28 TYPING AND NONTYPING PERFORATORS

ADJUSTMENTS

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2.13 Punch Mechanism continued

LATCH LEVER CLEARANCE

REQUIREMENT (FOR BOTH TYPING AND NON-TYPING PERFORATORS)

WITH "BLANK" COMBINATION SELECTED, THE FUNCTION CLUTCH DISENGAGED AND LATCHED. CLEARANCE BETWEEN THE PUNCH SLIDE AND ITS ASSOCIATED LATCH LEVER.

MIN. 0.015 INCH

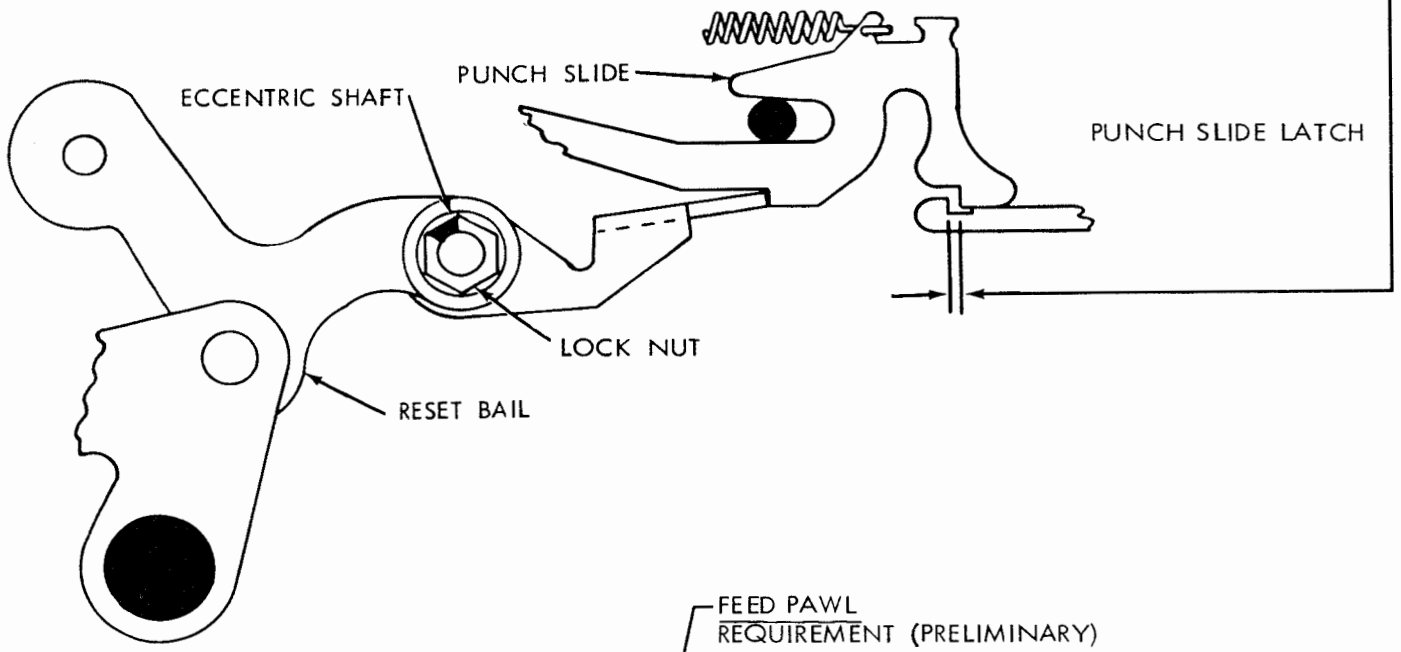
MAX. 0.025 INCH

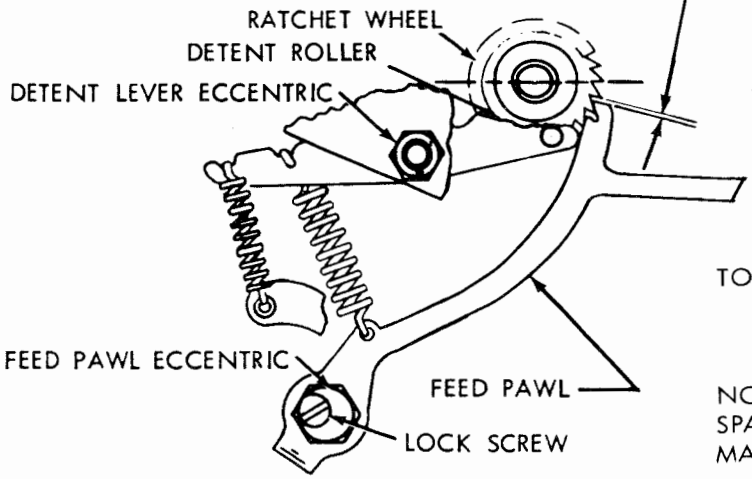
FOR THE SLIDE HAVING THE LEAST CLEARANCE.

