# TELETYPE

PRINTING TELEGRAPH SYSTEMS

BULLETIN 252B

ADJUSTMENTS AND LUBRICATION
MODEL 28
TRANSMITTER DISTRIBUTOR
LAXD



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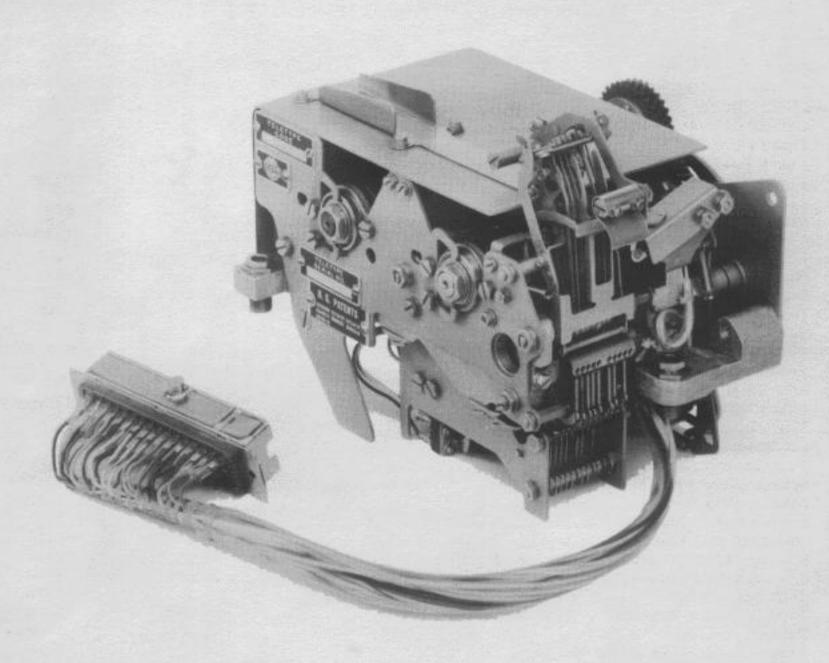
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# LIST OF EFFECTIVE PAGES

MARCH, 1958

Page Number	Change In Effect
Title Page	Original
A to B	Original
C to D	Original
-1 to 1-20	Original
2-1 to 2-2	Original
3-1 to 3-9	Original

The above list indicates the effective pages as of the date of issue. Upon receipt of change pages, insert them numerically and discard any superseded pages.



LAXD - TRANSMITTER DISTRIBUTOR ( Pivoted head, multi-contact)

# TABLE OF CONTENTS

# SECTION 1

# ADJUSTMENTS AND SPRING TENSIONS

		PAGE
1,	GENERAL	1-1
2.		1-2
	Cam Shaft Bearing Retainer	1-3
	Cam Sleeve End Play	1-3
	Check Pawl	1-17
	Clutch Shoe Lever	1-6
	Clutch Trip Assembly Mounting Plate	1-4
	Clutch Trip Lever Upper Extension	1-6
	Clutch Trip Magnet Armature Hinge	1-4
	Contact Slide Lever	1-15
	Distributor Block Assembly	1-8
	Distributor Cam Follower Guide	1-7
	Distributor Contact Gap	1-8
	Feed Lever Set Collar	1-9
	Feed Pawl (Final)	1-17
	Feed Pawl (Preliminary)	1-17
	Idler Gear Assembly	1-3
	Last Character Switch Spring Leaf	1-19
	Magnet Bracket	1-19
	Oil Reservoir Assembly	E0.540
	Duch Lever	1-11
	Push Lever	1-12
	Sensing Head Pivot Screws	1-16
	Sensing Pins	1-12
	Storing Switch Assembly	1-11
	Storing Switch Contacts	1-15
	Storing Switch Contacts (Preliminary)	1-10
	Storing Switch Guides	1-10
	Tape Deflector	
	Tape Deflector Bracket	1-16
	Tape Depressor	1-19
	Tape Retaining Lid Latch	1-18
	Top Plate	1-18
3.	SPRING TENSIONS	
	Armature Bail Spring	1-4
	Auxillary Lever Spring	1-12
	Cam Follower Lever Spring	1-8
	Check Pawl Spring	1-17
	Clutch Latch Lever Spring	1-5
	Clutch Shoe Lever Spring	1-2
	Clutch Shoe Spring	1-2
	Clutch Trip Lever Spring	1-5
	Contact Slide Lever Springs	1-10
	Distributor Rocker Compression Spring	1-7
	Feed Lever Spring	1 0

3.	SPRING TENSIONS (CONT)	PAGE
	Latch Lever Spring	1-14
	Latch Stripper Bail Spring	1-14
	Push Lever Spring	1-14
	Pusher Stripper Bail Spring	1-7
	Sensing Bail Springs	1-13
	Sensing Pins Springs	1-13
	Storing Switch Contact Lever Extension Spring	1-10
	Tape Deflector Spring	1-20
	Tape Depressor Spring	1-20
	Tape-Out (6th) Pin Spring	1-13
	SECTION 2	
	DISASSEMBLY AND REASSEMBLY	
1.	GENERAL	2-1
2.	DISASSEMBLY AND REASSEMBLY	2-1
	Clutch Trip Assembly	2-1
	Distributor Block Assembly	2-2
	Distributor Shaft Assembly	2-1
	Idler Gear Assembly	2-1
	Pivot Shait	2-1
	Pivoted Sensing Head	2-2
	Sensing Shaft Assembly	2-1
	Storing Switch Assembly	2-2
	SECTION 3	
	LUBRICATION	
1.	GENERAL	3-1
2.	I UPDICATION DODITE	
L.	LUBRICATION POINTS	3-2
		3-2
		3-3
		3-4
		3-4
		3-5
		3-5
		3-6
		3-7
		3-7
		3-8
	4.11 Sensing Mechanism	3-8
	THE RESERVE AND ADDRESS OF THE RESERVE AND ADDRESS OF THE PARTY OF THE	-3-34

## SECTION 1

#### ADJUSTMENTS

# 1. GENERAL

- a. The adjustments of the Pivoted Transmitter Distributor are arranged in a sequence that should be followed if a complete readjustment of the unit were undertaken.
- b. After an adjustment has been completed, be sure to tighten any nuts or screws that may have been loosened.
- c. Tools and spring scales required to perform the adjustments are listed below, but are not supplied as a part of the equipment.

Part No.	Description	
110443	Spring Scale (8 oz)	
110444	Spring Scale (32 oz)	
110445	Spring Scale (64 oz)	
159133	Sensing Head Spacing Guage	

- d. The adjusting illustrations, in addition to indicating the adjusting tolerances, positions of moving parts and spring tensions, also show the angle at which the scale should be applied when measuring spring tensions.
- e. From time to time the requirements and procedures for the various adjustments may change. For this reason, the text of the adjustment in the latest issue should be read through before proceeding to make any readjustment.
- f. If a part that is mounted on shims is removed, the number of shims used at each of its mounting screws should be noted so that the same shim pile-up may be replaced when the part is remounted.
- g. If parts or assemblies are removed to facilitate readjustment and subsequently replaced, recheck any adjustment that may have been

affected by the removal of these parts or assemblies.

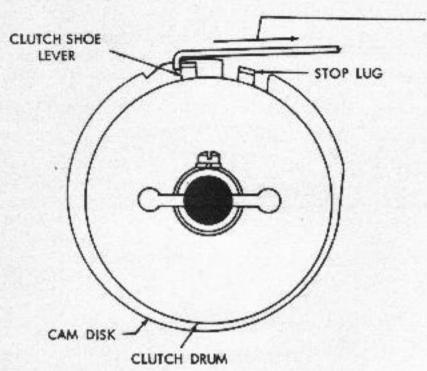
h. The spring tensions given in this bulletin are indications (not exact values) and should be checked with proper spring scales in the position indicated. Springs which do not meet the requirement and for which no adjusting procedure is given should be replaced by a new spring.

# NOTE -

When rotating either the sensing or distributor shaft by hand, the clutch does not fully DISENGAGE upon reaching its stop position. In order to relieve the drag on the clutch and permit the main shaft to rotate freely, apply pressure on a lug of the clutch disk with a screwdriver to cause it to engage its latch lever and thus DISENGAGE the internal expansion clutch shoes from dragging on the clutch drum.

- i. References made to left or right denote the attendent's left or right as he faces the front of the unit.
- j. When the requirement calls for the clutch to be DISENGAGED, the clutch shoe lever must be fully latched between its trip lever and latch lever so that the clutch shoes release their tension on the clutch drum. When ENGAGED, the clutch shoe lever is unlatched and the clutch shoes are wedged firmly against the clutch drum.
- k. The covers may be removed for inspection and minor repair of the unit; however, when more extensive maintenance is to be undertaken, it is recommended that the unit be removed from its sub-base to disconnect the power and to permit the unit to be inverted.

NOTE: REQUIREMENTS A AND B ARE ADJUSTED AT THE FACTORY AND SHOULD NOT BE DISTURBED UNLESS ASSOCIATED MECHANISMS HAVE BEEN REMOVED FOR SERVICING OR THERE IS REASON TO BELIEVE THAT THE REQUIREMENTS ARE NOT MET. THE FOLLOWING REQUIREMENTS APPLY TO BOTH THE SENSING CLUTCH AND DISTRIBUTOR CLUTCH.



# (A) CLUTCH SHOE LEVER SPRING

REQUIREMENT
CLUTCH ENGAGED AND CAM DISK
HELD TO PREVENT TURNING. SCALE
PULLED AT TANGENT TO CLUTCH,
MIN. 15 OZS,

MAX. 20 OZS.

TO MOVE CLUTCH SHOE LEVER IN CONTACT WITH STOP LUG.

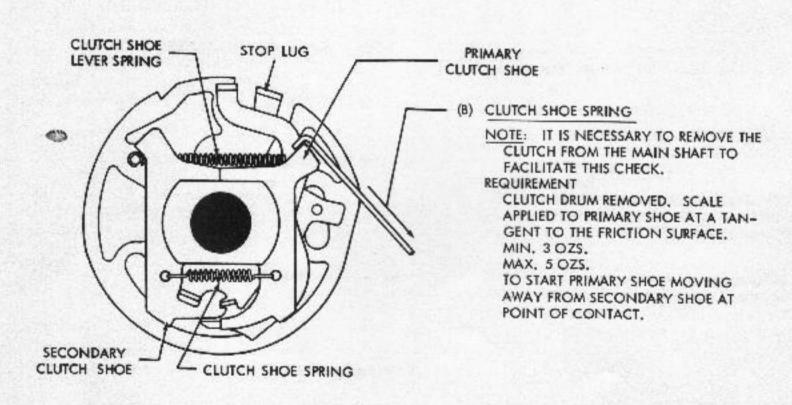


FIGURE 1-1 CLUTCH MECHANISM

NOTE: THE FOLLOWING REQUIREMENTS APPLY TO BOTH THE DISTRIBUTOR AND SENSING CAM SLEEVES.

