INSTALLATION AND MAINTENANCE

Installation of Mobile Clutches

Installation Procedure

1. This installation assumes the most common form of mounting, mounting to a pump bracket or direct mounting to a pump face. The pump can be hydraulic, water, a vacuum, or a compressor. These clutches consist of two major subassemblies: the field and the rotor/armature assembly.

2. Attach the field to the customer-supplied mounting bracket or pump face. Use the four ¼" cap screws supplied with the clutch. Tighten each screw to 8ft-lbs, taking care not to strip the heads. The flange should be perpendicular to the pump shaft within 0.003" TIR at a 6" diameter.

3. Install the customer-supplied key into the pump shaft key way.

4. Mount the rotor/armature assembly onto the shaft.

   A. Straight-bore type: First, establish the required clearance between the end of the armature hub and the face of the field mounting flange. Some models have these two aligned, in which case no clearance is required. Check the part drawing for the appropriate specification. A shaft step or a spacer will be required to set this proper clearance. Then, slide the rotor/armature assembly onto the pump shaft.

   B. Taper-bore or set-screw type: Slide the rotor/armature assembly onto the pump shaft, taking care to properly align both the shaft and hub key ways.

5. Secure the rotor/armature assembly.

   A. Center-bolt type: Install and securely tighten the center bolt and washer supplied with most models (recommended torque: 20~30ft-lbs).

   B. Set-screw type: The set screws can be accessed through openings in the field mounting flange. If there is no shaft step or spacer to position the hub, slide the rotor/armature assembly onto the shaft until it contacts the field. Then back off the assembly approximately 0.1" and tighten the set screws.

6. After installing the assembly, turn the pulley by hand to verify that there is no contact between the pulley and the field. If contact is noticed, reinstall the rotor/armature assembly or refer to the Noisy Clutch section of the Troubleshooting guide online.

7. Connect the lead wire(s) to the electric circuit. Check the lead wire polarity if the clutch coil has a diode (only possible on two-wire fields). All single-wire fields are grounded at the factory. If the field support is not properly grounded, it is a good practice to attach a wire from the ground terminal on the field to the equipment to provide a sure ground. Possible interference with proper grounding is a painted surface in the connection.

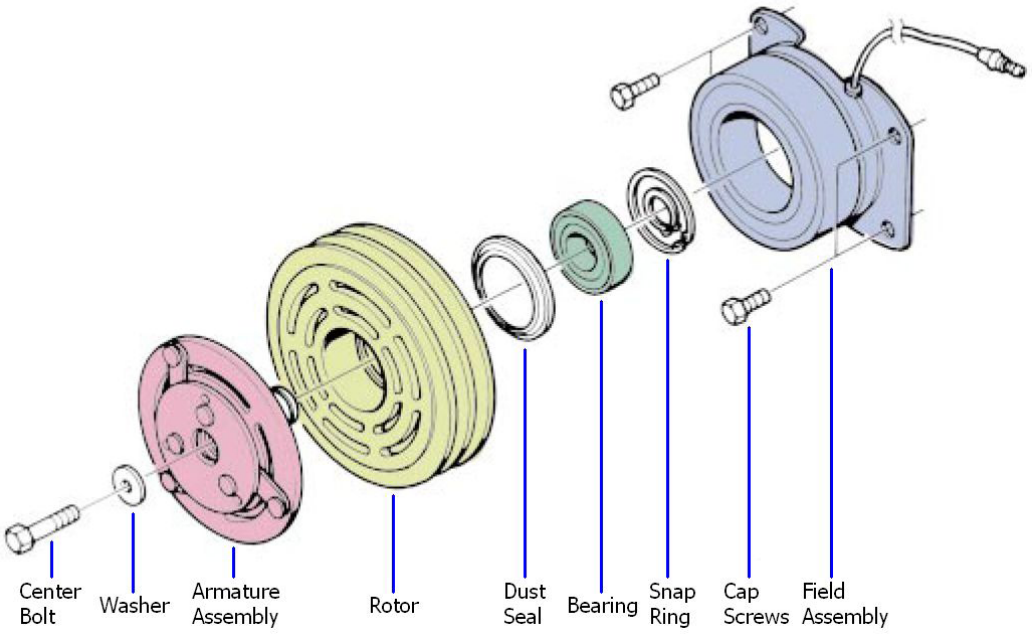
8. Engage and disengage the clutch several times to ensure it is functioning properly. If full torque is required immediately, the clutch should be burnished. This involves cycling the clutch at a reduced speed not more than 4 times per minute so the surfaces can mate together. In most applications, 20~50 cycles are required for burnishing.

Troubleshooting

For problems during installation or operation, please refer to the troubleshooting section on the website. If you still have questions, please contact us directly for assistance.

Contamination

Care should be taken so that contaminants such as oil, grease, etc. do not come in contact with the working faces of the unit. In some cases it may be necessary to provide a cover or baffle to prevent this. Oil and grease on the friction surfaces should be removed by wiping with a small amount of environmentally friendly grease solvent. However, depending on the permeability of the grease or oil, it may be impossible to remove completely, so if the unit shows signs of slippage it needs to be replaced.



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