

Styles 009N and 009H FireLock EZ™ Installation-Ready™ Rigid Couplings



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.

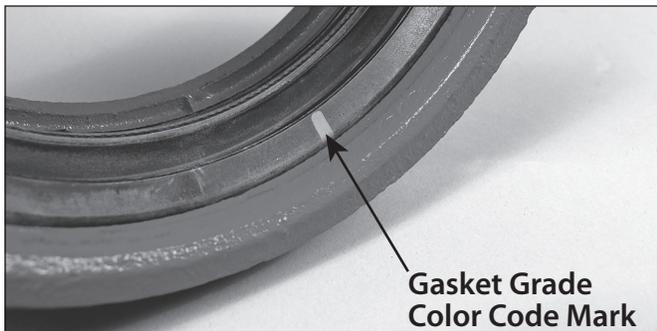
INSTRUCTIONS FOR THE INITIAL INSTALLATION OF STYLE 009N/009H COUPLINGS



1. DO NOT DISASSEMBLE THE COUPLING: Style 009N/009H FireLock EZ™ Installation-Ready™ Rigid Couplings are 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 insert the grooved end of mating components 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 components' outside diameter ("OD"), groove dimensions, and maximum allowable flare diameter shall be within the tolerances published in current Victaulic Original Groove System (OGS) specifications, publication 25.01, which can be downloaded at victaulic.com.



3. CHECK GASKET: Check the gasket to verify that it is suitable for the intended service. The color code identifies the material grade. Refer to Victaulic publication 05.01 for the color code chart, which can be downloaded at victaulic.com. **REFER TO THE NOTICE IN THE FOLLOWING COLUMN FOR IMPORTANT GASKET INFORMATION.**

NOTICE

- Victaulic Style 009N/009H Couplings are designed for use ONLY on wet and dry fire protection systems (temperatures greater than -40°F/-40°C). For rigid pipe connections in systems continuously operating below 0°F/-18°C, Victaulic recommends Style 005 FireLock™ Rigid Couplings with Grade "L" (silicone) FlushSeal™ gaskets.
- Gaskets for Victaulic Style 009N/009H Couplings are provided with *Vic-Plus*. 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 surfaces of the mating components contain raised or undercut weld seams, or cracks or voids at the weld seams

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

WARNING

- Never leave a Style 009N/009H Coupling partially installed on mating component ends. A partially-installed coupling poses a drop or burst hazard during testing.
- Keep hands away from the mating component ends and the openings of the coupling when attempting to insert grooved mating component ends into the coupling.
- Keep hands away from coupling openings during tightening.

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

NOTICE

- When stainless steel hardware is special ordered, the bolt head will contain a "316" mark, as shown to the left.



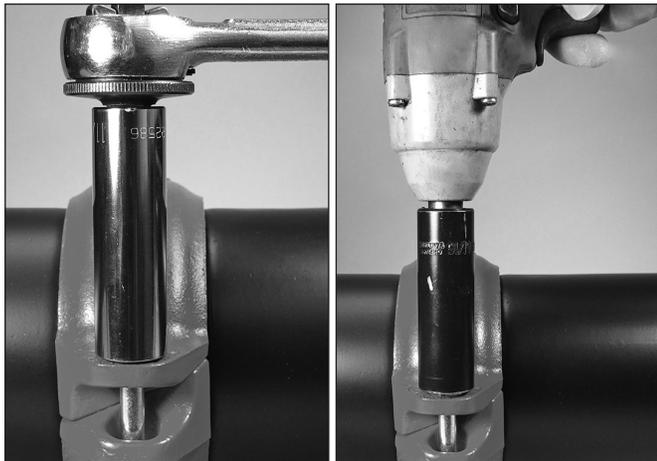
4. ASSEMBLE JOINT: Assemble the joint by inserting the grooved end of a mating component into each opening of the coupling. The ends of the grooved mating components shall be inserted into the coupling until contact with the center leg of the gasket occurs. A visual check is required to verify that the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

NOTE: When assembling Style 009N/009H Couplings onto end caps, take additional care to verify that the end cap is seated fully against the center leg of the gasket. Use only FireLock No. 006 End Caps containing the “EZ” marking on the inside face or No. 60 End Caps containing the “EZ QV” marking on the inside face. **NOTE:** Victaulic recommends the use of Victaulic fittings with Style 009N/009H Couplings.

