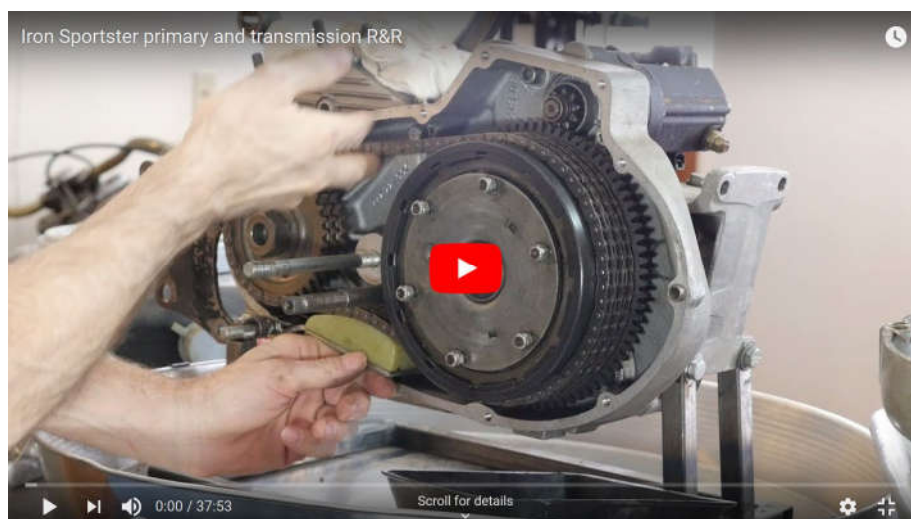


Iron Sportster primary, tranny R&R

Tips and tricks for removing and replacing the primary, and the transmission.

The tips and tricks:

1. **Take notes on what is missing or broken.**
2. **Buy the factory service and parts manual.**
3. **Use number-3 Philips for screws.**
4. **Never pry the cover off.**
5. **Drain the oil first.**
6. **Don't glue the gasket on or use silicone or Loctite.**
7. **An impact gets the crank and clutch nuts off.**
8. **Tap the tranny out with a mallet.**
9. **You can polish the cover just like you polish rocker boxes.**
10. **Have a bin or tray for all the parts.**
11. **As always, return the tools to the toolbox as you work.**
12. **Clean clean clean.**



Getting the primary cover off is easy. Getting the transmission out or back in is harder. (Click for video.)

The engine in this video is pretty dirty from sitting around for years. I am taking it completely apart, so some exterior dirt getting on the inside is not too serious. But when you are just doing a service, you should wash and blow off the engine. Think of an open engine like a patient on an operation table, you want to keep things that clean. I like to use plastic bags to keep the parts from getting more dirty than they are. Once I wash and clean and inspect things, I use fresh plastic bags to store and organize the parts.

There is a tool that lets you compress the clutch so you can ease it out. It also lets you see that the center springs are adjusted right. Lithium grease is fine to lube the tranny, it will dissolve in engine oil and is easier to work with. You can put the mainshaft rollers in from the outside after installing the transmission, then put in the flat washer and the cir-clip. Be sure to add oil before running the bike.