

"DATASPEED[®]" TAPE RECEIVER 5B

ADJUSTMENT, LUBRICATION, REMOVAL AND REPLACEMENT OF COMPONENTS

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Fan Assembly		1. GENERAL	
Fan housing mounting bracket	9	1.01 This section contains adjustment, lubri- cation, removal and replacement of com- ponents information for DATASPEED Tape Receiver 5B. It is reissued to add adjustments and correct existing adjustments, add a lubri- cation requirement, change the title and include TCN 906. Because this is a general revision, marginal arrows used to indicate changes and additions have been omitted.	
Fan sleeve	9	1.02 For description, adjustment, lubri- cation, and removal and replacement of components for the Tape Punch Unit (DRPE), refer to Sections 592-803-100, 592-803-700, 592-803-701, and 592-803-702. For informa- tion concerning Tape Receiver 5B options, refer to Sections 592-808-101 and 592-808-102.	
Tape Handling Mechanism		CAUTION: TURN OFF POWER BEFORE MAKING ANY ADJUSTMENTS TO UNIT.	
Bracket and roller	12	1.03 Adjustment steps are given in a sequence that would be followed if a complete read- justment of the equipment were made. Parts or assemblies may be removed to simplify ad- justments. If there is more than one adjustment for an illustration, follow the letter sequence (A), (B), (C), etc.	
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SECTION 592-808-700

1.04 Unless stated otherwise, left or right, front or rear, and up or down refers to normal operating position (front view). Nuts and screws are to be loosened friction tight, then tightened after the adjustment is completed.

1.05 Refer to Section 570-005-800 for a list of adjustment tools. Punch driver card adjustments are rarely (if ever) needed. If however they are needed, an oscilloscope and a small screwdriver would be required.

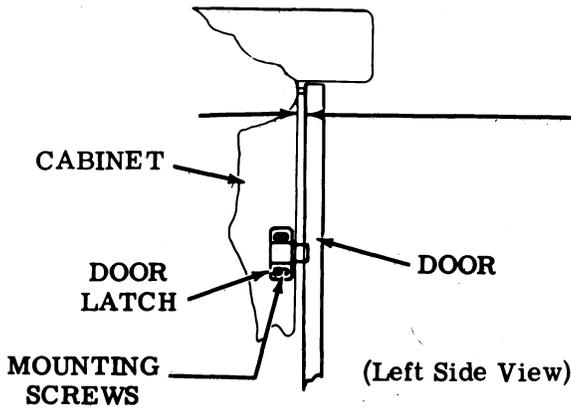
1.06 All spring tension ratings are indications, not exact values. Check readings taken in the positions shown with an accurately calibrated spring tension scale. If no tension spring adjustment procedure is given, replace spring.

1.07 Read adjustment procedures carefully before making any adjustment. Check all movable parts for possible binds before applying power.

2. ADJUSTMENTS

CABINET

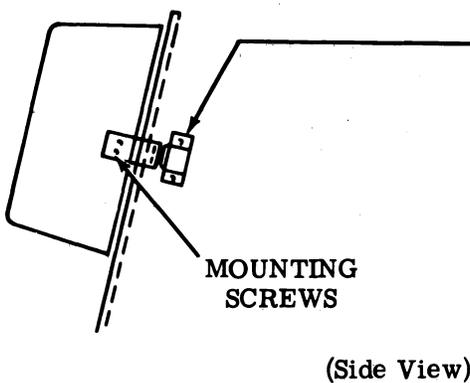
2.01 Cabinet Structure



DOOR LATCH

Requirement
Minimum clearance between door and rubber bumpers with door latched.

To Adjust
Loosen mounting screws. Move latch to front or rear to meet requirement. Tighten screws.



PUNCH COVER LATCHES

Requirement
Cover to be held firmly against the front panel at the top and two sides.

To Adjust
Loosen mounting screws. Move magnetic latches in or out to meet requirement. Tighten screws.

2.02 Cabinet Structure (continued)

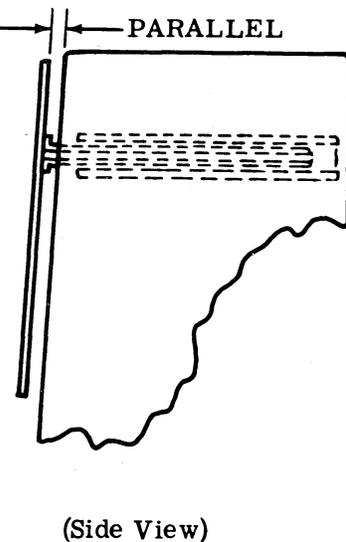
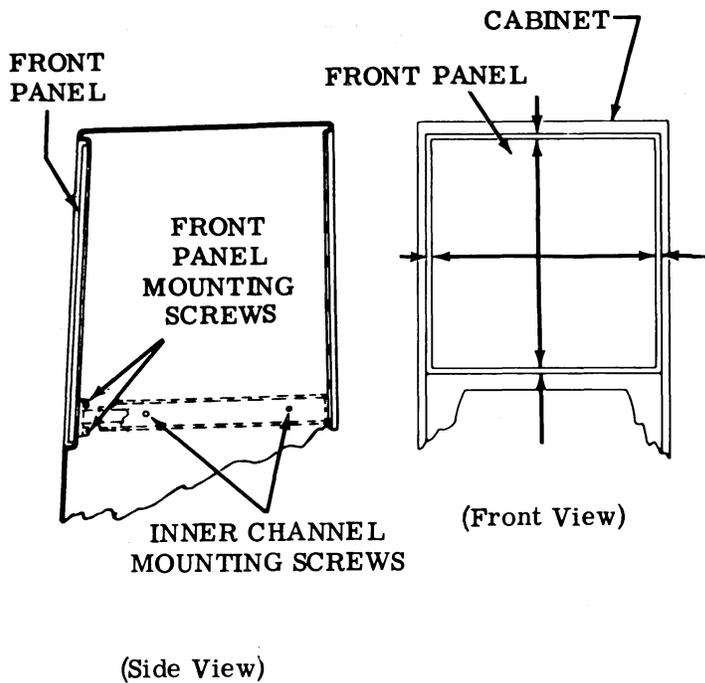
FRONT PANEL CLEARANCE

Requirement

An equal gap between front panel and cabinet shell on all four sides. Panel should be parallel to cabinet shell as viewed from side.

To Adjust

- (1) Loosen left and right inner channel mounting screws. Move channels up or down until the top and bottom gap between panel and cabinet is about equal and panel is parallel. Tighten mounting screws.
- (2) Loosen front panel mounting screws. Move panel left or right until gap between sides of panel and cabinet are about equal. Tighten mounting screws.



