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› Forney 52750 Battery Charger User Manual: 6V/12V, 2A-100A Start

Forney 52750

Forney 52750 Battery Charger User Manual

Model: 52750 | Brand: Forney

1. INTRODUCTION

The Forney 52750 Battery Charger is a versatile and intelligent device designed for charging and maintaining 6-volt and 12-volt batteries. It offers multiple charging rates, including 2 amps (trickle), 10 amps (standard), and 20 amps (quick charge). Additionally, it features a powerful 100 amp engine start capability for jump-starting vehicles and a 13.6-volt power supply mode for powering 12-volt devices or retaining memory during battery replacement. This charger is compatible with Absorbed Glass Mat (AGM), GEL, and standard (STD) batteries.

The unit incorporates smart technology with LED indicators and button controls for ease of use and accuracy. Its active charging indicator cycles between volts, amps, and battery percentage, providing real-time status updates. The recessed control panel helps prevent accidental setting changes, and built-in safety features protect against short circuits, overheating, and reverse polarity.



Figure 1: Front view of the Forney 52750 Battery Charger, showcasing its control panel and robust design.

2. SAFETY INFORMATION

Please read and understand all safety instructions before operating the Forney 52750 Battery Charger. Failure to follow these instructions may result in electric shock, fire, or serious injury.

- **Proposition 65 Warning:** This product may expose you to chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.
- **Explosive Gases:** Batteries generate explosive gases during normal operation. Ensure adequate ventilation and avoid open flames or sparks near the battery.
- **Sulfuric Acid:** Batteries contain sulfuric acid, which can cause severe burns. Wear eye protection and protective clothing when handling batteries. In case of contact, flush immediately with water and seek medical help.
- **No Sparks, Flames, Smoking:** Do not smoke or allow a spark or flame in the vicinity of the battery or engine.
- **Reverse Polarity Protection:** The charger is equipped with reverse polarity protection. It will not operate if the clamps are reversed and will display an error notification.
- **Proper Connection:** Always ensure a secure and correct connection to battery terminals. An error

notification will light up if a bad connection is detected.

3. PRODUCT FEATURES

- **Versatile Charging Options:** Supports 6V charging at 2, 10, and 20 amps, and 12V charging at 2, 10, 20, and 100 amps start, accommodating various battery types and sizes.
- **Powerful 100 Amp Engine Start:** Provides a powerful 100 amp engine start mode for fast and efficient jump-starting of vehicles.
- **Automatic Voltage Detection:** Features automatic voltage detection to ensure safe and accurate charging for both 6V and 12V batteries.
- **User-Friendly Design:** Equipped with easy-to-read digital display and robust button controls, making it simple to operate and connect to your vehicle's battery.
- **Durable Construction:** Built with high-quality materials in a black and green design, this charger is designed to withstand heavy-duty use and provide long-lasting performance.
- **Battery Compatibility:** Suitable for Absorbed Glass Mat (AGM), GEL, and standard (STD) batteries.
- **Automatic Charge Cycle:** Functionality switches to float mode after fully charging the battery.
- **Safety Protections:** Includes short circuit, overheat, and reverse polarity protection.
- **Auto Amperage Detection:** The charger can detect the best amperage (cycling between trickle and quick or vice-versa) based on battery condition.

4. COMPONENTS

The Forney 52750 Battery Charger package includes:

- Forney 52750 Battery Charger unit with integrated AC power cord and battery clamps.



Figure 2: Rear view of the charger showing the integrated cables neatly wrapped for storage.

5. SETUP

1. **Prepare the Battery:** Ensure the battery terminals are clean and free of corrosion. If necessary, clean them with a wire brush and a mixture of baking soda and water.
2. **Connect Battery Clamps:** Attach the red (positive, +) clamp to the positive battery terminal. Attach the black (negative, -) clamp to the negative battery terminal. Ensure connections are secure. The charger features reverse polarity protection and will indicate an error if connected incorrectly.
3. **Connect to Power:** Plug the charger's AC power cord into a standard 120V AC electrical outlet. The charger will power on and perform a self-test.



Figure 3: The charger with its heavy-duty clamps extended, ready for connection to a battery.

6. OPERATING INSTRUCTIONS

The Forney 52750 Battery Charger features an intuitive control panel for selecting charging modes and monitoring progress.

