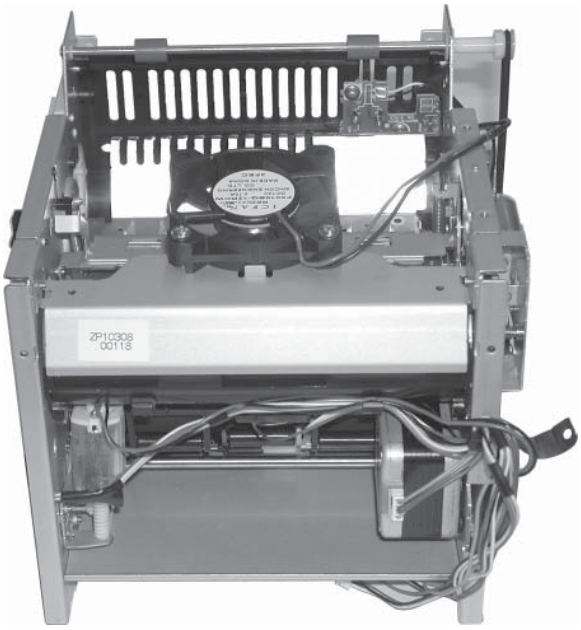
FILE NO.

SANYO

MECHANISM SERVICE TECHNICAL INFORMATION

Digital Photo Printer



DVP-P1EX
(Product code: 126 306 02)

DVP-P1
(Product code: 126 306 01)

DVP-P1C
(Product code: 126 306 03)

Contents

1. SERVICE TOOLS

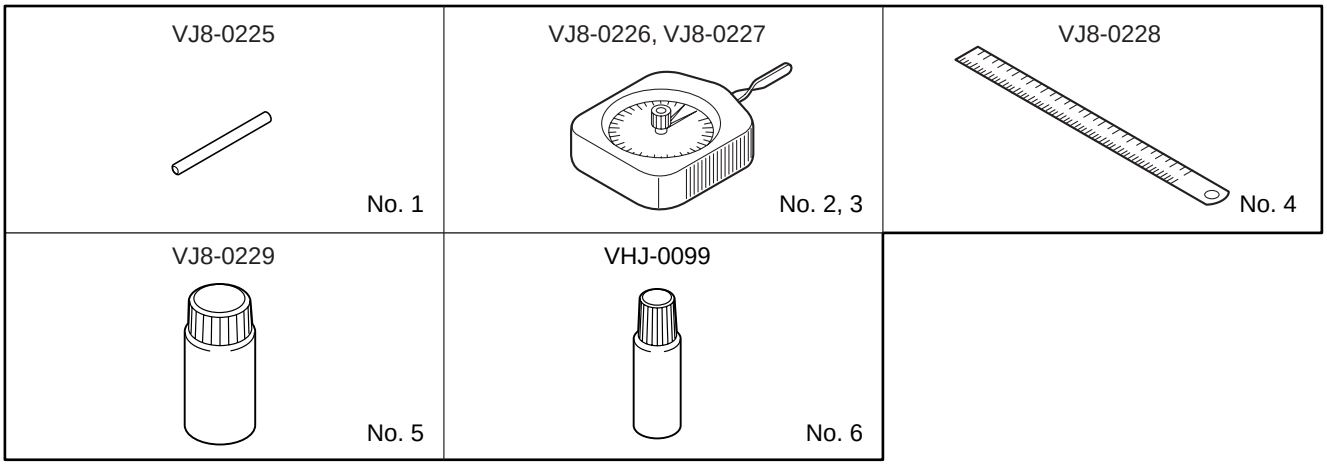


Fig.1-1-1

No.	Jig No.	Quantity	Parts name
1	VJ8-0225	1	Lever TPH adjusting tool
2	VJ8-0226	1	Dial tension gauge
3	VJ8-0227	1	Dial tension gauge
4	VJ8-0228	1	Ruler
5	VJ8-0229	1	Grease
6	VHJ-0099	1	Oil

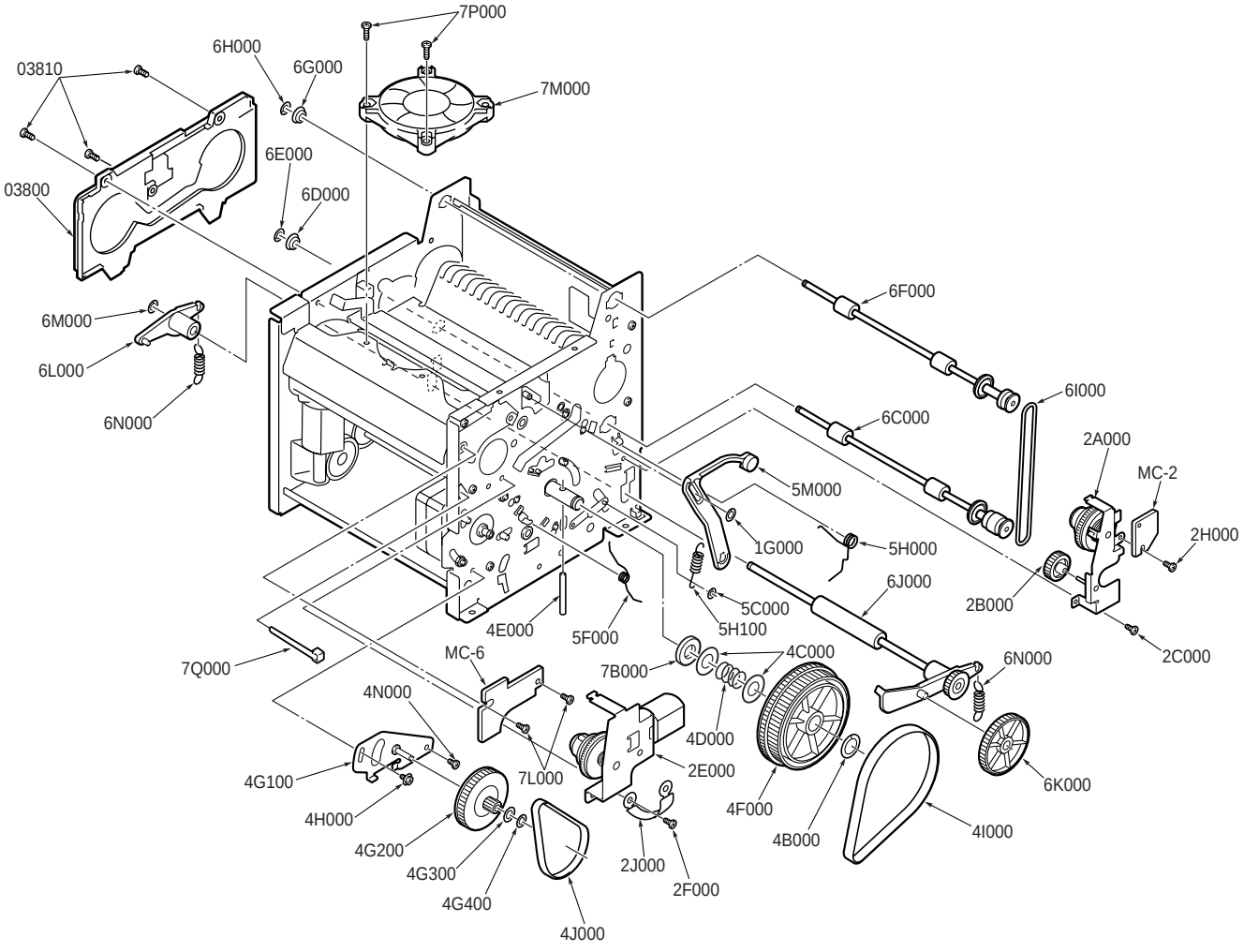
2. AN OVERVIEW OF THE MECHANISM

2-1. Exploded view of the Unit

Loc. No.	Quantity	Parts name
MC-2	1	COMPL PWB,MC-2
MC-6	1	COMPL PWB,MC-6
03800	1	GUIDE,INK-SVF01/EX
03810	3	SCR S-TPG BIN+W 2X5
1G000	1	SPECIAL WAHSER-3X0.5
2A000	1	COMPL,HOUSING REEL S
2B000	1	GEAR,RELAY PAPER EXIT
2C000	1	SCR S-TPG BIN 2.6X4
2E000	1	COMPL,HOUSING REEL T
2F000	1	SCR S-TPG BIN 2.6X4
2H000	1	SCR S-TPG BIN 2.6X4
2J000	1	CORD,TERMINAL
4B000	1	SPECIAL WASHER-7.1X0.8
4C000	2	WASHER Y 8X16X0.25
4D000	1	SPRING,PRESSURE DRUM
4E000	1	SHAFT,PULLEY FIX
4F000	1	PULLEY,DRUM
4G100	1	ASSY,LEVER,PULLEY
4G200	1	PULLEY,RELAY DRUM
4G300	1	STOPPER,BELT DRUM
4G400	1	SPECIAL WAHSER-3X0.5
4H000	1	SPECIAL SCREW-2.6X8
4I000	1	BELT,DRUM
4J000	1	BELT,MOTOR STEP

Loc. No.	Quantity	Parts name
4N000	1	SCR S-TPG BIN 2.6X3
5C000	1	SPECIAL WASHER-1.5X0.5
5F000	1	SPRING,PINCH ROLLER F
5H000	1	SPRING,PINCH ROLLER RB
5H100	1	SPRING,PINCH RELEASE
5M000	1	SLIDE,LEVER TPH
6C000	1	ASSY,ROLLER,EXIT GEAR
6D000	1	BEARING,SHAFT L
6E000	1	SPECIAL WASHER-2.5X0.5
6F000	1	ASSY,ROLLER,EXIT PULLEY
6G000	1	BEARING,SHAFT L
6H000	1	SPECIAL WASHER-2.5X0.5
6I000	1	BELT,PAPER EXIT
6J000	1	ASSY,ROLLER,PICK GEAR
6K000	1	GEAR,RELAY PICK UP
6L000	1	ARM,TRAY PAPER L
6M000	1	SPECIAL WASHER-3.5X0.5
6N000	2	SPRING,ARM TRAY PAPER
7B000	1	BEARING,DRUM
7L000	2	SCR S-TPG BIN 2.6X4
7M000	1	MOTOR,FAN DC 1.8W
7P000	2	SCR S-TPG BIN 3X12
7Q000	1	FIXER

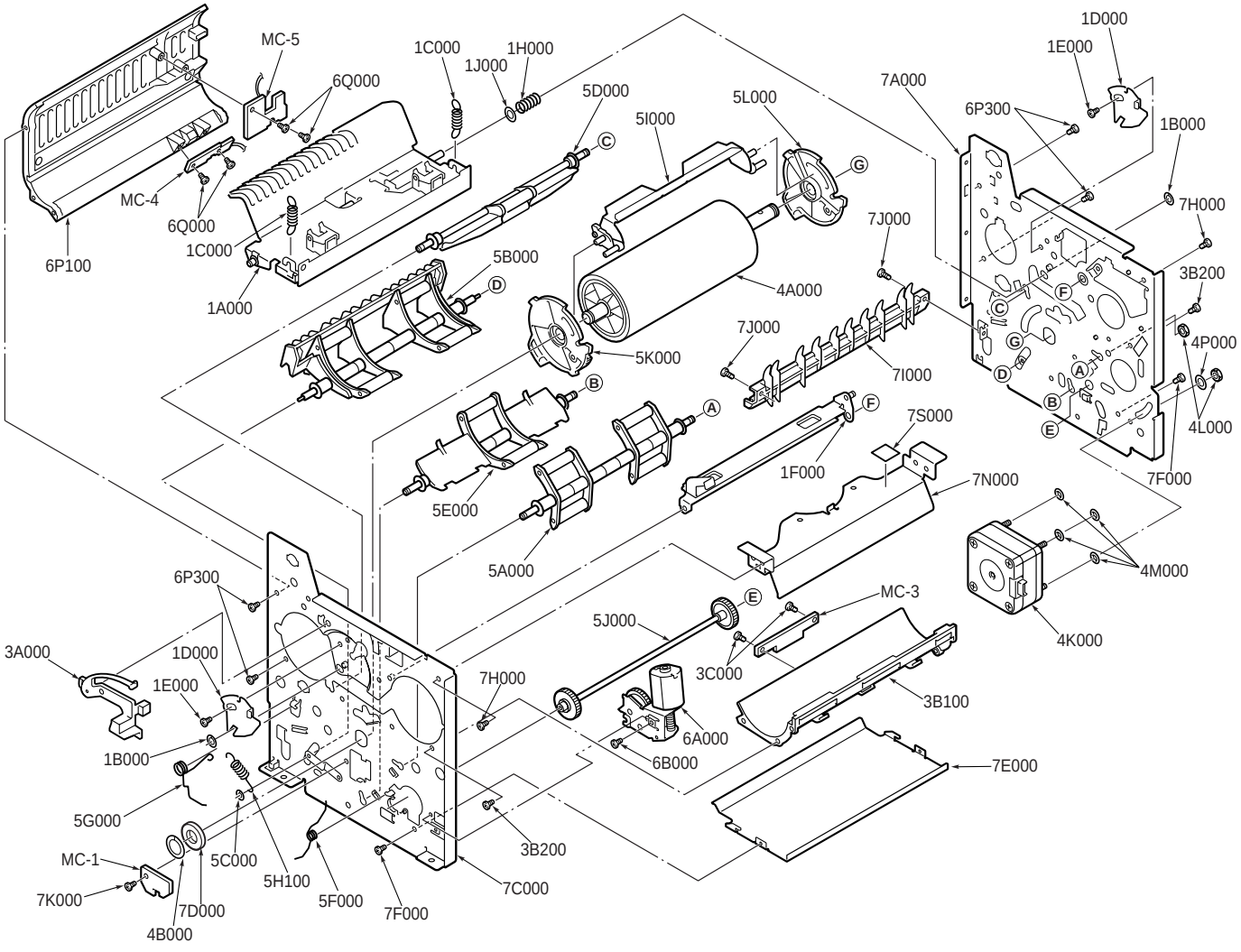
NOTE: Items marked “(N.S.P.)” are not supplied.



Loc. No.	Quantity	Parts name
MC-1	1	COMPL PWB,MC-1
MC-3	1	COMPL PWB,MC-3
MC-4	1	COMPL PWB,MC-4
MC-5	1	COMPL PWB,MC-5
1A000	1	COMPL,HOLDER TPH
1B000	2	SPECIAL WASHER-3.5X0.3
1C000	2	SPRING,TPH HNG
1D000	2	LEVER,TPH ADJUST
1E000	2	SCR S-TPG BIN 2.6X4
1F000	1	ASSY,LEVER,TPH DOWN
1H000	1	SPRING,TPH CENTER
1J000	1	SPECIAL WASHER-4.2 X 0.3
3A000	1	LEVER,CASSETTE STOPPER
3B100	1	GUIDE,CASSETTE R
3B200	2	SCR S-TPG BIN 2.6X4
3C000	2	SCR S-TPG BIN 2.6X4
4A000	1	COMPL,PIPE DRUM RUBBER
4B000	1	SPECIAL WASHER-7.1X0.8
4K000	1	ASSY,MOTOR STEPPING
4L000	2	NUT HEX 3
4M000	4	GASKET,O RING(D2.8)
4P000	1	SPECIAL WASHER-4X0.3
5A000	1	COMPL,HOLDER,PINCH SIDE
5B000	1	COMPL,HOLDER,PINCH EXIT
5C000	1	SPECIAL WASHER-1.5X0.5

Loc. No.	Quantity	Parts name
5D000	1	COMPL,HOLDER,PINCH PICK
5E000	1	COMPL,HOLDER,PINCH EXIT F
5F000	1	SPRING,PINCH ROLLER F
5G000	1	SPRING,PINCH ROLLER LB
5H100	1	SPRING,PINCH RELEASE
5I000	1	COMPL,GUIDE,PAPER
5J000	1	ASSY,GEAR,CAM
5K000	1	CAM,MECHANISM L
5L000	1	CAM,MECHANISM R
6A000	1	COMPL,MOTOR CAM
6B000	1	SCR S-TPG BIN 2.6X4
6P100	1	GUIDE,PAPER EXIT
6P300	4	SCR S-TPG BIN 2.6X4
6Q000	4	SCR S-TPG BIN 2.6X4
7A000	1	ASSY,CHASSIS R (N.S.P.)
7C000	1	ASSY,CHASSIS L (N.S.P.)
7D000	1	BEARING,DRUM
7E000	1	CHASSIS,SUB LOWER
7F000	2	SCR S-TPG BIN 2.6X4
7H000	2	SCR S-TPG BIN 2.6X4
7I000	1	GUIDE,PAPER PICK
7J000	2	SCR S-TPG BIN 2.6X5
7K000	1	SCR S-TPG BIN 2.6X4
7N000	1	HOUSING,MOTOR FAN
7S000	1	ADHESIVE FAN HERNESS

NOTE: Items marked “(N.S.P.)” are not supplied.



2-2. Overview

The mechanism is run by the following three types of motors: the "COMPL, MOTOR CAM *(6A000)* ", the "ASSY, MOTOR STEPPING *(4K000)* ", and the "COMPL, HOUSING REEL T *(2E000)* ".

These motors are controlled by the CPU, which detects the position of each movement by means of head position sensor (Cam Sensor MC-1), ribbon encode sensor (Reel Sensor MC-2), ribbon top sensor *(MC-3)*, paper top sensor *(MC-4)*, and paper exit sensor *(MC-5)*, as explained in the "Circuit Movement Details."

2-3. Cam Drive

The cams ("CAM, MECHANISM L: *5K000* "; "CAM, MECHANISM R: *5L000* ") are run by the "COMPL, MOTOR CAM *(6A000)*" through the following set mechanism modes: Standby ①←→ Paper exit ②←→ Paper/Ribbon advance ③←→ Paper-supply ④←→ Print ⑤.

Chart 1 provides the Cam Drive related timing chart.

- The angle of revolution of the cam is detected by the "COMPL PWB, MC-1" upper head position sensor (cam sensor). The mechanism mode position is detected based on the combined power output signals of S1, S2, and S3.
- The pressure and release of the head ("COMPL, HOLDER TPH: *1A000* ").
- The setting of the paper guide ("COMPL, GUIDE, PAPER: *5I000*"), and the play of the head ("COMPL, HOLDER TPH: *1A000* ") when under pressure.
- The pressure and release of the non-paper-exit pinch rollers ("COMPL, HOLDER, PINCH SIDE: *5A000* ", "COMPL, HOLDER, PINCH PICK: *5D000*", and "COMPL, HOLDER, PINCH EXIT F: *5E000* ")
- The pressure and release of the paper-exit pinch roller ("COMPL, HOLDER, PINCH EXIT: *5B000* ").
- The release and connection of the paper-supply gear ("GEAR, RELAY PICK UP: *6K000* ").
- The locking and release of the S reel brake ("SLIDE, LEVER TPH: *5M000* ").

Note 1: The Cam I.D. symbols are the numbers etched into the "CAM,MECHANISM L *(5K000)* ".

Note 2: The code in letters and numbers in parentheses indicate identifying Loc. No. in the Parts Price List.

