INSTALLATION INSTRUCTIONS

"T3" Wide Range Universal Tapping Saddle

US Patent 9,970,584

4 Inch through 48 Inch Pipe Diameters

Step 1. Prepare pipe surface by thoroughly cleaning surface of all rust, dirt, scale, and debris. Verify that the tapping saddle is the proper diameter range for the main pipe on which it is to be installed. Use a pipe outside diameter (OD) tape to confirm main pipe diameter. Installer shall confirm that pipe to be tapped has structural integrity sufficient for the tapping saddle. Please consult a piping engineer or the factory if there is any doubt in this matter.

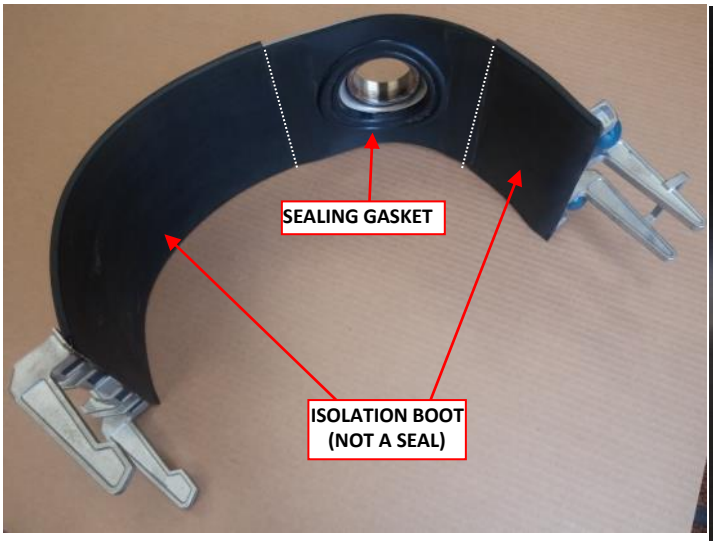
Step 2. Inspect pipe sealing surface for damage. Do not mount tapping saddle on any pipe surface that is damaged. Damage may include gauges, holes, cuts, pits, cracks, or other surface imperfections that could impede gasket sealing performance.

Step 3. Lubricate the pipe surface, all saddle sealing gasket and isolation boot surfaces (see Fig.1), with a mixture of soapy water. Do not use grease or pipe lubricant except where otherwise specifically instructed. For AC Pipe, Ductile Iron and Cast Iron Pipe, lubricate all surfaces with NSF approved pipe lube.

Step 4. Mount the Saddle to the pipe, attaching the track head end of the bolts into the bolt slots on the mating Lug. Ensure nut side of the bolts is secured through closed holes on appropriate lug. The track head should nest securely behind the two bolt head retaining tips on the bolt U-slot. (See Fig. 2) Once bolts are secured in the bolt slots, but not yet tightened, rotate the saddle to the desired orientation. **For double panel units see Note on Page 2.**

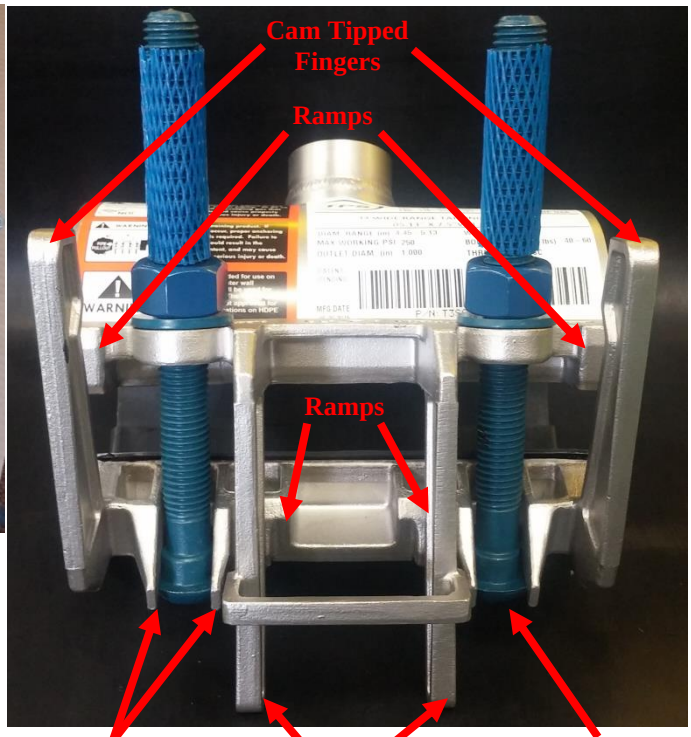
Step 5. Tighten nuts evenly (maintaining an even gap) to correct torque per requirements (Located on Product Label). As Saddle is tightened, verify lug fingers travel along mating ramps. (See Figure 2)