2.03 Tape Handling Mechanism

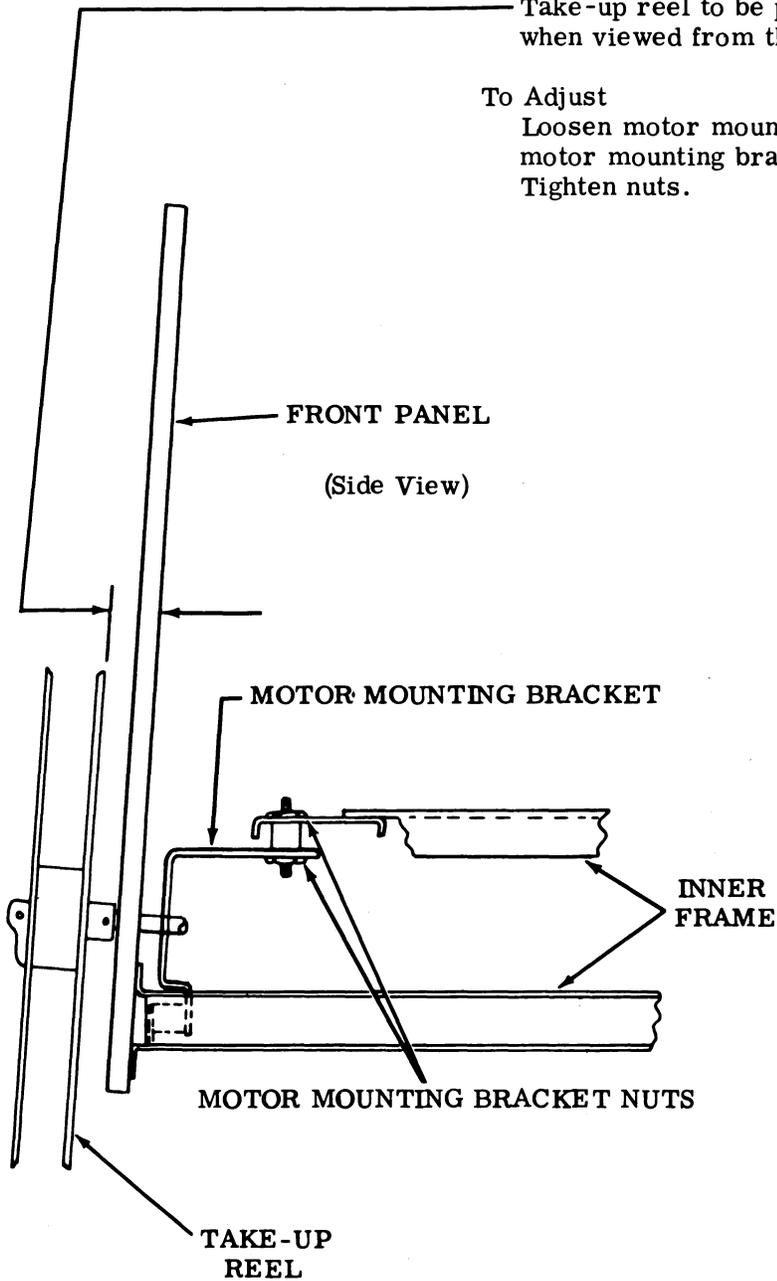
TAKE-UP REEL

Requirement

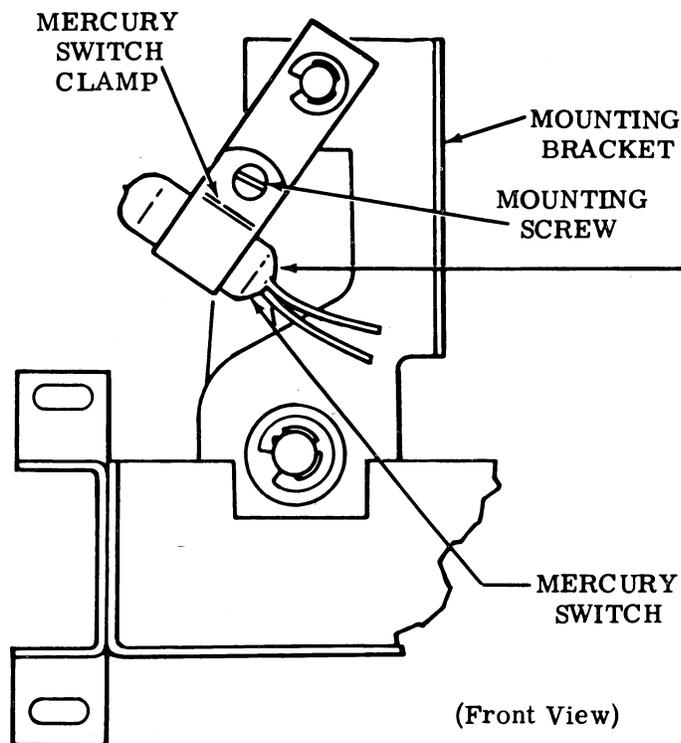
Take-up reel to be parallel to the front panel when viewed from the side of panel.

To Adjust

Loosen motor mounting bracket nuts. Move motor mounting bracket in or out to meet requirement. Tighten nuts.



2.04 Tape Handling Mechanism (continued)



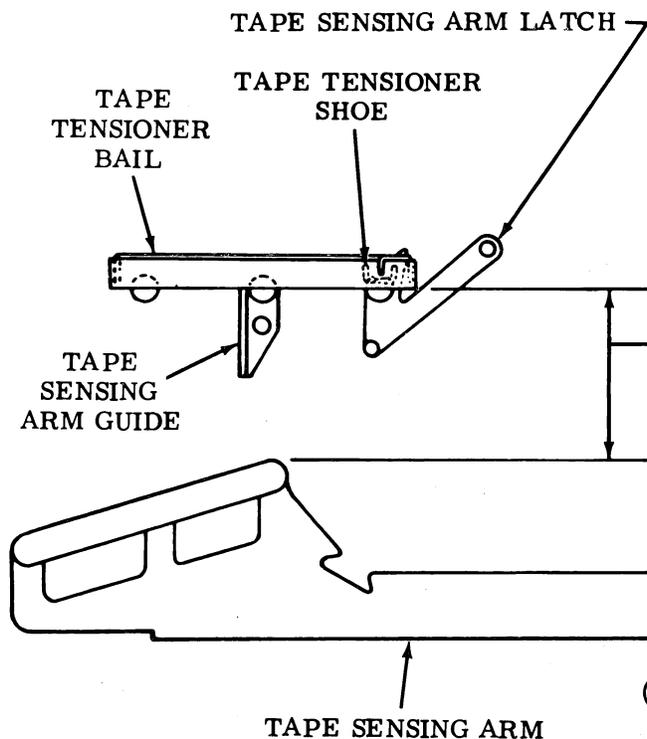
WINDER SWITCH CONTACT POSITIONING

Requirement

The two mercury switch electrodes should be on the same horizontal plane.

To Adjust

Loosen mercury switch clamp mounting screw. Rotate mercury switch within the clamp to meet requirement. Tighten screw.



WINDER SWITCH POSITIONING

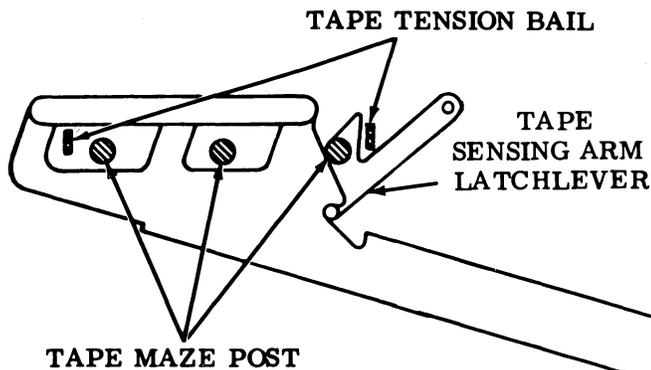
Requirement

Winder motor should start when inner post on tape sensing arm is
 Min 3-3/4 inch --- Max 4-1/2 inch
 from tape tensioner bail.

