

RICOH XR-7

**REPAIR MANUAL
AND
REPAIR PARTS**

RICOH COMPANY LTD.

INDEX

SPECIFICATIONS.....	2
1. PURPOSE OF TABLE MAT.....	3
2. TOOL SET FOR XR-6, 7	4
3. DISASSEMBLING OF MAJOR COMPONENT PARTS ...	5
1. Finder cover	5
2. Bottom cover	5
3. SD base plate assy	6
4. Film counter assy	6
5. ASA contact holder assy.....	6
6. SPD circuit board assy	7
7. Fresnel lens.....	9
8. Mirror box.....	9
9. Mirror frame assy.....	9
10. Winding shaft.....	10
4. ASSEMBLING.....	11
1. Mirror box.....	11
2. Winding shaft.....	12
3. Wind connection lever guide assy	13
4. Mirror box.....	13
5. Fresnel lens.....	14
6. Bending of SPD circuit board assy.....	14
7. LCD	16
8. Prism frame assy	17
9. Prism	17
10. SPD circuit board assy	18
11. ASA contact holder assy.....	22
12. Soldering of lead wires	22
13. Film counter	24
14. SD base plate assy	24
15. Arranging of all lead wires	25
16. ASA dial	25
17. Care for replacement of following contacts	26
5. ADJUSTMENT.....	27
1. Film wind up	27
2. Sprocket reverse stop	27
3. 45° mirror	28
4. Focusing of finder	29
5. F stop	30
6. LCD mark	30
7. Body back	31
8. Electric equipment	32
6. WIRING DIAGRAM	34
7. SCHEMATIC DIAGRAM	35
8. SKETCH INDEX AND PARTS LIST	36
A. Top and front parts	36
B. View finder and film counter parts	38
C. Back cover and film transport parts	40
D. Shutter and bottom parts.....	42
E. Mirror box parts	44
9. PARTS INDEX	46

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 1/6 to 1/1000 sec.
Manual from 1/6 to 1/1000 sec. plus B
SELF-TIMER..... Operating delay about 10 seconds during operation
the red LED light pulsates and an electronic sound is emitted
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, F-Stop Number, AE Lock
FOCUSING..... Split-image spot in microprism 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) AE Lock System (MEMORY)
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..... 480g (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.

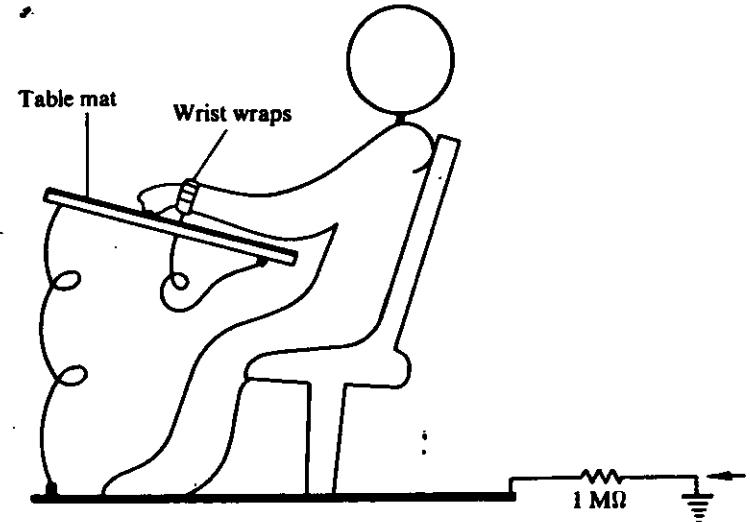
1. PURPOSE OF TABLE MAT

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 mate (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.

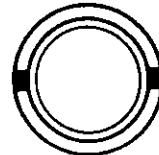
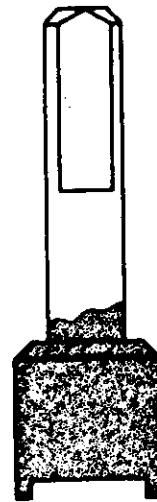
Caution:

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.

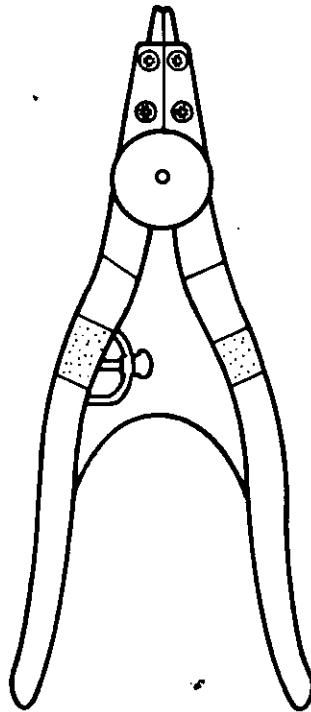


2. TOOL SET FOR XR-6, 7

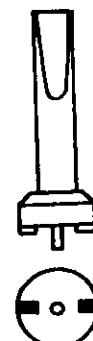
Sketch No.	Tool No.	Description	XR-7	XR-6	XR-1S	XR-2S	KR-10	KR-5
1	31269999	Tool for Winding Lever Nut (Sketch No. 4 on page 36)	<input type="radio"/>	<input type="radio"/>				
2	31269998	Tool for Stopring Pliers (Sketch No. 41 on page 36)	<input type="radio"/>	<input type="radio"/>				
3	31169996	Tool for Syncro Socket (Sketch No. 33 on page 36)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		
4	31169995	Tool for Tool Shaft	<input type="radio"/>					
5	31269997	Tool for 45° Adjustment Mirror (Fig. 53)	<input type="radio"/>	<input type="radio"/>				



1



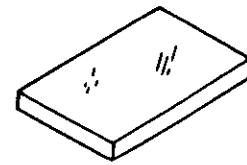
2



3



4



5

1. DISASSEMBLING OF MAJOR COMPONENT PARTS

1. Finder cover (see Fig. 1)

- 1) Take off the SCREW (No. 1) and remove the COVER: WIND LEVER (No. 2).
- 2) Take off the SCREW (No. 3) and remove the WIND LEVER (No. 4).
- 3) Remove the NUT (No. 5).
- 4) Take off three SCREWS (No. 9) and remove the SHUTTER SPEED PLATE (No. 6) carefully.
- 5) Take off three SCREWS (No. 7) and remove the SHUTTER SPEED DIAL (No. 8).
- 6) Remove the REWINDING DISK (No. 13).
- 7) Remove the RETAINING RING (No. 14).
- 8) Remove the ASA DIAL (No. 15).
- 9) Take off five SCREWS (No. 10).
- 10) Remove the FINDER COVER (No. 16) carefully.

NOTE:

Pay attention not to lose the A LOCK BUTTON (No. 17) and the WASHER (sketch No. 35 on page 38).

2. Bottom cover (see the sketch No. 40 on page 42).

- 1) Take off five SCREWS (sketch No. 41).
- 2) Remove the BOTTOM COVER (sketch No. 40).

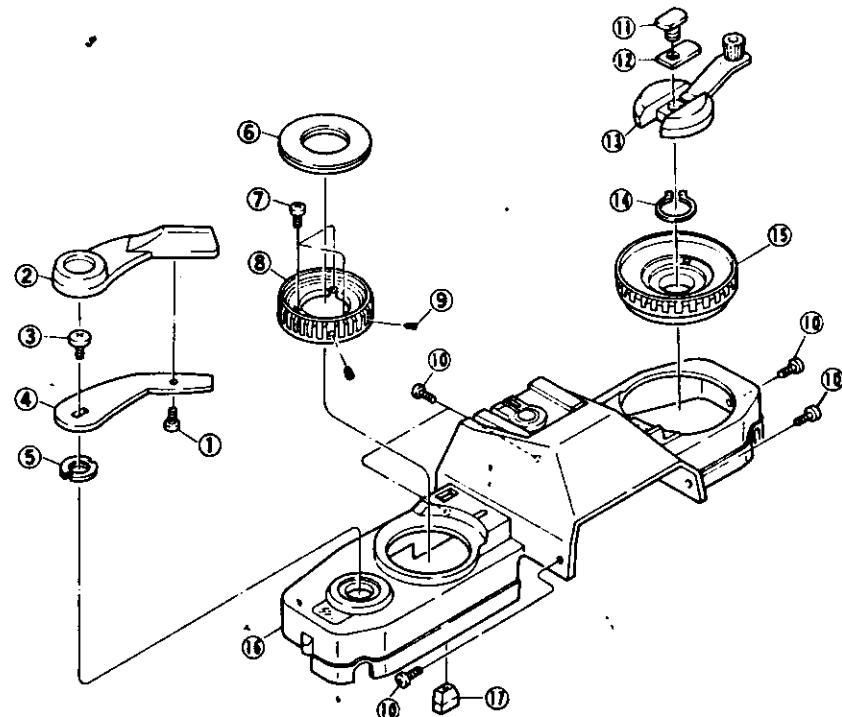


Fig. 1

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 38).
- 4) Remove the SD BASE PLATE ASSY (No. 2) carefully.

NOTE:

Pay attention not to bend the contacts and not to lose the SPRING (No. 4).

- 5) Remove the SPACER (No. 1).

4. Film counter assy (sketch No. 36 on page 38)

- 1) Remove the WASHER (sketch No. 35 on page 38).
- 2) Take off two SCREWS (sketch No. 29 on page 38).
- 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.

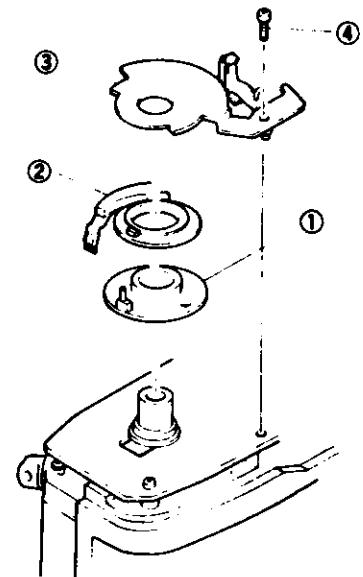
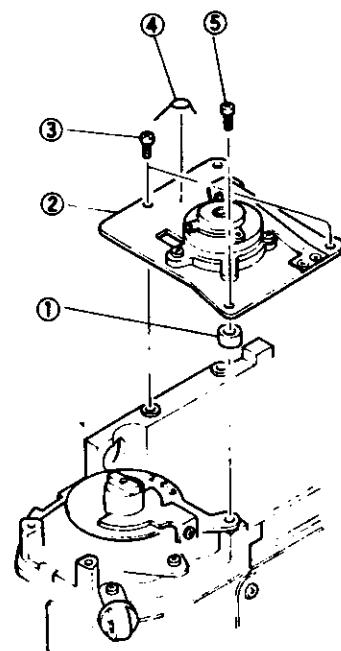


Fig. 3

Fig. 2

6. SPD circuit board assy (sketch No. 24 on page 38)

- 1) Detach the soldered portions of all LEAD WIRES shown in Fig. 4.
- 2) Take off two SCREWS (sketch No. 25 on page 38), and remove the SYNCHRO BASE PLATE (sketch No. 26).
- 3) Take off two SCREWS (sketch No. 44 on page 40).
- 4) Remove the EYE PIECE FRAME (sketch No. 43) and the SHIELD PLATE (sketch No. 17 on page 38).
- 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.

