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› Standard Motor Products TS24 Temp Sender/Sensor Instruction Manual

## Standard Motor Products TS24

# Standard Motor Products TS24 Temp Sender/Sensor Instruction Manual

Comprehensive guide for installation, operation, and maintenance.

## PRODUCT OVERVIEW

The Standard Motor Products TS24 Temp Sender/Sensor is a critical automotive component designed to accurately measure the temperature of a vehicle's engine coolant or other fluids. This sensor converts temperature readings into an electrical signal, which is then transmitted to the vehicle's engine control unit (ECU) or dashboard temperature gauge, providing essential data for engine management and driver information.

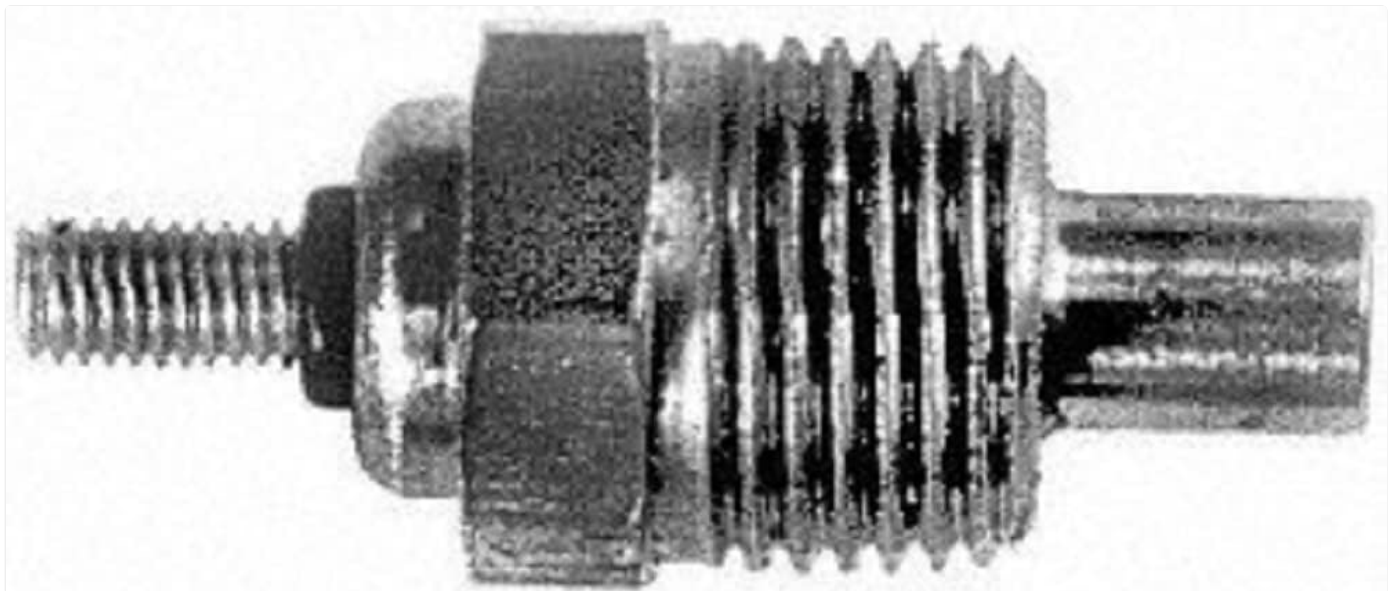


**Figure 1:** Standard Motor Products TS24 Temp Sender/Sensor. A close-up view of the metallic cylindrical component with threaded sections on both ends. One end features finer threads for electrical connection, while the other end has coarser threads for mechanical installation into a vehicle's engine block or cooling system. A hexagonal nut section is present in the middle for tightening.

## KEY FEATURES

- **Product Type:** Auto Part
- **Compact Design:** Item package dimensions of 4.15" L x 3.16" W x 1.6" H for easy handling and installation.
- **Lightweight:** Weighs approximately 0.65 lbs, contributing to ease of installation.

