TUXING TXEDM042

TUXING TXEDM042 4500Psi Scuba PCP Air Compressor Instruction Manual

Model: TXEDM042

1. Introduction and Overview

The TUXING TXEDM042 is a high-pressure PCP air compressor designed for various applications including scuba diving, firefighting, paintball, and pressure testing. This compressor features a built-in two-stage water-oil filtration system for cleaner air output and an automatic shut-off function when the set pressure is reached. It operates on a 110V power supply and is capable of reaching pressures up to 4500Psi (300 Bar).

This manual provides essential information for the safe and efficient operation, setup, and maintenance of your TUXING TXEDM042 air compressor. Please read it thoroughly before initial use.

2. Safety Information

WARNING: Failure to follow these safety instructions may result in serious injury or property damage.

- Always operate the compressor in a well-ventilated area to prevent overheating and accumulation of fumes.
- Ensure the compressor is placed on a stable, level surface.
- **Never** operate the compressor without a proper water cooling system connected and functioning. The compressor requires an external bucket of cooling water.
- Before each use, verify that all connections are secure and free from leaks.
- Do not exceed the maximum operating pressure of 4500Psi (300 Bar). The built-in safety valve will automatically activate if overpressure occurs.
- Always wear appropriate personal protective equipment, including eye protection, when operating the compressor.

- Keep children and unauthorized personnel away from the compressor during operation.
- Disconnect the power supply before performing any maintenance or cleaning.
- Ensure the oil level is correct before starting the compressor.

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3. Product Components and Accessories

Familiarize yourself with the main components and included accessories of your TXEDM042 compressor.

