OUTSIDE VAN

APPROACH

OWNER'S MANUAL

FOR SERVICE OR WARRANTY, PLEASE CONTACT YOUR SELLING DEALER

CONTENTS

OUTSIDE VAN
APPROACH

GETTING STARTED

Your Approach 170 van was made to support your desires for freedom and independence. This van is made for those seeking the unconventional and willing to take it further. For more detailed information on your Approach, refer to the individual manufacturer's manuals provided. This User Manual is intended as a guide to aid you in safe and enjoyable adventures.

Please take note of warnings and cautions found throughout this guide as shown with the following icons:

DANGER

Danger is used to warn of electric shock issues present.

WARNING

Warnings are used to indicate a threat to human life or safety.

CAUTION

Cautions are used to indicate the possibility of damage to the van or its contents, or to highlight information to be aware of that might limit your ability to use the features of the van.

The General section covers information on the following:

- Getting on the road
- Roadside assistance
- Basic campsite tips

GETTING ON THE ROAD

CAUTION

Traveling to some areas may result in a loss of connectivity. It is recommended to download any content that is desired to be accessed while on your trip.

WARNING

All loose items must be properly secured inside or on top of the van to prevent damage to property or injury to persons.

WARNING

All seats must be secured in their bases and in the fully upright position to provide adequate safety features. Child restraints must be installed and operated according to the manufacturer of the applicable child safety seat/device.

WARNING

Never start or run the engine in an enclosed space, like a closed garage. This could result in serious injury or death.

CAUTION

Make sure all water and waste hoses and components are drained and/or placed in a container to prevent water damage to van components. Traveling with waste in the porta-potty could lead to spilling of waste inside the van and present a health hazard for passengers. Monitor waste tank level and empty to an approved sewer waste connection when necessary.

Prior to driving the Approach van, all loose items should be secured inside the van or on the roof storage rack. All table and bed components should be secured in place in a manner that will not allow them to move throughout the cabin. All cabinets and drawers should be fully closed and latched, including the shower water box.

Roll up the sections of the cabin soft wall divider and secure in place at the ceiling.

Make sure that all exterior caps and covers are closed or secured in place.

Make sure that the refrigerator and microwave doors are fully shut and latched.

Make sure that the awning is fully retracted.

Cabin Stowed

Verify that both Maxxfan lids are either fully open or fully shut.

Appropriate items can be secured to the L-track on either side cabin wall.

Verify side view and towing mirrors are positioned to provide optimal viewing of surroundings.

Use the following checklist as a basic guideline for preparing the Approach van for travel. Items marked with an “*” are those that do not come standard with the van:

- Stow the following components in their designated storage location:
  - 30A shore power cord
  - Air compressor hoses/ accessories
  - Porta-potty
  - Shower liner
  - Sink covers
  - Dinette table and legs
  - Shower hand sprayer
  - Portable induction cooktop
  - Remote controls
  - User guides/manuals
  - TV

Table Stowed

- Stow the following components in a secure location:
  - Awning crank rod
  - Fresh water hoses*
  - Grey water waste hose*
  - Wheel chocks*
  - Dishes/tableware/utensils*
  - Cleaning supplies/toiletries*
  - Personal items/luggage*
  - Electronics*

ROADSIDE ASSISTANCE

For roadside or remote campsite emergencies, contact Roadside Assistance (MB Vans 1-800-367-6372) or other vehicle assistance membership (Good Sam, AAA Plus RV, etc.)

CAUTION

The Apex rim has compatible lug nuts with the supplied spare tire; the Black Rhino rim is not compatible. Make sure compatible lug nuts are used in the event spare tire usage is required.

BASIC CAMPSITE TIPS

It is recommended to verify the availability of the following campsite amenities prior to arrival, if possible:

- City water connection
- Sewer connections
- 30A shore power
- Public restrooms/showers
- Trash cans or dumpsters

For the safety of all travelers, follow these basic guidelines:

- Take caution while backing into any camping location, using all installed safety devices.
- Always make sure power is secured before connecting any electrical connections.
- Make sure all seats are properly positioned and engaged prior to driving the van.
- Make sure your Approach van is positioned at a safe and usable distance from any campsite connections to be used.
- Follow all state and local laws applicable to the camping location.
- Make sure all faucets and water valves are closed prior to pressurizing the water system.
- Always engage the parking brake and use wheel chocks as necessary.
- Never travel with loose items on the interior or exterior of the van.

SECTION 1

SAFETY

IN THIS SECTION

OVERVIEW

Safety equipment is installed on your Approach van for emergency use and alerts.

The Safety section covers information about the following features:

1. Combination Smoke/CO Alarm
2. Fire Extinguisher
3. General Safety

SMOKE/CO ALARM

The Approach van is outfitted with a combination smoke and carbon monoxide alarm, located in the overhead above the right passenger captain seat.

WARNING

This smoke/CO alarm cannot operate without working batteries. Removing the batteries for any reason, or failing to replace the batteries at the end of their service life, removes your protection.

CAUTION

This unit has two separate alarms. The CO alarm is not designed to detect fire or any other gas. It will only indicate the presence of carbon monoxide gas at the sensor. Carbon monoxide gas may be present in other areas. The smoke alarm will only indicate the presence of smoke that reaches the sensor. The smoke alarm is not designed to sense gas, heat, or flames.

WHAT YOU NEED TO KNOW ABOUT CO

CO is an invisible, odorless, tasteless gas produced when fossil fuels do not burn completely or are exposed to heat (usually fire).

Such fuels include: wood, coal, charcoal, oil, natural gas, gasoline, kerosene, and propane.

Common appliances are often sources of CO. If they are not properly maintained, are improperly ventilated, or malfunction, CO levels can rise quickly. CO is a real danger in “air-tight” spaces with added insulation, sealed windows, and other weatherproofing that can “trap” CO inside. (Electrical appliances typically do not produce CO.)

A CO alarm is an excellent means of protection. It monitors the air and sounds a loud alarm before Carbon Monoxide levels become threatening for average, healthy adults.

A CO Alarm is not a substitute for proper maintenance of home appliances.

To help prevent CO problems and reduce the risk of CO poisoning:

- Test and maintain all fuel-burning equipment annually.
- Make regular visual inspections of all fuel-burning appliances. Check appliances for excessive rust and scaling. Also check the flame on the burners and pilot lights. The flame should be blue. A yellow flame means fuel is not being burned completely and CO may be present.
- Use vents or fans when they are available on all fuel-burning appliances. Make sure appliances are vented to the outside.
- Check for exhaust backflow from CO sources. Look for cracks on furnace heat exchangers.
- Keep windows and doors open slightly. If you suspect that CO is escaping into your Approach van, open a window or a door. Opening windows and doors can significantly decrease CO levels.

SYMPTOMS OF CO POISONING

These symptoms are related to CO POISONING and should be discussed with ALL users of the Approach van. Exposure to Carbon Monoxide can cause brain damage, or even death.

Mild Exposure: Slight headache, nausea, vomiting, fatigue (“flu-like” symptoms).

Medium Exposure: Throbbing headache, drowsiness, confusion, fast heart rate.

Extreme Exposure: Convulsions, unconsciousness, heart and lung failure.

PARTS OF THE SMOKE/CO ALARM

The key parts of the smoke/CO alarm are identified below (Figure 1-1).

1. Test/Silence button
2. Battery Compartment
3. Power/Smoke Alarm LED
4. CO Alarm LED

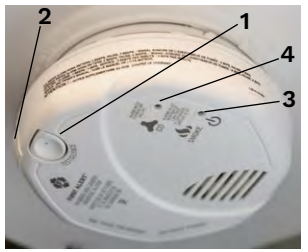


Figure 1-1. Parts of the Smoke/CO Alarm

REGULAR MAINTENANCE

The unit has been designed to be as maintenance-free as possible, but there are a few simple steps required to keep it in proper working order.

- Test your smoke/CO alarm at least once a week.
- Clean the unit at least once a month:
  - Gently vacuum the outside of the alarm using a soft brush attachment, or use a can of clean compressed air (sold at computer or office supply stores), following manufacturer instructions for use.
  - DO NOT use water, cleaners or solvents, as they may damage the unit.
  - Test the alarm to make sure it is working properly.
- If the unit has a build-up of dirt, dust, or grime, it could sound unwanted alarms. If it cannot be cleaned as described, it should be replaced immediately.

WEEKLY TESTING

WARNING

NEVER use an open flame of any kind to test this unit. You might accidentally damage or set fire to the unit or to your Approach Van. The built-in test switch accurately tests the unit's operation as required by Underwriters Laboratories, Inc. (UL). NEVER use vehicle exhaust! Exhaust may cause permanent damage and voids your warranty.

WARNING

DO NOT stand close to the alarm when the horn is sounding. Exposure at close range may be harmful to your hearing. When testing, step away when horn starts sounding.

CAUTION

It is important to test this unit every week to make sure it is working properly. Using the test button is the recommended way to test this Smoke/CO Alarm.

To perform a weekly test on the smoke/CO alarm, press and hold the Test/Silence button for 3-5 seconds until the unit's alarm sounds.

During the test:

1. The horn will sound three (3) beeps, followed by a pause, then three (3) more beeps.
2. The Power/Smoke LED will flash red and the CO LED will be off.
3. The horn will then sound four (4) beeps, followed by a pause, then four (4) more beeps.
4. The Power/Smoke LED will be Off and the CO LED will flash red.

If the unit does not alarm, make sure the batteries are correctly installed and do the test procedure again. If the unit still does not alarm, it should be replaced immediately.

LOW BATTERY WARNING

When the batteries are low, the Smoke/CO alarm will "chirp" once every minute, and the LED will flash, indicating the need to replace thethe batteries. You can use the Silence feature to temporarily quiet the sound.

REPLACING THE BATTERIES

Your Smoke/CO alarm requires two (2) standard AA batteries. The manufacturer recommends Duracel MN1500, available at many local retail stores. DO NOT use rechargeable batteries. Clean the battery contacts and those of the device prior to installing batteries. Be sure to install batteries with the correct polarity (+ and –).

1. Open the battery compartment .
2. Press tabs A and B (Figure 1-2) and remove each battery.
3. Insert the new batteries, making sure they snap completely into the battery compartment and match the polarity of the terminals on the ends of the batteries with the terminals on the unit.
4. Close the battery compartment, and test the unit by pressing the Test/Silence button.

Figure 1-2. Battery Compartment

SILENCE FEATURE

The silence feature will temporarily quiet the chirp of a low battery or end of service life warning.

Low Battery

Press the Test/Silence button on the alarm cover. Once the low battery warning silence feature is activated, the unit continues to flash the green light once a minute for eight (8) hours. After eight (8) hours, the chirp will resume. It is important to replace the batteries as soon as possible. The unit will not operate without battery power.

To deactivate this feature, press the Test/Silence button again. The unit will go into Test Mode and the low battery warning will resume (LED flashes and "chirp" sounds once every minute).

End of Service Life

You can silence the End of Life warning "chirp" by pressing the Test/Silence button. The horn will chirp, acknowledging that the End of Life silence feature has been activated.

After approximately 2 days, the End of Life "chirp" will resume.

WHEN THE ALARM SOUNDS

Identify the Type of Alarm

Smoke

- Power/Smoke LED flashes red
- Horn beeps three (3) times, pauses, beeps three (3) times, pauses.
- CO LED is off.

Carbon Monoxide (CO)

- CO LED flashes red
- Horn beeps four (4) times, pauses, beeps four (4) times, pauses.
- Power/Smoke LED is off.

If the CO Alarm Sounds

Move to Fresh Air

If you hear the CO alarm horn and the CO red light is flashing, move everyone to a source of fresh air. DO NOT remove the batteries!

WARNING

The actuation of your CO Alarm indicates the presence of carbon monoxide (CO) which can kill you. In other words, when your CO Alarm sounds, you must not ignore it!

1. Push the Test/Silence button.
2. Call your emergency services, fire department, or 911.
3. Move to fresh air: outdoors or by an open door or window.

WARNING

This CO alarm measures exposure to CO over time. It sounds an alarm if CO levels are extremely high in a short period of time, or if CO levels reach a certain minimum over a long period of time. The CO alarm generally sounds an alarm before the onset of symptoms in *average, healthy adults*. In many reported cases of CO exposure, victims may be aware that they are not feeling well, but become disoriented and can no longer react well enough to exit the space or get help. Young children and pets may be the first affected. The average healthy adult might not feel any symptoms when the CO alarm sounds. People with cardiac or respiratory problems, infants, unborn babies, pregnant mothers, or elderly people, however, can be more quickly and severely affected by CO. If you experience even mild symptoms of CO poisoning, consult your doctor immediately!

OUTSIDE VAN
APPROACH
1

FINDING THE SOURCE OF CO AFTER AN ALARM

Carbon monoxide is an odorless, invisible gas, which often makes it difficult to locate the source of CO after an alarm. These are a few of the factors that can make it difficult to locate sources of CO:

- Space has been well ventilated before the investigator arrives.
- The problem was caused by "backdrafting."
- It is a transient CO problem caused by special circumstances.

