Introduction

Carefully follow the instructions in this manual for optimum performance and trouble free service.

This manual applies to standard Floating Shaft type couplings. The Floating Shaft couplings are recommended for horizontal applications only. For vertical applications please consult with Lovejoy application Engineering.

The Floating Shaft type coupling is used for applications requiring distance between the shaft ends greater than standard. This function must be performed under NO LOAD, STATIC conditions.

Installation & Alignment Instructions

All parts must be clean and free of any foreign materials before attempting assembly, use a non-flammable solvent. All Parts should be examined for any damage during shipping and handling. Measurements should be taken to verify correctness of parts to meet application requirements, such as, hub and shaft fits, shaft separation, etc. Check hubs, shafts and keyways for burrs.

1) Install keys in respective shafts. Keys should fit shaft keyseat with a tight fit on the sides and slight clearance over the key. Coat the shafts with an anti-galling lubricant and use plastic oil sealing compound around keys to prevent loss of lubricant. Insure that seals and pipe plugs are in place in the gear sleeve. Lubricate around sleeve gear teeth and seal surface and place over respective shaft before mounting hubs. Protect shaft on which sleeve will rest during hub installation.

2) Determine the mounting arrangement of the proper mating hub and sleeve as illustrated in figure 1. Heat hubs in either an oil bath or oven until bores are larger than shaft diameter. Never apply an open flame to hub teeth. Mount so that the end of each hub is flush with the end of the shaft as illustrated in figure 1. Allow hubs to cool before proceeding.

3) Although the shafts may be perfectly aligned at installation they should be realigned after mounting of coupling. Position equipment in the approximate alignment with the approximate “G” dimension found on Chart 1. Align coupling using the instrument method as described below.

4) Angular Alignment – Using an inside micrometer, take readings at four points 90° apart. Adjust machines until all four readings are identical refer to figure 2. The difference in maximum and minimum measurements must not exceed the installation angular limits specified in chart 1.

5) Parallel Offset Alignment – Set the drive most difficult to move to true level and bolt it in place. Set the floating shaft on V-blocks. Position floating shaft...
for the correct “G” dimension. Using the dial indicator
method for this procedure. Attach the dial indicator
base to one hub and set the dial indicator needle in
contact with the outside diameter of opposite hub.
Rotate hub on which the indicator is mounted 360°,
taking indicator readings at four points 90° apart.
Adjust machines until all four readings are identical
refer to figure 3. The difference in maximum and
minimum measurements must not exceed the
installation-offset limits specified in chart 1. Tighten
all foundation bolts and repeat step 4 and 5. Realign
coupling if necessary.

6) Position Second drive for the correct “G” dimension
and align per step 4 and 5. DO NOT move the floating
shaft. Bolt drive in place and recheck alignment and
“G” dimension. Realign if necessary.

7) Coat hub teeth and body as well as inside of sleeve
with coupling grease. Slide each sleeve onto its
respective hub, making sure that the gear teeth mesh
properly. Apply light sots of oil to one side of the
gasket. Install gasket between the sleeve flanges,
align the bolt holes and press the side with oil against
flange. Move sleeves together, with lube plugs 90°
apart. Install bolts and locknuts, tightening alternately
and evenly to recommended torque in chart 1.
Remove the two lube plugs in each sleeve and fill
coupling with the recommended amount of coupling
grease indicated in Chart 1. Replace lube plugs and
tighten securely.

Maintenance
Following an initial break-in period of about 3 million
revolutions (80 hr. @ 600 rpm) it is recommended that
the coupling be completely flushed and relubricated.
Thereafter, a regular relubrication schedule should be
maintained. If coupling leaks grease, is exposed to
extreme temperatures, excessive moisture or frequent
reversals, frequent lubrication may be required. For
average industrial operating conditions, relubrication
every 12 months should suffice with periodic visual
inspections to insure that neither the quality nor the
supply (due to leakage) of the lubricate has
deteriorated to an unacceptable level.

During relubrication cycle or at least yearly, whichever
comes first, the coupling should be disassembled and
thoroughly cleaned of all grease. Remove and visually
inspect all parts; gear teeth for signs of abnormal
stress and wear, the seals and gaskets for any cracks
or breaks.

Any parts showing signs of wear or damage should be
replaced. These parts are available for purchase by
referencing the coupling UPC number, size, type and
bolting style. Hub and sleeve should be replaced as
half coupling whenever possible.

Check alignment per steps 4 and 5. If maximum
operating misalignment values are exceeded, realign
the coupling to the recommended installation values
found in chart 1.

Lubrication
Adequate lubrication is essential for satisfactory
operation. Lovejoy Coupling Grease is specially
formulated for coupling applications to increase
coupling life while drastically reducing maintenance
cycle time. And it” in complete compliance with AGMA
9001 lubrication recommendations.

Unlike a bearing or general-purpose grease, coupling
grease must withstand the centrifugal forces generated
by a spinning coupling. Lovejoy Coupling Grease is
designed to resist centrifugal separation, which allows
the lubricant to be used for relatively long periods of
time.

Other benefits of this product includes; highest
pressure and wear protection available, built-in rust
and corrosion inhibitors, increased coupling life,
reduced maintenance costs, reduced downtime and
superior lubrication.

One of the secrets to the success of Lovejoy Coupling
Grease is the variable consistency throughout the
working cycle of the application. The consistency of
our grease changes with the operating conditions.
Working of the lubricant under actual service
conditions causes the grease to become semi-fluid,
functionally splash lubricating the wear surfaces of the
coupling. As the grease cools, it returns to the original
consistency, thereby preventing leakage.
<table>
<thead>
<tr>
<th>Item</th>
<th>1 Rigid Hub</th>
<th>2 Flex Hub</th>
<th>3 Sleeve</th>
<th>4 Shaft</th>
<th>5 Key Stock</th>
<th>Accessory Kit</th>
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<tbody>
<tr>
<td>FIGURE 1</td>
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<th>F5.5</th>
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<td>10.5 oz</td>
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