

Troubleshooting: C130, 140, 150 or 160 Error for e-STUDIO205L/255/305/355/455 Series

[1] When C130, 140, 150 or 160 error occurs

1. Check the status when the error occurred

Important
Follow this procedure to check the condition of the equipment when the error occurs.

- 1) Do not turn the power OFF while performing the following procedures.
- 2) Did a gear unmeshing sound occur? (ask the end users)

Contents	Items to check				Check
Did a loud high noise sound occur?	Yes	or	No	or	Not remembered
Did a loud low noise sound occur?	Yes	or	No	or	Not remembered

<Countermeasures>

If "Yes", the gear in the drive unit of the drawer tray-up may be damaged.
Refer to "8.6.25 Upper tray-up motor (M11)" in the Service Manual (page 8-27 and 28) and check whether the gear tooth flank is damaged.

If "Yes", the fan-shaped gear in the drawer may be damaged.

- 3) Check the message indication area on the touch panel. (Fig. 1)
Either of following messages appears in this area.
It does not appear in the alert message indication area (black part of the bottom of the menu).

Message	Check
"READY" or "ADD PAPER"	

When "Add paper" appears, check the paper feeding section where the error occurs with the self-diagnosis mode (test mode 3).

Contents	Items to check		Check
Drawer tray-up sensor	Tray at upper limit position	or	Other than upper limit position
Drawer empty sensor	No paper	or	Paper present

* Refer to the Service Handbook page 2-4.

If "Other than upper limit position" appears for the drawer tray-up sensor, take off the rear cover and check the gear condition in the drawer.
(Refer to 1-4)

Checking area

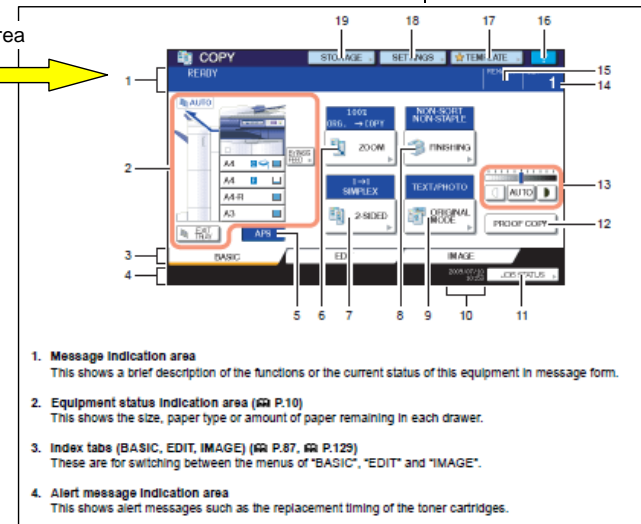
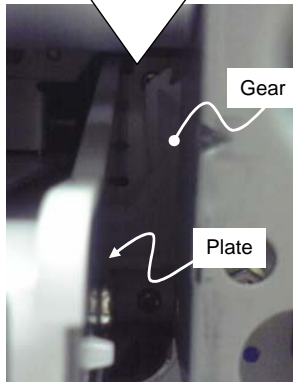


Fig. 1

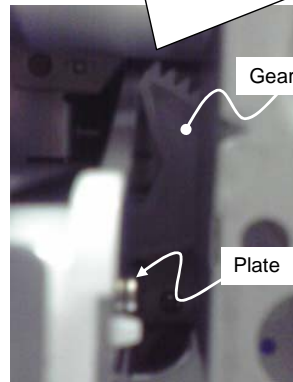
- 4) Check the condition of the gear in the drawer.
Take off the rear cover and check the gear condition in the drawer.

If there is a clearance (A) between the gear and the plate as shown in Fig. 2, the gear condition is normal.



Picture 1

If the gear and the plate contact as shown below, the error may occur again and the gear may be damaged.



Picture 2



Picture 3
Refer to Fig. 3.

