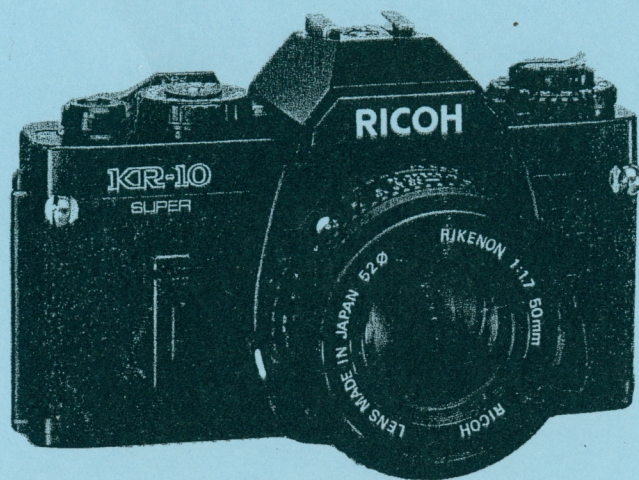




RICOH KR-10 SUPER

REPAIR MANUAL AND REPAIR PARTS

RICOH COMPANY LTD.

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SPECIFICATIONS

TYPE.....	35 mm SLR with automatic electronic exposure control focal plane shutter
FILM FORMAT AND	
FRAME SIZE	35 mm film; 24 × 36 mm
LENS MOUNT.....	K mount
STANDARD LENSES.....	50 mm XR RIKENON f/1.4 50 mm XR RIKENON f/1.7 50 mm XR RIKENON f/2.0
SHUTTER	Electronically controlled, vertically moving metal focal plane shutter Automatic from 16 to 1/1000 sec. Manual from 16 to 1/1000 sec. plus B
SELF-TIMER.....	Operating delay about 10 seconds during operation the red LED light pulsates and Cancelable
VIEWFINDER.....	Field of view covers 93% horizontally and vertically Viewing Magnification 0.88X (with 50 mm f/1.4 lens) Indicators in the viewfinder — Exposure Adjustment, Bulb, Manual, Overexposure, Underexposure, Shutter Speeds, Slow Shutter, Long Time Exposure, Battery Low Warning, Flash Ready (LED) Light,
FOCUSING.....	Split-image spot in micropism band
EXPOSURE METER	TTL full open metering for center-weighted average light reading coupled automatically to f-stop

EXPOSURE COUPLING

RANGE.....	EV 0 ~ EV 18 (with ASA 100 film, 50 mm f/1.4 lens)
FILM SPEED RANGE.....	ASA 12 ~ 3200
FLASH TERMINAL.....	X synchro contact
ACCESSORY SHOE.....	Hot Shoe (with Flash Ready Signal Contact) Flash Synchro Terminal
EXPOSURE	
ADJUSTMENT	Exposure adjustment system (+2 ~ -2, in 1/3 steps)
FILM ADVANCE.....	Single stroke film advance lever with 135° winding angle and 35° stand-off Automatic winding possible by mounting XR Winder-2
EXPOSURE COUNTER.....	Additive, automatic resetting
FILM REWIND.....	Film Rewind Crank system
MIRROR.....	Quick return mirror
BACK COVER.....	Hinged type, opened by pulling up Film Rewind Knob
POWER SOURCE	Two SR-44 1.5V Silver Oxide batteries Two LR-44 1.5V Alkaline Manganese batteries
DIMENSIONS	136 (W) × 86 (H) × 50 (D) mm (body only)
WEIGHT.....	460g(body only)
WEIGHT OF STANDARD	
LENSES.....	50 mm f/1.4 260g 50 mm f/1.7 210g 50 mm f/2 140g

*Specifications are subject to change without notice.

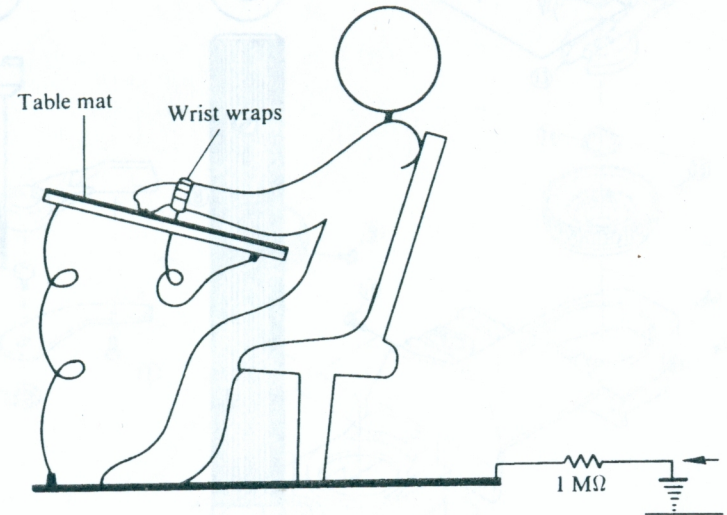
1. PURPOSE OF TABLE MAT

It is necessary to discharge static electricity in and around the work table including the operator in order to protect IC or printed circuit boards from destruction by electrostatic charge. For this purpose, a conductive table mat (ground mat) should be put on the work table and the operator should wear a wrist band which is connected to the table mat. Thus the surface of the work table is made free from static charge and conductive containers, and equipment placed on the table and the operator should be discharged with static electricity instantaneously in order to protect ICs and printed circuit boards from electrostatic damages.

As mentioned above, a table mat should be used on the table when XR cameras are repaired.

Caution:

1. Do not repair such electric equipment as electronic flashes and projectors to prevent electric shocks on the static control table mat.
2. When using the static control table mat, the soldering iron of the low leakage current or with ground connection should be used.



3. SD base plate assy (see Fig. 2)

- 1) Take off two SCREWS (No. 3).
- 2) Take off the SCREW (No. 5).
- 3) Take off the SCREW (sketch No. 29 on page 46).
- 4) Remove the SD BASE PLATE ASSY (No. 2) carefully.
- 5) Remove the SPACER (No. 1).

4. Film counter assy (sketch No. 36 on page 46)

- 1) Remove the WASHER (sketch No. 35 on page 46).
- 2) Take off two SCREWS (sketch No. 29 on page 46).
- 3) Remove the FILM COUNTER.

5. ASA contact holder assy (see Fig. 3)

- 1) Take off the SCREW (No. 4).
- 2) Remove the ASA CONTACT HOLDER ASSY (No. 3).
- 3) Remove the BLC CONTACT ASSY (No. 2) carefully.
- 4) Remove the ASA CONTACT ASSY (No. 1) carefully.

NOTE:

Pay attention not to bend CONTACTS Nos. 1 and 2.

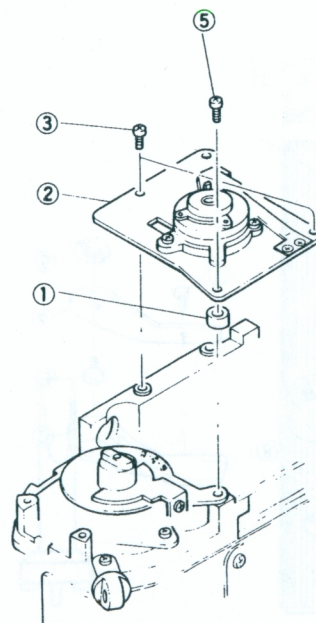


Fig. 2

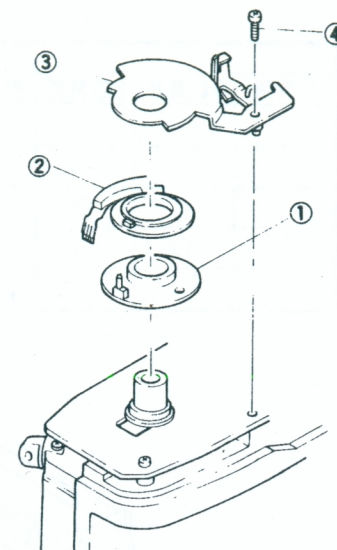


Fig. 3

6. SPD circuit board assy (sketch No. 24 on page 46)

- 1) Detach the soldered portions of all LEAD WIRES shown in Fig. 4.
- 2) Take off two SCREWS (sketch No. 25 on page 46), and remove the SYNCHRO BASE PLATE (sketch No. 26).
- 3) Take off two SCREWS (sketch No. 44 on page 48).
- 4) Remove the EYE PIECE FRAME (sketch No. 43) and the SHIELD PLATE (sketch No. 17 on page 46).
- 5) Take off two SCREWS (No. 1) shown in Fig. 5.
- 6) Detach seven soldered portions of SPD CIRCUIT BOARD ASSY shown in Fig. 6.

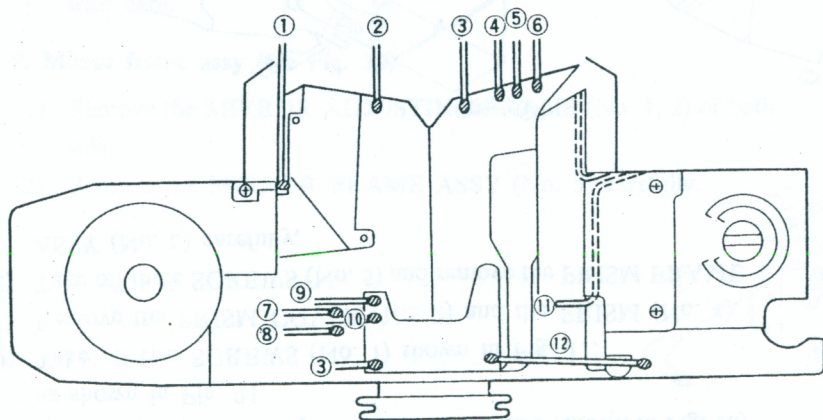


Fig. 4

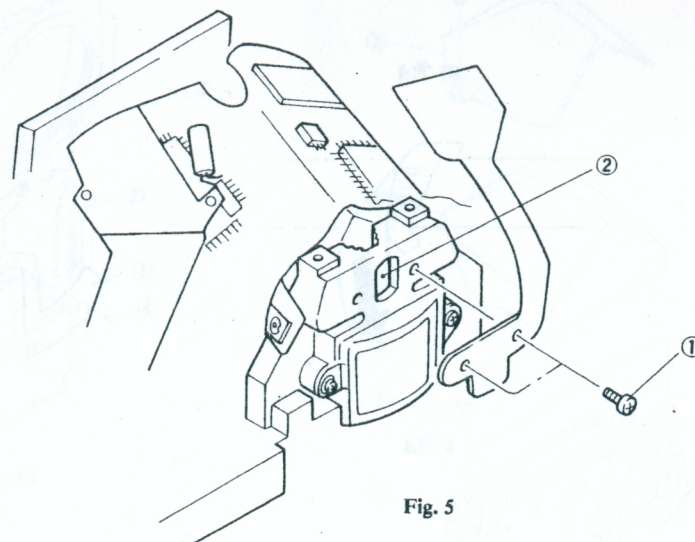


Fig. 5

- ① Green
- ② White
- ③ Yellow
- ④ Grey
- ⑤ Orange
- ⑥ Blue
- ⑦ Green
- ⑧ Purple
- ⑨ Brown
- ⑩ Black
- ⑪ Purple
- ⑫ Grey

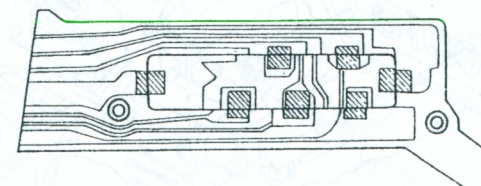


Fig. 6

- 7) Take off two SCREWS Nos. 1 and 2 shown in Fig. 7.
- 8) Take off three SCREWS shown in Fig. 8.
- 9) Move the SPD CIRCUIT BOARD ASSY with care as shown in Fig. 9.

NOTE:

Do not pull up A and B portions of the SHEET (shown in Fig. 10) as shown in Fig. 21.

- 10) Take off two SCREWS (No. 1) shown in Fig. 11.
- 11) Remove the PRISM COVER (No. 2) and the PRISM (No. 4).
- 12) Take off three SCREWS (No. 5) and remove the PRISM FRAME ASSY (No. 6) carefully,

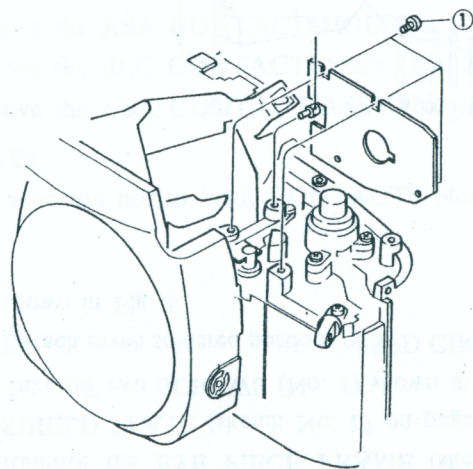


Fig. 8

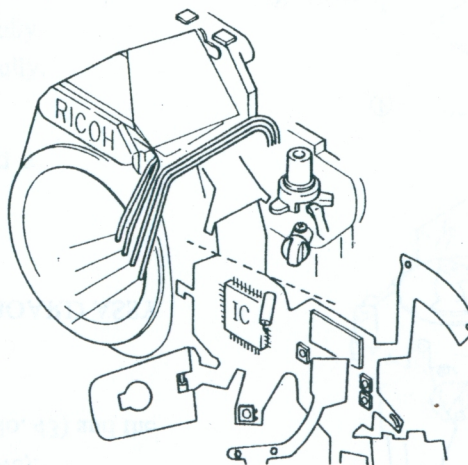


Fig. 9

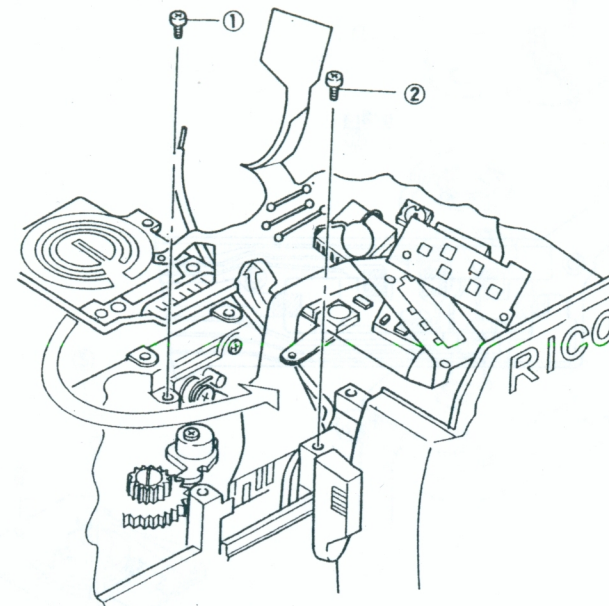


Fig. 7

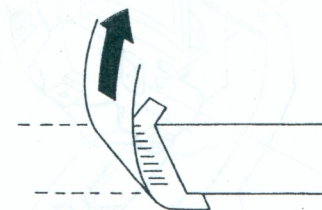


Fig. 10

7. Fresnel lens (see Fig. 11)

- 1) Take off three SCREWS (No. 9).
- 2) Remove the FRESNEL HOLDER (No. 8) and the SHIELDS (No. 10).
- 3) Remove the FRESNEL LENS (No. 7).

8. Mirror box (see Fig. 12)

- 1) Peel off both FRONT LEATHERS (sketch Nos. 5, 43 on page 50).
- 2) Take off two screws (No. 3) and remove the SELF LED COVER (No. 2).
- 3) Take off four SCREWS (No. 1) and remove the MIRROR BOX ASSY.
- 4) Take off three SCREWS (No. 4) and remove the MIRROR BOX with care.

9. Mirror frame assy (see Fig. 13)

- 1) Remove the MIRROR ADJUSTING FRAME (No. 1, 2) of both side.
- 2) Remove the MIRROR FRAME ASSY (No. 5) carefully.

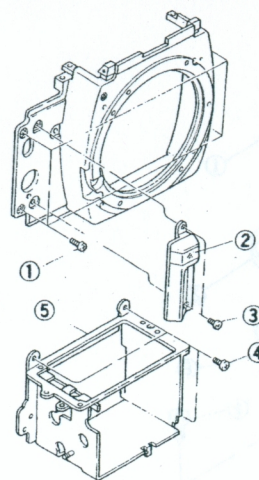


Fig. 12

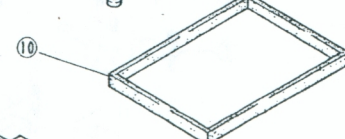
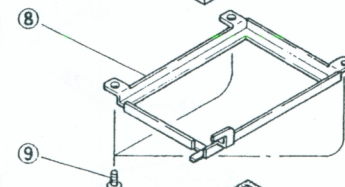
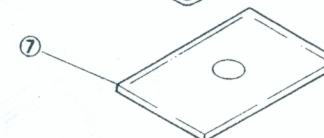
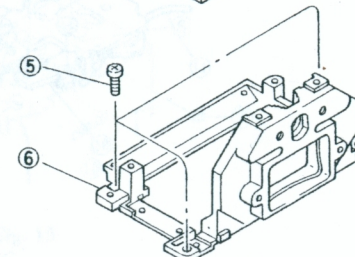
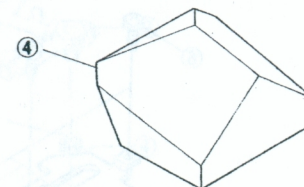
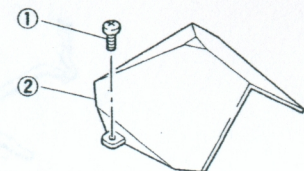


Fig. 11

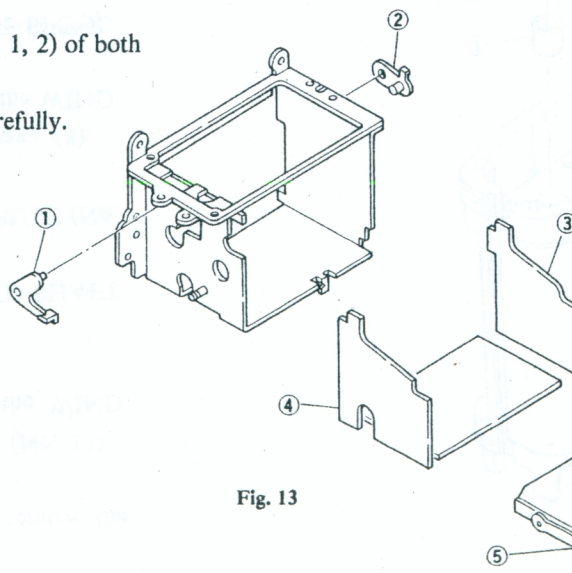


Fig. 13

10. Winding shaft (see Fig. 14)

- 1) Take off the SCREW (No. 1) (Turn clockwise) and remove the WINDER CONNECTION SHAFT (No. 2).
- 2) Detach the soldered portion of purple LEAD WIRE (No. 11).
- 3) Take off three SCREWS (No. 8, 9) and remove the WIND CONNECTION LEVER GUIDE ASSY (No. 10).
- 4) Remove the WIND RATCHET ASSY (No. 3).
- 5) Take off two SCREWS (No. 4) and remove the WIND SHAFT BUSH (No. 5).
- 6) Remove the REWINDING SPRING (No. 6) and the BUSH (No. 7).
- 7) Pull up the WINDING SHAFT (sketch No. 33 on page 48).
- 9) Take off three SCREWS (sketch No. 18) and remove the WIND SHAFT BASE PLATE ASSY (sketch No. 19).
- 10) Remove the SPOOL GEAR (sketch No. 20) and the SPOOL FRICTION ASSY (sketch No. 21).
- 11) Remove the SPOOL (sketch No. 22).

