

MR CARTOOL B80

MR CARTOOL B80 OBD2 Car Memory Saver Cable

INSTRUCTION MANUAL

Model: B80 | Brand: MR CARTOOL

1. Introduction

The MR CARTOOL B80 Car Memory Saver Cable is designed to maintain the vehicle's electronic control unit (ECU) data during battery replacement. This prevents the loss of settings for various vehicle systems such as dashboard information, digital clock, audio system presets, memory seats, electric rear mirrors, anti-slip systems, and ABS. It also features real-time voltage and current display, along with an auto leakage detection function.



Figure 1: Vehicle systems protected by the memory saver.

2. Product Features

- **Voltage and Current Display:** Features a high-definition digital display screen for real-time observation of battery voltage and current during operation. This helps prevent the use of depleted backup batteries and ensures uninterrupted power. The current display can also detect circuit leaks or measure vehicle quiescent current.

VOLTAGE AND CURRENT DISPLAY

Configure a high-definition digital display screen for easy observation of voltage and current changes during device operation.



Figure 2: Real-time voltage and current display.

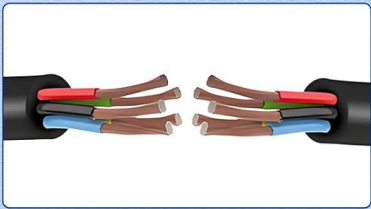
- **Auto Leakage Detection Function:** Enables preliminary detection of vehicle leakage by monitoring current values. Removing fuses one by one and observing current fluctuations can indicate potential leakage in the corresponding circuit.
- **Safety Protection:** Equipped with multiple safety features to prevent damage to equipment and the vehicle's ECU.

SECURITY PROTECTION

It can effectively prevent damage to equipment and vehicle ECU in case of circuit failure.



Built-in 3A Fuse



A Replacement Fuse



Overcurrent Protection Overvoltage Protection Polarity Reverse Protection

Figure 3: Security protection features including a 3A fuse.

- **Insulated Electrical Clamps:** Features a fully enclosed insulated design with leak-proof construction for enhanced safety and ergonomic comfort.

INSULATED ELECTRICAL CLAMPS

Featuring a fully enclosed insulated design with leak-proof construction for enhanced safety and ergonomic comfort.



Figure 4: Insulated electrical clamps.

- **Thickened Copper Wire Cord:** The B80 features a thickened copper core conductor design, delivering enhanced conductivity and high flex endurance to ensure power supply stability.

THICKENED COPPER WIRE CORD

The B80 features a thickened copper core conductor design, delivering enhanced conductivity and high flex endurance to ensure power supply stability.

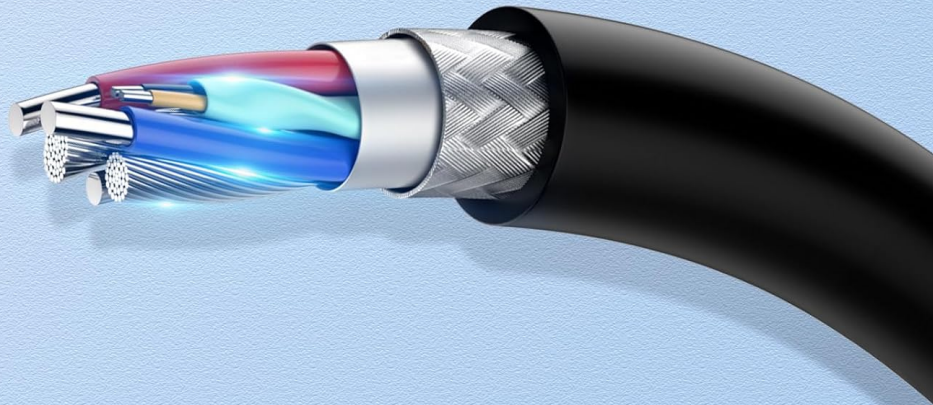


Figure 5: Thickened copper wire cord construction.

