

2019

ADVANCED DISPLAY USER GUIDE

FOR SKID STEER, COMPACT TRACK AND MULTI-TERRAIN LOADERS



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NOTE:

The information in this guide may not reflect the hardware or software level in your machine. Although accurate at the time of publication, the Advanced Display and its software are subject to change over time.

Please use this manual as a reference guide only. If you have specific questions about the display's features which are not answered here, please consult your local Cat® dealer.

ADVANCED DISPLAY MODULE



Illustration 1: Advanced Display

- (1) Dedicated Alert Indicators
- (2) Soft Input Keys
- (3) Display Window

DEDICATED ALERT INDICATORS (1)

There are several dedicated alert indicator lamps located across the top of the Advanced Display. All other alert indicators will be icons located along the sides of the display window and will activate as needed. See “Monitoring Screen, Alert Indicators.”

SOFT INPUT KEYS (2)

There are six soft input keys located across the bottom of the Advanced Display. These keys are used to navigate among the various menu screens and to input operator selections within the menu screens. The functions will vary depending on the menu. The current function will be displayed as an icon on the display window directly above the key.

DISPLAY WINDOW (3)

The Display window will display the welcome screen, the main monitoring screen, and the various menu and adjustment screens. The display window will also become the Backup Camera monitor when that feature is installed and active. See “Backup Camera Mode.”

MONITORING SCREEN

The monitoring screen is the primary screen that displays information to the operator during most operations. Several background color schemes and gauge layouts are available for selection by the operator. See “Menu Screen, Display Settings.”



Illustration 2: Monitoring Screen

- (4) Engine Coolant Temperature Gauge
- (5) Hydraulic Oil Temperature Gauge
- (6) Alert Indicator Icons
- (7) Engine Speed Gauge
- (8) Service Hour and Battery Voltage Meter
- (9) Creep Controller
- (10) Fuel and DEF Level Gauge and SCR Warning Alert Indicator
- (11) Favorites Icon
- (12) Backup Camera Icon
- (13) Menu System Entry Icon
- (14) Smart Attachment Portal

ENGINE COOLANT TEMPERATURE GAUGE (4)



The needle in the red zone indicates that the engine coolant temperature is too high. If the gauge's numerical values are enabled, the background will change from black to red to indicate that the engine coolant is approaching an unsafe temperature. The machine should be stopped soon and the engine set to low idle to allow the engine to cool. See “Display Settings, Digital Readout.”

HYDRAULIC OIL TEMPERATURE GAUGE (5)



The needle in the red zone indicates that the hydraulic oil temperature is too high. If the gauge's numerical values are enabled, the background will change from black to red to indicate that the hydraulic oil temperature is approaching an unsafe temperature. The hydraulics functions should be stopped soon and the engine set to low idle to allow the hydraulic system to cool. See "Menu Screen, Display Settings, Digital Readout."

ENGINE SPEED GAUGE (7)



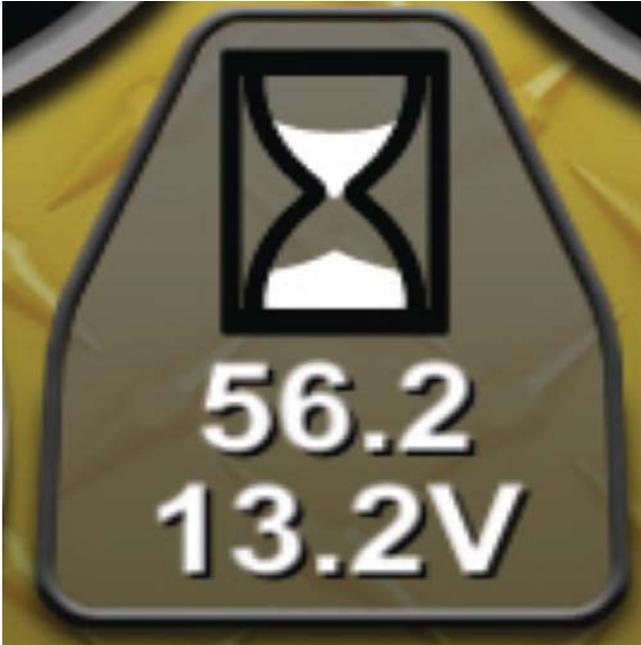
The needle indicates the engine's RPM. If the gauge's numerical values are enabled, the background will change from black to red to indicate that the engine speed is above the allowable HIGH IDLE limit. The throttle should be turned down to the acceptable range. The Cat dealer should be contacted to determine the cause. See "Display Settings, Digital Readout."

ALERT INDICATOR ICONS (6)



There are several alert indicator icons located along the sides of the display window and will activate as needed. See the machine's Operation and Maintenance Manual "Alert Indicators" for a description of the warnings and mode indicators.

SERVICE HOUR AND BATTERY VOLTAGE METER (8)



The service hour meter indicates the number of engine running hours for the machine. The hours should be used to determine which maintenance interval service items to perform. The hourglass icon blinks slowly when the engine is running indicating that hours are being accrued. The hour meter also indicates the current battery voltage.

CREEP CONTROLLER (9)



This controller will be displayed when "Creep Control" is engaged. This controller allows the operator to adjust the creep setting from the main screen without having to enter the Creep Control adjustment screen. See "Menu Screen, Machine Settings, Creep Control."

NOTE:

The optional Advanced Display module is required for Creep Control feature.

FUEL AND DIESEL EXHAUST FLUID (DEF) LEVEL GAUGE AND SCR WARNING ALERT INDICATOR (10)



The fuel level gauge indicates the amount of fuel that remains in the fuel tank. The needle in the red range indicates low fuel.

On machines which require diesel exhaust fluid (DEF), this gauge will contain two independent needles. The top needle will indicate the amount of fuel that remains in the fuel tank. The bottom needle will indicate the amount of DEF that remains in the DEF tank.

NOTE:

DEF will be consumed at a significantly slower rate than diesel fuel.