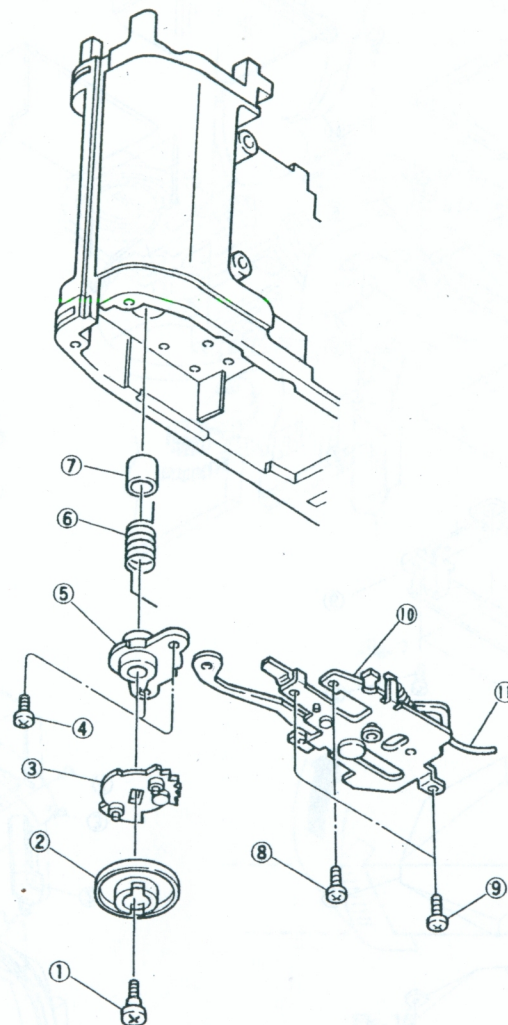


Fig. 14

4. ASSEMBLING

1. Mirror box (see Fig. 15, 16)

- 1) Set the STOPPER RUBBER (No. 8).
- 2) Hook the SPRING (No. 10).
- 3) Set the SPRING (No. 4) to the Q SET LEVER ASSY (No. 3) and insert it into the Q SET LEVER SHAFT (No. 6).
- 4) Fix the RETAINING RING (No. 7).
- 5) Set the RELEASE LEVER ASSY (No. 1) and fix the RETAINING RING (No. 5).
- 6) Hook the SPRING (No. 2).
- 7) Set the Mg BASE PLATE (No. 1 in Fig. 16) and tighten two SCREWS (No. 2).
- 8) Hook the RELEASE LEVER SPRING (No. 4).
- 9) Tighten the SCREW (No. 3).
- 10) Set the Q SET LEVER (No. 7) in the arrow direction.
- 11) Set the LEVER (No. 6) of MAGNET in the arrow direction.
- 12) Tighten two SCREWS (No. 5).

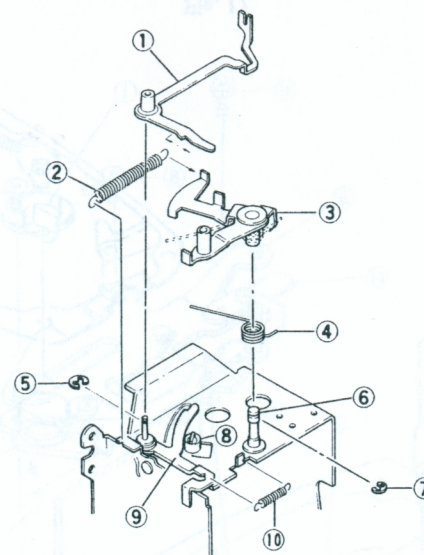


Fig. 15

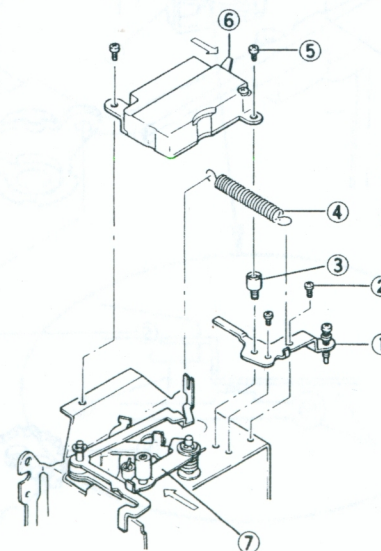


Fig. 16

10. Winding shaft (see Fig. 14)

- 1) Take off the SCREW (No. 1) (Turn clockwise) and remove the WINDER CONNECTION SHAFT (No. 2).
- 2) Detach the soldered portion of purple LEAD WIRE (No. 11).
- 3) Take off three SCREWS (No. 8, 9) and remove the WIND CONNECTION LEVER GUIDE ASSY (No. 10).
- 4) Remove the WIND RATCHET ASSY (No. 3).
- 5) Take off two SCREWS (No. 4) and remove the WIND SHAFT BUSH (No. 5).
- 6) Remove the REWINDING SPRING (No. 6) and the BUSH (No. 7).
- 7) Pull up the WINDING SHAFT (sketch No. 33 on page 48).
- 8) Take off three SCREWS (sketch No. 18) and remove the WIND SHAFT BASE PLATE ASSY (sketch No. 19).
- 9) Remove the SPOOL GEAR (sketch No. 20) and the SPOOL FRICTION ASSY (sketch No. 21).
- 10) Remove the SPOOL (sketch No. 22).

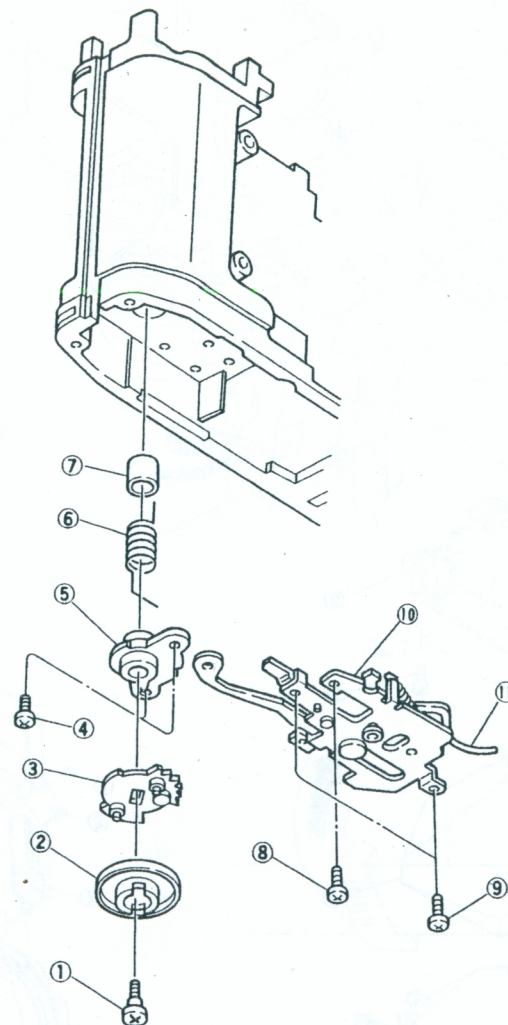


Fig. 14

4. ASSEMBLING

1. Mirror box (see Fig. 15, 16)

- 1) Set the STOPPER RUBBER (No. 8).
- 2) Hook the SPRING (No. 10).
- 3) Set the SPRING (No. 4) to the Q SET LEVER ASSY (No. 3) and insert it into the Q SET LEVER SHAFT (No. 6).
- 4) Fix the RETAINING RING (No. 7).
- 5) Set the RELEASE LEVER ASSY (No. 1) and fix the RETAINING RING (No. 5).
- 6) Hook the SPRING (No. 2).
- 7) Set the Mg BASE PLATE (No. 1 in Fig. 16) and tighten two SCREWS (No. 2).
- 8) Hook the RELEASE LEVER SPRING (No. 4).
- 9) Tighten the SCREW (No. 3).
- 10) Set the Q SET LEVER (No. 7) in the arrow direction.
- 11) Set the LEVER (No. 6) of MAGNET in the arrow direction.
- 12) Tighten two SCREWS (No. 5).

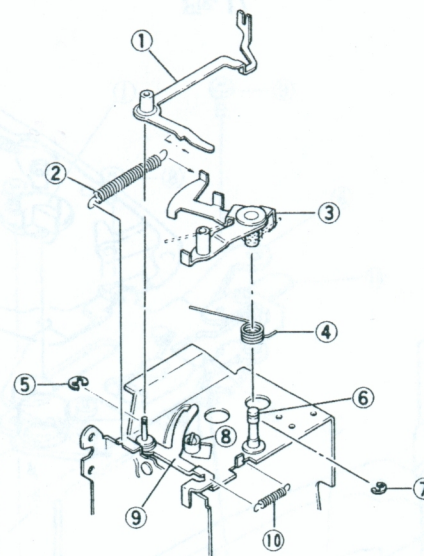


Fig. 15

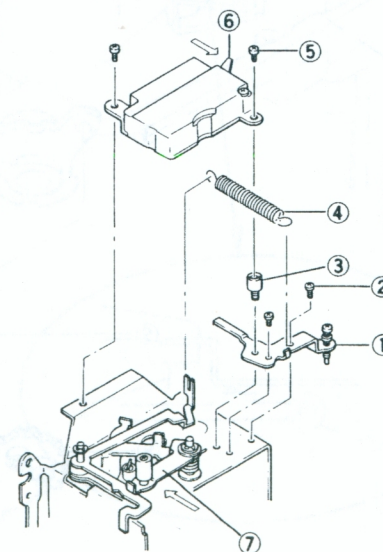


Fig. 16

2. Winding shaft (see Fig. 17)

- 1) Insert the BUSH (No. 2) in the WINDING SHAFT (No. 1).
- 2) Insert the REWINDING SPRING (No. 3) in the WINDING SHAFT (No. 1) as shown in Fig. 17.
- 3) Turn the WINDING SHAFT (No. 1) and set the position of the REWINDING SPRING (No. 3) as shown in Fig. 17.
- 4) Fix the REWINDING SPRING (No. 3) in the BUSH (No. 4) and tighten two SCREWS (No. 5).
- 5) Turn the WINDING SHAFT (No. 1) to the clockwise about one rotation and set the WIND RATCHET ASSY (sketch No. 13 on page 50).
- 6) Set the WIND CONNECTION LEVER GUIDE ASSY (sketch No. 32).
- 7) Set the WINDER CONNECTION SHAFT (sketch No. 13) and tighten the SCREW (sketch No. 14).

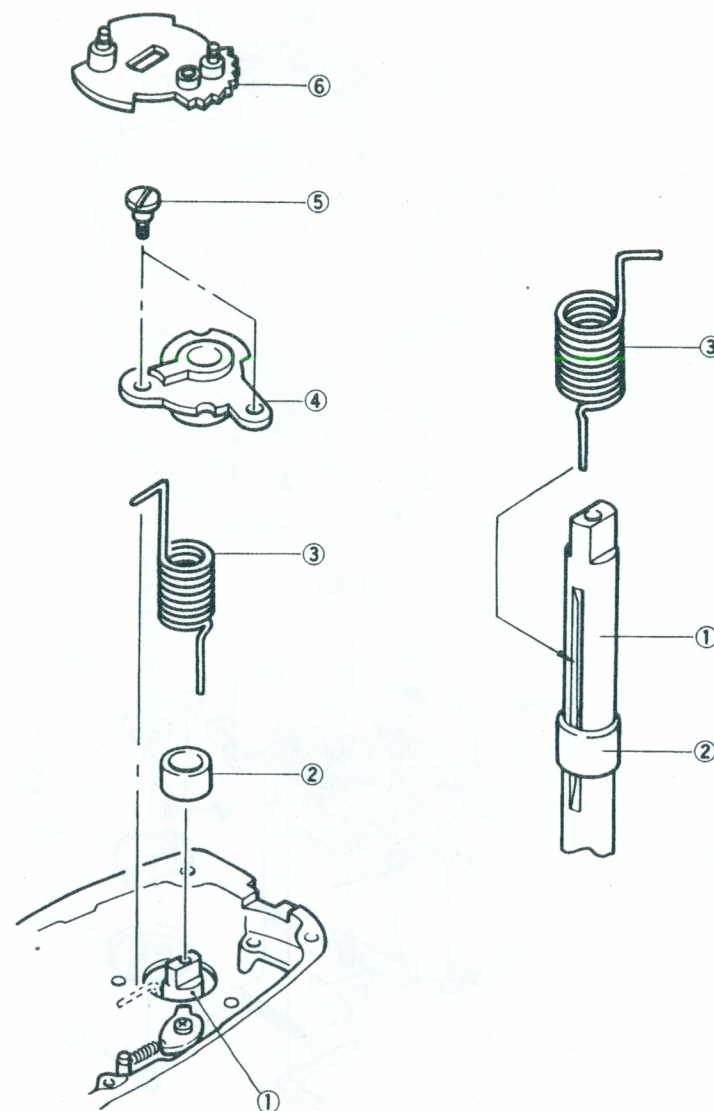


Fig. 17

3. Wind connection lever guide assy (see Fig. 18)

- 1) Hold the LEVER (No. 10) up and align the SCREW (No. 7) holes.
- 2) Bring the LEVER (No. 1) to the stitch line (No. 2) from the shutter side.
- 3) Insert the WIND CONNECTION LEVER GUIDE ASSY so that the LEVER (No. 3) does not protrude from (No. 4) and (No. 5) can get in the LEVER (No. 6).
- 4) Tighten three screws (No. 7, 8 and 9)

NOTE:

Detailed drawing of (No. 4) shows that the LEVER (No. 1) and the LEVER (No. 3) are engaged.

4. Mirror box (see the sketch No. 43 on page 52)

- 1) Fix the SHUTTER and tighten three SCREWS (sketch No. 44 on page 50).
- 2) Set the MIRROR BOX in the main body.
- 3) After ascertaining that the mirror box has been completely mounted, fasten it to the main body with four SCREWS, (sketch No. 52 on page 44).
- 4) Wind the FILM WIND UP LEVER and confirm that the shutter works properly.

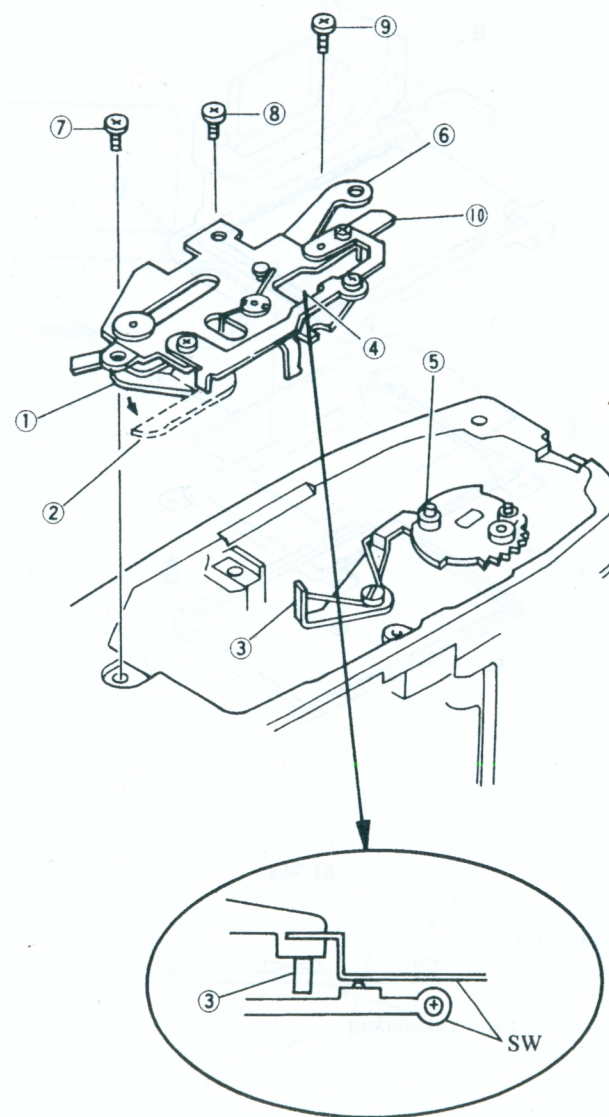


Fig. 18

5. Fresnel lens (see Fig. 20)

- 1) Check the scratch and the stain on the FRESNEL LENS (No. 2).
- 2) Set the FRESNEL LENS on the PRISM FRAME (No. 1) as shown in Fig. 19.
- 3) Fix the A portion of the FRESNEL HOLDER (No. 3) in the B portion of the PRISM FRAME (No. 1) and tighten three SCREWS (No.4).
- 4) Attach the SHIELDS (No. 5).

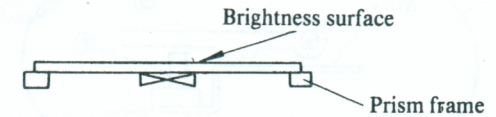


Fig. 19

6. Bending of SPD circuit board assy (see Fig. 21)

- Bend it round, not sharply.
 - The thick line in the figure shows turning up.
The stitch line shows turning down.
- 1) Bend at the line (1) so that the turned part (LCD) comes in close contact with IC-2.
 - 2) Turn down at the line (2).
 - 3) The thick line in the figure turn up and the stitch line turn down from (3) to (15).
 - 4) When assembling the ASA resistor plate and the shutter resistor, turn inside out them to fix.
 - 5) Bend the lines from (12) to (15) as shown in Fig. 21A.

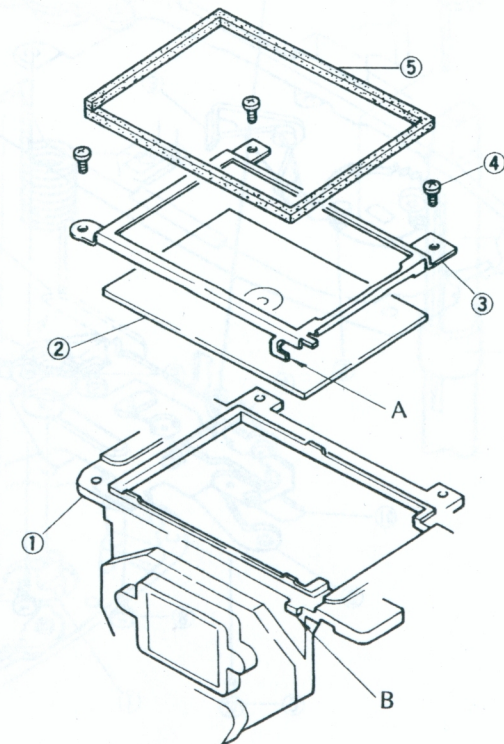


Fig. 20

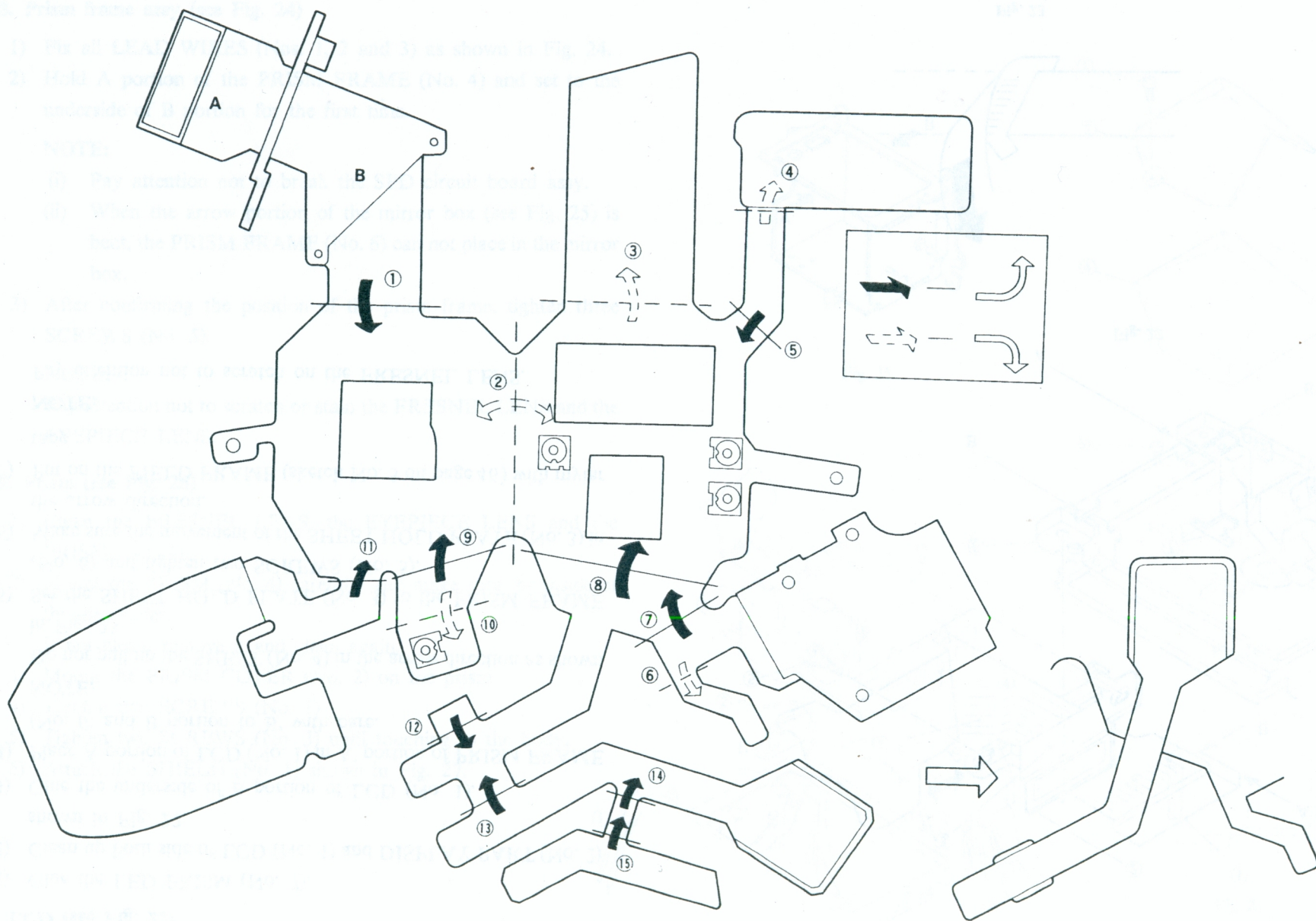


Fig. 21

Fig. 21A

7. LCD (see Fig. 22)

- 1) Glue the LED PRISM (No. 7).
- 2) Clean up both side of LCD (No. 1) and DISPLAY PART (No. 2) shown in Fig. 22.
- 3) Glue the underside of B portion of LCD (No. 1).
- 4) Place A portion of LCD (No. 1) in A' portion of PRISM FRAME (No. 6) and B portion to B' with care.