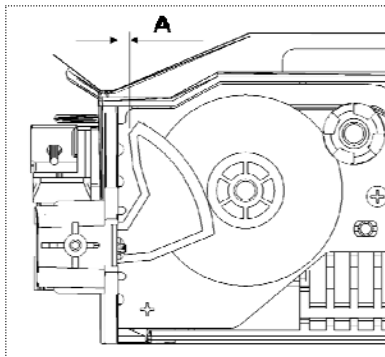


Fig. 2

Gear conditions	Items to check Check		
Does the gear contact the plate?	Yes	or	No
Is the gear becoming whitened?	Yes	or	No

If "Yes", replace the gear with the new one.
Moreover, since the gear in the drive unit of the drawer tray-up may be damaged, refer to "8.6.25 Upper tray-up motor (M11)" in the Service Manual (page 8-27 and 28) and check whether the gear tooth flank is damaged.

5) Take out the drawer from the equipment and check the paper conditions.

Paper conditions	Items to check					Check
Presence/absence of paper	Paper present	or	No paper			
Paper remaining (height)	15 mm or lower	or	approx. 15 mm - 30 mm	or	30 mm or more	

6) Check the version of the main firmware.



If the firmware version is "470-M08" or earlier, upgrade it to "470-M09" or later. (Refer to the Service Handbook page 8-1)

If the firmware version is "470-M09" or later, go to [3].

2. Reproduction of the phenomenon

- 1) Pull out the drawer in which the error occurs and check that it has enough paper (the recommended height is approx. 15 mm - 30 mm). Then insert the drawer.
- 2) Turn the power ON.
- 3) Does a gear unmeshing sound occur?

Contents	Items to check					Check
Does a loud high noise sound occur?	Yes	or	No	or	Not remembered	
Does a loud low noise sound occur?	Yes	or	No	or	Not remembered	

If "Yes", the gear in the drive system of the tray-up assembly may be damaged. Refer to "8.6.25 Upper tray-up motor (M11)" in the Service Manual (page 8-27 and 28) and check whether the gear tooth flank is damaged.

- 4) Check the message indication area on the touch panel. (Refer to 1.-3))
- 5) Leave the power ON and pull out the drawer. Then insert the drawer again.
- 6) Check 3) and 4) again.

If "Yes", the fan-shaped gear in the drawer may be damaged.

→ If any result for 3) is "Yes", go to [3].

[2] When C130, 140, 150 or 160 error has been solved

1. Check the status when the error occurred (ask the end users)

Ask the end users the condition of the equipment when the error occurred.

Check

Contents	Items to check				
Did a loud high noise sound occur?	Yes	or	No	or	Not remembered
Did a loud low noise sound occur?	Yes	or	No	or	Not remembered
Did "Add Paper" appear on the touch panel even if there was enough paper in the drawer? (*1)	Yes	or	No	or	Not remembered

*1: "Add paper" appears in the message indication area.
It does not appear in the alert message indication area (black part of the bottom of the menu).

2. Reproduction of the phenomenon

Refer to [1]-2. and do the same.

[3] Check the equipment and functions

- 1) Check the drawer
 - 1)-a Check the condition of the fan-shaped gear.
Check it while the tray in the drawer is at the lowest position.

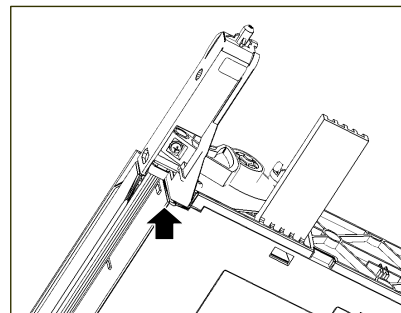
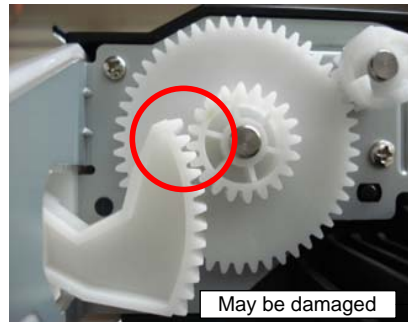
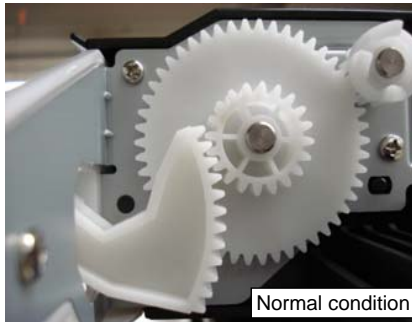


Fig. 3

If "Yes", the gear in the drive unit of the drawer tray-up may be damaged.
Refer to "8.6.25 Upper tray-up motor (M11)" in the Service Manual (page 8-27 and 28) and check whether the gear tooth flank is damaged.

