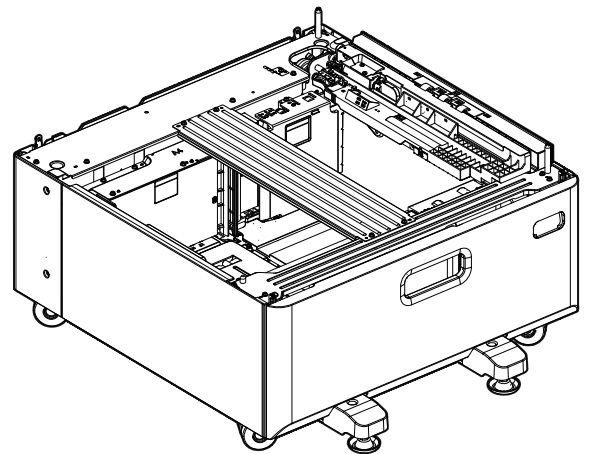


TOSHIBA

SERVICE MANUAL

Large Capacity Feeder
KD-1073



Model: KD-1073
Publish Date: December 2021
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Ver00 F1 2022-03

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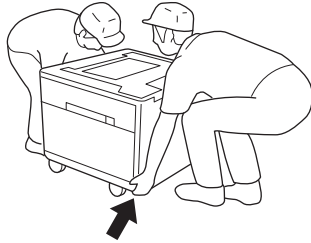
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General Precautions for Installation, Servicing and Maintenance for this Option

The installation and service shall be done by a qualified service technician.

1. When installing this option to the MFP, be sure to follow the instructions described in the "Unpacking/Set-Up Procedure for the Equipment" booklet which comes with this option.
2. This option shall be installed by an authorized or qualified person.
3. When transporting or installing this option, employ two persons and be sure to use the positions as indicated below.
This option weighs approx. 25 kg, therefore pay full attention when handling it.



4. Both the Paper Feed Pedestal and the Large Capacity Feeder have 4 adjusters (antiskid devices) underneath. After the MFP with this option connected has been moved and installed, be sure to turn and lower those adjusters to fix it, since the drawers may not be opened or closed smoothly depending on the floor condition.
5. Before starting installation, servicing or maintenance work, be sure unplug the power cable of the MFP first.
6. The MFP with this option connected shall be installed near the socket outlet and shall be easily accessible.
7. Be sure to fix and plug in the power cable securely after the installation so that no one trips over it.
8. Unplug the power cable and clean the area around the prongs of the plug and socket outlet once a year or more. A fire may occur when dust lies on this area.
9. This option shall be grounded to the specified positions on the MFP frame.
10. When servicing or maintaining the MFP with this option connected, be careful about the rotating or operating sections such as gears, pulleys, sprockets, cams, belts, etc.
11. When the parts of this option are disassembled, reassembly is the reverse of disassembly unless otherwise noted in this manual or other related documents. Be careful not to install small parts such as screws, washers, pins, E-rings, star washers, harnesses in the wrong places.
12. Basically, the MFP with this option connected should not be operated with any parts removed or disassembled.
13. Power for this option is supplied through the MFP, requiring no additional power sources.
14. When servicing the MFP with this option connected while the power is turned ON, be sure not to touch live sections and rotating/operating sections.

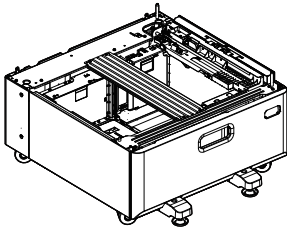
15. Delicate parts for preventing safety hazard problems (such as fuses, thermofuses, door switches, sensors, etc. if any) should be handled, installed and adjusted correctly.
16. Tools and instruments
 - Use designated jigs and tools.
 - Use recommended measuring instruments or equivalents.
17. During servicing or maintenance work, be sure to check the nameplate and other cautionary labels (if any) to see if they are clean and firmly stuck. If not, take appropriate actions.
18. The ICs on the PC boards tend to be damaged by static electricity. Therefore, the PC boards must be stored in an anti-electrostatic bag and handled carefully using a wristband. Before using the antistatic wrist strap, unplug the power cable of the MFP and make sure that there are no charged objects which are not insulated in the vicinity.
19. Regarding the recovery and disposal of the MFP with this option connected, supplies, packing materials, follow the relevant local regulations or rules.
20. Return the MFP with this option connected to the original state and check the operation when the service is finished.
21. Regarding the recovery and disposal of the MFP with this option connected, supplies, packing materials, follow the relevant local regulations or rules.
22. Return the MFP with this option connected to the original state and check the operation when the service is finished.
23. Check the procedures and perform them as described in the Service Manual.
24. Make sure you do not lose your balance.
25. Avoid exposure to your skin and wear protective gloves as needed.
26. Do not leave plastic bags where children can get at them. This may cause an accident such as suffocation if a child puts his/her head into a bag. Plastic bags of options or service parts must be brought back.

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1. SPECIFICATIONS

Item	KD-1073
Appearance	
Paper feeding method	Tandem tray
Paper	Size: A4/LT, Thickness: 64 g/m ² to 300 g/m ² (17lbs(bond) to 150lbs(index)) (Reused paper is not available.)
Capacity	Stack height: 110.0 mm (Approx. 1000 sheets x 2: 80 g/m ²)
Dimensions	575 (W) x 583 (D) x 292 (H) mm (Height: Floor to top of the paper exiting part) 660 (W) x 723 (D) x 292 (H) mm (including the stabilizer cover)
Weight	Approx. 25 kg
Power supply	3.3V, 5 V, 24 V, 100 V (JPD) * Supplied from the MFP
Accessories	Unpacking Instructions (1), Connecting plate (4), Screws for the connecting plate (7) Fixing screw of the ground wire (1), Stabilizer bracket (6) Right side stabilizer cover (1), Rear side stabilizer cover (2), Front side stabilizer cover (2) Screw for the stabilizer (6), Rubber cap (4)
Appearance color	Jet black

2. OVERVIEW

2.1 Front Sectional View

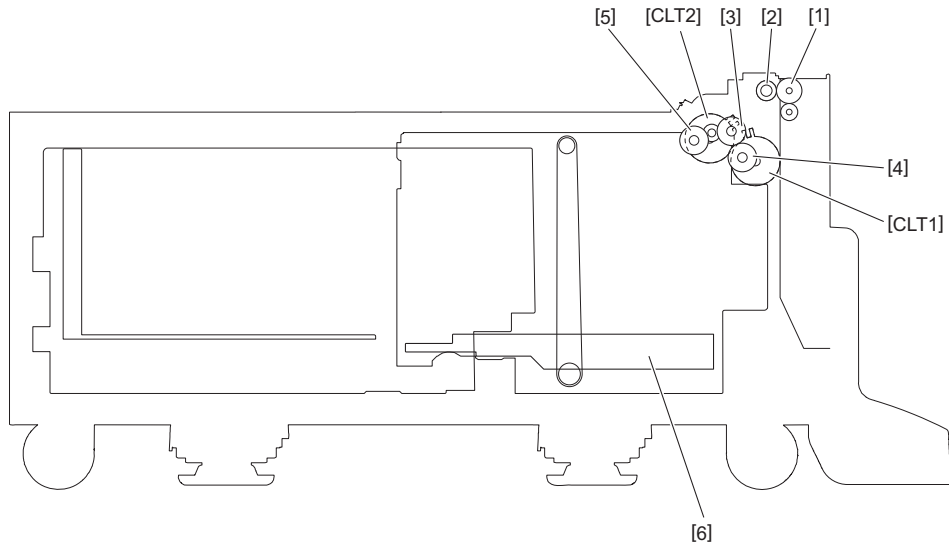


Fig. 2-1

Symbol	Name	Symbol	Name
1	T-LCF side cover transport roller	5	T-LCF pickup roller
2	T-LCF transport roller	6	Elevator tray
3	T-LCF paper feed roller	CLT1	T-LCF paper feed clutch (CLT1)
4	T-LCF separation roller	CLT2	T-LCF transport clutch (CLT2)

2.2 Electric Parts Layout

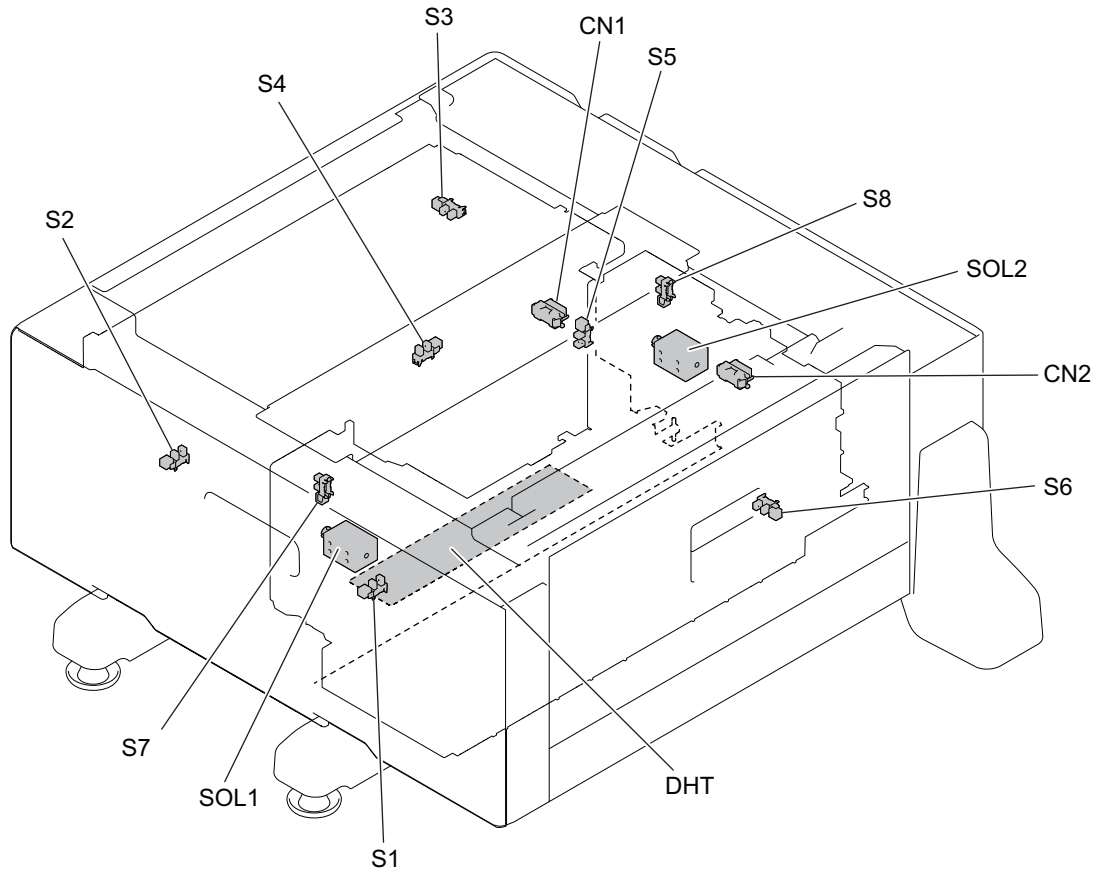


Fig. 2-2

Symbol	Name	Symbol	Name
S1	T-LCF end fence stop position sensor	S7	T-LCF paper feeding side stopper opening/closing detection sensor (front)
S2	T-LCF end fence home position sensor	S8	T-LCF paper feeding side stopper opening/closing detection sensor (rear)
S3	T-LCF standby side paper remaining detection sensor	SOL1	T-LCF paper feeding side stopper opening/closing solenoid (front)
S4	T-LCF standby side paper empty sensor	SOL2	T-LCF paper feeding side stopper opening/closing solenoid (rear)
S5	T-LCF standby side paper mis-stacking detection sensor	CN1	T-LCF standby side drawer connector
S6	T-LCF paper feeding side bottom sensor	CN2	T-LCF paper feeding side drawer connector
		DHT	Damp heater

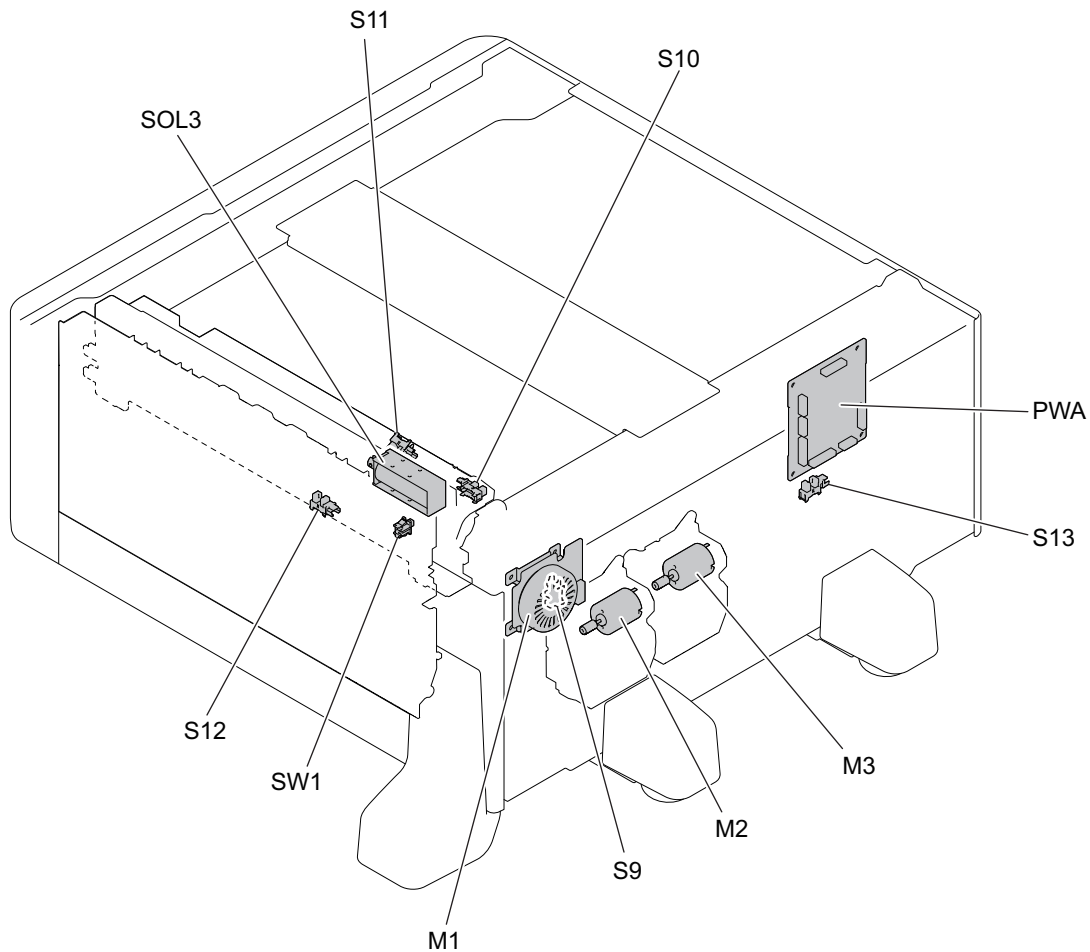


Fig. 2-3

Symbol	Name	Symbol	Name
M1	T-LCF transport motor	S10	T-LCF paper feeding side paper empty sensor
M2	T-LCF tray-up motor	S11	T-LCF tray-up sensor
M3	T-LCF end fence motor	S12	T-LCF transport sensor
SW1	T-LCF jam access cover opening/closing switch	S13	T-LCF standby side tray detection sensor
SOL3	T-LCF pickup solenoid	PWA	T-LCF PC board
S9	T-LCF paper feeding side tray detection sensor		