Because CO may dissipate by the time an investigator arrives, it may be difficult to locate the source of CO. The dealer or manufacturer shall not be obligated to pay for any carbon monoxide investigation or service call.

Potential Sources of CO

1. Fuel-burning appliances like a portable heater, gas range or cooktop.
2. Improper use of appliance/device such as operating a barbecue grill or leaving the vehicle running in an enclosed area (like a garage or screened porch).
3. Transient CO Problems
   - "Transient" or on-again off-again CO problems can be caused by outdoor conditions and other special circumstances.

The following conditions can result in transient CO situations:

- Excessive spillage or reverse venting of fuel appliances caused by outdoor conditions such as:
  - Wind direction and/or velocity, including high, gusty winds. Heavy air in the vent pipes (cold/humid air with extended periods between cycles).
  - Negative pressure differential resulting from the use of exhaust fans.
  - Several appliances running at the same time competing for limited fresh air.
- Extended operation of unvented fuel burning devices (range, oven, heater).
- Temperature inversions, which can trap exhaust close to the ground.
- Vehicle idling in an open or closed attached garage, or near the Approach van.

These conditions are dangerous because they can trap exhaust. Since these conditions can come and go, they are also hard to replicate during a CO investigation.

ABOUT THE SMOKE ALARM

Battery operated smoke alarms provide protection even when electricity fails, provided the batteries are fresh and correctly installed.

Smoke/CO Alarms cannot work without power. Battery operated units cannot work if the batteries are missing, disconnected or dead, if the wrong type of batteries are used, or if the batteries are not installed correctly.

This Smoke/CO Alarm will not sense smoke or CO that does not reach the sensors. It will only sense smoke or CO at the sensor. Smoke or CO may be present in other areas.

Smoke/CO Alarms may not be heard. The alarm horn loudness meets or exceeds current UL standards of 85dB at 10 feet (3 meters).

The Alarm may not have time to alarm before the fire itself causes damage, injury, or death, since smoke from some fires may not reach the unit immediately. Examples of this include persons smoking in bed, children playing with matches, or fires caused by violent explosions resulting from escaping gas.

This Smoke/CO Alarm is not a substitute for life insurance. Though this Smoke/CO Alarm warns against increasing CO levels or the presence of smoke, the manufacturer does not warrant or imply in any way that they will protect lives. Users must still insure their lives.

This Smoke/CO Alarm has a limited life. Although this Smoke/CO Alarm and all of its parts have passed many stringent tests and are designed to be as reliable as possible, any of these parts could fail at any time. Therefore, you must test this device weekly. The unit should be replaced immediately if it is not operating properly.

This Smoke/CO Alarm is not foolproof. Like all other electronic devices, this Smoke/CO Alarm has limitations. It can only detect smoke or CO that reaches the sensors. It may not give early warning if the source of smoke or CO is located at a distance from the alarm device.

OUTSIDE VAN
APPROACH
1

SMOKE/CO ALARM TROUBLESHOOTING

See Table 1-1.

Table 1-1. Troubleshooting

Problem	Probable Cause	Solution
Horn “chirps” every minute	Low battery warning	Install two new AA batteries*
Horn does three “chirps” every minute; LED has 3 rapid flashes with “chirps”.	MALFUNCTION SIGNAL. Device is not working properly, and needs to be replaced.	Units under warranty should be returned to manufacturer for replacement. See “Limited Warranty” for details.
The light flashes GREEN and the horn sounds 5 “chirps” every minute.	END OF LIFE SIGNAL. Alarm needs to be replaced.	Immediately replace the Alarm.
Carbon Monoxide Alarm ONLY		
CO Alarm goes back into alarm 4 minutes after you silence it.	CO levels indicate a potentially dangerous situation.	**If you are feeling symptoms of CO poisoning, evacuate** and call 911 or the Fire Department. Refer to “If The CO Alarm Sounds” for details.
Smoke Alarm ONLY		
Smoke alarm sounds when no smoke is visible.	Unwanted alarm may be caused by nonemergency source like cooking smoke.	Silence alarm using Test/Silence button; clean the Alarm’s cover with a soft, clean cloth.

* Manufacturer recommends Duracel MN1500

FIRE EXTINGUISHER

Your Approach van is delivered with a First Alert dry chemical fire extinguisher, which is located on the back of the base of the first-row passenger seat (Figure 1-3).

Figure 1-3. Fire Extinguisher

WARNING

This extinguisher is designed for use against small fires that have just started and are small enough to fight safely. It is not designed to fight large fires that are burning out of control. If the fire is too hot or smoky for you to get within 6 feet (2 meters) of it, do not try to fight it yourself. Warn everyone, evacuate the premises, and have someone call the Fire Department from outside the area. Trying to fight a large fire yourself can result in injury or death.

WARNING

Do not puncture or burn any fire extinguisher. The contents are under pressure, and the extinguisher could explode.

WARNING

Never locate this extinguisher close to an engine, stove or other source of heat. It is pressurized and could rupture or explode if exposed to temperatures over 150° F (66° C).

CAUTION

This extinguisher contains a dry powder extinguishing agent. The agent/powder is nontoxic, but can irritate skin. When using this unit, avoid breathing the powder. Always ventilate the area after use.

To operate the fire extinguisher to fight a fire, perform the following:

Remove the extinguisher from the mounting bracket.

Hold the unit firmly with the nozzle facing away from you. Pull out the pin to break the “Safety Seal”. You won’t be able to squeeze the lever until the safety seal is removed.

Stand back 6 feet (2 meters) from the fire and make sure the fire is not between you and your exit.

Hold the extinguisher upright and aim the nozzle at the base of the fire.

Squeeze and hold the lever to discharge the powder.

Sweep the spray at the base of the burning material, using quick side-to-side motions. (If the spray scatters the fire, move back).

Move slowly towards the fire as the extinguisher spray pushes the fire back. Maintain a 6-foot (2 meter) distance between you and the front of the fire at all times.

Completely discharge the contents of the extinguisher and make sure the fire is completely out. Flashbacks are common with fires.

For kitchen fires on a kitchen stove, turn off the stove immediately if possible, otherwise as soon as it is safe.

If you suspect a fire had an electrical origin, shut off the electrical power, if possible, without eliminating your escape route. Do not touch electrical wires or appliances.

After you have completely discharged your extinguisher, leave the immediate area, closing all the doors behind you as possible.

WARNING

After the fire is extinguished, do not turn the electrical power back on or plug in any appliances until the area has been cleaned up completely. If all powder is not removed from electrical equipment can result in damage to electrical components or an electrical shock hazard.

For proper maintenance of the fire extinguisher, perform the following:

Inspect the extinguisher once a week. Remove the extinguisher from the mounting bracket and inspect the gauge. If the yellow pointer is in the GREEN area, the extinguisher is properly pressurized and ready to use. If the pointer drops into the RED area, the extinguisher has lost some pressure and should be replaced.

Check for signs of damage or misuse. Make sure you can still read all the text on the label. Carefully examine the surface of the extinguisher for corrosion. You can help prevent corrosion by cleaning the extinguisher if it gets wet or

OUTSIDE VAN
APPROACH

dirty. If you notice corrosion during the warranty period, contact the manufacturer.

Make sure the tamper indicator ("safety seal") is still intact and the nozzle is clean and unobstructed.

When you finish inspecting the extinguisher, always put it back securely into the mounting bracket.

GENERAL SAFETY

WARNING

Any safety defects that could result in accident, injury or death should be reported to the National Highway Traffic Safety Administration (NHTSA) immediately. To contact the NHTSA, call the Vehicle Safety Hotline toll-free at 1-888-327-4236 (TTY 1-800-424-9153) or go to www.safecar.gov.

WARNING

Operating, servicing, and maintaining this vehicle can expose you to various chemicals—including engine exhaust, carbon monoxide, phthalates, and lead—which are known to the state of California to cause cancer and birth defects or other reproductive harm. For more information, go to: www.p65warnings.ca/gov/passenger-vehicle

WEIGHT CAPACITIES

CAUTION

Towing will affect handling and fuel economy of the vehicle. Do not exceed any gross vehicle weight ratings.

For safe and proper operation of the Approach van, follow these weight capacity guidelines:

- Exterior ladder — maximum weight of 300 lbs.
- Beds — maximum weight of 600 lbs.
- Towing — maximum towing capacity of 5000 lbs; maximum tongue weight of 500 lbs.

SECTION 2

POWER

IN THIS SECTION

OVERVIEW

The Approach van is outfitted with an advanced lithium-ion energy storage system (Flex Pack) with components located in the upper cabinetry and throughout the van. The system uses this energy source to supply AC and DC power to van components.

The Power section covers information about the following features:

- Volta Power System
- Volta Pushbutton
- Touchscreen
- Flex Pack
- Alternator
- Inverter
- Converter
- Solar Controller
- MyVolta App
- Power System Troubleshooting

VOLTA POWER SYSTEM

The Battery Management System (BMS) shuts down the Volta system if the Flex Pack reaches a very low voltage limit or 0% State-of-Charge (SOC). When the Volta System reaches 0% SOC, the pushbutton LED flashes yellow, the SOC is red, and the system shuts down. Do not attempt to turn on the system until a charge source is connected. Perform one of the recovery procedures in the Flex Pack section. Failure to recover from a low voltage shutdown will result in further Flex Pack discharge, which may require service from a Volta technician.

WARNING

Do not connect the Volta System to a 240 VAC outlet. Connecting to a 240 VAC outlet may result in permanent damage not covered by the Volta Power Systems warranty.

VOLTA PUSHBUTTON

The system is turned on/off by a pushbutton located in the upper cabinetry (Figure 2-1). The LED light color and pattern show the status of the system.

Press the On/Off pushbutton to turn on the Volta System and power your vehicle's electrical systems and devices. When the On/Off pushbutton is pressed to turn on the Volta System, a 2- to 5-second system check occurs. If all systems checks are successful, the Flex Pack's internal contactor engages, supplying power to all Volta components, turning on the Volta System.

Do not repeatedly press the pushbutton. After pressing the button, wait 30 seconds for all system checks to occur before pressing the button again.

OUTSIDE VAN
APPROACH

2

Figure 2-1. ON/OFF Pushbutton

Table 2-1. Pushbutton LED Indicators

LED Color	System Status
Green	System on
Green Flashing	Charge Only Mode - System turned off and charge source connected
Yellow	Too cold to charge
Yellow Flashing (5 seconds)	Volta System is starting after pressing the pushbutton
Dim Yellow Flashing (5 seconds)	Volta System is shutting down after pressing the pushbutton
Yellow Flashing (30 econds then system shuts down)	System fault causing shutdown. If possible, monitor the touchscreen before shutdown to assist in diagnosing the fault

Press the On/Off pushbutton to turn off the Volta System. After pressing the pushbutton to turn off the system, a few seconds will pass before the pushbutton LED turns off and the Touchscreen shuts down, signaling that the Volta System is turned off.

TOUCHSCREEN

The Volta power system is monitored and controlled by a touchscreen located in the upper cabinetry (Figure 2-2). The touchscreen turns on a few seconds after the pushbutton is pressed, a charge source is sensed, or the vehicle is turned on.

The touchscreen display provides the following indications and controls:

- State-of-Charge Gauge (SOC) — displays the approximate SOC of the Flex Pack. The gauge color and pattern indicate flash codes showing the system state (Table 2-2).

Figure 2-2. Touchscreen Display

Table 2-2. State-of-Charge (SOC) Flash Codes

Gauge Color	System State
Solid Green	Normal Operating SOC (greater than 20%)
Solid Yellow	Low SOC (10-20%)
Solid Red	Very Low SOC (less than 10%)
Flashing Red	High Temperature
Slow Flashing Blue	Too Cold to Charge

- Charge Time Remaining — displays the approximate charge time remaining in the Flex Pack
- Current Time — displays the current time
- Menu Bar — touch the menu bar buttons to access the corresponding screens. These include the following:
  - Alerts button
  - Settings button
  - Inverter button
  - Sleep button
  - Home button
- System Indicators — communicate system changes or statuses. These include the following:
  - Alternator Charging — Flex Pack is ready for charging from alternator, or is currently charging from alternator
  - Flex Pack Temperature Low — Flex Pack is too cold to charge
  - Heating Pads On — Heating pads are on and actively warming the Flex Pack
  - Flex Pack Temperature High — Flex Pack is at or near the high temperature shutdown limit
- Pack Temp — displays the current temperature of the Flex Pack
- Power Flow — displays the power consumption (negative value) on the Flex Pack or the rate of charge (positive value) to the Flex Pack

Some available screens require a password to edit and include settings that should only be adjusted by a Volta approved technician. The following screens have settings that are accessible for all users:

- Screen Timeout — the screen timeout value adjusts the time after inactivity before the touchscreen turns off. When disabled, the touchscreen never goes to sleep. Touch the screen to wake up the touchscreen.
- Units - toggle the temperature units between °F or °C
- Date Adjustment — adjust the date (day, month, year)
- Time Adjustment — adjust the current time (hour, minute, AM/PM, 12/24 hr)
- Theme — toggle the touchscreen color theme
- Screen Brightness — adjust the screen brightness or toggle between Auto and Manual mode

CAUTION

Only Volta technicians or trained professionals with in-depth knowledge of Volta Systems should service these components.

