Canovision 8

SERVICE MANUAL

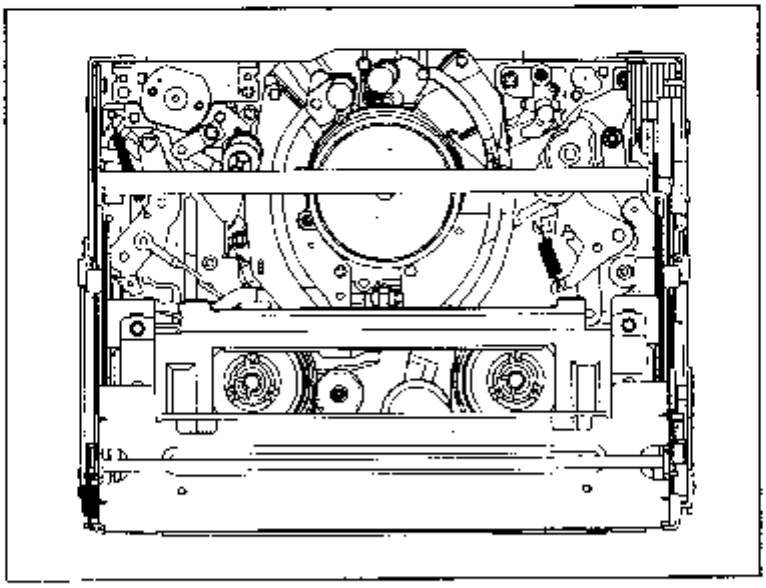
Revision sheets for MC-5

NTSC

PAL

SECAM

MECHANICAL CHASSIS



REVISION

These revision sheets are provided to correct the typographical, description errors, etc. On this Service Manual.

Before reading the manual, please replace the each page with these Sheets.

Chapter II Adjustments/Replacements

1. Preparation Items

For the details about the removal of external covers, C.B.A.s and test points, refer to the service manual of camcoder which equips this mechanism.

1-1 List of maintenance tools and supplies

Tools

Description	Tool No.	Remarks
Cassette torque gauge	DY9 1947-000	
Alignment tape K (Tracking B)	DY9 1955 000	NTSC
Alignment tape F (Tracking C)	DY9-1956-000	PAL, FPAL

Supplies

Description	Tool No.	Remarks
Screw lock 1401C	CY9 6011-000	Camera Service Dept.
Ethyl alcohol	-	Commercially available
Lens tissue K-1, K-3	CY9-4023-003	Camera Service Dept.

2 Periodic Check/Maintenance

2-1 Cleaning of rotary drum assembly

(1) Moisten a lens tissue (CY9-4023-003) with an ethyl alcohol.

(2) Clean the drum with it gently while rotating the drum counterclockwise slowly.

* Notes:

1. Do not rotate the drum by motor.
   Also, be sure to rotate it counterclockwise.
2. To avoid damaging the head chip, do not move the lens tissue vertically against the head chip.

2-2 Cleaning of tape path (Fig. Ⅱ-2)

(1) In EJECT mode, clean the tape path (P1, 2, 3, 4, 5, 6, 8, 9, 10, 11, 12 and pinch roller) and the lower drum by using a lens tissue with ethyl alcohol moistened. (See Fig. Ⅱ-2)

