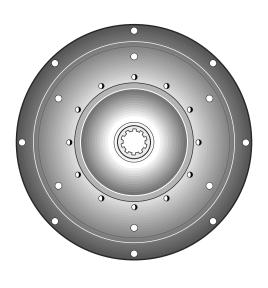


OWNERS MANUAL

INSTALLATION INSTRUCTIONS

Elastomer Mounted Hub Coupling





IMPORTANT

For best possible performance and continuous, satisfactory operation, read these instructions before installing coupling.

Should service be required, this manual can be a valuable guide. It should be kept near the installation for ready reference.

Berkeley Pumps / 293 Wright Street / Delavan, WI 53115

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Installation

Elastomeric Coupling

WHY USE A TORSIONAL COUPLING?

Soft elastomeric couplings provide a means of dampening and isolating vibrations in the system. This reduces the possibility of damage occurring to pump and engine components.

SELECTION OF THE ELASTOMERIC COUPLING:

Before mounting the coupling, make sure that the proper coupling has been selected. The coupling selection chart may be found in *Berkeley Tech Data* (Type "B" Centrifugal Pumps, Close Coupled Pump Ends For Engines With SAE Flywheel Housings").

TO WHICH SAE ENGINE DRIVE UNITS DOES THE ELASTOMERIC COUPLING APPLY?

The elastomeric couplings are suitable for use on Berkeley units requiring a 10" or 11-1/2" clutch size (1-3/8 or 1-1/2" shaft). For units manufactured prior to May 1995, it may be necessary to reduce the overall shaft diameter .001 to .003 of an inch so that the shaft may accommodate the coupling. This can be accomplished by using a lathe, file or emery cloth.

MOUNTING THE ELASTOMERIC COUPLING:

STEP 1: PREFITTING THE COUPLING: The machined surfaces on the elastomeric coupling have very close tolerances. Burnishing the coupling and shaft splined surfaces will improve ease of mounting of the pump/coupling/engine assembly.

- a. Clean shaft and coupling surfaces thoroughly using a lubricating cleaning fluid.
 - **NOTE:** Couplings are shipped with a protective coating.
- b. Carefully aligning the coupling and shaft splines, start coupling on shaft.
- c. Slide coupling onto shaft.

- d. If necessary, use a 1/8" flat file or emery cloth to remove burrs that might prevent coupling from sliding freely onto shaft.
- e. Ensure coupling can move axially on shaft, without interference.
- f. Remove coupling from shaft.

STEP 2: PREPARATION FOR ASSEMBLY OF PUMP ON ENGINE:

- a. Clean face and register fit of flywheel housing and flywheel as necessary to remove rust or debris which would prevent proper mounting and alignment.
- b. Lubricate shaft spline sparingly with light grease.
- c. Slide coupling onto shaft until it has bottomed on the spline.

hub) of coupling faces pump bracket. Transposed mounting may result in damage to the pump and engine components. Refer to Figure 1.

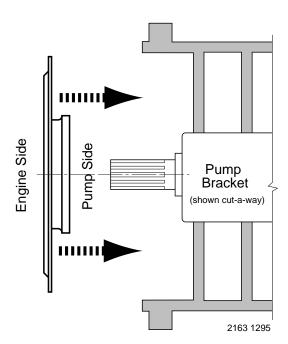


FIGURE 1

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Installation

Elastomeric Coupling

- d. Measure the distance from the engine side of elastomeric coupling plate to the mounting face of the pump bracket. Refer to Figure 2, below, Dimension "A".
- e. Measure depth from face of flywheel housing on engine, to face on flywheel against which coupling will be bolted. Refer to Figure 2, below, Dimension "B".

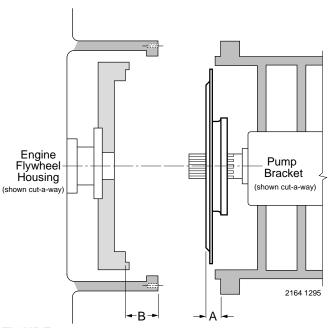


FIGURE 2

f. Pump measurement must be less than engine measurement (Dimension "A" must be less than Dimension "B"). Any axial interference will result in thrust force on engine crank shaft bearings.

STEP 3: INSTALLATION OF COUPLING ON FLYWHEEL:

- a. The elastomeric couplings are aligned concentrically with the flywheel by register fit on the flywheel. Fit the coupling into the flywheel. Align the bolt holes and engage coupling with register fit on flywheel. Tap coupling with a soft heavy hammer, if necessary, to ensure coupling is seated flat against flywheel. Secure coupling tightly to flywheel with capscrews provided in the hardware kit.
- b. Remove any grease or dirt from the elastomer components of the coupling.
- c. For flywheel housings other than overcenter type, please consult factory.

INSTALLATION OF PUMP ON ENGINE:

STEP 1: Lift pump with suitable lifting apparatus and align pump shaft with coupling. End of pump shaft has a pilot diameter which facilitates engagement of pump shaft into coupling.

STEP 2: Reach into pump suction opening and rotate impeller slightly to engage shaft and coupling splines. Verify that there is no gap between bracket and flywheel housing faces. Rotate pump as necessary to align bracket holes with engine. Install capscrews and bolt pump end securely to engine.

NOTE: If any interference, or incompatibility of parts is detected during installation **DO NOT** proceed with assembly. Please consult factory for assistance.

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Berkeley/Wicor Canada Company ("Wicor") warrants to the original consumer purchaser ("Purchaser") of its products that they are free from defects in material or workmanship.

If within twelve (12) months from the date of installation or twenty-four (24) months from the date of manufacture any such product shall prove to be defective, it shall be repaired or replaced at Berkeley's/Wicor's option, subject to the terms and conditions set forth below.

General Terms and Conditions

Purchaser must pay all labor and shipping charges necessary to replace product covered by this warranty. This warranty shall not apply to products which, in the sole judgement of Berkeley/Wicor, have been subject to negligence, abuse, accident, misapplication, tampering, alteration; nor due to improper installation, operation, maintenance or storage; nor to other than normal application, use or service, including but not limited to, operational failures caused by corrosion, rust or other foreign materials in the system, or operation at pressures in excess of recommended maximums.

Requests for service under this warranty shall be made by contacting the installing Berkeley/Wicor dealer as soon as possible after the discovery of any alleged defect. Berkeley/Wicor will subsequently take corrective action as promptly as reasonably possible. No requests for service under this warranty will be accepted if received more than 30 days after the term of the warranty.

The warranty on all three phase submersible motors is void if three-leg overload protection of recommended size is not used.

This warranty sets forth Berkeley's/Wicor's sole obligation and purchaser's exclusive remedy for defective products.

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