

Water Pump Rebuild Recommendations

Some special tools will be needed to carry out certain parts of the rebuild process. These tools are to eliminate damage to the parts you will need when rebuilding the pump.

Pulling tool, for removing pulley for 6cyl, and top hat pulley adaptor for V8.

This is done by pulling on the four threaded holes in the top face of pulley/top hat. Then pushing shaft out with large bolt, whilst holding pulling tool firmly in a vice.

We also recommend the use of a fly press for removal and refitment of shaft, impeller etc.

When using the fly press, for refitting new parts, special mandrels will be needed for locating parts square and flat.

Dismantling:

1. Remove pulley or top hat. Remove 3/8" UNF bolt from end of shaft, prior to removing top hat flange
2. Remove small C clip (6cyl only).
3. Support pump body on flat mounting face and push shaft out all the way through bearings, with impeller and water seal still connected.
4. Knock top bearing out with long punch and hammer from impeller side.
5. Remove old grease, bearing spacer and large internal C clip.
6. Now push out bottom bearing, also from impeller side, remembering to keep bearing square.
7. Now fully clean pump body remembering to clean out overflow hole in side of pump.
8. Note. Check water seal face and bore for corrosion and cracking, as this may cause leaking past the seal. If this occurs, the seal will need to be refitted with silicon to stop leaking.
9. Paint pump body and pulley as required.

Rebuilding:

1. It is important to remove the dust cap, from one side only, from each of the bearings prior to assembly.
2. Fit bottom bearing, with exposed bearings facing away from impeller, using mandrel to keep bearing square. Use Loctite bearing seal if casting is over size.
3. Fit new large C clip.
4. Place bearing spacer in position, with small amount of grease around spacer.
5. Fit top bearing, with exposed bearings towards spacer, and keeping bearing square. Use Loctite bearing seal if casting is over size.
6. Supporting pump on top face of top bearing. Now push new shaft all the way through the bearings using mandrel to keep shaft square from impeller side.
7. Refit the new water seal, we have made a small aluminium adaptor to convert the imperial water pump body to take the new metric seal. Press this adaptor in first using a small amount of Loctite or Silicon then press in the new seal into this adaptor using mandrel to keep square. This seal is now used for both types of V8 water pump seals.
8. While still supported on bearings fit new impeller. This must be pushed on square to bottom face of pump body and with a clearance gap of 0.012"/0.015".
9. Note. Make sure there is no dirt or debris between seal and impeller.
10. Turn pump over and fit new small C clip.
11. Place pulley, or top hat, top side down on flat surface of fly press. For 6 Cyl:- push pump into pulley as far as possible making sure pump turns. For V8:- push pump until it stops. Push pump by pushing Impeller end of shaft ONLY.

Should you require any further assistance, please do not hesitate to contact us.