

Onan Coach Command™

Operator's Manual

CCRVB



Printed in U.S.A.

900-0530
10-2003

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Safety Precautions

Electricity, fuel, exhaust, moving parts, and batteries present hazards which can result in severe personal injury or death.

Thoroughly read the OPERATOR'S MANUAL before operating Coach Command. Safe operation and top performance can only be obtained when equipment is operated and maintained properly.

The following symbols in this manual alert you to potential hazards to the operator, service person, and equipment.

⚠ DANGER *alerts you to an immediate hazard which will result in severe personal injury or death.*

⚠ WARNING *alerts you to a hazard or unsafe practice which can result in severe personal injury or death.*

⚠ CAUTION *alerts you to a hazard or unsafe practice which can result in personal injury or equipment damage.*

GENERAL PRECAUTIONS

- Always turn off Auto Genstart capability:
 - When the recreational vehicle is placed in a garage, storage area, or confined space
 - During refueling
 - When servicing the genset
 - When servicing appliances
 - For short or long-term storage

For information on turning off Auto Genstart capability, see “Activating Automatic Genset Start” on page 19.

- If a carbon monoxide detector is sounding from the recreational vehicle or the garage, storage area, or confined space where the recreational vehicle is located, do not enter until the area has been completely ventilated. Harmful or fatal amounts of carbon monoxide may be present.

- Always make sure the genset is not running and will not automatically start whenever checking fluid levels or servicing the genset. Read and observe all safety precautions in your genset Operator's Manual.
- Keep multi-class ABC fire extinguishers handy (Class A for fires involving ordinary combustible materials such as wood and cloth; Class B for fires involving combustible and flammable liquid and gaseous fuels; Class C for fires involving live electrical equipment – ref. NFPA No. 10).
- Keep children away from electrical equipment.
- Carefully follow all applicable local, state, and federal codes for electrical connections.

ELECTRICAL SHOCK CAN CAUSE SEVERE INJURY OR DEATH

- High voltage presents serious shock hazards that can result in severe personal injury or death. Make sure all service and adjustments are performed by an electrician or authorized service representative.
- Generator output connections must be made by a trained and experienced electrician in accordance with applicable codes.
- The genset must not be connected to any wiring or equipment that is also connected to the public utility or any other source of electrical power. Connection of the genset to the public utility could lead to electrocution of utility personnel and damage to equipment. An approved switching device must be used to prevent interconnection between the genset and the utility.
- AC power is present when the genset is running. Do not open the generator output box while the set is running. Read and observe all safety precautions in your genset Operator's Manual.

ENGINE EXHAUST IS DEADLY!

Exhaust gasses contain carbon monoxide, an odorless, colorless gas that can cause severe injury or death. Symptoms of carbon monoxide poisoning include:

- Dizziness
- Muscular twitching
- Weakness and sleepiness
- Throbbing in temples
- Headache
- Inability to think clearly
- Nausea
- Vomiting

LEARN THE SYMPTOMS OF CARBON MONOXIDE POISONING AS DESCRIBED ABOVE. IF YOU OR ANYONE ELSE EXPERIENCES ANY OF THESE SYMPTOMS, GET OUT INTO THE FRESH AIR IMMEDIATELY. If symptoms persist, seek medical attention. Shut down the genset and do not operate it until it has been inspected and repaired.

- Primary protection against inhaling carbon monoxide is proper installation of the exhaust system and daily inspection (every eight hours) for visible and audible exhaust system leaks.
- Engine cooling air must not be used for heating the working or living space or compartment.
- Inspect for exhaust leaks at every startup and after every eight hours of running.
- Make sure there is ample fresh air when operating the genset in a confined area.
- Never sleep in the vehicle with the genset running unless the vehicle is equipped with a working carbon monoxide detector.

FUEL IS FLAMMABLE AND EXPLOSIVE

- Do not smoke or turn electrical switches ON or OFF where fuel fumes are present or in areas sharing ventilation with fuel tanks or equipment.
- Keep flame, sparks, pilot lights, arc-producing equipment, and all other sources of ignition well away.

BATTERY GAS IS EXPLOSIVE

- Wear safety glasses and do not smoke while servicing batteries.
- When disconnecting or reconnecting battery cables, always disconnect the negative (-) battery cable first and reconnect it last to reduce arcing.

MOVING PARTS CAN CAUSE SEVERE PERSONAL INJURY OR DEATH

- Keep hands away from moving parts.
- Keep guards in place over fans, belts, pulleys, etc.

Introduction

ABOUT THIS MANUAL

This operator's manual provides information necessary to operate the Coach Command power management system. Each operator should study this manual carefully and observe all of its instructions and safety precautions. Keep this manual with the other vehicle manuals.

The *Displays and Menus*, *Setup and Operation*, *System Status Monitoring*, *Storage*, and *Troubleshooting* sections provide instructions necessary to operate the system. For information on how to obtain service, see page 52.

SYSTEM OVERVIEW

The Coach Command power management system receives information from a variety of components in the recreational vehicle and provides the means to easily monitor and control power usage from a central location.

Coach Command readings (i.e. currents, loads, voltage) displayed on the menus are for reference purposes only. These readings may vary slightly from those obtained when using test equipment.

IMPORTANT! If Coach Command is turned off at the master switch, all systems can be operated manually. Depending on the installation, some appliances may run off inverter power. However, care must be taken not to run down the batteries or overload the circuit breakers.

Figure 1 illustrates the Coach Command network.

Standard Features

Coach Command includes the following standard features:

- Power source monitoring
- Automatic genset start/stop (diesel engines only)
- Tank level monitoring
- Coach engine monitoring
- Pre-start checklist
- Maintenance reminders
- Display messages of system events and faults

Optional Features

Coach Command is designed so that additional features or future hardware and software upgrades can easily be added.

A Coach Command system may include the following optional features:

- Load control and monitoring
- 2-way internet satellite feed
- GPS satellite feed
- DirecTV satellite feed
- Support for wireless tablet or PDA
- Outdoor and indoor temperature monitoring

Controlled loads are items (air conditioners, hot water heater, engine block heater, auxiliary heater, electric heater, and washer/dryer) that are linked to the Coach Command power management system with Load Control Nodes. Coach Command can monitor these items and control their power usage. The Coach Command power management system controls the loads to limit the amount of current drawn to 80 percent of 30 or 20 amp shore power.

Non-controlled loads include AC outlets and appliances (stove, refrigerator, microwave, toaster, etc.). Coach Command does not monitor these loads or control their power usage.

Coach Command continually monitors the present power source (inverter or shore/public-utility power) and determines if there is enough power to supply loads. If there is not enough power available in the system, Coach Command either disables controlled loads based on load priority or, if the Automatic Genset Start (Auto Gen) is set to "ON," creates more power capacity by starting the generator set (genset). Controlled loads are enabled again when sufficient power is available; loads with a higher priority are enabled first. Load priorities are established and set by the recreational vehicle's manufacturer. When switching power sources, non-controlled loads can continue to run off inverter power and are not disabled.

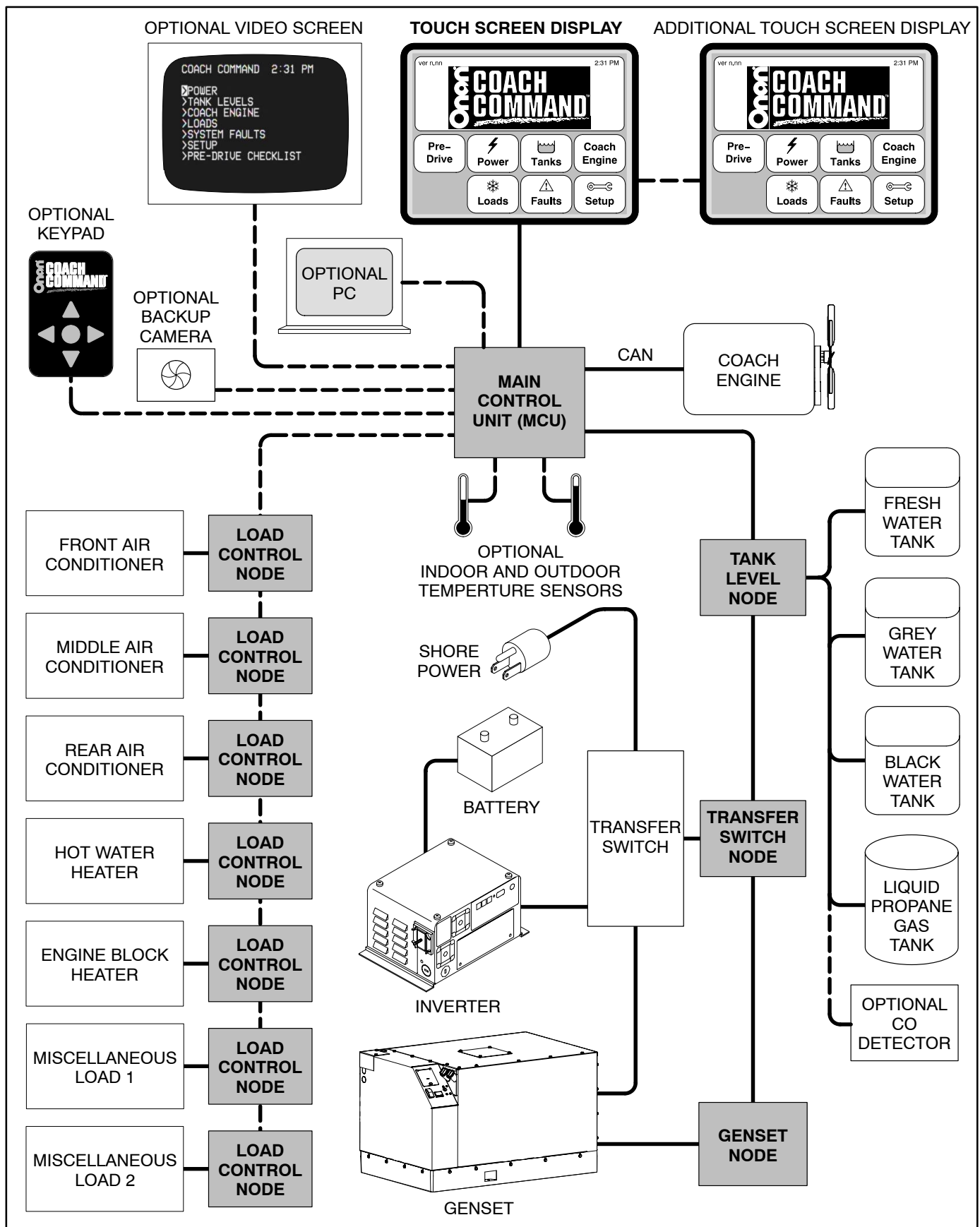


FIGURE 1. THE COACH COMMAND NETWORK

Standard Equipment

The Coach Command power management system includes node boards that provide status and fault information on power sources, appliances, and monitoring devices. This information can be viewed on a display. If the system fails to communicate with an individual node board, a fault is displayed and its associated functions are disabled. The standard node types are:

- Main Control Unit (MCU) – Provides an interface to the available display types (see “Display Options” below) and to the coach engine Controller Area Network (CAN). It also provides an interface to optional equipment (video input and indoor and outdoor temperature sensors).
- Genset Node – Starts, stops, and communicates with Onan gensets. This node monitors genset voltage, frequency, RPM, engine temperature, operational hours, and diagnostics.
- Tank Level Node – Provides tank level monitoring for the fresh water, grey water, black water, and liquid propane (LP) gas tanks.

Each Coach Command installation also includes:

- A display for viewing menus, monitoring the system, and changing parameters (see “Display Options” below)
- A transfer switch for selecting a power source and a transfer switch node for providing the network with coach voltages, currents, and battery voltage (see “Transfer Switch Options” below).

Display Options

Each Coach Command system includes at least one of the following displays:

- Touch Screen Display – Some installations include two touch screen displays
- Video Display and Keypad
- Ruggedized Personal Computer (PC) – Some installations also include a wireless PC

Transfer Switch Options

Each Coach Command installation includes one of the following transfer switch options.

- Transfer Switch with a separate Transfer Switch Node – The transfer switch node contains the network power supply and provides the network with coach voltages, currents, and battery voltage. This option is shown in Figure 1.
- Combined Transfer Switch – This device combines the functions of a transfer switch and a transfer switch node.

Optional Equipment

The following is a list of optional Coach Command equipment.

- Load Control Nodes – If used, up to seven nodes may be connected to provide load control and monitoring for devices such as air conditioners, hot water heater, engine block heater, and appliances.
- Connections to outdoor and indoor temperature sensors
- CO Detector
- Satellite dish
- Satellite Modem
- GPS Modem or Adapter

MODEL IDENTIFICATION

When contacting an Onan dealer for parts, service, or product information, be prepared to provide the model and serial numbers from the Coach Command nameplate. Figure 2 illustrates the nameplate and its location either on the transfer switch node cover or the combined transfer switch cover. The model and serial number are shown in the shaded

areas. Every character in these numbers is significant. (The last character of the model number is the specification letter; it is important for obtaining the right parts.) Record the model and serial numbers in the boxes in Figure 2 so that they are easy to find when you need them.

Genuine Onan replacement parts are recommended for best performance and safety.

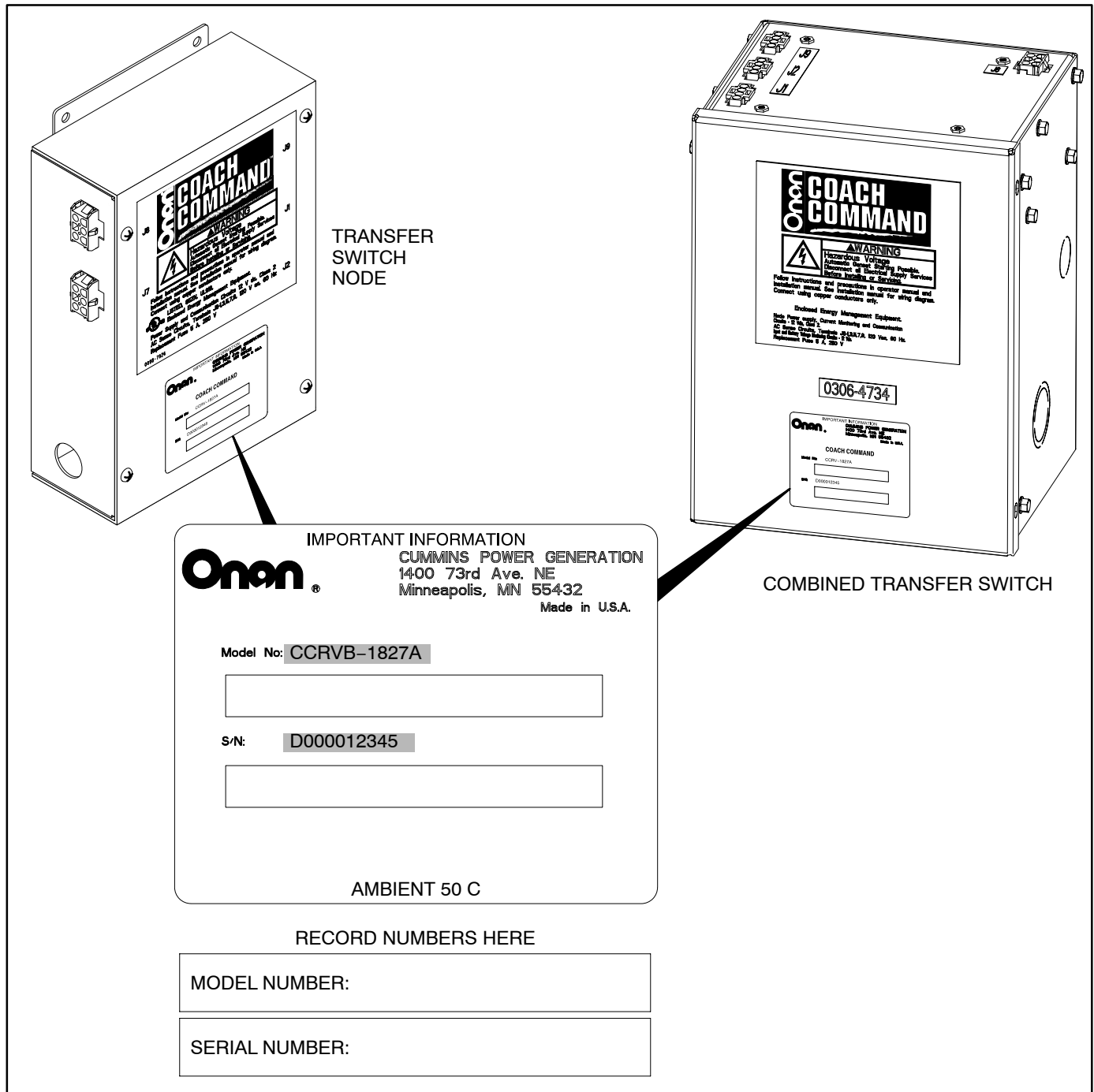


FIGURE 2. TYPICAL NAMEPLATE

Displays and Menus

This section describes the Coach Command displays and illustrates the menus.

The following types of displays are available with Coach Command:


- Primary Touch Screen Display – Standard display included with all Coach Command installations (see Figure 1 and Figure 3)
- Secondary Touch Screen Display – Optional display (see Figure 1 and Figure 3)
- Video Display and Keypad – Optional display (see Figure 1, Figure 4, and Figure 5)
- Personal Computer – Optional PC and wireless PC have a unique set of menus (not covered in this manual – on-line Help is available on PCs)

All displays include menus that show status information, parameters, events, and messages. While the same features are available on both the primary touch screen display and the video display, the menus are not the same. This manual includes separate sections describing the menus and required procedures needed to customize the setup of your system (see page 15 for touch screen displays and page 26 for video displays). Information on system monitoring starts on page 36.

The menus are displayed whenever Coach Command is powered up. Power up occurs by:

1. Turning off the Coach Command power at the master ON/OFF switch.
2. Disconnecting and reconnecting the coach 12 VDC power (i.e. battery). For more information, refer to the recreational vehicle owner's manual.

TOUCH SCREEN DISPLAYS

A touch screen display include electronic buttons that are touch activated. Touch the buttons to view menus and change parameters. Each top-level menu and submenu includes a "Back" button , used to return to the previous menu.

Touch Screen Display Main Menu

All Coach Command systems included a primary touch screen display that displays the Main Menu. The Main Menu includes seven top-level menus (Power, Tanks, Coach Engine, Pre-Drive, Loads, Faults, and Setup). Figure 3 shows the touch screen Main Menu displayed whenever Coach Command is powered up. Navigating through the menus is shown in Figure 6. A brief description of the menus and page references to additional information is included in Table 1.

Some Coach Command systems include an additional secondary touch screen display that displays the same menus as the primary touch screen display.

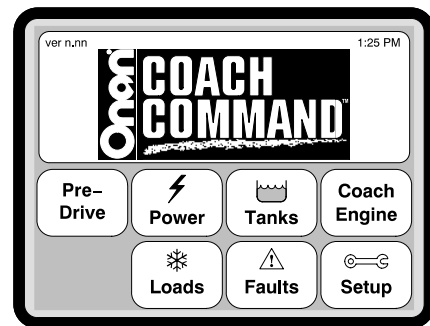






FIGURE 3. MAIN MENU

System Messages

 Active faults and warnings are displayed whenever Coach Command is powered up. Any new fault or warning is displayed as it occurs. For more information, see *Troubleshooting* on page 49.

 Event messages (for example, automatic genset start) are displayed stating what happened and, if applicable, why the event occurred.

 Some menus include a Help button  in the upper right corner of the menu. Touch this button to view Help information.

VIDEO DISPLAY AND KEYPAD

The video display includes menus that display the same types of information as the primary touch screen display. The Coach Command keypad (see Figure 4) allows you to navigate through the menus and customize the setup of your system.

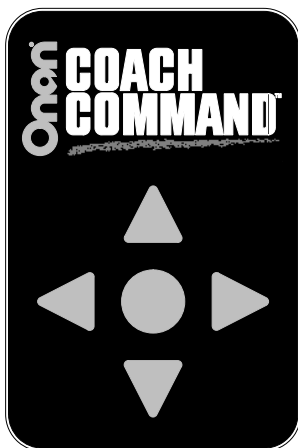


FIGURE 4. COACH COMMAND KEYPAD

The Coach Command keypad includes four directional buttons and a center round button.

- The up and down keypad buttons are used to select from a list of menu subjects or change parameters within a field.
- The right keypad button is used to display a menu or select a field within a menu.
- The left keypad button is used to exit a menu and, in some cases, return to a previous field within a menu.
- The center button is used to select one of three display modes:
 - Black screen with text (see Figure 5)
 - Video screen with text
 - Video only – This mode is automatically selected when the coach is put in reverse.

Video Display Main Menu

The Main Menu provides links to the seven top-level menus (Power, Tank Levels, Coach Engine, Loads,

System Faults, Setup, and Pre-Drive Checklist). Figure 5 shows the Main Menu displayed whenever Coach Command is powered up. Navigating through the menus is shown in Figure 7. A brief description of the menus and page references to additional information is included in Table 2.

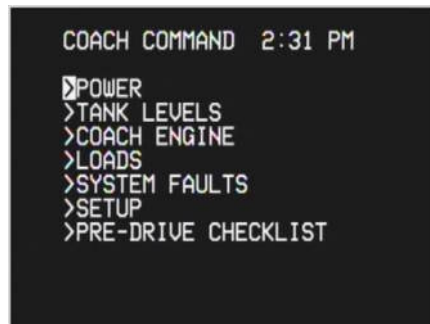





FIGURE 5. VIDEO DISPLAY MAIN MENU

Selectable subjects listed in menus show a cursor symbol  in front of the subject. When a subject is selected, the cursor reverses color . Press the right keypad button to open the menu or select the first field within a subject. When an adjustable field associated with a menu subject is selected, it also reverses color (is highlighted).

Except for the main menu, all menus include “Back” or “Back and Save” along with a  cursor at the bottom of the menu. This indicates that the left keypad button must be pressed to exit the menu and return to the previous menu. Any adjustments made are then saved and are available for viewing on the other Coach Command display(s).

SYSTEM MESSAGES

Active faults and warnings are displayed whenever Coach Command is powered up. Any new fault or warning is displayed as it occurs. For more information, see *Troubleshooting* on page 49.

Event messages (for example, automatic genset start) are displayed stating what happened and, if applicable, why the event occurred.

