

35 TYPING REPERFORATOR

ADJUSTMENTS

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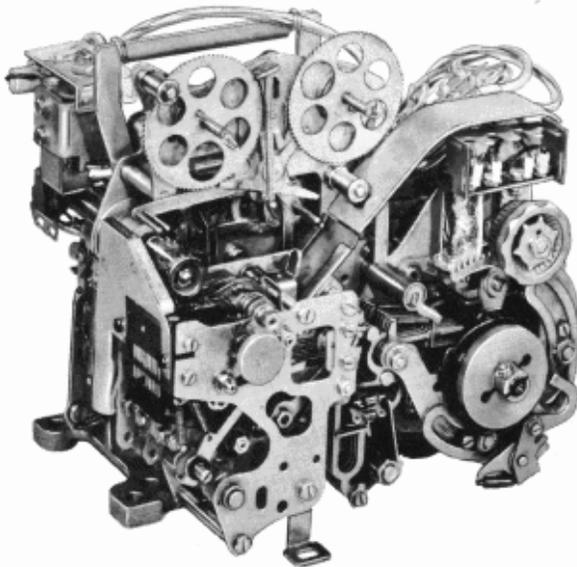


Figure 1 - Typical 35 Typing Reperforator  
(Left Front View)

**1. GENERAL**

1.01 This section is reissued to include complete adjustment requirements for the 35 Typing Reperforator as a standard.

1.02 This section contains specific requirements and adjustments for the 35 Typing Reperforator (Fig. 1). The basic equipment includes selector mechanism, transfer mechanism, eight-level fully perforating punch mechanism, and printing mechanism. The printing mechanism includes letters-figures contacts and magnet and may include print suppression, remote control non-interfering rubout tape feed-out, end of feed-out timing contacts and power drive backspace mechanisms.

1.03 Reference to left or right, front or rear and up or down refer to the apparatus in its normal operating position, as viewed from the front with the selector mechanism to the

right and the punch mechanism to the left. It is assumed that the elements depicted in illustrations in this section are being viewed from a position in front of the equipment, unless the illustrations are specifically labeled otherwise. In the illustrations, pivot points are shown by circles or ellipses that are solid black to indicate fixed points and cross-hatched to indicate floating points.

1.04 Tools required to make the adjustments and test the spring tensions are listed in the appropriate section. Spring tensions given in this section are indications, not exact values, and should be checked with the correct scale applied in the positions shown in the drawings.

1.05 The unit is in its unoperated, or stop, condition when it is not under power. It is in its idling condition when it is under power and clutches are disengaged (steady marking condition of signal line). The unit is in the letters condition when the typewheel rack is in its upper position (the numerals appear on the top half of the typewheel). The unit is in the figures condition when the typewheel rack is in its lower position (the letters appear on the top half of the typewheel).

**CAUTION: APPARATUS SHOULD NOT BE SEPARATED FROM ITS PROTECTIVE HOUSING UNLESS POWER IS DISCONNECTED. WHERE OPERATION OF THE EQUIPMENT IS REQUIRED AFTER IT HAS BEEN SEPARATED FROM ITS PROTECTIVE HOUSING, APPROPRIATE PRECAUTIONARY MEASURES SHOULD BE TAKEN TO PREVENT ACCIDENTS.**

1.06 When a requirement calls for a clutch to be **DISENGAGED**, the clutch shoe lever must be fully latched between its trip lever (or stop arm) and latch lever. The main shaft will then turn freely without the clutch shoes dragging. When the clutch is **ENGAGED**, the shoe lever and cam disk stop lug are moved apart, and the clutch shoes are wedged against the drum so that the clutch turns with the shaft.

Note: If the shaft is turned by hand, the clutch will not fully disengage upon reaching its stop position. Where a procedure calls for disengagement, rotate the clutch to its stop position, apply a screwdriver to the cam disk stop lug and turn the disk in the normal direction of shaft rotation until the latch lever seats in its notch in the disk.

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1.07 To manually operate the 35 Typing Reperforator, proceed as follows:

- (a) Attach the armature clip to the selector magnet armature by carefully putting the flat formed end of the armature clip over the top of the armature between the pole pieces and then hooking the projection under the edge of the armature. The spring tension of the armature clip will hold the selector armature in the marking (attracted) position.
- (b) While holding the selector magnet attracted by means of the armature clip, manually rotate the main shaft in a counterclockwise direction until all the clutches are brought to their disengaged position.
- (c) Fully disengage the clutches in accordance with 1.06, Note.
- (d) Release the selector magnet armature momentarily to permit the selector clutch to engage.
- (e) Rotate the main shaft slowly until all the push levers have fallen to the left of their selecting levers.
- (f) Strip the pushlevers from their selector levers if they are spacing in the code combination of the character or function that is being selected. Allow the push levers to move to the right. The push levers and selector levers move in succession, starting with the inner lever No. 1 to the outer lever No. 8.
- (g) Continue to rotate the main shaft until all operations initiated by the selector action clear through the unit.

1.08 Parts dismantled to facilitate checking or readjustment should be reassembled after the operation is completed. If a part mounted on shims is to be dismantled, the number of shims used at each mounting screw

should be noted so that the same shim pile-ups can be replaced when the part is remounted. When parts removed are replaced, related adjustments which may have been affected should be checked.

1.09 Parts that are worn to the extent that they can no longer be made to meet the specified requirements by authorized adjustments or which are worn to the extent that it seems probable that early further wear might cause a loss of adjustment should be replaced by new parts. Springs which do not meet the requirements and for which there are no adjusting procedures should be discarded and replaced by new springs.

1.10. All contact points should meet squarely. Smaller points should fall wholly within the circumference of larger mating points. Points that are the same size should not be out of alignment more than 25 per cent of the point diameter. Avoid sharp kinks or bends in the contact springs.

Note: Keep all electrical contacts free of oil and grease.

1.11 Where a 35 Typing Reperforator is used as a component of a receive only or a send-receive set, it is mounted on a base or keyboard base. Refer to the base, keyboard and other applicable sections for gear mesh and additional adjustment requirements.

## 2. BASIC UNIT

2.01 The following figures show the adjusting tolerances, position of parts and spring tensions. The illustrations are arranged so that the adjustments are in the sequence that would be followed if a complete readjustment of the apparatus were being made. In some cases, where an illustration shows interrelated parts, the sequence that should be followed in checking the requirements and making the adjustments is indicated by the letters (A), (B), (C), etc.

2.02 Selector Mechanism

2.03 Function Mechanism

NOTE: FOR GEAR MESH ADJUSTMENT, REFER TO APPLICABLE SECTIONS COVERING BASE OR KEYBOARD MOUNTING FACILITY.

(A) CLUTCH SHOE LEVER

NOTE:

THIS ADJUSTMENT SHOULD BE MADE FOR BOTH SELECTING AND FUNCTION CLUTCHES.

TO CHECK

- (1) DISENGAGE CLUTCH. MEASURE CLEARANCE.
- (2) ALIGN HEAD OF CLUTCH DRUM MOUNTING SCREW WITH STOP LUG. ENGAGE CLUTCH. MANUALLY PRESS SHOE LEVER AND STOP LUG TOGETHER AND ALLOW TO SNAP APART. MEASURE CLEARANCE.

REQUIREMENT

CLEARANCE BETWEEN SHOE LEVER AND STOP LUG:

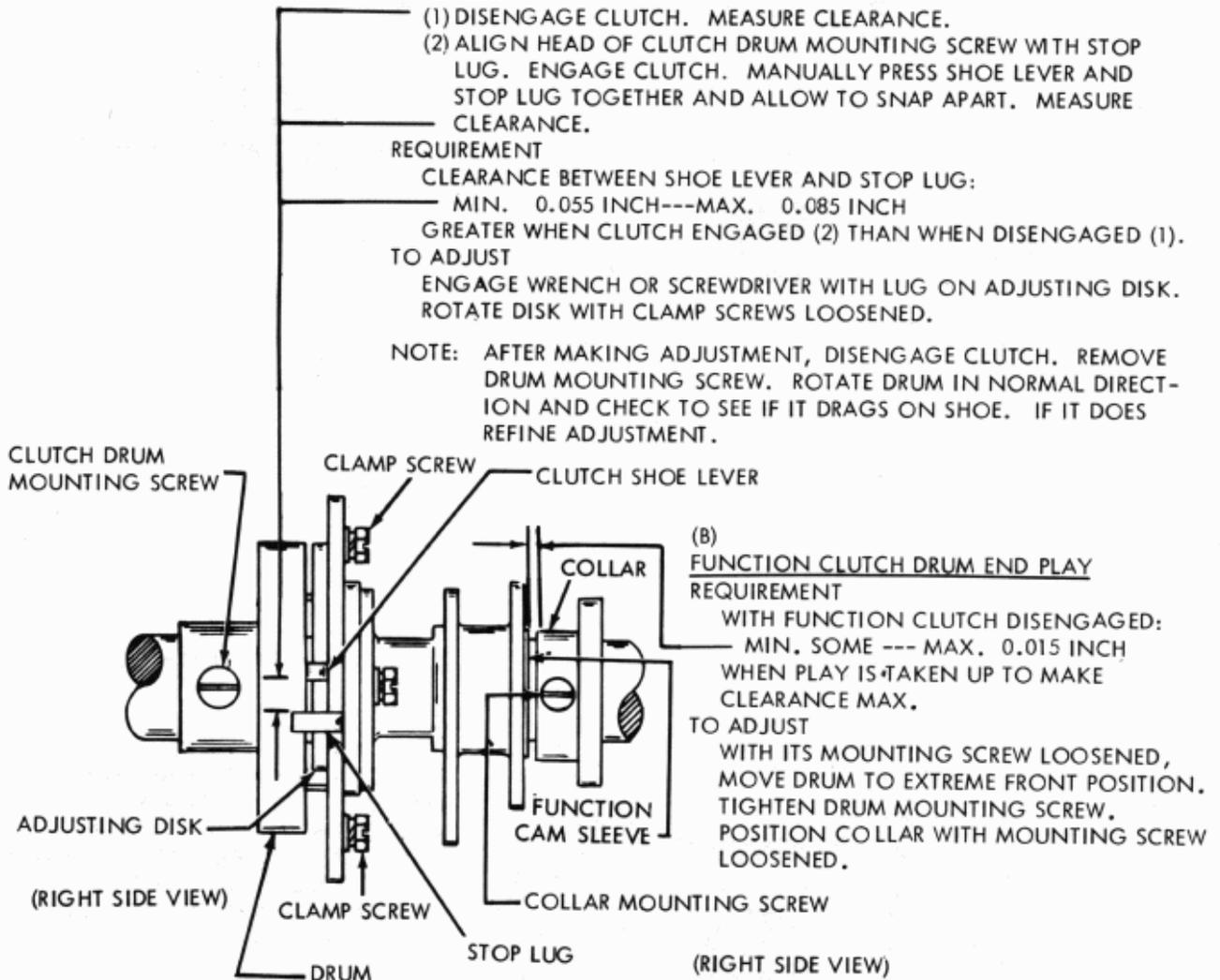
MIN. 0.055 INCH---MAX. 0.085 INCH

GREATER WHEN CLUTCH ENGAGED (2) THAN WHEN DISENGAGED (1).

TO ADJUST

ENGAGE WRENCH OR SCREWDRIVER WITH LUG ON ADJUSTING DISK. ROTATE DISK WITH CLAMP SCREWS LOOSENED.

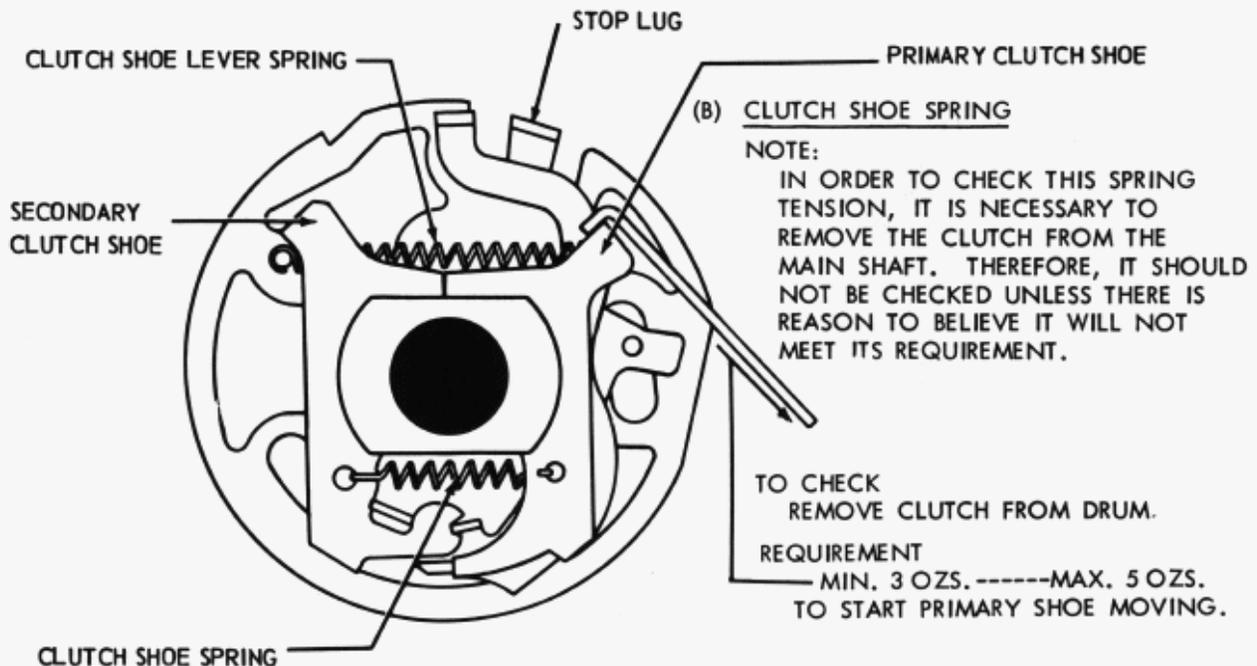
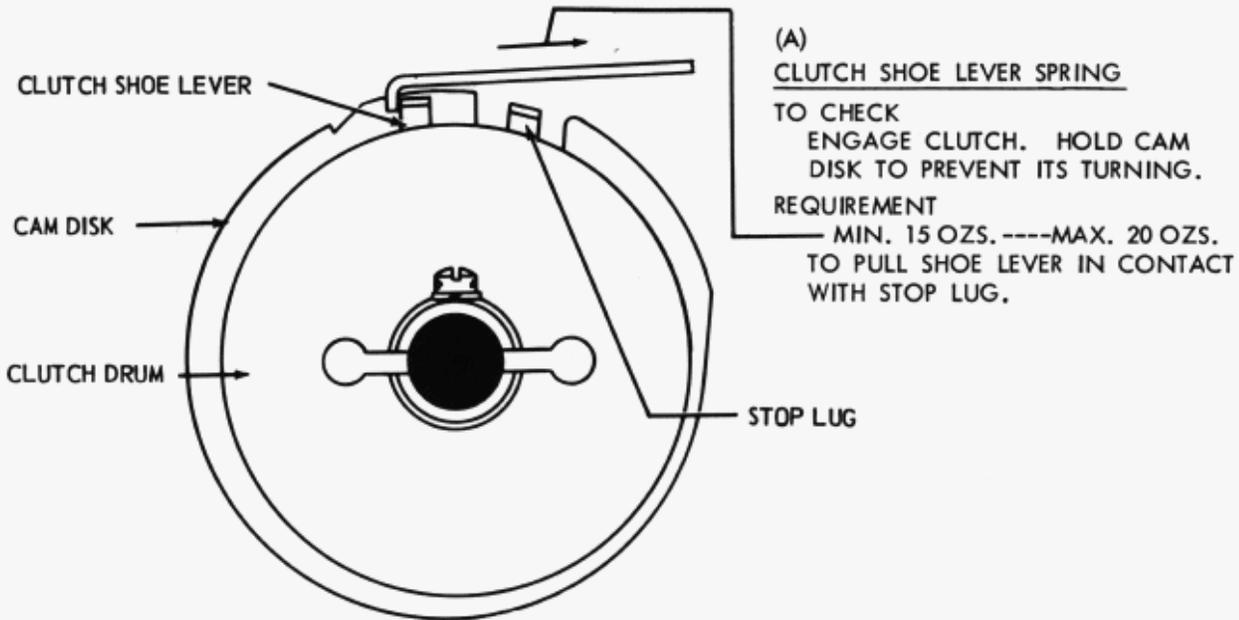
NOTE: AFTER MAKING ADJUSTMENT, DISENGAGE CLUTCH. REMOVE DRUM MOUNTING SCREW. ROTATE DRUM IN NORMAL DIRECTION AND CHECK TO SEE IF IT DRAGS ON SHOE. IF IT DOES REFINES ADJUSTMENT.



SECTION 574-233-700

- 2.04 Selector Mechanism (continued)
- 2.05 Function Mechanism (continued)

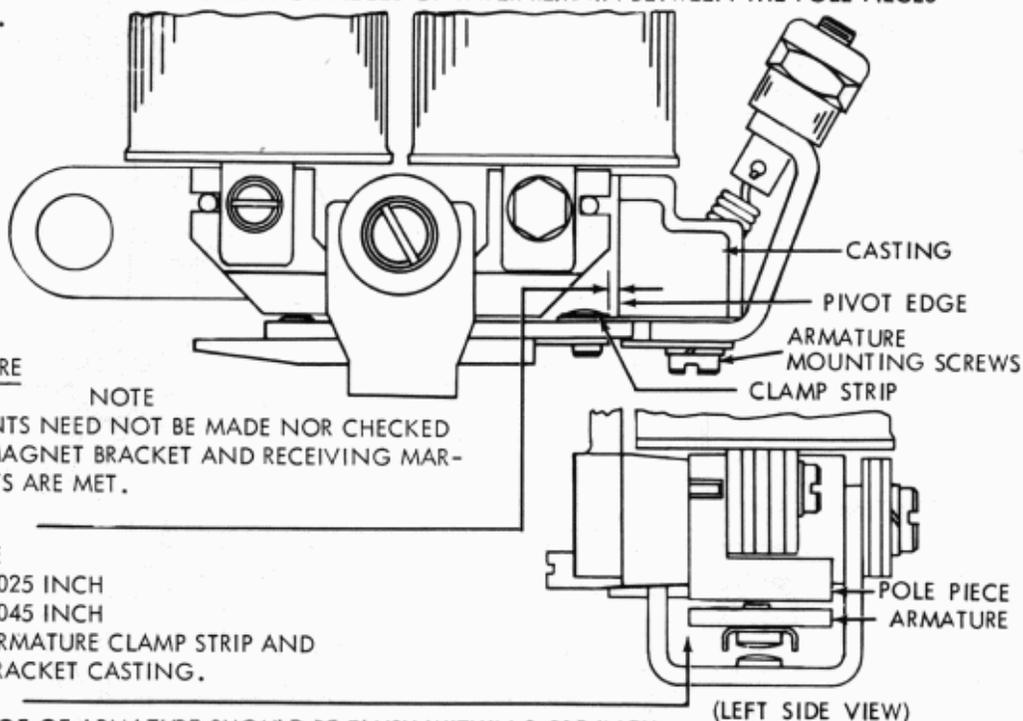
NOTE:  
THESE SPRING TENSIONS APPLY TO BOTH CLUTCHES.



## 2.06 Selector Mechanism (continued)

## NOTE

TO FACILITATE MAKING THE FOLLOWING ADJUSTMENTS, REMOVE THE RANGE FINDER ASSEMBLY AND SELECTOR MAGNET ASSEMBLY. TO INSURE BETTER OPERATION, PULL A PIECE OF BOND PAPER BETWEEN THE ARMATURE AND THE POLE PIECES TO REMOVE ANY OIL OR FOREIGN MATTER THAT MAY BE PRESENT. MAKE CERTAIN THAT NO LINT OR PIECES OF PAPER REMAIN BETWEEN THE POLE PIECES AND THE ARMATURE.

SELECTOR ARMATURE

## NOTE

THESE REQUIREMENTS NEED NOT BE MADE NOR CHECKED IF THE SELECTOR MAGNET BRACKET AND RECEIVING MARGIN REQUIREMENTS ARE MET.

(1) REQUIREMENT  
CLEARANCE

MIN. 0.025 INCH

MAX. 0.045 INCH

BETWEEN ARMATURE CLAMP STRIP AND  
MAGNET BRACKET CASTING.

## (2) REQUIREMENT

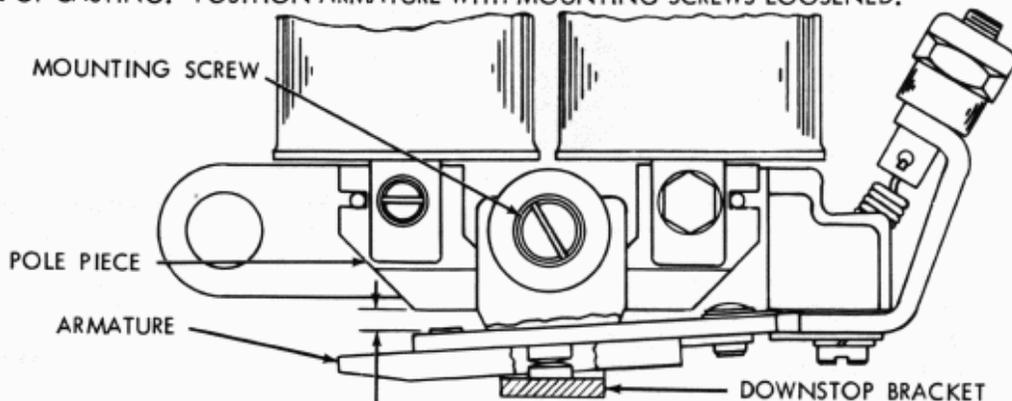
OUTER EDGE OF ARMATURE SHOULD BE FLUSH WITHIN 0.015 INCH  
WITH OUTER EDGE OF POLE PIECES.

## (3) REQUIREMENT

START LEVER SHALL DROP FREELY INTO ARMATURE EXTENSION SLOT.

## TO ADJUST

POSITION ARMATURE SPRING ADJUSTING NUT TO HOLD ARMATURE FIRMLY AGAINST PIVOT  
EDGE OF CASTING. POSITION ARMATURE WITH MOUNTING SCREWS LOOSENED.

SELECTOR ARMATURE DOWNSTOP BRACKET

## REQUIREMENT

REMOVE OIL SHIELD. WITH MAGNET DE-ENERGIZED, LOCK LEVERS ON HIGH PART OF  
THEIR CAM, AND ARMATURE RESTING AGAINST ITS DOWNSTOP, CLEARANCE BETWEEN  
END OF ARMATURE AND LEFT EDGE OF LEFT POLE PIECE

MIN. 0.025 INCH MAX. 0.030 INCH.

## TO ADJUST

POSITION DOWNSTOP BRACKET WITH MOUNTING SCREW LOOSENED. REPLACE  
OIL SHIELD AND CHECK OIL SHIELD ADJUSTMENT.



2.08 Selector Mechanism (continued)

NOTE: SEE PRECEDING PAGE FOR SELECTOR MAGNET BRACKET ADJUSTMENTS (1) AND (2).

SELECTOR MAGNET BRACKET (continued)

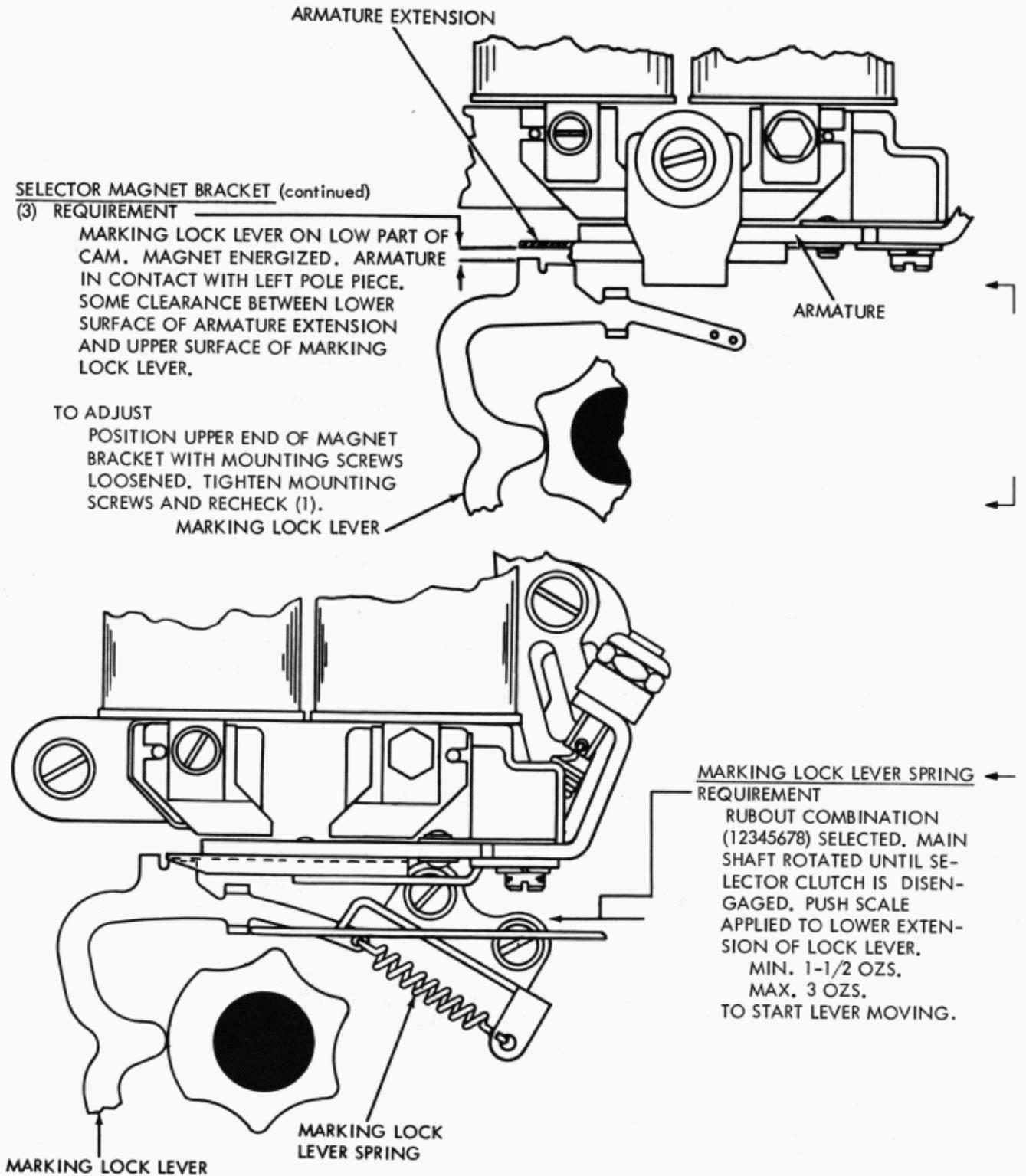
(3) REQUIREMENT

MARKING LOCK LEVER ON LOW PART OF CAM. MAGNET ENERGIZED, ARMATURE IN CONTACT WITH LEFT POLE PIECE. SOME CLEARANCE BETWEEN LOWER SURFACE OF ARMATURE EXTENSION AND UPPER SURFACE OF MARKING LOCK LEVER.

TO ADJUST

POSITION UPPER END OF MAGNET BRACKET WITH MOUNTING SCREWS LOOSENED. TIGHTEN MOUNTING SCREWS AND RECHECK (1).

MARKING LOCK LEVER



MARKING LOCK LEVER SPRING REQUIREMENT

RUBOUT COMBINATION (12345678) SELECTED. MAIN SHAFT ROTATED UNTIL SELECTOR CLUTCH IS DISENGAGED. PUSH SCALE APPLIED TO LOWER EXTENSION OF LOCK LEVER.  
 MIN. 1-1/2 OZS.  
 MAX. 3 OZS.  
 TO START LEVER MOVING.

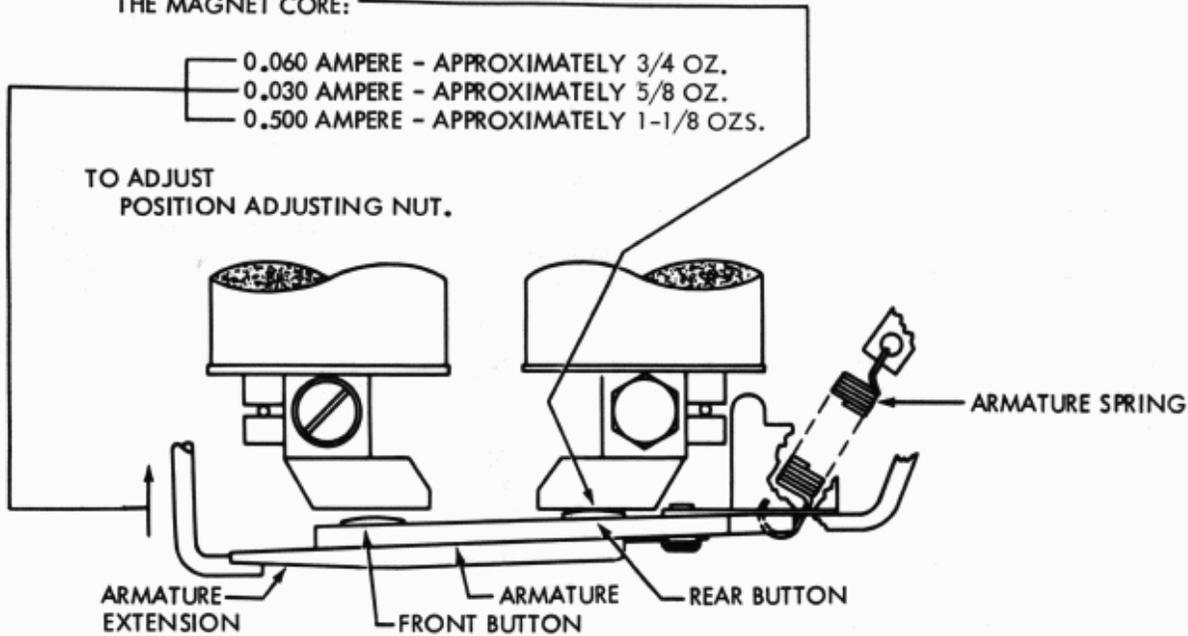
2.09 Selector Mechanism (continued)

**SELECTOR ARMATURE SPRING**

(FOR UNITS EMPLOYING SELECTOR ARMATURE WITH TWO ANTI-FREEZE BUTTONS ONLY).

**REQUIREMENT (PRELIMINARY)**

WITH LOCKING LEVERS AND START LEVER ON HIGH PART OF THEIR CAMS, SCALE APPLIED AS NEARLY VERTICAL AS POSSIBLE UNDER END OF ARMATURE EXTENSION. IT SHALL REQUIRE APPROXIMATELY THE FOLLOWING TENSIONS TO MOVE THE REAR ANTI-FREEZE BUTTON AGAINST THE MAGNET CORE:

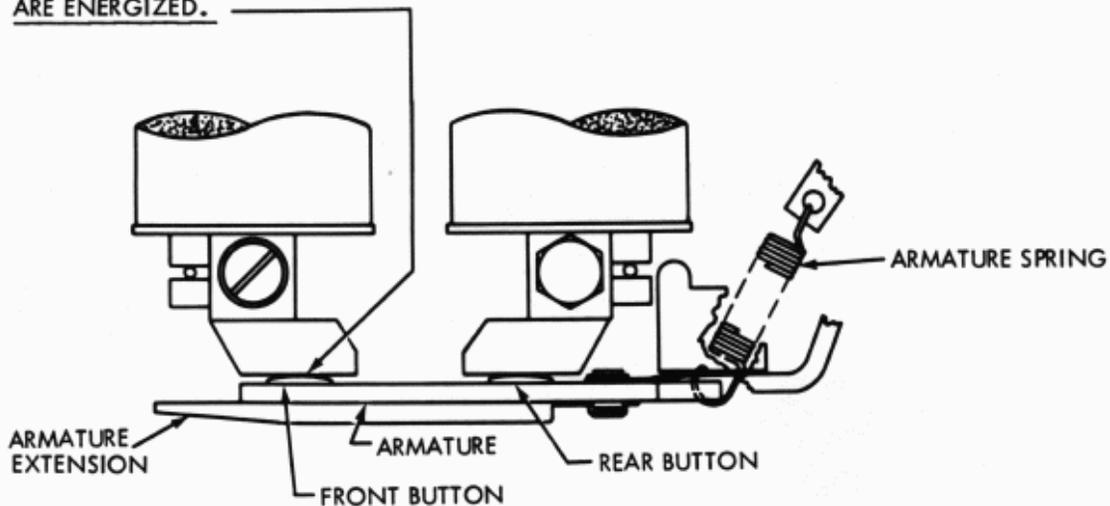


(SEE SELECTOR RECEIVING MARGIN ADJUSTMENT)

**SELECTOR ARMATURE SPRING**

**REQUIREMENT (FINAL)**

WHEN A DISTORTION TEST SET IS AVAILABLE, THE SELECTOR ARMATURE SPRING TENSION SHOULD BE REFINED, IF NECESSARY, TO OBTAIN SATISFACTORY RECEIVING MARGINS. THE FRONT ANTI-FREEZE BUTTON MUST CONTACT THE MAGNET CORE WHEN THE MAGNET COILS ARE ENERGIZED.



**REQUIREMENT (FINAL)**

SEE SELECTOR RECEIVING MARGIN ADJUSTMENT (PARAGRAPH 2.14)

2.10 Selector Mechanism (continued)

**SELECTOR ARMATURE SPRING**  
(FOR UNITS EMPLOYING SELECTOR ARMATURE WITH SINGLE ANTI-FREEZE BUTTON ONLY).  
REQUIREMENT (PRELIMINARY)

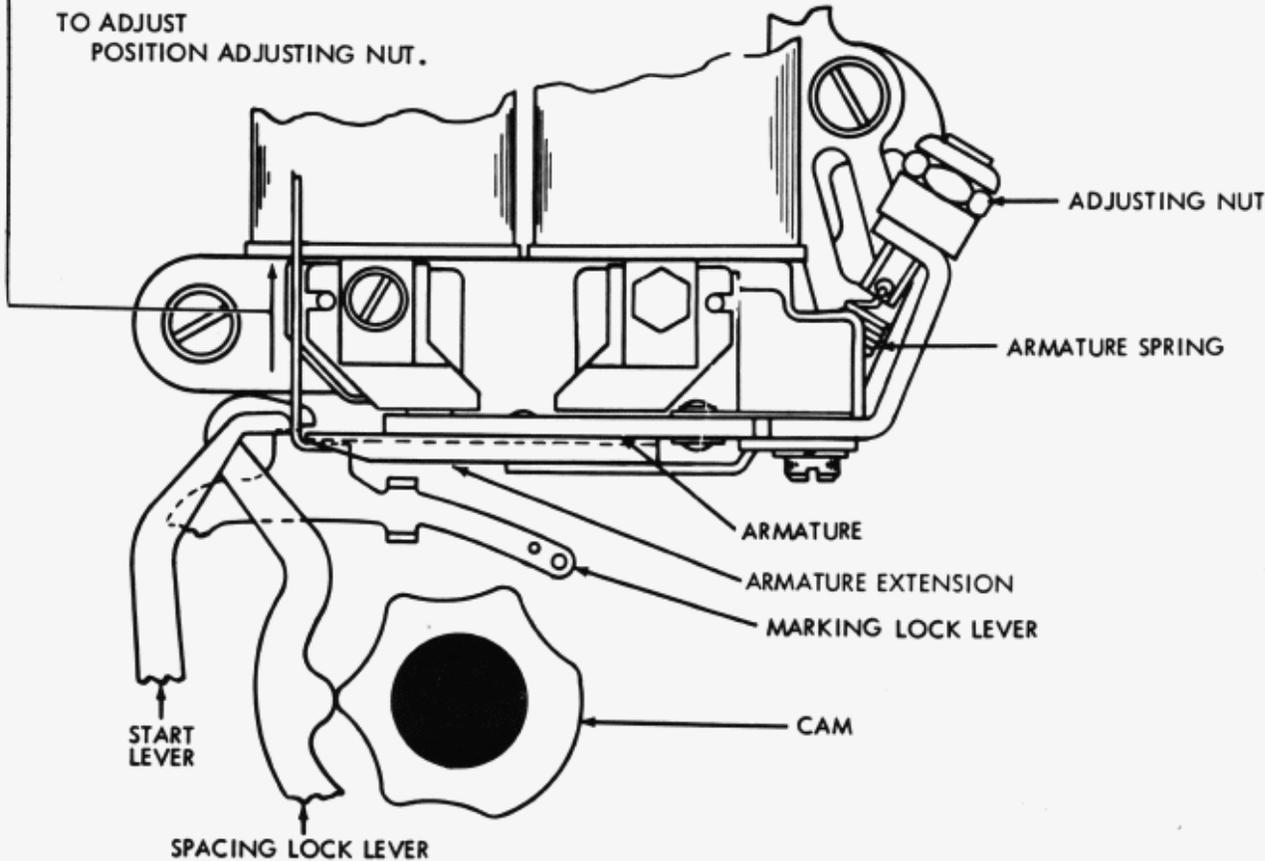
WITH LOCKING LEVERS AND START LEVER ON HIGH PART OF THEIR CAMS, SCALE APPLIED AS NEARLY VERTICAL AS POSSIBLE UNDER END OF ARMATURE EXTENSION. IT SHALL REQUIRE THE FOLLOWING TENSIONS TO MOVE ARMATURE TO MARKING POSITION:

- 0.060 AMPERE - MIN. 2-1/2 OZS. --- MAX. 3 OZS.
- 0.030 AMPERE - MIN. 1-1/2 OZS. --- MAX. 2 OZS.
- 0.500 AMPERE - MIN. 4-1/2 OZS. --- MAX. 5-1/2 OZS.

**NOTE**

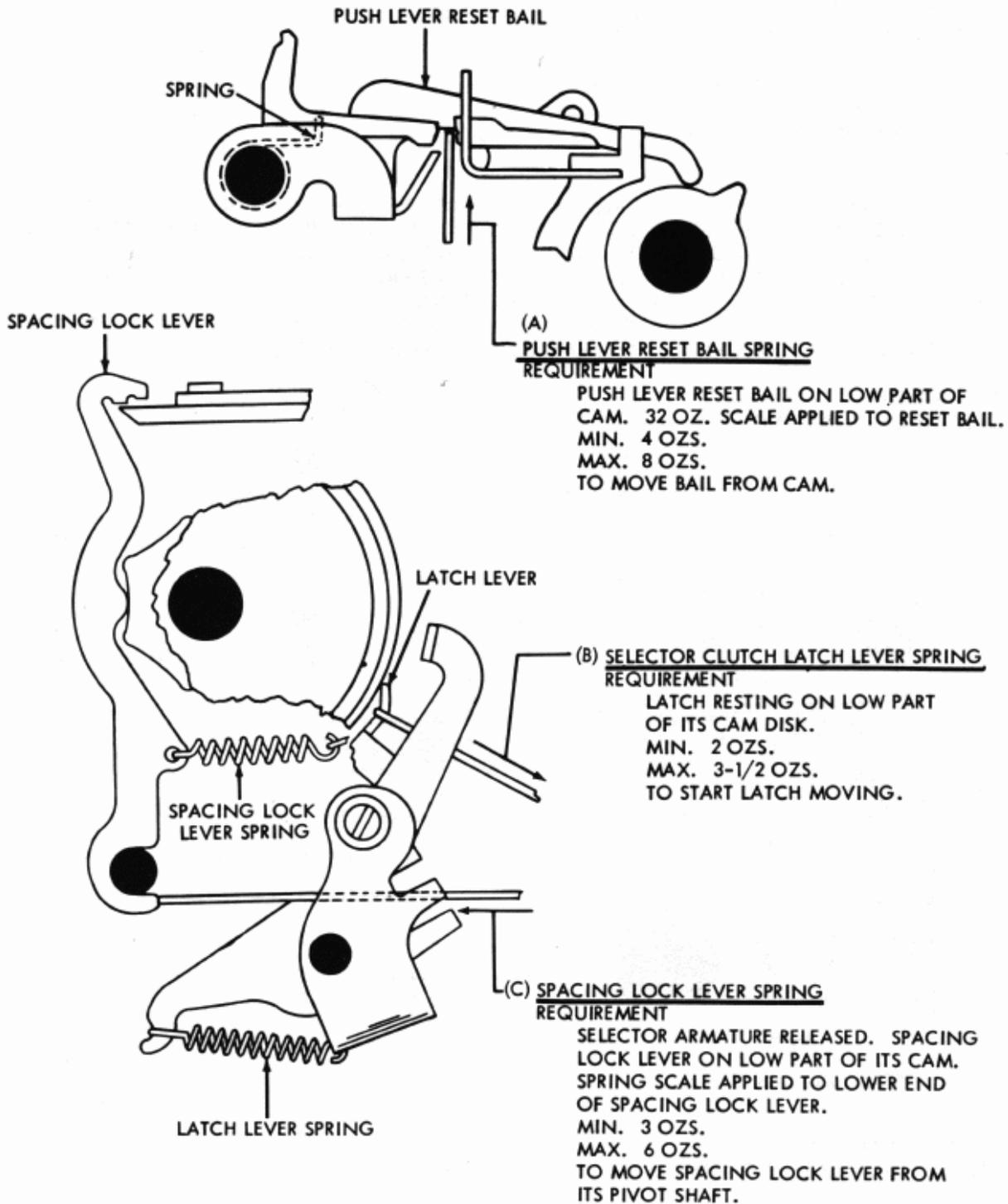
THIS SPRING CAN BE ADJUSTED FOR MAXIMUM SELECTOR PERFORMANCE ONLY WHEN PRINTER IS CONNECTED TO THE SPECIFIC CIRCUIT OVER WHICH IT IS TO OPERATE UNDER SERVICE CONDITIONS. SINCE THERE ARE SEVERAL OPERATING SPEEDS AND SINCE CIRCUITS VARY WIDELY, IT IS IMPOSSIBLE TO ADJUST SPRING FOR MAXIMUM PERFORMANCE AT THE FACTORY. THE FOREGOING SPRING TENSION REQUIREMENT IS GIVEN TO PERMIT OPERATION PRIOR TO MEASUREMENT OF RECEIVING MARGINS. READJUSTMENT MADE TO OBTAIN SATISFACTORY RECEIVING MARGIN SHOULD NOT BE DISTURBED IN ORDER TO MEET REQUIREMENTS OF THIS ADJUSTMENT.

TO ADJUST  
POSITION ADJUSTING NUT.

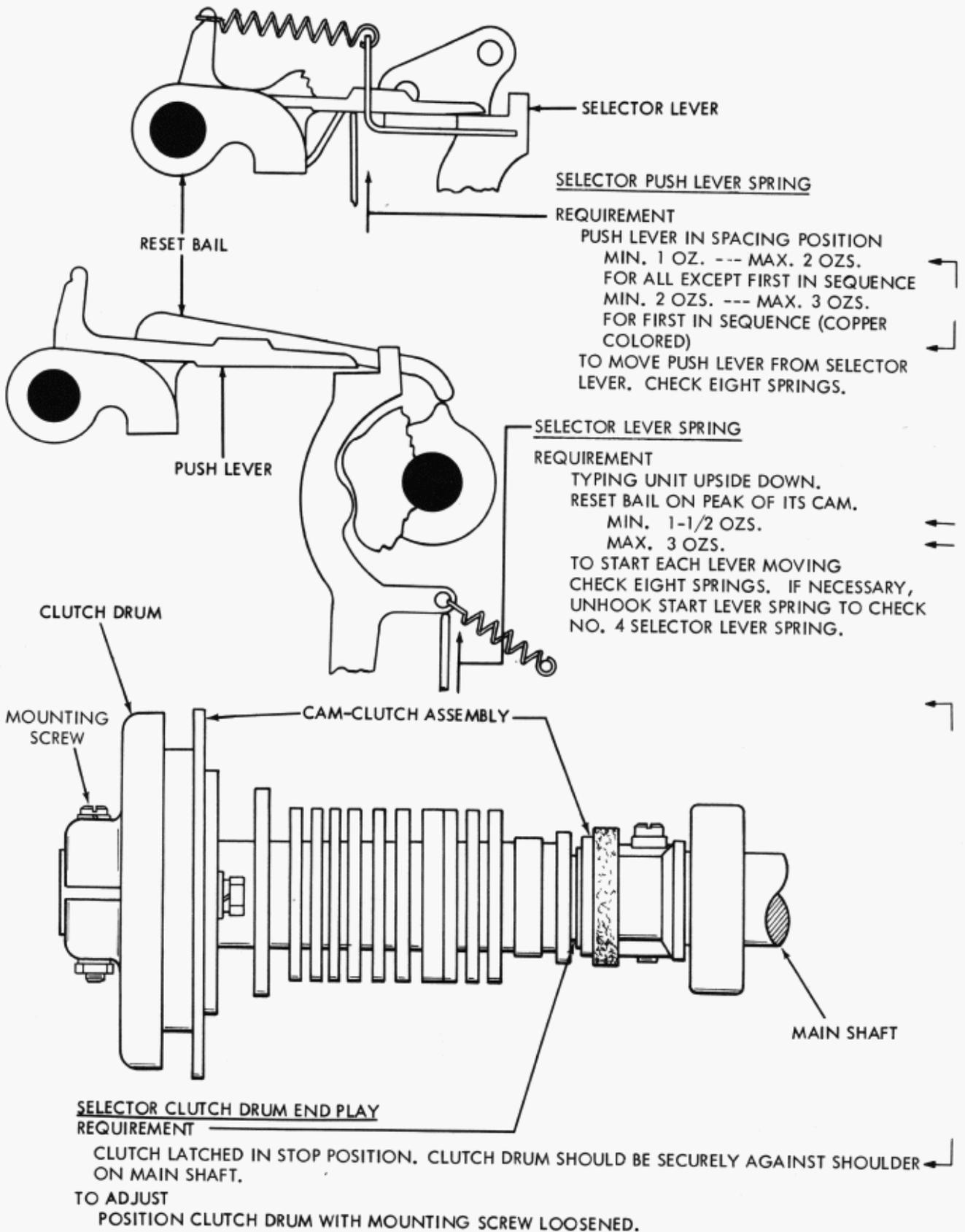


REQUIREMENT (FINAL)  
SEE SELECTOR RECEIVING MARGIN ADJUSTMENT (PARAGRAPH 2.14)

→ 2.11 Selector Mechanism (continued)



2.12 Selector Mechanism (continued)

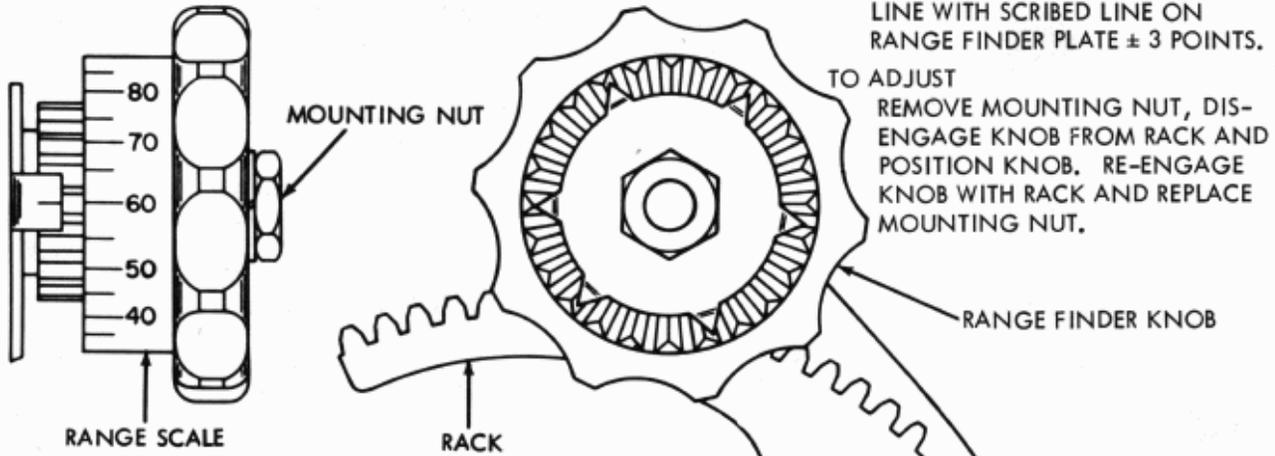


→ 2.13 Selector Mechanism (continued)

(A) RANGE FINDER KNOB PHASING

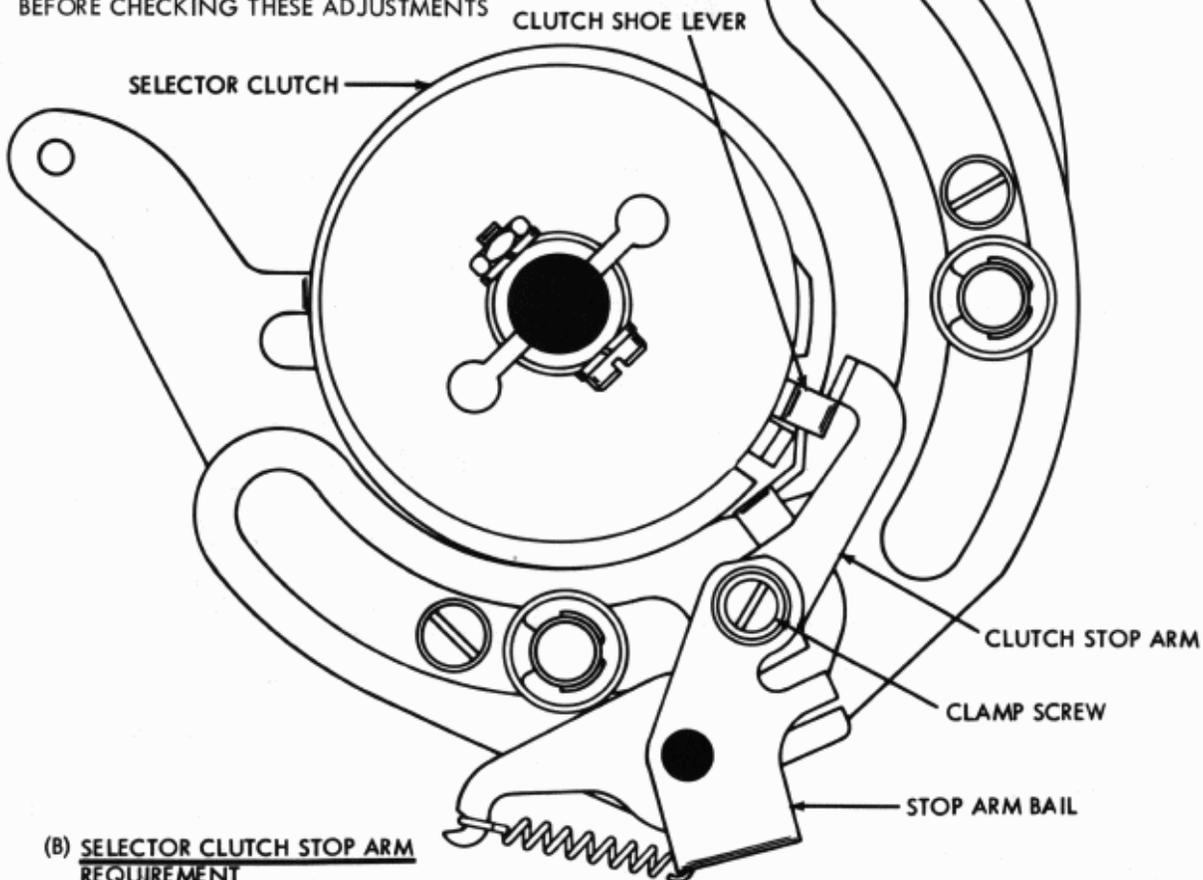
REQUIREMENT

WITH RANGE FINDER KNOB TURNED TO EITHER END OF RACK, ZERO MARK ON SCALE SHOULD BE IN LINE WITH SCRIBED LINE ON RANGE FINDER PLATE ± 3 POINTS.



