

Fig. 4-3-3

**4-4 CHECK AND ALIGNMENT OF TAPE DECK SECTION**

**4-4-1 Capstan Assembly Thrust**

Turn the thrust adjusting screw (Plastic); Refer to Fig. 4-3-2. Provided on the bottom of the flywheel so that thrust of the capstan shaft is within 0.1 mm to 0.2 mm.

**4-4-2 Micro Switch Assembly Clearance**

This adjustment should be made for both the Cassette-In switch and the Record Protection switch.

First, loosen two microswitch mounting screws and adjust the mounting position of the switch so that the micro switch actuator is positioned within the setting range(s) as shown in Fig. 4-4-1.

After completion of the adjustment, actually load the tape deck with a blank tape, and check to see the switches turn on and off.

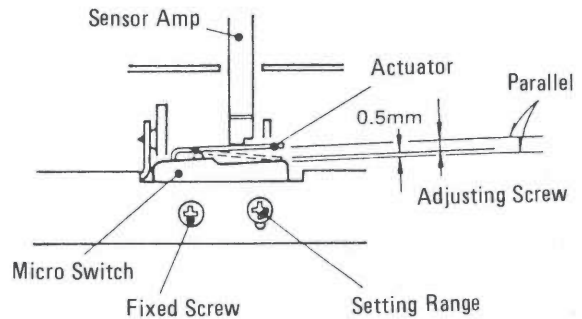


Fig. 4-4-1

**4-3-4 Input Amplifier PCB Ass'y, Monitor Amplifier PCB Ass'y**

- 1) Remove fader knobs and other control knobs on the top panel, and the mother PCB on bottom side.
- 2) Remove the screw (d) to remove the Input amplifier PCB Assembly, and screw (e) to remove the monitor amplifier PCB Assembly. Refer to Fig. 4-3-4

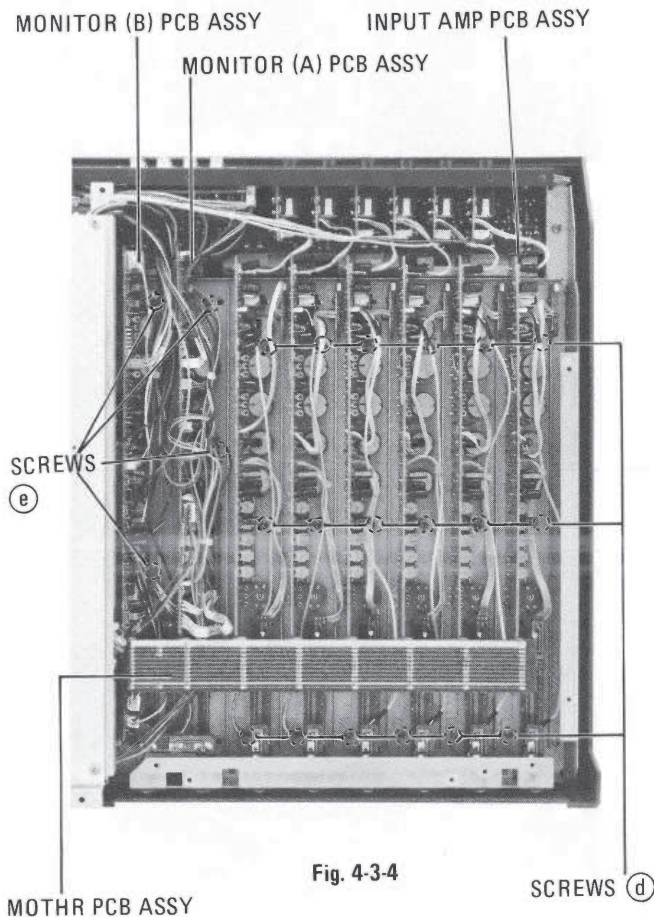


Fig. 4-3-4

**4-4-3 Head Base Position**

**STOP Mode**

- 1) With the deck set to STOP mode, observe stop position of the head base and note the position.
- 2) Turn the reduction pulley with your hand and observe whether the head base comes to the same position as noted or exceeds the position. If exceed, adjust the trim pot 552. (Refer to Fig. 4-4-2)

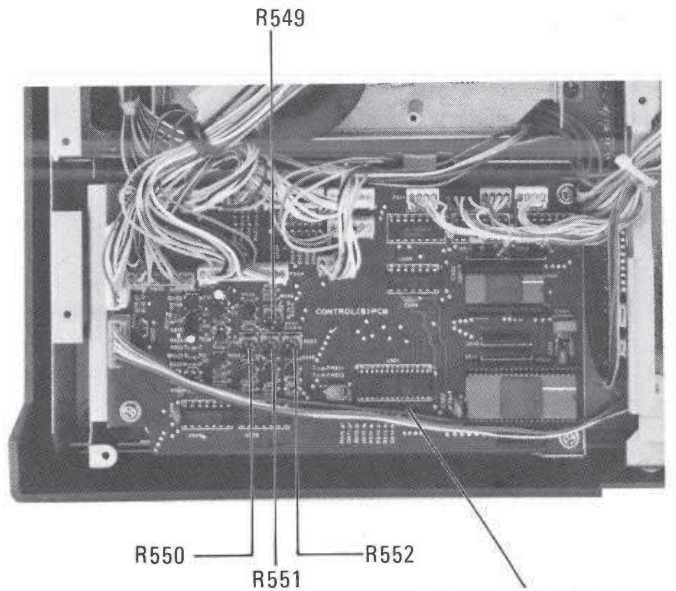


Fig. 4-4-2

- Run the deck in PLAY mode, then STOP mode, and finally turn the power off. Repeat this sequence two times. Then observe the stop position of the head base again. If the head base still exceeds the position noted, adjust R552 again and repeat the steps 1 and 3 until the head base comes to the most forward position.

