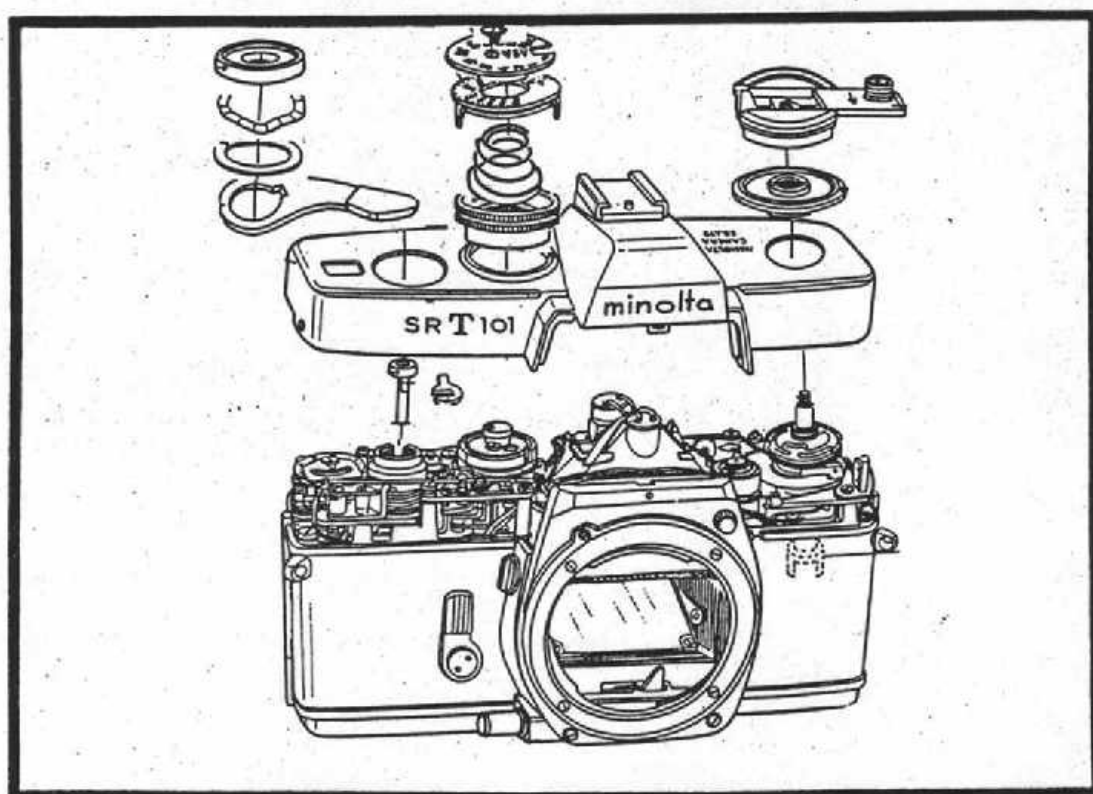


# MINOLTA

## SRT 101



# SERVICE

# MANUAL

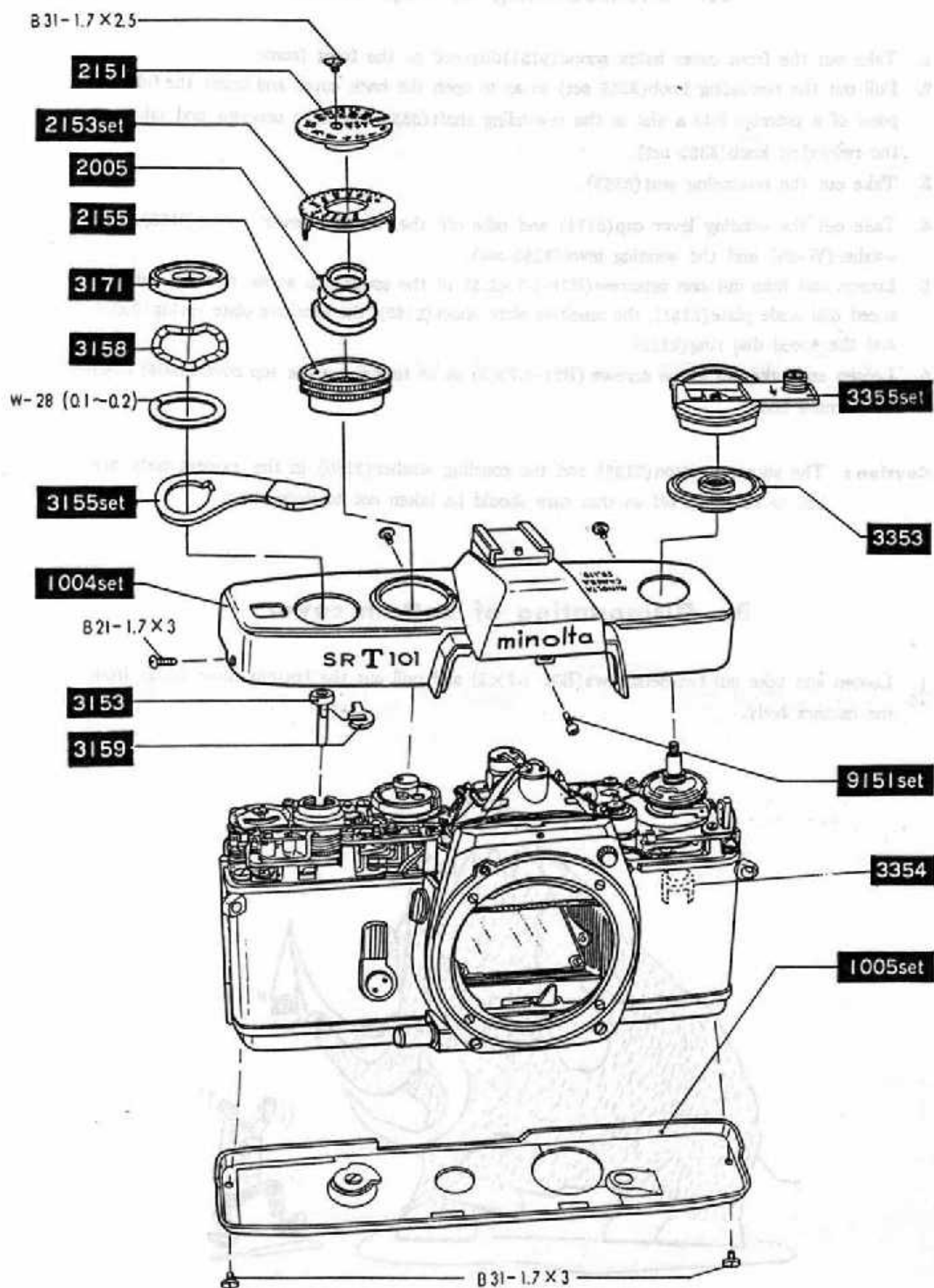
## Assembly and Mounting

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## DISASSEMBLY SECTION



Fig. 1





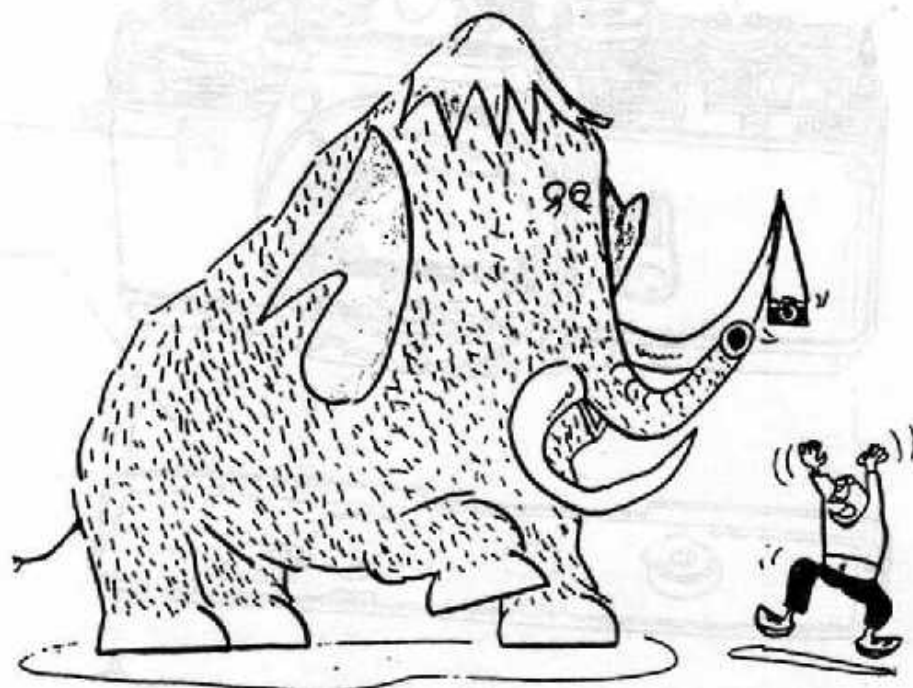
## A. Dismounting of Top cover

1. Take out the front cover index screw(9151)disposed on the front frame.
2. Pull out the rewinding knob(3355 set) so as to open the back cover and insert the fulcrum point of a pincette into a slot in the rewinding shaft(3354) so as to unscrew and take out the rewinding knob(3355 set).
3. Take out the rewinding seat(3353).
4. Take out the winding lever cap(3171) and take off the winding lever spring(3158), the washer(W-28) and the winding lever(3155 set).
5. Loosen and take out one setscrew(B31-1.7×2.5) of the speed dial so as to take out the speed dial scale plate(2151), the sensitive plate sheet(2153), the sensitive plate spring(2005) and the speed dial ring(2155).
6. Loosen and take out three screws (B21-1.7×3) so as to pull out the top cover(1004) from the camera body.

**Caution:** The shutter button(3153) and the coupling washer(3159) in the camera body are apt to be taken off so that care should be taken not to loose them.

## B. Dismounting of Bottom cover

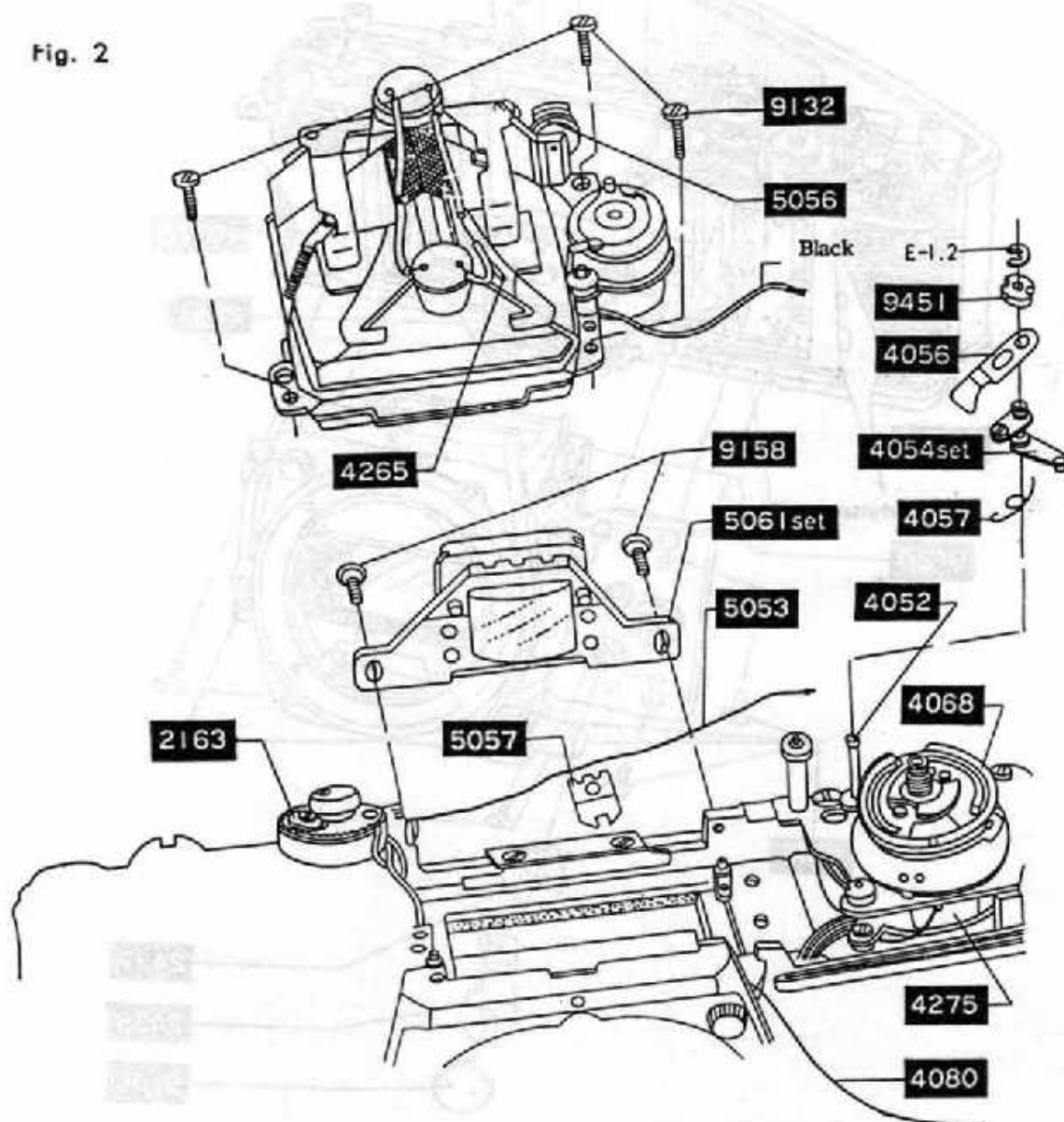
1. Loosen and take out two setscrews(B31-1.7×3) and pull out the bottom cover(1005) from the camera body.



### C. Dismounting of View-finder, Meter block

1. Take out the top cover. (See P. 5)
2. Disconnect the soldered portions of the lead wires (white and orange colored) of the wire print plate(4265) of the roof portion of the pentagon prism.
3. Disconnect the soldered portion of the lead wire(black colored) of the wire cord lug plate(4275) from the front part of the camera body.
4. Take out the coupling washer(E-1.2) embedded in the needle following axis(4052) of the needle following base plate, and then the needle following lever nut(9451) and the needle following upper lever(4056). Unhook the returning spring(4057) engaged with the rotate axis(4054 set) and pull out the rotate axis(4054 set) and take out the returning spring(4057).
5. Take out two eye-piece frame setscrews(9158) and then the eye-piece frame(5061set).
6. Release the index coupling string(5053) fitted into the slot in the index spring outer tube (5056), and take out the shutter speed index(5057) attached to the index coupling string (5053) from the underneath of the mirror holder. Disengage the slot portion of the index position adjuster(2163) and take out the coupling string(5053). Take out the shutter speed index(5057) from the coupling string(5053).
7. Disengage and take out the AV coupling string(4080) engaged in the slot of the time value pulley(4068). Disengage and locate it at the lateral side of the front frame.
8. Take out three prism holder setscrews(9132) and take off the viewfinder and meter block.

Fig. 2

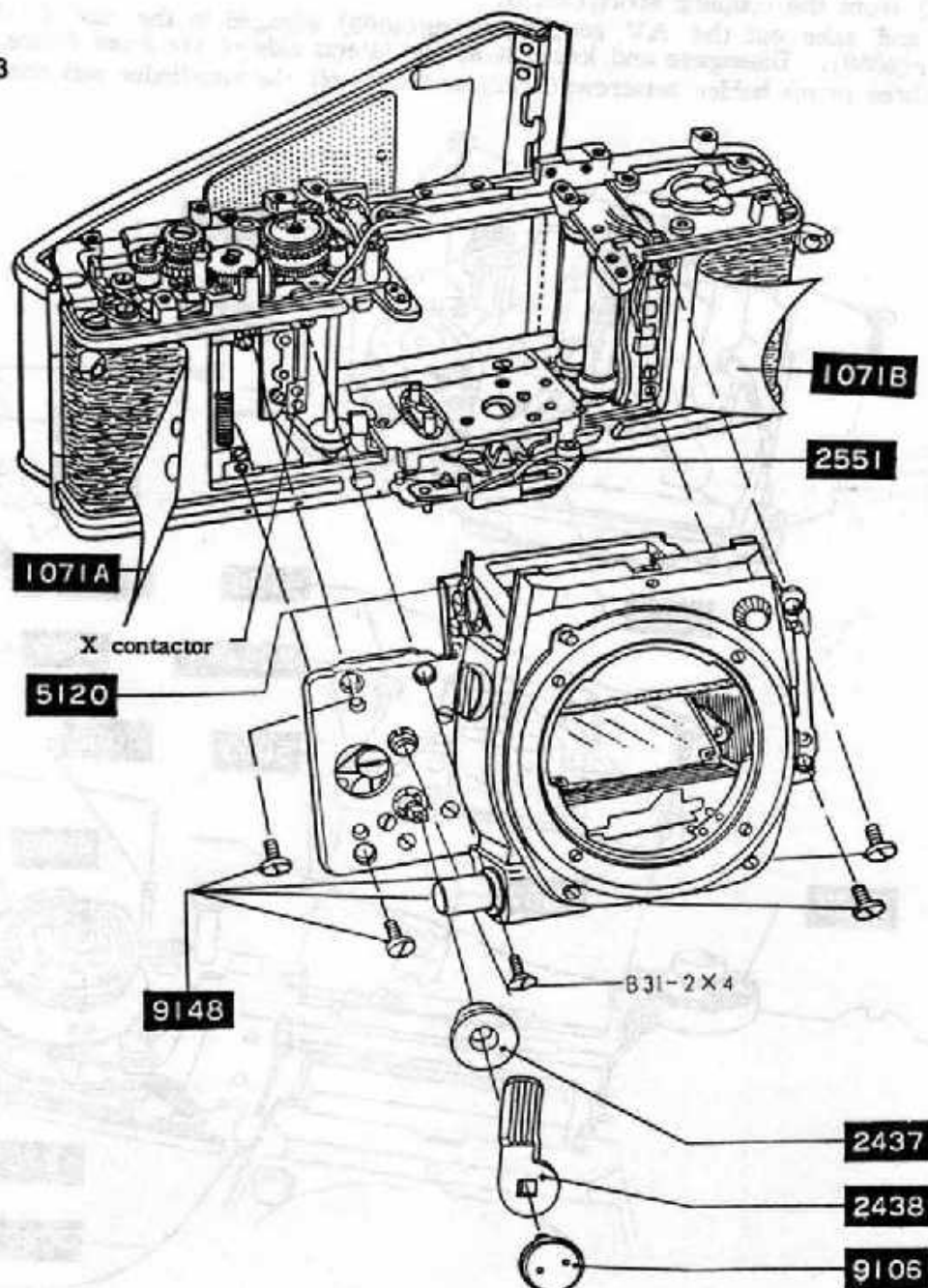




## D. Dismounting of Front base frame

1. Dismantle the viewfinder, meter block. (See P. 6)
2. Take out the charge lever setscrew(9106) from the front side of the camera body and the self-timer charge lever(2438) and the self-timer bush(2437).
3. Peel off the front leather-A(1071A) and the front leather-B(1071B).
4. Set the camera body to the state in which the shutter has been released, then take out four base plate setscrews(9148) and one setscrew (B31-2×4) so as to take out the front base frame from the camera body.