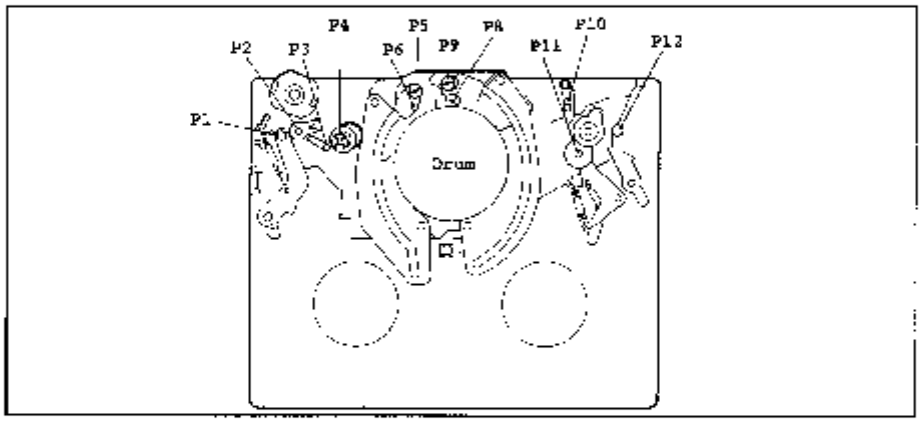


Fig. Ⅱ-2

2-3 Adjustments after replacement

The following adjustments are required after the replacement.

Required adjustments	Replaced parts
Position of tension regulator	Tension spring, T belt
Back tension	Tension spring, T belt
FWD/RVS torque check Position of tension regulator	T reel S reel
Tape path	Parts in tape running section

3. Adjustment of Tension Regulator Position (Figs. Ⅱ-4, Ⅱ-5)

(1) Referring to 1-2 (P. 21), run the tape without the cassette compartment.

(2) Confirm that Ⓐ in the Fig. Ⅱ-4 is within the width of groove Ⓑ.

(3) If it is not within the width, take out the tape once, and loosen the screw securing the T belt. Then, adjust the position referring to the direction of arrows in the Fig. Ⅱ-4 and Ⅱ-5.

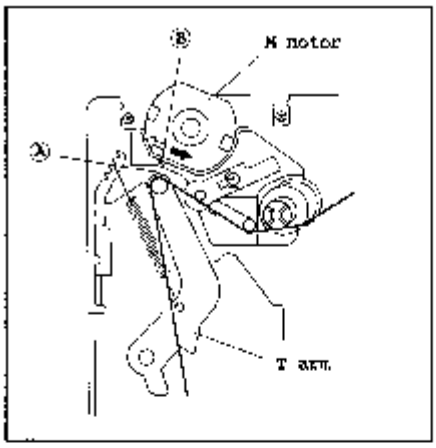


Fig. Ⅱ-4

Note: Any type of tape can used for the adjustment. However, note that the adjustment must be performed by using the following part of tape.
- From 5 mintes after BOT to the middle of tape. (For example, if you use a 60 minute tape, use a 5 minutes-30minutes portion for adjustment.)

(4) Repeat the above steps (2) and (3) until the Ⓐ is positioned within the width of groove Ⓑ.

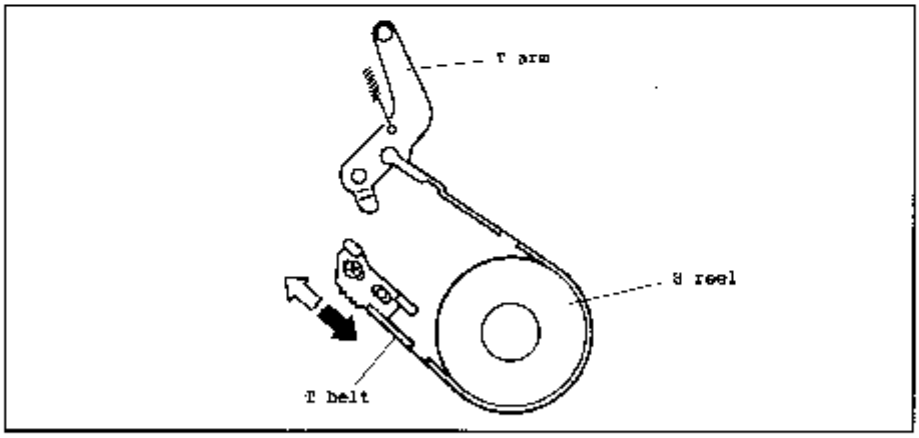


Fig. Ⅱ-5

6-3 Adjustment at inlet side (Fig. Ⅱ-9)

(1) Set the master tape.
Then, display the waveform in PLAY mode.

