Optimus EPS Configuration and Commissioning – Color CANtrak

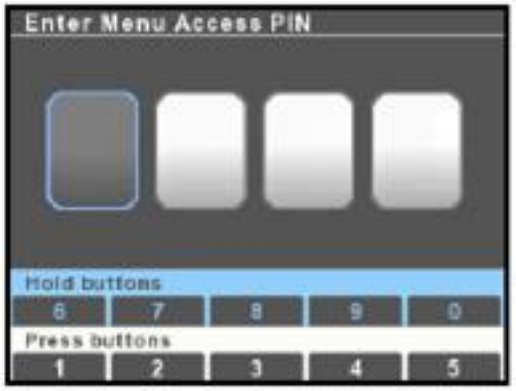


Figure D-5.

All setup and configuration tools are reached from the Dealer Menu, which authorized installers can access with a four digit PIN code (if you don't have a code contact SeaStar Solutions technical support). From the main run screen, press and hold **Menu** until you see the PIN entry screen.

Use the buttons to enter your four digit PIN code. Press the buttons briefly for digits 1-5, press and hold for digits 5-9.

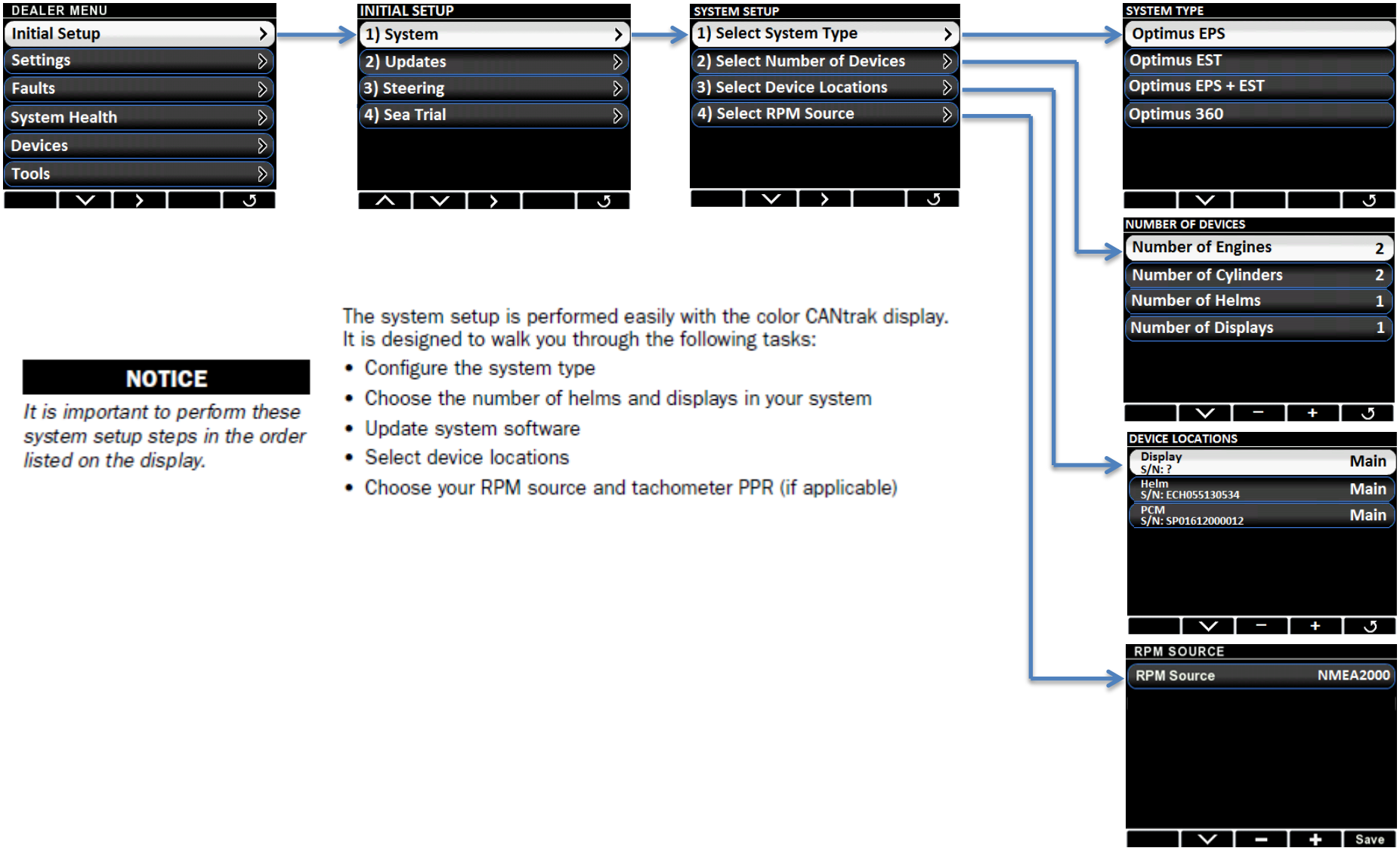
If you enter the code incorrectly you will exit the screen and be placed into the user menu. Press and hold **Menu** again to get back to the PIN entry screen.

