Other CruzPro Products

- Depthsounders, FishFinder & Speed/Temperature/Log
- DC Volts/Amps/Amp-Hour Monitor
- AC Volts/Amps//Freq/kW Monitor
- LPG/Petrol Gas Detectors/Alarms
- Bilge Water Alarms & Bilge Pump Controllers
- Windlass Controller/Chain Counter
- Digital Fuel Gauges & Fuel Consumption Calculator
- Digital Tankage Gauges/w Alarms
- Smart Alternator Regulators
- Marine Security System
- RPM/Engine Hours/Elapsed Time Gauge
- Digital Oil Pressure & Water Temp. Gauges/w Alarms
- Digital Rudder Angle Indicator
- One and Three Bank Digital Volts Gauges
- Digital Amps Gauge
- Digital Clock/Watch/Race Timers/Alarms
- 8 and 16 Amp Light Dimmers / Motor Speed Controller
- Solar Panel Charge Controllers 6/8/9 & 20 Amps
- 4 & 8 Channel NMEA Combiners/RS-232 Convertors
- Engine/Exhaust Temp. Monitor & Digital Pyrometer
- NMEA 0183 Remote Data Repeater/w 4 Input Channels

CruzPro[®]

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EH60



Engine Hours and Elapsed Trip Time Gauge with Maintenance Alarm

Page 1

NOTES	

Introduction

The EH60 is a full featured Engine Hours and Elapsed Trip Time gauge which displays total engine hours and elapsed trip time from 000.0 hours to 9999 hours. A separate engine hours countdown alarm can be set to warn you to perform needed maintenance such as changing the engine oil or oil filters. When activated the built-in alarm will sound and the display will flash. The total engine hours can be preset for retrofit to older existing engines. Five levels of backlighting can be selected from the front panel, including OFF and the backlights can be deactivated with a remote switch. All calibration and alarm values are saved to a nonvolatile memory. The EH60 is easy to install with a minimum of only two wires connected to the ignition line and ground.

Page 14 Page 3

Table of Contents NOTES Operation8Key Functions8Backlight Intensity8 Displaying Engine Hours and Elapsed Time 9 ©2007 CruzPro Ltd. EH60 VA Made in New Zealand http://www.cruzpro.com Page 15

Specifications	NOTES
Power supply: 9.5 to 33.0 VDC, .035 amps nom.	
Operating temperature: 32 to 122 F (0 to 50 C)	
Size: 2.5" dia X 4.1" deep (61mm x 104 mm)	
Range: 000.0 to 9999 hours.	
Clock Accuracy: Factory calibrated & user adjustable	
Alarms: Engine Hours countdown alarm settable from 1 to 9,999 hours.	
Display: 4 digits, 5 levels of backlight.	
Data output: NMEA 0183 serial data output	

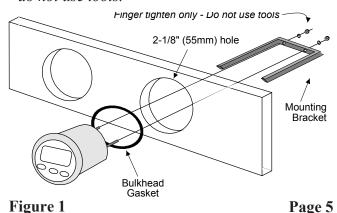
Page 4 email: info@cruzpro.com Page 13

Adjusting Elapsed Time Clock Speed

If the clock is running too slow or fast, press and hold the ▼key while applying power to the EH60. Press the ▼ key to slow the clock speed. Press the ▲ key to increase clock speed. Press the ♣ key to save the Clock Speed calibration information.

Installation

Before starting the installation, please read this entire section first. Be sure to install the bulkhead gasket before you install the instrument. Finger tighten the screws that mount the instrument bracket - do not use tools.



Page 12

Setting the Maintenance Alarm

While displaying Engine Hours, press and hold the + key for ten (10) seconds. You will hear a long beep and the EH60 will display the Maintenance Alarm value in full hours. Press the ▲ and ▼ keys to set the desired alarm value (0 to 9,999 hours). Press the + key to save your entry. The maintenance alarm will count down to zero whenever power is applied to the EH60B. When it reaches zero, the alarm will sound and the display will flash the engine hours. Press any key to silence the maintenance alarm. A value of zero disables this feature.

connections to the screw terminal on the instrument case back as shown in figure 2.

• Carefully check all your wiring against those shown in figure 2. If everything is wired correctly, turn on the ignition switch and check the operation.

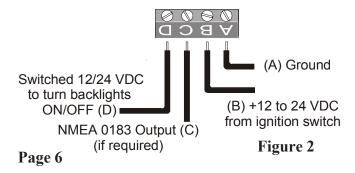
When mounting the EH60 in the instrument hole use only finger tension to tighten the bracket hold-down nuts *Do not overtighten the bracket or you may damage the case.*

Page 10 Page 7

Mounting and Wiring

- Drill a 2-1/8" (55mm) mounting hole where you desire to mount the instrument (Figure 1).
- Bring the power and ground lines out of the mounting hole and use a small flat screwdriver to make the

ALL WIRES AWG 18 - 22 GUAGE (0.6 - 1.0 mm)



Presetting Engine Hours

If the engine is not new when connecting the EH60, you might wish to preset the Engine Hours to a value. Turn off the power. Press and hold the \triangle key while reapplying power to the EH60 to change the Engine Hours value. Use the \triangle and \blacktriangledown keys to adjust the engine hours and press the + key to save the new value.

Page 11

Operation

Key Functions

The $\nabla +$ and \triangle keys are used to select Engine Hours, Elapsed time, set backlight levels, calibrate the instrument and set the engine hours maintenance alarm values. After changes are made, the new information is automatically saved to memory.

Backlight Intensity

Press the + key for 1/2 second to adjust the backlight level for nighttime viewing. Each time you press the "+" key, the level will get brighter 1, 2, 3, 4, OFF, 1, 2, ..., etc. Screw terminal "D" must be switched or connected to +12/24 VDC for the backlights to operate.

Displaying Engine Hours, Elapsed Time

To display Engine Hours press the **+** or **△** keys. To display Elapsed Trip Time, press the **▼** key.

Clearing Elapsed Time

While viewing Elapsed Time, press and hold the + key for ten (10) seconds. You will hear a long beep and the elapsed trip time will restart counting from 0:00.

Page 9