Date: **July 23, 2001**

Model: **FVS-T1000**

Subject: **NEW TOOLS—MIRROR ADJUSTING FIXTURE AND REFERENCE BASE ASSEMBLY**

Serial No: **ALL**

DESCRIPTION

The tools in Table 1 are now available as service parts.

Table 1

Description	Part No.
Mirror Adjusting Fixture	J-6515-100-A
Reference Base Assembly	J-6515-150-A

ORDERING INFORMATION

NOTE: To order upgrades or for regional service center and parts ordering information, refer to the following document, which lists all contact telephone numbers:

Technical Bulletin *001999000*

Canadian customers: Please order parts from your usual supplier.

MIRROR ADJUSTING FIXTURE

(See Figure 1.)

- The mirror adjusting fixture is a glass chart used to adjust the mirror.
- Use the mirror adjusting fixture when replacing the OPS assembly (A-8321-626-❑).

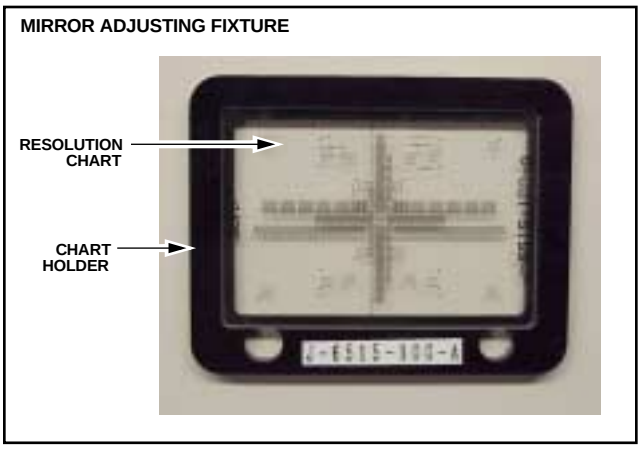

Figure 1

MIRROR ADJUSTMENT PROCEDURE

Equipment Requirements

- Mirror Adjusting Fixture (Resolution Chart, Chart Holder) (J-6515-100-A)
- HD Monitor (Sony HDM-20EIJ or equivalent)
- HD Waveform Monitor (Sony Tektronix WFM1125 or equivalent)

Preparation

1. Install the 35 mm gate assembly to the unit.
2. Install the 16 mm zoom lens to the unit.
3. Connect the HD monitor to the unit's HD OUTPUT MONITOR (SUPER) connector.

   NOTE: Set the HD monitor to the under-scan mode.
4. Connect the HD waveform monitor to the unit's HD OUT1 connector.
5. Turn the unit on.

Adjustment

1. Install the mirror adjusting fixture to the gate base assembly as shown in Figure 2.

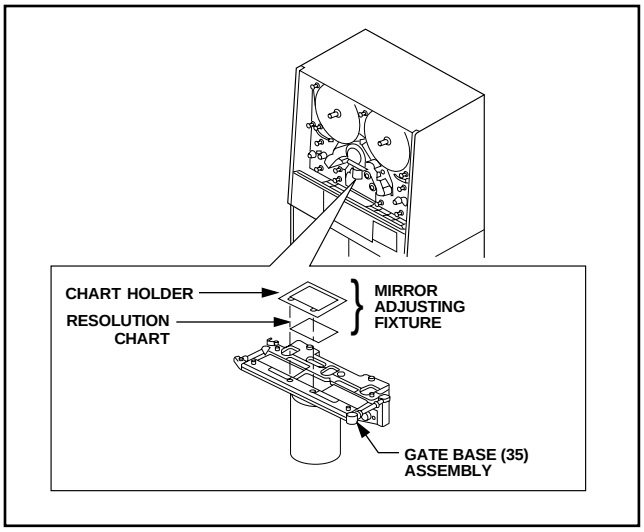

Figure 2

2. Select Mode No. 18 from the control panel and set the IRIS data to 7FFF (OPEN).
3. Select Mode No. 19 from the control panel and ND filter to “2” (1/16).
4. Adjust the camera position (mode No. 08 or 18) so that the SUPER16 area of the resolution chart fully occupies the display area of the HD monitor.
5. **For OPS with suffix -A** (without nuts):
   - Remove the locking paint from the two mirror adjustment screws of the OPS assembly.

