

Remanufactured

DRIVE MOTOR BATTERY PACK

Drive Motor Battery Packs, often referred to as High-Voltage Batteries or Hybrid Batteries, are used in Hybrid Electric (HEV), Plug-In Hybrid Electric (PHEV) and Electric (EV) vehicles to power the propulsion electric motors. These batteries are recharged through regenerative braking, a plug-in charger (if the vehicle is equipped), or an internal combustion engine (HEV only).

Like all batteries in time, the Drive Motor Battery pack eventually loses the ability to hold a charge or has an internal failure.

CARDONE's Drive Motor Battery Packs are remanufactured to utilize the best-available components and strictest testing requirements to get your hybrid or electric vehicle back on the road at a fraction of the O.E. replacement cost.

- Each battery module is 100% tested and thoroughly validated through more than 20 hours of testing prior for use in a remanufactured battery pack.
- After module selection, the entire battery pack is balanced and subjected to a series of charging, energy, and discharging tests to verify that each module is operating at a consistent efficiency.
- If equipped, the Battery Electronic Control Unit is renewed and 100% tested to ensure reliability.
- Relays, fans and other internal components are 100% tested to guarantee proper function and cooling of the battery pack.
- Terminal nuts and connectors are electro-tin-plated to prevent corrosion and improve conductivity.



Product Description

Features and Benefits

Good Maintenance Practices

Signs of Wear and Troubleshooting

FAQs



Subscribe to [receive email notification](#) whenever we introduce new products or technical videos.

cardone.com

Tech Service: 888-280-8324

Rev Date: 041219

- If equipped, sheet metal covers are powder-coated to increase corrosion protection and appearance.
- Battery packs are shipped in reusable containers to improve the product's overall sustainability and facilitate easier core returns.

Good Maintenance Practices

- Make sure the high-voltage battery air inlet vent, duct work and battery cooling fan is kept clean and clear from any obstruction. It is very important to ensure proper ventilation to avoid overheating the battery.
- Some vehicles use the HVAC system to heat and cool the battery. Make sure this system is working as designed.
- Replace high-voltage battery air inlet filter, if equipped, according to specified intervals stated in the service manual, or if the filter is dirty.
- Use a vacuum to clean the duct work and fan at least every 24K miles or every 2 years. Do not use compressed air to clean the fan blades. Using compressed air can cause the fan motor to over spin which may result in failure of the motor.
- If a hybrid or electric vehicle is not driven periodically or is put into long term storage, the state of charge (SOC) of its battery pack will gradually decrease. Follow the O.E. Manufacturer's charging guidelines to prevent the battery from discharging. In general, the battery pack on a HEV should be charged by the vehicle's charging system at least once every 30 days. This procedure may take 30 minutes or more depending on the vehicle.

Signs of Wear and Troubleshooting

- Decreased miles per gallon
- Diagnostic Trouble Codes set
- Warning indicators illuminated on multi-function display or instrument panel
- Internal Combustion Engine (ICE) running more than usual
- Hybrid vehicle runs in EV mode less than usual or not at all
- Large fluctuations in the battery's state of charge
- Slower rate of charge for plug-in hybrids or electric vehicles

Product Description

Features and Benefits

Good Maintenance Practices

Signs of Wear and Troubleshooting

FAQs

FAQs

How does CARDONE remanufacture drive motor batteries? How do CARDONE remanufactured battery packs compare to O.E. replacement batteries?

CARDONE's remanufacturing process is a thorough, multi-step process. First, we disassemble core batteries to separate battery pack electronic components from the battery modules. Most battery packs contain at least 28 separate battery modules, but it only takes one failed or unbalanced module to cause the battery to stop working properly. After 20 hours of increasingly rigorous levels of testing, only battery modules that have significant useful service life and superior performance characteristics are profiled and placed into our library of battery modules. The unacceptable battery modules are safely sent to a recycler for proper disposal or material recovery.

All battery pack internal components, including electronic control modules, relays, and cooling fans, are 100% tested to ensure functionality and repaired, if necessary. Sheet metal battery pack covers are cleaned and powder-coated to improve appearance and corrosion resistance. Battery terminal nuts and connector plates are cleaned to remove any corrosive residue and are electro-tin-plated to improve conductivity.

To rebuild a pack, the best-suited modules in our library are carefully profile-matched by our engineers to ensure peak performance. The matched set of modules is subjected to charging, energy, and discharging tests before proceeding to final assembly. The set of battery modules are then properly balanced and recharged to a common level. All components and housings are reassembled with the battery modules, and the completed pack is placed in a reusable shipping container.

What are "renewed battery cells"?

Battery packs can set a fault code if only one of the battery modules falls out of balance. Many modules from battery cores still are viable and capable of O.E. performance. Renewed battery modules are obtained from battery cores that have passed CARDONE's very stringent set of performance tests, meet O.E. performance, and are suitable for renewal and reuse in a remanufactured Drive Motor Battery.

- Product Description
- Features and Benefits
- Good Maintenance Practices
- Signs of Wear and Troubleshooting
- FAQs

What does CARDONE do with my battery core?

Remanufacturing is an environmentally-sustainable option compared to the production of new parts. CARDONE will reuse all repairable materials from your battery core, and recycle or safely dispose of all scrap materials in a responsible manner. By purchasing a remanufactured battery from CARDONE, you are making an earth-friendly choice.

Do I need to order a separate safety or service plug?

The hybrid or electric vehicle's original safety or service plug can be reused with CARDONE's replacement Drive Motor Battery. If this original plug is damaged or misplaced, CARDONE offers replacement service plugs for sale.

Are there any precautions I need to take before I start work on the high-voltage battery?

Always make sure the "READY" light is off on the instrument panel or multi-function display, the ignition or power button is off and the key is out of the vehicle before you begin any service or repair work. If the vehicle has a remote keyless entry system, remove the key from the vehicle and keep the keyless fob at least 20 feet away to prevent accidental starts and/or trouble codes from being set. The negative terminal at the 12-volt auxiliary battery must be disconnected and the service plug must be removed. If equipped with a service switch, the switch must be in the "off" position.

What personal safety precautions should you take when performing diagnostics on or replacing a high-voltage battery?

Always wear safety glasses, Class "O" linemen gloves rated @ 1,000 volts and leather outer protectors over the linemen gloves. Gloves must be certified and expiration date must be current. Always remove jewelry and use insulated hand tools. Other forms of Personal Protective Equipment such as an insulated safety hook, goggles, face shield, apron, and shoes should be considered. Always follow O.E. Manufacturer's safety procedures.

Can the electrical motor/generator in a hybrid electric vehicle still generate voltage if vehicle is pushed?

Yes, the electrical motor/generator in a hybrid electric vehicle can generate voltage when pushed with its wheels on the ground. The vehicle should be moved using dollies under the front and rear wheels.

Product Description

Features and Benefits

Good Maintenance Practices

Signs of Wear and Troubleshooting

FAQs