






QuickVic™ Flexible Coupling for Steel Pipe

STYLE 177

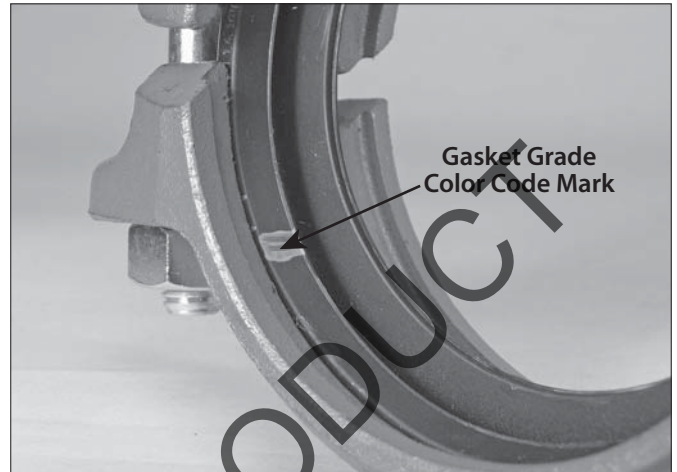


⚠ WARNING

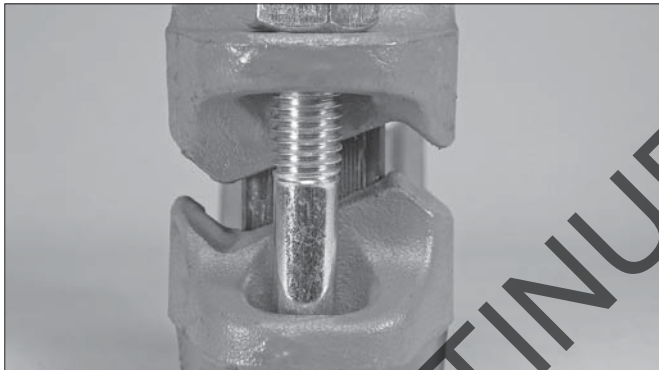






- Read and understand all instructions before attempting to install any Victaulic piping products.
- Depressurize and drain the piping system before attempting to install, remove, adjust, or maintain any Victaulic piping products.
- Wear safety glasses, hardhat, and foot protection during installation.

Failure to follow these instructions could result in serious personal injury, improper product installation, and/or property damage.



INSTRUCTIONS FOR THE INITIAL INSTALLATION OF STYLE 177 COUPLINGS



1. DO NOT DISASSEMBLE THE COUPLING: Style 177 Couplings are installation ready. The coupling is designed so that the installer does not need to remove the bolts and nuts for installation. This design facilitates installation by allowing the installer to directly install the grooved end of pipe/mating components into the coupling.

2. CHECK PIPE/MATING COMPONENT ENDS: The outside surface of the pipe/mating component, between the groove and the pipe/mating component end, must be smooth and free from indentations, projections, weld seams, and roll marks to ensure a leak-tight seal. All oil, grease, loose paint, dirt, and cutting particles must be removed. Measurements taken across grooved pipe/mating component ends must not exceed the maximum allowable flare diameter. The pipe/mating component OD, groove dimensions, and maximum allowable flare diameter must be within the tolerances published in current Victaulic grooving specifications. **NOTE:** Maximum allowable pipe/mating component ovality shall comply with the requirements of ASTM A-999 and API 5L. Greater variations between the major and minor pipe/mating component diameters will result in difficult coupling assembly.

⚠ WARNING

- A compatible lubricant must be used to prevent the gasket from pinching/tearing during installation.



Failure to follow this instruction could cause joint leakage, resulting in property damage.

3. CHECK GASKET: Check the gasket to make sure it is suitable for the intended service. The color code identifies the gasket grade. Refer to Victaulic publication 05.01 in the G-100 General Catalog or the I-100 Field Installation Handbook for the color code chart.