   For OPS with suffix -B (with nuts):
   - Loosen nuts of screws A and B of the OPS assembly to adjust. (See Figure 3.)

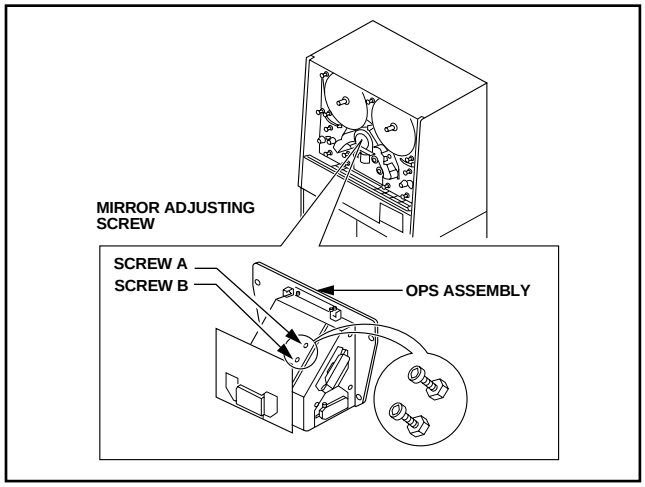

Figure 3

6. Select Mode No. 18 from the control panel and set the FOCUS data to 4000.
7. Using the line selector on the HD waveform monitor, select the portion of a single waveform for 16 mm at the center of the waveform.
8. Adjust the mirror adjustment screws of the OPS assembly so that the waveform is symmetrical on the left and right.

   CAUTION:

   For OPS with suffix -A (without nuts):
   - Turn the screws manually. Do not tighten the screws too tight.

   For OPS with suffix -B (with nuts):
   - For screws A and B, use a tightening torque of 0.5 Kgf.cm (0.05 Nm).
9. Verify that the waveform remains symmetrical when the focus knob on the control panel is turned. (See Figure 4.)

   If the waveform is not symmetrical, adjust the mirror adjustment screws as follows.
   - If the peak appears late at the right side of the waveform when the focus knob is turned clockwise, loosen screw B and tighten screw A.
   - If the peak appears late at the left side of the waveform when the focus knob is turned clockwise, loosen screw A and tighten screw B.
10. Verify that the waveform remains symmetrical when the OPS assembly is hit lightly.

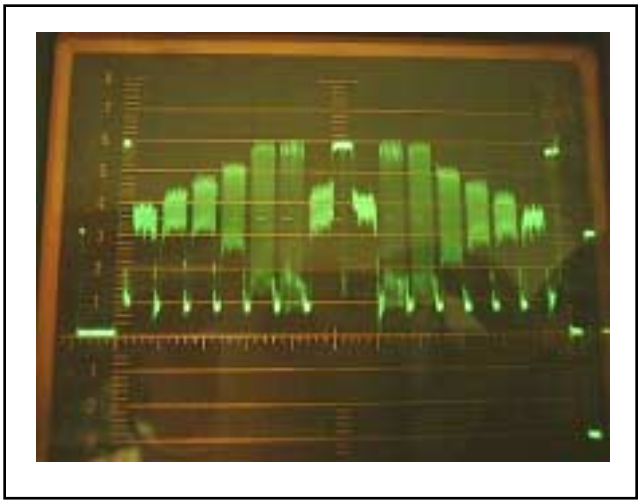

Figure 4

11. **For OPS with suffix -A** (without nuts):
    - Apply locking paint to the two mirror adjustment screws of the OPS assembly.

    For OPS with suffix -B (with nuts):
    - Loosen the nuts and apply locking paint to the two mirror adjustment screws of the OPS assembly.
12. Remove the mirror adjustment fixture.
13. Turn the unit off.

REFERENCE BASE ASSEMBLY

(See Figure 5.)