THESE MECHANISMS SHOULD NOT BE DISTURBED UNLESS THERE IS REASON TO BELIEVE THE REQUIREMENTS ARE NOT MET.

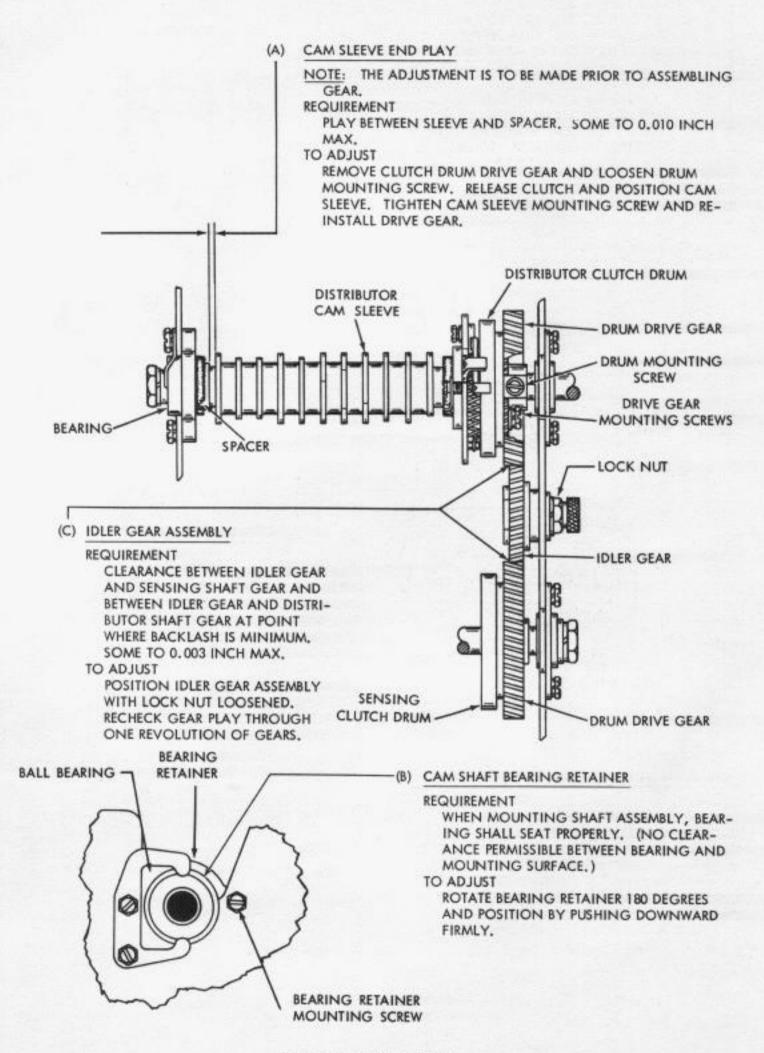


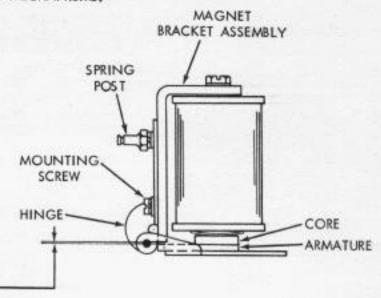
FIGURE 1-2 CAM SHAFTS

# NOTE: REQUIREMENTS APPLY TO BOTH CLUTCH TRIP MECHANISMS.

# (A) CLUTCH TRIP MAGNET ARMATURE HINGE REQUIREMENT

AIR GAP BETWEEN ARMATURE AND MAGNET ASSEMBLY BRACKET WITH ARMATURE FLUSH AGAINST MAGNET CORE. MIN. 0.004 - MAX. 0.008 INCH TO ADJUST

REMOVE ARMATURE EXTENSION SPRING. POSITION HINGE WITH SPRING POST AND HINGE MOUNT-ING SCREW LOOSENED. RECHECK AIR GAP AND REPLACE SPRING.



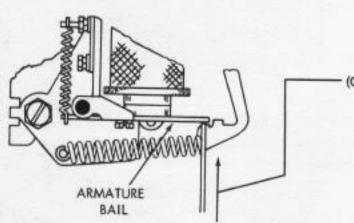
# PLATE MOUNTING SCREW (REAR OF UNIT) RESET CAM CLUTCH TRIP LEVER CLUTCH TRIP LEVER RESET EXTENSION LOWER EXTENSION REAR PLATE ARMATURE PLATE BAIL

### (B) CLUTCH TRIP ASSEMBLY MOUNT-ING PLATE

#### REQUIREMENT

CLEARANCE BETWEEN END OF ARMATURE BAIL AND LATCH-ING SURFACE OF CLUTCH TRIP LEVER LOWER EXTEN-SION WITH CLUTCH TRIP LEVER RESET EXTENSION ON HIGH PART OF CAM. (TAKE-UP PLAY IN PARTS FOR MIN-IMUM CLEARANCE.) MIN. 0.020 INCH MAX. 0.030 INCH

TO ADJUST POSITION PLATE WITH SCREWDRIVER IN LOWER ADJUSTING SLOT WITH PLATE ADJUSTING SCREW AND PLATE MOUNTING SCREW LOOSENED. (TAKE-UP PLAY IN TRIP LEVER IN DIRECTION OF CAM.)



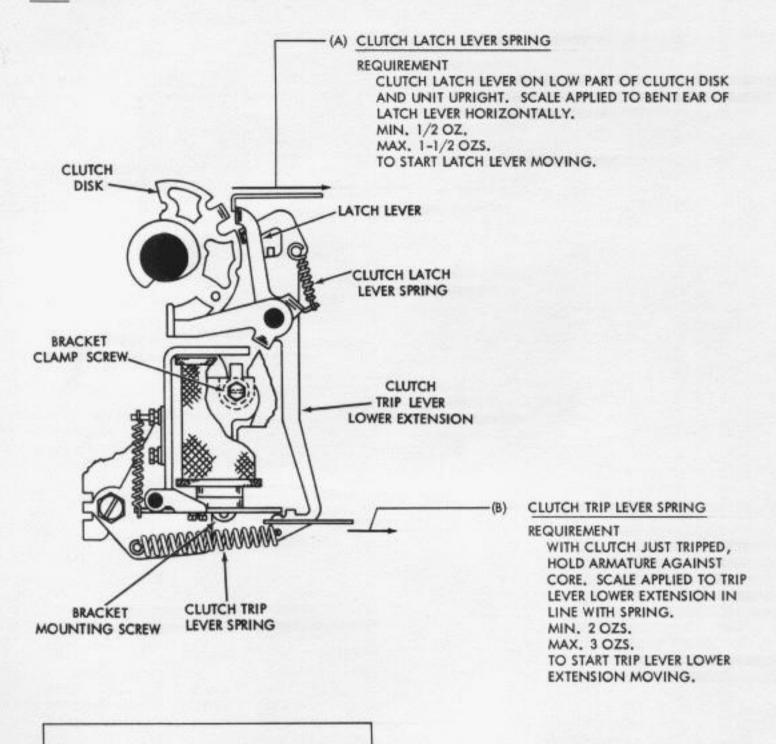
ADJUSTING SCREW

# (C) ARMATURE BAIL SPRING

## REQUIREMENT

TRIP LEVER RESET EXTENSION ON HIGH PART OF CAM. SCALE APPLIED TO LATCHING END OF ARMATURE BAIL. MIN. 2-1/2 OZS. MAX. 4-1/2 OZS. TO START ARMATURE BAIL MOVING.

## NOTE: REFER TO REQUIREMENTS IN PRECEDING PAGE.



# (C) MAGNET BRACKET

# REQUIREMENT

CLEARANCE BETWEEN ARMATURE BAIL
AND TOP EDGE OF TRIP LEVER LOWER
EXTENSION WITH CLUTCH TRIP LEVER
RESET EXTENSION ON HIGH PART OF
CAM AND ARMATURE FLUSH AGAINST
CORE. (TAKE-UP PLAY FOR MINIMUM
CLEARANCE.)

MIN. 0.030 INCH MAX. 0.040 INCH

# TO ADJUST

INSERT SCREWDRIVER IN UPPER SLOT AND PIVOT BRACKET, WITH BRACKET MOUNTING SCREW AND CLAMP SCREW LOOSENED.

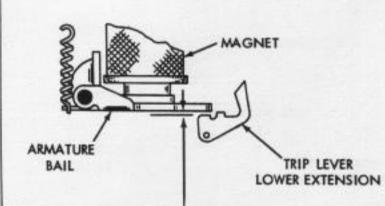


FIGURE 1-4 CLUTCH TRIP MECHANISM

# NOTE: REQUIREMENTS A AND B APPLY TO BOTH CLUTCHES.

# (A) CLUTCH TRIP LEVER UPPER EXTENSION

(1) REQUIREMENT

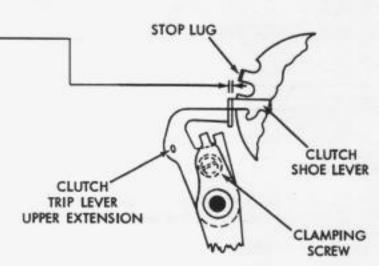
CLUTCH TRIP LEVER LATCHED (CLUTCH IN STOP POSITION). CLUTCH TRIP LEVER UPPER EXTENSION SHALL FULLY ENGAGE CLUTCH SHOE LEVER.

TO ADJUST

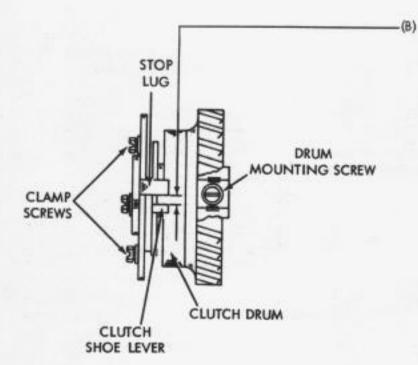
POSITION UPPER EXTENSION, WITH CLUTCH TRIP LEVER CLAMPING SCREW LOOSENED.

NOTE

WITH ARMATURE IN ATTRACTED POSITION,
THE CLEARANCE BETWEEN CLUTCH TRIP LEVER
UPPER EXTENSION AND THE SHOE LEVER
OR STOP LUG SHOULD BE AT LEAST 0.010 INCH
REFINE ABOVE ADJUSTMENT IF NECESSARY.







