



Operation and Maintenance Manual

Product Link® PLE601, PL641, PL631, PL542, PL240, PL241, PL141, PL131, PL161, and G0100 Systems

PL6 1-UP (Machine Control & Guidance Products) PL2 1-UP (Machine Control & Guidance Products) PL1 1-UP (Machine Control & Guidance Products) PL5 1-UP (Machine Control & Guidance Products)

Important Safety Information

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, including human factors that can affect safety. This person should also have the necessary training, skills and tools to perform these functions properly.

Improper operation, lubrication, maintenance or repair of this product can be dangerous and could result in injury or death.

Do not operate or perform any lubrication, maintenance or repair on this product, until you verify that you are authorized to perform this work, and have read and understood the operation, lubrication, maintenance and repair information.

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

The hazards are identified by the "Safety Alert Symbol" and followed by a "Signal Word" such as "DANGER", "WARNING" or "CAUTION". The Safety Alert "WARNING" label is shown below.



The meaning of this safety alert symbol is as follows:

Attention! Become Alert! Your Safety is Involved.

The message that appears under the warning explains the hazard and can be either written or pictorially presented.

A non-exhaustive list of operations that may cause product damage are identified by "NOTICE" labels on the product and in this publication.

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.

WARNING

When replacement parts are required for this product Caterpillar recommends using Cat replacement parts.

Failure to follow this warning may lead to premature failures, product damage, personal injury or death.

In the United States, the maintenance, replacement, or repair of the emission control devices and systems may be performed by any repair establishment or individual of the owner's choosing.

Table of Contents

Foreword	4
Safety Section	
Safety Signs and Labels	5
General Hazard Information	6
Product Information Section	
Identification Information	7
Operation Section	
Operation2	26
Index Section	
Index	29

4

Foreword

Literature Information

This manual should be stored in the operator's compartment in the literature holder or seat back literature storage area.

This manual contains safety information, operation instructions, and maintenance recommendations.

Some photographs or illustrations in this publication show details or attachments that can be different from your product.

Continuing improvement and advancement of product design might have caused changes to your product which are not included in this publication. Read, study and keep this manual with the product.

Whenever a question arises regarding your product, or this publication, please consult your Cat dealer for the latest available information.

Safety

The safety section lists basic safety precautions. In addition, this section identifies the text and locations of warning signs and labels used on the machine.

Operation

The operation section is a reference for the new operator and a refresher for the experienced operator. This section includes a discussion of gauges, switches, product controls, attachment controls, and programming information.

Photographs and illustrations guide the operator through correct procedures of checking, starting, operating and stopping the product.

Operating techniques outlined in this publication are basic. Skill and techniques develop as the operator gains knowledge of the product and its capabilities.

Maintenance

The maintenance section is a guide to equipment care.

SEBU8832-08 5
Safety Section

Safety Section

i06753557

Safety Signs and Labels

SMCS Code: 7606

WARNING

Do not operate or work on this equipment unless you have read and understand the instructions and warnings in the Operation and Maintenance Manuals. Failure to follow the instructions or heed the warnings could result in injury or death. Contact your Caterpillar dealer for replacement manuals. Proper care is your responsibility.

MARNING

Improper operation of an access platform could result in injury or death. Operators must carry out their duties properly and follow all instructions and guidelines given for the machine and access platform.

MARNING

Accidental engine starting can cause injury or death to personnel working on the equipment.

To avoid accidental engine starting, disconnect the battery cable from the negative (-) battery terminal. Completely tape all metal surfaces of the disconnected battery cable end in order to prevent contact with other metal surfaces which could activate the engine electrical system.

Turn the battery disconnect switch to the OFF position and lockout the battery disconnect switch with a safety lock.

Place a Special Instruction, SEHS7332, "Do Not Operate" tag at the start switch and battery disconnect location to inform personnel that the machine is being worked on.

Safety Messages

The warning film in Illustration 1 can be found in a location such as the dash or control panel. The warning film is clearly visible to the operator during the normal operation of the equipment.

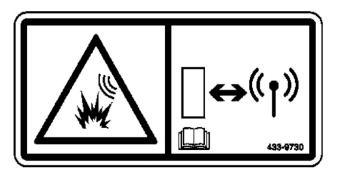


Illustration 1 Film

g03356592

Safety Signs and Labels

MARNING

This equipment is equipped with a Cat® Product Link communication device. When electric detonators are being used for blasting operations, radio frequency devices can cause interference with electric detonators for blasting operations which can result in serious injury or death. The Product Link communication device should be deactivated within the distance mandated under all applicable national or local regulatory requirements. In the absence of any regulatory requirements Caterpillar recommends the end user perform their own risk assessment to determine safe operating distance.

The blast site is defined as the area that handles explosive material during loading. Included is the perimeter that is formed by the loaded blast holes.

If required, the following are suggested methods to disable the Caterpillar Product Link communication device:

- Turn theProduct Link radio disable switch to the OFF position.
- Disconnect the Caterpillar Product Link communication device from the main power source. This action is performed by disconnecting the wiring harness at the Product Link radio.
- If equipped with a PL141 or PL131 turn off the Product Link device or remove its internal battery.
- If equipped with a PL161 remove the PL161 from the equipment.

