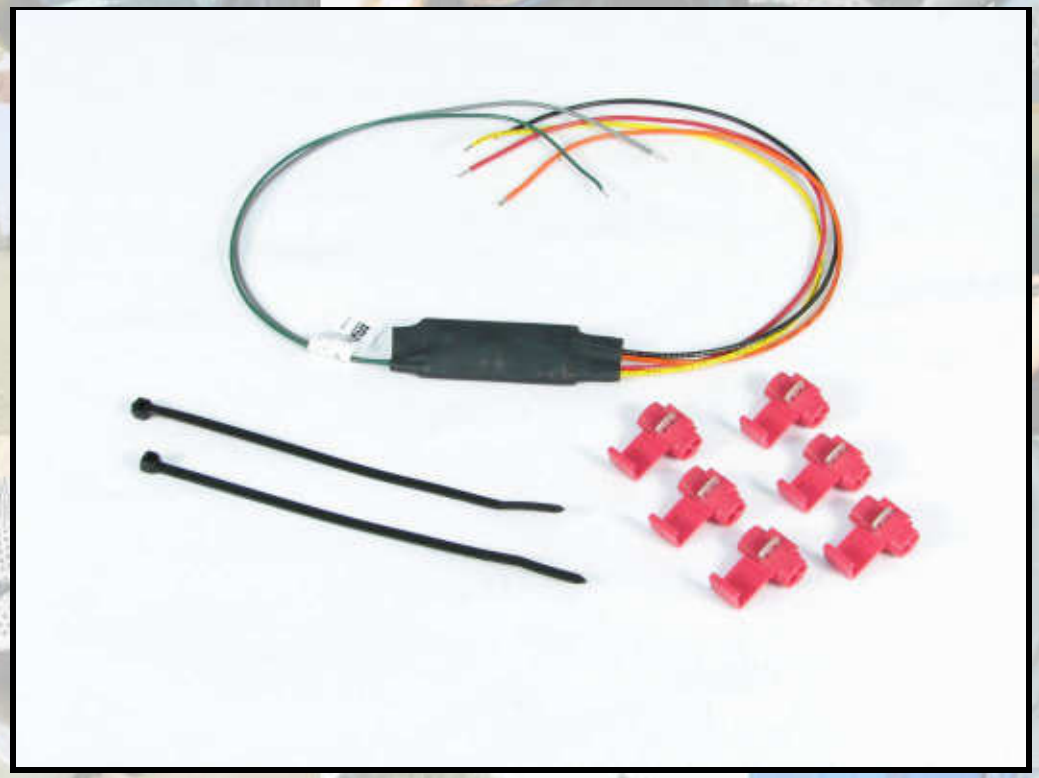
MUTH® MIRROR SYSTEMS

Brake Module Installation Instructions

TO BE USED WITH MUTH *SIGNAL*® MIRRORS



***THE safety accessory of the 21st Century.*™**

P/N 210-0059-0 Rev H (4/23/09), BTV

Please read instructions prior to installation.

Note: Professional Installation Recommended

Warranty does not cover damage to the vehicle or mirror housing due to improper installation. The following installation instructions are to be considered as a guide only. Door removal procedures, indicator wire color and location may have changed since publication of these instructions. The installer is responsible for any damage that may occur during installation.

INCLUDED ITEMS:

(1) brake module w/wire harness, (6) wire taps, (2) nylon cable ties, and (1) instruction manual.

REQUIRED TOOLS:

Wire crimper, stripper, Masking tape, Multimeter, Sturdy gloves, and Safety glasses (goggles).

PROBLEMS OR QUESTIONS?

Technical Assistance is available by calling Muth Mirror Systems Technicians at:
1-800-844-6616
Monday through Friday
Between 8:00 a.m. and 5:00 p.m. CST
Or through the Muth web site:
www.muthco.com
Or via E-mail: techsupport@muthco.com

IMPORTANT NOTICE! READ THIS FIRST!

