## FlowKooler

### Before installing your new FlowKooler water pump:

- Compare your old pump's bolt pattern, fan hub working height and fan hub hole pattern to your new FlowKooler pump to be certain you have ordered the proper pump.
- Do NOT powder coat, chrome, polish or alter your pump as it will not be eligible for exchange.
- 3. Disconnect battery. Drain coolant. Thoroughly flush and drain the cooling system.
- 4. Examine the hoses, clamps, and the radiator and cap. Repair or replace if necessary.
- 5. Gain working room. If necessary for working room, remove the radiator, fan shroud, and other components. A few minutes spent analyzing adjacent components and removing those in the way may save you hours of lost labor.
- 6. Remove belts. Remove all belts that ride on the fan pulley.
- 7. Remove the fan. Remove the fan and inspect it carefully. Important: A flying fan blade can be deadly! If you detect any evidence of cracks or bends in a fan, replace it. Never try to straighten or repair a fan.
- Inspect fan clutch. If a fan clutch is present, check it for evidence of fluid leakage.
   If the fan spins more than five revolutions when turned by hand, the fan clutch
   mechanism should be replaced. Faulty fan clutches are a major cause of
   overheating.

#### **Installation Procedures**

- a) Thoroughly clean the entire cooling system, engine cavity and gasket surface.
- Confirm backing plate is tightened securely and properly sealed. Position new gaskets on the pump using sealer on both sides.
- Carefully install the pump. DO NOT STRIKE THE SHAFT. Tighten bolts in a crisscross fashion.
- d) Turn the pump by hand to assure clearance.
- e) Inspect and/or replace thermostat & radiator cap if there is sticking or leaking.
- f) Inspect hoses and belts for wear or visible defects. Rubber parts older than four years should be replaced.
- Reconnect hoses. Consult your OEM manual for fill procedures and fill your system. Inspect system for leaks.
- h) Inspect and replace any fan with cracks, bends or loose rivets. NEVER STRAIGHTEN A BENT FAN.
- Inspect and replace any fan clutch with wobble, looseness, or loss of oil. A bad or misaligned clutch will damage a water pump.
- Make sure pulley or clutch sits squarely on the pump hub. Using lockwashers, torque the bolts evenly so all parts turn without wobbling.
- k) Rotate the fan by hand to see if it wobbles; maximum to be 3/32" at the outer edge if there is not clutch and 1/4" with a clutch.
- On engines with automatic tensioners, adjust the belts to proper tension using a tension gauge. Refer to manufacturer specs or adjust belts for deflection of ½" -¾". Inspect and replace any defective automatic tensioners or idler pulleys.
- m) Check fan blade clearance to the radiator & shroud. Check electrical fan to ensure it is properly functioning.
- Inspect & replace motor mounts if you observe signs of wear and splitting.
   Tighten any loose belts.
- Start engine until it reaches a normal operating temperature. Never stand in line
  with the fan when running the engine and CLOSE the hood when revving the
  engine.

# FlowKooler

### LIMITED WARRANTY AND RETURN POLICY

(Effective August 1, 2010)

FlowKooler guarantees that its products are free from defects in faulty workmanship and defective materials for a period of two years from the purchase date. This warranty is valid only if it is determined to FlowKooler's sole satisfaction that the products are, and have been subjected to, ordinary use and service and have been properly installed by the purchaser (see instructions shipped with product).

FlowKooler's Warranty is null and void if the product is or has been

- 1. altered in any way e.g. polishing, chroming, powder coating
- used for racing
- 3. blown up, burnt stators or stripped rotor threads
- 4. cracked housings, blown bearings or shaft breakage
- 5. scratched or damaged due to incorrect installation and/or over-tightened

This warranty does not apply to any product where failure is a result of misapplication, improper use, or maintenance nor is there any warranty expressed or implied as to the merchandise-ability of the product.

This warranty is valid for the original purchaser and is not transferable.

FlowKooler in no event shall be liable for labor, special or consequential damages, property damage or bodily injury or death or damages to or loss of use of any property directly or indirectly attributable to our products and under no circumstances any charges in excess of the invoice amount of the product proven to be defective.

If any product fails to conform to these warranties FlowKooler will, at its sole option and as its sole and exclusive liability hereunder, replace the product proven to be defective.

THIS WARRANTY PERTAINS TO PURCHASES MADE AFTER AUGUST 1, 2010. IT EXCLUDES ALL OTHER EXPRESSED OR IMPLIED WARRANTIES, ORAL OR WRITTEN WARRANTIES, INCLUDING WITHOUT LIMITATION WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

#### PROCESS TO RETURN MERCHANDISE

NO merchandise may be returned to FlowKooler for any reason without prior approval by authorized representatives of FlowKooler.

Follow these steps in order to ensure proper return of merchandise:

- Contact FlowKooler and provide full and proper information regarding the details of the merchandise to be returned; reason(s) why, date of purchase, etc.
- 2. All returns must be accompanied by a copy of the original invoice.
- 3. All merchandise must be properly repackaged in order to ensure safe shipment and delivery of the merchandise to FlowKooler
- 4. Absolutely no refunds will be given after (30) days from date of purchase.
- After a 30 day period FlowKooler will exchange unused and unpainted pumps in original packaging, subject to a 20% restocking charge.
- 6. All Freight charges are the responsibility of the customer.

FlowKooler reserves the right to apply a restocking charge and/or deny credit to the customer for returned merchandise that has been special-ordered, altered, modified, damaged, or otherwise changed from its original state, regardless of reason. Original shipping charges will be credited only in the event of a shipping error by FlowKooler. All other incurred shipping charges for returned merchandise are the responsibility of the customer or distributor.