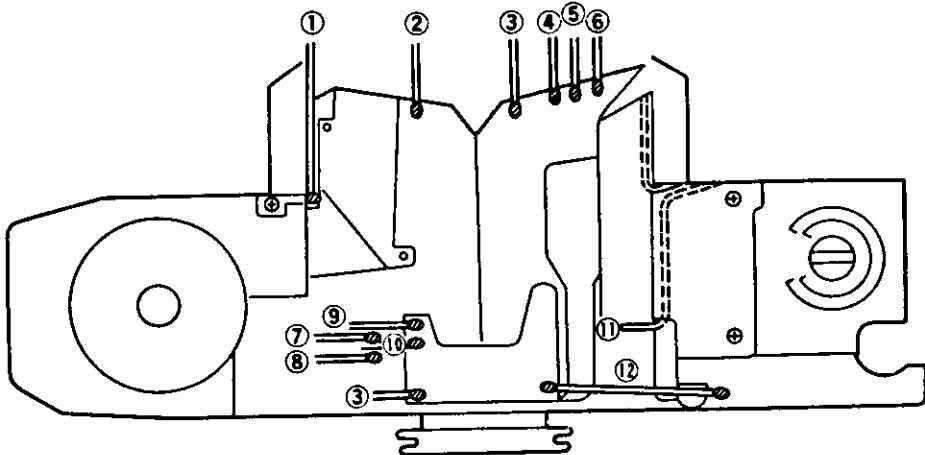


Fig. 4

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

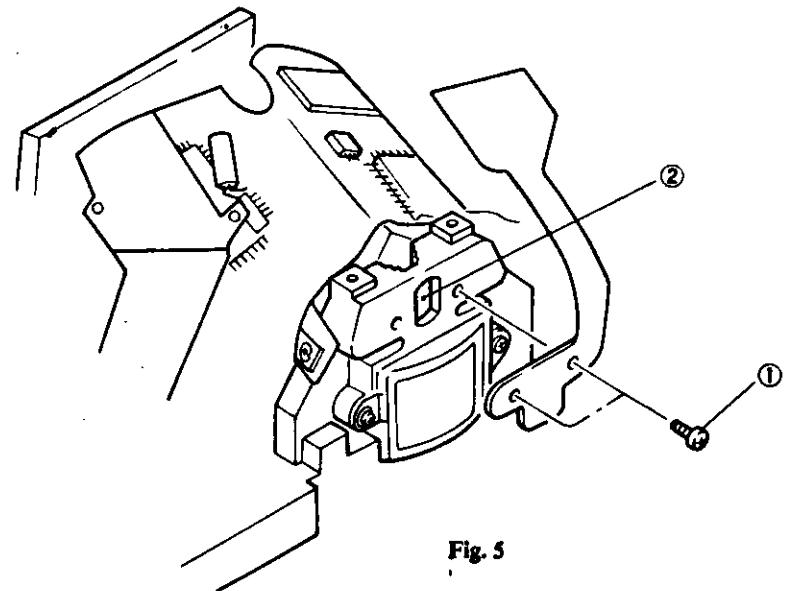


Fig. 5

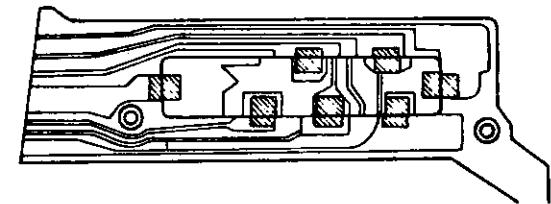


Fig. 6

- 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,

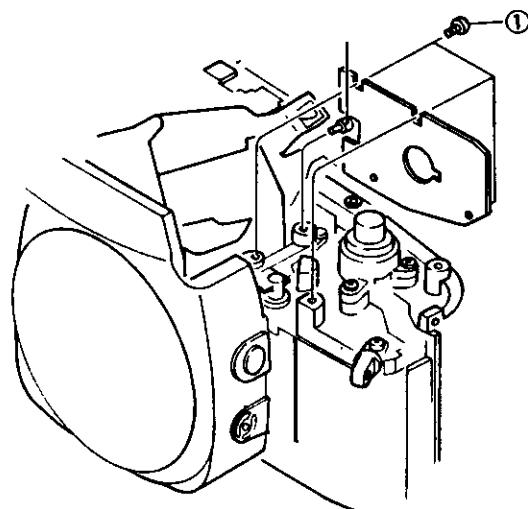


Fig. 8

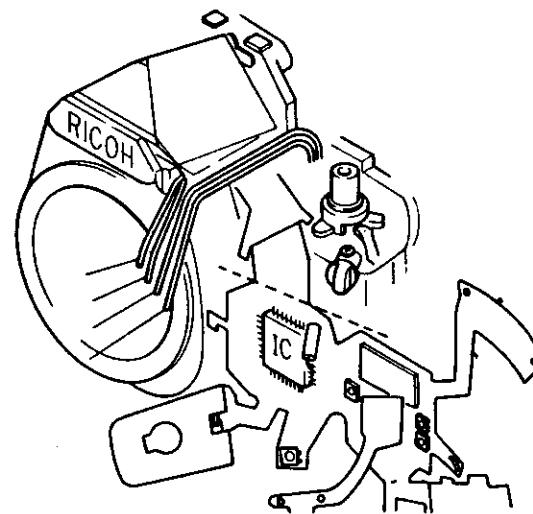


Fig. 9

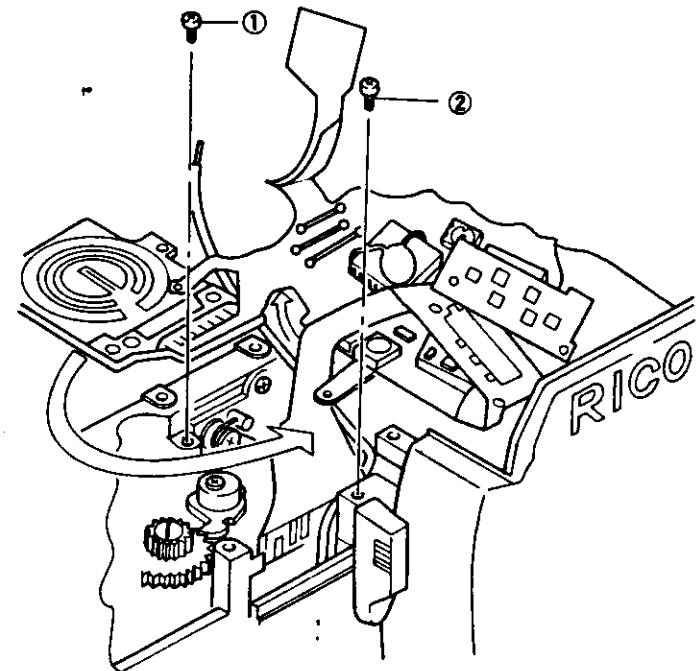


Fig. 7

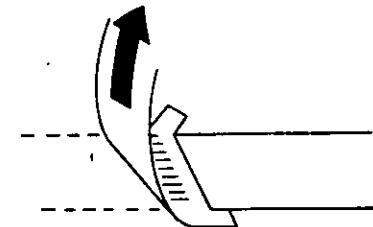


Fig. 10

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).

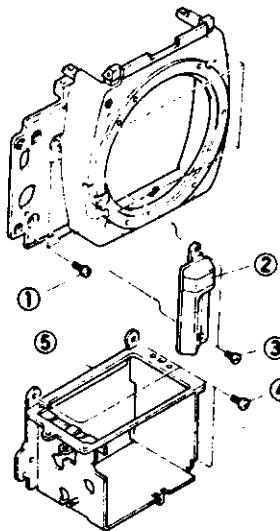


Fig. 11

8. Mirror box (see Fig. 12)

- 1) Peel off both FRONT LEATHERS (sketch Nos. 5, 43 on page 42).
- 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.

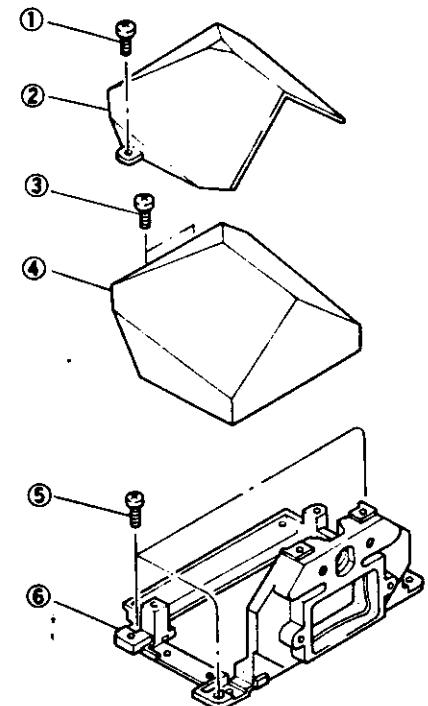


Fig. 12

9. Mirror frame assy (see Fig. 13)

- 1) Peel off both side of SHIELDS (No. 3, 4).
- 2) Remove the MIRROR ADJUSTING FRAME (No. 1, 2) of both side.
- 3) Remove the MIRROR FRAME ASSY (No. 5) carefully.

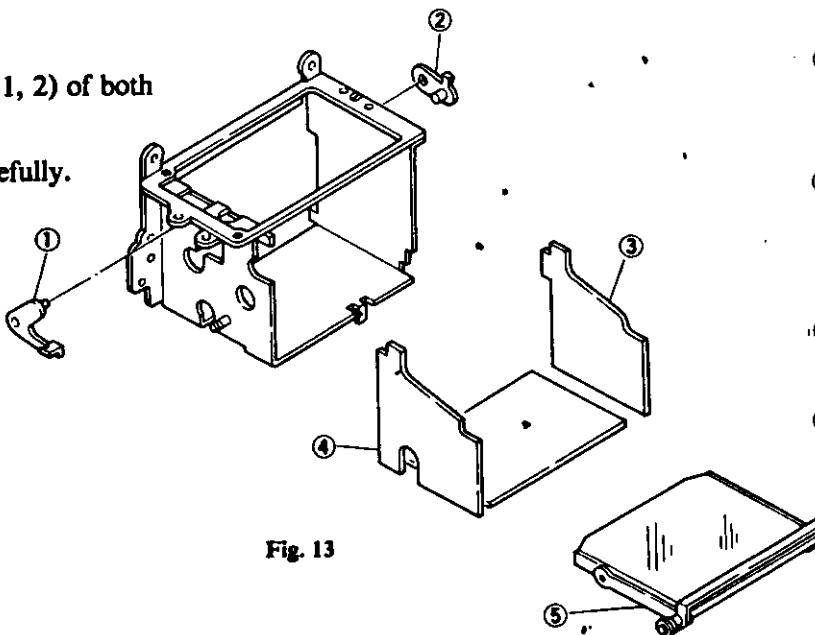


Fig. 13

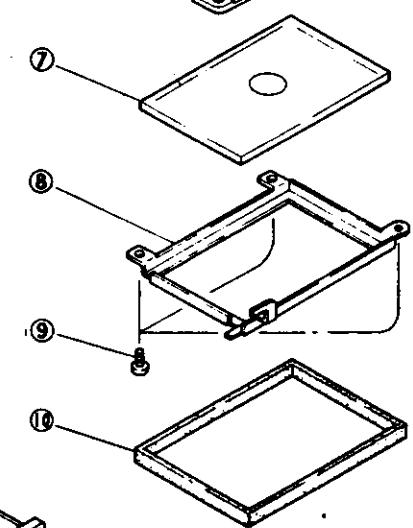


Fig. 11

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 40).
- 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).

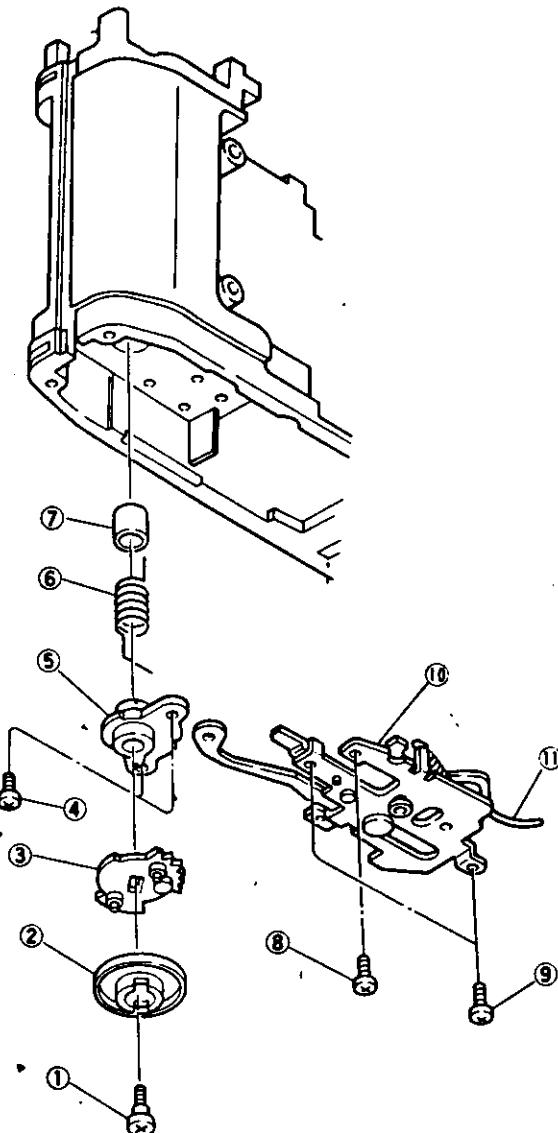


Fig. 14

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).

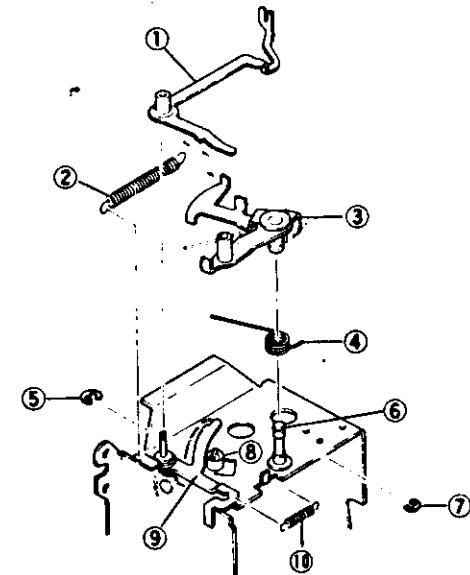


Fig. 15

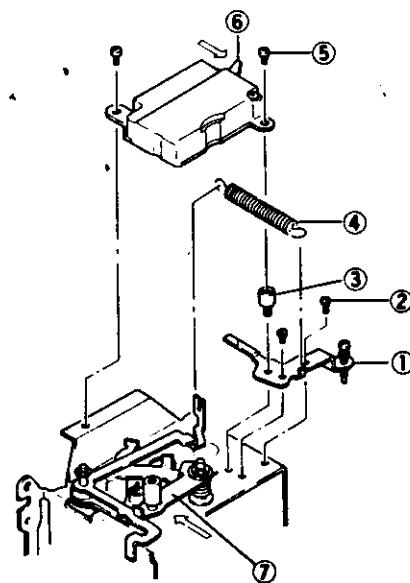


Fig. 16

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 42).
- 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).

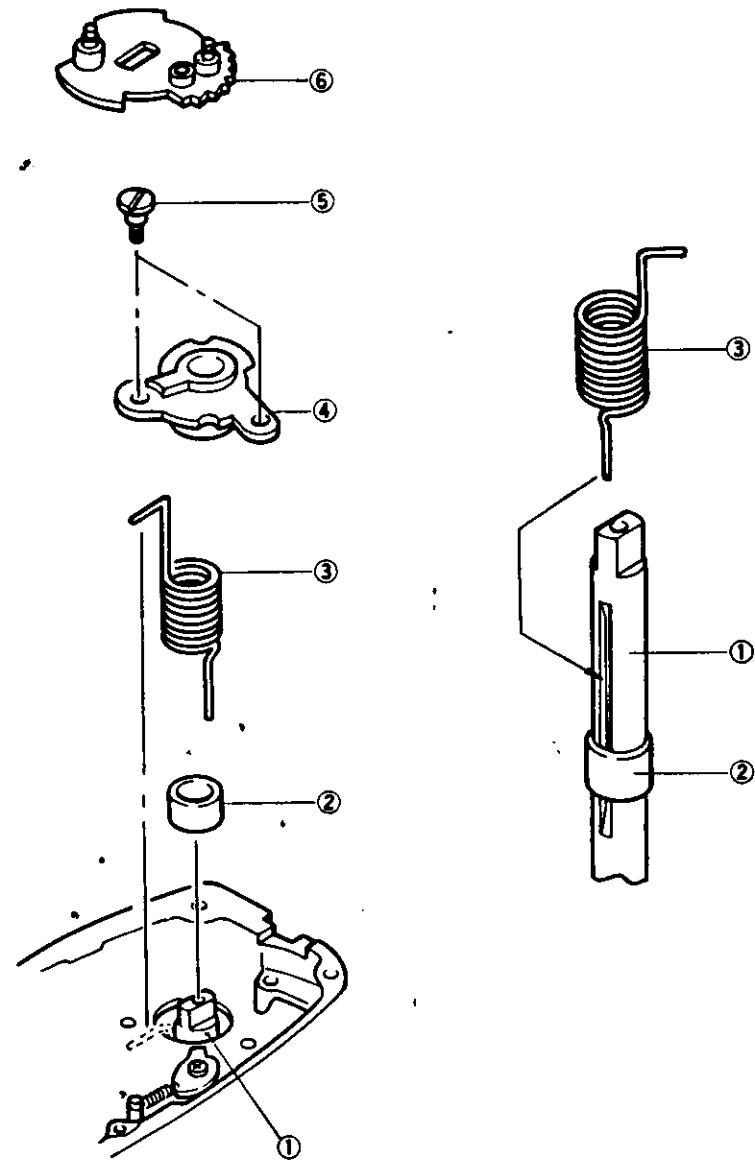


Fig. 17

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 44)

- 1) Fix the SHUTTER and tighten three SCREWS (sketch No. 44 on page 42).
- 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 36).
- 4) Wind the FILM WIND UP LEVER and confirm that the shutter works properly.

