## Style 152A Expansion Joint Coupling

### WARNING







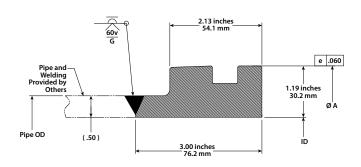




- · Read and understand all instructions before attempting to install any Victaulic products.
- Always verify that the piping system has been completely depressurized and drained immediately prior to installation, removal, adjustment, or maintenance of any Victaulic products.
- Confirm that any equipment, branch lines, or sections of piping that may have been isolated for/during testing or due to valve closures/
  positioning are identified, depressurized, and drained immediately prior to installation, removal, adjustment, or maintenance of any
  Victaulic products.
- . Wear safety glasses, hardhat, and foot protection.

Failure to follow these instructions could result in death or serious personal injury and property damage.

#### **VIC-RING WELD DETAIL**



## **A** WARNING

- It is the welder's responsibility to verify that Vic-Rings are welded correctly to the pipe, in accordance with project/sitespecific welding standards and in conformance with the Vic-Ring Weldment submittal drawing(s) provided for the specific project.
- The weld shall be capable of withstanding all thrust loads, in accordance with appropriate American Welding Society (AWS) specifications or other local or national codes and requirements. All welds shall be leak-tight.
- Applicable safety procedures shall be followed during the welding process.

Failure to follow these instructions could cause improper product installation, resulting in death or serious personal injury and property damage.

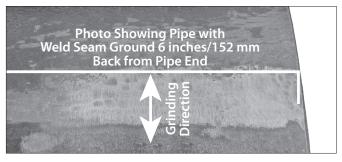
Size		Dimensions
Nominal inches DN	Actual Outside Diameter inches mm	<b>"A"</b> inches mm
10	10.750	12.13
DN250	273.0	308.1
12	12.750	14.13
DN300	323.9	358.9
14	14.000	15.38
DN350	355.6	390.7
16	16.000	17.38
DN400	406.4	441.5
18	18.000	19.38
DN450	457.2	492.3
	480.0	20.28 515.1
20	20.000	21.38
DN500	508.0	543.1
	530.0	22.25 565.2
22	22.000	23.38
DN550	559.0	593.9

Size		Dimensions
Nominal inches DN	Actual Outside Diameter inches mm	<b>"A"</b> inches mm
	580.0	24.22 615.2
24 DN600	24.000 609.6	25.38 644.7
	630.0	26.18 665.0
26 DN650	26.000 660.4	27.38 695.5
	680.0	28.15 715.0
27	27.000 685.8	28.38 720.9
28 DN700	28.000 711.2	29.38 746.3
30 DN750	30.000 762.0	31.38 797.1
	780.0	32.09 815.1

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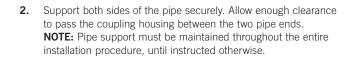


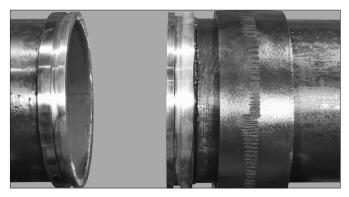
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- **1a.** Prior to welding a *Vic-Ring* onto the pipe end, weld seams shall be ground flush to the pipe surface (outside diameter). Grind the weld seam from the pipe end to a minimum distance of 6 inches/152 mm back from the pipe end. This area shall be generally free from indentations, projections, and roll marks.
- **1b.** Weld the *Vic-Ring* onto the pipe end per the literature provided with the shipment and the specifications listed in Victaulic publication 09.15.
- **1c.** Clean the outside surface of the *Vic-Rings* to remove dirt and other foreign material.





**3.** Slide the coupling housing past the *Vic-Ring* on one pipe end, as shown. Use caution to prevent scratches on the inside surface of the coupling housing. Clean the o-ring grooves in the *Vic-Rings* to remove any foreign material, weld spatter, etc.

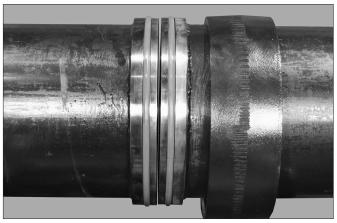


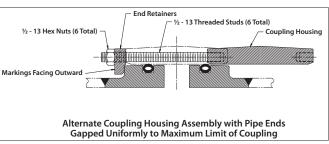
**4.** Lubricate the o-rings thoroughly with barium grease or silicone grease. Prevent dirt and debris from contacting lubricated o-rings.