TO ADJUST

LOOSEN THE LOCK NUT ON THE RESET BAIL ECCENTRIC SHAFT AND POSITION THE RESET BAIL BY ROTATING THE ECCENTRIC SHAFT TO MEET THE REQUIREMENT: THE INDENT SHALL BE KEPT ABOVE THE HORIZONTAL CENTER LINE OF THE ECCENTRIC.

NOTE: ON KEYBOARD PERFORATORS NOT HAVING A "BLANK" KEY, SUBSTITUTE USE OF THE "T" KEY WHENEVER USE OF THE "BLANK" KEY IS REQUIRED.





FEED PAWL

REQUIREMENT (PRELIMINARY)

FUNCTION CLUTCH DISENGAGED, IDENTATION 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 CENTER LINE THROUGH THE RATCHET WHEEL WITH NO PERCEPTIBLE CLEARANCE.

TO ADJUST

ROTATE THE FEED PAWL ECCENTRIC WITH LOCK NUT LOOSENED.

NOTE: THIS ADJUSTMENT IS RELATED TO FEED HOLE SPACING AND THE TWO ADJUSTMENTS MUST BE MADE AT THE SAME TIME.

2.14 Punch Mechanism continued

NOTE: THE ADJUSTMENTS ON THIS PAGE APPLY ONLY TO CHADLESS TAPE MECHANISM.

FEED HOLE SPACING (PRELIMINARY)

REQUIREMENT

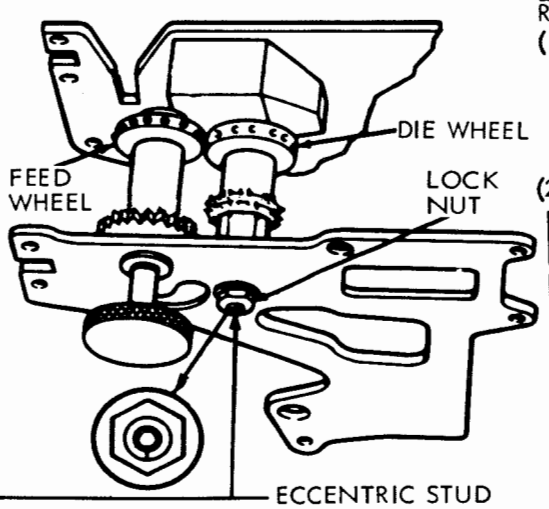
THE INDENT OF DIE WHEEL ECCENTRIC STUD SHALL BE POINTING DOWNWARD.

TO ADJUST

POSITION DIE WHEEL ECCENTRIC STUD WITH LOCK NUT LOOSENED.

NOTE

BEFORE PROCEEDING WITH THE FOLLOWING ADJUSTMENTS, CHECK BOTH TAPE GUIDE SPRING TENSIONS.

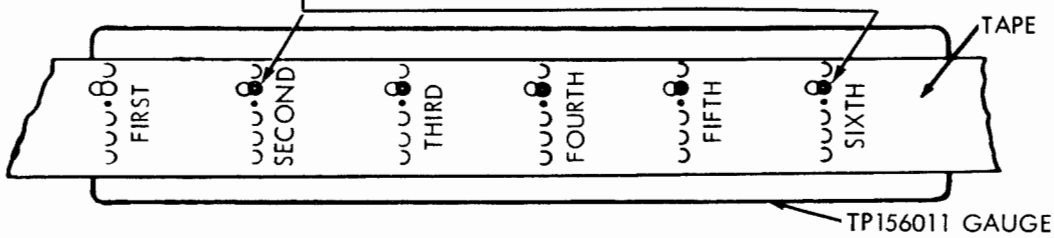


FEED HOLE SPACING (FINAL)

REQUIREMENT

(1) WITH TAPE SHOE BLOCKED AWAY FROM THE FEED WHEEL, THE FEED PAWL AND DETENT DISENGAGED, AND TAPE REMOVED FROM THE PUNCH MECHANISM, THE FEED WHEEL SHALL ROTATE FREELY. (CHECK THROUGH 3 OR 4 ROTATIONS).

