

TP193825 BACKSPACE MAGNET ASSEMBLY

APPARATUS AFFECTED: 28A, 28B, 28D, 28E, 28F, 28G, 28G-1, 28H, 28J, 28J-1, 28K, 28LA Perforator-Transmitter-Bases.

OBJECT: To provide more reliable operation and simplify adjusting procedure.

REASON FOR REISSUE: To revise information under "CHANGE" which was incorrectly specified. TP119648 retainer is changed to read TP119649 retainer.

CHANGE: 1. The TP159966 backspace magnet assembly used in the backspace mechanism is replaced by the TP193825 backspace magnet assembly.

TP159966 Backspace Magnet Assembly

| | |
|-------------------------|---------------------------------|
| 1 — TP224M Coil, Magnet | 2 — TP151152 or TP151737 Screws |
| 2 — TP2034 Flat Washers | 1 — TP151442 Screw |
| 1 — TP2191 Lockwasher | 1 — TP152893 Screw |
| 1 — TP3599 Nut | 1 — TP159965 Arm |
| 4 — TP3640 Lockwashers | 1 — TP159973 Bracket |
| 2 — TP3650 Flat Washers | 1 — TP159974 Eccentric |
| 1 — TP70878 Spring | 1 — TP159975 Bail |
| 1 — TP110743 Lockwasher | 1 — TP159976 Armature |
| 1 — TP119648 Retainer | 1 — TP159977 Hinge |
| 2 — TP119649 Retainers | 1 — TP159978 Shaft |
| 2 — TP125215 Screws | 1 — TP159979 Arm |
| | 1 — TP159980 Post |

TP193825 Backspace Magnet Assembly

| | |
|-------------------------|--------------------------|
| 1 — TP224M Coil, Magnet | 1 — TP151152 Screw |
| 2 — TP2034 Flat Washers | 1 — TP151632 Screw |
| 1 — TP2191 Lockwasher | 2 — TP151737 Screws |
| 4 — TP3640 Lockwashers | 1 — TP158760 Spring Post |
| 2 — TP3650 Flat Washers | 1 — TP159976 Armature |
| 1 — TP55063 Spring | 1 — TP193804 Armature |
| 1 — TP119649 Retainer | 1 — TP193821 Bracket |
| 2 — TP125215 Screws | 1 — TP193822 Clamp |
| | 1 — TP193824 Latch |

2. Requirement is added to Section 573-119-700, Section 573-118-700 and Section 573-117-700, after the last adjustment for the backspace mechanism.

See FIGURE 1.

The parts are shown in Teletype Bulletins 1167B, page 2-28, change 6; 1169B, page 2-16, change 7, and page 3-32, change 6; 1172B, page 15, change 3; 1166B, page 2-19, change 6.

IDENTIFICATION: See "CHANGE".

SECTION 573-117-700.01

INTERCHANGEABILITY: New and old style assemblies are interchangeable.

CLASSIFICATION FOR APPARATUS FURNISHED BY TELETYPE: This change is now in effect. Replacement parts for old style assemblies will be available on sales orders.

W.E.CO. STOCK OF OLD STYLE PARTS: Old style parts may be furnished.

APPLICATION TO APPARATUS IN THE FIELD: Old style parts giving satisfactory service need not be replaced.

APPLICATION AT W.E.CO. DIST. HOUSE REPAIR SHOPS: Units may be equipped with new or old style parts.

MANUAL AND POWER DRIVE BACKSPACE MECHANISM
(LATEST DESIGN)

MAKE THE FOLLOWING STANDARD ADJUSTMENTS.