2.3 Electric Parts

- Motor

Symbol	Name	Function	Remarks	P-I
M1	T-LCF transport motor	Drives the paper feeding and transporting systems.	Brushless motor	3-29
M2	T-LCF tray-up motor	Lifts up the elevator tray.	Brush motor	3-1
M3	T-LCF end fence motor	Drives the end fence movement.	Brush motor	3-1

- Electromagnetic clutch

Symbol	Name	Function	Remarks	P-I
CLT1	T-LCF paper feed clutch	Drives the paper feeding.		3-25
CLT2	T-LCF transport clutch	Drives the paper transporting.		3-25

- Switch and Sensor

Symbol	Name	Function	Remarks	P-I
S1	T-LCF end fence stop position sensor	Detects the stop position of the end fence.	Photo interrupter	6-31
S2	T-LCF end fence home position sensor	Detects the home position of the end fence.	Photo interrupter	6-31
S3	T-LCF standby side paper remaining detection sensor	Detects the paper remaining level in the standby side drawer.	Photo interrupter	6-31
S4	T-LCF standby side paper empty sensor	Detects the paper loading level in the standby side drawer.	Photo interrupter	6-31
S5	T-LCF standby side paper mis-stacking detection sensor	Detects mis-stacking of paper in the standby side drawer.	Photo interrupter	6-31
S6	T-LCF paper feeding side bottom sensor	Detects the tray bottom position.	Photo interrupter	7-23
S7	T-LCF paper feeding side stopper opening/closing detection sensor (front)	Detects the opening and closing status of the front side stopper.	Photo interrupter	7-23
S8	T-LCF paper feeding side stopper opening/closing detection sensor (rear)	Detects the opening and closing status of the rear side stopper.	Photo interrupter	7-23
S9	T-LCF paper feeding side tray detection sensor	Detects the paper feeding side tray.	Photo interrupter	2-24
S10	T-LCF paper feeding side paper empty sensor	Detects the paper loading level in the paper feeding side.	Photo interrupter	5-4
S11	T-LCF tray-up sensor	Detects the lifting up the elevator tray.	Photo interrupter	5-4
S12	T-LCF transport sensor	Detects the paper misfeeding.	Photo interrupter	1-21
S13	T-LCF standby side tray detection sensor	Detects the standby side tray.	Photo interrupter	2-24
SW1	T-LCF jam access cover opening/closing switch	Detects the opening and closing state of the side cover for interlock.	Push switch	1-39

- PC Board

Symbol	Name	Function	Remarks	P-I
PWA	T-LCF PC board	Controls the driving of the T-LCF.		2-30

- Solenoid

Symbol	Name	Function	Remarks	P-I
SOL1	T-LCF paper feeding side stopper opening/closing solenoid (front)	Drives the opening and closing of the front side stopper.		7-44
SOL2	T-LCF paper feeding side stopper opening/closing solenoid (rear)	Drives the opening and closing of the rear side stopper.		7-44
SOL3	T-LCF pickup solenoid	Lifts up the T-LCF pickup roller.		4-3

- Damp Heater

Symbol	Name	Function	Remarks	P-I
DHT	Damp heater	Keeps the temperature and dehumidifies the T-LCF.	JPD only	-

3. GENERAL OPERATION

3.1 Driving and Paper Feeding Operations

The Large Capacity Feeder (T-LCF) mainly consists of the T-LCF drawer, T-LCF pickup roller, T-LCF paper feed roller, T-LCF separation roller, T-LCF transport roller and drive systems for those components.

- Paper feeding and transporting system
The T-LCF transport motor drives the T-LCF pickup roller, T-LCF paper feed roller and T-LCF transport roller in the paper feeding section of the T-LCF drawer.
- T-LCF drawer tray system
The T-LCF tray-up motor moves (upward and downward) the standby side tray.
- End fence system
The stack of paper in the standby side tray is moved to the paper feeding side tray when it has become empty.

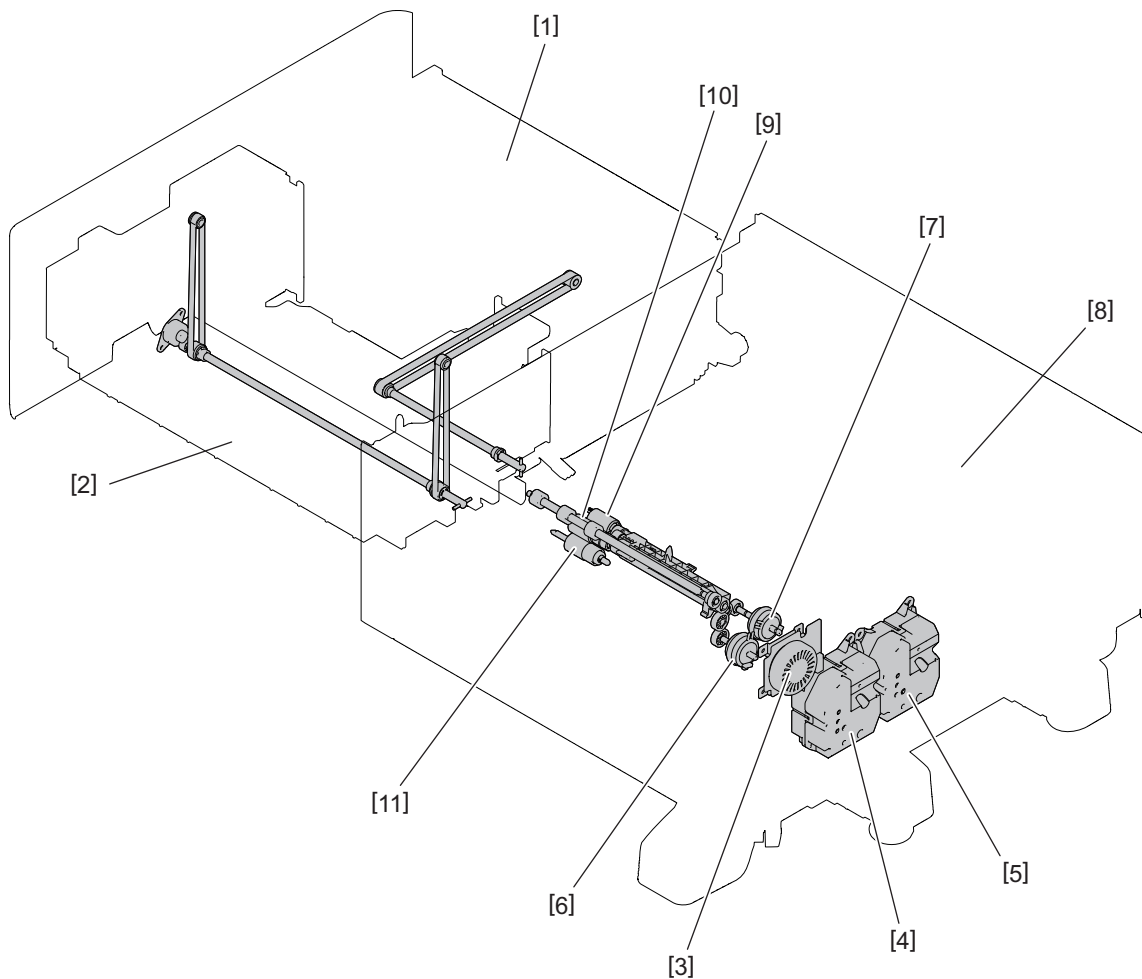


Fig. 3-1

- [1] Standby side tray
- [2] Paper feeding side tray
- [3] T-LCF transport motor
- [4] T-LCF tray-up motor
- [5] T-LCF end fence motor

- [6] T-LCF paper feed clutch
- [7] T-LCF transport clutch
- [8] T-LCF
- [9] T-LCF pickup roller
- [10] T-LCF paper feed roller
- [11] T-LCF transport roller

3.2 Operation Description

[A] From power-ON to the ready status

- (1) When the MFP is turned ON, power is also supplied to the T-LCF. Then the T-LCF starts the pre-running operation at warming up and the T-LCF tray-up motor (M2) rotates forward and raises the tray.

When the T-LCF tray-up sensor (S11) is turned ON correspondingly, the T-LCF tray-up motor (M2) is turned OFF and stops the lifting up of the tray.

If the T-LCF paper feeding side paper empty sensor (S10) is turned ON at this time, it is judged that there is paper in the paper feeding side tray. If the T-LCF paper feeding side paper empty sensor (S10) is turned OFF at this time, it is judged that there is no paper in the paper feeding side tray and the T-LCF standby side tray detection sensor (S13) is checked. When the T-LCF standby side tray detection sensor (S13) is turned ON, the T-LCF standby side empty sensor (S4) is checked. When the T-LCF standby side empty sensor (S4) is turned OFF, that means there is no paper in the standby side tray, and it is therefore assumed that there is no paper in the T-LCF. When the T-LCF standby side empty sensor (S4) is turned ON, the paper in the standby side tray is moved to the paper feeding side tray.

The T-LCF tray-up motor (M2) is rotated in reverse and lowers the paper feeding side tray. The lowered tray turns ON the T-LCF standby side paper empty sensor (S4), and the T-LCF tray-up motor (M2) is turned OFF to stop the tray.

When the tray is stopped, the T-LCF pickup solenoid (SOL3) is turned ON. The T-LCF end fence motor (M3) rotates forward and the paper in the standby side tray is moved onto the paper feeding side tray. The T-LCF end fence motor (M3) is stopped for a second when the T-LCF end fence stop position sensor (S1) is turned ON. Then the T-LCF end fence motor (M3) immediately starts to rotate in reverse to return the end fence to the position where the T-LCF end fence home position sensor (S2) is turned ON.

When the returning operation is started, the T-LCF pickup solenoid (SOL3) is turned OFF and the T-LCF tray-up motor (M2) is rotated forward to raise the tray.

When the T-LCF tray-up sensor (S11) is turned ON correspondingly, the T-LCF tray-up motor (M2) is turned OFF and stops the lifting up of the tray. If the T-LCF paper feeding side paper empty sensor (S10) is turned ON at this time, it is judged that there is paper in the paper feeding side tray.

- (2) If the paper feeding side tray has been pulled out when the power is turned ON, the tray-up movement is not operated. The tray is lifted up as soon as it is installed and whether there is paper or not in it is detected.
- (3) If the T-LCF transport sensor (S12) is turned ON (there is paper in the transport path) when the power is turned ON, that means paper misfeeding has occurred and the operation is disabled until the misfed paper is removed.

[B] Ready status

- (1) By means of the tray operation as described in [A], the MFP goes into the ready status.
- (2) When the tray is pulled out, only the standby side tray is taken out if there is paper on the paper feeding side tray. After that, the tray goes down automatically when the paper feeding side tray is removed and is raised as soon as it is reinstalled then checks if there is paper in the tray. Both the paper feeding side tray and the standby side tray are taken out if there is no paper on the paper feeding side tray.

[C] From the start to the end of copying

- (1) When the [START] button is pressed, the MFP is turned ON as well as the T-LCF transport motor (M1).
- (2) When the MFP judges that the T-LCF is ready for feeding paper, the T-LCF paper feed clutch (CLT1) is turned ON. This clutch drives the T-LCF pickup roller and the T-LCF paper feed roller to feed paper from the tray.
- (3) The leading edge of the paper turns the T-LCF transport sensor (S12) ON. Then the T-LCF paper feed clutch (CLT1) is turned OFF and feeding from the T-LCF drawer is completed.
- (4) When a certain time has passed after the paper is passed through the registration roller of the MFP, feeding the next sheet of paper becomes possible and the procedures (2) to (3) are repeated.
- (5) When the copying operation is completed, the MFP is turned OFF as well as the T-LCF transport motor (M1).

3.3 Error Detection

[A] Paper misfeeding detection

- (1) Paper misfeeding errors such as E190, E3C0, E3D0 and E3E0 occur in the following cases.
 - The T-LCF transport sensor (S12) is not turned ON within a specified period of time after the paper feeding is started.
 - The leading edge of the paper does not pass each drawer paper feed sensor in the transport path within a specified period of time.
- (2) The paper misfeeding status can be cleared when the side cover of the T-LCF is opened, all the paper remaining on the transport path is removed and then the side cover is closed. If the T-LCF transport sensor (S12) is still ON when the side cover is closed, it is determined that there is still paper on the transport path and the paper misfeeding status is not cleared.
- (3) When paper misfeeding occurs in the T-LCF during continuous copying, the sheet of paper that was fed before the paper misfeeding is copied normally.