4. LUBRICATE GASKET: Apply a thin coat of Victaulic Lubricant or silicone lubricant only to the sealing lips of the gasket interior. **NOTE: The gasket exterior is supplied with a factory-applied lubricant, so it is not necessary to remove the gasket from the housings to apply additional lubricant to the exterior surface.**

⚠ WARNING

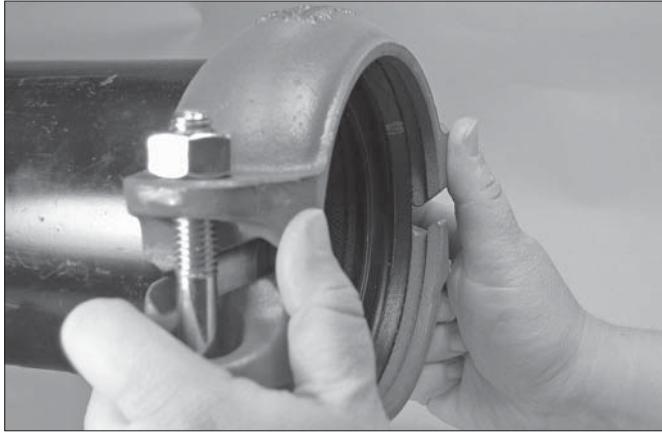



- Never leave a Style 177 Coupling partially assembled. A partially assembled Style 177 Coupling poses a drop hazard or a burst hazard during testing.
- Keep hands away from the pipe/mating component ends and the openings of the coupling when attempting to insert the grooved pipe/mating component ends into the coupling.

Failure to follow these instructions could cause serious personal injury and/or property damage.

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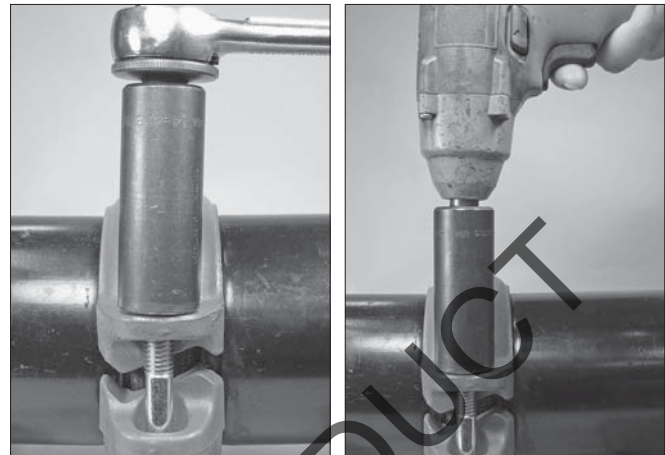
5. ASSEMBLE JOINT: Assemble the joint by inserting the grooved end of a pipe/mating component into each opening of the coupling. The ends of the grooved pipe/mating components must be inserted into the coupling until contact with the center leg of the gasket occurs. A visual check is required to ensure the coupling keys align with the grooves in the pipe/mating components. **NOTE:** The coupling may be rotated to ensure the gasket is seated properly.

NOTE: When assembling Style 177 Couplings onto end caps, take additional care to ensure the end cap is seated fully against the center leg of the gasket. **DO NOT** use non-Victaulic fittings with Style 177 Couplings. Use only Victaulic No. 60 end caps containing the "QV" or "QV/EZ" markings on the inside face.

WARNING

- Style 177 Couplings contain a centering feature at the bolt pads. It is important to tighten the nuts evenly by alternating sides until metal-to-metal contact occurs at the bolt pads. The middle section of the bolt pad mating surface must be in full metal-to-metal contact to ensure proper assembly.
- Keep hands away from coupling openings during tightening.

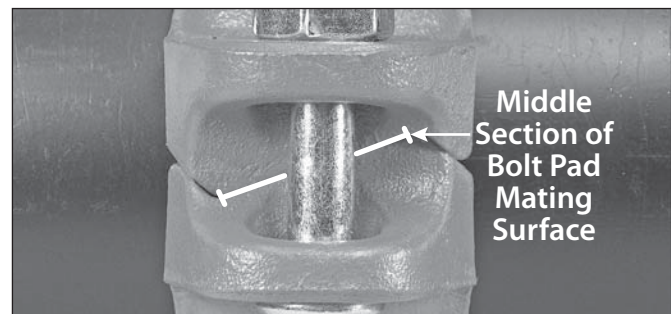
Failure to follow these instructions could cause joint failure, serious personal injury, and property damage.