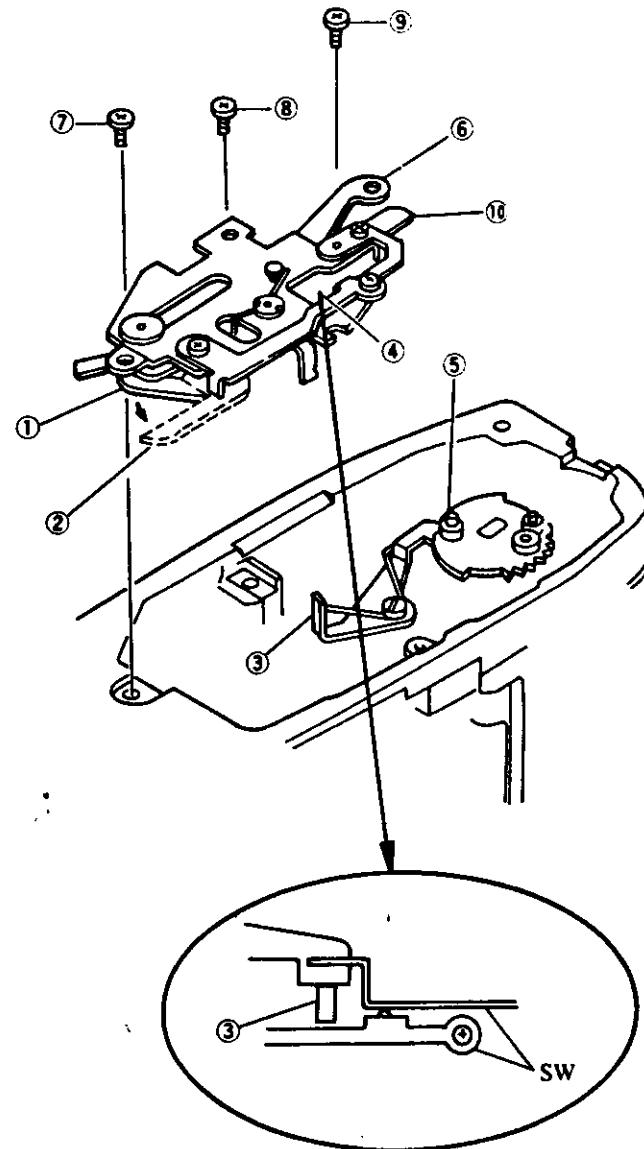


Fig. 18

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) Atatch the SHIELDS (No. 5).

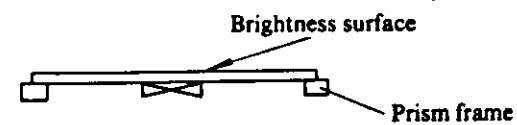


Fig. 19

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.

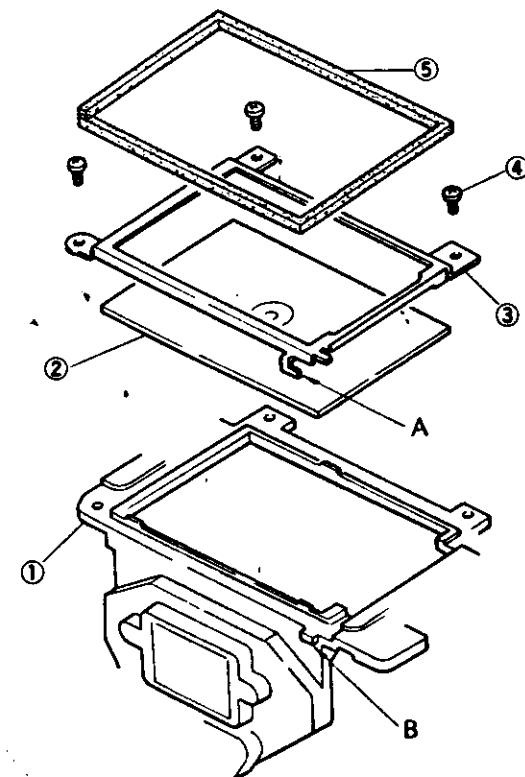


Fig. 20

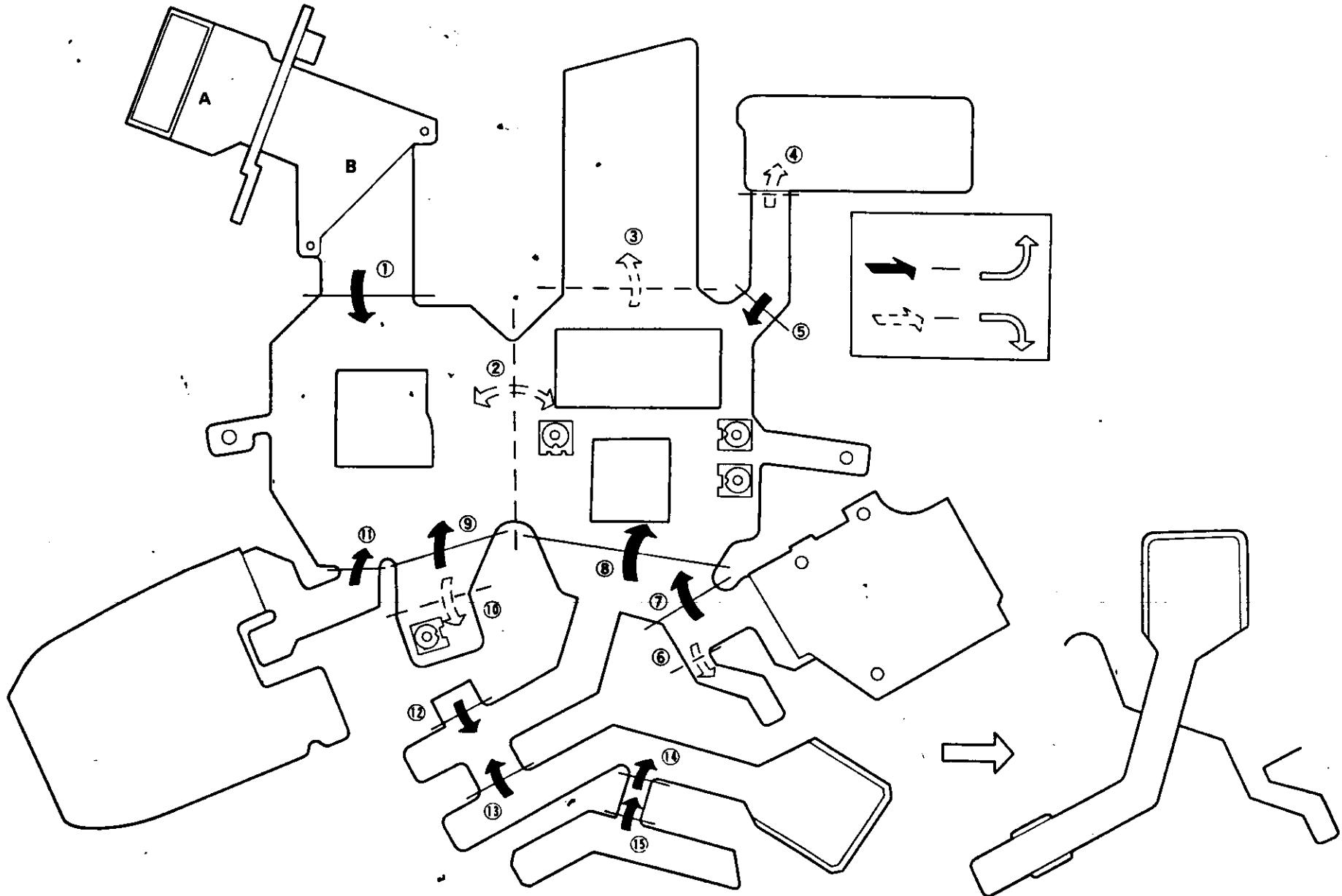


Fig. 21

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 38) with mylar tape.

NOTE:

Pay attention not to scratch on the FRESNEL LENS.

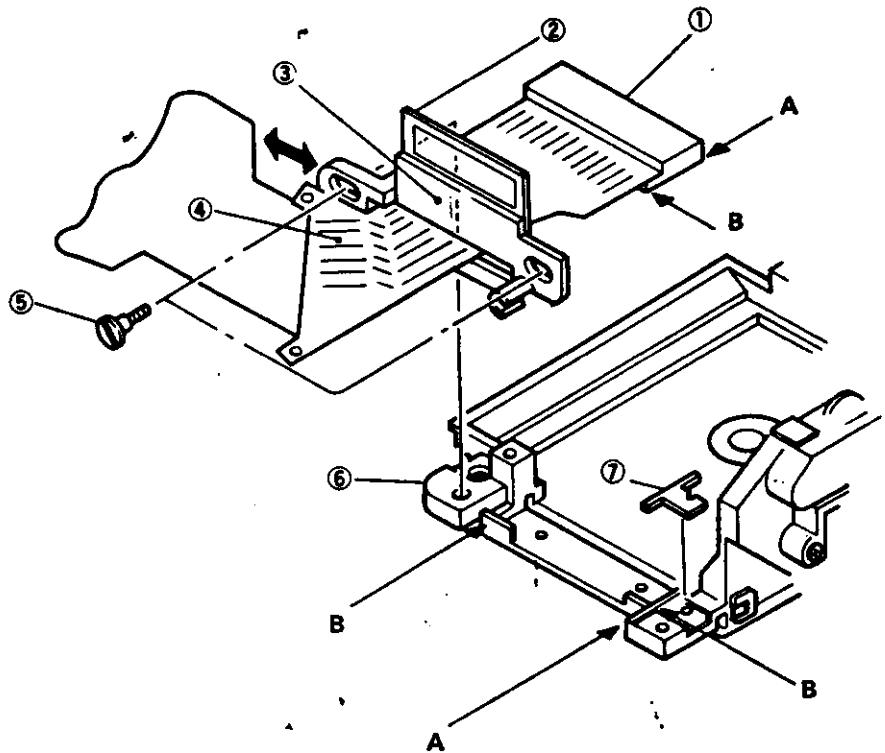


Fig. 22

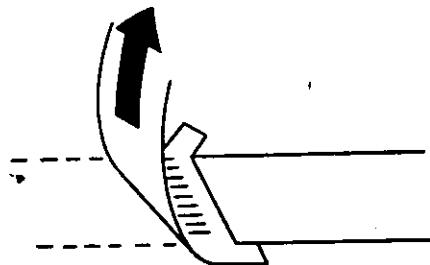


Fig. 23

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.

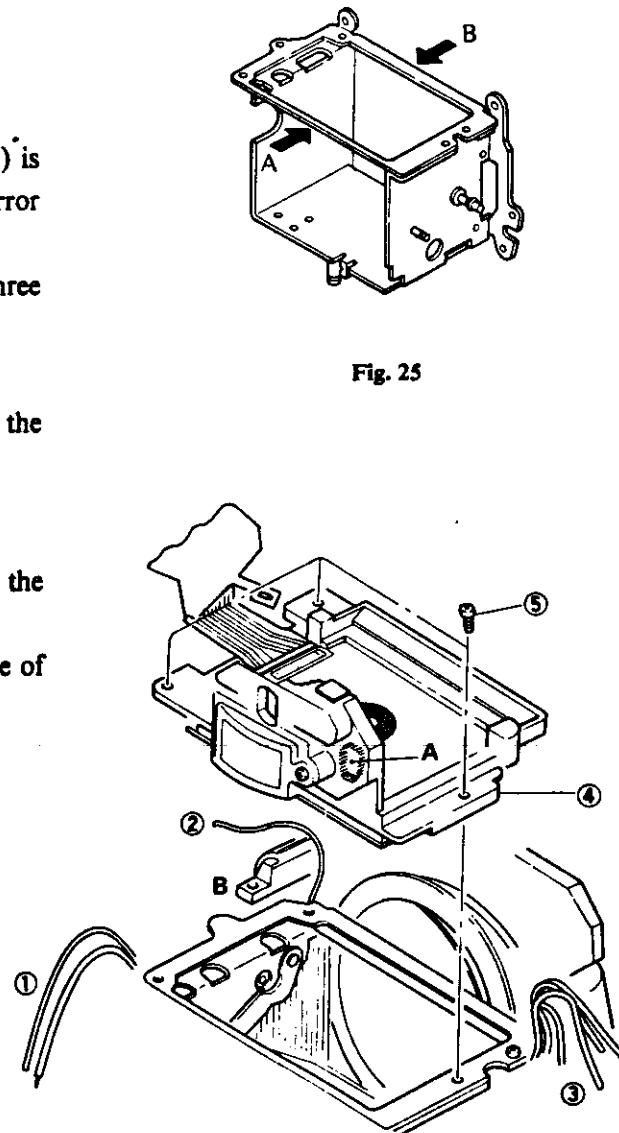


Fig. 24

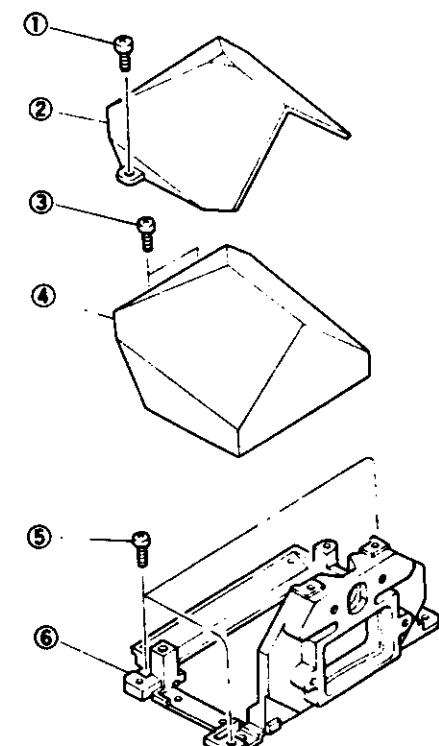


Fig. 26

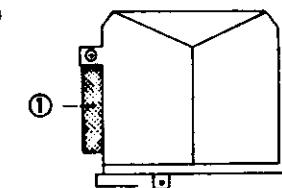


Fig. 27

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.