3. Safety Information

Observe the following safety guidelines when using the MR CARTOOL B80:

- The device operating voltage range is **10V to 14V**.
- An audible alarm will trigger if the voltage is **below 10V or above 14V**.
- Power-off protection automatically activates if the device voltage exceeds **16V**.
- Features auto-polarity recognition to prevent damage from reverse connections.
- Includes a built-in **3A fast-blow fuse** for overload protection. A replacement fuse is also provided.
- **Important Note:** The B80 is designed for emergency power supply during car battery replacement only. It cannot provide long-term power for vehicle computers. Replace the car battery as soon as possible.
- **Caution:** Never connect the OBD2 memory saver to the car ECU's battery directly, as this poses a risk of short circuit.
- During battery replacement, ensure the vehicle's ignition remains off throughout, with no electrical appliances active, to prevent sudden excessive currents.

4. Setup and Operation

4.1. Battery Replacement Procedure

Follow these steps to use the B80 for maintaining ECU data during battery replacement:

1. **Prepare a Backup Battery:** Ensure you have a fully charged 12V backup battery ready. This can be another car battery or a suitable power source.
2. **Connect Power Clips:** Connect the red alligator clip to the positive (+) terminal of the backup battery and the black alligator clip to the negative (-) terminal. After a successful connection, the B80's screen will display the real-time voltage.
3. **Connect to OBD Interface:** Locate your vehicle's OBD2 port (typically under the dashboard on the driver's side) and firmly plug in the B80's OBD connector.
4. **Replace Vehicle Battery:** With the B80 providing continuous power to the ECU, carefully remove the old vehicle battery and install the new one. Ensure all connections are secure.
5. **Disconnect B80:** Once the new battery is installed and secured, disconnect the B80 from the vehicle's OBD port, then disconnect the alligator clips from the backup battery.

HOW TO USE THE B80



- 1 Have a fully charged 12V backup battery ready.



- 2 Connect the power clip, and after successful connection, the screen will display voltage.



- 3 Connect the OBD interface.



- 4 Remove the old vehicle battery and install a new one.

Figure 6: Step-by-step guide for battery replacement.

4.2. Auto Leakage Detection Procedure

To use the B80 for preliminary leakage detection:

1. **Disconnect Negative Terminal:** Disconnect the negative terminal of your vehicle's battery.
2. **Connect B80:** Connect the B80's alligator clips to the vehicle's battery terminals (red to positive, black to negative) and plug the OBD connector into the vehicle's OBD port.
3. **Observe Current:** Note the current value displayed on the B80.
4. **Remove Fuses:** One by one, remove fuses from the car's fuse box. Observe the current display for any significant fluctuations. A sudden drop in current after removing a specific fuse indicates a potential leakage in the circuit corresponding to that fuse.
5. **Reconnect:** Reinstall all fuses and reconnect the vehicle battery's negative terminal after detection.

Your browser does not support the video tag.

Video 1: Official operation video demonstrating the steps to use the MR CARTOOL B80 OBD2 Car Memory Saver Cable for vehicle battery replacement.

5. Maintenance

To ensure the longevity and proper functioning of your MR CARTOOL B80:

- Store the device in a dry, cool place away from direct sunlight and extreme temperatures.
- Keep the cables and connectors clean and free from dirt or corrosive materials.
- Inspect the alligator clips and OBD connector for any signs of wear or damage before each use.
- If the fuse blows, replace it with a 3A fast-blow fuse of the same type.

6. Troubleshooting

If you encounter issues with your B80, consider the following:

- **No Display/No Power:**
 - Ensure the backup battery is fully charged and properly connected.
 - Check the 3A fuse for continuity. Replace if blown.
 - Verify the power switch on the B80 is in the 'ON' position.
- **Audible Alarm Sounds:**
 - Check the voltage display. If it's below 10V, the backup battery is too low and needs charging or replacement.
 - If the voltage is above 14V, the backup power source is too high. Disconnect immediately.
- **Data Loss After Battery Replacement:**
 - Ensure the B80 was properly connected to a charged backup battery and the vehicle's OBD port throughout the entire battery replacement process.
 - Verify the B80 remained powered on during the procedure.