Once you have entered the correct code you will go directly to the Dealer Menu. You won't need to enter the code again unless you cycle system power.

NOTICE

The Dealer Menu can be unlocked when faults are active. Faults are suppressed during setup and system updates.

Optimus EPS Configuration and Commissioning – Color CANtrak



NOTICE

It is important to perform these system setup steps in the order listed on the display.

The system setup is performed easily with the color CANtrak display. It is designed to walk you through the following tasks:

- Configure the system type
- Choose the number of helms and displays in your system
- Update system software
- Select device locations
- Choose your RPM source and tachometer PPR (if applicable)

Optimus EPS Configuration and Commissioning – Color CANtrak

The CANtrak display is built with smart menus. The options that are available to you will depend on the system type you set in the initial system setup. The menu structure is extensive, so rather than presenting a map of the entire structure we will highlight the key things you need to know.

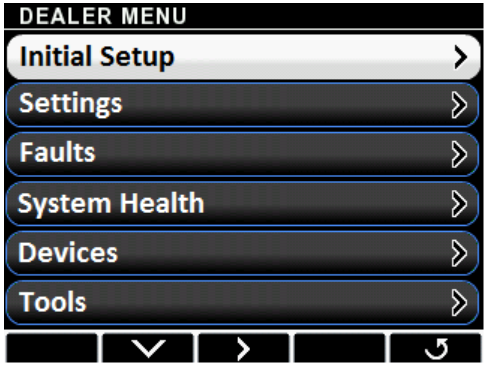


Figure D-6.

