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Onon Coach Command[™] Operator's Manual

CCRV





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Safety Precautions

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.

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

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

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

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

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

For information on turning off Auto Genstart capability, see "Activating Automatic Genset Start" on page 13.

 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 the public utility or any other source of electrical power. Connection could lead to electrocution of utility personnel and damage to equipment. An approved switching device must be used to prevent interconnections.
- 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.

PLYH-1



ENGINE EXHAUST IS DEADLY!

- Learn the symptoms of carbon monoxide poisoning as described below.
- 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.

Exhaust gasses contain carbon monoxide, an odorless, colorless gas. Symptoms of carbon monoxide poisoning include:

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

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. Never sleep in the vehicle with the genset running unless the vehicle is equipped with a working carbon monoxide detector. Primary protection against inhaling carbon monoxide, however, is proper installation of the exhaust system and daily inspection (every eight hours) for visible and audible exhaust system leaks.

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.



PLYH-1

Introduction

ABOUT THIS MANUAL

This operator's manual provides information necessary for operation of 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 Operation, System Monitoring, Storage, and *Troubleshooting* sections provide the instructions necessary for operating the system. This manual also includes information on how to obtain service.

MODEL IDENTIFICATION

When contacting an Onan dealer for parts, service, or product information, be prepared to provide the model and serial numbers on the Coach Command nameplate. Figure 1 illustrates the nameplate and its location on the Transfer Switch node cover. The upper grey box shows the model and spec number. The lower grey box shows the serial number. Every character in these numbers is significant. (The last character of the model number is the specification letter, which is important for obtaining the right parts.) Record the model and serial numbers in the boxes in Figure 1 so that they are easy to find when you need them.

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

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IMPORTANT INFORMATION CUMMINS POWER GENERATION 1400 73rd Ave. NE Minneapolis, MN 55432 Made in U.S.A.				
Model No: CCRV-1827A				
s₁N: D000012345				
RECORD NUMBERS HERE				
MODEL NUMBER:				
SERIAL NUMBER:				

FIGURE 1. TYPICAL NAMEPLATE

Coach Command is a trademark of Onan Corporation.



SYSTEM OVERVIEW

The Coach Command power management system gathers information from a variety of components in a recreational vehicle and provides the means to easily monitor and control power usage. Coach Command includes the following features:

- Power Source Monitoring
- Load Control and Monitoring
- Automatic Generator Start/Stop
- Tank Level Monitoring
- Coach Engine Monitoring

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

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 power [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, noncontrolled loads can continue to run off inverter power and are not disabled.

The Coach Command power management system includes six types of node boards, linking power sources, appliances, and monitoring devices to the Touch Screen display. If the system fails to communicate with an individual node board, a fault is displayed and its associated functions are disabled. The node types are:

- Master Node Provides an interface to the Touch Screen display.
- Load Control Nodes Up to seven nodes provide load control and monitoring for items such as air conditioners, hot water heater, engine block heater, and appliances.
- Genset Node Starts, stops, and communicates with Onan gensets. This node monitors generator 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.
- Transfer Switch Node Contains the network power supply and provides the network with coach voltages, currents, and battery voltage.
- Engine Interface Controller Area Network (CAN) Node Provides monitoring of the coach engine.

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 circuit breakers.

Figure 2 illustrates the Coach Command network.









Operation

This section describes the Touch Screen menus and illustrates navigation through the menus. The screen displays status information, setup menus, and active faults or warnings. Setup menus contain parameters with adjustable values. Descriptions in this section include ranges for the parameters and default values.

INTRODUCTION

The screen or menu displays status information, parameters, events, and messages. Displays include electronic buttons that are touch activated.

Press the buttons to view menus and change parameters. Each top-level menu and submenu includes a "Back" button 🖕, used to navigate to the previous screen.

Main Menu

Figure 3 shows the primary Main Menu 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.