# (B) CLUTCH SHOE LEVER

REQUIREMENT

GAP BETWEEN CLUTCH SHOE LEVER AND ITS STOP LUG SHOULD BE 0.050 INCH TO 0.080 INCH GREATER WHEN CLUTCH IS ENGAGED THAN WHEN CLUTCH IS DISENGAGED.

TO CHECK

DISENGAGE CLUTCH, HOLD LATCH LEVER AWAY AND MEASURE GAP. APPLY A 64 OZ. SCALE TO THE SHOE LEVER WITH A FORCE OF 32 OZS. AGAIN MEASURE GAP WITH CLUTCH THUS ENGAGED

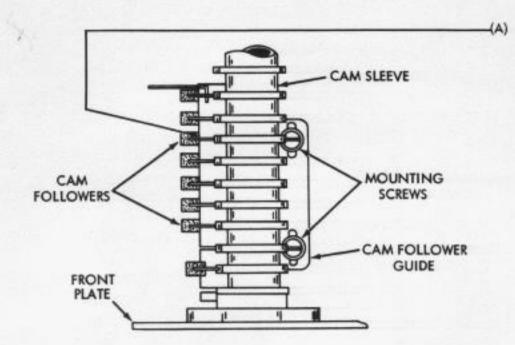
TO ADJUST

ENGAGE A WRENCH OR SCREWDRIVER ON A SCREW ON ADJUSTING DISK AND ROTATE DISK, WITH CLAMP SCREWS LOOSENED AND CLUTCH DISENGAGED,

NOTE: AFTER ADJUSTMENT, DISENGAGE
CLUTCH, REMOVE DRUM MOUNTING SCREW
AND ROTATE DRUM IN ITS NORMAL DIRECTION OF ROTATION TO MAKE CERTAIN THAT
IT DOES NOT DRAG ON SHOE. IF DRUM
DRAGS, REFINE ABOVE ADJUSTMENT.

FIGURE 1-5 CLUTCH MECHANISM

# NOTE: REMOVE OIL RESERVOIR AND DISTRIBUTOR BLOCK ASSEMBLY FOR REQUIREMENTS A, B AND C.



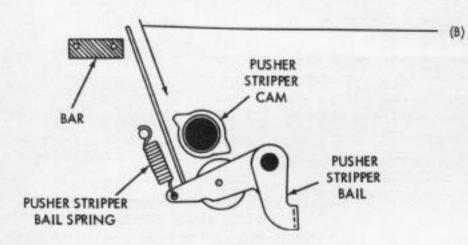
## (A) DISTRIBUTOR CAM FOLLOWER GUIDE

#### REQUIREMENT

AT LEAST ONE CAM FOLLOWER SHOULD ENGAGE CAM BY FULL THICKNESS OF THE FOLLOWER AS FOLLOWER IS MOVED FROM SIDE TO SIDE IN ITS GUIDE SLOT. OTHER CAM FOLLOWERS SHOULD ENGAGE BY 90 PER CENT IN SAME MANNER. ALL CAM FOLLOWERS SHALL MOVE FREELY IN GUIDE SLOTS.

#### TO ADJUST

POSITION GUIDE WITH CAM FOLLOWER GUIDE MOUNTING SCREWS LOOSENED, RECHECK REQUIREMENT.



# PUSHER STRIPPER BAIL SPRING

#### REQUIREMENT

WITH UNIT UPRIGHT, SELECT BLANK
COMBINATION, TRIP CLUTCH AND
ROTATE SHAFT TO STOP POSITION.
32 OZ SCALE APPLIED TO POINT JUST
BELOW SPRING ANCHOR,
MIN. 7 OZS,
MAX. 11 OZS.
TO START BAIL MOVING AWAY FROM
CAM.

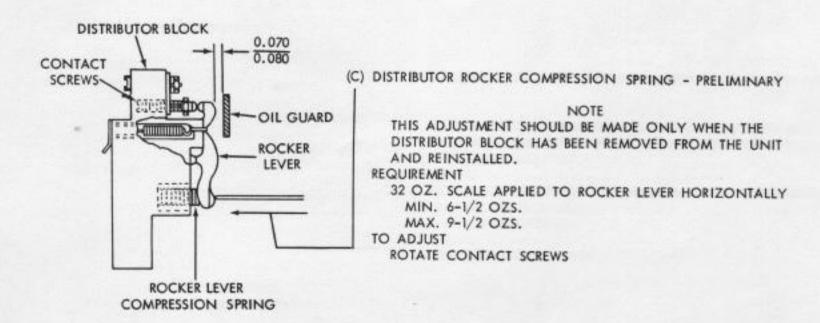
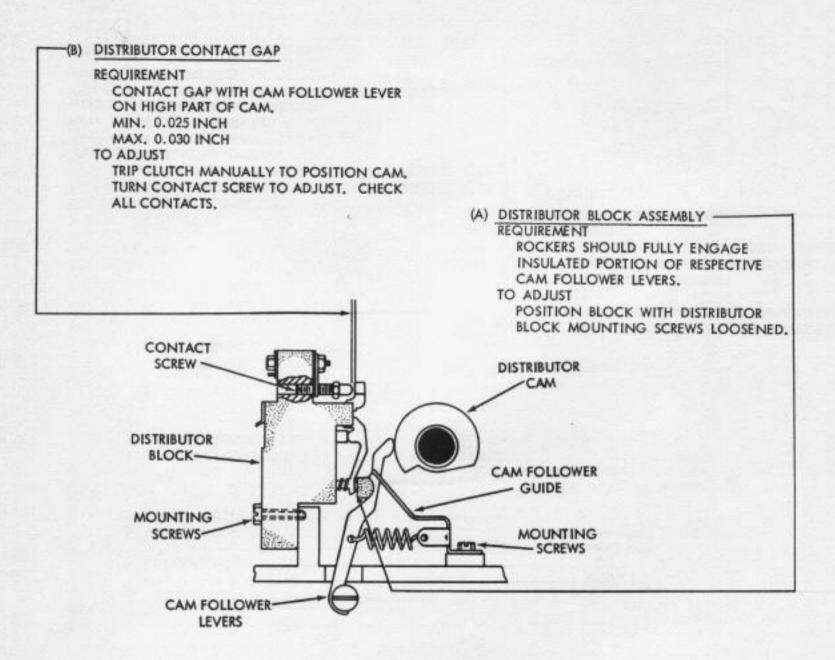
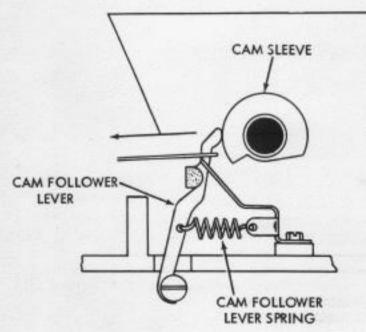


FIGURE 1-6 DISTRIBUTOR CONTACT MECHANISM

# NOTE: REINSTALL OIL RESERVOIR





# (C) CAM FOLLOWER LEVER SPRING

REQUIREMENT

CAM FOLLOWER LEVER ON HIGH PART OF

CAM, SCALE APPLIED JUST BELOW SLIDING

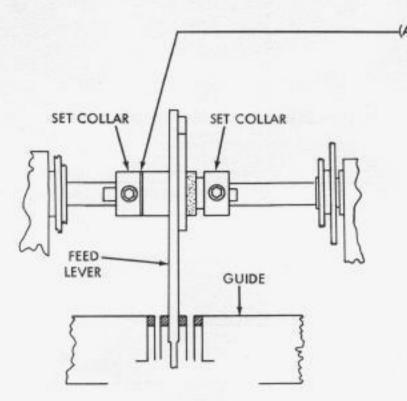
SURFACE OF LEVER HORIZONTALLY.

MIN. 1/2 OZ.

MAX. 1-1/2 OZS, TO START EACH LEVER

MOVING.

FIGURE 1-7 DISTRIBUTOR CONTACT MECHANISM



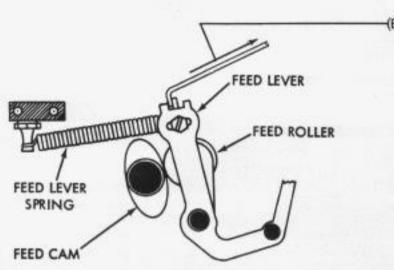
# (A) FEED LEVER SET COLLAR

#### REQUIREMENT

FEED LEVER SHOULD MOVE FREELY WITH-OUT BINDING AT GUIDE OR SET COLLARS.

# TO ADJUST

POSITION FEED LEVER, WITH SET COLLAR SCREWS LOOSENED.



# (B) FEED LEVER SPRING

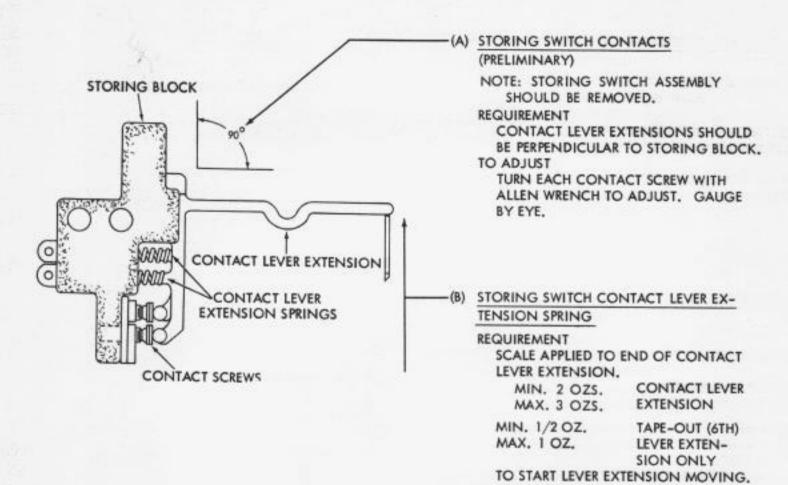
# REQUIREMENTS

SENSING CLUTCH TRIPPED AND FEED ROLLER OFF FEED CAM. SCALE APPLIED TO FEED LEVER.

MIN. 30 OZS.

MAX. 40 OZS.

TO START FEED ROLLER MOVING AWAY FROM CAM.



