**DIESELSITE** 1999-2003 Ford 7.3L

# WATER PUMP with FILTER KIT

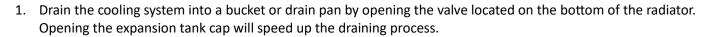
# WPCF

This water pump does not utilize the OE 7.3L Ford LONG STEM thermostat.
This pump will use the INTERNATIONAL 444 HIGH TEMP SHORT STEM.
REPLACEMENT THERMOSTAT CROSS REFERENCE: 14252

### This kit WILL NOT work on the following:

- E-Series / Vans Dual Alternator Setups
- F650/F750 Medium & Heavy Duty Trucks

## **INSTALLATION INSTRUCTIONS:**



- 2. Disconnect the upper and lower hoses from the radiator using a hose clamp tool or large plier. Disconnect the heater hose from the top of the water pump.
- 3. Loosen the fan clutch. \*You will need a Fan Clutch Wrench for this job; rent or buy from most auto parts stores.
- 4. Unbolt the fan shroud from the radiator and carefully remove them from the engine bay together.
- 5. Remove the fan belt by applying leverage on the tensioner pulley. To do this: take a ½ drive breaker bar (no socket attached), stick it in the square hole, and pull the ratchet towards the passenger side of the truck to apply pressure to loosen the tension on the belt.
- 6. Remove the water pump from the engine block by removing the original nine (9) mounting bolts. Discard the bolts but retain the water pump for sensor collection.
- 7. Clean the pockets inside the front cover behind the water pump and all mounting surfaces.

## 8. Complete these tasks BEFORE mounting your new water pump:

- a) Remove the OE coolant temp sensor from the old water pump to the left of the thermostat housing.
- b) Install sensor into the new water pump, same location, using a 3/8" Allen wrench and supplied red thread locker.
- c) Install the large brass barbed fitting into your new water pump using the supplied red thread locker.
- d) Install the water pump gasket provided into the gasket groove on the backside of the new pump.
- e) Install the new thermostat into the new water pump and place the thermostat gasket on top.
- f) Install the thermostat housing directly over top of the thermostat and gasket; sandwich the seal.
  - \*Snug the bolts hand tight, otherwise do not exceed 100 in/lbs.
- g) Remove the plastic impeller guard from the back of the new water pump (if applicable).

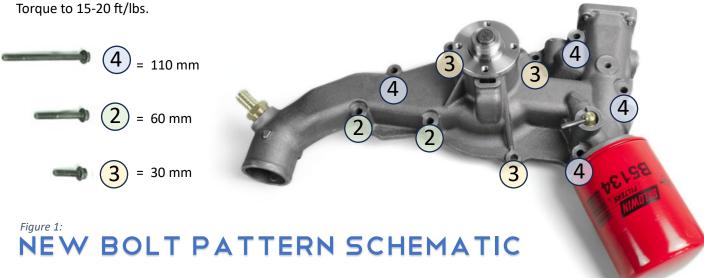
#### **QUICK TIP:**

Cold snaps can shrink the metals of the engine and water pump causing the gasket to fail prematurely and leak when the truck is parked.

Adding a very small bead of RTV sealant around the flats of the water pump to aid the seal can help prevent possibly seal failure.



9. Install the new water pump to your engine block referring to the newly provided bolt pattern schematic. [Figure 1]



- 10. Install the new custom lower radiator hose to the water pump using the larger hose clamp on the water pump connection and the small clamp on the radiator connection.
- 11. Using the 3 ft of coolant hose supplied, attach the hose to the brass barb fitting on the water pump with one of the supplied mini hose clamps. The other end of this heater hose can join the OEM heater hose in two possible ways:
  - a. You can connect the OEM heater hose that originally connected to the top of the OEM water pump. Use the supplied union and the two remaining mini hose clamps and splice the two heater hoses together. You will most likely need to cut both hoses to route them in a clean manner.
  - b. If you have a factory heater valve or a DIESELSITE Max AC Assist valve installed, simply run the new heater hose to the valve and secure with mini hose clamp. Union not required with this option.
- 12. Reinstall the fan pulley onto the water new water pump only hand tightening the bolts. Reinstall the serpentine belt then proceed to tighten the pulley bolts with wrench. [Figure 2]
- 13. Carefully reinstall your fan, clutch, and shroud.
- 14. Reconnect the upper radiator hose or install the DIESELSITE optional re-route hose if purchased to the thermostat housing.
- 15. Using a provided coolant filter, spin the filter onto the water pump. Snug by completing half a turn (1/2) after the gasket contacts the pump.

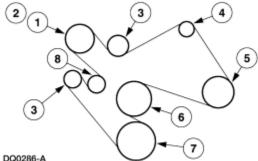


Figure 2: Belt Routing Diagram (Single Alternator)

- 16. Make sure your coolant valve is running PARALLEL with flow to your filter [north-south] for the OPEN position. When the valve is perpendicular to flow to the filter [east-west], the valve is in the CLOSED position.
- \*NOTE: This valve is meant only for the convenience of filter changes. If filter is removed, minimal coolant spillage is still possible.
- 17. Make sure everything is clear of moving objects; double check hoses will not make contact with the belts or the fan. If you need to adjust a hose: TWIST them from either end's connection to torque them away from the concern.
- 18. Refill the cooling system. Reconnect the wiring harness for your coolant sensor. Start the engine and check for leaks.

