

**Models:** e-STUDIO 6530c Series

**Subject:** C4E2 Error Code

## Overview

On certain serial number machines the one-way bearing (6LH07583000 GEAR-8H23-OWC-N) for the fuser drive could slip causing the fuser not to rotate at the correct speed during the standby mode.

## Detail

Some dealerships have received eStudio6530c Series machines that could require the one-way bearing to be replaced. To be proactive and prevent a possible future service call, we are automatically sending those dealerships new one-way bearings for the fuser drive unit to prevent the error.

Please replace the one-way bearing according to the instructions provided during set up or the next service call.

A new one-way bearing has been applied to production since the following serial numbers:

eStudio5520c – CSJ810484

eStudio6520c – CTK810324

eStudio6530c – CUK810307

The new one-way bearing can be identified by a black dot on the plastic surface.

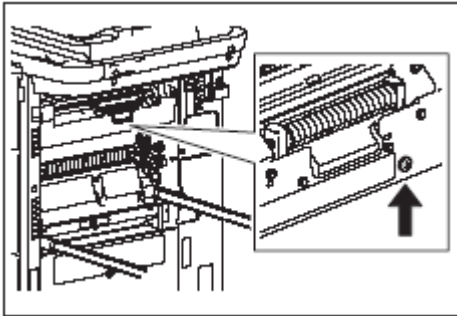
## Procedure:

### 1. Shut down the machine and unplug the power cord.

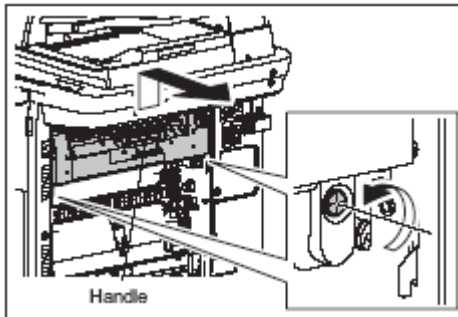
### 2. Remove the Fuser unit

2.1 - Open the duplexing unit.

2.2 - Remove 1 screw (RED) and release the lock of the grip handle.

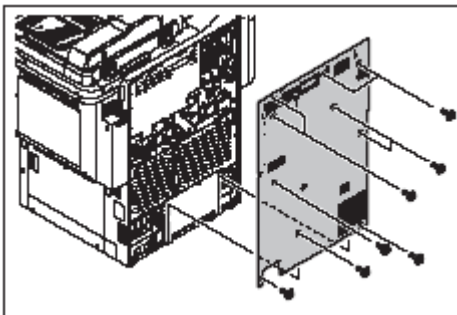


2.3 - Loosen 2 screws and then take off the fuser unit by holding its grip handle.



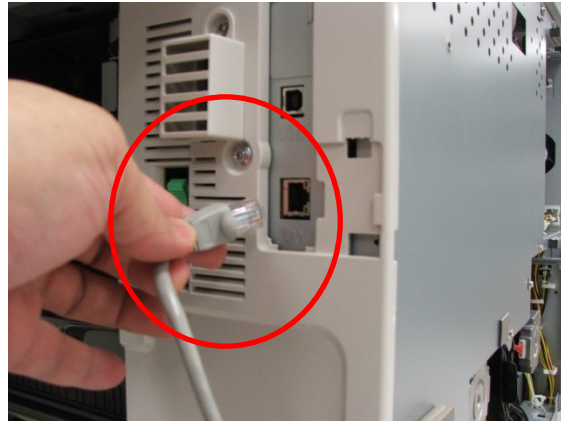
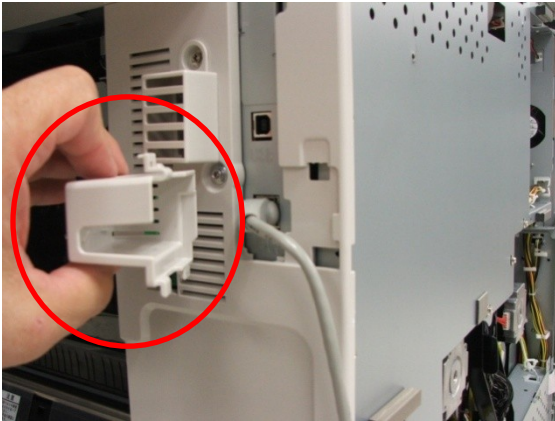
### 3. Remove the rear cover

3.1 – Remove 10 screws and remove the rear cover.

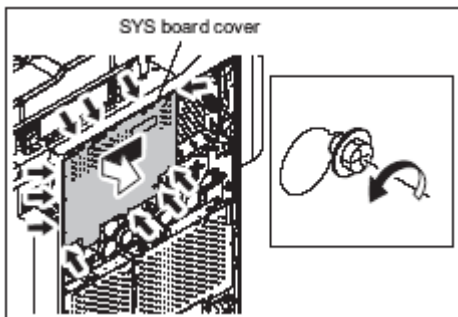


#### 4. Open the SYS Board Case

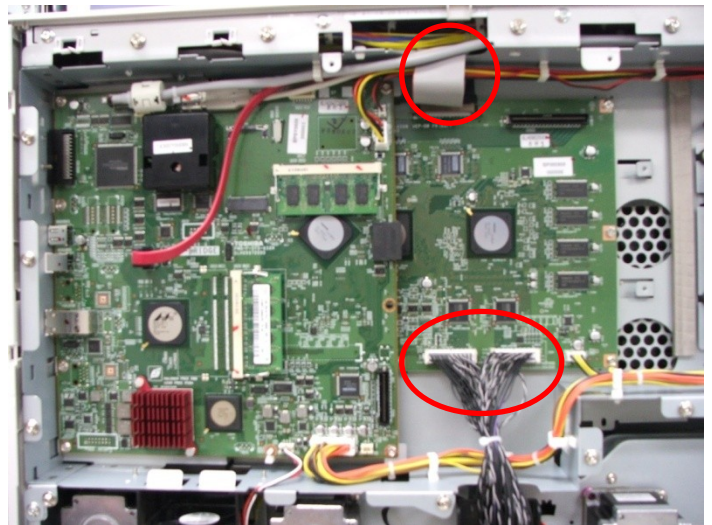
4.1 - Remove Network interface cable cover and cable if connected.