WARNING

- Nuts shall be tightened evenly by alternating sides until metal-to-metal contact occurs at the angled bolt pads.
- Equal and positive or neutral offsets shall be present at the angled bolt pads.

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



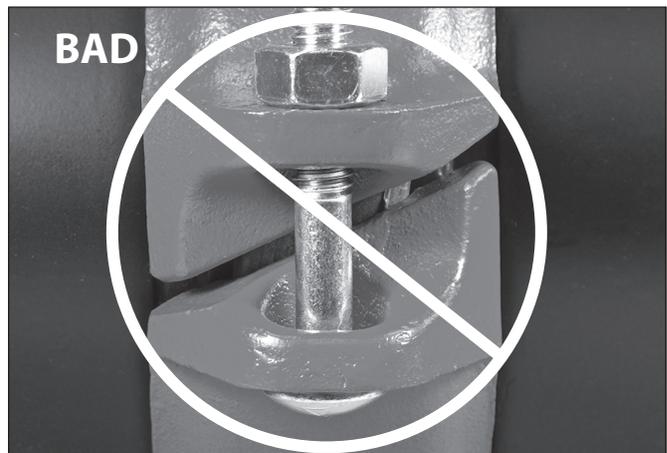
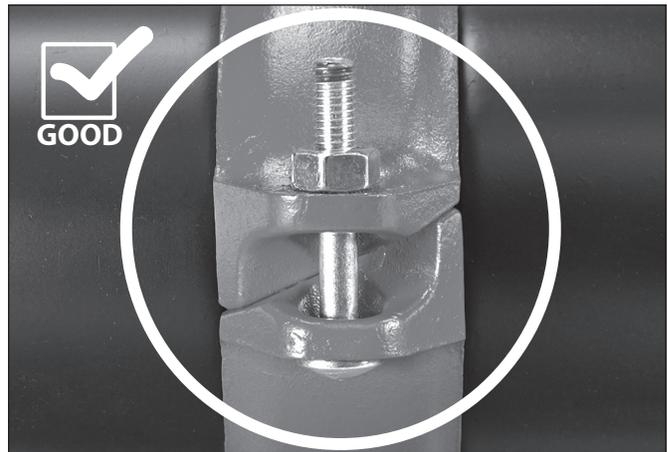
5. TIGHTEN NUTS: Tighten nuts evenly by alternating sides until metal-to-metal contact occurs at the angled bolt pads. Verify that the oval neck of each bolt seats properly in the bolt hole and that housings’ keys engage the grooves completely on both mating components. Equal and positive or neutral offsets shall be present at the bolt pads.

NOTICE

- It is important to tighten the nuts evenly by alternating sides to prevent gasket pinching.
- An impact wrench or standard socket wrench with a deep-well socket can be used to bring the bolt pads into metal-to-metal contact.
- Refer to the “Style 009N/009H Helpful Information” and “Impact Wrench Usage Guidelines” sections.

STYLE 009N/009H HELPFUL INFORMATION

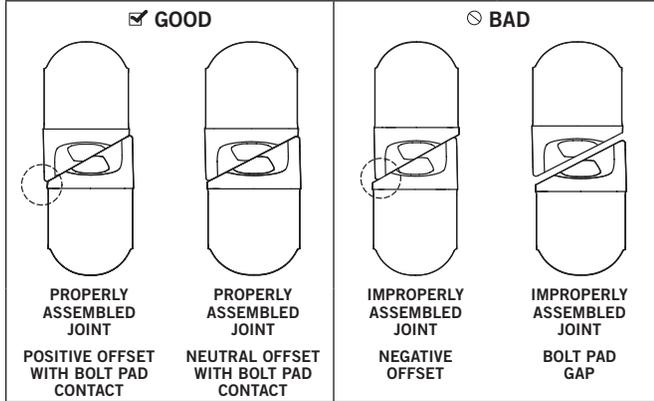
Size		Nut Size	Deep-Well Socket Size
Nominal inches or mm	Actual Outside Diameter inches/mm	inches/Metric	inches/mm
1 ¼ – 4	1.660 – 4.500 42.4 – 114.3	¾ M10	1 ½ 17
76.1 – 108.0 mm	3.000 – 4.250 76.1 – 108.0	¾ M10	1 ½ 17
133.0 – 165.1 mm	5.250 – 6.500 133.0 – 165.1	½ M12	¾ 18
5 – 6	5.563 – 6.625 141.3 – 168.3	½ M12	¾ 18
216.3 mm	8.515 216.3	¾ M16	1 ½ 24
8	8.625 219.1	¾ M16	1 ½ 24
10 – 12	10.750 – 12.750 273.0 – 323.9	¾ M22	1 ½ 34



6. Visually inspect the bolt pads at each joint to verify that metal-to-metal contact is achieved across the entire bolt pad section. Equal and positive or neutral offsets shall be present at each bolt pad, in accordance with step 5.