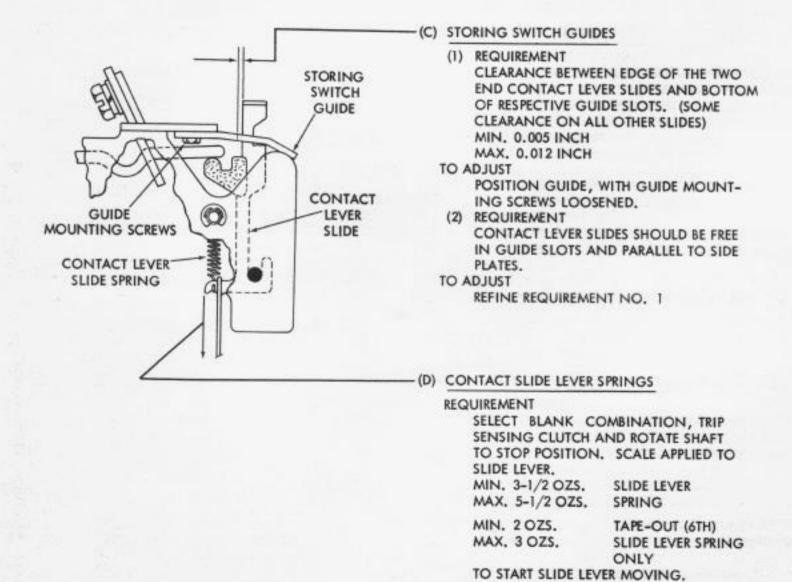
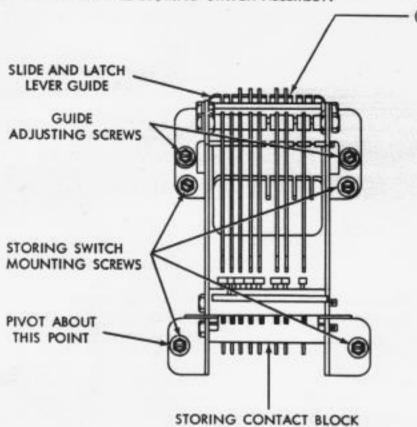


FIGURE 1-9 STORING SWITCH MECHANISM

NOTE: REINSTALL STORING SWITCH ASSEMBLY.



# (A) STORING SWITCH ASSEMBLY

#### REQUIREMENT

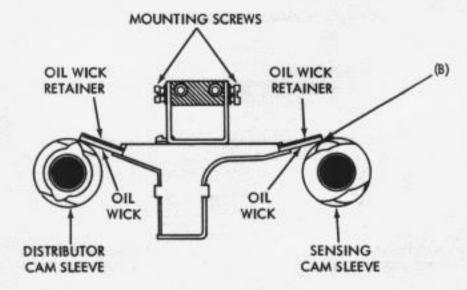
STORING SWITCH ASSEMBLY SHOULD ALIGN WITH LATCH LEVERS SO THAT LATCH LEVERS AND SLIDES FUNCTION WITHOUT BINDING.

#### TO CHECK

MANUALLY PUSH LATCH BAIL FOL-LOWER AWAY FROM CAM UNTIL LATCHES ARE FREE FROM GUIDE. RELEASE LATCH BAIL FOLLOWER AND NOTE IF LATCHES FALL INTO THEIR RESPECTIVE SLOTS.

#### TO ADJUST

PIVOT STORING SWITCH WITH STOR-ING SWITCH MOUNTING SCREWS LOOSENED. RECHECK REQUIREMENT.



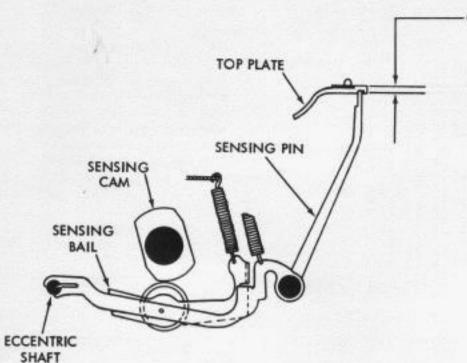
# OIL RESERVOIR ASSEMBLY

# REQUIREMENT

OIL WICKS SHALL REST LIGHTLY ON CAM SLEEVES AND BE PARALLEL TO CAM SLEEVE. DEFECTION OF WICK SHOULD NOT EXCEED 1/64 INCH.

#### TO ADJUST

POSITION OIL RESERVOIR ASSEM-BLY, WITH FOUR RESERVOIR BRACKET MOUNTING SCREWS LOOSENED. GUAGE DEFECTION VISUALLY. MAKE ADJUSTMENT ON INDIVIDUAL CAMS BY BENDING TEETH ON OIL WICK RETAINERS.



# (A) SENSING PINS

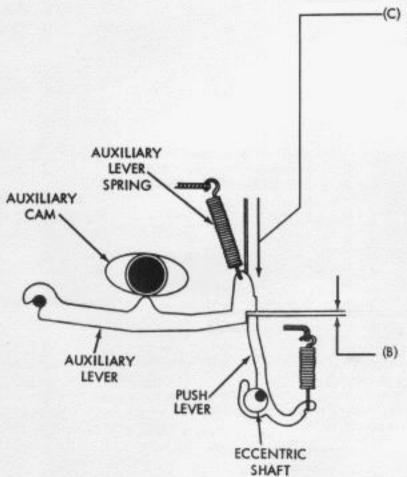
#### REQUIREMENT

IN STOP POSITION, HIGHEST SENSING PIN SHOULD BE FLUSH TO 0.005 INCH BELOW SURFACE OF TOP GUIDE PLATE.

# TO ADJUST

WITH CLUTCH LATCHED AND YOKE IN LOCKED POSITION, LOOSEN NUT ON ECCENTRIC SHAFT AND ADJUST ECCENTRIC SHAFT WITH HIGH PART OF ECCENTRIC TOWARD RIGHT OF UNIT, TIGHTEN NUT, ROTATE SHAFT AND RECHECK, CHECK THROUGHOUT SENSING HEAD TRAVEL, FOR TWO-CYCLE OPERATION, CHECK BOTH HALVES OF CAM SLEEVE.

NOTE: HIGH PART OF ECCENTRIC
IS MARKED ON FRONT END OF
SHAFT BY A SMALL INDENTATION.



#### (C) AUXILIARY LEVER SPRING

### REQUIREMENT

EACH AUXILIARY LEVER ON LOW PART OF ITS CAM. SCALE APPLIED TO LEVER JUST AHEAD OF SPRING.
MIN. 1-1/2 OZS.
MAX. 3 OZS.
TO START AUXILIARY LEVER MOVING.

# PUSH LEVER REQUIREMENT

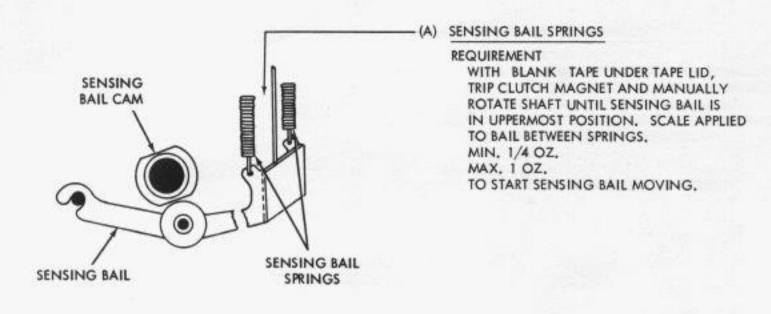
WITH FIRST ONE AND THEN THE
OTHER OF THE TWO PUSH LEVERS
ON THE LOW PART OF CAM, THE
AUXILIARY LEVER WITH THE LEAST
CLEARANCE SHOULD CLEAR THE TIP
OF ITS PUSH LEVER BY
MIN. 0.025 INCH

MIN. 0.025 INCH MAX. 0.040 INCH

#### TO ADJUST

WITH PUSH LEVER ECCENTRIC SHAFT LOCK NUT (FRONT PLATE) LOOSEN-ED AND HIGH PART OF ECCENTRIC LOCATED TOWARD THE UPPER RIGHT, ROTATE ECCENTRIC TOWARD RIGHT OR LEFT.

FIGURE 1-11 SENSING MECHANISM



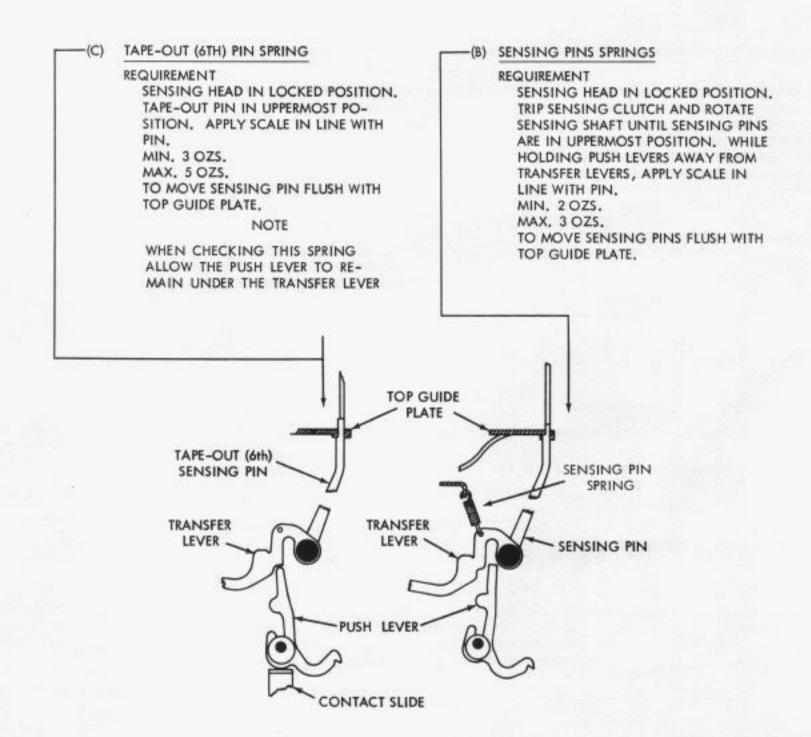
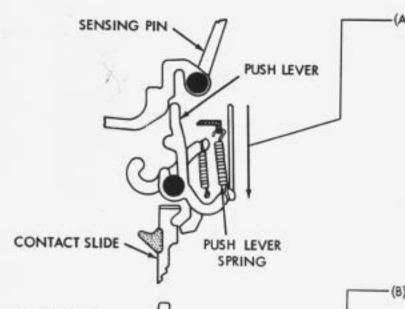


FIGURE 1-12 SENSING MECHANISM SPRINGS



LATCH LEVER

SPRING

CONTACT SLIDE

LATCH LEVER

# (A) PUSH LEVER SPRING

# REQUIREMENT

CLUTCH TRIPPED AND SHAFT ROTATED UNTIL SENSING PINS ARE IN UPPERMOST POSI-TION. APPLY SCALE AT RIGHT ANGLE TO EXTREME LOWER END OF PUSH LEVER (SEN-SING PUSH LEVERS ONLY). MIN. 1 OZ.