General Hazard Information

Note: If no radio disable switch is installed and the equipment will be operating near a blast zone, a radio disable switch may be installed. The switch will allow the Caterpillar Product Link communication device to be shut off by the operator from the equipment control panel. Refer to Special Instruction, REHS7339, Special Instruction, REHS8850, Special Instruction, REHS9111, Special Instruction, SEHS0377, and Special Instruction, REHS9757 for more details and installation instructions.

Other Films

The film in Illustration 2 can be found in a location such as the dash or control panel. The warning film is clearly visible to the operator during the normal operation of the equipment.



Illustration 2 q0335673

The film in Illustration 2 is intended to inform the operator that the equipment is equipped with a wireless transmitting device. Accordingly, data concerning this equipment, the condition of the equipment, and the operation of the equipment is being transmitted by the Caterpillar Product Link communication device to Caterpillar and is communicated to customers and Caterpillar dealers by the user interface. The data is used to serve the customer better and to improve upon Caterpillar products and services. Transmission of information using a Caterpillar Product Link communication device is subject to legal requirements that may vary from location to location.

Refer to the Operation and Maintenance Manual, SEBU8832, "Operation" and the Operation and Maintenance Manual, SEBU8832, "Regulatory Compliance" section for additional information.

i05951990

General Hazard Information

SMCS Code: 7606

WARNING

Do not operate or work on this equipment unless you have read and understand the instructions and warnings in the Operation and Maintenance Manuals. Failure to follow the instructions or heed the warnings could result in injury or death. Contact your Caterpillar dealer for replacement manuals. Proper care is your responsibility.

Foreword

This document is a supplement to the Operation and Maintenance Manual for the equipment. Permanently attach this document to the Operation and Maintenance Manual for the equipment.

Introduction

This document provides information about the operation of the Caterpillar Product Link communication device.

Operation of the equipment and the maintenance of the equipment must not occur unless the instructions and warnings in the Operation and Maintenance Manual for the equipment have been read and the instructions and the warnings are understood. The contents of this document must be understood before the equipment that is equipped with the Caterpillar Product Link communication device is operated.

SEBU8832-08 7

Product Information Section Identification Information

Product Information Section

Identification Information

i06753185

Manufacturing Information

SMCS Code: 7606

Name of the EAC Importer and the Manufacture

Distributor: "Caterpillar Eurasia" Ltd.

Russia, Moscow, 115035 Sadovnicheskaya Nab 75

Phone: +7 (495) 2133340, Fax: +7 (495) 2133372,

email: cat_moscow@cat.com

Manufacturer: Caterpillar Inc.

100 NE Adams Street Peoria, Illinois 61629 United

States of America

Country of origin - USA

Date of Manufacture

Markings on the device and or package contain information about the date of manufacture, or a link to the source of this information. If required, the date of manufacture can be obtained by the serial number of the product, by contacting your authorized dealer.

Term and Conditions of Storage and Transportation

The product is packed in consumer packaging of manufacturer. The product should be stored in the factory packing and storage conditions for climatic factors of Group 4 in accordance with GOST 15150-69. When loading and transportation requirements on warning labels on the boxes must be followed, shocks and bumps that can affect the appearance and performance of the device should not be allowed.

Transportation can be done by all kinds of covered transport vehicles. When transporting by air, ensure that the Product Linkdevice is transported in a sealed heated compartment.

Actions In Case of Technical Failures

Before calling to the dealer for repair, the integrity of the electric wires, and cycle the battery power to the device. Cycling battery power can be accomplished by:

- Turn the machines master disconnect off and then back on.
- Unplug the Product Link harness from the machine connector and then plug the harness hack in
- Disconnect the negative cable from the negative battery terminal and then reconnect the cable.

If these solutions do not help, call for service.

i06993546

Regulatory Compliance

SMCS Code: 7606

NOTICE

The transmission of information using a Caterpillar Product Link communication device is subject to legal requirements. The legal requirements may vary from location to location, including, but not limited to, radio frequency use authorization. The use of a Caterpillar Product Link communication device must be limited to those locations where all legal requirements for the use of the Caterpillar Product Link communication device and communication network have been satisfied.

If equipment outfitted with the Caterpillar Product Link communication device is located in or relocated to a location where (i) legal requirements are not satisfied or (ii) transmitting or processing of such information across multiple locations would not be legal, Caterpillar disclaims any liability related to such failure to comply, and Caterpillar may discontinue the transmission of information from that equipment.

Consult your Cat dealer with any questions that concern the operation of the Product Link system in a specific country.

G0100 Radio Notices

FCC Notice

- This device may not cause harmful interference.
- This device must accept any interference received, including interference that may cause undesired operation.

This equipment has been tested and found to comply with 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

Changes or modifications to this device without the express approval of Caterpillar may void the users authority to use this device.

Industry Canada Notice to Users

Operation is subject to the following two conditions:

- · This device may not cause interference
- This device must accept any interference, including interference that may cause undesired operation of the device.

PL631 Radio Notices

FCC Notice

This device complies with part 15 of the FCC rules. Operation is subject to the following two conditions:

- This device may not cause harmful interference.
- This device must accept any interference received, including interference that may cause undesired operation.

This equipment has been tested and found to comply with 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

Changes or modifications to this device without the express approval of Caterpillar may void the users authority to use this device.

Industry Canada Notice to Users

Operation is subject to the following two conditions:

- This device may not cause interference
- This device must accept any interference, including interference that may cause undesired operation of the device.

