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› Runleader RL-TS002 Waterproof Temp Sensor -20°C~+300°C(-4°F~+572°F) for Lawn Mower ATV Motorcycle Tractor Cultivator Tiller Chipper Aerator User Manual

Runleader RL-TS002

Runleader RL-TS002 Waterproof Temperature Sensor User Manual

MODEL: RL-TS002

Introduction

The Runleader RL-TS002 is a waterproof temperature sensor designed to provide accurate temperature readings for various applications, including lawn mowers, ATVs, motorcycles, tractors, cultivators, tillers, chippers, and aerators. This sensor is compatible with a range of Runleader display products that feature temperature measurement functions.

Safety Information

Please read all safety warnings before installation and use.

WARNING

- Please keep it away from the fire.
- Please keep it out of reach of children or babies.

WARNUNG

- Bitte halten Sie es vom Feuer fern.
- Bitte bewahren Sie es außerhalb der Reichweite von Kindern oder Babys auf.

AVERTISSEMENT

- Veuillez le tenir à l'écart du feu.
- Veuillez le garder hors de portée des enfants ou des bébés.

AVVERTIMENTO

- Si prega di tenerlo lontano dal fuoco.
- Una pila a bottone o una batteria a bottone ingerita possono causare ustioni chimiche interne in appena 2 ore.

ADVERTENCIA

- Por favor, manténgalo alejado del fuego.
- Manténgalo fuera del alcance de niños o bebés.

WAARSCHUWING

- Houd het uit de buurt van het vuur.
- Houd het buiten het bereik van kinderen of baby's.

Image: Safety warning labels for the Runleader RL-TS002 sensor.

- Keep the sensor and its components away from fire and extreme heat sources.
- Ensure the sensor and its packaging are kept out of reach of children and babies to prevent accidental ingestion or injury.

Product Overview

The RL-TS002 temperature sensor consists of a durable cable, a ring terminal for temperature sensing, and a connector for integration with compatible Runleader display units.



Image: Overall view of the Runleader RL-TS002 temperature sensor, showing the ring terminal, cable, and connector.



Image: Another perspective of the RL-TS002 sensor, highlighting the compact coiled cable and connector.



Image: Close-up view of the RL-TS002 sensor's ring terminal and the connection point to the main cable.

Specifications

Feature	Specification
Measuring Range	-20°C to +300°C (-4°F to +572°F)
Cable Length	1.1 meters (43.31 inches)
Waterproof Rating	IP68
Material	Plastic
Package Dimensions	3.54 x 1.81 x 0.94 inches
Weight	0.35 ounces

Setup and Installation

1. **Identify Temperature Source:** Determine the optimal location for temperature sensing on your equipment. This is typically a metal surface that accurately reflects the temperature you wish to monitor, such as a spark plug, engine block, or exhaust pipe.
2. **Attach Ring Terminal:** Securely attach the sensor's ring terminal to the chosen temperature source. For spark plug installations, the ring terminal is typically placed under the spark plug. Ensure a tight and stable connection.
3. **Connect to Display Unit:** Locate the temperature input port on your compatible Runleader display unit (e.g., RL-HM035A, RL-HM035T, RL-HM035LT, RL-HM028A, RL-TM003A, RL-TM004, RL-TM005, RL-TM008, RL-TM008A). Connect the white connector of the RL-TS002 sensor firmly into this port.
4. **Route and Secure Cable:** Carefully route the 1.1-meter sensor cable away from any moving parts, sharp edges, or areas of extreme heat that could damage the cable. Use cable ties or clips to secure the cable along its path, minimizing slack and preventing it from snagging or vibrating excessively.
5. **Verify Connection:** Once installed, power on your Runleader display unit and verify that temperature readings are being displayed correctly.

Operating Instructions

The Runleader RL-TS002 is a passive temperature sensor that works in conjunction with a compatible Runleader display unit. Once properly installed and connected, the sensor will continuously transmit temperature data to the display unit. Refer to the user manual of your specific Runleader display unit for instructions on how to view, interpret, and configure temperature-related settings.

Maintenance

- **Regular Inspection:** Periodically inspect the sensor cable and connections for any signs of wear, fraying, or damage. Ensure the ring terminal remains securely attached to the temperature source.
- **Cleaning:** If necessary, gently wipe the sensor and cable with a clean, damp cloth. Avoid using harsh chemicals or abrasive materials that could damage the waterproof coating or cable insulation.
- **Cable Management:** Re-secure any loose sections of the cable to prevent damage from vibration or entanglement.

Troubleshooting

- **No Temperature Reading / 'ERR' Display:**
 - Check the connection between the sensor's white connector and the display unit. Ensure it is fully seated.
 - Verify that the ring terminal is securely attached to the temperature source and making good contact.
 - Inspect the entire length of the sensor cable for any visible damage or breaks.
- **Inaccurate Temperature Readings:**
 - Ensure the ring terminal is making proper contact with the temperature source and is not insulated by dirt or debris.
 - Confirm that the sensor is within its specified operating temperature range (-20°C to +300°C).
- **Sensor Cable Breakage (especially near ring terminal):**
 - This can occur due to excessive vibration or improper cable routing. Ensure the cable is routed with sufficient slack and secured to minimize stress points.
 - If the cable is broken, the sensor will need to be replaced.

Warranty and Support

For warranty information, technical support, or replacement parts, please refer to the documentation provided with your Runleader display unit or visit the official Runleader website. You may also contact Runleader customer service directly for assistance with your RL-TS002 temperature sensor.