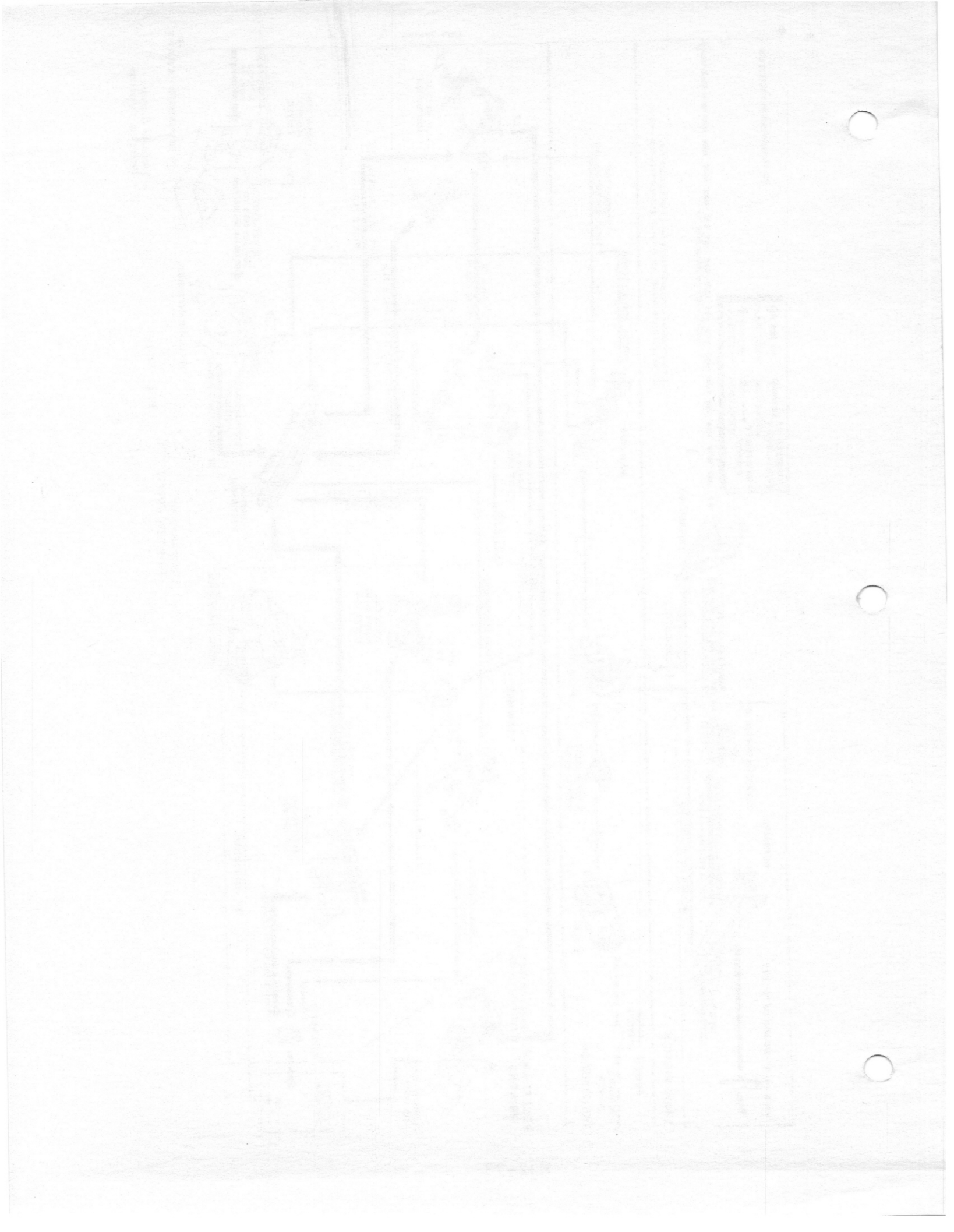
M32-73



(Courtesy of Teletype Corp.)

Fig. 32-101

- Schematic Diagram - Typing Unit Operation





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