

Special Instruction
Installation Procedure for the Product Link® PL161

Installation Procedure for the Product Link® PL161 System

Introduction

This Special Instruction will provide instructions for installing the Product Link® PL161 Asset Tracker.

The PL161 is part of a remote monitoring solution that enable efficient and effective equipment management. In coordination with a mobile device application, the PL161 transmits its information via a cellular GSM communications network to the Telematics Back Office for use with VisionLink®.

The PL161 provides basic asset tracking with GPS location reporting when in range of a mobile device with the Cat TrackIt application installed and enabled.

Product Link™ Device

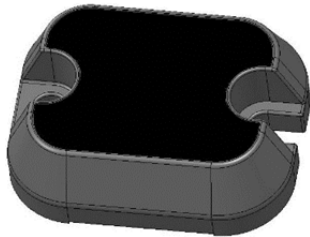


Figure 1: PL161

PL161 Bluetooth Device

The PL161 is a Bluetooth device that sends data to VisionLink® over a cellular network using a mobile device with the Cat TrackIt application installed and enabled. The PL161 has an internal antenna for the transmission of the devices information to the mobile device.

Important Safety Information

Work safely. Most accidents that involve product operation, maintenance, and repair are caused by failure to observe basic safety rules or precautions. An accident can often be avoided by recognizing potentially hazardous situations before an accident occurs.

A person must be alert to potential hazards. This person must also have the necessary training, skills, and tools to perform these functions properly.

Safety precautions and warnings are provided in this instruction and on the product. If these hazard warnings are not heeded, bodily injury or death could occur to you or to other persons.

Caterpillar cannot anticipate every possible circumstance that might involve a potential hazard. The warnings in this publication and on the product are, therefore, not all inclusive. You must not use this product in any manner different from that considered by this manual without first satisfying yourself that you have considered all safety rules and precautions applicable to the operation of the product in the location of use, including site-specific rules and precautions applicable to the worksite. If a tool, procedure, work method or operating technique that is not specifically recommended by Caterpillar is used, you must satisfy yourself that it is safe for you and for others. You should also ensure that you are authorized to perform this work, and that the product will not be damaged or become unsafe by the operation, lubrication, maintenance or repair procedures that you intend to use. The information, specifications, and illustrations in this publication are on the basis of information that was available at the time that the publication was written. The specifications, torques, pressures, measurements, adjustments, illustrations, and other items can change at any time. These changes can affect the service that is given to the product. Obtain the complete and most current information before you start any job. Cat dealers have the most current information available.

Note: Safety regulations govern the transport of lithium batteries and devices that contain lithium batteries. If the operator intends to initiate transport of the PL161 Product Link device, the operator is responsible for understanding and adhering to local, national, and international regulations related to packing instructions, warning labels and other safety precautions for devices with lithium batteries.

Required Parts for PL161 System

Quantity	Part#	Description
1	503-2958	Cont Gp
1	505-1738	Plate
2	8T-0267	Bolt
2	9X-8256	Washer - Hard
1	433-9728	Film
1	433-9730	Film

Table 1

Record the Registration Information

Dealer Registration

Before the PL161 is mounted on the equipment, record all the information that will be needed to subscribe services in the "Dealer Services Portal" (DSP).

Note: The information needed to subscribe services to the equipment is on the label located on the bottom of the device. Once the PL161 is installed, this information will no longer be visible without uninstalling the device.

A one page form is included in the PL161 kits. Use the form to aid in recording all the data that will be required to subscribe services in the DSP. The title of the form is "Product Link PL161 Asset Tracker Installation Data". If a form was not included in the kit, or if you need another one, the form can be downloaded from dealer.cat.com/PL.

Customer Registration

For Customer Registration procedure, please reference the Special Instructions for Cat Activate

Mounting the PL161

Read all instructions prior to installing the hardware.

FCC Notice

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.

Industry Canada Notice to Users

This device complies with Industry Canada license- exempt RSS standard(s). Operation is subject to the following two conditions:

1. This device may not cause interference, and
2. This device must accept any interference received, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes :

- (1) l'appareil ne doit pas produire de brouillage, et
- (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement

PL161 Mounting Requirements

The following are requirements when deciding where to mount the PL161:

- If possible, mount the PL161 so that the potting side is facing out away from the mounting surface.

- The maximum torque for the mounting bolts is 12 N·m (as per 1E0279B).
- Do not mount on a cantilever
- Do not mount on a flexible surface
- Must be mounted on a flat surface
- Place the PL161 in an area that is easily accessible and can be serviced in a reasonable amount of time.
- Place the PL161 in an area and with an orientation that it is not used as a "boot step" or a "fulcrum point".

PL161 Environmental Information

PL161 Environmental Information Table	
Parameter	Specification
Operating Temperature Range	-40°C to 85°C
Storage Temperature Range	-50°C to +95°C
Vibration	29.59 Grms
Ingress Protection	IP68 (35kPA)

Table 2

Installing the PL161

The PL161 has two mounting options, adhesive mount or hard mount.

Note: Avoid mounting the device next to high heat sources such as exhaust stacks.

Note: Avoid mounting the device in a transmitted beam of any radar equipment. For best adhesion, the PL161 should be mounted at temperatures between 21° C (69.80° F) and 38° C (100.40° F).

Adhesive Mount Option

Note: Refer to "PL161 Mounting Requirements" before mounting the device.

The PL161 comes with two strips of adhesive tape loose in the kit.

Note: For best adhesion, the PL161 should be mounted at temperatures between 21° C (69.80° F) and 38° C (100.40° F) and the device should be mounted to a clean/dry area.

1. Record all the data needed to subscribe services in the "DSP" before mounting the Product Link device. Refer to "Record the Registration Information".
2. Remove the strip of protective plastic from one side of each adhesive strip.
3. Apply one piece of adhesive tape to each side of the back of the PL161.
4. Remove the remaining strip of protective plastic from each of the adhesive strips.
5. Firmly press the radio down on the mounting surface.

Hard Mount Option

Note: Refer to "PL161 Mounting Requirements" before mounting the device.

1. Record all the data needed to subscribe services in the "DSP" before mounting the Product Link radio. Refer to "Record the Registration Information".
2. Clean off an appropriate sized area to weld the mounting plate to.
3. Weld the mounting plate to the surface.
4. Apply thread locker to each bolt (1E2200L or 1E2200A)
5. Bolt the PL161 onto the mounting plate using the provided bolts. Tighten the mounting hardware to 12 ± 3 N·m (8.851 lb ft).