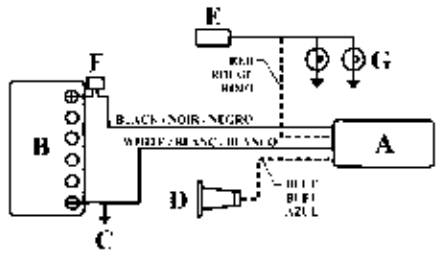
Wiring Instructions for Electronic Brake Controls

READ THIS FIRST:
Read and follow all instructions carefully before wiring brake control. Keep these instructions with the brake control for future reference.

Generic Wiring Diagram



A. Brake Control
B. 12 Volt Battery
C. Chassis Ground
D. Trailer Connector
E. Stoplight Switch
F. Automatic Reset Circuit Breaker
G. Turn / Brake Lights

Important Facts to Remember

1. The brake control must be installed with a 12 volt negative ground system. *(To install with a positive ground system use Tekonsha Towing Systems P/N 3191)*
2. Reversing BLACK and WHITE wires or improper wiring will damage or destroy brake control.
3. Be sure to solidly connect all four wires or brake control will not function properly.
4. Soldering is recommended or crimp-on butt connectors are a suitable substitution.
5. Route all wires as far from the radio antenna as possible to reduce AM interference.
6. Use of proper gauge wire when installing the brake control is CRITICAL; smaller gauge wire may result in less than efficient braking. **Minimum** wire gauges are as follows:
   - 1-2 axle applications - 14 GA.
   - 3-4 axle applications - 12 GA.
7. Collection of water inside the trailer connector mounted on the tow vehicle will reduce the life of the connector. To minimize corrosion build up inside the connector:
8. Connector terminals should be completely covered with dielectric compound *(Tekonsha Towing Systems P/N 2990)*.
9. Mount trailer connector such that the brake line and ground terminals are not located near the 6 o'clock position.
10. Technical Assistance Call Toll-Free: 1-800-786-7068

Generic Wiring Instructions

NOTE: Please review **your vehicle's Specific Wiring Section** before continuing with the following Generic Instructions.

Wiring Legend

- BLACK Wire (Positive Battery)
- WHITE Wire (Negative Battery)
- RED Wire (cold side of stoplight switch)
- BLUE Wire (brake output to trailer)

1. Using the appropriate hardware, connect the WHITE (-) wire to the NEGATIVE (-) terminal of the battery.

NOTE: Grounding to any other location than the negative terminal of the battery may cause intermittent braking or lack of sufficient voltage to trailer brakes. DO NOT ground the WHITE wire to the dash or other interior metal surfaces.

2. Connect BLACK (+) wire through an automatic reset circuit breaker (20 amp for 1-2 axles, 30 amp for 3-4 axles) to the POSITIVE (+) terminal of the battery. The BLACK wire is the power supply line to the brake control.
3. The RED (stoplight) wire must be connected to the cold side of the brake pedal stoplight switch. Splice down line from the switch; DO NOT disturb the position of the switch.
4. The BLUE (brake output) wire must be connected to the trailer connector's brake wire.

Specific Wiring Instructions for Daimler Chrysler Tow Vehicles

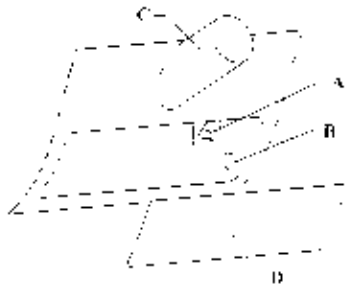
NOTE:
1. For all Dodge tow vehicles equipped with the Factory Tow Package Brake Connector, the 15 amp fused power line will not be sufficient for 3 and 4 axle applications. For 3 and 4 axle applications, a separate power wire directly connected to the POSITIVE (+) terminal of the battery with a 30 amp automatic reset circuit breaker inline is required to be connected to the BLACK (+) wire of the brake control.

1988-1993 D and W Series:
The brake control's RED (stoplight) wire splices into the WHITE wire on the cold side of stoplight switch.
1994-1995 D and W Series and 1995-1996 Ram Vans:
The brake control's RED (stoplight) wire splices into the WHITE WITH TAN TRACER wire on the cold side of the stoplight switch.
1996-1999 Dodge Rams / Dakotas and 1999 Durangos:
The factory Tow Package has a 4 pin connector located on the steering column under the dash. Follow factory supplied wiring instructions. If you experience intermittent or permanent loss or display lights on brake control, call Customer Support at 1-800-STOP-YOU for a Dodge Ground Harness Upgrade Kit. This kit will improve your Dodge Tow Vehicle's grounding capabilities.
1988-1990 Jeeps:
The brake control's RED (stoplight) wire splices into the LIGHT BLUE WITH BLACK TRACER wire on the cold side of the stoplight switch.
1991-1993 Jeeps:
The brake control's RED (stoplight) wire splices into the WHITE WITH TAN TRACER wire on the cold side of the stoplight switch.
1994 and Newer Jeeps:
Consult Jeep Dealer.