- The reference base assembly is used as a reference fixture to check the height of:
  - S/T reel tables
  - S/T tension regulators
  - Guide rollers (G1 to G3; G8 to G10)
  - Reel assembly and roller guide 35/16 when experiencing running difficulty
- The reference base assembly is installed to the posts of the FTP panel on the base plate and used with the 35GR height gauge (J-61515-90-A).
- Use the reference base assembly when replacing the reel assembly (A-8321-629-❑) and the roller guide 35/16 (3-617-343-❑).
- When adjusting units with the following serial numbers for the first time using the reference base assembly, adjust the height of the S/T reel tables, S/T tension regulators, and guide rollers (G1 to G3; G8 to G10) simultaneously.
  - 10,002–10,003
  - 10,302–10,304
  - 10,401–10,405
  - 10,502–10,503

  After performing the adjustment, verify or adjust the replaced or defective part only.

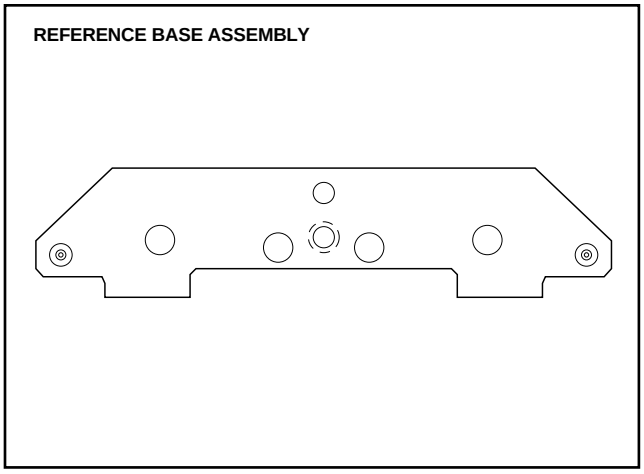

Figure 5

REFERENCE BASE ASSEMBLY OPERATION PROCEDURE

Confirm the height of the S reel table, S tension regulator, and guide rollers (G1 to G3) as follows.

1. Remove FTP panels A, B, C, and F. (See the maintenance manual, Part 1, 1st Edition.)
2. Install the reference base assembly (J-6515-150-A) to the posts affixing the FTP panel on the base plate using an L wrench (diagonal length 3, M3) at two locations as shown in Figure 6.

