

INSTRUCTIONS FOR INSTALLING THE TUW200 TAPE UNWINDER

1. GENERAL

- a. The TUW Tape Unwinder is a self-contained, motor-driven unit capable of supplying paper tape to readers or punches operating at speeds up to 2400 wpm.
- b. The tape unwinder is used for 11/16 to 1" fresh, chadless or fully perforated tape of up to 3,000 feet in length (14.5 inch diameter rolls).
- c. The unit unwinds tape from the outside of the tape roll.
- d. A reel adapter ring should be used with rolls of perforated tape having a large inside diameter, such as those from a TW17 Winder (4-1/2 I.D.). Reel adapter No. 147707 is available for use on the TW17 and various business machines with 4-1/2" diameter core.

2. INSTALLATION (Figures 1 to 4)

- a. The tape unwinder can be used for table top applications or mounted on a shelf on the side of a TELESPEED SENDING TERMINAL or RECEIVING TERMINAL SET. The 148164 modification kit (ordered separately and covered in Teletype Specification 50232S) provides the hardware and instructions for mounting the unwinder to the cabinet.
- b. The tape unwinder can also be mounted within the ac apparatus cabinets. These ac cabinets are positioned next to a TELESPEED SENDING TERMINAL, or RECEIVING TERMINAL and accommodate both the tape unwinder and TW17 Tape Winder.
- c. Connect the power line cord to a 115 v 60 cycle ac outlet.
- d. Insert the tape roll into the unwinder with the tape from the outside of the tape roll coming off the bottom of the roll. Keep the tape on the inside of the tape roll from protruding beyond the sides of the tape roll during insertion of the tape into the unwinder bin. See Figure 1. If necessary, drop the roll of tape onto a flat table to remove any telescoping.
- e. Unroll several feet of tape and thread it thru the tape rollers (pull tape depressor back), down thru the tape sensing arm, up thru the tape guide loop and into the tape reader or punch. (See Figure 1)
- f. The unwinder will turn on when the tape sensing arm is raised.
- g. At the end of a roll of tape the tape sensing arm drops, automatically turning the unwinder off.

h. To remove small diameter tape rolls from inside the tape bin, lift the tape bin strap from the rear of the unwinder. (See Figure 1)

i. A reel adapter ring should be used with rolls of perforated tape having a large inside diameter, such as those from a TW17 Winder (4-1/2 I.D.). Reel adapter No. 147707 is available for use on the TW17 and various business machines with 4-1/2" diameter core.

j. When unperforated tape is to be supplied to a punch, the cardboard core will not pass thru the pinch roller, but will either separate from the tape or cause the tape sensing arm to raise fully and turn the unwinder off.

k. A semi-flexible strap is used for inserting or removing a tape roll from the unwinder (See Figure 1).

3. ADJUSTMENTS AND LUBRICATION

NOTE

The Tape Unwinder comes fully adjusted and lubricated from the factory. Make the following adjustments and lubrication as necessary:

a. Mercury Switch (Slack Tape)

Requirement

The "motor on" position of the tape arm shall occur when the tape sensing arm is raised to $5 \pm \frac{1}{4}$ inches above the bottom of the unit. (See Figure 2 and 5).

To Adjust

With the motor off, tape arm down and switch clamp screw friction tight, position the mercury switches as shown in Figure 5C. Raise the tape sensing arm to the $5 \pm \frac{1}{4}$ inch position and slowly rotate the slack tape switch to turn the motor "on". See Figure 5B. Tighten the cable clamp screw.

To Check

With tape being pulled from the unwinder, the off-on range of the tape sensing arm shall occur approximately in the mid-range of the tape sensing arm travel.

b. Mercury Switch (Tight Tape)

Requirement

The motor shall turn "off" when the tape sensing arm is raised to $10 \pm \frac{1}{4}$ inches. (See Figure 2 and 5).

To Adjust

With the tape sensing arm raised to 10 inches, the motor "on", and the switch clamp screw friction tight, position the tight tape mercury switch to de-energize the motor as shown in Figure 5A.

c. Mercury Switch Orientation

Requirement

The mercury switch contact pins inside the switch must be positioned in a horizontal plane. (See Figure 5).

