

Breakaway Battery Charger Installation Instructions for: ABCD*, TOW CHARGER, PUSH TO TEST WITH/WITHOUT 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.
2. Mount battery case securely to frame, jack post or other suitable location on trailer.
3. Bolt Breakaway Switch* to frame of trailer or battery case bracket.
4. Disconnect trailer from tow vehicle. Install battery and charger into the battery case. Feed wires out the back, then close the top.
5. Wire per schematic diagram. Properly insulate all connections.

Important Facts to Remember

1. **CAUTION** 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. **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.
3. **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.
4. 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.
5. 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.
6. 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).

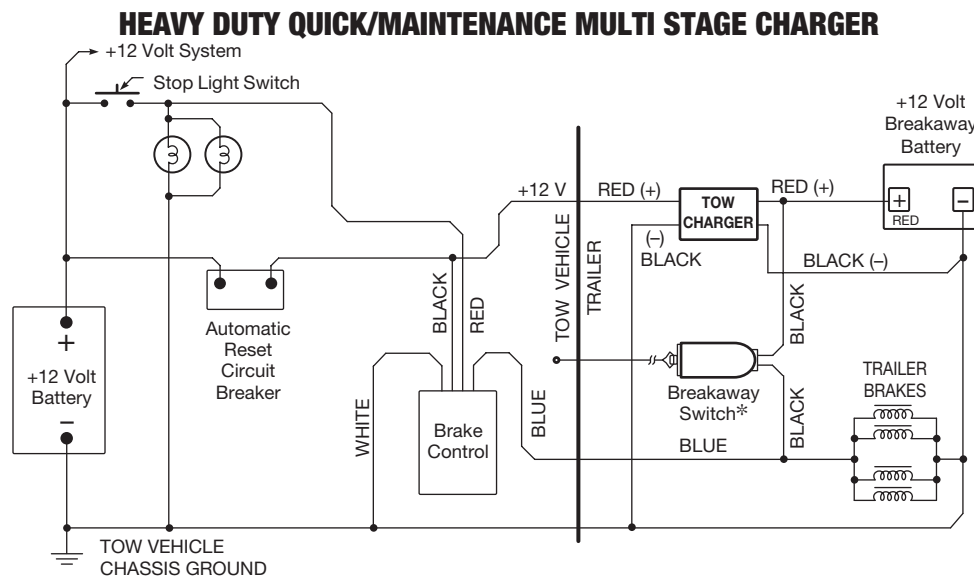
12 Volt Sealed Lead-Acid Battery

To maximize the life of the battery the following conditions should be met:

1. 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.
3. Avoid exposing batteries to heat! Service life is shortened considerably at ambient above 30°C (86°F).
4. 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.
6. Provide adequate air circulation when charging battery. Do not charge battery in any other container besides the supplied battery box.
7. **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.
9. **CAUTION** 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.

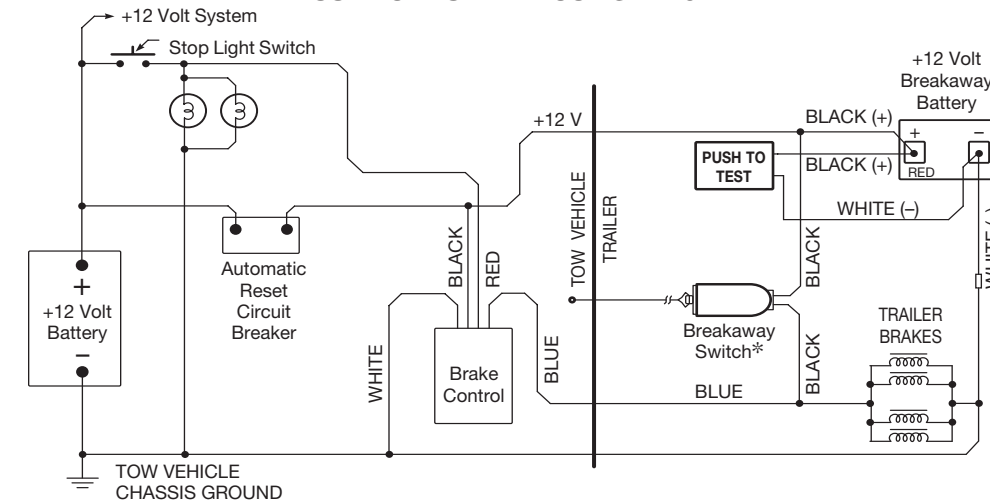
Battery Data Chart

- 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.



