 TRACKPOINT SYSTEMS	DRAWING NO		REV
	WI 005-184-501		1
	APPROVAL		DATE
	ISSUER:	BAS	4/24/11
	ENGINEERING:	BAS	4/24/11
Installation Instruction Tr/IPSNET™ Door Sensor	PRODUCTION/MATERIAL:	WRC	4/24/11
	QA APPROVAL:	WRC	4/24/11

REVISION HISTORY

LTR	DESCRIPTION	DATE	APPROVED
1	Preliminary Release	4/24/11	BAS

1. Purpose / Scope

1.1. This work instruction defines the methods, materials and processes used to install TrackPoint Systems (TPS) Trailer Inventory Protection System (Tr/IPS™) Door Sensor. This sensor shall be installed as part of a Tr/IPS™ Asset management system and requires the use of a Tr/IPS™ Master Control Unit to provide communications for the sensor.

1.2. Responsibility

1.2.1. The customer is responsible for following this instruction during the installation of the referenced product. TPS manufacturing / process engineering is responsible for generating and maintaining this instruction.

NOTE:

Failure to follow this instruction will void the product warranty.

1.3. Following the installation conditions and procedures, in the order indicated in this instruction, are necessary to ensure the Tr/IPS™ Door Sensor creates a secure bond to the wall of the trailer and is aligned properly with the magnet actuator.

1.3.1. Failure to follow this installation instruction could result in the Tr/IPS™ Temp Sensor not operating properly. Please call TPS Customer Service before making any deviations from this Installation Procedure.

TPS Customer Service

615-469-5152

support@trackpointsystems.com

1.3.2. Contact TPS prior to any deviations from the installation of the Tr/IPS™ Door Sensor Unit described in this instruction. **TPS will not be responsible for any loss or damage caused by improper installation.**

2. Reference Documents

2.1. WI 158-3377 Tr/IPS™ Website Application Instructions

3. MATERIALS

3.1. Medium Duty abrasive pad (3M Scotch-Brite Pad #9650 or equivalent)

3.2. Clean, lint-free towels or paper towels

- 3.3. 50% to 70% Isopropyl Alcohol and water solution - (3M Prep-Solvent 70 or equivalent)
- 3.4. Substrate Primer (3-M #94 or equivalent)

4. TOOLS

- 4.1. 6' step ladder as needed
- 4.2. ¾" to 1" wide soft bristle brush as needed
- 4.3. 1" wide Masking Tape (or equivalent)
- 4.4. Portable Drill and bit for # 6 sheet metal screw

5. INSTRUCTIONS

- 5.1. Recommended Location for Door Sensor mounting location is at the corner formed by the wall, the ceiling, and the door on the right side (the door that is opened first).

The Door Sensor must be mounted such that the words "Activation Magnet here" on the top label of the Sensor box are pointing toward the door.

The Door Sensor should be mounted to the steel frame on the ceiling of the trailer or along the inside wall of the trailer near the door, depending on the trailer configuration.

The actuator magnet should be mounted on the door itself.

- 5.2. The sensor is typically mounted using the tape on the back of the sensor box. Please note the tape will not adhere to Kemlite or similar plastic unless the wall is above 60°F, which necessitates the use of screws as well. Install one screw in the top flange and one in the bottom flange as a minimum if necessary.

- 5.3. Surface Preparation:

- 5.3.1. Select the location for mounting and (optional) outline the area with masking tape or marker. The dimensions of the mounting area are 5.5" x 3.5".
- 5.3.2. If using screws, hold the Sensor in position and mark the location of the mounting screws. Drill pilot holes.
- 5.3.3. Clean the area where the tape (see Figure 2) will be applied using the 50-50 IPA and water solution and a clean lint free towel. Ensure any dirt, film, oil, wax, or other contaminants are removed from the mounting area. Allow the surface to dry thoroughly before abrading the surface.

- 5.3.4. Abrade the cleaned area with the Scotch-Brite pad or equivalent where the Sensor will make contact with the trailer wall.
- 5.3.5. Again clean the abraded surface with the IPA cleaning solution and a clean towel. Repeat this step with a new clean towel until the clean towel shows no sign of any remaining contamination.
- 5.3.6. Thoroughly wipe the surface dry with another clean towel.
- 5.3.7. Apply the 3M Primer 94 (supplied in a “snap stick”) to the cleaned and abraded Sensor mounting surface. Allow the primer to dry completely.

5.4. Sensor Installation:

- 5.4.1. Remove the plastic film from the VHB™ tape to expose the tape adhesive surface. DO NOT touch the exposed adhesive surface or primed surface. Any contamination will degrade the VHB™ bond strength.
- 5.4.2. Carefully place the sensor in position and install the screws if required. DO NOT over Torque the screws.
- 5.4.3. Firmly press the Sensor module all along the VHB mounting areas back and forth several times.
- 5.4.4. Remove and discard the masking tape.

5.5. Actuator Magnet Installation:

- 5.5.1. It is critical that the magnet is aligned properly with the sensor inside the Door Sensor box. The magnet should be installed on the door such that it is flush with the top edge of the gasket on the box and with the right wall of the box, when the box is positioned on the ceiling of the trailer. The ideal positioning is shown in Figure 1.

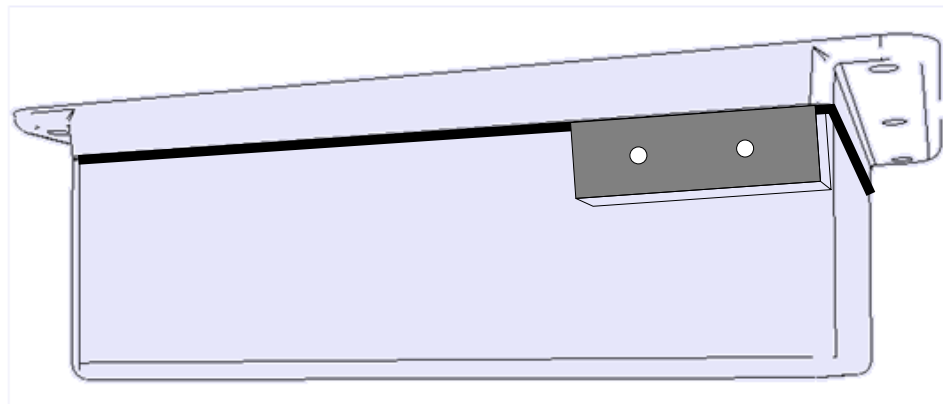


Figure 1

5.5.2. The gap between the magnet and the Door Sensor shall not be more than ½" when the door is closed.

5.5.3. To install the actuator magnet, If using screws, mark the location of the mounting screws. Drill pilot holes, and install the sensor using the included #6 sheet metal screws.

6. DEVICE REGISTRATION

The sensor has been pre-configured to communicate only with the Tr/IPS™ MCU installed on the trailer. Once the Tr/IPS™ MCU has been registered, there are no additional steps required to turn the Door Sensor on or register the device.