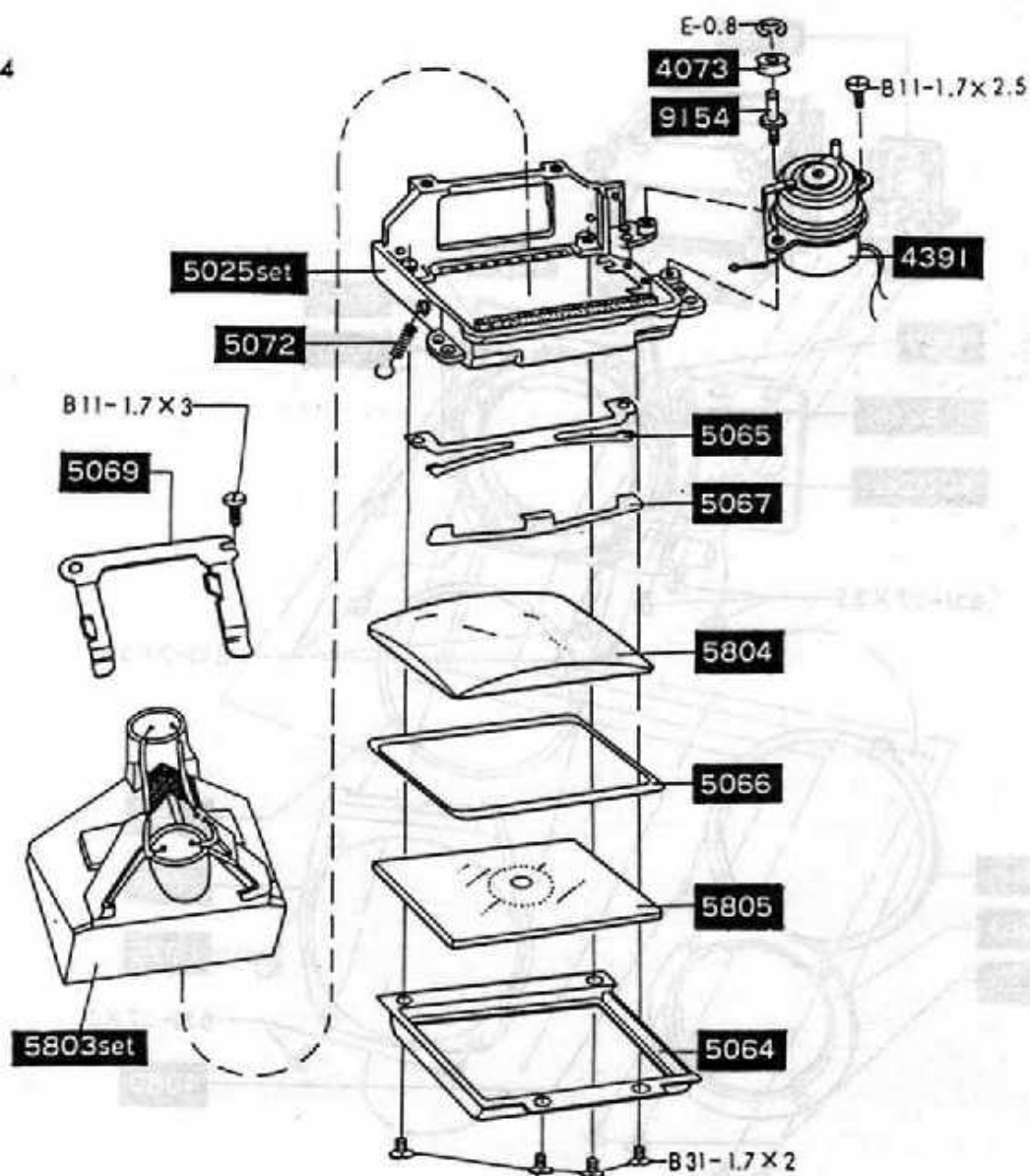
Fig. 3



## E. Disassembly of View-finder and Meter block

1. Dismantle the viewfinder, meter block. (See P. 6)
2. Disconnect the prism pressure support spring(5072) which is engaged with the prism pressure spring(5069).
3. Loosen and take out the setscrew(B11-1.7×3), and then take out the pressure spring(5069) and the pentagon prism(5803 set).
4. Take out the coupling washer(E-0.8) and then pull out the AV middle pulley-B(4073) and take out the middle pulley-B axis(9154). Loosen and take out one setscrew(B11-1.7×2.5) so as to take out the exposure meter moving coil set(4391).
5. Loosen and take out four setscrews(B31-1.7×2) from the beneath of the condenser holder(5064), and then take out the prism holder(5025 set). Then take out from the condenser holder (5064), the condenser pressure-B(5065), the pressure-F(5067), the condenser lens(5804), the fresnel lens(5805) and the condenser holder(5064).

Fig. 4

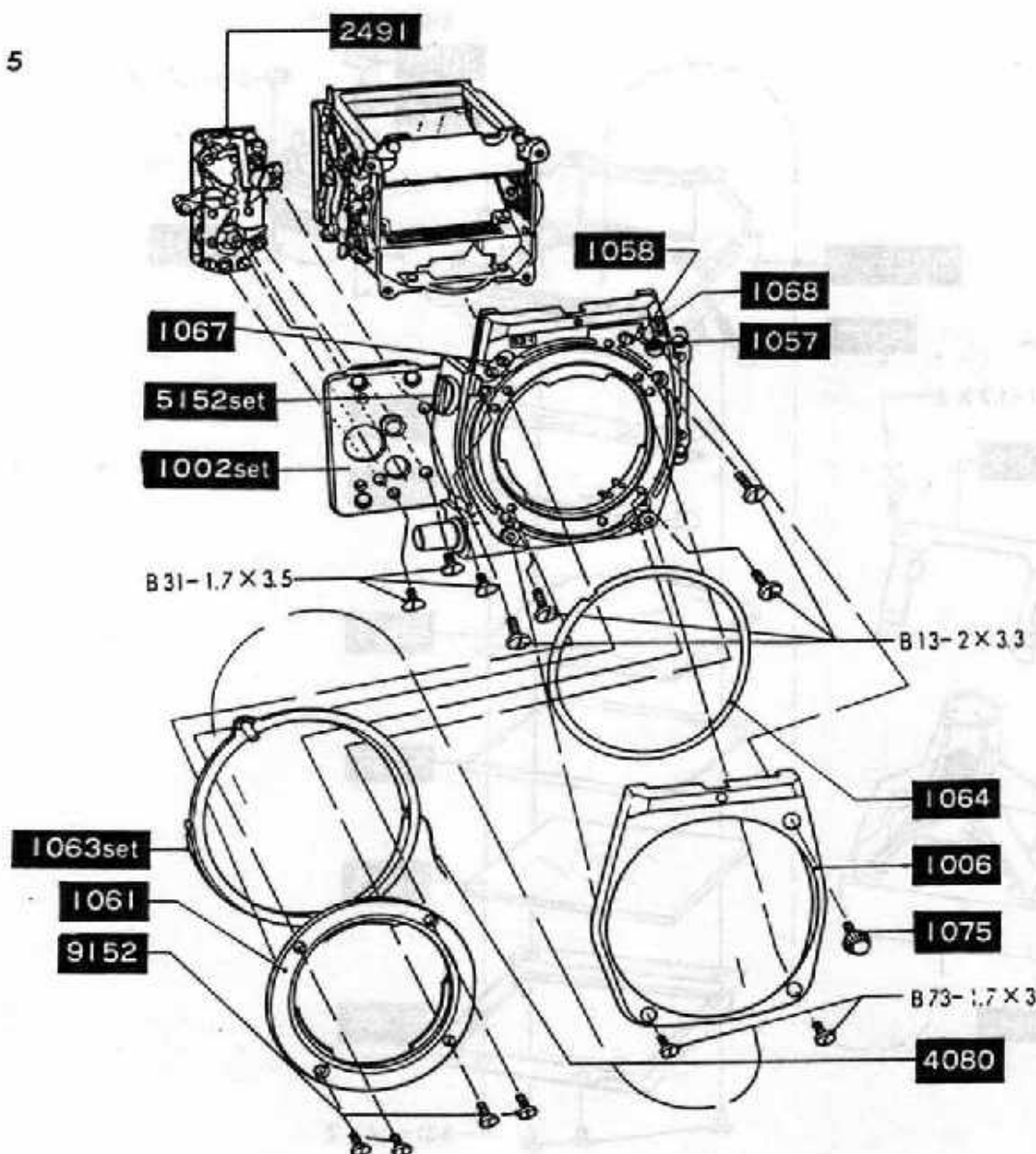




## F. Dismounting of Self-timer gear and Mirror box

1. Dismantle the front base frame (See P. 7).
2. Loosen and take out three setscrews (B31-1.7×3.5) so as to take out the self-timer gear (2491).
3. Take out the lock button (1075).
4. Take out four bayonet setscrews (9152) so as to take out the bayonet (1061), and then take out from the slot of the back of the aperture coupling ring (1063), the AV coupling string (4080) so as to take out the coupling ring (1063 set).
5. Take out the coupling ring washer (1064) with care so that the washer may not be deformed, and loosen and take out two setscrews (B73-1.7×3) so as to take out the front cover (1006).
6. Loosen and take out four setscrews (B13-2×3.3) and dismount the mirror box from the front base frame.

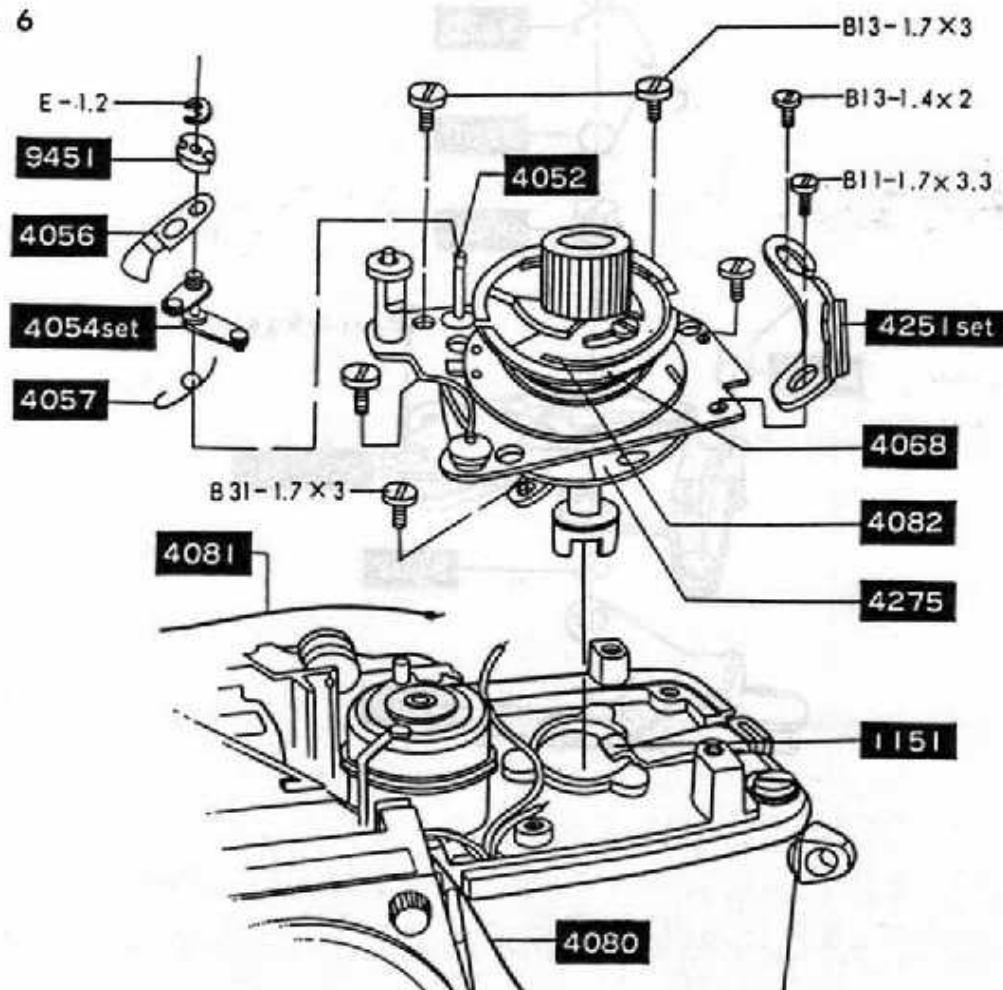
Fig. 5



## G. Dismounting of Needle following base plate

1. Dismount the top cover (See P. 5).
2. Attach to the rewinding shaft the TV pulley press nut jig (03Y-0013-79) take out the AV coupling string (4080) which is fitted into the slot of the pulley (4068) and disengage the same so as to locate it at the lateral side of the front frame.
3. Take out the TV coupling string (4081) which is fitted into the slot of the adjusting ring (4082) and also disconnect the engagement with the slot of the film speed ring so as to take out the coupling string (4081).
4. Disconnect the soldered portions of the lead wires (yellow, white and blue colored) of the AV safety switch holder (4251) and the lead wires (red and black colored) of the wire cord lug plate (4275) from the front side of the camera body.
5. Loosen and take out one setscrew (B11-1.7×3.3) and also one setscrew (B13-1.4×2) so as to take out the AV safety switch holder (4251 set).
6. Take out the coupling washer (E-1.2) embedded into the needle following axis (4052) and then the following lever nut (9451) so as to take out the following upper lever (4056). Also disconnect the engagement of the following lever return spring (4057) with the rotate axis (4054) and then pull out the rotate axsi (4054 set) so that the return spring (4057) may be taken out.
7. Loosen and take out two setscrews (B31-1.7×3) of the needle following base plate and also three setscrews (B31-1.7×3) from the opening of the base plate so that the needle following base plate.

Fig. 6

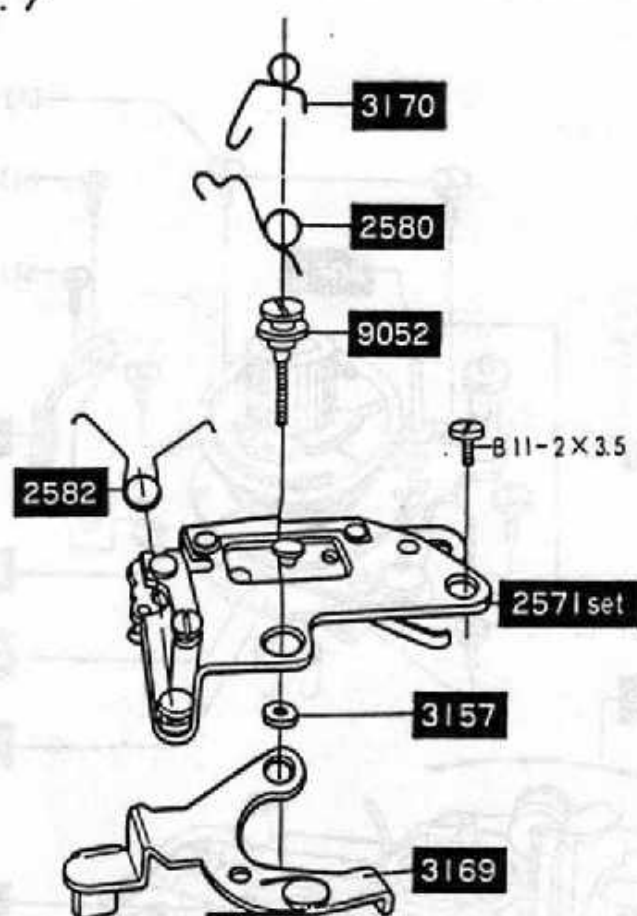




## H. Dismounting of Aperture reducing base plate

1. Take out the front base frame. (See P. 7).
2. Attach to the rewinding shaft the rewinding seat(3353) so as to take out the bottom cover. (See P. 5).
3. Expose the bottom of the body and disconnect the charge lever-B spring(3170), rub plate spring(2580), engaged with the charge lever-B axis(9052). Then, take out the axis(9052). Take out the coupling plate spring(2582) and loosen and take out one setscrew(B11-2×3.5) so that the aperture reducing base plate(2571 set) may be taken out of the camera body. When taken out, take out also the charge lever axis receiver(3157) located in the charge lever-B(3169) of the camera body.

Fig. 7





# I. Dismounting of Slow-gear and Shutter base plate-A

1. Take out the top cover. (See P. 5).
2. Loosen and take out two setscrews(B13-1.7×2.5) and take out the slow governor(2391).
3. Take out two eye-piece frame setscrews(9158) and the eye-piece frame(5061).
4. Take out the TV coupling string(4081). (Refer to dismounting of needle following base plate. P. 10).
5. Take out the index coupling string(5053). (Refer to dismounting of viewfinder meter block. P. 6).
6. Take outside the lead wires (white and brown colored) placed in the cord holder(2263) and loosen and take out one setscrew(B19-1.7×4.2). Then take out another setscrew(B19-1.7×4.2).
7. Loosen and take out two setscrews (B11-1.7×2.5). Then take out the pulley base(4077 set)and one pulley base axis-B(9156) and also another pulley base axis-A(9153) so that the speed dial stopper(2159), shutter base plate-A(2049 set) may be taken out.