4.2 - Loosen but do not remove 11 screws and remove the SYS board cover by sliding it to the right then pull out.

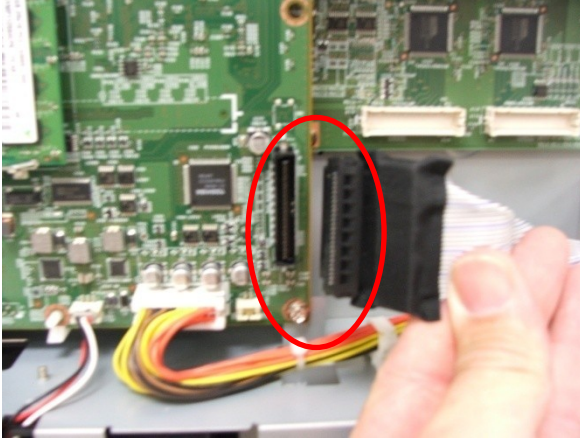


4.3 - Disconnect 3 connectors on the IMG board.

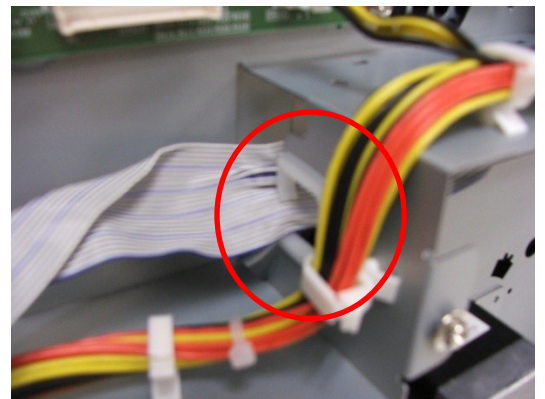


If the Fax option is installed complete steps 4.4 thru 4.6. Otherwise proceed to step 4.7.

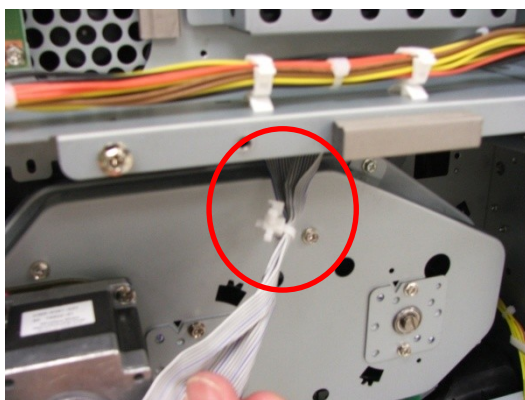
4.4 - Disconnect 1 connector on the SYS board.



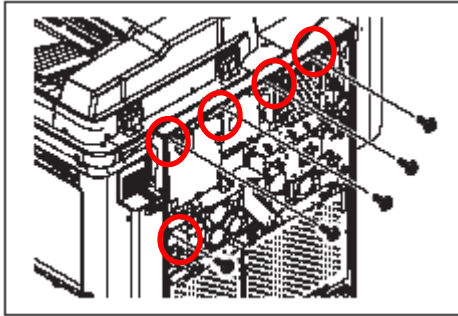
4.5 - Carefully remove ribbon cable from the frame clip.



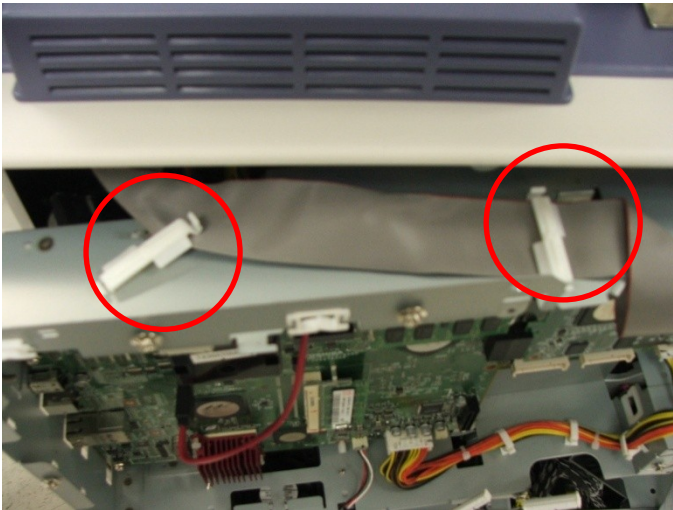
4.6 - Release cable clamp from bottom of SYS board case.



4.7 - Remove 5 screws holding the SYS Board case.

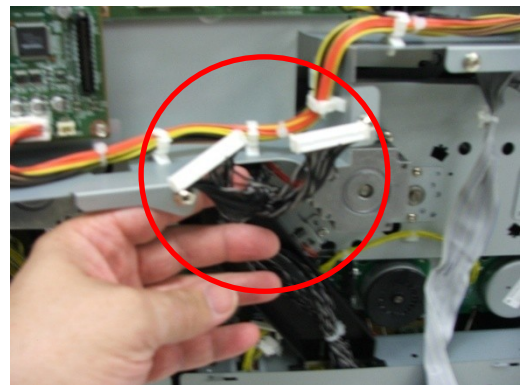
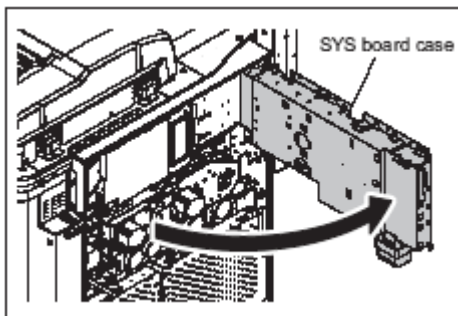


4.8 - Open the SYS board case slightly. Then release the harness from 2 clamps and remove the harness from the SYS board case.