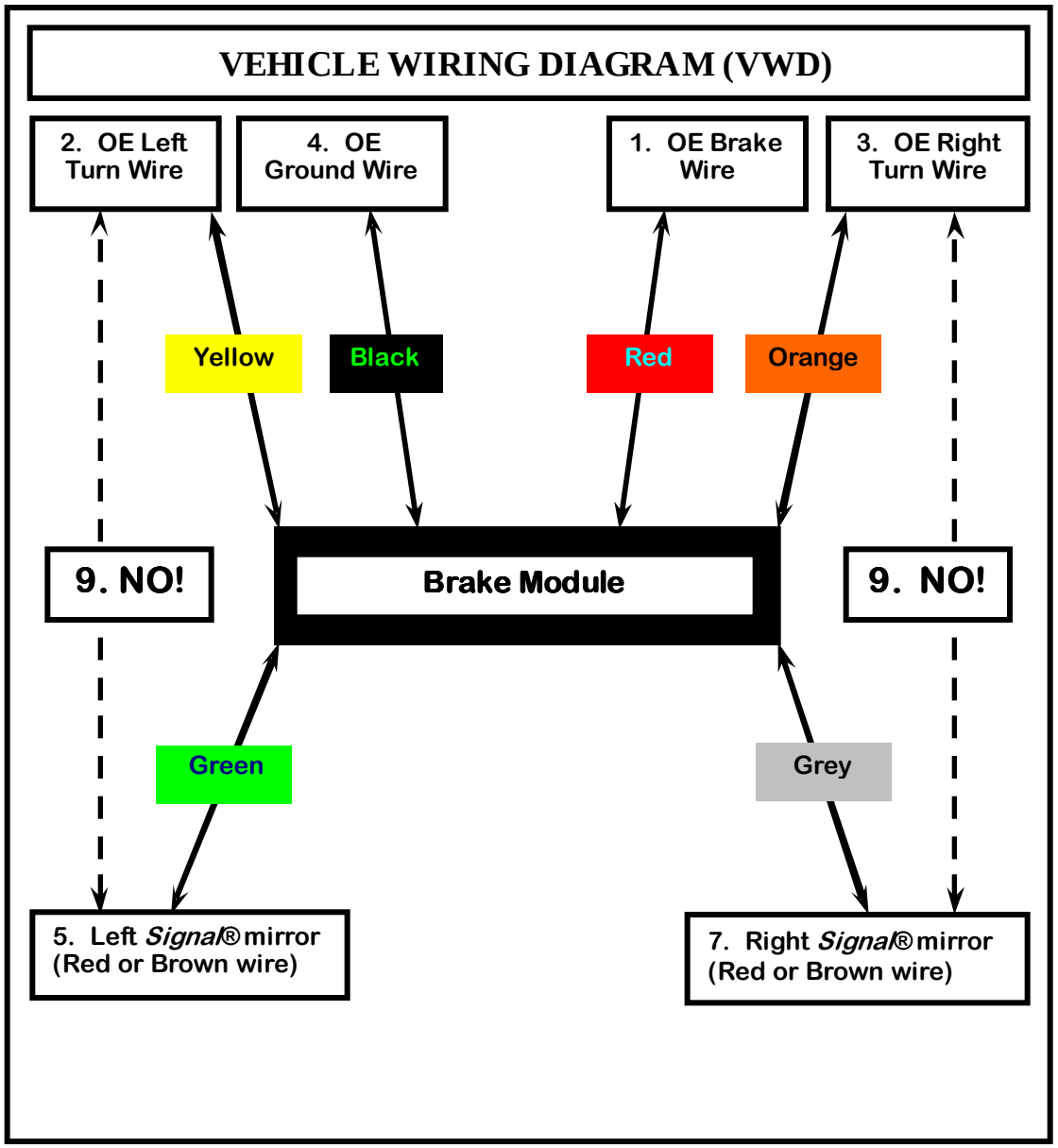
THE MUTH BRAKE MODULE IS TO BE USED ONLY WITH MUTH *SIGNAL*® MIRRORS. USING THE MUTH BRAKE MODULE WITH ANYTHING OTHER THAN MUTH *SIGNAL*® MIRRORS MAY DAMAGE THE MODULE! DO NOT USE WITH THE MUTH MULTIFUNCTION MODULE.™

If you are installing the Muth brake module along with a **NEW** *Signal*® mirror installation, **DO NOT** connect the positive (red) wires from the *Signal*® mirror wire harnesses to the vehicle's turn indicator wires. Instead, connect them directly to the Muth brake module's wire harness. You will need to connect the negative (black) wires from each *Signal*® mirror wire harness to a suitable ground.