Fig. 8

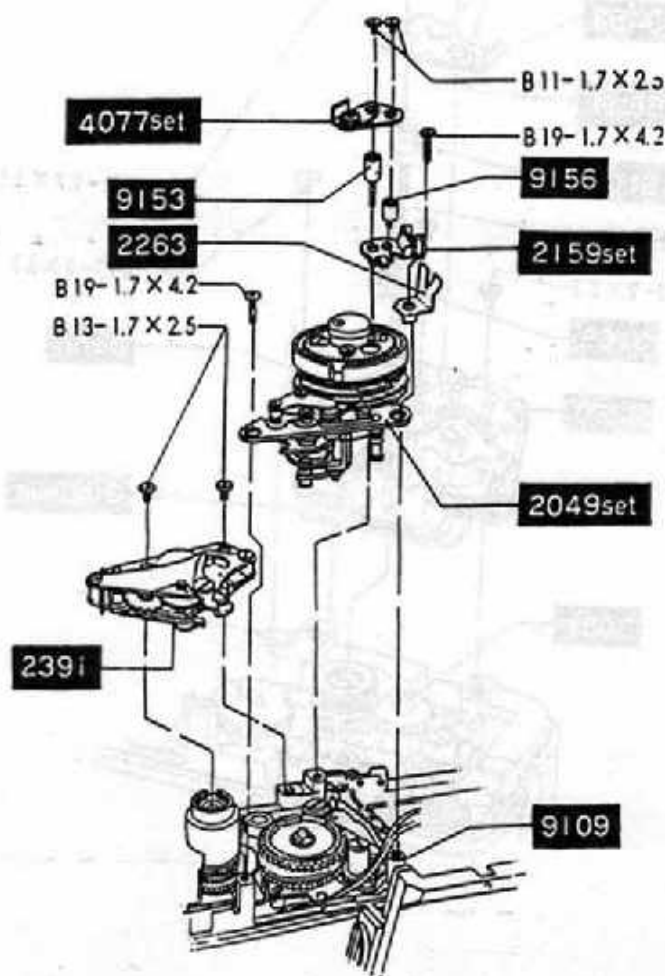


Fig. 10

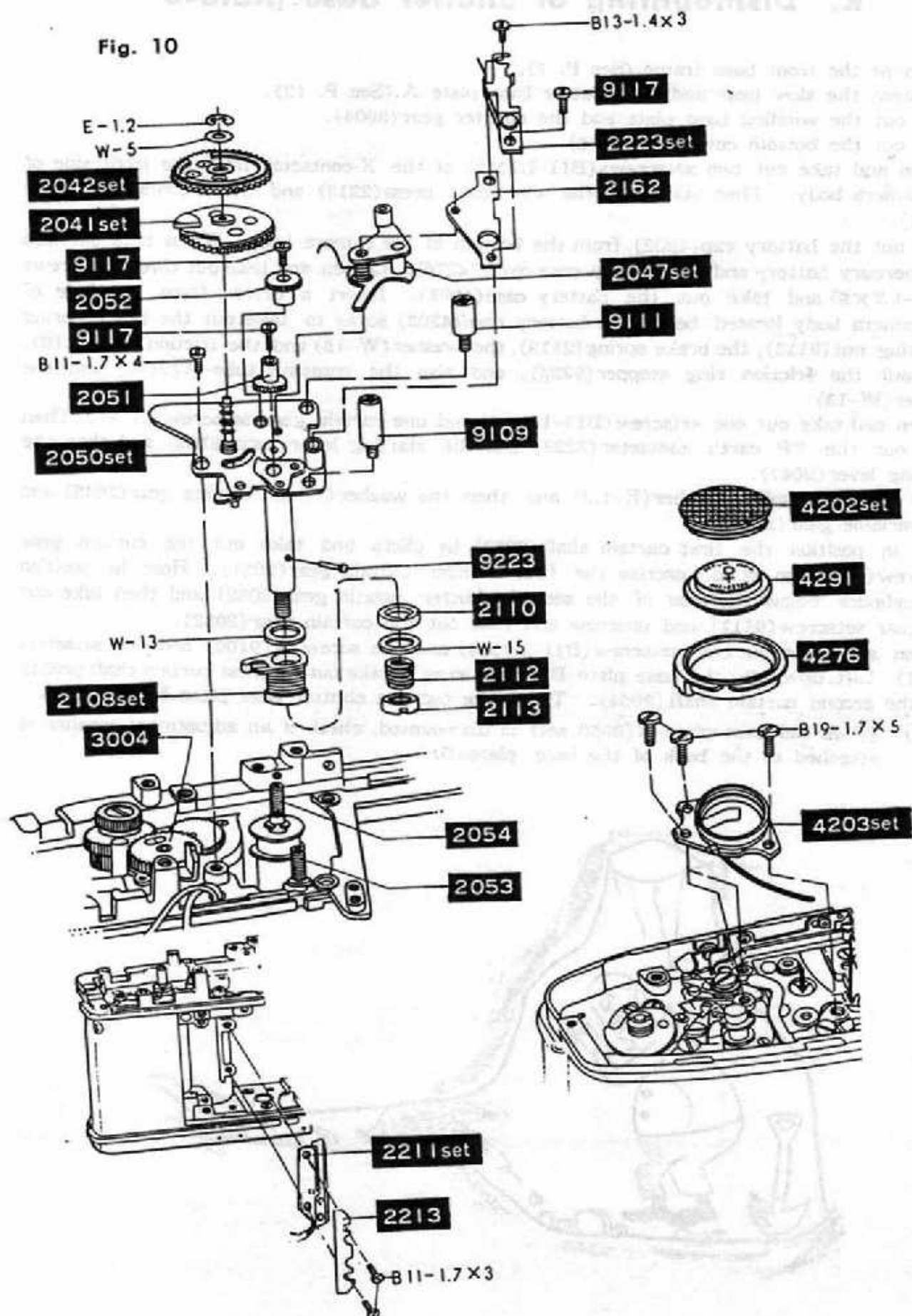
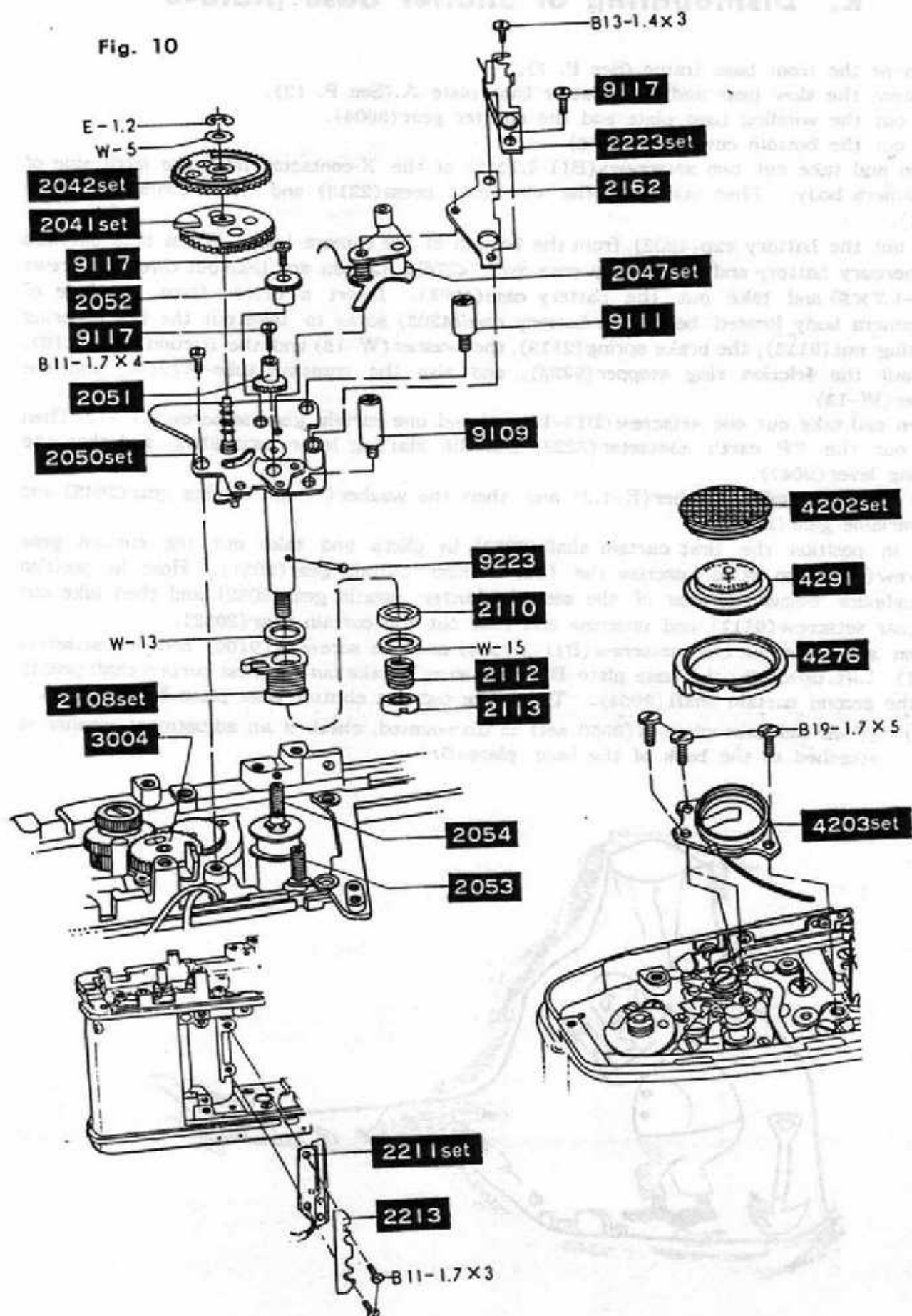




Fig. 10

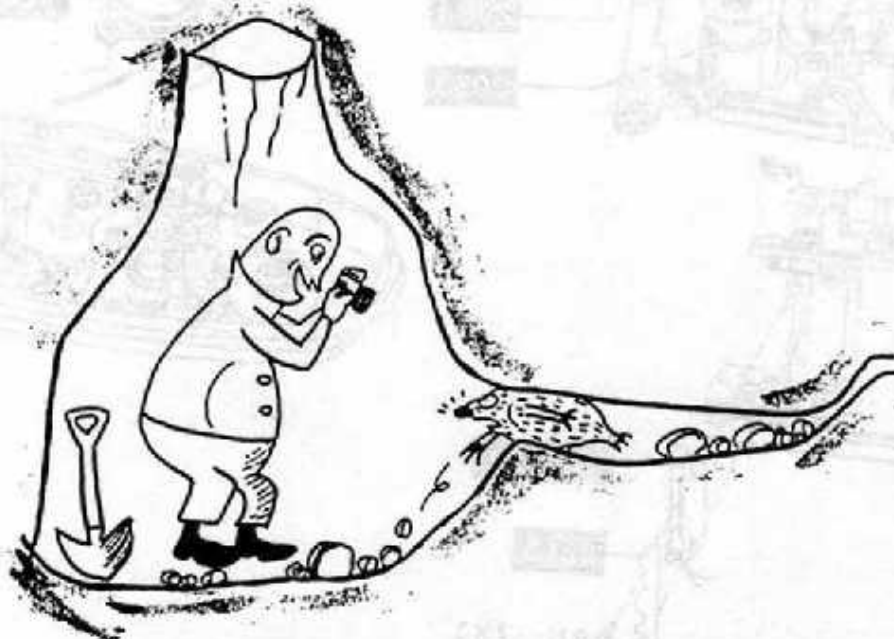




## K. Dismounting of Shutter base plate-B

1. Dismount the front base frame.(See P. 7).
2. Dismount the slow gear and the shutter base plate A.(See P. 12).
3. Take out the winding base plate and the shutter gear(3004).
4. Take out the bottom cover.(See P. 5).
5. Loosen and take out two setscrews(B11-1.7×3) of the X-contactor from the front side of the camera body. Then take out the wire cord press(2213) and the X-contactor holder (2211).
6. Take out the battery cap(4202) from the bottom of the camera body. Then take out also the mercury battery and the battery case cover(4276). Loosen and take out three setscrews (B19-1.7×5) and take out the battery case(4203). Insert a driver from the hole of the camera body located below the battery case(4203) so as to take out the brake spring adjusting nut(2113), the brake spring(2112), the washer(W-15) and the friction ring(2110). Pull out the friction ring stopper(9223), and also the transmit tube-A(2108) and the washer(W-13).
7. Loosen and take out one setscrew(B13-1.4×3) and one curtain gear setscrew(9117). Then take out the FP earth contactor(2223) and the starting lever axis(2162) and then the starting lever(2047).
8. Take out the coupling washer(E-1.2) and then the washer(W-5), driving gear(2042) and the variable gear(2041).
9. Hold in position the first curtain shaft(2053) by pliers and take out the curtain gear setscrew(9117) so as to unscrew the first shutter curtain gear(2051). Hold in position the cylinder below the gear of the second shutter curtain gear(2052) and then take out the gear setscrew(9117) and unscrew and take out the curtain gear(2052).
10. Loosen and take out one setscrew(B11-1.7×4) and one screw-A(9109) and one setscrew (9111). Lift upwardly the base plate-B(2050) so as to take out the first curtain shaft(2053) and the second curtain shaft(2054). Then take out the shutter base plate-B(2050 set).

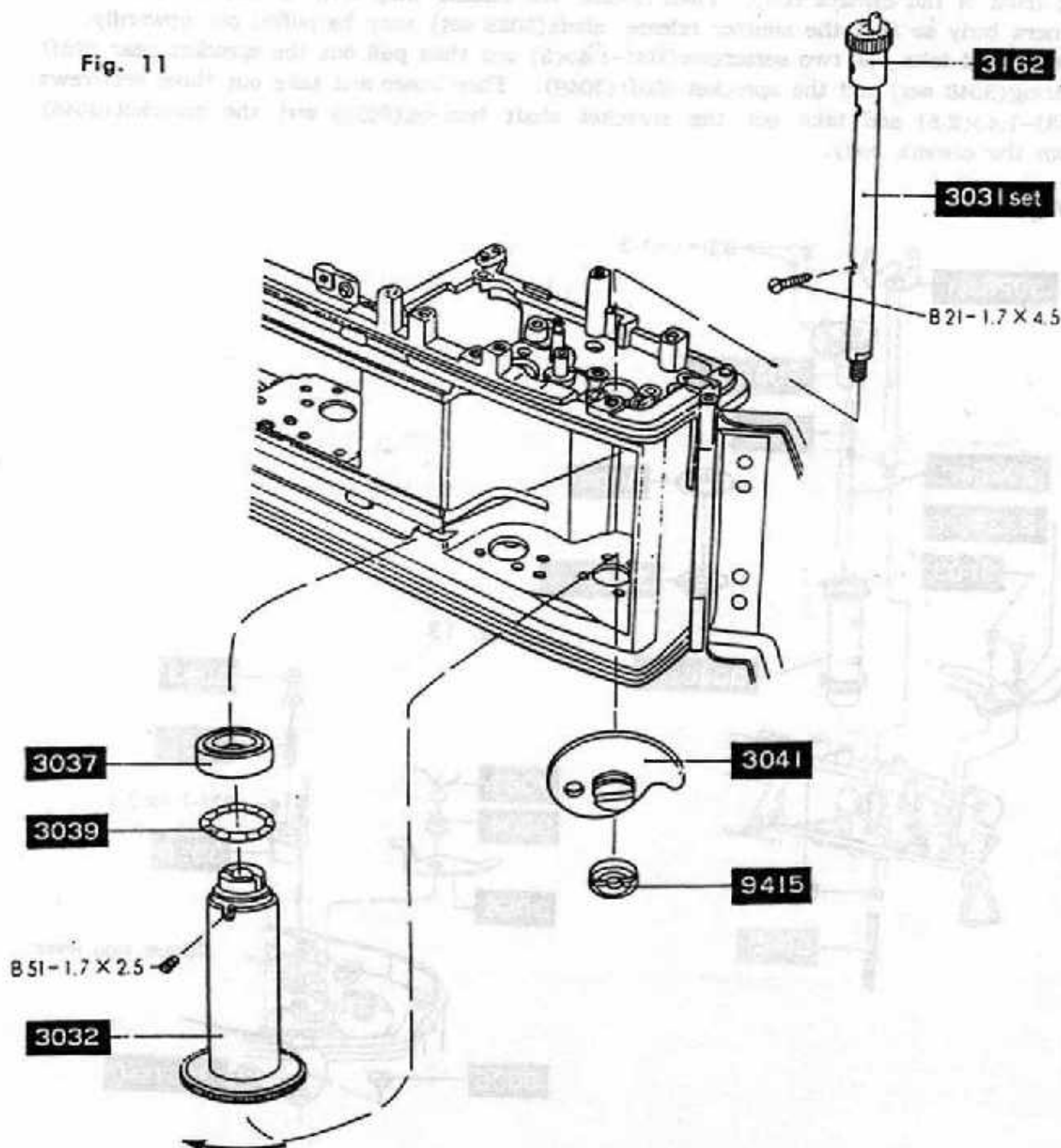
**Caution:** When the base plate-B(2050 set) is dismounted, check if an adjustment washer is attached to the back of the base plate-B.



## L. Dismounting of Film take-up spool

1. Dismount the slow gear. (See P. 12).
2. Dismount the winding base plate. (See P. 13).
3. Dismount the bottom cover. (See P. 5).
4. Take out the spool shaft nut(9415) from the lower side of the camera body so as to take out the charge cam(3041).
5. Open the back cover and loosen and take out one setscrew(B51-1.7×2.5) for the spool and secure firmly the spool gear(3162) on the camera body. Then turn the spool in the clockwies direction and take out one setscrew(B21-1.7×4.5) from the hole of the spool. Then pull out the film spool shaft(3031) upwardly, and then take out from the camera body the decoration ring(3037), the spring washer(3039) and the film spool(3032).

Fig. 11





## M. Dismounting of Sprocket

1. Dismantle the shutter base plate B. (See P. 15).
2. Take out two setscrews(9103) of the middle contactor base(2224) from the camera body and then the contactor base(2224 set).
3. Take out from the bottom of the camera body the charge lever-A axis(9006) and let the charge lever-A(3061) free toward the outside of the camera body. Then disconnect the sprocket lock lever spring(3067) engaged with the sprocket lock lever(3066) and take out the lock lever axis(9004) and the lock lever(3066).
4. Open the back cover and hold the sprocket when the rewind release button(3053) (left handed screw) is loosened and taken out from the bottom of the camera body. Take out also the sprocket spring(3051).
5. Take out the coupling washer(E-1.5) embedded into the shutter release shaft(3028) from the front of the camera body. Then release the release stop lever of the bottom of the camera body so that the shutter release shaft(3028 set) may be pulled out upwardly.
6. Loosen and take out two setscrews(B31-1.4×3) and then pull out the sprocket gear shaft bearing(3048 set) and the sprocket shaft(3049). Then loosen and take out three setscrews(B31-1.4×2.5) and take out the sprocket shaft bearing(3050) and the sprocket(3046) from the camera body.

Fig. 12

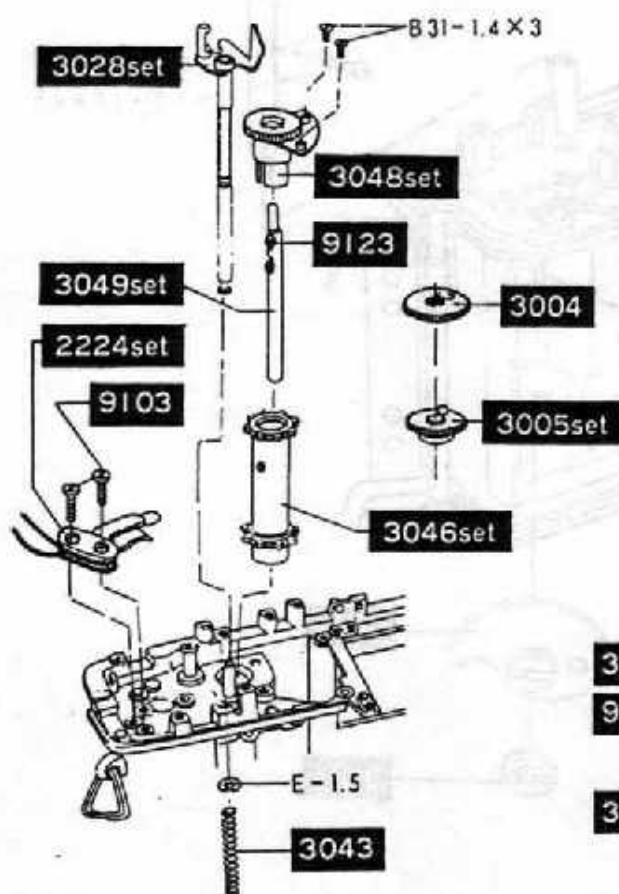
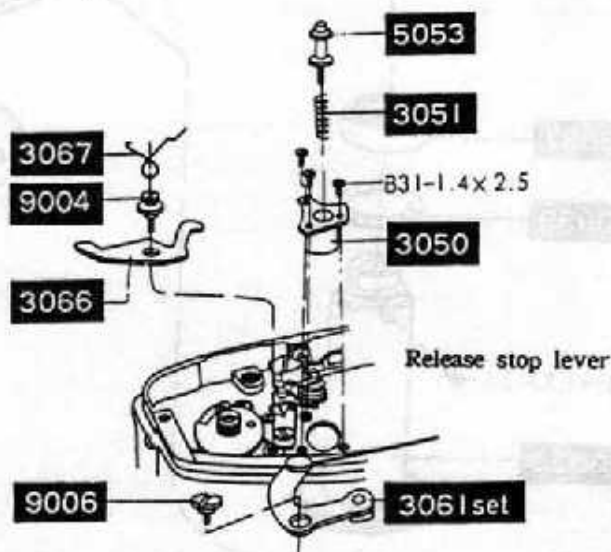


Fig. 13





## N. Dismounting of Shutter curtains

1. Dismantle the bottom cover. (See P. 5).
2. Dismantle the front base frame. (See P. 7).
3. Dismantle the shutter base plate-B. (See P. 15).
4. Loosen and take out two setscrews (B11-1.7×1.9, B31-1.4×2.5) from the front side of the camera body and then take out the front light shield plate (1026).
5. Expose the bottom of the camera body and then disconnect the soldered portions of the lead wires (two yellow colored one and red and orange colored, and for the semi-fixing resistor) of the battery switch isolation plate (4271) and the lead wires (black and blue colored, and for the semi-fixing resistor) of the isolation base (4259), then loosen two contactor setscrews (9163) and remove the contactor isolation base (4259 set).
6. Disconnect the reversion spring (2523) engaged with the pre-set lever stopper (2507) and then take out the nail ratchet spring A, B (2074, 2075) from the adjusting nail axis (9205). Unscrew and take out two the curtain spring adjusting nail ratchets (2073) (left handed screw).
7. Loosen and take out two setscrews (B13-1.7×3) and take out the lower plate (2076). Then pull out the spring shaft for the first and second shutter curtains and then take out the first and second curtains from the front of camera body.