Dealer Menu

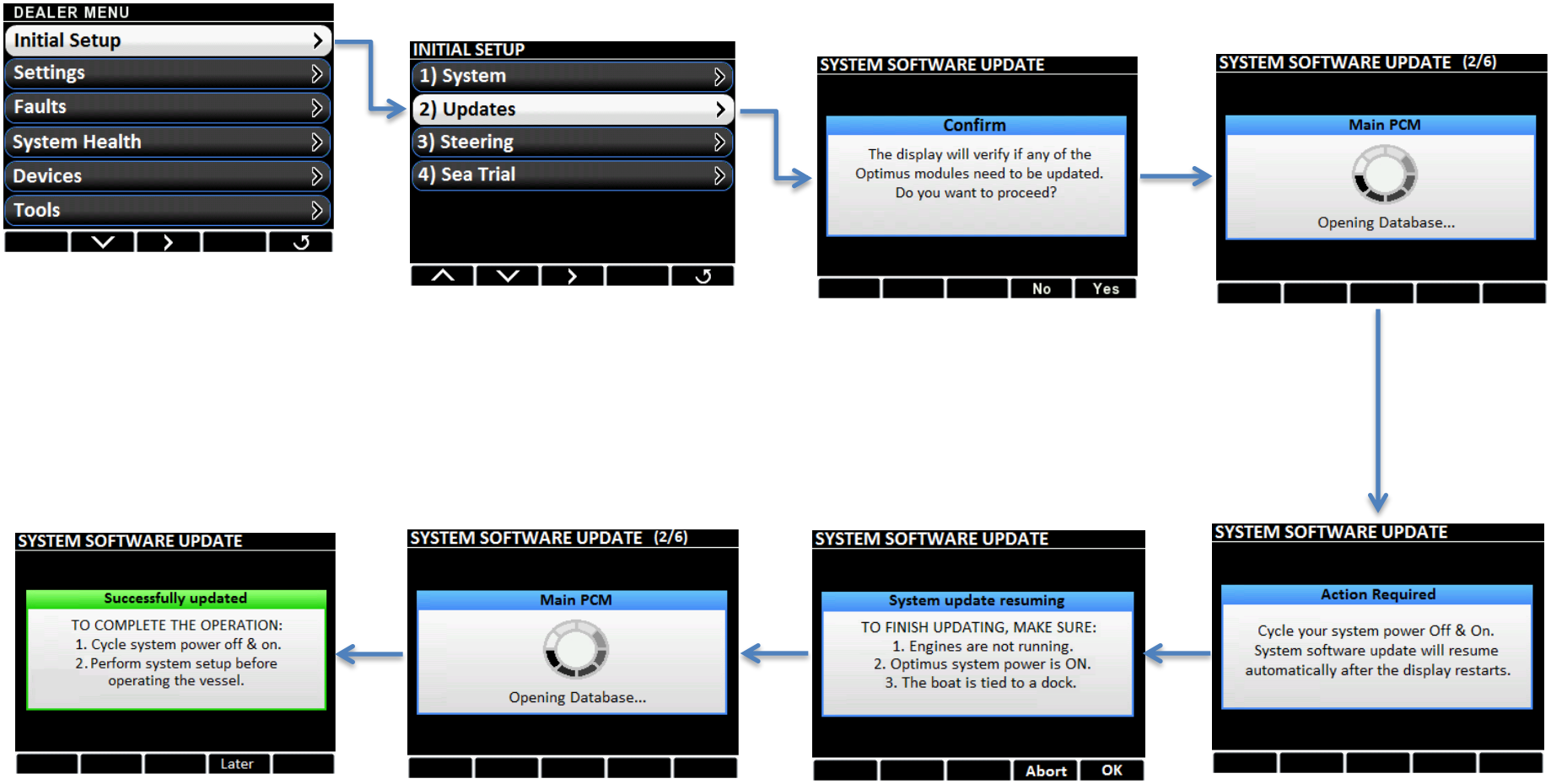
The Dealer Menu is the base level menu for access to all of the setup tools. There are six submenus available from this screen.

Dealer Submenus

Shaded items are hidden on Optimus EPS (steering-only) systems.

INITIAL SETUP	
1) System	Set system type, firmware update, set number of devices and their location, select RPM source.
2) Steering	Set cylinder types, purge and calibrate cylinders, set cylinder stroke limits.
3) Shift and Throttle	Adjust shift and throttle settings for Optimus 360 with i6800 EST system.
3) Yamaha EST Gateway	Configure EST gateway for Optimus 360 with Yamaha DEC engines.
3) Suzuki EST Gateway	Configure EST gateway for Optimus 360 with Suzuki SPC engines.
4) Joystick	Joystick tuning for Optimus 360.

Updating Component Software with Color CANTrak



Updating Component Software with Color CANTrak

Software for the individual components can be updated through the Color display. When you perform a software update for the Color CANTrak, the latest version of the components software is loaded into the display. You will then perform a mass update for the remaining components.

Procedure

1. Make sure the Color Cantrak display is up to date with the latest version of software from the "Optimusdealers.com" website.

2. Access the Dealer Menu by entering the four digit access code.

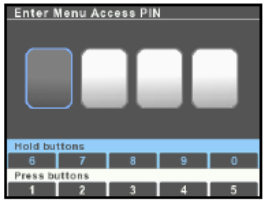
3. Navigate to the "**Initial Setup**" tab on the Dealer Menu.

4. Navigate to the "**Updates**" section of the menu.

5. The system will check all of the components on the network to verify if their software level is up to date. The system will alert you to components that do not have the latest level and ask if you would like to proceed. Select "**Yes"** to update all of the components that are on the CAN network.

6. Once completed, the screen will prompt you for two key cycles. This process writes the new software into the component.