The icon below the DEF gauge is designated the SCR Warning alert indicator. The status of this icon will vary based on the SCR warning levels. See the machine's Operation and Maintenance Manual "Selective Catalytic Reduction Warning System" for complete details.

FAVORITES ICON (11)



There are several settings within the “Machine Settings” and “Display Settings” menus that may be selected as the “Favorite.” This is useful for quickly recalling an often-used setting without having to navigate the menu system in the normal manner.



Any time an open star icon appears over the right most soft key, the currently highlighted setting may be chosen as the “Favorite” by pressing the soft key. The open star icon will become solid indicating that setting is now the “Favorite.”



When a “Favorite” is established, a solid star icon will appear above one of the soft keys anytime the main monitoring screen is the active display. Pressing this soft key will immediately jump the user to the sub menu where the “Favorite” setting is located and highlight the setting.

Pressing the right most soft key while any other eligible setting is highlighted will make this setting the new “Favorite.” Pressing the right most soft key while the current favorite is highlighted will turn the “Favorite” off, indicated by changing the solid star icon back to an open star.

NOTE:

There can only be one “Favorite” at any time.

BACKUP CAMERA ICON (12)



The soft key under this icon is used to access the backup camera view if the optional camera is installed. The display window will change from the current screen to the backup camera view regardless of the direction of travel and remain so until the soft key under the “undo” icon is pressed. See “Backup Camera Mode” for more information.



MENU SYSTEM ENTRY ICON (13)



The menu screens are accessed from the Monitoring Screen by pressing the soft key under this icon.

SMART ATTACHMENT PORTAL (14)



The menu screens for smart attachments are accessed from the Monitoring Screen by pressing the soft key under this icon. The portal to smart attachment screens is only available when the machine ECM detects the presence of a smart attachment via the machine's electrical connector. The smart attachment monitoring and adjustment screens will vary depending on which attachment is connected.



Example Monitoring Screen



Example Adjustment Screen

NOTE:

A detailed description of the smart attachment's monitoring and adjustment screens will be found in the attachment's Operation and Maintenance Manual.

NOTE:

The Smart Attachment Portal is only available for D3 Series machines.

MENU SYSTEM

The base menu screen displays the icons and descriptions of available sub menus listed below. The icons will scroll horizontally using the soft keys. The active selection is always in the center of the screen and appears larger than the other selections. The sub menus are selected by pressing the right most soft key under the “Enter Arrow” icon. The available sub menus are:

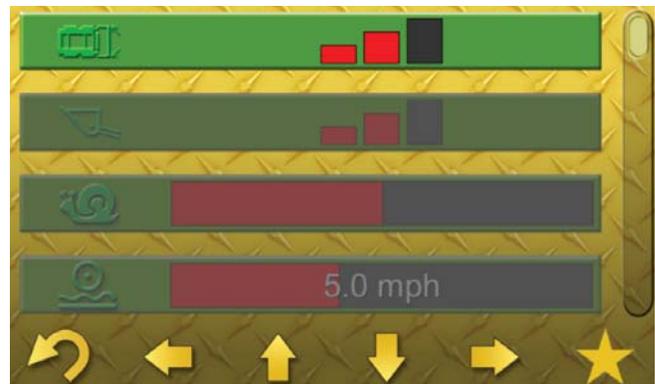
- Machine Settings
- Display Settings
- Job Clock
- Service Menu
- User Management

Machine Settings Menu



The “Machine Settings” menu allows the operator to adjust several machine response and performance settings. These settings will be stored under each operator profile. When the Anti-Theft Security System is enabled, the settings take effect each time an Operator Code is entered at the log in prompt. If the Anti-Theft Security System is not enabled, the operator settings at the time of the previous KEY OFF will remain in effect. See “Anti-Theft Security System.”

DRIVE SYSTEM SENSITIVITY



This parameter is used to change the “Drive Control Mode” which has three settings.

- **Standard Mode** – one bar
- **Intermediate Mode** – two bars
- **Maximum Mode** – three bars

NOTE:

Intermediate Mode (two bars) is the factory default setting.

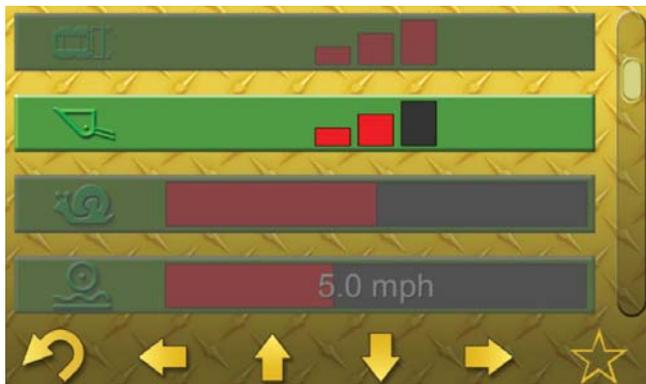
NOTE:

The Drive Control Mode setting will not return to the factory default level when the ignition key switch is turned OFF.

NOTE:

The machine will start, stop, and steer more aggressively with each progressive drive control mode. Test drive the machine in an open area to become familiar with the new operating characteristics of the machine.

IMPLEMENT SYSTEM SENSITIVITY



This parameter is used to change the “Implement Control Mode” which has three settings.

- **Fine Control Mode** – one bar
- **Standard Mode** – two bars
- **Coarse Control Mode** – three bars

NOTE:

Standard Mode (two bars) is the factory default setting.

NOTE:

The Implement Control Mode setting will not return to a factory default level when the ignition key switch is turned OFF.

NOTE:

The machine lift arms and work tool coupler will move more aggressively with each progressive implement control mode. Test the implement functions in an open area to become familiar with the new operating characteristics of the machine.