[B] Service call

- (1) When the T-LCF tray-up sensor (S11) is not turned ON even though the specified period of time has passed since the tray started to be raised, it is assumed that the tray is not operational and the corresponding message appears on the control panel display.
- (2) When the T-LCF paper feeding side bottom sensor (S6) is not turned ON even though the specified period of time has passed since the tray started to be lowered, it is assumed that the tray is not operational and the corresponding message appears on the control panel display.
- (3) When the T-LCF end fence stop position sensor (S1) is not turned ON even though the specified period of time has passed since the end fence started to move the paper in the standby side tray, it is assumed that the tray is not operational and the corresponding message appears on the control panel display.
- (4) When the T-LCF end fence home position sensor (S2) is not turned ON even though the specified period of time has passed since the end fence started to move the paper in the standby side tray, it is assumed that the tray is not operational and the corresponding message appears on the control panel display.
- (5) The states (1) to (4) are cleared by opening the drawer to solve the problems.

4. DISASSEMBLY AND REPLACEMENT

Notes:

The covers of the actual T-LCF and images differ in the color.

4.1 Installation and Removal of Covers

4.1.1 Standby side tray

- (1) Pull the standby side tray [1] toward you.
- (2) Remove 2 screws and take off the left cover [2].

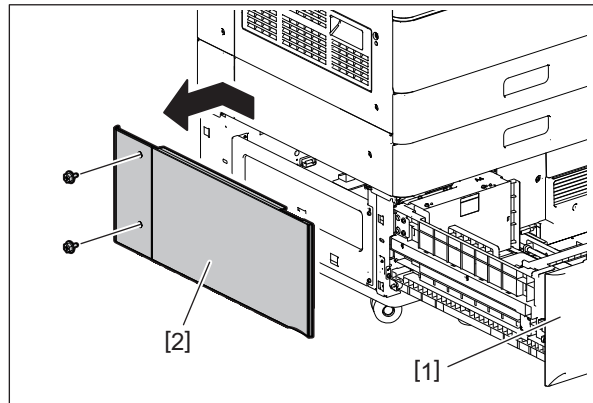


Fig. 4-1

- (3) Remove 2 screws and take off the stopper [3].

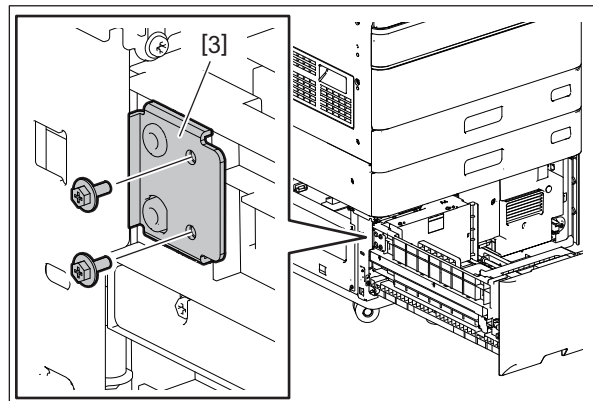


Fig. 4-2

- (4) Pull out the standby side tray [1] and remove 3 screws.

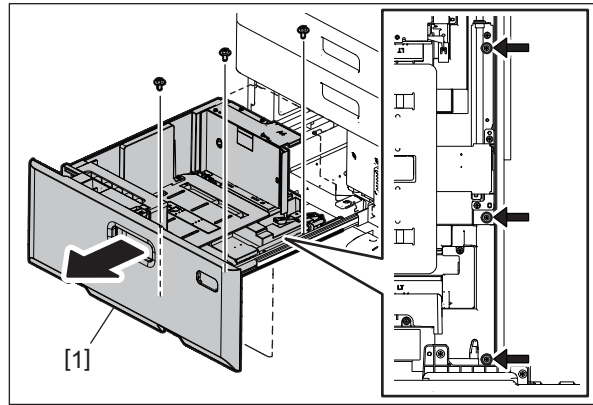


Fig. 4-3

- (5) Take off the standby side tray [1].

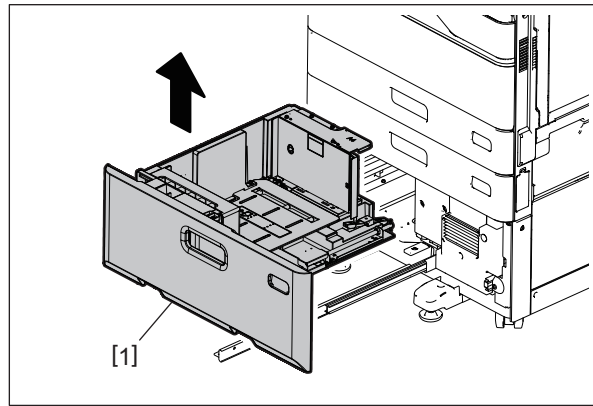


Fig. 4-4

4.1.2 Paper feeding side tray

- (1) Take off the standby side tray.
P. 4-1 "4.1.1 Standby side tray"
- (2) Pull the paper feeding side tray [1].

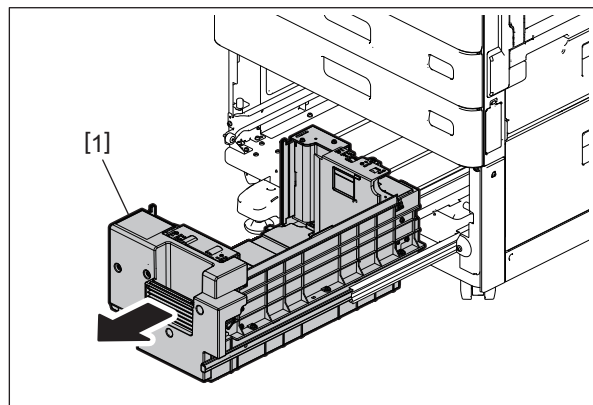


Fig. 4-5

(3) Remove 3 screws and take off the paper feeding side tray [1].

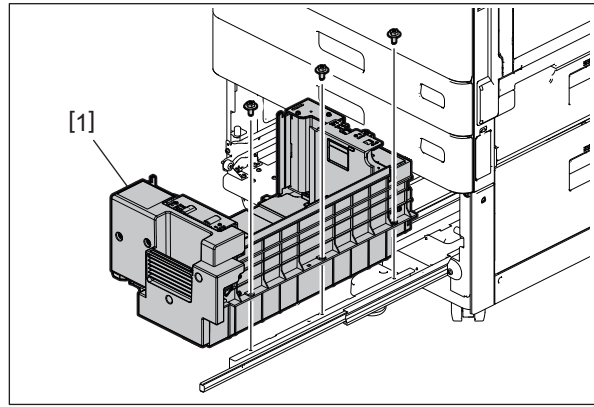


Fig. 4-6

4.1.3 Stabilizer cover

(1) Release the locks [1] and remove the front stabilizers [2].

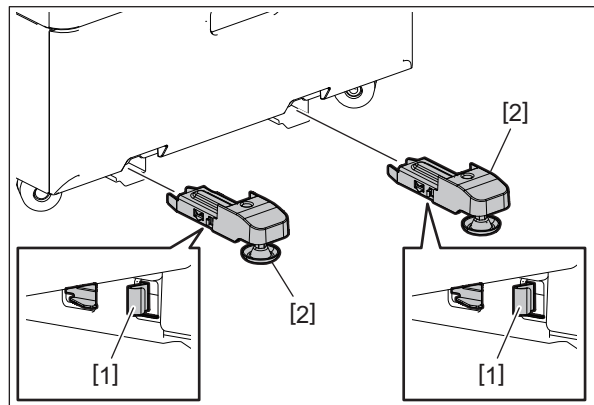


Fig. 4-7

(2) Remove 2 screws and take off the stabilizer covers [3].

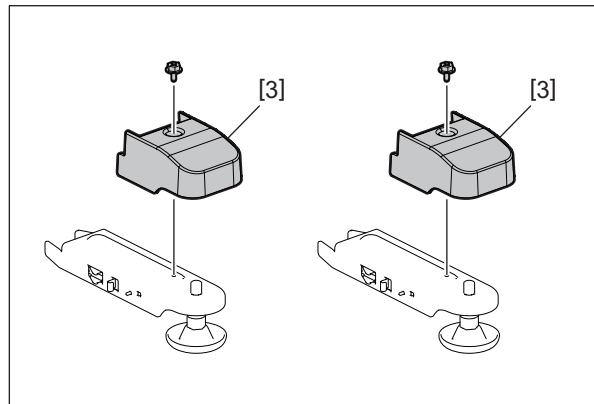


Fig. 4-8

- (3) Remove 1 screw and take off the paper feeding side stabilizer [4].
- (4) Remove 2 screws and take off the rear stabilizer covers [5].

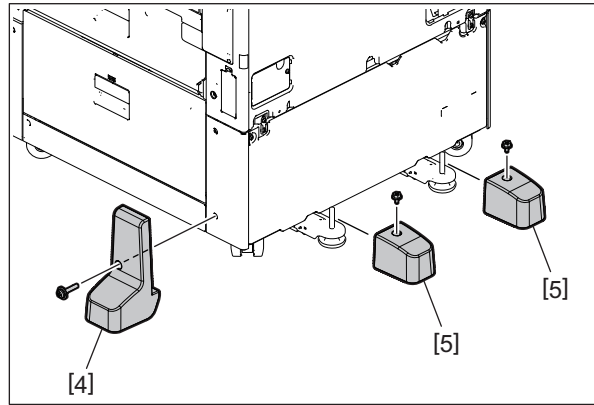


Fig. 4-9

4.1.4 Jam Access Cover

- (1) Open the jam access cover [1].
- (2) Remove 1 screw and release the band [2].
- (3) Disconnect 1 connector [3].

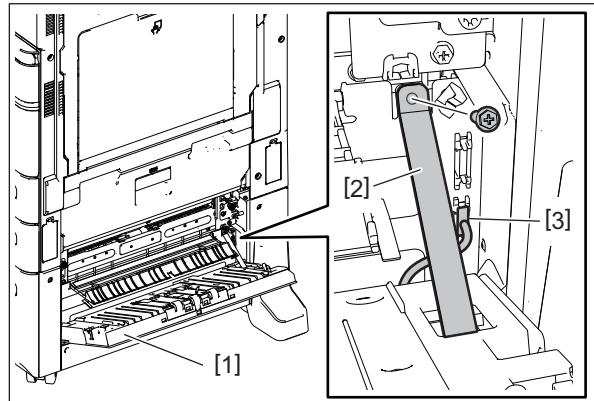


Fig. 4-10

- (4) Remove the stopper [4].
- (5) Release the front support section [5] and take off the jam access cover [1].

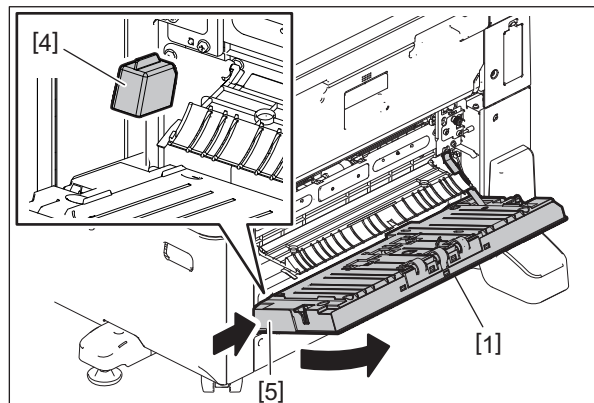


Fig. 4-11

4.1.5 Paper feeding side front cover

- (1) Pull the paper feeding side tray together with the standby side tray.
- (2) Remove 1 screw and take off the paper feeding side front cover [1].

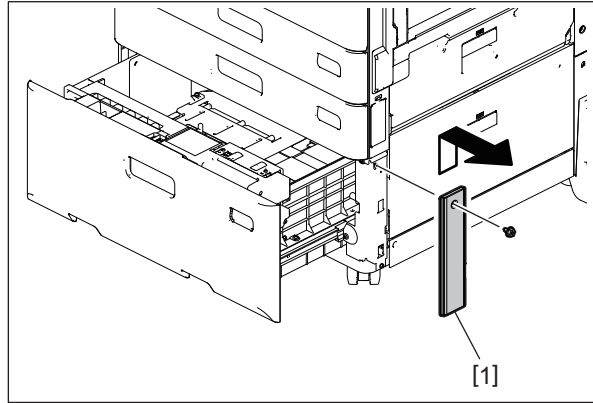


Fig. 4-12

4.1.6 Paper feeding side rear cover

- (1) Take off the paper feeding side stabilizer cover.
📖 P. 4-3 “4.1.3 Stabilizer cover”
- (2) Remove 1 screw and take off the paper feeding side rear cover [1].

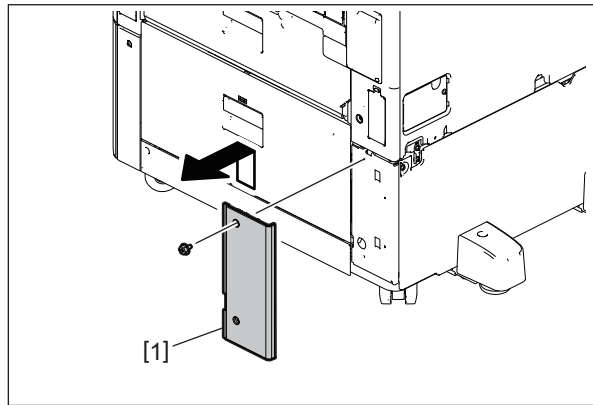


Fig. 4-13

4.1.7 Rear cover

- (1) Take off the rear stabilizer covers.
📖 P. 4-3 “4.1.3 Stabilizer cover”
- (2) Remove 2 screws and take off the rear cover [1].