PL641 Radio Notices

FCC Notice

- This device may not cause harmful interference.
- This device must accept any interference received, including interference that may cause undesired operation.

This equipment has been tested and found to comply with 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

Changes or modifications to this device without the express approval of Caterpillar may void the users authority to use this device.

Industry Canada Notice to Users

Operation is subject to the following two conditions:

- This device may not cause interference
- This device must accept any interference, including interference that may cause undesired operation of the device.

PL542 Radio Notices

FCC Notice

This device complies with Part 15 of the FCC rules. Operation is subject to the following two conditions:

- This device may not cause harmful interference.
- This device must accept any interference received, including interference that may cause undesired operation.

This equipment has been tested and found to comply with FCC Part 22, Part 24, and with 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

Changes or modifications to this device without the express approval of Caterpillar may void the users authority to use this device.

Industry Canada Notice to Users

Operation is subject to the following two conditions:

- This device may not cause interference
- This device must accept any interference, including interference that may cause undesired operation of the device.

PL240 Radio Notices

FCC Notice

- This device may not cause harmful interference.
- This device must accept any interference received, including interference that may cause undesired operation.

This equipment has been tested and found to comply with 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

Changes or modifications to this device without the express approval of Caterpillar may void the users authority to use this device.

Industry Canada Notice to Users

Operation is subject to the following two conditions:

- This device may not cause interference
- This device must accept any interference, including interference that may cause undesired operation of the device.

Indonesia Certificate

49587/SDPPI/2017

3130

Singapore Certificate

Complies with IMDA Standards DB105771

PL240 Certification Markings

COUNTRIES	Labeling Requirements	
AUSTRALIA	€	
COSTA RICA	FCC mark	
JAPAN	© 003-160123 T D160071003	
NEW ZEALAND	E401	
NIGERIA	"Connection and use of this Communications equipment is permitted by the Nigerian Communications Commission"	
QATAR	ictQATAR Type Approval reg. No: CRA/\$A/2016/R-5433	
THAILAND	"This telecommunication equipment conforms to NTC technical requirement"	
UKRAINE	028	
U NITED ARAB EMIRATES	TRA REGISTERED No: ER47254/16 DEALER No: DA0130583/14	

Illustration 3 g06159202

PL241 Radio Notices

FCC Notice

- This device may not cause harmful interference.
- This device must accept any interference received, including interference that may cause undesired operation.

This equipment has been tested and found to comply with 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

Changes or modifications to this device without the express approval of Caterpillar may void the users authority to use this device.

Industry Canada Notice to Users

Operation is subject to the following two conditions:

- This device may not cause interference
- This device must accept any interference, including interference that may cause undesired operation of the device.

PL141 Radio Notices

FCC Notice

This device complies with part 15 of the FCC rules. Operation is subject to the following two conditions:

- This device may not cause harmful interference.
- This device must accept any interference received, including interference that may cause undesired operation.

This equipment has been tested and found to comply with 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

Changes or modifications to this device without the express approval of Caterpillar may void the users authority to use this device.

Industry Canada Notice to Users

Operation is subject to the following two conditions:

- This device may not cause interference
- This device must accept any interference, including interference that may cause undesired operation of the device.

⚠ WARNING

Care must be taken in handling lithium batteries.

Lithium batteries are not a serviceable part.

Personal injury can result from battery exploding.

Caution must be used because there is risk of an explosion if the battery is replaced by an incorrect type.

Do not dispose of battery or batteries in a fire. The battery is capable of exploding and emitting caustic chemicals.

Dispose of used batteries according to federal and local laws.

PL131 Radio Notices

FCC Notice

This device complies with part 15 of the FCC rules. Operation is subject to the following two conditions:

- This device may not cause harmful interference.
- This device must accept any interference received, including interference that may cause undesired operation.

This equipment has been tested and found to comply with 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

Changes or modifications to this device without the express approval of Caterpillar may void the users authority to use this device.

Industry Canada Notice to Users

Operation is subject to the following two conditions:

- This device may not cause interference
- This device must accept any interference, including interference that may cause undesired operation of the device.

WARNING

Care must be taken in handling lithium batteries.

Lithium batteries are not a serviceable part.

Personal injury can result from battery exploding.

Caution must be used because there is risk of an explosion if the battery is replaced by an incorrect type.

Do not dispose of battery or batteries in a fire. The battery is capable of exploding and emitting caustic chemicals.

Dispose of used batteries according to federal and local laws.

PL161 Radio Notices

FCC Notice

This device complies with part 15 of the FCC rules. Operation is subject to the following two conditions:

- This device may not cause harmful interference.
- This device must accept any interference received, including interference that may cause undesired operation.

This equipment has been tested and found to comply with 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

Changes or modifications to this device without the express approval of Caterpillar may void the users authority to use this device.

Industry Canada Notice to Users

Operation is subject to the following two conditions:

- This device may not cause interference
- This device must accept any interference, including interference that may cause undesired operation of the device.

WARNING

Care must be taken in handling lithium batteries.

Lithium batteries are not a serviceable part.

Personal injury can result from battery exploding.

Caution must be used because there is risk of an explosion if the battery is replaced by an incorrect type.

Do not dispose of battery or batteries in a fire. The battery is capable of exploding and emitting caustic chemicals.

