

4. With the deck in the reproduce mode, set the tape into motion and check that the tape is traveling along the center of the head with no fluctuation in position. While you are at it, check that there is no curling of the tape at the guides or rollers.

If you are not 100 % satisfied with the results, repeat the adjustments of the guides, etc. again.

#### B. Head contact

Contact of the record/sync heads and the repro head is properly aligned by following the below methods.

1. Set the OUTPUT SELECT switch to REPRO or SYNC and load a TEAC YTT-1144SP test tape, or a prerecorded tape with a constant level tone and reproduce.
2. While observing the VU meters, temporarily increase the back tension to the left reel by lightly applying pressure by hand. If sufficient contact pressure is applied to the head while the tape is running, no change will be noticed on the meter when the back tension is increased. However, if insufficient pressure is applied to the head, the deflection needle will show increased deflection due to contact pressure caused by the back tension. This method will help determine whether head contact is properly adjusted or not. To adjust, loosen the retaining screw (A), that'll be the center screw at the rear of the head as shown in Fig. 7-27. Then, change the direction of the head for proper alignment.

**Note:** The amount of pressure to be applied to the reel is very important; too strong of pressure lowers the speed of the tape, while too light of pressure does not ensure contact. However, by practicing a few times, you will be able to judge approximate pressure to be applied.

3. With the test tape signal at 16 kHz, determine the point where maximum level of each channel is obtained and retighten the retaining screws (A) at that position.
4. For proper head contact, adjust the record/sync reproduce heads as necessary.

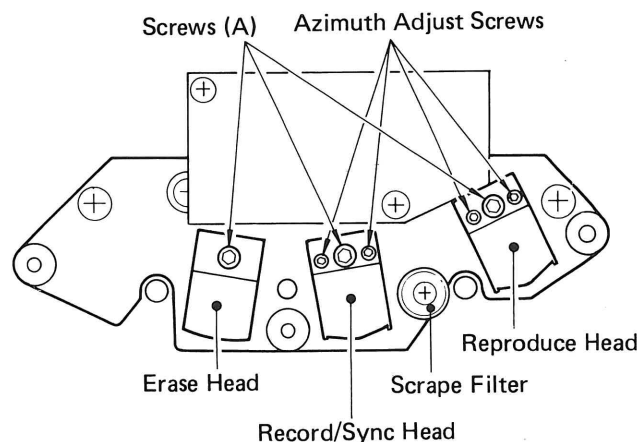


Fig. 7-27. Head Adjustment Screws

#### C. Head azimuth adjustment

1. Connect the OUTPUT jack for channel 2 of the deck to the vertical input terminals of an oscilloscope.
2. Connect the OUTPUT jack for channel 7 of the deck to the horizontal input terminals of the oscilloscope.
3. Connect an AF level meter to the OUTPUT jack(s) as shown in Fig. 7-28.
4. Switch the OUTPUT SELECT switch to REPRO.
5. Load the reproduce alignment test tape to reproduce. Then, a scope display reading showing phase relations between both channels will be obtained as shown in Fig. 7-29.
6. Adjust the repro head azimuth screw until the scope display shows less than 90 degree at 10 kHz out of phase with the AF level meter showing approximately maximum value for both channels.
7. Switch the OUTPUT SELECT switch to SYNC, and adjust the record/sync head azimuth screw the same way.

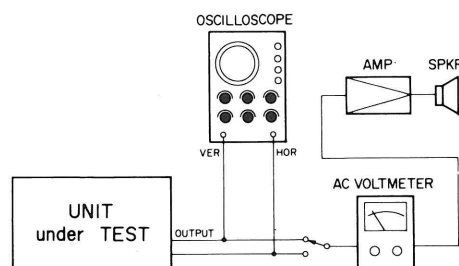


Fig. 7-28. Head Azimuth Test Set-Up