(2) PERFORATE SIX SERIES OF (9) "BLANK" COMBINATIONS FOLLOWED BY (1) "LETTERS" COMBINATION. OPEN CHADS SO CODE HOLES ARE VISIBLE. PLACE TAPE OVER SMOOTH SIDE OF THE TP156011 TAPE GAUGE SO CIRCULAR PORTION OF THE FIRST NUMBER TWO CODE HOLE IN TAPE IS CONCENTRIC WITH THE FIRST (0.072) HOLE OF TAPE GAUGE. (SEE NOTE). THE NEXT FOUR 0.072 HOLES IN TAPE GAUGE SHALL BE VISIBLE THROUGH THE NUMBER TWO CODE HOLES IN TAPE AND CIRCULAR PORTION OF THE LAST (SIXTH) NUMBER TWO CODE HOLE IN TAPE SHALL BE ENTIRELY WITHIN THE 0.086 DIA. HOLE OF TAPE GAUGE.



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

TO ADJUST

(1) WITH TAPE REMOVED FROM PUNCH MECHANISM, LOOSEN DIE WHEEL ECCENTRIC STUD LOCK NUT AND ADJUST DIE WHEEL SO THAT IT JUST BINDS ON FEED WHEEL, BACK OFF ECCENTRIC SO DIE WHEEL IS JUST FREE (CHECK FREENESS THROUGH 3 OR 4 ROTATIONS). KEEP INDENT OF ECCENTRIC STUD BELOW THE HORIZONTAL CENTER LINE OF STUD.

(2) CHECK TEN CHARACTERS PER INCH REQUIREMENT AND REFINE FEED WHEEL DIE WHEEL CLEARANCE ADJUSTMENT TO MEET THE REQUIREMENT BY MOVING INDENT OF DIE WHEEL ECCENTRIC STUD TOWARD FEED WHEEL TO DECREASE CHARACTER SPACING AND AWAY FROM FEED WHEEL TO INCREASE THE CHARACTER SPACING.

CAUTION: WITH THE TAPE REMOVED FROM THE PUNCH MECHANISM, BE SURE THE DIE WHEEL DOES NOT BIND.

(3) WITH THE TAPE SHOE AWAY FROM THE FEED WHEEL, THE FEED PAWL AND DETENT DISENGAGED, AND THE TAPE REMOVED FROM THE PUNCH MECHANISM, THE FEED WHEEL SHALL ROTATE FREELY. FAILURE TO MEET THIS REQUIREMENT INDICATES THE DIE WHEEL ECCENTRIC HAS BEEN OVER-ADJUSTED. TO MEET THIS REQUIREMENT, REFINE THE ADJUSTMENT.

3. VARIABLE FEATURES

NOTE: UNLESS OTHERWISE SPECIFIED, THE FOLLOWING BACKSPACE ADJUSTMENTS APPLY TO BOTH THE CHADLESS AND FULLY PERFORATED TAPE MECHANISMS.

3.01 Manual and Power Drive Backspace Mechanism (For Chadless Tape)

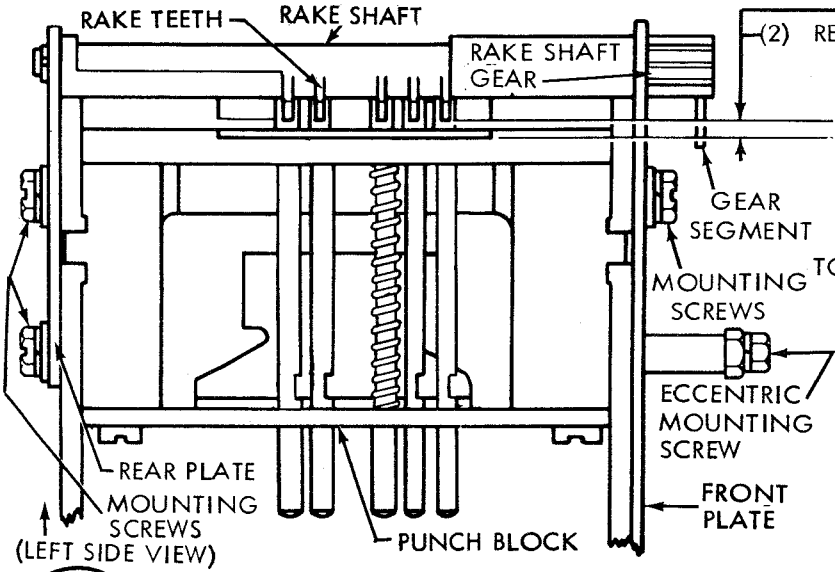
RAKE (A)