Dispose of used batteries according to federal and local laws.

PLE601 Network Manager Notices

WARNING

Care must be taken in handling lithium batteries.

Lithium batteries are not a serviceable part.

Personal injury can result from battery exploding.

Caution must be used because there is risk of an explosion if the battery is replaced by an incorrect type.

Do not dispose of battery or batteries in a fire. The battery is capable of exploding and emitting caustic chemicals.

Dispose of used batteries according to federal and local laws.

i06995400

Declaration of Conformity

SMCS Code: 7606

European Union EU Declaration of Conformity PLE601

Table 1

CATERPILLAR ®
EU Declaration of Conformity

The undersigned, representing

And the authorized representative established within

the Community

Product Information Section Declaration of Conformity

(Table 1, contd)

CATERPILLAR INC CATERPILLAR INC

100 N.E. Adams Street Alberto JUAREZ-RAMIREZ

Peoria, IL 61629 Fleet Specialist / Technology Distribution Consultant

USA EAME DSD- Equipment Management

Tel: 32(0) 71.25.97.03 / Mob: 32(0) 499.85.97.03

Email: juarez-ramirez_alberto@cat.com

Caterpillar Belgium - Bldg A

1, Avenue des Etats-Unis,

BE 6041, Gosselies, Belgium

hereby declares that the product:

Brand: Product Link

Model: PLE601 Part Number: 417 - 4722

is in conformity with essential requirements of the following EU Directives

2014/30/EU Electromagnetic Compatibility (EMC) Directive

2011/65/EU Restriction of certain Hazardous Substances Directive

as is verified by compliance with the following standards:

EN 50581:2012 EN 6100-4-8:2016 ISO 13766:2006 EN 6100-4-6:2003 EN 13309:2010 EN 6100-4-4:2016 EN ISO 14982:2009 EN 6100-4-5:2014 SEBU8832-08

I hereby declare that the equipment named above has been designed to comply with the relevant sections of the above referenced specifications.

Signature

Name: Michael Caruthers

Title: Engineering Manager Date: 11-2-2016

Illustration 4 g06144088

European Union EU Declaration of Conformity G0100

Table 2

CATERPILLAR ® EU Declaration of Conformity

The undersigned, representative established within

the Community

CATERPILLAR INC CATERPILLAR INC

100 N.E. Adams Street Alberto JUAREZ-RAMIREZ

Peoria, IL 61629 Fleet Specialist / Technology Distribution Consultant

USA EAME DSD- Equipment Management

Tel: 32(0) 71.25.97.03 / Mob: 32(0) 499.85.97.03

Email: juarez-ramirez_alberto@cat.com

Caterpillar Belgium - Bldg A

1, Avenue des Etats-Unis,
BE 6041, Gosselies , Belgium

hereby declares that the product:

Brand: Product Link

Model: G0100 Part Number: 417 - 4723

is in conformity with essential requirements of the following EU Directives

1999/5/EC Radio and Telecommunications Terminal Equipment Directive

2014/30/EU Electromagnetic Compatibility (EMC) Directive

2011/65/EU Restriction of certain Hazardous Substances Directive

as is verified by compliance with the following standards:

16 SEBU8832-08

Product Information Section Declaration of Conformity

(Table 2, contd)

EN 62311:2008 EN 300 440-2:V1.4.1:2010 EN 50581:2012 EN 301 489-1:V1.9.2: 2011

ISO 13766:2006 EN 301 511:v9.0.2 EN ISO 14982:2009 EN 301 908–2:2010

EN 13309:2010

I hereby declare that the equipment named above has been designed to comply with the relevant sections of the above referenced specifications.

Signature

Name: Michael Caruthers
Title: Engineering Manager
Date: 11-2-1016

Illustration 5 g06144088

European Union EU Declaration of Conformity PL131

Table 3

CATERPILLAR ® EU Declaration of Conformity

The undersigned, representing And the authorized representative established within

the Community

CATERPILLAR INC CATERPILLAR INC

100 N.E. Adams Street Alberto JUAREZ-RAMIREZ

Peoria, IL 61629 Fleet Specialist / Technology Distribution Consultant

USA EAME DSD- Equipment Management

Tel: 32(0) 71.25.97.03 / Mob: 32(0) 499.85.97.03

Email: juarez-ramirez_alberto@cat.com

Caterpillar Belgium - Bldg A

1, Avenue des Etats-Unis,
BE 6041, Gosselies , Belgium

hereby declares that the product:

Brand: Product Link

Model: PL131 Part Number: 448-3378

(Table 3, contd)

is in conformity with essential requirements of the following EU Directives

1999/5/EC Radio and Telecommunications Terminal Equipment Directive

2014/30/EU Electromagnetic Compatibility (EMC) Directive

2011/65/EU Restriction of certain Hazardous Substances Directive

as is verified by compliance with the following standards:

EN 60950-1:2005 (ed 2);am1;am 2
EN 301 489-1:V1.9.2: 2011
EN 62311:2008
EN 301 489-20:V1.2.1: 2002
EN 50581:2012
EN 301 489-3:V1.6.1:2013
ISO 13766:2006
EN 300 440-2:V1.4.1:2010
EN ISO 14982:2009
EN 301 441:V1.1.1:2000

EN 13309:2010

I hereby declare that the equipment named above has been designed to comply with the relevant sections of the above referenced specifications.