If you purchased your vehicle with the Volta system already installed, you will need to work directly with your dealer or original manufacturer to arrange service.

FLEX PACK

The Flex Pack is the energy source for your Volta power system. A steel housing protects the lithium-ion cells. An internal Battery Management System monitors the system, balances the cells, and controls energy output.

The Flex Pack can be charged by the following methods:

- Shore Power — when plugged into an acceptable outlet (30A/120V) the Flex Pack samples incoming power for a few seconds to ensure uniformity requirements are met. If incoming power meets the requirements, the Volta system turns on and begins charging the Flex Pack. The rate at which the system charges depends on your system settings chosen on the touchscreen. Charge rate selection and guidance are shown on the inverter screen (Figure 2-3).
- Secondary Alternator — refer to Alternator section.
- Generator — the Flex Pack can charge via a connection to a generator that meets the AC input range and frequency of the inverter. The inverter samples incoming power for a few seconds to ensure uniformity requirements are met. If incoming power meets the requirements, the Volta system turns on and begins charging the Flex Pack.
- Solar Power — solar panels supply additional energy to the Flex Pack when there is sufficient sunlight. The solar charging system is primarily used to increase the time needed between charges. The secondary alternator or shore power connection are more effective in charging the Flex Pack.

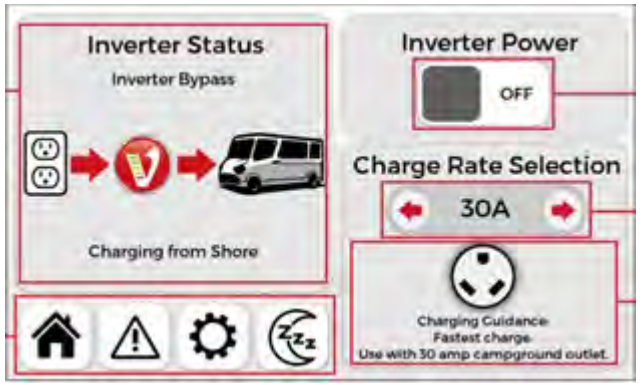


Figure 2-3. Inverter Screen

To recover from a zero State-of-Charge using shore power, perform the following:

- Turn off the Volta system, if not off already.
- Connect to shore power.
- Ensure the appropriate charge rate is selected.
- Charge the system to at least 20% SOC before returning to normal system operation and use. Fully charge the system as soon as possible.

To recover from a zero State-of-Charge using the secondary alternator, perform the following:

- Turn off the Volta system, if not off already.
- Start the vehicle. Immediately raise and hold the engine RPMs over 1500 for at least 5 minutes.
- Drive the vehicle, maintaining at least 1500 RPM, to charge the system until the SOC indicates at least 20% before returning to normal system operation and use.
- Fully charge the system as soon as possible.

High Temperature Operation:

- The Flex Pack is designed with passive cooling. The BMS shuts down the Flex Pack or prevents charging at elevated temperatures to allow the Flex Pack to cool.
- The Volta System charges normally and distributes power normally up to 116°F (47°C). At or above 116°F (47°C), the Battery Management System (BMS) prevents charging. At or above 134°F (57°C) the BMS shuts down the system.
- To protect the Flex Pack, avoid using or storing the Flex Pack at or above 134°F (57°C). Storage of the Flex Pack at elevated temperatures is not recommended, as it will reduce the lifetime and capacity of the Flex Pack.

Cold Temperature Operation:

- The Volta System is capable of powering electrical systems below freezing temperatures. However, if the Flex Pack temperature is too low, the system does not charge.
- For system operation in cold environments, and to maintain the Flex Pack at charge-accepting temperatures, the energy storage modules inside

the Flex Pack are equipped with internal heating pads. The internal heating system operates automatically when the Volta System is on and sufficient energy is available from the Flex Pack.
- Refer to the Heat & Cooling section for charging strategies while in cold weather.

STORAGE PRECAUTIONS

WARNING

Do not store the Volta System at low State-of-Charge. The system is designed with a limited energy reserve, in case the system is left on and the low voltage shutdown occurs. This reserve may last for three months until irreversible damage could occur. Neglecting system maintenance and allowing the Flex Pack to come to this state will result in voiding the warranty.

WARNING

Failure to turn off the Volta System before storing your vehicle long term (greater than 3 months) will cause the Flex Pack(s) charge to deplete faster, even if all loads on the system are removed, which can cause permanent damage to the Flex Pack.

Preparations should be made to protect the life and performance of the Flex Pack when not in use. When leaving the vehicle in storage, turn off the Volta system by pressing the On/Off pushbutton.

To prepare for long-term storage:

- Charge the Volta System to greater than 70% SOC as indicated on the touchscreen.
- Press the On/Off pushbutton and verify that the pushbutton LED and touchscreen turn off, indicating the Volta System is off.
- Turn on the Volta System every three months to verify the pack is maintaining a high State-of-Charge (SOC). If necessary, charge the system to above 70% SOC before storing the vehicle again.

If the vehicle is frequently used, keep the system in Charge Only Mode and connected to shore power for convenient operation.

To place the system in Charge Only Mode for short-term storage:

- Press the On/Off pushbutton to turn on the system.
- Ensure the appropriate charge rate is selected.
- Press the On/Off pushbutton to turn off the system. Verify that the pushbutton LED and touchscreen turn off, indicating that the Volta system is off.
- Connect the vehicle to shore power.

While in Charge Only Mode, the Volta System turns on, charges as needed, and maintains an operational state. For example, in cold climates, while in Charge Only Mode, the Volta System turns on as necessary to maintain an operating temperature. Also, if a fuse blows or power is lost (disconnected from shore power), the Flex Pack System turns off to retain charge.

ALTERNATOR

The approach van is equipped with a secondary alternator that provides charging power directly from your van's engine to the Flex Pack when all of the following occur:

- The vehicle is running
- The vehicle is maintaining a high enough RPM (1500 minimum)
- The Volta System is turned on If the engine does not sustain a high enough RPM, the Battery Monitoring System (BMS) sends a signal to turn off the alternator until the BMS determines it is appropriate to turn on the alternator.

INVERTER

The inverter changes the Flex Pack's energy from direct current (DC) into alternating current (AC) to power the vehicle's 120V AC devices (outlets, cook top, etc.). The inverter also converts shore power (AC) to direct current (DC) for charging the Flex Pack.

The Inverter Screen on the touchscreen shows the status of the inverter and allows you to turn the inverter on/off. When the inverter is not needed (not using 120V devices), turn off the inverter to conserve Flex Pack SOC (Figure 2-3).

CONVERTER

The DC-DC converter drops the Flex Pack's energy from 58V DC to power your vehicle's 12V DC or 24V DC devices (vehicle electronics, lights, refrigerator, etc.)

SOLAR CONTROLLER

The solar controller regulates solar power input from external solar panels into a stable, usable form of energy to charge the Flex Pack.

MYVOLTA APP

Download the myVolta app to your mobile device, then follow instructions in the app to pair with your Bluetooth module.

You can view the following information from your Volta System in the myVolta app:

- Performance Data
- Estimated Runtime Remaining
- Charging Status
- Pack Temperature
- Warnings, Faults, or Errors

POWER SYSTEM TROUBLESHOOTING

Table 2-3. Troubleshooting

Problem	Probable Cause	Solution
Volta system will not charge	The State-of-Charge is too high	Allow the system to deplete to below 90–95
	The Flex Pack is too cold or too hot	Follow guidance for hot/cold operation
	The shore power connection does not meet the charging requirements	Connect to a 30A/120V power supply or charge using another method
	The charge rate is not appropriate	Raise or lower the charge rate based on Inverter Screen recommendation
	Surge protector not compatible with the Volta System	Remove the surge protector and test operation with shore power directly to van

OUTSIDE VAN
APPROACH

2

Problem	Probable Cause	Solution
Volta system will not charge (*continued*)	Shore power not available	Unplug the shore power cord from the campsite outlet, then verify the cord is fully connected at the power cord connection of the van. Check that any circuit breakers are open (power OFF) at the campsite outlet. Plug the power cord into the campsite outlet and shut the applicable breaker. If power is still not available, contact the site owner to troubleshoot power issues.
120V outlet not providing power	Inverter is off	Turn on the inverter using the touchscreen
	GFCI is tripped	Press reset on the GFCI outlet once devices have been unplugged. If GFCI continues to trip, there may be an issue with the device being plugged in
Heat or A/C not operating	System is not turned on or configured correctly	Refer to the Heat and Cooling section to setup heat or air conditioning
	Circuit breaker or fuse issue	Make sure the circuit breaker is closed. Check that the fuse is installed and intact
Individual electrical component not receiving power	Inverter is off (120V device)	Turn on the inverter using the touchscreen
	Circuit breaker or fuse issue	Make sure the circuit breaker is closed. Check that the fuse is installed and intact
Approach van engine will not start	Main battery is depleted	Follow instructions in the vehicle manufacturer's manual to attempt to jump start the van
	Other mechanical or electrical issue	Contact Roadside Assistance (MB Vans 1-800-367-6372) or other vehicle assistance membership (Good Sam, AAA Plus RV, etc.)

SECTION 3

HEAT & COOLING

IN THIS SECTION

OVERVIEW

The Approach van is outfitted with heating and cooling equipment to provide comfortable cabin temperatures, manage humidity levels, and provide freeze protection.

The Heat and Cooling section covers information about the following features:

- Touchscreen Controller
- Air Conditioner
- Exhaust/Circulation Fans
- Heater

CAUTION

With the cabin soft wall divider rolled down, temperature differences may cause condensation in the cab. Towels can be placed on the seats, dashboard and cab floor to collect any dripping condensation.

The following operating and charging strategies should be followed while in cold weather:

- Roll down the cabin soft wall divider to reduce the space requiring heating.
- If planning a trip during cold weather, connect the vehicle to shore power and ensure the inverter is turned on a day prior to leaving. Depending on ambient temperature, this should allow sufficient time for the heating pads to warm the energy storage pack.
- Leave the Volta System on while in cold temperatures. The heating pads only activate when the Volta System is on (unless connected to shore power).
- Connect to shore power whenever possible. When connected to shore power, the heating pads will draw power from shore power instead of the Flex Pack. When the Flex Pack warms enough to accept charge, the charge from shore power begins automatically.
- If shore power is not available, turn on the Volta System to warm the Flex Pack. When the Flex Pack warms enough to accept charge, turn on the vehicle and drive the vehicle to charge the Flex Pack via the alternator.
- If a charge source is not available, and the SOC is too low to activate the heating pads long enough to warm the Flex Pack, turn off the Volta system to limit power consumption. If possible, park the vehicle in a warmer location to raise the Flex Pack temperature, or contact Volta Power Systems for additional strategies to warm the Flex Pack.

Heating and cooling are the two largest loads in the vehicle; to maximize system runtime, do the following:

- Turn off the inverter if 120 VAC loads are not required: When 120 VAC devices (air conditioner, heater, cooktop, etc.) are not in use, turn off the inverter via the touchscreen.
- Increase the thermostat in warm climates: Increasing the desired vehicle temperature reduces the amount of time the air conditioner compressor needs to run in warm climates.
- Decrease the thermostat in cool climates: Decreasing the desired vehicle temperature reduces the amount of time the heating system needs to run in cold climates. Generally, heating using electricity uses almost twice the energy as cooling.

NOTE: The Rixen furnace uses approximately 0.06 to 0.23 gallons of fuel per hour while in operation.

To maintain a comfortable temperature inside the van during warm weather, follow these recommendations:

- Park the van in a shaded area.
- Keep all windows and doors closed.
- Avoid prolonged use of heat producing appliances.
- Lower/install all window coverings.
- Roll down the cabin soft wall divider to reduce the space requiring cooling.

TOUCHSCREEN CONTROLLER

The touchscreen display is located in the upper cabinetry and works with other installed van components to provide heated air to the cabin. The touchscreen controller icons are configured to match the configuration of the Approach van (Figure 3-1). If the power supply in the vehicle is interrupted (e.g., the battery is disconnected) the system's controller retains all the basic settings.

The heat source options are located on the left side of the screen (furnace or electric). One of these options must be selected to produce hot air for the RV.

Figure 3-1. Touchscreen Controller

Fan speed, interior temperature, humidity and set temperature are displayed down the center of the screen.

The controller works independently from any cellular or satellite signal by creating its own Wi-Fi hotspot which then communicates directly with a smart phone/laptop/ tablet etc. The device offers a range of 10-30 meters, depending on obstructions.