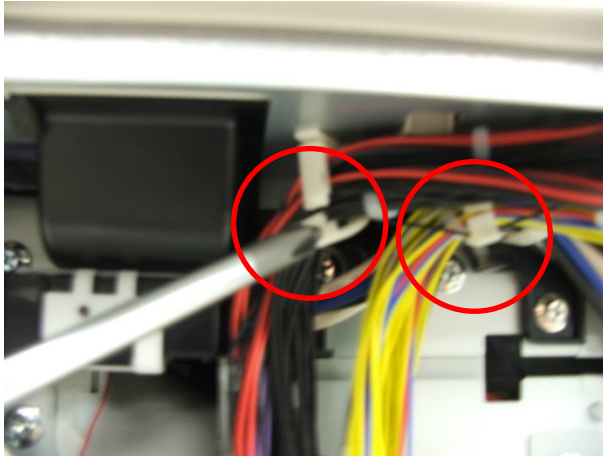
4.9 - Open the SYS board case approximately 90 degrees.

**Note:** To avoid damage to the wires, open the board case gently while making sure all wiring is clear of the case.

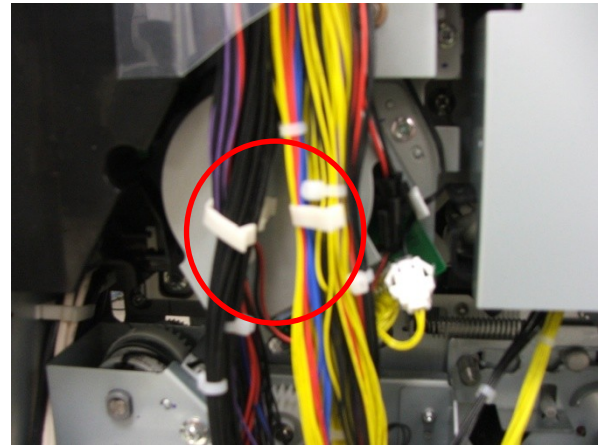


## 5. Remove the exit paper cooling fan (rear)

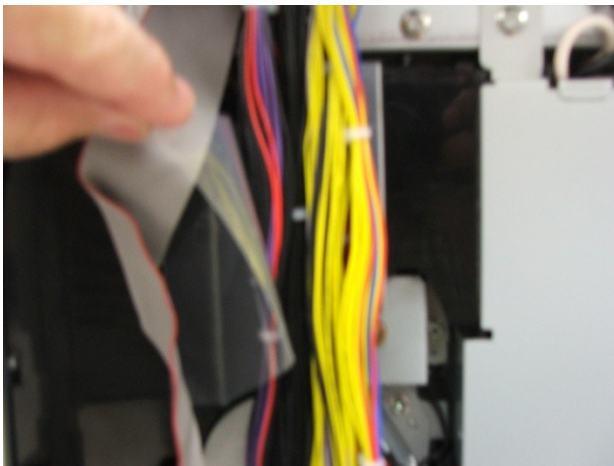
5.1 - Release the harnesses from 2 clamps at the top.



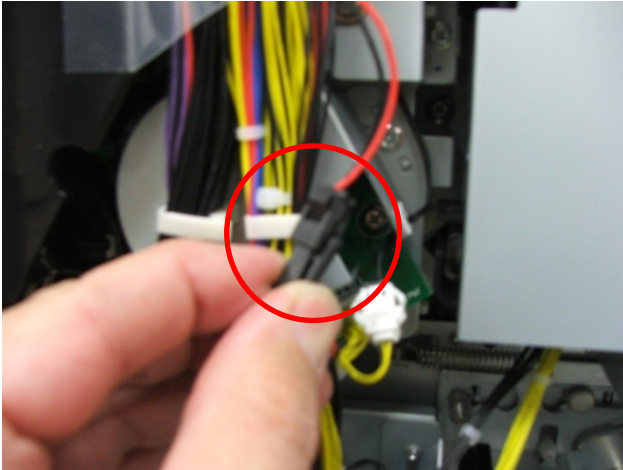
5.2 - Release the harnesses from 2 clamps on the fuser drive motor housing.



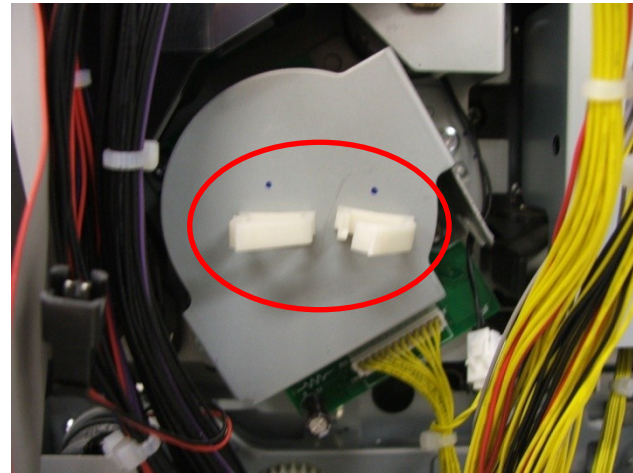
5.3 -Lift Mylar shield and remove wires from the fan housing.