Name: Michael Caruthers

Title: Engineering Manager
Date: 11-2-2016

Illustration 6 g06144088

European Union EU Declaration of Conformity PL141

Table 4

CATERPILLAR * EU Declaration of Conformity

The undersigned, representative established within

the Community

CATERPILLAR INC CATERPILLAR INC

100 N.E. Adams Street Alberto JUAREZ-RAMIREZ

Peoria, IL 61629 Fleet Specialist / Technology Distribution Consultant

USA EAME DSD- Equipment Management

Tel: 32(0) 71.25.97.03 / Mob: 32(0) 499.85.97.03

18 SEBU8832-08

Product Information Section Declaration of Conformity

(Table 4, contd)

Email: juarez-ramirez_alberto@cat.com

Caterpillar Belgium - Bldg A

1, Avenue des Etats-Unis,
BE 6041, Gosselies , Belgium

hereby declares that the product:

Brand: Product Link

Model: PL141 Part Number: 448-3379

is in conformity with essential requirements of the following EU Directives

1999/5/EC Radio and Telecommunications Terminal Equipment Directive

2014/30/EU Electromagnetic Compatibility (EMC) Directive

2011/65/EU Restriction of certain Hazardous Substances Directive

as is verified by compliance with the following standards:

EN 301 489-1:V1.9.2: 2011
EN 62311:2008
EN 301 489-3:V1.6.1:2013
EN 50581:2012
EN 301 489-7:V1.3.1:2005
ISO 13766:2006
EN 301 489-24:V1.5.1:2010
EN ISO 14982:2009
EN 300 440-2:V1.4.1:2010
EN 13309:2010
EN 301 908-2:V6.2.1:2013

19

SEBU8832-08

I hereby declare that the equipment named above has been designed to comply with the relevant sections of the above referenced specifications.

Signature

Michael Caruthore

Name: Michael Caruthers

Title: Engineering Manager

Date: 11-2-4016

Illustration 7 g06144088

European Union EU Declaration of Conformity PL240

Table 5

CATERPILLAR ® EU Declaration of Conformity

The undersigned, representative established within

the Community

CATERPILLAR INC CATERPILLAR INC

100 N.E. Adams Street Alberto JUAREZ-RAMIREZ

Peoria, IL 61629 Fleet Specialist / Technology Distribution Consultant

USA EAME DSD- Equipment Management

Tel: 32(0) 71.25.97.03 / Mob: 32(0) 499.85.97.03

Email: juarez-ramirez_alberto@cat.com

Caterpillar Belgium - Bldg A

1, Avenue des Etats-Unis,
BE 6041, Gosselies , Belgium

hereby declares that the product:

Brand: Product Link

Model: PL240 Part Number: 505 - 6727

is in conformity with essential requirements of the following EU Directives

1999/5/EC Radio and Telecommunications Terminal Equipment Directive

2014/30/EU Electromagnetic Compatibility (EMC) Directive

2011/65/EU Restriction of certain Hazardous Substances Directive

as is verified by compliance with the following standards:

20 SEBU8832-08

Product Information Section Declaration of Conformity

(Table 5, contd)

EC 60950-1:2005+AM 1:2009
EN 301 489-1:V1.9.2: 2011
EN 62311:2008
EN 301 489-24:V1.5.1:2010
EN 50581:2012
EN 301 489-7:V1.3.1:2005
ISO 13766:2006
EN 301 511:V9.0.2:2003
EN ISO 14982:2009
EN 301 908-1:V6.2.1
EN 13309:2010
EN 301 908-2:V6.2.1

I hereby declare that the equipment named above has been designed to comply with the relevant sections of the above referenced specifications.

Signature

Name: Michael Caruthers

Title: Engineering Manager

Date: //- Z- Ze/4

Illustration 8 g06159175

European Union EU Declaration of Conformity PL241

Table 6

CATERPILLAR * EU Declaration of Conformity

The undersigned, representing And the authorized representative established within

the Community

CATERPILLAR INC CATERPILLAR INC

100 N.E. Adams Street Alberto JUAREZ-RAMIREZ

Peoria, IL 61629 Fleet Specialist / Technology Distribution Consultant

USA EAME DSD- Equipment Management

Tel: 32(0) 71.25.97.03 / Mob: 32(0) 499.85.97.03

Email: juarez-ramirez_alberto@cat.com

Caterpillar Belgium - Bldg A

1, Avenue des Etats-Unis,
BE 6041, Gosselies , Belgium

hereby declares that the product:

Brand: Product Link

(Table 6, contd)

Model: PL241 Part Number: 444-9619

is in conformity with essential requirements of the following EU Directives

1999/5/EC Radio and Telecommunications Terminal Equipment Directive

2014/30/EU Electromagnetic Compatibility (EMC) Directive

2011/65/EU Restriction of certain Hazardous Substances Directive

as is verified by compliance with the following standards:

EN 60950-22:2006 EN 301 489-1:V1.9.2: 2011 EN 60950-1:2006 EN 301 489-3:V1.6.1:2013 EN 62311:2008 EN 301 489-7:V1.3.1:2005 EN 50581:2012 EN 301 489-24:V1.5.1:2010 ISO 13766:2006 EN 301 511:V9.0.2:2003 EN ISO 14982:2009 EN 300 440-2:V1.4.1:2010 EN 13309:2010 EN 301 908-1:V6.2.1:2013 EN 301 908-2:V6.2.1:2014

I hereby declare that the equipment named above has been designed to comply with the relevant sections of the above referenced specifications.