To Adjust

Loosen mercury switch clamp mounting screw. Adjust clamp to meet requirement. Tighten screw.

2.05 Tape Handling Mechanism (continued)



(Front View)

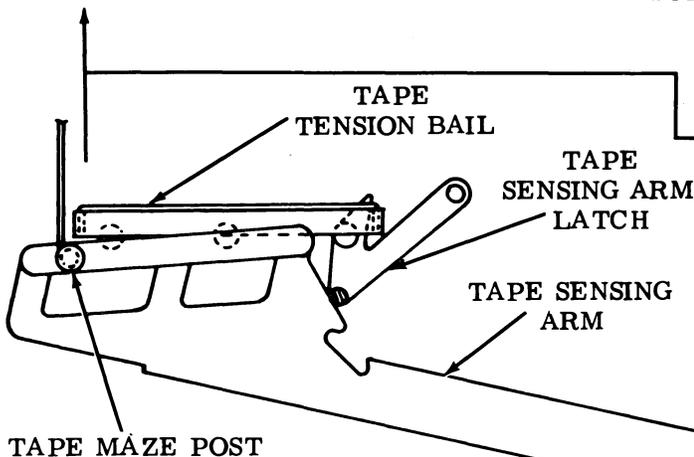
TAPE SENSING ARM CLEARANCE

Requirement

With set in its latched position, the tape sensing arm should clear the tape tension bail and the tape maze posts.

To Adjust

Loosen tape sensing arm mounting screw. Move tape sensing arm right or left to meet requirement. Tighten screw.



(Front View)

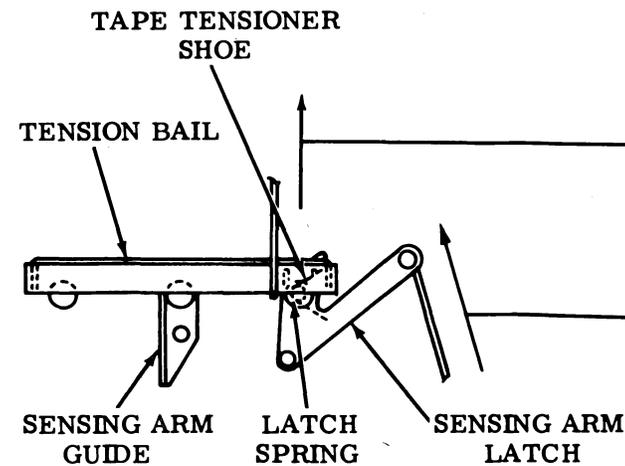
TAPE SENSING ARM SPRING

Requirement

Min 10 oz---Max 14 oz to pull the sensing arm into contact with the sensing arm latch.

To Measure

Hook a 32 oz spring scale under the small diameter of the tape maze post and pull in the direction shown to meet requirement.



(Front View)

TAPE TENSION BAIL SPRING

Requirement

Min 5 oz---Max 8 oz to lift tape tensioner shoe off its post.

To Measure

Hook a 32 oz spring scale under the bail at the tape tensioner post and lift.

TAPE SENSING ARM LATCH SPRING

Requirement

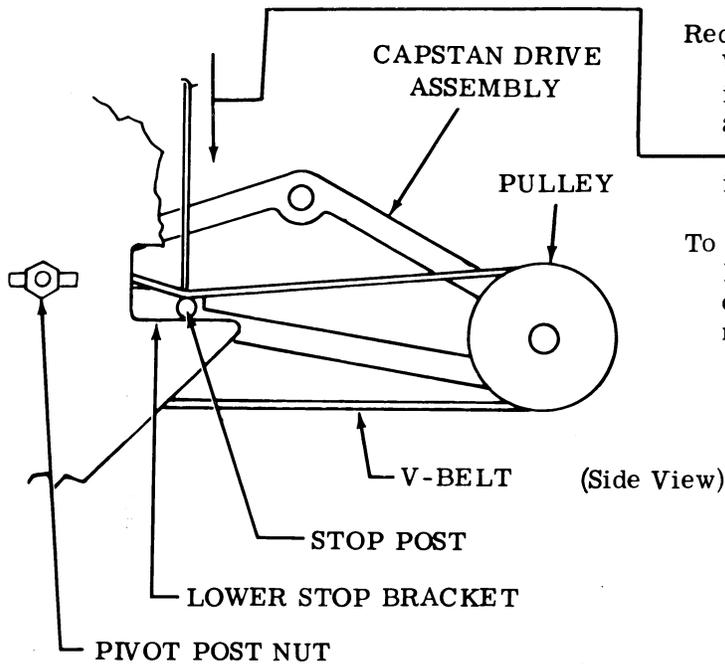
Min 1/4 oz---Max 3/4 oz to start latch moving.

To Measure

Apply push end of an 8 oz scale to handle of latch and push in direction shown.

2.06 Tape Handling Mechanism (continued)

V-BELT TENSION



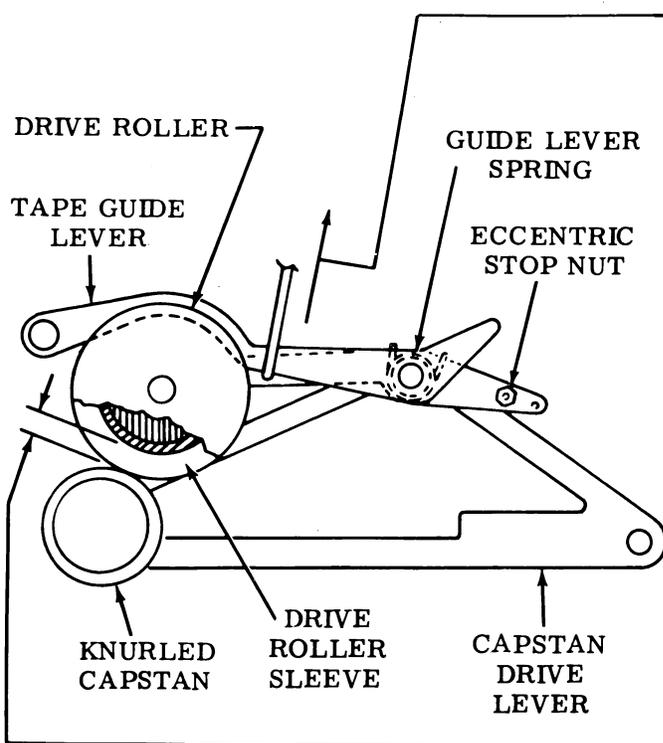
Requirement

With capstan drive assembly held against its lower stop bracket, and a 32 oz scale applied to top of V-belt above the stop post, a Min 7 oz---Max 17 oz is needed to force V-belt against stop post.