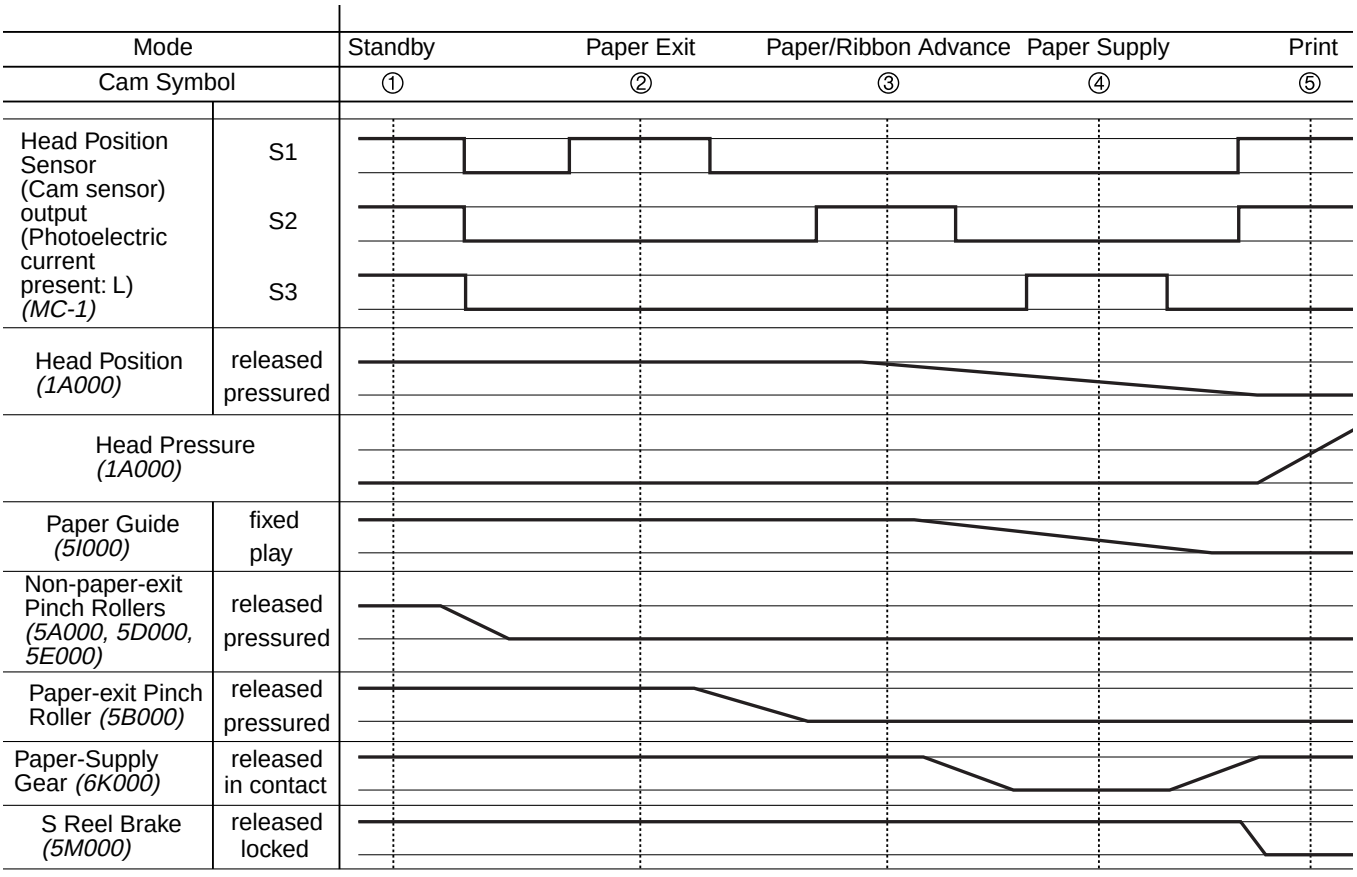


Chart 1

2-4. Paper Advance Drive

The stepping motor ("ASSY,MOTOR STEPPING: *4K000* ") connects the timing belt ("BELT,MOTOR STEP: *4J000* "; BELT,DRUM: *4I000*"), the "PULLEY,DRUM *(4F000)*", and the paper-supply gear ("GEAR,RELAY PICK UP: *6K000*"), drives the "ASSY,ROLLER,PICK GEAR *(6J000)* " and starts the supply of printing paper.

At this point, the paper guide ("ARM, PAPER, PICK") of the "COMPL,HOLDER,PINCH EXIT *(5B000)* " is lifted up and the printing paper is sent to the platen ("COMPL,PIPE DRUM RUBBER: *4A000* ").

The pulley drum ("PULLEY,DRUM: *4F000* ") is directly connected to the shaft of the platen ("COMPL,PIPE DRUM RUBBER: *4A000*") so the pulley drum ("PULLEY,DRUM: *4F000*") and the stepping motor ("ASSY,MOTOR STEPPING: *4K000*") rotate together.

Each of the pinch rollers ("COMPL,HOLDER,PINCH PICK: *5D000* ", "COMPL,HOLDER,PINCH SIDE: *5A000* ", "COMPL,HOLDER,PINCH EXIT F: *5E000* ", "COMPL, HOLDER,PINCH EXIT: *5B000* ") is pressing on the platen ("COMPL,PIPE DRUM RUBBER: *4A000* "), so the supplied printing paper is rolled onto the platen ("COMPL,PIPE DRUM RUBBER: *4A000* ").

During printing, the printing paper proceeds in the order Y (yellow) → M (magenta) → C (cyan) → OP (Over Print) making a total of four revolutions.

After printing, the paper guide portion ("ARM PAPER PICK") of the "COMPL,HOLDER,PINCH EXIT *(5B000)* " descends, so the printing paper is expelled by the platen ("COMPL,PIPE DRUM RUBBER: *4A000* ") and the paper exit roller ("ASSY,ROLLER,EXIT GEAR: *6C000*", "ASSY,ROLLER,EXIT PULLEY: *6F000* ").

Ordinarily, the stepping motor ("ASSY,MOTOR STEPPING: *4K000* ") revolves in the regular direction (counterclockwise when looking at the mechanism from the right). The drive for the paper exit rollers ("ASSY,ROLLER,EXIT GEAR: *6C000*", "ASSY,ROLLER,EXIT PULLEY: *6F000* ") is the stepping motor ("ASSY,MOTOR STEPPING: *4K000* ").

Printing Operations

	Mecha-nism Mode	COMPL, MOTOR CAM *(6A000)*	COMPL, HOUSING REEL T *(2E000)*	ASSY, MOTOR STEPPING *(4K000)*	Paper top sensor *(MC-4)*	Paper eject sensor *(MC-5)*	Ribbon top sensor *(MC-3)*	Ribbon encode sensor *(MC-2)*	Head position sensor *(MC-1)*	Ink type sensor *(MC-6)*
Cassette verification	①									○
Ribbon slack taken up	①		ON					○		
Mechanism movement	④	ON							○	
Paper supply	④			ON	○					
Mechanism movement	③	ON							○	
Paper rolled on/ Y ribbon set	③		ON	ON	○		○	○		
Mechanism movement	⑤	ON							○	
Yellow printing	⑤		ON	ON	○			○		
Mechanism movement	③	ON							○	
Paper re-set/ M ribbon set	③		ON	ON	○		○	○		
Mechanism movement	⑤	ON							○	
Magenta printing	⑤		ON	ON	○			○		
Mechanism movement	③	ON							○	
Paper re-set/ C ribbon set	③		ON	ON	○		○	○		
Mechanism movement	⑤	ON							○	
Cyan printing	⑤		ON	ON	○			○		
Mechanism movement	③	ON							○	
Paper re-set/ OP ribbon set	③		ON	ON	○		○	○		
Mechanism movement	⑤	ON							○	
Over printing	⑤		ON	ON	○			○		
Mechanism movement/ribbon slack taken up	②	ON	ON					○	○	
Paper ejected	②			ON		○		○		
Completed (Mechanism movement)	①	ON							○	

Chart 2

2-5. Ink Ribbon Drive

At the initiation of printing, the ribbon motor ("COMPL,HOUSING REEL T: *2E000* ") starts up and the slack in the ribbon within the cassette is taken up. At this time, the ribbon encoder sensor ("COMPL PWB,MC-2: *MC-2* ") confirms that the slack in the ribbon has been eliminated.

Next, the printing paper is supplied and, while the paper is moving into the initial position for printing, the ribbon motor ("COMPL,HOUSING REEL T: *2E000* ") operates and the ink ribbon is wound to the beginning of the Y (yellow) ribbon. The beginning position of the Y (yellow) ribbon is verified by the top sensor ("COMPL PWB,MC-3: *MC-3* ").

During the yellow printing stage, the S side Reel Brake is locked by the "SLIDE,LEVER TPH *(5M000)* ", and while applying the appropriate tension to the ink ribbon, the ribbon is rolled up.

Since the ink ribbon and the printing paper are held between the head ("COMPL,HOLDER TPH: *1A000* ") and the platen ("COMPL,PIPE DRUM RUBBER: *4A000* ") during the yellow printing process, they are driven at a set speed by the stepping motor ("ASSY,MOTOR STEPPING: *4K000* ").

Upon completion of the Y (yellow) printing process, when the printing paper is returned to the initial position for printing, and the ink ribbon is wound to the beginning of the M (magenta) ribbon. The beginning position of the M (magenta) ribbon is verified by the ribbon top sensor ("COMPL PWB,MC-3: *MC-3* ") and the subsequent operations are carried out in the same order as described for the Y (yellow) printing process. After that, the C (cyan) and then the OP (over print) printing steps are carried out, but the drive procedure is the same.

After the OP (over print) step, the ribbon slack is taken up again.

2-6. Mechanism Mode Verification Method

By using a light source to illuminate the mechanism mode verification hole of the "ASSY, CHASSIS L *(7C000)* ", the numbers etched into the "CAM, MECHANISM L *(5K000)* " can be verified.

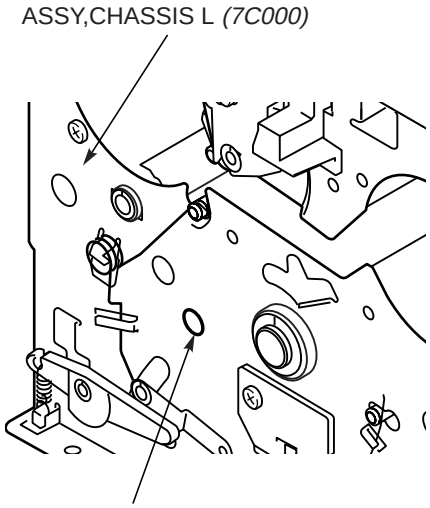


Fig. 2-6-1

3. DISASSEMBLING THE MAIN PARTS OF THE MECHANISM

POINTS TO NOTE

- Referring to "3. HOW TO REMOVE THE CABINET PARTS" in the Service Manual, remove the cabinet parts and the circuit board assembly, and remove the Compl Mechanism.
- The codes (letter and numbers in parentheses) indicate Loc. No. in the parts list.
- When fitting the parts of the mechanism, refer to the "Assembly Notes", and proceed in the reverse of the dis-assembly order.
- Clamps and dowels are used to prevent parts coming loose. When removing a clamp or dowel, be careful not to force it, as this can result in damage.
- Since the dimension of the screw names in the figures are subject to change without notice, always refer to the parts list.

3-1. "MOTOR,FAN DC 1.8W *(7M000)* ", "GUIDE,INK-SVF01/EX *(03800)* ", and "LEVER,CASSETTE STOPPER *(3A000)* "

(See Figs. 3-1-1 to 3-1-2)

1) Remove the two "SCR S-TPG BIN 3X12 *(7P000)* " and remove the "MOTOR, FAN DC 1.8W *(7M000)*". (Refer to Fig. 3-1-1.)
2) Remove the cables from the hook on the "GUIDE, INK-SVF01/EX *(03800)* " as shown in Fig. A of Fig. 3-1-1.
3) Remove the three "SCR S-TPG BIN+W 2X5 *(03810)*" and the "GUIDE,INK-SVF01/EX *(03800)* ". (Refer to Fig. 3-1-1.)
4) Remove portion A on the "LEVER, CASSETTE STOPPER *(3A000)* " from hole on the "ASSY, CHASSIS L *(7C000)* " as shown in Fig. B of Fig. 3-1-2.
5) While rotating portion B on the "LEVER, CASSETTE STOPPER *(3A000)* " upper side, remove it from hole on the "ASSY, CHASSIS L *(7C000)* ". (Refer to Fig. 3-1-2.)
6) Pull portion C on the "LEVER, CASSETTE STOPPER *(3A000)* " out from hole on the "ASSY, CHASSIS L *(7C000)* " and remove the "LEVER, CASSETTE STOPPER *(3A000)* ". (Refer to Fig. 3-1-2.)

ASSEMBLY NOTES:

1. Insert the two dowels on the "GUIDE, INK-SVF01/EX *(03800)*" into holes on the "ASSY, CHASSIS L *(7C000)*", and install the "GUIDE, INK-SVF01/EX *(03800)* " by sliding it upwards. (Refer to Fig. 3-1-1.)
2. Place portion D on the "LEVER, CASSETTE STOPPER *(3A000)*" in the reverse side of portion E on the "LEVER, TPH ADJUST *(1D000)* " as shown in Fig. B of Fig. 3-1-2, and verify that the "LEVER, TPH ADJUST *(1D000)* " moves smoothly by flicking it.

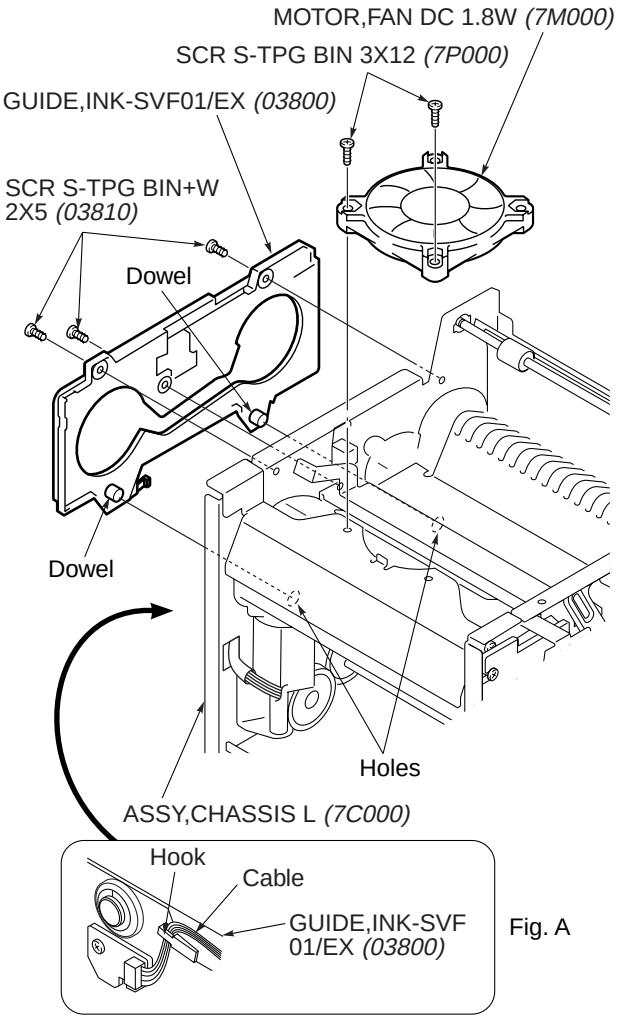


Fig. 3-1-1

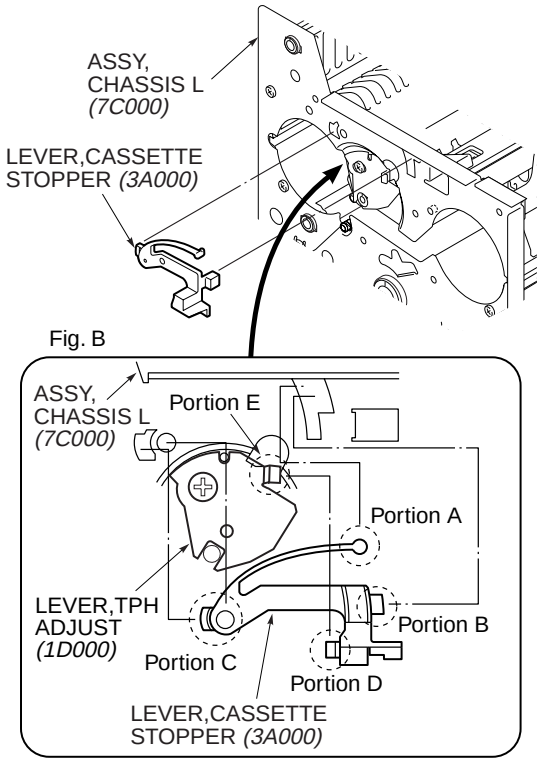


Fig. 3-1-2

3-2. S REEL ASSEMBLY
(See Figs. 3-2-1 to 3-2-2)

3-2-1. "BELT, PAPER EXIT *(6I000)* ", "COMPL, HOUSING REEL S *(2A000)* ", "GEAR, RELAY PAPER EXIT *(2B000)* ", and "COMPL PWB, MC-2 *(MC-2)* "

1) Remove the "BELT, PAPER EXIT *(6I000)*". (Refer to Fig. 3-2-1.)
2) Remove the "SCR S-TPG BIN 2.6X4 *(2H000)* " and remove the "COMPL PWB,MC-2 *(MC-2)*". (Refer to Fig. 3-2-2.)
3) Remove the "SCR S-TPG BIN 2.6X4 *(2C000)*". (Refer to Fig. 3-2-2.)
4) Remove the "COMPL, HOUSING REEL S *(2A000)* ". (Refer to Fig. 3-2-2.)
5) Remove the "GEAR, RELAY PAPER EXIT *(2B000)* ". (Refer to Fig. 3-2-2.)

ASSEMBLY NOTES:

1. After cleaning shaft 1, apply oil (VHJ-0099) around it. (Refer to Fig. 3-2-2.)
2. Insert portion A on the "COMPL, HOUSING REEL S *(2A000)*" into hole on the "ASSY, CHASSIS R *(7A000)*", as shown in Fig. A of Fig. 3-2-2.
3. Align dowel 1 on the "ASSY, CHASSIS R *(7A000)* " with hole 1 on the "COMPL, HOUSING REEL S *(2A000)* ". (Refer to Fig. 3-2-2.)
4. Install the "BELT, PAPER EXIT *(6I000)*" without bending.