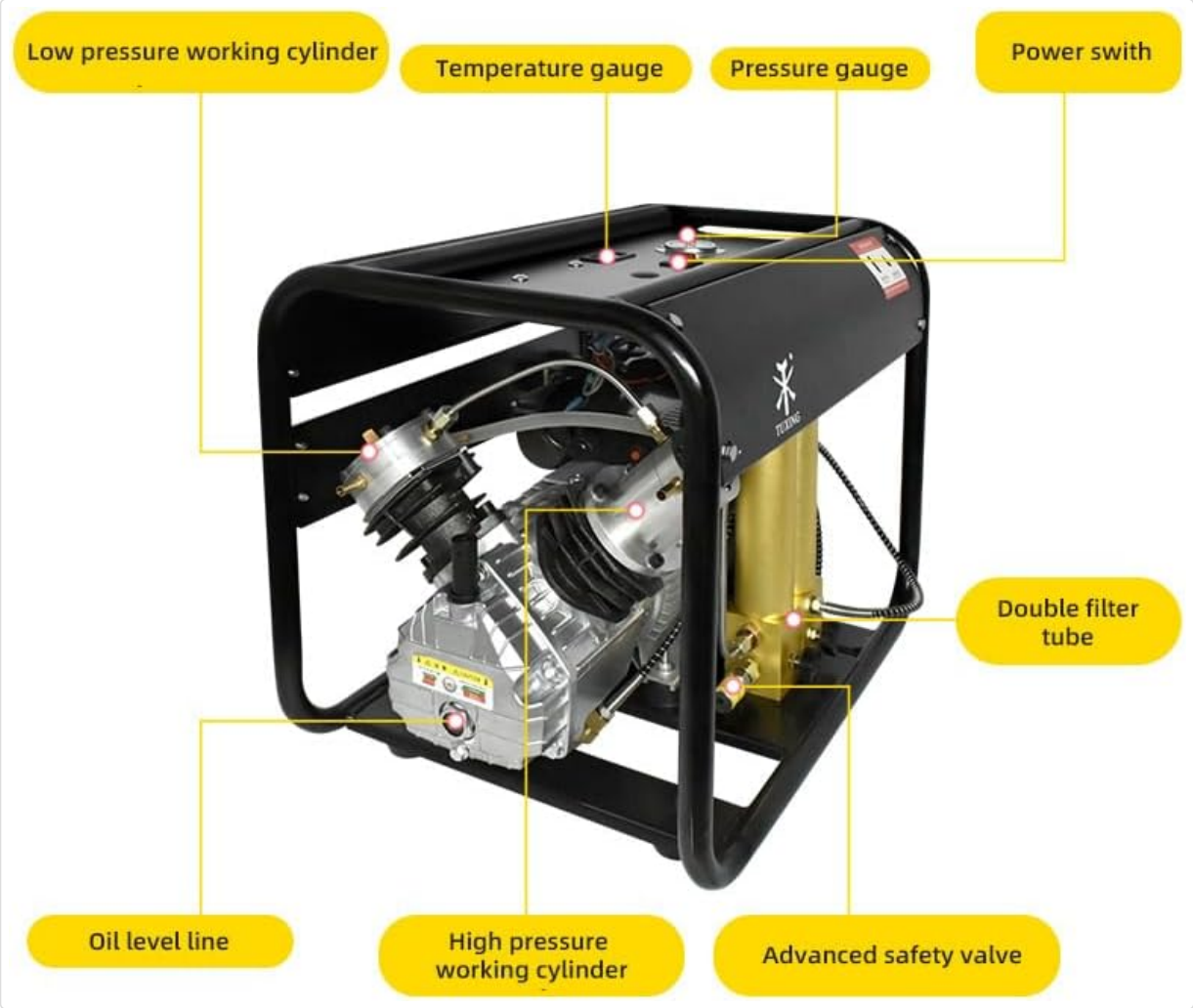

Figure 3.1: Labeled diagram of the TXEDM042 compressor components.

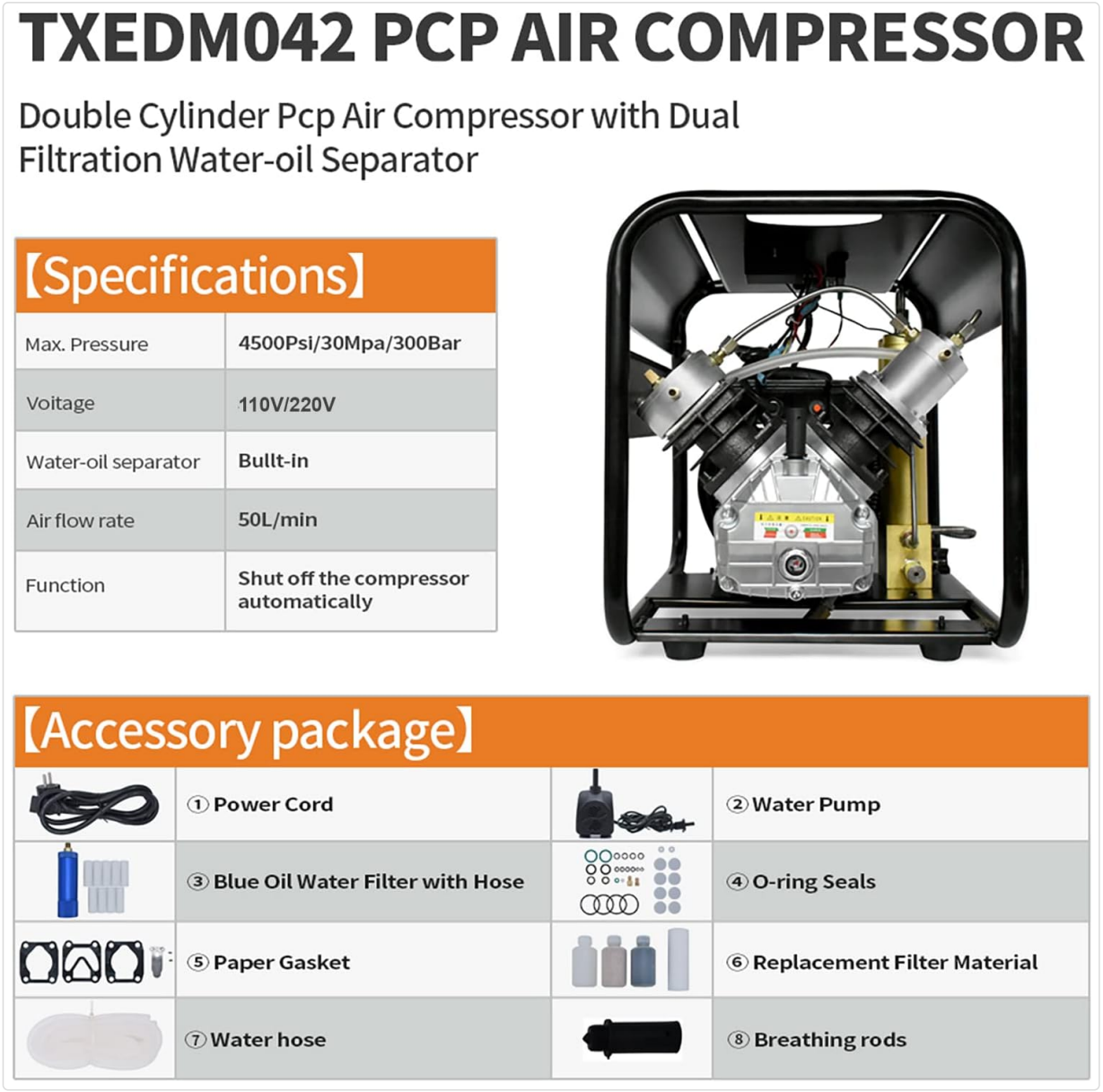

Figure 3.2: Compressor overview with specifications and accessory package.

