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› Fragola 482103-BL AN-3 90-Degree Union Fitting Instruction Manual

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Model: 482103-BL

1. INTRODUCTION

This manual provides essential information for the proper installation, use, and maintenance of your Fragola 482103-BL AN-3 90-Degree Union Fitting. Please read these instructions carefully before proceeding with installation to ensure optimal performance and safety.

2. PRODUCT OVERVIEW

The Fragola 482103-BL is a high-quality AN-3 male to AN-3 male 90-degree union fitting, crafted from lightweight aluminum and finished with a durable black anodized coating. It is designed to connect two AN-3 hose ends at a 90-degree angle, facilitating efficient routing in various fluid transfer applications.



Figure 1: Fragola 482103-BL AN-3 90-Degree Union Fitting. This image shows the black anodized aluminum fitting with two male AN-3 threaded ends connected by a 90-degree elbow.

Key Features:

- **Type:** 90-Degree Union Fitting
- **Size:** AN-3 Male to AN-3 Male
- **Material:** Aluminum
- **Finish:** Black Anodized
- **Application:** Designed for automotive fluid transfer systems.

3. SETUP AND INSTALLATION

Proper installation is crucial for the reliable performance of this fitting. Always ensure a clean working environment and use appropriate tools.

Installation Steps:

1. **Inspect Components:** Before installation, carefully inspect the fitting and the AN-3 hose ends for any damage, debris, or manufacturing defects. Ensure all threads are clean and free of burrs.
2. **Lubricate Threads:** Apply a small amount of appropriate lubricant (e.g., assembly lube or a compatible fluid) to the AN threads of both the fitting and the hose ends. This aids in smooth assembly and prevents galling.

3. **Hand Tighten:** Carefully thread the AN-3 hose ends onto the fitting. Ensure that the threads engage smoothly without cross-threading. Hand tighten until snug.
4. **Torque to Specification:** Using an AN wrench (aluminum wrench recommended to prevent marring), tighten the hose ends to the fitting. Refer to the hose end manufacturer's torque specifications for the AN-3 size. Avoid over-tightening, as this can damage the threads or the fitting.
5. **Leak Check:** After installation, pressurize the system and thoroughly inspect all connections for leaks. Address any leaks immediately by re-tightening to specification or disassembling and re-inspecting components.

Note: Always use AN-specific wrenches to prevent damage to the anodized finish and the hex surfaces of the fitting and hose ends.

4. OPERATING CONSIDERATIONS

Once properly installed, the Fragola 482103-BL fitting functions as a passive conduit for fluid transfer. Ensure that the fluid being transferred is compatible with aluminum and the system's operating pressures and temperatures do not exceed the limits of the connected hose and hose ends.

5. MAINTENANCE

Regular inspection and maintenance will prolong the life and ensure the reliability of your fitting.

Maintenance Guidelines:

- **Periodic Inspection:** Regularly check the fitting and its connections for any signs of leaks, corrosion, cracks, or physical damage.
- **Cleaning:** If necessary, clean the exterior of the fitting with a mild, non-abrasive cleaner and a soft cloth. Avoid harsh chemicals that could damage the anodized finish.
- **Replacement:** If any damage is observed, or if the fitting shows signs of wear that could compromise its integrity, replace it immediately with a new Fragola fitting. Do not attempt to repair damaged fittings.

6. TROUBLESHOOTING

Most issues related to fittings are installation-dependent.

Common Issues and Solutions:

- **Leaks at Connection:**
 - Ensure threads are clean and free of debris.
 - Verify proper torque applied to the hose end.
 - Check for cross-threading or damaged threads on both the fitting and the hose end.
 - Confirm compatibility of all components.
- **Difficulty Threading:**
 - Ensure proper alignment before threading.
 - Check for cross-threading. If resistance is felt, stop, unthread, and re-align.
 - Inspect threads for damage or burrs.
 - Apply thread lubricant.

7. SPECIFICATIONS

Attribute	Specification
Model Number	482103-BL
Brand	Fragola
Fitting Type	90-Degree Union Fitting
Connector Type	AN-3 Male to AN-3 Male
Material	Aluminum
Color/Finish	Black Anodized
Dimensions (L x W x H)	1.85 x 3.85 x 0.85 inches
Item Weight	0.48 ounces
UPC	099998502979
Country of Origin	United States

8. WARRANTY INFORMATION

Specific warranty details for the Fragola 482103-BL fitting are subject to the manufacturer's terms and conditions. Please refer to the official Fragola website or contact your authorized dealer for the most current warranty policy and registration information.

9. CUSTOMER SUPPORT

For technical assistance, product inquiries, or support, please contact Fragola customer service directly or reach out to your authorized Fragola product dealer. Contact information can typically be found on the official Fragola website.