

INSTRUCTIONS FOR INSTALLING THE 193749 MODIFICATION KIT  
TO PROVIDE REMOTE CONTROL NON-INTERFERING "LETTERS"  
TAPE FEED-OUT MECHANISM ON MODEL 35 TYPING REPERFORATORS

1. GENERAL

a. The 193749 Modification Kit provides a suitable length of "LETTERS" tape by remote control at the end of each message. Reperforators so equipped may be mounted on any existing base other than the keyboard of the Automatic Send-Receive Set (ASR) or the Reperforator Transmitter Set (RT).

b. The 193749 Modification Kit, after feeding out a predetermined but adjustable (.6" to 18") length of "LETTERS" tape, stops, recycles, and remains inoperative until another feed-out cycle is initiated. Should a message be received during any part of the tape feed-out cycle, the mechanism stops and does not interfere with or cause loss of any portion of the incoming message.

c. The 193749 Modification Kit has the 173465 Frame Assembly on which the start magnet operates with 115V. A.C. + 10%, 120 V. D.C. + 10% with 1350 ohms resistance, and 48 V. D.C. + 10% with a 350 ohms series resistance.

d. The 193749 Modification Kit consists of:

3	2034	Washer, Flat	2	125011	Washer, Flat
9	2191	Washer, Lock	2	151152	Screw
1	2539	Nut	2	151629	Nut
2	3640	Washer, Lock	2	151630	Screw
1	4812	Wick, Oiling	2	151632	Screw
3	7002	Washer, Flat	1	151642	Screw
1	7655	Spring	1	151658	Screw
3	8330	Washer, Flat	1	151659	Screw
2	45963	Spring	1	151694	Screw
1	55669	Spring	2	153799	Screw
1	73175	Washer, Lock	3	153839	Screw
1	76422	Spring	1	156132	Bearing, Eccentric
1	86873	Spring	1	156136	Bracket
1	101796	Washer, Felt	1	156137	Washer Flat
2	110743	Washer, Lock	1	156740	Screw
1	113039	Spring Post	1	159565	Bracket, Mounting
2	119649	Ring, Retainer	1	160842	Washer, Spring
1	119653	Ring, Retainer	1	162809	Spring
1	119655	Ring, Retainer	1	162741	Cam
1	119656	Ring, Retainer	1	162742	Pawl, Detent

1	162743	Pawl, Feed	1	173602	Plate w/Stud
1	162744	Shaft	1	173604	Spring Post
1	162745	Lever w/Shaft	1	173605	Bail Assembly
1	162747	Roller	1	173614	Link w/Stud
1	162748	Lever w/Hub	1	173616	Lever w/Hub
1	162753	Collar, Spacing	1	173618	Bail
1	162755	Bracket, Spring	1	173621	Cable Assembly
1	162756	Bushing	1	179573	Nut
1	162758	Lever, Cam Follower	1	193639	Lever w/Shaft
1	162762	Slide Storage Assembly	1	193869	Bracket
3	163327	Ring, Retainer	1	193875	Plate, Trip
1	173465	Frame Assembly	1	193876	Lever, Trip
1	173601	Cam	1	193878	Lever, Slide Trip

e. For parts referred to other than those listed above, see Teletype Parts Bulletin 1188B.

## 2. INSTALLATION

### NOTE

References in the text to left or right, up or down, front or rear, apply to the unit in its normal operating position as viewed from the front.

a. Replace the 151416 Hexagon Nut that fastens the 156094 Front Toggle Link to the 156060 Eccentric Shaft with the 179573 Hexagon Nut.

b. Mount the 162762 Slide Storage Assembly to the 156028 Punch Front Plate using two 152893 Screws, 3640 Lock Washers and 125011 Flat Washers. The 162772 Link (part of the 162762 Slide Storage Assembly) must engage the 179573 Nut.

c. Remove and retain the selector mechanism in accordance with standard practice. Discard only the 156472 Spring Post and the 151442 Screw which are used to mount the 152402 Selector Lever Guide Post.

d. Replace the 170234 Selector Lever Guide Bracket with the 193869 Selector Lever Guide Bracket replacing all the screws, lock washers, levers and spring.

e. Remove and retain the 156248 Punch Slide Latches and associated springs. Replace the 170203 Reset Bail Trip Lever with the 193878 Reset Bail Trip Lever. Replace the 156248 Punch Slide Latches and springs. Add the 76422 Spring with a 4812 Wick between the reset bail and the new reset bail trip lever.

f. Remove the main shaft as follows:

(1) Remove and discard the 150040 Function Clutch Drum Mounting Screw retaining the 2191 Lock Washer.

(2) Remove and discard the 151632 Screw, retaining the 2191 Lock Washer used to mount the collar.

(3) Loosen the 159411 Lower Cam Follower Roller.

(4) Remove and retain the 156467 Retainer Ring, two 151246 Washers, and the 156465 Spring Washer from the selector end of the main shaft.

(5) Remove and retain the 158745 Bearing Clamp and its mounting hardware.

(6) Pull the main shaft out from the rear of the unit. The function cam, clutch assembly, and collar will drop.

#### NOTE

If the unit being modified is equipped with needle bearings, the 40 needle bearings must drop out before the function clutch drum can slide over. Retain all parts except the collar.

(7) If the unit being modified is equipped with a function cam and clutch assembly with needle bearings, remove and retain the 156527 Trip Bracket and its associated parts. To do this remove and retain the 151630 Screw and 2191 Lock Washer used to mount the bracket to the 162862 Bar, and the two 151631 Screws, 2191 Lock Washers, and 7002 Flat Washer that mount the bracket to the frame.

g. Mount the 162755 Spring Bracket on the top of the 159625 Rocker Bail Guide Bracket using the existing screws and lock washers while discarding the two 7002 Flat Washers.

h. Replace the main shaft as follows:

#### NOTE

Relubricate the main shaft in accordance with standard practice.

(1) Add the 119656 Retainer Ring to the groove in the main shaft near the rear ball bearing.

(2) Add a 160842 Spring Washer to the main shaft next to the 119656 Retainer Ring.

(3) Start the selector end of the main shaft through the rear bearing hole in the frame. Over the shaft add the 156132 Eccentric Bearing (prongs toward the selector), a 162743 Feed Pawl (teeth down and toward the right), a 156137 Flat Washer, a 162742 Detent Pawl (longest leg down and toward the right), a 162741 Cam (hub toward the front), the function cam and clutch assembly, and over the hub of the function clutch drum, add the 173601 Cam (hub toward the rear).

(4) If the unit being modified is equipped with needle bearings for the function cam and clutch assembly, push the function cam and clutch assembly toward the front and the 162741 Cam and associated parts toward the rear. Position the main shaft so that the front groove for needle rollers is between the 162741 Cam and the function cam. Add 20 needle rollers to the groove, and place the function cam and clutch assembly over the needle rollers to keep them in place.

(5) Mount the 162741 Cam to the main shaft using a 151659 Screw and the retained 2191 Lock Washer.

#### NOTE

Before securing the 162741 Cam make sure that the feed pawl, washer, and detent pawl are all on their respective eccentric shoulders. Rotate the main shaft until the feed pawl is in the extreme right position and position the 162741 Cam so that its detent is facing down.

(6) Position the main shaft so that the rear groove for the needle rollers is between the 162741 Cam and the function cam and clutch assembly. Add 20 needle rollers to the groove. Move the function cam and clutch assembly over the needle rollers to keep them in place.

(7) Mount the 173601 Cam and 150000 Clutch Drum to the main shaft with a 151642 Screw and the retained 2191 Lock Washer.

(8) Reinstall the 156467 Retainer Ring, two 151246 Flat Washers, and the 156465 Spring Washer which were removed in step 2.f.(4).

(9) Reinstall the 158745 Bearing Clamps (with its mounting hardware) removed in step 2.f.(5).

(10) Reinstall the 156257 Trip Bracket if it was previously removed in step 2.f.(7).

i. Mount the 113039 Spring Post to the 173602 Plate with a 2191 Lock Washer.

j. Remount the selector mechanism (removed in step 2.c.) in accordance with standard practice, adding the 173602 Plate to the rear of the trip bracket using a 153839 Screw (replaces the 151442 Screw) and the retained 2191 Lock Washer. Add an 8330 Flat Washer between the 173602 Plate and the frame, and replace the 156492 Spring Post with a 173604 Spring Post using the retained 2191 Lock Washer and 3598 Nut.

k. Mount the 173618 Bail and the 173616 Lever to the post on the 173602 Plate using the 119653 Retainer Ring.

l. Add the 55669 Spring between the 173616 Lever and the 173618 Bail; and the 7655 Spring between the 173618 Bail and the 173602 Plate.

m. Readjust the rocker bail lower roller, the rocker bail guide bracket, the selector and the punch in accordance with standard practice.

n. To the 162745 Drive Arm:

(1) Add the 101796 Felt Washer and 162747 Roller to the post with a 119649 Retainer Ring.

(2) Add the 162748 Lever with a 156740 Screw, 2191 Lock Washer, and 8330 Flat Washer.

o. Mount the 156136 Bracket on the frame with two 151630 Screws and 2191 Lock Washers.

p. Add the 163327 Retainer Ring to the end groove of the 162744 Shaft and insert the shaft through the hole in the 156136 Bracket. Place the 162745 Drive Arm Assembly over the shaft and push the shaft through the hole in the 192828 Main Plate until the retainer ring on the shaft butts against the 156136 Bracket. Add the other 163327 Retainer Ring on the other side of the bracket. Secure the 162745 Drive Arm Assembly to the shaft with a 151658 Screw and a 2191 Lock Washer.

q. Mount the 193876 Adjusting Lever on the 162744 Shaft using a 153839 Screw, 2191 Lock Washer, 7002 Flat Washer and a 151629 Nut.

r. Add the 162753 Spacer over the 162744 Shaft and mount the 193875 Plate to the right side of the spacer with two 153799 Screws, 3640 Lock Washers, and 125011 Flat Washers.

s. Add the 86873 Spring between the 162745 Drive Arm and the 162755 Spring Bracket.

t. Secure the 162756 Bushing to the trip bracket using a 73175 Lock Washer and a 2539 Nut, so that the threaded portion is toward the front.

u. Add a 163327 Retainer Ring to the 193639 Lever w/Shaft and mount the lever w/shaft to the unit through the 162756 Bushing. Add the 162758 Cam Follower Lever to the lever w/shaft using a 153839 Screw, 2191 Lock Washer, 8330 Flat Washer and a 151629 Nut.

#### NOTE

The cam follower lever mounts in the selector between the push lever reset bail and the selector rear plate.

v. Mount the 173605 Bail Assembly on the 173465 Feed-Out Frame Assembly over the 162778 Lever w/Hub and 162775 Post and secure it with a 119655 Retainer Ring. Add the 162809 Spring between the bail and the 113039 Spring Post.

w. Mount the feed-out frame assembly as follows:

NOTE

To simplify installation, remove the ratchets from the frame assembly by removing the two retainer rings. The 162786 Blocking Arm should engage the 162745 Drive Arm. The lever on the 193639 Lever w/Shaft fits into the rectangular opening of the 162760 Latch Lever. The 173620 Armature Bail should be positioned so that it will move the 173618 Bail away from the 173605 Bail Assembly.

(1) If the unit being modified is equipped with timing contacts, remove and discard the 151632 Screw, 2191 Lock Washer, 7002 Flat Washer and the 2481 Spacer used to mount the 159565 Bracket to the right side of the frame.

(2) Secure the feed-out frame assembly to the frame by its lower mounting hole using a 151632 Screw, 2191 Lock Washer, and 7002 Flat Washer.

(3) Secure the 173614 Link w/Stud to the 173605 Bail Assembly with a 119649 Retainer Ring, and to the 164888 Lever w/Post with a 2034 Flat Washer and a 119649 Retainer Ring.