NOTE:

Do not pull up the SHEET (No. 4) in the arrow direction as shown in Fig. 23.

- 5) Set the SHEET HOLD PLATE (No. 3) to the PRISM FRAME (No. 6) and tighten two SCREWS (No. 5).
- 6) Make sure the movement of the SHEET HOLD PLATE (No. 3) in the arrow direction.
- 7) Put on the FIELD FRAME (sketch No. 5 on page 46) with mylar tape.

NOTE:

Pay attention not to scratch on the FRESNEL LENS.

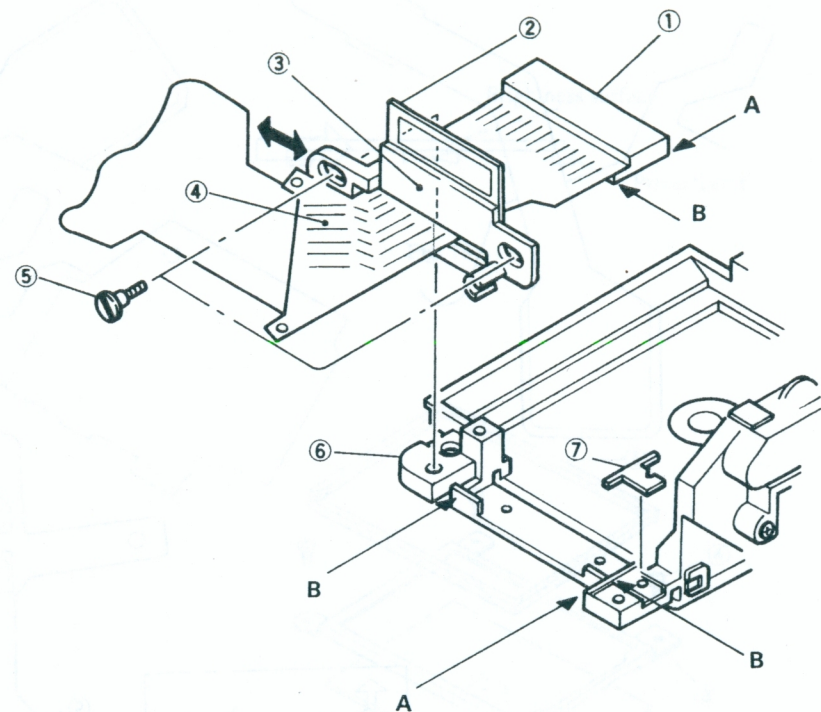


Fig. 22

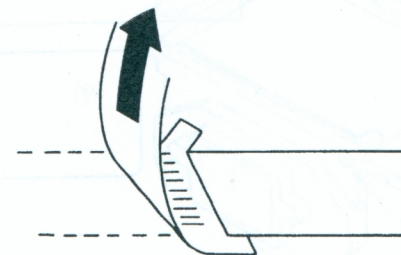


Fig. 23

8. Prism frame assy (see Fig. 24)

- 1) Fix all LEAD WIRES (Nos. 1, 2 and 3) as shown in Fig. 24.
- 2) Hold A portion of the PRISM FRAME (No. 4) and set to the underside of B portion for the first time.

NOTE:

- (i) Pay attention not to break the SPD circuit board assy.
 - (ii) When the arrow portion of the mirror box (see Fig. 25) is bent, the PRISM FRAME (No. 6) can not place in the mirror box.
- 3) After confirming the position of the prism frame, tighten three SCREWS (No. 5).

NOTE:

Pay attention not to scratch or stain the FRESNEL LENS and the EYEPiece LENS.

9. Prism (see Fig. 26)

- 1) Clean the FRESNEL LENS, the EYEPiece LENS and the PRISM (No. 4).
 - 2) Mount the PRISM (No. 4) carefully and make sure the inside of the viewfinder.
- If not clean, remove it and clean again.
- 3) Mount the PRISM COVER (No. 2) on the prism.
 - 4) Tighten two SCREWS (No. 1).
 - 5) Tighten two SCREWS (No. 3) until touching to the body.
 - 6) Attach the SHIELD (No. 1) shown in Fig. 27.

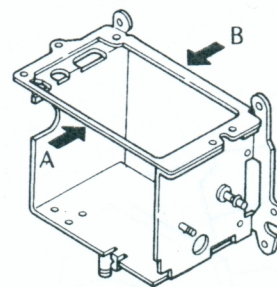


Fig. 25

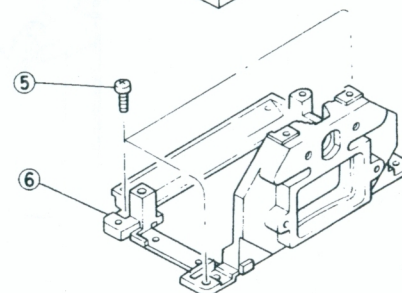
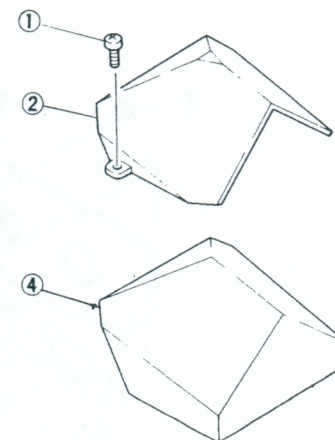


Fig. 26

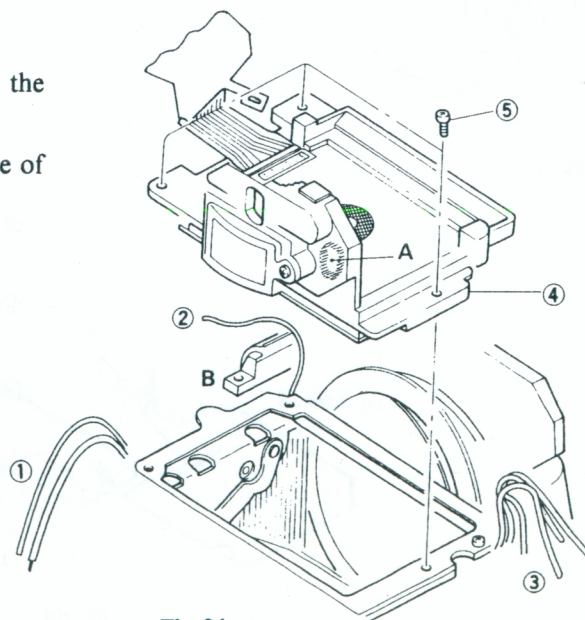


Fig. 24

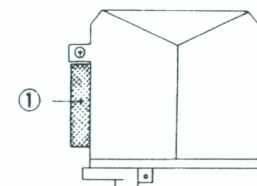


Fig. 27

10. SPD circuit board assy

When repairing of SPD circuit board assy, use the static control mat.

ASA RESISTOR PLATE SIDE.

- 1) Arrange two LEAD WIRES (blue and orange) along the prism cover shown in Fig. 28.
- 2) Bend the SPD CIRCUIT BOARD ASSY at A-A' portion and assemble it as shown in Fig. 29.
- 3) Set the LED (red) (No. 1) into the sheet hold plate shown in Fig. 29.
- 4) Turn the ASA RESISTOR PLATE and assemble it as shown in Fig. 30.
- 5) Tighten three SCREWS (No. 2) shown in Fig. 29.



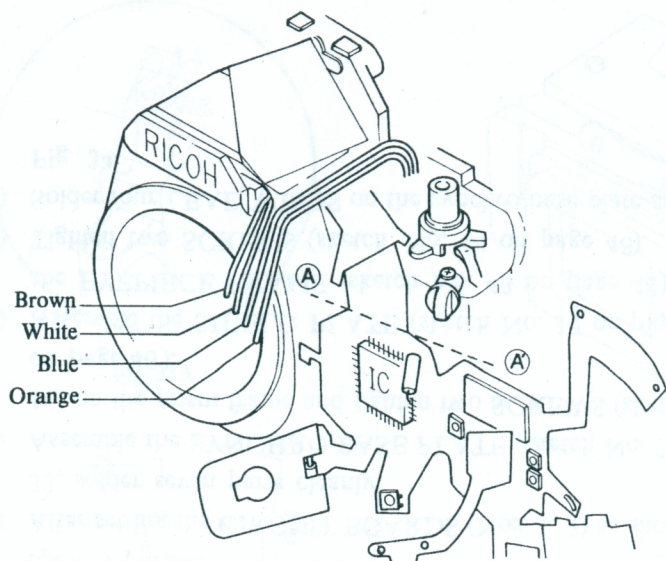


Fig. 28

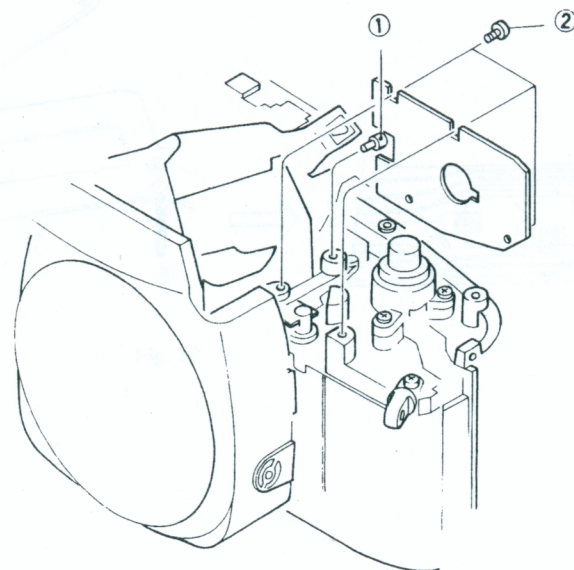


Fig. 29

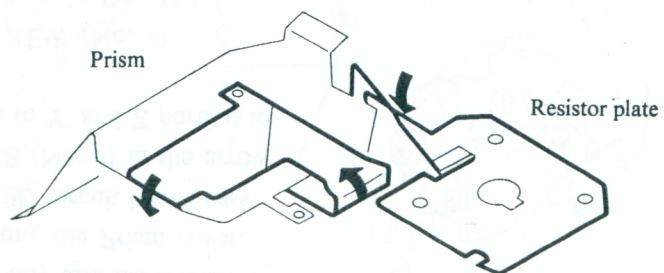


Fig. 30

SHUTTER RESISTOR PLATE SIDE (see Fig. 31)

- 6) Fix BLACK LEAD WIRE between the body and the shutter as shown A portion in Fig. 31 and set it along the Prism cover.
- 7) Set the FPC (No. 3) to B portion of the SPD circuit board assy.
- 8) Move the SHUTTER RESISTOR PLATE (No. 4) in the arrow direction and set it on the FPC (Y portion to Y' and Z portion to Z').
- 9) Tighten the SCREW (No. 1) and the SCREW (No. 2).
- 10) Fix D portion under the C portion as shown in Fig. 31A.
- 11) Insert the SPD in the SPD WINDOW (No. 2) shown in Fig. 32 and tighten two SCREWS (No. 1).
- 12) Put A' portion of CIRCUIT BOARD (No. 2) upon A portion of CIRCUIT BOARD (No. 1) shown in Fig. 33 and put B' portion upon B portion.
- 13) After setting the CIRCUIT BOARDS (Nos. 1, 2) as shown in Fig. 33, solder seven parts cleanly.
- 14) Assemble the SYNCHRO BASE PLATE (sketch No. 26 on page 46) on the prism frame and tighten two SCREWS (sketch No. 25 on page 46).
- 15) Assemble the SHIELD PLATE (sketch No. 17 on page 46) and the EYEPIECE FRAME (sketch No. 43 on page 48).
- 16) Tighten two SCREWS (sketch No. 44 on page 48).
- 17) Solder four LEAD WIRES on the synchro base plate as shown in Fig. 34.

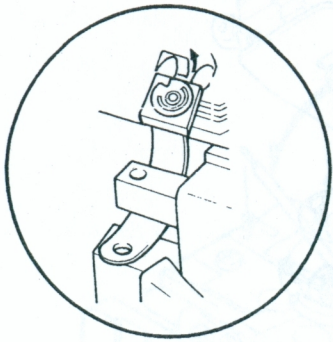


Fig. 31A.

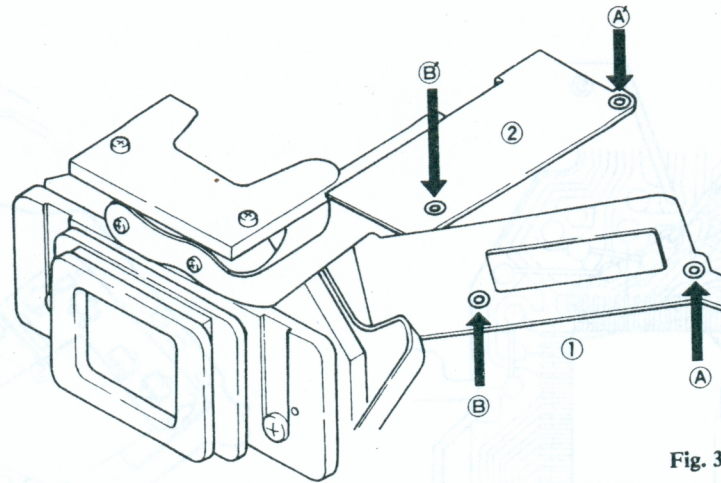


Fig. 33

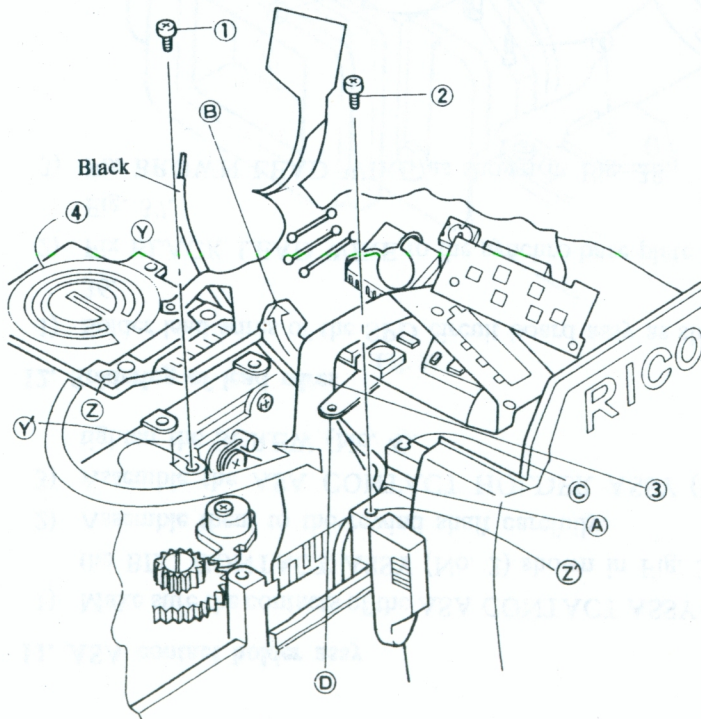
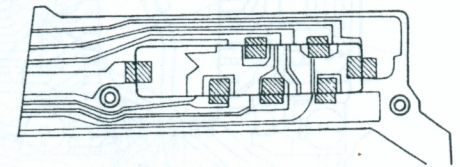


Fig. 31

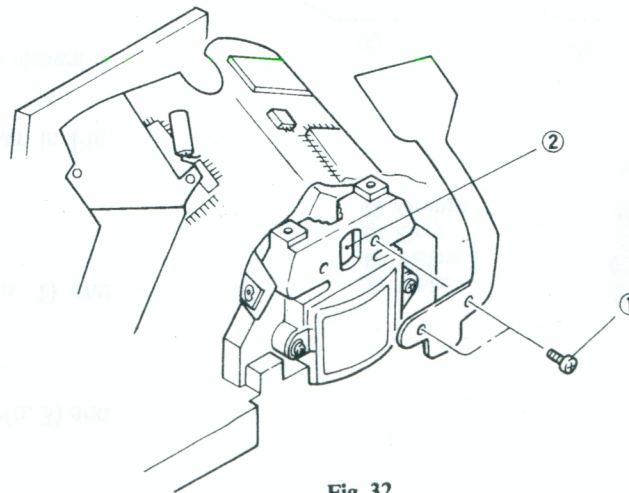


Fig. 32

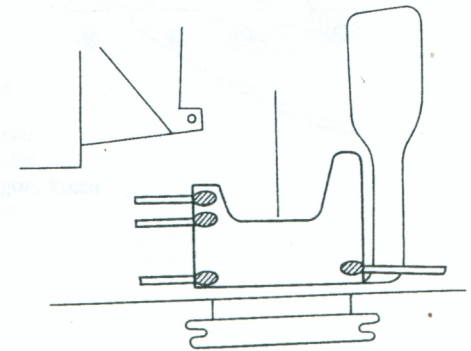


Fig. 34

11. ASA contact holder assy

- 1) Make sure the contacts of the ASA CONTACT ASSY (No. 3) and the BLC CONTACT ASSY (No. 2) shown in Fig. 35.
- 2) Assemble them to the rewind shaft carefully.
- 3) Assemble the ASA CONTACT HOLDER ASSY (No. 1) and tighten the SCREW (No. 4).

12. Soldering of lead wires

- 1) Solder lead wires of the SPD circuit board assy as shown in Fig. 36.
- 2) Fix **BLACK LEAD WIRE** to the synchro base plate as shown in Fig. 37.
- 3) Fix **BROWN LEAD WIRE** as shown in Fig. 38.

