

PriorityStart!®

Automatic Battery Protection

24-VOLT OWNERS MANUAL

PriorityStart! attaches easily to any type of standard 24-volt vehicle battery. No vehicle modifications are necessary. *PriorityStart!* will not switch-off battery power when the engine is running.

How *PriorityStart!* Works

The *PriorityStart!* stops dead batteries *automatically* before damage occurs. Constantly monitors voltage. Senses *any* voltage drain and *automatically* disconnects the drain, leaving starting power. Then *automatically* reconnects your battery when you turn the key and *start*. Computer “chip” technology, Universal design fits top post or side post batteries. Fits any 24-volt application. No similar product on the market.



TROUBLESHOOTING

PriorityStart! does not put life back into a battery, it only monitors available voltage. Repeated disconnects or complete battery failure can be an indication of a weak or bad battery. Most warranty calls are a result of corroded, loose, frayed or improperly installed cables, weak batteries (batteries having experienced previous deep discharges). Once unit disconnects the battery, you **MUST** wait one full minute before reconnecting. When unit operates you may hear the gears engage, this is normal operation.

Problem:*PriorityStart!* switches off battery power too often.

- An accessory is unintentionally left on; *or,*
- Ground connection requires attention. Make sure that ground terminal is firmly secured to a clean surface; *or,*
- Post adapter needs tightening; *or,*
- Corrosion buildup on battery terminals or cables. Clean per battery instructions; *or,*
- Battery is weak, needing replacement; bad battery cable; *or,*
- There is a short circuit or problem in the vehicle electrical system.

Problem:*Battery is dead.*

- Ground connection may require attention; *or,*
- Battery may need replacement.

Problem:*Vehicle cable not long enough to install unit in desired location.*

- Purchase after-market cable. Available at most auto parts stores.

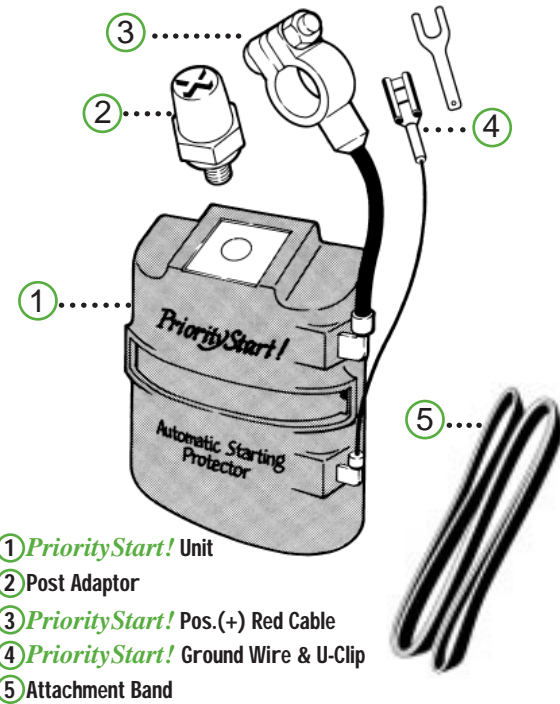
MAINTENANCE

- Keep all connections tightly fastened and clean from corrosion. Battery cables may be sprayed (coated) with corrosion inhibiting products.
- Care for the unit the same as your vehicle battery.
- PriorityStart!* can be disconnected by unplugging the ground wire. The battery is *still* connected.
- A vehicle should be started at least every 60-90 days and engine run for 15 minutes to offset normal battery discharge.

TECHNICAL SPECIFICATIONS

- Operates on 24-volt Neg.(-) or Pos. (+) ground system, when installed per instructions.
- Temperature range: -40°F to +185°F.

PriorityStart! Parts List and Terminology



- ① PriorityStart! Unit
- ② Post Adaptor
- ③ PriorityStart! Pos.(+) Red Cable
- ④ PriorityStart! Ground Wire & U-Clip
- ⑤ Attachment Band

INSTALLATION INSTRUCTIONS

(Please read *entire* instructions before installation and follow exact sequence of instructions. If you have experienced previous "deep discharges" you may need a replacement battery).

- ❑ Engine off, accessories off and ignition key out. Key left in on position may cause unit to be inoperative. High amp devices (i.e. lightbars, rotating lights) should not operate when engine is off.
- ❑ Disconnect existing cables from battery, *first* Neg.(-) then Pos.(+).

NOTE: Clean vehicle battery terminals. Do not install on a corroded cable or battery post.

- ❑ PriorityStart! can be located anywhere on any top-post or side-post battery, as long as the vehicle Pos.(+) cable reaches [figure 4].

IMPORTANT!

- ❑ Do *not* allow PriorityStart! red cable (item ③) to contact battery post or cable until instructed.
- ❑ Make sure PriorityStart! post adaptor (item ②), when installed, will *not* contact closed hood.

TOP-POST BATTERY INSTALLATION

1. Using a 7/8" wrench, tighten firmly Post Adaptor (item ②), into top of PriorityStart! [Fig. 1] (see note 4).

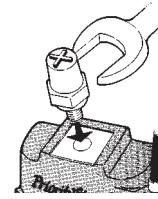


Figure 1

2. Install band (item ⑤) Slip band around battery. **DO NOT slip PriorityStart!** under the band at this time.



Figure 2

3. Install U-Clip (item ④) securely to negative battery cable and post. Reconnect negative battery cable [Fig. 2]. **DO NOT** connect ground wire to U-Clip at this time.

