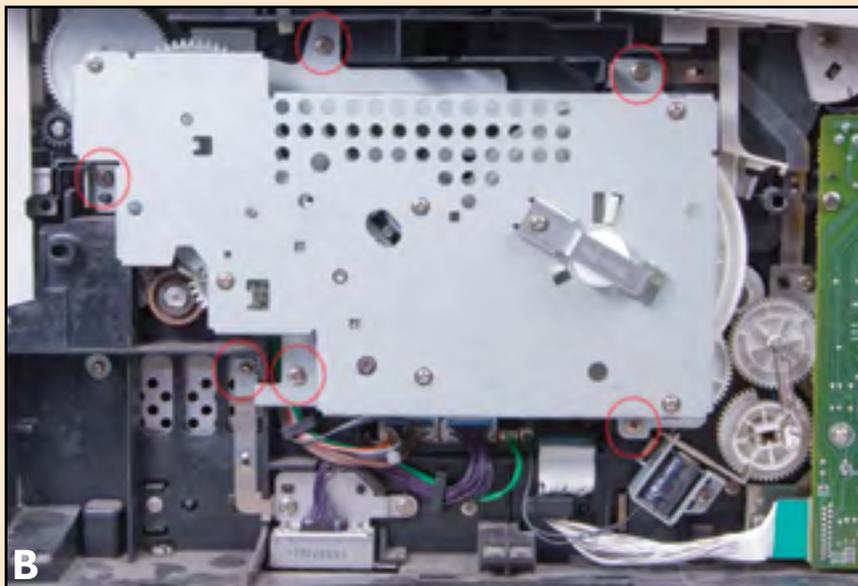
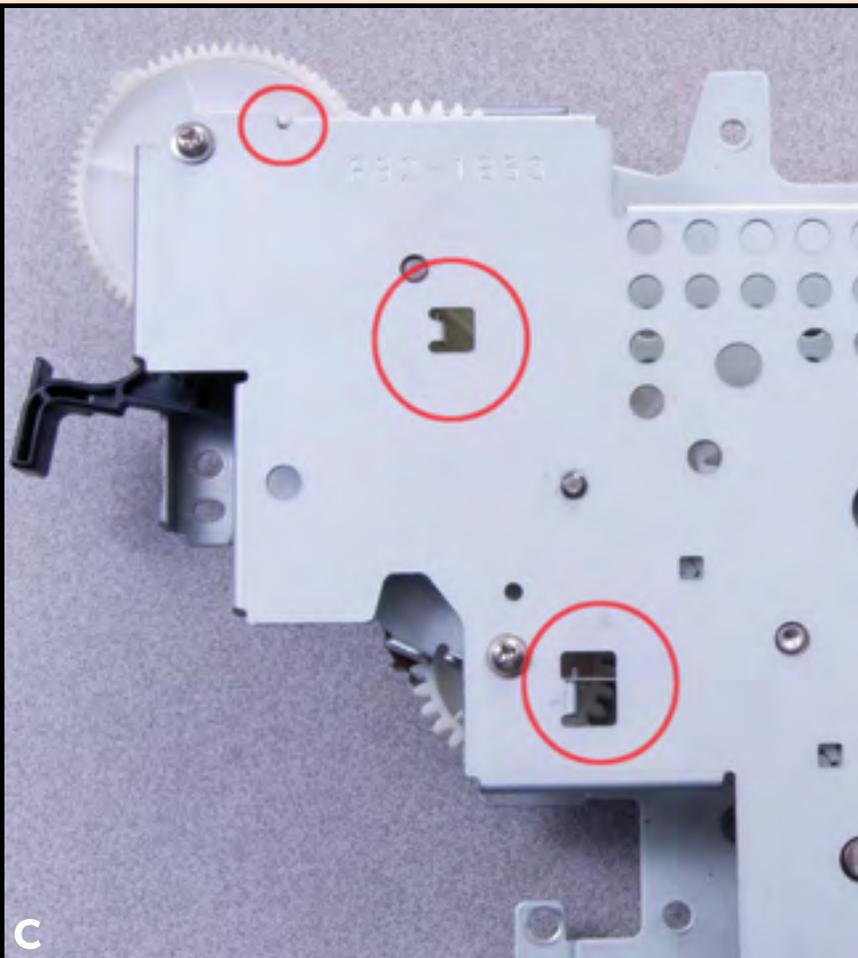




A



B



C

PRINTER TECH ARTICLE

Replacing 5000/5100 Fuser Drive Gears

Like many other HP printers, the LaserJet 5000 and 5100 can have problems with the gears on the fuser and in the printer wearing each other out. It had been necessary to replace the entire main drive assembly (RG5-3543 for the 5000, RG5-7079 for the 5100), but now you can save money by replacing just the affected gears.