To Adjust

Loosen the pivot post nut and position the capstan drive assembly to front or rear to meet requirement. Tighten pivot post nut.

TAPE GUIDE LEVER



Requirement

Min 1/2 oz---Max 2 oz to lift guide lever away from the drive roller.

To Measure

Hook an 8 oz spring scale under the guide lever and pull at right angles.

To Adjust

Unhook one end of guide lever spring and wind or unwind the spring to meet requirement. Return spring to its original position.

CAPSTAN CLEARANCE

Requirement

With the drive lever against its eccentric stop nut, there should be a Min 0.040 inch---Max 0.080 inch gap between the drive roller sleeve and the knurled capstan.

To Adjust

Loosen eccentric locknut. Rotate eccentric locknut to meet requirement. Tighten nut.

(Side View)

2.07 Tape Handling Mechanism (continued)

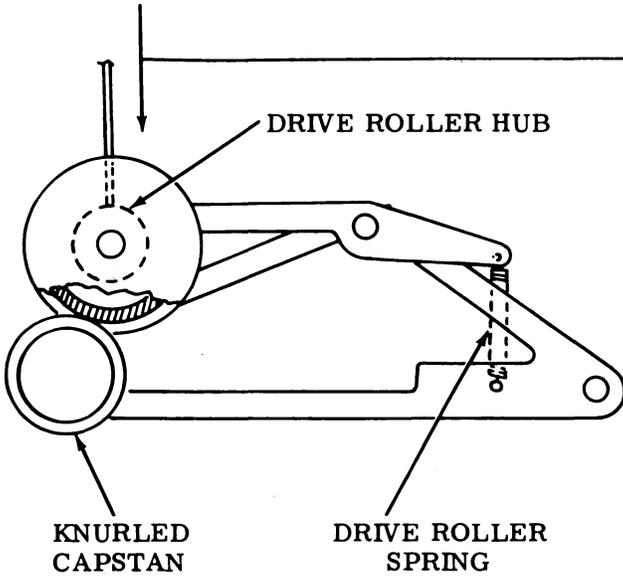
TAPE DRIVE ROLLER SPRING

Requirement

Min 3 oz---Max 5 oz
to engage drive roller with knurled capstan.

To Measure

Apply push end of 8 oz spring scale to drive roller hub and push in line with spring.



(Side View)

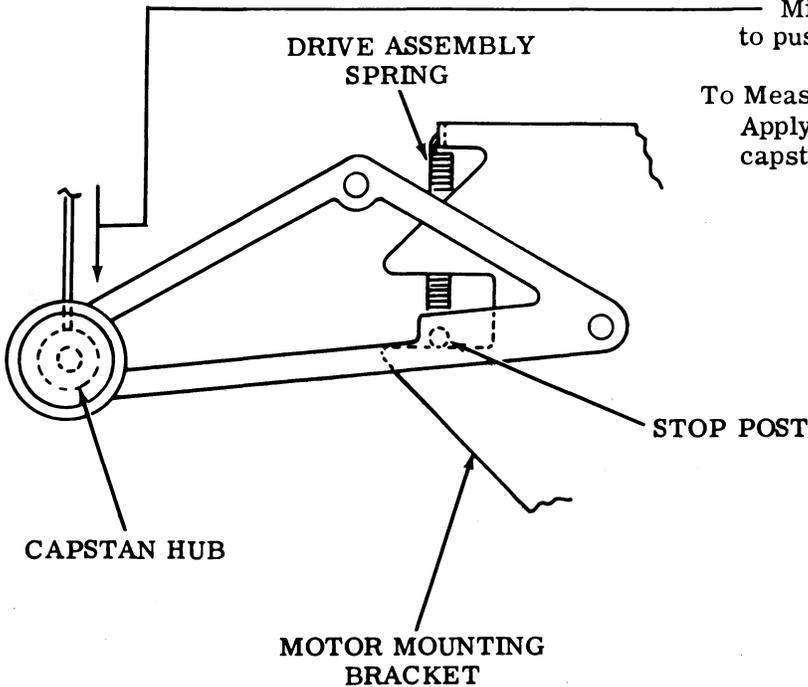
CAPSTAN DRIVE ASSEMBLY SPRING

Requirement

Min 30 oz---Max 48 oz
to push assembly to lower limit.

To Measure

Apply push end of 64 oz spring scale to capstan hub and push in line with spring.



(Side View)