(4) On units equipped with timing contacts, proceed as follows:

(a) If the furnished 159565 Bracket is similar to the one on the unit, discard the furnished bracket, a 151694 Screw and a 2191 Lock Washer from the kit.

(b) If the furnished 159565 Bracket is not similar to the one on the unit, install the furnished bracket using the mounting hardware from the bracket on the unit. Discard the old bracket and a 151694 Screw, and 2191 Lock Washer from the kit.

(5) On units not equipped with timing contacts, proceed as follows:

(a) Remove and retain the 153839 Screw and the 2191 Lock Washer (if unit is equipped with a connector bracket discard the 2481 Spacer), used to mount the 162862 Bar to the frame.

(b) Mount the 159565 Bracket to the unit using a 151694 Screw and a 2191 Lock Washer and the 153839 Screw with 2191 Lock Washer removed in step (a) above.

(6) Secure the feed-out assembly by its upper mounting hole and the 159565 Bracket by its formed over leg using a 151632 Screw, 2191 Lock Washer and 7002 Flat Washer.

x. Add the 45963 Springs between the 159565 Bracket, the 162743 Feed Pawl, and the 162742 Detent Pawl.

y. Add the 173621 Cable Assembly and wire per Wiring Diagram 4957WD.

### 3. ADJUSTMENTS AND LUBRICATION

a. For standard adjustments and lubrication refer to the appropriate sectionalized information.

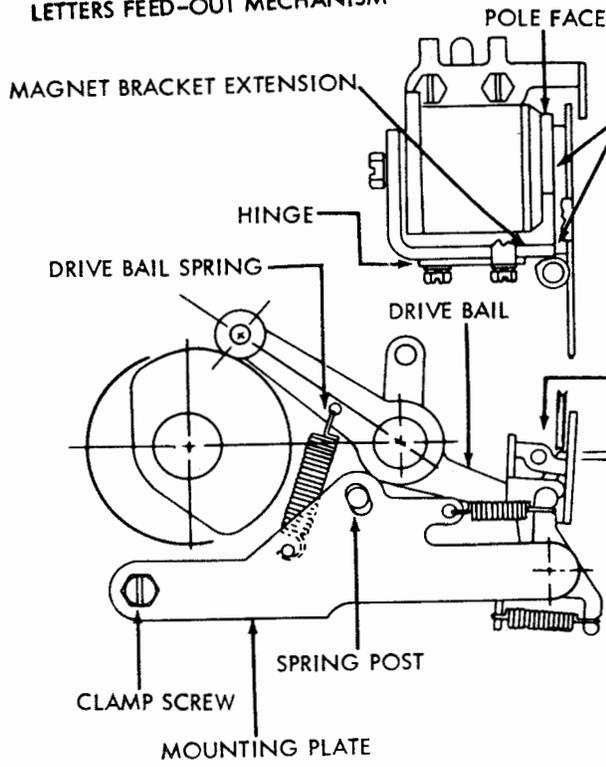
b. Make the adjustments and lubricate as shown in the attached figures.

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LETTERS FEED-OUT MECHANISM



ARMATURE HINGE

REQUIREMENT

WITH ARMATURE MANUALLY OPERATED, IT SHALL BE FLUSH AGAINST POLE FACE AND MAGNET BRACKET EXTENSION.

TO ADJUST

LOOSEN ARMATURE HINGE BRACKET MOUNTING SCREWS, POSITION ARMATURE AND TIGHTEN SCREWS.

DRIVE BAIL SPRING

REQUIREMENT

ROTATE MAIN SHAFT UNTIL DRIVE BAIL IS ON HIGH PART OF ITS CAM.

MIN. 20 OZS. --- MAX. 28 OZS.

TO START THE DRIVE BAIL MOVING.

MOUNTING PLATE

REQUIREMENT

WITH ARMATURE IN UNOPERATED POSITION, ROTATE MAIN SHAFT UNTIL DRIVE BAIL IS ON HIGH PART OF ITS CAM. CLEARANCE BETWEEN THE BLOCKING BAIL AND DRIVE BAIL SURFACE.

MIN. 0.006 INCH  
MAX. 0.015 INCH

TO ADJUST

POSITION BLOCKING BAIL WITH MOUNTING PLATE CLAMP SCREW AND SPRING POST FRICTION TIGHT.

MAGNET ASSEMBLY

REQUIREMENT

WITH ARMATURE HELD IN OPERATED POSITION, ROTATE MAIN SHAFT UNTIL DRIVE BAIL ROLLER IS ON HIGH PART OF ITS CAM. CLEARANCE BETWEEN BLOCKING BAIL AND RIGHT EDGE OF DRIVE BAIL.

MIN. 0.005 INCH

MAX. 0.015 INCH

TO ADJUST

POSITION MAGNET ASSEMBLY, ARMATURE HELD AGAINST MAGNET POLE PIECE WITH MAGNET BRACKET MOUNTING SCREWS FRICTION TIGHT.

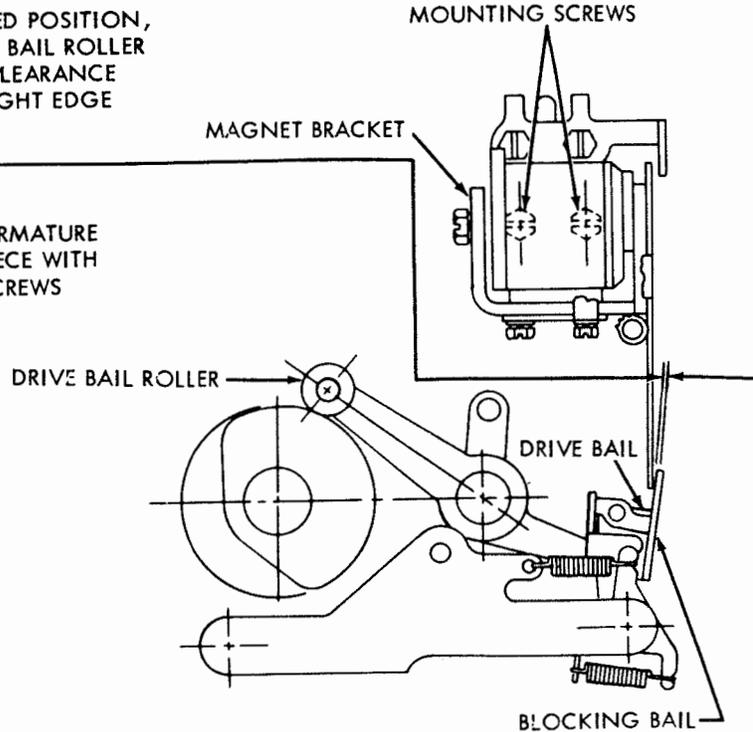
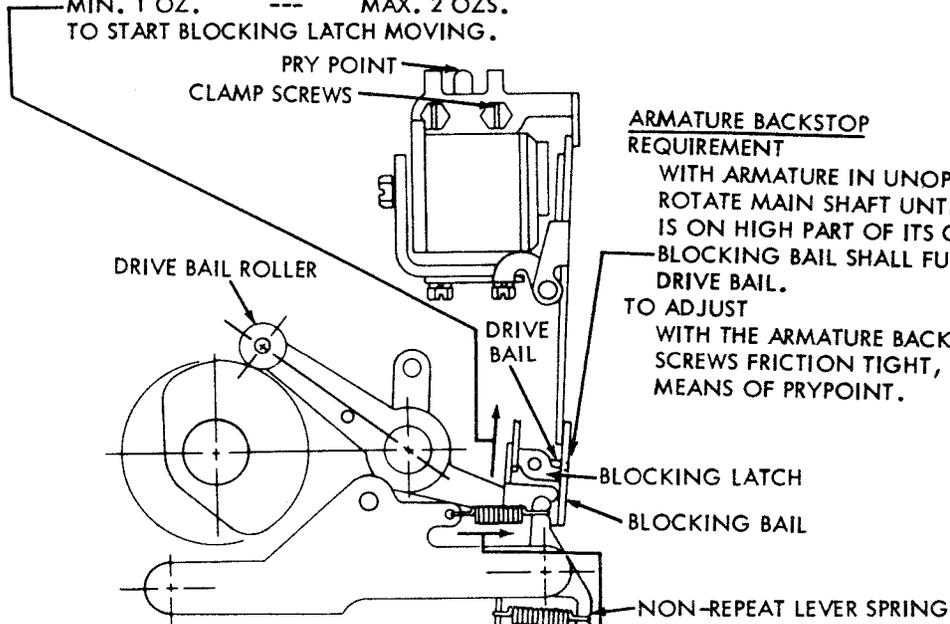


FIGURE 1.

**BLOCKING LATCH TORSION SPRING  
REQUIREMENT**

WITH ARMATURE IN UNOPERATED POSITION AND  
DRIVE BAIL ROLLER ON HIGH PART OF ITS CAM,  
MIN. 1 OZ. --- MAX. 2 OZS.  
TO START BLOCKING LATCH MOVING.



**ARMATURE BACKSTOP  
REQUIREMENT**

WITH ARMATURE IN UNOPERATED POSITION,  
ROTATE MAIN SHAFT UNTIL DRIVE BAIL ROLLER  
IS ON HIGH PART OF ITS CAM.  
BLOCKING BAIL SHALL FULLY ENGAGE THE  
DRIVE BAIL.  
TO ADJUST  
WITH THE ARMATURE BACKSTOP MOUNTING  
SCREWS FRICTION TIGHT, POSITION BY  
MEANS OF PRYPOINT.

**NON-REPEAT LEVER SPRING  
REQUIREMENT**

WITH ARMATURE IN UNOPERATED POSITION AND  
DRIVE BAIL ROLLER ON HIGH PART OF ITS CAM  
MIN. 6 OZS. --- MAX. 9 OZS.  
TO PULL SPRING TO INSTALLED LENGTH.

**BLOCKING BAIL SPRING  
REQUIREMENT**

WITH ARMATURE IN UNOPERATED POSITION AND  
DRIVE BAIL ROLLER ON HIGH PART OF ITS CAM,  
MIN. 3 OZS. --- MAX. 5 OZS.  
TO PULL SPRING TO INSTALLED LENGTH.

**RELEASE LEVER  
REQUIREMENT**

WITH ARMATURE IN OPERATED POSITION, ROTATE  
MAIN SHAFT UNTIL DRIVE BAIL ROLLER IS IN IN-  
DENT OF ITS CAM. CLEARANCE BETWEEN RELEASE  
LEVER AND LATCH LEVER.  
MIN. 0.010 INCH  
MAX. 0.025 INCH  
TO ADJUST  
WITH CLAMP SCREW FRICTION TIGHT POSITION  
RELEASE LEVER.