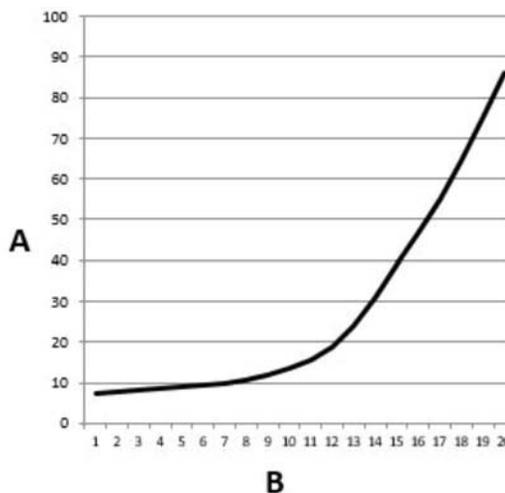
CREEP CONTROL



The “Creep Control” mode allows the operator to set a maximum machine travel speed at full joystick movement. Use Creep Control for operations that require slow, constant speed independent of engine idle speed, such as cold planning or trenching.

The Creep Control has 20 settings:

- **Slowest Setting** – one bar
- **Default Setting** – five bars
- **Fastest Setting** – twenty bars



Creep Speed Map
(A) % of Maximum Travel Speed
(B) Creep Speed Setting

NOTE:

The machine may not travel at the lower settings depending on terrain, work tool, load, etc. If the machine does not travel at a particular setting, increment the Creep Control to progressively higher values until travel occurs.

NOTE:

The optional Advanced Display module is required for Creep Control feature. See “Monitoring Screen, Creep Controller.”

RIDE CONTROL



Ride Control improves the ride quality and material retention over rough terrain while carrying heavy loads by essentially using the lift cylinders as shock absorbers.

The “Ride Control Adjustment” allows the operator to change the activation speed at which the system engages when the Ride Control system is ON. The adjustment can be made in 0.1 km/h (0.06 mph) increments.

Default activation speed is approximately:

- 8 km/h (5 mph) for SSL
- 6 km/h (3.7 mph) for CTL/MTL

STEERING DRIFT CORRECTION

**NEUTRAL (Factory Default)**

The “Steering Drift Correction Adjustment” allows the operator to make fine adjustments to straight-line travel to account for things like tire mismatch, drive chain tension differences, normal drive motor wear, etc. The adjustment is offered in 10 fine increments to correct either a left or right bias. Adjust the feature left for a machine that drifts to the right and vice versa. The factory default is the neutral setting.

**LEFT Correction****RIGHT Correction**

NOTE:

Steering Drift Correction is only intended to correct for minor travel bias. If the machine fails to travel straight at the limits of adjustment, contact your Cat dealer for diagnosis of a potentially more serious fault.

NOTE:

Steering Drift Correction is only available for D3 Series machines.

MACHINE SPEED LIMIT



The “Machine Speed Limit Adjustment” allows the maximum travel speed to be limited. The adjustment can be made in 1% increments from 20% to 100% of the machine’s maximum travel speed.

NOTE:

If the Anti-Theft Security System is enabled, a user logged in under an Operator Code will only be allowed to adjust this setting up to the value stored in the Master Profile. See “Menu Screen, User Management, Master Code, and Operator Code.”

NOTE:

At some of the lower Machine Speed Limit settings, 2-speed shifting may be automatically disabled.

REVERSING FAN FREQUENCY



The “Reversing Fan Frequency” is the time between reverse cycles in the automatic mode. The lower the setting, the more frequent the reverse cycle will occur.

- Maximum Frequency: Every 6 min
 - Default Frequency: Every 30 min
 - Minimum Frequency: Every 240 min
-

NOTE:

The fan is more effective at cooling the machine’s engine coolant and hydraulic oil in the forward direction. Running the fan in reverse too frequently may contribute to machine overheating events.

REVERSING FAN DURATION



The “Reversing Fan Duration” is the duration of each reverse cycle in the automatic mode. The fan will automatically return to the forward air flow direction after each reverse cycle.

- Minimum Duration: 5 sec
- Default Duration: 8 sec
- Maximum Duration: 12 sec

Display Settings Menu



The “Display Settings” menu allows the operator to adjust several aspects regarding the look of the display. These adjustments will be stored under each operator profile. When the Anti-Theft Security System is enabled, the settings take effect each time an Operator Code is entered at the log in prompt. If the Anti-Theft Security System is not enabled, the operator settings at the time of the previous KEY OFF will remain in effect. See “Anti-Theft Security System.”

UNITS



The “Units Adjustment” allows the operator to switch between Metric and English units. The factory default is English.

LANGUAGE



The “Language Adjustment” allows the operator to switch the display messages among six languages:

- English
- Spanish
- French
- German
- Portuguese
- Italian

DIGITAL READOUT



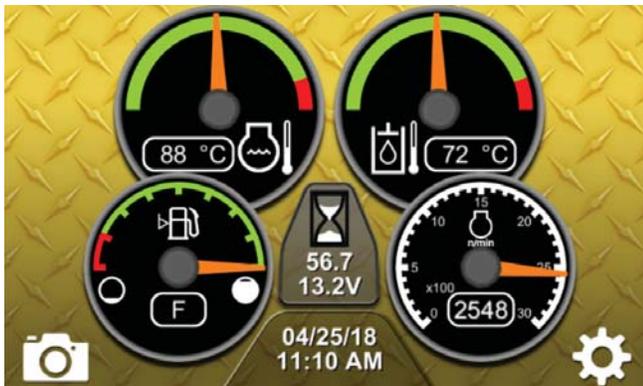
The “Digital Readout” allows the operator to either have the numerical gauge values display turned ON or OFF. The factory default is “ON.”



