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**Set-Up Mode**

**Yamaha Mode**

**Others Mode**
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- HN0366 - Others Adapter Harness Addendum B
- HN0374 - Honda Adapter Harness Addendum C
**Faria Pilot II Description**

The Faria Pilot II system is a multifunctional instrument designed to give simultaneous readouts of several different and independent functions on an upper and lower LCD display. A digital Bar Graph provides continuous display of either Trim or Fuel Level. The illustration above shows the various functions provided by the instrument.

**Warning:** The Fuel Management system is not to be used for navigation.

**Important:** Always install the Fuel Flow Transducer AFTER the primary filter. The primary filter must be a good quality water separator type with a minimum filtration of 30 microns or better. Failure to provide this level of filtration protection will result in inaccurate readings or total failure or damaged to the transducer. If there is not a suitable length of hose after the primary filter, an in-line filter (30 micron or better) should be fitted before the Fuel Flow transducer. Damage due to insufficient filtration is not covered by warranty. If in doubt please consult your local Faria® Marine Instruments dealer for advice prior to installation.
Set-Up Mode:
The Set-Up Mode allows the operator to adjust the operation of the Pilot II to many operating conditions and installed options on the boat. “Set-Up” Mode is often only used once and therefore requires a special method to access the settings. To access “Set-Up” Mode, press and hold both the “Up” and “Down” buttons while turning on the ignition switch.

Press the “Mode” button to advance through the menu selections.

Once any changes have been made to the various settings, the “Mode” button must be pressed and held. This will save all settings and cause the Pilot II to enter Operation mode.

Pilot II has two main modes of operation, YAMAHA and OTHER. Yamaha mode is designed to utilize the various automatic features of the 2001+ Yamaha outboard engine. “Other” mode can accommodate many different features of several types of installations.

The first menu that appears in Set-Up mode is the selection of one of these two modes of operation, displayed as “YAHA” and “OtHr”. The default is “OtHr”.

For more set-up procedures including set up of the trim function see the Set-up Mode procedures later in this manual.
Power:
The Pilot II instrument will turn on when the ignition key switch is set to the run position. When the ignition key switch is turned to the off position, the Pilot II will turn off.

*If the mode button is accidentally pressed for an extended period of time the unit will enter a diagnostic OFF Mode. This can be remedied by pressing the “Mode” button again to turn the unit on.

Illumination On or Up:
To turn the dial illumination on or make it brighter, press the right, “Up” arrow with the Pilot II in the “Normal” mode.

Illumination Down or Off:
To turn the dial illumination down or off, press the left, “Down” arrow with the Pilot II in the “Normal” mode.

“Normal” Mode:
Pilot II is operating showing the last selected functions. “Normal” Mode functions available are:

- **Upper Digital Display:**
  - Tachometer
  - Engine Temperature
  - Oil Pressure

- **Lower Digital Display:**
  - Fuel Flow
  - Fuel Used
  - Total Fuel Used
  - Fuel Remaining in Tank
  - Engine Running Hourmeter

Bar graph Display:
- Fuel Level
- Trim Adjustment

Note: When in either the “Select” or “Edit” Modes described below, if no button is pushed for 5 seconds the Pilot II will revert to the “Normal” Mode displaying the functions last used or the new values if settings have been changed.

“Select” Mode:
The “Select” Mode allows selection of the upper, lower, or bar graph LCD displays and/or the function desired in each display.

Activating the “Select” Mode:
To activate the “Select” Mode, press the “Mode” button quickly. The Pilot II will beep and the last selected active display (upper, lower or bar graph) will flash.

Selecting the upper, lower, or bar graph active display:
Activate the “Select” Mode and while the display is flashing, press the “Up” or “Down” arrow to select the desired active display.

Selecting a display function, (moving the Function Indicator):
When in the “Select” Mode (with the display flashing), press the “Mode” button quickly.

With each press of the “Mode” button the
display will show new information. The Function Indicator(s) at the edges of the display will show which function is being displayed and in many cases, the display units.

