Notice to Users of This Manual

Throughout this publication, dangers, warnings, cautions, and notices (accompanied by the International HAZARD Symbol ⚠) are used to alert the mechanic to special instructions concerning a particular service or operation that may be hazardous if performed incorrectly or carelessly. These safety alerts follow ANSI standard Z535.6-2006 for product safety information in product manuals, instructions, and other collateral materials. **Observe them carefully!**

These safety alerts alone cannot eliminate the hazards that they signal. Strict compliance to these special instructions when performing the service, plus common sense operation, are major accident prevention measures.

⚠ DANGER

Indicates a hazardous situation which, if not avoided, will result in death or serious injury.

⚠ WARNING

Indicates a hazardous situation which, if not avoided, could result in death or serious injury.

⚠ CAUTION

Indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.

NOTICE

Indicates a situation which, if not avoided, could result in engine or major component failure.

IMPORTANT: Identifies information essential to the successful completion of the task.

NOTE: *Indicates information that helps in the understanding of a particular step or action.*

This manual has been written and published by the Service Department of Mercury Marine to aid our dealers' mechanics and company service personnel when servicing the products described herein. We reserve the right to make changes to this manual without prior notification.

It is assumed that these personnel are familiar with marine product servicing procedures. Furthermore, it is assumed that they have been trained in the recommended service procedures of Mercury Marine Power Products, including the use of mechanics' common hand tools and the special Mercury Marine or recommended tools from other suppliers.

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We could not possibly know of and advise the marine trade of all conceivable procedures and of the possible hazards and/or results of each method. Therefore, anyone who uses a service procedure and/or tool, which is not recommended by the manufacturer, first must completely satisfy himself that neither his nor the products safety will be endangered.

All information, illustrations, and specifications contained in this manual are based on the latest product information available at the time of publication. As required, revisions to this manual will be sent to all dealers contracted by us to sell and/or service these products.

Refer to dealer service bulletins, operation maintenance and warranty manuals, and installation manuals for other pertinent information concerning the products described in this manual.

Precautions

It should be kept in mind, while working on the product, that the electrical and ignition systems are capable of violent and damaging short circuits or severe electrical shocks. When performing any work where electrical terminals could possibly be grounded or touched by the mechanic, the battery cables should be disconnected at the battery.

Any time the intake or exhaust openings are exposed during service they should be covered to protect against accidental entrance of foreign material into the cylinders which could cause extensive internal damage when the engine is started.

During any maintenance procedure, replacement fasteners must have the same measurements and strength as those removed. Numbers on the heads of the metric bolts and on the surfaces of metric nuts indicate their strength. American bolts use radial lines for this purpose, while most American nuts do not have strength markings. Mismatched or incorrect fasteners can result in damage or malfunction, or possibly personal injury. Therefore, fasteners removed should be saved for reuse in the same locations whenever possible. Where the fasteners are not satisfactory for reuse, care should be taken to select a replacement that matches the original.

Replacement Parts

Use of parts other than the recommended service replacement parts will void the warranty on those parts that are damaged as a result.

⚠ WARNING

Avoid fire or explosion hazard. Electrical, ignition, and fuel system components on Mercury Marine products comply with U.S. Coast Guard rules to minimize risk of fire or explosion. Do not use replacement electrical or fuel system components that do not comply with these rules. When servicing the electrical and fuel systems, properly install and tighten all components.

Cleanliness and Care of Product

A Mercury Marine Power Product is a combination of many machined, honed, polished, and lapped surfaces with tolerances measured in the ten thousands of an inch/mm. When any product component is serviced, care and cleanliness are important. It should be understood that proper cleaning and protection of machined surfaces and friction areas is a part of the repair procedure. This is considered standard shop practice even if not specifically stated.

Whenever components are removed for service, they should be retained in order. At the time of installation, they should be installed in the same locations and with the same mating surfaces as when removed.

Personnel should not work on or under an engine that is suspended. Engines should be attached to work stands, or lowered to ground as soon as possible.

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Section 1 - Getting Started

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Overview

The SmartCraft VesselView is a comprehensive boat information center. VesselView displays vital information for up to three engines at one time. It continuously monitors and reports basic operating data, as well as detailed information such as sea water temperature and depth, trim status, boat speed and steering angle, and the status of fuel, oil, water, and waste tanks.

VesselView can be fully integrated with a boat's global positioning system (GPS) to provide up to the minute navigation, speed, and fuel-to-destination information.

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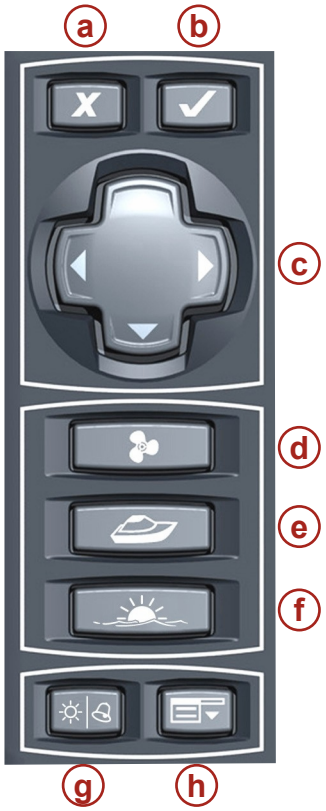
Keypad Functions

VesselView offers seven buttons and an arrow trackpad for easy navigation through the screens and pages.



25354

a - Cancel button
b - Enter button
c - Arrow trackpad
d - Propulsion button
e - Vessel button
f - Environment and navigation button
g - Brightness and alarm button
h - Menu button

Arrow Trackpad

- Operates the up, down, and side to side movement of the VesselView cursor to navigate through the various screens and function prompts
- Scrolls through page categories
- Performs other functions as described in the on-screen prompts

Enter Button

- Activates or confirms the highlighted selection
- Accesses functions within pages
- Performs other functions as described in the on-screen prompts

Cancel Button

- Deactivates or cancels the highlighted selection
- Performs other functions as described in the on-screen prompts
- Closes the menu panel
- Allows a full shut down of VesselView when held down while the key switch is turned off

Propulsion, Vessel, and Environment Buttons

- Opens the initial propulsion, vessel, or environmental and navigation screen
- Scrolls available propulsion, vessel, or environmental and navigation screens
- Change the menu area displayed when the menu panel is open

Brightness and Alarm Button

- Opens the screen brightness control
- Allows you to use the arrow trackpad to adjust the brightness of the VesselView screen
- Allows you to view any active faults with details

Menu Button

- Opens the menu panel
- Toggles between the menu panel for setup and the current screen category (propulsion, vessel, or environment and navigation)

Turning the VesselView On or Off

VesselView automatically turns on when the key switch for any engine connected to VesselView is turned to the "RUN" position.

VesselView enters suspend mode for 48 hours when the key switches for all engines connected to VesselView are turned to the "OFF" position. When any key switch is turned to the "RUN" position again, VesselView quickly displays the last active screen.

To shut down the VesselView completely for storage, press the cancel button while turning the key switches to the "OFF" position. When any key switch is turned to the "RUN" position again, VesselView displays the last active screen after it completes the boot up cycle.

NOTE: *Replace the VesselView sun cover when the unit is not is use to protect the screen.*

During the initial startup sequence for VesselView, a setup wizard screen appears, prompting you to enter the initial setup for the unit. If this happens, follow the procedures in **Section 2 - Setup and Calibration**.

Cleaning the VesselView Screen

The VesselView screen will need to be cleaned as part of proper maintenance. Use a soft cloth with soap and water to clean the screen. Avoid using a more abrasive cloth as this may scratch and damage the screen lens.

Section 2 - Setup and Calibration

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Initial Setup

Turning the key switch to the "RUN" position activates all VesselView units connected to the system. Complete the following initial setup process when starting up any VesselView unit for the first time, or after selecting "RESET SETTINGS DIRECTORY" on the factory reset screen. This process calibrates each VesselView unit to the vessel's engine, sensor, and instrument configuration. Initial setup procedures include:

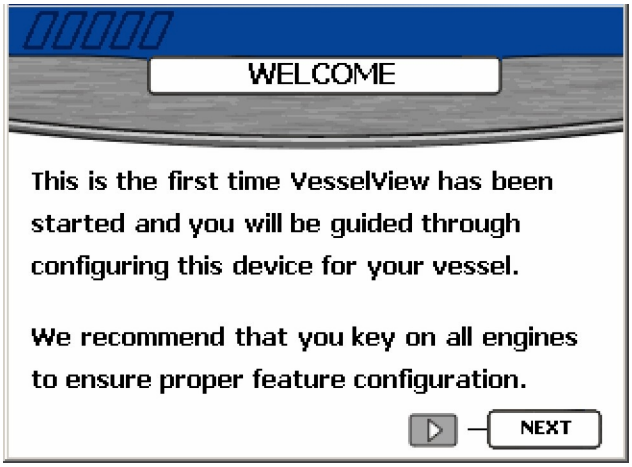
- Following the steps of the setup wizard
- Calibrating the tanks
- Configuring trim settings, if applicable

Repeat the following procedures for each VesselView unit installed on the vessel.

Using the Setup Wizard

The setup wizard guides you through the first steps of configuring the VesselView. The setup wizard automatically begins when the VesselView unit is turned on the first time, or when a factory reset is performed.

1. Turn on all engines. The first screen is the "WELCOME" screen.



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2. Press the right arrow button on the arrow trackpad to proceed to "IMPORT CONFIG".

Import Configuration (optional)

The import configuration menu is used to import selected configuration settings using a USB memory stick. This will import configurations that were saved to a USB memory stick from another VesselView unit.

1. The "IMPORT CONFIG" screen instructs you to insert a memory stick and wait for instructions. To skip this step and manually configure the VesselView, press the right arrow button.

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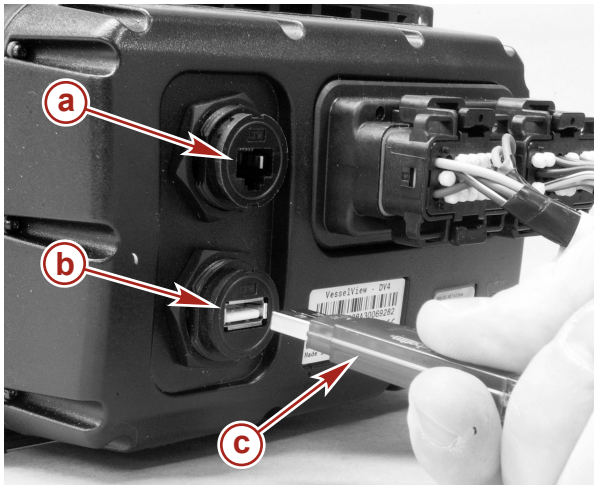
2. On the back of the VesselView unit there is a USB port. Insert a USB memory stick with a saved configuration into the USB port.



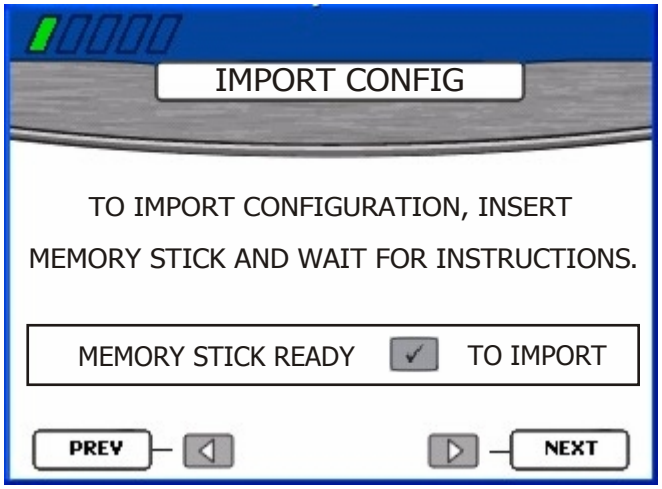
27329

a - Ethernet port (future use)
b - USB Port
c - USB memory stick

IMPORTANT: Do not remove the USB memory stick until the import process is complete.

3. When the memory stick is detected, the "IMPORT CONFIG" screen will display "MEMORY STICK READY".

4. Press the enter button to import the configuration.



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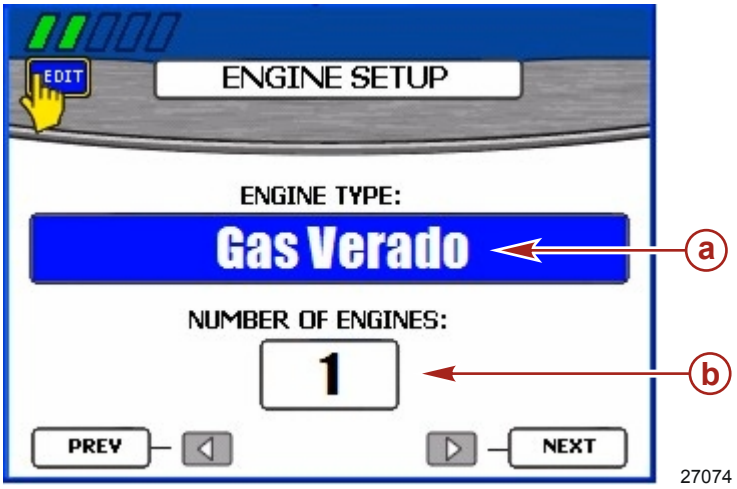
5. VesselView will restart and import the configuration. You will not need to go through the rest of the setup wizard.

Engine Setup

VesselView automatically detects the vessel's power package. On the "ENGINE SETUP" screen, VesselView allows you to change the type and number of engines. The available power packages are:

- "2 Stroke Gas Outboard"
- "4 Stroke Gas Outboard"
- "Gas Sterndrive"
- "Gas Sterndrive No Troll"
- "Gas Inboard"
- "Gas Inboard No Troll"
- "Gas Jet Drive"
- "Gas Verado"
- "Diesel Sterndrive"
- "Diesel Sterndrive No Troll"
- "Diesel Inboard"

- "Diesel Inboard No Troll"



a - Engine type
b - Number of engines

IMPORTANT: The "ENGINE TYPE" box may be blank when the "ENGINE SETUP" screen initially appears. Before beginning this procedure, wait until an engine type appears in the "ENGINE TYPE" box. If an engine type does not appear, check that all engines are on and that the VesselView is properly connected. For installation information, refer to Section 9 - Installation and Wiring.

1. Wait until an engine type appears in the "ENGINE TYPE" box. The "ENGINE TYPE" box may take several seconds to detect the engine.
2. If the engine type is correct, proceed to step 5; otherwise, press the enter button to access the "ENGINE TYPE" box.
3. Press the left or right arrow button to scroll through the available engine types.
4. Confirm your selection by pressing the enter button.
5. If the number of engines is correct, proceed to step 8; otherwise, press the enter button, then the down arrow button to access the "NUMBER OF ENGINES" box.
6. Press the right arrow button to increase the number of engines or the left arrow button to decrease the number of engines. The maximum number of engines is four.

IMPORTANT: Select the total number of engines installed, regardless of how many you wish to display on the VesselView.

7. Confirm your selection by pressing the enter button.
8. Press the right arrow button to proceed to the "DISPLAY SETUP" screen.

NOTE: *VesselView displays data from one engine by default.*

NOTE: *Although you may select up to four engines, VesselView only displays data for a maximum of two diesel engines or three gasoline engines. Choosing four engines allows you to add two more tanks; and to view the total fuel flow, fuel range, and drive link gauges for all engines. All other data is displayed for the maximum number of engines allowed.*

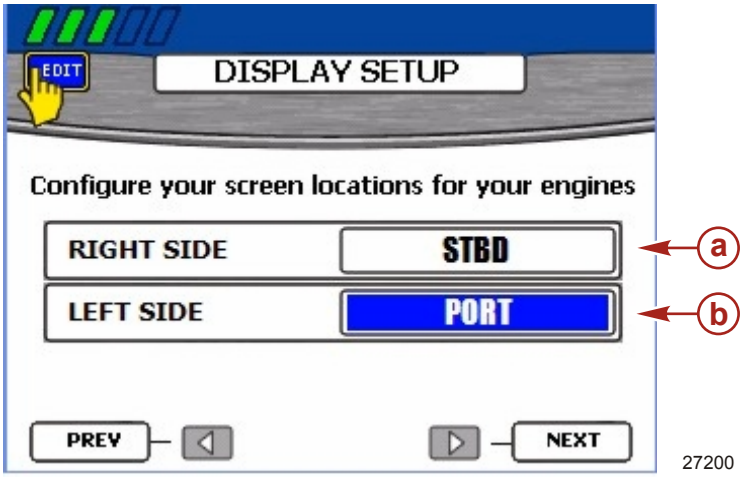
Display Setup

The "DISPLAY SETUP" screen allows you to choose where the data for each engine is displayed on the VesselView. Typically, the engines are displayed left to right in the same order as their physical locations port to starboard. Some helm configurations may require different display settings. If you choose to display only one engine in a multi-engine application, VesselView displays aggregate data such as total fuel flow and range for all engines, but displays engine specific data for only the engine selected for that display.

IMPORTANT: Do not choose the same screen location for more than one engine.

1. If the screen locations are correct, proceed to step 7; otherwise, press the enter button to access the "RIGHT SIDE" box.

NOTE: *The "DISPLAY SETUP" screen shown is for dual engines. Triple and quad applications will show three boxes. The third box will be listed as "CENTER" location.*



a - Right side location
b - Left side location

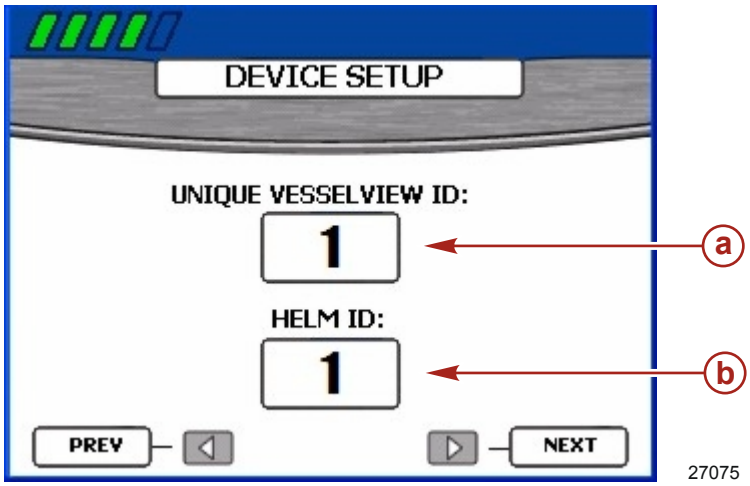
2. Press the left or right arrow button to scroll through the available location types. You may select any of the following, depending on the number of engines:
   - "NONE"
   - "STBD"
   - "PORT"
   - "CENTER" (triples only)
   - "STBDCNTR" (quads only)
   - "PORTCNTR" (quads only)
3. If there are multiple engines, press the down arrow to proceed to the "LEFT SIDE" box.
4. Press the left or right arrow button to scroll through the available location types.
5. For three or four engine applications, press the down arrow to proceed to the "CENTER" box.
6. Confirm your selections by pressing the enter button.
7. Press the right arrow button to proceed to the "DEVICE SETUP" screen.

Device Setup

The unique VesselView ID differentiates the VesselView unit from all other installed SmartCraft devices, such as other VesselView units or SmartCraft gauges. The "DEVICE SETUP" screen allows you to assign a unique identifier to each VesselView unit and to designate whether the VesselView is installed at the primary or secondary helm.

IMPORTANT: Do not choose the same Unique VesselView ID for more than one VesselView unit.

1. If there is only one VesselView or SmartCraft device installed in the vessel, proceed to step 6; otherwise, press the enter button to access the "UNIQUE VESSELVIEW ID" box.

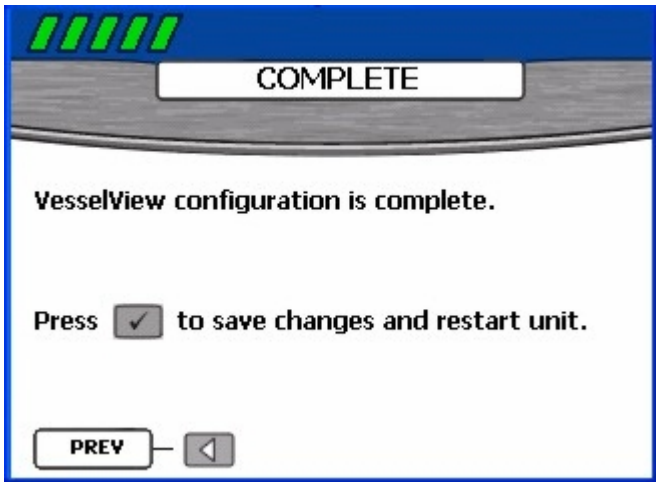


a - VesselView ID
b - Helm ID

2. Press the right arrow button to increase the number of the ID. Choose a number that is different from the number assigned to any other VesselView unit installed.
3. Press the down arrow to proceed to the "HELM ID" box.
4. Press the left or right arrow button to choose helm 1 or helm 2.
5. Confirm your selections by pressing the enter button.
6. Press the right arrow button to proceed to the "COMPLETE" screen.

Complete

The Setup Wizard displays the "COMPLETE" screen after you have completed all the steps of the wizard. To review your choices or to go back to a screen to make corrections, use the left arrow button.



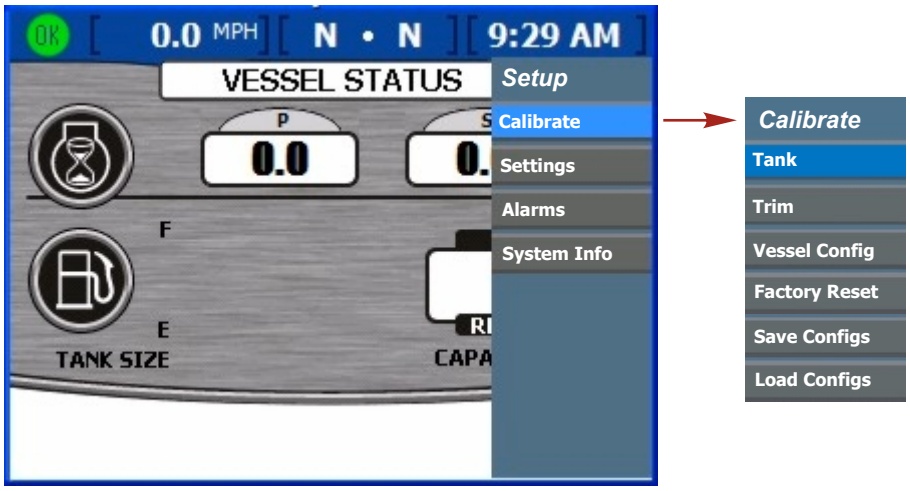
When you are sure that your selections are correct, press the enter button to save your configuration and restart the VesselView unit. VesselView displays a saving settings message, then restarts. The restart process may take a few minutes.

NOTE: If you want to change the vessel configuration after exiting the Setup Wizard, you may either restart the wizard by choosing Reset Settings Directory on the "Factory Reset" screen in the "Calibration" menu or reconfigure the vessel using the "Vessel Config" menu.

Calibration Menu Options

The "Calibrate" menu will allow you to setup your VesselView to your specific boat. The "Calibrate" menu items include the following:

- "Tank"
- "Trim"
- "Vessel Config"
- "Factory Reset"
- "Save Configs"
- "Load Configs"



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Calibrating the Tanks

Open the tank config screen by pressing the menu button until the "Setup" menu appears. Use the down arrow button to select the "Calibrate" option. Press the enter button to open the "Calibrate" menu, then the enter button to select "Tank".

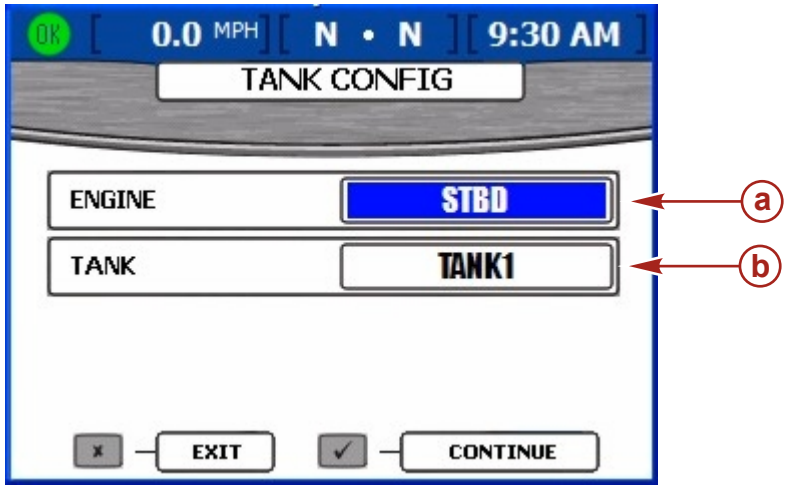
Tank and Location Selection

1. Open the "TANK CONFIG" screen. The engine location box is highlighted.
2. Use the left or right arrow button to choose which engine to configure.

NOTE: You may configure up to two tanks for each engine on the boat if these engines are so equipped. For example, on a triple-engine application, six tanks are available.

3. Press the down arrow to proceed to the tank selection box.

4. Use the right arrow button to choose which tank number to configure.



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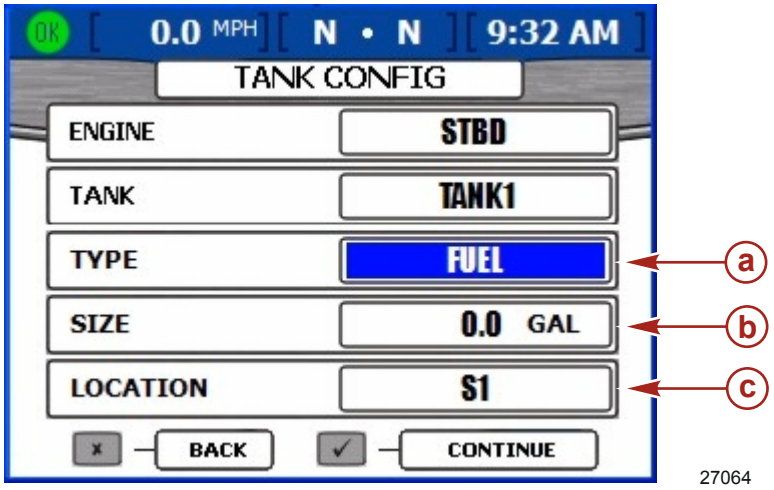
a - Engine location
b - Tank selection

5. Press the enter button to confirm your choice. The "TYPE", "SIZE", and "LOCATION" boxes will appear.



27064

a - Type of tank
b - Size of tank
c - Location of tank

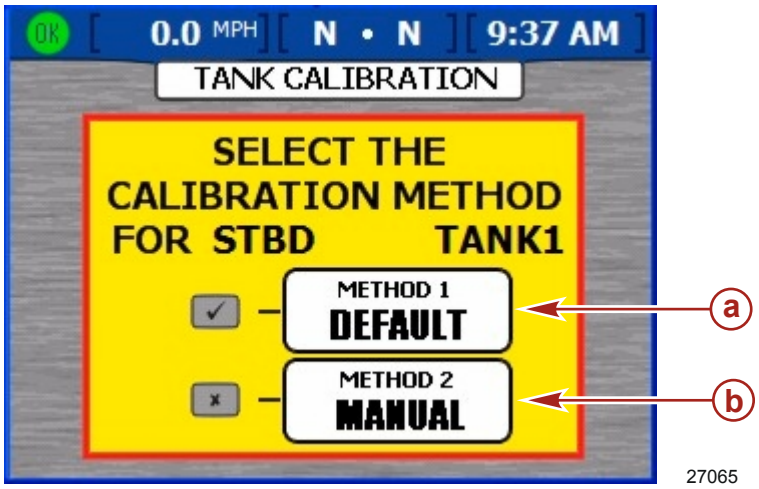
6. Use the left or right arrow button to scroll through the available tank types in the "TYPE" box. You may select any of the following:
   - "NOT USED"
   - "FUEL"
   - "OIL"
   - "WATER"
   - "WASTE"
7. Press the down arrow to proceed to the "SIZE" box.
8. Use the right arrow button to scroll to the capacity of the tank. Holding the button down causes the scroll to speed up.

IMPORTANT: The default unit for measuring tank capacity is U.S. gallons. To choose a different unit of measurement, refer to Section 7 - Settings.

9. Press the down arrow to proceed to the "LOCATION" box. You may select any of the following:
   - "S1" (starboard 1), "S2" (starboard 2), "S3" (starboard 3), "SF" (starboard forward), or "SA" (starboard aft)
   - "P1" (port 1), "P2" (port 2), "P3" (port 3), "PF" (port forward), or "PA" (port aft)
   - "C1" (center 1), "C2" (center 2), "C3" (center 3), "CF" (center forward), or "CA" (center aft)
10. To change the values already entered, press the cancel button to return to the previous screen. Otherwise, press the enter button to confirm your selections. VesselView will then display two methods of calibration.