4. Connect vehicle Pos.(+) cable **A** securely to Post Adaptor (item ②) atop PriorityStart! [Fig. 3].

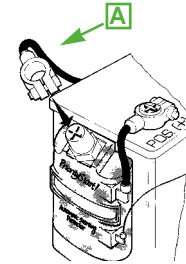


Figure 3

5. Connect PriorityStart! red cable *securely* to Pos. (+) terminal post on vehicle battery [Fig.3].

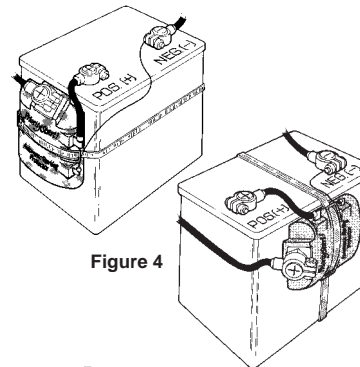
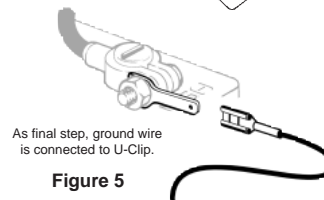


Figure 4

6. Slip PriorityStart! under band (item ⑤). Unit can be installed in either a vertical or horizontal position [Fig. 4].

7. Connect PriorityStart! ground wire connector to installed U-Clip [Fig. 5].



As final step, ground wire is connected to U-Clip.

Figure 5

PriorityStart! IS NOW OPERATIONAL

SIDE-POST BATTERY INSTALLATION

1. Using a 7/8" wrench, take Post Adaptor off top of unit, install and tighten firmly into Pos.(+) side of vehicle battery [Fig.6].(See Note 4)

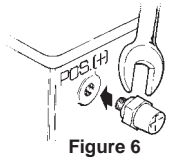


Figure 6

2. Install band (item ⑤) Slip band around battery. **DO NOT slip PriorityStart!** under the band at this time.

3. Install U-Clip (item ④) securely to negative battery cable and post. Reconnect negative battery cable [Fig. 7.] **DO NOT** connect ground wire to U-Clip at this time.

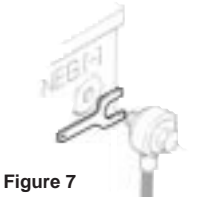


Figure 7

4. Connect vehicle Pos.(+) cable **A** *securely* into top of PriorityStart! [Fig.8].

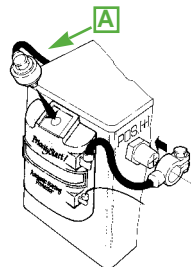


Figure 8

5. Connect PriorityStart! Red Cable *securely* to Pos. (+) terminal post (Post Adaptor) on vehicle battery [Fig.8].

6. Slip PriorityStart! under band (item ⑤). Unit can be installed in either a vertical or horizontal position [Fig. 4].

7. Connect PriorityStart! ground wire connector to installed U-Clip [Fig. 9].



As final step, ground wire is connected to U-Clip.

Figure 9

PriorityStart! IS NOW OPERATIONAL

NOTES:

1. When system disconnects, you **MUST** wait at least one minute before reconnection.
2. Reprogram any vehicle memory devices.
3. Car alarms can be wired directly to the battery, bypassing PriorityStart!. If you elect to do this, be aware that alarm operation may drain battery.
4. Torque post adaptor at 7-10 ft./lb. Do not over tighten.

WARNING: Batteries produce explosive gases. Cover battery with cloth before removing cables.

DATA/SPEC SHEET

January 2015

**3 Easy
Connections**

PriorityStart!® introduces the **NEW**
(Heavy Duty) **PriorityStart! HD**

PriorityStart! (In the vehicle market 20 years) is the only Totally Automatic Battery Protection system in the market preventing a dead battery; thus protecting your battery, alternator, and the entire electrical system. It's Preventative Maintenance has been saving fleets thousands of dollars in vehicle down time, lost man hours, and reducing the replacement of batteries and alternators.



**Attaches In Minutes
NO Hard Wiring Required**

With three (3) easy connections, the **PriorityStart!** monitors your entire electrical system. If any load drains the battery, below 11.7 volts and stays there for more than a minute, **PriorityStart!** **automatically disconnects**, leaving starting power in the battery. A simple load change (step on brake, switch on lights etc.) **automatically reconnects** the **PriorityStart!**.

The new **PriorityStart! HD** is designed for the heavier demands being put on the Fleet/Utility and larger sized engine vehicles.

Specs for **PriorityStart! HD**:

- 📏 Size: 5"L X 3"W X 1.25"D.
- 📏 Unit Weight: 1.0 lbs.
- 📏 Handles over 1600 starting amps (*ProMax* handled approximately 1000 amps).
- 📏 Handles approximately 400 continuous amps (*ProMax* handled approximately 250 amps).
- 📏 Disconnects at 11.7V; times out after approximately 1 minute.
- 📏 Reconnects with 0.2mV load change (brake pedal, light switch etc.).
- 📏 High intensity LED light indicates connect/disconnect status.
- 📏 Temperature parameters: -40°F to +185°F.
- 📏 Nine (9) New Features in the Heavy Duty (HD) unit.