For example, when the Function Indicator next to TEMP is active, either the °F or °C indicator will also be active. The Pilot II will beep each time the “Mode” button is pressed. Stop at the desired function.

“Edit” Mode:
The “Edit” Mode allows you to adjust or set the values for the following features of the Pilot II:

**Upper Digital Display:**
- Tachometer: Over-rev alarm.
- Engine Temperature: Engine over temp alarm, and temperature units (°F or °C).
- Oil Pressure: Low oil pressure alarm, and oil pressure units (PSI or BAR).

**Lower Digital Display:**
- Fuel Flow: Fuel units (G or L)
- Fuel Used: Reset fuel used, and calibrate fuel flow system.
- Total Fuel Used: Reset total fuel consumed
- Engine Running Hourmeter: No settings.

**Bar graph Display:**
- Fuel Level: No settings
- Trim Adjustment: No settings (See the “Set Up” Mode to adjust the full up and full down calibration limits for your trim sender. The “Set Up” Mode limit calibration must be done to ensure the most accurate use of your trim adjusts display. This calibration need only be done once unless the engine mount or the trim sender are moved, in which case, the limit calibration must be repeated.)

Choosing the “Edit” Mode:
Select the desired display function. Press and hold the “Mode” button until the Pilot II beeps.

The “Edit” Mode is now active. If no buttons are pushed within 5 seconds, the Pilot II will revert automatically to the “Normal” Mode.

You can also enter the “Edit” Mode while in the “Select” Mode. The Pilot II display will then stop flashing (“Select” Mode) indicating the change to the “Edit” Mode. Changes that are made in the “Edit” Mode are saved as they are made.

To exit the “Edit” Mode, press and hold the “Mode” button.

If no button is pressed for five seconds, the unit will automatically exit the “Edit” Mode.

The operation of the “Edit” Mode will be explained for each function throughout this manual.

**Upper Digital Display Functions**
The upper digital displays utilize the TEMP, BF, BC; OIL, PSI, BAR; and the RPM Function Indicators.
**Tachometer:**

**Description:**
The Tachometer function provides a digital LCD display of engine RPM from 0 to 9995 RPM. In order to minimize “flicker”, RPM is displayed in 5 RPM increments.

The function includes a user adjustable “over-rev” alarm. When the engines RPMs exceed the alarm setting the tachometer display flashes and an audible alarm is activated. The alarm remains active until the “over-rev” condition is corrected. The alarm setting is adjustable in 100 RPM increments from 0 to 9900 RPM. The alarm setting, once made, is stored in memory and will remain even if the battery is disconnected. The alarm can be completely disabled by setting the alarm RPMs to a higher value than the engine can achieve or by setting the alarm value to off.

**Operation**
Using “Select” Mode, change upper display screens until the Function Indicator is pointing to RPM. The LCD is now displaying engine RPM.

**Setting the Alarm**
Press and hold the “Mode” button until the Pilot II beeps. The unit is now in “Edit” Mode.

The current setting for the “over-rev” setting will be displayed. Using the “Up and Down” buttons, adjust the setting to the desired RPM.

**Engine Temperature**
(For operation of the Temperature Function in Yamaha Mode see below.)

**Description:**
The Engine Temperature function provides a digital LCD display of engine temperature. Engine Temperature is displayed in 2˚ F or 1˚ C increments. Fahrenheit or Celsius units can be selected for the Engine Temperature function. A user adjustable “over-temp” alarm is also provided. The alarm provides a visual and audible indication that the Engine Temperature has exceeded the preset alarm value.

**Operation**
Using “Select” Mode, change upper display screens until the Function Indicator is pointing to TEMP. An additional Function Indicator will turn on pointing to either °F or °C. The LCD is now displaying Engine Temperature in the indicated units.

**Setting the Engine Temperature Alarm**
Press and hold the “Mode” button until the Pilot II beeps.
The unit is now in “Edit” Mode. The current setting for the “over-temp” value will be displayed. Using the “Up” and “Down” buttons, this value can be adjusted to the desired setting.