6. TIGHTEN NUTS: Tighten the nuts evenly by alternating sides until metal-to-metal contact occurs at the bolt pads. The middle section of the bolt pad mating surfaces must be in full metal-to-metal contact to ensure a properly assembled joint. Make sure the housings' keys engage the grooves completely during tightening.

STYLE 177 HELPFUL INFORMATION

Nominal Size inches/mm	Actual Pipe Outside Diameter inches/mm	Nut Size		Socket Size	
		inches/ Metric	inches/ Metric	inches/ Metric	inches/ Metric
2 - 2 1/2 76.1 mm	2.375 - 2.875 60.3 - 73.0	3/8	1 1/16	17	17
		M10	M10	17	17
3 - 5 108.0 mm	3.500 - 5.563 88.9 - 141.3	1/2	7/8	22	22
		M12	M12	22	22
133.0 mm	5.250 133.0	1/2	7/8	22	22
		M12	M12	22	22
139.7 mm	5.500 139.7	1/2	7/8	22	22
		M12	M12	22	22
159.0 mm	6.250 159.0	3/4	1 1/16	27	27
		M16	M16	27	27
165.1 mm	6.500 165.1	3/4	1 1/16	27	27
		M16	M16	27	27
6 - 8 216.3 mm	6.625 - 8.625 168.3 - 219.1	3/4	1 1/16	27	27
		M16	M16	27	27

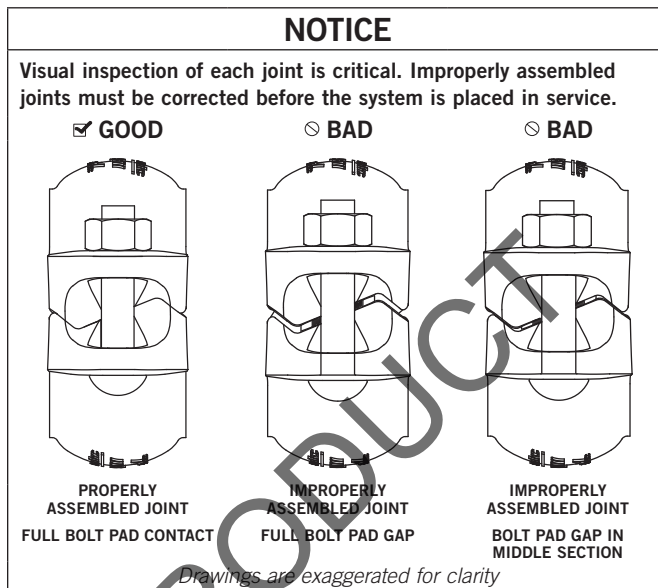
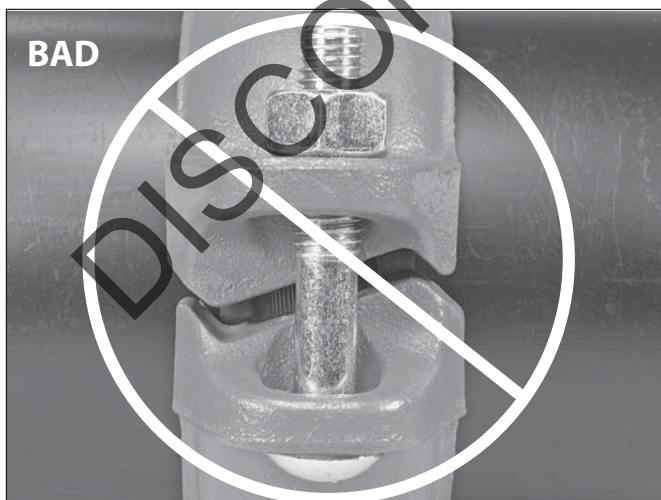
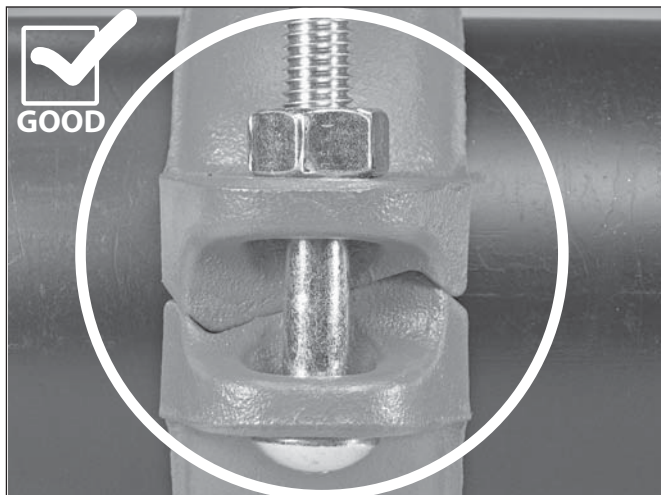