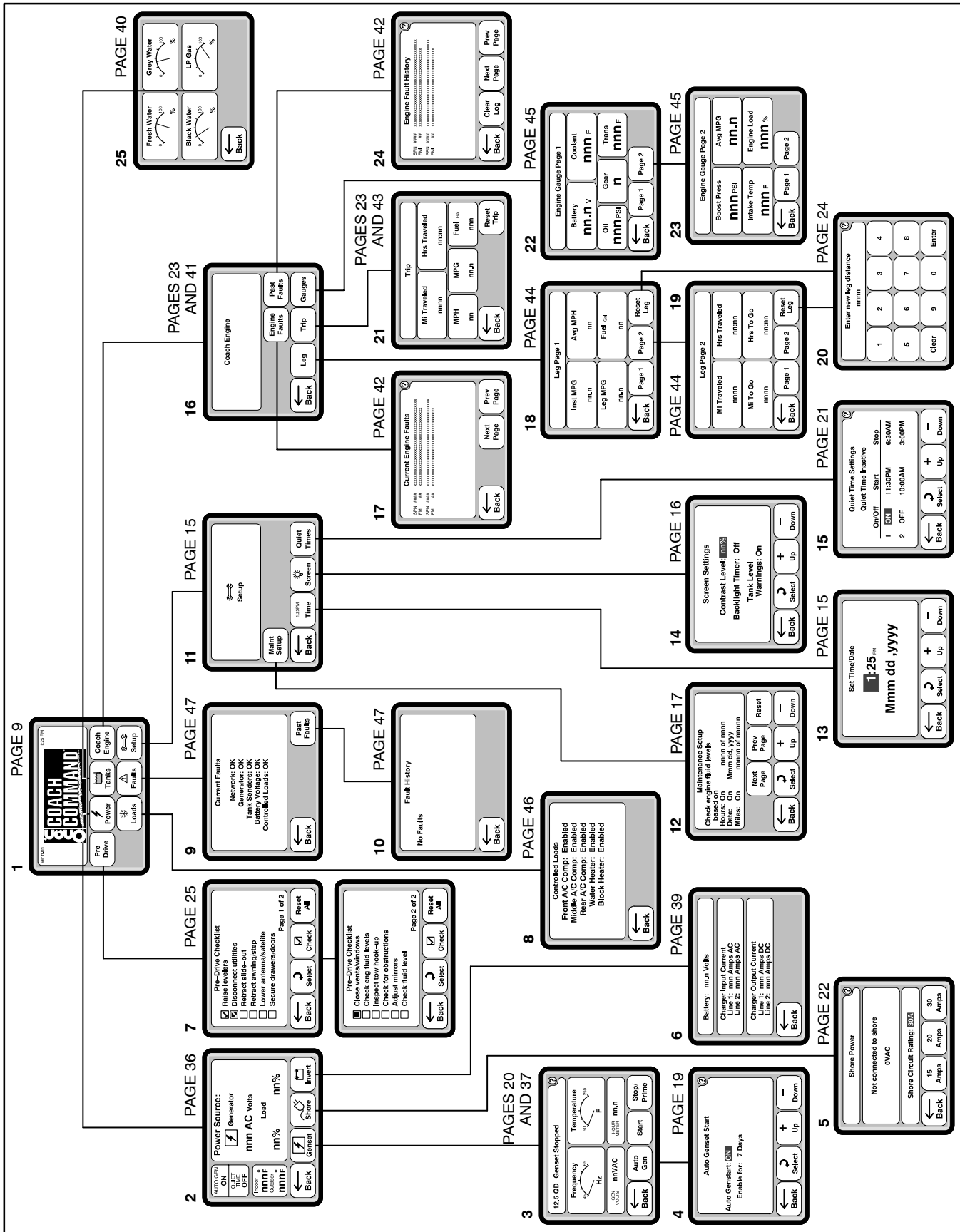


FIGURE 6. COACH COMMAND MENUS – TOUCH SCREEN DISPLAY

TABLE 1. TOUCH SCREEN DISPLAY MENU DESCRIPTIONS

Menu #	Menu	Description	Page
1	Main Menu	Provides links to the Power Source, Tank Levels, Coach Engine, Pre-Drive Checklist, Loads, Faults, and Setup menus.	9
2	Power Source Menu	Displays the Power Source, AC voltage, percentage of available load capacity being used, Auto Gen status, Quiet Time status, and the optional interior and exterior temperatures.	36
3	Genset Menu	Displays the genset type, status information, and operating information. It also provides the means to start, stop, and prime the genset.	20 & 37
4	Auto Genset Start Menu	Provides the means to switch the automatic genset start feature On/Off and set the number of days it is enabled.	19
5	Shore Power Menu	Displays shore power status information and provides the means to select 15, 20, or 30 amp shore power.	22
6	Inverter Menu	Displays battery voltage and AC/DC charge current information.	39
7	Pre-Drive Checklist (Pages 1 and 2)	Displays a list of twelve tasks that should be completed before starting a trip and provides the means to check off each task when it is completed.	25
8	Controlled Loads Menu	Displays a list of controlled loads and indicates if they are enabled or disabled.	46
9	Current Faults Menu	Displays the current status of the network, genset, tank senders, battery voltage, and controlled loads.	47
10	Fault History Menu	Displays a list of the last five network, genset, tank sender, battery voltage, and controlled load faults that occurred.	47
11	Setup Menu	Provides links to the Maintenance Setup, Set Time/Date, Screen Settings, and Quiet Times Settings menus.	15
12	Maintenance Setup (14 Menus)	Provides the means to set up reminders to schedule maintenance based on number of hours, a specific date, or number of miles.	17
13	Set Time/Date Menu	Provides the means to adjust the date and time.	15
14	Screen Settings Menu	Provides the means to adjust the screen contrast, adjust the Backlight Timer, and enable or disable the display of tank level warning messages.	16
15	Quiet Time Settings Menu	Provides the means to set up quiet times when the genset will not automatically start.	21
16	Coach Engine Menu	Provides links to the Engine Faults, Past Engine Faults, Leg, Trip, and Gauges menus.	23 & 41
17	Current Engine Faults Menu	Displays a detailed list of up to 25 active coach engine faults.	42
18	Leg Page 1 Menu	Displays instant miles per gallon, leg miles per gallon, average miles per hour, and amount of fuel used on the current portion of a trip.	24 & 44
19	Leg Page 2 Menu	Displays miles traveled, miles to go, time passed, and expected hours it will take to reach your destination for the current portion of a trip.	24 & 44
20	New Leg Distance Menu	Provides the means to set up the number of miles for a portion of a trip you wish to monitor.	24
21	Trip Menu	Displays current trip information (miles traveled, hours traveled, MPH, MPG, and amount of fuel used) and provides the means to reset the values for each trip.	23 & 43
22	Engine Gauge Page 1 Menu	Displays intake manifold boost pressure, average miles per gallon, battery voltage, and percent of engine load information.	45
23	Engine Gauge Page 2 Menu	Displays engine coolant temperature, intake manifold pressure, engine oil pressure, gear, and transmission temperature information.	45
24	Engine Fault History Menu	Displays a detailed list of up to 25 past engine faults and provides the means to delete past faults from the list	42
25	Tanks Menu	Displays fresh water, grey water, black water, and LP gas tank level information.	40

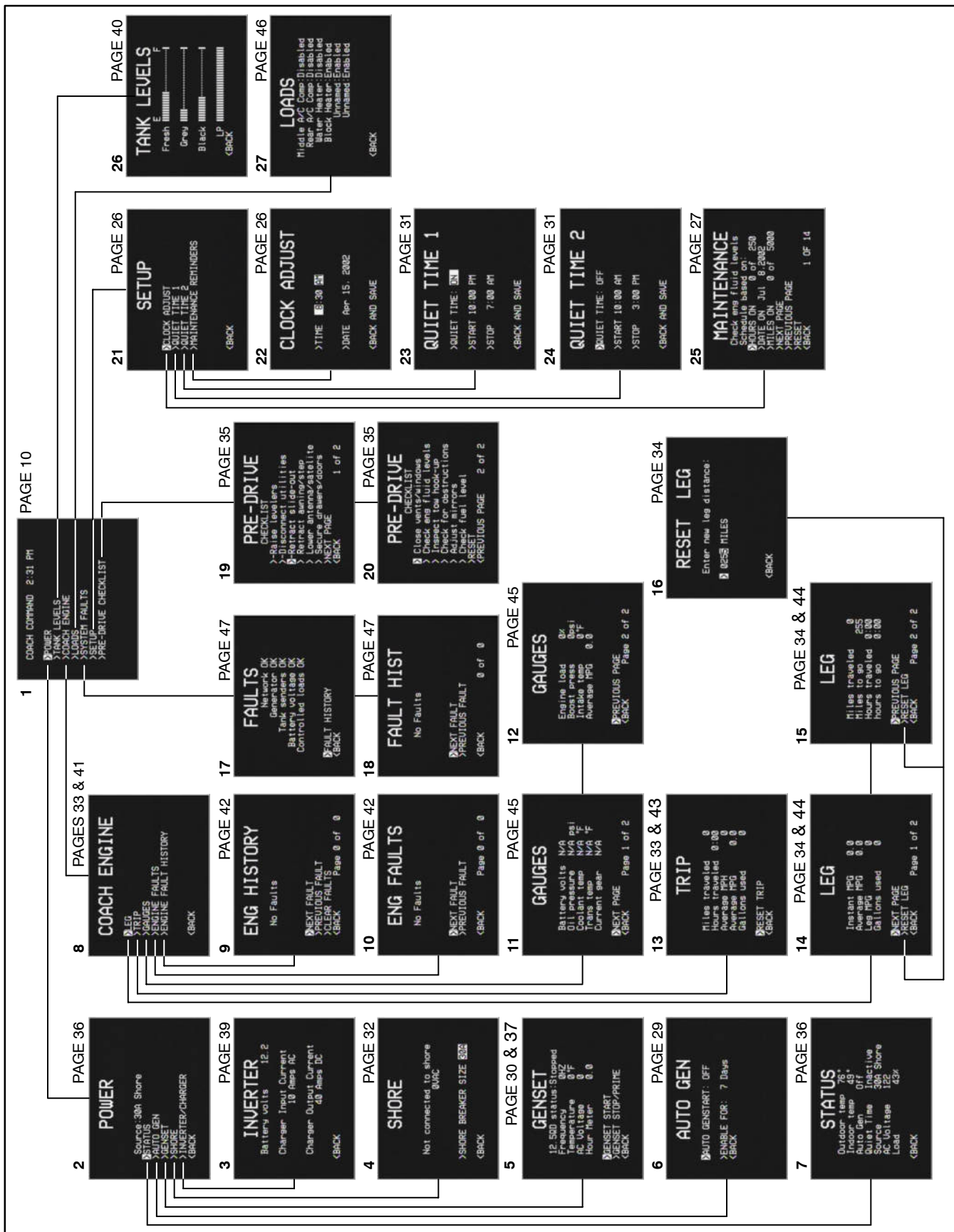


FIGURE 7. COACH COMMAND MENUS – VIDEO DISPLAY

TABLE 2. VIDEO DISPLAY MENU DESCRIPTIONS

Menu #	Menu	Description	Page
1	Main Menu	Provides links to the Power, Tank Levels, Coach Engine, Loads, System Faults, Setup, and Pre-Drive Checklist menus.	10
2	Power Menu	Displays the Power Source and provides links to the Status, Auto Gen, Genset, Shore, and Inverter/Charger menus.	36
3	Inverter Menu	Displays battery voltage and AC/DC charge current information.	39
4	Shore Menu	Displays shore power status information and provides the means to select 15, 20, or 30 amp shore power.	32
5	Genset Menu	Displays the genset type, status information, and operating information. It also provides the means to start, stop, and prime the genset.	30
6	Auto Gen Menu	Provides the means to switch the automatic genset start feature On/Off and set the number of days it is enabled.	29 & 37
7	Status Menu	Displays Auto Gen status, Quiet Time status, the power source, DC voltage, and the percentage of available load capacity being used	36
8	Coach Engine Menu	Provides links to the Leg, Trip, Gauges, Engine Faults, and Engine Fault History menus.	33 & 41
9	Engine History Menu	Displays a detailed list of up to 25 past engine faults and provides the means to delete past faults from the list.	42
10	Engine Faults Menu	Displays a detailed list of up to 25 active coach engine faults.	42
11	Gauges Page 1 Menu	Displays intake manifold boost pressure, average miles per gallon, battery voltage, and percent of engine load information.	45
12	Gauges Page 2 Menu	Displays battery voltage, intake manifold pressure, engine coolant temperature, transmission temperature, and gear information.	45
13	Trip Menu	Displays current trip information (miles traveled, hours traveled, MPH, MPG, and amount of fuel used) and provides the means to reset the values for each trip.	33 & 43
14	Leg Page 1 Menu	Displays instant miles per gallon, average miles per hour, leg miles per gallon, and amount of fuel used on the current portion of a trip.	34 & 44
15	Leg Page 2 Menu	Displays miles traveled, miles to go, time passed, and expected hours it will take to reach your destination for the current portion of a trip.	34 & 44
16	Reset Leg Menu	Provides the means to set the number of miles for a portion of a trip you wish to monitor.	34
17	Faults Menu	Displays the current status of the network, genset, tank senders, battery voltage, and controlled loads.	47
18	Fault History Menu	Displays a list of the last five network, genset, tank sender, battery voltage, and controlled load faults that occurred.	47
19 & 20	Pre-Drive Menu (Pages 1 and 2)	Displays a list of twelve tasks that should be completed before starting a trip and provides the means to check off each task when it is completed.	35
21	Setup Menu	Provides links to the Clock Adjust, Quiet Time, and Maintenance menus.	26
22	Clock Adjust Menu	Provides the means to adjust the date and time.	26
23	Quiet Time 1 Menu	Provides the means to set a quiet time when the genset will not automatically start.	31
24	Quiet Time 2 Menu	Provides the means to set a second quiet time when the genset will not automatically start.	31
25	Maintenance Menu (1 of 14 Menus)	Provides the means to set up reminders to schedule maintenance based on number of hours, a specific date, or number of miles.	27
26	Tank Levels Menu	Displays fresh water, grey water, black water, and LP gas tank level information.	40
27	Loads Menu	Displays a list of controlled loads and indicates if they are enabled or disabled.	46

Setup and Operation – Touch Screen Display

This section describes how to use the touch screen display menus to customize the setup of your system . Descriptions in this section include ranges for the parameters and default values.

OVERVIEW

Coach Command allows you to adjust the following parameters using the touch screen display menus:

- Time and date
- Screen contrast level
- Screen backlight timer – On/Off
- Display of tank level warnings – On/Off
- Genset usage – Start, Stop/Prime, and Automatic Genset start (Auto Gen)
- Quiet Times
- Maintenance reminders
- Shore power (public utility power) selection – The control system automatically detects 50 amp, 240 volt shore power. However, an adjustment to select 15, 20, or 30 amp shore power must be made when connected to 120 volt shore power.
- Trip – To view information on the current trip
- Leg – To view information on a portion of a trip

Coach Command also provides a pre-drive checklist of twelve tasks that should be completed before starting a trip. Upon completion, these tasks can be checked off on the Pre-Drive Checklist menu.

INITIAL SETUP

The Setup menu can be used to adjust the time and date, adjust screen settings (screen contrast level, backlight timer, and display of tank level warnings), and set up maintenance reminders.




Adjusting the Time and Date

Use the Time menu (see Figure 8) to set the correct time and date.

To adjust the time and date:

1. Touch the Setup button on the Main menu.
2. Touch the Time button on the Setup menu. The menu opens with the hour field highlighted.

NOTE: AM or PM settings are also made by changing the hour field.

3. Repeatedly touch the Up  or Down  buttons until the correct value is displayed.
4. Touch the Select button  to select the next field.
5. Repeat steps 3 and 4 to adjust the minutes, month, day, and year fields.

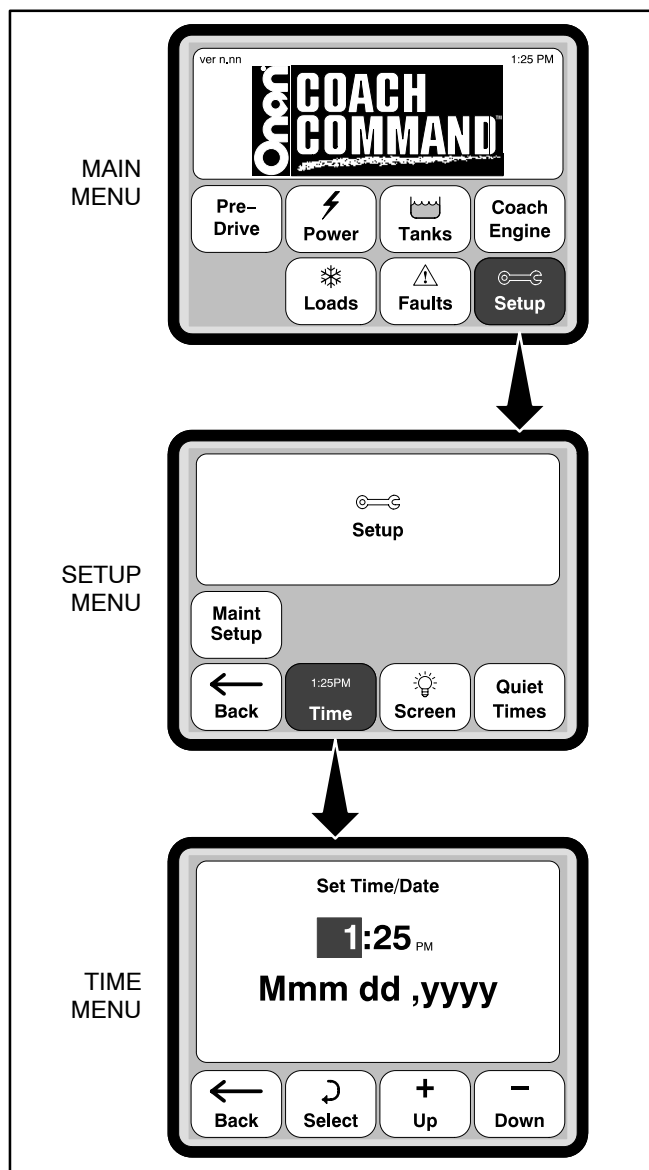


FIGURE 8. ADJUSTING THE TIME AND DATE

Adjusting Screen Settings

Use the Screen Settings menu (Figure 9) to adjust the screen Contrast Level, set the Backlight Timer, and select whether or not tank level warning messages will be automatically displayed.

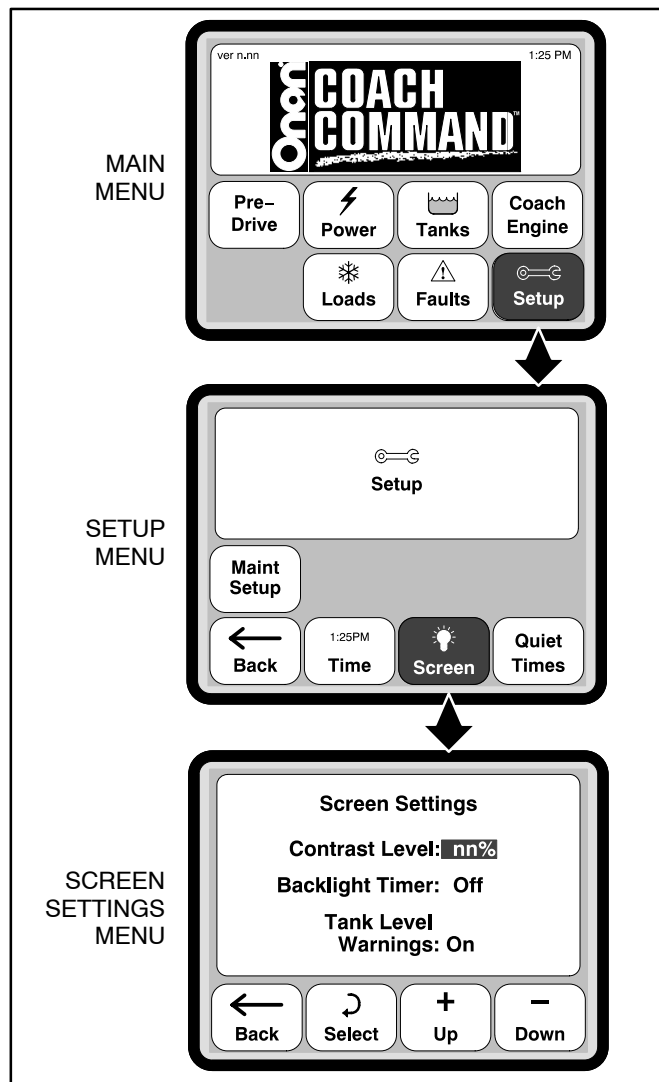


FIGURE 9. ADJUSTING SCREEN SETTINGS

Adjusting Screen Contrast

To adjust the screen Contrast Level for the best readability under various light conditions:

1. Touch the Setup button on the Main menu.
2. Touch the Screen button on the Setup menu. The menu opens with the Contrast Level field highlighted.
3. Repeatedly touch the Up or Down button to adjust the contrast. The percentage of contrast is displayed.

Adjusting the Backlight Timer

The Backlight Timer can be set to shut off the screen backlight after a specified period of screen inactivity. You may find this desirable in the low light conditions of night. To reactivate the screen once it has gone dark, touch anywhere on the screen.

NOTE: The screen is also reactivated whenever a system event occurs (for example, a fault condition is detected or the genset automatically starts). A message is then displayed describing the event.

To adjust the Backlight Timer:

1. Touch the Setup button on the Main menu.
2. Touch the Screen button on the Setup menu.
3. Touch the Select button until the Backlight Timer field is highlighted.
4. Repeatedly touch the Up or Down button to set the desired number of seconds before the backlight is deactivated.

NOTE: Time can be adjusted from 10 to 240 seconds, in increments of 10 seconds.

To keep the screen activated at all times, the backlight timer must be set to “Off.” With the Backlight Timer field highlighted, repeatedly touch the Up or Down button until “Off” is displayed.

Displaying Tank Level Warning Messages

A warning message is normally displayed when a fresh water or LP gas tank is less than ten percent full or a grey water or black water tank is greater than ninety percent full.

To select whether or not tank warning messages are displayed:

1. Touch the Setup button on the Main menu.
2. Touch the Screen button on the Setup menu.
3. Touch the Select button until the Tank Level Warning field is highlighted.
4. Touch the Up or Down button to set this function to either “On” or “Off.”

For more information on tank levels, see page 40.

Setting Maintenance Reminders






Maintenance reminders can be set up using the fourteen Maintenance Setup menus. Each menu can be set up to be activated based upon hours of operation, a specified date, and/or miles traveled. When activated, a maintenance reminder message is displayed.

NOTE: Genset maintenance reminders cannot be set based upon miles traveled.

Figure 10 shows the first of the following fourteen maintenance setup menus.

- Check engine fluid levels
- Replace eng(ine) air filter
- Replace eng(ine) fuel filter
- Insp(ect) fuel/H2O separator
- Change coolant filter
- Change engine coolant
- Service brakes
- Service transmission
- Engine service due
- Change eng(ine) oil/filter
- Change gen(set) oil/filter
- Check gen(set) fluid levels
- Replace gen(set) air filter
- Genset service due

To set up maintenance reminders:

1. Touch the Setup button on the Main menu.
2. Touch the Maint Setup button on the Setup menu.
3. To enable a maintenance reminder type, touch the Up  or Down  button to set the function to either “On.”
4. Touch the Select button  to select a field. When selected, the field is highlighted.
5. Touch the Up  or Down  button to adjust maintenance reminder type parameters.
 - Hours can be set from 50 to 2,500 hours.
 - Date – Set the month, day, and year.
 - Miles can be set from 1,000 to 99,000 miles.
6. Repeat steps 3 through 5 to enable any or all of the remaining maintenance reminders. Touch the Next Page and Prev Page buttons to navigate through the maintenance menus.