AIR CONDITIONER

The Approach van is equipped with a 48V roof-top air conditioner capable of cooling incoming air by approximately 17-24 degrees (Figure 3-2). Humidity levels, sun load on the outside unit, and several other factors can affect this temperature difference. Safety switches are installed in the unit to protect the compressor from premature failure; abnormal conditions may cause the compressor to not run. If normal maintenance tasks do not restore normal operation, it should be inspected by a qualified technician.

Figure 3-2. Air Conditioner

A digital controller is installed on the inside unit to allow for basic air conditioner controls.

A washable filter is installed on the inside unit that can be cleaned with water. The filter captures dirt, dust, grease and other particles from the air to prevent damage to the internal parts of the air conditioner. A dirty filter can lead to performance issues with the air conditioner such as lowered air flow and excessive cycling.

CAUTION

Do not operate your air conditioning unit for extended periods of time without the air filter installed. This will lead to dirt, dust, grease, lint, etc. clogging the cooling coil which will result in a much more costly repair.

The condenser coils on the roof-top portion of the unit can become partially clogged over time while driving down the road. It is necessary to periodically clean the coils (Figure 3-3).

Figure 3-3. Condenser Coils

CAUTION

Do not use high pressure water to clean the condenser coil. This can lead to damage of the aluminum fins on the coil which can lead to system failure. Use only normal water pressure from a typical garden hose.

To clean the air filter, perform the following:

- Remove the 4 thumb screws from the filter retaining ring.
- Lower the ring and filter from the ceiling assembly.
- Rinse out the filter with clean water.
- Remove excess water from the clean filter.
- Reinstall the filter and retaining ring using the four (4) thumb screws.

To clean the condenser coils, perform the following:

- Attach a water hose to a clean source of water with normal operating pressure.
- Rinse the coils until dirt and debris are removed.

EXHAUST/CIRCULATION FANS

There are two (2) fans installed in the cabin area for exhaust and circulation (Figure 3-4, Figure 3-5, Figure 3-6). The fans provide a means of circulating fresh are through the cabin and minimizing the need to run the air conditioner. They also provide a means to remove steam and moisture from the shower and galley areas. Removable filter screens are installed to prevent insects from entering the cabin and to protect the fan components.

Figure 3-4. Fan (interior view)

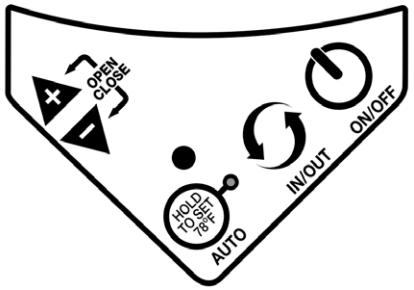


Figure 3-5. Fan (interior detail view)

Figure 3-6. Fan (exterior view)

CAUTION

Never operate the fan with the insect screen removed. When removing the screen for cleaning, turn the fan off. Use only mild detergent solutions to clean the filter screen.

CAUTION

The fan lids are designed to be fully open or fully closed when the vehicle is moving.

Keypad controls operate the functions of the fans. A beeping sound will confirm each keypad button press.

The keypad controls include the following:

- ON/OFF — Start or stop the fan. On automatic opening models, the lid will also open or close when the fan is turned on or off.
- IN/OUT — Reverse the direction of the fan. The fan will slow down and pause for 2 seconds before resuming operation in the opposite direction. In auto mode, the fan direction is automatically positioned to exhaust.
- AUTO — Allows the thermostat to turn the fan on and off based on the thermostat setting. Press this key once for less than 3 seconds to enter auto mode. Three quick beeps and the green LED light will confirm that the fan has entered auto mode. To exit auto mode, press the ON/OFF key. The initial factory setpoint for the thermostat is 78°F/25°C.
- HOLD TO SET — To set the thermostat, press this key for more than 3 seconds and one long beep will confirm that the thermostat is reset to 78°F. If desired, use the (+) or (-) arrow keys to adjust the temperature setting.
- VENT LID POSITION (OPEN/CLOSE) — In manual mode, press these buttons to open or close the lid.
- ARROW KEYS — Adjust the temperature setting once HOLD TO SET has been activated, or adjust the fan speed when in manual mode. Pressing both keys at the same time will open or close the lid for automatic lift models.

Remote control units are provided to operate the fans (Figure 3-7).

With the fan motor running, close the vent lid to enter Ceiling Fan Mode. The fan motor will continue to run and circulate air within the cabin.

A knob is provided to manually open or close the vent lid. On automatic opening models, do not push or pull on this knob. Rotate the knob clockwise to close the vent lid and counterclockwise to open the vent lid.

Figure 3-7. Fan Remote

To clean the insect screen, perform the following:

- Rotate the four (4) thumbscrews ½ turn.
- Remove the screen.
- Wash the screen with water and mild detergent.
- Remove excess water from the screen.
- Reinstall the screen using the thumbscrews.

HEATER

Heating options installed on the Approach van are the diesel furnace and the electric element (Figure 3-8). The furnace will normally be used as the source of heat, unless connected to shore power. The furnace is an Eberspaecher 5KW hydronic fuel operated heater and the electric element is a 1500W element that sits inside the expansion tank of the MCS7 system.

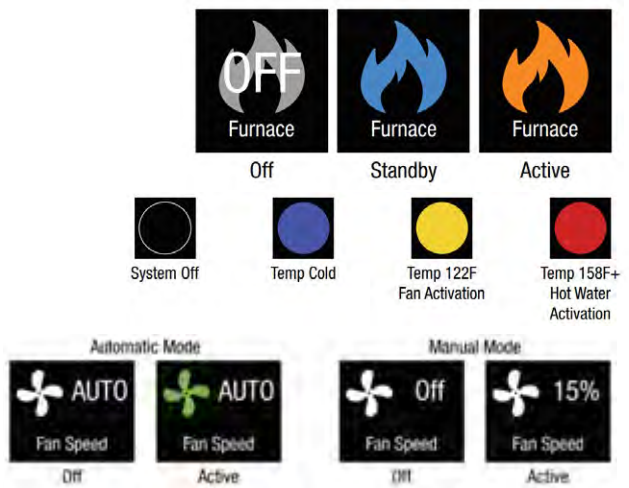
Figure 3-8. Heating Options

Heating controls are on the touch-screen in the upper cabinetry (Figure 3-9).

To heat the van's interior, you will set the thermostat to the desired setpoint temperature. Choose your heat source, select your fan speed (manual settings run in 5% increments) and the system will auto run the fan on high until the interior air temperature starts to reach the setpoint temperature. At this point the fan will automatically slow down and remain on low levels maintaining the set point temperature.

On the top middle of the screen is the interior fan speed. This can be controlled automatically by the MCS7 system or manually by the operator. To choose the manual or automatic fan speed tap the fan speed % number or the auto icon to toggle between the two. There is also an On/Off button for the fan.

The temperature in the middle of the screen is the reading from the external air sensor attached to the controller. This will display the current interior temperature of the RV. The humidity of the interior of the RV is also displayed under the current temperature. Touching the set temperature allows you to change the interior temperature with the negative and plus symbols. The thermostat can be set low enough for antifreeze protection.



Furnace lights

Temperature color lights

Fan Icons

Figure 3-9. Heating Controls

The system coolant temperature icon displays the current coolant temperature of the MCS7.

For additional information on the Rixen MCS7 heating system, use the QR code (Figure 3-10) to access Rixen documentation

Figure 3-10. Rixen's MCS7 Documents

SECTION 4

WATER & PLUMBING

IN THIS SECTION

OVERVIEW

The Approach van is equipped with a 20 gallon fresh water tank. The tank is located in the driver side bench water box area with other associated water system components. A sink is in the galley area with a pulldown hand sprayer. An indoor shower with a removable hose is in the shower water box area, where the porta-potty is stored. The sink and the indoor shower drain to the 22 gallon grey water tank. The shower hose can also be connected at the rear of the van for the outdoor shower. The water pump can be started from the switch control panel (Figure 4-1) on the upper cabinetry or at the outdoor shower station (Figure 4-2). HepvO sanitary waste valves are installed in the drain lines for the galley sink and the indoor shower. These valves protect the cabin from foul odors from the grey water tank and eliminate the need for individual vents.

The Water & Plumbing section covers information about the following features:

- Tanks
- Shower Drain Pump
- Hot Water
- Storage and Winterization

Figure 4-1. Upper Cabinet Switch Control Panel

Figure 4-2. Oudoor Shower Station Switch

CAUTION

Pressurizing the fresh water system with the water pump or city water connection will cause water to flow through any open faucet or water valve. Monitor tank levels and water flow while pressurizing the water system to prevent water damage to the van components. Always use a water pressure regulator to protect the water system from overpressure when using city water.

CAUTION

The grey water tank is sized to hold the full capacity of the fresh water tank. Always closely monitor the level of the grey water tank when water is being used inside the van.

TANKS

The tank level monitor in the upper cabinetry (Figure 4-3) performs automatic scans of the fresh water and grey water tank levels in the background while the screen is off. If either tank level is out of bounds (respectively empty or full) an alarm will sound and the backlight will come on. The backlight will also come on if you manual scan the levels of the tanks using the arrow keys. A full scan can be performed by pressing both arrow keys at the same time.

Figure 4-3. Tank Level Monitor

To temporarily silence a tank level alarm, press the OK button to acknowledge the alarm. An alarm can be fully disabled for one or both tanks. All alarms can be disabled by pressing the MENU and OK buttons at the same time, then pressing the down arrow once the AUDIBLE ALARMS screen appears. To enable all alarms, press the MENU and OK buttons at the same time and press the up arrow once the AUDIBLE ALARMS screen appears.

To fill the fresh water tank, perform the following:

- Unlock and open the tank fill port on the exterior of the van (Figure 4-4).
- Fill the fresh water tank with a source of clean filtered water or from a clean water tank.

To drain the grey water tank, perform the following:

- Make sure that the tank drain valve under the driver side of the van is closed.
- Remove the cap on the drain outlet and attach a sewer hose to the drain outlet (Figure 4-4).
- Place the other side of the sewer hose in an authorized drain collection point.
- Open the grey water tank drain valve by pulling the T-handle.

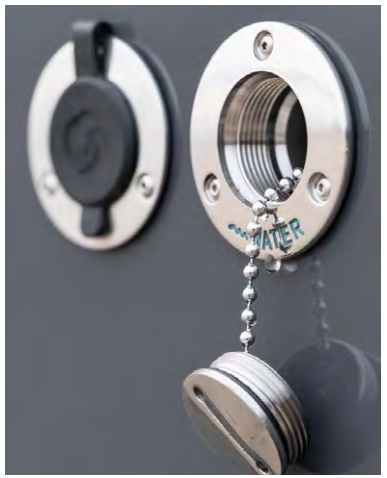


Figure 4-4. Exterior Water Connections

Figure 4-5. Grey Water Tank Drain

- Once the tank is drained, it is recommended to flush the tank and drain hose with clean water. If a source of clean water is not available, flush the grey water tank and drain hose as soon as possible.
- Close the grey water tank drain valve.
- Remove and store the sewer hose, making sure it is completely drained before removing from the drain collection point.
- Reinstall the cap on the drain outlet.

SHOWER DRAIN PUMP

The shower water box is drained by an installed drain pump. When water rises and reaches 40-55 mm (2 inches; level of the second detector cell), the switch starts the pump. When the water level has dropped to 20-30 mm, the first detector cell is above the water level and the pump will stop. The shower sump pump system also has a back flow prevention valve installed. The motor and float switch assembly can be pulled out of the container for removal of hair or debris. If necessary, remove the filter and wash it. The pump can be operated by rocker switches on the passenger side wall (Figure 4-6).

Figure 4-6. Shower Drain Switches

HOT WATER

To generate continuous hot water for the shower and sink, you will need to select the furnace icon on the top left of the screen (Figure 4-7). This is because the furnace can create 17,500 BTU of heat while the electric element is capable of 5,000 BTU of heat. The element alone is not enough to create continuous hot water (Figure 4-8).

For most applications, the user will select the furnace option as 17,500 BTU is more than enough to keep up with the call for continuous hot water. If you're plugged into shore power and you want the best performance, you can select both furnace and electric icons for 22,500 BTU. The aqua stat in the expansion tank will prioritize the element so that it will minimize

Figure 4-7. Furnace Icon

Figure 4-8. Hot Water Icon

the usage of fuel from the furnace. If there is a greater heating demand on the system, the furnace will automatically engage picking up where the element left off. When you select the hot water icon, located on the bottom right of the screen, the system will prioritize creating hot water. If in warmer weather and you do not want to generate interior heat, make sure that the air temperature is set to off. This will prevent that fan from turning on and heating up the interior of the van.

SHOWER (INDOOR)

To use the indoor shower, perform the following:

- Set up the shower water box area (Figure 4-9):
  - Remove the top cushion.
  - Open the shower water box enclosure and remove all items.
  - Unlatch and fold down the sides of the water box.
- Attach the shower hose holder to the L-track on the upper passenger wall. (See upper circled area on Figure 4-9.)
- Attach the shower liner to the two attach points on the L-track and the two attach points on the ceiling (Figure 4-10).