If "Yes", the fan-shaped gear in the drawer may be damaged.

If any reply is "Yes", go to [3].

Refer to [1]-1.-3) and check the condition.

Check whether the gear fixing screw is loose or not.
If the screw is loose, tighten it firmly.

Check whether the gear is damaged or not by referring to [1]-1.-4).

1)-b Check the condition of the tray lift up lever in the drawer.

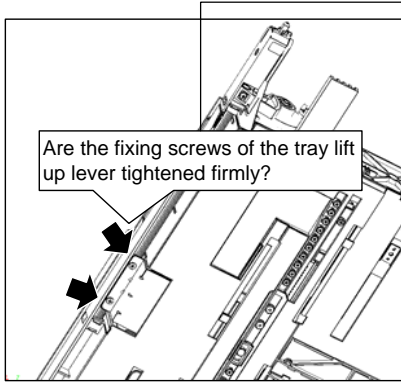


Fig. 4

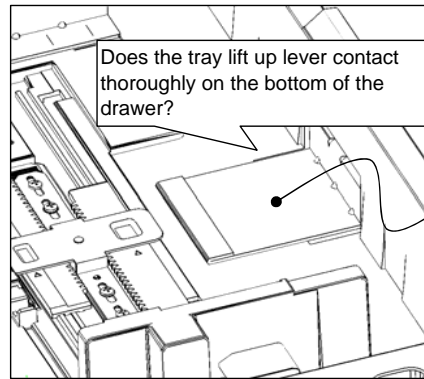


Fig. 5

If the screws are loose, tighten them firmly.

If the tray lift up lever does not contact thoroughly on the bottom of the drawer, the screws in Fig. 4 may become loose or the lever may be deformed. If the lever is not bent at a right angle, replace it with a new one.

1)-c Check the condition of the gear fixing bracket in the rear side of the drawer.

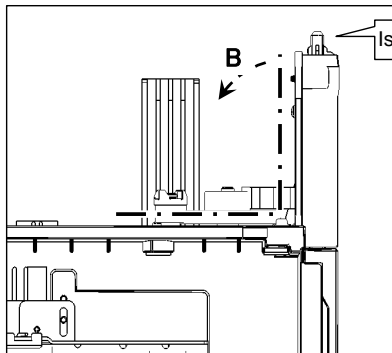


Fig. 6

The bracket at a right angle is good.

If the bracket is slanted in the direction of B, it may contact the fan-shaped gear and become damaged during the lifting of the tray.

To avoid this, replace the bracket with a new one.

- 2) Check the drive unit of the drawer tray-up motor
 2)-a Check the condition of the tray-up motor installed section.

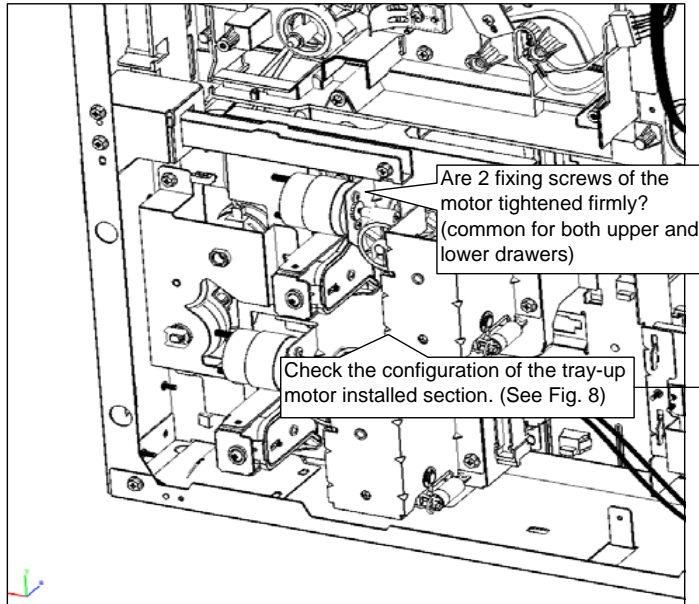


Fig. 7

→ If the screws are loose, tighten them firmly.