7. After the final key cycle, login to the "**Dealer Menu"** and enter the device to make sure the software update was successful.



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Use the buttons to enter your four digit PIN code. Press the buttons briefly for digits 1-5, press and hold for digits 5-9.

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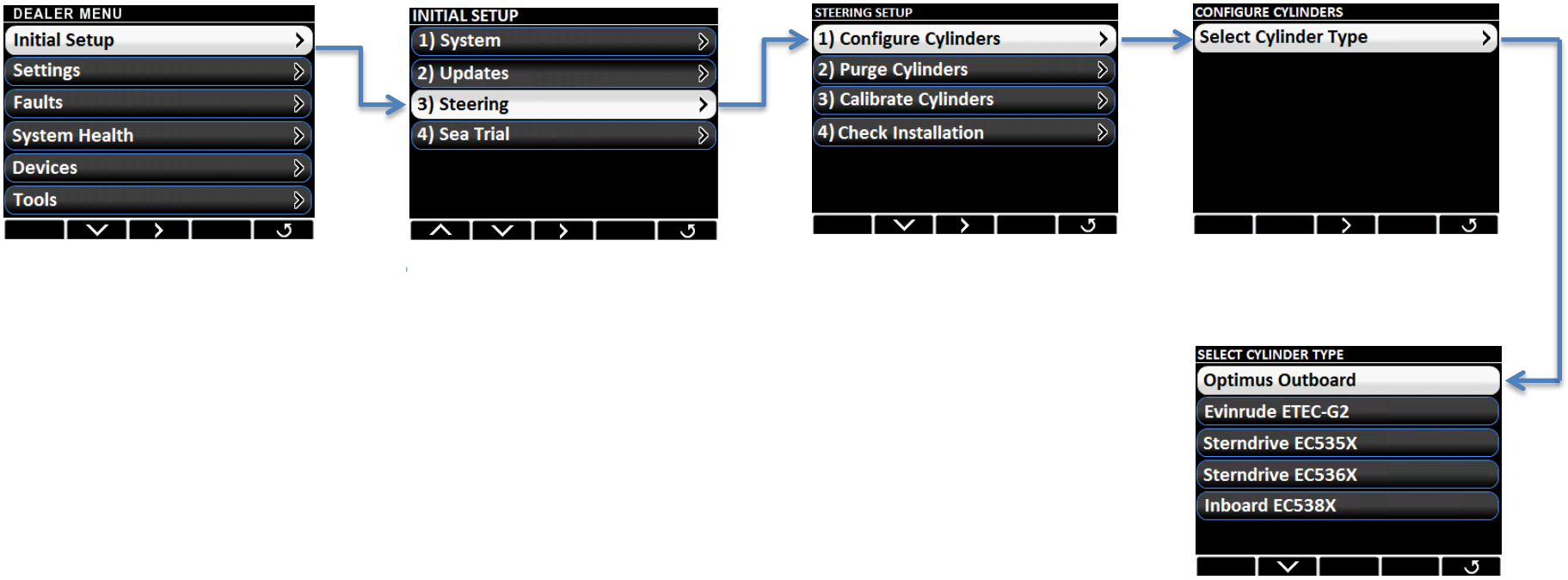
NOTICE

The Dealer Menu can be unlocked when faults are active. Faults are suppressed during setup and system updates.

Optimus EPS Cylinder Configuration - Outboard



Note: The steering setup is the same for all outboard cylinders. Additional configuration settings are necessary for sterndrive and inboard cylinders. The setup procedure will be discussed in the sterndrive and inboard configuration section.

Optimus EPS Cylinder Configuration

Steering Setup

Once you have completed the initial system setup and software update you will need to configure the steering. Navigate to **Dealer Menu > Initial Setup > Steering** to get to the Steering Setup menu.