- **Origin:** Manufactured in China.

## SPECIFICATIONS

|                          |                                         |
|--------------------------|-----------------------------------------|
| Brand                    | Standard Motor Products                 |
| Model Number             | TS24                                    |
| Product Dimensions       | 1.6"D x 2"W x 1.6"H                     |
| Item Weight              | 0.8 ounces (approx. 22.68 g)            |
| Style                    | Modern                                  |
| Measuring Range          | -40°C to 120-250°C (-40°F to 248-482°F) |
| Mounting Type            | Surface Mount                           |
| Output Type              | Electrical Signal                       |
| Specific Uses            | Temperature Sensing                     |
| UPC                      | 091769031756                            |
| Manufacturer Part Number | TS24                                    |
| Contents                 | 1x TS24 Temp Sender/Sensor              |

## INSTALLATION GUIDE

Proper installation is crucial for the accurate function and longevity of the TS24 Temp Sender/Sensor. It is highly recommended that installation be performed by a qualified automotive technician or by following the specific service manual for your vehicle model.

### General Installation Steps (Consult Vehicle Manual for Specifics):

1. **Safety First:** Ensure the vehicle's engine is completely cool and the ignition is off. Disconnect the negative terminal of the battery to prevent accidental electrical shorts.
2. **Locate Old Sensor:** Identify the existing temperature sender/sensor. Its location varies by vehicle but is typically found on the engine block, cylinder head, or intake manifold, often near the thermostat housing.
3. **Drain Coolant (if necessary):** Depending on the sensor's location, you may need to drain a small amount of coolant to prevent spills when removing the old sensor. Place a drain pan underneath.
4. **Disconnect Wiring:** Carefully disconnect the electrical connector from the old sensor.
5. **Remove Old Sensor:** Use an appropriately sized wrench or sensor socket to unscrew and remove the old sensor. Be prepared for any remaining coolant to leak out.
6. **Prepare New Sensor:** Apply a small amount of thread sealant (compatible with automotive coolants) to the threads of the new TS24 sensor, if not pre-applied or if specified by your vehicle's manual.
7. **Install New Sensor:** Carefully thread the new TS24 sensor into the opening by hand to avoid cross-threading. Once hand-tight, use a wrench to tighten it to the vehicle manufacturer's specified torque. *Do not overtighten.*
8. **Reconnect Wiring:** Reconnect the electrical connector to the new sensor, ensuring a secure fit.
9. **Refill Coolant (if drained):** If coolant was drained, refill the cooling system to the appropriate level with the correct type of

coolant for your vehicle.

10. **Reconnect Battery:** Reconnect the negative battery terminal.
11. **Check for Leaks:** Start the engine and allow it to reach operating temperature. Carefully inspect the area around the new sensor for any coolant leaks. Monitor the temperature gauge to ensure it is functioning correctly.

**Warning:** Working with automotive cooling systems can involve hot fluids and moving parts. Always exercise extreme caution and wear appropriate personal protective equipment (PPE) such as gloves and eye protection. Refer to your vehicle's specific service manual for detailed, model-specific instructions and safety precautions.

OPERATION

Once correctly installed, the Standard Motor Products TS24 Temp Sender/Sensor operates automatically as part of your vehicle's engine management system. It continuously monitors the temperature of the engine coolant and sends real-time electrical signals to the vehicle's onboard computer (ECU) and/or the dashboard temperature gauge. No manual operation or adjustment is required from the user.

- Function:** Provides accurate temperature data essential for optimal engine performance, fuel efficiency, and emissions control.
- Monitoring:** Allows the driver to monitor engine temperature, helping to prevent overheating and potential engine damage.

MAINTENANCE

The Standard Motor Products TS24 Temp Sender/Sensor is designed for long-term reliability and typically requires minimal maintenance after proper installation.

