Dorman 800-634

Dorman 800-634 Aluminum Tubing Instruction Manual

Model: 800-634

1. Product Overview

The Dorman 800-634 Aluminum Tubing is designed for various applications where durable and corrosion-resistant fluid or air lines are required. This product consists of straight, rigid aluminum tubes, each measuring 12 inches in length with a 5/8 inch (16mm) outer diameter. Aluminum's inherent properties make this tubing naturally lightweight, facilitating easier handling and installation.
Key features include:

- **Leak-resistant design:** Engineered for secure connections when properly installed.
- **Versatile application:** Suitable for a wide variety of uses, including automotive air conditioning systems or other areas where tubing may have corroded.
- **Lightweight construction:** Aluminum material ensures ease of handling and installation.
- **Corrosion resistance:** Aluminum naturally resists corrosion, rust, and warping.

Image 1.1: A pack of six Dorman 800-634 12-inch straight rigid aluminum tubes. Each tube has a uniform silver-gray finish.

2. Safety Information

Always prioritize safety when working with tools and materials. Failure to follow safety guidelines can result in injury or damage to property.

- **Personal Protective Equipment (PPE):** Always wear appropriate safety glasses or goggles to protect eyes from metal shavings or debris. Gloves are recommended to prevent cuts and abrasions.
- **Cutting and Bending:** Use appropriate tools for cutting and bending aluminum tubing. Improper tools can cause burrs, kinks, or weaken the tubing, leading to leaks or failure.
- **Sharp Edges:** Cut ends of tubing can be sharp. Handle with care and deburr all cut edges to prevent injury and ensure proper sealing.
- **System Pressure:** If installing in a pressurized system, ensure the tubing and connections are rated for the system's operating pressure. Always relieve system pressure before working on lines.
- **Chemical Compatibility:** Ensure the aluminum tubing is compatible with the fluids or gases it will transport.
- **Ventilation:** If soldering or welding, ensure adequate ventilation.

3. Package Contents

Upon opening the package, verify that all components are present and undamaged.

- 6 x Dorman 800-634 Aluminum Tubing (12 inches long, 5/8 inch OD)

4. Specifications

Specification	Value
Brand	Dorman
Model Number	800-634
Material	Aluminum
Product Dimensions (L x W)	12 inches L x 0.63 inches W
Item Length	12 Inches
Outside Diameter (OD)	5/8 inch (0.625 inches / 16mm)
Item Weight	11.2 ounces (per pack of 6)
UPC	019495130420
Manufacturer Part Number	800-634
OEM Part Number	5302

Image 4.1: A single Dorman 800-634 aluminum tube, showcasing its straight, rigid form and metallic finish.

5. Installation Guidelines

These guidelines provide general steps for working with aluminum tubing. Specific application requirements may vary. Professional installation is recommended for critical systems such as brake lines or fuel lines.

1. **Preparation:**
    - Ensure the work area is clean and well-lit.
    - Gather all necessary tools: tubing cutter, deburring tool, flaring tool (if applicable), bending tool (if applicable), measuring tape, and appropriate fittings.
    - Verify the correct length and diameter of tubing for your application.
2. **Measuring and Cutting:**
    - Measure the required length accurately.
    - Use a sharp tubing cutter to make a clean, square cut. Rotate the cutter around the tube, gradually tightening the feed screw until the cut is complete.
    - Avoid using hacksaws or other tools that can create excessive burrs or deform the tubing.
3. **Deburring:**
    - After cutting, use a deburring tool to remove any internal or external burrs from the cut end. This is crucial for proper sealing and unrestricted flow.
4. **Bending (if required):**
    - If bending is necessary, use a proper tubing bender to prevent kinking or collapsing the tube.
    - Avoid sharp bends that can compromise the structural integrity or flow capacity of the tubing.
5. **Flaring (if required):**
    - For applications requiring flared connections, use a suitable flaring tool (e.g., double flare or single flare, depending on the fitting type).

    - Follow the flaring tool manufacturer's instructions carefully to create a clean, concentric flare.
6. **Connection:**
    - Install appropriate fittings (e.g., compression fittings, flared fittings) onto the prepared tubing ends.
    - Tighten fittings to the manufacturer's recommended torque specifications to ensure a leak-free seal without over-tightening, which can damage the tubing or fitting.
7. **Leak Testing:**
    - After installation, perform a leak test appropriate for the system (e.g., pressure test with soapy water for air/gas, visual inspection for fluid).

6. Operating and Handling

Once installed, aluminum tubing generally requires minimal operational considerations beyond ensuring it is not subjected to conditions exceeding its design limits.

- **Temperature and Pressure:** Ensure the operating temperature and pressure of the system remain within the safe limits for aluminum tubing and its associated fittings.
- **Vibration:** In applications with significant vibration, consider using clamps or supports to secure the tubing and prevent fatigue failure.
- **Physical Damage:** Avoid exposing the tubing to impacts, crushing forces, or abrasion that could compromise its integrity.

7. Maintenance

Regular inspection and basic maintenance can extend the lifespan and ensure the reliable performance of your Dorman aluminum tubing.

- **Visual Inspection:** Periodically inspect the tubing for signs of corrosion, cracks, dents, or other physical damage. Check connections for any signs of leakage (e.g., fluid residue, bubbles for gas lines).
- **Cleaning:** Clean the exterior of the tubing as needed to remove dirt, grease, or other contaminants. Use mild cleaning agents and avoid abrasive materials that could scratch or damage the surface.
- **Connection Integrity:** Re-check the tightness of fittings if any leaks are suspected or during routine maintenance checks. Do not over-tighten.
- **Support and Clamping:** Ensure all clamps and supports are secure and providing adequate support to the tubing, especially in areas subject to movement or vibration.

8. Troubleshooting

This section addresses common issues that may arise with aluminum tubing installations.

Problem	Possible Cause	Solution

Problem	Possible Cause	Solution
Leakage at Connection	◦ Improperly tightened fitting ◦ Damaged flare or fitting seat ◦ Burrs on tubing end ◦ Incorrect fitting type	◦ Tighten fitting to specifications. ◦ Inspect and re-flare or replace tubing/fitting. ◦ Deburr tubing end thoroughly. ◦ Ensure correct fitting for application.
Restricted Flow	◦ Kinked tubing ◦ Excessive burrs inside tubing ◦ Debris inside tubing	◦ Replace kinked section. ◦ Ensure proper deburring during installation. ◦ Flush tubing before installation.
Tubing Damage (Cracks, Dents)	◦ Physical impact ◦ Improper bending ◦ Excessive vibration	◦ Replace damaged section. ◦ Use proper bending tools and techniques. ◦ Add or reinforce tubing supports.

9. Warranty and Support

For specific warranty information regarding your Dorman product, please refer to the documentation provided with your purchase or visit the official Dorman website. If you require technical assistance or have questions about the Dorman 800-634 Aluminum Tubing, please contact Dorman customer support.
Dorman Customer Support:

- **Website:** www.dormanproducts.com (Please check the website for contact details and support resources.)

© 2023 Dorman Products. All rights reserved.