

Bleeding Procedures for Yanmar 4JHE 44HP Diesel Engine

1. Turn off Fuel Petcock in line before primary filter, open the drain in the bottom of the primary Racor fuel filter and check for water & contaminants. (If nothing comes out- loosen top cover). Drop fuel level in filter so you can more easily remove the old filter.
2. Remove Racor Filter (Part number 2010SM (2 micron) 2010TM (10 Micron)) and insert the new filter SLOWLY.
3. Before putting top back on Racor Filter body- fill with Fuel up to the top. (Bleed as much air out as you can)
4. Fasten lid on Racor filter- but not tightly- open petcock and bleed last bit of air out of the filter then tighten lid.
5. Remove secondary Fuel Filter on engine & replace with a new Yanmar filter (Do NOT pre-fill the new fuel filter with fuel or you may allow contaminants into your engine!) (P/N 129470-55701).
6. Loosen bleeder screw above secondary filter (figure 2 below) and use the manual feed pump priming lever (figure 1) to fill the new filter with fresh diesel to bleed off all air. You may have to pump awhile until fuel starts pumping out of the bleed screw above the filter. As soon as fuel starts to come out- close the bleeder screw.

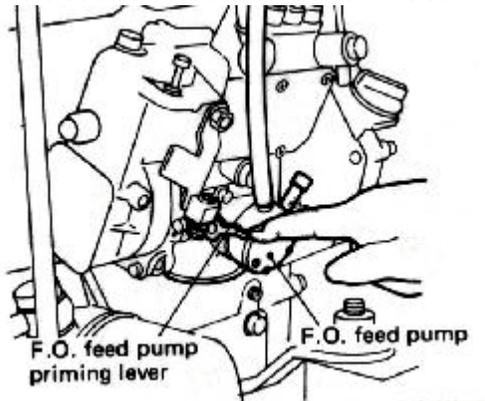


Figure 1

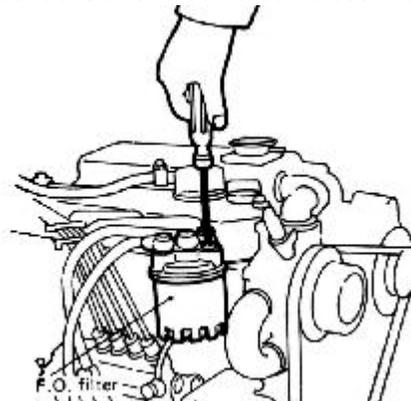


Figure 2

7. Loosen the bolt on the fuel injector pump (figure 3 below) and use the priming lever to bleed all air out of the injector pump & retighten.

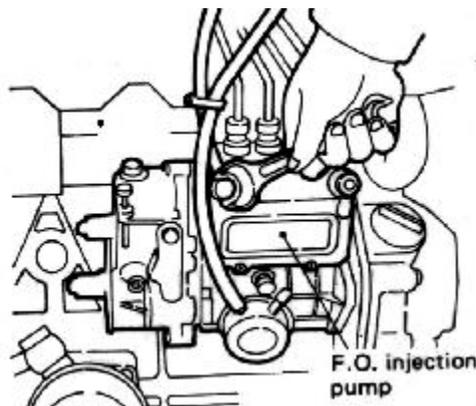
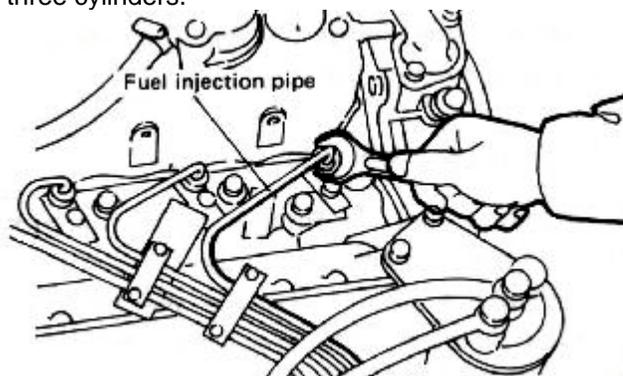


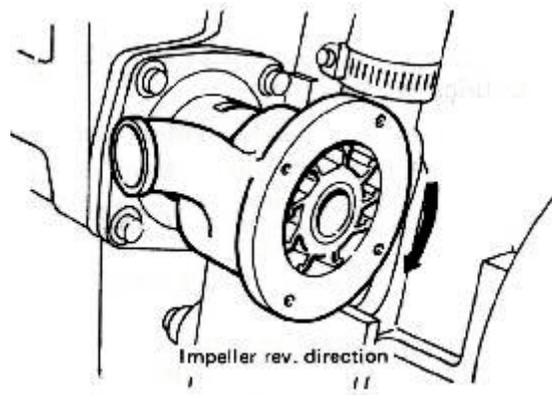
Figure 3

8. If the engine will not start there may be air in the fuel injection piping. Put the throttle lever so it is at a medium throttle setting (not just idle). Loosen the fuel injection pipe nipples on top of each fuel injector one at a time with a 17mm wrench (see below) while cranking the engine over to vent any air still in the line to each injector. At some point the engine will begin to run. Make sure to bleed all cylinders just in case one still is air blocked and you're only running on three cylinders.

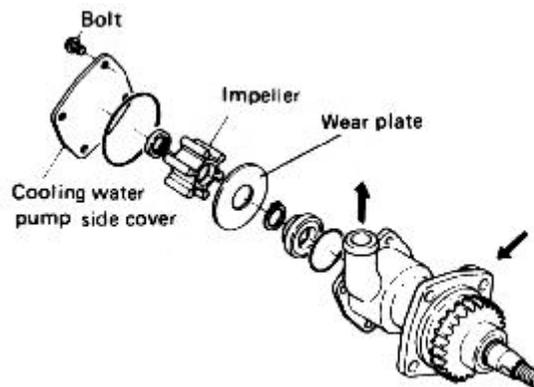


Impeller Rotation

Impeller Parts:
O-Ring Impeller housing #24321-000750
Impeller #129470-42530



Impeller Assembly



Yanmar 4JHE Valve Adjustment

1. Do this only when engine is cold.
2. Use breaker bar on pulley on crankshaft to rotate cam.
3. Pistons #1 & #4 go up and down at same time, #2 & #3 likewise.
4. Cylinders #1 & #4 valves will be up at the same time (180 degrees)
5. Watch #4 exhaust valve close- when #4's intake just starts to open- Adjust #1
6. Gap should be .008 (8 thousandths) (0.2 mm)

Misc Yanmar 4JHE Info:

Misc- Injector Info: First 1000 Yanmar 4JHE have different injectors.

Cetane Boost- at least +8 minimum effective.

Add Lubricity- replaces sulfur for additional lubrication

NO compression release lever on this engine

Max RPM 3600 (run 1hr max)

Run at 3000 RPM all day long

Adjust prop pitch so engine can top out to max RPM- otherwise too much pitch.

Every 300 hours- torque head.

Thermostat Yanmar #129470-49801

Oil Filter Yanmar #129150-35150