**Setting the Engine Temperature Units**

Pressing the “Mode” button again in the “Edit” mode will change the display to show the current temperature units selected.

Using the “Up” and “Down” buttons, the units can be changed between °F and °C.

**Oil Pressure:**

(For operation of the Oil Level Function in Yamaha Mode see below)

**Description:**

The Oil Pressure function provides a digital LCD display of engine oil pressure. Oil pressure is displayed in 2 PSI increments. PSI or BAR units can be selected for the Oil Pressure function. A user adjustable “low oil pressure” alarm is also provided. The alarm provides a visual and audible indication that the oil pressure is less than the preset alarm value.

**Operation**

Using “Select” Mode, change upper display screens until the Function Indicator is pointing to OIL. An additional Function Indicator will turn on pointing to either PSI or BAR. The LCD is now displaying Oil Pressure in the indicated units.

**Setting the Oil Pressure Alarm**

Press and hold the “Mode” button until the Pilot II beeps.

The unit is now in “Edit” Mode. The current setting for the “low oil pressure” value will be displayed. Using the “Up” and “Down” buttons, this value can be adjusted to the desired setting.

**Setting the Oil Pressure Units**

Pressing the “Mode” button again in the “Edit” mode will change the display to show the current pressure units selected.
Using the “Up and Down” buttons, the units can be changed between PSI and BAR.

**Lower Digital Display Functions**

The lower digital displays utilize the G/H, L/H; G-U, L-U; and the “hourglass” Function Indicators.

### Fuel Management System

**Fuel Flow:**

**Description**

The Fuel Flow function provides a digital LCD display of the current fuel consumption rate. Fuel Flow is displayed from 0.5 – 35 GPH in 0.1 increments. Gallons or Liter can be chosen as the unit of measure for the Fuel Flow function.

**Operation**

Using “Select” Mode, change lower display screens until the Function Indicator is pointing to G/H or L/H. The LCD is now displaying Fuel Flow in the indicated units.

**Setting the Fuel Flow Units**

Press and hold the “Mode” button until the Pilot II beeps. The unit is now in “Edit” Mode.

The current setting for the fuel units, G/H or L/H, will be displayed. Using the “Up” and “Down” buttons, this value can be changed to the desired setting.

When this choice is made, all values in the Fuel Management System are correctly converted to the new units. This includes stored and accumulated values.

**Fuel Used:**

**Description**

The Fuel Used function displays the amount of fuel used, from 0.1 to 999.9 gallons or corresponding liters since this function was last reset. This function is similar to a trip odometer and can be used in a similar fashion. The value displayed can be reset to zero in the “Edit” Mode and will then log the quantity of fuel used since the reset. A second “Edit” Mode display allows calibration of the Fuel Management System system (see below).

**Operation**

Using “Select” Mode, press the “Mode” button once from the Fuel Flow function to access the Fuel Used function. The Function Indicator will point to G-U or L-U and the display will indicate XXX.X (with decimal point). The LCD is now displaying Fuel Used in the indicated units.

**Resetting the Fuel Used Value**

Press and hold the “Mode” button until...
the Pilot II beeps.

The unit is now in “Edit” Mode. The current quantity of fuel used since last reset is displayed. Pressing the “Up” or “Down” arrow button will reset the quantity displayed to zero.

Calibrating the Fuel Management System

Calibration of the Fuel Management System is accomplished by comparing and correcting the Fuel Used reading to a known amount of fuel replaced.

The procedure is as follows:

1) The Fuel Used function is reset to zero when the fuel tank is filled.

2) The engine is operated until as much fuel as possible is consumed. The amount is not critical but the more fuel that is used, the better the calibration.

3) The fuel tank is refilled and the amount of fuel added by the refueling pump is noted.

4) The amount of fuel indicated by the Fuel Used display is adjusted to match the amount of fuel added.

5) The adjusted “fuel used” value is used by the microprocessor to correct all stored and active fuel values and calculations. Once this has been done, the measured and displayed values in the Fuel Management System will reflect this calibration until repeating this procedure changes the calibration.