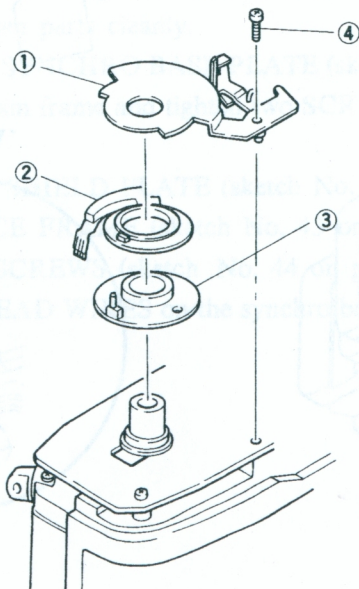


Fig. 35

- | | |
|------------|------------------|
| (A) White | (E) Blue |
| (B) Yellow | (F) Yellow green |
| (C) Grey | (G) Purple |
| (D) Orange | (H) Green |

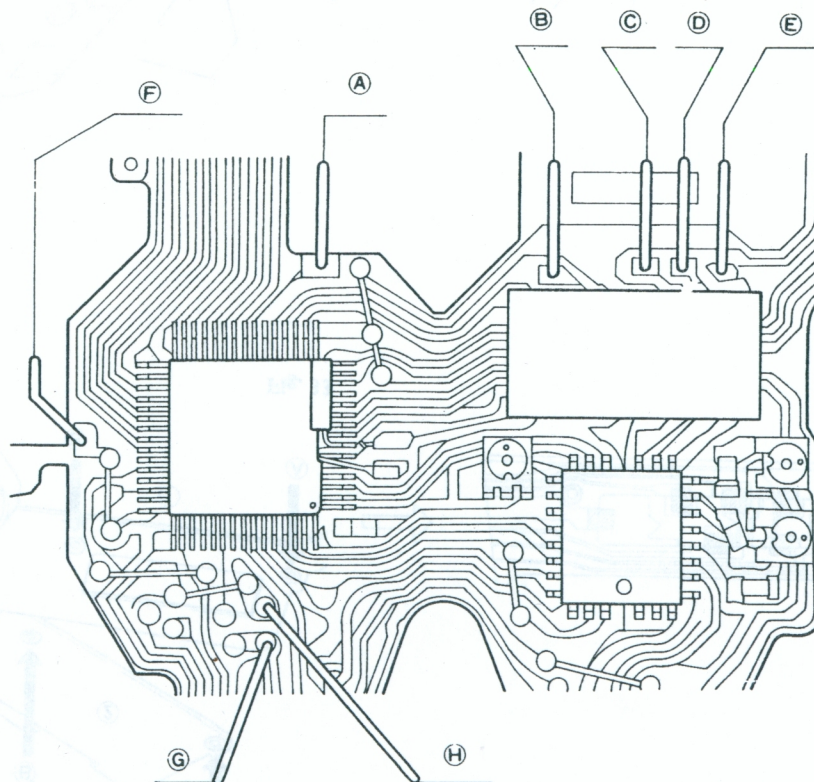


Fig. 36

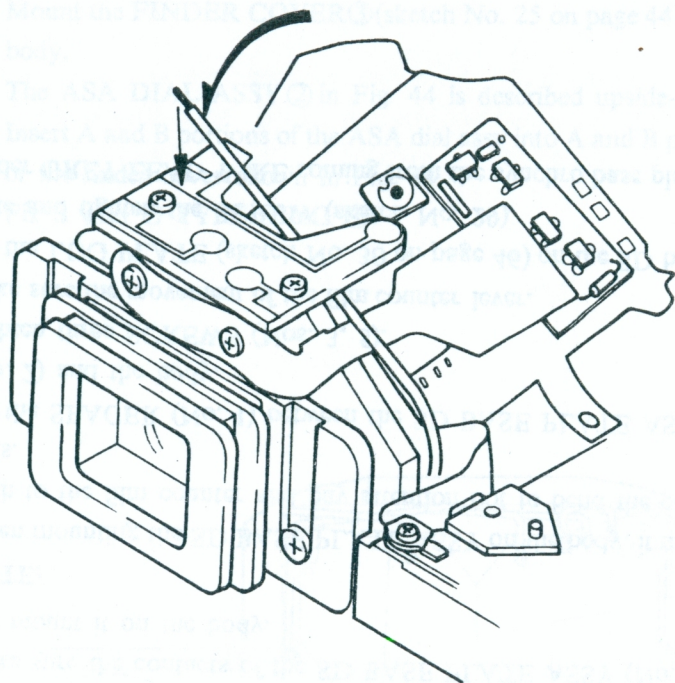


Fig. 37

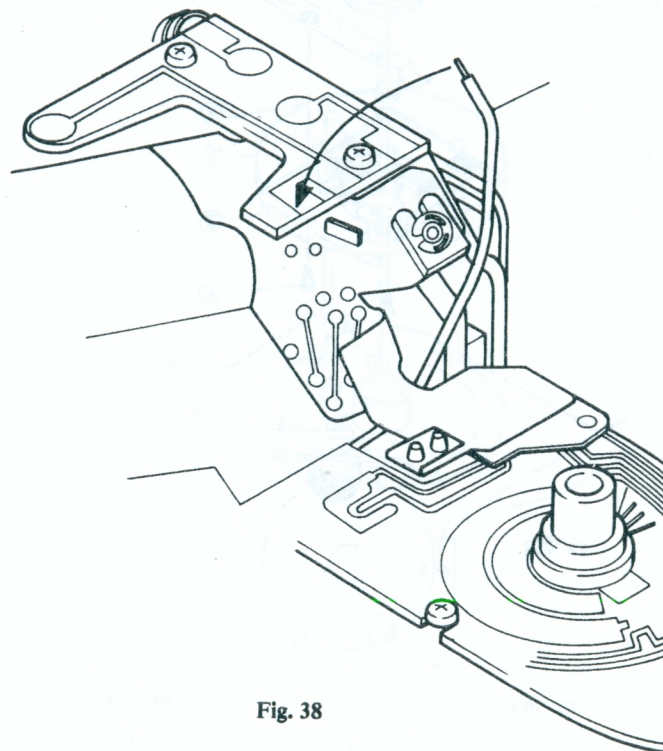


Fig. 38

13. Film counter (see Fig. 39, 40, 41)

- 1) Adjust the CAM portion (A) of the GEAR A ASSY on the line B shown in Fig. 39.
- 2) Set the WIND SHAFT A ASSY to the film counter as shown in Fig. 40.
- 3) Fix the starting position of the film counter gear as shown in Fig. 41.

14. SD base plate assy (see Fig. 42)

- 1) Make sure the contacts of the SD BASE PLATE ASSY (No. 2) and mount it on the body.

NOTE:

When mounting the SD BASE PLATE ASSY on the body, it may tatch to the film counter and pay attention not to bend the contacts.

- 2) Set the SPACER (No. 1) between the SD BASE PLATE ASSY (No. 2) and the body.
- 3) Tighten three SCREWS (Nos. 3, 5).
make sure the movement of the film counter lever.
- 4) Set the LUG PLATE (sketch No. 30 on page 46) on the SD base plate and tighten the SCREW (sketch No. 29).
- 5) Solder GREY LEAD WIRE coming from the synchro base plate.

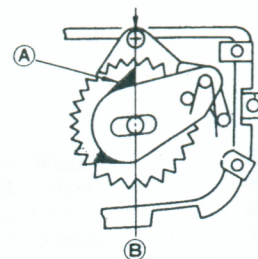


Fig. 39

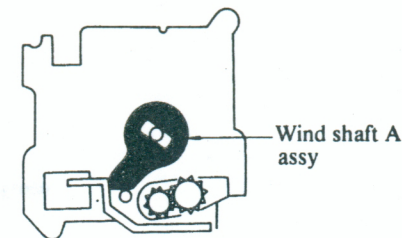


Fig. 40

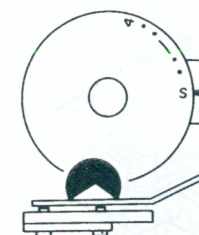


Fig. 41

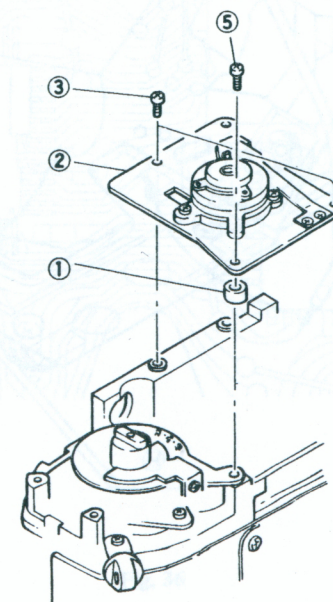


Fig. 42

15. Arranging of all lead wires

- 1) Arrange each lead wires as shown in Fig. 43 with care.

16. ASA dial (see Fig. 44)

- 1) Mount the FINDER COVER ③ (sketch No. 25 on page 44) on the body.
- 2) The ASA DIAL ASSY ② in Fig. 44 is described upside-down.
- 3) Insert A and B portions of the ASA dial assy into A and B portions of the finder cover shown in Fig. 44.
- 4) Fix it with G TYPE RING ①.

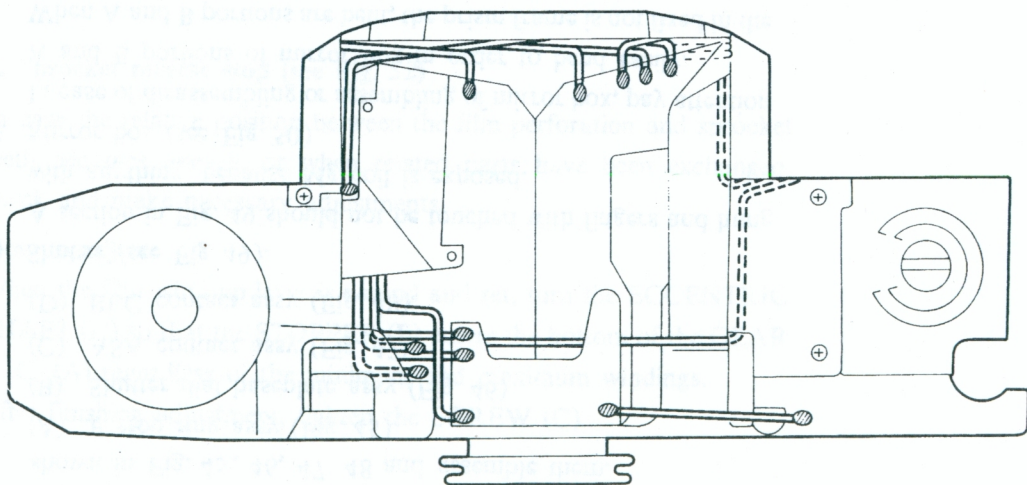


Fig. 43

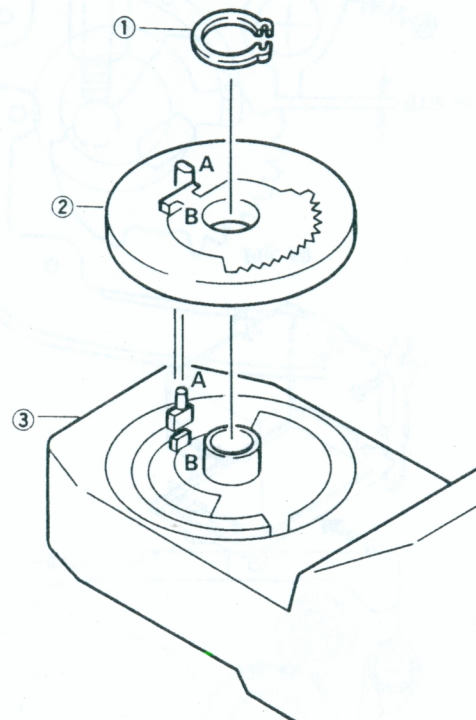


Fig. 44

17. Care for replacement of following contacts

- 1) When replacing following parts, carefully cut the contacts as shown in Fig. 45, 46, 47, 48 and assemble them.

(A) F stop ring assy (Fig. 45).

(B) Shutter dial baseplate assy (Fig. 46).

(C) ASA contact assy (Fig. 47).

(D) BLC contact assy (Fig. 48).

- 2) Shutter (see Fig. 49).

A section in Fig. 49 should not be touched with fingers and hung with anything, because Mg coil is exposed.

- 3) Mirror box (see Fig. 50)

In case of disassembling or assembling of mirror box, pay attention A and B portions of mirror box in order to bend easily.

When A and B portions are bent, the prism frame is not fixed in the mirror box or the view finder is out of focus.

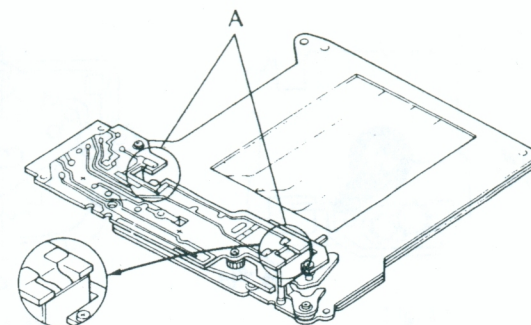


Fig. 49

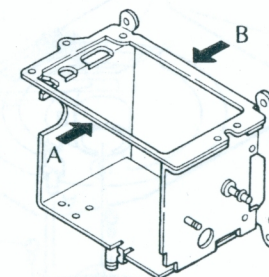


Fig. 50

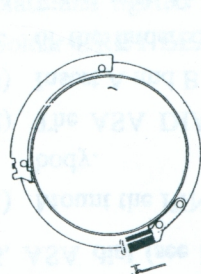


Fig. 45

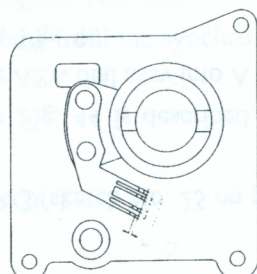


Fig. 46

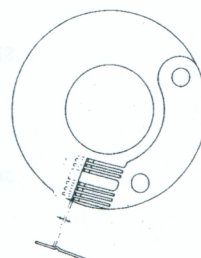


Fig. 47

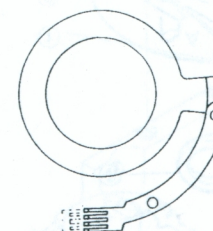


Fig. 48

5. ADJUSTMENT

1. Film wind up (see Fig. 51)

When changing the wind ratchet or related parts, check and make necessary adjustments.

How to adjust:

Fully wind the film wind up lever, and adjust with a SCREW so that there is a clearance of 0.05 ~ 0.1 mm after the NAIL LEVER slips off from the WIND RATCHET (in fully wound condition).

NOTE:

- 1) If it is not adjusted to the prescribed clearance after the NAIL LEVER slips off, the film wind up lever may occasionally fail to return.
- 2) When the clearance exceeds the prescribed limit after the NAIL LEVER slips off, the interval between the photographic frames on the film will become uneven.

2. Sprocket reverse stop (see Fig. 52)

In case the relative position between the film perforation and sprocket teeth becomes uneven, or when related parts have been exchanged, check and make necessary adjustments.

How to adjust:

When the film wind up lever is wound and set, turn the ECCENTRIC SHAFT (D) so that the STOPPER (B) enters the bottom of the GEAR B. C, (A) regardless of the minimum and maximum windings.

After finishing adjustment, tighten the SCREW (C).

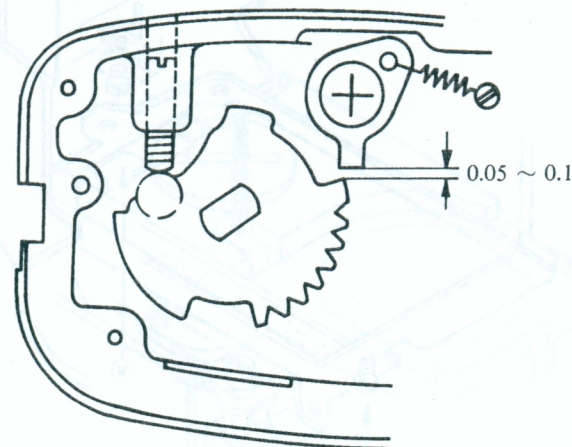


Fig. 51

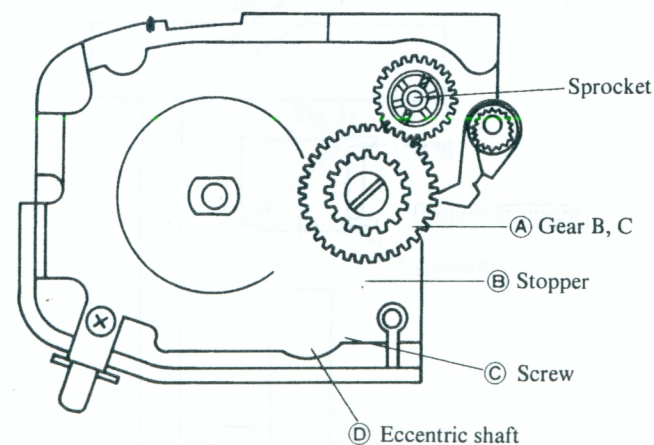


Fig. 52

3. 45° mirror (see Fig. 53, 54)

When changing the mirror box, check and make necessary adjustments.

- 1) For a 45° mirror adjustment, use a collimeter and set the camera as shown in Fig. 53.
- 2) Adjust the chart in the center of the collimeter frame.
- 3) Adjust the 45° angle of the mirror with SCREWS (A) shown in Fig. 54.

NOTE:

- 1) Absolutely refrain from turning the SCREWS (A) of Fig. 54, unless the mirror or the mirror box has been exchanged.
- 2) In case the mirror angle is not precisely 45°, a discrepancy between the image viewed through the finder and the image projected upon the film will occur.
- 4) The screw for adjusting the mirror at 45° is not that for adjusting the finder focus, so take this fully in mind.

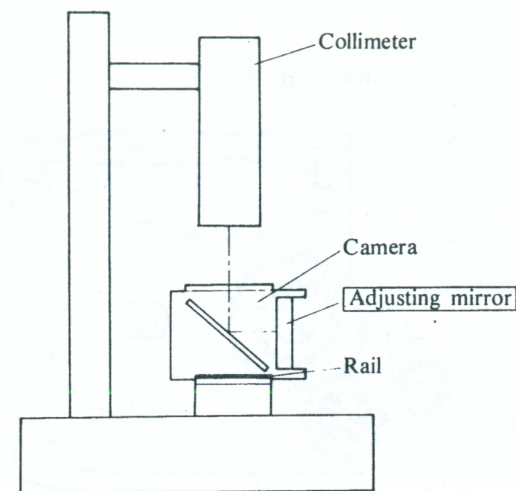


Fig. 53

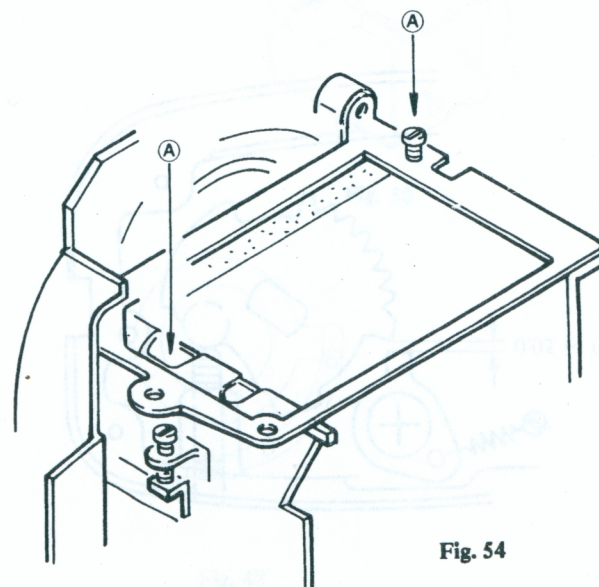


Fig. 54

4. Focusing of finder (see Fig. 55)

When finder is out of focus.

Remove the BOTTOM COVER and adjust with SCREW shown by an arrow in Fig. 55.

How to adjust:

- 1) When finder focus is too long, turn clockwise (Tightening direction).
- 2) When finder focus is too short, turn counter-clockwise (Loosening direction).

Sequence of checking when finder is out of focus:

- 1) Check whether the lens unit correctly focus or not.
- 2) Check whether the body back is set within the prescribed limits or not.
- 3) After checking the above problems, adjust the focus of the finder.

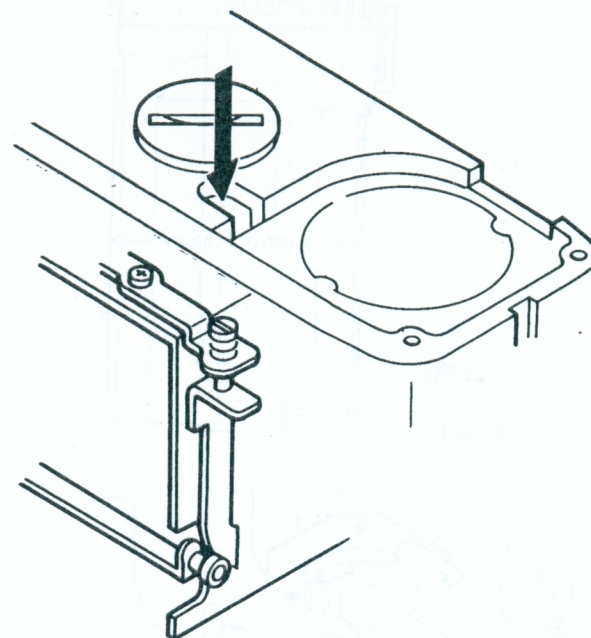


Fig. 55

5. LCD mark (see Fig. 57)

- 1) Load two G13 silver-oxide batteries (Mallory MS76, Eveready S76 or Equivalent) in the battery box of the camera.
- 2) Set the shutter speed dial at "30".
- 3) Turn on the POWER SWITCH (sketch No. 53 on page 44).
- 4) Look through the finder and make sure the position of the SHUTTER SCALE DISPLAY.
- 5) When the SHUTTER SCALE DISPLAY is out of place, turn the SCREW (A) for adjusting.
- 6) See Fig. 57 for allowable limit of the SHUTTER SCALE DISPLAY.