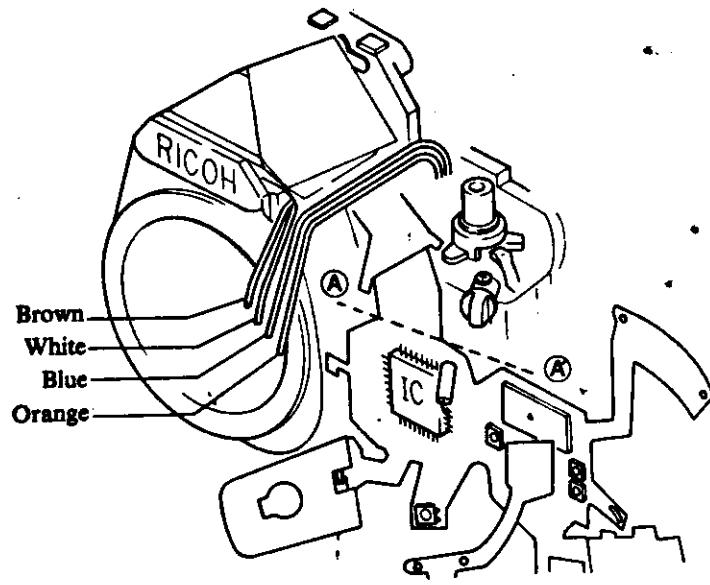


Fig. 28

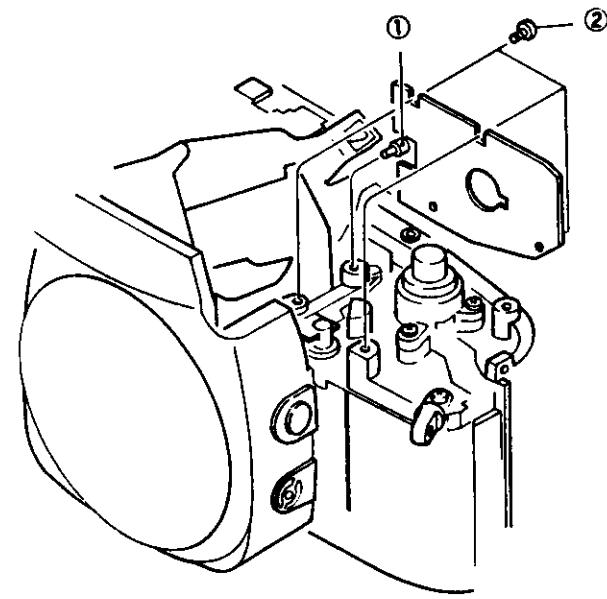


Fig. 29

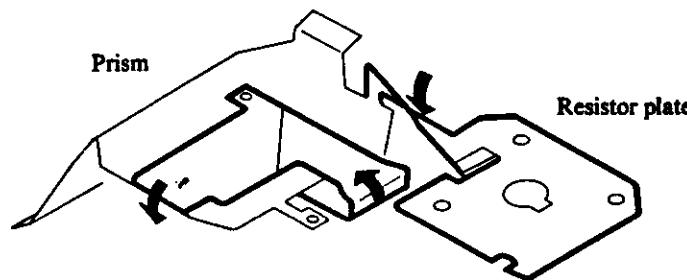


Fig. 30

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 38) on the prism frame and tighten two SCREWS (sketch No. 25 on page 38).
- 15) Assemble the SHIELD PLATE (sketch No. 17 on page 38) and the EYEPIECE FRAME (sketch No. 43 on page 40).
- 16) Tighten two SCREWS (sketch No. 44 on page 40).
- 17) Solder four LEAD WIRES on the synchro base plate as shown in Fig. 34.

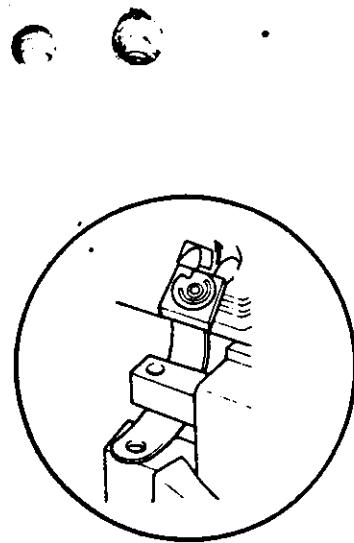


Fig. 31A.

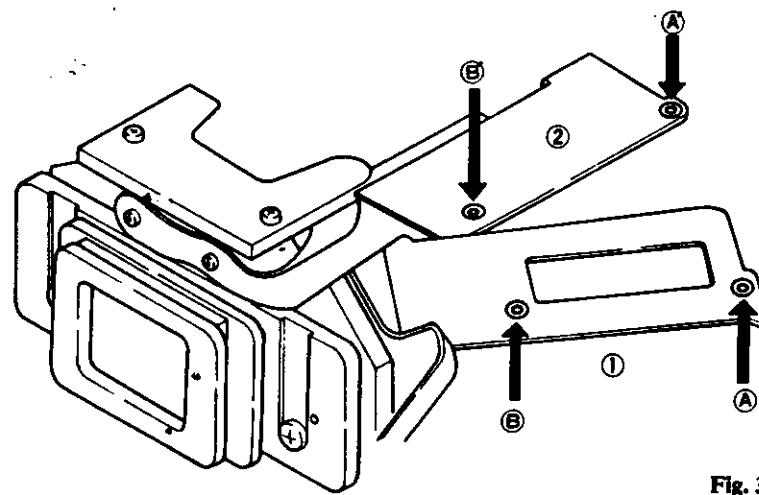


Fig. 33

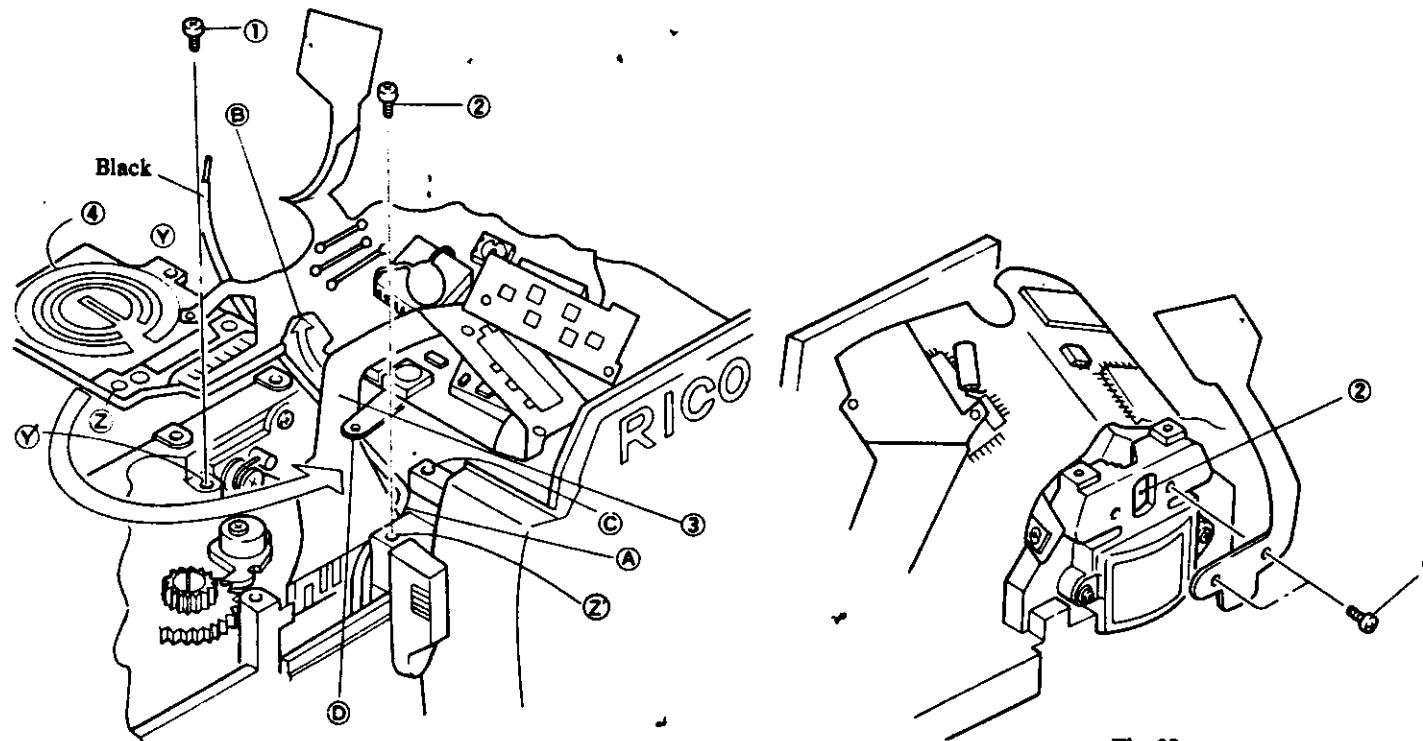


Fig. 31

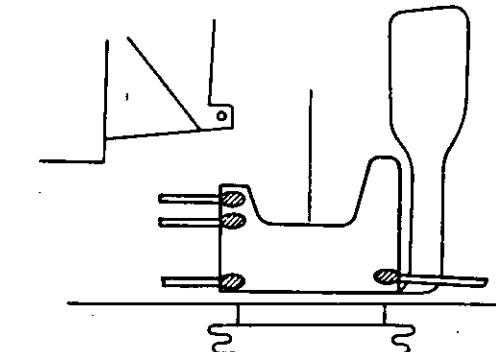


Fig. 34

Fig. 32

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.

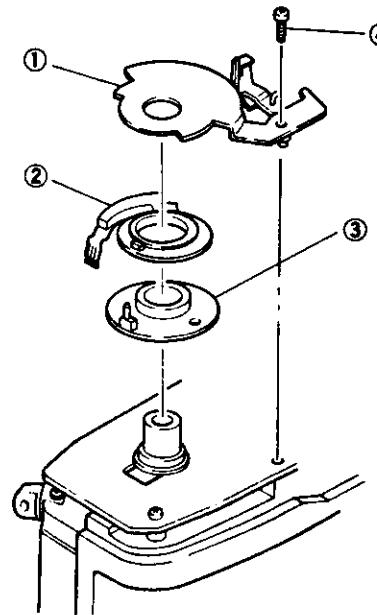


Fig. 35

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

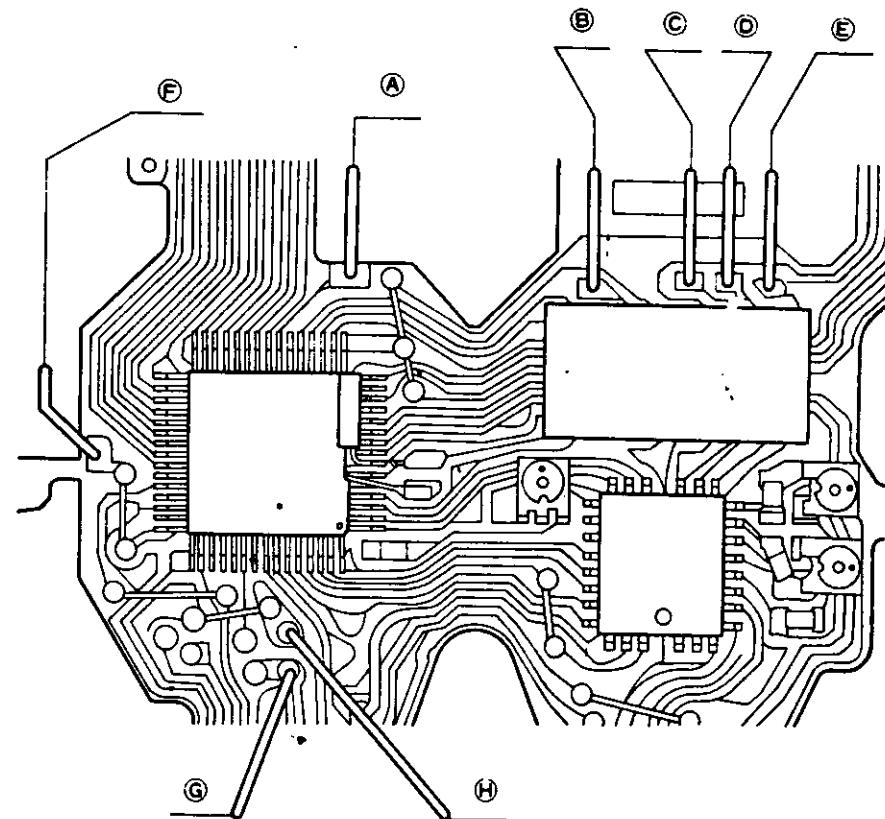


Fig. 36

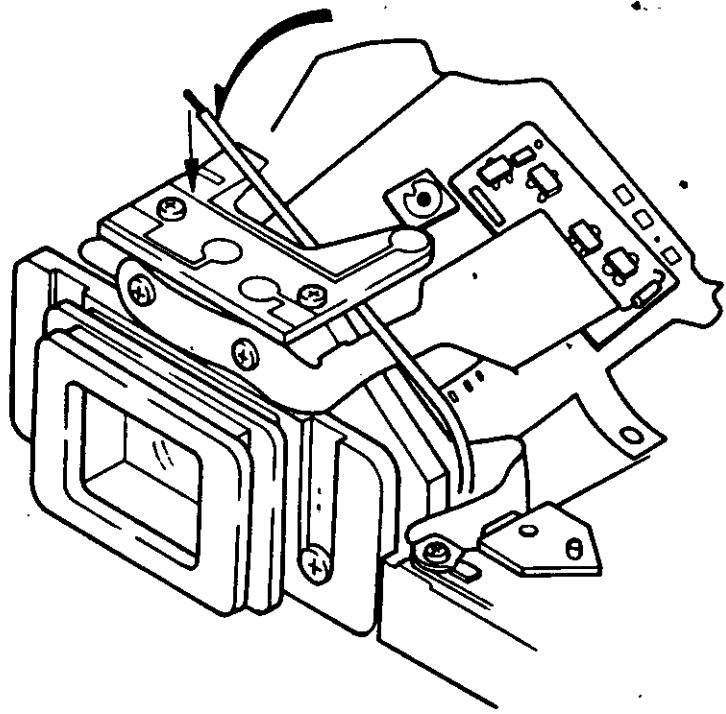


Fig. 37

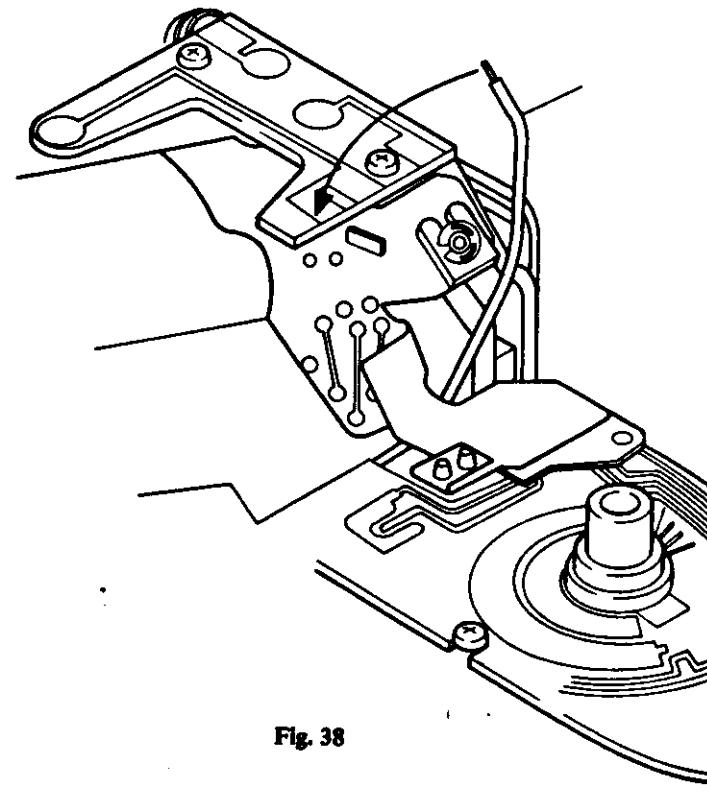


Fig. 38

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.

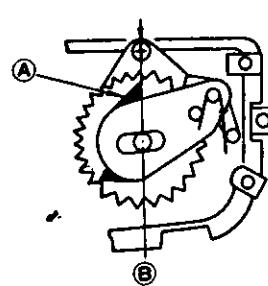


Fig. 39

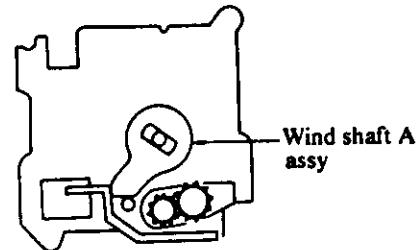


Fig. 40

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 catch 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).
- 4) Set the SPRING (No. 4) and make sure the movement of the film counter lever.
- 5) Set the LUG PLATE (sketch No. 30 on page 38) on the SD base plate and tighten the SCREW (sketch No. 29).
- 6) Solder GREY LEAD WIRE coming from the synchro base plate.