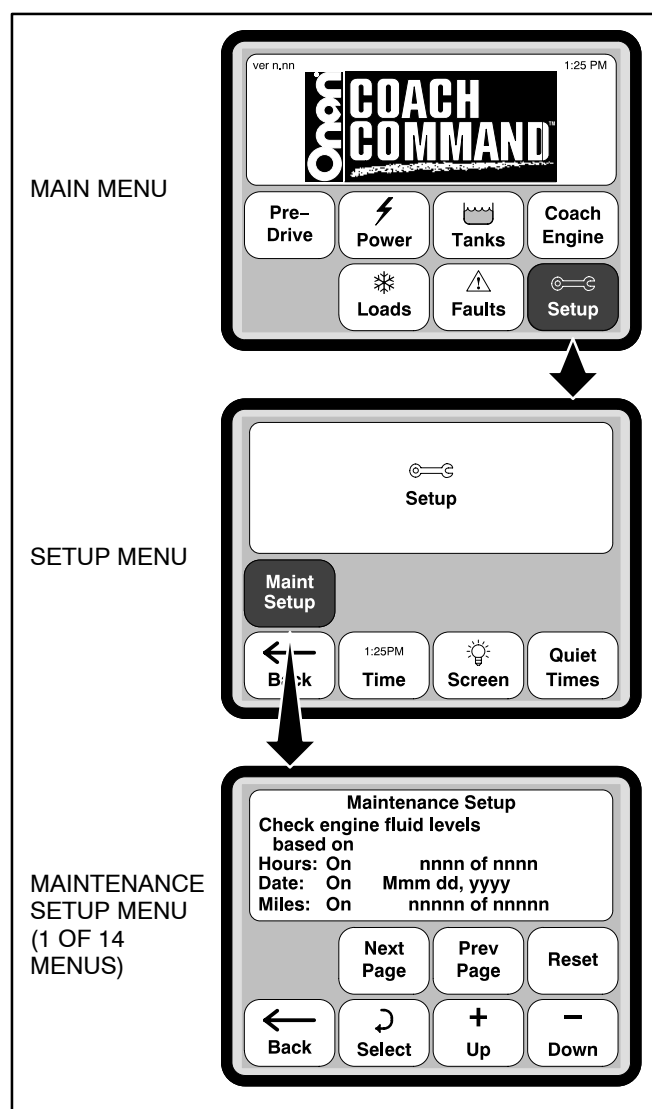


FIGURE 10. MAINTENANCE SETUP MENU

POWER SOURCES

Whenever changing power sources, controlled loads are temporarily disabled by Coach Command. These loads are again enabled when the new power source is determined to be stable. Up to three minutes may be needed to switch power sources.

When Auto Gen is “ON” and genset power is needed, the genset is started and becomes the power source until adequate inverter or shore power becomes available. The genset is turned off five minutes after genset power is no longer needed.

Using Auto Gen

Auto Genstart is set to “OFF” when Coach Command is powered up. To activate this feature, use the Auto Genset Start menu. For more information, see “Activating Automatic Genset Start” on page 19.

When Auto Genstart is set to “ON,” Coach Command automatically starts the genset when available inverter or shore power is insufficient to supply load demand or it is necessary to charge the batteries.

NOTE: The genset will not start while a Quiet Time is active (see page 21).

NOTE: For installations that include connections to CO detectors, the genset will not start if high levels of carbon monoxide are detected.

All controlled loads are disabled when running only on inverter power. With Auto Genstart set to “ON,” the genset automatically starts when there is:

- Inverter overload
- Shore power overload
- Low battery voltage

⚠ WARNING *Automatic genset start can result in severe personal injury, death, and equipment damage. Always be aware that the genset may start at any time when Auto Genstart is set to “ON.”*

Always turn off Auto Genstart:

- During refueling
- When the genset is being serviced
- When servicing appliances
- For short or long-term storage (see *Storage* on page 48).
- When the recreational vehicle is placed in a garage, storage area, or confined space

⚠ DANGER *Severe personal injury or death can result from entering an area where harmful or fatal amounts of carbon monoxide is present. If a carbon monoxide detector is sounding from the recreational vehicle or the garage, storage area, or confined space where the recreational vehicle is located, do not enter until the area has been completely ventilated.*

If high appliance demand causes inverter or shore power overload, Auto Gen starts the genset and temporarily disables the controlled loads. Once the genset is running, the controlled loads that were running are again enabled, based on priority. The highest priority load is enabled shortly after the genset starts. The remaining loads are enabled, based on priority, separated by ten-second delays. Delays are necessary to prevent circuit overload due to current surge. Load priorities are established and set by the recreational vehicle’s manufacturer.

Activating Automatic Genset Start

The Auto Genset Start menu (Figure 11) is used to turn Auto Gen ON/OFF and set the number of days Auto Gen is enabled.



⚠ WARNING *Severe personal injury, death, and equipment damage can result from operating the genset in a garage, building, or confined space. The genset produces dangerous fumes when it is running. Never park the recreational vehicle in a garage, building, or confined space without first setting Auto Genstart to “OFF.”*

NOTE: For installations that include connections to CO detectors, the genset will immediately shut down if high levels of carbon monoxide are detected.


Always turn off Auto Genstart capability:

- When the recreational vehicle is placed in a garage, storage area, or confined space
- During refueling
- When the genset is being serviced
- When servicing appliances
- For short or long-term storage

To enable the Automatic Genset Start:

1. Touch the Power button on the Main menu.
2. Touch the Genset button on the Power Source menu.
3. Touch the Auto Gen button on the Genset menu. The Auto Genstart field is highlighted.
4. Touch the Up  or Down  buttons on the Auto Genset Start menu until the Auto Genstart field reads “ON.”

NOTE: When enabled, a message is displayed to warn you about a carbon monoxide hazard that may exist when the genset is running. Read it and press any of the directional buttons to clear the message.

5. Touch the Select button  to select the Enable for field and repeatedly touch the Up or Down buttons until the desired number of days (1–120) is displayed.

NOTE: To disable Auto Gen, use steps 1 through 4 and touch the Up or Down buttons until the Auto Genstart field reads “OFF.”

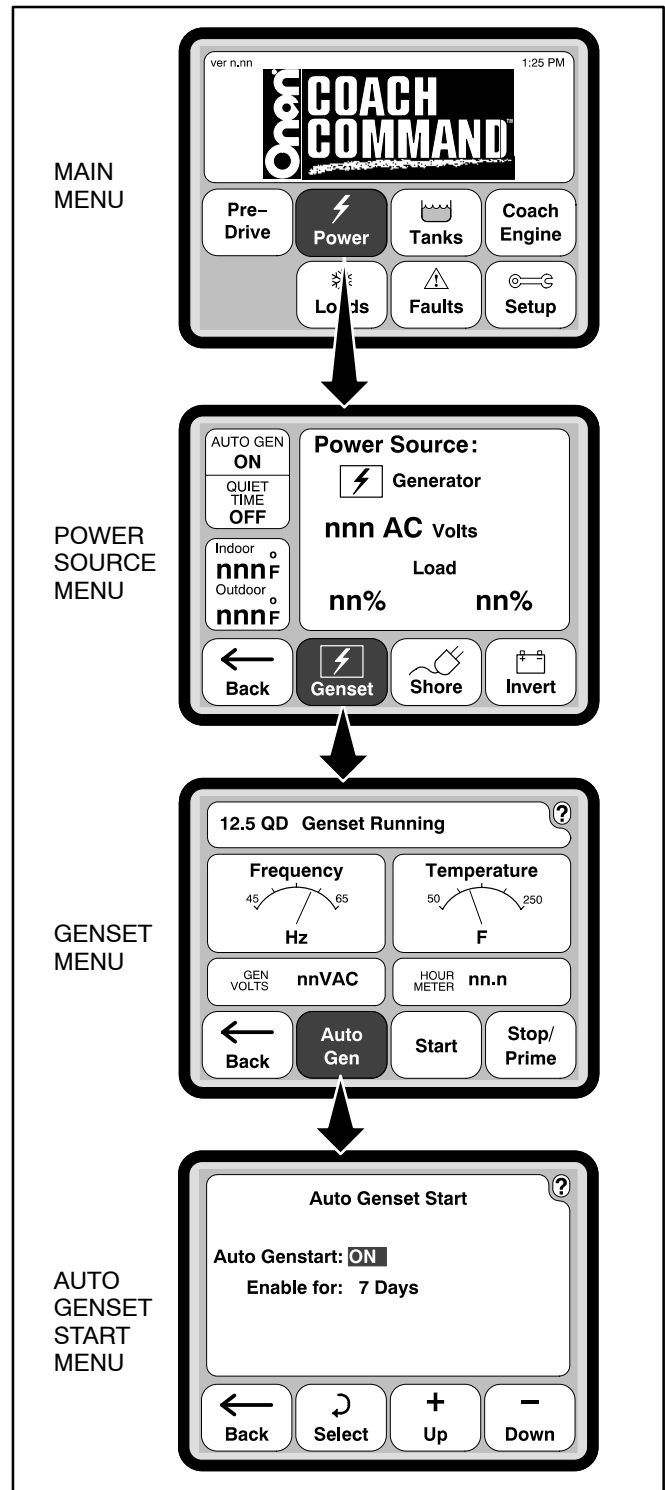


FIGURE 11. ACTIVATING AUTO GEN

Starting, Stopping, and Priming the Genset

Coach Command allows manually starting, stopping, and priming the genset (Figure 12).

⚠ WARNING *Automatic genset start can result in severe personal injury, death, and equipment damage. Before checking fluid levels or servicing the engine, always make sure the genset is not running and will not automatically start. Never service a genset without first making sure Auto Genstart is set to “OFF.”*

To manually start the genset:

1. Touch the Power button on the Main menu.
2. Touch the Genset button on the Power Source menu.
3. Touch the Start button. “Genset Starting” is temporarily displayed at the top of the Genset menu.

NOTE: For Onan diesel gensets, there is a delay after touching Start before the genset starter motor engages while the glow plugs preheat the engine. The delay may be up to 15 seconds, depending on the engine temperature.

4. Once the genset starts, “Genset Running” is displayed at the top of the Genset menu.

NOTE: If you manually start the genset while in a Quiet Time and Auto Genstart is set to “ON,” Coach Command automatically turns off the genset.

To manually stop the genset:

1. Touch the Power button on the Main menu.
2. Touch the Genset button on the Power Source menu.
3. Touch the Stop/Prime button. “Genset Stopped” is displayed at the top of the Genset menu.

NOTE: If the genset is manually stopped while Auto Genstart is set to “ON,” Auto Genstart is automatically switched to “OFF” (see Figure 12).

To manually prime the genset:

1. Touch the Power button on the Main menu.
2. Touch the Genset button on the Power Source menu.

3. Touch the Stop/Prime button. “Genset Priming” is displayed at the top of the Genset menu.

NOTE: The genset will prime for 60 seconds. Touch the Stop/Prime button again to stop priming.

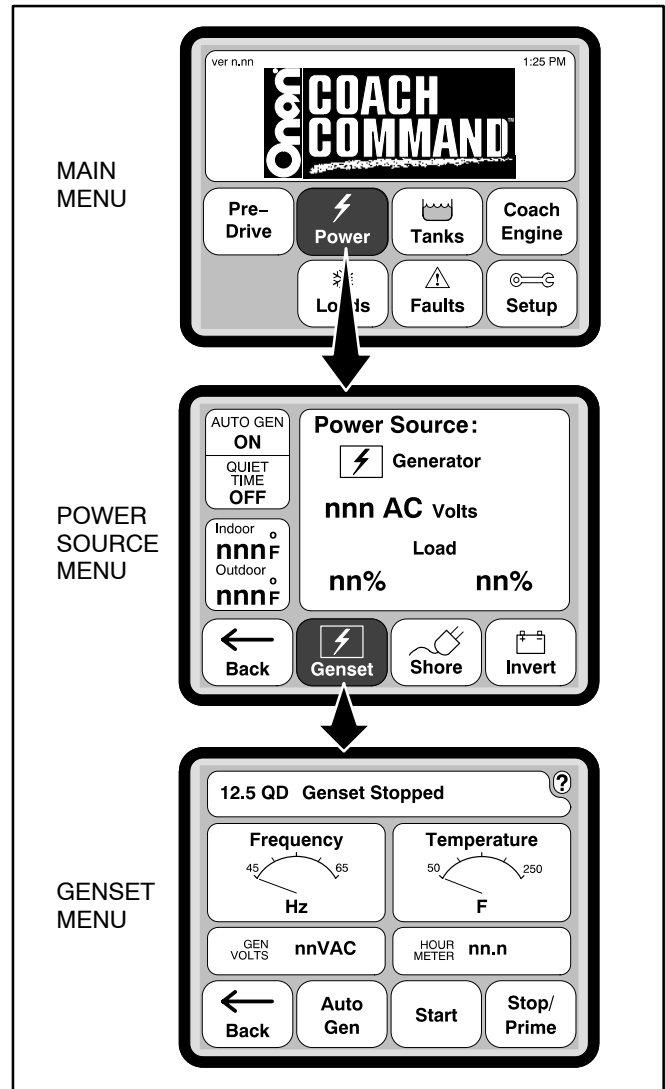


FIGURE 12. STOPPING THE GENSET




QUIET TIME

You may choose to set up periods of time when the genset will not automatically start even though Auto Gen is “ON.” These are called quiet times. When a Quiet Time is ON, Auto Gen is temporarily disabled between the start and stop times. If a quiet time begins while the genset is running, the genset is turned off. You can set up to two quiet times per day using the Quiet menu (see Figure 13).

NOTE: If you manually start the genset while in a Quiet Time and Auto Genstart is set to “ON,” Coach Command automatically turns off the genset.

Setting Up Quiet Times

To set up a Quiet Time:

1. Touch the Setup button on the Main menu.
2. Touch the Quiet button on the Setup menu. The menu opens with the Enable field for the first quiet time highlighted.
3. Touch the Up  or Down  buttons to enable a Quiet Time (“ON”).
4. Touch the Select button  to select the hour field for the first Start time and touch the Up or Down buttons to adjust the value.

NOTE: These are the start and stop times for the Quiet Time period. The genset will not automatically start during this period of time.

5. Touch the Select button to select the minute field for the first Start time and touch the Up or Down buttons to adjust the value by increments of ten minutes.
6. Repeat steps 4 and 5 to adjust the Stop time for the first Quiet Time.
7. Repeat steps 3 through 6 if you wish to set up a second Quiet Time.

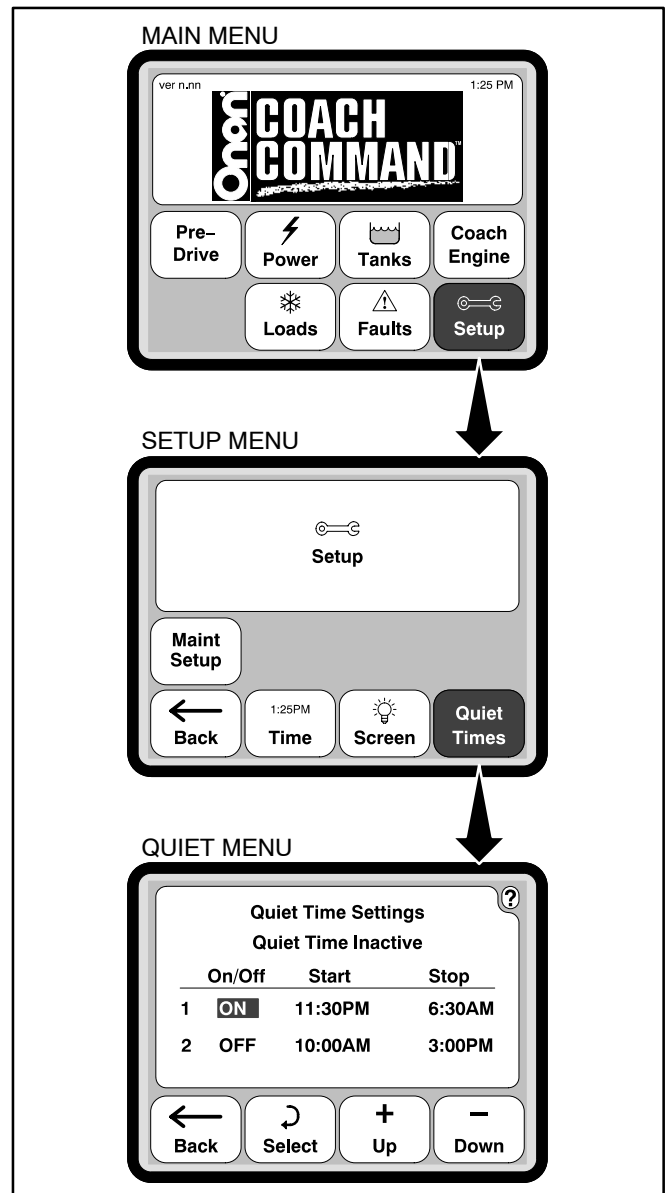


FIGURE 13. SETTING UP QUIET TIMES

SHORE POWER

The Shore Power menu displays shore power status information. The control system automatically detects 50 amp, 240 volt shore power (Figure 14).

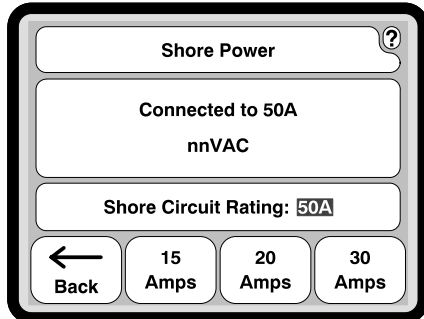


FIGURE 14. SHORE POWER MENU (50 AMPS)

If the shore power supply is 120 volts, Coach Command must be set for 15, 20, or 30 amp shore power before the recreational vehicle is connected to the power source (Figure 15).

⚠ CAUTION *Make sure the Coach Command shore power setting matches the actual shore power rating before any connection is made to a 15, 20, or 30 amp shore power supply. The failure to make this setting will cause inaccurate Load % values and Auto Gen starting later than usual, and may result in a blown circuit breaker.*

Adjusting the Shore Power Setting

To change the 15/20/30 amp shore power setting:

1. Make sure the coach is disconnected from the shore power (utility power) supply.
2. Touch the Power button on the Main menu.
3. Touch the Shore button on the Power Source menu.
4. Touch the 15 Amps, 20 Amps, or 30 Amps button, as required.
5. Connect the coach to the shore power supply.

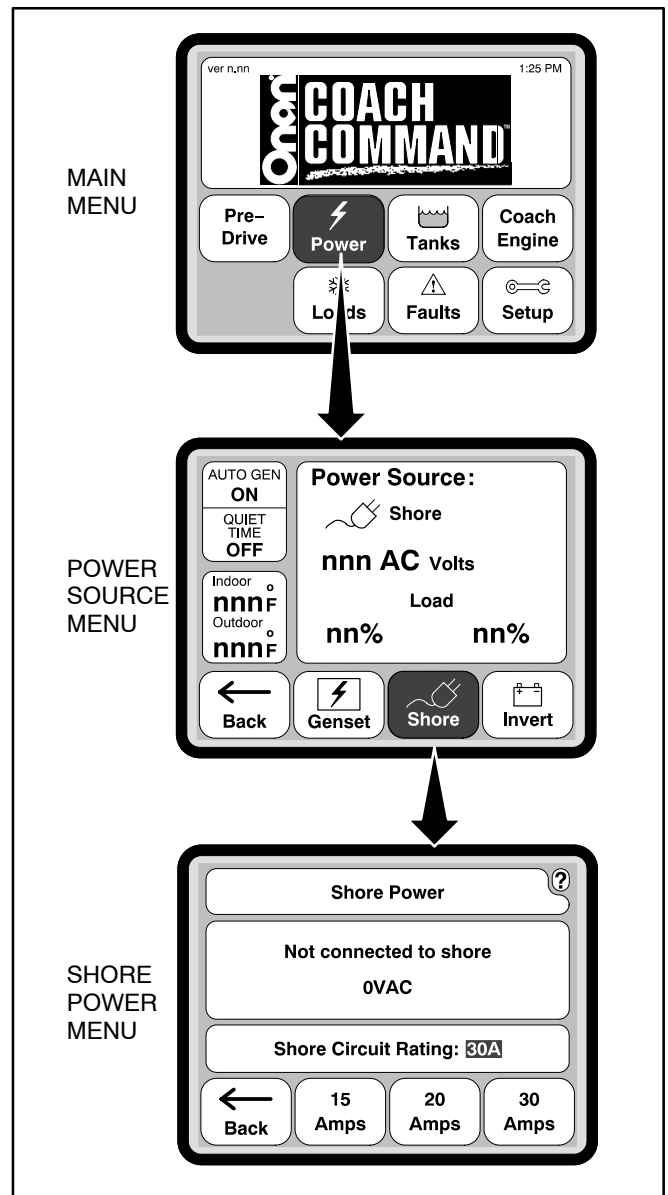


FIGURE 15. ADJUSTING THE SHORE POWER SETTING

COACH ENGINE

The Coach Engine menus display coach engine status information. In addition to using these menus to monitor this information, you can:

- Reset the Trip menu to display information on the current trip
- Reset the Leg menus to display information on a portion of the current trip

NOTE: Coach Engine menus are not available on secondary touch screen displays.

Resetting the Trip Menu

To set the Trip menu (Figure 16) to display information on the current trip:

1. Touch the Coach Engine button on the Main menu.
2. Touch the Trip button on the Coach Engine menu.
3. To reset the trip values to zero, touch the Reset Trip button on the Trip menu.

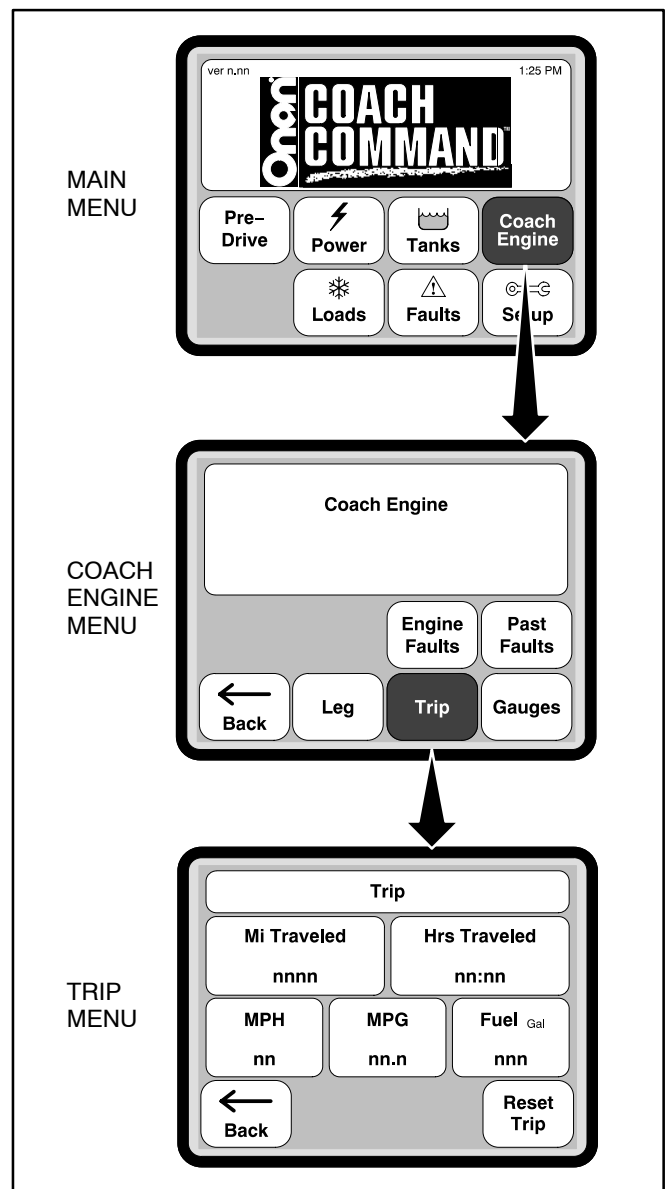


FIGURE 16. COACH ENGINE TRIP SETUP

Resetting the Leg Menu

To set up the Leg menus (Figure 17) to display information on a portion of the current trip:

1. Touch the Coach Engine button on the Main menu.
2. Touch the Leg button on the Coach Engine menu.
3. Touch the Reset Leg button on either the Leg Page 1 or Leg Page 2 menu.
4. Use the numeric buttons to enter the number of miles for the current leg of the trip.