Enter the “Edit” Mode.
Do Not Reset The Fuel Used Display.

Press the “Mode” button again in the “Edit” Mode and the unit will be in the Fuel Cal mode.

The display will continue to show the last Fuel Used value. Using the “Up” and “Down” arrow buttons, adjust the value displayed to match the amount indicated on the refueling pump.

Press and hold the “Mode” button to exit “Edit” Mode.

Now reset the Fuel Used value to zero using the procedure above. The fuel management system is calibrated. It is strongly recommended that this procedure be accomplished prior to utilizing the information from the “Fuel Remaining in Tank” function below.

Total Fuel Used:

Description

The Total Fuel Used function displays the amount of fuel used, from 0 to 9999 gallons or corresponding liters since this function was last reset. Uses for this function might include accumulating the fuel used during several short “trips” or legs of a longer trip. It could also be used
to accumulate the fuel used over a longer time frame to more effectively monitor fuel usage. The value displayed can be reset to zero in the “Edit” Mode and will then log the quantity of fuel used since the reset.

**Operation**

Using “Select” Mode, press the “Mode” button once from the Fuel Used function to access the Total Fuel Used function.

The Function Indicator will point to G-U or L-U and the display will indicate XXXX (with no decimal point). The LCD is now displaying Total Fuel Used in the indicated units.

---

**Resetting the Total Fuel Used Value**

Press and hold the “Mode” button until the Pilot II beeps.

The unit is now in “Edit” Mode. The current total fuel used quantity is displayed. Pressing the “Up” or “Down” arrow button will reset the quantity displayed to zero.

---

**Fuel Remaining in Tank:**

**Description**

This function displays the amount of Fuel Remaining in Tank from 0 – 999.9 gallons or corresponding liters since this function was last reset. It operates similarly to the “Normal” fuel level gauge but is based on information manually entered by the operator and the Fuel Used data from the Fuel Management System to calculate the amount of fuel that should be remaining in the tank. This function is NOT a substitute for the fuel level gauge but can be used to provide a secondary source of fuel level information. In addition, a user adjustable alarm can provide an audible and visual indication that the fuel level is below the preset alarm level.

**Operation**

Using “Select” Mode, press the “Mode” button once from the Total Fuel Used function to access the Fuel Remaining in Tank function.

The Function Indicator will point to G-U or L-U and the display will indicate XXX.X (with decimal point). The LCD is now displaying Fuel Remaining in Tank in the indicated units.

To use this function, the “known” amount of fuel in a full fuel tank is manually entered by the user. As with the calibration procedure, this is best done
when the fuel tank is filled at the refueling pump. Once the tank is known to be full, the displayed value of Fuel Remaining in Tank must be manually set by the operator to match the known capacity of the fuel tank. The Fuel Used value is then continuously subtracted from the full tank, “at the pump”, value to provide the Fuel Remaining in Tank quantity.

**Adjust Fuel Remaining in Tank Value**

Press and hold the “Mode” button until the Pilot II beeps.

The unit is now in “Edit” Mode. The current fuel remaining in tank quantity is displayed and the indicator blinks indicating either G-U or L-U, which ever is selected.

Pressing the “Up” or “Down” arrow buttons will adjust the indicated value, in steps of .2 gal/liters, to match the known full fuel tank capacity.

It is strongly recommended that the Fuel Management System calibration procedure above be accomplished prior to utilizing the information from the “Fuel Remaining in Tank” function.

**Setting Fuel Remaining in Tank Alarm**

Press the “Mode” button again in the “Edit” mode to change the display to show the current Fuel Remaining in Tank Alarm value.

Using the “Up” and “Down” buttons, the value can be changed, in whole gal/liters steps, to the desired number of gallons of fuel remaining below which the alarm will activate.

The new value is automatically saved. Press and hold the “Mode” button to exit the “Edit” mode.

