

#### PIPE PREPARATION

Victaulic Style 707-IJ Transition couplings are designed to connect Japanese Industrial Standard (JIS) steel pipe to IPS steel pipe of the same nominal outside diameter. Style 707-IJ coupling must be assembled with the assembly lugs on opposite ends of the housing. ALWAYS LUBRICATE GASKET FOR PROPER COUPLING ASSEMBLY. PIPE MUST ALWAYS BE PREPARED IN ACCORDANCE WITH VICTAULIC SPECIFICATIONS.

#### PERFORMANCE DATA

Pipe – millimeters/inches			Maximum Work. Press. PSI/kPa	Angular Movement	
Nom.inal Size	IPS O.D.	JIS O.D. +1.6 mm/-0.8 mm		Degrees Per Cplg.	Pipe mm/m – In./Ft.
200A 8	219.1 8.625	216.3 8.515	2500 363	1.70	29.17 0.35
250A 10	273.1 10.750	267.4 10.528	2500 363	1.30	22.50 0.27
300A 12	323.9 12.750	318.5 12.539	2500 363	1.10	19.17 0.23

#### JAPANESE INDUSTRIAL STANDARD PIPE

#### Standard Roll Groove Specifications

1 Nom. Size JIS mm inches	2 Pipe Outside Diameter O.D. – mm/inches		3 Gasket Seat A ±0.76 ±0.03	4 Groove Width B ±0.76 ±0.03	5 Groove Dia. C		6 Groove Depth (ref.)	7 Min. Allow. Wall Thick. T	8 Max. Allow. Flare Dia.
	Basic	Tolerance			Basic	Tol. +0.00 +0.000			
200A 8	216.3 8.625	+1.60 +0.063 -0.79 -0.031	19.05 0.750	0.469 11.91	211.6 8.331	-0.64 -0.025	2.34 0.092	5.10 0.201	220.7 8.69
250A 10	267.4 10.750	+1.60 +0.063 -0.79 -0.031	19.05 0.750	0.469 11.91	262.6 10.340	-0.69 -0.027	2.39 0.094	5.80 0.228	271.8 10.70
300A 12	318.5 12.750	+1.60 +0.063 -0.79 -0.031	19.05 0.750	0.469 11.91	312.9 12.321	-0.76 -0.030	2.77 0.109	6.00 0.236	322.8 12.71

† On roll grooved pipe, Allowable Pipe End Separation and Deflection from Centerline will be one-half values listed for cut grooved pipe. See column notes below.

#### Standard Cut Groove Specifications

1 Nom. Size JIS mm inches	2 Pipe Outside Diameter O.D. – mm/inches		3 Gasket Seat A ±0.76 ±0.03	4 Groove Width B ±0.76 ±0.03	5 Groove Dia. C		6 Groove Depth (ref.)	7 Min. Allow. Wall Thick. T
	Basic	Tolerance			Basic	Tol. +0.00 +0.000		
200A 8	216.3 8.625	+1.60 +0.063 -0.79 -0.031	19.05 0.750	11.13 0.438	211.61 8.331	-0.64 -0.025	2.34 0.092	6.05 0.238
250A 10	267.4 10.750	+1.60 +0.063 -0.79 -0.031	19.05 0.750	12.70 0.500	262.64 10.340	-0.69 -0.027	2.39 0.094	6.35 0.250
300A 12	318.5 12.750	+1.60 +0.063 -0.79 -0.031	19.05 0.750	12.70 0.500	312.90 12.321	-0.76 -0.030	2.77 0.109	7.09 0.279

COLUMN 1 – Nominal JIS pipe size.

COLUMN 2 – Metric (JIS) outside diameter. The outside diameter of roll grooved pipe shall not vary more than the tolerance listed. For (JIS) metric pipe, the maximum allowable tolerance from square cut ends is 1.52 mm for sizes 200 mm and above, measured from the true square line.

COLUMN 3 – Gasket seat: the pipe surface shall be free from indentations, roll marks, and projections from the end of the pipe to the groove, to provide a leak-tight seal for the gasket. All loose paint, scale, dirt, chips, grease and rust must be removed. It continues to be Victaulic's first recommendation that pipe be square cut. When using beveled pipe contact Victaulic for details. Gasket seat "A" is measured from the end of the pipe. IMPORTANT: roll grooving of beveled end pipe may result in unacceptable pipe end flare. See column 8.