Included Accessories:

- Power Cord
- Water Pump
- Blue Oil Water Filter with Hose
- O-ring Seals (various sizes)
- Paper Gasket
- Replacement Filter Material
- Water Hose
- Breathing Rods

Figure 3.3: Complete accessory package.

4. Specifications

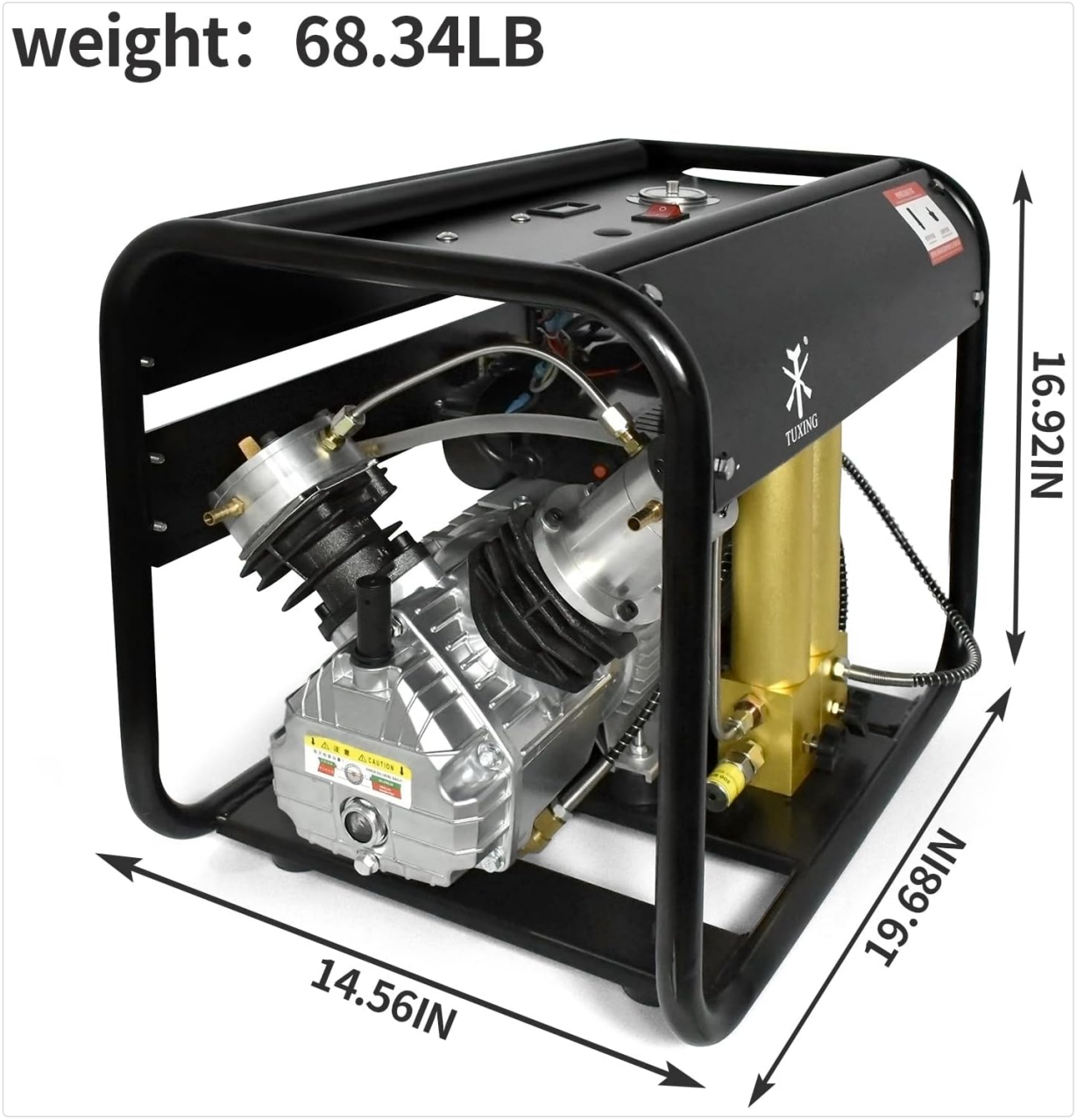

Figure 4.1: TXEDM042 dimensions and weight.