NOTE: It is possible to bring the outside sections of the bolt pads into metal-to-metal contact without having metal-to-metal contact at the middle section of the bolt pad mating surfaces. Tightening the nuts evenly by alternating sides is required to bring the entire bolt pad sections into metal-to-metal contact. Refer to the graphics on the following page for details.

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In addition, it is important to tighten the nuts evenly by alternating sides to prevent gasket pinching. An impact wrench or standard socket wrench can be used to bring the bolt pads into metal-to-metal contact. Refer to the "Impact Wrench Usage Guidelines" section.



INSTRUCTIONS FOR RE-INSTALLATION OF STYLE 177 COUPLINGS

⚠ WARNING

- Make sure the system is depressurized and drained completely before attempting to disassemble any couplings.

Failure to follow this instruction could cause serious personal injury and/or property damage.

Since the coupling housings conform to the outside diameter of the pipe/mating component during an initial installation, direct installation of the pipe/mating components into the coupling may not be possible upon re-installation. If this is the case, refer to the following steps for re-installing the coupling.

1. Make sure the system is depressurized and drained completely before attempting to disassemble any couplings.
2. Follow steps 2 – 3 of the "Instructions for the Initial Installation of Style 177 Couplings" section.

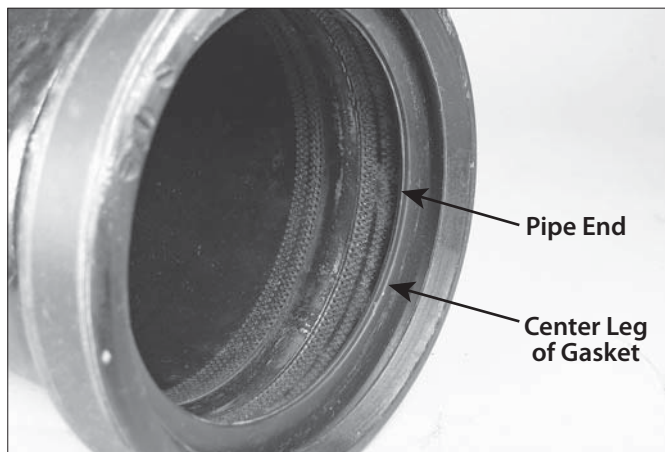


3. FOR RE-INSTALLATION OF STYLE 177 COUPLINGS, LUBRICATE GASKET: Apply a thin coat of Victaulic Lubricant or silicone lubricant to the gasket sealing lips and exterior. It is normal for the gasket surface to have a hazy white appearance after it has been in service.

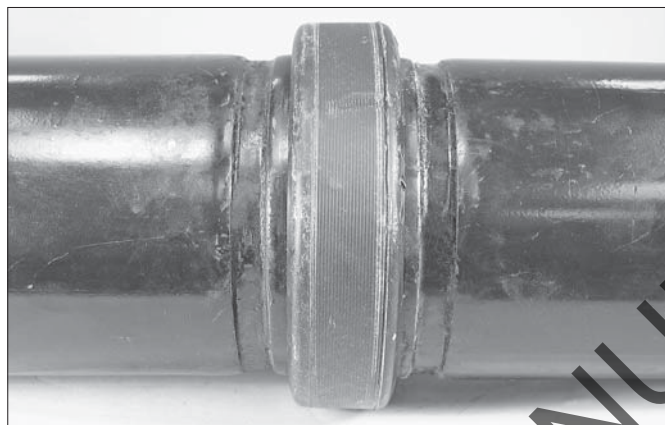
7. Visually inspect the bolt pads at each joint to ensure metal-to-metal contact is achieved across the entire bolt pad section.