  NOTE: Make sure that the shower hose is on the inside of the shower liner.

Figure 4-9. Shower Water Box (with Shower Hose Attached)

- Turn on the exhaust fan directly above the shower liner to remove heat and moisture. (See circled area on Figure 4-10.).
- Attach the shower hose to the hose connection in the water box. (See lower circled area on Figure 4-9.)
- Pressurize the water system from city water or by turning on the water pump (if not already pressurized).
- Operate the water valve handle to turn on hot or cold water.
- Operate the drain pump as required to drain waste water to the grey tank.

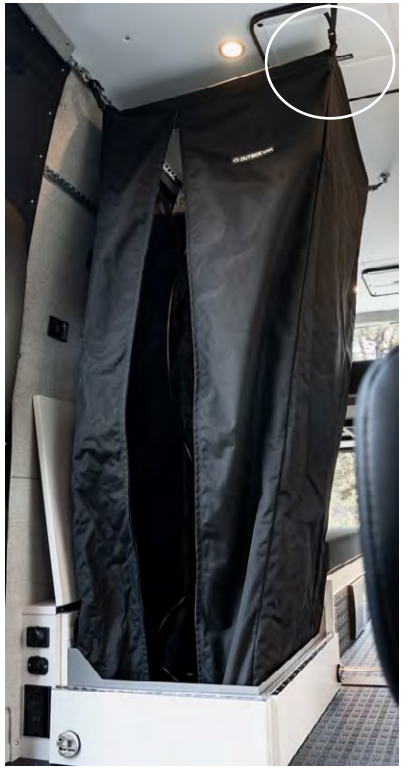


Figure 4-10. Shower Liner

After shower use is complete, perform the following:

- Turn off the water and allow the exhaust fan to remove all heat and moisture from the shower area.
- Store the shower liner, shower hose, and water box items as necessary.

  NOTE: The shower liner should be dry prior to storing.
- Turn off the exhaust fan or water pump as desired.

SHOWER (OUTDOOR)

To use the outdoor shower:

- Attach the shower hose holder to the connection on the rear left door.
- Attach the shower hose to the water connection at the rear of the van (Figure 4-11).
- Attach the magnetic shower curtain as desired for privacy.
- Pressurize the water system from city water or by turning on the water pump (if not already pressurized).
- Operate the water valve handle to turn on hot or cold water.

After shower use is complete, perform the following:

- Turn off the water
- Store the magnetic shower liner, shower hose, and shower hose holder as necessary.

  NOTE: The shower liner should be dry prior to storing.
- Turn off the water pump as desired.

Figure 4-11. Outdoor Shower Connection

STORAGE AND WINTERIZATION

It is advisable to drain the RV prior to storage to maintain a clean fresh water system while also offering frost protection in the winter.

For extended periods between use, sterilizer can be added as a backup. Draw some sterilized water through the faucets and outlets and leave to activate for a couple of hours. Afterward, drain down the water system again and leave empty and sterile for the next trip.

A Floë device is installed in the main water box behind the fresh water tank. The Floë pressurizes the water system piping to force out remaining water after draining the system. (See Figure 4-12 and Figure 4-13 for system components.)

To fully drain and winterize (if required) your water system, perform the following:

- Make sure that the system is set to draw water from the onboard water tank and not the city water inlet.
- Manually drain the water tank and heater, then shut the drain valves.
- Set valves to bypass the water heater.
- Close the sink faucet to seal the water system.
- Disconnect the shower sprayer hose from shower connection(s).
- Open the blue shutoff valve under the Floë and switch on the Floë unit to push compressed air into the system.
  - Once 15 psi is reached, the motor will stop (this takes about 30 to 60 seconds).
  - If it takes longer than 90 seconds for the motor to stop, switch off the Floë and refer to the manufacturer's manual to troubleshoot the issue.
- Open the sink faucet with the handle positioned for cold water flow.
  - The compressed air will push out water until only a spray mist of water and air remains.
  - Floë will automatically restart to help push out any remaining water.
  - Once all water is forced out, close the faucet.
- Open the sink faucet with the handle positioned for hot water flow.
  - Allow the Floë to force out all remaining water then close the faucet.
- Connect the shower spray hose to the indoor shower connection.
  - Drain the cold and hot water lines to the indoor shower with the same procedure.

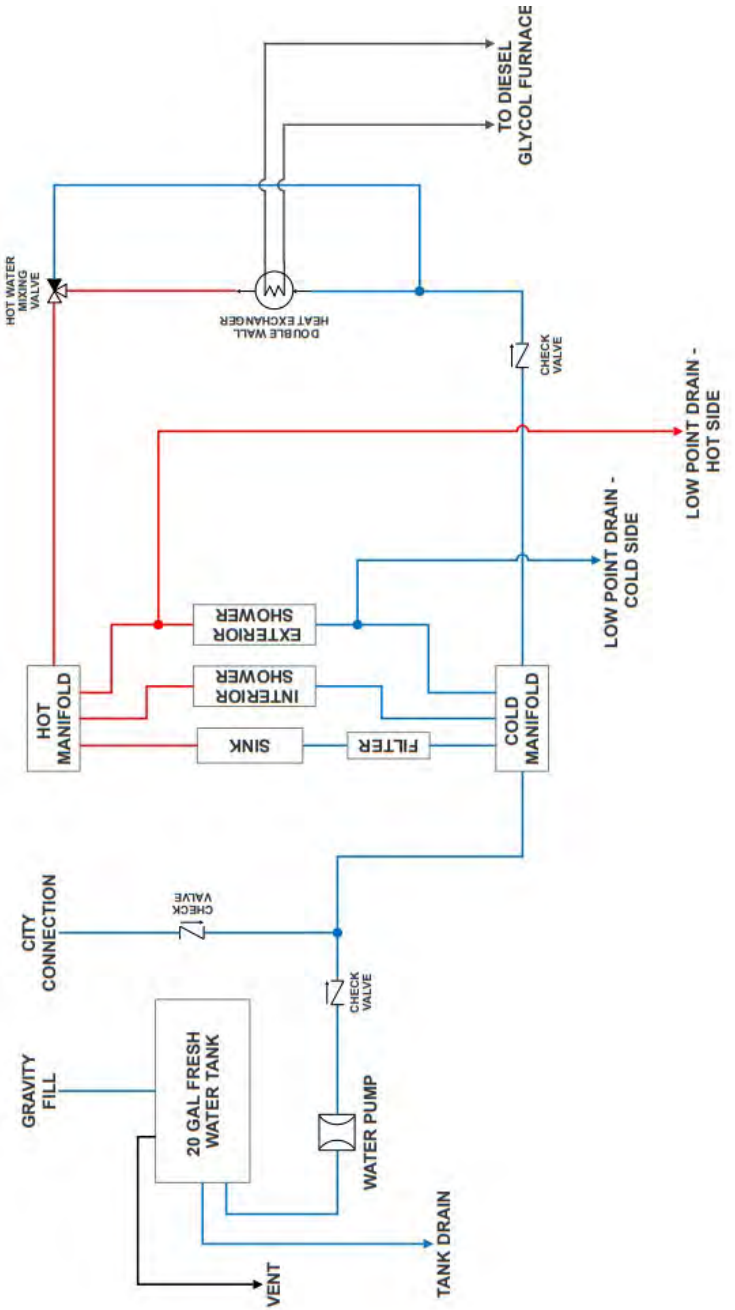


Figure 4-12. Fresh Water System

- Connect the shower spray hose to the outdoor shower connection.
  - Drain the cold and hot water lines to the indoor shower with the same procedure
- Residual water can be drained from the water heater by building up pressure and reopening the valves that bypass the water heater then opening the outside drain valve.
  - After all residual water is drained, set the valves to bypass the heater again.
- Once the main system is drained, build up pressure again and pull out the city water filter plug (outside) to drain any residual water,

  NOTE: Stand clear to avoid potential water spray.

- Switch off the Floë and close the blue shutoff valve.
  - Leave all faucets and outlets in the open position since fresh air is a good sterilizer.
  - All water handles should be positioned for warm water flow to allow both cold and hot portions of the system to be open.
- Remove the water filter and empty any residual water.
- In the winter, pour half a cup of antifreeze into the sink and shower drain holes.

  NOTE: Wipe off any spilled antifreeze to avoid staining.

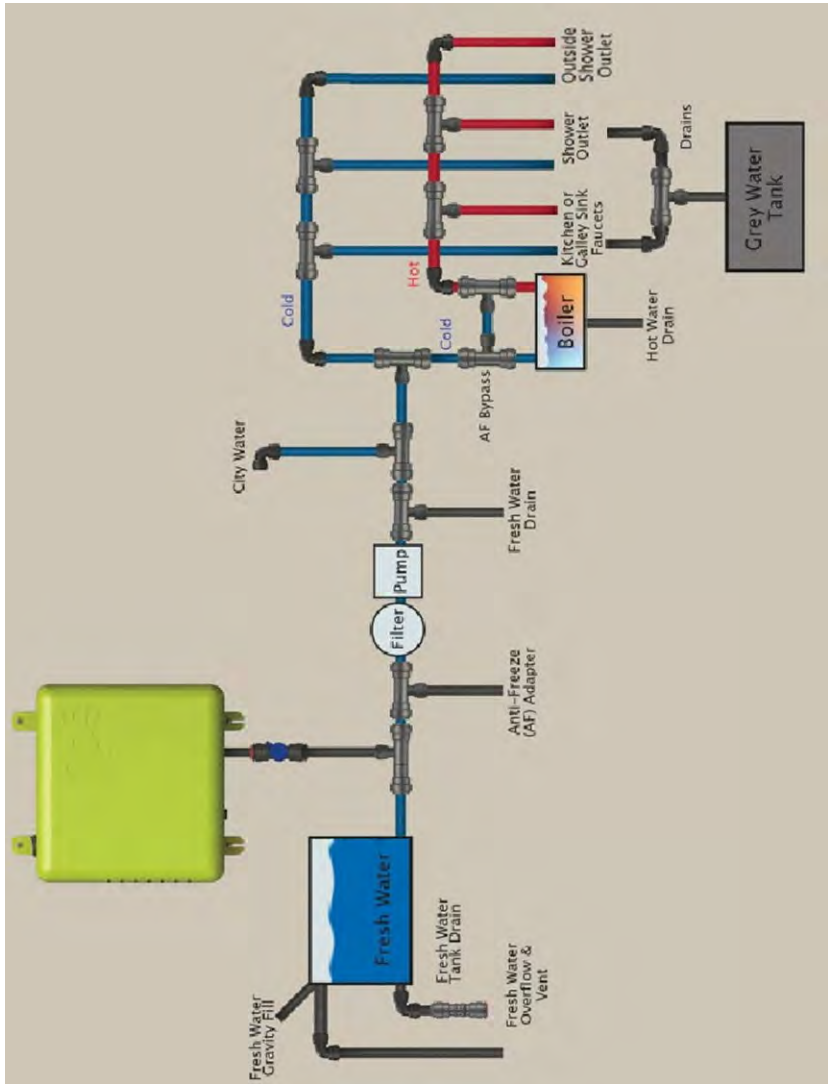


Figure 4-13. Floë

SECTION 5

INTERIOR

IN THIS SECTION

OVERVIEW

The Approach van seats and sleeps four people.

The van is equipped with two rows of seats. The first row seats can be swiveled 180 degrees to face the cabin for dining and comfort, or swiveled 50 degrees towards front doors. The second row seats are custom captain chairs with recline, swivel and quick-release functionality. Two queen beds can be deployed or stowed to allow for sleeping or dining in the cabin area. Interior lights are located throughout the cabin for general lighting, reading, loading light, and accent lighting. Appliances are provided for storage and preparation of food and drinks. A portable toilet (porta-potty) is stored in the water closet.

The Interior section covers information about the following features:

- Seats and Beds
- Interior Lighting
- Appliances
- Porta-potty

SEATS AND BEDS

SEATS

WARNING

Risk of injury or fatal injuries if the driver's seat and front passenger seat are not engaged. Engage the driver's seat and front passenger seat in the direction of travel before driving the vehicle.

WARNING

Risk of accident due to adjusting the vehicle settings while the vehicle is in motion. Always wait until the van is parked before making adjustments to the vehicle's seats.

The front row seats can be rotated by 50 and 180 degrees as follows (Figure 5-1):

- Prior to rotating a front row seat, follow these precautions:
  - Ensure the parking brake is applied and the brake lever is down as far as it will go.
  - Open the respective front door to avoid collision with the door trim.
  - Adjust the steering wheel to allow for sufficient clearance to rotate or adjust the driver's seat.
  - Slide the front passenger seat forward before rotating it.
- Push the lever at the front of the seat base towards the door and rotate the seat slightly inwards. This will unlock the turning device.
- Release the lever.
- Rotate the seat to the desired position (50 degree rotation towards the exit or 180 degrees to face the cabin).

Refer to the vehicle manufacturer's manual for more details.