Fig. 14

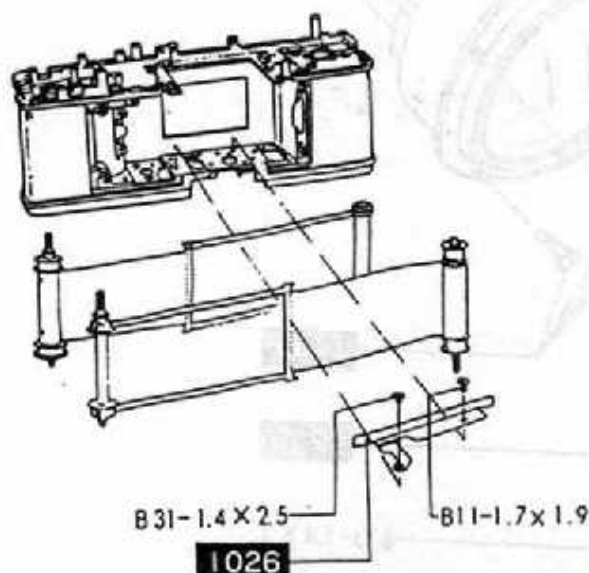
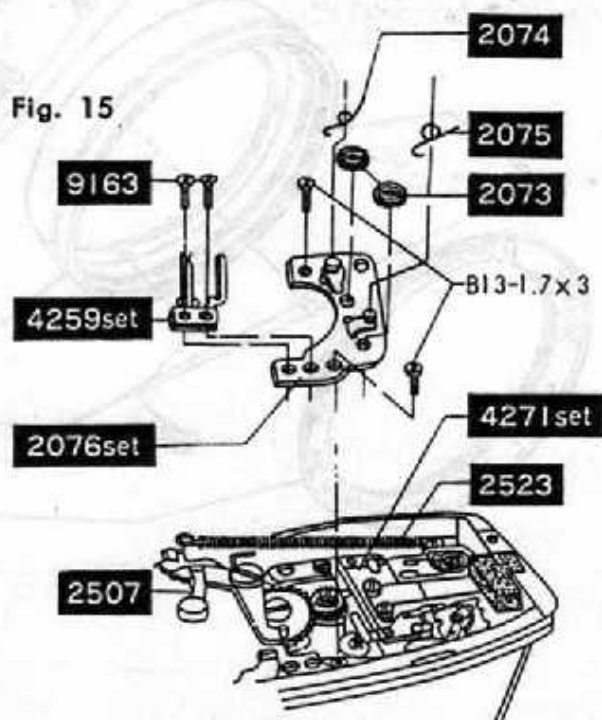


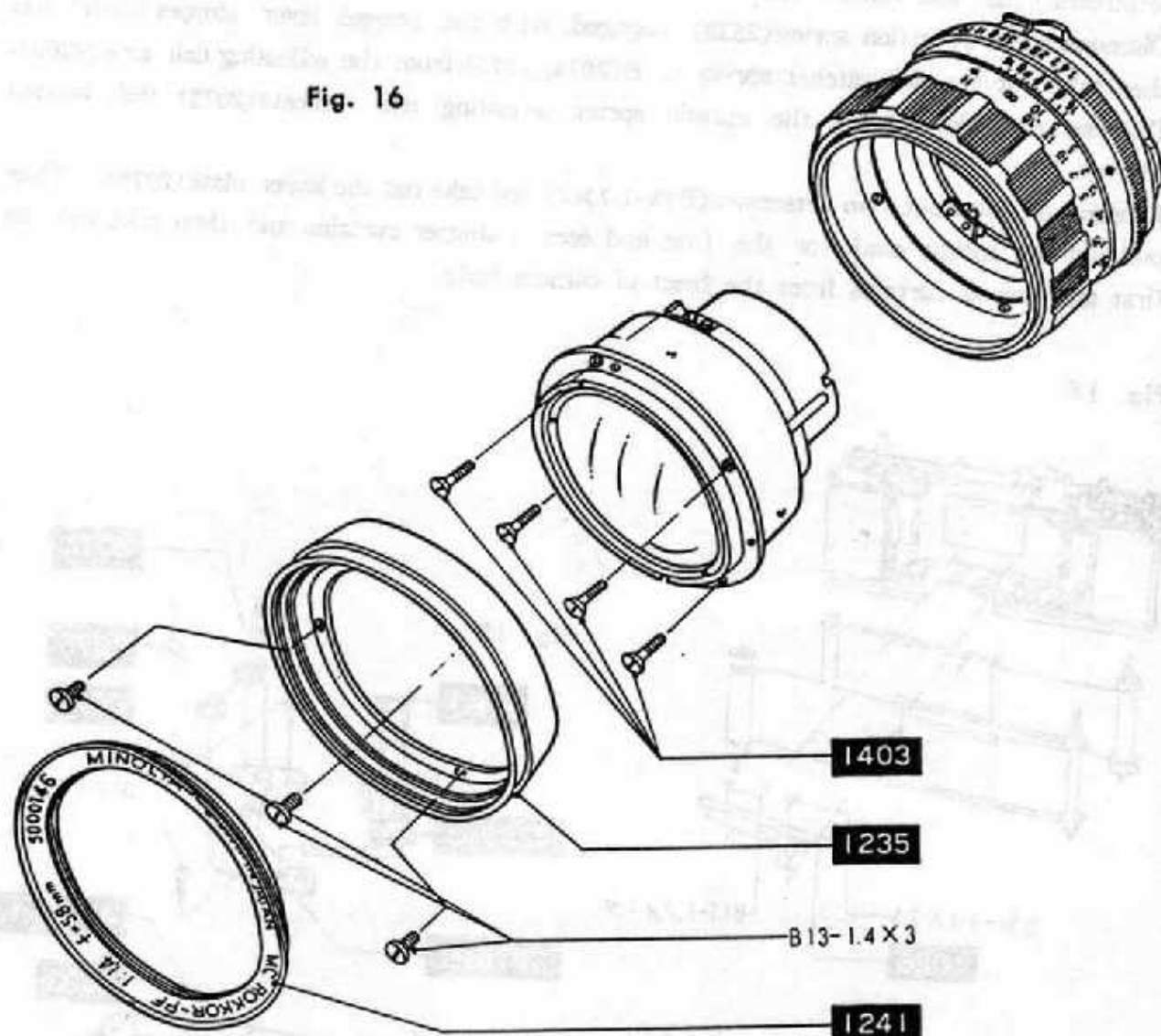
Fig. 15



## O. Dismounting of Lens inner barrel

1. Take out the number ring(1241) and loosen and taken out three setscrews (B13-1.4×3) so as to take out the filter ring(1235).
2. Take out four inner barrel setscrews(1403) and take out the inner barrel(1110 set) from the outer barrel.

Fig. 16



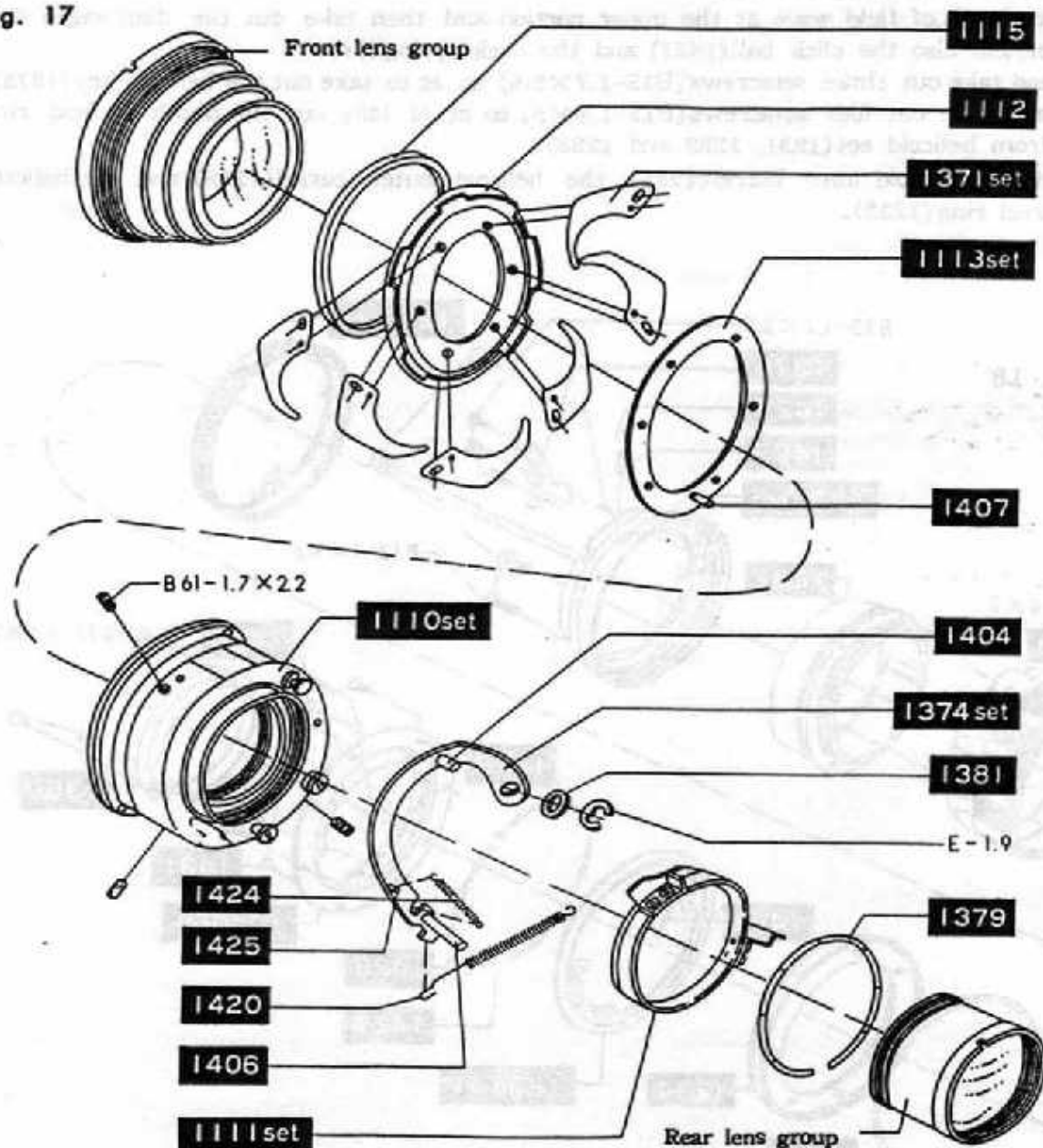


## P. Disassembly of Inner barrel

1. Dismount the front and rear lens components from the inner barrel(1110 set).
2. Disconnect the pressure(1424) engaged with the operation plate pin(1407) and loosen and take out three setscrews(B61-1.7×2.2) located around the inner barrel so that the press barrel holder(1115) may be taken out from the inner barrel(1110). Then, take out the diaphragm press barrel(1112), six diaphragm blades(1371 set) and the diaphragm operation plate(1113).
3. Take out the washer(1379) with care so that the washer may be not deformed and then pull out of the inner barrel the cam ring(1111).
4. Disconnect the engagement of the both ends of the aperture spring(1420) and then take out the coupling washer(E-1.9) and the operation lever(1374 set).

**Caution:** In some cases, an adjusting washer is located below the operation lever(1374 set) so that care should be taken not to lose it.