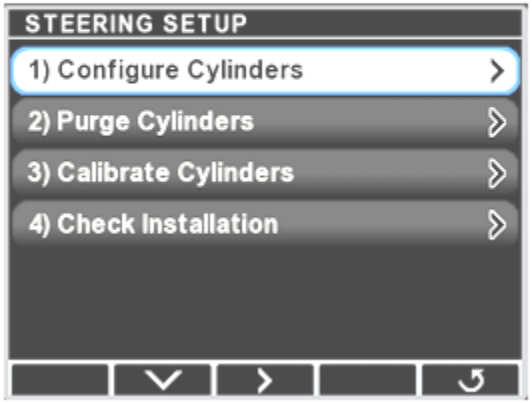


Figure 2 – Steering Setup screen

Optimus EPS Cylinder Configuration

1.2.1 Select Cylinder Type

From the Steering Setup menu, press > to get to the Configure Cylinders screen, then press > again to see a list of available cylinder types. The list will change based on the system type you selected in the Initial Setup, so you may not see all of the options listed below.

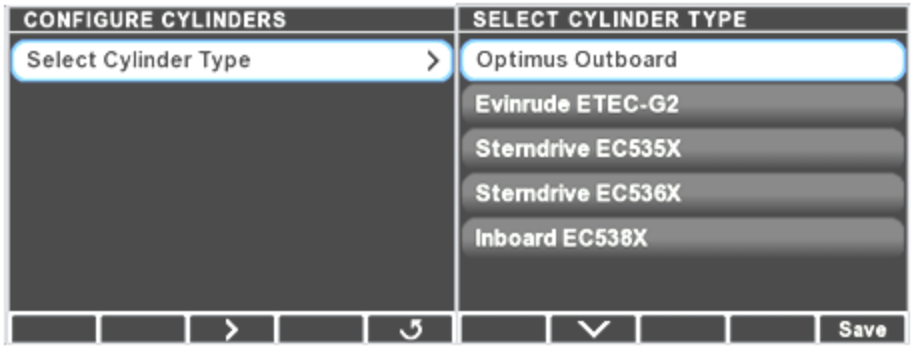


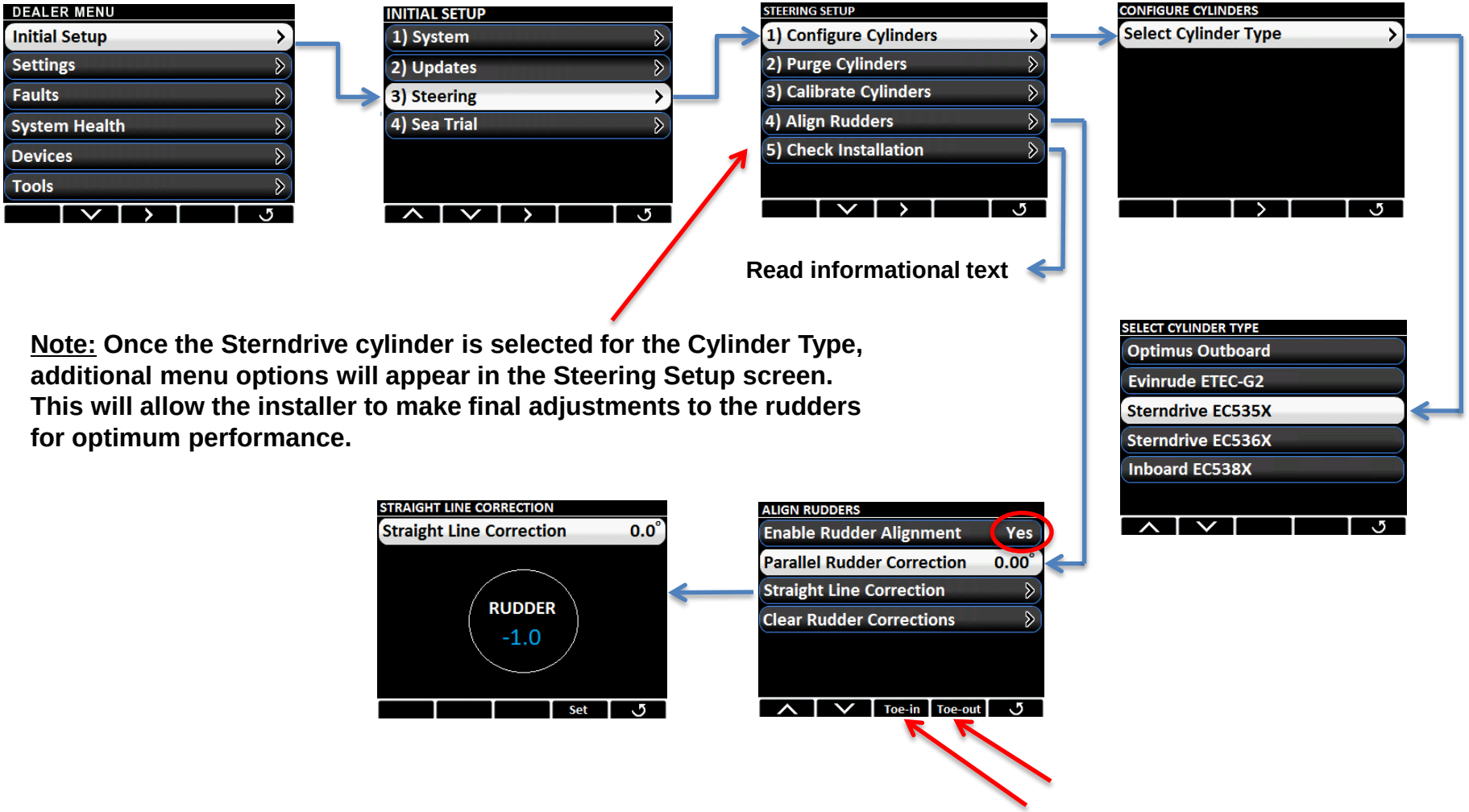
Figure 3 – Configure Cylinders and Select Cylinder Type screens