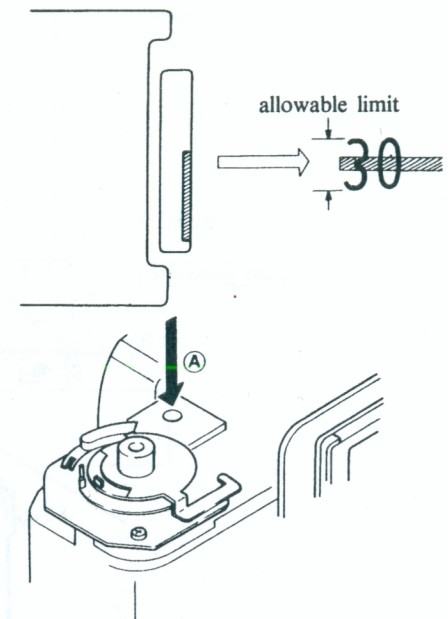


Fig. 57

6. Body back (see Fig. 58, 59)

For maintaining the interchangeability of focus, it is necessary to control the length from the mounting plate to the film surface and the parallel position between them.

Length from the lens fixing mount surface to the pressure plate surface (body back) is $45.65 \text{ mm} \pm 0.02$.

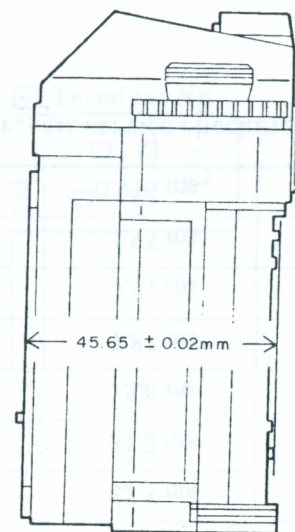


Fig. 58

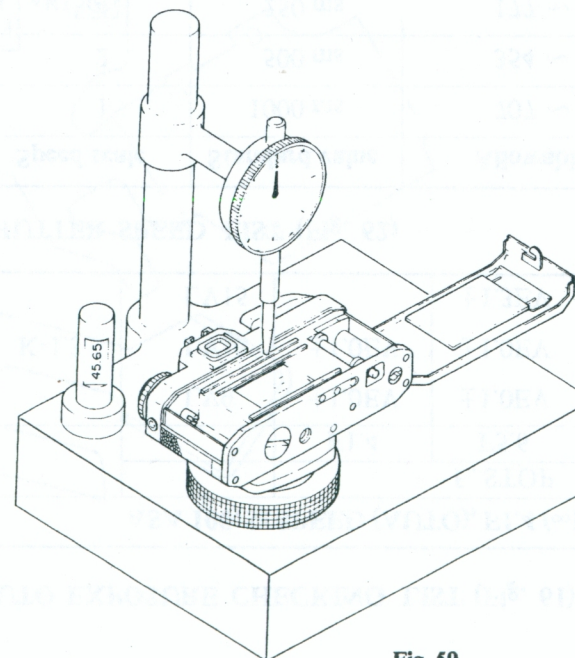


Fig. 59

7. Electric equipment

After the SPD circuit board has been replaced proceed as follows. LCD, VR2, VR3 and VR4 are adjusted before service parts are shipped from Factory, so it requires no adjustment after the replacement of SPD circuit board and never touch them.

1. Confirming of LCD

- 1) Any ASA setting, F stop and LV will do.
- 2) Connect a regulated power supply to the camera.
- 3) When supplying 2.4V to the camera, any displays do not appear in the viewfinder.
- 4) When supplying 2.6V to the camera, some displays appear in the viewfinder.

2. EV adjustment

(1) LV12

- 1) As in case of the adjustment of SPD, use a dummy finder cover so that no lights enter the SPD except for the light through the lens (Attach ASA dial to ASA 100).
- 2) Mount the F1.4 lens (or F2.0) on the camera and set the F stop at "5.6".
- 3) Set the camera ASA 100 and the distance ring to "∞".
- 4) Set the shutter speed at "AUTO".
- 5) Mount the camera to EE tester.
- 6) Using a brightness box, apply the light of LV12 to the camera through the lens.
- 7) Turn VR1 shown in Fig. 60 and adjust EV to "0".
- 8) Allowable range is ± 1.0 EV for adjusting.

(A) AUTO EXPOSURE CHECKING LIST (Fig. 61)

ASA 100, S: SPEED (AUTO), F1.4 (∞)				
		F. STOP		
		F1.4	F5.6	F16
K-1.3	LV9	± 1.0 EV	± 1.0 EV	± 1.0 EV
	LV12	± 1.0 EV	± 1.0 EV	± 1.0 EV
	LV15		± 1.3 EV	± 1.3 EV

(B) SHUTTER SPEED LIST (Fig. 62)

Speed scale	Standard value	Allowable range
1	1000 ms	707 ~ 1414
2	500 ms	354 ~ 707
4	250 ms	177 ~ 354
8	125 ms	88.4 ~ 177
15	62.5 ms	44.2 ~ 88.4
30	31.2 ms	22.1 ~ 44.2
60	15.6 ms	11.0 ~ 22.1
125	7.81 ms	4.65 ~ 13.1
250	3.91 ms	2.32 ~ 6.57
500	1.95 ms	1.16 ~ 3.28
1000	0.976 ms	0.58 ~ 1.64

The list for repair service checking only

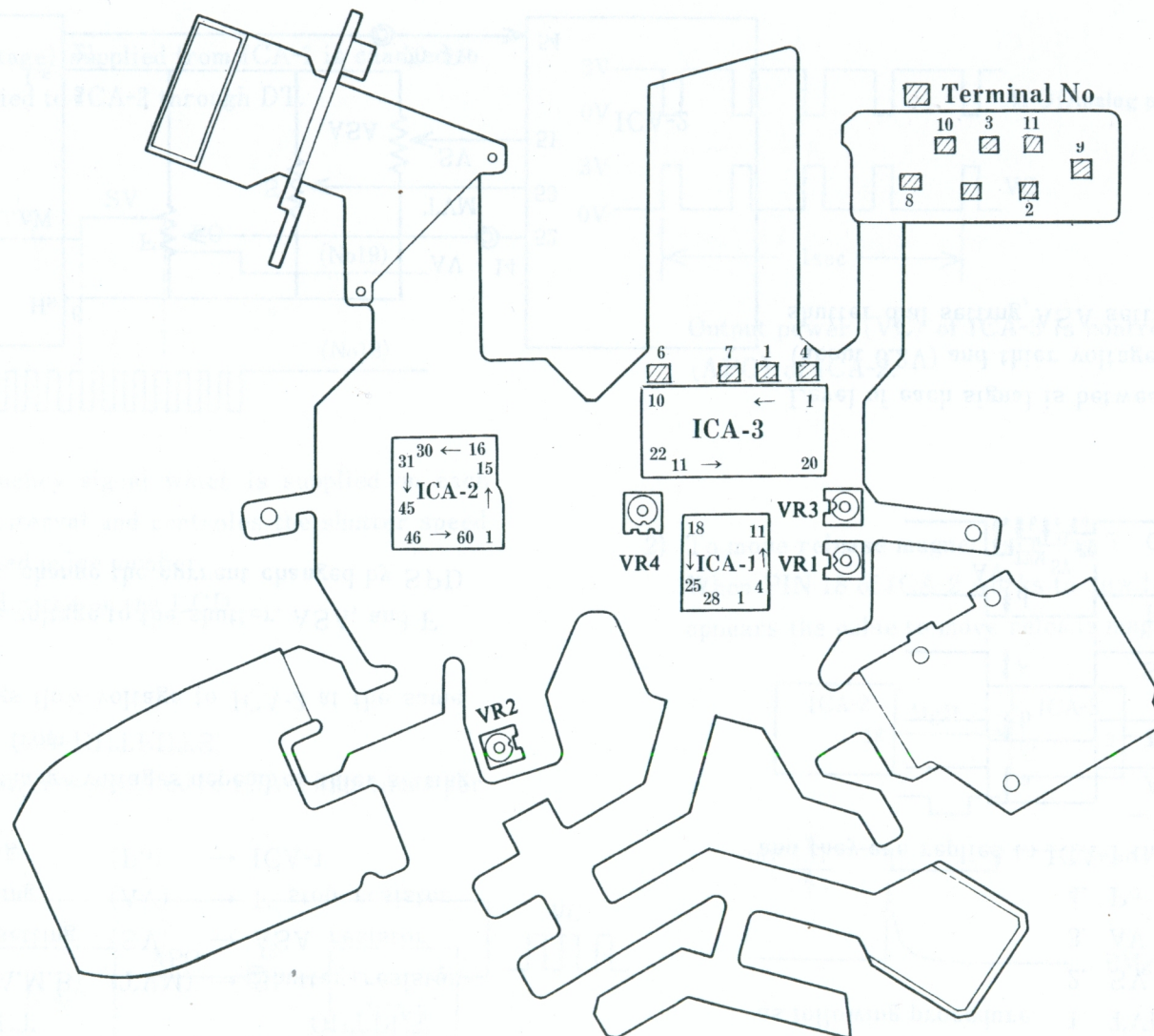


Fig. 60

6. MAIN FUNCTION OF ICA-1, ICA-2 & ICA-3 (See Fig 60,63,64)

1. ICA-1 & ICA-2

1)	INPUT	OUTPUT
①	Fixing of mode (A.M.B) (TVM) →	Shutter resistor
②	ASA sensitivity setting (SV) →	ASA resistor
③	Lens F stop setting (AV) →	F stop resistor
④	Light value setting (Po) →	ICA-1

Above INPUTS change voltages depend on thier setting and flow to ICA-2 from OUTPUTS.

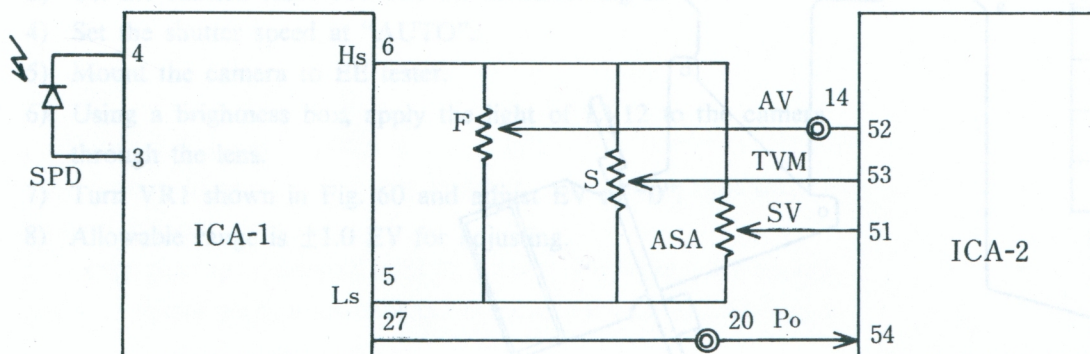
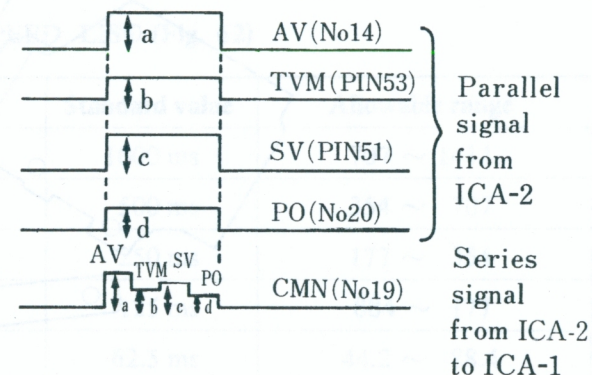
These four settings flow voltage to ICA-2 at the same time.

ICA-1 supplies the voltage to the shutter, ASA, and F stop resistor also, change the current changed by SPD to voltage.

2) Four settings (voltages) supplied from ICA-2 are changed as following procedure.

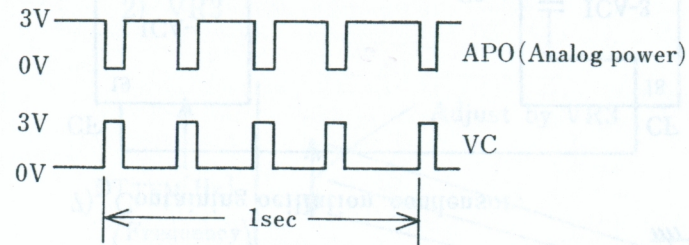
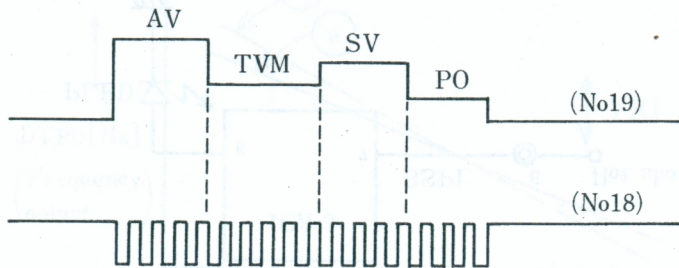
1. TVM
2. SV
3. AV
4. Po

and they are replied to ICA-1 through CMN.



Level of each signal is between Hs (about 0.6V) and Ls (about 0.2V) and thier voltages are changed by Fstop, shutter dial setting, ASA setting and light value.

- 3) Series signal (voltage) supplied from ICA-1 is changed to frequency and replied to ICA-2 through DT.



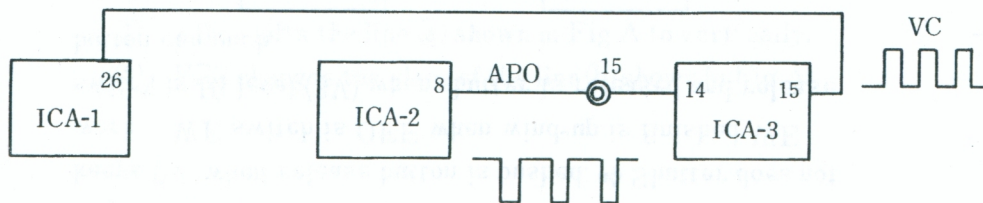
Output power (VC) of ICA-3 is controlled by output power (APO) of ICA-2.

- 4) ICA-2 counts frequency signal which is supplied on each signal by constant interval and controls the shutter speed depend on the counted pulse number. shutter speed is indicated on the LCD.

2. ICA-3

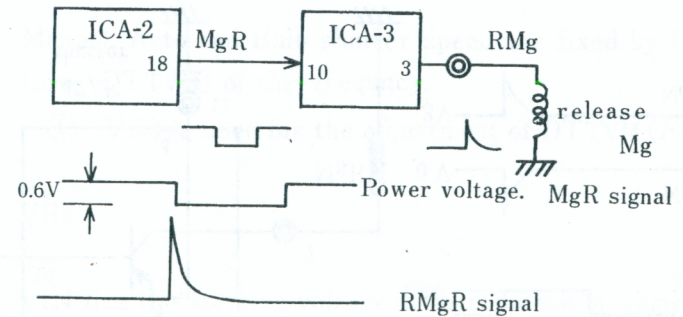
- 1) To supply power to ICA-1.

When measuring, power is supplied to ICA-1 four times per second.



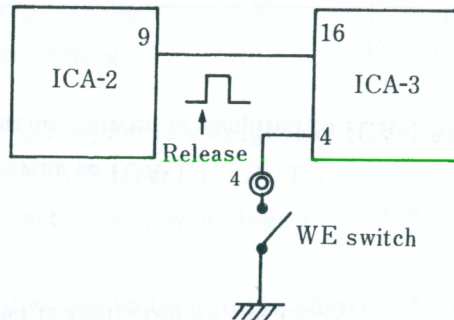
- 2) To move release magnet (see Fig 5)

When PIN 18 of ICA-2 works to low level, PIN 3 of ICA-3 appears the pulse to move release magnet.



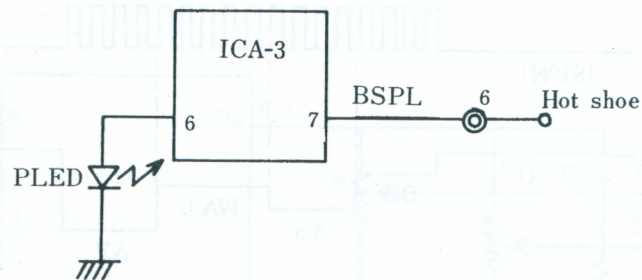
- 3) To work the shutter release after finishing wind-up.

When wind-up is not finished, WE switch is on. Then, WE keeps 0V when release button is pushed. → Shutter does not work. WE switch is OFF when wind-up is finished WE switch is Hi level (3V) when shutter is released and release button can push.



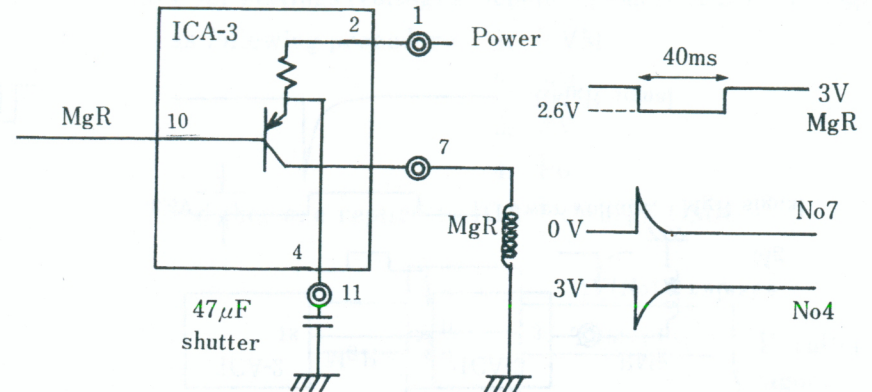
- 4) To light on PLED in view finder after charging up Auto flash.

PLED is lighted on when supplying 2.5V to PIN 6.

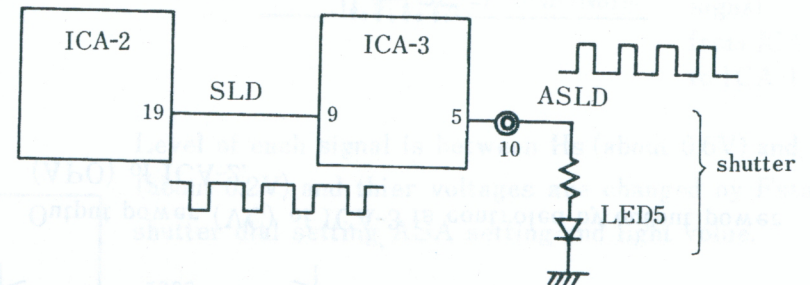


- 5) To charge up condensor for release magnet.

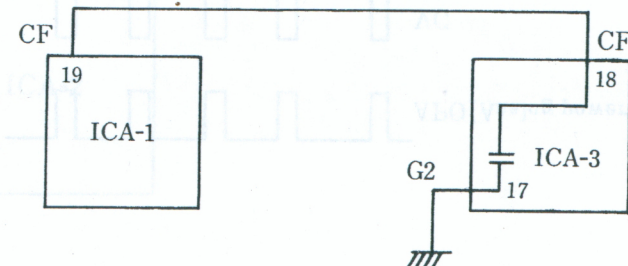
When release button is pushed, pulse is as follow.



- 6) Self LED blinks when self timer is working.



- 7) Containing ocillation condensor.



3. FUNCTION OF VR1 ~ VR4

1) VR1 and VR2

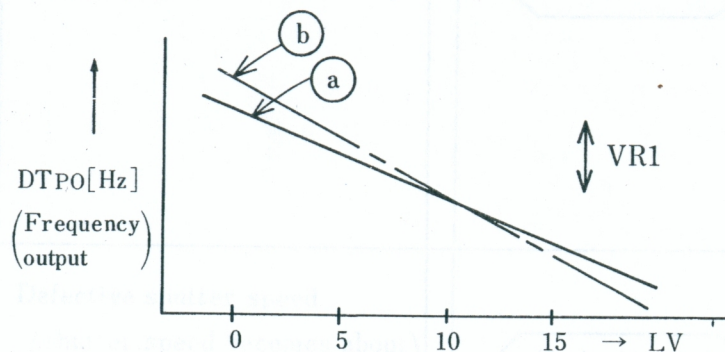


Fig A.