FIGURE 3. PRIMARY MAIN MENU

All Coach Command systems included a screen that displays the primary Main Menu. The primary Main Menu includes six top-level menus (Power, Tanks, Coach Engine, Loads, Faults, and Setup). Some Coach Command systems include an additional screen that displays a secondary Main Menu. The secondary Main Menu includes all the top-level menus except "Coach Engine" (see Figure 4).



FIGURE 4. SECONDARY MAIN MENU

The Main Menu is used to access the top-level menus. Top-level menus display status information, include setup menus, and may include links to submenus. Navigating through the menus is shown in Figure 5. A brief description of the 23 menus and page references to additional information is included in Table 1.

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 27.

With Auto Gen "ON," Coach Command displays a message whenever the genset automatically starts. These messages indicate why the genset started. For more information, see *Auto Gen* on page 13.

Some menus include a Help button ? in the upper right corner of the screen, indicating onscreen Help is available. Press this button to view information on the menu displayed.





FIGURE 5. COACH COMMAND MENUS



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TABLE 1. MENU DESCRIPTIONS

Menu #	Menu	Description	Page
1	Main Menu	Provides links to the top-level menus	7
2	Power Source Menu	Displays the Power Source, Auto Gen status, Quiet Time status, and the percentage of available load capacity being used	19
3	Genset Menu	Displays genset type, status information, operating information. It also allows starting, stopping, and priming the genset.	14 & 20
4	Auto Genset Start Menu	Allows for turning the automatic genset start feature On/Off and setting the number of days it is enabled.	13
5	Shore Power Menu	Displays shore power status information and allows for selecting 15, 20, or 30 amp shore power	16
6	Inverter Menu	Displays battery voltage and AC/DC charge current information	21
7	Loads Menu	Displays a list of controlled loads and indicates if they are enabled/dis- abled	24
8	Current Faults Menu	Displays the current status of the network, generator, tank senders, bat- tery voltage, and controlled loads	25
9	Fault History Menu	Displays a list of the last five faults that occurred	25
10	Setup Menu	Provides links to the Time, Screen Settings, and Quiet Times adjustment menus	10
11	Time Menu	Allows adjusting the date and time	10
12	Screen Setting Menu	Allows adjusting the screen contrast, adjusting the backlight timer, and enabling/disabling the display of tank level warning messages	11
13	Quiet Times Menu	Allows setting up quiet times when the genset will not automatically start	15
14	Coach Engine Menu	Provides links to the Engine Faults, Past Engine Faults, Leg, Trip, and Gauges menus	17 & 22
15	Current Engine Faults Menu	Displays a detailed list of up to 25 active coach engine faults	22
16	Leg Page 1 Menu	Displays the instant miles per gallon, leg miles per gallon, average miles per hour, and amount of fuel used on the current portion of a trip	18 & 23
17	Leg Page 2 Menu	Displays the miles traveled, miles to go, time passed, and expected hours it will take to reach your destination for the current portion of a trip	18 & 23
18	Reset Leg Distance Menu	Allows for setting up the number of miles for a portion of a trip you wish to monitor	18
19	Trip Menu	Displays information on the current trip (miles traveled, hours traveled, MPH, MPG, and amount of fuel used) and provides the means to reset trip parameters	17 & 23
20	Engine Gauge Page 1 Menu	Displays information on intake manifold boost pressure, average miles per gallon, battery voltage, and percent of engine load	24
21	Engine Gauge Page 2 Menu	Displays information on engine coolant temperature, intake manifold pressure, and engine oil pressure	24
22	Engine Fault History Menu	Displays a detailed list of up to 25 past engine faults and allows for de- leting past faults from the list	22
23	Tanks Menu	Displays the level information for the fresh water, grey water, black wa- ter, and LP gas tanks	21



Overview

Coach Command allows changing of the following parameters:

- Time and date
- Screen contrast and backlight timing
- Display of tank level warning messages
- Generator usage Start, Stop/Prime, and Automatic Genset start (Auto Gen)
- Quiet Times
- 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

INITIAL SETUP

Adjustments to the Time, Date, screen Contrast Level, and Backlight Timer are made using the Setup menu (see Figure 6).

Adjusting the Time and Date

Use the Time menu to set the correct time and date.