Use the up and down arrow keys to select the cylinder type for the installation.

- If you are setting up a system with outboard engines of any type other than an Evinrude ETEC-G2, choose Optimus Outboard as your cylinder type.
- If you are setting up an inboard or sterndrive system and you are unsure which cylinder you are using, check the carton label or the product identification label on the cylinder itself.

When you've selected the appropriate cylinder type press **Save** to return to the Configure Cylinders screen. If you are setting up an outboard or sterndrive system you are finished configuring the cylinder(s). Press ↺ to exit.

Optimus EPS Cylinder Configuration - Sterndrive



Note: Once the Sterndrive cylinder is selected for the Cylinder Type, additional menu options will appear in the Steering Setup screen. This will allow the installer to make final adjustments to the rudders for optimum performance.

CAUTION: The Align Rudders menu contains items that will cause the Outdrive(s) to move. Ensure that no one is near the outdrives, steering cylinder(s), and/or tiller(s).

Optimus EPS Cylinder Configuration - Sterndrive

1.2.4 Align Rudders (Sterndrive Only)

The steering range of a sterndrive is particularly sensitive to variations in transom thickness. This means the drive may not be aligned straight ahead when the steering cylinder is at its calculated zero position. On a twin sterndrive this can also result in outdrives that are not parallel.

You can correct these issues in **Steering Setup > Align Rudders**.

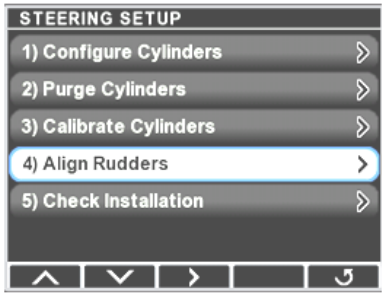


Figure 5 – Align Rudders appears when a sterndrive cylinder is selected.

CAUTION: The Align Rudders menu contains items that will cause the outdrive(s) to move. Ensure that no one is near the outdrives, steering cylinder(s), and/or tiller(s).

Step 1 – Enable Rudder Alignment

On the Align Rudders screen you must first enable rudder alignment. Use the + or – button to toggle the parameter from No to Yes. Additional menu options will be displayed as shown in figure 6. (The Parallel Rudder Correction parameter is visible only on twin sterndrive systems.)

When enable rudder alignment is toggled to Yes on a twin sterndrive system the steering range of the cylinders is adjusted so that they are both the same. One of the outdrives may move a small amount.