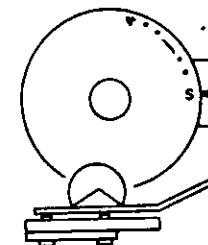


Fig. 41

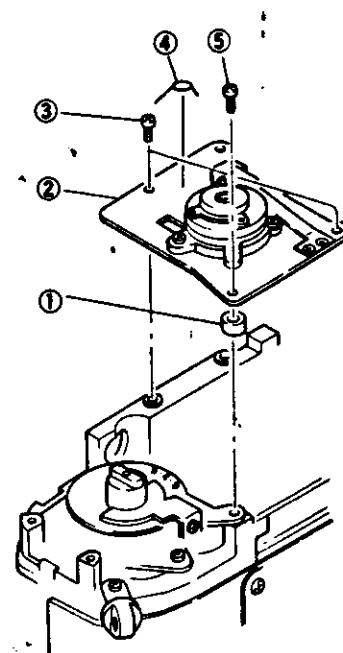


Fig. 42

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 36) 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.

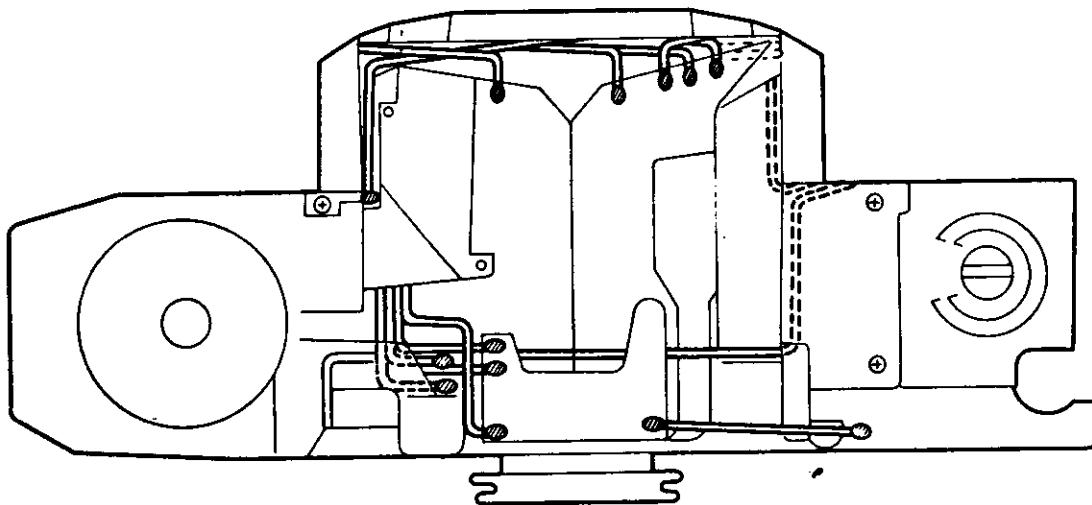


Fig. 43

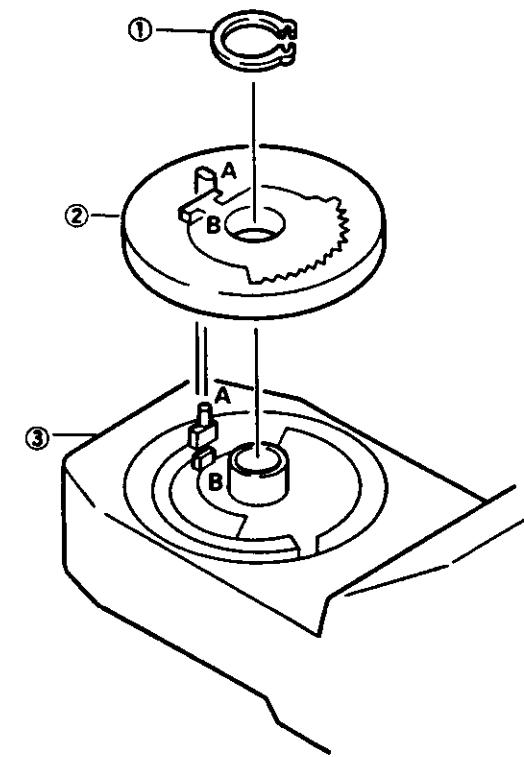


Fig. 44

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.

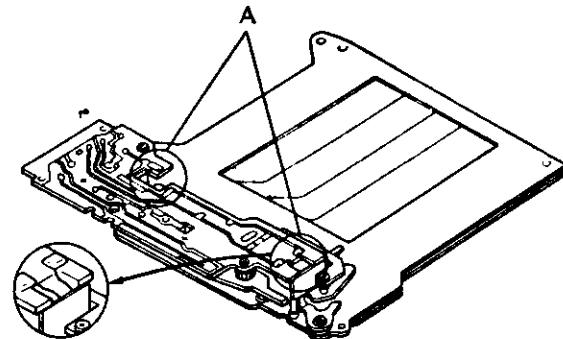


Fig. 49

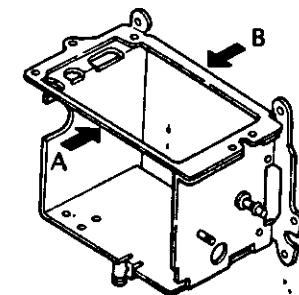


Fig. 50

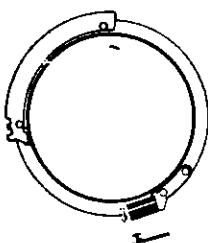


Fig. 45

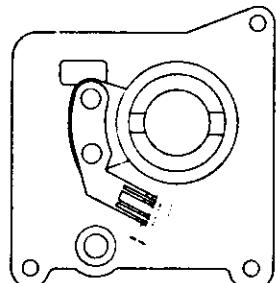


Fig. 46

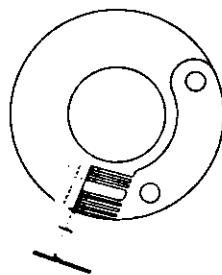


Fig. 47

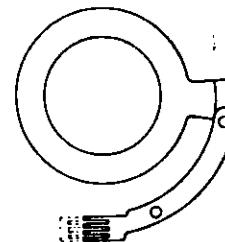


Fig. 48

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 $0.05 \sim 0.1$ 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).

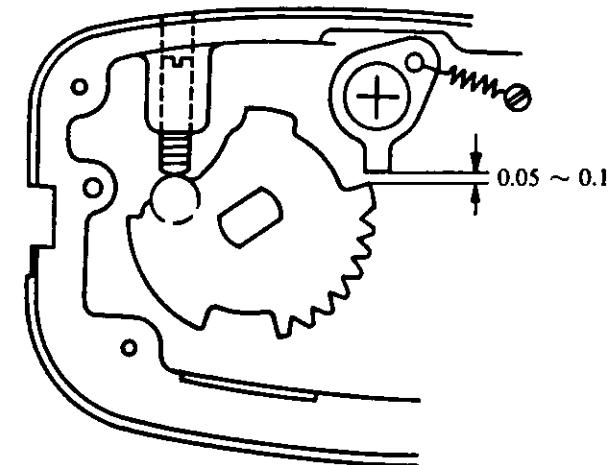


Fig. 51

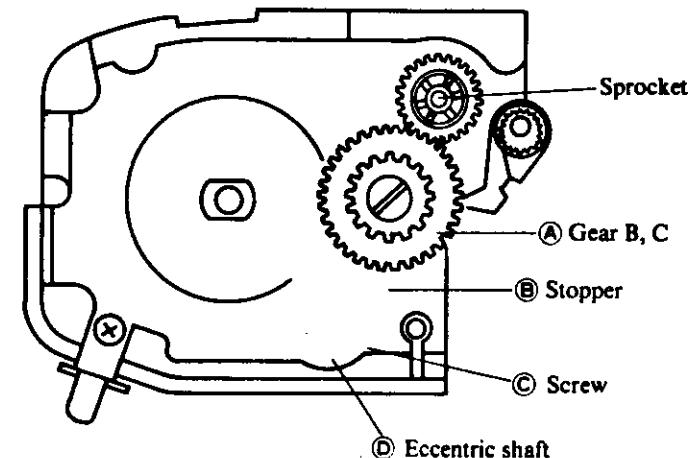


Fig. 52

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.
- 3) The screw for adjusting the mirror at 45° is not that for adjusting the finder focus, so take this fully in mind.

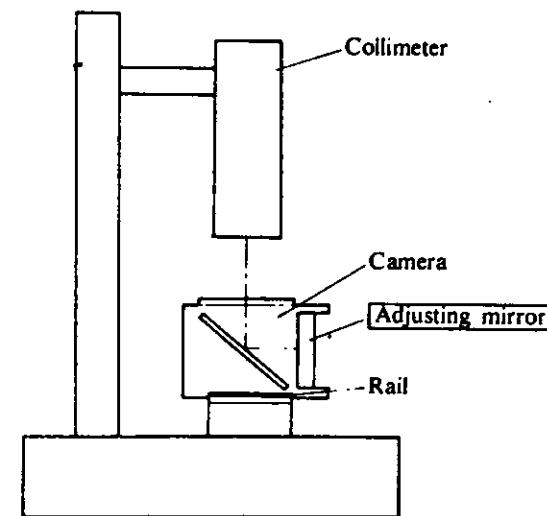


Fig. 53

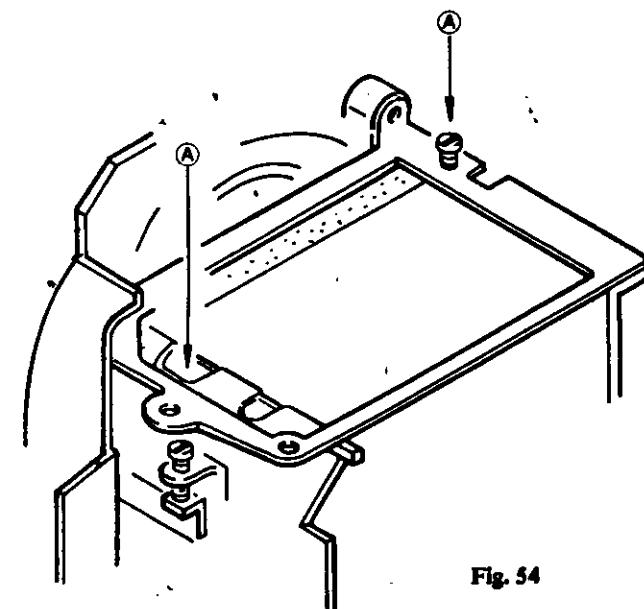


Fig. 54

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.

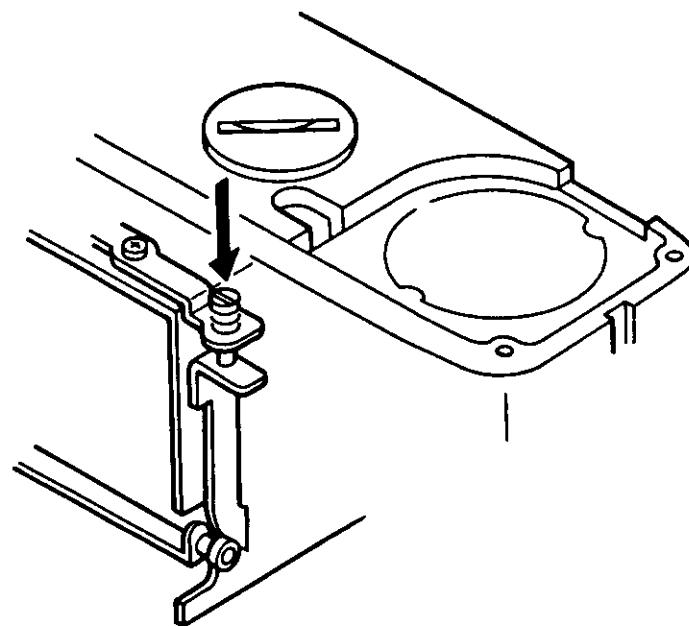


Fig. 55

5. F stop (see Fig. 56)

Adjust F stop indication, when the F stop indication window inside the finder is out of place (outside the prescribed limit).

How to adjust:

- 1) Install the lens (Any standard lens will do).
- 2) Set the F stop of the lens to (5.6).
- 3) Look through the finder and turn F stop indication adjusting SCREWS in Fig. 56 so that the F stop (5.6) appearing in the F stop indication window of Fig. 56 comes to the center.
 - a) When the figure displays at upperside of the window, loosen two SCREWS (A and B).

6 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 36).
- 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.

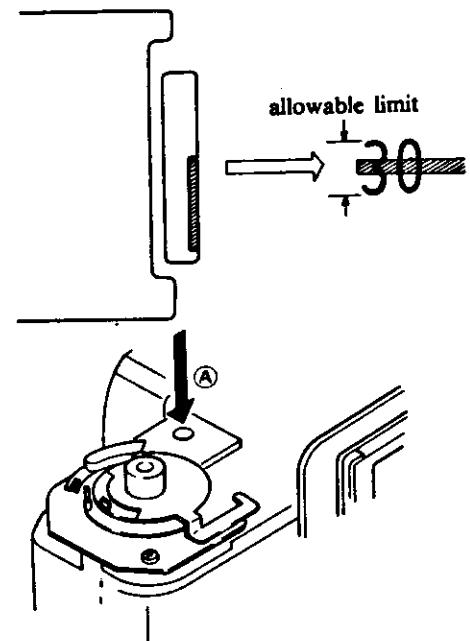


Fig. 57

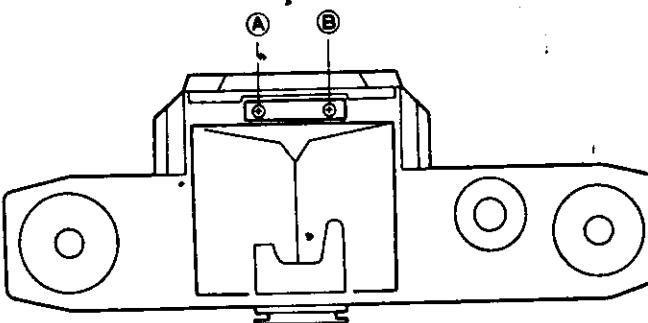


Fig. 56

7. 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 $45.65 \text{ mm} \pm 0.02$.