FOR CHADLESS TAPE

- (1) RAKE
- (2) FEED PAWL CLEARANCE
- (3) RETURN LATCH
- (4) FEED PAWL

FOR FULLY PERFORATED TAPE

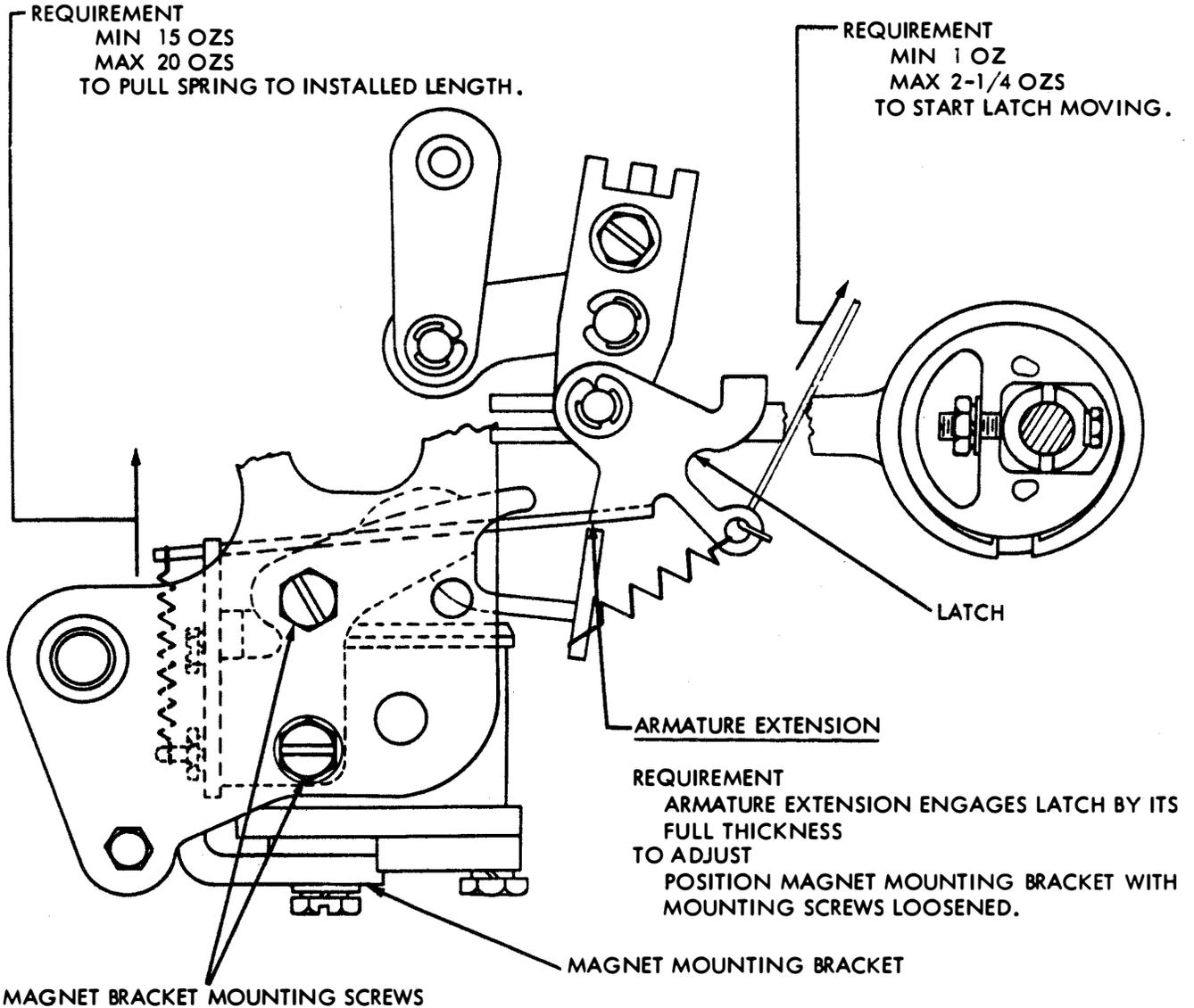
- (1) BACKSPACE RATCHET
- (2) BACKSPACE PAWL CLEARANCE
- (3) FEED PAWL DISABLING

ARMATURE SPRING

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

LATCH EXTENSION SPRING

REQUIREMENT
MIN 1 OZ
MAX 2-1/4 OZS
TO START LATCH MOVING.



REQUIREMENT
ARMATURE EXTENSION ENGAGES LATCH BY ITS
FULL THICKNESS
TO ADJUST
POSITION MAGNET MOUNTING BRACKET WITH
MOUNTING SCREWS LOOSENED.

FINAL POWER OR MANUAL (FOR CHADLESS TAPE)
SAME AS STANDARD ADJUSTMENT

FIGURE 1. MANUAL AND POWER DRIVE BACKSPACE MECHANISM
FOR CHADLESS OR FULLY PERFORATED
TAPE (LATEST DESIGN)

TP194993 TAPE GUIDE

APPARATUS AFFECTED: 28A, 28B, 28C, 28D, 28E, 28F, 28G, 28J, 28J-1, 28K, 28L, 28M Typing Reperforator Units; 28A, 28D, 28D-1, 28D-2, 28D-3, 28D-4, 28D-6, 28E, 28F, 28F-1, 28F-2 Reperforator-Transmitter Units; 28D, 28E, 28G-1, 28K Perforator-Transmitter-Bases.