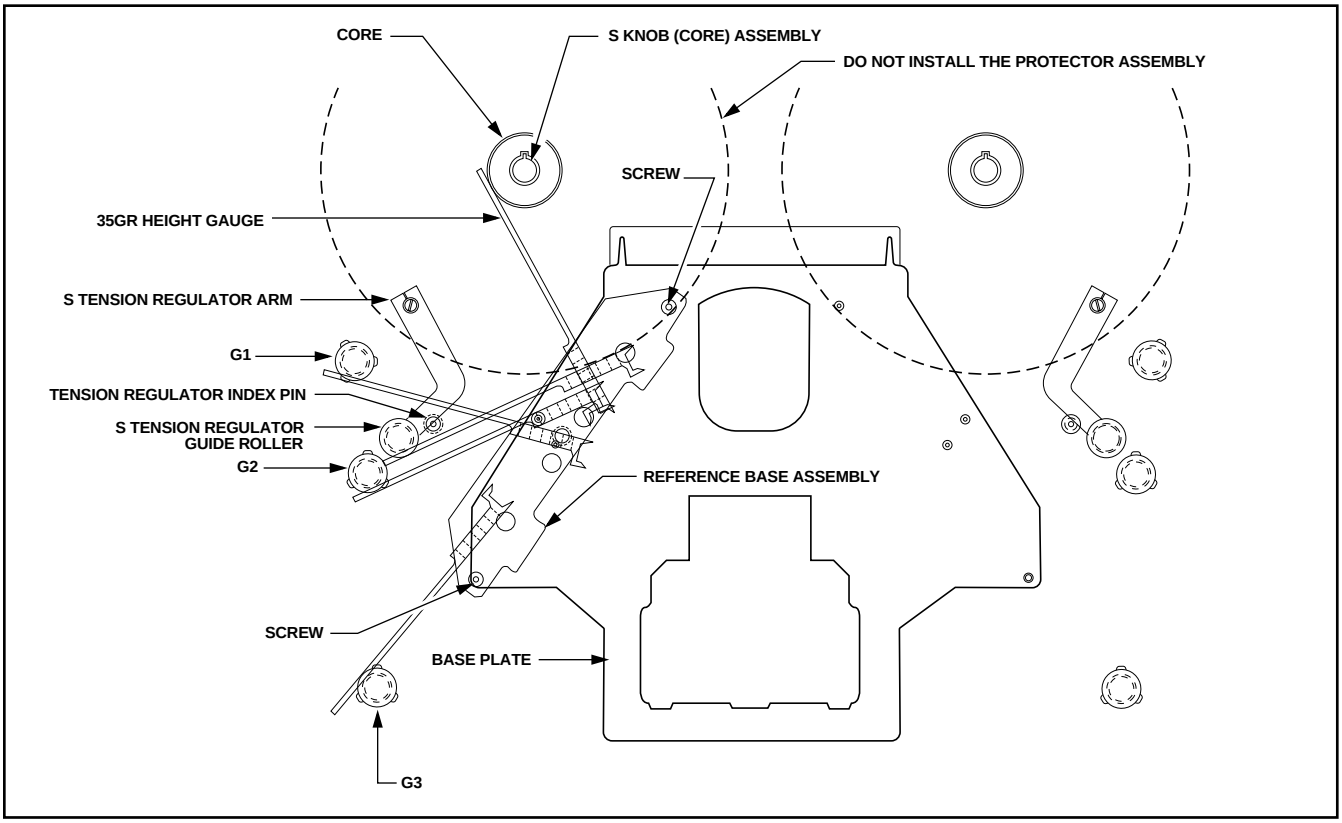

Figure 6

3. While pressing the 35GR height gauge gently towards the reference base assembly, verify the height by sliding the 35GR height gauge. (See Figure 7.)

   CAUTION: Take care to avoid damaging the sprocket and rollers.

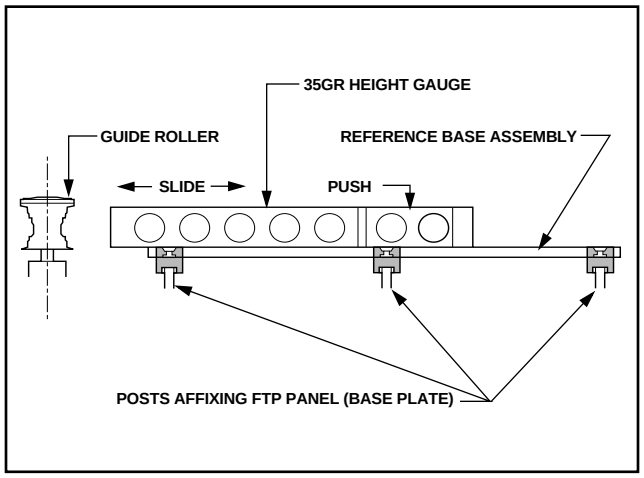

Figure 7

S Reel Table Height Adjustment

1. Install the core stopper, knob (core) assembly and core without installing the protector assembly. (See Figure 8.)

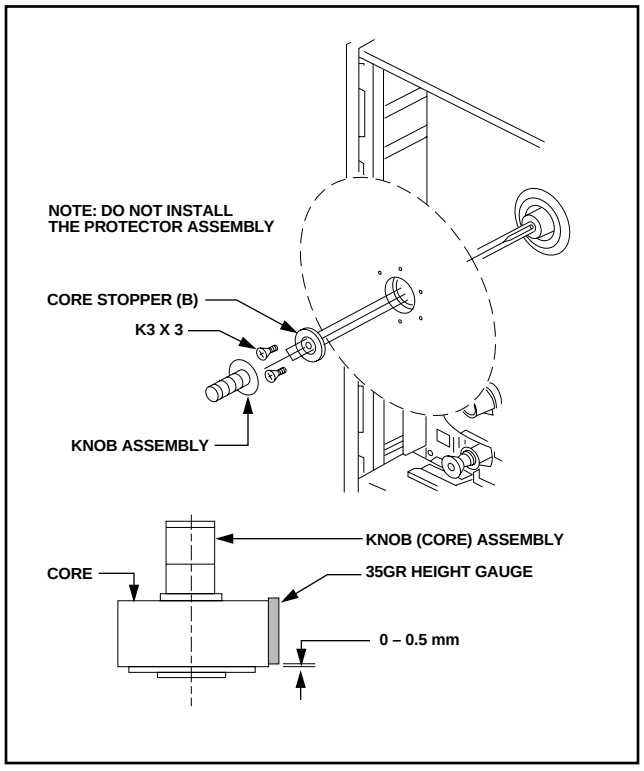

Figure 8

2. Slide the 35GR height gauge into contact with the core.

   If the clearance between the lower surface of the core and the lower surface of the 35GR height gauge is 0 to 0.5 mm (the 35GR height gauge sits above the core), no further adjustment is necessary.

