

Rotary Joint Installation Manual

Proper mounting, connection, and maintenance guidelines for Begapunk rotary joints and rotary unions. Follow these steps to ensure long, leak-free operation.

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1. Connections

Step-by-step connection procedure for Begapunk rotary joints.

1.1 Use flexible connections

Begapunk rotary joints **must always** be installed using flexible hose connections. To avoid damage to the bearings, the union needs to find its center during operation. **Never hard-pipe** either the shaft or the housing.

1.2 Pre-assemble in a vise

Hold the housing of the union in a vise and install the flexible connection before mounting the union to the machine. This prevents twisting during installation.

1.3 Clean and seal threads

Clean female threads and the face of the shaft prior to installation. Use PTFE (Teflon) pipe tape or pipe sealant on NPT threads. NPT threads should be hand-tight plus 1–3 turns to seal. For parallel threads, use appropriate gaskets or O-rings.

1.4 Allow free movement

There should be a slight, kink-free curve in the hose when installed. It is essential that the housing or shaft is allowed to float to compensate for any eccentricity or misalignment.

Important: Hard-piping either side will transfer machine vibration and misalignment directly to the bearings and seals, causing premature failure.

2. Anti-Rotation

Preventing stator rotation while allowing self-centering.

In many applications, the flexible hose connections themselves provide sufficient anti-rotation. For other installations, an external anti-rotation device is required — such as a fork around the fittings, pin, yoke, or bracket.

Anti-rotation devices must "float." They should prevent rotation of the stationary side but must not rigidly lock the union in place. The device must allow the union to self-center during operation.

Warning: A rigid anti-rotation setup that prevents the union from floating will cause seal wear and leakage within weeks.

3. Filtration

Protecting seals and shaft faces from contamination.

To prevent scoring damage to the shaft and seal faces, Begapunk requires fluid filtration to:

- **25 microns or finer** — for general applications
- **10 microns or finer** — for high-speed or precision unions

Contaminants larger than the seal gap will embed in the seal material and grind grooves into the shaft face. This damage is irreversible and will cause progressive leakage.

Warranty Note: Failure to provide adequate filtration may void your warranty and cause premature failure.

4. Lubrication

Grease fitting maintenance for bearing-equipped rotary joints.

If your Begapunk rotary joint is equipped with grease fittings (typically on the bearing housing):

- Use lithium-based grease rated for the operating temperature of your application.
- Lubricate with **no more than two pumps** of grease per fitting during routine maintenance.
- Over-greasing can force grease past the seals and contaminate the fluid path.
- Refer to your product data sheet for the recommended lubrication interval (typically every 3–6 months for continuous-duty applications).

5. Startup Checklist

Verify these items before first operation.

- 1 Verify all connections are tight but not over-torqued.
- 2 Confirm hoses have a gentle curve — no tension or kinks.
- 3 Check that the anti-rotation device allows free float.
- 4 Verify filtration system is active and filter is clean.
- 5 Start at low speed and pressure, then gradually ramp to operating conditions.
- 6 Inspect for leaks during the first 30 minutes of operation.

6. Maintenance Schedule

Recommended inspection and service intervals.

Interval	Tasks
Monthly	Visual inspection for leaks, hose condition, and anti-rotation clearance.
Quarterly	Grease bearings (if fitted), check filter pressure differential, inspect seal faces for wear.
Annually	Replace seals if leakage exceeds acceptable limits. Contact Begapunk for OEM seal kits.

Need a seal kit or have questions? Contact our support team with your product serial number.