MAX. 2 OZS.

TO START PUSH LEVER MOVING.

NOTE: BE SURE CONTACT SLIDES DO NOT INTERFERE WITH MOVEMENT OF PUSH LEVERS.

# (B) LATCH LEVER SPRING

#### REQUIREMENT

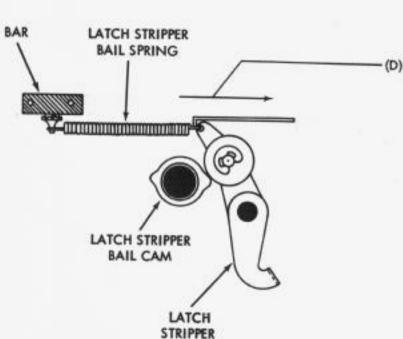
SELECT BLANK COMBINATION, TRIP SEN-SING CLUTCH AND ROTATE SHAFT TO STOP POSITION. SCALE APPLIED AT RIGHT ANGLE TO TOP OF LATCH LEVER,

MIN. 1 OZ.

MAX. 2-1/2 OZS.

TO START LATCH LEVER MOVING.

NOTE: TAKE CARE NOT TO DAMAGE PUSH LEVER SPRINGS IN CHECKING REQUIREMENT.



BAIL

# (D) LATCH STRIPPER BAIL SPRING

#### REQUIREMENT

TRIP CLUTCH, ROTATE SHAFT SO LATCH BAIL FOLLOWER ROLLER IS ON LOW PART OF CAM. SCALE APPLIED TO TOP OF LATCH STRIPPER BAIL. MIN. 2-3/4 OZS.

MAX. 5 OZS.

TO START LATCH STRIPPER BAIL MOVING.

FIGURE 1-13 SENSING MECHANISM SPRINGS

# (A) CONTACT SLIDE LEVER

REQUIREMENT

CLEARANCE BETWEEN CLOSEST PUSH LEVER AND CONTACT LEVER SLIDE WITH SENSING PINS IN UPPERMOST POSITION, PUSH LEVERS SELECTED AND LATCH LEVERS STRIPPED.

MIN. 0.005 INCH

MAX. 0.012 INCH

TO ADJUST

SENSING SHAFT CLUTCH TRIPPED AND SHAFT ROTATED UNTIL SENSING PINS ARE IN UPPERMOST POSITION. TRIP LATCH LEVERS MANUALLY. POSITION ECCENTRIC SHAFT TOWARD THE RIGHT WITH LOCKING NUTS LOOSENED.

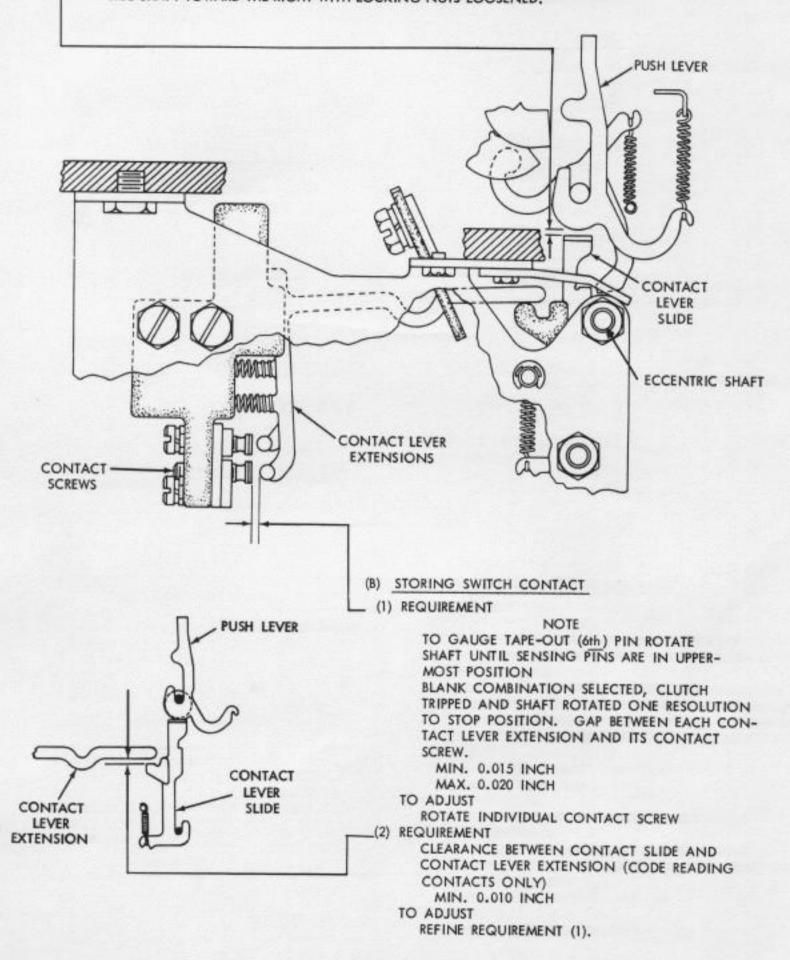
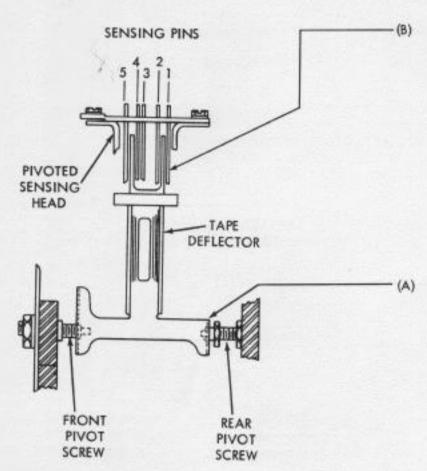


FIGURE 1-14 DISTRIBUTOR MECHANISM



# (B) TAPE DEFLECTOR

#### REQUIREMENT

SENSING PINS 1-2 AND 4-5 SHALL PASS FREELY VERTICAL EARS ON TAPE DEFLEC-TOR WITH PIVOTED SENSING HEAD IN LOCKED POSITION.

#### TO ADJUST

POSITION TAPE DEFLECTOR WITH FRONT PIVOT SCREW.

# (A) SENSING HEAD PIVOT SCREWS

(1) REQUIREMENT

SENSING YOKE SHALL BE FREE OF BINDS

TO ADJUST

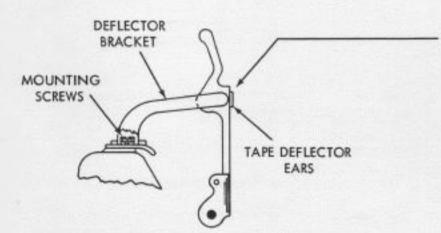
POSITION REAR PIVOT SCREW FOR MIN-IMUM END PLAY WITHOUT BINDING.

(2) REQUIREMENT

SENSING PINS SHALL MOVE FREELY IN TOP PLATE

TO ADJUST

REFINE REQUIREMENT NO. 1 ADJUST-MENT.



# (C) TAPE DEFLECTOR BRACKET

# REQUIREMENT

ARMS OF DEFLECTOR BRACKET SHALL CONTACT EARS ON TAPE DEFLECTOR SIMULTANEOUSLY WITH SENSING YOKE IN FIXED POSITIONS.

# TO ADJUST

POSITION DEFLECTOR BRACKET WITH MOUNTING SCREWS LOOSENED.

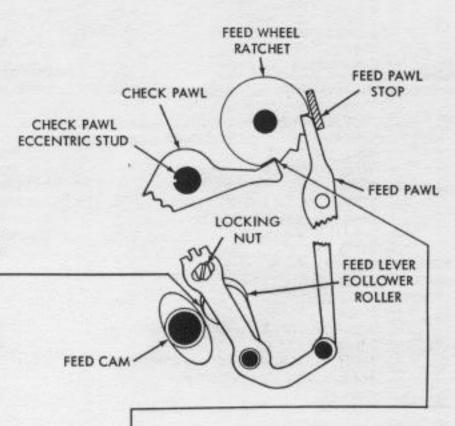
# (A) FEED PAWL (PRELIMINARY)

REQUIREMENT

FEED LEVER FOLLOWER ROLLER SHALL BE OFF CAM WHEN FEED PAWL RESTS AGAINST ITS UPWARD STOP.

TO ADJUST

TRIP CLUTCH AND ROTATE SHAFT UNTIL FEED PAWL IS IN ITS UP-PER POSITION AND BOTTOMED ON ITS STOP, POSITION ROLLER WITH LOCK NUT LOOSENED, NOTE: FOR 2-CYCLE OPERATION CHECK BOTH SIDES OF FEED CAM,



# (B) CHECK PAWL

(1) REQUIREMENT
CHECK PAWL SHALL ENGAGE BOTH
TEETH ON RATCHET WITH FEED PAWL
IN ITS UP POSITION,

TO ADJUST

ROTATE CHECK PAWL ECCENTRIC STUD.
NOTE: GROOVE ON ECCENTRIC STUD
(HIGH PART OF ECCENTRIC) MUST BE ON
LEFT SIDE DURING ADJUSTMENT.

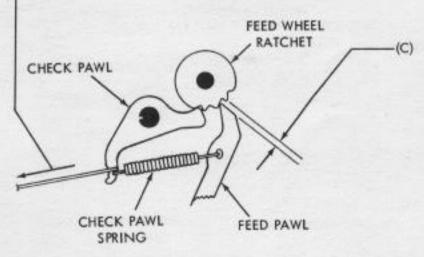
(2) REQUIREMENT
FEED WHEEL SHALL NOT MOVE WITH
SENSING CLUTCH IN STOP POSITION
(FEED PAWL DOWN FULLY).
NOTE: CHECK REQUIREMENT AROUND
ENTIRE PERIPHERY OF RATCHET.

TO ADJUST

REFINE REQUIREMENT NO. 1
NOTE: USE SLIGHT PRESSURE ON FEED
WHEEL TO PREVENT FALSE INDICATION DUE TO OVER-RIDING CHECK
PAWL SPRING.

# -(D) CHECK PAWL SPRING

REQUIREMENT
SENSING CLUTCH IN STOP
POSITION. SCALE APPLIED
TO CHECK PAWL.
MIN. 7 OZS.
MAX. 11 OZS.
TO START CHECK PAWL
MOVING.



# (C) FEED PAWL (FINAL)

REQUIREMENT

CLEARANCE BETWEEN FEED PAWL AND FEED RATCHET TOOTH WITH CLUTCH IN STOP POSITION.
MIN. 0.030 INCH MAX. 0.035 INCH

TO ADJUST

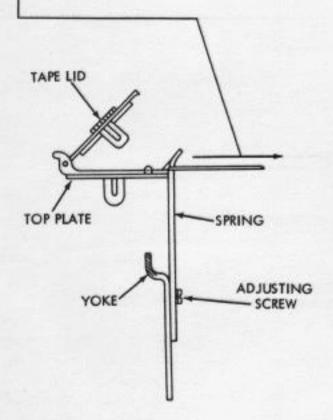
REFINE FEED PAWL PRELIMINARY ADJUSTMENT (A).