Specific Wiring Instructions for FORD Tow Vehicles

NOTE:
1. Prior to 1992, the Ford Trailer Tow Package DOES NOT include the stoplight wire which the brake control's RED (stoplight) wire splices into.
2. For all Ford tow vehicles equipped with the Factory Tow Package Brake Connector, the 20 amp fused power line will not be sufficient for 3 and 4 axle applications. For 3 and 4 axle applications, a separate power wire directly connected to the POSITIVE (+) terminal of the battery with a 30 amp automatic reset circuit breaker inline is required to be connected to the BLACK (+) wire of the brake control.

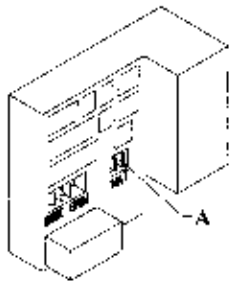
Explorer, Ranger and Aerostars:
The brake control's RED (stoplight) wire splices into the cold side of the stoplight switch.
1989-1991 E and F Series:
The brake control's RED (stoplight) wire must splice into the stoplight line via the turn signal harness. The turn signal harness is a crescent shaped connector attached to the steering column. The connector has two rows with four positions on the inner row and seven positions on outer row. The wire, which needs to be spliced into, is LIGHT GREEN in color and is located at the second position of the outer row of seven.
1992-1993 E and F Series:
The brake control's RED (stoplight) wire splices into the Ford 4-pin connector's LIGHT GREEN wire for F Series or LIGHT GREEN WITH RED TRACER for E Series. The connector is located at the bottom of the instrument panel, directly below the radio, for F Series, and near the brake pedal support arm for E Series.
1994-1999 E and F Series &
1997-1999 Expeditions and Navigators
The brake control's RED (stoplight) wire splices into the Ford 6-pin connector's LIGHT GREEN wire. The connector is attached to the computer module access located just right of the steering column.
1999 F250-F350:
The 6 pin connector is located behind the fuse panel just under the steering column (C).
1. Remove fuse panel (D), just to the right of the opening is a vertical panel and a 6-pin connector (A).
2. There is an access hole (B) the lower right corner of this panel. Feed the connector supplied with your Tow Package, through this hole and up to the fixed connector mounted on panel.
3. Connect the brake control's wires to the connector's pigtail following Tow Package Instructions.



Specific Wiring Instructions for GM Tow Vehicles

1988-1993 S, T, C, K and G Series
1994 S, T and Suburban Series:
The brake control's RED (stoplight) wire splices into the WHITE wire on the cold side of the stoplight switch.
1994 C, K and G Series:
The brake control's RED (stoplight) wire splices into the YELLOW wire on the cold side of the stoplight switch.
1995-1996 All GM Tow Vehicles:
The brake control's RED (stoplight) wire splices into a specific WHITE wire on a 10-pin connector. This connector is located to the left of the steering column. It is coming from the main loom of wires going into the instrument panel. The connector is WHITE and is wrapped with gray foam tape; it will have two WHITE wires exiting the connector. The correct wire is the WHITE wire located in corner (F position) of the connector. Splicing into this specific wire will eliminate any problems with electrical circuits associated with ABS or the cruise control.
1997 GM Full Size Trucks
1. Locate the convenience center at the firewall just under the emergency brake pedal.
2. Remove 6-8" of tape covering main loom of 40+ wires.
3. You will find:
   - 5 WHITE Wires
   - 4 light gauge wires (16 GA.)
   - 1 heavy gauge wire (14 GA.)
   - Multiple wires wrapped with YELLOW tape. (DO NOT DISTURB AIR BAG SENSOR WIRES.)
4. Probe the 4 light gauge wires with a test light.
5. The wire that is cold until brake pedal is depressed and does not flash with hazard flashers activated is the correct wire. Splice that wire into the brake control's RED (stoplight) wire.
6. Rewrap remaining wires.

Old Style Convenience Center



1998-1999 GM Trucks, Suburbans, and Tahoes
1. Locate the convenience center at the firewall just under the emergency brake pedal.
2. At the bottom of the convenience center locate the bottom row of cavities marked:
   - DRK GRN (Rectangular Shaped)
   - NAT (Square Shaped)
3. Inside the small square cavity (NAT) are two male spade terminals. The spade terminal on the right is the Stoplight Feed (A).
4. Connect an INSULATED 1/8" female spade terminal to the brake control's RED (stoplight) wire.
5. Connect the female spade terminal to the male terminal specified in STEP 3.