Digital Readout OFF



Gauge Layout 1



Digital Readout ON



Gauge Layout 2

GAUGE LAYOUT



Gauge Layout 3

The “Gauge Layout Adjustment” allows the operator to select the Main Monitor Screen display from several available layouts. See “Monitoring Screen.” The factory default is Gauge Layout 1. A unique night time scheme is represented by the “moon” icon:



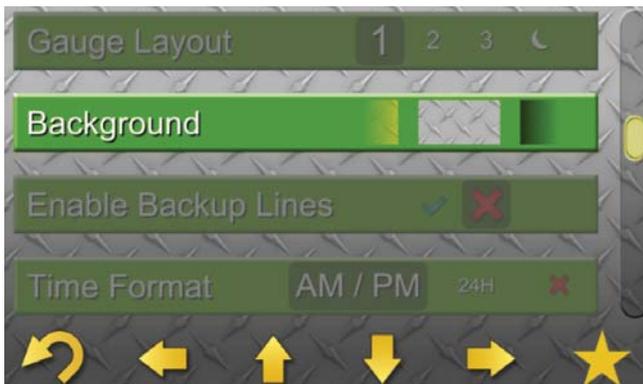
Night Time Gauge Layout

BACKGROUND

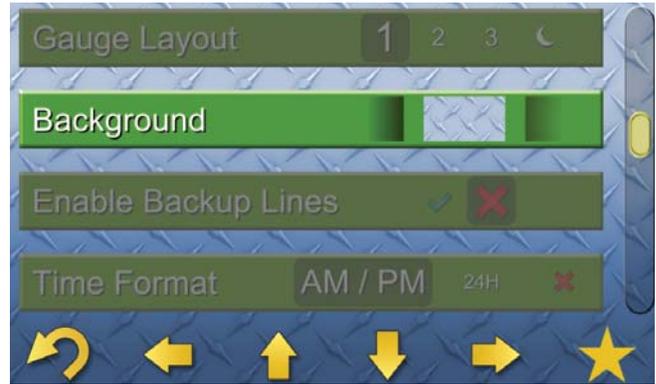
The "Background Adjustment" allows the operator to select the background color of the display from several available colors.



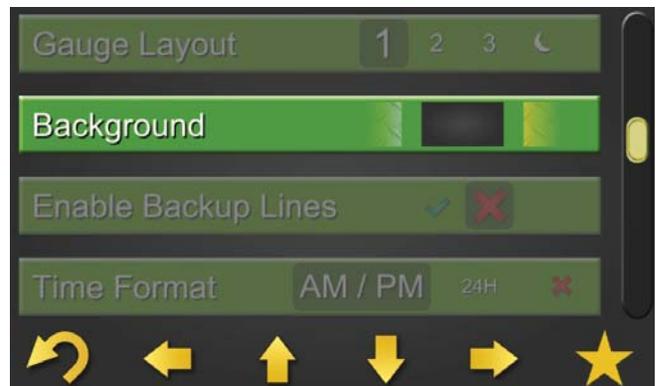
Yellow Diamond Plate Background



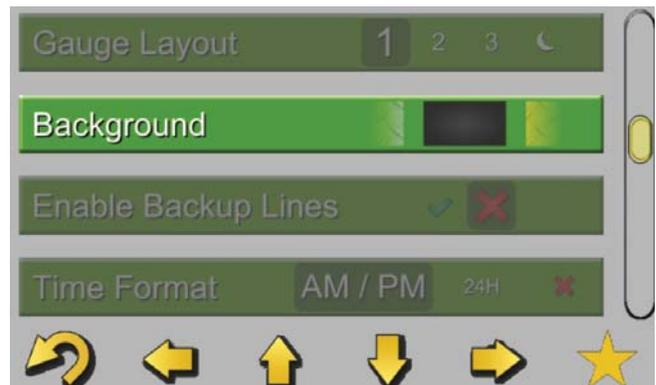
Grey Diamond Plate Background



Blue Diamond Plate Background



Black Plain Background



Grey Plain Background

NOTICE

Use of backup camera lines does not replace the basic safety precaution and procedures for machine operation in reverse.

ENABLE BACKUP LINES



The “Enable Backup Lines Adjustment” allows the operator to turn on reference lines when the display is in Backup Camera Mode. The Machine Width reference lines provide an approximate indication of the backup path of the machine in a straight line. The Rear Distance reference marks provide an approximate gauge of how close objects are to the rear of the machine.

Select the green “check mark” icon to enable the backup lines. Select the red “X” icon to disable the backup lines.

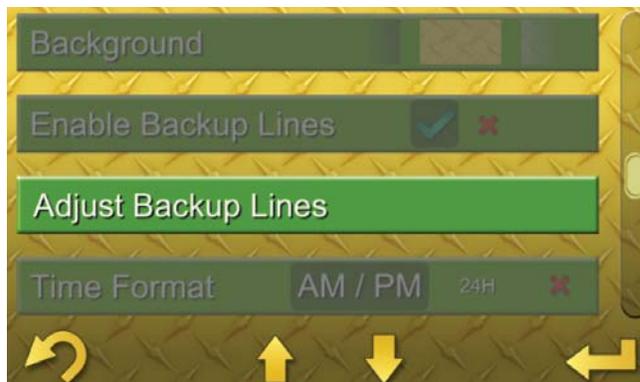
NOTE:

The backup lines should never replace visually ensuring the area behind the machine is free of objects before traveling in reverse. The backup lines may be adjusted by the operator to better suit their preferences. See “Adjust Backup Lines.”

NOTICE

Use of backup camera lines does not replace the basic safety precaution and procedures for machine operation in reverse.

ADJUST BACKUP LINES



If the Backup Lines are enabled, the “Adjust Backup Lines Adjustment” screen provides the user various adjustments for the Machine Width reference lines and the Rear Distance reference marks.

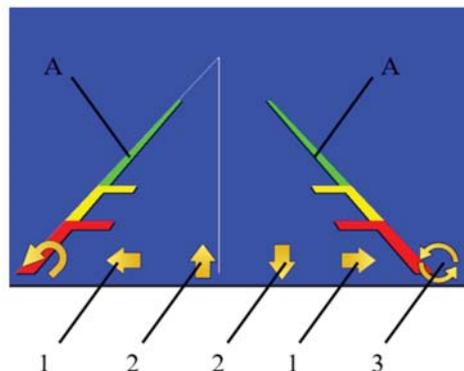


Illustration 3: Machine Width Reference Lines Adjustment

(A) Machine Width Reference Lines

(1) Left/Right Position Adjustments

(2) Angle Adjustments

(3) Adjustment Toggle

The position of the Machine Width reference lines may be adjusted left and right, and the angle of each increased or decreased independently to suit the operator. Refer to Illustration 3. It is recommended to align the Machine Width reference lines with the outside of the machine’s tracks or tires and parallel to the machine. A long straight edge, tape, curb, etc. may be useful during this adjustment.

