

# SHARP TROUBLE & ERROR CODES

## AR-651, AR-810

### 5. TROUBLESHOOTING

#### 5.1 Diagnosis and Prescription for Each Error Code and Phenomenum

##### 5.1.1 Paper transport jam

[E01] Leading edge of paper not reaching the fuser exit sensor

[E02] Trailing edge of paper not passing the fuser exit sensor

Open the jam access cover. Is there any paper on the transport path?

YES → Remove the paper.

NO

Is the fuser exit sensor working?

(Perform the input check in the test mode: 03-[ENERGY SAVER]ON/[6]/[F]).

- NO
1. Check if the connector of the exit sensor is disconnected.
  2. Check if the connector J335 on the LGC board is disconnected.
  3. Check if the connector pins are disconnected and the harnesses are open-circuited.
  4. Check if the conductor pattern on the LGC board is short- or open-circuited.
  5. Replace the exit sensor.
  6. Replace the LGC board.

YES

Is the registration motor working? (Perform the output check in the test mode: 03-108/158)

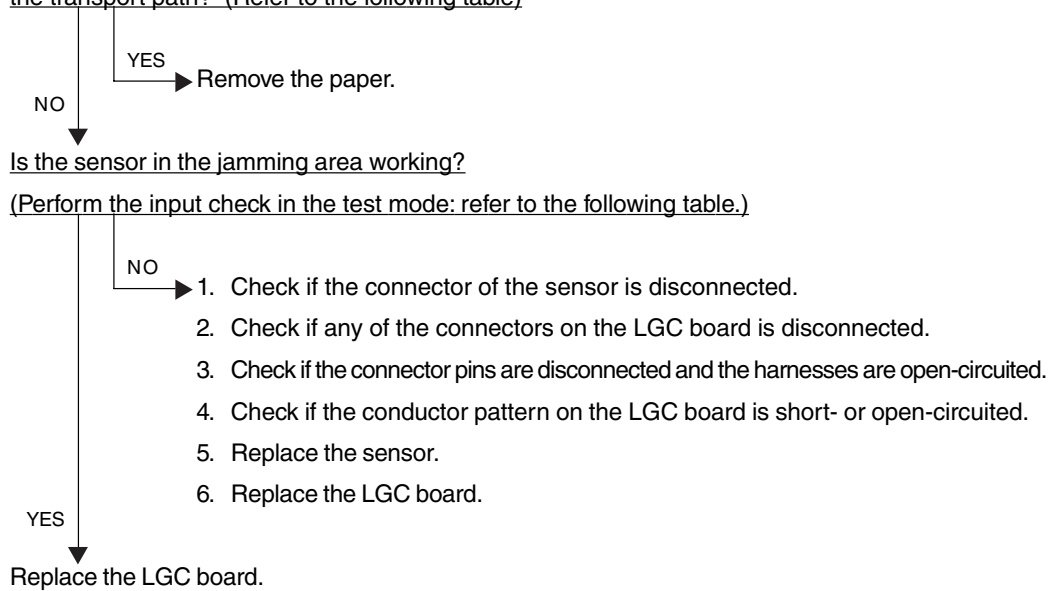
- NO
1. Check if the connector of the registration clutch is disconnected.
  2. Check if the connector J341 on the LGC board is disconnected.
  3. Check if the connector pins are disconnected and the harnesses are open-circuited.
  4. Check if the conductor pattern on the LGC board is short- or open-circuited.
  5. Replace the registration clutch.
  6. Replace the LGC board.

YES

Check the registration roller. Replace it if it is worn out.

**[E03] Paper remaining inside the copier at power ON**

Open the cover of the unit/area whose picture is flashing on the control panel. Is there any paper on the transport path? (Refer to the following table)



Relation between the jamming area and the corresponding sensors

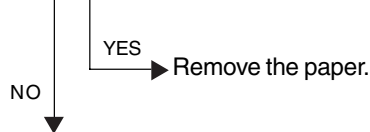
Jamming area	Sensor	Test mode/Input check
Registration area	Registrationsensor	03-[ENERGYSAVER]ON/[4][E]
Exit/Reverse area	Exitsensor	03-[ENERGYSAVER]OFF/[6][G]
	Reversesensor1	03-[ENERGYSAVER]OFF/[6][C]
	Reversesensor2	03-[ENERGYSAVER]OFF/[6][B]
Reverse transport area	Transportsensor1	03-[ENERGYSAVER]OFF/[0][C]
	Transportsensor2	03-[ENERGYSAVER]OFF/[0][A]
	Transportsensor3	03-[ENERGYSAVER]OFF/[0][B]
Paper feeding area	1st cassette feed sensor	03-[ENERGYSAVER]OFF/[2][A]
	2ndcassettefeed sensor	03-[ENERGYSAVER]OFF/[3][A]
	3rdcassette/TandemLCFfeed sensor	03-[ENERGYSAVER]OFF/[4][A]
	4thcassette/TandemLCFfeed sensor	03-[ENERGYSAVER]OFF/[5][A]
	1stcassette transport sensor	03-[ENERGYSAVER]OFF/[2][B]
	2ndcassette transport sensor	03-[ENERGYSAVER]OFF/[3][B]
	3rd cassette/Tandem LCF transport sensor	03-[ENERGYSAVER]OFF/[4][B]
	4th cassette/Tandem LCF transport sensor	03-[ENERGYSAVER]OFF/[5][B]

**[E09] Jam caused by an abnormal HDD**

- (1) Check if the connectors of the HDD are disconnected.
- (2) Check if the connector pins are disconnected and the harnesses are open-circuited.
- (3) Replace the HDD.
- (4) Replace the SYS board.

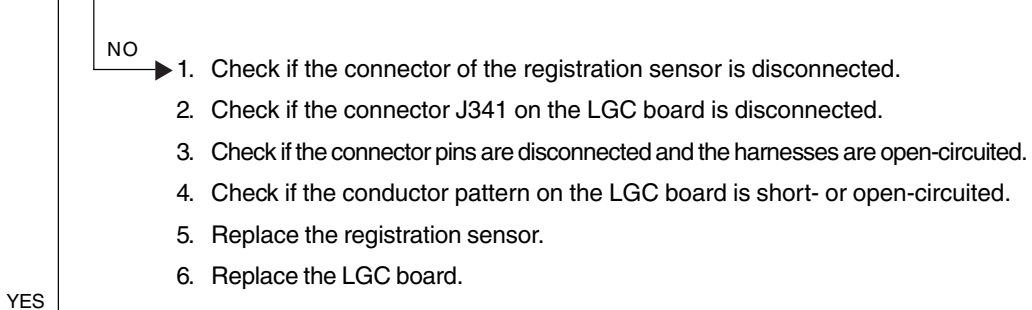
**[E20] Paper fed from the 1st cassette not reaching the registration sensor**

Open the jam access cover. Is there any paper in front of the registration sensor?



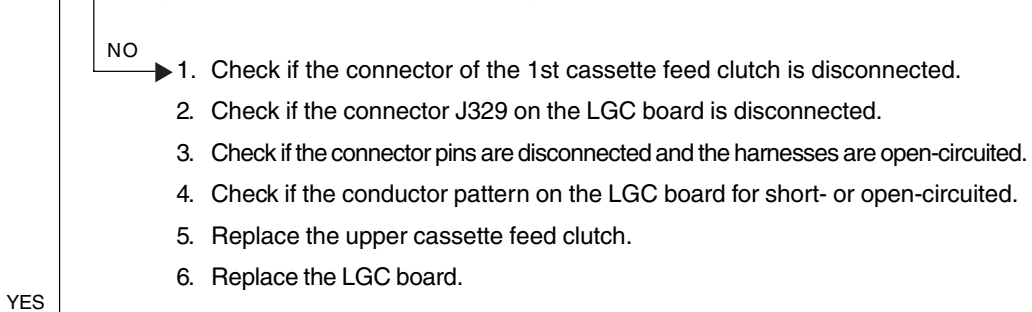
Is the registration sensor working?

(Perform the input check in the test mode: 03-[ENERGY SAVER]ON/[4]/[E])



Is the 1st cassette feed clutch working?

(Perform the output check in the test mode: 03-201)



Check the 1st cassette feed roller and separation roller. Replace them if they are worn out.

**[E22] Paper fed from the 2nd cassette not reaching the registration sensor**

**[E30] Paper fed from the 3rd cassette not reaching the registration sensor**

**[E34] Paper fed from the 4th cassette not reaching the registration sensor**

**[E3C] Paper fed from the tandem LCF not reaching the registration sensor**

Open the bypass unit cover. Is there paper in front of the registration sensor?

YES → Remove the paper.

NO

Is the registration sensor working?

(Perform the input check in the test mode: 03-[ENERGY SAVER]ON/[4]/[E])

- NO →
1. Check if the connector of the registration sensor is disconnected.
  2. Check if the connector J341 on the LGC board is disconnected.
  3. Check if the connector pins are disconnected and the harnesses are open-circuited.
  4. Check if the conductor pattern on the LGC board is short- or open-circuited.
  5. Replace the registration sensor.
  6. Replace the LGC board.

YES

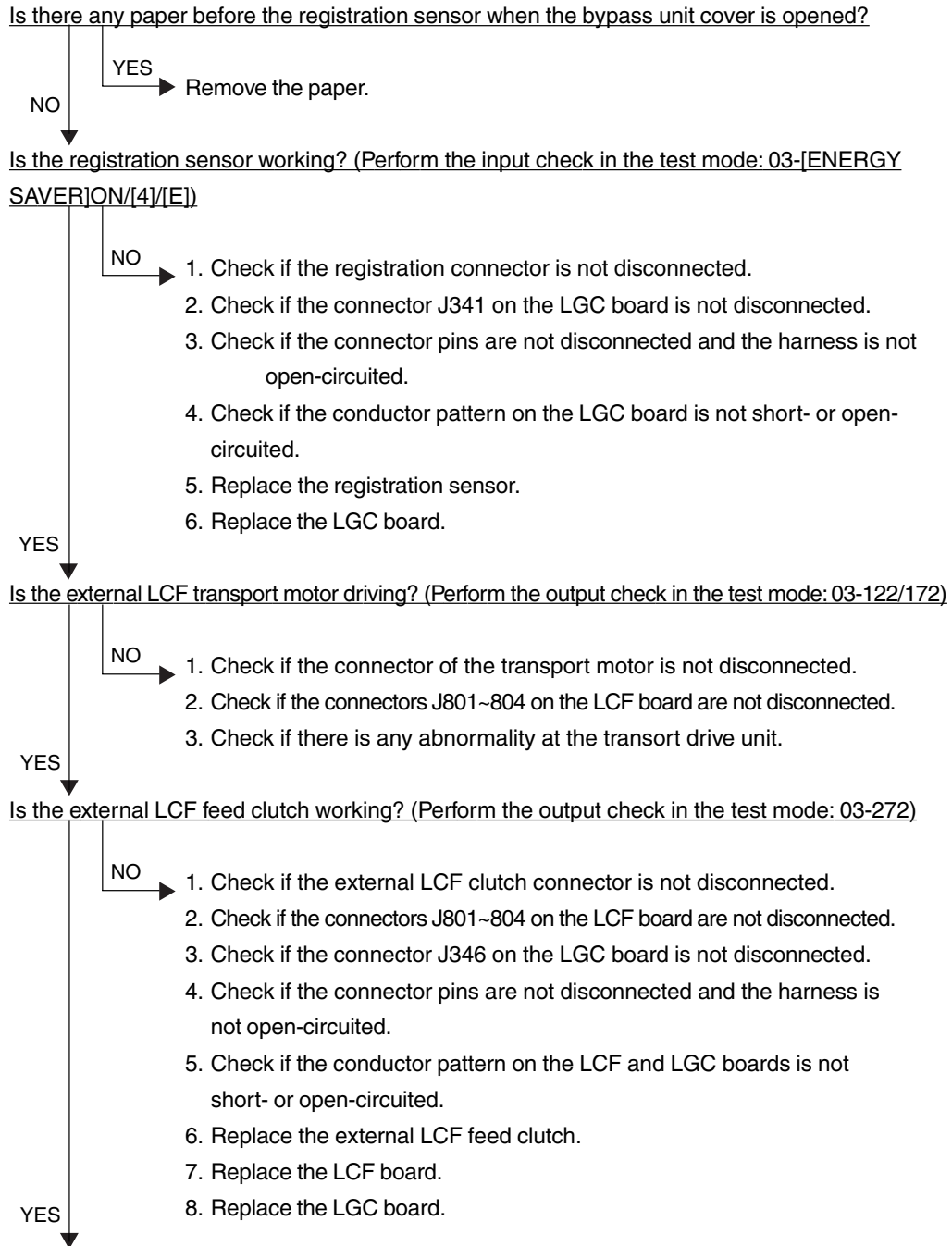
Are the transport clutches working? (Perform the output check in the test mode: 03-202, 203, 210)

- NO →
1. Check if the connectors of the transport clutches are disconnected.
  2. Check if the connector J328, 329, 350 on the LGC board is disconnected.
  3. Check if the connector pins are disconnected and the harnesses are open-circuited.
  4. Check if the conductor pattern on the LGC board is short- or open-circuited.
  5. Replace the transport clutches.
  6. Replace the LGC board.

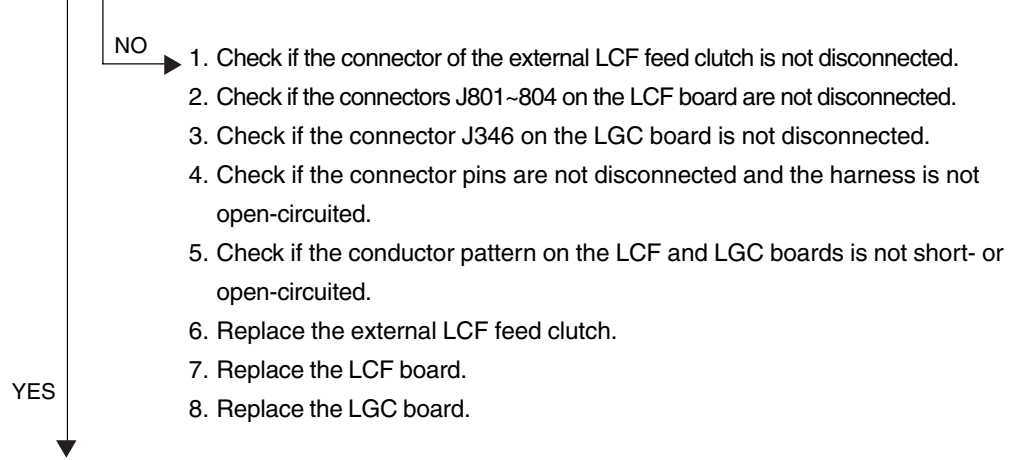
YES

Check the transport roller. Replace it if it is worn out.

**[E25] External LCF transport jam (paper not reaching the registration sensor)**

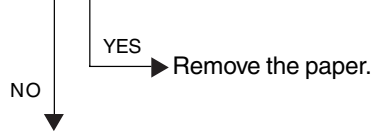


Is the external LCF transport clutch working? (Perform the output check in the test mode: 03-273)



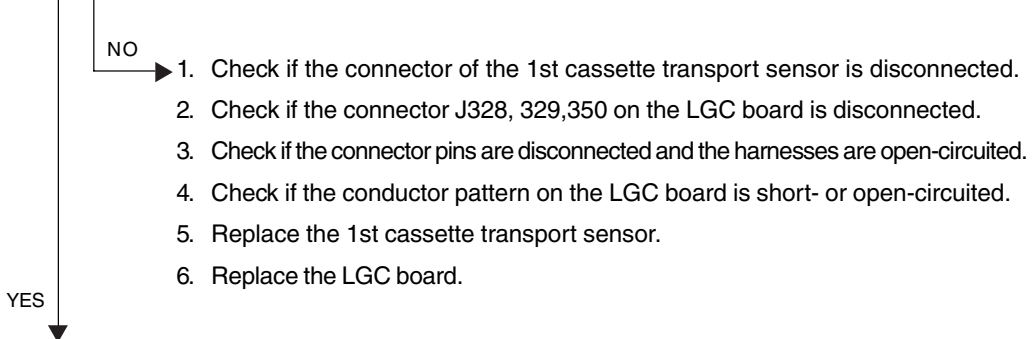
- [E21] Paper fed from the 1st cassette not reaching the 1st cassette transport sensor
- [E23] Paper fed from the 2nd cassette not reaching the 1st cassette transport sensor
- [E31] Paper fed from the 3rd cassette not reaching the 1st cassette transport sensor
- [E35] Paper fed from the 4th cassette not reaching the 1st cassette transport sensor
- [E3D] Paper fed from the tandem LCF not reaching the 1st cassette transport sensor

Open the feed cover. Is there paper in front of the 1st cassette transport sensor?

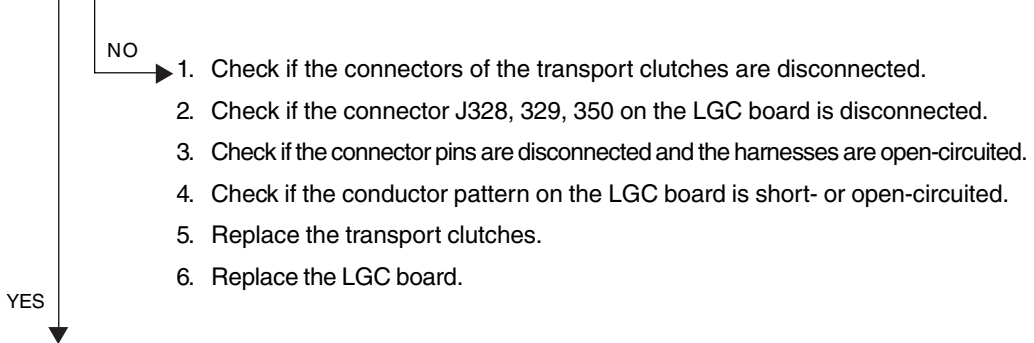


Is the 1st cassette transport sensor working?

(Perform the input check in the test mode: 03-[ENERGY SAVER]OFF/[2]/[B])



Are the transport clutches working? (Perform the output check in the test mode: 03-202, 203, 210)

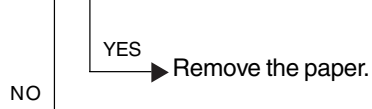


Check the transport roller. Replace it if it is worn out.



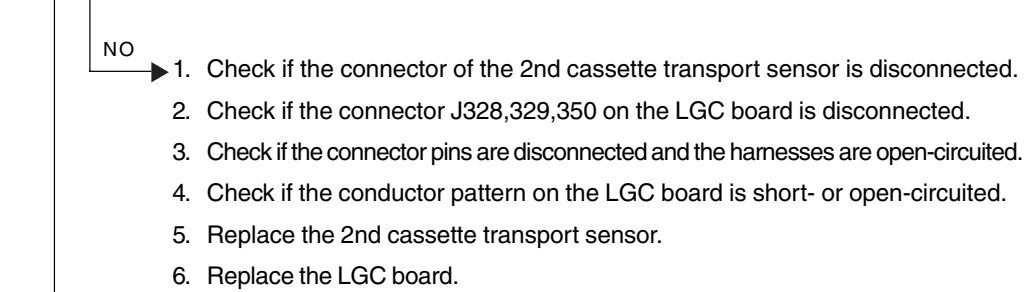
- [E24] Paper fed from the 2nd cassette not reading the 2nd cassette transport sensor**
- [E32] Paper fed from the 3rd cassette not reaching the 2nd cassette transport sensor**
- [E35] Paper fed from the 4th cassette not reaching the 2nd cassette transport sensor**
- [E3E] Paper fed from the tandem LCF not reaching the 2nd cassette transport sensor**

Open the feed cover. Is there paper in front of the 2nd cassette transport sensor?

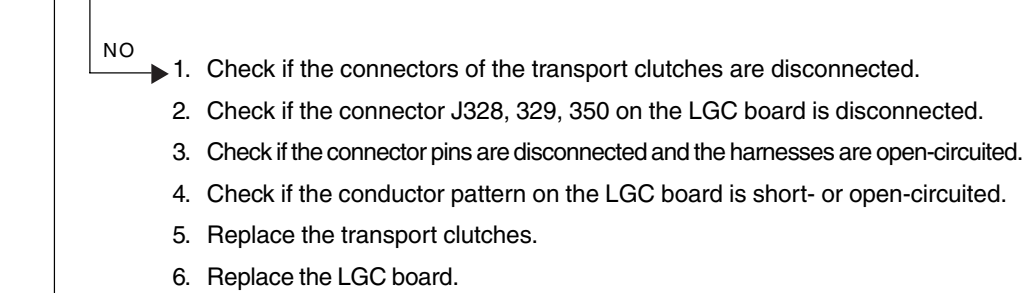


Is the 2nd cassette transport sensor working?

(Perform the input check in the test mode: 03-[ENERGY SAVER]OFF/[3]/[B]).



Are the transport clutches working? (Perform the output check in the test mode: 03-203, 210, 226)

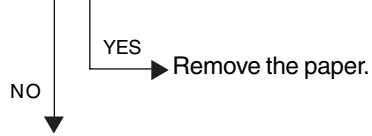


Check the transport roller. Replace it if it is worn out.

**[E33] Paper fed from the 3rd cassette not reaching the 3rd cassette transport sensor**

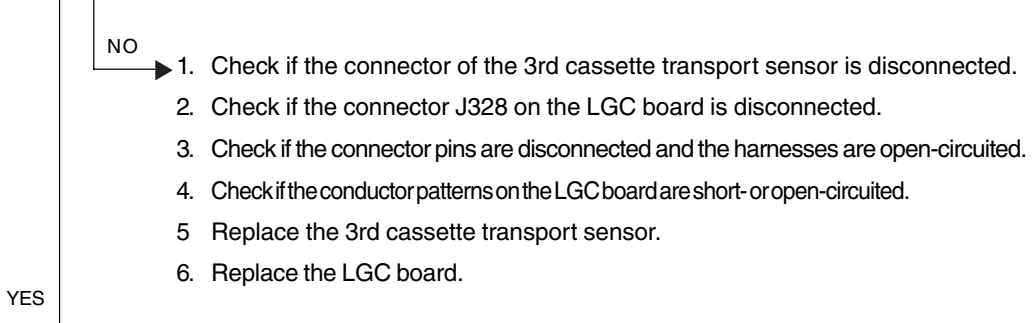
**[E37] Paper fed from the 4th cassette not reaching the 3rd cassette transport sensor**

Open the feed cover. Is there any paper in front of the 3rd cassette transport sensor?

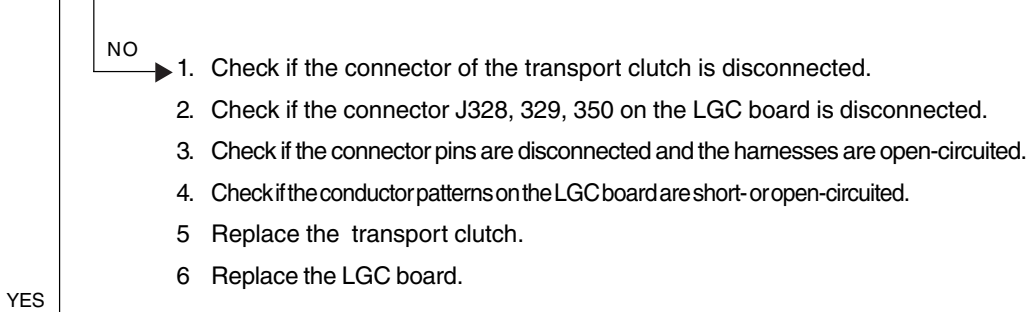


Is the 3rd cassette transport sensor working?

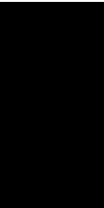
(Perform the input check in the test mode: 03-[ENERGY SAVER]OFF/[4]/[B])



Is the transport clutch working? (Perform the output check in the test mode: 03-225)



Check the transport roller. Replace it if it is worn out.



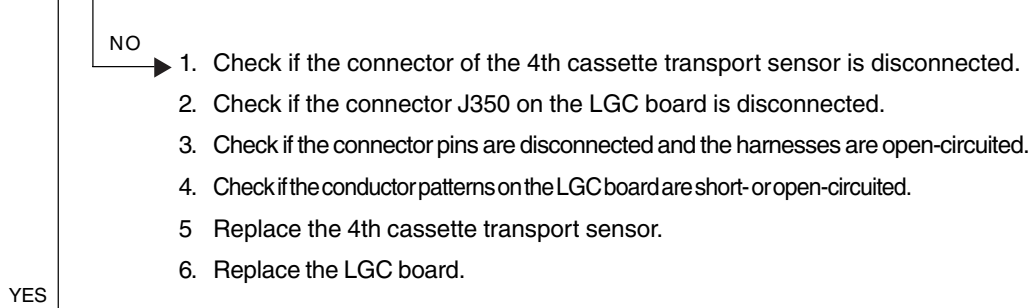
**[E38] Paper fed from the 4th cassette not reaching the 4th cassette transport sensor**

Open the feed cover. Is there any paper in front of the 4th cassette transport sensor?

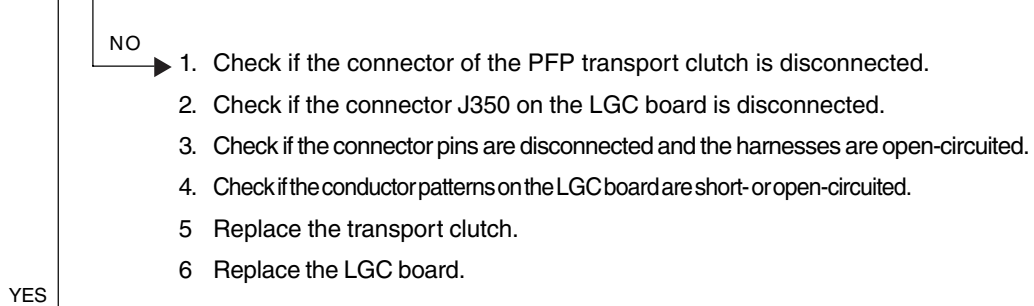


Is the 4th cassette transport sensor working?

(Perform the input check in the test mode: 03-[ENERGY SAVER]OFF/[5]/[B])



Is the transport clutch working? (Perform the output check in the test mode: 03-225)



Check the transport roller. Replace it if it is worn out.

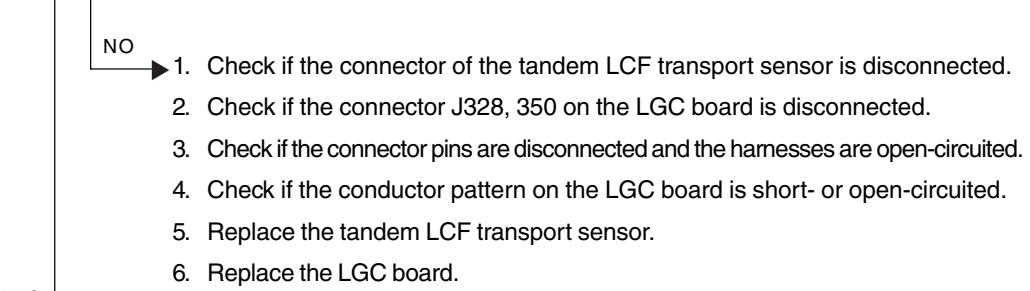
**[E3F] Paper fed from the tandem LCF not reading the tandem LCF transport sensor**

Open the feed cover. Is there paper in front of the tandem LCF transport sensor?

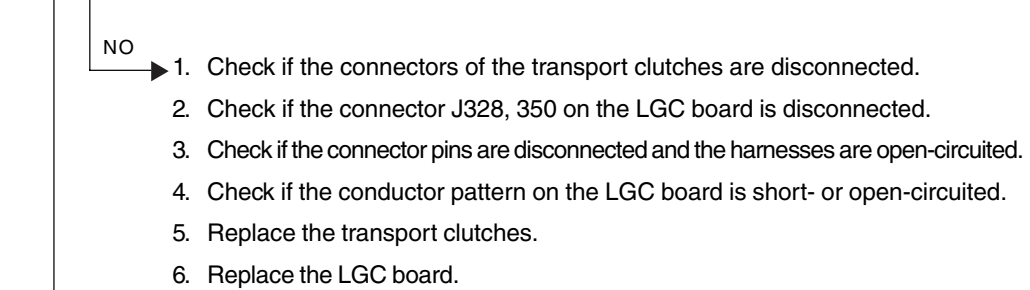


Is the tandem LCF transport sensor working?

