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› [SharkBite 1/2 Inch Push-to-Connect Brass Plumbing Coupling \(Model U008LFA\) Instruction Manual](#)

SharkBite U008LFA

SharkBite 1/2 Inch Push-to-Connect Brass Plumbing Coupling (Model U008LFA) Instruction Manual

Brand: SharkBite

INTRODUCTION

The SharkBite 1/2 Inch Push-to-Connect Brass Plumbing Coupling (Model U008LFA) is an innovative fitting designed for quick and easy installation in plumbing systems. It allows for the connection of various pipe materials without the need for special tools, soldering, crimping, or glue. This coupling is suitable for PEX, copper, CPVC, PE-RT, and HDPE tubing, enabling versatile connections in any combination.

Key features include:

- **Installs in Seconds:** Push-to-connect design for quick, watertight unions.
- **Versatile Compatibility:** Connects copper, CPVC, PEX, PE-RT, and HDPE pipes in any combination.
- **Lead-Free Construction:** Made of high-quality forged DZR brass, safe for potable water lines.
- **Professional Standard:** Meets commercial and residential plumbing application standards.
- **Made in the USA:** Manufactured and tested in the USA.



Image: SharkBite Brass Push Coupling emphasizing its tool-free installation, versatility with various pipe types, and approval for behind-the-wall use.

SETUP AND INSTALLATION

Proper preparation of the pipe and understanding the fitting's mechanism are crucial for a secure, leak-free connection.

1. Pipe Preparation

- Cut the Pipe:** Ensure the pipe is cut cleanly and squarely. For copper pipes, use a pipe cutter. For PEX, CPVC, PE-RT, or HDPE, use a PEX cutter.
- Deburr and Clean:**
 - For copper pipes, remove any burrs from both the inside and outside edges of the pipe using a deburring tool. Ensure the pipe end is round and free of dirt or damage.
 - For PEX, CPVC, PE-RT, or HDPE pipes, ensure the cut end is clean and free of debris.
- Mark Insertion Depth:** Use a depth gauge or ruler to mark the correct insertion depth on the pipe. This ensures the pipe is fully seated within the fitting for a proper seal. Refer to the table below for common insertion depths.

Brass Push Coupling

Push-to-Connect



APPROVALS

NSF/ANSI/CAN 61 | ASTM E84 | UL 263
ASSE 1061 | CSA B125.3 | NSF/ANSI 372
CAN/ULC S102.2 | ASTM E119 | CAN/ULC S101

Image: SharkBite Brass Push Coupling with a table showing pipe insertion depths for various fitting sizes. This ensures correct pipe seating for a secure connection.

2. Connecting the Pipe

1. **Insert Pipe:** Push the prepared pipe firmly into the SharkBite fitting. You will feel resistance as the pipe passes through the grab ring and then the O-ring.
2. **Full Insertion:** Continue pushing until the pipe reaches the marked insertion depth. The pipe should be fully seated against the internal stop of the fitting.
3. **Verify Connection:** Once inserted, pull back on the pipe to ensure it is securely gripped by the fitting. The stainless-steel teeth of the grab ring will prevent the pipe from pulling out.

Brass Push Coupling

Push-to-Connect



- ✓ Can be installed in wet lines
- ✓ Can be rotated after assembly for easier and faster installation
- ✓ Rated for 200 psi and 200°F (93°C)

Image: A close-up view of the SharkBite Brass Push Coupling, highlighting its internal components like the grab ring and O-ring. Text indicates it can be installed in wet lines, rotated after assembly, and is rated for 200 psi and 200°F (93°C).

Installation Demonstration Videos

How to Use SharkBite 1/2" Straight Coupling Plumbing Fitting

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Video: A detailed guide on how to properly use the SharkBite 1/2" Straight Coupling, demonstrating pipe preparation, insertion, and removal.

Push To Connect Assembly Rendering

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Video: An animated rendering illustrating the internal mechanism and assembly process of a SharkBite Push-to-Connect fitting.

OPERATING PRINCIPLES

Once installed, the SharkBite coupling creates a permanent, watertight seal. The fitting's design allows for rotation after assembly, which can be beneficial for installation in confined spaces. It is designed to maintain its seal under various pressure and temperature conditions, making it suitable for both hot and cold potable water lines.

- **Watertight Seal:** Achieved by a specially formulated O-ring that compresses around the pipe.
- **Secure Grip:** Stainless-steel teeth in the grab ring firmly hold the pipe in place.
- **Rotational Capability:** Fittings can be rotated 360 degrees after installation for optimal positioning.

MAINTENANCE

SharkBite couplings are designed for long-term, maintenance-free operation once properly installed. Periodically inspect visible connections for any signs of leaks or damage. If a connection needs to be modified or replaced, the fitting can be easily disconnected.

Disconnection Procedure

To disconnect a SharkBite fitting, you will need a SharkBite disconnect clip or disconnect tongs.

1. **Depressurize System:** Ensure the water supply to the pipe is turned off and the system is depressurized.
2. **Engage Disconnect Tool:**
 - **Using a Disconnect Clip:** Snap the clip onto the pipe, ensuring it rests against the fitting's release collar.
 - **Using Disconnect Tongs:** Slide the tongs over the fitting and pipe, aligning the jaws with the release collar.
3. **Release and Remove:** Press the release collar firmly with the tool while simultaneously pulling the pipe away from the fitting. The pipe should release smoothly.
4. **Inspect Fitting:** After removal, inspect the fitting for any damage to the O-ring or grab ring. If no damage is present, the fitting can be reused.

How to Install Push-to-Connect Fittings (Includes Disconnection)

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Video: This video demonstrates the installation of various push-to-connect fittings, including a segment on how to properly disconnect them using the appropriate tools.

TROUBLESHOOTING

Most issues with SharkBite fittings are related to improper installation. Follow these steps if you encounter problems:

- **Leaks at Connection:**
 - Ensure the pipe is cut squarely and deburred (especially copper).
 - Verify the pipe is inserted to the correct depth mark. Insufficient insertion is a common cause of leaks.
 - Check for scratches or damage on the pipe surface that could compromise the O-ring seal.
 - Inspect the internal O-ring and grab ring of the fitting for damage. Replace the fitting if damaged.
- **Difficulty Inserting Pipe:**
 - Ensure the pipe end is clean and free of burrs.

- Apply a small amount of silicone lubricant (potable water safe) to the pipe end if needed.
- Confirm the pipe is aligned straight with the fitting before pushing.
- **Difficulty Removing Pipe:**
 - Ensure the system is fully depressurized.
 - Use the correct size SharkBite disconnect clip or tongs.
 - Apply firm, even pressure to the release collar while pulling the pipe.

SPECIFICATIONS

Feature	Detail
Model Number	U008LFA
Size	1/2 inch
Material	DZR Brass
Color	Brass
Connector Type	Coupling (Push-to-Connect)
Compatible Pipe Types	PEX, Copper, CPVC, PE-RT, HDPE
Max Pressure Rating	200 psi
Max Temperature Rating	200°F (93°C)
Lead-Free	Yes
Item Weight	0.01 Ounces
Product Dimensions	7 x 5 x 2 inches
Manufacturer	US - Reliance Worldwide Corporation

WARRANTY

This SharkBite product is covered by a manufacturer's warranty. For specific details regarding warranty terms, conditions, and duration, please refer to the official SharkBite website or contact Reliance Worldwide Corporation directly.

SUPPORT

For further assistance, technical support, or additional product information, please visit the official SharkBite website at www.sharkbite.com or contact their customer service department. You can also find helpful resources and FAQs on their website.