To adjust the time and date:

- 1. Press the Setup button on the Main menu.
- 2. Press the Time button on the Setup menu. The screen opens with the hour field highlighted.
 - **NOTE:** AM or PM settings are also made by changing the hour field.
- 3. Repeatedly press the Up 👘 or Down 👼 buttons until the correct value is displayed.
- 4. Press the Select button : to select the next field.
- 5. Repeat steps 3 and 4 to adjust the minutes, month, day, and year fields.



FIGURE 6. ADJUSTING THE TIME AND DATE



Power Generation

Adjusting Screen Settings

Use the Screen Settings menu (Figure 7) to adjust the screen Contrast Level, set the Backlight Timer, and select whether or not tank level warning messages should be automatically displayed.

Adjusting Screen Contrast

The screen contrast feature allows adjusting the display for readability under various light conditions.

To adjust the screen Contrast Level:

- 1. Press the Setup button on the Main menu.
- 2. Press the Screen button on the Setup menu. The screen opens with the Contrast Level field highlighted.
- 3. Repeatedly press the Up 📩 or Down 🚋 button to adjust the contrast. The percentage of contrast is displayed.

Adjusting the Backlight Timer

The Backlight Timer feature allows setting times when the screen backlight is deactivated after a set 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, press anywhere on the screen.

NOTE: The screen is also reactivated whenever a fault condition is detected or the genset automatically starts. A system message is displayed showing the fault condition or the reason why the genset has automatically started.

To adjust the Backlight Timer:

- 1. Press the Setup button on the Main menu.
- 2. Press the Screen button on the Setup menu.
- 3. Press the Select button (until the Backlight Timer field is highlighted.
- 4. Repeatedly press 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 on at all times, the backlight timer must be turned off. To turn off the automatic backlight timer, repeatedly press the Up or Down button until "Off" appears in the Backlight Timer field.



FIGURE 7. ADJUSTING SCREEN SETTINGS

Displaying Tank Level Warning Messages

A tank level sender is installed on each tank (water and LP gas) to monitor tank levels. A warning message is normally displayed when a tank level sender detects that the tank level is less than ten percent full



for fresh water and LP gas tanks or greater than ninety percent full for grey water or black water tanks.

To select whether or not these warning messages are displayed:

- 1. Press the Setup button on the Main menu.
- 2. Press the Screen button on the Setup menu.
- 3. Press the Select button Juntil the Tank Level Warning field is highlighted.
- 4. Press the Up 🔅 or Down 📼 button to set this function to either "On" or "Off."

For more information on tank levels, see page 21.

AUTO GEN

Auto Genstart is set to "OFF" when Coach Command is powered up. Use the Auto Genset Start menu to activate this feature. For more information, see "Activating Automatic Genset Start" on page 13.

When Auto Genstart 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 15).

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

AWARNING 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 capability:

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

ADANGER 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 Genset Start menu (Figure 8) is used to turn Auto Gen ON/OFF. It also allows setting the number of days Auto Gen is enabled.

AWARNING 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."

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. Press the Power button on the Main menu.
- 2. Press the Genset button on the Power Source menu.
- 3. Press the Auto Gen button on the Genset menu. The Auto Genstart field is highlighted.
- 4. Press the Up 🔅 or Down 📼 buttons on the Auto Genset Start menu until the Auto Genstart field reads "ON."
- Press the Select button → to select the Enable for field and repeatedly press 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 press the Up or Down buttons until the Auto Genstart field reads "OFF."



FIGURE 8. ACTIVATING AUTO GEN



Starting, Stopping, and Priming the Genset

Coach Command allows manually starting, stopping, and priming the genset (Figure 9).

AWARNING 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. Press the Power button on the Main menu.
- 2. Press the Genset button on the Power Source menu.
- 3. Press 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 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, "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. Press the Power button on the Main menu.
- 2. Press the Genset button on the Power Source menu.
- 3. Press 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 9).

To manually prime the genset:

- 1. Press the Power button on the Main menu.
- 2. Press the Genset button on the Power Source menu.