2.08 Fan Assembly

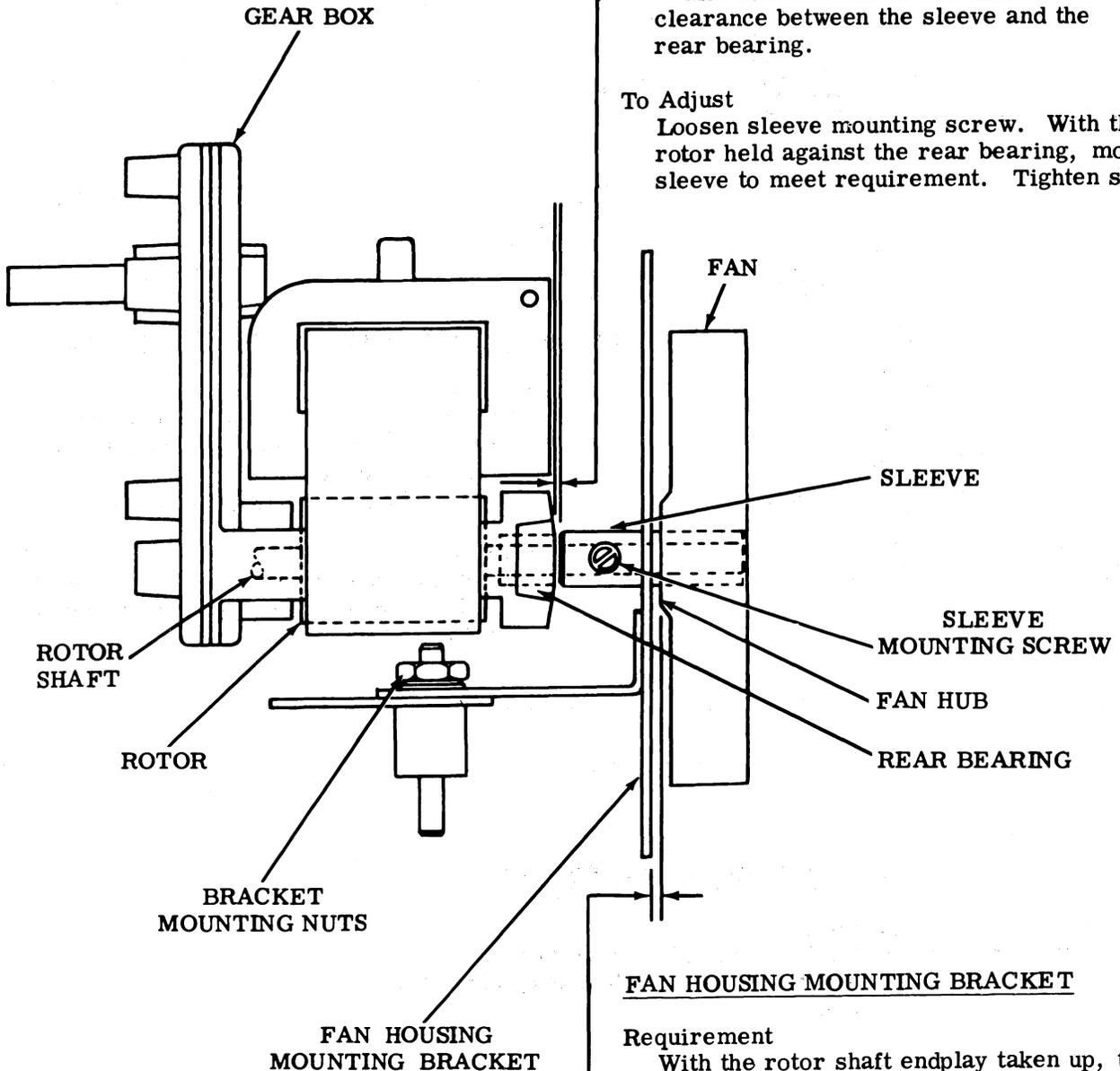
FAN SLEEVE

Requirement

With the rotor endplay taken up away from the gear box, there should be
 Min some---Max 0.015 inch
 clearance between the sleeve and the rear bearing.

To Adjust

Loosen sleeve mounting screw. With the rotor held against the rear bearing, move sleeve to meet requirement. Tighten screw.



(Side View)

FAN HOUSING MOUNTING BRACKET

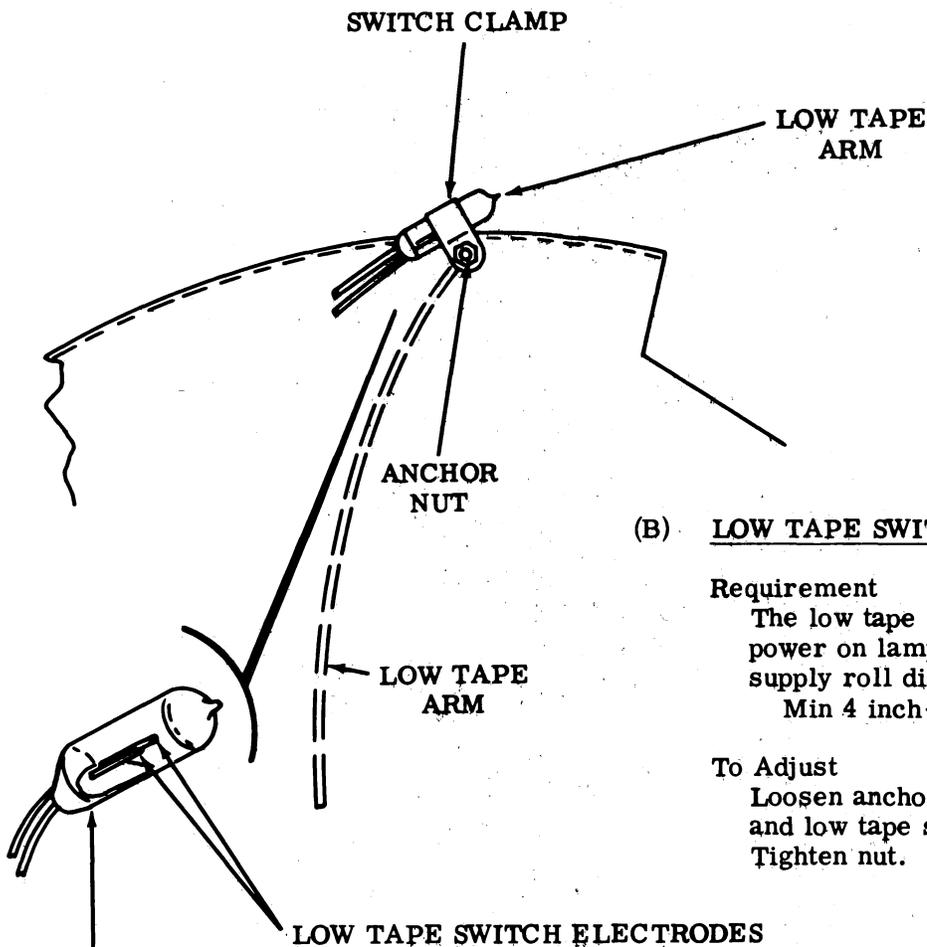
Requirement

With the rotor shaft endplay taken up, there should be a
 Min 0.035 inch---Max 0.075 inch
 between the fan hub and fan housing mounting bracket.

To Adjust

Loosen bracket mounting nut. Move fan housing mounting bracket to meet requirement. Tighten nut.

2.09 Tape Handling Mechanism (continued)



(B) LOW TAPE SWITCH CLAMP POSITIONING

Requirement

The low tape lamp should light and the power on lamp should flash when the tape supply roll diameter is
Min 4 inch---Max less than 5 inch

To Adjust

Loosen anchor nut. Rotate switch clamp and low tape switch to meet requirement. Tighten nut.

(Front View)

