

# “RJ” Gland Pack Slip Type Expansion Joint



## RECOMMENDED OPERATING INSTRUCTIONS

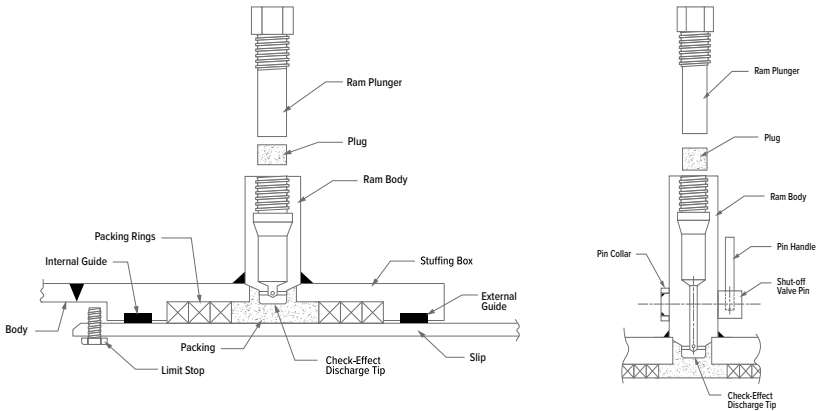


Figure 1

**\*\* Note that the Ram with Shut-Off Valve is Now Standard on All Models \*\***

**\*\* Older Models without Shut Off: Contact Factory \*\***

**A. Packing Adjustment** – When the expansion joints are packed at the factory, the packing is pressed into the stuffing box under cold conditions. Most packings will compress further when exposed to heat. Therefore, it is imperative, if there is any leakage, that additional semi-plastic plugs be injected uniformly through all rams if any leaks occur after the joints are put into service.

Do not overpack.

1) **Ram-Pak Injection (Ram w/Shut-Off Valve)** – The packing Ram Valve is “open” when the valve handle is parallel with the Ram body. Before injecting packing, make sure that the Ram Valve is closed, handle 90° to the Ram body. Next, remove the Ram plunger and insert a plug of semi-plastic packing, then screw the Ram plunger into the body until it is snug on the packing plug. Finally, open the Ram Valve and screw the Ram plunger all the way down to inject the plug, and then close the Ram Valve. The procedure may be repeated as required, and it is suggested to lubricate the Ram threads with an Anti-Seize compound.

**B. Packing Removal** – The “RJ” expansion joint is designed to last for years of service without packing removal or replacement. It is recommended that joint be returned to ADSCO for reconditioning.

### C. Preventative Maintenance

1) **Leak Detection** – After initial installation, the joint should be inspected regularly based on service conditions, Number of heat-up cycles, and experience. It is very important that any leakage through the packing be stopped immediately. If the leak is permitted to continue, it may cut channels through both the packing and the slip, requiring not only new packing, but also a new slip.

- 2) **Inspection** – Alignment guides, pipe supports, anchors, and the joint itself should be inspected yearly for proper operations. It is recommended that the expansion joint be inspected during the shutdown and the start-up cycle at this time.
- 3) **Slip Maintenance** – The slip has a hard, corrosion-resistant, highly-polished surface which slides and keeps friction at a minimum through the packing. To extend the life of the packing, the slip should be cleaned periodically. Remove any residue, dirt, build-up, etc., from the exposed slip surface using a putty knife, steel wool, or crocus cloth. Care must be used not to scratch or score the slip. The frequency of cleaning will depend on the environment.

**D. Service Conditions** – The ADSCO expansion joint has been designed for the specific service conditions listed on the purchase order. Changes in pressures, temperatures, material conveyed via the piping etc., can change the optimum packing or joint design from that furnished. Any of the above changes, unless notified and approved by ADSCO would void the warranty.

