

Mamiya

SERVICE INSTRUCTIONS

for

Mamiya M645

M645₁₀₀₀S


Mamiya
CAMERA CO., LTD.
TOKYO, JAPAN

General Specifications
for
Mamiya **m645**

General Specification for Mamiya M645

Camera body

Camera Type :

6 x 4.5cm electronic focal-plane shutter SLR.

Film Type :

120 roll-film for 15 exposures,

220 roll-film for 30 exposures

Standard Lenses :

Mamiya-Sekor C (multi-coated)

80mm f/1.9, automatic diaphragm,

with meter coupler, 67mm filter size

Mamiya-Sekor C (multi-coated)

80mm f/2.8, automatic diaphragm,

with meter coupler, 58mm filter size

Lens Mount :

Mamiya M645 bayonet mount

Shutter : M645 1000S

B, 8--1/1000 sec.

Moving Coil Electronic Focal-Plane Shutter,

FP and X (1/60 sec.) synchronization,

Shutter release lock and shutter speed dial lock
provision

M645 500

B, 8--1/500 sec.

Moving Coil Electronic Focal-Plane Shutter,

FP and X (1/60 sec.) synchronization,

Shutter release lock provision

Battery Type :

One 6V silver-oxide battery

(Eveready 544, UCAR 544, Mallory PX28)

Focusing Method :

Each Mamiya-Sekor lens is equipped with its own
helicoid focusing mount

Focusing Screen :

The standard focusing screen, which is interchangeable, has three focusing aids, a central split-image rangefinder spot (wedge set at a 45° angle) surrounded by a micro-prism collar and outer ground glass ring.

A Fresnel lens assures corner-to-corner brightness, and 94% of the picture-taking area is visible.

Mirror :

Instant return, with mirror lock-up provision

Film Transport : For M645 1000S

A single revolution of the interchangeable film advance crank transports the film. The camera is equipped with double exposure prevention, but multiple exposure can be easily made.

For M645 500

Film advance knob equipped with crank, film transported with single turn of film advance crank.

Exposure Counter :

Progressive type, automatic reset, automatic changeover with insertion of 120/220 roll-film inserts

Battery Check :

Depressing B.C. button illuminates green L.E.D. if battery condition is satisfactory.

Multiple-Exposure :

Lowering multiple-exposure lever makes multiple-exposures possible; exposure counter does not move during multiple-exposures.

Delays Shutter Release : For only M645 1000S

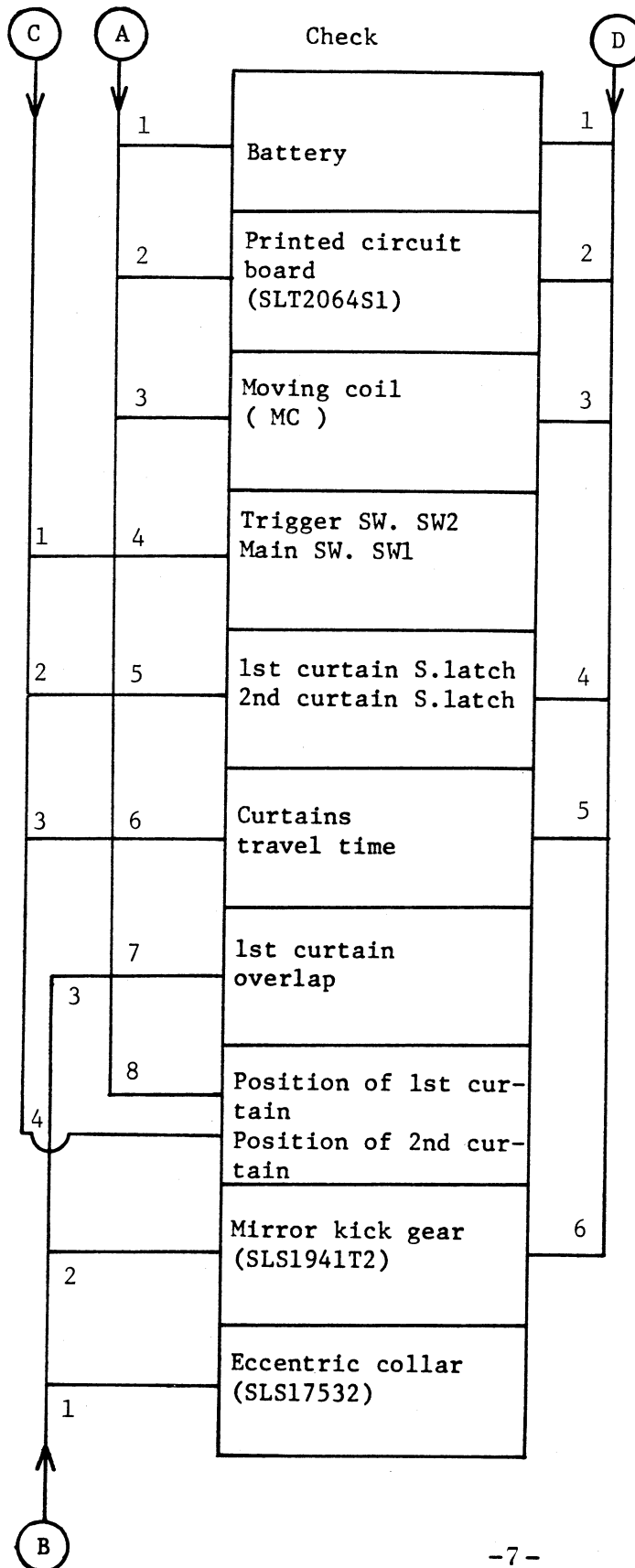
Variable time delay of 5-10 seconds.

Depth-of-Field Preview Lever : For only M645 1000S

Spring-loaded, self-returning.

Trouble Shooting
for
***Mamiya* M645**

- ✕ (A) Inaccurate Shutter speed at 1/1000ms (SLS 1/500ms)
 (B) Difference Shutter speed at Mirror UP
 (C) Shutter runs, but not exposed (Shutter Tester indication numeral not stop)
 (D) 2nd Curtain not run



Point	
Voltage 6 V.	
Earth, Soldering, Short, Broken	8-3 8-4
Operation Short	8-2 8-4
Out of the position of spring, SLS17651, 13841 Operation, Contact efficiency	5-1
Out of the position of spring, SLS17451, 17551 Operation, Play	
	4-4
Adequate overlap Warp of curtain metal	3-2~I 5-1
S.charge gear No.1 S.charge gear No.3 Parallel of the cur- tains	3-2
Moving	3-2~E
Adjustment	5-2

Malfunction of Bulb

(See 5-4)

SLS2045T1
Bulb switch lever

Contact efficiency
of Brush

SW 3. Bulb
Switch

X.synchro. contact

(See 5-3)

Shutter bounce
and speed

Delay time

1st curtain bounce

(See 4-4)

Check curtain
travel time

SLS1845T1
X.Gear position

SLS18652 Spring,
out of position

Remaining Curtain metal
at 1/1000 (SLS 1/500)
and B

BC.lamp not illuminate

(See 8-4)

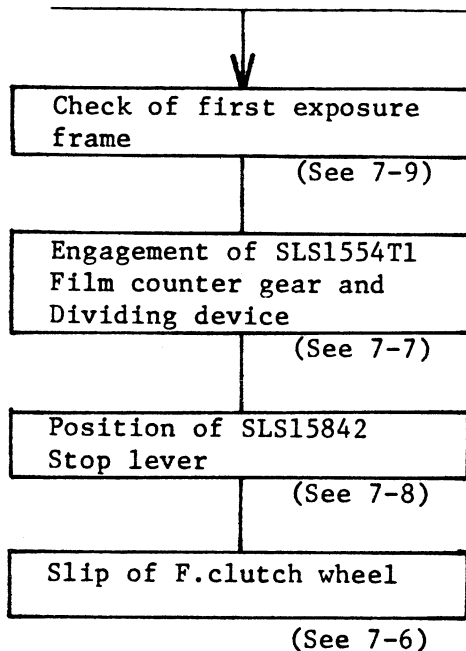
Battery voltage

Current of Battery
chamber

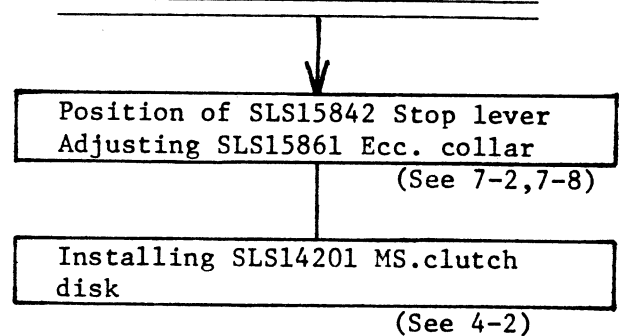
Current to BC
circuit

Change BC.lamp

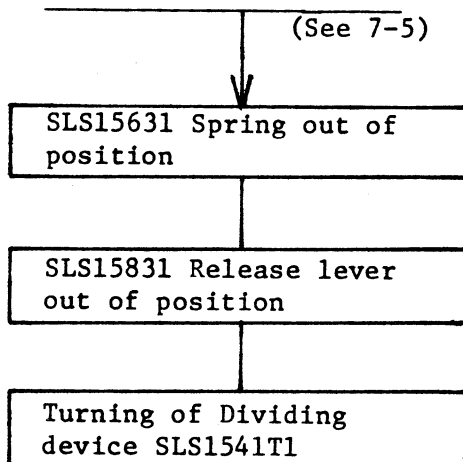
Overlap between exposure frames
Lack of last exposure frame



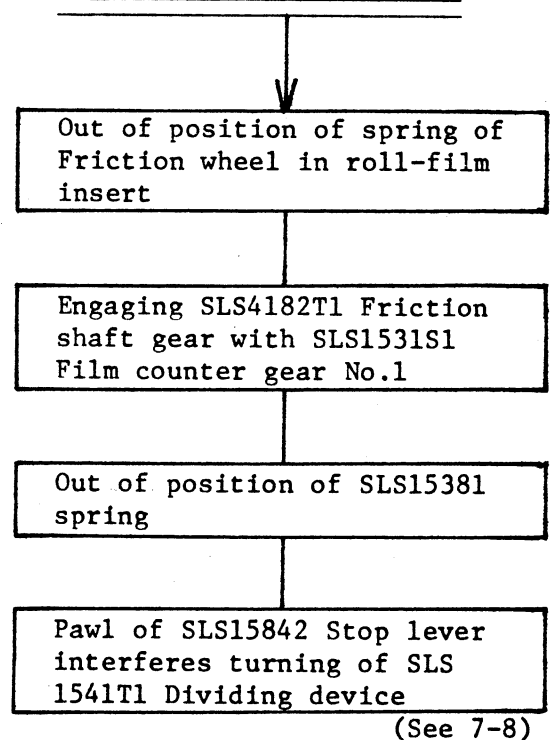
Film winding is stopped on way
from "S" to No.1

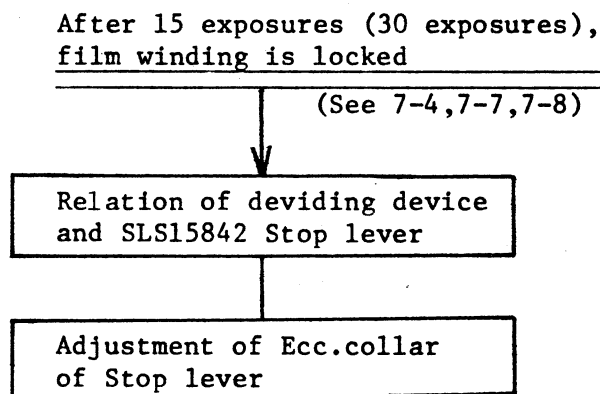
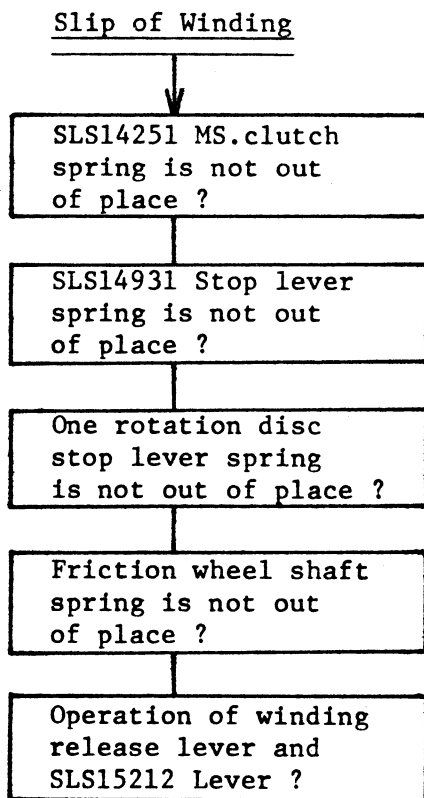
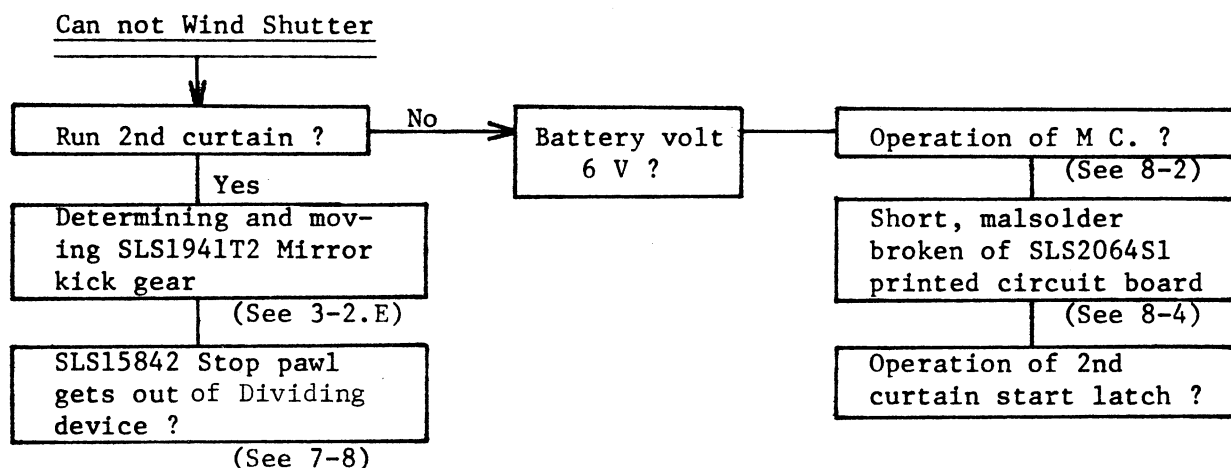


Film counter not reset
to its start position
(See 7-5)



Not advance film exposure
counter





Note : Film advance would not be made by a single revolution of film advance crank or knob, but it will be made by two revolution with empty spool.

Heavy and creak Winding

SLS14611 Winding cam strikes SLS14501 winding base plate

Lack of oil for spool gear in roll-film insert

Lack of Shutter curtain shafts and bearings

Creak of each gear and rack gear

Warp of curtain metals

Space between Roller of the roll-film insert and SLS11241 Roller on film rail way in body is narrow ?

Note : If so, change the both SLS41411 Shaft bearing and SLS41531 Shaft bearing to new ones.

After winding, mirror rises up

Loosening screw for SLS14201 MS.clutch disc gear

Clearance of 2nd curtain start latch and protrusion of S.gear No.3
(See 3-2.G)

SLS2551T1 Mirror release lever is set in crank disc

Not release by delayed Shutter release

(See 5-5)

Operation of delayed shutter release

Is its lever coupled with SLT23151 Coupling lever ?

Adjustment of release stroke ?

Battery exhaustion

(See 8-4)

Touch of main switch
SW1 contacts ?

Operation of Moving Coil ?

Short of leadwire for MC. ?
(White and Brown)

Short of leadwire for
Battery chamber ?

Short of other circuit ?

Short in P.D Prism finder
circuit ?

Repair Manual
for
Mamiya m645 Camera Body

CONTENTS

	Page
1. <u>Disassembly and reassembly of left and right side panel, front cover, bottom plate and F.body, M.body</u>	20
<u>1-1 Removing and attaching the film advance crank and knob</u>	20
A Removing the film advance crank	"
B Attaching the film advance crank	"
C Removing the knob	21
D Attaching the knob	"
<u>1-2 Disassembly and reassembly of SLS16101 Left side panel</u>	22
A Disassembly	"
B Reassembly	"
<u>1-3 Disassembly and reassembly of SLT16201 Right side panel</u>	22
A Disassembly	"
B Reassembly	"
C Disassembly and reassembly of M645 500(SLS)	"
<u>1-4 Disassembly and reassembly of SLT2131T1 Front cover</u>	23
A Disassembly	"
B Reassembly	"
C Disassembly and reassembly of the front cover of M645 500	"
<u>1-5 Disassembly and reassembly of SLT16401 Bottom plate</u>	24
A Removal	"
B Reassembly	"
C Dis- and re-assembly of bottom plate of M645 500	"
<u>1-6 Disassembly and reassembly of F.body and M.body</u>	25
A Disassembly of SLS13101 Winding base unit, F.body and M.body	"
B Reassembly	26

2. <u>Shutter mechanism and Mirror housing mechanism</u>	27
2-1 <u>Cocking shutter</u>	27
2-2 <u>Charge of mirror drive spring</u>	28
2-3 <u>When pushing down shutter release botton</u>	"
2-4 <u>Winding mechanism</u>	29
A Stop mech.	"
B Release of shutter release lock	"
C Unlock of winding	"
D Lock of shutter release	30
2-5 <u>Mirror LOCK-UP mechanism</u>	30
A Mirror-UP	"
B Release of Mirror-UP	"
C Replacement of mirror	31
3. <u>Disassembly and reassembly of shutter curtain</u>	32
3-1 <u>Disassembly</u>	32
3-2 <u>Assembly of shutter curtain unit</u>	33
A Installing the shutter curtain unit into the M.body	"
B Check and adjustment of parallel of 1st curtain metal	34
C Determining 2nd curtain	35
D Adjusting parallel of 2nd curtain	36
E Installing SLS1941T2 Mirror kick gear	"
F Determining SLS1721T1 MS.gear No.2	37
G Clearance of 2nd curtain start latch and protrusion of S.gear No.3	"
H Installation of S.charge gear No.3	38
I Determining 1st curtain	40
J Installing SLS19611 Ornament cover and SLS19662 Bracket	"
K Assembly of F.body, M.body, Winding base unit, Bottom plate and etc.	"
L Replacement of only 2nd curtain unit	41

4.	1st curtain brake, position of MS.clutch and timing <u>When the MS.clutch is detached</u>	Page 42
4-1	<u>42Installing X.synchro gear and 1st curtain brake</u>	42
A	Installing X.synchro gear	"
B	Installing 1st curtain brake	"
4-2	<u>Installing SLS14201 MS.clutch disk</u>	42
4-3	<u>Timing when the SLS14201 MS.clutch is detached</u>	43
A	Adjustment	"
B	Check	"
4-4	<u>Check and adjustment of 1st curtain bounce</u>	44
A	Adjusting curtain travel time	"
B	Check and adjustment of 1st curtain bounce	"
5.	<u>Adjustment of shutter speed</u>	46
5-1	<u>Adjusting shutter speed at quick return of mirror</u>	46
A	Adjustment	"
5-2	<u>Adjusting shutter speed at Mirror-UP</u>	47
5-3	<u>Flash synchronization</u>	49
A	X-contact	"
B	FP-contact	50
5-4	<u>Bulb mechanism</u>	51
A	Operation	"
B	Main cause of B. malfunction	"
5-5	<u>Delayed Shutter Release</u>	52
A	Replacement of Delayed shutter release	"
B	Operation	"
C	Check	"
D	Adjustment	"
5-6	<u>Release stroke the shutter release button</u>	53
A	Release stroke	"
B	Adjustment	"

	Page
6. <u>Body flange back and Finder infinity</u>	54
6-1 <u>Body flange back and flat of bayonet face</u>	54
A Check	"
B Adjustment	55
6-2 <u>Mirror angle 45° degress</u>	56
A Check	"
B Adjustment	"
6-3 <u>Adjusting infinity(∞) of Finder focus</u>	57
A Check	"
B Adjusting infinity	"
7. <u>Film transport mechanism</u>	58
7-1 <u>Film transport</u>	59
7-2 <u>From start mark to the first exposure</u>	60
7-3 <u>Exposure counter No.2....</u>	"
7-4 <u>After 15 exposures for 120,30 exposures for 220</u>	61
7-5 <u>Reset to starting position "S"</u>	62
7-6 <u>Multiple-Exposure mechanism</u>	63
7-7 <u>Determine SLS1554T1 Film counter gear</u>	64
A Determine SLS15611 Stopper	"
B Determine SLS1541T1 Dividing device	"
7-8 <u>Position of SLS15842 Stop lever</u>	65
A New SLS15842 Stop lever	"
B Old type stop lever	"
7-9 <u>Check and Adjustment of the first exposure frame position</u> <u>on film</u>	67
A Check the first exposure frame position	"
B Adjustment	"

	Page
8. <u>Moving Coil mode, Electronic circuit and parts</u>	68
<u>8-1 Electronic circuit</u>	68
A The exposure time control capacitor C1 discharges	"
B Beginning of charge to C1 capacitor	"
C Determining exposure time	"
D Charge to capacitor C2	"
<u>8-2 Replacement of the moving coil</u>	72
A Check by Tester	"
B Replacement of the moving coil	74
<u>8-3 Replacement SLT2064S1 Printed circuit</u>	75
A Adjusting the variable resistor as shown in Fig.92	"
<u>8-4 Check electronic circuit by Tester</u>	76
A Circuit	"
B Parts	77
C Main cause for battery exhaustion	79

1. Disassembly and reassembly of left and right side panel, front cover, bottom plate and F.body, M.body

1-1 Removing and attaching the film advance crank and knob

A. Removing the film advance crank

- 1 Rotate the film advance crank until it stops.
- 2 Rotate it counterclockwise approximately 20° while simultaneously pushing in on the release lever (A), and it will detach as shown in Fig. 1.

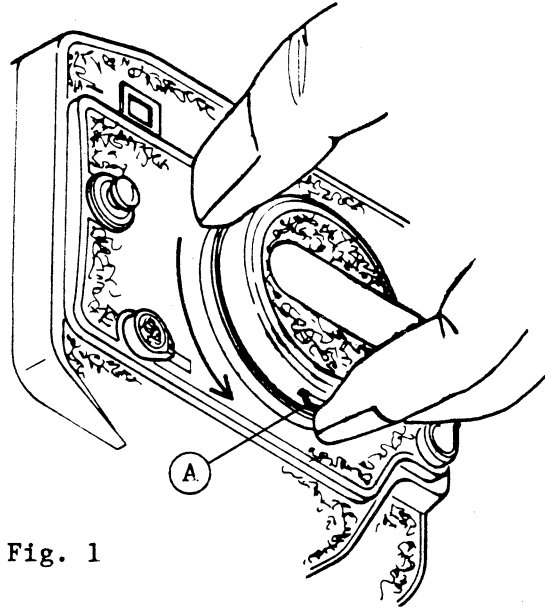


Fig. 1

B. Attaching the film advance crank

- 1 Align the red dot (B) of the camera body with the index line (C) on the film advance crank as shown in Fig. 2.
- 2 Push the film advance crank into the receptor, then twist approximately 20° clockwise while pushing in on the release lever (A), and it will lock into place.

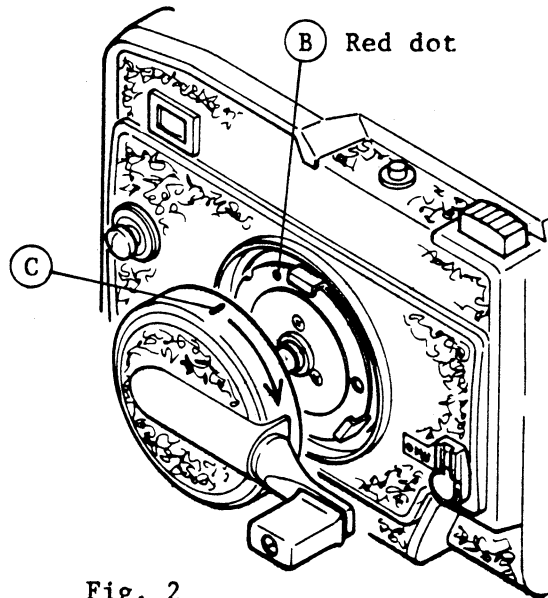


Fig. 2

C. Removing the knob

- 1 Rotate the film advance knob until it stops.
- 2 While holding the release lever ① of the knob in the UP position with a small screwdriver or suitable tool, rotate knob counterclockwise and it will disengage from camera body as shown in Fig. 3.

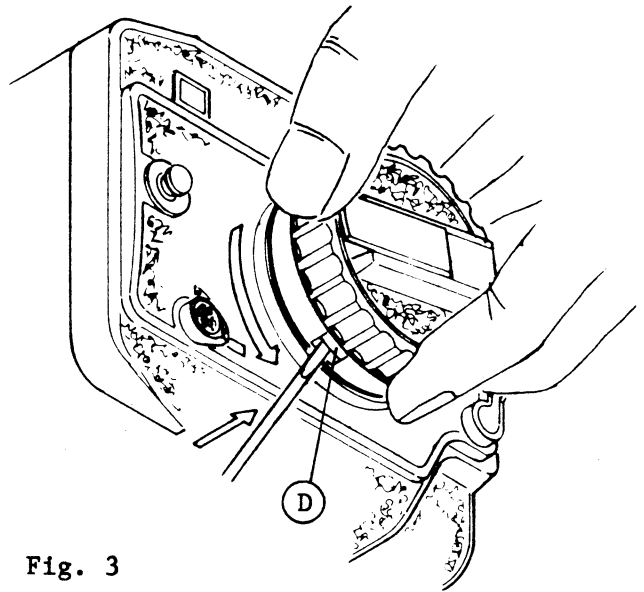


Fig. 3

D. Attaching the knob

- 1 Rotate the SLS14501 as far as it will go. Then the red dot will be facing upward.
- 2 With the release lever ① of the knob at its lowest position, place knob against the SLS14501 Knob receptor, rotating it clockwise approximately 20° and the knob will lock into place.

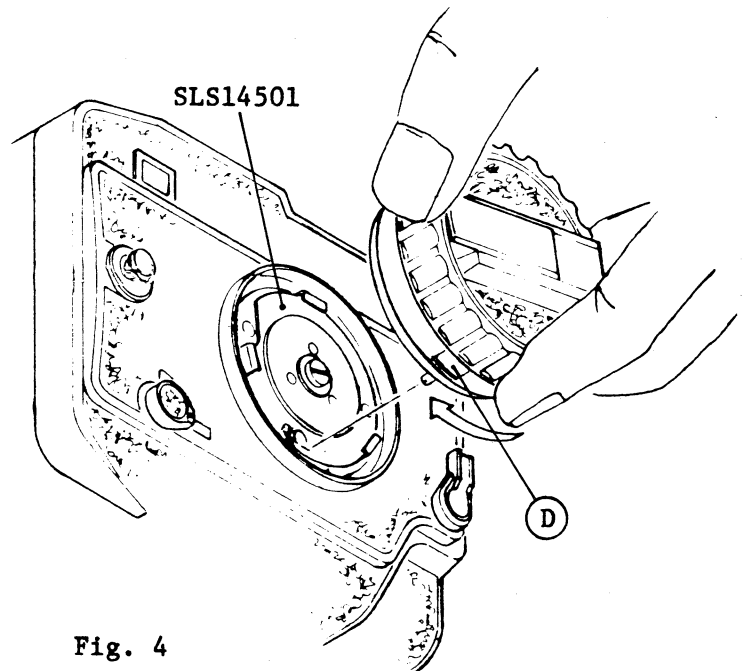


Fig. 4

1-2 Disassembly and reassembly of
SLS16101 Left side panel

A. Disassembly

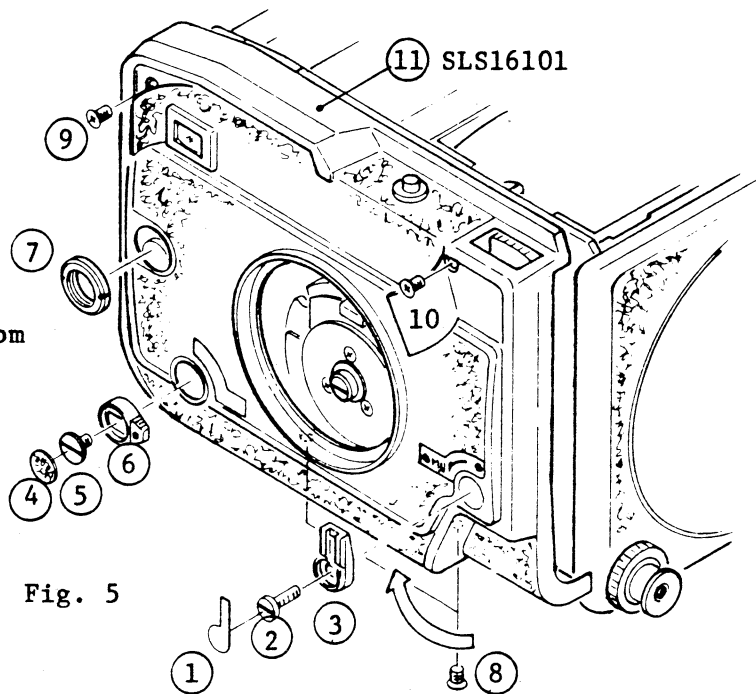
The arabic numeral in a circle as shown in Fig. 5 indicates the procedure of disassembly.

Note : When removing ⑪ left side panel, first pull its bottom a little then push it UP.

B. Reassembly

Reassembly is normally the reverse of disassembly.

Note : When attaching the left side panel, take care that SLS 15242 DX cam is not on SLS 15432 Click lever as shown in Fig. 6.



1-3 Disassembly and reassembly of
SLT16201 Right side panel

A. Disassembly

The arabic numeral in a circle as shown in Fig. 7 indicates the procedure of disassembly.

B Reassembly

Reassembly is normally the reverse of disassembly.

C. Disassembly and reassembly of
M645 500 (SLS)

As its method is quite similar with M645 1000S except shutter dial mechanism, please refer to above step A .and B .

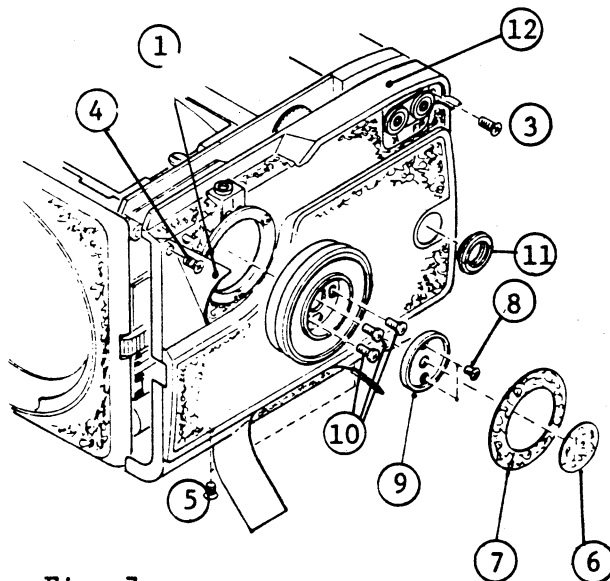
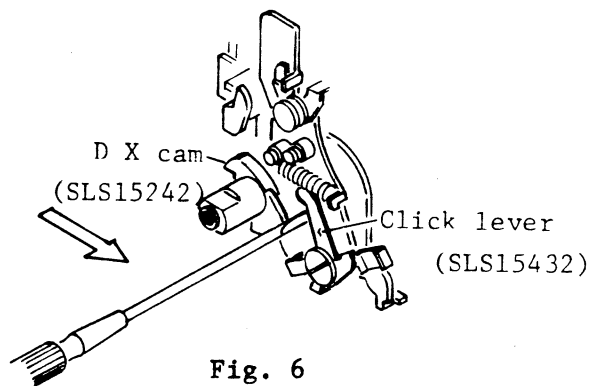


Fig. 7

1-4 Disassembly and reassembly of SLT2131T1 Front cover

A. Disassembly

The arabic numeral in a circle as shown in Fig. 8 indicates the procedure of disassembly.

B. Reassembly

Reassembly is normally the reverse of disassembly.

a. Attaching delayed shutter release lever

- 1) Attaching the SLT2331T1 Release lever temporarily and cock the delayed shutter release by rotating it then remove it again.
- 2) Attach the SLT2341T1 Activating lever in its cocked position as shown in Fig. 9.
- 3) Attach the SLT2331T1 Delayed shutter release lever, SLT23361 Spring and SLT23331 Disc.
- 4) Get the top of SLT23361 Spring through the SLT23331 Disc.
- 5) Tighten 3PD1.4x3BNi Screw loosely.
Wind the spring by turning the disc counterclockwise 90° and then tighten the screw steadily.

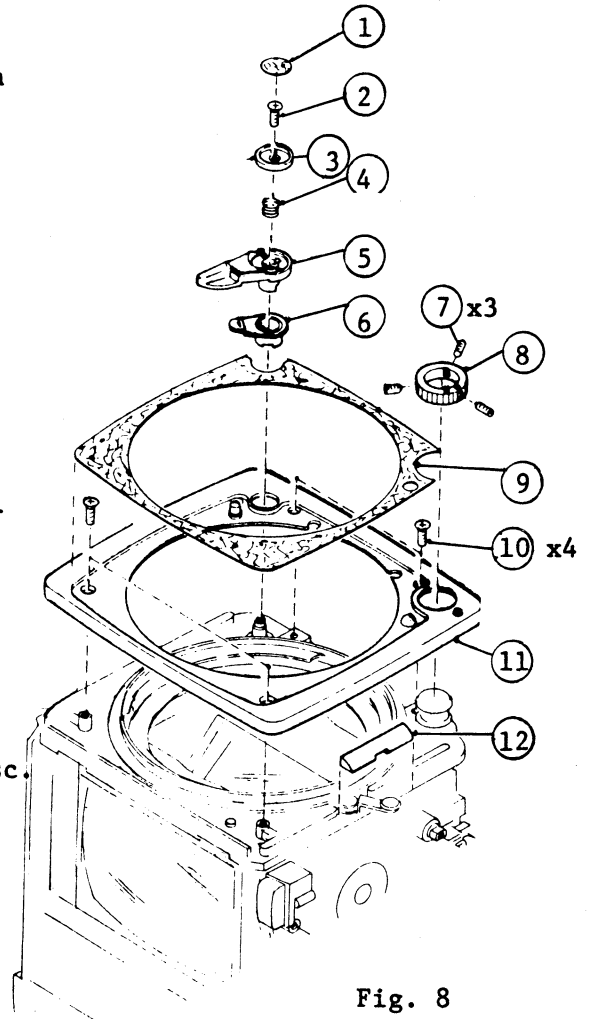


Fig. 8

C. Disassembly and reassembly of the front cover of M645 500.

M645 500 is without delayed shutter release mechanism, therefore dis-and re-assembly method is easier than M645 1000S.

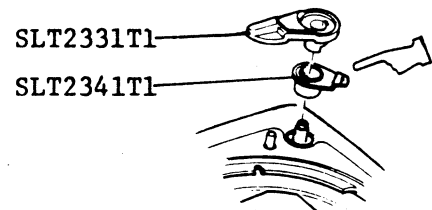


Fig. 9

1-5 Disassembly and reassembly of SLT16401 Bottom plate

A. Removal

After removing SLT29211 Leatherette, take off two PD2x5BNi and two 3PB1.7x3BNi screws. Then the bottom plate can be removed as shown in Fig. 11.

B. Reassembly

Reassembly is normally the reverse of removal.

C. Dis-and re-assembly of bottom plate of M645 500

Note : Before tightening its screws, hook end of the spring to inside of the battery chamber as shown in Fig. 10.

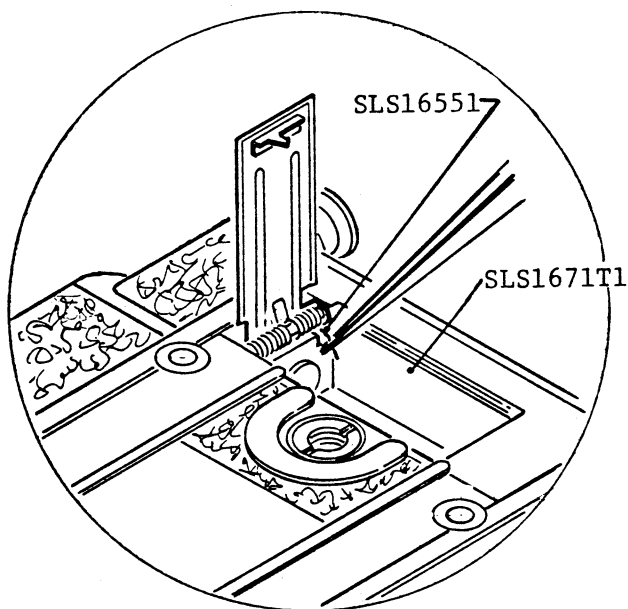


Fig. 10

1-6 Disassembly and reassembly of F.body and M.body

A. Disassembly of SLS13101 Winding base unit, F.body and M.body.

The arabic numeral in a circle as shown in Fig. 11 indicates the procedure of disassembly.

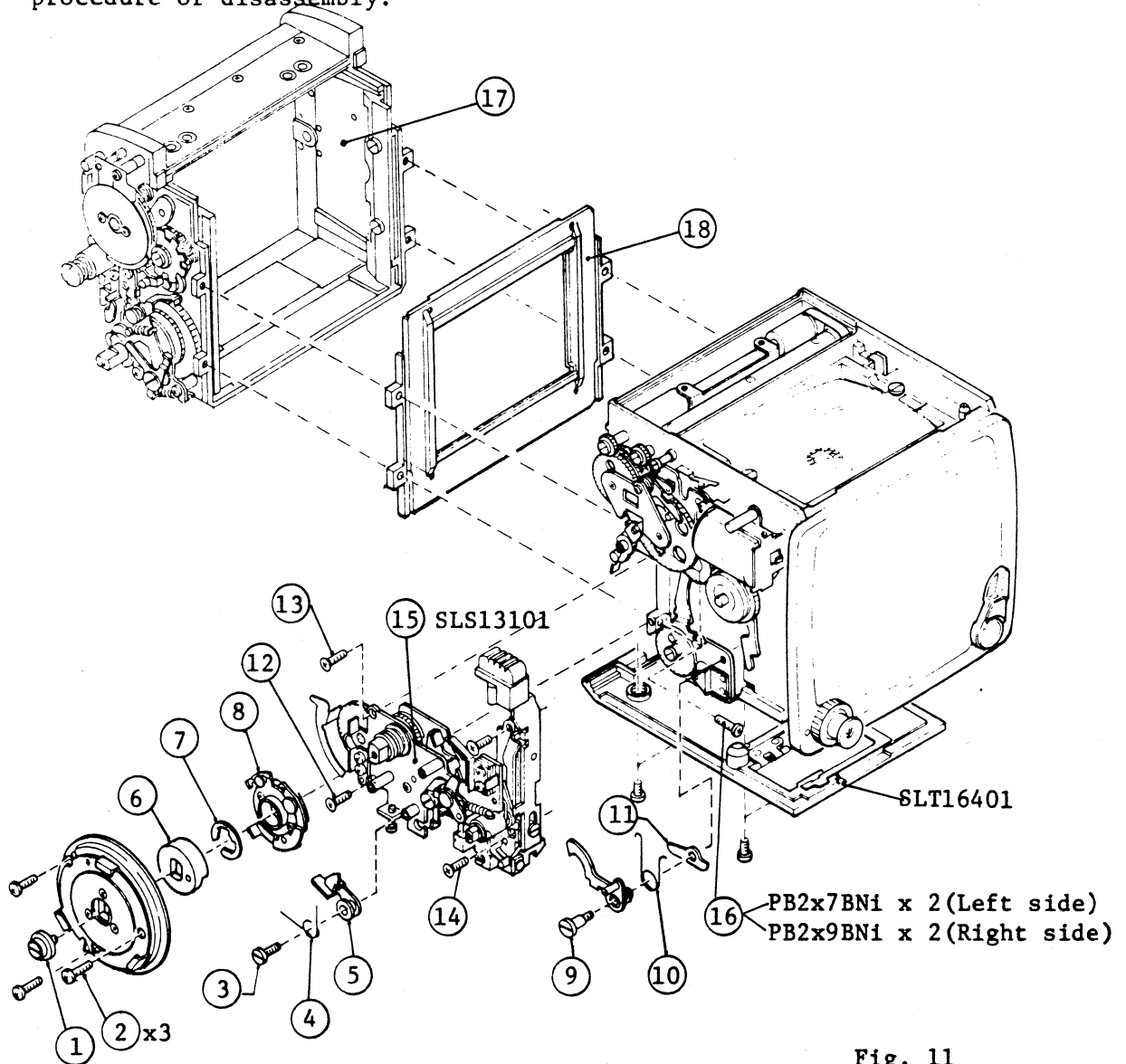


Fig. 11

Note : Before removing above, please do following points.

- 1) Unsolder SLS14351 Yellow leadwire to the trigger switch SW2, SLS14461 Pinc and SLS14471 Brown leadwire to FP-contact. Remove the SLS1355T1 Main switch SW1 by taking off its two screws PB1.7x4BNi.
- 2) Remove SLS29511 Sealing strip in bottom face.

B. Reassembly

Reassembly is normally the reverse of disassembly.

- 1) Install the (15) SLS13101 Winding base unit :
 - a. Release the shutter
 - b. While pushing and holding SLT21531 Release lever in direction shown by the arrow with right hand thumb, put the winding base unit on the body and hold it left hand as shown in Fig. 12.
 - c. When rotating the mirror lock-up lever counterclockwise 90° with tweezers or pincers, you can hear "click". Now the winding base unit will be installed into right position.
 - d. Tighten its four screws.

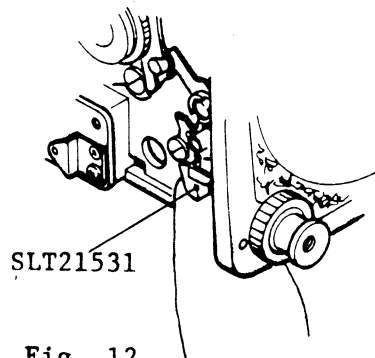


Fig. 12

- 2) After reassembling the F.body and M.body, the SLS29511 Sealing strip must be put to its position in bottom face without fault to prevent light leak.

2. Shutter mechanism and Mirror housing mechanism

2-1 Cocking shutter

- 1) When winding the film advance crank or knob,
① MS.gear No.1 turns clockwise, simultaneously ② MS.gear No.2 and ③ S.gear No.2 turn.
- 2) ③ S.gear No.2 turns ④ S.gear No.3 for 1st curtain and ⑤ S.gear No.1 for 2nd curtain by protrusion from its back side.
- 3) When ④ S.gear No.1 and ⑤ S.gear No.3 which are engaged with gears of 1st and 2nd curtain shafts rotate, both 1st and 2nd curtains are wound.
- 4) First the 1st curtain is set by ⑥ 1st curtain start latch and in succession the 2nd curtain is set by ⑦ 2nd curtain start latch.

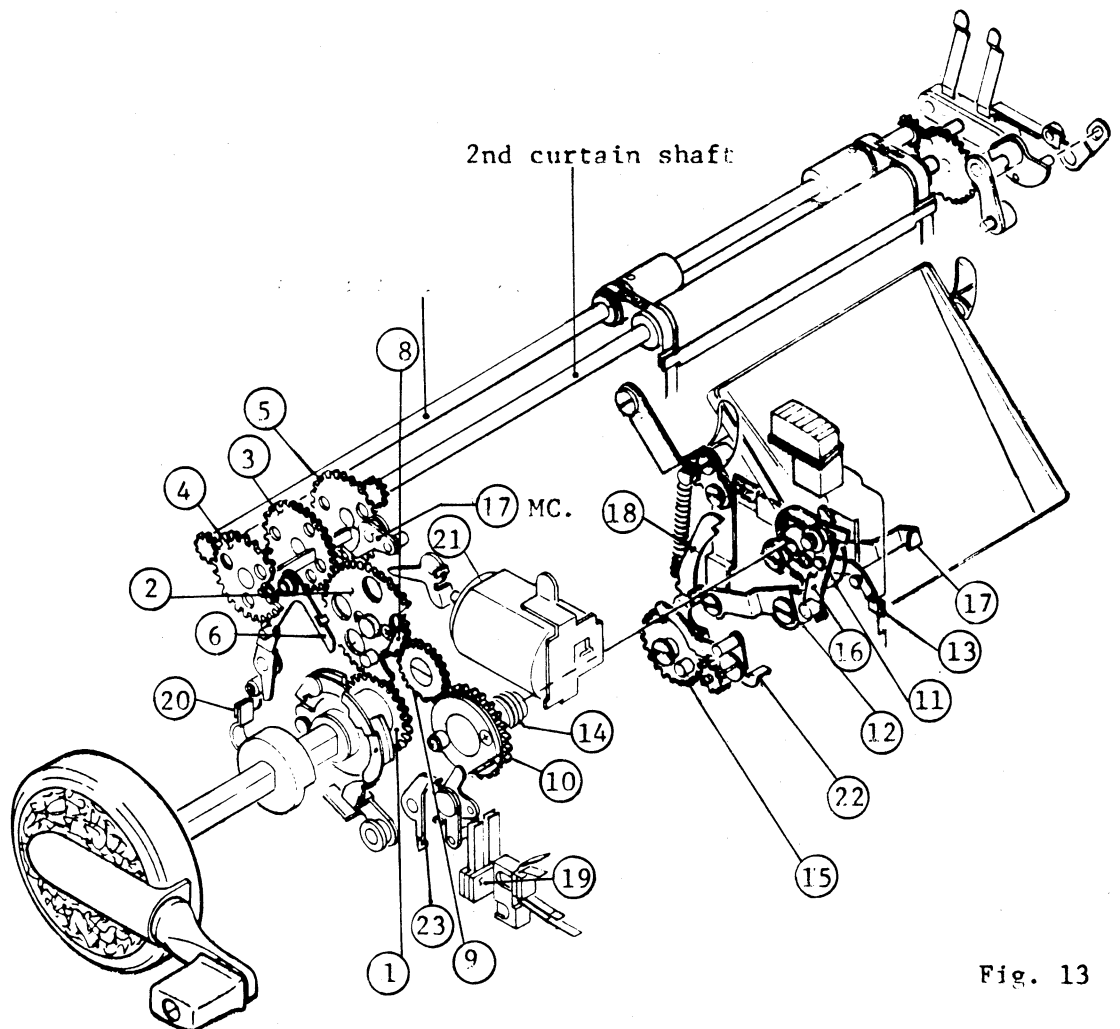


Fig. 13

2-2 Charge of mirror drive spring

- 1) When (1) MS.gear No.1 turning, simultaneously (8) M1.gear and (9) M2.gear turn and then (10) M3.gear is turned.
The (10) M3.gear and (11) mirror raising crank is in one unit.
With the (10) and (11) turned, (12) mirror raising lever and (13) mirror release lever are set.
At this time (14) mirror drive spring is fully wound.
- 2) (15) M.kick gear is also charged by 2nd curtain spring shaft gear.

2-3 When pushing down shutter release button

- 1) With the (13) mirror release lever released, the (10) M3.gear and (11) Mirror raising crank are turned clockwise by the (14) mirror spring.
- 2) Mirror goes up by (12) mirror raising lever is kicked with kick lever.
- 3) At starting of mirror raising up, (8) aperture relay lever is pressed down and aperture mechanism in lens operates.
- 4) (18) mirror raising lock holds the mirror to its raised position.
- 5) When running the (10) M3.gear, (19) SW1 main switch is switched on by the pin on the (10) M3.gear.
- 6) Also (9) M2.gear and (8) M1.gear run.
(2) MS.gear turns clockwise and then the pin of the (2) MS.gear releases (6) 1st curtain start latch.
(4) S.charge gear No.3 turns and the 1st curtain starts running.
- 7) Simultaneously (20) SW2 trigger switch is off.
Release the (7) 2nd curtain start latch by the moving coil operating.
Then the 2nd curtain runs.
- 8) At the same time, the (15) mirror kick gear is turned clockwise.
When the 2nd curtain closing, the mirror is returned to its position by setting off the (18) mirror raising lock with the pin of (15) mirror kick gear.
At this time (19) SW1 main switch is off by pushing (23) SLT13811 Hook with (22) braking lever.

2-4 Winding mechanism

A. Stop mechanism

- 1) Insert a roll of film in the roll-film insert and place it into camera body.
- 2) Align the multiple-exposure lever with the white dot.
- 3) When winding up film advance crank or knob, top of SLS15842 Stop lever goes into a hollow of SLS1541T1. And then moves (A) lever in direction shown by the arrow in Fig. 14.
- 4) When the (A) lever moving in direction → 2 → 3, (B) stopper get in cam of SLS14131 (A) rotation stop disc. Then film advance crank or knob does not wind any more.

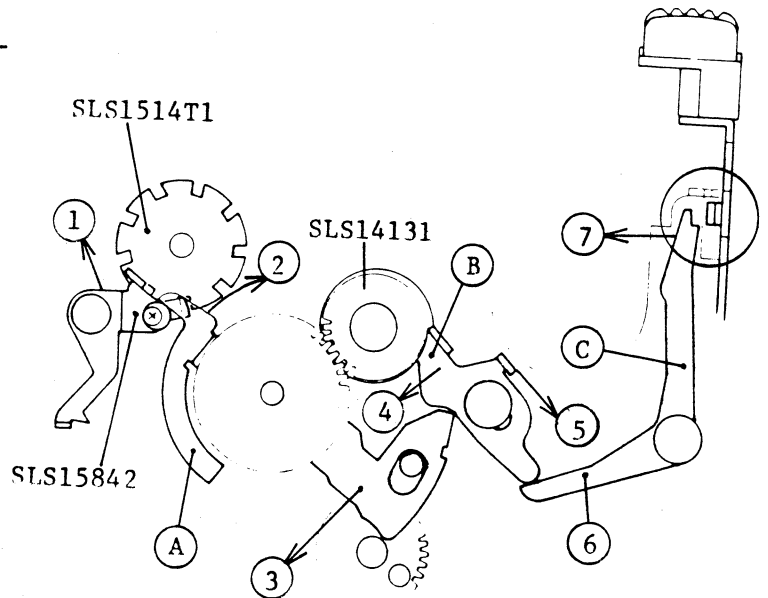


Fig. 14

B. Release of shutter release lock

- 1) When winding up more than above step A-4), the (B) stop lever is pushed down by the cam of SLS14131 (A) rotation stop disc.
- 2) (C) Shutter release stop lever is moved in direction → 6 → 7 by being pushed with tail of the (B) stopper. Then the shutter release lock becomes free.

C. Unlock of winding

- 1) When the 2nd curtain closing, the pin of SLS1941T2 Mirror kick gear kicks (A).
- 2) The (A) pushes the (B) stopper out of the cam of SLS14131 (A) rotation stop disc. Then winding is possible.

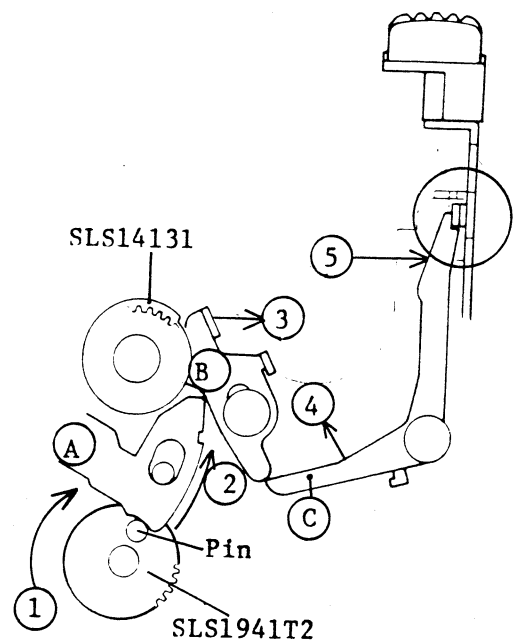


Fig. 15

D. Lock of shutter release

Getting out of the SLS14131 A rotation stop disc, the (B) stopper goes up. Continuously the (C) shutter release stop lever moves in direction → (4) → (5). Then shutter release button is locked.

2-5 Mirror Lock-UP mechanism

To lock the mirror up, merely move the mirror lock-up lever backwards, until it is horizontal.

Note : The lever may be lowered either before or after cocking the shutter.

Pressing the shutter button in this condition, only shutter runs. With the film advance crank or knob wound, the shutter is cocked and film is advanced.

A. Mirror-UP

The arabic numeral in a circle as shown in Fig. 16-1 indicates operation of the mirror up.

B. Release of Mirror UP

When return the mirror lock-up lever, SLS2471T1 Mirror arm returns, simultaneously (A) turns clockwise and continuously [2], [3], [4] and [5] operate as shown in Fig 16-2. Then return the mirror to its normal position.

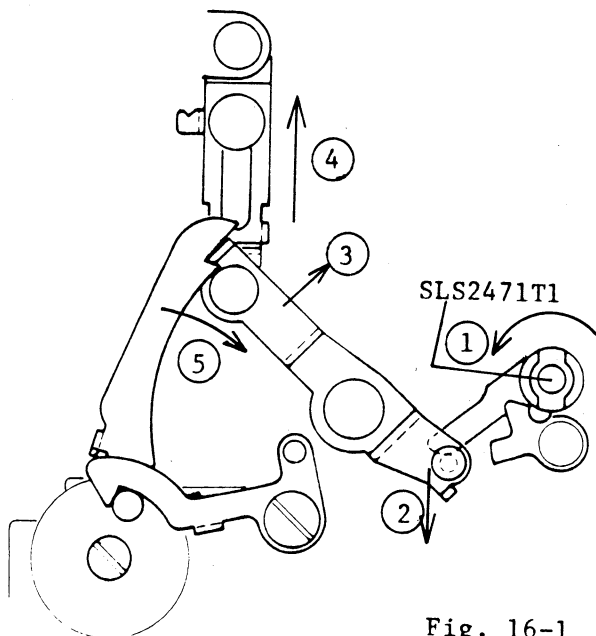


Fig. 16-1

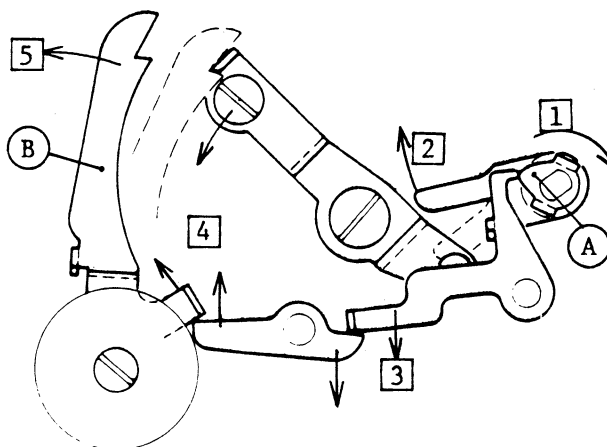


Fig. 16-2

C. Replacement of mirror

1) Removal

Remove SLS24151 Retaining spring by taking off two PB1.4x1.8BN1 screws as referring to the parts catalog page 4.
Then the mirror can be removed.

2) Attaching

Attach the mirror carefully not to put your fingerprints and scratches on it.
After that check mirror angle 45° by referring to 6-2.

3. Disassembly and Reassembly of shutter curtain

3-1 Disassembly

The arabic numeral in a circle as shown in Fig. 18 indicates the procedure of disassembly.

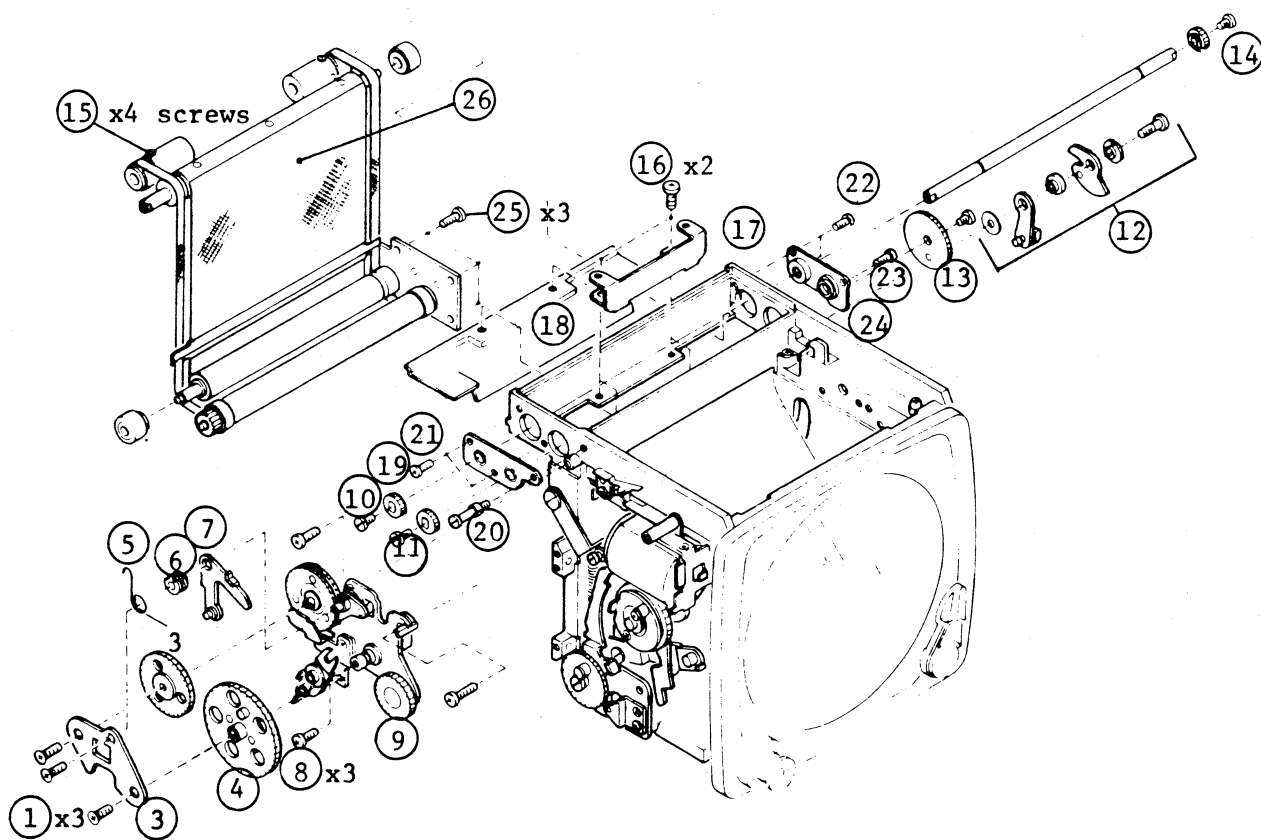


Fig. 18

3-2 Assembly of shutter curtain unit

A. Installing the shutter curtain unit into the M.body

- 1) Put the curtain unit in order as shown in Fig. 19.
First install part-(A) of the curtain unit to the M.body and then part-(B).
Tighten three screws PB1.7x3BNi.
- 2) After installing the part-(A) and (B), 1st and 2nd curtain spring drums, get the 1st curtain out of the 2nd curtain by passing 1st curtain metal and its ribbons through the 2nd curtain as shown in Fig. 20-1.
- 3) Check thrust play of 2nd curtain spring drum.

When 2nd curtain spring drum does not move smoothly, raise up end of SLS19381 Bracket a little as shown in Fig. 20-2.

Note : Must not make its thrust play much.

- 4) Embrace ribbons of 1st curtain inside of 2nd curtain shaft (C) and then attach the 2nd curtain shaft (C) to the body.
- 5) Attach SLS1841T1 Bearing plate with three screws PB1.7x2.5BNi.
- 6) Set a washer to opposite side of the shaft and attach SLS1831T1 Bearing plate with an anchor and two screws PB1.7x2.5BNi.
- 7) Put twist of 1st curtain ribbon in order. Insert SLS18151 Shaft into hole of the M.body and then set SLS18161 Ribbon pipes.

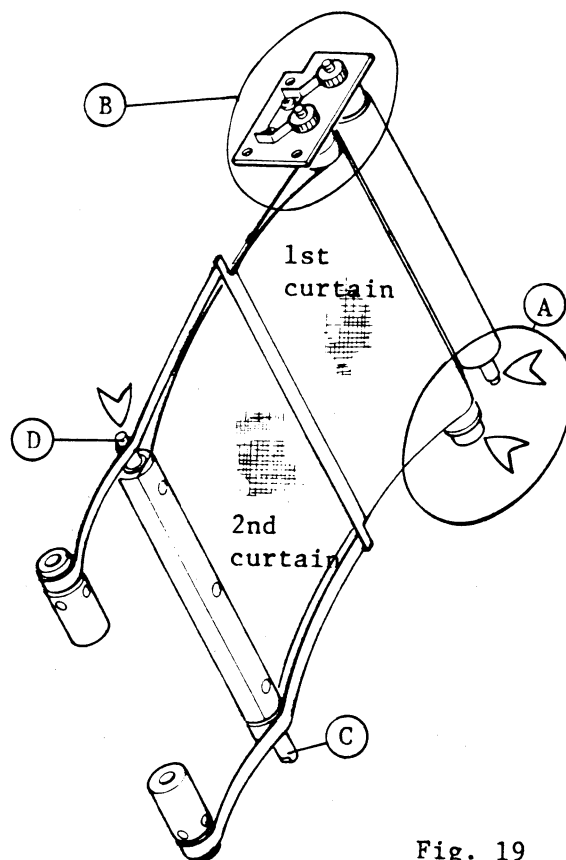


Fig. 19

Fig. 19 ◀ Apply Moebius oil.

