

FLEX-TEND® Flexible Expansion Joints Maintenance and Repair

CAUTION! For the safety of the operator and to prevent damage to FLEX-TEND be sure the line pressure has been released.

FLEX-TENDS in general do not require periodic maintenance due to the FLEX-TEND'S design, as mentioned in the brochure. EBAA Iron, Inc. recommends that if any maintenance or repair is required, that it should be sent back to the manufacturer for refurbishment. If field refurbishment is necessary the following steps below should be taken.

Removal

Removal is basically the reverse of installation.

1. Remove the polyethylene sleeve to expose the bolts.
2. Properly block or suspend the unit to prevent injury.
3. Loosen and remove all of the bolts at the end connection leaving the bolts over the ball and those on the stop collar tight.
4. Remove the FLEX-TEND.

Disassembly

1. Remove the stop collar bolts and the stop collar.
2. Pull the expansion joint apart.
3. Remove the bolts over the ball joint then remove the gland and dirt shield.
4. Separate the socket from the ball unit.
5. Remove both the ball and expansion gasket(s) and discard.

Inspection

1. Carefully clean all surfaces to facilitate inspection.
2. Closely inspect all fusion bonded epoxy surfaces on both the lining and the gasket sealing areas clearly marking minor defects and chipped areas for later repair.
3. Inspect the exterior surfaces for damaged coating.
4. Inspect the gasket seating areas of both the ball and the expansion joint for rough surfaces, chipped coating, or foreign matter.

Repair and Replacement

Repair that may be considered minor may be completed in the field using the following recommendation and practices of good workmanship. Any major repair would be best performed at the factory. In either case feel free to contact EBAA with any question using the toll free phone number listed in this document.

1. Interior coating damage such as chips or pinholes may be repaired using a liquid epoxy coating compatible with the fusion bonded surface and applied in accordance with the manufacturer's recommendation. Contact EBAA for a recommendation on the proper repair coating.

2. Exterior coating damage may be repaired using coal tar epoxy coating such as Koppers 300M applied in accordance with the manufacturer's recommendations.
3. All gaskets should be replaced. Contact EBAA for these gaskets.

Reassembly

1. Thoroughly clean and lubricate both the ball and socket using a lubricant such as Dow Corning 111 Valve lubricant. If the unit is to contact potable water the lubricant must meet NSF 61 or FDA requirements.
2. Insert the ball unit into the socket being careful not to chip the coating.
3. Insert a new and lubricated ball gasket into the gasket cavity. Install the gland over the gasket and insert the bolts to a hand tightness.
4. Tighten the bolts in an alternate manner to 90 ft. lbs. being careful not to pinch the gasket reaching the final torque in several passes.
5. Slide the dirt shield into place and pull up over the gland.
6. Install the expansion gasket and lubricate gasket.
7. Lubricate the spigot end and insert into the bell pushing the joint together using a prybar or press as necessary.
8. Set the expansion joint to the desired length of expansion and contraction.
(Default Manufacturer's Values: 75% expansion, 25% Contraction)
9. Install the stop collar and tighten the bolts to 90 ft. lbs.