Tank Calibration

VesselView offers two tank calibration methods. For linear shaped fuel tanks, choose "METHOD 1: DEFAULT". Using method 1, VesselView assumes that the tank is uniformly shaped and that each quarter of the tank holds a quarter of its total capacity. For irregularly shaped fuel tanks, choose "METHOD 2: MANUAL". You will be required to fill the tank for the manual method.



a - Method 1 - Default
b - Method 2 - Manual

METHOD 1: DEFAULT

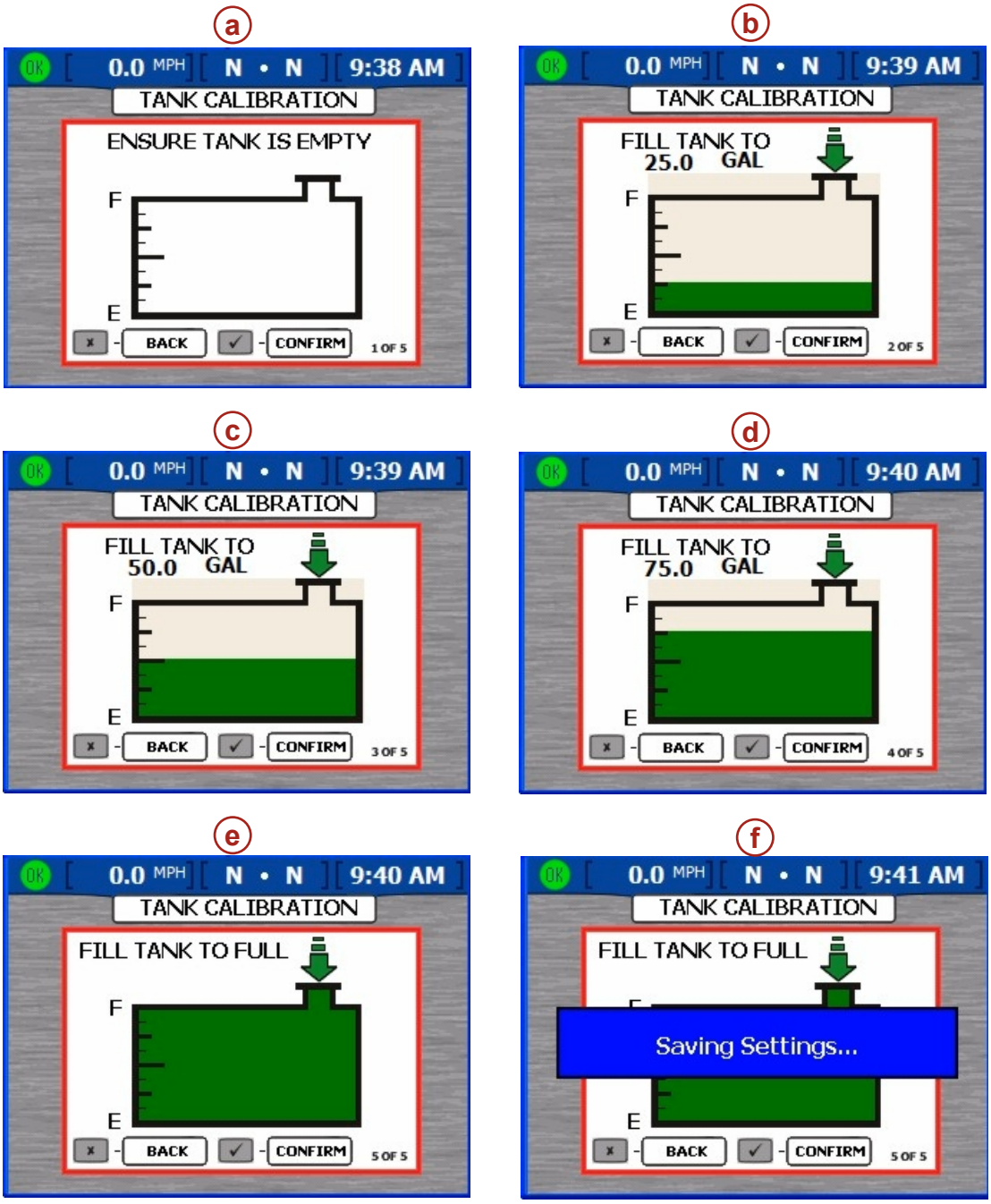
1. On the tank calibration screen, press the enter button to choose the "DEFAULT" calibration method. VesselView displays a saving settings message.
2. Repeat the tank calibration process for any additional tanks.

METHOD 2: MANUAL

1. On the tank calibration screen, press the cancel button to choose the "MANUAL" calibration method.
2. Ensure the tank is empty. Press the enter button to confirm.
3. Following the direction on the screen, fill the tank to 25% of its capacity. Press the enter button to confirm or the back button to go back one step.
4. Following the direction on the screen, fill the tank to 50% of its capacity. Press the enter button to confirm or the back button to go back one step.

5. Following the direction on the screen, fill the tank to 75% of its capacity. Press the enter button to confirm or the back button to go back one step.
6. Following the direction on the screen, fill the tank to 100% of its capacity. Press the enter button to confirm or the back button to go back one step.

7. VesselView will display the saving settings message and return you to the beginning of "TANK CONFIG". Repeat the tank calibration process for any additional tanks.



27066

a - Empty tank
b - Fill to 25% full
c - Fill to 50% full
d - Fill to 75% full
e - Fill to 100% full
f - Saving settings message

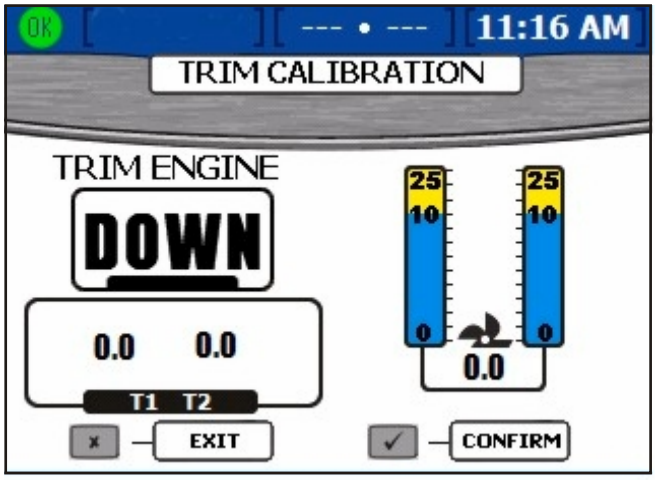
Calibrating Trim

For power packages with trim, configure the trim settings on the "TRIM CALIBRATION" screen. VesselView does not display the "TRIM CALIBRATION" screen for power packages without trim. To open the "TRIM CALIBRATION" screen, press the menu button until the "Setup" menu appears, then use the down arrow button to select the "Calibrate" option. Press the enter button to open the "Calibrate" menu. Press the down arrow button, then the enter button to select "Trim".

NOTE: *Trim calibration does not set the maximum engine trim and trailer limits. Refer to the engine installation manual for more information on your specific engine.*

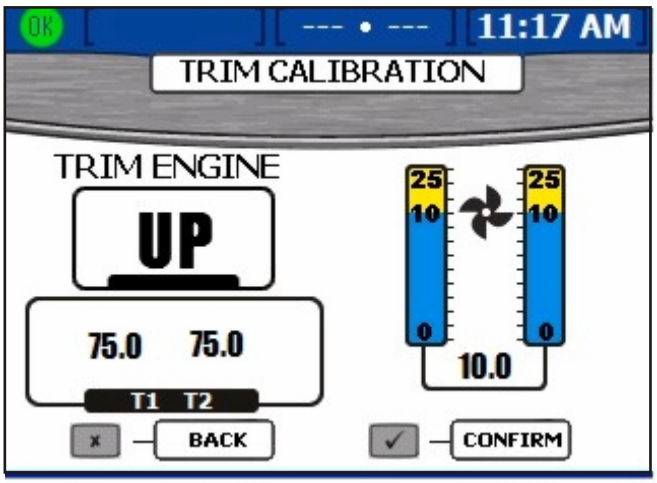
Trim Calibration

1. Open the "TRIM CALIBRATION" screen.
2. The "TRIM ENGINE" box prompts you to trim all engines or drives "DOWN".



27204

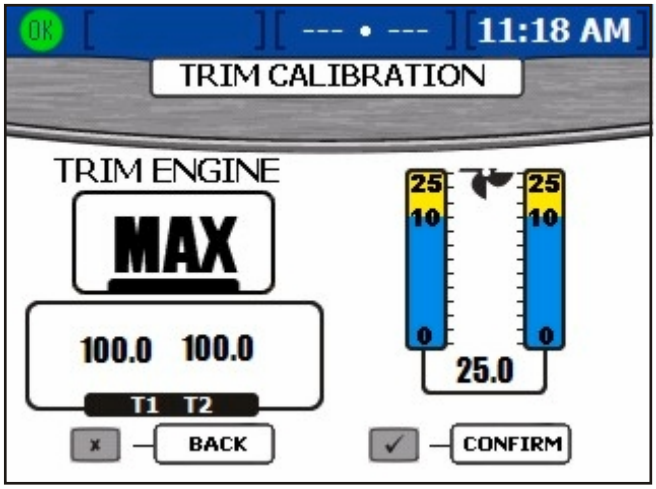
3. Press the enter button to confirm that you have trimmed all engines or drives to the full down position, or press the escape button to go back one step. This sets the "0.0" trim setting.
4. When the "TRIM ENGINE" box prompts you to trim "UP", trim all engines or drives up, but not to the trailer position. This will display a "10.0" trim setting.



27206

5. Press the enter button to confirm that you have trimmed all engines or drives up to the "10.0" position, or press the escape button to go back one step.

6. When the "TRIM ENGINE" box prompts you to trim to "MAX", trim all engines or drives all the way up to the trailer position. This will display a "25.0" trim setting.



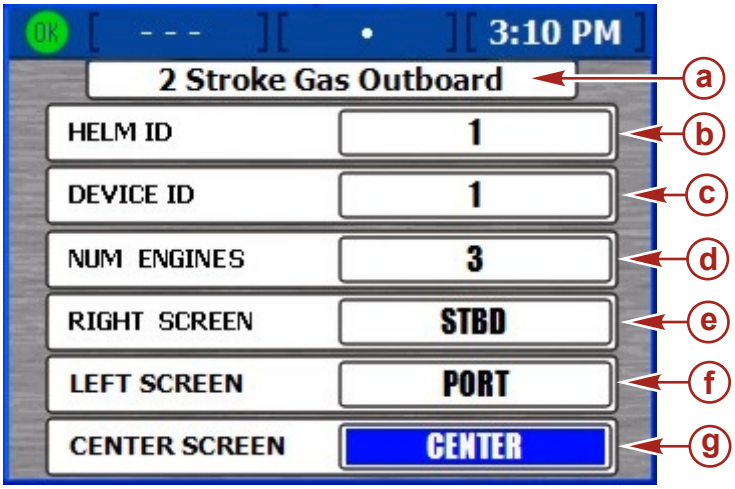
27207

7. Press the enter button to confirm that you have trimmed all engines or drives to the trailer position or press the escape button to go back one step. VesselView will display the saving settings screen.

Vessel Configuration

NOTE: *Vessel configuration does not need to be performed if the vessel has been configured using the setup wizard.*

Vessel configuration is used to assign the VesselView it's location on the vessel. It also allows you to select the number of engines on the vessel and where the engine data should be displayed. To begin vessel configuration, press the menu button until the "Setup" menu appears, then use the down arrow button to select the "Calibrate" option. Press the enter button to open the "Calibrate" menu, then use the down arrow to select "Vessel Config". Press enter to open the vessel configuration screen.



27128

a - Power package name
b - "HELM ID" - Identifies the helm location of the VesselView
c - "DEVICE ID" - Unique identifier for the VesselView unit
d - "NUM ENGINES" - Number of engines
e - "RIGHT SCREEN" - Engine data displayed on the right side of the screen
f - "LEFT SCREEN" - Engine data displayed on the left side of the screen (multiple engines only)
g - "CENTER SCREEN" - Engine data displayed on the center of the screen (triple and quad engines only)

NOTE: *The power package can only be changed in the setup wizard. Perform a factory reset to change the power package and go to the setup wizard. Refer to* ***Factory Reset***

1. Use the right and left arrow buttons to select the helm id number.
2. Press the down arrow button to proceed to "DEVICE ID".
3. Use the right and left arrow buttons to select the device id number.
4. Press the down arrow button to proceed to "NUM ENGINES".
5. Use the right and left arrow buttons to select the number of engines.
6. Press the down arrow button to proceed to "RIGHT SCREEN".
7. Press the left or right arrow button to scroll through the available location types. You may select any of the following, depending on the number of engines:
   - "NONE"
   - "STBD"
   - "PORT"
   - "CENTER" (triples only)
   - "STBDCNTR" (quads only)
   - "PORTCNTR" (quads only)
8. If there are multiple engines, press the down arrow to proceed to the "LEFT SCREEN".

9. Press the left or right arrow button to scroll through the available location types.
10. For three or four engine applications, press the down arrow to proceed to "CENTER SCREEN".
11. Confirm your selections by pressing the enter button.
12. VesselView will display the saving setting screen and restart.

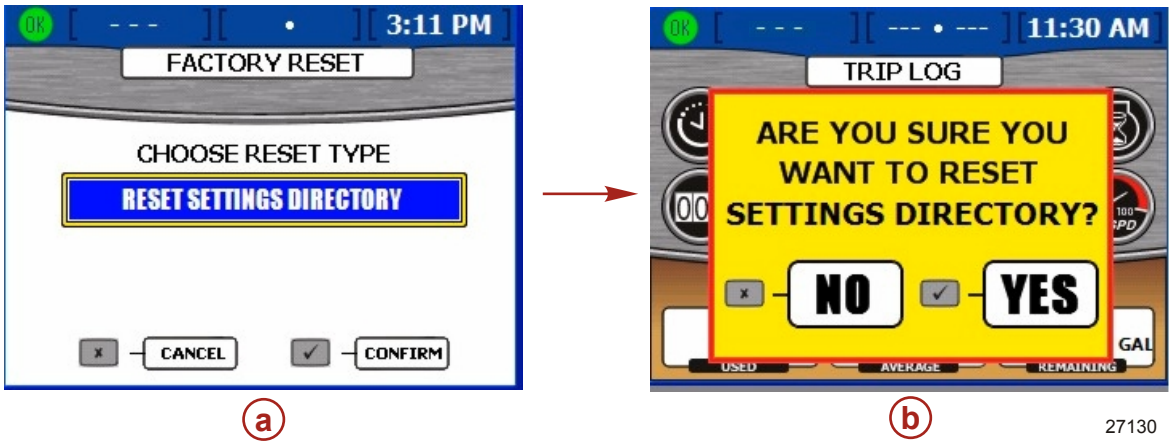
Factory Reset

The factory reset menu is used to reset all VesselView settings to factory default or to perform a sensor detection. To perform a factory reset, press the menu button until the "Setup" menu appears, then use the down arrow button to select the "Calibrate" menu. Press the enter button to open the "Calibrate" menu, then use the down arrow to select "Factory Reset". Press enter to open the factory reset screen.

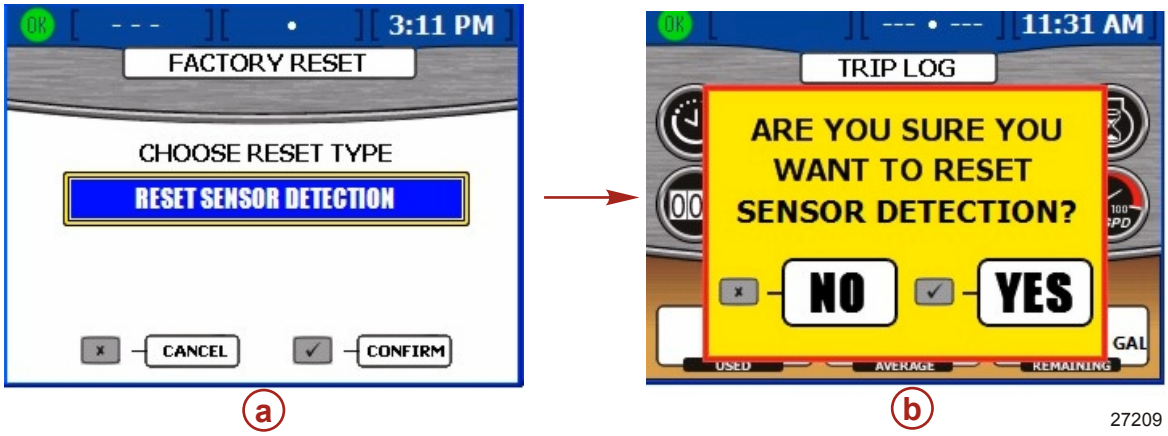
IMPORTANT: By selecting "RESET SETTINGS DIRECTORY" all vessel data settings will be lost.

1. The factory reset screen will ask you to "CHOOSE RESET TYPE". The two types of resets are:
   - "RESET SETTINGS DIRECTORY" - This will reset VesselView to factory defaults
   - "RESET SENSOR DETECTION" - This will scan the VesselView network for any recently removed or installed sensors
2. Use the left and right arrow buttons to select between the two types.

3. To "RESET SETTINGS DIRECTORY", press the enter button to confirm. A yellow screen will pop up reading "ARE YOU SURE YOU WANT TO RESET SETTINGS DIRECTORY?". Press enter to continue or cancel to go back. By pressing enter, the VesselView will reset to factory default and will restart with the setup wizard. Refer to**Using the Setup Wizard.**



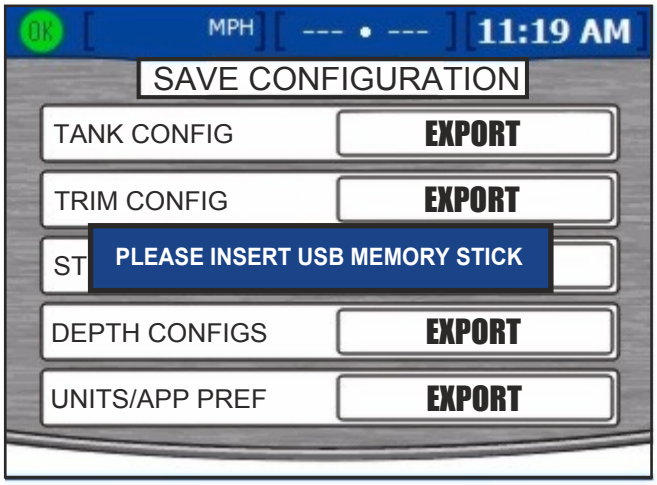
4. To "RESET SENSOR DETECTION", press the enter button to confirm. A yellow screen will pop up reading "ARE YOU SURE YOU WANT TO RESET SENSOR DETECTION?". Press enter to continue or cancel to go back. By pressing enter, the VesselView will reset and restart. You will not go through the setup wizard and will be directed to the engine status screen. All sensors connected before the reset have been detected and data will display in their menu screens.



Save Configuration

The "SAVE CONFIGURATION" menu is used to export selected configuration settings to a USB memory stick for use with other VesselView units. This saves time by importing a configuration without having to complete the entire setup wizard and other calibrations. To "Save Configs", press the menu button until the "Setup" menu appears, then use the down arrow button to select the "Calibrate" menu. Press the enter button to open the "Calibrate" menu, then use the down arrow to select "Save Configs". Press enter to open the "Save Configs" screen.

1. Once in the "SAVE CONFIGURATION" screen, a blue pop-up window tells you to "PLEASE INSERT USB MEMORY STICK".



2. Insert a USB memory stick into the USB port on the back of the VesselView. Refer to **Import Configuration** for an illustration showing the USB port.

IMPORTANT: Do not remove the USB memory stick until the export process is complete.

3. When the VesselView detects the memory stick, the blue pop-up screen will disappear; this may take several seconds.

4. The screen shows the five configuration categories with the tank configuration box highlighted in blue. Select either "EXPORT" or "SKIP" using the left and right arrow buttons.

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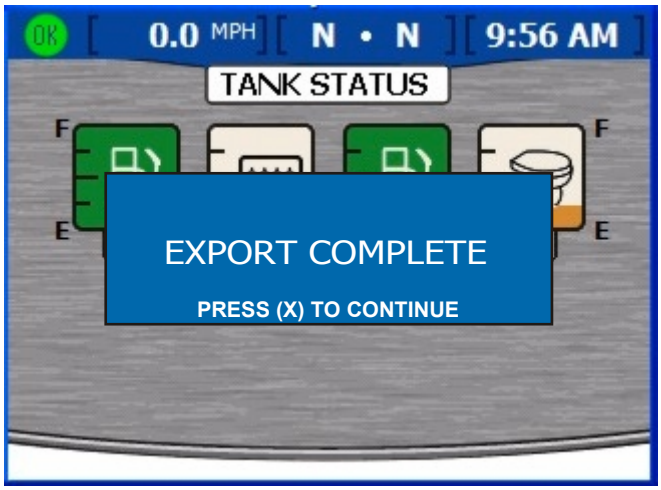
a - Tank configuration
b - Trim configuration
c - Steering
d - Depth configuration
e - Units and application preferences

5. Press the down arrow button to proceed to the next configuration category. Select either "EXPORT" or "SKIP" for each of the categories.
6. Press the enter button to save the chosen configurations.
7. When the export is complete, a blue pop-up screen displays the words "EXPORT COMPLETE". Press the cancel button to exit.



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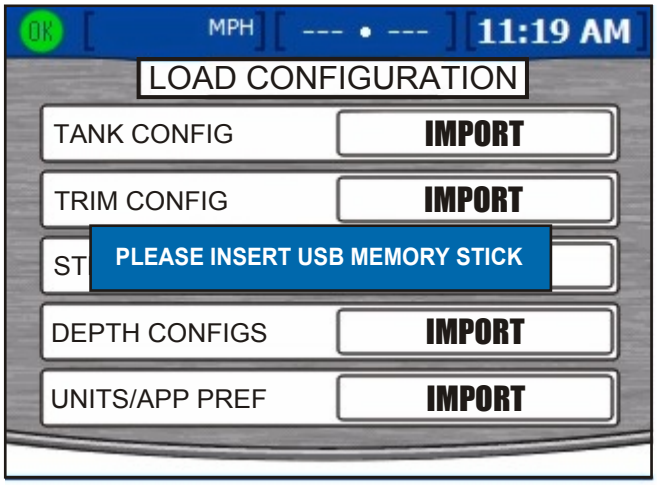
8. It is now safe to remove the USB memory stick.

Load Configuration

The "LOAD CONFIGURATION" menu imports selected configuration settings saved to a USB memory stick from another VesselView unit. To "Load Configs", press the menu button until the "Setup" menu appears, then use the down arrow button to select the "Calibrate" menu. Press the enter button to open the "Calibrate" menu, then use the down arrow to select "Load Configs". Press enter to open the "Load Configs" screen.

1. Once in the "LOAD CONFIGURATION" screen, a blue pop-up window tells you to "PLEASE INSERT USB MEMORY STICK".

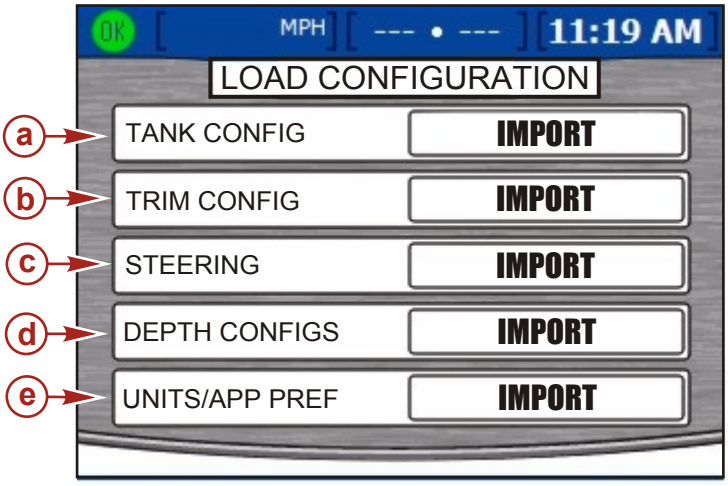


27232

2. Insert a USB memory stick into the USB port on the back of the VesselView. Refer to **Import Configuration** for an illustration showing the USB port.

IMPORTANT: Do not remove the USB memory stick until the export process is complete.

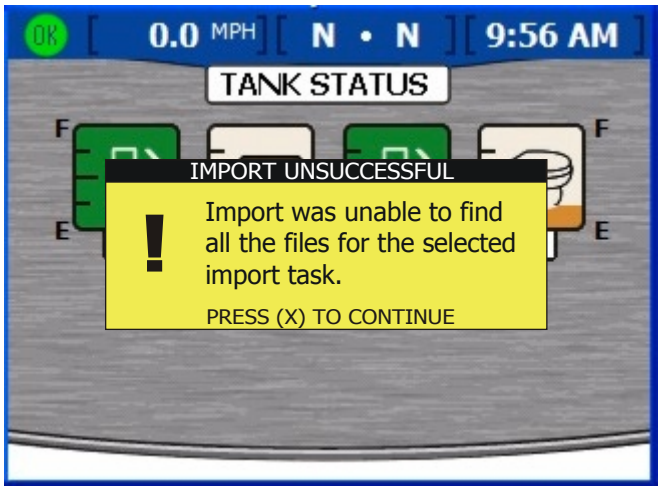
3. When the VesselView detects the memory stick, the blue pop-up screen will disappear; this may take several seconds.
4. The screen shows the five configurations categories with the tank configuration highlighted in blue. Select either "IMPORT" or "SKIP" using the left and right arrow buttons.



27293

a - Tank configuration
b - Trim configuration
c - Steering
d - Depth configuration
e - Units and application preferences

IMPORTANT: Do not select "IMPORT" for a configuration category that was not exported previously. This will create an error and a yellow pop-up window reading "IMPORT UNSUCCESSFUL".



27302

Import unsuccessful pop-up window

5. Press the down arrow button to proceed to the next configuration category. Select either "IMPORT" or "SKIP" for each of the categories.
6. Press the enter button to save the selected configurations. The VesselView will restart and finish loading the configuration.

Notes:

Section 3 - Overview and Operation

Table of Contents

3

Identifying and Using Screen Categories

VesselView displays engine, vessel, environmental, navigation, and calibration data through various screens. These screens are grouped into four categories:

- **Propulsion** contains all screens related to propulsion, trim, and engine performance.
- **Vessel** contains all screens related to fuel use, tank levels, and other items such as generators, heating and air conditioning systems, and ventilation.
- **Environmental** contains all screens related to depth, navigation, and GPS.
- **Setup** contains all screens related to setting up and calibrating the systems connected to the VesselView.

There are two ways to view the pages in a category:

1. Use the propulsion, vessel, or environment and navigation button to view screens in each screen category.
   a. Press the button that corresponds to the screen category you wish to view. Refer to **Keypad Functions**.
   b. Use the right arrow button or the propulsion, vessel, or environment nd navigation button to advance to the next page in the category. Use the left button to move back a page.
2. Use the menu button to view screens in the propulsion, vessel, environment and navigation, or setup screen categories.
   a. Press the menu button to access a list of propulsion, vessel, and environment and navigation screens. The list will pop up on the right side of the screen.
   b. To view each screen category while in the menu screen, press the desired Propulsion, Vessel, or Environmental button. This will list each screen display name in the selected screen category.
   c. Use the up or down arrow button to select a screen to view. Once you have highlighted a screen display name, press the enter button to view the screen. To go back to the screen display list, press the menu button.

Available VesselView Display Screens

The following charts show the available screens for MerCruiser, Outboard, and Jet Drive engines.

