TUXING TXF001-B

TUXING TXF001-B 4500Psi PCP Air Filter Instruction Manual

Model: TXF001-B

1. Introduction

The TUXING TXF001-B 4500Psi PCP Air Filter is designed to enhance the quality of compressed air by effectively removing oil, moisture, and other impurities. This filter is an essential component for PCP (Pre-Charged Pneumatic) hand pumps and high-pressure air compressors, ensuring that the air used to fill PCP cylinders is clean and dry. Proper use and maintenance of this filter will prolong the life of your equipment and improve performance.

Figure 1: TUXING TXF001-B PCP Air Filter with quick connectors.

2. Safety Information

Please read and understand all safety instructions before using the TUXING TXF001-B air filter. Failure to follow these instructions may result in injury or damage to equipment.

- Always wear appropriate personal protective equipment (PPE), including eye protection, when working with high-pressure air systems.
- Ensure all connections are secure and leak-free before pressurizing the system.
- Do not exceed the maximum rated pressure of 45 MPa (450 Bar / 6525 Psi). The normal operating pressure is 30 MPa (300 Bar / 4500 Psi).
- Never point pressurized equipment at yourself or others.
- Keep the filter away from heat sources, open flames, and flammable materials.
- Store the filter in a clean, dry environment when not in use.
- Do not attempt to modify the filter or its components. Use only genuine TUXING replacement parts.

3. Product Overview

3.1 Components

- Blue Aluminum Alloy Shell
- Internal Filter Element (replaceable)
- M10 x 1 Threaded Connectors
- 8mm Male Quick Connector
- 8mm Female Quick Connector (soft hose connection)
- Sealing O-rings

3.2 Features

- **High-Quality Material:** Constructed from durable blue aluminum alloy for longevity and resistance to high pressure.
- **Effective Filtration:** Designed to filter oil, moisture, and impurities from compressed air.
- **High Pressure Resistance:** Capable of withstanding normal operating pressures of 30 MPa (4500 Psi) and maximum pressures up to 45 MPa (6525 Psi).
- **Versatile Connectivity:** Features M10 x 1 threaded ends with 8mm male and female quick connectors for broad compatibility with PCP hand pumps and high-pressure air compressors.
- **Stable Structure:** Ensures reliable and safe operation.

Figure 2: Detail of the male quick connector on the TUXING TXF001-B filter.

4. Setup

Follow these steps to properly connect your TUXING TXF001-B air filter to your air source and PCP cylinder.

1. **Identify Connections:** The filter has two ends. One end typically connects to the air source (PCP hand pump or compressor), and the other connects to the PCP cylinder or device to be filled. The filter comes with M10 x 1 threaded ends and 8mm male and female quick connectors.
2. **Connect to Air Source:** Attach the appropriate end of the filter (usually the male quick connector or M10 thread) to

the output of your PCP hand pump or high-pressure air compressor. Ensure the connection is tight and secure to prevent air leaks.

3. **Connect to PCP Cylinder:** Attach the other end of the filter (usually the female quick connector or M10 thread) to the input valve of your PCP cylinder or airgun. Again, ensure a tight and secure connection.
4. **Check for Leaks:** Before full operation, perform a low-pressure leak test if possible. Listen for hissing sounds or use a soapy water solution on connections to detect bubbles, indicating a leak. Tighten connections as necessary.

Figure 3: The 8mm female quick connector for hose attachment.

5. Operating Instructions

Once the filter is securely connected, you can begin the air filling process.

1. **Initiate Air Flow:** Begin operating your PCP hand pump or high-pressure air compressor according to its own instruction manual.
2. **Monitor Pressure:** Continuously monitor the pressure gauge on your air source and the PCP cylinder to ensure you do not exceed the maximum recommended pressure for your cylinder or the filter (30 MPa / 4500 Psi normal, 45 MPa / 6525 Psi max).
3. **Observe Filtration:** The filter will automatically remove moisture and oil as air passes through it. No specific action is required during operation other than monitoring.
4. **Complete Filling:** Once the desired pressure is reached in your PCP cylinder, stop the air source.

5. **Depressurize and Disconnect:** Carefully depressurize the system before disconnecting the filter from the air source and the PCP cylinder. Refer to your air source and cylinder manuals for proper depressurization procedures.

6. Maintenance

Regular maintenance of your TUXING TXF001-B air filter is crucial for its performance and longevity. The primary maintenance task is replacing the internal filter element.

6.1 Filter Element Replacement

The filter element should be replaced when it becomes saturated with moisture or oil, or if you notice a decrease in air quality. The frequency depends on usage and environmental humidity.

1. **Depressurize System:** Ensure the entire air system is fully depressurized before attempting any maintenance.
2. **Disassemble Filter:** Carefully unscrew the end cap of the filter housing. This may require a wrench if tightened securely.
3. **Remove Old Element:** Extract the saturated filter element from inside the housing. Dispose of it responsibly.
4. **Inspect O-rings:** Check the O-rings for any signs of wear, cracks, or damage. Replace them if necessary to ensure a proper seal.
5. **Insert New Element:** Place a new, clean filter element into the housing.
6. **Reassemble Filter:** Screw the end cap back onto the filter housing. Tighten it firmly by hand, then use a wrench for a final snug turn, but do not overtighten.
7. **Test for Leaks:** After reassembly, reconnect the filter to your air system and perform a leak test at low pressure before full operation.

Figure 4: Replacement filter elements for the TUXING TXF001-B.

Figure 5: The TUXING TXF001-B filter disassembled, showing the internal filter element.

7. Troubleshooting

Problem	Possible Cause	Solution
Air Leakage	Loose connections, damaged O-rings, improperly seated filter element.	Tighten all connections. Inspect and replace O-rings if damaged. Ensure filter element is correctly seated.
Reduced Air Flow / Slow Filling	Saturated or clogged filter element.	Replace the filter element (refer to Section 6.1).
Moisture or Oil in Output Air	Saturated filter element, incorrect installation.	Replace the filter element. Verify correct installation and ensure all seals are intact.
Difficulty opening filter housing	Over-tightened cap, pressure still in system.	Ensure system is fully depressurized. Use a wrench for leverage, but avoid excessive force to prevent damage.

8. Specifications

Model: TXF001-B

Material: High-quality Blue Aluminum Alloy

Dimensions (L x W x H): 12.5 x 4 x 4 cm (approximately 4.9 x 1.6 x 1.6 inches)

Weight: 590 grams (approximately 1.3 lbs)

Normal Operating Pressure: 30 MPa (300 Bar / 4500 Psi)

Maximum Pressure: 45 MPa (450 Bar / 6525 Psi)

Thread Connections: M10 x 1

Quick Connectors: 8mm Male and Female

Compatible Hose Diameter: 8 mm

Manufacturer: Xiamen Subang Technology Co.,Ltd.

Included Components: Filter unit, soft hose with female and male quick connectors, replacement filter elements, O-rings.

9. Warranty and Support

Specific warranty information for the TUXING TXF001-B air filter is not provided in this manual. Please refer to your purchase documentation or contact the retailer for details regarding warranty coverage.

For technical support or inquiries about replacement parts, please contact TUXING customer service through their official website or the platform where the product was purchased. Ensure you have your model number (TXF001-B) and purchase details available when contacting support.

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