## Installation & Assembly - Fig. 7001 Standard Coupling

The instructions are based on pipe grooved in accordance with Gruvlok® grooving specifications. Check pipe ends for proper groove dimensions and to assure that the pipe ends are free of indentations and projections which would prevent proper sealing.

ALWAYS USE A GRUVLOK® LUBRICANT FOR PROPER COUPLING ASSEMBLY. Thorough lubrication of the external surface of the gasket is essential to prevent pinching and possible damage to the gasket. For temperatures above 150°F use Gruvlok Xtreme™ Lubricant and lubricate all gasket surfaces, internal and external. See Gruvlok Lubricants in the Technical Data section of the Gruvlok catalog for additional important information.



Check & lubricate gasket Check gasket to be sure it is compatible for the intended service. Apply a thin coating of Gruvlok lubricant to outside and sealing lips of the gasket. Be careful that foreign particles do not adhere to lubricated surfaces.



**Gasket Installation** Slip the gasket over the pipe end making sure the gasket lip does not overhang the pipe end.

On couplings 10" and larger it may be easier to turn the gasket inside out-then lubricate and slide the gasket over the pipe end as shown.





After aligning the two pipe ends, pull the gasket into position centering it between the grooves on each pipe. Gasket should not extend into the groove on either pipe.

On couplings 10" and larger, flip or roll the gasket into centered position.





Housings Place the coupling housing halves over the gasket making sure the housing keys engage the grooves. Insert bolts and turn nuts finger tight.



**Tighten Nuts** Tighten Nuts
Tighten the nuts alternately and equally to the specified bolt torque. The housing bolt pads must make metal-to-metal contact. CAUTION: Uneven tightening may cause the gasket to pinch.



Assembly is completed 6 Assembly is compared to assure the coupling keys are fully engaged in the pipe grooves and the bolt pads are in firm even metal-to-metal contact on both sides of the coupling.

Bolt

mm

M10

M12

M16

M20

M22

M24

Note: The housings for sizes 16" and larger are cast in four or more segments.

To install: loosely pre-assemble the segments into two "Housing Halves" making sure that the alignment tang(s) and slot(s) on the bolt pad(s) are properly mated. Install the "Housing Halves" as shown in steps 4 & 5. The coupling is properly installed when all bolt pads are firmly together - Metal-to-Metal.

## **Specified Bolt Torque**

Specified bolt torque is for the oval neck track bolts used on Gruvlok® couplings and flanges. The nuts must be tightened alternately and evenly until fully tightened. Caution: Use of an impact wrench is not recommended because the torque output can vary significantly due to many variables including air pressure supply, battery strength and operational variations.

Caution: Proper torquing of coupling bolts is required to obtain specified performance. Over torquing the bolts may result in damage to the bolt and/or casting which could result in pipe joint separation. Under torquing the bolts may result in lower pressure retention capabilities, lower bend load capabilities, joint leakage and pipe joint separation. Pipe joint separation may result in significant property damage and serious injury.

ANSI Specified Bolt Torque		
Bolt Size	Wrench Size	Specified Bolt Torque *
In.	In.	FtLbs
3/8	11/16	30-45
1/2	7/8	80-100
5/8	11/16	100-130
3/4	11/4	130-180
7/8	<b>1</b> <sup>7</sup> ⁄₁6	180-220
1	1%	200-250
11//8	<b>1</b> 13/16	225-275
11/4	2	250-300

METRIC SPECIFIED BOLT TORQUE

Wrench

16

22

24

30

34

Specified

Bolt Torque\*

N-M

40-60

110-150

135-175

175-245

245-300

270-340

<sup>\*</sup> Non-lubricated bolt torques