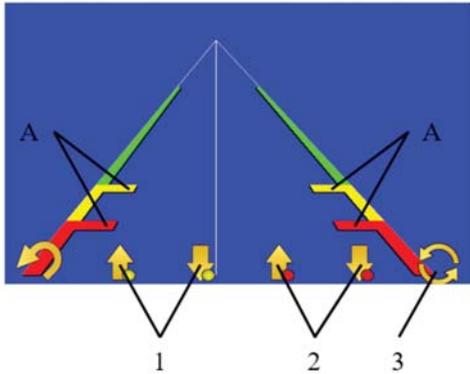


Illustration 4: Rear Distance Reference Marks Adjustment
 (A) Rear Distance Reference Marks
 (1) Yellow Marks Adjustments
 (2) Red Marks Adjustments
 (3) Adjustment Toggle

The position of the Rear Distance reference marks may be adjusted in and out (or nearer to and farther from) with respect to the rear of the machine to suit the operator. Refer to Illustration 4. It is recommended to set these reference marks known distances from the machine's rear door. A pair of cones, flags, paint marks, etc. may be useful during this adjustment.

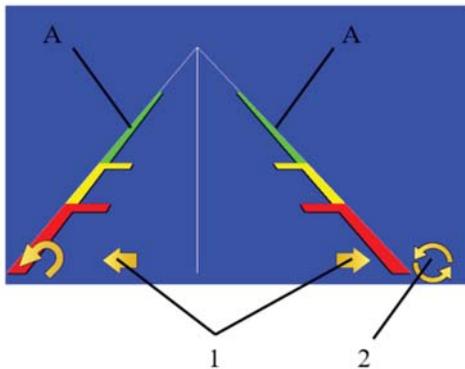


Illustration 5: Reference Lines Skew Adjustment
 (A) Reference Lines
 (1) Left and Right Skew Adjustment
 (2) Adjustment Toggle

The left-to-right skewness of the reference lines may be adjusted to account for the off-center location of the backup camera on some models. Refer to Illustration 5.

NOTE:

The backup lines should never replace visually ensuring the area behind the machine is free of objects before traveling in reverse.

NOTE:

The meaningfulness of the backup lines depends greatly on the position and angle of the backup camera, which can change over time. The backup lines should be checked or re-adjusted periodically. Each operator should be aware of the backup lines and understand their relative meaning on the machine.

TIME FORMAT



The "Time Format Adjustment" allows the operator to select a 12 hr AM/PM, 24 hr clock format, or disable the clock from appearing.

SET THE TIME



The “Set the Time Adjustment” allows the operator to set the current time of day.

SET THE DATE



The “Set the Date Adjustment” allows the operator to set the current date.



Illustration 6: Setting the Time
 (1) Accept the Changes and Exit
 (2) Cancel the Changes and Exit
 (3) Turn OFF the Clock Display



Illustration 7: Setting the Date
 (1) Accept the Changes and Exit
 (2) Cancel the Changes and Exit
 (3) Turn OFF the Date Display

DATE FORMAT



The “Date Format Adjustment” allows the operator to select between three date formats; MM/DD/YY, DD/MM/YY, or YY/MM/DD.

SET CUSTOM IMAGE



This screen allows the owner to upload a custom image that will be used as the “splash” screen image which is visible while the display boots up after each key ON. The image is loaded via a USB thumb drive plugged into the machine’s USB port. The image must be either a .jpeg, .jpg, or .png file and formatted 800 × 400 for best fit. See “Operator Controls, Left Side Controls, Power Supply Port.”



Custom Image Example

SECURITY GRACE PERIOD



If Machine Security is enabled, the “Security Grace Period Adjustment” allows the user to select from several choices of grace periods, which will determine how long the machine remains unsecured once Keyed OFF. The grace period timer begins at Key OFF and during the grace period, the machine will not require reentry of a PIN when Keyed ON again.

The available grace periods are:

- 15 minutes
- 30 minutes
- 1 hour
- 2 hours
- 4 hours

The factory default is 30 min. A user logged in via a Master Code may select any of the available grace periods. A user logged in via an Operator Code will only be allowed to adjust this value up to the grace period stored in the Master Profile. See “Anti-Theft Security System ” and “User Management, Master Code” and “User Management, Operator Code.”

DEALER NAME



The “Dealer Name” setting allows the owner to enter a Dealer Name or any other combination of text and numerals. The entry is displayed momentarily on the Welcome Screen each time the machine is “KEYED ON.” This adjustment requires a Master Code to access once a Master Code has been established. An Operator Code will not allow access to this adjustment. See “User Management, Master Code, and Operator Code.”

DEALER PHONE



The “Dealer Number” setting allows the owner to enter a Dealer Phone Number or any other combination of numerals. The entry is displayed momentarily on the Welcome Screen each time the machine is “KEYED ON.” This adjustment requires a Master Code to access once a Master Code has been established. An Operator Code will not allow access to this adjustment. See “User Management, Master Code, and Operator Code.”

Job Clock Menu



These screens allow the operator to start, stop, and reset a job clock. The job clock saves over the key cycle and starts up automatically on the next startup or operator login. A separate job clock is stored under each operator profile.

Service Menu



The “Service Menu” is comprised of several sub menus which allow the user to access valuable information about the machine. These sub menus are described below:

DIAGNOSTICS SUB MENU



The screens within this sub menu allow the user to view active (currently occurring) or logged (having occurred; may be active or no longer active) machine condition warnings.



Example Diagnostic Codes List



Example Diagnostic Code Detail

DIAGNOSTICS AND EVENTS

Diagnostic Codes indicate that a sensor or hardware component is currently faulted (Active Diagnostic), or has faulted previously (Logged Diagnostic) and machine functionality may be impacted.

Event Codes indicate that a sensor is detecting (Active Event), or has previously detected (Logged Event) a condition that could result in machine damage if not corrected as soon as possible.

