



INSTALLATION INSTRUCTIONS

Water Pumps

IMPORTANT

CAREFULLY READ THESE INSTRUCTIONS BEFORE INSTALLATION!

Proper installation of this water pump is the responsibility of the installer. Improper installation will void your warranty and may result in vehicle damage or personal injury. If you have any installation questions, call our Tech Service personnel at 216-961-1800 from 7am to 4pm EDT.

CAUTION!

NEVER REMOVE RADIATOR CAP WHEN ENGINE IS HOT!

These are custom water pumps designed for performance applications. Water pumps for race applications are available from Tuff Stuff - see catalog for complete information. Always refer to your vehicle manufacturer repair manual for exact replacement procedure and torque specifications when replacing your water pump. If you do not feel qualified to perform this installation, have a professional mechanic install the pump.

If used on a Vortec block or Ramjet engine without a bypass port on the block that mates with the bypass port on the pump mounting flange, you must use a bypass thermostat or modify existing thermostat by drilling two 1/8 inch holes in thermostat.

FLUSH COOLING SYSTEM BEFORE REPLACING WATER PUMP!

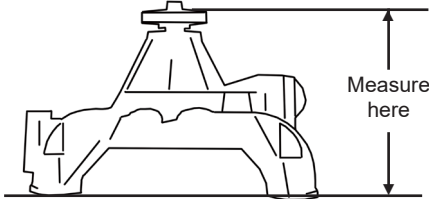
Any fluid contamination or dirt in the cooling system could ruin the seal on the new pump.

Removal of Stock Water Pump

1. Drain cooling system.
2. Disconnect the lower radiator hose and heater hose at the water pump. Inspect all hoses for dry rot, cracks and tears. Replace if necessary.
3. Remove all drive belts to the water pump pulley.
4. Loosen and remove the fan, fan clutch (if equipped) and pulley assembly.
5. Remove the water pump to cylinder block bolts and remove water pump.
6. Compare the new and the old water pumps and verify that the hub height dimensions are the same. Water pumps are available in a number of heights - it is the installer's responsibility to make sure the correct height water pump is installed.

WATER PUMP HEIGHTS

A long or short water pump may be used on any Chevy V8 (Gen I SB - Gen II BB) engine as long as the correct pulleys are used and the belts are in alignment.



Measure from the top fan hub surface to the water pump mounting surface

| APPLICATION | Short Water Pump | Long Water Pump |
|------------------------|------------------|-----------------|
| Chevy Small Block | | |
| All except Corvette | 5.659" | 6.932" |
| Corvette | 5.800" | |
| Chevy Big Block | | |
| All including Corvette | 5.752" | 7.287" |

Water Pump Installation

1. Clean the water pump mounting surface before installation.
2. Inspect the fan, fan clutch and pulley to verify that all are in good working condition. A defective or out of balance fan, fan clutch or pulley will cause premature pump failure.
3. Inspect the belt tensioner (if equipped) and verify that it is in good working order.
4. If water pump is equipped with a steel back plate covering the impeller, verify that all fasteners are tight. If the water pump has a threaded nipple, verify that it is tight. **CAUTION - do not over-tighten the nipple as it can crack the housing!**
5. Install the water pump on the block using new gaskets and gasket sealer to assure a positive seal. Tighten the mounting bolts gradually and evenly in a staggered sequence to factory torque specifications.
6. Install the pulley and fan onto the pump, making sure that the pulley does not scrape the face of the pump. If scraping occurs, use a 1/16" shim between the pump hub and pulley to solve the problem. Tighten securely.
7. Rotate the fan / water pump shaft by hand to make sure it turns freely.
8. Connect all hoses and fill the cooling system.
9. Install and tighten the fan belts to factory specifications. Reinstall any brackets or fasteners that may have been removed during disassembly
10. Check belt alignment as additional shimming may be required.
11. Start the engine and check for leaks. Let engine cool down, top off radiator coolant and recheck for leaks.

rev 9/22

LIMITED WARRANTY

Hurst Auto-Truck Electric, Ltd., d.b.a. Tuff Stuff Performance Accessories, Ltd., warrants that its products will be free from defects in materials and workmanship for one year from the original retail purchase date. This warranty applies only to the original purchaser. To request a warranty evaluation, the product must be returned to the original retailer where it was purchased.