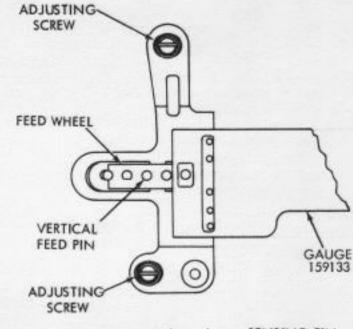
# -(B) TAPE RETAINING LID LATCH

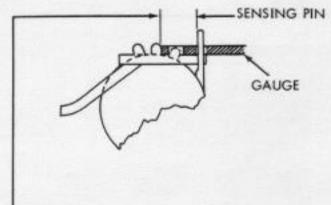
- (1) REQUIREMENT
  TENSION REQUIRED TO START
  TAPE RETAINING LID LATCH
  SPRING AWAY FROM TOP PLATE,
  MIN. 1-1/2 OZS,
  MAX. 2-1/2 OZS,
- TO ADJUST
  BOW LID LATCH SPRING WITH
  FINGERS. DO NOT REMOVE
  SPRING FROM YOKE.
- (2) REQUIREMENT
  WHEN LATCHED, NO PLAY BETWEEN TAPE RETAINING LID AND
  TOP PLATE.
- TO ADJUST

  POSITION LID LATCH SPRING WITH
  ADJUSTING SCREW LOOSENED.

  NOTE: BE SURE LID LATCH SPRING
  ALIGNS WITH LID ON TAPE RETAINING LID.

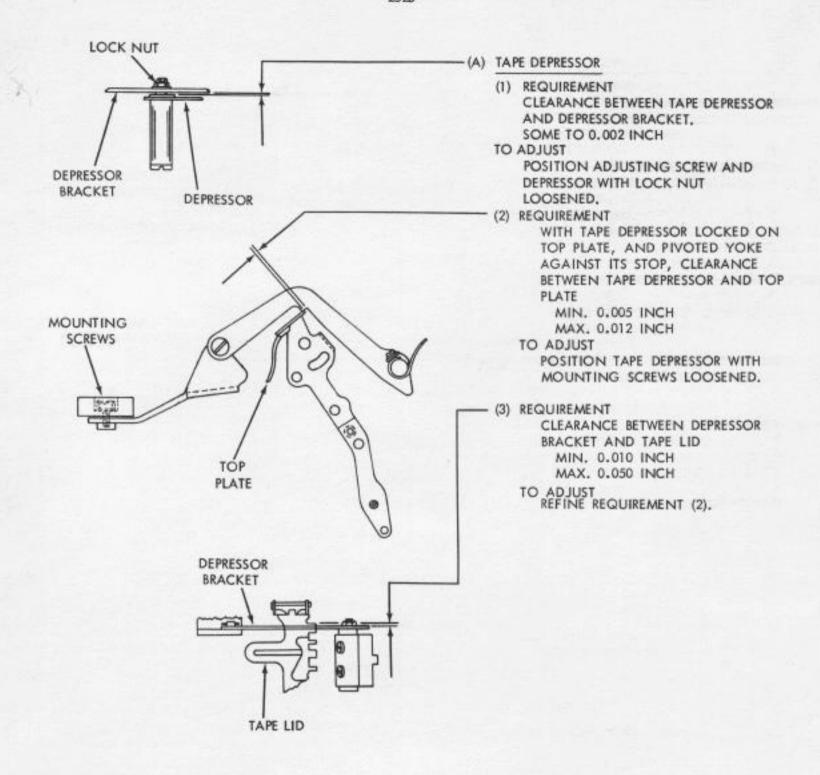


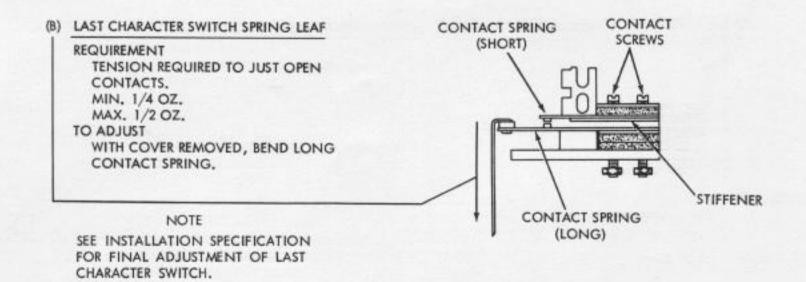


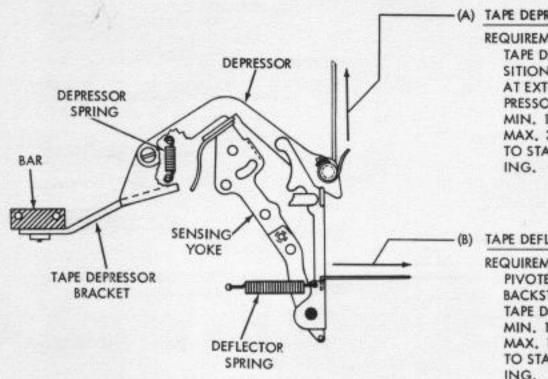


#### (A) TOP PLATE

- (1) REQUIREMENT
  SPACING BETWEEN VERTICAL FEED WHEEL
  PIN AND SENSING PINS. -0.300 INCH
- TO ADJUST
  WITH PIVOTED SENSING HEAD AGAINST
  ITS BACKSTOP, TRIP CLUTCH AND ROTATE
  SHAFT UNTIL SENSING PINS ARE IN UPPERMOST POSITION. WITH TOP PLATE
  MOUNTING SCREWS LOOSENED, PLACE
  GAUGE 159133 ON TOP PLATE AND POSITION TOP PLATE. RECHECK REQUIREMENT.
- (2) REQUIREMENT
  TAPE RETAINING LID MUST CENTER OVER
  TOP PLATE (GAUGE VISUALLY).
- TO ADJUST REFINE REQUIREMENT NO. 1







# (A) TAPE DEPRESSOR SPRING

#### REQUIREMENT

TAPE DEPRESSOR IN LOCKED PO-SITION. SCALE APPLIED TO LIP AT EXTREME RIGHT END OF DE-PRESSOR VERTICALLY. MIN. 1/4 OZ. MAX. 3/4 OZ. TO START TAPE DEPRESSOR MOV-

# (B) TAPE DEFLECTOR SPRING

#### REQUIREMENT

PIVOTED SENSING HEAD AGAINST BACKSTOP. SCALE APPLIED TO TAPE DEFLECTOR HORIZONTALLY. MIN. 1/2 OZ. MAX. 1-1/2 OZS. TO START TAPE DEFLECTOR MOV-ING.

FIGURE 1-19 TAPE DEPRESSOR AND TAPE DEFLECTOR

#### SECTION 2

#### DISASSEMBLY AND REASSEMBLY

# 1. GENERAL

- a. In order to replace parts it will often necessitate disassembly of portions of the pivoted transmitter distributor. The disassembly procedures in this section break the machine into its various subassemblies. Further disassembly procedures are not described but may be undertaken by maintenance personnel as necessary. For detailed illustrations of parts which are discussed in the following text, refer to the Teletype Model 28 Pivoted Transmitter Distributor (LAXD) Parts Bulletin.
- b. Perform any necessary adjustments after reassembly of the unit.

# 2. DISASSEMBLY AND REASSEMBLY

# a. Idler Gear Assembly

- To remove idler gear assembly, remove feed lever spring (82727) and latch stripper bail spring (125252).
- (2) Remove bar assembly by removing four screws (152893) and lock washers (3640).
- (3) Pull out idler gear oil retainer plug (158789) and remove leather washer (85318).
- (4) Remove idler gear bearing stud lock nut (3595), lock washer (158622) and flat washer (76081).
- (5) Remove idler gear bearing stud (158790), idler gear assembly (158791) and spacer (158792) as a unit.
- (6) To install idler gear assembly, reverse disassembly procedure.

# b. Sensing Shaft Assembly

- To remove sensing shaft assembly, remove idler gear (see paragraph 2a).
- (2) Remove the front bearing clamp (156788) by removing three screws (151630) and lock washers (2191).

- (3) Remove the rear bearing clamp (158847) by removing two screws (151722) and lock washers (2191).
  - (4) Remove sensing shaft assembly.
- (5) To install sensing shaft assembly, reverse the disassembly procedure.
- c. Distributor Shaft Assembly. Follow the sensing shaft procedure in step b. above.

# d. Clutch Trip Assembly

- To remove the clutch trip assembly, disconnect wires leading to the clutch magnet (252M).
- (2) Remove the plate mounting screw (151630), lock washer (2191) and flat washer (76099) and the plate adjusting screw (151630), lock washer (2191) and flat washer (7002).
- (3) Withdraw clutch trip assembly from bottom side of unit.
- (4) To install clutch trip assembly, reverse disassembly procedure.

# e. Pivot Shaft

- (1) To remove the pivot shaft, remove the sensing shaft assembly (paragraph b. above).
- (2) Remove two ring retainers (119652) (one is hidden under a felt washer).
  - (3) Loosen the collar set screws (158852).
- (4) Remove pivot shaft nut (3599) and lock washer (3640).
- (5) Remove the pivot shaft (158819) by pushing it toward the rear plate, being careful not to lose the feed lever collars and felt washers (156515).
- (6) To install pivot shaft, reverse disassembly procedure.

# f. Pivoted Sensing Head

- (1) To remove sensing head and tape deflector, remove the last character contact assembly. The contact assembly is secured into two screws (153799), lock washers (3640) and flat washers (2034).
  - (2) Remove check pawl spring (45104).
  - (3) Remove tape deflector spring (82999).
- (4) Loosen rear pivot screw lock nut (76474) and run the rear pivot screw (158801) as far as possible into the casting.
- (5) Pull the sensing pins down and free from the top plate (159153).
- (6) Loosen front pivot screw lock nut (112626).
- (7) Turn front pivot screw (158800) until deflector (159158) is free from the pivot screw.
  - (8) Remove sensing head and tape deflector.