(A) LOW TAPE SWITCH ELECTRODES

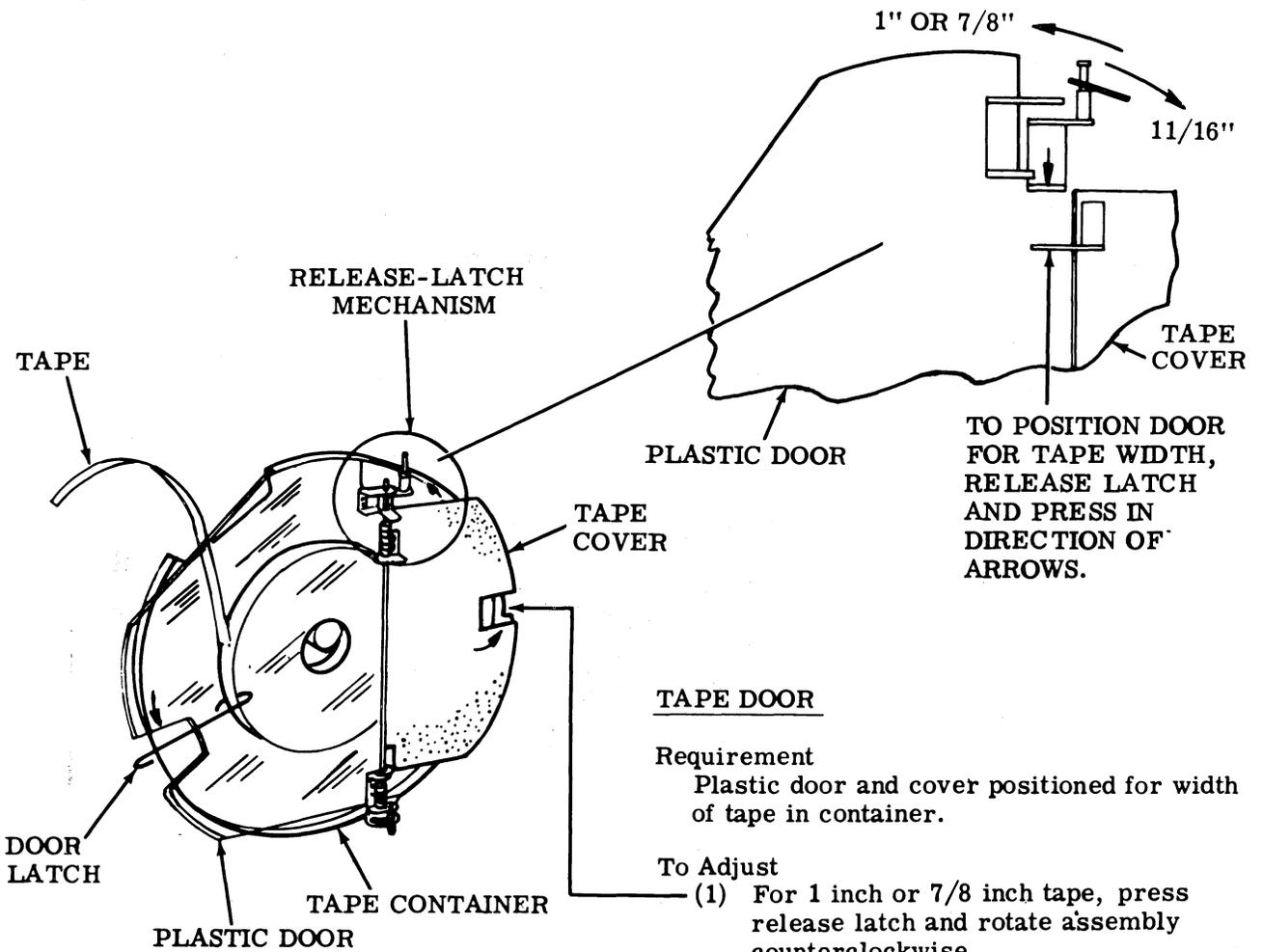
Requirement

The two electrodes of the low tape switch should be on the same horizontal plane.

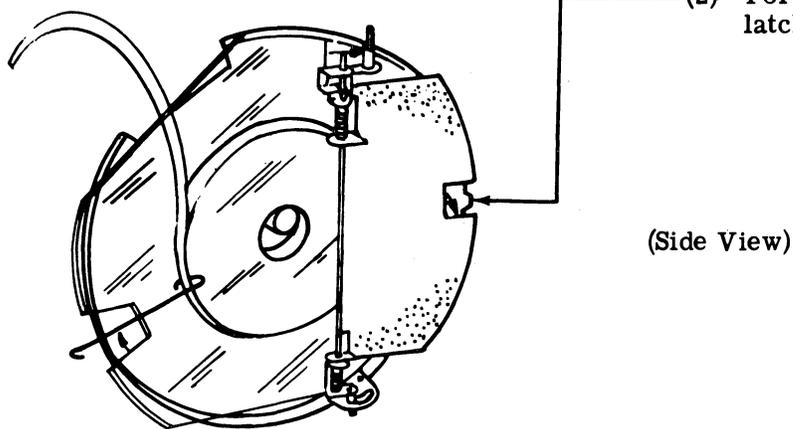
To Adjust

Loosen anchor nut. Rotate low tape switch within its clamp to meet requirement. Tighten nut.

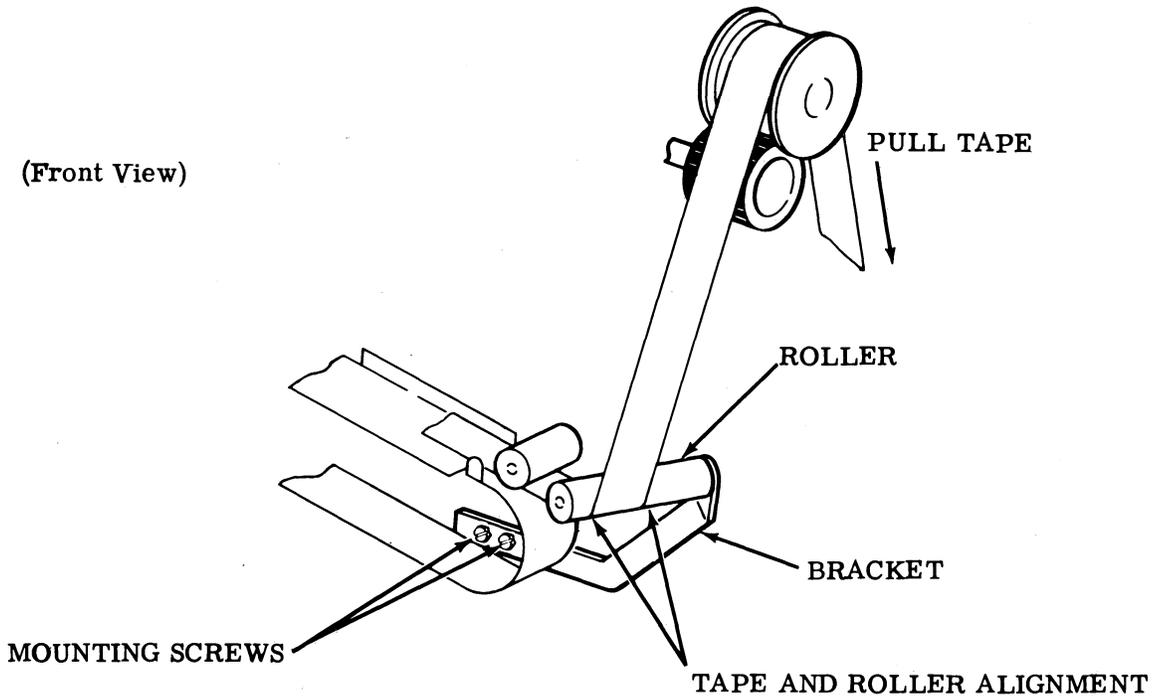
2.10 Tape Handling Mechanism (continued)



- (1) For 1 inch or 7/8 inch tape, press release latch and rotate assembly counterclockwise.
- (2) For 11/16 inch tape, press release latch and rotate assembly clockwise.



2.11 Tape Handling Mechanism (continued)



BRACKET AND ROLLER

Requirement

Tape should line up evenly with roller.