OBJECT: To facilitate adjustment of units equipped with the TP194993 tape guide.

CHANGE: Requirements given in Section 573-117-700, issue 3, paragraph 2.50, for the *PERFORATOR POSITION* (1); Section 573-118-700, issue 6, paragraph 2.05, for the *PUNCH MOUNTING POSITION* (2); Teletype Bulletins 247B, change 5, page 1-17, for the *PERFORATOR POSITION* (2); 250B, change 3, page 1-38, for the *PERFORATOR POSITION* (1) are changed to:

Punch Mechanisms for Chadless Tape

To check:

With the unit in the stop position and the typewheel in the letters field.

Requirement:

Clearance between the top of the rear leg of the stripper platform on the punch block and the typewheel character "Z".

MIN. 0.090 inch — MAX. 0.110 inch

Punch Mechanisms for Fully Perforated Tape

To Check:

With the unit in the stop position and the typewheel in the figures field.

Requirement:

Clearance between the top of the rear leg of the stripper platform on the punch block and the typewheel character "5".

MIN. 0.075 inch — MAX. 0.095 inch

IDENTIFICATION: Not involved.

INTERCHANGEABILITY: Not involved.

CLASSIFICATION FOR APPARATUS FURNISHED BY TELETYPE: This change is now in effect.

W.E.CO. STOCK OF OLD STYLE PARTS: Not involved.

APPLICATION TO APPARATUS IN THE FIELD: The new adjustment may be applied.

APPLICATION AT W.E.CO. DIST. HOUSE REPAIR SHOPS: The new adjustment may be used.

BACKSPACE MECHANISM ADJUSTMENTS

APPARATUS AFFECTED: 28A, 28B, 28D, 28E, 28F, 28G, 28G-1, 28H, 28J, 28J-1, 28K, 28LA Perforator-Transmitter-Bases; 35A, 35B, and 35D Perforator-Transmitter-Bases.

OBJECT: To add a requirement to the backspace mechanism requirements.

CHANGE: The following requirements are added at the end of the backspace mechanism adjustments on the following pages:

Section 573-117-700, Issue 3, Page 117
Section 573-118-700, Issue 6, Page 100
Section 573-119-700, Issue 3, Page 66
Section 574-224-700, Issue 4, Page 38

FINAL POWER OR MANUAL BACKSPACE ADJUSTMENT

(1) REQUIREMENT

WITH TAPE IN THE UNIT, PLACE THE FEED WHEEL SHAFT OIL HOLE IN ITS UPPERMOST POSITION, OPERATE THE BACKSPACE MECHANISM ONCE. THE RATCHET WHEEL SHALL BE BACKED ONE SPACE INTO A FULLY DETENTED POSITION.

NOTE: "A FULLY DETENTED POSITION" IS DEFINED AS FOLLOWS: WITH THE DETENT ROLLER IN CONTACT WITH THE RATCHET WHEEL, THE PUNCH UNIT FEED PAWL SHALL ENGAGE THE FIRST TOOTH BELOW THE HORIZONTAL CENTER LINE OF THE FEED RATCHET WITH NO PERCEPTIBLE CLEARANCE.

(2) REQUIREMENT

WITH THE UNIT OPERATING UNDER POWER, PERFORATE APPROXIMATELY TWO INCHES OF TAPE WITH THE "LETTERS" COMBINATION SELECTED. BACKSPACE 12 CHARACTERS IN SUCCESSION. WITH THE UNIT STILL UNDER POWER, AGAIN PERFORATE APPROXIMATELY TWO INCHES OF TAPE WITH THE "LETTERS" COMBINATION SELECTED. CLIPPING OF THE CODE HOLES SHALL BE HELD TO A MINIMUM AND SHALL NOT EXCEED MORE THAN 0.005 INCH AS GAUGED BY EYE.

TO ADJUST

ON MANUAL BACKSPACE MECHANISMS, REFINE THE FEED PAWL PRELIMINARY ADJUSTMENT. ON POWER DRIVE BACKSPACE MECHANISMS, LOOSEN THE ARM ADJUSTING SCREW AND POSITION THE ADJUSTING PLATE. TIGHTEN THE ARM ADJUSTING SCREW.