Fig. 17

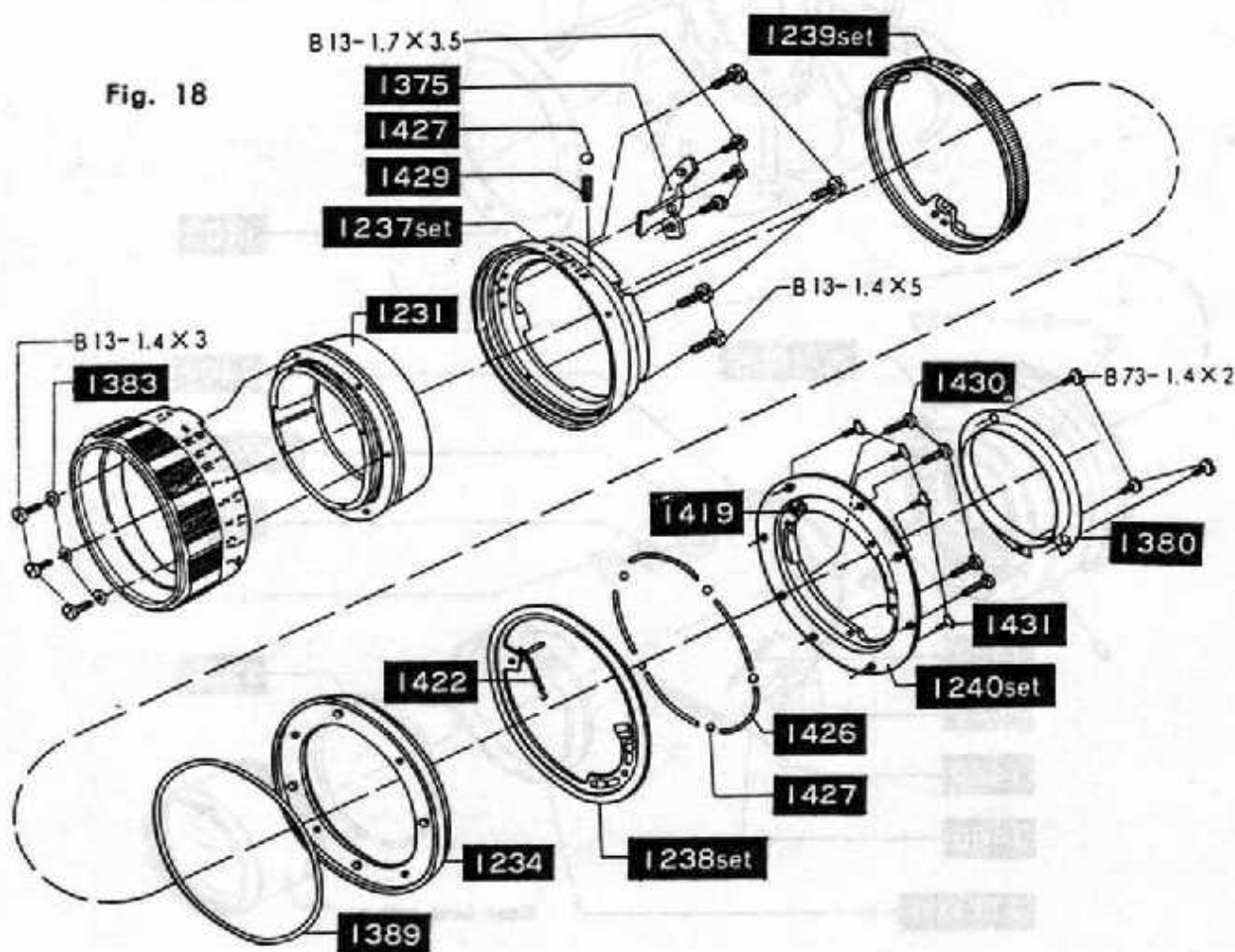




## Q. Disassembly of Outer barrel

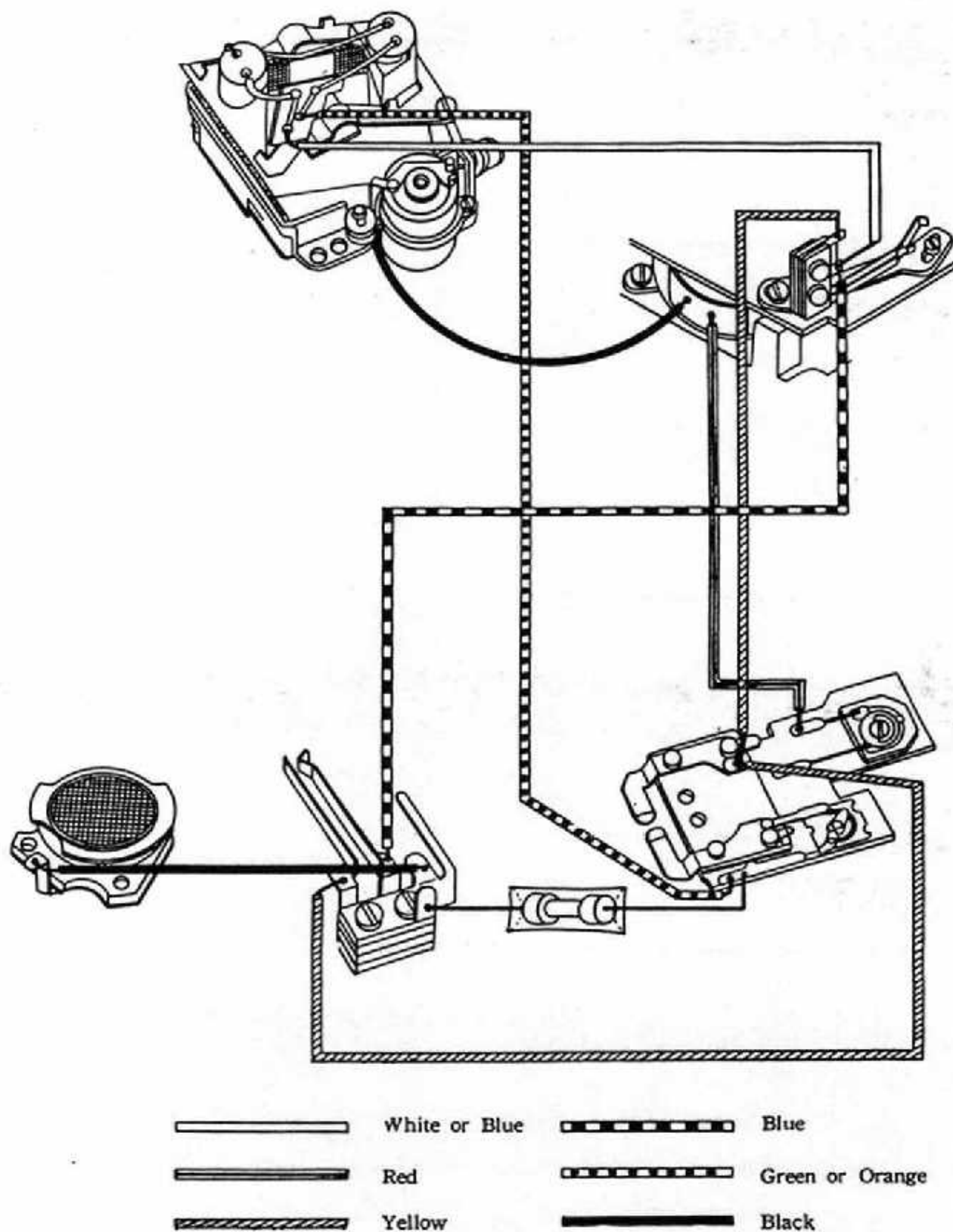
1. Turn the distance scale ring(1236) and set it to the infinity( $\infty$ ) position. Then, put to mark on the between the distance scale ring(1236) and the helicoid inner barrel(1231).
2. Loosen and take out three setscrews(B13-1.4 $\times$ 3) and then three scale ring set washers (1383) attached to said screws so as to take out the scale ring(1236).
3. Loosen and take out three setscrews(B73-1.4 $\times$ 2) from the rear of the outer barrel so as to take out the bayonet cover(1380).
4. Take out four bayonet setscrews(1430) so as to take out the lens bayonet(1240 set) and also take out the diaphragm ring washer(1389).
5. Disconnect take out the interlock plate return spring(1422) engaged with the return spring hook(1419) from the front side of the bayonet(1240 set).
6. Take out four decoration ring setscrews(1431) from the back of the lens bayonet(1240 set), and also the bayonet(1240), five rotation spacers(1246), five click balls(1427) and the pre-set interlock plate(1238 set).
7. Place the depth of field scale at the upper portion and then take out the diaphragm ring (1239 set) and also the click ball(1427) and the click spring(1429).
8. Loosen and take out three setscrews(B13-1.7 $\times$ 3.5) so as to take out the helicoid key(1375).
9. Loosen and take out four setscrews(B13-1.4 $\times$ 5) so as to take out the depth of field ring (1237) from helicoid set(1231, 1232 and 1233).
10. Take out the helicoid inner barrel(1231), the helicoid outer barrel(1232) and the helicoid outer barrel ring(1233).

Fig. 18



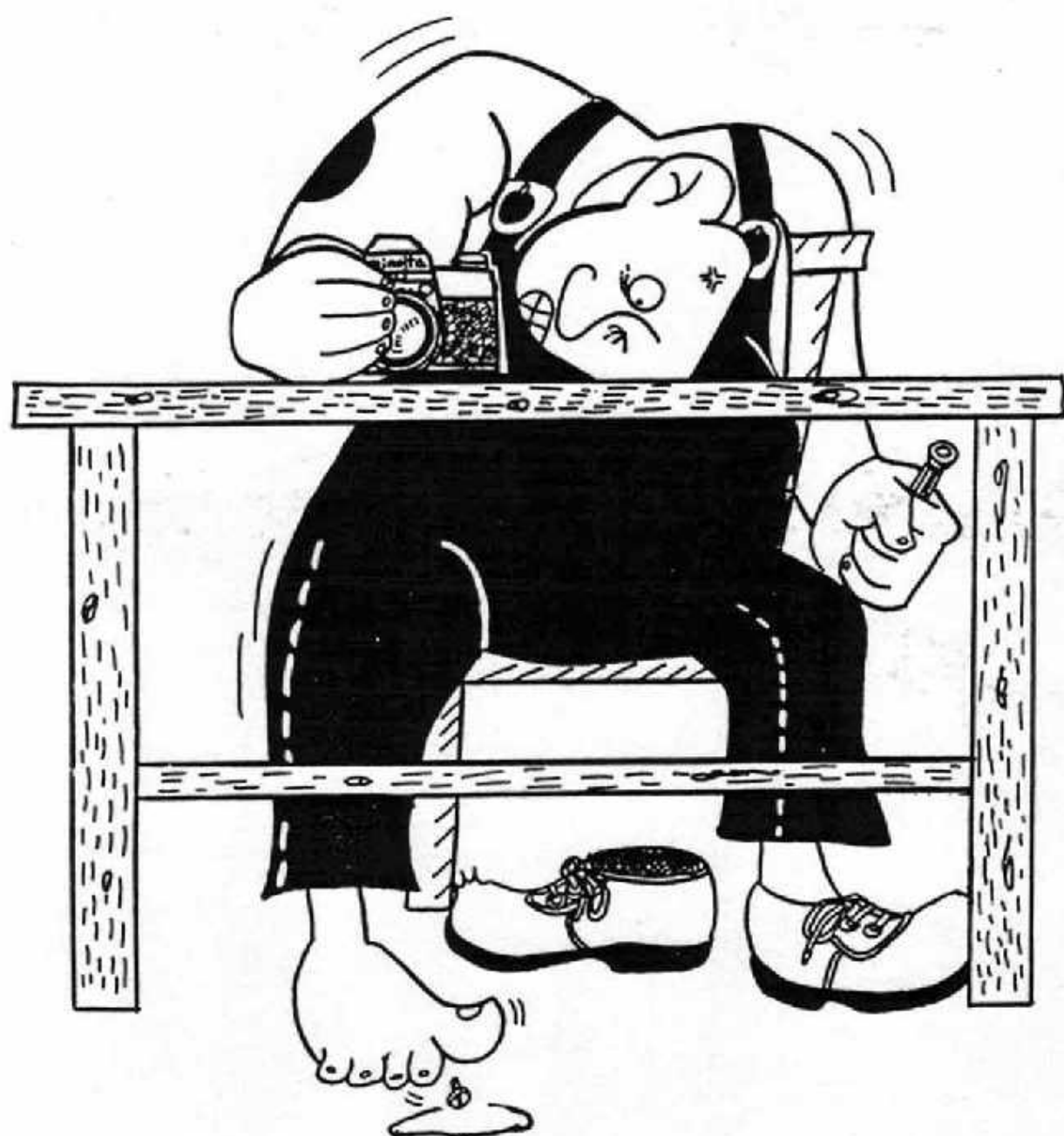
# WIRING SCHEMATIC DIAGRAM

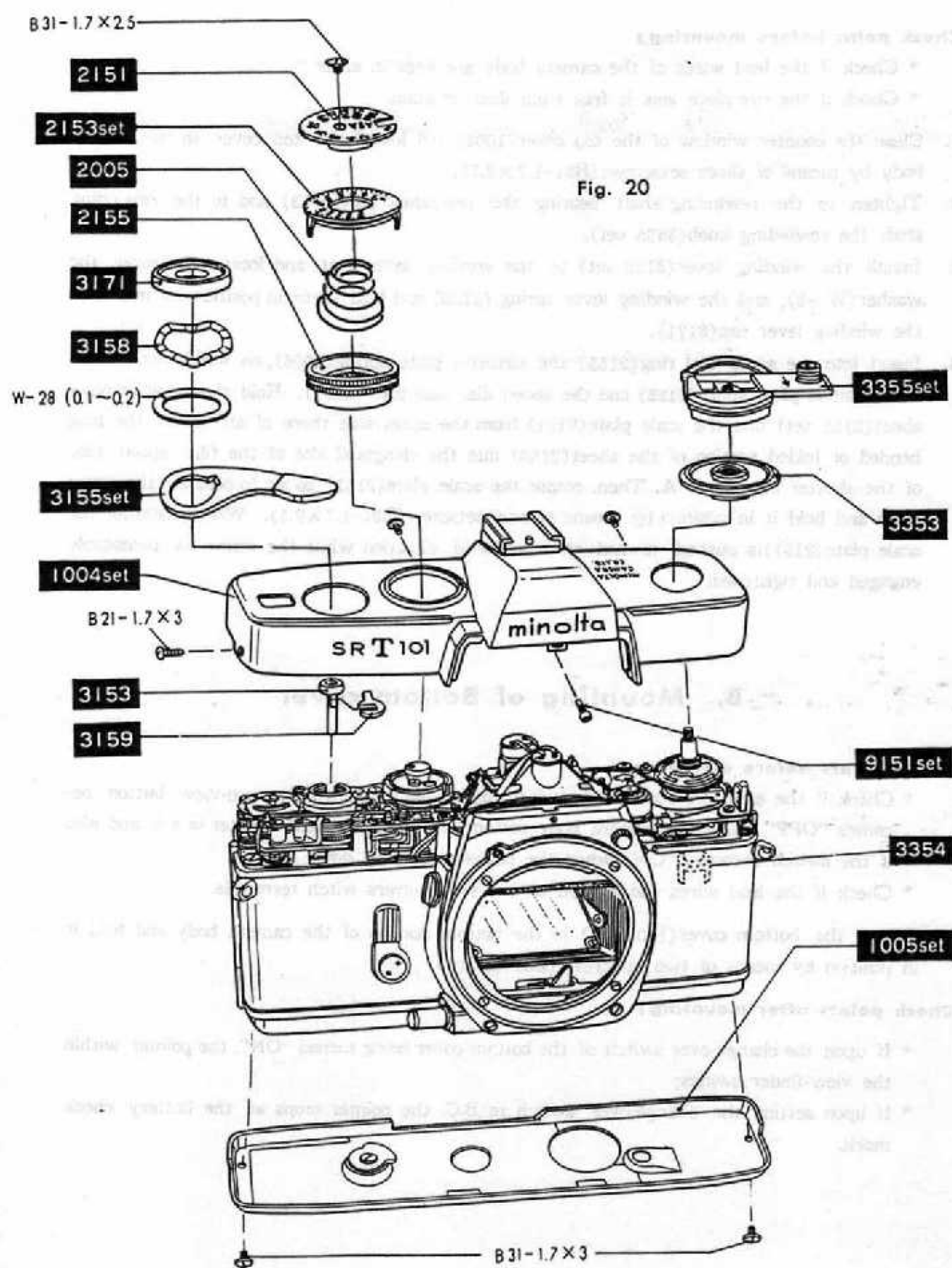
Fig. 19





## REASSEMBLY SECTION







## **A. Mounting of Top cover**

### **Check point before mounting ;**

- \* Check if the lead wires of the camera body are kept in order ;
  - \* Check if the eye-piece lens is free from dust or stain.
1. Clean the counter window of the top cover(1004) and install the top cover to the camera body by means of three setscrews(B21-1.7×2.7).
  2. Tighten to the rewinding shaft bearing the rewinding seat(3353) and to the rewinding shaft the rewinding knob(3355 set).
  3. Install the winding lever(3155 set) to the winding lever seat and locate thereover the washer(W-28), and the winding lever spring (3158) and hold them in position by means of the winding lever cap(3171).
  4. Insert into the speed dial ring(2155) the sensitive plate spring(2005), on which are located the sensitive plate sheet(2153) and the speed dial scale plate(2151). Hold the sensitive plate sheet(2153 set) and the scale plate(2151) from the upper side there of and insert the long bended or folded portion of the sheet(2153) into the elongated slot of the film speed ring of the shutter base plate A. Then, rotate the scale plate(2151) so as to coincide the screw holes and hold it in position by means of one setscrew(B31-1.7×2.5). When installed, the scale plate(2151) is pushed toward the clockwise direction while the screw is threadably engaged and tightened.

## **B. Mounting of Bottom cover**

### **Check points before mounting ;**

- \* Check if the exposure controlling switch upon pushing down the pre-view button becomes "OFF" when the camera body bottom is exposed and the shutter is set, and also if the switch becomes "ON" when the button is pushed down again.
  - \* Check if the lead wires are located on the switch-overswitch terminals.
1. Embed the bottom cover(1005 set) in the bottom portion of the camera body and hold it in position by means of two setscrews(B31-1.7×3).

### **Check points after mounting ;**

- \* If upon the change-over switch of the bottom cover being turned "ON", the pointer within the view-finder swings;
- \* If upon setting the change-over switch to B.C. the pointer stops at the battery check mark.

Fig. 21

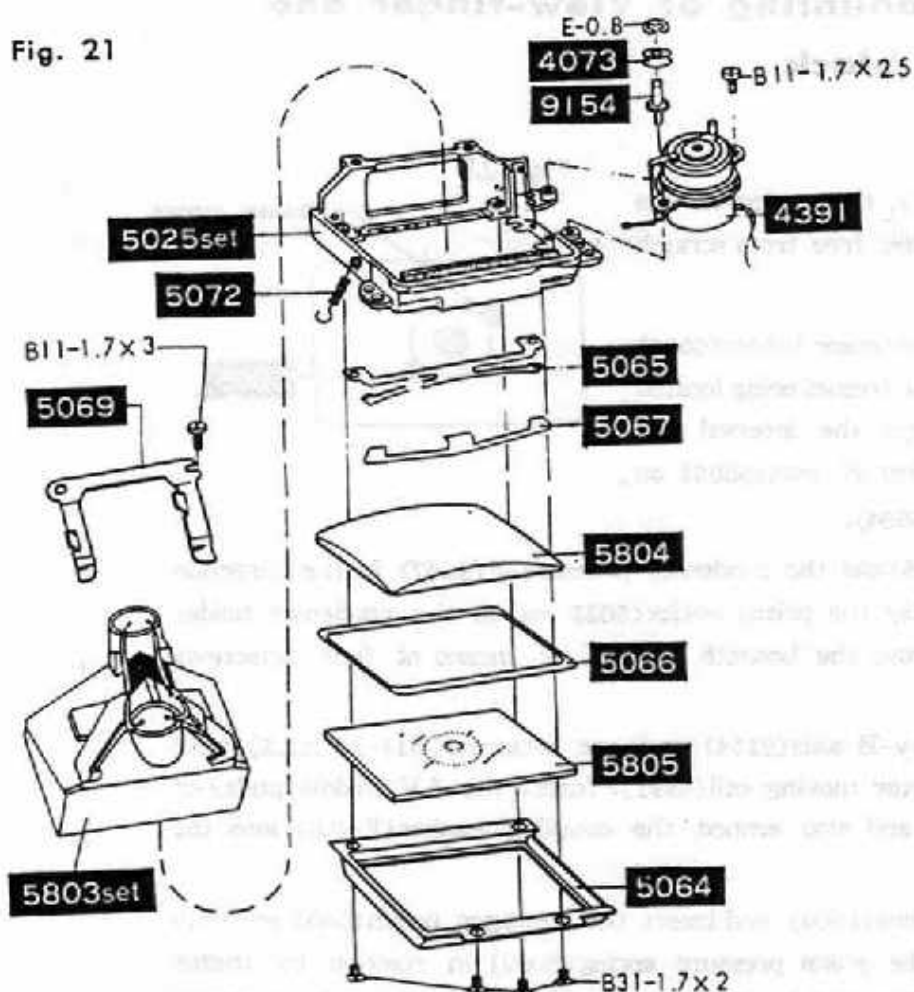
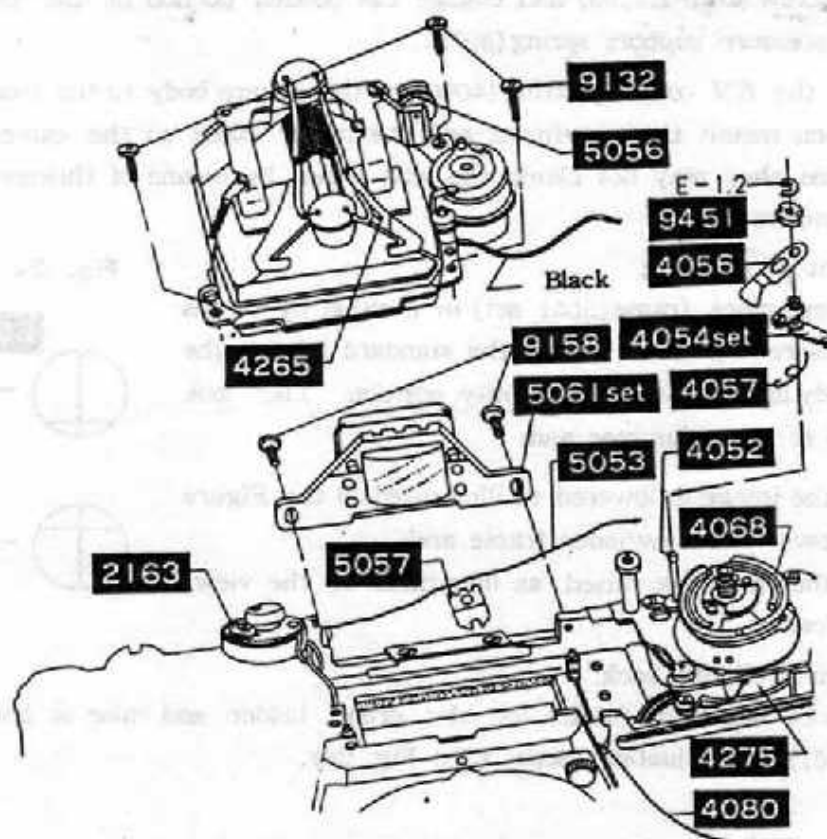


Fig. 22





## C. Assembly and mounting of View-finder and Exposure meter block

### Check point before assembly ;

- \* Check if the pentagon prism(5803), the condenser lens (5804) and the fresnel lens(5805) are free from scratch and stain or dust.

1. Fit the fresnel lens(5805) into the condenser holder (5064) with the portion having on groove of the fresnel being located downwardly and then overlay thereon the interval seat (5066). Clean the surface of the fresnel lens(5805) on which is placed the condenser lens(5804).
2. Insert the condenser pressure-B(5065) and the condenser pressure-F(5067) in the direction shown in the Figure, and then overlay the prism holder(5025 set) on the condenser holder (5064), which is held in position from the beneath thereof by means of four setscrews (B31-1.7×2).
3. Mount by means of one middle pulley-B axis(9154) and one setscrew(B11-1.7×2.5) with care for the meter needle of the meter moving coil(4391). Insert the AV middle pulley-B (4073) into the pulley-B axis(9154) and also embed the coupling washer(E-0.8) into the pulley-B axis.
4. Clean the surface of the condenser lens(5804) and insert the pentagon prism(5803 set) into the prism holder(5025 set). Hold the prism pressure spring(5069) in position by means of one setscrew(B11-1.7×3) and engage the bended portion of the pressure spring(5069) with the pressure support spring(5072).
5. Withdraw the AV coupling string(4080) of the camera body to the front side of the camera body. Then mount the viewfinder and the meter block on the camera body, in such a manner that they may not clamp the lead wires, by means of three prism holder setscrews (9132) temporarily.