If you are installing the Muth brake module as an add-on to an **EXISTING** *Signal*® mirror installation, you will have to disconnect the positive (red) wires from the *Signal*® mirror wire harnesses and connect them directly to the Muth brake module's wire harness.

Locate the vehicle's brake and turn indicator wires before starting the installation. Turn indicator wires in automobiles are usually located on the driver side behind a kick panel or underneath the dash, however, some turn indicator wires are also found on the passenger side.
NOTE: The *Signal*® mirrors may flash out of sync with the turn indicators on some vehicles, due to the vehicles electrical system, which would be considered normal operation.

BRAKE MODULE WIRING INFORMATION

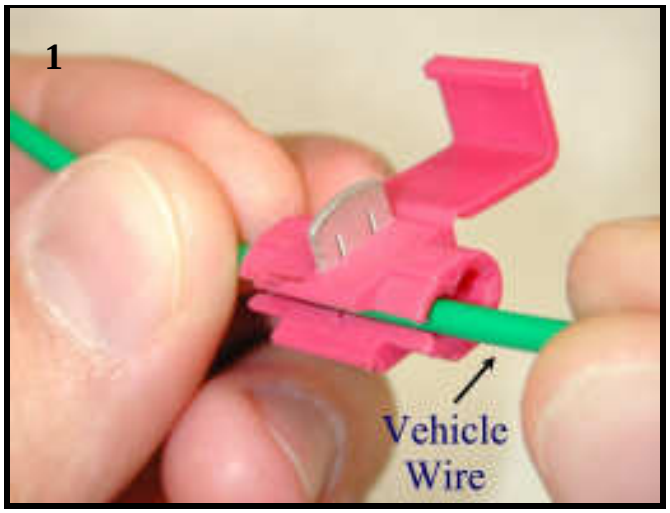


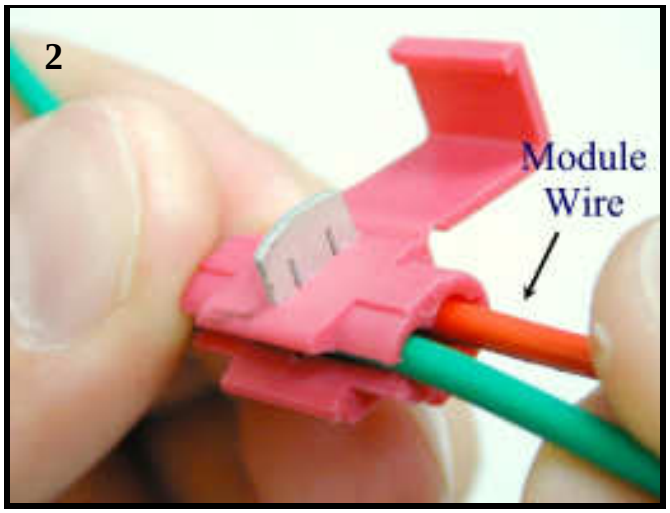
CONNECTIONS (SEE VWD)