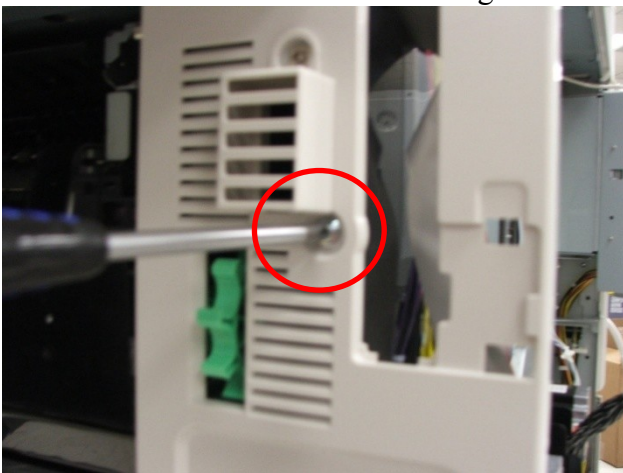
5.4 - Disconnect the fan connector



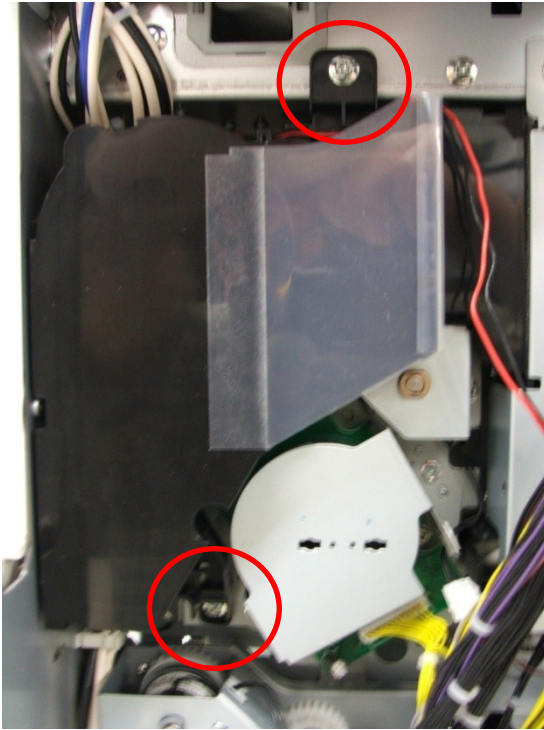
5.5 - Remove 2 cable clamps by pushing in and turning clamp until aligned with keyed hole then pull out.



5.6 - Remove the fan mounting screw located in the Left Rear cover.

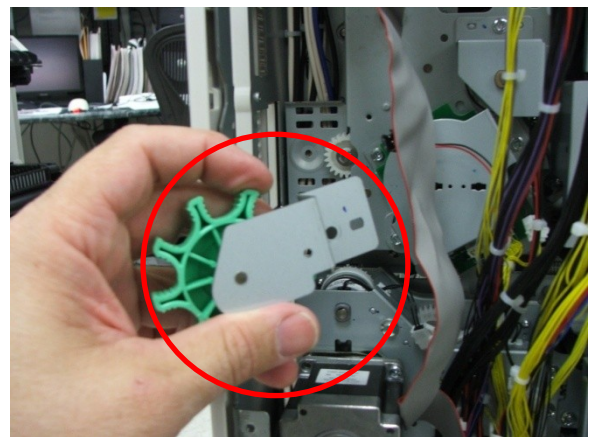
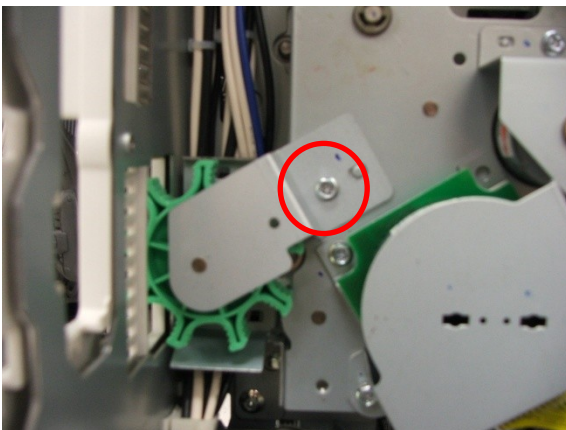


5.7 - Remove 2 screws and take off the duct.