Name: Michael Caruthers

Title:

Engineering Manager

Date:

11-2-2016

Illustration 9 g06144088

European Union EU Declaration of Conformity PL542

Table 7

CATERPILLAR ® **EC** Declaration of Conformity

The undersigned, representing And the authorized representative established within

the Community

CATERPILLAR INC CATERPILLAR INC (Table 7, contd)

100 N.E. Adams Street Alberto JUAREZ-RAMIREZ

Peoria, IL 61629 Fleet Specialist / Technology Distribution Consultant

USA EAME DSD- Equipment Management

Tel: 32(0) 71.25.97.03 / Mob: 32(0) 499.85.97.03

Email: juarez-ramirez_alberto@cat.com

Caterpillar Belgium - Bldg A 1, Avenue des Etats-Unis,

BE 6041, Gosselies, Belgium

hereby declares that the product:

Brand: Product Link

Model: PL542 Part Number: 515-7080

Is in conformity with essential requirements of the following EC Directives as is verified by compliance with the following standards:

Directive 1995/5/EC Radio and Telephone and Terminal Equipment (R&TTE)	Harmonized Standards Granting Presumption of Conformity
	ETSI EN 203 367 V1.1.0 March 2016
	ETSI EN 300 328 V1.9.1
Dadia Farmana ana ataura usa (DOTTE art 2.2)	ETSI EN 300 328 V2.1.1 Nov 2016
Radio Frequency spectrum use (R&TTE art. 3.2):	ETSI EN 301 511 V9.0.2 March 2003
	ETSI EN 301 908- 1 V11.1.1 July 2016
	ETSI EN 301 908- 2 V11.1.1 July 2016
	ETSI EN 301 489–1 V1.8.1 2012
	ETSI EN 301 489-1 V2.1.1 Nov 2016
Electromagnetic Compatibility (R&TTE art. 3.1b):	ETSI EN 301 489-7 V1.3.1 Nov 2005
	ETSI EN 301 489-17 V2.2.1 Sept 2012
	ETSI EN 301 489-24 V1.5.1 Oct 2010
Electrical Safety (R&TTE art. 3.1a):	EN 60950-1:2006 + A12:2011 + A2:2003
2011/65/EU	Restriction of certain Hazardous Substances Directive EN 62311:2008
Directive 2011/65/EU RoHS Restriction of the use of certain hazardous substances in electrical and electronic equipment	EN 50581:2012
	EN 13309:2010
Directive 2014/30/EU Electromagnetic Compatibility	EN 14982:2009
	ISO 13766:2006

23

SEBU8832-08

I hereby declare under the sole responsibility of "Client Name", Inc. that that the equipment named above has been designed to comply with the relevant sections of the above referenced specifications.

Signed:

Date: /

Illustration 10 g06192049

European Union EU Declaration of Conformity PL631

Table 8

CATERPILLAR ® EU Declaration of Conformity

The undersigned, representing

And the authorized representative established within

the Community

CATERPILLAR INC CATERPILLAR INC

100 N.E. Adams Street Alberto JUAREZ-RAMIREZ

Peoria, IL 61629 Fleet Specialist / Technology Distribution Consultant

USA EAME DSD- Equipment Management

Tel: 32(0) 71.25.97.03 / Mob: 32(0) 499.85.97.03

Email: juarez-ramirez_alberto@cat.com

Caterpillar Belgium - Bldg A

1, Avenue des Etats-Unis,
BE 6041, Gosselies , Belgium

hereby declares that the product:

Brand: Product Link

Model: PL631 Part Number: 442-7199 (external antenna)

is in conformity with essential requirements of the following EU Directives

1999/5/EC Radio and Telecommunications Terminal Equipment Directive

2014/30/EU Electromagnetic Compatibility (EMC) Directive

2011/65/EU Restriction of certain Hazardous Substances Directive

as is verified by compliance with the following standards:

24 SEBU8832-08

Product Information Section Declaration of Conformity

(Table 8, contd)

EN 60950-1:2006/A11:2009/A1:2010/A12:2011 EN 300 440-2:V1.4.1 EN 50581:2012 EN 301 441:V1.1.1

ISO 13766:2006 EN 301 489-1:V1.9.2:2011 ISO 14982:2009 EN 301 489-20:V1.2.1:2002

ISO 13309:2010

I hereby declare that the equipment named above has been designed to comply with the relevant sections of the above referenced specifications.