Parameter	Value
Model	TXEDM042
Max. Pressure	4500Psi / 30Mpa / 300Bar
Voltage	110V
Power	2.2kW
Frequency	60Hz
Flow Rate	40L/min
Cooling System	Independent Water Cooling
Filtration System	Built-in Two-Stage Water-Oil Filter
Inflation Nozzle	8mm Quick Connector
Automatic Shut-off	Yes, adjustable pressure gauge
Noise Level	85 Decibels
Weight	68.34 LB
Dimensions (L x W x H)	19.68 in x 14.56 in x 16.92 in

Figure 4.2: Performance metrics and internal features.

Figure 4.3: High pressure performance and valve details.

5. Setup Instructions

1. **Unpacking and Inspection:** Carefully remove the compressor and all accessories from the packaging. Inspect for any visible damage.
2. **Oil Filling:** Before initial use, replace the oil suction device and fill the compressor with the appropriate oil (refer to the oil type specified in the separate oil instructions or product labeling). Ensure the oil level is correct.
3. **Cooling Water System Setup:**
    - Place an external bucket of clean water near the compressor.
    - Connect the provided water pump to the water hose and submerge the pump in the bucket.
    - Connect the other end of the water hose to the compressor's water inlet.
    - Ensure the water pump is powered and circulating water through the compressor's cooling system before starting the compressor.
4. **Filtration System Connection:** Connect the blue oil and water filter with its hose to the designated port on the compressor. This two-stage filtration system helps ensure cleaner air output.
5. **Inflation Nozzle Connection:** Attach the 8mm quick connector inflation nozzle to the air outlet of the

compressor.

6. **Power Connection:** Connect the power cord to the compressor and then to a standard 110V household power outlet.

Figure 5.1: Dual filtration system diagram.

6. Operating Instructions

1. **Pre-Operation Check:** Verify all setup steps are complete, including oil level, cooling water circulation, and secure connections.
2. **Set Desired Pressure:** Use the adjustable pressure gauge to set the desired shut-off pressure. The compressor will automatically stop when this pressure is reached.
3. **Connect Device:** Connect the device to be filled (e.g., scuba tank, paintball tank) to the 8mm quick connector inflation nozzle.
4. **Start Compressor:** Turn on the power switch. The compressor will begin to operate.
5. **Monitor Operation:** Continuously monitor the pressure gauge and the digital thermometer for the cooling system. Ensure the cooling water is circulating effectively and the compressor does not

overheat.

6. **Automatic Shut-off:** Once the set pressure is reached, the compressor will automatically shut off.
7. **Release Pressure:** After the compressor stops, slowly open the release valve to vent any residual pressure in the hose before disconnecting the filled device.
8. **Disconnect Device:** Once pressure is released, disconnect the filled device from the inflation nozzle.
9. **Power Off:** Turn off the compressor's power switch and disconnect from the main power supply.

Typical Inflation Times:

- Filling a 0.5-liter water tank from 0-300 bar: Approximately 3 minutes.
- Filling a 6.8-liter water tank from 0-300 bar: Approximately 45 minutes.

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7. Maintenance

Regular maintenance is crucial for the longevity and safe operation of your compressor.

- **Oil Checks and Changes:** Regularly check the oil level using the oil level line. Change the compressor oil according to the manufacturer's recommendations or after a specified number of operating hours.
- **Filter Replacement:** The built-in two-stage water-oil filter and any external filters should be inspected and replaced periodically to ensure optimal air quality. Use the provided replacement filter material.
- **Cooling System Maintenance:** Ensure the cooling water is clean. Periodically clean the water pump and hoses to prevent blockages.
- **Draining Water/Oil:** After use, especially in humid conditions, drain any accumulated water or oil from the appropriate outlets to prevent corrosion and maintain performance.
- **General Cleaning:** Keep the exterior of the compressor clean and free from dust and debris.

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8. Troubleshooting

If you encounter issues with your compressor, consider the following common troubleshooting steps:

- **Compressor does not start:** Check power connection, ensure the power switch is on, and verify the circuit breaker has not tripped.
- **Compressor runs but does not build pressure:** Check for leaks in connections, ensure the release valve is closed, and verify the inflation nozzle is properly connected to the device.
- **Compressor overheats:** Ensure the cooling water system is functioning correctly, the water pump is circulating water, and the water level in the external bucket is sufficient. Operate in a well-ventilated area.
- **Automatic shut-off not working:** Verify the pressure setting on the adjustable gauge. If the issue persists, contact customer support.
- **Air quality issues (e.g., moisture in air):** Replace the water-oil filter elements. Ensure proper draining of water/oil after use.

For persistent issues or problems not covered here, please refer to the support section.