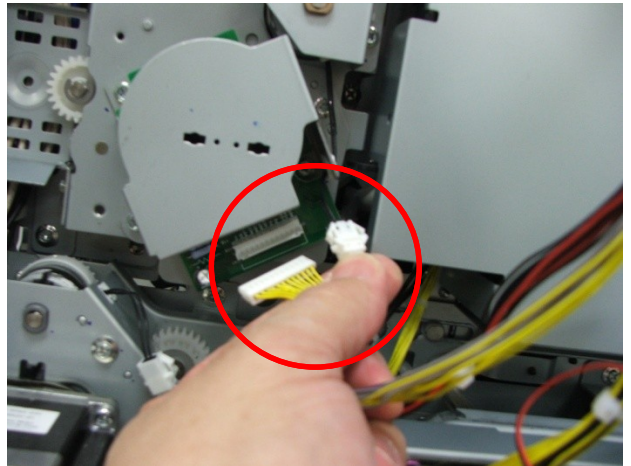


## 6. Remove fuser drive unit

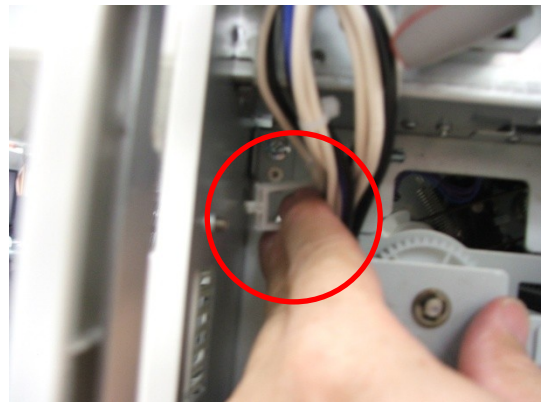
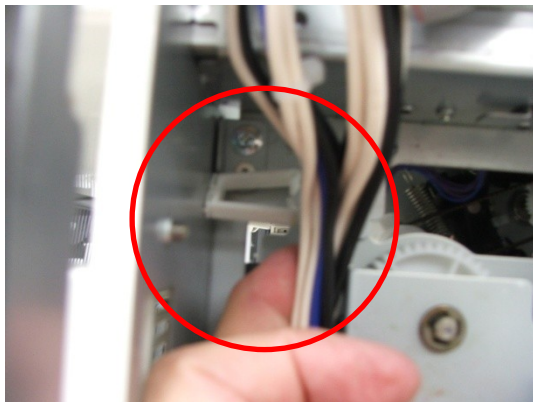
6.1 - Remove 1 screw and take off the bracket of the handle.



6.2 -Disconnect 2 connectors.



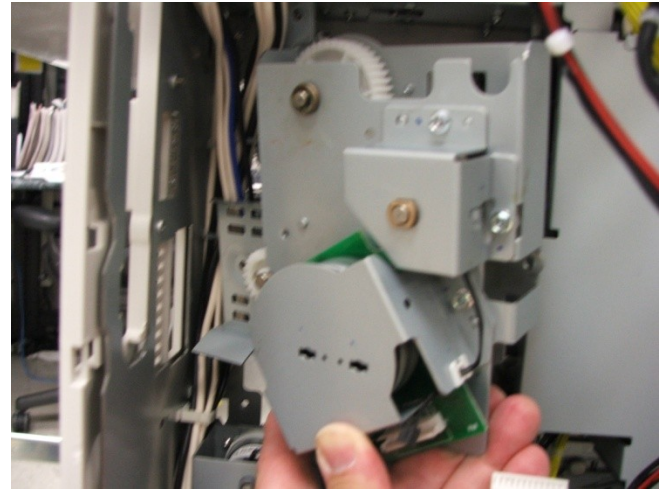
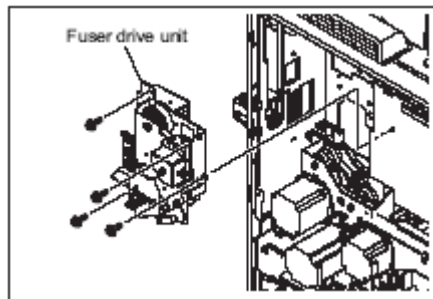
6.3 - Remove wires from frame clip and remove the clip by rotating it until the key lines up with the hole.



6.4 - Remove 4 screws and carefully remove the fuser drive unit by lifting up and rotating.

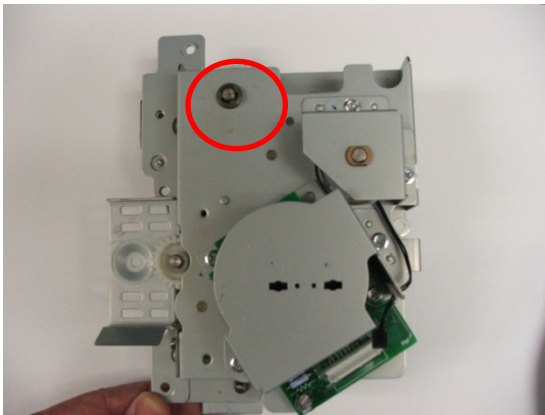
**Notes:**

- a. Use caution not to drop the screws when removing screws in this area as a dropped screw could fall onto the power supply.
- b. Remove this assembly gently so as not to damage fuser drive gears.

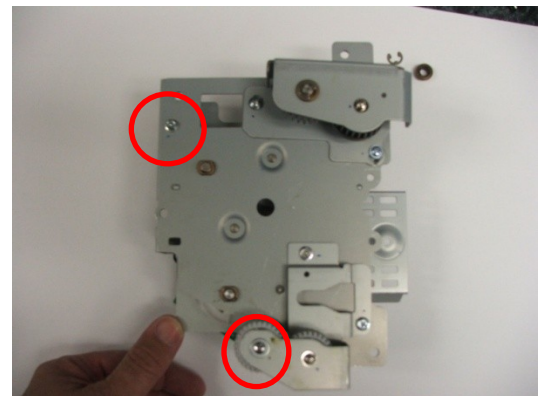


## 7. Replace One Way Gear

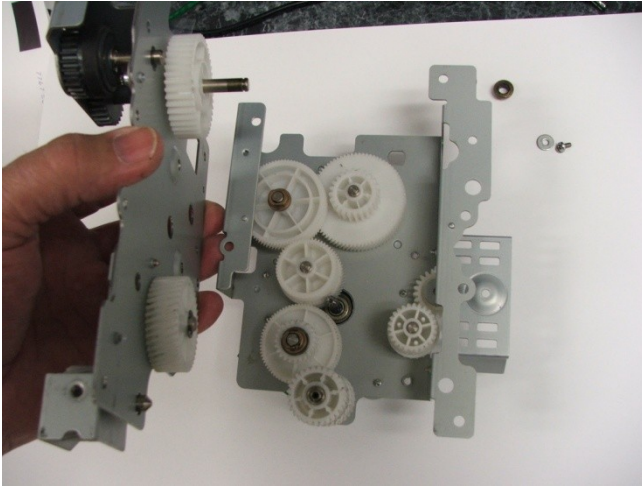
7.1 - Place drive unit on workspace with the motor facing up. Remove E-clip and bushing in the location indicated in the following illustration.