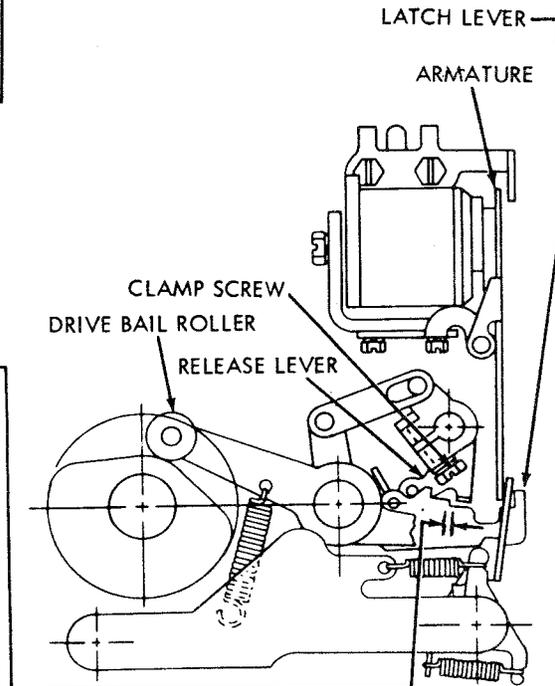
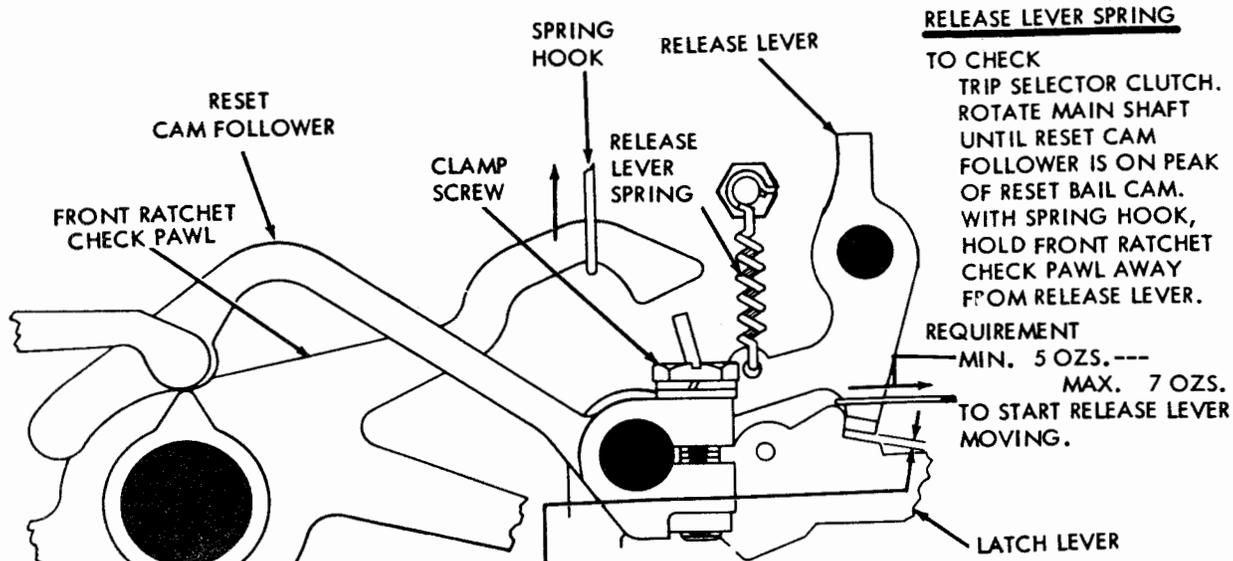


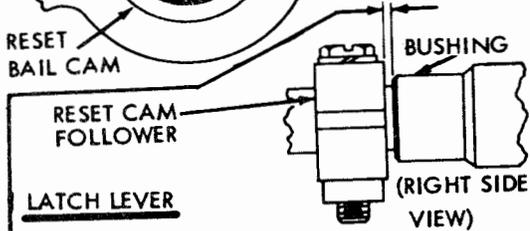
FIGURE 2.



**RELEASE LEVER SPRING**

**TO CHECK**  
TRIP SELECTOR CLUTCH. ROTATE MAIN SHAFT UNTIL RESET CAM FOLLOWER IS ON PEAK OF RESET BAIL CAM. WITH SPRING HOOK, HOLD FRONT RATCHET CHECK PAWL AWAY FROM RELEASE LEVER.

**REQUIREMENT**  
MIN. 5 OZS. ---  
MAX. 7 OZS.  
TO START RELEASE LEVER MOVING.

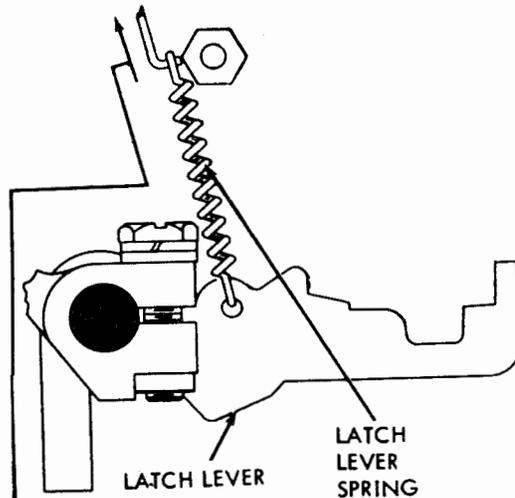


**LATCH LEVER**

**TO CHECK**  
TRIP SELECTOR CLUTCH. ROTATE MAIN SHAFT UNTIL RESET CAM FOLLOWER IS ON PEAK OF RESET BAIL CAM.

**REQUIREMENT**  
(1) MIN. 0.018 INCH --- MAX. 0.028 INCH BETWEEN RELEASE LEVER AND LATCH LEVER.  
(2) MIN. SOME --- MAX. 0.008 INCH END PLAY BETWEEN CAM FOLLOWER AND BUSHING.

**TO ADJUST**  
POSITION LATCH LEVER WITH CLAMP SCREW ON RESET CAM FOLLOWER LOOSENED.



**LATCH LEVER SPRING**

**TO CHECK**  
TRIP SELECTOR CLUTCH. ROTATE MAIN SHAFT UNTIL RESET CAM FOLLOWER IS ON PEAK OF RESET BAIL CAM.

**REQUIREMENT**  
MIN. 7 OZS. --- MAX. 10 OZS. ---  
TO PULL SPRING TO INSTALLED LENGTH.

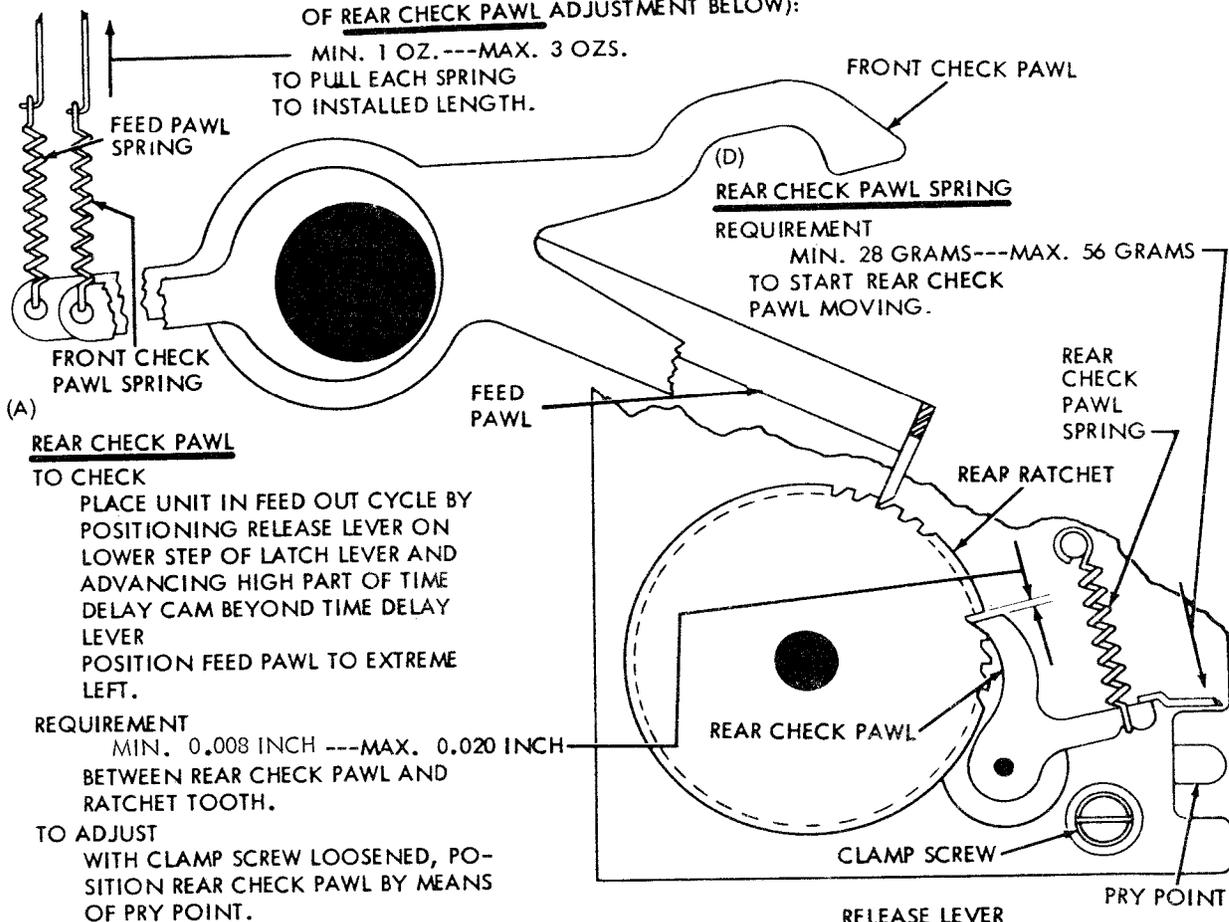
FIGURE 3.

**(C) FEED PAWL AND FRONT CHECK PAWL SPRINGS****REQUIREMENT**

WITH UNIT IN FEED OUT CYCLE (SEE "TO CHECK"  
OF REAR CHECK PAWL ADJUSTMENT BELOW):

MIN. 1 OZ. --- MAX. 3 OZS.

TO PULL EACH SPRING  
TO INSTALLED LENGTH.

**(B) RATCHET STOP BLOCK**

TO CHECK  
WITH UNIT IN STOP POSITION, PLACE RELEASE LEVER ON LOWER STEP OF LATCH LEVER. PERMIT STOP ON FRONT RATCHET TO REST AGAINST STOP BLOCK. ROTATE MAIN SHAFT UNTIL FEED PAWL IS IN EXTREME RIGHT POSITION.

**REQUIREMENT**

MIN. 0.002 INCH --- MAX. 0.015 INCH  
BETWEEN FRONT CHECK PAWL AND FRONT RATCHET TOOTH.

**TO ADJUST**

WITH TWO CLAMP SCREWS LOOSENED POSITION STOP BLOCK BY MEANS OF PRY POINT.