TO ADJUST REMOVE MOUNTING NUT, DIS-ENGAGE KNOB FROM RACK AND POSITION KNOB. RE-ENGAGE KNOB WITH RACK AND REPLACE MOUNTING NUT.

NOTE: REPLACE RANGE FINDER AND SELECTOR MAGNET ASSEMBLY BEFORE CHECKING THESE ADJUSTMENTS

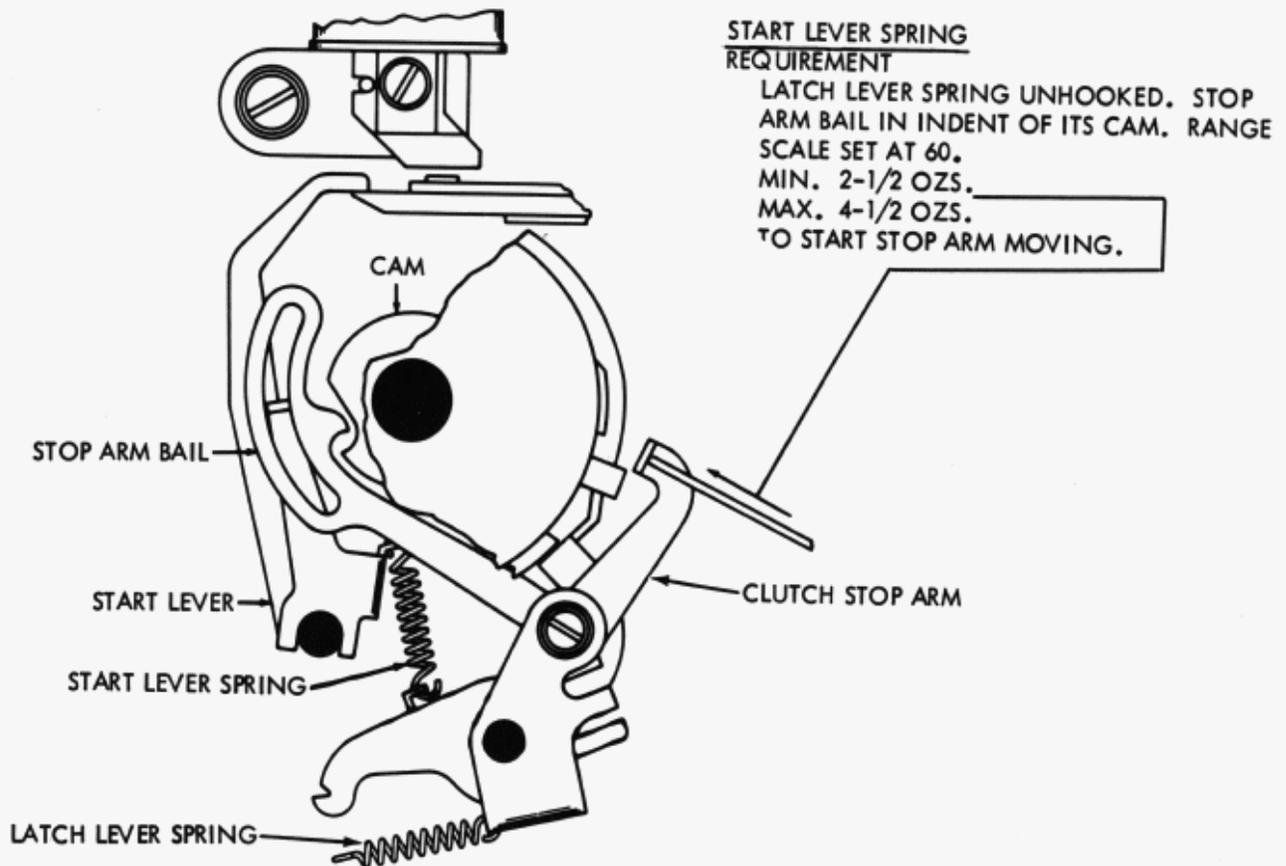


(B) SELECTOR CLUTCH STOP ARM  
REQUIREMENT

RANGE SCALE SET AT 60. SELECTOR CLUTCH DISENGAGED. ARMATURE IN MARKING POSITION. CLUTCH STOP ARM SHOULD ENGAGE CLUTCH SHOE LEVER BY APPROXIMATELY FULL THICKNESS OF STOP ARM.

TO ADJUST POSITION STOP ARM ON STOP ARM BAIL WITH CLAMP SCREW LOOSENED.

## 2.14 Selector Mechanism (continued)



SELECTOR RECEIVING MARGIN

REQUIREMENT (FOR UNITS EMPLOYING ARMATURE WITH ONE ANTI-FREEZE BUTTON)

WHEN A SIGNAL DISTORTION TEST SET IS USED FOR DETERMINING THE RECEIVING MARGINS OF THE SELECTOR, AND WHERE THE CONDITION OF THE COMPONENTS IS EQUIVALENT TO THAT OF NEW EQUIPMENT, THE RANGE AND DISTORTION TOLERANCES BELOW SHOULD BE MET.

REQUIREMENT (FOR UNITS EMPLOYING ARMATURE WITH TWO ANTI-FREEZE BUTTONS)

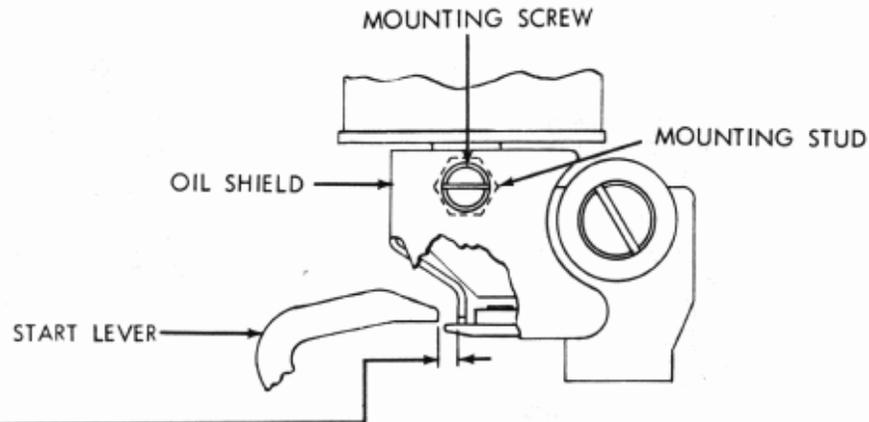
WHEN A DISTORTION TEST SET IS AVAILABLE, THE SELECTOR ARMATURE SPRING TENSION SHOULD BE REFINED, IF NECESSARY, TO OBTAIN SATISFACTORY RECEIVING MARGINS. THE FRONT ANTI-FREEZE BUTTON MUST CONTACT THE MAGNET CORE WHEN THE MAGNET COILS ARE ENERGIZED.

TO ADJUST: REFINE THE SELECTOR ARMATURE SPRING ADJUSTMENT

SELECTOR RECEIVING MARGIN MINIMUM REQUIREMENTS

| CURRENT                           | SPEED<br>IN<br>W.P.M. | POINTS RANGE<br>WITH ZERO<br>DISTORTION | PERCENTAGE OF MARK-<br>ING AND SPACING BIAS | END DISTORTION TOLER-<br>ATED WITH SCALE AT<br>BIAS OPTIMUM SETTING |
|-----------------------------------|-----------------------|---|---|---|
| 0.500 AMP<br>(WINDINGS<br>SERIES) | 100                   | 72                                      | 38  | 35  |

→ 2.15 Selector Mechanism (continued)



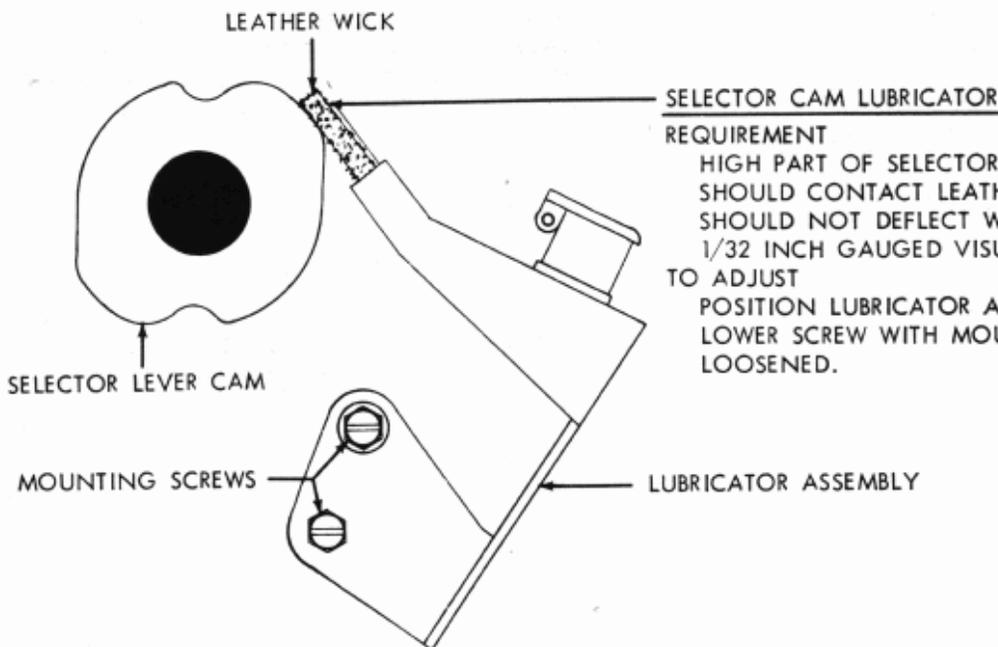
OIL SHIELD  
REQUIREMENT

(1) MAGNET DE-ENERGIZED. STOP ARM BAIL ON LOW PART OF ITS CAM. CLEARANCE BETWEEN START LEVER AND OIL SHIELD. MIN. 0.020 INCH



(2) MAGNET ENERGIZED. STOP ARM BAIL ON HIGH PART OF ITS CAM. CLEARANCE BETWEEN END OF ARMATURE AND OIL SHIELD. MIN. 0.010 INCH

TO ADJUST POSITION SHIELD WITH MOUNTING SCREW LOOSENED. MAKE SURE OIL SHIELD MOUNTING STUD IS SECURE BEFORE MAKING ADJUSTMENT.



SELECTOR CAM LUBRICATOR  
REQUIREMENT

HIGH PART OF SELECTOR LEVER CAMS SHOULD CONTACT LEATHER WICK BUT SHOULD NOT DEFLECT WICK MORE THAN 1/32 INCH GAUGED VISUALLY.

TO ADJUST

POSITION LUBRICATOR ASSEMBLY AROUND LOWER SCREW WITH MOUNTING SCREWS LOOSENED.

## 2.16 Function Mechanism (continued)

NOTE: FOR UNITS EQUIPPED WITH AUTOMATIC NON-INTERFERING LETTERS TAPE FEED OUT MECHANISM, SUBSTITUTE ADJUSTMENT IN VARIABLE FEATURES, PARAGRAPH 3.

(A) FOLLOWER LEVER REQUIREMENT

WITH FOLLOWER LEVER ON HIGH PART OF CAM:

(1) CLEARANCE BETWEEN RELEASE AND MAIN TRIP LEVER:

MIN. 0.010 INCH --- MAX. 0.030 INCH

(2) SOME CLEARANCE BETWEEN MAIN TRIP LEVER AND DOWNSTOP BRACKET. TO ADJUST

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

(C) MAIN TRIP LEVER SPRING (LATEST DESIGN) REQUIREMENT

TRIP RESET BAIL TRIP LEVER EXTENSION.

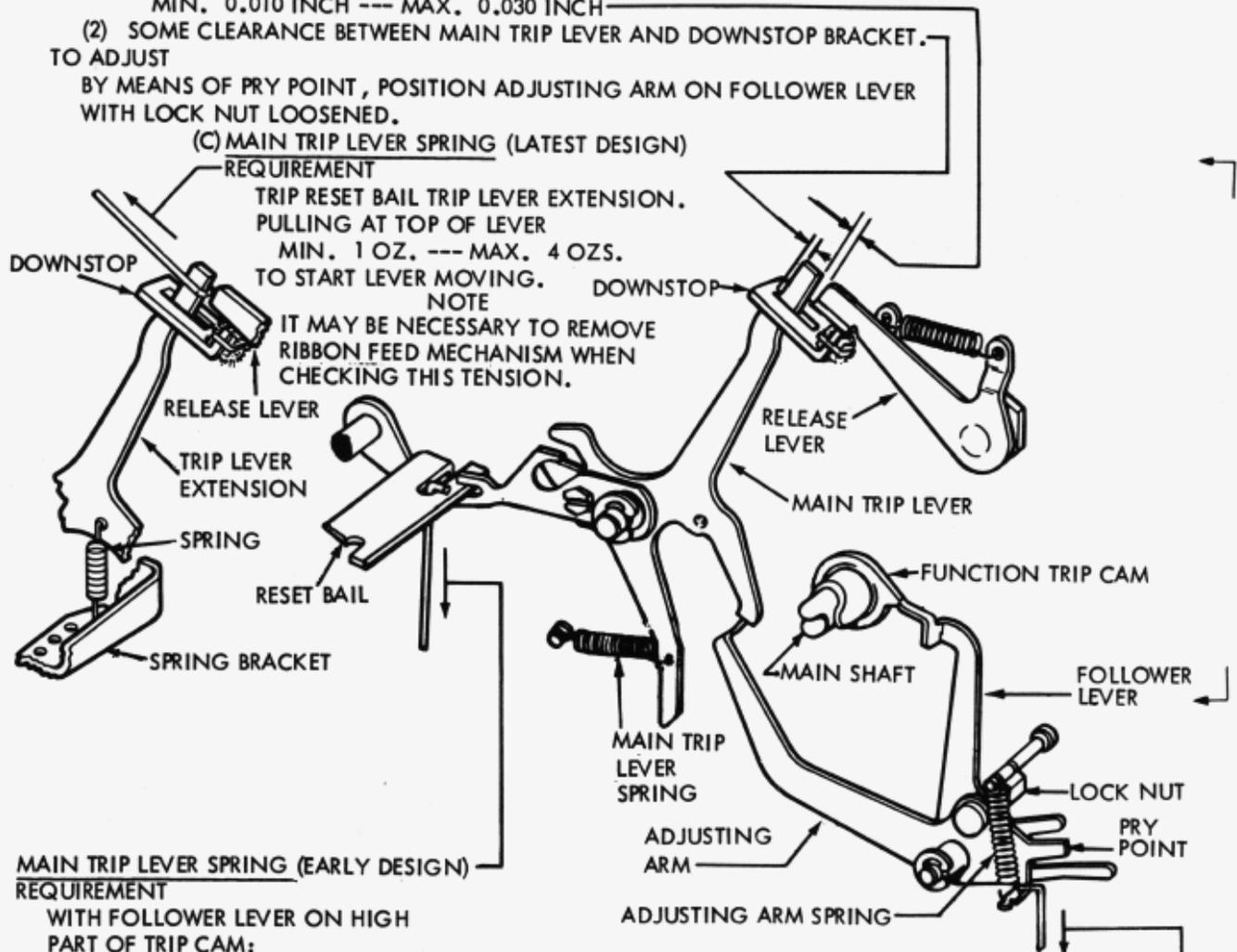
PULLING AT TOP OF LEVER

MIN. 1 OZ. --- MAX. 4 OZS.

TO START LEVER MOVING.

NOTE

IT MAY BE NECESSARY TO REMOVE RIBBON FEED MECHANISM WHEN CHECKING THIS TENSION.



MAIN TRIP LEVER SPRING (EARLY DESIGN) REQUIREMENT

WITH FOLLOWER LEVER ON HIGH PART OF TRIP CAM:

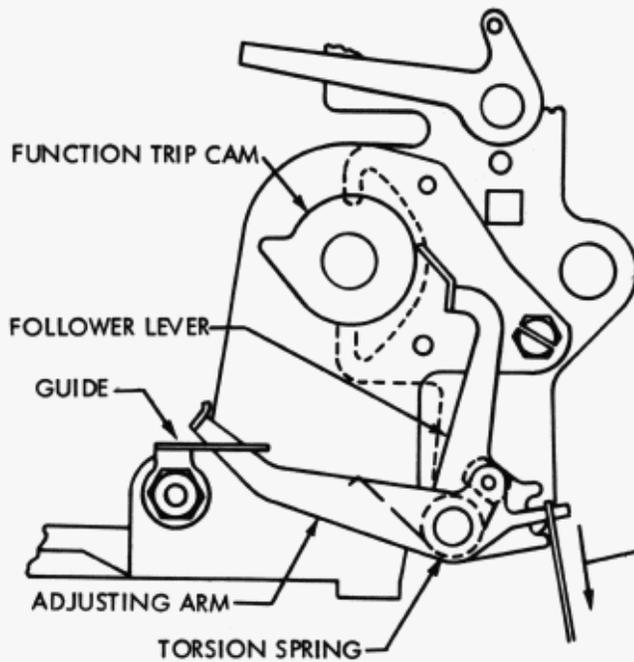
MIN. 2-1/2 OZS. --- MAX. 4-1/2 OZS. TO START TRIP LEVER MOVING.

(B) ADJUSTING ARM SPRING REQUIREMENT (EARLY DESIGN)

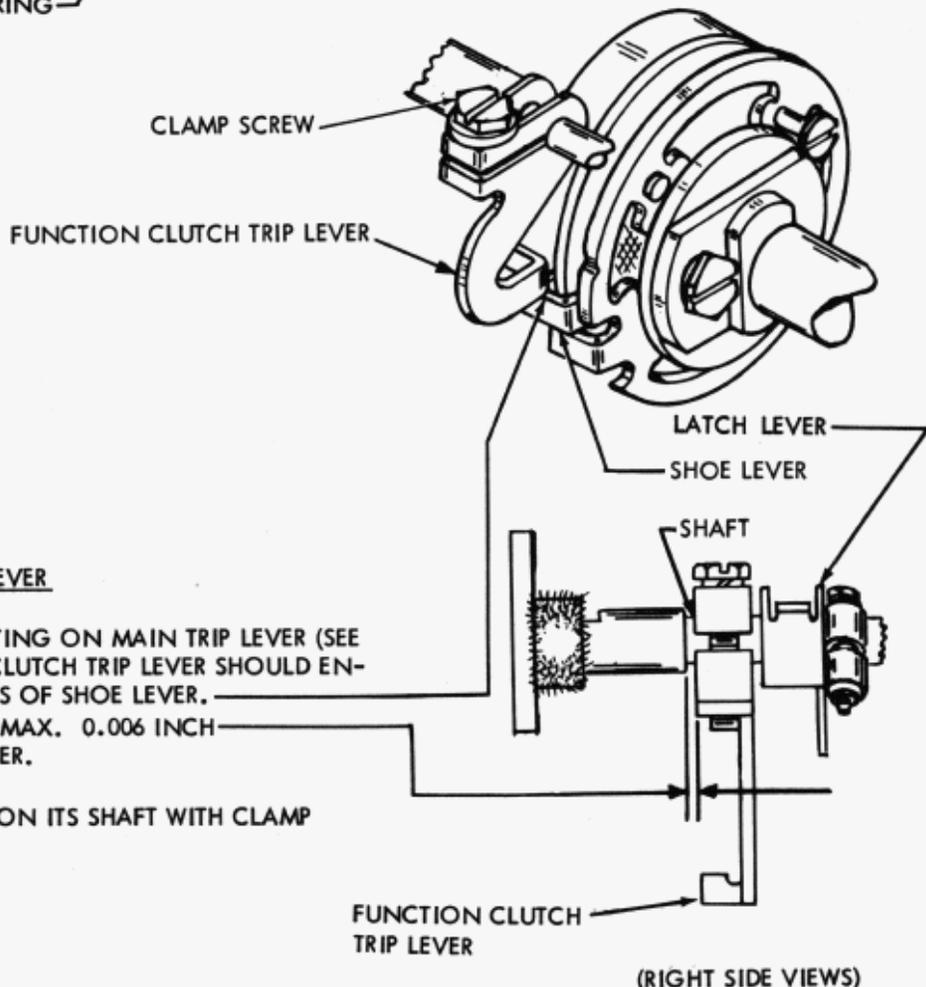
WITH FOLLOWER LEVER ON HIGH PART OF TRIP CAM AND MAIN TRIP LEVER HELD AWAY FROM ADJUSTING ARM:

MIN. 2-1/2 OZS. --- MAX. 4 OZS. TO START ADJUSTING LEVER MOVING.

→ 2.17 Function Mechanism (continued)



ADJUSTING ARM TORSION SPRING  
(LATEST DESIGN)  
WITH FOLLOWER LEVER ON LOW  
PART OF TRIP CAM AND MAIN  
TRIP LEVER HELD AWAY FROM  
ADJUSTING ARM  
— MIN. 1 OZ. --- MAX. 4 OZS.  
TO START ADJUSTING LEVER MOVING.



FUNCTION CLUTCH TRIP LEVER

REQUIREMENT

(1) WITH RELEASE RESTING ON MAIN TRIP LEVER (SEE BELOW), FUNCTION CLUTCH TRIP LEVER SHOULD ENGAGE FULL THICKNESS OF SHOE LEVER.

(2) MIN. SOME----MAX. 0.006 INCH  
END PLAY IN TRIP LEVER.

TO ADJUST

POSITION TRIP LEVER ON ITS SHAFT WITH CLAMP SCREW LOOSENED.

2.18 Function Mechanism (continued)

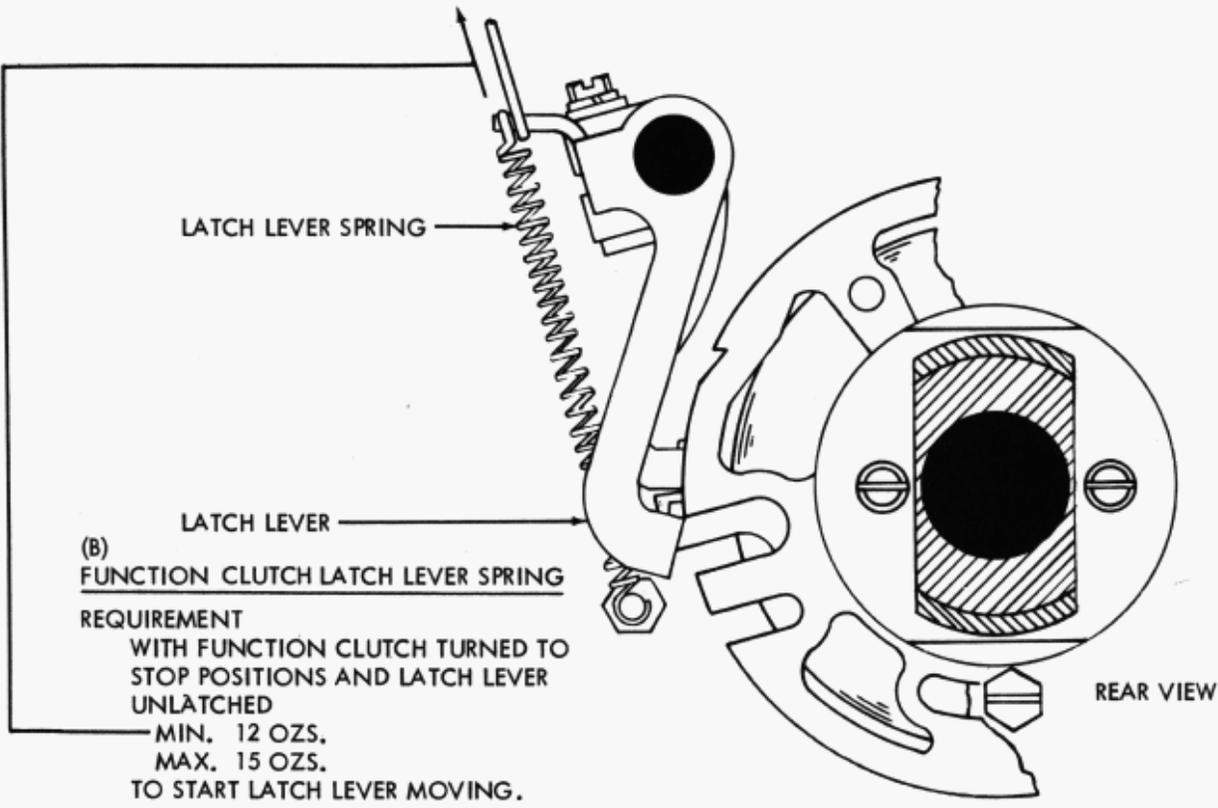
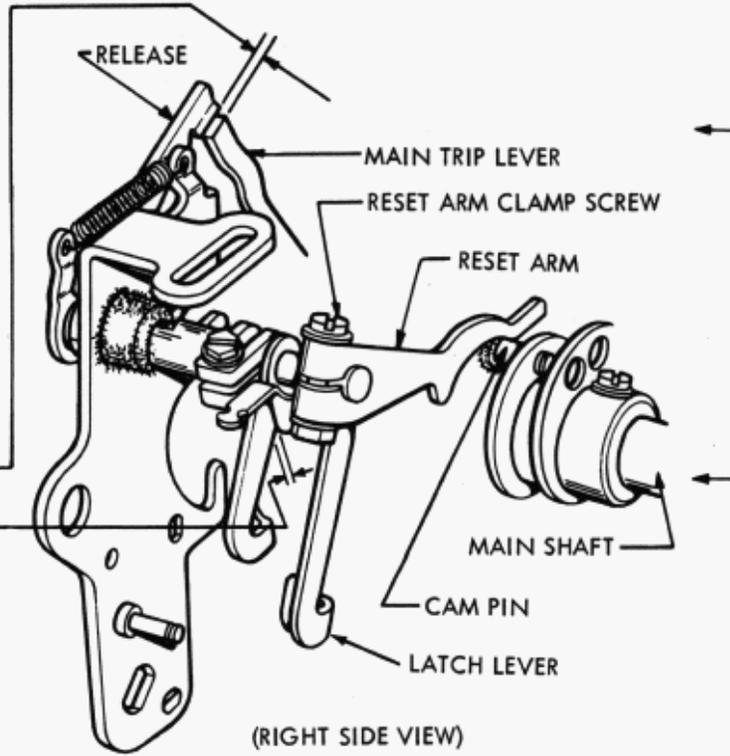
(A)  
RESET ARM  
TO CHECK

TRIP FUNCTION CLUTCH AND POSITION  
MAIN SHAFT SO THAT RESET ARM IS  
HELD IN ITS HIGHEST POSITION BY CAM PIN.

REQUIREMENT

- (1) CLEARANCE BETWEEN RELEASE  
AND MAIN TRIP LEVER:  
MIN. 0.010 INCH----MAX. 0.030 INCH
- (2) LATCH LEVER END PLAY:  
MIN. SOME----MAX. 0.010 INCH

TO ADJUST  
POSITION RESET ARM WITH CLAMP  
SCREW LOOSENED.



(B)  
FUNCTION CLUTCH LATCH LEVER SPRING

REQUIREMENT  
WITH FUNCTION CLUTCH TURNED TO  
STOP POSITIONS AND LATCH LEVER  
UNLATCHED  
MIN. 12 OZS.  
MAX. 15 OZS.  
TO START LATCH LEVER MOVING.

→ 2.19 Function Mechanism (continued)

(A)

→ CAM FOLLOWER ROLLER

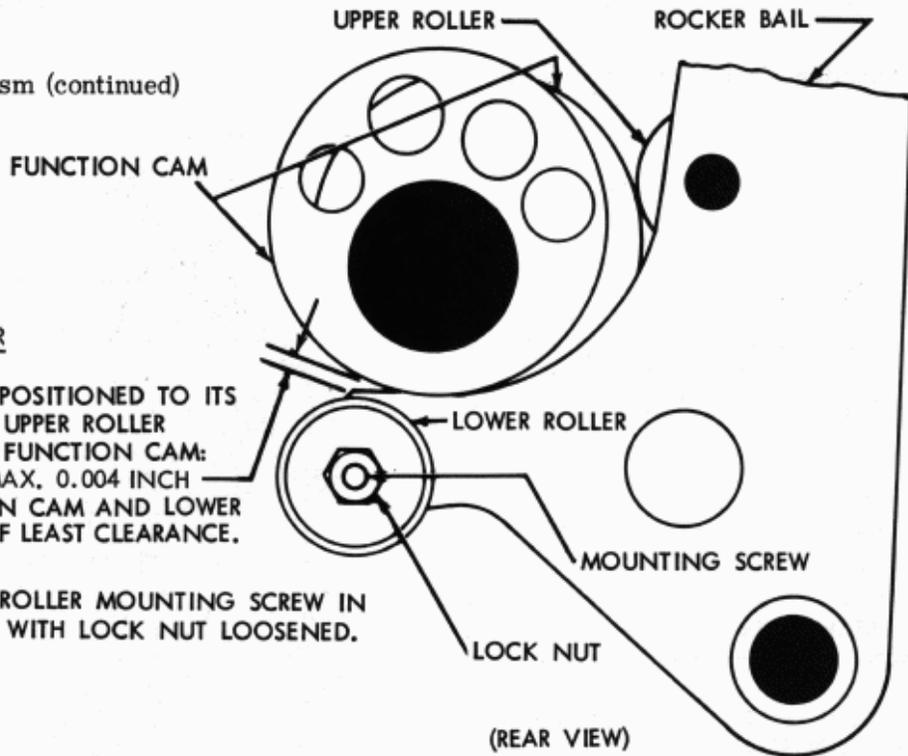
REQUIREMENT

WITH ROCKER BAIL POSITIONED TO ITS EXTREME LEFT AND UPPER ROLLER IN CONTACT WITH FUNCTION CAM:

MIN. SOME----MAX. 0.004 INCH CLEARANCE BETWEEN CAM AND LOWER ROLLER AT POINT OF LEAST CLEARANCE.

TO ADJUST

POSITION LOWER ROLLER MOUNTING SCREW IN ELONGATED SLOT WITH LOCK NUT LOOSENED.



(B)

→ CAM FOLLOWER ROLLER ALIGNMENT

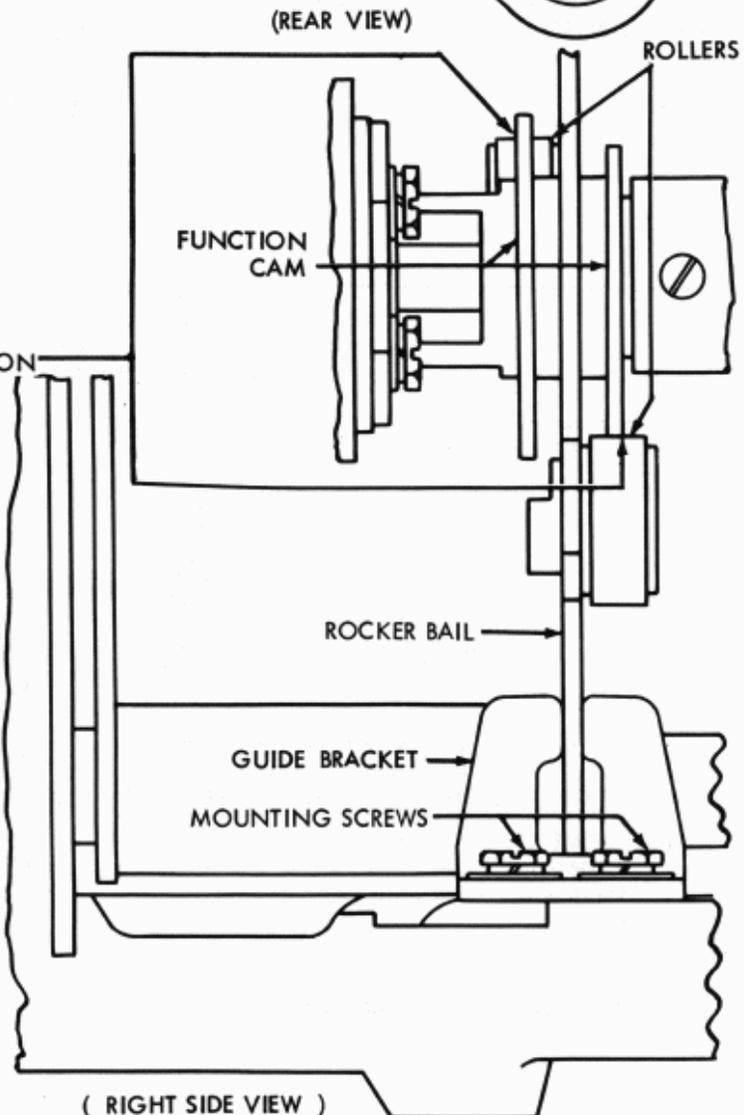
REQUIREMENT

(1) ROCKER BAIL ROLLERS SHOULD ENGAGE FULL THICKNESS OF FUNCTION CAM.

(2) LIFTER ROLLER IN FULL ENGAGEMENT WITH ROCKER BAIL CAMMING SURFACE.

TO ADJUST

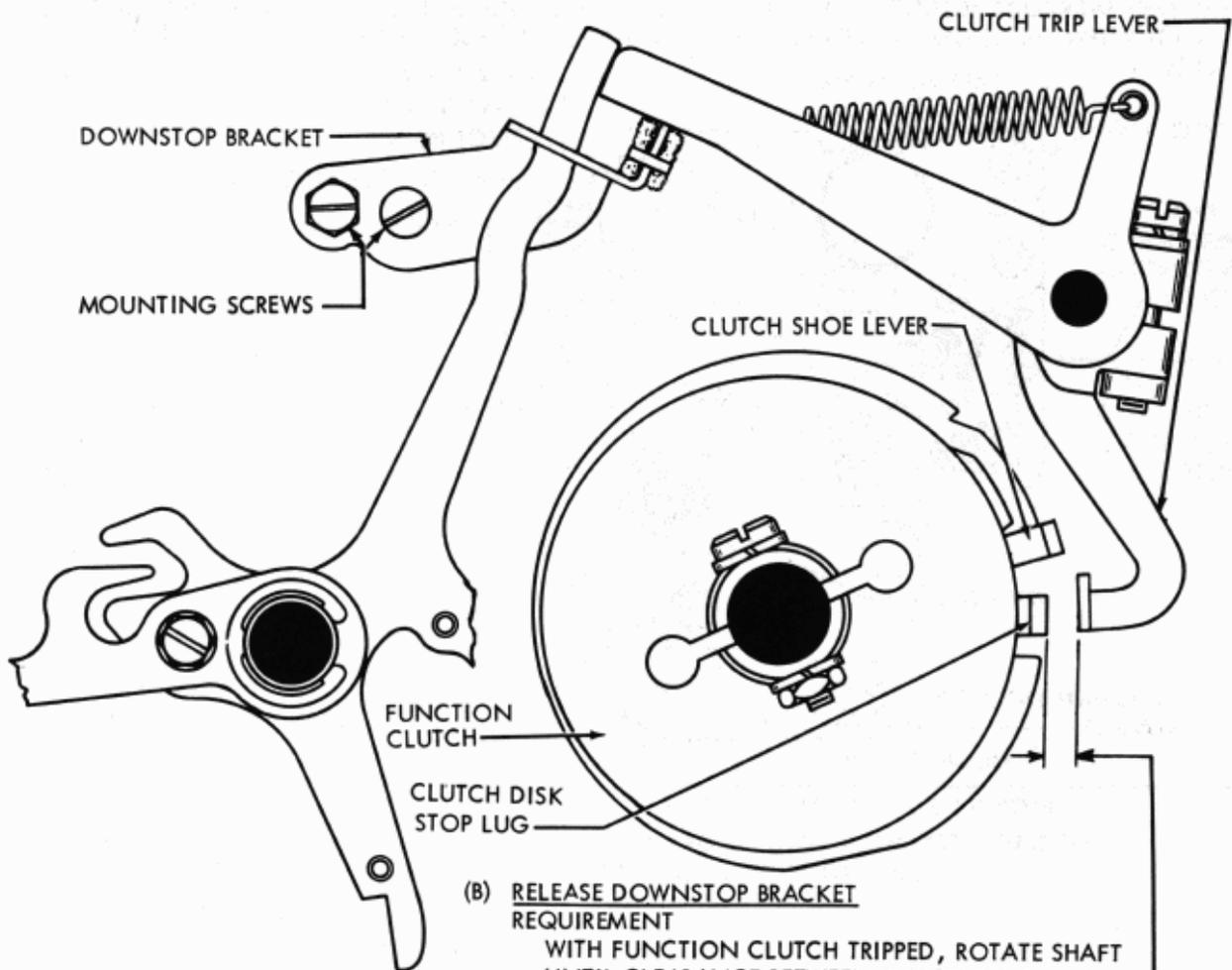
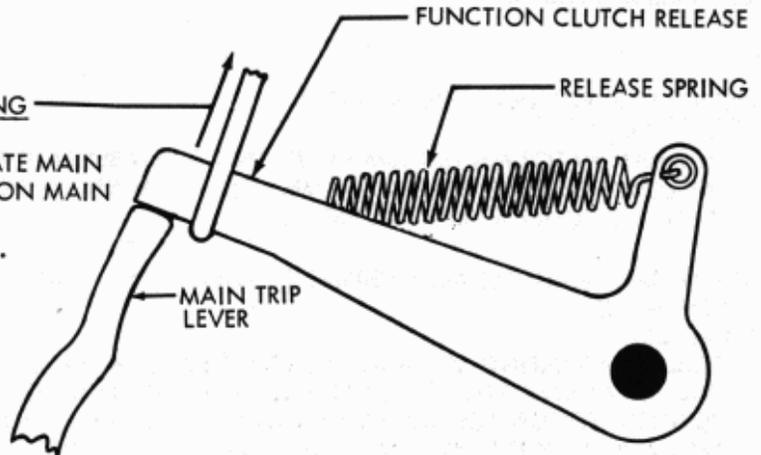
POSITION ROCKER BAIL AND GUIDE BRACKET WITH GUIDE BRACKET MOUNTING SCREWS LOOSENED.



2.20 Function Mechanism (continued)

(A) FUNCTION CLUTCH RELEASE SPRING REQUIREMENT

TRIP FUNCTION CLUTCH. ROTATE MAIN SHAFT UNTIL RELEASE IS RESET ON MAIN TRIP LEVER.  
MIN. 5 OZS. --- MAX. 8 OZS. TO START RELEASE MOVING.



(B) RELEASE DOWNSTOP BRACKET REQUIREMENT

WITH FUNCTION CLUTCH TRIPPED, ROTATE SHAFT UNTIL CLEARANCE BETWEEN FUNCTION CLUTCH DISK STOP LUG AND CLUTCH STOP LEVER IS AT A MINIMUM. RELEASE RESTING AGAINST DOWNSTOP BRACKET. CLEARANCE BETWEEN FUNCTION CLUTCH DISK STOP LUG AND STOP LEVER:  
MIN. 0.002 INCH --- MAX. 0.045 INCH

TO ADJUST

REMOVE TAPE GUIDE. WITH DOWNSTOP BRACKET MOUNTING SCREWS FRICTION TIGHT POSITION BRACKET.

2.21 Punch Mechanism

PERFORATOR POSITION (PRELIMINARY)

REQUIREMENT

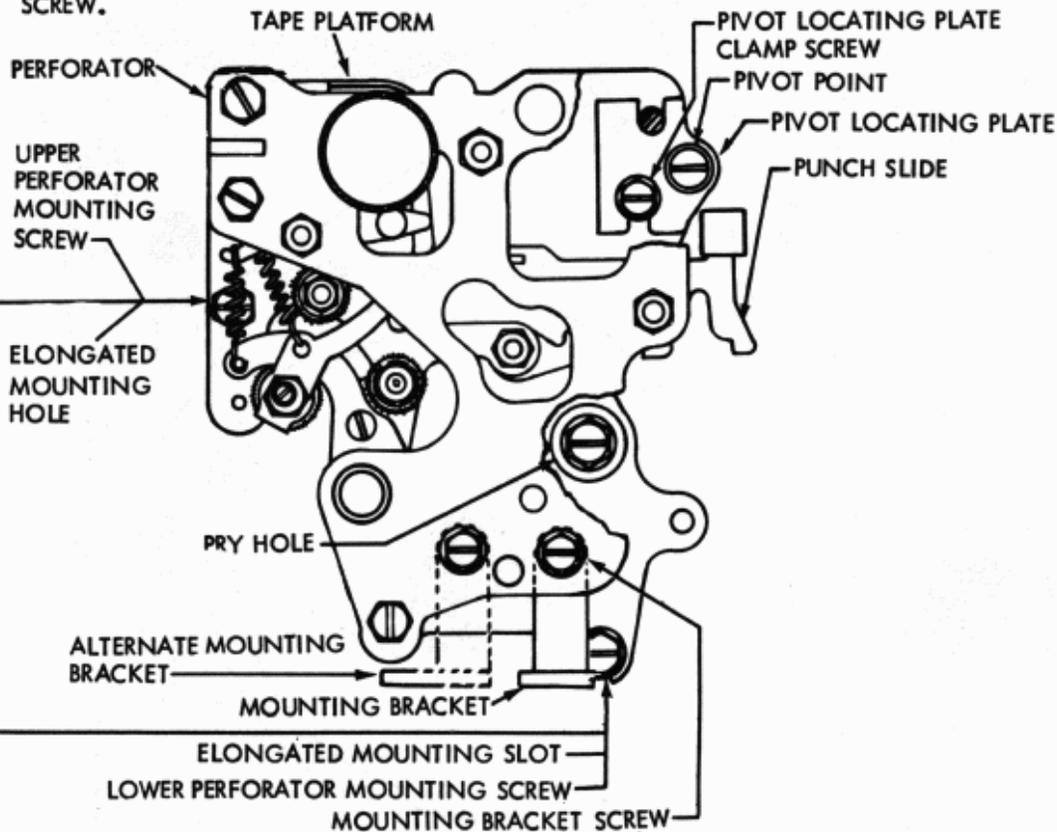
THE PERFORATOR MECHANISM MOUNTING SCREW BENEATH PUNCH BLOCK AND MOUNTING SCREW AT LOWER EDGE OF PERFORATOR MECHANISM BACKPLATE SHALL BE LOCATED CENTRALLY WITHIN THEIR RESPECTIVE MOUNTING HOLES.

NOTE

THE MOUNTING HOLES ARE OVERSIZE TO FACILITATE USE OF PERFORATOR MECHANISM ON THE TYPING REPERFORATOR.