NOTE: If a wrong value is entered, touch the Clear button and re-enter the correct value.

5. Touch the Enter button.

The value entered in step 4 is displayed in the Mi(les) To Go field of the Leg Page 2 menu. Initially, all values displayed on the Leg Page 1 and Leg Page 2 menus are reset to 0. During your trip, the Hours to Go field of the Leg Page 2 menu will display the estimated number of hours it will take to reach your destination, based upon your average speed.

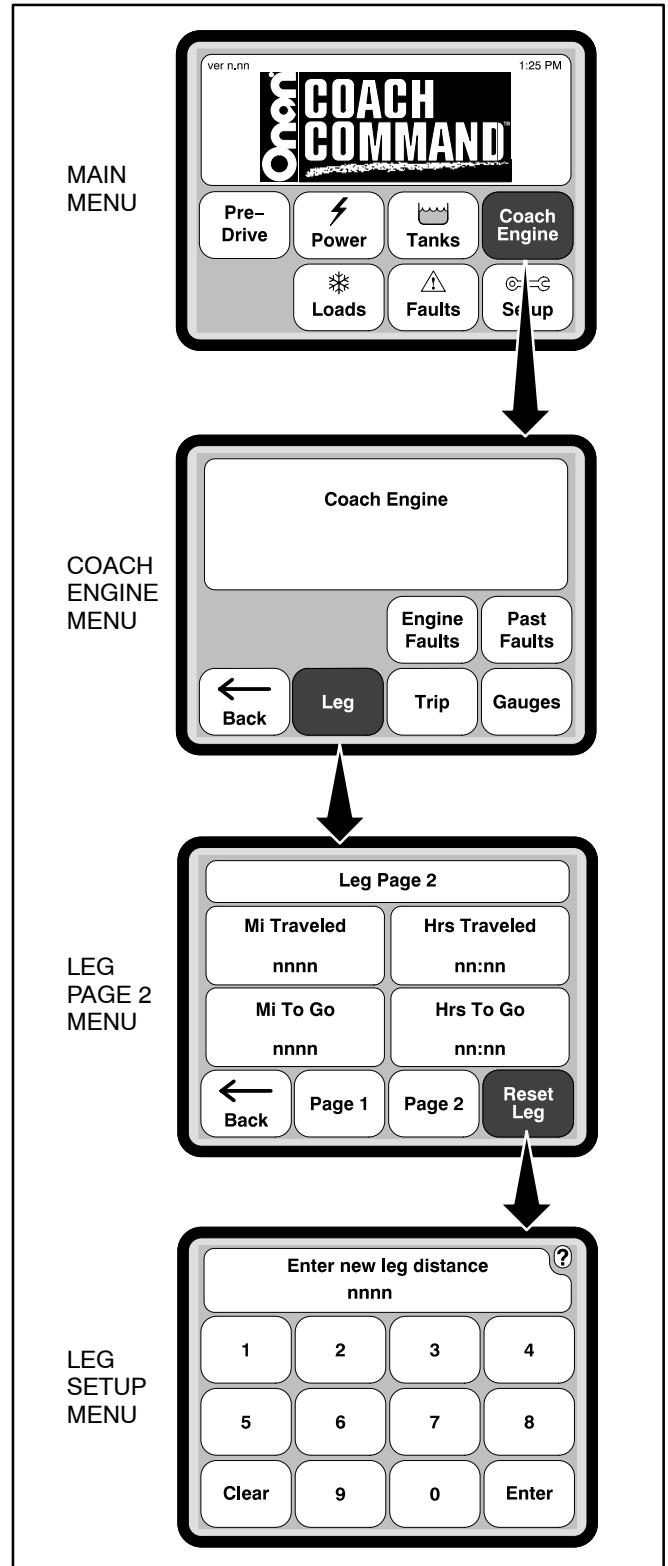


FIGURE 17. COACH ENGINE LEG SETUP

PRE-DRIVE CHECKLIST

The Pre-Drive Checklist menus (Figure 18) provides a list of twelve tasks that should be completed before starting a trip. When a task is completed, you can check it off.

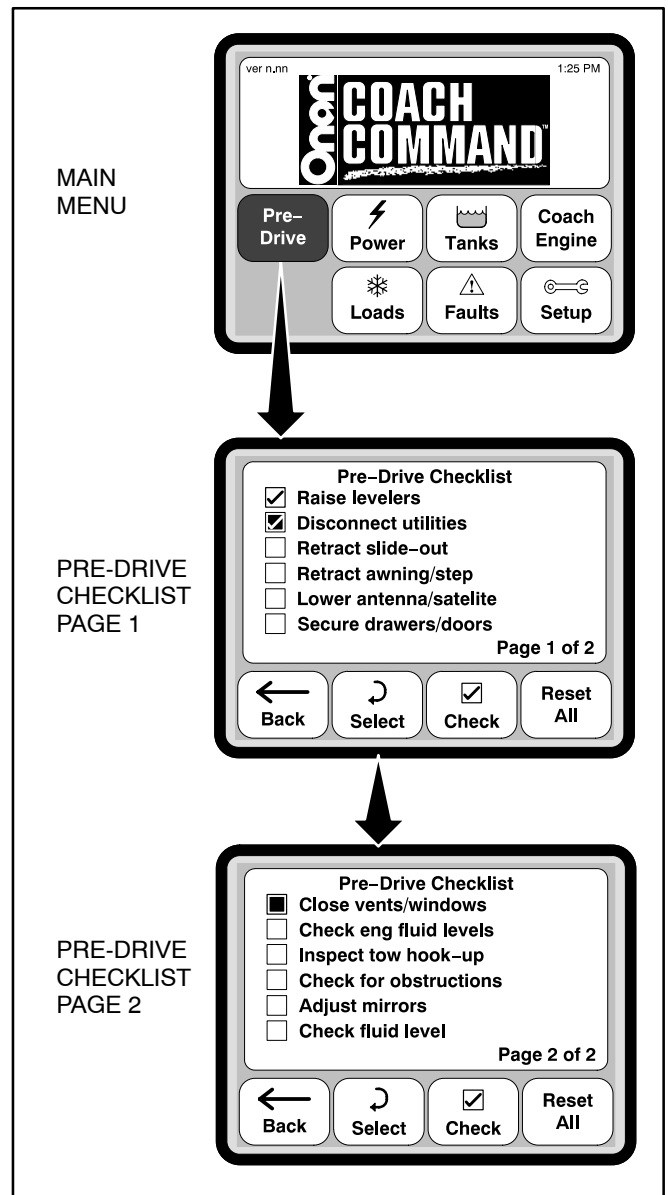
When the check box is dark, it is selected. When a task is completed, touch the Check button and a check mark is displayed. Touch the Select button to select the next task.

To view and check off completed tasks:

1. Touch the Pre-Drive button on the Main menu to view page 1 of the Pre-Drive Checklist.
2. Touch the Select button to select a task. When selected, the box in front of the task turns dark.
3. Touch the Check button to check off a completed task. When checked off, a check mark is displayed in the box in front of the task (see Figure 18).

NOTE: If you accidentally check off a task before it is completed, touch the Check-button again to remove the check.

4. Touch the Select button until page 2 of the Pre-Drive checklist is displayed and continue to check off tasks as they are completed.
5. After all applicable tasks have been completed and checked off, touch the Reset All button to clear all check marks.



**FIGURE 18. PRE-DRIVE CHECKLIST
(PAGES 1 AND 2)**

Setup and Operation – Video Display and Keypad

This section describes how to use the video display menus and keypad to customize the setup of your system. These menus are only available on coaches that include the optional Coach Command keypad. Descriptions in this section include ranges for the parameters and default values.

OVERVIEW

Coach Command allows you to change the following parameters using the video display menus:

- Time and date
- Genset usage – Start, Stop/Prime, and Automatic Genset start (Auto Gen)
- Quiet Times
- Maintenance reminders
- Shore power (public utility power) selection – The control system automatically detects 50 amp, 240 volt shore power. However, an adjustment to select 15, 20, or 30 amp shore power must be made when connected to 120 volt shore power.
- Trip – To view information on the current trip
- Leg – To view information on a portion of a trip

Coach Command also provides a pre-drive checklist of twelve tasks that should be completed before starting a trip. Upon completion, these tasks can be checked off on the Pre-Drive Checklist menu.

INITIAL SETUP

The Setup menu can be used to adjust the time and date and set up maintenance reminders.

Adjusting the Time and Date

Use the Time menu (see Figure 19) to set the correct time and date.

To adjust the time and date:

1. Press the down keypad button on the Main menu until Setup is selected.
2. Press the right keypad button to display the Setup menu. The menu opens with Clock Adjust highlighted.

3. Press the right keypad button to display the Clock Adjust menu.
4. Press the right keypad button to select the hour field.

NOTE: AM or PM settings are also made by changing the hour field.

5. Repeatedly press the up or down keypad buttons until the correct value is displayed.
6. Press the right keypad button to select the next field and repeat step 5 to adjust the minutes field.

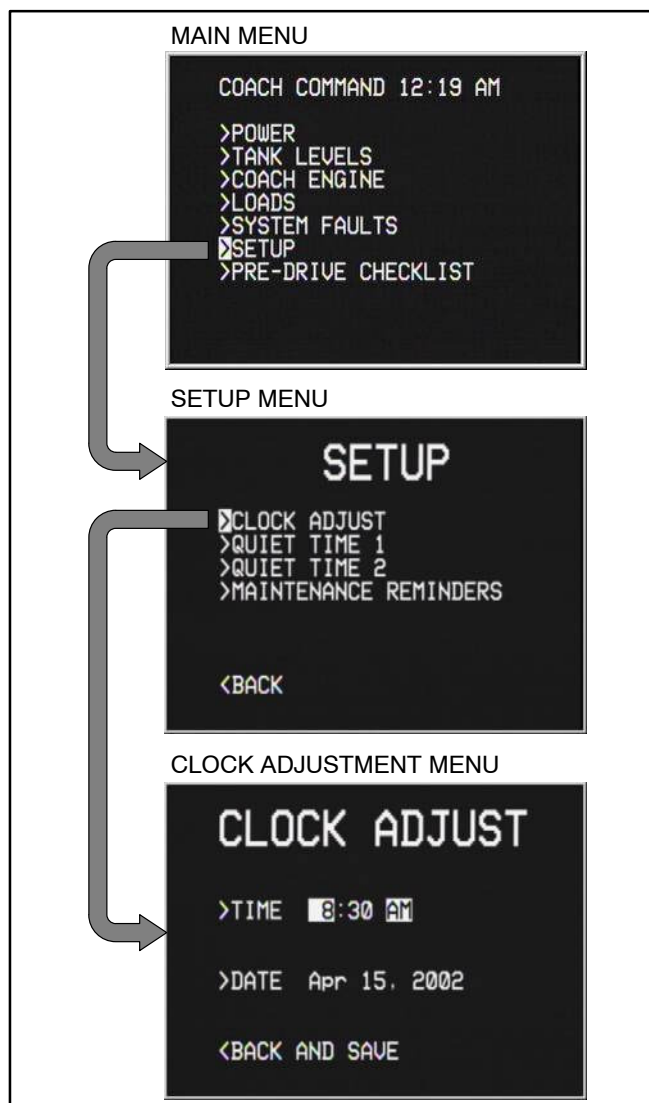


FIGURE 19. ADJUSTING THE TIME AND DATE

7. Press the right keypad button to return to the beginning of the subject. and then press the bottom keypad button to select the next subject.
8. Repeat the procedure described in steps 4 thru 7 to set the date.
9. Press the left keypad button to save your adjustments and return to the Setup menu.

Setting Maintenance Reminders

Maintenance reminders can be set up using the fourteen Maintenance Setup menus. Each menu can be set up to be activated based upon hours of operation, a specified date, and/or miles traveled. When activated, a maintenance reminder message is displayed.

NOTE: Genset maintenance reminders cannot be set based upon miles traveled.

Figure 20 shows the first of the following fourteen maintenance setup menus.

- Check engine fluid levels
- Replace eng(ine) air filter
- Replace eng(ine) fuel filter
- Insp(ect) fuel/H2O separator
- Change coolant filter
- Change engine coolant
- Service brakes
- Service transmission
- Engine service due
- Change eng(ine) oil/filter
- Change gen(set) oil/filter
- Check gen(set) fluid levels
- Replace gen(set) air filter
- Genset service due

To set up maintenance reminders:

1. Press the down keypad button on the Main menu until Setup is selected. Press the right keypad menu to view the Setup menu.
2. Press the down keypad button on the Setup menu until Maintenance Reminders is highlighted.
3. Press the right keypad button to open the first Maintenance menu.
4. Press the right keypad button to enter one of the subjects; the subject (i.e. "HOURS OFF") will be highlighted.
5. To enable a maintenance reminder type, press the Up or Down keypad button to set the func-

tion to "ON." Figure 20 shows all three maintenance reminder types enabled.

6. When set to "ON," the appropriate fields associated with the subject are displayed. Press the right keypad button to select a field. When selected, the field is highlighted.
7. Press the Up or Down keypad buttons to adjust maintenance reminder type parameters.
 - Hours can be set from 50 to 2,500 hours.
 - Date – Set the month, day, and year.
 - Miles can be set from 1,000 to 99,000 miles.
8. Repeat steps 3 through 7 to enable any or all of the remaining maintenance reminders. Use Next Page and Previous Page to navigate through the maintenance menus.

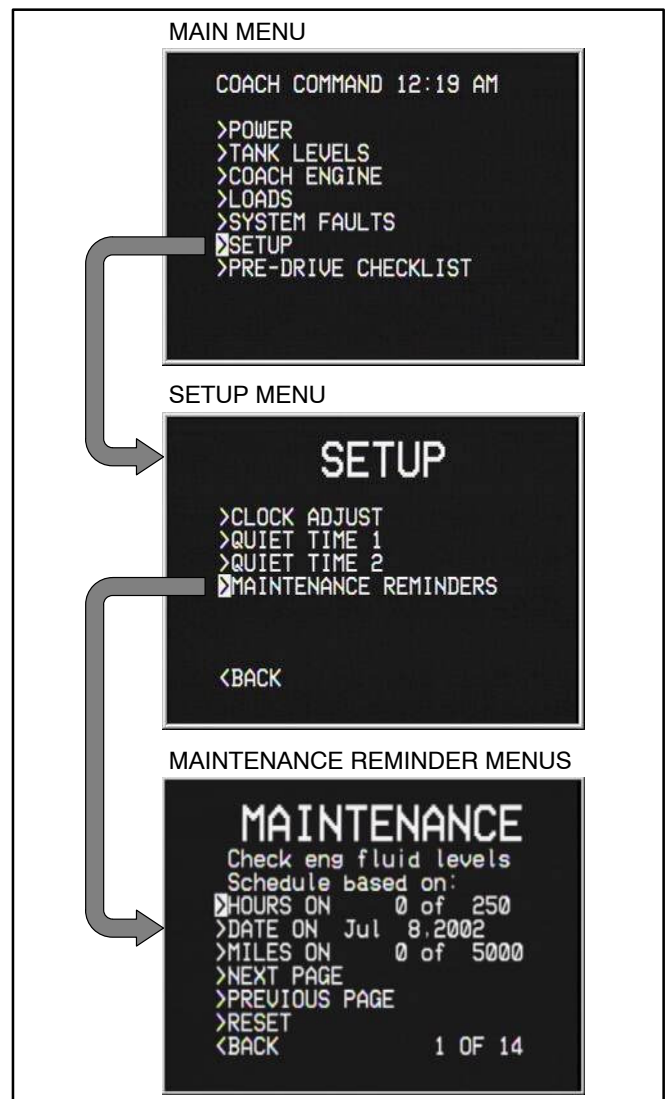


FIGURE 20. MAINTENANCE SETUP MENU

POWER SOURCES

Whenever changing power sources, controlled loads are temporarily disabled by Coach Command. These loads are again enabled when the new power source is determined to be stable. Up to three minutes may be needed to switch power sources.

When Auto Gen is “ON” and genset power is needed, the genset is started and becomes the power source until adequate inverter or shore power becomes available. The genset is turned off five minutes after genset power is no longer needed.

Using Auto Gen

Auto Gen is set to “OFF” when Coach Command is powered up. To activate this feature, use the Auto Gen menu. For more information, see “Activating Automatic Genset Start” on page 29.

When Auto Gen is set to “ON,” Coach Command automatically starts the genset when available power is insufficient to supply load demand or it is necessary to charge the batteries.

NOTE: The genset will not start while a Quiet Time is active (see page 31).

NOTE: For installations that include connections to CO detectors, the genset will not start if high levels of carbon monoxide are detected.

All controlled loads are disabled when running only on inverter power. With Auto Gen set to “ON,” the genset automatically starts when there is:

- Inverter overload
- Shore power overload
- Low battery voltage

⚠ WARNING *Automatic genset start can result in severe personal injury, death, and equipment damage. Always be aware that the genset may start at any time when Auto Genstart is set to “ON.”*

Always deactivate the automatic genset start capability:

- When the recreational vehicle is placed in a garage, storage area, or confined space

⚠ DANGER *Severe personal injury or death can result from entering an area where harmful or fatal amounts of carbon monoxide is present. If a carbon monoxide detector is sounding from the recreational vehicle or the garage, storage area, or confined space where the recreational vehicle is located, do not enter until the area has been completely ventilated.*

- During refueling
- When the genset is being serviced
- When servicing appliances
- For short or long-term storage

When inverter or shore power overload occurs (due to appliance demand), Auto Gen starts the genset and temporarily sheds controlled loads. Once the genset is running, the controlled loads are again enabled incrementally, based on priority. The highest priority load is enabled shortly after the genset starts. The remaining loads are enabled, based on priority, separated by ten-second increments. Delays are necessary to prevent circuit overload due to current surge. Load priorities are established and set by the recreational vehicle’s manufacturer.

Activating Automatic Genset Start

The Auto Gen menu (Figure 21) is used to turn Auto Gen ON/OFF and set the number of days Auto Gen is enabled.

⚠WARNING *Severe personal injury, death, and equipment damage can result from operating the genset in a garage, building, or confined space. The genset produces dangerous fumes when it is running. Never park the recreational vehicle in a garage, building, or confined space without first setting Auto Gen to “OFF.”*

Always deactivate the automatic genset capability:

- When the recreational vehicle is placed in a garage, storage area, or confined space
- During refueling
- When the genset is being serviced
- When servicing appliances
- For short or long-term storage

To activate the automatic genset start:

1. Press the down keypad button on the Main menu until Power is selected. Press the right keypad button to view the Power menu.
2. Press the down keypad button on the Power menu until Auto Gen is selected. Press the right keypad button to view the Auto Gen menu.
3. Press the right keypad button; “OFF” is highlighted.
4. Press the keypad up or down buttons to enable the Auto Gen (Auto Genstart is set to “ON”).

NOTE: When enabled, a message is displayed to warn you about a carbon monoxide hazard that may exist when the genset is running. Read it and press any of the directional buttons to clear the message.

5. Press the down keypad button to select Enable For. Press the right keypad button; the number of days field is highlighted.
6. Press the up or down keypad buttons until the desired number of days (1–120) is displayed.

NOTE: To disable Auto Gen, use steps 1 through 4 and press the Up or Down keypad buttons until the Auto Genstart field reads “OFF.”

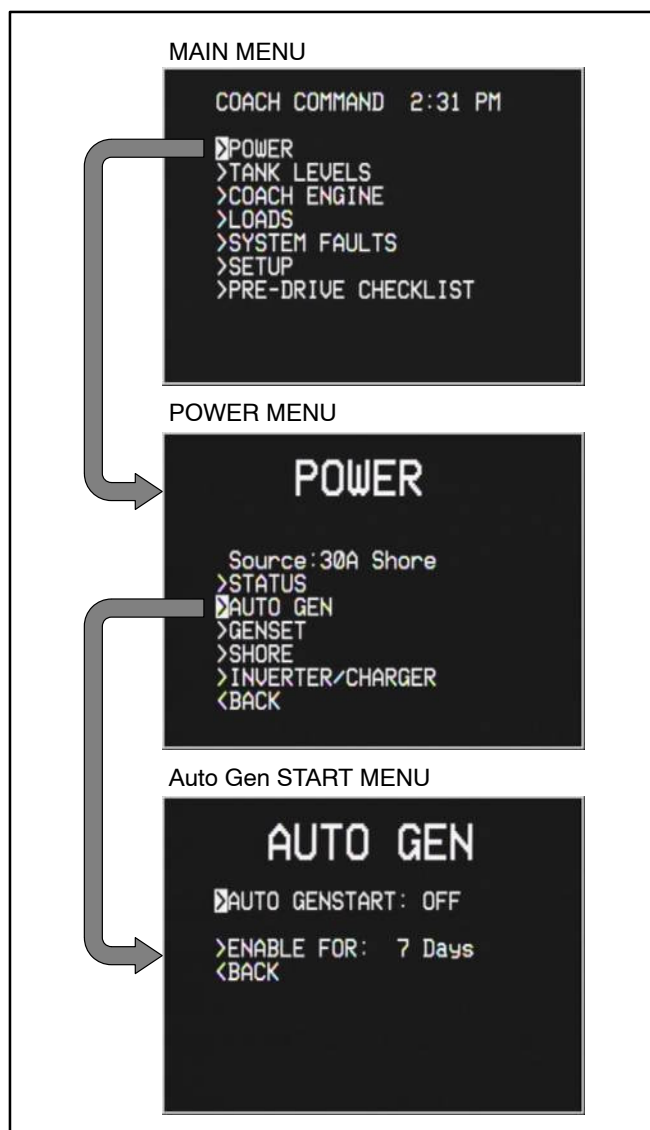


FIGURE 21. ACTIVATING AUTO GEN

Starting, Stopping, and Priming the Genset

Coach Command allows manually starting, stopping, and priming the genset (Figure 22).

⚠WARNING *Automatic genset start can result in severe personal injury, death, and equipment damage. Before checking fluid levels or servicing the engine, always make sure the genset is not running and will not automatically start. Never service a genset without first making sure Auto Genstart is set to “OFF.”*

NOTE: For installations that include connections to CO detectors, the genset will immediately shut down if high levels of carbon monoxide are detected.

To manually start the genset:

1. Press the down keypad button on the Main menu until Power is selected. Press the right keypad button to view the Power menu.
2. Press the down keypad button on the Power menu until Genset is selected. Press the right keypad button to view the Genset menu.
3. Press the right keypad button to start the genset. The genset status temporarily displays "Starting."

NOTE: For Onan diesel gensets, there is a delay after pressing Start before the genset starter motor engages while the glow plugs preheat the engine. The delay may be up to 15 seconds, depending on the engine temperature.

4. Once the genset starts, the genset status displays "Running."

NOTE: If you manually start the genset while in a Quiet Time and Auto Gen is set to "ON," Coach Command automatically turns off the genset.

To manually stop the genset:

1. Press the down keypad button on the Main menu until Power is selected. Press the right keypad button to view the Power menu.
2. Press the down keypad button on the Power menu until Genset is selected. Press the right keypad button to view the Genset menu.
3. Press the down keypad button until Genset Stop/Prime is selected.
4. Press the right keypad button. The genset status displays "Stopped."

NOTE: If the genset is manually stopped while Auto Gen is set to "ON," Auto Gen is automatically switched to "OFF."

To manually prime the genset:

1. Press the down keypad button on the Main menu until Power is selected. Press the right keypad button to view the Power menu.
2. Press the down keypad button on the Power menu until Genset is selected. Press the right keypad button to view the Genset menu.
3. Press the down keypad button until Genset Stop/Prime is selected.