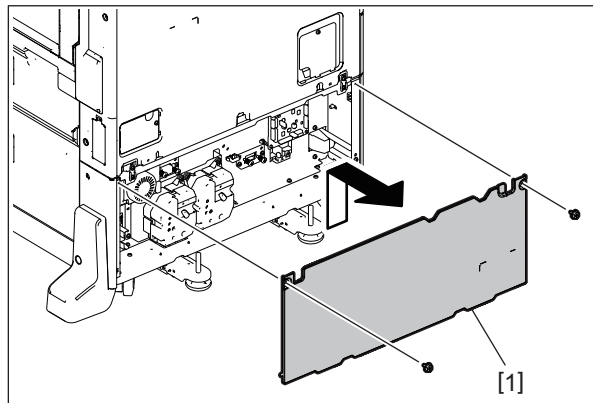


Fig. 4-14

4.1.8 Paper feeding side cover

- (1) Remove 1 screw and take off the paper feeding side cover [1].

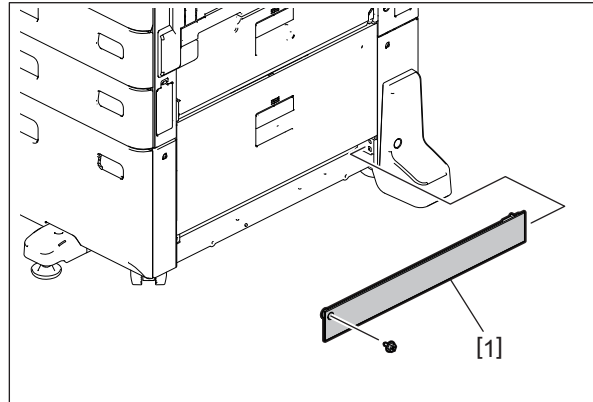


Fig. 4-15

4.2 T-LCF PC Board (PWA)

- (1) Take off the rear cover.
📖 P. 4-5 “4.1.7 Rear cover”
- (2) Disconnect 7 connectors.
- (3) Remove 1 screw and take off the ground wire [1].

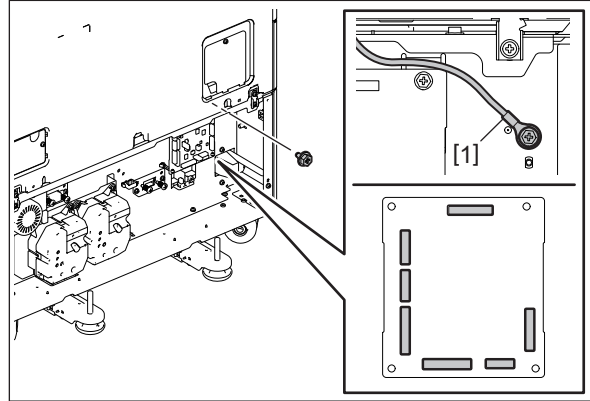


Fig. 4-16

- (4) Remove 2 screws and release 2 clamps. Take off the T-LCF PC board [2].

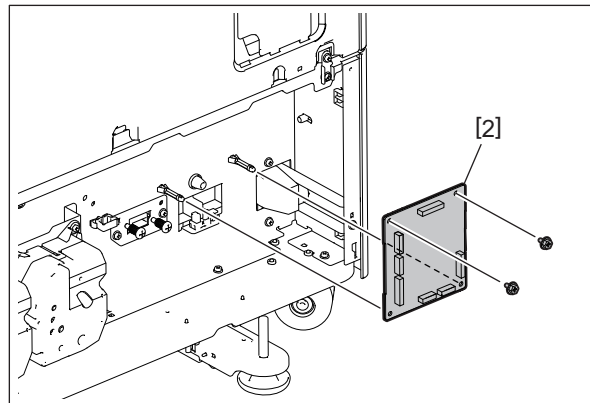


Fig. 4-17

4.3 Paper Feed Unit

4.3.1 T-LCF paper feed unit

- (1) Pull out the drawer [1].

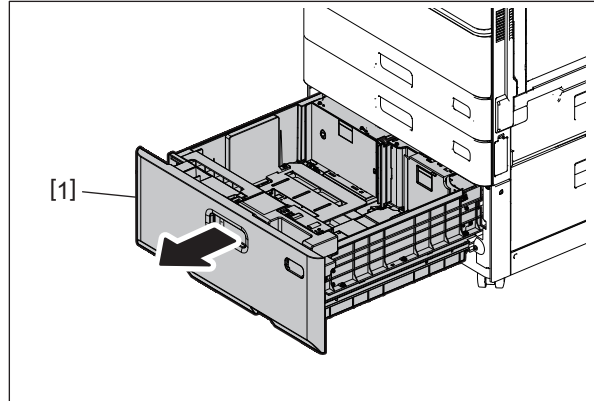


Fig. 4-18

- (2) Open the jam access cover [2].
- (3) Release the harness from 1 harness clamp [3]. Disconnect 1 connector [4].

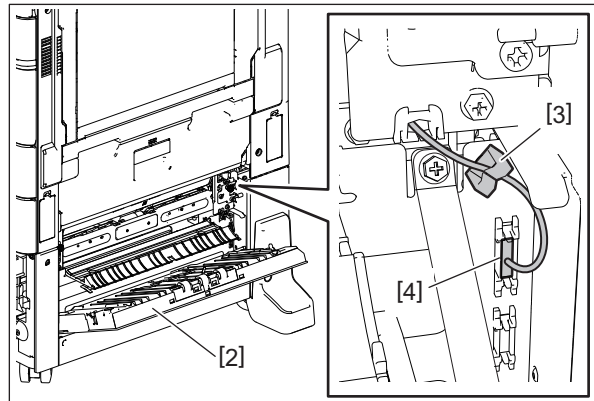


Fig. 4-19

- (4) Loosen 2 screws [6] of the T-LCF paper feed unit [5].
- (5) Slide the bracket [7] in the direction of the arrow.

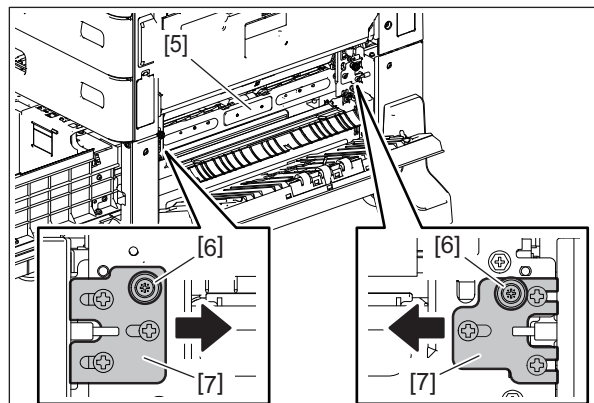


Fig. 4-20

- (6) Take off the T-LCF paper feed unit [5].

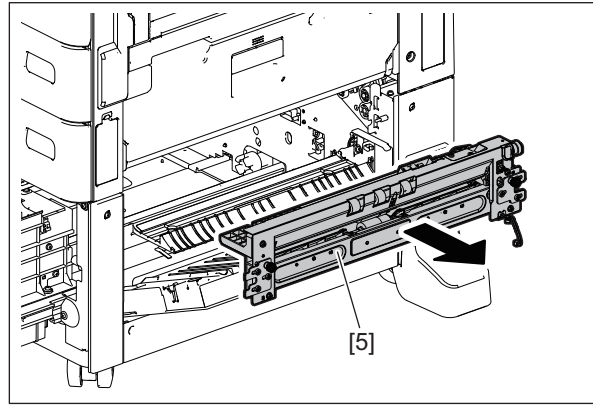


Fig. 4-21

4.3.2 T-LCF pickup solenoid (SOL3)

- (1) Take off the T-LCF paper feed unit.
P. 4-8 "4.3.1 T-LCF paper feed unit"
- (2) Disconnect 1 connector [1] of the T-LCF pickup solenoid.

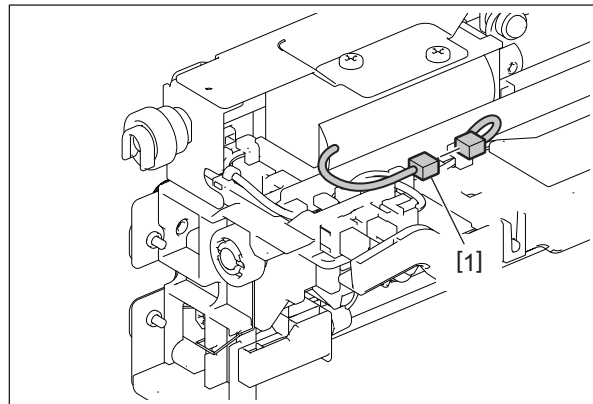


Fig. 4-22

- (3) Release the harness from the harness clamp [2], remove 5 screws and take off the frame [3] of the T-LCF paper feed unit.

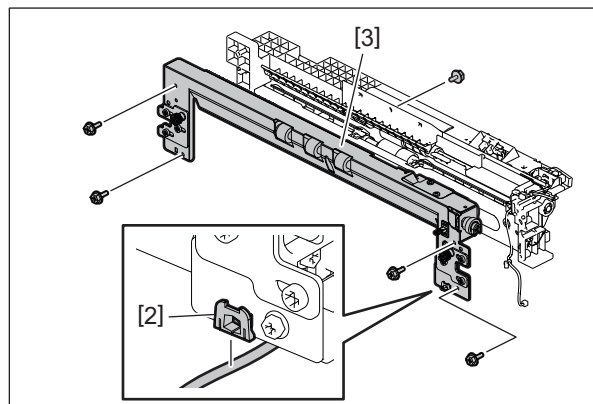


Fig. 4-23

(4) Remove 1 shoulder screw [4] and the lever [5].

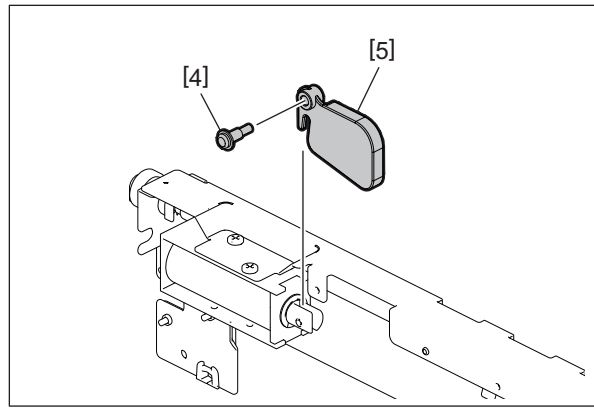


Fig. 4-24

(5) Remove 2 screws and take off the T-LCF pickup solenoid [6].

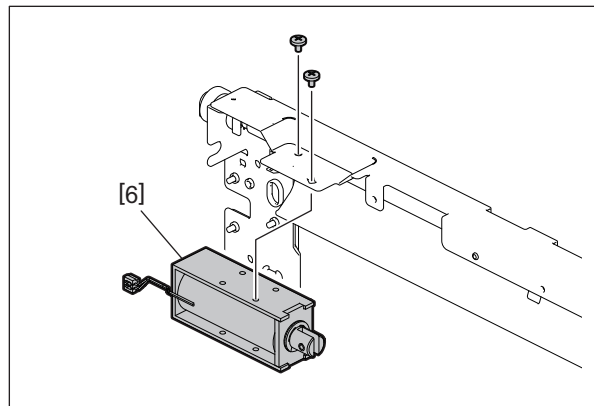


Fig. 4-25

4.4 T-LCF Separation Roller, T-LCF Pickup Roller, T-LCF Paper Feed Roller

4.4.1 T-LCF separation roller **PM**

- (1) Take off the T-LCF paper feed unit.
📖 P. 4-8 “4.3 Paper Feed Unit”
- (2) Remove the T-LCF separation roller [1] from the T-LCF paper feed unit.

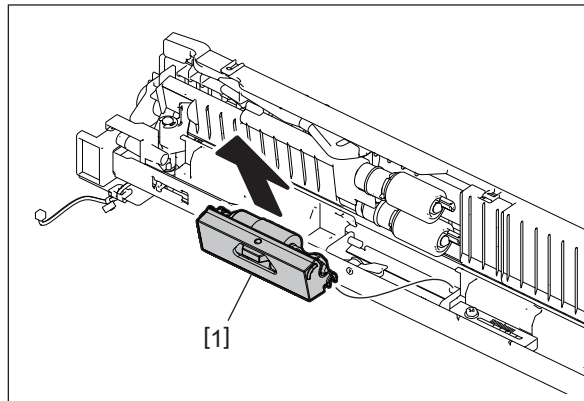


Fig. 4-26

Notes:

When installing the T-LCF separation roller [1], firmly engage the hook [2].

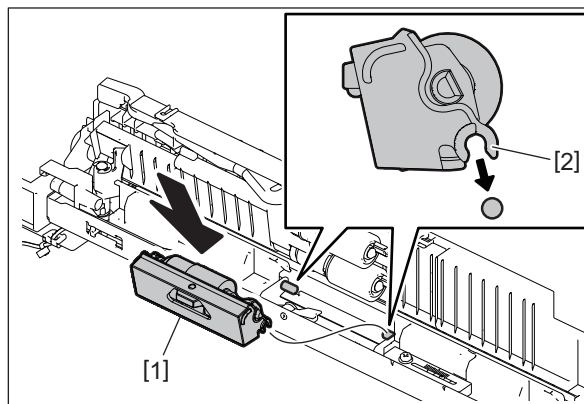


Fig. 4-27

4.4.2 T-LCF pickup roller **PM**

- (1) Take off the T-LCF paper feed unit.
📖 P. 4-8 “4.3 Paper Feed Unit”
- (2) Remove the sub guide [1] from the transport guide of the T-LCF paper feed unit.