7. Specifications

Model	B80
Operating Voltage Range	10V ~ 14V
Operating Current	< 7A
Operating Temperature	-20°C ~ 60°C
Built-in Fuse	3A Fast-Blow Fuse
OBD Cable Length	0.4m
Power Clamp Cable Length	0.5m

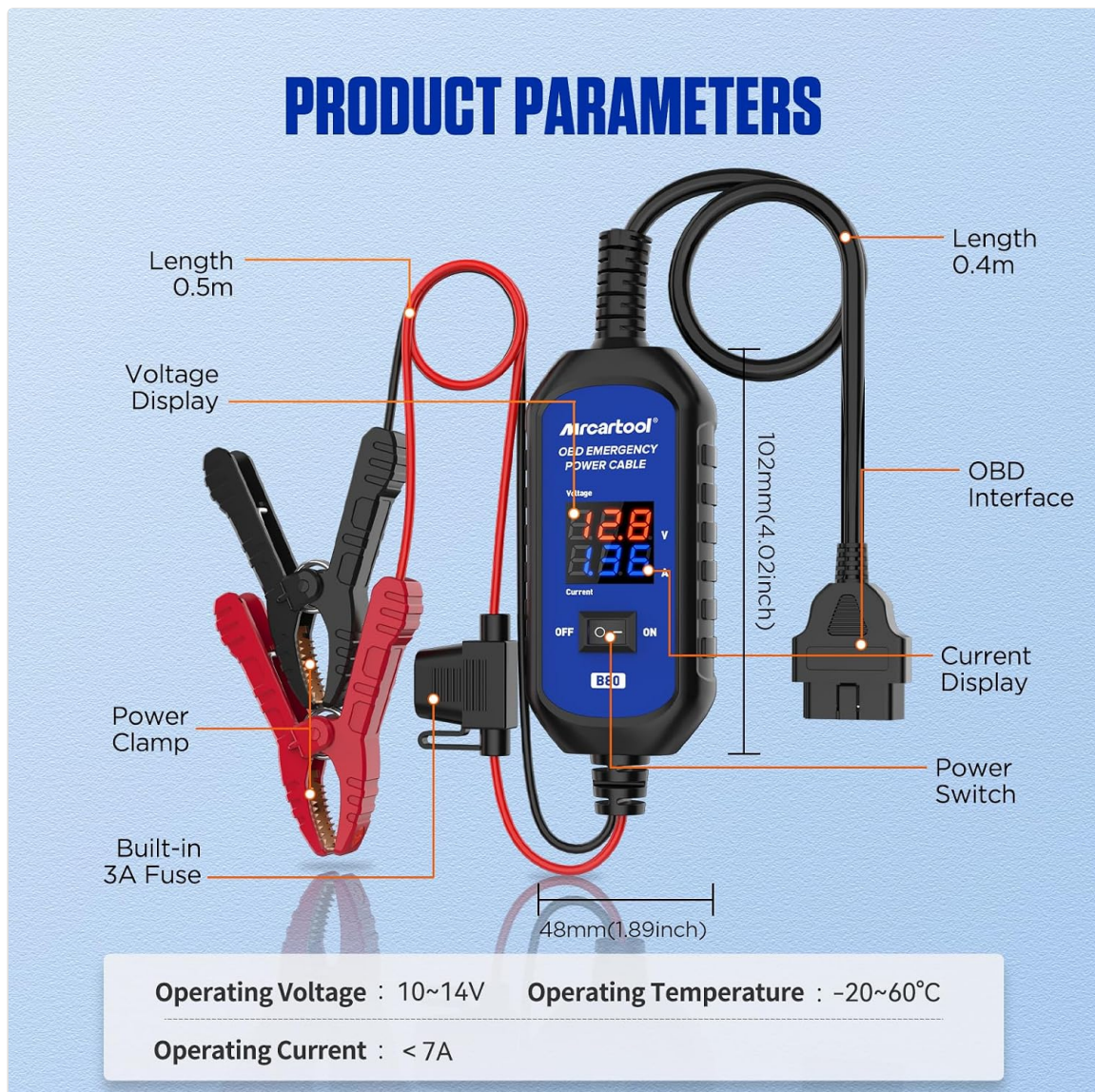


Figure 7: Product dimensions and parameters.

8. Warranty and Support

For warranty information or technical support, please refer to the official MR CARTOOL website or contact their customer service directly. Keep your purchase receipt for warranty claims.