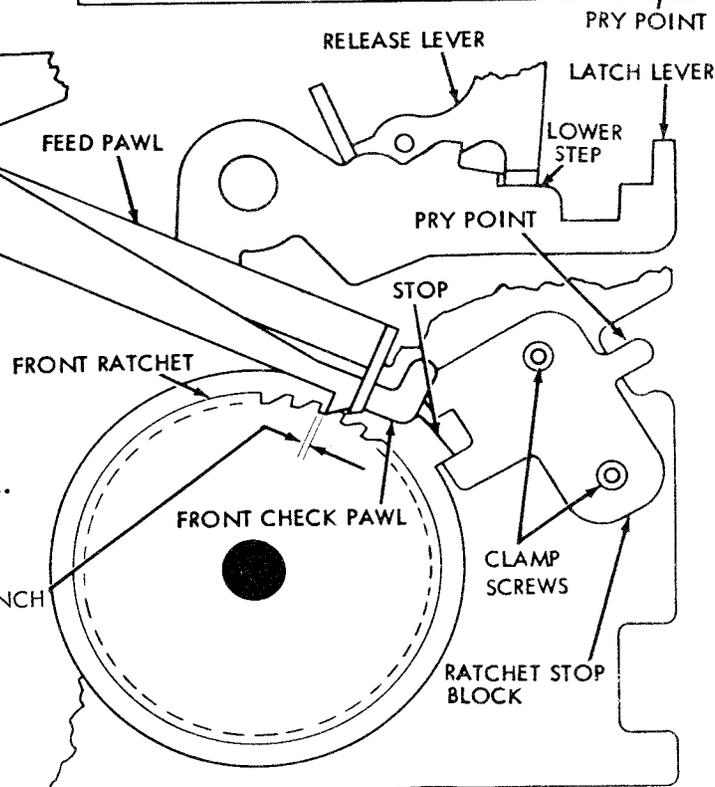
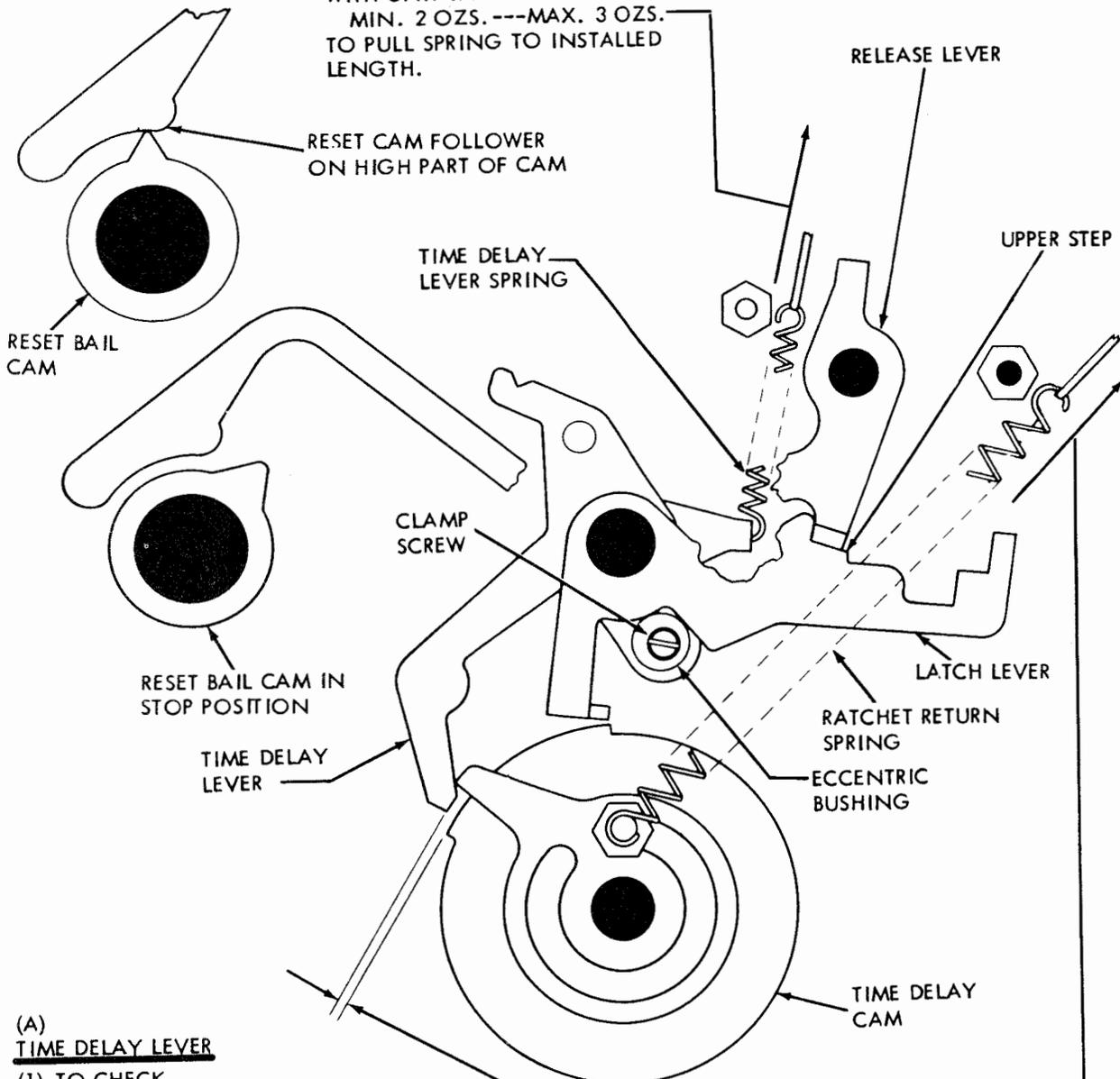


FIGURE 4.

**(B) TIME DELAY LEVER SPRING**

REQUIREMENT  
 WITH UNIT IN STOP POSITION:  
 MIN. 2 OZS. ---MAX. 3 OZS.  
 TO PULL SPRING TO INSTALLED  
 LENGTH.



**(A) TIME DELAY LEVER**

- (1) TO CHECK  
 TRIP SELECTOR CLUTCH AND ROTATE  
 MAIN SHAFT UNTIL RESET CAM FOL-  
 LOWER IS ON HIGH PART OF RESET BAIL  
 CAM.  
 REQUIREMENT  
 MIN. 0.040 INCH ---MAX. 0.060 INCH---  
 CLEARANCE BETWEEN TIME DELAY LEVER AND  
 HIGH PART OF TIME DELAY CAM.
- (2) REQUIREMENT  
 WITH UNIT IN STOP POSITION:  
 MIN. SOME \_\_\_\_\_  
 CLEARANCE BETWEEN TIME DELAY LEVER AND  
 HIGH PART OF TIME DELAY CAM.

TO ADJUST  
 WITH CLAMP SCREW LOOSENED, POSITION  
 ECCENTRIC BUSHING.

**(C) RATCHET RETURN SPRING**

REQUIREMENT  
 WITH UNIT IN STOP POSITION:  
 MIN. 5 OZS. ---MAX. 7 OZS.---  
 TO PULL SPRING TO INSTALLED  
 LENGTH.

FIGURE 5.

RELEASE ARM

(1) REQUIREMENT

WITH UNIT IN THE FEED-OUT CYCLE, RATCHETS ADVANCED BEYOND THE TIME DELAY. CLEARANCE BETWEEN THE DRIVE ARM AND UPPER SURFACE OF RELEASE ARM:

MIN. 0.010 INCH

MAX. 0.030 INCH

POSITION CAM SO SURFACES ARE IN LINE.

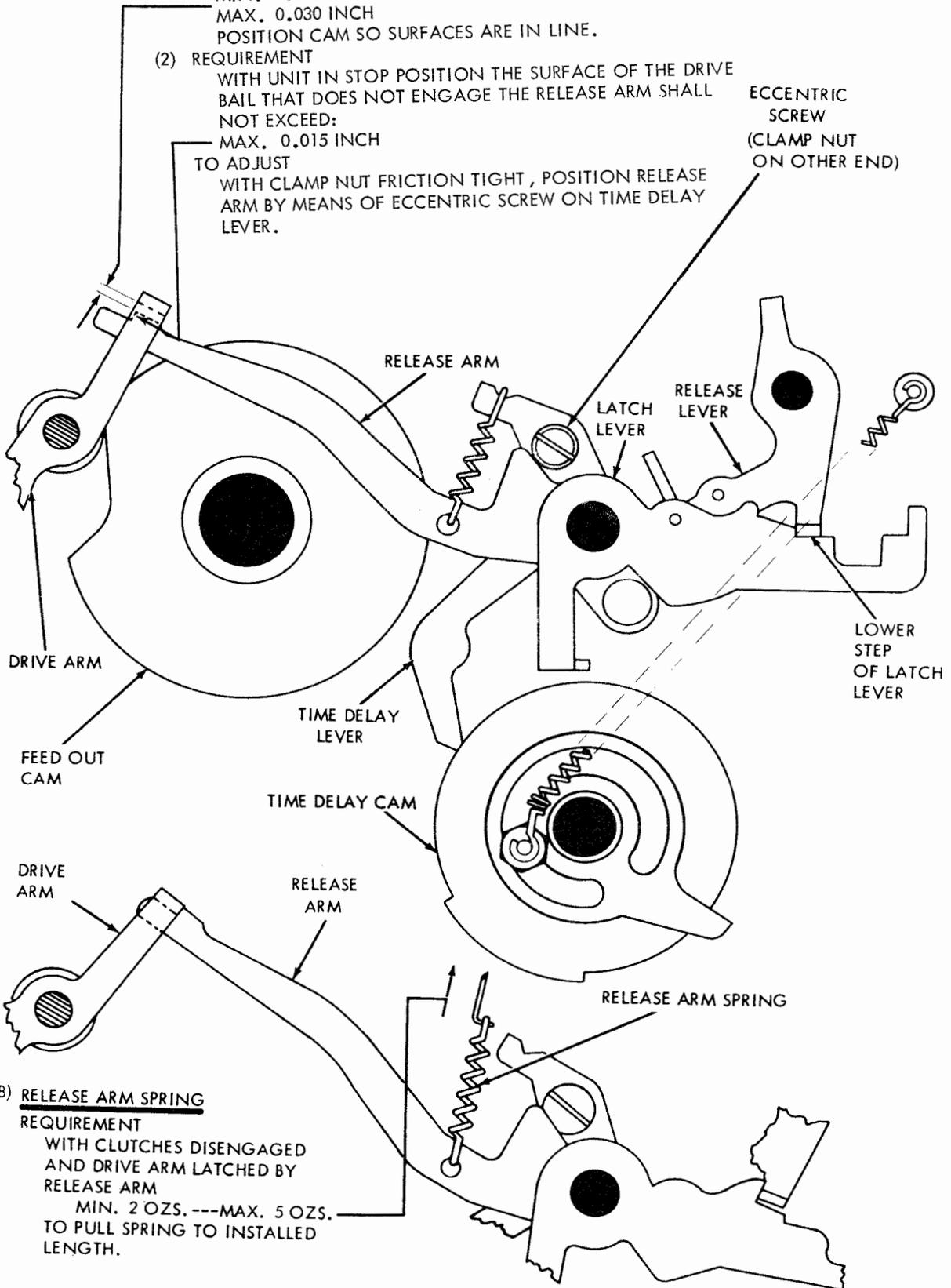
(2) REQUIREMENT

WITH UNIT IN STOP POSITION THE SURFACE OF THE DRIVE BAIL THAT DOES NOT ENGAGE THE RELEASE ARM SHALL NOT EXCEED:

MAX. 0.015 INCH

TO ADJUST

WITH CLAMP NUT FRICTION TIGHT, POSITION RELEASE ARM BY MEANS OF ECCENTRIC SCREW ON TIME DELAY LEVER.