MerCruiser Display Screens

Screen Category	Menu Screen	Gas Sterndrive No Troll	Gas Inboard No Troll	Gas Sterndrive	Gas Inboard	Diesel Sterndrive No Troll	Diesel Inboard No Troll	Diesel Sterndrive	Diesel Inboard
Propulsion	Engine Status	X	X	X	X	X	X	X	X
	Performance & Fuel	X	X	X	X	X	X	X	X
	Steering		X		X		X		X
	Peak Performance	X	X	X	X				
	Trim	X		X		X	X		
	Demand & Load					X	X	X	X
	Boost	Menu Option							
	Troll			X	X			X	X
	Cruise Control	Option (DTS only)							
	Smart Tow	Option (DTS only)							
	Transmission						X		X
	Intake					X	X	X	X
Vessel	Vessel Status	X	X	X	X	X	X	X	X
	Tank Status	X	X	X	X	X	X	X	X
	Generator	X	X	X	X	X	X	X	X
	Steer Position	X	X	X	X	X	X	X	X
Environment and Navigation	Depth	X	X	X	X	X	X	X	X
	Trip Log	X	X	X	X	X	X	X	X
	Fuel to Waypoint	GPS only							
	Navigation	GPS only							

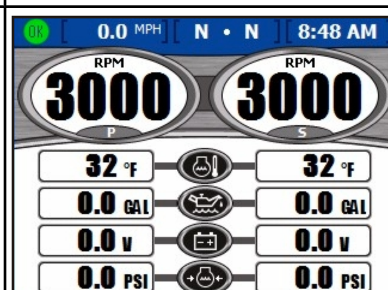
Outboard and Jet Drive Display Screens

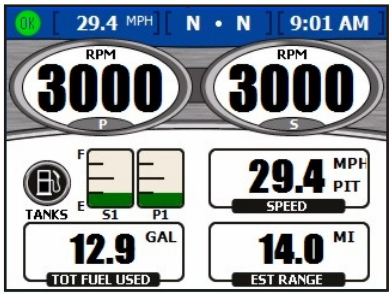
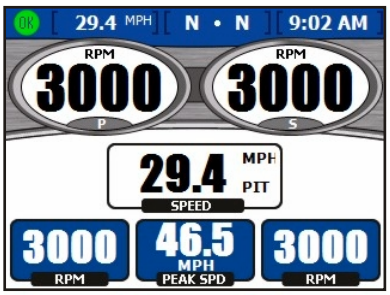
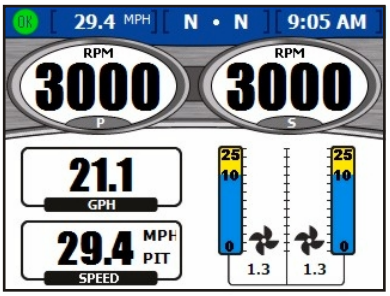
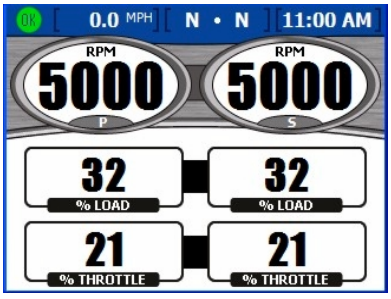
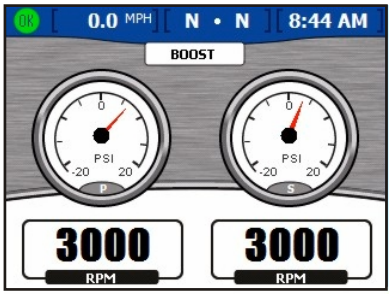
Screen Category	Menu Screen	2 Stroke Gas Outboard	4 Stroke Gas Outboard	Gas Jet Drive	Gas Verado
Propulsion	**Engine Status**	X	X	X	X
	Performance & Fuel	X	X	X	X
	Steering	MerCruiser only			
	Peak Performance	X	X	X	X
	Trim	X	X		X
	Demand & Load	MerCruiser only			
	Boost	Menu Option (Verado only)			
	Troll	X	X	X	X
	Cruise Control	Option (DTS only)			
	Smart Tow	Option (DTS only)			
	Transmission	MerCruiser only			
	Intake	MerCruiser only			
Vessel	**Vessel Status**	X	X	X	X
	Tank Status	X	X	X	X
	Generator	X	X	X	X
	Steer Position	MerCruiser only			
Environment and Navigation	**Depth**	X	X	X	X
	Trip Log	X	X	X	X
	Fuel to Waypoint	GPS only			
	Navigation	GPS only			

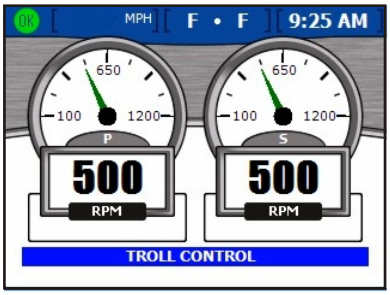
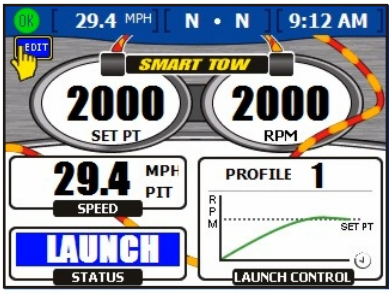
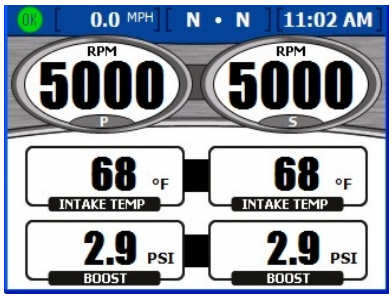
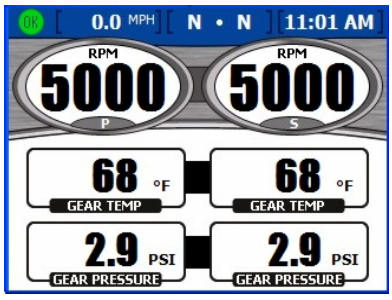
VesselView Display Screens

NOTE: The screens listed in the following charts may vary depending on engine type and number of engines. Refer to ***Available VesselView Display Screens****.*

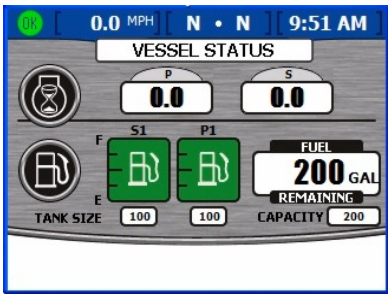
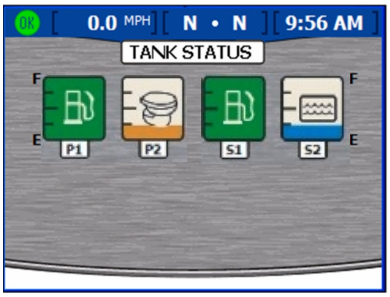
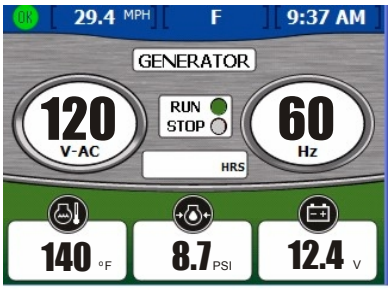
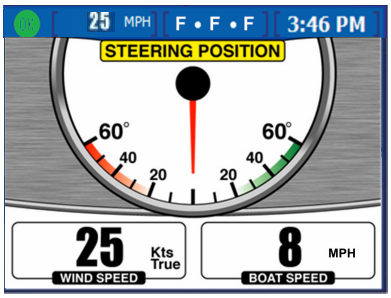
Propulsion

Screen Display Name	Description	Screen
Engine Status	Displays engine RPM and shows various engine data depending on the engine type.	 27210

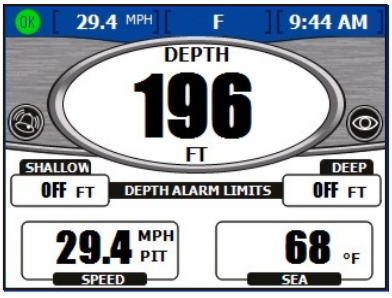
Screen Display Name	Description	Screen
Performance and Fuel	Displays engine RPM, speed, fuel tank levels, total fuel used, and estimated fuel range.	 27211
Peak Performance	Displays actual engine RPM and speed, along with the peak RPM and speed.	 27212
Trim	Displays engine RPM, speed, fuel flow, and trim level.	 27213
Demand and Load	Displays engine RPM, load, and throttle percentages.	 27115
Boost	Displays engine supercharger boost pressure for Verado engines. ***NOTE:*** *The boost screen can be turned on or off under the "Setup" menu by selecting "Settings" and then "Preferences".*	 27214

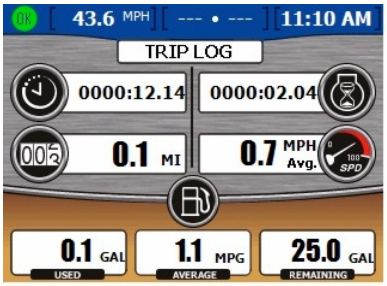
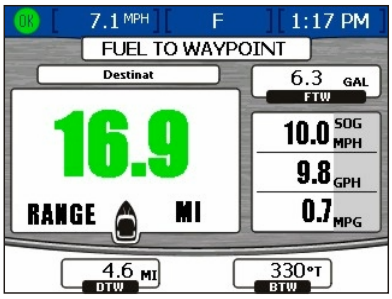
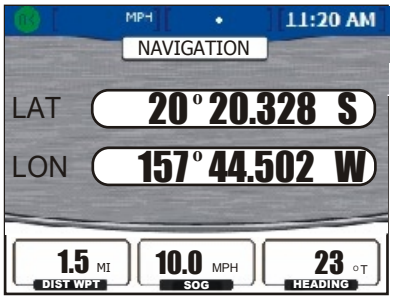
Screen Display Name	Description	Screen
Troll	Displays engine RPM and allows the operator to set troll speed below 1000 RPM.	 27215
Cruise Control	Allows the operator to set engine RPM above 1000 RPM on a DTS engine.	 27119
Smart Tow	Allows the operator to control the speed of acceleration from idle to set cruise speed on a DTS engine.	 27216
Intake	Displays engine RPM, intake temperature, and boost.	 27116
Transmission	Displays engine RPM with transmission gear temperature and pressure.	 27117

Vessel

Screen Display Name	Description	Screen
Vessel Status	Displays fuel tank levels with total fuel remaining.	 27114
Tank Status	Displays all tank levels and location.	 27113
Generator	Displays a group of various generator data.	 27217
Steer Position	Displays steering position, depth, and boat speed.	 27118

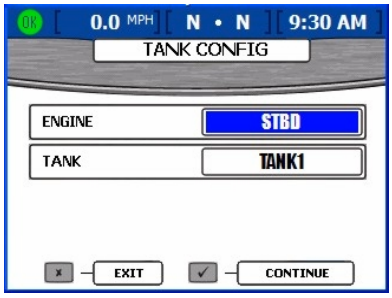
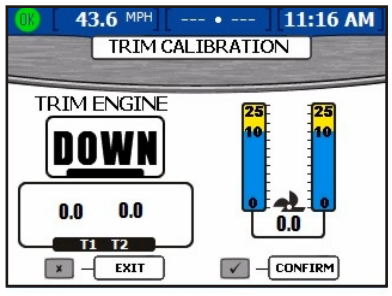
Environment and Navigation

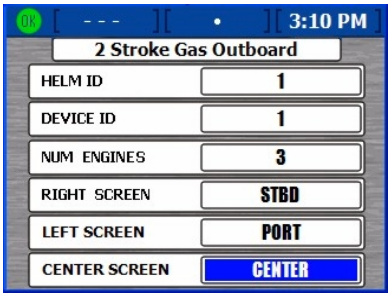
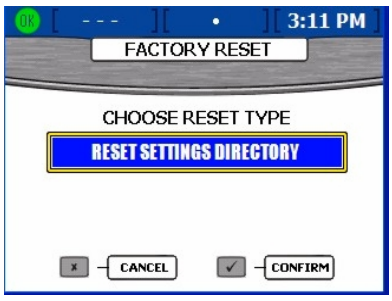
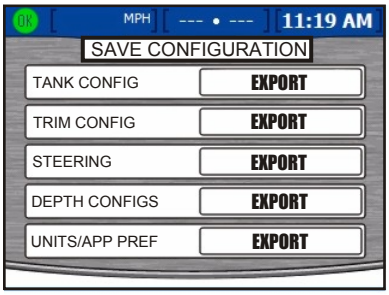
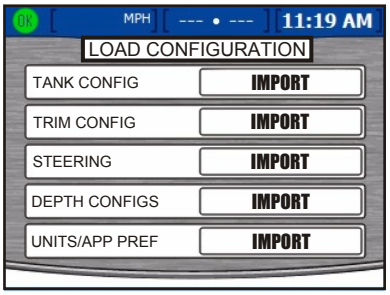
Screen Display Name	Description	Screen
Depth	Displays water depth and allows the operator to change the depth alarm limits.	 27218

Screen Display Name	Description	Screen
Trip Log	Displays total trip time, average speed, distance, and fuel usage data.	 27220
Fuel to Waypoint	Displays fuel usage data to a specified waypoint.	 27110
Navigation	Displays the exact location of the vessel.	 27335

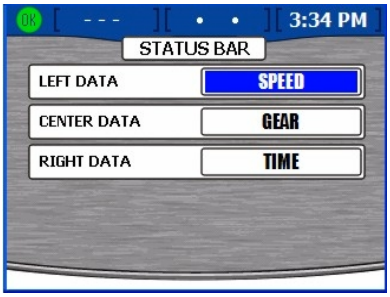
VesselView Setup Screens

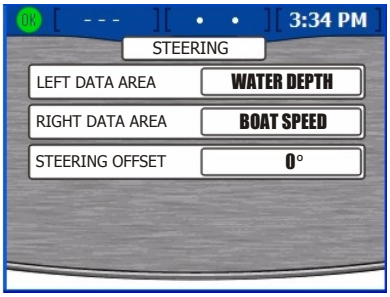
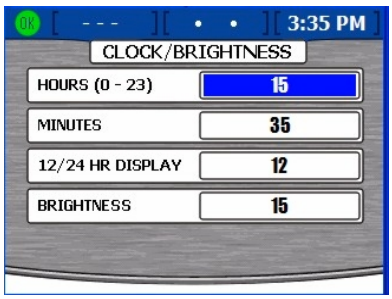
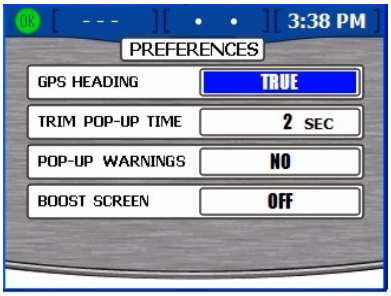
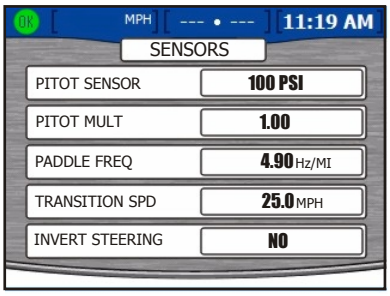
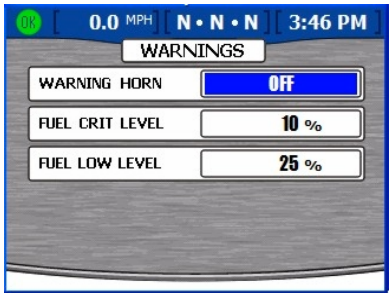
Calibrate

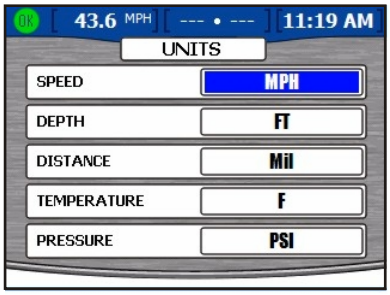
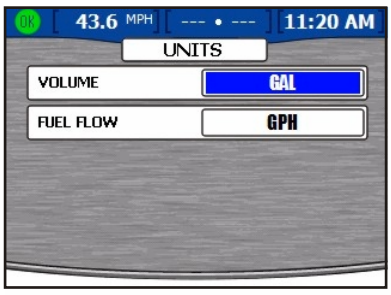
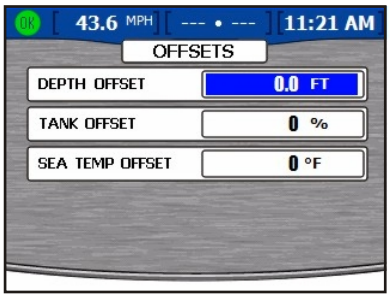
Menu Option	Description	Screen
Tank	Configures each tank by type, size, and location.	 27126
Trim	Sets the engine trim levels.	 27222

Menu Option	Description	Screen
Vessel Config	Assigns VesselView location, number of engines, and the data display location.	 27125
Factory Reset	Resets all VesselView settings to factory default. Can also reset just the engine sensor detection to factory default.	 27124
Save Configs	Used to save selected configuration data to a memory stick.	 27235
Load Configs	Used to load configuration data through a memory stick.	 27234

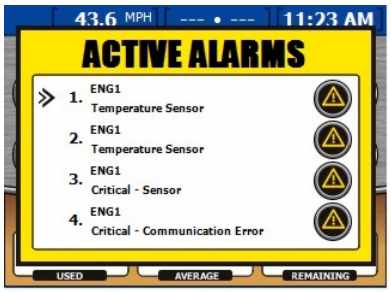
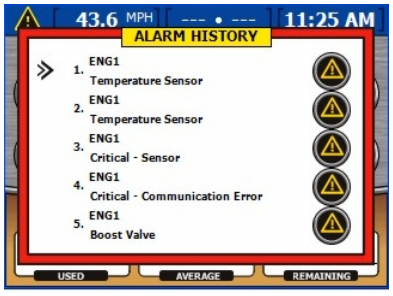
Settings

Menu Option	Description	Screen
Screen Options > Status Bar	Sets the status bar info at the top of every display screen.	 27121

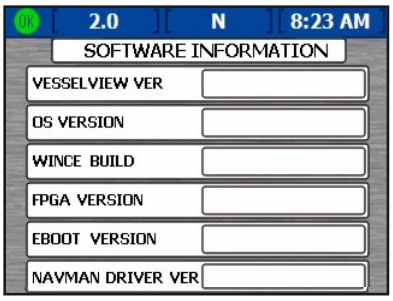
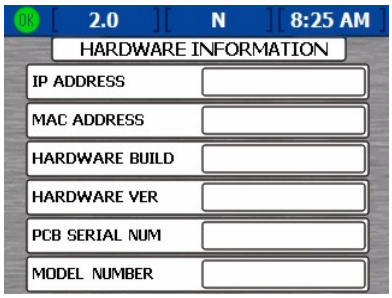
Menu Option	Description	Screen
Screen Options > Steering	Sets the data to display at the bottom of the steering position screen in the vessel menu, and is also used to zero a rudder angle sensor.	 27269
Clock/Light	Sets the clock time and the brightness of the screen.	 27120
Preferences	Sets the GPS heading, trim pop-up time, pop-up warnings, and boost screen.	 27122
Sensors	Sets the pitot and paddle wheel settings and steering sensor.	 27238
Warnings	Turns the warning horn on or off and sets the fuel level alarm.	 27123

Menu Option	Description	Screen
Units	Sets unit of speed, depth, distance, temperature, and pressure.	 27223
Units 2	Sets units of volume and fuel flow.	 27224
Offsets	Sets offset for depth, tank, sea temperature, and steering offset if applicable.	 27226

Alarms

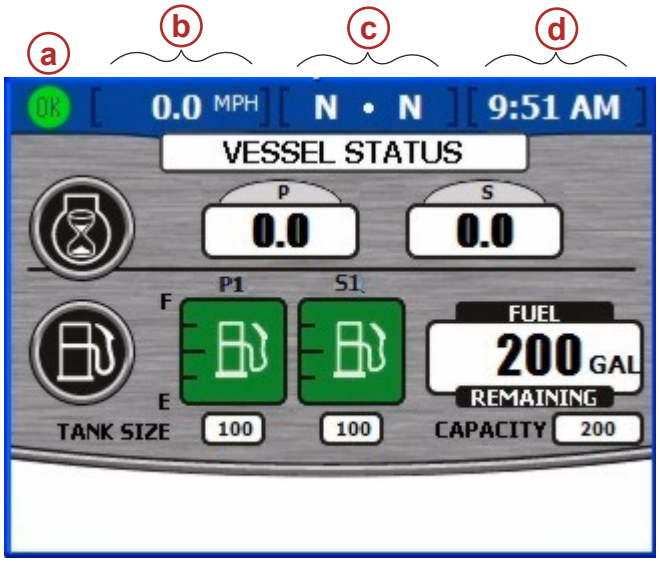
Menu Option	Description	Screen
Active Alarms	Displays active alarms.	 27227
Alarm History	Displays alarms in the history.	 27228

System Info

Menu Option	Description	Screen
Software Info	Displays the VesselView software version and other data.	 27426
Hardware Info	Displays VesselView hardware information.	 27427

Checking Status Using the Status Bar

VesselView displays important information in the status bar at the top of each screen. The status bar displays up to four different icons and messages. Notices of conditions that may need attention (such as warnings, fuel level alerts, and faults) appear as an icon on the left side of the status bar. Other status information such as time, speed, air temperature, and fuel consumption appear in the other three data boxes. The data in these boxes can be arranged under the "Setup" menu by selecting "Settings", then "Screen Options", and then selecting "Status bar". The table below identifies each status data box:



27077

a - Fault icon
b - Left data box
c - Center data box
d - Right data box

Fault Icons

VesselView displays fault icons to alert the operator of any faults. A green icon with the word "OK" inside will let the operator know all systems are operating normally. For all other faults, there are four icons to warn the operator. The operator can view the fault in detail by pressing the brightness/alarm button. Refer to **Section 8 - Alarms**.

Icon or Message	Icon Description	Warning Description
 26889	Blue "OK" inside a green circle.	All systems are operating normally
 26890	Yellow "!" on a black background in a yellow triangle.	Warning - A fault has occurred.

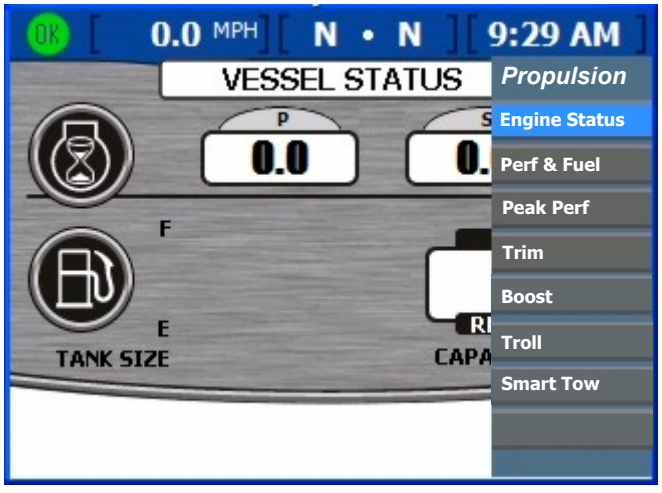
Icon or Message	Icon Description	Warning Description
 26891	White "!" inside a red triangle.	Alarm - A fault has occurred and has activated engine guardian.
 26892	Black fuel pump on a yellow background inside a black circle.	Fuel Level Low
 26893	White fuel pump on a red background.	Fuel Level Critical

Using the Menu Panel

Menus allow you to access the same screens available through the propulsion, vessel, and environment and navigation buttons; as well as the calibration, settings, alarms, and system information screens only available in the menu panel. To use the menu panel, follow these steps:

1. Press the menu button. The menu panel specific to the currently open screen category appears.
2. Press a button to open the appropriate menu panel.
   a. To see the available propulsion screens, press the propulsion button while the menu panel is open. The "Propulsion" menu panel appears.

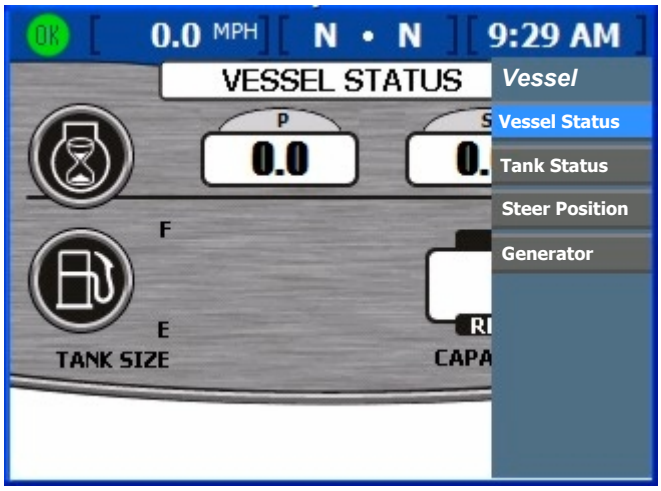
NOTE: *The available VesselView menu options may display differently than those listed in the pictures; menu options depend on the engine type.*



27368

Propulsion Menu Panel

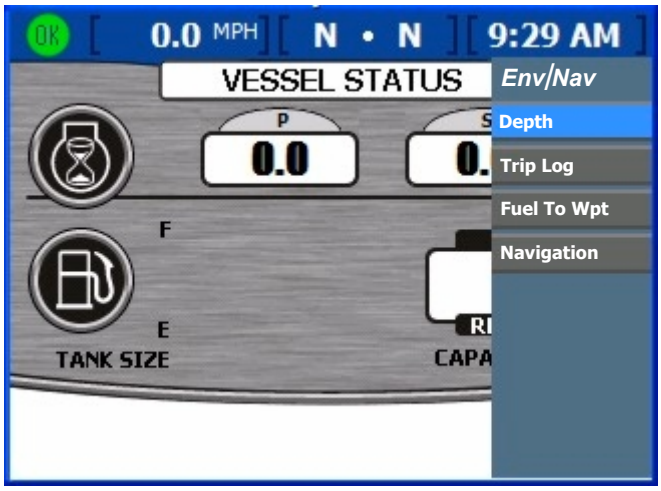
b. To see the available vessel screens, press the vessel button while the menu panel is open. The "Vessel" menu panel appears.



27380

Vessel Menu Panel

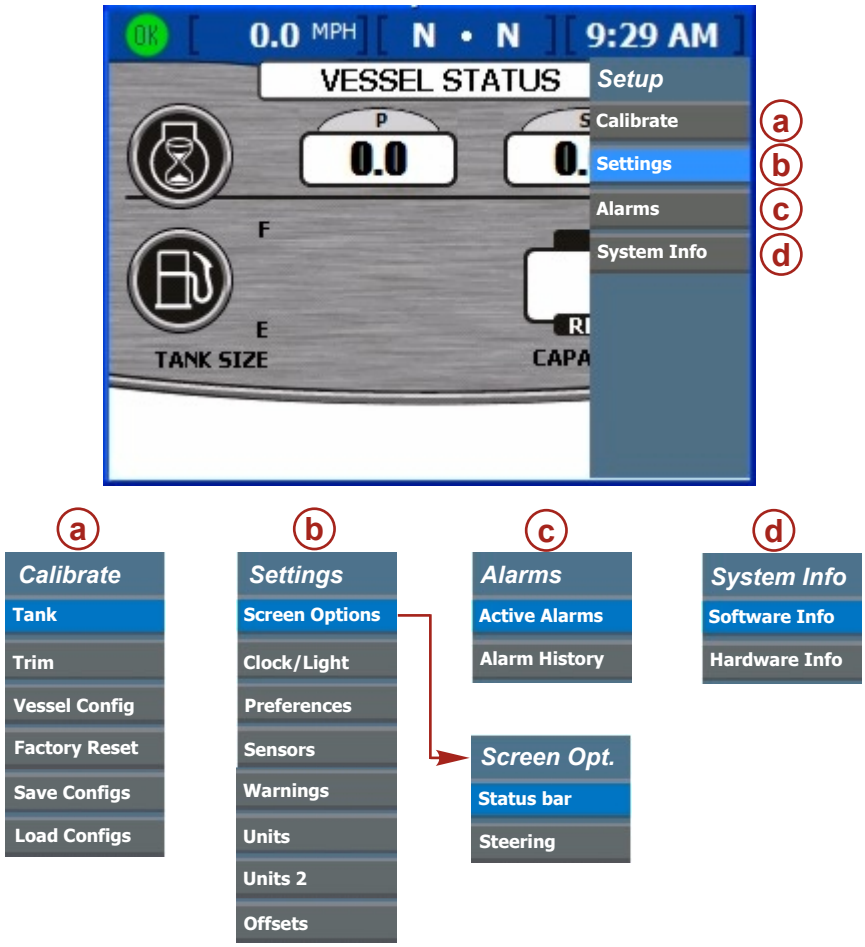
c. To see the available environment and navigation screens, press the environment and navigation button while the menu panel is open. The "Environmental" menu panel appears.



27382

Environmental and Navigation Menu Panel

d. To see the available setup screens, press the menu button while the menu panel is open. The "Setup" menu panel appears.



a - Calibration menu
b - Settings menu
c - System Info menu
d - Alarms menu

3. Use the arrow trackpad to choose a menu item.
4. Press the enter button to confirm your choice.

Using Pop-Up Windows

Pop-up windows appear within screens. Pop-up windows show alarms, allow access to controls or functions specific to a screen, and allow changes to settings or calibration.

The control icon appears in the upper left corner of any screen that includes a pop-up window for access to controls and screen functions. The control icon disappears about 3 seconds after each screen is loaded. To open a pop-up window from one of these screens, press the enter button. To close any pop-up window, press the cancel button.

26876

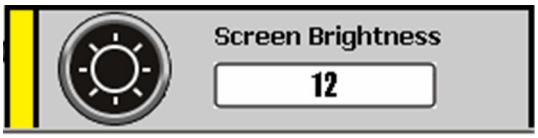
Control icon

Alarms and Faults

Some alarms and faults display pop-up windows to notify you of a condition requiring your attention. Refer to **Section 8 - Alarms** for more information about alarms and fault codes. To close a pop-up window displaying alarm or fault information, press the cancel button. You can review alarm information in two ways:

1. Press the brightness/alarm button to see active alarms and faults in a pop-up window.
2. Review the alarm information in the "Setup" menu.
   a. Press the menu button until the "Setup" menu appears.
   b. Use the down arrow button to select "Alarms".
   c. Press the enter button to open the "Alarms" menu.
   d. Use the down arrow button to select "Active Alarms" to review current alarm information, or select "Alarm History" to review all alarms recorded since the last factory reset.
   e. Press the enter button to open the alarm screen you chose.
   f. Press the cancel button to close the pop-up window when you finish reviewing the alarms.