To Adjust

Twist the mercury switch in its clamp until the contact pins lie in a horizontal plane.

d. Tape Depressor

Requirement

With tape threaded over the drive roller there shall be 0.060 to 0.100 inch clearance between the tape and tape depressor at the closest point. (See Figure 3).

To Adjust

The tape depressor pin must contact the flat surface on the pinch roller shaft. With the pinch roller shaft locking nut friction tight, rotate the pinch roller shaft to obtain the clearance. Tighten nut. Check clearance.

e. Belt Tension (Motor)

Requirement

Min. 0.437 inch---Max. 0.562 inch deflection at center of motor drive belt when 5 oz. pressure is applied at center of belt. (See Figure 4).

To Adjust

With three motor mounting screws friction tight, depress midpoint of belt with 8 oz. spring scale. Rotate motor to give required belt deflection. Tighten three mounting screws.

f. Pinch Roller Spring Tension

Requirement

8 to 15 ozs. spring tension, to start shaft moving. (See Figure 3).

To Measure

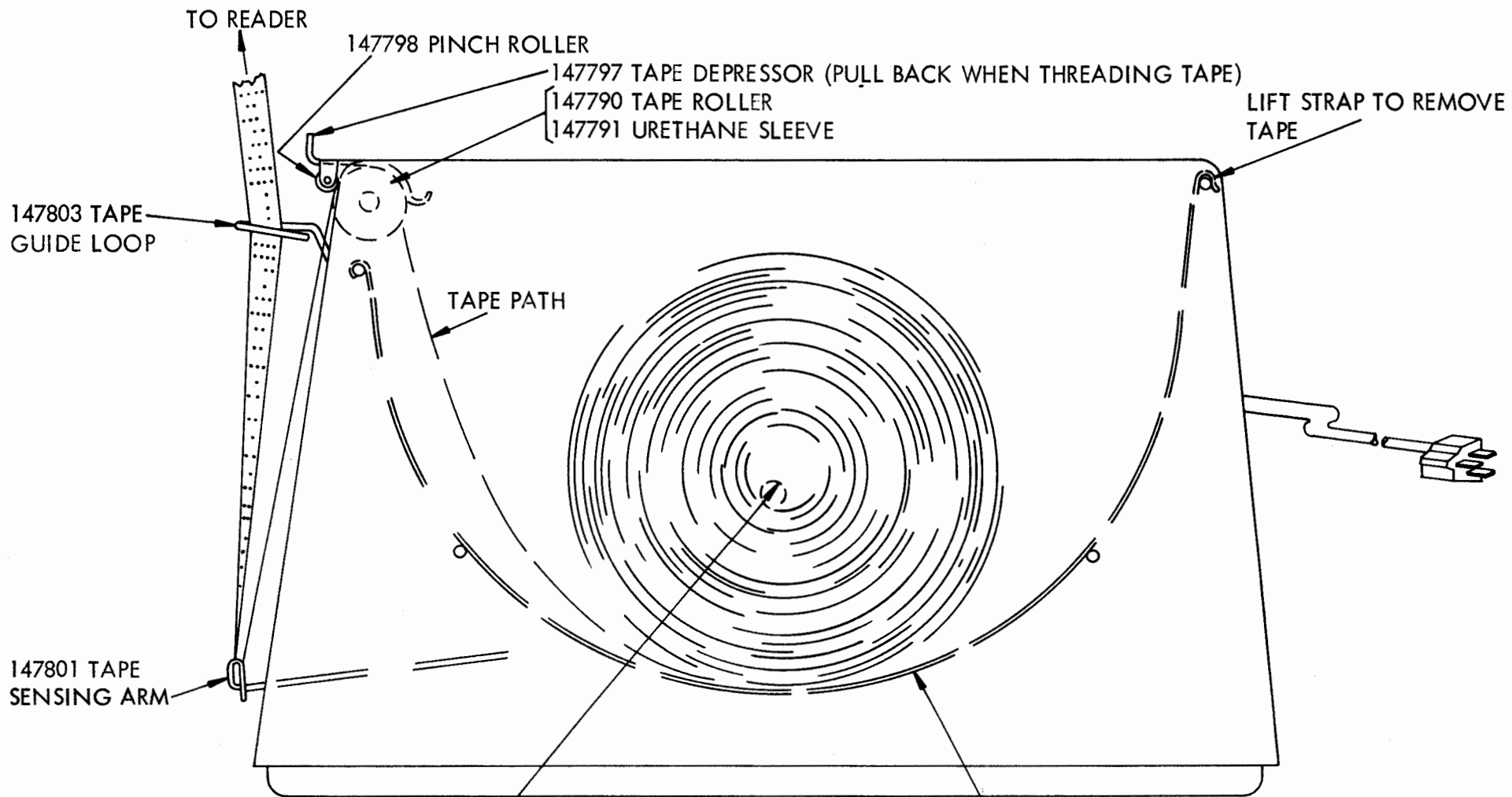
Hook a 32 oz. spring scale on the pinch roller shaft and pull. Replace spring if necessary.