- (9) To install sensing head and tape deflector, reverse disassembly procedure.
  - g. Storing Switch Assembly
- To remove the storing switch assembly, disconnect cable (159809).
- (2) Remove four mounting screws (151631), lock washers (2191) and flat washers (7002).
  - (3) Remove storing switch assembly.
- (4) To install storing switch assembly, reverse disassembly procedure.
  - h. Distributor Block Assembly
- To remove the distributor block assembly, disconnect cable (159809).
- (2) Remove three mounting screws (153839), lock washers (2191) and flat washers (7002).
  - (3) Remove distributor block assembly.
- (4) To install distributor block assembly, reverse disassembly procedure.

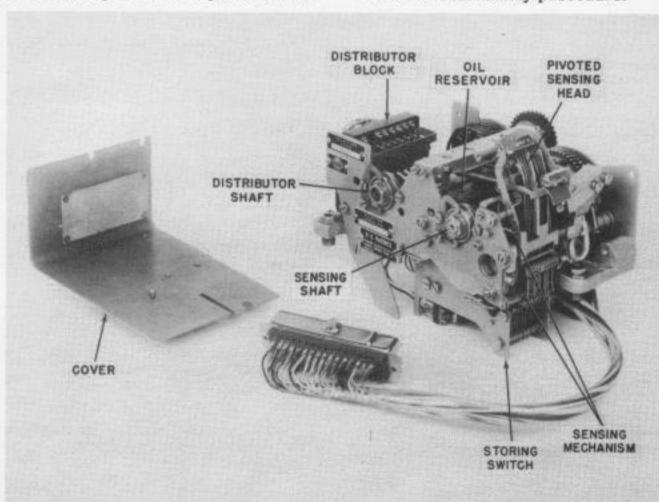


Figure 2-1. Components and Mechanisms

#### SECTION 3

# LUBRICATION

# 1. GENERAL

a. The pivoted transmitter distributor should be lubricated before being placed in service or prior to storage. After a few weeks of service re-lubricate to make certain that all specified points receive lubrication. Thereafter, the lubrication schedule shall be followed:

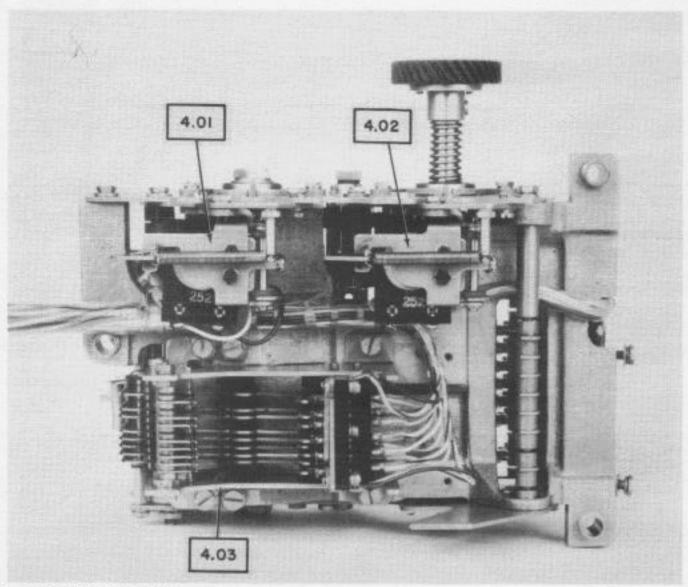
OPERATING SPEED	LUBRICATION INTERVAL
01222	****
60 W.P.M.	3000 hours or
	1 year*
75 W.P.M.	2400 hours or
	1 year*
100 W. P. M.	1500 hours or
	6 months*
200 W.P.M.	1000 hours or
	4 months*

<sup>\*</sup>Whichever occurs first.

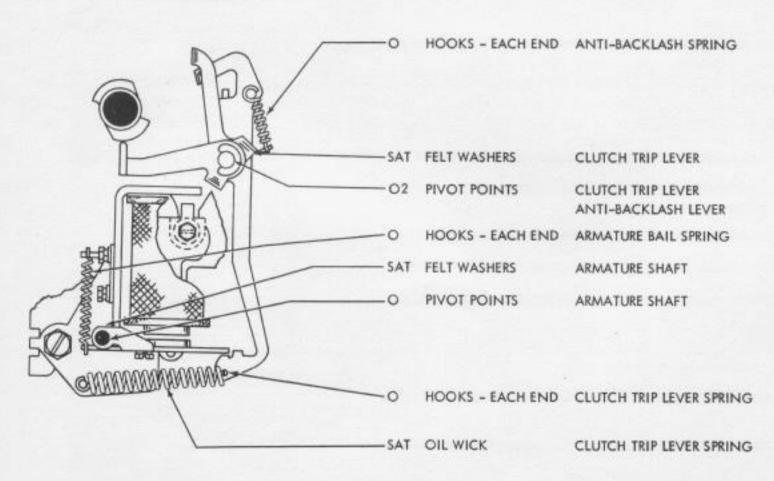
b. Teletype KS7470 oil should be used for the lubrication of all points where oil is specified. KS7471 grease should be used at all points where grease is specified. All felt lubricating washers and all moving surfaces should be thoroughly lubricated. However, over-lubrication which would allow oil to drip or grease to be thrown on other parts should be avoided. Special care should be exercised to avoid getting oil or grease on any contact point face.

- c. The following general instructions will supplement the specific points of lubrication which are illustrated on subsequent pages.
- (1) Lubricate all spring eyes with one drop of oil.
  - (2) Cam surfaces are to be lightly oiled.
- (3) The gears are to be covered with a light coat of grease.
- (4) All felt oil retainers are to be saturated with oil.
  - (5) All pivot points are to be oiled.
  - (6) All sliding surfaces are to be lightly oiled.
- d. The illustration symbols indicate the following lubrication directions:

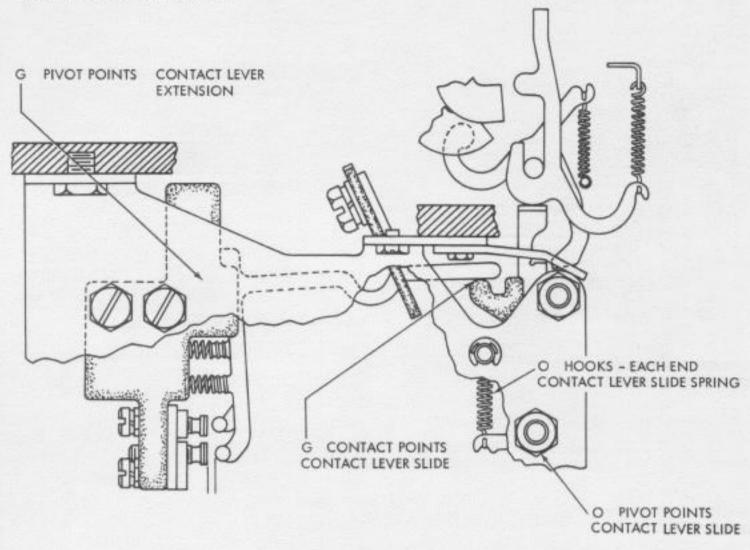
0	Apply 1 drop of oil
O2	Apply 2 drops of oil
O3	Apply 3 drops of oil
O20	Apply 20 drops of oil
G	Apply thin film of grease
SAT	Saturate with oil

