Pleasure-Way

2021.5 / 2022 ONTOUR 2.0

Ford Transit 250





IT IS NOT SAFE TO USE COOKING APPLIANCES FOR COMFORT HEATING.

Cooking appliances need fresh air for safe operation.

Before Operation:

Open overhead vent or turn on exhaust fan. Open Window.

FAILURE TO COMPLY COULD RESULT IN DEATH OR SERIOUS INJURY.

Unlike homes, the amount of oxygen supply is limited due to the size of the recreational vehicle, and proper ventilation when using the cooking appliances(s) avoids dangers of asphyxiation. It is especially important that cooking appliances not be used for comfort heating, as the danger of asphyxiation is greater when the appliance is used for long periods of time.



DO NOT FILL CONTAINER (S) TO MORE THAN 80 PERCENT OF CAPACITY. FAILURE TO COMPLY COULD RESULT IN DEATH OR SERIOUS INJURY.

Overfilling the propane container can result in uncontrolled propane flow, which can cause fire or explosion. A properly filled container contains approximately 80 percent of its volume as liquid propane.



IF YOU SMELL PROPANE:

Extinguish any open flames, pilot lights and smoking materials.

Do not touch electrical switches.

Shut off the propane supply at the container valve(s) or propane supply connection.

Open doors and other ventilating openings.

Leave the area until the odor clears.

Have the propane system checked and leakage source corrected before using again.

Failure to comply could result in explosion resulting in death or serious injury.



Propane cylinders shall not be placed or stored inside the vehicle. Propane cylinders are equipped with safety devices that relieve excessive pressure by discharging propane to the atmosphere.

FAILURE TO COMPLY COULD RESULT IN DEATH OR SERIOUS INJURY.

▲ WARNING: Breathing diesel engine exhaust exposes you to chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

- · Always start and operate the engine in a well-ventilated area.
- · If in an enclosed area, vent the exhaust to the outside.
- Do not modify or tamper with the exhaust system.
- · Do not idle the engine except as necessary.

For more information go to www.P65warnings.ca.gov/diesel.

▲ WARNING: Operating, servicing and maintaining a passenger vehicle or offroad vehicle can expose you to 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. To minimize exposure, avoid breathing exhaust, do not idle the engine except as necessary, service your vehicle in a well-ventilated area and wear gloves or wash your hands frequently when servicing your vehicle. For more information go to www.P65Warnings.ca.gov/passenger-vehicle.

Pleasure-Way

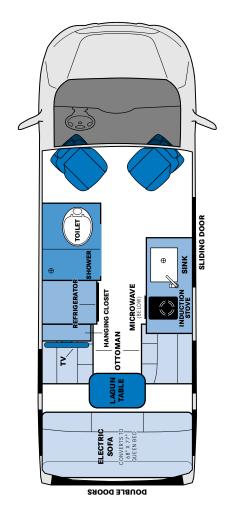
Pleasure-Way Industries Ltd. takes great pride in the quality and excellence that the Pleasure-Way name represents. We appreciate having you as a customer and welcome you into the Pleasure-Way family. This manual is provided to introduce you to the many features of your new Ford Ontour 2.0 including operation, maintenance and warranties. We strongly advise you to take time to read this manual, the Ford chassis owner's manual as well as those of the motorhome components before you use your new motorhome. It will help you to better understand the many operational features of this recreational vehicle.

After reading this manual, be sure to keep it in the motorhome as a reference. Your Pleasure-Way dealer will be glad to answer any further questions about the operation of your motorhome and the appliances.

All reasonable precautions have been taken in the preparation of this manual. We have been as accurate as possible at the time of this publication. However, due to our policy of continuous improvement and refinement to our product, Pleasure-Way reserves the right to make product changes at any time without prior notice and without incurring obligations. As a result, Pleasure-Way assumes no responsibility for errors or omissions in the accuracy of the content of this manual.

We know that you will enjoy your new Pleasure-Way and we wish you many miles of pleasant and carefree driving.

Happy Travels!



ONTOUR 2.0

▼ TABLE OF CONTENTS

i	WARRANTY/POLICIES
01	SAFETY
01	Occupant and Cargo Carrying Capacity
01	Smoke Detector
02	LP/Carbon Monoxide Detector
02	Fire Extinguisher
02	GFCI Outlet
03	Refueling
03	Generator
03	Filling The LP Gas Fuel Cylinder
04	Appliances
04	TV
04	Vehicle Ground Clearance
04	Seat Belts
04	Emergency Escape
05	MOTORHOME EXTERIOR
05	Chassis Paint Codes
05	Motorhome Dimension, Capacities, Specs
06	Appliance List
07	Tire and Loading Information
07	Propane Fill, Breather Valve & BBQ Quick Connect
07	Sewer Dump Compartment
07	Utility Center
07	Water Heater Vent/Access Door
08	Exterior Shower
08	Fresh Water Holding Tank Fill
08	Furnace Vent
08	Exterior 110-120 Volt Plug
08	Porch Light
09	Power Awning
09	Air Conditioner
09	Solar Panel Package
10	Fantastic Vent® Fan