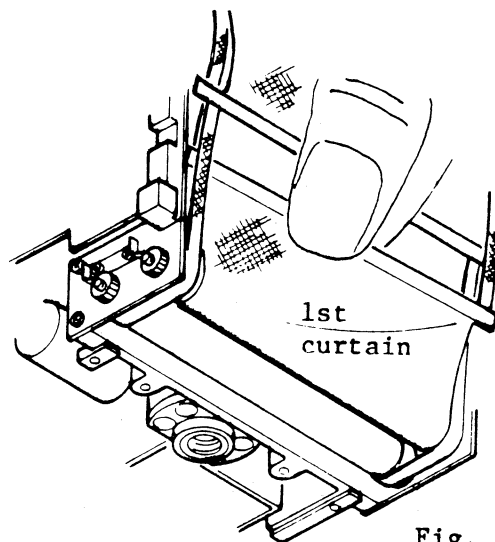
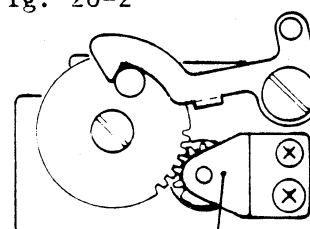


Fig. 20-1

Fig. 20-2



SLS19381

- 8) Tighten a SLS18172 Set screw to one of the ribbon pipes as shown in Fig. 21.

Note : The set screw must be tightened into groove of the shaft as shown in Fig. 22

- 9) Rotate the shaft 180° (one half) and tighten second SLS18172 Set screw into oppsite side hole of the first one.
- 10) Set the other ribbon pipe as same method with first one.

Note : Take care that the curtain metal should be in parallel.

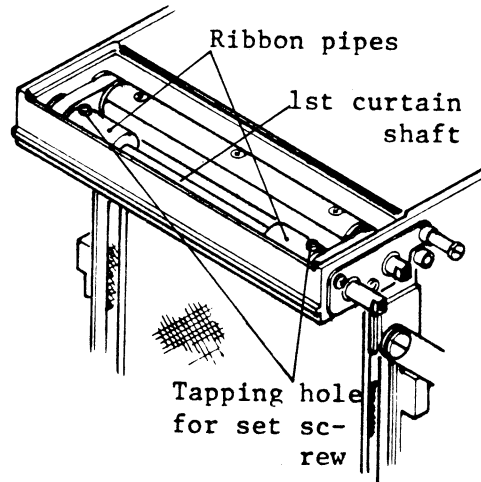


Fig. 21

B. Check and adjustment of parallel of 1st curtain metal.

1) Check

Wind 2nd curtain until a half of film format.
Check the parallel of 1st curtain metal with bottom line of the film format.

2) Adjustment

Adjustment is made by resetting the ribbon pipe.

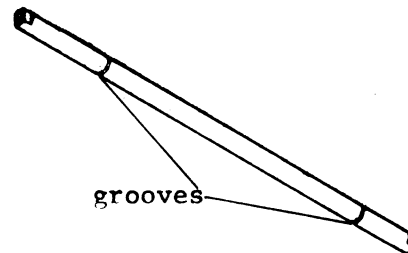


Fig. 22

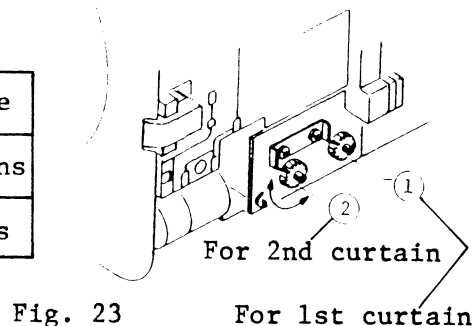
C. Determining 2nd curtain

- 1) Attach SLS18371 Gear to end of 1st curtain shaft in right side.
After applying plyo-bond into tapping hole of the shaft, tighten the SLS18381 Screw.

- 2)

	Turn clockwise
1st curtain spring shaft	Four full turns
2nd curtain spring shaft	Two full turns

Fig. 23



- 3) Install SLT17101 Base plate and SLS 17451 Spring as shown in Fig. 18.
- 4) Rotate the 1731T1 S.gear No.1 counterclockwise until it stops.
- 5) Rotate 2nd curtain shaft with the index finger and middle finger of left hand counterclockwise, until its cut end points 11 O'clock (inclines at thirty degrees) as shown in Fig. 24.
- 6) Attach SLS18371 Gear by facing its protrusion side upward to the 2nd curtain shaft.
Simultaneously engage it with the SLS1731T1 S.gear No.1.
- 7) Cock the 2nd curtain only by rotating its shaft with the index and middle finger.
- 8) 2nd curtain position when cocking it up fully:

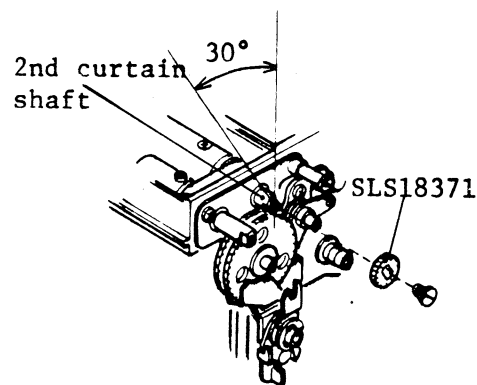


Fig. 24

- a. Bottom line of 2nd curtain metal should be on three dots as shown in Fig. 25.
 - b. When 2nd curtain is in proper position, apply the Plyo-bond into tapping hole of the 2nd curtain shaft and tighten SLS18381 Screw.
- 9) Adjustment

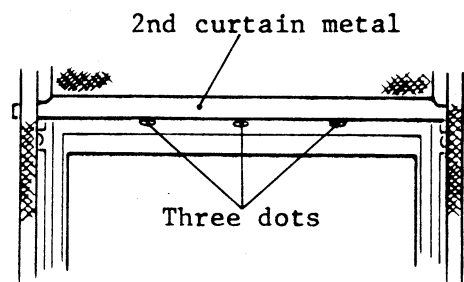


Fig. 25

When position of 2nd curtain metal is out of the limit, adjust it by changing mesh of the SLS18371 Gear with SLS1731T1 S.gear No.1.

D. Adjusting parallel of 2nd curtain

1) Parallel with 2nd curtain wound.

- a. Cut some black color Binyl-tape in same width with curtain ribbon.
- b. Rotate the 2nd curtain spring drum with left hand index finger and middle finger counterclockwise about one rotation. Both ribbons will become loose as shown in Fig. 26.
- c. Put the adequate length of Binyl-tape between the ribbons which it would be necessary to amend.

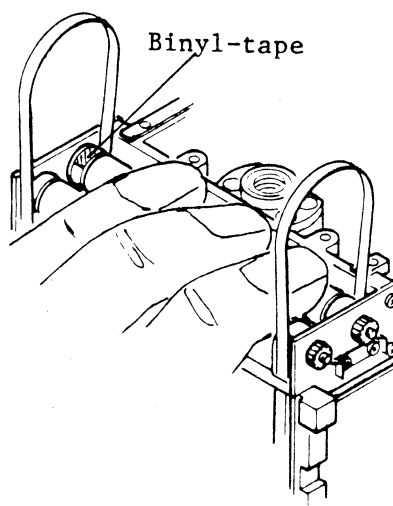


Fig. 26

2) Parallel with 2nd curtain released :

- a. Wind the 2nd curtain until the curtain metal goes over bottom line of the film format by rotating the 2nd curtain spring drum.

Check the parallel of the curtain metal with the bottom line of the film format.

b. Adjustment

1. Cock the 2nd curtain by rotating the 2nd curtain spring drum.
2. Put the adequate length of Binyl-tape on the ribbon, if it would be required as shown in Fig. 27.

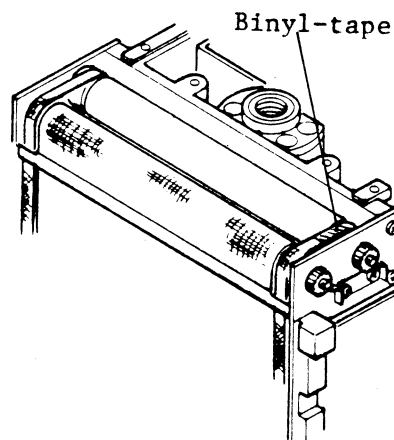


Fig. 27

E. Installing SLS1941T2 Mirror kick gear

- 1) Release the shutter
- 2) Apply Moebius oil to shaft of gear and pin on gear.
- 3) Temporarily attach SLS1944T2 Brake lever to its position and then install the gear as shown in Fig. 28. Tighten its screw SLS21721.
- 4) The gear should rotate smoothly. If not, adjust it by SLS19381 Bracket as shown in Fig. 28.

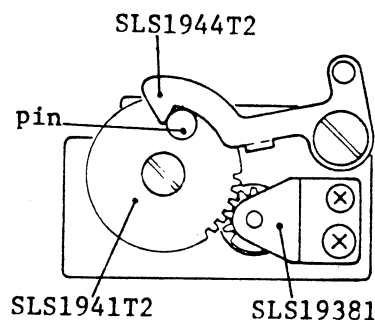


Fig. 28

F. Determining SLS1721T1 MS.gear NO.2

- 1) Release shutter
- 2) Rotate the SLS1735T1 Gear No.2 as center of protrusion (A) is on the line (B) as shown in Fig. 29
- 3) Engage SLS1721T1 MS.gear No.2 with SLS1735T1 S.gear No.2 as making a right angle at the center of pin (C) between line D-C and E-C as shown in Fig. 29.
- 4) For being the angle 90° degrees, change mesh of the SLS1735T1 S.gear No.2.

Allowable limit of changing mesh shown in Fig. 30.

Left side of the protrusion (A) should be in $\pm 0.3\text{mm}$ from the line (B).

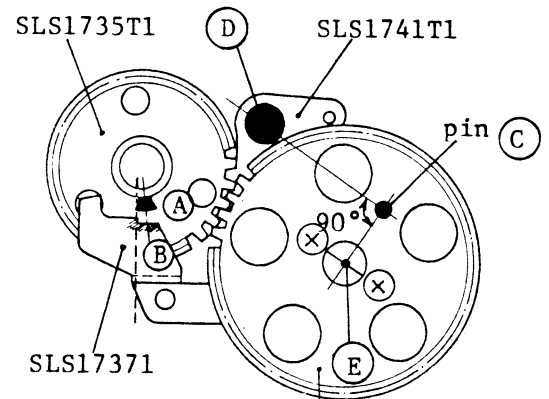


Fig. 29

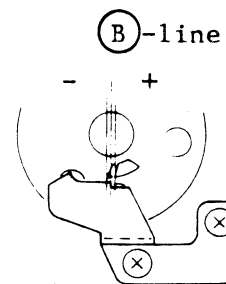


Fig. 30

G. Clearance of 2nd curtain start latch and protrusion of S.gear No.1:

- 1) Check
 - a. Cock the shutter by turning SLS2511T2 Mirror raising crank gear counterclockwise.
 - b. Check clearance between the SLS1741T1 2nd curtain start latch and the protrusion of SLS1731T1 S.gear No.1 by looking through hole of SLS1735T1 S.gear No.2 as shown in Fig. 31.

2) Adjustment

- a. Adjustment should be made by changing mesh of the SLS1735T1 S.gear No.2.

Clearance	Change mesh
Less than 0.3mm	One tooth clockwise
Over 0.6mm	One tooth counterclockwise

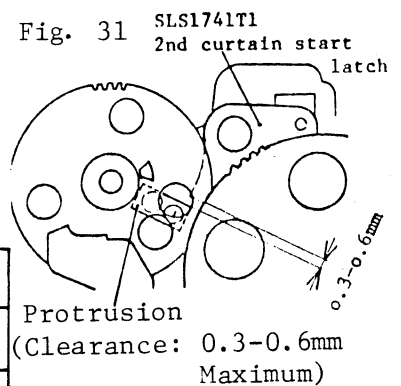


Fig. 31

b. Fine adjustment

Normally adjustment is made by step "a", however fine adjustment can be done by turning SLS25532 Eccentric collar as shown in Fig. 32.

After adjusting apply screw Lock-tight around the collar.

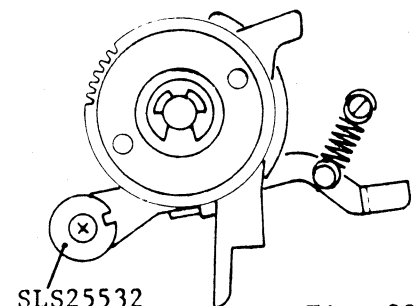


Fig. 32

H. Installation of S.charge gear NO.3

- 1) Attach the SLS18371 Gear to the 1st curtain shaft by facing the Protrusion side of it downward.
- 2) Apply Plyo-bond into tapping hole of the shaft and tighten the SLS18381 Screw.
- 3) Release the shutter
- 4) Wind the 1st curtain by rotating 1st curtain shaft with index and middle finger until the 1st curtain metal overlaps on the 2nd curtain metal at about its half width as shown in Fig. 33.
- 5) In keeping above step 4), engage SLS1731T1 S.charge gear No.3 with the 1st curtain shaft gear.
But the protrusion on reverse side of it should be in touch with SLS 17371 Stopper as shown in Fig. 34.
- 6) Install the SLS1751T2 1st curtain start latch.
- 7) Install the SLS17532 Ecc.collar by facing its notch upward.
- 8) Set the SLS17551 Spring.
- 9) Link the pin of the SLS1751T2 1st curtain start latch with the SLS 17661 Trigger switch lever.
- 10) Place the SLS17751 Fixing base and tighten it three screws and apply lock tight on them.

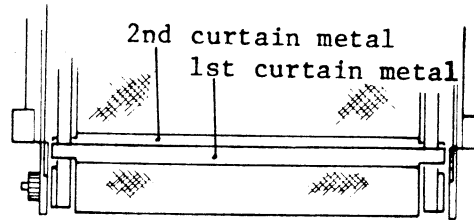


Fig. 33

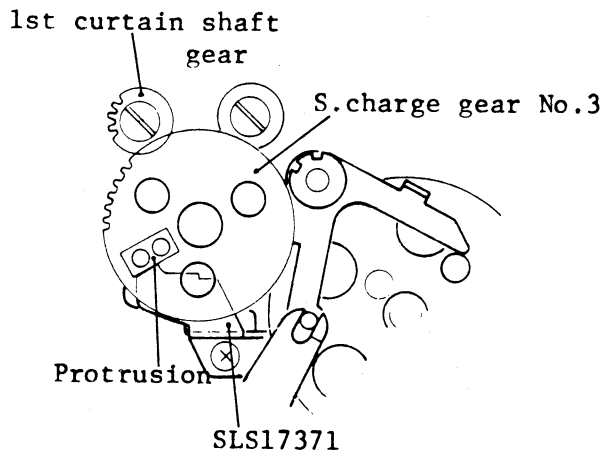


Fig. 34

11) Recheck

Wind the shutter slowly and check as follows.

- a. First the 1st curtain start latch should be set with sound "click".
- b. Next the 2nd curtain start latch should be set.
- c. Finally the SLS2551T1 Mirror release crank lever should be set.

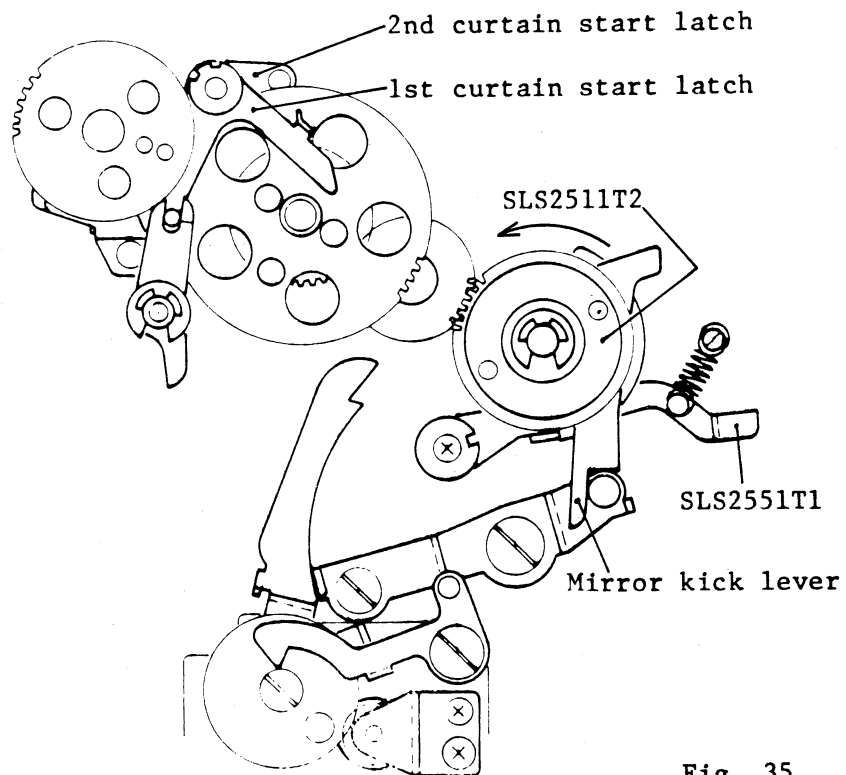


Fig. 35

With the SLS2511T2 Mirror raising crank counterclockwise wound, 1st and 2nd curtains are cocked as well as the mirror drive spring.

When releasing the SLS2551T1 Mirror release lever and then the Mirror kick lever, the mirror drive spring and 1st curtain run.

When releasing the 2nd curtain start latch, the 2nd curtain runs.

I. Determining 1st curtain :

Cock the shutter and then release only the SLS2551T1 Mirror release lever.

Consequently, 1st and 2nd curtain metals should be come down slightly.

1) Check

- a. In above case width of both curtain metals should be 4.4mm to 4.8mm at each side as shown in Fig. 36.
- b. Release only the 1st curtain and cheack the parallel of 1st curtain metal with bottom line of the film format.

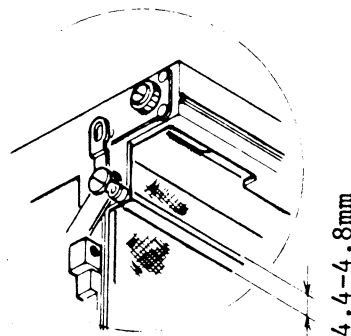


Fig. 36

2nd curtain
1st curtain

2) Adjustment

- a. Adjustment for above step "a" and "b" is made by resetting the ribbon on pipes.
- b. As the parallel of 1st curtain metal at its released position is OK, but, in Fig. 36 its parallel is no good.

In such condition, adjustment is made as follows:

Release the 1st curtain and put an adequate length of Binyl-tape on the ribbon, if it would be required as shown in Fig. 37.

- c. After adjusting, apply the screw lock.

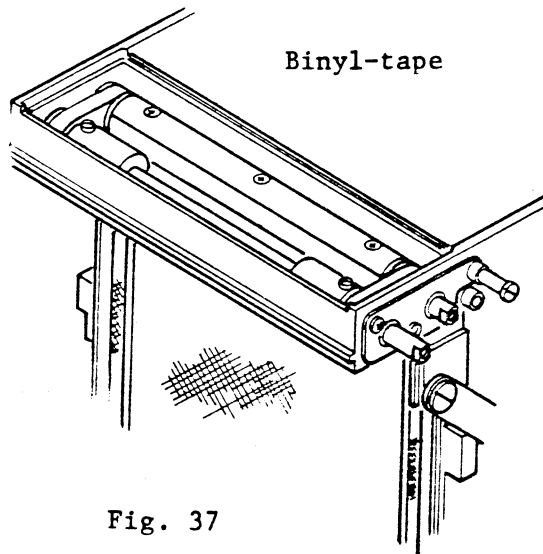


Fig. 37

J. Installing SLS19611 Ornament cover and SLS19662 Bracket.

Install the ornament cover by pulling it to outside fully.

When inserting the SLS11211 Guide rail plate, the ornament cover must not disturb the guide rail plate.

K. Assembly of F.body , M.body, Winding base unit Bottom plate and etc.

Please do them by refering to 1-5 and 1-6, as well as soldering lead wires.

L. Replacement of only 2nd curtain

The 2nd curtain unit can be changed without disassembling M.body, F.body and SLT17101 Charging base.

If the 2nd curtain unit is changed without removing the 1st and 2nd curtains complete unit, the new 2nd curtain must be install in exactly the same position as the old ones, (because overlap and start position of the 2nd curtain can not be adjusted.)

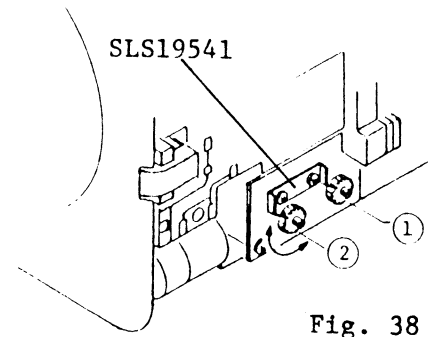


Fig. 38

1) Removing 2nd curtain unit:

- a. Release the shutter
- b. Release SLS19541 Stop spring ② on the gear of 2nd curtain spring drum by tweezers as shown in Fig. 38.
- c. Loosen three PD1.7x6BNi screws for SLT18291 Curtain fastener as shown in Fig.39.
- d. Pull out the curtain from the SLT 18261 2nd curtain drum.
- e. Strip the both ribbon from the SLS19231 2nd curtain spring drum.
- f. Remove the 2nd curtain by pulling it upward.

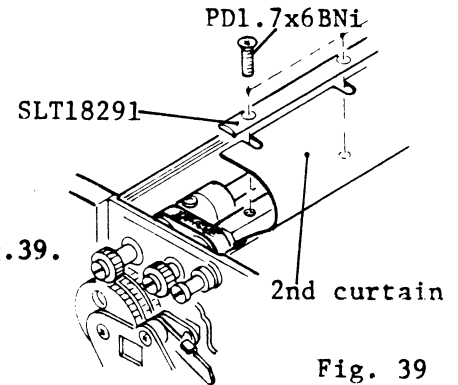


Fig. 39

2) Installation of 2nd curtain

- a. Installing a new curtain in exactly the same position as the old ones, draw a line on reverse side of new curtain by pencil as A=A' shown in Fig. 40.
- b. Insert the both ribbon from top of the body.
- c. Install the curtain on the drum and tighten the 3 screws.
- d. Cock the 2nd curtain.
- e. Put the both ribbon to the 2nd curtain spring drum with Plyo-bond.

Note : 1. Put the both ribbon as being parallel.

2. Apply the Plyo-bond to the ribbon until one and half turns.

- f. Rotate the 2nd curtain spring shaft clockwise two turns fully.
- g. For the parallel of the 2nd curtain, refer to 3-2 D.

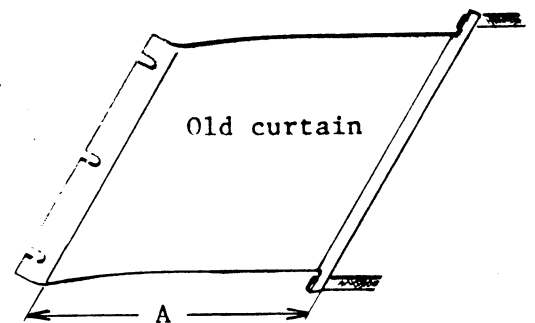
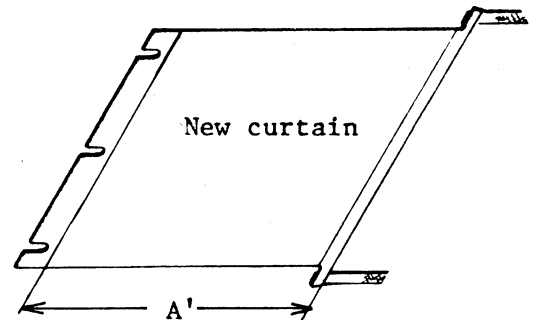


Fig. 40

4. 1st curtain brake, position of MS.clutch and timing
when the MS.clutch is detached.

4-1 Installing X.synchro. gear and 1st
curtain brake

A. Installing X.synchro. gear :

- 1) Cocking the shutter.
- 2) As align the center of pin (A) on the line $\overline{BC}$ or put the (A) one tooth upward from the line $\overline{BC}$, engage the X.synchro. gear with the 1st curtain gear.

And SLS15371 Screw as shown in Fig. 41.

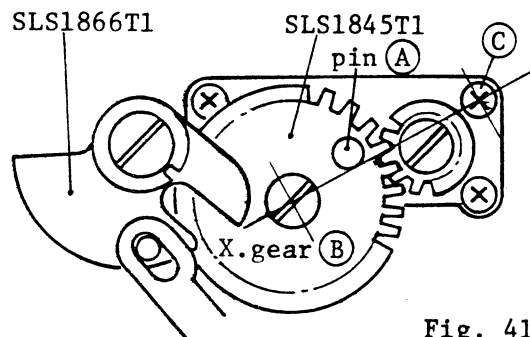


Fig. 41

B. Installing 1st curtain brake :

- 1) Install relative parts for brakes as shown in Fig. 42.
- 2) Put the SLS18681 Eccentric collar by facing its notch downward.
- 3) Never forget to set the SLS18651 Spring.
- 4) Apply Moebuis oil to (A) parts and EP grease or Hericolube to (B) parts as shown in Fig. 43.

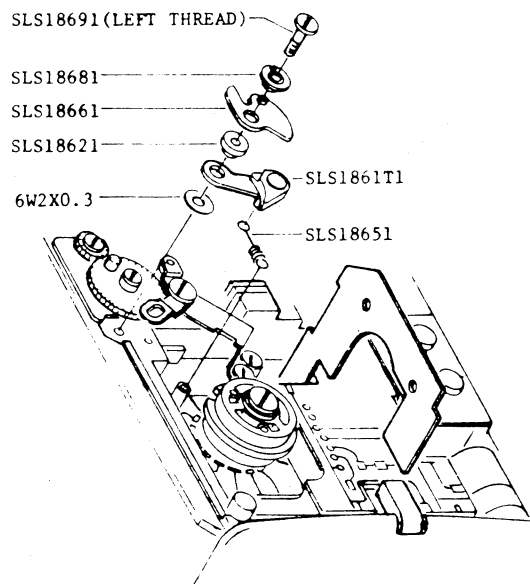


Fig. 42

4-2 Installing SLS14201 MS.clutch disc

- 1) Release the shutter.
- 2) Turn the SLS1721T1 MS. gear No.2 clockwise until it stops.
- 3) As align the center of (A) pin on the line $\overline{BC}$ or put it one tooth upward, engage the SLS14201 MS. clutch disc gear with the SLS 1721T1 MS.gear No.2.
- 4) Attach the C-8 C-ring.

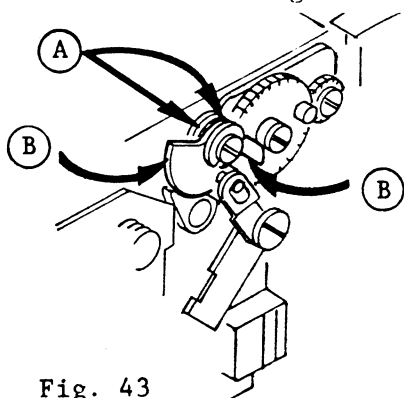


Fig. 43

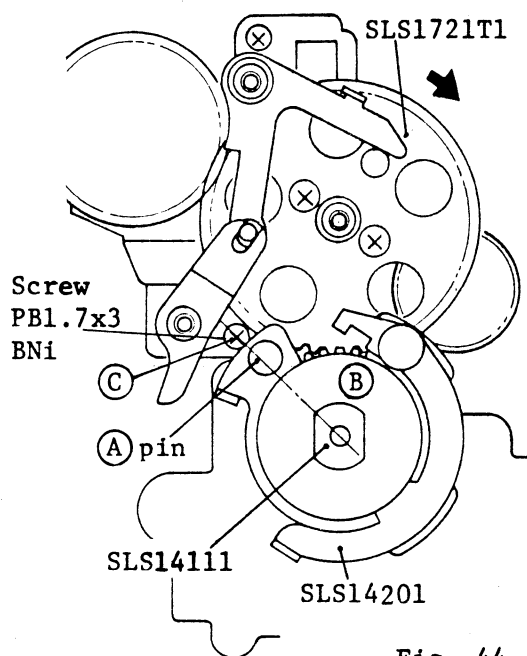


Fig. 44

4-3 Timing when the SLS14201 MS.clutch
is detached

A. Adjustment :

- 1) Attach SLS-18 Winding tool and wind slowly.
- 2) As it has been explained at Fig. 35, first the 1st curtain start latch should be set with sound "click" and then the 2nd curtain start latch.
- 3) Finally when the SLS2551T1 Mirror release lever is set, its lever will move up slightly as shown in Fig. 45. 46. 47.

Note : If you observe it carefully, you can see its movement through space of body.

- 4) When the lever (A) moving up, stop winding at once and keep the film advance crank at stopped position, without winding fully or return.
- 5) Loosen the N1.7 Nut and then screw in the PB1.7x6BNi adjusting screw (B) until it touches with the SLS1391S1 Clutch stopper.

Fig.45

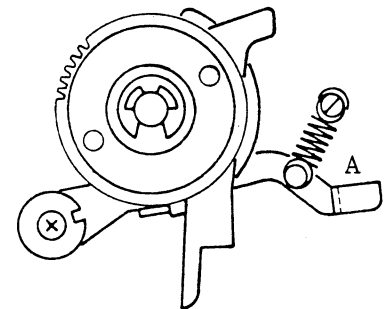
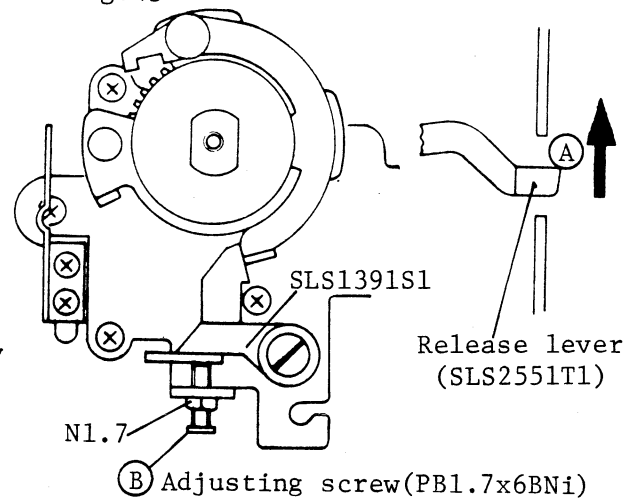
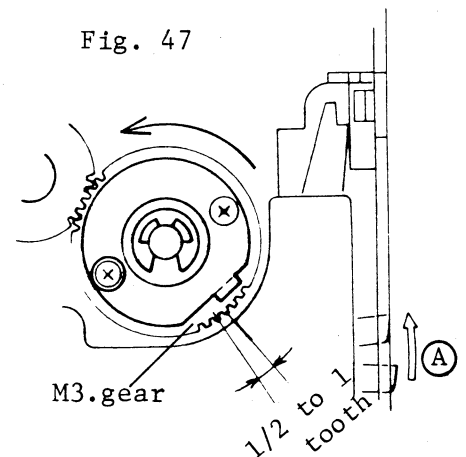


Fig.46

B. Check

- 1) Wind the shutter quietly and slowly. Stop the winding as soon as the release lever is set and keep the film advance crank at stopped position.
- 2) When winding up it slowly again from stopped position, the SLS14201 MS. clutch should be detached from the SLS14611 Winding cam after a half tooth or one tooth of M3.gear moved more as shown in Fig. 47.
- 3) Tighten the N1.7 Nut and apply plyo-bond around the nut.

Fig. 47



4-4 Check and adjustment of 1st curtain bounce

A. Adjusting curtain travel time :

Standard travel time : 12ms to 12.5ms

- 1) Put the one 6V silver-oxide battery into camera body.
- 2) Set the shutter speed dial to 1/1000 (SLS 1/500)
- 3) Adjust the curtain travel time with the shutter tester.
- 4) Adjustment :

Adjustment is made by turning the 1st and 2nd curtain spring drum shafts as shown in Fig. 48.

Turn it clockwise.....fast

Turn it counterclockwise....slow

Note : 1. With the SLS19561 Gear in two teeth turned, the curtain travel time would be changed 0.1ms.

2. 1st curtain travel time should not be slower than 2nd curtain and the difference between both curtain travel time should be within 0.1ms.

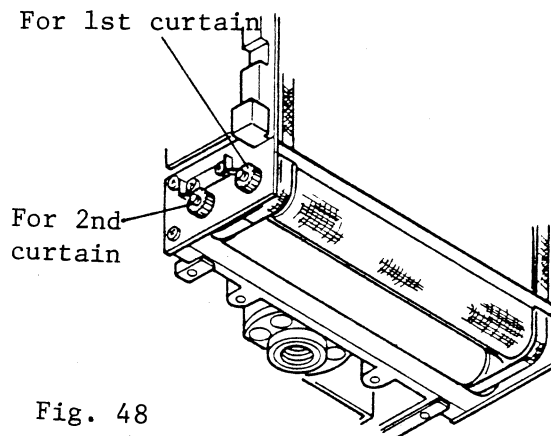


Fig. 48

B. Check and adjustment of 1st curtain bounce.

1) Check:

- a. Set the shutter speed dial to 1/1000 (SLS 1/500).
- b. After releasing the shutter several time, check it with the shutter tester.

2) Adjustment :

Adjustment is made by turning the SLS18681 Ecc.collar counterclockwise as shown in Fig. 49.

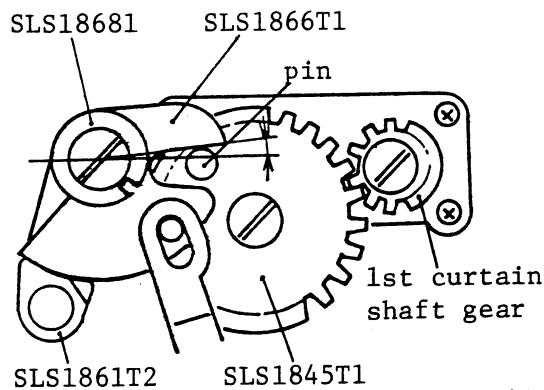


Fig. 49

3) Check 1st curtain does not stay in the film format.

- a. Release the shutter speed at 1/1000(SLS1/500) and B alternately.
- b. The 1st curtain metal must not remain in the film format as shown in Fig. 50.

Shutter speed	Remainder of the metal	Braking	Turn Ecc. collar
1/1000 or 1/500	Yes	Weaker	
B	Yes	Stronger	

4) Adjust the 1st curtain bounce by doing above step 2) and 3) repeatedly.

5) Check moving the pin of SLS1845T1 X.synchro gear:

After releasing the shutter, try to turn the 1st curtain shaft gear counterclockwise.

At this time the pin must not get out of the brake.

Note : If it get out, readjust the bounce by changing engagement of the gears.

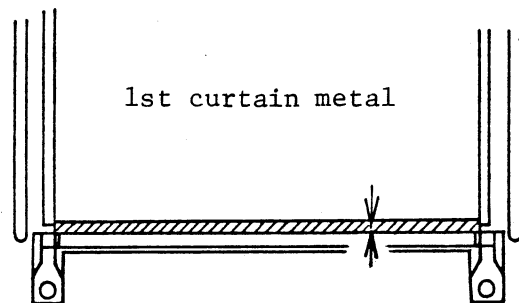


Fig. 50

5. Adjustment of shutter speed

All shutter speeds for this camera are determined by performing the quickest shutter speed 1/1000 (or 1/500 for SLS) adjustment so that the 1/1000ms (or 1/500) should be adjusted as accurate as possible.

ms \	Standard	Max.	Mini.
1/1000	0.98ms	1.6ms	0.7ms
1/500	1.95ms	2.7ms	1.7ms

5-1 Adjusting shutter speed at quick return of mirror

Recheck curtain travel time adjustment before shutter speed adjustments.

A. Adjustment

1) Adjustment by Ecc. collar

- Set the shutter speed ring to 1/1000 (SLS 1/500).
- Adjust it by turning the Ecc. collar on the trigger switch as shown in Fig. 51.

When changing space between Ecc. collar and SLS17661 Trigger switch lever wider or narrower, shutter speed should be changed as follows.

Space \	Shutter speed
Wider (C)	Slower
Narrower (D)	Faster

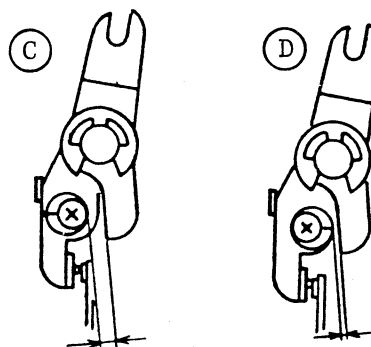
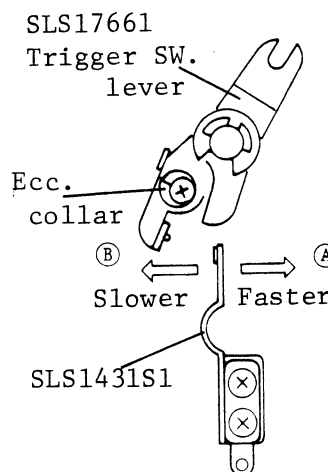


Fig. 51

2) Adjustment by the SLS1431S1 Trigger switch

Fine adjustment is made by bending the trigger switch.

Bend direction	Shutter speed
→ (A)	Faster
← (B)	Slower

3) Adjustment by changing overlap of 1st curtain

- a. If it is impossible to adjust by step 1) and 2), change the overlap of 1st curtain metal to the 2nd curtain metal by resetting the ribbon pipes of the 1st curtain as shown in Fig. 52.

Note : Please refer to 3-2 to do it.
But disassembly F.body and M.body is not necessary.

- b. If the overlap of 1st curtain metal is changed, the shutter travel time must be adjusted before shutter speed adjustment.

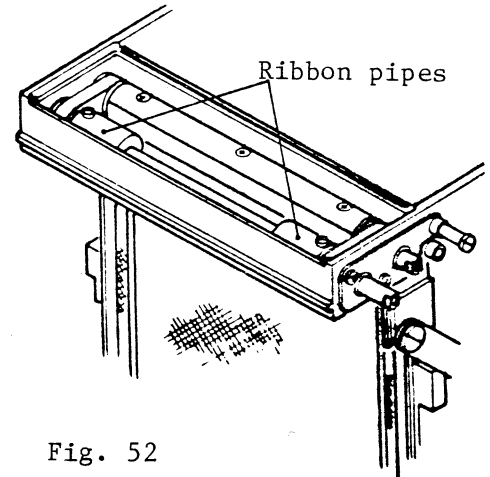


Fig. 52

5-2 Adjusting shutter speed at Mirror-UP

This adjusting mechanism has been improved since July 1976 so that adjustment has been simplified.

Installing three improved parts as shown in Fig. 53 into old body can be possible.

Adjusting method for old body is all the same to above step 3).

- 1) Check for new mechanism
 - a. Set the shutter speed dial to 1/1000 (SLS 1/500).
 - b. Set the mirror lock-up mech. to mirror-up.
 - c. Compare its shutter speed with the speed at quick return of the mirror.

Allowable limit against the shutter speed at quick return of mirror : + 0
- 0.2^{ms}

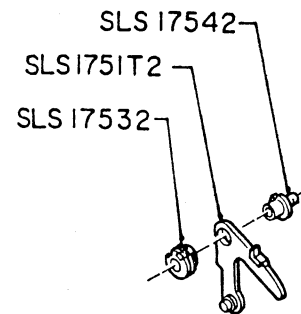


Fig. 53

2) Adjustment

- a. Adjustment is made by turning the SLS17532 Ecc.collar as shown in Fig. 54.

Turn Ecc.collar	Shutter speed
Counterclockwise	Faster
Clockwise	Slower

Note : When difference of both shutter speed is over 0.5ms, adjustment should be made by changing the overlap of 1st curtain by resetting the ribbon pipes primarily. Then fine adjustment should be done by the Ecc.collar.

- b. If the SLS17532 Ecc.collar is moved, the shutter travel time should be checked.

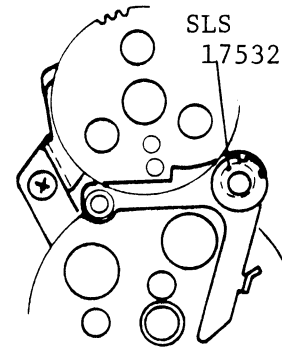


Fig. 54

5-3 Flash synchronization

After performing the shutter curtain bounce and shutter speed adjustment, X and FP delay time should be adjusted.

A. X. contact

1) Operation

X-contacts condition with the shutter wound is shown in Fig. 55-1.

When shutter is released, the long contact A is depressed by the SLS 1851T1 X.synchro. lever. Then switch is on as shown in Fig. 55-2.

2) Adjustment

When winding the shutter slowly, the 1st curtain metal 1.5mm to 2mm would appear in bottom of film format as shown in Fig. 56.

At this time, adjust it by bending the contact A as the contact A should detach from the contact B.

3) X-contact delay time

a. After setting the shutter speed dial to 1/60ms, check it with shutter tester.

b. Adjustment

Adjust delay time by bending contact A as follows.

Delay time and Contact efficiency of X and FP

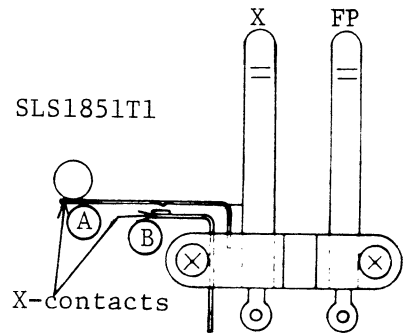


Fig. 55-1

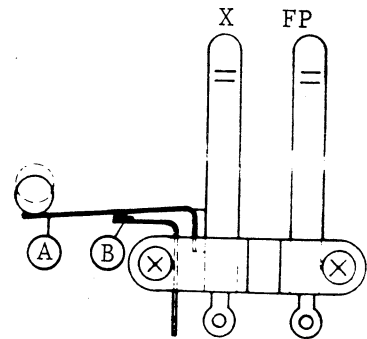


Fig. 55-2

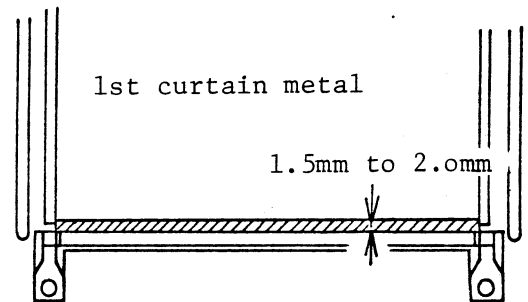


Fig. 56

	Shutter speed	Delay time	Contact efficiency
X	1/60	Slit A:Over 0.3ms B:Over 2.5ms	Over 60%
FP	1/1000 (SLS1/500)	Slit A:7-15ms B:	Over 60%

B. FP-contact

1) Operation

With the shutter released, the pin (B) is pushed up lower contact by turning the gear (A) clockwise. Then the switch is on.

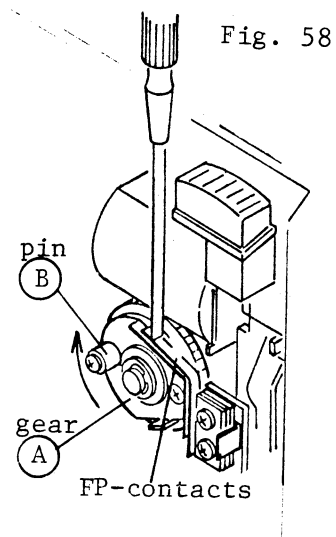
2) Check

After setting shutter speed dial to 1/1000(SLS 1/500), check it with shutter tester.

3) Adjustment

Delay time adjustment is made by bending the contacts as shown in Fig. 58.

Note : After assembling the SLT or SLS16201 Right hand side panel, recheck X and FP-contact by all means.



5-4 Bulb mechanism

A. Operation

- 1) With the shutter dial set to "B", circuit is changed to SW3 in the Main switch SW1 by shifting the SLS20451 Bulb switch arm as shown in Fig. 59.60.
- 2) While depressing the shutter release button, the SW3 is OFF by the shutter release bar as shown in Fig. 60.
In above condition, as the SLS 1355T1 Main switch is ON, the current is off because the SW3 is OFF.

So that the 2nd curtain would not run after releasing the 1st curtain.

Then the shutter opened now.

- 3) When returning the release button, the SW3 is ON and the current is on. Then the 2nd curtain runs.
- 4) With the 2nd curtain closed, the Main switch SW1 is OFF.

B. Main cause of B. malfunction

- 1) Position of the SLS2045T1 Bulb switch and its contact efficiency
- 2) Contact efficiency of the brush to SLT20311 Time print board.
- 3) Contact efficiency of the SW3.

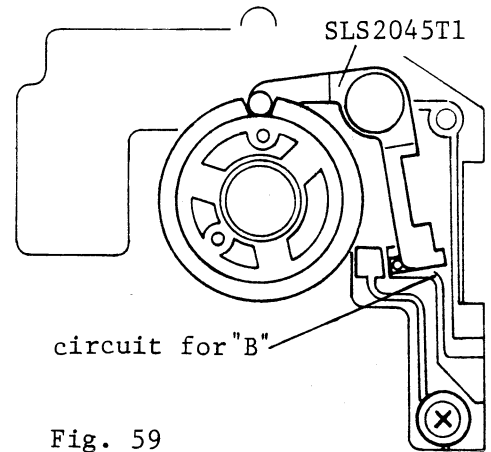


Fig. 59

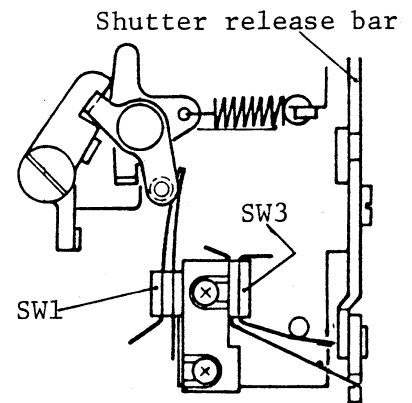


Fig. 60

5-5 Delayed Shutter Release

Please refer to page 52-53 of M645 1000S Instructions about use of it.

A. Replacement of Delayed shutter release

- 1) The arabic numeral in a circle as shown in Fig. 61 indicates the procedure of disassembly and reassembly is normally the reverse of disassembly.

Note : Please refer to "1-4" for replacement of its lever.

B. Operation

- 1) When releasing the Delayed shutter release, first ①-lever moves and continuously ②, ③ and ④ as shown in Fig. 62. The SLS1341T1 Shutter release bar is depressed by the end of ④-SLS 21531 Release lever, so that the shutter is released.

C. Check .

- 1). Releasing position of shutter :
While the SLT21531 Release lever moves from 2mm to 3mm, the shutter should be released.
- 2) After releasing, the ④-SLT21531 Release lever should move a little move and should return.
- 3) During operation of the Delayed shutter release, its operating speed must not change remarkably.

D. Adjustment

- 1) Adjustment is made by changing position of the SLT2311T1 Plate as shown in Fig. 61.
- 2) Apply Screw-lock tight on the two screws after adjusting.

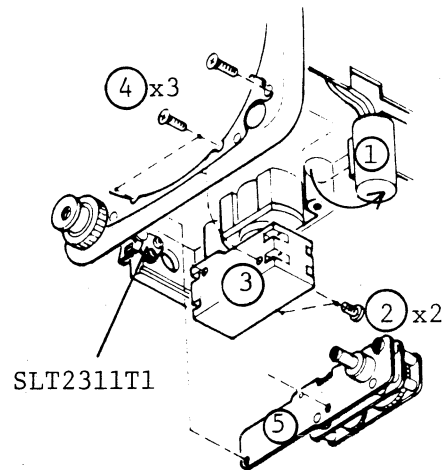


Fig. 61

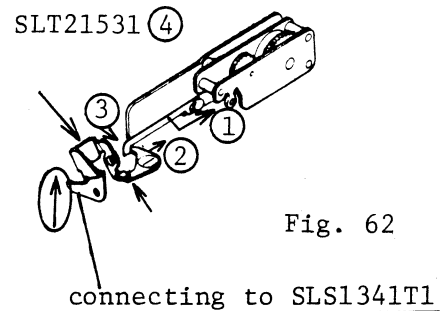


Fig. 62

5-6 Release stroke the shutter release button

A. Release stroke

- 1) While the release button (A) is pushed from 2mm to 3mm, the shutter should be released as shown in Fig. 63-1.
- 2) When releasing the shutter slowly with pushing the button (B), after releasing, the button (B) should be pushed a little move as shown in Fig. 63-2.

B. Adjustment

Adjustment is made by bending the top of SLS2551T1 Mirror release lever with pincers as shown in Fig. 64.

Note : Bend the top of release lever gently.

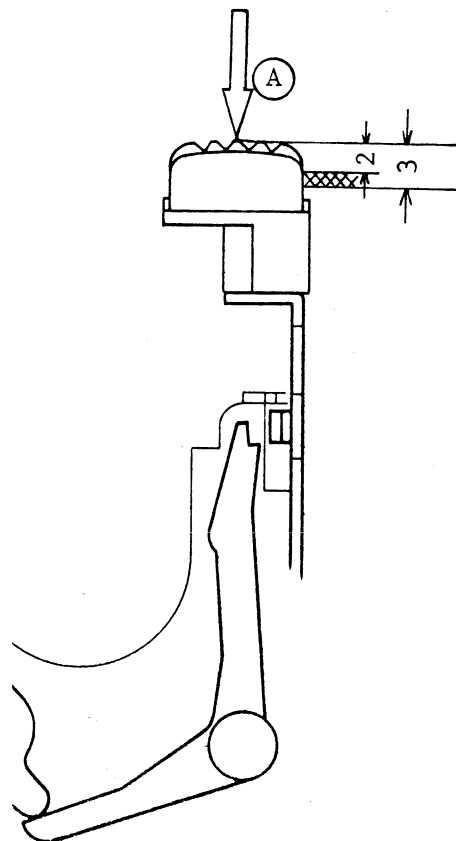


Fig. 63-1

Fig. 64

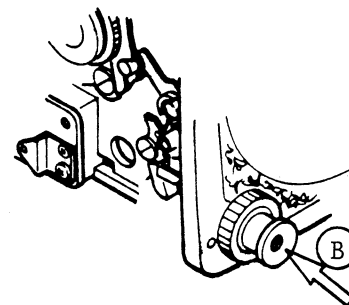
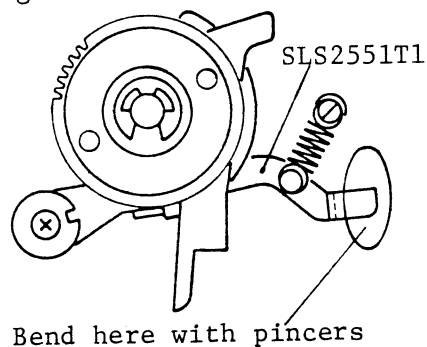


Fig. 63-2

6. Body flange back and Finder infinity

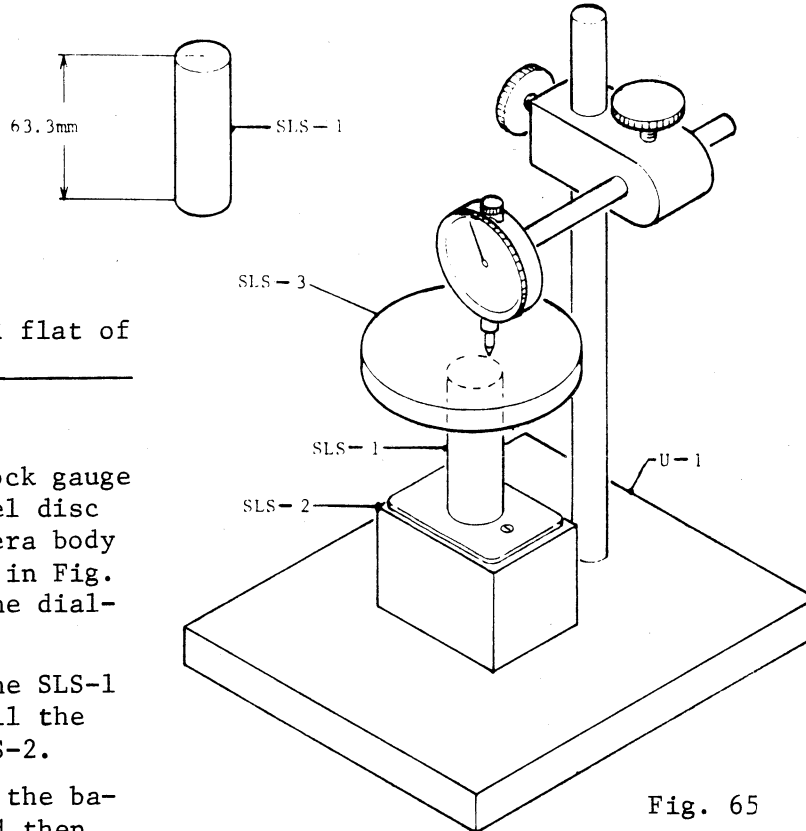


Fig. 65

6-1 Body flange back and flat of Bayonet face

A. Check

- 1) Put the SLS-1 Block gauge and SLS-3 Parallel disc on the SLS-2 Camera body support as shown in Fig. 65 and then set the dial-gauge to Zero.
- 2) After removing the SLS-1 and SLS-3, install the camera on the SLS-2.
- 3) Put the SLS-3 on the bayonet surface and then measure four appointed points as shown in Fig. 66.

Standard body flange back :

$$63.3\text{mm} \pm 0.03$$

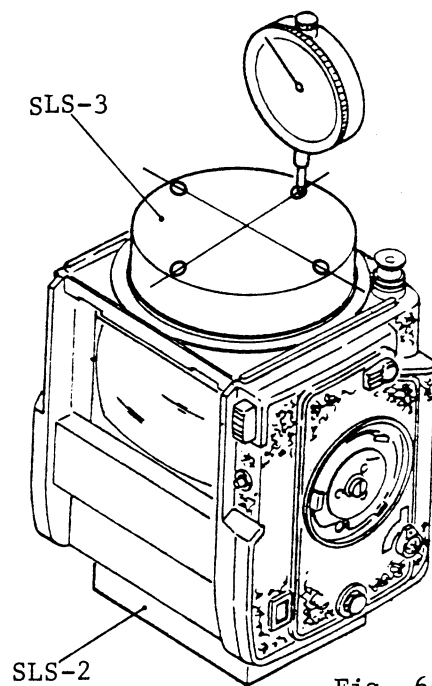
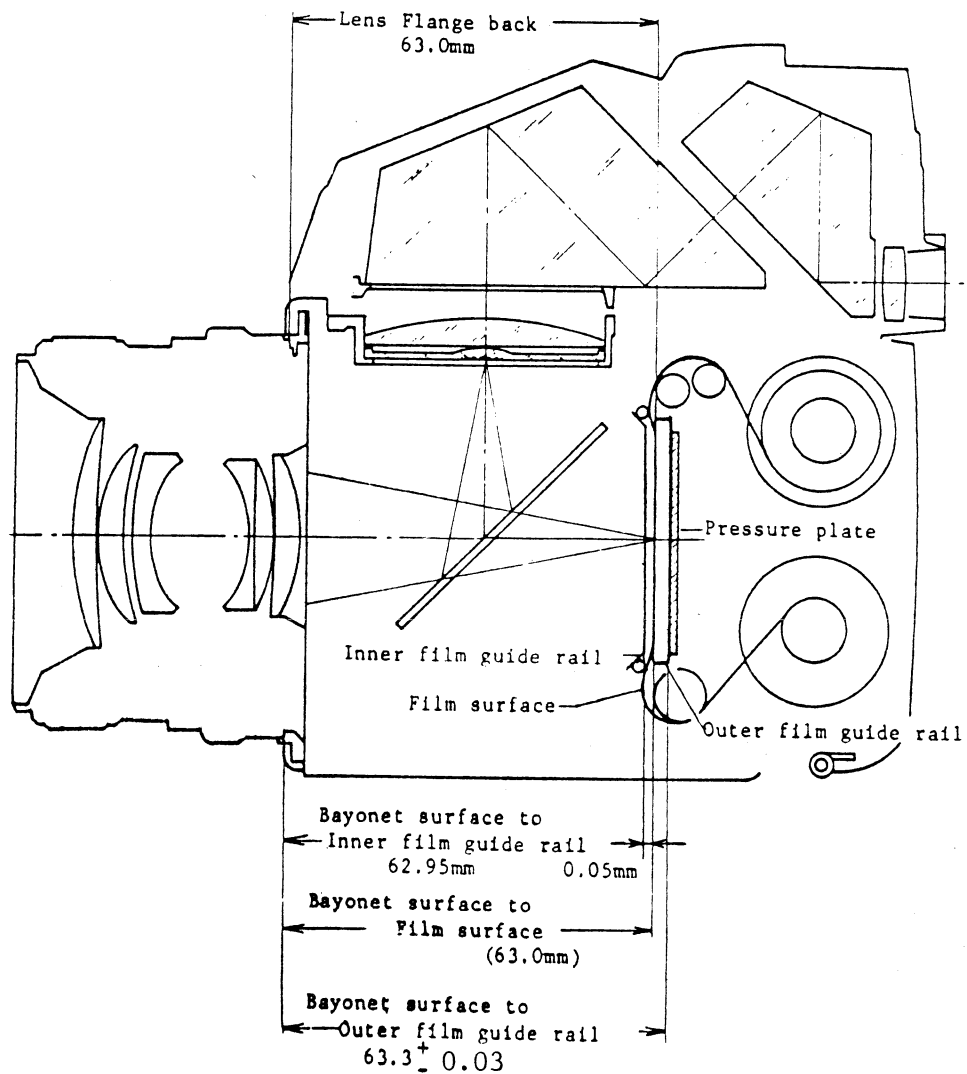
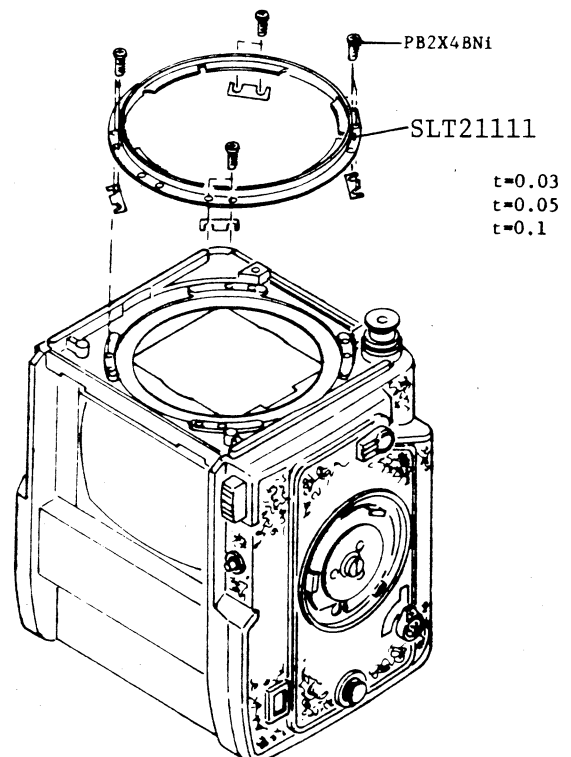


Fig. 66



B. Adjustment

- 1) Remove eight screws PB2x4BNi of the bayonet ring.
- 2) Remove the bayonet ring and put adequate washer on the place where it is required.
- 3) Each points should be with in tolerance $63.3\text{mm} \pm 0.03$.



6-2 Mirror angle 45° degrees

A. Check

- 1) With the camera on the SLS-5 Mirror 45° stand installed, check the angle with auto-collimeter.

Note : Before checking the mirror angle 45°, should check and amend warp of the SLS2412S1 Holder plate.

B. Adjustment

- 1) After loosening a 3PB1.7x3BNi Screw, adjustment is made by moving the SLS24441 Adjusting plate as shown in Fig.69.

- 2) Apply Screw-lock-tight on the screw.

Note : Auto-collimator with its focal length 120mm or less than 300mm is much the better for accurate check.