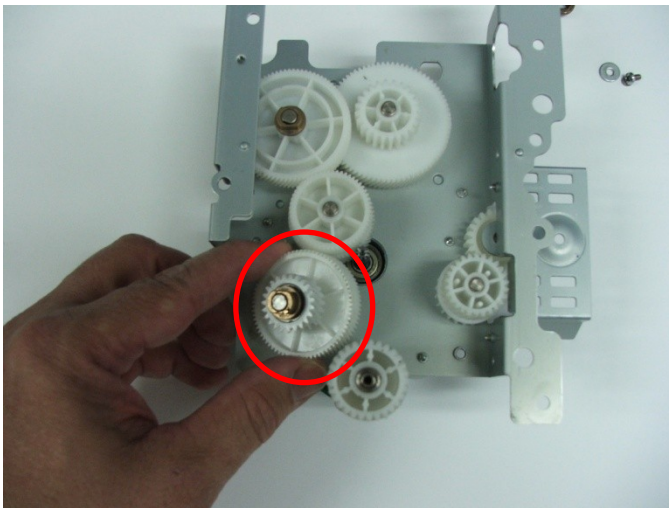
7.2 - Turn the drive unit over and remove the 2 screws shown here.



7.3- Carefully remove the top plate and set it aside.



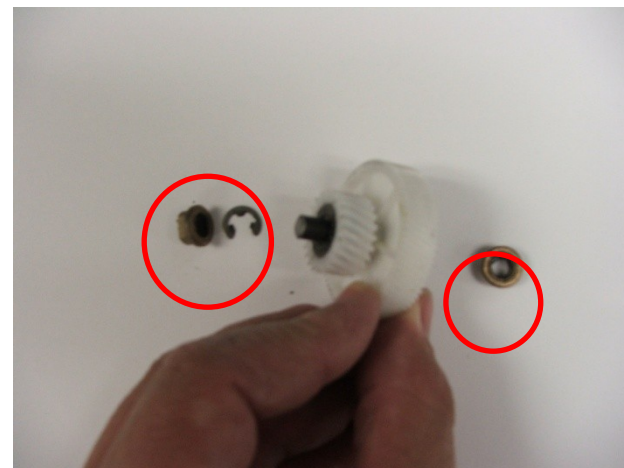
7.4 - Remove the one way gear assembly from the drive unit.



7.5 - Remove 2 bushing and one E-clip from the ends of the shaft.

**Notes:**

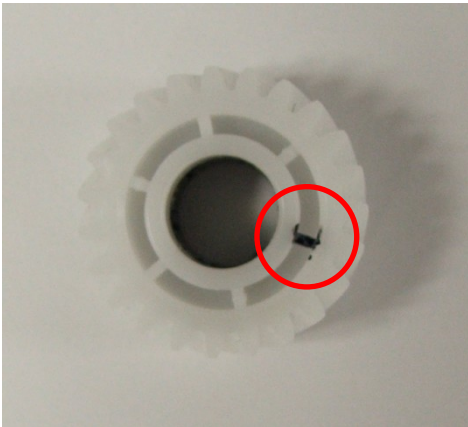
- a. Be careful not to lose the pin in the bottom of the large gear. Once the e-clip is removed, the shaft may slip out allowing the pin to fall out.
- b. The bottom bushing may have remained in the frame of the drive unit.



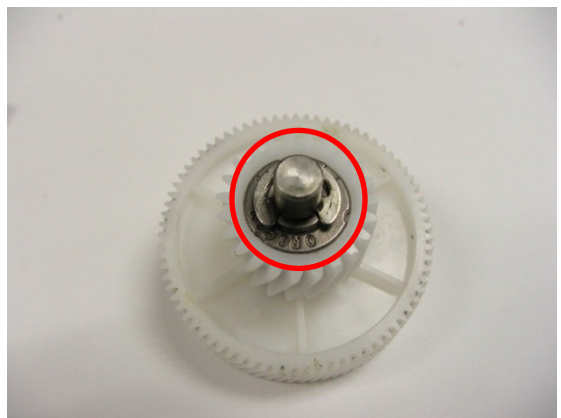
7.6 - Remove and discard the gear containing the one way bearing.



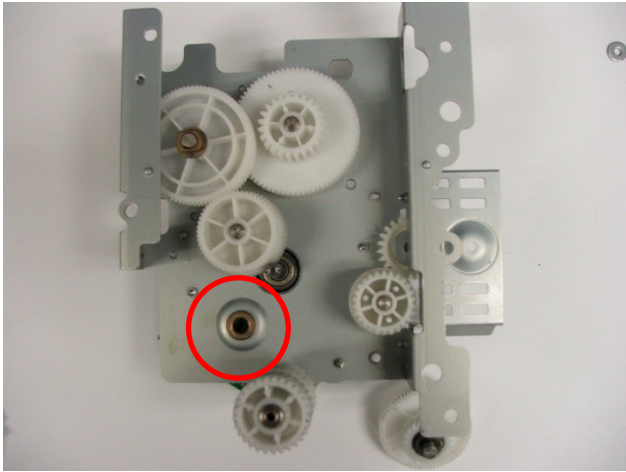
7.7 - Confirm the new replacement gear by locating the Black dot on the back side of the gear.