### 6. Adjustment of parallax;

Hold the eye-piece frame(5061 set) in position by means of two setscrews(9158). Mount the standard lens to the camera body and set it to the infinity position. Then look the image of the collimator and:

- \* When the image is lowered as illustrated in the Figure right, lower the viewfinder frame and;
- \* When the image is raised as illustrated in the viewfinder frame.

### 7. Adjustment of finder back;

Loosen three setscrews(9132) for the prism holder and raise or lower three adjustment screws(9101) for adjusting focus. (See Fig. 25).

Fig. 23

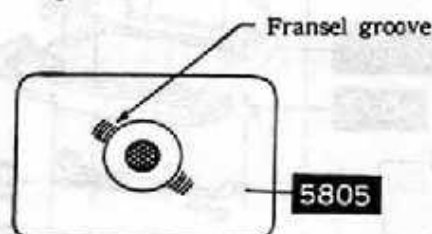
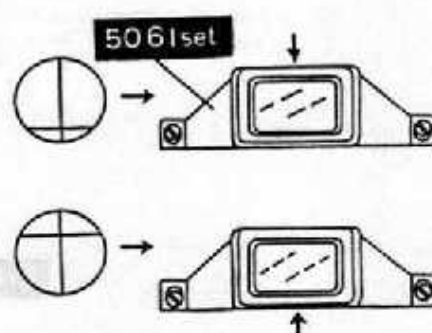


Fig. 24



When the adjustment is to be made from the beginning, turn the adjustment screws about three turns to raise them from their initial positions where the adjustment screws have been screwed first. Then, start adjustment from such raised positions. When adjustment is made, care should be taken not to disconnect the lead wires or give damage to the meter since the yare located adjacent the adjustment screws. When the following adjustment from a) to d) is made and when you look the image, care must be taken to lightly press or hold the pinchers portion. Then, tighten three setscrews(9132) and check again if the image is in focus at such tightened position.

Fig. 25

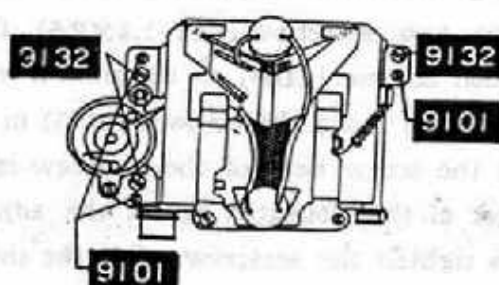


Fig. 26

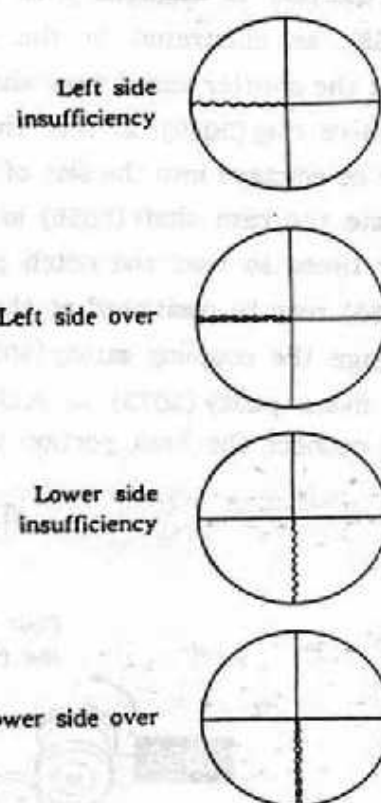
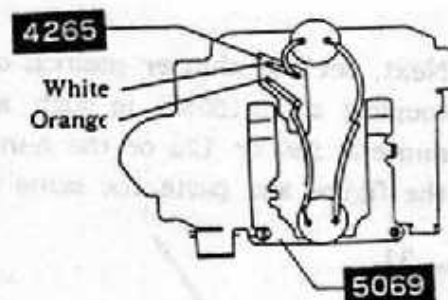


Fig. 27



- a) When the left portion is of a wave form as illustrated in the right figure, the left side is insufficient so that the focus adjusting screw on the left must be lowered for adjustment.
  - b) When the left portion is of crossing waves form, the left side is over or in excess so that the left side focus adjusting screw must be raised for adjustment. Conversely when the right side is of a wave form or crossing waves form, the right side is insufficient or excess respectively, so that the right side focus adjusting screw must be adjusted accordingly.
  - c) When the lower portion is of a wave form as shown in the right figure, the lower side is insufficient so that the lower focus adjusting screw must be lowered for adjustment.
  - d) When the lower portion is of crossing waves form, the lower side portion is in excess so that the lower side focus adjusting screw must be raised for adjustment. Conversely when the upper portion is of a wave form or crossing waves form, the upper side is insufficient or in excess respectively so that the right and left side focus adjusting screws must be adjusted.
8. Connect to the wire cord lug plate(4275) below the following pointer base plate the lead wire (black colored) from the front side of the camera body by soldering. Pull out from below the pressure spring (5069) and connect the lead wires (white and orange colored) to the wire printed plate(4265) by soldering as indicated in the figure. Take out two setscrews(9158) and the eye-piece frame(5061 set).



9. Engage the connecting string for a pointer (5053) and loosen two setscrews (B11-1.4×2.5) for the index position adjuster (2163) on the shutter mount base plate -A. Then move the adjuster (2163) in such a manner that the screw head of the setscrew is located at the center of the elongated slot of the adjuster (2163) and then tighten the setscrew. Set the shutter base plate -A to bulb and one knot portion of the index coupling string (5053) is inserted through the hole of the joint gear (2154) on the shutter mount base plate A and pulled out outwardly of the camera body from the beneath of the film sensitive ring (2010) so that the knot portion is engaged with the slot of the adjuster (2163), as illustrated in the figure. Rotate but not twist the shutter speed cam shaft (2156) underneath the sensitive ring (2010) so that the coupling string (5053) may be engaged into the slot of the string pulley (4017). Rotate the cam shaft (5056) in the clockwise direction four times so that the notch portion of the cam shaft (5056) may be positioned at the right overhead position. Engage the coupling string (5053) with two position of the index pulley (5073) in such a manner that the coupling string (5053) may not be twisted and connect the knot portion to the notch portion of the index spring outer tube (5056).

Fig. 28

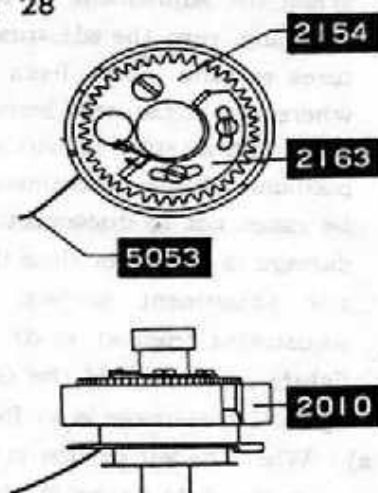


Fig. 29

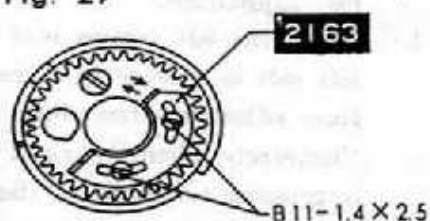
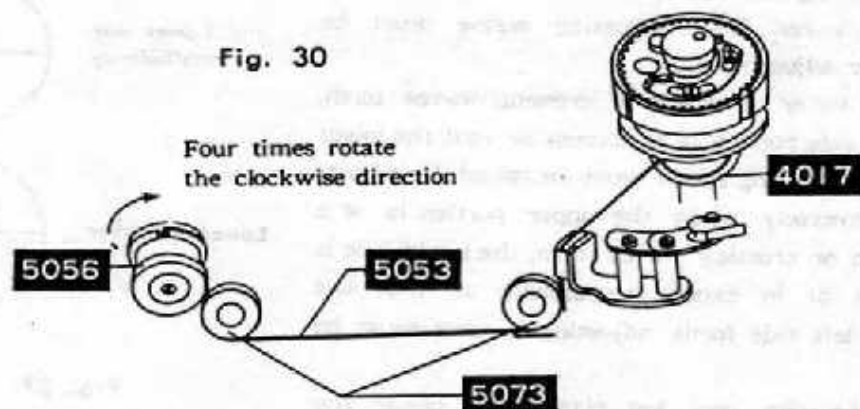
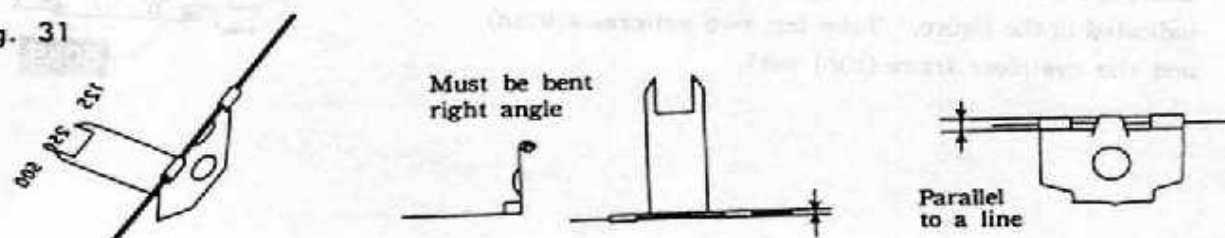


Fig. 30



Next, set the shutter position of the shutter base plate A to 250 or 125 and install the coupling string (5053) in such a manner that the coupling string (5053) may be set to the numeral 250 or 125 or the numeral indicator plate within the view-finder as illustrated in the figure and paste the same in position.

Fig. 31



Look through the view-finder and rotate the joint gear(2154) of the shutter base plate A so as to actuate the shutter speed index(5057) from the numeral plate letters B to 1000 within the view-finder. When the speed index(5057) is actuating in such manner that it swings to the right and left, as illustrated in the figure 32, the speed index(5057) is pressed against and slides on the index adjusting plate(5071) or the prism holder.

There fore, check the shape and the fixed position of the speed index(5057). Further, when the exposed part of the speed index(5057) varies as illustrated below, the index coupling string(5053) is twisted so that the coupling string(5053) must be released and engaged again correctly. (Fig. 32).

Fig. 32

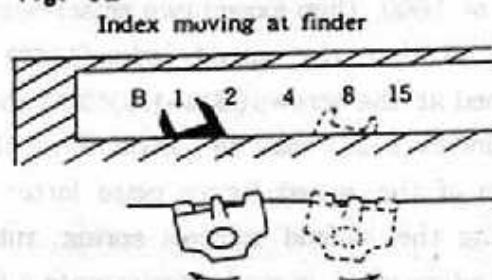
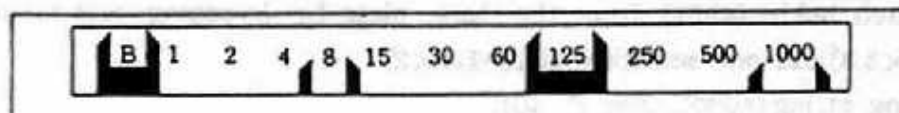


Fig. 33

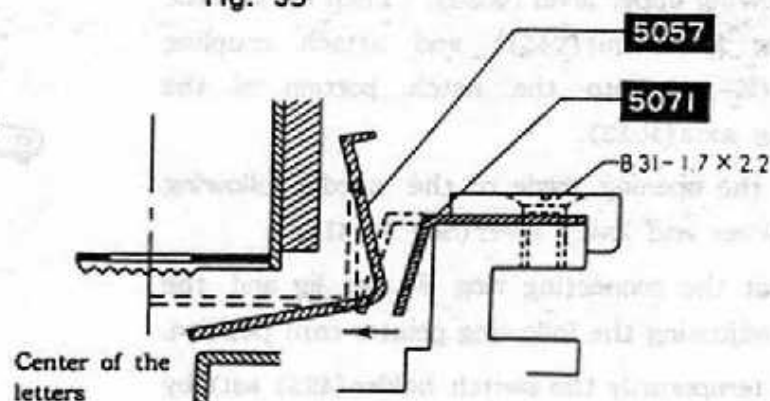


When the tip end of the speed index(5057) is positioned lower than the numeral plate center within the view-finder, move the speed index(5057) from B to 1000 of the numeral plate. When the speed index(5057) is positioned at the lowest position in the movement from B to 1000, loosen two setscrews(B31-1.7×2.2) so as to push forward the adjusting plate (5071) and adjust and tighten the screws so that the tip end of the speed index(5057) may be positioned at the center of the letters.

Fig. 34



Fig. 35

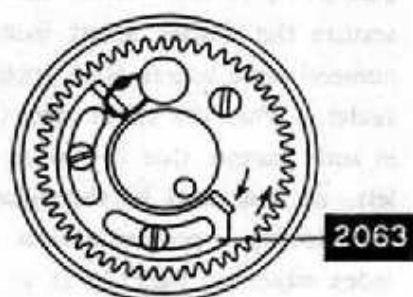


Conversely, when the tip end of the shutter speed index(5057) is overexposed above the letter center of the speed figure plate, release the knot portion of the index coupling string(5053) from the notch or slot portion of the index spring outer tube(5056) and rotate both lateral strings of the speed index(5057) to your side so that they may be made contact with the index adjusting plate(5071), and then attach the outer tube(5056). Finally rotate the joint gear(2154) of the shutter base plate A so as to be set to the shutter



speed of 1000, then loosen two setscrews (B11-1.4  $\times$  2.5) so that the speed index (5057) may be positioned at the screws (B11-1.4  $\times$  2.5) so that the speed index (5057) may be positioned at the lowest position of the speed figure plate letter 1000 by adjusting the second curtain spring tube (2063). When adjustment is made, reciprocate a few times the speed index (5057) so as to settle the string, and then check the position.

Fig. 36



10. Clean the viewfinder glass of the eye-piece frame (5016 set) and attach the same by two frame setscrews (5061 set) and attach the same by two frame setscrews (9158). Then adjust the parallax. (See P. 27).
11. Withdraw the switch holder (4251) from the base plate by loosening and taking out one setscrew (B11-1.7  $\times$  3.3) and one setscrew (B13-1.4  $\times$  2).
12. Attach AV coupling string (4080). (See P. 40).
13. Adjust the needle following cam position. (See P. 41).
14. Insert the return spring (4057) with its bended portion being placed upwardly into the needle following axis (4052) of the needle following base plate and insert the rotate axis (4054). Attach the return spring (4057) to the rotate axis (4054 set) as illustrated in the Figure and then insert the following upper lever (4056). Then tighten the following lever nut (9451) and attach coupling washer (E-1.2) into the notch portion of the following axis (4052).
15. Adjust the opening angle of the needle following upper lever and lower lever (See P. 41).
16. Take out the connecting ring F4 set jig and the jig for adjusting the following pointer cam position.
17. Attach temporarily the switch holder (4251 set) by two setscrews (B11-1.7  $\times$  3.3, B13-1.4  $\times$  2) and make the adjustment of the AV safety switch contactor. (See P. 42).
18. Check the brightness. (See P. 55).
19. Loosen and take out one setscrew (B31-1.7  $\times$  2.5) of the speed dial, and then take out the speed dial scale plate (2151), the sensitive plate sheet (2153 set), the sensitive plate spring (2005) and the speed dial ring (2155). Then, attach the top cover. (See P. 25)

Fig. 37

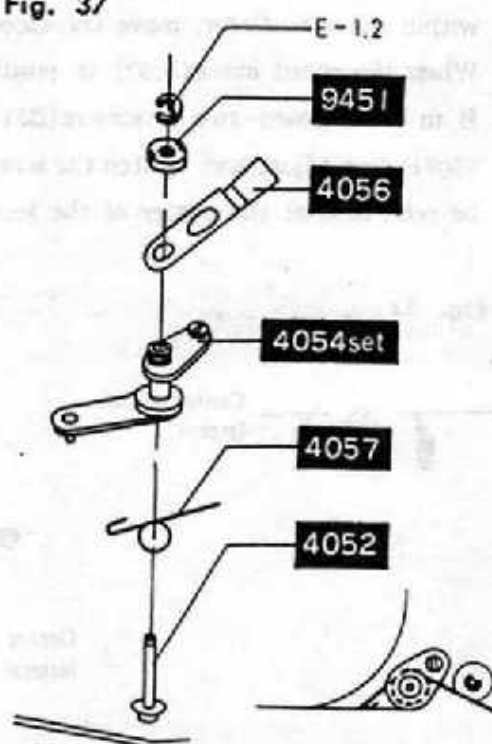
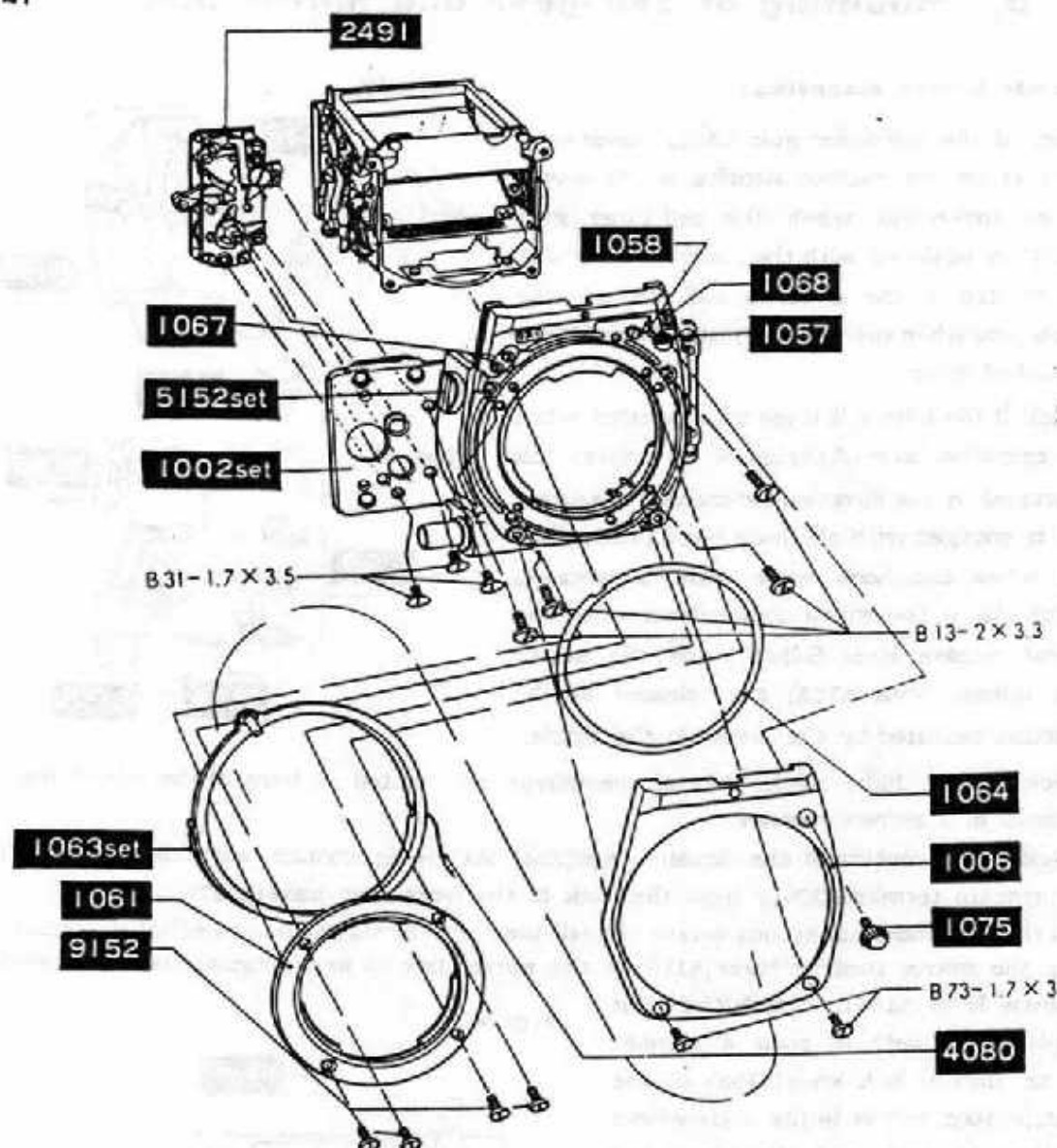
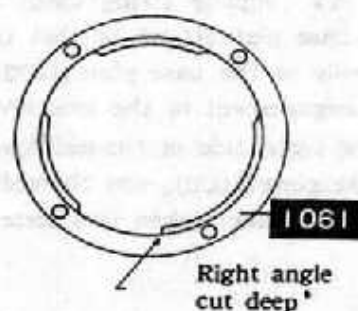


Fig. 41



5. Withdraw the coupling string (4080) upwardly, and then engage the notch portion of the coupling ring washer (1064) with the projection of the coupling ring stopper (1067).
6. Engage the knot portion of the coupling string (4080) into the inside of the slot of the back of the aperture coupling ring (1063), and then paste the same. Then, attach the aperture coupling ring (1063).
7. Mount the bayonet (1061) at such a position as indicated in the figure by four bayonet setscrews (9152).
8. Mount the lock button (1075).

