

Yellow Jacket 49887

Yellow Jacket 49887 Titan 2-Valve Test and Charging Manifold Instruction Manual

Model: 49887

1. INTRODUCTION

This manual provides detailed instructions for the safe and effective use of the Yellow Jacket 49887 Titan 2-Valve Test and Charging Manifold. This precision instrument is designed for testing and charging refrigeration and air conditioning systems using R-22, R-134A, and R-404A refrigerants. It features durable construction and clear, easy-to-read gauges for accurate pressure and temperature measurements.

2. SAFETY INFORMATION

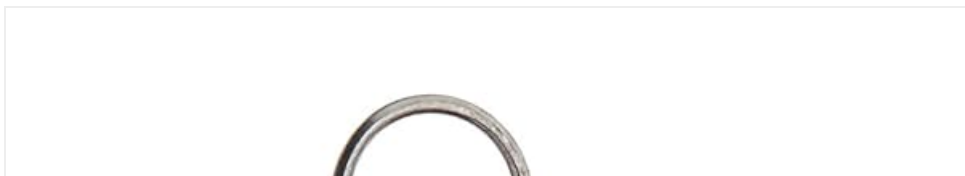
WARNING: Always follow proper safety procedures when working with refrigerants and pressurized systems. Failure to do so can result in serious injury or equipment damage.

- Wear appropriate personal protective equipment (PPE), including safety glasses and gloves, when handling refrigerants.
- Ensure adequate ventilation in the work area to prevent accumulation of refrigerant vapors.
- Never apply heat directly to refrigerant cylinders.
- Do not over-pressurize refrigeration systems. Refer to system manufacturer specifications.
- Always connect hoses securely before opening valves.
- Dispose of refrigerants and associated waste according to local environmental regulations.

3. PACKAGE CONTENTS

Verify that all items are present and undamaged upon unpacking:

- Yellow Jacket 49887 Titan 2-Valve Manifold with Red/Blue Gauges
- Set of three (3) color-coded charging hoses (Red, Blue, Yellow)