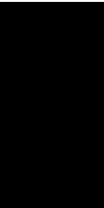
(Perform the input check in the test mode: 03-[ENERGY SAVER]OFF/[4]/[B])



Are the transport clutches working? (Perform the output check in the test mode: 03-225)

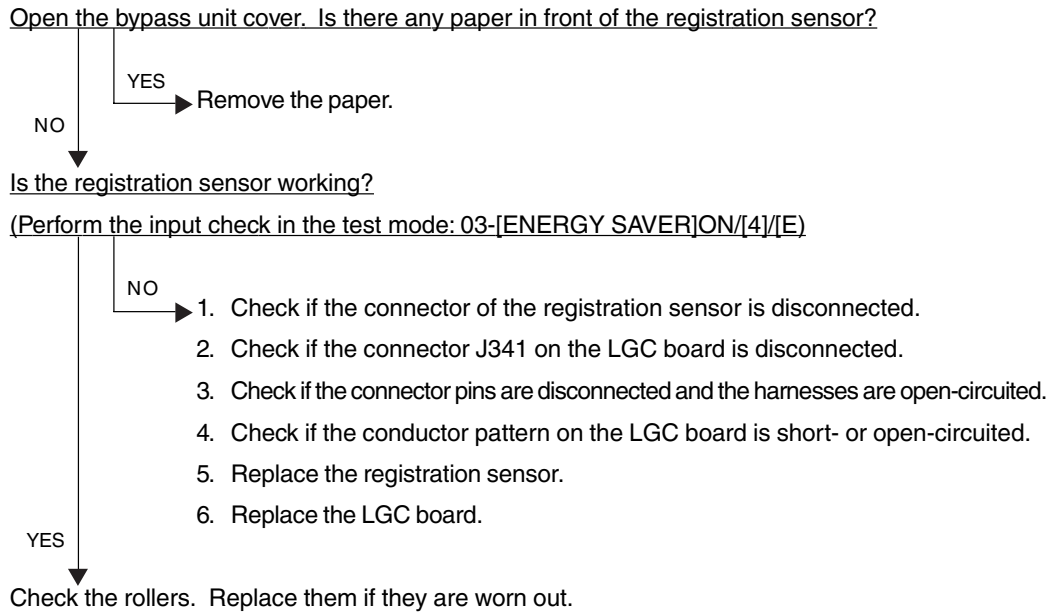


Check the transport roller. Replace it if it is worn out.

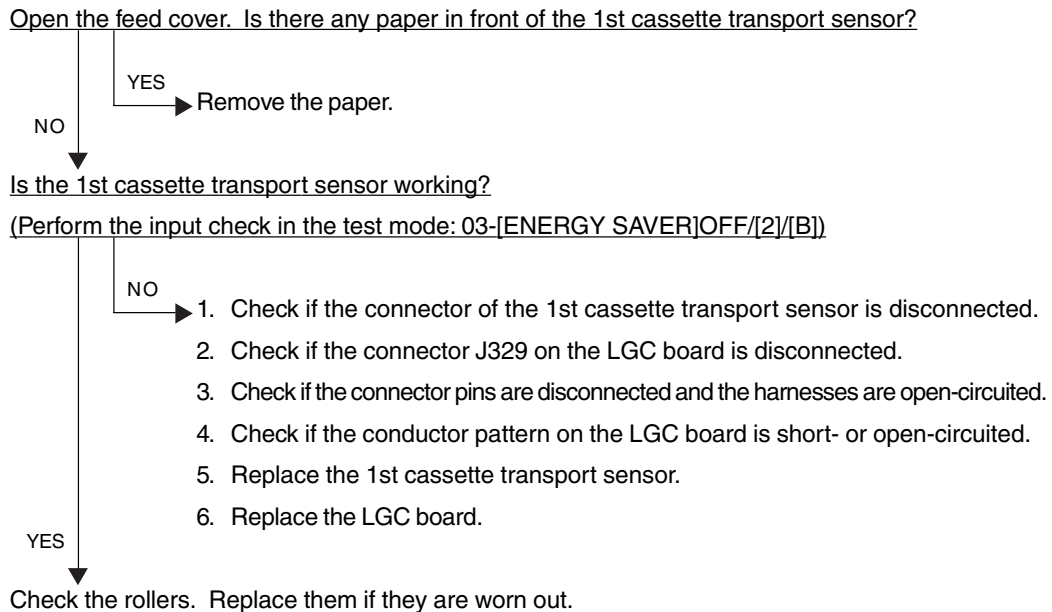


**[EB5] Paper left on the transport path**

In case an paper is fed from the 1st cassette, bypass feed unit or reversed paper transport section:

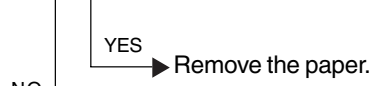


In case an paper is fed from the 2nd, 3rd, 4th or tandem LCF:



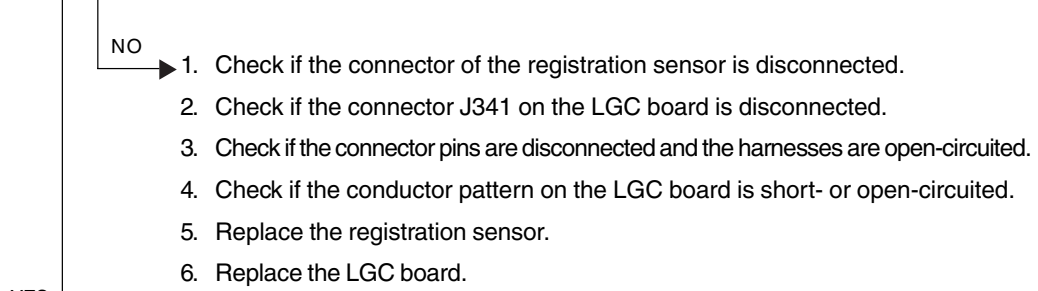
**[EB6] Paper left on the transport path**

Open the bypass unit cover. Is there any paper in front of the registration sensor?



Is the registration sensor working?

(Perform the input check in the test mode: 03-[ENERGY SAVER]ON/[4]/[E])



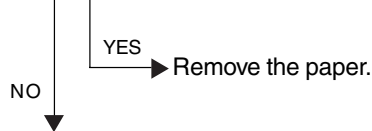
Check the rollers. Replace them if they are worn out.



## 5.1.2 Paper misfeeding

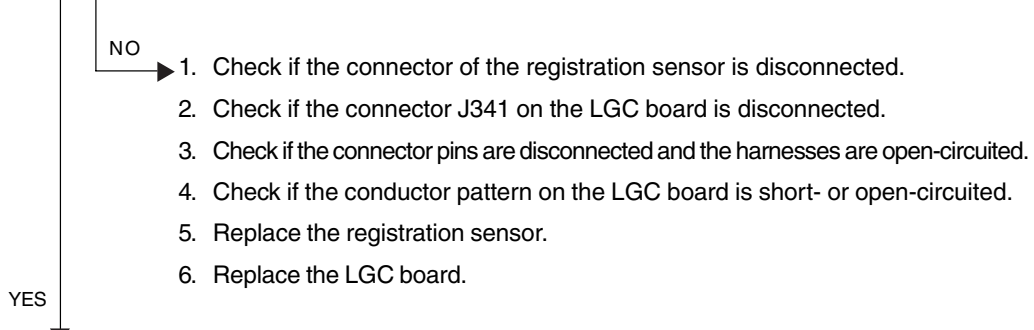
### [E11] Misfeeding during duplex printing (paper not reaching the registration sensor)

Open the bypass unit cover. Is there any paper in front of the registration sensor?



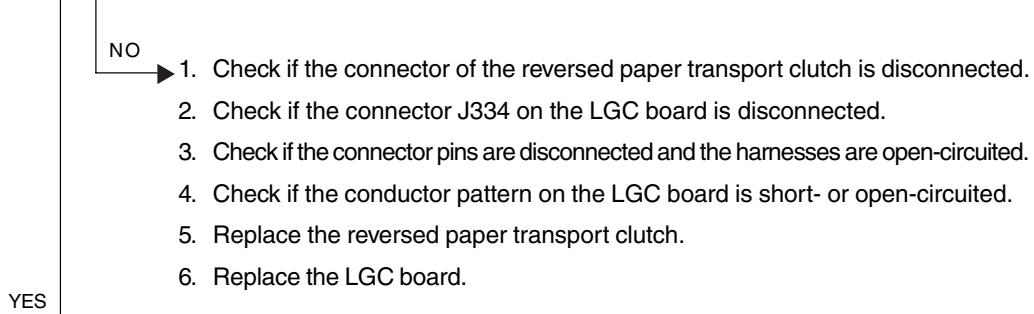
Is the registration sensor working?

(Perform the input check in the test mode:03-[ENERGY SAVER]ON/[4]/[E])



Is the reversed paper transport clutch working?

(Perform the output check in the test mode: 03-220, 221)



Check the rollers in the reversed papaer transport section. Replace them if they are worn out.

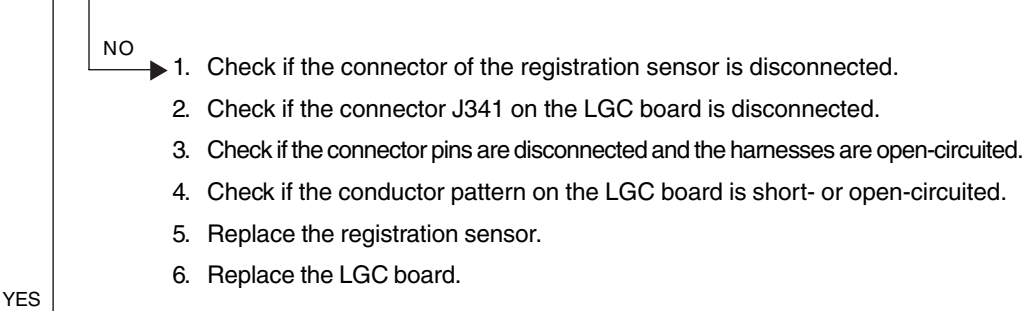
**[E12] Bypass misfeeding (paper not reaching the registration sensor)**

Open the bypass unit cover. Is there any paper in front of the registration sensor?

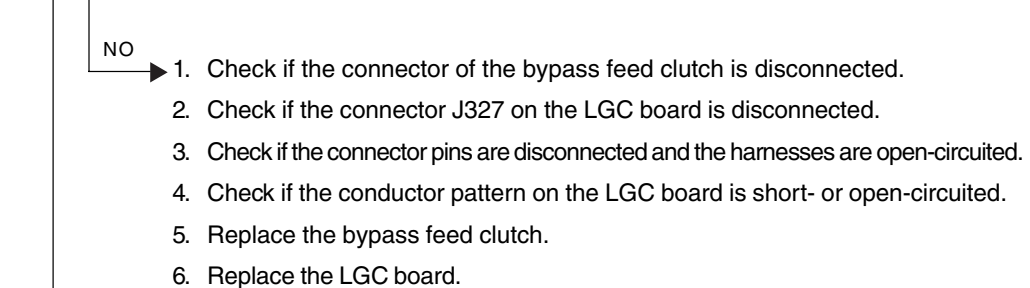


Is the registration sensor working?

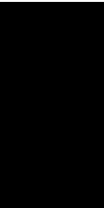
(Perform the input check in the test mode: 03-[ENERGY SAVER]ON/[4]/[E])



Is the bypass feed clutch working? (Perform the output check in the test mode: 03-204)



Check the bypass feed roller and separation roller. Replace them if they are worn out.



**[E13] 1st cassette misfeeding (paper not reaching the 1st cassette feed sensor)**

Open the feed cover. Is there any paper in front of the 1st cassette feed sensor?

NO  
YES → Remove the paper.

Is the 1st cassette feed sensor working?

(Perform the input check in the test mode: 03-[ENERGY SAVER]OFF/[2]/[B])

NO →  
1. Check if the connector of the 1st cassette feed sensor is disconnected.  
2. Check if the connector J329 on the LGC board is disconnected.  
3. Check if the connector pins are disconnected and the harnesses are open-circuited.  
4. Check if the conductor pattern on the LGC board is short- or open-circuited.  
5. Replace the 1st cassette feed sensor.  
6. Replace the LGC board.

YES

Is the 1st cassette feed clutch working?

(Perform the output check in the test mode: 03-201)

NO →  
1. Check if the connector of the 1st cassette feed clutch is disconnected.  
2. Check if the connector J329 on the LGC board is disconnected.  
3. Check if the connector pins are disconnected and the harnesses are open-circuited.  
4. Check if the conductor pattern on the LGC board is short- or open-circuited.  
5. Replace the 1st cassette feed clutch.  
6. Replace the LGC board.

YES

Check the 1st cassette feed roller and separation roller. Replace them if they are worn out.

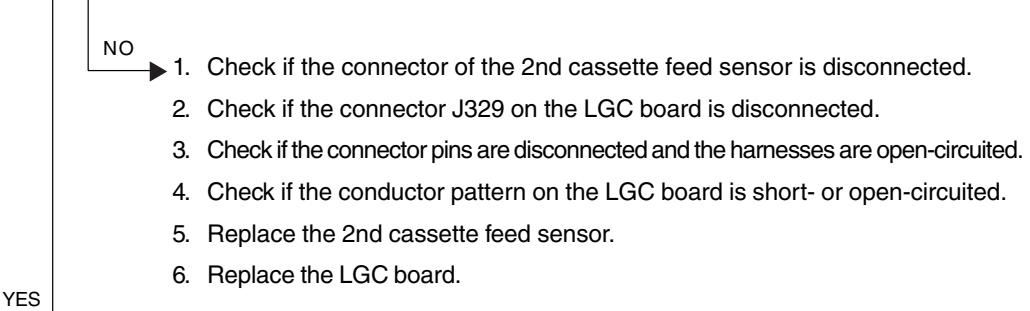
**[E14] 2nd cassette misfeeding (paper not reaching the 2nd cassette feed sensor)**

Open the feed cover. Is there any paper in front of the 2nd cassette feed sensor?



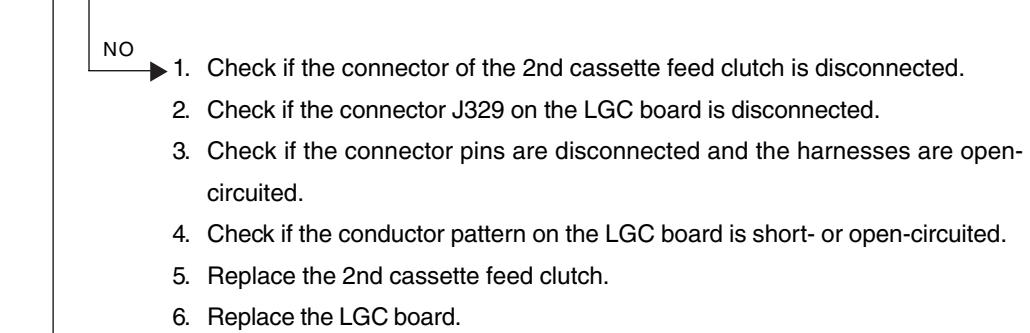
Is the 2nd cassette feed sensor working?

(Perform the input check in the test mode: 03-[ENERGY SAVER]OFF/[3]/[B])



Is the 2nd cassette feed clutch working?

(Perform the output check in the test mode: 03-202)



Check the 2nd cassette feed roller and separation roller. Replace them if they are worn out.



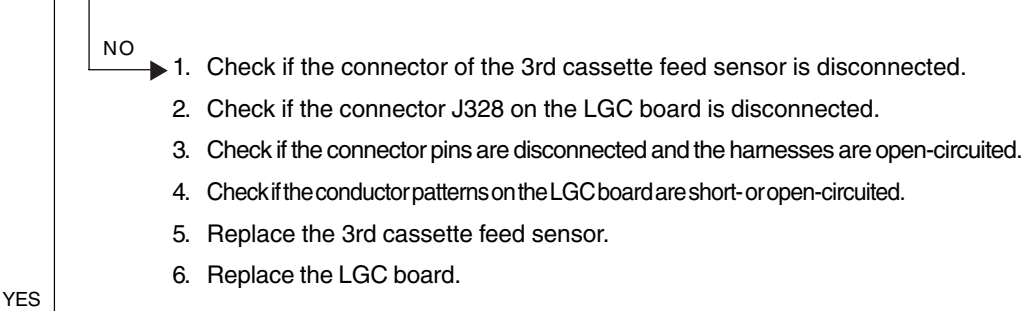
**[E15] 3rd cassette misfeeding (paper not reaching the 3rd cassette feed sensor)**

Open the feed cover. Is there any paper in front of the 3rd cassette feed sensor?

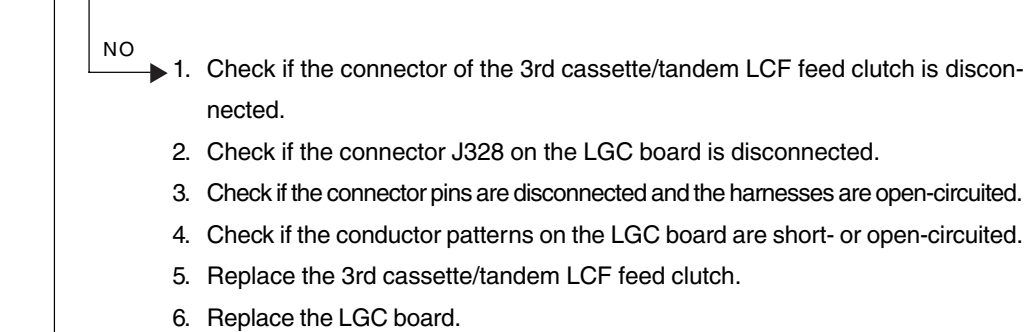


Is the 3rd cassette feed sensor working?

(Perform the input check in the test mode: 03-[ENERGY SAVER]OFF/[4]/[B])



Is the 3rd cassette/tandem LCF feed clutch working? (Perform the output check in the test mode: 03-226)



Check the 3rd cassette/tandem LCF feed roller and separation roller. Replace them if they are worn out.

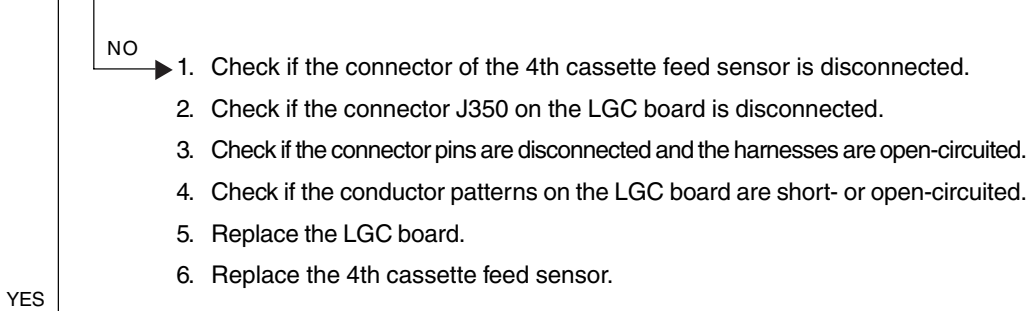
**[E16] 4th cassette misfeeding (paper not reaching the 4th cassette feed sensor)**

Open the feed cover. Is there any paper in front of the 4th cassette feed sensor?



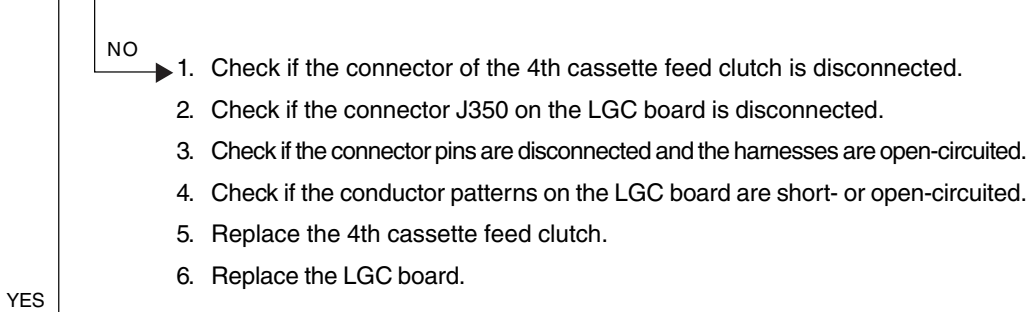
Is the 4th cassette feed sensor working?

(Perform the input check in the test mode: 03-[ENERGY SAVER]OFF/[5]/[B]).



Is the 4th cassette feed clutch working?

(Perform the output check in the test mode: 03-228).



Check the 4th cassette feed roller and separation roller. Replace them if they are worn out.



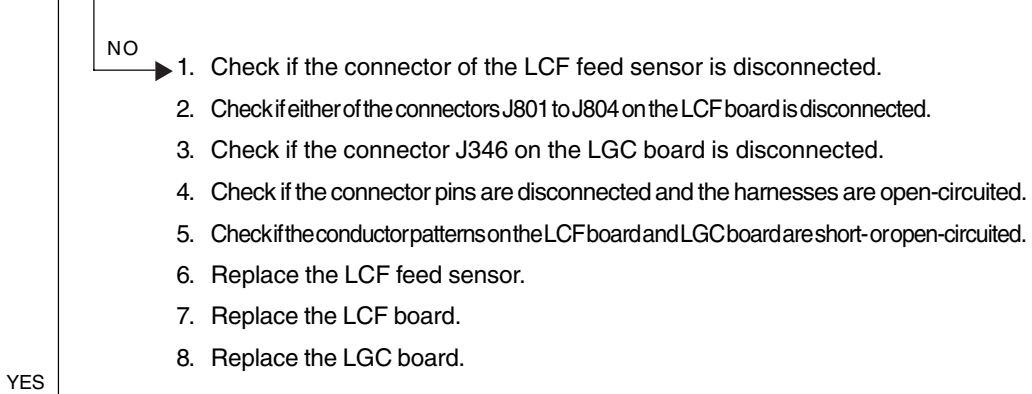
**[E19] LCF misfeeding (paper not reaching the LCF feed sensor)**

Open the LCF (release from the copier) side cover. Is there any paper in front of the LCF feed sensor?



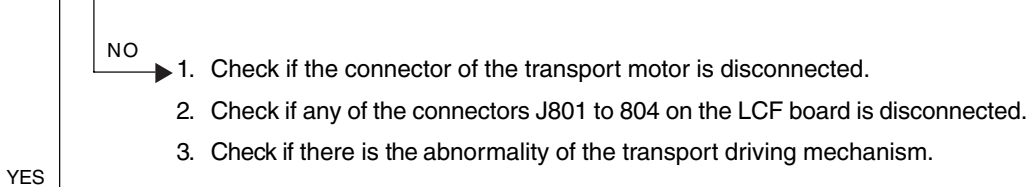
Is the LCF feed sensor working?

(Perform the input check in the test mode: 03-[ENERGY SAVER]OFF/[1]/[B])

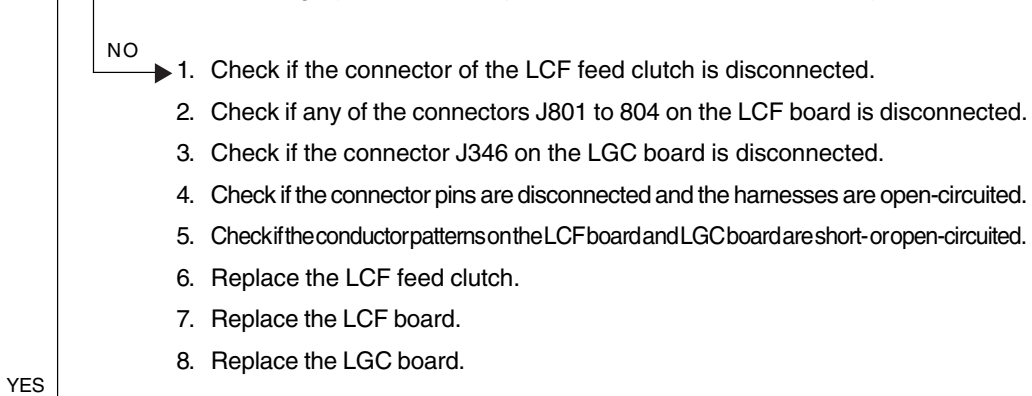


Is the LCF transport motor working?

(Perform the output check in the test mode: 03-122/172)



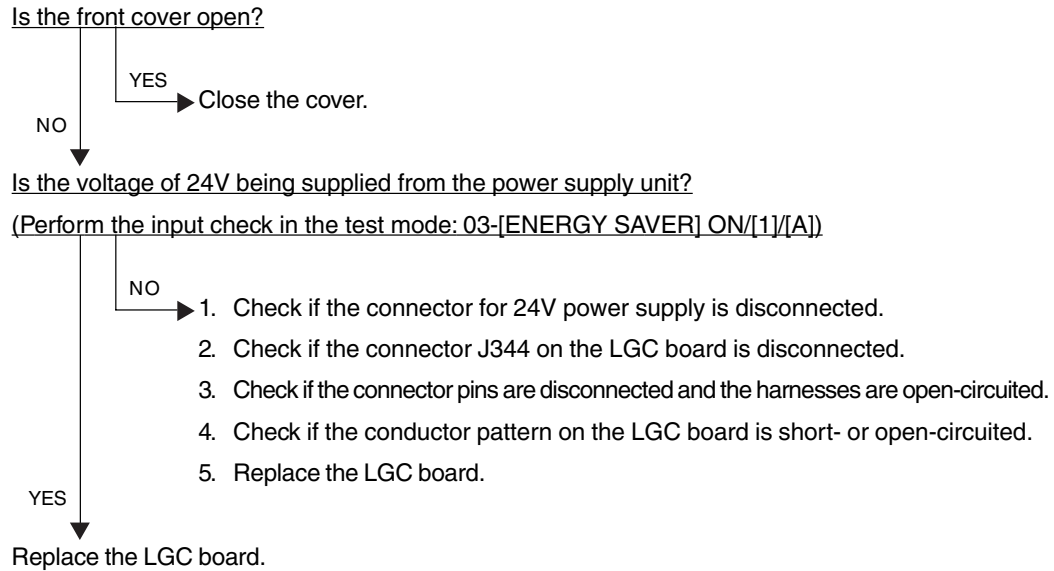
Is the LCF feed clutch working? (Perform the output check in the test mode: 03-272)



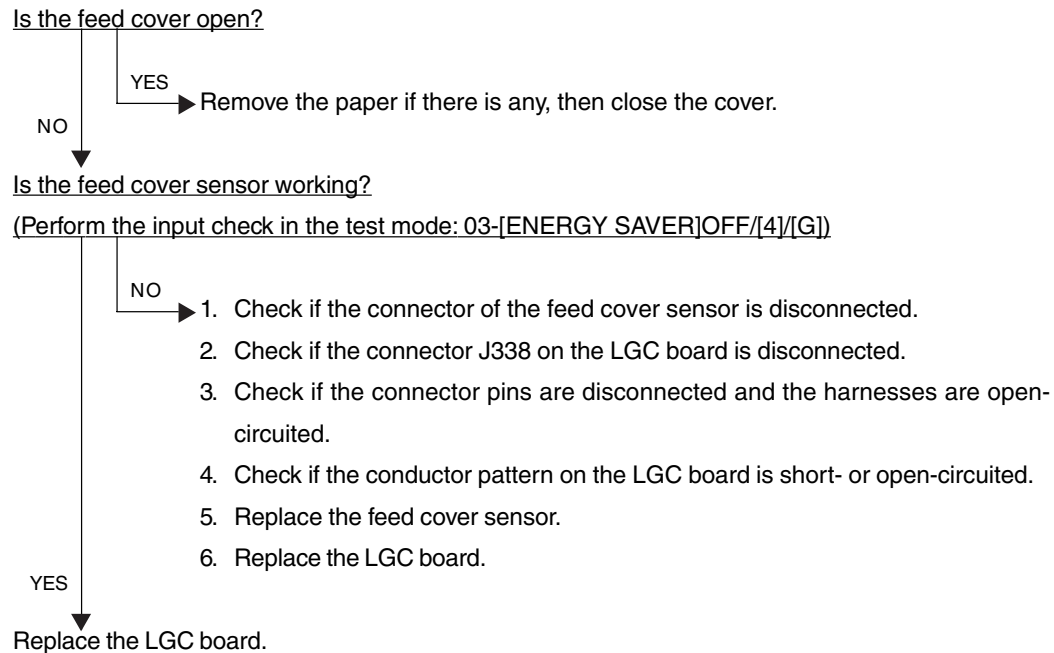
1. Check if there is abnormality of the transport driving mechanism.
2. Check the LCF feed roller and separation roller. Replace them if they are worn out.

### 5.1.3 Cover open jam

#### [E41] Front cover opened during printing



#### [E44] Feed cover opened during printing



#### [E45] LCF opened during printing

Is the LCF open?

NO  
YES → Remove the paper if there is any, then close the LCF.

Is the LCF set sensor working?