Fig. 42





#### Check points after mounting :

- \* Check if the self-gear actuates correctly.
- \* Check if the coupling string (4080) extending backwardly of the base plate (1002 set) actuates lightly and smoothly when the coupling string (4080) is lightly pulled back so as not to be disengaged from the pulley and when the connecting ring is actuated by means of the connecting ring pin. If the movement of the coupling string (4080) is heavy, the cause is that the washer (1064) is deformed or the front cover (1006) is attached to the wrong position. Check and make suitable countermeasures against such defects.
- \* Check if the mirror lifts up when the mirror lock is lowered and if the mirror comes down when the mirror lock is returned to its initial position. When and if there is something wrong with the mirror lock, adjustment for the mirror lock must be made according to the following instruction:

#### Mirror lock adjustment :

Push the operation lever-A (5153) of the mirror box in the direction indicated by the arrow and engage with the hook lever plate (5169). Then release the hook lever plate so as to hold the mirror in a clear position. (See Fig. 43). In this position, check if the clearance between the mirror lock release lever (5153) and the tip end of the mirror lock lever-A (5118) is in the order of 0.5 to 1.5mm when looking down the mirror box from above. When the mirror lock is out of order, the cause is that the clearance is less than 0.5 mm or the mirror returning lever fails to click in because the mirror lock release lever (5135) touches the mirror box. Disengage the engagement of the returning lever (3154) and the release lever-B (5117) of the mirror box so as to let the mirror come down. Displace slightly the mirror lock knob (5152) from its click in position and make an adjustment for the clearance by bending the bended portion of the release lever (5135) is spaced apart by the maximum distance from the attaching boss for the front frame of the mirror box.

Fig. 43

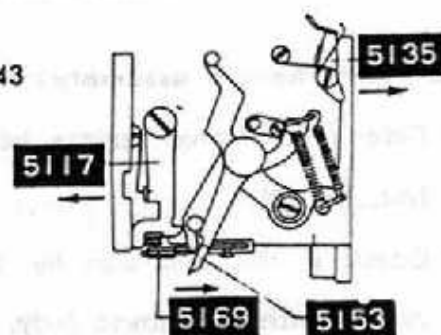


Fig. 44

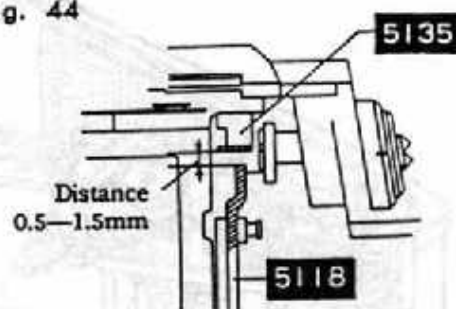
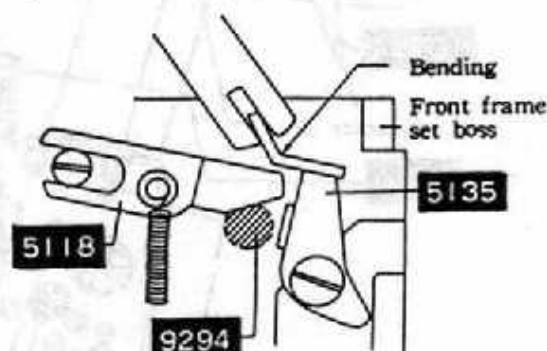


Fig. 45

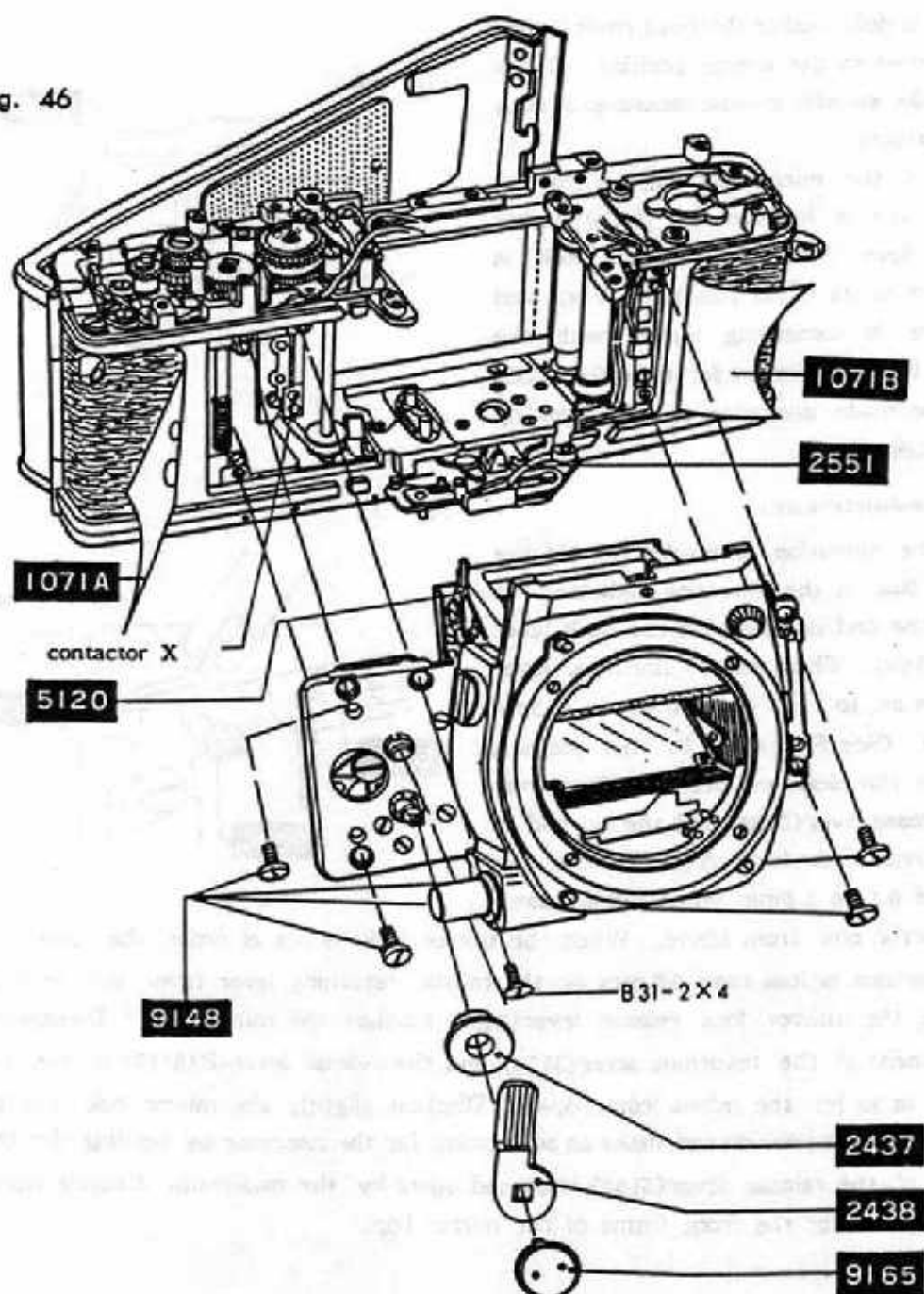


## E. Assembly of Front base frame

### Check points before assembly :

- \* Refer to the check points before and after mounting of the self-time gear and the box. (P. 32).
- \* Check if the lead wire for the X terminals of the camera body is placed along in contact with the camera body.

Fig. 46





1. Release the shutter and push the mirror operation lever-A(5153) of mirror box to arrow way then hook the hook lever plate(5169) to operation lever-A and set free the hook lever plate(5169) also keep the mirror in its clear position. Hold the support starting lever(5125) by your finger and withdraw the coupling string(4080) upwardly of the camera body. Coincide the slot of the molt plane at the bottom of the mirror box to the pre-set lever-A(2551) of the camera body so that the front base plate(1002 set) may be fitted into the camera body. Release the lever of self-gear from the hole in the front side of the base plate(1002 set) and tighten four setscrews(B11-2×3.5).
2. Body back adjustment: Set the shutter speed dial to B, than stay open the shutter curtain, next open the back cover and place the mask cover scale anvil with its projection portion being positioned at the right. Fit the body over the projected portion of the mask cover scale anvil and place the dial guage upon the washer place. Then, slide the dial guage up and down, to the right and left and further along the diagonal lines and measure the dimensions of the four corners. Loosen four setscrews(B11-2×3.5), and rotate four body back adjustment screws(9112) which can be seen from the opening of the front frame so that the body back may be positioned in the order of  $43.7^{+0.03}_{-0}$ mm and the parallelism in the order of 0.02 mm. The body back adjustment screw may be raised or lowered by 0.35 mm upon one rotation of the screw. When the screw is rotated angularly about 10 degrees of angle, the screw can be raised or lowered by 0.1mm. After adjustment, tighten one setscrew(B31-2×4) and also tighten four setscrews(B11-2×3.5).

Fig. 47

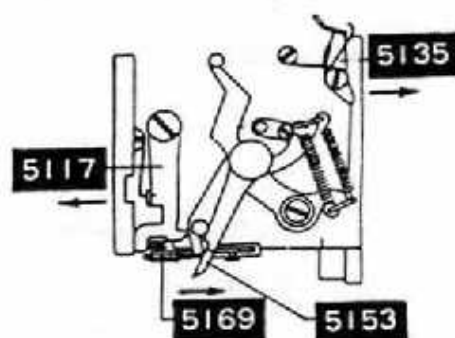
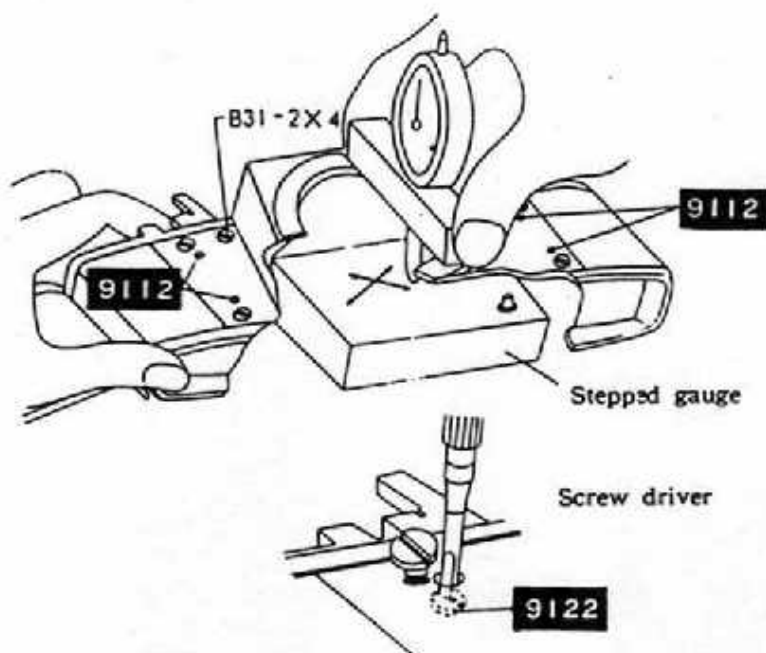
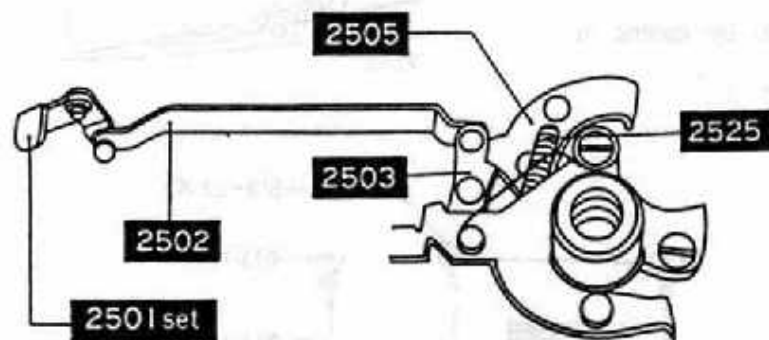


Fig. 48



3. Mount the viewfinder and the meter block. (See P. 27).
4. Mount the winding lever to the winding base plate and then wind the winding lever. If the mirror is raised in the course of winding, the engagement between the release lever-B (2503) and the pre-set lever-B (2505) is not correctly made so that the pre-set lever-B spring (2525) must be strengthened and the release lever coupling arm (2502) must be bended for adjustment.
5. Paste over the camera body the front leather-A,B (1071-A,B) and attach the self-timer bush (2437) and the charge lever (2438). Then tighten the charge lever setscrew (9106).
6. Take off the winding lever and mount the top cover. (See P. 25)

Fig. 49





## F. Mounting of Following needle base plate

1. Consolidate or place in order the lead wires as indicated in the figure. Align the elongated slot of the bottom of the rewinding shaft bearing (3351) of the needle following plate with the look plate (1151) and embed base (lead wires). Then attach the shaft bearing (3351) by means of three setscrews (B13-1.7×3).
2. Withdraw the base plate (4072) forwardly of the camera body and after inserting the lead wire (white colored) of the wire printed plate (4265 set) as indicated in the figure attach the base plate (4072) by means of two setscrews (B13-1.7×3).

Fig. 50

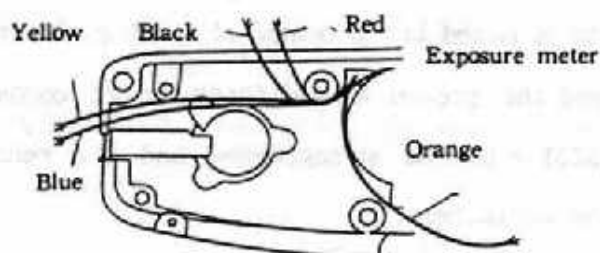


Fig. 51

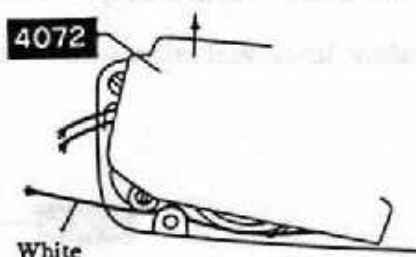
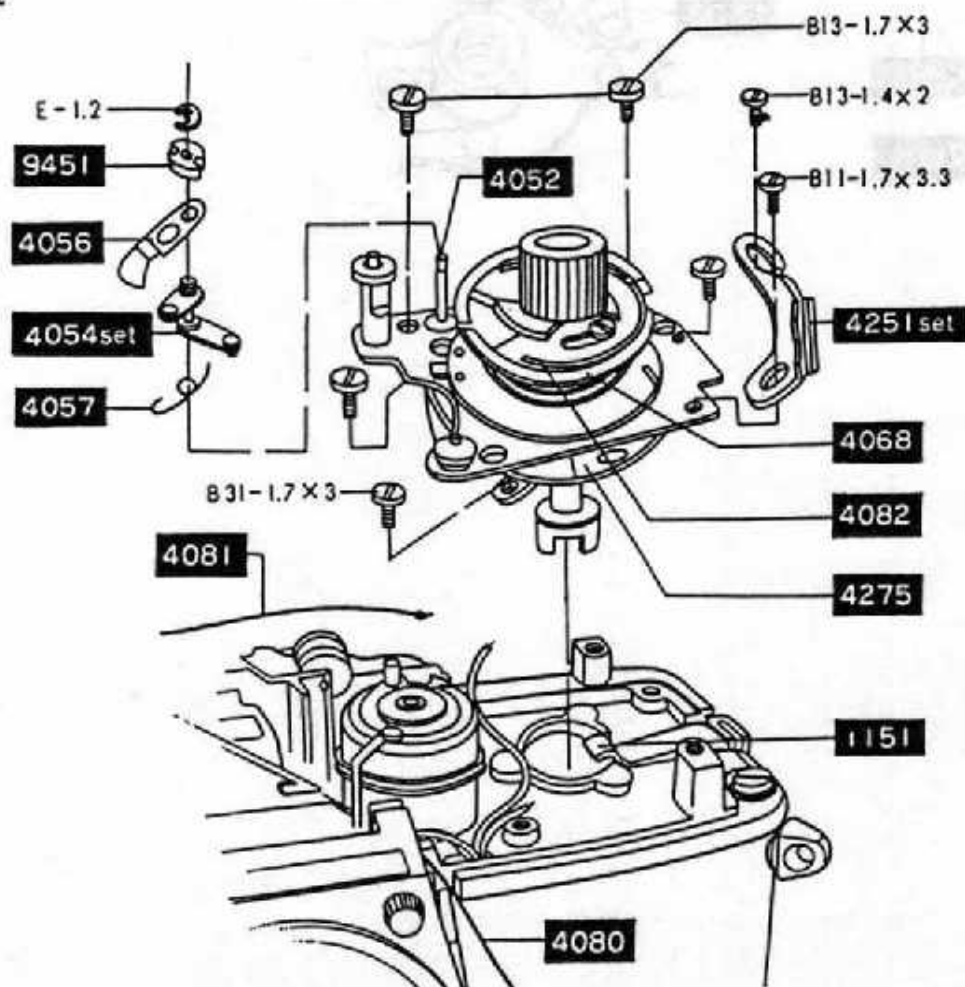


Fig. 52



### 3. Attachment of AV and TV strings:

Attach the MC standard F1.4/58mm lens to the body bayonet mount and set the diaphragm ring to F4. Then attach the TV pulley press nut jig (03Y-0013-79) to the rewinding shaft. One knot portion of the TV coupling string (4081) is to be inserted into the slot of the film sensitive ring (2158) of the shutter base plate-A, and then pull out the coupling string (4081) below the sensitive ring (2158). (See Fig. 53). Fix the speed dial ring (2155), the sensitive plate spring (2005), the sensitive plate sheet (2153 set) and the speed dial scale plate (2151) to the shutter base plate-A by means of one setscrew (B31-1.7×2.5). (See P. 24) Set the speed dial to 1/30 sec. and ASA 50.