**Engine Running Hourmeter:**

**Description**

The Engine Running Hourmeter function displays the number of hours that the engine has been operated. The hours are only counted when a tachometer signal is received. The hours displayed therefore reflect true hours of engine use. The hourmeter displays 0.1 to 999.9 hours. No reset is available.
**Operation**
Using “Select” Mode, change lower display screens until the Function Indicator is pointing to the “hourglass” symbol. The LCD is now displaying Engine Running hours.

**Bar Graph Display Functions**
The bar graph displays utilize the FUEL and TRIM Function Indicators.

**Fuel Level**

**Description**
The Fuel Level bar graph displays the amount of fuel in the fuel tank. The information for this display is obtained from the fuel level sender mounted in the fuel tank. A full fuel tank is displayed as all segments of the display activated.

A fuel tank approaching empty is displayed as only one segment active.

This function provides a continuous monitor of fuel level. Used in conjunction with the calibrated Fuel Remaining in Tank function and alarm, very accurate monitoring of fuel level can be obtained.

**NOTE:** For proper operation no additional fuel gauge may be connected to the fuel level sender.

**Operation**
Using “Select” Mode, change the bar graph screens until the Function Indicator is pointing to FUEL. The LCD is now displaying Fuel Level in 8ths of a tank.

**Trim Adjustment**

**Description**
The Trim Adjustment bar graph displays the current position of the engine trim sender. This display can be used to establish “reference” settings for trim adjustment. Small adjustments can then be made to optimize the trim setting. The Trim limit adjustment in the Set Up mode should be performed to correctly set the limits of the trim sender in the actual installation.

**Operation**
Using “Select” Mode, change bar graph screens until the Function Indicator is pointing to TRIM. The LCD is now displaying the current Trim Adjustment setting.
YAMAHA Special Functions:

Oil:
In “Yamaha” Mode Pilot II provides standard Yamaha oil level information in lieu of oil pressure readings when the Oil Function is selected or whenever a Yamaha warning condition exists.

2 Stroke Yamaha Engines
1) When all oil levels are satisfactory the Oil Function displays “GOOD”

2) When the main oil tank is empty but the reserve oil tank is satisfactory the Upper Display changes to the Oil Function and displays “RES”. The display flashes slowly and the audible alarm sounds to warn the operator that oil is needed very soon.

3) When the main oil tank still contains oil but the reserve oil tank is approaching empty, the Upper Display changes to the Oil Function and displays “RES0”. The display flashes quickly and the audible alarm sounds rapidly to warn the operator that while there is oil in the main tank, the engine reserve tank is almost empty.

4) When both the main oil tank is empty and the reserve oil tank is approaching empty, the Upper Display changes to the Oil Function and displays “OIL”. The display flashes quickly and the audible alarm sounds rapidly to warn the operator that all oil is almost depleted.

4 Stroke Yamaha Engines
When the oil pressure drops below safe levels the Upper Display changes to the Oil Function and displays “OIL”. The display flashes quickly and the audible alarm sounds rapidly to warn the operator that oil pressure is too low.

Temperature:
In Yamaha mode Pilot II provides standard Yamaha over-temperature warnings in lieu of engine temperature readings when the Temperature Function whenever a Yamaha warning condition exists.

2 and 4 Stroke Yamaha Engines
When the engine temperature exceeds acceptable limits, the Upper Display
changes to the Temperature Function and displays “HOT”. The display flashes slowly and the audible alarm sounds to warn the operator that engine temperature is too high.
The Set-Up Mode

The Set-Up Mode allows the operator to adjust the operation of the Pilot II to many operating conditions and installed options on the boat.

Set-Up Mode is often only used once and therefore requires a special method to access the settings. **To access Set-Up Mode, press and hold both the “Up” and “Down” buttons while turning on the ignition switch.**

Press the “Mode” button to advance through the menu selections.

Once any changes have been made to the various settings, the “Mode” button must be pressed and held. This will save all settings and cause the Pilot II to enter **Operation Mode.**

Pilot II has two main modes of operation, Yamaha and Other. Yamaha mode is designed to utilize the various automatic features of the 2001+ Yamaha outboard engine. The “Other” mode can accommodate many different features of several types of installations.