(2) Loosen the screw of P5.
(Fig. Ⅱ-9)

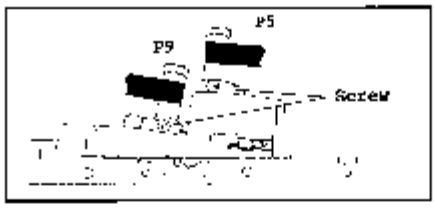


Fig. Ⅱ-9

(3) Adjust the P5 to flatten the inlet side of waveform.

(4) After the flattest waveform is obtained, tighten the screw. However, as the waveform may change a little when tightening the screw, estimate it when adjusting.

6-4 Adjustment at outlet side (Fig. Ⅱ-9) (P9)

(1) Set the master tape.
Then, display the envelope waveform in PLAY mode.

(2) Loosen the screws of P9. (Fig. Ⅱ-9)

(3) Adjust the P9 to flatten the outlet side of waveform.

(4) After the flattest waveform is obtained, tighten the screw. However, as the waveform may change a little when tightening the screw, estimate it when adjusting.

Chapter Ⅲ Disassembling/Reassembling

1. Preparation

Tools

Description	Tool No.	Remarks
Mode selector	DY9-1074-000	
Mode selector converter	DY9-1116-000	Extension Cable Kit for E07
Hexagonal wrench	-	Commercially available
Upper drum removing tool	DY9-1120-000	New

Supplies

Description	Tool No.	Remarks
Grease EL-4	DY9-3020-000	
Hydroflud NT-68	DY9-3010-000	
Grease	DY9-3022-000	New
Alonalpha	CY9-6007-000	Camera Service Dept.

3. Frames L, R and Holder-Up Spring (Figs. Ⅲ-4, Ⅲ-3-A)

3-1 Disassembling

(1) Referring to 2 (P. 33), remove the cassette component.

(2) Remove the frames L and R by removing two E rings ⑩.

(3) Remove the holder up spring from the shaft of frame R.

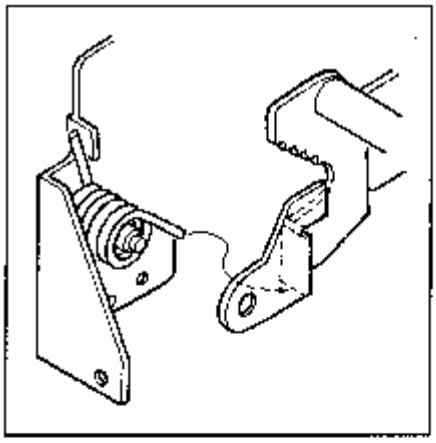


Fig. Ⅲ-4

3-2 Reassembling (Fig. Ⅲ-4)

(1) Reverse the disassembling procedures.

Note:

1. Hook the holder-up spring as shown in the Fig. Ⅲ-4. (Also, when hooking, be careful your fingers.)
2. When replacing the Frame R, apply the EL-4 (grease) on the positions of ① and ② indicated respectively by arrows. (Fig. Ⅲ-3-A)
3. When replacing the Frame L, apply the Grease EL-4 on the positions ③ indicated by arrows (Fig. Ⅲ-3-A)