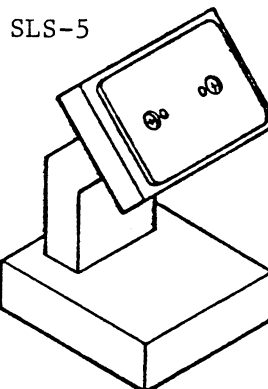


Fig. 68

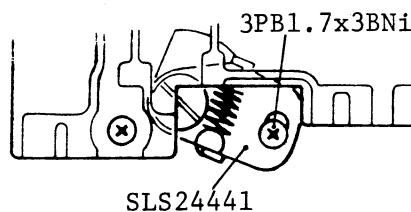


Fig. 69

6-3 Adjusting infinity (∞) of Finder focus

After performing the body flange back and mirror angle 45° adjustment, infinity should be adjusted.

A. Check

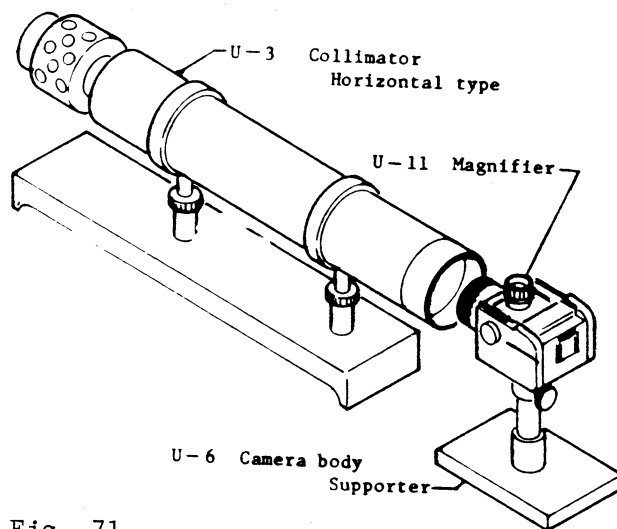
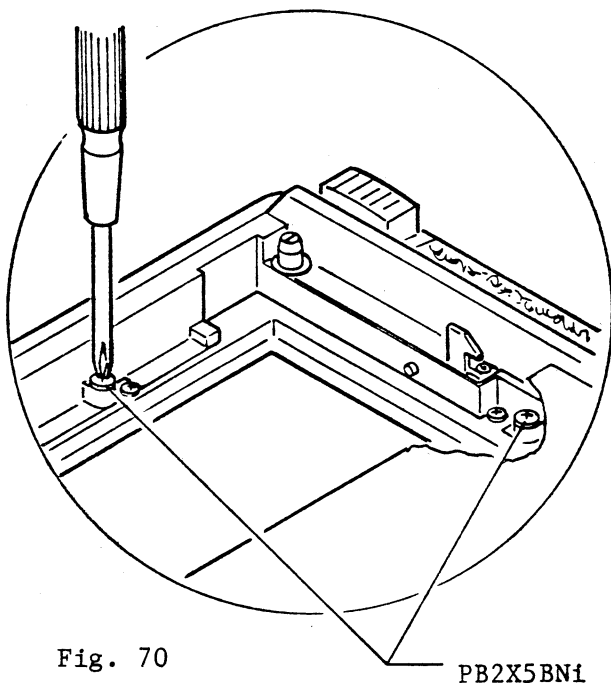
Attach the standard lens to camera and check it with magnifier as shown in Fig. 71.

B. Adjusting infinity

- 1) After removing Focusing screen, adjustment is made by three adjusting screws PB2x5BN1 as shown in Fig. 70.

Note : Tighten or loosen three screws evenly.

- 2) After adjusting, apply Screw-lock-tight on the screws.



7. Film transport mechanism

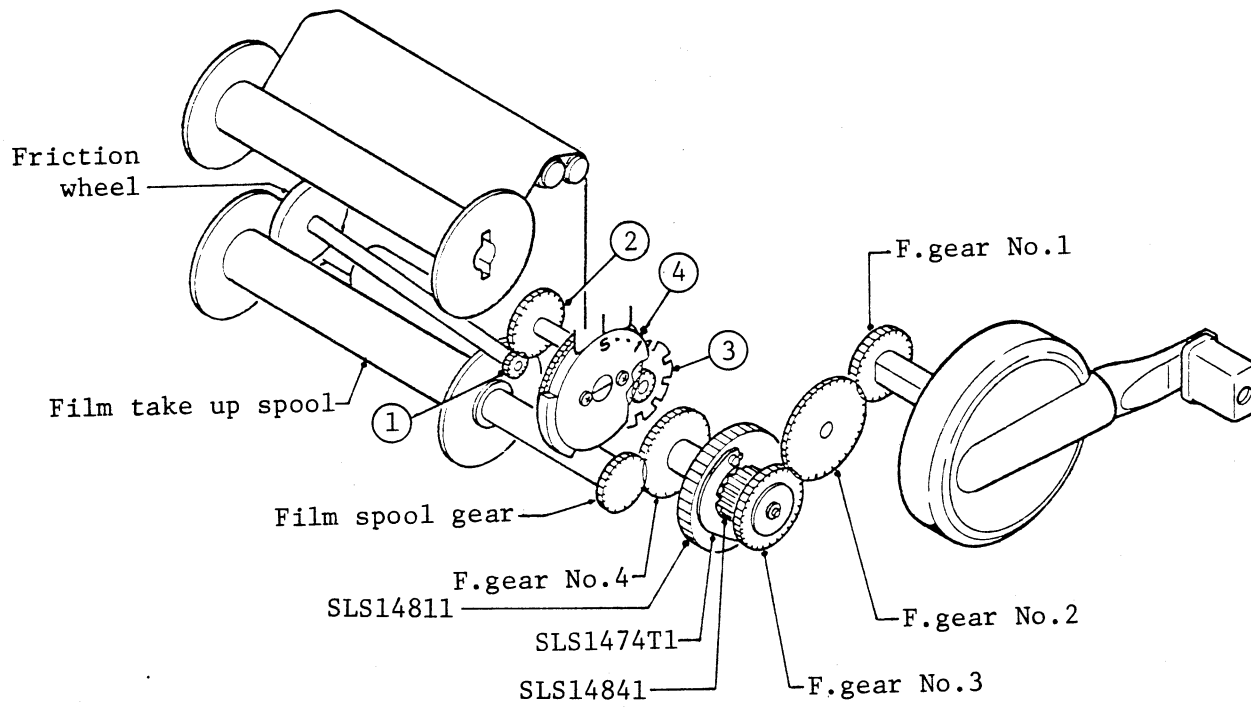


Fig.72

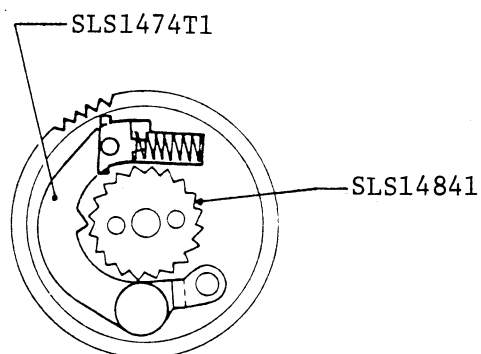


Fig.73

7-1 Film transport

- 1) With the film advance crank or knob wound, F.gear No. 1, No. 2 and No. 3 rotate.
- 2) SLS14841 Ratchet gear which is linked with the F.gear No. 3 engages with SLS1474T1 Clutch in the SLS14811 F.clutch wheel.

Then F.gear No. 4 is linked with the SLS-1474T1 Clutch is turned as well as the SLS14811 F.clutch.

- 3) When the F.gear No. 4 in the film chamber rotates, the film spool gear in the film insert which is linked with the F.gear No. 4 rotated counter clockwise.

- 4) The film is wound by the film take up spool rotating.

The friction wheel attaching to leader paper around the film take up spool is rotated by rotation of the film take up spool.

Film advance is determined by rotation of the friction wheel.

Simultaneously ①-Friction gear rotates

②-Film counter gear No. 1.

Continuously rotates ③-Film counter dividing device and ④-Film counter.

7-2 From start mark to the first exposure

- 1) When (4) Film counter rotates, operation of SLS15842 Stop lever is controlled by protrusion (A) of SLS15521 Film counter disk as shown in Fig. 74.
- 2) When the film counter reaches to No. 1, the (A) Protrusion passes over. (B) end of the SLS15842 Stop lever gets into (3) Film counter dividing device and the other end (C) pawl gets into between teeth of the F.clutch wheel as shown in Fig. 75. At this time the SLS1474T1 Clutch is detached from the SLS14841 Ratchet gear so that film transport is stopped.

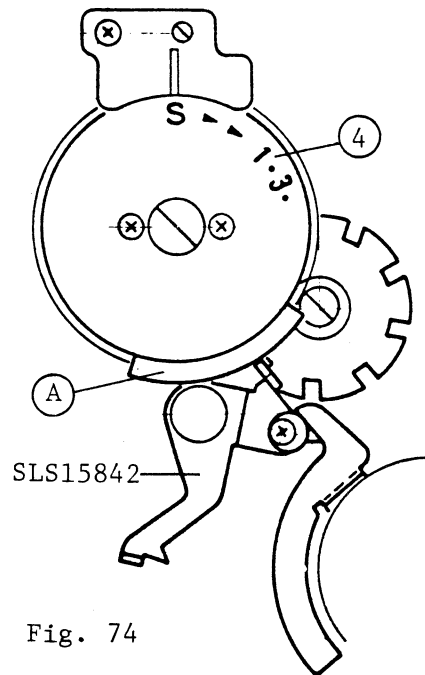


Fig. 74

7-3 Exposure counter No. 2.....

- 1) With the shutter released, the (D) moves in direction shown by the arrow and then the (B) end of SLS15842 Stop lever is detached from the (3) Film counter dividing device and the other end (C) from the F.clutch wheel as shown in Fig. 76.
- 2) The film advance crank or knob is automatically unlocked. Make it possible to transport the film to the next frame.

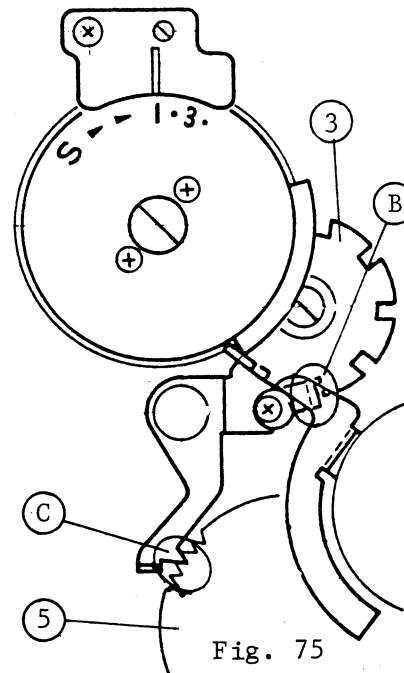


Fig. 75

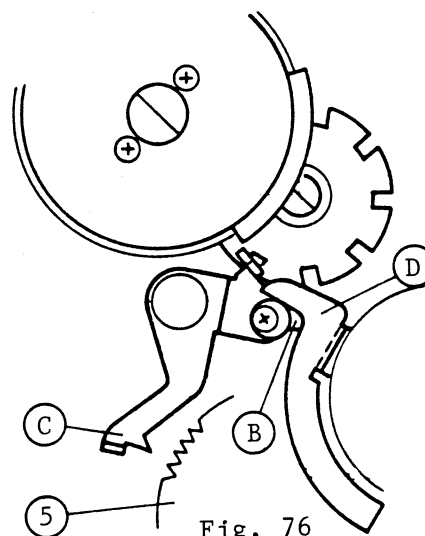


Fig. 76

- 1) With 120 Roll-film insert :

When winding the film advance lever more after the fixed number of exposures have been taken (15), turn of the exposure counter is stopped because the (E)-protrusion on back of SLS15521 Film counter base strikes against the SLS1571T2 Change-over lever as shown in Fig. 77-1.

- 2) With 220 Roll-film insert :

With 220 Roll-film insert set into body, the SLS1571T2 Change-over lever is pushed up in direction shown by the arrow.

Therefore, after the fixed number of exposures have been taken (30), the (E)-protrusion strikes against the SLS15611 Stopper as shown in Fig. 77-2.

- 3) In above steps 1) and 2), the SLS1541T1 Dividing device is stopped in position to prevent movement of the SLS15842 Stop lever.

Above means that the end (B) of SLS15842 Stop lever is on the top of the dividing device and can not get into its groove as shown in Fig. 77-1 and 77-2.

- 4) (1)-Friction gear that conveys rotation of the friction wheel engages with (2) SLS-1531S1 Film counter gear No. 1.

As the film is wound further, (2)-Film counter gear No. 1 is pushed aside by rotation of the (1)-Friction gear as shown in the Fig. 78 because (4)-Film counter is stopped.

Therefore, they are disengaged from each others.

Consequently, the film spool gear turn freely to wind film only without advancing the exposure counter.

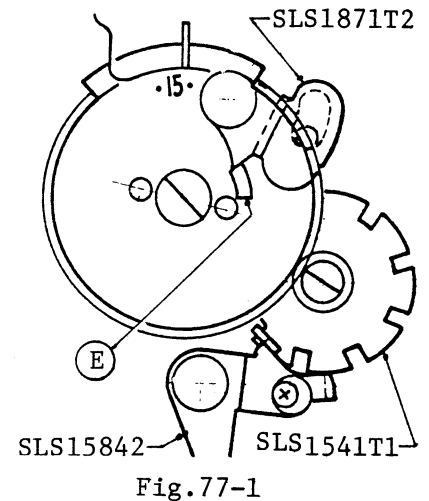


Fig.77-1

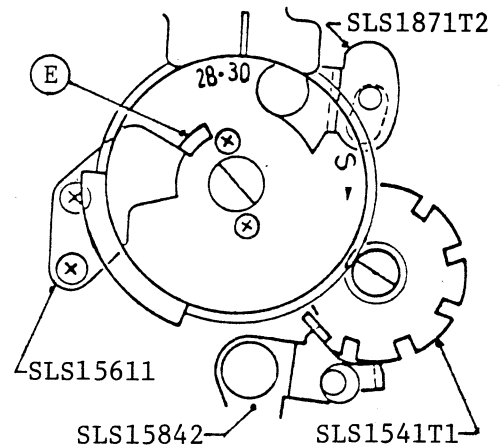
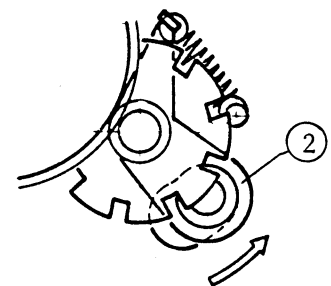


Fig.77-2



(Pushed aside)

Fig. 78

7-5 Reset to starting position "S"

- 1) When opening the back cover, both ends of the SLS15842 Stop lever are detached from the SLS1541T1 Dividing device and from the SLS14811 F.clutch wheel by the SLS15812 Zero reset lever moving as shown in Fig. 79.
- 2) As removing the Roll-film insert, the exposure counter will reset to "S" because SLS4182T1 Gear in the Roll-film insert disengages from SLS1531S1 Gear in the F.body.

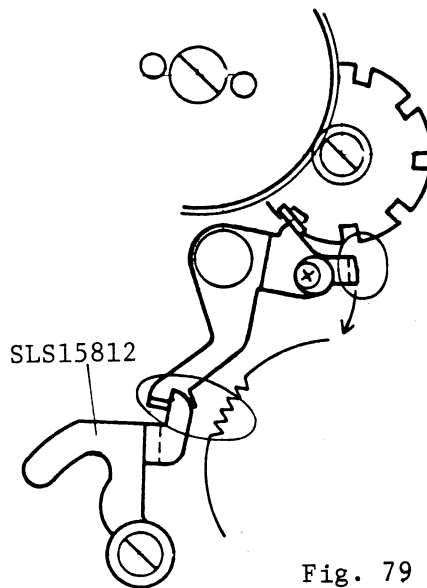


Fig. 79

7-6 Multiple-Exposure mechanism

When setting the multiple-exposure lever to Multi, the double-exposure prevention mechanism is disengaged, so that the shutter can be cocked with the film advance crank or knob without moving the film, making multiple-exposures possible.

In this case, the exposure counter does not advance.

- 1) When setting the multiple-exposure lever to Multi, the SLS15242 Cam turns about 1/4 turn (90°) in direction shown by the arrow in Fig. 80.
- 2) As the 1 -Lever moves in direction shown by the arrow, the F.clutch wheel is turned counterclockwise by A -pawl engages with the SLS 14811 F.clutch wheel.
- 3) The SLS1474T1 Clutch in the F.clutch wheel moves in direction shown by the arrow. Consequently, it is detached from the SLS14841 Ratchet gear as shown in Fig. 81.
- 4) If winding the film advance crank or knob, the F.clutch wheel does not rotate so that the film is not advanced.

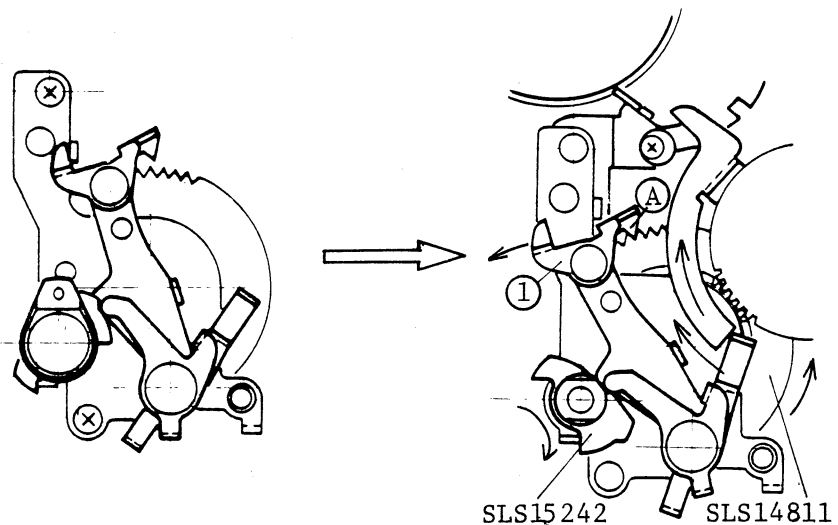


Fig.80

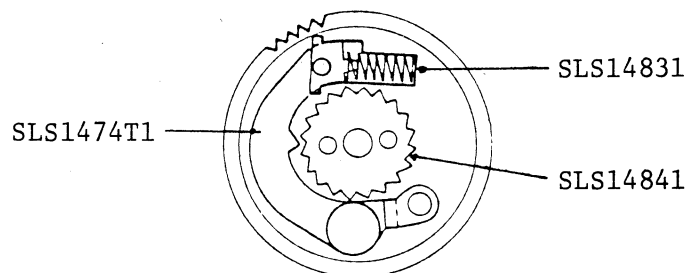


Fig.81

7-7 Determine SLS1554T1 Film counter gear

A. Determine SLS15611 Stopper :

- 1) Install the SLS-17 Position gauge to the SLS15561 Shaft as shown in Fig. 82.
- 2) Loosen two screws of the SLS15611 Stopper.
- 3) Tighten two screws by pushing down the stopper with left hand index finger.
- 4) Apply screw-lock tight on the two screws.

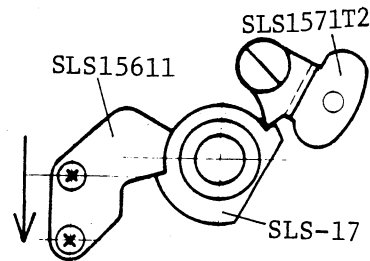


Fig. 82

B. Determine SLS1541T1 Dividing device :

- 1) When the exposure counter indicates to "S" (start), engage SLS1541T1 Dividing device with the SLS1554T1 Film counter gear as end (B) of the SLS15842 Stop lever should be determined as shown in Fig.83.

2) Film adjustment :

Fine adjustment is made by turning the Ecc.dowel after loosening two screws of the SLS15521 Film counter base.

3) Check :

After adjusting, install the 120-type roll-film insert into the camera body and check that the film can be completely wound onto the take-up spool without stopping at the exposure counter 16.

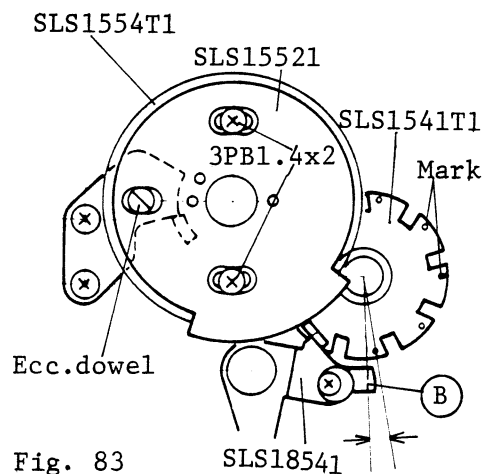


Fig. 83

7-8 Position of SLS15842 Stop lever

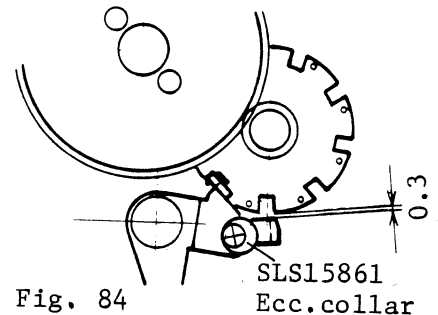
As we already have informed you with technical bulletin 078-M645-03, the stop lever is modified.

First describe about new lever and next about old one.

A. New SLS15842 Stop lever

1) Position of the stop lever

- a. When releasing the shutter, the clearance between the stop lever and the dividing device should be over 0.3mm as shown in Fig. 84.
- b. With the film advance lever fully wound, the pawl of the SLS15842 Stop lever get into the dividing device certainly.
- c. Install the 120-type roll-film insert into the camera body and check that the film can be completely wound onto the take-up spool without stopping at the exposure counter 16.



2) Adjustment

Adjustment is made by turning the SLS15861 Ecc. collar.

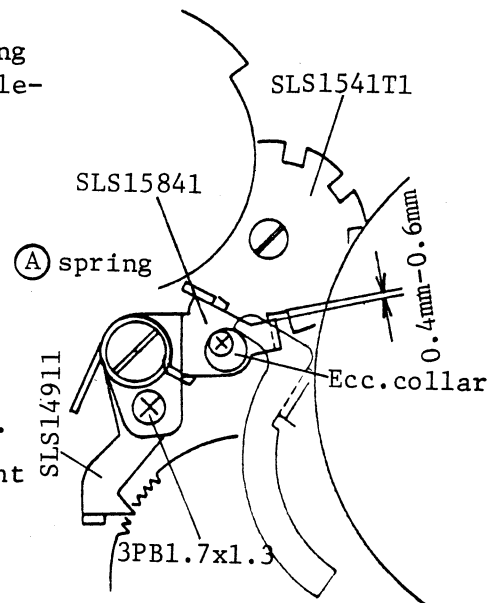
B. Old type stop lever

1) Position of the stop lever :

When the stop lever get into the dividing device after winding the shutter, the clearance between stop lever and bottom of groove of the dividing device should be 0.4mm to 0.6mm as shown in Fig. 85.

2) Adjustment

- a. Free the (A)-spring and loosen 3PB1.7x1.3BNi Screw.
- b. Push the pawl of SLS14911 Lever in direction shown by the arrow lightly. Adjustment is made by moving SLS15841.
- c. After adjusting, apply Screw-lock tight around the screw.



3) Position of the ecc.collar :

a. Check

1. Install the 120 type roll-film insert into the camera body and check that the film can be completely wound on to the take-up spool without stopping at the exposure counter 16.
2. Each film advance must be made at a single revolution of the film advance crank or knob.

b. Adjustment :

1. Adjustment is made by turning the ecc.collar.
2. After adjusting, apply Screw-lock tight on the screw.

7-9 Check and adjustment of the first exposure frame position on film

Draw three lines at a distance of 218mm^{+15}_{-7} from the start mark in the 120 type roll-film as shown in Fig. 87.

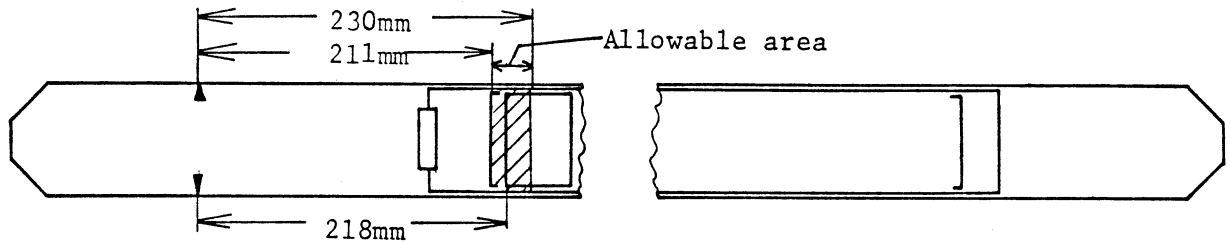


Fig. 87

A. Check the first exposure frame position :

- 1) Load the above film is marked in the 120 film insert and install it into the camera body.
- 2) Set the shutter speed dial to "B".
- 3) Wind the film advance crank or knob until it stops.
Depress the release button and keep it depressed position.
- 4) Check the first exposure frame is in the tolerance.

B. Adjustment :

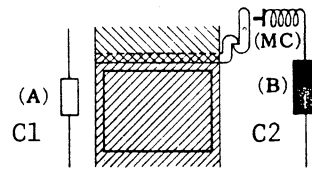
- 1) If it is without the tolerance, readjust 7-7 and 7-8.
- 2) Fine adjustment is made by turning the ecc.dowel in the SLS1554T1 Film counter gear after loosening two screws 3PB1.4x2BNI as shown in Fig.83.

8. Moving Coil mode, Electronic circuit and parts

8-1 Electronic circuit

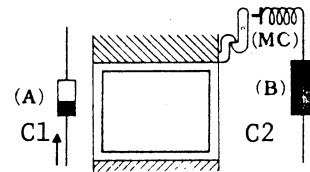
A. The exposure time control capacitor C1 discharges :

- 1) With the film advance crank or knob wound, the C1 capacitor discharges completely by switch-on of SW2 Trigger switch.
- 2) At this time, the moving coil capacitor C2 is charged at peak voltage of the battery.



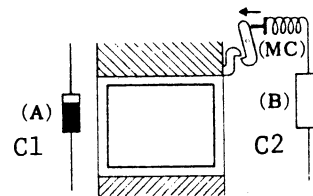
B. Beginning of charge to C1 capacitor

- 1) When depressing the shutter release button, the 1st curtain runs and the shutter is opened. Simultaneously, the SW1 Main switch is on.
- 2) When the 1st curtain moves, the SW2 Trigger switch is off and then the exposure time control capacitor C1 begins to charge.
- 3) The charge-time of capacitor C1 is determined by VR1 (Shutter speed).



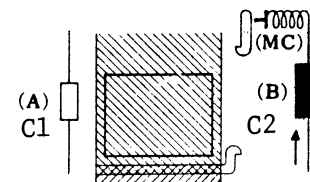
C. Determining exposure time :

- 1) When the capacitor C1 reaches the determined voltage in VR2, the moving coil is moved by I C.
- 2) Capacitor C2 discharges, energizing the moving coil which in turn moves the 2nd curtain runs and the shutter is closed.



D. Charge to capacitor C2

- 1) With the 2nd curtain closing, SW1 main switch is off and then capacitor C2 charges.
- 2) The charge-time is extremely short and accomplished by very little electric power. Battery performance is maintained at a high level, as indicated in the accompanying diagrams, as the moving coil condenser is normally charged keeping the battery at peak voltage. Thus the battery is protected from drops in voltage, as when the switch is on.



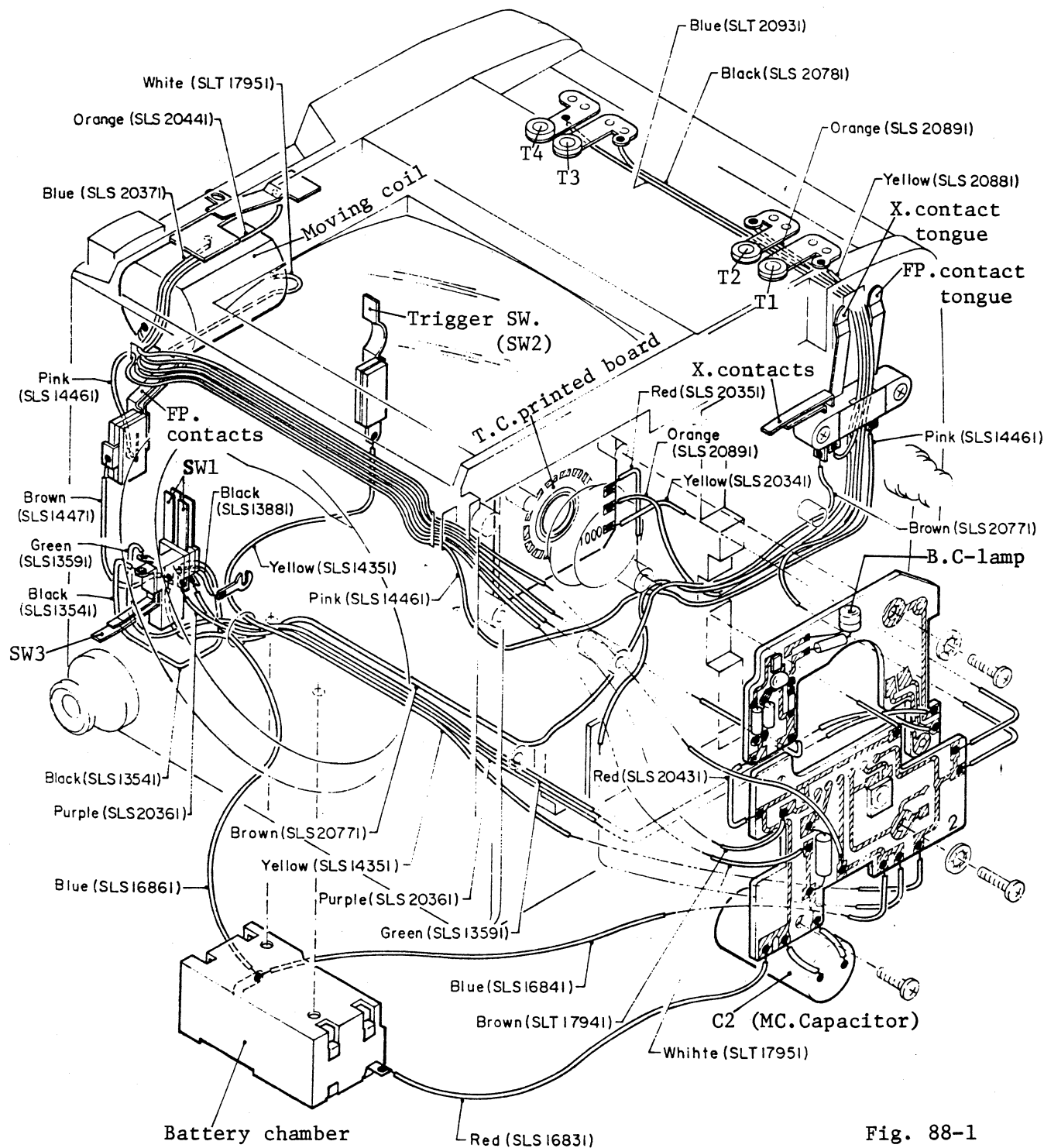


Fig. 88-1

Electric Circuit Diagram

(For M645 1000S)

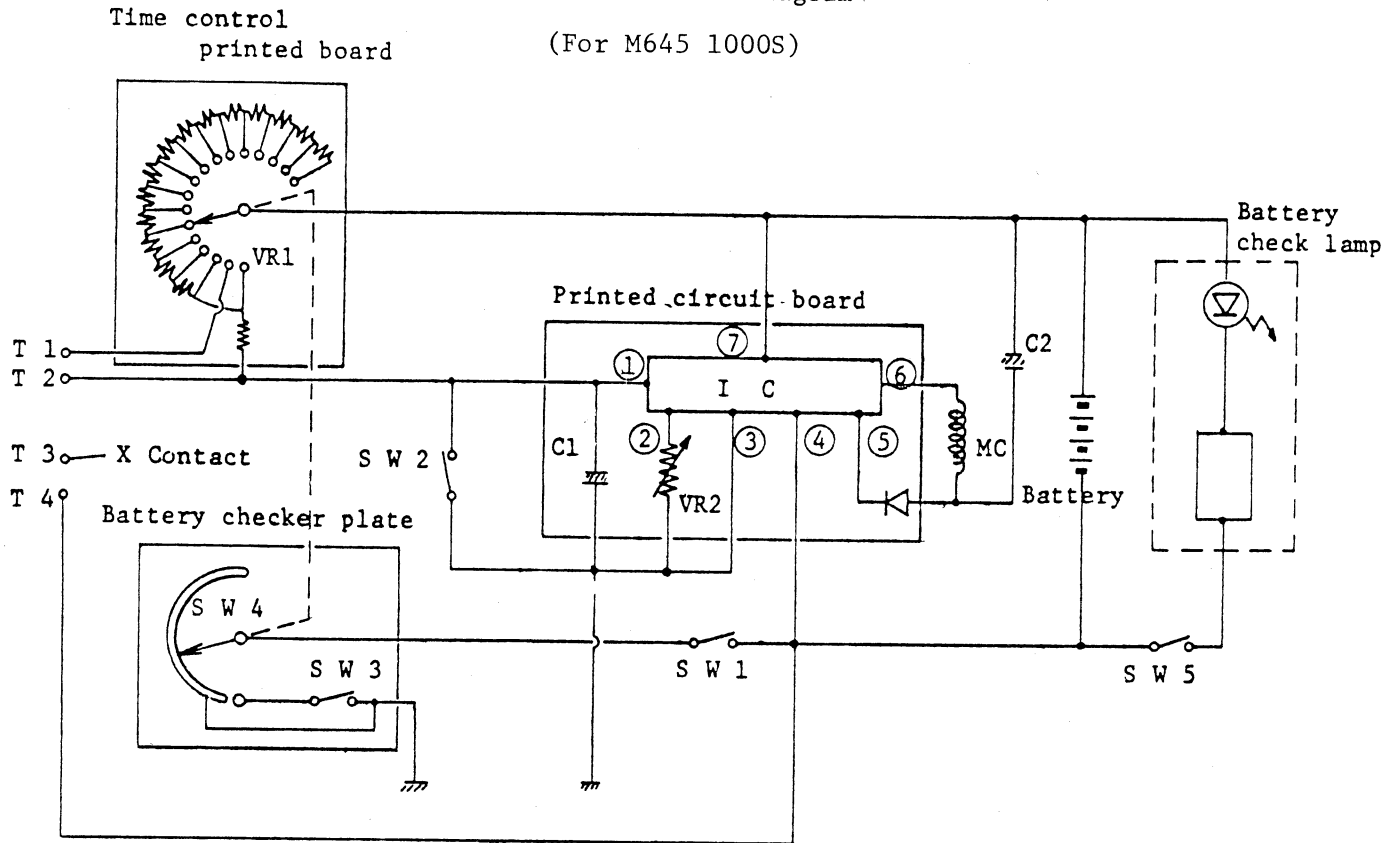


Fig. 88-2

Electric Circuit Diagram

(For M645 500)

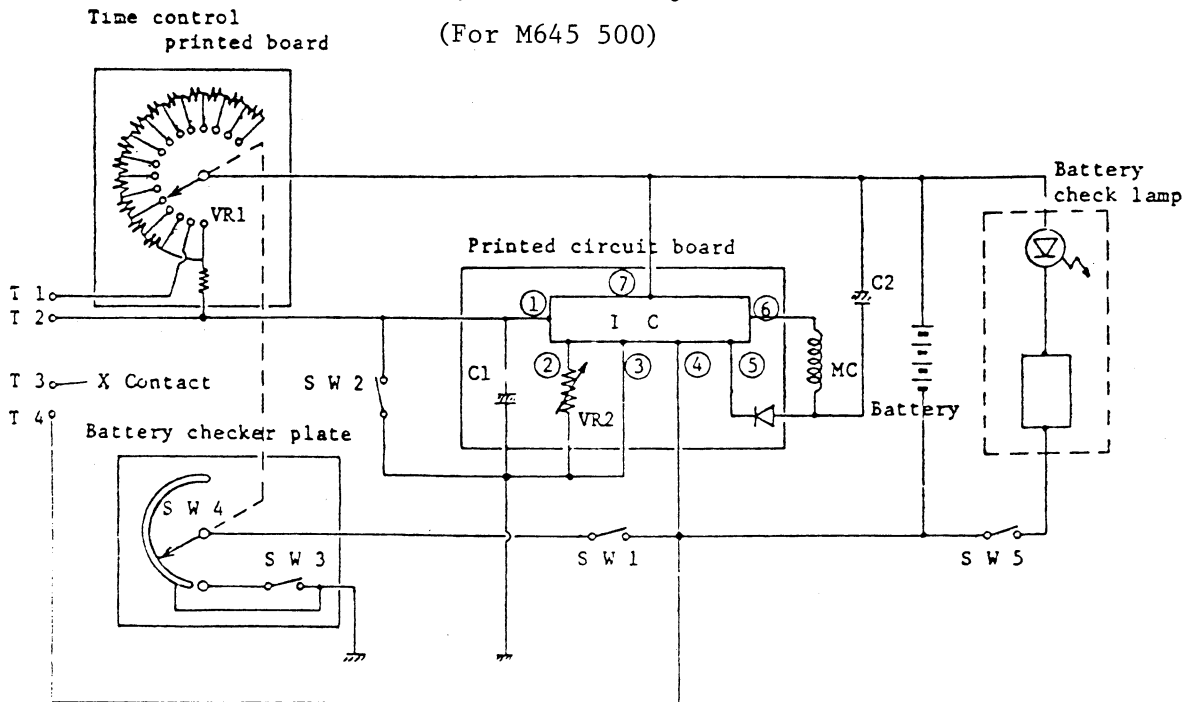


Fig. 88-3

SLT2064S1 Printed circuit board
for M645 1000S

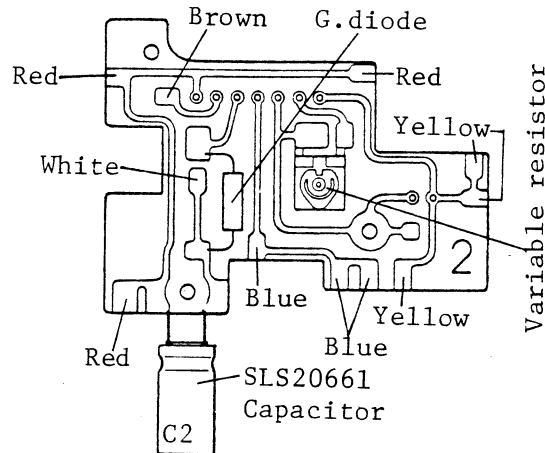


Fig. 88-4

SLT20311 Time control
printed board for
M645 1000S

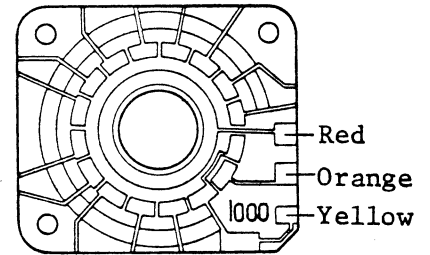


Fig. 88-5

SLS2064S1 Printed circuit board
for M645 500

Printed circuit board

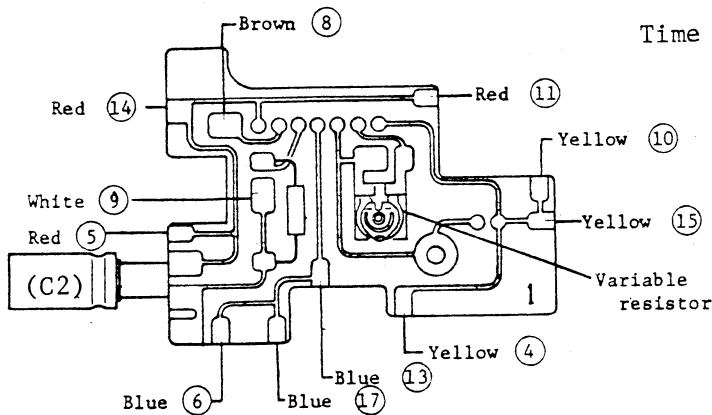


Fig. 88- 6

SLS20311 Time control
printed board for
M645 500

Time control printed board

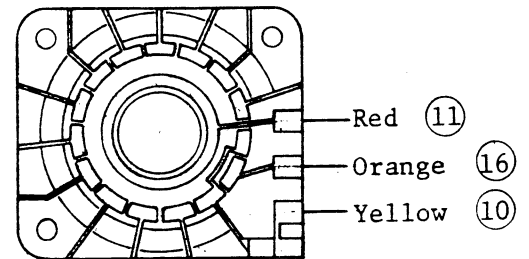


Fig. 88-7

Battery checker plate
SLS2041S1 for M645 1000S and M645 5000

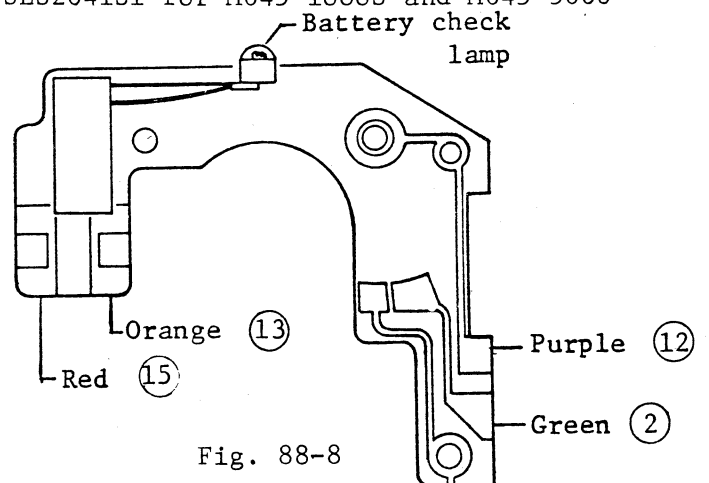


Fig. 88-8

8-2 Check and replacement of the Moving coil (M.C)

Before replacement the M.C, check the following points without fail.

A. Check

- 1) Battery voltage : 6 V
- 2) Battery chamber (SLT1671T1, SLS1671T1) :

Check electric current by the Tester.

If not , check following three points.

- a. Looseness of (+) and (-) terminals in the chamber.
- b. Malsolder of lead wires to the chamber.
- c. Dirty and weakend terminals.

- 3) Operation of the trigger switch (SW2) :

- a. With the shutter cocked, the SLS1431S1 Trigger switch must be switched on as shown in the Fig. 89-1.
- b. With the shutter released, the trigger switch must be switched off as shown in the Fig. 89-2.

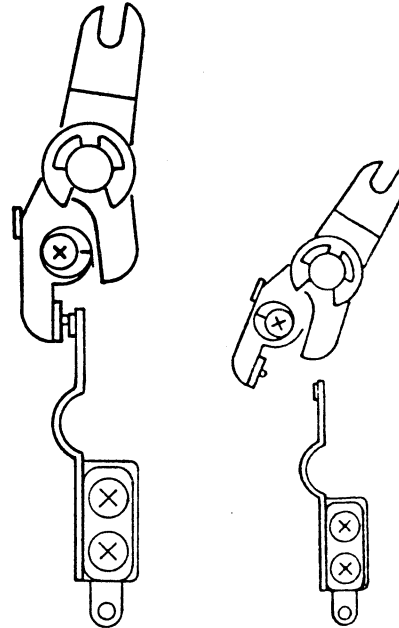


Fig. 89-1

89-2

- 4) Operation and electric current of the Main switch (SW1) :

a. Operation :

1. Set the shutter speed dial to " B ".
While depressing the shutter release button, never return it, check that the lever (A) pushes contacts of the main SW1 as shown in the Fig.89-3.
2. Is the SLS13841 Spring not out of its place ?

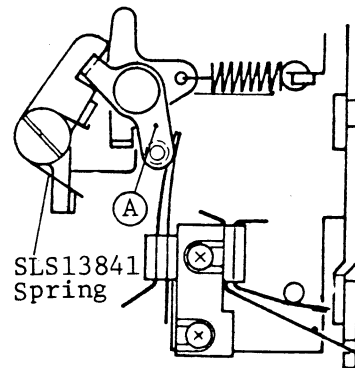


Fig. 89-3

b. Electric current :

Remove the battery from the body.
Then release the only 1st curtain by
pressing the shutter release button.

In above condition, check electric current
by using the Tester as follows.

Tester range.....X100

Tester terminal red(+)...Purple leadwire

Tester terminal black(-)...Blue leadwire

Tester needle should move to Zero
If not, check following four points.

1. Malsolder of purple and blue lead wires.
2. Sufficient contact efficiency of the SW1.
3. Dirty contacts of the SW1.
4. Is the SW1 installed tightly ?
- 5) Operation of the Bulb switch-over lever
See "5-4".
- 6) Check also "8-4" electronic circuit and
parts.
- 7) Check of the M.C :

Remove the battery from the body and
unsolder brown and white lead wires from
the printed circuit board as shown in
the Fig. 90-1.

Tester range.....X 1

Tester terminal red (+)...White leadwire

Tester terminal black(-)...Brown leadwire

Tester needle must indicate between 5Ω
and 10Ω and the M.C shaft must thrust out.
If not, the M.C is wrong.

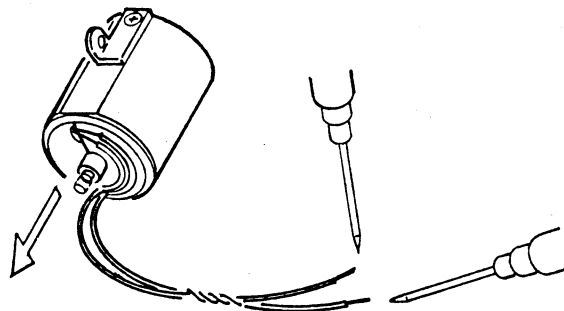


Fig. 90-2

Battery checker plate

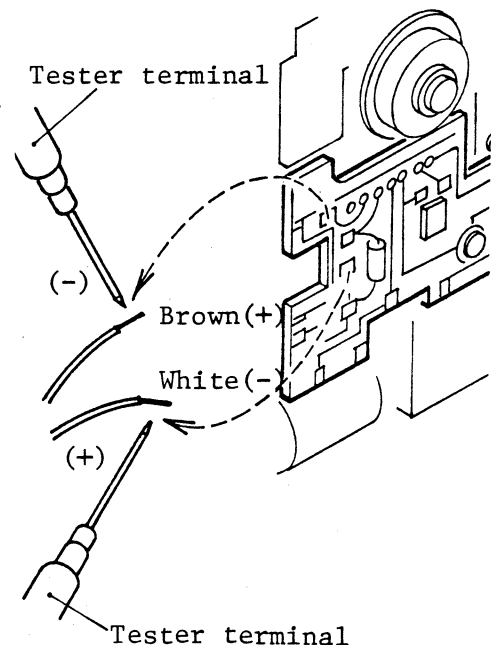
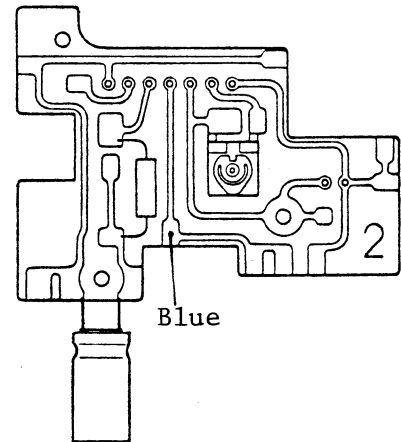
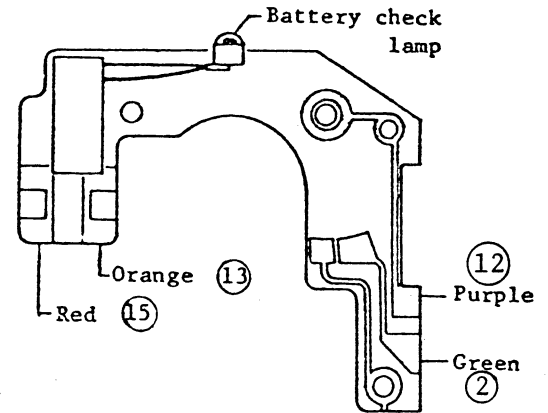


Fig. 90-1

B. Replacement of the moving coil

1) Remove the M.C from the body

- a. Remove SLS11551 and SLT17931 Screws as shown in the Fig. 91-1.
- b. Remove the M.C with brown and white lead wires from the body.

2) Installing new M.C :

- a. Check its operation by the Tester

Note : Do not apply 6 V to the M.C directly.

- b. The pole on the M.C where the brown lead wire is soldered is plus (+) and the other pole with white lead wire is minus (-).

Note : (+) and (-) pole of M.C is different among moving coils.

Brown lead wire is for plus pole and white one is for minus pole. When changing M.C or its lead wires, never mistake (+) and (-) poles.

- c. Install the M.C into the camera body.

Note : Do not pinch blue, orange, brown and white lead wires under the M.C.

- d. Put in order brown and white lead wires as shown in the Fig. 91-1 and do not make it touching to the release bar.

- e. Insulation of M.C :

Tester range.....X 1

Tester terminal red(+).White and brown lead wire alternately

Tester terminal black(-)...Earth as shown in Fig. 91-2

With above test, the M.C must be in insulation.

- f. Recheck voltage and operation of M.C.
- g. Solder brown and white lead wires to the printed board.
- h. Insert battery into the battery chamber and check operation of M.C by releasing shutter.

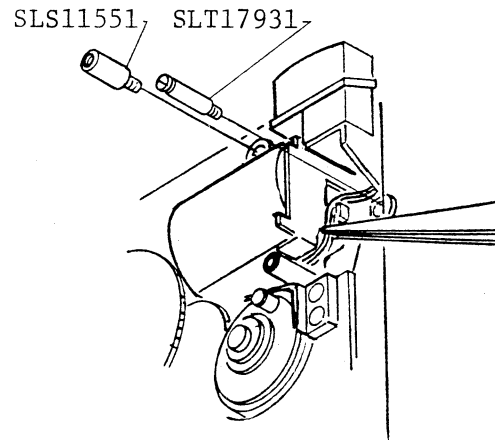


Fig. 91-1

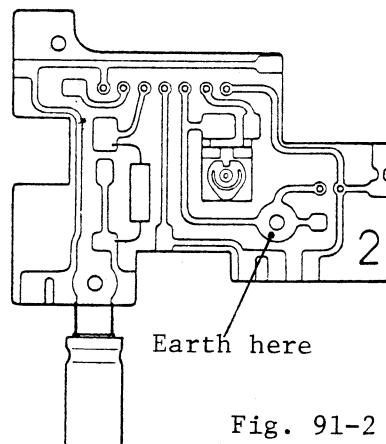


Fig. 91-2

8-3 Replacement SLT2064S1 Printed circuit

This printed circuit maybe very seldom to replace for its malfunction or damage.
If it is necessary, check following points.

A. Adjusting the variable resistor as shown in Fig. 92.

1) After performing the curtain travel time and shutter speed adjustment, set the shutter dial to 1/60sec..

2) Check its shutter speed.

A.slit.....15.8ms to 17ms

3) Adjustment is made by the variable resistor.

4) After rechecking the curtain travel time, check and adjust 1/1000sec. (SLS 1/500).

5) Check also X.synchro. delay time.

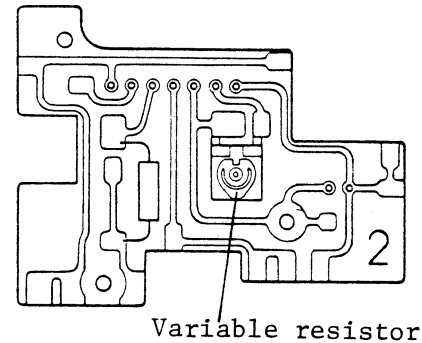
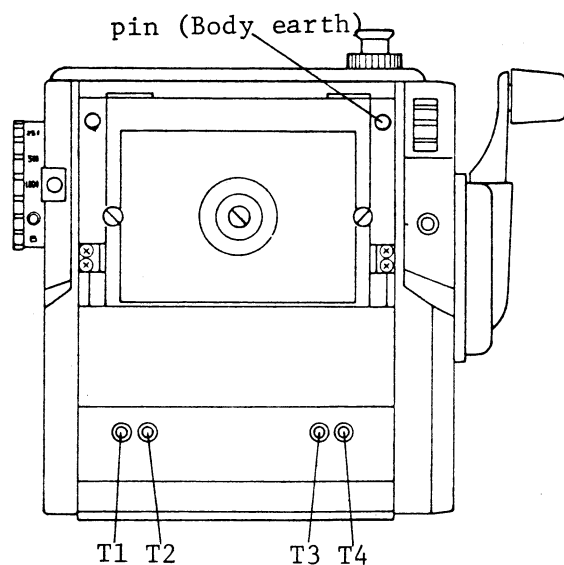


Fig. 92

8-4 Check electronic circuit by Tester

A. Circuit

Check place	Its purpose	Battery	S.P Dial	Tester Range	Tester terminal		Tester indicator
					Red	Black	
T 1-T 2	Current for P.D finder	With	⊙	D C 10 V	T 2	T 1	Shutter runs O K
T 2-T 4	Battery voltage for P.D finder	With	⊙	D C 10 V	T 2	T 4	6 Volt
T 3-Body earth	X.Synchro.contact When attaching finder	With	1/30	X 1	Body earth ↕ Synchro.cover		Current during shutter moves.....O K
T 4-Body earth	Short between minus circuit and body earth	Without	Except ⊙	X 1	Body earth	T 4	Must not move
Bulb	Its operation	With	B	D C 10 V	Red T: Green or purple lead wire	Black T: IC pin No.4 blue lead wire	After winding and releasing —6 Volt. During "B"—0



Connect terminal

T 1 : for shutter speed input at the shutter dial "⊙"

T 2 : for Battery (+) at the shutter dial "⊙"

T 3 : for X-contact

T 4 : for Battery (-)

Fig. 93

B. Parts

1/2

Parts	Tester Range	Tester terminal		Tester indicator & others
		Red	Black	
1) Germa diode	X100	Pin 5 of IC	White lead wire of MC.	Moves widely
		Reverse of above		Moves slightly
2) Moving coil Capacitor C2	X100	(-) Pole of C2	Pin 7 of IC	Moves widely and then returns to Zero
3) Moving coil	X 1	White lead wire	Brown lead wire	Moves in limit 5Ω to 10Ω (Moving coil should operate)
4) B C.lamp with Battery	D C 10 V	Red lead wire	Orange lead wire	With the BC.button depressed, should point 6 V.
B C.lamp without Battery	X 1	Red lead wire on BC.	Red lead wire on printed circuit board	With the BC.button depressed. should not move
		Orange lead wire on BC.	Blue lead wire on printed circuit board	" Ditto "

Note : As Germa diode has a special character that is to send electric current only in one way direction, if you insert $\pm$ poles of the Battery Upside-down, the current is off.

If above check for the BC.lamp is O K, but the lamp does not illuminate yet, change the BC.lamp to new one.

I C	Battery	S.P Dial	Tester Range	Tester terminal		Tester indicator & others
				Red	Black	
Pin 1	With	1/1000 (SLS 1/500)	D C 10 V	Pin 1	Pin 4	Points 6 V.
	With- out		X 1	SW 2	Pin 1	Current is on at start and of winding
Pin 2	With	1 sec. } 8 sec.	D C 10 V	Pin 2	Body earth	When winding, points Zero volt. While Slow shutter operating, points about 1.32 Volt
Pin 3	With	1 sec. } 8 sec.	D C 10 V	Pin 3	Body earth	When winding, points Zero volt. While Slow shutter operating, points Zero Volt
Pin 4 (Battery pole minus(-),blue lead wire line)	With		D C 10 V	Pin 4	Body earth	When winding, moves in direction to minus(-). While Slow shutter oper- ating, points Zero Volt
Pin 5 (Current to the M C.)	With		D C 10 V	Pin 5	Body earth	" Ditto "
Pin 6 (For M C capacitor C2)	With		D C 10 V	Pin 6	Body earth	" Ditto "
Pin 7 (Battery pole plus(+),red lead wire line)	With		D C 10 V	Pin 7	Body earth	When winding, points zero volt. While Slow shutter operating, 6 Volt

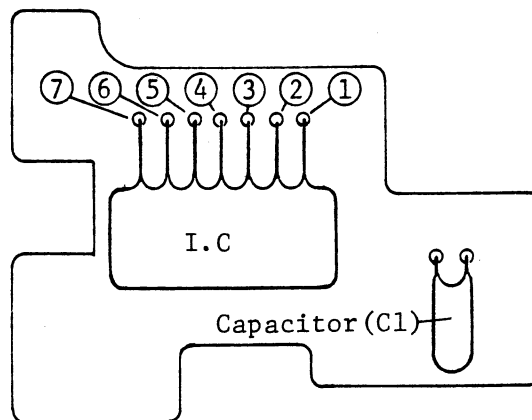


Fig. 94

C. Main cause for Battery exhaustion

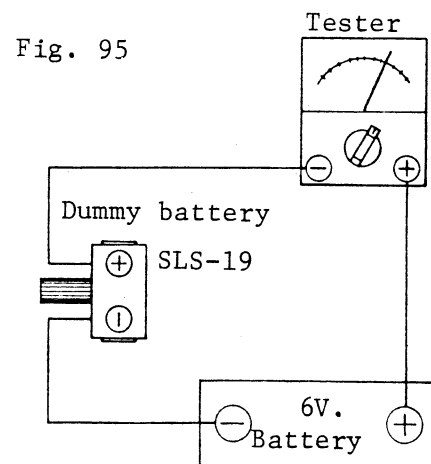
Main cause	Battery	Tester Range	Tester terminal		Tester indicator
			Red	Black	
Touch of main switch SW 1 contacts	With	D C 10 V	Body earth	Pin 4 (I C)	When releasing at Slow shutter speed, points under 6 Volt..... exhausting
M C. Operation	With-out	X 1	White (lead wire of MC)	Brown	Moves in limit 5Ω to 10Ω . (M C. should operate)
Short of M C. lead wires (White and Brown)	With-out	X 1	Body earth	White, Brown mutually	If shorted, indicator needle moves
Short of lead wires of Battery chamber	With-out	X 1	Body earth	Blue, Red mutually	" Ditto "

✕ Special check method of Battery exhaustion with dummy Battery

Check points	S.P.Dial	Tester Range	Tester indicator
Short, broken and malsolder of lead wires for Battery chamber and M C. Dirty shaft of M C.	At any shutter speed 0 K except ⊙	1. First release shutter at "DC mA 25" 2. Next shift it to "DC mA 0.05"	Should come down less than $5^{\mu A}$ within 10 sec. to 15 sec.

Note : Checking method of the Battery leak with Dummy battery and Tester.

1. Remove the battery from camera body and then put the SLS-19 Dummy battery into the chamber.
2. Make electric circuit among the Tester, Dummy battery and 6V Battery as shown in Fig. 95.
3. Checking procedure is shown above, "Battery exhaustion".



Special Tool List and
Special Measuring Instruments
for
***Mamiya* M645**

Special Tool List and Special Measuring Instrument

Instrument No.

Description and Use

SLS-1

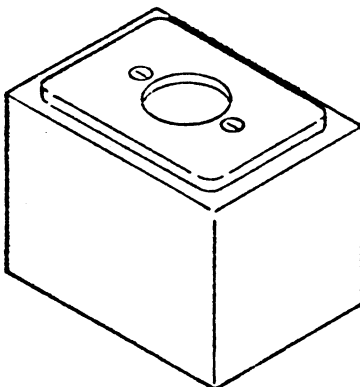


Adjusting Body
flange back and
Parallelism

Standard gauge bar.