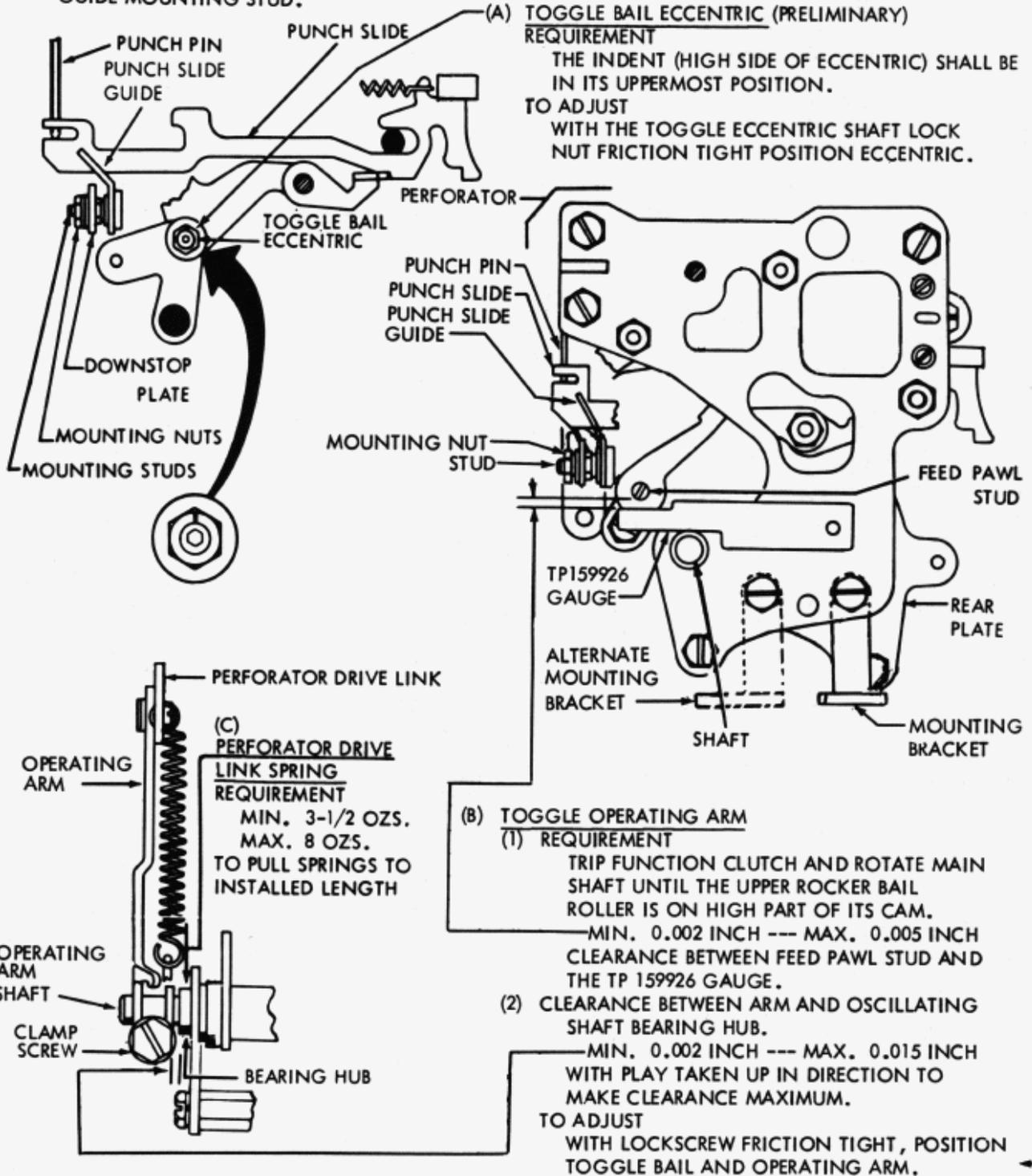
TO ADJUST

REMOVE MOUNTING SCREW AT THE LOWER EDGE OF PERFORATOR MECHANISM BACKPLATE, WITH THE TWO REMAINING BACKPLATE MOUNTING SCREWS AND MOUNTING BRACKET SCREW FRICTION TIGHT, POSITION PERFORATOR MECHANISM SO THAT THE TAPPED HOLE OF THE FRAME IS CENTRALLY LOCATED (AS GAUGED BY EYE) WITHIN LARGE BODY HOLE OF PUNCH MECHANISM BACKPLATE. TIGHTEN THE TWO BACKPLATE MOUNTING SCREWS AND RECHECK TO SEE THAT REQUIREMENT IS MET. REPLACE AND TIGHTEN THE LOWER BACKPLATE MOUNTING SCREW. TIGHTEN THE BRACKET MOUNTING SCREW.



2.22 Punch Mechanism (continued)

**NOTE**  
 BEFORE PROCEEDING WITH THE PUNCH MECHANISM ADJUSTMENTS, CHECK THE ROCKER BAIL CAM FOLLOWER ROLLER ADJUSTMENT AND LOOSEN THE PUNCH SLIDE DOWNSTOP MOUNTING NUT AND GUIDE MOUNTING STUD.



2.23 Punch Mechanism (continued)

(A) PUNCH PIN PENETRATION

REQUIREMENT

(1) WITH THE RUBOUT COMBINATION SELECTED, FUNCTION CLUTCH ENGAGED. ROTATE MAIN SHAFT UNTIL ALL PUNCH PINS ARE INTO OR ABOVE THE TAPE APERTURE IN PUNCH BLOCK. WITH THE TP159926 GAUGE IN POSITION

MIN. 0.050 INCH

CLEARANCE BETWEEN FEED PAWL STUD AND THE GAUGE.

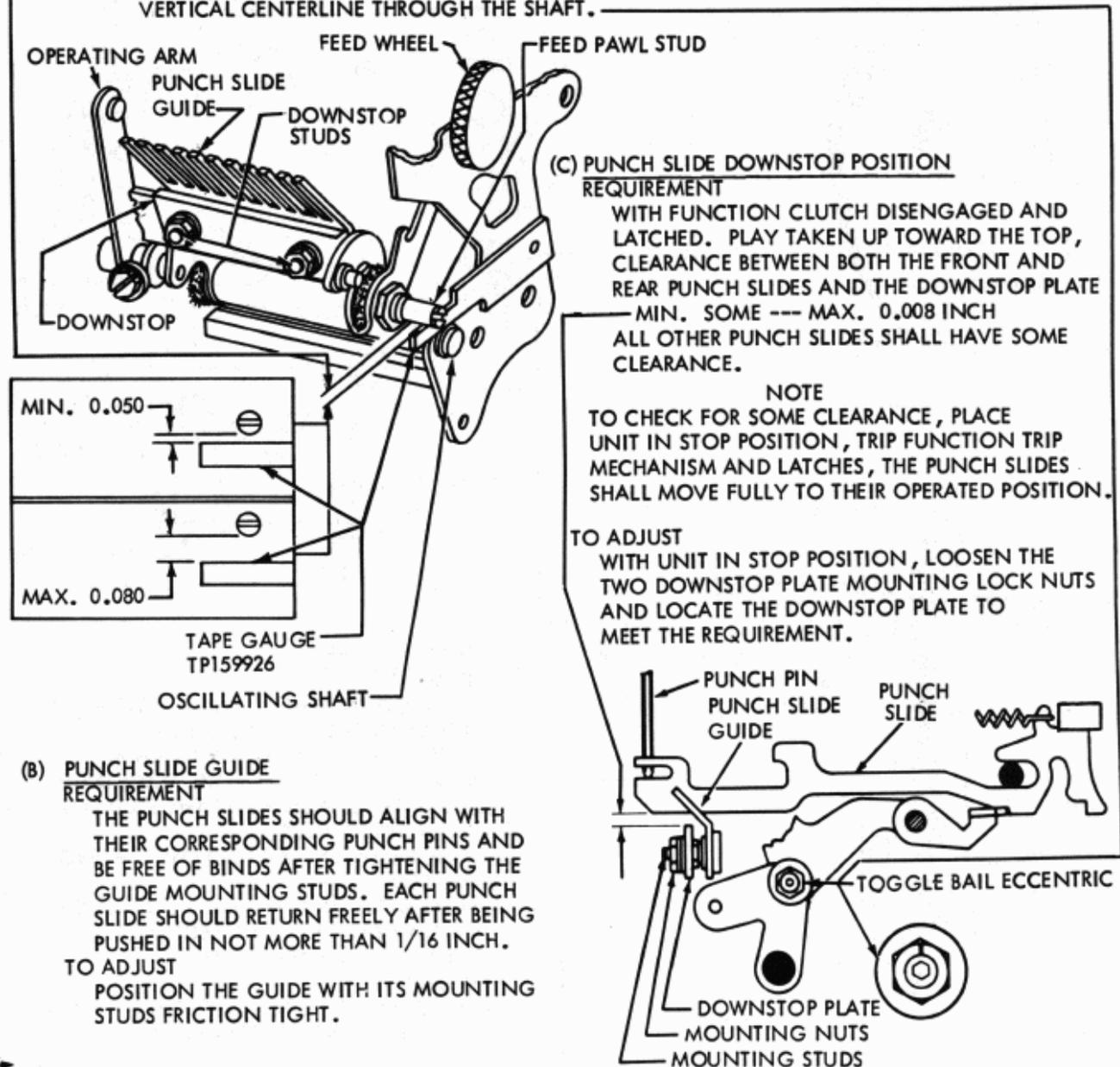
(2) WITH RUBOUT COMBINATION SELECTED, FUNCTION CLUTCH ENGAGED. ROTATE MAIN SHAFT UNTIL ALL PUNCH PINS HAVE CLEARED THE PUNCH BLOCK. WITH THE TP159926 GAUGE IN POSITION

MAX. 0.080 INCH

CLEARANCE BETWEEN FEED PAWL STUD AND GAUGE.

TO ADJUST

REFINE THE TOGGLE BAIL ECCENTRIC ADJUSTMENT KEEPING THE INDENT TO THE RIGHT OF A VERTICAL CENTERLINE THROUGH THE SHAFT.



(C) PUNCH SLIDE DOWNSTOP POSITION REQUIREMENT

WITH FUNCTION CLUTCH DISENGAGED AND LATCHED. PLAY TAKEN UP TOWARD THE TOP, CLEARANCE BETWEEN BOTH THE FRONT AND REAR PUNCH SLIDES AND THE DOWNSTOP PLATE

MIN. SOME --- MAX. 0.008 INCH

ALL OTHER PUNCH SLIDES SHALL HAVE SOME CLEARANCE.

NOTE

TO CHECK FOR SOME CLEARANCE, PLACE UNIT IN STOP POSITION, TRIP FUNCTION TRIP MECHANISM AND LATCHES, THE PUNCH SLIDES SHALL MOVE FULLY TO THEIR OPERATED POSITION.

TO ADJUST

WITH UNIT IN STOP POSITION, LOOSEN THE TWO DOWNSTOP PLATE MOUNTING LOCK NUTS AND LOCATE THE DOWNSTOP PLATE TO MEET THE REQUIREMENT.

(B) PUNCH SLIDE GUIDE

REQUIREMENT

THE PUNCH SLIDES SHOULD ALIGN WITH THEIR CORRESPONDING PUNCH PINS AND BE FREE OF BINDS AFTER TIGHTENING THE GUIDE MOUNTING STUDS. EACH PUNCH SLIDE SHOULD RETURN FREELY AFTER BEING PUSHED IN NOT MORE THAN 1/16 INCH.

TO ADJUST

POSITION THE GUIDE WITH ITS MOUNTING STUDS FRICTION TIGHT.

PERFORATOR POSITION----FINAL

## (1) TO CHECK

SELECT RUBOUT CODE COMBINATION (12345678). ROTATE UNTIL FUNCTION CLUTCH TRIPS WITH PUNCH LEVERS IN EXTREME LEFT-HAND POSITION.

## REQUIREMENT

CLEARANCE BETWEEN PUNCH SLIDE AND PUNCH SLIDE LATCH:  
MIN. 0.015 INCH----MAX. 0.045 INCH  
AT SLIDE WHERE CLEARANCE IS LEAST.

## TO ADJUST

LOOSEN PERFORATOR MOUNTING SCREWS, ADJUSTING CLAMP LOCK SCREW, ADJUSTING CLAMP PIVOT SCREW AND ANCHOR BRACKET SCREW UNTIL FRICTION TIGHT. PLACE TIP OF SCREW DRIVER BETWEEN SCREW AND RIM OF PRY HOLE AND PRY PERFORATOR UP OR DOWN. TIGHTEN ONLY ADJUSTING CLAMP LOCK SCREW.

## (2) TO CHECK

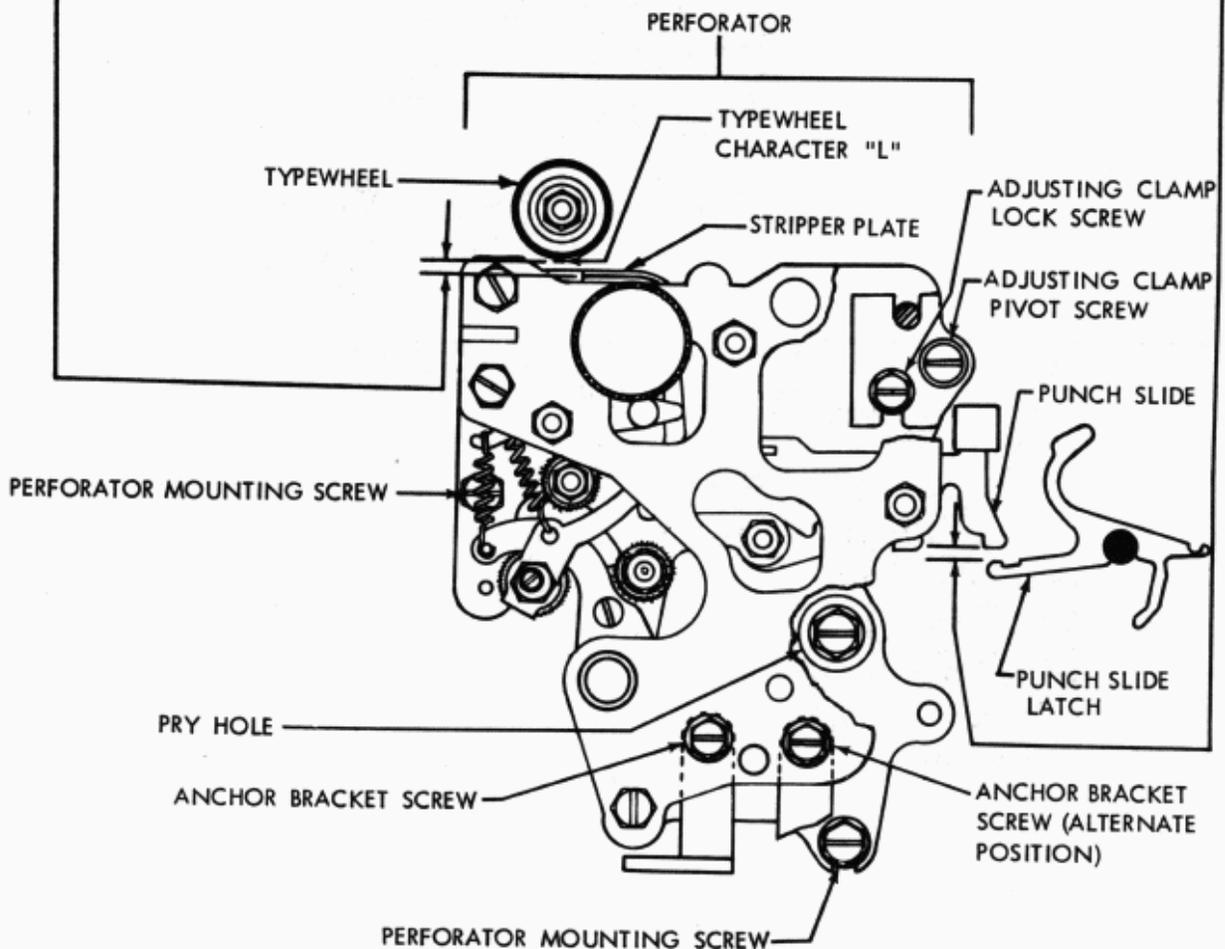
SELECT "L" CODE COMBINATION (--34--78). TRIP FUNCTION CLUTCH AND MOVE ROCKER BAIL TO EXTREME LEFT.

## REQUIREMENT

CLEARANCE BETWEEN STRIPPER PLATE AND TYPEWHEEL CHARACTER "L":  
MIN. 0.075 INCH----MAX. 0.085 INCH

## TO ADJUST

REMOVE RIBBON FROM CARRIER. POSITION PERFORATOR WITH TWO MOUNTING SCREWS, ADJUSTING CLAMP PIVOT SCREW AND ANCHOR BRACKET SCREW LOOSENED. CHECK RESET BAIL TRIP LEVER REQUIREMENT FOR SOME CLEARANCE AND ADJUST IF NECESSARY.



2.25 Punch Mechanism (continued)

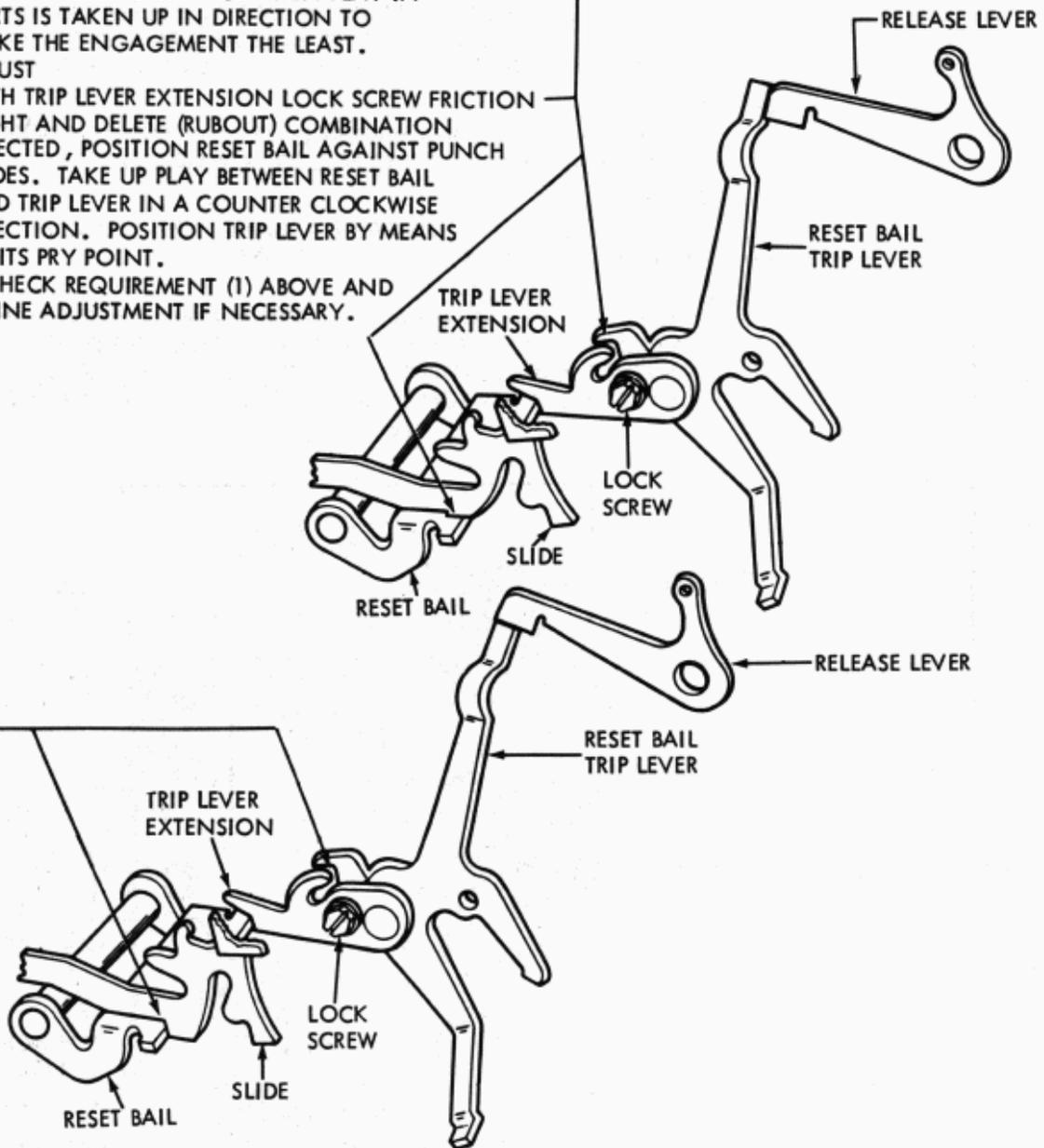
RESET BAIL TRIP LEVER

REQUIREMENT

- (1) MANUALLY SELECT AN ALL SPACING COMBINATION. MANUALLY ROTATE RESET BAIL TRIP LEVER. THE PUNCH SLIDE RESET BAIL SHALL TRIP BEFORE THE FUNCTION CLUTCH IS TRIPPED.
- (2) WITH FUNCTION AND SELECTOR CLUTCHES DIS-ENGAGED AND LATCHED, THE PUNCH SLIDE RESET BAIL SHALL FULLY ENGAGE THE PUNCH SLIDE LATCHING SURFACE WHEN PLAY IN PARTS IS TAKEN UP IN DIRECTION TO MAKE THE ENGAGEMENT THE LEAST.

TO ADJUST

- (1) WITH TRIP LEVER EXTENSION LOCK SCREW FRICTION TIGHT AND DELETE (RUBOUT) COMBINATION SELECTED, POSITION RESET BAIL AGAINST PUNCH SLIDES. TAKE UP PLAY BETWEEN RESET BAIL AND TRIP LEVER IN A COUNTER CLOCKWISE DIRECTION. POSITION TRIP LEVER BY MEANS OF ITS PRY POINT.
- (2) RECHECK REQUIREMENT (1) ABOVE AND REFINE ADJUSTMENT IF NECESSARY.



2.26 Punch Mechanism (continued)

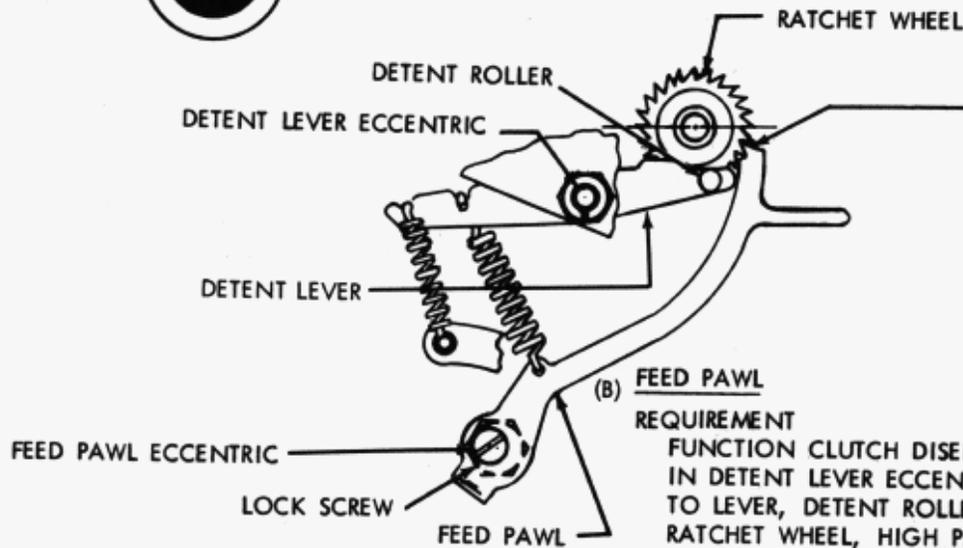
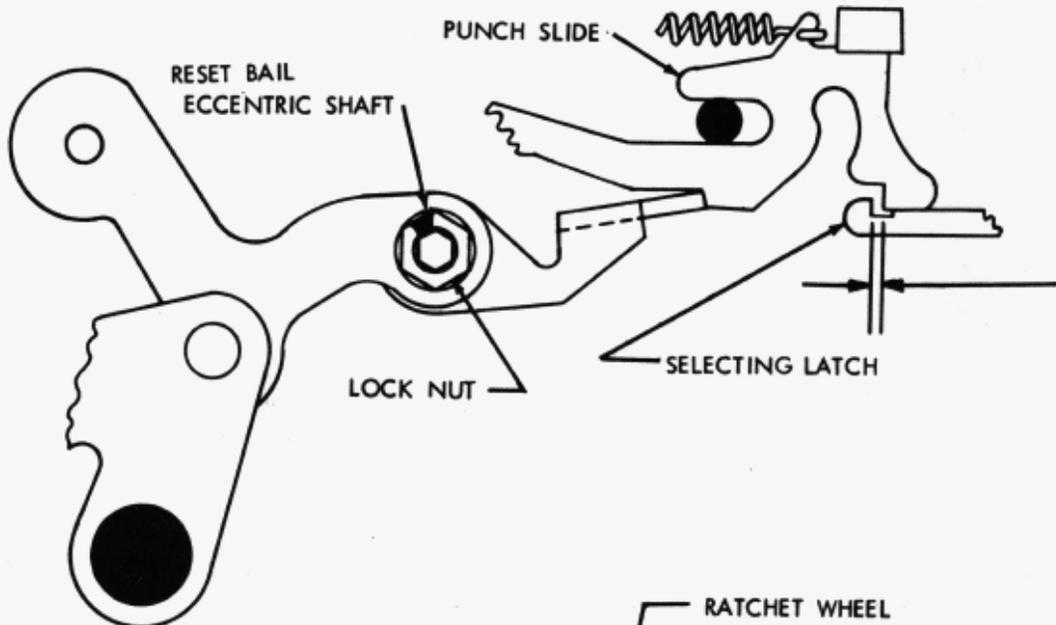
(A) PUNCH SLIDE RESET BAIL

REQUIREMENT

WITH FUNCTION CLUTCH DISENGAGED:  
 MIN. 0.005 INCH---MAX. 0.015 INCH  
 BETWEEN PUNCH SLIDE AND PUNCH SLIDE LATCH.

TO ADJUST

ROTATE THE RESET BAIL ECCENTRIC SHAFT WITH ITS LOCK NUT LOOSENED.  
 KEEP THE INDENTATION IN THE ECCENTRIC ABOVE CENTER OF SHAFT.



(B) FEED PAWL  
 REQUIREMENT

FUNCTION CLUTCH DISENGAGED, INDENTATION  
 IN DETENT LEVER ECCENTRIC AT RIGHT ANGLE  
 TO LEVER, DETENT ROLLER IN CONTACT WITH  
 RATCHET WHEEL, HIGH PART OF FEED PAWL  
 ECCENTRIC TO THE RIGHT OF ITS LOCK SCREW:  
 THE FEED PAWL SHOULD ENGAGE THE FIRST  
 TOOTH BELOW A HORIZONTAL CENTERLINE  
 THROUGH THE RATCHET WHEEL WITH  
 NO PERCEPTIBLE CLEARANCE.

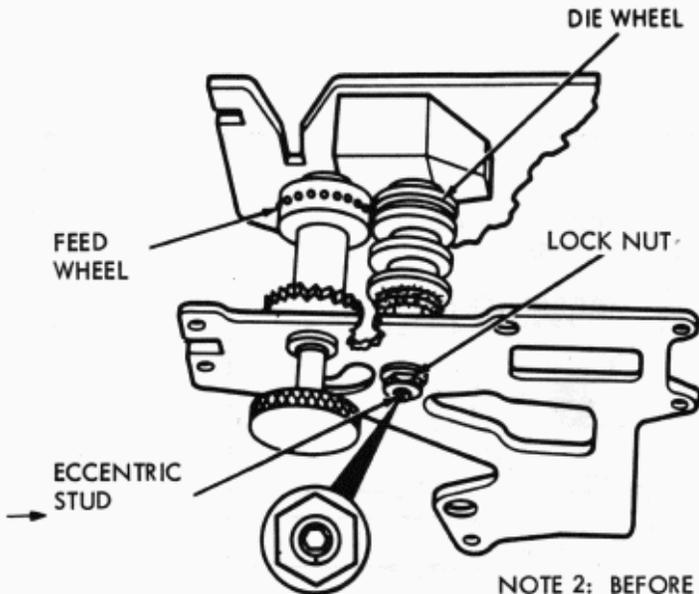
NOTE

THIS ADJUSTMENT IS RELATED TO FEED HOLE  
 SPACING, AND TWO ADJUSTMENTS SHOULD BE  
 MADE AT SAME TIME.

TO ADJUST

ROTATE THE FEED PAWL ECCENTRIC WITH LOCK  
 SCREW LOOSENED.

→ 2.27 Punch Mechanism (continued)



FEED HOLE SPACING-----PRELIMINARY REQUIREMENT

INDENT OF DIE WHEEL ECCENTRIC STUD POINTING DOWNWARD.

TO ADJUST

POSITION DIE WHEEL ECCENTRIC STUD WITH LOCK NUT LOOSENED.

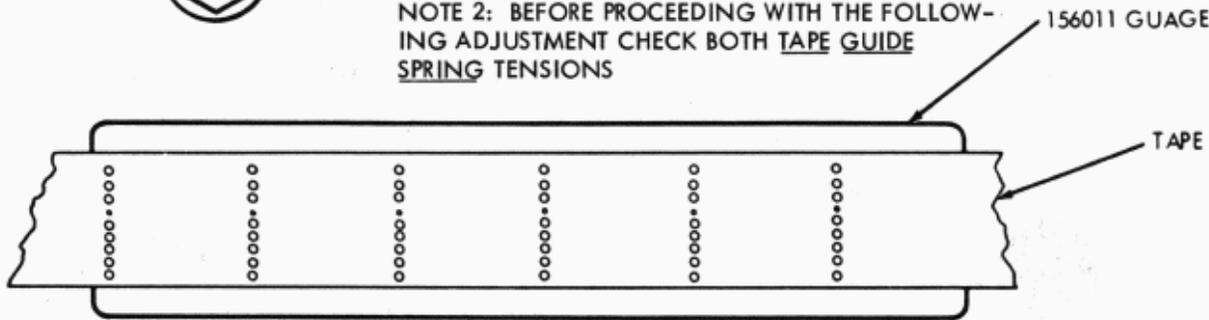
NOTE 1: BEFORE PROCEEDING WITH THE FOLLOWING ADJUSTMENTS, CHECK BOTH TAPE GUIDE SPRING TENSIONS

FEED HOLE SPACING-----FINAL

(1) REQUIREMENT

WITH TAPE SHOE BLOCKED AWAY FROM FEED WHEEL, FEED PAWL AND DETENT DISENGAGED, AND TAPE REMOVED, FEED WHEEL SHOULD ROTATE FREELY. CHECK THROUGH 3 OR 4 REVOLUTIONS OF FEED WHEEL. REFINE PRELIMINARY (ABOVE) IF NECESSARY TO MEET REQUIREMENT.

NOTE 2: BEFORE PROCEEDING WITH THE FOLLOWING ADJUSTMENT CHECK BOTH TAPE GUIDE SPRING TENSIONS



FEED HOLE SPACING

(1) REQUIREMENT

WITH A PIECE OF TAPE PERFORATED WITH SIX SERIES OF 9 SPACE CODE COMBINATIONS FOLLOWED BY A RUBOUT COMBINATION PLACED OVER THE SMOOTH SIDE OF THE 156011 TAPE GAUGE SO THAT THE CIRCULAR PORTION OF THE FIRST NUMBER 2 CODE HOLE IN THE TAPE IS CONCENTRIC WITH THE FIRST HOLE OF THE TAPE GAUGE. THE NEXT FOUR HOLES IN THE TAPE GAUGE SHOULD BE VISIBLE THROUGH THE NUMBER 2 CODE HOLES IN THE TAPE AND THE CIRCULAR PORTION OF THE LAST (SIXTH) NUMBER 2 CODE HOLE IN THE TAPE SHALL BE ENTIRELY WITHIN THE 0.086 DIAMETER HOLE OF THE TAPE GAUGE.

(2) REQUIREMENT

WITH TAPE SHOE HELD AWAY FROM FEED WHEEL, FEED PAWL AND DETENT DISENGAGED AND TAPE REMOVED, FEED WHEEL SHOULD ROTATE FREELY.

TO ADJUST

WITH TAPE REMOVED FROM PUNCH MECHANISM, LOOSEN ECCENTRIC LOCK NUT AND ROTATE DIE WHEEL ECCENTRIC SHAFT UNTIL IT BINDS AGAINST FEED WHEEL. BACK OFF ECCENTRIC UNTIL DIE WHEEL IS JUST FREE. CHECK THROUGH 3 OR 4 ROTATIONS. KEEP THE INDENT OF ECCENTRIC BELOW THE HORIZONTAL CENTERLINE OF THE STUD. REFINE ADJUSTMENT FOR REQUIREMENT (1), IF NECESSARY, BY MOVING THE DIE WHEEL TOWARD THE FEED WHEEL TO DECREASE THE CHARACTER SPACING AND AWAY FROM THE FEED WHEEL TO INCREASE THE CHARACTER SPACING.

**CAUTION:** WITH TAPE REMOVED. MAKE SURE FEED WHEEL AND DIE WHEEL DO NOT BIND. RECHECK REQUIREMENT (1). IF NECESSARY, REFINE.

NOTE 3: FIRST THROUGH FIFTH HOLES IN GAUGE ARE SAME SIZE AS CODE HOLES IN TAPE (0.072 INCH DIAMETER). SIXTH HOLE IN GAUGE IS LARGER (0.086 INCH). THIS ARRANGEMENT ALLOWS ± 0.007 INCH VARIATION IN 5 INCHES.

## 2.28 Punch Mechanism (continued)

(FOR LATEST DESIGN SEE PARAGRAPH 2.29)

LATERAL AND FRONT TO REAR FEED WHEEL POSITION DETENT (EARLY DESIGN)REQUIREMENT

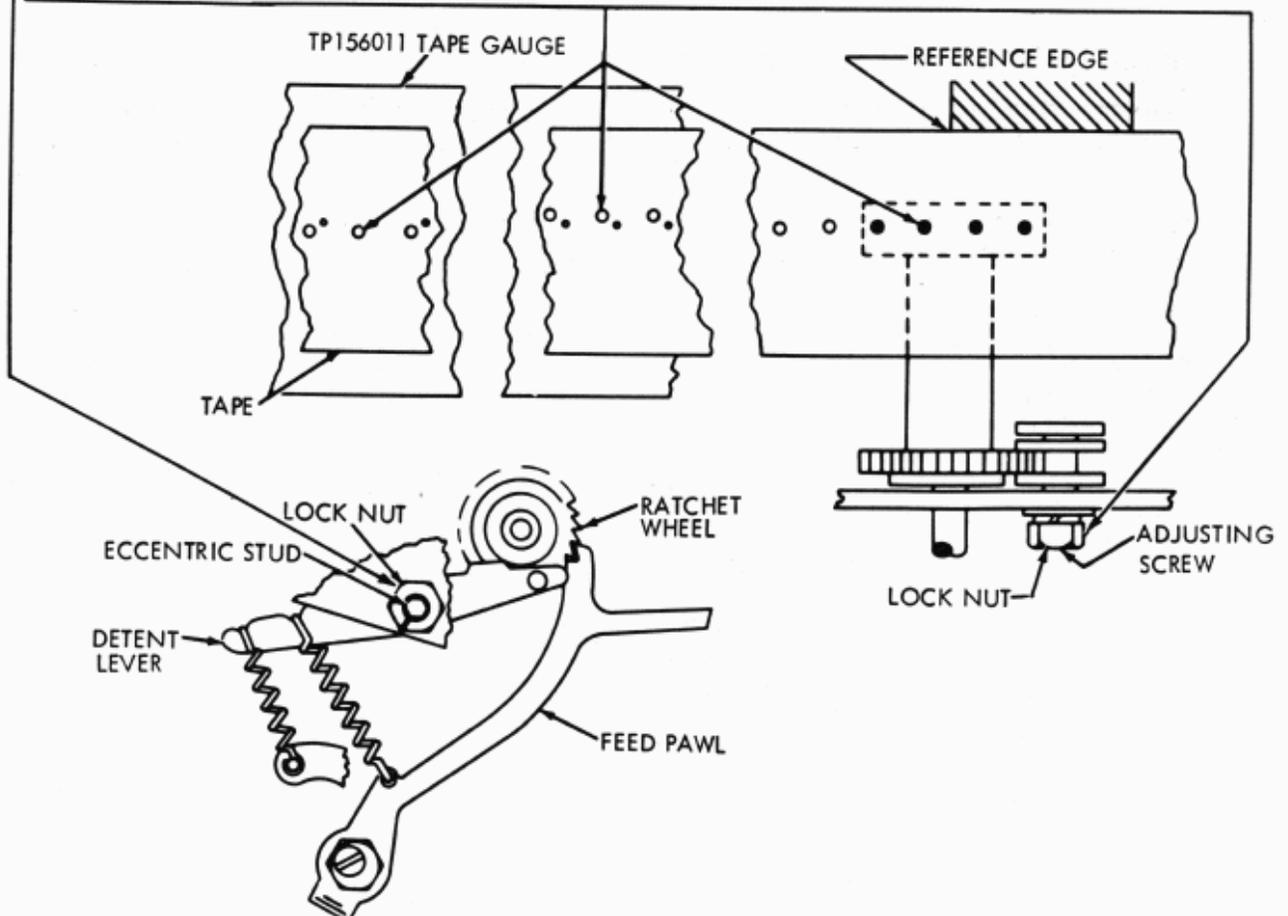
WITH THE REPERFORATOR OPERATING UNDER POWER, OBTAIN A TAPE SAMPLE CONSISTING OF A SERIES OF "SPACE" PERFORATIONS, BY A VISUAL INSPECTION OF THE PERFORATED FEED HOLES, LATERALLY AND FRONT TO REAR, THE INDENTATIONS OF THE FEED WHEEL SHALL BE FULLY PUNCHED OUT.

TO ADJUST

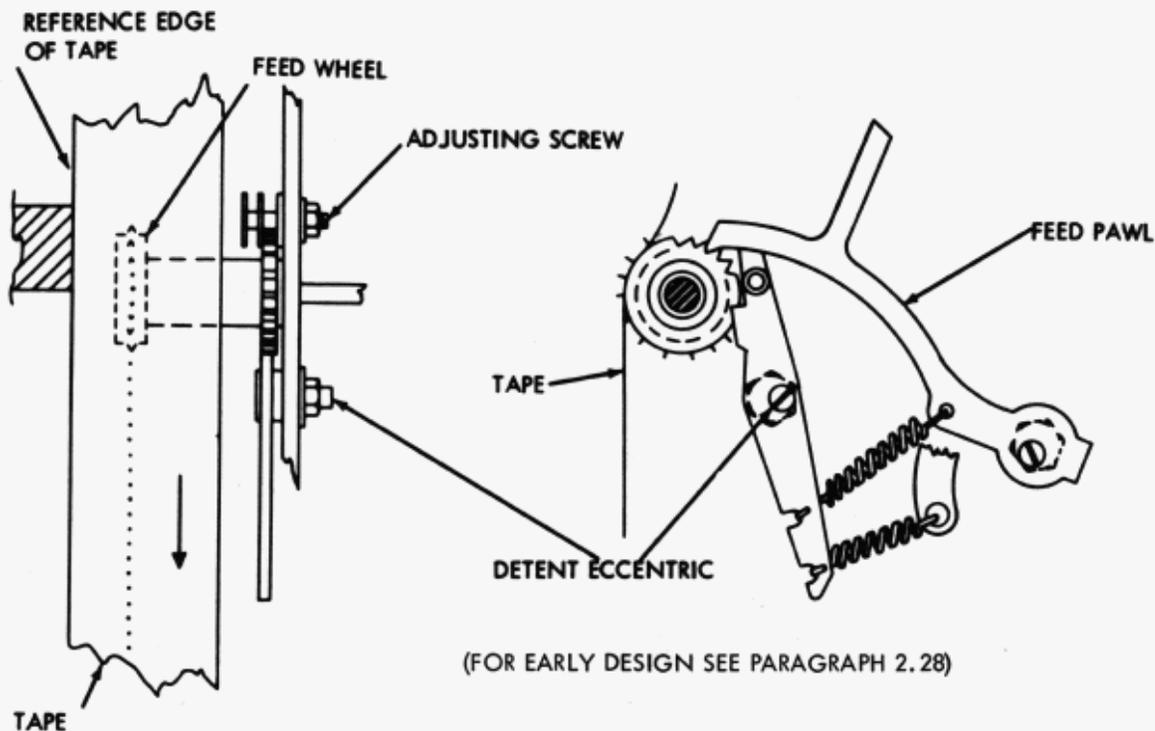
(1) TO MEET THE LATERAL REQUIREMENT. LOOSEN THE DETENT ECCENTRIC STUD LOCK NUT AND ROTATE THE DETENT ECCENTRIC CLOCKWISE TO MOVE THE FEED WHEEL PERFORATIONS TOWARDS THE LEAD EDGE OF THE FEED HOLE AND ROTATE THE DETENT ECCENTRIC COUNTER CLOCKWISE TO MOVE THE FEED WHEEL PERFORATION TOWARDS THE TRAILING EDGE OF THE FEED HOLE. REFINE THE FEED PAWL ADJUSTMENT.

(2) TO ADJUST

TO MEET THE FRONT TO REAR REQUIREMENT WITH RESPECT TO THE REFERENCE EDGE OF THE TAPE, LOOSEN THE ADJUSTING SCREW LOCK NUT AND POSITION THE ADJUSTING SCREW. TO MOVE THE INDENTATIONS IN THE TAPE AWAY FROM THE REFERENCE EDGE OF THE TAPE, MOVE THE FEED WHEEL TOWARDS THE FRONT PLATE OF THE PUNCH MECHANISM BY ROTATING THE ADJUSTING SCREW COUNTER CLOCKWISE. TO MOVE THE INDENTATIONS IN THE TAPE TOWARDS THE REFERENCE EDGE OF THE TAPE, MOVE THE FEED WHEEL TOWARDS THE BACKPLATE OF THE PUNCH MECHANISM BY ROTATING THE ADJUSTING SCREW CLOCKWISE. REFINE THE DETENT ADJUSTMENT TO ALIGN THE LATERAL INDENTATIONS OF THE FEED WHEEL IF REQUIRED.



2.29 Punch Mechanism (continued)



(FOR EARLY DESIGN SEE PARAGRAPH 2.28)

LATERAL AND FRONT TO REAR FEED WHEEL POSITION DETENT (LATEST DESIGN) REQUIREMENT

THE INDENTATIONS PUNCHED BY THE FEED WHEEL SHOULD BE CENTRALLY LOCATED BETWEEN THE PUNCHED FEED HOLES (GAUGED BY EYE) AND ON SAME HORIZONTAL CENTERLINE. THE UNIT MUST BACKSPACE THE TAPE AT LEAST 30 CHARACTERS WITHOUT LOSING ITS POINT OF REGISTRATION.

TO CHECK

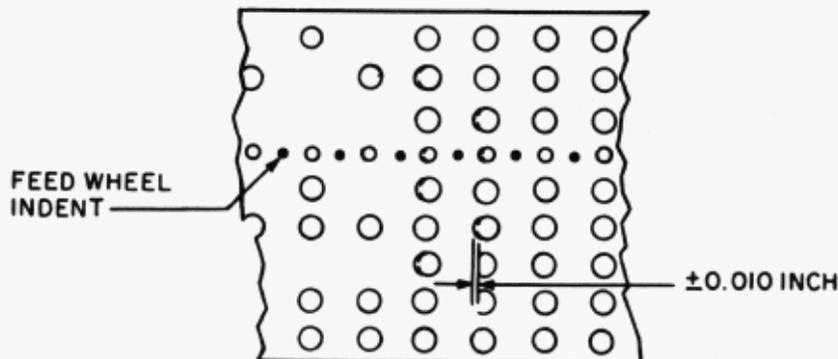
PERFORATE 6 INCHES OF RY TAPE. BACK SPACE 30 CHARACTERS. REPERFORATE WITH RUBOUT CHARACTERS. CODE HOLES MUST COINCIDE EXCEPT FOR FIRST TWO CHARACTERS WHICH MAY BE ELONGATED  $\pm 0.010$  INCH.

TO ADJUST (LATERALLY)

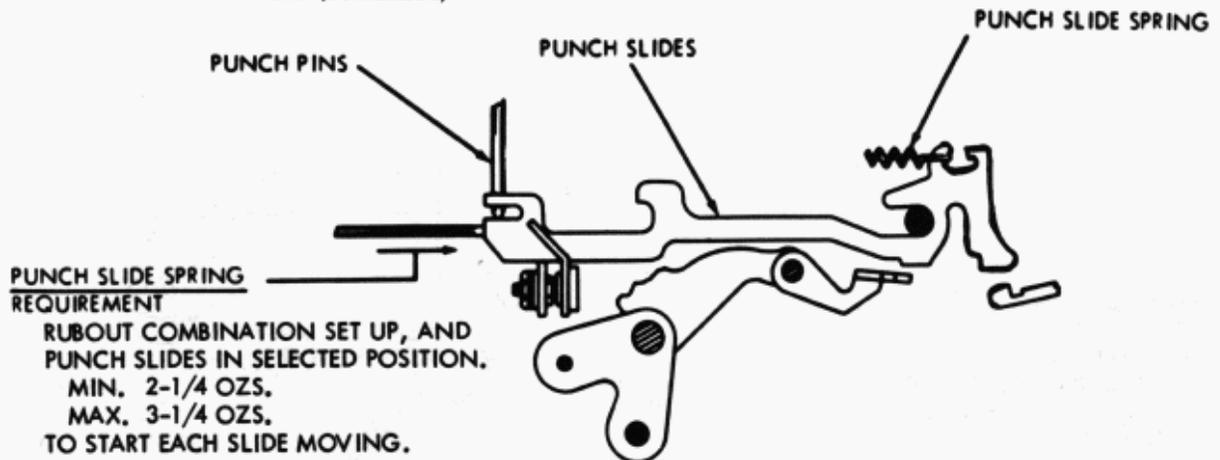
ROTATE DETENT ECCENTRIC CLOCKWISE TO MOVE THE FEED WHEEL PERFORATION TOWARD THE LEADING EDGE OF THE FEED HOLE AND ROTATE ECCENTRIC COUNTERCLOCKWISE TO MOVE THE PERFORATION TOWARD THE TRAILING EDGE OF THE FEED HOLE. TIGHTEN LOCK NUT. REFINE FEED PAWL ADJUSTMENT IF NECESSARY.

TO ADJUST (FRONT TO REAR)

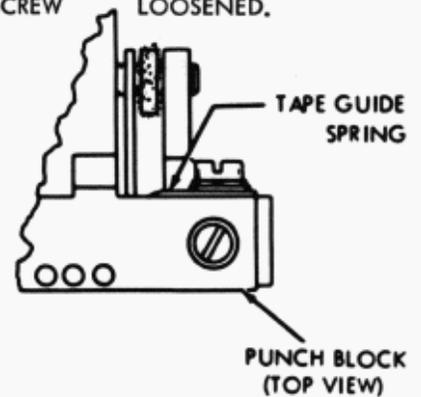
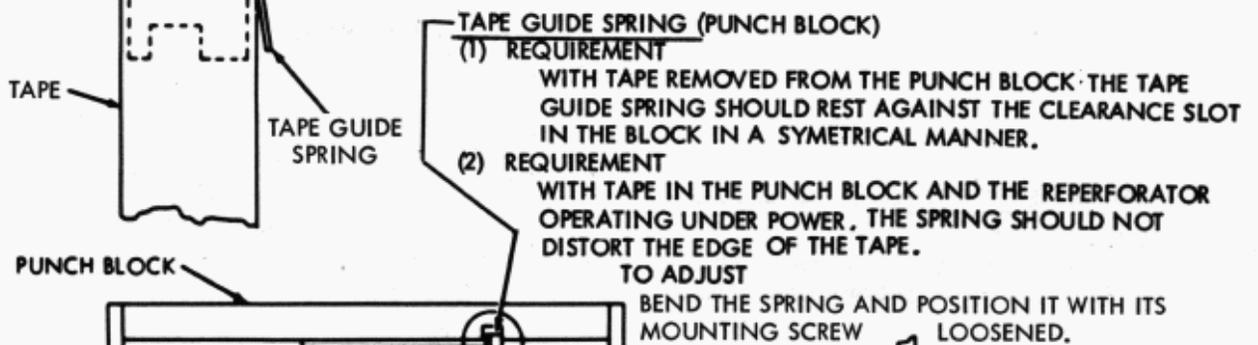
LOOSEN LOCK NUT ON ADJUSTING SCREW AND ROTATE THE SCREW COUNTERCLOCKWISE TO MOVE THE INDENTATIONS IN THE TAPE AWAY FROM THE REFERENCE EDGE (REAR) OF THE TAPE. TO MOVE INDENTATIONS IN THE TAPE TOWARD THE REFERENCE EDGE OF THE TAPE, ROTATE ADJUSTING SCREW CLOCKWISE. REFINE THE DETENT ADJUSTMENT IF NECESSARY.