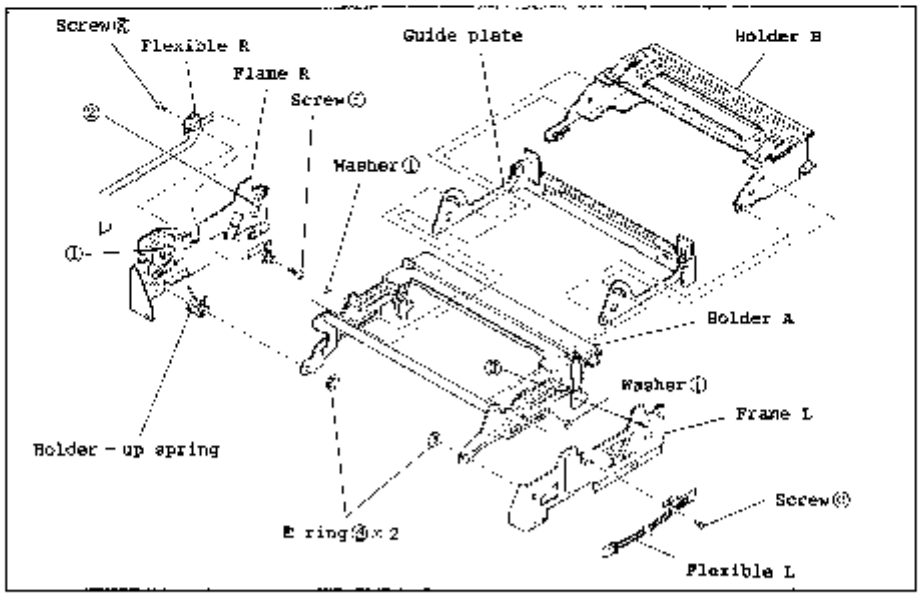


Fig. Ⅲ-3-A

5. Holders A, B and Guide Plate (Fig. Ⅲ-3-C)

5-1 Disassembling

(1) Referring to 2 and 3 (P. 33, 34), remove the cassette component, frames L, R and holder-up spring.

(2) Seperate the holders A, B and the guide plate by removing two washers ①.

5-2 Reassembling

(1) Reverse the disassembling procedures.

Notes:

1. When replacing the holder A, apply the EL-4 (grease) on the positions of ① and ② indicated repectively by arrows. (Fig. Ⅲ-3-C)
2. When replacing the holder B, apply the Grease EL-4 on the positions ③ indicated by arrows. (Fig. Ⅲ-3-C)