(B) RELEASE ARM SPRING

REQUIREMENT

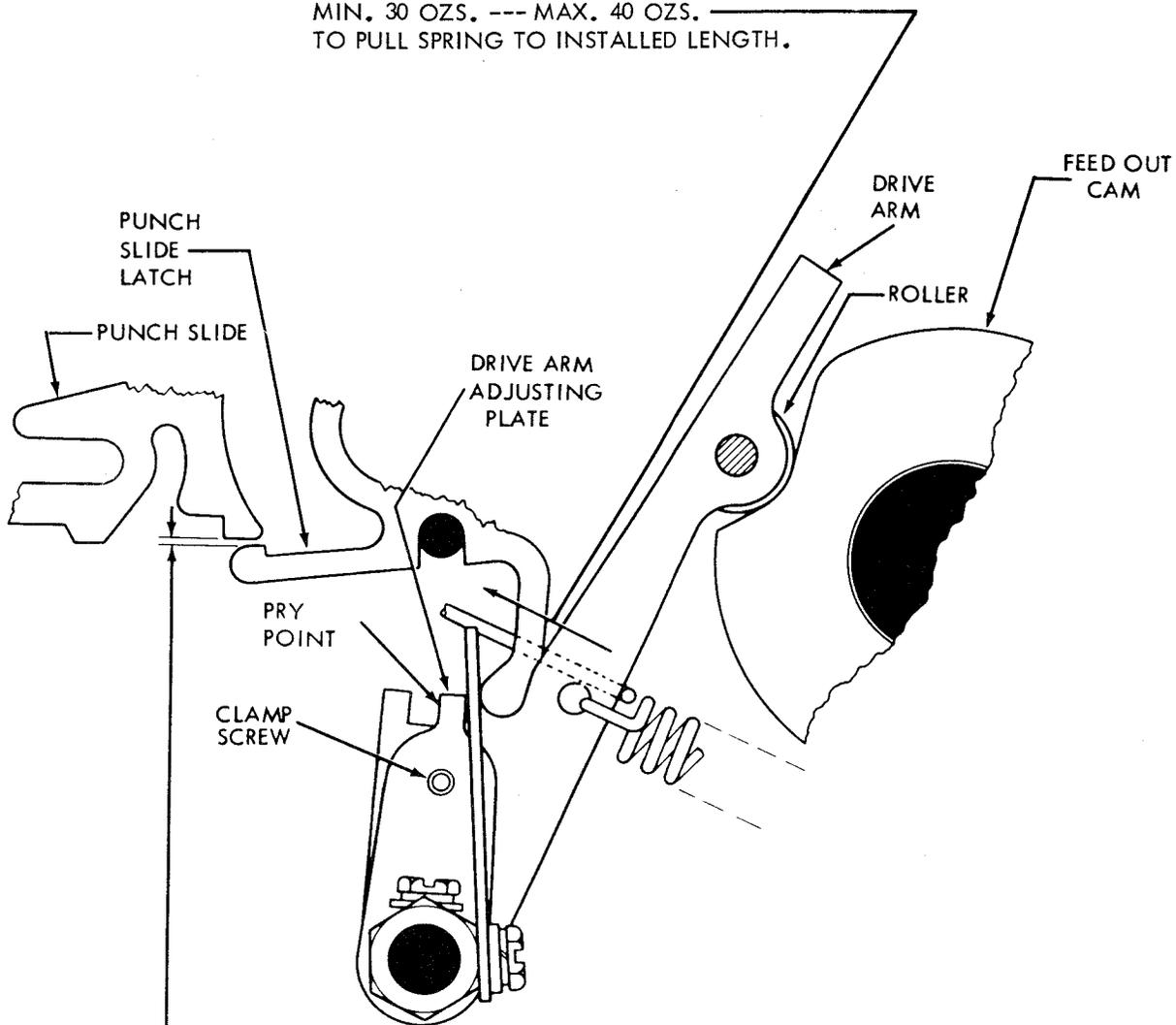
WITH CLUTCHES DISENGAGED AND DRIVE ARM LATCHED BY RELEASE ARM

MIN. 2 OZS. ---MAX. 5 OZS. TO PULL SPRING TO INSTALLED LENGTH.

FIGURE 6.

(A) DRIVE ARM SPRING

WITH UNIT IN FEED-OUT CYCLE AND DRIVE ARM ROLLER HELD FIRMLY AGAINST ITS CAM INDENT.  
 REQUIREMENT  
 MIN. 30 OZS. --- MAX. 40 OZS.  
 TO PULL SPRING TO INSTALLED LENGTH.

(B) DRIVE ARM ADJUSTING PLATE  
TO CHECK

SET UP BLANK CODE COMBINATION IN SELECTOR. PLACE UNIT IN FEED OUT CYCLE BY POSITIONING RELEASE LEVER ON LOWER STEP OF LATCH LEVER AND ADVANCING HIGH PART OF TIME DELAY CAM BEYOND TIME DELAY LEVER. ROTATE MAIN SHAFT UNTIL DRIVE ARM ROLLER IS ON LOW PART OF FEED OUT CAM. MAKE SURE THAT RESET BAIL IS IN LOWER POSITION.

## REQUIREMENT

MIN. 0.010 INCH --- MAX. 0.030 INCH  
 BETWEEN PUNCH SLIDE AND PUNCH SLIDE LATCH AT SLIDE WHERE CLEARANCE IS LEAST.

## TO ADJUST

WITH CLAMP SCREW LOOSENED, POSITION DRIVE ARM ADJUSTING PLATE BY MEANS OF PRY POINT.

FIGURE 7.

ADJUSTING LEVER  
TO CHECK

PLACE UNIT IN FEED OUT CYCLE BY POSITIONING RELEASE LEVER ON LOWER STEP OF LATCH LEVER AND ADVANCING HIGH PART OF TIME DELAY CAM BEYOND TIME DELAY LEVER (AS SHOWN ON FIGURE 6). POSITION MAIN SHAFT SO THAT DRIVE ARM ROLLER IS ON LOW PART OF FEED OUT CAM.

**REQUIREMENT**

- (1) MIN. 0.010 INCH --- MAX. 0.030 INCH BETWEEN RELEASE AND MAIN TRIP LEVER.
- (2) SOME CLEARANCE BETWEEN MAIN TRIP LEVER AND DOWNSTOP BRACKET.

**TO ADJUST**

LOOSEN THE CLAMP SCREW ON THE ADJUSTING LEVER AND POSITION MAKING SURE THE ADJUSTING LEVER RIDES FULLY ON THE SLIDE TRIP LEVER. TIGHTEN SCREW.

**(A) FOLLOWER LEVER**

**REQUIREMENT**

WITH FOLLOWER LEVER ON HIGH PART OF TRIP CAM:

- (1) MIN. 0.010 INCH---MAX. 0.030 INCH BETWEEN RELEASE AND MAIN TRIP LEVER.
- (2) SOME CLEARANCE BETWEEN MAIN TRIP LEVER AND DOWNSTOP BRACKET.

**TO ADJUST**

WITH LOCK NUT LOOSENED, POSITION ADJUSTING ARM BY MEANS OF PRY POINT.

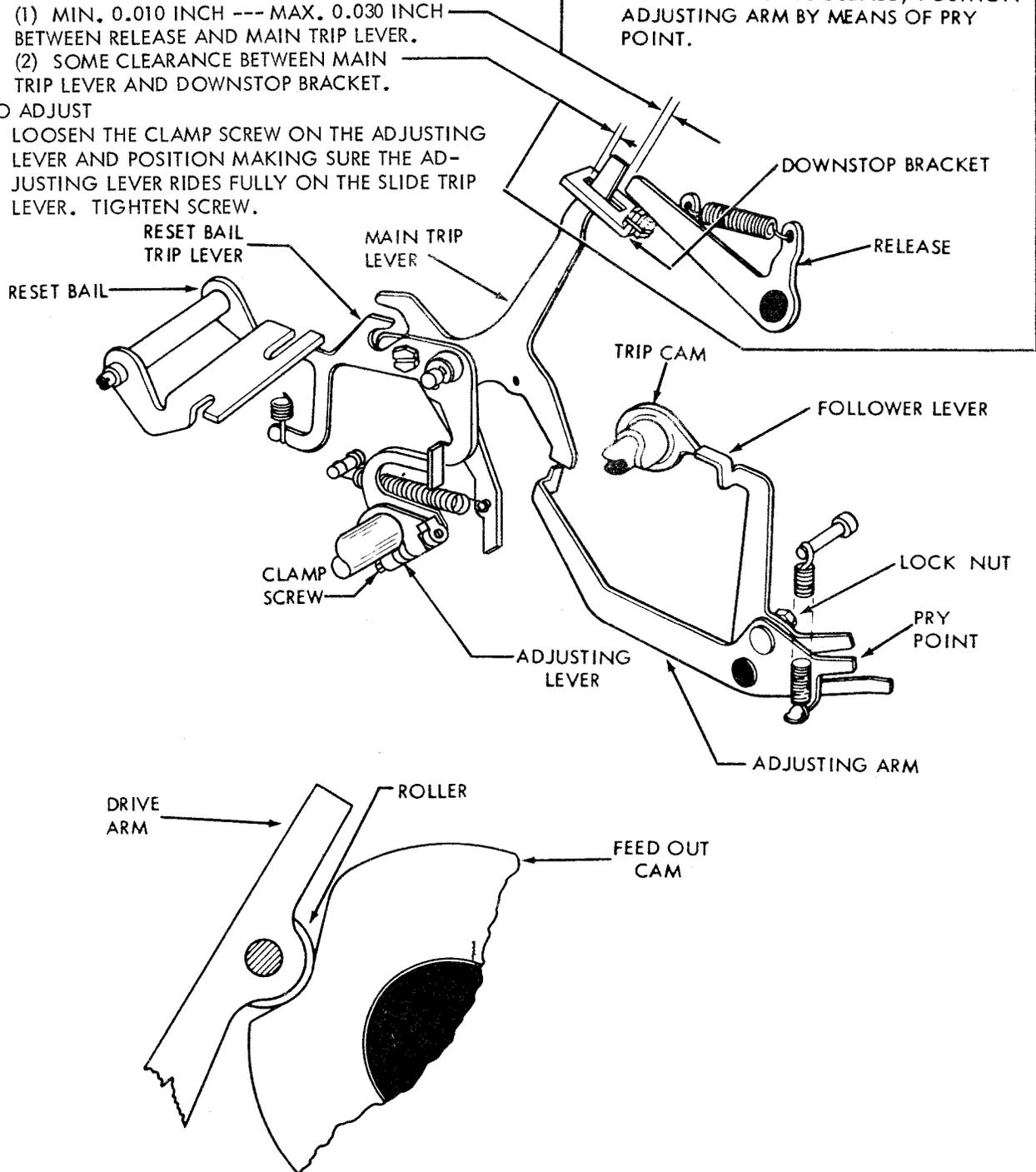
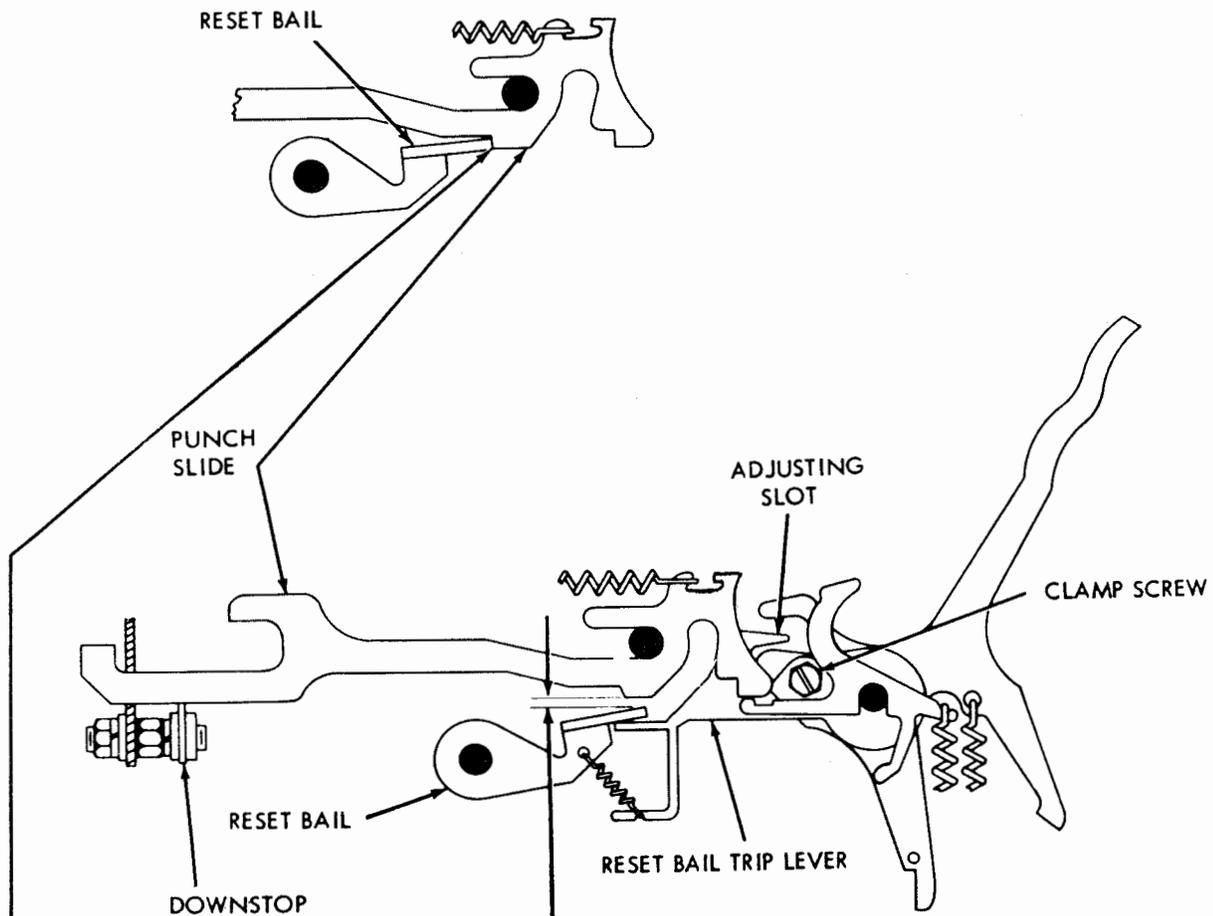


FIGURE 8.