(Perform the input check in the test mode: 03-[ENERGY SAVER]OFF/[1]/[G])

NO →

1. Check if the connector of the LCF set sensor is disconnected.
2. Check if either of the connectors J801 to 804 on the LCF board is disconnected.
3. Check if the connector J346 on the LGC board is disconnected.
4. Check if the connector pins are disconnected and the harnesses are open-circuited.
5. Check if the conductor patterns on the LCF board and LGC board are short- or open-circuited.
6. Replace the LCF set sensor.
7. Replace the LCF board.
8. Replace the LGC board.

YES →

1. Replace the LCF board.
2. Replace the LGC board.

#### [E46] Bypass feed unit cover opened during printing

Is the bypass feed unit cover open?

NO  
YES → Remove the paper if there is any, then close the bypass feed unit cover.

Is the bypass feed unit cover sensor working?

(Perform the input check in the test mode: 03-[ENERGY SAVER]OFF/[7]/[G])

NO →

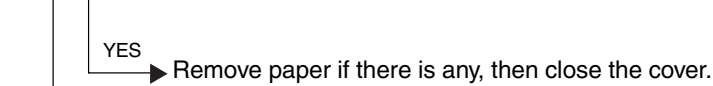
1. Check if the connector of the bypass feed unit cover sensor is disconnected.
2. Check if the connector J338 on the LGC board is disconnected.
3. Check if the connector pins are disconnected and the harnesses are open-circuited.
4. Check if the conductor patterns on the LGC board are short- or open-circuited.
5. Replace the bypass feed unit cover sensor.
6. Replace the LGC board.

YES →

2. Replace the LGC board.

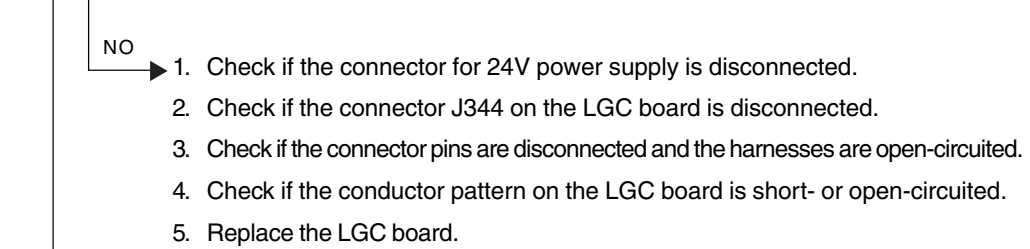
**[E47] Feed cover opened during printing**

Is the feeds cover close?



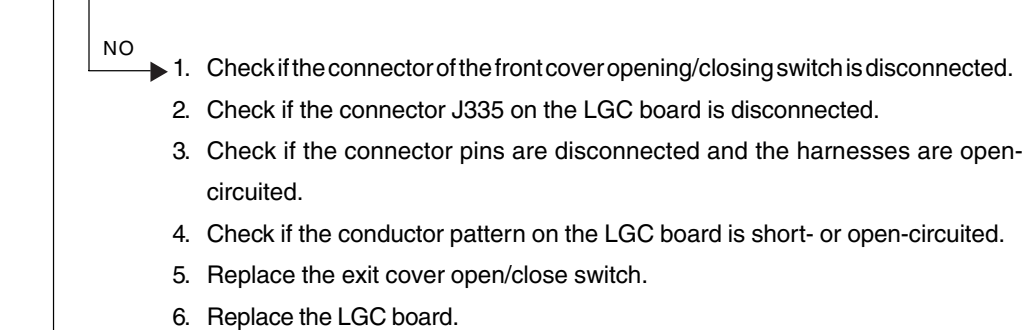
Is the voltage of 24V being supplied from the power supply unit?

(Perform the input check in the test mode: 03-[ENERGY SAVER] ON/[1]/[A])

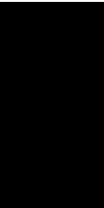


Is the exit cover open/close switch working?

(Perform the input check in the test mode: 03-[ENERGY SAVER]OFF/[6]/[H])

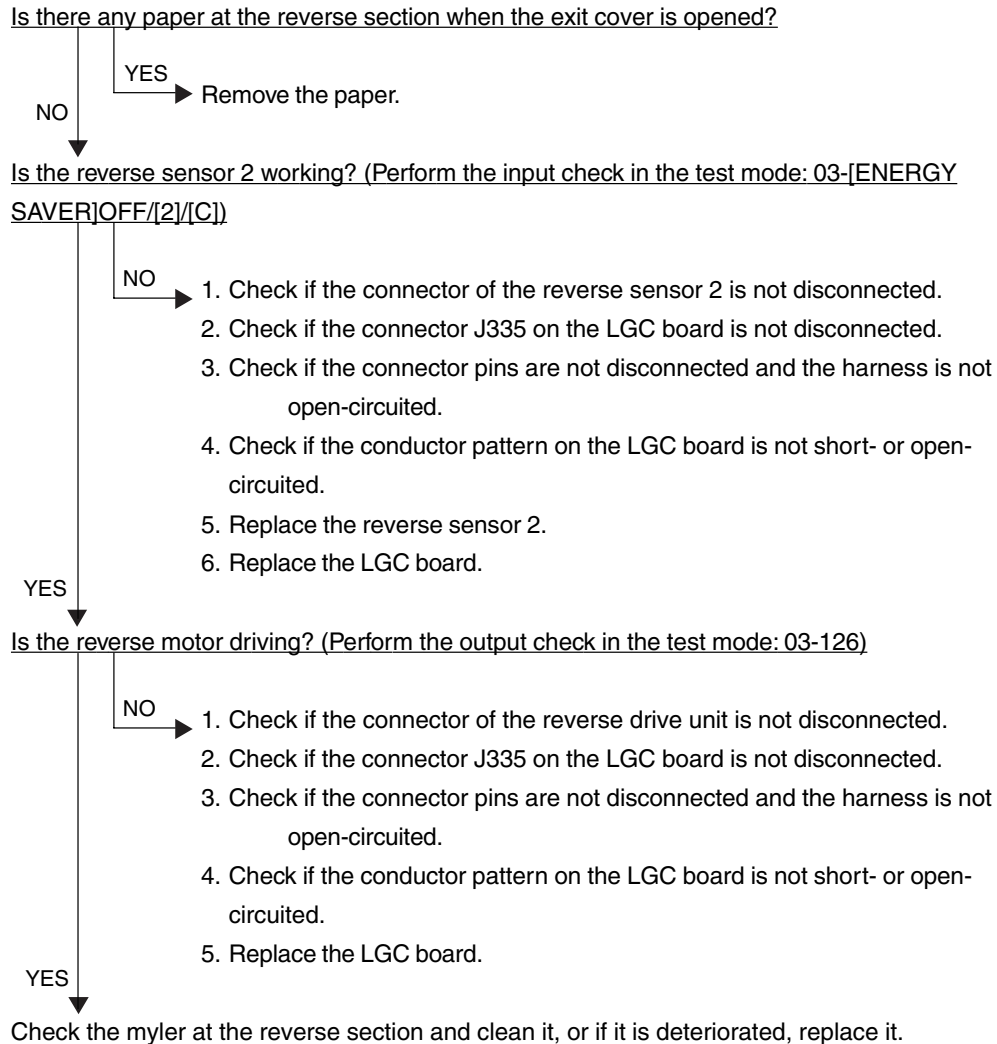


Replace the LGC board.



#### 5. 1. 4. Jams at exit/reverse section and other transport jams

##### [E50] Leading edge of paper not reaching the reverse sensor 2



**[E51] Leading edge of paper not reaching the transport sensor 1**

Is there any paper at the reverse section when the exit cover is opened?

NO  
YES → Remove the paper.

Is the transport sensor 1 working? (Perform the input check in the test mode: 03-[ENERGY SAVER]OFF/[9]/[A])

NO →  
1. Check if the connector of the transport sensor 1 is not disconnected.  
2. Check if the connector J334 on the LGC board is not disconnected.  
3. Check if the connector pins are not disconnected and the harness is not open-circuited.  
4. Check if the conductor pattern on the LGC board is not short- or open-circuited.  
5. Replace the transport sensor 1.  
6. Replace the LGC board.

YES

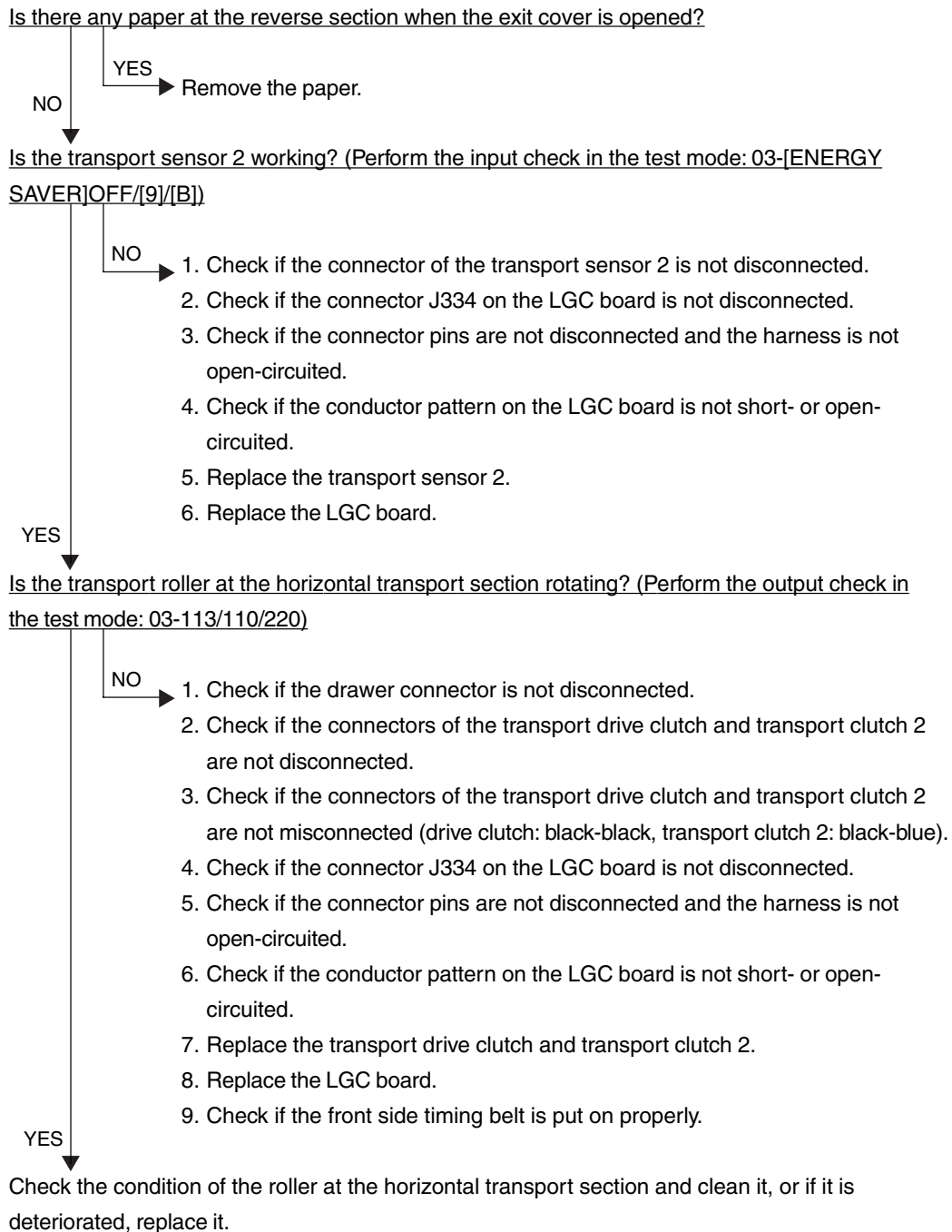
Is the transport roller at the horizontal transport section rotating? (Perform the output check in the test mode: 03-113/110/220)

NO →  
1. Check if the drawer connector is not disconnected.  
2. Check if the connectors of the transport drive clutch and transport clutch 1 are not disconnected.  
3. Check if the connectors of the transport drive clutch and transport clutch 1 are not misconnected (drive clutch: black-black, transport clutch1: blue-purple).  
4. Check if the connector J334 on the LGC board is not disconnected.  
5. Check if the connector pins are not disconnected and the harness is not open-circuited.  
6. Check if the conductor pattern on the LGC board is not short- or open-circuited.  
7. Replace the transport drive clutch and transport clutch 1.  
8. Replace the LGC board.  
9. Check if the front side timing belt is put on properly.

YES

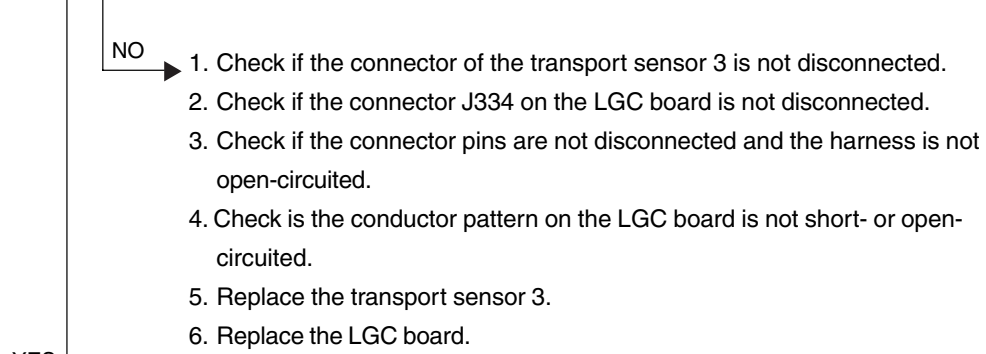
Check the condition of the roller at the horizontal transport section and clean it, or if it is deteriorated, replace it.

**[E52] Leading edge of paper not reaching the transport sensor 2**



**[E54] Leading edge of paper not reaching the transport sensor 3**

Is the transport sensor 3 working? (Perform the input check in the test mode: 03-[ENERGY SAVER]OFF/[9]/[C])

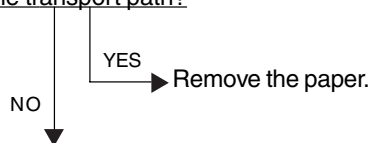


Check the condition of the roller at the horizontal transport section and clean it, or if it is deteriorated, replace it.



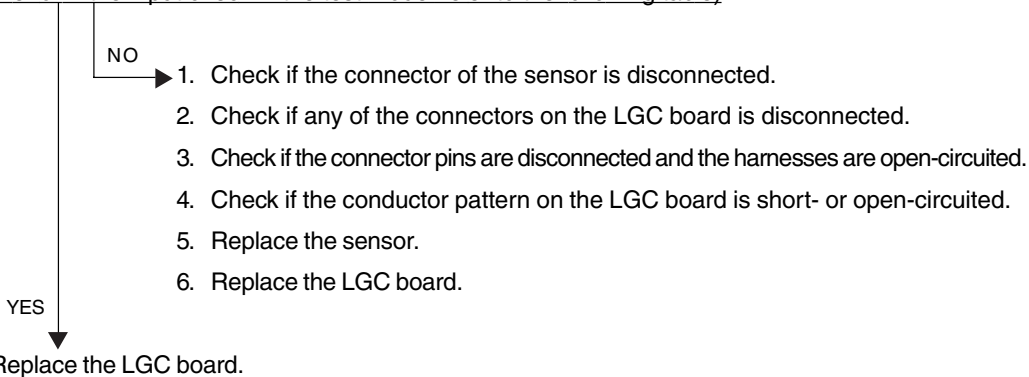
**[E55] Paper remaining on the transport path when CRUN is OFF**

Open the cover of the unit/area whose picture is flashing on the control panel. Is there any paper on the transport path?



Is the sensor in the jamming area working?

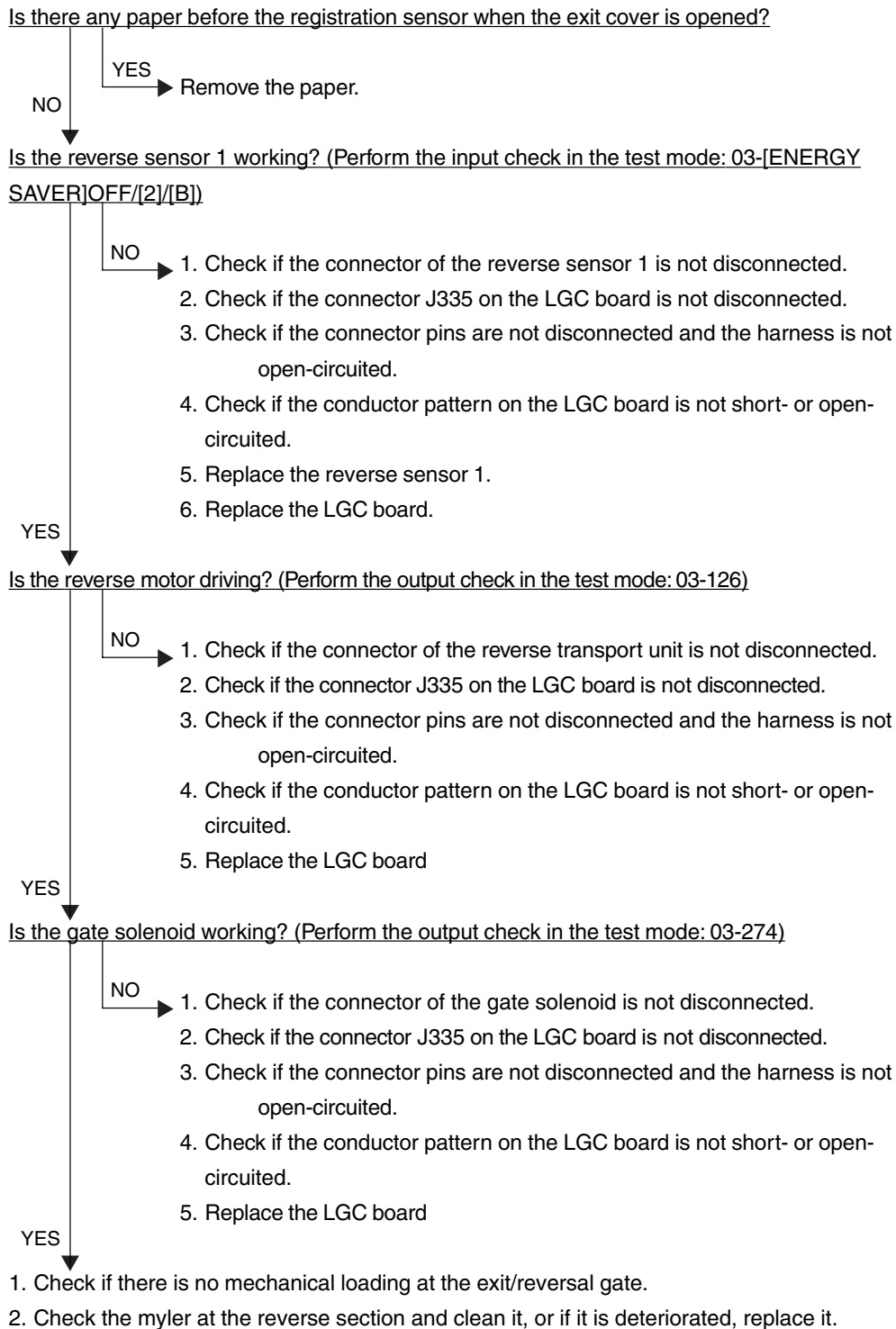
(Perform the input check in the test mode: refer to the following table)



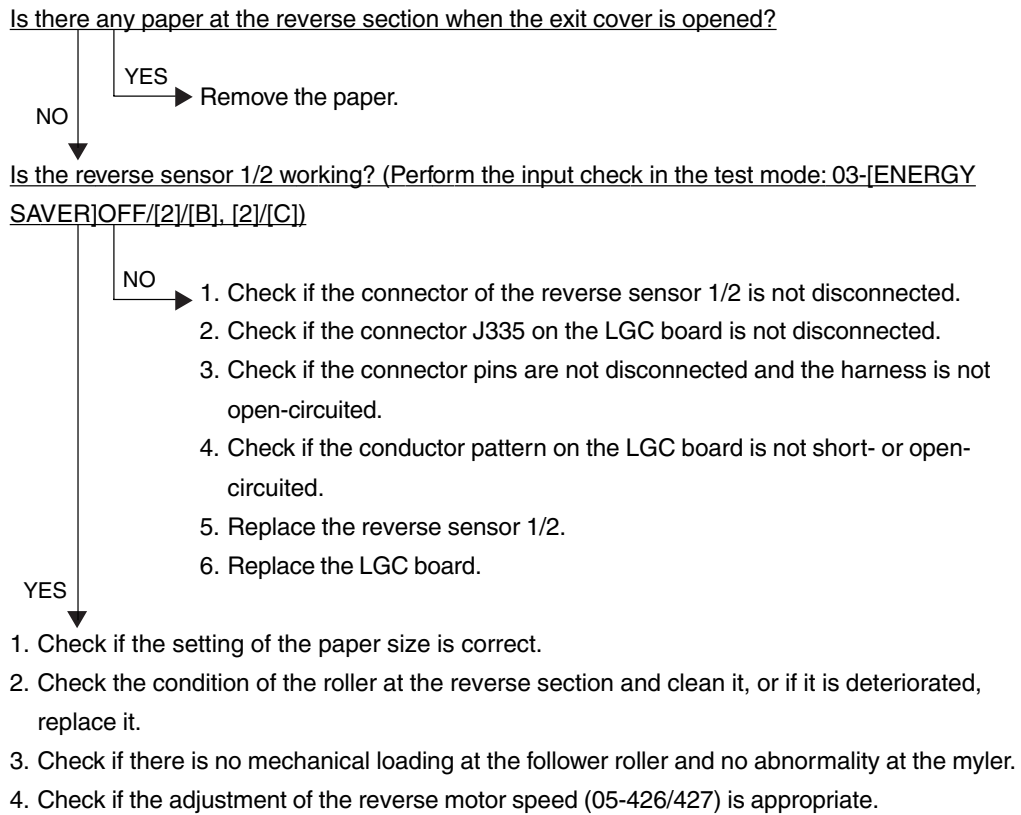
Relation between the jamming area and the corresponding sensors

Jamming area	Sensor	Test mode/Input check
Registration area	Registration sensor	03-[ENERGY SAVER]ON/[4][E]
Exit/Reverse area	Exit sensor	03-[ENERGY SAVER]OFF/[6][G]
	Reversel sensor 1	03-[ENERGY SAVER]OFF/[6][C]
	Reversel sensor 2	03-[ENERGY SAVER]OFF/[6][B]
Reverse transport area	Transport sensor 1	03-[ENERGY SAVER]OFF/[0][C]
	Transport sensor 2	03-[ENERGY SAVER]OFF/[0][A]
	Transport sensor 3	03-[ENERGY SAVER]OFF/[0][B]
Paper feeding area	1st cassette feed sensor	03-[ENERGY SAVER]OFF/[2][A]
	2nd cassette feed sensor	03-[ENERGY SAVER]OFF/[3][A]
	3rd cassette/Tandem LCF feed sensor	03-[ENERGY SAVER]OFF/[4][A]
	4th cassette/Tandem LCF feed sensor	03-[ENERGY SAVER]OFF/[5][A]
	1st cassette transport sensor	03-[ENERGY SAVER]OFF/[2][B]
	2nd cassette transport sensor	03-[ENERGY SAVER]OFF/[3][B]
	3rd cassette/Tandem LCF transport sensor	03-[ENERGY SAVER]OFF/[4][B]
	4th cassette/Tandem LCF transport sensor	03-[ENERGY SAVER]OFF/[5][B]

**[E57] Leading edge of paper not reaching the reverse sensor 1**



**[E58] Trailing edge of paper not passing the reverse sensor 1/2**



**[E59] Leading edge of paper not reaching the exit sensor**

Is the exit sensor working? (Perform the input check in the test mode: 03-[ENERGY SAVER]ON/

[1]/[C])

NO

1. Check if the connector of the exit sensor is not disconnected.
2. Check if the connector J335 on the LGC board is not disconnected.
3. Check if the connector pins are not disconnected and the harness is not open-circuited.
4. Check if the conductor pattern on the LGC board is not short- or open-circuited.
5. Replace the exit sensor.
6. Replace the LGC board.

YES

<Simple discharging>

Is the gate solenoid working? (Perform the output check in the test mode: 03-274)

NO

1. Check if the connector of the gate solenoid is not disconnected.
2. Check if the connector J335 on the LGC board is not disconnected.
3. Check if the connector pins are not disconnected and the harness is not open-circuited.
4. Check if the conductor pattern on the LGC board is not short- or open-circuited.
5. Replace the LGC board.

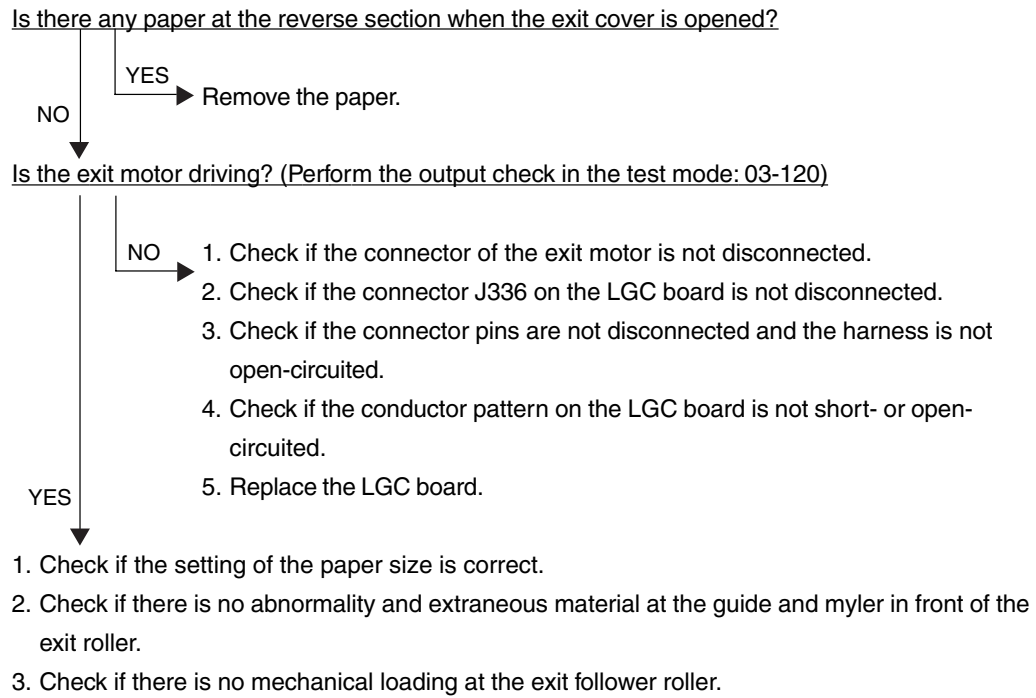
YES

Replace the LGC board.

<Reversal discharging>

1. Check if the setting of the paper size is correct.
2. Check if there is no abnormality and extraneous material at the guide and myler in front of the exit roller.

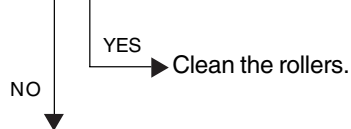
**[E5A] Trailing edge of paper not passing the exit sensor**



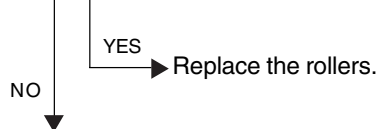
### 5.1.5 Original jam in RADF

#### [E71] Original feeding jam

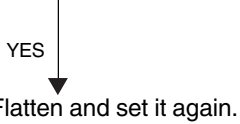
Are the pickup roller, feed roller and separation roller dirty?



Is the transport force of the rollers insufficient?



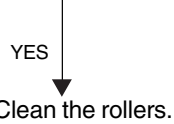
Is the original abnormally curled or folded?



#### [E72] Original transport jam

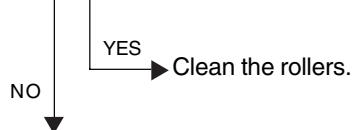
#### [E73] Original discharging jam

Are the registration roller, read roller and exit roller dirty?

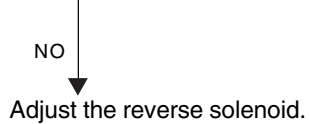


#### [E74] Original reversing jam

Are the read roller and reverse roller dirty?

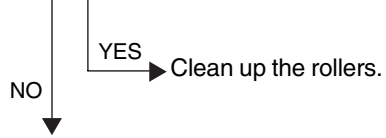


Is the reverse flapper working properly?



**[E76] Short-sized original exit jam**

Are the registration roller, read roller, intermediate transport roller and small original reverse roller tainted?

