



# 1999-2003 Ford Waterpump with Integrated Coolant Filter Installation Instructions

(**not** for dual alternator setups)

# Included with your new waterpump

- New Waterpump with integrated coolant filter
- Waterpump replacement Gasket
- 205° Thermostat and Billet Housing already installed on pump
- 5/8" Barbed Brass Fitting already installed on pump
- New Mounting Hardware
  - o (4)-Metric 8 Flanged bolts 4 3/8" (110mm) long
  - o (2)-Metric 8 Flanged bolts 2 3/8" (60mm) long
  - o (3)-Metric 8 Flanged bolts 1 1/8" (30mm) long
- (1) 5/8 Barbed Brass Union Fitting
- 3 feet of 5/8" Black Heater Hose
  - o (3)-#8 Mini Stainless Hose Clamps
- (1) New DIESELSITE Silicone Long Life Radiator Hose
  - o (1)-#40 Large Stainless Hose Clamp
  - o (1)-#32 Medium Stainless Hose Clamp
- (3)-New Baldwin B5134 non-charged Coolant Filters

### What you will need

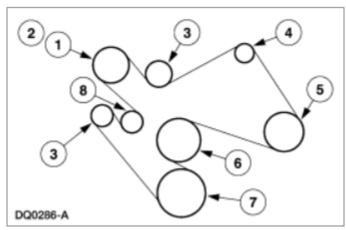
- Bucket or coolant drain pan
- Basic Metric Tool kit
- · Coolant: we suggest Evans or Motorcraft Green or equivalent
- Dieselsite modified waterpump with integrated coolant filter
- Fan clutch hub wrench kit available for rent at many auto parts stores.

#### **Notes**

- The 205 degree thermostat is already installed in the water pump. There is no need to unbolt the thermostat housing.
- Thread sealant has been added to the brass barbed fitting on the waterpump and it has already been tightened to the appropriate torque.

# **Installation**

- 1. You may want to disconnect the negative battery cable for each battery before starting.
- 2. Drain the cooling system into a bucket by opening the valve located on bottom of the radiator.
- 3. Disconnect the upper and lower hoses from the radiator using a hose clamp tool or large channellock and disconnect the heater hose. Disconnect the heater hose from the top of the waterpump.
- 4. Unbolt the fan shroud from the radiator
- 5. Remove the Fan and Fan Clutch. You will need the fan clutch wrench for this job. Be mindful of the radiator as you do not want to damage it by accidentally bumping into it.
- 6. Remove the fan belt by applying leverage on the tensioner pulley. To do this, simply take a 1/2 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. If you do not have the original diagram on the radiator showing the routing of your belt here are schematic to use.



Single Alternater setup

- 7. Remove the 9 bolts on the waterpump and then remove the water pump from the engine block. Discard all original waterpump mounting bolts. You will be installing new bolts that are included in your kit.
- 8. Clean the pockets inside the front cover behind the waterpump and all mounting surfaces.
- 9. Once the engine block mounting area is clean, you are ready to install the new pump. The new pump will have new mounting bolts and new bolt lengths. Install the new black gasket provided with the new waterpump by pushing it into the gasket groove on the backside of the new waterpump. No silicon is needed. Once the gasket is in place, bolt the new pump to the engine block using the new bolts. (Please see the new Bolt Pattern Schematic located in these instructions below.) Torque all bolts to approximately 15-20 ft-pounds.
- 10. Reinstall the bottom radiator hose onto the new water pump with the new hose provided and tighten using the larger #40 hose clamp on the water pump side. Use the medium #32 clamp on the radiator.
- 11. Using the 3 feet of coolant hose supplied with your new water pump, attach the new hose to the brass barb fitting on the water pump using a #8 mini stainless hose clamp.

- 12. The other end of the new 5/8" heater hose can join the OEM heater hose in two possible options.
  - a. You can connect to the OEM heater hose that originally connected to the top of the OEM waterpump. Using the new 5/8" brass barbed union and #8 mini stainless hose clamps included in your kit, 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 valve, simply run the new heater hose to the valve. Use the new #8 mini stainless hose clamps for this connection. If this option is used, you will not need the 5/8" brass union.
- 13. Reinstall the fan pulley onto the new waterpump.
- 14. Carefully reinstall your fan, clutch and shroud.
- 15. Reinstall your serpentine belt being careful to route it exactly the way it was and tighten the 4 bolts holding the fan clutch. Refer to the routing schematic above if you are unsure.
- 16. Reconnect the upper radiator hose to the new black billet housing. Use your original hose clamp to secure the hose. If you are replacing the upper radiator hose at this time, use the original hose clamp or a new purchased clamp (not included in this kit).
- 17. Using one of the new coolant filters provided, screw the filter onto the water pump and turn ½ turn after the rubber gasket makes contact with the pump.
- 18. Make sure your coolant valve is running in the North-South direction (open). East-West direction is closed. Close the valve only when changing your filter.
  - a. We suggest changing your filter every 3 months for the first year, then once per year after that.
- 19. Refill your cooling system, reconnect your negative battery cable if disconnected, start your engine and then check for leaks.

For Technical help call DieselSite at 888-414-3457

