



# INSTRUCTIONS

## **CORK-NEOPRENE GASKETS P.D.S. NO. 7249-9**

### **For "URS" Tap Changers and "URS" Regulators**

The gaskets used for sealing the various openings and flanges of the "URS" Tap Changers and "URS" Regulators are made of Cork-Neoprene composition.

In use, cork-neoprene gaskets retain their resilient properties indefinitely when compressed to approximately three-fourths their original thickness.

Gasket stops are not used on the "URS" Tap Changers and "URS" Regulators, since cork-neoprene will not creep if reasonable care is exercised when the gaskets are installed.

*Note: It is very important that all openings in the tap changer and regulator case be tightly closed before putting a unit into operation. This is necessary whether the unit is for indoor or outdoor operation. For all liquid filled tap changers and regulators, the bushing flanges, main cover, manhole covers, etc., must be oil and gas tight.*

### **GASKET INSTALLATION**

Metal surfaces must be thoroughly cleaned of old paint, varnish, gasket cement, scale, etc. The gasket material should be cut into strips of the proper width to conform to the contour of the parts to be joined together. Where it is necessary to use spliced pieces, the end should be scarfed permitting an overlap of four times the thickness of the gasket, maintaining full thickness along the lap. Manhole, handhole and small cover plate gaskets may be used repeatedly if cemented only on one side and if care is used when cover is removed.

Inspect before resealing to make certain that the gasket has not cracked or peeled.

For other sealed joints, it is recommended that both surfaces of gasket and metal be coated with cement. Apply a liberal coating of gasket cement M-7386-1, Style No. 4718 80-E (1 quart can) or Style No. 1150 419 (1 pint can,) and allow it to dry one hour before putting the gasket in place. Lapped joints must be thoroughly coated with cement. When the parts are put together, make certain that the gasket is properly located and remains in place.

Tighten enough bolts spaced opposite each other to securely clamp the gasket in place. Proceed to gradually tighten the bolts by going from one bolt to another bolt on the opposite side until all bolts have been tightened with approximately the same amount of torque. Do not completely tighten any bolt before tightening the others. Tighten bolts uniformly.

### **LEAKAGE TESTS**

The best protection against leakage, after a unit has been opened, is to use a new gasket properly cemented to thoroughly cleaned surfaces.

Liquid filled unit tanks, the nameplates of which indicate that they are good for filling under a complete vacuum, may be tested in the field with an internal pressure of ten pounds per square inch above the atmosphere. All other tanks may be tested in the field at a pressure of five pounds per square inch.

The tap changer compartment must have the pressure relief valve removed and the tank connection capped before testing.

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# INSTRUCTIONS

## **CORK-NEOPRENE GASKETS P.D.S. NO. 7249-11**

### **For "URS" and "URT" Tap Changers and Regulators**

The gaskets used for sealing the various openings and flanges of the "URS" and "URT" Tap Changers and Regulators are made of Cork-Neoprene composition.

In use, cork-neoprene gaskets retain their resilient properties indefinitely when compressed to approximately three-fourths their original thickness.

Gasket stops are not used on the "URS" and "URT" Tap Changers and Regulators, since cork-neoprene will not creep if reasonable care is exercised when the gaskets are installed.

*Note: It is very important that all openings in the tap changer and regulator case be tightly closed before putting a unit into operation. This is necessary whether the unit is for indoor or outdoor operation. For all liquid filled tap changers and regulators, the bushing flanges, main cover, manhole covers, etc., must be oil and gas tight.*

### **GASKET INSTALLATION**

Metal surfaces must be thoroughly cleaned of old paint, varnish, gasket cement, scale, etc. The gasket material should be cut into strips of the proper width to conform to the contour of the parts to be joined together. Where it is necessary to use spliced pieces, the end should be scarfed permitting an overlap of four times the thickness of the gasket, maintaining full thickness along the lap. Manhole, handhole and small cover plate gaskets may be used repeatedly if cemented only on one side and if care is used when cover is removed.

Inspect before resealing to make certain that the gasket has not cracked or peeled.

For other sealed joints, it is recommended that both surfaces of gasket and metal be coated with cement. Apply a liberal coating of gasket cement M-7386-1, Style No. 4718 80-E (1 quart can) or Style No. 1150 419 (1 pint can,) and allow it to dry one hour before putting the gasket in place. Lapped joints must be thoroughly coated with cement. When the parts are put together, make certain that the gasket is properly located and remains in place.