For Retailers and E-Retailers:

If a Tuff Stuff product is determined to be defective, Tuff Stuff may choose to repair or replace it. Defective products must be returned—along with proof of purchase—to Tuff Stuff's manufacturing facility in Cleveland, Ohio. Before returning any product, you must contact Tuff Stuff to obtain an RGA (Return Goods Authorization) number. Call 216-961-1800 for an RGA authorization number. Customers are responsible for all transportation and shipping costs associated with returning the product. Tuff Stuff is not responsible for any product returned without an RGA authorization number.

- Blown up, shattered or cracked drive end housings, burnt or broken starters are not warrantable.
- Alternators with burnt stators or stripped rotor threads are not warrantable.
- Water pumps with cracked housings or blown bearings/seals or coolant stain at the weep hole are not warrantable.
- Chrome plated, polished or painted units that have been scratched or damaged in any way because of careless installation are not warrantable "Blued Chrome" is not a defective product.
- Units that have been disassembled, modified or altered in any way are not warrantable.
- Unit must be returned in its original box, with a copy of paid receipt or it will not be warranted.
- Power Brake Boosters must be dry and no brake fluid in unit for return.
- There are no implied warranties of merchantability or fitness for a particular purpose on any Tuff Stuff product.
- Under no condition is labor, installation fees or compensation allowed.

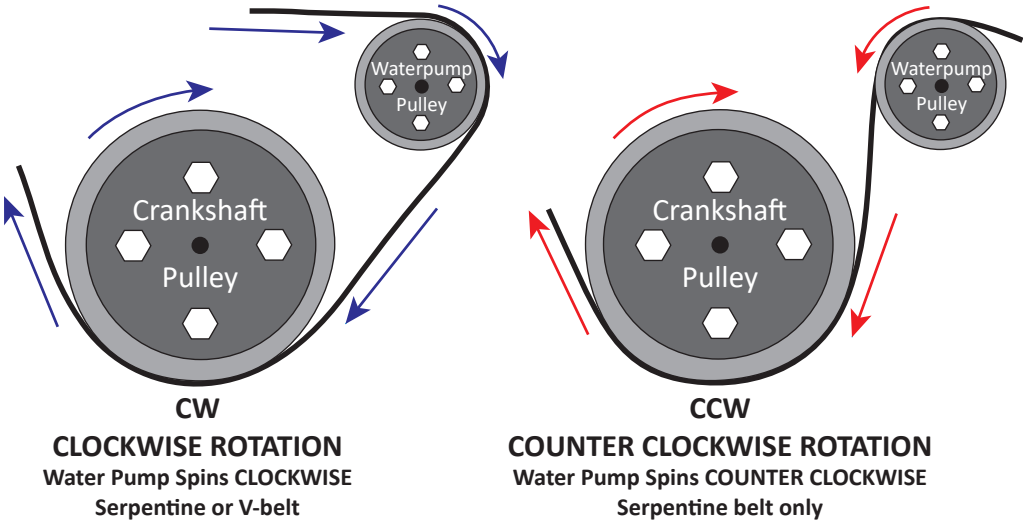
In no instance shall Tuff Stuff be responsible to repair or replace a product under this Limited Warranty if said product was improperly installed, altered or misused, including using the product contrary to Tuff Stuff's printed instructions or instructions stamped on the product itself.