COLUMN 4 – Groove width: bottom of groove to be free of loose dirt, chips, rust and scale that may interfere with proper coupling assembly. Corners at bottom of groove must be radiused. For (JIS) metric pipe, 1.3R mm for 200 mm and up.

COLUMN 5 – Groove outside diameter: the groove must be uniform depth for the entire pipe circumference. Groove must be maintained within the "C" diameter tolerance listed.

COLUMN 6 – Groove depth: for reference only. Groove must conform to the groove diameter "C" listed.

COLUMN 7 – Minimum allowable wall thickness: this is the minimum wall thickness which may be roll or cut grooved.

COLUMN 8 – (Roll groove only) Maximum allowable pipe end flare diameter. Measured at the most extreme pipe end diameter square cut or beveled.

# Installation and Assembly

## ASSEMBLY

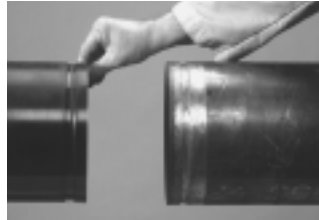
**⚠ WARNING**



Always read and understand all installation instructions before attempting assembly of Victaulic piping products. **Failure to do so could result in serious personal injury, property damage, joint leakage or joint separation.**

**⚠ WARNING**

Piping systems must always be depressurized and drained before attempting disassembly and removal of any Victaulic piping products. **Failure to do so could result in serious personal injury, property damage, joint leakage or joint separation.**



**1. CHECK PIPE ENDS:** Pipe ends must be free from gouges, projections, or roll marks on the exterior from the end to the groove, to assure a leak-tight seat for the gasket.



**2. CHECK GASKET, LUBRICATE AND ASSEMBLE:** Check gasket supplied to be certain it is suited for the intended service. Color code identifies gasket grade. Apply a thin coat of Victaulic Lubricant or silicone lubricant to gasket lips and outside of gasket. Exercise caution to prevent pick-up of foreign materials after lubrication.



**3. INSTALL GASKET:** Place the large (NPS side) opening over the larger pipe end (NPS side). Be sure that the gasket lips do not overhang the pipe end.



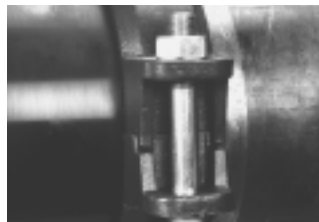
**4. JOIN PIPE ENDS:** Align and bring the pipe ends together. Slide the gasket into position and center the gasket between the grooves on both pipe ends. No portion of the gasket may extend into the groove on either pipe. Check to be sure the JIS side of the gasket is on the JIS pipe and the NPS side is on the NPS pipe.

**⚠ CAUTION**

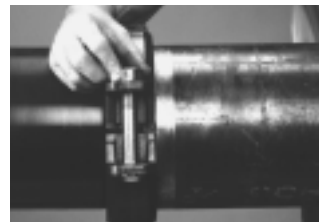
Style 707- IJ flexible transition couplings must have nuts tightened until bolt pads meet firmly metal-to-metal. Housings must be aligned and assembly lugs positioned on opposite sides with gasket properly positioned as detailed in Step 5. **Failure to do so could result in serious personal injury, property damage, joint leakage or joint separation.**



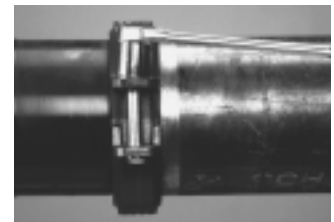
**5. APPLY HOUSING:** Position the coupling halves over the gasket, being sure the housing keys engage the groove on each pipe. Make sure that the coupling and gasket side marked JIS is on the JIS pipe and the side marked NPS is on the NPS steel pipe. Lubrication on the gasket exterior and the interior of the housing is essential to prevent gasket pinching.



Victaulic Transition coupling housings are designed with assembly lugs to aid proper positioning of NPS to NPS and JIS to JIS sides of the housing. These lugs must be on opposite sides and housings properly aligned for proper assembly.



**6. INSERT BOLTS:** Insert the bolts and start the nuts. Bolts may be inserted from either side to allow convenient tightening of the nuts. Bolts are track head, engaging the housings to permit tightening from one side.



**7. TIGHTEN NUTS:** Tighten nuts alternately and equally until housing bolt pads are firmly together metal-to-metal.