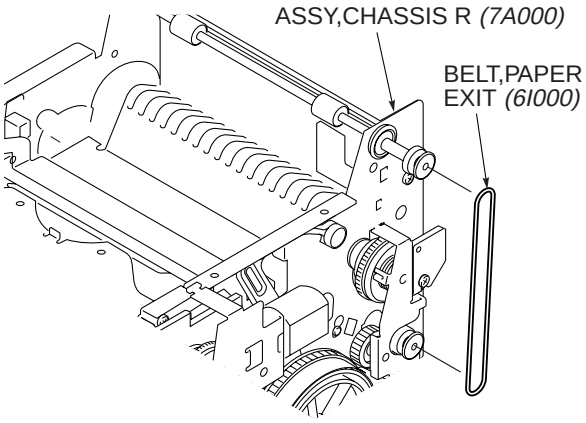


Fig. 3-2-1

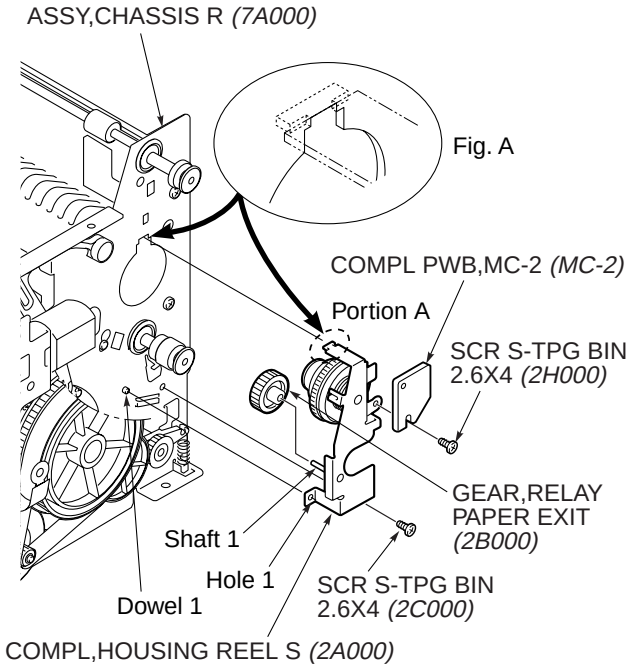


Fig. 3-2-2

3-3. HEAD

(See Figs. 3-3-1 to 3-3-3)

3-3-1. "COMPL, HOUSING REEL T *(2E000)* ", "CORD, TERMINAL *(2J000)* ", "ASSY, LEVER, TPH DOWN *(1F000)* ", and "COMPL PWB, MC-1 *(MC-1)* "

1) Referring to section 3-1, remove the "MOTOR, FAN DC 1.8W *(7M000)* ".
2) Remove the "SCR S-TPG BIN 2.6X4 *(2F000)* " and remove the "CORD, TERMINAL *(2J000)* ". (Refer to Fig. 3-3-1.)
3) Remove the "COMPL, HOUSING REEL T *(2E000)* ". (Refer to Fig. 3-3-1.)
4) Remove the "SPECIAL WAHSER-3X0.5 *(1G000)* ". (Refer to Fig. 3-3-1.)
5) Remove dowel 1 on the "ASSY, LEVER,TPH DOWN *(1F000)*" from hole 1 on the "ASSY, CHASSIS R *(7A000)*". (Refer to Fig. 3-3-2.)
   NOTE: When carrying out steps 5) - 8), be careful not to injure the surface of the head by pressing down too hard on the "COMPL,HOLDER TPH *(1A000)*" shown in Fig. 3-2-2. To prevent injury to the surface of the head, insert printing paper (approx. 100mm wide x 148mm long) from the ink ribbon slot.
6) Insert dowel 1 side of portion A on the "ASSY, LEVER, TPH DOWN *(1F000)*" into hole 2 on the "ASSY, CHASSIS R *(7A000)* " as shown in Fig. B of Fig. 3-3-2.
7) While press the "ASSY, LEVER, TPH DOWN *(1F000)* " approximately 2mm to the "ASSY, CHASSIS R *(7A000)* " side, pull hole 3 on the "ASSY, LEVER, TPH DOWN *(1F000)* " out from shaft 2 on the "ASSY, CHASSIS L *(7C000)* ". (Refer to Fig. 3-3-2.)
8) Be careful not to distort the "ASSY, CHASSIS R" and pull portion A out from hole 2 and remove the "ASSY, LEVER, TPH DOWN *(1F000)* ". (Refer to Fig. 3-3-2.)
9) Disconnect the connector from the "COMPL PWB, MC-1 *(MC-1)* ".
10) Remove the "SCR S-TPG BIN 2.6X4 *(7K000)* " and remove the "COMPL PWB, MC-1 *(MC-1)*". (Refer to Fig. 3-3-2.)
    NOTE: It is unnecessary to remove the "COMPL PWB, MC-1 *(MC-1)* " to replace the "COMPL, HOLDER TPH *(1A000)* ".

ASSEMBLY NOTES:

1. Insert portion B on the "COMPL, HOUSING REEL T *(2E000)* " into hole on the "ASSY, CHASSIS R *(7A000)* " as shown in Fig. A of Fig. 3-3-1.
2. Align hole 3 with shaft 2 on the "ASSY, CHASSIS L *(7C000)* ". Align dowel 1 with hole 1 on the "ASSY, CHASSIS R *(7A000)* ". Align shaft 1 with slot 1 on the "SLIDE, LEVER TPH *(5M000)* ". (Hole 3, dowel 1, and shaft 1 are on the "ASSY, LEVER, TPH DOWN *(1F000)*"). Be careful not to distort the "ASSY, CHASSIS R/L" and install the "ASSY, LEVER, TPH DOWN *(1F000)* ".

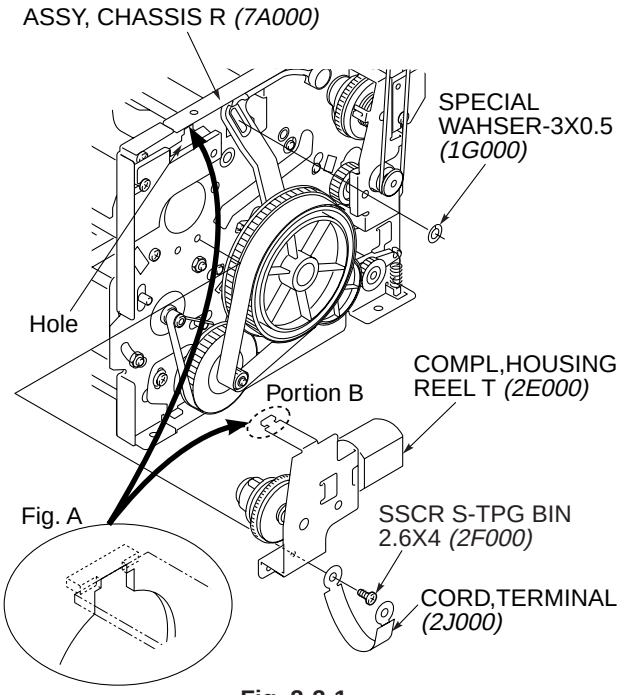


Fig. 3-3-1

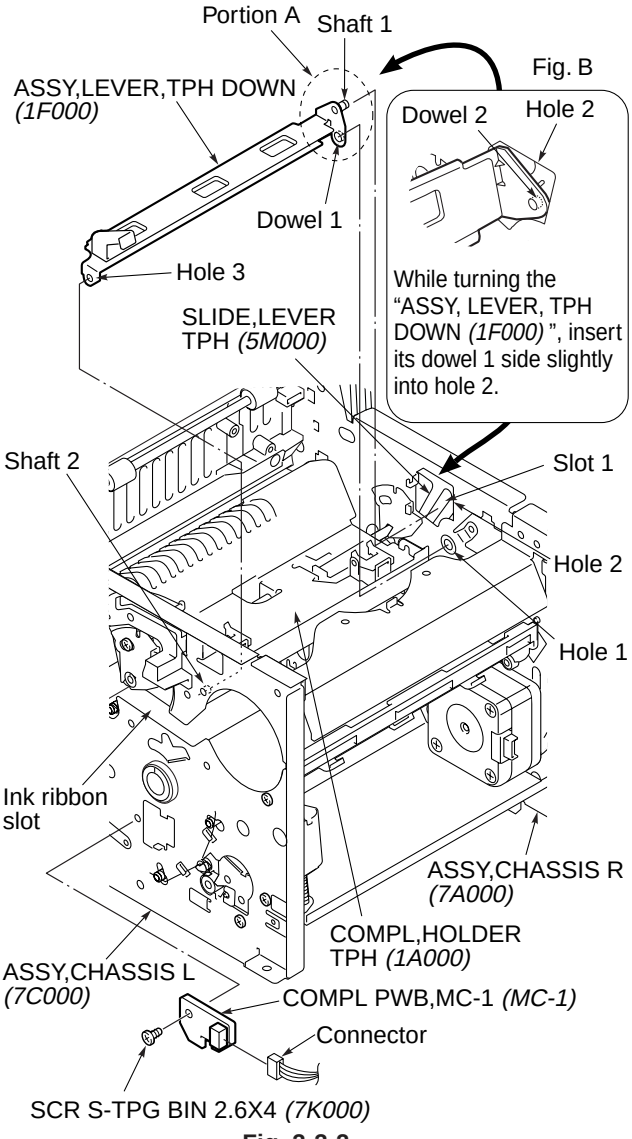


Fig. 3-3-2

3-3-2. "COMPL,HOLDER TPH *(1A000)* "

1) Remove the two "SPECIAL WASHER-3.5X0.3 *(1B000, 1J000)* ". (Refer to Fig. 3-3-3.)
2) To prevent injury to the surface of the head due to dropping it, insert printing paper (approx. 100mm wide x 148mm long) under the "COMPL, HOLDER TPH *(1A000)*" from the ink ribbon slot.
3) To prevent the "COMPL, HOLDER TPH *(1A000)* " from falling down, remove the two "SPRING, TPH HNG *(1C000)* " while holding the "COMPL, HOLDER TPH *(1A000)* ".
4) Pull shaft 2 out while pressing the "COMPL, HOLDER TPH *(1A000)*" approximately 2mm to the "ASSY, CHASSIS R *(7A000)* " side.
5) Insert portion D on into the ink ribbon slot as shown in Fig. C.
6) Pull shaft 3 on the "COMPL, HOLDER TPH *(1A000)*" the out from hole 4 and remove it. Remove shaft 3 in the direction of the arrow as shown in Fig. D.
   NOTE: Be careful that the "ASSY, CHASSIS" is not transformed. Be careful not to touch the surface of the head on the "COMPL, HOLDER TPH *(1A000)* ".
7) Remove the "SPRING, TPH CENTER *(1H000)* " and "SPECIAL WASHER-4.2 X 0.3 *(1J000)* ".

ASSEMBLY NOTES:

1. After replacing the "COMPL, HOLDER TPH *(1A000)*", be sure to refer to the "Adjustment of Circuit" section in the Service Manual and perform "4-1. Adjustment of Thermal Printer Head Resistance Value".

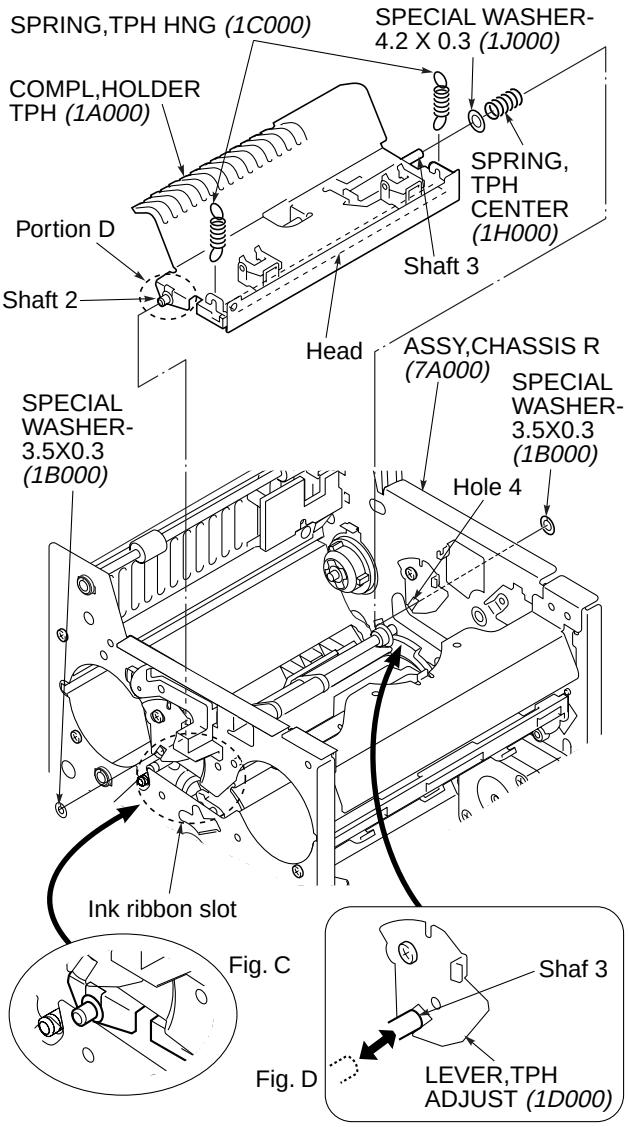


Fig. 3-3-3

3-4. PAPER EXIT ROLLER
(See Figs. 3-4-1 to 3-4-3)

3-4-1. "BELT, PAPER EXIT *(6I000)* ", "ASSY, ROLLER, EXIT PULLEY *(6F000)* ", and "ASSY, ROLLER, EXIT GEAR *(6C000)* "

1) Referring to section 3-1, remove the "GUIDE, INK-SVF01/EX *(03800)* ".
2) Remove the "BELT, PAPER EXIT *(6I000)*". (Refer to Fig. 3-4-1.)
3) Remove the "SPECIAL WASHER-2.5X0.5 *(6H000)* ". (Refer to Fig. 3-4-2.)
4) Pull the "ASSY, ROLLER, EXIT PULLEY *(6F000)*" out as shown in Fig. 3-4-3 and remove the "BEARING, SHAFT L *(6D000)* " on the upper side as shown in Fig. 3-4-2.
   NOTE: Do not injure the rubber roller portions on the "ASSY, ROLLER, EXIT PULLEY *(6F000)* " when pulling it out from the "ASSY, CHASSIS R *(7A000)* ".
5) Remove the "SPECIAL WASHER-2.5X0.5 *(6E000)* ". (Refer to Fig. 3-4-2.)
6) Pull the "ASSY, ROLLER, EXIT GEAR *(6C000)* " out as shown in Fig. 3-4-3 and remove the "BEARING, SHAFT L *(6D000)* " on the lower side as shown in Fig. 3-4-2.
   NOTE: Do not injure the rubber roller portions on the "ASSY, ROLLER, EXIT GEAR *(6C000)* " when pulling it out from the "ASSY, CHASSIS R *(7A000)* ".

ASSEMBLY NOTES:

1. Do not injure the rubber roller portions on the "ASSY, ROLLER, EXIT GEAR *(6C000)*" and the "ASSY, ROLLER, EXIT PULLEY *(6F000)* " when installing them into the "ASSY, CHASSIS".
2. Align portion A on the "ASSY, ROLLER, EXIT PULLEY *(6F000)* " and portion B on the "ASSY, ROLLER, EXIT GEAR *(6C000)* " with holes on the "ASSY, CHASSIS R *(7A000)* " as shown in Fig. B of Fig. 3-4-3.
3. Install the two "BEARING, SHAFT L *(6D000)*" so that they align with the each of the holes on the "ASSY, CHASSIS R *(7A000)* " as shown in Fig. A of Fig. 3-4-2.
4. Install the "BELT, PAPER EXIT *(6I000)* " without the bending.

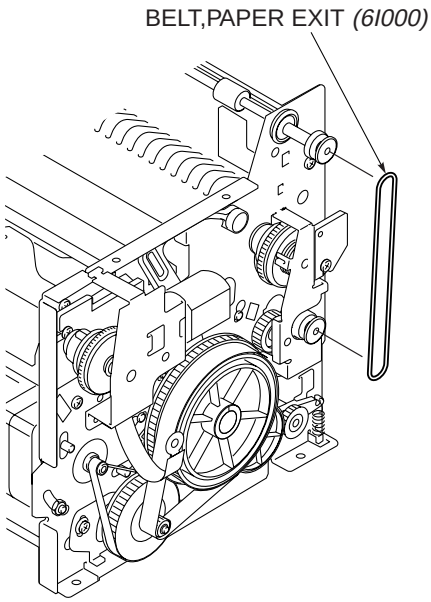


Fig. 3-4-1

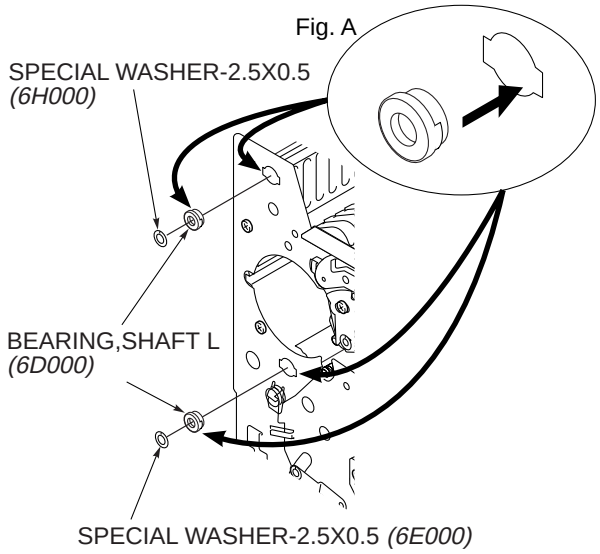


Fig. 3-4-2

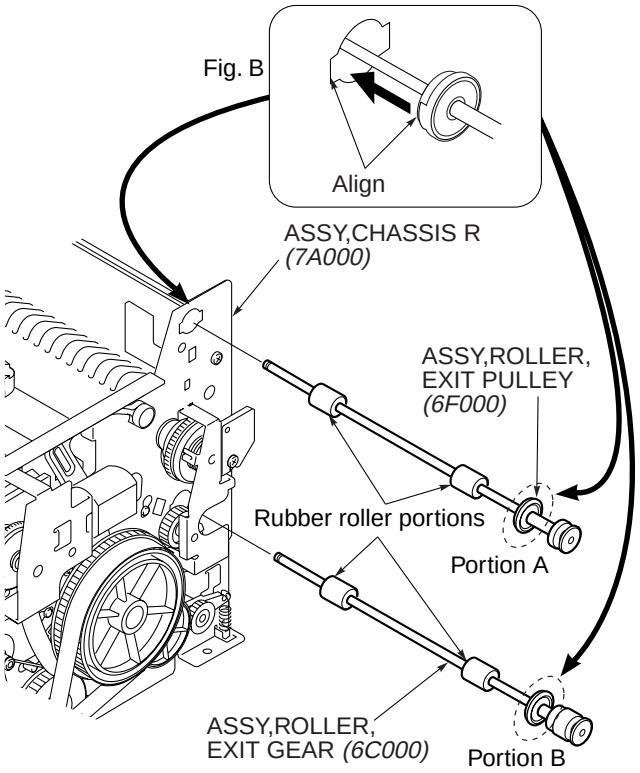


Fig. 3-4-3

3-5. SUPPLY PAPER ROLLER
(See Figs. 3-5-1 to 3-5-3)

3-5-1. "ASSY, ROLLER, PICK GEAR *(6J000)* ", "GUIDE, PAPER PICK *(7I000)* ", "GEAR, RELAY PICK UP *(6K000)* ", and "ARM, TRAY PAPER L *(6L000)* "

1) After remove the two "SCR S-TPG BIN 2.6X5 *(7J000)* " and the two "SPRING, PINCH RELEASE *(5H100)* ", remove the "GUIDE ,PAPER PICK *(7I000)*". (Refer to Fig. 3-5-2.)

2) Remove the two "SPRING, ARM TRAY PAPER *(6N000)*". (Refer to Fig. 3-5-1 and Fig. 3-5-3.)
3) Remove the "SPECIAL WASHER-3.5X0.5 *(6M000)* ". (Refer to Fig. 3-5-1.)
4) Remove the "ASSY,ROLLER,PICK GEAR *(6J000)*". (Refer to Fig. 3-5-3.)
   NOTE: Do not injure the rubber roller portion on the "ASSY, ROLLER,PICK GEAR *(6J000)* " when pulling it out from the "ASSY, CHASSIS R *(7A000)* ".
5) Remove the "GEAR, RELAY PICK UP *(6K000)* ". (Refer to Fig. 3-5-3.)
6) Remove the "ARM, TRAY PAPER L *(6L000)* ". (Refer to Fig. 3-5-1.)