10	TV/ A - L		
10	TV Antenna		
10	Non-Capped Sewer Vent Pipes		
11	MAINTAINING YOUR MOTORHOME		
12	Ultraleather Cleaning & Care		
13	TRAVEL PREPARATION		
14	MOTORHOME SYSTEMS		
14	Liquid Propane Gas System		
15	LP Fill Valve & LP Bleeder Valve		
15	BBQ Quick Connect		
15	LP Tank Gauge		
15	How to Use LP Appliances		
16	Water Heater		
17	Furnace		
17	Fresh Water System		
17	Fresh Water Fill & Drain		
18	Fresh Water System Drain		
18	City Water Connection		
18	Draining Waste Holding Tanks		
19	Waste System		
20	Water Pump		
20	Toilet		
21	Kitchen Faucet		
21	Cooktop		
21	Microwave		
22	The Energy Management System		
22	Refrigerator		
23	WINTERIZING		
23	Winterizing The Water Systems		
24	Optional Winterizing For Milder Climates		
25	Winter Storage Electrical		

26	LIVING AREA ELECTRICAL SYSTEMS
26	Voltage Chart
27	AC 110-120 Volt Power
27	Automatic Transfer Switch
28	Inverter/Charger
29	Inverter/Display Control Panel
30	AC Electrical Distribution Panel
30	GFCI Outlets
31	DC Load Center
32	DC Breakers
33	12 Volt Battery Disconnect Switch
33	Charge Line Disconnect
33	Mastervolt DC - DC Charger
34	Touchscreen Control Panel
34	Troubleshooting The DC/12 Volt System
35	Troubleshooting The AC Power
36	Chassis Battery
36	Chassis Battery Disconnect
36	Coach Batteries
38	Storage
38	Generator
39	AGS Easy Setup
41	AGS Manual Setup

42	MOTORHOME INTERIOR
42	Interior Cockpit Map Light
42	Cooktop
42	Furnace
42	Refrigerator
42	Microwave
43	Water Heater
43	Thermostat
43	Air Conditioner
43	Kitchen Faucet
44	Fan-Tastic Vent® Fan
44	Solar Panel Package
45	USB Charging Port
45	TV & Blu-ray
46	Table Set Up & Storage
47	Front Cab Privacy Shades
47	Bed Layout
47	Jack & Jack Tools
48	TIRE SAFETY
53	REPORTING SAFETY DEFECTS
54	MAINTENANCE LOG



WARRANTY / POLICIES

CUSTOMER RESPONSIBILITY

It is very important that you read and understand the information provided to you in the package containing all the manuals, information and warranties pertaining to your Pleasure-Way Motorhome, its appliances and components, as well as the chassis and tires.

Please familiarize yourself with all terms and conditions of this Limited Warranty, as well as all other applicable warranties, including, but not limited to, the warranty for the chassis, tires, batteries, microwave, television, awning, refrigerator, stove, fan, toilet, air conditioner, etc. These warranty and operator's manuals contain important cautions, warnings, operational, maintenance and warranty information on the chassis, tires, the Motorhome, its components and appliances. All information, requirements and recommendations in these owner's manuals and warranties should be reviewed and followed for your safety.

You are responsible to ensure that the procedures for obtaining warranty repairs for your Motorhome are followed properly. It is your responsibility and obligation to return your Motorhome in a timely manner to an authorized Pleasure-Way dealership for warranty service repairs.

As the owner of the Motorhome, you are responsible for regular and proper maintenance performed in a timely manner in accordance with the Pleasure-Way and OEM manuals provided. Regular and proper maintenance and operation of your Motorhome, including correct load weight and distribution, is required under this Limited Warranty and failure to do so voids this Limited Warranty.

FIVE-YEAR, NON-TRANSFERABLE LIMITED WARRANTY

Subject to the exclusions, terms and conditions specified further in this document, Pleasure-Way Industries Ltd. ("Pleasure-Way") warranties the specified new Pleasure-Way Motorhome ("Motorhome") free from defects in material and craftsmanship on portions manufactured by Pleasure-Way under **normal recreational travel/camping use** and service, reasonable wear and tear excluded, for 60 months/60,000 miles/100,000 kilometers, whichever comes first, after the date of purchase by the **first retail purchaser** from an authorized Pleasure-Way dealer. **This Pleasure-Way Limited Warranty is non-transferable to sequential owners.**

TERMS AND CONDITIONS FOR OBTAINING WARRANTY REPAIRS:

Warranty repairs must be within the five year or 60,000 miles/100,000 kilometers, whichever comes first, limited warranty.

All warranty work required to be done on the chassis or any of its parts or components must be taken to an authorized Mercedes Benz, Ford or Chrysler dealership (depending on your chassis make) and processed through their warranty procedures. Pleasure-Way will not reimburse any claims regarding the chassis or any of its parts or components or tires. Please be advised that tires are covered under a separate warranty that is included with your chassis information and warranty package.

