Parking Brake Sensor
Installation and Programming Guide
About this Document:

Document Title: *Parking Brake Sensor Installation and Programming Guide*
Part Number: 785-00008 Rev A
Revision History:

<table>
<thead>
<tr>
<th>Revision No.</th>
<th>Revisions</th>
<th>Author</th>
<th>Date</th>
</tr>
</thead>
</table>

Notice of Rights:

The Parking Brake Sensor Installation and Programming Guide was created by inthinc, inc., 4225 West Lake Park Boulevard, Suite 100, West Valley City UT, 84120 (801) 886-2255. Copyright© 2011 by inthinc Technology Solutions, Inc. All rights reserved. Information in this document is subject to change. Names and data used in examples are fictitious unless otherwise noted. No part of this document may be reproduced or transmitted in any form by any means, without prior written permission of inthinc, Inc. For more information on obtaining permission for reprints or excerpts, contact inthinc Training & Development, (801) 886-2255, ext. 519.

Trademarks:

Trademark names are used in this document. We have attempted to put a trademark symbol (™) with each occurrence of a trademark name. If we did not use a trademark symbol, we are using the names in an editorial fashion to the benefit of the trademark owner, and not to infringe upon the trademark.

About this Device:

**FCC Notification**

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

This product meets the applicable Industry Canada technical specifications.

*Le présent matériel est conforme aux specifications techniques applicables d’Industrie Canada.*

This Class B digital apparatus complies with Canadian ICES-003.

*Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.*

Changes or modifications to the this device that are not expressly approved by inthinc, inc. could void the user’s authority to operate the device.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications; however, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected: Consult the dealer or an experienced radio/TV technician for help.
Install the Hardware

For the parking brake sensor installation, you need the following items.

- Parking brake sensor that you attach to parking brake assembly.
- Magnet that you attach to the parking brake assembly.
- Permabond 910 Metal Bonding adhesive for parking brake sensor magnet.
- Permabond 737 adhesive for parking brake sensor (reed sensor switch).

**CAUTION!** Don’t glue anything until you have verified and tested that the magnet is in the proper N/S orientation and you have programmed and tested the sensor.

1. To verify that either north or south pole is being adhered to the assembly, perform the following:
2. Attach two magnets to each other. The two sides that are attached are the north and south poles. Either north or south pole will work.
3. Once a side has been determined, mark the north and south side such that it is easily visible. Either of the two sides will be adhered to the parking brake assembly.
4. Test sensor placement on a non-moving part of the parking brake assembly before installation.
5. Test magnet placement on the moving part of the parking brake assembly before installation.

---

*Figure 1: Magnet and Reed Sensor Switch placement on foot brake assembly in a Ford F-150. Closed position shown.*

*Figure 2: Magnet and Reed Sensor Switch placement on a typical hand brake assembly. Closed position shown.*
1. Connect the two reed sensor switch wires to a multi-meter. The switch is normally open, but will be closed when the magnet is nearby. Make sure the switch works reliably.

2. Clean both surfaces with provided alcohol wipe.

3. Use a silicone adhesive glue (not included) to glue the reed sensor switch and wire to non-movable parking brake assembly location.

4. Use tape to hold the switch in place while the adhesive sets (1-15 minutes, depending on amount used).

5. Route the switch wires out of the way back to the waySmart unit so that the wire is not likely to be damaged by driver movement or equipment.

6. Connect the white reed sensor switch wires as shown in the figure below. Use the included Solder Wire Splices and a heat gun to solder the two wires together.

7. Use a silicone adhesive glue (not included) to glue the magnet on movable parking brake assembly. The magnet can be placed anywhere on the assembly as long as the sensor (switch) can sense the magnet. For positioning ideas, see the previous figures.

---

**Note:** Figure 1 and Figure 2 show the brakes in the closed position.

---

![Figure 3: Open position shown in a Ford F-150.](image1)

![Figure 4: Open position shown on hand brake assembly.](image2)

---

**Figure 5: Parking Brake Sensor Wiring Diagram**

---

Purple
Black
Gray
Red
White
Black

Parking Brake Harness

Seat Belt Harness
Tips and Tricks

Test the placement when the parking brake assembly is engaged to make sure there is enough of a gap for the magnet. If not, the magnet and/or the sensor could come loose. If this is the case, move the magnet, sensor or both.

Program the Parking Brake Sensor

54912 <ENTER>, 333 <ENTER>, 809 <ENTER>
155 <ENTER>, 811 <ENTER>, 2 <ENTER>  (Note: This sets a delay on the unit before it alarms, equal to 2 seconds.)

Test it using a “83” keypad command Out of Programming mode. With the park brake ON, you should receive High tones, with the park brake OFF, you should receive Low tones.