ASSEMBLY NOTES:

1. Align dowel 1 with hole 1 on the "ASSY, CHASSIS L *(7C000)*" and install the "ARM, TRAY PAPER L *(6L000)*" as shown in Fig. 3-5-1.
2. Install the "SPRING, ARM TRAY PAPER *(6N000)* " as shown in Fig. C of Fig. 3-5-1.
3. Pay attention to the direction of installation of the "GEAR, RELAY PICK UP *(6K000)* " and install it on the "ASSY, ROLLER, PICK GEAR *(6J000)*" as shown in Fig. E of Fig. 3-5-3.
4. Align dowel 2 with hole 2 and install the "GEAR, RELAY PICK UP *(6K000)* " to the "ASSY, CHASSIS R *(7A000)* " as shown in Fig. 3-5-3. At that time, be careful that dowel 2 is not placed over the "CAM, MECHANISM R *(5L000)*".
5. Install the "SPRING, ARM TRAY PAPER *(6N000)* " as shown in Fig. D of Fig. 3-5-3.
6. Insert and hook the long end of the "SPRING, PINCH RELEASE *(5H100)* " between washer and arm plate, and hook the short end onto the "GUIDE, PAPER PICK *(7I000)* " as shown in Figs. A and B of Fig. 3-5-2.
7. Do not injure the rubber roller portion on the "ASSY, ROLLER, PICK GEAR *(6J000)*" when inserting it into hole on the "ASSY, CHASSIS".

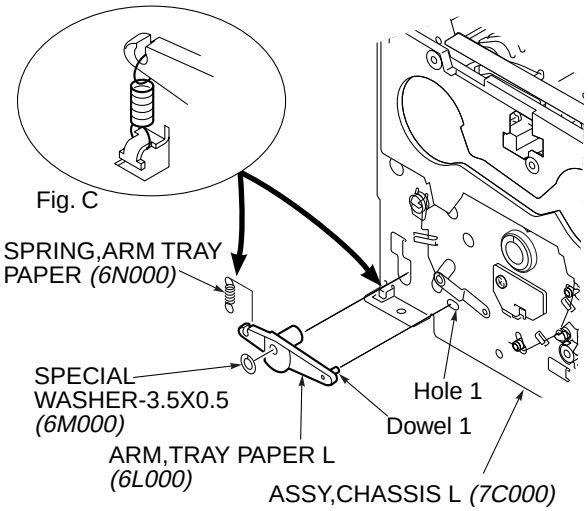


Fig. 3-5-1

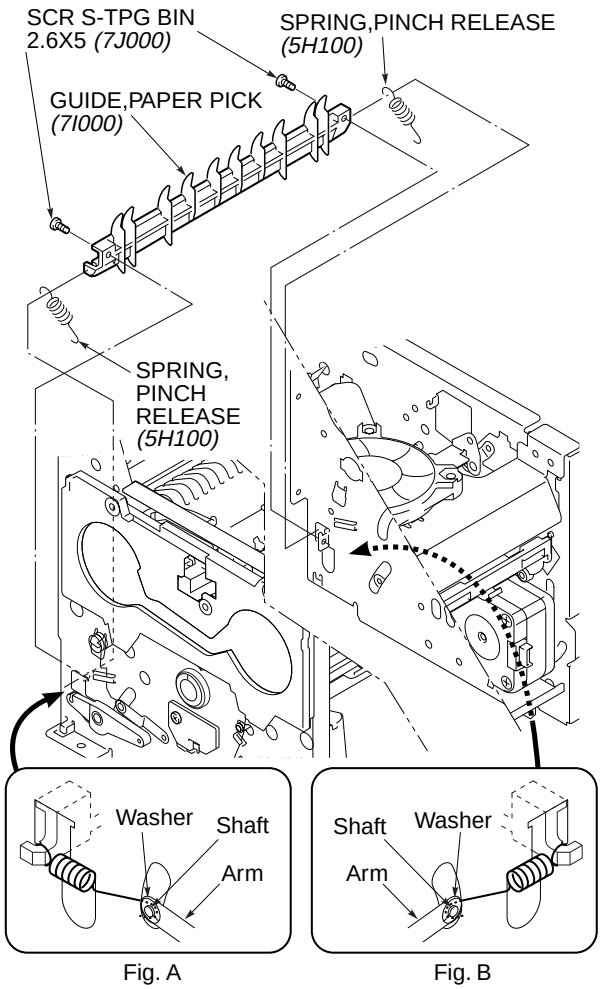


Fig. 3-5-2

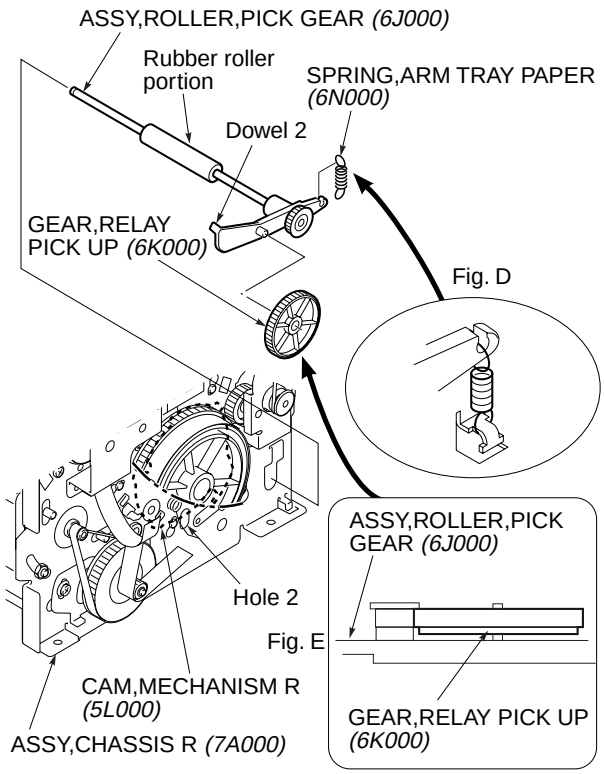


Fig. 3-5-3

3-6. "ASSY, MOTOR STEPPING *(4K000)* " (See Figs. 3-6-1 to 3-6-3)

1) Disconnect the connector on the "ASSY, MOTOR STEPPING *(4K000)* ". (Refer to Fig. 3-6-1.)
2) Remove the two "NUT HEX 3 *(4L000)* " ((A) and (B)) and remove the "ASSY, MOTOR STEPPING *(4K000)* ". (Refer to Fig. 3-6-1.)
   NOTE: Take care not to lose the "SPECIAL WASHER-4X0.3 *(4P000)*" when removing the "NUT HEX 3 *(4L000)*". Take care not to lose the four "GASKET, O RING(D2.8) *(4M000)* " when removing the "ASSY, MOTOR STEPPING *(4K000)* ".

ASSEMBLY NOTES:

1. Referring to Fig. 3-6-2, install the "ASSY, MOTOR STEPPING *(4K000)* " according to the following procedure.
   a. Hook the "BELT, MOTOR STEP *(4J000)* " to the "ASSY, MOTOR STEPPING *(4K000)*" and tighten the two "NUT HEX 3 *(4L000)* " at the point where the "BELT, MOTOR STEP *(4J000)* " stretches tightly.
   b. Referring to section 3-7, confirm that the adjustment tension value of the "BELT, DRUM *(4I000)*" is correct.
   c. Rotating the "PULLEY, DRUM *(4F000)* " clockwise, rotate the "BELT, MOTOR STEP *(4J000)* " more than one revolution.
   d. Set the Ruler (VJ8-0228) along the "BELT, MOTOR STEP *(4J000)* ", confirm that the pressure welding value is [0.34N±0.15N] when pressing the Dial Tension Gauge DTN-100G (VJ8-0227) until the play in the "BELT, MOTOR STEP *(4J000)* " is 0.5mm. The measuring position and the direction of pressure on the "BELT, MOTOR STEP *(4J000)* " are shown in Fig. 3-6-3.
   e. If the pressure welding value is not [0.34N±0.15N], loosen the "NUT HEX 3 *(4L000)* " (B) and fine-adjust the "ASSY, MOTOR STEPPING *(4K000)* ", then re-tighten the "NUT HEX 3 *(4L000)* " (B) again.
   f. Repeat steps c, d, and e above until the pressure welding value is within [0.34N±0.15N].

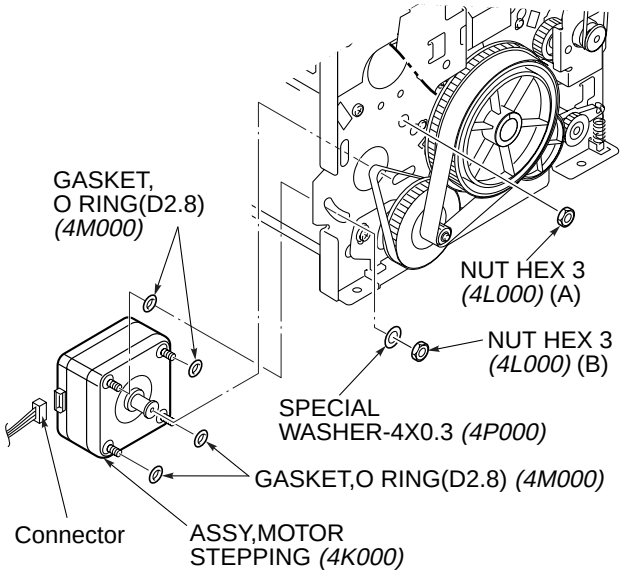


Fig. 3-6-1

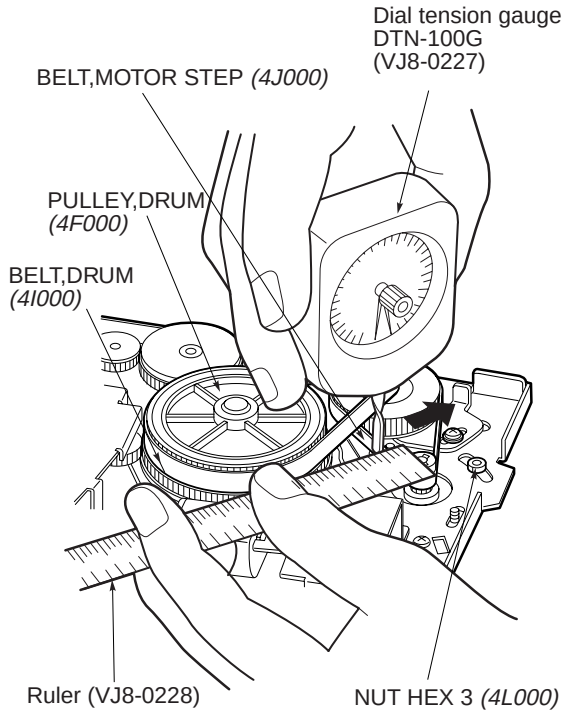


Fig. 3-6-2

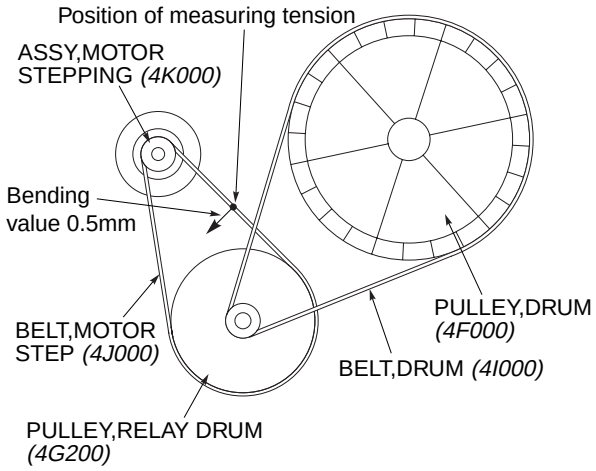


Fig. 3-6-3

3-7. RELAY PULLEY (See Figs. 3-7-1 to 3-7-3)

3-7-1. "BELT,MOTOR STEP *(4J000)* ", "BELT, DRUM *(4I000)* ", "ASSY, LEVER, PULLEY *(4G100)* ", and "PULLEY, RELAY DRUM *(4G200)* "

1) Remove the "SPECIAL SCREW-2.6X8 *(4H000)*" and the "SCR S-TPG BIN 2.6X3 *(4N000)* ". (Refer to Fig. 3-7-2.)
2) Remove the "BELT,MOTOR STEP *(4J000)* " and the "BELT,DRUM *(4I000)* ". (Refer to Fig. 3-7-2.)
3) Remove the "ASSY,LEVER,PULLEY *(4G100)*". (Refer to Fig. 3-7-2.)
4) Remove the "SPECIAL WAHSER-3X0.5 *(4G400)* " and the "STOPPER,BELT DRUM *(4G300)* ". (Refer to Fig. 3-7-2.)
5) Remove the "PULLEY,RELAY DRUM *(4G200)* ". (Refer to Fig. 3-7-2.)

ASSEMBLY NOTES:

1. Install the “PULLEY,RELAY DRUM *(4G200)* ” and the “STOPPER, BELT DRUM *(4G300)* ” to the “ASSY, LEVER, PULLEY *(4G100)* ” with the “SPECIAL WAHSER-3X0.5 *(4G400)* ”.
   Turn the raised side of the “STOPPER,BELT DRUM *(4G300)* ” toward the “PULLEY, DRUM *(4F000)* ” as shown in Fig. B of Fig. 3-7-2.
2. Insert portion A into hole 1 and initially install the “ASSY, LEVER, PULLEY *(4G100)* ” using the “SCR S-TPG BIN 2.6X3 *(4N000)* ” as shown in Fig. A of Fig. 3-7-2.
3. Referring to Fig. 3-7-3, adjust the pressure welding value and install the “ASSY,LEVER,PULLEY *(4G100)* ” as follows:
   a. Hook the “BELT, DRUM *(4I000)* ” and the “BELT, MOTOR STEP *(4J000)* ” on the gears, and tighten the “SPECIAL SCREW-2.6X8 *(4H000)* ” and the “SCR S-TPG BIN 2.6X3 *(4N000)* ” at the point where both belts stretch tightly.
   b. Rotating the “PULLEY, DRUM *(4F000)* ” clockwise, rotate the “BELT, DRUM *(4I000)* ” more than one revolution.
   c. Set the Ruler (VJ8-0228) along the “BELT,DRUM *(4I000)* ”, and confirm that the pressure welding value is [1.34N±0.29N] when pressing the Dial Tension Gauge DTN-150G (VJ8-0226) until play in the “BELT,DRUM *(4I000)* ” is 1mm. The measuring position and the direction of pressure are shown in Fig. 3-7-1.
   d. If the pressure welding value is not [1.34N±0.29N], loosen the “SPECIAL SCREW-2.6X8 *(4H000)* ” and fine-adjust the “ASSY,LEVER,PULLEY *(4G100)* ”, then re-tighten the “SPECIAL SCREW-2.6X8 *(4H000)* ”. Repeat steps b and c above until the pressure welding value is within [1.34N±0.29N].
   e. Referring to section 3-6, adjust the tension of the “BELT,MOTOR STEP *(4J000)* ”.

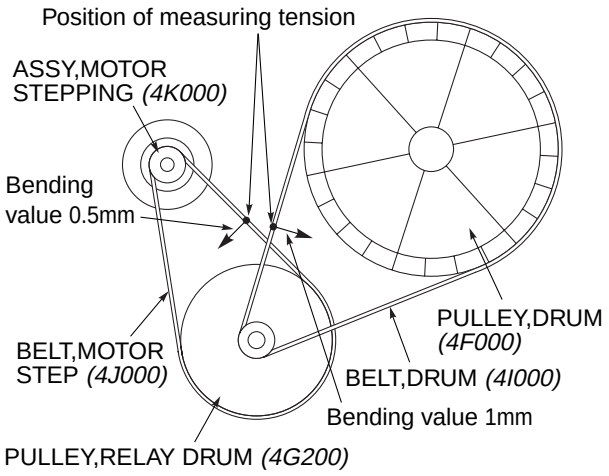


Fig. 3-7-1

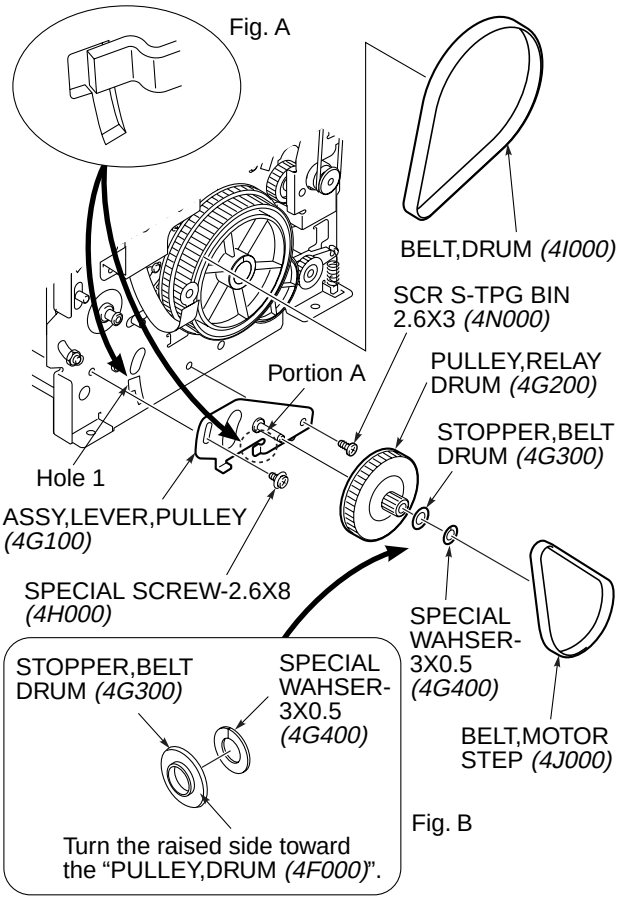


Fig. 3-7-2

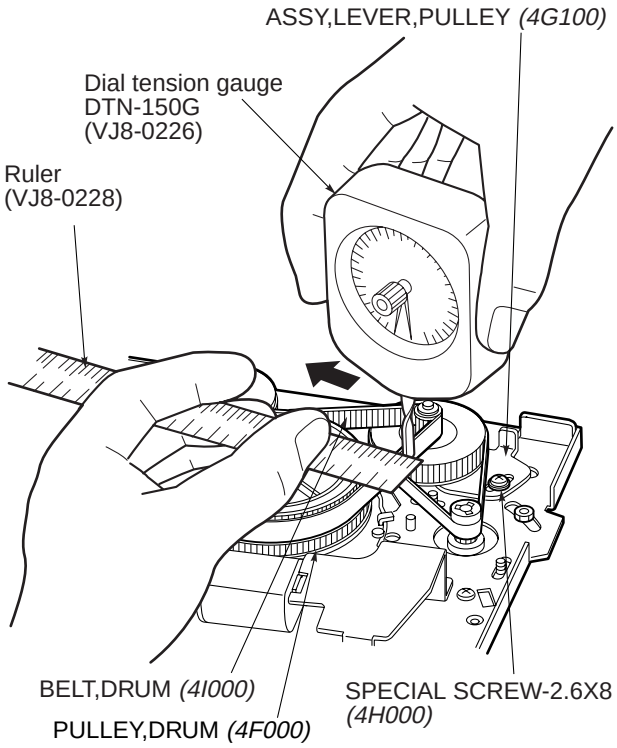


Fig. 3-7-3

3-8. "PULLEY,DRUM *(4F000)* " (See Fig. 3-8-1)

1) Referring to section 3-2, remove the "COMPL,HOUSING REEL S *(2A000)* ".
2) Referring to section 3-5, remove the "ARM,TRAY PAPER L *(6L000)* ".
3) Referring to section 3-7, remove the "SPECIAL WAHSER-3X0.5 *(4G400)* " and the "STOPPER,BELT DRUM *(4G300)* ", and remove the "BELT,DRUM *(4I000)* ".
4) Remove the "SPECIAL WASHER-7.1X0.8 *(4B000)* " and remove the "PULLEY,DRUM *(4F000)* ".

