INSTALLATION GUIDE

LEGENDPRESS® CSG CSW CARBON STEEL VALVES & FITTINGS

WARNINGS

Replace CSG with CSW in yellow highlighted areas.

Replace HNBR with REPDM in green highlighted areas.

Read this Installation Manual BEFORE installing this product and follow all written instructions. Noncompliance with safety protocols and usage information may result in serious personal injury, property damage, and voiding of the product warranty. Keep this IOM for future reference.

APPLICATIONS

non-potable water applications like hydronic heating & cooling and fire sprinklers.

LegendPressCSG is a carbon steel press-to-connect system for ~~fuel gas and compressed air~~ designed to be installed on ASTM A53 Schedule 10 to Schedule 40 carbon steel pipe in place of welded and threaded connections. These products are not suitable for steam applications. LegendPressCSG is constructed from corrosion and oxidation-resistant zinc-coated carbon steel, and each end connection is equipped with an HNBR o-ring, chrome-plated copper spacer, and stainless steel grip ring to ensure a positive connection. The "Remove After Press" stickers (control labels) visually indicate that a connection has been pressed.

A green ot on the fitting bead provides a convenient way to identify the HNBR o-rings, which provide the heat and temperature resistances required for ~~general-purpose applications, including residential and industrial gas systems.~~ The various sizes and configurations available allow

Fittings are approved for indoor and outdoor applications, both above and below ground. Refer to local codes prior to installation to confirm if a permit and/or inspector approval is required.

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PRODUCT SPECIFICATIONS

LegendPressCSG is certified and/or meets the following standards for performance, dimensional, and material requirements: ANSI LC

See submittal tech sheet for info in this section.

r: 200psi max

Refer to the LegendPressCSG submittal sheet for additional specification information.

INSTALLATION CONSIDERATIONS

1. When preparing for installation, utilize all proper personal protection equipment (PPE), including durable gloves, eye protection, hard hats, and steel-toed boots. Failure to follow the installation instructions in this document may void the product warranty and lead to the failure of a press joint, potentially resulting in serious property damage and/or bodily injury, including death.
2. LegendPressCSG fittings are compatible with most commercially available press tools that use IPS-P jaws, including those made by Milwaukee, Rigid, and DeWalt. A full list of compatible tools and press jaws can be found in the list on Page 2. Before pressing, please refer to the manufacturer's instructions for proper tool operation and maintenance.

COMPATIBLE TOOLS & PRESS JAWS

Milwaukee Products:

- M-12 Force Logic with IPS-P Jaws – Up to 1″
- M-18 Force Logic with IPS-P Jaws – Up to 2″

Rigid Products:

- Compact (RP240 & 241) with MegaPress Jaws – Up to 1″
- Standard (RP350, 351 & 342-XL)
  - MegaPress Jaws – Up to 1″
  - V1 Actuator and MegaPress Rings – Up to 1-1/4″
  - V2 Actuator and MegaPress Rings – Up to 2″

DeWalt Products:

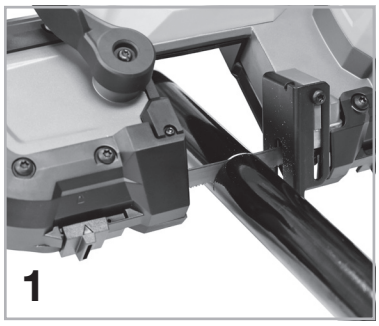
- DCE200 tool with the above Milwaukee & Rigid jaws/rings.

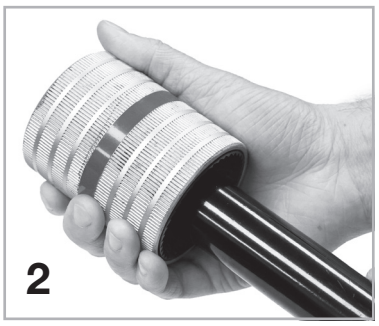
TUBE PREPARATION INSTRUCTIONS

For 1/2″ to 2″ fittings used on Schedule 10 to Schedule 40 Carbon Steel Pipe.

1. Cut the pipe to the desired length, ensuring the cut is square and that the tube section is round. Only Schedule 10 to Schedule 40 carbon steel pipe should be used with these fittings.
2. Carefully deburr the inside and outside of the tube using appropriate powered or hand tools to remove metal fragments left by the cutting process. Then, using sandcloth or similar material, clean the pipe area to be inserted into the fitting and pressed. It must be free of scratches, dents, burrs, loose paint, rust, and dirt.
3. Using the insertion depth table, identify the correct insertion depth per fitting size. Measuring from the cut end of the tube, mark the insertion depth on the pipe; failing to do so may result in an improper seal.

Fitting Diameter	1/2″	3/4″	1″	1-1/4″	1-1/2″	2″
Insertion Depth (in.)	1-1/8″	1-1/4″	1-3/8″	1-7/8″	1-7/8″	2″





INSTALLATION INSTRUCTIONS

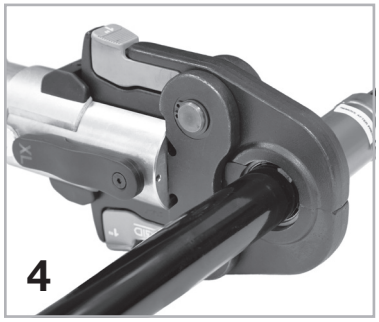
For 1/2″ to 2″ fittings used on Schedule 10 to Schedule 40 Carbon Steel Pipe.