OUTSIDE VAN
APPROACH

WARNING

Risk of injury or fatal injuries if the passenger seats are not in their fully upright positions with restraints properly in use while the vehicle is in motion. Make sure that all installed passenger seat bases are fully engaged prior to driving.

CAUTION

Make sure that the sliding door is open as necessary and seats are adjusted to allow proper clearances prior to adjusting the second row passenger seats.

The second row seats can be reclined, swiveled or removed by performing the following (Figure 5-2):

- To recline the seat, pull up on the lever on the side of the seat and recline as desired (1).
- To swivel the seat, press down on the seat base lever closest to the front of the seat and swivel the seat to the desired position (2).
- To remove a second row seat, press down on the center-mst seat base lever (3), pull the back lever (4), and lift the seat out of its track.

Figure 5-1. Front Dinette

Figure 5-2. Seat Levers

5

BEDS

WARNING

To avoid injury or damage to equipment always properly secure all interior components prior to operating the vehicle.

The two queen beds can be configured to sleep four people when desired. They can also be folded and stowed to allow for bench seating and/or dining. The base of the upper bed can be secured to the track using a nut driver tool (Figure 5-3, Figure 5-4, and Figure 5-5).

Figure 5-3. Queen Beds Assembled

Figure 5-4. Benches

Figure 5-5. Top Bed Folded

INTERIOR LIGHTING

The interior lights consist of the following (Figure 5-6, Figure 5-7, Figure 5-8, Figure 5-9, and Figure 5-10):

- Ceiling lights – dimmable lights located in the ceiling throughout the cabin. Controlled by a rocker switch in the upper cabinetry (dimmable by holding the switch), a push button near the sliding door, and a push button on the rear wall.
- Galley lights – controlled by a push button above the sink.
- Gear lights – controlled by a rocker switch in the upper cabinetry, a push button near the sliding door, and a push button near the rear door on the passenger side.
- Exterior scene lights – controlled by a push button near the sliding door and a push button on the rear wall.
- Reading light – controlled by a push button above the driver side second row seat.
- Slider loading light – controlled by a push button near the sliding door and a push button on the rear wall.

Figure 5-6. Switch Control Panel

Figure 5-7. Cabin and Loading Lights Push Buttons

Figure 5-8. Reading and Galley Lights

Figure 5-9. Ceiling Lights Push Button

Figure 5-10. Cabin and Loading Lights Push Buttons

APPLIANCES

The Approach van is equipped with appliances for the preparation and storage of drinks and food items. The manufacturer does not claim liability for proper temperature storage requirements of medical supplies.

The standard appliances that come equipped with the Approach van are as follows:

- Refrigerator (Figure 5-11)
- Microwave (Figure 5-12)
- Portable induction cooktop (Figure 5-13)
- Faucet (Figure 5-14)

REFRIGERATOR

WARNING

This unit contains fluorinated greenhouse gas R134a within a hermetically sealed system whose operation depends on the presence of said gas. Contact a qualified certified technician for handling fluorinated gases in the event of damage to the refrigerant circuit.

WARNING

The only purpose and function of the product when used as a freezer is to maintain already frozen food completely frozen. The refrigerator will not freeze non-frozen or partially frozen food products. If a non-frozen or partially frozen food product is stored in the freezer, this is considered improper use and can cause possible unintended thawing of food which may lead to problems related to safety, illness or injury if consumed. The preservation of non-frozen or partially frozen food in the freezer can also affect the quality of other frozen food products stored in the freezer. Exposure to temperatures above the temperature of the climatic class range for which the freezer was built, power supply interruptions and/or frequent opening of the freezer can influence the effectiveness of the refrigerator and the quality of the contents of the freezer. The user should always check food quality before ingesting.

The refrigerator's temperature is continuously regulated by the thermostat, which also includes a power-off function if turned counterclockwise to the end position.

The refrigerator is equipped with a closed cooling system, which does not require maintenance or refrigerant refills.

CAUTION

All work on electrical parts or connections and the refrigerant circuit must be carried out by qualified and authorized technicians.

CAUTION

The freezer door hinge can be damaged if the freezer door is not properly and fully closed. Ensure that no items in the freezer prevent a full seal of the freezer door before shutting the main door.

The refrigerator door is marine quality and requires shutting until the latch fully clicks into to place. The latch attach point can slide to the right, placing the door in ventilation mode; in this mode the door will remain slightly open when the latch is fully engaged. This allows for ventilating the refrigerator for defrost or storage while keeping the door securely in place. Slide the latch attach point back to the left to resume normal shutting operation.

The freezer door has a "stay in place" design that allows it to remain fully open while adding or removing items. The freezer compartment features a magnetic seal to minimize frost issues. Always ensure that there are no items preventing the freezer door from fully shutting and making a tight seal, including the ice tray.

For proper operation of the refrigerator/freezer, follow these precautions:

- If possible, the refrigerator should be turned on for about 6 hours prior to inserting food items.
- Frequent opening of the refrigerator door will result in greater power consumption.
- Keep the inside of the refrigerator clean and dry. This can be done using a soft brush and a vacuum cleaner. It can also be cleaned by washing it with warm water and mild soap and by drying any water/condensation that may be encountered. Remove the condensation water from the drip tray beneath the refrigerator's freezer compartment where present.
- To keep the surface of the door in good condition and intact, make sure that it is always clean and dry.
- The unit has been designed with product lock protection in the event of low battery voltage. In the event of a compressor block, follow the instructions in the manufacturer's manual and/or contact a qualified certified technician.
- The compressor can operate up to an angle of 30°, while greater angles can cause permanent damage to the compressor.

The evaporator operates at temperatures well below freezing, and ice and frost will inevitably form on it. Temperature, humidity and frequency of door opening will significantly impact frost formation. The refrigerator should always be defrosted when the layer of frost on the evaporator reaches a thickness of 3-4 mm or more.

To defrost the refrigerator, perform the following:

- Turn off the refrigerator by turning the thermostat to its 0 position.
- Defrosting should be performed when the products can remain as cool as possible outside of the refrigerator itself. Do not use sharp objects to remove ice and frost from the evaporator, as this could damage it and result in leaks.
- Only turn the refrigerator back on once it has been defrosted, cleaned and thoroughly dried. Remove, empty and dry the drip tray beneath the evaporator. A towel can be placed at the base of the refrigerator during the defrosting procedure in order to facilitate water collection.

To replace the LED light bulb, slide the lighting unit's glass down using the appropriate lever. Replace the light bulb with an original manufacturer's replacement part and return the lighting unit to its original state.

Refer to the Indel Webasto Marine YouTube channel for more information and tutorials.

Figure 5-11. Refrigerator

MICROWAVE

A microwave is installed in the upper cabinetry for heating foods and beverages in microwave-safe containers.

To ensure safe operation and to reduce the risk of fire in the microwave, follow these precautions:

- Do not overcook food. Carefully attend appliance when paper, plastic or other combustible materials are placed inside the oven while cooking.
- Remove wire twist-ties and metal handles from paper or plastic containers before placing them in the oven.
- If materials inside the oven ignite, keep the oven door closed, turn the oven off and disconnect the power cord, or shut off power at the fuse or circuit breaker panel.
- Do not store any materials in the oven when not in use. Do not leave paper products, cooking utensils, or food in the cavity when not in use. All racks should be removed from oven when not in use.
- Do not operate without food in the oven.

Figure 5-12. Microwave

OUTSIDE VAN
APPROACH

PORTABLE INDUCTION COOKTOP

WARNING

To protect against electric shock, do not immerse cord plugs or cooker in water (or other liquid substances).

WARNING

When using any electric appliance used around children, close supervision is strongly suggested. To prevent accidents and achieve optimal fan ventilation, allow for sufficient space around the cooking area. Make sure that cooktop is placed on a level and stable surface.

The induction cooktop is an 1800W glass ceramic heat source for heating food or liquids in approved cookware. For proper heating, the cooktop requires the use of ferrous (magnetic) pots and pans. Check your cookware packaging for the induction symbol or test the surface of the cookware using a magnet. Optimal cookware is round, flat-bottomed, with a diameter of 4.5 to 10 inches.

CAUTION

Heat-resistant glass, ceramic, copper, aluminum pans/ pots, round bottomed cookware, or cookware with a base less than 4.5 inches are not compatible with the cooktop.

To use the cooktop, perform the following:

- Remove the cooktop from its storage location in the upper cabinetry and plug the power plug into a standard outlet.
- The Power button will light up and the unit will sound to indicate on.
- The device will remain in standby mode, awaiting user direction.
- Place ferromagnetic cookware (with water, oil or food already inside) on the center of the glass-ceramic top center.
- Now press the Power button on the control panel, this will turn the cooktop on. The power display will blink and sound another indicator.
- Press the Heat function key once. The pre-set power level "5" is the default selection as the device turns on.
- Using the +/ - keys you can change the settings at any time, ranging from 1-10. This is considered to be the HEAT function.
- Adjust the temperature setting as desired:

- Using the +/ - keys you can change the temperature settings at any time. Settings range from 150-450 degrees Fahrenheit. (Exact temperatures: 150, 180, 210, 240, 270, 300, 330, 360, 390, 420 and 450° F).
- After selecting the HEAT or TEMP mode, press the TIMER button once. The display will show the number “0.” Using the +/ - keys you can select the operating time in 1-minute intervals (up to a max of 150 min).
- The display will count down the duration in minutes. Once the time is up, the unit sounds and automatically goes into standby mode. To continue cooking, press the Power button and Heat button to restart.
- During the timer operation, you can change the timer duration at any time with the arrow keys. The device’s built-in memory maintains the HEAT or TEMP setting previously entered.
- You can also change the HEAT or TEMP settings without affecting the current timer setting.

- When you are finished cooking, simply press the Power button to turn off the machine.
- Upon completion of cooking, the fan may remain on until the unit is cool.
- Once the unit has completely cooled, it may be cleaned and/or stored in its storage location.

For proper cleaning and safety, follow these precautions:

- Always allow the unit to completely cool prior to cleaning, moving or touching the cooking surface.
- Before cleaning always switch OFF the device and wait for it to be completely cool. Clean the unit after each use to remove food residues.
- Wipe off the glass-ceramic plate and the plastic surface with a slightly damp cloth (microfiber works best). Dishwashing soap may be used when necessary.
- Make sure that no water seeps into the device. Never use abrasive cleaners (i.e. metal pads) or oil-based liquids. Never run the cooktop under water.
- A vacuum cleaner attachment may be used to suck up dirt from the air intake and exhaust vent.

The cooktop has a built-in safety shut off that will turn the unit off after 150 minutes of continuous use. This occurs for both the HEAT and TEMP settings. The panel will display “H” if the cooking zone is hot. If further use of the cooktop is required, the unit can be turned back on and set to the desired settings again.

Figure 5-13. Induction Cooktop

FAUCET

The galley sink is equipped with a one-handed pulldown faucet with spray wand. The mode of the water flow from the faucet can be selected between stream or spray mode by pressing the corresponding portion of the lower button on the back of the sprayer wand. Power boost can be turned on for either selected water flow mode by pressing the small upper button on the back of the sprayer wand (if installed). The power boost function is turned off when the faucet water flow is turned off.

CAUTION

Remove the sink covers prior to turning on the faucet to avoid water spills and damage to any mechanical or electrical components in the van.

To pressurize the water system, connect to city water or turn on the water pump using the WATER PUMP rocker switch. A rocker switch is located on the switch panel in the upper cabinetry. It may take a few moments for water to begin to flow for the first use following pressurizing the water system.

CAUTION

Always monitor the fresh water and grey water tank levels on the tank monitoring panel in the upper cabinetry. Verify that cleaners, soaps, fresheners, etc. are safe for use in the installed grey water tank.

Water from the sink drains to the installed grey water waste tank. It is recommended to minimize the amount of food waste allowed to drain through the sink drain. Refer to the Water and Plumbing section for more information.

For reduced flow from the faucet with the water system pressurized, perform the following to clean the filter screen installed in the water line:

- Unscrew the spray wand assembly from the pulldown hose.
- Remove the O-ring and screen.
- Clean the screen by rinsing for a few seconds to remove any possible debris, then turn off the water.
- Reinstall the O-ring and screen into the spray wand.
- Reattach the spray wand to the pulldown hose and tighten.

Figure 5-14. Faucet

PORTA-POTTY

SETTING UP THE PORTABLE TOILET

To setup the porta-potty for use, perform the following (Figure 5-15):

- Make sure the pressure in the holding tank is equalized: to do this, open the slide valve with the seat cover closed by pulling the flush grip out and then pushing it closed it again.
- Remove the cap of the flush water tank and fill it up until the water level has reached approx. 25 mm (1 inch) below the top. Screw the cap on again on the flush water tank.
- Pull the flush grip to open the slide valve.
- Put an appropriate sanitary additive directly into the holding tank.
- Close the slide valve.

CAUTION

Never put sanitary additive into the porta-potty when the slide valve is closed.