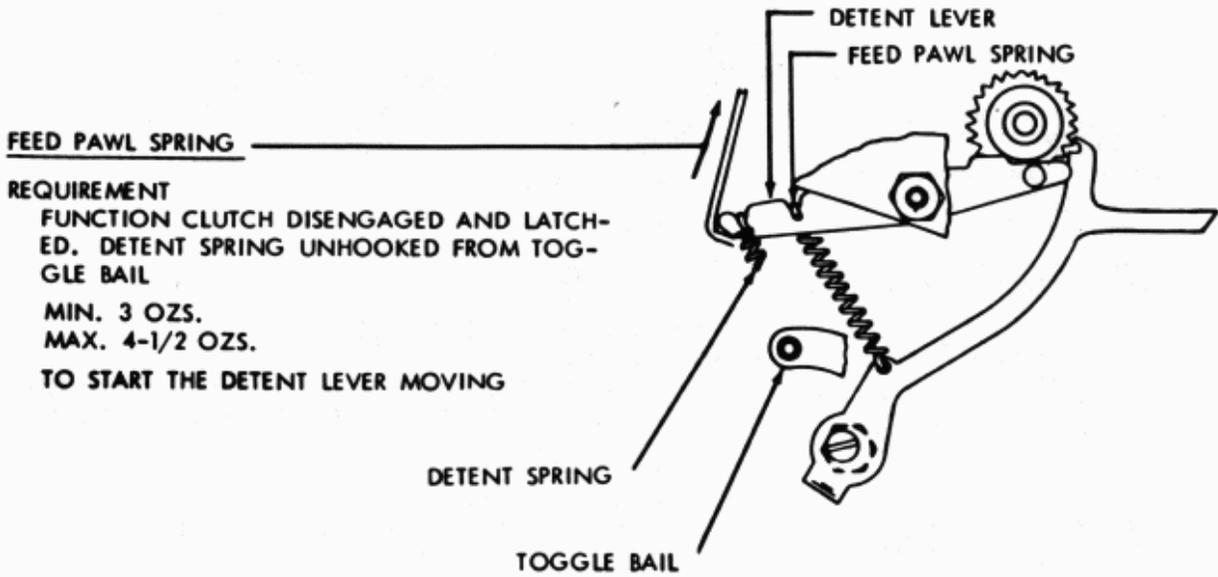
2.30 Punch Mechanism (continued)



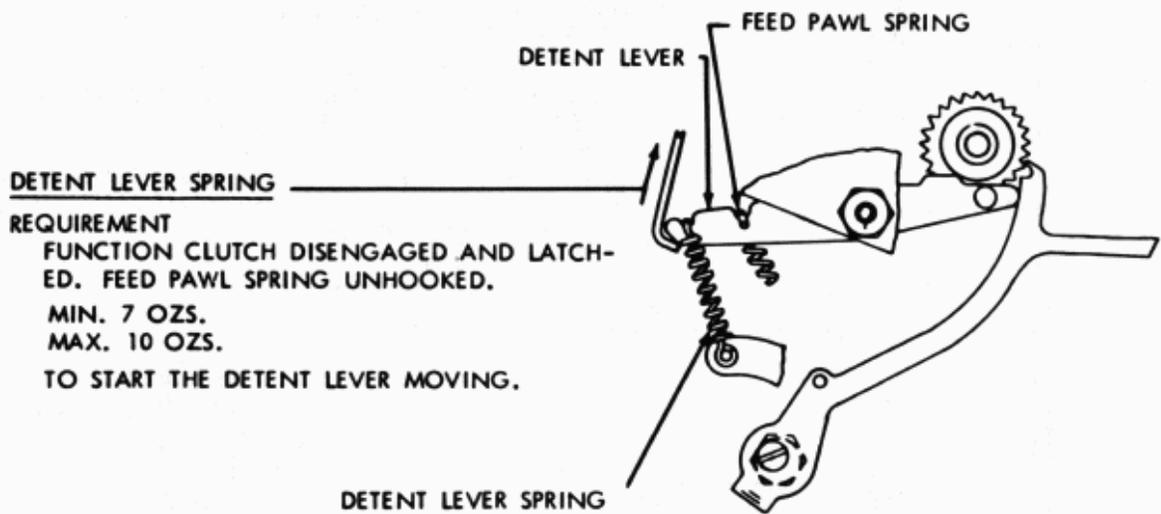
NOTE  
 IT IS NECESSARY TO REMOVE SEVERAL PARTS, ON UNITS EQUIPPED WITH BACK SPACE MECHANISM. IN ORDER TO CHECK THIS SPRING TENSION. IT SHOULD NOT BE CHECKED UNLESS THERE IS GOOD REASON TO BELIEVE THAT REQUIREMENTS ARE NOT MET.



→2.31 Punch Mechanism (continued)



**REQUIREMENT**  
FUNCTION CLUTCH DISENGAGED AND LATCHED. DETENT SPRING UNHOOKED FROM TOGGLE BAIL  
MIN. 3 OZS.  
MAX. 4-1/2 OZS.  
TO START THE DETENT LEVER MOVING



**REQUIREMENT**  
FUNCTION CLUTCH DISENGAGED AND LATCHED. FEED PAWL SPRING UNHOOKED.  
MIN. 7 OZS.  
MAX. 10 OZS.  
TO START THE DETENT LEVER MOVING.

2.32 Punch Mechanism (continued)

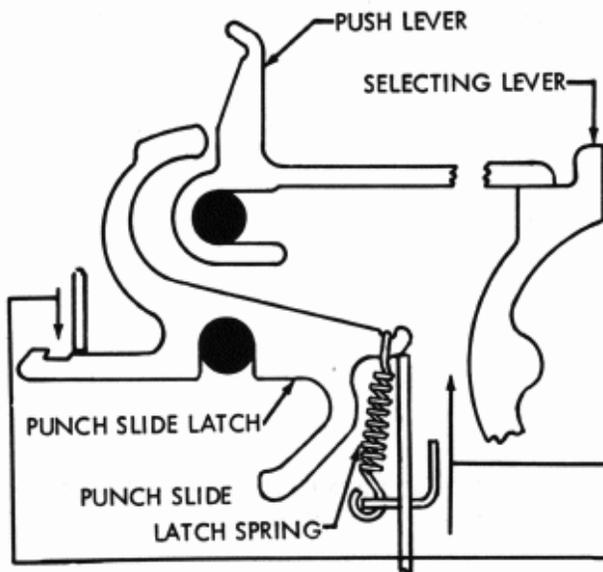
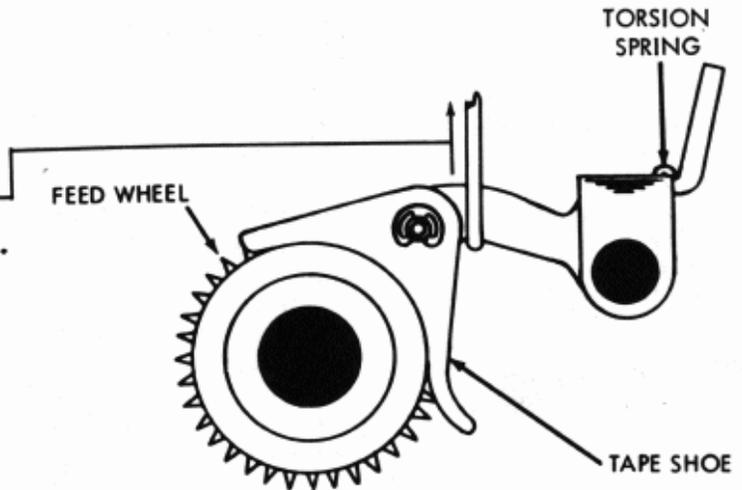
TAPE TORSION SPRING

REQUIREMENT

MIN. 13 OZS.

MAX. 18 OZS.

TO MOVE TAPE SHOE FROM FEED WHEEL.



PUNCH SLIDE LATCH SPRING  
TO CHECK

SELECT RUBOUT CODE COMBINATION (12345678). POSITION ROCKER BAIL TO EXTREME LEFT. STRIP PUSH LEVERS FROM SELECTING LEVERS.

REQUIREMENT

FOR ONE-SHAFT UNIT

MIN. 1 OZS. --- MAX. 3 OZS.  
TO START LATCH MOVING.

FOR TWO-SHAFT UNIT

MIN. 3/4 OZS. --- MAX. 2 OZS.  
TO START LATCH MOVING.

→ 2.33 Typing Mechanism

(A) PUSH BAR OPERATING BLADE (PRELIMINARY)

TO CHECK

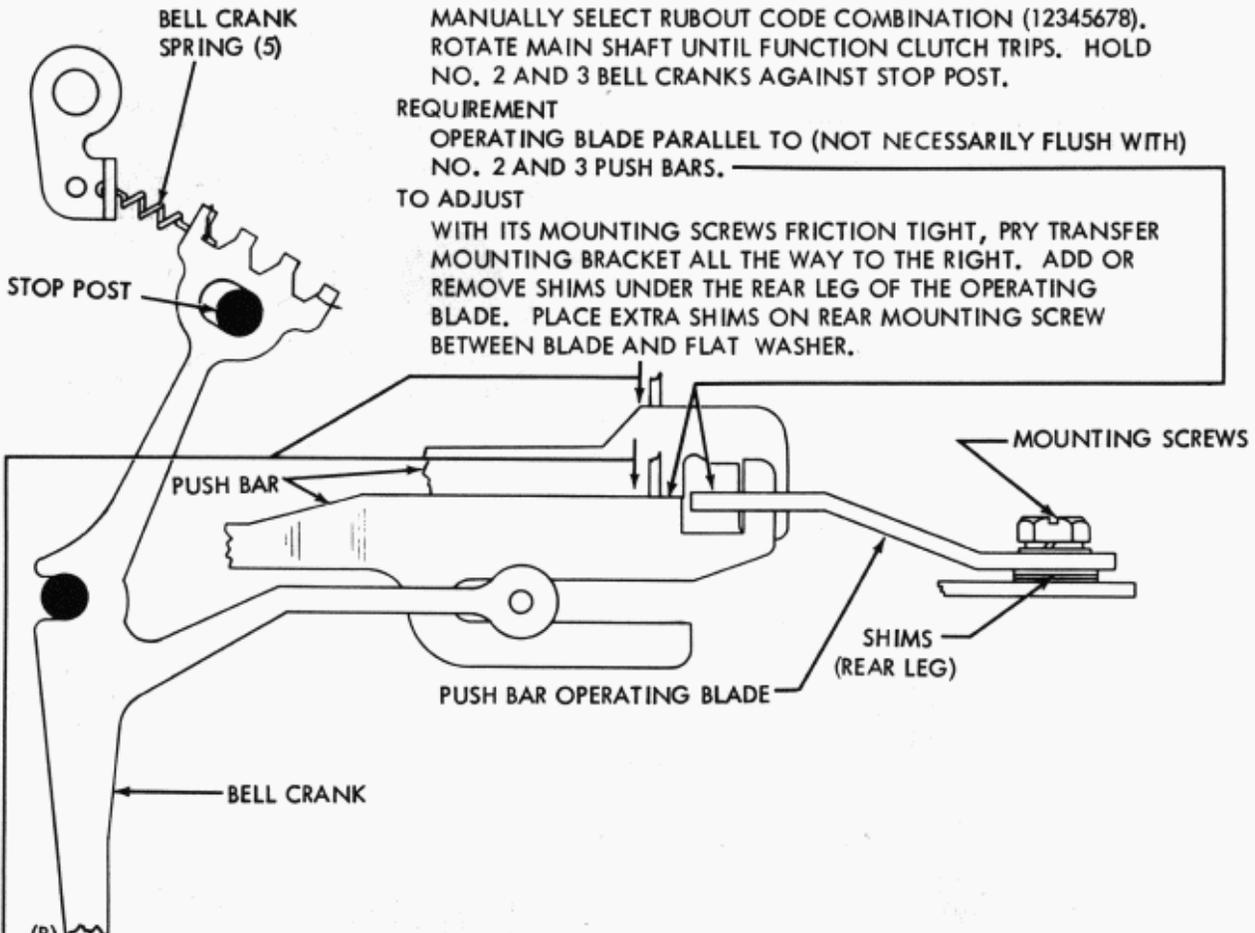
MANUALLY SELECT RUBOUT CODE COMBINATION (12345678). ROTATE MAIN SHAFT UNTIL FUNCTION CLUTCH TRIPS. HOLD NO. 2 AND 3 BELL CRANKS AGAINST STOP POST.

REQUIREMENT

OPERATING BLADE PARALLEL TO (NOT NECESSARILY FLUSH WITH) NO. 2 AND 3 PUSH BARS.

TO ADJUST

WITH ITS MOUNTING SCREWS FRICTION TIGHT, PRY TRANSFER MOUNTING BRACKET ALL THE WAY TO THE RIGHT. ADD OR REMOVE SHIMS UNDER THE REAR LEG OF THE OPERATING BLADE. PLACE EXTRA SHIMS ON REAR MOUNTING SCREW BETWEEN BLADE AND FLAT WASHER.



(B) BELL CRANK SPRING (5)

TO CHECK

SELECT RUBOUT CODE COMBINATION (12345678). ROTATE MAIN SHAFT UNTIL FUNCTION CLUTCH TRIPS.

REQUIREMENT

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

TO START PUSH BAR MOVING

NOTE:

CHECK ALL FIVE SPRINGS.

NOTE: THIS ADJUSTMENT IS COMPLETED ON THE FOLLOWING PAGE.

## 2.34 Typing Mechanism (continued)

PUSH BAR OPERATING BLADE (FINAL)(1) TO CHECK

MANUALLY SELECT RUBOUT CODE COMBINATION (12345678). ROTATE MAIN SHAFT UNTIL FUNCTION CLUTCH TRIPS. MANUALLY SEAT PUSH BARS IN DETENTED POSITION. IN BAR WHICH IS NEAREST LEFT EDGE OF BLADE, TAKE UP PLAY TO LEFT AND REAR, AND THEN RELEASE.

REQUIREMENT

CLEARANCE BETWEEN BAR AND LEFT EDGE OF BLADE:

MIN. 0.015 INCH --- MAX. 0.030 INCH

(2) REQUIREMENT

SOME CLEARANCE BETWEEN RIGHT EDGE OF BLADE AND PUSH BARS WHEN PLAY IN BARS HAS BEEN TAKEN UP TO RIGHT AND RELEASED.

(3) REQUIREMENT

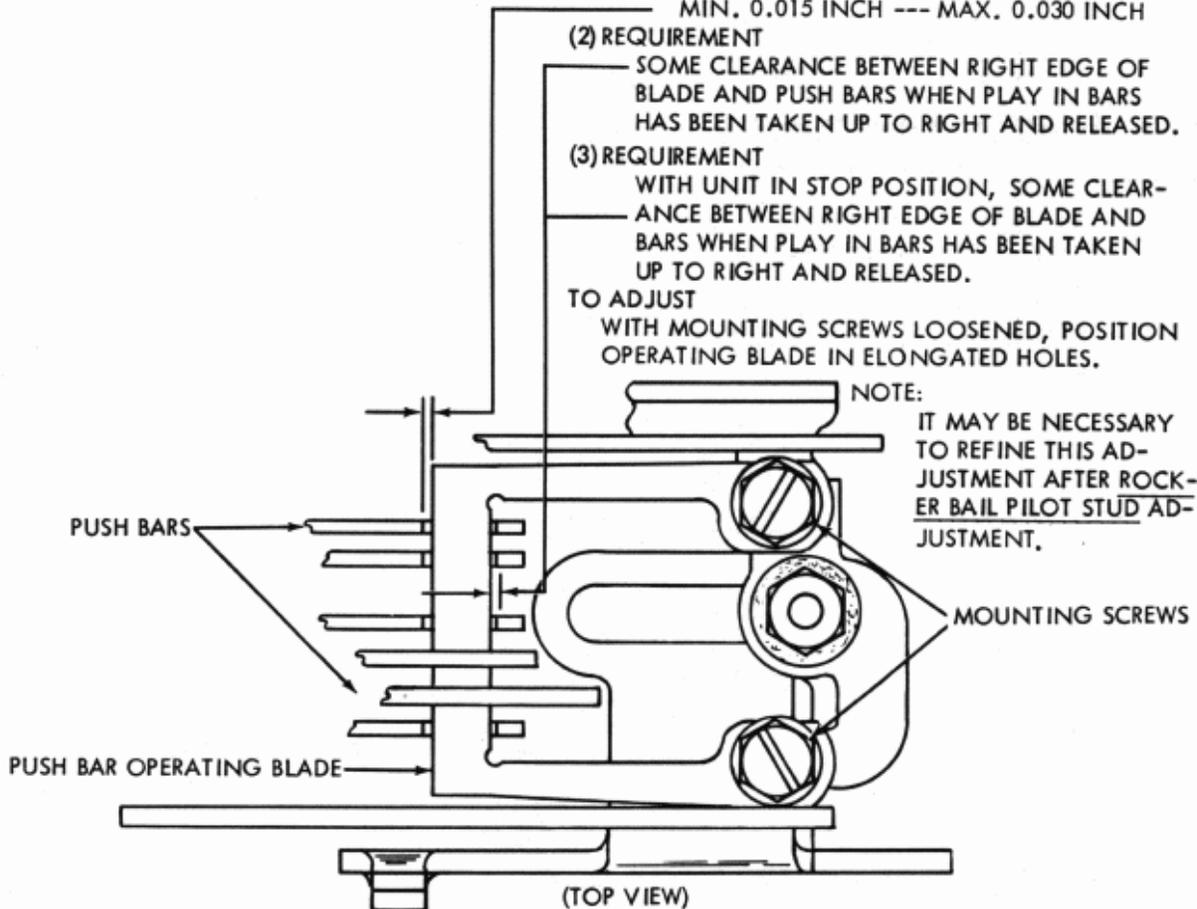
WITH UNIT IN STOP POSITION, SOME CLEARANCE BETWEEN RIGHT EDGE OF BLADE AND BARS WHEN PLAY IN BARS HAS BEEN TAKEN UP TO RIGHT AND RELEASED.

TO ADJUST

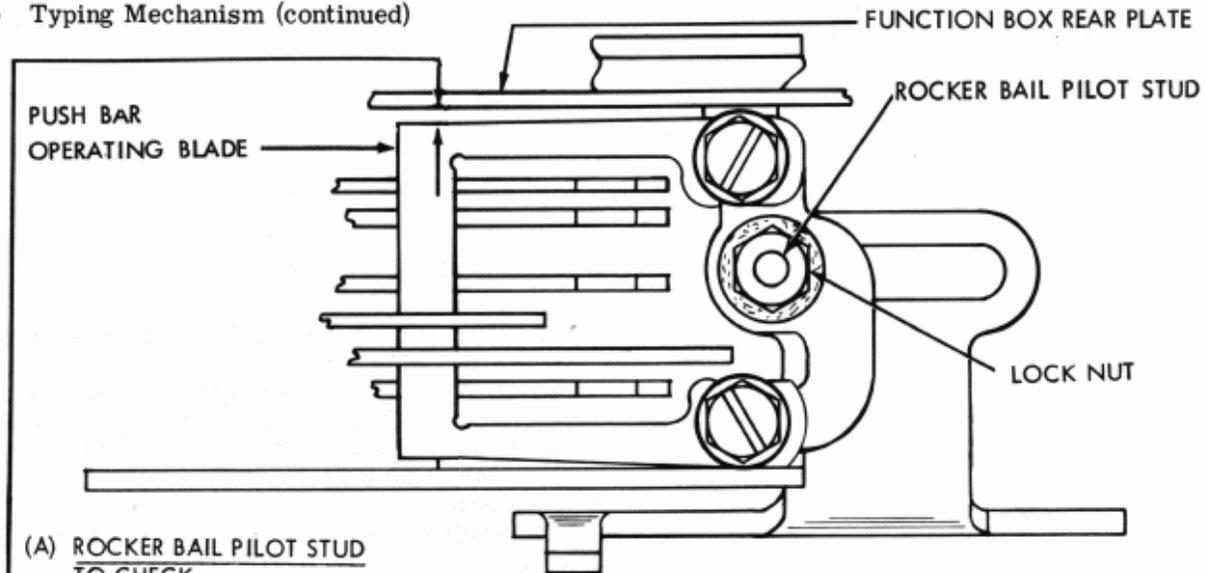
WITH MOUNTING SCREWS LOOSENED, POSITION OPERATING BLADE IN ELONGATED HOLES.

NOTE:

IT MAY BE NECESSARY TO REFINE THIS ADJUSTMENT AFTER ROCKER BAIL PILOT STUD ADJUSTMENT.



→ 2.35 Typing Mechanism (continued)



(A) ROCKER BAIL PILOT STUD  
TO CHECK

SELECT SPACE COMBINATION. POSITION  
ROCKER BAIL THROUGH A COMPLETE CYCLE  
TO INSURE THE CLEARANCE IS A MINIMUM.

REQUIREMENT

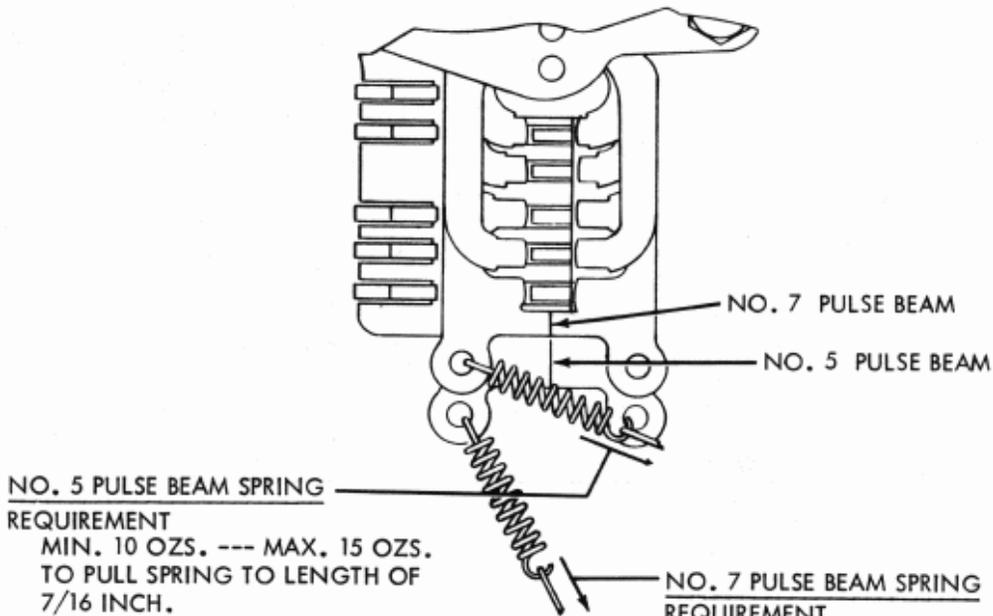
CLEARANCE BETWEEN FUNCTION BOX REAR  
PLATE AND PUSH BAR OPERATING BLADE:

MIN. 0.005 INCH ---- MAX. 0.020 INCH  
AT A POINT IN THE CYCLE WHERE PLAY IS  
TAKEN UP TO MAKE CLEARANCE MINIMUM.

TO ADJUST

POSITION ROCKER BAIL PILOT STUD IN  
ELONGATED HOLE WITH LOCK NUT  
LOOSENED.

(TOP VIEW)



NO. 5 PULSE BEAM SPRING  
REQUIREMENT

MIN. 10 OZS. --- MAX. 15 OZS.  
TO PULL SPRING TO LENGTH OF  
7/16 INCH.

NO. 7 PULSE BEAM SPRING  
REQUIREMENT

MIN. 20 OZS. --- MAX. 25 OZS.  
TO PULL SPRING TO LENGTH OF  
7/16 INCH.

(TOP VIEW)

## 2.36 Typing Mechanism (continued)

**FUNCTION BOX****REQUIREMENT**

WITH LETTERS (RUBOUT) PUSH BAR TO EXTREME RIGHT AND FULLY DETENTED, RUBOUT CODE (12345678) SELECTED, PUNCH SLIDES DISENGAGED AND FUNCTION CLUTCHED TRIPPED. ELIMINATE PLAY IN DOWNWARD DIRECTION, THEN RELEASE. KEEP OPERATING BLADE PARALLEL WITH NO. 2 AND NO. 3 PUSH BARS AND TAKE-UP FUNCTION BOX PLAY IN A CLOCKWISE DIRECTION. THE TOP OF THE OPERATING BLADE SHALL BE

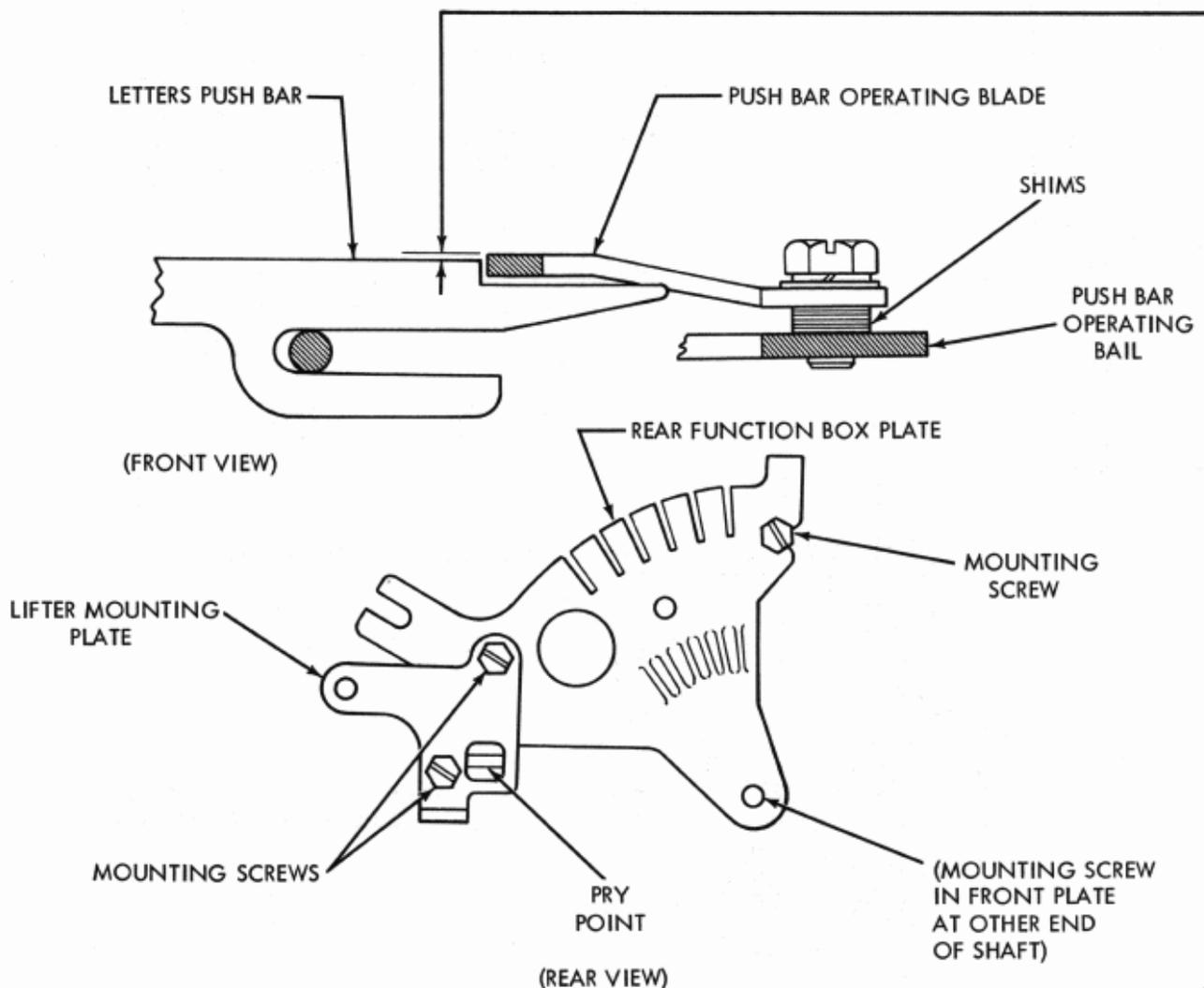
MIN. FLUSH --- MAX. 0.020 INCH  
ABOVE TOP RUBOUT PUSH BARS.

**TO ADJUST**

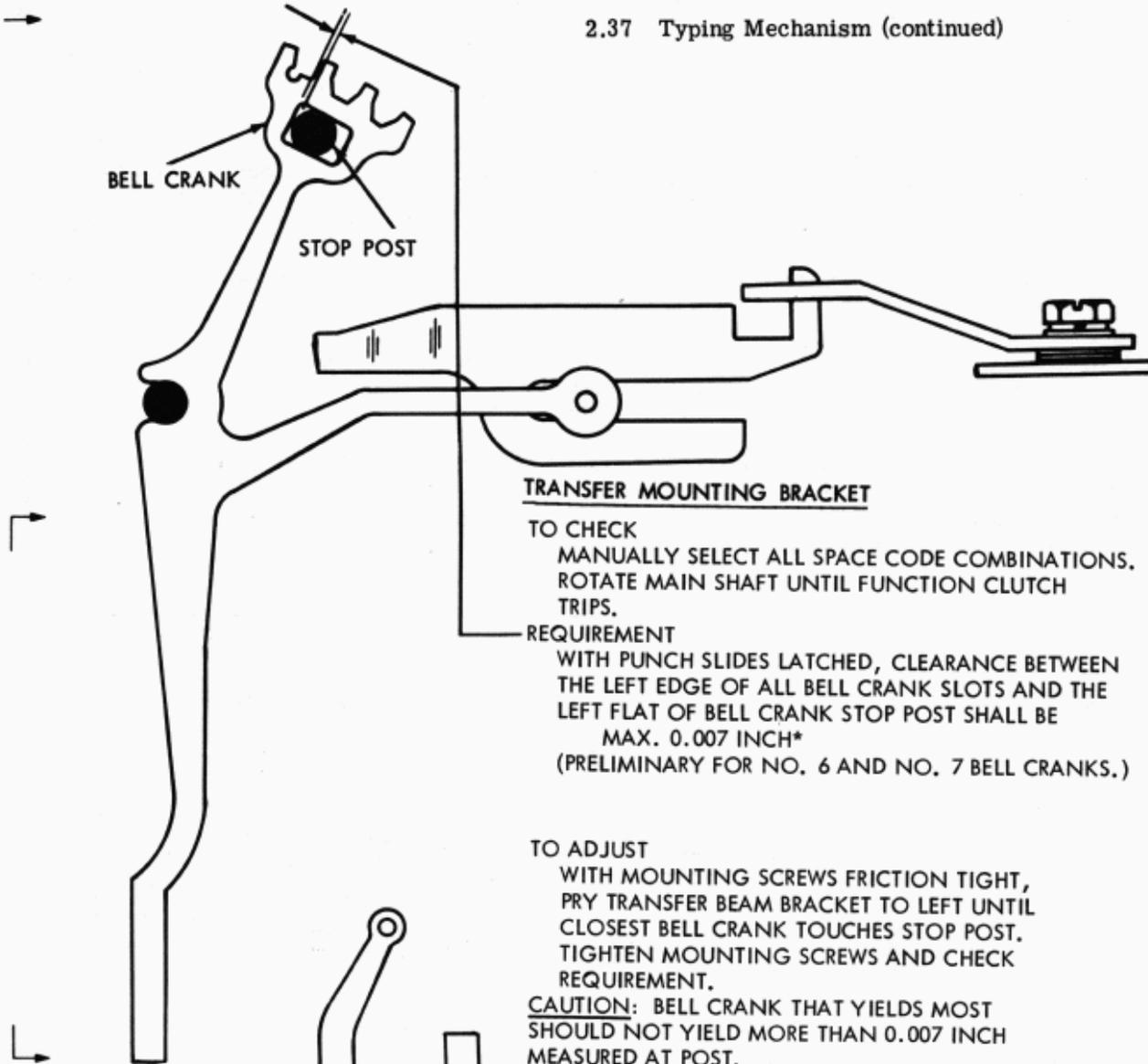
- (1) LOOSEN TWO SCREWS MOUNTING FUNCTION BOX TO FRONT PLATE SPACER POSTS
- (2) USING PRY POINT, ROTATE ENTIRE FUNCTION BOX.
- (3) TAKE UP SPACER POST PLAY TO RIGHT AND TIGHTEN SCREWS.

**TO CHECK**

- (1) FUNCTION BOX SHALL BE FREE TO ROTATE AT LEAST 0.010 INCH IN ITS MOUNTING AS MEASURED AT LIFTER MOUNTING PLATE SHOULDER SCREWS.
- (2) SELECT ALL MARKING CODE COMBINATIONS, TRIP FUNCTION CLUTCH AND CHECK FOR FREE MOVEMENT OF FUNCTION BOX PLATE.



2.37 Typing Mechanism (continued)



BELL CRANK

STOP POST

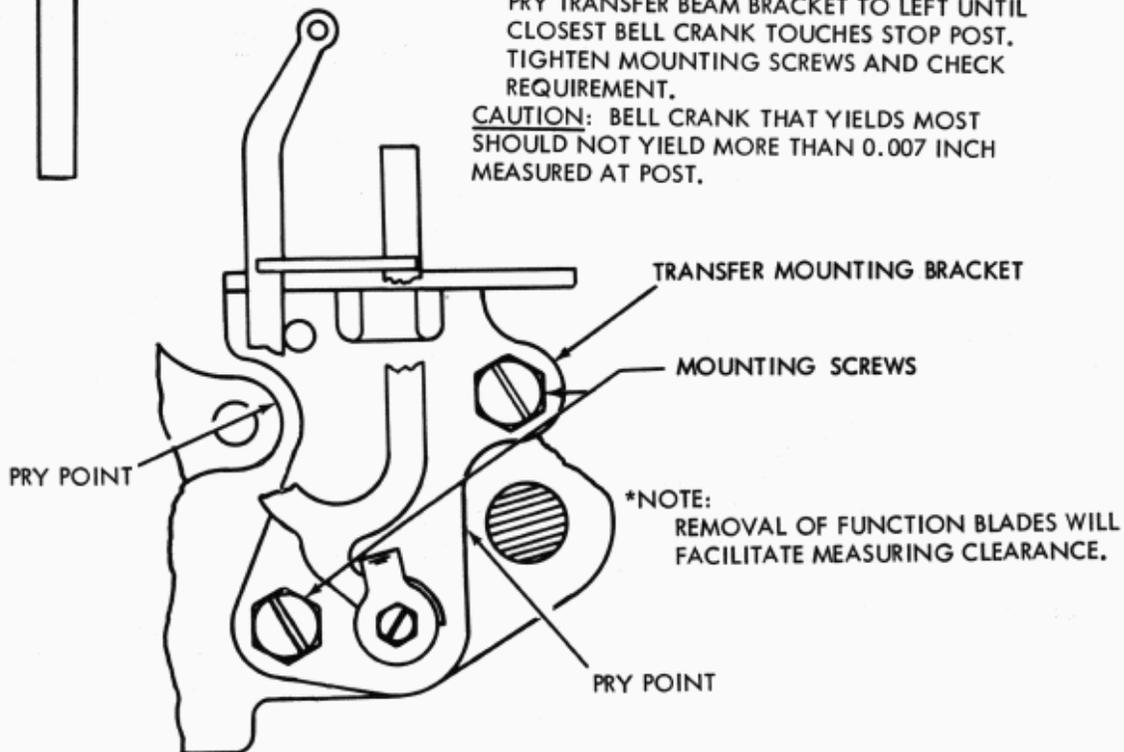
TRANSFER MOUNTING BRACKET

TO CHECK  
MANUALLY SELECT ALL SPACE CODE COMBINATIONS.  
ROTATE MAIN SHAFT UNTIL FUNCTION CLUTCH  
TRIPS.

REQUIREMENT  
WITH PUNCH SLIDES LATCHED, CLEARANCE BETWEEN  
THE LEFT EDGE OF ALL BELL CRANK SLOTS AND THE  
LEFT FLAT OF BELL CRANK STOP POST SHALL BE  
MAX. 0.007 INCH\*  
(PRELIMINARY FOR NO. 6 AND NO. 7 BELL CRANKS.)

TO ADJUST  
WITH MOUNTING SCREWS FRICTION TIGHT,  
PRY TRANSFER BEAM BRACKET TO LEFT UNTIL  
CLOSEST BELL CRANK TOUCHES STOP POST.  
TIGHTEN MOUNTING SCREWS AND CHECK  
REQUIREMENT.

CAUTION: BELL CRANK THAT YIELDS MOST  
SHOULD NOT YIELD MORE THAN 0.007 INCH  
MEASURED AT POST.



TRANSFER MOUNTING BRACKET

MOUNTING SCREWS

PRY POINT

\*NOTE:  
REMOVAL OF FUNCTION BLADES WILL  
FACILITATE MEASURING CLEARANCE.

PRY POINT

## 2.38 Ribbon Shift and Print Suppression Mechanism

NOTE: REFER TO VARIABLE FEATURES (PARAGRAPH 3) FOR ADDITIONAL ADJUSTMENTS APPLYING TO PRINT SUPPRESSION ONLY.

RIBBON SHIFT AND PRINT SUPPRESSION CONTACTS

## REQUIREMENT

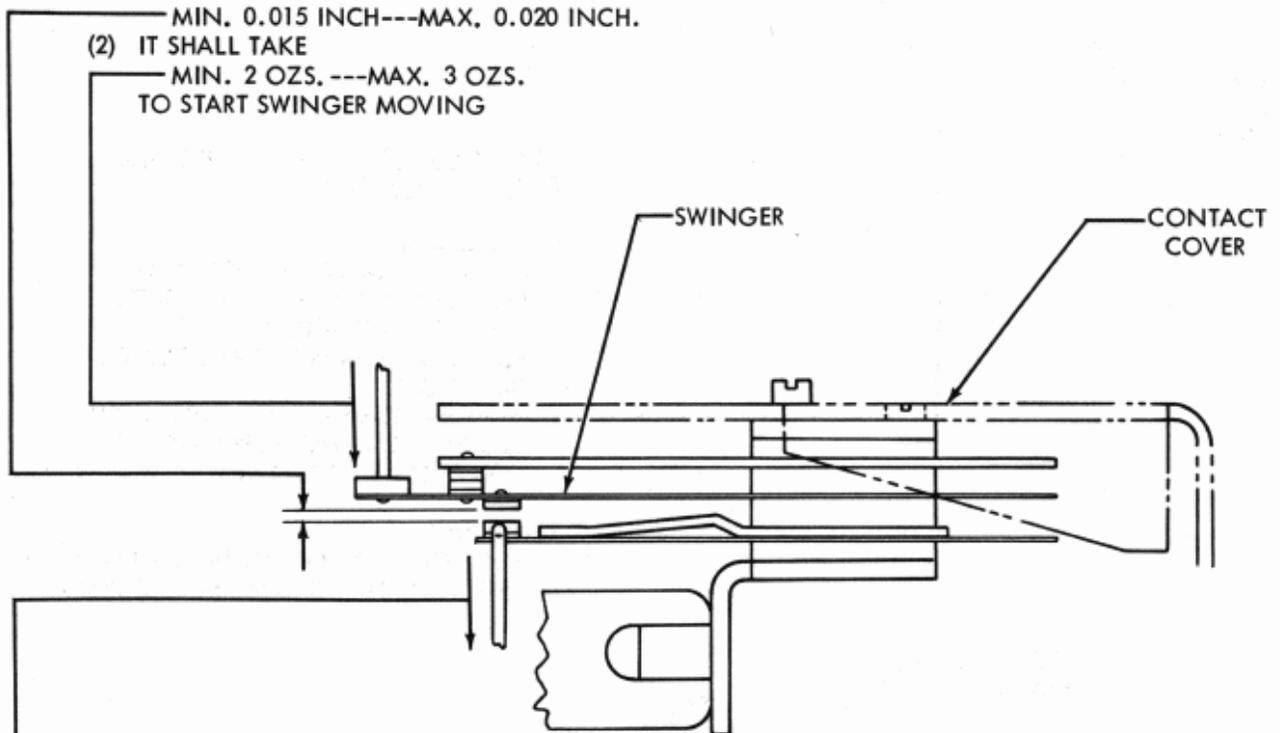
DISCONNECT ALL POWER FROM UNIT. REMOVE CONTACT ASSEMBLY FROM FUNCTION BOX.

(1) CLEARANCE BETWEEN SWINGER CONTACT POINTS AND NORMALLY OPEN CONTACT POINTS SHALL BE

MIN. 0.015 INCH---MAX. 0.020 INCH.

(2) IT SHALL TAKE

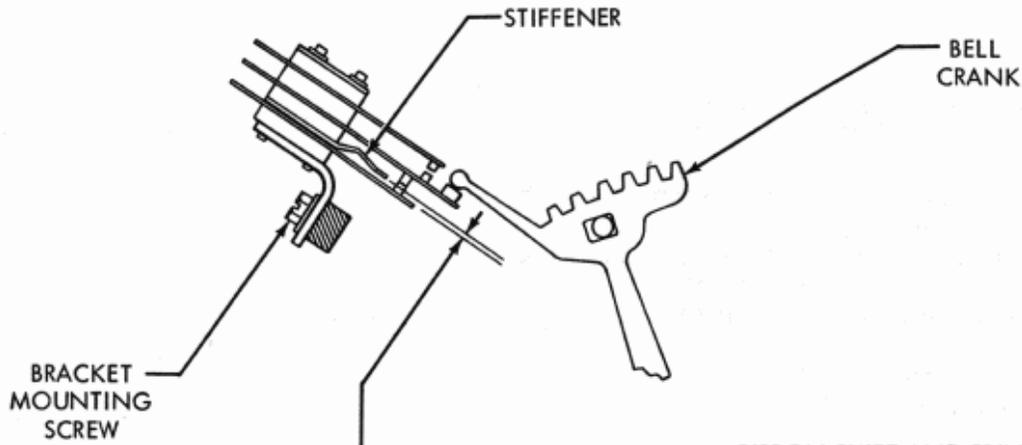
MIN. 2 OZS. ---MAX. 3 OZS.  
TO START SWINGER MOVING



(3) IT SHALL TAKE  
MIN. 2 OZS. ---MAX. 3 OZS.  
TO START NORMALLY OPEN CONTACT MOVING.

TO ADJUST  
REMOVE COVER AND REPLACE COVER SCREWS. BEND CONTACTS WITH CONTACT ADJUSTING TOOL.

2.39 Ribbon Shift and Print Suppression Mechanism (continued)

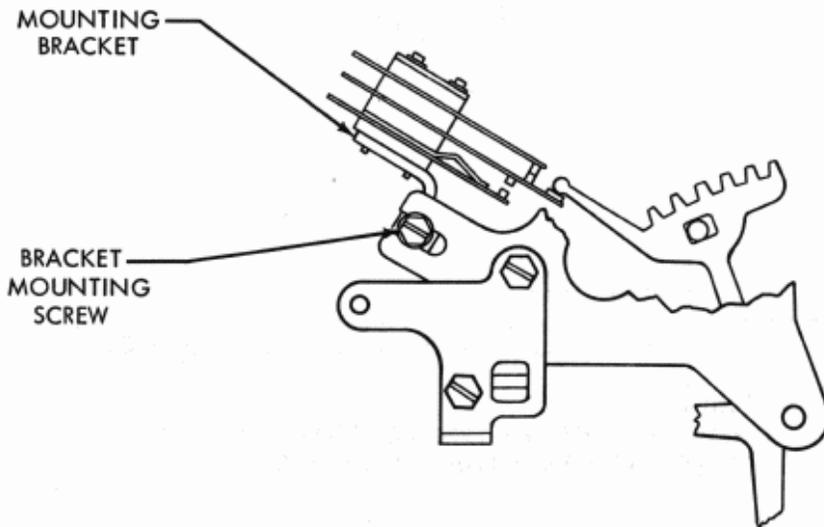


RIBBON SHIFT AND PRINT SUPPRESSION CONTACT POSITION

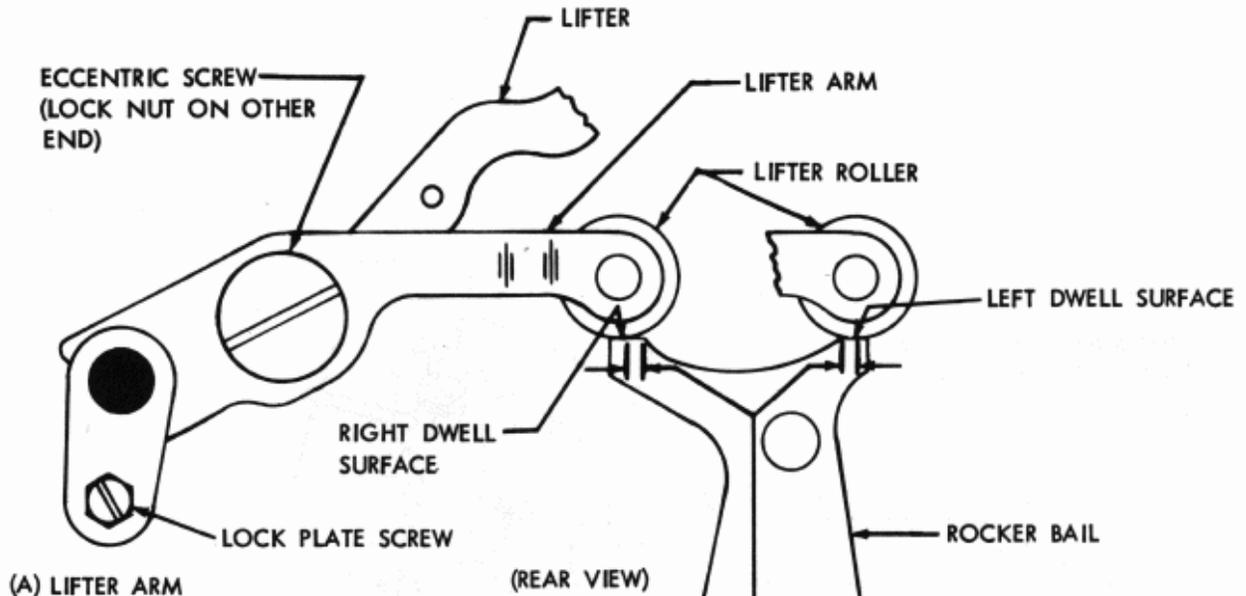
REQUIREMENT  
MANUALLY SELECT ALL SPACING COMBINATION (-----) AND TRIP FUNCTION CLUTCH. TAKE UP FUNCTION BOX PLAY IN CLOCKWISE DIRECTION.

MIN. SOME---MAX. 0.004 INCH CLEARANCE BETWEEN SPACING CONTACT AND STIFFENER.

TO ADJUST POSITION CONTACT MOUNTING BRACKET WITH ITS MOUNTING SCREWS LOOSENED.



2.40 Typing Mechanism (continued)



TO CHECK TRIP FUNCTION CLUTCH. MOVE ROCKER BAIL TO EXTREME LEFT POSITION AND OBSERVE TRAVEL OF LIFTER ROLLER ON RIGHT DWELL SURFACE. MOVE ROCKER BAIL TO EXTREME RIGHT POSITION AND OBSERVE TRAVEL OF ROLLER ON LEFT DWELL SURFACE.