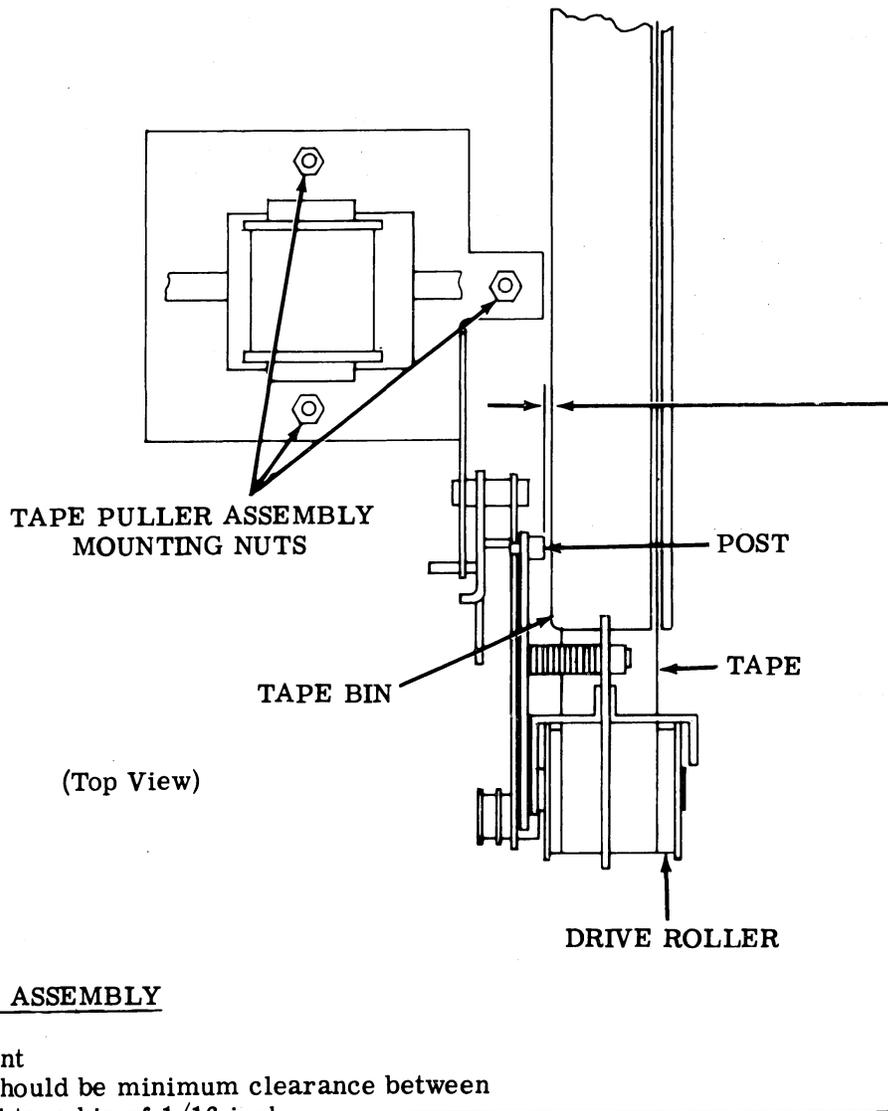
To Check

Pull tape in direction of the arrow.

To Adjust

Loosen mounting screws. Move bracket up or down around right mounting screw to meet requirement. Tighten screws.

2.12 Tape Handling Mechanism (continued)

TAPE PULLER ASSEMBLY

(1) Requirement

There should be minimum clearance between post and tape bin of 1/16 inch.

(2) Requirement

The tape and drive roller should meet without damaging tape.

To Check

Install a 3000 foot roll of tape. Operate punch.

To Adjust

Loosen tape puller assembly mounting nuts. Check for minimum clearance, tighten nuts and run tape. Repeat adjustment if necessary.

SECTION 592-808-700

RECEIVER MODULE

2.13 For receiver module circuit card adjustments, refer to Section 592-808-700.

3. LUBRICATION

GENERAL

3.01 When lubricating Tape Receiver 5B, use KS7470 oil, and a thin coat of grease (Lubriplate --- TP108805) as directed. The following lubrication symbols show the type and amount of lubricant to be used.

- O1 - One drop of oil
- O3 - Three drops of oil
- G - Thin coat of grease

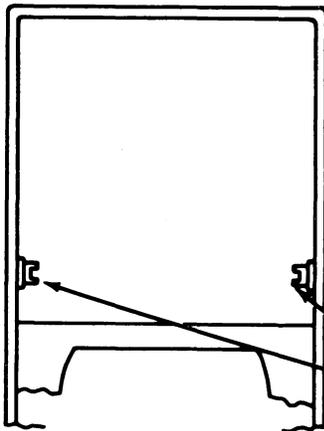
3.02 No lubrication is needed for the receiver module. Lubricate the cabinet as needed and the punch unit before it is operated, again within two weeks, and thereafter at intervals suggested for the tape punch unit.

TAPE PUNCH

3.03 Lubrication for the tape punch unit is covered in Section 592-803-701.

CABINET

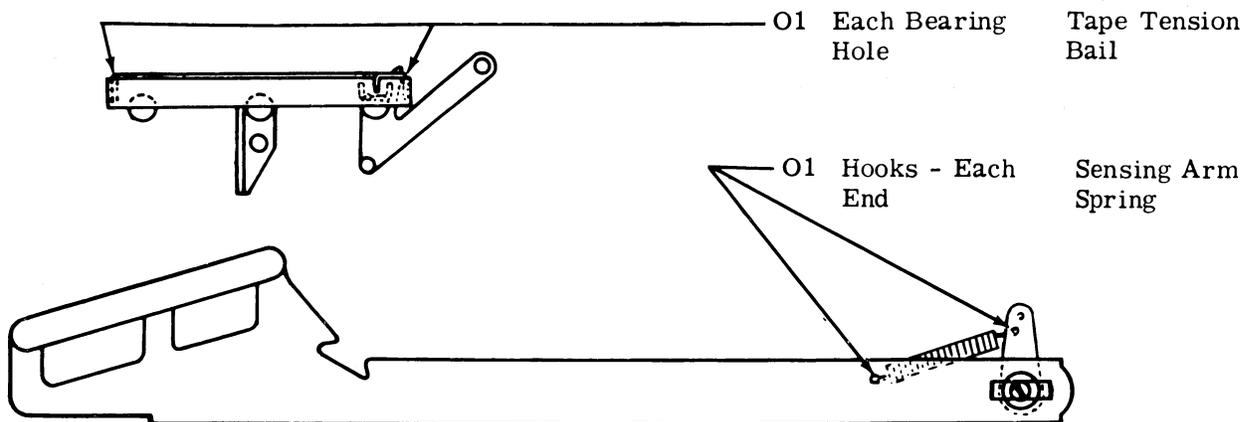
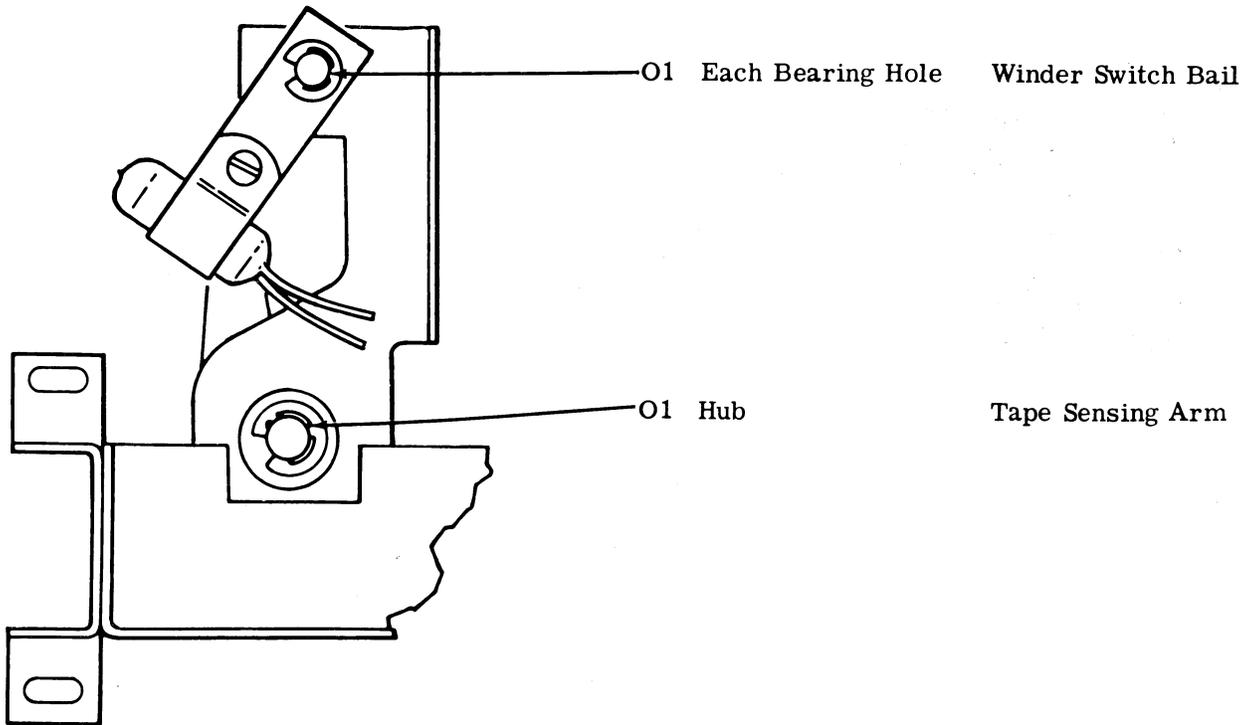
3.04 Cabinet Structure