The brightness in front of the camera is changed to the frequency and flow from the PIN15 (DT) on the ICA-1 to the PIN3 (DT) on the ICA-2. (see Fig A)

VR1 and VR2 are used to fix the peculiarity of the frequency.

- ① VR1 shifts the line ① shown in Fig A to vertically.
- ② VR2 changes the slant of the line ② shown in Fig A.

2) VR3

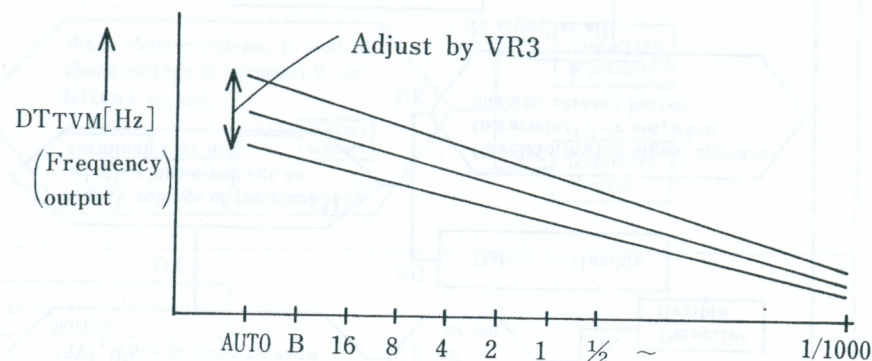


Fig B,

Manual, Auto and Bulb shutter speed are fixed by Hi and Low (DTTVM) of the frequency.

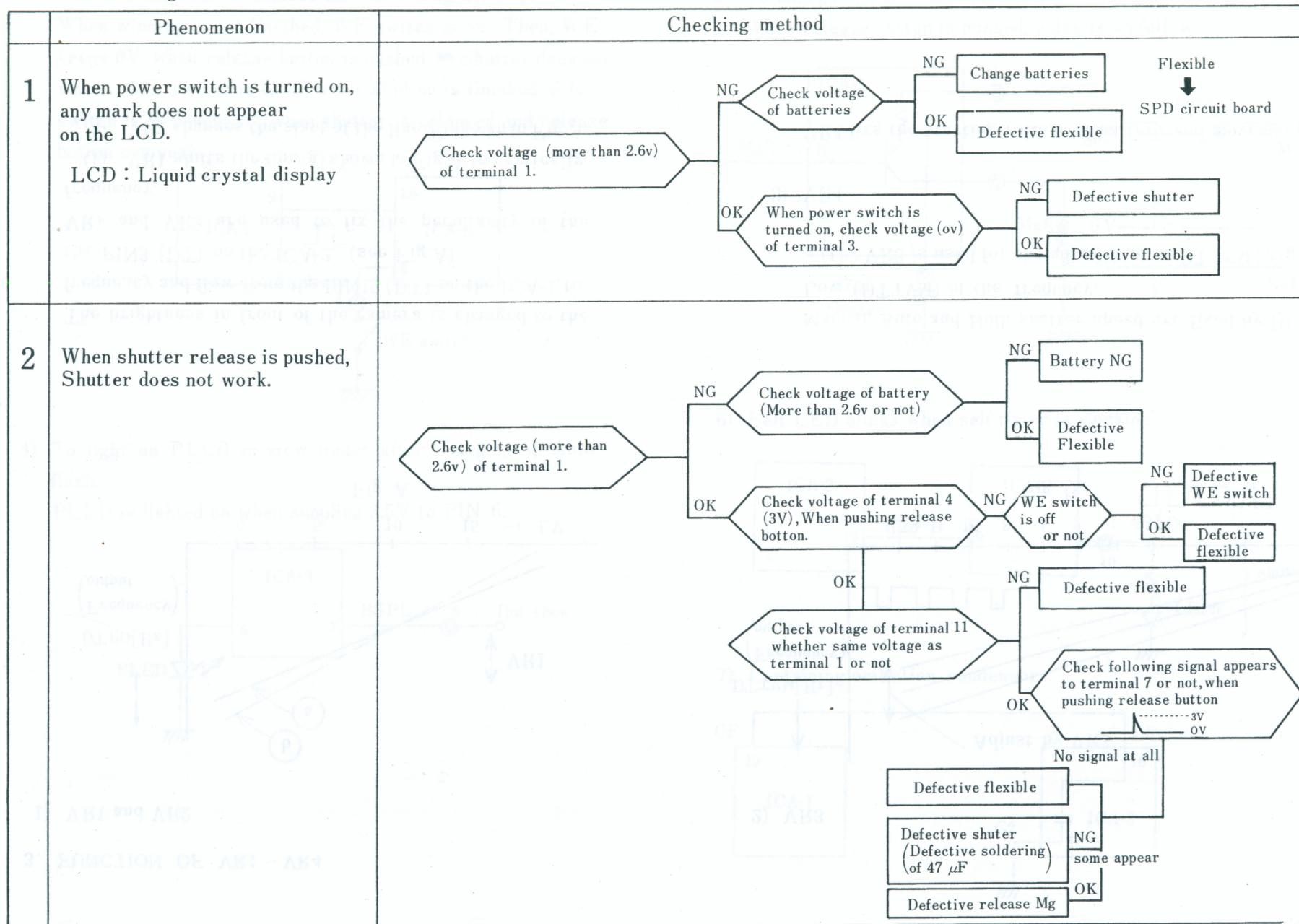
- ① VR3 is used for the adjustment of DTTVM (Fig B)

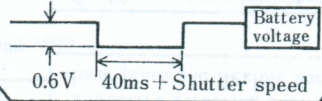
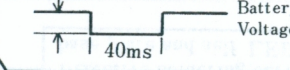
3) VR4

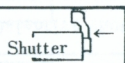
VR4 fixes the starting voltage of battery-end movement.

7. TROUBLE SHOOTING

1) Checking method of Shutter trouble or Flexible (circuit board) (see Fig63)



	Phenomenon	Checking method
3	Shutter speed is always 1/2000 sec	Check soldering of terminal 9 NG Defective soldering of terminal 9 OK When shutter release is pushed, check voltage of terminal 9 as follows or not.  Battery voltage NG Defective Flexible OK Defective shutter
4	Defective shutter speed (shutter speed becomes about 25 ms longer at any shutter speed).	Check soldering of terminal 8 NG Defective soldering OK When shutter release is pushed, voltage of terminal 8 is as follows or not.  Battery Voltage NG Defective flexible OK Defective shutter
5	Self timer works but self LED does disappear	Electronic sound is pulsated. OK Defective shutter NG Check voltage of terminal 10 as follows or not  3V 0V NG Defective flexible OK Defective shutter

Phenomenon	Checking method
6 Self timer does not work.	<pre> graph TD A[When shutter release is pushed, Shutter works or not.] -- NG --> B[Refer to "SHUTTER DOES NOT WORK"] A -- OK --> C[When contacting pattern of ASA resistor plate, Self timer works or not.] C -- NG --> D[Defective flexible (IC-2)] C -- OK --> E[Confirm contact between rubber switch and resistor pattern] E -- NG --> F[Defective rubber switch contact] E -- OK --> G[Dirty rubber switch and ASA resistor plate] </pre>
7 Self LED does not light but self timer works.	<pre> graph TD A{{LED is pulsated or not}} -- O.K --> B[Defective soldering between shutter base plate and self LED] A -- NG --> C[Confirm soldering of terminal 10] C -- NG --> D[Defective soldering of terminal 10] C -- O.K --> E{{Check voltage of terminal 10 as follows or not}} E -- O.K --> F[Defective soldering between shutter base plate and flexible board] E -- NG --> G[Confirm resistor (Ω) between terminal 10 and camera body] G -- NG --> H[Shutter flexible board is touched to camera body] G -- O.K --> I[Defective flexible] </pre>  

2) Main trouble shooting

	Phenomenon	Cause
1	Shutter does not work	① Defective soldering of R104 ② Defective soldering of IC-2 pin 10 ③ Defective soldering between pin 18 (IC-2) and pin 10 (IC-3) ④ Broken IC-3 ⑤ Dirty contact of release Mg (31261549 or 31272118) ⑥ Defective soldering of grey lead wire coming from release Mg (31261549 or 31272118)
2	Defective shutter speed	① Defective soldering of R102 ② Defective soldering between Pin 6 (IC-1) and VR2 ③ Defective soldering of Pin 53 (IC-2) ④ Broken IC-2
3	LCD display does not appear	① Defective soldering of VR-1 and R101 ② Defective soldering of IC-2 Pin 13 ③ Defective soldering between Pin 1 and Pin 20 (IC-3) ④ Defective adjusting of VR4 ⑤ Defective soldering of orange read wire coming from battery contact.
4	Double LCD display	① Defective soldering of R103 ② Defective heat sheet contact

8. WIRING DIAGRAM

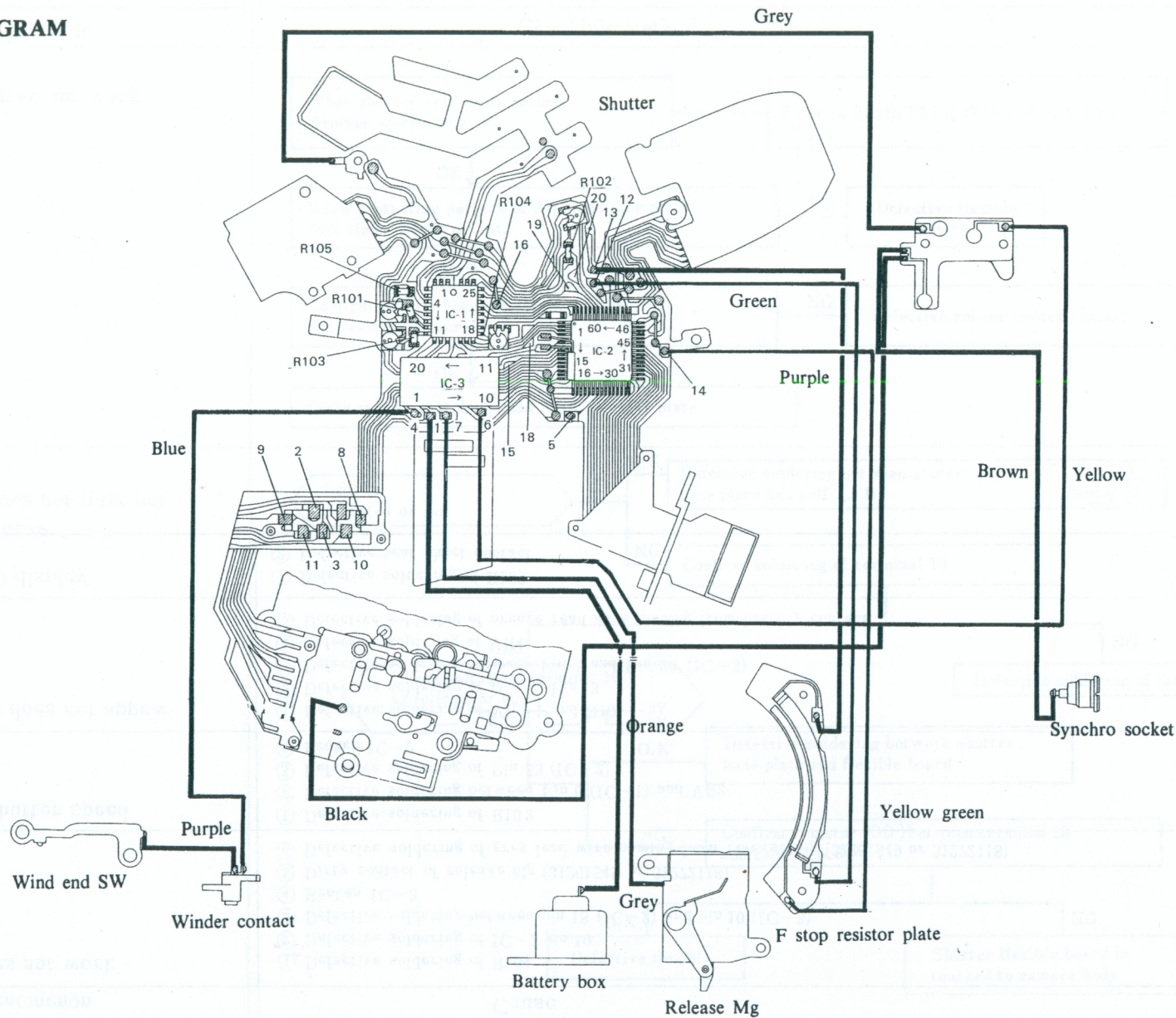


Fig. 63

9. SCHEMATIC DIAGRAM

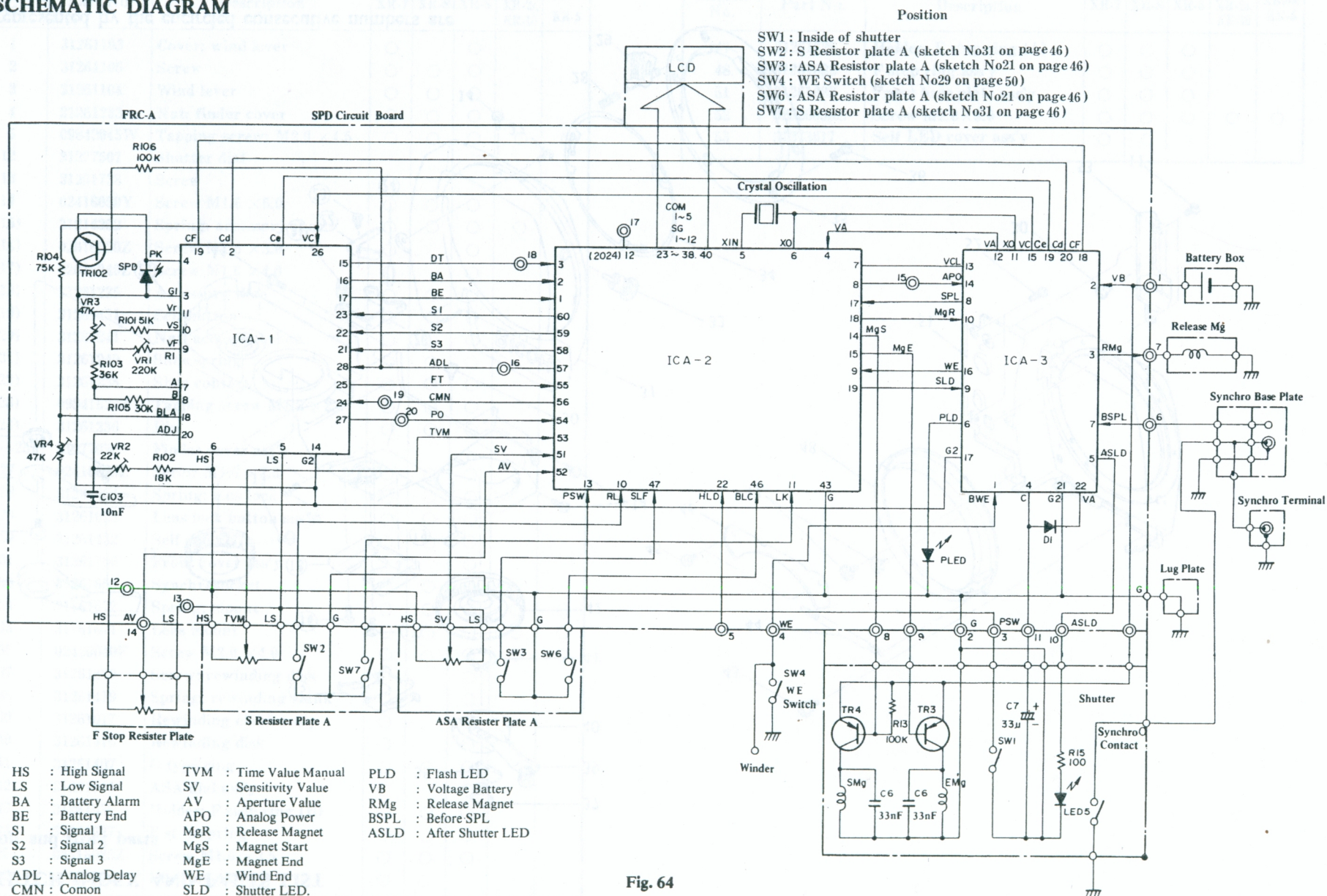
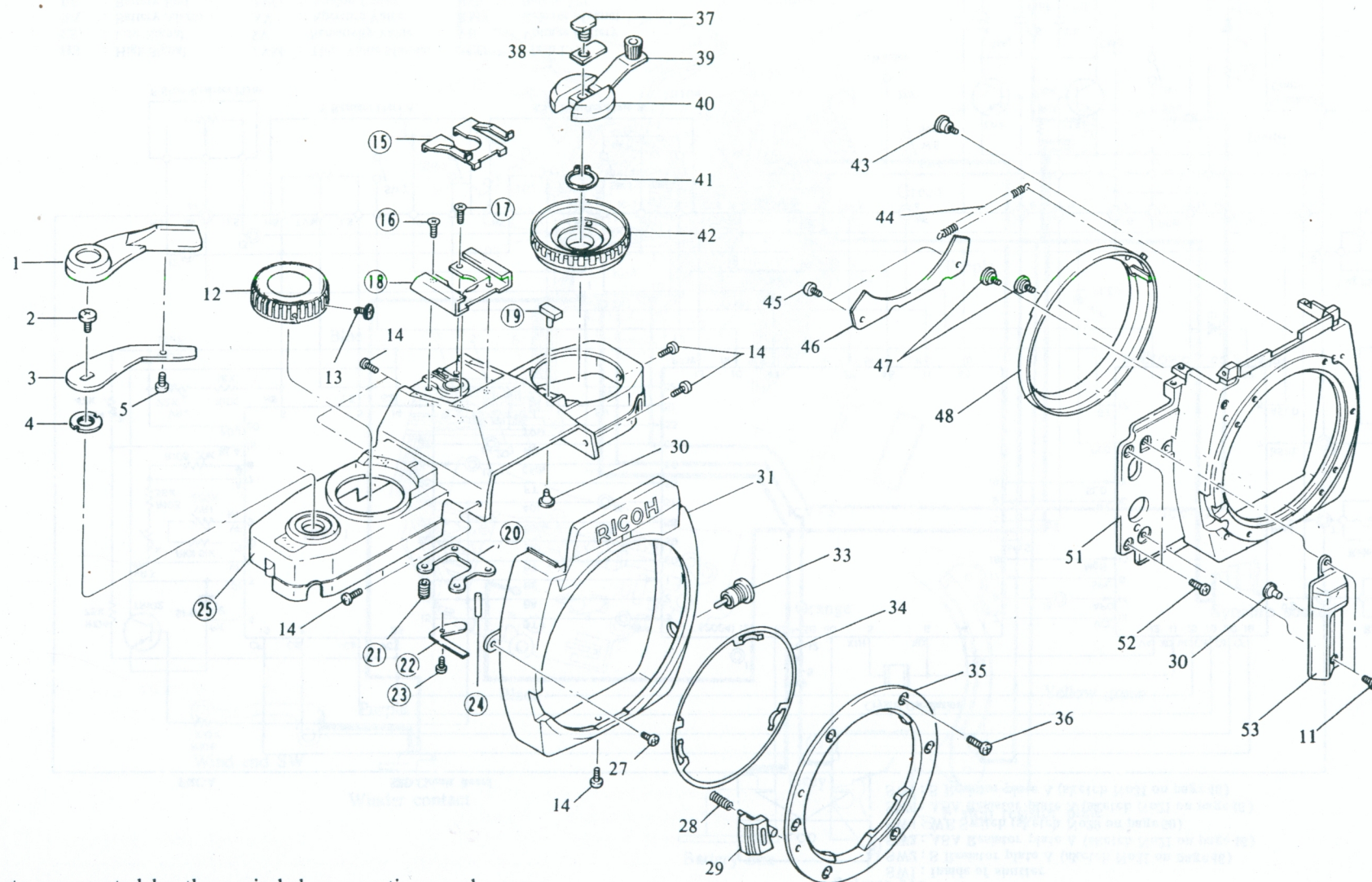