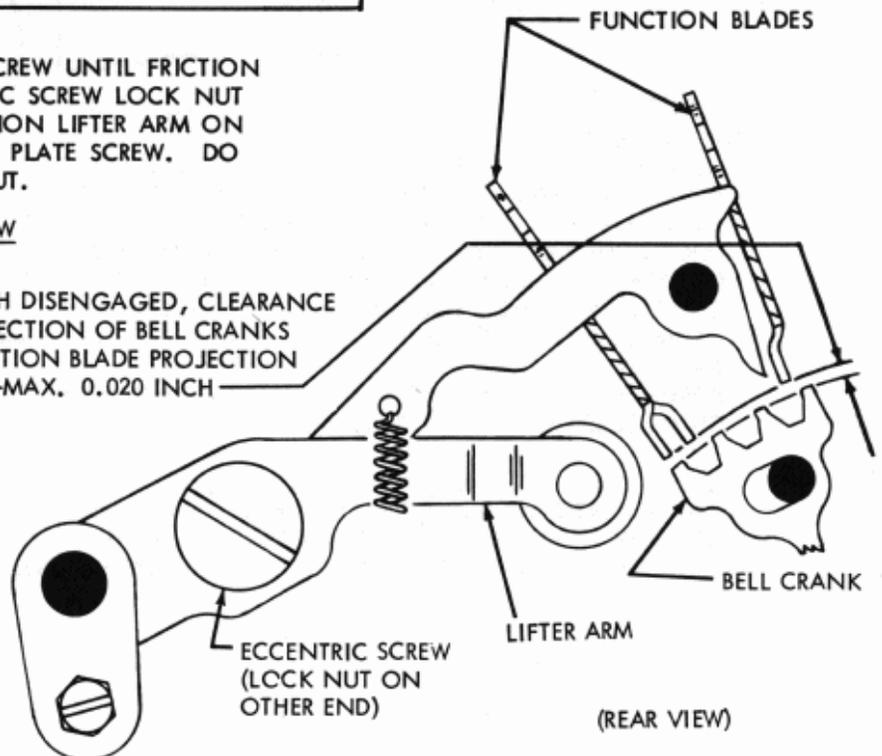
REQUIREMENT APPROXIMATELY EQUAL TRAVEL ON EACH DWELL SURFACE.

TO ADJUST LOOSEN LOCK PLATE SCREW UNTIL FRICTION TIGHT. WITH ECCENTRIC SCREW LOCK NUT FRICTION TIGHT, POSITION LIFTER ARM ON LIFTER. TIGHTEN LOCK PLATE SCREW. DO NOT TIGHTEN LOCK NUT.

(B) LIFTER ARM ECCENTRIC SCREW

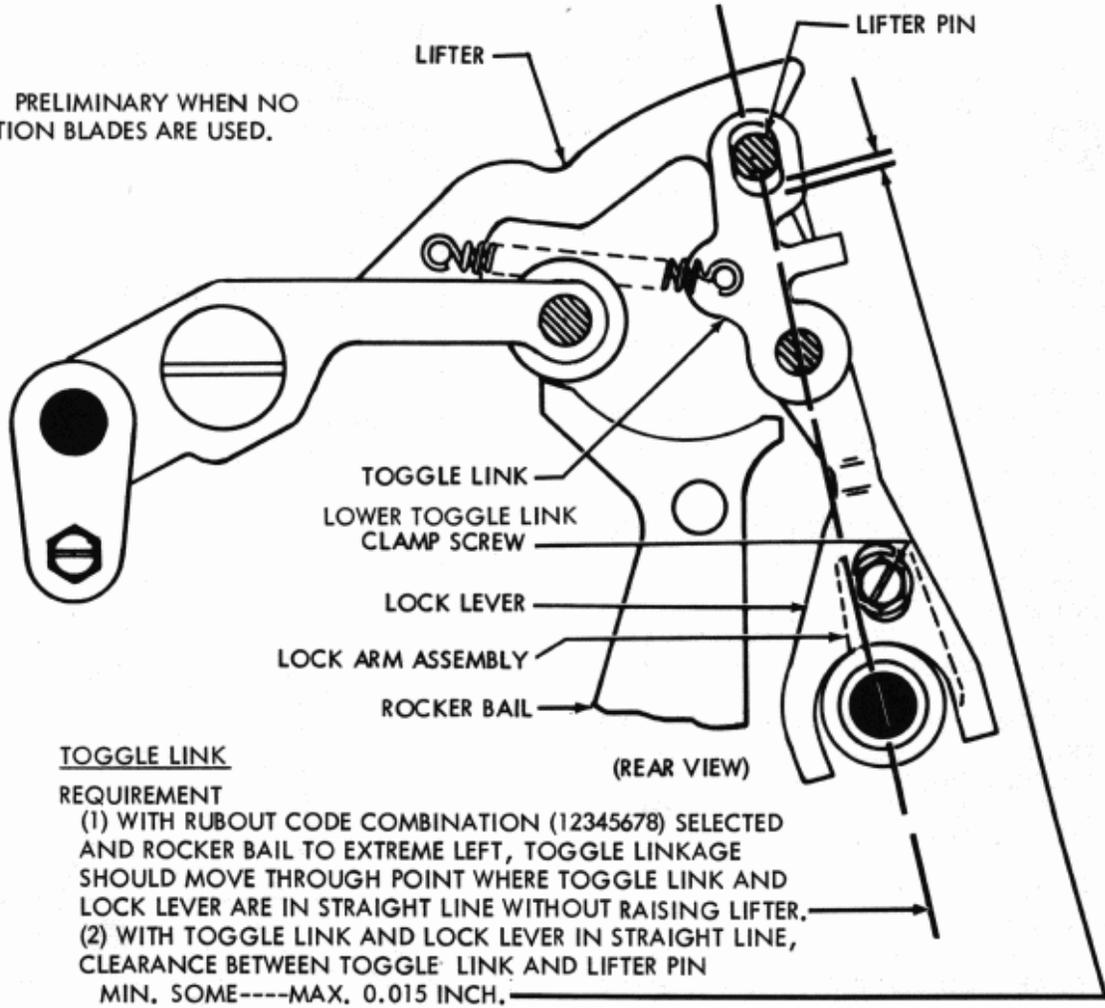
REQUIREMENT WITH FUNCTION CLUTCH DISENGAGED, CLEARANCE BETWEEN CLOSEST PROJECTION OF BELL CRANKS AND ASSOCIATED FUNCTION BLADE PROJECTION  
MIN. 0.008 INCH----MAX. 0.020 INCH

TO ADJUST POSITION LIFTER ARM ECCENTRIC SCREW WITH LOCK NUT LOOSENED.



→ 2.41 Typing Mechanism (continued)

→ NOTE: PRELIMINARY WHEN NO FUNCTION BLADES ARE USED.



→ TOGGLE LINK

REQUIREMENT

- (1) WITH RUBOUT CODE COMBINATION (12345678) SELECTED AND ROCKER BAIL TO EXTREME LEFT, TOGGLE LINKAGE SHOULD MOVE THROUGH POINT WHERE TOGGLE LINK AND LOCK LEVER ARE IN STRAIGHT LINE WITHOUT RAISING LIFTER.
- (2) WITH TOGGLE LINK AND LOCK LEVER IN STRAIGHT LINE, CLEARANCE BETWEEN TOGGLE LINK AND LIFTER PIN MIN. SOME----MAX. 0.015 INCH.

→ TO ADJUST

POSITION TOGGLE LINK ON LOCK ARM ASSEMBLY WITH CLAMP SCREW FRICTION TIGHT.

NOTE

TO AVOID INTERFERENCE WITH LOCK LEVER, IT MAY BE NECESSARY TO MOVE HIGH PART OF CORRECTING DRIVE LINK ECCENTRIC BEARING ABOVE HORIZONTAL CENTER LINE.

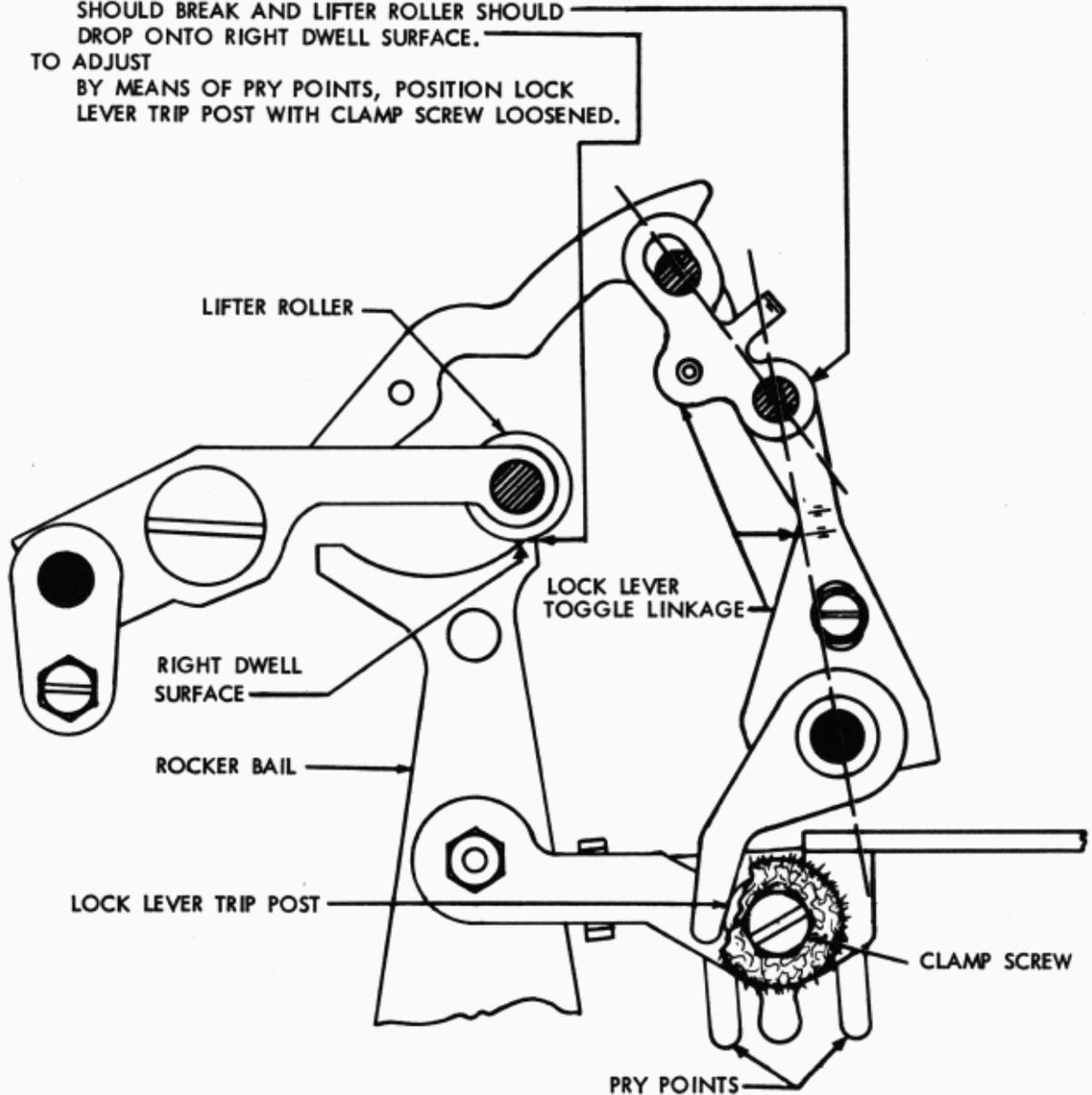
## 2.42 Typing Mechanism (continued)

TOGGLE TRIP ARM  
REQUIREMENT

AS ROCKER BAIL APPROACHES EXTREME RIGHT POSITION, LOCK LEVER TOGGLE LINKAGE SHOULD BREAK AND LIFTER ROLLER SHOULD DROP ONTO RIGHT DWELL SURFACE.

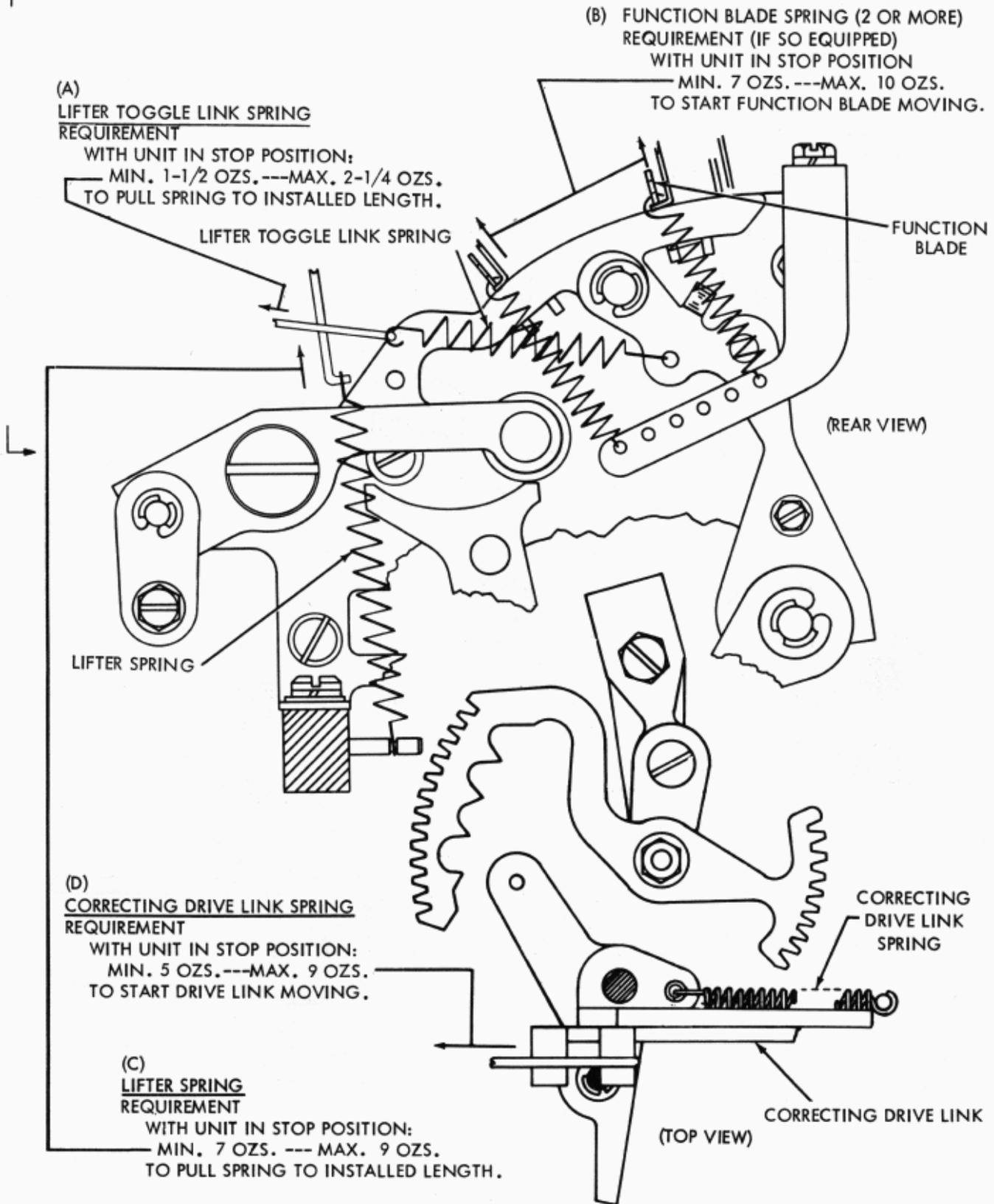
## TO ADJUST

BY MEANS OF PRY POINTS, POSITION LOCK LEVER TRIP POST WITH CLAMP SCREW LOOSENED.



(REAR VIEW)

2.43 Typing Mechanism (continued)



## 2.44 Typing Mechanism (continued)

(A) OSCILLATING DRIVE LINK

TO CHECK

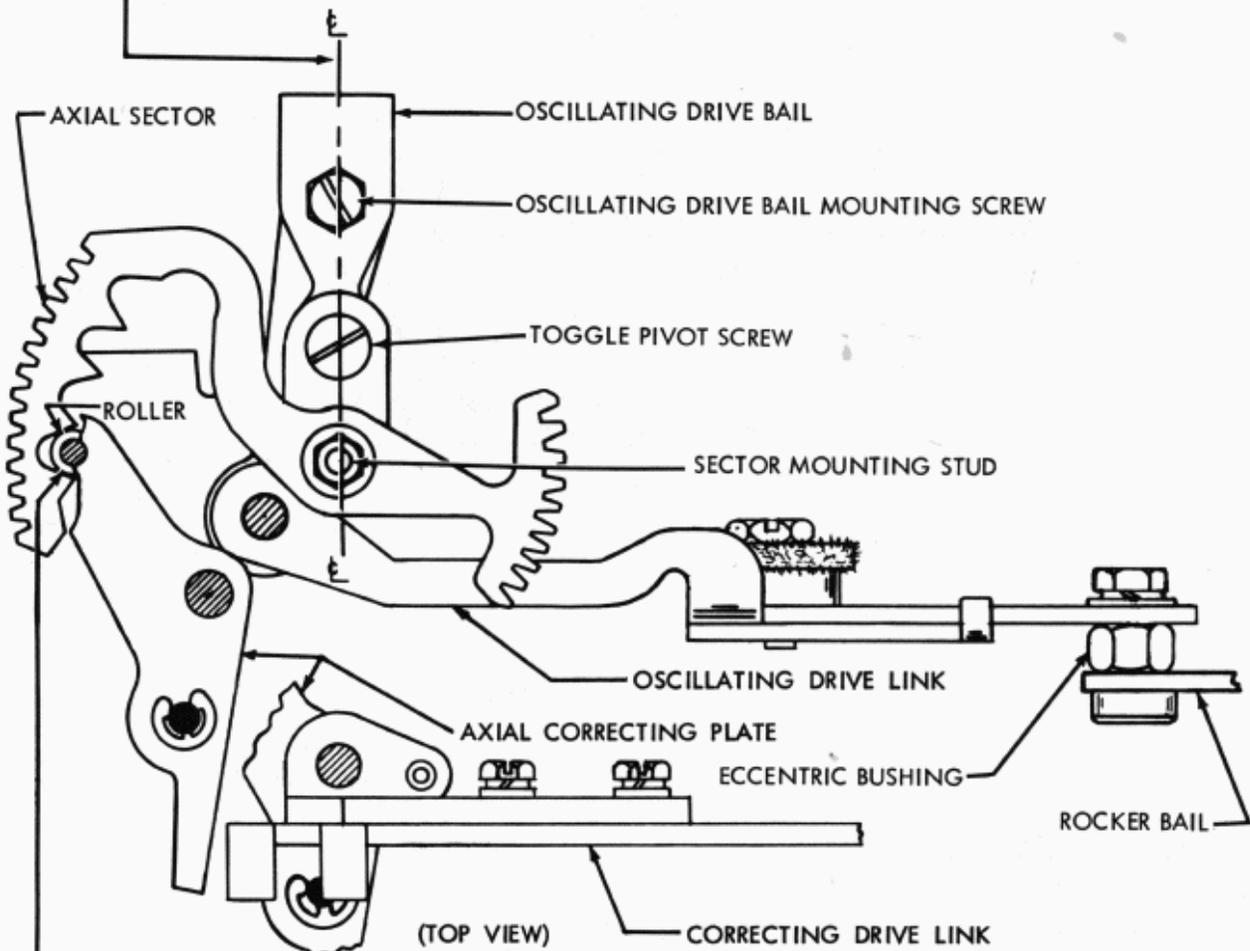
POSITION ROCKER BAIL TO ITS EXTREME LEFT.

REQUIREMENT

SECTOR MOUNTING STUD, TOGGLE PIVOT SCREW AND OSCILLATING DRIVE BAIL MOUNTING SCREW SHOULD APPROXIMATELY LINE UP.

TO ADJUST

POSITION OSCILLATING DRIVE LINK BY MEANS OF ITS ECCENTRIC BUSHING.



(B)

AXIAL CORRECTOR (NON-YIELDING)

TO CHECK

MANUALLY SELECT ALL SPACING CODE COMBINATION. ROTATE MAIN SHAFT UNTIL ROCKER BAIL IS TO EXTREME LEFT.

REQUIREMENT

ROLLER ON AXIAL CORRECTING PLATE SEATED FIRMLY IN CENTER OF FIRST NOTCH OF AXIAL SECTOR.

TO ADJUST

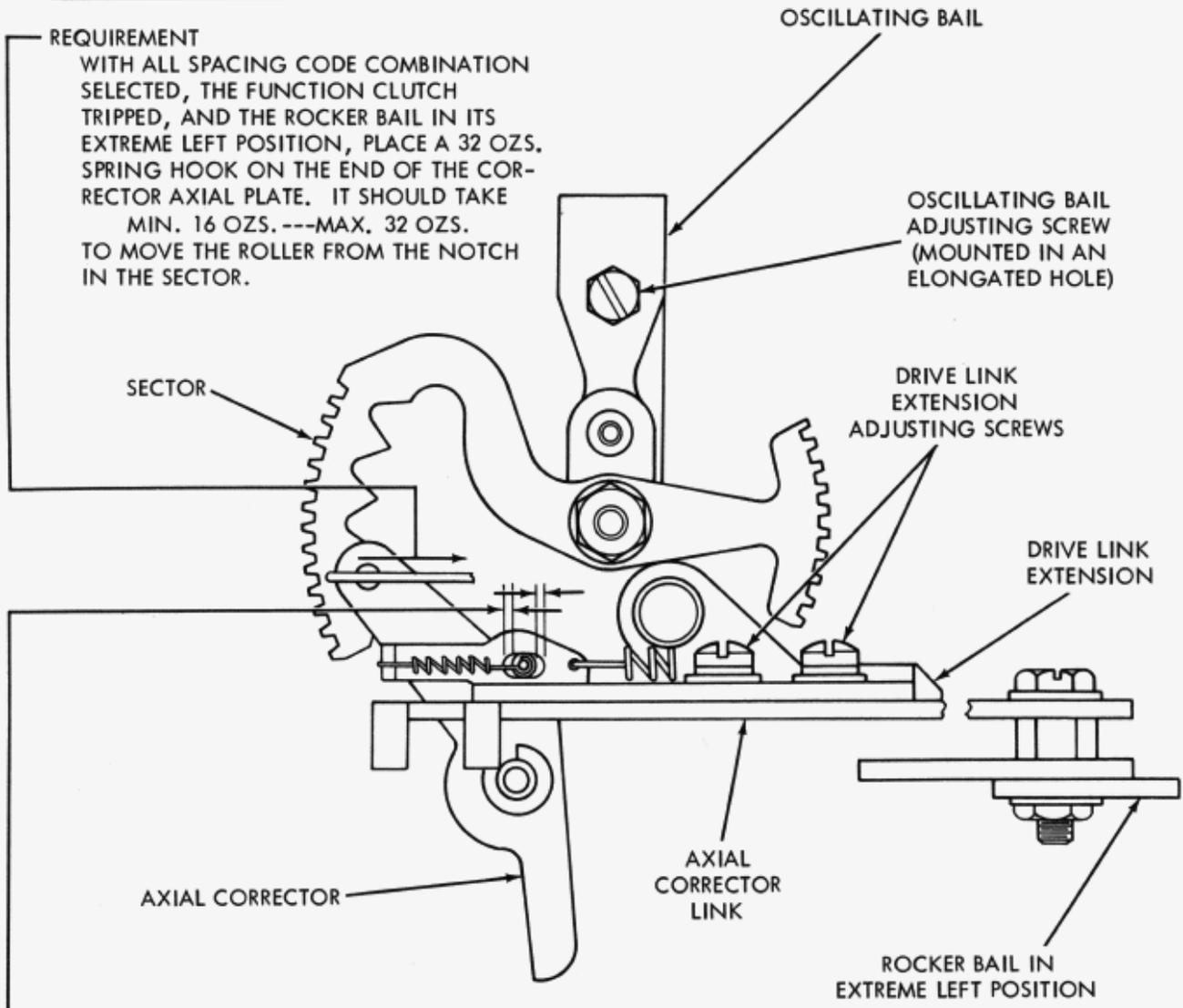
- (1) LOOSEN DRIVE LINK ADJUSTING SCREWS. FIRMLY SEAT AXIAL CORRECTOR ROLLER INTO FIRST NOTCH OF SECTOR BY MANUALLY APPLYING AND HOLDING THIS POSITION FOR NEXT PART OF ADJUSTMENT.
- (2) APPLY MANUAL PRESSURE ON DRIVE LINK TO BOTTOM ITS SLOT AGAINST ROCKER BAIL BUSHING.
- (3) MAINTAIN PRESSURE AT THESE TWO PLACES. TIGHTEN ADJUSTING SCREWS.

2.45 Typing Mechanism (continued)

CORRECTOR DRIVE LINK (YIELDING)  
EXTENSION SPRING TENSION

REQUIREMENT

WITH ALL SPACING CODE COMBINATION SELECTED, THE FUNCTION CLUTCH TRIPPED, AND THE ROCKER BAIL IN ITS EXTREME LEFT POSITION, PLACE A 32 OZS. SPRING HOOK ON THE END OF THE CORRECTOR AXIAL PLATE. IT SHOULD TAKE MIN. 16 OZS. ---MAX. 32 OZS. TO MOVE THE ROLLER FROM THE NOTCH IN THE SECTOR.



AXIAL CORRECTOR (YIELDING)

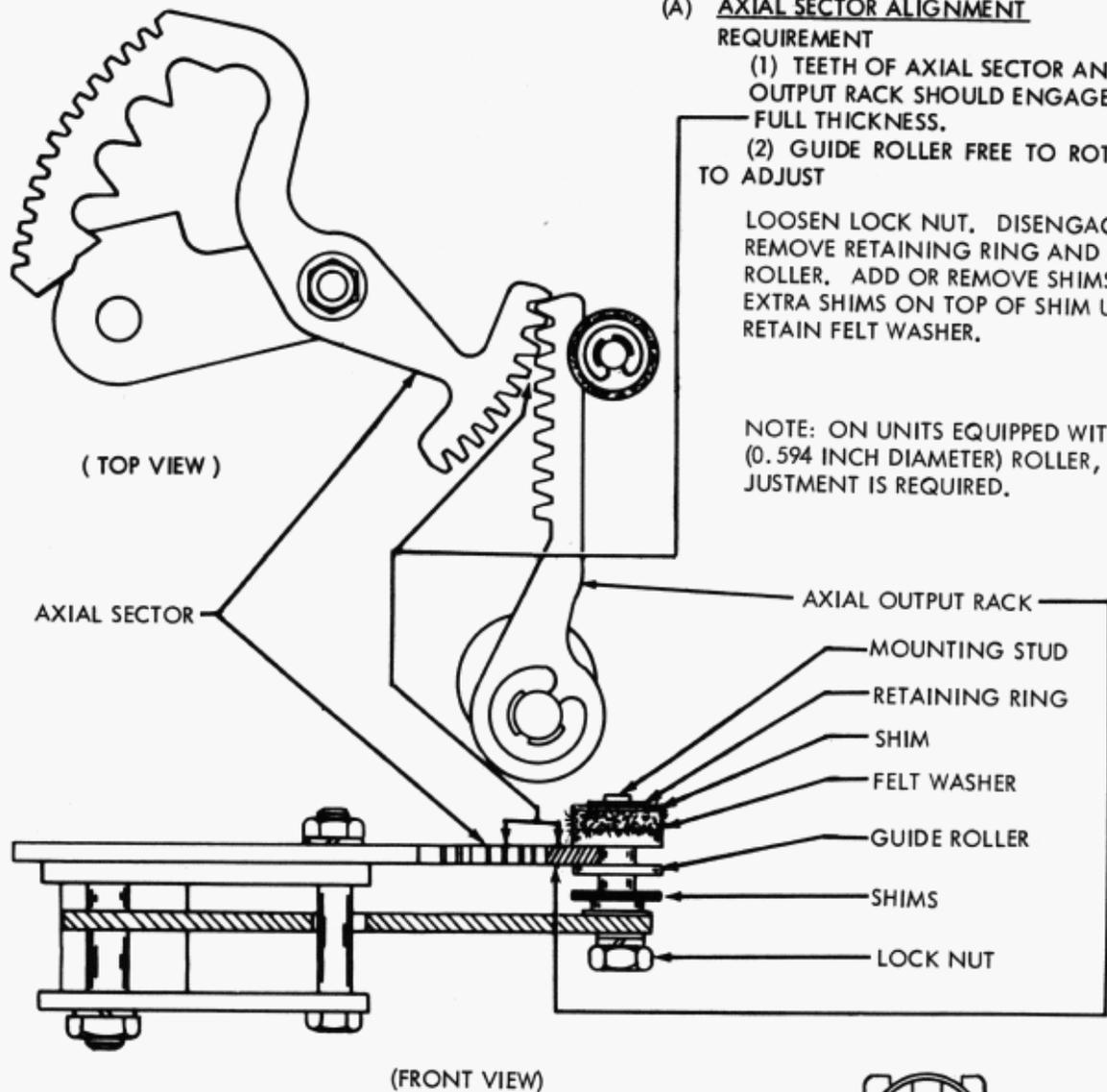
REQUIREMENT

WITH ALL SPACING CODE COMBINATION SELECTED, FUNCTION CLUTCH TRIPPED AND ROCKER BAIL IN ITS EXTREME LEFT POSITION, THE AXIAL CORRECTOR ROLLER SHOULD SEAT IN THE FIRST SECTOR NOTCH AND THERE SHOULD BE MIN. 0.005 INCH BETWEEN THE ENDS OF THE SLOT AND THE SPRING POST. CHECK BOTH SIDES AND CHECK SEATING IN FOURTH NOTCH (LETTERS SELECTION). TURN THE RETAINING RING THAT FASTENS THE DRIVE LINK EXTENSION TO THE CORRECTOR PLATE TO CHECK THE MINIMUM REQUIREMENT.

TO ADJUST

LOOSEN TWO DRIVE LINK ADJUSTING SCREWS. POSITION DRIVE LINK TO MEET THE REQUIREMENT AND RETIGHTEN THE SCREWS.

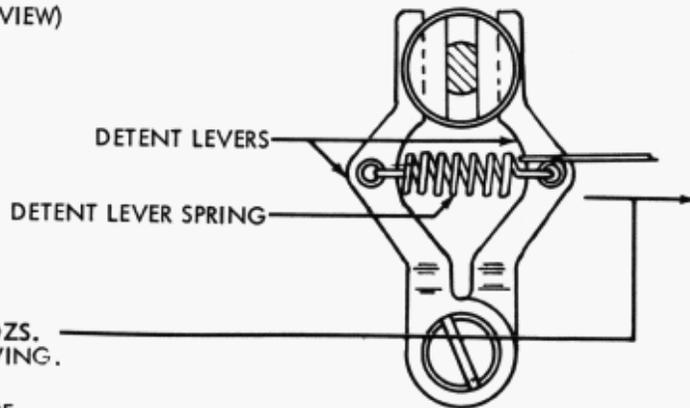
2.46 Typing Mechanism (continued)



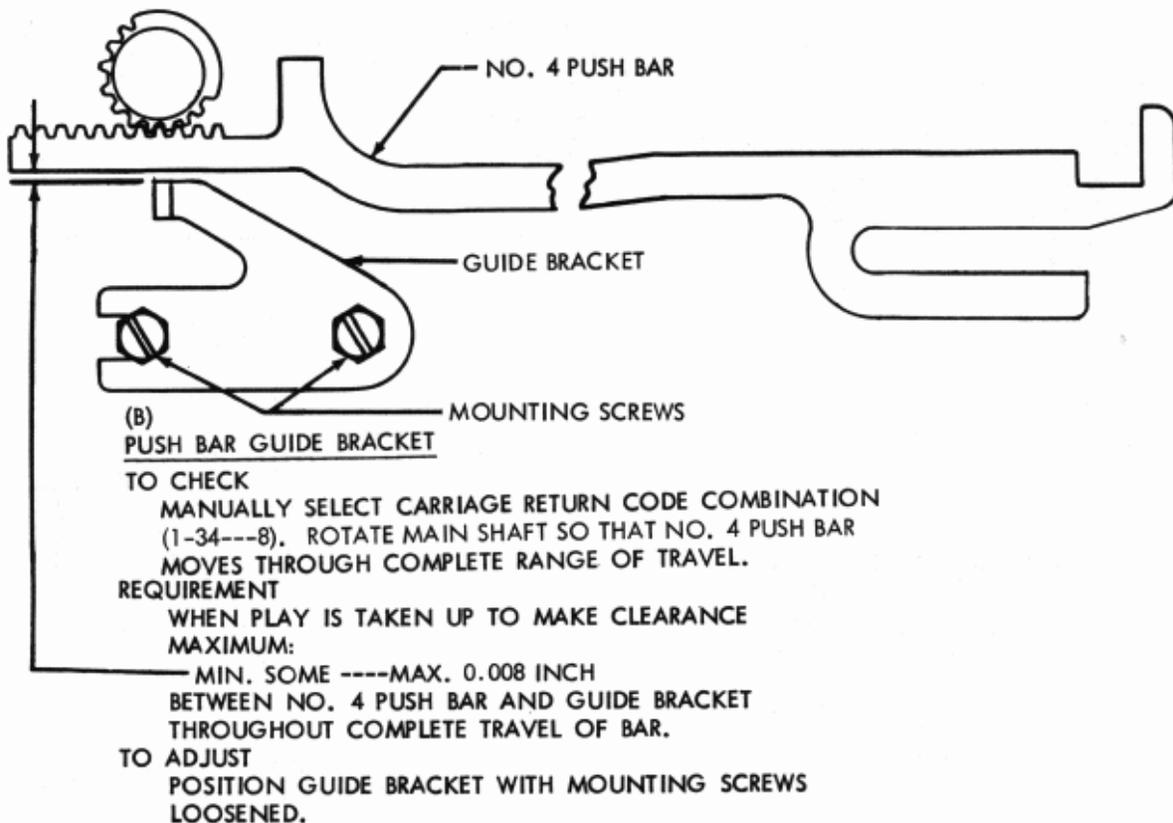
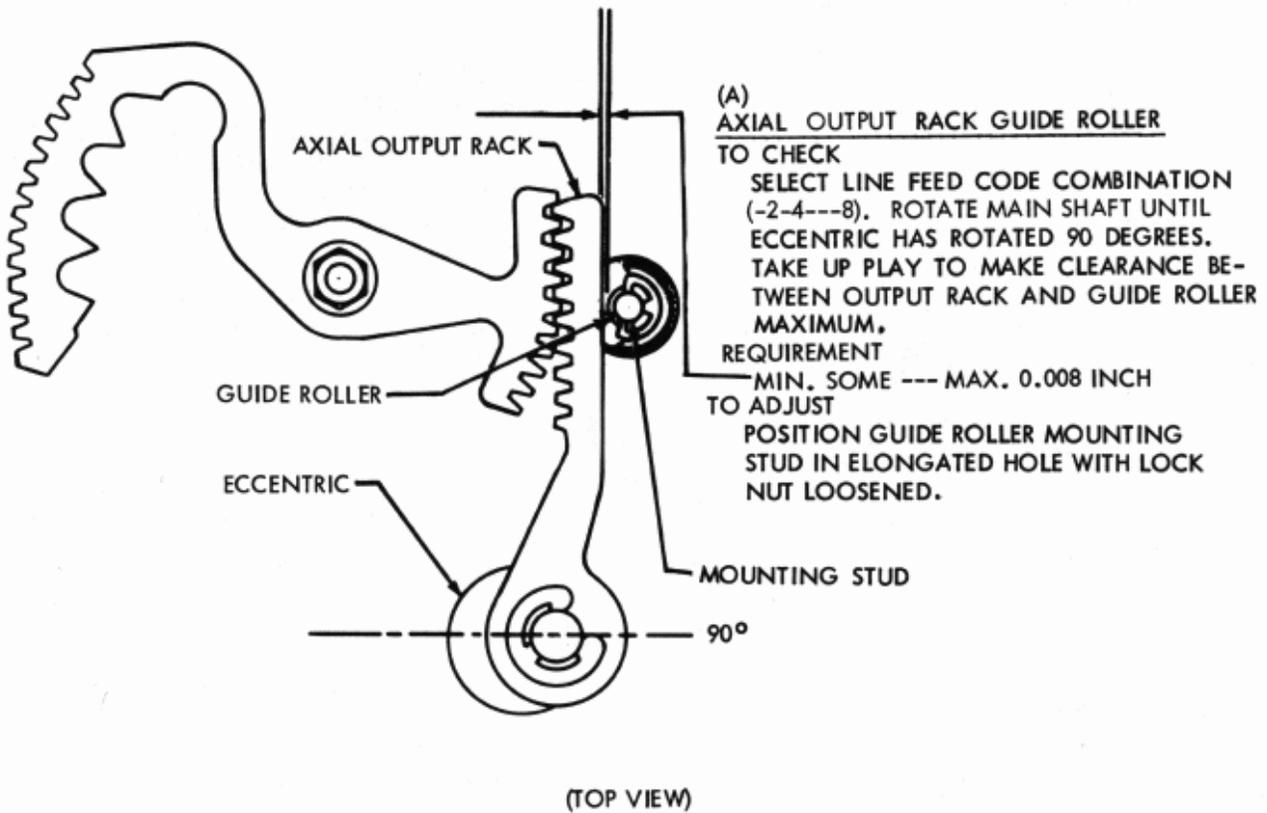
**ECCENTRIC SHAFT**  
 (B) **DETENT LEVER SPRING (6)**

MIN. 7 OZS. ---MAX. 10 OZS.  
 TO START DETENT LEVER MOVING.

**NOTE:**  
 CHECK ALL 6 SPRINGS. THERE ARE TWO ON THE AXIAL POSITIONING MECHANISM AND FOUR ON THE ROTARY POSITIONING MECHANISM.



→ 2.47 Typing Mechanism (continued)



2.48 Typing Mechanism (continued)

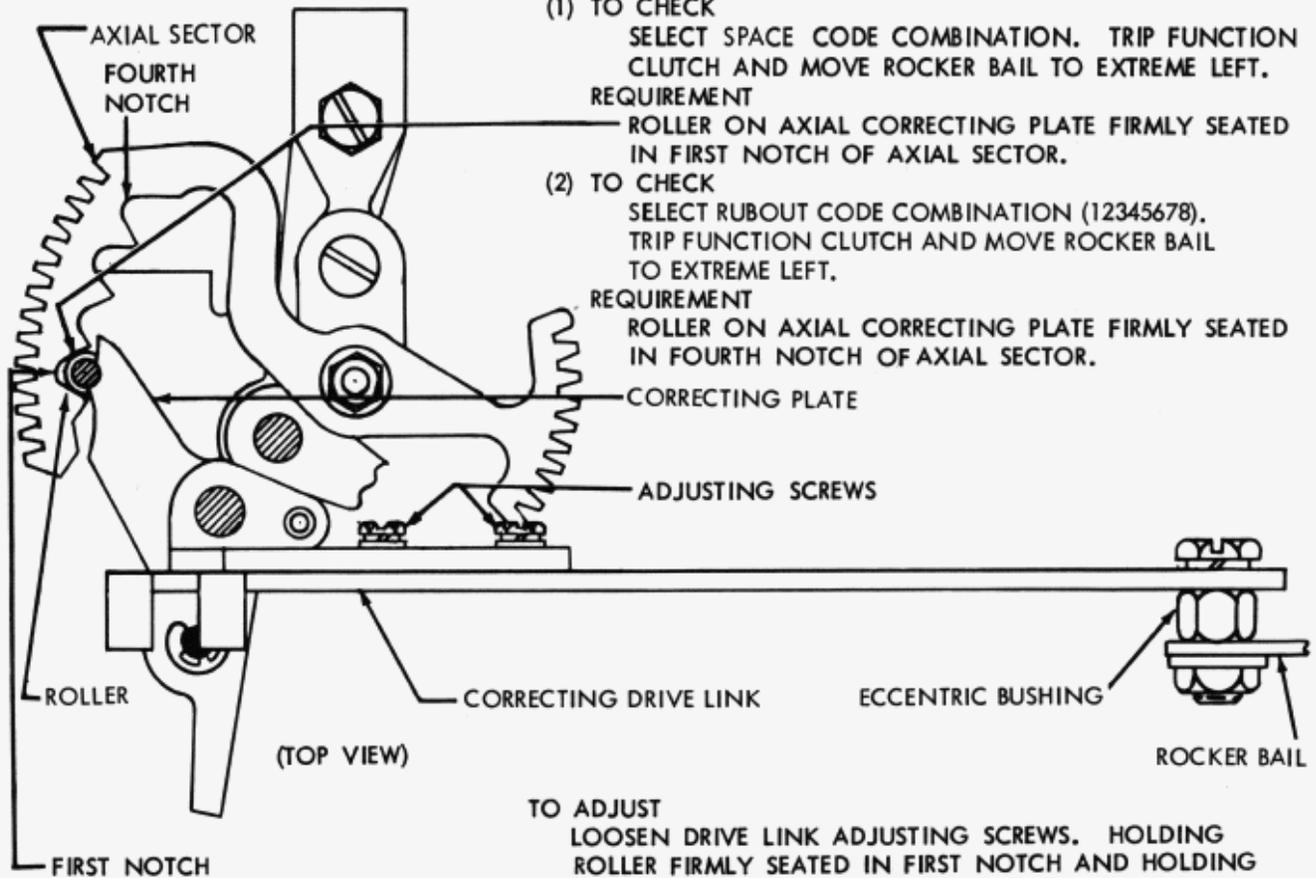
(A) CORRECTING DRIVE LINK

(1) TO CHECK  
 SELECT SPACE CODE COMBINATION. TRIP FUNCTION CLUTCH AND MOVE ROCKER BAIL TO EXTREME LEFT.  
 REQUIREMENT

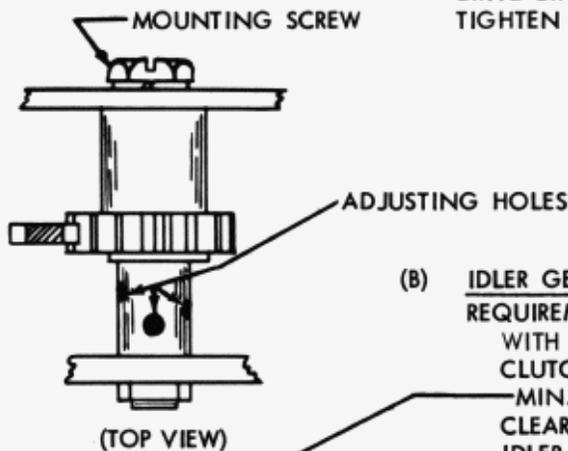
ROLLER ON AXIAL CORRECTING PLATE FIRMLY SEATED IN FIRST NOTCH OF AXIAL SECTOR.

(2) TO CHECK  
 SELECT RUBOUT CODE COMBINATION (12345678). TRIP FUNCTION CLUTCH AND MOVE ROCKER BAIL TO EXTREME LEFT.  
 REQUIREMENT

ROLLER ON AXIAL CORRECTING PLATE FIRMLY SEATED IN FOURTH NOTCH OF AXIAL SECTOR.



TO ADJUST  
 LOOSEN DRIVE LINK ADJUSTING SCREWS. HOLDING ROLLER FIRMLY SEATED IN FIRST NOTCH AND HOLDING DRIVE LINK DOWN (BOTTOMED) AGAINST BUSHING, TIGHTEN ADJUSTING SCREWS.



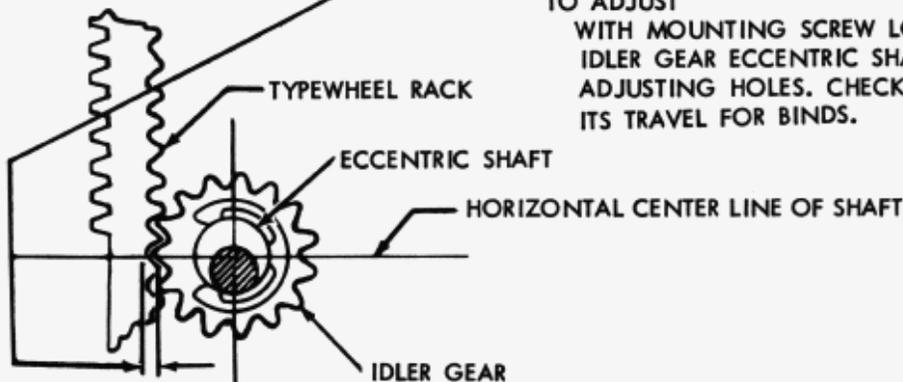
(B) IDLER GEAR ECCENTRIC SHAFT

REQUIREMENT

WITH UNIT IN RUBOUT CONDITION AND FUNCTION CLUTCH DISENGAGED;  
 MIN. SOME ---- MAX. 0.015 INCH  
 CLEARANCE BETWEEN TYPEWHEEL RACK TOOTH AND IDLER GEAR TOOTH.

TO ADJUST

WITH MOUNTING SCREW LOOSENED, POSITION IDLER GEAR ECCENTRIC SHAFT BY MEANS OF THREE ADJUSTING HOLES. CHECK RACK THROUGHOUT ITS TRAVEL FOR BINDS.



→ 2.49 Typing Mechanism (continued)

ROTARY CORRECTING LEVER

(1) TO CHECK

LOOSEN CORRECTING CLAMP ADJUSTING SCREW. WITH UNIT IN FIGURES CONDITION SELECT "X" CODE COMBINATION (---45-78). TRIP FUNCTION CLUTCH AND POSITION ROCKER BAIL TO EXTREME LEFT. MANUALLY SEAT ROTARY CORRECTING LEVER IN TYPEWHEEL RACK.

REQUIREMENT

SECOND TOOTH FROM TOP OF RACK SEATED BETWEEN LOBES OF CORRECTING LEVER.

TO ADJUST

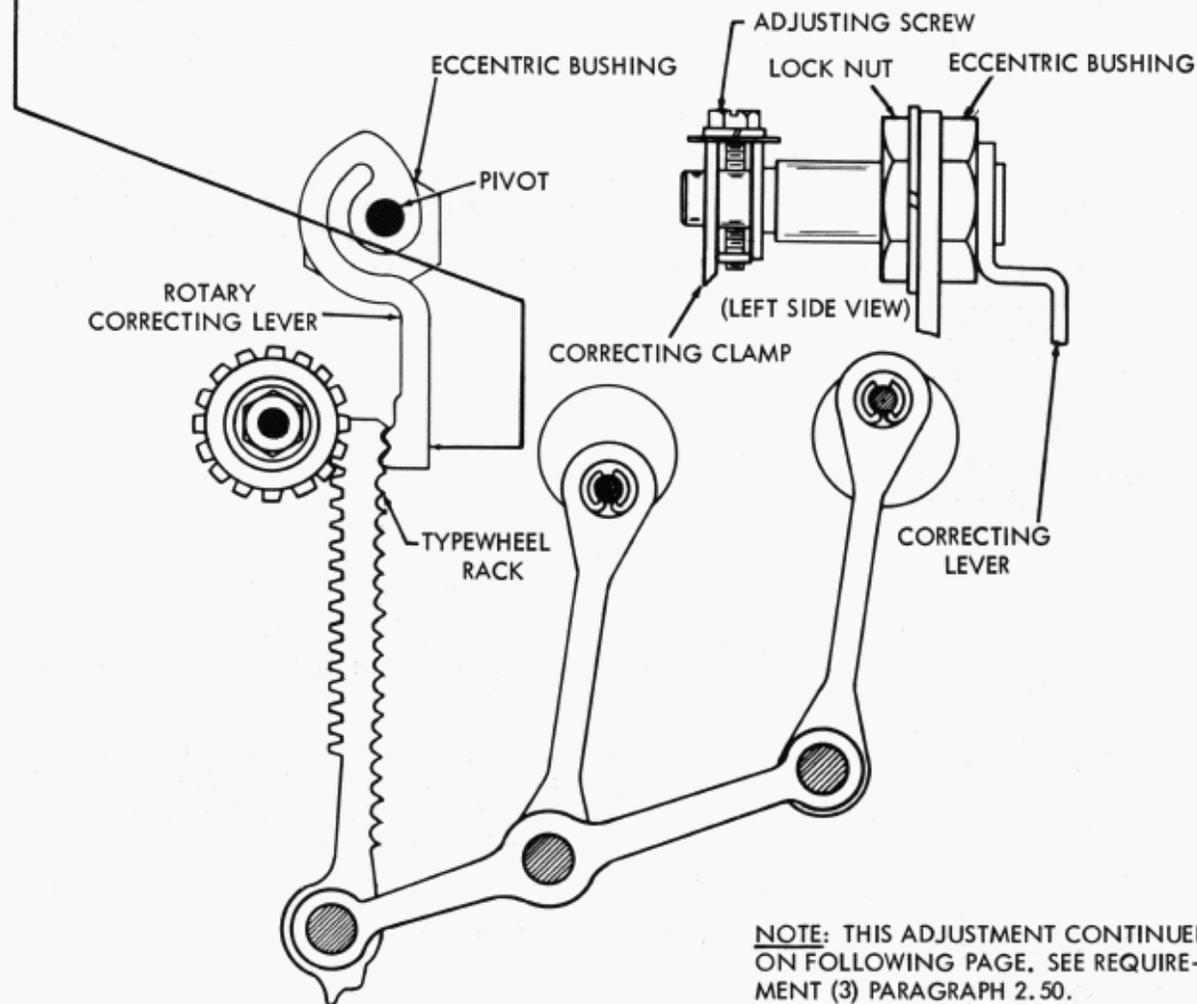
LOOSEN ECCENTRIC BUSHING LOCK NUT. WITH CLAMP ADJUSTING SCREW LOOSENED AND CORRECTING LEVER PIVOT TO RIGHT OF CENTER LINE, POSITION CORRECTING LEVER. TIGHTEN BUSHING LOCK NUT. DO NOT TIGHTEN CLAMP ADJUSTING SCREW AT THIS TIME.