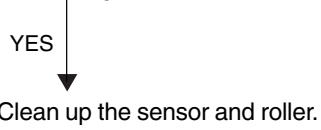


Are the small original exit flapper and small original reverse flapper operating normally?

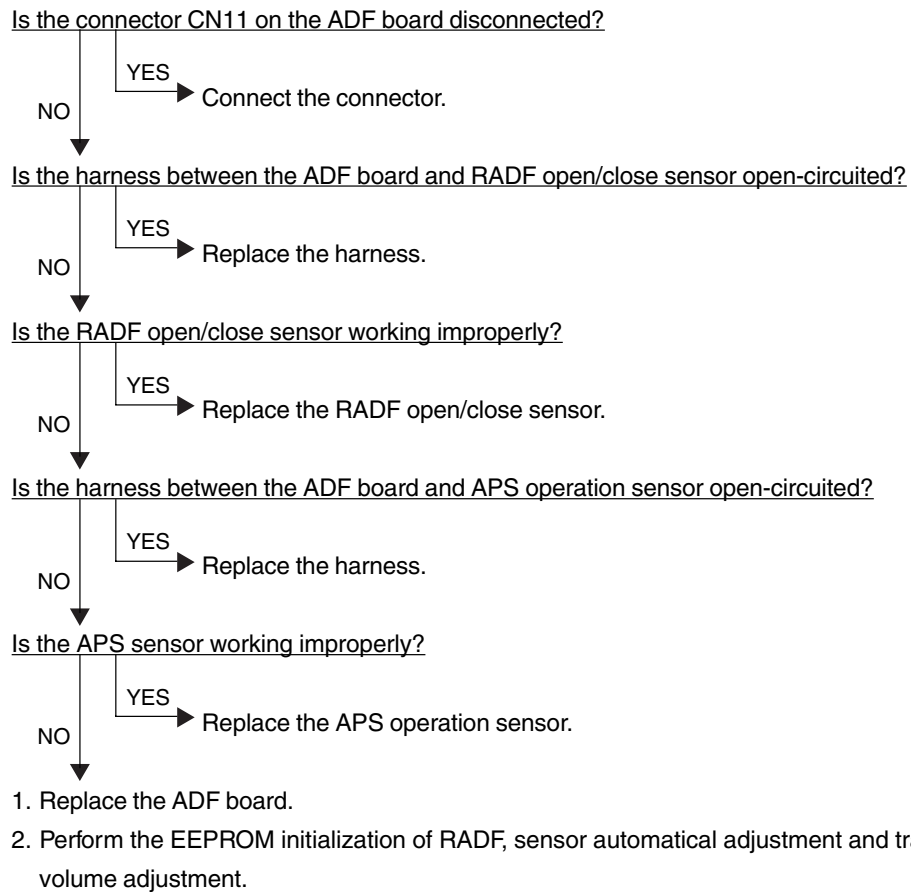
Adjust the small original exit solenoid.

**[E77] Transport jam at scanning section**

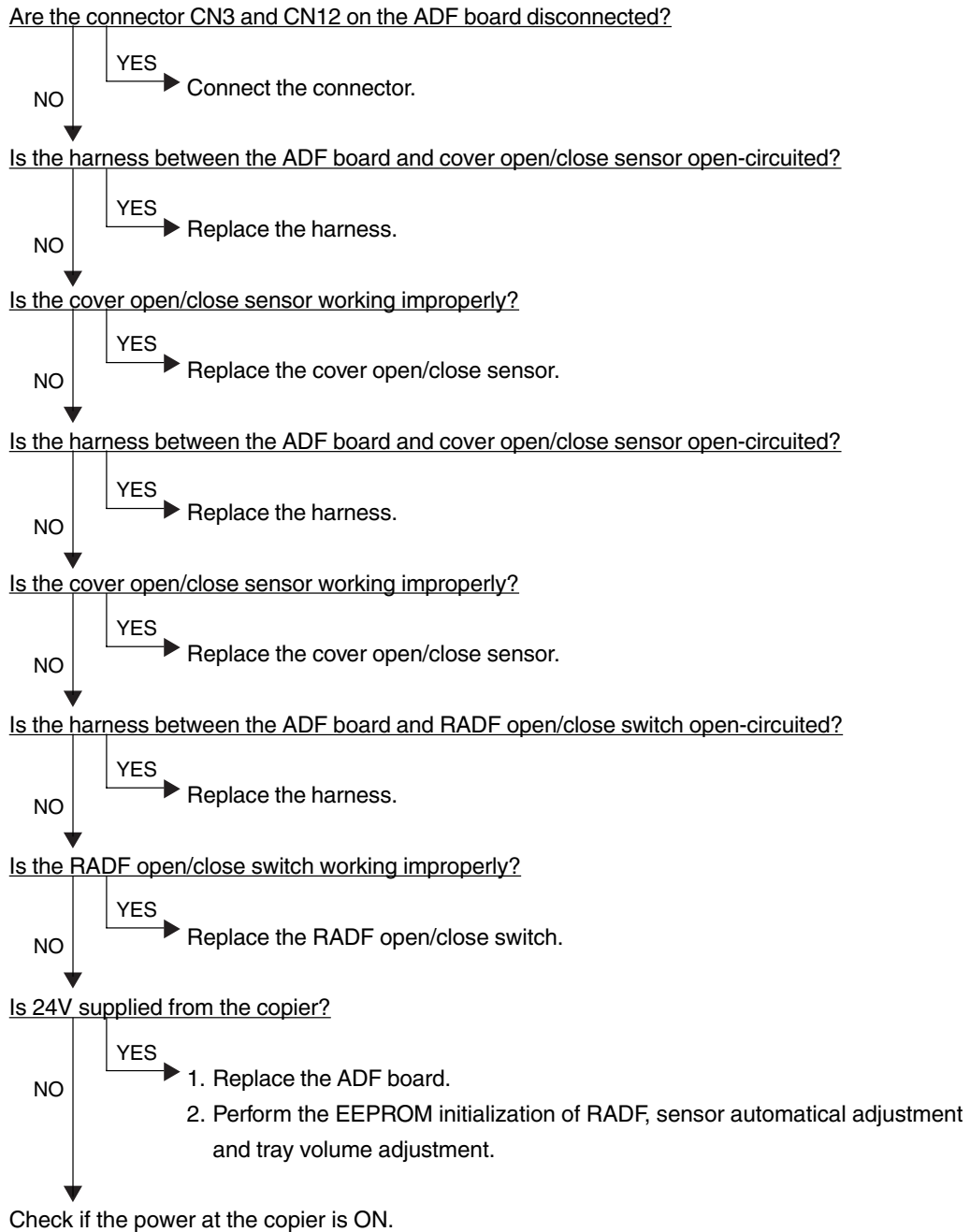
Are the registration sensor and read roller tainted?



- [E7A] RADF opened during original feeding
- [E7B] RADF opened during original transporting
- [E7C] RADF opened during large-sized original discharging
- [E7D] RADF opened during small-sized original reversing
- [E7E] RADF opened during small-sized original discharging
- [E7F] RADF opened at the scanning section



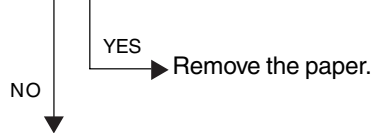
- [E80] Jam access cover opened during original feeding
- [E81] Jam access cover opened during original transporting
- [E82] Jam access cover opened during large-sized original discharging
- [E83] Jam access cover opened during small-sized original reversing
- [E84] Jam access cover opened during small-sized original discharging
- [E85] Jam access cover opened at the scanning section



## 5. 1. 6. Paper jam in finisher

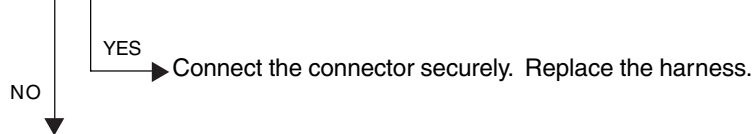
### [E9F] Punching jam

Is there any paper remaining on the transport path in the finisher or main unit?

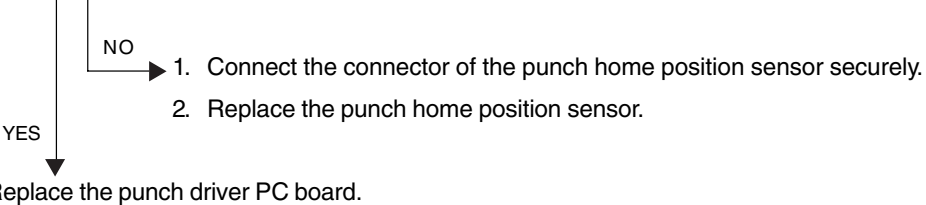


Is the connector J1 on the punch driver PC board disconnected?

Is the harness connecting the punch driver PC board and punch home position sensor (PI3P) open-circuited?

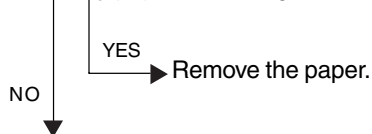


Is the punch home position sensor working properly?



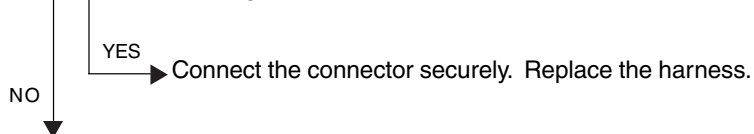
### [EA1] Finisher paper transport delay jam

Is there any paper remaining on the transport path in the finisher or main unit?

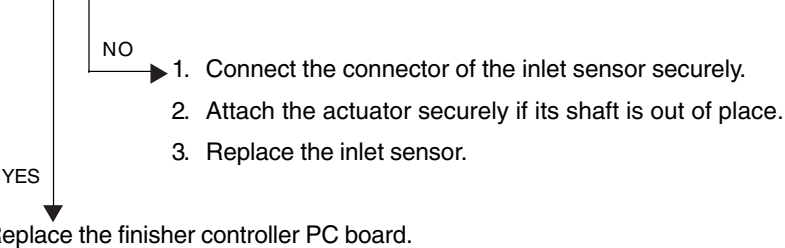


Is the connector J17 on the finisher controller PC board disconnected?

Is the harness connecting the finisher controller PC board and inlet sensor (PI1) open-circuited?



Is the inlet sensor working properly? (Check the movement of the actuator.)



**[EA2] Finisher paper transport stop jam**

Is there any paper remaining on the transport path in the finisher or main unit?

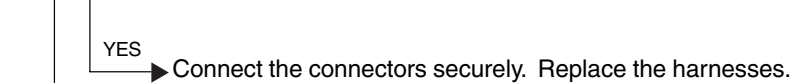


Is any of the connectors J17, J24, J9 and J11 on the finisher controller PC board disconnected?  
Is the harness connecting the finisher controller PC board and inlet sensor (PI1) open-circuited?  
Is the harness connecting the finisher controller PC board and buffer path inlet paper sensor (PI17) open-circuited?

Is the harness connecting the finisher controller PC board and buffer path paper sensor (PI14) open-circuited?

Is the harness connecting the finisher controller PC board and stapling tray sensor (PI4) open-circuited?

Is the harness connecting the finisher controller PC board and delivery sensor (PI3) open-circuited?



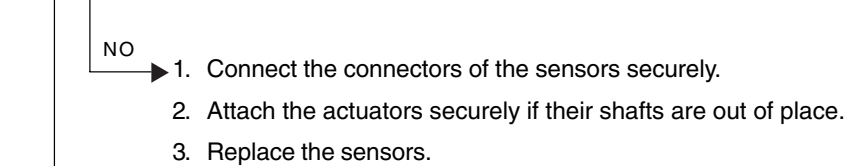
Is the inlet sensor working properly? (Check the movement of the actuator.)

Is the buffer path inlet paper sensor working properly? (Check the movement of the actuator.)

Is the buffer path paper sensor working properly? (Check the movement of the actuator.)

Is the stapling tray sensor working properly? (Check the movement of the actuator.)

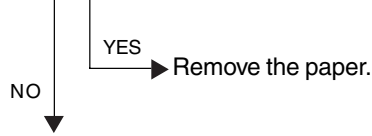
Is the delivery sensor working properly? (Check the movement of the actuator.)



Replace the finisher controller PC board.

**[EA3] Paper remaining inside the finisher at power ON**

Is there any paper remaining on the transport path in the finisher?



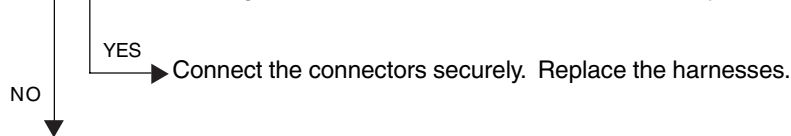
Is any of the connectors J17, J24 and J11 on the finisher controller PC board disconnected?

Is the harness connecting the finisher controller PC board and inlet sensor (PI1) open-circuited?

Is the harness connecting the finisher controller PC board and buffer path inlet paper sensor (PI17) open-circuited?

Is the harness connecting the finisher controller PC board and buffer path paper sensor (PI14) open-circuited?

Is the harness connecting the finisher controller PC board and delivery sensor (PI3) open-circuited?

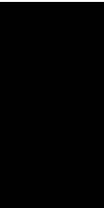
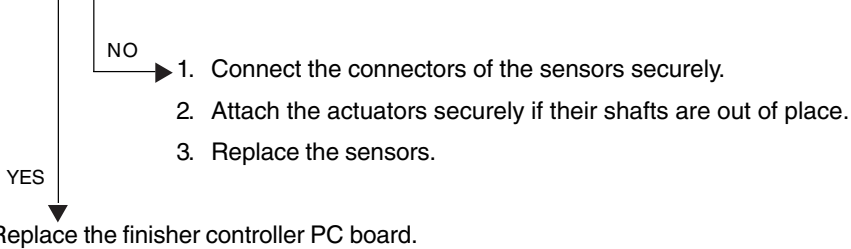


Is the inlet sensor working properly? (Check the movement of the actuator.)

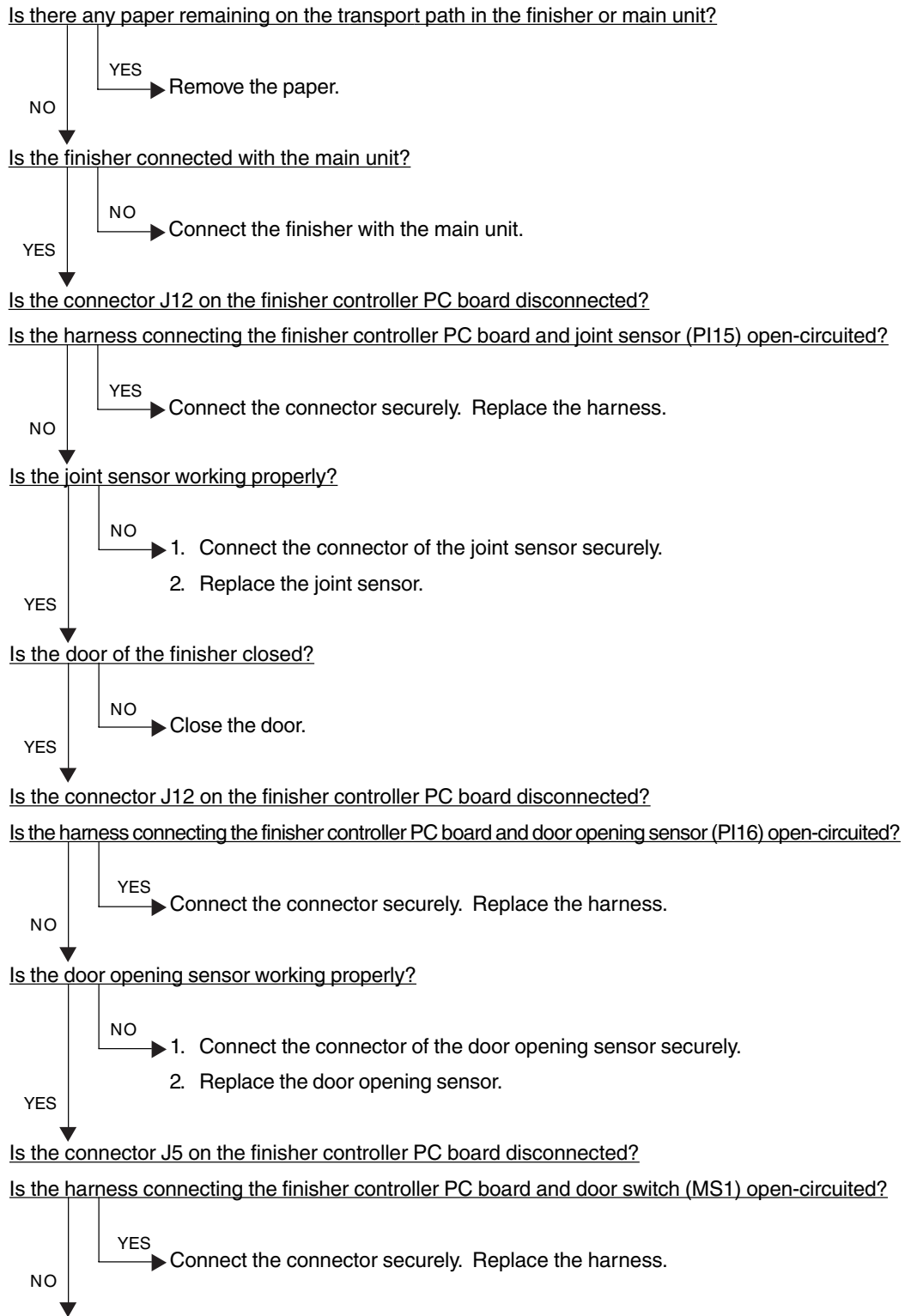
Is the buffer path inlet paper sensor working properly? (Check the movement of the actuator.)

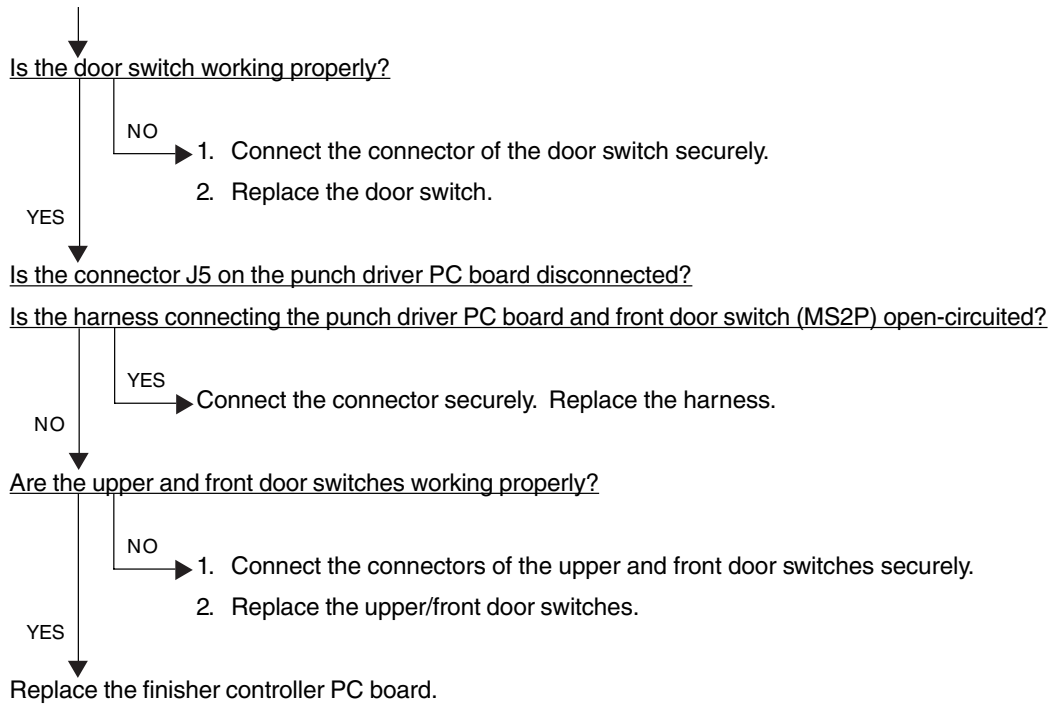
Is the buffer path paper sensor working properly? (Check the movement of the actuator.)

Is the delivery sensor working properly? (Check the movement of the actuator.)



**[EA4] Finisher front door opened during printing**



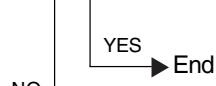


**[EA5] Finisher stapling jam**

Is there any paper remaining on the transport path in the finisher or main unit, or on the stapling tray?

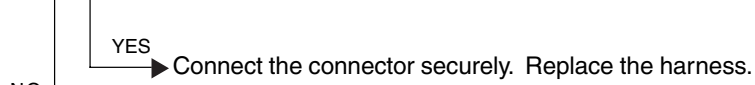


Is the jam cleared by taking off the staple cartridge from the finisher and removing the staple sheet sliding it from the staple case?

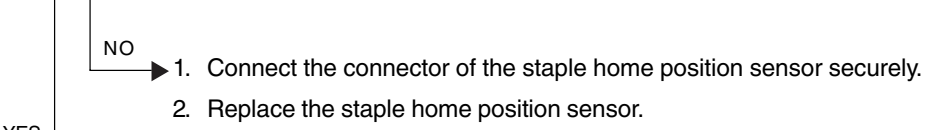


Is the connector J8 on the finisher controller PC board disconnected?

Is the harness connecting the finisher controller PC board and staple home position sensor (PI22) open-circuited?



Is the staple home position sensor working properly?



Replace the finisher controller PC board.

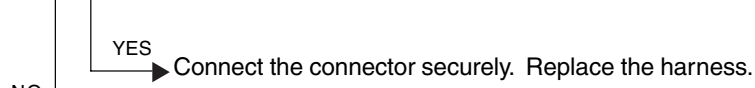
**[EA6] Finisher early arrival jam**

Is there any paper remaining on the transport path in the finisher or main unit?

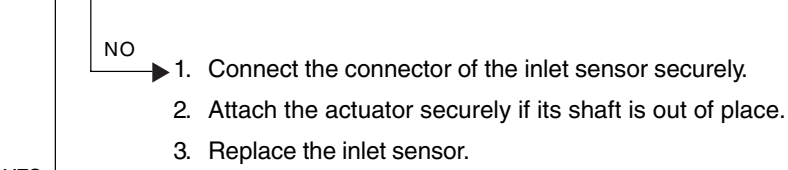


Is the connector J17 on the finisher controller PC board disconnected?

Is the harness connecting the finisher controller PC board and inlet sensor (PI1) open-circuited?



Is the inlet sensor working properly? (Check the movement of the actuator.)

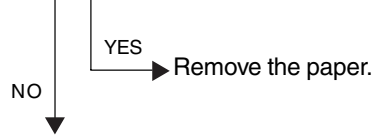


Replace the finisher controller PC board.

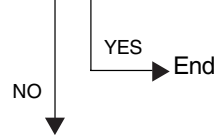


**[EA8] Saddle stitcher stapling jam**

Is there any paper remaining on the transport path in the finisher, saddle stitcher section or main unit, or on the stapling tray?

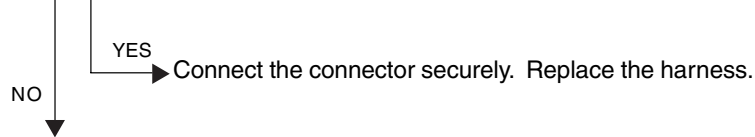


Is the jam cleared by taking off the staple cartridge from the finisher and removing the staples stuck in the stapling unit?

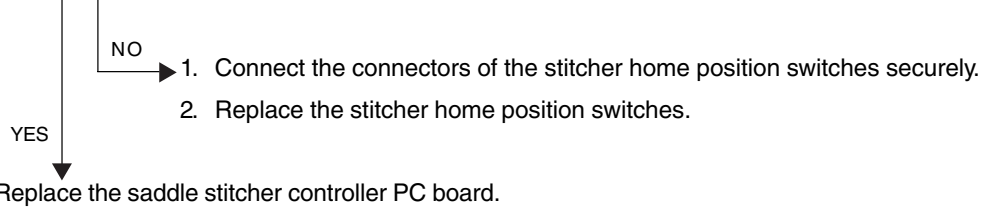


Is the connector J8 on the saddle stitcher controller PC board disconnected?

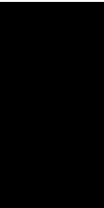
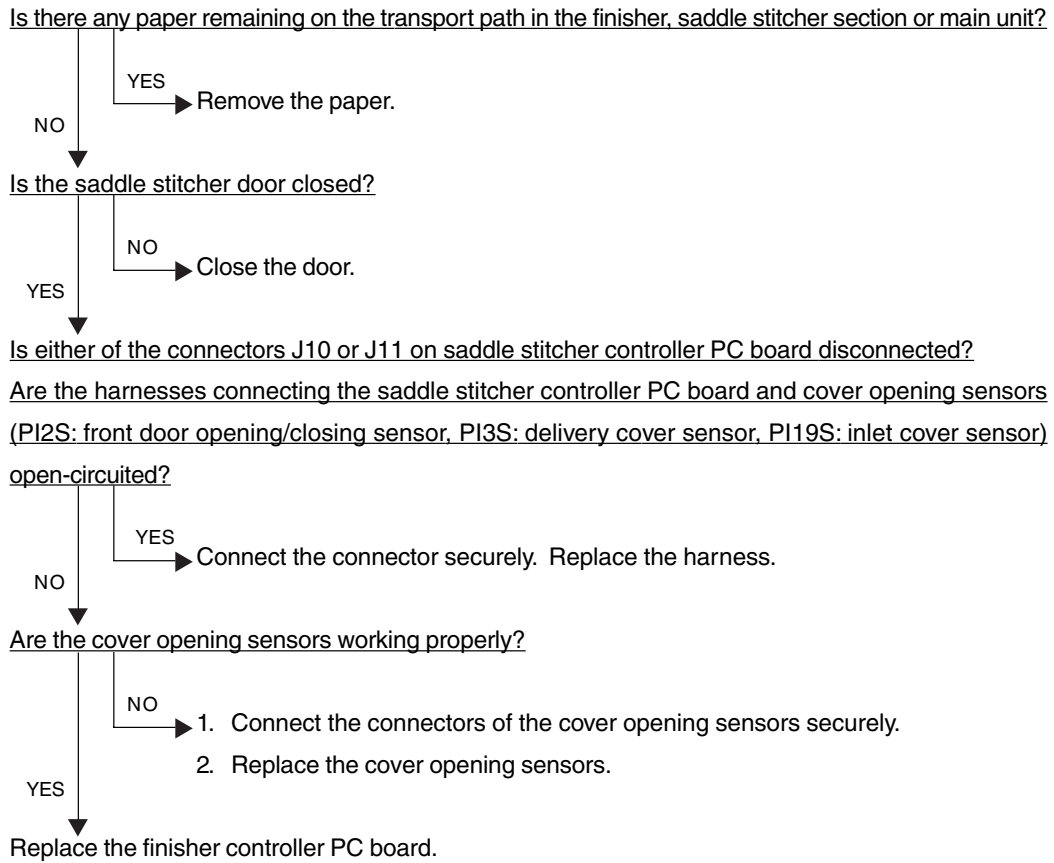
Is the harness connecting the saddle stitcher controller PC board and stitcher home position switch (rear: MS5S, front: MS7S) open-circuited?