Fig. 64

10. SKETCH INDEX AND PARTS LIST

A. Top and front parts



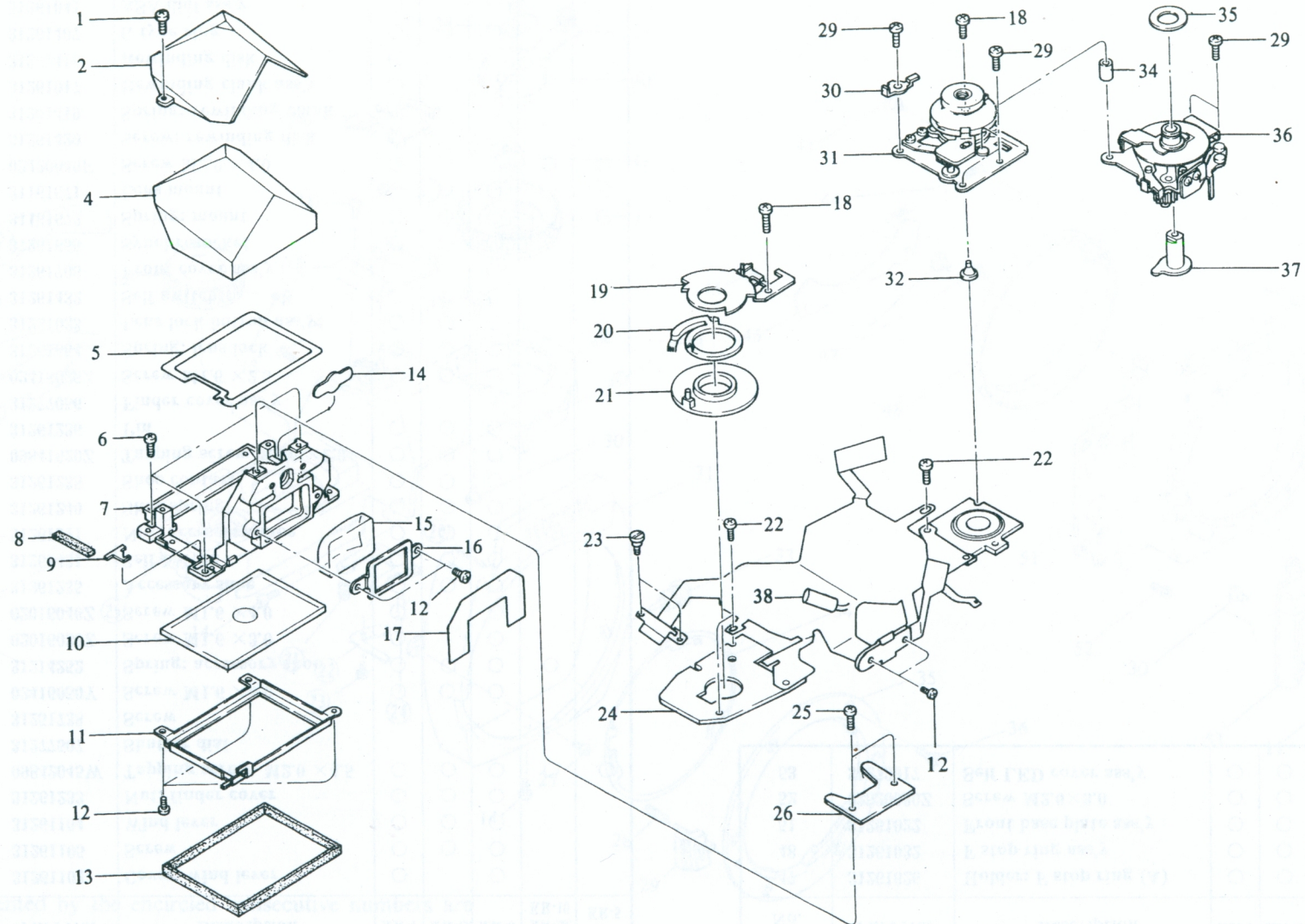
Parts represented by the encircled consecutive numbers are also deliverable as assembly parts.

○: using

Sketch No.	Part No.	Description	XR-7	XR-S	XR-6	XR-1s, XR-2s, KR-10	XR500 KR-5
1	31261103	Cover: wind lever	○		○		
2	31261105	Screw	○	○	○		
3	31261104	Wind lever	○	○	○		
4	31261233	Nut: finder cover	○	○	○		
5	09842045W	Tapping screw: M2.0 × 4.5	○	○	○	○	○
12	31277507	Shutter dial					
13	31251738	Screw					
14	02416050Y	Screw M1.6 × 5.0	○	○	○		
(15)	31214252	Spring: accessory shoe	○	○	○	○	
(16)	02016030Z	Screw M1.6 × 3.0	○		○		
(17)	02016040Z	Screw M1.6 × 4.0	○		○		
(18)	31261235	Accessory shoe	○	○	○		
(19)	31261431	Self button	○	○	○		
(20)	31261241	Nut: accessory shoe	○	○	○		
(21)	31261240	Shoe spring	○	○	○		
(22)	31261238	Shoe contact	○	○	○		
(23)	09841620Z	Tapping screw M1.6 × 2.0	○	○	○		
(24)	31261236	Pin	○	○	○		
(15~25)	31277056	Finder cover ass'y					
27	02416025Z	Screw M1.6 × 2.5	○	○	○		
28	31261654	Spring: lens lock	○	○	○		
29	31261033	Lens lock button ass'y	○	○	○		
30	31261432	Self switch	○	○	○		
31	31261706	Front cover ass'y			○		
33	31261655	Synchrosocket	○	○	○		
34	31161672	Spring: mount	○	○	○	○	○
35	31161671	Lens mount	○	○	○	○	○
36	02420040F	Screw M2.0 × 4.0	○	○	○	○	○
37	31261420	Screw: rewinding disk	○		○		
38	31261419	Spring: rewinding clank	○		○		
39	31261017	Rewinding clank ass'y	○		○		
40	31261416	Rewinding disk	○		○		
41	31261407	G type ring	○	○	○		
42	31261041	ASA dial ass'y	○		○		
43	31261630	Holder: F stop ring (B)	○	○	○		
44	31261627	F stop spring	○	○	○		
45	02516025Z	Screw M1.6 × 2.5	○	○	○		
46	31272202	Resistor plate	○	○			

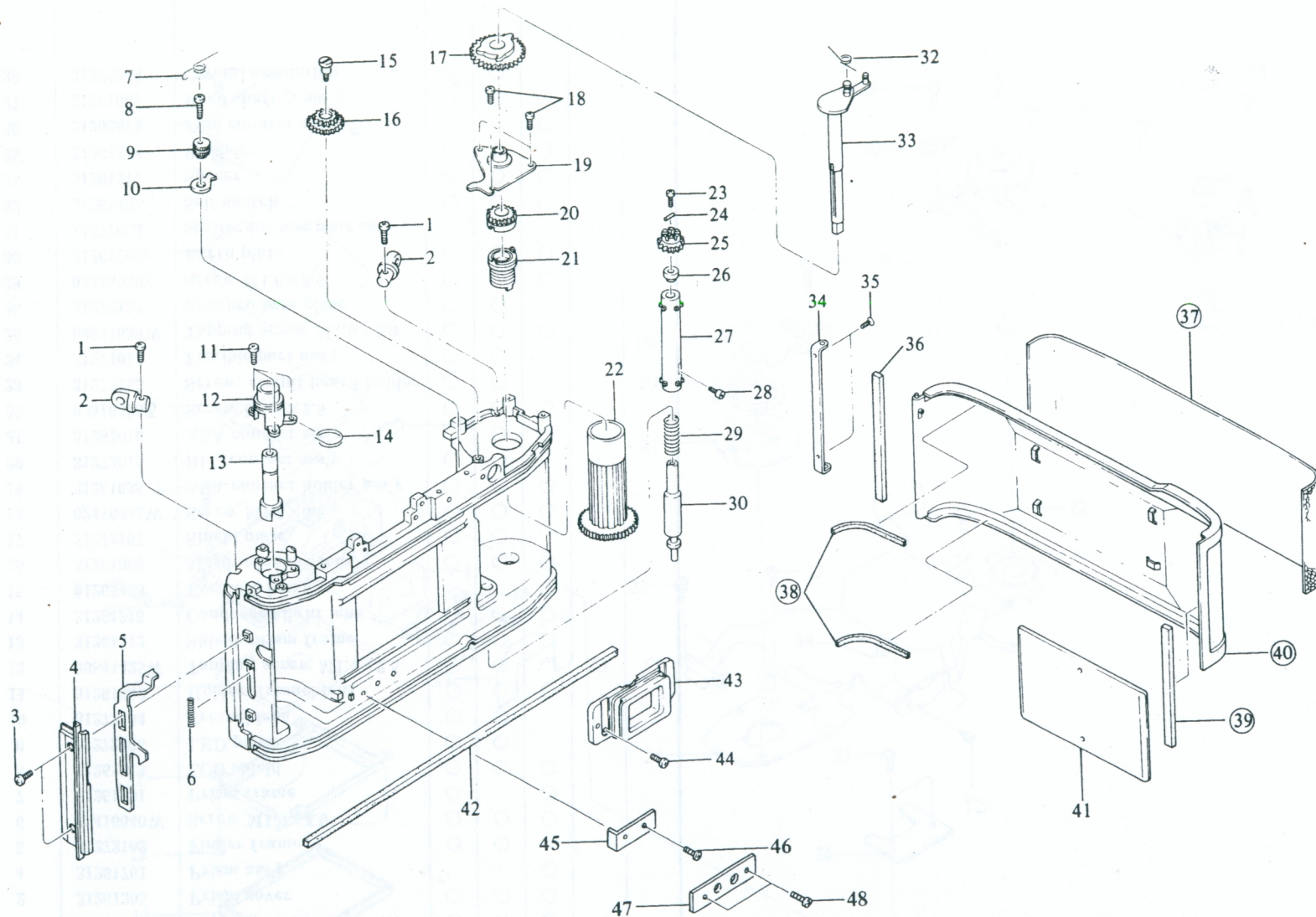
Sketch No.	Part No.	Description	XR-7	XR-S	XR-6	XR-1s, XR-2s, KR-10	XR500 KR-5
47	31261626	Holder: F stop ring (A)	○	○	○		
48	31261032	F stop ring ass'y	○	○	○		
51	31261022	Front base plate ass'y	○	○	○		
52	02520030Z	Screw M2.0 × 3.0	○	○	○	○	○
53	31273017	Self LED cover ass'y	○	○			

B. Viewfinder and film counter parts



Sketch NO.	Part No.	Description	XR-7	XR-S	XR-6	XR-1s, XR-2s, KR-10	XR500 KR-5
1	09841650W	Tapping screw M1.6×5.0	○	○	○		
2	31261305	Prism cover	○	○	○		
4	31261701	Prism ass'y			○		
5	31272102	Finder frame	○	○			
6	02416040W	Screw M1.6×4.0	○	○	○		
7	31261301	Prism frame	○		○		
8	31261313	LCD shield	○	○	○		
9	31272106	LED prism	○	○			
10	31272104	Fresnel lens	○	○			
11	31261303	Holder: fresnel lens	○	○	○		
12	09841425W	Tapping screw M1.4×2.5	○	○	○	○	○
13	31261312	Shield: prism frame	○	○	○		
14	31261315	Condensed light lens	○	○	○		
15	31265148	Eyepiece lens			○		
16	31261309	Mask: eyepiece lens	○	○	○		
17	31272157	Shield plate	○	○			
18	02416055W	Screw M1.6×5.5	○	○	○		
19	31261035	ASA contact holder ass'y	○	○	○		
20	31273015	BLC contact ass'y	○	○			
21	31261016	ASA contact ass'y	○	○	○		
22	02516025Z	Screw M1.6×2.5	○	○	○		
23	31272153	Screw: circuit board holder	○	○			
24	31274013	Flexible part ass'y	○	○			
25	09841630W	Tapping screw M1.6×3.0	○	○	○		
26	31272159	Synchro base plate	○	○			
29	02416030Z	Screw M1.6×3.0	○	○	○		
30	31261269	Earth plate	○	○	○		
31	31277053	Shutter dial base plate ass'y					
32	31261432	Self switch	○	○	○		
34	31261217	Spacer	○	○	○		
35	31261234	Washer	○	○	○		
36	31262011	Film counter ass'y			○		
37	31261001	Wind shaft A ass'y	○	○	○		
38	31272209	Crystal oscillation	○	○			

C. Back cover and film transport parts

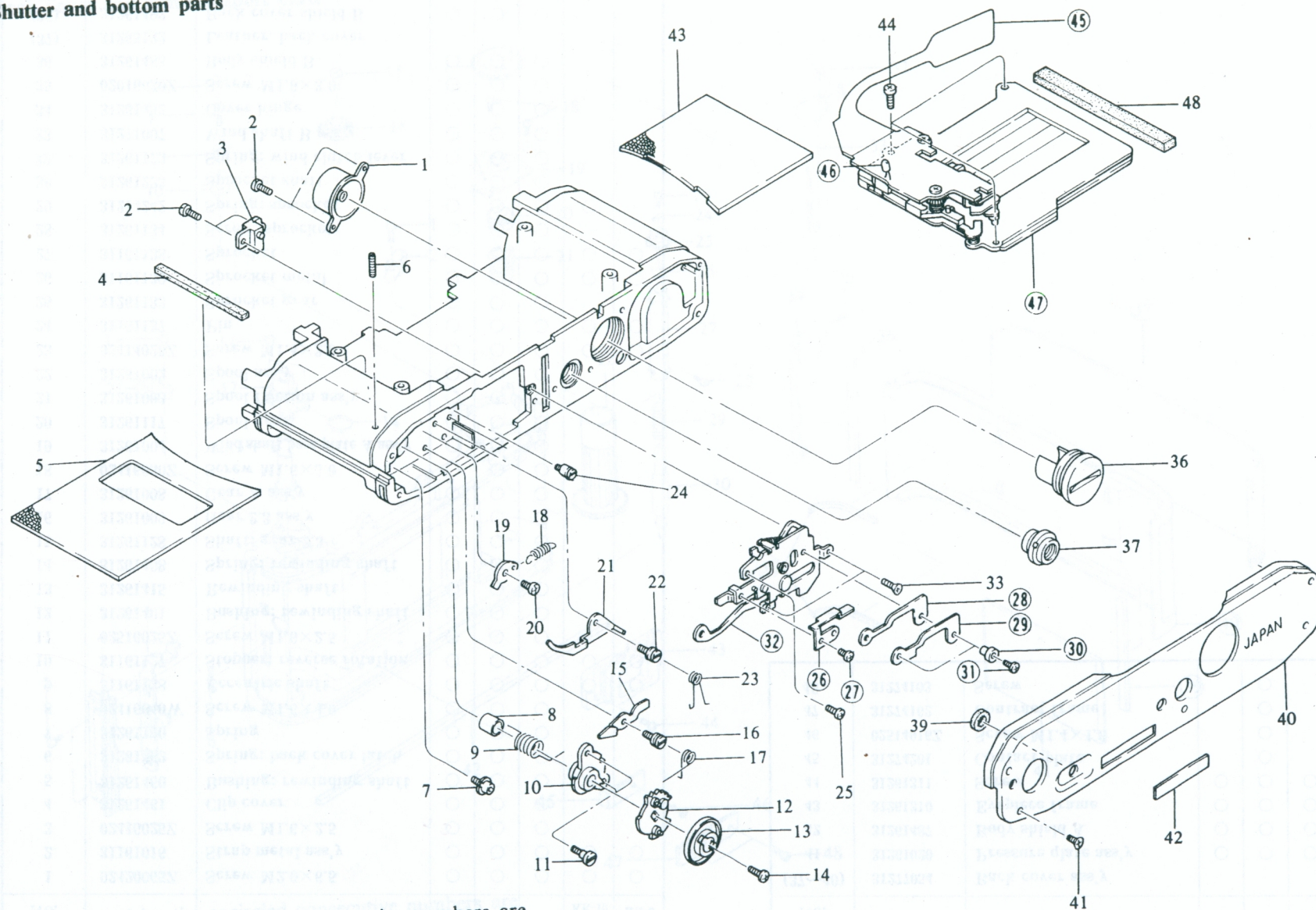


Parts represented by the encircled consecutive numbers are also deliverable as assembly parts.

Sketch No.	Part No.	Description	XR-7	XR-S	XR-6	XR-1s, XR-2s, KR-10	XR500 KR-5
1	02420065Z	Screw M2.0×6.5	○	○	○	○	○
2	31161016	Strap metal ass'y	○	○	○	○	○
3	02416025Z	Screw M1.6×2.5	○	○	○		
4	31261461	Clip cover	○	○	○		
5	31261460	Bushing: rewinding shaft	○	○	○		
6	31261462	Spring: back cover latch	○	○	○		
7	31261140	Spring	○	○	○		
8	02416040W	Screw M1.6×4.0	○	○	○		
9	31161128	Eccentric shaft	○	○	○	○	○
10	31161127	Stopper: reverse rotation	○	○	○	○	○
11	02516025Z	Screw M1.6×2.5	○	○	○		
12	31261401	Bushing: rewinding shaft	○	○	○		
13	31261415	Rewinding shaft	○	○	○		
14	31261408	Spring: rewinding shaft	○	○	○		
15	31261128	Shaft: gear 2.3	○	○	○		
16	31261009	Gear 2.3 ass'y	○	○	○		
17	31261008	Gear A ass'y	○	○	○		
18	02416030Z	Screw M1.6×3.0	○	○	○		
19	31261004	Wind shaft base plate A ass'y	○	○	○		
20	31261117	Spool gear	○	○	○		
21	31261003	Spool friction ass'y	○	○	○		
22	31261002	Spool ass'y	○	○	○		
23	02414020Z	Screw M1.4×2.0	○	○	○	○	○
24	31161137	Pin	○	○	○	○	○
25	31261133	Sprocket gear	○	○	○		
26	31161139	Sprocket metal	○	○	○	○	○
27	31161138	Sprocket	○	○	○	○	○
28	31261134	Screw: sprocket	○	○	○		
29	31214242	Spring: sprocket	○	○	○	○	
30	31261223	Sprocket shaft	○	○	○		
32	31261123	Spring: wind clutch lever	○	○	○		
33	31271007	Wind shaft B ass'y	○	○	○		
34	31261452	Cover hinge	○	○	○		
35	02016030Z	Screw M1.6×3.0	○	○	○		
36	31261488	Body shield B	○	○	○		
(37)	31265132	Leather: back cover					
(38)	31261492	Back cover shield B	○	○	○		
(39)	31261491	Back cover shield A	○	○	○		

Sketch No.	Part No.	Description	XR-7	XR-S	XR-6	XR-1s, XR-2s, KR-10	XR500 KR-5
(37~40)	31277054	Back cover ass'y					
41	31261020	Pressure plate ass'y	○	○	○		
42	31261487	Body shield A	○	○	○		
43	31261310	Eyepiece frame	○	○	○		
44	31261311	Screw	○	○	○		
45	31274201	Contact plate		○			
46	02514016Z	Screw M1.4×1.6		○			
47	31274102	Contract frame		○			
48	31274103	Screw		○			

D. Shutter and bottom parts

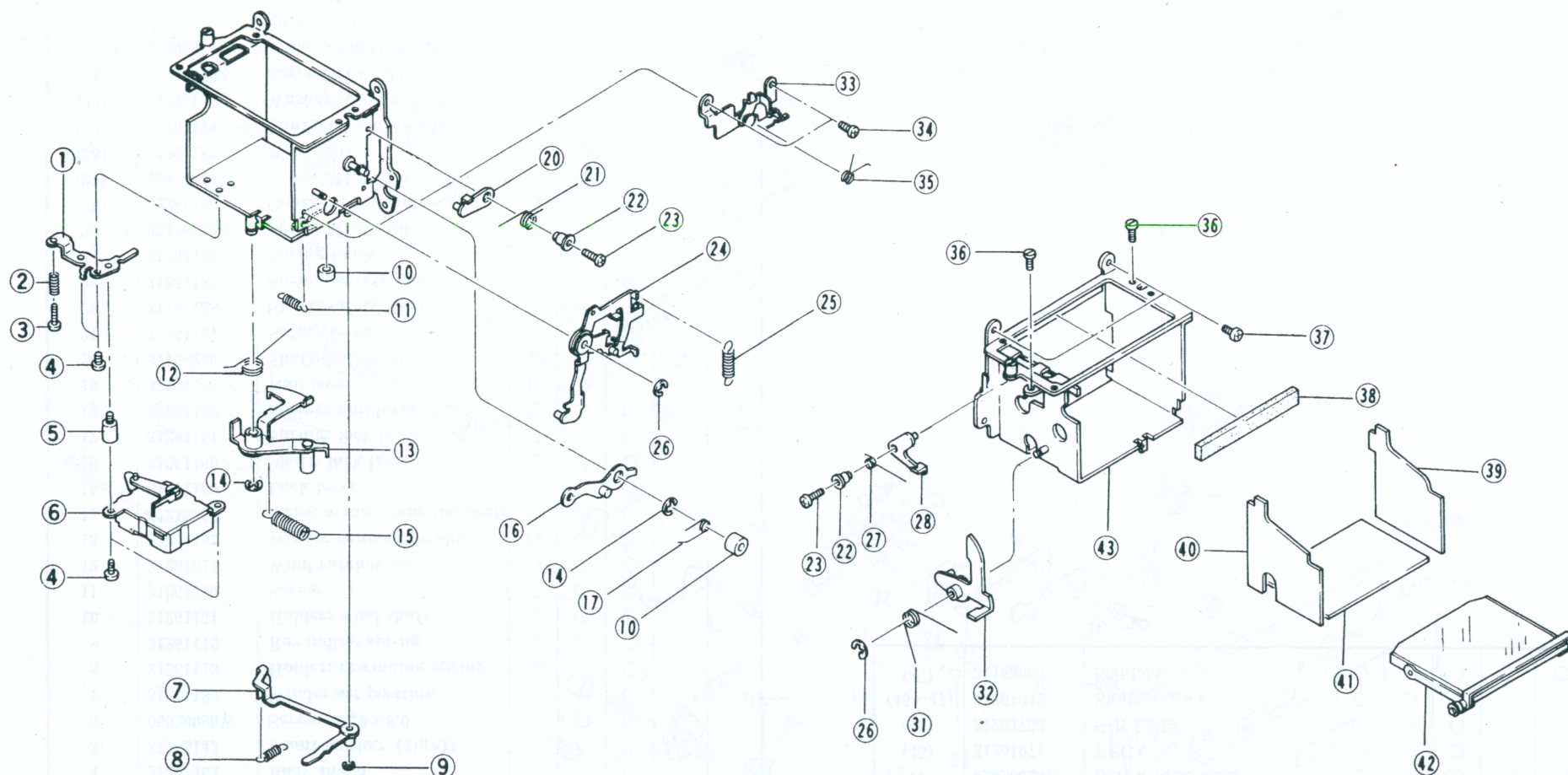


Parts represented by the encircled consecutive numbers are also deliverable as assembly parts.