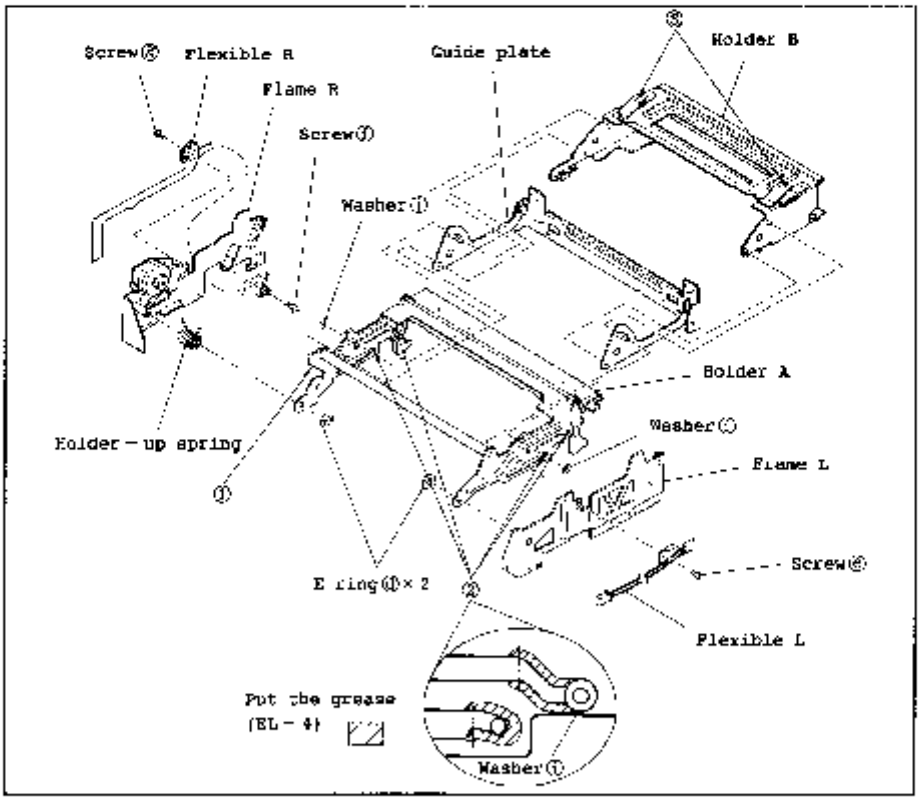


Fig. Ⅲ-3-C

10. Upper Drum (Fig. Ⅲ-12, 13, 13.5 and 14)

10-1 Disassembling

(1) Referring to 2 and 8 (P. 33 and 38), remove the cassette component, the stator flexible connector and rotor.

(2) Secure the earth spring.

(3) Remove two hexagonal screws. Then, while talking care of head, take out the upper drum upward.

(4) If the upper drum cannot be dismounted, take out the earth assembly referring to 8, set the upper drum removing tool by using the screw holes for rotor and the hexagonal screws for the upper drum and then remove the upper drum.

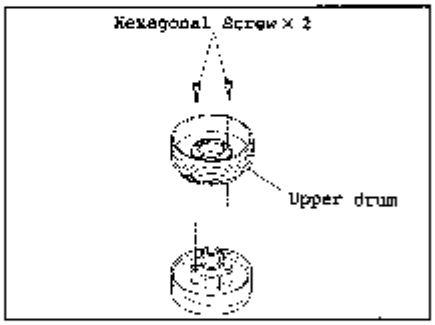


Fig. Ⅲ-12

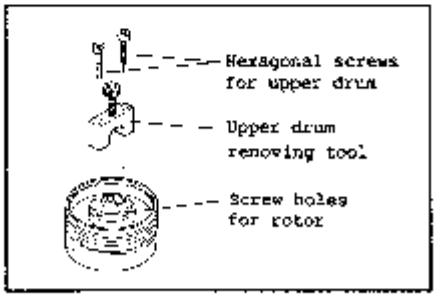


Fig. Ⅲ-13.5

10-2 Reassembling

(1) Align the polarities of upper drum and the lower drum. (Fig. Ⅲ-14)

(2) Revease the disassembling procedures.

(3) Release the rotary earth spring locking.

Note: When the upper drum is replaced, be sure to perform the tape path adjustment.

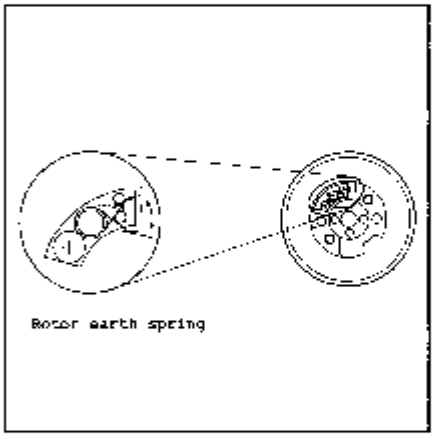


Fig. Ⅲ-13

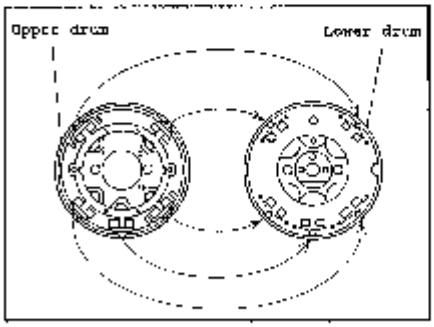


Fig. Ⅲ-14

11. Loading Assembly (Fig. Ⅲ-15, 16 and 17)

11-1 Disassembling (Fig. Ⅲ-15)

(1) Referring to 2 and 7 (P. 33, 37), remove the cassette component and the drum assembly.

(2) Take out the loading assembly by removing three screws Ⓜ.

11-2 Reassembling (Fig. Ⅲ-16, 17)

(1) Apply the grease EL-4 on the ▨ portion in the Fig. Ⅲ-16.

(2) Set the loading assembly and the mechanism unit to the unloading state completely. (See P.32, 1-2.)