## RECOMMENDED INSTALLATION SPECIFICATIONS

### INTRODUCTION

The slip type expansion joint is designed to accommodate only axial movement, no lateral movement is allowed. Rigid adherence to installation and alignment specifications must, therefore, be maintained. Misalignment due to improper installation or anchor and/or guide failure can result in joint leakage from uneven packing wear, slip damage, or slip binding. Proper attention paid to installation and operating procedures will assure long, trouble-free joint life.

**A. RECOMMENDED INSTALLATION** – The best procedure for installing an expansion joint is to first install the pipe, pipe supports, hangers, and guides between two main anchors. Then cut the opening for the joint. The following procedure incorporates these steps:

- 1) Protect the slip surface during handling and installation. A smooth slip is essential to prevent leakage and reduce wear on the packing.
- 2) Every expansion joint installation should provide ample working room and access to the packing glands and rams.
- 3) (a) All expansion joints are shipped from the factory in the fully open position, for compression only, unless otherwise specified on the order. It is assumed they will be installed at ambient temperature, approximately 70°F.  
  
(b) If the pipe is likely to be exposed to colder temperatures than prevail at the time the joint is installed, the slip should be extended to allow the maximum contraction which may occur. Otherwise, all the fittings and anchors may be subjected to excessive strain.
- 4) Install or check pipe, anchors, guides, roller supports, slide supports, spring supports, on the piping system completely. Make sure they are in proper running order and have been bolted/welded completely.
- 5) For new installations, cut opening for expansion joint.
- 6) Securely align, level (shim, grout, etc.) and fasten down anchor base expansion joints by welding/bolting. Do not weld/bolt piping to the slip ends at this time.
- 7) Align and weld/bolt the piping to the body end of the single anchor base joints.
- 8) Adjust as necessary the anchors, guides, and pipe supports/slides on the slip side of the expansion joint to align the piping. The slip outer surfaces or, on flanged joints, the outside surfaces of the flanges, must be within 3/32" of each other. Measured on two axis 90° apart.



- 9) Joints without bases should be installed using the same procedure as (4) and (5) above; that is, welding the body end, then the slip end after aligning piping. Care must be taken with these joints to orient drip, vent, or service connections on the vertical or horizontal axis as designed.
- 10) Any field piping changes, anchor modifications, etc., should be thoroughly considered as the change may require re-engineering. This will ensure proper guiding, anchoring, and support and expansion/contraction for the expansion joint.

## **WARRANTY**

### **WARRANTY TERMS**

ADSCO Packed Expansion Joints are sold subject to the mutual agreement that they are warranted by ADSCO Manufacturing Corporation to be free from defects in material and workmanship, but ADSCO's liability and the buyer's exclusive remedy shall be limited to replacement or repair without charge, at ADSCO's factory, of any material defects which become apparent within five years of the date of shipment, and which shall be determined to be defective by ADSCO upon their return to the factory, or at ADSCO's option to a refund of the purchase price; and that ADSCO shall have no liability for damages of any kind, direct or indirect, arising from an installation and/or use of any material, and by accepting the material the buyer will assume all liability for any damages, direct or consequential, which may result from its use or misuse.

### **FIVE YEAR SERVICE GUARANTEE**

In addition, ADSCO guarantees the satisfactory performance of ADSCO Packed Expansion Joints for a period of five years from the date of shipment, provided, only, that the Expansion Joints are installed, operated, and serviced in accordance with ADSCO's prescribed standards. ADSCO will either replace or repair, without charge, at ADSCO's factory, any Packed Expansion Joint which fails to give five year's service under the above conditions.

### **FIVE YEAR LEAK-FREE GUARANTEE**

In addition, ADSCO guarantees the satisfactory leak-free performance of ADSCO Packed Expansion Joints for a period of five years from the date of shipment, provided, only, that the Expansion Joints are installed, operated, and maintained in accordance with ADSCO's prescribed standards. ADSCO will furnish replacement packing at no extra charge within a period of five years from date of shipment.

# **ADSCO**

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