The first menu that appears in Set-Up mode is the selection of one of these two modes of operation, displayed as YAHA and OtHr. The default is OtHr.

If the manufacturer has been changed Pilot II will ask for confirmation.

Leaves Set-up Mode
Yamaha Mode

Upper Display TYPE
Lower Display YAMA

to select 2 or 4 stroke engine

Upper Display En9
Lower Display or 25cr 45cr
Default

to select 6 or 12 pole Tachometer signal

Upper Display TACH
Lower Display or 6 or 12
Default

to select Tachometer Signal Level

Upper Display TACH
Lower Display or Hi or nor or Lo
Default

AMS = American Marine Sender
EMS = European Marine Sender
YAMA 2001 Sender (105-5 ohms) (Not normally used in USA)

to select Fuel Level Sender Type

Upper Display FL_LL
Lower Display or 1 or 2 or 3
(Default)
AMS (240-33.5 ohms)
EMS (10-180 ohms)
YAMA 2001 Sender (105-5 ohms) (Not normally used in USA)

Operation:
Adjust trim to full UP position. The Lower display should flash “uP”.
Sets as the top limit position.
Adjust trim to full DOWN position. The Lower display should flash “dn”.
Sets as the bottom limit position.

If the engine trim is between 45% and 55% down, the limits cannot be set, and the display show “CEnt” to show that the drive is in mid-position.

Press buttons simultaneously to resets to defaults. The “dn” or “uP” should start flashing again.
“Other” Mode

Note: Please refer to owners manual for proper settings.

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<th>Upper Display</th>
<th>Lower Display</th>
</tr>
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<tbody>
<tr>
<td>TYPE</td>
<td>OTHER</td>
</tr>
</tbody>
</table>

Tachometer set up screen

<table>
<thead>
<tr>
<th>Upper Display</th>
<th>Lower Display</th>
</tr>
</thead>
<tbody>
<tr>
<td>TACH</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>or 2</td>
</tr>
<tr>
<td></td>
<td>or 3</td>
</tr>
<tr>
<td></td>
<td>or 4</td>
</tr>
<tr>
<td></td>
<td>or 5</td>
</tr>
<tr>
<td></td>
<td>or 6</td>
</tr>
<tr>
<td></td>
<td>or TAC2</td>
</tr>
<tr>
<td></td>
<td>or TAC3</td>
</tr>
</tbody>
</table>

(Default) 2 pulses/rev (4 cyl)
3 pulses/rev (6 pole)
4 pulses/rev (8 cyl)
5 pulses/rev (10 pole)
6 pulses/rev (12 pole)
8 pulses/rev
10 pulses/rev (20 pole)
uses TAC2 settings (see below)
uses TAC3 settings (see below)

TAC2 - Select tAC2 from MAIN screen

<table>
<thead>
<tr>
<th>Upper Display</th>
<th>Lower Display</th>
</tr>
</thead>
<tbody>
<tr>
<td>TAC2</td>
<td>1 to 35</td>
</tr>
</tbody>
</table>

Displays selected pulses/rev
(Max input frequency = 15KHz)
Note: The “MAIN” tachometer set-up screen must display “TAC2” to enable this screen. Otherwise lower display shows “—”

TAC3 - Select tAC3 from MAIN screen

<table>
<thead>
<tr>
<th>Upper Display</th>
<th>Lower Display</th>
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<tbody>
<tr>
<td>TAC3</td>
<td>reference RPM</td>
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</tbody>
</table>

Displays RPM measured from a running engine.
Note: The “MAIN” tachometer set-up screen must display “TAC3” to enable this screen. Otherwise lower display shows “—”
Signal Level
The default values are usually correct but can be changed if needed.