(2) TO CHECK

IN A MANNER SIMILAR TO THAT DESCRIBED ABOVE, CHECK ENGAGEMENT OF FIFTH TOOTH (--34--78), NINTH TOOTH (---4---8) AND SIXTEENTH TOOTH (--3-5--8).

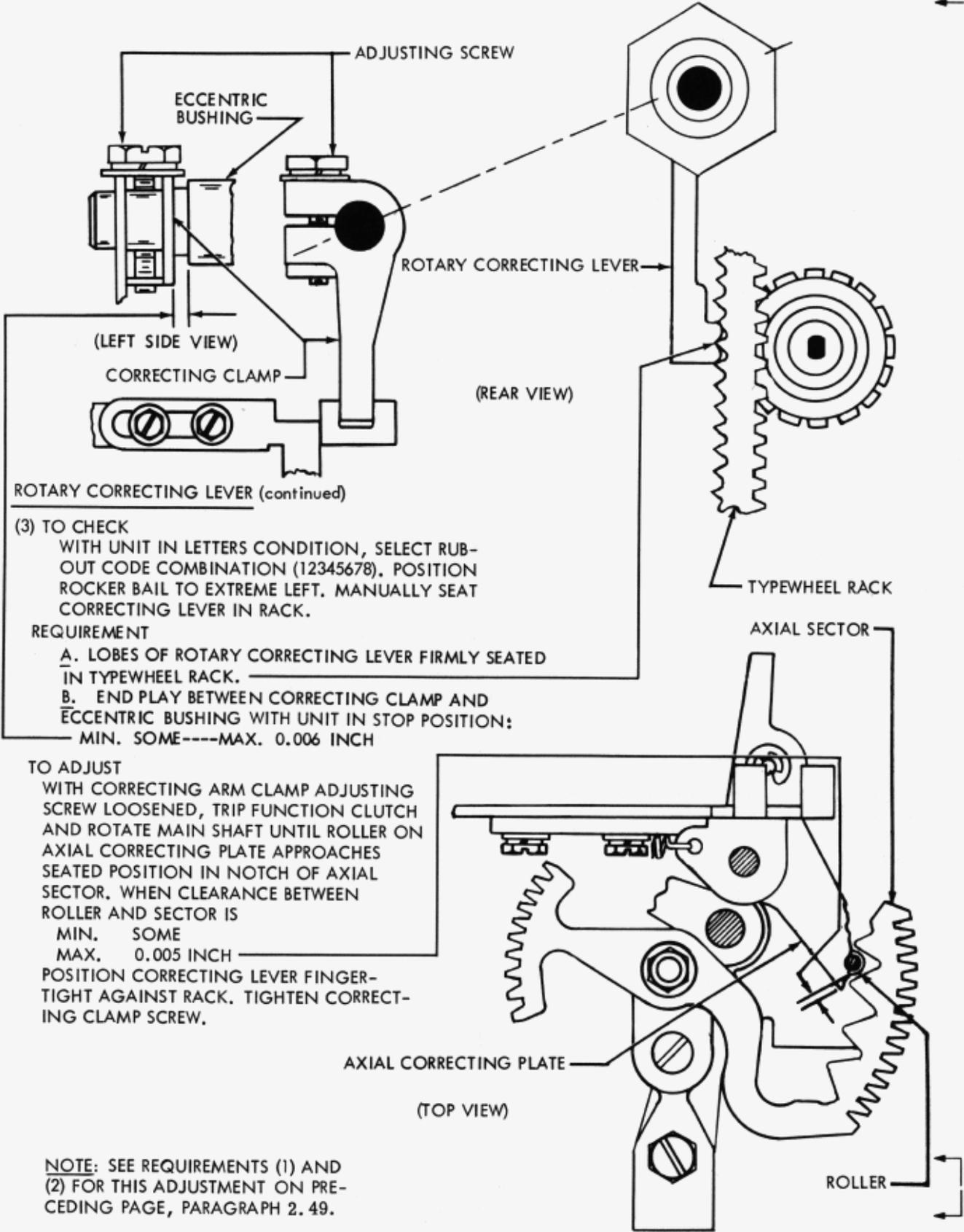
TO ADJUST

REFINE ADJUSTMENT UNDER (1) ABOVE.



NOTE: THIS ADJUSTMENT CONTINUED ON FOLLOWING PAGE. SEE REQUIREMENT (3) PARAGRAPH 2.50.

2.50 Typing Mechanism (continued)



ROTARY CORRECTING LEVER (continued)

(3) TO CHECK  
 WITH UNIT IN LETTERS CONDITION, SELECT RUB-  
 OUT CODE COMBINATION (12345678). POSITION  
 ROCKER BAIL TO EXTREME LEFT. MANUALLY SEAT  
 CORRECTING LEVER IN RACK.

REQUIREMENT

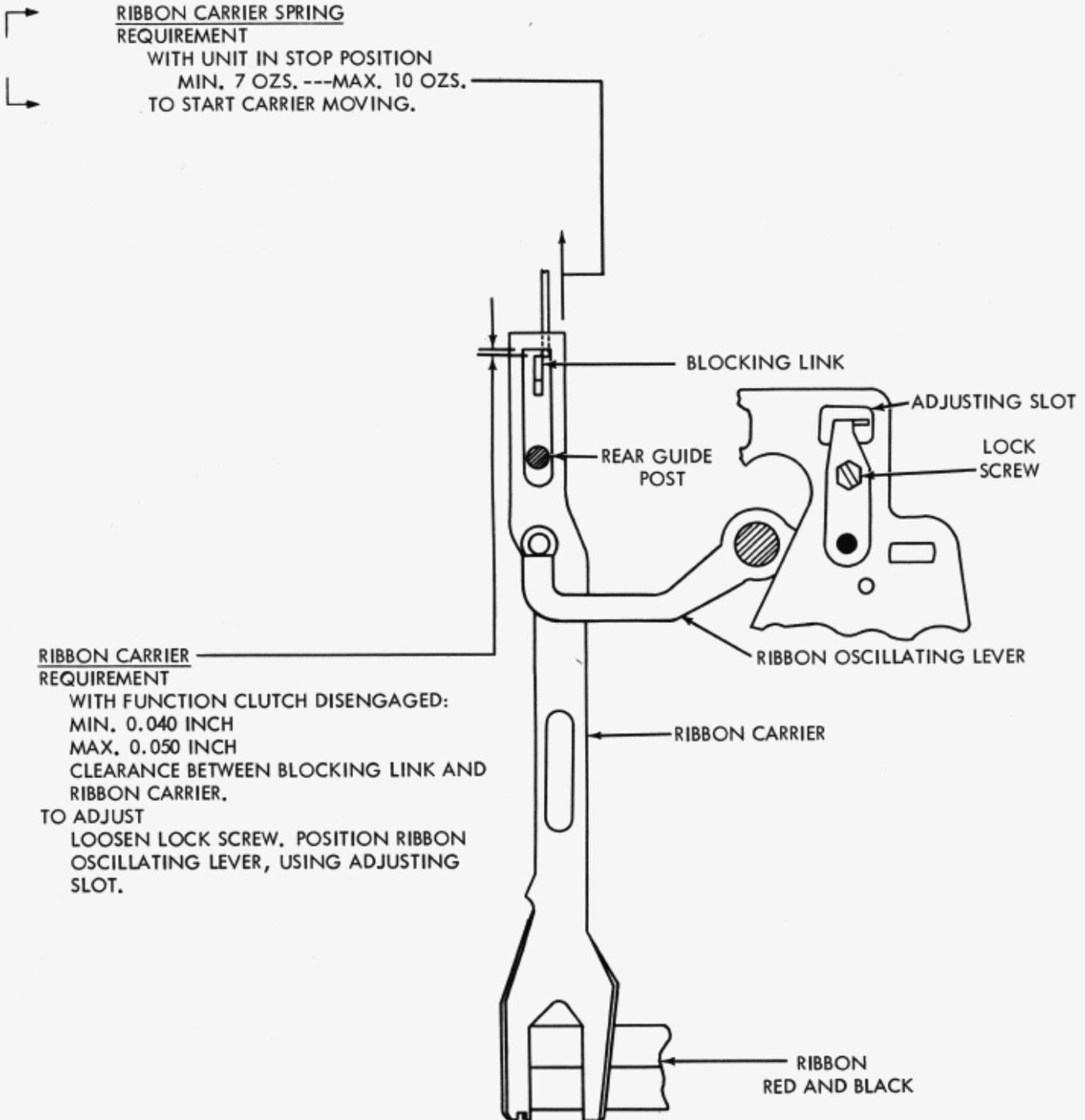
- A. LOBES OF ROTARY CORRECTING LEVER FIRMLY SEATED  
 IN TYPEWHEEL RACK.
- B. END PLAY BETWEEN CORRECTING CLAMP AND  
 ECCENTRIC BUSHING WITH UNIT IN STOP POSITION:  
 MIN. SOME----MAX. 0.006 INCH

TO ADJUST

WITH CORRECTING ARM CLAMP ADJUSTING  
 SCREW LOOSENED, TRIP FUNCTION CLUTCH  
 AND ROTATE MAIN SHAFT UNTIL ROLLER ON  
 AXIAL CORRECTING PLATE APPROACHES  
 SEATED POSITION IN NOTCH OF AXIAL  
 SECTOR. WHEN CLEARANCE BETWEEN  
 ROLLER AND SECTOR IS  
 MIN. SOME  
 MAX. 0.005 INCH  
 POSITION CORRECTING LEVER FINGER-  
 TIGHT AGAINST RACK. TIGHTEN CORRECT-  
 ING CLAMP SCREW.

NOTE: SEE REQUIREMENTS (1) AND  
 (2) FOR THIS ADJUSTMENT ON PRE-  
 CING PAGE, PARAGRAPH 2.49.

→ 2.51 Ribbon Shift and Print Suppression Mechanism (continued)

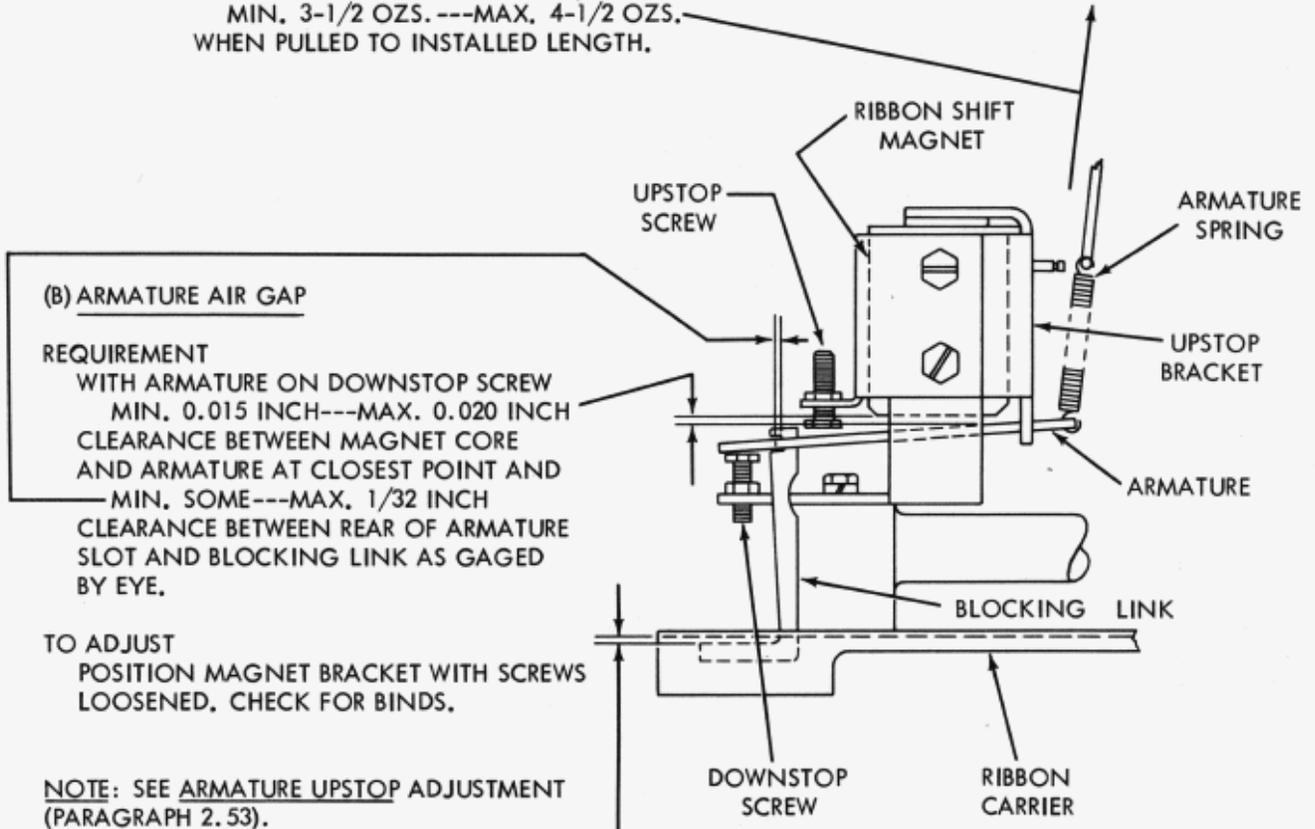


2.52 Ribbon Shift and Print Suppression Mechanism (continued)

NOTE: REFER TO VARIABLE FEATURES (PARAGRAPH 3) FOR ADDITIONAL PRINT SUPPRESSION ADJUSTMENTS.

ARMATURE SPRING

REQUIREMENT  
WITH SPRING DISCONNECTED  
MIN. 3-1/2 OZS. ---MAX. 4-1/2 OZS.  
WHEN PULLED TO INSTALLED LENGTH.



(B) ARMATURE AIR GAP  
REQUIREMENT  
WITH ARMATURE ON DOWNSTOP SCREW  
MIN. 0.015 INCH---MAX. 0.020 INCH  
CLEARANCE BETWEEN MAGNET CORE  
AND ARMATURE AT CLOSEST POINT AND  
MIN. SOME---MAX. 1/32 INCH  
CLEARANCE BETWEEN REAR OF ARMATURE  
SLOT AND BLOCKING LINK AS GAGED  
BY EYE.

TO ADJUST  
POSITION MAGNET BRACKET WITH SCREWS  
LOOSENED, CHECK FOR BINDS.

NOTE: SEE ARMATURE UPSTOP ADJUSTMENT  
(PARAGRAPH 2.53).

(A) ARMATURE DOWNSTOP

REQUIREMENT  
WITH ROCKER BAIL IN EXTREME LEFT POSITION  
AND RIBBON CARRIER BIASED DOWNWARD  
MIN. SOME---MAX. 0.005 INCH  
CLEARANCE BETWEEN TOP SURFACE OF BLOCKING  
LINK AND LOWER SURFACE OF RIBBON CARRIER.

TO ADJUST  
POSITION ARMATURE DOWNSTOP SCREW WITH  
LOCK NUT LOOSENED.

2.53 Ribbon Shift and Print Suppression Mechanism (continued)

NOTE: REFER TO VARIABLE FEATURES (PARAGRAPH 3) FOR ADDITIONAL PRINT SUPPRESSION ADJUSTMENTS.

NOTE: THIS ADJUSTMENT IS TO BE PRECEDED BY ARMATURE DOWNSTOP AND ARMATURE AIR GAP ADJUSTMENTS (PARAGRAPH 2.52).

ARMATURE UPSTOP

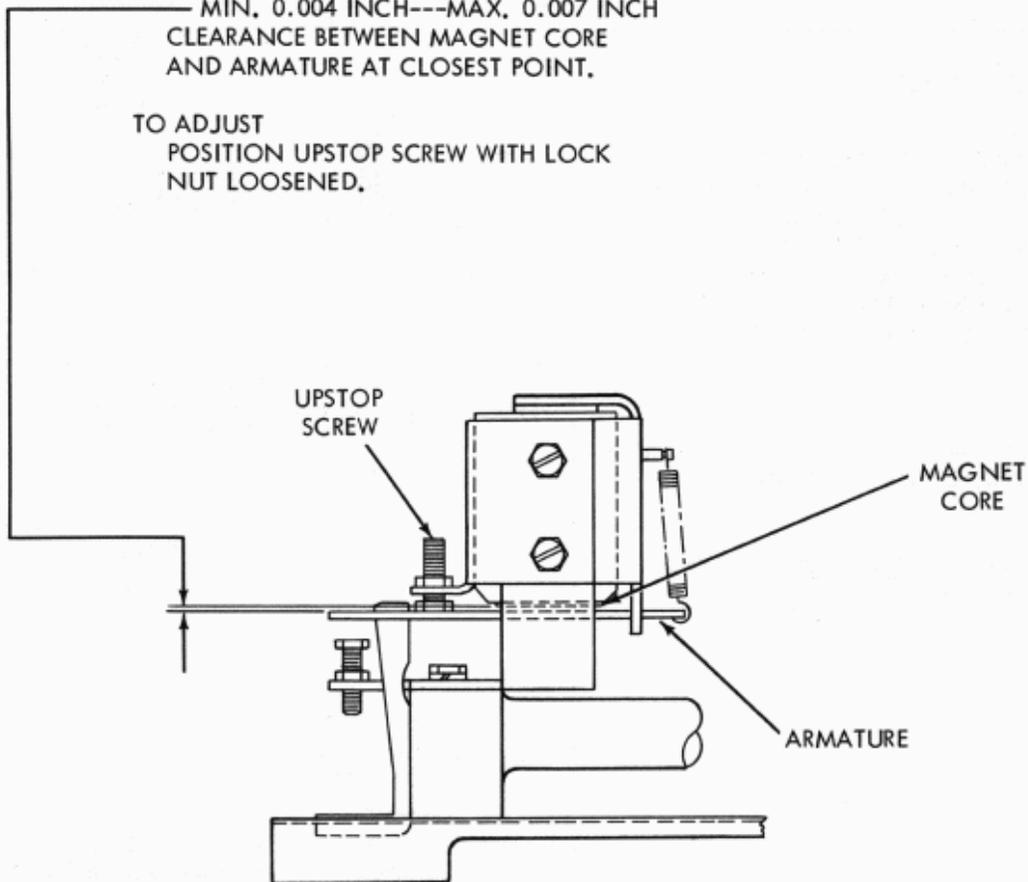
REQUIREMENT

WITH ARMATURE HELD AGAINST UPSTOP SCREW (MAGNET IS NOT TO BE ENERGIZED)

MIN. 0.004 INCH---MAX. 0.007 INCH CLEARANCE BETWEEN MAGNET CORE AND ARMATURE AT CLOSEST POINT.

TO ADJUST

POSITION UPSTOP SCREW WITH LOCK NUT LOOSENED.



2.54 Typing Mechanism (continued)

PRINTING TRIP LINK

TO CHECK

TRIP FUNCTION CLUTCH AND POSITION ROCKER BAIL TO EXTREME LEFT. MANUALLY LIFT ACCELERATOR SO THAT LATCHING SURFACES OF PRINTING LATCH AND ACCELERATOR ARE EVEN.

REQUIREMENT

MIN. SOME----MAX. 0.015 INCH CLEARANCE BETWEEN ACCELERATOR AND LATCH.

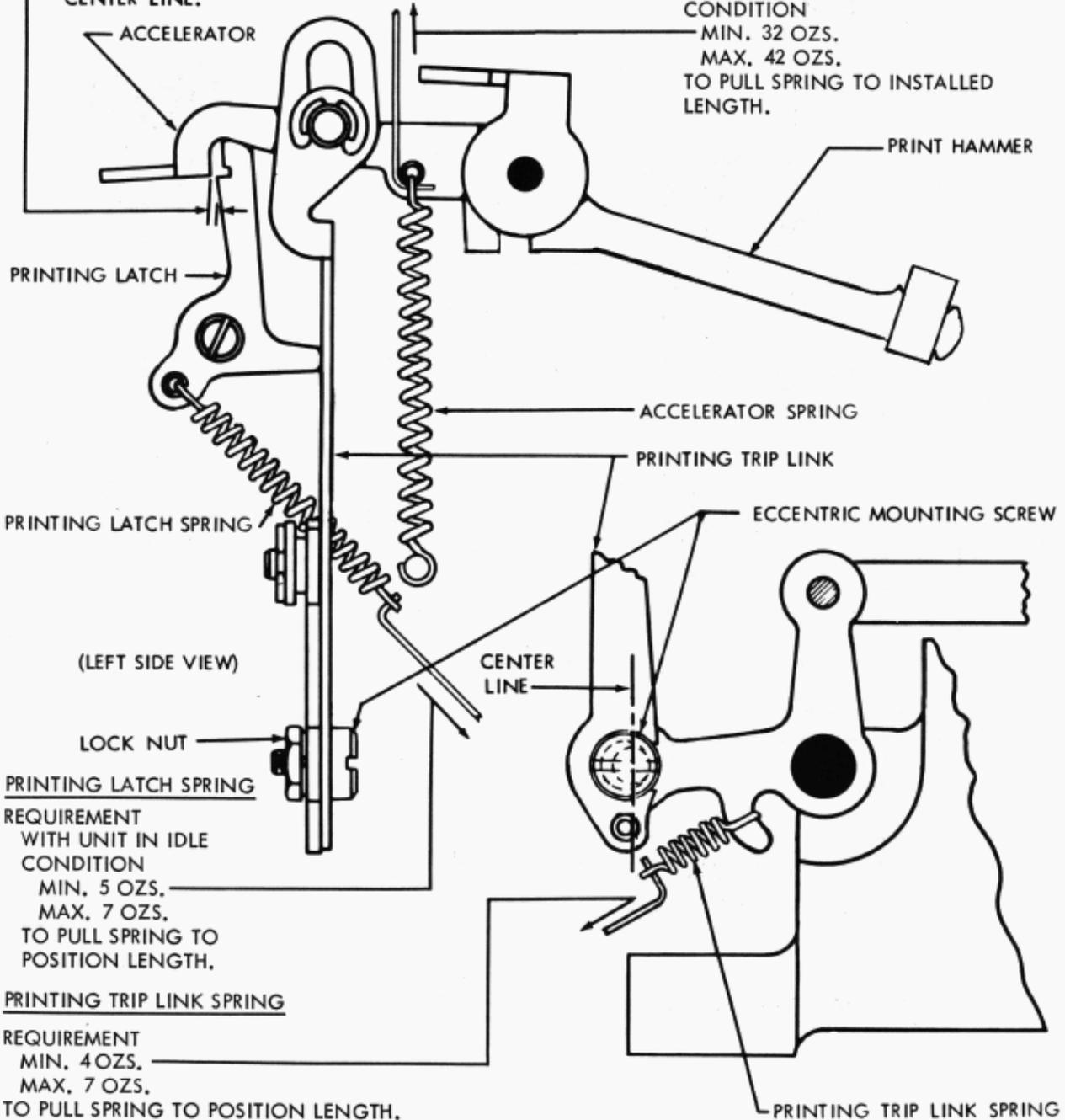
TO ADJUST

WITH LOCK NUT LOOSENED, POSITION PRINTING TRIP LINK BY MEANS OF ECCENTRIC MOUNTING SCREW. KEEP HIGH PART OF SCREW TO LEFT OF CENTER LINE.

ACCELERATOR SPRING

REQUIREMENT WITH UNIT IN STOP CONDITION

MIN. 32 OZS.  
MAX. 42 OZS.  
TO PULL SPRING TO INSTALLED LENGTH.



PRINTING LATCH SPRING

REQUIREMENT WITH UNIT IN IDLE CONDITION

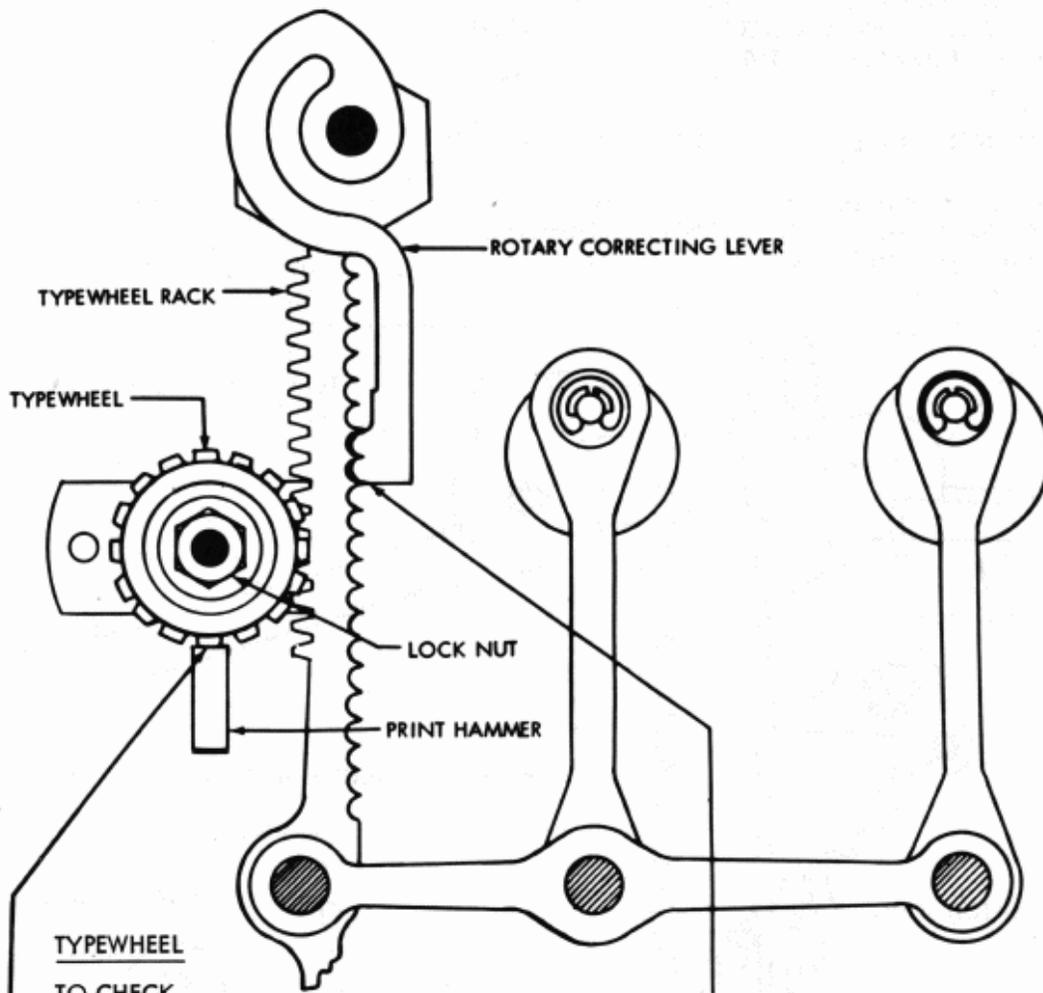
MIN. 5 OZS.  
MAX. 7 OZS.  
TO PULL SPRING TO POSITION LENGTH.

PRINTING TRIP LINK SPRING

REQUIREMENT MIN. 4 OZS.  
MAX. 7 OZS.

TO PULL SPRING TO POSITION LENGTH.

→ 2.55 Typing Mechanism (continued)



TYPEWHEEL

TO CHECK

SELECT "M" CODE COMBINATION (--345--8). PLACE ROCKER BAIL TO EXTREME LEFT. CORRECTING LEVER SHOULD BE FIRMLY SEATED IN TYPEWHEEL RACK.

REQUIREMENT

TYPEWHEEL ALIGNED SO THAT FULL CHARACTER IS PRINTED UNIFORMLY AND 6-1/2 CODE HOLE SPACES BEHIND ITS PERFORATED CODE HOLE.

TO ADJUST

POSITION TYPEWHEEL WITH LOCK NUT LOOSENED. CHECK PRINTING BY MANUALLY LIFTING ACCELERATOR TO LATCHED POSITION AND RELEASING IT.

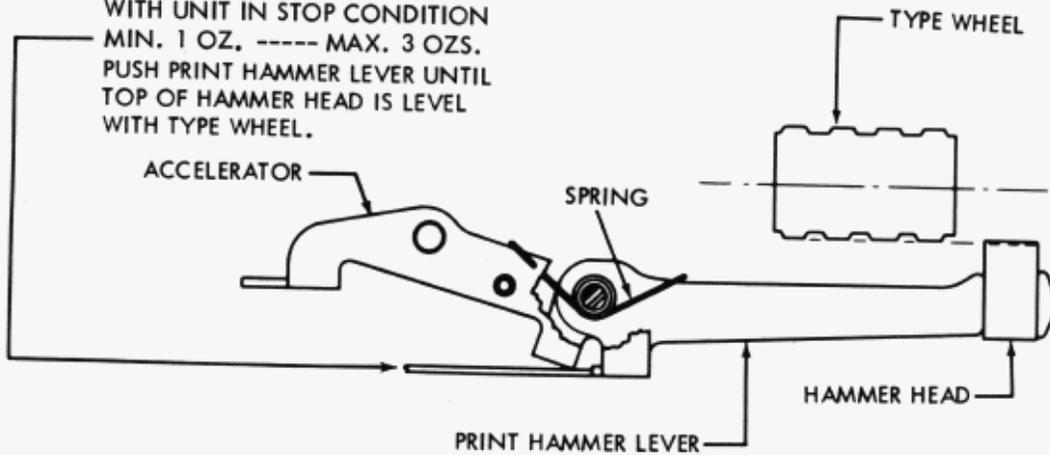
NOTE

FOR BEST RESULTS, IT MAY BE NECESSARY TO MAKE PRINT HAMMER ADJUSTMENT AND THEN REFINE THIS ADJUSTMENT.

2.56 Typing Mechanism (continued)

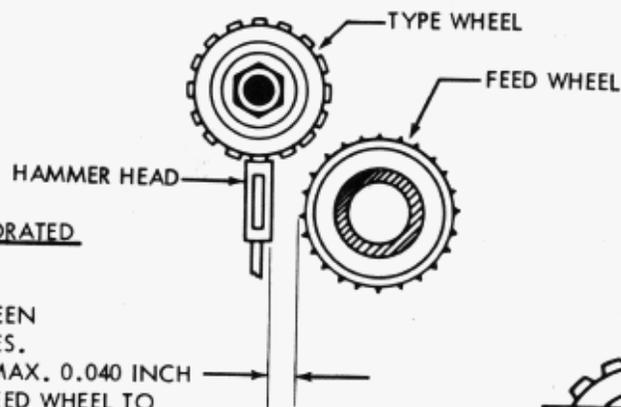
PRINT HAMMER SPRING  
REQUIREMENT

WITH UNIT IN STOP CONDITION  
MIN. 1 OZ. ----- MAX. 3 OZS.  
PUSH PRINT HAMMER LEVER UNTIL  
TOP OF HAMMER HEAD IS LEVEL  
WITH TYPE WHEEL.



PRINTING BETWEEN PERFORATED  
FEED HOLES  
REQUIREMENT

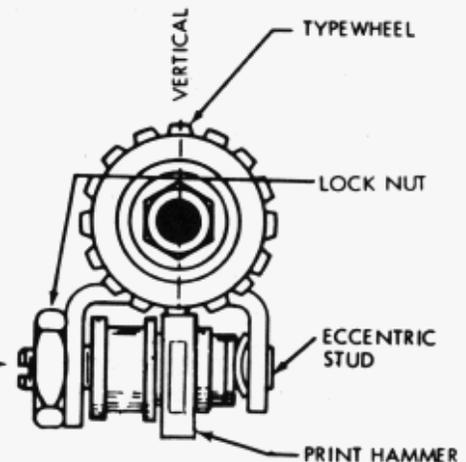
CLEAR PRINTING BETWEEN  
PERFORATED FEED HOLES.  
MIN. 0.030 INCH --- MAX. 0.040 INCH  
FROM PIN POINT OF FEED WHEEL TO  
SIDE OF PRINT HAMMER.



TO ADJUST  
POSITION ECCENTRIC STUD WITH  
LOCK NUT LOOSENED, REPEAT  
PROCEDURE IF NECESSARY.

NOTE  
IT MAY BE NECESSARY TO  
REMAKE TYPE WHEEL  
ADJUSTMENT.

FRONT VIEW



→ 2.57 Typing Mechanism (continued)

FEED PAWL SPRING

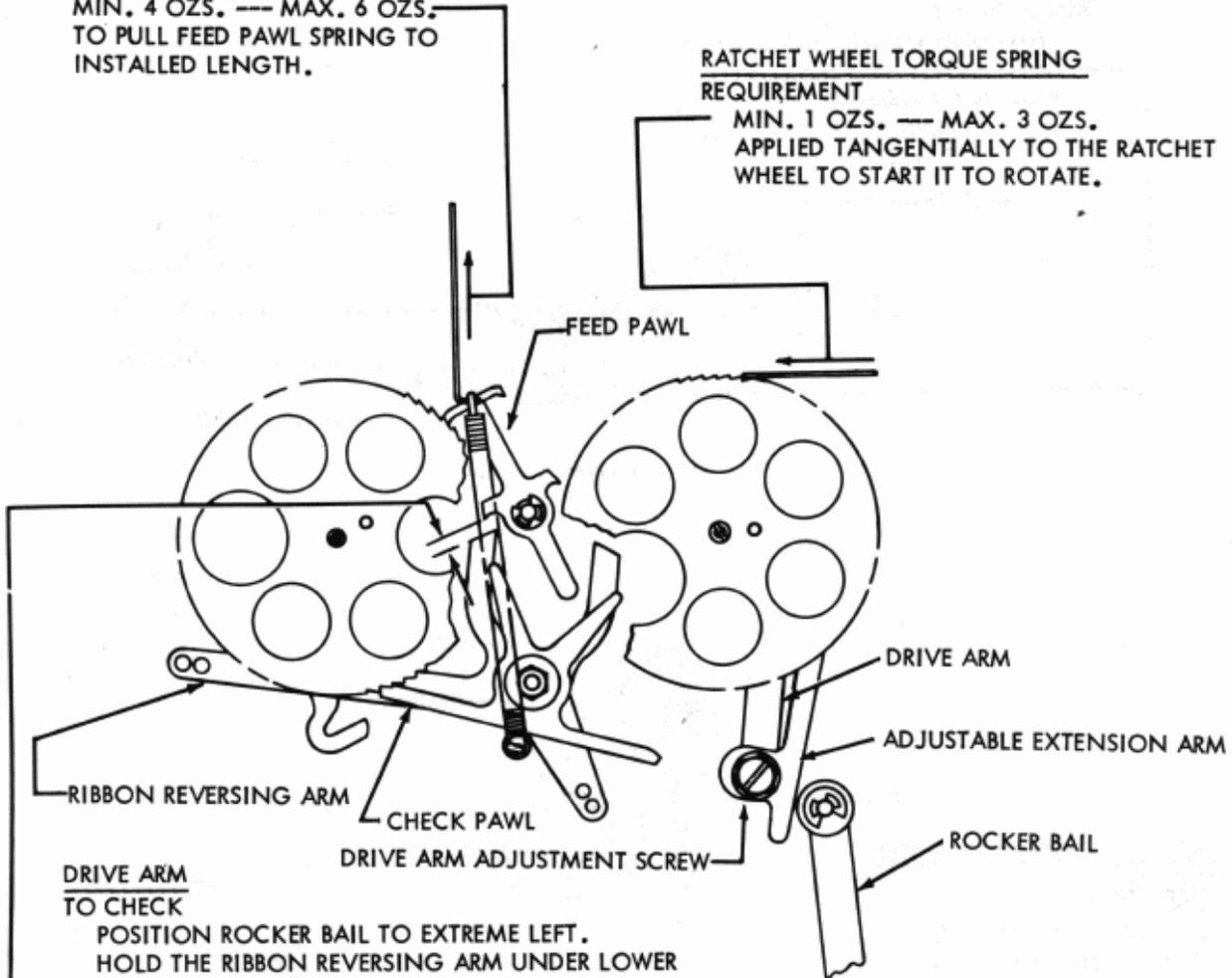
REQUIREMENT

WITH ROCKER BAIL TO EXTREME RIGHT:  
MIN. 4 OZS. --- MAX. 6 OZS.  
TO PULL FEED PAWL SPRING TO  
INSTALLED LENGTH.

RATCHET WHEEL TORQUE SPRING

REQUIREMENT

MIN. 1 OZS. --- MAX. 3 OZS.  
APPLIED TANGENTIALLY TO THE RATCHET  
WHEEL TO START IT TO ROTATE.



DRIVE ARM  
TO CHECK

POSITION ROCKER BAIL TO EXTREME LEFT.  
HOLD THE RIBBON REVERSING ARM UNDER LOWER  
REVERSING EXTENSION OF FEED PAWL.

REQUIREMENT

- (1) CLEARANCE BETWEEN BLOCKING EDGE OF RIBBON REVERSE ARM AND REVERSING EXTENSION OF FEED PAWL:  
MIN. SOME
- (2) CLEARANCE SHALL NOT BE SO GREAT AS TO ALLOW FEED PAWL TO FEED MORE THAN TWO TEETH AT A TIME.
- (3) FEED PAWL DETENTED IN BOTH ITS RIGHT AND LEFT POSITION.

TO ADJUST

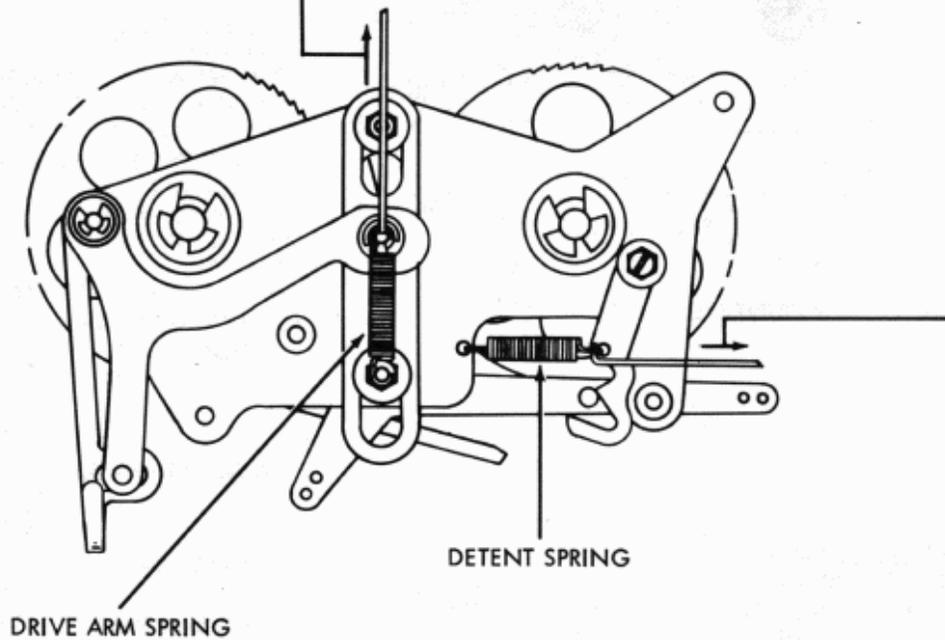
POSITION DRIVE ARM ADJUSTABLE EXTENSION LEVER WITH ITS MOUNTING SCREW LOOSENED.

2.58 Typing Mechanism (continued)

DRIVE ARM SPRING

REQUIREMENT

WITH ROCKER BAIL TO EXTREME RIGHT  
 MIN. 9 OZS. --- MAX. 14 OZS.  
 TO PULL DRIVE ARM SPRING TO  
 INSTALLED LENGTH.



DETENT SPRING

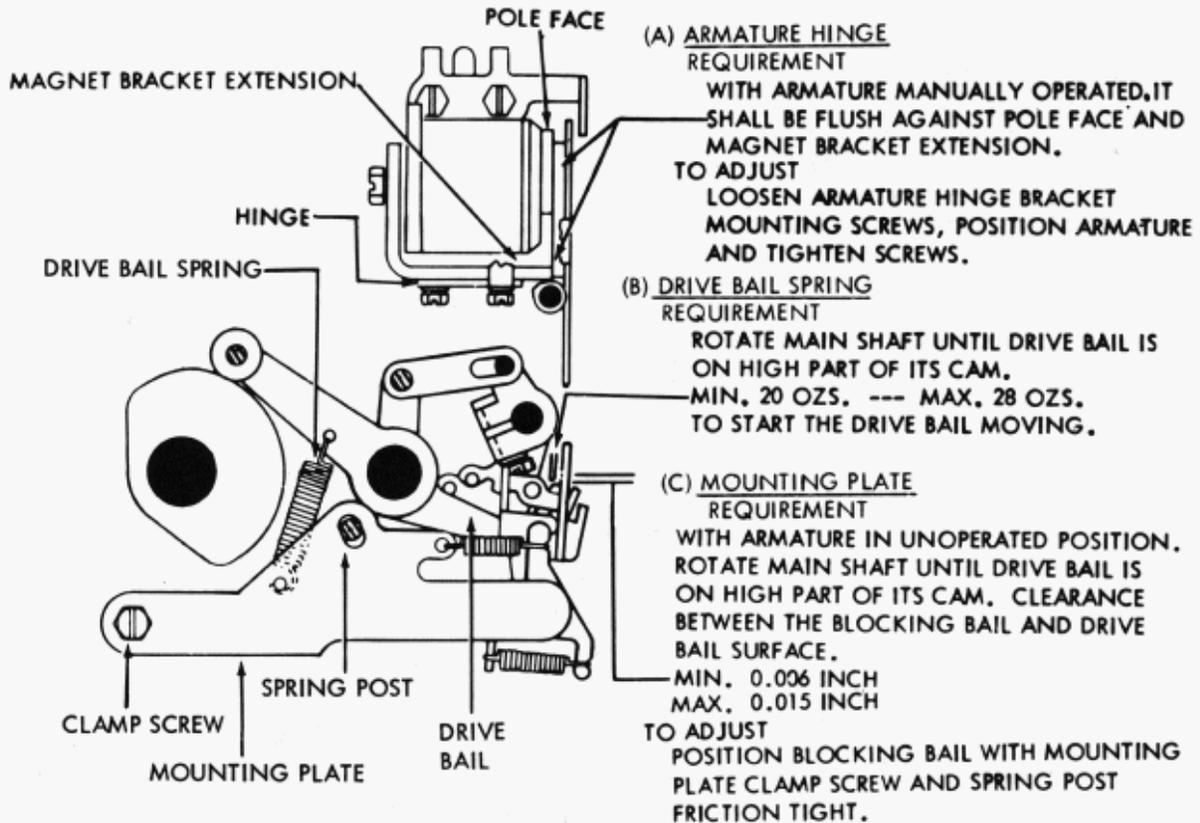
REQUIREMENT

WITH REVERSING ARM IN ITS EXTREME  
 RIGHT OR LEFT POSITION:  
 MIN. 2 OZS. --- MAX. 4 OZS.  
 TO PULL DETENT SPRING TO ITS  
 INSTALLED LENGTH.

3. VARIABLE FEATURES

→ REMOTE CONTROL NON-INTERFERING "RUBOUT" TAPE FEED-OUT MECHANISM

3.01 Remote Control Non-Interfering RUBOUT  
Tape Feed-Out Mechanism



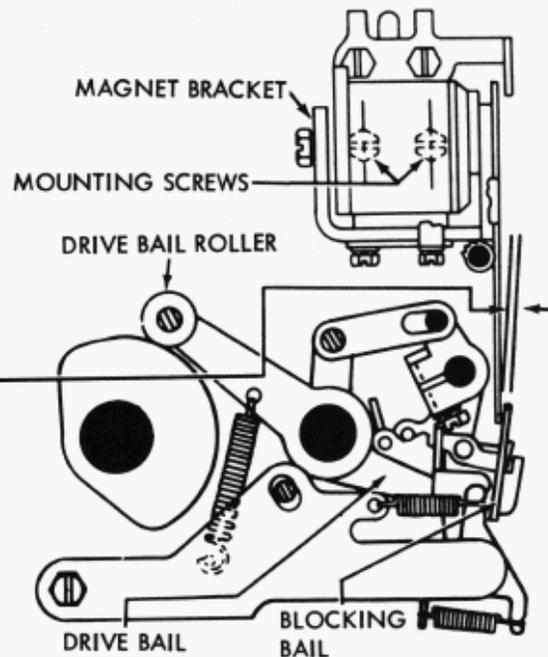
(D) MAGNET ASSEMBLY REQUIREMENT

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.