ASSEMBLY NOTES:

1. Apply grease (VJ8-0229) to portion A as shown in Fig. 3-8-1.
2. Adjust the "SHAFT,PULLEY FIX *(4E000)* " so that the length of portion B and portion C measured look to be equal as shown in Fig. A.
3. Place the "PULLEY,DRUM *(4F000)* " so that the slots on its reverse side are aligned with and enter the "SHAFT, PULLEY FIX *(4E000)* " as shown in Fig. B.
4. While pressing the top of the opposite side of shaft 1, push the "PULLEY,DRUM *(4F000)* " on to shaft 1 and install the "SPECIAL WASHER-7.1X0.8 *(4B000)* ".
5. Referring to section 3-6, adjust the tension of the "BELT,MOTOR STEP *(4J000)* ".
6. Referring to section 3-7, adjust the tension of the "BELT,DRUM *(4I000)* ".

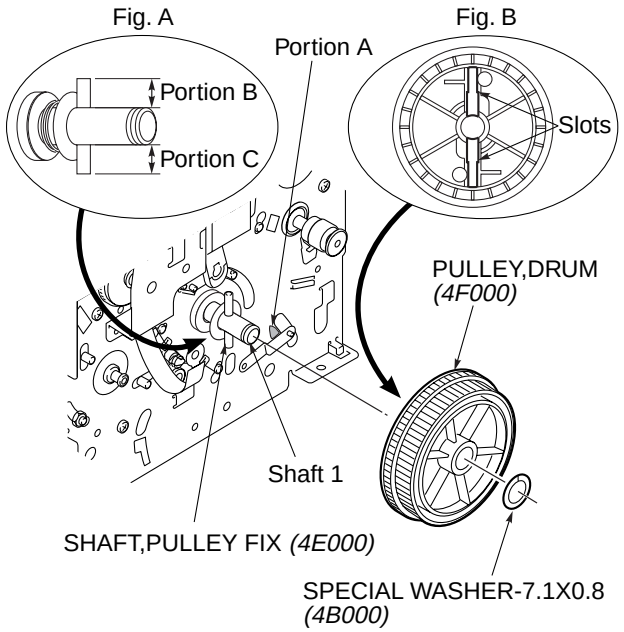


Fig. 3-8-1

3-9. CAM MOTOR (See Figs. 3-9-1 to 3-9-4)

3-9-1. "COMPL,MOTOR CAM *(6A000)* " and "ASSY,GEAR,CAM *(5J000)* "

1) Referring to section 3-6, remove the "ASSY,MOTOR STEPPING *(4K000)* ".
2) Rotate the worm gear on the "COMPL,MOTOR CAM *(6A000)* " until the indication shown in the mechanism mode verification hole becomes [1]. (For the location of the mechanism mode verification hole, refer to Fig. 3-9-2.)
   NOTE: Rotating in direction A moves the numeral up and direction B moves it down as shown in Fig. A
3) Remove the "SCR S-TPG BIN 2.6X4 *(6B000)* ". (Refer to Fig. 3-9-1.)
4) Release the cable on the "COMPL,MOTOR CAM *(6A000)* " from the hooks on the "GUIDE,CASSETTE R *(3B100)* ".
5) Remove the "FIXER *(7Q000)* ".
6) While pushing the "COMPL,MOTOR CAM *(6A000)* " in the direction of the arrow A with a screwdriver, slide it in the direction of the arrow B and remove as shown in Fig. B of Fig. 3-9-1.
   NOTE: Be careful that the "ASSY,CHASSIS L *(7C000)* " is not distorted.
7) Remove the "ASSY,GEAR,CAM *(5J000)* ".

ASSEMBLY NOTES:

1. Install the "ASSY,GEAR,CAM *(5J000)* " in the designated position, move gear on the "ASSY,CHASSIS L *(7C000)* " side approximately 5mm in the direction C as shown in Fig. H of Fig. 3-9-3 and hold it with your right hand.
2. Rotate the gear with your forefinger in the direction D ("CAM,MECHANISM R *(5L000)* " rotates too) as shown in Fig. H of Fig. 3-9-3. Then press portion F on the "CAM,MECHANISM R *(5L000)* " against the shaft on the "COMPL,HOLDER,PINCH EXIT *(5B000)* " as shown in Fig. G of Fig. 3-9-3.
3. While keeping the state in step 2 above, rotate the "CAM,MECHANISM L *(5K000)* " with your finger and press portion E on it against the shaft of the "COMPL, HOLDER,PINCH EXIT *(5B000)* " as shown in Fig. F of Fig. 3-9-3.
4. While keeping the state in steps 2 and 3 above, install shaft 1 on the "ASSY,GEAR,CAM *(5J000)* " into slot 1 on the "ASSY,CHASSIS L *(7C000)* " without a gap. (Refer to Fig. H of Fig. 3-9-3.)
5. Keep the state in step 4 above so that there are no gaps between the gears on either side of the "ASSY,GEAR,CAM *(5J000)* ", the gears on the "CAM,MECHANISM L *(5K000)* " and the "CAM,MECHANISM R *(5L000)* ".
6. Install the "COMPL,MOTOR CAM *(6A000)* " so that portion A, portion B and portion C align accurately with the dowels as shown in Fig. C, Fig. D and Fig. E of Fig. 3-9-2, and tighten the "SCR S-TPG BIN 2.6X4 *(6B000)* ".
7. Referring Fig. A of Fig. 3-9-1, rotate the worm gear on the "COMPL,MOTOR CAM *(6A000)* " in direction A with your finger. Then place one end of the shaft of the "COMPL, HOLDER,PINCH EXIT *(5B000)* " onto portion G of the "CAM,MECHANISM L *(5K000)* " and the other end onto portion H of the "CAM, MECHANISM R *(5L000)* " as shown in Fig. 3-9-4.
8. Referring Fig. A of Fig. 3-9-1, rotate the worm gear on the "COMPL,MOTOR CAM *(6A000)* " in direction B with your finger, and verify that the shafts on either side of the "COMPL, HOLDER,PINCH EXIT *(5B000)* " slip down at the same time. If the "CAM,MECHANISM R *(5L000)* " and

the "CAM,MECHANISM L *(5K000)*" are aligned correctly, the shafts on either side of the "COMPL, HOLDER,PINCH EXIT *(5B000)* " will slip down at the same time. If not correctly aligned, the timing of the shaft drop will be off.

9. If, on completion of step 8, the Cam Mechanism is out of phase, repeat steps 1 to 8.
10. Upon completion of installing the "COMPL,MOTOR CAM *(6A000)* " correctly, rotate the worm gear on it until the indication shown in the mechanism mode verification hole become [1].
11. Referring to section 3-6, adjust the tension of the "BELT,MOTOR STEP *(4J000)* ".

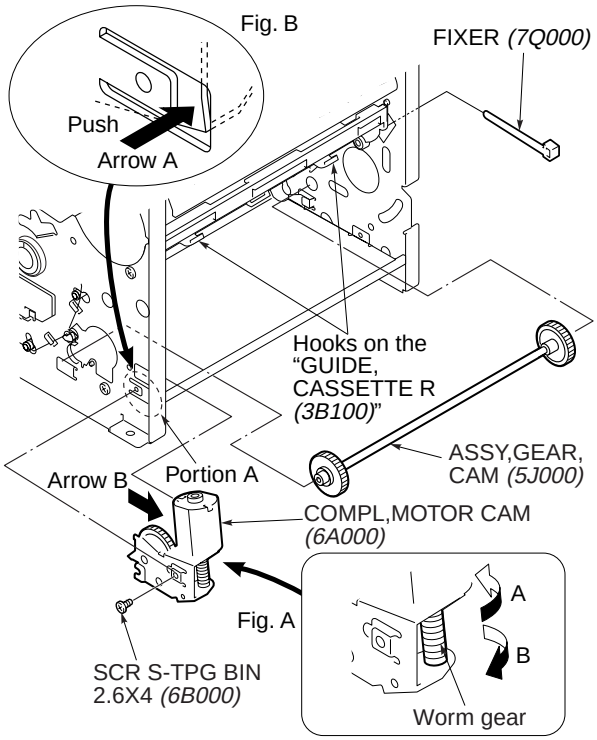


Fig. 3-9-1

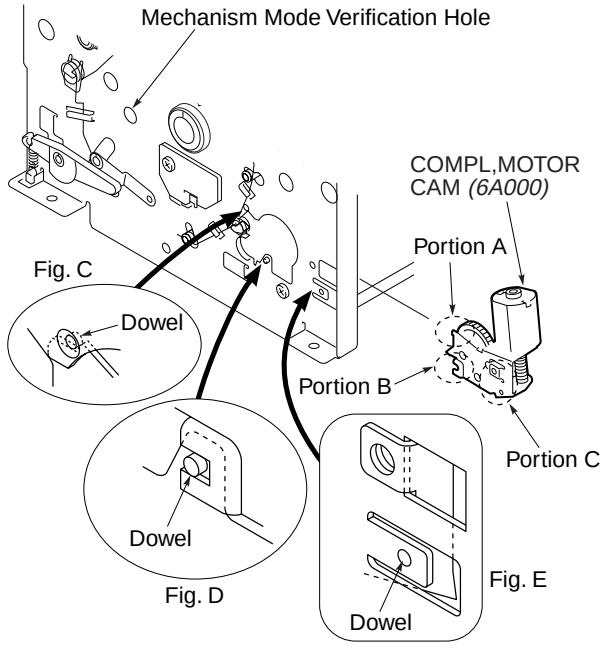


Fig. 3-9-2

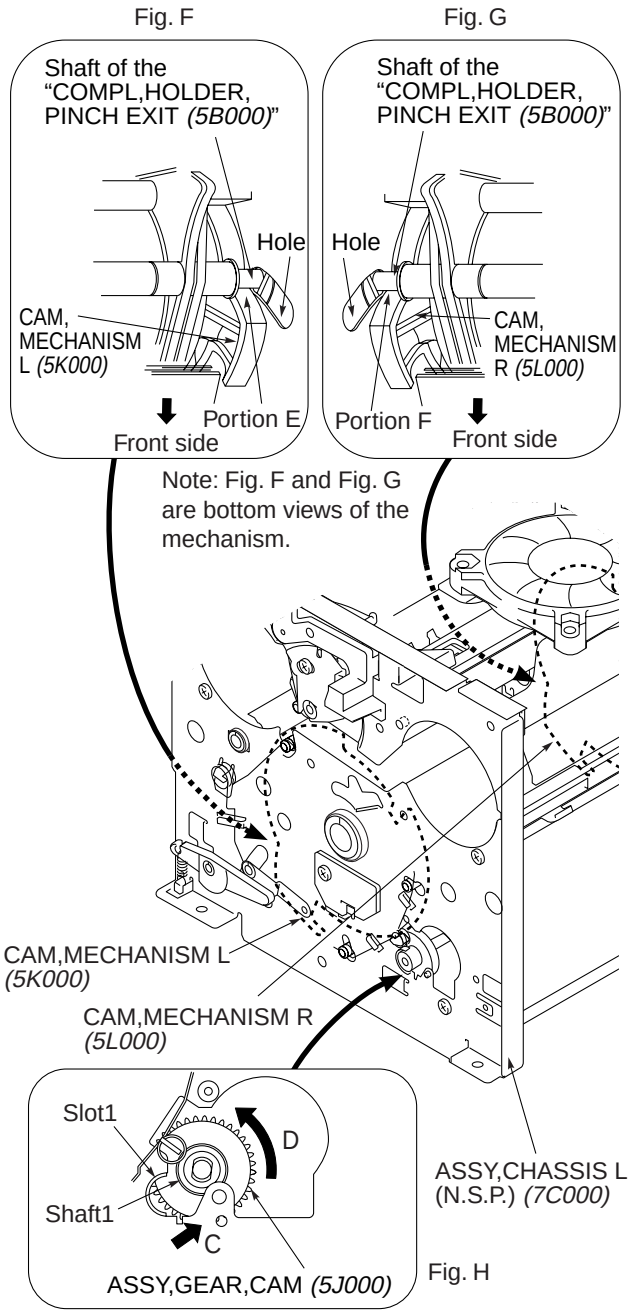


Fig. 3-9-3

Note: Fig. 3-9-4 is bottom views of the mechanism.

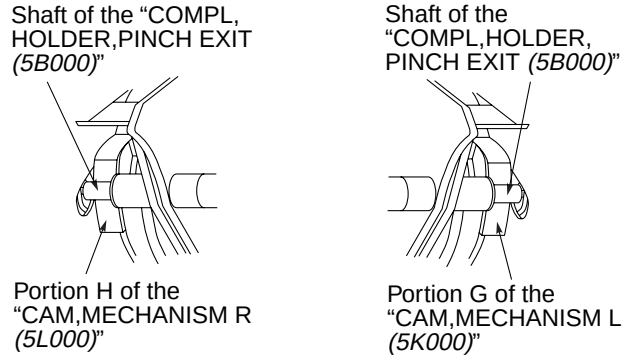


Fig. 3-9-4

3-10. "CHASSIS,SUB LOWER *(7E000)* " (See Fig. 3-10-1)

1) Referring to section 3-7, remove the "ASSY, LEVER, PULLEY *(4G100)* " and the "PULLEY, RELAY DRUM *(4G200)* ".
2) Remove the two "SCR S-TPG BIN 2.6X4 *(7F000)* " and remove the "CHASSIS,SUB LOWER *(7E000)* ".

ASSEMBLY NOTES:

1. Install the "CHASSIS,SUB LOWER *(7E000)* " so that portions A and B hook onto the "ASSY,CHASSIS R *(7A000)* " and the "ASSY,CHASSIS L *(7C000)* " respectively as shown in Fig. A and Fig. B.
2. Install the "CHASSIS,SUB LOWER *(7E000)* " so that it does not contact the relay gear on the "COMPL,MOTOR CAM *(6A000)* ".

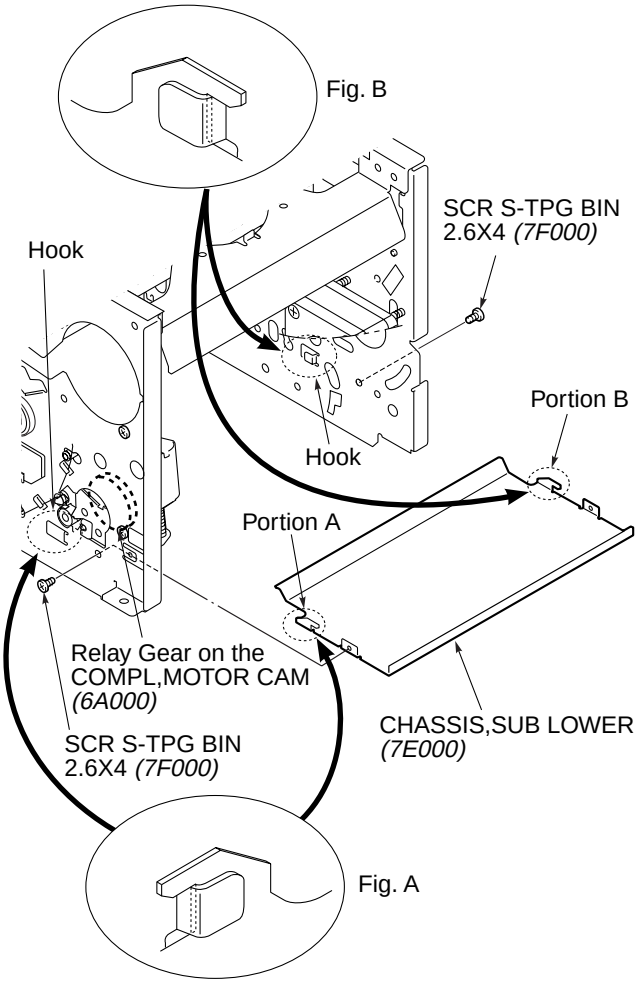


Fig. 3-10-1

3-11. "COMPL,HOLDER,PINCH SIDE *(5A000)* ", "COMPL,HOLDER,PINCH PICK *(5D000)* ", "COMPL,HOLDER, PINCH EXIT F *(5E000)* ", and "COMPL, HOLDER,PINCH EXIT *(5B000)* " (See Figs. 3-11-1 to 3-11-3)

NOTE: Be careful not to dirty the pinch rollers on each "COMPL,HOLDER,PINCH ○○○".

1) Referring to section 3-3, remove the "ASSY,LEVER,TPH DOWN *(1F000)* " and the "COMPL,HOLDER TPH *(1A000)* ".
2) Referring to section 3-5, remove the "ASSY, ROLLER,PICK GEAR *(6J000)* " and the "ARM,TRAY PAPER L *(6L000)* ".
3) Referring to section 3-6, remove the "ASSY, MOTOR STEPPING *(4K000)* ".
4) Referring to section 3-8, remove the "PULLEY,DRUM *(4F000)* ".
5) Referring to section 3-9, remove the "COMPL,MOTOR CAM *(6A000)* " and the "ASSY,GEAR,CAM *(5J000)* ".
6) Referring to section 3-10, remove the "CHASSIS,SUB LOWER *(7E000)* ".
7) Remove the "SPRING,PINCH ROLLER F *(5F000)* " on the both sides. (Refer to Fig. 3-11-1 and Fig. 3-11-2.)
8) Remove the "COMPL,HOLDER,PINCH SIDE *(5A000)* ". (Refer to Fig. 3-11-2.)
9) Remove the "SPRING,PINCH ROLLER RB *(5H000)* " and the "SPRING, PINCH ROLLER LB *(5G000)* ". (Refer to Fig. 3-11-1 and Fig. 3-11-3.)
10) Remove the "COMPL,HOLDER,PINCH PICK *(5D000)* ". (Refer to Fig. 3-11-2.)
11) Remove the "COMPL,HOLDER,PINCH EXIT F *(5E000)* ". (Refer to Fig. 3-11-3.)
12) Remove the two "SPECIAL WASHER-1.5X0.5 *(5C000)* " on the both sides and the "COMPL,HOLDER,PINCH EXIT *(5B000)* ". (Refer to Fig. 3-11-3.)