(1) REQUIREMENT

WITH ROTATIONAL PLAY IN RAKE TAKEN UP TO LEFT, BOTTOM SURFACE OF RAKE TEETH SHOULD BE WITHIN 0.040 INCH OF THE SAME VERTICAL PLANE AS LEFT SIDE OF PUNCH BLOCK OR SLIGHTLY TO THE RIGHT.

TO ADJUST

REMOVE TWO MOUNTING SCREWS FROM REAR PLATE. POSITION RAKE SHAFT GEAR IN RELATION TO GEAR SEGMENT. REPLACE MOUNTING SCREWS.



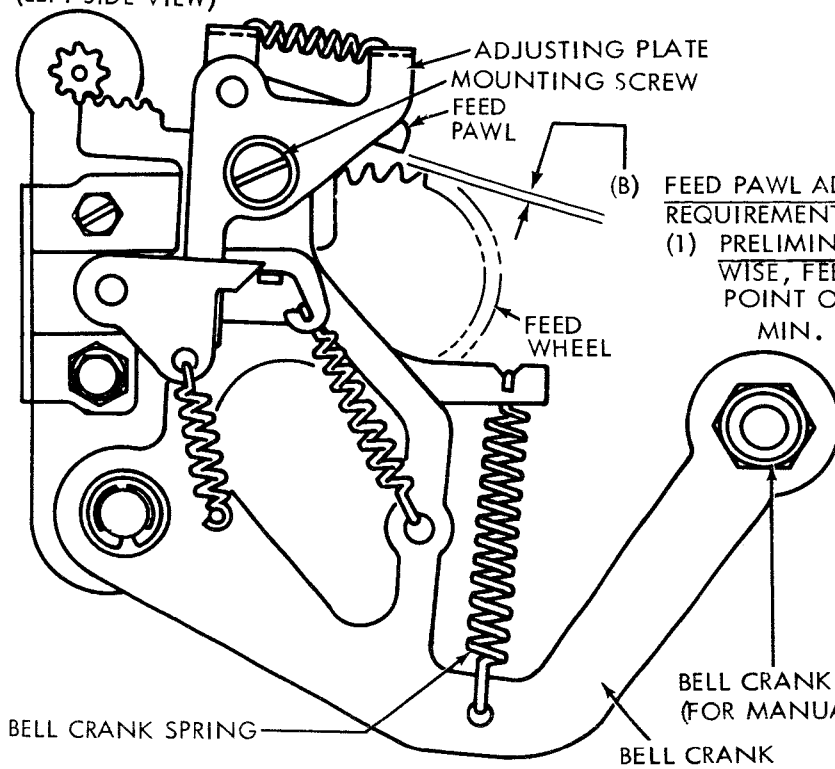
(2) REQUIREMENT

WITH BELL CRANK SPRING UNHOOKED AND RAKE IN OPERATED POSITION, CLEARANCE BETWEEN BOTTOM OF RAKE TEETH AND LOWER SURFACE OF TAPE SLOT:

MIN. 0.007 INCH---MAX. 0.011 INCH (CHECK AT NO. 1 & 5 PINS.)

TO ADJUST

LOOSEN THE FOUR PUNCH BLOCK MOUNTING SCREWS FRICTION TIGHT, POSITION THE RAKE MOUNTING PLATE AND BELL CRANK MOUNTING PLATE SO THAT THE FRONT EDGE OF BOTH PLATES IS APPROXIMATELY IN LINE WITH THE VERTICAL PLANE OF THE PUNCH BLOCK. WITH THE RAKE IN THE OPERATED POSITION (BELL CRANK IN MAXIMUM DOWNWARD POSITION) MOVE THE RAKE UP OR DOWN TO MEET CLEARANCE REQUIREMENT. TIGHTEN SCREWS AND REPLACE THE BELL CRANK SPRING.



