 TRACKPOINT SYSTEMS	DRAWING NO		REV
	WI 005-155-501		B
	APPROVAL		DATE
	ISSUER:	WRC	11/04/07
	ENGINEERING:		
Installation Instruction Tr/IPs™ MCU P/N 005-155-501	PRODUCTION/MATERIAL:		
	QA APPROVAL:		

REVISION HISTORY

LTR	DESCRIPTION	DATE	APPROVED
1	Preliminary Release	11/04/07	WRC
2	General Revision	12/23/08	WRC
3	Added TM information	1/10/09	WRC
A	Released for Production	1/16/09	WRC
B	General Update ECN 100197	4/28/11	WRC

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™) master control unit (MCU) specifically for a flat aluminum trailer roof and Composite roof trailers.

2. Responsibility

- 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.

- 2.2. Following the installation conditions and procedures, in the order indicated in this instruction, is necessary to ensure the Tr/IPs™ MCU creates a secure bond to the roof of the trailer .

CAUTION!

- 2.2.1. Failure to follow this installation instruction could result in the Tr/IPs™ Master Control Unit separating from the vehicle resulting in possible injury or worse! Call TPS Customer Service before making any deviations from this Installation Procedure.

TPS Customer Service
615-469-5152

info@Trackpointsystems.com

- 2.2.2. Contact TPS prior to any deviations from the installation of the Tr/IPs™ Master Control Unit described in this instruction. **TPS will not be responsible for any loss or damage caused by improper installation.**

3. Reference Documents

Note: These Documents are available on the TrackPoint Systems LLC website
<http://www.trackpointsystems.com/downloads.html>

- 3.1. WI 158-3377 Tr/IPs™ Website Application Instructions

4. MATERIALS

- 4.1. Medium Duty abrasive pad (3M Scotch-Brite Pad #9650 or equivalent)
- 4.2. Clean, lint-free towels or paper towels
- 4.3. 50% to 70% Isopropyl Alcohol and water solution - (3M Prep-Solvent 70 or equivalent)
- 4.4. Substrate Primer (3-M #94 or equivalent)
- 4.5. Disc Magnet
- 4.6. Weatherproof Silicone caulk

5. TOOLS

- 5.1. 16' ladder
- 5.2. 3/4 to 1" wide soft bristle brush
- 5.3. 1" wide Masking Tape (or equivalent)
- 5.4. Optional - 1.0" dia. x 2.0" min. wide hard rubber roller
- 5.5. Caulking Gun

CAUTION!

Trailer roof temperature shall be maintained above (60°F) for a minimum of 30 minutes before and after installation!

DO NOT install the Tr/IPs™ MCU in wet conditions, e.g. rain, fog, snow, ice, condensation, etc. evident on the trailer roof.

6. INSTRUCTIONS

6.1. The MCU shall be orientated on the trailer roof as shown in Figure 1, with the electronics pointing toward the front of the trailer.

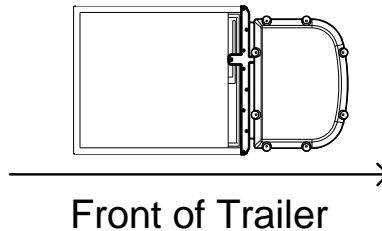
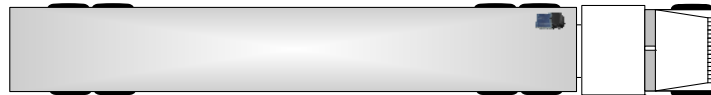


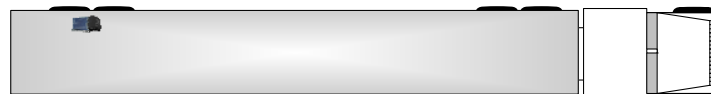
Figure 1

6.2. The unit should be mounted on a level part of the roof of the trailer with no swales. There are two recommended mounting locations on the trailer roof as indicated below:

6.2.3. Option one is intended to maximize the view of the sky when the trailer is backed into a dock while protecting the unit from low-hanging branches. The unit should be placed approximately 3ft. back from the front of the trailer, and about 1ft. in from the left (driver-side) of the trailer.