(Exclusively used for Inst No. U-1)

SLS-2

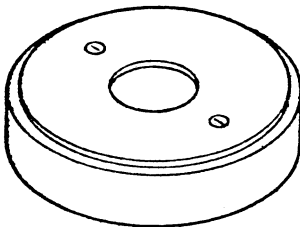


Adjusting Body
flange back and
Parallelism

Camera Body supporter

(Exclusively used for Inst No. U-1)

SLS-3

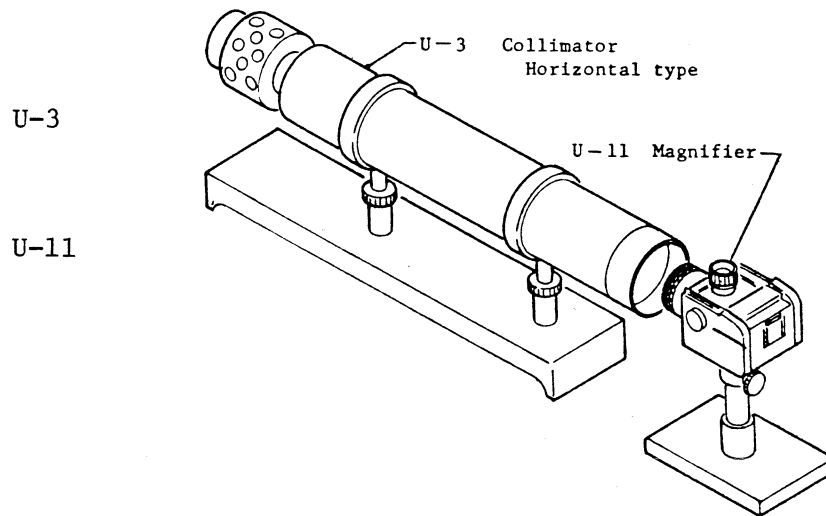


Adjusting Body
flange back and
Parallelism

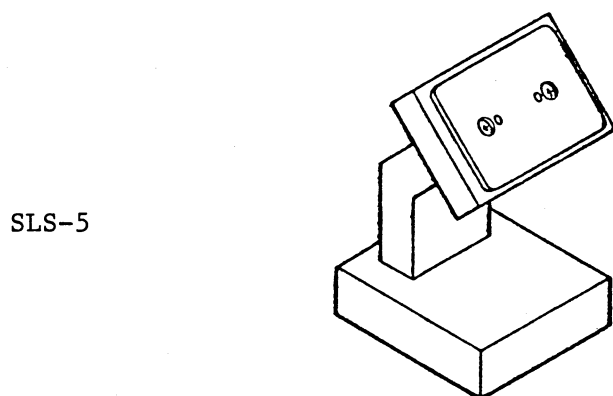
Parallel disk gauge

(Exclusively used for Inst No. U-1)

Finder infinity check collimator
(Horizontal type)

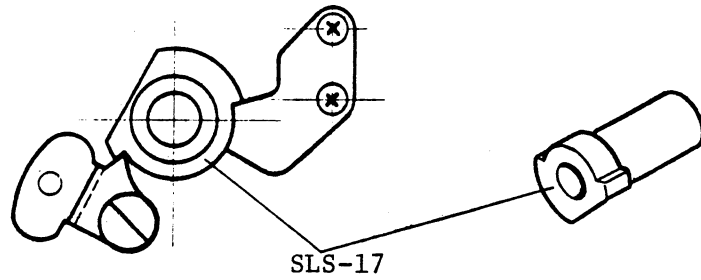


Magnifier



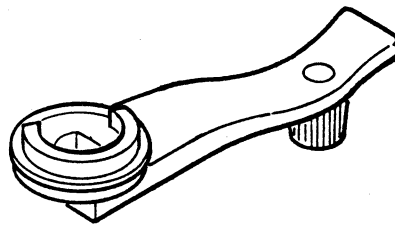
Mirror 45° checking stand

SLS-17



Position gauge for determining SLS15611 Stopper

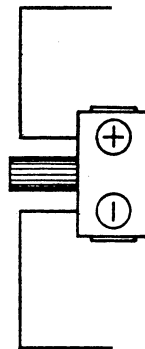
SLS-18



Winding crank lever

Temporarily use for repair work

SLS-19



Dummy Battery for checking battery leak

Mamiya

PARTS CATALOG

M645₁₀₀₀S

M645



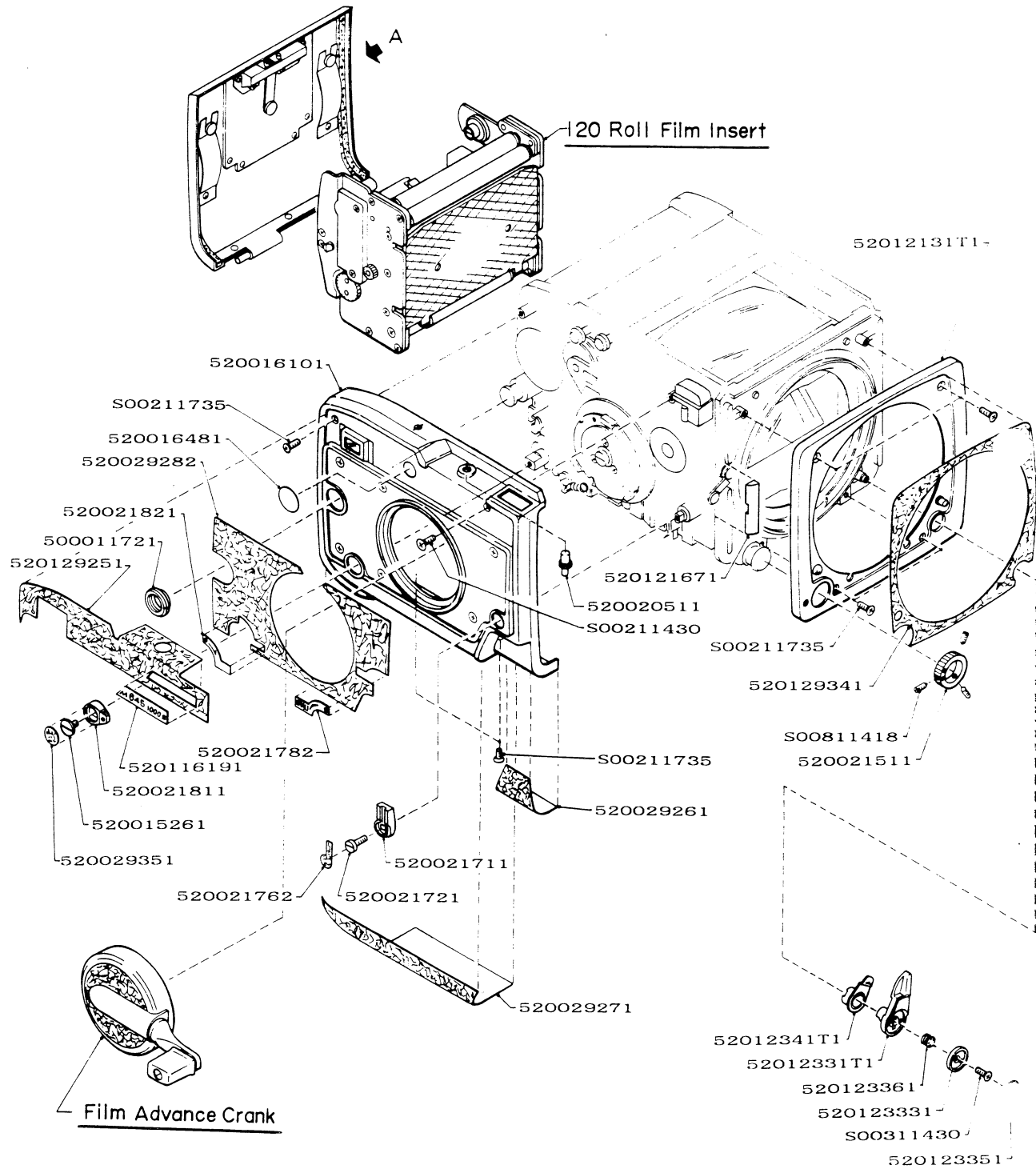
MAMIYA AMERICA CORPORATION

8 Westchester Plaza, Elmsford, NY 10523 • 914-347-3300

M645₁₀₀₀S

Camera Body

Body Ass'y	1.....	1
Body Ass'y	2.....	2
Body Ass'y	3.....	3
Body Ass'y	4.....	4
Body Ass'y	5.....	5
Body Ass'y	6.....	6
Body Ass'y	7.....	7
Body Ass'y	8.....	8
Body Ass'y	9.....	9
Body Ass'y	10.....	10
Body Ass'y	11.....	11
Body Ass'y	12.....	12
Body Ass'y	13.....	13
DETAIL "A" Back Cover Ass'y		14
DETAIL "B" Bottom Cover Ass'y		15
DETAIL "C" Winding Base Plate Ass'y	..	16
DETAIL "E" Charging Base Ass'y		17
DETAIL "D" MS Clutch Disk Ass'y & "F" Winding Base Gear Ass'y		18
5201 16201 Side Panel R Ass'y		19
5201 18001 Shutter Curtain Ass'y		20



PARTS LIST

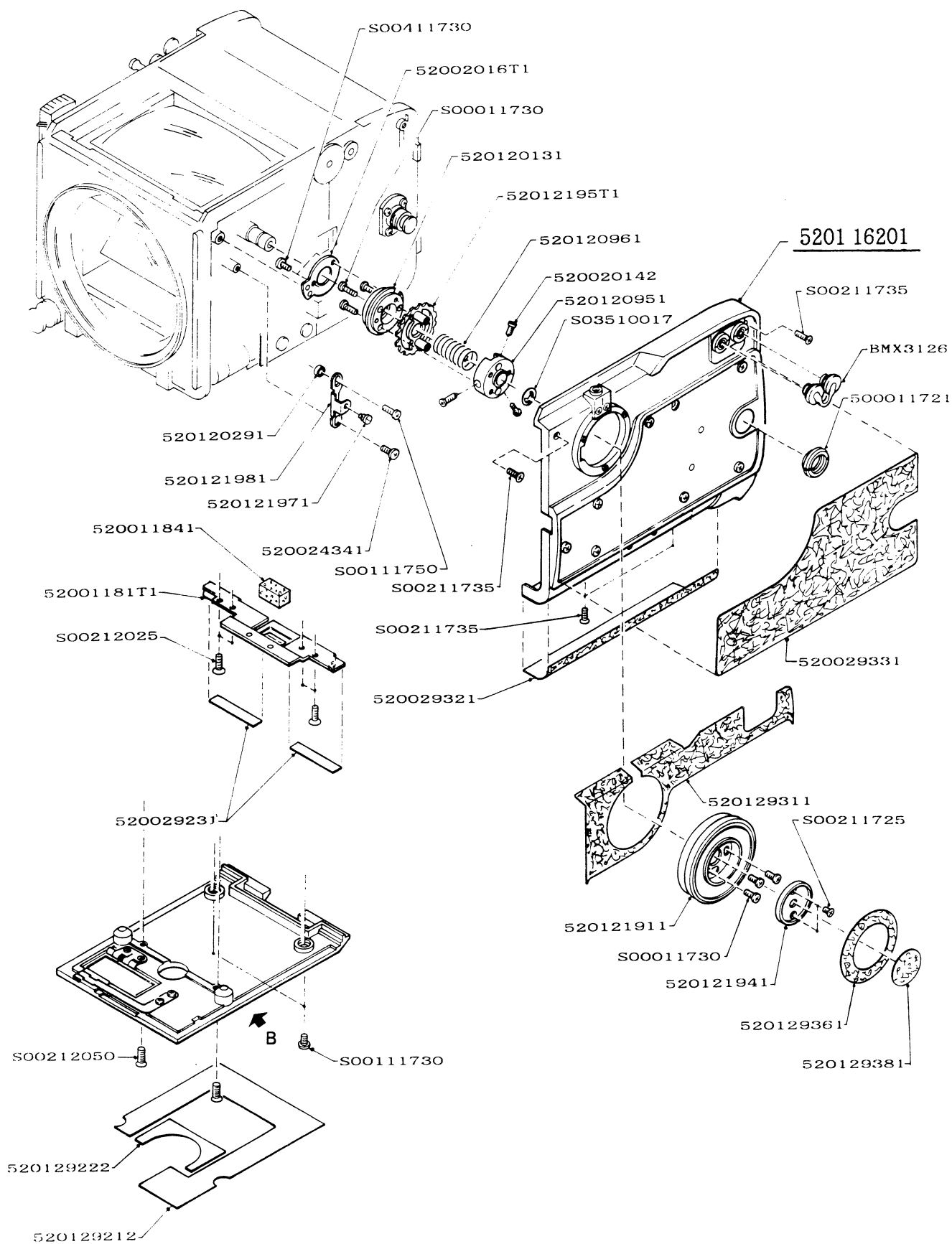
1 1

Parts No.	Common Use Parts No.	QTY.	Description	部 品 名 称
5201 16191	(SLT16191)	1	Name plate	1 0 0 0 S マーク
5201 2131T1	(SLT2131T1)	1	Front panel	前カバー
5201 21671	(SLT21671)	1	Cover	絞り操作板カバー
5201 2331T1	(SLT2331T1)	1	Self-timer lever	セルフつまみ
5201 23331	(SLT23331)	1	Decoration Disk	セルフ軸飾り
5201 23351	(SLT23351)	1	Leatherette	セルフつまみ革
5201 23361	(SLT23361)	1	Spring	つまみ戻しバネ
5201 2341T1	(SLT2341T1)	1	Lever	起動レバー
5201 29251	(SLT29251)	1	Leatherette A	左側板革(上)
5201 29341	(SLT29341)	1	Leatherette B	前カバー革
5200 15261	(SLS15261)	1	Screw	D X カム止ネジ
5200 16101	(SLS16101)	1	Side panel L	左側板
5200 16481	(SLS16481)	1	Disk	左側板盲板
5200 20511	(SLS20511)	1	BC Button	B C ボタン
5200 21511	(SLS21511)	1	S Lock ring	S ロックつまみ
5200 21711	(SLS21711)	1	Mirror-up lever	M U つまみ
5200 21721	(SLS21721)	1	Screw	M U つまみ止ネジ
5200 21762	(SLS21762)	1	Leatherette C	M U つまみ革
5200 21782	(SLS21782)	1	Indicator plate	M U 表示板
5200 21811	(SLS21811)	1	M exposure lever	D X つまみ
5200 21821	(SLS21821)	1	Indicator plate	D X 表示板
5200 29261	(SLS29261)	1	Leatherette D	左側板革(下前)
5200 29271	(SLS29271)	1	Leatherette E	左側板革(下後)
5200 29282	(SLS29282)	1	Leatherette F	左側板飾革
5200 29351	(SLS29351)	1	Leatherette G	D X つまみ革
5000 11721	(RS1172)	1	Nut	吊金具止ネジ
S00211430	(PD1.4×3)	1	Screw	左側板止ネジ
S00211735	(PD1.7×3.5)	7	Screw	止ネジ
S00311430	(3PD1.4×3)	1	Screw	セルフ軸飾り止ネジ
S00811418	(A1.4×1.8)	3	Screw	つまみ止ネジ

※ DETAIL A Back Cover Ass'y.....Page 14
 ※ Film Advance Crank.....Page 21
 ※ 120 Roll Film Insert.....Page 22

Remarks

86



PARTS LIST

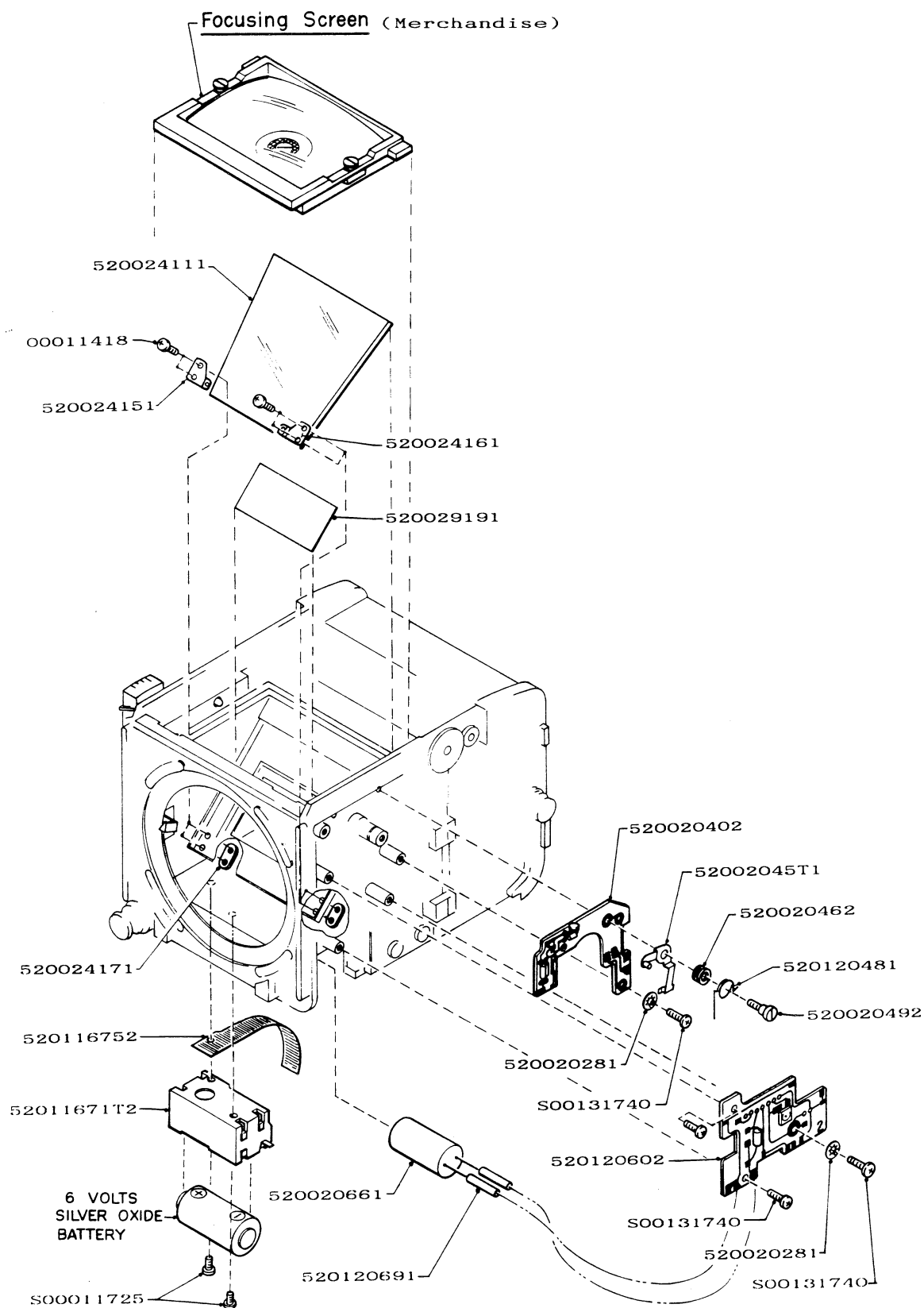
1 2

Parts No.	Common Use Parts No.	QTY.	Description	部 品 名 称
5201 16201	(SLT16201)	1	Side panel R	右側板Ass'y
5201 20131	(SLT20131)	1	Shutter dial hub	Tダイヤルハブ
5201 20291	(SLT20291)	1	Collar	ピン台カラー
5201 20951	(SLT20951)	1	Holder	Tダイヤル台
5201 20961	(SLT20961)	1	Spring	Tロックバネ
5201 21911	(SLT21911)	1	Shutter speed dial	Tダイヤル
5201 21941	(SLT21941)	1	Disk	Tダイヤルプレート
5201 2195T1	(SLT2195T1)	1	Click disk	Tロック板
5201 21971	(SLT21971)	1	Shoulder screw	Tロックピン
5201 21981	(SLT21981)	1	Stopper plate	Tロックピン台
5201 29212	(SLT29212)	1	Leatherette L	下部カバー革(大)
5201 29222	(SLT29222)	1	Leatherette S	下部カバー革(小)
5201 29311	(SLT29311)	1	Leatherette U	右側板革(上)
5201 29361	(SLT29361)	1	Leatherette	Tダイヤル革
5201 29381	(SLT29381)	1	Leatherette	Tダイヤルボタン革
5200 1181T1	(SLS1181T1)	1	Hinge plate	蝶番
5200 11841	(SLS11841)	1	Cushion	蝶番止金クッション
5200 20142	(SLS20142)	3	Screw	T Dハブ止ネジ
5200 2016T1	(SLS2016T1)	1	Brush disk	Tブラシ台板
5200 24341	(SLS24341)	1	Screw	T Dプレート止ネジ
5200 29231	(SLS29231)	2	Leatherette	ボディ蝶番革
5200 29321	(SLS29321)	1	Leatherette	右側板革(下)
5200 29331	(SLS29331)	1	Leatherette	右側板飾り革
5000 11721	(RS1172)	1	Nut	吊金具ナット
BMX3126		1	Cover	シンクロプラグカバー
S00011730	(PB1.7×3)	6	Screw	止ネジ
S00211725	(PD1.7×2.5)	2	Screw	T Dプレート止ネジ
S00211735	(PD1.7×3.5)	4	Screw	右側板止ネジ
S00212025	(PD2×2.5)	4	Screw	蝶番止ネジ
S00212050	(PD2×5)	2	Screw	下部カバー止ネジ
S00111730	(3PB1.7×3)	2	Screw	下部カバー止ネジ
S00111750	(3PB1.7×5)	1	Screw	ロックピン台止ネジ
S00411730	(TB1.7×3)	1	Screw	Tブラシ台止ネジ
S03510017	(E-17)	1	E-ring	Tダイヤル止リング

※ 5201 16201 Side Panel R Ass'y.....Page 19

※ DETAIL B Bottom Cover Ass'y.....Page 15

Remarks



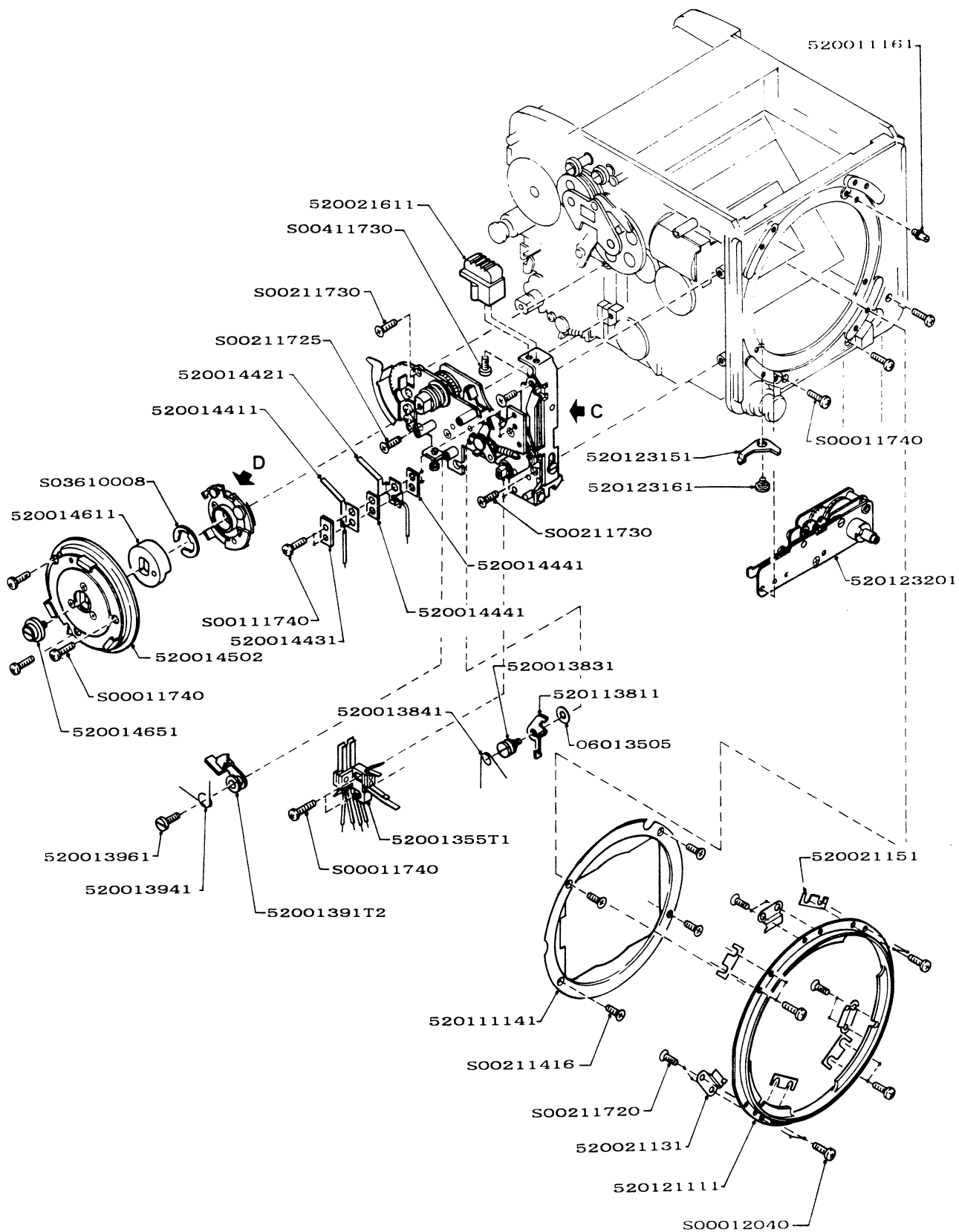
PARTS LIST

1 | 3 |

Parts No.	Common Use Parts No.	QTY.	Description	部 品 名 称
5201 1671T2	(SLT1671T2)	1	Battery chamber Ass'y	電池ケースAss'y
5201 16752	(SLT16752)	1	Ribbon	電池リボン
5201 20481	(SLT20481)	1	Spring	切替スイッチバネ
5201 20602	(SLT20602)	1	Shutter PC plate	T回路配線板
5201 20691	(SLT20691)	2	Vinyl tube	チューブ
5200 20281	(SLS20281)	2	Fastener	ネジアース座金
5200 20402	(SLS20402)	1	Battery check PC plate	B C 基板
5200 2045T1	(SLS2045T1)	1	Switch lever	切替スイッチレバー
5200 20462	(SLS20462)	1	Hub	スイッチレバー軸
5200 20492	(SLS20492)	1	Shoulder screw	S W レバー止ネジ
5200 20661	(SLS20661)	1	MC condenser	M C コンデンサー
5200 24111	(SLS24111)	1	Mirror	ミラー
5200 24151	(SLS24151)	1	Leaf spring L	ミラー押え(左)
5200 24161	(SLS24161)	1	Leaf spring R	ミラー押え(右)
5200 24171	(SLS24171)	2	Rataining plate	ミラー座金
5200 29191	(SLS29191)	1	Paper	ミラー裏紙
00011418	(PB1.4×1.8)	4	Screw	ミラー押え止ネジ
S00011725	(PB1.7×2.5)	2	Screw	電池ケース止ネジ
S00131740	(3PB1.7×4Ni)	4	Screw	止ネジ

Remarks

86



PARTS LIST

1 4

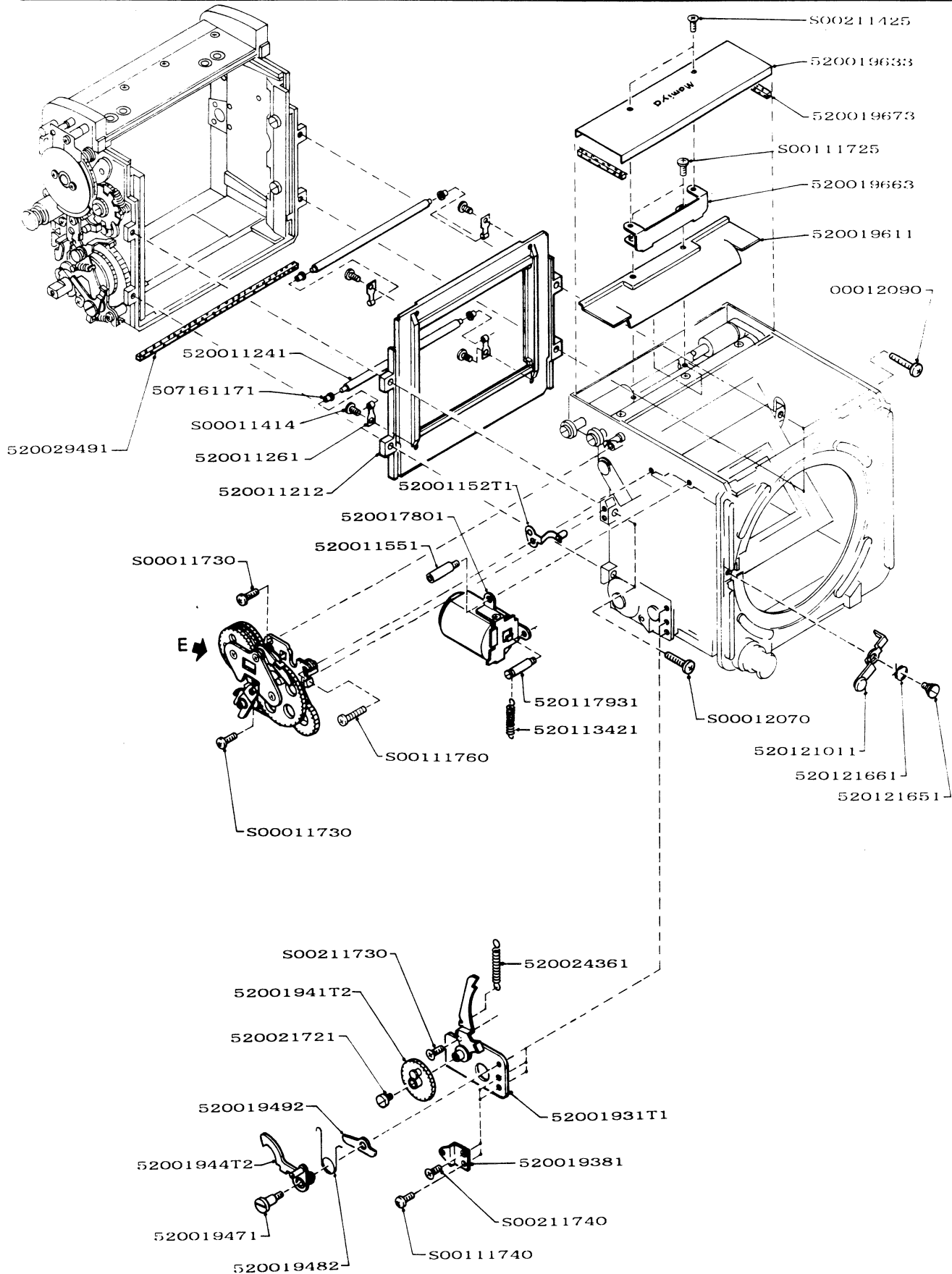
Parts No.	Common Use Parts No.	QTY.	Description	部 品 名 称
5201 11141	(SLT11141)	1	Shading frame	バヨネ下カバー
5201 13811	(SLT13811)	1	Hook	スイッチ掛金
5201 21111	(SLT21111)	1	Bayonet ring	バヨネットリング
5201 23201	(SLT23201)	1	Self-timer Ass'y	セルフタイマー
5201 23151	(SLT23151)	1	Lever	セルフレバー
5201 23161	(SLT23161)	1	Shoulder screw	セルフレバー軸
5200 11161	(SLS11161)	1	Stopper pin	バヨネ回転止ピン
5200 1355T1	(SLS1355T1)	1	Main switch	トリプルSW. Ass'y
5200 13831	(SLS13831)	1	Shoulder screw	スイッチ掛金軸
5200 13841	(SLS13841)	1	Spring	スイッチ掛金バネ
5200 1391T2	(SLS1391T2)	1	Clutch stopper	ストッパー
5200 13941	(SLS13941)	1	Spring	ストッパーバネ
5200 13961	(SLS13961)	1	Screw	ストッパー止ネジ
5200 14411	(SLS14411)	1	FP contact U	上FP接片
5200 14421	(SLS14421)	1	FP contact L	下FP接片
5200 14431	(SLS14431)	1	Insulation plate	FP接片
5200 14441	(SLS14441)	2	Insulation washer	FP接片絶縁板
5200 14502	(SLS14502)	1	Winding knob disk Ass'y	巻上上基板
5200 14611	(SLS14611)	1	Winding cam	MS巻上カム
5200 14651	(SLS14651)	1	Shoulder screw	ノブ受板止め軸
5200 21131	(SLS21131)	3	Leaf spring	バヨネバネ
5200 21151	(SLS21151)	0~4	Washer(t=0.03,0.05,0.1)	バヨネワッシャ
5200 21611	(SLS21611)	1	Shutter release button	リリースボタン
S00011740	(PB1.7×4)	8	Screw	止ネジ
S00012040	(PB2×4)	8	Screw	バヨネ止ネジ
S00111740	(3PB1.7×4)	2	Screw	FP接片台止ネジ
S00211416	(PD1.4×1.6)	4	Screw	カバー止ネジ
S00211720	(PD1.7×2)	6	Screw	バヨネバネ止ネジ
S00211725	(PD1.7×2.5)	1	Screw	巻上中基板止ネジ
S00211730	(PD1.7×3)	3	Screw	巻上下基板止ネジ
S00411730	(TB1.7×3)	2	Screw	Rボタン止ネジ
06013505	(5W2×0.5)	1	Washer	スイッチ掛金座金
S03610008	(C-8)	1	C-ring	MSI歯車止リング

※ DETAIL C Winding Base Ass'y.....Page 16

※ DETAIL D MS Clutch Disk Ass'y.....Page 18

Remarks

86



PARTS LIST

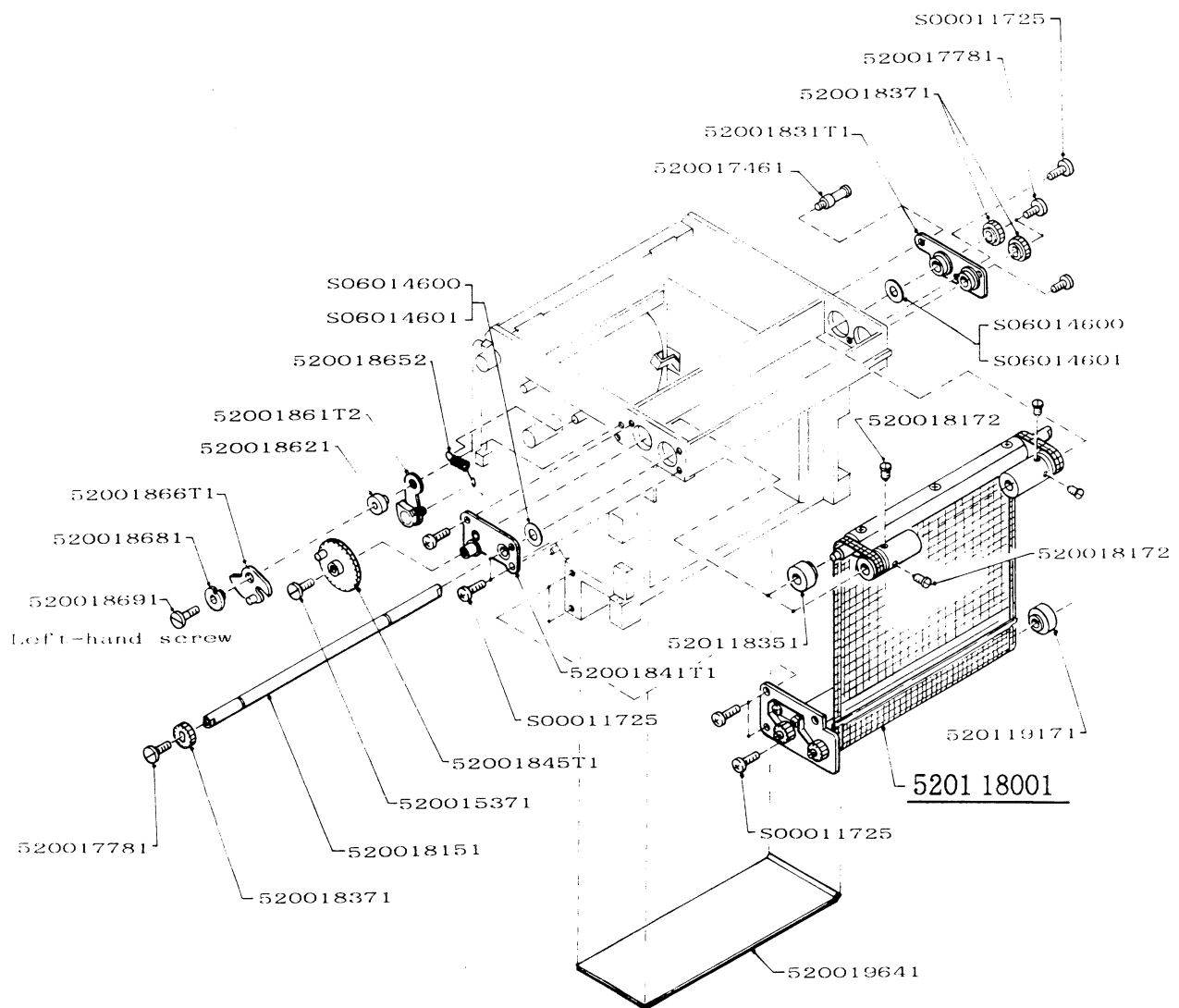
1 | 5 |

Parts No.	Common Use Parts No.	QTY.	Description	部 品 名 称
5201 13421	(SLT13421)	1	Spring	レリーズ板バネ
5201 17931	(SLT17931)	1	Shaft	MU受ネジ
5201 21011	(SLT21011)	1	Lever	絞り込み操作板
5201 21651	(SLT21651)	1	Shoulder screw	絞り込み操作板軸
5201 21661	(SLT21661)	1	Spring	絞り込み操作板バネ
5200 11212	(SLS11212)	1	Guide reil frame	レール板
5200 11241	(SLS11241)	2	Film roller	Fローラー
5200 11261	(SLS11261)	4	Leaf spring	Fローラーバネ
5200 1152T1	(SLS1152T1)	1	Leaf spring	クリックバネ
5200 11551	(SLS11551)	1	Shaft	左側板受柱
5200 17801	(SLS17801)	1	Moving coil Ass'y	MU Ass'y
5200 1931T1	(SLS1931T1)	1	Base plate	スプリング軸左基板
5200 19381	(SLS19381)	1	Bracket	スプリング軸受板
5200 1941T2	(SLS1941T2)	1	Gear	ミラーケリ歯車
5200 1944T2	(SLS1944T2)	1	Braking lever	後幕ブレーキレバー
5200 19471	(SLS19471)	1	Shoulder screw	ブレーキレバー軸
5200 19482	(SLS19482)	1	Spring	ブレーキレバーバネ
5200 19492	(SLS19492)	1	Lever	ミラー下げレバー
5200 19611	(SLS19611)	1	Cover L	幕軸下カバー
5200 19633	(SLS19633)	1	Cover U	幕軸室カバー
5200 19663	(SLS19663)	1	Cover holder	幕軸室カバー受
5200 19673	(SLS19673)	2	Sealing strip	幕軸室モルト
5200 21721	(SLS21721)	1	Screw	歯車止ネジ
5200 24361	(SLS24361)	1	Spring	ミラー下げバネ
5200 29491	(SLS29491)	1	Sealing strip	下カバーモルト
5071 61171	(ARSH6117)	4	Collar	Fローラ受け
S00011414	(PB1.4×1.4)	4	Screw	バネ止ネジ
S00011730	(PB1.7×3)	2	Screw	MS巻上基板止ネジ
S00012070	(PB2×7)	2	Screw	ボディ結合ネジ(左)
00012090	(PB2×9)	2	Screw	ボディ結合ネジ(右)
S00111725	(3PB1.7×2.5)	2	Screw	幕軸下カバー止ネジ
S00111740	(3PB1.7×4)	1	Screw	軸受板止ネジ
S00111760	(3PB1.7×6)	1	Screw	解除レバー止ネジ
S00211425	(PD1.4×2.5)	2	Screw	幕軸室止ネジ
S00211730	(PD1.7×3)	1	Screw	左基板止ネジ
S00211740	(PD1.7×4)	1	Screw	軸受板止ネジ

※ DETAIL E Charging Base Ass'y.....Page 17

Remarks

86



PARTS LIST

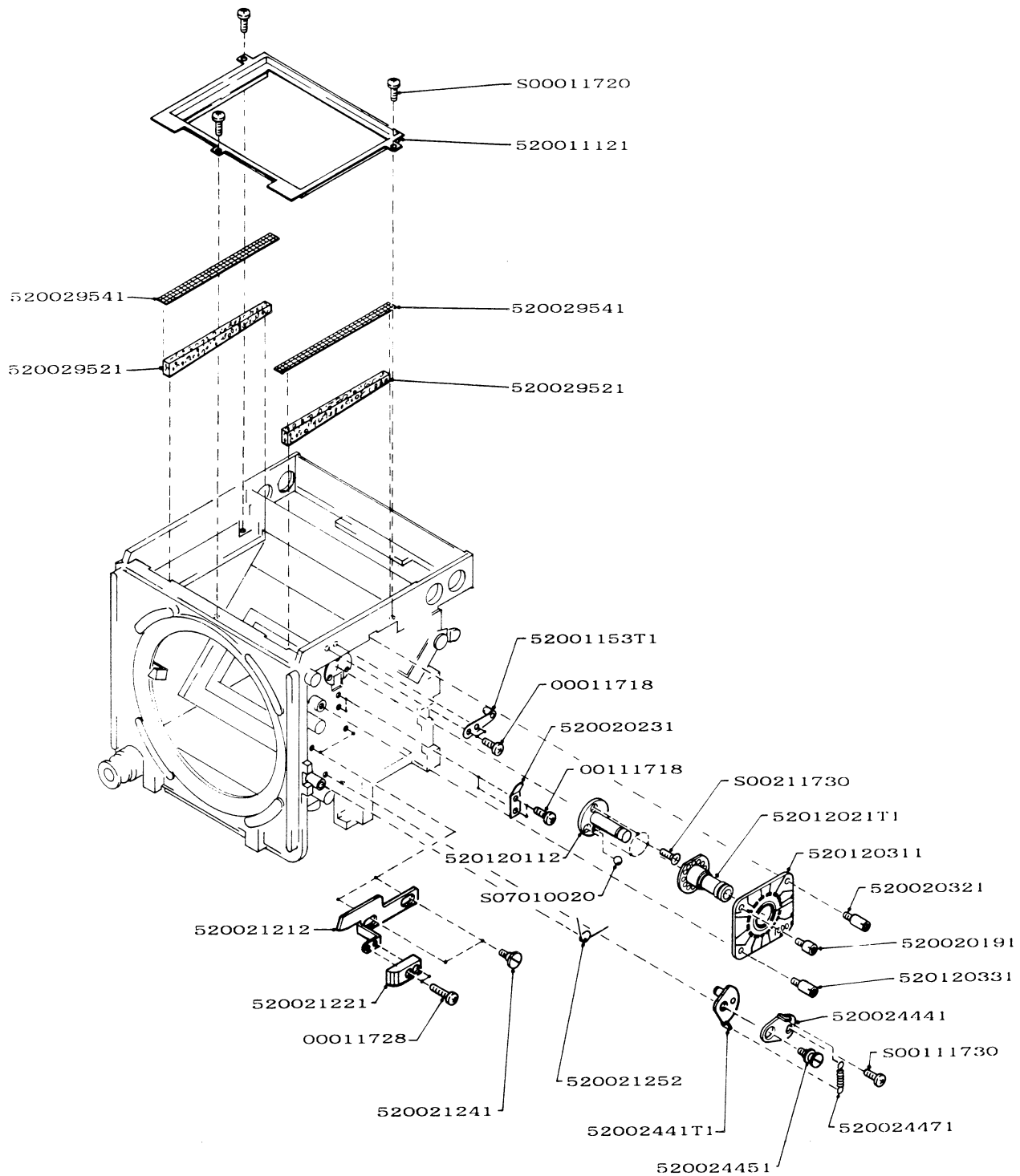
1 6

Parts No.	Common Use Parts No.	QTY.	Description	部 品 名 称
5201 18001	(SLT18001)	1	Shutter curtain Ass'y	シャッター Ass'y
5201 18351	(SLT18351)	1	Pulley A	後幕軸ローラー
5201 19171	(SLT19171)	1	Pulley B	S 軸ローラー
5200 15371	(SLS15371)	1	Screw	X 歯車止ネジ
5200 17461	(SLS17461)	1	Anchor	S I 歯車掛金バネ掛
5200 17781	(SLS17781)	3	Screw	幕軸歯車止ネジ
5200 18151	(SLS18151)	1	Shaft	先幕軸
5200 18172	(SLS18172)	4	Set screw	先幕筒止ネジ
5200 1831T1	(SLS1831T1)	1	Bushing plate	幕軸基板(左)
5200 18371	(SLS18371)	3	Gear	幕軸歯車
5200 1841T1	(SLS1841T1)	1	Bushing plate	幕軸基板(右)
5200 1845T1	(SLS1845T1)	1	X synchro gear	X 歯車
5200 1861T2	(SLS1861T2)	1	Braking lever	先幕ブレーキ板(下)
5200 18621	(SLS18621)	1	Hub	先幕ブレーキ板軸
5200 18652	(SLS18652)	1	Spring	ブレーキ戻しバネ
5200 1866T1	(SLS1866T1)	1	Cam	先幕ブレーキ板(上)
5200 18681	(SLS18681)	1	Collar	先幕ブレーキカラー
5200 18691	(SLS18691)	1	Shoulder screw	ブレーキ板止ネジ
5200 19641	(SLS19641)	1	Cover	スプリング軸カバー
S00011725	(PB1.7×2.5)	8	Screw	止ネジ
S06014600	(6W2.5×0.05)	0~2	Washer	先幕軸調整ワッシャ
S06014601	(6W2.5×0.1)	0~2	Washer	先幕軸調整ワッシャ

※ 5201 18001 Shutter Curtain Ass'y.....Page 20

Remarks

86



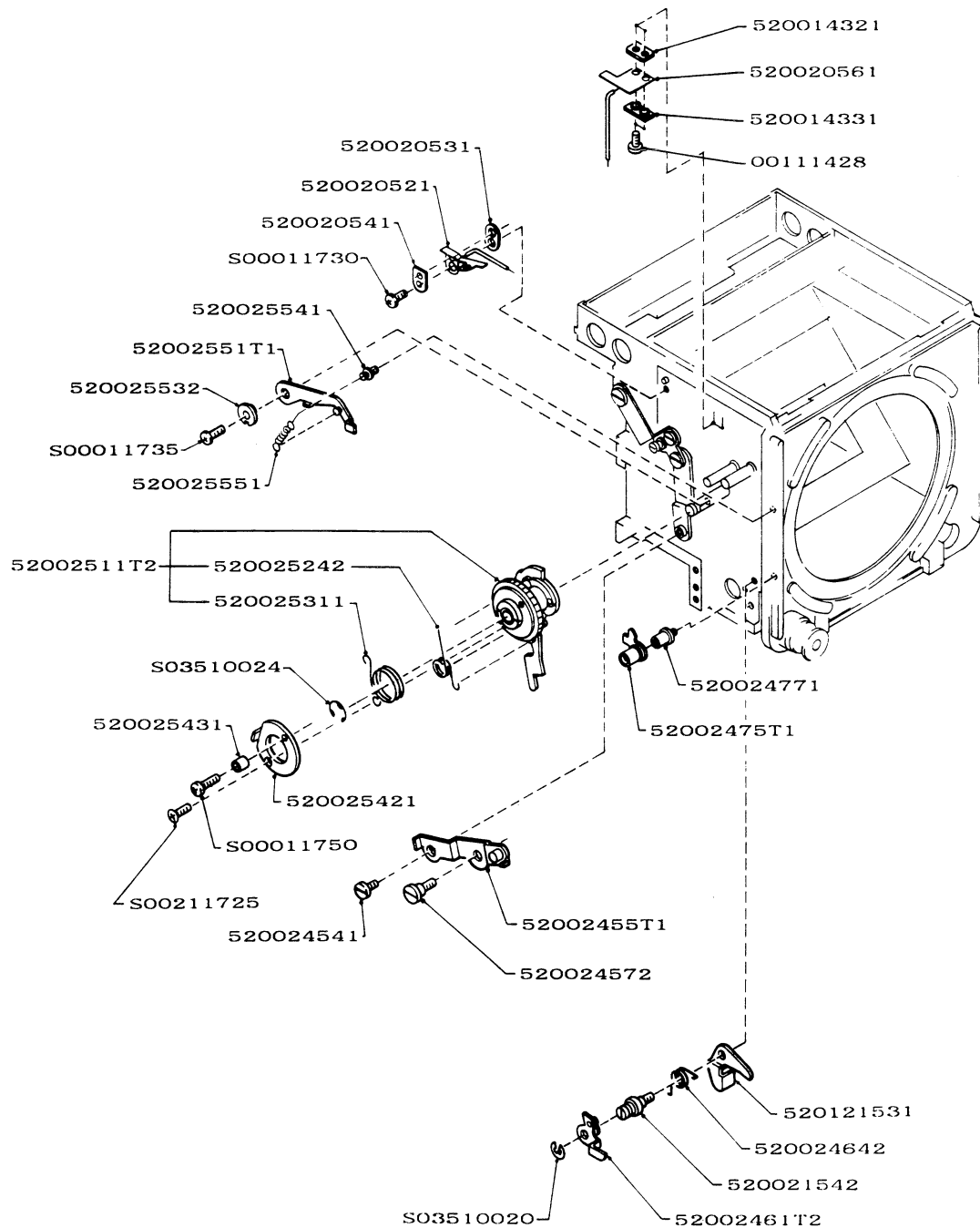
PARTS LIST

1 7

Parts No.	Common Use Parts No.	QTY.	Description	部 品 名 称
5201 20112	(SLT20112)	1	Shaft	Tダイヤル軸
5201 2021T1	(SLT2021T1)	1	Dial click	Tクリック軸
5201 20311	(SLT20311)	1	Time PC board	Tプリント板
5201 20331	(SLT20331)	1	Pole	Tロックピン台柱
5200 11121	(SLS11121)	1	Frame	ボディ上カバー
5200 1153T1	(SLS1153T1)	1	Leaf spring R	クリックバネ(右)
5200 20191	(SLS20191)	1	Shaft	Tプリント止柱
5200 20231	(SLS20231)	1	Leaf spring	Tクリックバネ
5200 20321	(SLS20321)	1	Shaft	Tプリント止柱
5200 21212	(SLS21212)	1	Lens release lever	L戻し止
5200 21221	(SLS21221)	1	Button	L戻し止ボタン
5200 21241	(SLS21241)	2	Guide screw	L戻し止ガイド
5200 21252	(SLS21252)	1	Spring	L戻し止バネ
5200 2441T1	(SLS2441T1)	1	Mirror stopper	ミラー角度板
5200 24441	(SLS24441)	1	Adjusting plate	ミラー角度調整板
5200 24451	(SLS24451)	1	Shoulder screw	ミラー角度調整板軸
5200 24471	(SLS24471)	1	Spring	ミラー角度調整板バネ
5200 29521	(SLS29521)	2	Sealing strip	ミラー側面モルト
5200 29541	(SLS29541)	2	Light baffle	ミラー側面遮光幕
00011718	(PB1.7×1.8)	2	Screw	クリックバネ止ネジ
S00011720	(PB1.7×2)	3	Screw	上カバー止ネジ
00011728	(PB1.7×2.8)	2	Screw	ボタン止ネジ
00111718	(3PB1.7×1.8)	2	Screw	Tクリックバネ止ネジ
S00111730	(3PB1.7×3)	1	Screw	角度調整板止ネジ
S00211730	(PD1.7×3)	3	Screw	Tダイヤル軸止ネジ
S07010020	(B020)	1	Steel ball (φ2.0)	クリックボール

Remarks

86



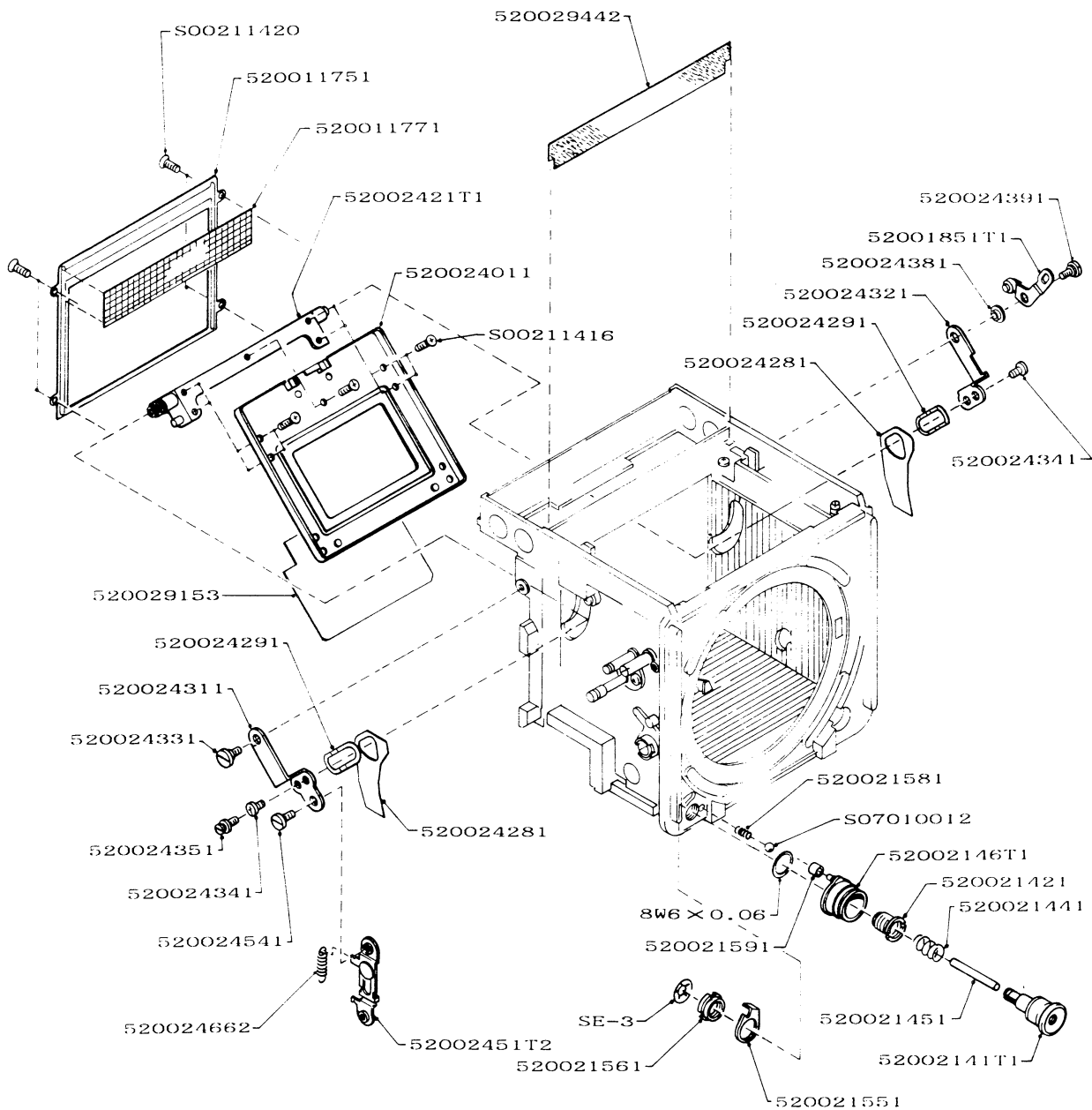
PARTS LIST

1 8

Parts No.	Common Use Parts No.	QTY.	Description	部 品 名 称
5201 21531	(SLT21531)	1	C release lever	C レリーズレバー
5200 14321	(SLS14321)	1	Insulation washer	B C 極絶縁座
5200 14331	(SLS14331)	1	Insulation plate	B C 極絶縁板
5200 20521	(SLS20521)	1	Leaf spring	B C ボタンバネ
5200 20531	(SLS20531)	1	Insulation plate	B C ボタンバネ絶縁板
5200 20541	(SLS20541)	1	Insulation holder	B C ボタンバネ絶縁台
5200 20561	(SLS20561)	1	Contact plate	B C 極
5200 21542	(SLS21542)	1	Shoulder screw	C レリーズレバー軸
5200 24541	(SLS24541)	1	Screw	止ネジ
5200 2455T1	(SLS2455T1)	1	Mirror raising lever	ミラーレバー
5200 24572	(SLS24572)	1	Hub	ミラーレバー軸
5200 2461T2	(SLS2461T2)	1	Stop lever	ミラーストップレバー
5200 24642	(SLS24642)	1	Spring	ストップレバーバネ
5200 2475T1	(SLS2475T1)	1	Link lever	第2 M U レバー
5200 24771	(SLS24771)	1	Shaft	第2 M U レバー軸
5200 2511T2	(SLS2511T2)	1	Mirror raising crank	ミラー歯車板
5200 25242	(SLS25242)	1	Spring	ミラー上爪バネ
5200 25311	(SLS25311)	1	Spring	ミラーバネ
5200 25421	(SLS25421)	1	Disk	M 3 歯車板
5200 25431	(SLS25431)	1	Collar	F P スイッチピン
5200 2551T1	(SLS2551T1)	1	M release lever	ミラー歯車板掛金
5200 25532	(SLS25532)	1	Collar	ミラー歯車板掛金軸
5200 25541	(SLS25541)	1	Anchor	バネ柱
5200 25551	(SLS25551)	1	Spring	ミラー歯車板掛金バネ
S00011730	(PB1.7×3)	2	Screw	B C ボタンバネ止ネジ
S00011735	(PB1.7×3.5)	1	Screw	掛金軸止ネジ
S00011750	(PB1.7×5)	1	Screw	M 3 歯車板ピン止ネジ
S00211725	(PD1.7×2.5)	1	Screw	M 3 歯車板止ネジ
00111428	(3PB1.4×2.8)	2	Screw	B C 極止ネジ
S03510020	(E-20)	1	E-ring	止リング
S03510024	(E-24)	1	E-ring	M 3 歯車止リング

Remarks

86



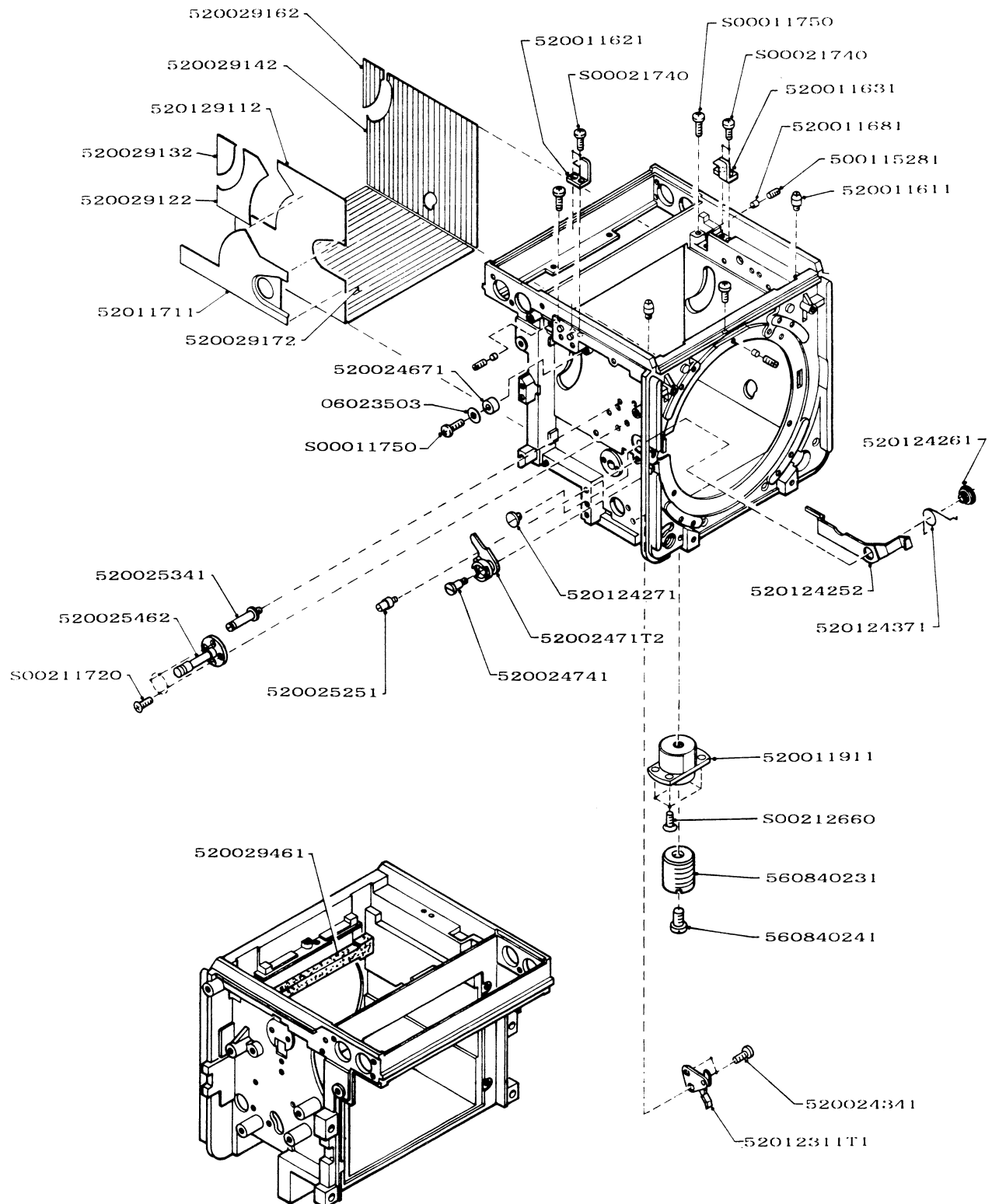
PARTS LIST

1 9

Parts No.	Common Use Parts No.	QTY.	Description	部 品 名 称
5200 11751	(SLS11751)	1	Light baffle plate	後カバー
5200 11771	(SLS11771)	1	Light baffle	ミラー遮光幕
5200 1851T1	(SLS1851T1)	1	X Synchro lever	X S W レバー
5200 2141T1	(SLS2141T1)	1	Shutter release button	S ボタン
5200 21421	(SLS21421)	1	Button guide	S ボタンガイド
5200 21441	(SLS21441)	1	Spring	S ボタンバネ
5200 21451	(SLS21451)	1	Shutter release rod	S 棒
5200 2146T1	(SLS2146T1)	1	Release lock ring	S ロックリング
5200 21551	(SLS21551)	1	Lock disk	S ロック板
5200 21561	(SLS21561)	1	Hub	S ロック板軸
5200 21581	(SLS21581)	1	Spring	クリックボールバネ
5200 21591	(SLS21591)	1	Collar	ピンカラー
5200 24011	(SLS24011)	1	Mirror holder plate	ミラーホルダー
5200 2421T1	(SLS2421T1)	1	Holder bracket	ミラーピン台
5200 24281	(SLS24281)	2	Light baffle plate	M ボディ遮光板
5200 24291	(SLS24291)	2	Spring washer	遮光板バネ
5200 24311	(SLS24311)	1	Mirror arm L	ミラーアーム(左)
5200 24321	(SLS24321)	1	Mirror arm R	ミラーアーム(右)
5200 24331	(SLS24331)	1	Shoulder screw	ミラーアーム軸
5200 24341	(SLS24341)	3	Screw (P1.7×3)	ミラーアーム止ネジ
5200 24351	(SLS24351)	1	Screw B	ミラーアーム止ネジ
5200 24381	(SLS24381)	1	Collar	ミラーアーム右カラー
5200 24391	(SLS24391)	1	Shoulder screw	ミラーアーム右軸
5200 2451T2	(SLS2451T2)	1	Coupling arm	ミラー上クランク板
5200 24541	(SLS24541)	1	Screw	クランク板止ネジ
5200 24662	(SLS24662)	1	Spring	クランク板バネ
5200 29153	(SLS29153)	1	RA Leatherette	ミラーホルダー遮光紙
5200 29442	(SLS29442)	1	Light baffle	ボディ上革
S00211416	(PD1.4×1.6)	5	Screw	ミラーピン台止ネジ
S00211420	(PD1.4×2)	4	Screw	後カバー止ネジ
8W6×0.06		1	Washer	S ロック調整ワッシャ
SE-3		1	SE-ring	S ボタン止リング
S07010012	(B012)	1	Steel ball (φ1.2)	クリックボール

