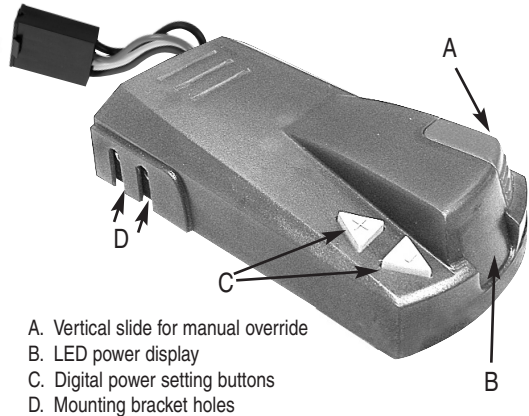


BRAKE-FORCE™

Electronic Brake Control



- A. Vertical slide for manual override
- B. LED power display
- C. Digital power setting buttons
- D. Mounting bracket holes

INSTALLATION PRECAUTIONS:

- Braking capacity is for 2, 4, or 6 trailer brake applications.
- This brake control will apply the trailer brakes while in reverse.
- This brake control is not reverse polarity protected. Reversing the connection to the vehicle battery or the breakaway battery on the trailer will damage the brake control.
- This brake control is designed to operate with electric trailer brakes and not electric-hydraulic brake systems.

WIRING GUIDE:

The BRAKE-FORCE™ came equipped with a quick connector plug wired to the back of the controller.

OPTION: If your vehicle came equipped with a factory tow package, brake control function wires may exist under the vehicle dash (usually found under the driver side dash). Consult vehicle manual or call for location. Purchase a vehicle specific Plug-in Simple!® brake control quick connector and simply plug into the factory tow package plug, or remove the quick connector plug on the brake control and splice the wires to the function wires under the dash.

Plug-In Simple® Connector Instructions

1. Plug the Hopkins® Plug-In Simple!® connector into the vehicle connector located under dash.
2. Test all Functions.

QUICK INSTALL OPTION

See store personnel to purchase Plug-In Simple!® brake control connector

UNIVERSAL INSTALLATION

White wire – ground/negative terminal (-) on battery
 Blue wire – trailer electric brakes
 Black wire – positive terminal (+) on battery
 Red wire – cold side of stop lamp switch or brake light

CAUTION: Wire colors vary by manufacturer. Be sure to wire by function only.

VEHICLE MANUFACTURER WIRING CODES:

| VEHICLE | CONTROL WIRE | BLUE | BLACK | RED | WHITE |
|---------------|--------------|-----------|-------------|---------------|-----------|
| FORD 94-07 | | BLUE | RED | GREEN | WHITE |
| CHEV/GM 99-06 | | DK BLUE | RED | LT BLUE | BLACK |
| CHEV/GM 07-08 | | DK BLUE | RED w/BLK | LT BLUE w/WHT | WHITE |
| DODGE 97-02 | | BLUE | RED | WHITE | BLACK |
| DODGE 03-07 | | BLUE | WHITE w/RED | BLUE w/WHT | GRN w/BLK |
| NISSAN | | BRN w/WHT | RED | RED w/GRN | BLACK |
| TOYOTA | | RED | BLACK w/RED | GRN w/ WHT | BROWN |

1. Be sure to use proper wire gauge when installing your control (12 gauge for electric brakes, power and ground / 16 gauge for the stoplight switch).
2. Connect white wire to negative post on the vehicle battery. Grounding to any other location may cause intermittent brake control operation or failure.
3. Attach 30 amp circuit breaker or in-line fuse to the positive terminal on the vehicle's battery. Route black wire from the brake control to the fuse or breaker.
4. Splice red wire into cold side of vehicle's stoplight switch located by the brake pedal. Find the wire by using a circuit tester and probing for the wire that powers the vehicle stoplights when the brake pedal is pressed.
5. Route blue wire from brake control to vehicle side trailer connector.
6. Plug harness into the plug wired to the back of the controller.

IMPORTANT: Please see "vehicle specific instructions" and "special notes" before every installation.

IMPORTANT INSTALLATION TIPS

- Wire color codes vary by manufacturer. Be sure to wire by function only.
- Some late model Ford / Mercury trucks and sport utility vehicles have two or more stoplight switch wires. For proper operation, **use the light green wire.** The other wire is red with a green stripe. This wire goes directly to ground when not in use. Splicing into this wire will short circuit your brake control and possibly destroy the unit.