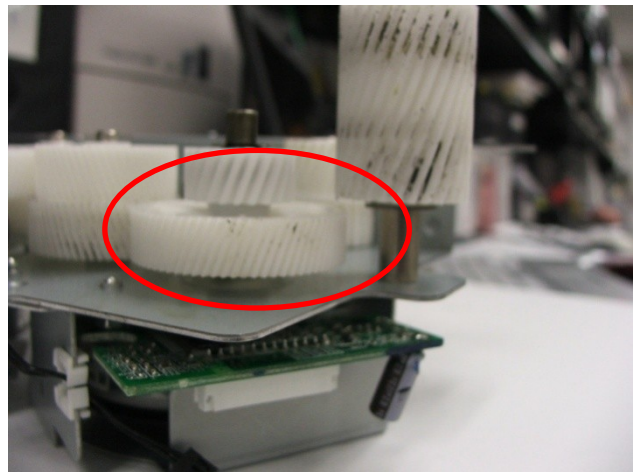
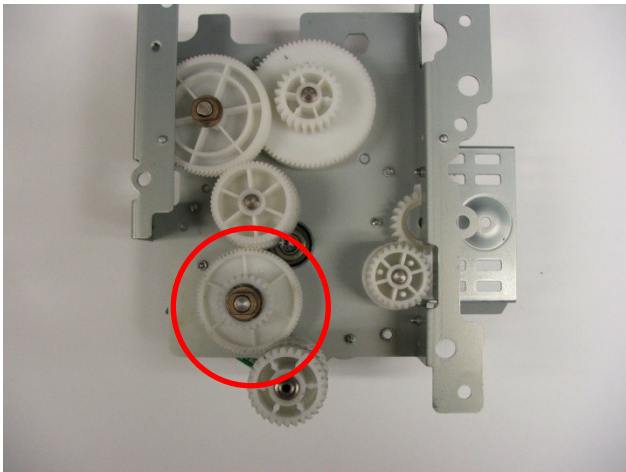
7.8 - Install the new one way clutch with the metal side facing out and replace the E-clip.



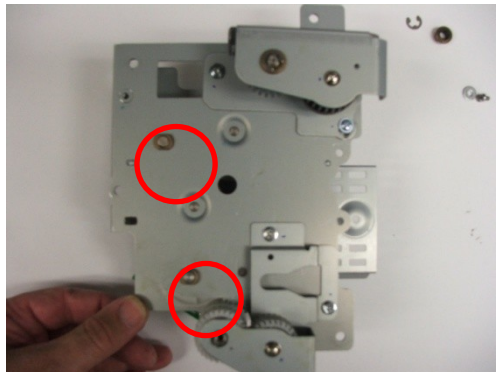
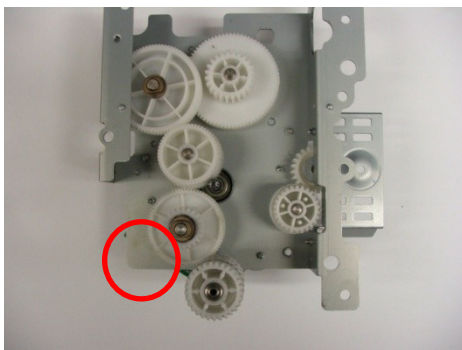
7.9 - Insert the bushing into the hole in drive unit frame.



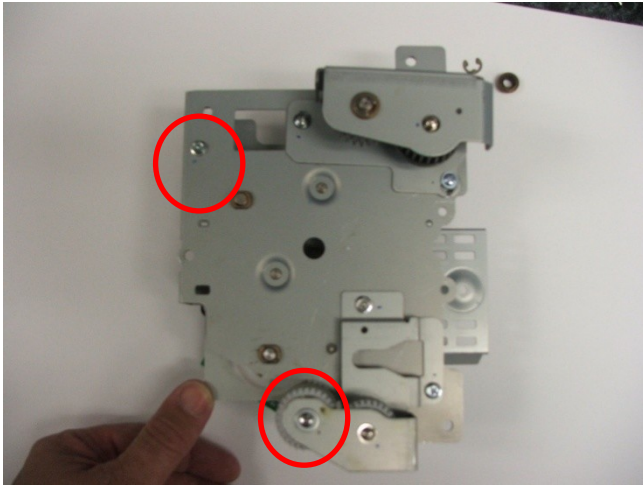
7.10 - Reinstall the gear into the drive assembly



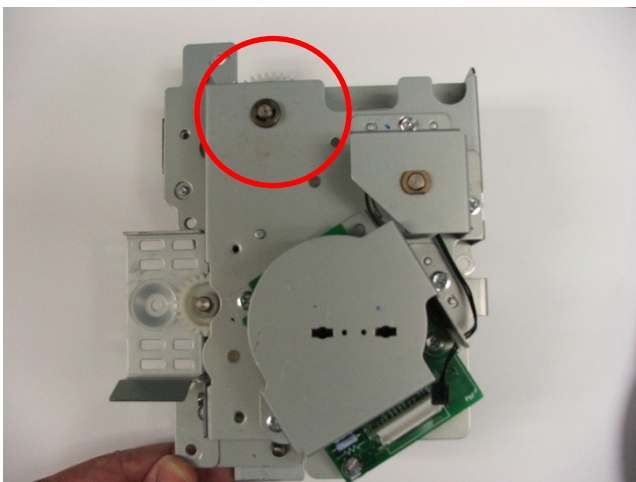
7.11 – Reinstall the bushing on the shaft with keyed side facing up and replace top half of the drive assembly. Be careful to align both bushings with keyed holes.



7.12 - Reinstall the 2 screws holding the two halves of the drive unit together.



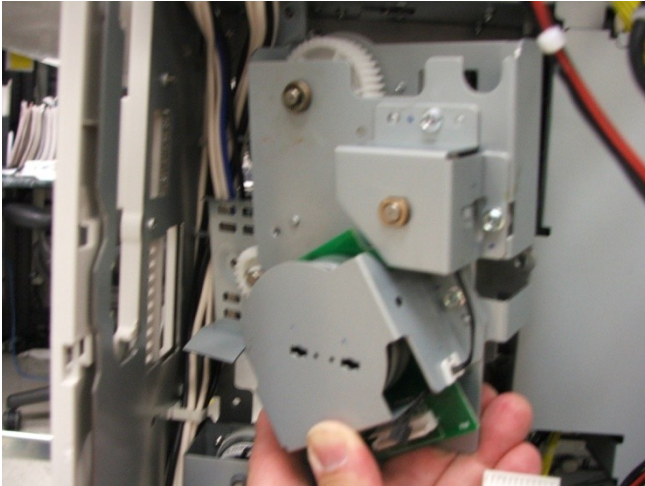
7.13 - Turn the Drive Unit over and reinstall the bushing and E-clip.