ASSEMBLY NOTES:

1. Install the "COMPL,HOLDER,PINCH EXIT *(5B000)* " so that the left and the right (the black part and the white part) of it are in proper position. (Refer to Fig. 3-11-3.)
2. Install the "COMPL,HOLDER,PINCH EXIT F *(5E000)* " so that the left and the right (the black part and the white part) of it are in proper position. Insert shafts of the both side into the each big holes, then move them to the each small holes as shown in Fig. F of Fig. 3-11-3.
3. Install the "COMPL,HOLDER,PINCH PICK *(5D000)* " so that the left and the right (the black part and the white part) of it is in proper position. Insert shafts on both sides into each big hole, then move them to each small hole as shown in Fig. C of Fig. 3-11-2.
4. Install the "SPRING,PINCH ROLLER LB *(5G000)* " as shown in Fig. E of Fig. 3-11-2.
5. Install the "SPRING,PINCH ROLLER RB *(5H000)* " as shown in Fig. A of Fig. 3-11-2.
6. Apply grease (VJ8-0229) to points where the shafts of the "COMPL,HOLDER,PINCH EXIT *(5B000)* " contact the "SPRING,PINCH ROLLER RB *(5H000)* " and "SPRING, PINCH ROLLER LB *(5G000)* ". (Refer to Fig. 3-11-1 and Fig. 3-11-3.)
7. Insert shafts of both sides of the "COMPL,HOLDER, PINCH SIDE *(5A000)* " into each big hole, then move them to each small hole as shown in Fig. C of Fig. 3-11-1.
8. Install the "SPRING,PINCH ROLLER F *(5F000)* " as shown in Fig. B of Fig. 3-11-1 and Fig. D of Fig. 3-11-2.
9. Referring to section 3-14, be careful not to allow dust or the trash to stick to the surface of the "COMPL,PIPE DRUM RUBBER *(4A000)* ".

10. Referring to section 3-9, align phase between the “CAM, MECHANISM R *(5L000)”* and the “CAM,MECHANISM L *(5K000)*”.

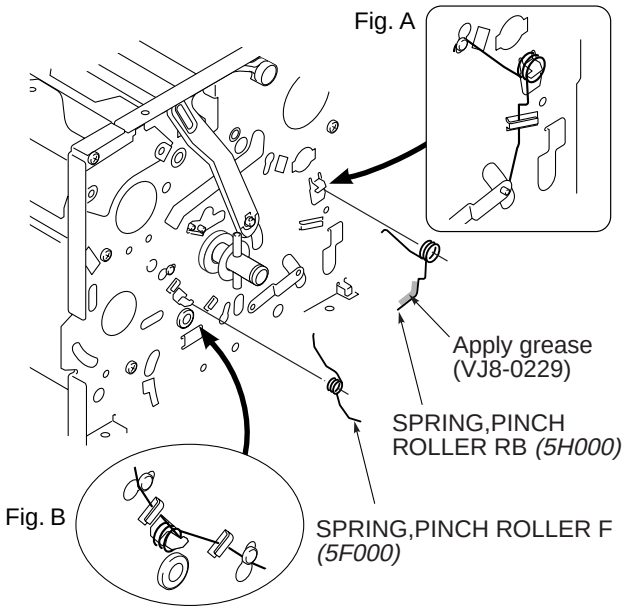


Fig. 3-11-1

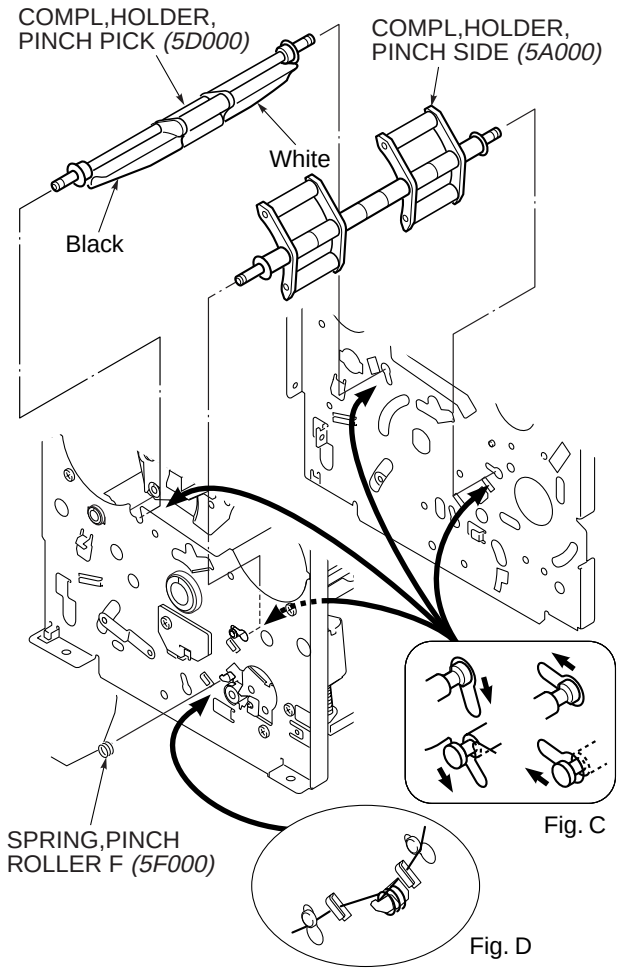


Fig. 3-11-2

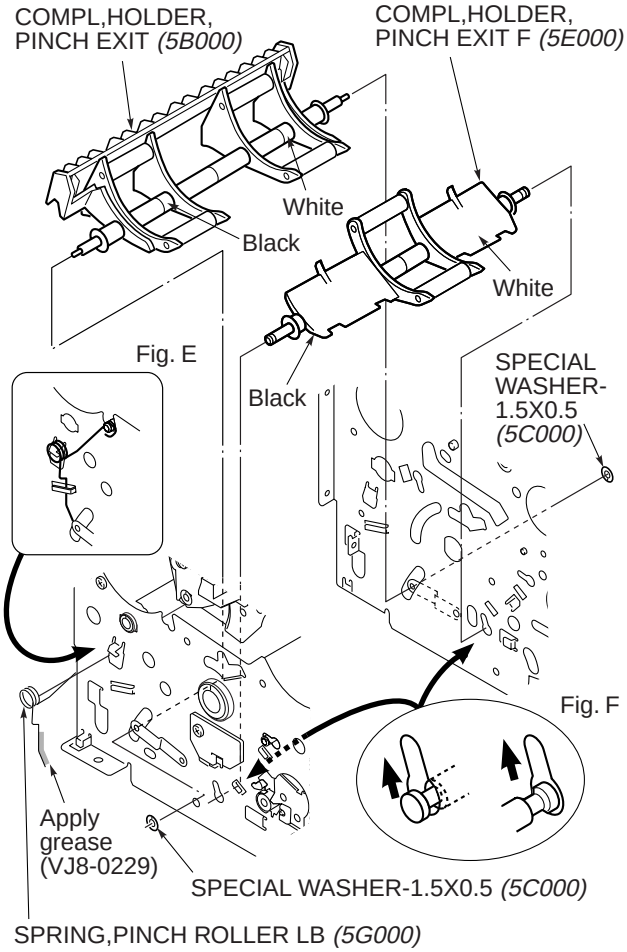


Fig. 3-11-3

3-12. "SLIDE,LEVER TPH *(5M000)* " (See Fig. 3-12-1)

1) Referring to section 3-11, remove the "COMPL, HOLDER, PINCH PICK *(5D000)* ".
2) Rotate the "SLIDE,LEVER TPH *(5M000)*" clockwise until the shape of the boss on it aligns with the shape of the hole as shown in Fig. A of Fig. 3-12-1.
3) Pull out the "SLIDE,LEVER TPH *(5M000)* ".

ASSEMBLY NOTES:

1. Apply grease (VJ8-0229) around the boss on the "CAM,MECHANISM R *(5L000)* ".
2. Insert the boss all over into hole and rotate the "SLIDE,LEVER TPH *(5M000)* " in the direction of the arrow while pressing its base as shown in Fig. A of Fig. 3-12-1.
3. Take care not to break the boss on the "SLIDE,LEVER TPH *(5M000)* ".
4. Referring to section 3-9, align phase between the "CAM, MECHANISM R *(5L000)*" and the "CAM,MECHANISM L *(5K000)* ".
5. Referring to section 3-6, adjust the tension of the "BELT,MOTOR STEP *(4J000)* ".
6. Referring to section 3-7, adjust the tension of the "BELT, DRUM *(4I000)* " is correct.

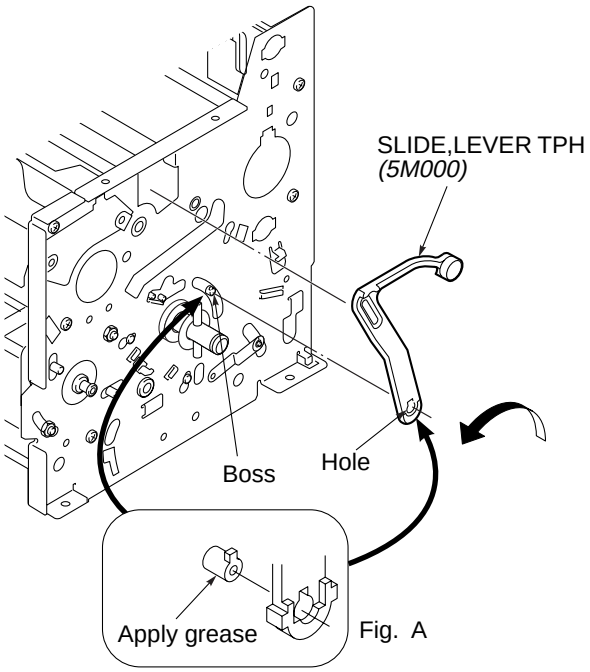


Fig. 3-12-1

3-13. "HOUSING,MOTOR FAN *(7N000)* " and "COMPL PWB,MC-6 *(MC-6)* " (See Fig. 3-13-1)

1) Referring to section 3-1, remove the "MOTOR,FAN DC 1.8W *(7M000)*" and the "GUIDE,INK-SVF01/EX *(03800)*".
2) Referring to section 3-3, remove the "COMPL,HOUSING REEL T *(2E000)* ".
3) Release the "FIXER *(7Q000)* ".
4) Referring to Fig. 3-3-2, disconnect the connector.
5) Remove the two "SCR S-TPG BIN 2.6X4 *(7L000)* " and "COMPL PWB,MC-6 *(MC-6)* ".
6) Remove the two "SCR S-TPG BIN 2.6X4 *(7H000)* " and "HOUSING,MOTOR FAN *(7N000)* ".

ASSEMBLY NOTES:

1. Align each of the three dowels with each hole 2 on the "HOUSING,MOTOR FAN *(7N000)* " and install it.
2. Pass the cable through hole 1 and put portion A over hole 1 as shown in Fig. A of Fig. 3-13-1.

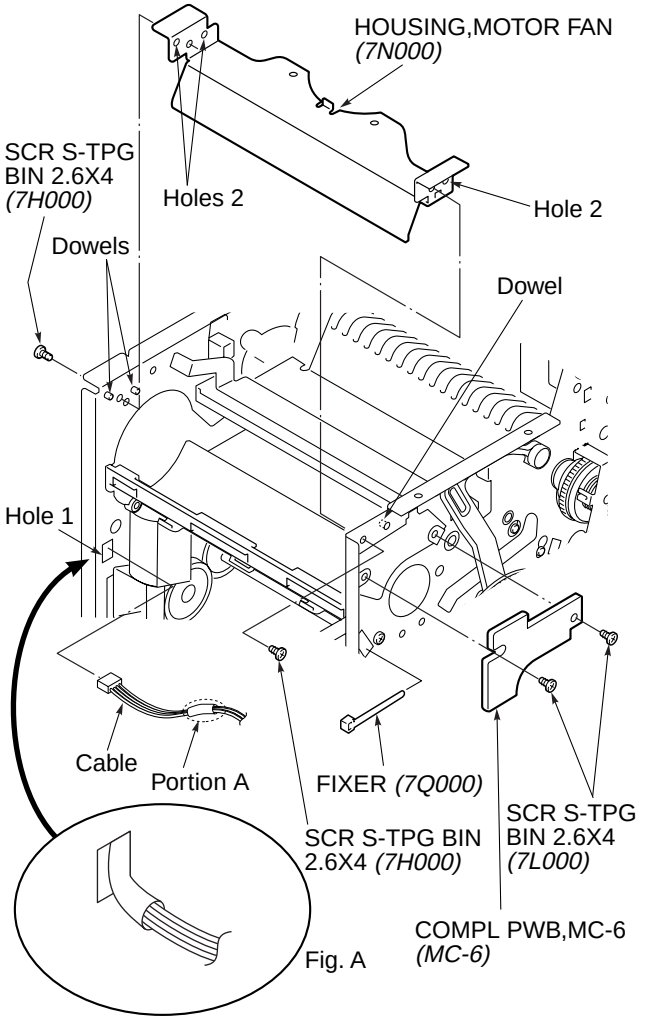


Fig. 3-13-1

MEMO

3-14. "ASSY,CHASSIS R *(7A000)* ", "COMPL, PIPE DRUM RUBBER *(4A000)* ", "COMPL,GUIDE,PAPER *(5I000)* ", "CAM,MECHANISM R *(5L000)* ", and "CAM,MECHANISM L *(5K000)* " (See Figs. 3-14-1 to 3-14-4)

1) Referring to sections 3-1 through 3-13, remove each part.
2) Remove the "SPECIAL WASHER-7.1X0.8 *(4B000)* ". (Refer to Fig. 3-14-3.)
3) Remove the "SCR S-TPG BIN 2.6X4 *(3B200)* " on the "ASSY,CHASSIS R *(7A000)*" side. (Refer to Fig. 3-14-2.)
4) Remove the two "SCR S-TPG BIN 2.6X4 *(6P300)*" on the "ASSY,CHASSIS R *(7A000)*" side. (Refer to Fig. 3-14-2.)
5) Pull connector 1 and connector 2 out from each hole. (Refer to Fig. 3-14-2.)
6) Place the "ASSY,CHASSIS L *(7C000)*" down and remove the "ASSY,CHASSIS R *(7A000)* ".
7) Pull out the "SHAFT,PULLEY FIX *(4E000)* " and remove the two "WASHER Y 8X16X0.25 *(4C000)* " and the "SPRING,PRESSURE DRUM *(4D000)* ". (Refer to Fig. 3-14-1.)
8) Remove the "COMPL,PIPE DRUM RUBBER *(4A000)* ", "COMPL,GUIDE,PAPER *(5I000)* ", "CAM,MECHANISM R *(5L000)* ", and "CAM,MECHANISM L *(5K000)* ".

ASSEMBLY NOTES:

1. Apply grease (VJ8-0229) as shown in Fig. C of Fig. 3-14-3.
2. Install the "COMPL,GUIDE,PAPER *(5I000)* " and "CAM,MECHANISM L *(5K000)* " into the "COMPL,PIPE DRUM RUBBER *(4A000)* ". Install the "CAM, MECHANISM L *(5K000)*" so that shaft 1 and shaft 2 on the "COMPL,GUIDE,PAPER *(5I000)*" are set into the slots as shown in Fig. D of Fig. 3-14-3.
3. Install the assembly ("COMPL,GUIDE,PAPER *(5I000)* ", "CAM,MECHANISM L *(5K000)* " and "COMPL,PIPE DRUM RUBBER *(4A000)* ") completed in step 2 to the "ASSY,CHASSIS L *(7C000)* " as shown in Fig. F of Fig. 3-14-4.
4. Install the "CAM,MECHANISM R *(5L000)*" so that shaft 3 and shaft 4 on the "COMPL,GUIDE,PAPER *(5I000)* " are set into the slots as shown in Fig. E of Fig. 3-14-3.
5. Install the "ASSY,CHASSIS R *(7A000)*" as shown in Fig. G of Fig. 3-14-4.
6. Pass connector 1 and connector 2 through hole 1 and hole 2 on the "ASSY,CHASSIS R *(7A000)* " respectively, and put portion A and portion B over hole 1 and hole 2 respectively. (Refer to Fig. 3-14-2.)
7. Insert dowel 1 into slot 1 and insert dowel 2 into hole 3 as shown in Fig. 3-14-2. (About slot 1 and hole 3 on the "GUIDE,PAPER EXIT *(6P100)* ", refer to Fig. A of Fig. 3-14-2.)
8. Insert dowel 3 into hole 4 and insert dowel 4 into hole 5 as shown in Fig. 3-14-2. (About hole 4 and hole 5 on the "GUIDE,CASSETTE R *(3B100)* ", refer to Fig. B of Fig. 3-14-2.)
9. Install the two "SCR S-TPG BIN 2.6X4 *(6P300)* " and the "SCR S-TPG BIN 2.6X4 *(3B200)* ", then install the "ASSY,CHASSIS R *(7A000)* ".
10. Do not allow dust or the trash to stick to the surface of the "COMPL,PIPE DRUM RUBBER *(4A000)* ".
11. Referring to section 3-9, align phase between the "CAM, MECHANISM R *(5L000)* " and the "CAM,MECHANISM L *(5K000)* ".
12. Referring to section 3-6, adjust the tension of the "BELT,MOTOR STEP *(4J000)* ".
13. Referring to section 3-7, adjust the tension of the "BELT,DRUM *(4I000)* ".