Remarks

86



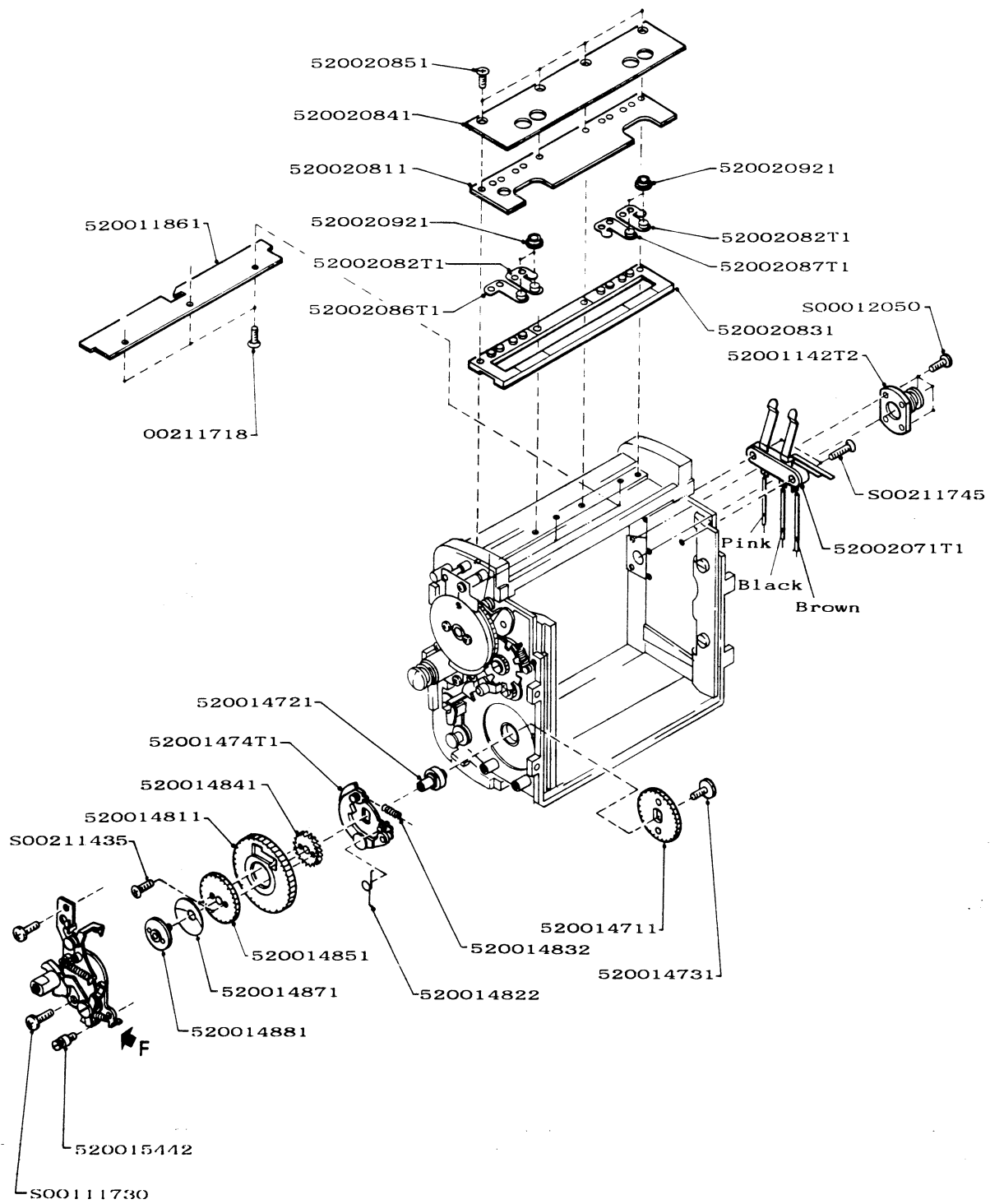
PARTS LIST

1 10

Parts No.	Common Use Parts No.	QTY.	Description	部 品 名 称
5201 11711	(SLT11711)	1	Plate	左遮光紙台板
5201 2311T1	(SLT2311T1)	1	Self-timer lever	セルフレバー
5201 24252	(SLT24252)	1	Aperture coupling lever	絞り込みレバー
5201 24261	(SLT24261)	1	Hub	絞り込みレバー軸
5201 24271	(SLT24271)	1	Screw	絞り込みレバー軸ネジ
5201 24371	(SLT24371)	1	Spring	絞り込みレバーバネ
5201 29112	(SLT29112)	1	RA leatherette	左遮光紙(大)
5200 11611	(SLS11611)	2	Guide screw	プリズム枠ガイド
5200 11621	(SLS11621)	1	Latch L	プリズム枠掛金(左)
5200 11631	(SLS11631)	1	Latch R	プリズム枠掛金(右)
5200 11681	(SLS11681)	3	Stopper piece	ピント調整ネジ押え
5200 11911	(SLS11911)	1	Tripod socket	三脚止
5200 24341	(SLS24341)	2	Screw	止ネジ
5200 24671	(SLS24671)	1	Rubber cushion	ミラーダンパー
5200 2471T2	(SLS2471T2)	1	Mirror-up arm	MUレバー
5200 24741	(SLS24741)	1	Shaft	MUレバー軸
5200 25251	(SLS25251)	1	Guide screw	ミラー上げ爪ガイド
5200 25341	(SLS25341)	1	Shaft	ミラーバネ柱
5200 25462	(SLS25462)	1	Shaft	M3歯車軸
5200 29122	(SLS29122)	1	RA leatherette	左遮光紙(中)
5200 29132	(SLS29132)	1	RA leatherette	左遮光紙(小)
5200 29142	(SLS29142)	1	RA leatherette	右遮光紙(大)
5200 29162	(SLS29162)	1	RA leatherette	右遮光紙(小)
5200 29172	(SLS29172)	1	RA leatherette	下遮光紙
5200 29461	(SLS29461)	1	Sealing strip	ミラーモルト
5001 15281	(ARS1528)	3	Screw	ピント調整止ネジ
5608 40231	(EFC4023)	1	Tripod socket adapter	三脚ネジ
5608 40241	(EFC4024)	1	Screw	三脚ネジ止め
S00021740	(PB1.7×4Cr)	4	Screw	プリズム枠掛金止ネジ
S00011750	(PB1.7×5)	4	Screw	止ネジ
S00211720	(PD1.7×2)	4	Screw	M3歯車軸止ネジ
S00212660	(PD2.6×6)	4	Screw	三脚止め止ネジ
06023503	(5W2×0.3)	1	Washer	ミラーダンパー押え

Remarks

86



PARTS LIST

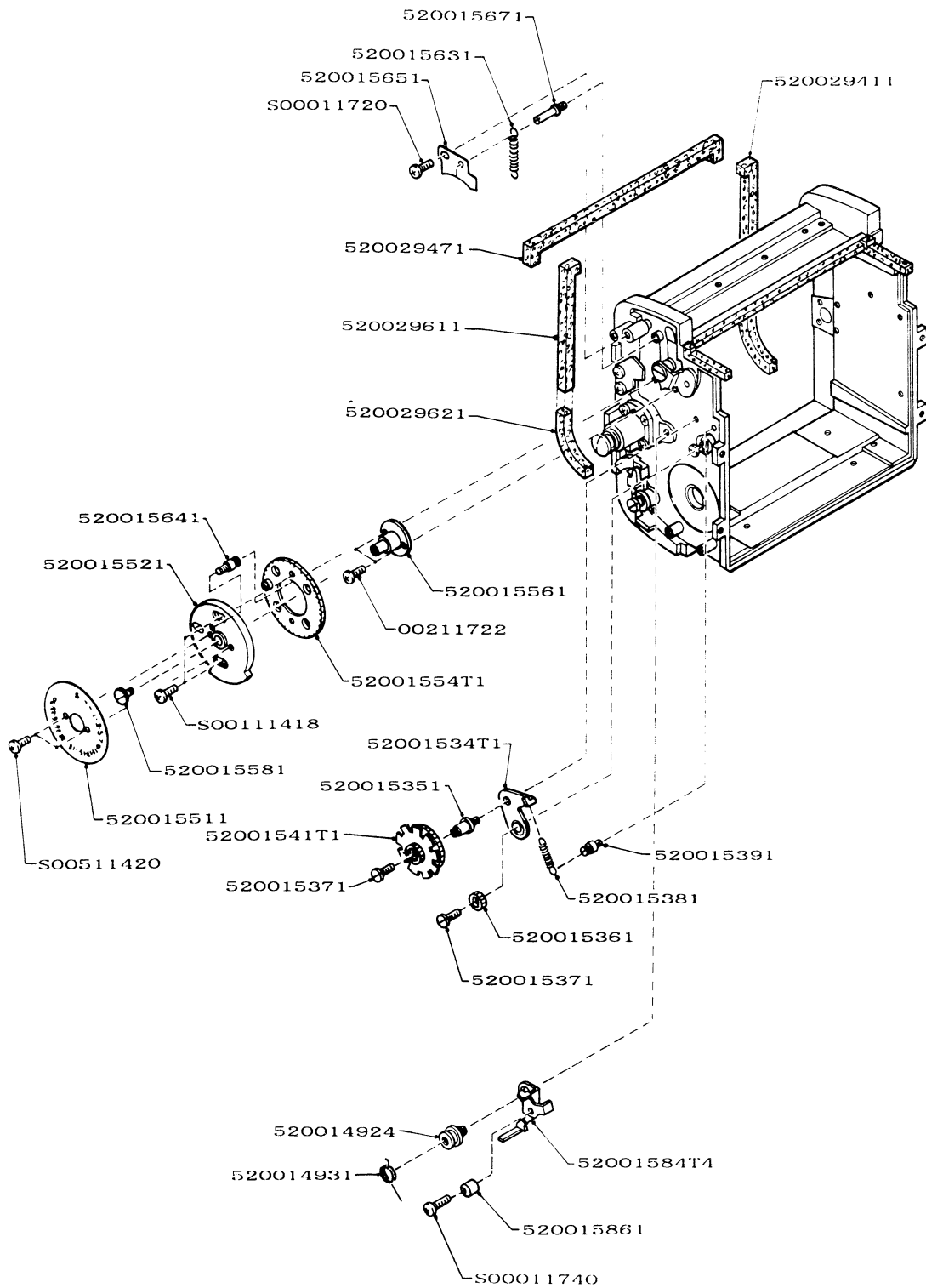
1 11

Parts No.	Common Use Parts No.	QTY.	Description	部 品 名 称
5200 1142T2		1	Strap lug R	吊金具(右)
5200 11861	(SLS11861)	1	Catch plate	裏蓋掛板
5200 14711	(SLS14711)	1	F4 Gear	F 4 歯車
5200 14721	(SLS14721)	1	Shaft	F 4 歯車軸
5200 14731	(SLS14731)	1	Screw	F 4 歯車止ネジ
5200 1474T1	(SLS1474T1)	1	Advancing clutch	F クラッチ板
5200 14811	(SLS14811)	1	F clutch wheel	F クラッチ爪車
5200 14822	(SLS14822)	1	Spring	F クラッチレバーバネ
5200 14832	(SLS14832)	1	Spring	F クラッチ押しバネ
5200 14841	(SLS14841)	1	Gear	F クラッチ送り歯車
5200 14851	(SLS14851)	1	F3 Gear	F 3 歯車
5200 14871	(SLS14871)	1	Spring washer	F 3 歯車摩擦バネ
5200 14881	(SLS14881)	1	Screw	F 3 歯車摩擦バネ止
5200 15442	(SLS15442)	1	Anchor	バネ掛
5200 2071T1	(SLS2071T1)	1	Synchro contact	X 接片台
5200 20811	(SLS20811)	1	Insulation plate	上部絶縁板
5200 2082T1	(SLS2082T1)	2	Contact	上部電極
5200 20831	(SLS20831)	1	Contact base plate	上部電極台
5200 20841	(SLS20841)	1	Contact cover	上部電極カバー
5200 20851	(SLS20851)	4	Screw (PD1.7×2.5)	上部電極カバー止ネジ
5200 2086T1	(SLS2086T1)	1	Earth plate	上部電極アース片
5200 2087T1	(SLS2087T1)	1	Contact	E X T 電極
5200 20921	(SLS20921)	4	Collar	上部接点ブッシュ
S00012050	(PB2×5)	4	Screw	吊金具止ネジ
S00111730	(3PB1.7×3)	2	Screw	D X 基板止ネジ
S00211435	(PD1.4×3.5)	2	Screw	F 3 歯車止ネジ
00211718	(PD1.7×1.8)	3	Screw	裏蓋掛板止ネジ
S00211745	(PD1.7×4.5)	2	Screw	X 接片台止ネジ

※ DETAIL F Winding Base Gear Ass'y.....Page 18

Remarks

86



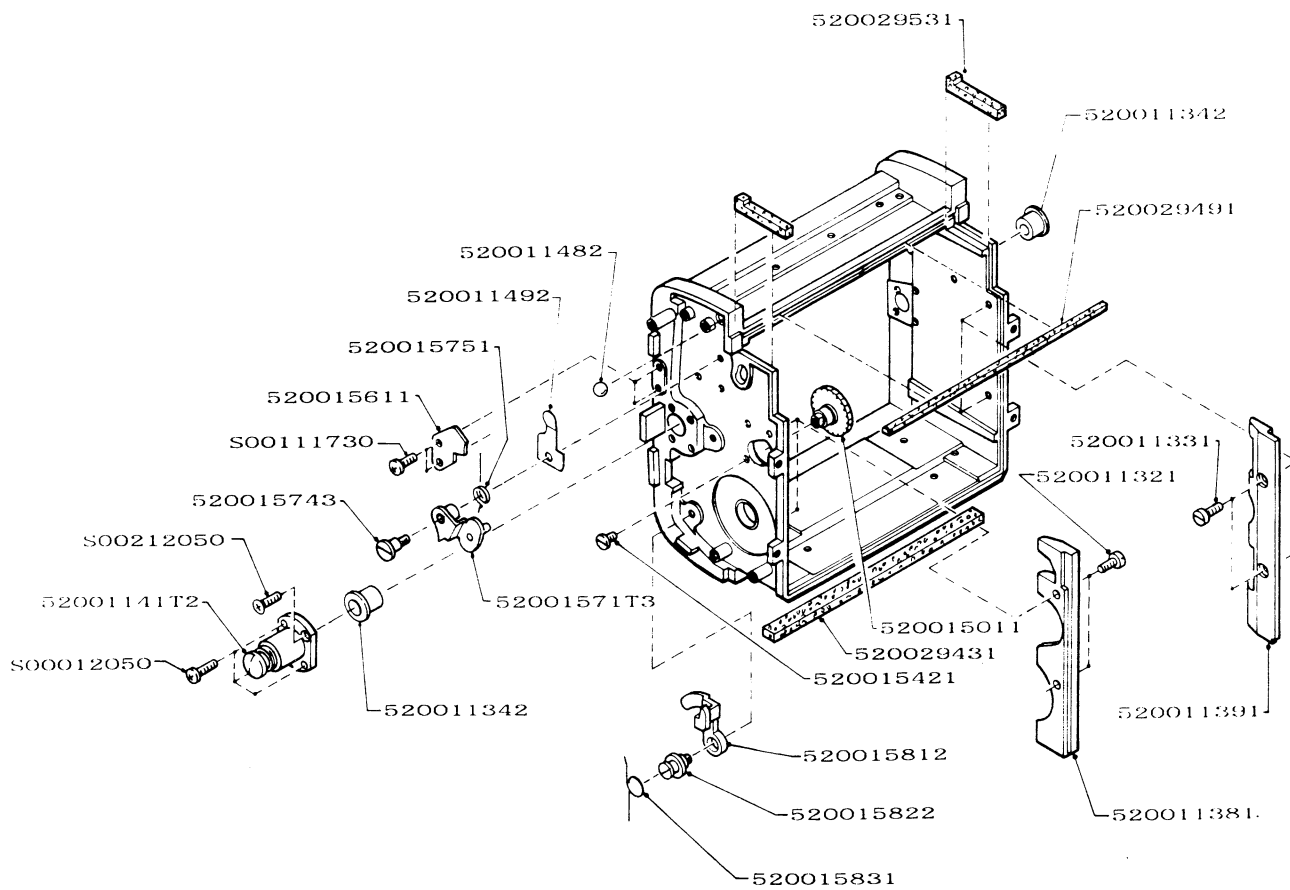
PARTS LIST

1 12

Parts No.	Common Use Parts No.	QTY.	Description	部 品 名 称
5200 14924	(SLS14924)	1	Shaft	F 止爪車
5200 14931	(SLS14931)	1	Spring	F 止爪車バネ
5200 1534T1	(SLS1534T1)	1	Lever	C 1 歯車基板
5200 15351	(SLS15351)	1	Shaft	C 1 歯車基板軸
5200 15361	(SLS15361)	1	C2 Gear	C 2 歯車
5200 15371	(SLS15371)	2	Screw	止ネジ
5200 15381	(SLS15381)	1	Spring	C 2 歯車バネ
5200 15391	(SLS15391)	1	Anchor	C 2 歯車バネ掛
5200 1541T1	(SLS1541T1)	1	Counter dividing device	割出板
5200 15511	(SLS15511)	1	Counter	カウンタ-板
5200 15521	(SLS15521)	1	Counter base	カウンタ-台
5200 1554T1	(SLS1554T1)	1	Counter gear	カウンタ-歯車
5200 15561	(SLS15561)	1	Hub	カウンタ-軸
5200 15581	(SLS15581)	1	Screw	カウンタ-板止ネジ
5200 15631	(SLS15631)	1	Spring	カウンタ-バネ
5200 15641	(SLS15641)	1	Anchor	カウンタ-バネ掛
5200 15651	(SLS15651)	1	Indicator	指標
5200 15671	(SLS15671)	1	Guide screw	指標ガイド
5200 1584T4	(SLS1584T4)	1	Stop lever	割出爪
5200 15861	(SLS15861)	1	Collar	割出爪鉋
5200 29411	(SLS29411)	2	Sealing strip	F ボディ溝モルト
5200 29471	(SLS29471)	1	Sealing strip	F ボディモルト
5200 29611	(SLS29611)	1	Sealing strip	F ボディ溝モルト
5200 29621	(SLS29621)	1	Sealing strip	F ボディ溝モルト
S00011720	(PB1.7×2)	1	Screw	指標止ネジ
S00011740	(PB1.7×4)	1	Screw	割出爪止ネジ
S00111418	(3PB1.4×1.8)	2	Screw	C 歯車止ネジ
00211722	(PD1.7×2.2)	2	Screw	カウンタ-軸止ネジ
S00511420	(3TB1.4×2)	2	Screw	カウンタ-板止ネジ

Remarks

86



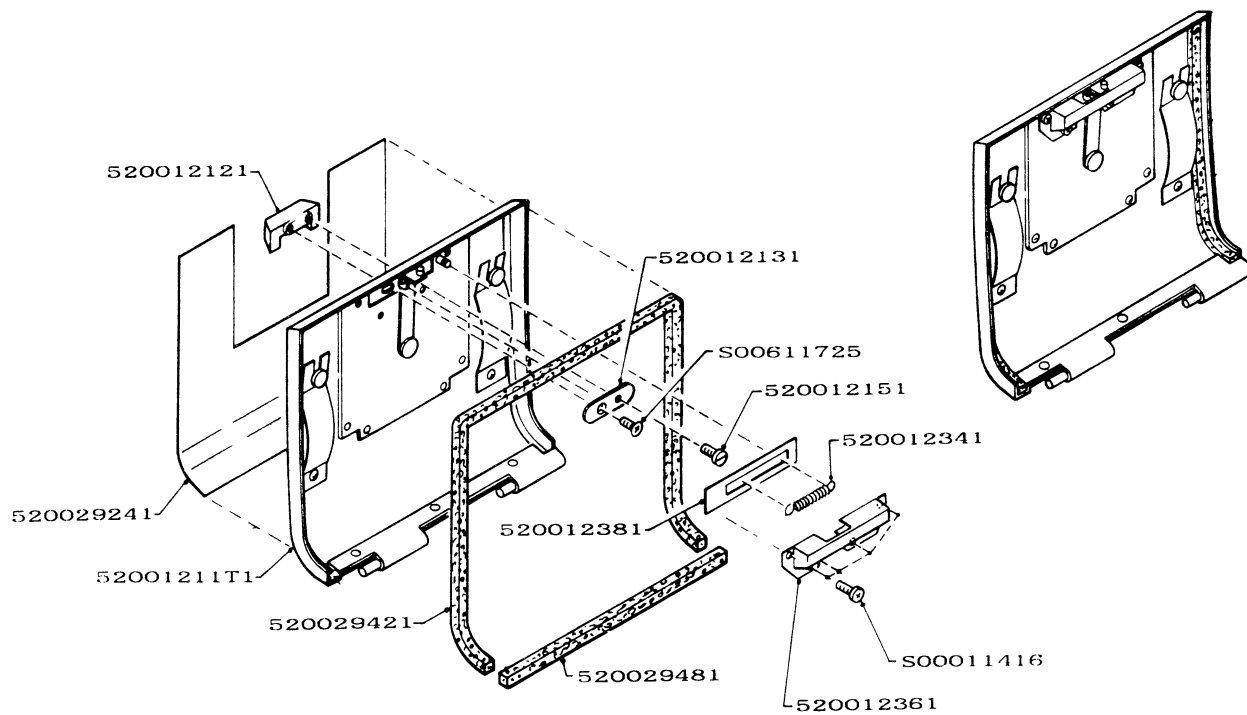
PARTS LIST

1 13

Parts No.	Common Use Parts No.	QTY.	Description	部 品 名 称
5200 11321	(SLS11321)	2	Guide screw L	Fホルダーガイド
5200 11331	(SLS11331)	2	Guide screw R	Fホルダーガイド
5200 11342	(SLS11342)	2	Lock guide	中枠ロックガイド
5200 11381	(SLS11381)	1	Guide plate L	F遮光枠(左)
5200 11391	(SLS11391)	1	Guide plate R	F遮光枠(右)
5200 1141T2		1	Strap lug L	吊金具(左)
5200 11482	(SLS11482)	1	Ball	F固定ボール
5200 11492	(SLS11492)	1	Leaf spring	F固定ボールバネ
5200 15011	(SLS15011)	1	C1 Gear	C1歯車
5200 15421	(SLS15421)	1	Screw	ストッパー
5200 15611	(SLS15611)	1	Stopper	カウンター戻し止
5200 1571T3	(SLS1571T3)	1	Change-over lever	カウンター切換板
5200 15743	(SLS15743)	1	Shoulder screw	カウンター切換板軸
5200 15751	(SLS15751)	1	Spring	カウンター切換板バネ
5200 15812	(SLS15812)	1	C release lever	カウンター解除レバー
5200 15822	(SLS15822)	1	Shoulder screw	解除レバー軸
5200 15831	(SLS15831)	1	Spring	解除レバーバネ
5200 29431	(SLS29431)	1	Sealing strip	Fボディ蝶番モルト
5200 29491	(SLS29491)	1	Sealing strip	Fボディ正面溝モルト
5200 29531	(SLS29531)	2	Sealing strip	ボディモルト(小)
S00012050	(PB2×5)	3	Screw	吊金具止ネジ
S00111730	(3PB1.7×3)	2	Screw	止ネジ
S00212050	(PD2×5)	1	Screw	吊金具止ネジ

Remarks

86

**DETAIL A**

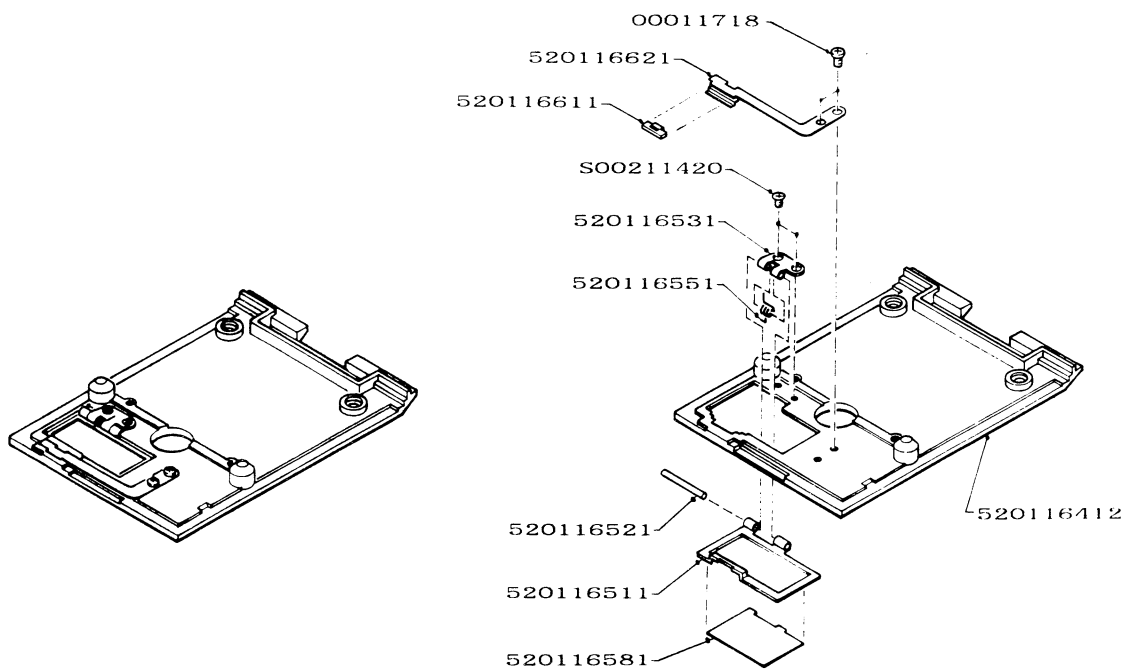
PARTS LIST

1 14

Parts No.	Common Use Parts No.	QTY.	Description	部 品 名 称
5200 1211T1	(SLS1211T1)	1	Back cover	裏 蓋
5200 12121	(SLS12121)	1	Knob	裏 蓋 つまみ
5200 12131	(SLS12131)	1	Rataining plate	裏 蓋 つまみ 止板
5200 12151	(SLS12151)	1	Screw	裏 蓋 つまみ 止ネジ
5200 12341	(SLS12341)	1	Spring	裏 蓋 掛金バネ
5200 12361	(SLS12361)	1	Cover	裏 蓋 掛金 ケース
5200 12381	(SLS12381)	1	Light tight seal	裏 蓋 掛金 遮光幕
5200 29241	(SLS29241)	1	Leatherette	裏 蓋 革
5200 29421	(SLS29421)	1	Sealing strip	裏 蓋 モルト
5200 29481	(SLS29481)	1	Sealing strip	裏 蓋 蝶番モルト
S00011416	(PB1.4×1.6)	4	Screw	ケース 止ネジ
S00611725	(TD1.7×2.5)	1	Screw	つまみ 止板 止ネジ

Remarks

86

**DETAIL B**

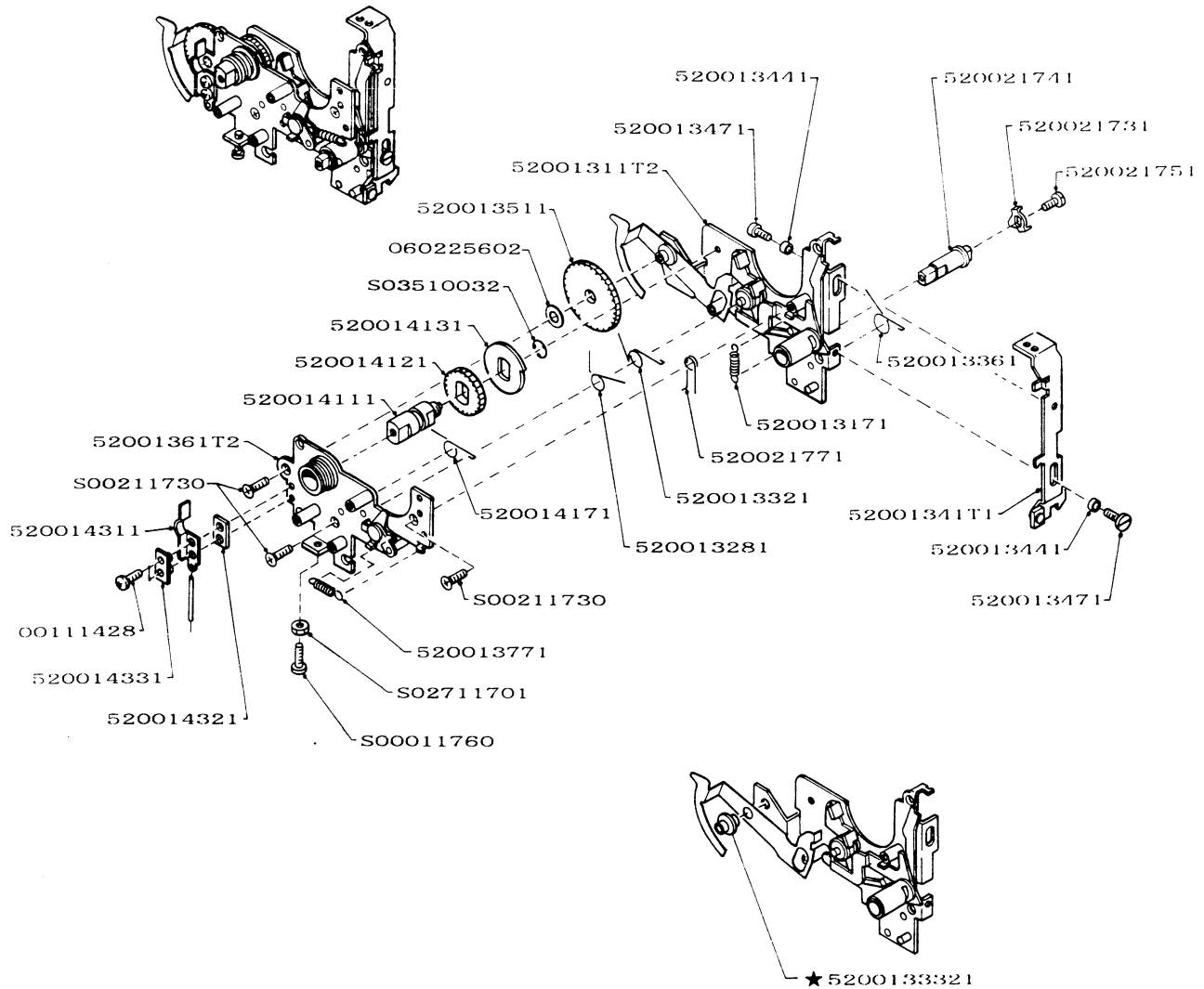
PARTS LIST

1 15

Parts No.	Common Use Parts No.	QTY.	Description	部 品 名 称
5201 16412	(SLT16412)	1	Bottom cover	下 部 カ バ ー
5201 16511	(SLT16511)	1	Battery chamber cover	電 池 蓋
5201 16521	(SLT16521)	1	Shaft	電 池 蓋 軸
5201 16531	(SLT16531)	1	Hinge	電 池 蓋 軸 受
5201 16551	(SLT16551)	1	Spring	電 池 蓋 バ ネ
5201 16581	(SLT16581)	1	Seal	電 池 蓋 シ ー ル
5201 16611	(SLT16611)	1	Lock plate	電 池 蓋 爪
5201 16621	(SLT16621)	1	Leaf spring	電 池 蓋 爪 カ バ ー
00011718	(PB1.7×1.8)	2	Screw	電 池 蓋 爪 カ バ ー 止 ネ ジ
S00211420	(PD1.4×2)	2	Screw	電 池 蓋 軸 受 止 ネ ジ

Remarks

86



DETAIL C

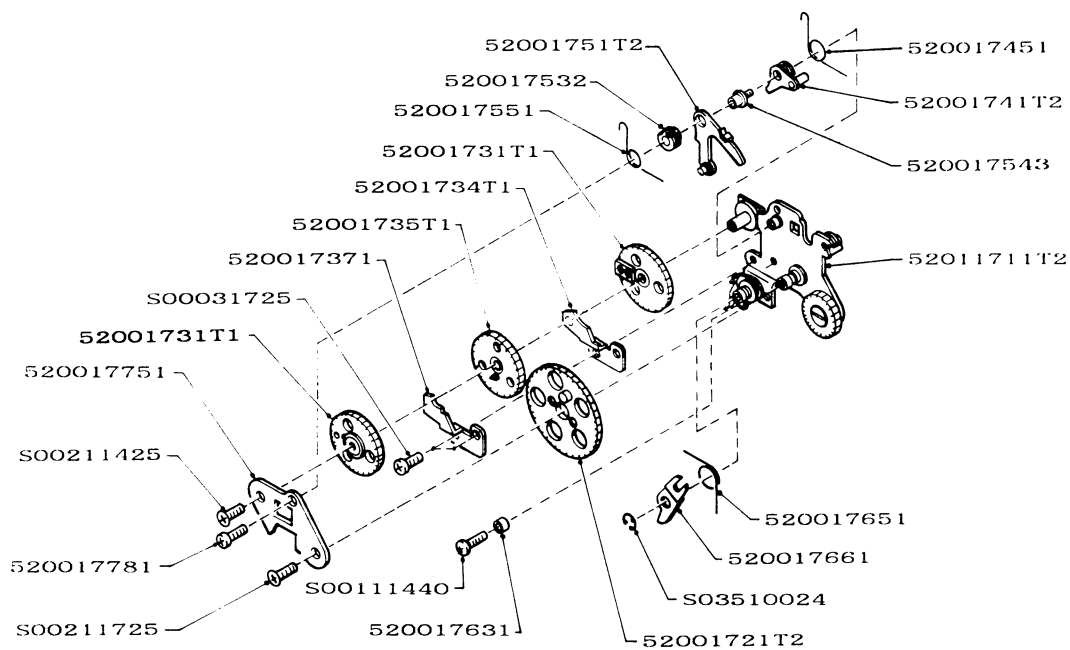
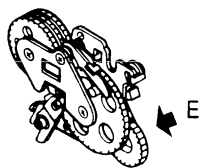
PARTS LIST

1 16

Parts No.	Common Use Parts No.	QTY.	Description	部 品 名 称
5200 1311T2	(SLS1311T2)	1	Winding base plate L	巻上下基板
5200 13171	(SLS13171)	1	Spring	R 止レバーバネ
5200 13281	(SLS13281)	1	Spring	一回転止レバーバネ
5200 13321	(SLS13321)	1	Spring	巻止連動レバーバネ
5200 13361	(SLS13361)	1	Spring	MU解除レバーバネ
5200 1341T1	(SLS1341T1)	1	Shutter release bar	リリース板
5200 13441	(SLS13441)	2	Collar	リリース板ガイド
5200 13471	(SLS13471)	2	Shoulder screw	リリース板止ネジ
5200 13511	(SLS13511)	1	F2 Gear	F 2 歯車
5200 1361T2	(SLS1361T2)	1	Winding base plate M	巻上中基板
5200 13771	(SLS13771)	1	Spring	スイッチレバーバネ
5200 14111	(SLS14111)	1	Shaft	巻上軸
5200 14121	(SLS14121)	1	F1 Gear	F 1 歯車
5200 14131	(SLS14131)	1	Wind stop disk	一回転停止板
5200 14171	(SLS14171)	1	Spring	F 1 歯車ギチバネ
5200 14311	(SLS14311)	1	Trigger switch	Tスイッチ接片
5200 14321	(SLS14321)	1	Insulation washer	Tスイッチ絶縁座
5200 14331	(SLS14331)	1	Insulation plate	Tスイッチ絶縁板
5200 21731	(SLS21731)	1	MU cam	MUカム
5200 21741	(SLS21741)	1	Shaft	MUカム軸
5200 21751		1	Screw	MUカム止ネジ
5200 21771	(SLS21771)	1	Spring	MUクリックバネ
S00011760	(PB1.7×6)	1	Screw	MSCS調整ネジ
S00211730	(PD1.7×3)	3	Screw	巻上中基板止ネジ
00111428	(3PB1.4×2.8)	2	Screw	Tスイッチ止ネジ
06025602	(6W3×0.2)	1	Washer	F 2 歯車ワッシャ
S03510032	(E-32)	1	E-ring	止リング
S02711701	(N1.7)	1	Nut	MSCS調整ナット
★5200 13332		1	Hob	巻止め連動レバー軸

Remarks

86



DETAIL E

PARTS LIST

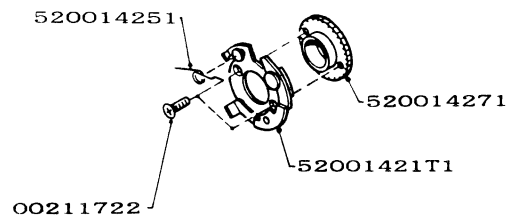
1 17

Parts No.	Common Use Parts No.	QTY.	Description	部 品 名 称
5201 1711T2 (SLT1711T2)		1	Charging base L	M S 巻上基板(下)
5200 1721T2 (SLS1721T2)		1	MS2 gear	M S 2 歯車
5200 1731T1 (SLS1731T1)		2	S1 gear	S 1 歯車
5200 1734T1 (SLS1734T1)		1	Stopper	S 1 歯車止め
5200 1735T1 (SLS1735T1)		1	S2 gear	S 2 歯車
5200 17371 (SLS17371)		1	Stopper	S 3 歯車止め
5200 1741T2 (SLS1741T2)		1	Hook	S 1 歯車掛金
5200 17451 (SLS17451)		1	Spring	S 1 歯車掛金バネ
5200 1751T2 (SLS1751T2)		1	Hook	S 3 歯車掛金
5200 17532 (SLS17532)		1	Hub	S 3 歯車掛金ハブ
5200 17543 (SLS17543)		1	Stud	S 3 歯車掛金軸
5200 17551 (SLS17551)		1	Spring	S 3 歯車掛金バネ
5200 17631 (SLS17631)		1	Eccentric collar	ピン
5200 17651 (SLS17651)		1	Spring	バネ
5200 17661 (SLS17661)		1	Trigger switch lever	T スタートレバー
5200 17751 (SLS17751)		1	Charging base U	M S 巻上基板(上)
5200 17781 (SLS17781)		1	Screw (※PB1.4×2.8)	M S 巻上基板止ネジ
S00031725 (PB1.7×2.5Ni)		2	Screw	S 3 歯車止止ネジ
S00111440 (3PB1.4×4)		1	Screw	ピン止ネジ
S00211425 (PD1.4×2.5)		1	Screw	M S 巻上基板止ネジ
S00211725 (PD1.7×2.5)		1	Screw	M S 巻上基板止ネジ
S03510024 (E-24)		1	E-ring	止リング

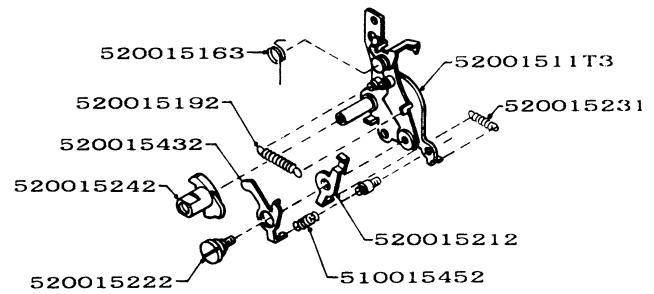
Remarks

86

DETAIL "D" MS Clutch Disk Ass'y
& "F" Winding Base Gear Ass'y



DETAIL D



DETAIL F

PARTS LIST

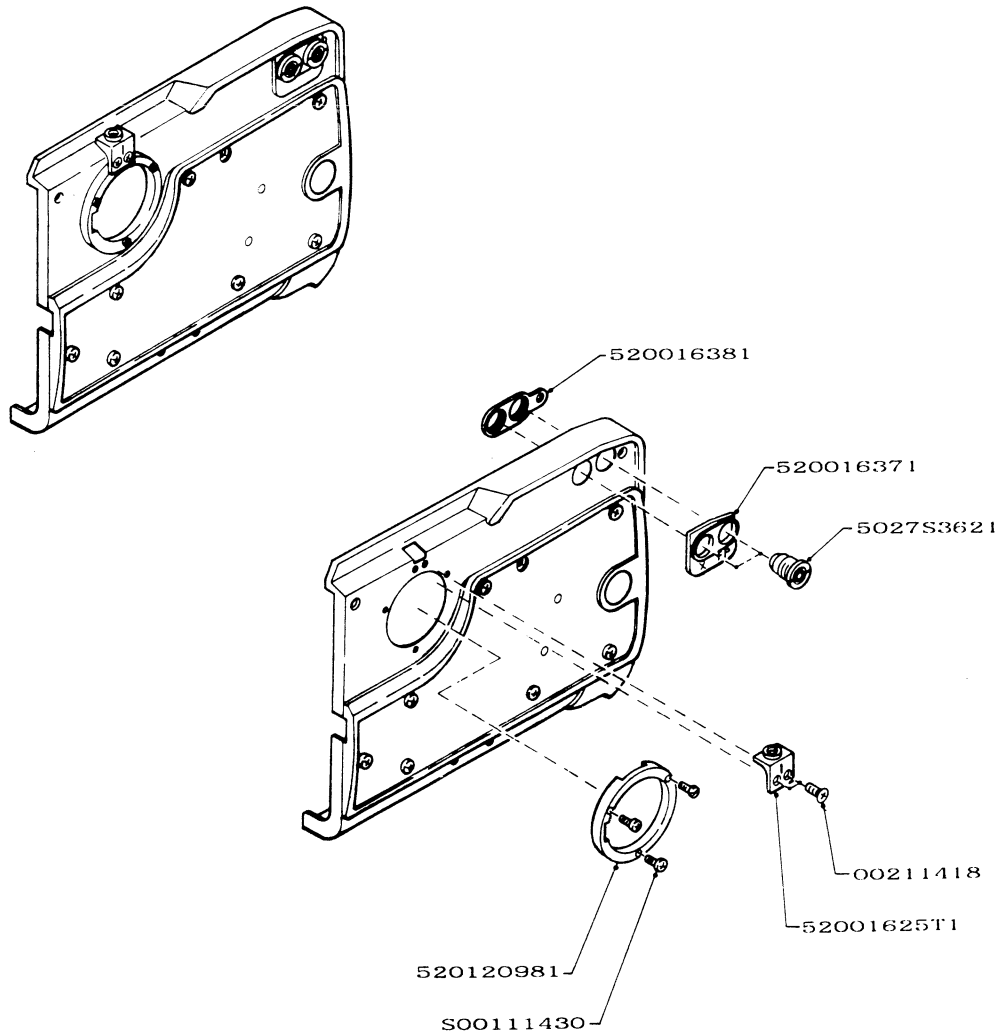
1 18

Parts No.	Common Use Parts No.	QTY.	Description	部 品 名 称
5200 1421T1	(SLS1421T1)	1	MS clutch disk	MS クラッチ 基板
5200 14251	(SLS14251)	1	Spring	MS クラッチ 爪 バネ
5200 14271	(SLS14271)	1	MS gear	MS I 歯車
00211722	(PD1.7×2.2)	2	Screw	基板 止ネジ

5200 1511T3	(SLS1511T3)	1	Change-over lever	DX 基板
5200 15163	(SLS15163)	1	Spring	DX 爪 バネ
5200 15192	(SLS15192)	1	Spring	DX 爪 レバー バネ
5200 15212	(SLS15212)	1	Sub lever	DX 補助 レバー
5200 15222	(SLS15222)	1	Shoulder screw	DX 補助 レバー 軸
5200 15231	(SLS15231)	1	Spring	DX 補助 レバー バネ
5200 15242	(SLS15242)	1	Cam	DX カム
5200 15432	(SLS15432)	1	Click lever	DX クリック レバー
5200 15452	(SLS15452)	1	Spring	クリック レバー バネ

Remarks

86



5200 16201

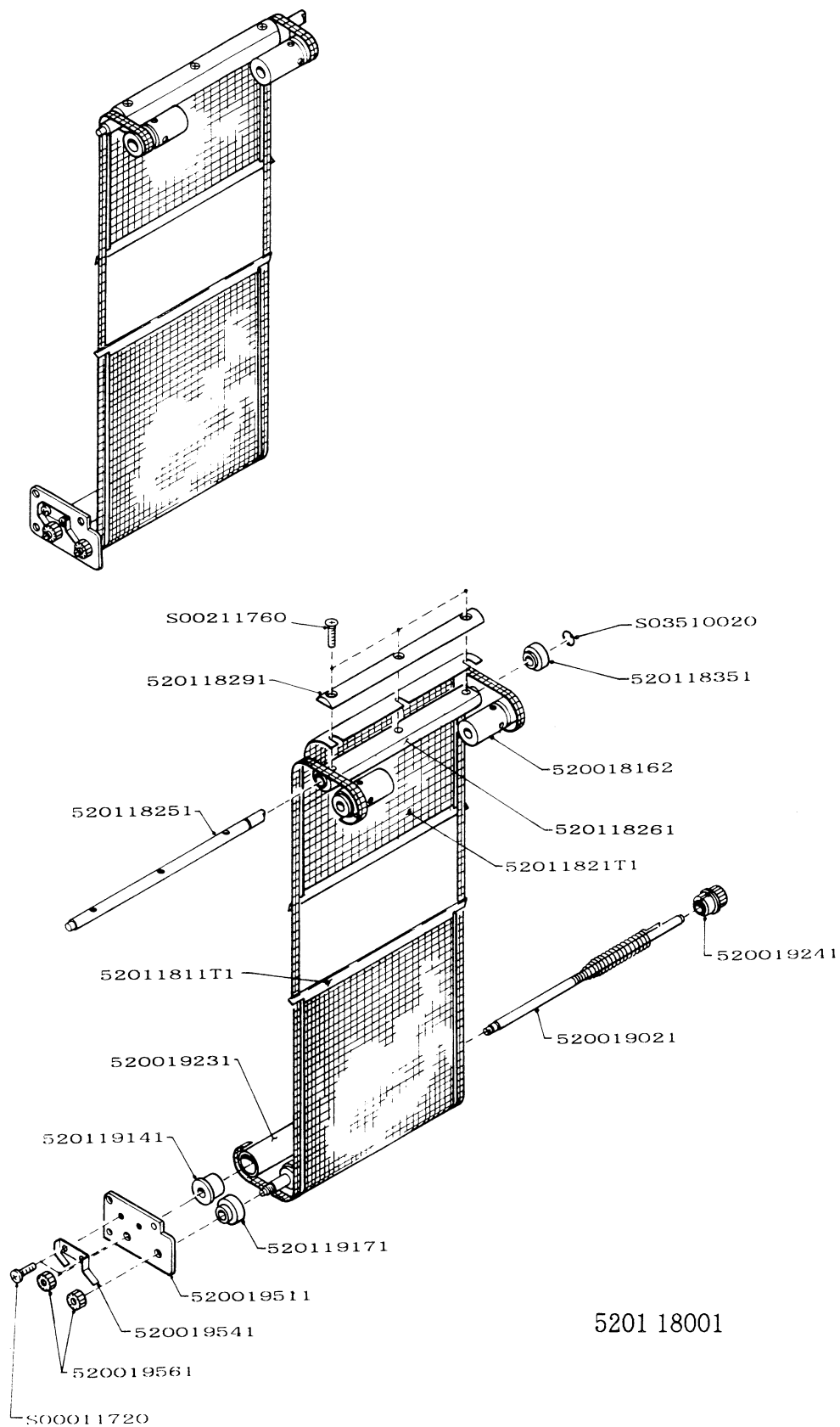
PARTS LIST

1 19

Parts No.	Common Use Parts No.	QTY.	Description	部 品 名 称
5201 20981	(SLT20981)	1	Shutter dial ring	Tダイヤルリング
5200 1625T1	(SLS1625T1)	1	Shutter speed indicator	スピード指標
5200 16371	(SLS16371)	1	Terminal base	シンクロ座
5200 16381	(SLS16381)	1	Terminal nut	シンクロ止ナット
5027 S3621	(LE103-362K2)	2	Flash terminal	シンクロAss'y
S00111430	(3PB1.4×3)	3	Screw	止ネジ
00211418	(PD1.4×1.8)	2	Screw	スピード指標止ネジ

Remarks

86



5201 18001

PARTS LIST

1 20

Parts No.	Common Use Parts No.	QTY.	Description	部 品 名 称
5201 1811T1	(SLT1811T1)	1	First curtain Ass'y	先 幕
5201 1821T1	(SLT1821T1)	1	Second curtain Ass'y	後 幕
5201 18251	(SLT18251)	1	Shaft	後 幕 軸
5201 18261	(SLT18261)	1	Tube	後 幕 筒
5201 18291	(SLT18291)	1	Rataining plate	後 幕 止
5201 18351	(SLT18351)	1	Pulley A	後 幕 軸 ロ ー ラ ー
5201 19141	(SLT19141)	1	Hub	スプリング軸受
5201 19171	(SLT19171)	1	Pulley B	スプリング軸ローラー
5200 18162	(SLS18162)	2	Ribbon pipe	先 幕 筒
5200 19021	(SLS19021)	1	Shaft	後 幕 ス プ リ ン グ
5200 19231	(SLS19231)	1	Tube	後 幕 ス プ リ ン グ 筒
5200 19241	(SLS19241)	1	Wheel	後 幕 ス プ リ ン グ 軸 受
5200 19511	(SLS19511)	1	Base plate	スプリング軸右基板
5200 19541	(SLS19541)	1	Adjustingspring	調整スプリング
5200 19561	(SLS19561)	2	Adjusting gear	スプリング調整歯車
S00011720	(PB1.7×2)	2	Screw	調整スプリング止ネジ
S00211760	(PD1.7×6)	3	Screw	後 幕 筒 止 ネ ジ
S03510020	(E-20)	1	E-ring	後 幕 軸 止 リ ン グ

Remarks

86

M645₁₀₀₀S

Film Advance Crank

Film Advance Crank Ass'y.....21

PARTS LIST

1 21

Parts No.	Common Use Parts No.	QTY.	Description	部 品 名 称
5274 2211T1		1	Film advance crank	巻上レバー
5274 22131	(SLT22131)	1	Film advance crank lid	巻上レバー台
5274 22141	(SLT22141)	1	Spring	クリックバネ
5274 22151	(SLT22151)	1	Knob	巻上レバーつまみ
5274 22171	(SLT22171)	1	Angle plate	巻上レバー押え
5274 22191	(SLT22191)	1	Screw	巻上レバーピン
5274 2221T1	(SLT2221T1)	1	Base bisk	巻上レバー台板
5274 22241	(SLT22241)	1	Spring	ノブロックレバーバネ
5274 22251	(SLT22251)	1	Bayonet bisk	ノブバヨネ
5274 29391	(SLT29391)	1	Leatherette	巻上レバー台革
5273 22431	(SLS22431)	1	Screw	つまみ止ネジ
S00211725	(PD1.7×2.5)	2	Screw	押え止リング
S00221735	(PD1.7×3.5Cr)	4	Screw	ノブバヨネ止ネジ

Remarks

86

M645₁₀₀₀S

120 Roll Film Insert & 220 Roll Film Insert

120 Roll Film Insert Ass'y.....	22
DETAIL "A" Left Panel Ass'y.....	23
DETAIL "B" Pressure Plate Ass'y & "C" Release Latch Ass'y....	24
Exclusive use for 220 Roll Film Insert.....	25

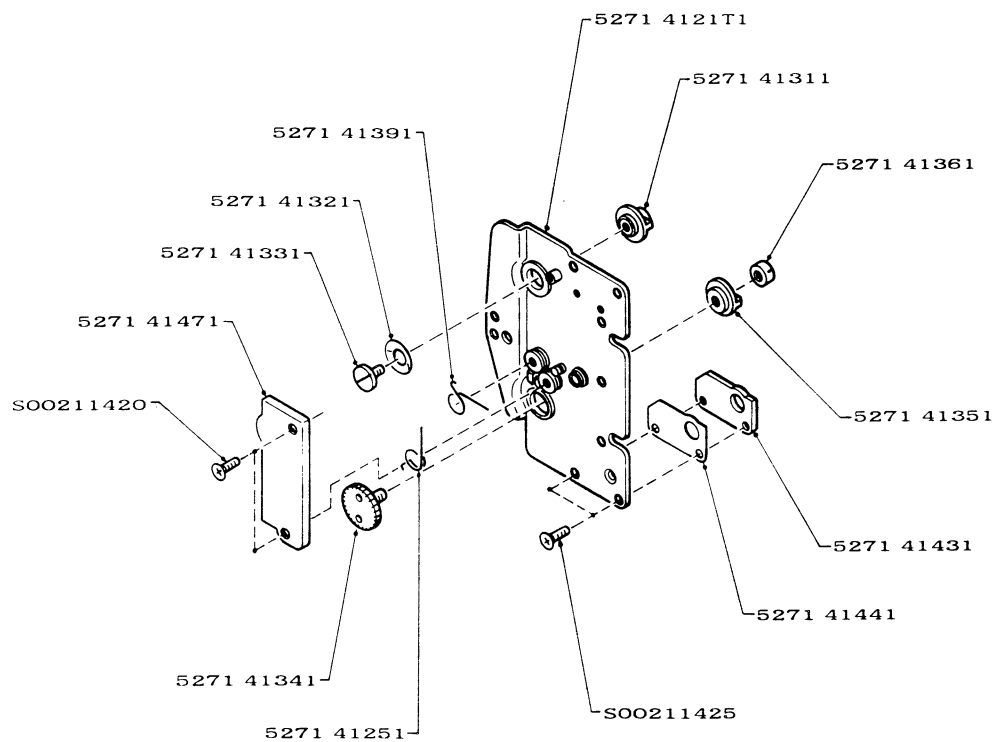
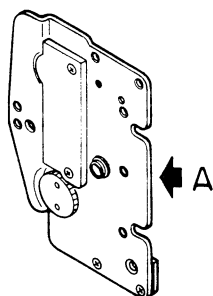
PARTS LIST

1 22

Parts No.	Common Use Parts No.	QTY.	Description	部 品 名 称
5271 41161	(SLS41161)	1	Leaf spring U	SP受板バネ(上)
5271 41171	(SLS41171)	1	Leaf spring L	SP受板バネ(下)
5271 41411	(SLS41411)	1	Guide	Fガイド左上
5271 41421	(SLS41421)	1	Spacer	Fガイド左上座金
5271 4149T2	(SLS4149T2)	2	Roller	繰出しローラー
5271 4151T1	(SLS4151T1)	1	Right panel	右基板
5271 41531	(SLS41531)	1	Guide	Fガイド右上
5271 41541	(SLS41541)	1	Spacer	Fガイド右上座金
5271 41551	(SLS41551)	1	Guide	Fガイド右上
5271 41561	(SLS41561)	1	Spacer	Fガイド右上座金
5271 41581	(SLS41581)	1	Plate	右基板止め板
5271 4161T1	(SLS4161T1)	1	Spool clip L	SP受板下
5271 4162T1	(SLS4162T1)	1	Spool clip U	SP受板上
5271 41671	(SLS41671)	2	Shaft	SP受板軸
5271 41681	(SLS41681)	1	Shaft	繰出しローラー軸(前)
5271 4172T1	(SLS4172T1)	1	Film roller	巻取ローラー
5271 41731	(SLS41731)	1	Shaft	繰出しローラー軸(後)
5271 41741	(SLS41741)	1	Shaft	巻取ローラー軸
5271 4182T2	(SLS4182T2)	1	Friction wheel	摩擦コロ軸
5271 41831	(SLS41831)	1	Gear	摩擦コロ歯車
5271 41841	(SLS41841)	1	Screw	摩擦コロ軸ネジ
5271 41851	(SLS41851)	1	Spring	摩擦コロバネ
5271 41861	(SLS41861)	1	Cover	摩擦コロバネカバー
S00121416	(3PB1.4×1.6Cr)	4	Screw	SP受板バネ止ネジ
S00211420	(PD1.4×2)	2	Screw	カバー止ネジ
S00211425	(PD1.4×2.5)	2	Screw	Fガイド左上止ネジ
S00211435	(PD1.4×3.5)	4	Screw	Fガイド右上止ネジ
S00211725	(PD1.7×2.5)	3	Screw	左基板止ネジ
S00211730	(PD1.7×3)	2	Screw	右基板止ネジ
S00211735	(PD1.7×3.5)	3	Screw	ローラー軸止ネジ
S00212040	(PD2×4)	2	Screw	巻取ローラー止ネジ
S00611730	(TD1.7×3)	3	Screw	基板支え止ネジ

Remarks

86



DETAIL "A"