Screen Brightness



26950

Screen brightness pop-up window

The brightness pop-up window controls the brightness of the screen on a scale of 0 to 15. To adjust screen brightness, use the following steps:

1. Press the brightness/alarm button. The "Screen Brightness" pop-up window appears.
2. Use the right or left arrow button to adjust screen brightness. The right arrow increases brightness. The left arrow decreases brightness.
3. Press the enter button to save the selected screen brightness.

Notes:

Section 4 - Propulsion

Table of Contents

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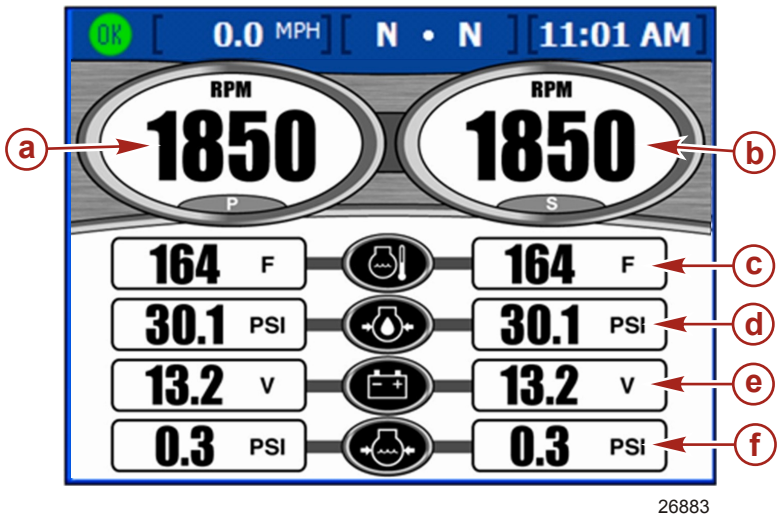
Using Propulsion Screens

The propulsion screens display information about boat propulsion systems such as fuel, speed, and trim. Screens available from the propulsion menu vary according to the engine type, but may include the following:

- Engine Status
- Performance and Fuel
- Peak Performance
- Trim
- Speed
- Steering
- Troll
- Cruise Control
- Smart Tow
- Demand and Load
- Transmission
- Intake

Viewing Engine Status

The engine status screen shows basic operating information for up to three engines. The information displayed differs for each engine type.



26883

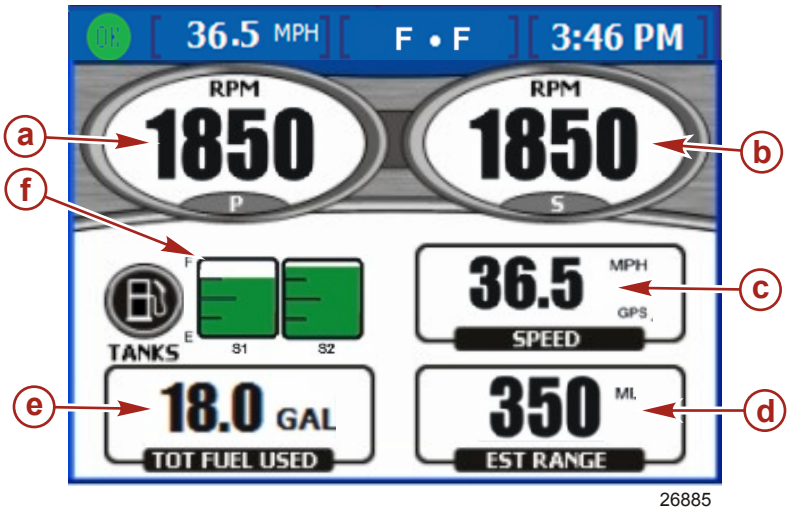
a - Port engine RPM
b - Starboard engine RPM
c - Engine temperature
d - Oil pressure
e - Battery voltage
f - Water pressure

- RPM is displayed for up to three gas engines or two diesel engines.
- Speed is displayed using pitot, paddle, or GPS sensor information.
- Diesel engines will display fuel flow instead of water pressure.
- Estimated range is determined using the total fuel flow for all engines and the current rate at which the engines are consuming fuel.

- Total fuel used is the amount of fuel used from all fuel tanks and all engines.

Viewing Performance and Fuel

The performance and fuel screen shows basic operating information for up to four engines.

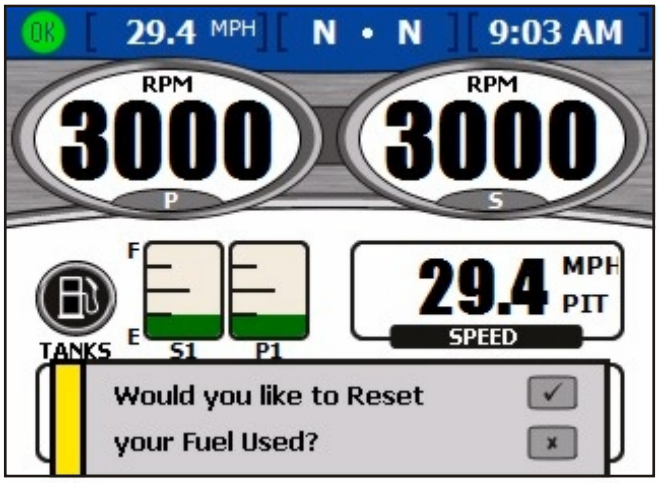


a - Port engine RPM
b - Starboard engine RPM
c - Boat speed
d - Estimated range
e - Total fuel used
f - Fuel tank status

- RPM is displayed for up to three gas engines or two diesel engines.
- Speed is displayed using pitot, paddle, or GPS sensor information.
- Estimated range is determined using the total fuel flow for all engines and the current rate at which the engines are consuming fuel.
- Total fuel used is the amount of fuel used from all fuel tanks and all engines.
- The fuel tank status icons display the amount and type of fuel in each tanks, as well as the location of each tank.
- The fuel tank color will change from green to red if the tank is below the critical level. Refer to **Section 7 - Settings** for critical fuel level adjustment.

RESETTING TOTAL FUEL USED

1. Press the enter button while on this screen to access the Total Fuel Used pop-up screen. The pop-up will ask you "Would you like to Reset your Fuel Used?".



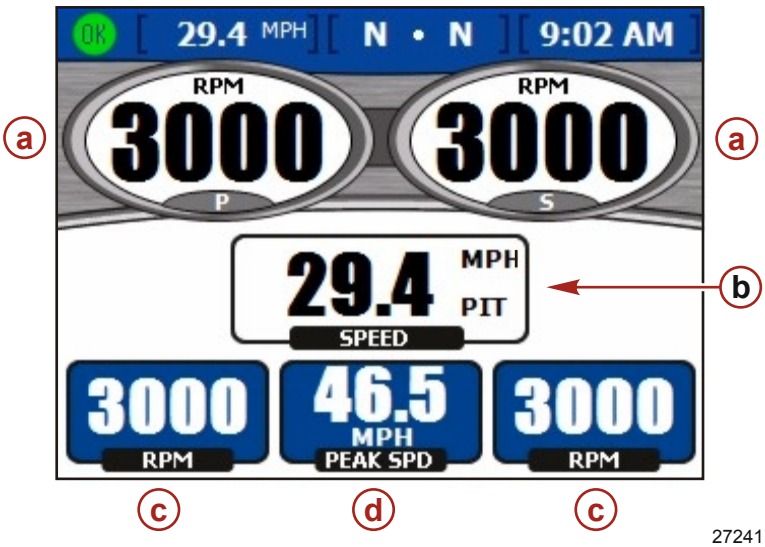
27265

Fuel used pop-up screen

2. Press the enter button to reset the total fuel used or the escape button to cancel.

Viewing Peak Performance

The peak performance screen shows current speed and RPM, as well as the highest speed and associated engine RPM recorded since the last reset.



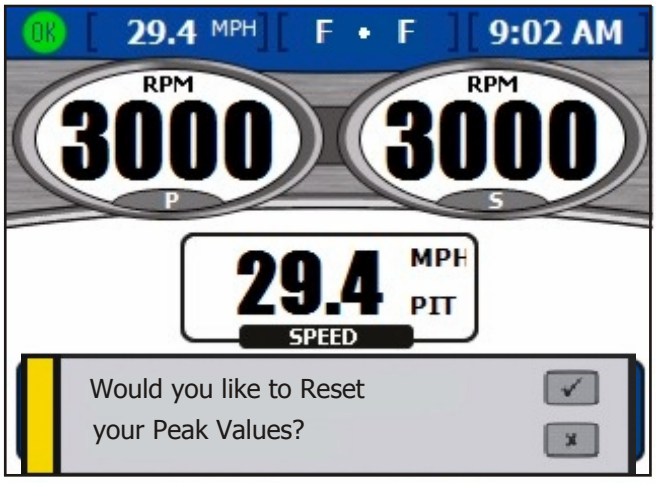
27241

a - Actual engine RPM
b - Actual boat speed
c - Peak engine RPM
d - Peak boat speed

- RPM is displayed for up to three gas engines or two diesel engines.
- Speed is displayed using pitot, paddle, or GPS sensor information.
- Peak speed is the highest speed recorded since the last reset of peak values.
- Peak engine RPM is the engine RPM associated with the highest speed since the last reset of peak values. RPM at peak speed is displayed for up to three engines.

RESETTING PEAK VALUES

1. Press the enter button while on this screen to access the peak values pop-up screen. The pop-up will ask you "Would you like to Reset your Peak Values?".



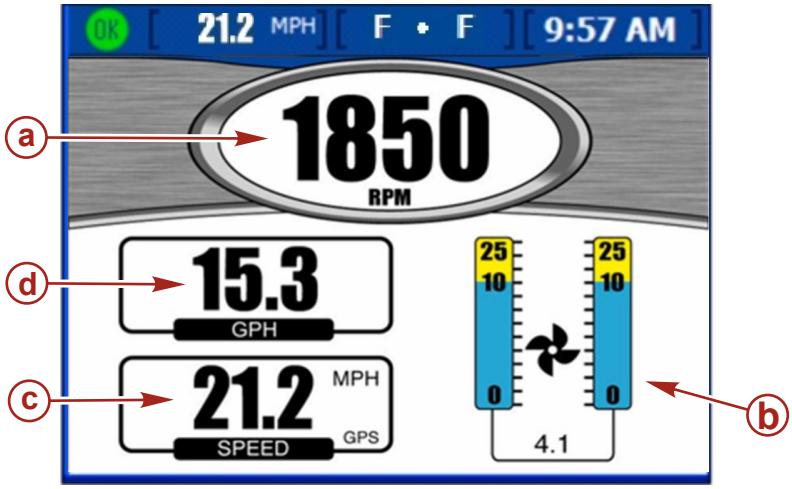
27243

Peak values pop-up screen

2. Press the enter button to reset the peak values or the escape button to cancel.

Viewing Trim Position

The trim screen shows current and peak operating information.



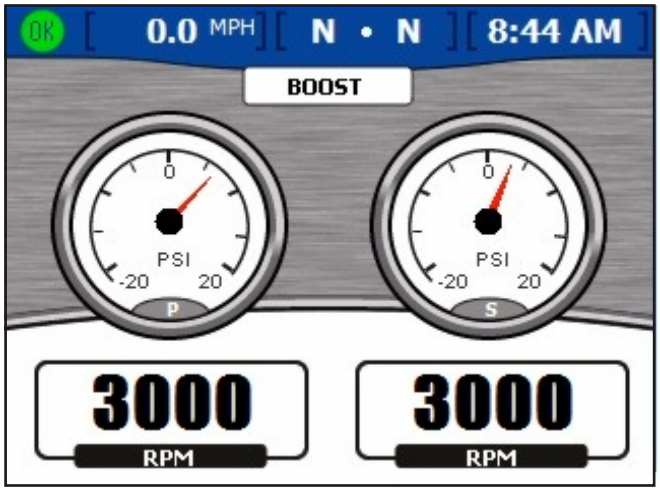
26937

a - Engine RPM
b - Current trim level
c - Speed (in this example in miles per hour as reported by a connected GPS unit)
d - Fuel flow rate

- RPM is displayed for up to three gas engines or two diesel engines.
- The trim level is 0 when trimmed all the way down, 10 when trimmed to maximum safe operating position, and 25 when in the trailer position.

Viewing Boost Pressure (optional)

The "BOOST" screen displays boost pressure and engine RPM.

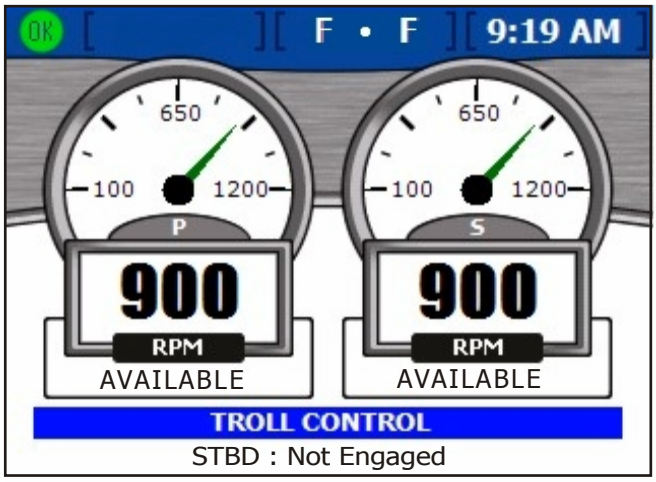


27247

- RPM and boost is displayed for up to three gas engines or two diesel engines.
- On a single engine display, speed is displayed using pitot, paddle, or GPS sensor information.

Using Troll Control

The "TROLL CONTROL" screen allows you to maintain trolling speed without using the throttle. Minimum and maximum trolling speeds depend on your engine type. Troll control is automatically cancelled if you move the throttle or shift into neutral gear. To use troll control, the engine must be in gear and at idle.

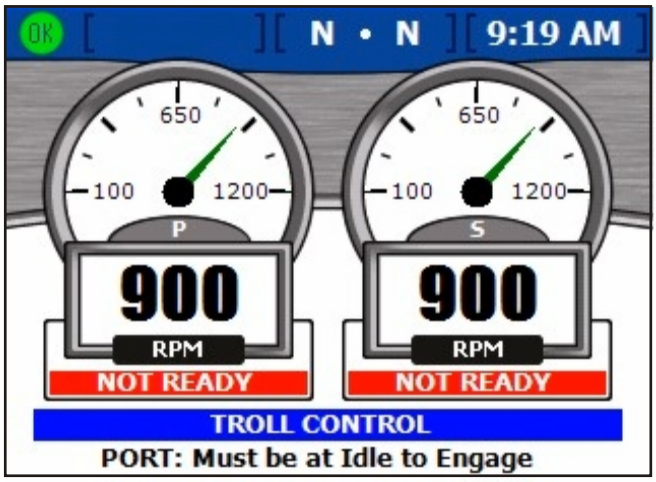


27741

SETTING TROLL CONTROL

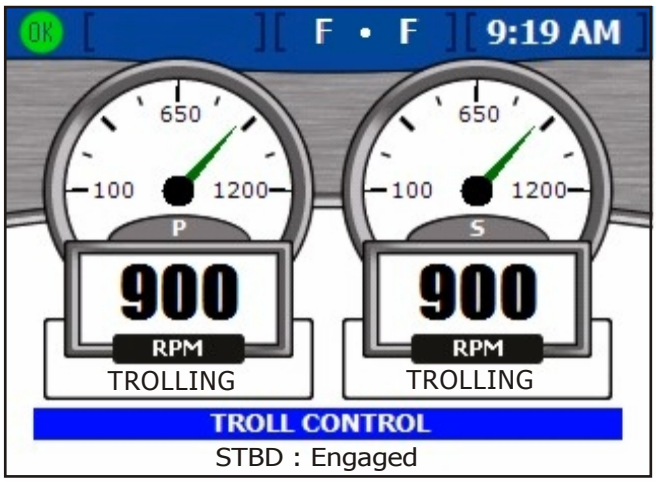
IMPORTANT: Do not leave the helm while using troll control.

1. The engines must be running and in gear to activate troll control. The screen will show the engine as "NOT READY" in a red box below the engine RPM if an engine is not in gear and running.



27739

2. With the engine running at idle, shift into forward or reverse gear. The display screen below RPM will change to "AVAILABLE". This lets the operator know the troll control feature is now available.
3. Press the enter button to edit the troll control speed.
4. For multiple engines, use the up and down arrow buttons to select which engines to control.
5. To activate the troll control, press the left or right arrow button and the engine will troll at the displayed speed. The display screen below RPM will change from "AVAILABLE" to "TROLLING".

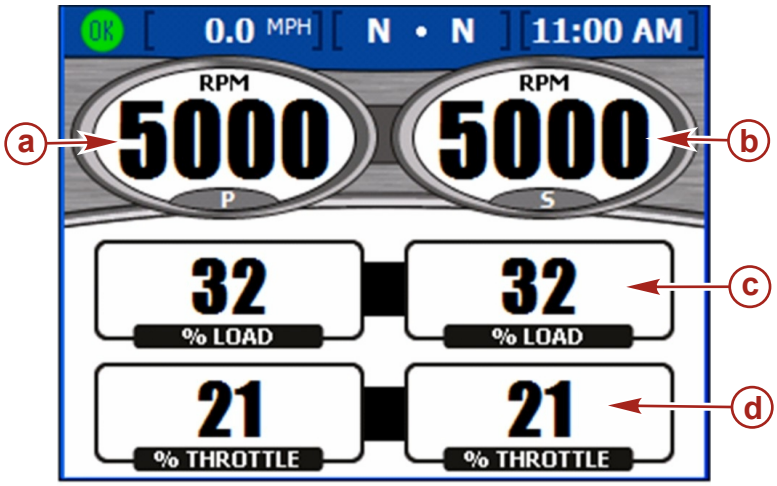


27743

6. Use the left and right arrow buttons to adjust speed up or down.

Viewing Demand and Load (Diesel only)

The demand and load screen shows current percentage of load and throttle for up to two diesel engine applications.

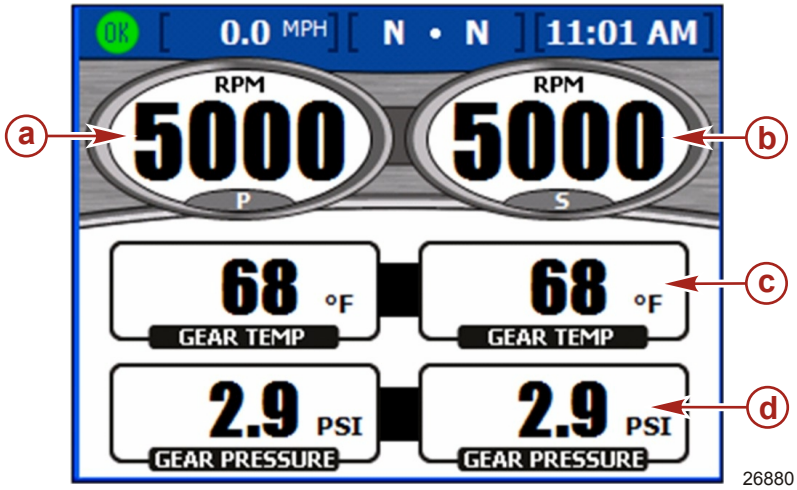


26882

a - Port engine RPM
b - Starboard engine RPM
c - Percentage of load
d - Percentage of throttle

Viewing Transmission Data (Diesel only)

The transmission screen shows gear temperature and gear pressure for up to two diesel engine applications.



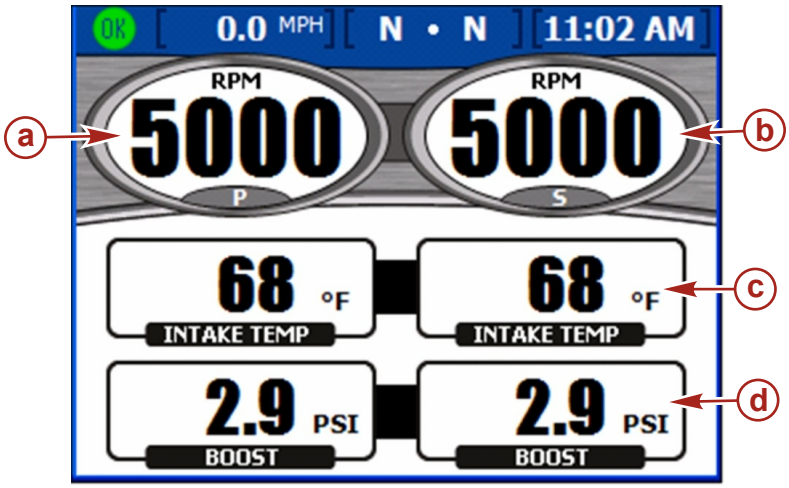
26880

a - Port engine RPM
b - Starboard engine RPM
c - Gear temperature
d - Gear pressure

- Gear temperature is displayed in degrees Fahrenheit by default.
- Gear pressure is displayed in PSI by default.

Viewing Intake Data (Diesel only)

The intake screen displays intake temperature and supercharger boost for up to two diesel engine applications.

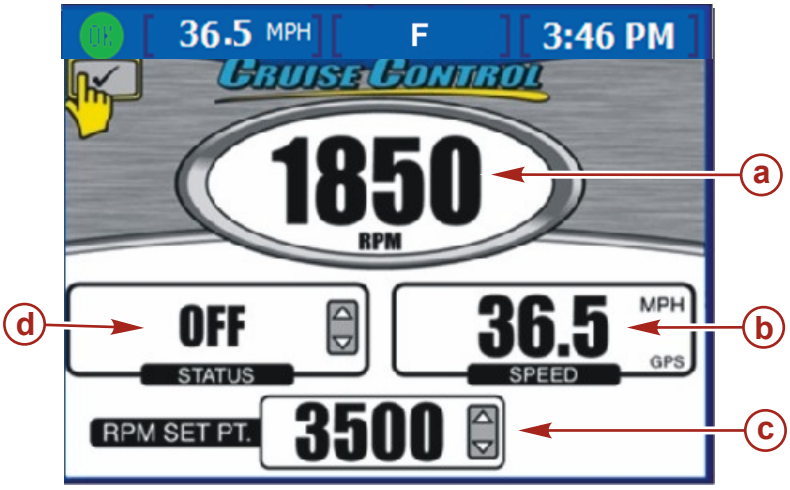


26881

a - Port engine RPM
b - Starboard engine RPM
c - Intake temperature
d - Boost

Using Cruise Control

The "Cruise Control" screen allows you to set an engine RPM level for each engine to maintain while the cruise control is engaged. Cruise control is not available on all vessels.



26875

a - Engine RPM
b - Boat speed
c - RPM set point
d - Cruise control status

- RPM is displayed for up to three engines.
- Speed is displayed using pitot, paddle, or GPS sensor information.

- The maximum RPM set point is the maximum engine RPM at wide open throttle (WOT). When cruise control is engaged, the engine will not accelerate past this RPM level.
- Cruise control status displays whether cruise control is "ENABLED" or "OFF".

SETTING THE CRUISE CONTROL

NOTE: *If the VesselView is equipped with Smart Tow, you will not have the "Cruise Control" menu.*

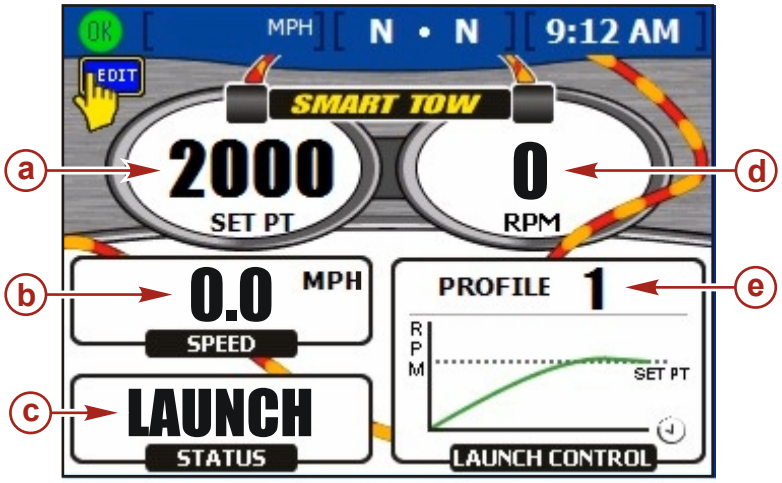
IMPORTANT: Do not leave the helm while using cruise control.

1. From the "Cruise Control" screen, press the enter button to activate cruise control.
2. Press the enter button to activate the RPM set point box.
3. Use the left and right arrow buttons to set the target RPM.
4. Press the up arrow to activate the Status box.
5. Press the left or right arrow button to set the status to "Enabled."
6. Press the enter button to exit the edit mode.
7. Move the remote control handle to the WOT position to reach the RPM set point.

NOTE: *While cruise control is enabled, adjust the RPM set point using the arrow trackpad; or by pressing the enter button to activate the RPM set point box and adjusting the RPM set point with the left and right arrow buttons.*

Using Smart Tow

The "SMART TOW" screen allows you to automatically accelerate using a preset launch profile, and to set a maximum cruising RPM for consistent tow sport performance. Five automatic launch profiles are available. Smart Tow is not available on all vessels.



27258

a - RPM set point
b - Boat speed
c - Smart Tow status box
d - Engine RPM
e - Launch profile

- The RPM set point is the target engine RPM when using Smart Tow for cruise control. The RPM set point also controls the target cruising engine RPM after launch.

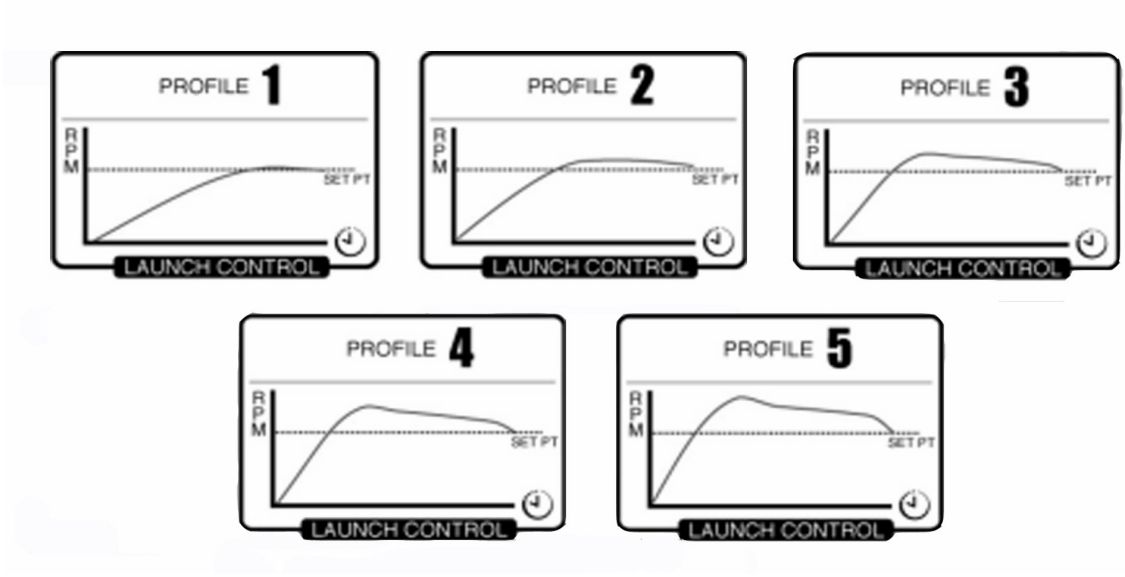
IMPORTANT: Changing the RPM set point does not affect the current launch profile selected.

- RPM "LAUNCH CONTROL" displays which profile is selected and the acceleration over time for that launch profile.
- Status displays whether launch control is enabled or off.
- Speed is displayed using pitot, paddle, or GPS sensor information.

SETTING SMART TOW LAUNCH CONTROL

IMPORTANT: Do not leave the helm while using Smart Tow launch control.

1. From the "SMART TOW" screen, press the enter button to activate the RPM set point box.
2. Use the left and right arrow buttons to set a maximum RPM.
3. Press the down arrow to activate the Smart Tow status box.
4. Press the left or right arrow button to set the status from "OFF" to "LAUNCH".
5. Press the down arrow to activate the "LAUNCH CONTROL" box.
6. Press the left or right arrow button to select the launch profile best suited to your towing application. Five profiles are available ranging from the least aggressive acceleration (Profile 1) to most aggressive acceleration (Profile 5).



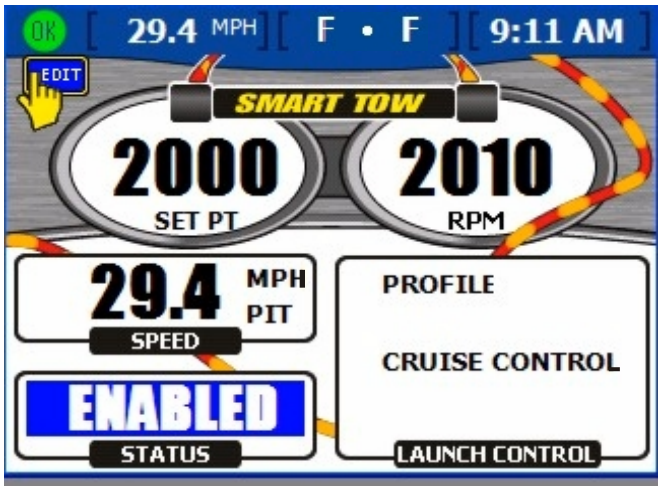
Launch profiles

7. Press the enter button to exit the edit mode.
8. Move the throttle to WOT to begin the launch. The Status box displays "ACTIVE" while the launch is in progress.

