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Flange Spreader
Parts and Operating Manual
General Information

The Flange Spreader is used to efficiently separate 150 – 300 pound flanges for the replacement of the flange gasket or the application of new sealant on the flange face. The Spreader, which attaches to the flange mounting hole, spreads the flange faces without the risk of damage to the flange sealing surfaces. The wedge action of the Flange Spreader spreads the gap between flanges up to 1 1/4" (31.8mm) with 100 ft-pounds of torque applied to the Manual Flange Spreader and yields up to 12,000 lbs. of spreading force.

Hydraulic Kits (D104-KIT) are required for the operation of the D101, D102 and D103 Hydraulic Flange Spreaders.

**D100**

The Manual Flange spreader is designed for use on 2” to 12” (51 – 305mm) 300-pound flanges. The hex nut at the top of the flange spreader requires a 1 1/4" wrench or socket. The dimensions of the Flange Spreader are:

A. Overall height – 10 ½ inches (267)
B. Width – 8 7/8 inches (225)
C. Maximum width between pins – 3 9/16 inches (90mm)
D. Height between the top of the pin and the bottom of the cross bar – 1 3/32 inches (28mm)

**D101**

The D101 Hydraulic Flange Spreader is designed for use on 12” to 24” (305 – 610mm) 150 & 300-pound flanges. The dimensions of the Flange Spreader are:

A. Overall height – 14 ½” (369mm)
B. Width – 2 ½” (64mm)
C. Maximum width between pins – 9 ½” (241mm)
D. Height between the top of the pin and the bottom of the cross bar – 1 ½” (38mm)

**D102**

The D102 Hydraulic Flange Spreader is designed for use on 26” to 36” (660 – 914mm) 150 & 300-pound flanges. The dimensions of the Flange Spreader are:

A. Overall height – 14 ½” (369mm)
B. Width – 2 5/8” (66.7mm)
C. Maximum width between pins – 13” (330mm)
D. Height between the top of the pin and the bottom of the cross bar – 1 ½” (38mm)
**D103**

The D103 Hydraulic Flange Spreader is designed for use on 2” to 12” (51 – 305mm) 150 & 300-pound flanges. The dimensions of the Flange Spreader are:

A. Overall height – 13” (330mm)
B. Width – 2 ½” (64mm)
C. Maximum width between pins – 8 ½” (215mm)
D. Height between the top of the pin and the bottom of the cross bar – 1 3/8” (35mm)

**D104-KIT**

A Hydraulic Hand Pump with reservoir hoses and quick disconnect, such as the Enerpac model 82C-OHP (maximum output of 10,000 psi (689 bar) or equal, can be used to actuate the Hydraulic Flange Spreader.

**Operation**

Two (2) Flange Spreaders and Hand Pumps with Reservoirs are required for spreading the flange to avoid damage to the flange sealing face.

**A - 1st Flange Spreader**

1. Center the wedge of Flange Spreader over the space between the two flanges.
2. Center the stud of the Holder Ears in the flange hole and push the Holder Ears in the direction of the arrows shown in the picture.
3. Apply hydraulic pressure or tighten the nut at the top of Flange Spreader so that it is held in position on the flange.

**B - 2nd Flange Spreader**

1. Center the wedge of the second Flange Spreader over the space between the two Flanges on the opposite side of the first Flange Spreader.
2. Center the stud of the Holder Ears in the flange hole and push the Holder Ears in the direction of the arrows shown in the picture.
3. Apply hydraulic pressure or tighten the nut at the top of Flange Spreader so that it held in position on the flange.
C – Spreading the Flange Faces

Once the above operation has been completed, apply pressure to each Flange Spreader equally to avoid damage to the flange sealing face.

Maintenance

The Flange spreader should be cleaned and inspected after each use in case of any damage, such as cracks, to the flange spreader. An Enerpac Model RC-53 hydraulic cylinder or equal can be used, if the hydraulic cylinder of the Hydraulic Flange Spreader requires replacement.
Warranty

For warranty details see Mathey Dearman's website at www.mathey.com