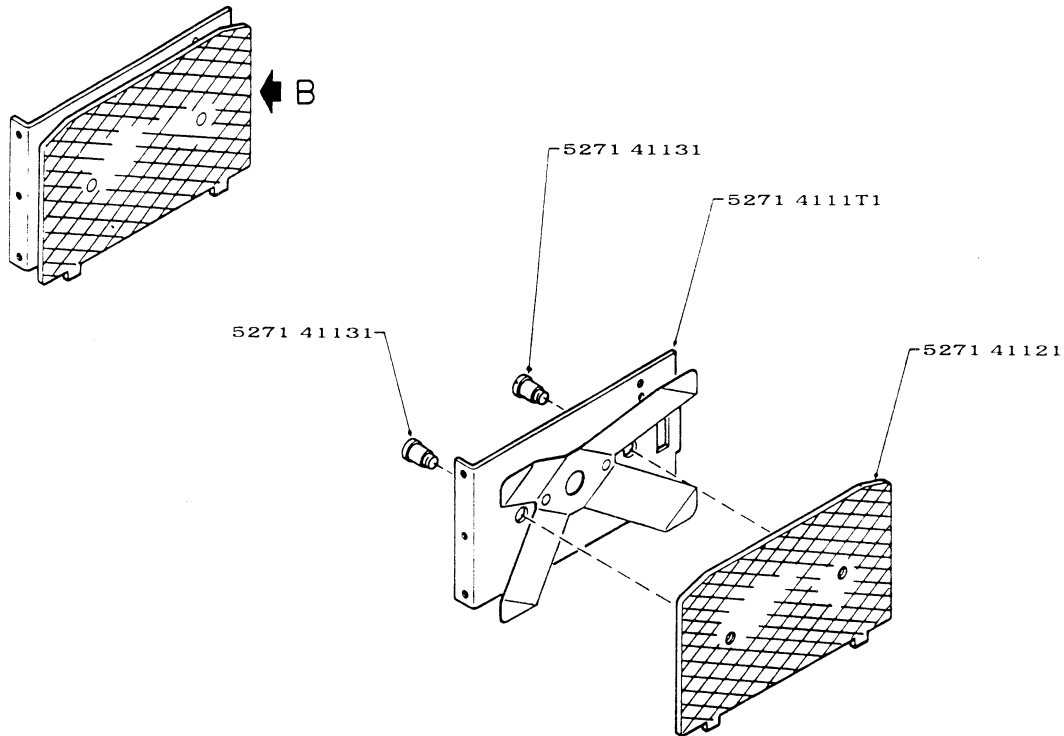
PARTS LIST

1 23

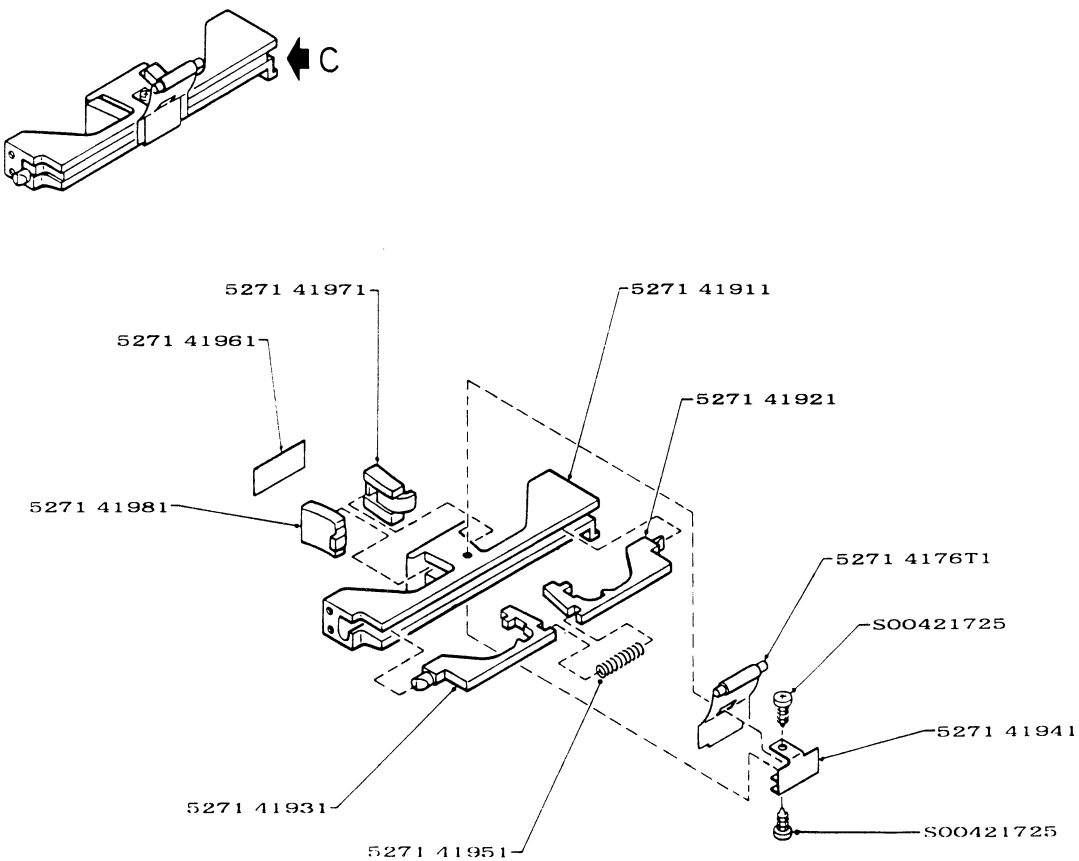
Parts No.	Common Use Parts No.	QTY.	Description	部 品 名 称
5271 4121T1	(SLS4121T1)	1	Left panel	左基板
5271 41251	(SLS41251)	1	Spring	SP歯車バネ
5271 41311	(SLS41311)	1	Spool holder	SP受け
5271 41321	(SLS41321)	1	Friction spring	SP受け摩擦バネ
5271 41331	(SLS41331)	1	Screw	SP受け止ネジ
5271 41341	(SLS41341)	1	Film spool gear	SP歯車
5271 41351	(SLS41351)	1	Film take-up spool	SP歯車爪
5271 41361	(SLS41361)	1	Nut	SP歯車ナット
5271 41391	(SLS41391)	1	Spring	SP歯車サブギチバネ
5271 41431	(SLS41431)	1	Guide	Fサイド左下
5271 41441	(SLS41441)	1	Spacer	Fサイド左下座金
5271 41471	(SLS41471)	1	Cover	左基板カバー
S00211420	(PD1.4×2)	2	Screw	左基板カバー止ネジ
S00211425	(PD1.4×2.5)	2	Screw	Fガイド左下止ネジ

Remarks

86



DETAIL "B"



DETAIL "C"

PARTS LIST

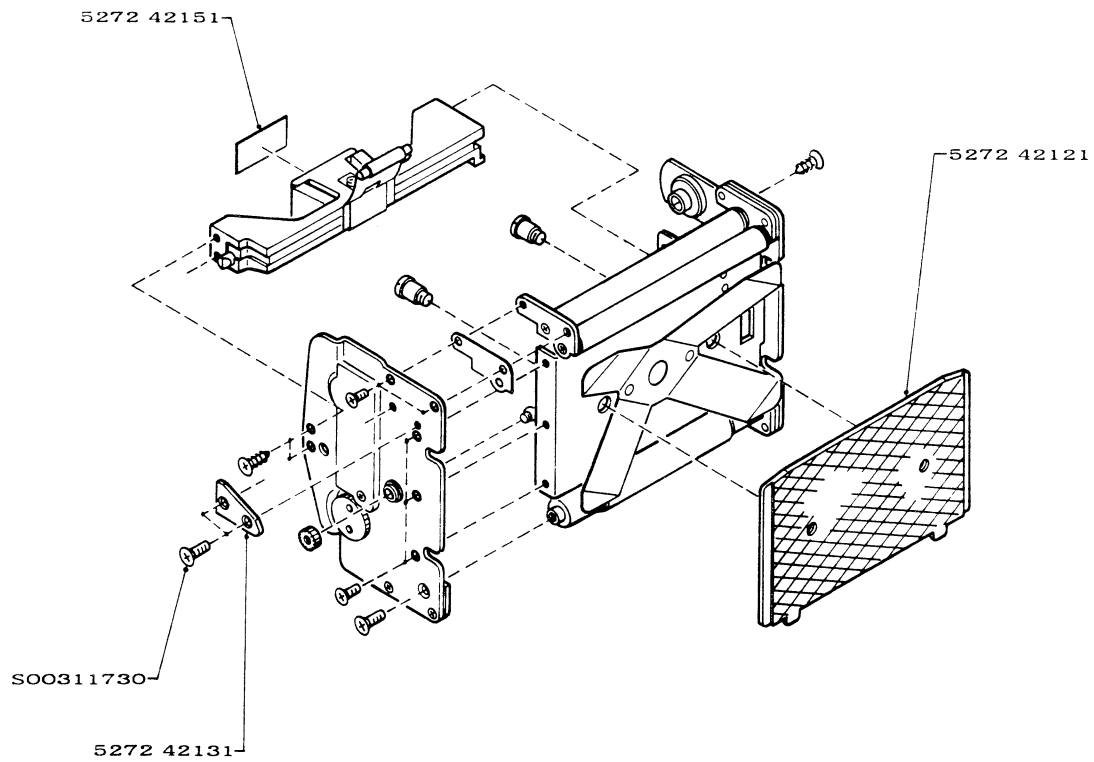
1 24

Parts No.	Common Use Parts No.	QTY.	Description	部 品 名 称
5271 4111T1	(SLS4111T1)	1	Base plate	H前基板
5271 41121	(SLS41121)	1	Pressure plate	圧板(120用)
5271 41131	(SLS41131)	2	Shoulder screw	圧板軸

5271 4176T1	(SLS4176T1)	1	T-spring	SPバネ
5271 41911	(SLS41911)	1	Release latch base	基板支え
5271 41921	(SLS41921)	1	Locking bracket	中枠ロック軸左
5271 41931	(SLS41931)	1	Locking bracket	中枠ロック軸右
5271 41941	(SLS41941)	1	Bracket	中枠ロック軸支え
5271 41951	(SLS41951)	1	Spring	ロック軸バネ
5271 41961	(SLS41961)	1	Index plate for 120	プレート(120用)
5271 41971	(SLS41971)	1	Release latch	中枠ツマミ左
5271 41981	(SLS41981)	1	Release latch	中枠ツマミ右
S00421725	(TB1.7×2.5Cr)	2	Screw	SPバネ止ネジ

Remarks

86



PARTS LIST

1	25
---	----

Parts No.	Common Use Parts No.	QTY.	Description	部 品 名 称
5272 42121	(SLS42121)	1	Pressure plate	圧板(220用)
5272 42131	(SLS42131)	1	Guide	220用フィルムカム
5272 42151	(SLS42151)	1	Index plate for 220	プレート(220用)
S00311730	(3PD1.7×3)	2	Screw	フィルムカム止ネジ

Remarks

86	
----	--

M645

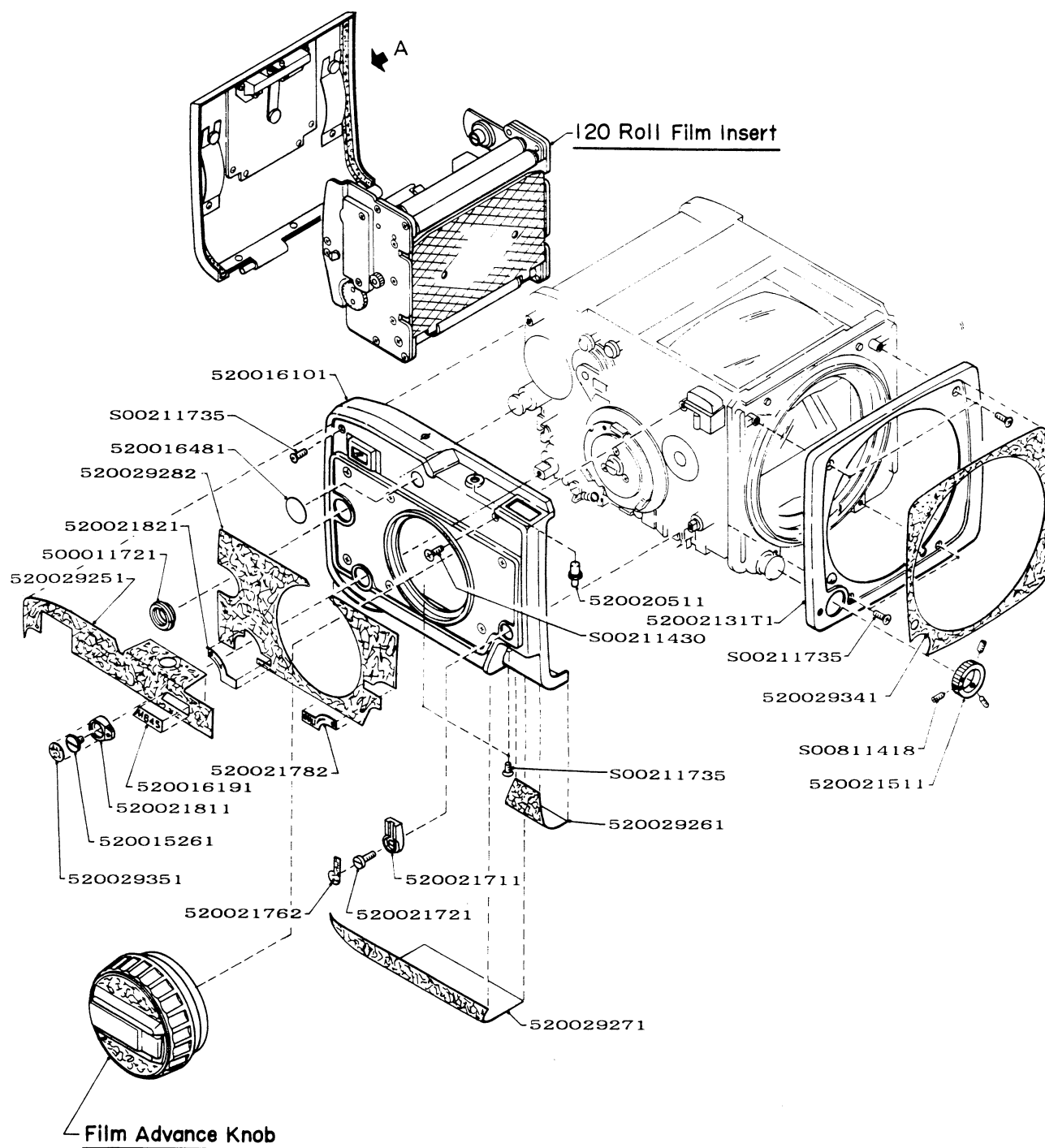
Camera Body

Body Ass' y	1.....	26
Body Ass' y	2.....	27
Body Ass' y	3.....	28
Body Ass' y	4.....	29
Body Ass' y	5.....	30
Body Ass' y	6.....	31
Body Ass' y	7.....	32
Body Ass' y	8.....	33
Body Ass' y	9.....	34
Body Ass' y	10.....	35
Body Ass' y	11.....	36
Body Ass' y	12.....	37
Body Ass' y	13.....	38
5200 16201 Side Panel R Ass' y.....		39

M645

Body Ass'y 1

1	26
---	----



PARTS LIST

1	26
---	----

Parts No.	Common Use Parts No.	QTY.	Description	部 品 名 称
5200 15261	(SLS15261)	1	Screw	D X カム 止 ネジ
5200 16101	(SLS16101)	1	Side panel L	左 側 板
5200 16191	(SLS16191)	1	Name plate	M 6 4 5 マ ー ク
5200 16481	(SLS16481)	1	Disk	左 側 板 盲 板
5200 20511	(SLS20511)	1	BC Button	B C ボ タ ン
5200 2131T1	(SLS2131T1)	1	Front panel	前 カ バ ー
5200 21511	(SLS21511)	1	S Lock ring	S ロ ッ ク つ ま み
5200 21711	(SLS21711)	1	Mirror-up lever	M U つ ま み
5200 21721	(SLS21721)	1	Screw	M U つ ま み 止 ネジ
5200 21762	(SLS21762)	1	Leatherette C	M U つ ま み 革
5200 21782	(SLS21782)	1	Indicator plate	M U 表 示 板
5200 21811	(SLS21811)	1	M exposure lever	D X つ ま み
5200 21821	(SLS21821)	1	Indicator plate	D X 表 示 板
5200 29261	(SLS29261)	1	Leatherette D	左 側 板 革 (下 前)
5200 29271	(SLS29271)	1	Leatherette E	左 側 板 革 (下 後)
5200 29282	(SLS29282)	1	Leatherette F	左 側 板 飾 革
5200 29251	(SLS29251)	1	Leatherette	左 側 板 革 (上)
5200 29341	(SLS29341)	1	Leatherette	前 カ バ ー 革
5200 29351	(SLS29351)	1	Leatherette G	D X つ ま み 革
5000 11721	(RS1172)	1	Nut	吊 金 具 止 ネジ
S00811418	(A1.4×1.8)	3	Screw	ロ ッ ク つ ま み 止 ネジ
S00211430	(PD1.4×3)	1	Screw	左 側 板 止 ネジ
S00211735	(PD1.7×3.5)	7	Screw	止 ネジ

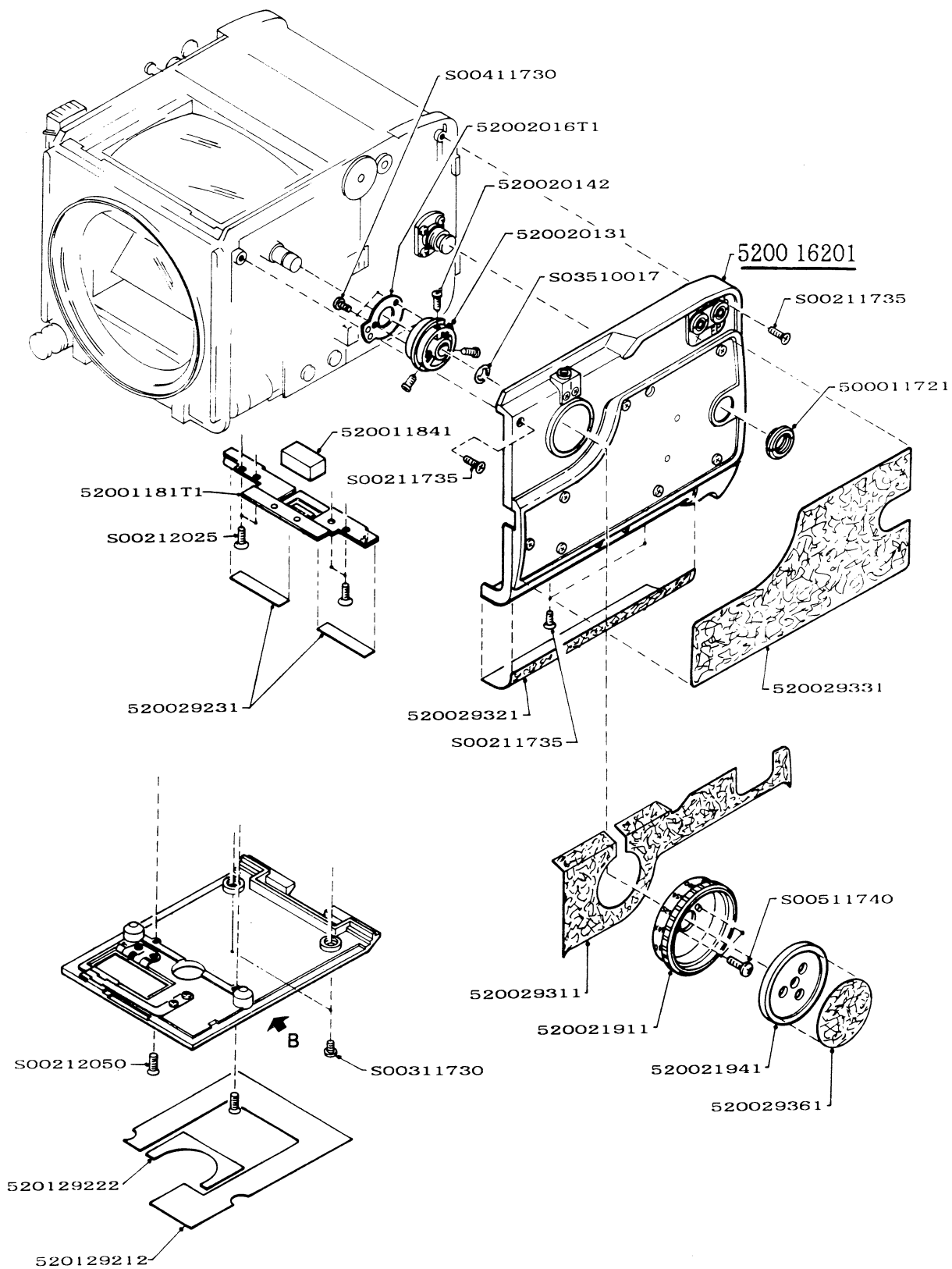
※ Film Advuance Knob.....Page 40

※ 120 Roll Film Insert.....Page 22 Common use M645 1000S

※ DETAIL A Back Cover Ass'y.....Page 14 Common use M645 1000S

Remarks

86



PARTS LIST

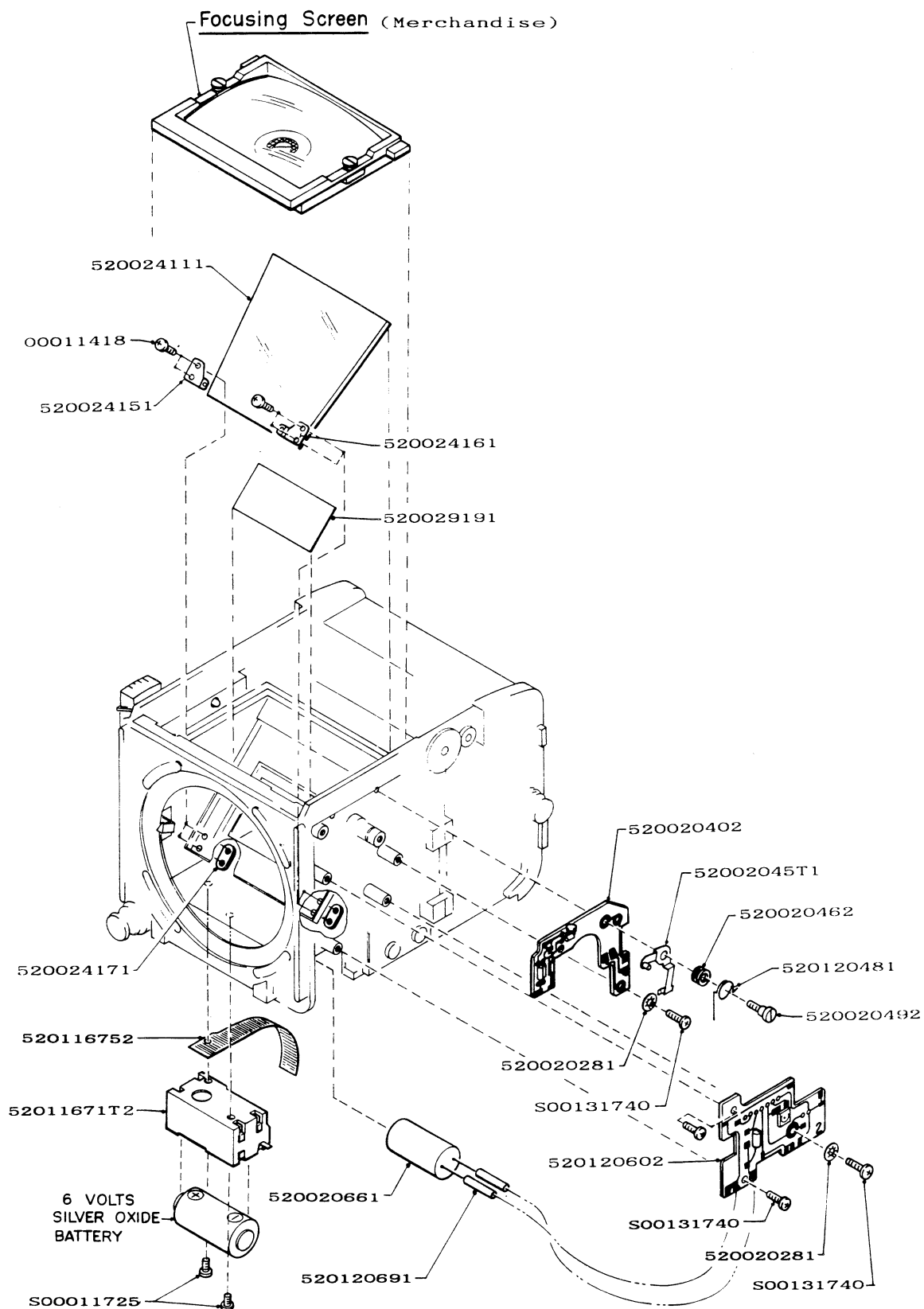
1	27
---	----

Parts No.	Common Use Parts No.	QTY.	Description	部 品 名 称
5200 1181T1	(SLS1181T1)	1	Hinge plate	蝶番
5200 11841	(SLS11841)	1	Cushion	蝶番止金クッション
5200 16201	(SLS16201)	1	Side panel R	右側板Ass'y
5200 20131	(SLS20131)	1	Shutter dial hub	Tダイヤルハブ
5200 20142	(SLS20142)	3	Screw	ダイヤルハブ止ネジ
5200 2016T1	(SLS2016T1)	1	Brush disk	Tブラシ台板
5200 21911	(SLS21911)	1	Shutter speed dial	Tダイヤル
5200 21941	(SLS21941)	1	Disk	Tダイヤルプレート
5200 29231	(SLS29231)	2	Leatherette	ボディ蝶番革
5200 29311	(SLS29311)	1	Leatherette	右側板革(上)
5200 29321	(SLS29321)	1	Leatherette	右側板革(下)
5200 29331	(SLS29331)	1	Leatherette	右側板飾り革
5200 29361	(SLS29361)	1	Leatherette	Tダイヤル革
5201 29212	(SLT29212)	1	Leatherette	下部カバー革(大)
5201 29222	(SLT29222)	1	Leatherette	下部カバー革(小)
5000 11721	(RS1172)	1	Nut	吊金具台ナット
S00211735	(PD1.7×3.5)	4	Screw	左側板止ネジ
S00212025	(PD2×2.5)	4	Screw	蝶番止ネジ
S00212050	(PD2×5)	2	Screw	下部カバー止ネジ前
S00311730	(3PD1.7×3)	2	Screw	下部カバー止ネジ後
S00411730	(TB1.7×3)	2	Screw	Tブラシ台板止ネジ
S00511740	(3TB1.7×4)	2	Screw	Tダイヤル止ネジ
S03510017	(E-17)	1	E-ring	Tダイヤル止リング

※ DETAIL B Bottom Cover Ass'y.....Page 15 Common use M645 1000S

※ 5200 16201 Side Panel R Ass'y.....Page 39

Remarks



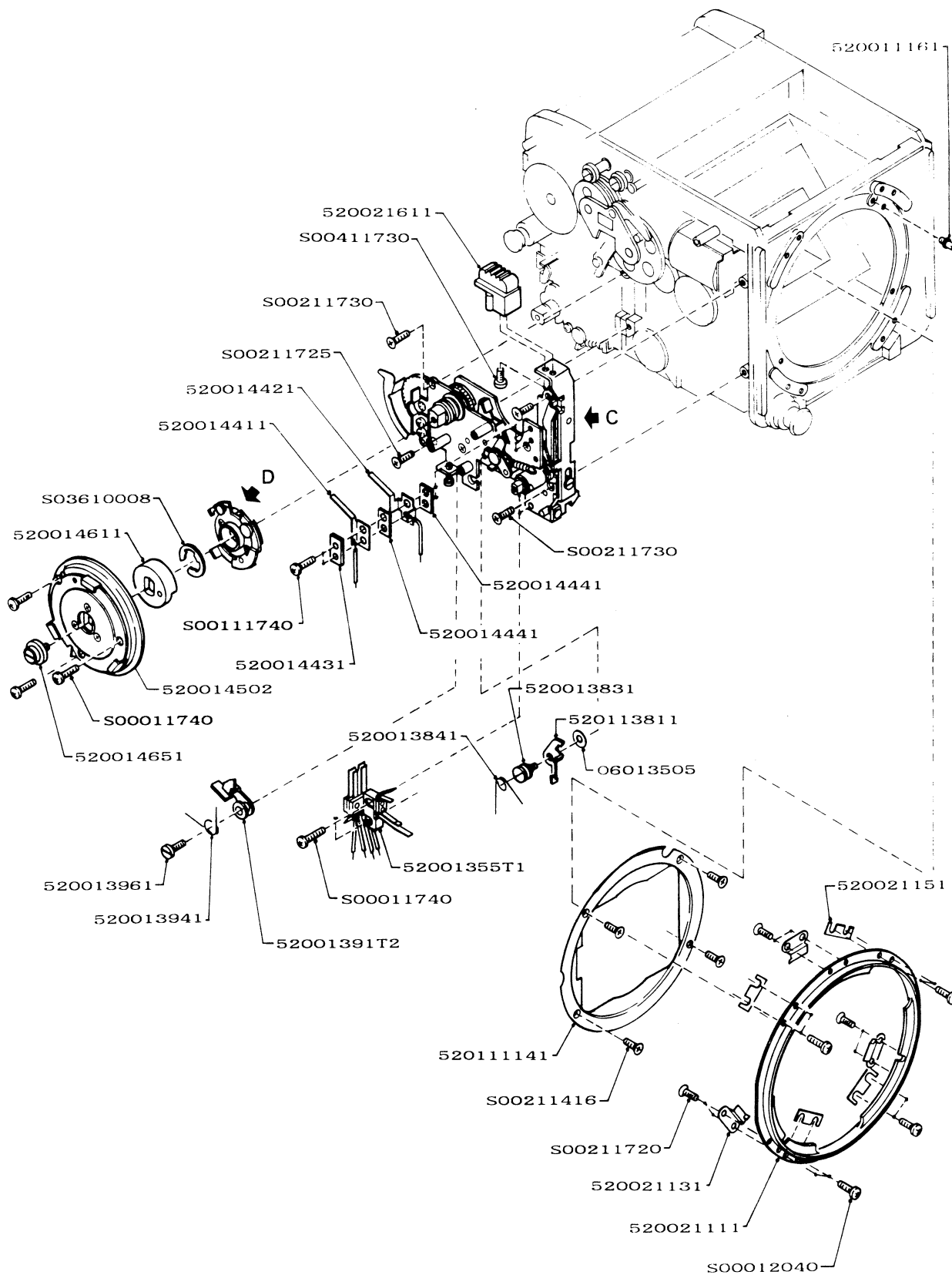
PARTS LIST

1 28

Parts No.	Common Use Parts No.	QTY.	Description	部 品 名 称
5201 1671T2	(SLT1671T2)	1	Battery chamber Ass'y	電池ケースAss'y
5201 16752	(SLT16752)	1	Ribbon	電池リボン
5201 20481	(SLT20481)	1	Spring	切替スイッチバネ
5201 20602	(SLT20602)	1	Shutter PC plate	T回路配線板
5201 20691	(SLT20691)	2	Vinyl tube	チューブ
5200 20281	(SLS20281)	2	Fastener	ネジアース座金
5200 20402	(SLS20402)	1	Battery check PC plate	BC基板
5200 2045T1	(SLS2045T1)	1	Switch lever	切替スイッチレバー
5200 20462	(SLS20462)	1	Hub	スイッチレバー軸
5200 20492	(SLS20492)	1	Shoulder screw	SWレバー止ネジ
5200 20661	(SLS20661)	1	MC condenser	MCコンデンサー
5200 24111	(SLS24111)	1	Mirror	ミラー
5200 24151	(SLS24151)	1	Leaf spring L	ミラー押え(左)
5200 24161	(SLS24161)	1	Leaf spring R	ミラー押え(右)
5200 24171	(SLS24171)	2	Rataining plate	ミラー座金
5200 29191	(SLS29191)	1	Paper	ミラー裏紙
00011418	(PB1.4×1.8)	4	Screw	ミラー押え止ネジ
S00011725	(PB1.7×2.5)	2	Screw	電池ケース止ネジ
S00131740	(3PB1.7×4Ni)	4	Screw	止ネジ

Remarks

86



Parts No.	Common Use Parts No.	QTY.	Description	部 品 名 称
5200 11161	(SLS11161)	1	Stopper pin	バヨネ回転止ピン
5200 1355T1	(SLS1355T1)	1	Main switch	トリプルスイッチ
5200 13831	(SLS13831)	1	Shoulder screw	スイッチ掛金軸
5200 13841	(SLS13841)	1	Spring	スイッチ掛金バネ
5200 1391T2	(SLS1391T2)	1	Clutch stopper	ストッパー
5200 13941	(SLS13941)	1	Spring	ストッパーバネ
5200 13961	(SLS13961)	1	Screw	ストッパー止ネジ
5200 14411	(SLS14411)	1	FP contact U	上FP接片
5200 14421	(SLS14421)	1	FP contact L	下FP接片
5200 14431	(SLS14431)	1	Insulation plate	FP接片
5200 14441	(SLS14441)	2	Insulation washer	FP接片絶縁板
5200 14502	(SLS14502)	1	Winding knob disk Ass'y	巻上上基板
5200 14611	(SLS14611)	1	Winding cam	MS巻上カム
5200 14651	(SLS14651)	1	Shoulder screw	ノブ受板止め軸
5200 21111	(SLS21111)	1	Bayonet ring	バヨネットリング
5200 21131	(SLS21131)	3	Leaf spring	バヨネバネ
5200 21151	(SLS21151)	0~4	Washer (t=0.03,0.05,0.1)	バヨネワッシャ
5200 21611	(SLS21611)	1	Shutter release button	リリースボタン
5201 11141	(SLT11141)	1	Shading frame	バヨネ下カバー
5201 13811	(SLT13811)	1	Hook	スイッチ掛金
S00011740	(PB1.7×4)	5	Screw	止ネジ
S00012040	(PB2×4)	8	Screw	バヨネ止ネジ
S00111740	(3PB1.7×4)	2	Screw	FP接片台止ネジ
S00211416	(PD1.4×1.6)	4	Screw	カバー止ネジ
S00211720	(PD1.7×2)	6	Screw	バヨネバネ止ネジ
S00211725	(PD1.7×2.5)	1	Screw	巻上中基板止ネジ
S00211730	(PD1.7×3)	3	Screw	巻上下基板止ネジ
S00411730	(TB1.7×3)	2	Screw	Rボタン止ネジ
06013505	(5W2×0.5)	1	Washer	スイッチ掛金座金
S03610008	(C-8)	1	C-ring	MSI歯車止リング

※ DETAIL C Winding Base Ass'y.....Page 16 Common use M645 1000S
 ※ DETAIL D MS Clutch Disk Ass'y.....Page 18 Common use M645 1000S

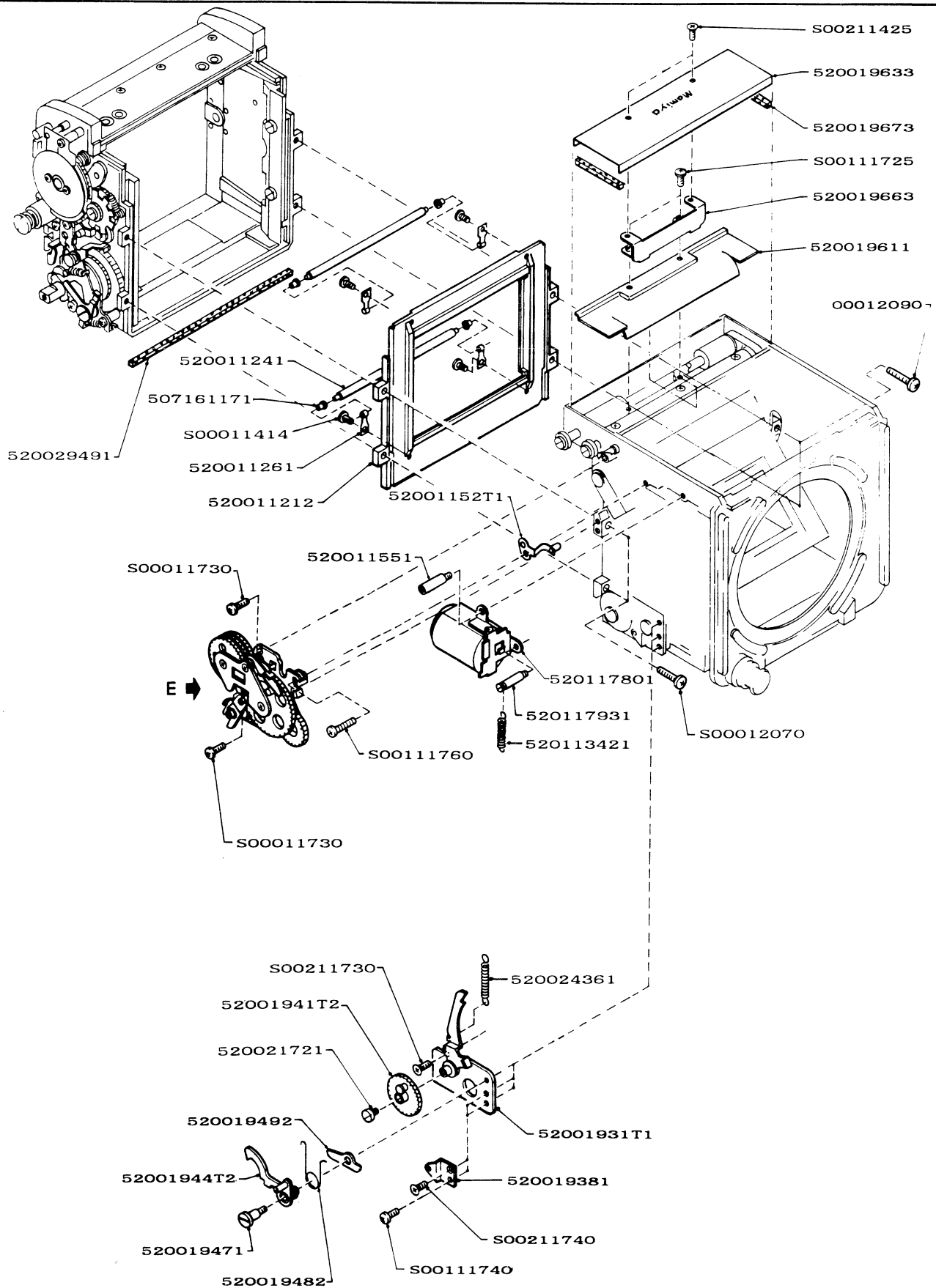
Remarks

86

M645

Body Ass'y 5

1 30

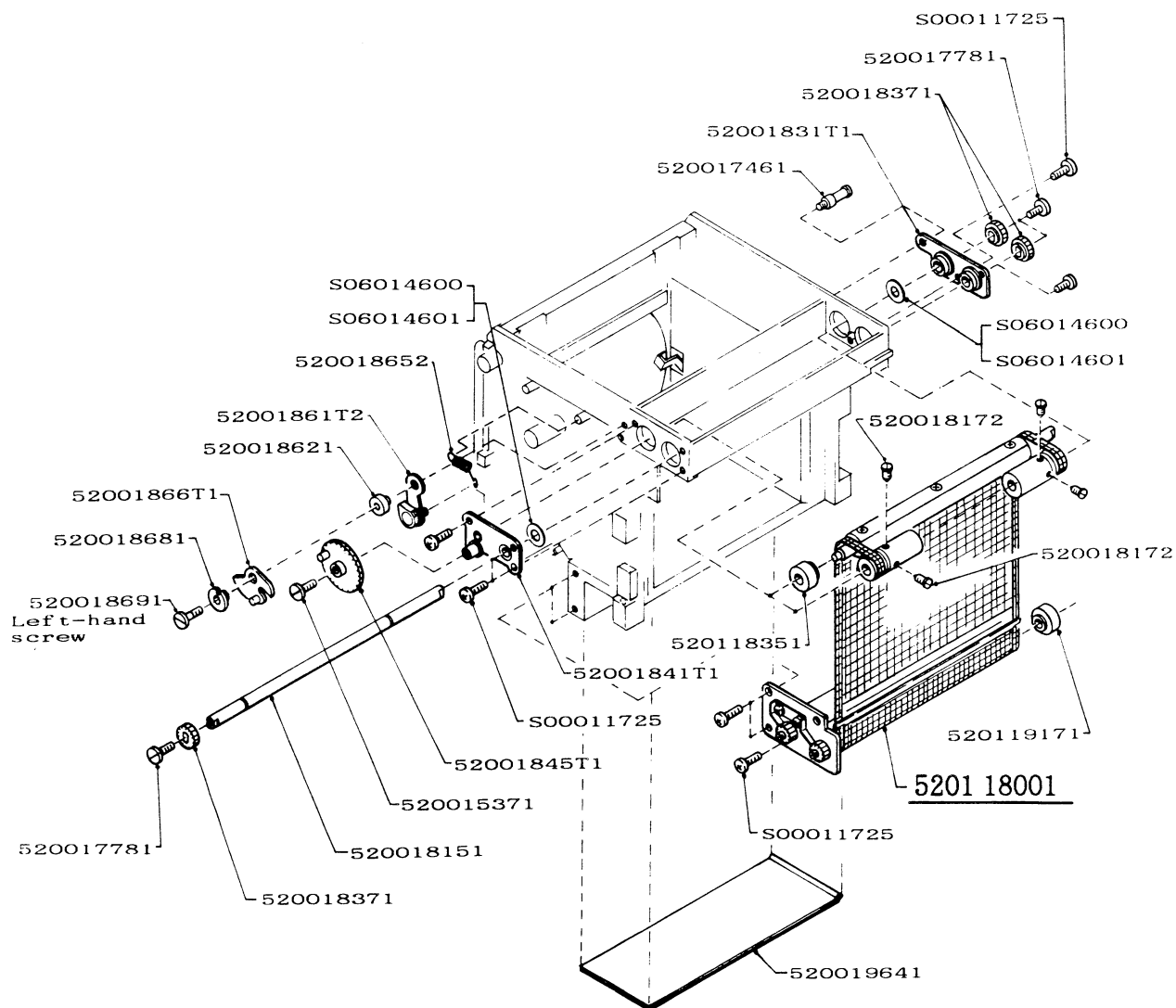


Parts No.	Common Use Parts No.	QTY.	Description	部 品 名 称
5200 11212	(SLS11212)	1	Guide reil frame	レール板
5200 11241	(SLS11241)	2	Film roller	Fローラー
5200 11261	(SLS11261)	4	Leaf spring	Fローラーバネ
5200 1152T1	(SLS1152T1)	1	Leaf spring	クリックバネ
5200 11551	(SLS11551)	1	Shaft	左側板受柱
5200 1931T1	(SLS1931T1)	1	Base plate	スプリング軸左基板
5200 19381	(SLS19381)	1	Bracket	スプリング軸受板
5200 1941T2	(SLS1941T2)	1	Gear	ミラーケリ歯車
5200 1944T2	(SLS1944T2)	1	Braking lever	後幕ブレーキレバー
5200 19471	(SLS19471)	1	Shoulder screw	ブレーキレバー軸
5200 19482	(SLS19482)	1	Spring	ブレーキレバーバネ
5200 19492	(SLS19492)	1	Lever	ミラー下げレバー
5200 19611	(SLS19611)	1	Cover L	幕軸下カバー
5200 19633	(SLS19633)	1	Cover U	幕軸室カバー
5200 19663	(SLS19663)	1	Cover holder	幕軸室カバー受
5200 19673	(SLS19673)	2	Sealing strip	幕軸室モルト
5200 21721	(SLS21721)	1	Screw	歯車止ネジ
5200 24361	(SLS24361)	1	Spring	ミラー下げバネ
5200 29491	(SLS29491)	1	Sealing strip	下カバーモルト
5201 13421	(SLT13421)	1	Spring	リリース板バネ
5201 17801	(SLT17801)	1	Moving coil Ass'y	M U Ass'y
5201 17931	(SLT17931)	1	Shaft	M U 受ネジ
5071 61171	(ARSH6117)	4	Collar	Fローラー受
S00011414	(PB1.4×1.4)	4	Screw	Fローラーバネ止ネジ
S00011730	(PB1.7×3)	2	Screw	M S 巻上基板止ネジ
S00012070	(PB2×7)	2	Screw	ボディ結合ネジ(左)
00012090	(PB2×9)	2	Screw	ボディ結合ネジ(右)
S00111725	(3PB1.7×2.5)	2	Screw	幕軸下カバー止ネジ
S00111740	(3PB1.7×4)	1	Screw	軸受板止ネジ
S00111760	(3PB1.7×6)	1	Screw	解除レバー止ネジ
S00211425	(PD1.4×2.5)	2	Screw	幕軸室止ネジ
S00211730	(PD1.7×3)	1	Screw	左基板止ネジ
S00211740	(PD1.7×4)	1	Screw	軸受板止ネジ

※ DETAIL E Charging Base Ass'y.....Page 17 Common use M645 1000S

Remarks

86



PARTS LIST

1	31
---	----

Parts No.	Common Use Parts No.	QTY.	Description	部 品 名 称
5201 18001	(SLT18001)	1	Shutter curtain Ass'y	シャッター Ass'y
5201 18351	(SLT18351)	1	Pulley A	後幕軸ローラー
5201 19171	(SLT19171)	1	Pulley B	S 軸ローラー
5200 15371	(SLS15371)	1	Screw	X 歯車止ネジ
5200 17461	(SLS17461)	1	Anchor	S I 歯車掛金バネ掛
5200 17781	(SLS17781)	3	Screw	幕軸歯車止ネジ
5200 18151	(SLS18151)	1	Shaft	先幕軸
5200 18172	(SLS18172)	4	Set screw	先幕筒止ネジ
5200 1831T1	(SLS1831T1)	1	Bushing plate	幕軸基板(左)
5200 18371	(SLS18371)	3	Gear	幕軸歯車
5200 1841T1	(SLS1841T1)	1	Bushing plate	幕軸基板(右)
5200 1845T1	(SLS1845T1)	1	X synchro gear	X 歯車
5200 1861T2	(SLS1861T2)	1	Braking lever	先幕ブレーキ板(下)
5200 18621	(SLS18621)	1	Hub	先幕ブレーキ板軸
5200 18652	(SLS18652)	1	Spring	ブレーキ戻しバネ
5200 1866T1	(SLS1866T1)	1	Cam	先幕ブレーキ板(上)
5200 18681	(SLS18681)	1	Collar	先幕ブレーキカラー
5200 18691	(SLS18691)	1	Shoulder screw	ブレーキ板止ネジ
5200 19641	(SLS19641)	1	Cover	スプリング軸カバー
S00011725	(PB1.7×2.5)	8	Screw	止ネジ
S06014600	(6W2.5×0.05)	0~2	Washer	先幕軸調整ワッシャ
S06014601	(6W2.5×0.1)	0~2	Washer	先幕軸調整ワッシャ

※ 5201 18001 Shutter Curtain Ass'y.....Page 20 Common use M645 1000S

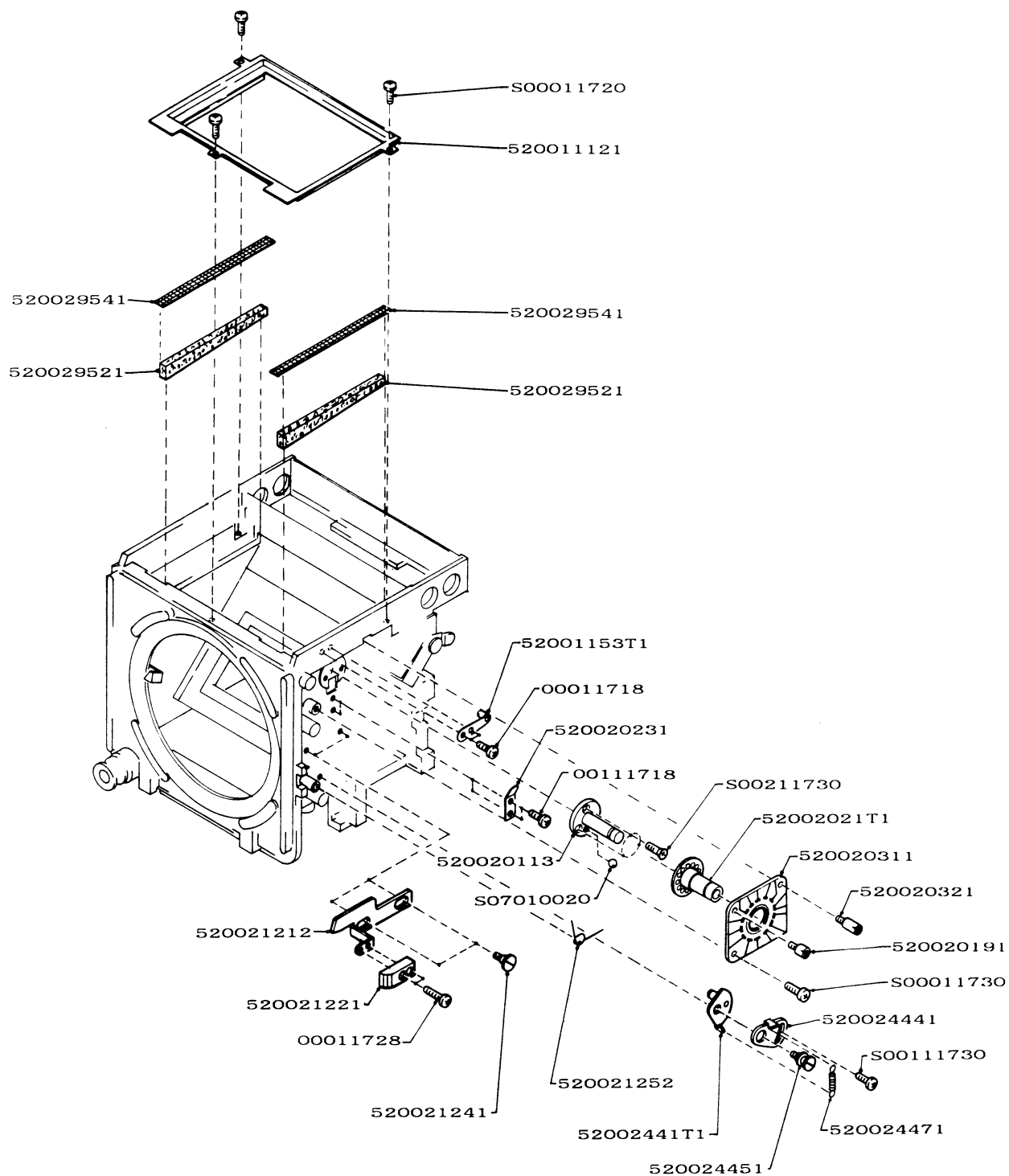
Remarks

86

M645

Body Ass'y 7

1 32



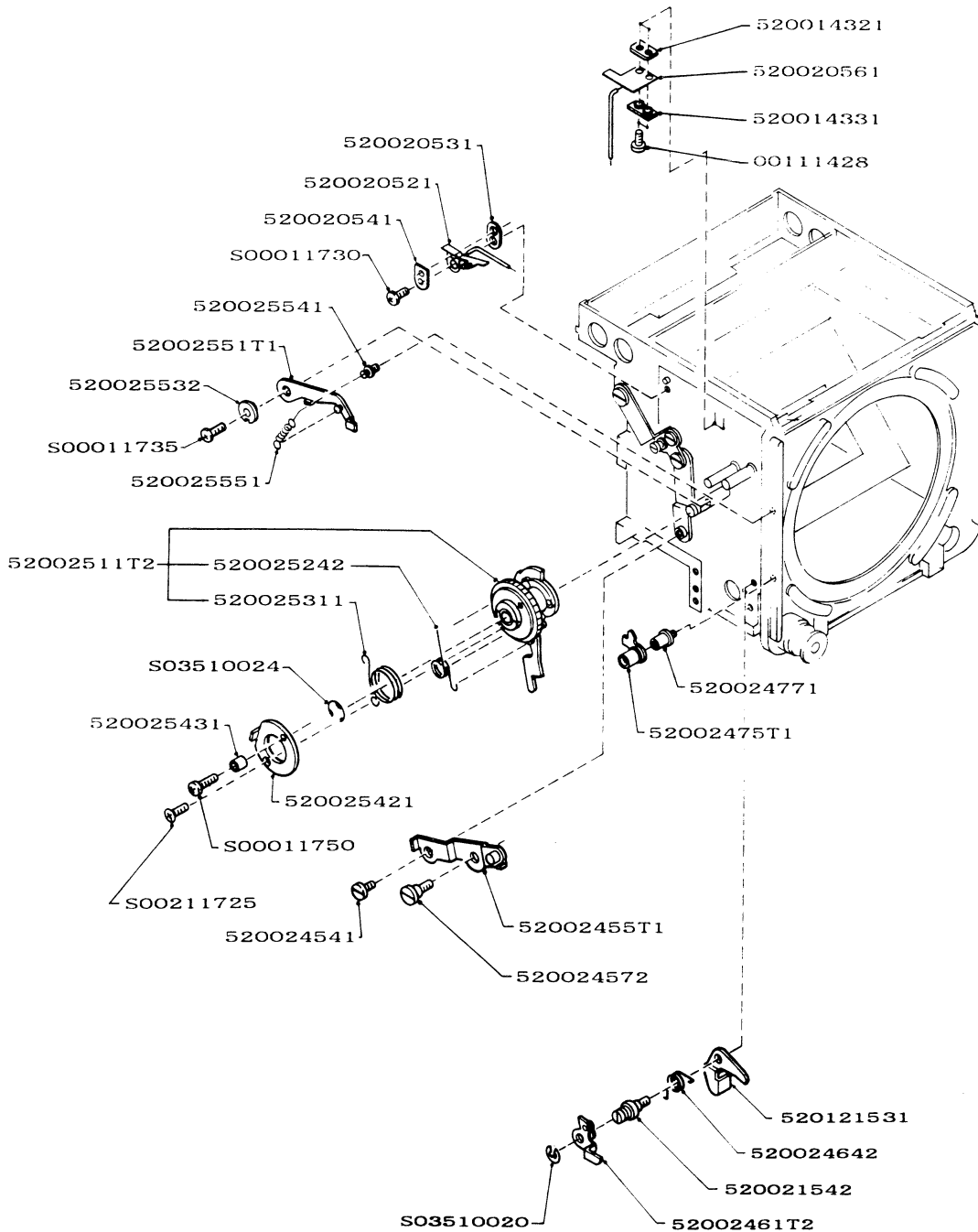
PARTS LIST

1 32

Parts No.	Common Use Parts No.	QTY.	Description	部 品 名 称
5200 11121	(SLS11121)	1	Frame	ボディ上カバー
5200 1153T1	(SLS1153T1)	1	Leaf spring R	枠クリックバネ(右)
5200 20113	(SLS20113)	1	Shaft	Tダイヤル軸
5200 20191	(SLS20191)	1	Shaft	Tプリント止柱
5200 2021T1	(SLS2021T1)	1	Dial click	Tクリック軸
5200 20231	(SLS20231)	1	Leaf spring	Tクリックバネ
5200 20311	(SLS20311)	1	Time PC board	Tプリント板
5200 20321	(SLS20321)	1	Shaft	Tプリント止柱
5200 21212	(SLS21212)	1	Lens release lever	L戻し止
5200 21221	(SLS21221)	1	Button	L戻し止ボタン
5200 21241	(SLS21241)	2	Guide screw	L戻し止ガイド
5200 21252	(SLS21252)	1	Spring	L戻し止バネ
5200 2441T1	(SLS2441T1)	1	Mirror stopper	ミラー角度板
5200 24441	(SLS24441)	1	Adjusting plate	ミラー角度調整板
5200 24451	(SLS24451)	1	Shoulder screw	ミラー角度調整板軸
5200 24471	(SLS24471)	1	Spring	ミラー角度調整板バネ
5200 29521	(SLS29521)	2	Sealing strip	ミラー側面モルト
5200 29541	(SLS29541)	2	Light baffle	ミラー側面遮光幕
00011718	(PB1.7×1.8)	2	Screw	クリックバネ止ネジ
S00011720	(PB1.7×2)	3	Screw	上カバー止ネジ
00011728	(PB1.7×2.8)	2	Screw	ボタン止ネジ
S00011730	(PB1.7×3)	1	Screw	Tプリント止ネジ
S00211730	(PD1.7×3)	3	Screw	Tダイヤル軸止ネジ
00111718	(3PB1.7×1.8)	2	Screw	Tクリックバネ止ネジ
S00111730	(3PB1.7×3)	1	Screw	調整板止ネジ
S07010020	(B020)	1	Steel baLL (φ2.0)	クリックボール

Remarks

86



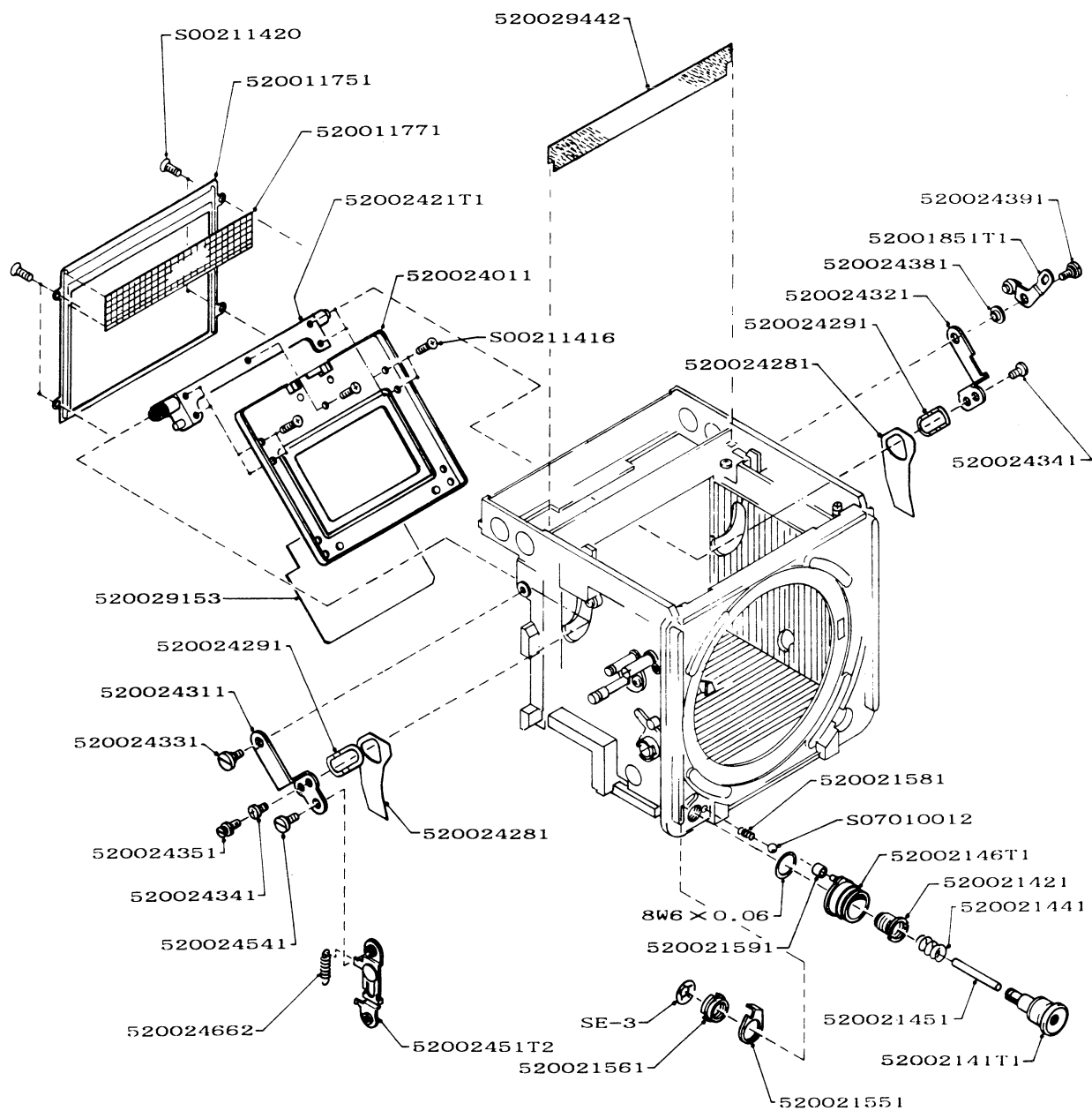
Parts No.	Common Use Parts No.	QTY.	Description	部 品 名 称
5201 21531	(SLT21531)	1	C release lever	C レリーズレバー
5200 14321	(SLS14321)	1	Insulation washer	B C 極絶縁座
5200 14331	(SLS14331)	1	Insulation plate	B C 極絶縁板
5200 20521	(SLS20521)	1	Leaf spring	B C ボタンバネ
5200 20531	(SLS20531)	1	Insulation plate	B C ボタンバネ絶縁板
5200 20541	(SLS20541)	1	Insulation holder	B C ボタンバネ絶縁台
5200 20561	(SLS20561)	1	Contact plate	B C 極
5200 21542	(SLS21542)	1	Shoulder screw	C レリーズレバー軸
5200 24541	(SLS24541)	1	Screw	止ネジ
5200 2455T1	(SLS2455T1)	1	Mirror raising lever	ミラーレバー
5200 24572	(SLS24572)	1	Hub	ミラーレバー軸
5200 2461T2	(SLS2461T2)	1	Stop lever	ミラーストップレバー
5200 24642	(SLS24642)	1	Spring	ストップレバーバネ
5200 2475T1	(SLS2475T1)	1	Link lever	第2 M U レバー
5200 24771	(SLS24771)	1	Shaft	第2 M U レバー軸
5200 2511T2	(SLS2511T2)	1	Mirror raising crank	ミラー歯車板
5200 25242	(SLS25242)	1	Spring	ミラー上爪バネ
5200 25311	(SLS25311)	1	Spring	ミラーバネ
5200 25421	(SLS25421)	1	Disk	M 3 歯車板
5200 25431	(SLS25431)	1	Collar	F P スイッチピン
5200 2551T1	(SLS2551T1)	1	M release lever	ミラー歯車板掛金
5200 25532	(SLS25532)	1	Collar	ミラー歯車板掛金軸
5200 25541	(SLS25541)	1	Anchor	バネ柱
5200 25551	(SLS25551)	1	Spring	ミラー歯車板掛金バネ
S00011730	(PB1.7×3)	2	Screw	B C ボタンバネ止ネジ
S00011735	(PB1.7×3.5)	1	Screw	掛金軸止ネジ
S00011750	(PB1.7×5)	1	Screw	M 3 歯車板ピン止ネジ
S00211725	(PD1.7×2.5)	1	Screw	M 3 歯車板止ネジ
00111428	(3PB1.4×2.8)	2	Screw	B C 極止ネジ
S03510020	(E-20)	1	E-ring	止リング
S03510024	(E-24)	1	E-ring	M 3 歯車止リング