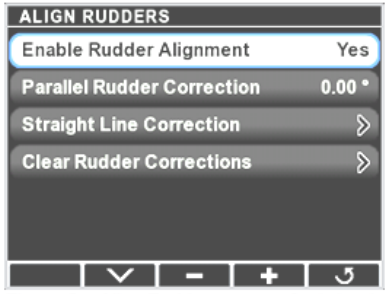


Figure 6 – Align Rudders screen for twin sterndrive system

Optimus EPS Cylinder Configuration - Sterndrive

Step 2 – Parallel Rudder Correction (Twin sterndrives only)

Select Parallel Rudder Correction and press **Toe-in** or **Toe-out** to adjust the outdrives until they are parallel. For best results use a tape measure to check that the drives are parallel. Only the starboard drive will move.

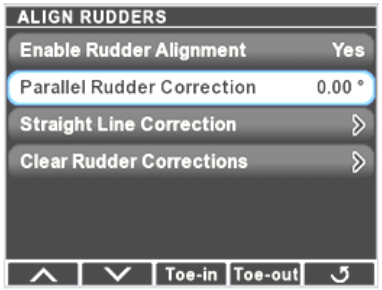


Figure 7 – Parallel Rudder Correction

Step 3 – Straight Line Correction

Steer with the helm until the outdrive(s) is aligned straight ahead. The Rudder value on the display will show the amount of correction that will be applied. Press **Set** on the display to apply the correction; you will see the Straight Line Correction value update and the Rudder value will go to 0.0. The display will now show 0° rudder when the drive(s) is straight ahead.