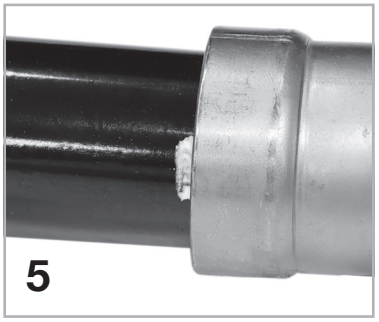
1. Before assembling the connection, inspect the fitting seals (HNBR o-rings) and grip rings to ensure both are seated correctly and free from damage. Do not add or use any oils or lubricants.
2. Place the fitting onto the tube and slide it to the marked depth, gently rotating to avoid resistance. If applicable, when the fitting reaches the marked depth, the tube should contact the fitting's internal stop.

INSTALLATION INSTRUCTIONS (CONTINUED)

3. Prepare the press tool and jaw, verifying that the tool and jaw are compatible with the size and connection (see page 2). Ensure the jaws are free of debris or foreign objects and prepare for installation. Refer to the details below for best pressing practices and follow all steps listed in the tool's operation guide.
    - **1/2" to 1" Connections:** Open the press jaw and position it at a right angle to the fitting bead. The jaws should be parallel to the end of the fitting, and the depth marker should still be visible.
    - **1-1/4" to 2" Connections:** Open and place the two-piece ring and actuator over the fitting bead, ensuring the ring is parallel to the end of the fitting and the depth marker is still visible. Then, align the actuator with the pressing ring and firmly set the tongs into the slots.
4. Begin the pressing process, holding the trigger until the jaw fully engages, and continue holding the trigger until the press cycle is complete (refer to the tool's operation guide for additional details). While pressing, monitor the insertion depth mark until the cycle is complete to ensure the fitting and tube do not shift during installation.
    a. **Note:** Releasing the trigger during the press cycle may lead to an improperly pressed joint.
5. After the press cycle is finished, release the jaw or remove the ring and carefully inspect the fitting and depth marks to verify that the installation was completed correctly. If visual signs of pressing are not present or unclear, return to Step 3 and press the joint.
6. If a complete connection has been made, remove the control label. After all connections have been made, inspect each joint to confirm no control labels remain and proceed to pressure test the system following all local codes. Initial pressure testing (air and water) should not exceed 15 PSI. If the initial test is successful, higher pressures may be tested.
    a. **Note:** LegendPressCSG's o-rings are designed to indicate incomplete connections by enhancing leak visibility during testing.

Update photos to ones with green stickers.





NOTICE

Failure to follow these installation instructions may void the product warranty and could result in serious property damage and/or bodily injury, including death.

WARNING

This product can expose you to chemicals which are known to the State of California to cause cancer. For more information, go to www.P65Warnings.ca.gov

APPROVED APPLICATIONS

non-potable water applications like hydronic heating & cooling and fire sprinklers.

HNBR (Ethylene-Propylene Diene Monomer) is known for its long-term stability and resistance to ~~heat, oil, and chemical exposure, making it the ideal sealing material for general-purpose fuel, gas, and oil applications.~~ However, HNBR cannot be used with steam or in systems that contact food or drinking water. This table outlines all approved applications and media.

Use application chart developed for CSW

Media[1]	Use Approved	Max. Pressure	Temp. Range (°F)	Notes
Water/Steam				
Water, Potable (Hot/Cold)	✕	–	–	*Application(s) not approved.*
Water, Chilled/Radiant Heating				
[illegible]ter				
Steam, Residential				
Fuels, Oils, and Lubricants				
Butane	✓	125 psi	-40° to 180°	
Diesel Fuel[3]	✓	125 psi	Max. 100°	
Engine Oil	✓	125 psi	-40° to 180°	
Gear Oil	✓	125 psi	-40° to 180°	Lubricant
Heating Fuel Oil[3]	✓	125 psi	Max. 100°	
Hydraulic Oil	✓	125 psi	-40° to 180°	
Lubricant (Lube) Oil[3]	✓	200 psi	150° Max.	Petroleum-based
Mineral Oil	✓	200 psi	Ambient[2]	
Natural Gas	✓	125 psi	-40° to 180°	Methane
Propane	✓	125 psi	-40° to 180°	
Transmission Fluid	✓	125 psi	-40° to 180°	
Waste Oil	✓	125 psi	-40° to 180°	E.g. Used Cooking Oil
Biodiesel	✕	–	–	*Application(s) not approved.*
Engine Coolant				
Ethanol				
Kerosene				
Gases				
Acetylene	✓	20 psi	Ambient[2]	350 psi Test Pressure
Ammonia	✓	200 psi	120° Max.	Environmental Exposure
Argon (Ar)	✓	200 psi	140° Max.	
Carbon Dioxide (CO_2)	✓	200 psi	140° Max.	Dry
Compressed Air	✓	200 psi	140° Max.	Oil Concentration ≤25 mg/m3
				Oil Concentration >25 mg/m3
Hydrogen (H_2)	✓	125 psi	140° Max.	
Nitrogen (N_2)	✓	200 psi	140° Max.	
Vacuum	✓	29.2" Hg (Diff.)	160° Max.	Min. Absolute Pressure: 750µm Hg
Carbon Monoxide (CO)	✕	–	–	*Application(s) not approved.*
Oxygen, Non-Medical (O_2)				
Other				
Acetone	✕	–	–	*Application(s) not approved.*
Isopropyl Alcohol				

[1] It is recommended to include labels identifying the media being conveyed.
[2] Ambient temperatures are assumed to be within the application's normal operating conditions and must not exceed the sealing element's temperature limitations (-40°F to 180°F).
[3] Application(s) not approved for use in Canada.