There are three levels of Diagnostic and Event Codes indicating the relative severity of the warning. The pop-up screens will change color depending on the warning level:

Level 1 – A condition is trending in a direction that may indicate that damage could occur if the operating condition persists. There is no pop-up screen displayed for this level but the Driver Alert Indicator will illuminate continuously. The diagnostic or event code will be shown on a green background in these screens. The operator should stop the machine at the earliest convenience and investigate the cause. If no additional alert indicators are illuminated, contact your Cat dealer or refer to the service manual for more information. See the machine's Operation and Maintenance Manual "Alert Indicators" for a description of the warnings.

Level 2 – A condition has been detected which could result in component damage. A yellow pop-up screen will be displayed providing information on the condition. The Driver Alert will be flashing but no cab alarm will be audible. The diagnostic or event code will be shown on a yellow background in these screens. The operator should change operation or perform the indicated maintenance being displayed. See the machine's Operation and Maintenance Manual "Alert Indicators" for a description of the warnings.

Level 3 – A condition has been detected that is likely to result in severe component damage and could result in injury. A red pop-up screen will be displayed providing information on the condition. The Driver Alert will be flashing and the cab alarm will be audible. The diagnostic or event code will be shown on a red background in these screens. The operator should stop the machine immediately and perform the indicated maintenance being displayed or contact your Cat dealer. See the machine's Operation and Maintenance Manual "Alert Indicators" for a description of the warnings.

PREVENTATIVE MAINTENANCE SUB MENU



The "Preventative Maintenance" interval screens are pop-up reminders to indicate that a scheduled maintenance interval is approaching. These intervals are based on machine hours and can be reset by the owner after the maintenance is performed. The screens will provide the operator several pieces of information including:

- **Maintenance Item** – The item to be checked or changed.
- **Interval Hours** – The service interval or machine hours between repeated services.
- **Hours Remaining** – The number of machine hours remaining before the service item becomes past due.
- **Activation Hours** – The actual value of the machine hours when the service is due.
- **Reset** – Select this icon to reset the maintenance interval after a service has been performed.

Maintenance Item	Interval Hrs	Hours Remaining
Engine Oil Change	500	441
Diesel Filter Cleaning	3000	2941
Fuel Filter Change	500	441
Hydraulic Filter Change	1000	941

Reset Service Interval Icon

NOTE:

Only the Master account can reset the maintenance interval.

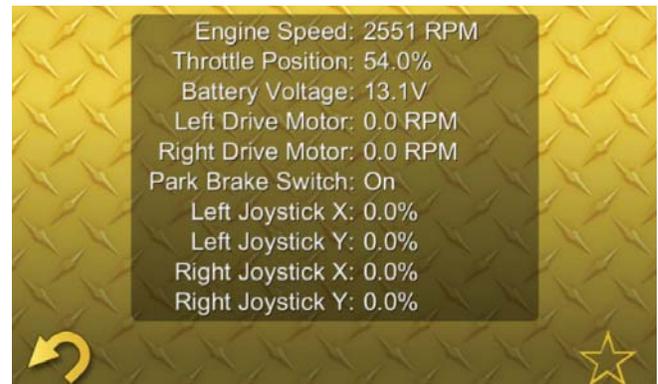


Reset Confirmation Example

STATUS PARAMETERS SUB MENU



The “Status Parameters” screen shows the status of some of the most important machine parameters such as throttle position, engine speed, joystick position, battery voltage, and drive motor speed. The parameter status information may be useful for basic troubleshooting.



INFORMATION SUB MENU



This screen will display various system-related information including the following items:

- Machine Serial Number
- Engine ECU hardware and software part number
- Advanced Display hardware and software part number



This information can be shared with the Cat dealer to ensure that the machine has the latest software installed to take advantage of any improvements developed since the machine was manufactured.

USB SOFTWARE UPDATE SUB MENU



The “USB Software Update” screen allows for the Cat dealer to service the Advanced Display’s software as needed.



Software Update Confirmation Screen

User Management Menu



On machines equipped with the latest Advanced Display software, security may be enabled by the user under this menu. Security may always be enabled by the Cat dealer regardless of machine configuration. See "Anti-Theft Security System."

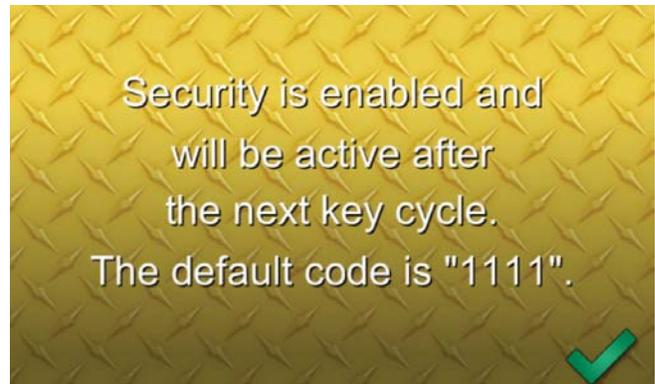
ENABLE SECURITY



Owner-Enabled Machine Security Option



Enable Security Confirmation Screen



Default Master Password Notification

If security has been enabled, the User Management menu screens allow the addition, deletion, and editing of operator profiles as well as the viewing and resetting of machine or operator-specific information.

There are two types of profiles; the Master Profile, which is accessed by entry of the Master Code during the log on sequence, and one or more Operator Profiles, which are accessed by entry of an Operator Code. Entry of either a Master Code or an Operator Code will yield specific rights regarding the viewing and editing capability of information.

MASTER CODE



The default Master Code is “1111” and is established when the Anti-Theft Security System is first enabled. This code should be changed by the owner as soon as possible as a security best practice. Options available in the User Management menu while logged in under the Master Code are as follows:

View – The master operator can view and edit the following information for each operator profile.

- An operator profile name up to 15 ASCII characters.
- The total machine hours accrued while the operator has been logged in.
- Total Fuel used while the operator has been logged in (electronic engines only).
- The Total Machine Hours and Total Fuel Used may be reset independently.
- The Event and Diagnostic Codes that have occurred while the operator has been logged in.