Sketch No.	Part No.	Description	XR-7	XR-S	XR-6	XR-1s, XR-2s, KR-5	XR500 KR-5
1	31261021	Battery case ass'y	○		○		
2	02416025Z	Screw M1.6×2.5	○	○	○		
3	31261013	Winder contact ass'y	○	○	○		
4	31261494	Body shield	○	○	○		
5	31265142	Front leather (right)					
6	05020080W	Screw M2.0×8.0	○	○	○		
7	31261186	Winder set position	○	○	○		
8	31261113	Holder: rewinding spring	○	○	○		
9	31261112	Rewinding spring	○	○	○		
10	31261151	Holder: wind shaft	○	○	○		
11	31261190	Screw	○	○	○		
12	31261011	Wind ratchet ass'y	○	○	○		
13	31261182	Winder connection shaft	○	○	○		
14	31261642	Screw: winder connection shaft	○	○	○	○	
15	31261159	Lock lever	○	○	○		
16	31261160	Shaft: lock lever	○	○	○		
17	31261161	Spring: lock lever	○	○	○		
18	31261189	Spring: nail lever	○	○	○		
19	31261155	Nail lever	○	○	○		
20	31196250	Shaft: nail lever	○	○	○	○	○
21	31261157	Safety lever	○	○	○		
22	31261158	Shaft: safety lever	○	○	○		
23	31261188	Spring: safety lever	○	○	○		
24	31261156	Spring hook	○	○	○		
25	02416030Z	Screw M1.6×3.0	○	○	○		
(26)	31261178	Contact ⊖: wind end	○	○	○		
(27)	02416016W	Screw M1.6×1.6	○	○	○		
(28)	31261181	Washer B	○	○	○		
(29)	31261179	Contact ⊖: wind end	○	○	○		
(30)	31261180	Washer A	○	○	○		
(31)	02416020Z	Screw M1.6×2.0	○	○	○		
(26~32)	31261038	Wind connection lever guide ass'y	○	○	○		
33	02016030Z	Screw M1.6×3.0	○	○	○		
36	31261046	Battery cover ass'y	○	○	○		
37	31261481	Tipod socket	○	○	○		
39	31261493	Shield	○	○	○		
40	31265106	Bottom cover			○		

Sketch No.	Part No.	Description	XR-7	XR-S	XR-6	XR-1s, XR-2s, KR-10	XR500 KR-5
41	02016030Y	Screw M1.6×3.0	○	○	○		
42	31277505	Number plate					
43	31265143	Front leather (left)					
44	02420025Z	Screw M2.0×2.5	○	○	○	○	○
(45)	31261071	FPC	○	○	○		
(46)	31261756	Self LED	○	○	○		
(45~47)	31261042	Shutter ass'y	○	○	○		
(48)	31163005	S shield	○	○	○	○	○

E. Mirror box parts



*(1 ~ 43) Mirror box ass'y 31262015

Part numbers from No. 1 to No. 43 are also deliverable as assembly part number 31262015

Sketch No.	Part No.	Description	XR-7	XR-S	XR-6	XR-1s, XR-2s, KR-10	XR500 KR-5
(1)	31261550	Mg base plate	○	○	○		
(2)	31161608	Spring	○	○	○	○	○
(3)	31161609	Screw	○	○	○	○	○
(4)	02416020Z	Screw M1.6×2.0	○		○		
(5)	31261551	Screw	○		○		
(6)	31272118	Release Mg	○	○	○		
(7)	31261030	Release lever ass'y	○	○	○		
(8)	31261548	Spring: release lever	○	○	○		
(10)	31261523	Stopper: diaphragm lever	○	○	○		
(11)	31261562	Spring: Q set stopper	○	○	○		
(12)	31261539	Spring: Q set lever	○	○	○		
(13)	31261029	Q set lever ass'y	○	○	○		
(14)	07200020C	Retaining ring	○	○	○		
(15)	31261542	Q return spring	○	○	○		
(16)	31261026	Mirror up lever ass'y	○	○	○		
(17)	31261530	Spring: mirror up lever	○	○	○		
(20)	31261040	Adjusting lever (right)					
		ass'y M frame	○	○	○		
(21)	31261560	Spring: adjusting lever (right)	○	○	○		
(22)	31261517	Shaft: adjusting lever (left)	○	○	○		
(23)	02516040W	Screw M1.6×4.0	○	○	○		
(24)	31262005	Diaphragm lever ass'y			○		
(25)	31261532	Spring: diaphragm lever	○	○	○		
(26)	07200015C	Retaining ring	○	○	○	○	○
(27)	31261518	Spring: adjusting lever (left)	○	○	○		
(28)	31261025	Adjusting lever (left)	○	○	○		
		ass'y M frame					
(31)	31261605	Spring: focus adjusting	○	○	○		
(32)	31261031	Focus adjusting arm ass'y	○	○	○		
(33)	31261036	S lever base plate ass'y	○	○	○		
(34)	02416016W	Screw M1.6×1.6	○	○	○		
(35)	31261535	Spring: S lever	○	○	○		
(36)	31261561	Adjusting screw	○	○	○		
(37)	02520030Z	Screw M2.0×3.0	○	○	○	○	○
(38)	31261563	Shield	○	○	○		
(39)	31261552	Shield (right)	○	○	○		
(40)	31261553	Shield (left)	○	○	○		

Sketch No.	Part No.	Description	XR-7	XR-S	XR-6	XR-1s, XR-2s, KR-10	XR500 KR-5
(41)	31261554	Shield (bottom)	○	○	○		
(42)	31262006	Mirror frame ass'y			○		
(1~43)	31273024	Mirror box ass'y			○		

NOTE:

Part No 31272118 and 31261549 are convertible.
As 31272118 will be stocked for service part,
please order it instead of 31261549.

11. PARTS INDEX

Part No.	Description	XR-7	XR-S	XR-6	XR-1s, XR-2s, KR-10	XR500 KR-5	Sketch No.
31271007	Wind shaft B assy	○	○	○			C-33
31272102	Finder frame	○	○				B-5
31272104	Fresnel lens	○	○				B-10
31272106	LED prism	○	○				B-9
31272118	Release Mg	○	○	○			E-(6)
31272153	Screw: circuit board holder	○	○				B-23
31272157	Shield plate	○	○				B-17
31272158	LCD spacer	○	○				B-38
31272159	Synchro base plate	○	○				B-26
31272202	Resistor plate	○	○				A-46
31273015	BLC contact ass'y						B-20
31273017	Self LED cover ass'y						A-53
31274013	Flexible part ass'y	○	○				B-24
31274102	Contact frame		○				C-47
31274103	Screw		○				C-48
31274201	Contact plate		○				C-45
31277053	Shutten dial base plate assy						B-31
31277054	Back cover ass'y						C-(37~40)
31277056	Finder cover ass'y						A-(15~25)
31277505	Number plate						D-42
31277507	Shutter dial						A-12
31261001	Wind shaft A ass'y	○	○	○			B-37
31261002	Spool ass'y	○	○	○			C-22
31261003	Spool friction ass'y	○	○	○			C-22
31261004	Wind shaft base plate A ass'y	○	○	○			C-19
31261008	Gear A ass'y	○	○	○			C-17
31261009	Gear 2.3 ass'y	○	○	○			C-16
31261011	Wind ratchet ass'y	○	○	○			D-12
31261013	Winder contact ass'y	○	○	○			D-3
31261016	ASA contact ass'y	○	○	○			B-21
31261017	Rewinding clank ass'y	○		○			A-39
31261020	Pressure plate ass'y	○	○	○			C-41
31261021	Battery case ass'y	○		○			D-1
31261022	Front base plate ass'y	○	○	○			A-51
31261025	Adjusting lever (left) ass'y: M frame	○	○	○			E-(28)

Part No	Description	XR-7	XR-S	XR-6	XR-1s, XR-2s, KR-10	XR500 KR-5	Sketch No.
31261026	Mirror up lever ass'y	○	○	○			E-(16)
31261029	Q set lever ass'y	○	○	○			E-(13)
31261030	Release lever ass'y	○	○	○			E-(7)
31261031	Focus adjusting arm ass'y	○	○	○			E-(32)
31261032	F stop ring ass'y	○	○	○			A-48
31261033	Lens lock button ass'y	○	○	○			A-29
31261035	ASA contact holder ass'y	○	○	○			B-19
31261036	S lever base plate ass'y	○	○	○			E-(33)
31261038	Wind connection lever guide ass'y	○	○	○			D- (26~32)
31261040	Adjusting lever (right) ass'y: M frame	○	○	○			E-(20)
31261041	ASA dial ass'y	○	○				A-42
31261042	Shutter ass'y	○	○	○			D-(45~47)
31261046	Battery cover ass'y	○	○				D-36
31261071	FPC	○	○	○			D-(45)
31261103	Cover: wind lever	○	○				A-1
31261104	Wind lever	○	○	○			A-3
31261105	Screw	○	○	○			A-2
31261112	Rewinding spring	○	○	○			D-9
31261113	Holder: rewinding spring	○	○	○			D-8
31261117	Spool gear	○	○	○			C-20
31261123	Spring: wind clutch lever	○	○	○			C-32
31261128	Shaft: gear 2.3	○	○	○			C-15
31261133	Sprocket gear	○	○	○			C-25
31261134	Screw: sprocket	○	○	○			C-28
31261140	Spring	○	○	○			C-7
31261151	Holder: wind shaft	○	○	○			D-10
31261155	Nail lever	○	○	○			D-19
31261156	Spring hook	○	○	○			D-24
31261157	Safety lever	○	○	○			D-21
31261158	Shaft: safety lever	○	○	○			D-22
31261159	Lock lever	○	○	○			D-15
31261160	Shaft: lock lever	○	○	○			D-16
31261161	Spring: lock lever	○	○	○			D-17
31261178	Contact ⊖: wind end	○	○	○			D-(26)
31261179	Contact ⊕: wind end	○	○	○			D-(29)

Part No.	Description	XR-7	XR-S	XR-6	XR-1s, XR-2s, KR-10	XR500 KR-5	Sketch No.
31261180	Washer A	○	○	○			D-(30)
31261181	Washer B	○	○	○			D-(28)
31261182	Winder connection shaft	○	○	○			D-13
31261186	Winder set position shaft	○	○	○			D-7
31261188	Spring: safety lever	○	○	○			D-23
31261189	Spring: nail lever	○	○	○			D-18
31261190	Screw	○	○	○			D-11
31261217	Spacer	○	○	○			B-34
31261223	Sprocket shaft	○	○	○			C-30
31261233	Nut: finder cover	○	○	○			A-4
31261234	Washer	○	○	○			B-35
31261235	Accessory shoe	○		○			A-(18)
31261236	Pin	○		○			A-(24)
31261238	Shoe contact	○	○	○			A-(22)
31261240	Shoe spring	○		○			A-(21)
31261241	Nut: accessory shoe	○	○	○			A-(20)
31261264	Screw	○		○			A-13
31261269	Earth plate	○	○	○			B-30
31261301	Prism frame	○		○			B-7
31261303	Holder: fresnel lens	○	○	○			B-11
31261305	Prism cover	○	○	○			B-2
31261309	Mask: eyepiece lens	○	○	○			B-16
31261310	Eyepiece frame	○	○	○			C-43
31261311	Screw	○	○	○			A-11,C-44
31261312	Shield: prism frame	○	○	○			B-13
31261313	LCD shield	○	○	○			B-8
31261315	Condensed light lens	○	○	○			B-14
31261401	Bushing: rewinding shaft	○	○	○			C-12
31261407	G type ring	○	○	○			A-41
31261408	Spring: rewinding shaft	○	○	○			C-14
31261415	Rewinding shaft	○	○	○			C-13
31261416	Rewinding disk	○		○			A-40
31261419	Spring: rewinding clank	○		○			A-38
31261420	Screw: rewinding disk	○		○			A-37
31261431	Self button	○		○			A-(19)
31261432	Self switch	○	○	○			A-30,B-32

Part No.	Description	XR-7	XR-S	XR-6	XR-1s, XR-2s, KR-10	XR500 KR-5	Sketch No.
31261452	Cover hinge	○	○	○			C-34
31261460	Back cover latch	○	○	○			C-5
31261461	Clip cover	○	○	○			C-4
31261462	Spring: back cover latch	○	○	○			C-6
31261481	Tripod socket	○	○	○			D-37
31261487	Body shield A	○	○	○			C-42
31261488	Body shield B	○	○	○			C-36
31261491	Back cover shield A	○	○	○			C-(39)
31261492	Back cover shield B	○	○	○			C-(38)
31261493	Shield ring	○	○	○			D-39
31261494	Body shield	○	○	○			D-4
31261517	Shaft: adjusting lever (left)	○	○	○			E-(22)
31261518	Spring: adjusting lever (left)	○	○	○			E-(27)
31261523	Stopper: diaphragm lever	○	○	○			E-(10)
31261530	Spring: mirror up lever	○	○	○			E-(17)
31261532	Spring: diaphragm lever	○	○	○			E-(25)
31261535	Spring: S lever	○	○	○			E-(35)
31261539	Spring: Q set lever	○	○	○			E-(12)
31261542	Q return spring	○	○	○			E-(15)
31261548	Spring: release lever	○	○	○			E-(8)
31261550	Mg base plate	○	○	○			E-(1)
31261551	Screw	○	○				E-(5)
31261552	Shield (right)	○	○	○			E-(39)
31261553	Shield (left)	○	○	○			E-(40)
31261554	Shield (bottom)	○	○	○			E-(41)
31261560	Spring: adjusting lever (right)	○	○	○			E-(21)
31261561	Adjusting screw	○	○	○			E-(36)
31261562	Spring: Q set stopper	○	○	○			E-(11)
31261563	Shield	○	○	○			E-(38)
31261605	Spring: focus adjusting	○	○	○			E-(31)
31261626	Holder: F stop ring A	○	○	○			A-47
31261627	F stop spring	○	○	○			A-44
31261630	Holder: F stop ring B	○	○	○			A-43
31261654	Spring: lens lock	○	○	○			A-28
31261655	Synchrosocket	○	○	○			A-33

Part No.	Description	XR-7	XR-S	XR-6	XR-1s, XR-2s, KR-10	XR500 KR-5	Sketch No.
31261701	Prism			○			B-4
31261706	Front cover ass'y			○			A-31
31261756	Self LED	○	○	○			D-(46)
31262005	Diaphragm lever ass'y			○			E-(24)
31262006	Mirror frame ass'y			○			E-(42)
31262011	Film counter ass'y			○			B-36
31262015	Mirror box ass'y			○			E-(1~42)
31265106	Bottom cover			○			D-40
31265132	Leather: back cover						C-(37)
31265142	Front leather (right)						D-5
31265143	Front: leather (left)						D-43
31265148	Eyepiece lens			○			B-15
31161016	Strap metal ass'y	○	○	○	○	○	C-2
31161127	Stopper: everse rotation	○	○	○	○	○	C-10
31161128	Eccentric shaft	○	○	○	○	○	C-9
31161137	Pin	○	○	○	○	○	C-24
31161138	Sprocket	○	○	○	○	○	C-27
31161139	Sprocket metal	○	○	○	○	○	C-26
31161608	Spring	○	○	○	○	○	E-(2)
31161609	Screw	○	○	○	○	○	E-(3)
31161671	Lens mount	○	○	○	○	○	A-35
31161672	Spring: mount	○	○	○	○	○	A-34
31163005	S shield	○	○	○	○	○	D-48
31195502	Sprocket shaft button	○	○	○	○	○	C-31
31196250	Shaft: nail lever	○	○	○	○	○	D-20
31214242	Spring: sprocket	○	○	○	○		C-29
31214252	Spring: accessory shoe	○	○	○	○		A-(15)
31216142	Screw: winder connection shaft	○	○	○	○		D-14
*02016030Z	Screw M1.6 × 3.0	○	○				A-(16),D-33 C-35
*02016030Y	Screw M1.6 × 3.0	○	○				D-41
*02016040Z	Screw M1.6 × 4.0	○					A-(17)
*02414020Z	Screw M1.4 × 2.0	○	○				C-23
*02414040W	Screw M1.4 × 4.0	○	○				B-3
*02416016W	Screw M1.6 × 1.6	○	○				D-(27),E-(34)

Part No.	Description	XR-7	XR-S	XR-6	XR-1s, XR-2s, KR-10	XR500 KR-5	Sketch No.
* 02416020Z	Screw M1.6 × 2.0	○	○				D-(31),E-(4)
* 02416025Z	Screw M1.6 × 2.5	○	○				A-27,D-2, E-(30)
* 02416030Z	Screw M1.6 × 3.0	○	○				A-7,B-29, D-25,C-18
* 02416040W	Screw M1.6 × 4.0	○	○				B-6
* 02416050Y	Screw M1.6 × 5.0	○	○				A-14
* 02416055W	Screw M1.6 × 5.5	○	○				B-18
* 02420025Z	Screw M2.0 × 2.5	○	○				D-44
* 02420040F	Screw M2.0 × 4.0	○	○				A-36
* 02420065Z	Screw M2.0 × 6.5	○	○				C-1
* 02516025Z	Screw M1.6 × 2.5	○	○				A-45,B22, C-11
* 02516040W	Screw M1.6 × 4.0	○	○				C-8,E-(23)
* 02520030Z	Screw M2.0 × 3.0	○	○				A-52,E-(37)
* 05020080W	Screw M2.0 × 8.0	○	○				D-6
* 09841425W	Tapping screw M1.4 × 2.5	○	○				B-12
* 09841620Z	Tapping screw M1.6 × 2.0	○	○				A-(23), D-35
* 09841630W	Tapping screw M1.6 × 3.0	○	○				B-24
* 09841650W	Tapping screw M1.6 × 5.0	○	○				B-1
* 09842045W	Tapping screw M2.0 × 4.5	○	○				A-5
* 09851425W	Tapping screw M1.4 × 2.5	○	○				B-27
07200012C	Retaining ring 12φ	○	○				E-(9)
07200015C	Retaining ring 15φ	○	○				E-(26)
07200020C	Retaining ring 20φ	○	○				E-(14)

(1) * Mark parts will be supplied minimum 100 pcs unit.

(2) Body will be not supplied for repair part.

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