4. Press the right keypad button. The genset status displays "Priming."

NOTE: The genset will prime for 60 seconds. Select Genset Stop/Prime again to stop priming.

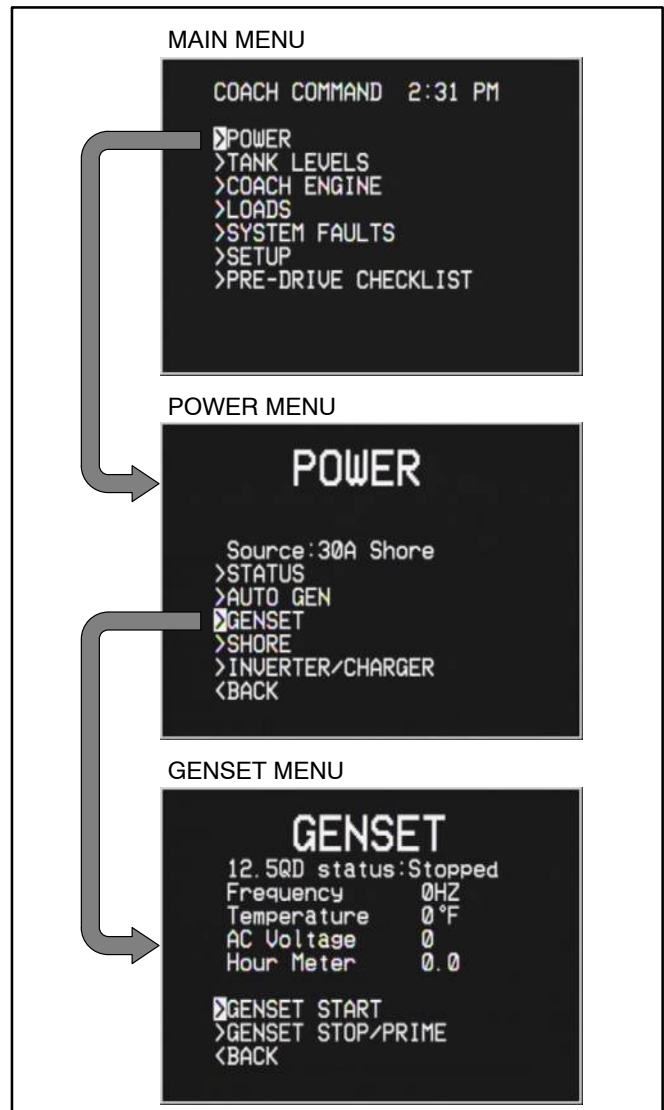


FIGURE 22. STOPPING THE GENSET

QUIET TIME

You may choose to set up periods of time when the genset will not automatically start even though Auto Gen is “ON.” These are called quiet times. When a Quiet Time is ON, Auto Gen is temporarily disabled between the start and stop times. If a quiet time begins while the genset is running, the genset is turned off. You can set up to two quiet times per day using the Quiet menu (see Figure 23).

NOTE: If you manually start the genset while in a Quiet Time and Auto Genstart is set to “ON,” Coach Command automatically turns off the genset.

Setting Up Quiet Times

To set up a Quiet Time:

1. Press the down keypad button on the Main menu until Setup is highlighted.
2. Press the down keypad button on the Setup menu until Quiet Time 1 is highlighted. Press the right keypad button to view the Quiet Time 1 menu.
3. Press the right keypad button; “OFF” is highlighted. Press the Up or Down buttons to enable the first Quiet Time (“ON”).
4. Press the right keypad button to exit the Quiet Time field. Press the down keypad button to select Start.
5. Press the right keypad button; the hour and AM/PM field is highlighted. Press the Up or Down buttons to adjust the hour value and AM/PM setting.
6. Press the right keypad button; the minute field is highlighted. Press the Up or Down buttons to adjust the minute value by increments of ten minutes.
7. Press the right keypad button again and press the down keypad button to select Stop.
8. Repeat steps 5 and 6 to adjust the Stop time.

NOTE: These are the start and stop times for the Quiet Time period. The genset will not automatically start during this period of time.

9. Repeat steps 2 through 8 if you wish go to the Quiet Time 2 menu and set up a second Quiet Time.

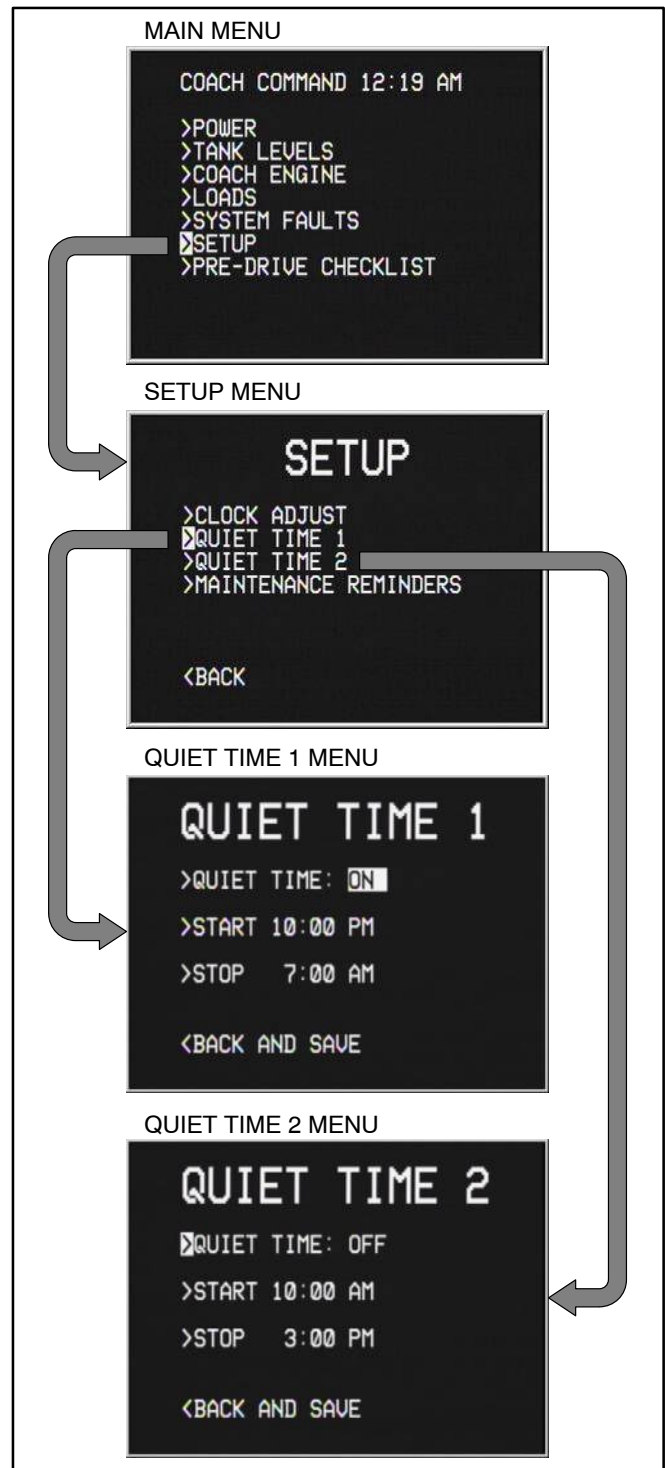


FIGURE 23. SETTING UP QUIET TIMES

SHORE POWER

The Shore Power menu displays shore power status information. The control system automatically detects 50 amp, 240 volt shore power.

If the shore power supply is 120 volts, Coach Command must be set for 15, 20, or 30 amp shore power before the recreational vehicle is connected to the power source (Figure 24).

⚠ CAUTION *Make sure the Coach Command shore power setting matches the actual shore power rating before any connection is made to a 15, 20, or 30 amp shore power supply. The failure to make this setting will cause inaccurate Load % values and Auto Gen starting later than usual, and may result in a blown circuit breaker.*

Adjusting the Shore Power Setting

To change the 15/20/30 amp shore power setting:

1. Make sure the coach is disconnected from the shore power (utility power) supply.
2. Press the down keypad button on the Main menu until Shore is selected.
3. Press the right keypad button to view the Shore menu.
4. Press the right keypad button; the amperage field will be highlighted.
5. Press the up or down keypad buttons until the appropriate amperage (15A, 20A, or 30A) is selected.
6. Connect the coach to the shore power supply.

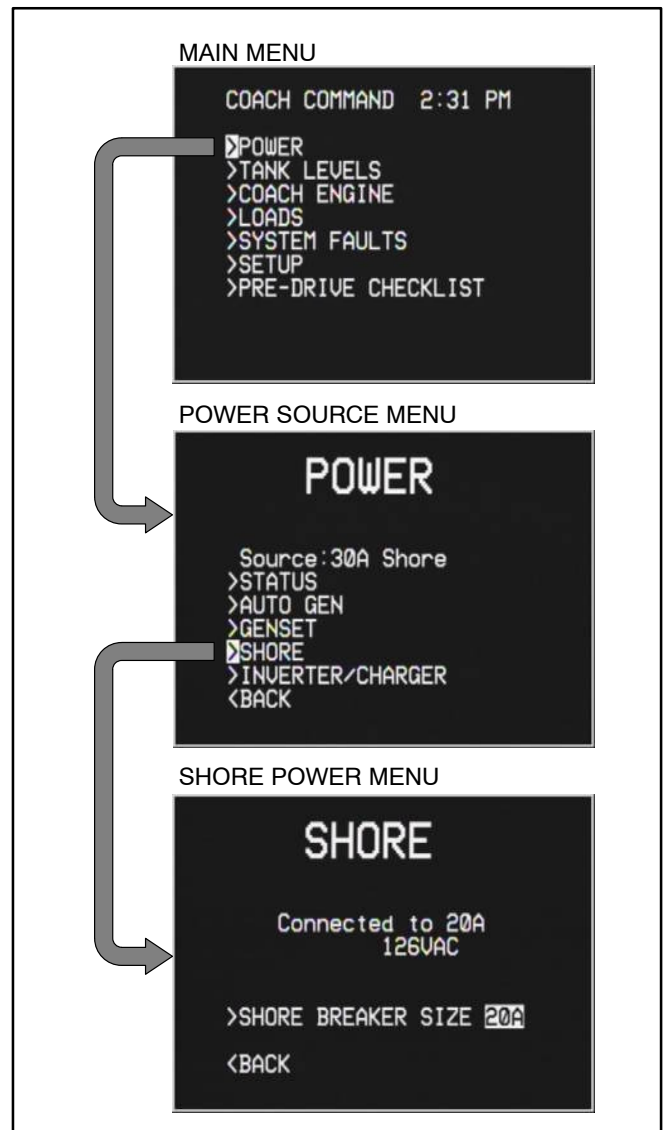


FIGURE 24. ADJUSTING THE SHORE POWER SETTING

COACH ENGINE

The Coach Engine menus display coach engine status information. From the Coach Engine menu, you can:

- Reset the Trip menu to display information on the current trip
- Reset the Leg menus to display information on a portion of the current trip

Resetting Trip Parameters

The Trip menu (Figure 25) can be set up to display information for the current trip only.

To set up Coach Command to display information on the current trip:

1. Press the down keypad button on the Main menu until Coach Engine is selected. Press the right keypad button to view the Coach Engine menu.
2. Press the down keypad button until Trip is selected. Press the right keypad button to view the Trip menu. The menu opens with Reset Trip selected.
3. Press the right keypad button to reset the trip. The message "Trip parameters have been reset" is displayed. Press any of the directional keys to clear the message.

NOTE: Initially, all values displayed on the Trip menu are set to zero.

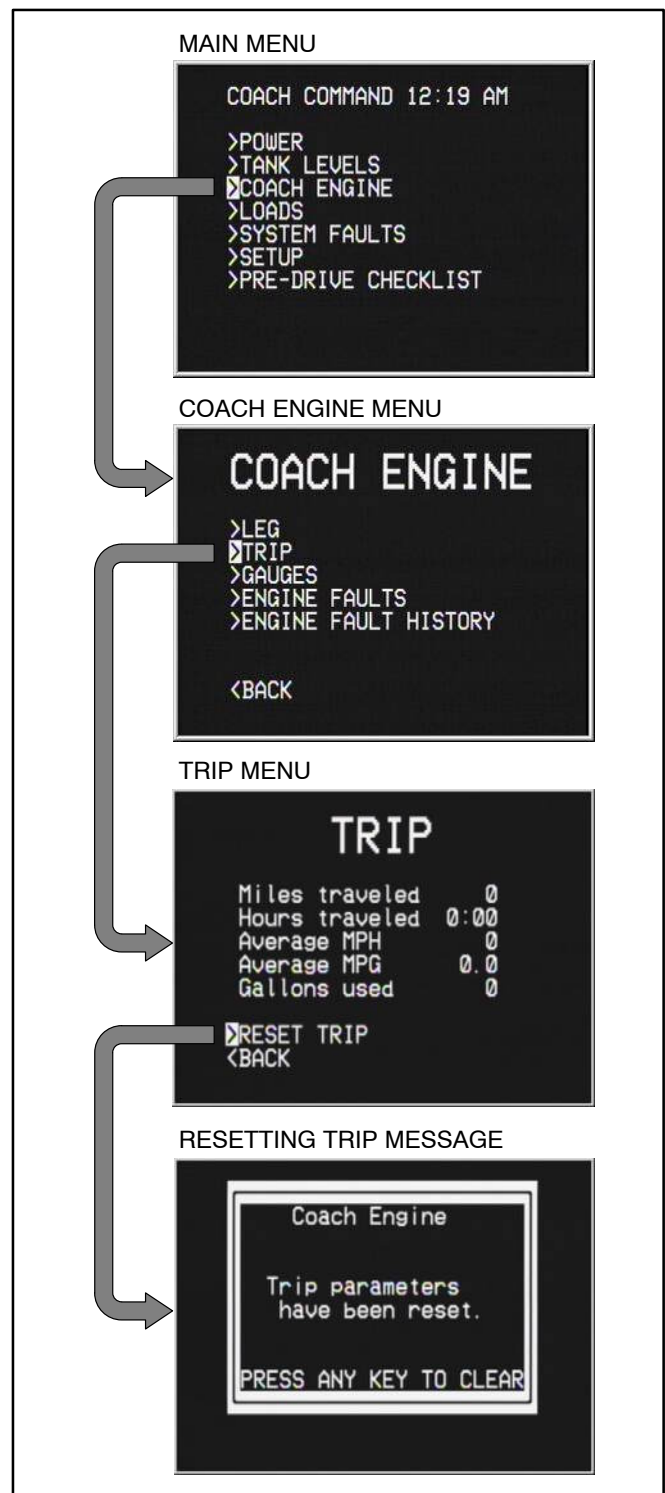


FIGURE 25. COACH ENGINE TRIP SETUP

Resetting Leg Parameters

The Leg menus (Figure 26) can be set up to display information on a portion of the current trip.

To set up Coach Command to display information on a portion of the current trip:

1. Press the down keypad button on the Main menu until Coach Engine is selected. Press the right keypad button to view the Coach Engine menu.
2. With Leg selected, press the right keypad button to view the Leg menu.
3. Press the down keypad button until Reset Leg is selected.

NOTE: Setting up leg parameters can be done on either of the two Leg menus.

4. Press the right keypad button. The Reset Leg menu is displayed.
5. Press the right keypad button again; the first number position in the Miles field is highlighted.
6. If this value is to be changed, use the up or down keypad buttons to change the value. Use the right keypad button to move to any of the other number positions and change them.
7. After the desired number of miles has been entered, exit the Reset Leg menu by pressing the left keypad button.

The value entered in step 6 is displayed in the Miles To Go field of the Legs Page 2 menu. Initially, all values displayed on the Legs Page 1 and Legs Page 2 menus are reset to 0. As your trip begins, the value displayed in the Hours to Go field of the Legs Page 2 menu is the estimated number of hours it will take to reach your destination, based upon your average speed.

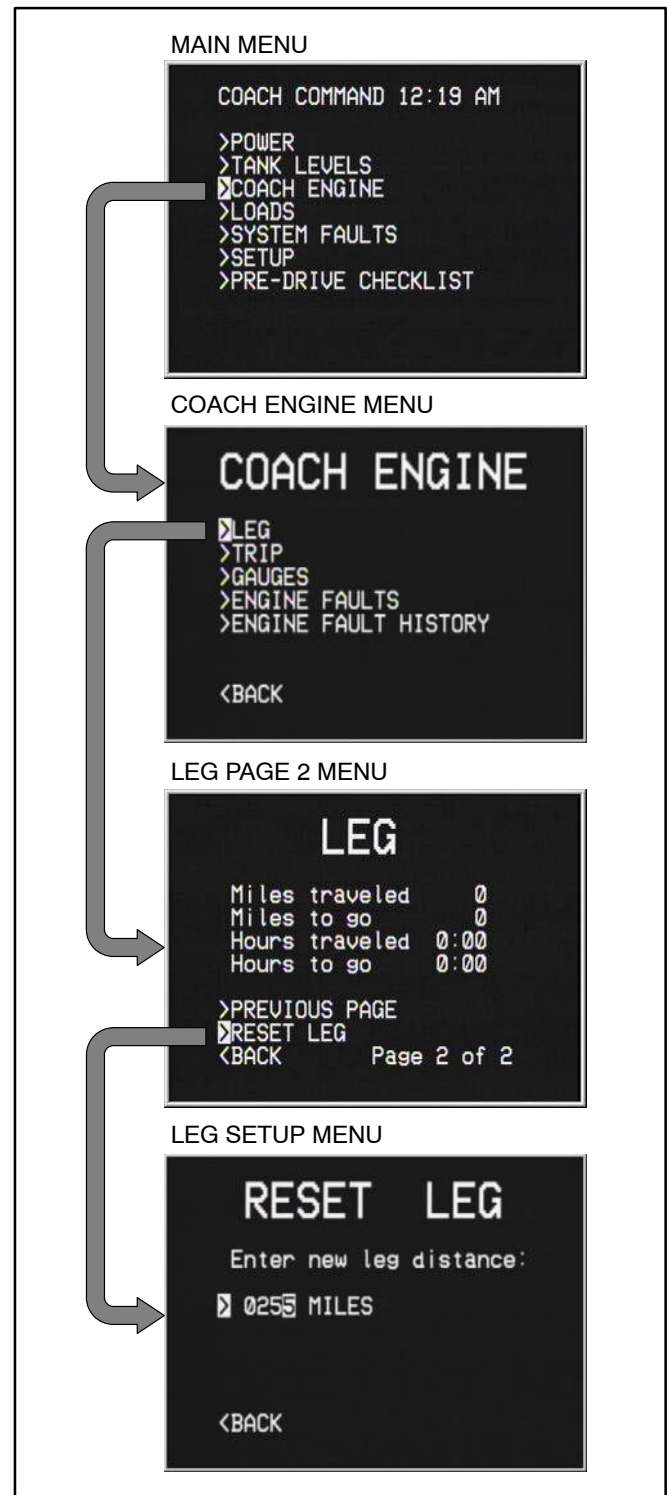


FIGURE 26. COACH ENGINE LEG SETUP

PRE-DRIVE CHECKLIST

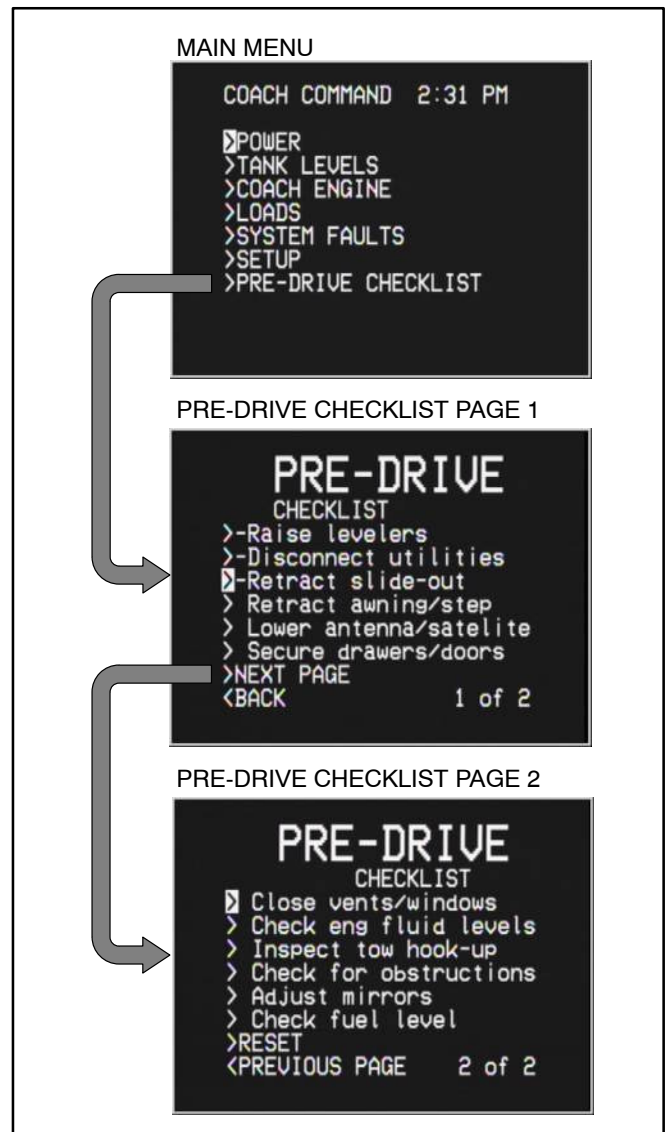
The Pre-Drive Checklist menus (Figure 27) provides a list of twelve tasks that should be completed before starting a trip. When a task is completed, you can check it off.

To view and check off completed tasks:

1. Press the down keypad button on the Main menu until Pre-Drive Checklist selected. Press the right keypad button to view the page 1 of the Pre-Drive checklist.
2. Press the up and down keypad buttons to select a task.
3. Press the right keypad button to check off a completed task. When checked off, a “-” is displayed in front of the task (see Figure 27).

NOTE: If you accidentally check off a task before it is completed, press the right keypad button again to remove the check.

4. Press the down keypad button to select Next Page. Press the right keypad button to view page 2 of the Pre-Drive checklist and continue to check off tasks as they are completed.
5. After all applicable tasks have been completed and checked off, Reset can be used to eliminate the check marks. Press the down keypad button until Reset is selected. Press the right keypad button to clear all check marks.



**FIGURE 27. PRE-DRIVE CHECKLIST
(PAGES 1 AND 2)**

System Status Monitoring

Coach Command monitors and reports faults for power sources, tank levels, the coach engine, and loads. It also monitors optional equipment, such as indoor and outdoor temperature sensors.

This section shows you how to access and interpret status and fault information.

POWER SOURCES

Whenever changing power sources, controlled loads are temporarily disabled by Coach Command and are again enabled when the new power source is determined to be stable. For more information on changing power sources, see “Power Sources” on page 18 or page 28.