Rotate about two and half turns the following pulley holder (4070) of the needle following base plate (4072 set) in the counter clockwise direction and attach the needle following cam position adjustment jig (03Y-0007-79). Rotate the aperture value pulley (4069) in the clockwise direction so that the switch lever (4058) attached to the pulley (4069) and made of bakelite is abutted against the pin of the jig plate. (See Fig. 54) The lengths of the AV coupling string (4080) and the TV coupling string (4081) are 195mm and 237mm respectively. When they are exchanged, the permissible dimension of the knot portion must be within the order of  $\pm 1\text{mm}$ . Otherwise, adjustment after attaching the strings can not be made. When the strings are attached, care should be taken not to overlay the AV string (4080) and the TV string (4081) on each other.

Fig. 53

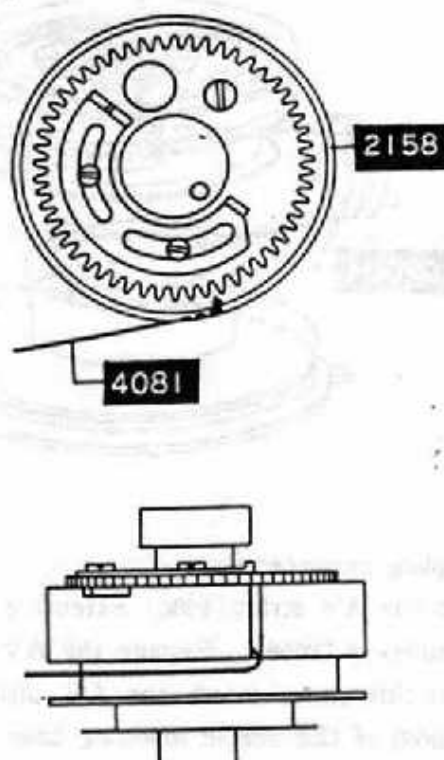


Fig. 54

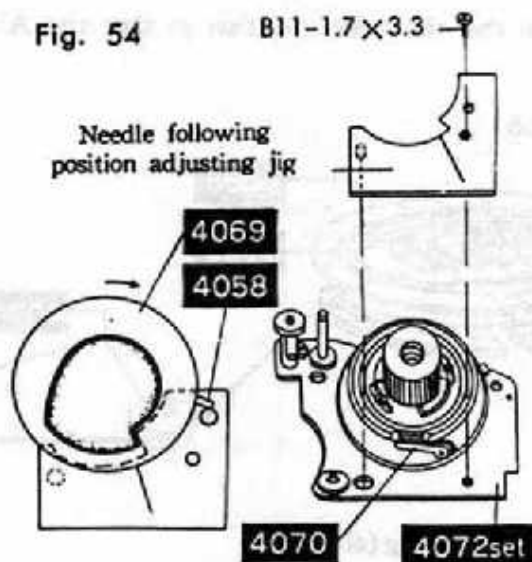
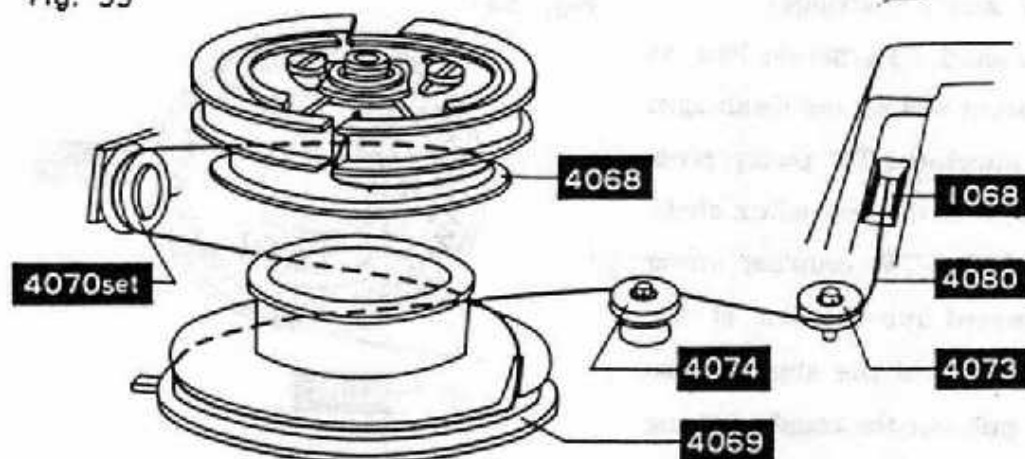




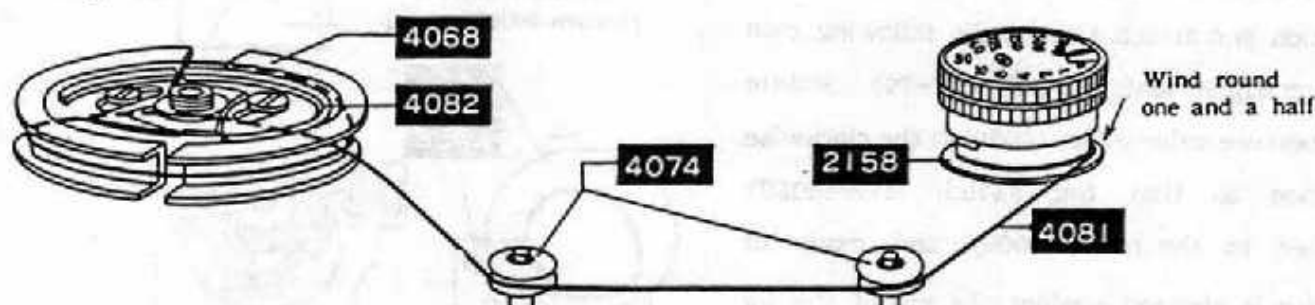
Fig. 55



4. AV coupling string (4080):

Check if the AV string (4080) extending from the front frame is not disengaged from the middle pulley-A (1068). Engage the AV string (4080) to the middle pulley band-C (4073, 4074). In this state, insert the AV string (4080) into the slot provided around the AV pulley (4069) of the needle following base plate in the clockwise direction. Insert the AV string (4080) into the slot portion of the AV pulley (4069) and then wind around the pulley of the pulley holder (4070 set) from the lower side thereof. Engage the knot portion with the upper slot portion from the beneath of the TV pulley (4068), which is then turned lightly in the clockwise direction so that the AV string (4080) may be tightened.

Fig. 56



5. TV coupling string (4081):

First set the camera to EV 9, that is ASA 50, shutter speed 1/30 sec. and F4 and then wind about one and a half turn in the clockwise direction the TV string (4081) extending from the shutter base plate-A around the film sensitive ring (2158). Wind the TV string (4081) around the middle pulley-C (4074), two places, and also around the TV pulley (4068) of the needle following base plate in the counter clockwise direction about one turn. The string must be passed into the inside from the notch portion of the TV pulley (4068) as indicated in the figure and the knot portion must be engaged with the notch portion of the adjusting ring (4082).

6. Cam position adjustment :

Loosen two setscrews(B11-1.4×1.6) of the adjusting ring(4082) and rotate the TV pulley(4068) in the clockwise direction and the adjusting ring(4082) in the counterclockwise direction so that the AV and TV (4080, 4081) may be tightened. The knot portion and the portion inserted in the slot of the AV string(4080) are pasted to hold it in position. Paste the only knot portion of the TV string(4081). Set the camera to EV 10, that is ASA 50, shutter speed 1/60 sec. and F4 and loosen two setscrews(B11-1.4×1.6) to move the adjusting ring(4082) for adjustment so that the straight portion of the following pointer coincides with the EV 10 line of the following cam position adjustment jig(03Y-0007-79).

7. Insert into the needle following axis(4052) of the base plate(4072 set) the following return spring(4057) with its bended portion being facing upwardly, and insert the needle following rotate axis(4054 set). Engage the return spring(4057) with the rotate axis(4054 set) as indicated in the figure, and insert the following upper lever(4056). Then, tighten the following lever nut(9451) and fit the coupling washer(E-1.2) into the notch portion of the following axis(4052).

8. Needle following lever opening angle adjustment :

This is the adjustment for calibrating the errors and deviation of the following cam and the meter following needle. Set the camera to EV 10 that is ASA 50, shutter speed 1/60 and F4 and then adjust by rotating the upper lever eccentric pin(9208) of the rotate axis (4054 set) so that the following needle within the meter may coincide with the checker point in the figure.

9. Take out the lens or connecting ring F4 set jig and the following cam position adjustment jig.

Fig. 57

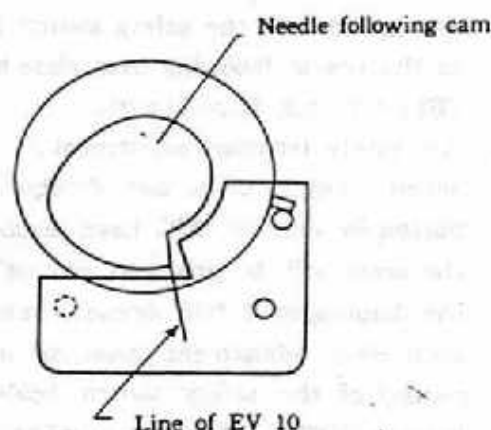


Fig. 58

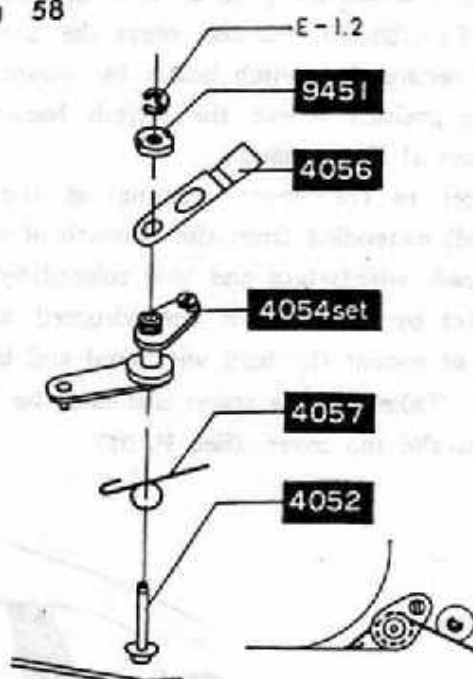
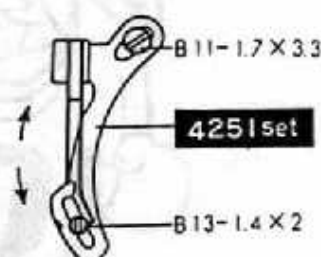
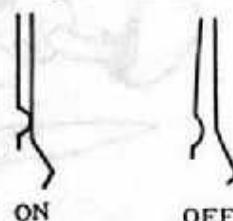


Fig. 59



At wide open      At close down





10. Set temporarily the safety switch holder(4251 set) to the needle following base plate by two setscrews (B11-1.7×3.3, B13-1.4×2).

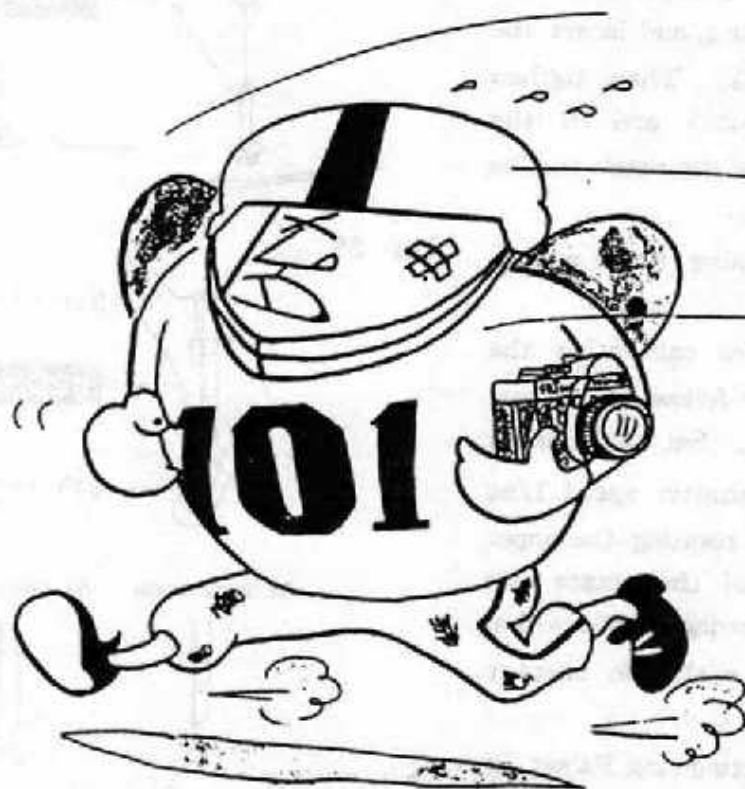
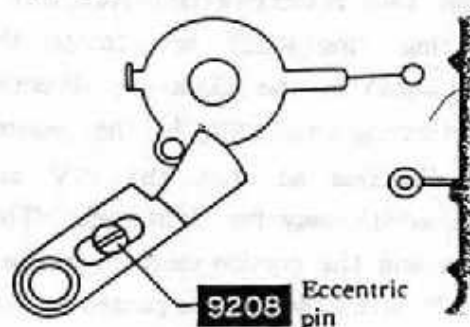
11. AV safety terminal adjustment:

When taking a photo and depressing the pre-view button in case of MC Lens(erroneous operation), the error will be produced except the case when the diaphragm is fully opened. In order to eliminate such error, adjustment must be made so that the contact of the safety switch holder(4251 set) will

become "OFF" when the coupling ring of the camera body is deviated from the fully opened position by even a little distance. Attach to the camera body the MC standard F1.4/58mm lens and move the switch holder(4251 set) forwardly and backwardly. Then secure the switch holder by means of two setscrews(B11-1.7×3.3, B13-1.4×2) at such a position where the switch becomes "OFF" on the MC standard lens diaphragm ring out of F1.4 position.

12. Connect to the upper terminal of the switch holder(4251 set) the lead wire (black colored) extending from the beneath of the base plate(4072) and to the lower terminals the leads wire(white and blue colored) by soldering.
13. Connect by soldering to the wirecord lug plate(4275) below the following needle base plate or mount the lead wires(red and blackcolored) from the front side of the camera body. Take out the speed dial and the TV pulley press nut.
14. Mount the top cover. (See P. 25)

Fig. 60



## G. Mounting of Aperture setting mount

### Check point before mounting :

\* Make it sure that the reducing lever plate spring (2574) of the aperture reducing base plate (2571 set) is bended as illustrated in the figure and that the reducing rub plate (2572) must slide lightly when the rub plate (2572) is rotated in the direction indicated by the arrow in the figure.

1. Insert the charge lever axis receiver (3157) into the charge lever-B (3169) of the bottom of the camera body. Move the rub plate (2572) of the base plate (2571 set) to the direction indicated by the arrow in the figure 61 so as to abut against the rub plate axis-A (9363), and in this state mount the reducing lever plate spring (2574) by one setscrew (B11-2×3.5) to the camera body so that the spring (2574) may extend forwardly of the pre-set lever-A (2551) of the camera body. (Because of lack of figure, this item may be mistranslated.) (See Fig 63.)
2. Set the charge lever-B axis (9052) to the base plate (2571 set) and insert the rub plate spring (2580) and the charge lever-B spring (3170) into the charge lever-B axis (9052) for engagement as indicated in the Fig. 62. Insert the coupling plate spring (2582) into the shoe rivet pin-F (9380) and engage as indicated in the Fig. 62.

Fig. 61

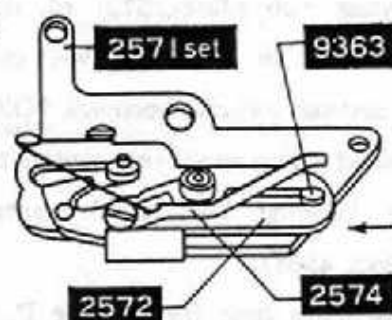


Fig. 62

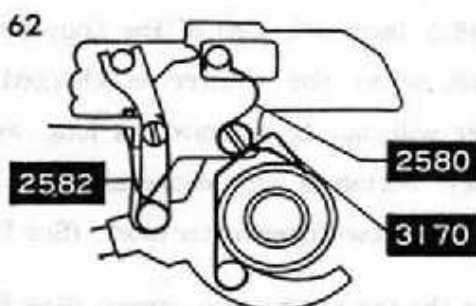


Fig. 63

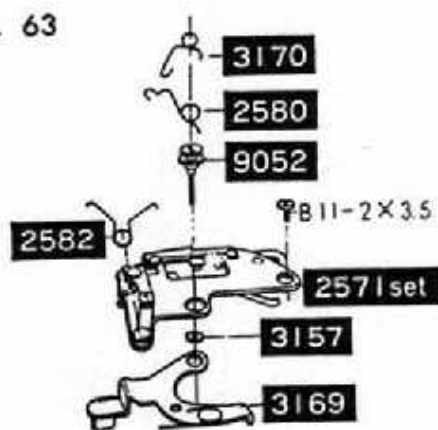
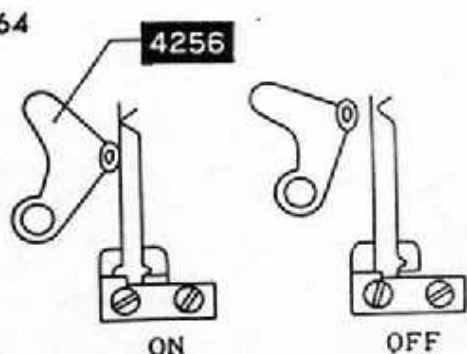


Fig. 64





3. The shutter of the camera body is cocked and then adjustment must be made so when the reducing rub plate(2572) of the base plate(2571 set) is pushed down once the aperture setting switch becomes "OFF" and when pushed down again the switch becomes "ON" by bending the switch contactor-A and B(4260, 4261).
4. Mount the front base frame. (See P. 35)
5. Adjust by rotating the support lever adjusting pin(9385) (eccentric pin) of the body bottom so that when the shutter is charged the shutter will not be released as long as the pre-view button is kept depressed.
6. Mount the view-finder meter block. (See P. 27)
7. Mount the top and bottom covers. (See P. 25)

Fig. 65

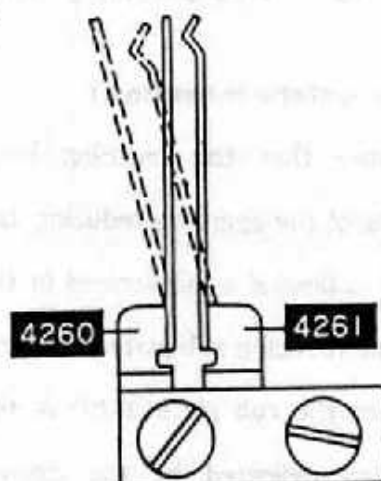


Fig. 66