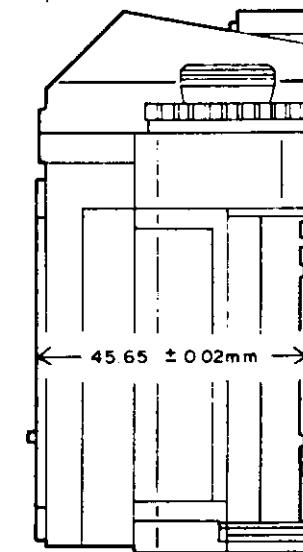


Fig. 58

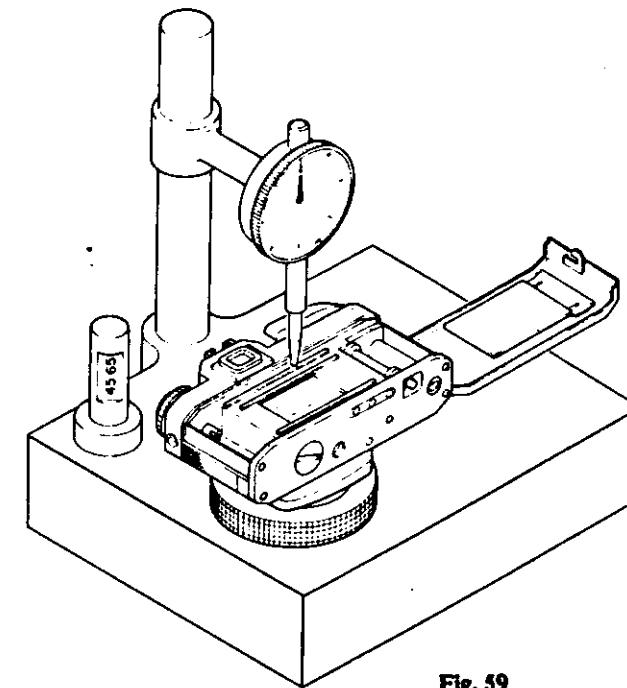


Fig. 59

8. 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	884 ~ 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

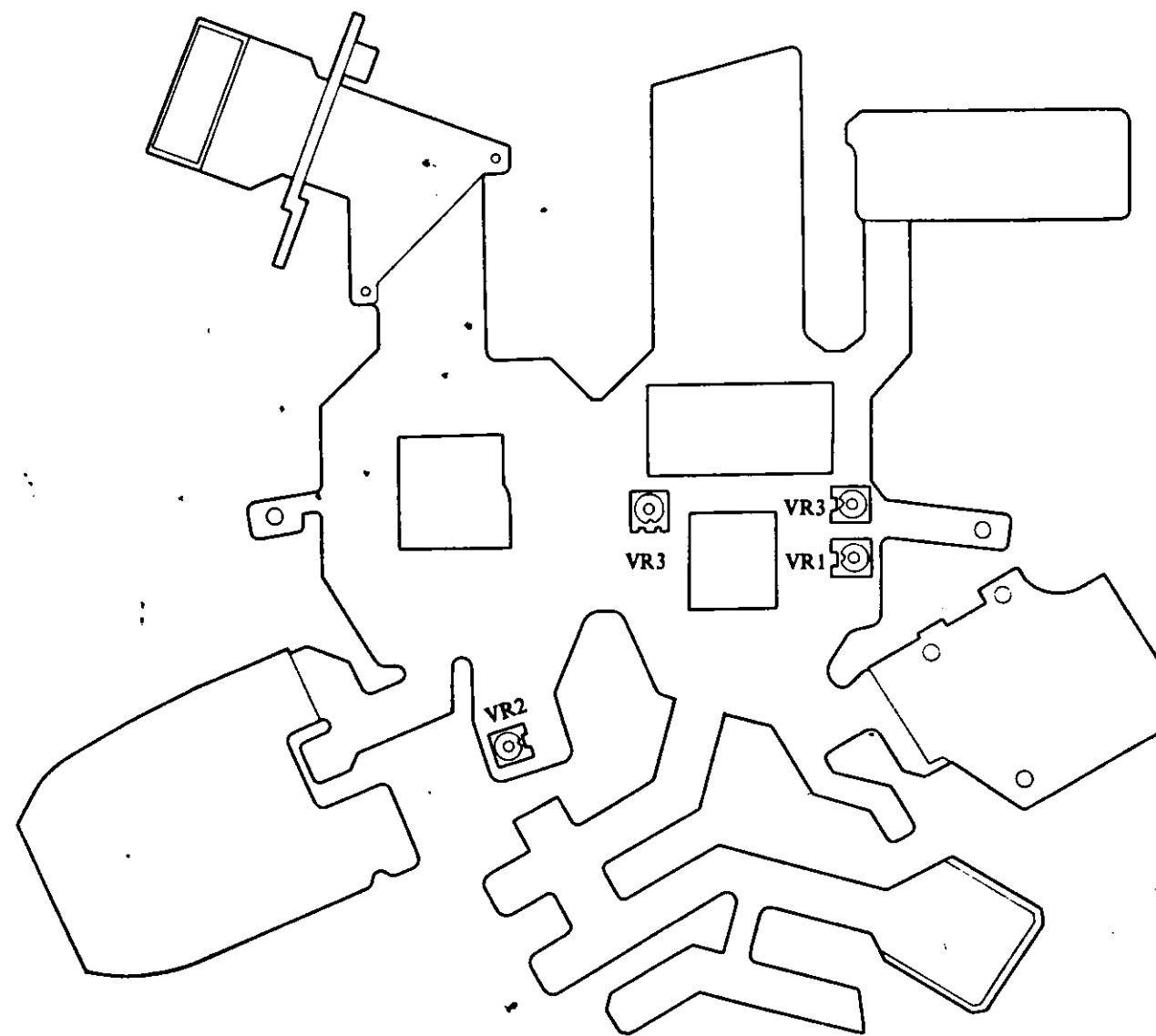


Fig. 60

6. WIRING DIAGRAM

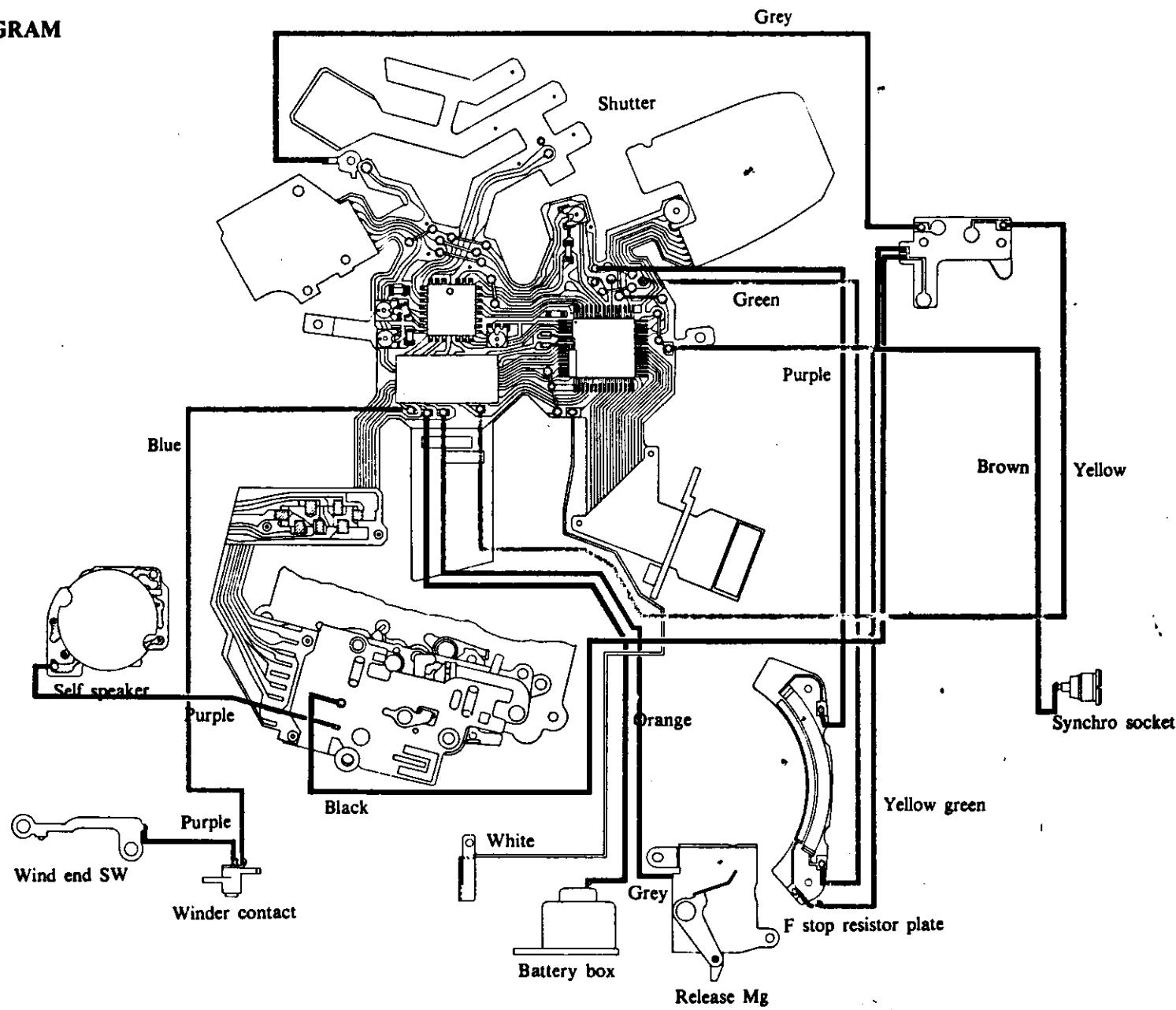


Fig. 63

SCHEMATIC DIAGRAM

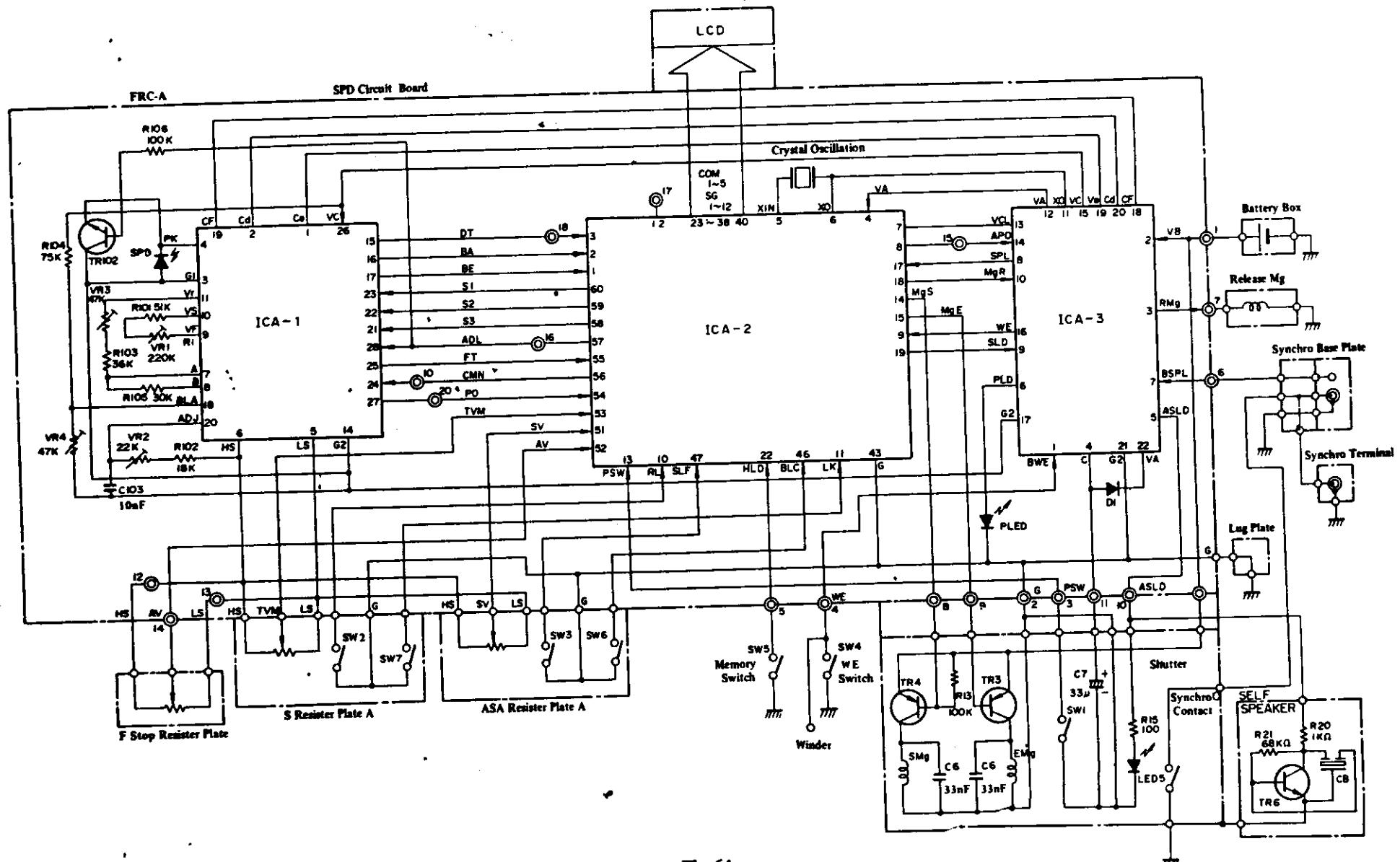
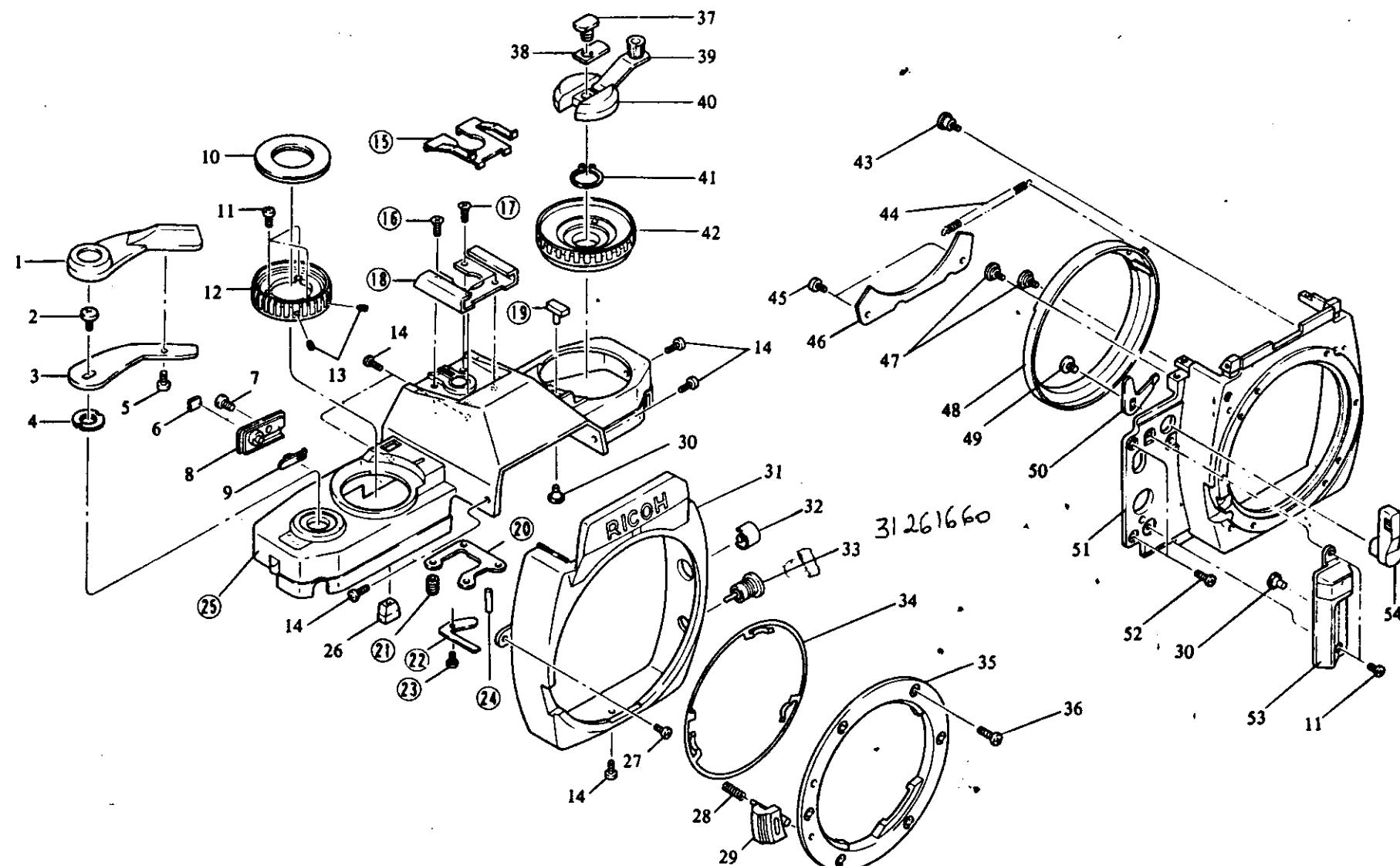