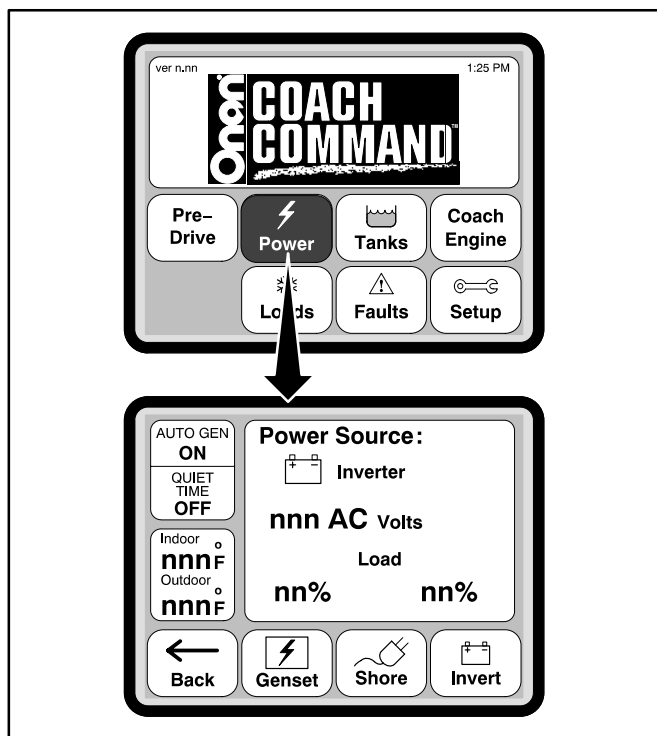


FIGURE 28. POWER SOURCE – TOUCH SCREEN DISPLAY

The Power Source (Figure 28) and Status menus (Figure 29) display:

- The power source currently being used (Genset, Shore, or Inverter)
- Auto Gen ON/OFF status
- Quiet Time ON/OFF status
- AC Voltage (genset or shore power) or DC voltage (inverter)

- Percentage of available load capacity being used

NOTE: What is displayed depends on how the coach was configured by the vehicle manufacturer. One value is displayed when connected to 120 volt, 15/20/30 amp shore power or when on inverter power with a single-inverter system. Two values are displayed when connected to 50 amp shore power, genset power, or inverter power with a two-inverter system.

- Indoor and outdoor temperatures (optional feature)

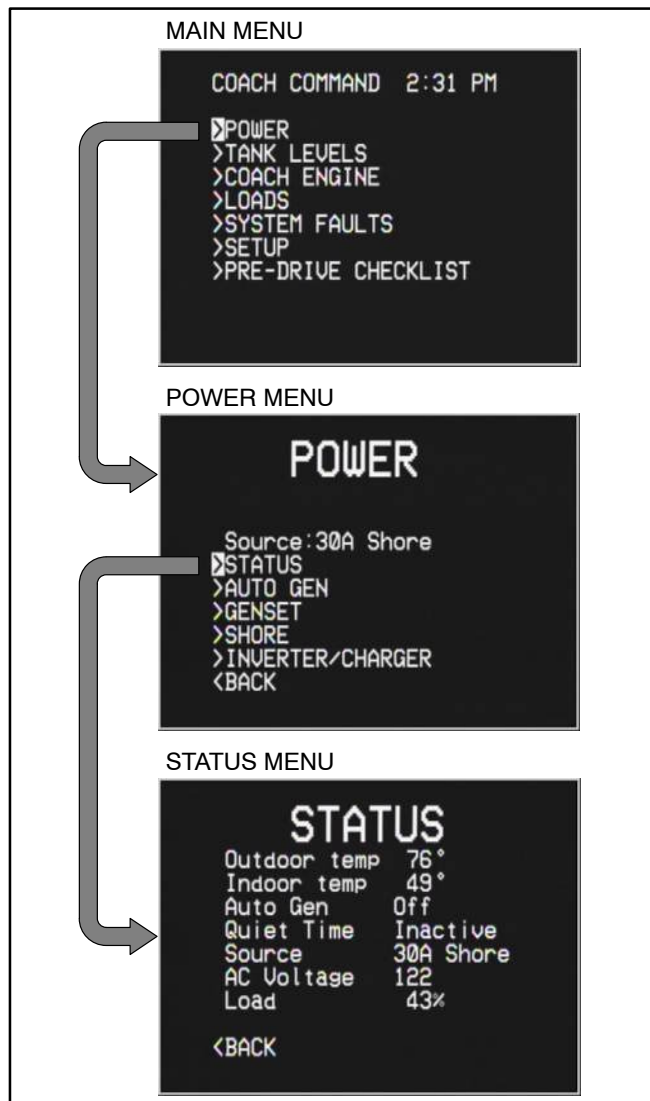


FIGURE 29. POWER SOURCE – VIDEO DISPLAY

The status of Genset, Shore, or Inverter Power may be viewed at any time, whether they are in use or not.

Genset Power

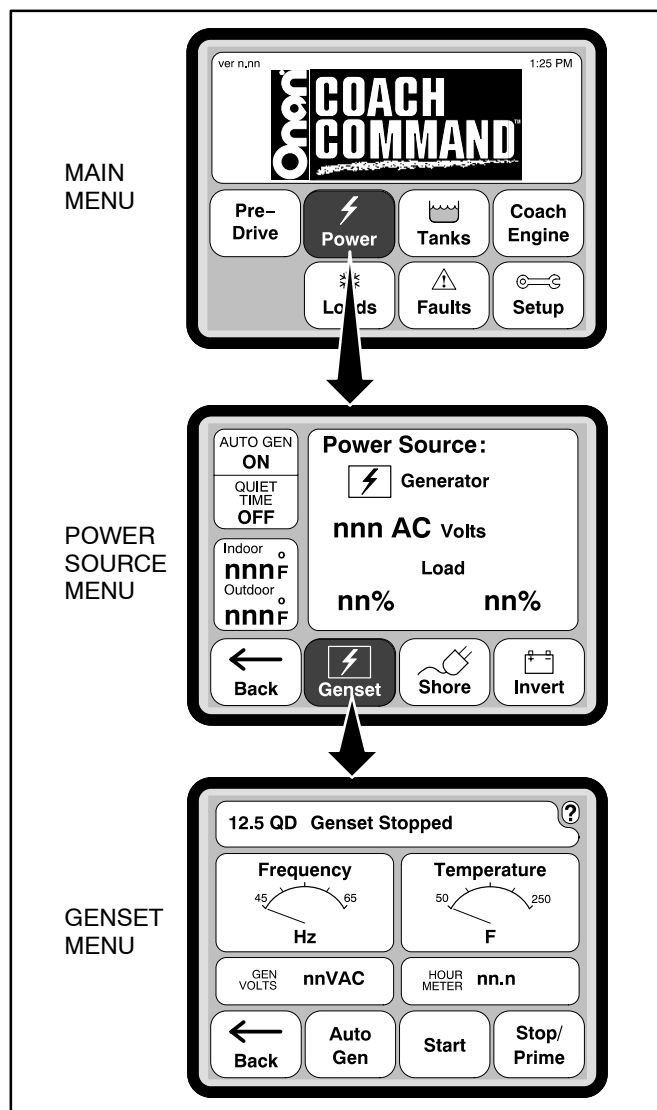


FIGURE 30. GENSET POWER – TOUCH SCREEN DISPLAY

The Genset menu (Figure 30 and Figure 31) displays the type of genset, status (stopped, starting, running, priming), and operating information (frequency, temperature, genset volts, and hour meter).

NOTE: The hour meter value is updated only after the genset has stopped.

The touch screen display Genset menu (Figure 30) is also used to turn the Auto Gen “ON” or “OFF” (see page 19) and to Start, Stop, or Prime the genset (see page 20).

The video display Genset menu (Figure 31) can also be used to Start, Stop, or Prime the genset (see page 30).

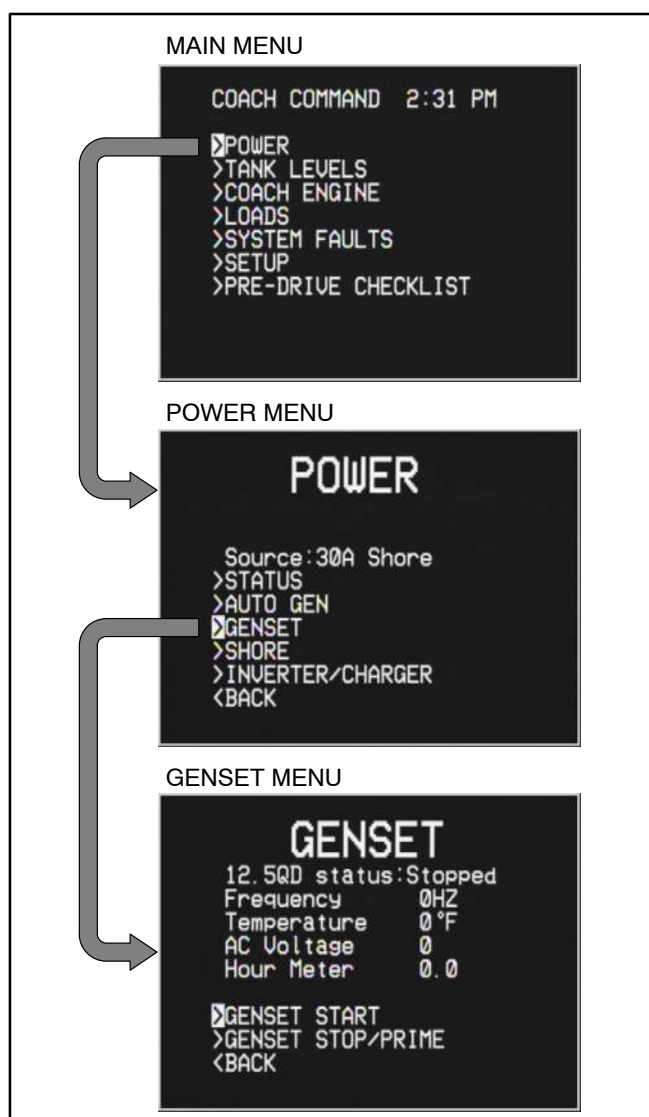


FIGURE 31. GENSET POWER – VIDEO DISPLAY

Shore Power

The Shore Power/Shore menu (Figure 32 and Figure 33) indicates whether or not the recreational vehicle is connected to shore power. If it is connected to shore power, the shore power amperage setting and current voltage is displayed. While the control system automatically detects 50 amp, 240 volt shore power, this menu can be used to set up the system for 15, 20, or 30 amp shore power (see page 22 for touch screen display menus or page 32 for video display menus).

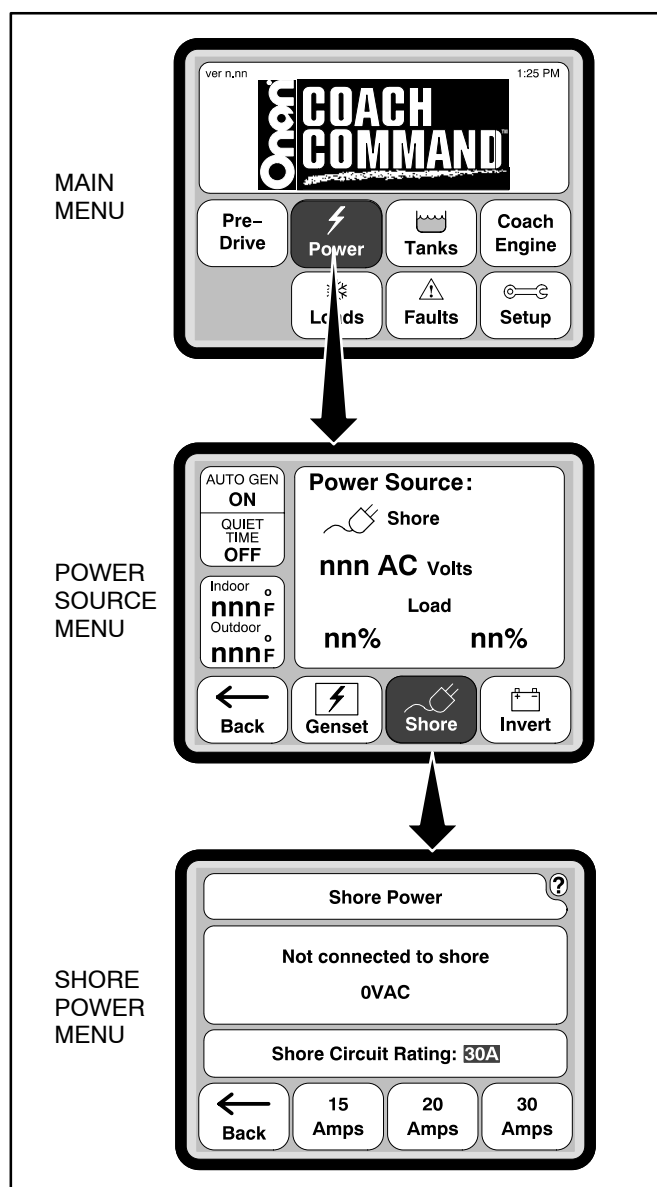


FIGURE 32. SHORE POWER – TOUCH SCREEN DISPLAY

⚠ CAUTION Make sure the Coach Command shore power setting matches the actual shore power rating before any connection is made to a 15, 20, or 30 amp shore power supply. The failure to make this setting will cause inaccurate Load % values and Auto Gen starting later than usual, and may result in a blown circuit breaker.

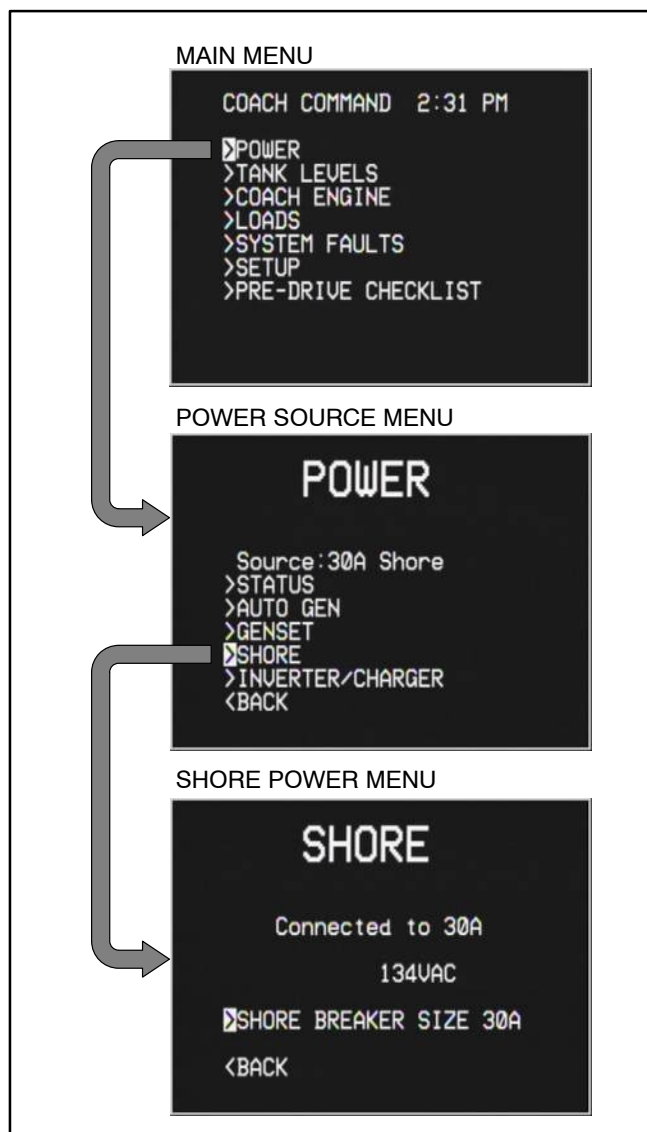


FIGURE 33. SHORE POWER – VIDEO DISPLAY

Inverter Power

The Inverter menu (Figure 34 and Figure 35) displays battery voltage and inverter AC input and DC output charge current.

NOTE: Refer to your inverter/charger user manuals for operation and use of those units.

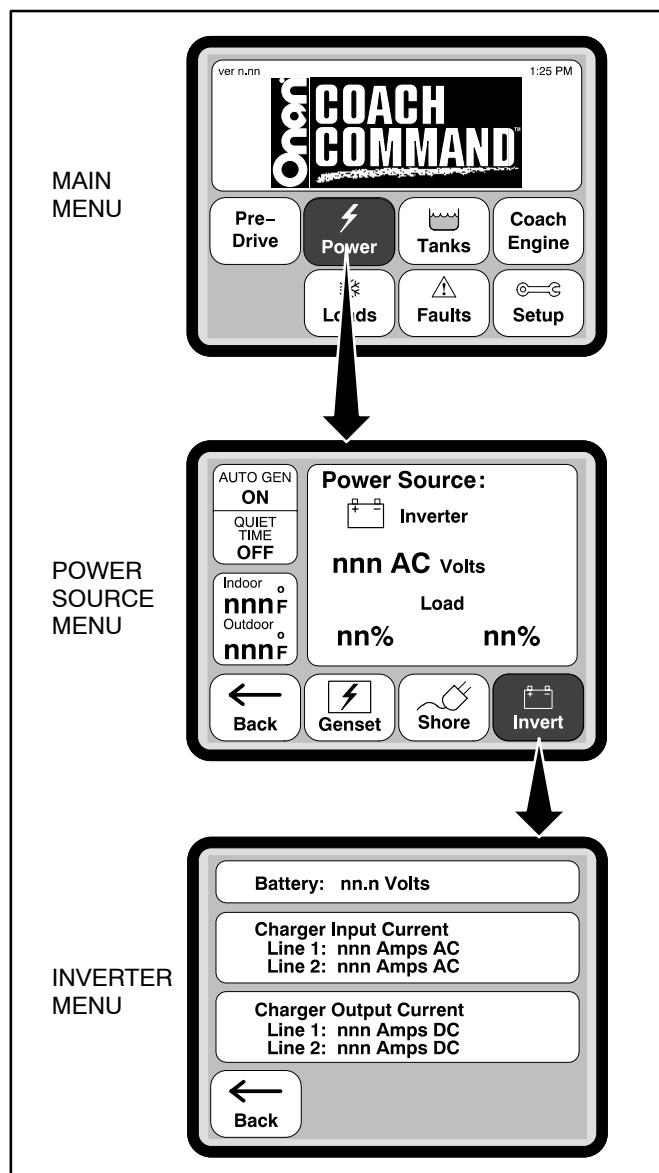


FIGURE 34. INVERTER POWER – TOUCH SCREEN DISPLAY

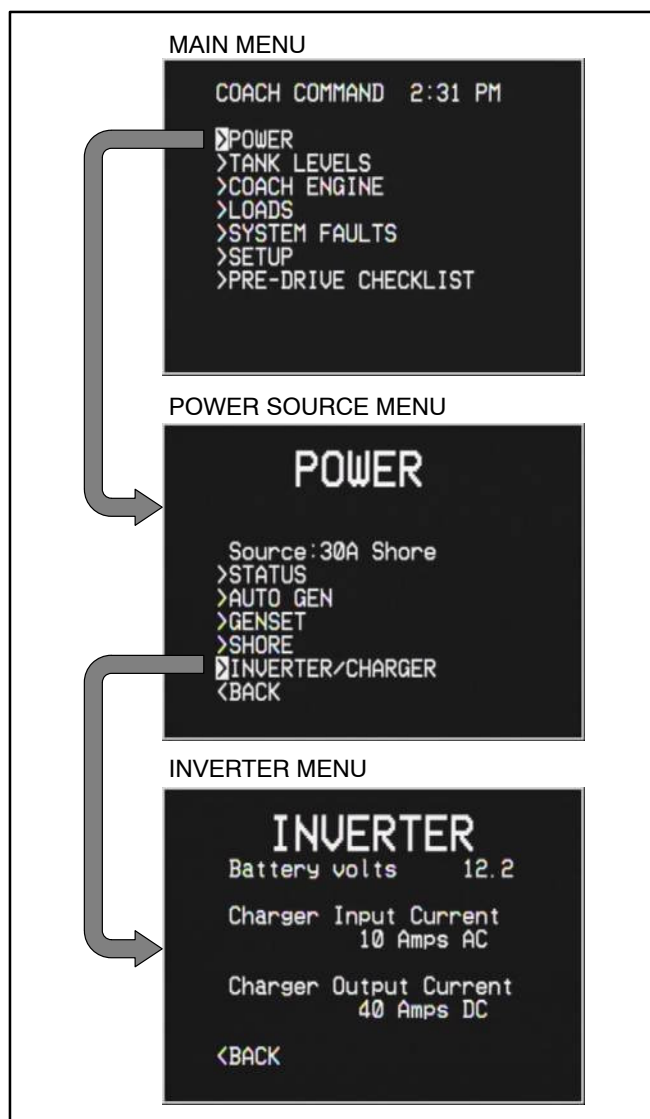


FIGURE 35. INVERTER POWER – VIDEO DISPLAY

TANK LEVELS

The Tank Levels menu (Figure 36 and Figure 37) displays levels for the following tanks:

- Fresh water
- Grey water – Source: sinks, shower, dish washer, clothes washer
- Black water – Source: toilet
- LP gas – Not available on all coaches

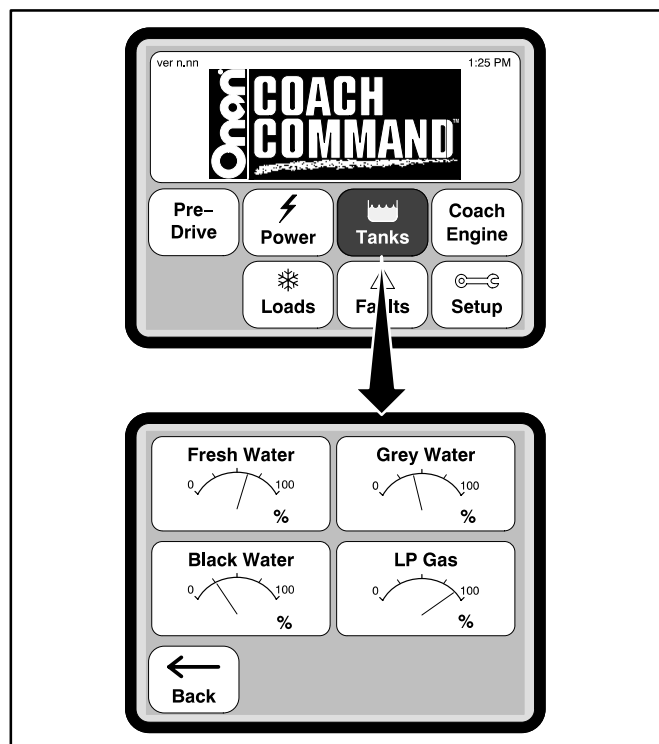


FIGURE 36. TANK LEVELS – TOUCH SCREEN DISPLAY

If Coach Command has been set up to display tank level warning messages (see page 16), a tank level fault is displayed whenever tank levels are outside their normal range of operation. When the fresh water or LP gas tanks are less than 10 percent full, a low tank warning is displayed. When either of the wastewater tanks are 90 percent full, a full tank warning is displayed.

NOTE: Although setting up Coach Command to display tank level warning messages can only be done using the touch screen menu system, the messages are displayed on all types of displays.

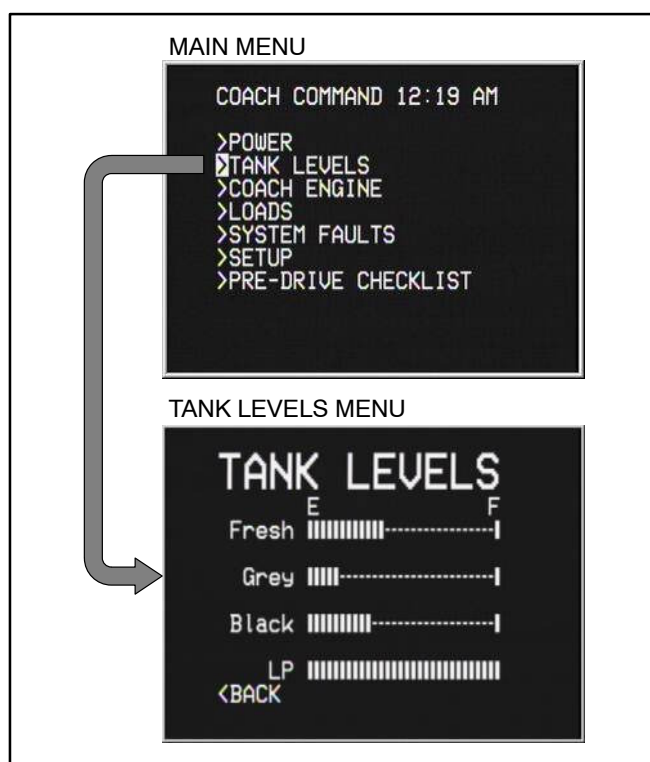


FIGURE 37. TANK LEVELS – VIDEO DISPLAY

COACH ENGINE

The Coach Engine menus (Figure 38 and Figure 39) display:

- Coach engine current and past faults
- Trip or leg information
- Coach engine diagnostic information (Gauges menus)

NOTE: When the coach engine is turned off, “NA” is displayed in all Coach Engine menu data fields.