(B) FEED PAWL ADJUSTING PLATE REQUIREMENT

(1) PRELIMINARY: WITH BELL CRANK ROTATED CLOCKWISE, FEED PAWL SHALL MISS FIRST TOOTH AT POINT OF LEAST CLEARANCE BY

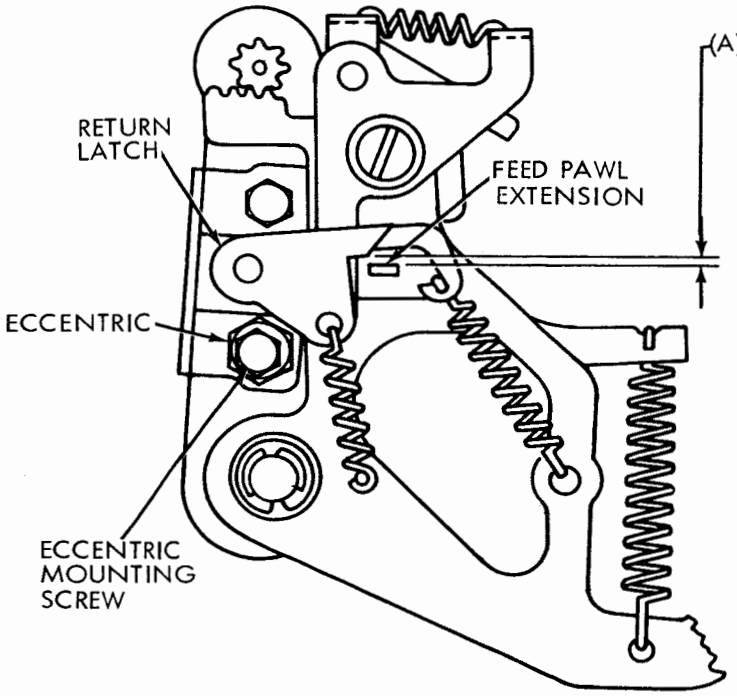
MIN. 0.006 INCH---MAX. 0.040 INCH

(2) FINAL: FEED PAWL SHALL MISS FIRST TOOTH AND ENGAGE SECOND TOOTH BY AT LEAST 1/2 OF RIGHT ENGAGING SURFACE OF FEED PAWL (AS GAUGED BY EYE WHEN FEED PAWL FIRST CONTACTS RATCHET TOOTH).

TO ADJUST

POSITION ADJUSTING PLATE WITH MOUNTING SCREW FRICTION TIGHT.