**RESET BAIL TRIP LEVER**

- (1) TO CHECK  
 SELECT LETTERS CODE COMBINATION.  
 ROTATE MAIN SHAFT UNTIL  
 FUNCTION CLUTCH TRIPS. POSITION  
 PUNCH SLIDES AGAINST DOWNSTOP.

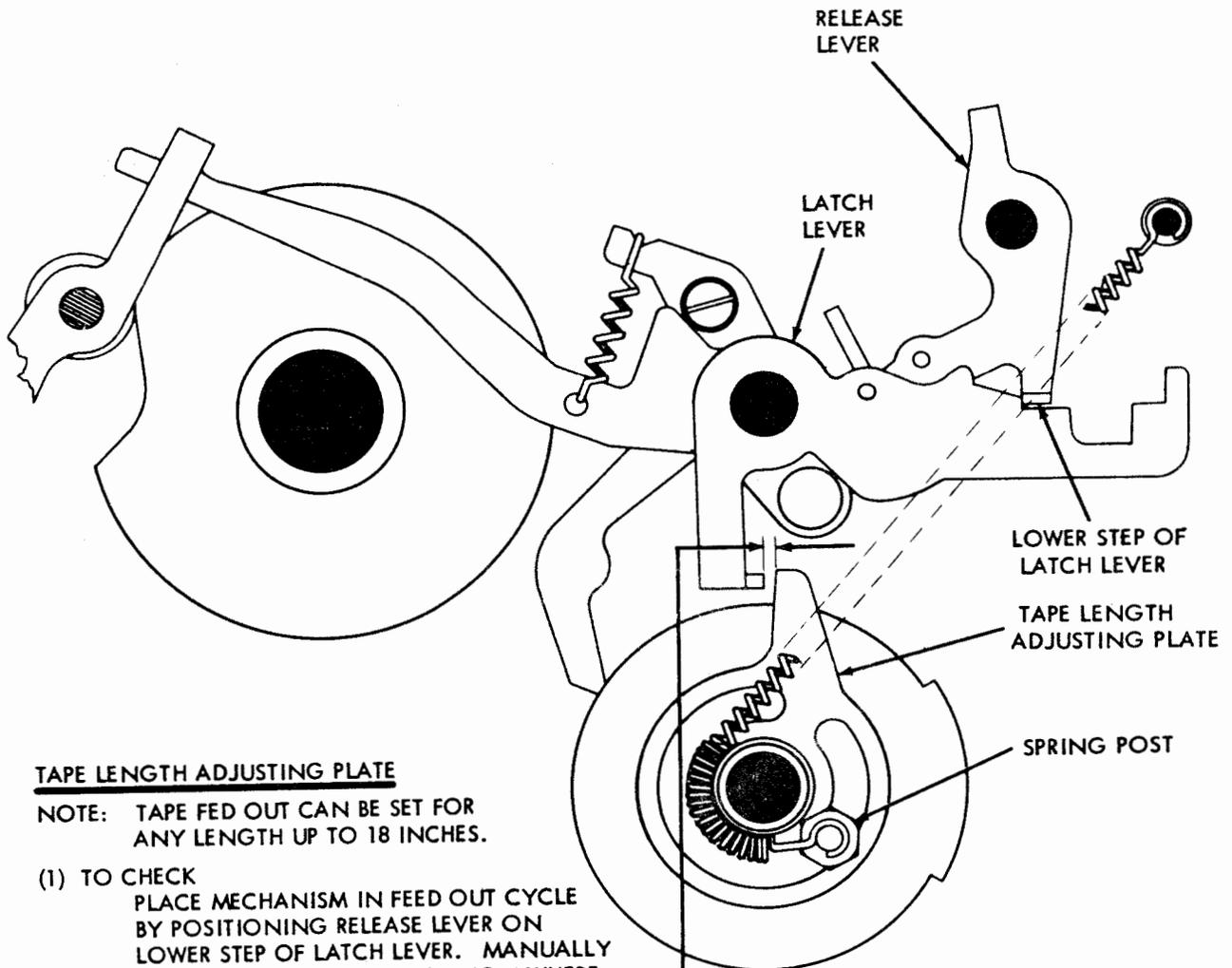
**REQUIREMENT**

MIN. 0.008 INCH --- MAX. 0.020 INCH  
 BETWEEN PUNCH SLIDE AND RESET BAIL.

- (2) REQUIREMENT  
 WITH CLUTCHES FULLY DISENGAGED  
 RESET BAIL SHOULD  
 FULLY ENGAGE NOTCHES IN PUNCH SLIDES.

TO ADJUST  
 WITH CLAMP SCREW LOOSENED, POSITION  
 RESET BAIL TRIP LEVER BY MEANS OF ADJUST-  
 ING SLOT.

FIGURE 9.



**TAPE LENGTH ADJUSTING PLATE**

NOTE: TAPE FED OUT CAN BE SET FOR ANY LENGTH UP TO 18 INCHES.

- (1) TO CHECK  
 PLACE MECHANISM IN FEED OUT CYCLE BY POSITIONING RELEASE LEVER ON LOWER STEP OF LATCH LEVER. MANUALLY ADVANCE RATCHETS TO POSITION WHERE NEXT ROTATION OF MAIN SHAFT WILL STOP FEED OUT CYCLE (FEED PAWL MUST BE IN DEEP TOOTH OF REAR RATCHET.)

**REQUIREMENT**

MIN. 0.002 INCH --- MAX. 0.020 INCH BETWEEN ADJUSTING PLATE AND LATCH LEVER.

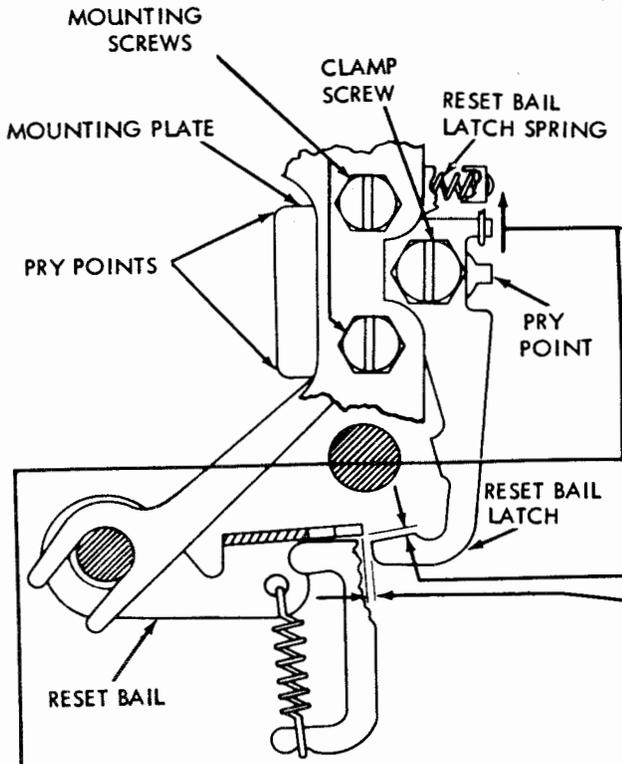
- (2) REQUIREMENT  
 WHEN OPERATING UNDER POWER, UNIT SHOULD FEED OUT CORRECT LENGTH OF TAPE.

**TO ADJUST**

WITH SPRING POST LOOSENED, POSITION ADJUSTING PLATE.

FIGURE 10.

**(A) RESET BAIL LATCH**



- (1) TO CHECK (VERTICAL CLEARANCE)  
 SELECT LETTERS CODE COMBINATION.  
 ROTATE MAIN SHAFT UNTIL  
 FUNCTION CLUTCH TRIPS AND PUNCH  
 SLIDES ARE TO EXTREME LEFT. SET UP  
 BLANK CODE COMBINATION  
 IN SELECTOR BY STRIPPING ALL PUSH  
 LEVERS FROM SELECTING LEVERS.  
 ROTATE MAIN SHAFT UNTIL  
 PUNCH SLIDES ARE JUST LATCHED.

**REQUIREMENT**

MIN. 0.008 INCH---MAX. 0.020 INCH  
 BETWEEN RESET BAIL AND RESET BAIL  
 LATCH.

**TO ADJUST**

WITH MOUNTING SCREWS LOOSENED,  
 POSITION MOUNTING PLATE BY MEANS  
 OF PRY POINTS.

- (2) REQUIREMENT (HORIZONTAL CLEARANCE)

WITH CLUTCHES DISENGAGED,  
 MIN. 0.005 INCH---MAX. 0.020 INCH  
 BETWEEN RESET BAIL AND RESET BAIL  
 LATCH.

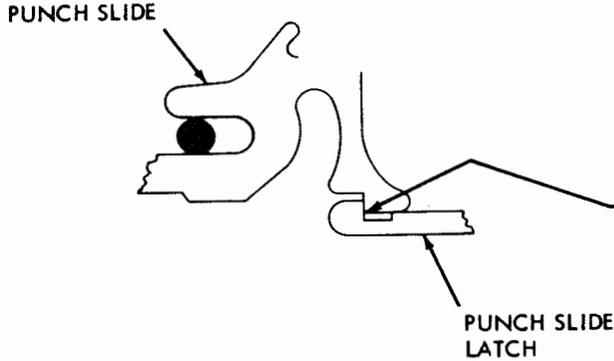
**TO ADJUST**

POSITION RESET BAIL SO THAT APPROX.  
 HALF ITS THICKNESS IS BELOW TOP  
 SURFACE OF ITS LATCH. WITH CLAMP  
 SCREW LOOSENED, POSITION RESET  
 BAIL LATCH BY MEANS OF PRY POINT.

**(B) RESET BAIL LATCH SPRING**

**REQUIREMENT**

WITH UNIT IN STOP CONDITION:  
 MIN. 1 OZ.---MAX. 3 OZS.  
 TO START RESET BAIL LATCH MOVING.



- (3) TO CHECK

SELECT LETTERS CODE COMBINATION.  
 ROTATE MAIN SHAFT UNTIL  
 FUNCTION CLUTCH TRIPS. SET UP  
 BLANK CODE COMBINATION  
 IN SELECTOR BY STRIPPING ALL PUSH  
 LEVERS FROM SELECTING LEVERS.  
 ROTATE MAIN SHAFT TO  
 STOP POSITION.

**REQUIREMENT**

PUNCH SLIDES LATCHED BY PUNCH  
 SLIDE LATCHES

**TO ADJUST**

REFINE (1) AND (2) ABOVE.