CLASSIFICATION FOR APPARATUS FURNISHED BY TELETYPE: These adjustments are now in effect.

APPLICATION TO APPARATUS IN THE FIELD: All units should have the new adjustments applied.

APPLICATION AT W.E.CO. DIST. HOUSE REPAIR SHOPS: All units shall have the new adjustments applied.

TP156484 PRINTING LATCH MOUNTING BRACKET

APPARATUS AFFECTED: 28A, 28B, 28C, 28D, 28E, 28F, 28G, 28J, 28K, 28L, 28M Typing Reperforator Units; 28LA, 28LA-1 Tape Typing Units; 28A, 28D, 28D-1, 28D-2, 28D-3, 28D-4, 28D-6, 28E, 28F, 28F-1, 28F-2 Reperforator-Transmitter Units; 28D, 28E, 28E-1, 28G-1, 28K, 28L Perforator-Transmitter-Bases; TP156484 Printing Latch Mounting Bracket.

OBJECT: To eliminate a possible interference between the TP173981 print hammer accelerator and the TP156869 or TP173755 ribbon guide.

CHANGE: 1. The TP156484 printing latch mounting bracket is modified by lengthening the present mounting slot approximately 1/16 inch and by changing the 0.144-inch diameter hole to a 0.144-inch by 1/4-inch slot.

2. The requirements given in Section 573-117-700, issue 3, paragraph 2.63; Section 573-118-700, issue 6, paragraph 2.29; and Teletype Bulletins 250B, page 1-57, change 3; 247B, page 1-55, change 5, for the *PRINTING TRIP LINK* are changed to add the following:

The following procedure is used on units equipped with adjustable printing latch mounting brackets.

Printing Latch Adjustment

Requirements

- (1) Rocker bail in its extreme left position. **SOME** ----- 0.015-inch clearance between the print hammer accelerator and the printing latch at the closest point when the accelerator is manually lifted.
- (2) Rocker bail in its extreme right position. There should be some overtravel of the print hammer with respect to the latching surface of the printing latch, and some clearance between the print hammer accelerator and the ribbon carrier.

To Adjust

- (1) Position the rocker bail to the extreme right. Adjust the eccentric so that there is approximately 0.065-inch clearance between the print hammer accelerator and the ribbon carrier. Keep the high part of the eccentric to the left. Loosen the two printing latch mounting bracket screws until they are friction tight, and move the bracket to its extreme rear position.
- (2) Position the rocker bail to the extreme left. Move the printing latch mounting bracket slowly to the front until the print hammer accelerator just trips. Tighten the two printing latch mounting bracket screws.
- (3) With the rocker bail to the extreme left, position the printing trip link by adjusting its eccentric until there is **SOME** ----- 0.015-inch clearance between the printing latch and the print hammer accelerator. The high part of the eccentric should be to the left.

SECTION 573-117-700.04

The TP156484 printing latch mounting bracket is shown in Teletype Bulletin 1167B, page 2-18, change 6.

IDENTIFICATION: New style brackets have two slots for mounting; old style brackets have one slot and a 0.144-inch diameter hole.

INTERCHANGEABILITY: New style brackets are interchangeable with old style brackets.

CLASSIFICATION FOR APPARATUS FURNISHED BY TELETYPE: This change is now in effect.

W.E.CO. STOCK OF OLD STYLE PARTS: May be furnished.

APPLICATION TO APPARATUS IN THE FIELD: Old style parts giving satisfactory service need not be replaced.

APPLICATION AT W.E.CO. DIST. HOUSE REPAIR SHOPS: Units may be equipped with new or old style parts. On units equipped with new style brackets, the new adjustment shall be applied.

TP3870 SPRING

APPARATUS AFFECTED: 28A Perforator-Transmitter-Base.

OBJECT: To provide more reliable operation of the tape-out switch.

CHANGE: 1. The TP110437 or TP2415 springs associated with the TP156449 switch lever are replaced by a TP3870 spring.

2. The requirement given in Section 573-117-700, issue 3, paragraph 2.11, for the *SWITCH LEVER SPRING* is changed as follows:

Requirement

MIN. 8-1/2 ozs. — MAX. 10 ozs.

To pull spring to length of 1-1/4 inches.

The TP110437 spring and TP2415 spring are shown in Teletype Bulletin 1169B; page 1-62, change 5, and page 1-29, change 8, respectively.

IDENTIFICATION: The TP3870 spring has 28 turns and is approximately 5/32 inch in diameter; the TP2415 spring has 34 turns and is approximately 1/8 inch in diameter.