→ The configuration of the tray-up motor installed section has been changed due to the countermeasure to unmeshing.
 The applicable production lots for each destination are as follows.
 If unmeshing occurs, even if any problem is found after checking [1] and [2], replace the drive unit of the drawer tray-up with a new one.
 (Refer to BSI No. G09H114 for details)

e-STUDIO205L : CLE910122-
 e-STUDIO255 : CNE910418-
 e-STUDIO305 : CME910269-
 e-STUDIO355 : CPE910686-
 e-STUDIO455 : CQE910606-

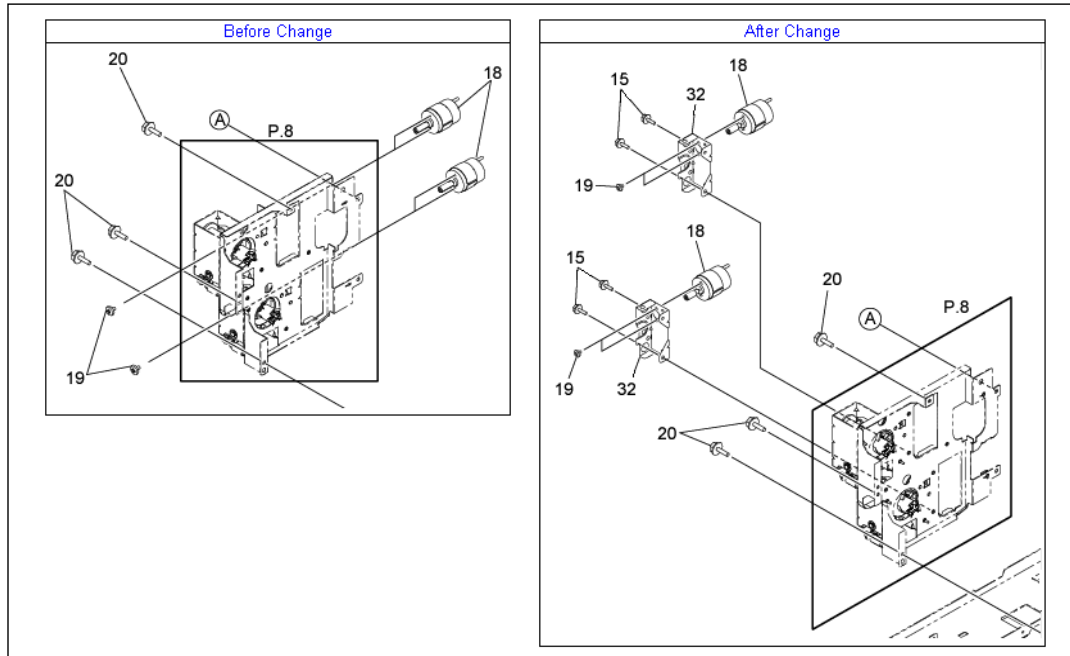


Fig. 8

3) Check the drawer feeding unit

Refer to the Service Manual pages 8-13 to 8-16, and check the following points of the drawer feeding unit.

3)-a Is the tray-up sensor installed firmly?
Does the sensor operate normally? Perform the self-diagnosis mode (test mode 3) to check it.

3)-b Is the harness connected firmly?

3)-c Is the pick up roller assembly installed to the pick up arms firmly?
Do the pick up arms move smoothly?

3)-d Is the torsion spring in the rear side of the unit installed correctly? (Fig. 9)

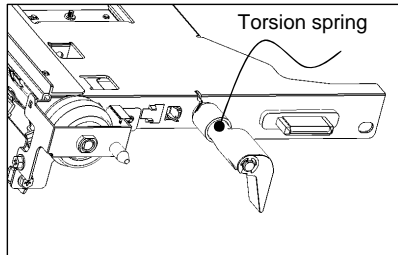


Fig. 9

Install the sensor firmly.
If the sensor does not operate normally in the self-diagnosis mode (test mode 3), replace it with a new one.

Install the pick up roller assembly to the pick up arms firmly.

If the pick up arms do not move smoothly, check their installing condition.

If the pick up arms are in fact installed correctly, then they may be damaged. In this case, replace them with new ones.

Install the torsion spring correctly.