SETTING CRUISE WITH SMART TOW

1. From the "SMART TOW" screen, press the enter button to activate the RPM set point box.
2. Use the left and right arrow buttons to set a maximum RPM.
3. Press the down arrow to activate the Smart Tow status box.

4. To activate the cruise control, press the left or right arrow button to set the status to "ENABLED".



27744

Smart Tow Cruise Control Screen

5. Press the enter button to exit the edit mode.
6. Move the remote control handle to the WOT position to reach the RPM set point.

Section 5 - Vessel

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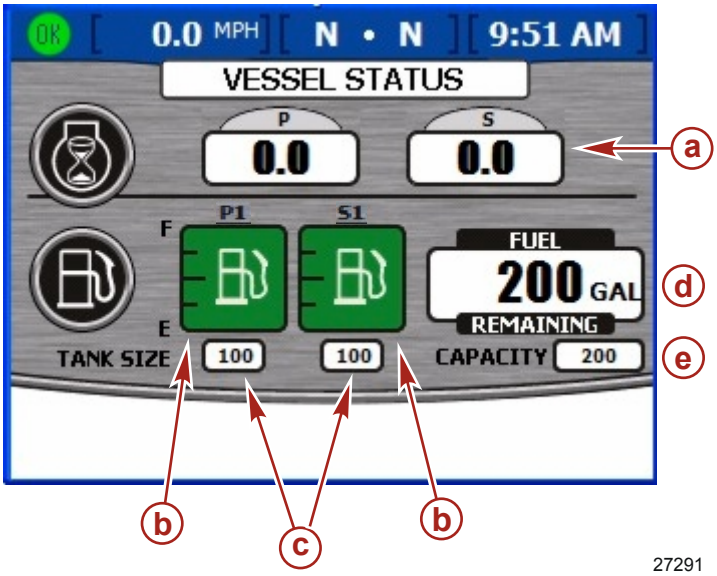
5

Using Vessel Screens

Checking Vessel Status

The "VESSEL STATUS" screen displays engine run time for up to three engines, as well as fuel information.

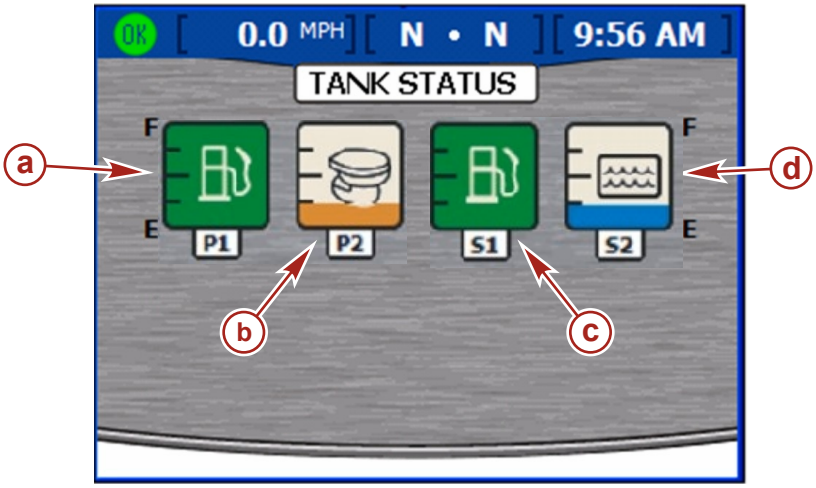


a - Engine run time
b - Fuel tank levels
c - Fuel tank size
d - Total fuel remaining
e - Total fuel capacity

- Engine run time is displayed in hours for up to three engines.
- Fuel remaining is displayed in U.S gallons by default. To change the units, refer to **Section 7 - Settings**.
- Capacity shows the total fuel capacity of all available fuel tanks.
- The fuel remaining in each tank is displayed in the fuel tank gauge icon. The fuel tank color will change from green to red if the tank is below the critical level.

Checking Tank Status

The "TANK STATUS" screen displays the contents and level of each tank, up to two tanks for each engine. To configure the tanks displayed on this screen, refer to **Section 2 - Setup and Calibration**.

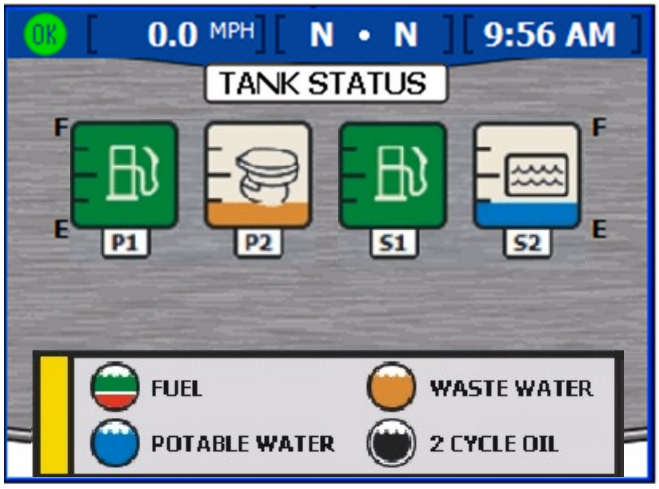


26933

a - Port tank 1 (P1); gasoline
b - Port tank 2 (P2); waste
c - Starboard tank 1 (S1); gasoline
d - Starboard tank 2 (S2); water

- Each tank gauge icon shows the type of tank: water, waste, fuel, or oil.
- Tanks are labeled by their locations. Available labels are
  - Starboard 1 (S1), starboard 2 (S2), starboard 3 (S3), starboard aft (SA), or starboard forward (SF)
  - Port 1 (P1), port 2 (P2), port 3 (P3), port aft (PA), or port forward (PF)
  - Center 1 (C1), center 2 (C2), center 3 (C3), center aft (CA), or center forward (CF)
  - The contents of each tank are color coded:
    - Blue represents water
    - Brown represents waste
    - Green represents gasoline or diesel fuel
    - Black represents oil
    - Red represents critical fuel level

NOTE: Press the enter button to see a pop-up reference screen for the colors and tank contents displayed. Press the escape button to close the pop-up screen.

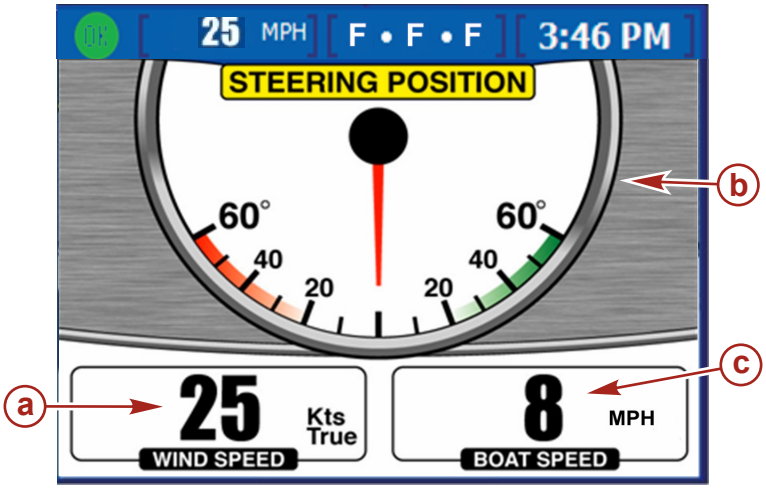


27290

Tank status pop-up window

Viewing Steering Position

The "STEERING POSITION" screen displays the current steering position in degrees. The default steering position can be adjusted 60 degrees in either direction by changing the offset. The data boxes on the bottom of the screen can be changed to display different data. Refer to **Section 7 - Settings** for more information.



26980

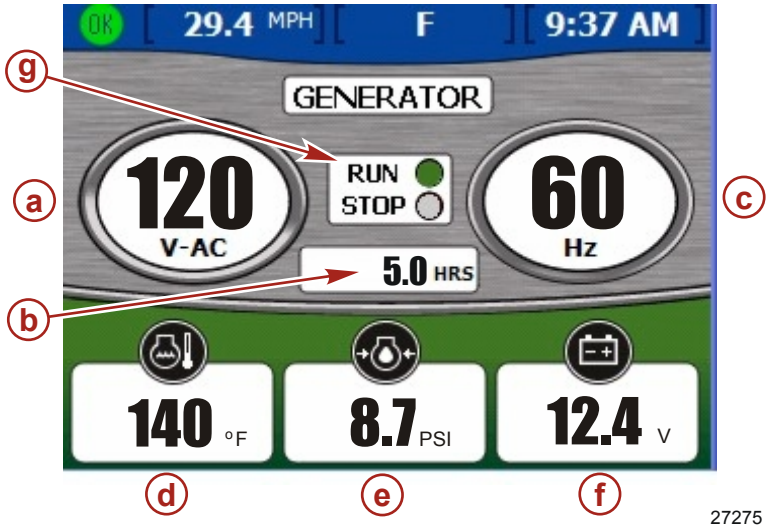
a - Wind speed
b - Current steering position
c - Boat speed

NOTE: To invert the steering position, use the Invert Steering option on the "Sensors" screen in the "Settings" menu.

- The steering position is displayed in degrees.
- Wind speed and boat speed are displayed below the steering position by default. You can choose to display boat speed, wind speed, wind direction, water depth, or gear position. Environment variables are only available for display on vessels equipped with these SmartCraft sensors.

Viewing Generator Data

VesselView allows you to view operating information for your SmartCraft-enabled Onan or Kohler generator on the "GENERATOR" screen. To start or stop the generator, use the enter button to open the Generator pop-up window.



27275

a - Generator output voltage (120V or 240V)
b - Generator run hours
c - Output frequency (Hz)
d - Generator engine temperature
e - Oil pressure
f - Generator cranking battery voltage
g - Run indicator

- Your generator manufacturer's name is automatically displayed at the top of the screen.
- If the generator is running, a green indicator appears next to "RUN." Otherwise, a red indicator appears next to "STOP."
- The run time displays the the running time of the generator to the tenth of an hour up to 999.9 hours, then in whole hours to up to 99,999 hours.
- Battery voltage and engine temperature are displayed with both Onan and Kohler generators.
- Oil pressure is available with Onan generators only.

Notes:

Section 6 - Environment and Navigation

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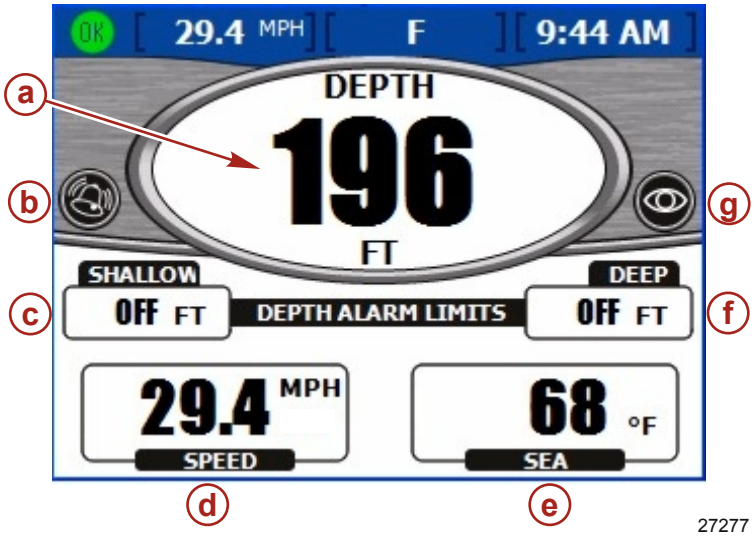
6

Using Environmental Screens

Viewing Depth and Water Temperature

The "DEPTH" screen allows you to view depth, speed, and sea temperature; and to set both deep and shallow depth alarms.



a - Actual depth
b - Horn alarm activated icon
c - Shallow alarm limit
d - Boat speed
e - Sea temperature
f - Deep alarm limit
g - Visual alarm activated icon

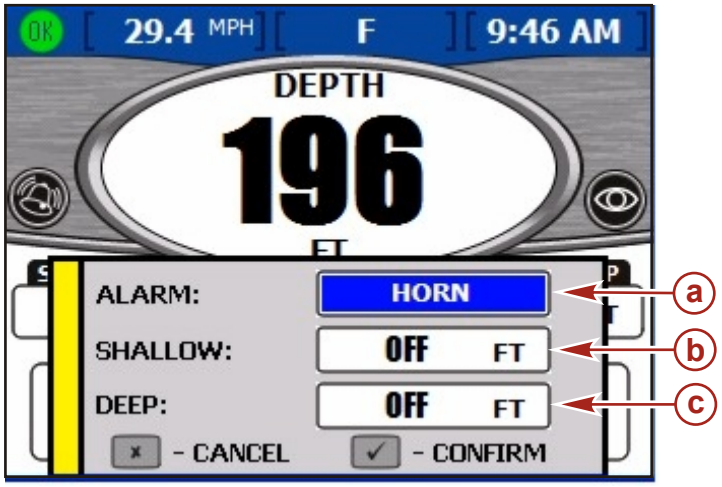
NOTE: *Shallow depth alarms sound audibly even if the "Warning Horn Off" option is selected in the "Warnings" screen of the "Settings" menu.*

- Depth is displayed in feet by default. To change the units, refer to **Section 7 - Settings**.
- The Depth screen displays an icon to indicate that audible or visual alarms are set.
- "SHALLOW" and "DEEP" alarm setting are displayed based on what has been set in the depth alarms pop-up screen.
- Speed is displayed using pitot, paddle, or GPS sensor information.
- Sea temperature is displayed in Fahrenheit by default. If the sea temperature sensor is unavailable or not connected, the temperature displayed is –40°.

SETTING DEPTH ALERTS

NOTE: *Any active alarms are available for review by pressing the brightness and alarm button.*

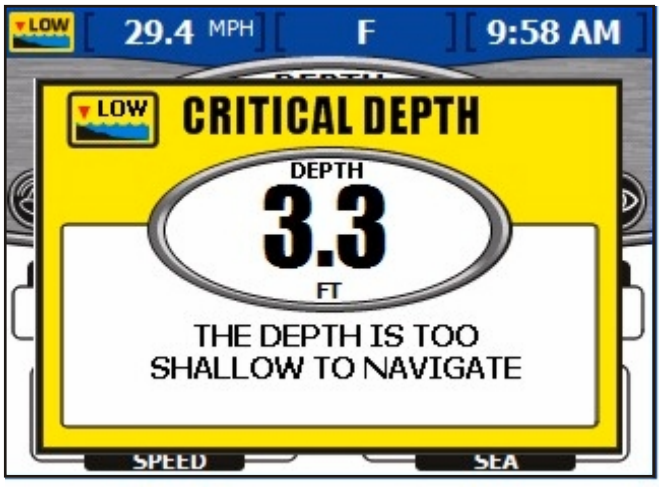
1. From the "DEPTH" screen, press the enter button. VesselView displays the depth alerts pop-up screen.



27278

a - Alarm type
b - Shallow alarm depth
c - Deep alarm depth

2. Use the left or right arrows to select what type of alert to set. The available options are:
   - "BOTH" - Both a visual alarm and audible alarm horn. There will also be a pop up window and the actual depth measurement text will change from black to red in color.
   - "NONE" - No horn or visual.
   - "VISUAL" - An alarm icon appears in the status bar and a pop-up window will appear when the alert level is reached. Also, the actual depth measurement text will change from black to red in color.
   - "HORN" - An audible alarm horn sounds and a pop-up window will appear when the alert level is reached.



27289

Critical depth pop-up window.

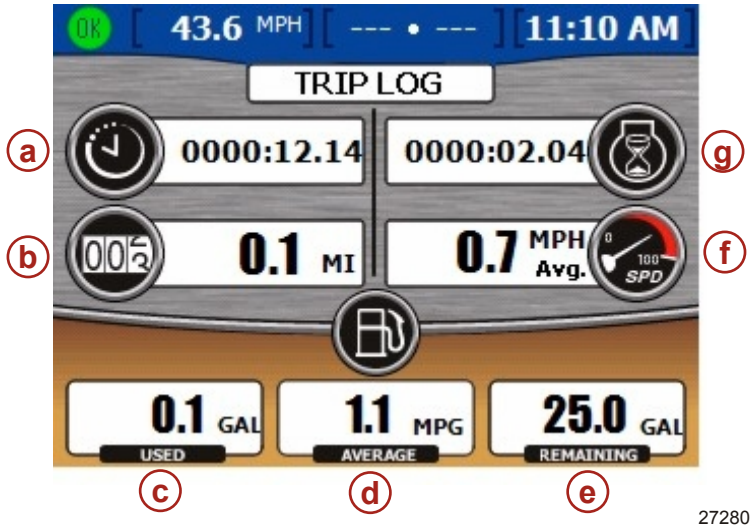
3. Press the down arrow to proceed to the "SHALLOW" box.

IMPORTANT: Depth is measured from the depth transducer location. To measure from the keel or waterline, set a depth offset in the "Offsets" screen of the "Settings" menu. Refer to Section 7 - Settings for more information.

4. Use the left or right arrow button to set the depth at which you wish to receive a shallow alert.
5. Press the down arrow to proceed to the "DEEP" box.
6. Use the left or right arrow button to set the depth at which you wish to receive a deep alert.
7. Press the enter button to confirm your selections.

Viewing Trip Log Information

The "TRIP LOG" screen allows you to view time, mileage, and average performance since the last reset.



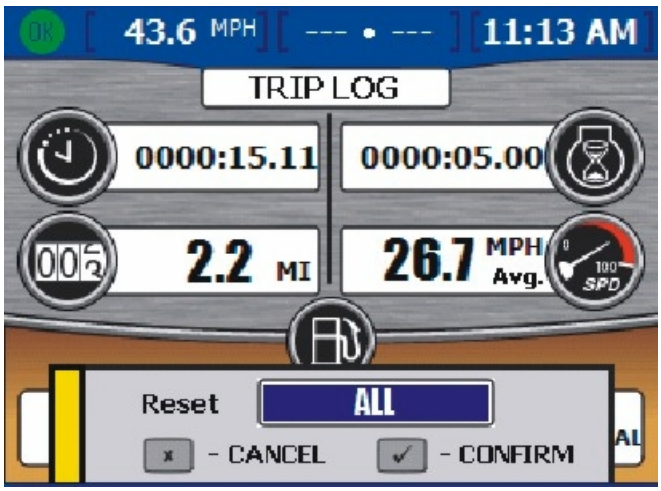
27280

a - Trip time
b - Distance traveled
c - Fuel used
d - Fuel economy
e - Fuel remaining
f - Average speed
g - Engine run time

- Trip time is the amount of time the VesselView has been operated since the last reset.
- Fuel economy displays the average fuel use since reset. By default, this is calculated in miles per gallon.
- Fuel used is the total amount of fuel used from all tanks since the last reset.
- Average speed displays the average boat speed since the last reset.
- Distance shows the distance traveled since the last reset.
- Run time shows the total hours the engines have been running since the last reset.
- Fuel remaining is the total fuel amount left in all tanks. This amount cannot be reset.

RESETTING TRIP LOG AMOUNTS

1. From the "TRIP LOG" screen, press the enter button. VesselView displays the reset pop-up screen.



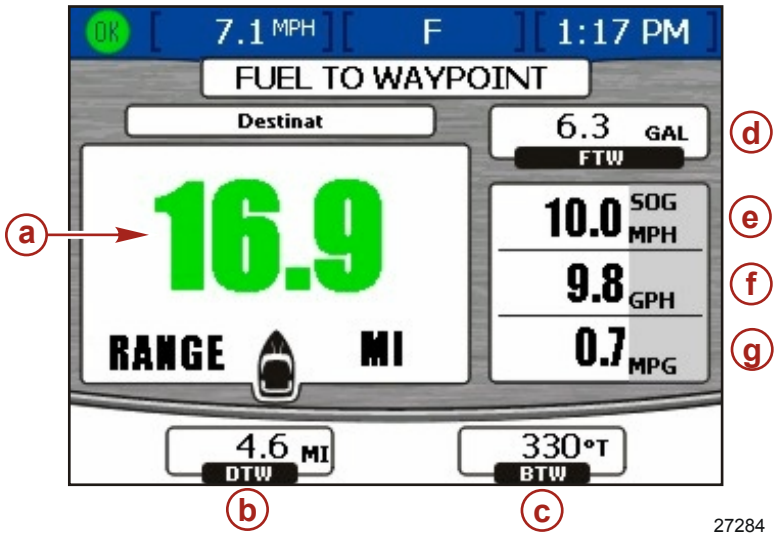
27281

Trip log reset pop-up screen

2. Use the left or right arrow button to select the value to reset. The fuel remaining value cannot be reset through this menu. Available options are:
   a. "ALL"
   b. "TRIP TIME"
   c. "FUEL ECON"
   d. "FUEL USED"
   e. "AVG SPEED"
   f. "DISTANCE"
   g. "RUN TIME"
3. Press the enter button to confirm your choice.

Viewing Fuel to Waypoint Data

The "FUEL TO WAYPOINT" screen displays dynamic travel information with a GPS unit connected. The range to waypoint box will show the estimated distance the engines will run at the current speed with the fuel available. If the distance to waypoint is less than the range to waypoint, the range distance will be green. If the distance to waypoint is more than the range to waypoint, the range distance will be red. For the most accurate data, maintain bearing to the waypoint destination.

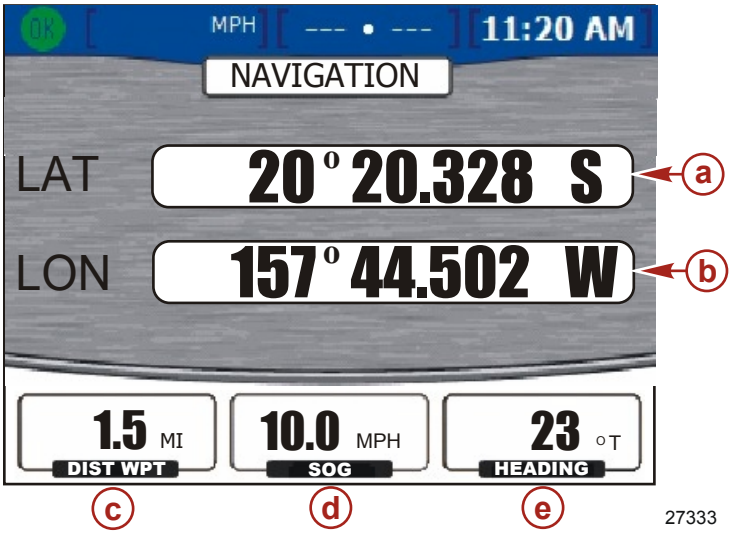


a - Range to waypoint
b - Distance to waypoint
c - Bearing to waypoint
d - Fuel to waypoint
e - Speed over ground
f - Total fuel flow rate
g - Fuel economy

- If you have set a waypoint on your GPS unit, the DTW (distance to waypoint) box shows the remaining distance.
- The SOG (speed over ground) box displays the boat's speed as calculated by the GPS unit.
- The FTW (fuel to waypoint) will display the estimated amount of fuel needed to reach the waypoint.
- The screen displays the total fuel flow rate and fuel economy.

Viewing Navigation Data

The "NAVIGATION" screen displays information from a connected GPS unit.



a - Latitude location coordinate
b - Longitude location coordinate
c - Distance to waypoint
d - Speed over ground
e - GPS heading

- Latitude and longitude are displayed based on available GPS data.
- If you have set a waypoint, the distance to waypoint box shows the remaining distance.
- The SOG (speed over ground) box displays the boat's speed as calculated by the GPS unit. Due to wind and current, this value may differ from speed though water.
- The heading is calculated by the GPS unit. Due to wind and current, this heading may differ from your course over ground.

Notes:

Section 7 - Settings

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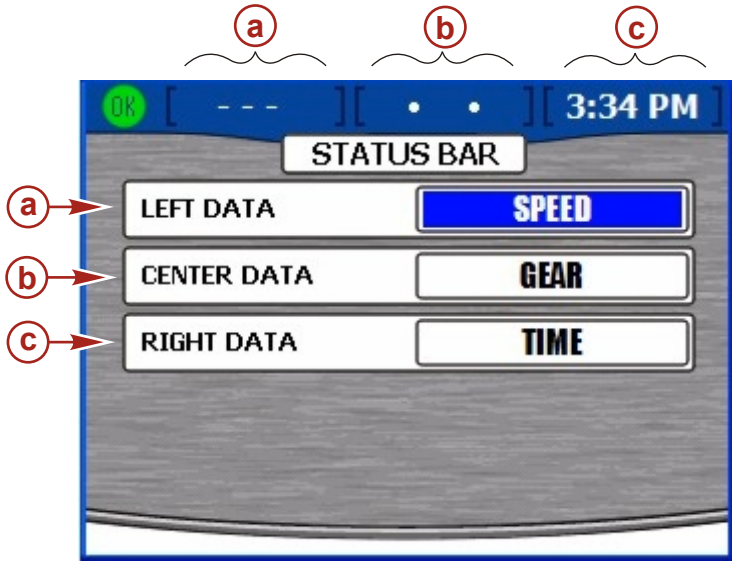
7

Screen Options

Status Bar

The "STATUS BAR" is located at the top of the screen and is separated in three different data boxes. The status bar can be arranged under the "Setup" menu by selecting "Settings", then "Screen Options", and then selecting "Status bar".



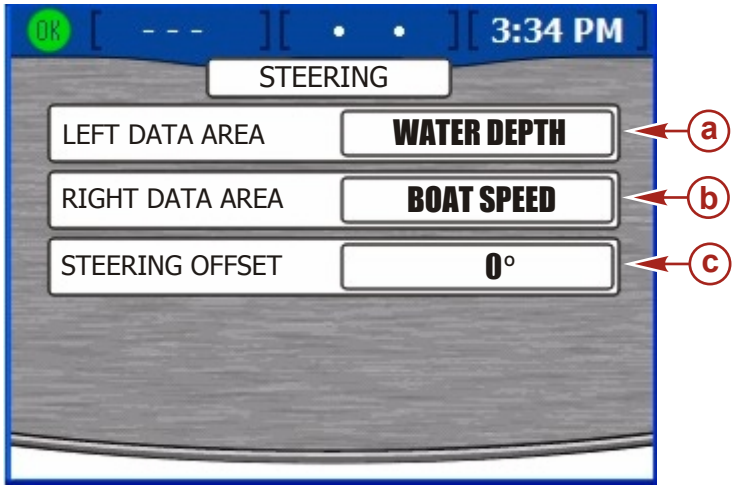
27132

a - Left data
b - Center data
c - Right data

1. Once in the "STATUS BAR" setup screen, the left data box will be highlighted in blue.
2. Use the right and left arrow buttons to scroll through the available display data. The data available to display is:
   - "SPEED" - Boat speed
   - "SPD OVR GRD" - Speed over ground (GPS)
   - "SEA TEMP" - Seawater temperature
   - "GEAR" - Shift position
   - "FUEL USAGE" - Fuel used
   - "FUEL LEVEL" - Fuel tank level
   - "DEPTH" - Water depth
   - "CRS OVR GND" - Course over ground (GPS)
   - "BRNG TO WP" - Bearing to waypoint (GPS)
   - "AIR TEMP" - Air temperature
   - "VOLTS" - Battery voltage
   - "TIME" - Clock
3. Press the down button to proceed to center data.
4. Use the right and left arrow buttons to scroll through the available display data.
5. Press the down button to proceed to right data.
6. Use the right and left arrow buttons to scroll through the available display data.
7. Once you have chosen the display data, press the enter button to save these settings.

Steering

The "STEERING" menu allows you to set the display data in the Vessel screen "STEERING POSITION". Refer to **Section 5 - Vessel**. The steering data can be arranged under the "Setup" menu by selecting "Settings", then "Screen Options", and then selecting "Steering".



27273

a - Left data area box
b - Right data area box
c - Steering offset box

1. Use the left or right arrow buttons to scroll through the options in left data area box. Choose which information to display in the box appearing on the bottom left of the steering position screen. These options are available:
   - "BOAT SPEED" - Boat speed
   - "WIND DIR" - Wind direction
   - "WATER DEPTH" - Water depth
   - "GEAR POS" - Gear position
   - "WIND SPEED" - Wind speed
2. Press the down arrow button to proceed to the right data area box.
3. Use the left or right arrow buttons to choose which information to display in the box appearing on the bottom right of the steering position screen.
4. Press the down arrow button to proceed to the steering offset box.
5. Use the left or right arrow buttons to adjust the steering position up to 60 degrees in either direction.
6. Press the enter button to save your settings.

Clock/Light

The "CLOCK/BRIGHTNESS" can be set under the "Setup" menu by selecting "Settings" and then selecting "Clock/Light".