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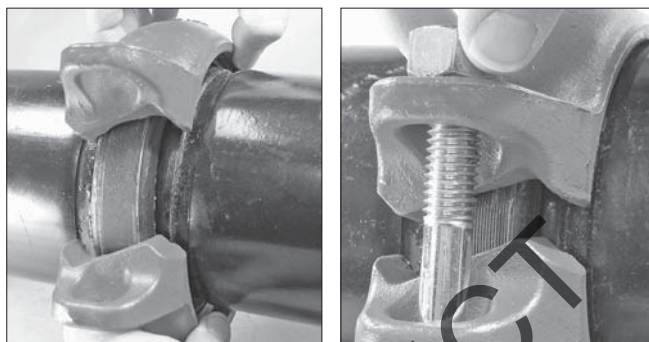
4. INSTALL GASKET: Insert the grooved end of a pipe/mating component into the gasket until it contacts the center leg of the gasket.



5. JOIN PIPE/MATING COMPONENTS: Align the two grooved ends of the pipe/mating components. Insert the other pipe/mating component end into the gasket until it contacts the center leg of the gasket. **NOTE:** Make sure no portion of the gasket extends into the groove of either pipe/mating component.



6. TO FACILITATE RE-ASSEMBLY: One bolt can be inserted into the housings with the nut threaded loosely onto the bolt to allow for the “swing-over” feature, as shown above. **NOTE:** The nut should be backed off no further than flush with the end of the bolt.



7. INSTALL HOUSINGS: Install the housings over the gasket. Make sure the housings’ keys engage the grooves properly on both pipes/mating components.

8. INSTALL REMAINING BOLT/NUT: Install the remaining bolt, and thread the nut finger-tight onto the bolt. **NOTE:** Make sure the oval neck of each bolt seats properly in the bolt hole.

9. TIGHTEN NUTS: Follow steps 6 and 7 of the “Instructions for the Initial Installation of Style 177 Couplings” section to complete the assembly.

IMPACT WRENCH USAGE GUIDELINES

⚠ WARNING

- Style 177 Couplings contain a centering feature at the bolt pads. It is important to tighten the nuts evenly by alternating sides until metal-to-metal contact occurs at the bolt pads. The middle section of the bolt pad mating surface must be in full metal-to-metal contact to ensure a properly assembled joint.
- **DO NOT** continue to use an impact wrench after the visual installation guidelines for the coupling are achieved.

Failure to follow these instructions could cause gasket pinching and coupling damage, resulting in joint failure, serious personal injury, and property damage.

Due to the speed of assembly when using an impact wrench, the installer should take extra care to ensure nuts are tightened evenly by alternating sides until proper assembly is complete. Always refer to the specific product installation instructions for complete installation requirements.

Impact wrenches do not provide the installer with direct “wrench feel” or torque to judge nut tightness. Since some impact wrenches are capable of high output, it is important to develop a familiarity with the impact wrench to avoid damaging or fracturing bolts or coupling bolt pads during installation. **DO NOT** continue to use an impact wrench after the visual installation guidelines for the coupling are achieved.

If the battery is drained or if the impact wrench is under-powered, a new impact wrench or a new battery pack must be used to ensure the visual installation guidelines for the coupling are achieved.

Perform trial assemblies with the impact wrench and check the assemblies with socket or torque wrenches to help determine the capability of the impact wrench. Using the same method, periodically check additional nuts throughout the system installation.

For safe and proper use of impact wrenches, always refer to the impact wrench manufacturer’s operating instructions. In addition, verify that proper impact grade sockets are being used for coupling installation.

For complete contact information, visit www.victaulic.com

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