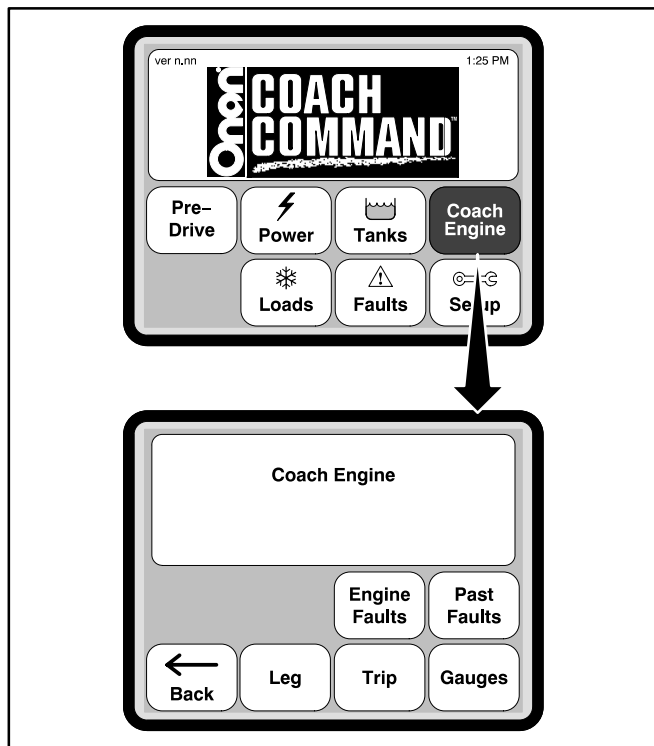


FIGURE 38. COACH ENGINE MENU - TOUCH SCREEN DISPLAY

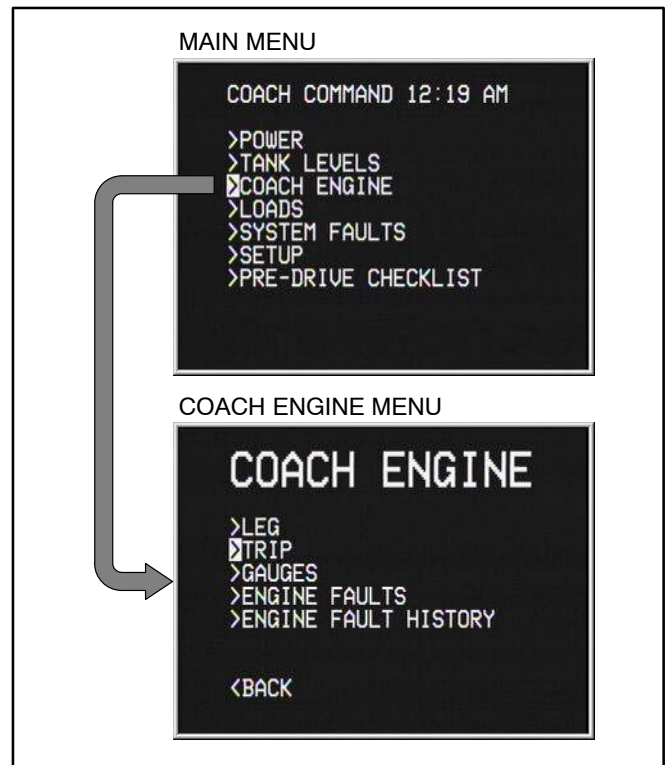


FIGURE 39. COACH ENGINE MENU - VIDEO DISPLAY

Current and Past Coach Engine Faults

The Current Engine Faults/Eng Faults menu (Figure 40 and Figure 41) displays a detailed list of up to 25 active coach engine faults, 5 at a time. As needed, touch the Page Up or Page Down buttons to view additional faults.

The Engine Fault History/Eng History menu (Figure 42 and Figure 43) displays a list of up to 25 past engine faults, 5 at a time. If needed, press the Page Up or Page Down buttons to view additional faults. After having the coach engine serviced, you can delete the list of engine faults by pressing the Clear Log button.

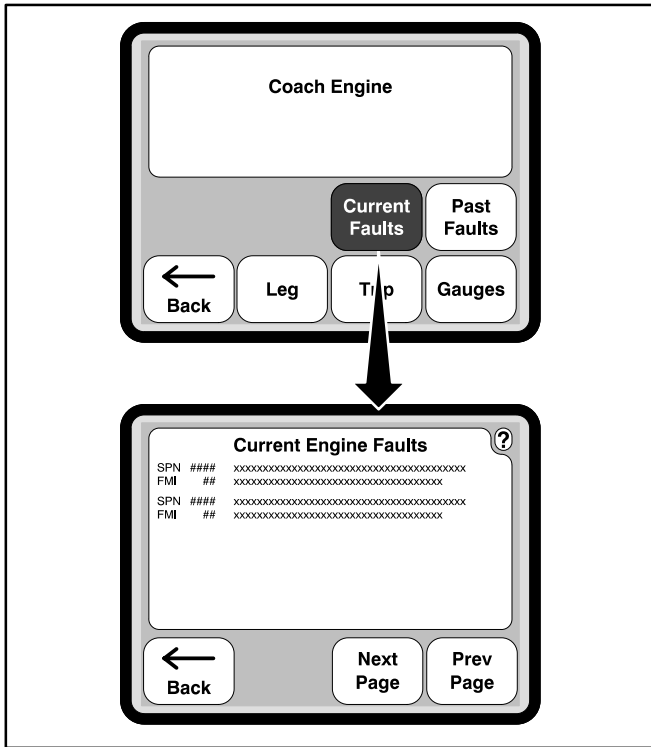


FIGURE 40. CURRENT COACH ENGINE FAULTS – TOUCH SCREEN DISPLAY

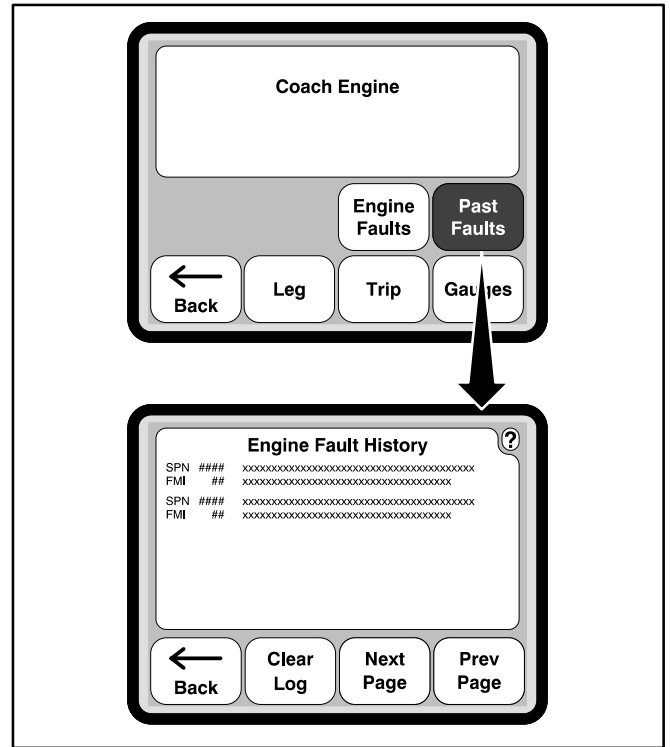


FIGURE 42. COACH ENGINE FAULT HISTORY – TOUCH SCREEN DISPLAY

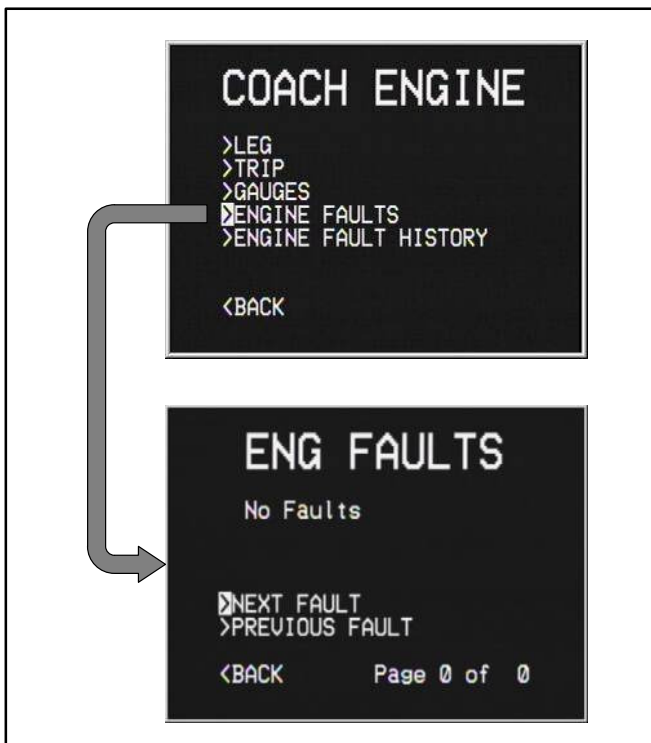


FIGURE 41. CURRENT COACH ENGINE FAULTS – VIDEO DISPLAY

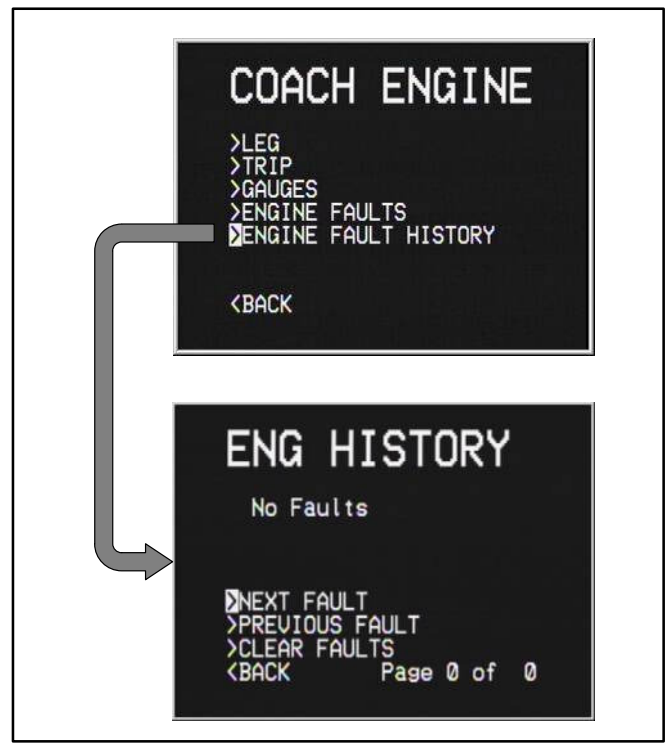


FIGURE 43. COACH ENGINE FAULT HISTORY – VIDEO DISPLAY

Trip Information

The Trip menu (Figure 44 and Figure 45) displays the following information for the current trip:

- Miles traveled
- Hours traveled
- Average miles per hour (MPH)
- Average miles per gallon for the trip (MPG)
- Amount of fuel used

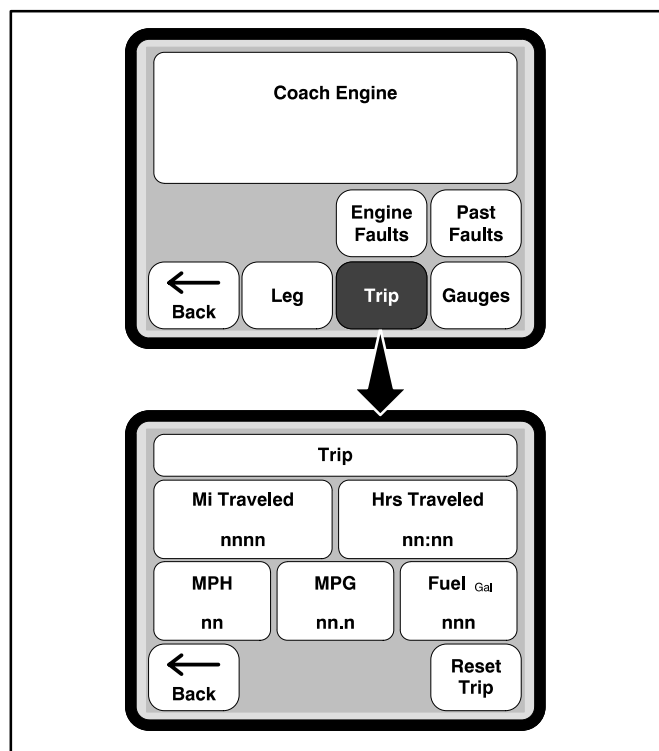


FIGURE 44. COACH ENGINE TRIP INFORMATION – TOUCH SCREEN DISPLAY

All values displayed reflect information since the last time the trip parameters were reset. Before starting your trip, you may wish to reset the trip parameters to erase old information (see page 23 or 33).

NOTE: Average MPG is not displayed until at least one gallon of fuel has been used.

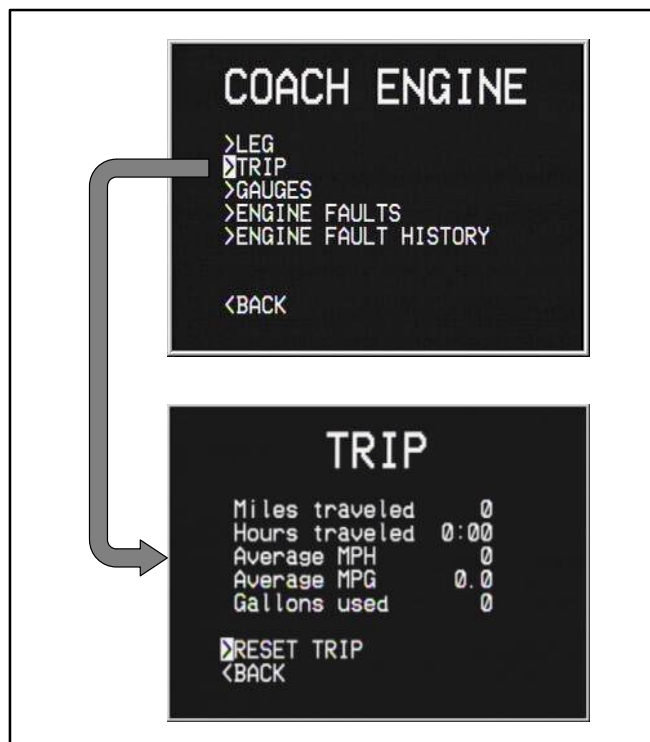


FIGURE 45. COACH ENGINE TRIP MENU – VIDEO DISPLAY

Leg Information

The two Leg menus (Figure 46) display the following information for the current leg of a trip:

- Instant (current) miles per gallon
- Miles per gallon for the leg
- Average speed (MPH)
- Amount of fuel used
- Miles traveled
- Miles to go
- Time passed since the leg began
- Expected number of hours it will take to reach your destination, based upon the miles entered

The Reset Leg menu allows setting up the number of miles you wish to monitor (see page 24).

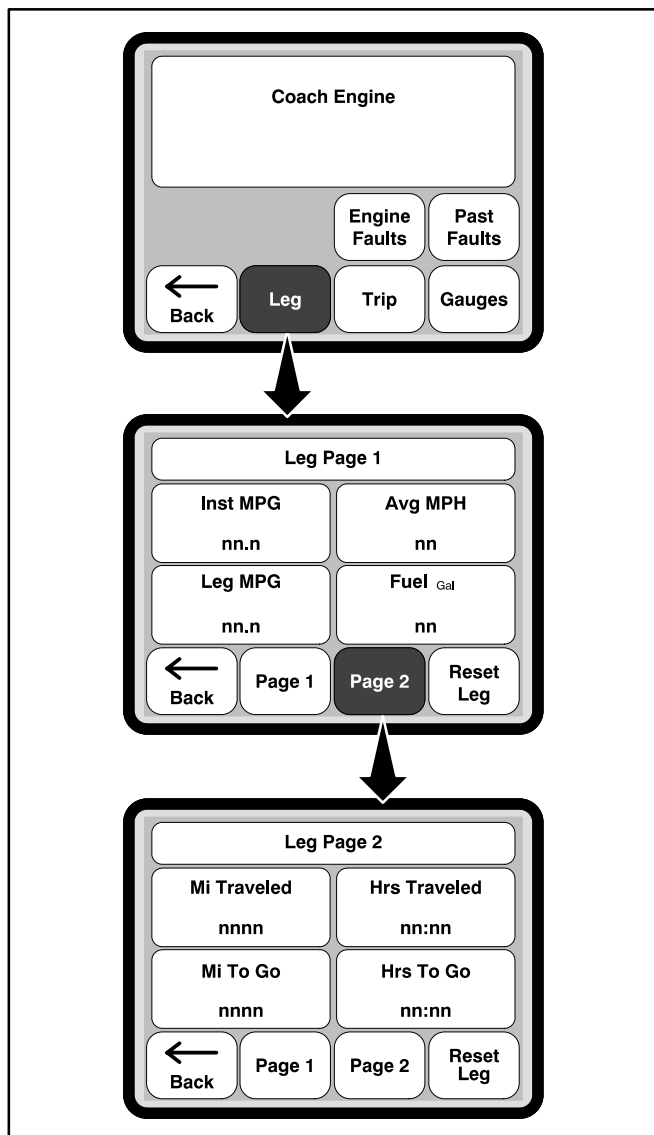


FIGURE 46. COACH ENGINE LEG INFORMATION – TOUCH SCREEN DISPLAY

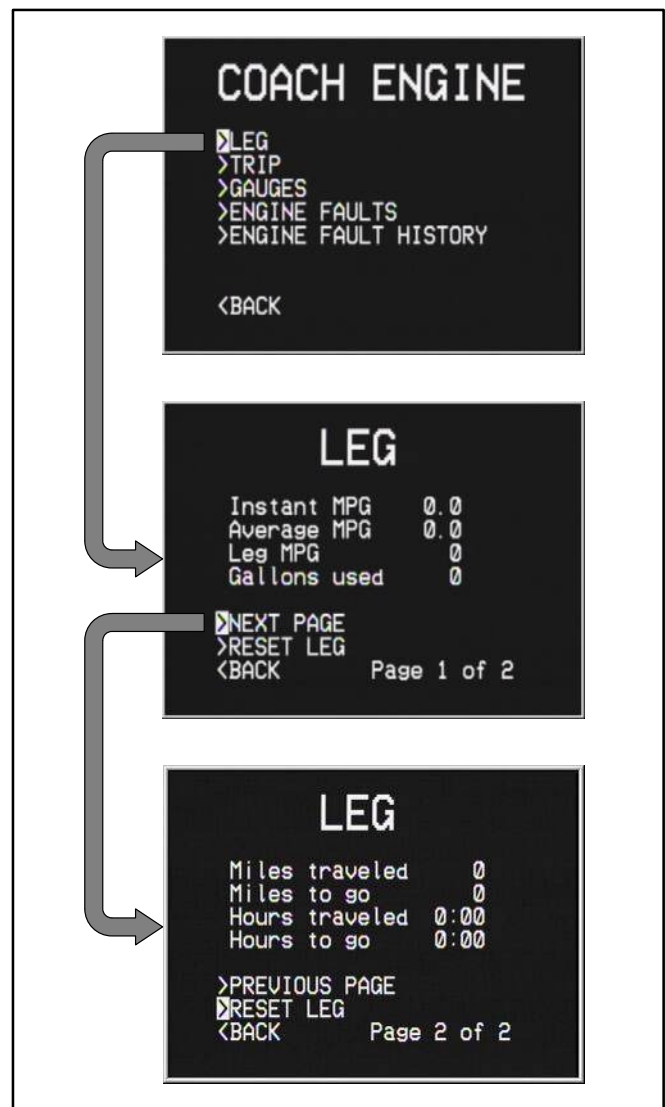


FIGURE 47. COACH ENGINE LEG INFORMATION – VIDEO DISPLAY

Coach Engine Diagnostic Information

The Engine Gauges/Gauges menus (Figure 48 and Figure 49) display the following Coach Engine information:

- Intake manifold boost pressure
- Average miles per gallon (for the life of the coach)
- Battery voltage
- Percent of engine load
- Engine coolant temperature
- Intake manifold temperature
- Engine oil pressure
- Current gear (park, neutral, reverse, 1st gear, etc.)
- Transmission temperature

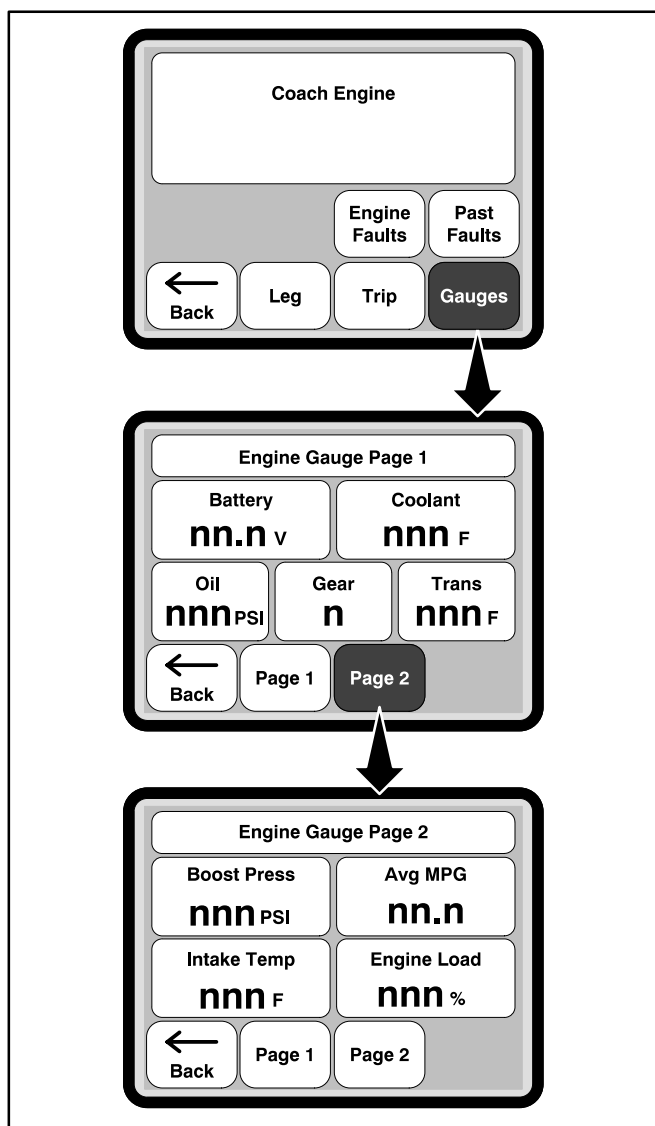


FIGURE 48. COACH ENGINE GAUGE MENUS – TOUCH SCREEN DISPLAY

For touch screen displays, touch the Page 1 or Page 2 buttons to toggle between the two menus. For video displays, press the right keypad button to toggle between the two menus.