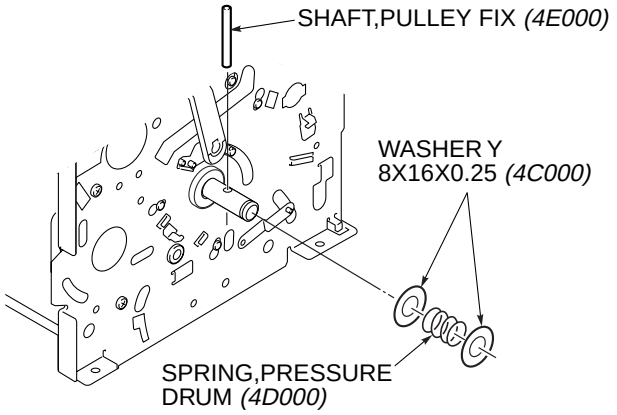


Fig. 3-14-1

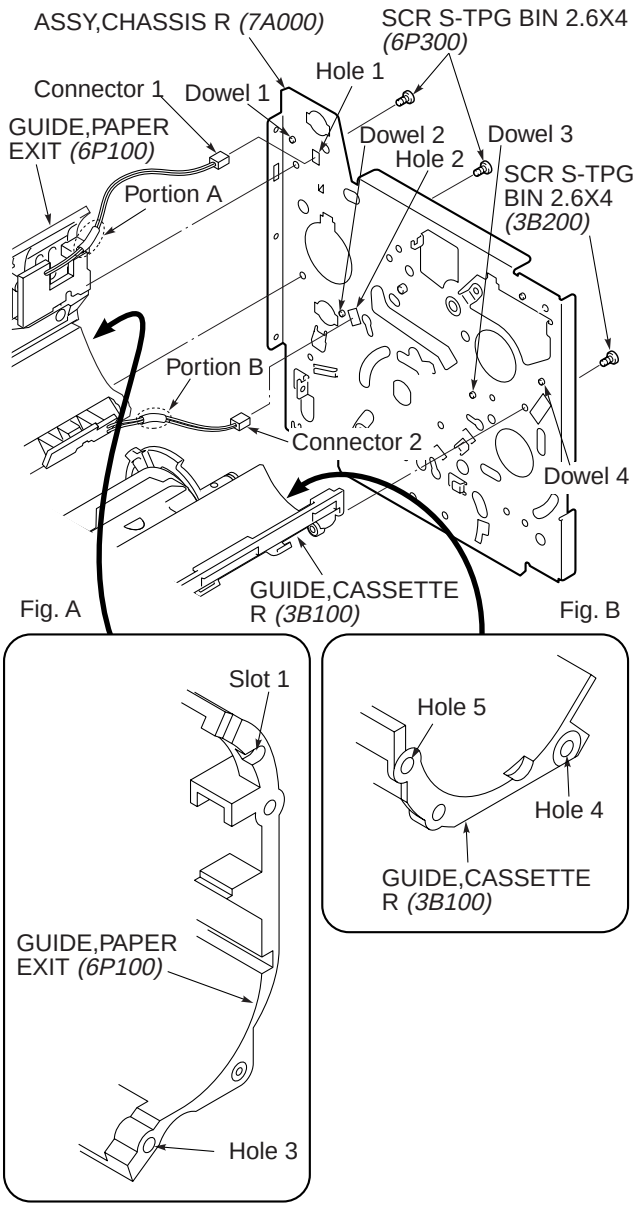


Fig. 3-14-2

Fig. C

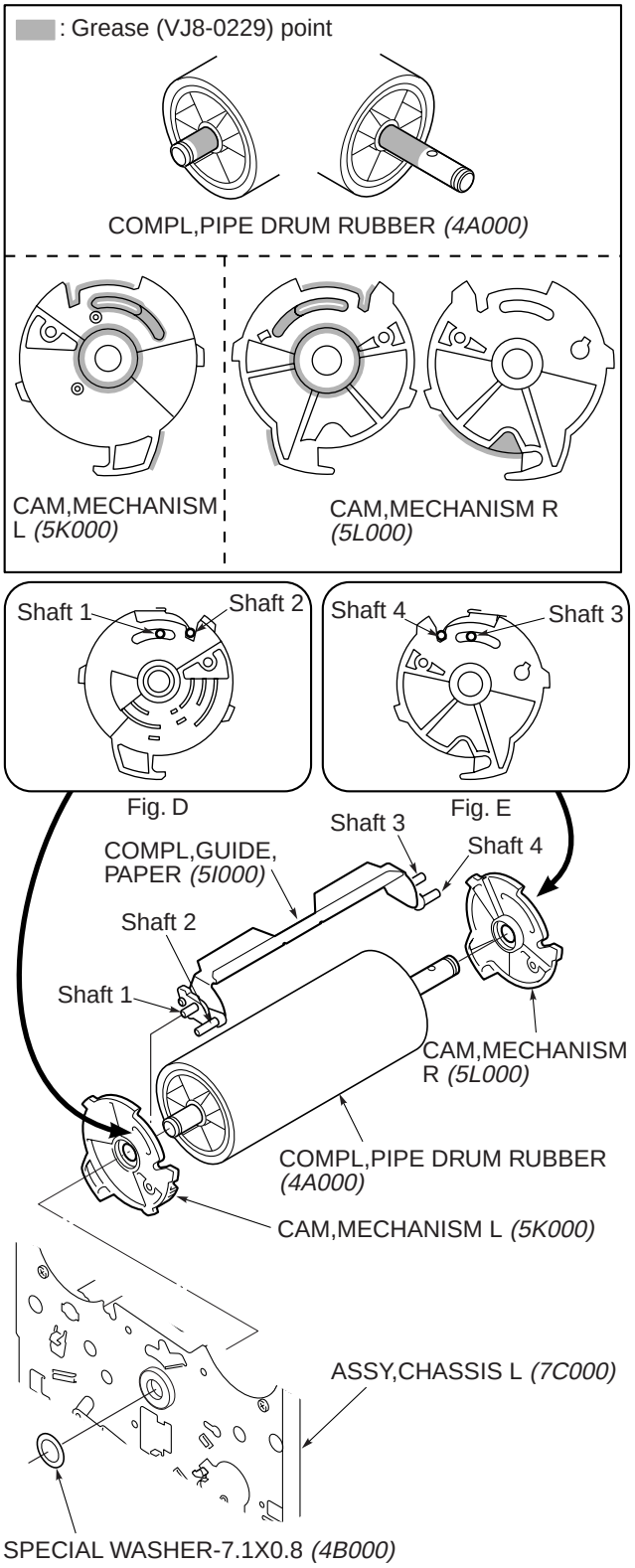


Fig. 3-14-3

Fig. F

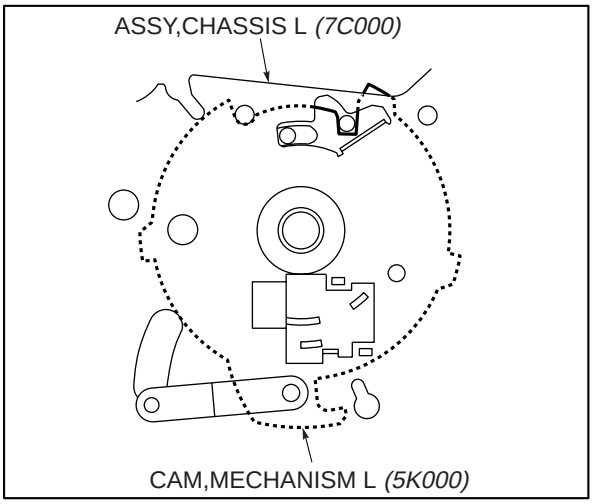


Fig. G

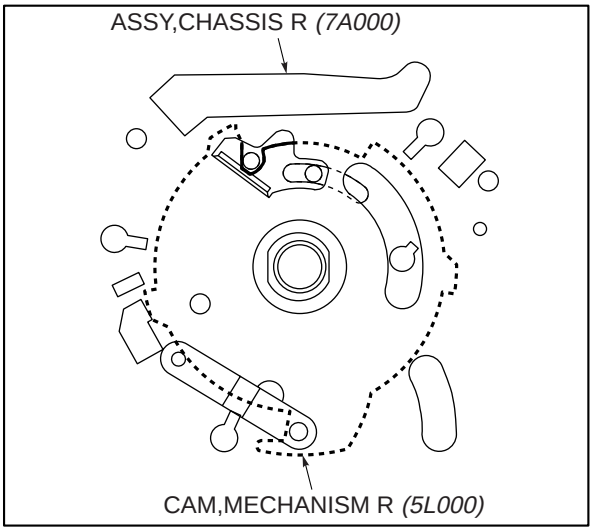


Fig. 3-14-4

3-15. "GUIDE,CASSETTE R *(3B100)* " and "COMPL PWB,MC-3 *(MC-3)* " (See Figs. 3-15-1 to 3-15-2)

1) Referring to section 3-14, remove the "ASSY,CHASSIS R *(7A000)* ".
2) Remove the "SCR S-TPG BIN 2.6X4 *(3B200)* " and remove the "GUIDE,CASSETTE R *(3B100)* ". (Refer to Fig. 3-15-1.)
3) Remove the two "SCR S-TPG BIN 2.6X4 *(3C000)* " and remove the "COMPL PWB,MC-3 *(MC-3)* ". (Refer to Fig. 3-15-2.)

ASSEMBLY NOTES:

1. Install the "GUIDE,CASSETTE R *(3B100)* " so that the positioning hole on it aligns with the dowel on the "ASSY,CHASSIS L *(7C000)* " as shown in Fig. A of Fig. 3-15-1.
2. Referring to section 3-9, align phase between the "CAM, MECHANISM R *(5L000)* " and the "CAM,MECHANISM L *(5K000)* ".
3. Referring to section 3-6 and 3-7, adjust the tension of the "BELT,MOTOR STEP *(4J000)* " and "BELT,DRUM *(4I000)* ".

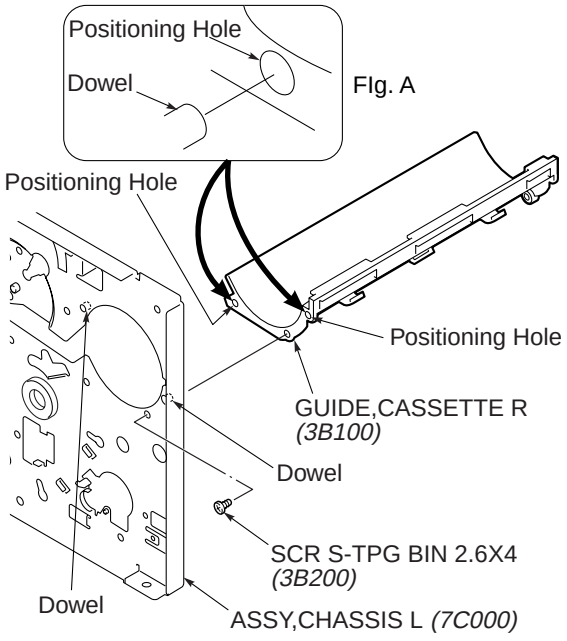


Fig. 3-15-1

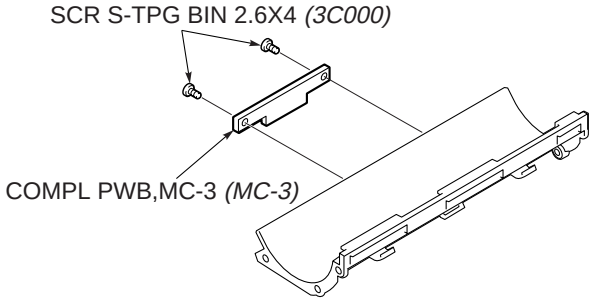


Fig. 3-15-2

3-16. "GUIDE,PAPER EXIT *(6P100)* ", "COMPL PWB,MC-4 *(MC-4)* ", and "COMPL PWB,MC-5 *(MC-5)* " (See Figs. 3-16-1 to 3-16-2)

1) Referring to section 3-14, remove the "ASSY,CHASSIS R *(7A000)* ".
2) Remove the two "SCR S-TPG BIN 2.6X4 *(6P300)* " and remove the "GUIDE,PAPER EXIT *(6P100)* ". (Refer to Fig. 3-16-1.)
3) Remove the two "SCR S-TPG BIN 2.6X4 *(6Q000)* " and remove the "COMPL PWB,MC-4 *(MC-4)* ". (Refer to Fig. 3-16-1.)
4) Remove the two "SCR S-TPG BIN 2.6X4 *(6Q000)* " and remove the "COMPL PWB,MC-5 *(MC-5)* ". (Refer to Fig. 3-16-2.)

ASSEMBLY NOTES:

1. Install the "GUIDE,PAPER EXIT *(6P100)* " so that the positioning hole on it aligns with the dowel on the "ASSY,CHASSIS L *(7C000)* " as shown in Fig. A.
2. Referring to section 3-9, align phase between the "CAM, MECHANISM R *(5L000)* " and the "CAM,MECHANISM L *(5K000)* ".
3. Referring to section 3-6 and 3-7, adjust the tension of the "BELT,MOTOR STEP *(4J000)* " and "BELT,DRUM *(4I000)* ".

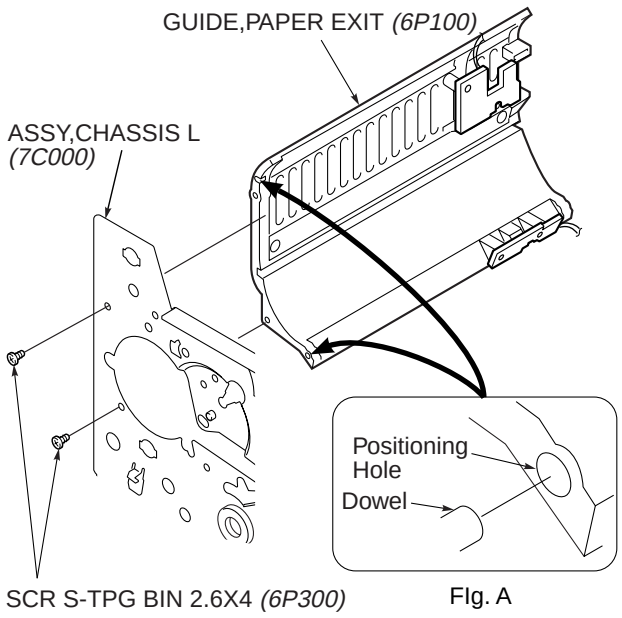


Fig. 3-16-1

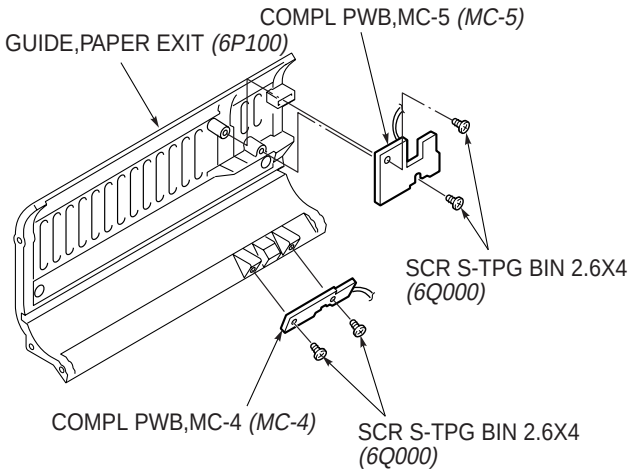


Fig. 3-16-2

3-17. "LEVER,TPH ADJUST *(1D000)* ", "BEARING,DRUM *(7D000)* ", and "BEARING,DRUM *(7B000)* " (See Figs. 3-17-1 to 3-17-2)

1) When removing the "BEARING,DRUM *(7B000)* " or the "LEVER,TPH ADJUST *(1D000)*" on the "ASSY,CHASSIS R *(7A000)* " side, refer to section 3-14 and remove the "ASSY,CHASSIS R *(7A000)* ". (Refer to Fig. 3-17-1.)
2) When removing the "BEARING,DRUM *(7D000)* " or the "LEVER,TPH ADJUST *(1D000)*" on the "ASSY,CHASSIS L *(7C000)* " side, refer to section 3-1 and remove the "GUIDE,INK-SVF01/EX *(03800)*". (Refer to Fig. 3-17-2.)
3) Remove the two "SCR S-TPG BIN 2.6X4 *(1E000)* ". (Refer to Fig. 3-17-1 and Fig. 3-17-2.)
4) Remove the "LEVER,TPH ADJUST *(1D000)* ". (Refer to Fig. 3-17-1 and Fig. 3-17-2.)
5) Remove the "BEARING,DRUM *(7D000)* ". (Refer to Fig. 3-17-2.)
6) Remove the "BEARING,DRUM *(7B000)* ". (Refer to Fig. 3-17-1.)

ASSEMBLY NOTES:

1. Align hole 1 on the "LEVER,TPH ADJUST *(1D000)* " with the dowel on the "ASSY,CHASSIS R *(7A000)* " or the "ASSY,CHASSIS L *(7C000)* ". (Refer to Fig. 3-17-1 and Fig. 3-17-2.)
2. Align hole 2 on the "LEVER,TPH ADJUST *(1D000)* " with hole 3 on the "ASSY,CHASSIS R *(7A000)* " or the "ASSY,CHASSIS L *(7C000)* ". (Refer to Fig. 3-17-1 and Fig. 3-17-2.)
3. Referring to Fig. A of Fig. 3-17-2, insert the Lever TPH Adjusting Tool (VJ8-0225) perpendicularly against the "LEVER,TPH ADJUST *(1D000)* " and then into the hole aligned in step 2 above, and align position of the "LEVER,TPH ADJUST *(1D000)*" on the "ASSY,CHASSIS L *(7C000)* " side. Then tighten "SCR S-TPG BIN 2.6X4 *(1E000)* ". Next align position of the "LEVER,TPH ADJUST *(1D000)*" on the "ASSY,CHASSIS R *(7A000)*" side.
4. After installing the "LEVER,TPH ADJUST *(1D000)* ", pull out the Lever TPH Adjusting Tool (VJ8-0225).
5. Referring to section 3-9, align phase between the "CAM, MECHANISM R *(5L000)* " and the "CAM,MECHANISM L *(5K000)* ".
6. Referring to section 3-6 and 3-7, adjust the tension of the "BELT,MOTOR STEP *(4J000)* " and "BELT,DRUM *(4I000)* ".

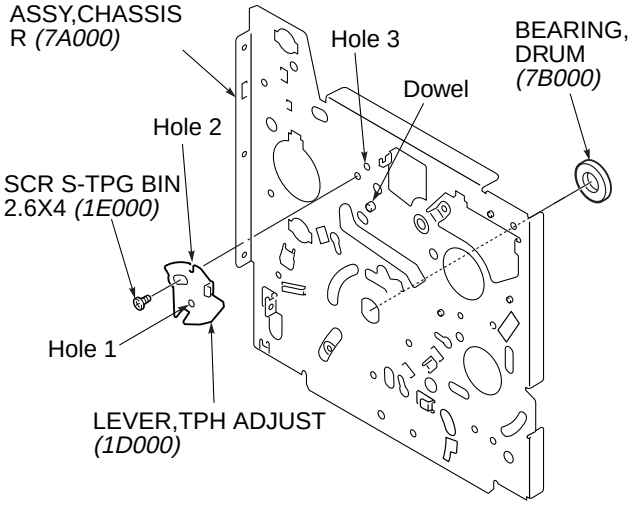


Fig. 3-17-1

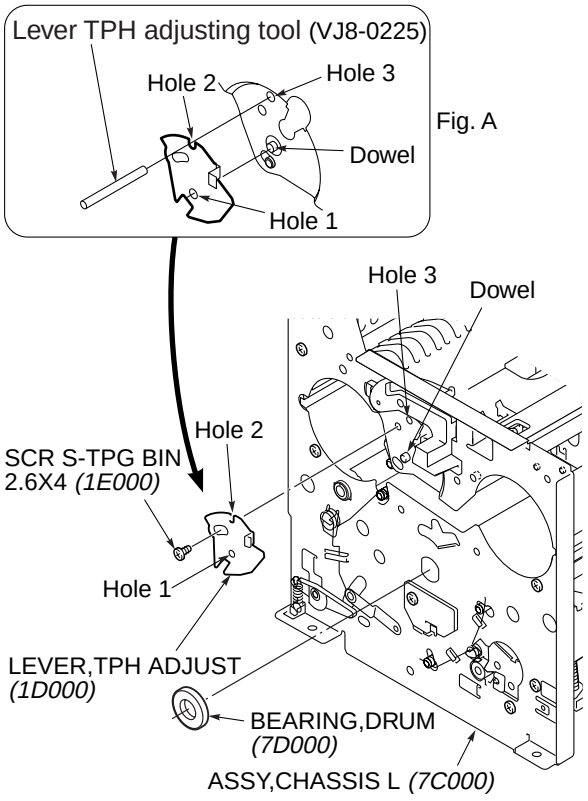
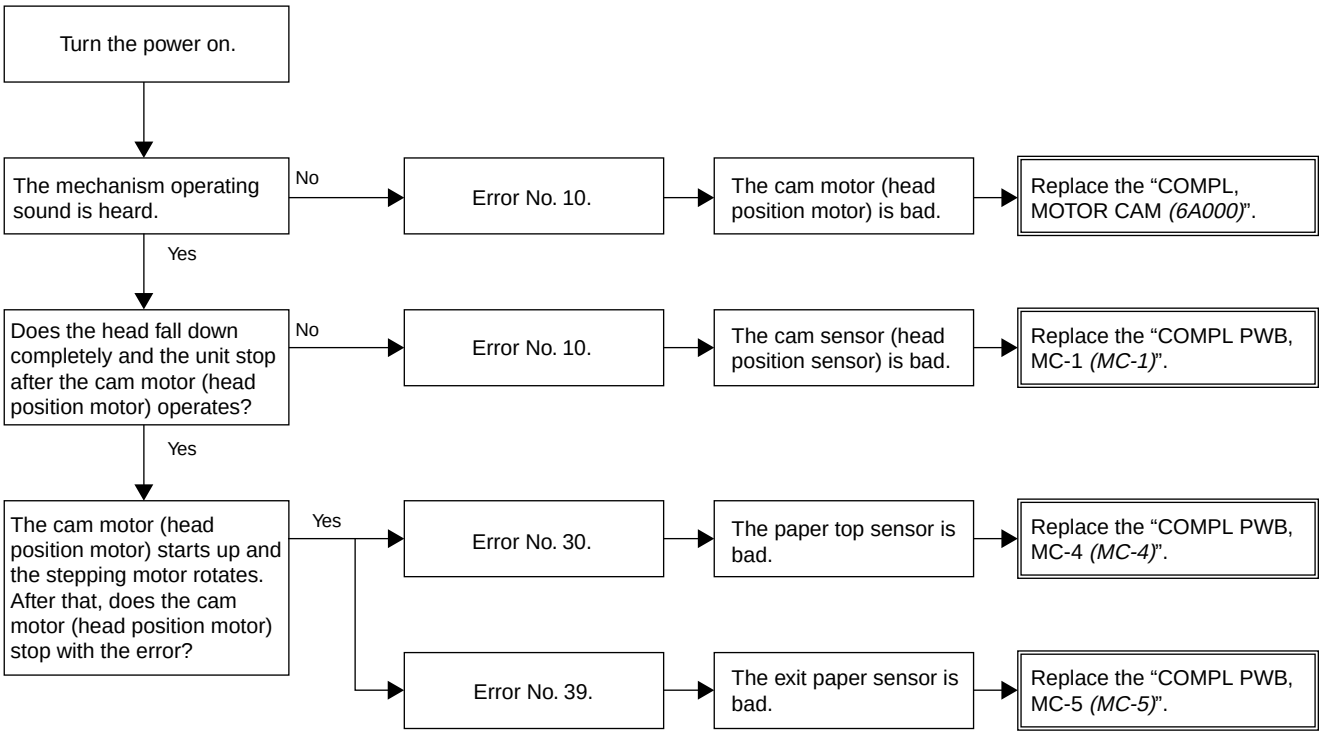