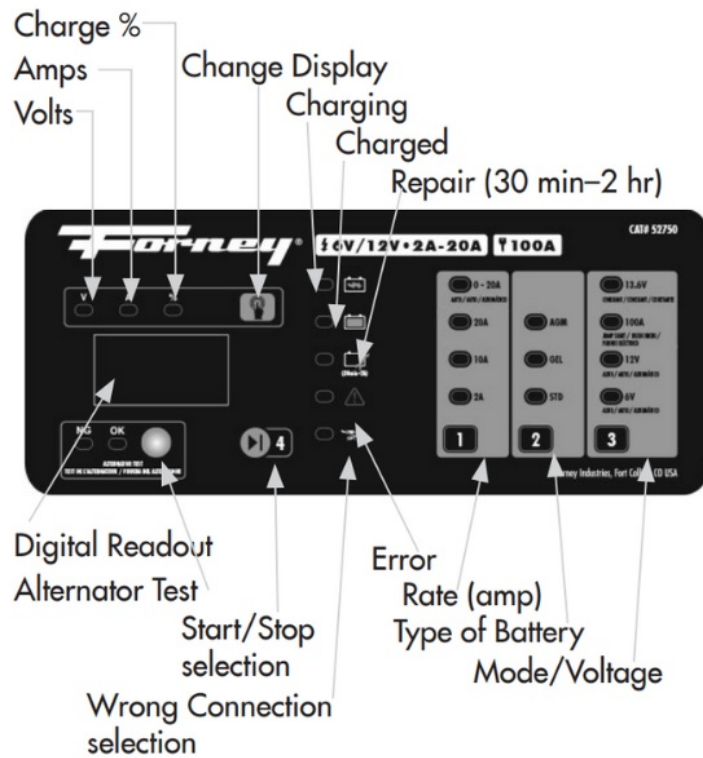


Figure 4: Detailed diagram of the control panel, highlighting the digital readout, selection buttons, and status indicators.

Control Panel Overview:

- **Digital Readout:** Displays Volts (V), Amps (A), and Charge Percentage (%).
- **Display Button:** Cycles through Volts, Amps, and Charge Percentage on the digital readout.
- **Alternator Test (NG/OK):** Indicates the health of the vehicle's alternator.
- **Start/Stop Button:** Initiates or pauses the charging process.
- **Charging Rate Selection (Column 1):** Select desired amperage: 0-20A (Auto), 20A, 10A, 2A.
- **Battery Type Selection (Column 2):** Select battery type: AGM, GEL, STD.
- **Mode/Voltage Selection (Column 3):** Select operating mode: 13.6V (Constant Power Supply), 100A (Jump Start), 12V (Auto), 6V (Auto).
- **Status Indicators:** Lights indicate Charging, Charged, Repair (30 min - 2 hr), Error, and Cables Reversed.

Charging Process:

1. After connecting the charger and plugging it in, the unit will automatically detect the battery voltage (6V or 12V).
2. Use the buttons in Column 1 to select the desired charging amperage (e.g., 10A for standard charging).
3. Use the buttons in Column 2 to select the correct battery type (AGM, GEL, or STD).
4. Use the buttons in Column 3 to select the appropriate voltage mode (12V Auto or 6V Auto). For jump-starting, select 100A Jump Start. For power supply, select 13.6V Constant.
5. Press the Start/Stop button to begin charging. The digital readout and status indicators will show the charging progress.
6. The charger will automatically switch to float mode once the battery is fully charged.

Video 1: An official product video demonstrating the features and operation of the Forney 52750 Battery Charger, including its various charging modes and safety features.

7. MAINTENANCE

- **Cleaning:** Disconnect the charger from power and the battery before cleaning. Wipe the casing with a damp cloth. Do not use solvents or abrasive cleaners.
- **Cable Inspection:** Regularly inspect the battery clamps and cables for any damage, fraying, or corrosion. Replace damaged components immediately.
- **Storage:** Store the charger in a cool, dry place when not in use. Ensure cables are neatly wrapped using the integrated wrap cleats to prevent damage.

8. TROUBLESHOOTING

- **Charger Not Turning On:** Ensure the AC power cord is securely plugged into a live outlet. Check the outlet with another device.
- **Error Indication (e.g., 'E21' or 'Cables Reversed' light):** This indicates an incorrect connection or a problem with the battery. Disconnect the charger, verify the positive and negative clamps are attached to the correct battery terminals, and ensure a good connection.
- **Battery Not Charging:** Verify that the correct battery type (AGM, GEL, STD) and voltage (6V/12V) are selected. Ensure the battery is not severely damaged or sulfated beyond repair. The charger may enter a 'Repair' mode for deeply discharged batteries (30 min - 2 hr).
- **Slow Charging:** Ensure the appropriate amperage rate is selected for the battery size and desired charging speed.

9. SPECIFICATIONS

Specification	Value
Brand	Forney
Model Number	52750
Product Dimensions (D x W x H)	10.75"D x 11"W x 6.75"H
Output Voltage	12 Volts (DC)
Input Voltage	5 Volts
Current Rating / Amperage	100 Amps (Engine Start)
Charging Amperage	6V: 2A, 10A, 20A 12V: 2A, 10A, 20A, 100A Start
Battery Types Supported	AGM, GEL, STD
GTIN / UPC	032277527508



Figure 5: Visual representation of the Forney 52750 Battery Charger with its key dimensions.

10. WARRANTY AND SUPPORT

Warranty Information:

The Forney 52750 Battery Charger comes with the following warranty:

- 3 Year Internal Electrical components
- 30 Day Product Defects
- 90 Day Components and Parts outside the charger cover

Customer Support:

For additional information, product registration, or technical support, please visit the official Forney website or contact their customer service department.

You can also visit the Forney Store on Amazon for more products and information.