   If the clearance exceeds 0.5 mm, adjust the height of the reel assembly.

S Tension Regulator Guide Roller Height Adjustment

1. Rotate the shaft of the S tension regulator arm with a flat-head screwdriver and manually move the S tension regulator arm to the thread-end position. (See Figure 9.)

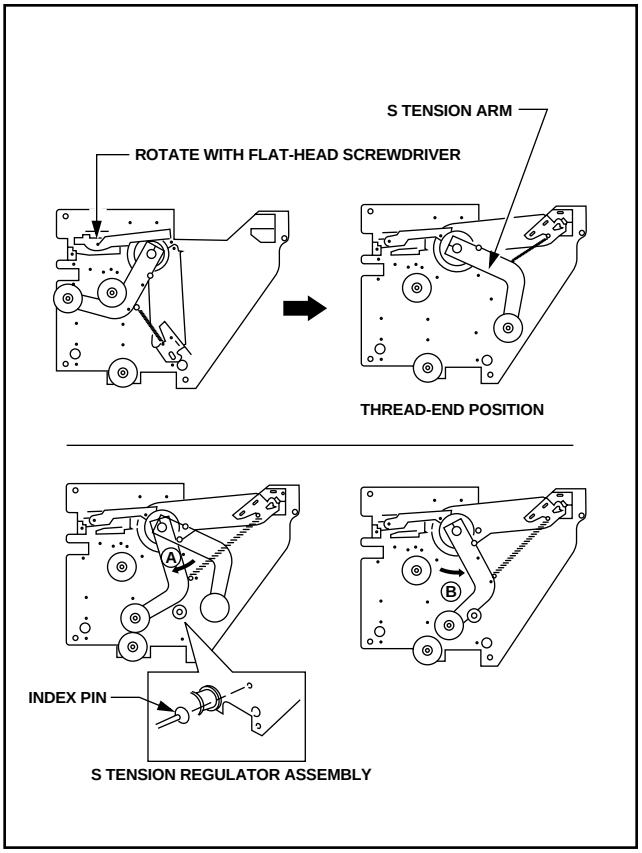

Figure 9

2. Manually move the tension arm in the direction of the arrow “A” and insert the index pin (positioning shaft of the tension regulator).
3. Move the tension arm back slowly in the direction of the arrow “B” into contact with the index pin.

4. Slide the 35GR height gauge to verify that the lower surface of the gauge comes into contact with the lower flange film support block of the guide roller.

   If the gauge touches the lower flange, no further adjustment is necessary. (See Figure 10.)

   If not, loosen the screw with a hexagon socket head at the top of the guide roller and adjust the height so that the lower surface of the gauge touches the lower surface of the film support block.
5. Tighten the screw after the adjustment.

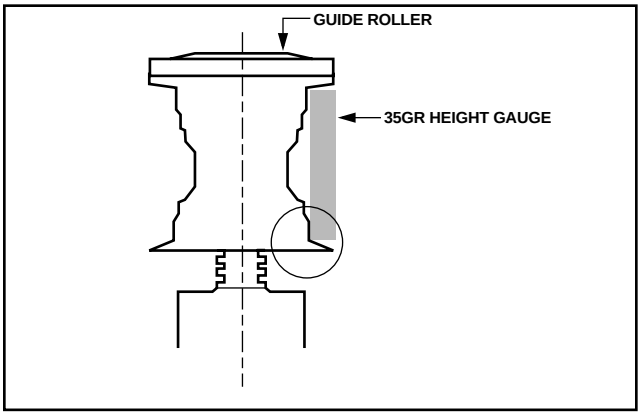

Figure 10

Guide Roller (G1 to G3) Height Adjustment

1. Slide the 35GR height gauge to verify that the lower surface of the gauge comes into contact with the lower flange film support block of the guide roller.