(3) Reverse the disassembling procedures.

(4) Check that the arrow-indicated holes are run through. (Fig. Ⅲ-17)

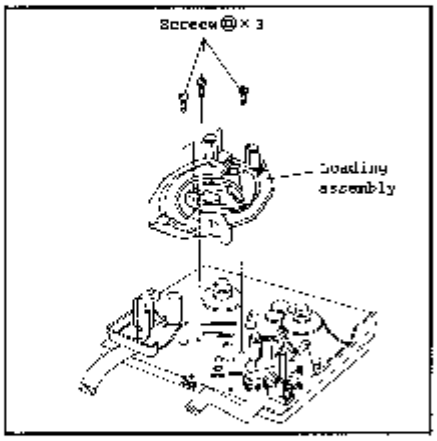


Fig. Ⅲ-15

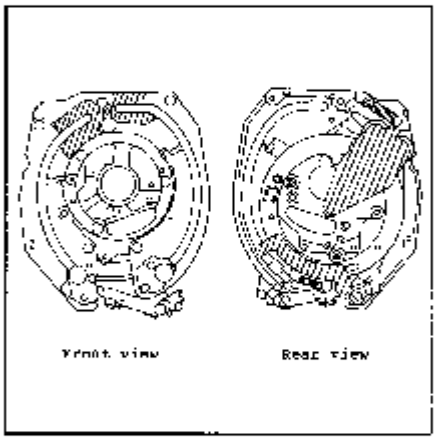


Fig. Ⅲ-16

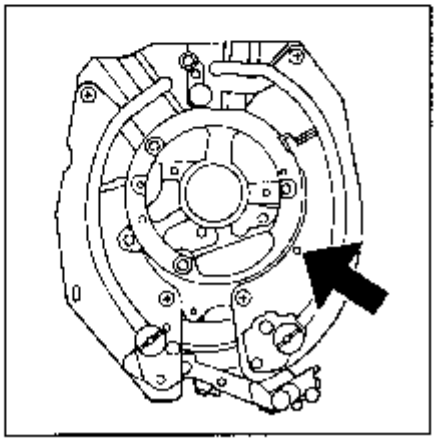


Fig. Ⅲ-17

15. P12 (Fig. Ⅲ-25)

15-1 Disassembling

(1) Referring to 2 (P.34), remove the cassette component.

(2) Remove the screw Ⓑ, and remove the P12's cover. Then, remove the P12 and P12's spring.

15-2 Reassembling

(1) Reverse the disassembling procedures.

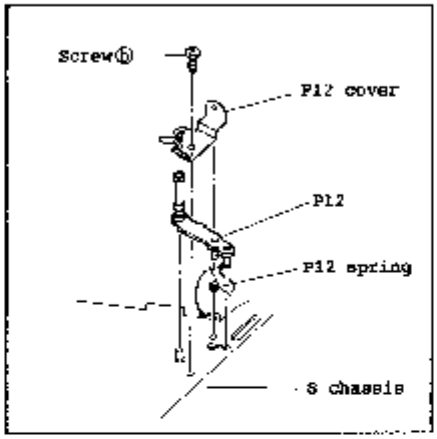


Fig. Ⅲ-25

26. S Reel (Fig. Ⅲ-35)

25-1 Disassembling

(1) Referring to 2, 19, 20 and 23, remove the cassette component, the T belt and the T belt, loading brake, LCH block cover.

(2) Remove the S reel from the shaft.

25-2 Reassembling

(1) Reverse the disassembling procedures.

Note:

1. Perform the position of tension regulator adjustment.

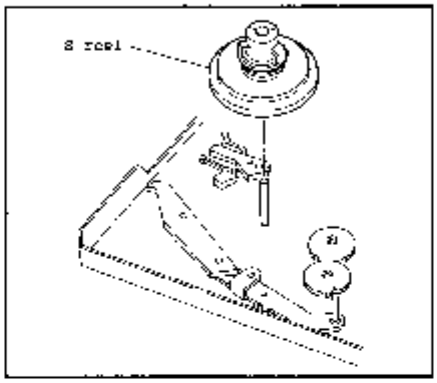


Fig. Ⅲ-35

33. P10 Unit (Fig. Ⅲ-42)

33-1 Disassembling

(1) Set the unloading state.