- **Periodic Inspection:** During routine vehicle maintenance, visually inspect the sensor and its wiring for any signs of physical damage, corrosion, or loose connections.
- **Cleanliness:** Ensure the sensor's exposed tip is free from excessive dirt or debris, though this is rarely an issue as it is submerged in coolant.
- **Coolant Quality:** Maintain proper coolant levels and ensure the use of the correct type of coolant for your vehicle, as specified by the manufacturer. Contaminated or incorrect coolant can potentially affect sensor performance over time.

If any issues are observed, refer to the Troubleshooting section or consult a qualified technician.

TROUBLESHOOTING

If you experience issues with your vehicle's temperature gauge or engine performance that you suspect are related to the temperature sensor, consider the following troubleshooting steps:

| Symptom                                         | Possible Cause                                                                                                                                                                                                                                                          | Solution                                                                                                                                                                                                                                                                                                                                                                                            |
|-------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Temperature gauge reads too high/low or erratic | <ul style="list-style-type: none"><li>◦ Faulty sensor (less common for new parts)</li><li>◦ Poor electrical connection</li><li>◦ Incorrect sensor for vehicle application</li><li>◦ Air pocket in cooling system</li><li>◦ Faulty temperature gauge or wiring</li></ul> | <ul style="list-style-type: none"><li>◦ Verify sensor part number matches vehicle requirements.</li><li>◦ Check electrical connector for corrosion or looseness; clean and secure.</li><li>◦ Bleed cooling system to remove air pockets.</li><li>◦ Test gauge and wiring continuity (requires specialized tools/knowledge).</li><li>◦ If all else fails, consider professional diagnosis.</li></ul> |

| Symptom                                                 | Possible Cause                                                                                                                                                                      | Solution                                                                                                                                                                                                                                                                            |
|---------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| No temperature reading on gauge                         | <ul style="list-style-type: none"><li>◦ Disconnected or damaged wiring</li><li>◦ Blown fuse (for gauge circuit)</li><li>◦ Completely failed sensor</li><li>◦ Faulty gauge</li></ul> | <ul style="list-style-type: none"><li>◦ Inspect and reconnect wiring.</li><li>◦ Check vehicle's fuse box for relevant fuses.</li><li>◦ Test sensor resistance (requires multimeter and specifications).</li><li>◦ Consult a professional for electrical system diagnosis.</li></ul> |
| Check Engine Light (CEL) related to coolant temperature | <ul style="list-style-type: none"><li>◦ Sensor out of specification</li><li>◦ Wiring issue to ECU</li><li>◦ ECU fault</li></ul>                                                     | <ul style="list-style-type: none"><li>◦ Scan vehicle for diagnostic trouble codes (DTCs) using an OBD-II scanner.</li><li>◦ Address specific DTCs as per vehicle service manual.</li><li>◦ Professional diagnosis is highly recommended for CEL issues.</li></ul>                   |

**Note:** Many temperature-related issues can also stem from other cooling system components (e.g., thermostat, water pump, radiator, fan). A thorough diagnosis by a qualified mechanic is often the most effective way to identify and resolve complex problems.

## WARRANTY AND SUPPORT

For information regarding the warranty coverage for your Standard Motor Products TS24 Temp Sender/Sensor, please refer to the warranty documentation provided at the time of purchase or visit the official Standard Motor Products website. Warranty terms and conditions may vary.

For technical support, product inquiries, or assistance with specific applications, please contact Standard Motor Products customer service directly or consult an authorized dealer. Contact information can typically be found on the manufacturer's official website.

### ASK A QUESTION ABOUT THIS MANUAL

Ask about setup, troubleshooting, compatibility, parts, safety, or missing instructions. Manuals+ will review the question and use this page's manual context to help answer it.

Name

Anonymous

Email

you@example.com

After a successful submission, we securely hash the supplied account or form email before sending it to Microsoft Advertising for conversion attribution. [Privacy details](#).

Question

Example: How do I reset this device or fix this error?

**Details**

Model number, symptoms, what you tried, or the section of the manual you are using.

**Submit question**