   If the gauge touches the lower flange, no further adjustment is necessary. (See Figure 10.)
2. If not, loosen the screw with hexagon socket head at the top of the guide roller and adjust the height so that the lower surface of the gauge touches the lower surface of the film support block.

T Reel Table, T Tension Regulator, and Guide Roller (G8 to G10) Height Adjustment

Verify the height of the T reel table, T tension regulator, and guide rollers (G8 to G10) as follows.

1. Install the reference base assembly (J-6515-150-A) to the posts affixing the FTP panel on the base plate using an L wrench (diagonal length 3, M3) at two locations as shown in Figure 11.
2. Perform all height confirmations and adjustments in the same manner as performed for the S side.

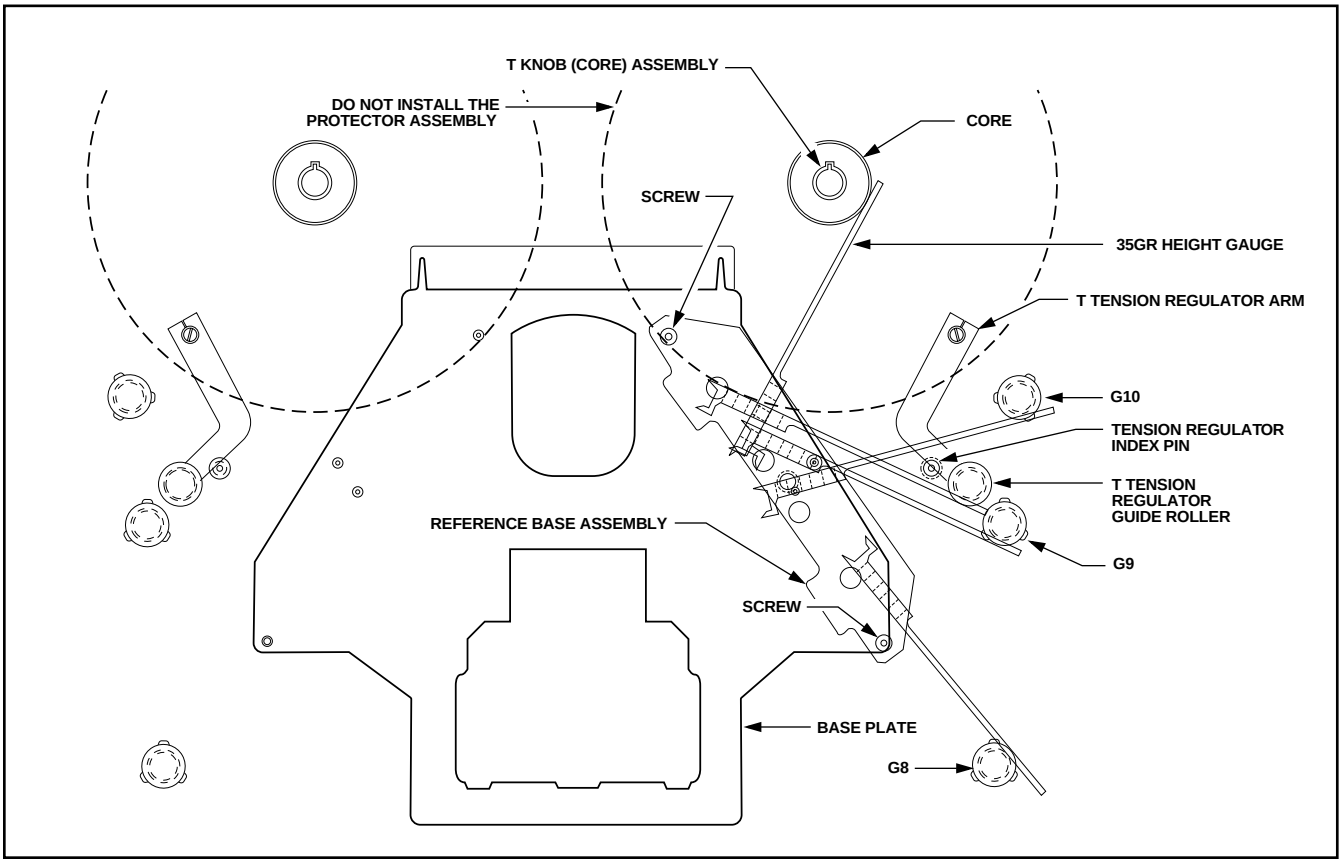

Figure 11

EVERTZ Guide Roller Height Adjustment

Adjust the height of the EVERTZ guide roller on which the EVERTZ KEY CODE reader in installed as follows.