- Press the pump approximately 15 times or until air comes out the cap of the flush water tank through the pressure relief valve.

CAUTION

Do not subject the flush water tank to too much pressure (e.g. by covering up the pressure relief valve). Do not pressurize the flush water tank if it is separated from the holding tank.

FLUSHING THE PORTABLE TOILET

CAUTION

Changes in the ambient temperature or the actual height above sea level while travelling can cause the pressure in the holding tank to rise or fall. Before use, make sure that the pressure in the holding tank is equalized by opening and closing the slide valve with the seat cover closed.

To flush the portable toilet, perform the following:

- Pull out the flush grip to allow the waste to pass into the holding tank.
- Press the flush button to flush the portable toilet.
- Push the flush grip to close the slide valve.

EMPTYING THE HOLDING TANK

When the filling level display shows “Full”, the holding tank needs to be emptied.

To empty the holding tank, perform the following:

- Pull the locking grip on the holding tank if the toilet is fitted with the optional fastening holders. To reach the rear bracket, lift up the toilet and move it.
- Pull up the rear latch to disconnect the flush water tank from the holding tank.
- Take the holding tank to a reliable disposal station (or a normal toilet).

WARNING

To protect the environment, never empty the holding tank directly into the environment, only into an approved disposal station or a toilet.

- Turn the waste pipe away from the tank and open the pressure relief valve on top of the tank.
- Empty the tank.
- If there is a water connection, flush out the holding tank.

STORING THE PORTABLE TOILET

To store the portable toilet, perform the following:

- Empty the holding tank and flush the water tank completely if you are not planning to use the portable toilet for a long time.
- Store the portable toilet in a dry, clean state. Refer to Figure 5-15.

CAUTION

Do not use sharp or hard objects or petroleum-based cleaning agents for cleaning as these may damage the product.

- Clean the product with a wet cloth and mild detergent regularly.

Figure 5-15. Porta potty stowed

SECTION 6

EXTERIOR

IN THIS SECTION

OVERVIEW

The Approach van is customized with many additional exterior features for safety and convenience. A sPOD controller is installed on the mid console of the vehicle to control exterior lighting and the installed air compressor. A manual awning is provided for sun protection while the vehicle is parked. An adjustable roof rack is provided for exterior gear storage. Automatic power steps provide easy passenger loading.

To clean the exterior of the van, mild soap and water that is environmentally safe is recommended. It is NOT recommended to use commercial car washes, as this may damage the vehicle and exterior surfaces.

The Exterior section covers information on the following:

- HD sPOD (Controls)
- Exterior Lighting
- Awning
- Roof Rack
- Air Compressor
- Power Step

HD SPOD

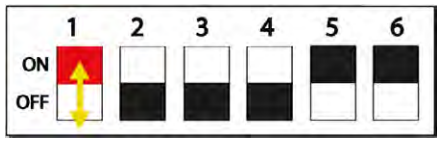
A HD sPOD is installed in the mid console of the vehicle's dashboard controls. The sPOD is customized to provide pushbutton controls for the additional exterior electrical components provided with the van. A Bantam sPOD controller is installed beneath the front passenger seat to provide inputs and controls via dip switches, and allow for Bluetooth device pairing (Figure 6-1).

Bantam sPOD (controller) - Start by going to Google Play for Android devices or iTunes for Apple devices and search "sPOD Bantam". Download the sPOD Bantam app onto your smartphone or tablet. Be sure that your device's Bluetooth is turned on. Once the app is activated, your HD will automatically be recognized. Pairing the panel to a Bluetooth device makes sure the panel only works with the device(s) that are paired and no other unwanted device can link to the panel (Figure 6-2).

Figure 6-1. sPOD App Icon and sPOD Bantam App Icon

To pair a Bluetooth device, perform the following:

- With the app closed and off, flip DIP switch 1 ON then OFF in quick succession to put the Bantam in PAIRING MODE for 60 seconds.



Dip Switches

- Open the Bantam app and touch SETUP.

- Touch the SCAN button and wait 10 seconds.

- Hit CANCEL and wait about 10 seconds for the PIN to appear in the upper left (in white). Touch the SETUP button.
- Touch the SCAN button and wait 10 seconds.
- When the pairing request dialog box appears, enter the PIN and then touch the PAIR button.

The HD will go into "Deep Sleep" after 6 hours of inactivity (i.e. no usage of the HD or not running the engine). Once in deep sleep, the HD will turn off any accessories that were left on. If you are running the HD with a Bantam, this feature can be disabled by turning on DIP switch #1.

To reset pairing with all devices, turn DIP switch #1 ON and OFF 5 times quickly.

Figure 6-2. HD sPOD

sPOD Website

EXTERIOR LIGHTING

Custom exterior lights are provided in addition to the factory lights on the Approach van (Figure 6-3). These lights are controlled by the sPOD HD switch panel mounted on the middle console.

The custom lights installed on the exterior of the van are as follows:

- 50” light bar
- Amber lights
- Fog lights
- Rear lights

Functionality and controls of this lighting can be further customized by changing the DIP switch settings on the sPOD Bantam.

Figure 6-3. Exterior Lights – Front and Rear

AWNING

A manually operated awning is installed on the passenger side of the van. The awning is designed for sun protection.

CAUTION

It is not recommended to leave the awning deployed during inclement weather. If the awning must remain extended while raining/snowing, it is advised to lower one side of the awning to allow precipitation to flow.

CAUTION

The passenger sliding door must remain shut to allow clearance for the first few inches of travel while deploying the awning and the last few inches of travel while retracting the awning.

To deploy the awning (Figure 6-4), perform the following:

- Make sure the passenger sliding door is shut.
- Place the crank rod on the crank mechanism at the rear of the awning (Figure 6-5).
- Turn the crank rod counterclockwise to begin deploying the awning
  - NOTE: To avoid unnecessary strain on the awning and roof, take out the legs when the awning is deployed about 3 ft (1 m).
- Unhook and lower the legs.
- Completely deploy the awning, making sure that unnecessary tension is not placed on the legs. Adjust leg height and position as required.
- Adjust the legs to the desired height.
- Secure the legs to the ground using stakes or attach the legs to the side mounts on the outer wall of the van (Figure 6-6).
- Stow the crank rod in an appropriate location.

To retract the awning (Figure 6-7), perform the following:

- Make sure the passenger sliding door is shut prior to fully retracting the awning.
- Remove stakes securing the legs to the ground or remove the legs from the van side mounts.
- Position the legs on the ground to avoid unnecessary tension, adjusting height and position as necessary.
- Place the crank rod on the crank mechanism at the rear of the awning.
- Turn the crank rod clockwise to begin retracting the awning.
- Once the awning is about 3ft (1 m) from being fully retracted, fold the legs up and into place in the awning.
- Completely retract the awning.
- Stow the crank rod in an appropriate location.

Figure 6-4. Awning Deployed

Figure 6-5. Awning Crank Rod Attachment

Figure 6-6. Awning Leg Side Mount

Figure 6-7. Awning Retracted

ROOF RACK

The Approach van is outfitted with a safari roof rack (Figure 6-8) with customizable storage components. Rack bars (Figure 6-9) can be adjusted along the track to accommodate gear of different sizes. A gear tray (Figure 6-10) can be used to secure items and can be bolted into place in multiple positions along the roof rack. The roof can be accessed by the installed ladder with reversible step grips for versatility and safety.

CAUTION

Make sure all storage equipment and gear stowed on the rooftop is properly secured and does not interfere with desired or required operation of the exhaust fans or solar panel.

To reposition or remove the rack bars, perform the following:

- Remove all gear attached to the rack bars.
- Loosen the bolts attaching the bar(s) desired to be moved.
  - NOTE: A socket driver or ratchet wrench is recommended for safe and effective operation.
- Reposition the bar in the desired location and tighten the bolts to secure them in place at the desired track point.

To reposition or remove the gear tray, perform the following:

- Remove all gear from the tray.
- Loosen the fasteners under the carriage bolt attach points using a wrench.
  - NOTE: Slight pressure may need to be applied to the top of the carriage bolts to hold them in place while loosening the fastener.
- Reposition the gear tray in the desired location and insert the carriage bolts.
  - NOTE: Make sure that all carriage bolts are positioned to secure the tray to a track attach point.
- Tighten the fasteners to secure the tray in place.

Figure 6-8. Safari Rack

Figure 6-9. Rack Bars

Figure 6-10. Gear Tray

AIR COMPRESSOR

A 12V air compressor is installed under the hood of the Approach van. The compressor is controlled by the push button switch on the HD sPOD controller mounted on the middle console. Air hose connection ports are provided around the exterior of the van to allow for airing up/down tires and general cleaning. One hose connection is located at the rear of the van, one at the step of the open sliding door, and one under the hood. Refer to Figures 6-11, 6-12, and 6-13.

Figure 6-11. Rear Air Hose Connection

Figure 6-12. Sliding Door Air Hose Connection

Figure 6-13. Under Hood Air Hose Connection

POWER STEP

AMP Research PowerStep running boards automatically move when the doors are opened to assist entering and exiting the vehicle.

WARNING

Keep hands clear when the running boards are in motion to prevent injury.

The PowerStep running boards provide the following functions:

- Automatic power deploy: The running boards will extend down and out when the doors are opened.
- Automatic power stow: The running boards will return to the stowed position when the doors are closed. There will be a 2-second delay before the

running boards move to the stowed position.

- Automatic stop: If an object is in the way of the moving running board, the running board will automatically stop. To reset, clear any obstruction, then simply open and close the door to resume normal operation.
- Manually set in the deployed (OUT) position for access to the roof: hold the step with your foot while at the same time closing the door. To resume normal operation, open and close the door.
- Maintenance: In adverse conditions, debris such as mud, dirt, and salt may become trapped in the running board mechanism, possibly leading to unwanted noise. If this occurs, the step may be washed by manually setting the running boards to the deployed position and flush the front and rear hinge arms with a high-pressure car wash wand. Avoid spraying the motors directly. After washing, apply silicone spray lubricant to the hinge pivot pins. Do not apply silicone, wax or protectants like Armor All® to the running board stepping surface.

An override switch is installed near the inside of the slide door opening to provide toggle control for the running boards.

The positions of the toggle switch are as follows:

- Toggle Up: Running Boards Retract and remain in the Stowed Position
- Neutral / Auto: Running Boards in Auto position operate with doors opened and closed.
- Toggle Down: Running Boards Deploy and remain in Deployed Position
  - Note: Running Boards will return to Auto Operation in the next door cycle after 30 minutes.

CAUTION

While cleaning the running boards, avoid spraying the motors directly.

Figure 6-14. Power Step Sliding Door

Figure 6-15. Power Step Driver Side

OUTSIDE VAN
APPROACH

SECTION 7

ENTERTAINMENT

IN THIS SECTION

OVERVIEW

The Approach van is equipped with a wall-mounted television and stereo system. The stereo accepts a variety of media players, including smartphones and other mobile devices. You can connect a compatible media player using a Bluetooth wireless connection or a USB connection to the USB port. Four speakers are installed in the van (2 on the ceiling and 2 on the rear doors) and can be operated in dual zone configuration.

The Entertainment section covers information on the following:

- TV
- Stereo system

TV

An LED TV is mounted on an adjustable arm at the top bed area on the left-side wall.

TV Inputs/Outputs

The TV provides the following inputs/outputs (refer to Figure 7-1):

- 1. USB Port
- 2. HDMI INPUT
- 3. PC IN (VGA and AUDIO) INPUT
- 4. COMPONENT INPUT
- 5. RF IN
- 6. HEADPHONE OUTPUT
- 7. SPDIF OUTPUT
- 8. AV IN (VIDEO and AUDIO)
- 9. AUDIO (L/R) OUT
- 10. DC IN

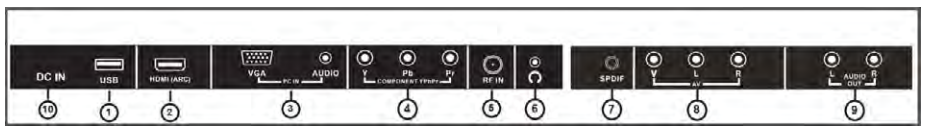


Figure 7-1. TV Inputs/Outputs

STEREO SYSTEM

You can pair the stereo to up to eight Bluetooth media devices.

You can control the playback using the stereo controls on all Bluetooth devices, and on some devices you can browse the music collection from the menu on the stereo.

On Bluetooth devices that do not support media browsing, you should select the song or playlist on the media device.

The availability of song information such as song title, artist name, track duration, and album art depends on the capability of the media player and music application.

You can play media from a compatible Bluetooth device using the Bluetooth wireless connection.

You can use the Fusion-Link remote control app on your compatible Apple or Android device to adjust the stereo volume, change the source, control playback, select and manage radio presets, and adjust some stereo settings. You can use the app to set up and configure DSP profiles on the stereo. The app communicates with the stereo using a wireless connection to the mobile device. You must connect your compatible device to the stereo using Bluetooth technology to use the app.

