

Iron Sportster split cases, starter R&R

Tips and tricks for getting the starter removed and splitting the engine cases.

The tips and tricks:

1. **Drain oil before opening primary cover.**
2. **Remove two Allen-head bolts to remove starter.**
3. **Be sure to get all case bolts out, including cap-head bolt.**
4. **Right-side case lifts off.**
5. **Use a press to push flywheel out of left-side case.**
6. **Plastic lunch bags can keep parts clean and organized.**
7. **Put flywheels in a clean garbage bag to keep dirt away.**
8. **Don't hammer flywheel out of case.**
9. **Have a bin or tray for all the parts.**
10. **As always, return the tools to the toolbox.**



Here are some tips and tricks for getting the rocker boxes off the cylinder heads, and then back on. (Click for video.)

With the gearcase and primary/transmission taken off, you can split the cases. The starter comes out with two bolts from inside the primary, be sure to drain the oil if you are just replacing the starter.

Case bolts are 1/2" head and 9/16" with one cap-head Allen bolt on the right side of the transmission. Never pry the cases open. You can tap with a rubber mallet to get the cases split. Note the rear motor mount is captivated by the case halves, it has to go on before you put the cases back together. There are aftermarket mounts that get around this.

Keep everything clean, especially if you are not going to strip down the flywheel assembly. I use Yamabond 4 to seal the cases, there are many other sealants that work. If you bead-blast the cases, make sure they are clean afterwards.