## 8. Reassemble

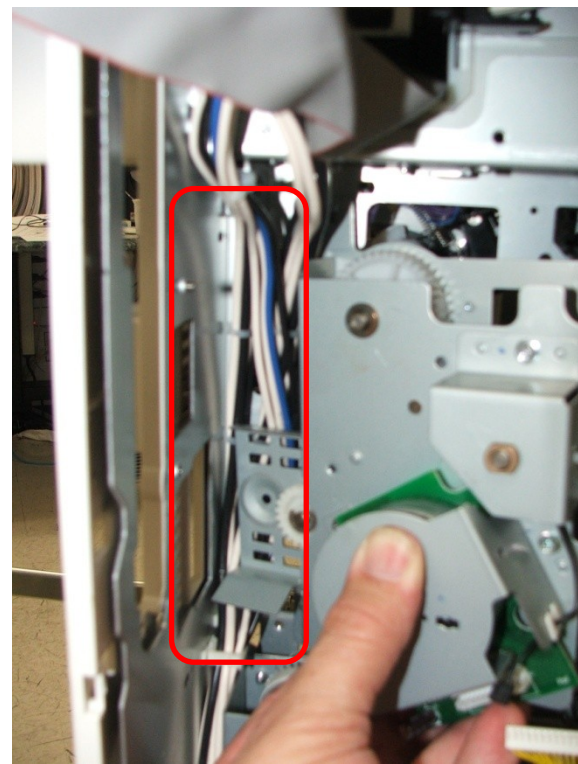
8.1 - Reinstall the drive assembly into the machine.

**Note:** Use caution not to pinch the wires when installing the drive unit.



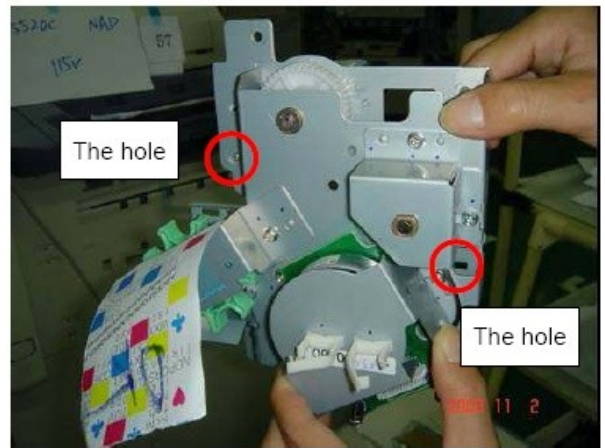
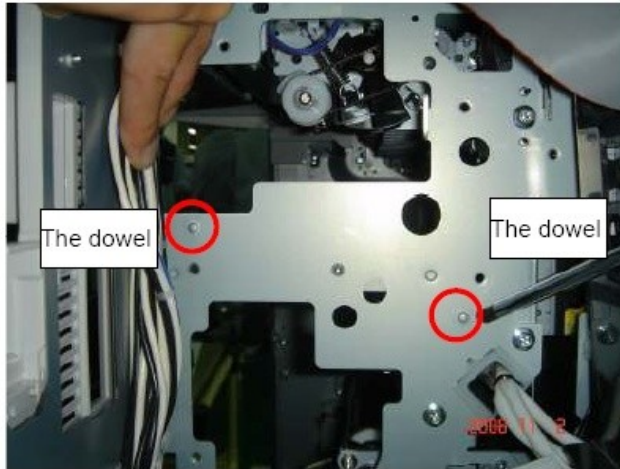
**Note:** Rear plate of the drive unit should be installed behind wires while outer plate goes in front as shown here.

**Warning!** Do not allow wires to get pinched under the drive unit. This could cause electrical shock and or fire when power is applied.

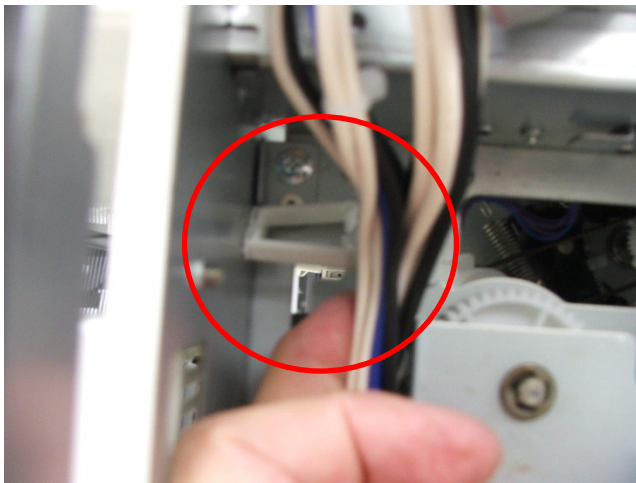


### 8.2 - Reinstall 4 screws.

**Note:** Confirm that 2 aligning dowls are correctly positioned in the holes before tightening the screws.



### 8.3 - Reinstall the frame clip for wire harness and insert the wires into the clip.



### 8.4 - Reassemble remaining components by returning to step 6.2 and reversing steps used to disassemble.

**Note:** To prevent errors be sure to confirm that all connectors are firmly seated and all wires are correctly routed before turning the machine on.