

How to polish a crankshaft with minimal rod deposits

1. Remove the damaged connecting rods. If your connecting rods have rod inserts, then simply unbolt the connecting rods from the crankshaft, then pry off the shell inserts making sure NOT to damage the crankshaft any further.
2. For non insert connecting rods, you may have to use a cold chisel to break them off of the crankshaft. Make sure NOT to hit the crankshaft, only the connecting rods.
3. It is much easier to remove the crankshaft and carefully put it in a vise on the non rod journal area so that you are able to polish the crankshaft.
4. First, inspect the crankshaft to see whether the crankshaft is damaged beyond repair. If you see grooves that have been worn below the actual surface of the crankshaft, then you can skip the remaining steps and plan on purchasing a new crankshaft, rods and bearing inserts. (if your pump has bearing inserts)
5. Take some 400 grit wet/dry sandpaper and some valve polishing compound. Apply the valve polishing compound to the crankshaft journal.
6. Now, take a piece of the 400 grit sandpaper and fold it to the exact size of the journal, yet using the entire length of the piece of sandpaper so that you are able to "lap" the journal.
7. Make sure to turn the crankshaft so that you can access the entire circumference of the journal. Your goal is to remove 100% of the aluminum deposits on the crankshaft journal.
8. Once you have removed all of the aluminum deposits on the crankshaft journals, do the same thing with 600 grit wet/dry sandpaper and the valve grinding compound. Your goal now is to polish the crankshaft journals to make them bright and smooth.
9. Once you have done this and ALL aluminum deposits have been removed and the crankshaft polished, you can reuse your crankshaft. **IMPORTANT:** Make sure to purchase NEW connecting rods and apply a thick layer of Assembly Grease/Lube (available at any auto parts store) on the crankshaft journals PRIOR to sliding the new bearing inserts or connecting rods onto the crankshaft. If you don't you will be doing this all over again.
10. Congratulations, you just saved yourself a good amount of money.