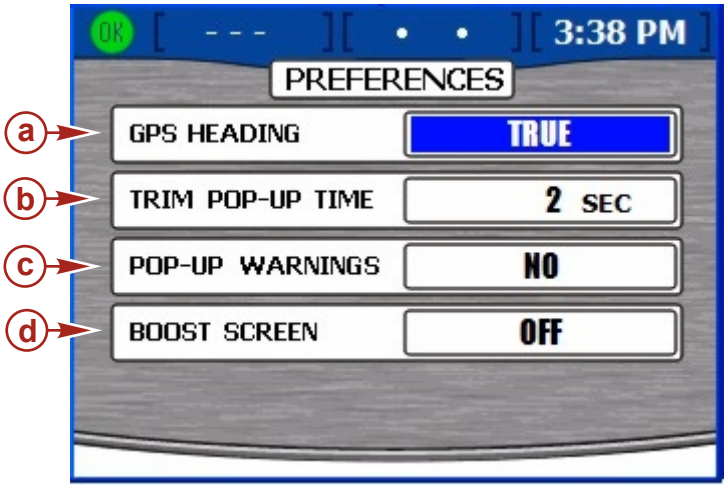
27135

a - Hours
b - Minutes
c - 12/24 Hour Display
d - Brightness

1. In the "CLOCK/BRIGHTNESS" screen, the hours will be highlighted in blue.
2. Use the right and left arrow buttons to select the hour of the day based on a 24 hour clock even if you use a 12 hour clock display.
3. Press the down arrow button to proceed to minutes.
4. Use the right and left arrow buttons to select minutes after the hour.
5. Press the down arrow button to proceed to 12/24 hour display.
6. Use the right and left arrow buttons to choose between 12 and 24 hours clock display.
7. Press the down arrow button to proceed to brightness.
8. Use the right and left arrow buttons to adjust screen brightness. The right arrow increases brightness and the left arrow decreases brightness.
9. Once you have finished adjusting your settings, press the enter button to save these settings.

Preferences

The "PREFERENCES" menu allows you to set the GPS heading, trim pop-up time, pop-up warnings, and boost screen. Preferences can be set under the "Setup" menu by selecting "Settings" and then selecting "Preferences".



27140

a - GPS heading
b - Trim pop-up time
c - Pop-up warnings
d - Boost screen

1. In the "PREFERENCES" screen, the GPS heading box will be highlighted in blue.
2. Use the left and right arrow buttons to select between "TRUE" or "MAGNETIC".
3. Press the down arrow button to proceed to trim pop-up time.
4. Use the left and right arrow buttons to select anywhere from 0 to 60 seconds. This will set the length of time you want the trim pop-up window to be displayed. Setting the pop-up time to 0 seconds will turn off the trim pop-up.
5. Press the down arrow button to proceed to pop-up warnings.
6. Use the left and right arrow buttons to select "YES" or "NO". If you choose "YES", an alarm message pop-up screen will appear if an alarm is activated.

NOTE: *Trim pop-up is separate from the other pop-up warnings.*

7. Press the down arrow button to proceed to boost screen.
8. Use the left and right arrow buttons to turn the screen "ON" or "OFF". If you choose "ON", a boost screen will be added in the propulsion menu. This screen will only display data on engines equipped with a supercharger.
9. Once you have finished adjusting your preferences, press the enter button to save these settings. The VesselView may restart depending on your selections.

Sensors

The "SENSORS" menu allows you to set the pitot sensor, pitot multiplier, paddle frequency, transition speed, and steering. Under the "Setup" menu, select "Settings" and then "Sensors" to set the sensor values.

27316

a - Pitot sensor
b - Pitot multiplier
c - Paddle frequency
d - Transition speed
e - Invert steering

1. In the "SENSORS" screen, the pitot sensor box will be highlighted in blue.
2. Use the left and right arrow buttons to select between "100PSI" and "200PSI".

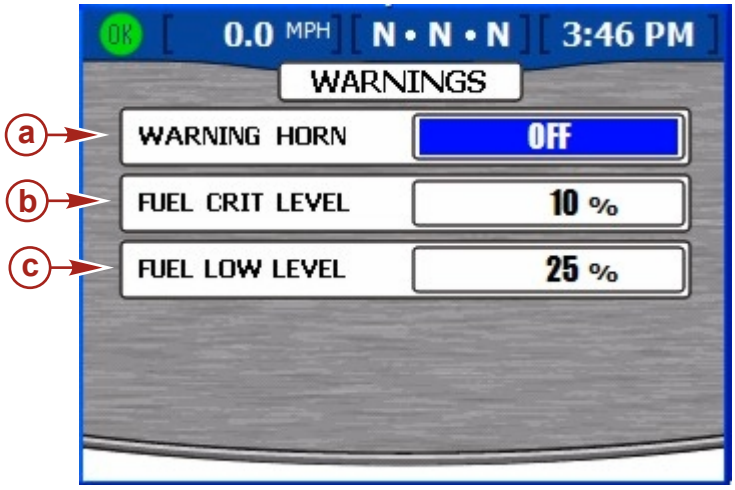
NOTE: *The standard speed input on Mercury production engines is 100PSI. Certain high performance applications may require a 200PSI input.*

3. Press the down arrow button to proceed to pitot multiplier.
4. The pitot multiplier will use 1.00 as a default setting and can be increased or decreased to correct speed display readings that read too high or too low. For a low speed reading, increase the pitot multiplier by pressing the right arrow button. For a high speed reading, decrease the pitot multiplier by pressing the left arrow button.
5. Press the down arrow to proceed to paddle frequency.
6. Frequency can be changed to match the requirements of different sensors. The frequency of the paddle wheel speed sensor provided by Mercury Marine is 4.9 Hz per mile or 5.7 HZ per knot. Press the left or right arrow button to decrease or increase the frequency.
7. Press the down arrow button to proceed to transition speed.
8. Transition speed is the boat speed at which the VesselView stops looking at the paddle wheel and starts looking at the pitot or GPS, if so equipped. The default setting is 25.0 MPH and can be set as low as 5.0 MPH. Press the left or right arrow button to decrease or increase the transition speed.
9. Press the down arrow button to proceed to invert steering.

10. Invert steering is used to display the rudder angle position in the opposite direction from default. The signal can be inverted to display the steering angle according to personal preference. Use the left and right arrow buttons to choose "YES" or "NO" to invert steering.
11. Once you have finished adjusting your sensors, press the enter button to save these settings.

Warnings

The "WARNINGS" menu option allows you to turn the warning horn on or off, and to adjust the fuel level alarm. Configure the warnings under the "Setup" menu by selecting "Settings" and then selecting "Warnings".



27143

a - Warning horn
b - Fuel critical level
c - Fuel low level

1. In the "WARNINGS" screen, the warning horn box will be highlighted in blue.
2. The VesselView warning horn can be turned "ON" or "OFF". By selecting "OFF", all engine alarms will be heard through the key switch harness warning horn. By selecting "ON", all alarms will be heard through the key switch harness horn and the VesselView horn. For warning horn details, refer to **Section 8 - Alarms.**
3. Use the left and right arrow buttons to select either "ON" or "OFF".
4. Press the down arrow button to proceed to fuel critical level.
5. The fuel critical level default setting is 10% and can be increased by pressing the right arrow button.

NOTE: *The fuel critical level cannot be higher than the fuel low level or lower than 10%.*

6. Press the down arrow button to proceed to fuel low level.
7. The fuel low level default setting is 25% and can be increased or decreased by using the right and left arrow buttons. The highest you may set the fuel low level is 50%.

NOTE: *The fuel low level cannot be lower than the fuel critical level.*

8. Once you have finished adjusting your warnings, press the enter button to save these settings.

Units

The "UNITS" menu option allow you to set units of measure for speed, depth, distance, temperature, and pressure. The units of measure can be changed under the "Setup" menu by selecting "Settings" and then selecting "Units".

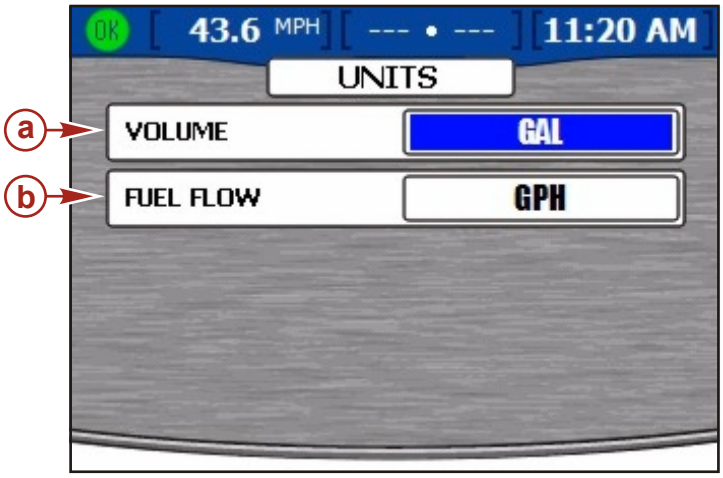
27317

a - Speed
b - Depth
c - Distance
d - Temperature
e - Pressure

1. In the "UNITS" screen, the speed box will be highlighted in blue.
2. Use the left and right arrow buttons to select speed units of "MPH", "KMH", or "Knots".
3. Press the down arrow button to proceed to depth.
4. Use the left and right arrow buttons to select depth units of "FT", "FTM", or "Met".
5. Press the down arrow button to proceed to distance.
6. Use the left and right arrow buttons to select distance units of "Mil", "KM", or "NM".
7. Press the down arrow button to proceed to temperature.
8. Use the left and right arrow buttons to select temperature units of "F" or "C".
9. Press the down arrow button to proceed to pressure.
10. Use the left and right arrow buttons to select pressure units of "PSI", "BAR", or "KPA".
11. Once you have finished selecting your units, press the enter button to save these settings.

Units 2

The "Units 2" menu option allow you to set units of measure for volume and fuel flow. The units of measure can be changed under the "Setup" menu by selecting "Settings" and then selecting "Units 2".



27319

a - Volume
b - Fuel Flow

1. In the "UNITS" screen, the volume box will be highlighted in blue.
2. Use the left and right arrow buttons to select volume units of "GAL", "LIT", or "IGL".
3. Press the down arrow button to proceed to fuel flow.
4. Use the left and right arrow buttons to select fuel flow units of "GPH", "LPH", "MPG", "KPL", or "NMPG".
5. Once you have finished selecting your units, press the enter button to save these settings.

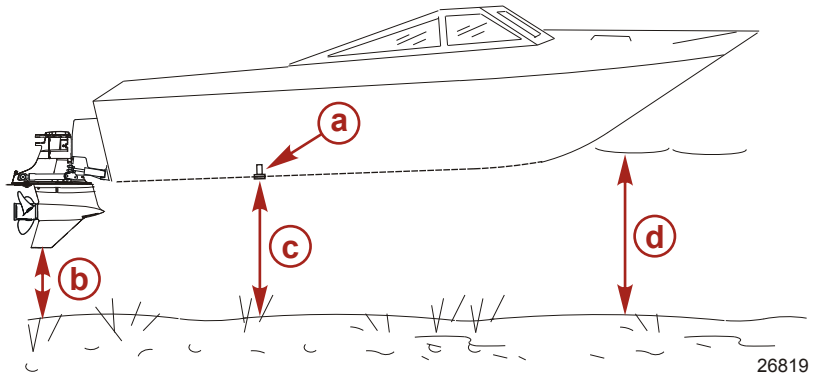
Offsets

The "OFFSETS" menu allows you to compensate for inaccuracies in depth, tank, and sea temp. The offsets can be changed under the "Setup" menu by selecting "Settings" and then selecting "Offsets".

27318

a - Depth offset
b - Tank offset
c - Sea temp offset

1. In the "OFFSETS" screen, the depth offset box will be highlighted in blue.
2. The depth offset default setting is 0.0 ft. Use the left and right arrow buttons to add or subtract depth offset. To set an offset below the transducer, subtract from the depth offset. To set an offset above the transducer, add to the depth offset. Refer to the picture below.



26819

a - Depth transducer
b - To set an offset below the transducer, subtract the depth offset.
c - No offset. Distance from depth transducer to bottom.
d - To set an offset above the transducer, add to the depth offset.

3. After you have selected the correct depth offset, press the down arrow button to proceed to tank offset.
4. The tank offset default setting is 0.0%. Use the left and right arrow buttons to add or subtract tank offset. If the fuel tank does not read "0" when empty, add tank offset until it equals the incorrect amount shown left in the tank. This should change the tank level screen so it reads "0".

NOTE: *The fuel tank offset can only be a positive offset.*

5. After you have selected the correct tank offset, press the down arrow button to proceed to sea temp offset.
6. The sea temp default setting is 0 degrees. Take the actual seawater temp and subtract the displayed sea temp. Then either add or subtract the difference in temp in the sea temp offset box using the right and left arrow buttons.
7. Once you have finished selecting the offsets, press the enter button to save the settings.

Notes:

Section 8 - Alarms

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VesselView Warning Horn Strategy

The VesselView is equipped with its own warning horn on the VesselView harness. This horn may sound alarms for engine faults, low water depth, or low tank level. The VesselView warning horn can be turned on or off in the "Warnings" screen of the "Settings" menu. Refer to **Section 7 - Settings.**

All engine alarms will be heard through the engine key switch harness horn regardless of the VesselView warning horn setting. From the factory, the VesselView horn will be turned off. If the horn is turned on in the "Warnings" screen of the "Settings" menu, engine alarms will also be heard through the VesselView horn. The VesselView horn will sound a solid tone for all faults and the engine warning horn will sound its specific warning tone. Check the engine owners manual for possible warning horns for your engine.

NOTE: *The warning horn strategy of the VesselView may not be the same horn strategy as the engine.*

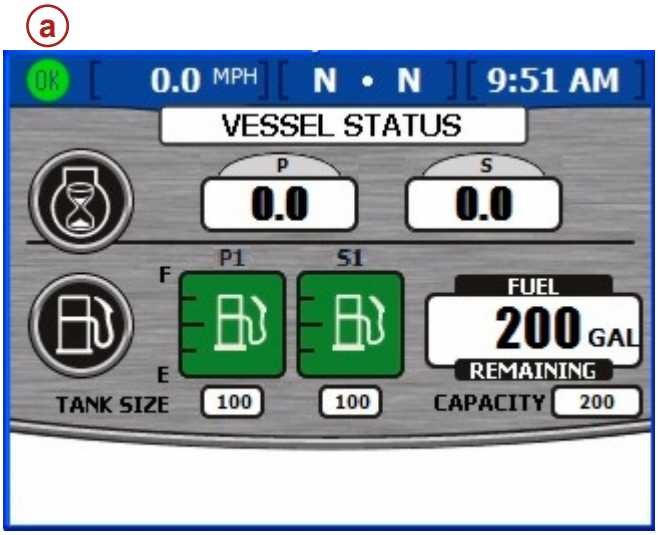
If the warning horn is turned on in the "Settings" menu and you are experiencing a VesselView alarm, press the cancel or enter button to acknowledge the fault and turn off the audible alarm.

The low water depth alarm is set in the "Depth screen of the "Environment and Navigation" menu. This menu allows you to turn the horn on or off. Low water depth alarms sound audibly even if the warning horn is turned off in the "Warnings" screen of the "Settings" menu.

The low tank level alarm is not able to be turned off. The tank level at which the alarm will sound can be adjusted down to 10% in the "Warnings" screen of the "Settings" menu. Refer to **Section 7 - Settings.**

Active Alarms

The active alarms screen displays all active alarms and warnings. The VesselView will alert you of any faults or warnings with an icon on the left side of the status bar. A green icon with the word "OK" inside will let the operator know all systems are operating normally.



27171

a - Fault status icon

Fault Icons

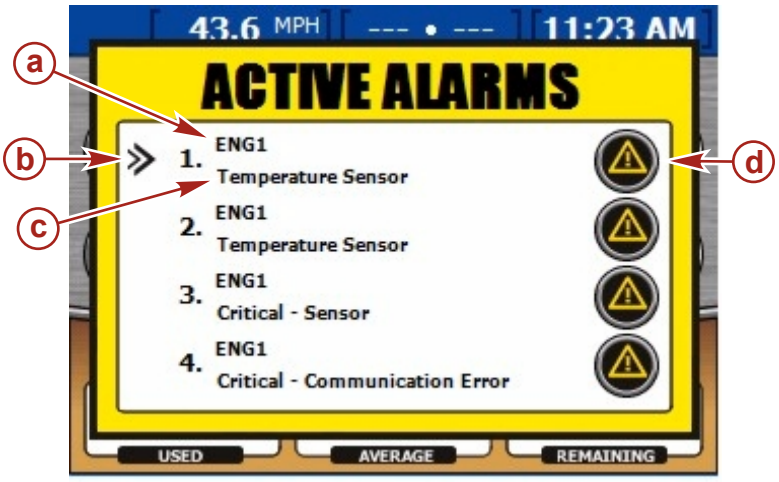
Icon or Message	Icon Description	Warning Description
 26889	Blue "OK" inside a green circle.	All systems are operating normally.
 26890	Yellow "!" on a black background in a yellow triangle.	Warning - A fault has occurred.
 26891	White "!" inside a red triangle.	Alarm - A fault has occurred and has activated engine guardian.
 26892	Black fuel pump on a yellow background inside a black circle.	Fuel Level Low
 26893	White fuel pump on a red background.	Fuel Level Critical.

Viewing Active Alarms

You can review active alarm information in two ways:

1. Press the brightness/alarm button to see active alarms and faults in a pop-up window.
2. Review the alarm information in the "Setup" menu.
   a. Press the menu button until the "Setup" menu appears.
   b. Use the down arrow button to select "Alarms".
   c. Press the enter button to open the "Alarms" menu.
   d. Use the down arrow button to select "Active Alarms"

The "ACTIVE ALARMS" screen will be a large yellow pop-up window that will list all active alarms.



27320

a - Engine identification
b - Arrow cursor
c - Fault short text
d - Fault icon

The "ACTIVE ALARMS" screen will display alarms on up to four engines. All alarms will be listed and numbered. Each numbered alarm will list which engine is activating the fault. Each fault will be identified as "ENG1", "ENG2", "ENG3", or "ENG4" depending on the number of engines. Follow the chart listed to identify the fault with the correct engine.

	Single Engine	Dual Engines	Triple Engines	Quad Engines
"ENG1"	Starboard	Starboard	Starboard	Starboard outside
"ENG2"	N/A	Port	Port	Port outside
"ENG3"	N/A	N/A	Center	Starboard inside
"ENG4"	N/A	N/A	N/A	Port inside

Below the engine id there will be short text to describe the fault. Details of the fault can be viewed in the "ALARM DETAILS" screen.

Viewing Alarm Details

1. To the left of the first alarm listed, there will be an arrow cursor. Use the up and down arrow buttons to move the cursor to choose an alarm.

2. When the arrow cursor is in front of the selected alarm, press the enter button to view "ALARM DETAILS".

27321

a - Fault short text
b - Fault long text
c - Action text

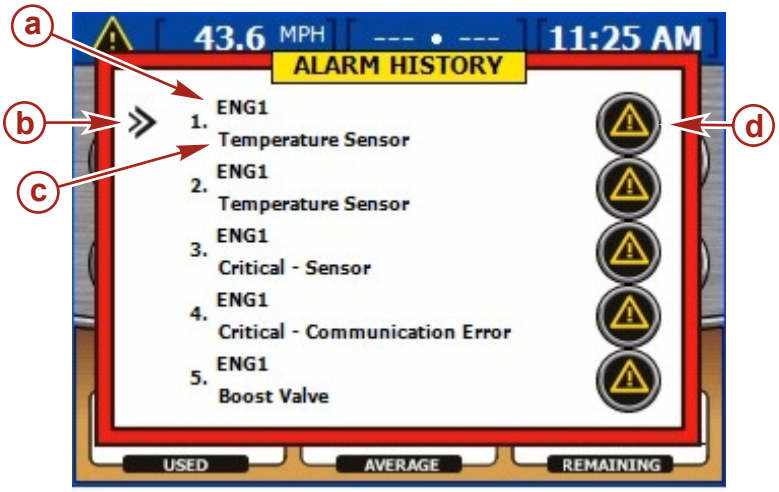
The "ALARM DETAILS" screen pop-up and will be a large yellow window that will list the details of the alarm.

- The short text to describe the alarm will be listed at the top of the pop-up screen.
- The long text explaining the the alarm will be listed below the short text
- The action text is listed at the bottom of the screen and will instruct the operator on how to handle the alarm.

For a complete list of faults refer to **VesselView Fault List**.

Alarm History

The alarm history can be viewed by entering the "Setup" menu and selecting "Alarms", then selecting "Alarm History". The "ALARM HISTORY" screen will be a large red pop-up window that will list all historic alarms.



27322

a - Engine identification
b - Arrow cursor
c - Fault short text
d - Fault icon

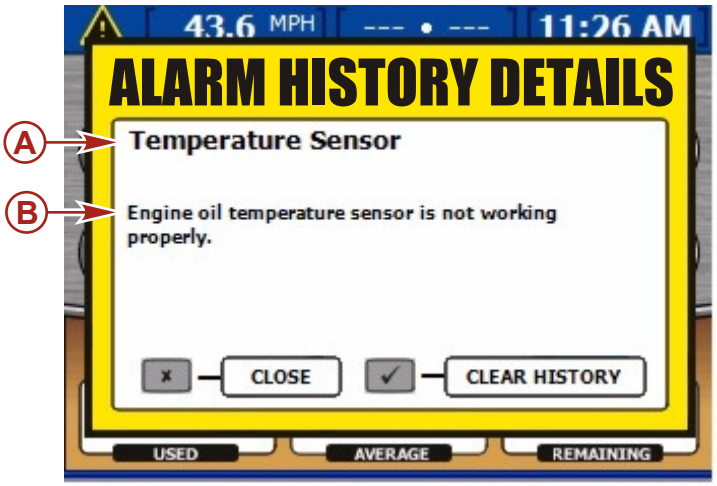
The "ALARM HISTORY" screen will display alarm history on up to four engines. All faults and alarms will be listed and numbered. Each numbered fault will list which engine activated the alarm. Each alarm will be identified as "ENG1", "ENG2", "ENG3", or "ENG4" depending on the number of engines. For a chart to identify each engine refer to **Active Alarms.**

Below the engine id there will be short text to describe the fault. Details of the fault can be viewed in the "ALARM HISTORY DETAILS" screen.

Alarm History Details

1. To the left of the first alarm listed, there will be an arrow curser. Use the up and down arrow buttons to move the cursor to choose an alarm.

2. When the arrow cursor is in front of the selected alarm, press the enter button to view "ALARM HISTORY DETAILS".



27324

a - Fault short text
b - Fault long text

The "ALARM HISTORY DETAILS" screen pop-up and will be a large yellow window that will list the details of the alarm.

- The short text explaining the the alarm will be listed on the top of the screen.
- The long text is listed below the short text and will instruct the operator on how to handle the alarm.

At the bottom of the screen you can choose to "CLOSE" the window or "CLEAR HISTORY"

1. Press the cancel button to "CLOSE" the window or the enter button to "CLEAR HISTORY".

NOTE: *Clearing the alarm history will erase all other historic alarms.*

2. By selecting "CLEAR HISTORY", a pop-up box will show up a the bottom of the screen. Press the cancel button to "CANCEL" or the enter button to "CONFIRM".

27325

3. To exit the alarms screens, press the cancel button.

VesselView Fault List

NOTE: *All of the following are determined by the calibration of the PCM. Not all faults are used on each engine. This information is accurate as of date of printing. Fault information is subject to change at any time.*

NOTE: *Unique diesel faults will be displayed on VesselView and may not match the faults on this VesselView fault list.*

Fault #	VesselView Short Text	VesselView Long Text	Action Text
1	Critical - High Voltage	Battery voltage is above normal limit. Refer to Owner's Manual for more information.	Return to port Immediately - Service engine before next use.
2	Critical - Low Voltage	Battery voltage is below normal limit. Turn off unnecessary loads, increase engine RPM and check battery conditions	Return to port Immediately - Service engine before next use.
3	Water Pressure	Water pressure in the cooling system is low. Water pump may be faulty.	Non-Critical - Service engine soon.
4	Critical - Overtemp	Compressor is overheating. Check for plugged water inlet. Water pump may be faulty.	Return to port Immediately - Service engine before next use.
5	Critical - Throttle Control	Throttle position control is not working properly.	Return to port Immediately - Service engine before next use.
6	Critical - Throttle Control	Throttle position control is not working properly.	Return to port Immediately - Service engine before next use.
9	Engine Power Limited	Engine Guardian is active. Power will be limited to prevent engine damage.	Reduce engine RPM.
10	Knock Sensor	Engine knock sensor is not working properly. Knock prevention system is not functioning. Avoid running engine at maximum power.	Non-Critical - Service engine soon.
11	Knock Sensor	Engine knock sensor is not working properly. Knock prevention system is not functioning. Avoid running engine at maximum power	Non-Critical - Service engine soon.
12	Oil Pressure	Engine oil pressure is low. Stop engine and check oil level.	Service Engine Soon - Refer to Owner's manual for service procedure.
13	Low Oil	Oil level in the 2 stroke remote oil tank is low.	Refill as soon as possible.
14	Critical - Low Oil	On-engine 2 stroke oil tank is low. Refill immediately or engine damage will result.	Limit Engine Running - Refill Oil Immediately.
15	Engine Sensor	Manifold absolute pressure sensor is not working properly. This fault will result in reduction of engine performance.	Non-Critical - Service engine soon.
16	Engine Sensor	Manifold absolute pressure sensor is not working properly. This fault will result in reduction of engine performance.	Non-Critical - Service engine soon.
17	Engine Idle	Engine is receiving too much air in the idle state, possible manifold leak.	Non-Critical - Service engine soon.
18	Critical - Oil Pump	Oil pump is not working properly.	Return to port Immediately - Service engine before next use.
19	Engine Overspeed	Excessive engine speed. Possible causes: Trim angle or improper propeller.	If condition persists - Service engine soon.
20	Overtemp	Engine is overheating. Check for plugged water inlet. Water pump may be faulty.	Non-Critical - Service Engine Soon - Refer to Owners manual for service procedure.
21	Overtemp	Engine is overheating. Check for plugged water inlet. Water pump may be faulty.	Non-Critical - Service Engine Soon - Refer to Owners manual for service procedure.

Fault #	VesselView Short Text	VesselView Long Text	Action Text
22	Warning Horn	Warning horn in boat is not operating. There will be no audible alarm in case of engine malfunction	Non-Critical - Service Engine Soon.
23	Water in Fuel	There is water in the fuel system. Continued operation may cause engine damage	Non-Critical - Service Engine Soon - Refer to Owners manual for service procedure.
24	Air Injector	Direct injector is not working properly.	Non-Critical - Service Engine Soon.
25	Air Injector	Direct injector is not working properly.	Non-Critical - Service Engine Soon.
26	Air Injector	Direct injector is not working properly.	Non-Critical - Service Engine Soon.
27	Air Injector	Direct injector is not working properly.	Non-Critical - Service Engine Soon.
28	Air Injector	Direct injector is not working properly.	Non-Critical - Service Engine Soon.
29	Air Injector	Direct injector is not working properly.	Non-Critical - Service Engine Soon.
30	Air Injector	Direct injector is not working properly.	Non-Critical - Service Engine Soon.
31	Air Injector	Direct injector is not working properly.	Non-Critical - Service Engine Soon.
32	Air Injector	Direct injector is not working properly.	Non-Critical - Service Engine Soon.
33	Air Injector	Direct injector is not working properly.	Non-Critical - Service Engine Soon.
34	Air Injector	Direct injector is not working properly.	Non-Critical - Service Engine Soon.
35	Air Injector	Direct injector is not working properly.	Non-Critical - Service Engine Soon.
36	Engine Sensor	Water pressure sensor is not working properly.	Non-Critical - Service Engine Soon.
37	Engine Sensor	Water pressure sensor is not working properly.	Non-Critical - Service Engine Soon.
38	Break-in Remaining	Engine is in break-in mode. This will increase oil consumption.	ECM will control break-in - See Owner's manual.
39	Temperature Sensor	Engine air temperature sensor is not working properly.	Non-Critical - Service Engine Soon.
40	Temperature Sensor	Engine air temperature sensor is not working properly.	Non-Critical - Service Engine Soon.
41	Temperature Sensor	Air compressor temperature sensor is not working properly.	Non-Critical - Service Engine Soon.
42	Temperature Sensor	Air compressor temperature sensor is not working properly.	Non-Critical - Service Engine Soon.
43	Ignition	Ignition coil is not working properly.	Non-Critical - Service Engine Soon.
44	Ignition	Ignition coil is not working properly.	Non-Critical - Service Engine Soon.
45	Ignition	Ignition coil is not working properly.	Non-Critical - Service Engine Soon.
46	Ignition	Ignition coil is not working properly.	Non-Critical - Service Engine Soon.
47	Ignition	Ignition coil is not working properly.	Non-Critical - Service Engine Soon.
48	Ignition	Ignition coil is not working properly.	Non-Critical - Service Engine Soon.
49	Ignition	Ignition coil is not working properly.	Non-Critical - Service Engine Soon.
50	Ignition	Ignition coil is not working properly.	Non-Critical - Service Engine Soon.
51	Ignition	Ignition coil is not working properly.	Non-Critical - Service Engine Soon.
52	Ignition	Ignition coil is not working properly.	Non-Critical - Service Engine Soon.
53	Ignition	Ignition coil is not working properly.	Non-Critical - Service Engine Soon.
54	Ignition	Ignition coil is not working properly.	Non-Critical - Service Engine Soon.
59	Fuel Injector	Fuel injector is not working properly.	Non-Critical - Service Engine Soon.
60	Fuel Injector	Fuel injector is not working properly.	Non-Critical - Service Engine Soon.
61	Fuel Injector	Fuel injector is not working properly.	Non-Critical - Service Engine Soon.