3.02 Manual and Power Drive Backspace Mechanism (For Chadless Tape) continued



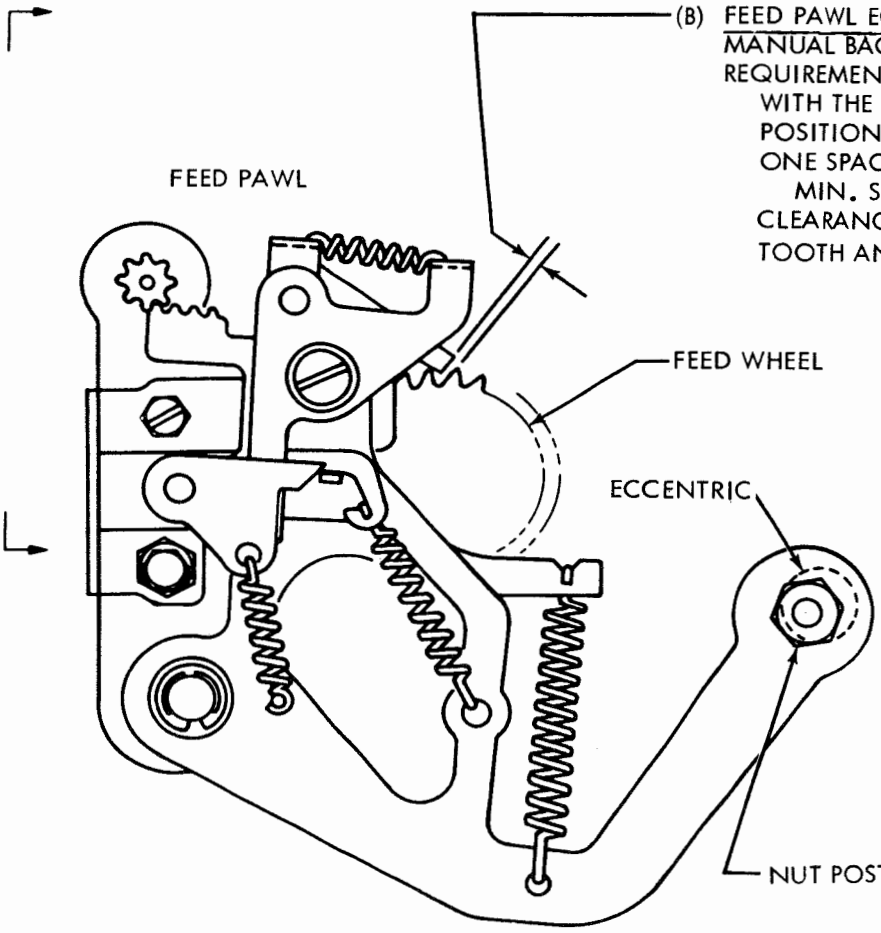
(A) RETURN LATCH REQUIREMENT

BACKSPACE MECHANISM IN UNOPERATED POSITION. CLEARANCE BETWEEN RETURN LATCH AND FEED PAWL EXTENSION

MIN. 0.004 INCH
MAX. 0.020 INCH

TO ADJUST

ADJUST ECCENTRIC WITH MOUNTING SCREW FRICTION TIGHT.



(B) FEED PAWL ECCENTRIC

MANUAL BACKSPACE (PRELIMINARY) REQUIREMENT

WITH THE BACKSPACE BELL CRANK IN ITS OPERATED POSITION AND THE FEED WHEEL DETENTED BACK ONE SPACE:

MIN. SOME---MAX. 0.003 INCH

CLEARANCE BETWEEN THE FEED WHEEL RATCHET TOOTH AND THE BACKSPACE FEED PAWL.

POWER DRIVE BACKSPACE

WITH THE BACKSPACE BELL CRANK IN ITS OPERATED POSITION, THE HIGH SIDE OF THE ECCENTRIC SHOULD BE IN ITS UPPERMOST POSITION.

TO ADJUST

LOOSEN THE NUT POST (FRICTION TIGHT) AND ROTATE ECCENTRIC WITH AN ALLEN WRENCH. TIGHTEN THE NUT POST.

3.06 Power Drive Backspace Mechanism (Early Design) continued

(A) ARMATURE HINGE

REQUIREMENT

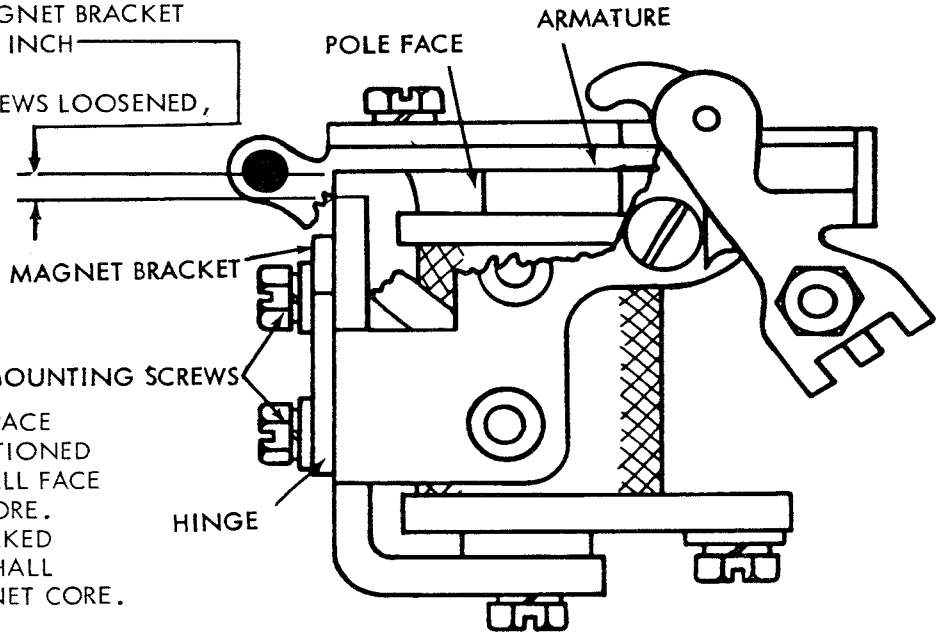
ARMATURE BAIL SPRING REMOVED. WITH ARMATURE HELD AGAINST POLE FACE AND PLAY TAKEN UP AT HINGE IN DOWNWARD DIRECTION, CLEARANCE BETWEEN ARMATURE AND MAGNET BRACKET

