

Swagelok SS-600-6

Instruction Manual for Swagelok SS-600-6 Tube Fitting Union

Model: SS-600-6 | Brand: Swagelok

1. PRODUCT OVERVIEW

The Swagelok SS-600-6 is a high-quality stainless steel tube fitting union designed for reliable, leak-tight connections in various fluid systems. This union is specifically engineered for 3/8 inch outside diameter (OD) tubing and has a length of 1.77 inches. It is suitable for applications requiring robust and corrosion-resistant connections.



Figure 1: A collection of Swagelok SS-600-6 tube fitting unions. The image displays several individual fittings, some arranged in a stack, highlighting their compact and uniform design. Two fittings are shown separately on the left, demonstrating their full form.

2. SETUP AND INSTALLATION

2.1 Safety Precautions

- Ensure the system is depressurized and drained before installation.
- Wear appropriate personal protective equipment (PPE), including safety glasses and gloves.
- Handle fittings carefully to avoid damage to sealing surfaces.

2.2 Required Tools

- Two wrenches of appropriate size for the fitting nuts.
- Tube cutter (for preparing tubing ends).
- Deburring tool (for preparing tubing ends).
- Swagelok gap inspection gauge (recommended for proper pull-up).

2.3 Installation Steps

1. **Prepare Tubing:** Cut the tubing squarely and remove all burrs from both the inside and outside diameters. Ensure the tubing ends are clean and free of scratches.
2. **Insert Tubing:** Insert the tubing into the fitting until it bottoms out against the shoulder.
3. **Finger-Tighten Nut:** Finger-tighten the nut.
4. **Mark Nut:** Mark the nut at the 6 o'clock position.
5. **Tighten Nut:** While holding the fitting body steady with a backup wrench, tighten the nut 1 1/4 turns with a wrench. For 1/16, 1/8, and 3/16 inch fittings, tighten 3/4 turn.
6. **Inspect Gap (Optional but Recommended):** Use a Swagelok gap inspection gauge to ensure proper pull-up. The gauge should not enter the gap between the nut and the fitting body.

3. OPERATING CONSIDERATIONS

Once installed, the Swagelok SS-600-6 union provides a secure connection for fluid transfer. It is designed for static applications where the connection remains undisturbed. Ensure that the operating pressure and temperature of your system do not exceed the rated limits for stainless steel tubing and fittings. Refer to Swagelok's general catalog for detailed pressure and temperature ratings based on tubing material and wall thickness.

4. MAINTENANCE

Swagelok tube fittings are designed for long-term, reliable service with minimal maintenance. However, periodic inspection is recommended to ensure continued integrity of the system.

4.1 Inspection

- Visually inspect fittings for any signs of corrosion, damage, or leaks.
- Check for proper alignment of tubing and fittings.
- Ensure all connections remain tight. Do not overtighten.

4.2 Cleaning

Clean the exterior of the fitting as needed using a mild detergent and water. Avoid abrasive cleaners or solvents that could damage the stainless steel finish.

4.3 Reassembly (if disconnected)

If a fitting is disconnected, it can typically be reassembled. When reassembling, insert the tubing into the fitting until the ferrules seat. Tighten the nut slightly with a wrench until it is finger-tight, then turn it approximately 1/4 turn past finger-tight. Always ensure the tubing is fully bottomed out before tightening.

5. TROUBLESHOOTING

5.1 Leaks

- **Issue:** Leak at the fitting connection.
- **Possible Cause 1:** Insufficient tightening during initial installation.
Solution: Depressurize the system. While holding the fitting body, tighten the nut an additional 1/8 to 1/4 turn. Do not overtighten.
- **Possible Cause 2:** Damaged tubing or fitting components (e.g., scratched tubing, damaged ferrules).
Solution: Depressurize the system. Disassemble the fitting and inspect the tubing end and fitting components. Replace damaged parts or re-prepare tubing if necessary.
- **Possible Cause 3:** Incorrect tubing material or size.
Solution: Verify that the tubing material and outside diameter match the fitting specifications.


6. SPECIFICATIONS



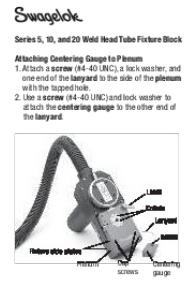


Attribute	Value
Model Number	SS-600-6
Brand	Swagelok
Material	Stainless Steel
Tube OD	3/8 inch
Length	1.77 inches
Product Dimensions (L x W x H)	0.79 x 0.79 x 1.97 inches
Item Weight	2.08 ounces
Connector Type	Union
Exterior Finish	Stainless Steel

7. WARRANTY AND SUPPORT

Swagelok products are manufactured to high standards of quality and reliability. For specific warranty information and technical support, please refer to the official Swagelok website or contact an authorized Swagelok distributor. Always ensure you are using genuine Swagelok components for optimal performance and safety. For further assistance, please visit: www.swagelok.com

Related Documents - SS-600-6

	<p>Swagelok FK Series Medium-Pressure Tube Fittings Installation Guide</p> <p>This guide provides detailed installation instructions for Swagelok FK series medium-pressure tube fittings, covering materials such as 316 stainless steel, alloy 2507, and alloy 625. It outlines required tools, step-by-step assembly procedures, torque specifications for various sizes and materials, and gaugeability checks for proper tightening. Instructions for reassembly, cap installation, plug installation, port connectors, and tube adapters/reducers are also included.</p>
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	<p>Swagelok Tube Fitting Installation and Reassembly Instructions</p> <p>Comprehensive guide to installing and reassembling Swagelok tube fittings for 1 inch (25 mm) and smaller sizes, covering safe practices, gaugeability, and reassembly steps.</p>
	<p>Swagelok Tube Fittings: An Installer's Pocket Guide</p> <p>Comprehensive guide for Swagelok tube fittings, covering installation, selection, ordering, and replacement parts. Essential resource for installers and engineers.</p>
	<p>Swagelok Series 5, 10, and 20 Weld Head Tube Fixture Block Instructions</p> <p>Instructions for attaching the centering gauge to the plenum and performing alignment adjustments for Swagelok Series 5, 10, and 20 Weld Head Tube Fixture Blocks.</p>
	<p>Swagelok Gaugeable Tube Fittings & Adapter Fittings Catalog Reliable Fluid System Connections</p> <p>Discover the comprehensive Swagelok catalog detailing gaugeable tube fittings and adapter fittings. Learn about advanced designs, material options, pressure ratings, and installation tools for reliable fluid system connections across diverse industries.</p>
	<p>Swagelok Tube Fittings: An Installer's Pocket Guide</p> <p>An Installer's Pocket Guide for Swagelok Tube Fittings. This comprehensive manual provides essential installation instructions, product specifications, and ordering information for Swagelok's extensive range of fluid system components, including NPT, ISO/BSP, SAE/MS, and specialized fittings. Essential for professionals in industrial fluid systems.</p>