Fault #	VesselView Short Text	VesselView Long Text	Action Text
62	Fuel Injector	Fuel injector is not working properly.	Non-Critical - Service Engine Soon.
63	Fuel Injector	Fuel injector is not working properly.	Non-Critical - Service Engine Soon.
64	Fuel Injector	Fuel injector is not working properly.	Non-Critical - Service Engine Soon.
65	Fuel Injector	Fuel injector is not working properly.	Non-Critical - Service Engine Soon.
66	Fuel Injector	Fuel injector is not working properly.	Non-Critical - Service Engine Soon.
67	Fuel Injector	Fuel injector is not working properly.	Non-Critical - Service Engine Soon.
68	Fuel Injector	Fuel injector is not working properly.	Non-Critical - Service Engine Soon.
69	Fuel Injector	Fuel injector is not working properly.	Non-Critical - Service Engine Soon.
70	Fuel Injector	Fuel injector is not working properly.	Non-Critical - Service Engine Soon.
75	Fuel Sender	Fuel level sensor is not working properly.	Non-Critical - Service Engine Soon.
76	Fuel Sender	Fuel level sensor is not working properly.	Non-Critical - Service Engine Soon.
77	Engine Sensor	Engine crank/cam encoder is not working properly.	Non-Critical - Service Engine Soon.
78	Sensor	Jack plate positioning sensor is not working properly.	Non-Critical - Service Engine Soon.
79	Sensor	Jack plate positioning sensor is not working properly.	Non-Critical - Service Engine Soon.
80	Critical - Engine Voltage	Main power relay is not working properly.	Return to port Immediately - Service engine before next use.
81	Engine Voltage	Main Power Relay Backfeed	Non-Critical - Service Engine Soon.
82	Engine Sensor	Oil level sensor in the oil tank is not working properly. Check oil level before continuing engine operation.	Non-Critical - Service Engine Soon.
83	Engine Sensor	Oil level sensor in the oil tank is not working properly. Check oil level before continuing engine operation.	Non-Critical - Service Engine Soon.
84	Engine Sensor	Engine oil pressure sensor is not working properly.	Non-Critical - Service Engine Soon.
85	Engine Sensor	Engine oil pressure sensor is not working properly.	Non-Critical - Service Engine Soon.
89	Temperature Sensor	Engine oil temperature sensor is not working properly.	Non-Critical - Service Engine Soon.
90	Temperature Sensor	Engine oil temperature sensor is not working properly.	Non-Critical - Service Engine Soon.
91	Oil Temp	Engine oil is overheating. Reduce throttle. Stop engine and check engine oil level.	Non-Critical - Service Engine Soon - Refer to Owner's manual for service procedure.
92	Sensor	Paddle wheel is not working properly.	Non-Critical - Service Engine Soon.
93	Sensor	Pitot sensor is not working properly.	Non-Critical - Service Engine Soon.
94	Sensor	Non-Critical - Service Engine Soon.	Non-Critical - Service Engine Soon.
95	Engine Sensor	Coolant temperature sensor is not working properly.	Non-Critical - Service Engine Soon.
96	Engine Sensor	Coolant temperature sensor is not working properly.	Non-Critical - Service Engine Soon.
97	Sensor	Trim tab sensor is not working properly.	Non-Critical - Service Engine Soon.
98	Sensor	Trim tab sensor is not working properly.	Non-Critical - Service Engine Soon.
99	Trim Tab	Tab down controller is not working properly.	Non-Critical - Service Engine Soon.
100	Trim Tab	Tab up controller is not working properly.	Non-Critical - Service Engine Soon.

Fault #	VesselView Short Text	VesselView Long Text	Action Text
101	Critical - Communication Error	There is a communication problem with the SmartCraft control system.	Return to port Immediately - Service engine before nest use.
102	Communication Error	There is a communication problem with the SmartCraft control system.	Non-Critical - Service Engine Soon.
103	Critical - Communication Error	There is a communication problem with the SmartCraft control system.	Return to port Immediately - Service engine before next use.
104	Temperature Sensor	Sea water temperature sensor is not working properly.	Non-Critical - Service Engine Soon.
105	Temperature Sensor	Sea water temperature sensor is not working properly.	Non-Critical - Service Engine Soon.
106	Critical - Shift Actuator	Shift actuator is not working properly.	Return to port Immediately - Service engine before next use.
107	Critical - Shift Actuator	Shift actuator is not working properly.	Return to port Immediately - Service engine before next use.
108	Critical - Shift Actuator	Shift actuator is not working properly.	Return to port Immediately - Service engine before next use.
109	Shift Actuator	Shift actuator is not working properly.	Non-Critical - Service Engine Soon.
110	Shift	Shift switch is not working properly.	Non-Critical - Service Engine Soon.
111	Temperature Sensor	Coolant temperature sensor is not working properly.	Non-Critical - Service Engine Soon.
112	Temperature Sensor	Coolant temperature sensor is not working properly	Non-Critical - Service Engine Soon.
113	Sensor	Trim tab sensor is not working properly.	Non-Critical - Service Engine Soon.
114	Sensor	Trim tab sensor is not working properly.	Non-Critical - Service Engine Soon.
115	Trim Tab	Tab down control is not working properly.	Non-Critical - Service Engine Soon.
116	Trim Tab	Tab down control is not working properly.	Non-Critical - Service Engine Soon.
117	Start System	Engine may not start. The starter solenoid is not working properly.	Non-Critical - Service Engine Soon.
118	Sensor	Steering angle sensor is not working properly.	Non-Critical - Service Engine Soon.
119	Sensor	Steering angle sensor is not working properly.	Non-Critical - Service Engine Soon.
120	Engine Sensor	Throttle positioning sensor is not working properly.	Non-Critical - Service Engine Soon.
121	Engine Sensor	Throttle positioning sensor is not working properly.	Non-Critical - Service Engine Soon.
122	Engine Sensor	Throttle positioning sensor is not working properly.	Non-Critical - Service Engine Soon.
123	Engine Sensor	Throttle positioning sensor is not working properly.	Non-Critical - Service Engine Soon.
124	Engine Sensor	Throttle positioning sensor is not working properly.	Non-Critical - Service Engine Soon.
125	Engine Sensor	Throttle positioning sensor is not working properly.	Non-Critical - Service Engine Soon.
126	Engine Sensor	Throttle positioning sensor is not working properly.	Non-Critical - Service Engine Soon.
127	Engine Sensor	Throttle positioning sensor is not working properly.	Non-Critical - Service Engine Soon.
128	Engine Sensor	Throttle positioning sensor is not working properly.	Non-Critical - Service Engine Soon.

Fault #	VesselView Short Text	VesselView Long Text	Action Text
129	Engine Sensor	Throttle positioning sensor is not working properly.	Non-Critical - Service Engine Soon.
130	Engine Sensor	Throttle positioning sensor is not working properly.	Non-Critical - Service Engine Soon.
131	Engine Sensor	Throttle positioning sensor is not working properly.	Non-Critical - Service Engine Soon.
132	Critical - Engine Sensor	Crankshaft position sensor is not working properly.	Return to port Immediately - Service engine before next use.
133	Critical - Voltage	Sensor power supply voltage is low.	Return to port Immediately - Service engine before next use.
134	Engine Overspeed	Excessive engine speed. Possible causes: Trim angle or improper propeller.	Non-Critical - Service Engine Soon.
135	Engine Overspeed	Excessive engine speed. Possible causes: Trim angle or improper propeller.	Non-Critical - Service Engine Soon.
136	Boost Valve	Boost bypass valve is not working properly.	Non-Critical - Service Engine Soon.
137	Boost Valve	Boost bypass valve is not working properly.	Non-Critical - Service Engine Soon.
138	Critical - Engine Control Unit	Engine control unit is not working properly.	Return to port Immediately - Service engine before next use.
148	Shift	Shift controller is not working properly.	Non-Critical - Service Engine Soon.
149	Critical - Engine Sensor	Electronic throttle controller is not working properly.	Return to port Immediately - Service engine before next use.
150	Critical - Communication Error	There is a communication problem with the SmartCraft control system.	Return to port Immediately - Service engine before next use.
151	Critical - Fuel Pump	Fuel Pump is not working properly.	Return to port Immediately - Service engine before next use.
152	Critical - Idle Air Valve	Idle air controller is not working properly. Open throttle slightly to start engine.	Return to port Immediately - Service engine before next use.
153	Drive Lube Low	Drive lube is low. Check level and refill as needed. Continued operation may cause damage.	Non-Critical - Service Engine Soon - Refer to Owner's manual for service procedure.
154	Excessive Airflow	Mass air flow calculation is above limit.	Non-Critical - Service Engine Soon.
155	Engine Sensor	Secondary manifold pressure sensor is not working properly.	Non-Critical - Service Engine Soon.
156	Engine Sensor	Secondary manifold pressure sensor is not working properly.	Non-Critical - Service Engine Soon.
157	Engine Sensor	Secondary manifold pressure sensor is not working properly.	Non-Critical - Service Engine Soon.
158	Temperature Sensor	Port exhaust manifold coolant temperature sensor is not working properly.	Non-Critical - Service Engine Soon.
159	Temperature Sensor	Port exhaust manifold coolant temperature sensor is not working properly	Non-Critical - Service Engine Soon.
160	Critical - Manifold Temp	Port exhaust manifold temperature is too high.	Return to port Immediately - Service engine before next use.
163	Critical - Communication Error	There is a communication problem with the SmartCraft control system.	Return to port Immediately - Service engine before next use.
169	Engine Sensor	Engine oil pressure sensor is not working properly.	Non-Critical - Service Engine Soon - Refer to Owner's manual for service procedure.
170	Engine Sensor	Engine oil pressure sensor is not working properly.	Non-Critical - Service Engine Soon - Refer to Owner's manual for service procedure.

Fault #	VesselView Short Text	VesselView Long Text	Action Text
171	Engine Power Limited	Engine power is limited. May not reach desired RPM.	Non-Critical - Service Engine Soon.
172	Engine Power Limited	Engine power is limited. May not reach desired RPM.	Non-Critical - Service Engine Soon.
173	Fuel System	Fuel Pressure is high.	If condition persists Return to port Immediately - Service Engine Soon.
174	Fuel System	Fuel Pressure is low. Check fuel level.	Non-Critical - Service Engine Soon.
175	Knock System	Engine knock system is not functioning. Avoid running engine at maximum power.	Non-Critical - Service Engine Soon.
176	Shift	A shift fault has occurred	Return to port Immediately - Service engine before next use.
177	Temperature Sensor	Starboard exhaust manifold coolant temperature sensor is not working properly.	Non-Critical - Service Engine Soon.
178	Temperature Sensor	Starboard exhaust manifold coolant temperature sensor is not working properly.	Non-Critical - Service Engine Soon.
179	Critical - Manifold Temp	Starboard exhaust manifold temperature is too High.	Return to port Immediately - Service engine before next use - Refer to Owner's manual for service procedure.
180	Engine Sensor	Secondary throttle position is not working properly.	Non-Critical - Service Engine Soon.
181	Critical - Engine Sensor	Throttle Position Sensors do not agree.	Return to port Immediately - Service engine before next use.
182	Engine Sensor	Throttle positioning sensor is not working properly.	Non-Critical - Service Engine Soon.
183	Engine Sensor	Throttle positioning sensor is not working properly	Non-Critical - Service Engine Soon.
184	Trim Down	Engine may not trim down. The trim down relay is not working properly.	Non-Critical - Service Engine Soon.
185	Trim Up	Engine may not trim up. The trim up relay is not working properly.	Non-Critical - Service Engine Soon.
186	Critical - Communication Error	There is a communication problem with the SmartCraft control system.	Return to port Immediately - Service engine before next use.
187	Critical - Communication Error	There is a communication problem with the SmartCraft control system.	Return to port Immediately - Service engine before next use.
188	Critical - Communication Error	There is a communication problem with the SmartCraft control system.	Return to port Immediately - Service engine before next use.
189	Critical - Communication Error	There is a communication problem with the SmartCraft control system.	Return to port Immediately - Service engine before next use.
190	Critical - Communication Error	There is a communication problem with the SmartCraft control system.	Return to port Immediately - Service engine before next use.
191	Tank 2 Level	Level sender for tank 2 is not working properly.	Non-Critical - Service Engine Soon.
192	Tank 2 Level	Level sender for tank 2 is not working properly.	Non-Critical - Service Engine Soon.
193	Shift	A shift fault has occurred.	Non-Critical - Service Engine Soon.
194	Shift	A shift fault has occurred.	Non-Critical - Service Engine Soon.
195	Thermostat	Engine thermostat is not working properly.	Non-Critical - Service Engine Soon.
196	Transmission Overtemp	Transmission is overheating. Key engine off and allow to cool. Restart engine. Refer to the Owner's manual for more information.	Non-Critical - Service Engine Soon.

Fault #	VesselView Short Text	VesselView Long Text	Action Text
197	Temperature Sensor	Supercharger output temperature sensor is not working properly.	Non-Critical - Service Engine Soon.
198	Temperature Sensor	Supercharger output temperature sensor is not working properly.	Non-Critical - Service Engine Soon.
199	Overtemp	Supercharger is overheating. Decrease throttle and allow to cool.	Non-Critical - Service Engine Soon.
200	Boost Valve	Boost bypass valve is not working properly.	Non-Critical - Service Engine Soon.
201	Temperature Sensor	Engine temperature sensor is not working properly.	Non-Critical - Service Engine Soon.
202	Temperature Sensor	Engine temperature sensor is not working properly.	Non-Critical - Service Engine Soon.
203	Overtemp	Engine is overheating. Check for plugged water inlet. Water pump may be faulty.	Non-Critical - Service Engine Soon - Refer to Owner's manual for service procedure.
204	Temperature Sensor	Block temperature sensor is not working properly.	Non-Critical - Service Engine Soon.
205	Temperature Sensor	Block temperature sensor is not working properly	Non-Critical - Service Engine Soon.
206	Overtemp	Engine is overheating. Check for plugged water inlet. Water pump may be faulty.	Non-Critical - Service Engine Soon - Refer to Owner's manual for service procedure.
207	Critical - Fuel Pump	Fuel lift pump is not working properly.	Return to port Immediately - Service engine before next use.
208	Critical - Fuel Pump	Fuel lift pump is not working properly.	Return to port Immediately - Service engine before next use.
209	Critical - Engine Voltage Low	Engine Actuator voltage is low.	Return to port Immediately - Service engine before next use.
210	Engine overspeed	Engine RPM is above specified limit with engine in neutral.	Reduce engine RPM.
211	Engine overspeed	Engine RPM is above specified limit with engine in reverse.	Reduce engine RPM or trim engine down.
212	Start Sequence Aborted	Attempted start was not successful. Refer to Owner's manual for more information.	Key engine off and restart. If the condition persists Seek Assistance. Return to port Immediately - Service engine before next use.
213	Critical Sensor	Fuel has overflowed into the vent system. Check for fuel leakage. May have been cause by multiple restart attempts.	Return to port Immediately - Service engine before next use.
214	Boost Valve	Boost bypass valve is not working properly.	Non-Critical - Service Engine Soon.
215	Critical - Communication Error	There is a communication problem with the SmartCraft control system.	Return to port Immediately - Service engine before next use.
216	Critical - Communication Error	There is a communication problem with the SmartCraft control system.	Return to port Immediately - Service engine before next use.
217	Voltage	Sensor power voltage is low.	Non-Critical - Service Engine Soon.
218	Critical - Communication Error	There is a communication problem with the SmartCraft control system.	Return to port Immediately - Service engine before next use.
219	Shift	Return handle to neutral and key engine off. Restart and shift engine.	Return to port Immediately - Service engine before next use.
220	Critical - Sensor	Fuel have overflowed into the vent system. Check for fuel leakage. May have been caused by multiple restart attempts.	Return to port Immediately - Service engine before next use.

Fault #	VesselView Short Text	VesselView Long Text	Action Text
221	Critical - Sensor	Lift pump float switch is not working properly.	Return to port Immediately - Service engine before next use.
222	Fuel Pump	Fuel lift pump is not working properly.	If the condition persists Return to port Immediately - Service engine before next use.
223	Low Pressure	Piston cooling oil jet pressure is low.	Non-Critical - Service Engine Soon.
224	Sensor	Piston cooling oil jet pressure is low.	Non-Critical - Service Engine Soon.
225	Sensor	Piston cooling oil jet pressure is low.	Non-Critical - Service Engine Soon.
226	Critical - Communication Error	There is a communication problem with the SmartCraft control system.	Return to port Immediately - Service engine before next use.
227	Engine Sensor	Shift pressure sensor is not working properly.	Non-Critical - Service Engine Soon.
228	Engine Sensor	Shift pressure sensor is not working properly.	Non-Critical - Service Engine Soon.
229	Engine Sensor	Shift pressure sensor is not working properly.	Non-Critical - Service Engine Soon.
230	Engine Sensor	Shift pressure sensor is not working properly.	Non-Critical - Service Engine Soon.
231	Engine Sensor	Shift pressure sensor is not working properly.	Non-Critical - Service Engine Soon.
232	Engine Sensor	Shift pressure sensor is not working properly.	Non-Critical - Service Engine Soon.
233	Engine Sensor	Shift system is not working properly.	Non-Critical - Service Engine Soon.
234	Engine Sensor	Shift pressure is high.	Non-Critical - Service Engine Soon.
235	Engine Sensor	Shift fault has occurred. return the handle to neutral and retry shift command.	Non-Critical - Service Engine Soon.
236	Emergency Stop	Emergency stop has been activated. Check lanyard.	Non-Critical - Service Engine Soon - Refer to Owner's manual for service procedure.
237	Engine Power Limited	Engine power is limited due to knock system. Reduce throttle demand.	Non-Critical - Service Engine Soon.
238	Engine Overspeed	Engine RPM is above specified limits in trailer position.	Reduce engine RPM or trim engine down.
239	Underwater Impact	Underwater impact has occurred. Inspect the engine for damage.	If damage has occurred - See Dealer Soon.
240	Critical - Low Voltage	Battery voltage is below normal limit. Turn off unnecessary loads, increase engine RPM and check battery connections.	Return to port Immediately - Service engine before next use.
241	Overtemp	Charge air temperature is above specified limits. Reduce throttle demand.	Non-Critical - Service Engine Soon.
242	Purge Valve	Fuel purge valve is not working properly.	Non-Critical - Service Engine Soon.
243	Sensor	Trim tab sensor is not working properly.	Non-Critical - Service Engine Soon.
244	Sensor	Trim tab sensor is not working properly.	Non-Critical - Service Engine Soon.
245	Shift	Shift switch is not working properly.	Non-Critical - Service Engine Soon.
246	Engine Power Limited	Engine power is limited due to supercharger overheat.	Non-Critical - Service Engine Soon.
247	Engine Power Limited	Engine power is limited due to knock system.	Non-Critical - Service engine soon.

Notes:

Section 9 - Installation and Wiring

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Cutting the Instrument Panel

Preparing the Mounting Location

1. Select a suitable location for the VesselView on the boat's instrument panel.

NOTE: *The area behind the panel should be clear of any cables, wiring, or other hardware that may interfere with installation. The mounting location should also provide good visibility from the boat operator's position.*

2. Disconnect the batteries powering the gauges or SmartCraft components.
3. Cut out the template located on the last page of the installation instructions.

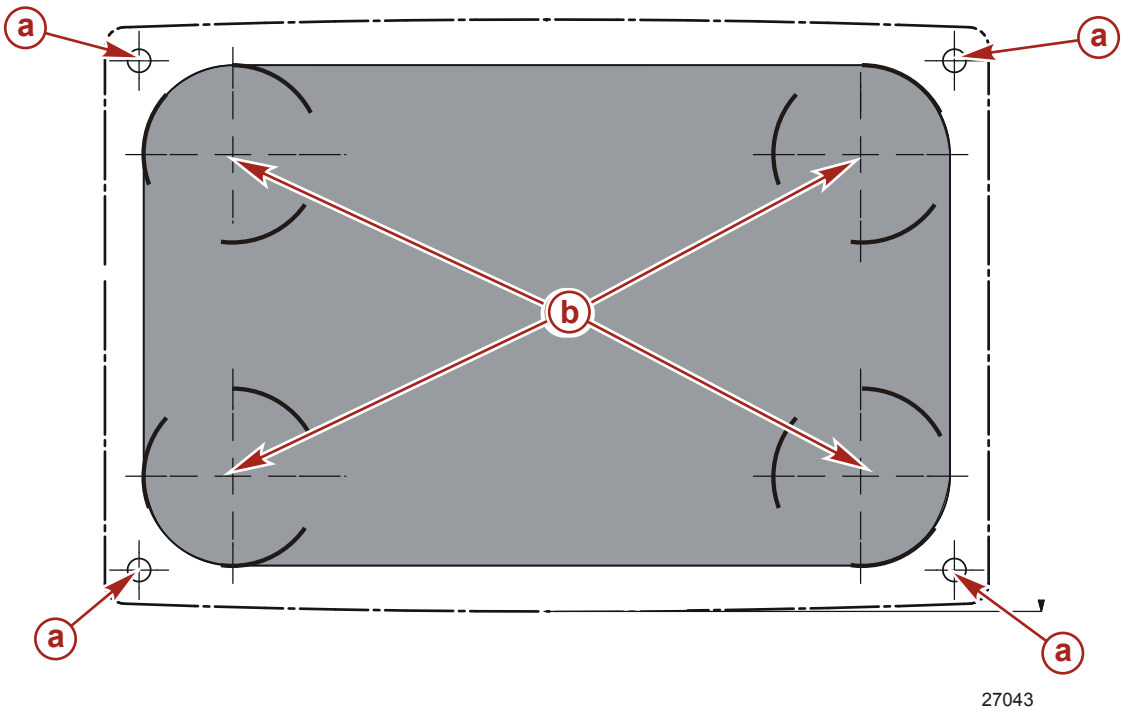
NOTE: *Always check the template cutout to the mounting holes on the VesselView before drilling.*

4. Use the template to determine the space required for mounting.
5. Prepare the mounting location surface as follows:
   - **Fiberglass panels:** Apply masking tape to the area being cut to prevent cracking the fiberglass.
   - **Vinyl-covered panels:** Use a razor blade to carefully remove the vinyl from the area being cut to avoid tearing the vinyl.

Cutting the Panel

1. After preparing the area to be cut, tape the mounting template to the panel.
2. Drill four 5.5 mm (7/32 in.) holes at the locations shown on the template for the mounting screws.
3. Drill four 19 mm (3/4 in.) holes at the locations shown on the template and cut out the shaded portion of the template.

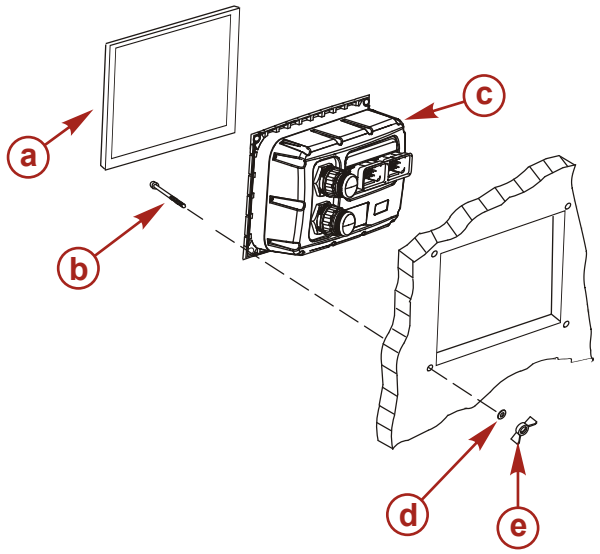
NOTE: *The following diagram is an example only. Use the template located at the last page of the installation instructions.*



a - Mounting screw holes (5.5 mm [7/32 in.])
b - Cutout pilot holes (19 mm [3/4 in.])

4. Remove the template and insert the VesselView into the panel to ensure fit. Do not secure to the instrument panel at this time.

Securing VesselView to the Instrument Panel



27059

a - Bezel
b - Mounting Screw
c - VesselView
d - Washer
e - Wing nut

1. Insert the VesselView into the opening.
2. Secure the VesselView with the four mounting screws, washers, and wing nuts. Do not overtighten the wing nuts.
3. The back of the bezel is labeled "TOP" and "BOTTOM". Ensure the bezel is aligned correctly to avoid damaging the bezel or VesselView.
4. Snap the bezel onto the VesselView.

VesselView Bezel Removal

1. The VesselView has four access slots at the bottom of the bezel.

27439

a - Access slots

2. Use an angled flat head screwdriver to pry the bezel off at one of the access slots.

27440

3. Move to the next access slot and proceed to pry the bezel off.
4. When the bottom of the bezel is loose, pry up the sides of the bezel with the screwdriver until the bezel releases.

DTS Wiring Guidelines

⚠ WARNING

Splicing or probing will damage the wire insulation allowing water to enter the wiring. Water intrusion may lead to wiring failure and loss of throttle and shift control. To avoid the possibility of serious injury or death from loss of boat control, do not splice or probe into any wire insulation of the DTS system.

- Never attempt to connect, network, tie into, switch, sink source voltage or current from the DTS wiring harnesses.
- Never attempt to connect any type of communication or navigation equipment into the DTS wiring harnessing other than at the designated connection point.
- Always install boat accessory equipment using an appropriate power source connection, such as a fuse panel or junction box.
- Never attempt to tap directly into any of the DTS electrical wiring harnesses for a source of power.

Wiring Guidelines for Electrical Boat Accessories

⚠ WARNING

Excessive voltage drop may compromise the DTS system, leading to serious injury or death from loss of throttle and shift control. Do not wire any electrical accessory into the 12-volt ignition key switch circuits of the DTS system.

IMPORTANT: Do not connect boat accessories to the ignition key switch. Use a separate, switched 12-volt source for wiring boat accessories.

IMPORTANT: The DTS system requires a consistent 12-volt power source. Splicing or connecting accessories to the 12-volt or ignition key switch DTS circuits (purple, purple/white, or red wires) could blow a fuse or overload circuits, causing intermittent or complete loss of operation.

Harness Installation Guidelines

- Locate an appropriate path for routing the harness connections to their installation points.

- Inspect the routing path to ensure that surfaces are free of any sharp edges or burrs that could cut the harness.
- Fasten and support the harness with clamps or cable ties every 45.8 cm (18 in.) along the routing path. A clamp or cable tie must be used within 25.4 cm (10 in.) of any connection in a DTS system.
- Ensure that all connections are tight. Seal all unused connectors with weather caps.

VesselView Harness Connection for SmartCraft Version 07 and Up

The VesselView adapter harness is required for all Mercury and MerCruiser Version 07 SmartCraft installations. Cummins MerCruiser Diesel installations do not require this harness assembly. For CMD applications, connect the VesselView harness directly to the junction box.

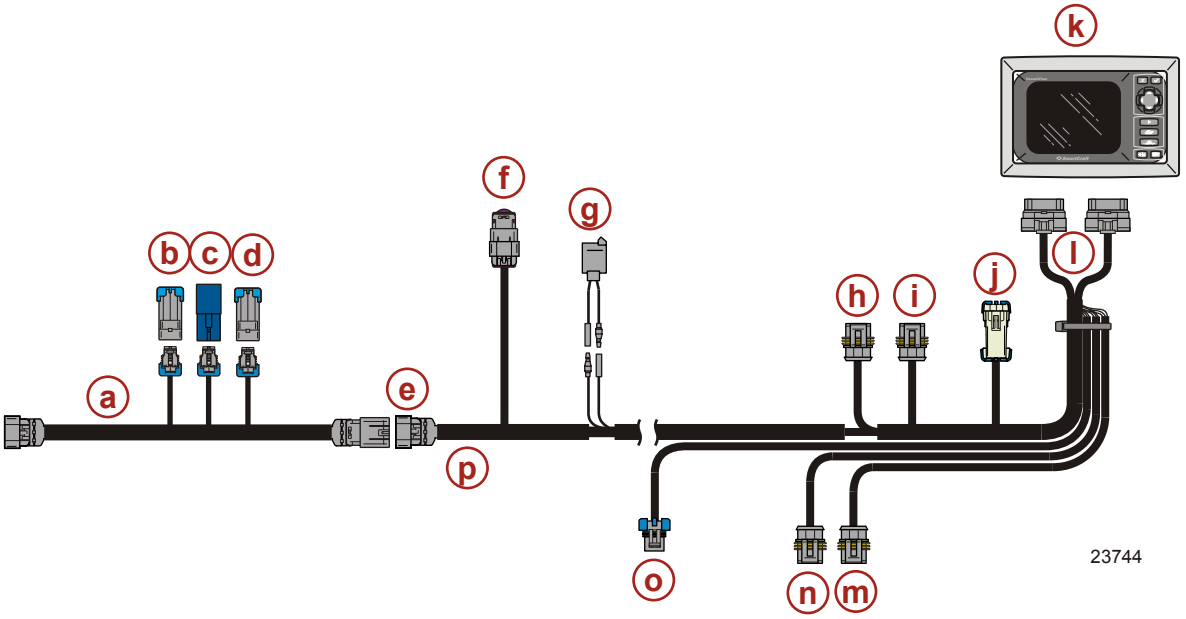
IMPORTANT: Do not connect the VesselView or the VesselView adapter harness to the vessel display connector on the command module harness.