INTERCHANGEABILITY: The TP3870 spring and TP2415 spring are interchangeable.

CLASSIFICATION FOR APPARATUS FURNISHED BY TELETYPE: This change is now in effect.

W.E.CO. STOCK OF OLD STYLE PARTS: May be furnished for other applications.

APPLICATION TO APPARATUS IN THE FIELD: Should be incorporated in all apparatus where required for proper operation.

APPLICATION AT W.E.CO. DIST. HOUSE REPAIR SHOPS: All units shall be equipped with new style parts if parts require replacement.

ROTARY CORRECTING LEVER ADJUSTMENT

APPARATUS AFFECTED: 28A through 28G, 28J, 28K, 28L, 28M Typing Reperforator Units; 28LA, 28LA-1 Tape Typing Units; 28D, 28E, 28E-1, 28G-1, 28K, 28L Perforator-Transmitter-Bases; 28A, 28D, 28D-1, 28D-2, 28D-3, 28D-4, 28D-6, 28E, 28F, 28F-1, 28F-2, Reperforator-Transmitter Units.

OBJECT: To prevent overlap of adjacent printed characters.

CHANGE: Requirement given in Section 573-117-700, issue 4, paragraph 2.60; and Section 573-118-700, issue 6, paragraph 2.24, is changed for part (3) of the ROTARY CORRECTING LEVER adjustment.

For units equipped with a yielding axial corrector:

TO ADJUST:

As the rocker bail approaches the extreme left and the spring post on the axial corrector starts to leave the end of the slot, position the rotary correcting lever finger-tight against the type-wheel rack and tighten the clamp screw.

For units equipped with a nonyielding axial corrector:

TO ADJUST:

As the rocker bail approaches the extreme left, measure the clearance between the axial corrector roller and the sector notch. When the clearance is SOME ---- MAX. 0.005 inch, position the rotary correcting lever tight against the type-wheel rack and tighten the clamp screw.

CLASSIFICATION FOR APPARATUS FURNISHED BY TELETYPE: This change is now in effect.

APPLICATION TO APPARATUS IN THE FIELD: Where required, the new adjustment should be used.

APPLICATION AT W.E.CO. DIST. HOUSE REPAIR SHOPS: All units shall have the new adjustment applied.

TP193825 BACKSPACE MAGNET ASSEMBLY AND TP193824 LATCH LEVER

APPARATUS AFFECTED: 28A, 28B, 28D, 28E, 28F, 28G, 28G-1, 28H, 28J, 28J-1, 28K and 28LA Perforator-Transmitter-Bases; TP193825 Backspace Magnet Assembly; TP193824 Latch Lever.

OBJECT: To reduce the possibility of the armature remaining in its operated position after the current is removed.

CHANGE: The latching surface of the TP193824 nonrepeat latch lever will be formed toward the hub at a 12-degree angle, 0.044 inch from the top of the latch.

Figure 1 is added to Sections 573-119-700, 573-118-700 and 573-117-700 after the last adjustment for the backspace mechanism.

IDENTIFICATION: See "CHANGE".

INTERCHANGEABILITY: New and old style TP193824 latch levers are interchangeable.

CLASSIFICATION FOR APPARATUS FURNISHED BY TELETYPE: This change is now in effect.

W.E.CO. STOCK OF OLD STYLE PARTS: Shall not be furnished.

APPLICATION TO APPARATUS IN THE FIELD: Old style parts giving satisfactory service need not be replaced.

APPLICATION AT W.E.CO. DIST. HOUSE REPAIR SHOPS: All units shall be equipped with the new style part if difficulty is encountered or if parts are disassembled for other reasons.

MANUAL AND POWER DRIVE BACKSPACE MECHANISM
(LATEST DESIGN)

MAKE THE FOLLOWING STANDARD ADJUSTMENTS.