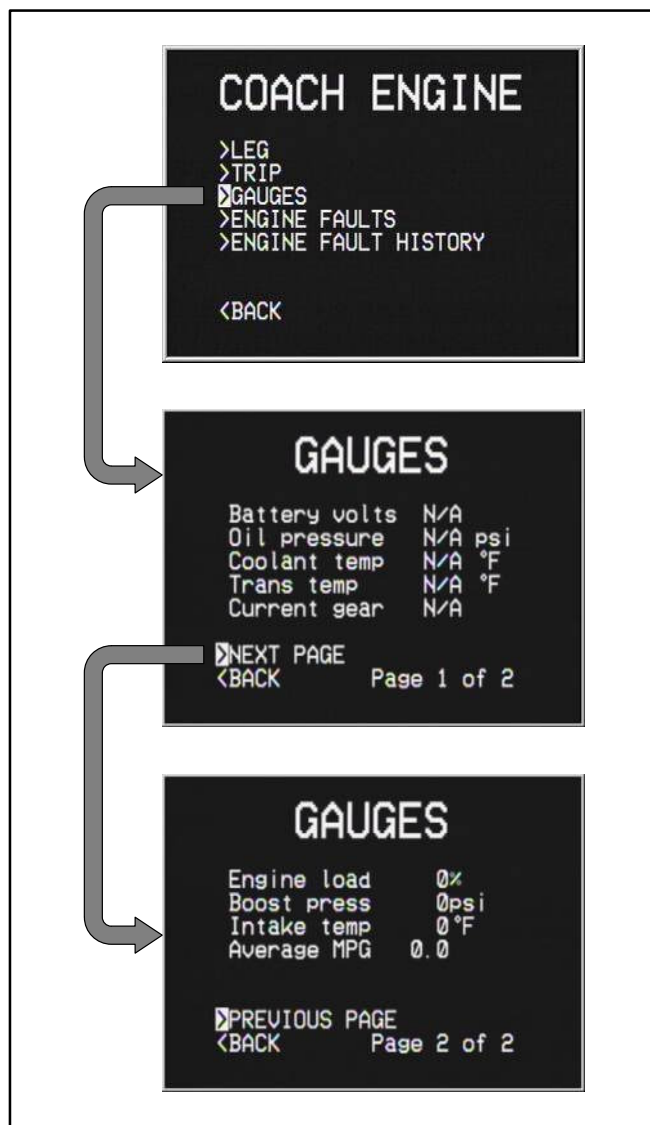


FIGURE 49. COACH ENGINE GAUGE MENUS – VIDEO DISPLAY

LOADS

The Controlled Loads/Loads menu (Figure 50 and Figure 51) displays a list of the loads controlled by Coach Command and indicates if they are Enabled or Disabled.

Controlled loads are not allowed to run on inverter power when Coach Command is operational.

When shore or genset power becomes available, loads are again enabled based on priority. Loads are enabled in the reverse order they were disabled.

NOTE: If your Coach Command system does not include load control nodes, only the title of this menu is displayed.

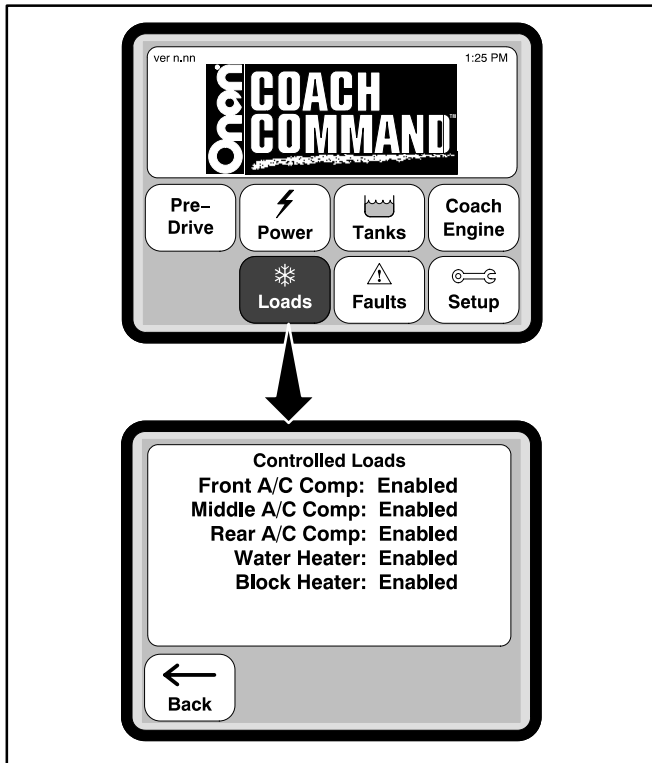


FIGURE 50. LOADS MENU – TOUCH SCREEN DISPLAY

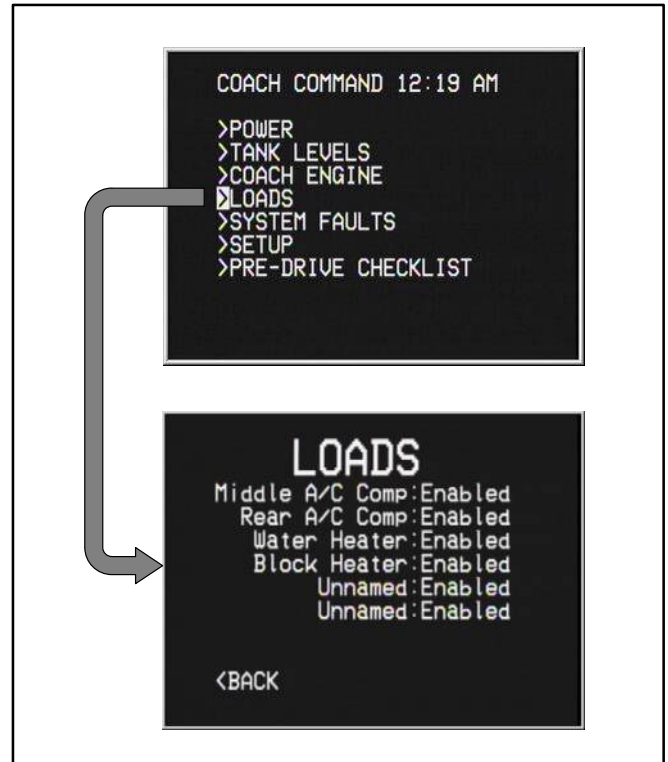


FIGURE 51. LOADS MENU – VIDEO DISPLAY

FAULTS

The Current Faults/Faults menu (Figure 52 and Figure 53) indicates the status ("OK" or "Fault") of the following:

- Network – "Fault" indicates not all nodes are communicating.
- Generator – "Fault" indicates a genset fault has been detected.
- Tank Senders – "Fault" indicates at least one tank level is outside the normal range of operation.
- Battery Voltage – "Fault" indicates the battery voltage is outside the normal range of operation.

- Controlled Loads – If your Coach Command system includes load control nodes, a fault indication means an individual controlled load is drawing excessive current. Coach Command will display a message, letting you know which load is drawing excessive current.
- CO Alarm – If an approved CO detector is connected to Coach Command tank level node, "CO Alarm" is displayed if a high level of carbon monoxide is detected or there is a short circuit fault in the CO detector circuit. A carbon monoxide warning is also displayed.

The Fault History/Fault Hist menu (Figure 52 and Figure 53) displays a list of the last five faults that occurred. Each fault includes a description along with the date and time that the fault occurred.

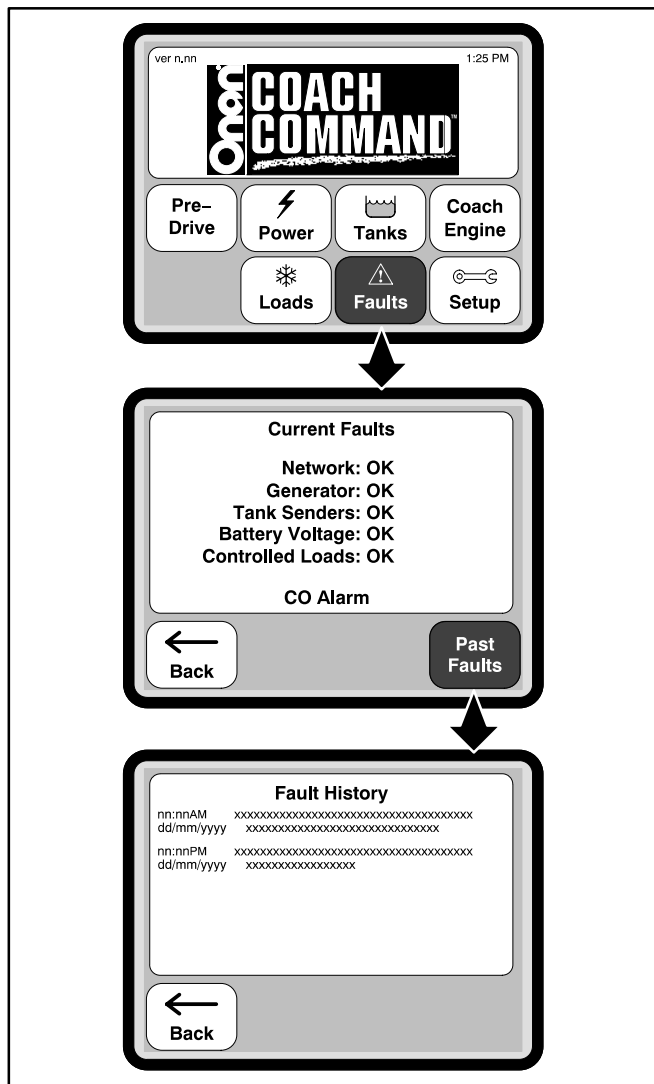


FIGURE 52. CURRENT AND PAST FAULTS MENUS – TOUCH SCREEN DISPLAY

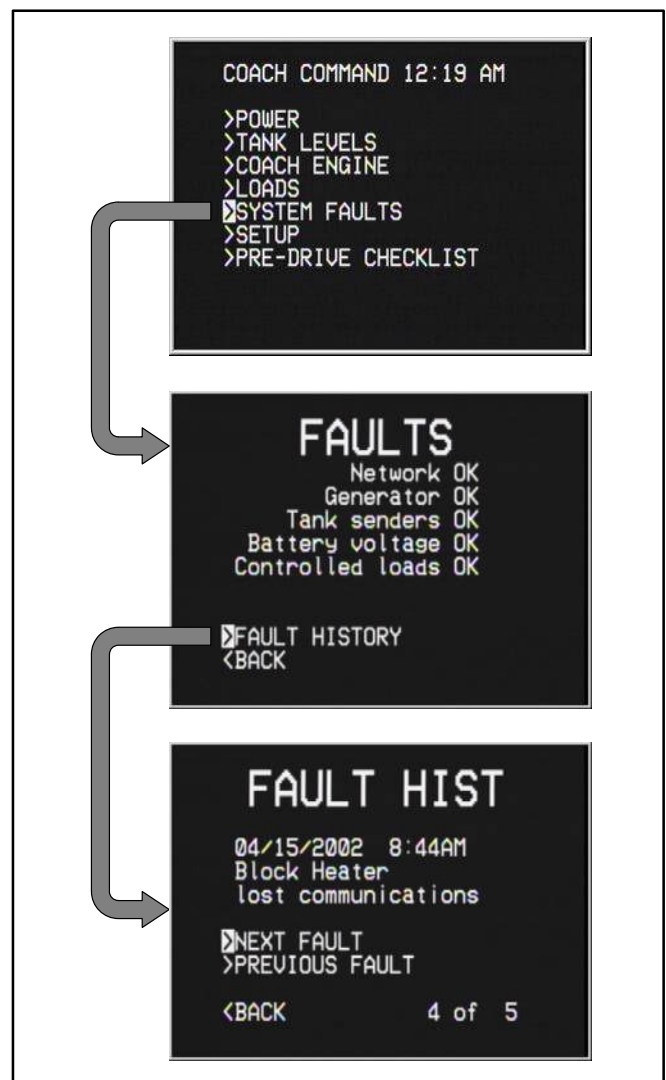


FIGURE 53. CURRENT AND PAST FAULTS MENU – VIDEO DISPLAY

Storage

Following proper storage procedures extends the life of the batteries and makes sure the coach is ready for operation when needed.

⚠️WARNING *Severe personal injury, death, and equipment damage can result from operating the genset in a garage, building, or confined space. The genset produces dangerous fumes when it is running. Never park the recreational vehicle in a garage, building, or confined space without first setting Auto Genstart to “OFF.”*

SHORT-TERM STORAGE

- Go to the Auto Genset Start menu (touch screen displays) or Auto Gen menu (video displays) and set Auto Genstart (touch screen displays) or Auto Gen (video displays) to “OFF.” This will prevent the genset from automatically starting if Coach Command detects a low battery charge condition while the coach is being

stored. For more information, see “Activating the Automatic Genset Start” on page 19 or page 29.

- If shore power is to be connected, make sure Coach Command is set up for the correct shore power setting before making the connection (see “Shore Power” on page 22 or page 32).
- If shore power is not connected, minimize power usage in the coach by switching off all unnecessary AC and DC loads.

LONG-TERM STORAGE

- Locate and turn off the Coach Command master power switch.
- Follow the genset manufacturer’s recommendations for long-term storage.
- Follow the recreational vehicle manufacturer’s recommendations for long-term storage.

Troubleshooting

COACH COMMAND FAULTS

Coach Command displays messages, indicating faults with the following:

- Network Communications
- The Generator
- Tank Level Senders
- The Battery
- Controlled load current draw
- CO Detector

If a malfunction occurs, a fault message is displayed. The fault is also shown on the Faults menu (see Figure 54 and Figure 55). For more information on current faults and fault history, see page 47.

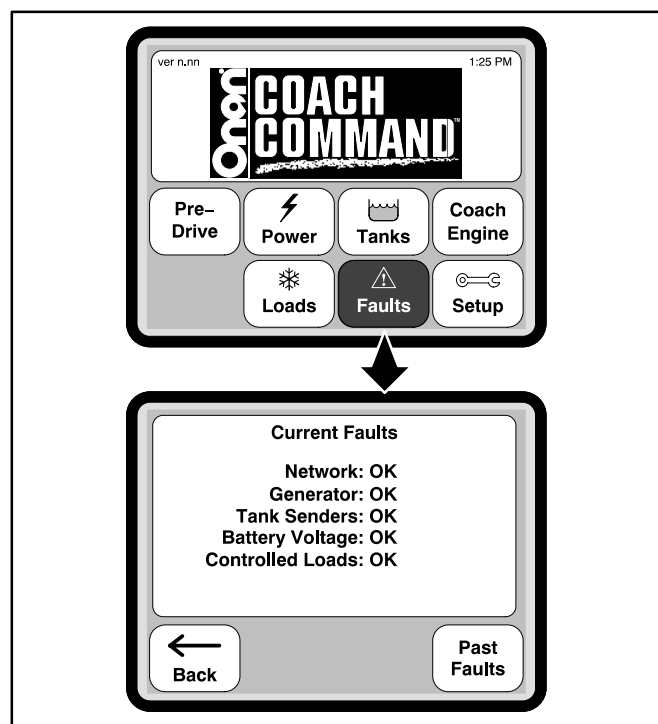


FIGURE 54. CURRENT FAULTS MENU – TOUCH SCREEN DISPLAY

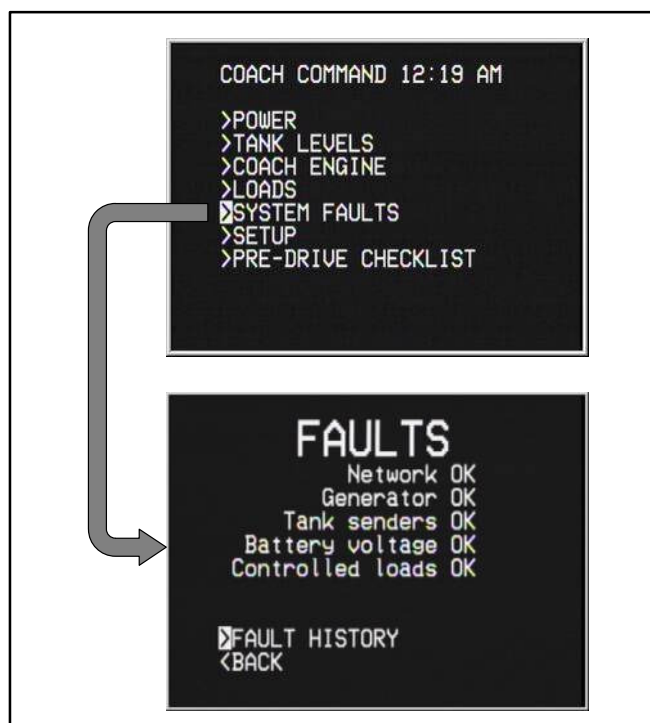


FIGURE 55. FAULTS MENU – VIDEO DISPLAY

Network Communication Faults

Coach Command communication fault messages include:

- Master node is not communicating.
- Genset node is not communicating. Auto Gen Disabled!
- Transfer Switch node is not communicating. Auto Gen Disabled!
- (Appliance/device) node is not communicating.
- Tank level node is not communicating.
- Engine interface node not communicating.

If any of these messages is displayed, a fault condition is also displayed in the Network field of the Current Faults/Faults menu.

If any of the above communication fault messages are displayed, see an authorized Onan dealer for service.

Genset Faults

If Coach Command cannot communicate with the genset, a “Genset not communicating” fault message is displayed. To restore genset communications, press the remote stop on the genset on/off switch. Open the Current Faults/Faults menu to see if the Generator field now reads “OK.” If a fault indication is still displayed, see an authorized Onan dealer for service.

Other genset fault messages may also be displayed on the Coach Command display. For more information on genset faults and step-by-step corrective actions, see the Troubleshooting section of your Onan genset Operator’s Manual. If any of these fault messages are displayed, a fault condition is also displayed in the Generator field of the Coach Command Current Faults/Faults menu.

Tank Level Sender Faults

Tank level sender fault messages that may be displayed include:

- Fresh water sender value is outside valid calibration range.
- Liquid propane sender value is outside valid calibration range.
- Grey water sender value is outside valid calibration range.
- Black water sender value is outside valid calibration range.

The above tank sender fault messages are indications of equipment failure. If any of these tank sender fault messages are displayed, see an authorized Onan dealer for service.

If any of these messages is displayed, a fault condition is also displayed in the Tank Senders field of the Current Faults/Faults menu.

Battery Faults

A battery fault is displayed when the battery charge is low or requires maintenance. For information on battery maintenance and battery charging, see your recreational vehicle’s Owner’s Manual.

If a battery fault message is displayed, a fault condition is also displayed in the Battery Voltage field of the Faults menu.

Controlled Loads Faults

A Controlled Loads fault is displayed when an appliance/device is drawing excessive current. Check to see if the appliance/device is operating properly. For more information on proper operation, see the Owner’s Manual for the appliance/device.

If a controlled load fault message is displayed, a fault condition is also displayed in the Controlled Loads field of the Faults menu.

CO Detector Fault

A CO detector fault is displayed when there is a short circuit fault in the CO detector circuit.

COACH COMMAND WARNINGS

A carbon monoxide hazard warning is displayed whenever the automatic genset start feature is enabled.

If activated, tank level warnings are displayed. Coach Command tank level warnings include:

- Fresh water tank level nearing empty!
- Liquid propane tank level nearing empty!
- Grey water tank level nearing full!
- Black water tank level nearing full!
- RV CO detector has indicated high CO. Take Precautions. Auto Gen Disabled!

A fresh water or LP gas tank warning indicates the tank is less than 10 percent full. Check the tank level and fill the tank, as recommended in your recreational vehicle Owner's Manual.

A grey water or black water tank warning indicates the tank is at least 90 percent full. Check the tank level and empty the tank, as recommended in your recreational vehicle Owner's Manual.

MCU LITHIUM BATTERY

The Main Control Unit (MCU) contains a lithium battery that is a backup for the real-time clock. If the time cannot be reset, the battery has failed. Contact an authorized Onan dealer to have the battery replaced.

The battery must be replaced only with the type specified on the MCU label. Be sure to dispose of the old battery properly, as recommended by the manufacturer.

⚠ CAUTION *Use only the type of battery specified on the MCU label. Use of another battery presents a risk of fire or explosion.*

⚠ CAUTION *Improper disposition of a lithium battery presents a risk of fire, explosion, and burns. Do not recharge, disassemble, heat above 212 degrees F (100 degrees C), or incinerate the battery.*

How to Obtain Service

If you require service, parts, or product literature, contact the nearest Onan dealer or distributor. Onan has factory-trained Parts and Service representatives, ready to handle your service needs. To locate the nearest authorized distributor:

1. Check the North American Sales and Service Directory (F-118) and the International Sales and Service Directory (IN-1013) supplied with your Coach Command power management system. These directories list authorized distributors who will assist you in locating the nearest authorized dealer.
2. Consult the Yellow Pages. Typically, our distributors are listed under:

GENERATORS – ELECTRIC,
ENGINES – GASOLINE OR DIESEL, or
RECREATIONAL VEHICLES – EQUIPMENT,
PARTS AND SERVICE.

3. Call 1-800-888-ONAN for the name and telephone number of the nearest Onan dealer in the United States or Canada. (This automated service utilizes touch-tone phones only). By calling this number, you can also request a directory of authorized RV servicing dealers: RV Sales and Service Directory F-919.

To get service, contact the authorized dealer or distributor nearest you, explain the problem, and make an appointment. If you have difficulty in arranging for service or resolving a problem, please contact the dealer coordinator or service manager at the nearest Onan dealer for assistance.

Before calling for service, have the following information available:

1. *The complete model number and serial number (see “Model Identification” on page 8)*
2. *Software version number, as shown on the Startup Screen*
3. *The date of purchase*
4. *The nature of the problem. See Troubleshooting (Page 49).*

⚠️WARNING *Improper service or replacement of parts can result in severe personal injury, death, and/or equipment damage. Service personnel must be trained and experienced to perform electrical and/or mechanical service.*

Glossary

Term	Definition
Auto Gen	Automatic Genset Start – a Coach Command feature that automatically starts the genset when there is not enough power available from inverter or shore power supply to meet electrical load demand.
Black Water	Waste water from toilets.
CAN	An acronym for Controller Area Network.
Controlled Loads	Appliances (air conditioners, hot water heater, engine block heater, auxiliary heater, electric heater, and washer/dryer) that have their power usage monitored and controlled by Coach Command load control nodes.
Fresh Water	Water used for drinking, washing, showering, and flushing.
Genset	An acronym for generator set.
Grey Water	Waste water from sinks, the shower, the dish washer, and the clothes washer
Inverter	A device for converting Direct Current (DC) into Alternating Current (AC)
Load	A device that consumes electrical power for operation.
LP	An acronym for Liquid Propane.
NFPA	National Fire Protection Association, 470 Atlantic Avenue, Boston, MA 02210.
Node Board	A communication device used to gather information from and control other devices.
Non-Controlled Loads	AC outlets and appliances (stove, refrigerator, microwave, etc.) that are not monitored or controlled by Coach Command.
Quiet Time	Periods of time when the genset will not automatically start even though Auto Gen is activated – used to control noise in recreational vehicle campgrounds.
Shore Power	An external public utility electrical outlet used as a power source for the appliances in the recreational vehicle.
Transfer Switch	An electrical switch used to select a power source for the loads while simultaneously disconnecting (isolates) all other power sources.



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