⚠ WARNING

- Visual inspection of each joint is critical.
 - Improperly assembled joints shall be corrected before the system is placed in service.
- Failure to follow these instructions could cause joint failure, resulting in death or serious personal injury and property damage.



- “Negative” bolt pad offsets can occur when the nuts are not tightened evenly, which produces over-tightening of one side and under-tightening of the other side. In addition, “negative” offsets can occur if both nuts are under-tightened.

INSTRUCTIONS FOR REASSEMBLY OF STYLE 009N/009H 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. Follow steps 2 – 3 on page 1. Inspect the gasket for any damage or wear. If any damage or wear is present, replace the gasket with a new Victaulic-supplied gasket of the same grade.

⚠ CAUTION

- A thin coat of Victaulic Lubricant or silicone lubricant shall be used to prevent the gasket from pinching/tearing during reassembly.
- Failure to use a compatible lubricant will cause gasket damage, resulting in joint leakage and property damage.



3. **FOR REASSEMBLY OF STYLE 009N/009H 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.

NOTICE

Two methods can be followed for reassembly of Style 009N/009H Couplings.



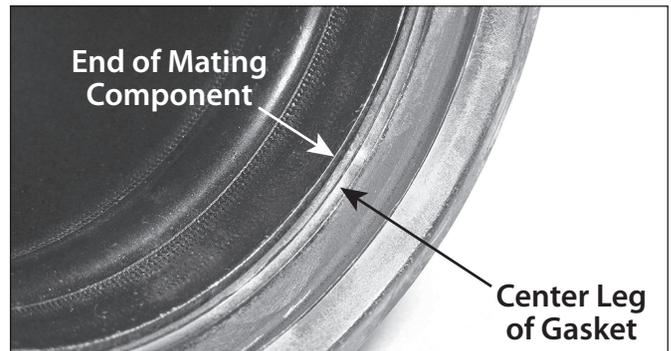
- **METHOD 1 FOR REASSEMBLY:** The coupling can be reassembled into its “installation-ready” condition by installing the gasket into the housings, then inserting the bolts and threading a nut onto each bolt until 2 – 3 threads are exposed, as shown above. If this method is chosen, steps 1 – 3 in the left column, along with all steps on page 2, shall be followed.

OR

- **METHOD 2 FOR REASSEMBLY:** The gasket and housings can be assembled onto the mating component ends by following steps 1 – 3 in the left column, along with all steps in the “Method 2 for Reassembly” section.

METHOD 2 FOR REASSEMBLY

1. Verify that steps 1 – 3 in the “Instructions for Reassembly of Style 009N/009H Couplings” section have been followed.



2. **INSTALL GASKET:** Insert the grooved end of a mating component into the gasket until it contacts the center leg of the gasket.



3. **JOIN MATING COMPONENTS:** Align the two grooved mating component ends. Insert the other mating component end into the gasket until it contacts the center leg of the gasket. **NOTE:** Verify that no portion of the gasket extends into the groove of either mating component.

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4. TO FACILITATE REASSEMBLY: 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.



5. INSTALL HOUSINGS: Install the housings over the gasket. Verify that the housings’ keys engage the grooves completely on both mating components.



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

7. TIGHTEN NUTS: Follow steps 5 – 6 on page 2 to complete the assembly.

IMPACT WRENCH USAGE GUIDELINES

⚠ WARNING

- Nuts shall be tightened evenly by alternating sides until metal-to-metal contact occurs at the angled bolt pads.
- Equal and positive or neutral offsets shall be present at the angled bolt pads.
- **DO NOT** continue to tighten the nuts after the visual installation guidelines for the coupling, described in steps 5 – 6 on page 2, are 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 bolts or the coupling’s bolt pads during installation. **DO NOT continue to tighten the nuts after the visual installation guidelines for the coupling, described in steps 5 – 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, described in steps 5 – 6 on page 2, 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