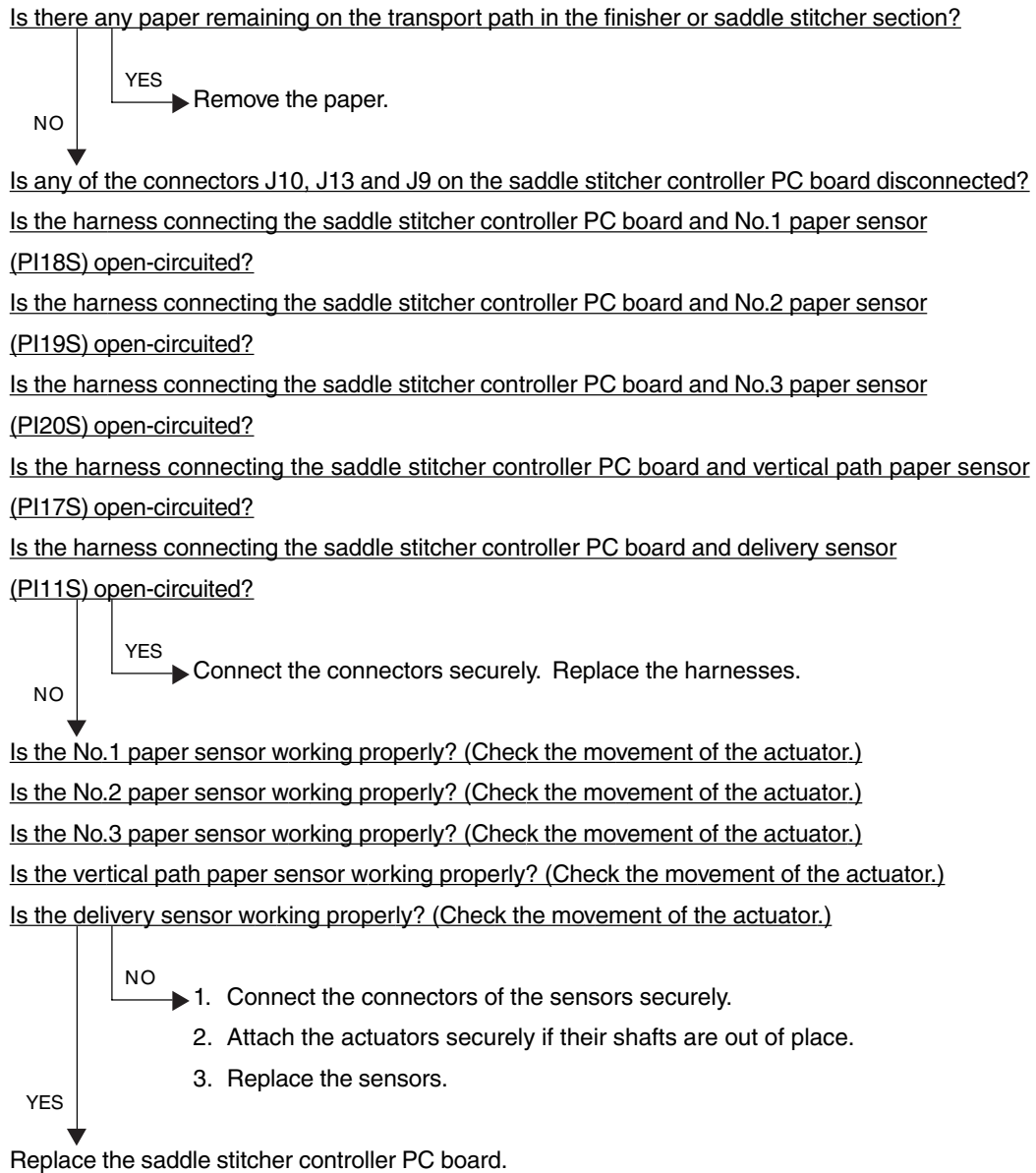
Are the stitcher home position switches working properly?



**[EA9] Saddle stitcher door opened during printing**

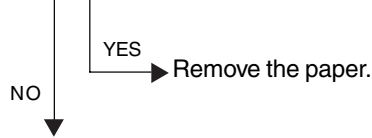


**[EAA] Paper remaining at the saddle stitcher at power ON**



**[EAB] Saddle stitcher transport stop jam**

Is there any paper remaining on the transport path in the finisher, saddle stitcher section or main unit?



Is the connector J17 on finisher controller PC board disconnected?

Is the harness connecting the finisher controller PC board and inlet sensor (PI1) open-circuited?

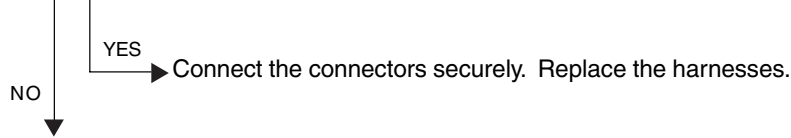
Is either of the connectors J10 or J9 on the saddle stitcher controller PC board disconnected?

Is the harness connecting the saddle stitcher controller PC board and No.1 paper sensor (PI18S) open-circuited?

Is the harness connecting the saddle stitcher controller PC board and No.2 paper sensor (PI19S) open-circuited?

Is the harness connecting the saddle stitcher controller PC board and No.3 paper sensor (PI20S) open-circuited?

Is the harness connecting the saddle stitcher controller PC board and delivery sensor (PI11S) open-circuited?



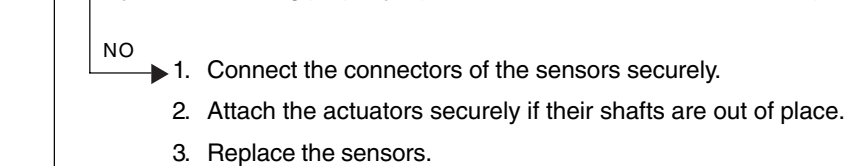
Is the inlet sensor working properly? (Check the movement of the actuator.)

Is the No.1 paper sensor working properly? (Check the movement of the actuator.)

Is the No.2 paper sensor working properly? (Check the movement of the actuator.)

Is the No.3 paper sensor working properly? (Check the movement of the actuator.)

Is the delivery sensor working properly? (Check the movement of the actuator.)



Replace the saddle stitcher controller PC board.



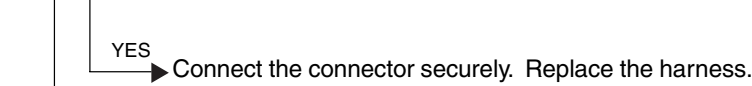
**[EAC] Saddle stitcher transport delay jam**

Is there any paper remaining on the transport path in the finisher, saddle stitcher section or main unit?

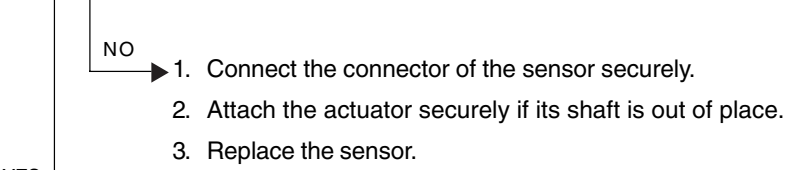


Is the connector J17 on the finisher controller PC board disconnected?

Is the harness connecting the finisher controller PC board and inlet sensor (PI1) open-circuited?



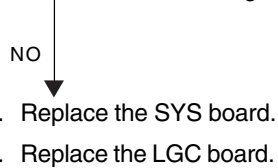
Is the inlet sensor working properly? (Check the movement of the actuator.)



Replace the finisher controller PC board.

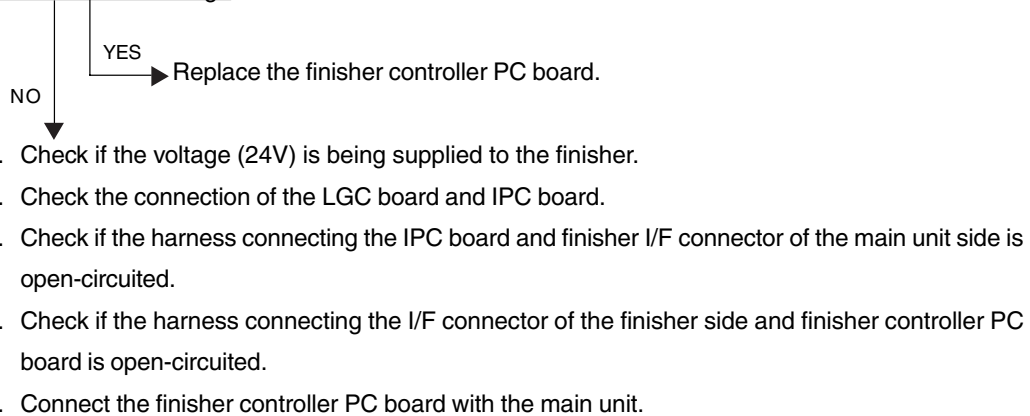
**[EAD] Print end command time-out jam**

Is the main motor rotating normally?



**[EAE] Receiving time time-out jam**

Is the finisher working?

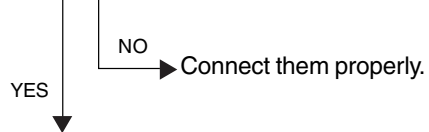


**[EB3] Ready time time-out jam**

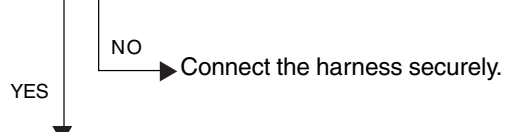
Is there paper in the main unit?



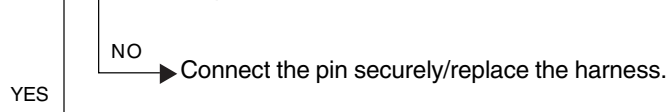
Are the IPC board and LGC board properly connected to each other?



Is the harness securely connected to the IPC board?



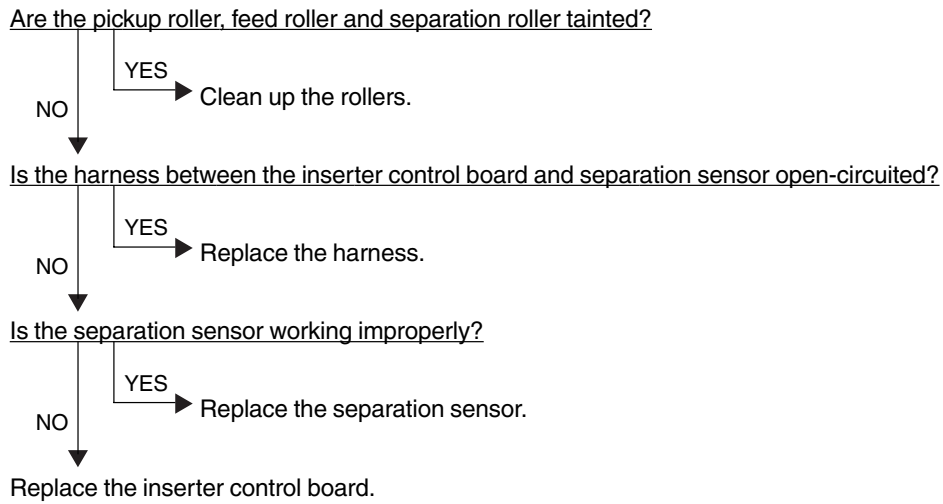
Is any of the connector pins of the harness connecting the copier and finisher disconnected or any of those harnesses open-circuited?



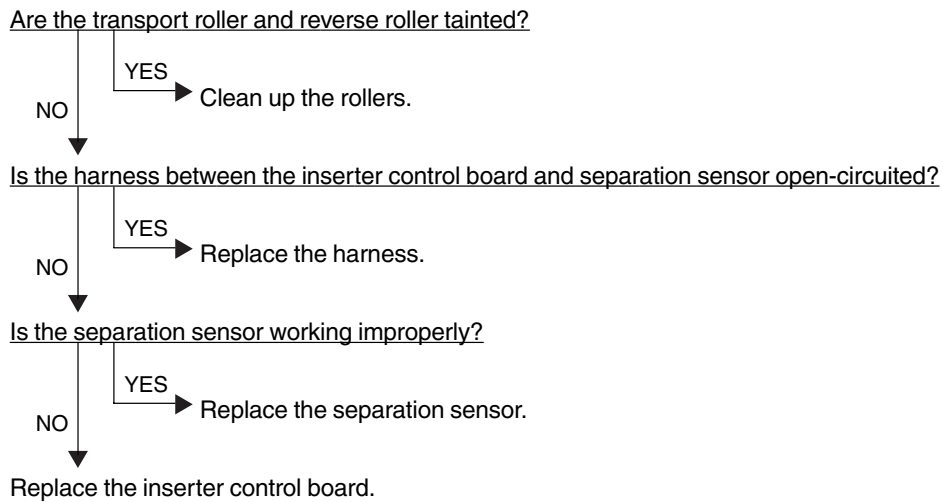
1. Replace the IPC board.
2. Replace the LGC board.
3. Replace the finisher controller PC board.



**[EC0] Inserter feeding delay jam**



**[EC1] Inserter feeding stop jam**

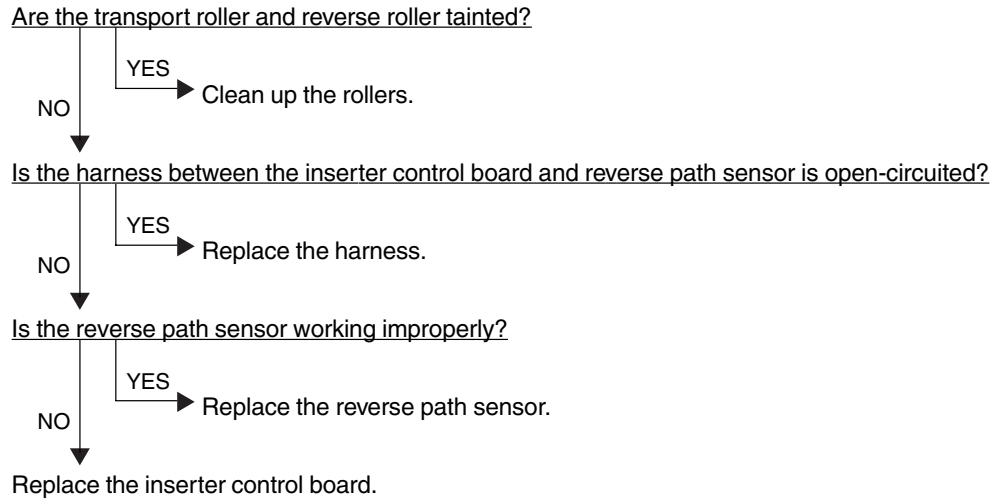


**[EC2] Inserter reverse path delay jam 1**

**[EC3] Inserter reverse path stop jam 1**

**[EC4] Inserter reverse path delay jam 2**

**[EC5] Inserter reverse path stop jam 2**

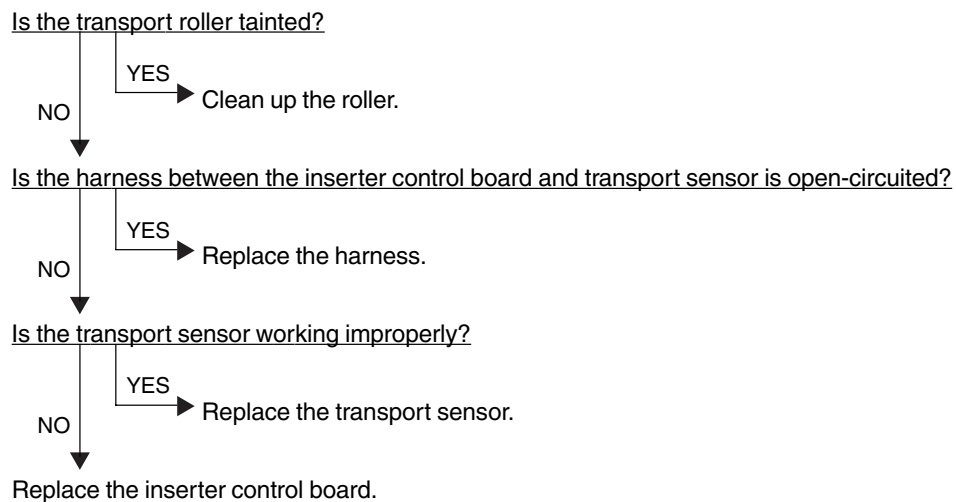


**[EC6] Inserter transport delay jam 1**

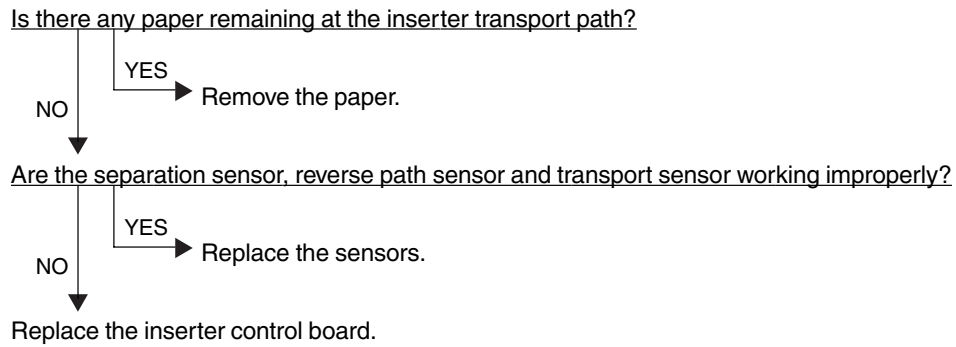
**[EC7] Inserter transport stop jam 1**

**[EC8] Inserter transport delay jam 2**

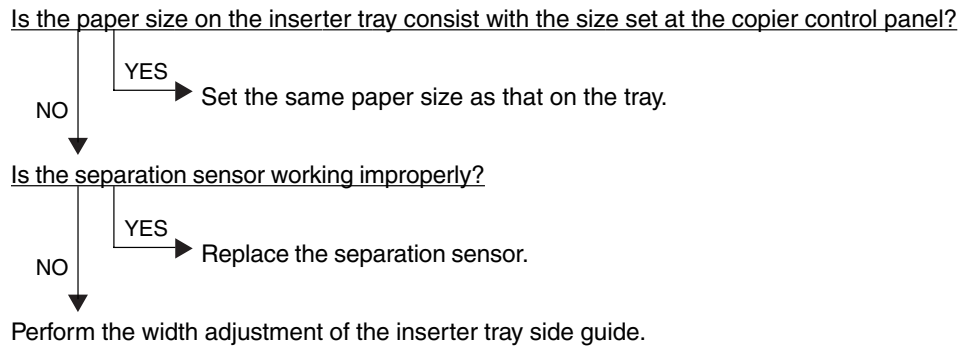
**[EC9] Inserter transport stop jam 2**



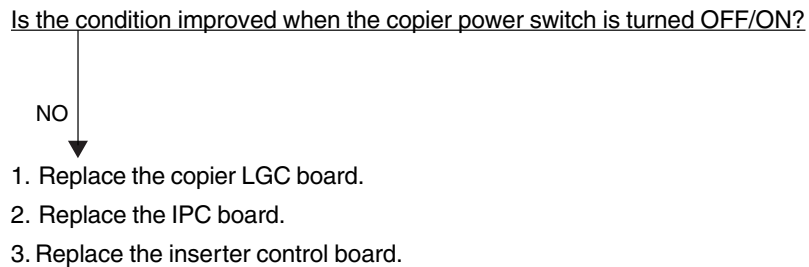
**[ECA] Paper remaining at the inserter when the power is ON**



**[ECB] Inserter size difference jam**



**[ECC] Inserter feeding jam**



## 5. 1. 7. Paper feeding system related service call

### [C04] Abnormal feed motor

Is the feed motor working? (Perform the output check in the test mode: 03-125/175)

NO

1. Check if the signal line connector of the feed motor is disconnected.
2. Check if the connector J327 on the LGC board is disconnected.
3. Check if the connector pins are disconnected and the harnesses are open-circuited.
4. Check if the conductor patterns on the feed motor board and LGC board are short- or open circuited.
5. Replace the feed motor.
6. Replace the LGC board.

YES

Is the LED on the feed motor board lit without flashing?

NO

1. Check if the connector pins are disconnected and the harnesses are open-circuited.
2. Check if the conductor patterns on the feed motor board and LGC board are short- or open-circuited.
3. Replace the feed motor.
4. Replace the LGC board.

YES

Replace the LGC board.



**[C13] Abnormal 1st cassette tray (paper can be fed from the cassettes other than copier cassettes)**

**[C14] Abnormal 2nd cassette tray (paper can be fed from the cassettes other than copier cassettes)**

**[C15] Abnormal 3rd cassette tray (paper can be fed from the cassettes other than 3rd cassette)**

**[C16] Abnormal 4th cassette tray (paper can be fed from the cassettes other than 4th cassette)**

Does the tray go up? (Perform the output check in the test mode: 03-242, 243)

NO

1. Check if the connector of the tray-up motor is disconnected.
2. Check if the connector J311 on the LGC board is disconnected.
3. Check if the connector pins are disconnected and the harnesses are open-circuited.
4. Check if the conductor pattern on the LGC board is short- or open-circuited.
5. Replace the LGC board.

YES

Is the tray-up sensor working?

(Perform the input check in the test mode: 03-[FAX]OFF/[6]/[H],/[7]/[H])

NO

1. Check if the connector of the sensor is disconnected.
2. Check if the connector J310 on the LGC board is disconnected.
3. Check if the slit reaches the sensor.
4. Check if the connector pins are disconnected and the harnesses are open-circuited.
5. Check if the conductor pattern on the LGC board is short- or open-circuited.
6. Replace the LGC board.

YES

1. Check if the conductor pattern on the LGC board is short- or open-circuited.
2. Replace the LGC board.

**[C18] Abnormal tandem LCF tray-up motor**

**(paper can be fed from cassettes other than the tandem LCF)**

Does the tray move? (Perform the output check in the test mode: 03-270)

NO

1. Check if the connector of the tandem LCF tray-up motor is disconnected.
2. Check if the connector J346 on the LGC board is disconnected.
3. Check if the connector pins are disconnected and the harnesses are open-circuited.
4. Check if the conductor pattern on the LGC board is short- or open-circuited.
5. Replace the LGC board.

YES

Are the LCF tray bottom sensor and LCF tray-up sensor working?

(Perform the input check in the test mode: 03-[ENERGY SAVER]OFF/[4]/[C]./[8]/[A])

NO

1. Check if the connectors of the sensors are disconnected.
2. Check if the connector J312 on the LGC board is disconnected.
3. Check if the slit reaches the sensors.
4. Check if the connector pins are disconnected and the harnesses are open-circuited.
5. Check if the conductor pattern on the LGC board is short- or open-circuited.
6. Replace the LGC board.

YES

1. Check if the driving mechanism is abnormal.
2. Check if the conductor pattern on the LGC board is short- or open-circuited.
3. Replace the LGC board.



**[C1A] Abnormal tandem LCF end fence motor**

**(paper can be fed from cassettes other than the tandem LCF)**

Is the LCF end fence motor working? (Perform the output check in the test mode: 03-207)

NO

1. Check if the connector of the tandem LCF end fence motor is disconnected.
2. Check if the connector J346 on the LGC board is disconnected.
3. Check if the connector pins are disconnected and the harnesses are open-circuited.
4. Check if the conductor pattern on the LGC board is short- or open-circuited.
5. Replace the LGC board.

YES

Are the tandem LCF end fence home/stop position sensors working?

(Perform the input check in the test mode: 03-[ENERGY SAVER]OFF/[7]/[A],/[7]/[B])

NO

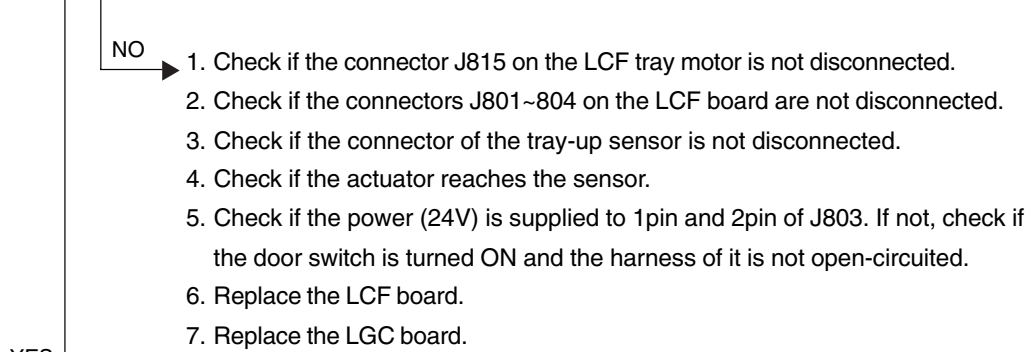
1. Check if the connectors of the sensors are disconnected.
2. Check if the connector J346 on the LGC board is disconnected.
3. Check if the slit reaches the sensors.
4. Check if the connector pins are disconnected and the harnesses are open-circuited.
5. Check if the conductor pattern on the LGC board is short- or open-circuited.
6. Replace the LGC board.

YES

1. Check if the driving mechanism is abnormal.
2. Check if the conductor pattern on the LGC board is short- or open-circuited.
3. Replace the LGC board.

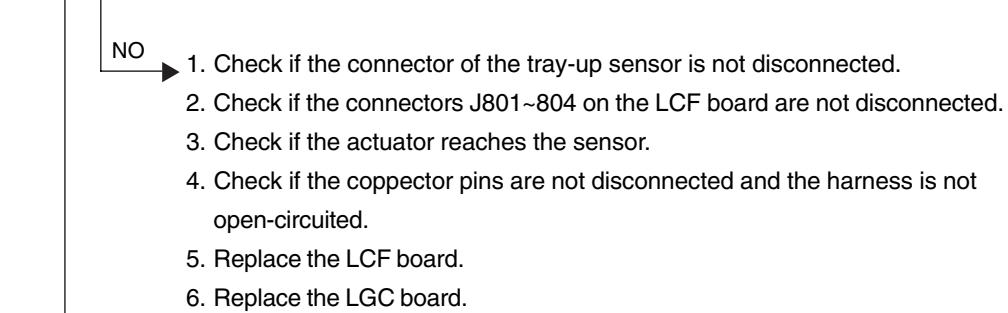
**[C1C] External LCF tray motor driving abnormally (Feeding is abled from the cassettes other than the external LCF.)**

Is the tray motor driving? (Perform the output check in the test mode: 03-271)



Is the tray-up sensor working? (Perform the input check in the test mode: 03-[ENERGY SAVER]

OFF/[1]/[C]



1. Check if the tray lifting mechanism has no abnormality.
2. Replace the LCF board.
3. Replace the LGC board.



## **5. 1. 8. Process system related service call**

### **[C36] Main charger wire cleaning operating abnormally**

- (1) Check if the main charger is not disconnected.
- (2) Check if the wire cleaner drive motor is driving.
- (3) Replace the LGC board.

### **[C37] Transfer belt operating abnormally**

- (1) Check if the connector of the transfer belt cam motor is not disconnected.
- (2) Check if the transfer belt contact/release switch is working properly.
- (3) Replace the transfer belt cam motor.
- (4) Replace the LGC board.

### **[CD1] Cleaning brush drive motor driving abnormally**

- (1) Check if the cleaning brush, recovery toner transport auger and recycle toner transport auger are not locked (no extraneous material or toner clod in both the toner transport sections at the cleaner unit and recycle toner unit).
- (2) Check if the connector on the LGC board and connector pins are not disconnected.
- (3) Replace the cleaning brush drive motor and recycle toner transport motor.
- (4) Replace the LGC board.

### **[CD2] Used toner transport motor driving abnormally**

- (1) Check if the transport auger is not locked (there is no extraneous material or toner clod).
- (2) Check if the connector on the LGC board and connector pins are not disconnected.
- (3) Replace the used toner transport motor.
- (4) Replace the LGC board.

### **[CD3] Recycle toner transport motor driving abnormally**

- (1) Check if the recycle toner transport auger is not locked (no extraneous material or toner clod in both the transport sections at the toner recycle unit and recycle toner hopper).
- (2) Check if the connector on the LGC board and connector pins are not disconnected.
- (3) Replace the recycle toner transport motor and toner recycle hopper motor.
- (4) Replace the LGC board.

**[CD4] Toner bag full**

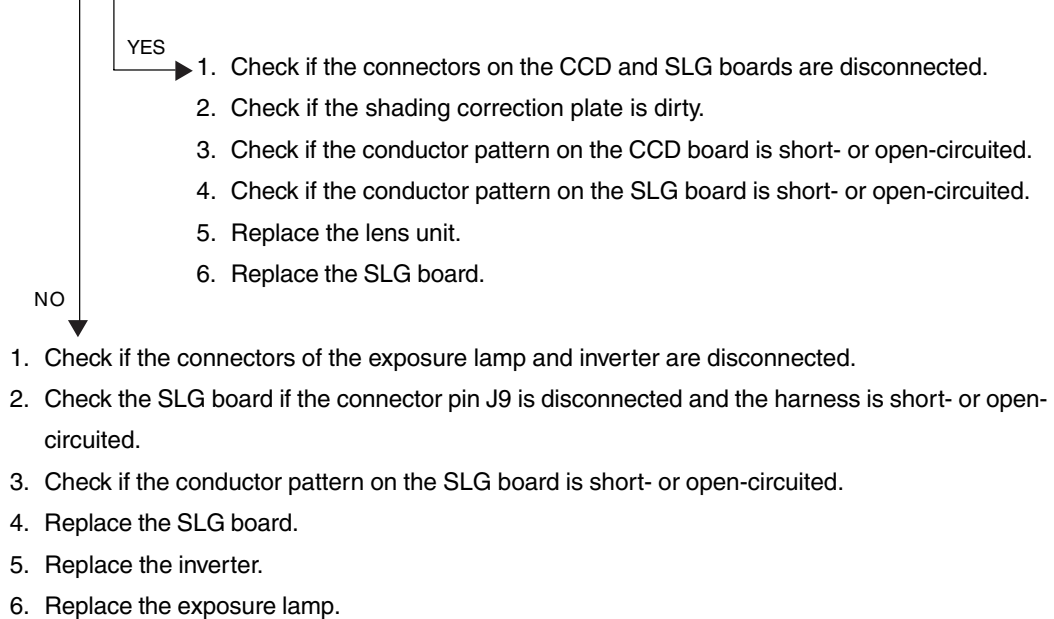
- (1) Check the toner bag.
  - Is the toner bag full?
- (2) Check the toner full detection sensor.
  - Is the tone full detection sensor working properly?
  - Is the connector not disconnected?
- (3) Check the used toner transport motor.
  - Is the used toner transport motor driving?
  - Does the pulley beside the motor become heavy when it is turned toward the direction of arrow (counterclockwise)?
- (4) Replace the LGC board.
- (5) Release the status counter.
  - Turn the power ON while pressing both the [0] and [8] keys.
  - Press the [START] key after inputting [399] with digital keys.
  - Change the status counter "1", "2" or "3" to "0" and press the [SET] or [INTERRUPT] key ([CD4] released).
  - Check if the copier becomes to a standby state normally when power is turned ON again.
  - In case that the used toner transport motor does not drive or [CD4] is not released when power is turned ON again, do the above procedure after manually turning the pulley beside the motor toward the direction of arrow (counterclockwise) several times.