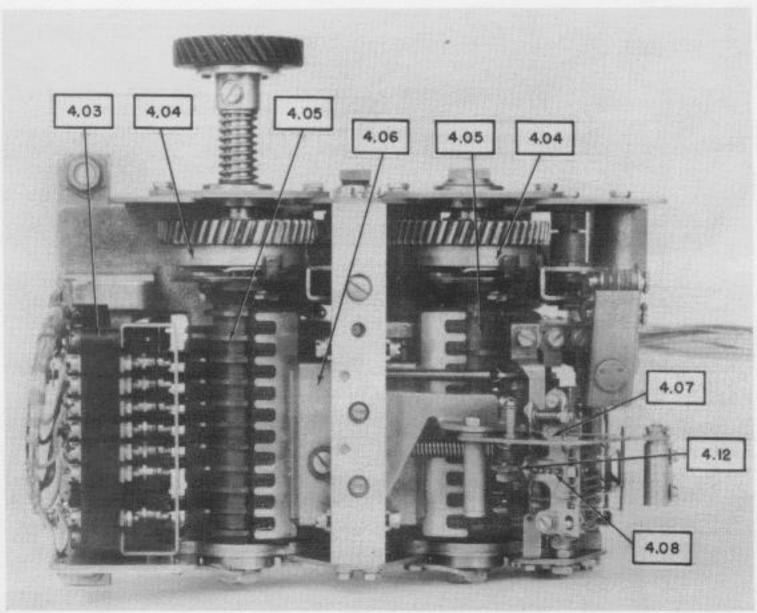


4.01 CLUTCH TRIP ASSEMBLIES

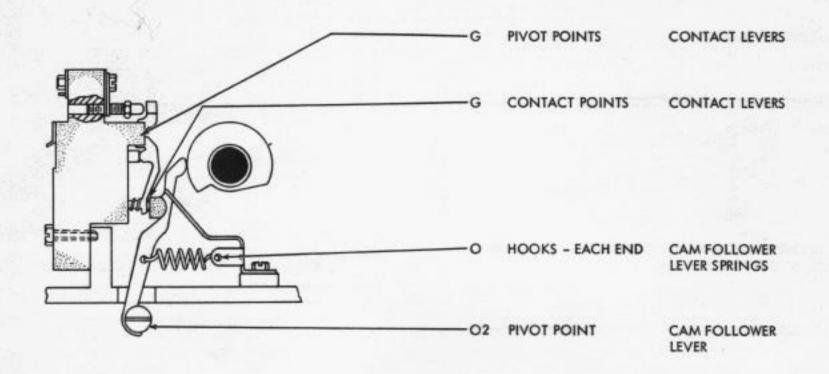


# 4.02 STORING SWITCH ASSEMBLY

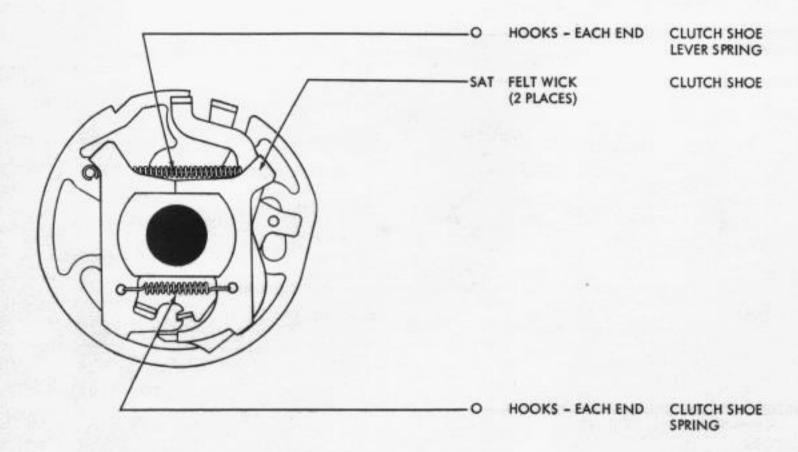




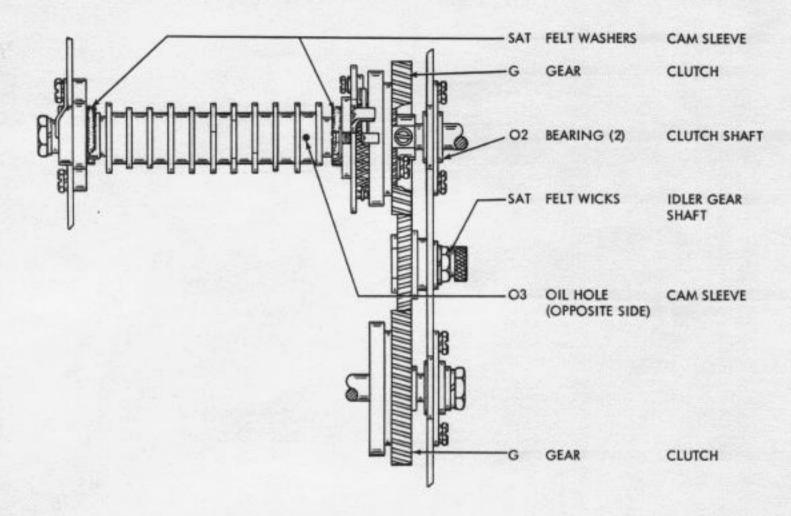
# 4.03 DISTRIBUTOR BLOCK ASSEMBLY



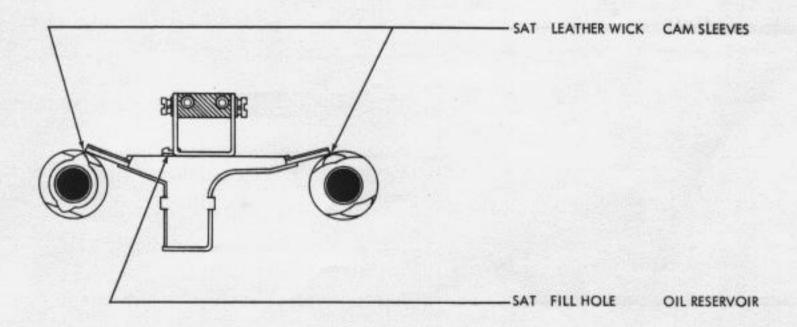
# 4.04 CLUTCH ASSEMBLIES

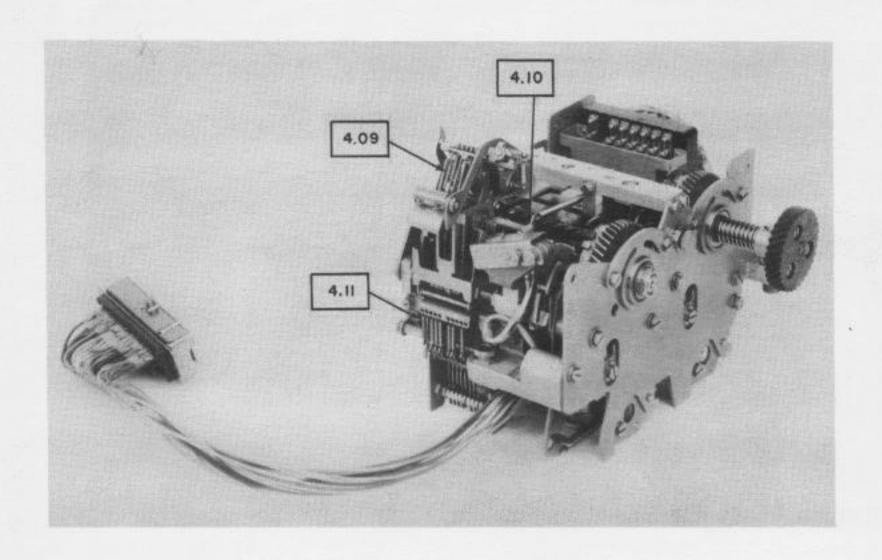


# 4.05 CAM SLEEVE ASSEMBLIES

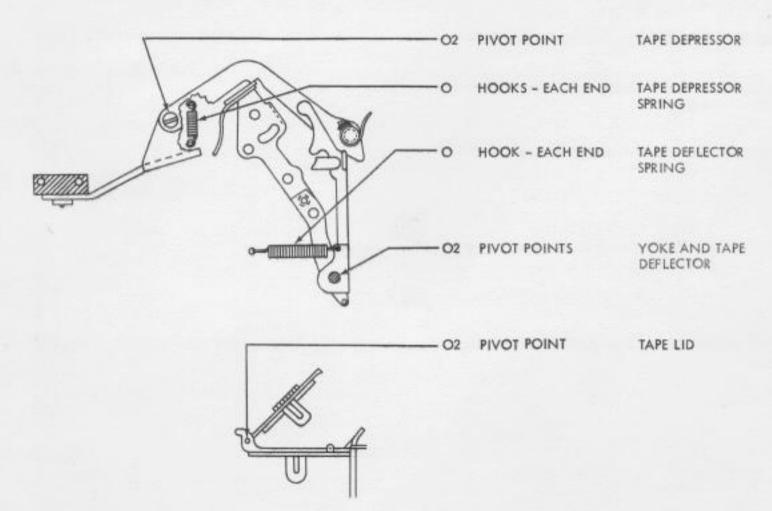


# 4.06 OIL RESERVOIR ASSEMBLY

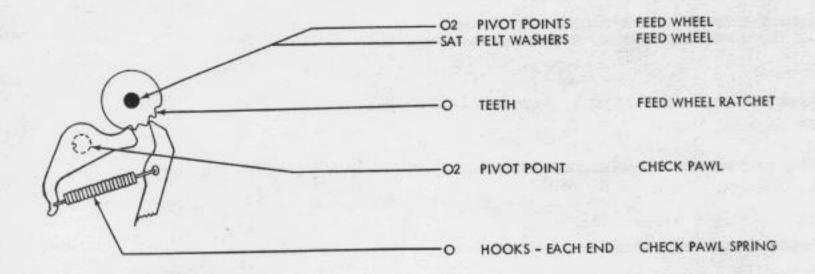




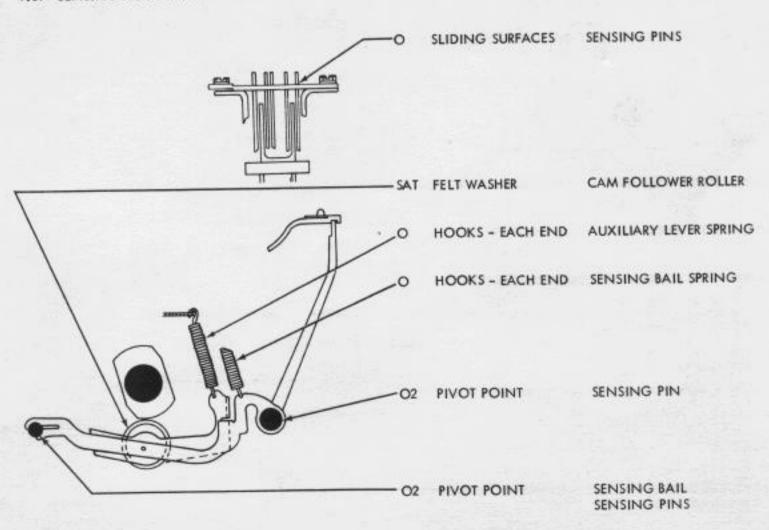
# 4.07 PIVOTED SENSING HEAD



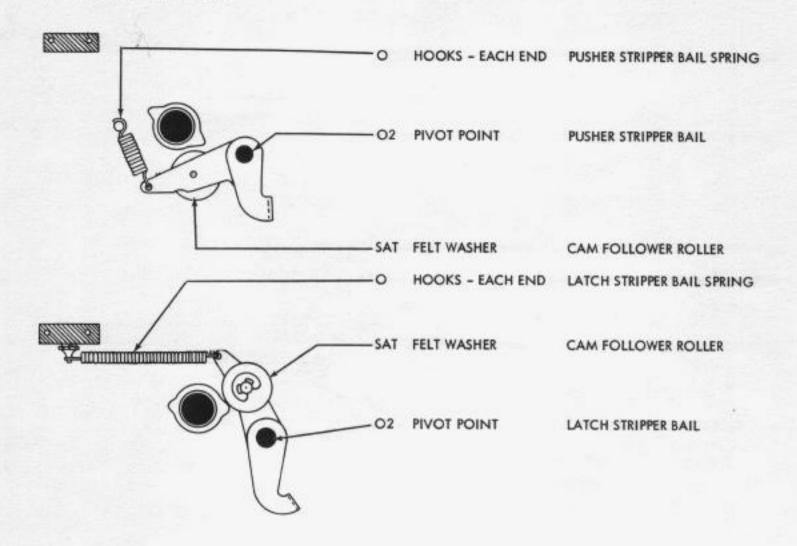
# 4.08 CHECK PAWL AND FEED WHEEL



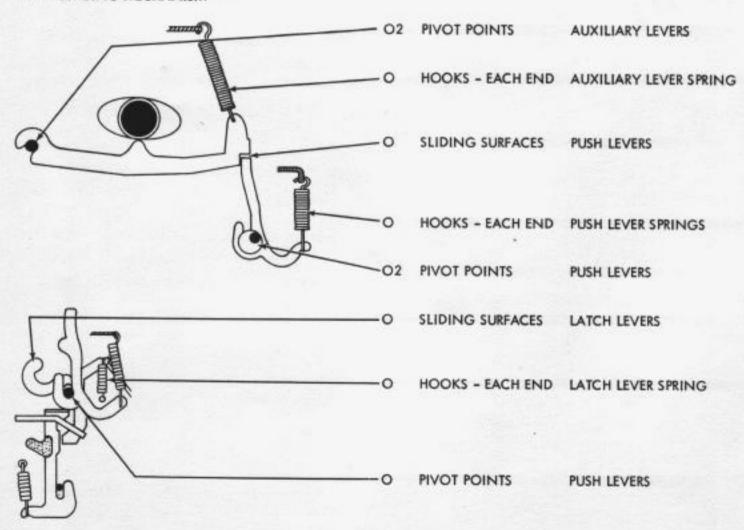
# 4.09 SENSING MECHANISM



# 4.10 SENSING MECHANISM



# 4.11 SENSING MECHANISM



# 4.12 FEED MECHANISM