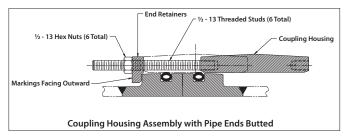
5. Install an o-ring into the groove in each Vic-Ring, as shown.

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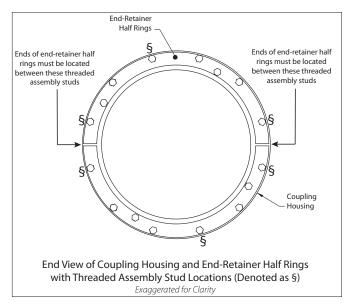


**6a.** Align and bring the pipe ends into the butted position, as shown. Pipe ends must be aligned squarely to ease assembly.

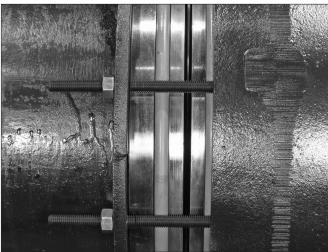
**6b.** An alternative is to gap the pipe ends uniformly to the maximum limit of the coupling, as shown, and restrain the pipes to maintain that position.

7. On the side of the coupling housing away from the *Vic-Rings*, install two end-retainer half rings. Verify that the markings on the end-retainer half rings are facing out. Thread ½ - 13 x ½-inch long Grade 8 hex-head cap screws through each outside hole in the end-retainer half rings and into the coupling housing, as shown. Tighten the hex-head cap screws completely.

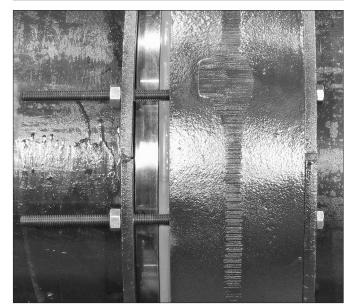
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On the opposite side of the coupling housing, thread six  $\frac{1}{2}$  -13 threaded assembly studs into the coupling housing at the locations shown in the drawing (denoted as §).

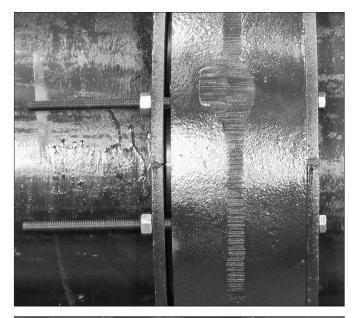


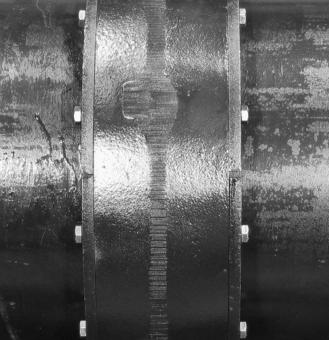
- **9a.** Place two end-retainer half rings over the threaded studs so that they contact the Vic-Ring. Verify that the markings on the endretainer half rings are facing out. NOTE: Refer to the drawings in steps 6a and 6b on the previous page for proper placement of the end-retainer half rings. Thread a nut onto the end of each stud.
- Begin tightening the nuts evenly in a crossing pattern to bring the coupling housing into contact with the first o-ring. Verify that the coupling housing contacts the o-ring evenly around the entire circumference. NOTE: It is important to tighten the nuts evenly to prevent the o-ring from pinching between the coupling housing and o-ring.



**9c.** Continue to tighten the nuts evenly in a crossing pattern until the coupling housing passes over the first o-ring completely. Verify that the coupling housing is pulled over the first o-ring uniformly to prevent o-ring damage.