## 5. 1. 9. Scanning system related service call

### [C26] Peak detection error

Does the exposure lamp light? (Perform the output check in the test mode: 03-267)

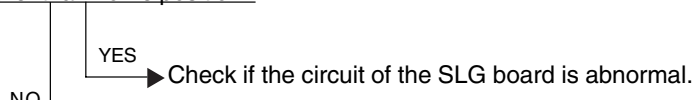


**[C27] Carriage home position sensor not going OFF within a fixed time**

**[C28] Carriage home position sensor not going ON within a fixed time**

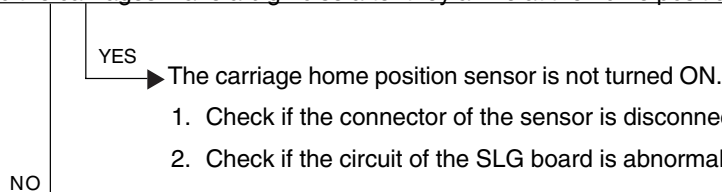
Remove the original glass and move the carriages to the paper feeding side. Turn ON the power and check the following items.

**[C27] Are the carriages slightly moved to the feeding direction?/Are the carriages staying at a position other than home position?**



1. Check if the connector pin is disconnected and the harness is short- or open-circuited.
2. Check if the conductor pattern on the SLG board is short- or open-circuited.
3. Replace the SLG board.

**[C28] Do the carriages make a big noise after they arrive at the home position?**



The carriages are stopped at the home position and do not move.

1. Check if the connector pins are disconnected and the harnesses are short- or open-circuited.
2. Check if the conductor pattern on the SLG board is short- or open-circuited.
3. Replace the SLG board.



## 5. 1. 10. Fuser unit related service call

### CAUTION

Turn OFF the power to check the IH control circuit and IH coil.

### [C41] Abnormal thermistor or heater at power ON

**Note:** Unplug the power cable to prevent any kind of danger before checking the following 1 and 2.

#### 1. Check the thermistors

- (1) Check if the connectors are disconnected.
- (2) Check if the center and side thermistors (front, rear) are in contact with the surface of the fuser roller properly?
- (3) Check if the harnesses of the center and side thermistors are open-circuited.

#### 2. Check the IH control board and IH coil

- (1) Check if the IH coil is broken.
- (2) Check if the connector of the IH coil is disconnected.
- (3) Check if the thermostat is blown.
- (4) Check if the connectors on the IH control board are disconnected (AC input connector and LGC I/F connectors J552 and J553).
- (5) Check if the IH control board or the switching power supply unit are abnormal.
  - Replace the IH control board.

#### 3. Check the LGC board

- (1) Check if the connector J334 is disconnected.
- (2) Check if the conductor pattern on the LGC board is short- or open-circuited.
- (3) Replace the LGC board.

#### 4. Clear the status counter

After repairing the matter which caused the error [C41], perform the following:

- (1) Turn ON the power while [0] and [8] are pressed simultaneously.
- (2) Enter "400" with the digital keys, then press the [START] key.
- (3) Change the current status counter value "1" or "2" to "0", then press the [SET] key or [INTERRUPT] key (to cancel [C41]).
- (4) Turn the power OFF and then back ON. Make sure that the copier enters the normal standby state.

**[C43] Abnormal thermistor after abnormality judgment**

**[C44] Abnormal fuser after abnormality judgment**

1.2.3. Check the thermistors, IH control board, IH coil and LGC board

Check the above components following the procedure 1, 2 and 3 for [C41].

4. Clear the status counter

Change the current status counter value (08-400) "4" to "0" for [C43] and "5", "7" or "9" to "0" for [C44], taking the same procedure as that for [C41].

\* The status counter value is as follows in the following cases. Change them to "0" respectively.

- The error occurred during warming-up: "4" or "5"
- The error occurred after the machine has become ready: "6"
- The temperature detected by the center thermistor is 230°C or higher: "9"
- The temperature detected by the side thermistor is 270°C or higher: "9"

**[C45] Abnormal side thermistor after the copier has become ready**

1. Check the side thermistor

- (1) Check if the connector is disconnected.
- (2) Check if the side thermistor is in contact with the surface of the fuser roller properly.
- (3) Check if the harness of the side thermistor is open-circuited.

2. Check the LGC board

- (1) Check if the connector J334 is disconnected.
- (2) Check if the conductor pattern on the board is short- or open-circuited.
- (3) Replace the LGC board.

3. Clear the status counter

Change the current status counter value (08-400) "6" to "0".



**[C46] Pressure roller thermistor being abnormal after the copier has become ready**

1. Check the pressure roller thermistor.

- (1) Check if the connector is not disconnected.
- (2) Check if the pressure roller thirnistor closely touches the surface of the pressure roller.
- (3) Check if the harness of the pressure roller thermistor is not open-circuited.

2. Check the LGC board.

- (1) Check if the connector J334 is not disconnected.
- (2) Check if the conductor pattern on the LGC board is not short- or open-circuited.
- (3) Replace the LGC board.

3. Clear the status counter.

Change the current status counter value (08-400) "3" or "8" to "0".

**[C47] Abnormal IH power voltage/IH initialization error**

1. Check the AC input voltage

Check if the AC input voltage is within the specified range.

(especially when the heater becomes ON after the power is turned ON (the copier is warming up))

2. Check the thermostat

Check if the thermostat is blown.

3. Check the IH control board

(1) Check if the AC input connector on the IH control board, the LGC I/F connectors J522 and J553 are disconnected?

(2) Check if the fuse on the IH control board has blown.

(3) Replace the IH control board.

4. Check the LGC board

(1) Check if the connector J334 is disconnected.

(2) Check if the conductor pattern on the board is short- or open-circuited.

(3) Replace the LGC board.

5. Clear the status counter

Change the values "10", "11", "13", "14" or "17" of the status counter (08-400) to "0".

\* The status counter value is as follows in the following cases. Change them to "0" respectively.

- The error occurred immediately after the power was turned ON: "10"
- The error occurred before the temperature of the fuser roller reaches 40°C: "11"
- The error occurred before the temperature of the fuser roller reaches 150°C: "14"
- The error occurred before the machine has become ready: "13"
- The error occurred when the machine is in the ready state: "17"



### **[C48] IGBT high temperature**

#### 1. Check the operation of the IH fan

Check if the IH fan is rotating normally. (Is the connector securely connected?)

#### 2. Check the IH control board

- (1) Check if the IGBT or IGBT radiation plate are normal. (Is the radiation plate securely attached?)
- (2) Check if the conductor pattern on the board is short- or open-circuited.
- (3) Replace the IH control board.

#### 3. Clear the status counter

Change the values "12", "14", "15" or "18" of the status counter (08-400) to "0".

- \* The status counter value is as follows in the following cases. Change them to "0" respectively.
- The error occurred before the temperature of the fuser roller reaches 40°C: "12"
  - The error occurred before the temperature of the fuser roller reaches 150°C: "15"
  - The error occurred before the machine has become ready: "14"
  - The error occurred when the machine is in the ready state: "18"

### **[C49] Abnormal IH circuit or coil**

#### 1. Check the IH control board

- (1) Check if the conductor pattern on the board is short or open-circuited.
- (2) Replace the IH control board.

#### 2. Check the IH coil

- (1) Check if the coil is broken or shorted.
- (2) Replace the IH coil.

#### 3. Clear the status counter

Change the values "13", "15", "16" or "19" of the status counter (08-400) to "0".

- \* The status counter value is as follows in the following cases. Change them to "0" respectively.
- The error occurred before the temperature of the fuser roller reaches 40°C: "13"
  - The error occurred before the temperature of the fuser roller reaches 150°C: "16"
  - The error occurred before the machine has become ready: "15"
  - The error occurred when the machine is in the ready state: "19"

[C47], [C48] and [C49] can be cleared by turning OFF and ON the main switch as long as the problem was solved, and the status counter does not have to be changed to "0".

The value of the status counter remains until the next service call overwrites the value.

**[C4A] Cleaning web finished**

- (1) Check if the cleaning web is remaining.
- (2) Check if the connector J332 on the LGC board is not disconnected.
- (3) Check if there is no abnormality at the web sensor.
- (4) Replace the LGC board.

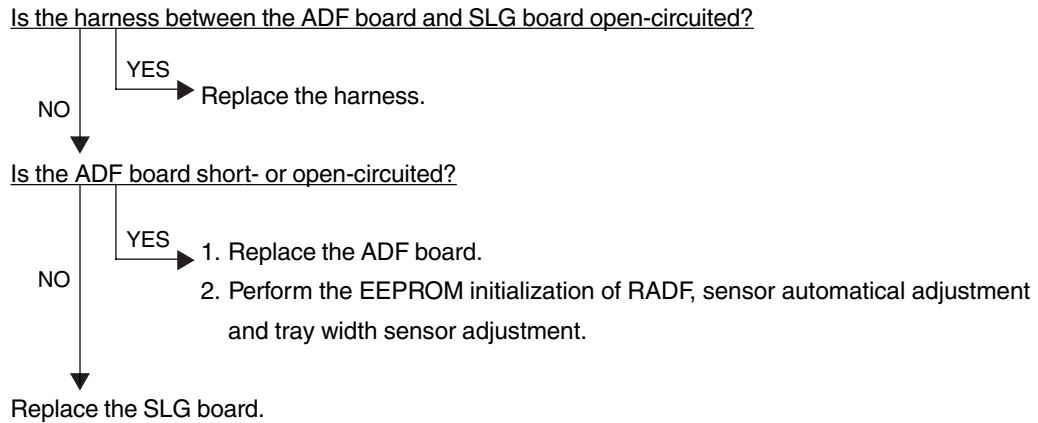
**[CD5] Abnormality at the web motor signal path**

- (1) Check if the connector of the web motor and connector pins are not disconnected.
- (2) Check if the drawer connector and connector pins are not disconnected.
- (3) Check if the harness between the drawer connector and the web motor is not open-circuited.
- (4) Check if the connector of the LGC board and connector pins are not disconnected.
- (5) Check if the harness between the connector of the LGC board and the drawer connector is not open-circuited.
- (6) Replace the LGC board.
- (7) Replace the fuser unit.



### 5. 1. 11. Communication system related service call

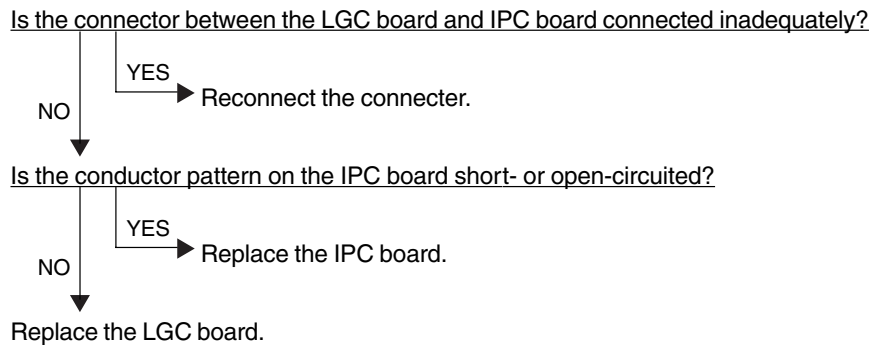
#### [C55] RADF I/F being abnormal



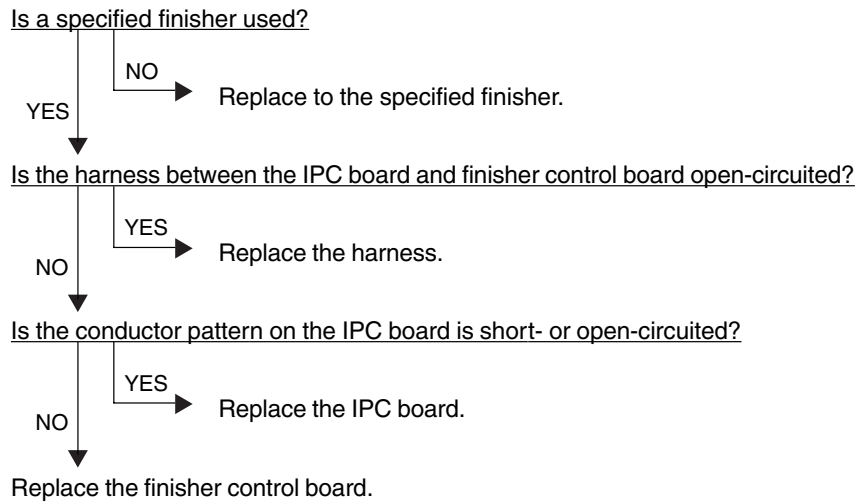
#### [C56] Communication error between the main CPU and PFC-CPU

- (1) Check if the conductor pattern around IC57 and IC58 is not short- or open-circuited.
- (2) Replace the LGC board.

#### [C57] Communication error between the main CPU and IPC board



**[C58] Communication error between the IPC board and finisher**



**[C59] Communication error between the main CPU and laser CPU**

- (1) Check if the harness between the LGC board and PLG board is not disconnected or open-circuited.
- (2) Check if the conductor panner around IC13, IC25, IC57, J327 and J342 on the LGC board is not short- or open-circuited.
- (3) Check if the conductor pattern around IC4, IC19 and J202 on the PLG board is not short- or open-circuited.
- (4) Replace the LGC board.
- (5) Replace the PLG board.



**[F07] Communication error between SYS board and LGC board**

**[F11] Communication error between SYS board and SLG board**

- (1) Check if the connectors J114 and J105 on the SYS board are disconnected.
- (2) Check if the connector J4 on the SLG board is disconnected.
- (3) Check if the harness connecting the SYS and SLG boards is open-circuited and the connector pins are disconnected.
- (4) Check if the harness connecting the SYS board and LGC board is open-circuited and the connector pins are disconnected.
- (5) Check the version of the FROM on the SYS board.
- (6) Check the version of the MROM on the LGC board.
- (7) Check the version of the SROM on the SLG board.
- (8) Replace the SYS board.
- (9) Replace the SLG board.
- (10) Replace the LGC board.

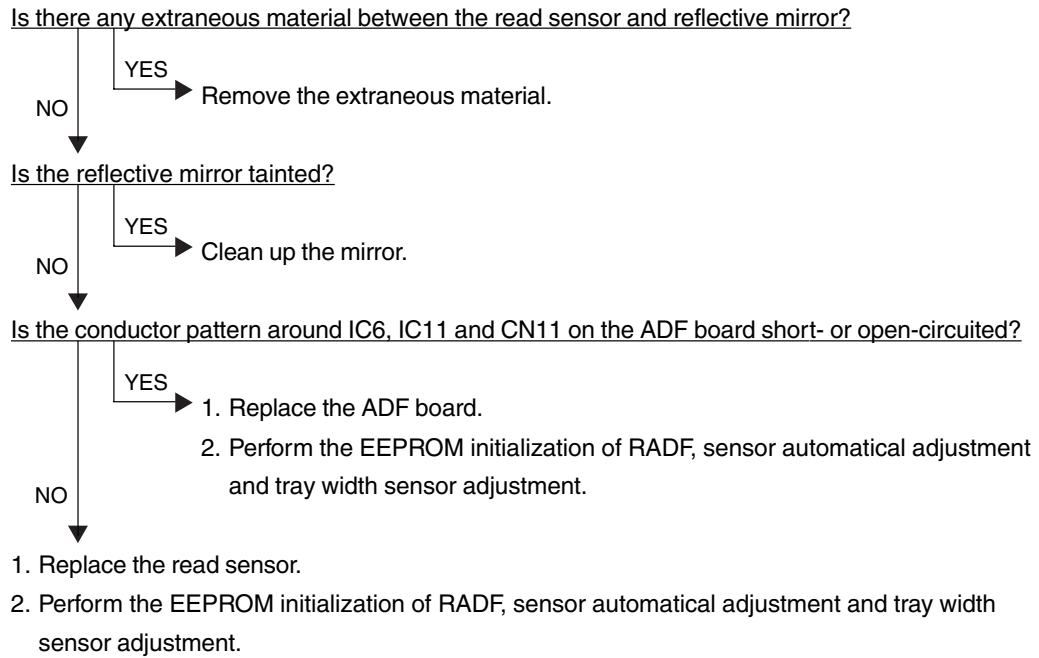
### 5.1.12 ADF related service call

#### **[C73] EEPROM initialization error**

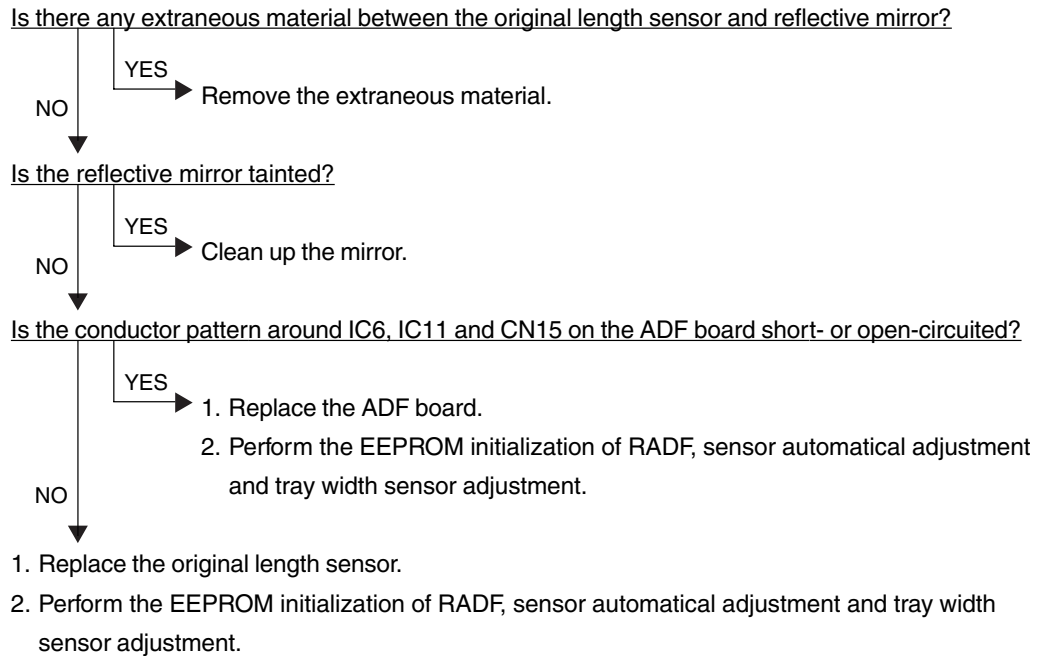
- (1) Check the ADF board, mainly IC13, for short- and open-circuits.
- (2) Replace the ADF board.
- (3) Perform the "Automatic adjustment of RADF sensor and EEPROM initialization" and "Adjustment of the tray width sensor".



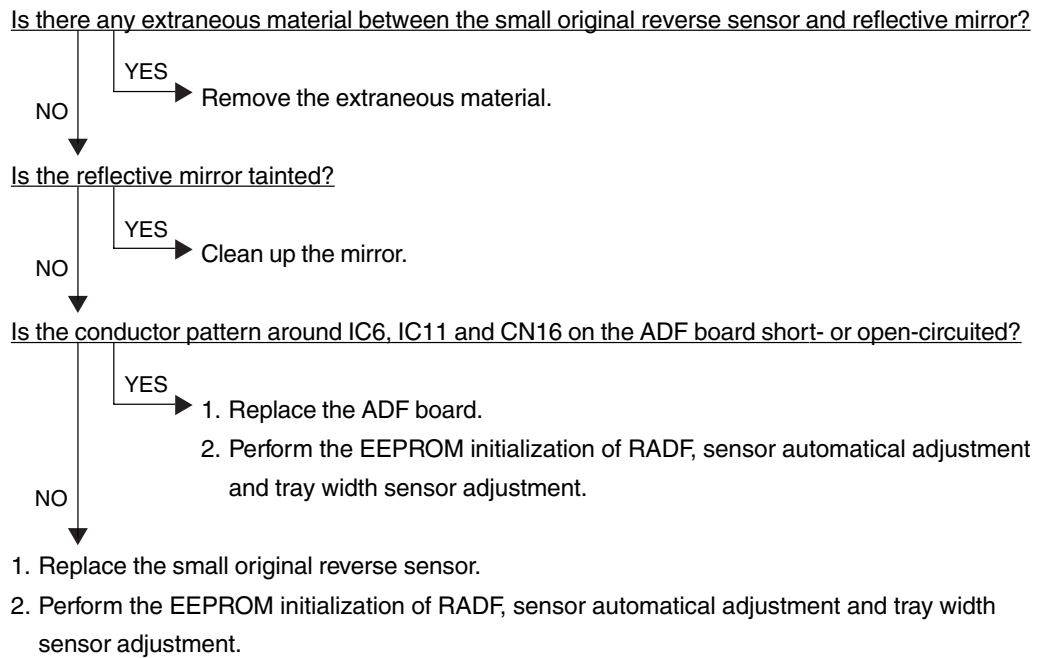
**[C82] Read sensor adjustment error**



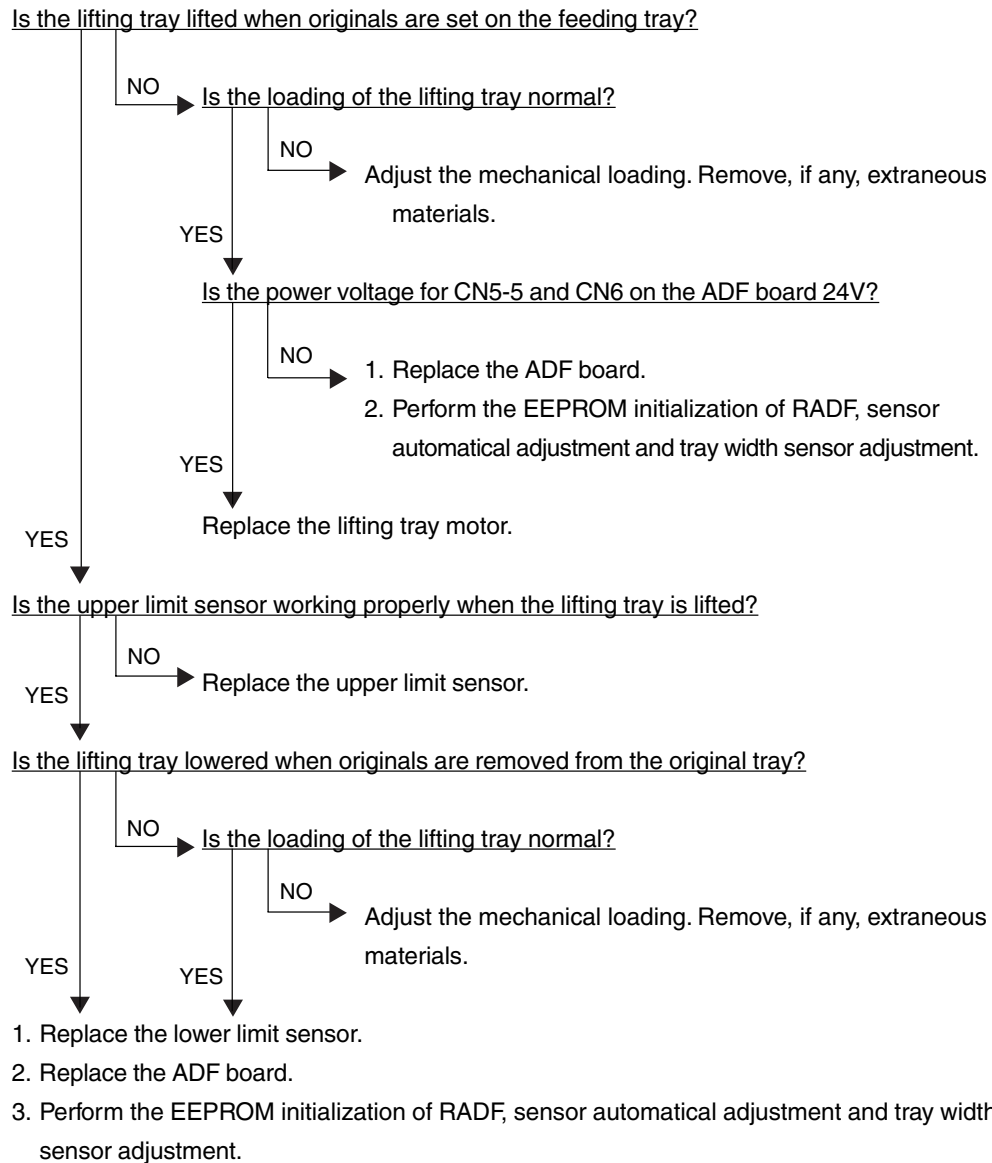
**[C83] Original length sensor adjustment error**



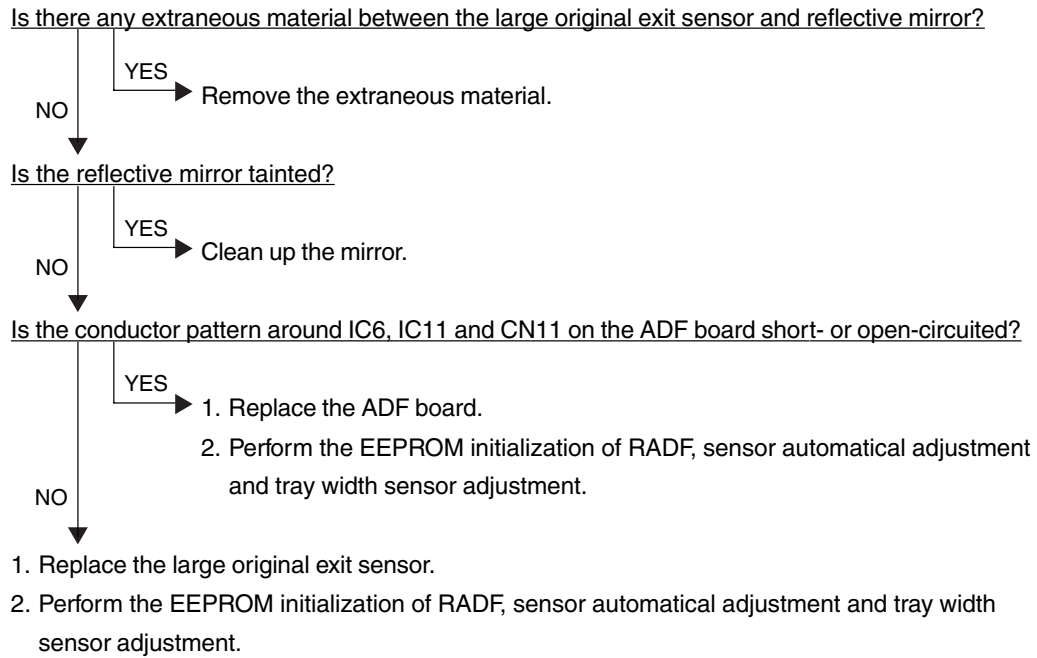
**[C84] Small original reverse sensor adjustment error**



**[C85] Lifting tray motor error**



**[C86] Large original exit sensor adjustment error**



### 5. 1. 13. Laser optical unit related service call

#### [CA1] Abnormal polygonal motor

Is the polygonal motor rotating?

NO

1. Check if the connector J302 on the LGC board is disconnected.
2. Check if the connector J203 on the POL board is disconnected.
3. Check if the harness is open-circuited and the connector pin is disconnected.
4. Check if the conductor pattern on the LGC board is short- or open-circuited.
5. Replace the laser optical unit.
6. Replace the LGC board.

YES

Are the pins-3 and -4 of the connector J203 on the POL board always level "L"?

NO

1. Check if the conductor pattern on the LGC board is short- or open-circuited.
2. Replace the laser optical unit.
3. Replace the LGC board.