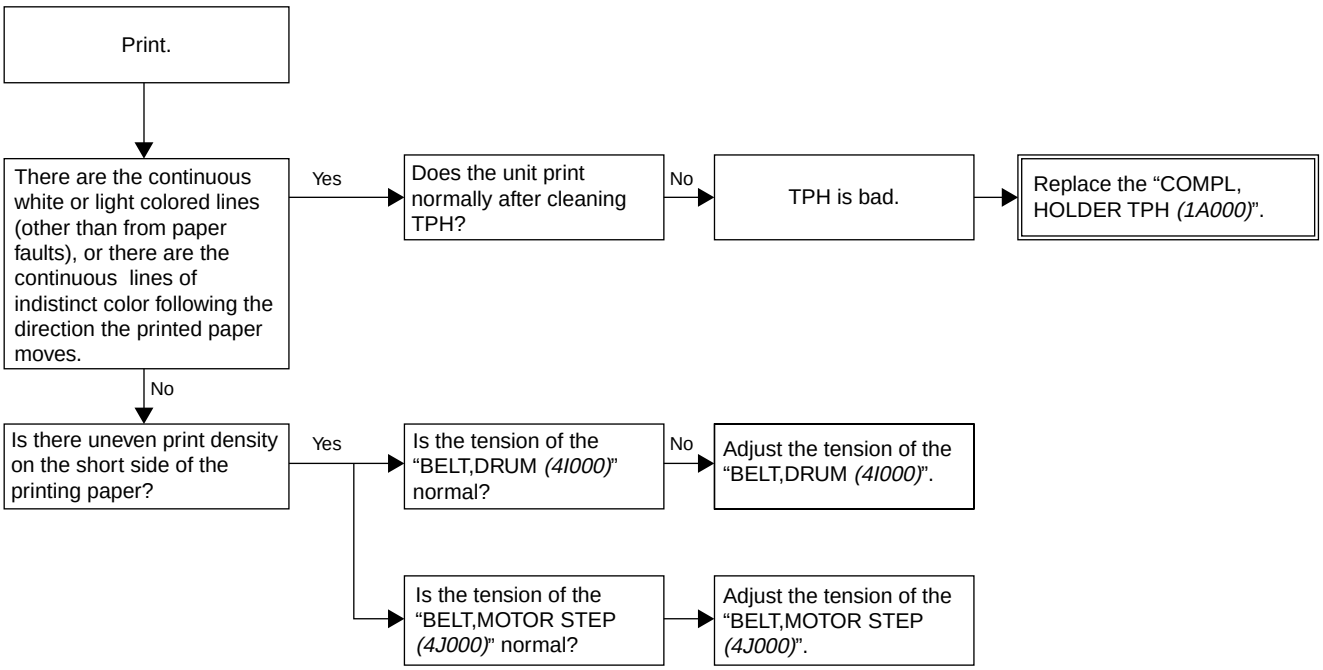
Fig. 3-17-2

4. TROUBLESHOOTING

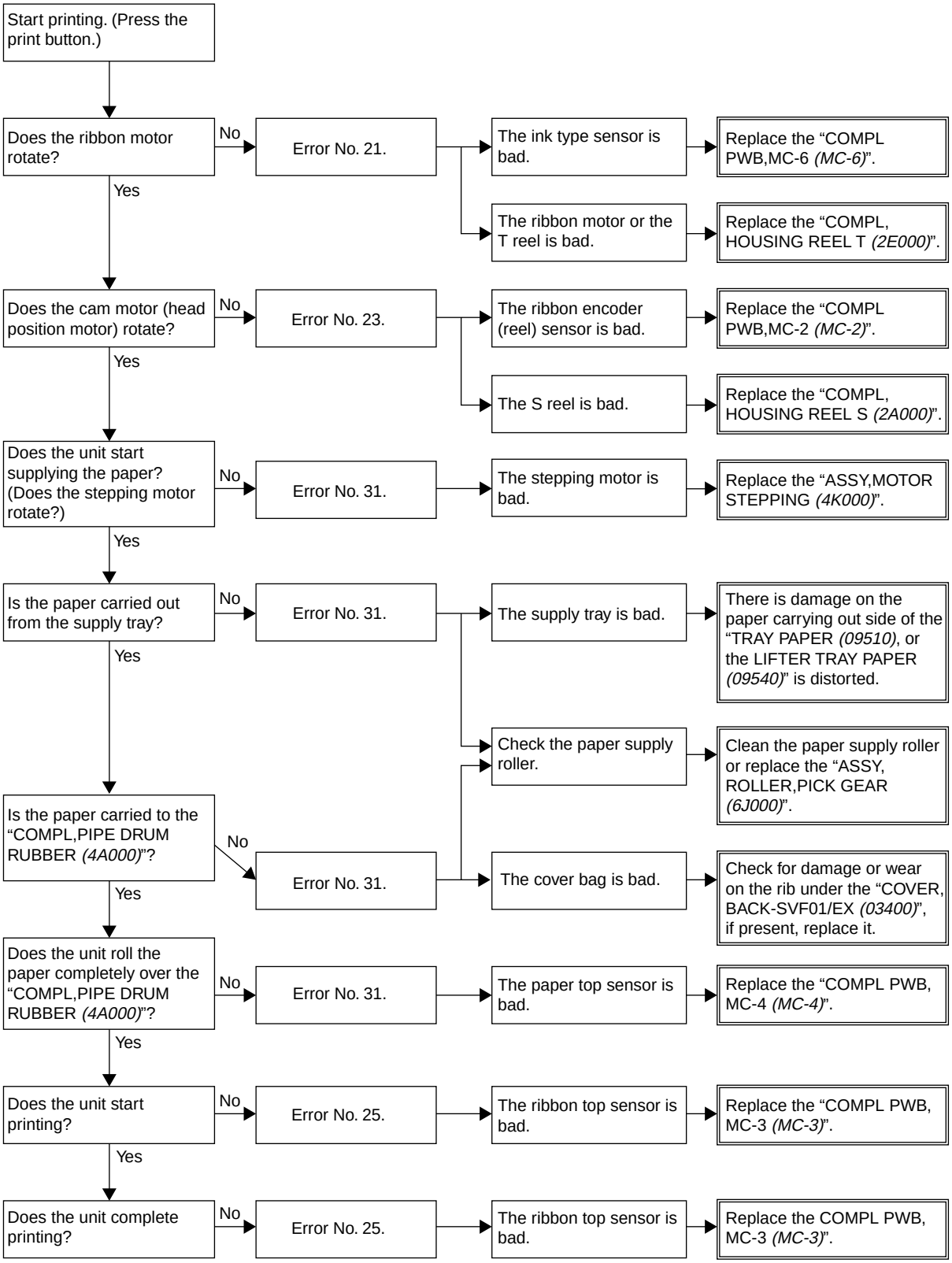
4-1. The mechanism malfunctions when the power is turned on.



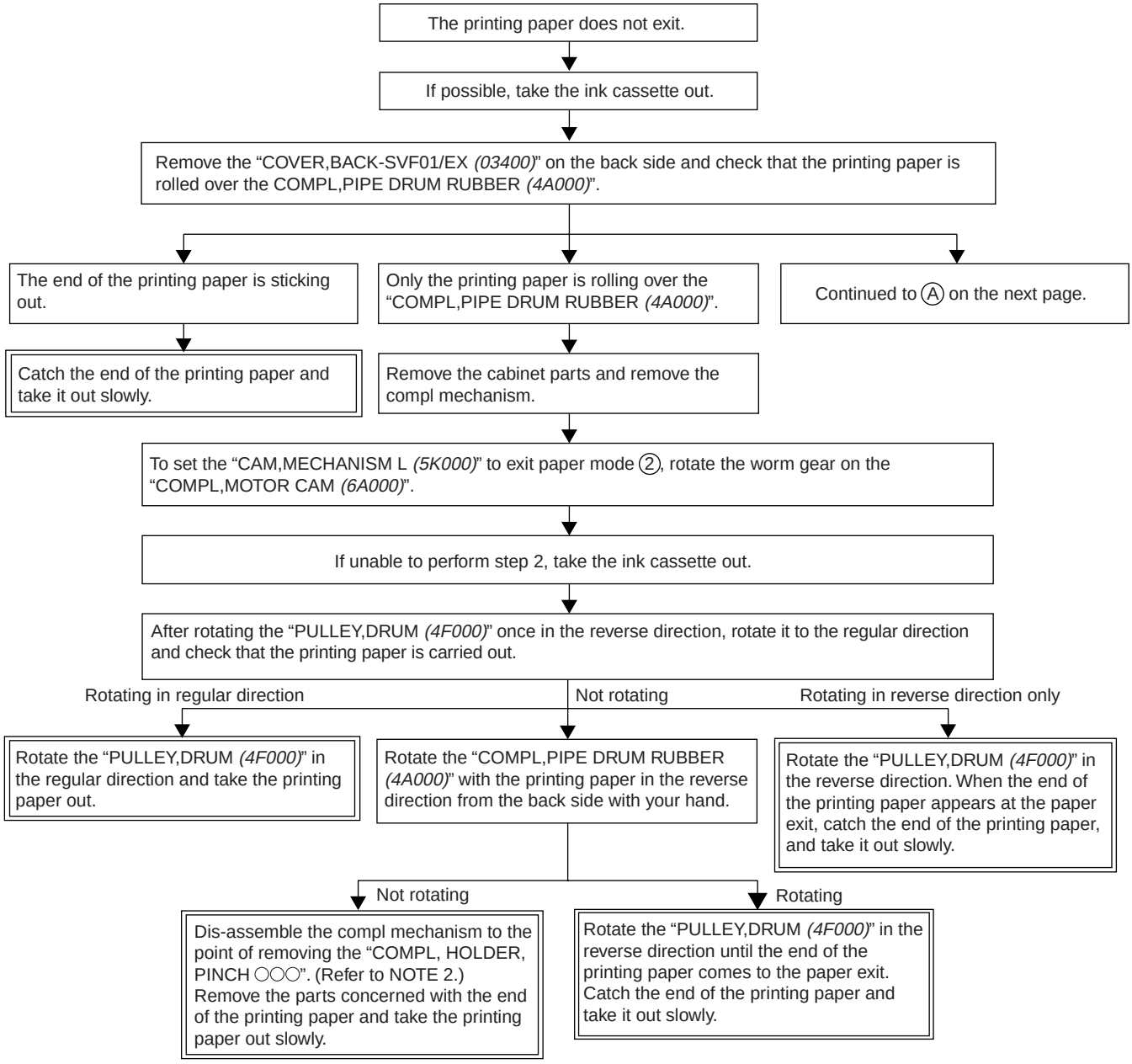
4-2. Poor printing quality



4-3. Not printing

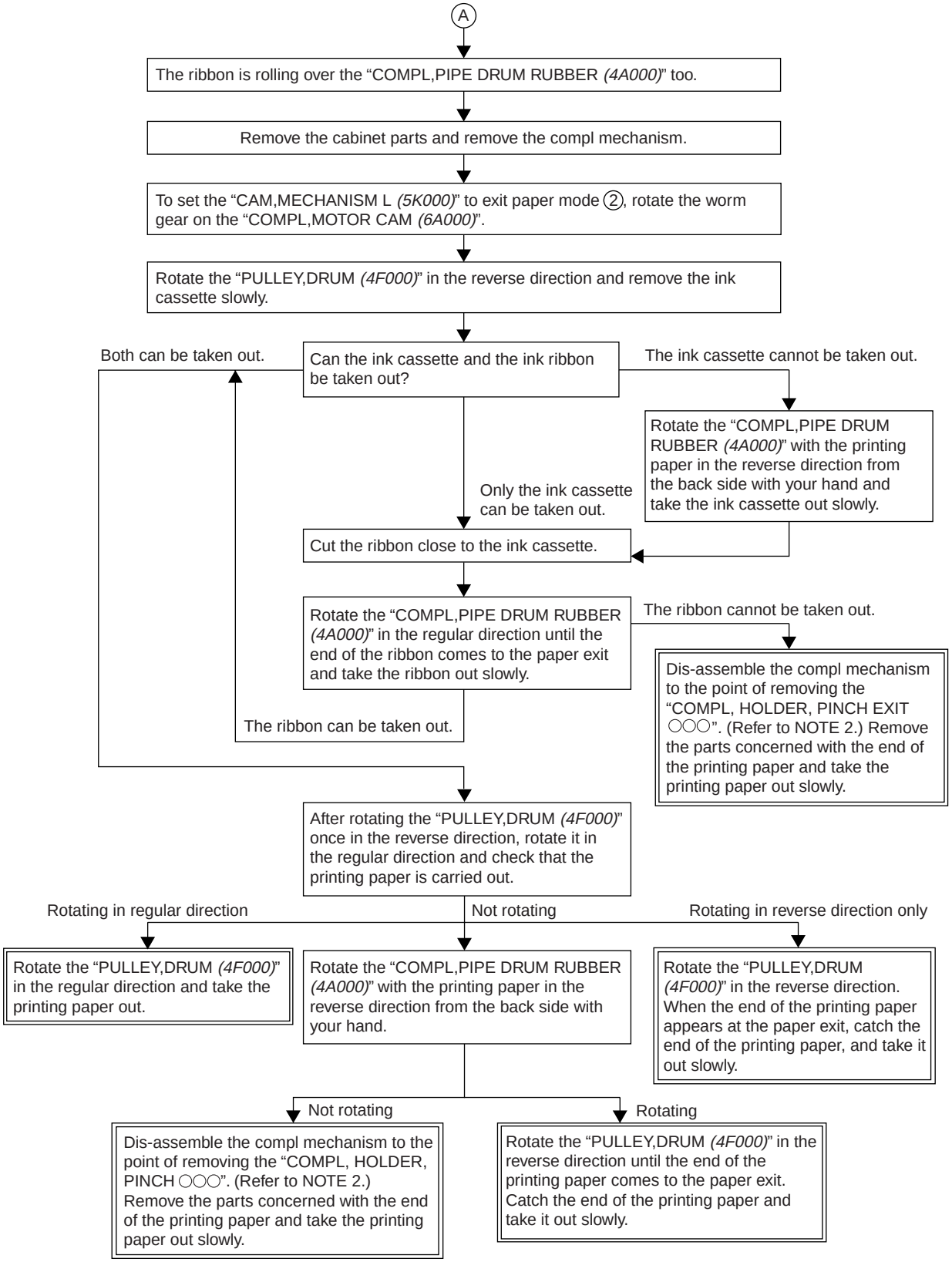


4-4. Paper stopping



NOTE 1: The rotation direction of the Motor Pulley is as follows:
"COMPL,MOTOR CAM *(6A000)*":
When rotated in the direction shown by arrow A in Fig. A of Fig. 3-9-1 in section 3-9, the mechanism mode shifts in the following order: ① Standby →② Paper exit →③ Paper/Ribbon advance →④ Paper-supply →⑤ Print.

NOTE 2: "COMPL,HOLDER,PINCH ○○○" refers to the following parts.
- "COMPL,HOLDER,PINCH SIDE *(5A000)*"
- "COMPL,HOLDER,PINCH EXIT *(5B000)*"
- "COMPL,HOLDER,PINCH PICK *(5D000)*"
- "COMPL,HOLDER,PINCH EXIT F *(5E000)*"


A
The ribbon is rolling over the “COMPL,PIPE DRUM RUBBER (4A000)” too.
Remove the cabinet parts and remove the compl mechanism.
To set the “CAM,MECHANISM L (5K000)” to exit paper mode ②, rotate the worm gear on the “COMPL,MOTOR CAM (6A000)”.
Rotate the “PULLEY,DRUM (4F000)” in the reverse direction and remove the ink cassette slowly.
Both can be taken out.
Can the ink cassette and the ink ribbon be taken out?
The ink cassette cannot be taken out.
Rotate the “COMPL,PIPE DRUM RUBBER (4A000)” with the printing paper in the reverse direction from the back side with your hand and take the ink cassette out slowly.
Only the ink cassette can be taken out.
Cut the ribbon close to the ink cassette.
Rotate the “COMPL,PIPE DRUM RUBBER (4A000)” in the regular direction until the end of the ribbon comes to the paper exit and take the ribbon out slowly.
The ribbon cannot be taken out.
Dis-assemble the compl mechanism to the point of removing the “COMPL, HOLDER, PINCH EXIT ○○○”. (Refer to NOTE 2.) Remove the parts concerned with the end of the printing paper and take the printing paper out slowly.
The ribbon can be taken out.
After rotating the “PULLEY,DRUM (4F000)” once in the reverse direction, rotate it in the regular direction and check that the printing paper is carried out.
Rotating in regular direction
Not rotating
Rotating in reverse direction only
Rotate the “PULLEY,DRUM (4F000)” in the regular direction and take the printing paper out.
Rotate the “COMPL,PIPE DRUM RUBBER (4A000)” with the printing paper in the reverse direction from the back side with your hand.
Rotate the “PULLEY,DRUM (4F000)” in the reverse direction. When the end of the printing paper appears at the paper exit, catch the end of the printing paper, and take it out slowly.
Not rotating
Rotating
Dis-assemble the compl mechanism to the point of removing the “COMPL, HOLDER, PINCH ○○○”. (Refer to NOTE 2.) Remove the parts concerned with the end of the printing paper and take the printing paper out slowly.
Rotate the “PULLEY,DRUM (4F000)” in the reverse direction until the end of the printing paper comes to the paper exit. Catch the end of the printing paper and take it out slowly.

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