

Supco SPFE14

Supco SPFE14 1/4" Union Elbow Instruction Manual

Model: SPFE14 | Brand: Supco

1. PRODUCT OVERVIEW

The Supco SPFE14 is a genuine OEM 1/4-inch union elbow fitting, designed for connecting tubing at a 90-degree angle. This quick-connect fitting is suitable for both hot and cold applications and is manufactured from high-quality engineering plastic, ensuring durability and ease of installation without the need for specialized tools.

Key features include:

- Union Elbow with 1/4-inch connections.
- Non-OEM replacement part, compatible with various systems.
- Replaces Part Numbers: PP0308W.



Figure 1: Supco SPFE14 1/4" Union Elbow. This image displays the white 1/4-inch union elbow fitting, designed for quick connect applications, alongside two blue C-shaped retaining clips used to secure the tubing connections.

2. SPECIFICATIONS

Attribute	Value
Brand Name	Supco
Model Number	SPFE14
Connector Type	Elbow, Union
Material Type	Plastic
Item Weight	0.96 ounces (approx. 0.06 lbs)
Package Dimensions	7 x 5 x 1 inches
Number of Pieces	1

3. SETUP AND INSTALLATION

The Supco SPFE14 union elbow features a quick-connect design, allowing for easy and tool-free installation. Follow these general steps for proper connection:

- Prepare Tubing:** Ensure the ends of the tubing to be connected are cut cleanly and squarely. Remove any burrs or sharp edges that could damage the O-ring seal inside the fitting.
- Insert Tubing:** Firmly push the prepared tubing into one end of the union elbow until it bottoms out. You should feel a slight resistance as the tubing passes through the O-ring and collet.

- 3. **Secure Connection (Optional but Recommended):** For added security and to prevent accidental disconnection, insert the blue retaining clip (if provided) around the tubing, flush against the fitting's collet. This clip locks the collet in place.
- 4. **Repeat for Second Tubing:** Repeat steps 2 and 3 for the second piece of tubing on the other end of the elbow.
- 5. **Test for Leaks:** After installation, slowly introduce pressure to the system and carefully check all connections for any signs of leaks. Tighten or re-seat connections if necessary.

Note: Always ensure the system is depressurized before attempting to connect or disconnect fittings.

4. OPERATING INSTRUCTIONS

Once properly installed, the Supco SPFE14 union elbow functions as a permanent or semi-permanent connection point for 1/4-inch tubing, allowing fluid or gas to flow through a 90-degree turn. It is designed for continuous operation within its specified pressure and temperature limits, which are typical for standard plumbing and fluid transfer applications.

No specific operational steps are required beyond ensuring a secure, leak-free connection. The fitting is passive and facilitates the flow of media through the connected system.

5. MAINTENANCE

The Supco SPFE14 union elbow is a low-maintenance component. Regular maintenance involves:

- **Visual Inspection:** Periodically inspect the fitting and surrounding tubing for any signs of wear, cracks, discoloration, or leaks.
- **Cleaning:** If necessary, clean the exterior of the fitting with a damp cloth. Avoid using harsh chemicals that could degrade the plastic material.
- **Leak Checks:** Routinely check for leaks, especially after any system modifications or if the system has been idle for an extended period.

If any damage or persistent leaks are observed, the fitting should be replaced immediately to prevent system failure or water damage.

6. TROUBLESHOOTING

Most issues related to the union elbow are connection-related. Here are common problems and their solutions:

Problem	Possible Cause	Solution
Leak at connection point	Tubing not fully inserted; damaged O-ring; improperly cut tubing end; incorrect tubing size.	Ensure tubing is pushed firmly until it bottoms out. Depressurize system, remove tubing, inspect O-ring for damage, re-cut tubing end cleanly, and re-insert. Verify tubing matches 1/4-inch specification.
Tubing pulls out easily	Retaining clip not installed (if applicable); collet not gripping tubing; tubing too small.	Install the blue retaining clip. Ensure tubing is fully inserted past the collet. Verify tubing is the correct 1/4-inch size. If collet is damaged, replace the fitting.

Difficulty inserting tubing	Tubing end not cut squarely; burrs on tubing; incorrect tubing size.	Re-cut tubing end squarely and remove any burrs. Ensure tubing is the correct 1/4-inch size.
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If issues persist after attempting these solutions, consider replacing the fitting.

7. WARRANTY AND SUPPORT

As a replacement part, specific warranty information for the Supco SPFE14 union elbow may vary depending on the retailer or the system it is integrated into. For detailed warranty terms or technical support, please refer to the documentation provided by your original equipment manufacturer (OEM) or contact Supco directly through their official website or customer service channels.

Always ensure you are using genuine Supco parts or approved replacements to maintain system integrity and performance.