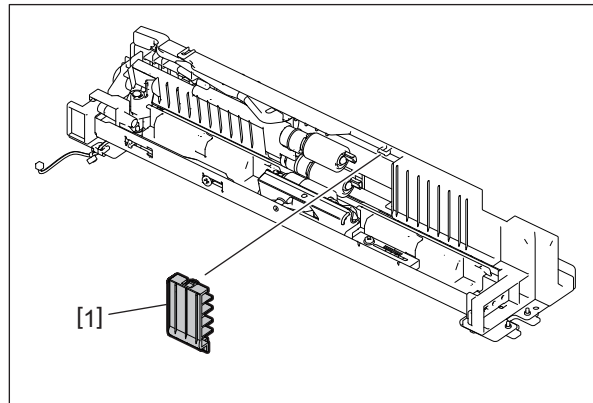


Fig. 4-28

- (3) Take off the T-LCF pickup roller [2].

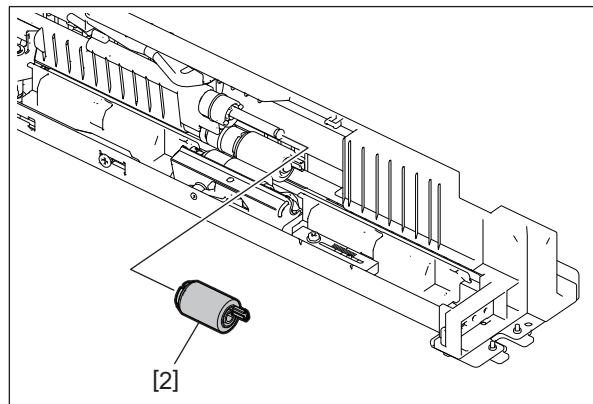


Fig. 4-29

4.4.3 T-LCF paper feed roller **PM**

- (1) Take off the T-LCF pickup roller.
📖 P. 4-12 “4.4.2 T-LCF pickup roller”
- (2) Take off the T-LCF paper feed roller [1].

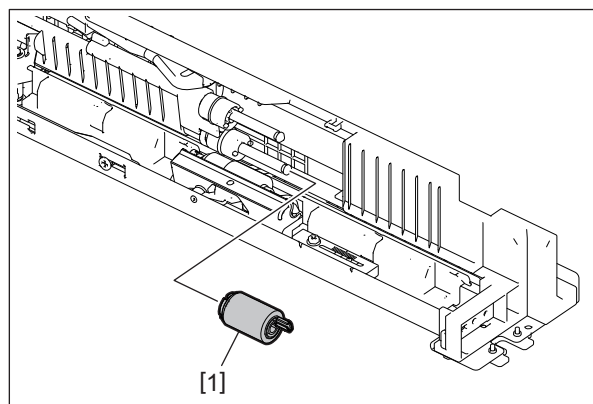


Fig. 4-30

4.5 Motor

4.5.1 T-LCF transport motor (M1)

- (1) Take off the rear cover.
📖 P. 4-5 “4.1.7 Rear cover”
- (2) Disconnect 1 connector [1].
- (3) Remove 2 screws and take off the T-LCF transport motor [2].

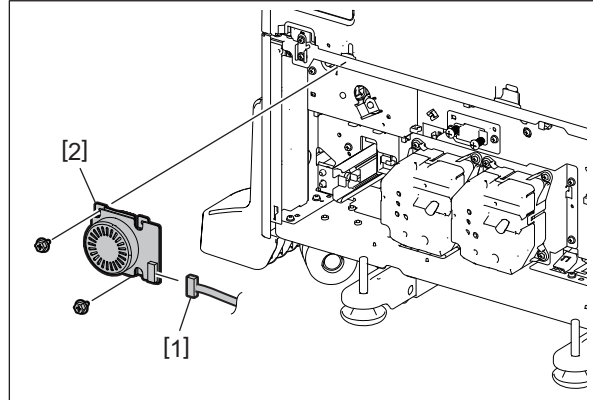


Fig. 4-31

4.5.2 T-LCF tray-up motor (M2)

- (1) Take off the rear cover.
📖 P. 4-5 “4.1.7 Rear cover”
- (2) Release the clamp [1] and disconnect 1 connector [2].

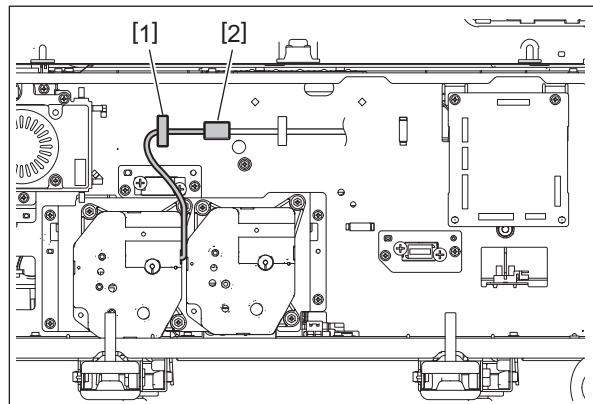


Fig. 4-32

- (3) Remove 3 screws and take off the T-LCF tray-up motor [3].

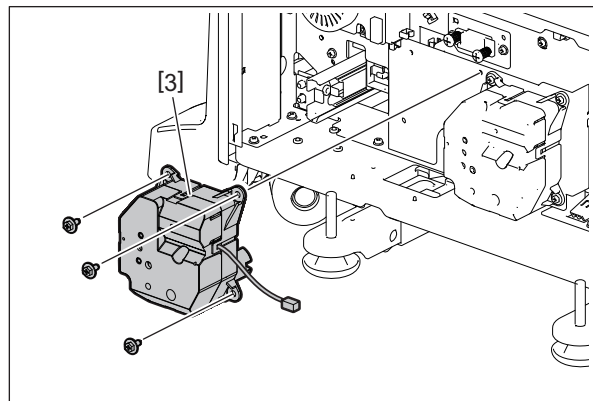



Fig. 4-33

4.5.3 T-LCF end fence motor (M3)

- (1) Take off the rear cover.
 P. 4-5 "4.1.7 Rear cover"
- (2) Release the clamp [1] and disconnect 1 connector [2].

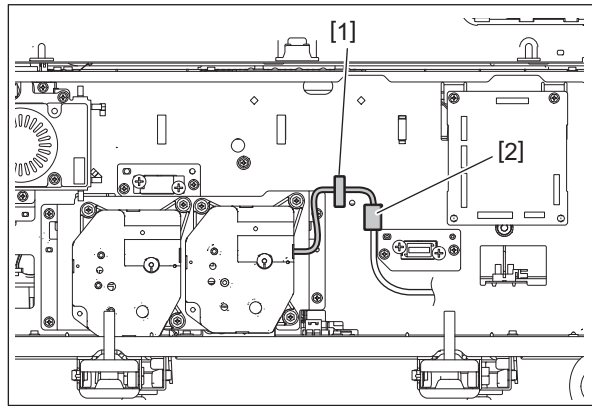


Fig. 4-34

- (3) Remove 3 screws and take off the T-LCF end fence motor [3].

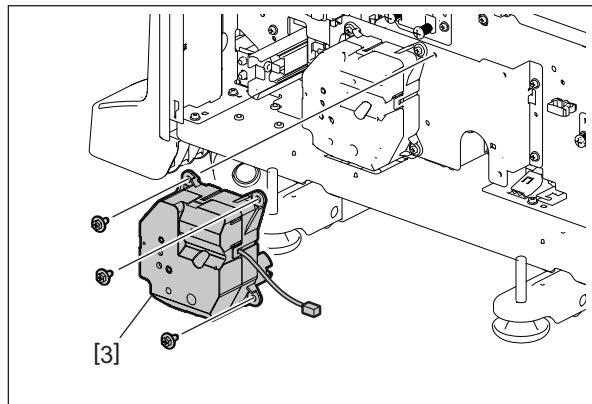


Fig. 4-35

4.6 T-LCF Paper Feed Clutch (CLT1), T-LCF Transport Clutch (CLT2)

- (1) Take off the rear cover.
📖 P. 4-5 "4.1.7 Rear cover"
- (2) Take off the T-LCF transport motor.
📖 P. 4-13 "4.5.1 T-LCF transport motor (M1)"
- (3) Release the harness from 2 clamps [1].

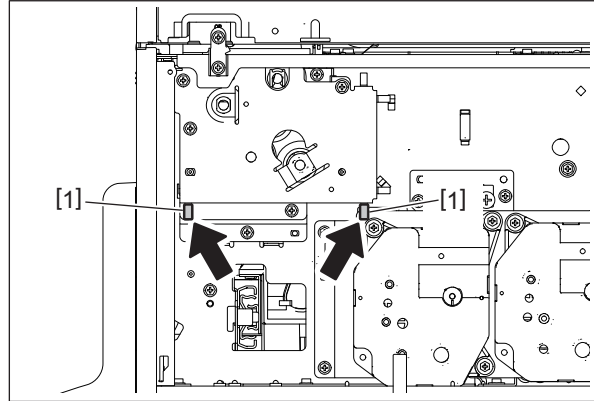


Fig. 4-36

- (4) Remove the clip [2].

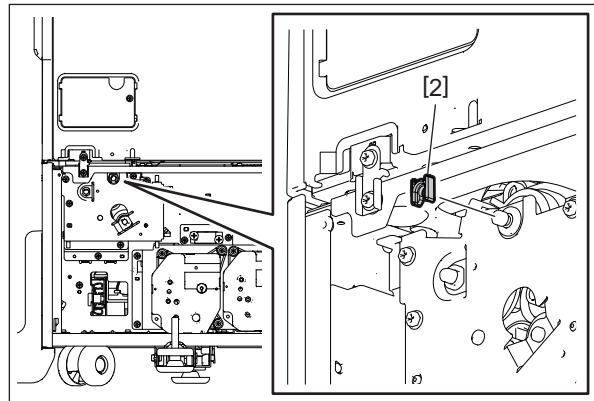


Fig. 4-37

- (5) Remove 1 bushing [3]. Remove 4 screws and take off the bracket [4].

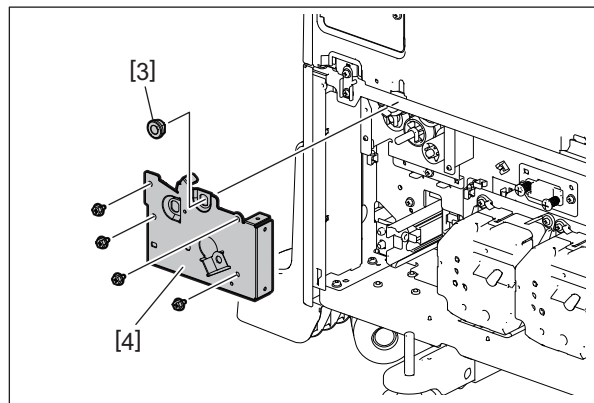


Fig. 4-38

Notes:

When installing the bracket [4], firmly attach the rotation stoppers [10] of the clutch.

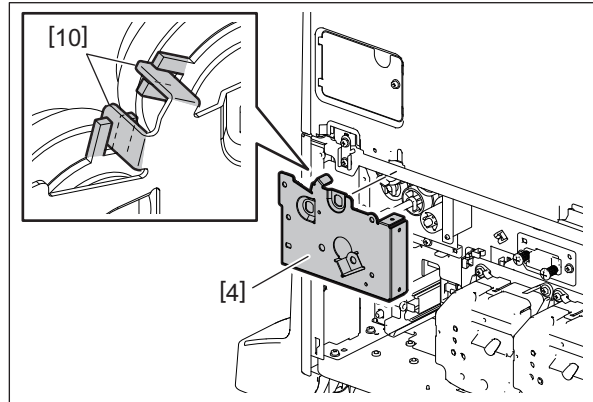


Fig. 4-39

- (6) Remove 1 bushing [5]. Take off the T-LCF paper feed clutch [6] and disconnect the connector [7].

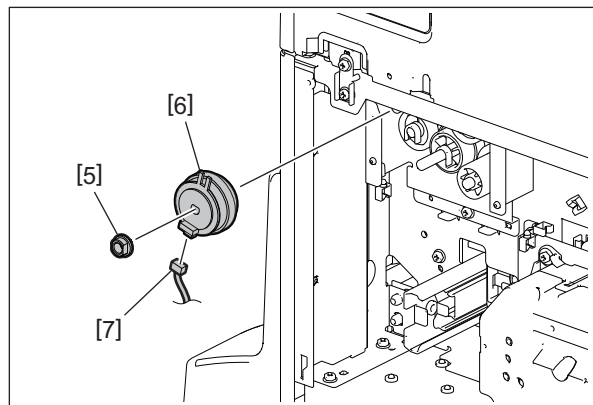


Fig. 4-40

- (7) Take off the T-LCF transport clutch [8] and disconnect the connector [9].

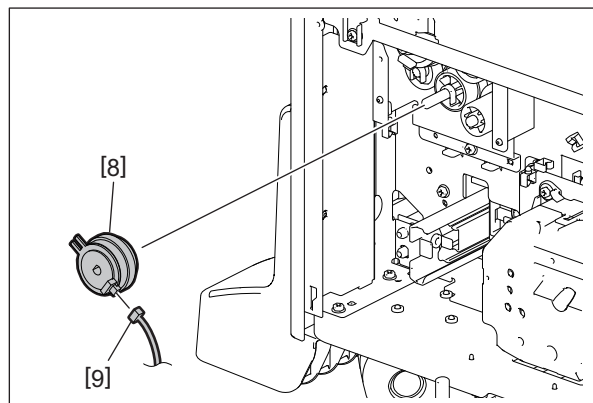



Fig. 4-41

4.7 Sensor

4.7.1 T-LCF standby side paper mis-stacking detection sensor (S5)

- (1) Take off the standby side tray.
 P. 4-1 “4.1.1 Standby side tray”
- (2) Remove 4 screws of the rear side guide and take off the bracket [1].