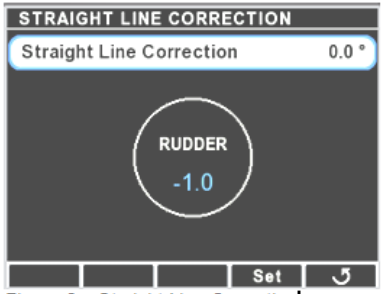


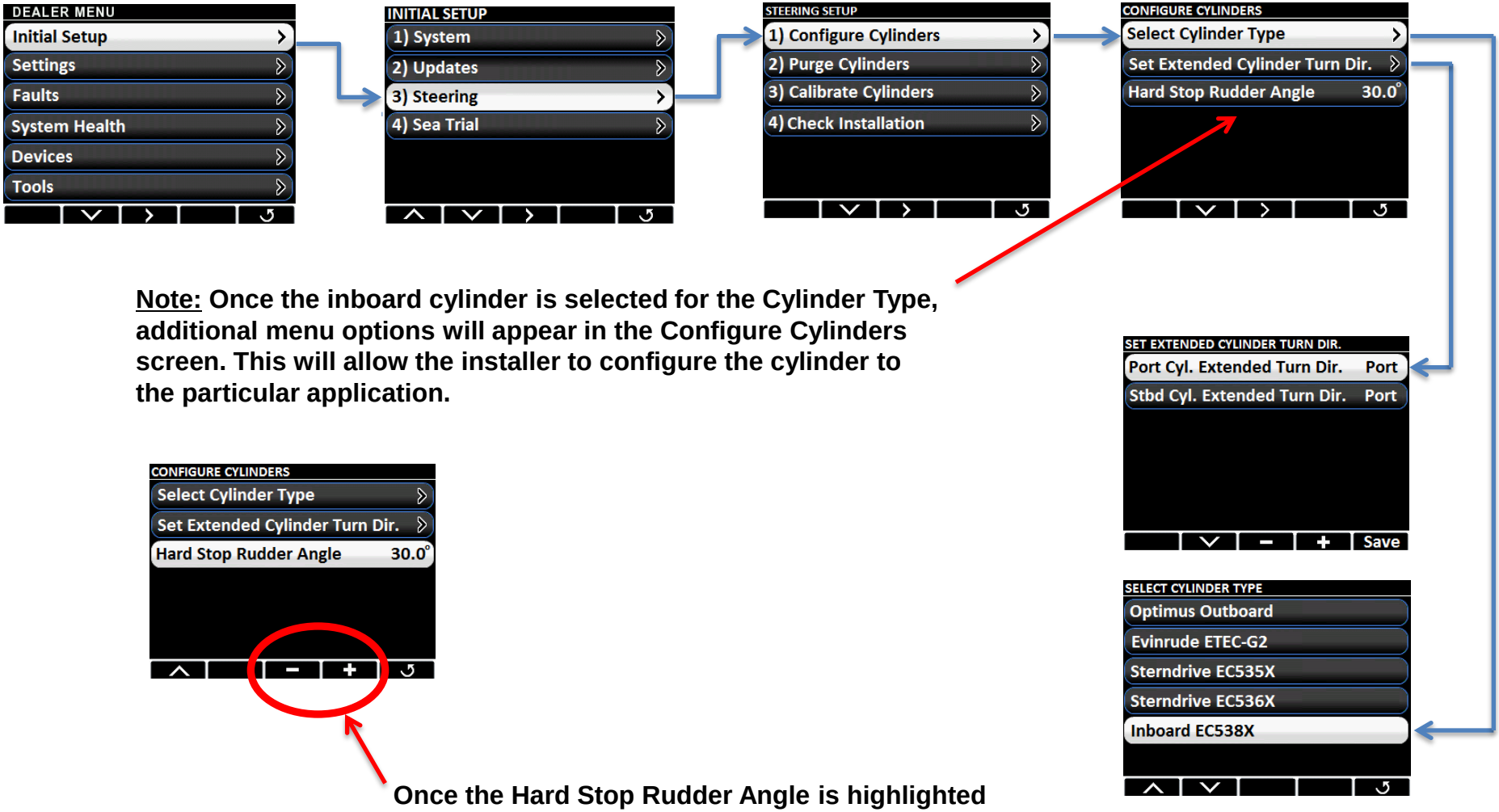
Figure 8 – Straight Line Correction

It is possible on some sterndrive-equipped boats that the vessel does not track straight through the water when the drive(s) is aligned straight ahead. This can be corrected by performing this step again during sea trial. Steer the helm until the vessel is tracking straight at cruising speed, then press **Set**.

Clear Rudder Corrections

You can clear all rudder corrections and revert to the original calibration state using this menu item.

Optimus EPS Cylinder Configuration - Inboard



<u>Note:</u> Once the inboard cylinder is selected for the Cylinder Type, additional menu options will appear in the Configure Cylinders screen. This will allow the installer to configure the cylinder to the particular application.

Once the Hard Stop Rudder Angle is highlighted a "-" and "+" will appear at the bottom of the screen. Simply adjust the angle as desired.

Optimus EPS Cylinder Configuration - Inboard

1.2.2 Configure Cylinders (Inboard only)

If you selected an inboard cylinder you will see additional menu options in the Configure Cylinders screen.

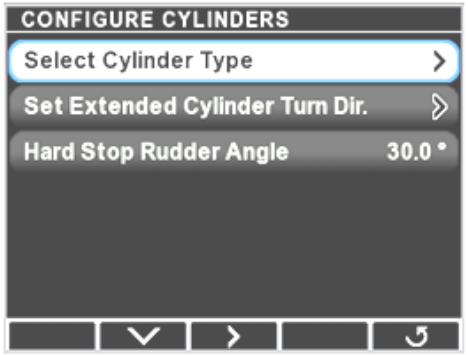


Figure 4 – Configure cylinders screen for an inboard cylinder

Step 1 – Set Extended Cylinder Turn Dir.

This parameter tells the system which direction the boat steers when the steering cylinder is *extended*. The default value is N/A. Change the parameter so that it correctly reflects how the cylinder is installed. There are parameters for both port and starboard cylinders; in a single-cylinder installation you need only set the *port* cylinder direction.

You must set this parameter or the CANtrak will display a Danger fault and you will not be able to steer the boat.

Step 2 – Set Hard Stop Rudder Angle

The angle the rudder steers through depends on the tiller arm length, as tabulated in the installation instructions for the inboard cylinder. The Hard Stop Rudder Angle parameter tells the system the actual rudder angle of the vessel when at hard over, and is used to calibrate the rudder angle display on the system run screen.

Note: the rudder angle is one-half the total steering angle tabulated in the supplemental instruction.

Select the Hard Stop Rudder Angle parameter and use the + and – buttons to adjust it as required.