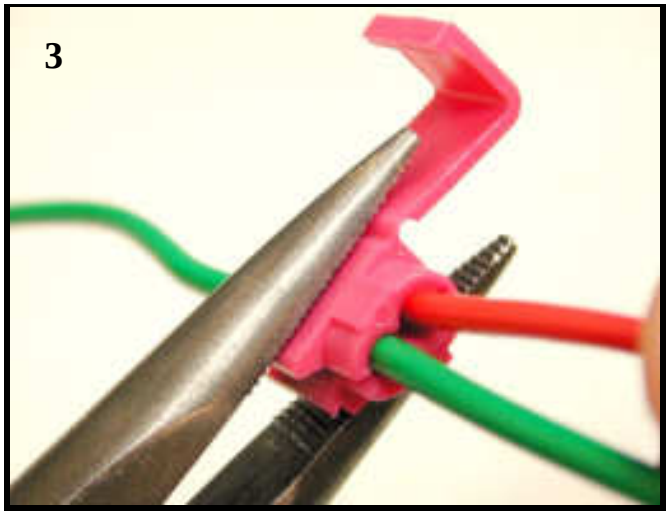
1. Tap the vehicle's Brake Wire to the RED input wire.
2. Tap the vehicle's left turn indicator wire to the YELLOW input wire.
3. Tap the vehicle's right turn indicator wire to the ORANGE input wire.
4. Tap the vehicle's ground wire to the BLACK input wire.
5. Connect the GREEN output wire to the non-black wire from the left *Signal Mirror*® harness. *Signal*® mirror non-black wire should only be connected to the GREEN wire, not to the vehicle.
6. Connect the GREY output wire to the non-black wire from the right *Signal Mirror*® harness. *Signal*® mirror non-black wire should only be connected to the GREY wire, not to the vehicle.
7. **DO NOT connect the Red or Brown wire from each *Signal*® mirror to the vehicle wiring. This connection must be cut if you are adding the Brake Module to an existing *Signal Mirror*® installation.**
8. **DO connect the negative (black) wires from each *Signal*® mirror to a suitable ground.**

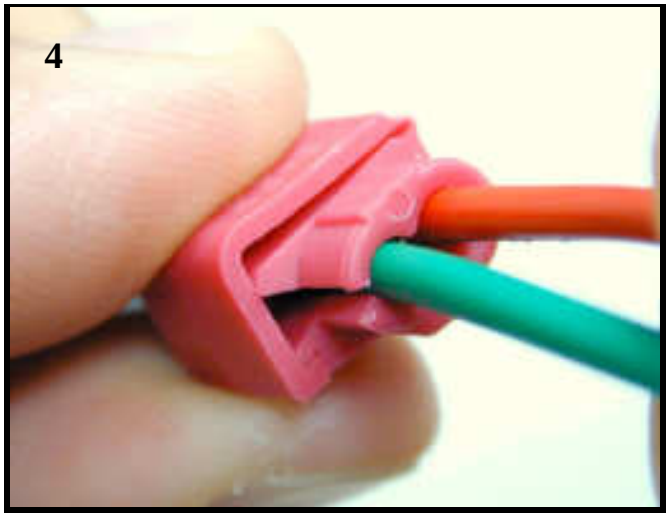
WHAT READING YOU SHOULD GET

- When the left turn indicator is active, the YELLOW input wire should pulse to +12 VDC. Connect (+) multimeter lead to GREEN output wire and (-) multimeter lead to GND, meter will pulse +12 VDC.
- When the right turn indicator is active, the ORANGE input wire should pulse to +12 VDC. Connect (+) multimeter lead to GREY output wire and (-) multimeter lead to GND, meter will pulse +12 VDC.
- When the brake is activated (applied), the RED input wire should be a steady +12 VDC. Connect (+) multimeter lead to GREEN output wire and (-) multimeter lead to GND, meter will read a steady +12 VDC. Connect (+) multimeter lead to GREY output wire and (-) multimeter lead to GND, meter will read a steady +12 VDC.
- When the brake is activated with left turn indicator, the RED input wire should be a steady +12 VDC. Connect (+) multimeter lead to GREY output wire and (-) multimeter lead to GND, meter will read a steady +12 VDC. The YELLOW input wire will pulse +12VDC. Connect (+) multimeter lead to GREEN output wire and (-) multimeter lead to GND, meter will read a pulsing +12 VDC.
- When the brake is activated with right turn indicator, the RED input wire should be a steady +12 VDC. Connect (+) multimeter lead to GREEN output wire and (-) multimeter lead to GND, meter will read a steady +12 VDC. The ORANGE input wire will pulse +12VDC. Connect (+) multimeter lead to GREY output wire and (-) multimeter lead to GND, meter will read a pulsing +12 VDC.









USE THE INCLUDED WIRE TAPS AND FOLLOW THE FOUR STEPS ABOVE TO SPLICE INTO THE BRAKE AND TURN INDICATOR WIRES

*****Activate the brake and each turn indicator to verify that the *Signal*® mirrors are working correctly.*****