Fig. 1



**** Note: Provides aperture seal only, Not a 360° sealing Product****

Fig. 2



BOLT TORQUE REQUIREMENTS

TOTAL PIPING SOLUTIONS
1760 Haskell Road
P. O. Box 525

See Individual Product Label for Bolt Torque Requirements

Note: In all installations, wait 10 minutes after applying torque and reapply torque. Refer to individual product label for additional information.

Step 5. After the Saddle is installed to main conductor pipe, and tapping valve installed, but prior to performing the line tap, hydrostatically test the assembly seals. Apply a hydraulic pressure test in accordance with the line working pressure plus an appropriate safety factor.

Test pressure may alternatively be applied thru the line tapping machine.

No compressed gases shall be used to perform this pressure test.

Step 6. Continue with installation of tapping equipment per manufacturer's instructions.

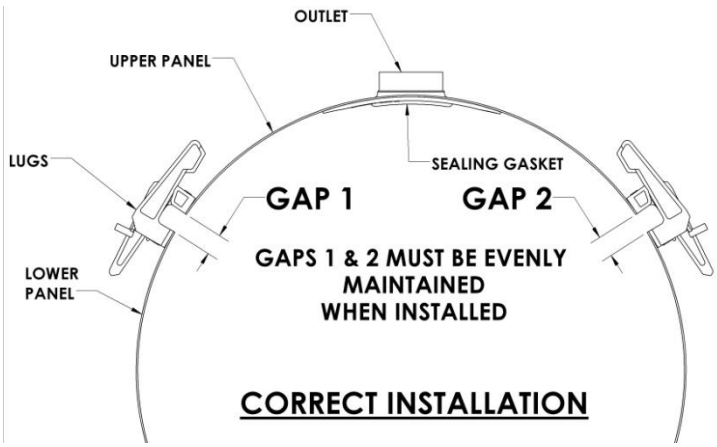
Step 7. After tap, verify no leaks are present and retighten nuts, if needed

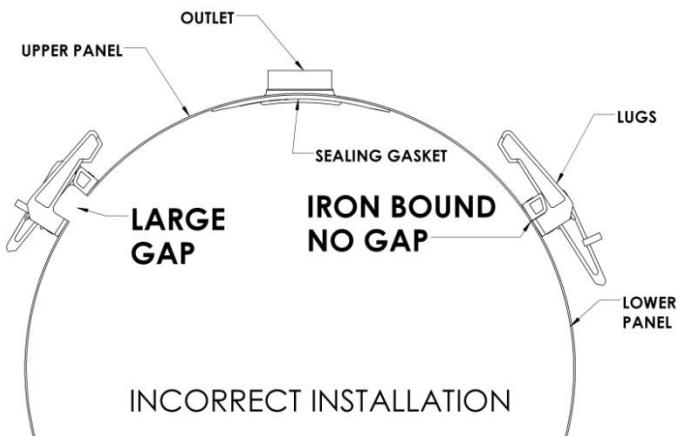
Step 8. Backfill Carefully to prevent shifts in ground and to provide support.

NOTE: DOUBLE PANEL UNITS:

Double Panel Units have 2 sets of lugs. To install double panel units, one side of lugs may be secured together before mounting to the pipe main. Once mounted, the other set may be secured.

