

CAT[®] DETECT WITH SURROUND & REAR CAMERA

CUSTOMER GUIDE



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01

VALUE OF SAFETY

SAFETY IS A CRITICAL ELEMENT AT CATERPILLAR

Fatalities, injuries, property damage, and equipment damage are among the biggest daily risks our customers face. Customers that effectively manage these risks benefit from higher worker engagement, lower expenses, and more projects completed on time. Any contact with a machine customer is a good time to talk about safety.

This Sales Guide provides product and sales information to assist you in explaining the value of Cat® Surround Camera & Rear Camera



SECTION 01

VALUE OF SAFETY

CATERPILLAR BELIEVES IN THE IMPORTANCE OF SAFETY

We want our customers to get everyone home safely every day. Continuously improving our product design to increase job site safety as well as improving production and efficiency is a critical part of our strategy. We want to help equipment owners get the best return on their investment. Not only do we design machines to have more than one life, we design the life of our equipment so that it's technology can be improved over time. Technologies can be retrofitted to many machines, extending their technological life and safe operation.

INTRODUCTION

WE'RE CONTINUOUSLY WORKING TO IMPROVE THE OPERATOR EXPERIENCE

Caterpillar understands that operating and working around machines can be hazardous, so Cat machines are designed with on-site safety in mind. We are constantly innovating in the design and technology of new products to increase operators' awareness, visibility and stamina. As new safety enhancements are integrated in new products, Caterpillar is looking for opportunities to bring those enhancements to machines in the field. Cat® Safety Upgrades bring some of the latest safety features from new product to the aftermarket.

PREVENTION IS KEY

The addition of safety enhancements to equipment not only improves safe operation, but also adds to operator confidence because they know they have technology that helps avoid damaging the machine or injuring co-workers. Running a fleet with updated features increases the likelihood of attracting, hiring and retaining qualified operators. OSHA and MSHA both confirm that operators with less experience are more likely to be involved in accidents, so offering features that attract more experienced operators can be a good strategy for preventing work site accidents. Adding more safety features can be a cost-effective, quick-turn way to help prevent accidents and make operations more productive and profitable.

BURNING PLATFORM



**APPROXIMATELY 150,000
INJURIES EACH YEAR ARE THE
RESULT OF CONSTRUCTION
SITE ACCIDENTS.**

Bureau of Labor Statistics (BLS)



BURNING PLATFORM



1 IN 5 WORK-RELATED DEATHS OCCUR IN CONSTRUCTION

*Occupational Safety and Health Administration (OSHA)
Safety Data 2017*



INTRODUCTION

04

SURROUND CAMERA & REAR CAMERA

SECTION 04



VALUE PROPOSITION

CAT® DETECT with SURROUND CAMERA & REAR CAMERA

INCREASE JOBSITE SAFETY

Surround Camera & Rear Camera improve an operator's view of busy jobsites with up to four cameras and an in-cab display.

The system is integrated with the machine so that based on machine movement, the camera system will automatically prompt the front and rear cameras to send the appropriate view to the in-cab display.

IMPROVES JOBSITE SAFETY



IMPROVES JOBSITE SAFETY by enhancing visibility and increasing operators' awareness of surroundings and changing work area conditions.

BOOSTS PRODUCTIVITY



BOOSTS PRODUCTIVITY by reducing downtime and mitigating machine damage, enhancing operators' confidence and peace of mind.

MIXED FLEET



IDEAL FOR MIXED FLEETS thanks to a universal design that is compatible with all equipment brands and easy to install.

SYSTEM FUNCTIONALITY

CAT® DETECT with SURROUND CAMERA & REAR CAMERA

SURROUND CAMERA

The system will automatically power on and begin operation once the machine key is switched on. The display shows top-down views of the front (if used), rear, left, and right cameras on the right side of the screen. The left side of the screen shows the dedicated camera view.

DEDICATED CAMERA (Left side of display)

- The dedicated camera view is automatically determined by machine movement.
- The image from the rear camera is displayed when the operator places the machine in reverse.
- The image from the forward camera is displayed at all other times.
- The operator can adjust the display to show the dedicated camera view at full screen by touching the dedicated view.

BIRD'S EYE VIEW (Right side of display)

- The right side of the display shows simultaneous views of the three or four installed cameras.
- The operator can touch a specific camera to have its view shown on the left side of the display.

REAR CAMERA

The system will automatically power on and begin operation once the machine key is switched on. The display can be configured to show the rear camera image at all times or to show the view from the rear camera only with the machine is in reverse.



CUSTOMER VALUE

CAT® DETECT with SURROUND CAMERA & REAR CAMERA

INCREASE SAFETY AWARENESS

- With additional views of the job site, operator awareness of the site surroundings, work tool activities, potential blind spots, and changes in work area conditions improves.
- The multi-camera system (Surround Camera) can be integrated into the machine, so the system will automatically prompt cameras based on machine motion to send the appropriate view to the display monitor.

A COMPLETE FLEET SOLUTION

- Cat Camera Systems can be retrofitted for your entire fleet of machines, regardless of manufacturer.

EASY INSTALLATION

- Installation of one, two, three or four camera Camera Systems is quick and easy with any 12-Volt or 24-Volt DC system.
- Installation for a single camera and display is 4-6 hours, plus one hour for each additional camera.

HELPS ENSURE VISIBILITY STANDARDS COMPLIANCE

- Cat Camera Systems can be added to enable a machine to comply with varying visibility standards, but the system does not take the place of other standard supplemental systems for vision such as rear mirrors and side mirrors.

REDUCES LABOR COSTS

- Cameras help eliminate the need for on the ground personnel.

COMPONENT OVERVIEW

CAT® DETECT with SURROUND CAMERA & REAR CAMERA

DISPLAY

The glove friendly, touchscreen display provides the operator with a high resolution (800p x 480p 8-inch display or 1280p x 800p 10-inch display) view of the jobsite. For Surround Camera, operators can alternate between cameras.

CAMERA

The digital camera comes with a robust bracket and will automatically try to soften distortion. For Surround Camera, operators will receive multiple camera views to optimize job site visibility.

HARNESS

The included 2 wire ethernet harness provides fast, high density data transmission from the camera to the display. Additional harness lengths are available to meet custom installation requirements.



PART NUMBERS

CAT® DETECT with SURROUND CAMERA

REQUIRED

10-inch Display kit: 601-5758

Camera (pick 3 or 4, can mix and match different camera angles)

488-9162 (129 degrees)

488-9163 (192 degrees)

Camera Mounting Kit

626-7906 (for both 129- and 192- degree cameras)



EXTENSION HARNESSES (for custom mounting locations)

1m harness: 590-2409

3m harness: 589-6576

5m harness: 589-6575

10m harness: 589-6574

*Part Number list is current as of document publishing date

PART NUMBERS

CAT® DETECT with REAR CAMERA

REQUIRED

8-inch Display kit: 570-0504

Camera (pick 1)

488-9162 (129 degrees)

488-9163 (192 degrees)

Camera Mounting Kit

626-7906 (for both 129- and 192- degree cameras)



EXTENSION HARNESSES (for custom mounting locations)

1m harness: 590-2409

3m harness: 589-6576

5m harness: 589-6575

10m harness: 589-6574

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*Part Number list is current as of document publishing date