MIN. SOME --- MAX. 0.004 INCH

TO ADJUST

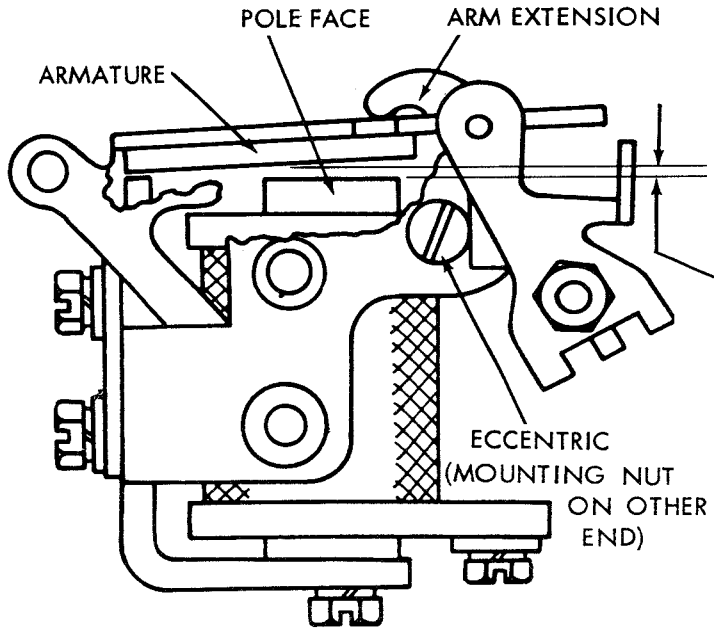
WITH HINGE MOUNTING SCREWS LOOSENED, POSITION ARMATURE.

NOTE: THE FOLLOWING ADJUSTMENTS ARE FOR USE WITH THE EARLY DESIGN BACKSPACE MAGNET ASSEMBLY. LATER DESIGN USE A NON-ADJUSTABLE BACKSPACE MAGNET ASSEMBLY.



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

NOTE: THIS ADJUSTMENT IS MADE AT FACTORY AND SHOULD NOT BE DISTURBED UNLESS A REASSEMBLY OF THE UNIT IS UNDERTAKEN. IF NECESSARY TO MAKE THIS ADJUSTMENT, THE PUNCH UNIT SHOULD BE REMOVED. SEE DISASSEMBLY AND REASSEMBLY. REMAKE PUNCH UNIT POSITION ADJUSTMENT.



(B) ARMATURE UP-STOP

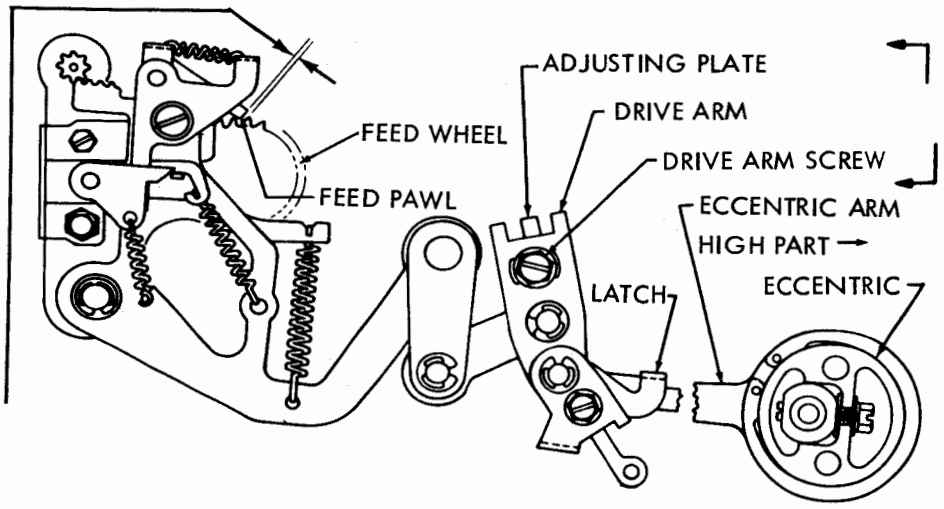
REQUIREMENT

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.