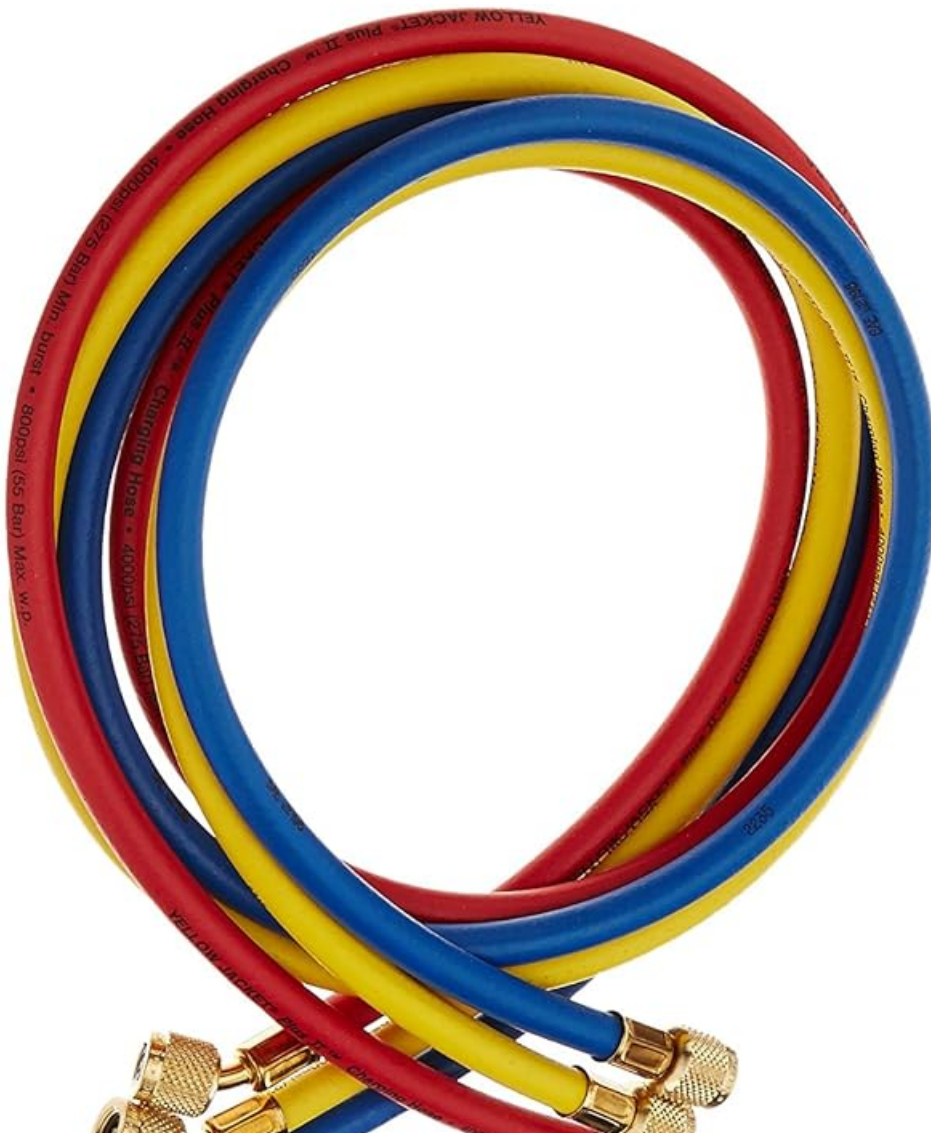




Image 1: The Yellow Jacket 49887 Titan 2-Valve Manifold, showing the red and blue gauges, manifold body, and the included red, blue, and yellow charging hoses.

4. PRODUCT FEATURES

- **2-Valve Design:** Facilitates efficient testing and charging operations.
- **Red/Blue Gauges:** Clearly marked for high-side (red) and low-side (blue) pressure readings.
- **Multi-Refrigerant Scales:** Compatible with R-22, R-134A, and R-404A refrigerants, with corresponding pressure and temperature scales in Degrees F and psi.
- **Durable Construction:** Built for reliability in professional use.
- **Integrated Hook:** For convenient hanging during service.



Image 2: Rear view of the Yellow Jacket 49887 Titan 2-Valve Manifold, showing the robust manifold body and hose connection points.

5. SETUP

1. **Inspect Components:** Before each use, inspect the manifold, gauges, and hoses for any signs of damage, wear, or leaks. Ensure all connections are clean.
2. **Connect Hoses to Manifold:**
 - Connect the **red** hose to the high-side port (typically on the right, marked "HIGH" or "H") of the manifold.

- Connect the **blue** hose to the low-side port (typically on the left, marked "LOW" or "L") of the manifold.
- Connect the **yellow** hose to the center service port (typically marked "SERVICE" or "VAC/CHARGE") of the manifold.

Ensure all hose connections are finger-tight, then tighten slightly with a wrench to prevent leaks. Do not overtighten.

6. OPERATING INSTRUCTIONS

This section outlines general procedures. Always refer to the specific equipment manufacturer's service manual for detailed instructions and refrigerant charge specifications.

6.1. Pressure Testing

1. **Prepare System:** Ensure the refrigeration or AC system is off and depressurized if necessary, following manufacturer guidelines.
2. **Connect to System:**
 - Connect the free end of the **red** hose to the high-side service port of the system.
 - Connect the free end of the **blue** hose to the low-side service port of the system.
3. **Open System Valves:** Slowly open the service port valves on the system to allow refrigerant pressure to reach the manifold gauges.
4. **Read Gauges:** Observe the pressure readings on both the red (high-side) and blue (low-side) gauges. Compare these readings to the system manufacturer's specifications for the specific refrigerant (R-22, R-134A, or R-404A) and operating conditions.
5. **Close System Valves:** Once readings are taken, close the system service port valves.
6. **Disconnect Hoses:** Carefully disconnect the hoses from the system service ports. Be prepared for a small release of refrigerant.

6.2. Refrigerant Charging

This procedure assumes the system has been properly evacuated.

1. **Connect to System:** Connect the red and blue hoses to the high and low-side service ports of the system, respectively, as described in Section 6.1.
2. **Connect to Refrigerant Tank:** Connect the free end of the **yellow** hose to the refrigerant supply tank. Ensure the tank valve is closed.
3. **Purge Air from Yellow Hose:**
 - Slightly open the refrigerant tank valve.
 - Loosen the yellow hose connection at the manifold center port just enough to allow a small amount of refrigerant to escape, purging air from the hose.
 - Retighten the yellow hose connection.
4. **Charge Refrigerant:**
 - With the system running (if charging by pressure/superheat) or off (if charging by weight), slowly open the low-side (blue) manifold valve to allow refrigerant to flow into the system.
 - Monitor the low-side gauge and the system's performance.
 - Close the low-side manifold valve when the desired charge is achieved.
 - *Note:* For liquid charging, the high-side valve may be used with the system off, or a liquid charging adapter may be required. Always follow system manufacturer guidelines.