YES

1. Check if the conductor pattern on the LGC board is short- or open-circuited.
2. Replace the LGC board.

#### [CA2] H-Sync detection error

Are the harness connecting the connector (J308) on the LGC board and connector (J202) on the SNS board open-circuited? Are the connectors disconnected?

YES

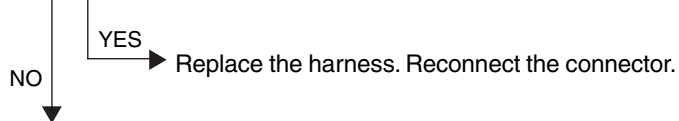
Replace the harness. Connect the disconnected connectors.

NO

1. Replace the LGC board.
2. Replace the laser optical unit.

- [CA3] Secondary scanning coarse adjustment
- [CA5] Laser power adjustment error
- [CA6] Laser calibration error
- [CAA] Secondary scanning fine adjustment error
- [CAB] Secondary scanning inter-page compensation error
- [CAC] Primary scanning dot adjustment error
- [CD0] Laser initializing time out
- [CE0] Abnormal comparator
- [CE1] Beam sensor detection error
- [CE2] Busy sensor
- [CE3] Primary scanning adjustment error
- [CE4] Abnormal window comparator

Is any harness between the PLG board and galvanic mirror, PLG board and laser drive PC board and PLG board and H-Sync detection PC board open-circuited or any connector disconnected?

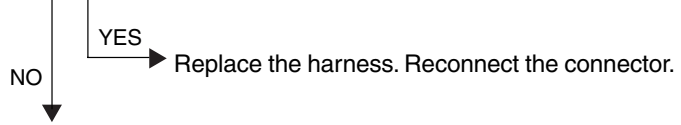


1. Replace the PLG board.
2. Replace the laser optical unit.



**[CA9] Sending error of the image data from the SYS board**

Is the harness between the PLG board and SYS board open-circuited or the connector disconnected?



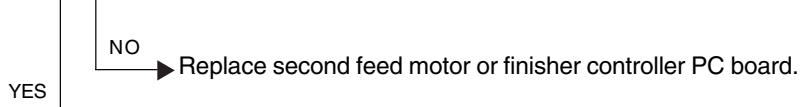
1. Replace the PLG board.
2. Replace the SYS board.

## 5. 1. 14 . Finisher related service call

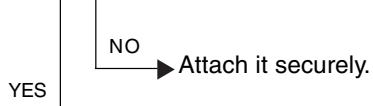
### [CB1] Abnormal feed motor

[Procedure 1]

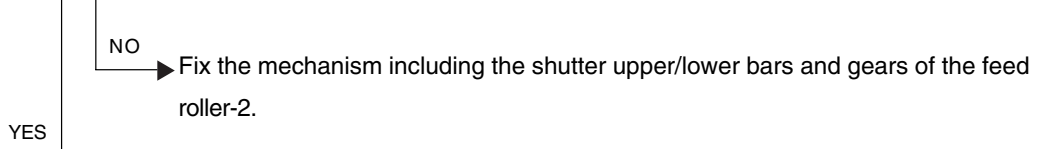
Is second feed motor (M8) rotating in reverse at the fixed timing?



Is the shutter securely attached to the shutter upper/lower bars?



Turn the feed roller-2 in reverse by hand. Do the shutter upper/lower bars move up and down?



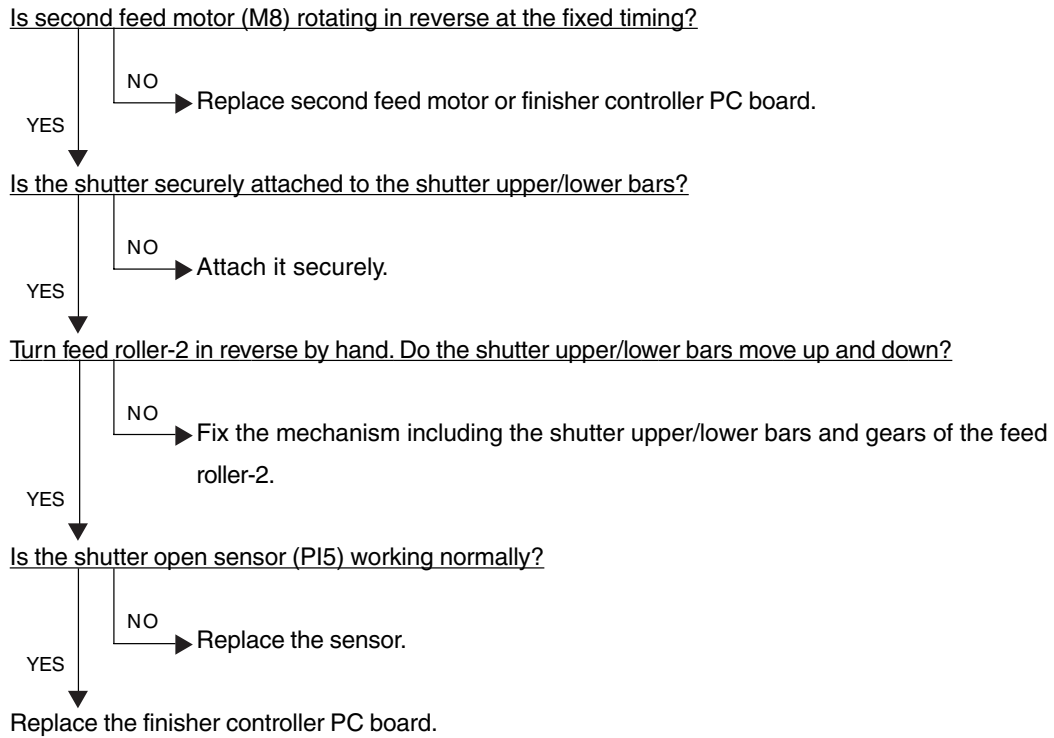
Is the shutter closed detecting switch (MS4) working normally?



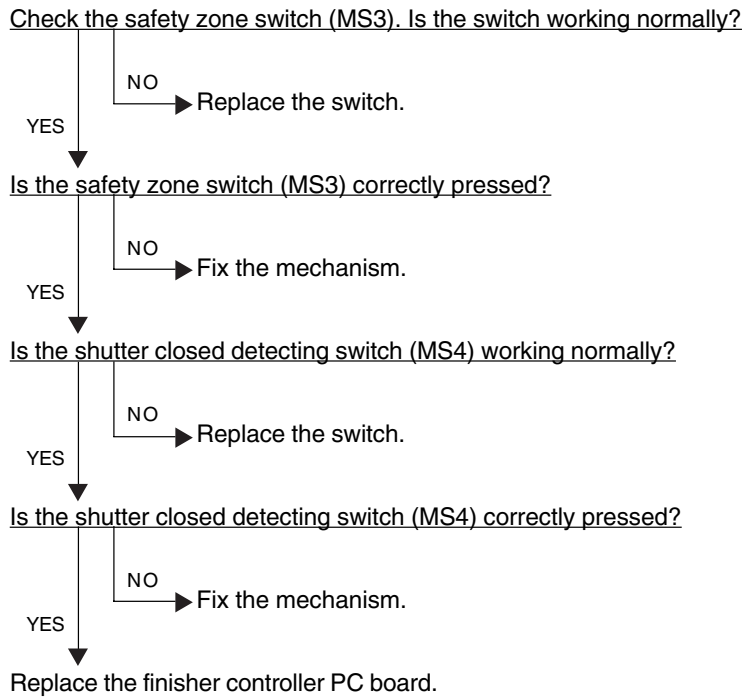
Replace the finisher controller PC board.



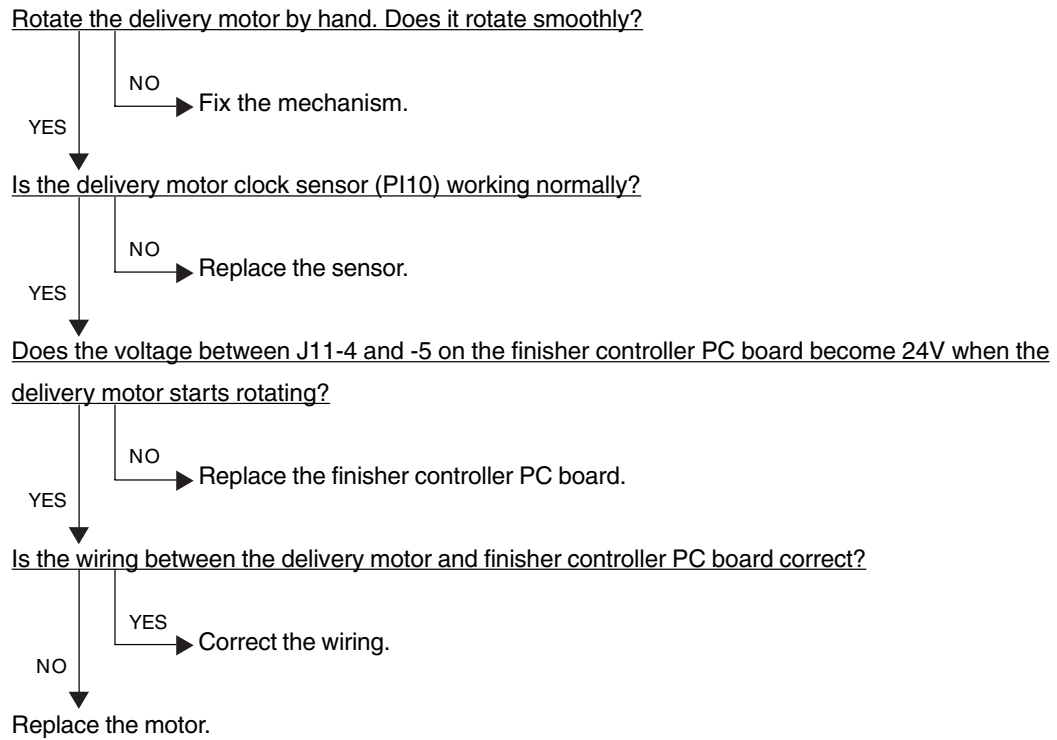
[Procedure 2]



[Procedure 3]



**[CB2] Abnormal delivery motor**



**[CB3] Tray lifting motor driving abnormally**

<Procedure 1>

Is the tray 1 home position sensor working properly?

NO → Replace the tray 1 home position sensor.

YES

Is the tray 1 lifting mechanism working properly?

NO → Correct the defect of the mechanism.

YES

Is 24V supplied to the tray1 lifting motor from the finisher control board at the timing of tray driving?

NO → Replace the finisher control board.

YES

Is the harness between the finisher control board and tray 1 lifting motor normal?

NO → Replace the harness.

YES

Replace the tray 1 lifting motor.

<Procedure 2>

Is the tray 1 lifted/lowered?

NO → Are the tray 1 lifting motor clock sensor 1 and 2 working properly?

NO → Replace the sensor board.

YES

Replace the finisher control board.

YES

Is the power supplied to the motor from the finisher control board at the timing of tray 1 lifting?

NO → Replace the finisher control board.

YES

Is there any abnormality at the tray 1 lifting mechanism?

YES → Correct the defect of the mechanism.

NO

Replace the tray 1 lifting motor.

<Procedure 3>

Is the tray 2 home position sensor working properly?

NO → Replace the tray 2 home position sensor.  
YES ↓

Is the tray 2 lifting mechanism working properly?

NO → Correct the defect of the mechanism.  
YES ↓

Is 24V supplied to the tray 2 lifting motor from the finisher control board at the timing of tray driving?

NO → Replace the finisher control board.  
YES ↓

Is the harness between the finisher control board and tray 2 lifting motor normal?

NO → Replace the harness.  
YES ↓

Replace the tray 2 lifting motor.

<Procedure 4>

Is the tray 2 lifted/lowered?

NO → Are the tray 2 lifting motor clock sensor 1 and 2 working normally?  
NO → Replace the sensor board.  
YES ↓  
Replace the finisher control board.

YES ↓

Is the power supplied to the motor from the finisher control board at the timing of tray 2 lifting?

NO → Replace the finisher control board.  
YES ↓

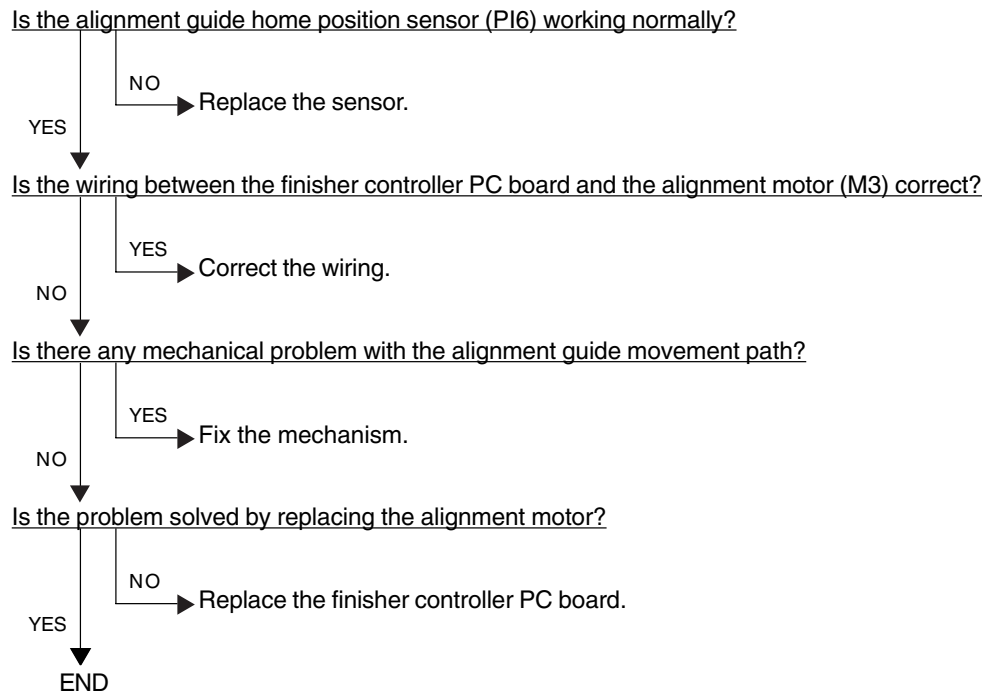
Is there any abnormality at the tray 2 lifting mechanism?

YES → Correct the defect of the mechanism.  
NO ↓

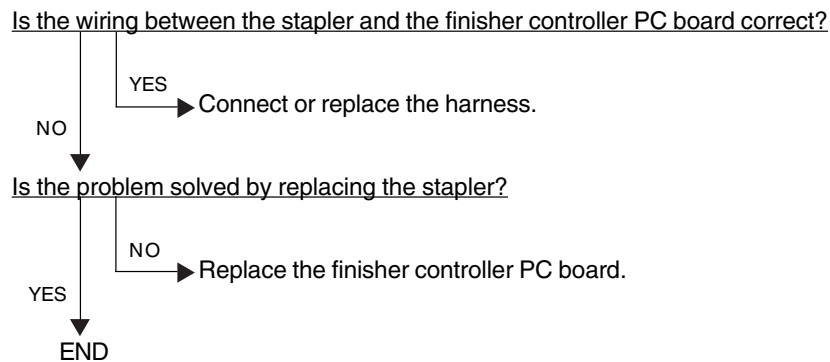
Replace the tray 2 lifting motor.



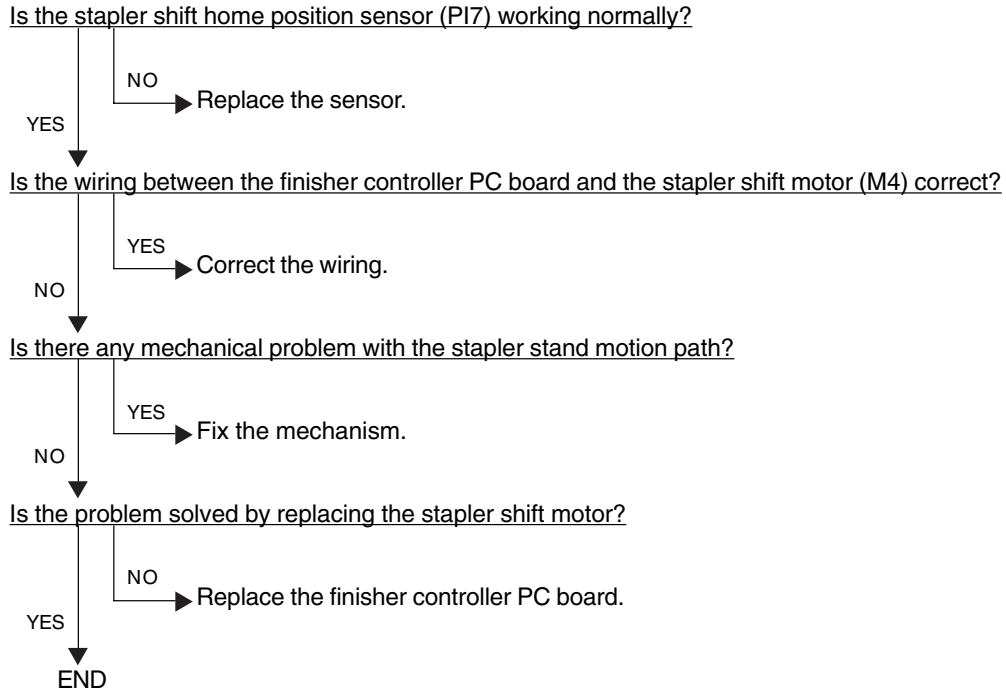
**[CB4] Abnormal alignment motor**



**[CB5] Abnormal staple motor**

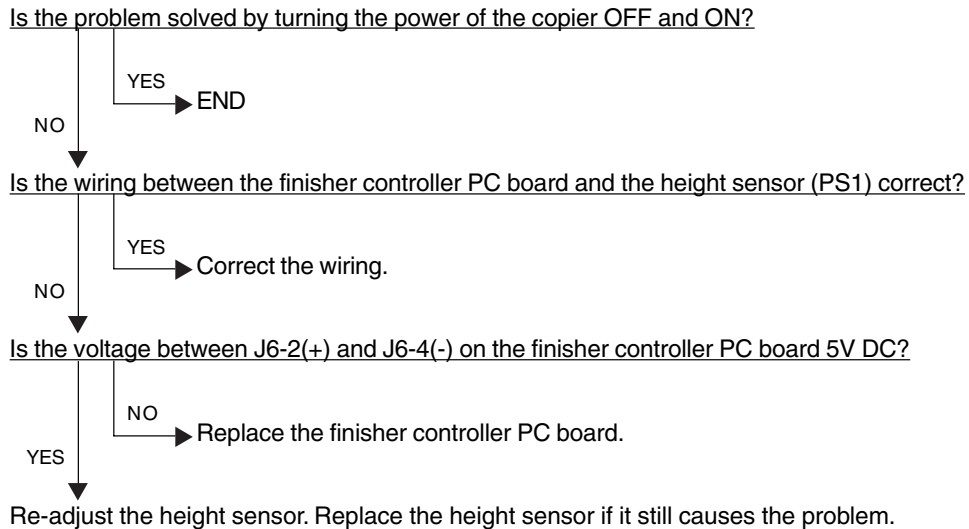


**[CB6] Abnormal stapler shift motor**



**[CB7] Abnormal height sensor**

[Procedure 1]



[Procedure 2]

Is the connector J6 on the finisher controller PC board, J114 of the height sensor (PS1) or relay connector J212 and J213 disconnected?

NO  
YES → Connect the connector(s).

Is the voltage between J6-2(+) and J6-4(-) on the finisher controller PC board 5V DC?

NO → Replace the finisher controller PC board.  
YES

Is the wiring between the finisher controller PC board and height sensor correct?

NO  
YES → Correct the wiring.

Replace the height sensor.

[Procedure 3]

Is the problem solved by readjusting the DIP switch?

NO  
YES → END

Is the wiring between the finisher controller PC board and height sensor (PS1) correct?

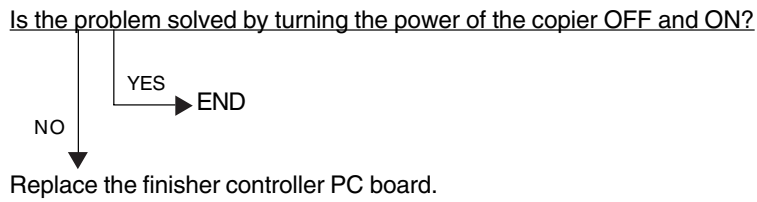
NO  
YES → Correct the wiring.

Is the voltage between J6-2(+) and J6-4(-) on the finisher controller PC board 5V DC?

NO → Replace the finisher controller PC board.  
YES

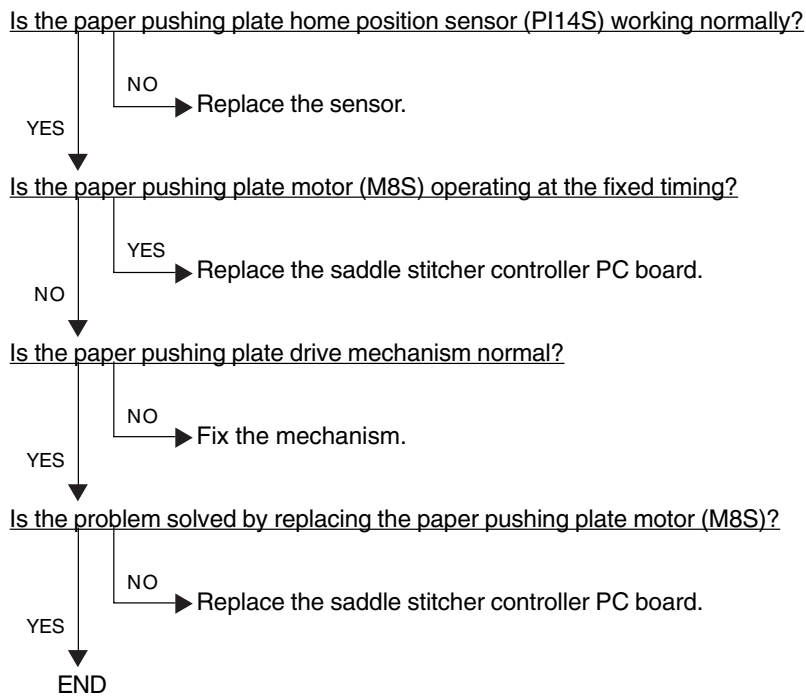
Replace the height sensor.

**[CB8] Abnormal backup RAM data**

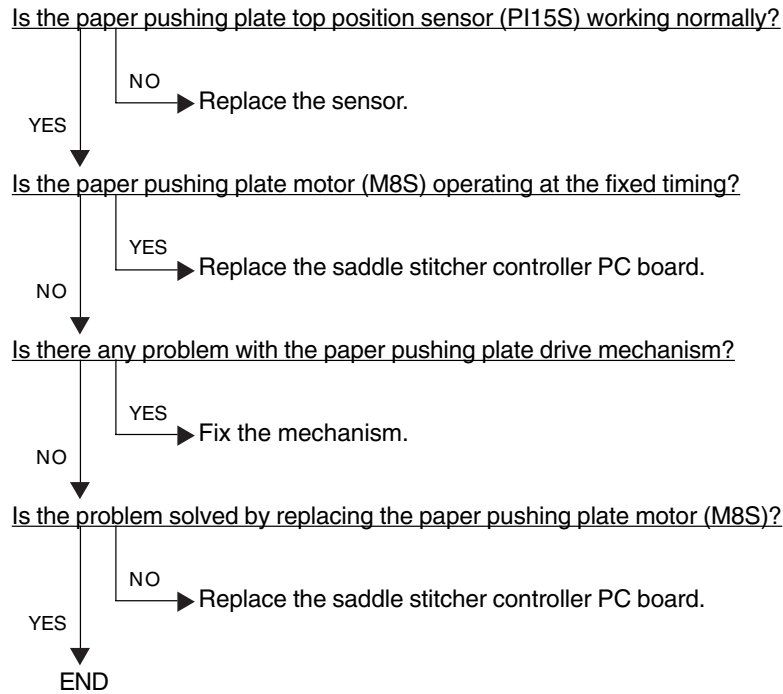


**[CB9] Abnormal saddle stitcher paper pushing plate motor**

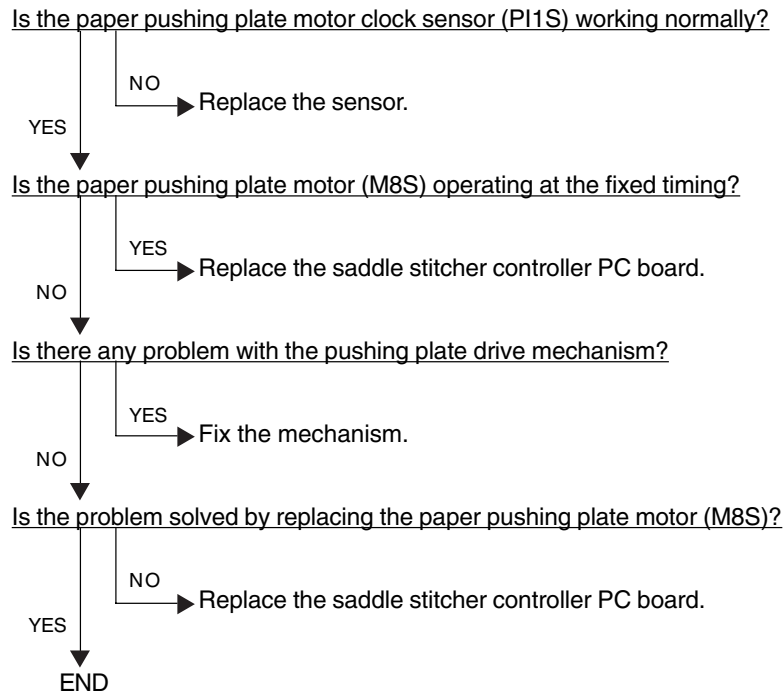
[Procedure 1]



[Procedure 2]

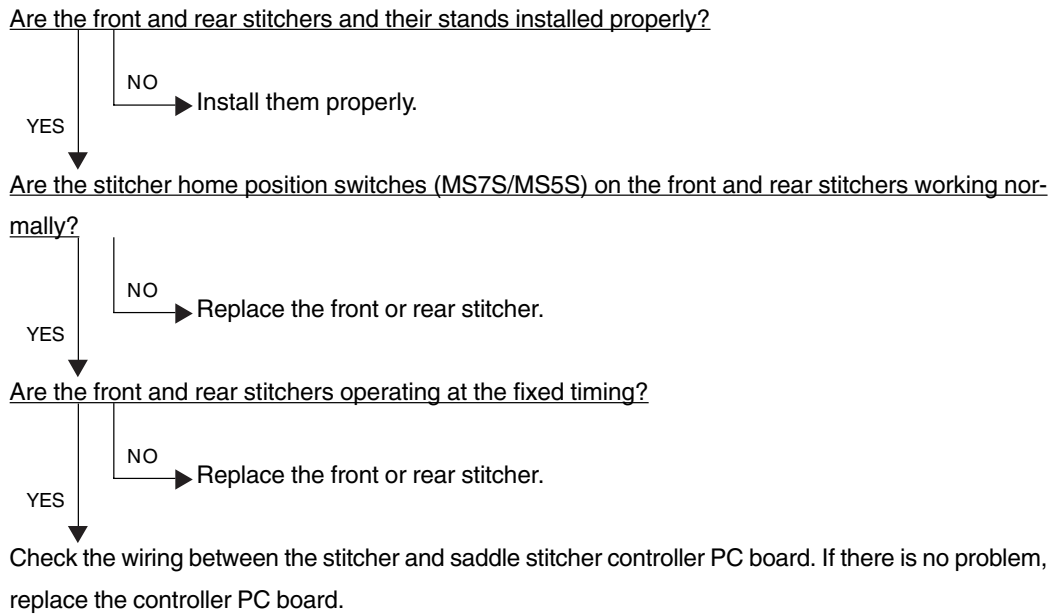


[Procedure 3]