1. Verify that the height of guide rollers G3 and G4 are adjusted with the reference base assembly and the 35GR height gauge.

   CAUTION: If an Analog Audio Assembly (BKFV-500) is already installed, the G4 guide roller is adjusted to the audio head; therefore adjust as follows.

   a. Place a mark on the bearing holder part (silver-colored on top) of the G4 guide roller.
   b. Adjust the G4 guide roller using the reference base assembly and the 35GR height gauge.
   c. After adjusting the height of the EVERTZ guide roller, return the G4 guide roller height to its original position by referring to the mark made previously.

2. Remove the EVERTZ reader mounting block.
3. Remove the discharger on the S side.
4. Position the 35GR height gauge manually so that the gauge touches the film support of the lower flanges of the G3 and G4 guide rollers. (See Figure 12.)

   NOTE: Hold the lower flanges of the guide rollers firmly to avoid depressing the guide roller. Be sure to use the 35GR height gauge in the correct directions (upper and lower).

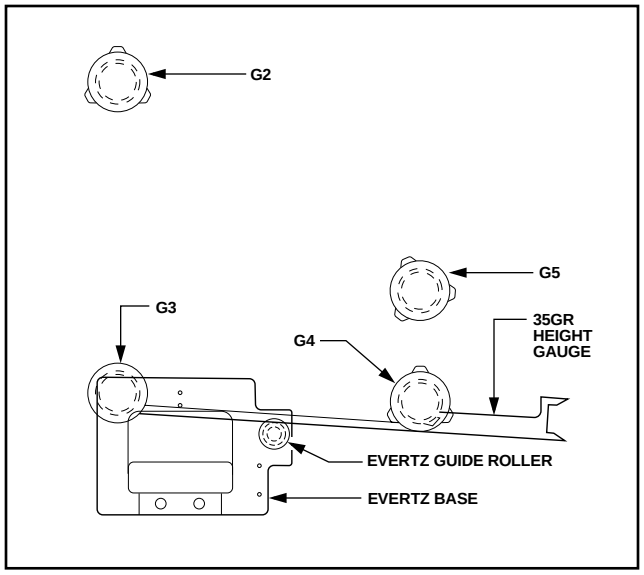

Figure 12

5. Loosen the screw with a hexagon socket at the upper side of the EVERTZ guide roller.
6. Adjust the height of the EVERTZ guide roller so that the upper portion of the gauge touches the film support block. (See Figure 13.)
7. Tighten the screw.

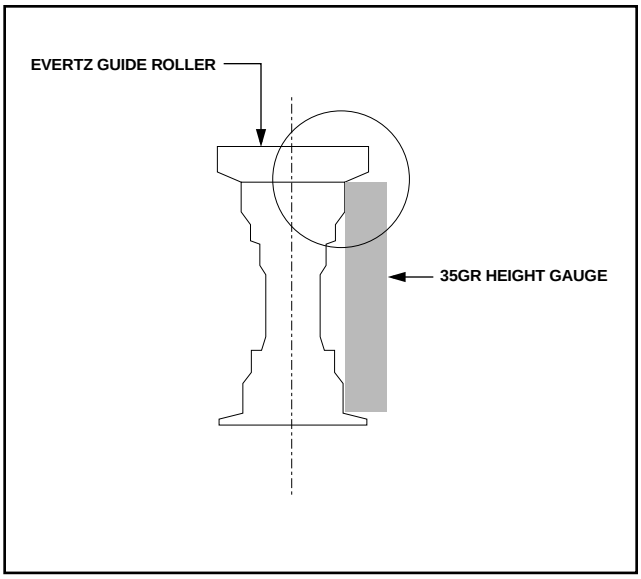

Figure 13