### 3.02 Remote Control Non-Interfering RUBOUT Tape Feed-Out Mechanism (continued)

#### (A) BLOCKING LATCH TORSION SPRING

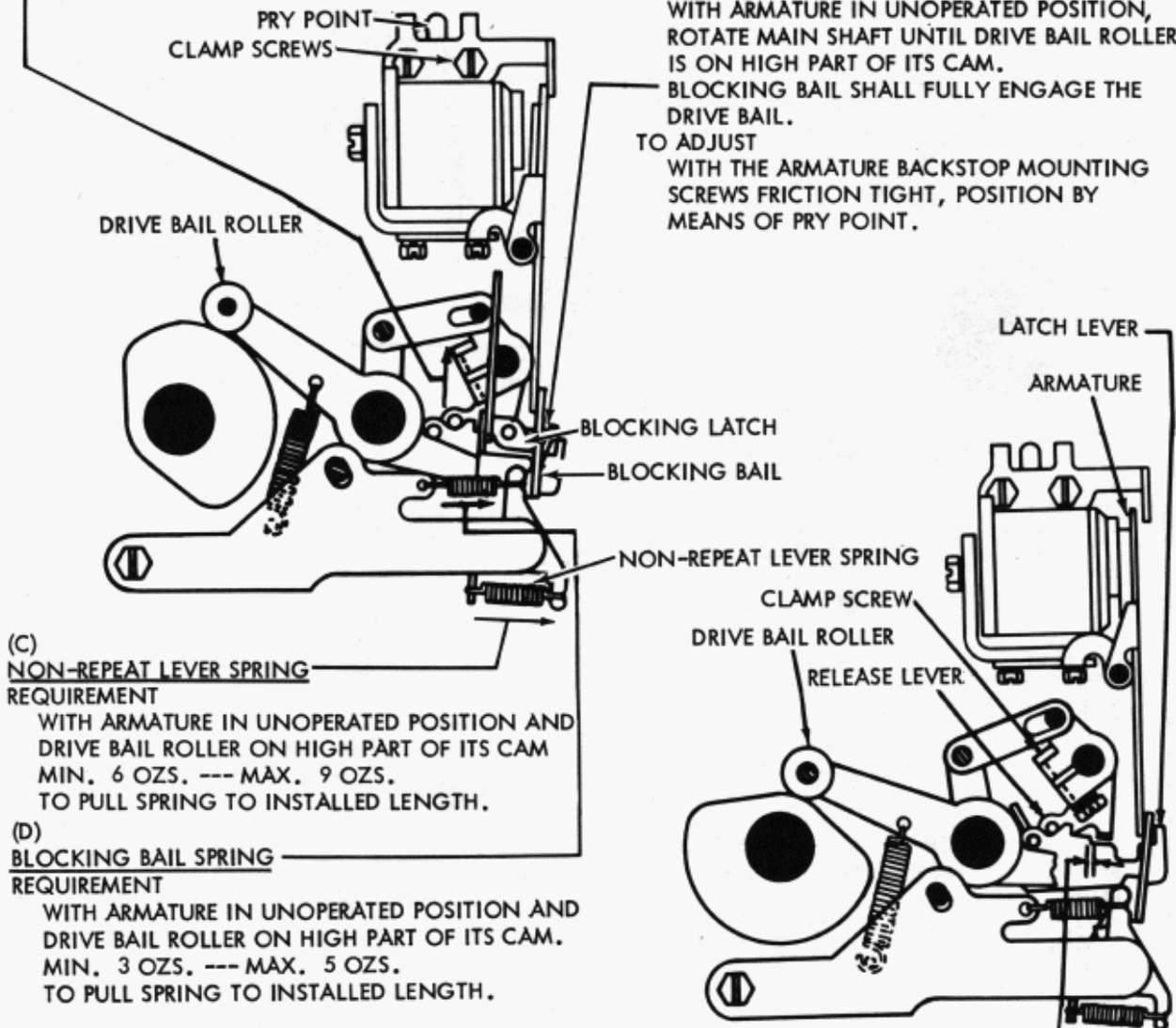
##### REQUIREMENT

WITH ARMATURE IN UNOPERATED POSITION AND  
DRIVE BAIL ROLLER ON HIGH PART OF ITS CAM.  
MIN. 15 OZ. --- MAX. 40 OZS.  
TO START BLOCKING LATCH MOVING.

#### (B) 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 PRY POINT.



#### (C) 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.

#### (D) BLOCKING BAIL SPRING

##### REQUIREMENT

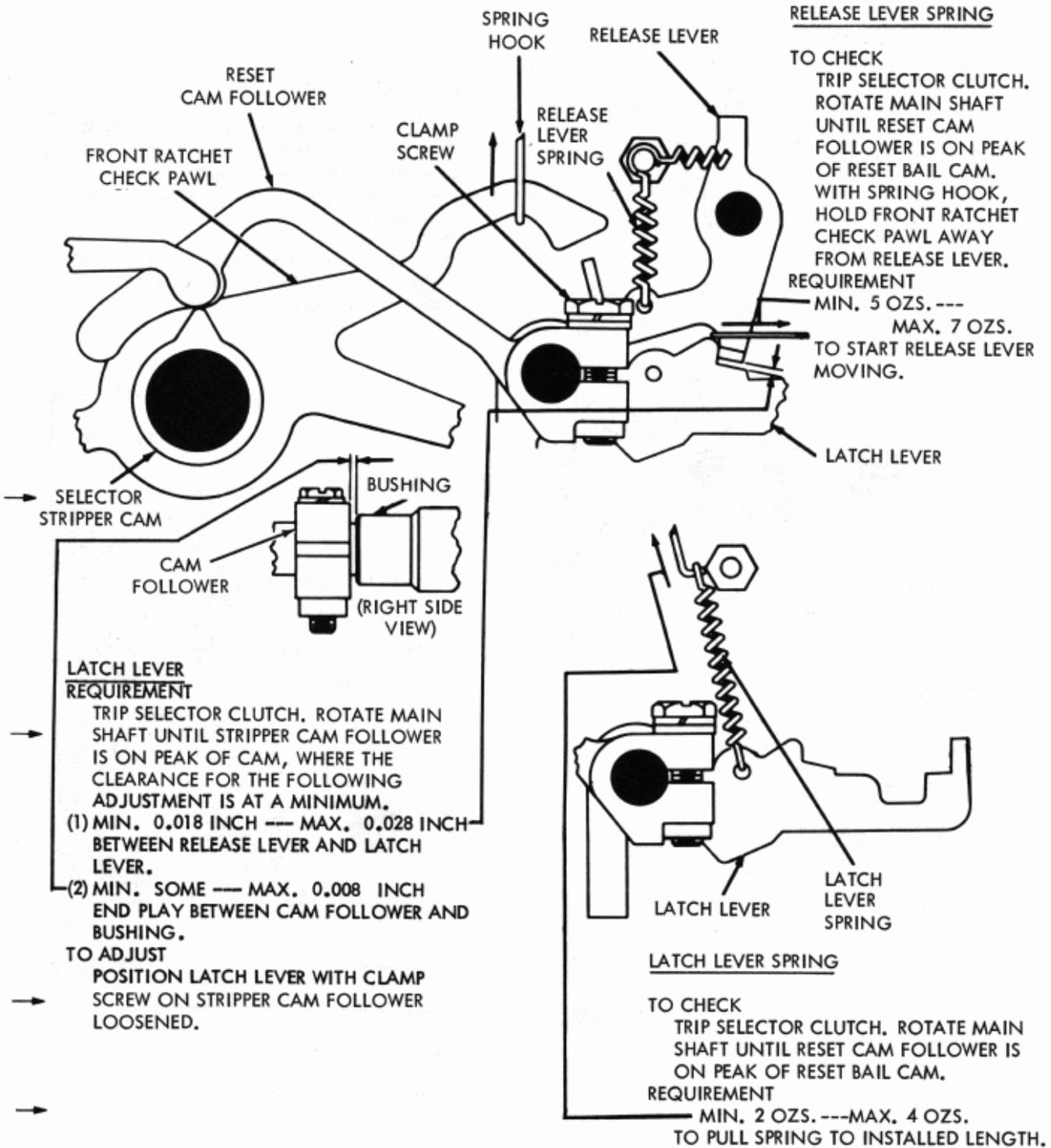
WITH ARMATURE IN UNOPERATED POSITION AND  
DRIVE BAIL ROLLER ON HIGH PART OF ITS CAM.  
MIN. 3 OZS. --- MAX. 5 OZS.  
TO PULL SPRING TO INSTALLED LENGTH.

#### (E) 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.

→ 3.03 Remote Control Non-Interfering  
RUBOUT Tape Feed-Out Mechanism (continued)

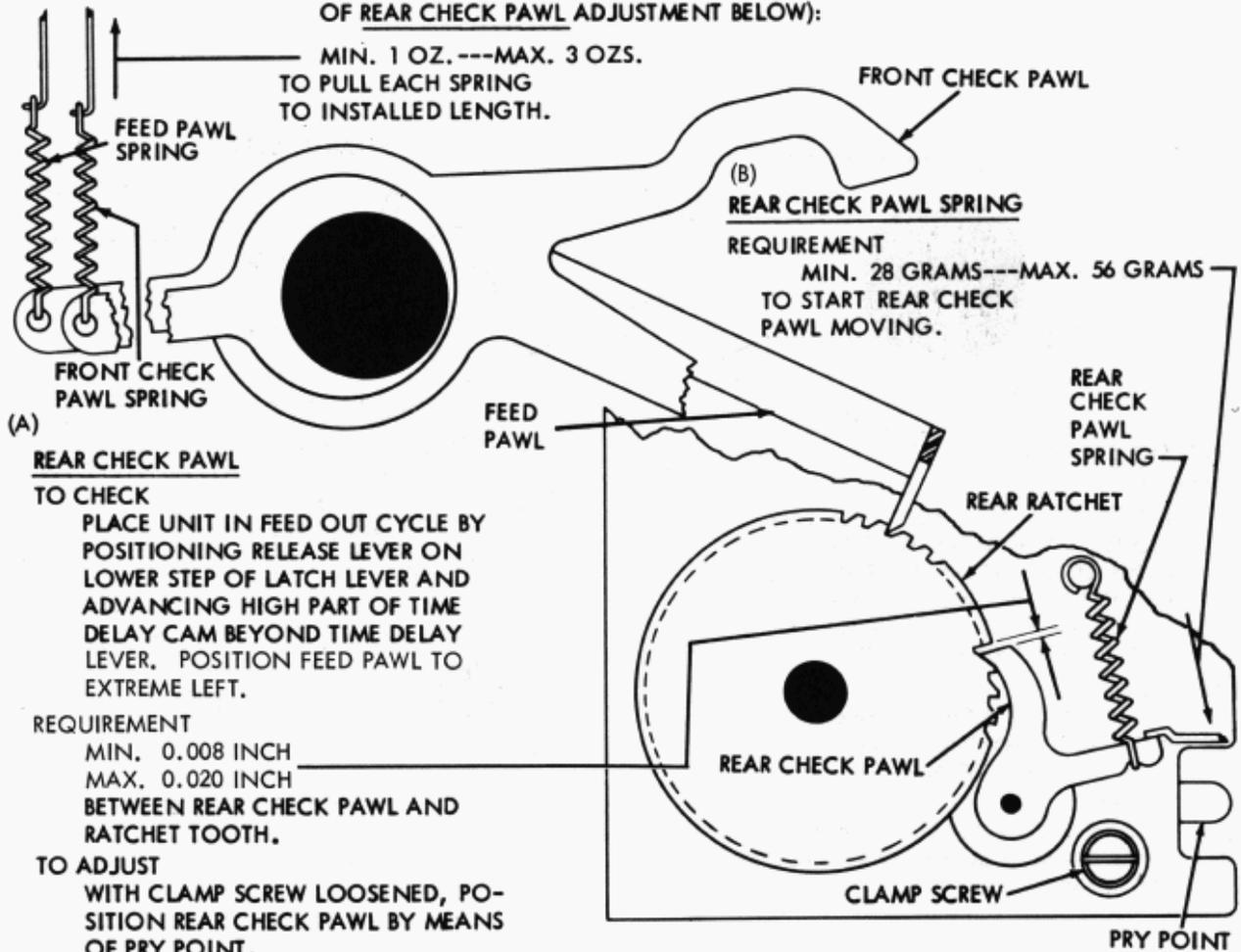


3.04 Remote Control Non-Interfering  
RUBOUT Tape Feed-Out Mechanism (continued)

**(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.



**(A) REAR CHECK PAWL**  
**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. POSITION FEED PAWL TO  
EXTREME LEFT.

**REQUIREMENT**  
MIN. 0.008 INCH  
MAX. 0.020 INCH  
BETWEEN REAR CHECK PAWL AND  
RATCHET TOOTH.

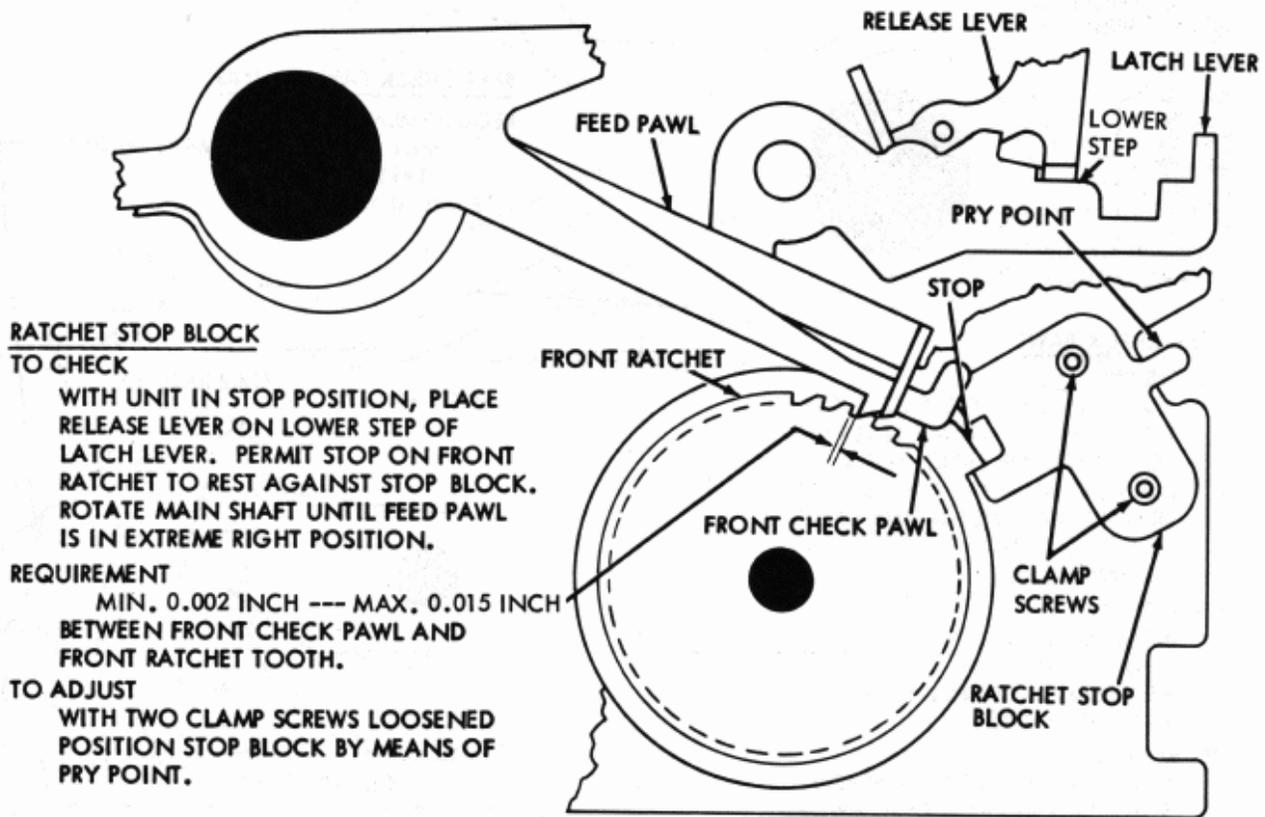
**TO ADJUST**  
WITH CLAMP SCREW LOOSENED, PO-  
SITION REAR CHECK PAWL BY MEANS  
OF PRY POINT.

**(B) REAR CHECK PAWL SPRING**  
**REQUIREMENT**  
MIN. 28 GRAMS ---MAX. 56 GRAMS  
TO START REAR CHECK  
PAWL MOVING.

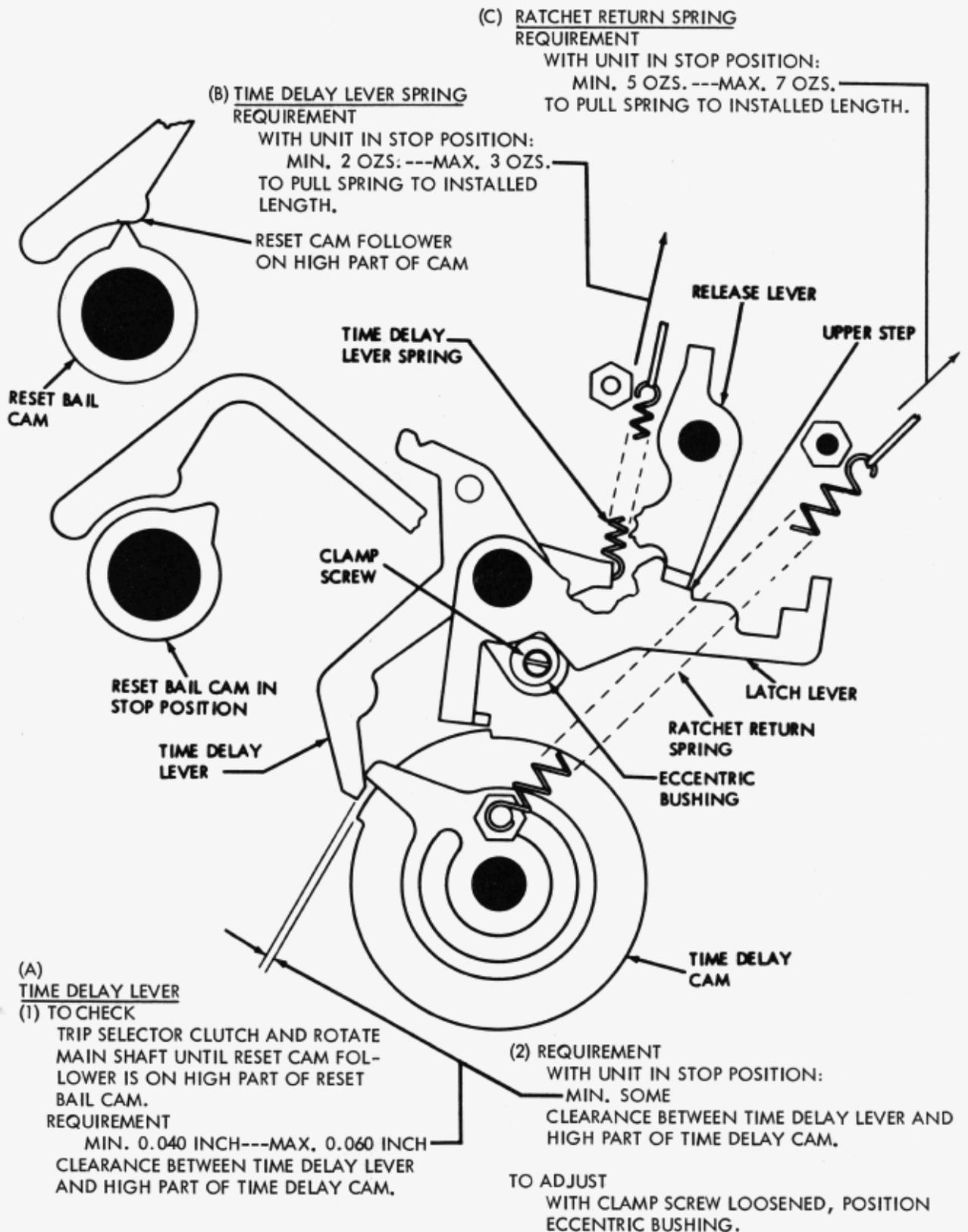
**NOTE: PROCEED TO RATCHET  
STOP BLOCK ADJUSTMENT  
(PARAGRAPH 3.05).**

→ 3.05 Remote Control Non-Interfering  
RUBOUT Tape Feed-Out Mechanism (continued)

NOTE: SEE REAR CHECK PAWL  
ADJUSTMENT (PARAGRAPH 3.04)  
BEFORE MAKING THIS ADJUSTMENT.



→ 3.06 Remote Control Non-Interfering  
RUBOUT Tape Feed-Out Mechanism (continued)



→ 3.07 Remote Control Non-Interfering  
RUBOUT Tape Feed-Out Mechanism (continued)

(A) RELEASE ARM

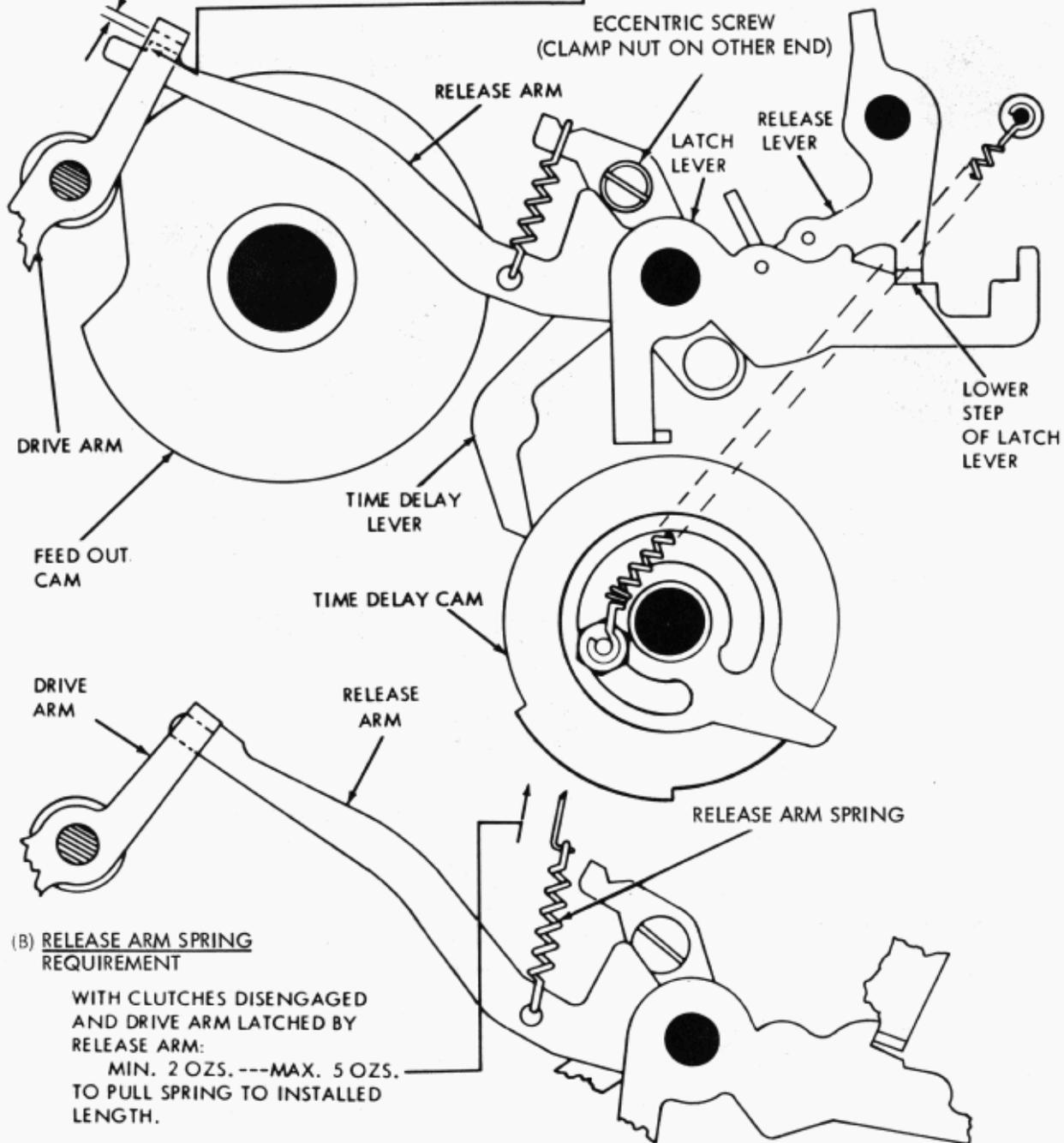
(1) REQUIREMENT

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 ARM 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.



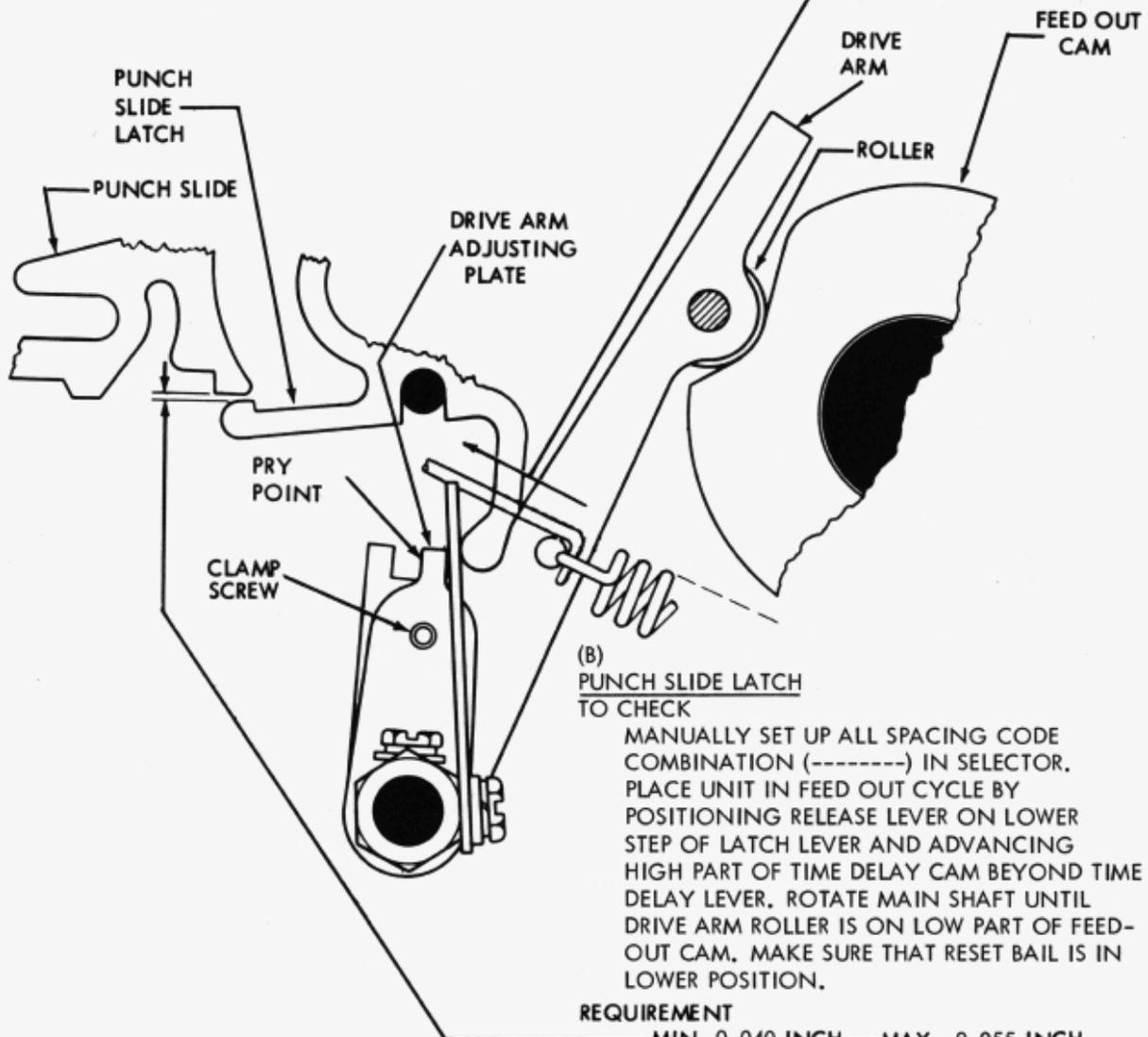
(B) RELEASE ARM SPRING  
REQUIREMENT

WITH CLUTCHES DISENGAGED  
AND DRIVE ARM LATCHED BY  
RELEASE ARM:  
MIN. 2 OZS. ---MAX. 5 OZS.  
TO PULL SPRING TO INSTALLED  
LENGTH.

3.08 Remote Control Non-Interfering  
RUBOUT Tape Feed-Out Mechanism (continued)

(A) DRIVE ARM SPRING  
REQUIREMENT

WITH UNIT IN FEED-OUT CYCLE AND DRIVE ARM  
ROLLER HELD FIRMLY AGAINST ITS CAM INDENT.  
MIN. 42 OZS. ---MAX. 50 OZS.  
TO PULL SPRING TO INSTALLED LENGTH.



(B) PUNCH SLIDE LATCH  
TO CHECK

MANUALLY SET UP ALL SPACING 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. 0.040 INCH---MAX. 0.055 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.

→ 3.09 Remote Control Non-Interfering RUBOUT Tape Feed-Out Mechanism (continued)

→ (B) 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. POSITION MAIN SHAFT SO THAT DRIVE ARM ROLLER IS ON LOW PART OF 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.

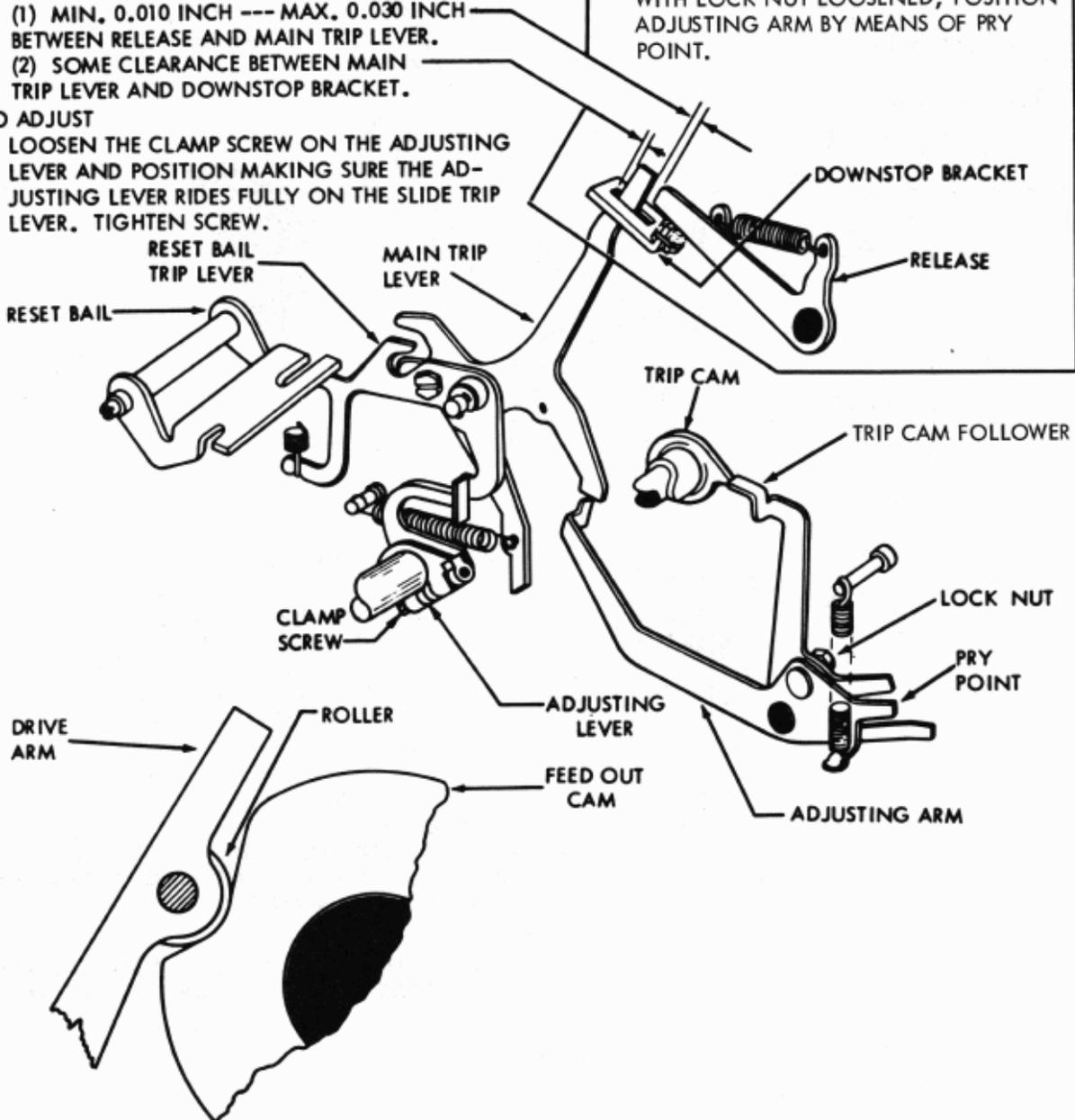
(A) TRIP CAM FOLLOWER REQUIREMENT

WITH FOLLOWER LEVER ON HIGH PART OF TRIP CAM:

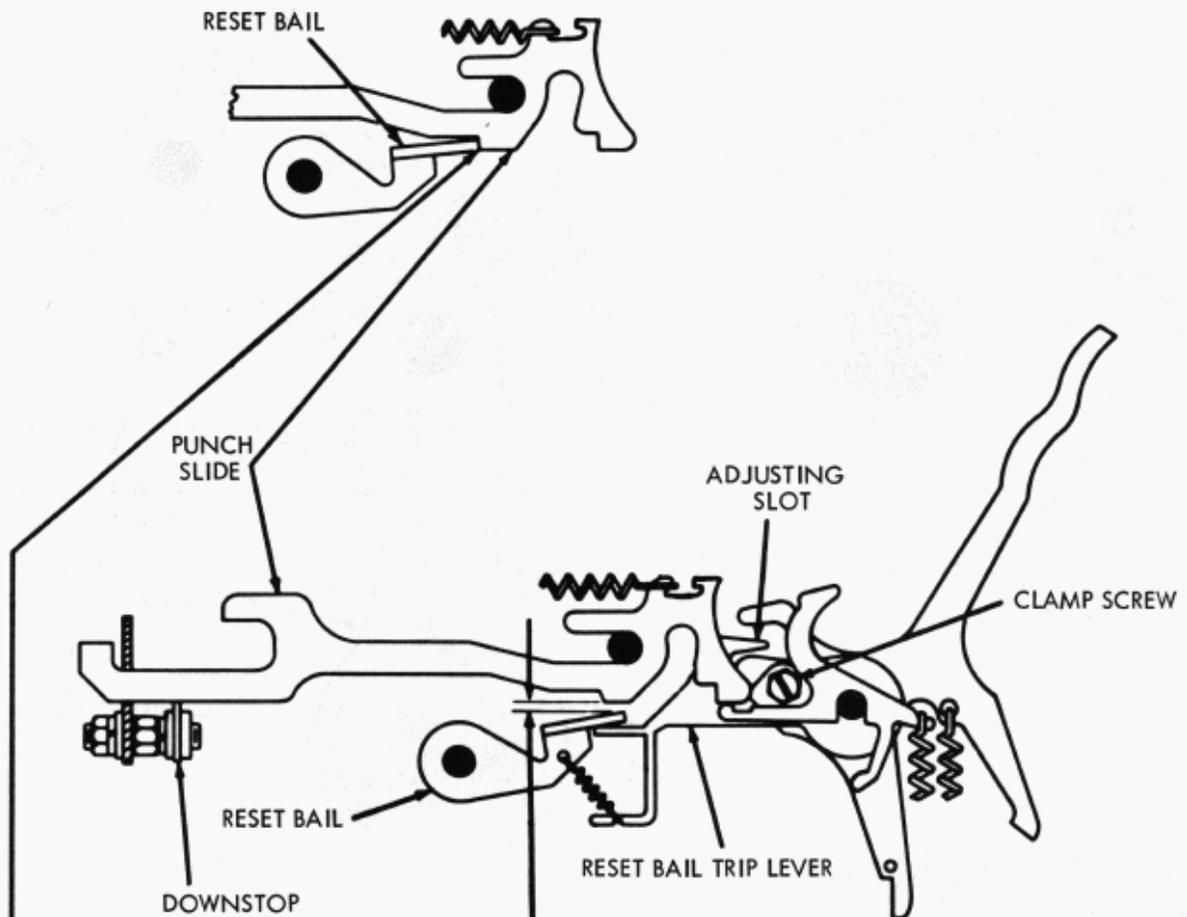
- (1) MIN. 0.010 INCH---MAX. 0.030 INCH BETWEEN RELEASE AND MAIN TRIP LEVER.
- (2) SOME CLEARANCE BETWEEN MAIN TRIP LEVER AND DOWNSTOP BRACKET.

TO ADJUST

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



3.10 Remote Control Non-Interfering  
RUBOUT Tape Feed-Out Mechanism (continued)



RESET BAIL TRIP LEVER

(1) TO CHECK

SELECT RUBOUT CODE COMBINATION (12345678). ROTATE MAIN SHAFT UNTIL FUNCTION CLUTCH TRIPS. POSITION PUNCH SLIDES AGAINST DOWNSTOP. TRIP CAM FOLLOWER ON HIGH PART OF CAM.

REQUIREMENT

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

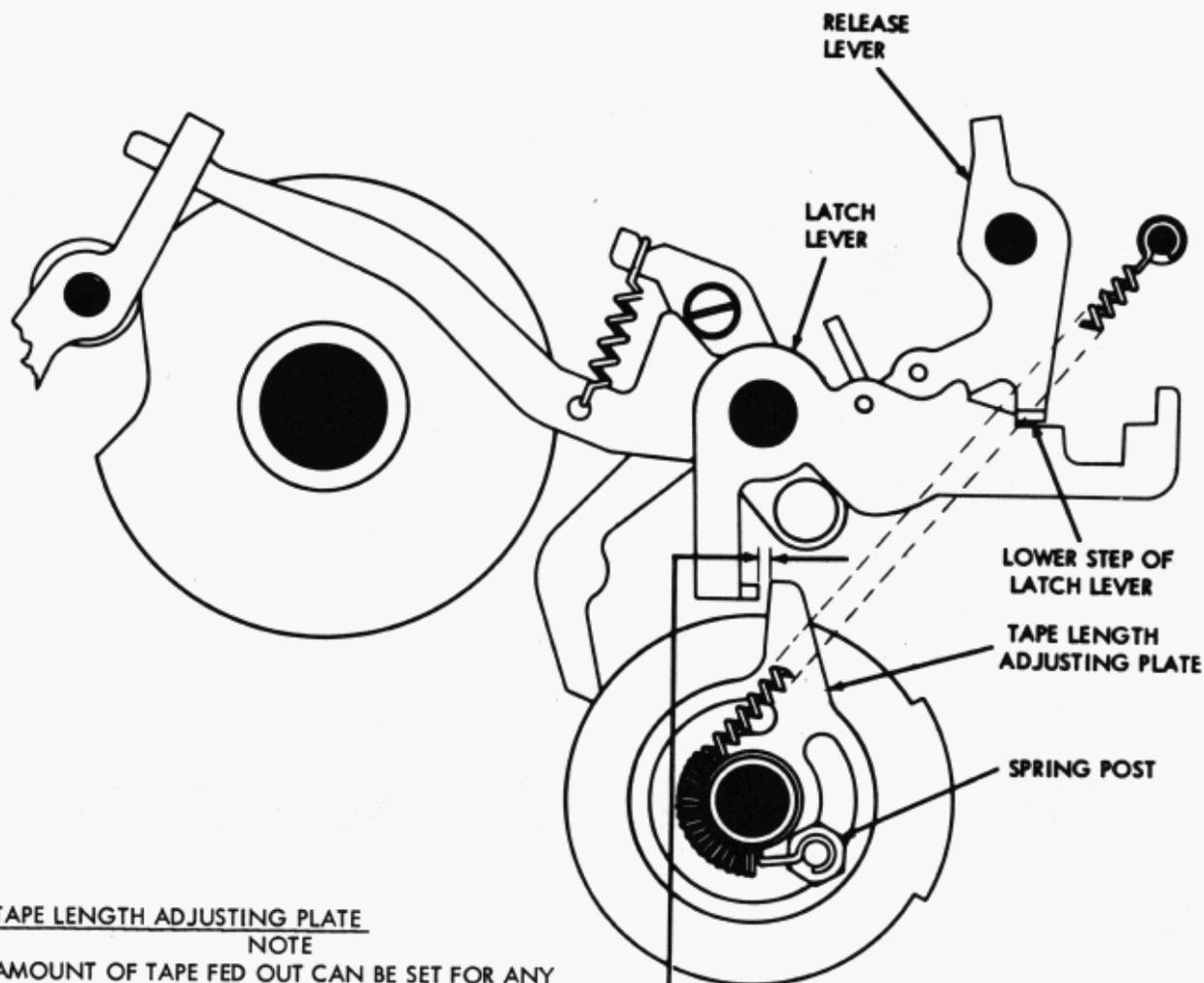
(2) REQUIREMENT

WITH CLUTCHES FULLY DISENGAGED AND LATCHED, RESET BAIL SHOULD FULLY ENGAGE NOTCHES IN PUNCH SLIDES.

TO ADJUST

WITH CLAMP SCREW LOOSENED, POSITION RESET BAIL TRIP LEVER BY MEANS OF ADJUSTING SLOT.

→ 3.11 Remote Control Non-Interfering  
RUBOUT Tape Feed-Out Mechanism (continued)



TAPE LENGTH ADJUSTING PLATE

NOTE

AMOUNT OF TAPE FED OUT CAN BE SET FOR ANY LENGTH UP TO 18 INCHES.

(1) REQUIREMENT

PLACE UNIT IN FEED OUT CYCLE BY POSITIONING RELEASE LEVER ON LOWER STEP OF LATCH LEVER. MANUALLY ADVANCE RATCHETS SO THAT FRONT RATCHET IS IN THE TOOTH PRECEDING TRIP OFF. ROTATE MAIN SHAFT UNTIL FEED PAWL IS IN THE EXTREME LEFT POSITION. CLEARANCE BETWEEN ADJUSTING PLATE AND LATCH LEVER PROJECTION:  
MIN. 0.002 INCH  
MAX. 0.020 INCH

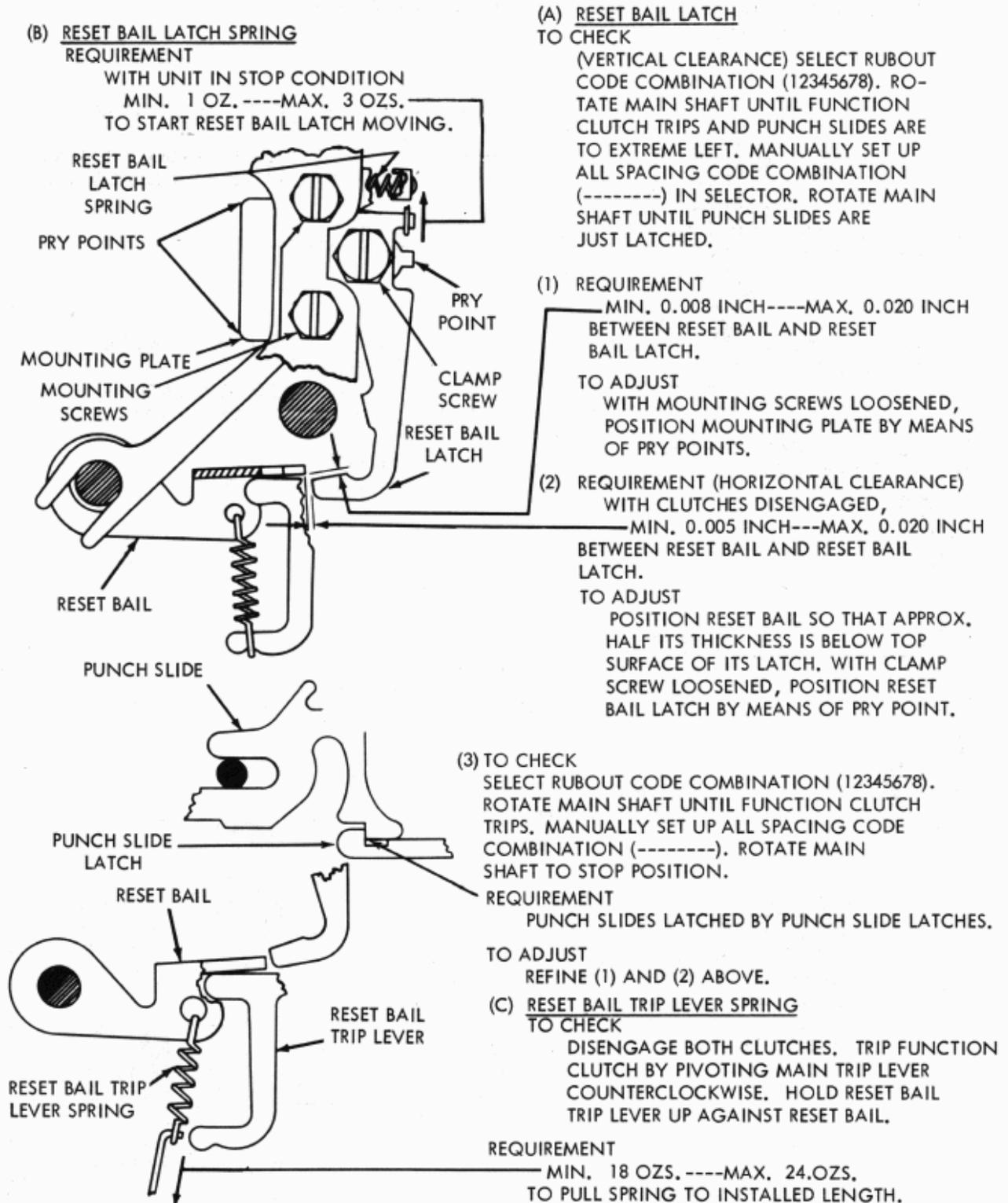
(2) REQUIREMENT

WHEN OPERATING UNDER POWER, UNIT SHOULD FEED OUT CORRECT LENGTH OF TAPE.

TO ADJUST

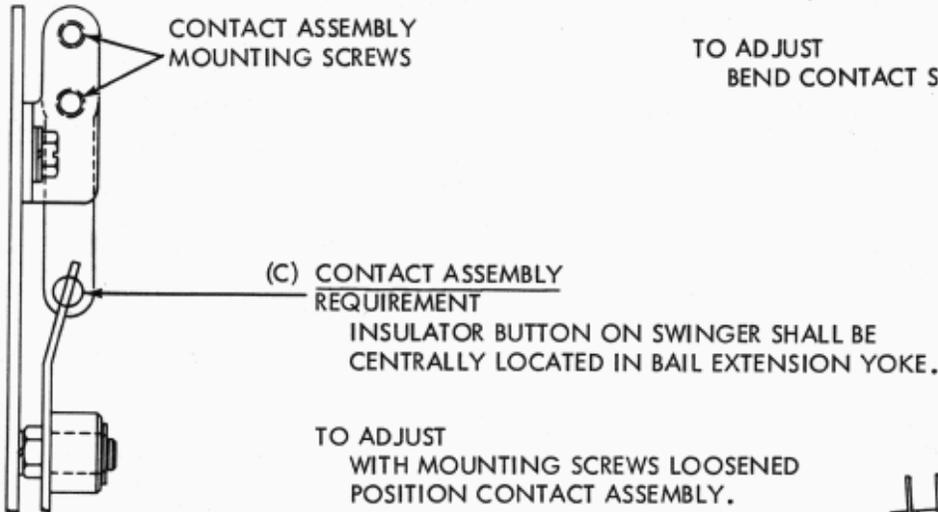
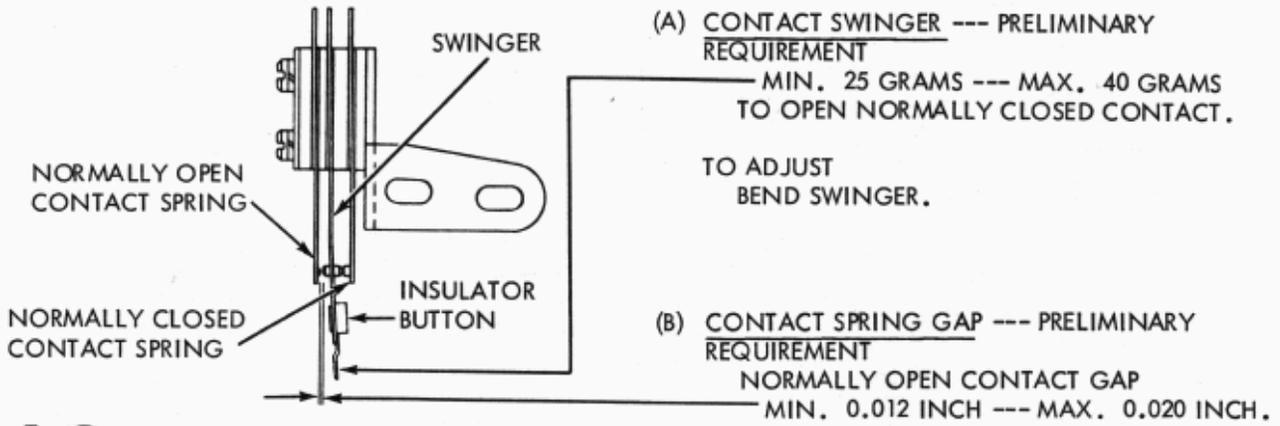
WITH SPRING POST FRICTION TIGHT. POSITION ADJUSTING PLATE.

