

Style 108 Firelock™ Installation-Ready™ Coupling



⚠ **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.

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

3a. CHECK GASKET: Check the gasket to ensure that it is suitable for the intended service. The color code identifies the gasket grade. Refer to Victaulic publication 05.01 for the color code chart, which can be downloaded at victaulic.com.



IMPORTANT INFORMATION

CORRECT - IGS Groove Profile



INCORRECT - OGS Groove Profile



The Style 108 FireLock™ Installation-Ready™ Coupling shall be used ONLY with pipe/mating components that are prepared to Victaulic IGS specifications. **DO NOT** attempt to install Style 108 Couplings on pipe/mating components prepared to any other groove specification. Refer to Victaulic publication 25.14, which can be downloaded at victaulic.com.

INSTRUCTIONS FOR THE INITIAL INSTALLATION OF STYLE 108 COUPLINGS



1. DO NOT DISASSEMBLE THE COUPLING: The Style 108 Coupling is designed so that the installer does not need to remove the bolt and nut for installation. This design facilitates installation by allowing the installer to directly insert the mating component's grooved end into the coupling.

2. CHECK MATING COMPONENT ENDS: The outside surface of the mating component, between the groove and the mating component end, shall 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 shall be removed. The mating component's outside diameter ("OD"), groove dimensions, and maximum allowable flare diameter shall be within the tolerances published in Victaulic publication 25.14, which can be downloaded at victaulic.com.

3b. REFER TO THE NOTICE BELOW FOR IMPORTANT GASKET INFORMATION.

NOTICE


- Style 108 Couplings are designed for use ONLY on wet and dry fire protection systems (temperatures greater than -40°F / -40°C).
- Style 108 Couplings are provided with the *Vic-Plus* gasket system. Additional lubrication is not required for the initial installation of wet pipe systems that are installed at or continuously operating above 0°F - 18°C . Refer to Victaulic publication 05.03 for the *Vic-Plus* Material Safety Data Sheet (MSDS), which can be downloaded at victaulic.com.

Supplemental lubrication is required for *Vic-Plus* gaskets only if any of the following conditions exist. If any of these conditions exist, apply a thin coat of Victaulic lubricant or silicone lubricant to the sealing lips of the gasket interior only.

- If the gasket has been exposed to fluids prior to installation
- If the surface of the gasket does not have a hazy appearance
- If the gasket is being installed into a dry pipe system
- If the system will be subjected to air tests prior to being filled with water
- If the gasket was involved in a previous installation
- If the gasket sealing surface of the pipe contains raised or undercut weld seams, or cracks or voids at the weld seams

However, lubricated gaskets will not enhance sealing capabilities on adverse pipe conditions. Pipe condition and pipe preparation shall conform to the requirements listed in product installation instructions.

⚠ WARNING



- Never leave a Style 108 Coupling partially installed on mating component ends. A partially-installed Style 108 Coupling poses a drop hazard or a burst hazard during testing.
- Keep hands away from the mating component ends and the openings of the coupling when attempting to insert the grooved mating component ends into the coupling.

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

4. ASSEMBLE JOINT: Assemble the joint by inserting the grooved end of a mating component into each opening of the coupling. The ends of the grooved mating components shall be inserted into the coupling until contact with the center leg of the gasket occurs. A visual check is required to ensure that the coupling keys align with the grooves in the mating components.



⚠ WARNING

- The nut shall be tightened until metal-to-metal contact occurs at the bolt pads.

Failure to follow this instruction could cause joint failure, resulting in death or serious personal injury and property damage.