You can connect an Apple device to the stereo using a USB cable to update the stereo software. For information about the Fusion-Link remote control app for compatible Apple or Android devices, go to the Apple App Store℠ or the Google Play™ store.

Figure 7-2. Fusion link app icon

To pair a Bluetooth device, perform the following:

- 1. Select the BLUETOOTH source.
- 2. Select > BLUETOOTH > CONNECTIONS > DISCOVERABLE to make the stereo visible to your compatible Bluetooth device.
- 3. Enable Bluetooth on your compatible Bluetooth device.
- 4. Bring the compatible Bluetooth device within 10 m (33 ft.) of the stereo.
- 5. On your compatible Bluetooth device, search for Bluetooth devices.
- 6. On your compatible Bluetooth device, select the stereo from the list of detected devices.
  - NOTE: The stereo appears in the Bluetooth device list as the device name (the default name is MS-RA210 unless it was changed in the settings).
- 7. On your compatible Bluetooth device, follow the on-screen instructions to pair and connect to the discovered stereo.
  - When pairing, your compatible Bluetooth device may ask you to confirm a code on the stereo. The stereo does not display a code, but it does connect correctly when you confirm the message on the Bluetooth device.
- 8. If your compatible Bluetooth device does not immediately connect to the stereo, repeat steps 1 through 7.
  - NOTE: If another Bluetooth device is already playing

music on the stereo, connecting a new device will not interrupt playback. You must select the newly-added device if you want to use it instead.

The DISCOVERABLE setting is disabled automatically after two minutes.

NOTE: On some Bluetooth devices, adjusting the volume on the device affects the volume level on the stereo.

When you have more than one Bluetooth device paired to the stereo, you can select a different device when needed. You can pair the stereo with up to eight Bluetooth devices.

To select a different Bluetooth device, perform the following:

- 1. With the BLUETOOTH source selected, select > BLUETOOTH > CONNECTIONS > PAIRED DEVICES.
- 2. Select a Bluetooth device.

BLUETOOTH SOURCE MENU AND SETTINGS

With the BLUETOOTH source selected, select > BLUETOOTH. The options in this menu vary based on the connected device:

- CONNECTIONS > DISCOVERABLE: Allows the stereo to be visible to Bluetooth devices. You can turn off this setting to prevent possible interruption to audio after pairing a Bluetooth device to the stereo.
- CONNECTIONS > PAIRED DEVICES: Shows a list of Bluetooth devices paired with the stereo. You can select a device in the list to connect it to the stereo if it is in range.
- CONNECTIONS > REMOVE DEVICE: Removes the Bluetooth device from the stereo. To listen to audio from this Bluetooth device again, you must pair the device again.
  - NOTE: You should also remove the stereo from the list of paired devices on your Bluetooth device to avoid connection issues when pairing the device again.
- REPEAT: Sets the repeat mode for the current selection (Apple devices only). You can repeat the current selection by selecting the REPEAT ONE option. You can repeat all items in the selection by selecting the REPEAT ALL option.
- SHUFFLE: Shuffles the tracks in the folder, album, or playlist (Apple devices only). PLAYLIST: Displays the playlists on the device (Apple devices only).
- ARTISTS: Displays the artists on the device (Apple devices only).
- ALBUMS: Displays the albums on the device (Apple devices only).
- GENRES: Displays the genres of music on the device (Apple devices only).
- SONGS: Displays the songs on the device (Apple devices only).

By default, the stereo automatically reconnects to the last connected Bluetooth device when you turn it on. You can disable this setting by performing the following:

- Select > SETTINGS > SOURCE > BLUETOOTH > AUTO CONNECT.
- When the AUTO CONNECT checkbox is clear, the stereo will not attempt to automatically reconnect to a Bluetooth device. When this feature is disabled, you must select a Bluetooth device manually to connect it

USB DEVICE COMPATIBILITY

You can use a USB flash drive or the USB cable included with your media player to connect a media player or mobile device to the USB port.

The stereo is compatible with iAP2 Apple devices such as the iPhone® Xs Max, iPhone Xs, iPhone XR, iPhone X, iPhone 8 Plus, iPhone 8, iPhone 7 Plus, iPhone 7, iPhone SE, iPhone 6s Plus, iPhone 6s, iPhone 6 Plus, iPhone 6, iPhone 5s, and iPod touch® (6th generation).

The stereo is compatible with Android devices that support MTP mode.

The stereo is compatible with media players and other USB mass storage devices, including USB flash drives. Music on USB drives must meet these conditions:

- The music files must be formatted as MP3, AAC (.m4a), or FLAC, files.
- If you connect a portable hard drive, you must connect it to an external power source. The USB port on this stereo cannot provide power for a portable hard drive.
- The USB mass storage device must be formatted using one of the following systems:
- Microsoft®: NTFS, VFAT, FAT1, MSDOS
- Apple: HFS, HFSPLUS
- Linux: EXT2, EXT3, EX4

You can connect a USB device to the USB port on the stereo by performing the following:

- 1. Locate the USB port on the back of the stereo.
- 2. Connect the USB device to the USB port.

To control music playback on a USB flash drive or media player, perform the following:

- 1. Connect a compatible USB flash drive or media player to the stereo.
- 2. Select the USB source.
- 3. Select > USB.
- 4. Select the name of the USB device.
- 5. Browse the music files on the device and begin playback. You can use the stereo controls to select, play, pause, and skip tracks.

- TIP: If the USB media player has a screen and controls, you can use the controls on the USB media player to control playback.

You can connect an Android device to the stereo using a USB cable to play media files stored on the Android device. To play media from an app on the Android device, you should connect the device using Bluetooth technology and perform the following:

- 1. Connect a compatible Android device to the stereo using an appropriate USB cable.
- 2. If necessary, enable USB file transfer or MTP on your Android device. See the documentation available for your Android device for more information.
- 3. Select the MTP source on the stereo.
- 4. Select > MTP.
- 5. Browse the music files on the Android device and begin playback.
  - NOTE: You can use the stereo controls to select, play, pause, and skip tracks.

USB SOURCE SETTINGS

With a USB device connected and a USB source selected, select , then select USB, iPOD, or MTP.

NOTE: You can browse the files on the device using this menu. The options in this menu vary based on the connected device.

REPEAT: For a USB or MTP source, select to start playing the tracks in the list from the beginning after the last track has played.

For an iPOD source, select REPEAT ONE to repeat the current track, or select REPEAT ALL to start playing the tracks in the folder, album, or playlist from the beginning after the last track has played.

SHUFFLE: For a USB or MTP source, select to randomly play the tracks in the list. For an iPOD source, select to randomly play the tracks in the folder, album, or playlist.

SIRIUSXM RADIO

You must have the radio ID of your SiriusXM Connect Tuner before you can activate your SiriusXM subscription. You can locate the SiriusXM Radio ID on the back of the SiriusXM Connect Tuner or its packaging, or by tuning your stereo to channel 0.

With the SiriusXM source selected, select > SiriusXM > CHANNELS > ALL CHANNELS > 000 RADIO ID. The SiriusXM Radio ID does not include the letters I, O, S, or F.

OUTSIDE VAN
APPROACH

To activate a SiriusXM subscription, perform the following:

- 1. With the SiriusXM source selected, tune to channel 1.
  - NOTE: You should be able to hear the preview channel. If not, check the SiriusXM Connect Tuner and antenna installation and connections, and try again.
- 2. Tune to channel 0 to locate the Radio ID.
- 3. Contact SiriusXM listener care by phone at (866) 635-2349 or go to www.siriusxm.com/activatenow to subscribe in the United States. Contact SiriusXM by phone at (877) 438-9677 or go to www.siriusxm.ca/activatexm to subscribe in Canada.
- 4. Provide the Radio ID.
  - NOTE: The activation process usually takes 10 to 15 minutes, but can take up to an hour. For the SiriusXM Connect Tuner to receive the activation message, it must be turned on and receiving the SiriusXM signal.
- 5. If the service is not activated within the hour, go to http://care.siriusxm.com/refresh or contact SiriusXM Listener Care by phone at 1-866-635-2349.

STATION OR CHANNEL PRESETS

To save a station or channel a preset, perform the following:

- 1. With an applicable source selected, tune the stereo to a station or a channel.
- 2. Press and hold the dial, and select the save icon.
  - TIP: For the AM, FM, or SiriusXM source, you can press and hold the play/pause button to save the current station or channel as a preset.
  - TIP: You can also select the menu icon, the name of the source, and PRESETS > SAVE CURRENT to save the current station or channel as a preset.

To select a preset channel or station from a list, perform the following:

- 1. With an applicable source selected, press and hold the dial.
  - TIP: You can also select , the name of the source, and PRESETS > VIEW PRESETS to view the list of presets.
- 2. Select a preset.

To remove a preset channel or station from a list, perform the following:

- 1. With an applicable source selected, press and hold the dial.
- 2. Select the delete icon.
- 3. Select each preset station or channel you want to remove.
- 4. When you are finished removing presets, select the delete icon.
  - TIP: You can also select the menu icon, the name of the

source, and PRESETS > REMOVE PRESETS or REMOVE ALL PRESETS to remove preset stations or channels.

SPEAKER ZONES

You can group speakers in one area into a speaker zone. This enables you to control the audio level of the zones individually. For example, you could make the audio quieter in the cabin and louder at the rear doors.

You can set the balance, volume limit, tone, subwoofer frequency, and name for each zone, and configure other zone-specific settings.

If you do not connect speakers directly to zones 1 and 2, you can disable the internal amplifier to reduce power consumption. To do so, perform the following:

- 1. Select > SETTINGS.
- 2. Select ZONE.
- 3. Select INTERNAL AMP ON to clear the check box.

The home zone is the speaker zone that you adjust by default when you turn the dial. To set the home zone, perform the following:

- 1. Select > SETTINGS.
- 2. Select ZONE > ASSIGN HOME ZONE.
- 3. Select a zone.

You can synchronize the volume levels on one or all zones with some source devices, such as a Bluetooth, AirPlay®, or UPnP source. To do so, perform the following:

- 1. Select > SETTINGS.
- 2. Select ZONE > PHONE VOLUME SYNC.
- 3. Select a zone or ALL.
  - NOTE: When you adjust the volume on the connected source, the volume on the selected zone is also adjusted.

By default, when you turn on the stereo, the system automatically reduces the volume to level 12 if it was louder than that when you turned it off. You can adjust this limit if you want to retain a louder volume or limit to a lower volume when you turn on the stereo. To do so, perform the following:

  - NOTE: This setting affects all zones on the stereo.
- 1. Select > SETTINGS.
- 2. Select ZONE > POWER ON VOLUME LIMIT.
- 3. Adjust the volume limit.

Maintaining Individual Zone Volume Levels

If you adjust the volume levels of individual zones so that some zones are louder than others, the individual zone volume settings are all affected when you adjust the volume for ALL zones. By default, if you adjust the volume for ALL to 00, this sets of the volume levels for all zones to 00 and resets all individual zone volume adjustments. You can enable the KEEP VOLUME RATIOS option to retain individual zone volume adjustments when you adjust the volume for ALL to 00.

NOTE: This setting applies to volume adjustments on the stereo or a connected ERX remote control only. If you adjust the volume on the stereo using a connected chartplotter or NRX remote control, the volume levels will still be reset.

TIP: For the best results when enabling this setting, you should set the power-on volume limit to 24

To enable the KEEP VALUME RATIOS option, perform the following:

- 1. Select > SETTINGS.
- 2. Select ZONE > KEEP VOLUME RATIOS.
  - NOTE: This setting applies to volume adjustments on the stereo or a connected ERX remote control only. If you adjust the volume on the stereo using a connected chartplotter or NRX remote control, the volume levels will still be reset.
  - TIP: For the best results when enabling this setting, you should set the power-on volume limit to 24 .

You can disable an unused zone and remove it from the audio level pages. When a zone is disabled, you cannot change any of the settings for that zone. You cannot disable zone 1.

To disable a zone, perform the following:

- 1. Select > SETTINGS.
- 2. Select ZONE.
- 3. Select a zone.
- 4. Select ZONE ENABLED to clear the check box.

You can set a name for a speaker zone to make it easier to identify by performing the following:

- 1. Select > SETTINGS.
- 2. Select ZONE.
- 3. Select a zone.
- 4. SelectZONE NAME, and select an option:
  - Select a pre-defined name from the list.
  - Select CUSTOM NAME, and enter a unique name for the zone.

You can link zones 1 and 2 to keep the volume levels synchronized. Adjusting the volume of either of the linked zones affects both zones. To link the zone, perform the following:

- 1. Select > SETTINGS.
- 2. Select ZONE > ZONE 2 > LINK TO ZONE 1.
  - NOTE: After zones 1 and 2 are linked, you cannot adjust the volume of each zone individually.

OUTSIDE VAN
APPROACH

Stereo System

Ceiling Speaker

Door Speaker

OUTSIDE VAN
APPROACH

7

INDEX

OUTSIDE VAN
APPROACH

Edition A 2024