g. Oil the tape roller bearing (felt wick) sparingly with KS7470-oil every 500 hours or 6 months, whichever occurs first.

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THE END OF THE TAPE SHALL NOT PROTRUDE BEYOND THE SIDES OF THE TAPE ROLL DURING INSERTION INTO THE BIN.

TAPE UNWINDER TUW200

FIGURE 1

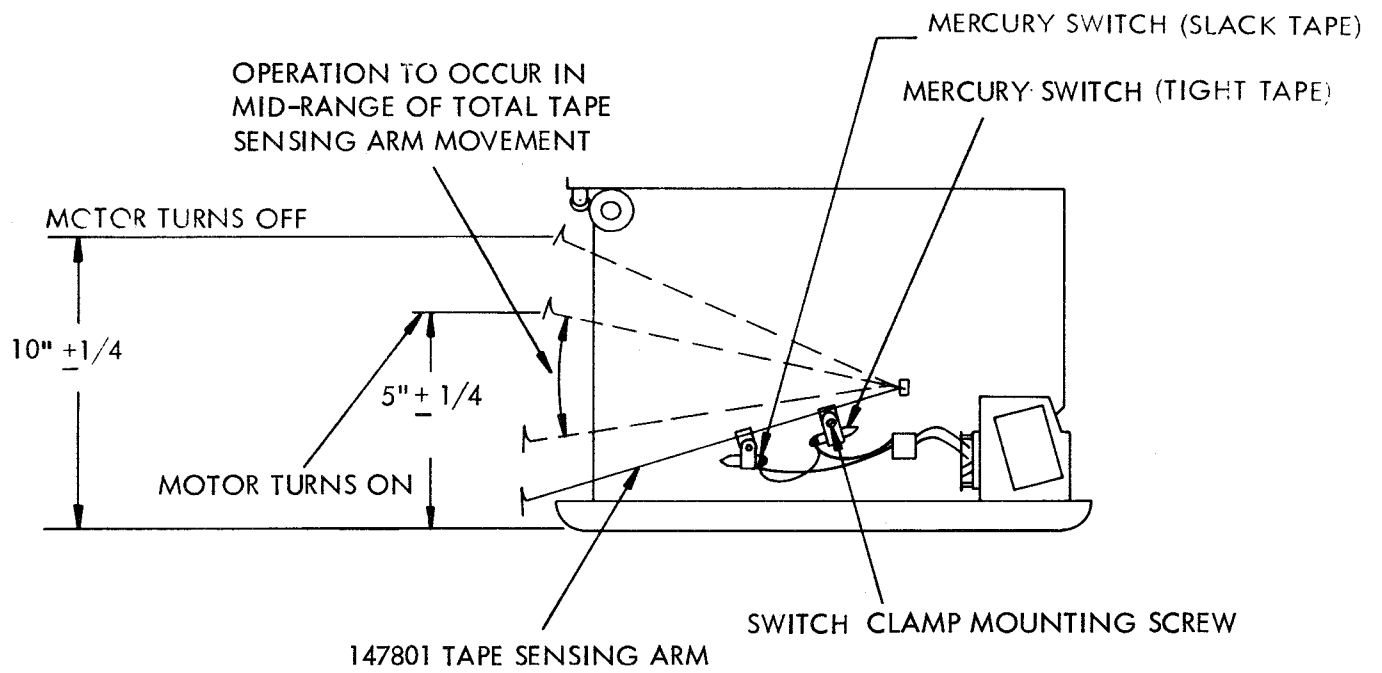