<table>
<thead>
<tr>
<th>Upper Display</th>
<th>Lower Display</th>
</tr>
</thead>
<tbody>
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<td></td>
<td></td>
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</tbody>
</table>

Engine Temperature
Allows selection of sensor used for engine temperature.
(See Engine Manual)

<table>
<thead>
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<th>Upper Display</th>
<th>Lower Display</th>
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<tbody>
<tr>
<td>En_1</td>
<td>2</td>
</tr>
</tbody>
</table>

AMS = American Marine Sender
EMS = European Marine Sender
FMS = Faria Marine Sender

Oil Pressure Sender
Allows selection of sensor used for oil pressure.
(See Engine Manual)

<table>
<thead>
<tr>
<th>Upper Display</th>
<th>Lower Display</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oil Pressure</td>
<td></td>
</tr>
</tbody>
</table>

AMS = American Marine Sender
EMS = European Marine Sender

Fuel Level Sender
Allows selection of sensor used for fuel level.
(See Engine Manual)

<table>
<thead>
<tr>
<th>Upper Display</th>
<th>Lower Display</th>
</tr>
</thead>
<tbody>
<tr>
<td>FLL</td>
<td>2</td>
</tr>
</tbody>
</table>

1 = American Marine Sender (240-33.5 ohms)
2 = European Marine Sender (10-180 ohms)
3 = YAMAHA 2001 Sender (105-5 ohms)
(Not normally used in USA)
**Operation:**

Adjust trim to full UP position. The Lower display should flash “uP”.
- Sets as the top limit position.

Adjust trim to full DOWN position. The Lower display should flash “dn”.
- Sets as the bottom limit position.

If the engine trim is between 45% and 55% down, the limits cannot be set, and the display show “CEnl” to show that the drive is in mid-position.

Press buttons simultaneously to resets to defaults. The “dn” or “uP” should start flashing again.

---

**Trim Sensor**
Allows selection of sensor used for trim. (See Engine Manual)

**Trim Sensor Limits**
Used to calibrate the trim display to the actual installation.

**to select Trim Sensor**

<table>
<thead>
<tr>
<th>Upper Display</th>
<th>Lower Display</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

OMC Outboard
Mercury / Force
Volvo SX (MD Mod)
Force (70 & 75 HP only)
OMC Cobra Stern
OMC Sea Stern Drive
Yamaha 1996
Yamaha 1997-2000
Volvo SX Cobra/ Volvo SX(HU Mod, NC Mod/ Volvo DP-S (NC Mod)*
Volvo DP (White)*
Not Used

**to adjust Trim Sensor Limits**

<table>
<thead>
<tr>
<th>Upper Display</th>
<th>Lower Display</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Upper Limit Set
Engine trim is between 45% and 55% down
Lower Limit Set
Harness HN0363
4 - pin connector
Yamaha adaptor

4- pin connector(CN0082)

<table>
<thead>
<tr>
<th>Pin</th>
<th>Color</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Yellow</td>
<td>+12 Ignition</td>
</tr>
<tr>
<td>B</td>
<td>Black</td>
<td>Ground</td>
</tr>
<tr>
<td>C</td>
<td>Gray</td>
<td>Tachometer Signal</td>
</tr>
<tr>
<td>D</td>
<td>Pink</td>
<td>Trim Sensor</td>
</tr>
</tbody>
</table>

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Multi-bullets to Yamaha Engine Harness

Yellow (Ignition)
Black (Grnd)
Black (Grnd)
Green (Tach Signal)

Black Shield

To Pilot II

Shrink Tubing or Wrap

From 6 - pin connector (Pin B)
(Fuel Flow Transducer Grnd)

To Engine

Black (Grnd)
Gray
Pink (Trim Sensor)
Harness HN0363
6 - pin connector
Yamaha adaptor

6- pin connector(CN0083)