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- **9d.** Repeat steps 9b and 9c to finish pulling the coupling housing over the second o-ring. Continue to tighten the nuts until the coupling housing meets the end-retainer half rings.
- **9e.** On the side of the coupling where the threaded studs are located, install  $\frac{1}{2}$   $\frac{13 \times 1}{2}$ -inch long Grade 8 hex-head bolts into the outside holes that do not contain threaded studs. DO NOT tighten the hex-head bolts completely, until instructed in Step 9g.
- **9f.** Remove the nuts and threaded studs. Save these components for assembling additional Style 152A Expansion Joint Couplings.
- **9g.** Install  $\frac{1}{2}$  13 x  $\frac{1}{2}$ -inch long Grade 8 hex-head bolts into the holes where the threaded studs were located previously. Tighten all hex-head bolts completely.

10. Style 152A installation is now complete.

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#### **DISASSEMBLY INSTRUCTIONS**

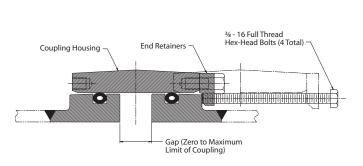
## **WARNING**



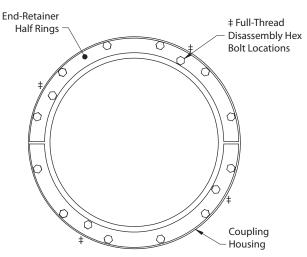
- Always verify that the piping system has been completely depressurized and drained immediately prior to installation, removal, adjustment, or maintenance of any Victaulic products.
- Confirm that any equipment, branch lines, or sections of piping that may have been isolated for/during testing
  or due to valve closures/positioning are identified, depressurized, and drained immediately prior to installation,
  removal, adjustment, or maintenance of any Victaulic products. Support both pipe lengths securely before
  attempting to disassemble this Victaulic coupling.

Failure to follow these instructions could result in death or serious personal injury and property damage.

1. Support both pipe lengths securely. If pipes shift during disassembly, damage to the coupling housing and o-rings can occur. Verify that there is ample space around the pipe to remove the coupling housing.



**Coupling Housing Disassembly** 

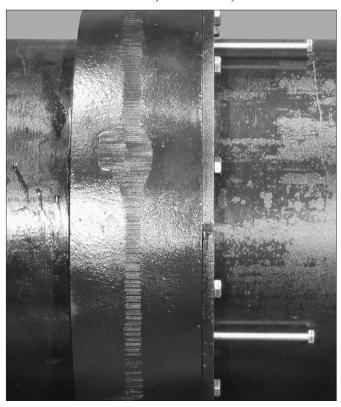


FULL-THREAD DISASSEMBLY HEX BOLT LOCATIONS

Exaggerated for Clarity

2. Thread the full-thread disassembly hex bolts into the holes on one side of the coupling assembly that are closest to the pipe (denoted as ‡).

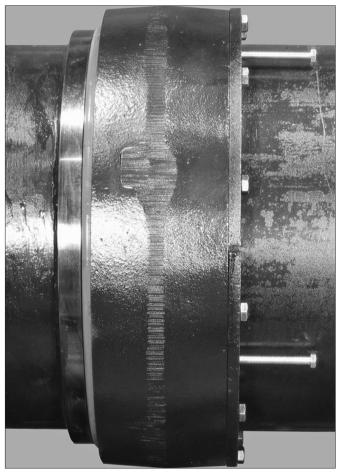
NOTE: These holes normally do not have any bolts installed in them.



**3a.** Remove the ½ - 13 x 1½-inch long Grade 8 hex-head bolts and end-retainer half rings from the side opposite where the disassembly bolts were installed in the previous step.

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- **3b.** Begin tightening the ¾ 16 disassembly bolts evenly in a crossing pattern to pull the coupling housing over the first o-ring. Verify that the coupling housing is being pulled over the o-ring uniformly around the entire circumference. Continue this procedure until the coupling housing passes over the second o-ring completely.
- 4. Remove all bolts from the entire assembly to permit removal of the end-retainer half rings.
- **5.** Slide the coupling housing completely off the *Vic-Rings*. Use caution to prevent scratches on the inside surface of the coupling housing.
- **6.** Remove the o-rings from the *Vic-Rings*.
- **7.** Separate the pipe ends sufficiently to remove the coupling housing. Use caution to prevent scratches on the inside surface of the coupling housing.
- **8.** The disassembly procedure is now complete.

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INSTALLATION INSTRUCTIONS I-152A

# **Style 152A Expansion Joint Coupling**