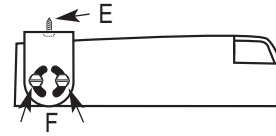
VEHICLE SPECIFIC INSTRUCTIONS

| YEAR | MAKE | MODEL |
|----------------|----------|------------------------|
| 1989 – 91 | Ford | E & F-Series |
| 1992 – 93 | Ford | F-Series |
| 1992 – 93 | Ford | E-Series |
| 1994 – 99 | Ford | E & F-Series |
| 1997 – 02 | Ford | Expedition & Navigator |
| 1988 – 93 | GM | Pickups |
| 1994 | GM | Pickups |
| 1995 – 96 | GM | Pickups & SUV's |
| 1988 – 93 | Chrysler | Pickups |
| 1994 – 95 | Chrysler | Pickups |
| 1996 – 02 | Chrysler | Pickups & SUV's |
| 1988 – 90 | Jeep | All |
| 1991 – 93 | Jeep | All |
| 1994 – Present | Jeep | All |

- For Chevrolet 1999 and up vehicles: If your vehicle does not have the towing package, only the ground and stoplight switch will be active in the Plug-In Simple® connector. The electric brake wire and 12-volt power lead will be terminated outside the firewall. These will have to be routed to the trailer connector and battery on the vehicle.
- Be sure your brake control is grounded properly. The ground wire should be connected to the negative post on the battery. Grounding in any other location may cause the control to operate intermittently.
- Ford and Dodge tow packages come with a 20 amp battery feed wire system which will accommodate 2 and 4 brake magnets. An upgrade to a 30 amp (12 gauge) battery wire system will be needed for 6 and 8 braking systems.

MOUNTING YOUR BRAKE CONTROL

1. Your Hopkins® brake control can be mounted in any direction, including upside down.
2. Mount the bracket to a secure location with Phillips screws provided (E) where you will be able to view the display and easily access the vertical slide.
3. Once you have chosen a location, check behind the dash to be sure there are no damageable components in the chosen location. Using the bracket as a template, drill holes in the dash.
4. Attach bracket with 2 provided screws and attach control to bracket with 2 remaining screws (F).
5. Plug wiring to controller.



CAUTION: Using large/longer screws may damage the unit.

OPERATING AND SETTING YOUR CONTROL

1. An orange light should be visible in the control's display when the brake pedal is depressed. This indicates the control has power. This light will turn to varying degrees of orange as the brake pedal is pressed and power applied. Light orange is the minimal setting. Bright orange delivers the greatest power.

2. The (+) and (-) buttons adjusts power sent to the trailer. Pressing the brake pedal and pressing the (+) and (-) buttons changes the intensity of power.
3. Connect your trailer and test drive in an open area to set the level of power.
4. Drive forward at approximately 20 miles per hour and apply the brakes. If brakes appear too weak, press the (+) button for additional power. If brakes lock up, press the (-) button to reduce power. Continue this step until smooth braking is reached.

IMPORTANT NOTES ABOUT YOUR HOPKINS® BRAKE CONTROL

- The orange light draws only 10 milliamps and will take 6 months to drain a charged vehicle battery.
- Works only with a 12-volt system.
- Brake lights on the vehicle and trailer activate when the manual slide is pushed.
- Unit is short-proof protected from electric trailer brake wiring shorts.
- Brake control adjustments may need to be made for different road conditions and trailer loads.
- Always test your brake power levels at low speed before every trip. Weather conditions and varying trailer loads may require adjustments to the brake control power.
- Limited lifetime warranty.

TROUBLE SHOOTING GUIDE

| CONDITION | PROBABLE CAUSE |
|--------------------------------|--|
| No orange light | No power to control, no ground |
| No power to trailer | Check vehicle and trailer connector pin outs |
| Trailer brakes on all the time | Check vehicle and trailer connector pin outs |
| | |
| | |

VEHICLE STOP LIGHT SWITCH

| WIRE COLOR | WIRE LOCATION |
|------------------------------|---|
| Light Green | Located in C-shaped connector on steering column; 2nd pin on the top row of 7. |
| Light Green | 4-pin connector in center of vehicle under dash. |
| Light Green with Red Stripe | 4-pin connector next to brake pedal. |
| Light Green | Under dash to the right of the steering column. |
| Light Green | Under dash to the right of the steering column. |
| White | Under dash near top of brake pedal. |
| Yellow | Under dash near top of brake pedal. |
| White | Connector on left of steering column. There are several white wires in this connector. The correct wire is located in position "F". |
| White | Under dash near top of brake pedal. |
| White with Brown Stripe | Under dash near top of brake pedal. |
| White with Brown Stripe | Under dash to the left of the steering column. |
| Light Blue with Black Stripe | Under dash near top of brake pedal. |
| White with Brown Stripe | Under dash near top of brake pedal. |
| CONTACT YOUR JEEP DEALER. | |