**(C) RESET BAIL TRIP LEVER SPRING**

**TO CHECK**

DISENGAGE BOTH CLUTCHES.  
 TRIP FUNCTION CLUTCH BY  
 PIVOTING MAIN TRIP LEVER  
 COUNTERCLOCKWISE  
 HOLD RESET BAIL  
 TRIP LEVER UP AGAINST RESET  
 BAIL.

**REQUIREMENT**

MIN. 18 OZS.---MAX. 24 OZS.  
 TO PULL SPRING TO INSTALLED  
 LENGTH.

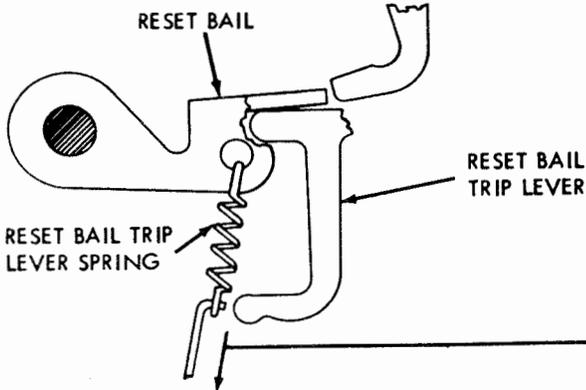
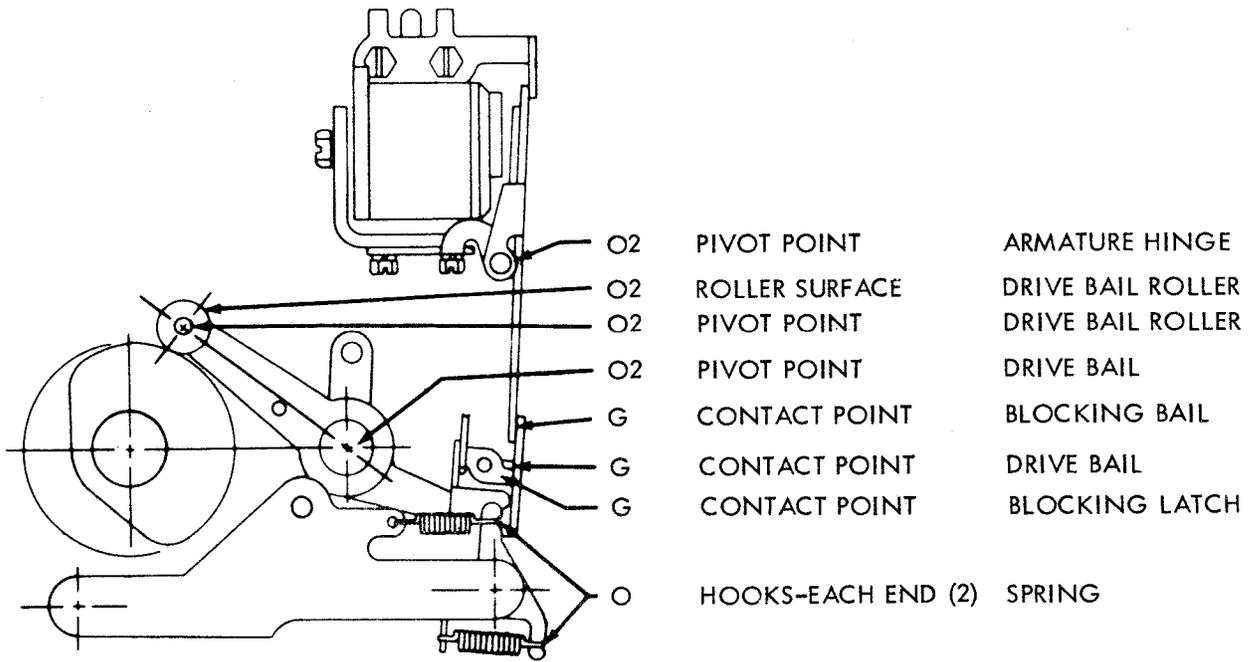


FIGURE 11.

LUBRICATION INSTRUCTIONS

NON-INTERFERING LETTERS TAPE FEED OUT MECHANISM



NON-INTERFERING LETTERS TAPE FEED OUT MECHANISM

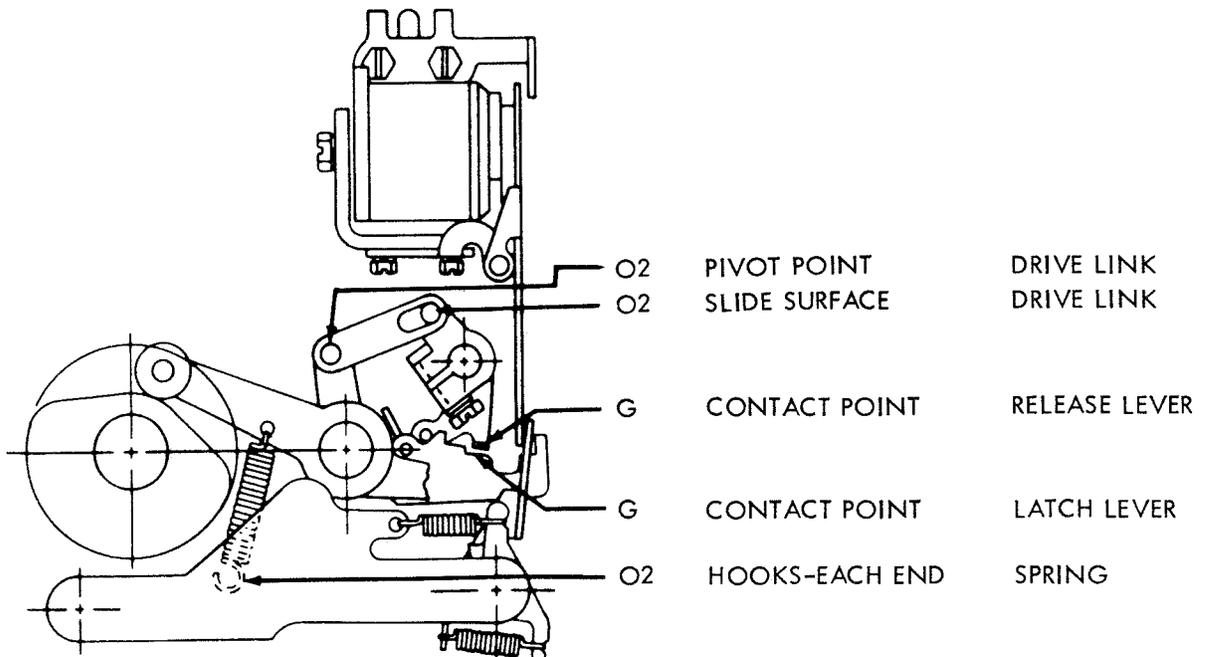
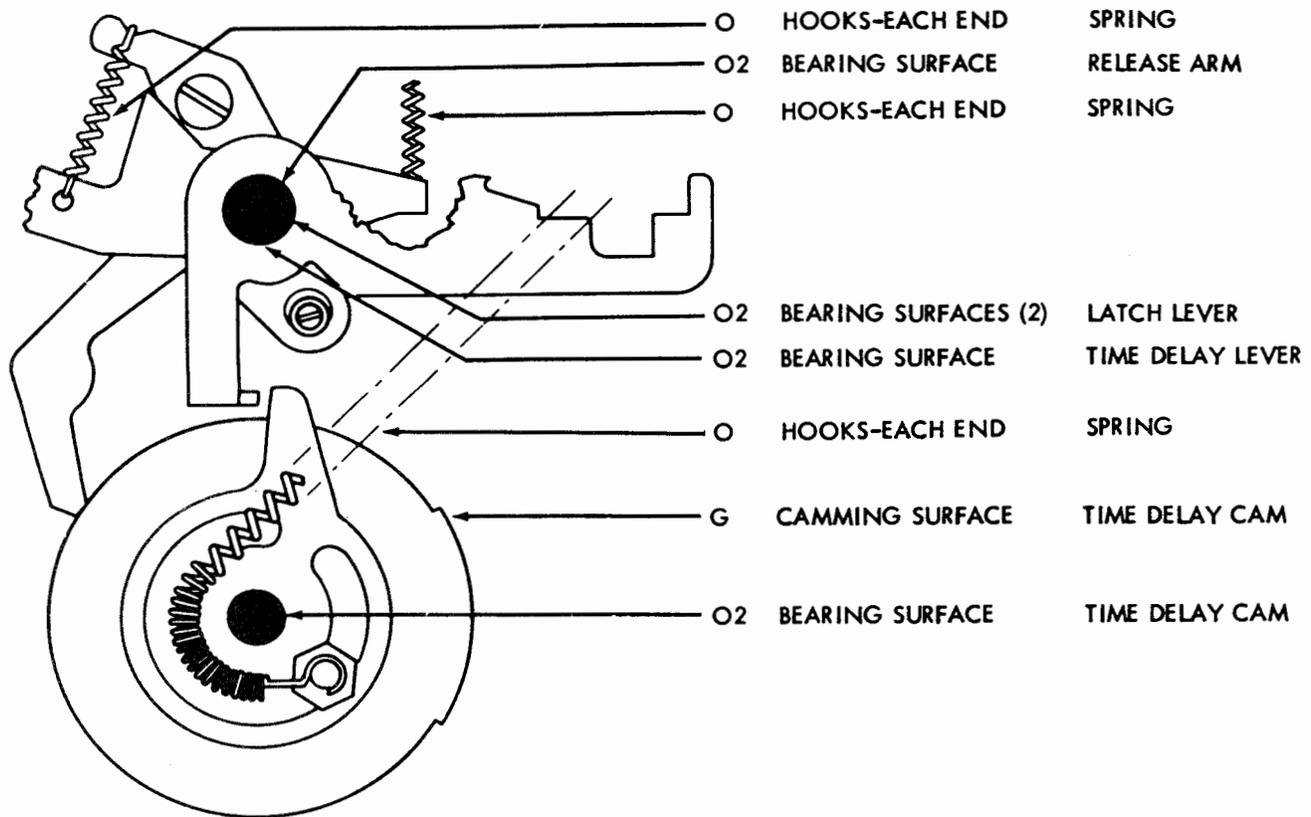


FIGURE 12.