Signature

Name: Michael Caruthers
Title: Engineering Manager
Date: 11-2-1016

Illustration 11 g06144088

European Union EU Declaration of Conformity PL641

Table 9

CATERPILLAR * EU Declaration of Conformity

The undersigned, representing And the authorized representative established within

the Community

CATERPILLAR INC CATERPILLAR INC

100 N.E. Adams Street Alberto JUAREZ-RAMIREZ

Peoria, IL 61629 Fleet Specialist / Technology Distribution Consultant

USA EAME DSD- Equipment Management

Tel: 32(0) 71.25.97.03 / Mob: 32(0) 499.85.97.03

Email: juarez-ramirez_alberto@cat.com

Caterpillar Belgium - Bldg A

1, Avenue des Etats-Unis,

BE 6041, Gosselies , Belgium

hereby declares that the product:

Brand: Product Link

(Table 9, contd)

Model: PL641 440 - 2104 (internal antenna) 440 - 2105 (external antenna)

is in conformity with essential requirements of the following EU Directives

1999/5/EC Radio and Telecommunications Terminal Equipment Directive

2014/30/EU Electromagnetic Compatibility (EMC) Directive

2011/65/EU Restriction of certain Hazardous Substances Directive

as is verified by compliance with the following standards:

EN 60950-1:2006+A11:2009 + A1:2010 + A12:2011 EN 300 440-2:V1.4.1:2010 EN 62311:2008 EN 301 489-1:V1.9.2: 2011 EN 50581:2012 EN 301 489-7:V1.3.1:2005 ISO 13766:2006 EN 301 489-24:V1.5.1:2010 EN ISO 14982:2009 EN 301 511: v9.0.2

EN ISO 14982:2009 EN 301 511: v9.0.2 EN 301 908-1:V6.2.1

I hereby declare that the equipment named above has been designed to comply with the relevant sections of the above referenced specifications.

Signature: Man

Name: Michael Caruthers

Title: Engineering Manager Date: 11-2-2016

Illustration 12 g06144088

Operation Section

Operation

i06977127

System Overview

SMCS Code: 7606

Note: Your equipment may be equipped with a Caterpillar Product Link communication device.

The Caterpillar Product Link communication device utilizes cellular and/or satellite technology to communicate equipment information. This information is communicated to Caterpillar, Cat dealers, and Caterpillar customers. The Caterpillar Product Link communication device contains a Global Positioning System (GPS) satellite receiver.

Note: The Product Link PL161 does not contain a GPS receiver.

The capability of two-way communication between the equipment and a remote user is available with the Caterpillar Product Link communication device. The remote user can be a dealer or a customer.

Note: The Product Link PL161 does not support two-way communication.

Data Broadcasts

Data concerning this equipment, the condition of the equipment, and the operation of the equipment is being transmitted by the Caterpillar Product Link communication device to Caterpillar and is communicated to customers and Caterpillar dealers by the user interface. The data is used to serve the customer better and to improve upon Caterpillar products and services. The information transmitted may include: equipment serial number, equipment location, and operational data, including but not limited to: fault codes, emissions data, fuel usage, service meter hours, software, and hardware version numbers and installed attachments.

Caterpillar and/or Cat dealers may use this information for various purposes. Refer to the following list for possible uses:

- Providing services to the customer and/or the equipment
- Checking or maintaining Product Link system
- Monitoring the health or performance of the equipment
- Helping maintain the equipment and/or improve the efficiency of the equipment

- Evaluating or improving Caterpillar products and services
- Complying with legal requirements and valid court orders
- Performing market research
- Offering the customer new products and services

Caterpillar may share some or all the collected information with Caterpillar affiliated companies, dealers, and authorized representatives. Caterpillar will not sell or rent collected information to any other third party and will exercise reasonable efforts to keep the information secure. Caterpillar recognizes and respects customer privacy. For more information, please contact your local Cat dealer.

Operation in a Blast Site for Product Link Radios

A WARNING

This equipment is equipped with a Cat® Product Link communication device. When electric detonators are being used for blasting operations, radio frequency devices can cause interference with electric detonators for blasting operations which can result in serious injury or death. The Product Link communication device should be deactivated within the distance mandated under all applicable national or local regulatory requirements. In the absence of any regulatory requirements Caterpillar recommends the end user perform their own risk assessment to determine safe operating distance.

Note: If using the previous version of Product Link radios (PL121SR, 522, 523, 420, or 421) refer to blast site requirements as stated in Operation and Maintenance Manual, SEBU8142, "Product Link - 121SR/321SR/420/421/522/523".

If required, the following are suggested methods to disable the Caterpillar Product Link communication device:

- Turn theProduct Link radio disable switch to the OFF position.
- Disconnect the Caterpillar Product Link communication device from the main power source. This action is performed by disconnecting the wiring harness at the Product Link radio.
- To turn off the PL141 or PL131 push the power button or remove the internal battery.
- The PL161 cannot be turned off. If necessary, remove the PL161 from the equipment.

27

 The PL542 contains an internal battery that cannot be turned OFF manually. If necessary remove the PL542 from the equipment.

Note: If no radio disable switch is installed and the equipment will be operating near a blast zone, a Product Link radio disable switch may be installed on the equipment. The switch will allow the Caterpillar Product Link communication device to be shut off by the operator from the equipment control panel. Refer to Special Instruction, REHS7339, Special Instruction, REHS8850, Special Instruction, SEHS0377, and Special Instruction, REHS9111 for more details and installation instructions.