- 3. Press the Stop/Prime button. "Genset Priming" is displayed at the top of the Genset menu.
- **NOTE:** The genset will prime for 60 seconds. Press the Stop/Prime button again to stop priming.



FIGURE 9. 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 10).

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 Setup button on the Main menu.
- 2. Press the Quiet button on the Setup menu. The menu opens with the Enable field for the first quiet time highlighted.
- 3. Press the Up (*) or Down (*) buttons to enable a Quiet Time (*ON").
- 4. Press the Select button (1) to select the hour field for the first Start time and press 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. Press the Select button to select the minute field for the first Start time and press 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 10. SETTING UP QUIET TIMES



SHORE POWER

The Shore menu (Figure 11) displays shore power status information. 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.

IMPORTANT! Make sure the Coach Command shore power setting matches the actual shore power rating before any connection is made for 15, 20 or 30 amp shore power.

Adjusting the Shore Power Setting

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

- 1. Press the Power button on the Main menu.
- 2. Press the Shore button on the Power Source menu.
- 3. Press the 15 Amps, 20 Amps, or 30 Amps button, as required.



FIGURE 11. ADJUSTING THE SHORE POWER SETTING



COACH ENGINE

The Coach Engine screens display coach engine status information. Coach Engine screens are only available on screens with a primary screen display. From the Coach Engine menu, you can:

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

Resetting Trip Parameters

The Trip menu (Figure 12) 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 Coach Engine button on the Main menu.
- 2. Press the Trip button on the Coach Engine menu.
- 3. Press the Reset Trip button on the Trip menu.

Initially, all values displayed on the Trip screen are reset to zero.



FIGURE 12. COACH ENGINE LEG SETUP



Setting Up Leg Parameters

The Leg menus (Figure 13) 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 Coach Engine button on the Main menu.
- 2. Press the Leg button on the Coach Engine menu.
- 3. Press 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, press the Clear button.

5. Press the Enter button.

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



FIGURE 13. COACH ENGINE LEG SETUP



System Monitoring

Coach Command allows monitoring of information on power sources, tank levels, the coach engine, loads, and faults.

The illustrations in this section show how to access each menu and shows the type of information displayed on each menu.

POWER SOURCES

Whenever changing power sources, controlled loads are temporarily disabled. Coach Command turns off these loads until the new power source is determined to be stable. Up to three minutes may be needed to switch power sources. For more information on changing power sources, see "Auto Gen" on page 12.

When Auto Gen is set to "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.

The Power menu (Figure 14) shows:

- The power source currently being used (Genset, Shore, or Inverter)
- Auto Gen ON/OFF status
- Quiet Time ON/OFF status

 Percentage of available load capacity being used – 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, generator power, or inverter power with a two-inverter system.

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



FIGURE 14. POWER SOURCE



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Genset Power

The Genset menu (Figure 15) displays the type of genset, status information (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.

This menu can also be used to turn the Auto Gen feature "ON" or "OFF" (see page 13) and to Start, Stop, or Prime the genset (see page 14).



FIGURE 15. GENSET POWER

Shore Power

The Shore Power menu (Figure 16) 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. This menu also allows setting up the system for 15, 20, or 30 amp shore power (see page 16).



FIGURE 16. SHORE POWER



Inverter Power

The Inverter menu (Figure 17) displays information on battery voltage and inverter AC/DC charge current.

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



FIGURE 17. INVERTER POWER

TANK LEVELS

The Tanks menu (Figure 18) displays the 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

If Coach Command has been set up to display tank level warning messages (see page 11), a tank level fault is displayed when the tank level senders are outside the 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.



FIGURE 18. TANK LEVELS



COACH ENGINE

The Coach Engine menus (Figure 19) display:

- Coach engine current and past faults
- Trip or leg information
- Coach engine diagnostic information
- **NOTE:**When the coach engine is turned off, "NA" is displayed in all Coach Engine menu data fields.



FIGURE 19. COACH ENGINE

Coach Engine Faults

The Current Engine Faults menu (Figure 20) provides a detailed list of up to 25 active coach engine faults, 5 at a time. If necessary, press the Page Up or Page Down buttons to view additional faults.