****Gaps between lugs on both sides of the double panel saddle must be evenly maintained during installation****





Saddle Reuse:

Saddles must not be reused until refurbished at TPS

**** NOT TO BE USED FOR NATURAL GAS OR OTHER GAS PIPING****
****FOR HDPE PIPE, WALL THICKNESS MUST BE DR 17 OR THICKER****

CAUTION:

Hot/Wet tapping methods are recommended. If a dry tapping method is used to install the T3 Service Saddle on a new potable water system, disinfecting of the water system must be performed in accordance with ASNSI/AWWA C651. The system must be thoroughly flushed. After flushing the MAXIMUM free chlorine level shall be 4 mg/L(ppm), and remain pressurized. Extended contact time, beyond AWWA disinfecting guidelines, to high chlorine levels and/or improper flushing may cause corrosion or damage to the T3 Service Saddle or other Stainless-Steel components on the new system.

INSTALLATION NOTES

Note 1: Refer to individual product label for actual pressure rating. Pressure rating will never be greater than Pressure rating of main pipe.
Note 2: Maximum Tapping Saddle Operating Temperature: 180 Deg. F (82 Deg C)
Note 3: Maximum Tapping Saddle Installation/Operating Temperature for PE/HDPE Pipe: 85 Deg. F (30 Deg C)
Note 4: Tapping Cutter must be smaller than tapping saddle outlet diameter. In most cases, cutter diameter is ½" smaller in diameter that saddle outlet.
Note 5: Use of a pipe diameter (PI) tape is strongly recommended to verify main conductor pipe diameter prior to final installation.
Note 6: Nut Size is 1-1/16 across flats. Use of appropriate socket wrench is recommended. Pneumatic/Air powered tools may be used to torque bolts as long as tightening sequence and multistage torque application steps are followed.
Note 7: This product is intended for use on HDPE SDR-17 or greater wall thicknesses, and shall be used for buried service only. The T3 product line is not approved for above ground applications on HDPE or other plastic pipe.
Note 8: Pipe thread tape or pipe thread sealant is recommended to be used when installing tapping equipment.

"T3" Wide
Range Service Saddles

Nominal Diameter	Lower Diameter	Upper Diameter	Connection Sizes	CTS	IPS	DI	Pit Cast	AC100	AC150	AC200
4	4.45	5.13	1/2 to 2"	5.13	4.50	4.80	5.00			
4 o.s.	4.74	5.61	1/2 to 2"			4.80	5.00	5.26	5.32	5.57
5	5.50	6.20	1/2 to 2"	6.13	5.56					5.57
6	6.55	7.42	1/2 to 2"		6.63	6.90	7.10	7.40	7.37	
6 o.s.	6.84	7.65	1/2 to 2"			6.90	7.10	7.40	7.37	7.60
8	8.54	9.44	1/2 to 2"		8.63	9.05	9.30			
8 o.s.	8.98	9.84	1/2 to 2"			9.05	9.30	9.57	9.62	9.79
10	10.64	11.46	1/2 to 2"		10.75	11.10	11.40			
10 o.s.	11.34	12.16	1/2 to 2"				11.40	11.77	12.12	12.12
12	12.62	13.56	1/2 to 2"		12.75	13.20	13.50			
12 o.s.	13.65	14.42	1/2 to 2"		14.00			14.04	14.38	14.38
14	15.22	16.16	1/2 to 2"		16.00	15.30	15.65	15.80		
14 o.s.	16.18	16.92	1/2 to 2"						16.73	16.88
16	17.25	18.18	1/2 to 2"		18.00	17.40	17.80	17.94		
16 o.s.	18.42	19.23	1/2 to 2"						18.97	19.19
18	19.32	21.04	1/2 to 2"		20.00	19.50	19.92	19.90	20.94	
18 o.s.	21.10	22.80	1/2 to 2"			21.60	22.06		21.30	22.54
20	23.20	25.10	1/2 to 2"		24.00			23.64		25.02
24	25.60	27.30	1/2 to 2"			25.80	26.32	27.17		
24 o.s.	27.80	29.70	1/2 to 2"					28.32	29.62	
30	29.70	30.30	1/2 to 2"		30.00					29.98
30 o.s.	31.96	32.46	1/2 to 2"			32.00	32.40			
36	35.80	36.20	1/2 to 2"		36.00					
36 o.s.	38.10	38.50	1/2 to 2"			38.30				
42	44.30	44.70	1/2 to 2"			44.50				
48	50.60	51.00	1/2 to 2"			50.80				