Remarks

M645

Body Ass'y 9

1 34



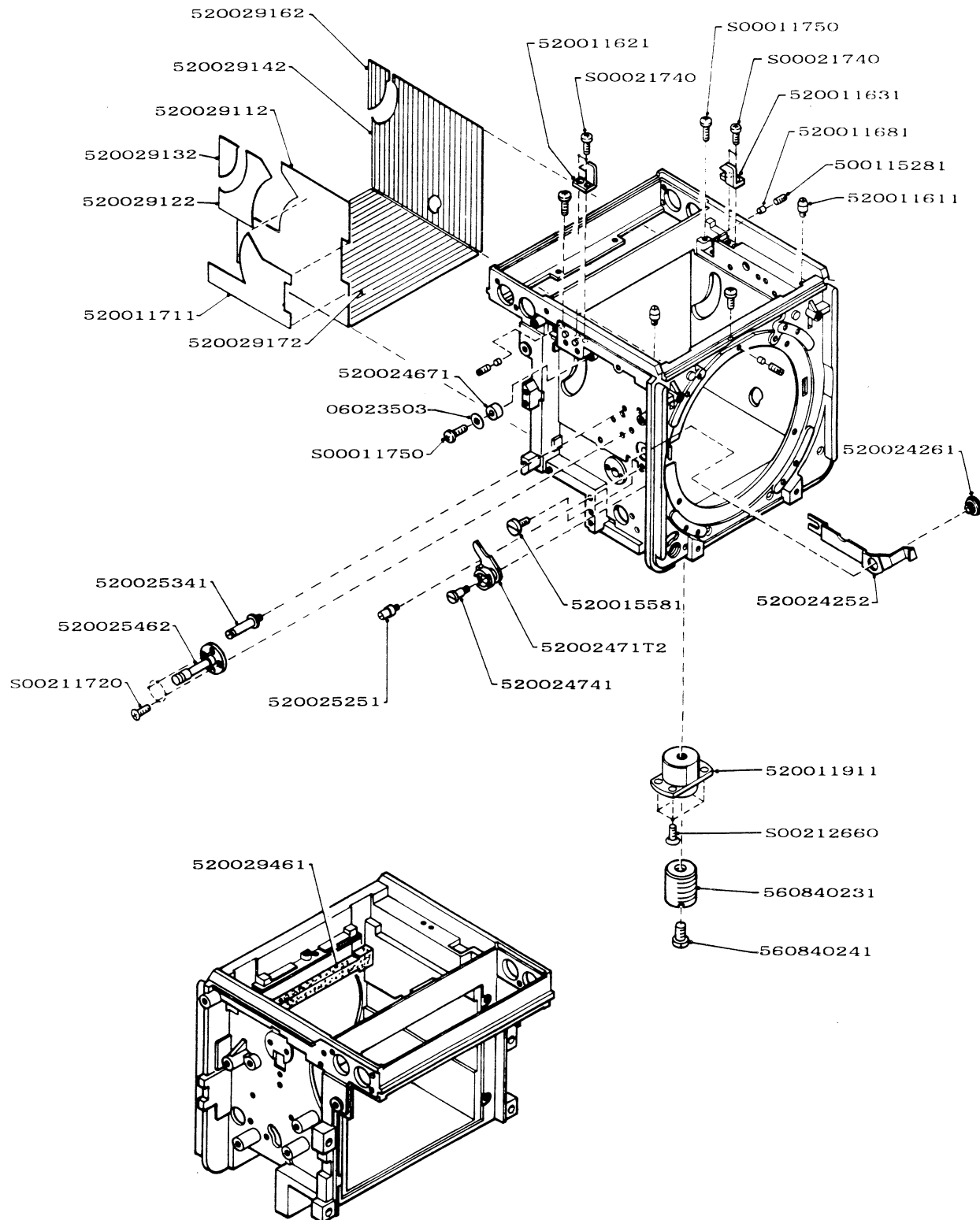
PARTS LIST

1	34
---	----

Parts No.	Common Use Parts No.	QTY.	Description	部 品 名 称
5200 11751	(SLS11751)	1	Light baffle plate	後カバー
5200 11771	(SLS11771)	1	Light baffle	ミラー遮光幕
5200 1851T1	(SLS1851T1)	1	X Synchro lever	X S W レバー
5200 2141T1	(SLS2141T1)	1	Shutter release button	S ボタン
5200 21421	(SLS21421)	1	Button guide	S ボタンガイド
5200 21441	(SLS21441)	1	Spring	S ボタンバネ
5200 21451	(SLS21451)	1	Shutter release rod	S 棒
5200 2146T1	(SLS2146T1)	1	Release lock ring	S ロックリング
5200 21551	(SLS21551)	1	Lock disk	S ロック板
5200 21561	(SLS21561)	1	Hub	S ロック板軸
5200 21581	(SLS21581)	1	Spring	クリックボールバネ
5200 21591	(SLS21591)	1	Collar	ピンカラー
5200 24011	(SLS24011)	1	Mirror holder plate	ミラーホルダー
5200 2421T1	(SLS2421T1)	1	Holder bracket	ミラーピン台
5200 24281	(SLS24281)	2	Light baffle plate	M ボディ遮光板
5200 24291	(SLS24291)	2	Spring washer	遮光板バネ
5200 24311	(SLS24311)	1	Mirror arm L	ミラーアーム(左)
5200 24321	(SLS24321)	1	Mirror arm R	ミラーアーム(右)
5200 24331	(SLS24331)	1	Shoulder screw	ミラーアーム軸
5200 24341	(SLS24341)	3	Screw (P1.7×3)	ミラーアーム止ネジ
5200 24351	(SLS24351)	1	Screw B	ミラーアーム止ネジ
5200 24381	(SLS24381)	1	Collar	ミラーアーム右カラー
5200 24391	(SLS24391)	1	Shoulder screw	ミラーアーム右軸
5200 2451T2	(SLS2451T2)	1	Coupling arm	ミラー上クランク板
5200 24541	(SLS24541)	1	Screw	クランク板止ネジ
5200 24662	(SLS24662)	1	Spring	クランク板バネ
5200 29153	(SLS29153)	1	RA Leatherette	ミラーホルダー遮光紙
5200 29442	(SLS29442)	1	Light baffle	ボディ上革
S00211416	(PD1.4×1.6)	5	Screw	ミラーピン台止ネジ
S00211420	(PD1.4×2)	4	Screw	後カバー止ネジ
8W6×0.06		1	Washer	S ロック調整ワッシャ
SE-3		1	SE-ring	S ボタン止リング
S07010012	(B012)	1	Steel ball (φ1.2)	クリックボール

Remarks

86	
----	--

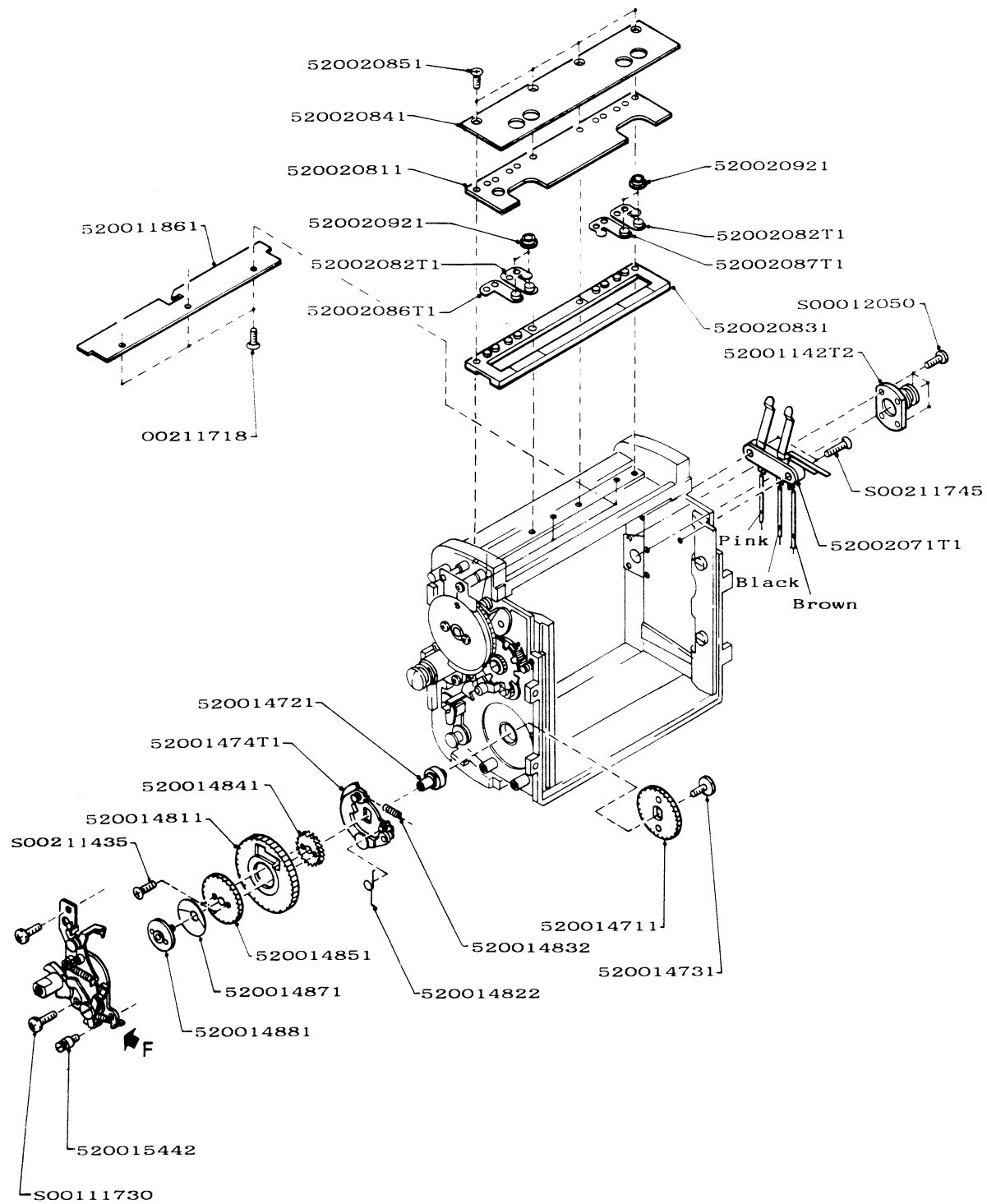


PARTS LIST

1	35
---	----

Parts No.	Common Use Parts No.	QTY.	Description	部 品 名 称
5200 11611	(SLS11611)	2	Guide screw	プリズム枠ガイド
5200 11621	(SLS11621)	1	Latch L	プリズム枠掛金(左)
5200 11631	(SLS11631)	1	Latch R	プリズム枠掛金(右)
5200 11681	(SLS11681)	3	Stopper piece	ピント調整ネジ押え
5200 11711	(SLS11711)	1	Plate	左遮光紙台板
5200 11911	(SLS11911)	1	Tripod socket	三脚止
5200 15581	(SLS15581)	1	Screw	レバー軸ネジ
5200 24252	(SLS24252)	1	Aperture coupling lever	絞り込みレバー
5200 24261	(SLS24261)	1	Hub	絞り込みレバー軸
5200 24671	(SLS24671)	1	Rubber cushion	ミラーダンパー
5200 2471T2	(SLS2471T2)	1	Mirror-up arm	MUレバー
5200 24741	(SLS24741)	1	Shaft	MUレバー軸
5200 25251	(SLS25251)	1	Guide screw	ミラー上げ爪ガイド
5200 25341	(SLS25341)	1	Shaft	ミラーバネ柱
5200 25462	(SLS25462)	1	Shaft	M3歯車軸
5200 29112	(SLS29112)	1	RA leatherette	左遮光紙(大)
5200 29122	(SLS29122)	1	RA leatherette	左遮光紙(中)
5200 29132	(SLS29132)	1	RA leatherette	左遮光紙(小)
5200 29142	(SLS29142)	1	RA leatherette	右遮光紙(大)
5200 29162	(SLS29162)	1	RA leatherette	右遮光紙(小)
5200 29172	(SLS29172)	1	RA leatherette	下遮光紙
5200 29461	(SLS29461)	1	Sealing strip	ミラーモルト
5001 15281	(ARS1528)	3	Screw	ピント調整止ネジ
5608 40231	(EFC4023)	1	Tripod socket adapter	三脚ネジ
5608 40241	(EFC4024)	1	Screw	三脚ネジ止め
S00021740	(PB1.7×4Cr)	4	Screw	掛金止ネジ
S00011750	(PB1.7×5)	4	Screw	止ネジ
S00211720	(PD1.7×2)	4	Screw	M3歯車軸止ネジ
S00212660	(PD2.6×6)	4	Screw	三脚止め止ネジ
06023503	(5W2×0.3)	1	Washer	ミラーダンパー押え

Remarks



Parts No.	Common Use Parts No.	QTY.	Description	部 品 名 称
5200 1142T2		1	Strap lug R	吊金具(右)
5200 11861	(SLS11861)	1	Catch plate	裏蓋掛板
5200 14711	(SLS14711)	1	F4 Gear	F 4 歯車
5200 14721	(SLS14721)	1	Shaft	F 4 歯車軸
5200 14731	(SLS14731)	1	Screw	F 4 歯車止ネジ
5200 1474T1	(SLS1474T1)	1	Advancing clutch	F クラッチ板
5200 14811	(SLS14811)	1	F clutch wheel	F クラッチ爪車
5200 14822	(SLS14822)	1	Spring	F クラッチレバーバネ
5200 14832	(SLS14832)	1	Spring	F クラッチ押しバネ
5200 14841	(SLS14841)	1	Gear	F クラッチ送り歯車
5200 14851	(SLS14851)	1	F3 Gear	F 3 歯車
5200 14871	(SLS14871)	1	Spring washer	F 3 歯車摩擦バネ
5200 14881	(SLS14881)	1	Screw	F 3 歯車摩擦バネ止
5200 15442	(SLS15442)	1	Anchor	バネ掛
5200 2071T1	(SLS2071T1)	1	Synchro contact	X 接片台
5200 20811	(SLS20811)	1	Insulation plate	上部絶縁板
5200 2082T1	(SLS2082T1)	2	Contact	上部電極
5200 20831	(SLS20831)	1	Contact base plate	上部電極台
5200 20841	(SLS20841)	1	Contact cover	上部電極カバー
5200 20851	(SLS20851)	4	Screw (PD1.7×2.5)	上部電極カバー止ネジ
5200 2086T1	(SLS2086T1)	1	Earth plate	上部電極アース片
5200 2087T1	(SLS2087T1)	1	Contact	E X T 電極
5200 20921	(SLS20921)	4	Collar	上部接点ブッシュ
S00012050	(PB2×5)	4	Screw	吊金具止ネジ
S00111730	(3PB1.7×3)	2	Screw	D X 基板止ネジ
S00211435	(PD1.4×3.5)	2	Screw	F 3 歯車止ネジ
00211718	(PD1.7×1.8)	3	Screw	裏蓋掛板止ネジ
S00211745	(PD1.7×4.5)	2	Screw	X 接片台止ネジ

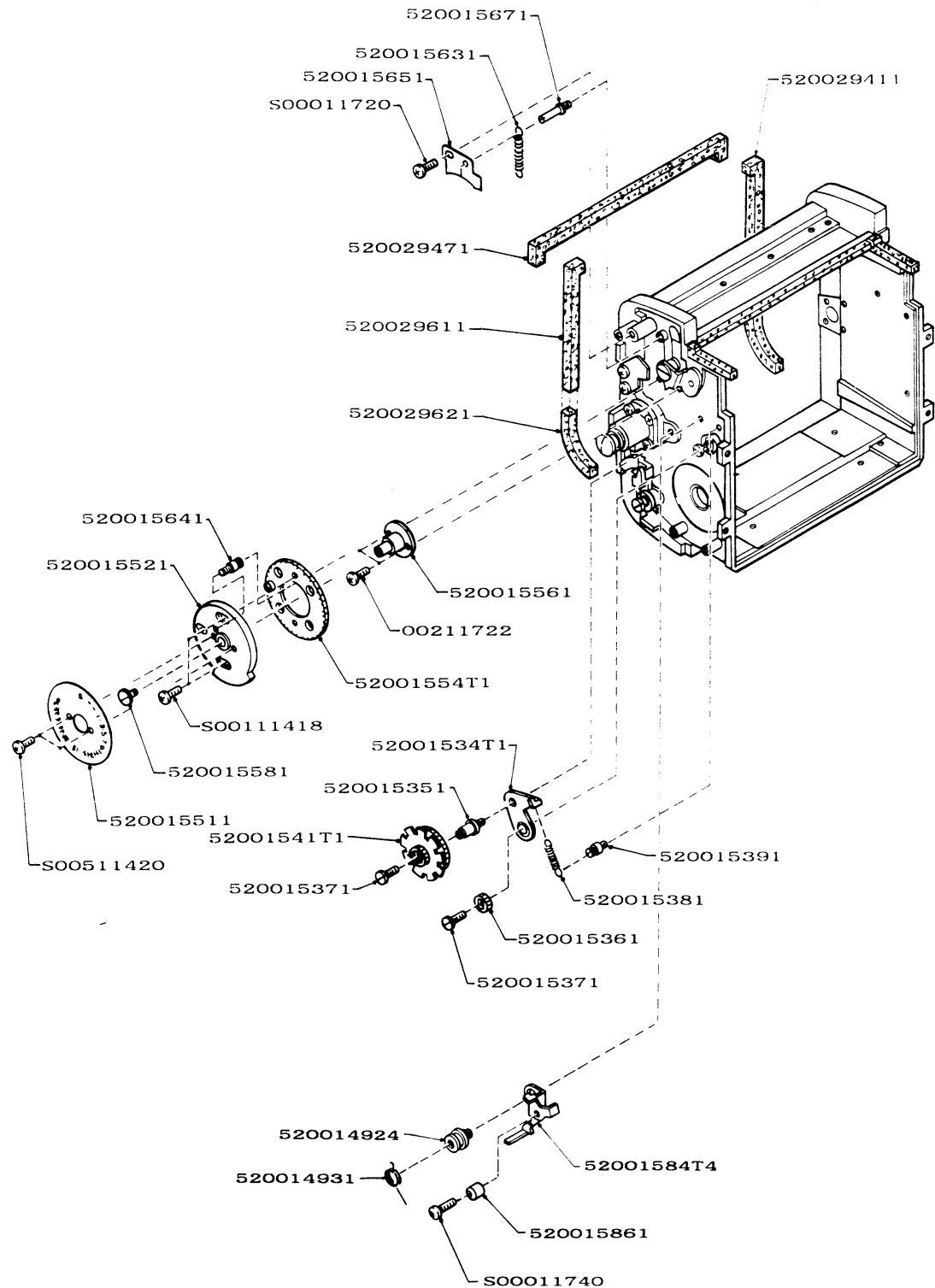
※ DETAIL F Winding Base Gear Ass'y.....Page 18 Common use M645 1000S

Remarks

M645

Body Ass'y 12

1 37



PARTS LIST

1	37
---	----

Parts No.	Common Use Parts No.	QTY.	Description	部 品 名 称
5200 14924	(SLS14924)	1	Shaft	F 止 爪 車
5200 14931	(SLS14931)	1	Spring	F 止 爪 車 バネ
5200 1534T1	(SLS1534T1)	1	Lever	C 1 歯 車 基 板
5200 15351	(SLS15351)	1	Shaft	C 1 歯 車 基 板 軸
5200 15361	(SLS15361)	1	C2 Gear	C 2 歯 車
5200 15371	(SLS15371)	2	Screw	止 ネジ
5200 15381	(SLS15381)	1	Spring	C 2 歯 車 バネ
5200 15391	(SLS15391)	1	Anchor	C 2 歯 車 バネ 掛
5200 1541T1	(SLS1541T1)	1	Counter dividing device	割 出 板
5200 15511	(SLS15511)	1	Counter	カ ウ ン タ ー 板
5200 15521	(SLS15521)	1	Counter base	カ ウ ン タ ー 台
5200 1554T1	(SLS1554T1)	1	Counter gear	カ ウ ン タ ー 歯 車
5200 15561	(SLS15561)	1	Hub	カ ウ ン タ ー 軸
5200 15581	(SLS15581)	1	Screw	カ ウ ン タ ー 板 止 ネジ
5200 15631	(SLS15631)	1	Spring	カ ウ ン タ ー バネ
5200 15641	(SLS15641)	1	Anchor	カ ウ ン タ ー バネ 掛
5200 15651	(SLS15651)	1	Indicator	指 標
5200 15671	(SLS15671)	1	Guide screw	指 標 ガイド
5200 1584T4	(SLS1584T4)	1	Stop lever	割 出 爪
5200 15861	(SLS15861)	1	Collar	割 出 爪 鉸
5200 29411	(SLS29411)	2	Sealing strip	F ボ デ ィ 溝 モ ル ト
5200 29471	(SLS29471)	1	Sealing strip	F ボ デ ィ モ ル ト
5200 29611	(SLS29611)	1	Sealing strip	F ボ デ ィ 溝 モ ル ト
5200 29621	(SLS29621)	1	Sealing strip	F ボ デ ィ 溝 モ ル ト
S00011720	(PB1.7×2)	1	Screw	指 標 止 ネジ
S00011740	(PB1.7×4)	1	Screw	割 出 爪 止 ネジ
S00111418	(3PB1.4×1.8)	2	Screw	C 歯 車 止 ネジ
00211722	(PD1.7×2.2)	2	Screw	カ ウ ン タ ー 軸 止 ネジ
S00511420	(3TB1.4×2)	2	Screw	カ ウ ン タ ー 板 止 ネジ

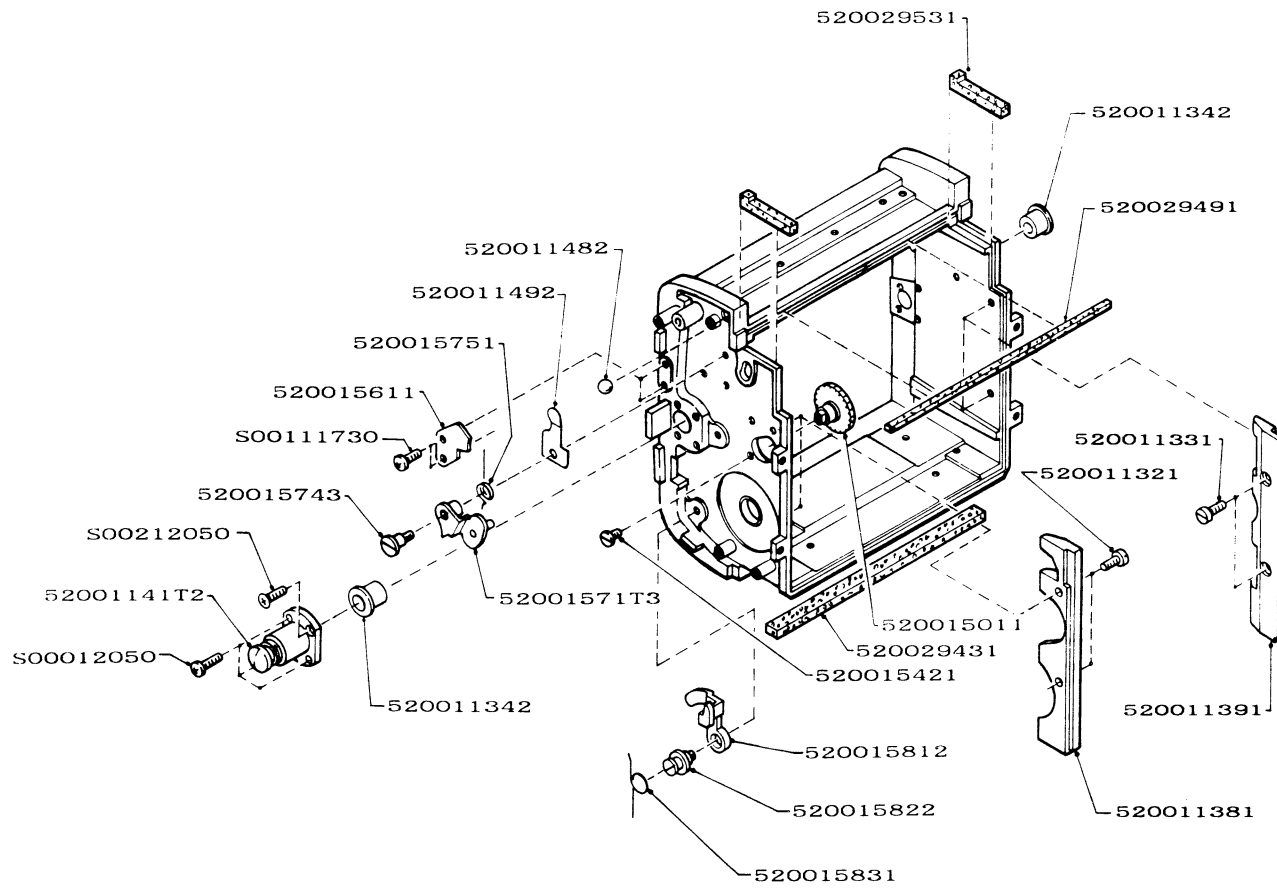
Remarks

86	
----	--

M645

Body Ass'y 13

1 38



PARTS LIST

1	38
---	----

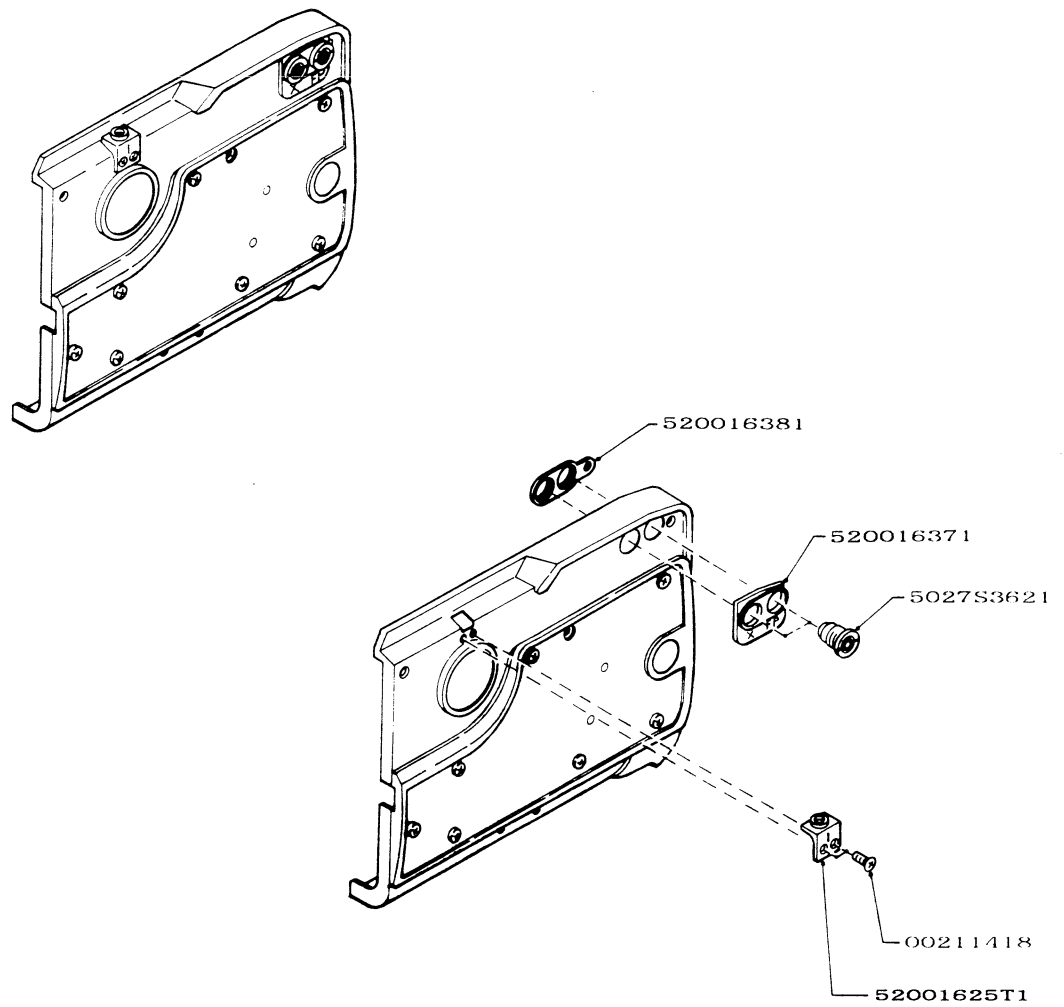
Parts No.	Common Use Parts No.	QTY.	Description	部 品 名 称
5200 11321	(SLS11321)	2	Guide screw L	Fホルダーガイド
5200 11331	(SLS11331)	2	Guide screw R	Fホルダーガイド
5200 11342	(SLS11342)	2	Lock guide	中枠ロックガイド
5200 11381	(SLS11381)	1	Guide plate L	F遮光枠(左)
5200 11391	(SLS11391)	1	Guide plate R	F遮光枠(右)
5200 1141T2		1	Strap lug L	吊金具(左)
5200 11482	(SLS11482)	1	Ball	F固定ボール
5200 11492	(SLS11492)	1	Leaf spring	F固定ボールバネ
5200 15011	(SLS15011)	1	C1 Gear	C1歯車
5200 15421	(SLS15421)	1	Screw	ストッパー
5200 15611	(SLS15611)	1	Stopper	カウンター戻し止
5200 1571T3	(SLS1571T3)	1	Change-over lever	カウンター切換板
5200 15743	(SLS15743)	1	Shoulder screw	カウンター切換板軸
5200 15751	(SLS15751)	1	Spring	カウンター切換板バネ
5200 15812	(SLS15812)	1	C release lever	カウンター解除レバー
5200 15822	(SLS15822)	1	Shoulder screw	解除レバー軸
5200 15831	(SLS15831)	1	Spring	解除レバーバネ
5200 29431	(SLS29431)	1	Sealing strip	Fボディ蝶番モルト
5200 29491	(SLS29491)	1	Sealing strip	Fボディ正面溝モルト
5200 29531	(SLS29531)	2	Sealing strip	ボディモルト(小)
S00012050	(PB2×5)	3	Screw	吊金具止ネジ
S00111730	(3PB1.7×3)	2	Screw	止ネジ
S00212050	(PD2×5)	1	Screw	吊金具止ネジ

Remarks

M645

5200 16201 Side Panel R Ass'y

1	39
---	----



5200 16201

M645

PARTS LIST

1	39
---	----

Parts No.	Common Use Parts No.	QTY.	Description	部 品 名 称
5200 1625T1	(SLS1625T1)	1	Shutter speed indicator	スピード指標
5200 16371	(SLS16371)	1	Terminal base	シンクロ座
5200 16381	(SLS16381)	1	Terminal nut	シンクロ止ナット
5027 S3621	(LE103-362K2)	2	Flash terminal	シンクロAss'y
00211418	(PD1.4×1.8)	2	Screw	スピード指標止ネジ

Remarks

86

M645

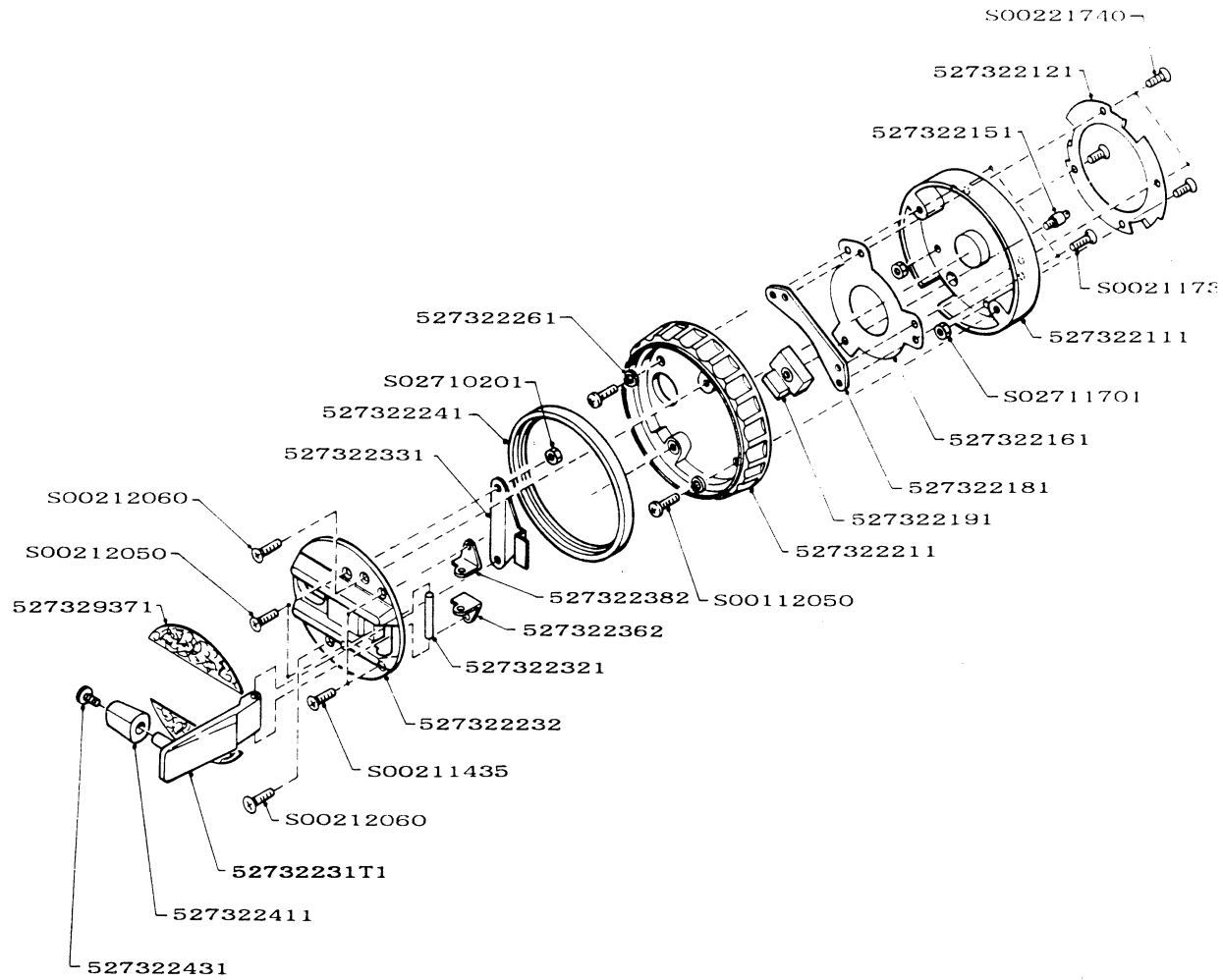
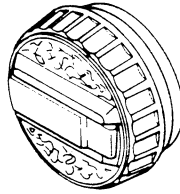
Film Advance Knob

Film Advance Knob Ass'y.....40

M645

Film Advance Knob Ass'y

1 40



PARTS LIST

1	40
---	----

Parts No.	Common Use Parts No.	QTY.	Description	部 品 名 称
5273 22111	(SLS22111)	1	Knob base ring	ノブ台
5273 22121	(SLS22121)	1	Bayonet disk	ノブバヨネ
5273 22151	(SLS22151)	1	Pin	ノブバヨネピン
5273 22161	(SLS22161)	1	Leaf spring	ノブバヨネピンバネ
5273 22181	(SLS22181)	1	Plate	ピンバネ止め板
5273 22191	(SLS22191)	1	Knob	つまみ
5273 22211	(SLS22211)	1	Film advance knob	巻上ノブ
5273 22232	(SLS22232)	1	Winding knob lid	巻上レバー台
5273 22241	(SLS22241)	1	Ring	巻上レバー台モール
5273 22261	(SLS22261)	2	Spring washer	バネ座金
5273 2231T1	(SLS2231S1)	1	Advance crank	巻上レバー
5273 22321	(SLS22321)	1	Shaft	巻上レバー軸
5273 22331	(SLS22331)	1	Leaf spring	巻上レバーバネ
5273 22362	(SLS22362)	1	Angle plate	巻上レバー軸押え
5273 22382	(SLS22382)	1	Angle plate	巻上レバー軸押え
5273 22411	(SLS22411)	1	Knob	巻上つまみ
5273 22431	(SLS22431)	1	Screw	巻上つまみ止ネジ
5273 29371	(SLS29371)	2	Leatherette	巻上ノブ革
S00211435	(PD1.4×3.5)	2	Screw	止ネジ
S00211730	(PD1.7×3)	2	Screw	止ネジ
S00221740	(PD1.7×4Cr)	4	Screw	ノブバヨネ止ネジ
S00212050	(PD2×5)	2	Screw	止ネジ
S00212060	(PD2×6)	2	Screw	巻上レバー台止ネジ
S00112050	(3PB2×5)	2	Screw	巻上ノブ止ネジ
S02711701	(N1.7)	2	Nut	ノブバヨネ止ナット
S02710201	(N2)	2	Nut	止ナット

Remarks

General Specifications for AE Prism Finder

Specifications

Viewfinder: Pentaprism type with correct, upright image. The magnification ratio is 0.74x with the standard lens focused at infinity.

Metering system: Center-weighted, averaged TTL open-aperture metering.

Control system: Aperture-priority, shutter-speed control.

Shutter coupling range: 2-1/1000 second.

Light measuring range: (ASA 100)

EV2.85-EV17 with f/1.9 lens (f/1.9, 1/2 sec. to f/11, 1/1000 sec.).

EV4-EV18 with f/2.8 lens (f/2.8, 1/2 sec. to f/16, 1/1000sec.).

Film sensitivity range: ASA25-ASA6400.

Aperture coupling range: Couples at all apertures of all available lenses.

AE lock: Pressing the AE lock button locks in the exposure value. AE control returns when the lock button is released.

How to connect measuring instruments

- A. Set SLS-7 Dummy body, SLS-8 Digital multi tester and SLS-9 Regulated D.C. power supply to U-7 Light source box and EE-tester and wire those cords as shown in the Fig. 1.

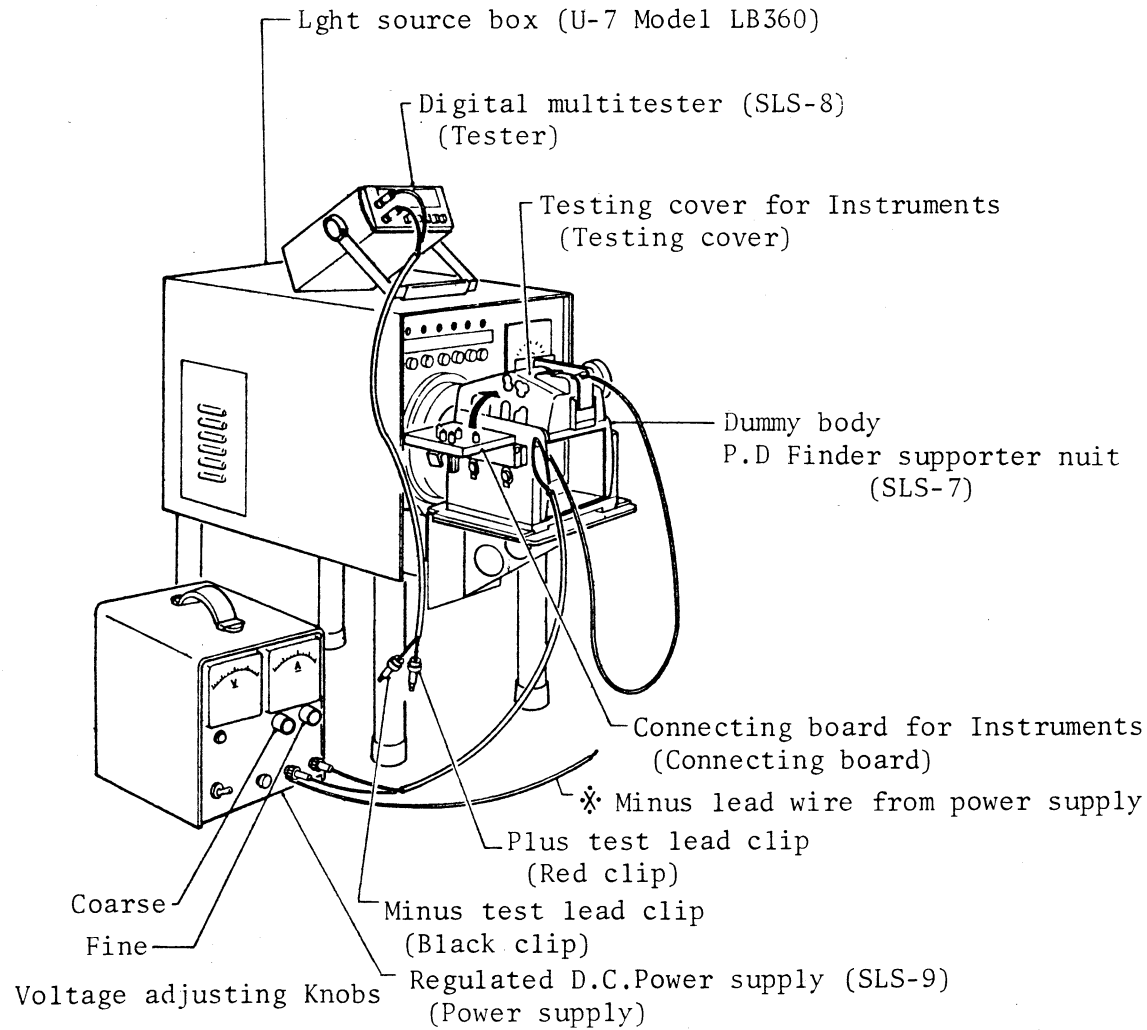


Fig.1

Note: When measuring the P.D. prismfinder with SLS-8 Digital multi tester, the minus, lead wire from SLS-9 can be used for minus terminal.

B. How to connect electric power cords:

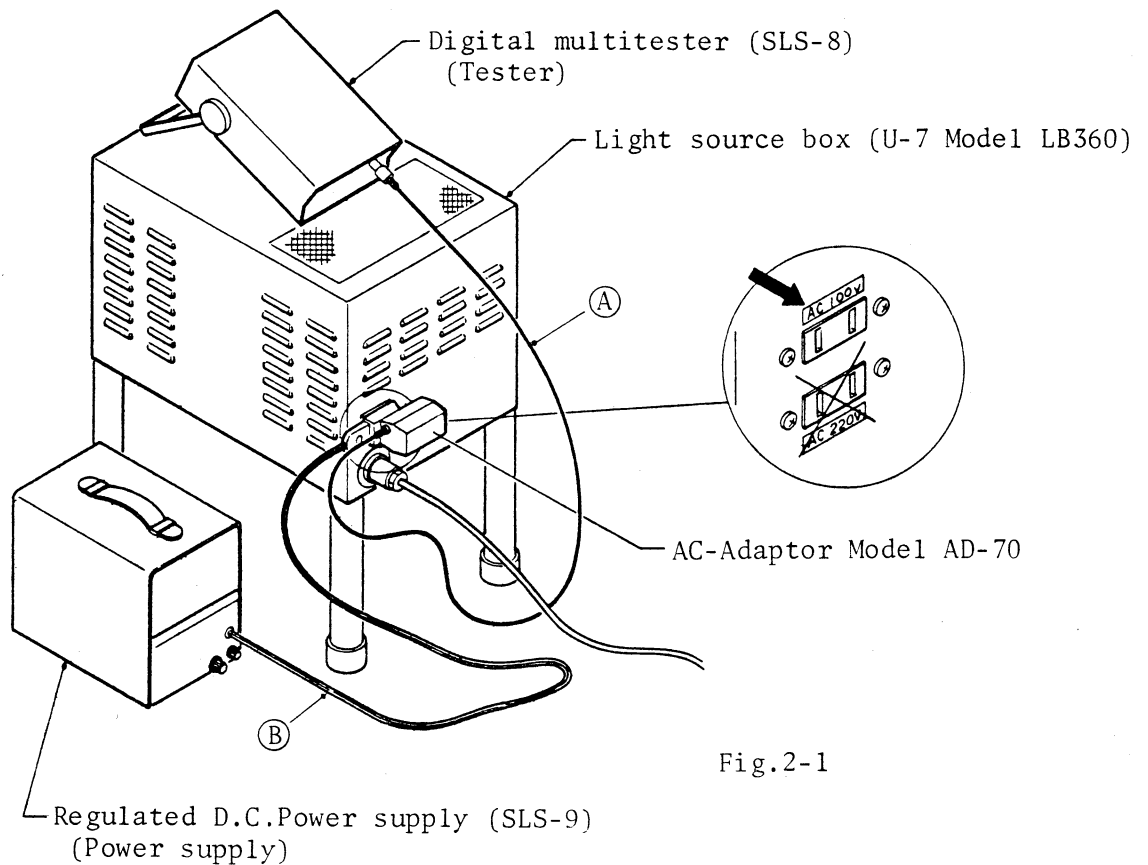


Fig.2-1

Connect the electric power cords ① and ② to the wall socket for AC 100V on back of the U-7 Light source box as shown in the Fig. 2-1.

※ Very important note:

Never put the above mentioned two cords into wall socket for AC-200V.

The wall socket for AC-200V is for only EE-Camera tester (U-8 Model CEE-1A) as shown in the Fig.2-2.

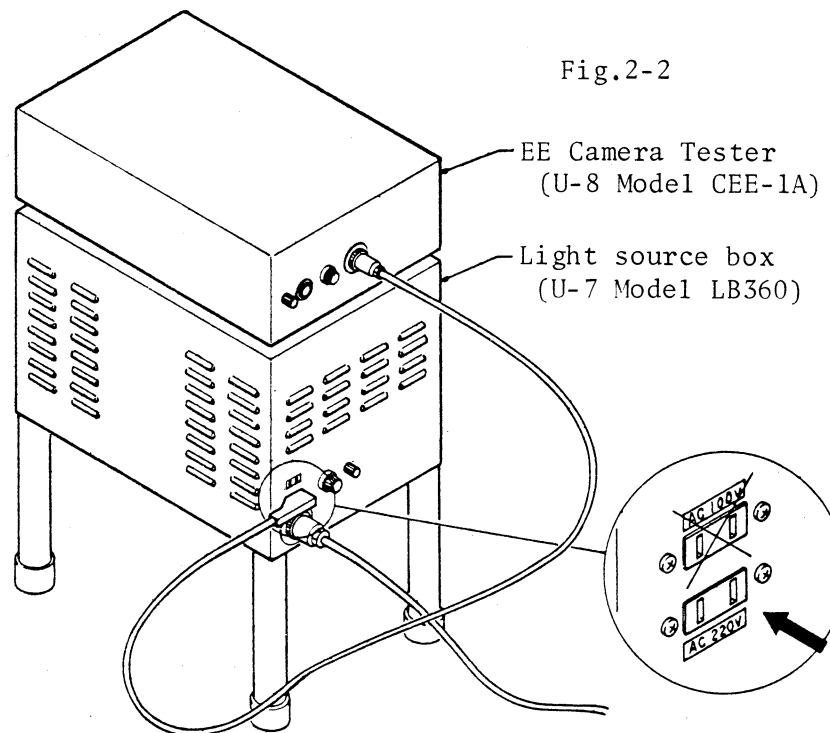


Fig.2-2

Repair Manual for AE Prism Finder

Electric Circuit Diagram
for AE Prism Finder

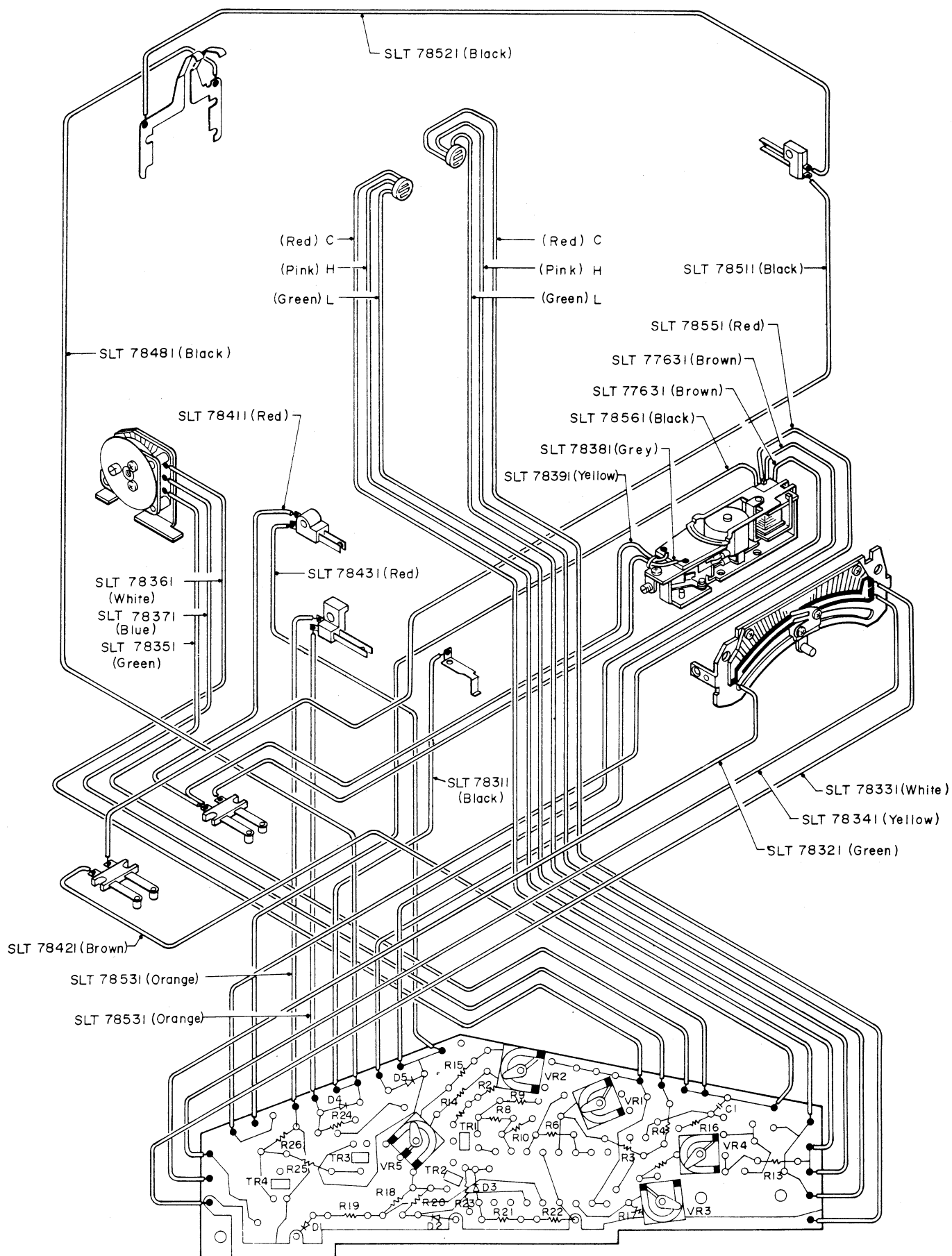
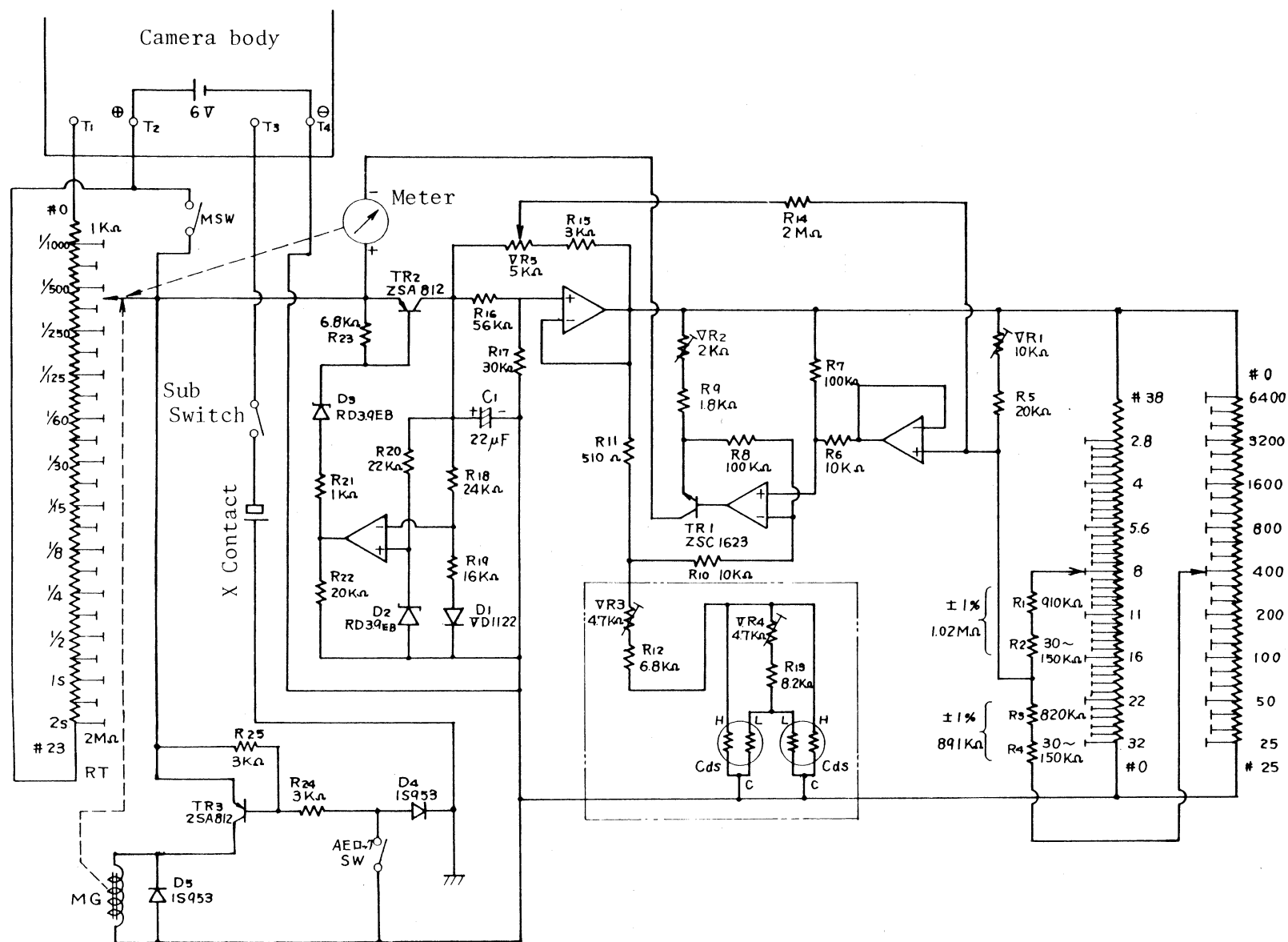


Fig.3-1



Contents

Page

1. Disassembly and reassembly of Top cover and Exposure meter

<u>1-1 Top cover (SLT75411)</u>	12
A. Disassembly	12
B. Reassembly	12
<u>1-2 Exposure meter (SLT77501)</u>	13
A. Disassembly	13
B. Reassembly	13

2. Trouble shooting

<u>2-1 General check</u>	14
<u>2-2 Check by the tester</u>	17
<u>2-3 Checking exposure meter by 6 volt battery</u>	18

3. Check and adjustment of exposure meter

<u>3-1 Check and adjustment No. I</u>	19
(Circuit for SLT77501 Exposure meter)	
<u>3-2 Checking output of exposure meter</u>	20
(Measurement of each terminal resistance on exposure meter printed circuit)	
<u>3-3 Check and adjustment No. II</u>	21
<u>3-4 Rechecking output</u>	21
<u>3-5 Voltage of CdS (V. CdS)</u>	22

1. Disassembly and reassembly of Top cover and Exposure meter

i-1 Top cover (SLT75411)

A. Disassembly

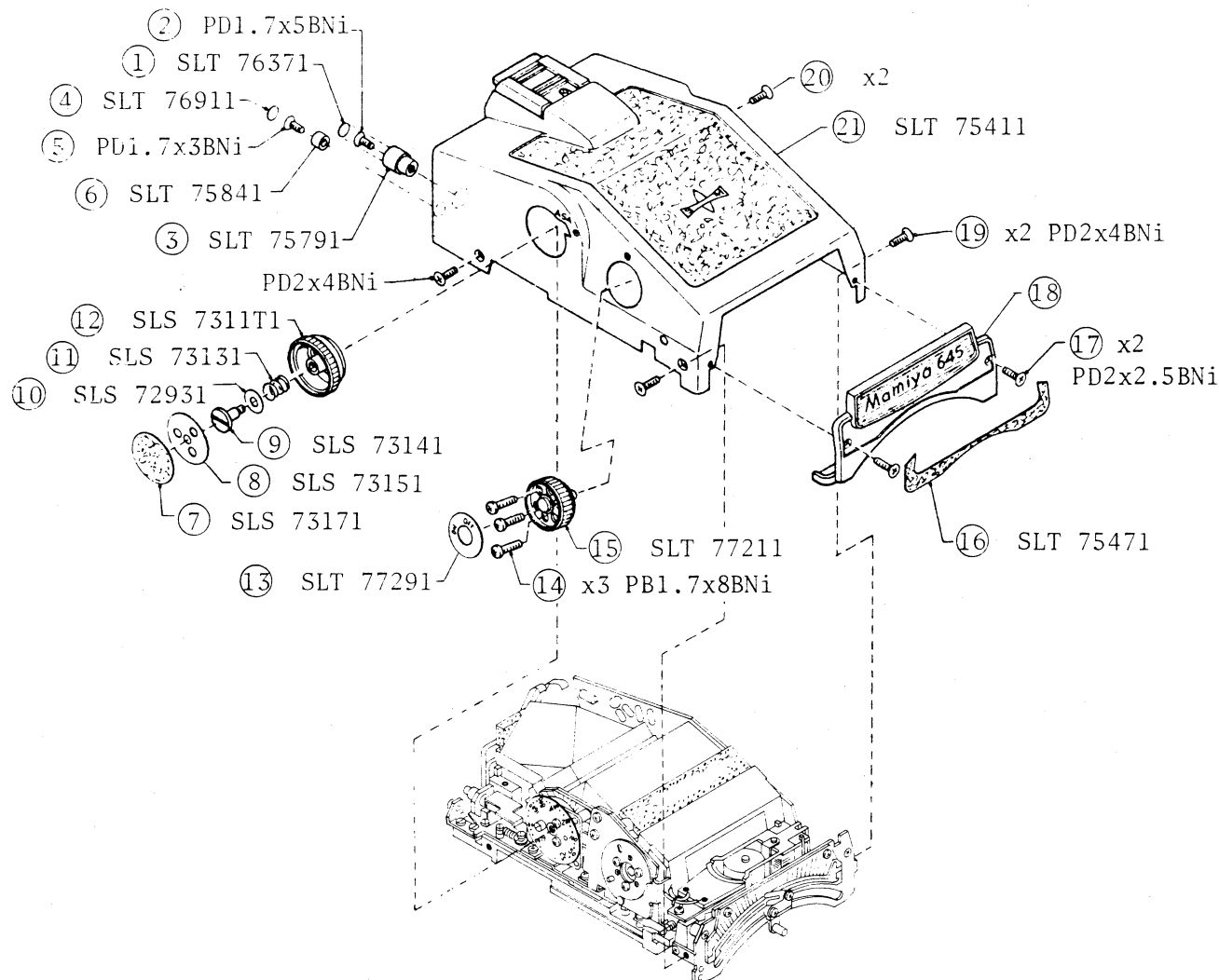


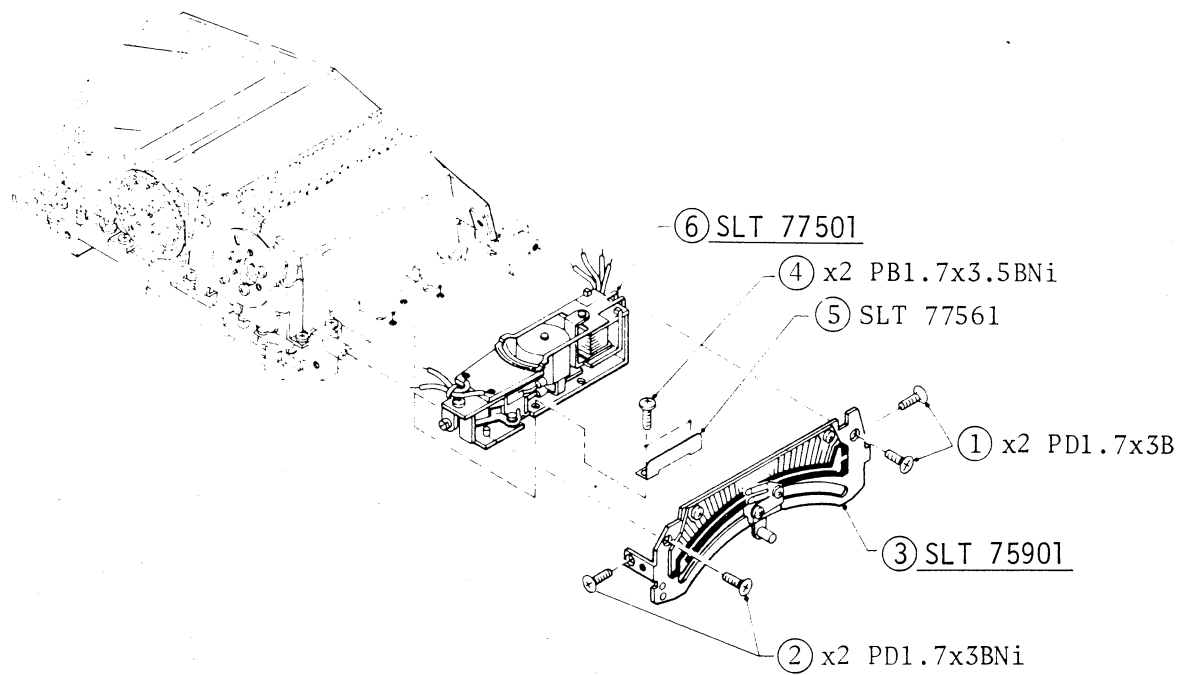
Fig.4

The arabic numeral in a circle as shown in the Fig. 4 indicates the procedure of disassembly.

