Breakaway Battery Charger Installation Instructions for:

ABCD* (*Accelerated Battery Charging Device)
TOW CHARGER
12 Volt Lead-Acid Battery

READ THIS FIRST:

Check condition of battery prior to installation and prior to each trip.

- 1. Remove Charger and Battery from the battery case.
- Mount battery case securely to frame, jack post or other suitable location on trailer.
- Bolt Breakaway Switch* to frame of trailer or battery case bracket.
- Disconnect trailer from tow vehicle. Install battery and charger into the battery case.
 Feed wires out the back, then close the top.
- Wire per schematic diagram. Properly insulate all connections.

Important Facts to Remember

- ACAUTION USE ZIP TIE TO SECURE
 COVER. To prevent accidental opening of the
 Battery Box, Use a UV-Resistant Zip Tie to
 Secure the Cover to the Box using one or both
 of the holes provided.
- 2. A CAUTION Improper installation of the breakaway battery will destroy the brake control. The negative (-) terminal must attach to ground and positive (+) terminal must attach to the breakaway switch.
- AWARNING Check your Breakaway
 System* periodically to insure that wiring and connections are secure. A short or an open circuit can result in a no-brake condition.
- If excessive discharging of the breakaway battery occurs, check battery and recharge using a Heavy Duty Multi Stage/Maintenance Charger. Tekonsha charger 2024-07 is recommended for proper charging.
- If the secondary battery needs charging, current will be drawn from the tow vehicle's battery at anytime the tow vehicle is connected to the trailer. Tekonsha charger 2024-07 is recommended for proper charging.
- To only charge the breakaway battery when vehicle is running, a battery isolator may be installed in the 12 volt supply line (RED wire for tow charger).

12 Volt Sealed Lead-Acid Battery To maximize the life of the battery the following conditions should be met:

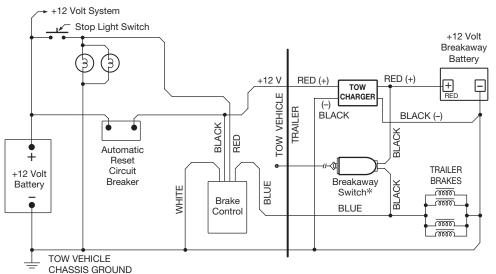
- Avoid over or undercharge. This is the single worst enemy of lead-acid batteries.
- 2. Batteries should not be stored in a discharged state or at elevated ambient temperatures.
- Avoid exposing batteries to heat! Service life is shortened considerably at ambient above 30°C (86°F).
- Due to the characteristics of this battery, after six to nine months of storage, the battery should be recharged.
- 5. Charge the battery at the proper rate. Current should be limited to 1.2 amps or less.
- Provide adequate air circulation when charging battery. Do not charge battery in any other container besides the supplied battery box.
- A CAUTION Do not place batteries in close proximity to objects which can produce sparks or flames.
- 8. Do not expose battery case to organic solvents or adhesives.
- ACAUTION Do not attempt to disassemble batteries. Contact with sulfuric acid may cause harm.
- 10. CAUTION Fasten batteries tightly and make provisions for shock absorption if exposure to shock or vibration is likely.
- 11. WARNING Do not throw batteries into fire; batteries so disposed may rupture or explode.

Battery Data Chart

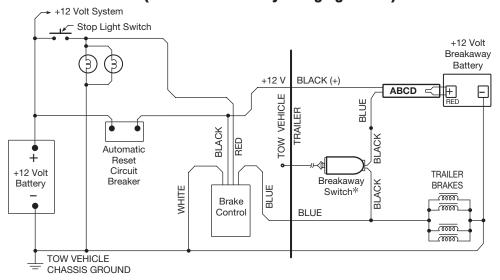
- 12 VOLT
- Maximum charge current must be limited to 1.2 amps
- Length = 3.54" Width = 2.76" Height = 4.13" Terminals: Fasten Tab .187" x .032"
- Service Life:

Under normal operating conditions, 4-5 years in standby applications or 200-1000 charge/discharge cycles depending upon depth of discharge and rate of charge.

HEAVY DUTY QUICK/MAINTENANCE MULTI STAGE CHARGER

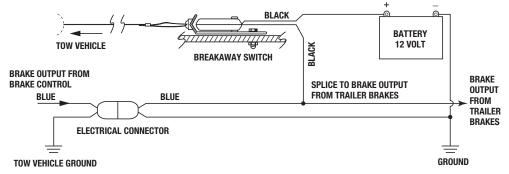


ABCD (Accelerated Battery Charging Device)



* Refer to Breakaway Switch Installation Instructions for complete operating instructions and cautionary statements.

BREAKAWAY SWITCH INSTALLATION INSTRUCTIONS



READ THIS FIRST:

Read and follow all instructions carefully before installing or operating the Breakaway Switch. Keep these instructions for future reference.

Important Facts to Remember

- ATTENTION INSTALLER: Please give this sheet to consumer upon completion of installation.
- 2. SAFETY ITEM: Solder all wire connections.
- 3. Check condition of battery prior to each trip.
- 4. WARNING Disconnect trailer plug before testing breakaway unit. Failure to do so will result in severe damage to electronic brake control.
- 5. WARNING Check your breakaway system periodically to insure that wiring and connections are secure. A short or an open circuit can result in a no-brake condition.
- 6. For optimal performance, it is recommended that breakaway devices be replaced every 3-5 years.

Installation Guide

- Mount Battery Case securely to frame, jack post or other suitable location on trailer with Breakaway Switch Cable towards tow vehicle.
- 2. WARNING Switch location should be selected to ensure unobstructed line of pull in event of vehicle separation.
- 3. Bolt breakaway switch bracket to frame of trailer or battery case bracket using 1/4" bolt and lock nut or (2) 1/4" jam nuts. (Bolt and nuts not included in kit.)
- 4. WARNING Do not over tighten bolt. Switch must be able to pivot.
- Disconnect trailer from tow vehicle. Check and install battery.
- 6. Wire per schematic. Properly insulate all connections.
- Attaching to tow vehicle: Attach
 Breakaway Switch Cable to tow vehicle
 frame being certain the cable does not
 drag on the ground and no strain or
 restriction is placed on the cable.
- 8. WARNING Do not hook cable to safety chain loop or hitch ball.



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