THE FOREGOING STATES THE SOLE AND EXCLUSIVE REMEDY FOR ANY BREACH OF WARRANTY or for any other claim based on any defect in or non-performance of the product(s). WITHOUT LIMIT THE GENERALITY OF THE FOREGOING, TUFF STUFF SHALL UNDER NO CIRCUMSTANCES BE LIABLE FOR ANY INCIDENTAL OR CONSEQUENTIAL LOSS OR DAMAGE WHATSOEVER ARISING OUT OF OR IN ANY WAY RELATING TO ANY BREACH OF WARRANTY OR CLAIMED DEFECT IN, OR NON-PERFORMANCE OF, THE PRODUCT(S). THIS LIMITED WARRANTY IS DESIGNED TO FULLY COMPLY WITH THE TERMS AND PROVISIONS OF THE MAGNUSON-MOSS WARRANTY ACT. SOME STATES MAY NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES SO THE ABOVE LIMITATIONS OR EXCLUSIONS MAY NOT APPLY TO YOU. THIS LIMITED WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS AND YOU MAY HAVE OTHER RIGHTS WHICH MAY VARY FROM STATE TO STATE.

Product specifications and pricing are subject to change without notice or obligation. Tradenames are used for reference only.
RGA RETURNS WILL ONLY BE PROCESSED FOR THE 48 CONTIGOUS UNITED STATES OFAMERICA. © 1/2026