(2) Remove the P10 unit by removing two screws ⑲.

33-2 Reassembling

(1) Apply the Grease EL-4 on the ▨ positions in the Fig. Ⅲ-42.

(2) Reverse the disassembling procedures.

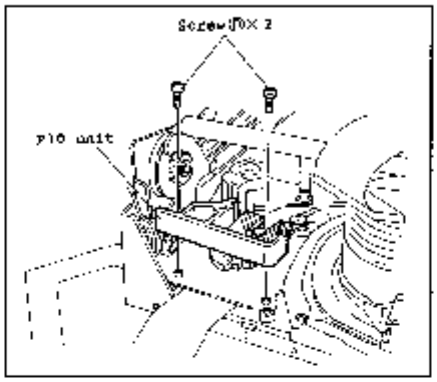


Fig. Ⅲ-42

35. Pinch Lever (Fig. Ⅲ-44-A)

35-1 Disassembling

(1) Referring to 2, 13 and 14, remove the cassette component, the pendulum arm gear and the S chassis.

(2) Remove the pinch lever.

35-2 Reassembling

(1) Apply the Grease EL-4 on the ▨ positions in the Fig. Ⅲ-44-A.

(2) Reverse the disassembling procedures while checking the position of holes. (Fig. Ⅲ-44-A)

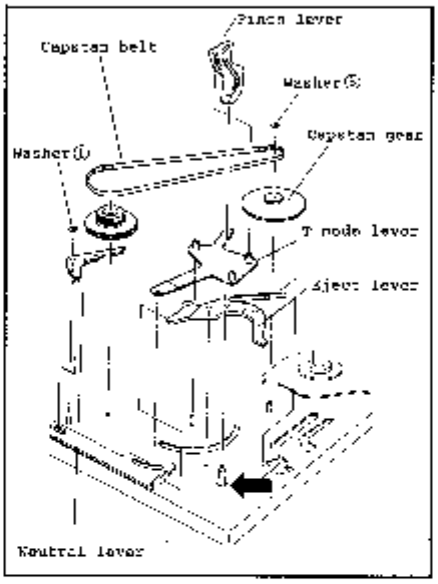


Fig. Ⅲ-44-A

39. T mode Lever (Fig. Ⅲ-44-B)

39-1 Disassembling

(1) Referring to 2, 13, 14, 35 and 38, remove the cassette component, the pendulum arm gear, the S chassis, the pinch lever and the capstan belt.

(2) Remove the T mode lever.

39-2 Reassembling

(1) Apply the Grease EL-4 on the ▨ and the arrow-indicated positions in the Fig. Ⅲ-44-B.

(2) Reverse the disassembling procedures while checking the position of holes.

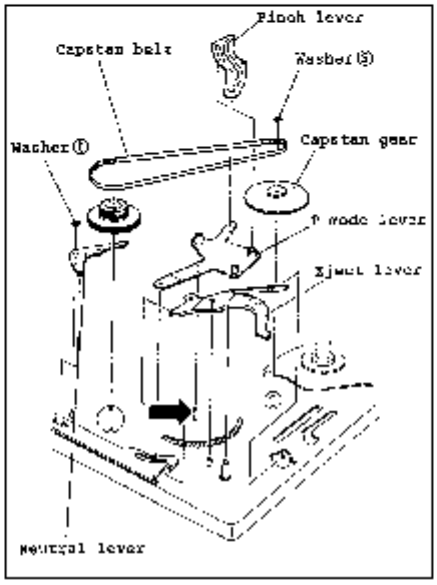


Fig. Ⅲ-44-B