

# BIG BLOCK CHEVY <u>ELECTRIC WATER PUMP</u> P/N 63547

These instructions are a basic guideline for installing a Moroso Performance Electric Water Pump. Always consult the proper manufacturer service manual for your vehicle for any general assembly/disassembly information.

NOTE: This water pump is supplied with additional longer fasteners for pump mounting with a front engine motor.

Before you install the water pump, check for which side the water pump inlet housing port should face for easiest plumbing to the lower radiator hose. Our inlet housing can be rotated to accommodate either driver or passenger side routing. Perform this operation prior to installing the water pump on the vehicle. It is much easier. See the instructions below for RE-ORIENTATION of the inlet housing if necessary.

The stock bypass and/or heater hose to the Water Pump are not used, and should be blocked off. The stock accessories (power steering pump, alternator, etc.) may have to be relocated in some cases to ensure clearance between belts, hoses, etc.. The accessory drive belt no longer turns the water pump. In applications where the water pump belt drives other accessories, a shorter drive belt will have to be used to bypass the water pump drive. On serpentine belt drive systems the tension/idler pulley may have to be re-located

### CAUTION: Seal failure will occur if pump is operated without water or coolant in the system or the pump.

This Electric Water Pump was designed to fit in the stock location on the engine. Check and clean all new pieces for any debris that may prevent the gaskets from sealing. When installing make sure the gasket sealing area on the engine is cleaned of any old sealing material. Use a high quality gasket sealer and the supplied hardware and gaskets to prevent leaks.

NOTE: Lubricate the screw threads with oil prior to installation.

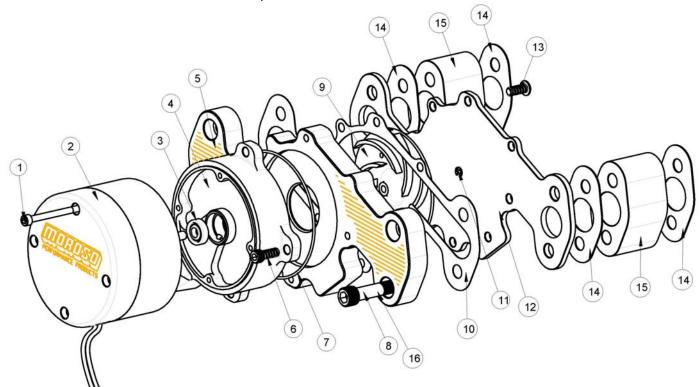
- 1. Place two gaskets (Det. 14) on the back of the water pump followed by the two spacers (Det. 15), followed by two more gaskets (Det. 14).
- 2. Lightly bolt (Det. 8) thru the water pump and into the engine block followed by the last three bolts. Torque bolts to 20 ft lbs.
- 3. Incorrect wiring of this pump will cause damage to the pump motor and/or your engine. The Red Wire is Positive and should be connected to a 12 to 16 Volt maximum system with a 20 Amp fused source. The Black Wire is Negative and should be connected to a suitable ground such as the engine or chassis.

#### **RE-ORIENTATION** of the inlet housing

- 1. Use a piece of masking tape and wrap it around the motor cap and the black stator ring at the joint. This will keep the two motor assemblies aligned to each other and help keep the parts from separating.
- 2. Remove (2) of the (4) socket cap screws (Det. 6). Place a drop of Loctite 242 thread retainer on these (2) screws so they will be ready for re-installation.
- 3. Keep constant pressure on the motor cap toward the water pump plate (Det. 5) while removing the last (2) screws to insure the O-ring does not come out of its seat.
- 4. Carefully rotate the inlet housing 90 degrees to the desired location and re-install the (2) socket cap screws that have Loctite applied.
- 5. Add Loctite to the other (2) screws and re-install them.
- 6. Remove (2) of the (4) motor cover screws (Det. 1) and add Loctite 242 thread retainer to them. Remove the next (2) screws while keeping pressure on the motor cap toward the water pump plate.
- 7. Rotate the motor cap and the stator housing 90 degrees back to its original position. Reinstall the (2) screws with Loctite. (Note they are in alignment with the screws holding the inlet housing). Add Loctite to the last (2) screws and re-install them.

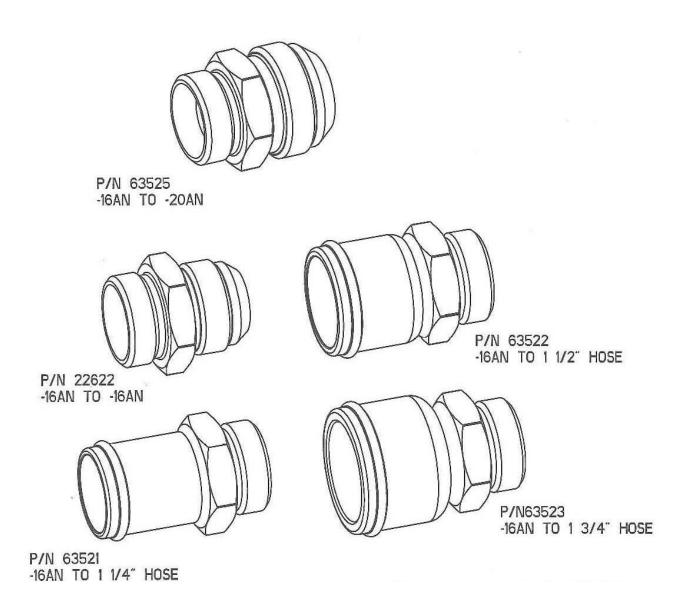
#### **IN ERROR** if the O-ring slipped out of its' seat while re-orientating:

- 1. Remove the (8) button head screws (Det. 13).
- 2. Remove the Rear Water Pump Plate (Det. 12)
- 3. Remove the E-circlip (Det. 11)
- 4. Use a 1/4" Snap-on or Bluepoint open end wrench and insert it thru the water pump inlet hole to the motor shaft. The motor shaft has (2) wrench flats for loosening/tightening the impeller. Remove the impeller by a counterclockwise rotation using a pin faced spanner wrench. There are (2) holes in the impeller for the use of the spanner wrench.
- 5. Remove the (4) socket head cap screws (Det. 6) from the inlet housing. Check for any damage to the O-ring and replace if necessary.
- 6. Re-insert the O-ring in the groove and use a small amount of O-ring grease or household Vaseline to help hold the O-ring in place.
- 7. Use Loctite 242 thread retainer on all fasteners and impeller threads prior to re-installing.
- 8. Put the water pump components back together in the reverse manner it came apart in.
- 9. The button head screws should be re-torque to 80 inch/lbs.



16	0506241	4	3/8-16 X 3.00 SHCS
15	63547170	2	W/P SPACERS
14	63547190	4	SPACER GASKET
13	0504044	8	1/4-20 X .5 BHCS
12	63547162	1	REAR W/P PLATE
11	63765107	1	E-CIRCLIP
10	63547181	1	GASKET BBC
9	63565553	1	IMPELLER 6 VANE
8	0506250	4	3/8-16 X 2.75 SHCS
7	63565222	1	O-RING
6	0504060	4	1/4-20 X .62 SHCS
5	63547152	1	W/P PLATE BBC
4	63564200	1	INLET HOUSING
3	63540130	1	WTR PUMP SEAL
2	63564751	1	MOTOR ASSEMBLY
1	63565815	4	10-24 X 2.62 SHCS
DETAIL	P/N	QTY	DESCRIPTION

## Water Pump Inlet Fittings Are Available From Your Moroso Retailer:



**ALL ABOVE FITTINGS INCLUDE O-RINGS P/N 22643-650**