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

PUSH TO TEST WITHOUT CHARGER

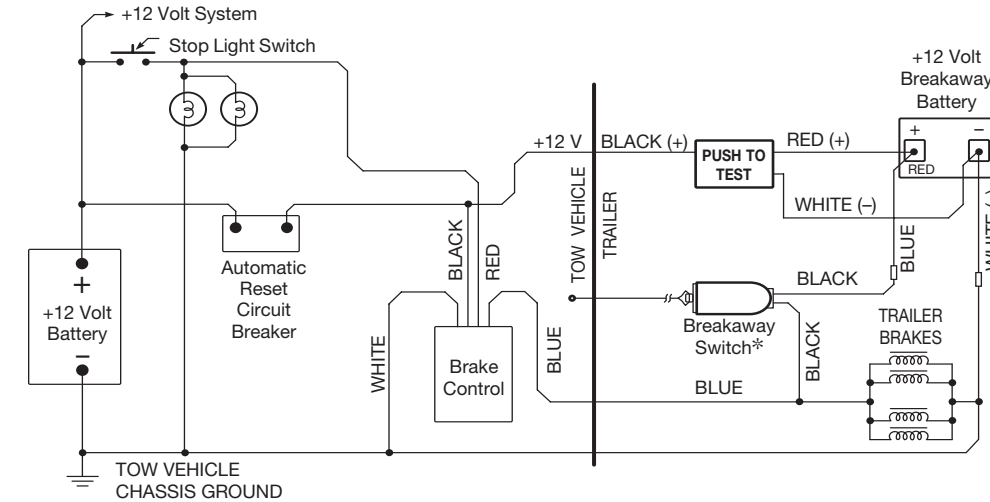


For Push-to-Test Models (Without Charger)

(NOTE: Use only with 12V Battery Systems. The lower the battery voltage, the dimmer the LED's will illuminate.)

- Press the Test Button:
 - If the RED LED is illuminated, the battery voltage is low and requires charging prior to use. Charge per battery manufactures instructions.
 - If the GREEN LED is illuminated the battery is charged.
- Wire Color: Black = Breakaway Battery, Positive, White = Breakaway Battery Negative.

PUSH TO TEST WITH CHARGER

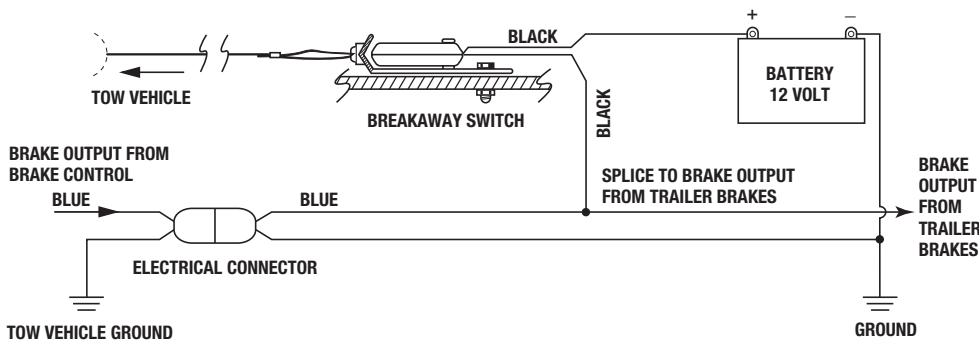


For Push-to-Test Models (With Charger)

(NOTE: Use only with 12V Battery Systems. The lower the battery voltage, the dimmer the LED's will illuminate.)

- The YELLOW LED will be illuminated when the Battery is being charged.
- Press the Test Button:
 - If the RED LED is illuminated, the battery voltage is low and requires charging prior to use. Connect the Trailer to the Tow Vehicle's charging system so the Breakaway Kit can charge from the vehicle's battery. Battery must be charged prior to use.
 - If the GREEN LED is illuminated the battery is charged.
- Wire Color with terminals: Red/Blue = Breakaway Battery, Positive, White = Breakaway Battery Negative.
- Wire Color without terminal: Black = Battery Input from Tow Vehicle, White = Vehicle Battery Negative.

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

1. 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

1. 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.
5. Disconnect trailer from tow vehicle. Check and install battery.
6. Wire per schematic. Properly insulate all connections.
7. 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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