Replacing the 5200 Fuser Drive Gears

The rollers of a fusing assembly turn because a fuser gear is being turned by a fuser drive gear (or a set of fuser drive gears) in the printer. Meshed together, these gears eventually wear out, become noisy and should be replaced.

In the LaserJet 5200 printer, there are four gears involved in driving the fuser, all mounted on the same metal plate. Until recently, none of these gears were available, which means there are a lot of noisy printers in the field today. Happily, all four gears are now available, either individually or as a kit (part number KIT-5200-GR). Call Liberty Parts Team to order.

The following instructions, devised by LPT’s Craig Kaltenberg, will help you make the repair quickly.

1. **Right Cover.** Simply slide the right cover toward the back of the printer to remove it.

2. **Lower Back Cover or Duplexer.**
   - **Duplexer:** If the printer has a duplexer, remove it by pulling it out (at the back of the printer) until it stops, then lifting slightly and pulling it out the rest of the way.
   - **Lower Back Cover:** If there is no duplexer, remove the lower back cover by inserting your finger into the hole and pulling toward you.

3. **Face-Up Bin.**
   - **A.** Open the face-up bin and loosen two recessed screws (Figure A). Note that these are captive screws and cannot be completely removed. The screw on your left will be easier to access if the face-up bin is opened all the way. To do this, first release the fuser nip (the black plastic
section of the bin) by slightly closing the bin and then pulling the two sections apart. Now the face-up bin will open all the way.

B. Once the screws have been loosened, close the bin, grasp the bottom of it, and gently pull out and up to remove it.

4. **Top Cover.**
   A. Remove two screws in the back (Figure B).
   B. Open the print-cartridge door, remove two more screws in the front (Figure E), and release three retaining tabs – one each on the left, center, and right, along the front edge of the cover (Figure D shows the rightmost retaining tab).
   C. Now you should be able to lift the cover off of the printer. Before you can get it very far, though, you will have to unplug the display cable on the right side (Figure C) and unwind it from the cable guides on the cover.

5. **Left Cover.**
   A. Removing the left cover is accomplished by releasing five retaining tabs in the proper order:
      1. in the center of the top edge (Figure F);
      2. in the lower left rear corner (Figure G);
      3. in the tray 2 cavity, about 5 inches in from the front of the printer;
      4. *under the rear end of the handle;
      5. *under the front end of the handle. (*These last two are accessed from the bottom of the printer, and are shown in Figure H).
   B. Once all five tabs are released, the cover can be easily lifted off, rotating it as in Figure I.

6. **Fuser.**
   A. Remove two screws (at the top, just below the white plastic of the delivery assembly), one on each side, and pull the fuser straight out the back.

7. **Fuser Drive Plate.**
   A. The black plastic at the upper front corner of the fuser drive plate has two arms attached to it, one on the outside of the printer (Figure J) and one on the inside (Figure K). Use a needle nose pliers to detach both arms from the captive plastic.
   B. Now remove seven screws (Figure L) and pull the fuser drive assembly away from the printer. Be careful – several of the gears on the inside of this plate are not captive and can fall off if it is tilted the wrong way. For best results, keep the inner surface tilted upward.
8. **Fuser Drive Gears.**

A. Figure M shows the inner surface of the fuser drive plate with the gears. The black gear (a) is the one that directly drives the fuser, and is the most likely to need replacement. Gear b is also often worn; gears c and d not so often. If in doubt, it is best to replace all four (KIT-5200-GR). Gears a and c are not captive, and can simply be lifted off of their shafts. To remove gears b and d, first remove the black plastic piece that covers them. Note that this piece is under spring tension. The spring will probably come off, but can easily be re-attached during re-assembly. Note that none of the four gears is symmetrical – on the black gear, the center hub protrudes farther on one side of the gear than on the other. When installing this gear, the longer protrusion should face into the drive plate assembly, with the shorter protrusion facing outward. All of the other gears are double gears with two sets of teeth. On gear b, the smaller section should face up; on gear d, the smaller section should face down; on gear c, the coarser teeth are on the bottom and the finer teeth on top. Note also that gears a and d both overlap gear b – if replacing all three of these, install gear b first.

B. Reverse the above steps to re-assemble the printer.

**Important Note:** When re-installing the fuser drive assembly, make sure that the black plastic part of the assembly gets properly coupled to the small white pin in the printer body. The coupling controls the fuser...
entrance flap, which should rotate up when the front door is closed. Figure N shows this coupling from the left side of the printer; Figure O shows it from the rear with the flap up; Figure P shows the rear view with the flap down. Note that the fuser is removed in these photos. If the black plastic and the white pin are not coupled properly, this flap will always be down, causing print quality issues and paper jams.

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