→ 3.07 Power Drive Backspace Mechanism (For Chadless Tape) (Early Design) continued



(A) DRIVE ARM

REQUIREMENT

WITH DRIVE ARM LATCH LEVER ENGAGED WITH ECCENTRIC LINK, MAIN SHAFT ROTATED TO PLACE ECCENTRIC IN ITS EXTREME RIGHT HAND POSITION AND FEED WHEEL DETENTED BACK ONE SPACE:

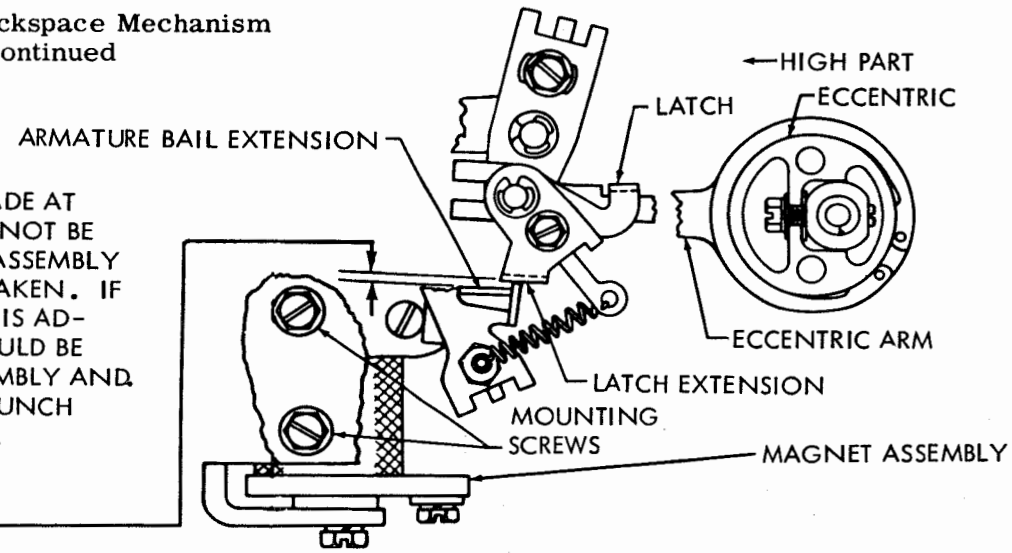
MIN. SOME---MAX. 0.003 INCH

CLEARANCE BETWEEN THE BACKSPACE FEED PAWL AND THE RATCHET TOOTH. CHECK WITH FEED WHEEL SHAFT OIL HOLE IN THE UPPERMOST POSITION AND RECHECK EACH 90 DEGREES ABOUT THE PERIPHERY OF THE FEED WHEEL.

TO ADJUST

LOOSEN DRIVE ARM SCREW (FRICTION TIGHT) AND POSITION ADJUSTING PLATE.

3.08 Power Drive Backspace Mechanism (Early Design) continued



NOTE:
THIS ADJUSTMENT IS MADE AT FACTORY AND SHOULD NOT BE DISTURBED UNLESS A REASSEMBLY OF THE UNIT IS UNDERTAKEN. IF NECESSARY TO MAKE THIS ADJUSTMENT, PUNCH SHOULD BE REMOVED. SEE DISASSEMBLY AND REASSEMBLY. REMAKE PUNCH POSITION ADJUSTMENT.

(B)
LATCH EXTENSION

REQUIREMENT

BACKSPACE MECHANISM IN UNOPERATED POSITION. HIGH PART OF ECCENTRIC TO LEFT. ARMATURE AGAINST POLE FACE. LATCH RESTING ON ECCENTRIC ARM NOTCH. CLEARANCE BETWEEN TOP OF ARMATURE BAIL EXTENSION AND LATCH EXTENSION

MIN. 0.005 INCH
MAX. 0.020 INCH

TO ADJUST

SWING MAGNET CLOCKWISE OR COUNTERCLOCKWISE, AS NECESSARY, WITH MOUNTING SCREWS FRICTION TIGHT.