FIGURE 2

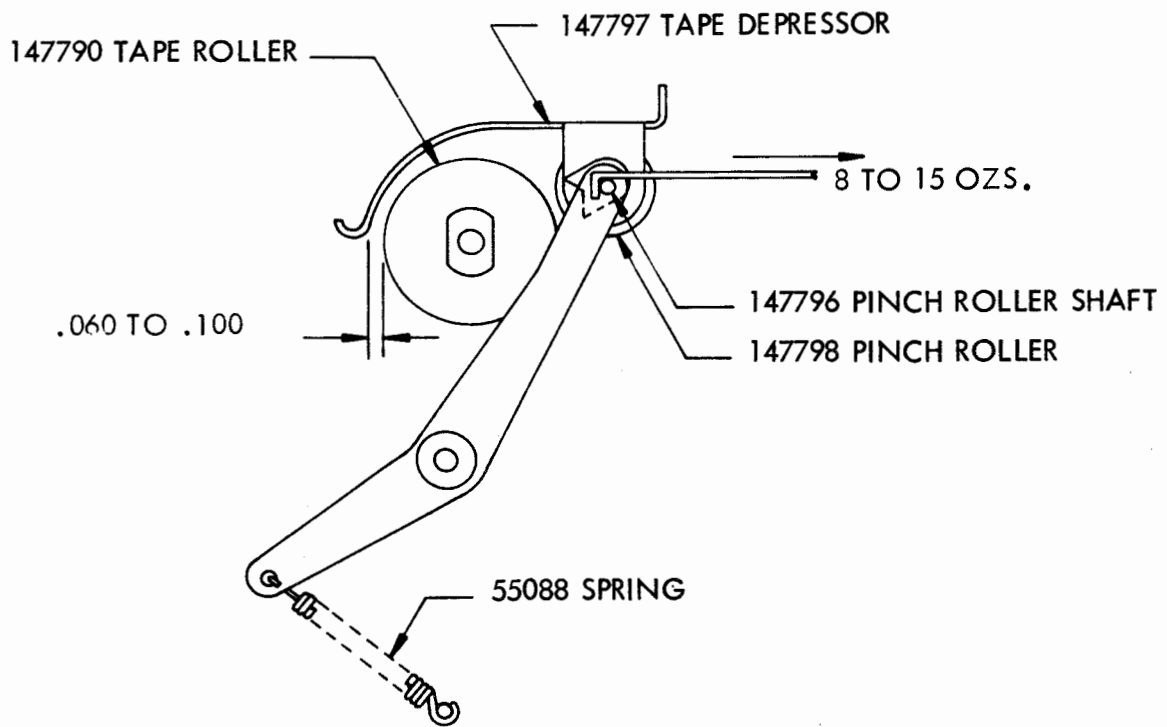


FIGURE 3

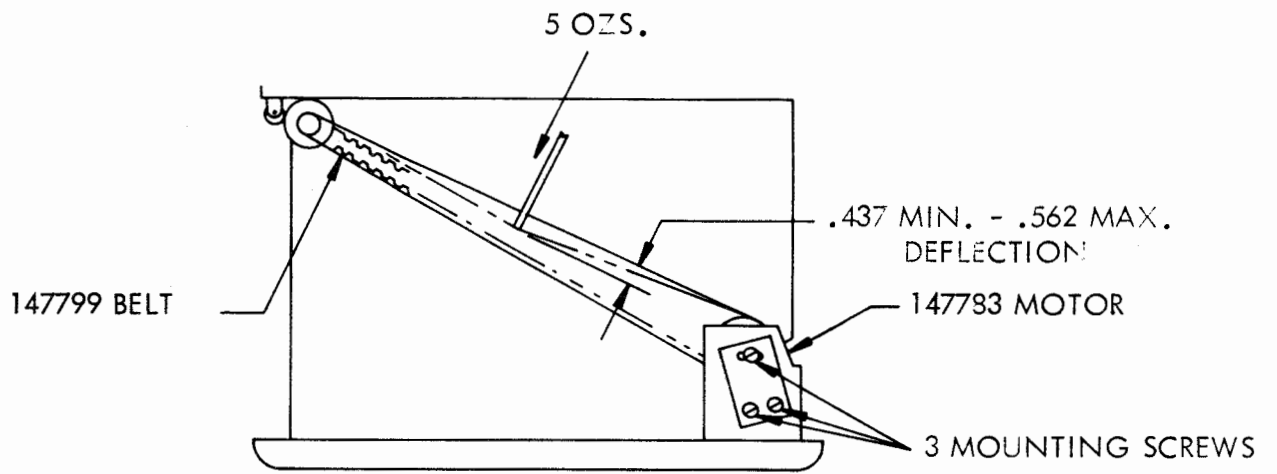


FIGURE 4

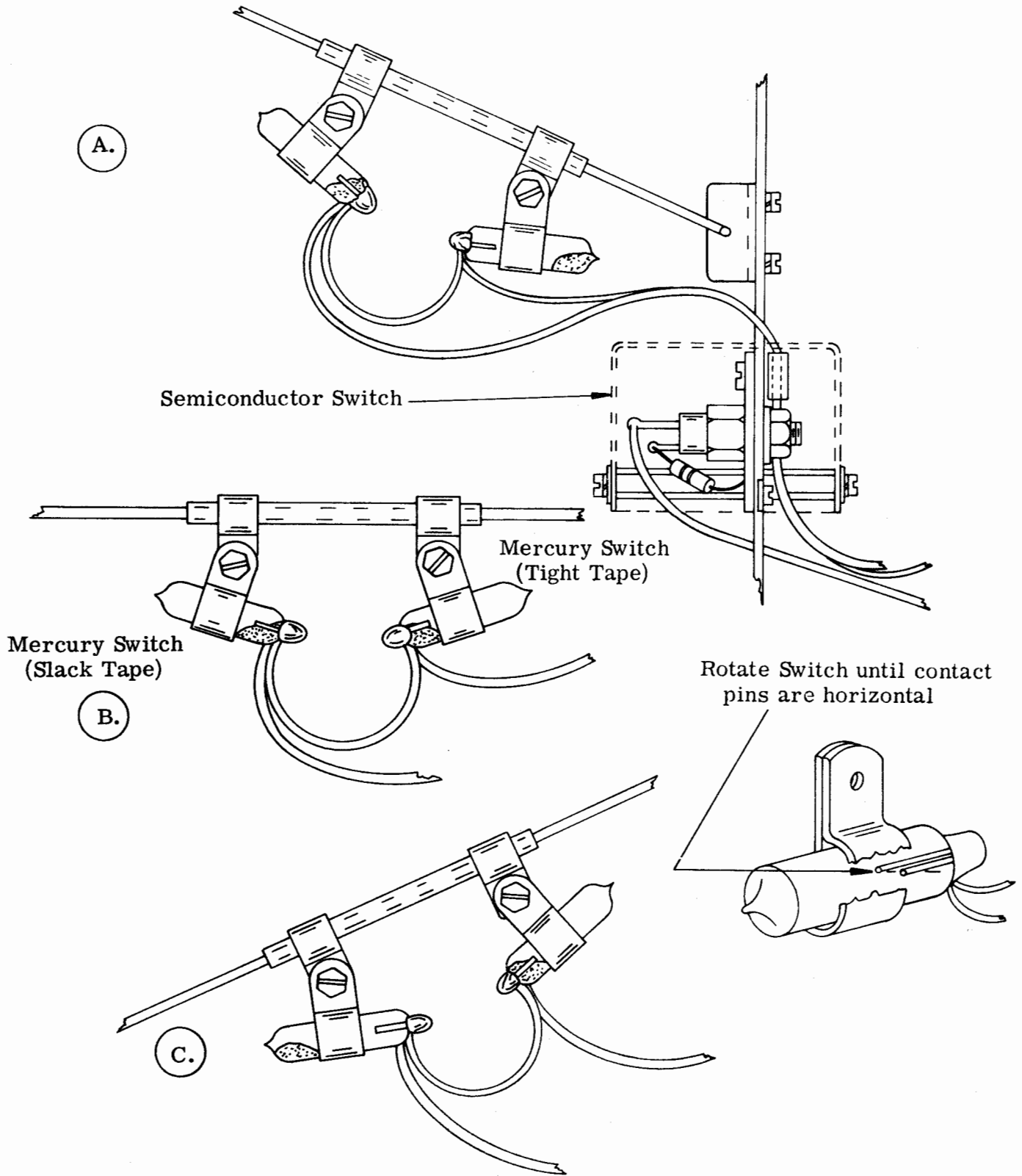


Figure 5