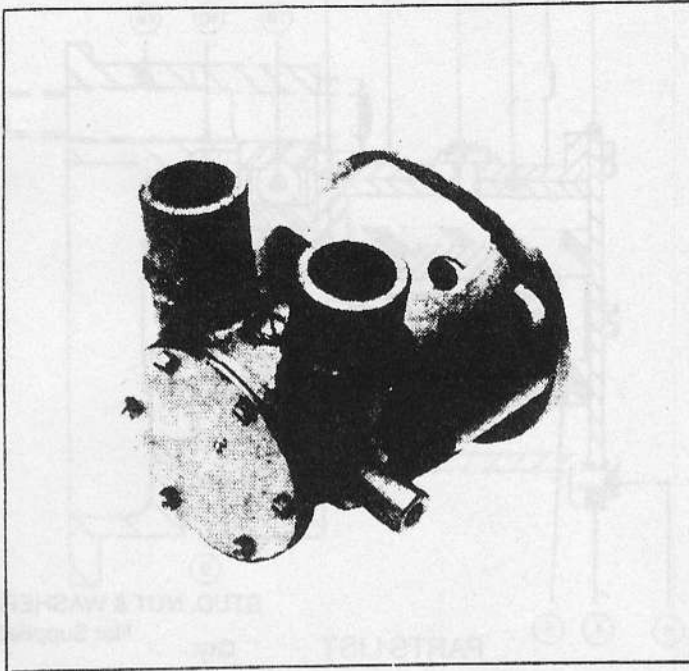


JABSCO®

PUMPS

MODEL 22740-0050

MODEL 22740-0050



Body: **Bronze**
 Impeller: **Jabscos Neoprene Compound**
 Shaft: **316 Stainless Steel**
 Shaft Seal: **Carbon-Ceramic Face Type**
 Ports: **1¼" Hose Barb**
 Weight: **4 lb. 6 oz. (1.95 kg.)**

APPLICATION

Marine Engine Cooling
 For Engine Models:
 Volvo V-8 (Chevrolet block)
 Alaskan Marine Engine

INSTALLATION

The pump has been designed to mount inside the crankshaft pulley of the Volvo V-8 (Chevrolet block) engines. Other engines listed have the pump mounted on adapter flanges. The maximum engine speed this pump will operate at is 5200 RPM. The maximum discharge head the pump should operate against is 20 ft. (6m) H₂O. When the pump is installed to operate at maximum RPM, the installation design must minimize suction head (a high speed scoop on the hull fitting is recommended).

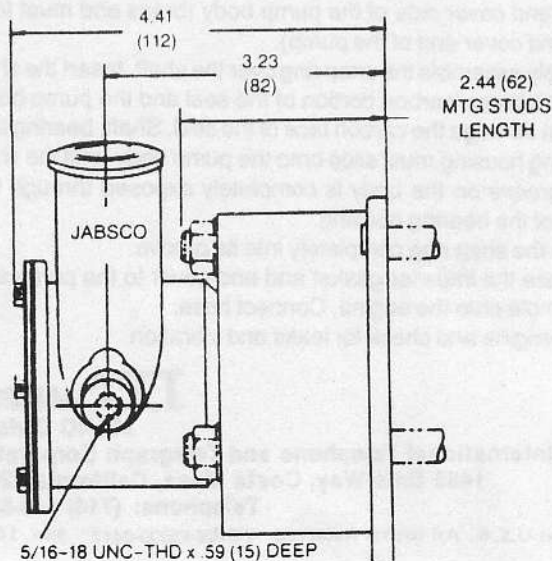
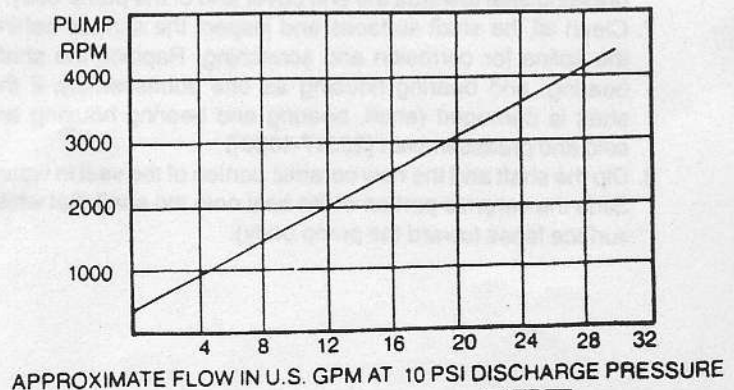
For installations where the pump is to be mounted on the crankshaft pulley, remove all belts that run off the crankshaft pulley. Remove the crankshaft pulley from crankshaft. New ¾" diameter bolts used to fasten the pump and pulley to the crankshaft must be 2.5" longer than the original bolts used to assemble only the pulley to the crankshaft.

