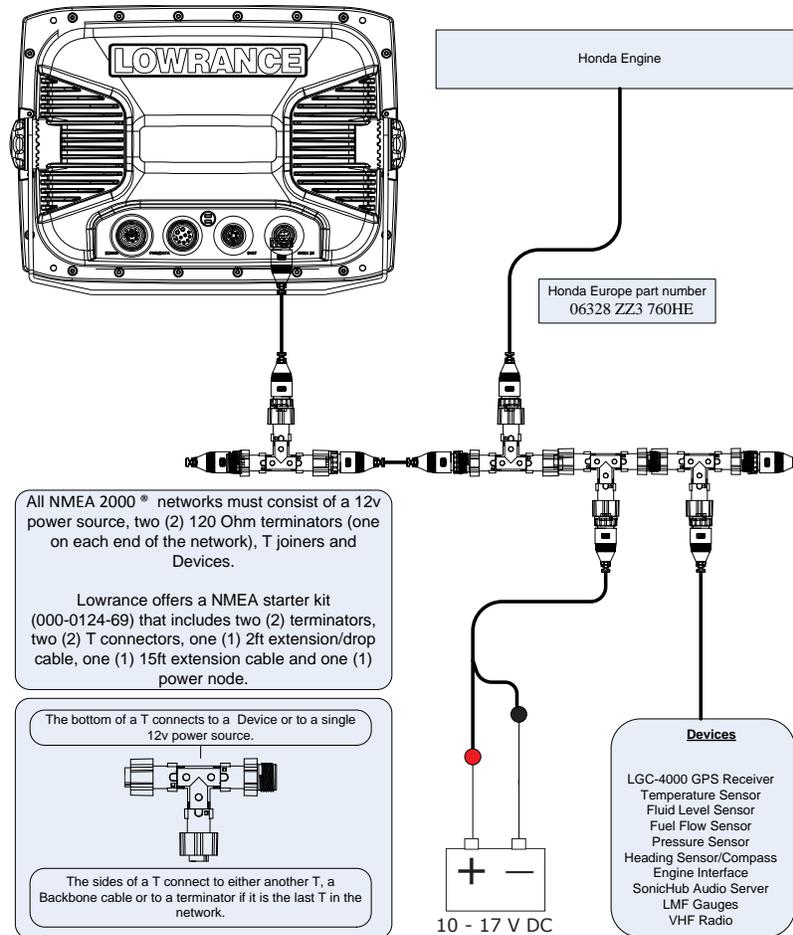**LOWRANCE®**

Honda® Engine Connection for NMEA 2000® Messages

Many Honda outboard engines have the ability to output engine data to a NMEA 2000® network. This output from the engine can be displayed on Navico Multi-Function Displays such as the Lowrance HDS, Lowrance LMF-200 and 400 gauges, the Simrad NSS/NSE/NSO or the B&G Zeus. The vessel must be equipped with an existing or new NMEA 2000® network as pictured below.

Honda Engine

Honda Europe part number
06328 ZZ3 760HE

All NMEA 2000 ® networks must consist of a 12v power source, two (2) 120 Ohm terminators (one on each end of the network), T joiners and Devices.

Lowrance offers a NMEA starter kit (000-0124-69) that includes two (2) terminators, two (2) T connectors, one (1) 2ft extension/drop cable, one (1) 15ft extension cable and one (1) power node.

The bottom of a T connects to a Device or to a single 12v power source.

The sides of a T connect to either another T, a Backbone cable or to a terminator if it is the last T in the network.

10 - 17 V DC

Devices

LGC-4000 GPS Receiver
Temperature Sensor
Fluid Level Sensor
Fuel Flow Sensor
Pressure Sensor
Heading Sensor/Compass
Engine Interface
SonicHub Audio Server
LMF Gauges
VHF Radio

Honda	40 +
RPM	✔
Alternator Voltage	✔
Alarm - Check Engine	✔
Alarm -High Engine Temp	✔
Alarm- Low oil pressure	✔
Alarm- Low system voltage	✔
Alarm- Water in fuel (225 only)	✔
Fuel Rate	✔
Engine Hours	✔
Engine Temperature	✔
Engine Hours	✔
Fuel Management (w/EP-85R and speed source)	✔
Transmission position (neutral only)	✔

Engine Connections

Connect to the factory harness located under the engine cowling using the Honda (06328 ZZ3 760HE) engine interface cable. See your Honda dealer for exact location.

Honda Engines Available with NMEA Output

Model	Standard Rotation	Counter Rotation
BF40 D	BBDJ 1000010 - FORWARD	N/A
BF50 D	BBEJ 1000042 - FORWARD	N/A
BF60 D	BBFJ 1000050 - FORWARD	N/A
BFP60 A	BBFJ 8000007 - FORWARD	N/A
BF115 D	BBHJ 1000001 - FORWARD	N/A
BF135 A	BARJ 1301771 - FORWARD	BASJ 1300175 - FORWARD
BF 150 A	BANJ 1304171 - FORWARD	BAPJ 1300650 - FORWARD
BF200 AK1	BAEJ 1600002 - FORWARD	BAFJ 1600001 - FORWARD
BF225 AK1	BAGJ 1600012 - FORWARD	BAHJ 1600003 - FORWARD

MFD Setup

After the physical connections have been made the user can now setup the unit to display the engine data.
On HDS perform the following steps:

1) Vessel Setup: Press the Menu key twice to access the system menu, select the Fuel menu then Vessel Setup…and press Enter. (Figure 1.A)
   a. Change the Vessel Setup to match the Engine/Tank configuration of the vessel. (Figure 1.B)
   b. Set the Tank Size. (Figure 1.C)
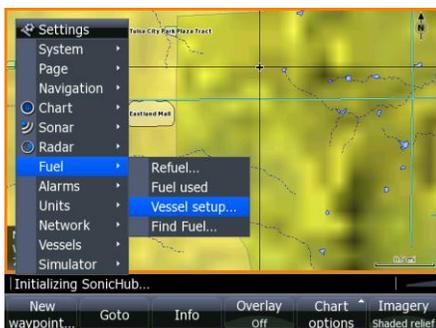   c. Select Save to retain these settings.

Figure 1.A

Figure 1.B

Figure 1.C

2) With the Engine powered on Confirm that it shows up in the device list.
   a. Press the Menu key twice to access the system menu, select the Network menu then Device List and press Enter. (Figure 2.A)
      i. You should now see your engine listed along with any other devices that are connected to your network.
   b. From the Device List you can highlight the Engine and press enter to see and the Data that is available from the Engine.
      i. Scroll to the Data tab and press Enter.

3) Confirm that the data sources are set for the Engine.
   a. Press the Menu key twice to access the system menu,

      select the Network menu then Data Sources and press Enter. (Figure 3.A)
      i. From here select Engine and press Enter.
      ii. Auto Configure the Network. In most cases this will set the data sources to the correct location.
         1. If the engine instances are not set by Honda then you may need to manually select the engine you wish to set (Port/Center/Starboard) and press Enter.
         2. From here you can manually set the data source for all engine related information.

4) Now Data overlays and the Info gauge screen can be set up.
   a. Reference the manual for your MFD to set overlays and edit the gauge screen.

Figure 2.A

Figure 3.A