FOR CHADLESS TAPE

- (1) RAKE
- (2) FEED PAWL CLEARANCE
- (3) RETURN LATCH
- (4) FEED PAWL

FOR FULLY PERFORATED TAPE

- (1) BACKSPACE RATCHET
- (2) BACKSPACE PAWL CLEARANCE
- (3) FEED PAWL DISABLING

ARMATURE SPRING

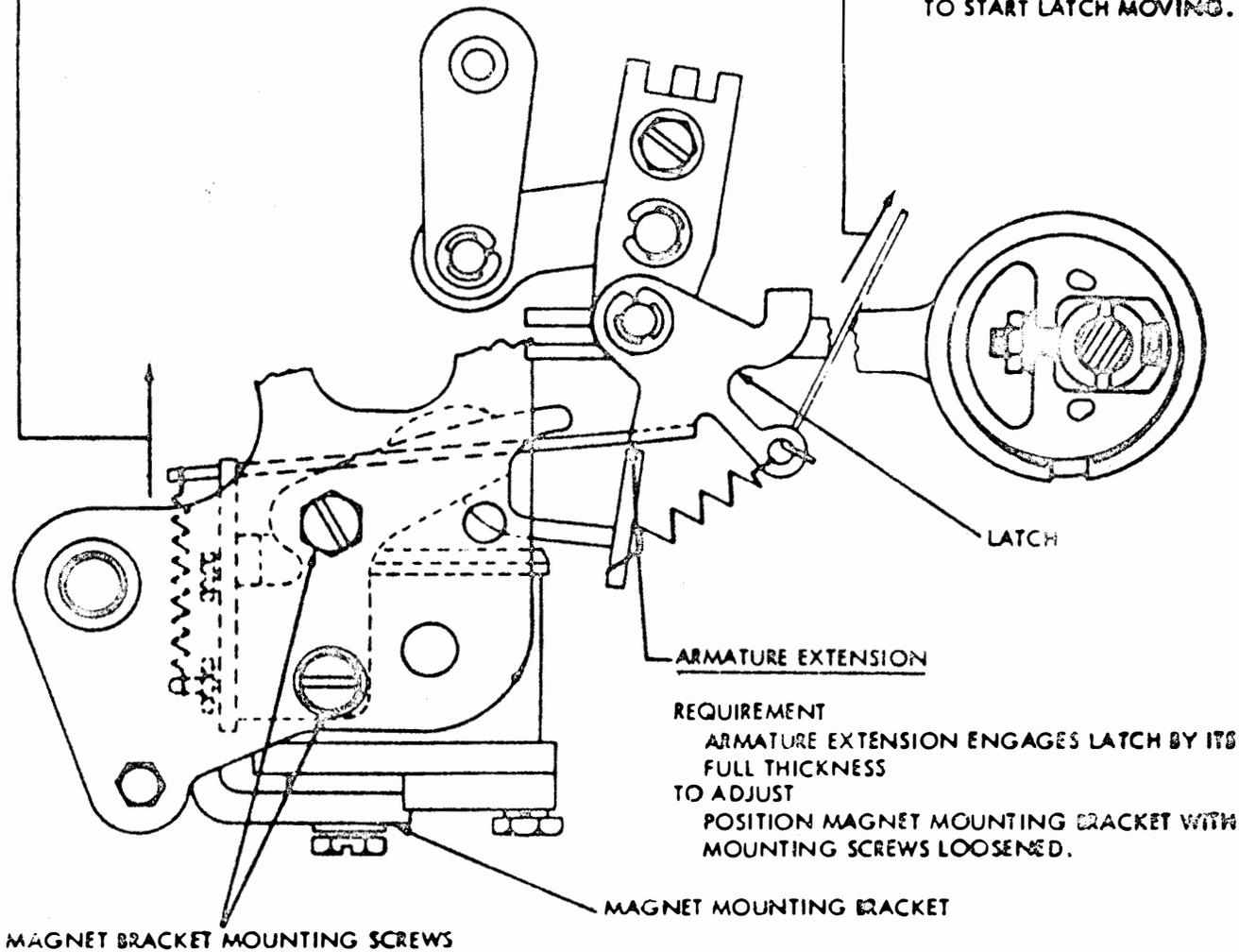
REQUIREMENT

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

LATCH EXTENSION SPRING

REQUIREMENT

MIN 1 OZ
MAX 2-1/4 OZS
TO START LATCH MOVING.



REQUIREMENT

ARMATURE EXTENSION ENGAGES LATCH BY ITS
FULL THICKNESS
TO ADJUST
POSITION MAGNET MOUNTING BRACKET WITH
MOUNTING SCREWS LOOSENED.

FINAL POWER OR MANUAL (FOR CHADLESS TAPE)
SAME AS STANDARD ADJUSTMENT

FIGURE 1. MANUAL AND POWER DRIVE BACKSPACE MECHANISM
FOR CHADLESS OR FULLY PERFORATED
TAPE (LATEST DESIGN)