

**#BCD-110
BRAKE CIRCUIT DISCONNECT
INSTALLATION INSTRUCTIONS
NSA, INC.**

Before you get started

This Brake Circuit Disconnect will prevent brake signal over ride when installed properly and according to the manufactures instructions. Your coach has turn signals, brake lights, back up lights, and hazard lights which all run to the coaches tail lights. These signals are also sent by way of the motor homes wire harness to the rear of the coach to allow for the towed vehicle to carry these same signals to the towed vehicles tail lights. Once properly hooked up the towed vehicle will have brake lights, turn signals, and hazard lights sent from the motor home to the towed vehicles tail lights.

Your towed vehicle also has its own turn signals, brake lights, back up lights, and hazard lights. When a braking system is installed which activates the towed vehicles brake, it causes the towed vehicle to send another brake signal to the towed vehicles tail lights, which in many cases can cause the signal being sent from the coach to be over-ridden or canceled out. This creates a problem if you should have your turn signal engaged in the motor home and the brake signal being sent from the towed vehicle is over-riding the motor homes signal, thus making the travelers behind you unaware that you are preparing to make a turn.

1. **The Brake Circuit Disconnect should be installed by a qualified professional.** You might want to check with the manufacturer of the towed vehicle to insure that you are not putting yourself into a risk of **voiding your towed vehicles warranty**. Many automotive manufacturers clearly state in their literature that the wire harness, or electrical system of the towed vehicle should not be modified, or altered. NSA, Inc. wishes to express that this system is optional and in no way states that the system is approved for installation without first seeking the advice of a certified automotive technician., or manufacturers representative.
2. **Have the proper installation tools.** When working with any electrical systems it is important to make sure that you have the proper tools to do the job. You will need a voltmeter, wire crimping tool, solder, wire cutters, wire ties, drill, and screw driver.

Installing the Brake Circuit Disconnect

Step 1. Locate the brake light switch. This switch is generally found toward the uppermost part of the brake arm. Refer to owners manual or seek the advice of a technician if you have problems finding this switch.

Step 2. Locate the wire which sends the signal to your brake lights from this switch. There will be two wires running to this switch. One supplies the switch with a constant 12 volt current, the other sends this current to the tail lights when the brake is activated. The wire which carries the signal to the brake lights upon activation of the brake pedal is the wire you will run to the relay.

Step 3. Cut the wire located in step 2. Make sure to cut the wire, which carries the signal to the brakelight located in step 2, Leaving enough length to splice it to the wires coming from the relay. The relay can then be wire tied or permanently mounted under the dash to a suitable structure.

Step 4. Connect all wires according to instructions. These connections must be properly made. There is a risk of short circuiting the electrical system, as well as a potential fire hazard if the electrical splices are not made correctly. Connect as follows:

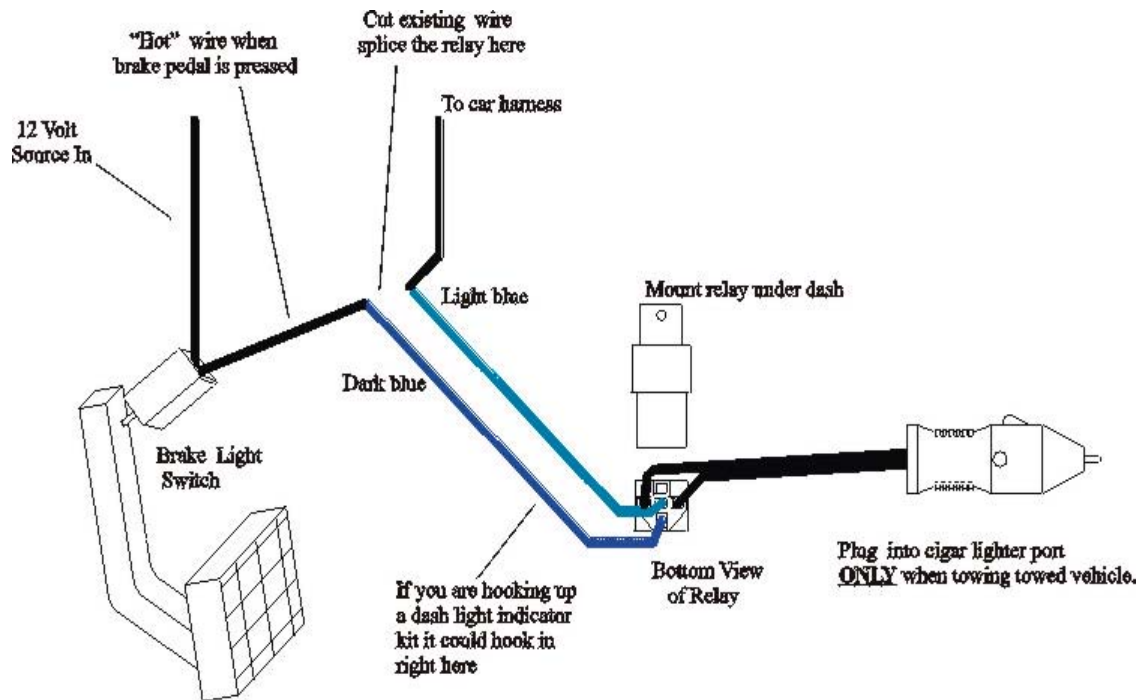
- A. The wire you have cut coming from the brake switch is to be connected to the dark blue wire

- coming from the relay. (If using a DL-100 Dash Light Indicator this is the wire you also connect the red wire to.)
- B. The other cut wire end should be connected to the light blue wire coming from the relay.
- C. Route the wire on the power plug under the dash and secure it with zip tie's or tape. The power plug needs to be plugged in when towing. Stow the power plug under the dash out of the way, when not in use.
- D. Now you are ready to test .

Testing your Brake Circuit Disconnect

You are now ready to test the brake circuit disconnect to insure proper installation and operation. During the testing keep the following in mind:

- The towed vehicle should have no brake lights when depressing the brake pedal when power plug is inserted into the cigar lighter or power port
- The towed vehicle should have brake lights when depressing the brake pedal when the power plug is NOT in the cigar lighter or power port.
- If either one of the previous steps fails to occur you should go through the installation instructions to make sure that all parameters were met, and properly executed. Also check fuses.



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 Join us on the web at www.readybrake.com or E-mail us at sales@readybrake.com
 N.S.A. Wants you to be completely satisfied with your Brake Circuit Disconnect.
 Please feel free to contact an N.S.A. Service representative at 1-800-933-3372 if you need assistance in installing your Brake Circuit Disconnect.