The following Caterpillar Product Link communication device specifications are provided to aid in conducting any related hazard assessment and to ensure compliance with all local regulations:

Table 10

Radio Transmitter Specifications			
Radio Model (Maximum)	Transmitter Frequency Range Transmitter Po		
	824 MHz - 849 MHz		
	880 MHZ - 915 MHz		
	1710 MHz - 1755 MHz		
PL640 G0100	1850 MHz - 1910 MHz	0.5W typical, 2W max	
	1920 MHz - 1980 MHz		
	2110 MHz - 2170 MHz		
	824 MHz - 849 MHz		
	880 MHZ - 915 MHz		
	1710 MHz - 1755 MHz		
PL641	1850 MHz - 1910 MHz	0.5W typical, 2W max	
	1920 MHz - 1980 MHz		
	2110 MHz - 2170 MHz		
PL631	1616 MHz - 1626.5 MHz	5.1W max	
PL542	824 MHz - 849 MHz		
	880 MHZ - 915 MHz		
	1710 MHz - 1755 MHz	0.5W typical, 2W max	
	1850 MHz - 1910 MHz		

(Table 10, contd)

(Table 10, Contd)			
	1920 MHz - 1980 MHz		
	2110 MHz - 2170 MHz		
	824 MHz - 849 MHz		
	880 MHZ - 915 MHz		
	1710 MHz - 1755 MHz		
PL240	1850 MHz - 1910 MHz	0.5W typical, 2W max	
	1920 MHz - 1980 MHz		
	2110 MHz - 2170 MHz		
	824 MHz - 849 MHz		
	880 MHZ - 915 MHz		
PL241	1710 MHz - 1755 MHz		
	1850 MHz - 1910 MHz	0.5W typical, 2W max	
	1920 MHz - 1980 MHz		
	2110 MHz - 2170 MHz		
	824 MHz - 849 MHz		
	880 MHZ - 915 MHz		
PL141	1710 MHz - 1755 MHz		
	1850 MHz - 1910 MHz	0.5W typical, 2W max	
	1920 MHz - 1980 MHz		
	2110 MHz - 2170 MHz		
PL131	1616 MHz - 1626.5 1.2W Typical, 1.5 MHz max		
PL161	2.4 GHz - 2.48 GHz	2.5 mW	

Table 11

Radio Transmitter Specifications — Russia Specific			
Radio Model and Part Numbers	Transmitter Frequency Range	Transmitter Power Average	
PL631 467-4162, 463-1177, 455-5564, 442-7199	1621.35 MHz - 1626.5 MHz	2.16 dBW	

Operation Section System Overview

Note: The PL631 is the only system that operates at a different frequency range in Russia. All other systems operate as indicated in Table 10.

Consult your Cat dealer if there are any questions.

Information for the initial installation of the Caterpillar Product Link communication device is available in Special Instruction, REHS7339, Special Instruction, REHS8850, Special Instruction, REHS9111, Special Instruction, SEHS0377, Special Instruction, REHS9757, and Special Instruction, M0077632.

Operation, configuration, and troubleshooting information for the Caterpillar Product Link communication device can be found in the Systems Operation, Troubleshooting, Testing and Adjusting, UENR3697, Systems Operation, Troubleshooting, Testing and Adjusting, UENR5823, Systems Operation, Troubleshooting, Testing and Adjusting, UENR5824, Systems Operation, Troubleshooting, Testing and Adjusting, M0070044, and Systems Operation, Troubleshooting, Testing and Adjusting, UENR6983.

Index

D	0	
Declaration of Conformity	Operation	26
European Union EU Declaration of Conformity G0100	Operation Section	
European Union EU Declaration of Conformity PL13116	Р	
European Union EU Declaration of Conformity PL14117	Product Information Section	7
European Union EU Declaration of Conformity PL24019	R	_
European Union EU Declaration of Conformity PL24120	Regulatory Compliance	
European Union EU Declaration of Conformity	PL131 Radio Notices PL141 Radio Notices	
PL542	PL161 Radio Notices	
European Union EU Declaration of Conformity	PL240 Radio Notices	9
PL631	PL241 Radio Notices	10
European Union EU Declaration of Conformity	PL542 Radio Notices	9
PL641	PL631 Radio Notices	8
European Union EU Declaration of Conformity	PL641 Radio Notices	8
PLE601 13	PLE601 Network Manager Notices	13
F	S	
Foreword 4	Cofety Coeties	_
Literature Information 4	Safety Section	
Maintenance 4	Safety Signs and Labels	
Operation 4	Other Films	
Safety 4	Safety Messages	
y	System Overview	26
•	Data Broadcasts	
G	Operation in a Blast Site for Product Link	
General Hazard Information6	Radios	26
Foreword	_	
Introduction6	T	_
I	Table of Contents	3
Identification Information 7		
Important Safety Information 2		
M		
Manufacturing Information 7		
Actions In Case of Technical Failures 7		
Date of Manufacture		
Name of the EAC Importer and the		
Manufacture 7		
Term and Conditions of Storage and		
Transportation 7		

Product and Dealer Information

Note: For product identification plate locations, see the section "Product Identification Information" in the Operation and Maintenance Manual.

Delivery D	ate:		
Product Information			
Model:			
Product Ide	entification Number:		
Engine Ser	ial Number:		
Transmissi	on Serial Number:		
Generator	Serial Number:		
Attachmen	t Serial Numbers:		
Attachmen	t Information:		
Customer E	Equipment Number:		
Dealer Equ	ipment Number:		
Dealer	Information		
Name:		Branch:	
Address:			
	Dealer Contact	Phone Number	Hours
	<u>Dealer Contact</u>	<u>i Hone Number</u>	110013
Sales:			
Parts:			
Service:			