The Engine Fault History menu (Figure 21) displays a list of up to 25 of the past engine faults, 5 at a time. If necessary, press the Page Up or Page Down buttons to view additional faults. After having the coach engine serviced, you may choose to delete the list of engine faults. To clear past faults, press the Clear Log button.



FIGURE 20. CURRENT COACH ENGINE FAULTS



FIGURE 21. COACH ENGINE FAULT HISTORY



Trip Information

The Trip menu (Figure 22) displays the following information on the current trip:

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

All values displayed reflect information since the last time the Reset Trip button was pressed. Before starting your trip, you may wish to press the Reset Trip button to erase any old information (see page 17).



FIGURE 22. COACH ENGINE TRIP INFORMATION

Leg Information

The Leg menus (Figure 23) display monitoring of information for a specific number of miles. The two Leg screens display the following information on 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 on the miles entered

The Reset Leg menu allows setting up the number of miles you wish to monitor (see page 18).



FIGURE 23. COACH ENGINE LEG INFORMATION



Gauges

The Gauges menus (Figure 24) display information on the following:

- Intake manifold boost pressure
- Average miles per gallon
- Battery voltage
- Percent of engine load
- Engine coolant temperature
- Intake manifold temperature
- Engine oil pressure



FIGURE 24. COACH ENGINE GAUGES

LOADS

The Loads menu (Figure 25) provides 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 generator power is available, loads are again enabled based on priority. Loads are enabled in the opposite order they were disabled.



FIGURE 25. LOADS



FAULTS

The Current Faults menu (Figure 26) shows the status of the following:

- Network A fault indication means that not all nodes are communicating.
- Generator A fault indication means that a genset fault has been detected.
- Tank Senders A fault indication means that not all tank level signals are within the normal range of operation.
- Battery Voltage A fault indication means that the battery voltage is outside the normal range of operation.
- Controlled Loads A fault indication means the controlled loads are drawing excessive current.



FIGURE 26. CURRENT FAULTS

Fault history is shown on the Past Faults menu (Figure 27). It 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 27. PAST FAULTS



Storage

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

AWARNING 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 and set Auto Genstart to "OFF." For more information, see "Activating the Automatic Genset Start" on page 13.

- 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 16).
- 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 master power switch to Coach Command.
- 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 Sensors
- The Battery
- Controlled load current draw

When a fault occurs, a fault message is displayed on the Touch Screen display. A fault indication is also shown on the Current Faults menu (see Figure 28). For more information on faults and fault history, see page 25.



FIGURE 28. CURRENT FAULTS MENU

Network Communication Faults

Coach Command communication fault messages include:

• Master node is not communicating.

- Generator 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 Faults menu.

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

Generator Faults

If Coach Command cannot communicate with the generator, the message "Genset not communicating" fault is displayed. To restore genset communications, press the remote stop on the genset on/ off switch. Open up the 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.

Various other generator faults are also displayed on the Coach Command screen. For more information on generator 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 Faults menu.

Tank Level Sensor Faults

The tank sender fault messages 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.

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 Faults menu.

Battery Faults

A battery fault is displayed when the battery 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.

COACH COMMAND WARNINGS

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!

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.



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:

- 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 4)
- 2. Software version number, as shown on the Startup Screen
- 3. The date of purchase
- 4. The nature of the problem. See Troubleshooting (Page 27).

AWARNING 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 Generator Start – a Coach Command feature that automatically starts the genset when not enough power is available from inverter or shore power
Black Water	Waste water from toilets
CAN	An acronym for Controller Area Network
Controlled Loads	Items (air conditioners, hot water heater, engine block heater, auxiliary heater, electric heater, and washer/dryer) that are linked to Coach Command with load control nodes. Coach Command can monitor and control their power usage.
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	The amount of power needed to run a device or an electrical appliance
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 electrical outlet used as a power source for the appliances in the recreational vehicle
Transfer Switch	An electrical switch used to provide isolation when switching between power sources





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