NOTE: *If installing more than one VesselView, use a separate VesselView harness and VesselView harness adapter for each unit.*

1. Connect the the VesselView adapter harness to the starboard junction box. Refer to the **Wiring Connections for SmartCraft Version 07** for diagrams.
2. Connect the VesselView harness to the VesselView adapter harness.
3. Connect the VesselView harness to the VesselView unit.
4. For multi-engine applications, install the appropriate multi-engine ignition harness (available separately) between the multi-ignition connector on the VesselView harness and the appropriate junction boxes.
5. Ensure the VesselView receives power when any key switch is in the "ON" position.

Wiring Connections for SmartCraft Version 07

VesselView Harness and Adapter



a - VesselView adapter harness
b - CAN V data connector
c - CAN V terminator resistor
d - CAN V wake connector
e - 10-pin connector
f - Multi-ignition connector
g - Warning horn
h - Port inner (engine 4) system link gauge connector (purple and red wires)
i - Starboard inner (center/engine 3) system link gauge connector (purple and tan wires)
j - NMEA 0183 connector
k - VesselView
l - VesselView connectors
m - Starboard (engine 1) system link gauge connector (purple wires)
n - Port (engine 2) system link gauge connector (purple and yellow wires)
o - Air temperature sensor connector
p - VesselView harness

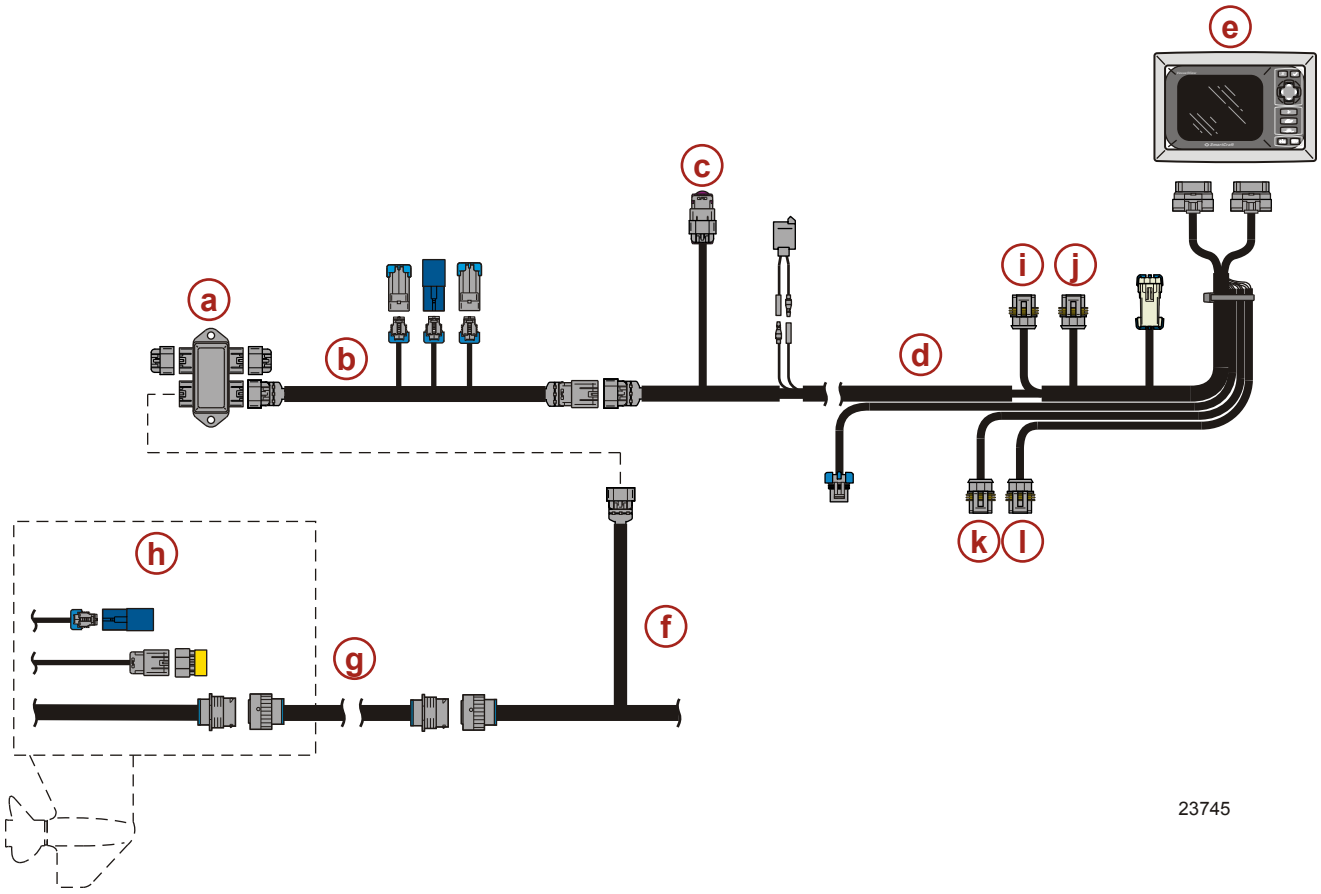
IMPORTANT: Do not connect the VesselView or the VesselView adapter harness to the vessel display connector on the command module harness.

IMPORTANT: Seal all unused connectors with weather caps.

The VesselView adapter harness provides connections for CAN V components. These connections provide CAN V support as follows:

- **CAN V data connector** - Allows data input to the CAN V bus.
- **CAN V terminator resistor** - Terminates CAN V if installed at the farthest end of the CAN V network; otherwise, this connector continues the CAN V bus.
- **CAN V wake connector** - Supplies CAN V wake to the entire CAN V network.

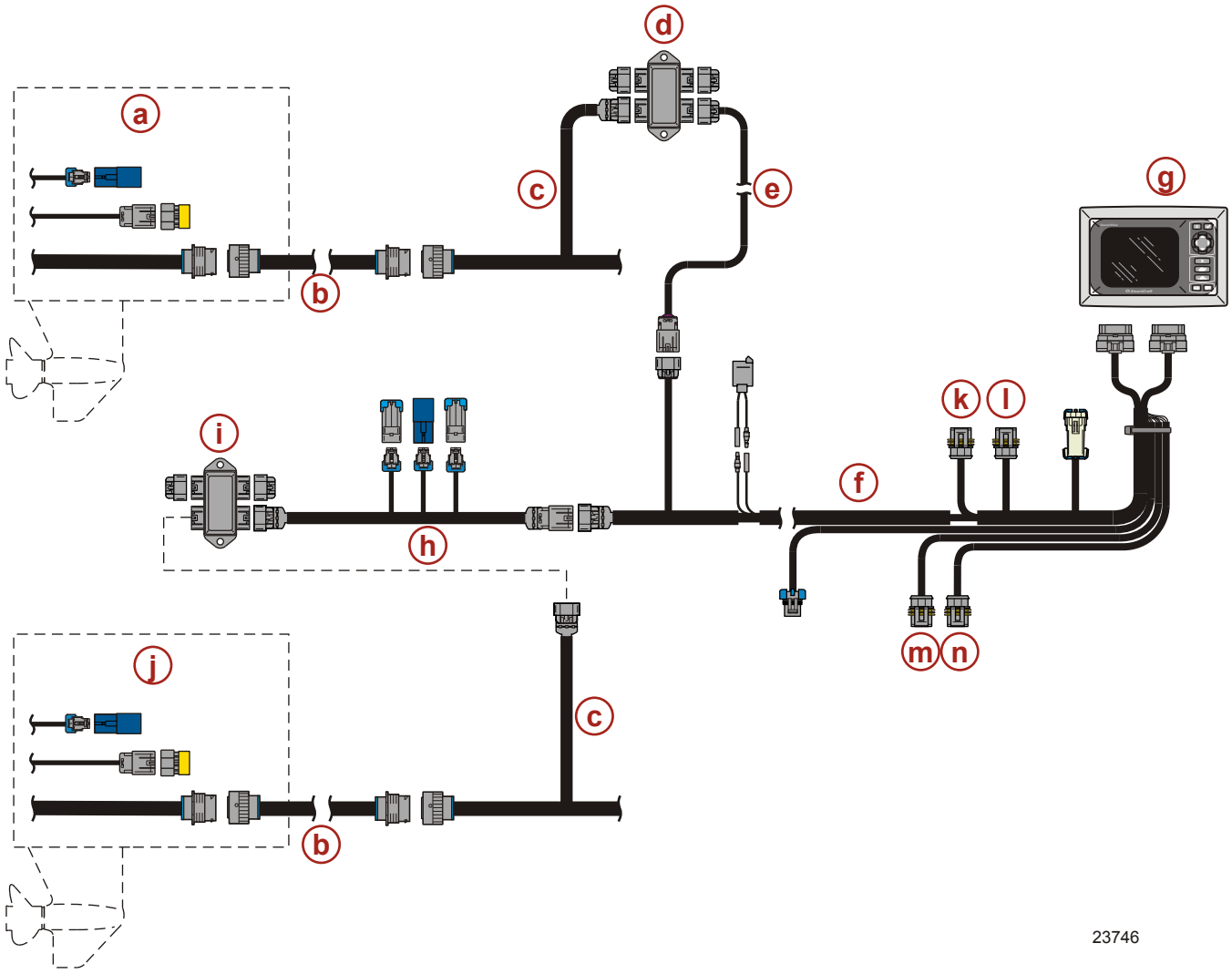
Single Engine Applications



a - Junction box
b - VesselView adapter harness
c - Multi-ignition connector
d - VesselView harness
e - VesselView
f - Command module harness
g - 14-pin data harness
h - Engine
i - Port inner (engine 4) system link gauge connector
j - Starboard inner (center/engine 3) system link gauge connector
k - Port (engine 2) system link gauge connector
l - Starboard (engine 1) system link gauge connector

IMPORTANT: Seal all unused connectors with weather caps.

Dual Engine Applications



a - Port engine
b - 14-pin harness
c - Command module harness
d - Port junction box
e - Multi-ignition harness for dual engine applications
f - VesselView harness
g - VesselView
h - VesselView adapter harness
i - Starboard junction box
j - Starboard engine
k - Port inner (engine 4) system link gauge connector
l - Starboard inner (center/engine 3) system link gauge connector
m - Port (engine 2) system link gauge connector
n - Starboard (engine 1) system link gauge connector

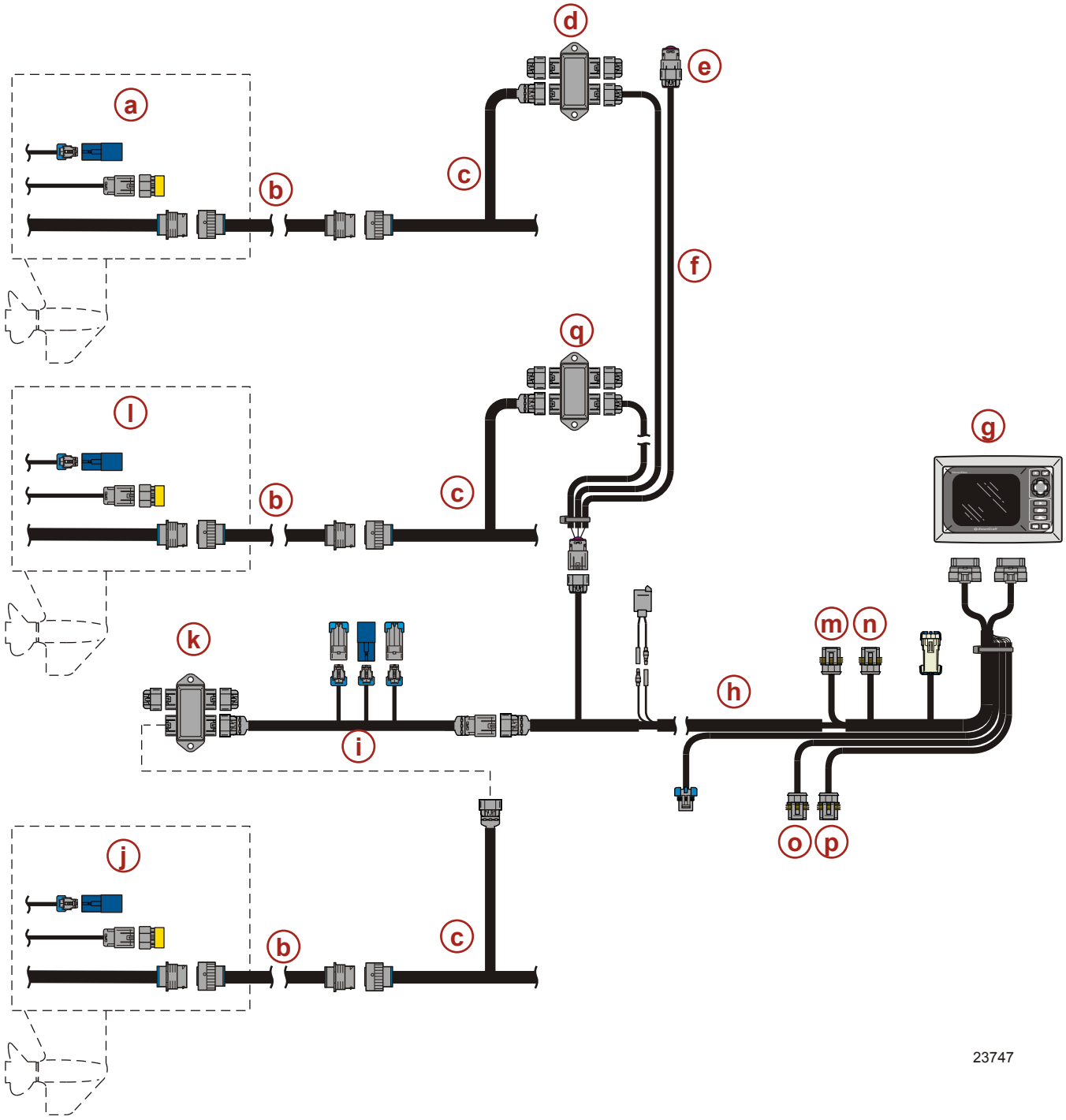
IMPORTANT: Seal all unused connectors with weather caps.

NOTE: *The multi-ignition harness for dual engine applications connects the port engine to the VesselView harness, allowing the VesselView to turn on when either key switch is turned on.*

NOTE: *Rudder angle or synchronizer system link gauges must be connected to the starboard system link gauge connector on the VesselView harness.*

NOTE: *The starboard junction box provides battery voltage and ground circuit to the VesselView. If the starboard battery (pin A) is unavailable because it has failed or is switched off, the VesselView will power up using another ignition source (port, starboard inner, or port inner batteries) but will not save any memory settings when the VesselView is turned off. The VesselView will not operate if the starboard ground (pin B) is unavailable at the starboard junction box.*

Triple Engine Applications



a - Port engine
b - 14-pin data harness
c - Command module harness
d - Port junction box
e - Multi-ignition connector (weather capped)
f - Multi-ignition harness for triple or quad engine applications
g - VesselView
h - VesselView harness
i - VesselView adapter harness
j - Starboard engine
k - Starboard junction box
l - Center engine
m - Port inner (engine 4) system link gauge connector
n - Starboard inner (center/engine 3) system link gauge connector
o - Port (engine 2) system link gauge connector
p - Starboard (engine 1) system link gauge connector
q - Center junction box

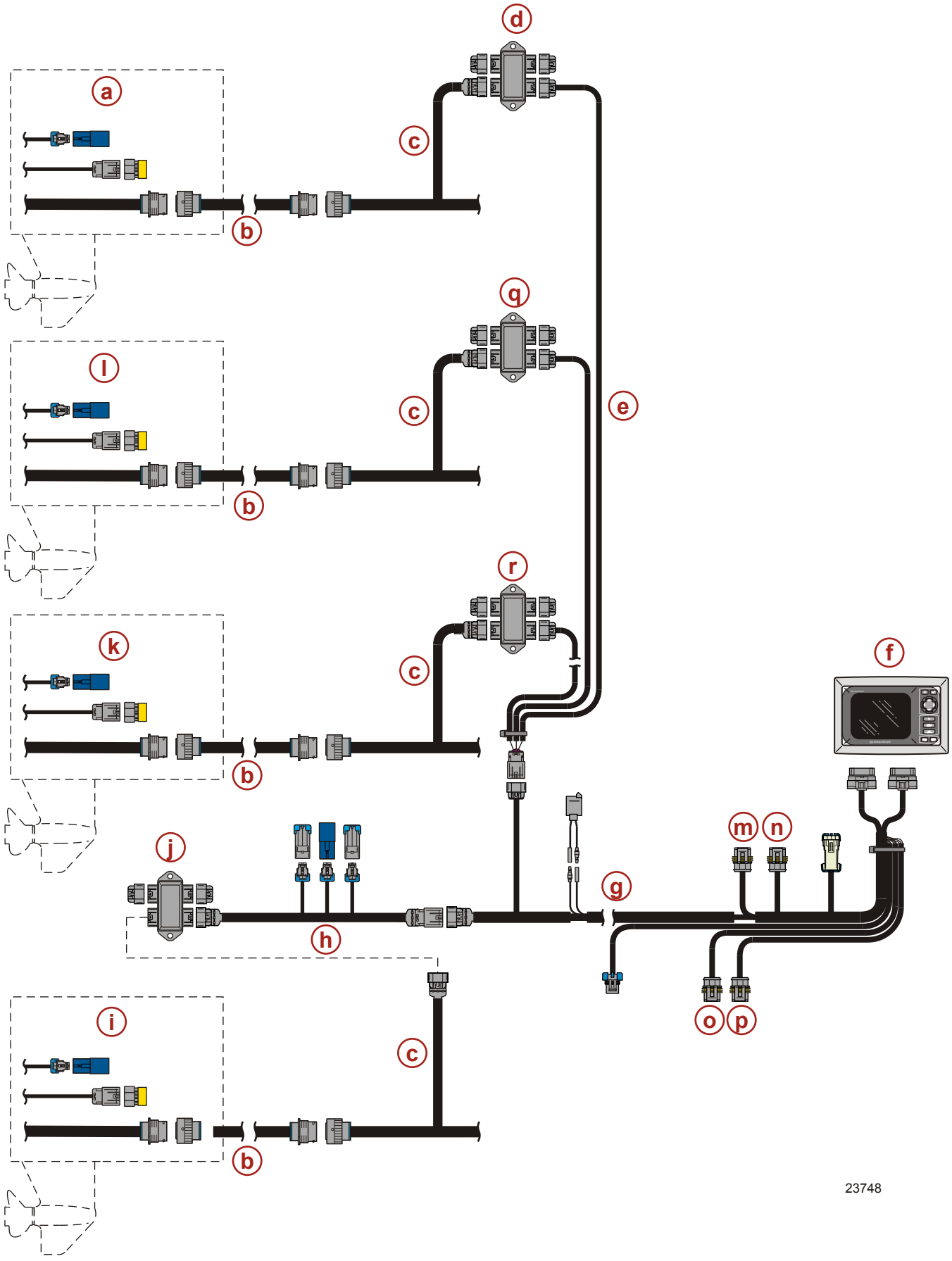
IMPORTANT: Seal all unused connectors with weather caps.

NOTE: *The multi-ignition harness for triple or quad engine applications connects each engine to the VesselView harness, allowing the VesselView to turn on when either key switch is turned on.*

NOTE: *A rudder angle system link gauge must be connected to the starboard system link gauge connector on the VesselView harness.*

NOTE: *The starboard junction box provides battery voltage and ground circuit to the VesselView. If the starboard battery (pin A) is unavailable because it has failed or is switched off, the VesselView will power up using another ignition source (port, starboard inner, or port inner batteries) but will not save any memory settings when the VesselView is turned off. The VesselView will not operate if the starboard ground (pin B) is unavailable at the starboard junction box.*

Quad Engine Applications



a - Port engine
b - 14-pin data harness
c - Command module harness
d - Port outside junction box
e - Multi-ignition harness for triple or quad engine applications
f - VesselView
g - VesselView harness
h - VesselView adapter harness
i - Starboard outside engine
j - Starboard outside junction box
k - Starboard inner engine
l - Port inner engine
m - Port inner (engine 4) system link gauge connector
n - Starboard inner (center/engine 3) system link gauge connector
o - Port (engine 2) system link gauge connector
p - Starboard (engine 1) system link gauge connector
q - Port inner junction box
r - Starboard inner junction box

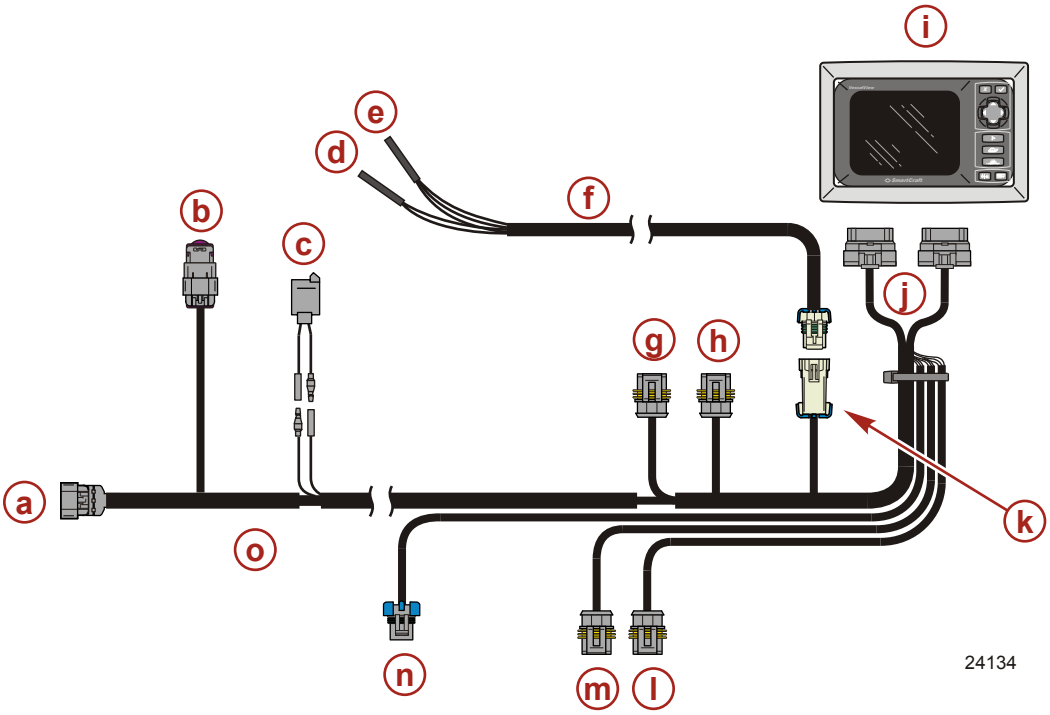
IMPORTANT: Seal all unused connectors with weather caps.

NOTE: *The multi-ignition harness for triple or quad engine applications connects each engine to the VesselView harness, allowing the VesselView to turn on when either key switch is turned on.*

NOTE: *A rudder angle system link gauge must be connected to the starboard system link gauge connector on the VesselView harness.*

NOTE: *The starboard junction box provides battery voltage and ground circuit to the VesselView. If the starboard battery (pin A) is unavailable because it has failed or is switched off, the VesselView will power up using another ignition source (port, starboard inner, or port inner batteries) but will not save any memory settings when the VesselView is turned off. The VesselView will not operate if the starboard ground (pin B) is unavailable at the starboard junction box.*

Installing the NMEA 0183 Adapter Harness

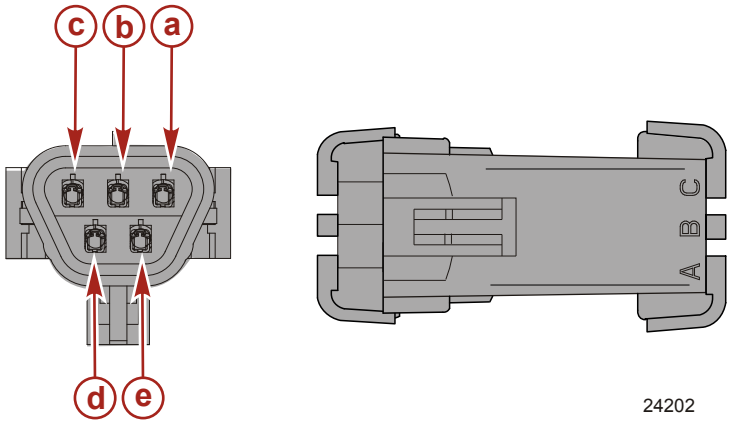


a - 10-pin connector
b - Multi-ignition connector
c - Warning horn
d - NMEA output connector (light blue with green stripe: NMEA out [+]; dark blue with red stripe: NMEA out [–])(reserved for future use)
e - NMEA input connector (white with dark blue stripe: NMEA in [+]; dark blue with white stripe: NMEA in [–])
f - NMEA adapter harness
g - Port inner (engine 4) system link gauge connector (purple and red wires)
h - Starboard inner (center/engine 3) system link gauge connector (purple and tan wires)
i - VesselView
j - VesselView connectors
k - NMEA 0183 connector
l - Starboard (engine 1) system link gauge connector (purple wires)
m -Port (engine 2) system link gauge connector (purple and yellow wires)
n - Air temperature sensor connector
o - VesselView harness

1. Connect the 5-pin NMEA connector on the adapter harness to the 5-pin NMEA 0183 connector on the VesselView harness as shown in the diagram.
2. Connect your GPS unit or other NMEA-compatible device to the adapter harness. Refer to the documentation provided with the device for installation requirements and procedures.

NMEA 0183 Connector

NOTE: *The connector image shown is the wire side of the plug.*



a - NMEA out (+)
b - NMEA out (–)
c - NMEA in (+)
d - NMEA in (–)
e - DC ground

Notes:

Section 10 - Appendix

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10

VesselView Systems Terminology

Term	Definition
ACTIVE	Active fault state of sensors, switches, injectors, etc.
BAR	Unit of measurement for pressure
BATTERY VOLTS	Main engine battery volts
BLOCK PSI	Inlet water pressure (PSI or kPa)
BEARING TO WAYPOINT	The compass direction from a position to a waypoint
BRG TO WP	Bearing to waypoint
BTW	Bearing to waypoint
C	Celsius
C1	Center tank 1
C2	Center tank 2
C3	Center tank 3
CA	Center aft tank
CF	Center forward tank
CAN	Controller Area Network
COURSE OVER GROUND	The current direction of travel relative to a ground position
CRS OVR GND	Course over ground
DEMAND %	TPI% / TPS%; On DTS models this is ERC demand %
DEVICE ID	Number to identify a VesselView at a station
DIST WPT	Distance to waypoint
DTS	Digital Throttle and Shift
DTW	Distance to waypoint
ENGINE ID	Engine identification
ENGINE RPM	Revolutions Per Minute of engine
ERC	Electronic Remote Control handle at the helm
ESC	Electronic Shift Control (Actuator)
F	Fahrenheit
FUEL LEVEL	Boat tank fuel sender data
FUEL TO WAYPOINT	The estimated amount of fuel needed to reach the waypoint.
FT	Feet
FTM	Fathoms
FTW	Fuel to waypoint
GAL	Gallons
GPH	Gallons per hour
GPS	Global Positioning System
GUARDIAN	Engine Guardian Strategy is active causing a forced reduction in available power
HEAD TMP	Cylinder head temperature (F or C)
HELM ID	Number to identify the station the VesselView is being installed on
IGL	Empirical gallons
KM	Kilometers
KMH	Kilometers per hour
KNOTS	Unit of measurement for speed

Term	Definition
KPA	Kilopascal
KPL	Kilometers per liter
LIT	Liters
LPH	Liters per hour
Met	Meters
Mil	Miles
MPG	Miles per gallon
MPH	Miles per hour
NM	Nautical mile
NMEA 0183	A combined electrical and data specification for communication between marine electronic devices and GPS receivers.
NMPG	Nautical Miles per gallon
NUM ENGINES	Number of engines on the boat
NA	Not Available
OIL PSI	Engine oil pressure (PSI or kPa)
P1	Port tank 1
P2	Port tank 2
P3	Port tank 3
PA	Port aft tank
PF	Port forward tank
PADDLE WHEEL	Data used to calculate boat speed (frequency in hertz)
PITOT	Pitot pressure sensor data for boat speed calculations
PORTCNTR	Port Center
PSI	Pounds per square inch
RANGE TO WAYPOINT	The estimated distance the engine(s) will run at the current speed with the fuel available.
RTW	Range to waypoint
S1	Starboard tank 1
S2	Starboard tank 2
S3	Starboard tank 3
SA	Starboard aft tank
SF	Starboard forward tank
SHIFT	Neutral or in gear position
SOG	Speed over ground
SPD OVR GRD	Speed over ground
SPEED OVER GROUND	The speed at which the vessel is moving relative to the earth's surface.
STBD	Starboard
STBDCNTR	Starboard Center
TEMP	Temperature
TRIM	Trim sender data
USB MEMORY STICK	Memory device used to save and load VesselView configuration data.
WOT	Wide Open Throttle

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