<table>
<thead>
<tr>
<th>Pin</th>
<th>Color</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Green/Red</td>
<td>Oil Press. / Warning</td>
</tr>
<tr>
<td>B</td>
<td>Gray</td>
<td>Engine Temp. / Warning</td>
</tr>
<tr>
<td>C</td>
<td>Pink</td>
<td>Fuel Level</td>
</tr>
<tr>
<td>D</td>
<td>Green/White</td>
<td>Yamaha 2 stroke-oil</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Yamaha 4 stroke-hot</td>
</tr>
<tr>
<td>E</td>
<td>White</td>
<td>Fuel Flow</td>
</tr>
<tr>
<td>F</td>
<td>Red</td>
<td>Fuel Flow Sensor Power</td>
</tr>
</tbody>
</table>

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To Engine

Shrink Tubing or Wrap

Green/ Red Stripe
(Oil Press. / Warning)

Green/ White Stripe
(Yamaha / Warning)

Fuel Flow Transducer

Yamaha Engine Harness

Pink

White
(Fuel Level)

White

Black

Red

Sheild

From 4 - pin connector (Pin B)
Harness HN0366
4 - pin connector

4- pin connector (CN0082)

<table>
<thead>
<tr>
<th>Pin</th>
<th>Color</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Purple</td>
<td>+12 vDC Ignition</td>
</tr>
<tr>
<td>B</td>
<td>Black</td>
<td>Ground</td>
</tr>
<tr>
<td>C</td>
<td>Gray</td>
<td>Tachometer Signal</td>
</tr>
<tr>
<td>D</td>
<td>Green/White</td>
<td>Trim Sensor</td>
</tr>
</tbody>
</table>

Shrink Tubing or Wrap

Page 23
Harness HN0366
6-pin connector

6-pin connector (CN0083)

<table>
<thead>
<tr>
<th>Pin</th>
<th>Color</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Lt. Blue</td>
<td>Oil Press Sender Sig.</td>
</tr>
<tr>
<td>B</td>
<td>Tan</td>
<td>Engine Temp</td>
</tr>
<tr>
<td>C</td>
<td>Pink</td>
<td>Fuel Level</td>
</tr>
<tr>
<td>D</td>
<td>Plug</td>
<td>Not Used</td>
</tr>
<tr>
<td>E</td>
<td>Pink/Yellow</td>
<td>Fuel Flow Signal</td>
</tr>
<tr>
<td>F</td>
<td>Red/Blue</td>
<td>Fuel Flow Sen. Power</td>
</tr>
</tbody>
</table>

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Shrink Tubing or Wrap

Fuel Flow Transducer

OIl Pressure Sender signal

Engine Water Temp. Sender signal

PJ0005 Pink Tan Lt. Blue (Fuel Level) From 4-pin connector (Pin B)

Red/Blue Stripe (Power) Black

Pink/Yellow Stripe (Signal) White

Black Shield (Grnd) (Grnd)
Harness HN0374
4-pin connector
Honda Adaptor

4-pin connector (CN0082)

<table>
<thead>
<tr>
<th>Pin</th>
<th>Color</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Blue/Yellow</td>
<td>+12 vDC Ignition</td>
</tr>
<tr>
<td>B</td>
<td>Black</td>
<td>Ground</td>
</tr>
<tr>
<td>C</td>
<td>Gray</td>
<td>Tachometer Signal</td>
</tr>
<tr>
<td>D</td>
<td>Plug</td>
<td>N/A</td>
</tr>
</tbody>
</table>

ECR 3313 03/07/02
Harness HN0374
6-pin connector
Honda Adaptor

6-pin connector (CN0083)

<table>
<thead>
<tr>
<th>Pin</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Plug</td>
</tr>
<tr>
<td>B</td>
<td>Plug</td>
</tr>
<tr>
<td>C</td>
<td>Pink</td>
</tr>
<tr>
<td>D</td>
<td>Plug</td>
</tr>
<tr>
<td>E</td>
<td>Pink/Yellow</td>
</tr>
<tr>
<td>F</td>
<td>Red/Blue</td>
</tr>
</tbody>
</table>

Shrink Tubing or Wrap

Red/Blue Stripe (Power) Black
Pink/Yellow Stripe (Signal) White

Black Shield (Grnd) (Grnd)

From 4-pin connector (Pin B)