Tighten enough bolts spaced opposite each other to securely clamp the gasket in place. Proceed to gradually tighten the bolts by going from one bolt to another bolt on the opposite side until all bolts have been tightened with approximately the same amount of torque. Do not completely tighten any bolt before tightening the others. Tighten bolts uniformly.

### **LEAKAGE TESTS**

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Liquid filled unit tanks, the nameplates of which indicate that they are good for filling under a complete vacuum, may be tested in the field with an internal pressure of ten pounds per square inch above the atmosphere. All other tanks may be tested in the field at a pressure of five pounds per square inch.

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*Note: It is very important that all openings in the tap changer and regulator case be tightly closed before putting a unit into operation. This is necessary whether the unit is for indoor or outdoor operation. For all liquid filled tap changers and regulators, the bushing flanges, main cover, manhole covers, etc., must be oil and gas tight.*

### GASKET INSTALLATION

**A. Preparing Metal Surfaces.** Before applying a gasket to any metal surface care must be taken to assure that the mating surfaces are free of ice, dew condensation, oil, grease, rust or dirt by wiping dry. This can be done by using clean rags or any other method that will assure a dry surface. Thin uniform films of primer paint or gasket cement need not be removed. If the gasket is cut in the field, cut the gasket to conform to the surfaces to be sealed. If the gasket is not a one-piece gasket, scarf the ends of the gasket so that the length of the overlap will be equal to four times the thickness of the gasket material. The mitering should be done with a fine toothed saw and a miter box to assure a clean uniform cut and to obtain full gasket thickness at the lap joint.

**B. Application of Permanent Gaskets when temperatures are above freezing.** It is recommended that both sides of the gasket be cemented to the gasket surfaces. Apply cement as follows:

‡ 8440-4 Cement

1. Apply cement to both gasket and joint surfaces and let dry at least ten minutes but not more than 60 minutes.
2. Assemble gasket and press firmly into place.
3. Coat other side as per (1).
4. Assemble joint.

**Application of Permanent Gaskets when temperatures are below freezing.** To keep the gasket from getting too hard and to keep the cement fluid, the gaskets and cement should be kept at a minimum temperature of 35°F up to the time of actual application of cement and compression of gaskets. This will mean that the cement and gaskets will usually have to be kept warmer than this in freezing weather. It will not be necessary to coat the gasket groove with ‡ 8440-4 cement providing the gasket is assembled with the mating parts before the cement is completely set-up. By following these instructions you can be sure that the gasket will not be too hard to compress properly and the cement will adhere to the metal surfaces assuring an oil-tight seal.

**C. Inspection Opening Gaskets.** Gaskets for inspection openings may be sealed on one side only to permit the removal of the inspection cover without destroying the gasket. It is recommended that the gasket be sealed to the stationary member of large openings and to the cover of small openings and load tap changer oil compartment doors. The gasket is sealed to one member by applying a uniform coating of gasket cement PDS‡ 8440-4, S‡ 1608171A to one side of the gasket and to the surface to which the gasket is cemented. It is suggested that the surface of the gasket not cemented be coated with silicone lubricant M-5861-4 S‡ 228A253H01, to prevent the vulcanizing of the gasket material to the steel plate. This will permit the removal of the cover without destroying the gasket.

For cemented surface follow cementing instructions above.

Prior to replacing a cover of an inspection opening, the gasket should be examined to make certain

## CORK-NEOPRENE GASKETS

that it has not been damaged and that it has sufficient thickness to reseal the joint.

**D. Cementing Both Surfaces.** For other sealed joints, it is recommended that both surfaces of gasket and metal be coated with cement. Apply a liberal coating of gasket cement PDS#8440-4 S#1608171-A and allow it to dry one hour before putting the gasket in place. Lapped joints must be thoroughly coated with cement. When the parts are put together, make certain that the gasket is properly located and remains in place.

Tighten enough bolts spaced opposite each other to securely clamp the gasket in place. Proceed to gradually tighten the bolts by going from one bolt to another bolt on the opposite side until all bolts have been tightened with approximately the same amount of torque. Do not completely tighten any

bolt before tightening the others. Tighten bolts uniformly.

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