Fig. 64

8. SKETCH INDEX AND PARTS LIST

A. Top and front parts



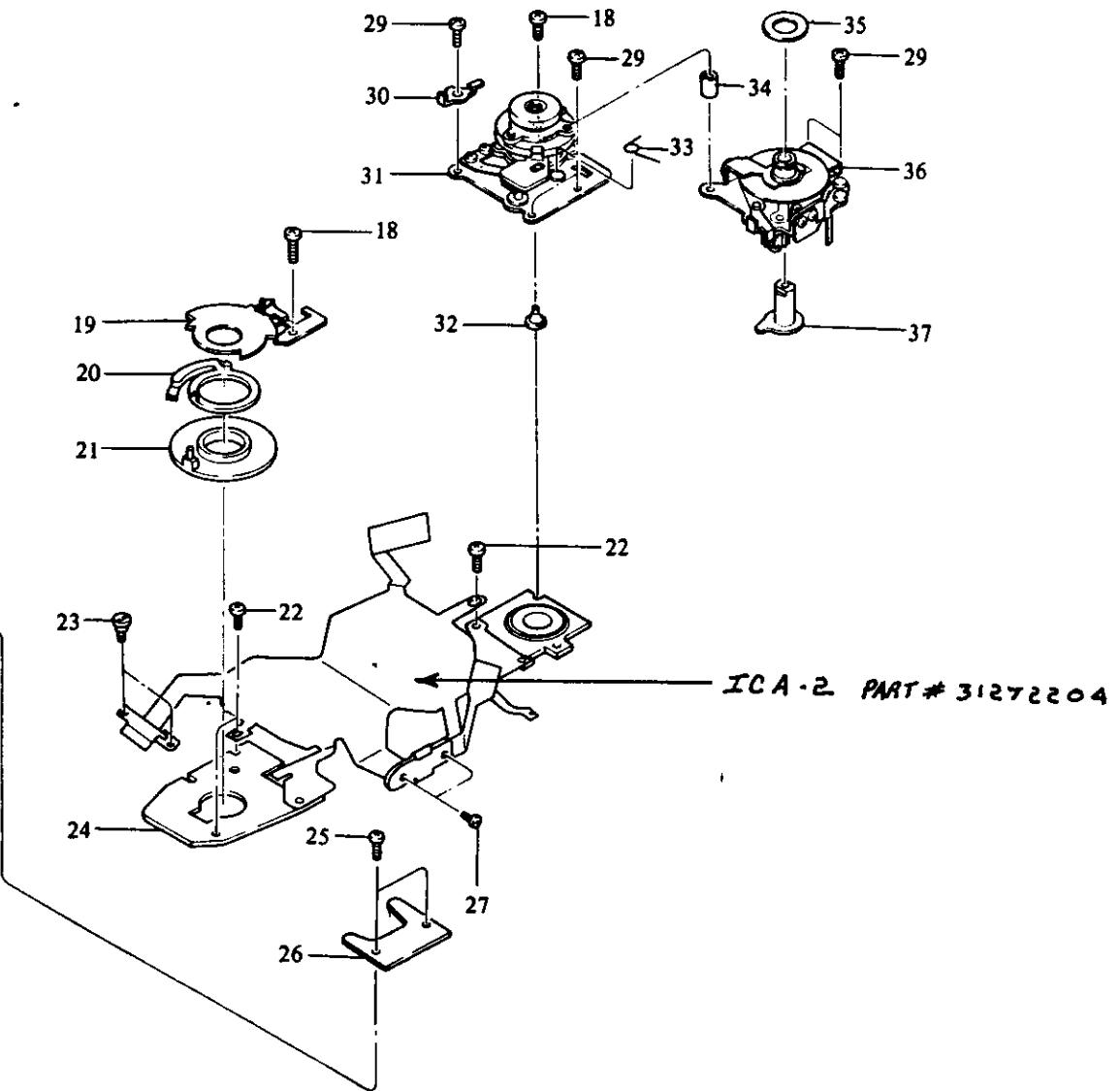
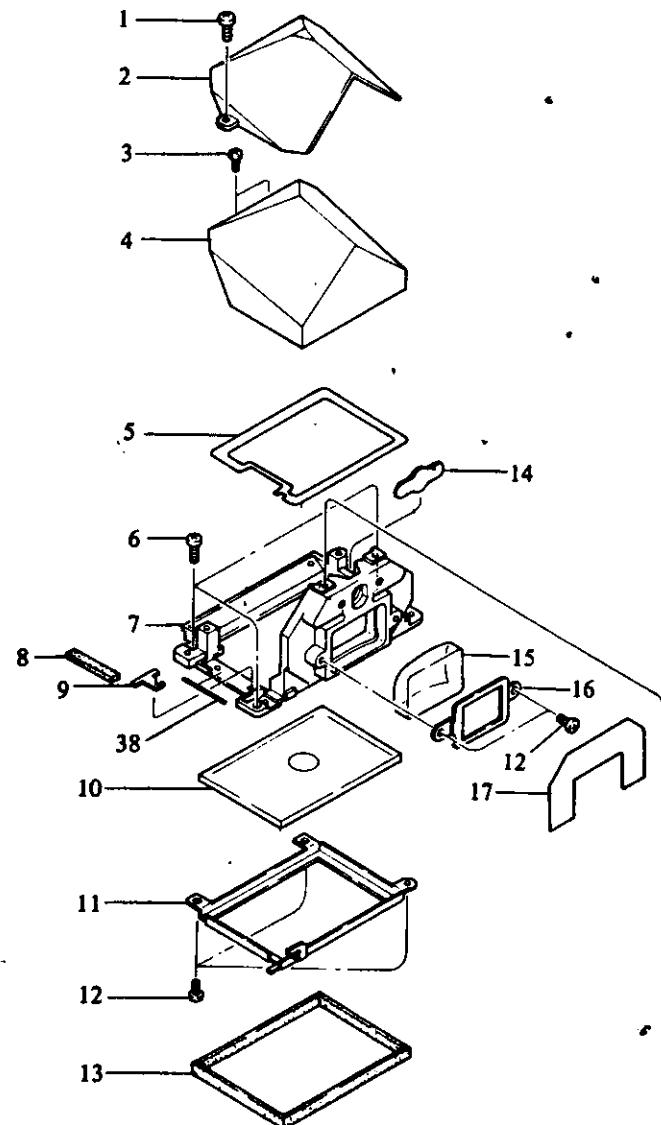
Parts represented by the encircled consecutive numbers are
also deliverable as assembly parts.

O: using

Sketch No.	Part No.	Description	XR-6	XR-1s, XR-2s, KR-10	XR500 KR-5	XR-1 XR-2
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	○	○	○	○
6	31272150	ME plate	○			
7	02416030Z	Screw M1.6 × 3.0	○			
8	31273020	ME button holder ass'y	○			
9	31272149	ME lock button	○			
10	31273002	Shutter speed plate ass'y	○			
11	31261311	Screw	○			
12	31261258	Shutter dial	○			
13	31261264	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)	31273008	Finder cover ass'y	○			
26	31261252	Auto lock button	○			
27	02416025Z	Screw M1.6 × 2.5	○			
28	31261654	Spring: lens lock	○			
29	31261033	Lens lock button ass'y	○			
30	31261432	Self switch	○			
31	31273014	Front cover ass'y	○			
32	31272141	Memory button	○			
33	31261655	Synchrosocket - 31261660	○	○	○	○
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	○			

Sketch No.	Part No.	Description	XR-6	XR-1s, XR-2s, KR-10	XR500 KR-5	XR-1 XR-2
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	○			
47	31261626	Holder: F stop ring (A)	○			
48	31261032	F stop ring ass'y	○			
49	31272140	Screw: PV connection B	○			
50	31272139	PV connection B	○			
51	31261022	Front base plate ass'y	○			
52	02520030Z	Screw M2.0 × 3.0	○	○	○	○
53	31273017	Self LED cover ass'y				
54	31272137	PV lever				

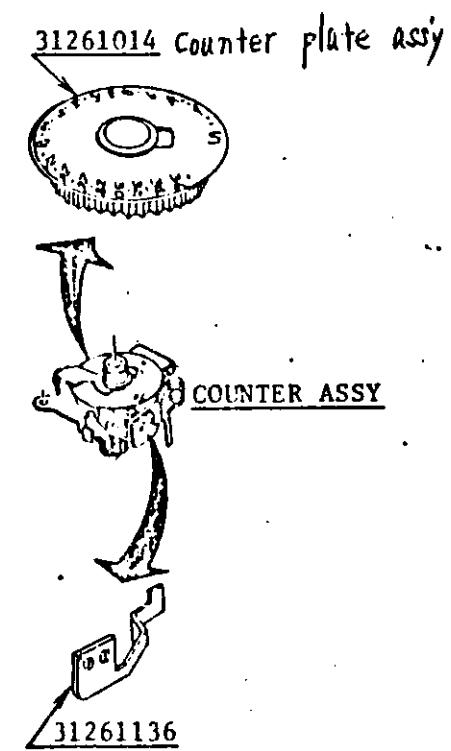
B. Viewfinder and film counter parts



○: using

Sketch No.	Part No.	Description	XR-6	XR-1s, XR-2s, KR-10	XR500 KR-5	XR-1 XR-2
1	09841650W	Tapping screw M1.6 × 5.0	○			
2	31261305	Prism cover	○			
3	02414040W	Screw M1.4 × 4.0	○	○	○	○
4	31273011	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	31261306	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	31273051	Flexible part ass'y				
25	09841630W	Tapping screw M1.6 × 3.0	○			
26	31272159	Synchro base plate				
27	09851425W	Tapping screw M1.4 × 2.5	○	○	○	○
29	02416030Z	Screw M1.6 × 3.0	○			
30	31261269	Earth plate	○			
31	31273021	Shutter dial base plate ass'y				
32	31261432	Self switch	○			
33	31272117	Spring				
34	31261217	Spacer	○			
35	31261234	Washer	○			
36	31273018	Film counter ass'y				
37	31261001	Wind shaft A ass'y	○			
38	31272158	LCD spacer				