3.12 Remote Control Non-Interfering  
RUBOUT Tape Feed-Out Mechanism (continued)



TIMING CONTACTS

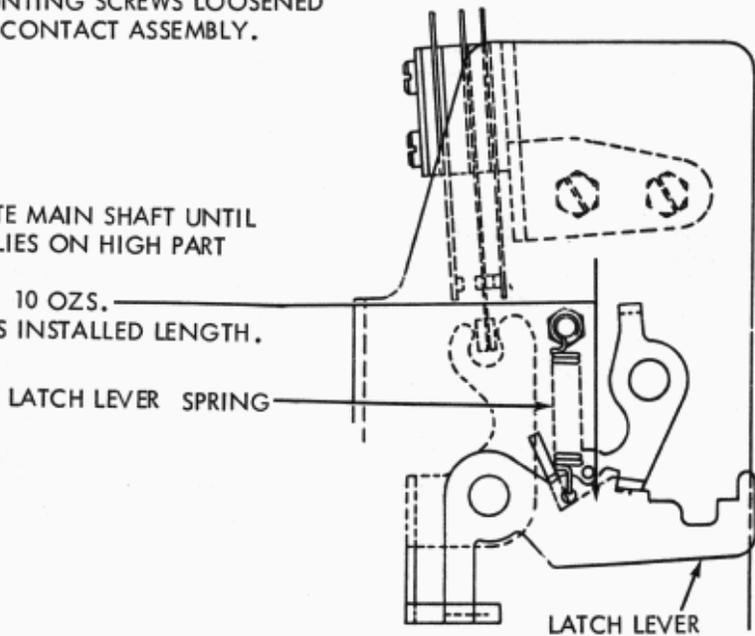
3.13 End of Feed-Out Contacts for Non-Interfering RUBOUT Tape Feed-Out Mechanism.



LATCH LEVER SPRING REQUIREMENT

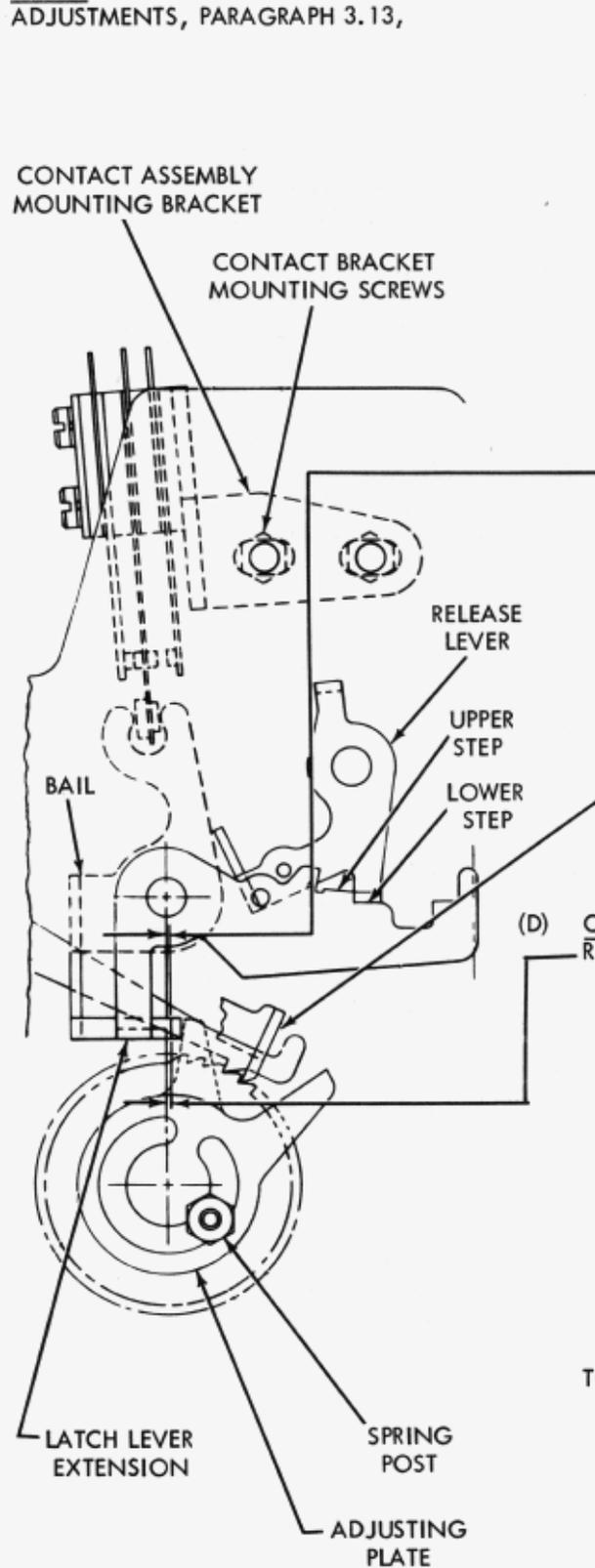
TRIP SELECTOR AND ROTATE MAIN SHAFT UNTIL STRIPPER CAM FOLLOWER LIES ON HIGH PART OF ITS CAM

MIN. 7 OZS. --- MAX. 10 OZS.  
 TO STRETCH SPRING TO ITS INSTALLED LENGTH.



3.14 End of Feed-Out Contacts for Non-Interfering RUBOUT Tape Feed-Out Mechanism (continued)

**NOTE:** SEE PRELIMINARY CONTACT ADJUSTMENTS, PARAGRAPH 3.13,



- (E) TAPE LENGTH ADJUSTING PLATE
- (1) REQUIREMENT  
 WITH UNIT IN STOP POSITION AND RELEASE LEVER ON LOWER STEP OF LATCH LEVER, MANUALLY ADVANCE RATCHETS SO THAT FEED PAWL IS IN THE FRONT TOOTH PRECEDING TRIP OFF (NOT IN DEEP TOOTH OF REAR RATCHET). HOLD BAIL LIGHTLY AGAINST LATCH LEVER EXTENSION.  
 MIN 0.002 INCH --- MAX 0.020 INCH CLEARANCE BETWEEN ADJUSTING PLATE AND BAIL.
- (2) REQUIREMENT  
 WHEN OPERATING UNDER POWER, UNIT SHOULD FEED-OUT CORRECT LENGTH OF TAPE.

TO ADJUST POSITION ADJUSTING PLATE WITH SPRING POST LOOSENED.

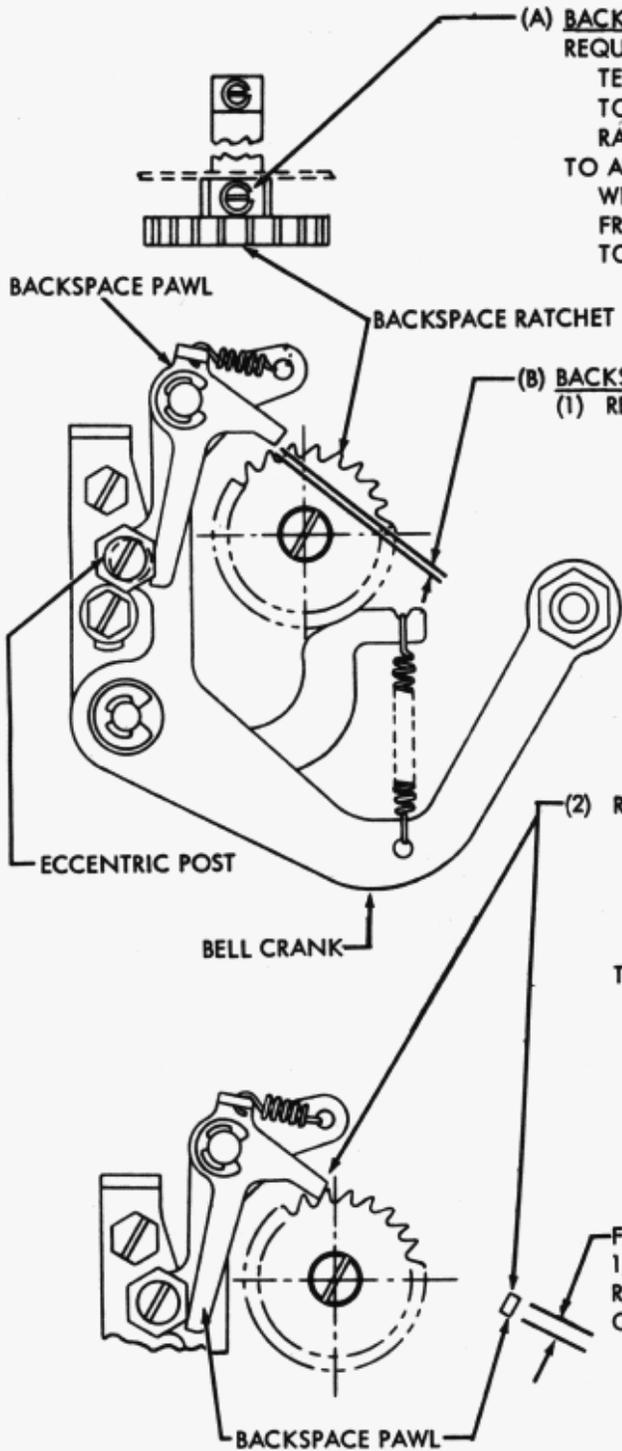
FEED PAWL IN EXTREME LEFT POSITION AND ADJUSTING PLATE IN DOTTED POSITION FOR ADJUSTMENT (B) ONLY.

- (D) CONTACT ASSEMBLY MOUNTING BRACKET REQUIREMENTS
- UNIT IN STOP POSITION
- (1) WHEN NORMALLY OPEN CONTACTS ARE USED AND RELEASE LEVER IS ABOVE LOWER STEP OF LATCH LEVER  
 MIN. 0.005 INCH  
 OVERTRAVEL OF SWINGER AFTER IT MAKES CONTACT WITH NORMALLY OPEN CONTACT.
- (2) WHEN NORMALLY CLOSED CONTACTS ARE USED AND RELEASE LEVER IS ON UPPER STEP OF LATCH LEVER, THE NORMALLY CLOSED CONTACTS SHOULD BE CLOSED AND BAIL SHOULD NOT EXERT ANY FORCE AGAINST SWINGER INSULATOR BUTTON.

TO ADJUST POSITION CONTACTS WITH BRACKET MOUNTING SCREWS LOOSENED.

POWER DRIVE BACKSPACE MECHANISM

3.15 Power Drive Backspace Mechanism



(A) **BACKSPACE RATCHET REQUIREMENT**  
 TEETH OF BACKSPACE AND FEED WHEEL RATCHETS TO LINE UP (VISUAL ALIGNMENT) FEED WHEEL RATCHET TO BE IN DETENTED POSITION.  
 TO ADJUST WITH ADJUSTING CLAMP MOUNTING SCREW FRICTION TIGHT, ROTATE BACKSPACE RATCHET TO MEET THE REQUIREMENT.

(B) **BACKSPACE PAWL CLEARANCE**  
 (1) **REQUIREMENT --- PRELIMINALY**  
 WITH BACKSPACE BELL CRANK ROTATED CLOCKWISE, THE BACKSPACE PAWL SHALL MISS THE FIRST TOOTH BY A CLEARANCE OF:  
 MIN. 0.003 INCH  
 MAX. 0.010 INCH  
 AT POINT OF LEAST CLEARANCE.

(2) **REQUIREMENT --- FINAL**  
 THE BACKSPACE PAWL SHALL MISS THE FIRST TOOTH, AND ENGAGE THE SECOND TOOTH BY AT LEAST 1/2 OF THE RIGHT ENGAGING SURFACE OF THE BACKSPACE PAWL (AS GAUGED BY EYE) WHEN BACKSPACE PAWL FIRST CONTACTS THE RATCHET TOOTH.  
 TO ADJUST TAKE UP ALL ROTATIONAL PLAY OF BACKSPACE RATCHET IN RELATION TO FEED RATCHET BY ROTATING IT CLOCKWISE AT SAME TIME ROTATE BELL CRANK CLOCKWISE.. WITH MOUNTING SCREW FRICTION TIGHT ROTATE ECCENTRIC POST TO MEET THE REQUIREMENTS.

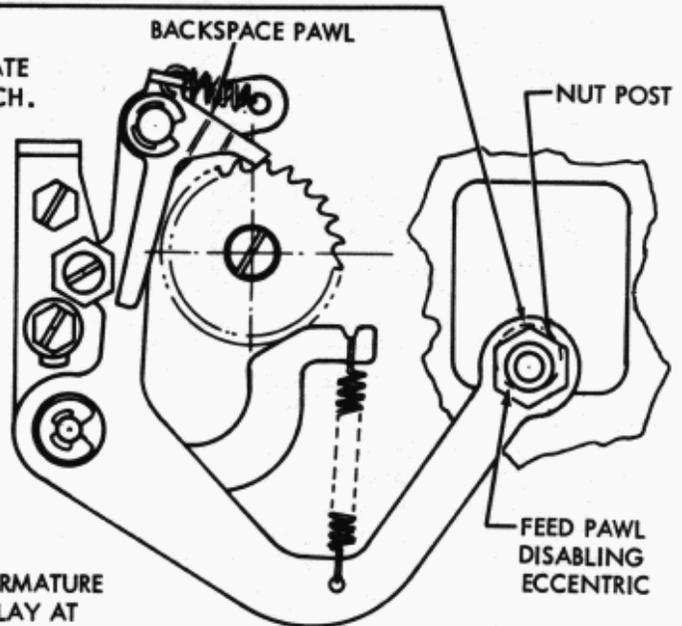
**FINAL MINIMUM ENGAGEMENT:**  
 1/2 OF SURFACE WITH SECOND RATCHET TOOTH AT FIRST POINT OF CONTACT.

3.16 Power Drive Backspace Mechanism (continued)

(A) FEED PAWL DISABLING REQUIREMENT

WHEN BELL CRANK IS IN OPERATED POSITION HIGH SIDE OF FEED PAWL DISABLING ECCENTRIC SHOULD BE IN UPPERMOST POSITION.

TO ADJUST WITH NUT POST FRICTION TIGHT, ROTATE ECCENTRIC WITH A 0.060" ALLEN WRENCH.

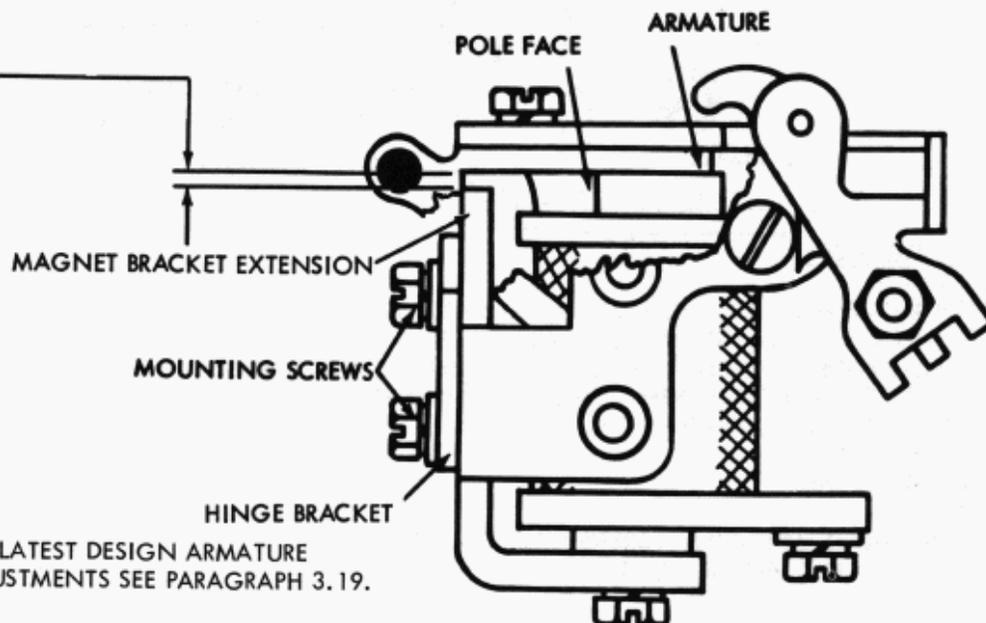


(B) ARMATURE HINGE (EARLY DESIGN) REQUIREMENT

WITH ARMATURE BAIL SPRING REMOVED, ARMATURE HELD AGAINST THE POLE FACE, TAKE UP PLAY AT HINGE IN A DOWNWARD DIRECTION. CLEARANCE BETWEEN THE ARMATURE AND MAGNET BRACKET. MIN. SOME MAX. 0.004 INCH

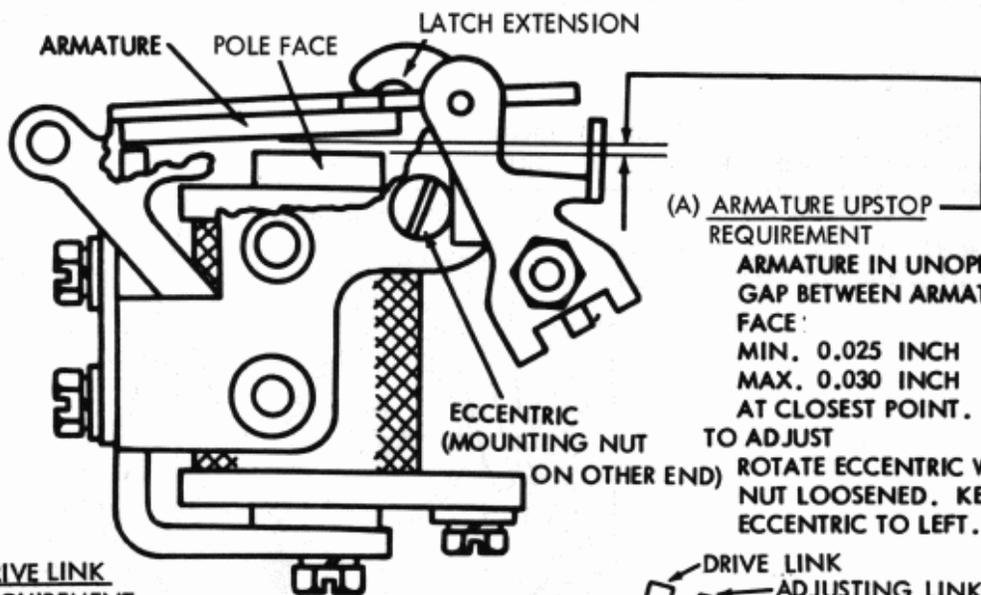
TO ADJUST WITH HINGE MOUNTING SCREWS FRICTION TIGHT, POSITION HINGE. ARMATURE SHOULD TOUCH FRONT AND REAR OF POLE FACE. TIGHTEN SCREWS AND RECHECK ADJUSTMENT.

NOTE: FOR DC OPERATION, THE ARMATURE SHALL BE POSITIONED SO THAT THE SIDE MARKED "C" FACES POLE FACE OF MAGNET CORE. FOR AC OPERATION, UNMARKED SIDE FACES POLE.



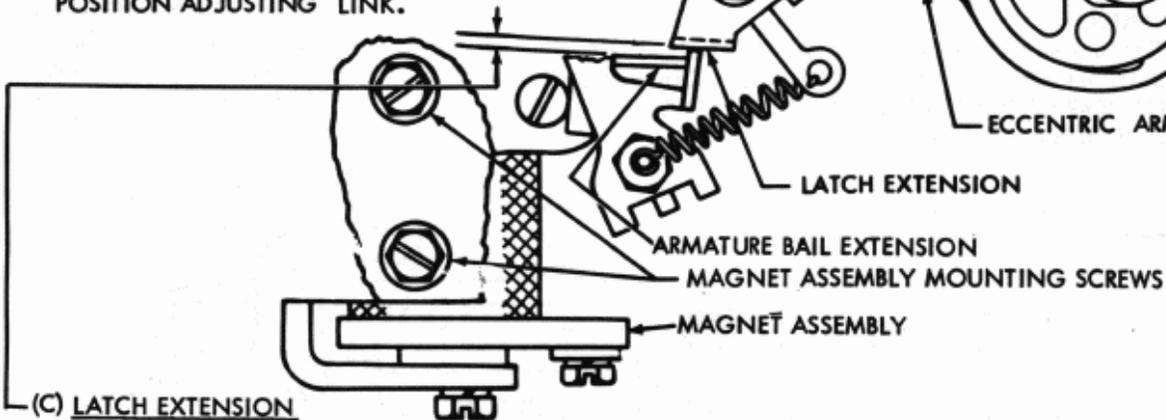
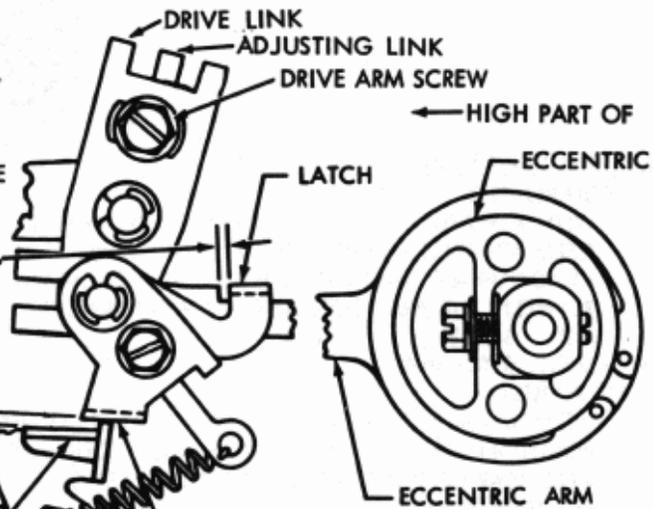
NOTE: FOR LATEST DESIGN ARMATURE ADJUSTMENTS SEE PARAGRAPH 3.19.

3.17 Power Drive Backspace Mechanism (continued)



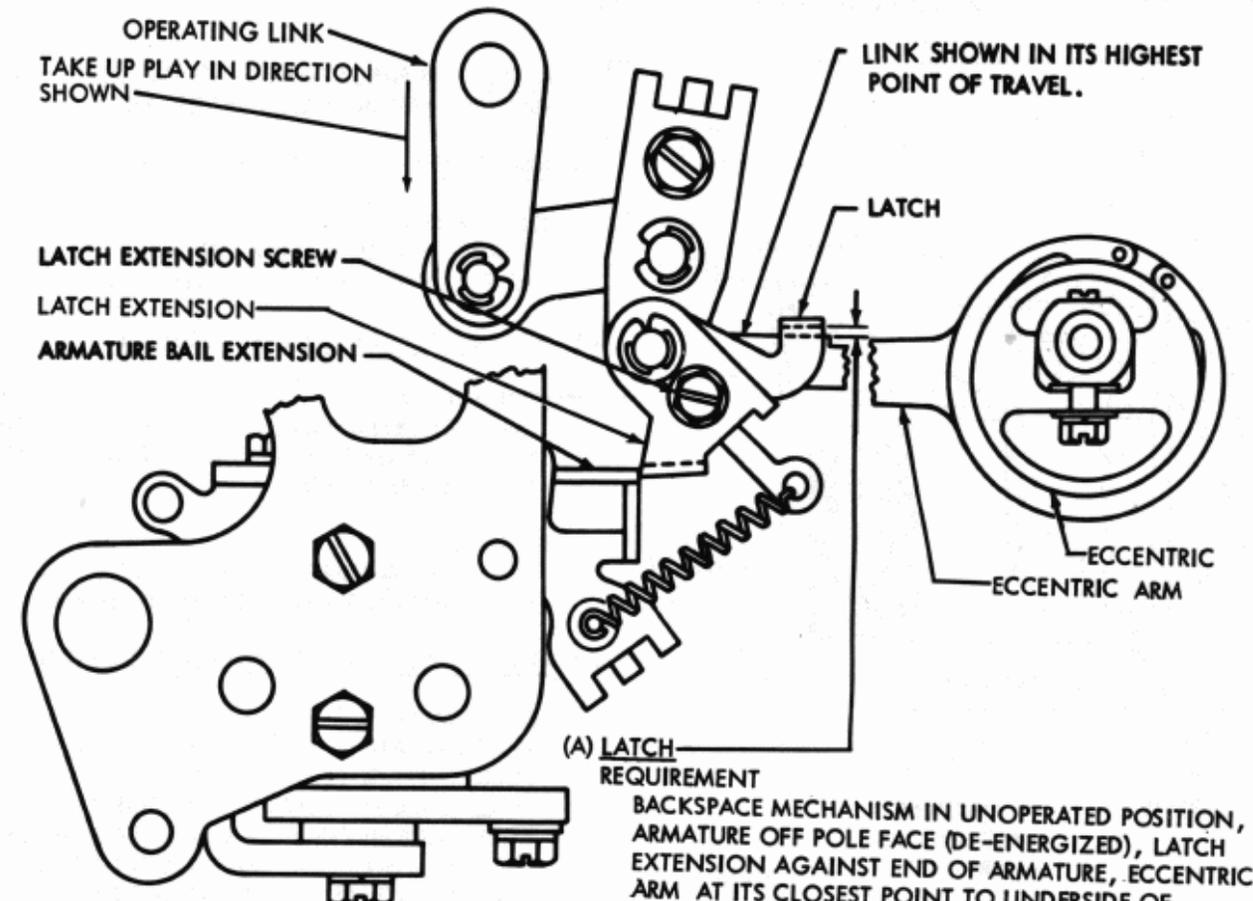
**(A) ARMATURE UPSTOP REQUIREMENT**  
 ARMATURE IN UNOPERATED POSITION.  
 GAP BETWEEN ARMATURE AND POLE FACE:  
 MIN. 0.025 INCH  
 MAX. 0.030 INCH  
 AT CLOSEST POINT.  
 TO ADJUST  
 ROTATE ECCENTRIC WITH MOUNTING NUT LOOSENED. KEEP HIGH PART OF ECCENTRIC TO LEFT.

**(B) DRIVE LINK REQUIREMENT**  
 WITH HIGH PART OF ECCENTRIC ARM IN LEFT HAND POSITION, ARMATURE AGAINST POLE FACE TO ALLOW DRIVE ARM LATCH LEVER TO REST AGAINST ECCENTRIC LINK. CLEARANCE BETWEEN STEP ON ECCENTRIC ARM AND LATCH LEVER WITH PLAY TAKEN UP TO MAKE  
 MIN. 0.040 INCH  
 MAX. 0.045 INCH  
 TO ADJUST  
 WITH DRIVE ARM SCREW FRICTION TIGHT, POSITION ADJUSTING LINK.



**(C) LATCH EXTENSION REQUIREMENT**  
 WITH BACKSPACE MECHANISM IN UNOPERATED POSITION, ECCENTRIC HIGH PART OF THE LEFT, ARMATURE AGAINST THE POLE FACE, LATCH RESTING ON THE ECCENTRIC ARM NOTCH. CLEARANCE BETWEEN TOP OF ARMATURE EXTENSION AND LATCH EXTENSION.  
 MIN. 0.005 INCH  
 MAX. 0.020 INCH  
 TO ADJUST  
 WITH MAGNET MOUNTING SCREWS FRICTION TIGHT, SWING MAGNET LEFT OR RIGHT.

3.18 Power Drive Backspace Mechanism (continued)



(A) LATCH REQUIREMENT

BACKSPACE MECHANISM IN UNOPERATED POSITION, ARMATURE OFF POLE FACE (DE-ENERGIZED), LATCH EXTENSION AGAINST END OF ARMATURE, ECCENTRIC ARM AT ITS CLOSEST POINT TO UNDERSIDE OF LATCH LEVER. CLEARANCE BETWEEN LATCH AND ECCENTRIC ARM WITH PLAY IN THE LINKS TAKEN UP TO MAKE THE CLEARANCE A MINIMUM SHOULD BE:

MIN. 0.005 INCH  
MAX. 0.025 INCH

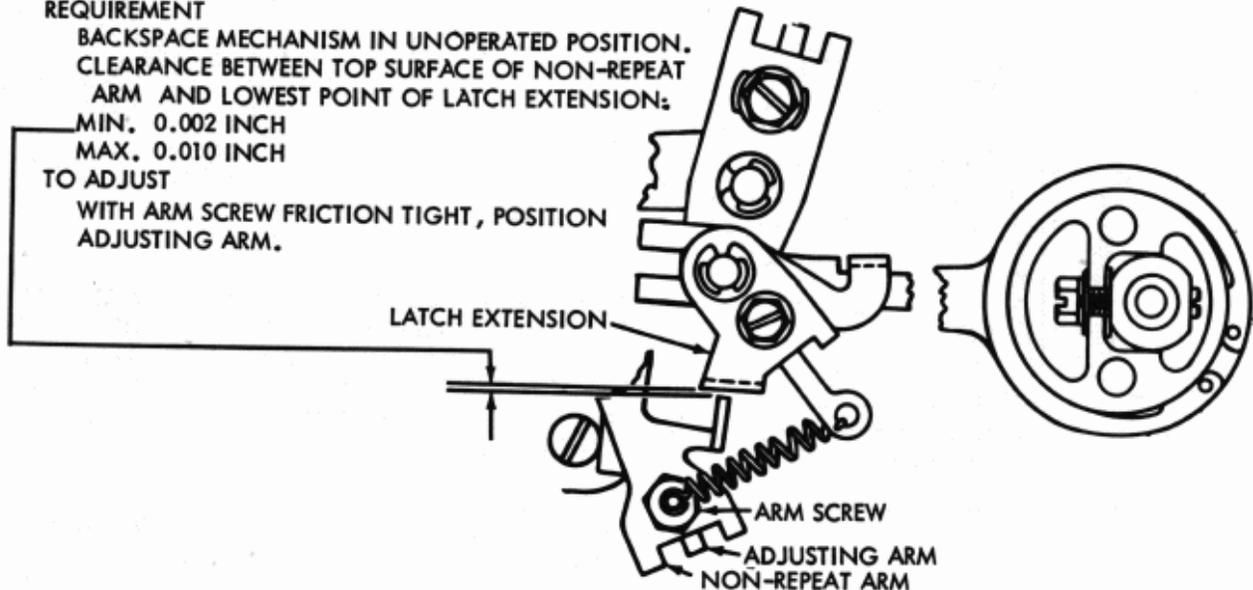
TO ADJUST WITH LATCH EXTENSION SCREW FRICTION TIGHT, POSITION LATCH.

(B) NON-REPEAT ARM REQUIREMENT

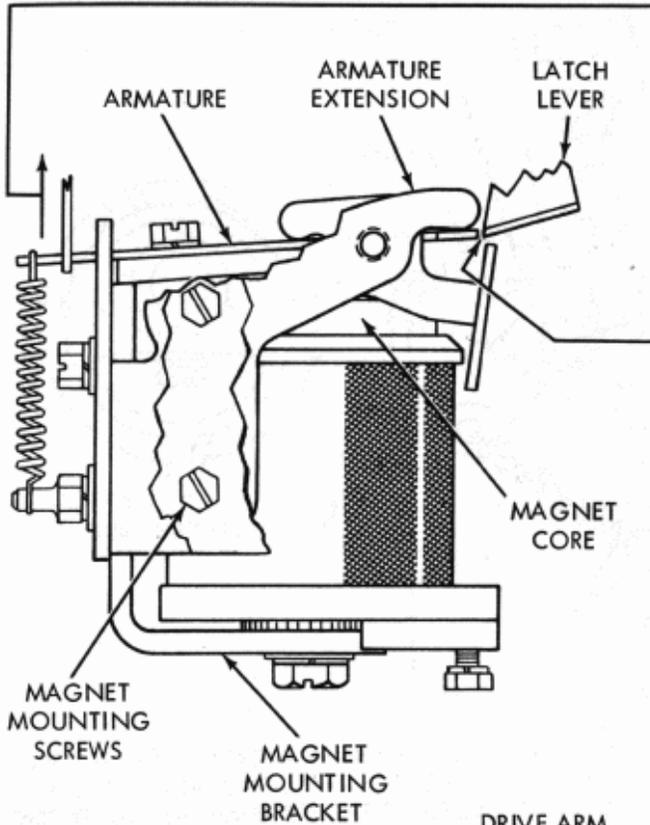
BACKSPACE MECHANISM IN UNOPERATED POSITION. CLEARANCE BETWEEN TOP SURFACE OF NON-REPEAT ARM AND LOWEST POINT OF LATCH EXTENSION:

MIN. 0.002 INCH  
MAX. 0.010 INCH

TO ADJUST WITH ARM SCREW FRICTION TIGHT, POSITION ADJUSTING ARM.



3.19 Power Drive Backspace Mechanism (continued)



NOTE: FOR EARLY DESIGN ADJUSTABLE MAGNET ASSEMBLY SEE PARAGRAPH 3.16.

ARMATURE SPRING (LATEST DESIGN)

REQUIREMENT  
MIN. 15 OZS. ---MAX. 20 OZS.  
TO PULL SPRING TO INSTALLED LENGTH.

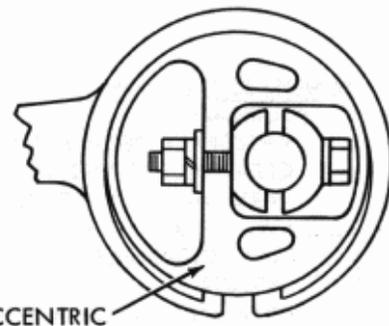
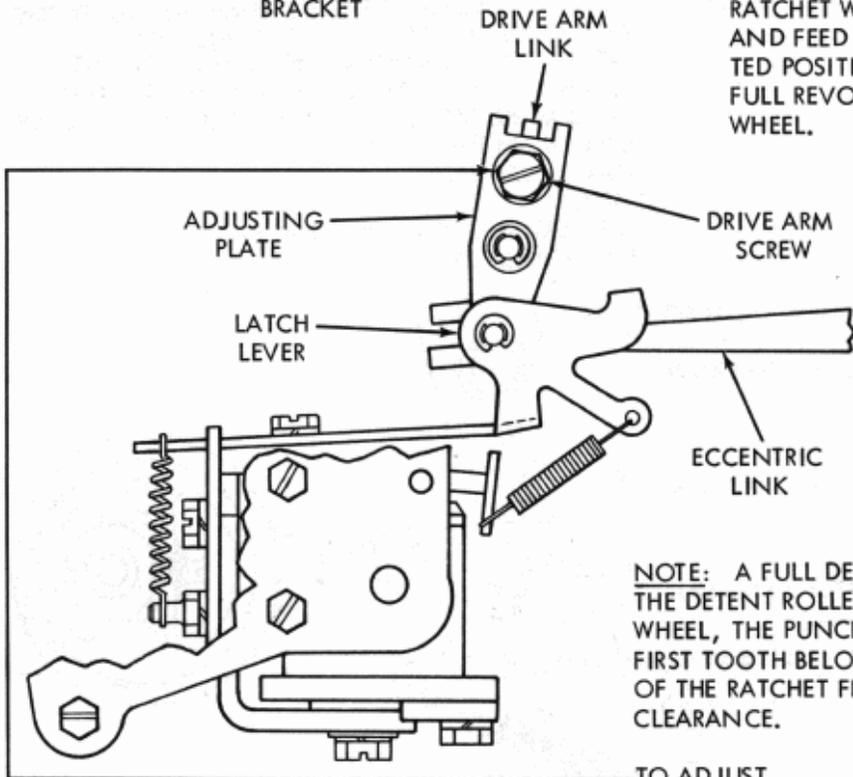
(A) MAGNET POSITION (LATEST DESIGN)

REQUIREMENT  
MAGNET DEENERGIZED, ARMATURE EXTENSION  
SHOULD ENGAGE LATCH BY APPROXIMATELY  
ITS FULL THICKNESS.

TO ADJUST  
POSITION MAGNET MOUNTING BRACKET  
BY LOOSENING TWO MOUNTING SCREWS.

(B) FINAL POWER ADJUSTMENT (LATEST DESIGN)

REQUIREMENT  
UNIT OPERATING UNDER POWER. TAPE IN  
PUNCH. PLACE FEED WHEEL SHAFT OIL HOLE  
IN UPPERMOST POSITION, AND OPERATE  
BACKSPACE MECHANISM ONCE. BACKSPACE  
RATCHET WHEEL SHALL BE BACKED ONE SPACE  
AND FEED WHEEL RATCHET TO A FULLY DETEN-  
TED POSITION. RECHECK EVERY 90° FOR ONE  
FULL REVOLUTION OF THE BACKSPACE RATCHET  
WHEEL.

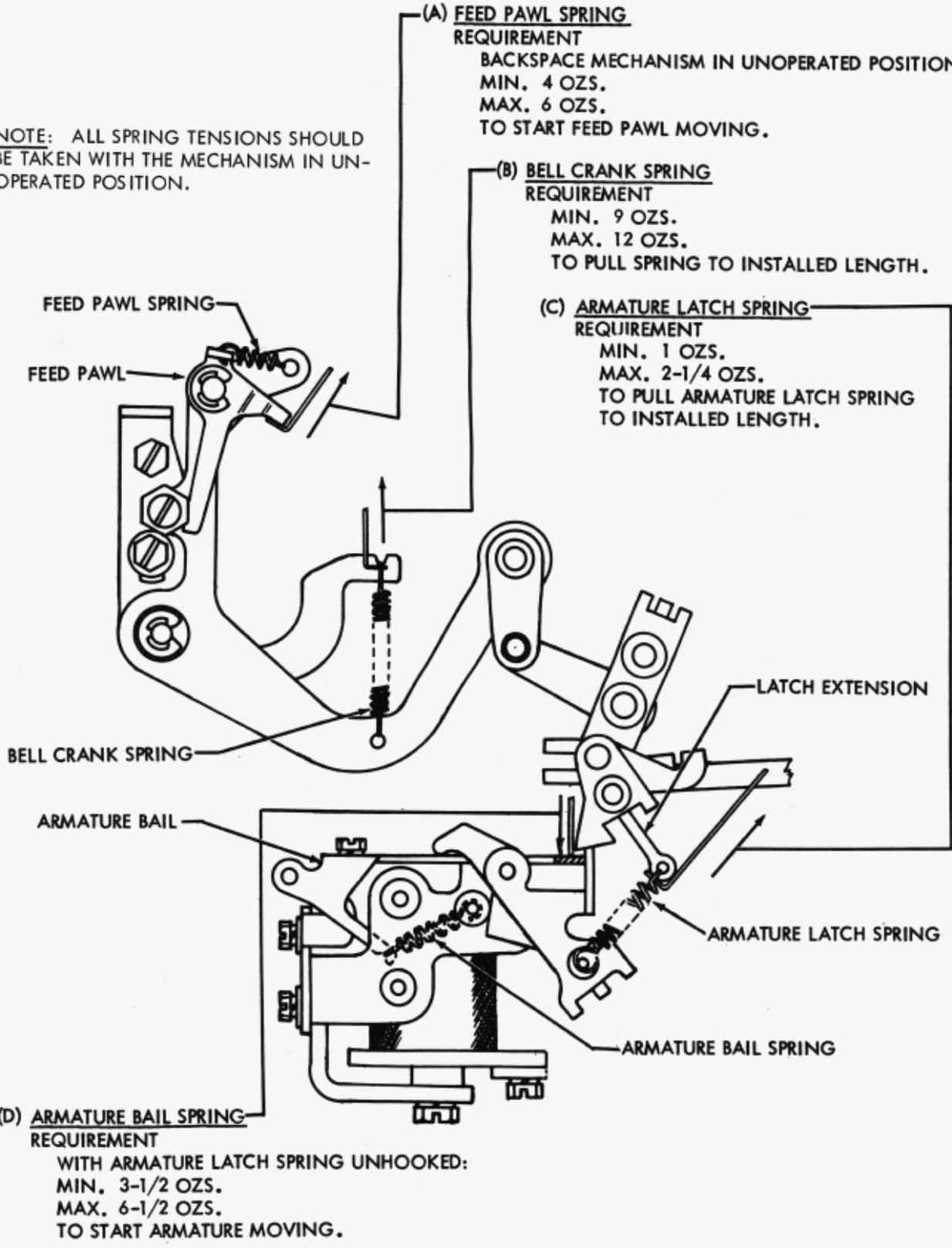


NOTE: A FULL DETENTED POSITION IS WHEN WITH  
THE DETENT ROLLER IN CONTACT WITH THE RATCHET  
WHEEL, THE PUNCH UNIT FEED PAWL ENGAGES THE  
FIRST TOOTH BELOW THE HORIZONTAL CENTER LINE  
OF THE RATCHET FEED WHEEL WITH NO PERCEPTIBLE  
CLEARANCE.

TO ADJUST  
LOOSEN ARM ADJUSTING SCREW AND MOVE ADJUST-  
ING PLATE.

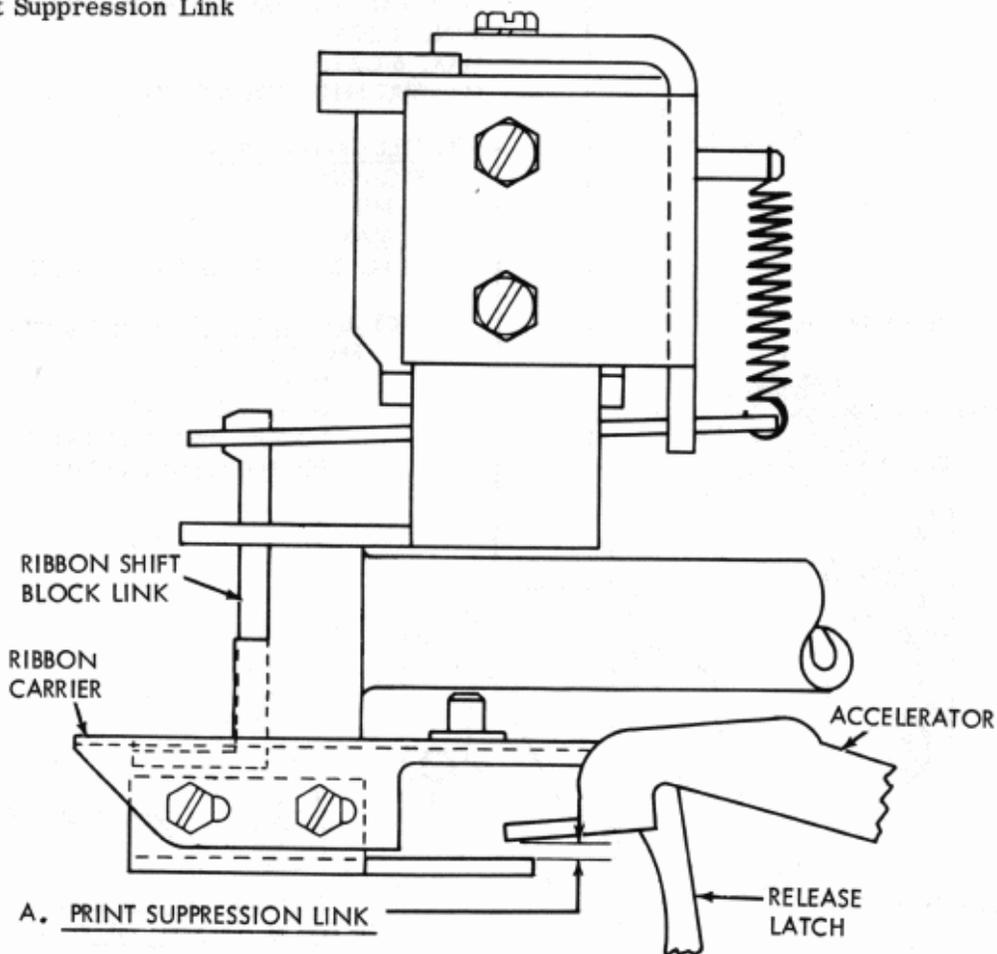
3.20 Power Drive Backspace Mechanism (continued)

NOTE: ALL SPRING TENSIONS SHOULD BE TAKEN WITH THE MECHANISM IN UNOPERATED POSITION.



PRINT SUPPRESSION MECHANISMS

3.21 Print Suppression Link



REQUIREMENT

FUNCTION CLUTCH TRIPPED AND MAIN SHAFT ROTATED UNTIL PRINT HAMMER TRIP LEVER JUST TOUCHES PRINT RELEASE LATCH. THERE SHALL BE

MIN. 0.030 INCH

MAX. 0.040 INCH

CLEARANCE BETWEEN THE UPPER SURFACE OF THE PRINT SUPPRESSION LINK AND THE LOWER SURFACE OF THE PRINT HAMMER ACCELERATOR

TO ADJUST

POSITION THE PRINT SUPPRESSION LINK ALL THE WAY TO THE REAR OF THE SLOTS ON THE RIBBON CARRIER. POSITION LINK IN VERTICAL DIRECTION WITH MOUNTING SCREWS LOOSENED TO MEET REQUIREMENT.

NOTE: REFER TO PARAGRAPH 2 FOR PRELIMINARY ADJUSTMENTS IN COMMON WITH RIBBON SHIFT ADJUSTMENTS IN ALL UNITS.

## 3.22 Manual Print Suppression Mechanism

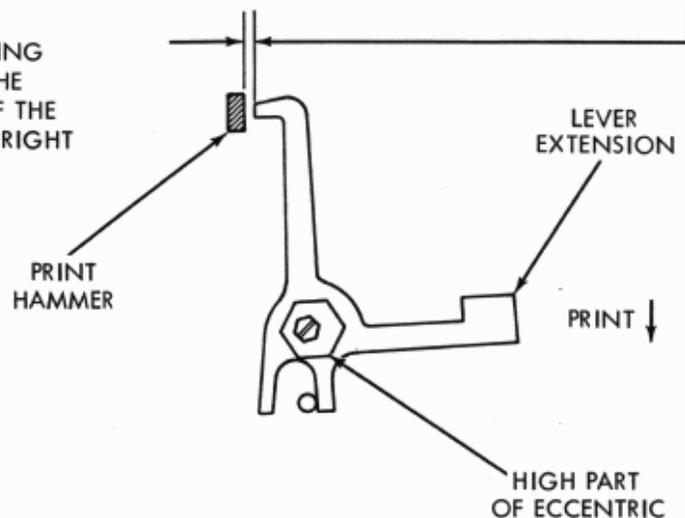
CONTROL LEVER (MANUAL)

## REQUIREMENT

- (1) THERE SHALL BE A CLEARANCE OF MIN. 0.015 INCH BETWEEN THE PRINT SUPPRESS LEVER AND THE PRINT HAMMER WHEN THE LEVER EXTENSION IS IN THE PRINT POSITION (DOWN).
- (2) WHEN THE LEVER EXTENSION IS IN THE NON-PRINT POSITION (UP), THE BLOCKING EXTENSION SHOULD EXTEND ACROSS THE FULL THICKNESS OF THE PRINT HAMMER WITH A CLEARANCE OF MIN. 0.015 INCH AT THE SIDE OF THE PRINT HAMMER.

## TO ADJUST

LOOSEN THE ECCENTRIC BUSHING MOUNTING NUT AND POSITION THE BUSHING UNTIL THE REQUIREMENTS ARE MET. THE HIGH PART OF THE ECCENTRIC SHOULD BE DOWN AND TO THE RIGHT AS VIEWED FROM THE REAR OF THE UNIT.



LEVER SHOULD EXTEND ACROSS FULL THICKNESS OF PRINT HAMMER.