WATER PUMP ROTATION

Water pump rotation is determined by standing directly in front of the engine



| ITEM | ROTATION | ITEM | ROTATION | ITEM | ROTATION | ITEM | ROTATION |
|--------------|----------|--------------|----------|--------------|----------|--------------|----------|
| 1310A | CW | 1432C | CW | 1469NREV | CCW | 1511NBREV | CCW |
| 1310B | CW | 1432CBBLUE | CW | 1470N | CW | 1511NC | CW |
| 1310C | CW | 1432CRED | CW | 1470NA | CW | 1511NCBLUE | CW |
| 1310D | CW | 1432CREV | CCW | 1470NC | CW | 1511NCORANGE | CW |
| 1317N | CW | 1432CYELLOW | CW | 1470NCBLUE | CW | 1511NCRED | CW |
| 1317NA | CW | 1432N | CW | 1470NCRED | CW | 1511NCREV | CW |
| 1317NB | CW | 1444N | CW | 1470NCYELLOW | CW | 1511NCYELLOW | CW |
| 1317NC | CW | 1444NA | CW | 1475 | CW | 1529A | CW |
| 1353 | CW | 1444NB | CW | 1475AA | CW | 1529B | CW |
| 1353NA | CW | 1445N | CW | 1475AB | CW | 1529N | CW |
| 1353NA7 | CW | 1445NA | CW | 1475AC | CW | 1534N | CW |
| 1353NB | CW | 1445NB | CW | 1475N | CW | 1534NA | CW |
| 1353NC | CW | 1448NA | CW | 1475NA | CW | 1534NAREV | CCW |
| 1353REV | CCW | 1448NA7 | CW | 1475NB | CW | 1534NB | CW |
| 1354N | CW | 1448NB | CW | 1476MC | CW | 1534NC | CW |
| 1354NA | CW | 1448NC | CW | 1484N | CW | 1538N | CW |
| 1354NAREV | CCW | 1448NCBLK | CW | 1484NA | CW | 1548 | CCW |
| 1354NAS | CW | 1449N | CW | 1484NB | CW | 1548NA | CCW |
| 1354NASREV | CCW | 1449NA | CW | 1484NC | CW | 1548NC | CCW |
| 1354NB | CW | 1449NAREV | CCW | 1485AA | CW | 1594AC | CW |
| 1354NBREV | CCW | 1449NB | CW | 1485AB | CW | 1594N | CCW |
| 1354NBS | CW | 1449NBREV | CCW | 1485AC | CW | 1594NA | CCW |
| 1354NBSREV | CCW | 1449NC | CW | 1493AN | CCW | 1594NC | CCW |
| 1354NC | CW | 1449NCBLUE | CW | 1493ANA | CCW | 1594NCBLUE | CCW |
| 1354NCBLUE | CW | 1449NCORANGE | CW | 1493ANB | CCW | 1594NCRED | CCW |
| 1354NCORANGE | CW | 1449NCRED | CW | 1493ANC | CCW | 1594NCYELLOW | CCW |
| 1354NCRED | CW | 1449NCREV | CCW | 1493N | CCW | 1594ND | CCW |
| 1354NCREV | CCW | 1449NCYELLOW | CW | 1493NB | CCW | 1594NE | CCW |
| 1354NCS | CW | 1459 | CW | 1493NC | CCW | 1594NF | CCW |
| 1354NCSREV | CCW | 1459NA | CW | 1494N | CW | 1625AC | CW |
| 1354NCYELLOW | CW | 1459NA7 | CW | 1494NA | CW | 1625N | CW |
| 1354NS | CW | 1459NB | CW | 1494NAREV | CCW | 1625NA | CW |
| 1362A | CW | 1459NC | CW | 1494NB | CW | 1625NC | CW |
| 1362B | CW | 1461AA | CW | 1494NBREV | CCW | 1625NCBLUE | CW |
| 1362C | CW | 1461AB | CW | 1494NC | CW | 1625NCRED | CW |
| 1394NA | CW | 1461AC | CW | 1494NCBLUE | CW | 1625NCYELLOW | CW |
| 1394NAREV | CCW | 1461N | CW | 1494NCORANGE | CW | 1625ND | CW |
| 1394NB | CW | 1461NA | CW | 1494NCRED | CW | 1625NE | CW |
| 1394NBREV | CCW | 1461NAREV | CCW | 1494NCREV | CCW | 1625NF | CW |
| 1394NC | CW | 1461NB | CW | 1494NCYELLOW | CW | 1625NG | CW |
| 1394NCBLUE | CW | 1461NBREV | CCW | 1495AA | CW | 1625NH | CW |
| 1394NCORANGE | CW | 1461NC | CW | 1495AAREV | CCW | 1625NI | CW |
| 1394NCRED | CW | 1461NCBLUE | CW | 1495AB | CW | 1625NJ | CW |
| 1394NCREV | CCW | 1461NCORANGE | CW | 1495ABREV | CCW | 1635E | CW |
| 1394NCYELLOW | CW | 1461NCRED | CW | 1495AC | CW | 1635EB | CW |
| 1394ND | CW | 1461NCREV | CW | 1495ACBLUE | CW | 1635N | CCW |
| 1394NE | CW | 1461NCYELLOW | CW | 1495ACORANGE | CW | 1635NA | CCW |
| 1394NF | CW | 1465NA | CW | 1495ACRED | CW | 1635NB | CCW |
| 1394NG | CCW | 1465NAREV | CCW | 1495ACREV | CCW | 1635ND | CCW |
| 1394NH | CCW | 1468A | CW | 1495ACYELLOW | CW | 1635NE | CCW |
| 1394NI | CCW | 1468B | CW | 1495NA7 | CW | 1635NG | CCW |
| 1421 | CW | 1468C | CW | 1496 | CW | 1675A | CCW |
| 1421AA | CW | 1468CBBLUE | CW | 1496NA | CW | 1675AA | CCW |
| 1421AC | CW | 1468CRED | CW | 1496NA7 | CW | 1675AB | CCW |
| 1421C | CW | 1468CYELLOW | CW | 1496NB | CW | 1675AC | CCW |
| 1421N | CW | 1468N | CW | 1496NC | CW | 1675N | CCW |
| 1432 | CW | 1469A | CW | 1504N | CW | 1675NA | CCW |
| 1432A | CW | 1469B | CW | 1504NA | CW | 1675NB | CCW |
| 1432AA | CW | 1469C | CW | 1504NA-2 | CW | 1675NC | CCW |
| 1432AB | CW | 1469CBBLUE | CW | 1504NB | CW | | |
| 1432AC | CW | 1469CRED | CW | 1511NA | CW | | |
| 1432AREV | CCW | 1469CYELLOW | CW | 1511NAREV | CCW | | |
| 1432B | CW | 1469N | CW | 1511NB | CW | | |