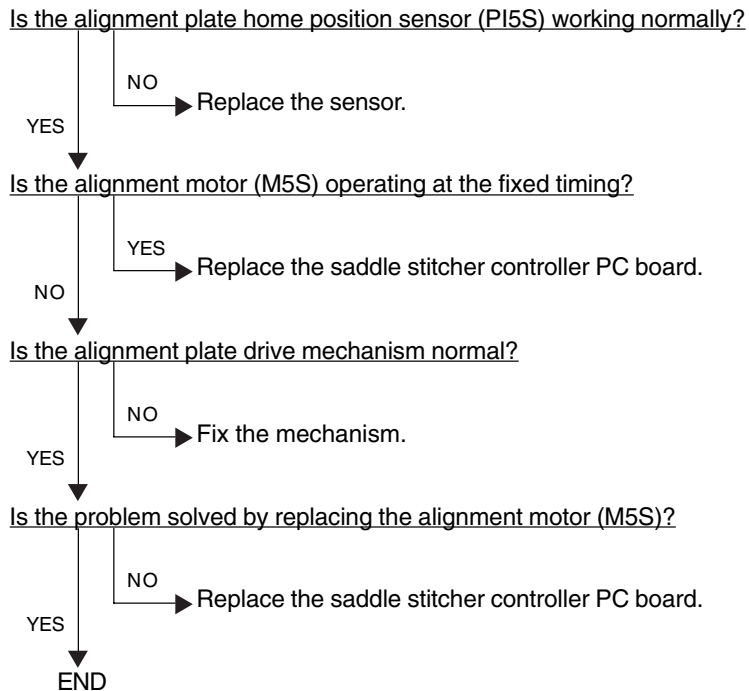


**[CBA] Abnormal saddle stitcher stitch motor (front)**

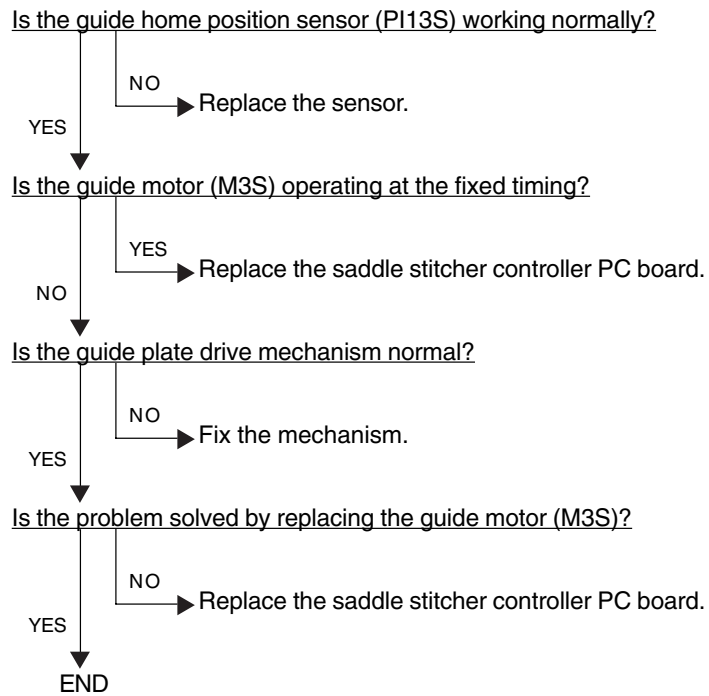
**[CBB] Abnormal saddle stitcher stitch motor (rear)**



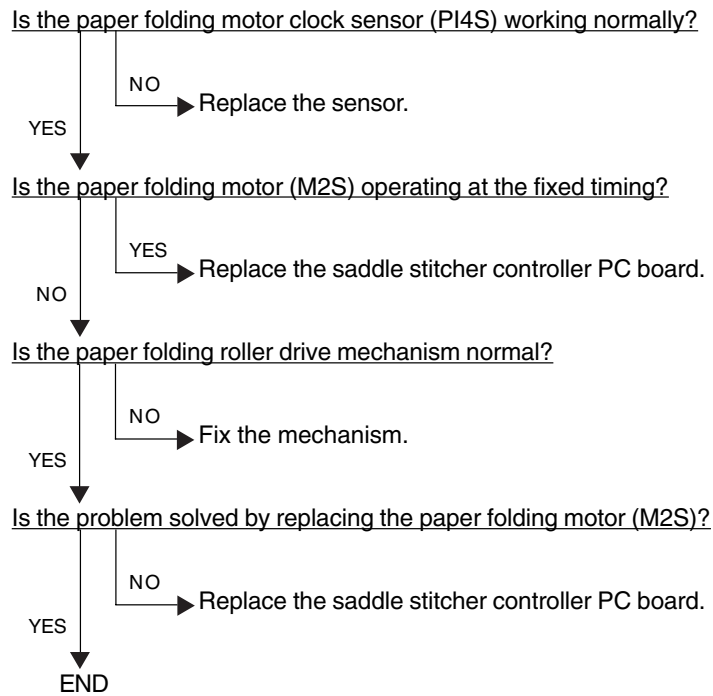
**[CBC] Abnormal saddle stitcher alignment motor**



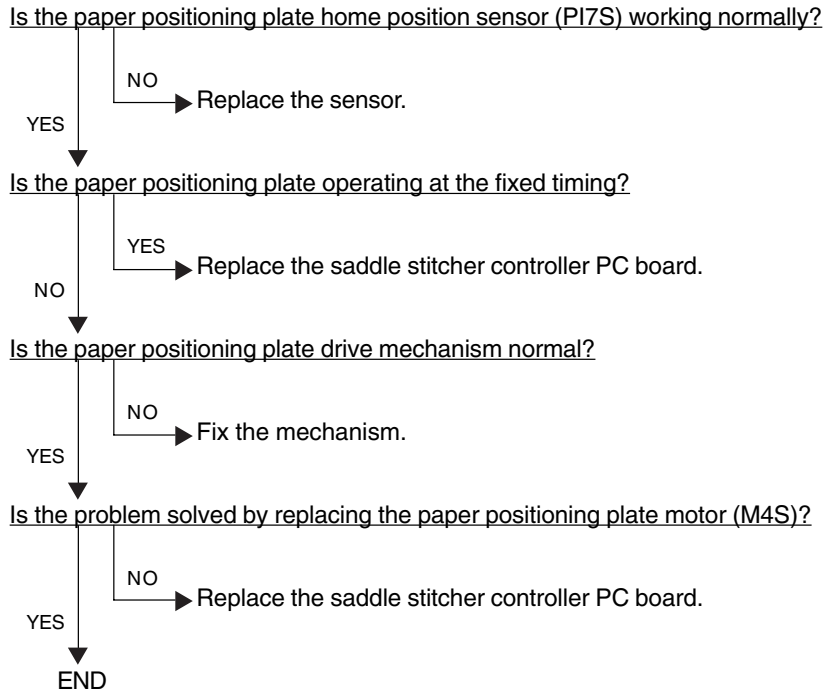
**[CBD] Abnormal saddle stitcher guide motor**



**[CBE] Abnormal saddle stitcher paper folding motor**

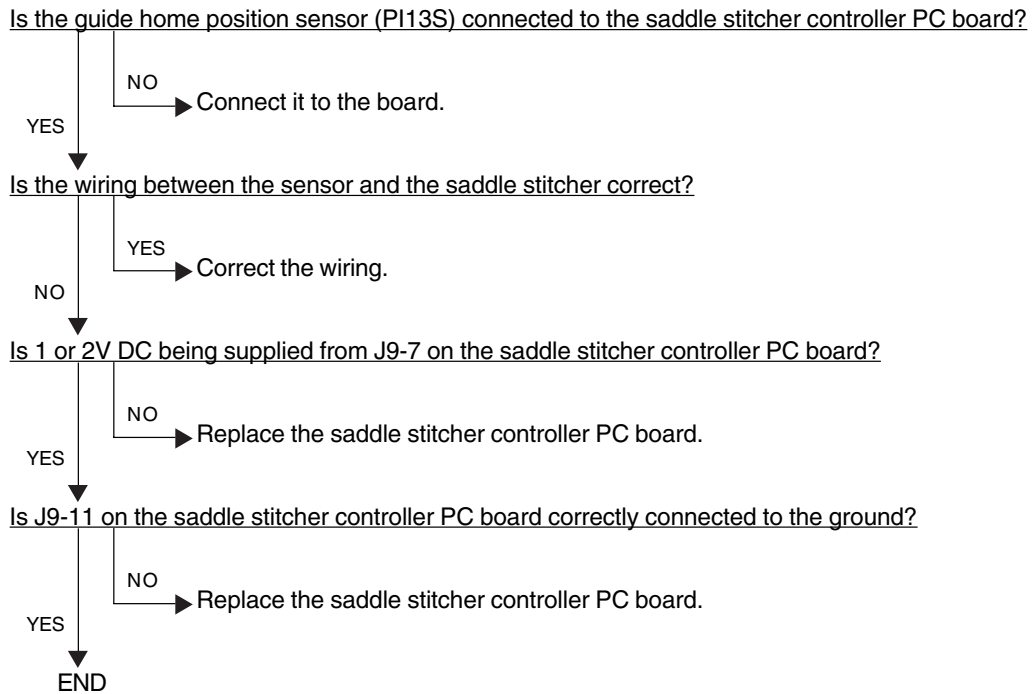


**[CBF] Abnormal saddle stitcher paper positioning plate motor**



**[CC0] Saddle stitcher sensor connector connection error**

[Procedure 1]

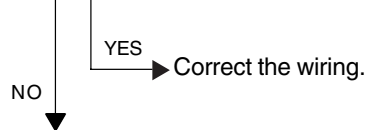


[Procedure 2]

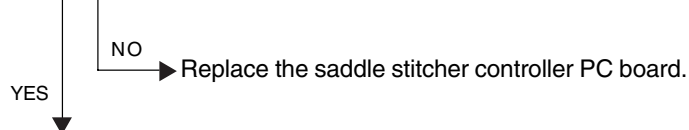
Is the paper pushing plate home position sensor (PI14S) connected to the saddle stitcher controller PC board?



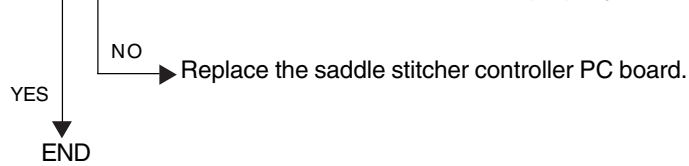
Is the wiring between the sensor and the saddle stitcher correct?



Is 1 or 2V DC being supplied from J9-10 on the saddle stitcher controller PC board?



Is J9-11 on the saddle stitcher controller PC board properly connected to the ground?

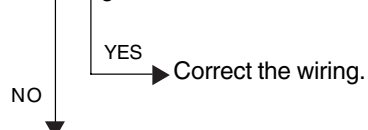


[Procedure 3]

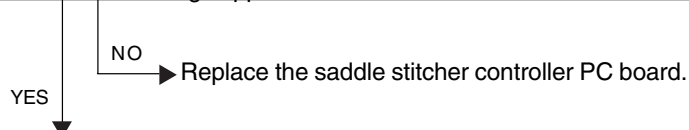
Is the paper pushing plate top position sensor (PI15S) connected to the saddle stitcher controller PC board?



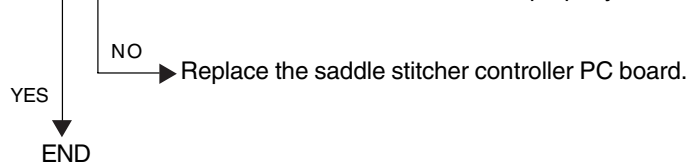
Is the wiring between the sensor and the saddle stitcher correct?



Is 1 or 2V DC being supplied from J9-13 on the saddle stitcher controller PC board?



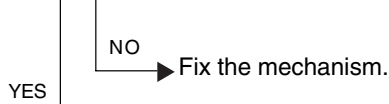
Is J9-14 on the saddle stitcher controller PC board properly connected to the ground?



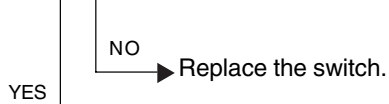
## [CC1] Abnormal Saddle stitcher microswitch

[Procedure 1]

Is the switch actuator for the inlet door working properly?

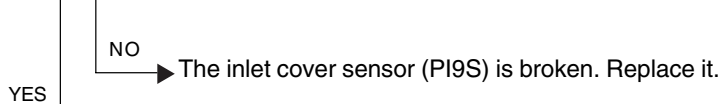


Is the inlet cover switch (MS1S) working normally?



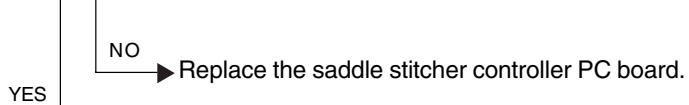
Measure the voltage of J10-8 on the saddle stitcher controller PC board when the inlet door is open.

Is it 5V?



Measure the voltage between J19-2 (+) and J19-1 (-) on the saddle stitcher controller PC board. Is it

24 V?



Check the wiring between J19 on the finisher controller PC board and J1 on the saddle stitcher controller PC board. If there is no problem, replace the saddle stitcher controller PC board.

[Procedure 2]

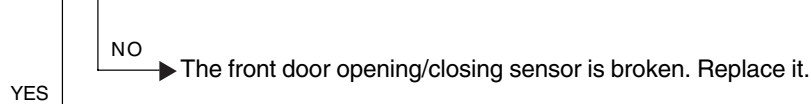
Is the switch actuator for the front door working properly?



Is the front cover switch (MS2S) working normally?



Measure the voltage of J11-12 on the saddle stitcher controller PC board when the front door is opened. Is it 5V?



Replace the saddle stitcher controller PC board.

[Procedure 3]

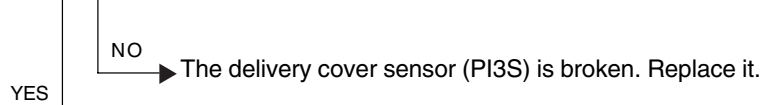
Is the switch actuator for the delivery door working properly?



Is the delivery cover switch working normally?

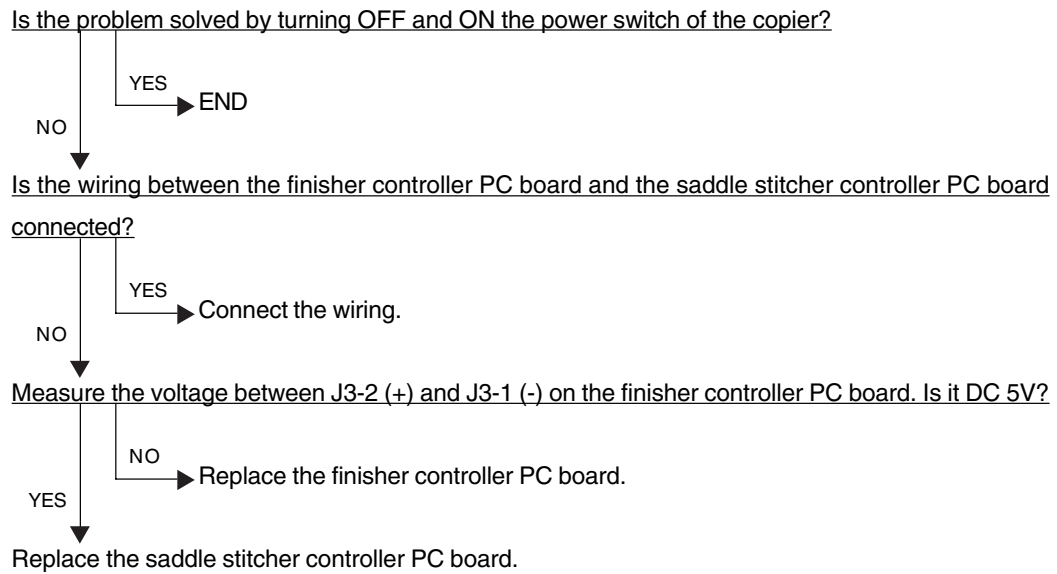


Measure the voltage of J11-9 on the saddle stitcher controller PC board when the delivery door is opened. Is it 5V ?



Replace the saddle stitcher controller PC board.

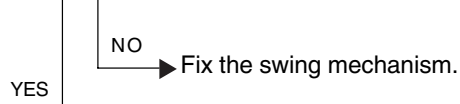
**[CC2] Communication error between finisher and saddle stitcher**



**[CC4] Abnormal swing motor**

[Procedure 1]

Rotate the swing motor in reverse by hand. Does the swing guide move up and down?



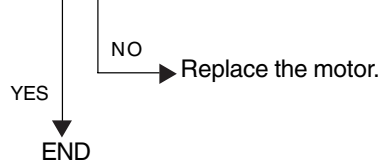
Is the swing guide closed detection switch-2 (MS6) working normally?



Is the swing guide open sensor (PI18) working normally?



Is the swing motor (M7) rotating in reverse at the fixed timing?

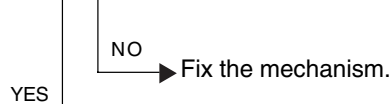


[Procedure 2]

Is the safety zone switch (MS3) working normally?



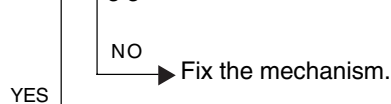
Is the safety zone switch (MS3) correctly pressed?



Is the swing guide closed detection switch-2 (MS6) working normally?



Is the swing guide closed detection switch-2 (MS6) correctly pressed?



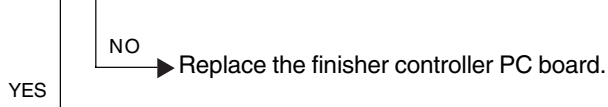
Replace the finisher controller PC board.

[Procedure 3]

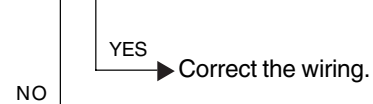
Is the swing motor clock sensor (PI20) working normally?



Does the voltage between J11-6 and -7 on the finisher controller PC board become 24V when the swing motor starts rotating?



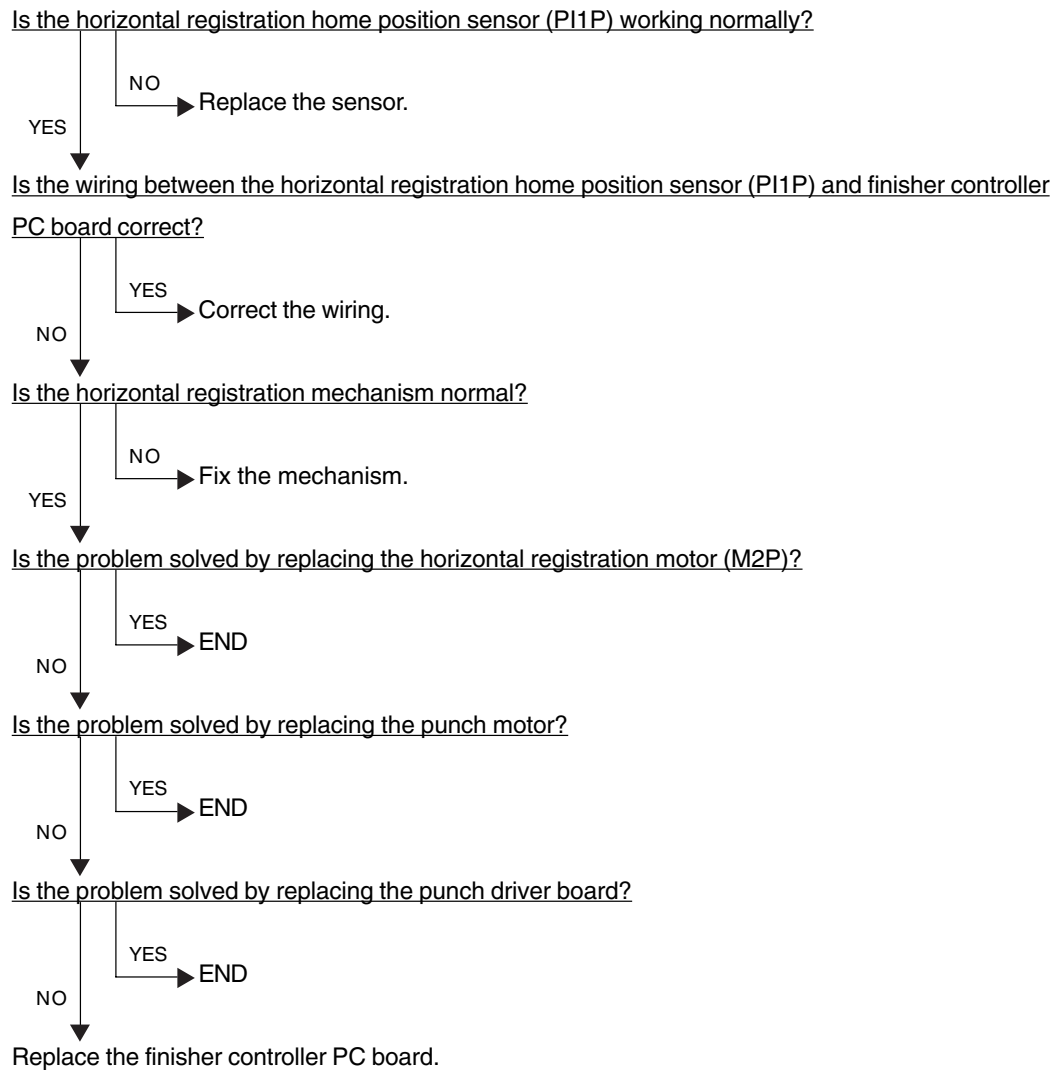
Is the wiring between the swing motor and finisher controller PC board correct?



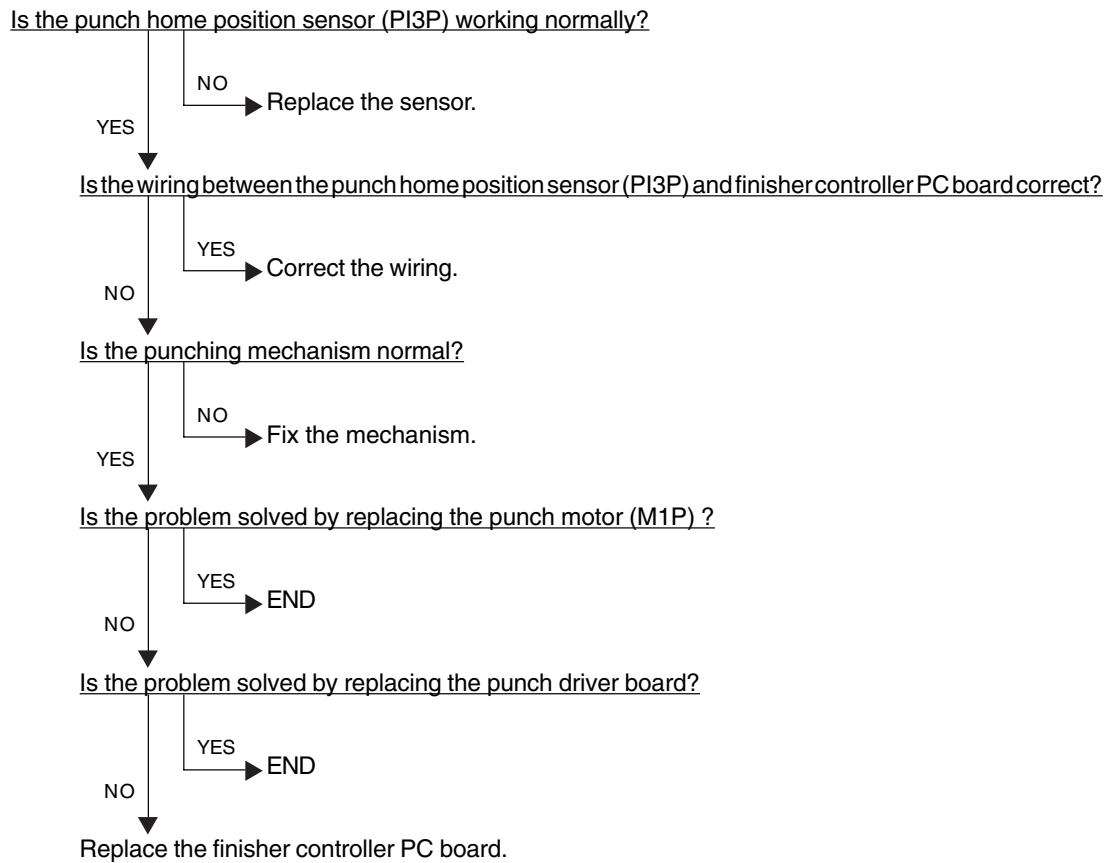
Replace the swing motor.



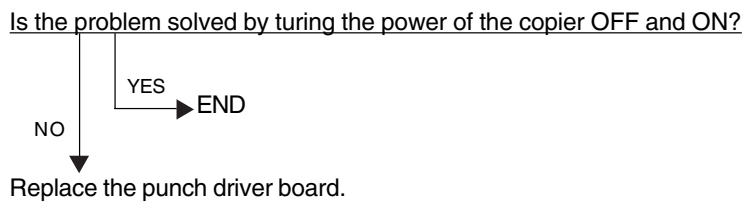
**[CC5] Abnormal horizontal registration motor (with AR-PN3 connected)**



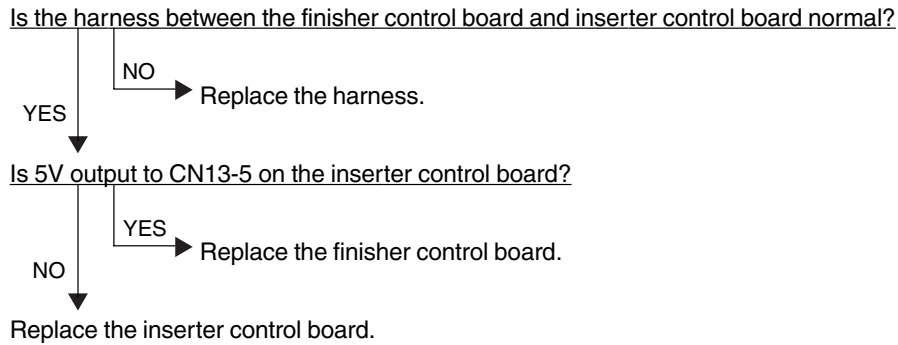
**[CC6] Abnormal punch motor (with AR-PN3 connected)**



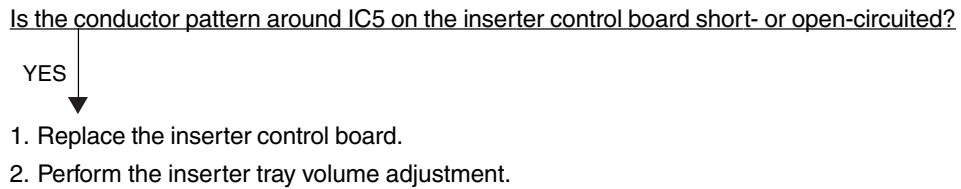
**[CC7] Abnormal punch unit backup RAM data**



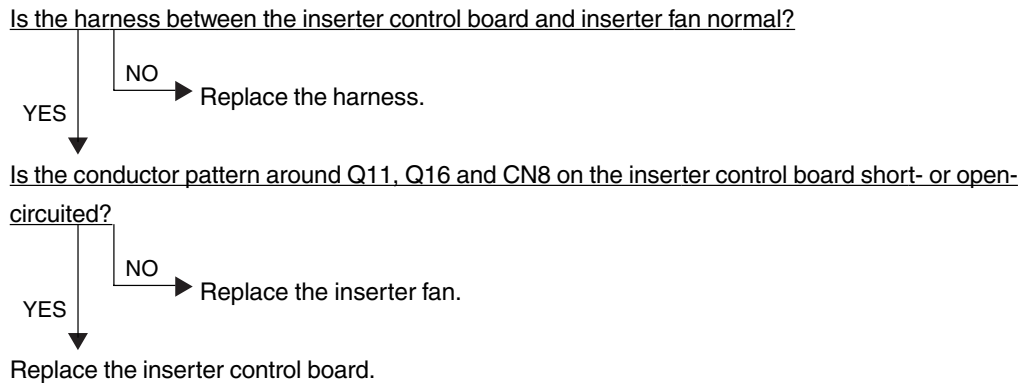
**[CCC] Communication error between the inserter and finisher**



**[CCD] Abnormal inserter EEPROM**



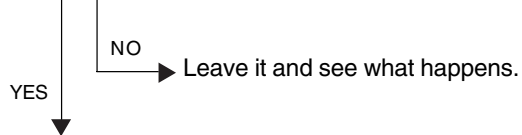
**[CCE] Abnormal inserter fan**



## 5. 1. 15. Service call for others

### [C94] Abnormal main CPU

Is the "Call for Service" displayed even after the main switch is turned OFF and back ON ?



1. Check if the circuit pattern between the main CPU and MROM is short- or open-circuited.
2. Replace the LGC board if this error occurs frequently.

### [F10] HDD Initialization error

- (1) Initialize the HDD. (mode (08) → code "690" → 2)
- (2) Check if the HDD is mounted.
- (3) Check if the specified HDD is mounted.
- (4) Check if the connector pins of the HDD are bent.
- (5) Check if the power supply connector is disconnected.
- (6) Check if the connector J107 on the SYS board is disconnected.
- (7) Replace the HDD.
- (8) Replace the SYS board.
- (9) Replace the harness.