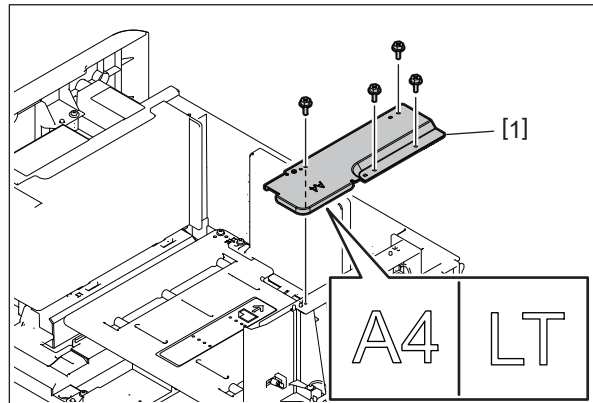


Fig. 4-42

Notes:

The bracket of the rear side guide varies depending on the paper size.

- (3) Remove 1 screw and take off the rear side guide stopper [2].

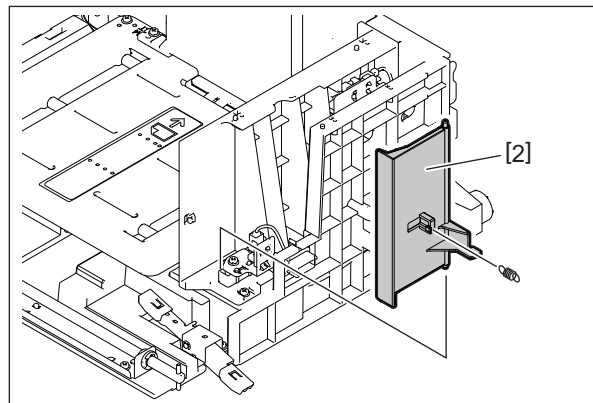


Fig. 4-43

- (4) Remove 1 screw and disconnect 1 connector [4]. Take off the sensor bracket [3].

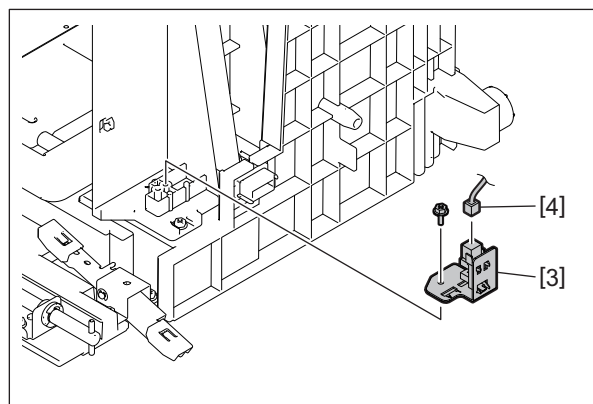


Fig. 4-44

(5) Remove the T-LCF standby side paper mis-stacking detection sensor [5].

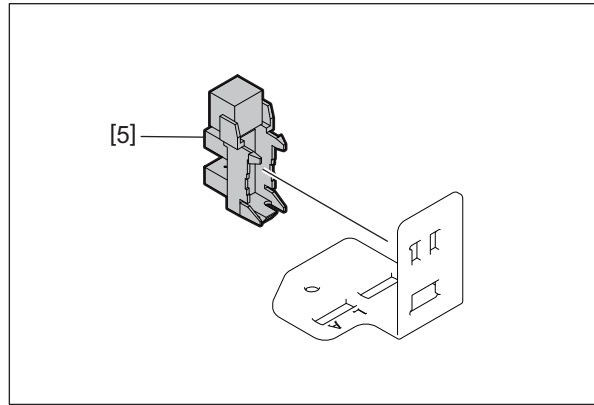


Fig. 4-45

Notes:

- The attachment position of the T-LCF standby side paper mis-stacking detection sensor [5] differs depending on the paper size.
 - a: A4 size
 - b: LT size
 - c: Standby side
 - d: Paper feeding side

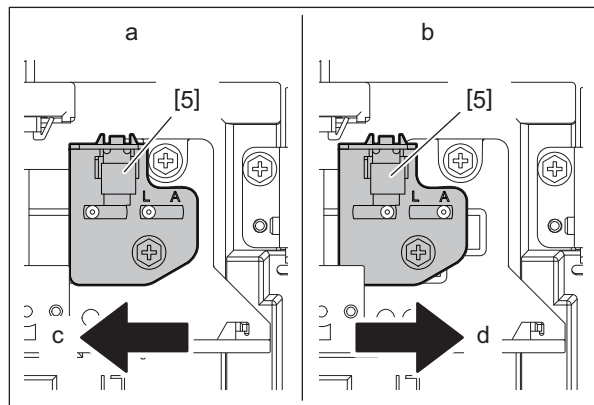


Fig. 4-46

- The hole for attaching the rear side guide stopper [2] differs depending on the paper size.

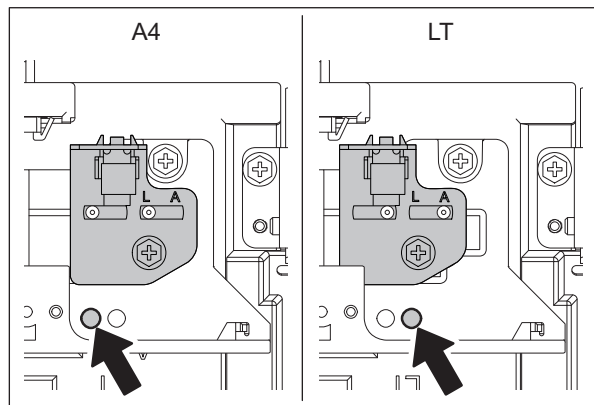


Fig. 4-47

4.7.2 T-LCF standby side paper remaining detection sensor (S3)

- (1) Take off the standby side tray.
☞ P. 4-1 “4.1.1 Standby side tray”
- (2) Remove 2 screws of the rear side guide. Disconnect 1 connector [2] and remove the sensor bracket [1].

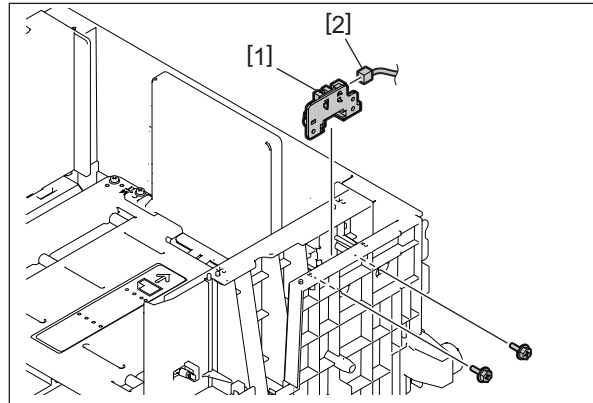


Fig. 4-48

- (3) Remove the T-LCF standby side paper remaining detection sensor [3] from the sensor bracket [1].

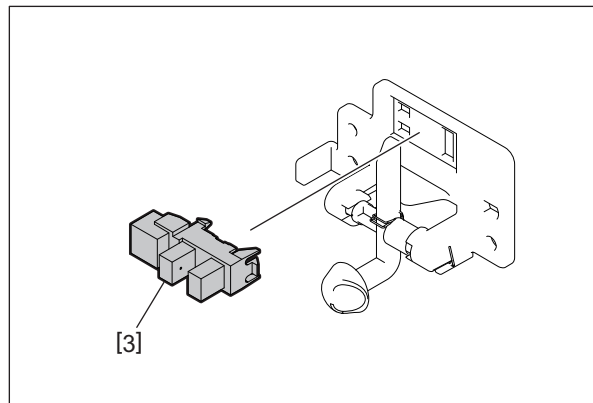


Fig. 4-49

4.7.3 T-LCF standby side paper empty sensor (S4)

- (1) Take off the standby side tray.
☞ P. 4-1 “4.1.1 Standby side tray”
- (2) Remove 3 screws and take off the rear side guide [1].

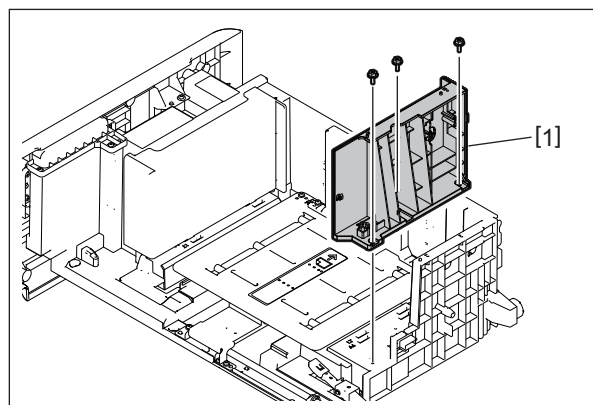


Fig. 4-50

- (3) Slide the end fence [2] in the direction of the arrow. Remove 1 screw and take off the sensor cover [3].

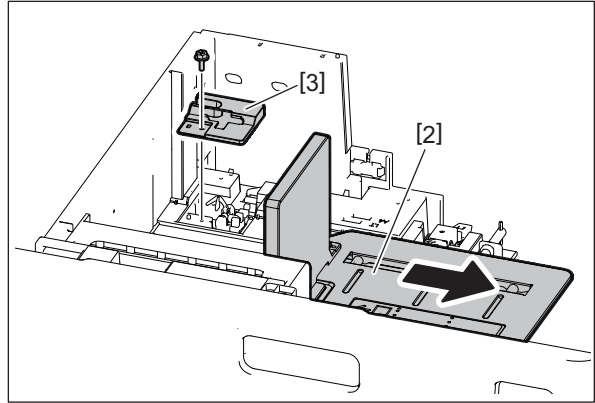


Fig. 4-51

- (4) Remove 2 screws. Disconnect 1 connector [5] and remove the sensor holder [4].

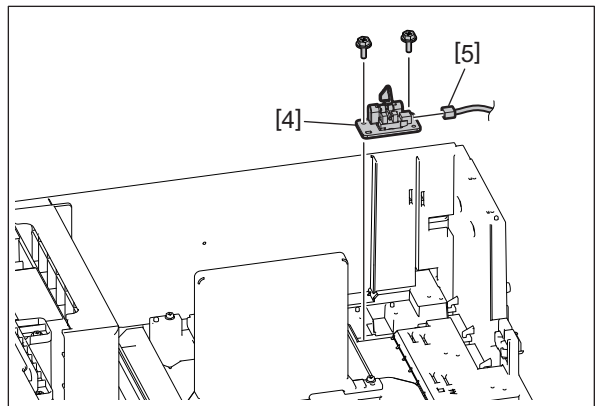


Fig. 4-52

- (5) Remove the T-LCF standby side paper empty sensor [6] from the sensor holder [4].

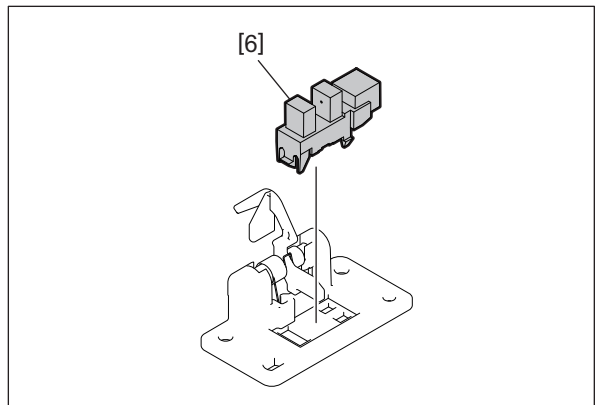


Fig. 4-53

4.7.4 T-LCF end fence home position sensor (S2)

- (1) Take off the standby side tray.
P. 4-1 "4.1.1 Standby side tray"
- (2) Pull the paper feeding side tray.
- (3) Slide the end fence [1] in the direction of the arrow. Remove 1 screw, disconnect the connector and take off the sensor cover [2].

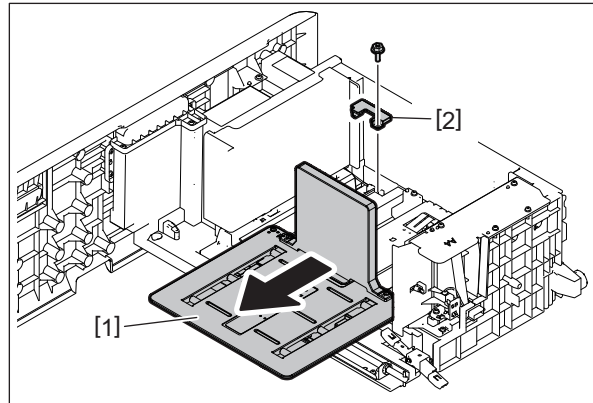


Fig. 4-54

- (4) Disconnect 1 connector [3] and remove the T-LCF end fence home position sensor [4].

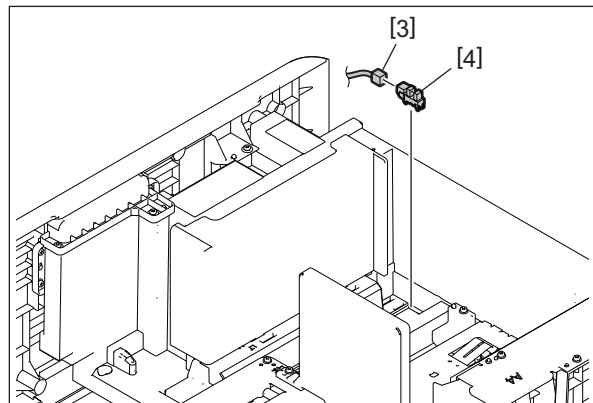


Fig. 4-55

4.7.5 T-LCF end fence stop position sensor (S1)

- (1) Take off the standby side tray.
☞ P. 4-1 “4.1.1 Standby side tray”
- (2) Remove 1 screw and take off the sensor cover [1].
- (3) Disconnect the connector [2] and remove the T-LCF end fence stop position sensor [3].