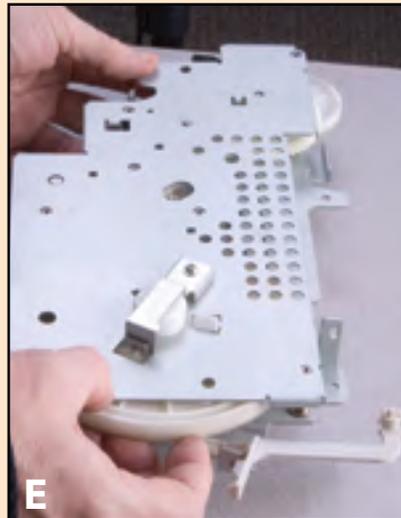
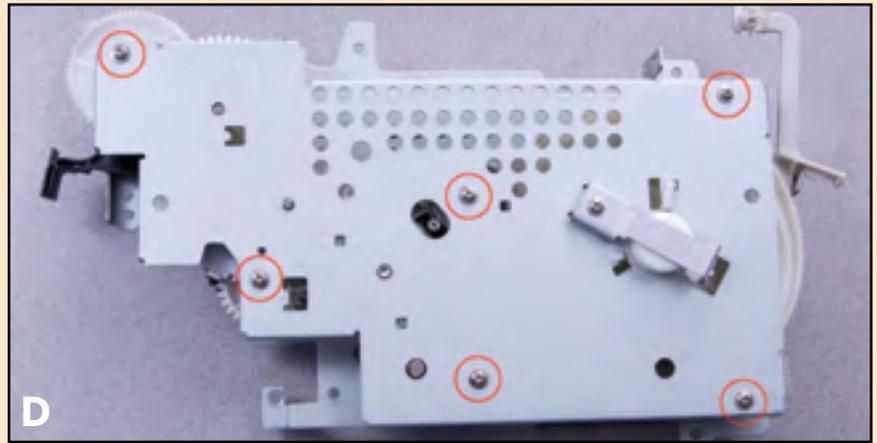
The gear that directly drives the fuser is part number RF5-2409 (swing arm/gear), and the gear that drives that one is RS6-0348 (29-tooth/14-tooth gear). It is usually best to replace both. The replacement procedure requires some care, but this article will help you replace the gears without causing any additional problems.

1. **Remove the Toner Cartridge.** Cover it or put it in a dark place.
2. **Remove the Top Cover.**
 - a. Release the toner cartridge engagement arm and remove two top and two rear screws, then unplug the control panel cable.
3. **Remove the Left Side Cover.**
 - a. Release the tab in the top middle by pushing down on it; then grasp the upper front and lower rear corners of the cover and rock gently to free two remaining tabs.
4. **Disconnect Main Motor Cable (Fig.A).**
5. **Remove the Main Drive Asm.**
 - a. Remove five self-tapping screws and one grounding screw (Fig. B); then rotate the bottom of the assembly out, away from the printer, and lower it to release the locating tab. Use caution to avoid breaking the toner cartridge engagement arm. At this point, you can replace the entire main drive assembly by simply reversing steps 1-5. If you wish to replace just the fuser drive gears, continue on to step 6.
6. **Observe Orientation of Spring.**
 - a. Before disassembling the drive assembly to replace the gear(s), observe the orientation of the three torsion springs near the rear of the assembly (Fig. C). The tension on these springs will be released when the outer plate is removed, so you

will need to remember their correct orientation.

7. Remove Outer Plate/Toner Drive.

- Remove six screws (Fig. D) while maintaining pressure on the outer plate.
- The large toner drive gear seats into this plate, but is not secured by anything, so you will need to support this gear and hold it against the plate while disassembling (Fig. E). This is very important – the toner drive mechanism also contains the toner ground, and if it comes apart and is not properly re-assembled, the toner cartridge will not have a good ground connection, resulting in unsatisfactory print quality (Fig. F). The best policy is to make sure it does not come apart in the first place, by removing the outer plate and the toner drive mechanism together.

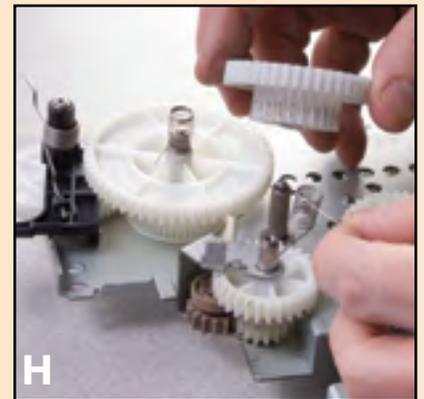
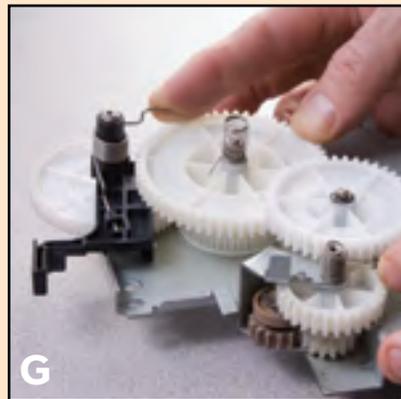


8. Remove 42/24 Double Gear, spring.

- Remove the 42/24-tooth double gear, then the torsion spring (Figs. G & H). Note the position and orientation of these items before removing them.

9. Remove Swing Arm/Gear and the 29-/14 Double Gear

- Now you can remove the swing arm/gear (this is the brown gear in the metal bracket) and the 29/14-tooth double gear. These gears will come off together. Note their relative position and orientation before pulling them apart (see Figs. I & J). When installing the new gears, make sure that the metal swing arm bracket is positioned on the correct side of the metal tab on the backing plate (the correct position can be seen in Figs. G & H).



10. Reassemble Drive Assembly.

- Carefully reassemble the drive assembly, making sure to properly orient the three torsion springs (Fig. G shows these springs in the correct position, but without the outer plate). Then reverse steps 1-5 above to reassemble the printer.

Do not forget to reconnect the toner cartridge engagement arm to the lid of the printer. Run a few test prints to make sure that everything has been re-installed correctly. In particular, make sure you do not get the kind of image shown in Fig. F (if you do, the toner cartridge is not getting a good ground connection).