Add Operator – Allows the Master Operator to add an operator profile and set the Operator Name and Operator Code.



Add Operator Icon

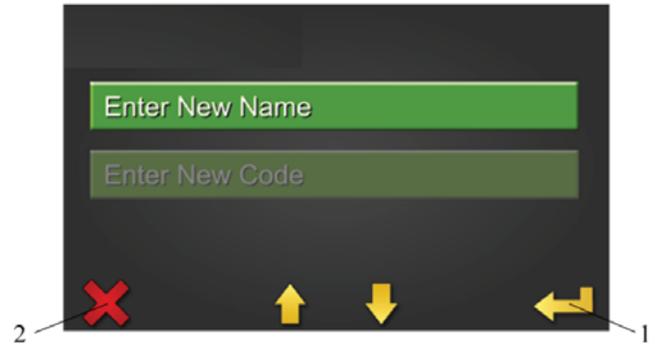


Illustration 8: Adding an Operator

- (1) Enter Data Input Screens
(2) Cancel and Exit

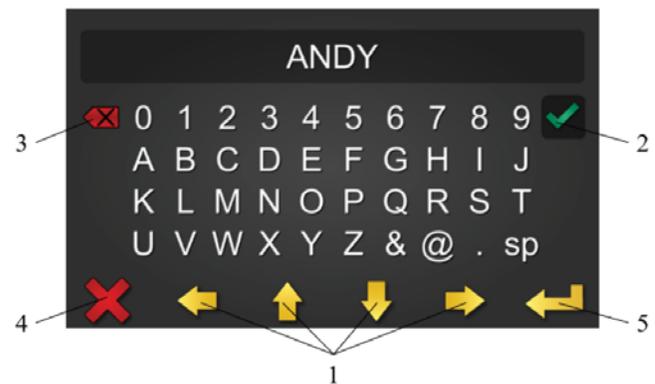


Illustration 9: Operator Name Entry

- (1) Navigation Arrows
(2) Accept Current Character
(3) Backspace/Delete Character
(4) Exit Data Entry without Changes
(5) Exit Data Entry to Confirmation Screen

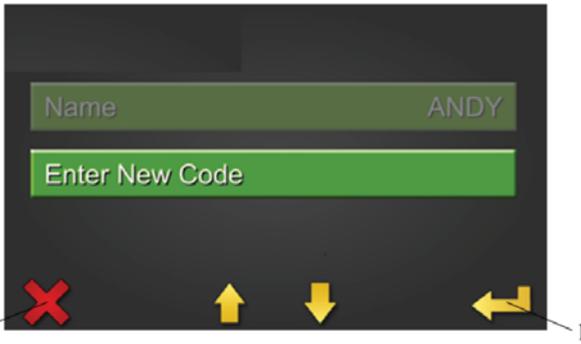


Illustration 10: Adding or Editing an Operator Code
 (1) Enter Data Input Screens
 (2) Cancel and Exit

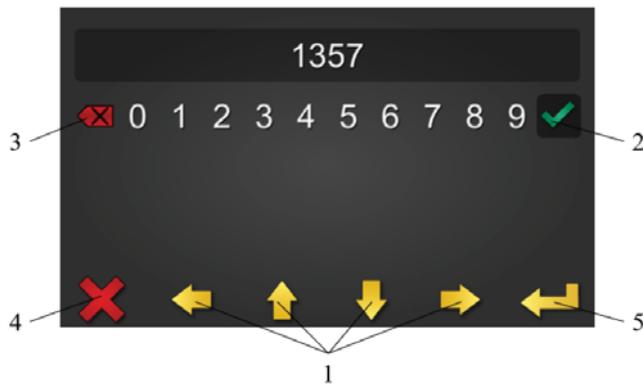


Illustration 11: Operator Code Entry
 (1) Navigation Arrows
 (2) Accept Current Digit
 (3) Backspace/Delete Digit
 (4) Exit Data Entry without Changes
 (5) Exit Data Entry to Confirmation Screen

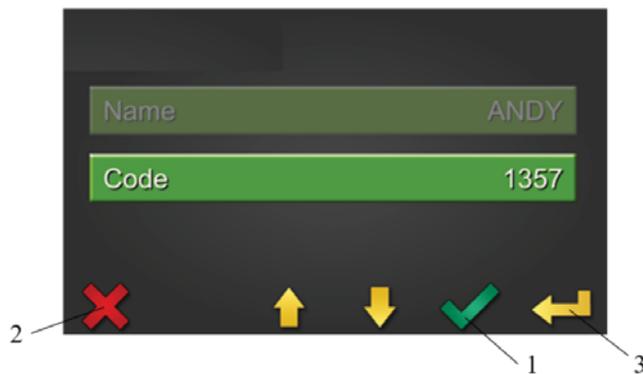


Illustration 12: Confirm Changes
 (1) Confirm Changes
 (2) Cancel Changes
 (3) Edit Data

Delete Operator – Allows the Master Operator to delete an operator profile. The Master Operator cannot be deleted.



Delete Operator Icon



Illustration 13: Delete Operator
 (1) Confirm Deletion of Operator
 (2) Exit without Deleting Operator

Edit Operator – Allows the Master Operator to Change the current Operator Name and Operator Code.