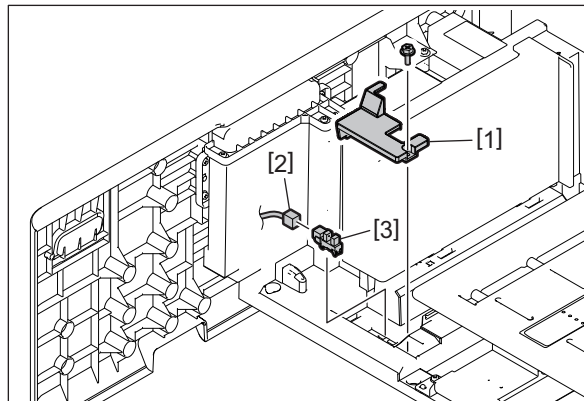


Fig. 4-56

4.7.6 T-LCF standby side tray detection sensor (S13)

- (1) Take off the standby side tray.
☞ P. 4-1 “4.1.1 Standby side tray”
- (2) Take off the paper feeding side tray.
☞ P. 4-2 “4.1.2 Paper feeding side tray”
- (3) Take off the rear cover.
☞ P. 4-5 “4.1.7 Rear cover”
- (4) Disconnect 1 connector [1] and remove the T-LCF standby side tray detection sensor [2].

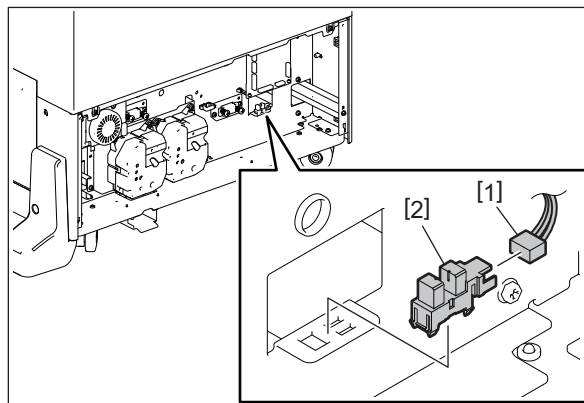


Fig. 4-57

4.7.7 T-LCF paper feeding side bottom sensor (S6)

- (1) Take off the standby side tray.
☞ P. 4-1 "4.1.1 Standby side tray"
- (2) Take off the paper feeding side tray.
☞ P. 4-2 "4.1.2 Paper feeding side tray"
- (3) Remove 6 screws of the paper feeding side tray.

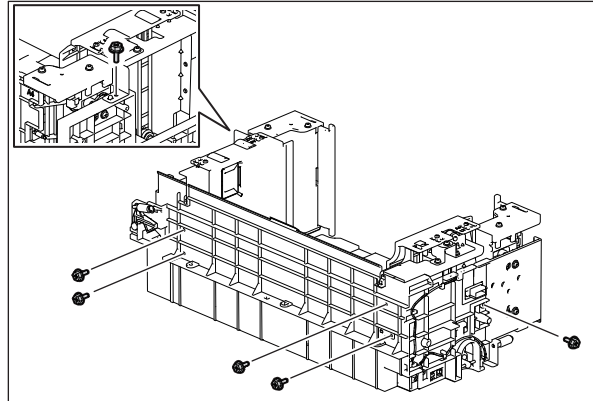


Fig. 4-58

- (4) Take off the paper feeding side tray lift-up unit [2].

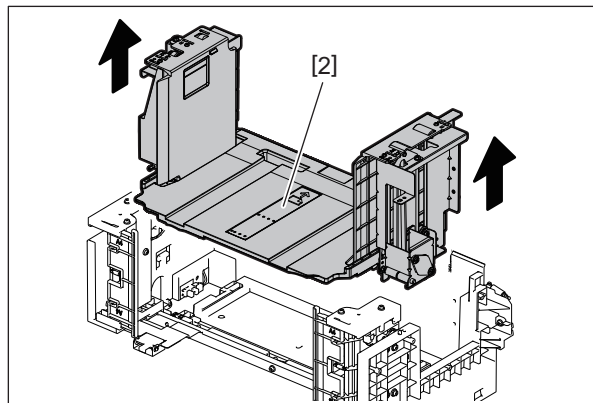


Fig. 4-59

- (5) Disconnect 1 connector [4] and remove the T-LCF paper feeding side bottom sensor [3].

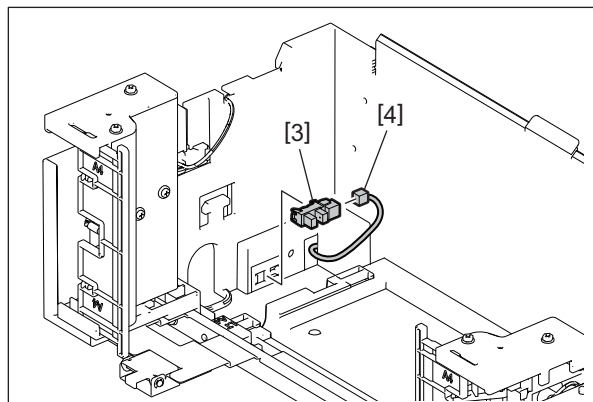


Fig. 4-60

4.7.8 T-LCF paper feeding side stopper opening/closing detection sensor (front) (S7)

- (1) Take off the standby side tray.
📖 P. 4-1 “4.1.1 Standby side tray”
- (2) Take off the paper feeding side tray.
📖 P. 4-2 “4.1.2 Paper feeding side tray”
- (3) Remove 4 screws and take off the paper feeding side front cover [1].

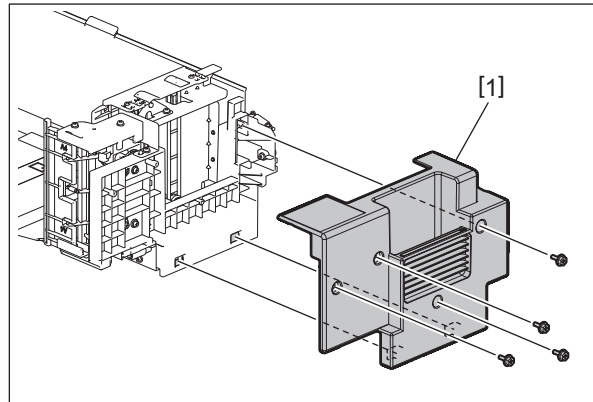


Fig. 4-61

- (4) Remove 2 screws and take off the paper feeding side stopper cover (front) [2].
- (5) Disconnect 1 connector [3] and remove the T-LCF paper feeding side stopper opening/closing detection sensor (front) [4].

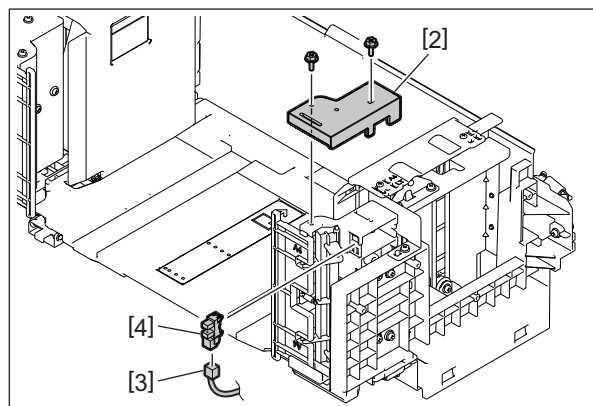


Fig. 4-62

4.7.9 T-LCF paper feeding side stopper opening/closing detection sensor (S8)

- (1) Take off the standby side tray.
☞ P. 4-1 “4.1.1 Standby side tray”
- (2) Take off the paper feeding side tray.
☞ P. 4-2 “4.1.2 Paper feeding side tray”
- (3) Remove 2 screws and take off the paper feeding side stopper cover (rear) [1].
- (4) Disconnect 1 connector [2] and remove the T-LCF paper feeding side stopper opening/closing detection sensor (rear) [3].

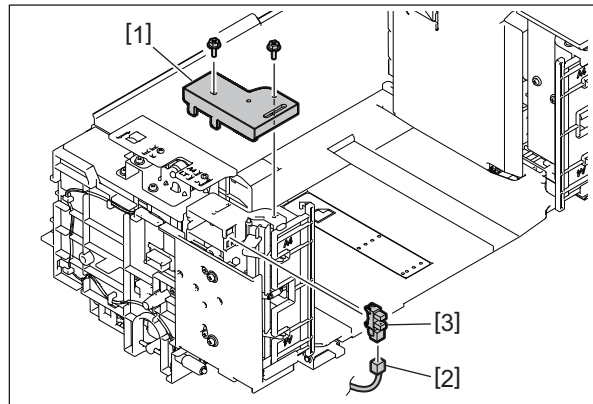


Fig. 4-63

4.7.10 T-LCF paper feeding side tray detection sensor (S9)

- (1) Take off the standby side tray.
☞ P. 4-1 “4.1.1 Standby side tray”
- (2) Take off the paper feeding side tray.
☞ P. 4-2 “4.1.2 Paper feeding side tray”
- (3) Take off the rear cover.
☞ P. 4-5 “4.1.7 Rear cover”
- (4) Disconnect 2 connectors [2] of the T-LCF tray-up motor unit and the T-LCF end fence motor unit and release the harness from the harness clamps [1].

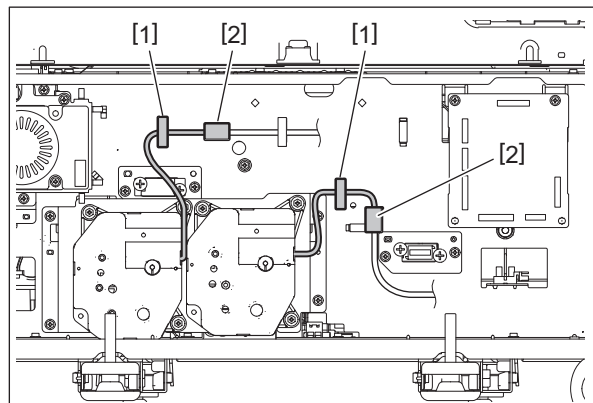


Fig. 4-64

- (5) Remove 4 screws and take off the bracket [3] of the motor unit.

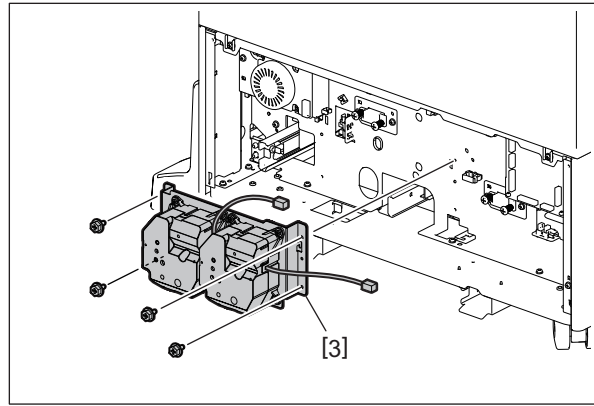


Fig. 4-65

- (6) Disconnect 1 connector [4] and remove the T-LCF paper feeding side tray detection sensor [5].

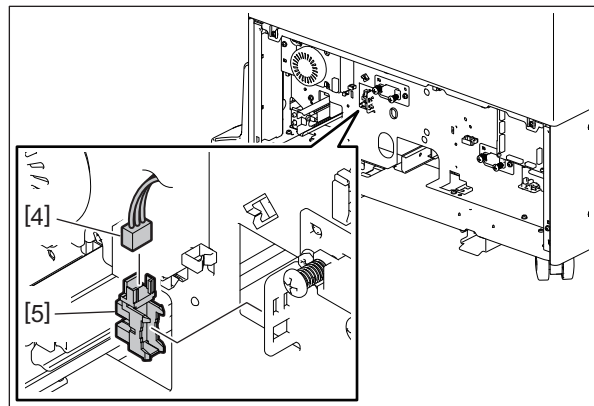


Fig. 4-66

4.7.11 T-LCF paper feeding side paper empty sensor (S10)

- (1) Take off the T-LCF paper feed unit.
P. 4-8 "4.3 Paper Feed Unit"
- (2) Disconnect 1 connector [2] and move the actuator [1]. Then remove the T-LCF paper feeding side paper empty sensor [3].

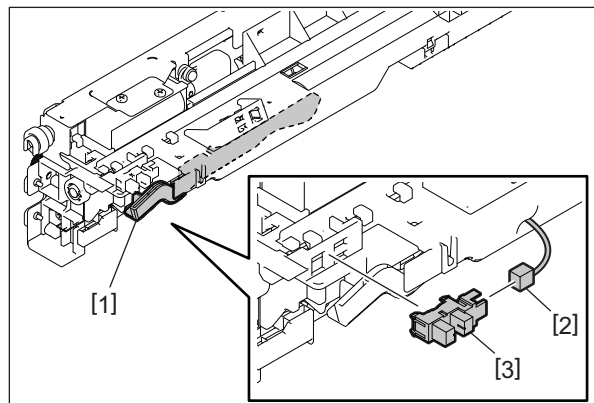


Fig. 4-67

4.7.12 T-LCF tray-up sensor (S11)

- (1) Take off the T-LCF paper feed unit.
P. 4-8 "4.3 Paper Feed Unit"
- (2) Disconnect 1 connector [1] and remove the T-LCF tray-up sensor [2].