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9. Wide Application

The TUXING TXEDM042 compressor is suitable for a variety of high-pressure air applications:

- Scuba Diving Tank Filling
- Firefighting Air Tank Filling
- Paintball Tank Filling
- PCP Rifle Air Filling
- Leak Detection
- Pressure Testing
- Automotive Applications (e.g., tire inflation, if applicable with appropriate adapters)
- Air Tightness Testing

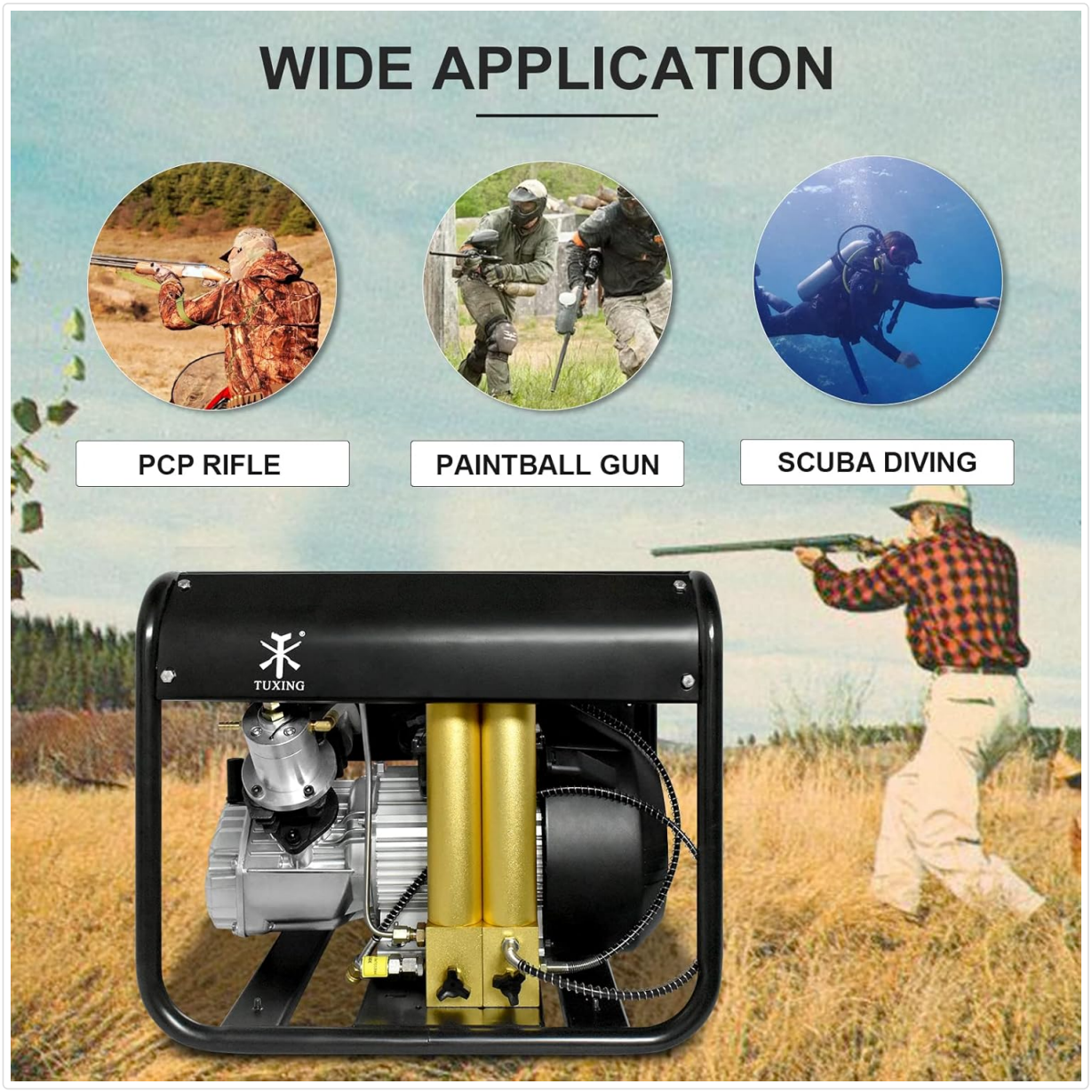

Figure 9.1: Examples of wide applications for the TXEDM042 compressor.

10. Warranty and Support

This product comes with an operating manual. If you have any questions, require technical assistance, or

need to report an issue, please contact the TUXING service team. Refer to your purchase documentation or the TUXING official website for specific warranty terms and contact information.

For prompt support, please have your model number (TXEDM042) and purchase date available when contacting customer service.