



DL-100 IN-DASH BRAKE INDICATOR INSTALLATION INSTRUCTIONS

DL-100

Before you get started.....

The In-Dash Brake Indicator will illuminate when your brake is being applied. This does not mean that braking is being applied in all instances. There is a minimum amount of brake pedal travel that must occur before actual braking is being initiated. Please note the following cautions:

1. The In-Dash Brake Indicator 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 at risk of **voiding your towed vehicle 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 RV Products, 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 system it is important to make sure that you have the proper tools to do the job. You will need a voltmeter or test light, wire crimping tool, solder, wire cutters and wire ties.

Installing the In-Dash Brake Indicator.....

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 the switch.

Step 2. Locate the wire that sends the signal to your brake lights from this switch. There are usually two wires running to this switch. One supplies the switch with a constant 12 volt current and the other sends a current to the tail lights when the brake is activated. The wire that carries the signal to the brake lights upon activation of the brake pedal is the wire you will splice and run to the dash of your motor-home.

Step 3. Install towed vehicle wire harness. Unroll the 15 foot section of wire harness with the female weather head attached to one end. Starting from a center location on the front bumper route the red and black 18 gauge wires to the brake switch location. The female weather head will be attached with wire ties or other suitable means to the front bumper location with the remainder of the wires extending back to the brake switch. Ground the black 18 gauge wire to the towed vehicles chassis then splice the red 18 gauge wire to the wire located in Step 2.
Note: This splice should come prior to the brake circuit disconnect option if it has been or is going to be installed.

Step 4. Install motor home wire harness. Unroll the 60 foot section of wire harness with the female weather head attached to one end. Starting from a center location on the rear bumper route the red and black 18 gauge wires to the under dash area of the motor home. The female weather head will be attached with wire ties or other suitable means to the rear bumper location with the remainder of the wires extending the length of the coach (preferably in the conduit or existing wire harness on the coach). The exposed end of the red & black 18 gauge wire is to remain unattached under the dash (allowing enough slack to attach to the led indicator light to be installed).

Step 5. Install LED indicator light. Locate where you would like the LED light mounted. Make sure there are no obstructions on the back side of the dash board in the location chosen for the LED light. Drill a 1/4" diameter hole. Feed the bare ends of red and black wires extending from the LED light through the newly drilled hole in the dash, pushing the LED dash mount in until snug. Connect the red wire from the LED light to the red wire coming from the motor home harness. The black wire extending from the LED light should be connected to the black wire.
(Red to red, Black to black)

Step 6. Attach tow bar jumper harness. Unroll the 10 foot section of wire harness with male weather heads on each end. Attach one male weather head to the female weather head from the motor home, and the other male weather head to the female weather head on the towed vehicle. Route all wire remaining along the tow bar. There should be adequate room to route this existing wire with the other wires extending from the motor home.

Testing your In-Dash Brake Indicator.....

You are now ready to test the in-dash brake indicator to ensure proper installation and operation. During the testing keep the following in mind:

- The in-dash brake indicator should only light up when the brake in your towed vehicle is applied.
- When driving you should see the light illuminate when your are braking your motor home. **Note: In light braking situations the LED may not illuminate as there may not be any movement of the brake pedal.**
- If either one of the previous steps fail to occur you should go through the installation instructions and make sure that all connections have been properly made. Also check to see if a fuse may have blown.

Note: Make sure all electrical connections are 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.

Please feel free to contact an N.S.A. RV Products service representative at 1-800-933-3372 if you need assistance installing your In-Dash Brake Indicator. We will be happy to answer you questions and offer advice. Once installed, your In-Dash Brake Indicator will allow you to monitor your towed vehicles braking system as you continue on your travels.