Replace the pulley on the crankshaft, and place the pump in the pulley. Make sure that the locator pins in the crankshaft are properly aligned with the locator pin holes in the pulley and pump bearing housing. Insert and tighten evenly the three mounting bolts. Be sure that standard ¾" washers are used under the mounting bolts. These washers should overlap both the pump bearing housing and the pump bearing outer face.

Replace all belts on the crankshaft pulley. Attach a torque arm/bracket from the torque arm boss on the pump to a convenient bolt on the engine. This torque arm must not impose a side force on the pump assembly. This could shorten bearing life in high RPM service.

Attach and double clamp the intake and discharge hoses (1¼" ID) to the pump ports. Be sure the hoses do not impose a side force on the pump assembly. This could shorten pump bearing life in high RPM service. Hoses should be flexible and supported by the engine (not the pump). Start the engine and run at low speeds. Check the installation for leaks or vibration.

PUMP FLOW CHART



ITT JABSCO

FORM 43000-0417 Rev. 10/81

OPERATION

Do not run the pump over 5200 RPM. Be sure that the intake system is free from obstructions and the discharge system has less than 20 ft. of water head. The pump may be operated in either rotational direction. Inspect the pump periodically for leaks and vibration.

SERVICE INSTRUCTION

IMPELLER/GASKET REPLACEMENT

1. Remove the six end cover screws (Key 8). Remove end cover (Key 2) and end cover gasket (Key 4).
2. Remove the impeller (Key 5) by grasping the impeller hub with a pair of pliers. If the impeller has been damaged and sections are missing, be sure that all bits of the impeller are removed from the pump housing, ports, discharge line and heat exchangers.
3. Install the new impeller by rotating the impeller into the pump bore (grease the pump bore to ease installation). Impeller bore must slide onto the shaft spline evenly.
4. Replace the gasket and end cover tightening the end cover screws evenly.
5. Start engine and check for leaks and vibration.