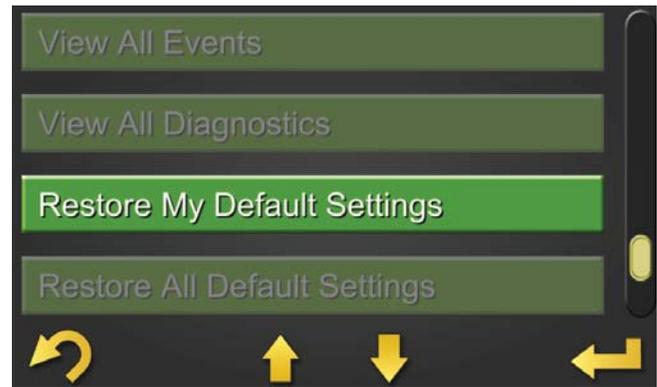
Edit Operator Icon



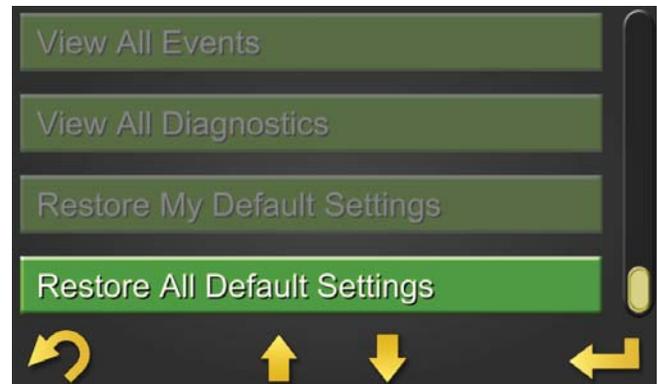
Illustration 14: Editing an Operator's Information
 (1) Enter the Editing Screens
 (2) Return to the Previous Menu

Set the Time and Date – Allows the Master Operator to set the current time and date. See "Set the Time" and "Set the Date."

Restore Default Settings – Allows the Master Operator to restore the factory machine settings of either the Master Profile (Restore My Default Settings), or the Master Profile, and all Operator Profiles (Restore All Default Settings).



Restore Single Operator Default Settings



Restore All User's Default Settings

Security Grace Period, and Machine Speed Limit will be the maximum allowable values for all Operator Profiles. A user logged in via an Operator Code will only be allowed to adjust these settings between the factory allowable minimum value and the value in the Master Profile. See "Machine Settings, Speed Limit" and "Display Settings, Security Grace Period" in this section.

OPERATOR CODE



Operator Profiles are only available for creation while logged in under the Master Code. During creation of an Operator Profile, a unique Operator Code (four to six digits) should be chosen. Options available in the User Management menu while logged in under an Operator Code are as follows:

View – The Operator can view the following information for the currently logged in operator.

- The name of the current operator
- The total machine hours accrued while the operator has been logged in.
- Total Fuel used while the operator has been logged in (electronic engines only).
- The Display Event and Diagnostic Codes that have occurred while the operator has been logged in.

Edit Operator – Allows the Operator to Change the current Operator Name and Operator Code.

KEY OFF “LOCK OUT” PROMPT

NOTE:

When switching between profiles, the Security Grace Period must be allowed to expire before the next key ON event will prompt for entry of a log on code. The grace period set by the current profile may be ignored at key OFF by selecting the soft key under the green check mark symbol. This selection will secure the machine within about 30 seconds, allowing for faster switching between profiles.



Illustration 15: Key OFF “Lock Out” Prompt

- (1) Lock Out Immediately (Grace Period Override)
(2) Apply Grace Period (Default for No Selection)

ANTI-THEFT SECURITY SYSTEM

If enabled, this feature requires an operator to enter a valid Operator Code before allowing the engine to crank. There is one Master Code and up to 50 unique Operator Codes.

Entry of a valid code will also automatically load Machine Settings and Display Settings that have been previously saved under the current operator profile. See “Menu Screen, Machine Settings” and “Menu Screen, Display Settings.”

At key “ON”, if the security system is enabled and locked, the operator will be prompted to enter their unique 4-digit to 6-digit Operator Code. Enter the pin code using the soft keys:

- Press the appropriate key once for the odd numeral (1, 3, 5, 7, or 9).
- Press the key twice quickly for the even numerals (2, 4, 6, 8 or 0).

After the code is entered, press the “enter” key to submit the code. If the code is incorrect, the Display Window will show “Invalid Code” and another attempt can be made. If the code is correct, the Welcome Operator Screen will be displayed and the Machine Settings and Display Settings will be loaded from the operator profile. The key switch may be moved to the “START” position to start the machine.

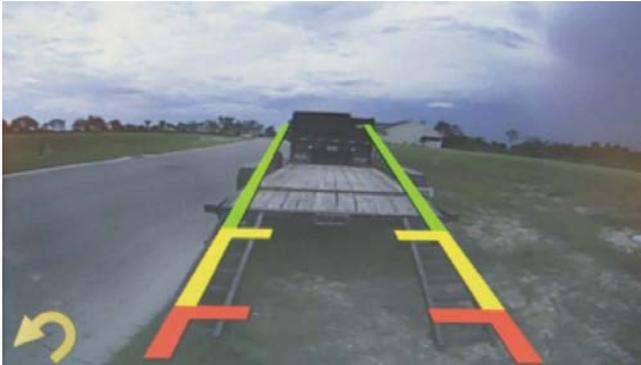
NOTE:

For security purposes, in the event an incorrect PIN is entered five times consecutively, the system will lock itself down for 15 minutes, during which period even a correct PIN will not allow the engine to crank. After the lockdown period, entry of a correct PIN will unlock the system as usual.

NOTE:

On machines equipped with the latest Advanced Display software, security may be enabled by the user under the “User Management” sub menu. Security may always be enabled by the Cat dealer regardless of machine configuration.

BACKUP CAMERA MODE



Backup Camera View Example

The Camera Screen shows the input from a connected camera if equipped. The display will automatically switch to the Camera Screen anytime the machine is commanded to travel in reverse. Once the reverse travel command is no longer applied, the screen will automatically revert to the prior screen.

The camera display may also be activated from the monitoring screen at any time by pressing the left most soft key which will depict a camera symbol above it while the camera display is not active. Pressing this button again will return the user to the monitoring screen. See "Backup Camera Quick Button."

NOTE:

The display will momentarily display the camera view each time the parking brake is released.

NOTE:

The backup lines should never replace visually ensuring the area behind the machine is free of objects before traveling in reverse. The backup lines may be adjusted by the operator to better suit their preferences. See "Display Settings, Adjust Backup Lines."

NOTICE

Use of backup camera lines does not replace the basic safety precaution and procedures for machine operation in reverse.

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AEXQ2538 (11-2019)

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