B. Reassembly

Reassembly is normally the reverse of disassembly.

A. Disassembly



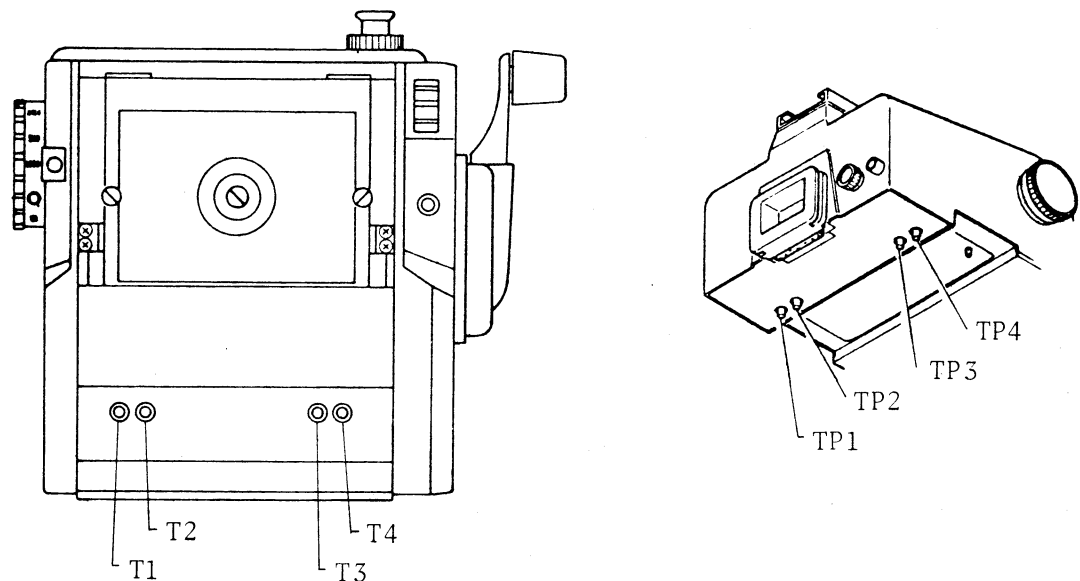
The arabic numeral in a circle as shown in the Fig. 5 indicates the procedure of disassembly.

Note: Unsolder six lead wires for the exposure meter previously.

B. Reassembly

Reassembly is normally the reverse of disassembly.

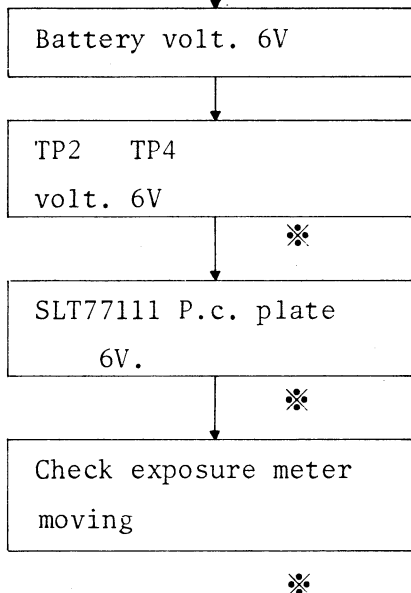
Note: Terminals between camera body and AE finder.



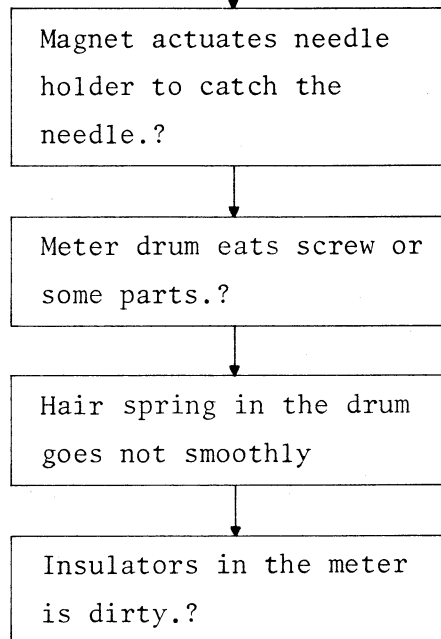
2. Trouble shooting

2-1 General check

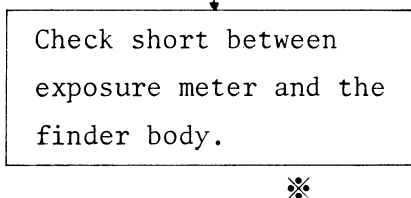
Exposure needle does not work



Exposure needle sticks or stops on the way



Exposure needle jumps up



Note: Please refer to step 2-2 and 2-3 for checking points with mark ※

When turning aperture ring,
exposure needle does not move.

Mal-solder or broken lead
wire for exposure meter ?

SLT771111 P.c. plate is
good ?

When changing ASA value,
exposure needle does not move.

Mal-solder or broken lead
wire for SLT76401 ASA P.c.
plate ?

SLT771111 P.c. plate is
good ?

When releasing shutter,
inaccurate shutter speeds
are. ?

Stained
Exposure meter upper
needle and S. printed
circuit plate terminals ?

TP1 ~ TP2
 $2M\Omega$?

NO

Mal-solder or broken lead wires for TP1
gray and TP2 yellow ?

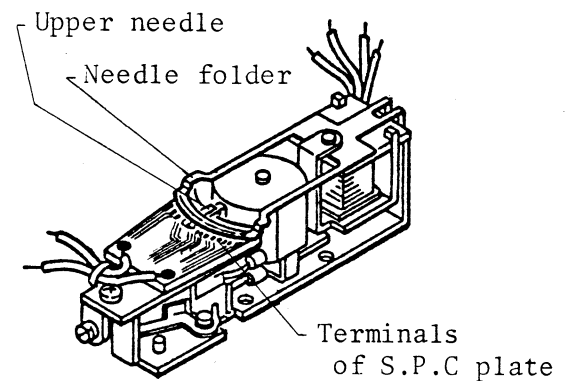


Fig.6

※ See 2-2

Mal-function of switch dial
ON and OFF

Mal-solder or broken
lead wire for CSL1541S1
Main switch ?

Stained Main switch
contacts and contact
efficiency ?

Married contacts ?

When switching ON AE lock
button does not react.

Mal-solder or broken
lead wire for SLT7741S1
AE lock switch ?

Stained switch contacts
and its contact effi-
ciency ?

Mal-function of exposure
meter magnet ?

✱

When switching OFF, red mark
does not appear in the finder

SLT77951 Spring is out
of place ?

Electric flash does not
go at hot shoe ?

Stained terminals T3
and TP3 ?

Mal-solder or broken lead
wire for SLS73311
Hot shoe contact and
SLS73341 Hot shoe
earth ?

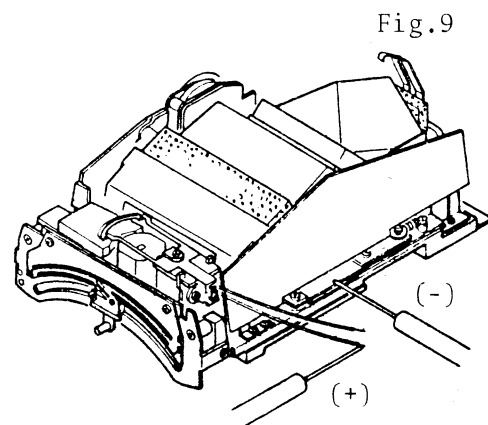
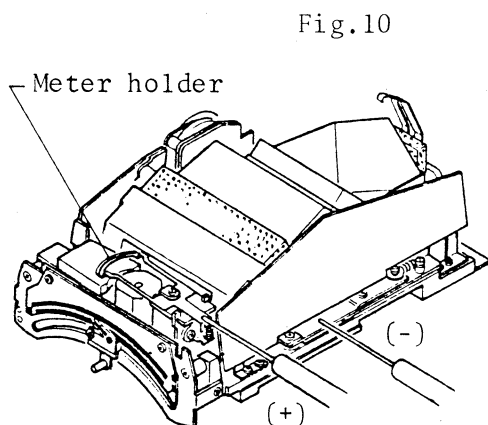
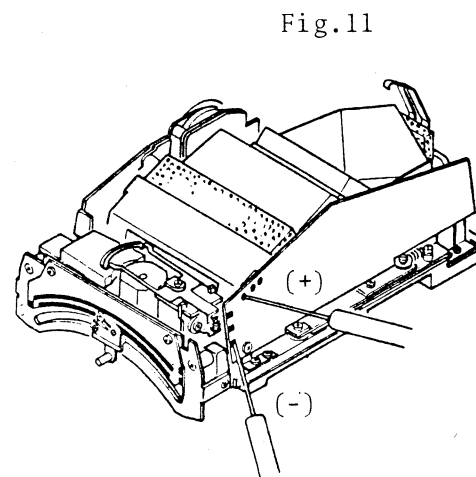
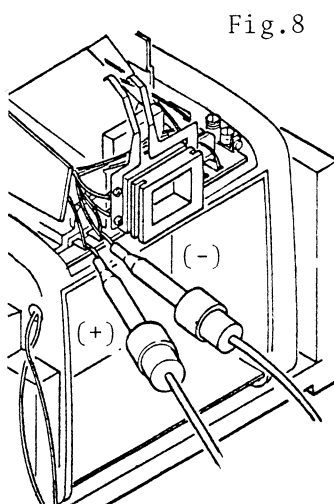
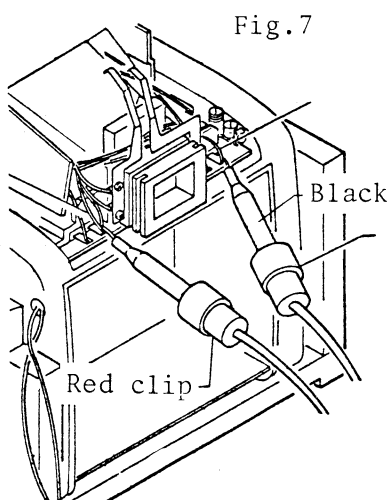
Both contacts touch to
Hot shoe enough ?

Mal-solder or broken
lead wire for SLS6572S1
Sub. switch ?

Stained Sub. switch and
contact efficiency ?

2-2 Check by tester

Tester terminals		Battery	Tester indicates	Step
Red (+)	Black (-)			
TP2	TP4	Yes	6 volt	Clean up T2, T4, TP2 and TP4 terminals
TP1	TP2	No	2 MΩ	Check mal-solder and broken lead wire for TP1 and TP2.
Red lead wire of the meter	Body earth	No	Must not have short	
Black " "				
Meter needle holder and body earth		No	Must not have short	
Refer to the Fig.		Yes	6 volt	If not 6 vot on the SLT77111 P.c. plate, change it to new one.



2-3 Checking exposure meter by 6 volt battery.

Unsolder red and black lead wires of exposure meter from the P.c. plate.

Then give about 300μ A to the meter in the circuit as shown in the Fig. 12.

In above test, the exposure meter must move.

If not, the meter is wrong.

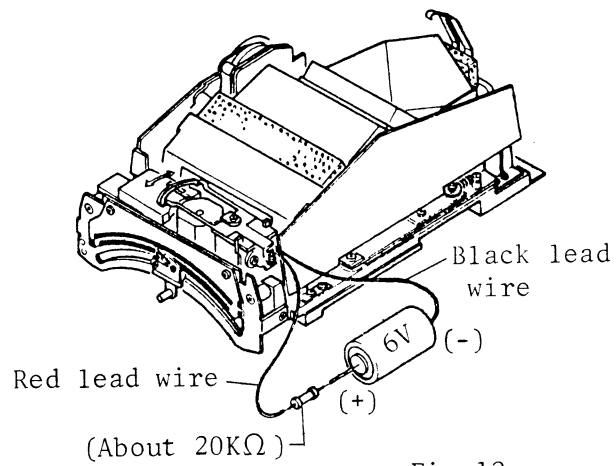


Fig.12

Unsolder two brown lead wires of exposure meter magnet from the P.c. plate.

Then connect them with 6 volt, battery directly as shown in the Fig. 13.

In above test, the meter needle holder must operate.

If not, the meter is wrong.

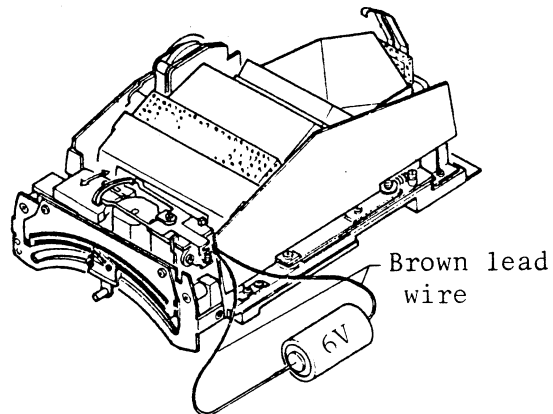


Fig.13

3. Check and adjustment of exposure meter

3-1 Check and adjustment No.1

(Circuit for SLT77501 Exposure meter)

° Regulated D.C. Power Supply6 volt

° Digital multitensten terminal:

Red(+). TP2

Black(-). TP4

° Switch dial. ON

EV	ASA	F.No.	Exposure needle	Adjustment
5	100	8	2sec	VR5
15			1/500	VR2
12			1/60	VR5
11			1/30	
9			1/8	
7			1/2	

1) At EV5:

a. Check

Exposure needle in the finder should point "2" sec.

Note: After setting the light source box to EV5, it must be checked thirty second later.

Cover the AE, P. finder with working top cover or a piece of black cloth for intercepting external light.

Whenever checking or adjusting, never forget to do it so.

b. Adjustment

Adjustment is made as the needle points "2" by VR5.

2) At EV15

a. Check

Exposure needle in the finder should point "1/500" sec.

b. Adjustment

Adjustment is made as the needle points "1/500" sec.

3) Check and adjust it at EV12, 11, 9 and 7 equally.

Adjustment must be made by VR5.

3-2 Checking output of exposure meter.

(Measurement of each terminal resistance on exposure meter printed circuit)

EV	ASA	F. NO.	Exposure needle	Limit of resistance (K Ω)		
				Stand.	Max	Mini
15	100	8	1/500	2.0	1.0	4.0
12			1/60	16.0	8	32.0
11			1/30	32.0	16	64
9			1/8	128.0	64	253
7			1/2	503.0	253	1.6M Ω
5			2sec	2.0M Ω	1.0M Ω	2.1M Ω

- ° After adjusting step "3-1", check "3-2".
- ° Unsolder gray lead wire from the TP1.
- ° Digital multitester terminal

Red (+)Gray lead wire

Black (-)TP2. See Fig. 14.

1) Check

Measure the resistance by pushing the AE button at each EV.

2) Adjustment

If it is out of limit adjust it by the VR5 and VR2 as referring to the step "3-1".

Note: If the exposure needle points a little bit leftside or rightside of F. number figures, it should be OK, because the resistance value in the step "3-2" is more important.

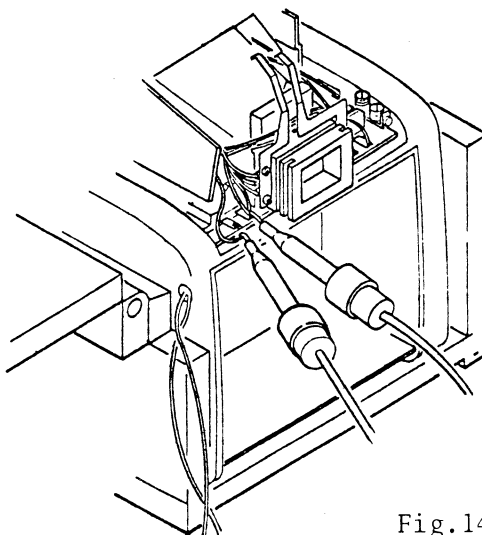


Fig.14

3-3 Check and adjustment NO. II

(For circuit of SLT75901 Aperture printed circuit and SLT76401 ASA unit)

After completing the step "3-1" and "3-2", perform this step 3-3.

° Digital multitester terminal

Red (+)TP2

Black (-).....TP4

° Set the switch dial of

AE.P. finderON

° Regulated D.C.P.

Supply6V

EV	ASA	F. NO.	Exposure needle	Adj.
11	25	16	1/2	VR1
	6400		1/500	VR5
	100		1/8	
	400		1/30	
	1600		1/125	

1) At ASA 25

a. Check

The exposure needle in the finder should point "1/2" sec.

b. Adjustment

Adjustment is made as the needle should point "1/2" sec. by VR1.

2) At ASA 6400

a. Check

The needle in the finder should point "1/500" sec.

b. Adjustment

Adjustment is made as the needle should point "1/500" sec. by VR5.

3) Check and adjust it at ASA 100, 400 and 1600 too. Adjustment must be made by VR5.

3-4 Rechecking output

Recheck output as referring to step "3-2" equally.

Note: Adjustment can be normally finished so far as step "3-4".

When being undermentioned condition, perform step "3-5" primarily.

After completing the step "3-5", readjust from step "3-1" to "3-4".

1. As every parts are correct, Adjustment can not be made so far as step "3-4".

2. Replace SLT76331 CdS or SLT77111 Printed circuit plate to new one.

1) Connecting points of the digital mulutitester terminals:

There are two kinds of SLT77111

Printed circuit plate.

It is possible to replace the old printed circuit plate into new one.

How to discriminate the old plate and new one:

The printed circuit plate which has cord number of parts on its surface is the old plate.

New one has not the cord number on its surface, but it has them its reverse side.

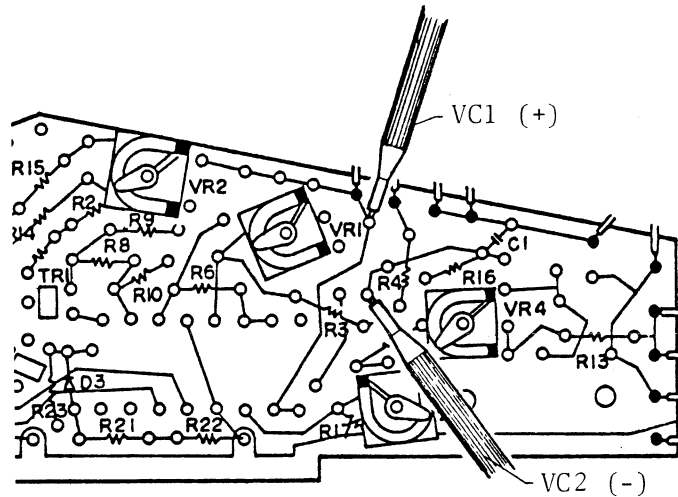


Fig.15

a. Old type P.C. plate

Temporarily solder about 5cm length lead wire to each pin ① and ② and the lead wire from (+) pin ① is VC1 and other is VC1 as shown in the Fig. 15.

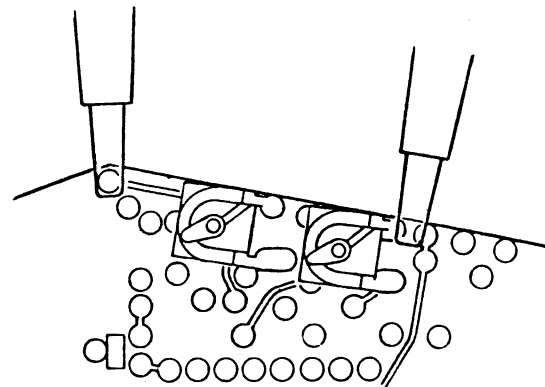


Fig.16

Connect the D.M. tester terminals to

Red (+)VC1

Black (-)VC2.

b. New type P.C. plate

Connect or clip the D.C. tester terminal with VC1 and VC2 on the P.C. plate as shown in the Fig. 16.

2) Check voltage of CdS

- ° AE.P. finder main switch ON.
- ° Regulated D.C.P. Supply..... 6V

a. At EV 5

After covering the eyepiece by something for insulating external light, measure its V. CdS.

The voltage must be 10mv to 40mv.

If not, must change it to new one.

EV	D.C. tester terminal		CdS-voltage	Adj.
	Red (+)	Black (-)		
5	VC1	VC2	10mv ~ 40mv	VR3
15			61 ~ 91	
12			45.7 ~ 75.7	VR4
11			40.6 ~ 70.6	
9			30.4 ~ 60.4	
7			20.2 ~ 50.2	

3) At EV 15

a. Check

V. CdS should be 70.5mv to 82.5mv.

b. Adjustment

Adjustment is made by VR3.

4) Check and adjust it at EV12, 11, 9, and 7 too.

Adjustment must be made by VR4.

5) After finishing this step, the step 3-1 to 3-4 must be adjusted again.

General Specifications for CdS Prism Finder

Specifications

Viewfinder: Unreversed, laterally correct image; 0.74 x magnification with standard 80 mm lens at infinity; built-in hot shoe and equipped with an eyecup.

Metering System: Center-weight TTL full-aperture, zero-method via indicator needle.

Meter Coupling Range: (with f/1.9 lens and 100 ASA film)

EV2.85-17 (f/1.9, 1/2 sec. - f/11, 1/1000sec.)

(with f/2.8 lens and 100 ASA film)

EV4 - 18 (f/2.8, 1/2 sec. - f/16, 1/1000 sec.)

Shutter Speed Range: 1/1000 - 1 sec.

ASA Range : 25 - 6400

(Aperture coupling in the entire range)

Power Source: One 1.5 V silver oxide battery

Repair Manual for CdS Prism Finder

Contents

	Page
<u>1. Disassembly and reassembly of top cover</u>	
<u>1-1 Dis-and reassembly</u>	33
A. Disassembly	33
B. Reassembly	33
 <u>2. Trouble shooting</u>	
<u>2-1 General check</u>	34
<u>2-2 Checking by tester</u>	37
 <u>3. Check and adjustment of exposure meter</u>	
<u>3-1 Set the finder to the dummy body</u>	38
<u>3-2 Check and adjustment exposure value</u>	38
A. At EV11	38
B. At EV15 and EV7	38
C. Check and adjust it at EV11, 15 and 17 again	38
<u>3-3 Check and adjustment of one step change of exposure meter needle</u>	39
A. Check	39
B. Adjustment	39
<u>3-4 Both resistors RSV and RPV</u>	40

1. Disassembly and reassembly of top cover

1-1 Dis-and reassembly

A. Dis assembly

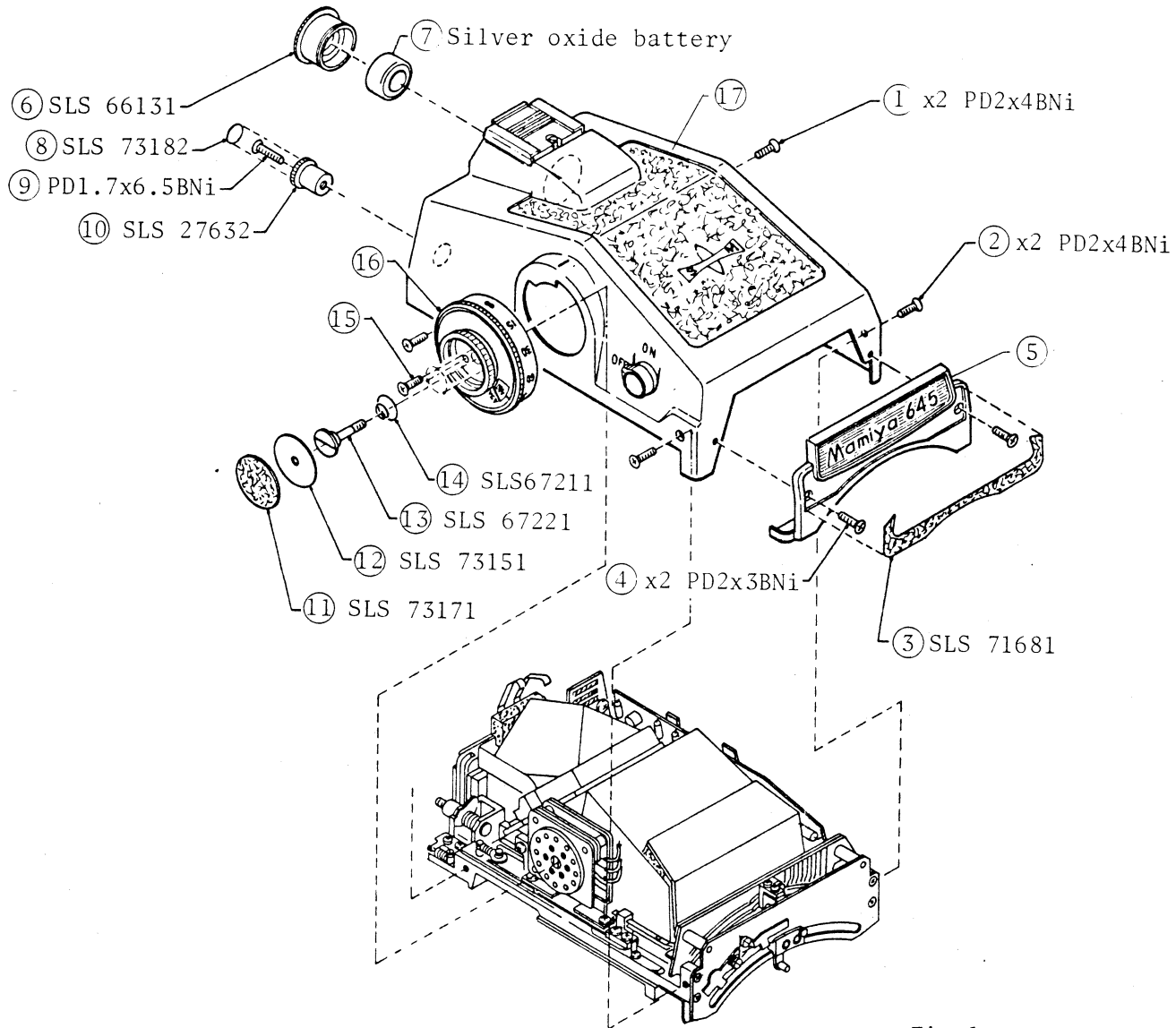


Fig.1

The arabic numeral in a circle as shown in the Fig. 1 indicates the procedure of disassembly.

- a. Set the shutter speed dial to 1/8 sec. and ASA dial to ASA 400 before removing them.

B. Reassembly

Reassembly is normally the reverse of disassembly.

- a. When turning shutter speed dial clockwise and counter clockwise at ASA 100, the dial must stop at 1/1000 sec. and 1/2sec.

2. Trouble Shooting

2-1 General check

Exposure meter does not work



Battery 1.5V

Dirty insid of battery
chamber.
Weakened contact

Dirty contacts of SLS6581T1
Main switch.
Not enough its contact
efficiency.

Dirty contacts of SLS65721T1
Sub. switch.

Mal-solder, short and broken
lead wires

Mal-solder, broken lead wire
of RDV, RSV and RVV Variable
resistors.

Exposure meter dull sensitivity

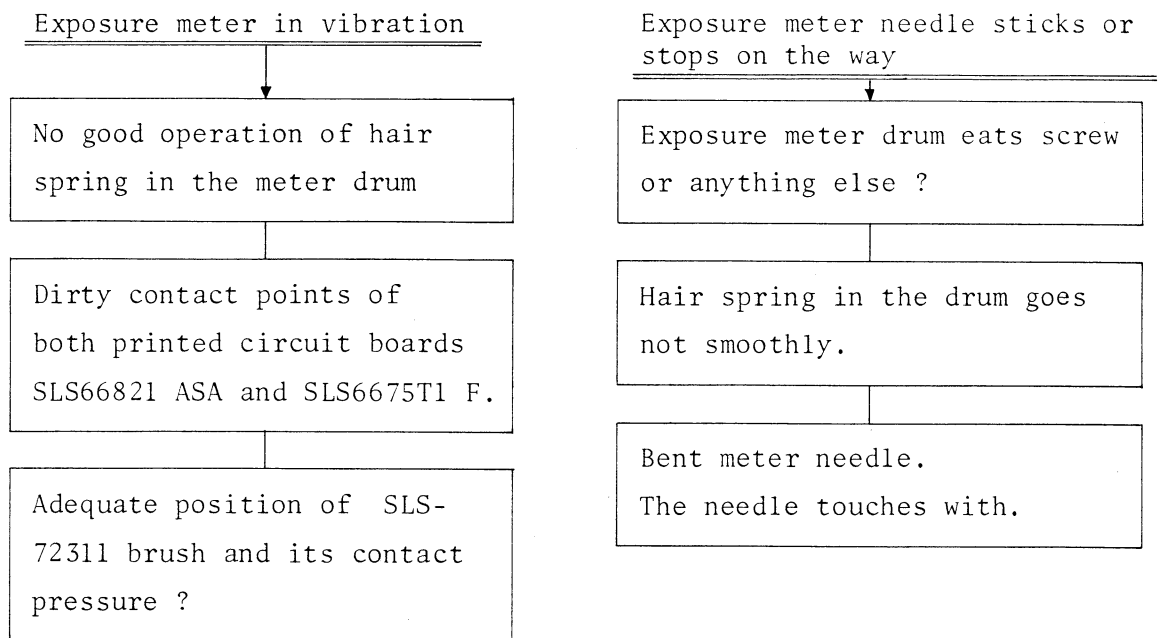


Mal-solder or broken lead wires,
Green (L), (14) and (8).

Short between lead wire (9) and
(10), (7) and (5).

Mal-solder or broken RPV Variable
resister.

Mal-solder or broken-resistors on
reverse side of SLS67631 printed
circuit plate.



✱ Fig. 2

Note: Right position of SLS72311 Brush:

All contact points on the F printed circuit plate are divided into inter vales of 0.2 EV equally as shown in the Fig. 2 .

For example, when the brush goes from contact point with short tail to nex contact point with short tail, one EV should be made.

With 80mm F2.8 lens, when turning aperture ring, the brush must stop on the contact with short tail at each F. mumber.

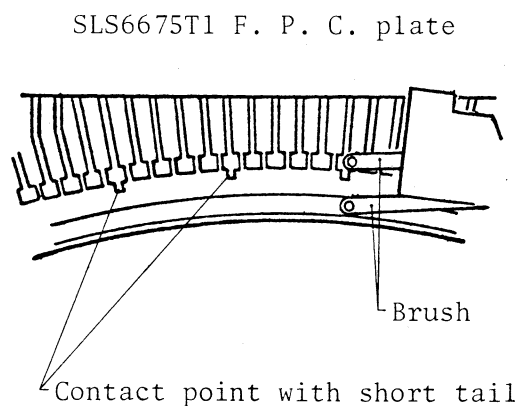


Fig. 2

Flash goes at hot shoe without shutter release

SLS2725 X. OFF switch contacts touch to body?
Short of lead wire to the contacts?

SLS73311 Hot shoe contact touches to SLS2778T1 base plate?

Short of SLS2753T1 X. synchro terminal because of chips of solder or any other metals around it ?

Flash does not go at hot shoe, when releasing shutter

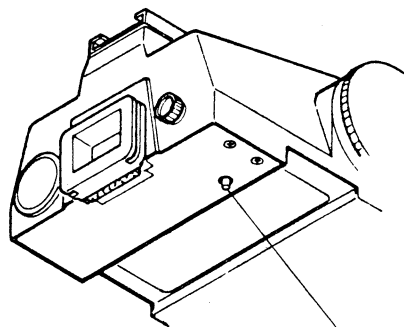
Dirty X-synchro terminal ?
Its contact pressure ?
Broken lead wire ?

Dirty SLS73311 Hot shoe contact and SLS73341 Hot shoe earth contact and their not enough contact pressure.
Broken lead wire or mal-solder

Dirty SLS2725 X. OFF switch contacts and its broken lead wire or mal-solder

Dirty hot shoe and its fixing is loose.

Fig.3

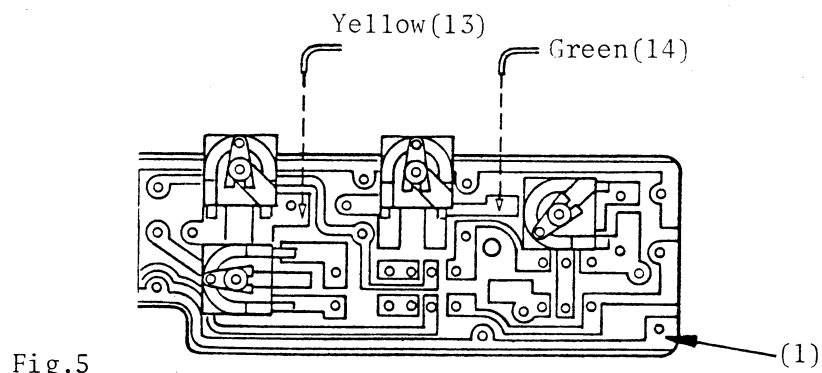
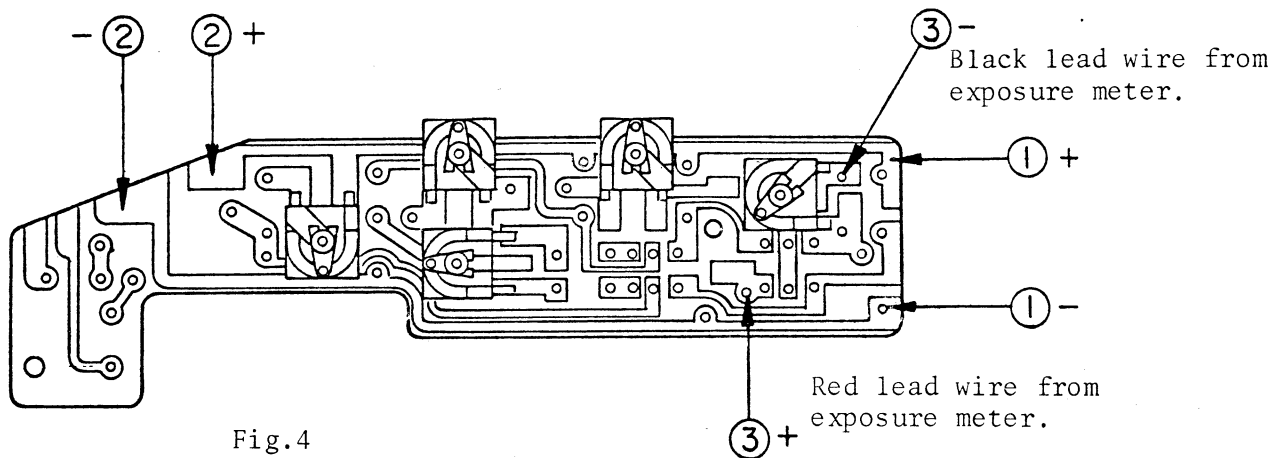


X. Synchro terminal

2-2 Checking by tester

Check point	Batt-ery	Main SW	Tester Range	Tester terminal		Remarks
				Red(+)	Black (-)	
Input to SLS6731 P.c. plate.(1.5V)	With	ON	DCV 2.5	See Fig. 4 - ①		Tester indicator Should point 1.5V.
Circuit of the P.c. plate.(1.5V)	With	ON	DCV 2.5	See Fig. 4 - ②		Ditto
Operation of exposure meter	NO	X	R1	See Fig. 4- ③		Exposure meter needle must move fully.
CdS unit	NO	X	R1	Lead wire (14)	Lead wire (13)	Short must not be. * See Fig. 5
				Lead wire (14)	Lead wire (1)	
				Lead wire (13)	Lead wire (1)	

* After unsoldering yellow lead wire(13) and green lead wire (14) from SLS67631 P.c. plate, check it as shown in the Fig.5.



3. Check and adjustment of exposure meter

3-1 Set the finder to the dummy body

- 1) Remove top cover and attach working top cover temporarily as shown in the Fig. 6. Install shutter dial temporarily.
- 2) Insert the battery and switch on its dial.
- 3) Set it to the dummy body.

Note: The SLS-7 Dummy body is common use with AE-prismfinder and PD-prismfinder.

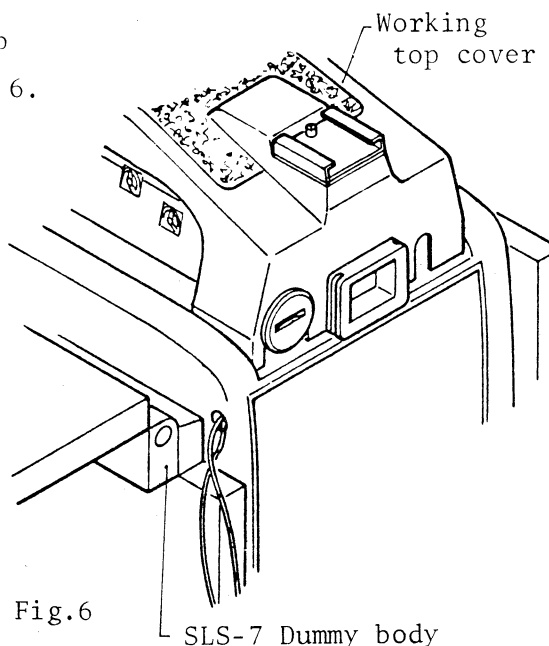


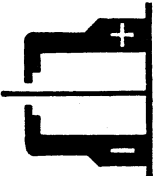
Fig.6

3-2 Check and adjustment exposure value

A. At EV11

1) Check

The meter needle should be in center or within ± 1 setp from zero point.

EV	ASA	F.NO	Shutter speed	Meter needle	Adjustment
11	100	8	1/30		RVV
15			1/500		RVV and RDV
7			1/2		

2) Adjustment

Adjustment is made by RVV variable resistor.

Fig.7

B. At EV15 and EV7

1) Check

Check the finder at EV15 and EV7 as referring to Fig. 7. The meter needle should be in center or within ± 1 step.

2) Adjustment

- a. Primarily adjust it by the RVV variable resistor.
- b. Next do it by RDV variable resistor.
- c. Adjust it again by repeating above step a and b.

C. Check and adjust it at EV11, 15 and 7 again.

3-3 Check and adjustment of one step change of exposure meter needle

A. Check

1) By turning shutter speed dial:

Turn the shutter speed dial 1/30 sec. to 1/125 sec. and 1/30 sec. to 1/8 sec. one step by one step.

2) By turning aperture ring:

With EV11, ASA 100 and shutter speed 1/30 sec. turn aperture ring aperture 8 to 4 and 8 to 16 one step by one step.

In above steps 1) and 2), the meter needle should change in one step (one EV) or must change within 0.5 EV to 1.5 EV limit.

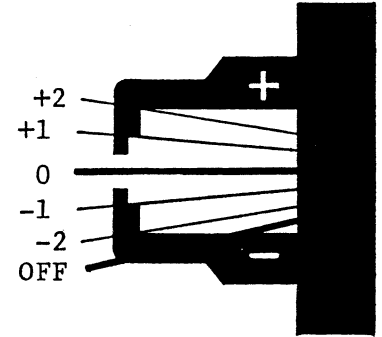


Fig. 8

B. Adjustment

When the meter needle moving is out of the limit or not equal to plus side and minus side, adjust it by RMV variable resistor.

Note: When the adjusting is impossible by the RMV variable resistor, it can be possible to adjust by changing R-6 resistor.

Limit of resistor Ω :

R61.2K Ω to 3K Ω

R112.2K Ω .

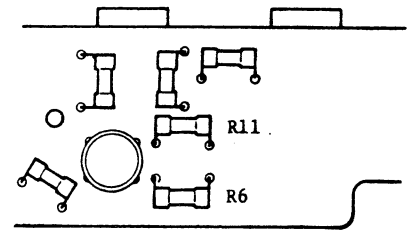


Fig. 9

Five different resistors for R-6 which are 1.2K Ω , 1.6K Ω , 2.2K Ω , 2.7K Ω and 3.5K Ω are provided for repair.

For example:

When changing R6 resistor 2.2 K Ω to 1.6K Ω , adjusting range by the RMV will widen 2 EV more.

When decreasing the resistor value, the meter needle will move to minus side more.

When adjusting it by the RMV, it must be necessary to check and adjust it again from the step 1-2.

3-4 Both resistors RSV . RPV

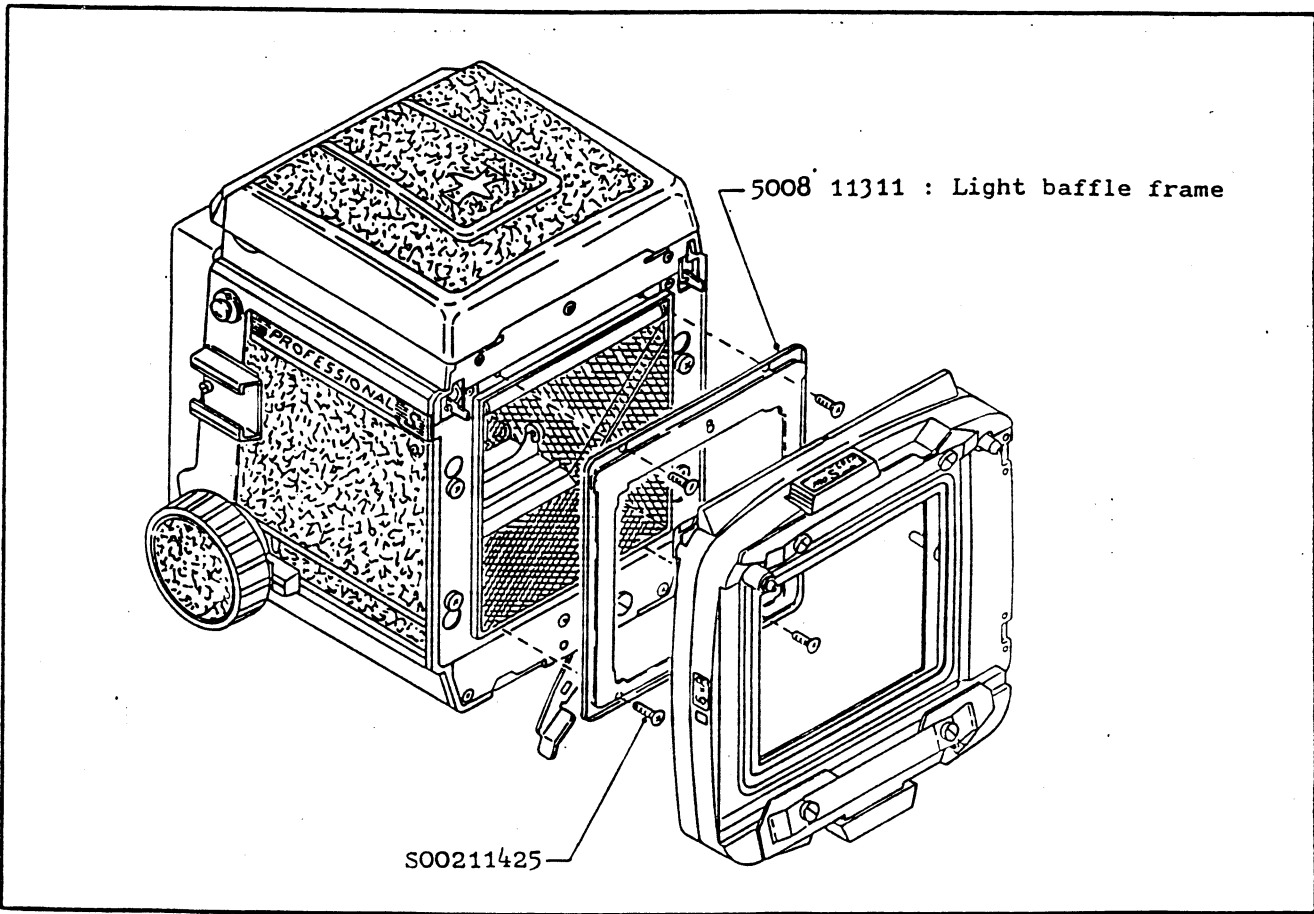
Both PSV and RPV variable resistors are for CdS.

As the two resistors have been already adjusted in the factory, please do not touch them, as well as spare parts SLS67631 P.c. plate which are supplied from us.

When changing CdS-unit only or SLS67631 P.c. plate, adjustment can be possible with the two other resistors RVV and RDV.

STEP : Carefully, remove four screws (S00211425) and replace the light baffle frame with a new 5008 11311 light baffle frame.

NOTE : RB67 Body with the new frame can be available for 6x7 size RHF.



TECHNICAL BULLETIN


Mamiya
CAMERA

ITEM: RB67 Acc.

OUR REF. NO. 079-RB67 Acc.-1

20 July 1979

120/220 Roll Film Power Drive

New RSW 8173C gear

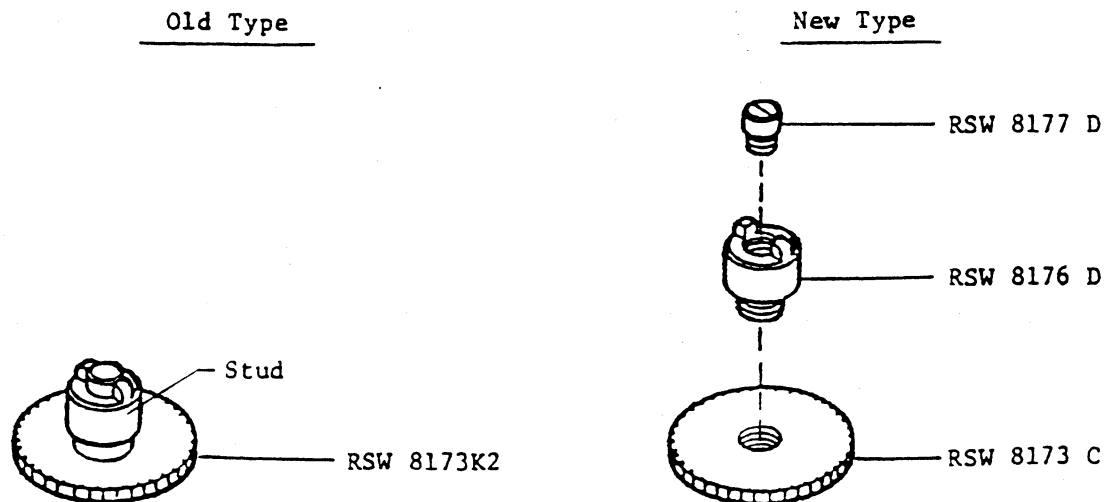
1. Purpose of modification : As the stud is liable to loose, its fixing mode was modified to screw mode.

2. Date of modification : April 1979

3. Replacement of the new parts :

New type gear in three individual parts into old body.....Possible

*Note : Apply the screw-lock tight on the screw thread before tightening the RSW 8176D stud into the RSW 8173C gear.



TECHNICAL BULLETIN

Mamiya
CAMERA

ITEM: RB67 Acc.

OUR REF. NO. 079-RB67 Acc.-2 20 July 1979

Roll Film Holder

New winding base hub

1. Purpose of modification : The hub of winding base plate has been reinforced with strength materials for its long life.
Consequently the aRSH 6419K2 E disc has been changed.

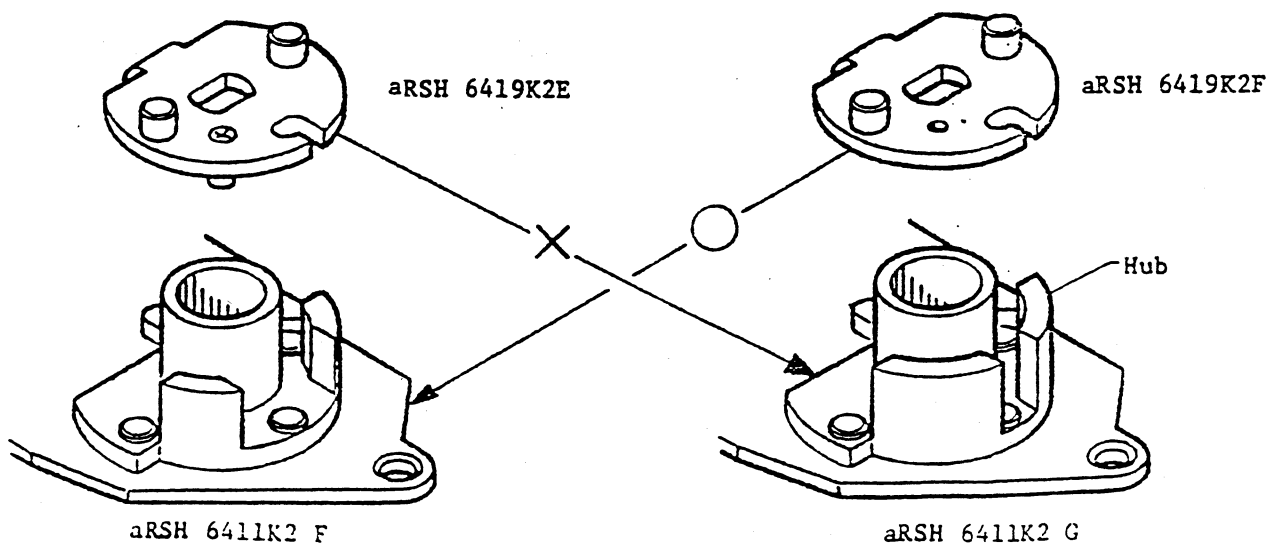
2. Date of modification : June 1979

3. Replacement of old and new parts :

- 1) The new parts in pair into the old body..... Possible.
- 2) The new aRSH 6419K2 F into the old body..... Possible.

Old Type

New Type



TECHNICAL BULLETIN

ITEM: RB67

OUR REF. NO. 081-RB-1 JAN. 8 1981

CdS Prism Finder

Check and adjustment of exposure meter

A. Check

1. Set the ASA to 100 and turn on the switch.
2. Attach the CdS Prism finder to a light source box, but with 90mm f/3.8 lens.
3. Move the exposure meter needle to center position at LV 11 by turning the shutter speed ring.

In above case proper exposure figures (shutter speed and aperture) should be indicated on the exposure dial.

4. Check also LV 15 and LV 7 as above Set 3.

		Shutter speed	f	Adjusting by
1	LV 11	1/30	8	VR 1 (Middle)
2	LV 15	1/250	11	VR 2 (High)
3	LV 7	1/2	8	VR 3 (Low)

ITEM:

RB67

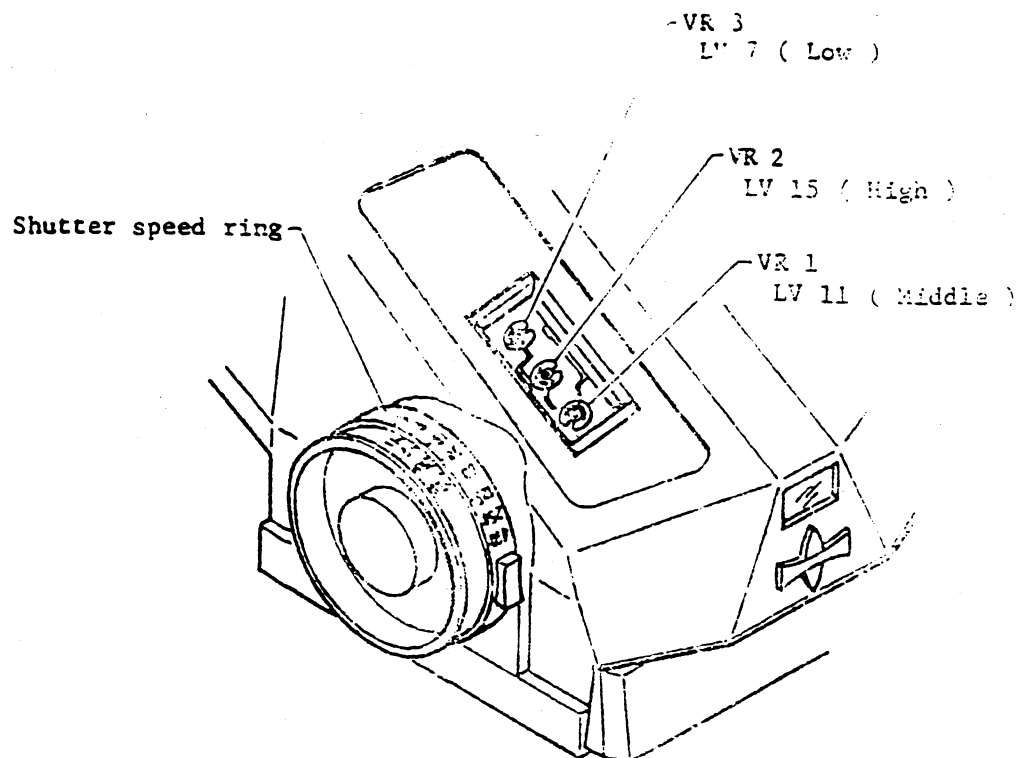
OUR REF. NO.

081-RB-1 JAN. 8 1981

CdS Prism Finder

B. Adjustment

1. Strip the leatherette of the dial side.
2. First adjust the meter at LV 11 by turning the VR 1 variable resistor as shown the proper figures.
3. Next adjust the meter at LV 15 by the VR 2 and LV 7 by VR 3 in order.
4. Check and adjust the meter at LV 11, 15 and 7 again.

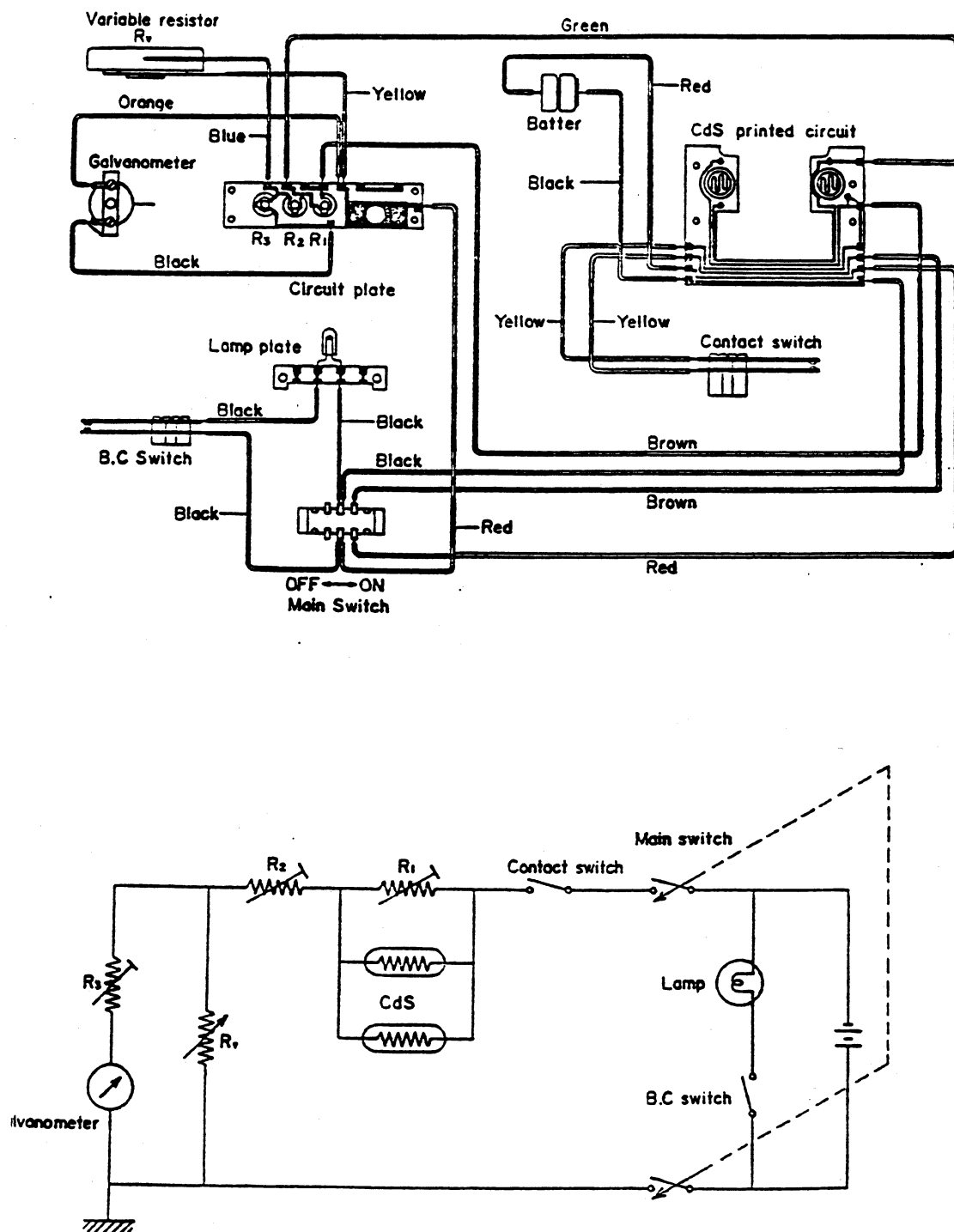


ITEM:RB67

CdS Prism Finder

OUR REF.NO.081-RB-1 JAN. 8 1981

Electric Circuit Diagram for RB67 CdS Prism Finder



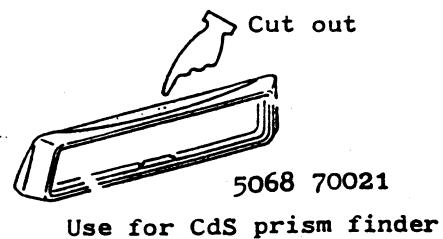
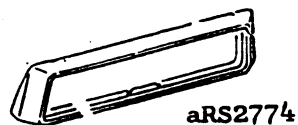
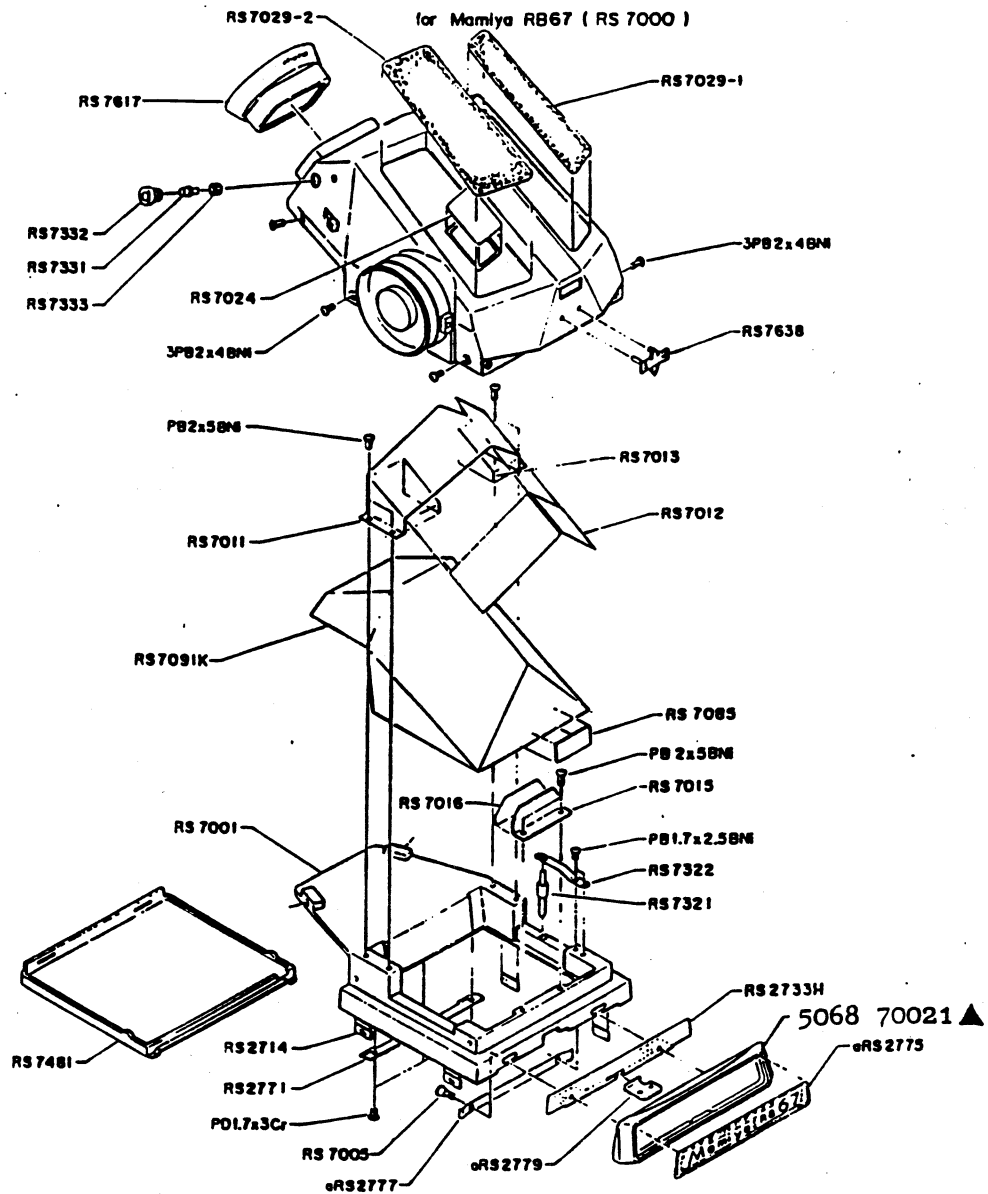
ERRATUM

1/1

1

CdS Prism Finder

for Mamiya RB67 (RS 7000)



Remarks