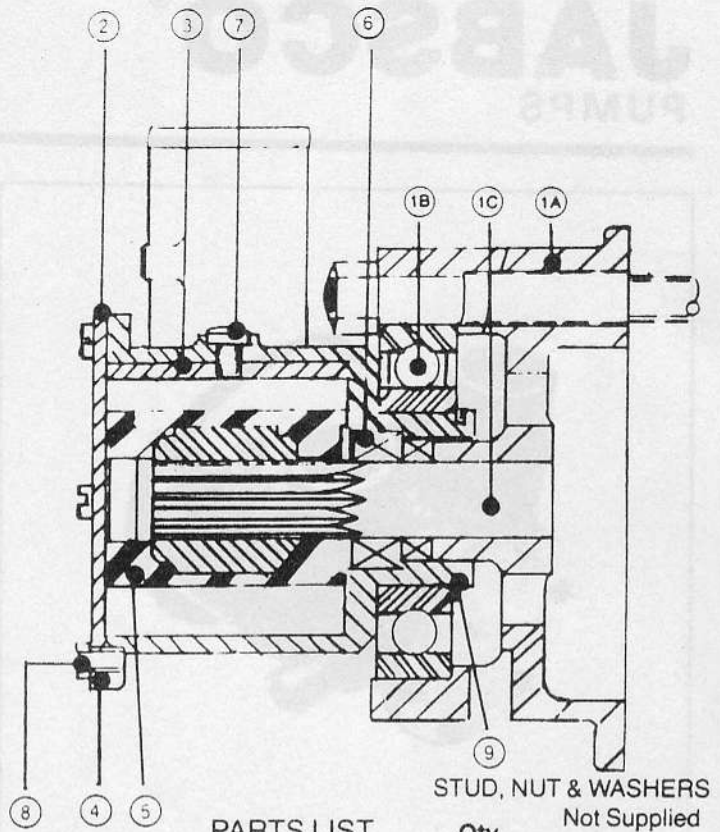
CAM REPLACEMENT

1. Follow steps 1 and 2 of Impeller replacement instructions.
2. Remove the cam screw (Key 7) from the cam and pump body.
3. Remove all Permatex from the cam and body.
4. Apply Permatex to cam screw and top portion of the new cam and assemble to pump body.
5. Replace impeller, gasket and end cover to pump body.

MAJOR SERVICE:

1. Remove the complete pump assembly from the engine.
2. Follow instructions 1 and 2 of Impeller Replacement Instructions.
3. Clean debris off the pump shaft (Key 1C).
4. The bearing housing (Key 1A) end of the pump has two access slots designed to allow removal of the snap ring (Key 9). Remove this snap ring completely from the snap ring groove.
5. The subassembly, consisting of shaft (Key 1C), bearing (Key 1B), and bearing housing (Key 1A), can now separate as one piece from the subassembly, consisting of the pump body (Key 1) and seal assembly (Key 6), by pulling the two assemblies apart by hand. If the assemblies will not separate by hand, lightly tap the pump body end of the pump shaft with a soft mallet (be sure not to damage the end of the pump shaft) until the pump body subassembly separates from the bearing subassembly. Remove the ceramic portion of the seal from the shaft.
6. Remove the carbon end of the seal from the pump body by pressing seal towards the end cover end of the pump body.
7. Clean all the shaft surfaces and inspect the surface behind the spline for corrosion and scratching. Replace the shaft, bearing, and bearing housing as one subassembly, if the shaft is damaged (shaft, bearing and bearing housing are sold and preassembled [22317-1000]).
8. Dip the shaft and the new ceramic portion of the seal in water. Slide the ceramic portion of the seal onto the shaft (flat white surface faces toward the pump body).

PARTS DIAGRAM



Key	Description	Qty.	Req. Part Number
1	Bearing Housing, Bearing and shaft assembly.	1	22317-1000
2	End Cover	1	12346-0000
3	Cam (half)	1	22318-0000
4	Gasket	1	3298-0000
5	Impeller	1	22120-0001
6	Seal Assembly	1	96080-0080
7	Screw (Cam)	1	91003-0100
8	Screw (End Cover)	1	91002-0010
9	Retaining Ring	1	22747-0000

9. Remove grease and debris from the impeller bore and seal bore on the pump body. Dip the seal bore and carbon/brass portion of the seal in water. Insert the carbon/brass portion of the seal into the seal bore of bronze pump body. This is done from end cover side of the pump body (brass end must face the end cover end of the pump).
10. Loosely assemble the snap ring over the shaft. Insert the shaft into the brass/carbon portion of the seal and the pump body. Do not damage the carbon face of the seal. Shaft, bearing and bearing housing must slide onto the pump body until the snap ring groove on the body is completely exposed through the back of the bearing housing.
11. Place the snap ring completely into its groove.
12. Replace the impeller, gasket and end-cover to the pump and assemble onto the engine. Connect hose.
13. Start engine and check for leaks and vibration.

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