#### FF and RWD Mode

Run the deck in the FF or RWD mode and make sure a clearance between each brake drum and the brake pad is approx. 1.5 to 2 mm. If not, adjust R550. (Refer to Fig. 4-4-2) After the adjustment has been completed, repeat switching operations from the STOP to FF or RWD two or three times and make sure the clearance "a" is within the specified range. If the "a" is not within 1.5 to 2 mm, adjust R550 again. Refer to Fig. 4-4-3.

#### PAUSE Mode

Set the deck to PAUSE mode and observe the clearance "b" between the pinch roller and capstan shaft. It should be approx. 0.5 to 1 mm. If not, adjust the trim pot R551 (Refer to Fig. 4-4-2). After completion of the adjustment, repeat switching operations from STOP to PAUSE mode two or three times, and make sure the clearance "b" is within the specified range. Also make sure there is a clearance "c" between the head base and a spring stud. (Refer to Fig. 4-4-3)

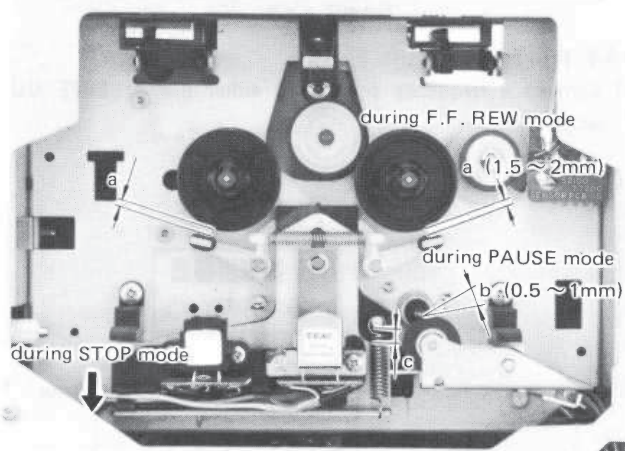


Fig. 4-4-3

#### 4-4-4 Pinch Roller Pressure

First remove the bottom cover and the Trim cover as shown in section 4-3.

- Turn the Cassette-In switch on with a finger or using a rubber ring.
- Run the deck in PLAY mode and hook a tension gauge to a small opening on the pinch roller arm as illustrated.
- Pull the gauge until the pinch roller moves away from the capstan shaft by approx. 2 mm, and then allow the pinch roller to just touch the capstan shaft again. Read the gauge when the pinch roller just starts to rotate.

The reading should be between 350 and 500 g.

**NOTE:** (1) During PLAY operation, make sure there is a little clearance "a" between the pinch roller arm and the spring arm. (Refer to Fig. 4-4-4 (A))

(2) When replacing the pinch roller arm spring, always position the spring around the lower half of the spring shaft as shown in the photo. (Refer to Fig. 4-4-4 (B))

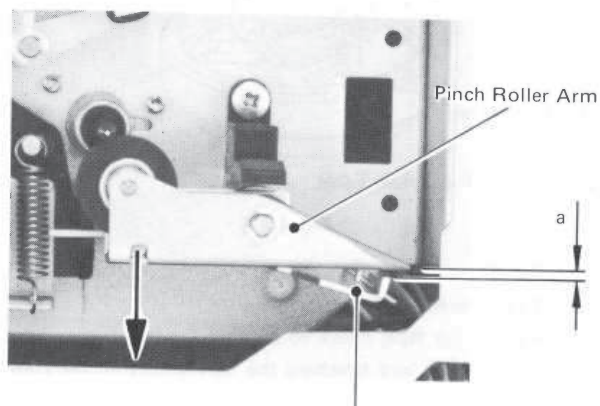


Fig. 4-4-4 (A) Spring Arm

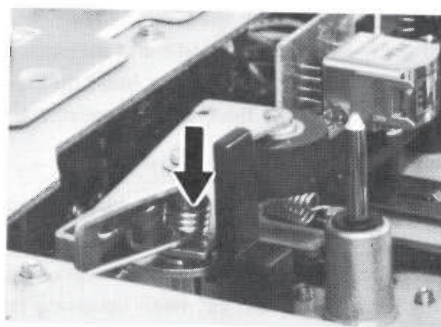


Fig. 4-4-4 (B)

#### 4-4-5 Take-Up Torque

##### Take-up Torque For Playback & Recording

Load a cassette torque meter instead of a cassette tape in the cassette holder, and run the deck in PLAY mode. Take-up torque of the right reel table should be 40 – 50 g. If not, adjust the trim pad R549 (Fig. 4-4-2) to read 45 g-cm. After completion of the adjustment repeat the STOP and PLAY mode operations 2 to 3 times, and then make sure the torque reading is within the limits. Back tension torque (left reel table) should be 2 to 4 g-cm. If the torque is still out of the limits, adjust the torque adjusting ring provided on the right reel table. The torque can be adjusted in three values as shown in Fig. 4-4-5. Turn the torque adjusting ring with the tab A pulling slightly upward and place the tab on one of three stepped portions having pawls to fix the tab.

##### FF and REW Torque

Load a cassette torque meter in the cassette holder and measure starting torque for both F.F. and REW operations with the tape rewound close to beginning of the tape or wound close to end of the tape, respectively.

The reading should be:

F.F. torque (right reel table): between 55 and 150 g-cm.

REW torque (left reel table): between 80 and 150 g-cm.