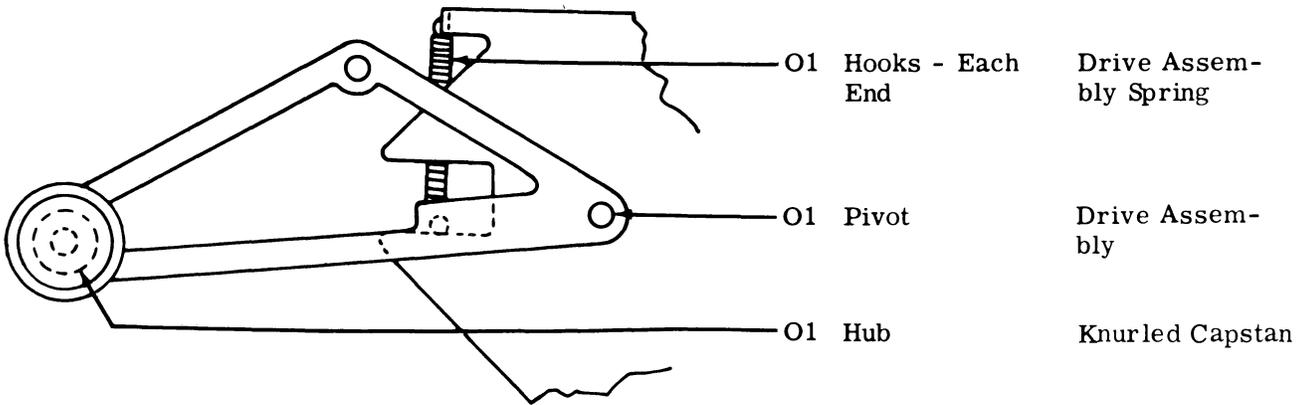
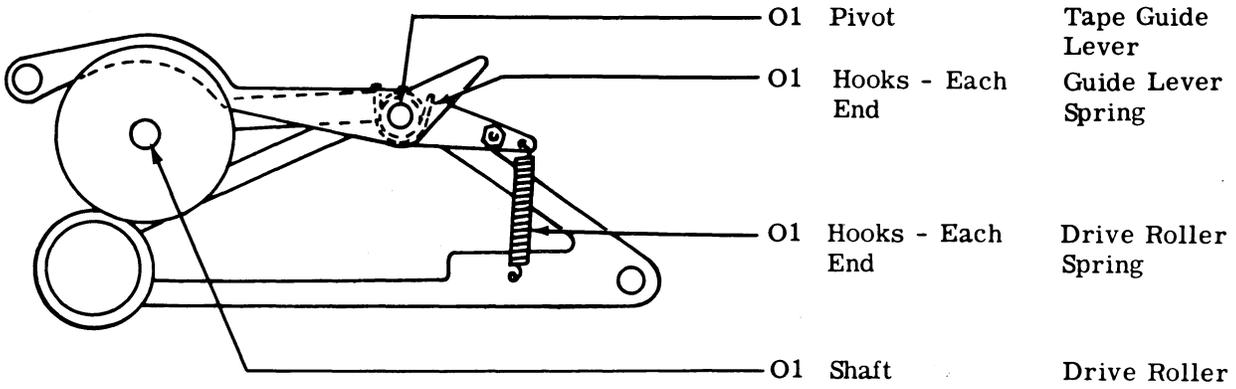
G Slides

Cabinet Channels

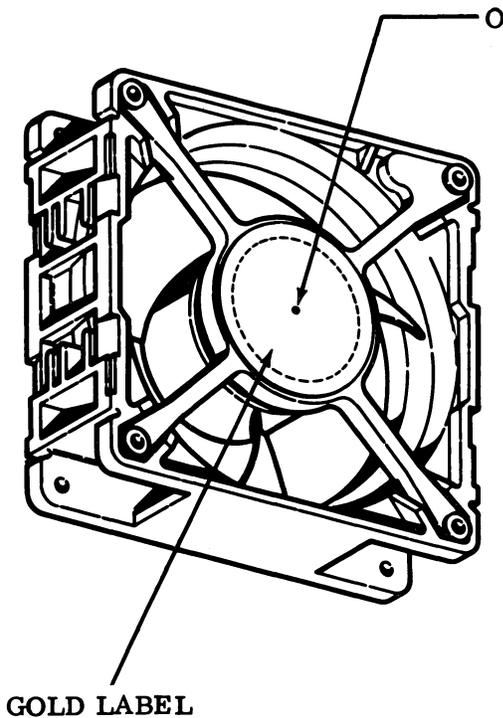
3.05 Tape Handling Mechanism



3.06 Tape Handling Mechanism (continued)



3.07 Cabinet Exhaust Fan



Center of Circle on Gold Label

Note: Use a TP194853 oil injector and proceed as follows:

1. Position the needle at an angle of approximately 45° at the center of the circle on the gold label.
2. Pierce the label and the concealed self-sealing rubber cap located under the label.
3. Depress the plunger of the oil injector slowly to allow approximately $1/8$ inch of oil to escape.

The above lubrication requirement should be performed once a year.

RECEIVER MODULE

- 3.08 No lubrication is needed for the receiver module.

4. REMOVAL AND REPLACEMENT OF COMPONENTS

- 4.01 Removal and replacement of components for Tape Receiver 5B is straightforward and needs no instructions. Removal and replacement of components for the tape punch unit is covered in Section 592-803-702. After any replacement of components, check adjustments wherever they apply.