

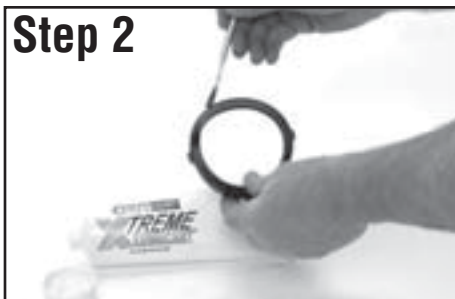
ALWAYS USE A GRUVLOK® SPF/ANVIL™ LUBRICANT FOR PROPER COUPLING ASSEMBLY. Thorough lubrication of the gasket is essential to assist the gasket into the proper sealing position.

## 1 Pipe preparation

Cut the appropriate size hole in the pipe and remove any burrs. Be sure to remove the slug from inside the pipe. Clean the gasket sealing surface within  $\frac{5}{8}$ " (16mm) of the hole and visually inspect the sealing surface for defects that may prevent proper sealing of the gasket.

BRANCH SIZE	HOLE SAW SIZE
Inches (mm)	Inches + $\frac{1}{8}$ , -0 (mm +3, -0)
1 25	1½ 38
1¼, 1½ (for a 2" run) 32, 40 (for a 20mm run)	1¾ 44
1¼, 1½ (for a 2½" - 6" run) 32, 40 (for a 20mm run)	2 51
2 50	2½ 64
2½ 65	2¾ 70
3 OD 76.1	2¾ 70

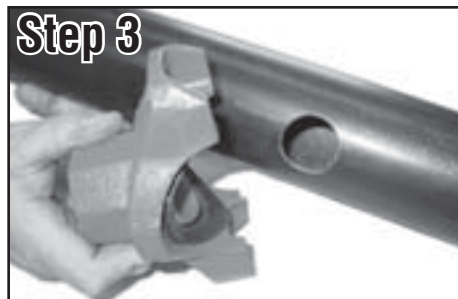
## Step 2



## 2 Check and lubricate gasket

Check the gasket to be sure it is compatible for the intended service. Apply a thin layer of Gruvlok SPF/Anvil lubricant to the back surface of the gasket. Be careful that foreign particles do not adhere to the lubricated surfaces. Insert the gasket back into the outlet housing making sure the tabs in the gasket line up with the tab recesses in the housing.

## Step 3



## 3 Gasket installation

Lubricate the exposed surface of the gasket. Align the outlet housing over the pipe hole making sure that the locating collar is in the pipe hole.

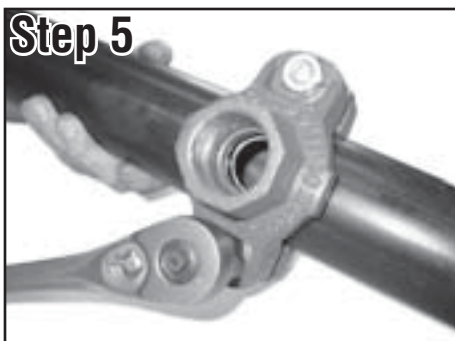
## Step 4



## 4 Alignment

Align the strap around the pipe, insert the bolts and tighten the nuts finger tight.

## Step 5



## 5 Tighten nuts

Alternately and evenly tighten the nuts to the specified bolt torque.

## Step 6



## 6 Assembly is complete

## Specified Bolt Torque

Specified bolt torque is for the oval neck track bolts used on the Threaded Mechanical Branches. 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.	Ft.-Lbs
$\frac{3}{8}$	1 $\frac{1}{16}$	30-45
$\frac{1}{2}$	$\frac{7}{8}$	80-100
$\frac{5}{8}$	1 $\frac{1}{16}$	100-130
$\frac{3}{4}$	1 $\frac{1}{4}$	130-180

\* Non-lubricated bolt torque

Metric Specified Bolt Torque		
Bolt Size	Wrench Size	Specified Bolt Torque*
mm	mm	N-M
M10	16	40-60
M12	22	110-150
M16	24	135-175
M20	30	175-245

\* Non-lubricated bolt torque