



Direct Drive Pump Removal

The following steps will assist you in removing your pump from your gas engine or electric motor.

1. To start the process, spray a few drops of penetrating oil onto the top groove or two small rectangular slots on the sides of the pump flange.
2. Remove the mounting bolts and washers securing the pump to the drive.
3. Loosen set screw.
4. Insert a flat head screwdriver into the two opposing slots on the mounting flange and pry pump from gas engine or electric motor. **Apply only reasonable pressure. Do not force separation.**
5. If pump resists the separation, insert two full threaded screws into the two special holes in the pump mounting flange. Thread in deep enough to make contact with the gas adapter plate or electric motor face. Then continue to thread in the bolts in an alternating pattern to separate the pump from the drive. **Apply only reasonable torque. Do not force separation.**
6. A strong bond may develop in any direct drive installation and may increase with heavy duty operation and time. It may be necessary to repeat one or more of these steps.

NOTE:

To ease the stress of future repairs, make a habit of removing the pump and applying **anti-seize lubricant** on a semiannual basis. With the heat that is generated in the crankshaft area, anti-seize won't last forever.

With the pump removed, apply a moderate layer of anti-seize lubricant to the pump's crankshaft and a small bead of high-heat caulk around the middle of the motor or engine's crankshaft to seal out any moisture to the coupling.

To purchase Anti-Seize Lubricant, see:

http://www.etscompany.com/cleaning_products/product_info.php/products_id/55057/

IS YOUR DIRECT DRIVE PRESSURE WASHER PUMP STUCK?

The procedure: Loosen the four flange bolts equally so that two threads are exposed. Start the motor and the centrifugal force of the spinning motor should cause the pump to move outward toward the bolt heads. You may have to help the pump by pulling on it while the motor is running. Once the pump has moved to the bolt heads, stop the motor and loosen the bolts so that another two threads are exposed.

Once the pump has moved, say 3/8", remove the flange bolts completely and start to pull the pump off the crankshaft. You may still have to pry the pump off, but it will be much easier. And the best part is, no broken parts to clean up!