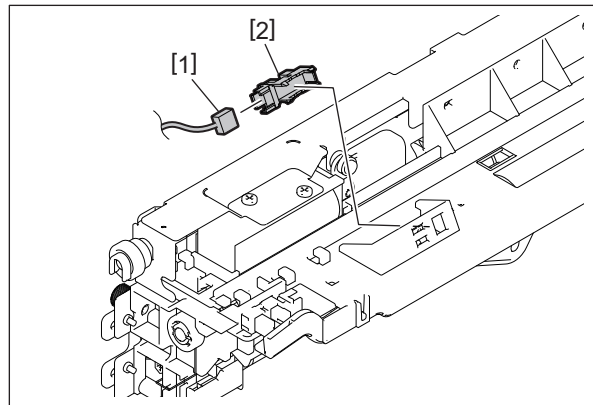


Fig. 4-68

4.7.13 T-LCF transport sensor (S12)

- (1) Take off the jam access cover.
P. 4-4 "4.1.4 Jam Access Cover"
- (2) Remove 5 screws and take off the guide [1].

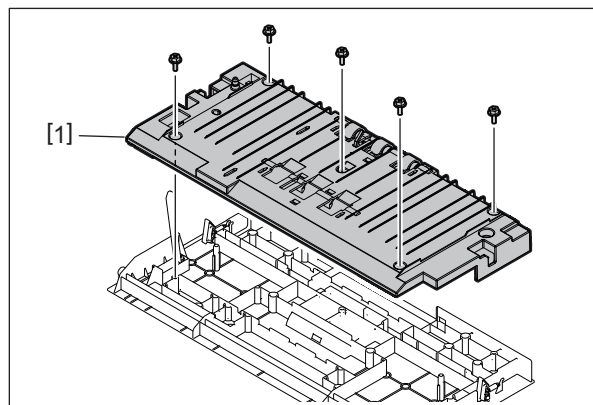


Fig. 4-69

- (3) Disconnect 1 connector [2] and remove the T-LCF transport sensor [3].

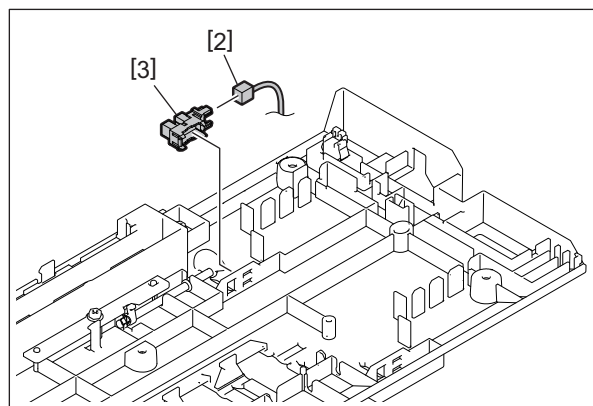


Fig. 4-70

4.7.14 T-LCF paper feeding side stopper opening/closing solenoid (front) (SOL1)

- (1) Take off the T-LCF paper feed unit.
📖 P. 4-8 “4.3 Paper Feed Unit”
- (2) Remove 2 screws, disconnect 2 connectors [2] and take off the T-LCF paper feeding side stopper (front) [1].

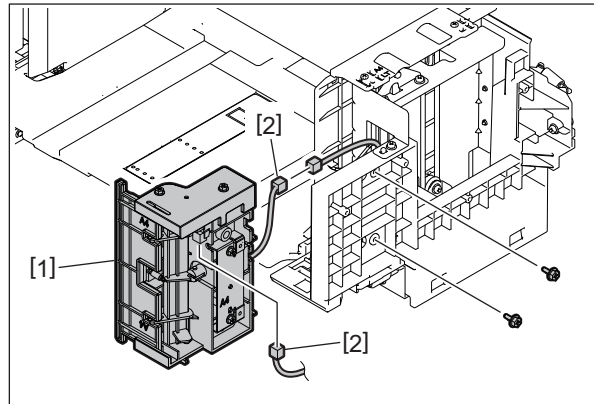


Fig. 4-71

- (3) Remove 2 screws.
- (4) Remove the T-LCF paper feeding side stopper (front) bracket [3] and take off the T-LCF paper feeding side stopper opening/closing solenoid (front) [4].

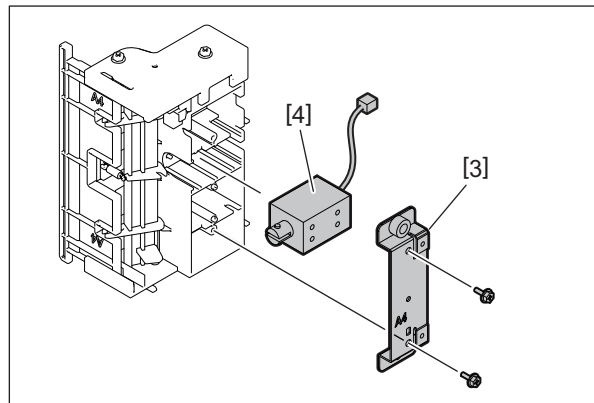


Fig. 4-72

4.7.15 T-LCF paper feeding side stopper opening/closing solenoid (rear) (SOL2)

- (1) Take off the T-LCF paper feed unit.
📖 P. 4-8 “4.3 Paper Feed Unit”
- (2) Remove 2 screws, disconnect 2 connectors [2] and take off the T-LCF paper feeding side stopper (rear) [1].

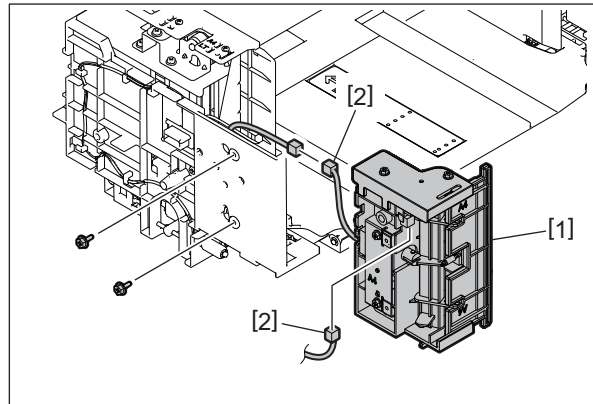


Fig. 4-73

- (3) Remove 2 screws.
- (4) Remove the T-LCF paper feeding side stopper (rear) bracket [3] and take off the T-LCF paper feeding side stopper opening/closing solenoid (rear) [4].

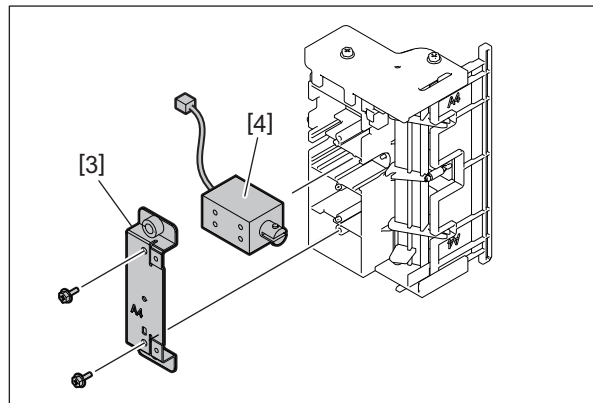



Fig. 4-74

4.8 Switch

4.8.1 T-LCF jam access cover opening/closing switch (SW1)

- (1) Take off the jam access cover.
 P. 4-4 “4.1.4 Jam Access Cover”
- (2) Remove 5 screws and take off the guide [1].

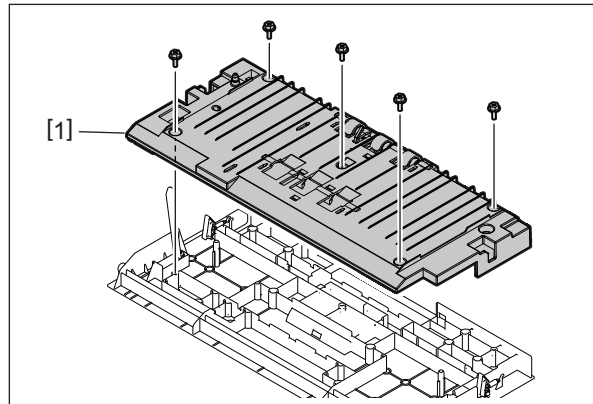


Fig. 4-75

- (3) Disconnect 1 connector [3] and take off the T-LCF jam access cover opening/closing switch [2].

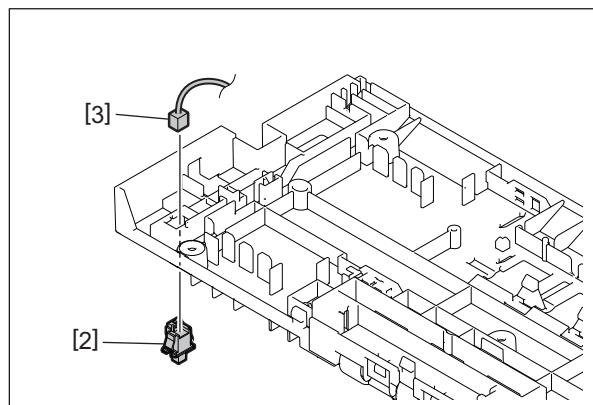


Fig. 4-76

5.2 PC Board Assembly Drawing

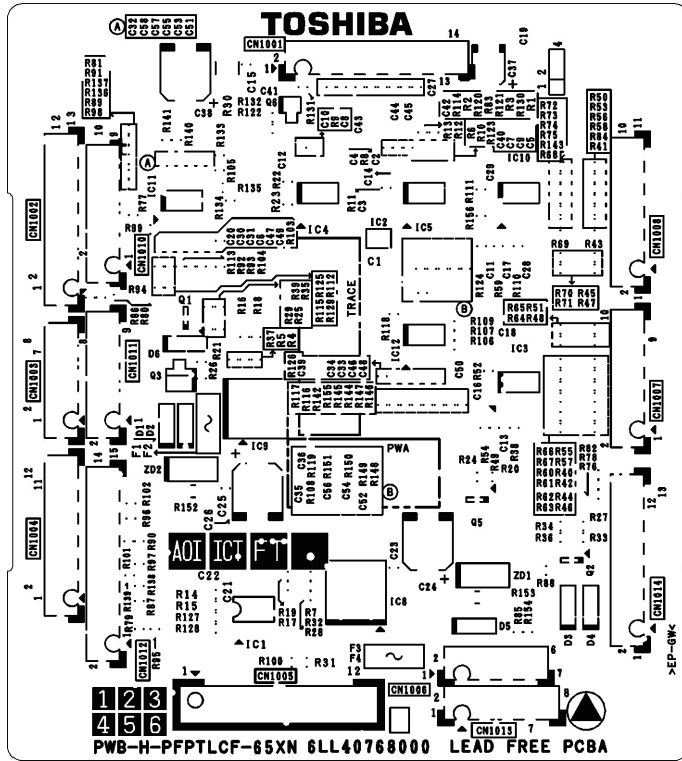


Fig.5-2

6. PERIODIC MAINTENANCE

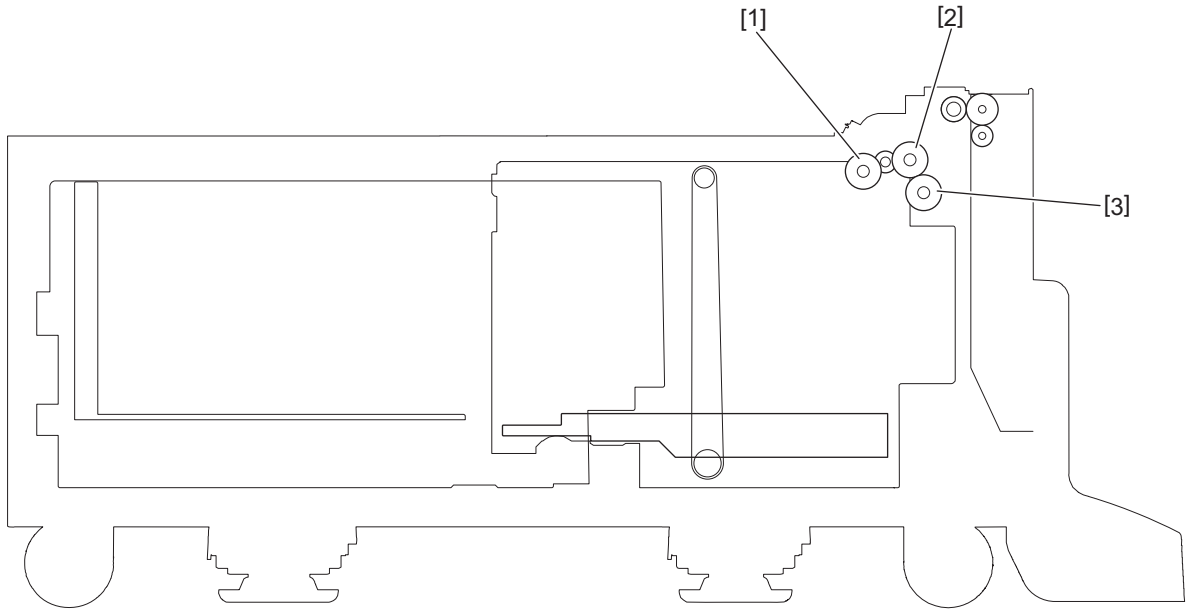


Fig.6-1

Symbols used in the checklist

Cleaning	Lubrication/Coating	Replacement	Operation check
A: Clean with alcohol	W1: White grease (Molykote EM-30L)	Value: Replacement cycle R: Replace if deformed or damaged	O: After cleaning or replacement, confirm there is no problem.

Preventive Maintenance Checklist

Items to check	Cleaning	Lubrication/Coating	Replacement (x 1,000 sheets)	Operation check	Parts list <P-I>	Remarks
1 T-LCF pickup roller	A		320		5-27	
2 T-LCF paper feed roller	A		320		5-27	
3 T-LCF separation roller	A		320		5-32	
- Drive gear (tooth surface)		W1				

- Perform preventive maintenance for the Large Capacity Feeder at the same interval as for the MFP to which it is connected.
- The column "Parts List <P-I>" shows the page and item number in the parts list.

REVISION RECORD

Ver.00

Ver.00 <2021/12/22>	
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	Initial release

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