5. Close Valves and Disconnect:

- Close the refrigerant tank valve.
- Close both the high-side and low-side manifold valves.
- Close the system service port valves.
- Carefully disconnect the hoses from the system and refrigerant tank.

7. MAINTENANCE

- **Cleaning:** After each use, wipe down the manifold and hoses with a clean, dry cloth. Avoid using harsh chemicals that could damage the gauges or seals.
- **Hose Inspection:** Regularly inspect hoses for cracks, cuts, or signs of wear. Replace damaged hoses immediately to prevent refrigerant leaks.
- **Gauge Calibration:** While Yellow Jacket gauges are factory calibrated for accuracy, if you suspect a gauge is inaccurate, it should be checked by a qualified technician. Do not attempt to recalibrate gauges yourself.
- **Storage:** Store the manifold and hoses in a clean, dry place, protected from extreme temperatures and direct sunlight.

8. TROUBLESHOOTING

Problem	Possible Cause	Solution
Refrigerant Leak	Loose hose connections, damaged O-rings, faulty hoses.	Tighten all connections. Inspect and replace O-rings or hoses as needed. Use leak detection fluid.
Inaccurate Gauge Readings	Gauge damage, improper connection, incorrect refrigerant scale selected.	Ensure proper connection. Verify correct refrigerant scale. If suspected damage, have gauges professionally checked.
Difficulty Charging/Evacuating	Manifold valves not fully open/closed, clogged hoses, system blockage.	Ensure manifold valves are fully actuated. Check hoses for obstructions. Consult system service manual for blockages.

9. SPECIFICATIONS

- **Model:** Yellow Jacket 49887 Titan 2-Valve Manifold
- **Gauge Type:** Red/Blue, Pressure/Temperature (Degrees F, psi)
- **Compatible Refrigerants:** R-22, R-134A, R-404A
- **Valve Type:** 2-Valve
- **Hose Connections:** Standard 1/4" SAE
- **Product Dimensions:** Approximately 12.5 x 11.7 x 5.3 inches
- **Item Weight:** Approximately 1 Pound
- **Manufacturer:** Fotronic Corporation



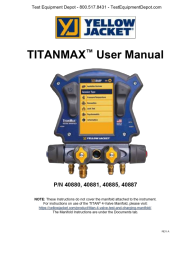


10. WARRANTY AND SUPPORT

For warranty information and technical support, please contact Yellow Jacket customer service or refer to the official Yellow Jacket website. Keep your purchase receipt as proof of purchase.

[Visit Yellow Jacket Official Website](#)

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Related Documents - 49887

	<p>Yellow Jacket RecoverXLT and RecoverX Refrigerant Recovery Machines</p> <p>Comprehensive guide to Yellow Jacket's RecoverXLT and RecoverX refrigerant recovery machines, detailing features, specifications, operation, and comparison charts for HVAC/R professionals.</p>
	<p>Yellow Jacket HVAC/R Charging Systems & Diagnostic Tools Catalog</p> <p>This catalog showcases Yellow Jacket's comprehensive range of HVAC/R charging systems and diagnostic tools, including the YJACK™ Series wireless sensors, P51 TITAN® Digital Manifolds, ManTooth® Wireless Gauges, and various BRUTE II® and Series 41 manifolds. The products are designed for accurate measurements, efficient system analysis, and enhanced user experience in HVAC/R applications.</p>
	<p>YELLOW JACKET TITANMAX™ User Manual</p> <p>Comprehensive user manual for the YELLOW JACKET TITANMAX™ digital manifold, detailing its features, operation, settings, maintenance, and troubleshooting for HVAC professionals. Includes model numbers P/N 40880, 40881, 40885, 40887.</p>
	<p>Yellow Jacket TITANMAX™ Digital Manifold Quick Start Guide</p> <p>Quick start guide for the Yellow Jacket TITANMAX™ Digital Manifold, covering setup, connections, main features, and settings for HVAC technicians. Learn how to power on, connect probes, navigate menus, and configure settings for pressure, temperature, vacuum, and psychrometric measurements.</p>
	<p>Yellow Jacket TitanMax Digital Manifold - Features and Specifications</p> <p>Explore the Yellow Jacket TitanMax Digital Manifold, a 4-valve system offering fast and accurate measurements for refrigeration and A/C systems. Features include a high-resolution touchscreen, wireless connectivity via Bluetooth to YJACK VIEW® and measureQuick® apps, on-board data logging, and compatibility with A2L refrigerants.</p>



[Yellow Jacket P51-870 TITAN Digital Manifold Quick Start Guide](#)

A quick start guide for the Yellow Jacket P51-870 TITAN Digital Manifold, covering operation modes, settings, and data management.