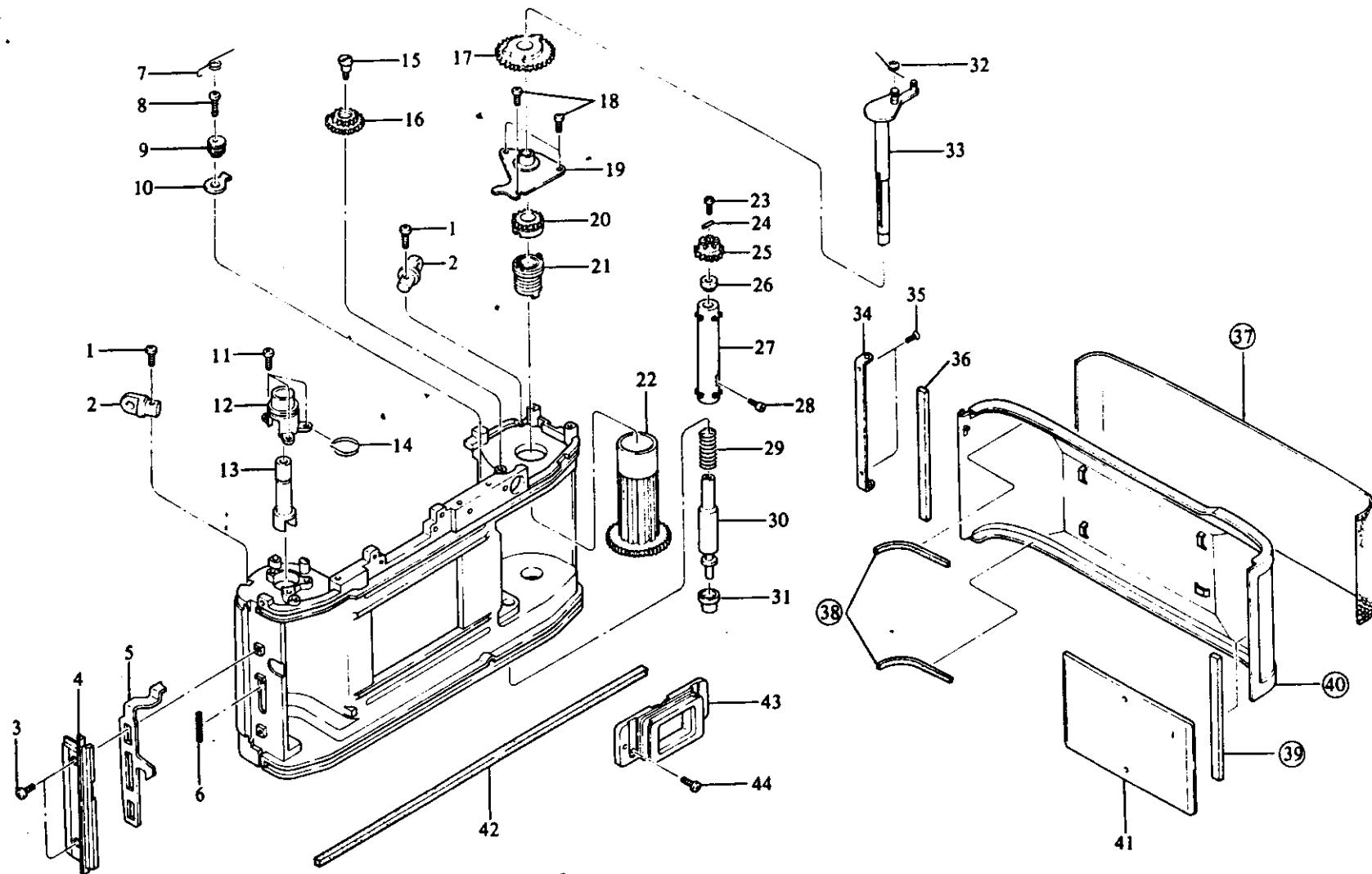
NEW PART # 31274013



31261136

click : Wind up lever

C. Back cover and film transport parts

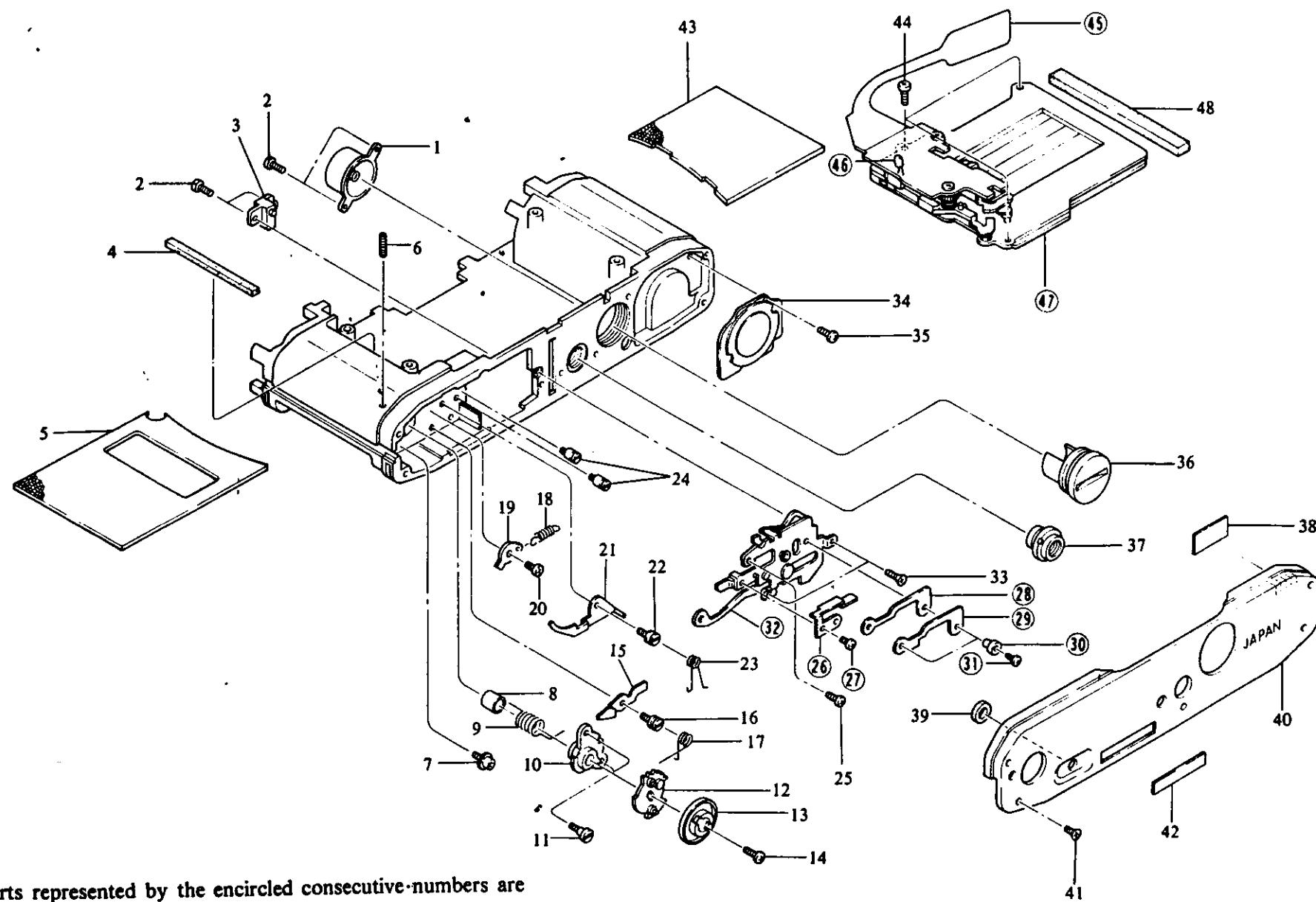


Parts represented by the encircled consecutive numbers are also deliverable as assembly parts.

Sketch No.	Part No.	Description	XR-6	XR-1s, XR-2s, KR-10	XR500 KR-5	XR-1 XR-2
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	Back cover latch	○			
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	31261132	Sprocket shaft	○			
31	31195502	Sprocket shaft button	○	○	○	
32	31261123	Spring: wind clutch lever	○			
33	31261007	Wind shaft B ass'y	○			
34	31261452	Cover hinge	○			
35	02016030Z	Screw M1.6 × 3.0	○			
36	31261488	Body shield B	○			
37	31261465	Leather: back cover	○			
38	31261492	Back cover shield B	○			

Sketch No.	Part No.	Description	XR-6	XR-1s, XR-2s, KR-10	XR500 KR-5	XR-1 XR-2
39	31261491	Back cover shield A	○			
(37~40)	31261019	Back cover ass'y	○			
41	31261020	Pressure plate ass'y	○			
42	31261487	Body shield A	○			
43	31261310	Eyepiece frame	○			
44	31261311	Screw	○			

D. Shutter and bottom parts



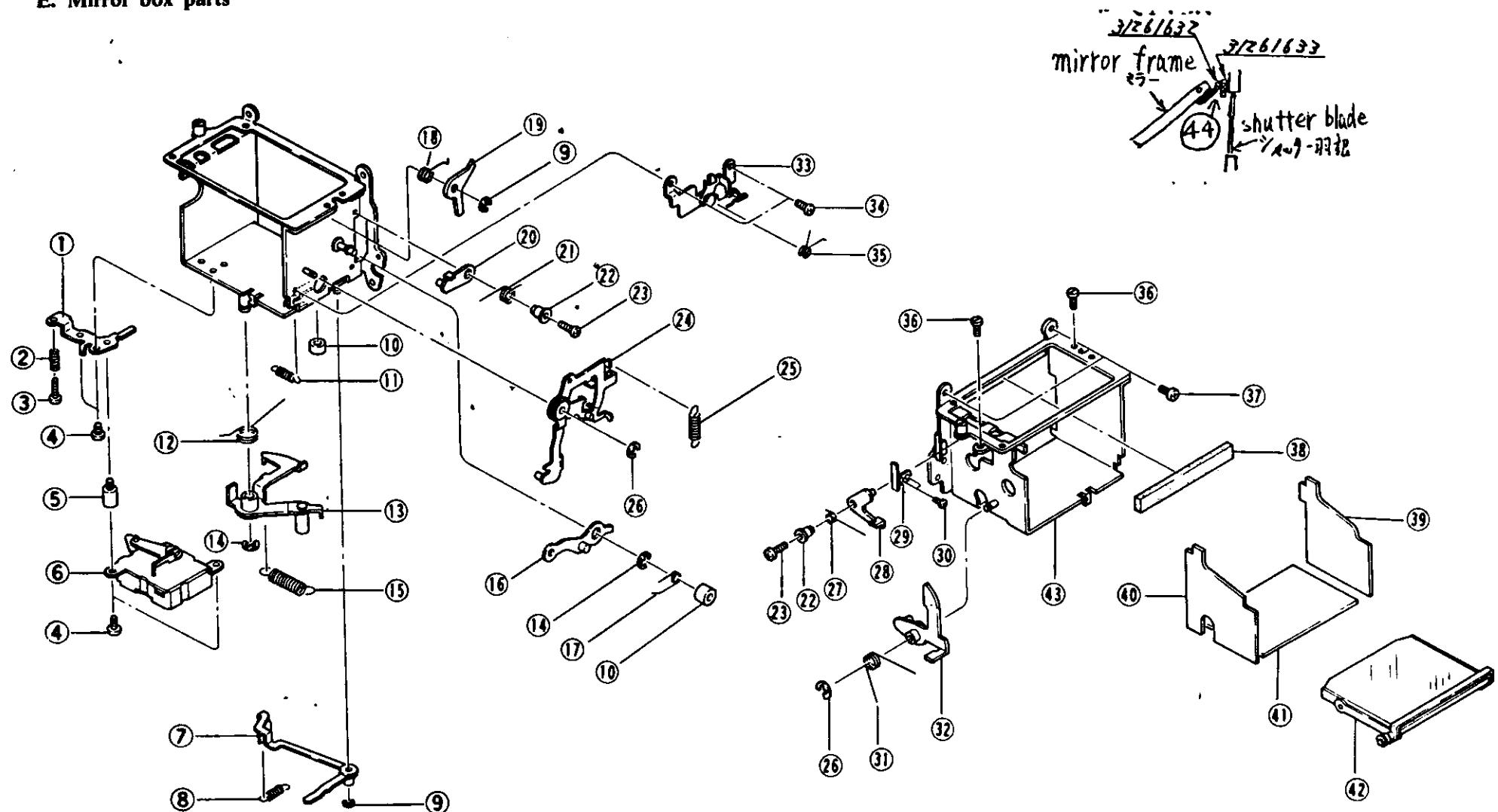
Parts represented by the encircled consecutive numbers are
also deliverable as assembly parts.

O: using

Sketch No.	Part No.	Description	XR-6	XR-1s,	XR500	XR-1
				XR-2s, KR-10	KR-5	KR-2
1	31261021	Battery case ass'y	○			
2	02416025Z	Screw M1.6 × 2.5	○			
3	31261013	Winder contact ass'y	○			
4	31261494	Body shield	○			
5	31272128	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	31216142	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	○			
34	31261771	Self speaker	○			
35	09841620Z	Tapping screw M1.6 × 2.0	○			
36	31261046	Battery cover ass'y	○			
37	31261481	Tripod socket	○			

Sketch No.	Part No.	Description	XR-6	XR-1s, XR-2s, KR-10	KR-5	KR-2
38	31261242	Shield	○			
39	31261493	Shield ring	○			
40	31261231	Bottom cover	○			
41	02016030Y	Screw M1.6 × 3.0	○			
42	31272152	Number plate				
43	31272127	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 31273024.

Part numbers from No. 1 to No. 43 are also deliverable as assembly
part number 31273024.

○: using

Sketch No.	Part No.	Description	XR-6	XR-1s, XR-2s, KR-10	XR500 KR-5	XR-1 XR-2
(1)	31261550	Mg base plate	○			
(2)	31161608	Spring	○	○	○	○
(3)	31161609	Screw	○	○	○	○
(4)	02416020Z	Screw M1.6 × 2.0	○			
(5)	31261551	Screw	○			
(6)	31261549	Release Mg	○			
(7)	31261030	Release lever ass'y	○			
(8)	31261548	Spring: release lever	○			
(9)	07200012C	Retaining ring	○	○	○	○
(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	○			
(18)	31272123	Spring: PV plate				
(19)	31273013	PV connection lever ass'y				
(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)	31273006	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	○			
(29)	31272142	Memory switch (A)				
(30)	02416025Z	Screw M1.6 × 2.5	○			
(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	○			

Sketch No.	Part No.	Description	XR-6	XR-1s, XR-2s, KR-10	XR500 KR-5	XR-1 XR-2
(36)	31261561	Adjusting screw	○			
(37)	02520030Z	Screw M2.0 × 3.0	○	○	○	○
(38)	31261563	Shield	○			
(39)	31261552	Shield (right)	○			
(40)	31261553	Shield (left)	○			
(41)	31261554	Shield (bottom)	○			
(42)	31273007	Mirror frame ass'y				
(1 ~ 43)	31273024	Mirror box ass'y				

44 31261030 shield

9. PARTS INDEX

Part No.	Description	XR-6	XR-15, XR-25, KR-10	XR-500	XR-1 XR-2	Sketch No.
31272102	Finder frame				B-5	
31272104	Fresnel lens				B-10	
31272106	LED prism				B-9	
31272117	Spring				B-33	
31272123	Spring: PV plate				E-(18)	
31272127	Front leather (left)				D-43	
31272137	PV lever				A-54	
31272139	PV connection B				A-50	
31272140	Screw: PV connection B				A-49	
31272141	Memory button				A-32	
31272142	Memory switch (A)				E-(29)	
31272149	ME lock button				A-9	
31272150	ME plate				A-6	
31272152	Number plate				D-42	
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	
31273002	Shutter speed plate ass'y				A-10	
31273006	Diaphragm lever ass'y				E-(24)	
31273007	Mirror frame ass'y				E-(42)	
31273008	Finder cover ass'y				A-(15~25)	
31273011	Prism ass'y				B-4	
31273013	PV connection lever ass'y				E-(19)	
31273014	Front cover ass'y				A-31	
31273015	BLC contact ass'y				B-20	
31273017	Self LED cover ass'y				A-53	
31273018	Film counter ass'y				B-36	
31273020	ME button holder ass'y				A-8	
31273021	Shutter dial base plate ass'y				B-31	
31273024	Mirror box ass'y				E-(1~42)	
31273051	Flexible part ass'y				B-24	
31261001	Wind shaft A ass'y	○			B-37	
31261002	Spool ass'y	○			C-22	

Part No.	Description	XR-6	XR-15, XR-25, KR-10	XR-500	XR-1 KR-5	XR-2	Sketch No.
31261003	Spool friction ass'y	○					C-22
31261004	Wind shaft base plate A ass'y	○					C-19
31261007	Wind shaft B ass'y	○					C-33
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
31261019	Back cover ass'y	○					C-(37~40)
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)
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

Part No.	Description	XR-6	XR-1s, XR-2s, KR-10	XR500 KR-5	XR-1 XR-2	Sketch No.
31261123	Spring: wind clutch lever	○				C-32
31261128	Shaft: gear 2.3	○				C-15
31261132	Sprocket shaft	○				C-30
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)
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
31261231	Bottom cover	○				D-40
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)
31261242	Shield	○				D-38
31261252	Auto lock button	○				A-26
31261258	Shutter dial	○				A-12
31261264	Screw	○				A-13
31261269	Earth plate	○				B-30
31261301	Prism frame	○				B-7

Part No.	Description	XR-6	XR-1s, XR-2s, KR-10	XR500 KR-5	XR-1 XR-2	Sketch No.
31261303	Holder: fresnel lens	○				B-11
31261305	Prism cover	○				B-2
31261306	Eyepiece lens	○				B-15
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
31261452	Cover hinge	○				C-34
31261460	Back cover latch	○				C-5
31261461	Clip cover	○				C-4
31261462	Spring: back cover latch	○				C-6
31261465	Leather: back cover	○				C-(37)
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)

Part No.	Description	XR-6	XR-1s, XR-2s, KR-10	XR500 KR-5	XR-1 KR-2	Sketch No.
31261548	Spring: release lever	○				E-(8)
31261549	Mg release	○				E-(6)
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
31261756	Self LED	○				D-(46)
31261771	Self speaker	○				D-34
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	○	○			G-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

Part No.	Description	XR-6	XR-1s, XR-2s, KR-10	XR500 KR-5	XR-1 KR-2	Sketch No.
* 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)
* 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.