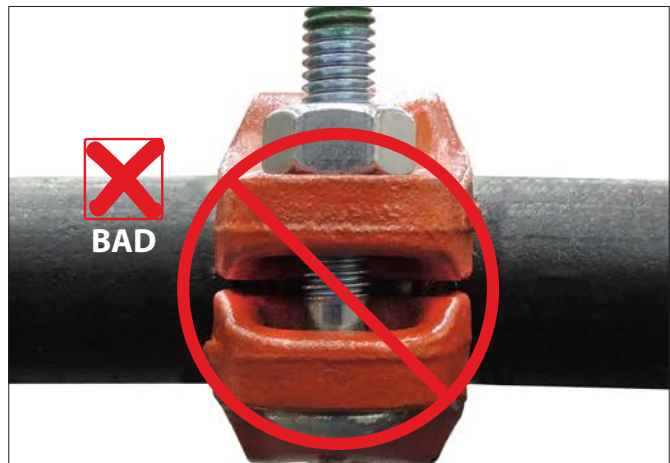
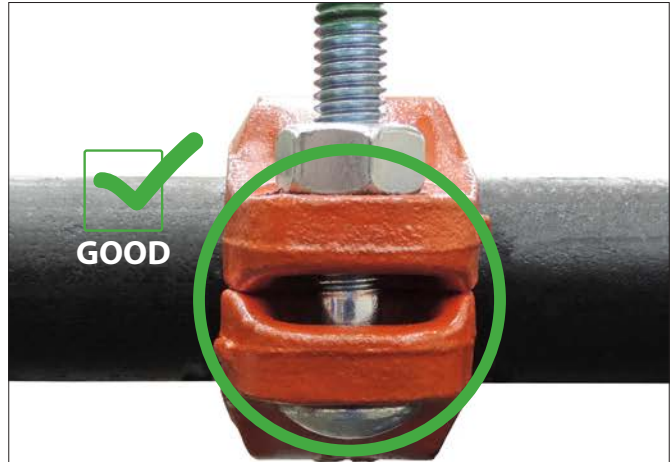
5. TIGHTEN NUT: Using an impact wrench or standard socket wrench with an 1¹/₁₆-inch/17-mm deep well socket, tighten the nut until metal-to-metal contact occurs at the bolt pads. Verify that the housings' keys engage the mating component's groove completely. Refer to the "Impact Wrench Usage Guidelines" section on page 4.



STYLE 108 HELPFUL INFORMATION

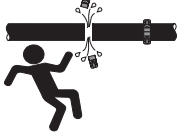
Size		Nut Size	Deep-Well Socket Size
Nominal Size inches	Actual Pipe Outside Diameter inches/mm	inches/Metric	inches/mm
1	1.315 33.7	3/8 M10	1 ¹ / ₁₆ 17

6. INSPECT PADS: Visually inspect the bolt pads at each joint to ensure that metal-to-metal contact is achieved in accordance with step 5.



INSTRUCTIONS FOR RE-INSTALLATION OF STYLE 108 COUPLINGS

⚠ WARNING



- Verify that the system is depressurized and drained completely before attempting to disassemble any couplings.

Failure to follow this instruction could result in death or serious personal injury and property damage.

1. Verify that the system is depressurized and drained completely before attempting to disassemble any couplings.
2. Loosen the nut of the coupling assembly to permit removal of the coupling from the mating component ends.
3. Remove the nut, bolt, gasket, and linkage from the housings. Inspect all components for damage or wear. If any damage or wear is present, replace with new Victaulic-supplied components. **NOTE:** Replacement gaskets shall be of the same grade that is suitable for the intended service.
4. Check the mating component ends, as described in step 2 of the "Instructions for the Initial Installation of Style 108 Couplings" section.

⚠ CAUTION

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

Use of an incompatible lubricant will cause gasket degradation, resulting in joint leakage and property damage.

5. **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.



- 6a. **REASSEMBLE COUPLING:** Place the lubricated gasket inside the gasket pocket of the housings.



- 6b. **INSTALL LINKAGE:** Install the linkage onto the housings.



- 6c. **INSTALL HARDWARE:** Install the bolt through the housings. Thread the nut onto the bolt until the top of the nut is flush with the end of the bolt, as shown below.



7. Follow steps 4 – 6 of the "Instructions for the Initial Installation of Style 108 Couplings" section to complete the assembly.

Style 108 Firelock™ Installation-Ready™ Coupling

IMPACT WRENCH USAGE GUIDELINES



WARNING

- It is important to tighten the nut until metal-to-metal contact occurs at the bolt pads.
- **DO NOT** continue to tighten the nut after metal-to-metal bolt pad contact is achieved.

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

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 the bolt or the coupling bolt pads during installation. **DO NOT continue to tighten the nut after the visual installation guidelines for the coupling, as described in steps 5 and 6 on page 2, are achieved.**

If the battery is drained or if the impact wrench is under-powered, a new impact wrench or a new battery pack shall be used to ensure that 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.



WARNING

Failure to follow instructions for tightening coupling hardware could result in:

- Personal injury or death
- Bolt fractures
- Damaged or broken bolt pads or coupling fractures
- Joint leakage

For complete contact information, visit victaulic.com

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