REMOTE NON-INTERFERING LETTERS TAPE FEED OUT MECHANISM



REMOTE NON-INTERFERING LETTERS TAPE FEED OUT MECHANISM

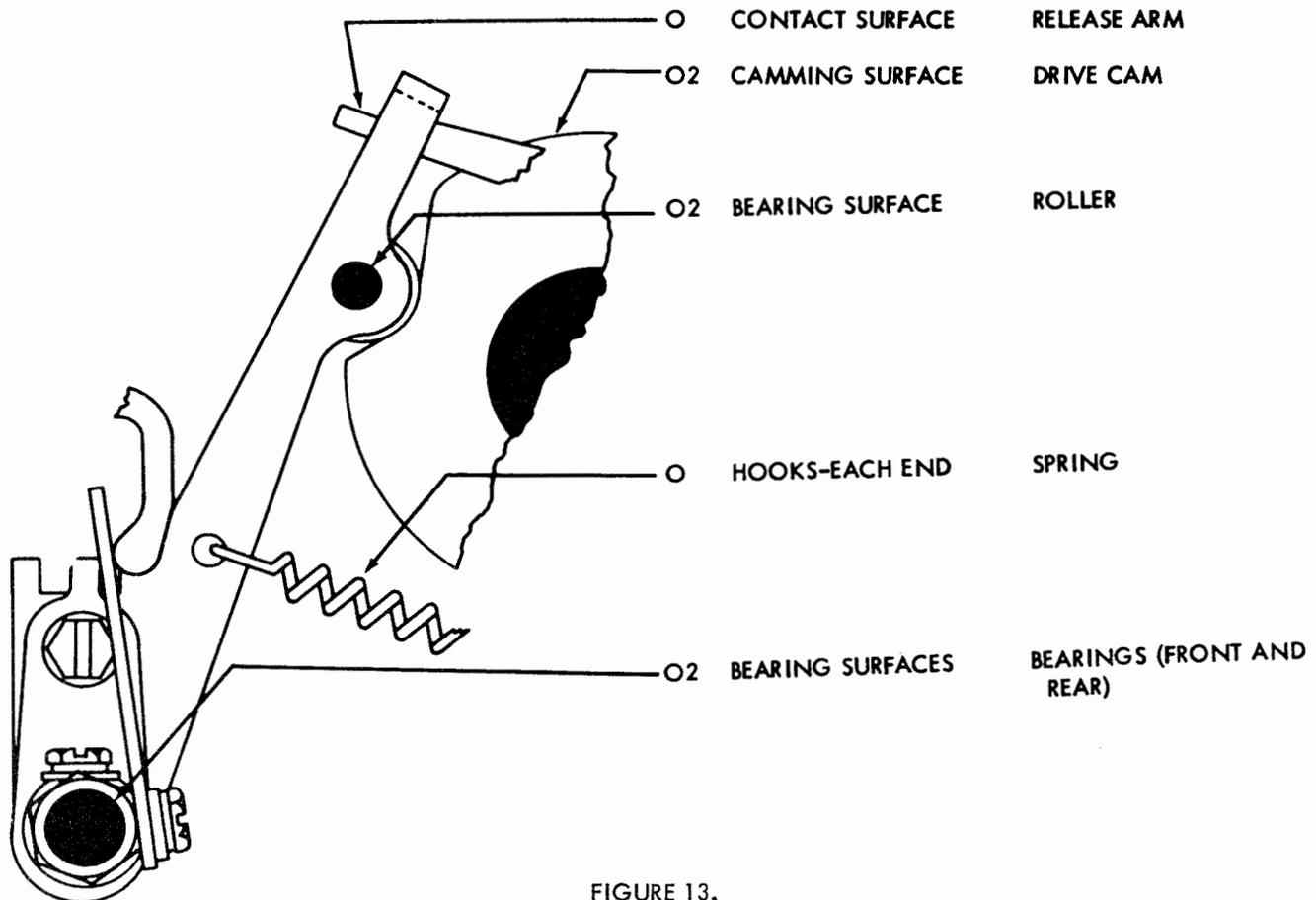
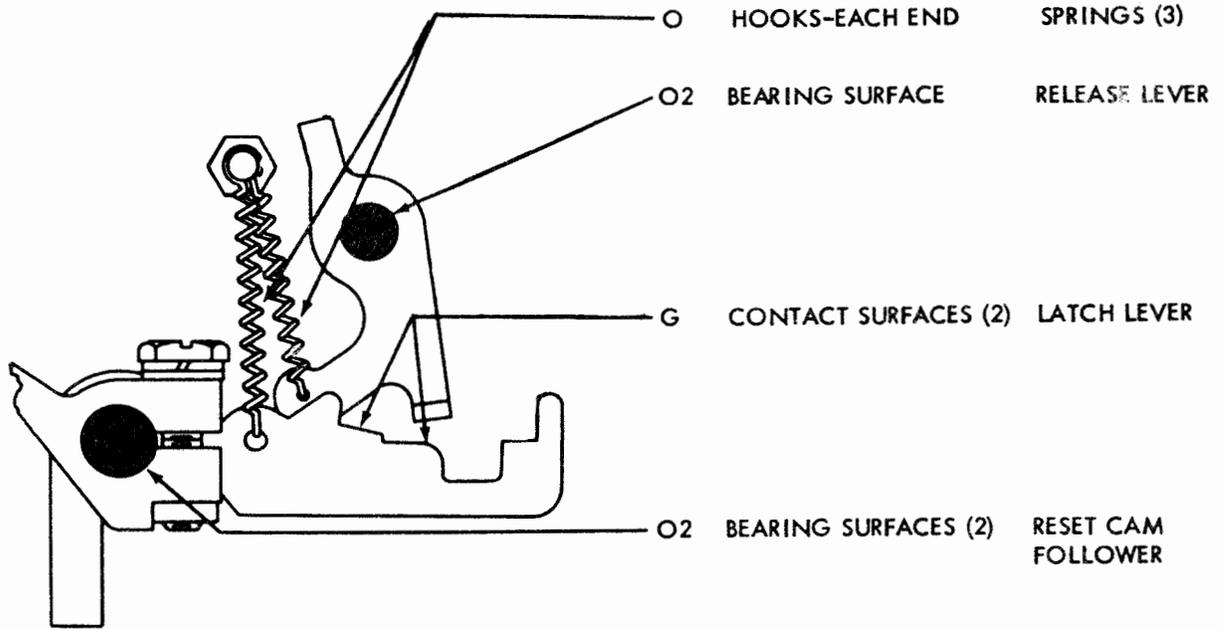


FIGURE 13.

REMOTE NON-INTERFERING LETTERS TAPE FEED-OUT MECHANISM



REMOTE NON-INTERFERING LETTERS TAPE FEED OUT MECHANISM

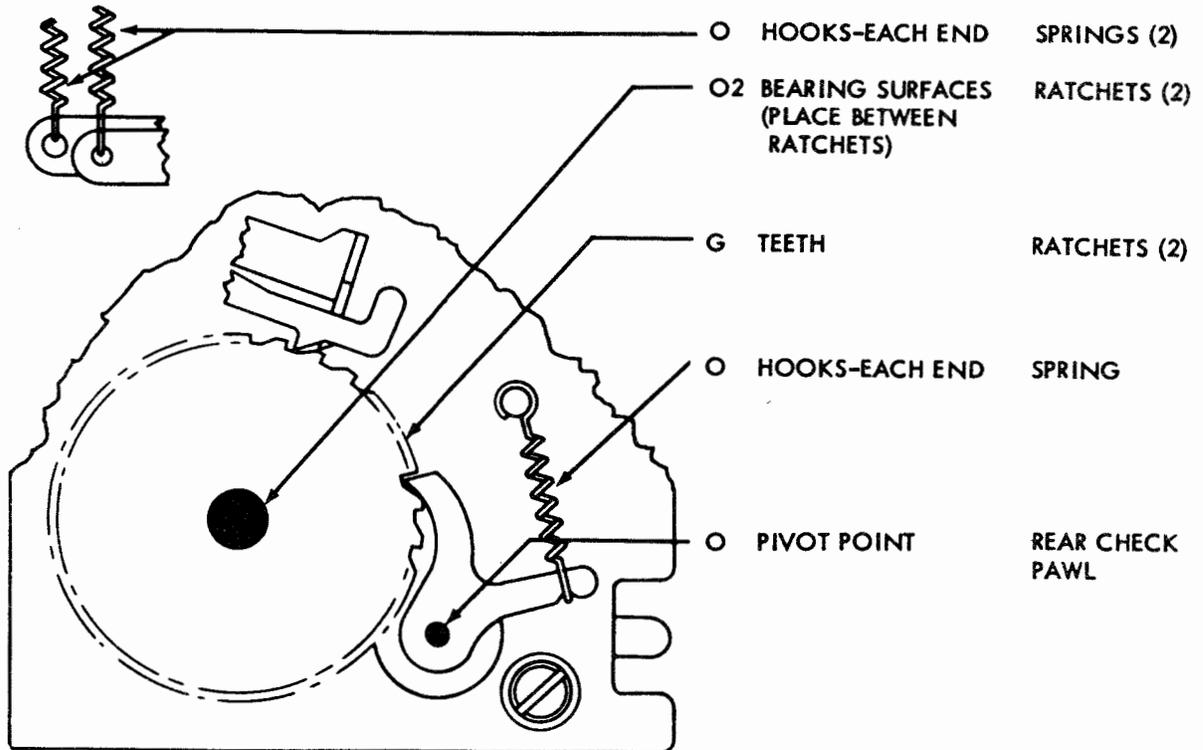


FIGURE 14.

REMOTE NON-INTERFERING LETTERS TAPE FEED OUT MECHANISM

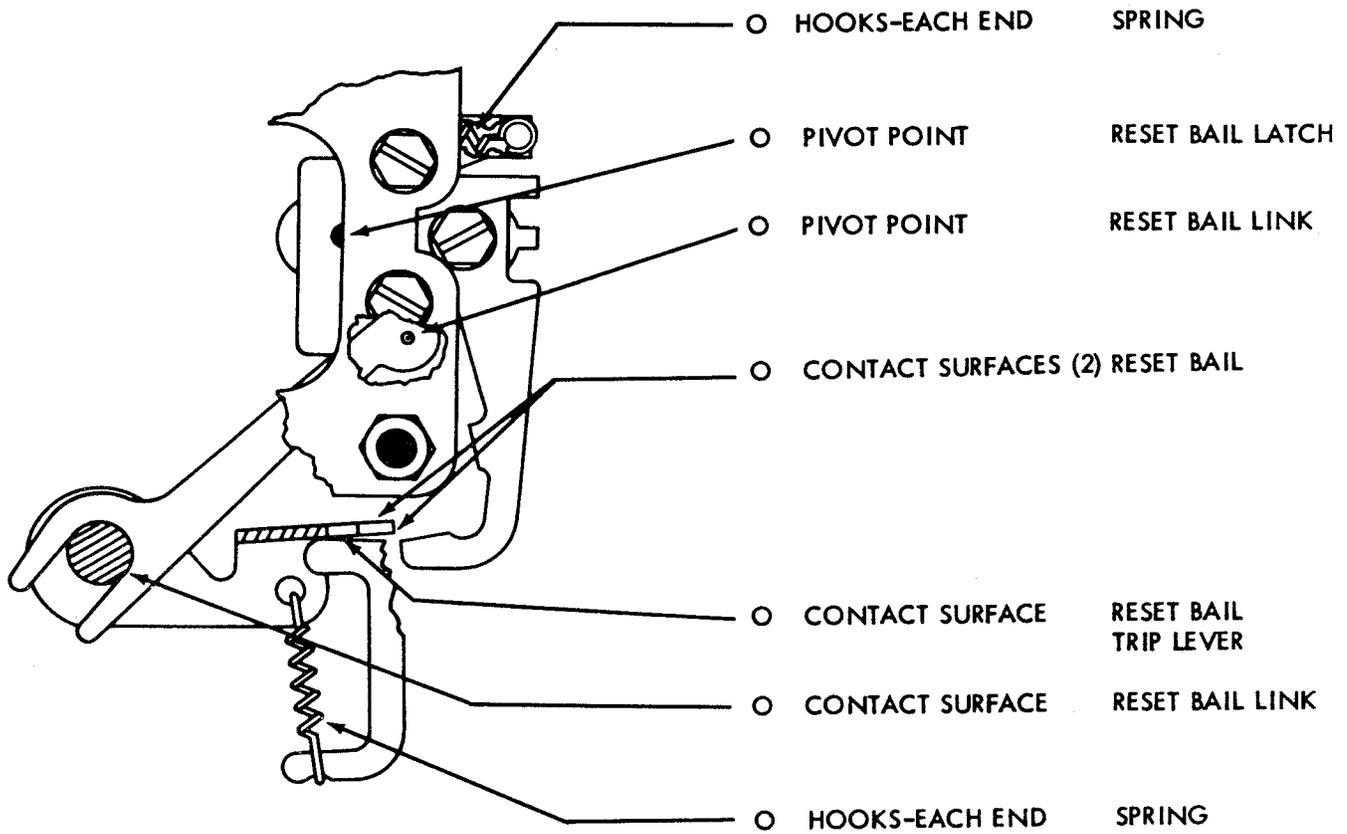


FIGURE 15.