6.2.4. Option two is intended to minimize the effect of the added height of the unit. The unit should be located over rear axle assembly and 1ft inboard from the left edge of the trailer. This location tends to minimize any height issues.



6.3. Surface Preparation:

6.3.1. Select the location for mounting and (optional) outline the area with masking tape or with a marking pen. The dimensions of the mounting area are 22" by 12"

6.3.2. 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.

- 6.3.3. Abrade the cleaned area with the Scotch-Brite pad where the Tr/IPs baseplate will make contact with the roof.
- 6.3.4. 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.
- 6.3.5. Thoroughly wipe the surface dry with another clean towel.
- 6.3.6. Apply the 3M Primer 94 to the cleaned and abraded tape mounting surface. Press on the gray dot on the primer ampoule until a “snap” is heard. The primer will then flow in to the brush end of the ampoule. Apply the primer at the locations where the VHB will be in contact with the roof surface. It is not necessary to cover prime the entire baseplate area, only where the VHB tape is mounted.
- 6.3.7. . Allow the primer at least 5 minutes to dry completely.

6.4. Device Installation:

- 6.4.1. Flip back the short piece of VHB(TM) (Very high Bond Tape) on the MCU and install the magnet in the pocket under where the tape will be applied. See Figure 2.

CAUTION!

THE MAGNET SHALL BE PLACED AS SHOWN IN FIGURE 2 BEFORE INSTALLING THE MCU, IF THE MAGNET IS NOT PLACED PROPERLY, THE DEVICE WILL NOT WORK

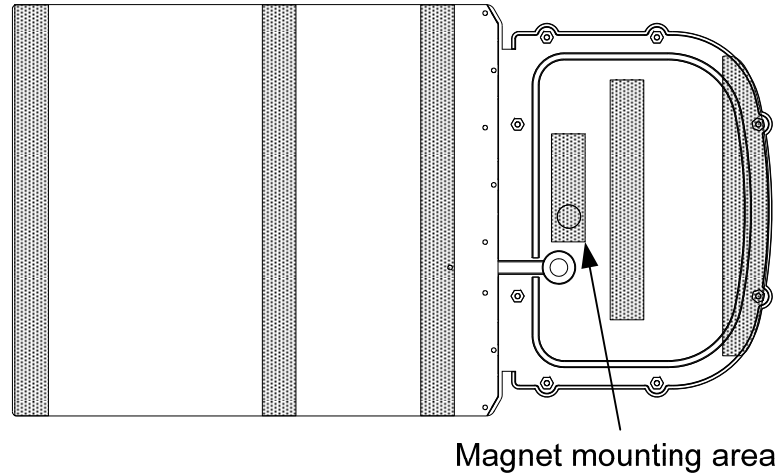


Figure 2

- 6.4.2. Peel the remaining protective strip off of the short length of VHB™ and press it firmly into place with the magnet between the housing bottom and the VHB™.
- 6.4.3. Hold the tape in place for 15 seconds so that is bonded to the plastic.
- 6.4.4. Remove the plastic film from the remaining 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. Carefully place the TP/IPS assembly on the roof within the boundaries of the masked area and the tape aligned with the primed roof surface..
- 6.4.5. Firmly press on solar panel and the Electronics module in to place, With a back and forth, motion push on the MCU to seat the tape. Repeat this motion along the VHB™ mounting areas several times. Use of a small, firm roller is suggested to ensure an even bond.
- 6.4.6. Remove and discard the masking tape.
- 6.4.7. Visually verify a bond has been established between the solar panel baseplate and the roof.
- 6.4.8. Allow 15 minutes for the adhesive to set before testing the bond.
- 6.4.9. Verify the bond by firmly but gently pulling up on the Tr/IPS™ unit to confirm a secure bond to the roof before releasing the trailer into service.

- 6.4.10. TPS suggests as an option that a bead of weatherproof silicone be run around the perimeter of the Electronics module to prevent wind and water from getting under the MCU.

7. DEVICE REGISTRATION

- 7.1. Provide the following information to your TrackPoint Customer Service Representative:

Company Name:
Trailer Number/Asset ID:
Tr/IPs™ Serial Number:

- 7.2. To view the setup message indicating a successful installation go to the website address provided by TrackPoint Systems and follow the instructions in WI 158-3377 to view the asset information display