Pleasure-Way will not reimburse any claims for work done on any components, parts or appliances that are not manufactured by Pleasure-Way or that are covered under their respective manufacturer's warranties. These warranties must be claimed through the manufacturer of the appliance or component. Examples include, but are not limited to: batteries, refrigerator, microwave, roof air-conditioning, water pump, furnace, awning, TV, fan, etc.

Pleasure-Way warranty registration cards must be on file before any claims will be processed. Claims made without warranty registration cards will be rejected until proof of ownership can be established.

To obtain warranty repairs, you must contact an authorized Pleasure-Way dealer and schedule an appointment. It is best if you have a written list of your maintenance schedule, repairs, defects or items in need of repair. As the owner, you are solely responsible for the maintenance of the motorhome as required or recommended by the owner's manual and associated costs of that maintenance. Repairs necessitated by failure to properly operate, correctly load, or maintain the Motorhome in a timely manner as required or recommended are not covered by warranty.

Please note that Pleasure-Way is not responsible for booking, scheduling or transporting your Motorhome for warranty or service purposes. Further, Pleasure-Way does not control the scheduling of service work at authorized or independent dealerships. You may encounter some delay in scheduling or completion of work.

Any and all warranty work must be performed and fulfilled by an authorized Pleasure-Way dealer or authorized Pleasure-Way service facility. For emergency repairs while traveling, you may choose to deal with non-authorized RV service facilities; however, all warranty repairs must be pre-authorized by Pleasure-Way.

Pleasure-Way will pay for the removal and re-installation of motorhome components only if Pleasure-Way deems it absolutely necessary to perform chassis warranty repairs. Pleasure-Way will not reimburse any costs in the removal and re-installation of these components if it is: out of the warranty period, non-warranty repairs, and/or routine maintenance or service or covered by the chassis manufacturer.

Pleasure-Way will, at its sole option, replace or repair, free of charge (including reasonable related labor charges), any defective part within the warranty period subject to any exclusions or limitations outlined in this Limited Warranty. The purchaser shall notify their authorized Pleasure-Way dealer within 10 days of this repair and the obligation of Pleasure-Way under this warranty is expressly limited to such replacement or repair. Your sole and exclusive remedy for breach of this Limited Warranty is monetary damages in an amount equal to the actual cost of material and/or labor necessary to repair or replace defective parts that were not repaired or replaced under this Limited Warranty. Pleasure-Way's sole and exclusive obligation is to repair any defects, subject to the exclusions, terms and conditions outlined in this document, discovered within the warranty coverage period if: (1) within 10 days of your discovery of a defect you notify Pleasure-Way or an authorized Pleasure-Way dealership of the defect; AND (2) you deliver your Motorhome to an authorized Pleasure-Way dealership at your cost and expense.

Pleasure-Way specifically excludes and disclaims any and all incidental and consequential damages, and shall not be liable for any such damages, including but not limited to, all expenses, costs, fees and charges related to: transportation, towing, loss of time, loss of pay, loss of use, inconvenience, commercial loss (including but not limited to lost wages or lost profits), bus/ taxi/air fares, vehicle rental, fuel, service call charges, gasoline, internet, telephone, facsimile transmissions, lodging, food, loss or damage to personal property or items stored inside or outside of the Motorhome, loss of or damage to Motorhome, condensation or moisture damage such as mold and mildew as well as rust and corrosion, etc. This exclusion and disclaimer is independent of any failure of the essential purpose or validity of any warranties provided with the Motorhome, and shall survive any determination that a warranty is invalid or failed of its essential purpose. Some states or provinces may not allow the exclusion or limitation of incidental or consequential damages, and, if so, the above limitation or exclusion may be limited or may not apply to you. This Limited Warranty gives you specific legal rights, and you may also have other rights which vary from state to state and/or by province.

Please note the distinction between "defect" and "damage". "Defect" means the failure of the workmanship performed and/ or materials used to conform with the design and manufacturing specifications and tolerances of Pleasure-Way. However, Pleasure-Way has no control over "damage" caused by such things, for example, as collision, misuse, improper loading or lack of maintenance that occurs after the Motorhome is delivered to the owner. Therefore, "damage" which occurs for any reason after the Motorhome is delivered is not covered under this Limited Warranty. Maintenance services are also excluded from this Limited Warranty because it is the owner's responsibility to maintain the Motorhome. Please note that exclusions from warranty claims are specified further herein.

Pleasure-Way reserves the right to change specifications, operating instructions, floor plans, standards and options on any and all products and Motorhomes built and/or sold by it at any time without notice and without incurring any obligation to maintain spare parts and without incurring any obligations to make the same or similar changes on motorhomes previously built and/or sold by Pleasure-Way.

This Limited Warranty is expressly in lieu of any and all other warranties, express or implied, including any implied warranty of merchantability or fitness for a particular purpose and of any other obligations or negligence or liabilities on Pleasure-Way. There is no warranty of any nature made by Pleasure-Way beyond that contained in this Limited Warranty. No person or entity has authority to create, imply, enlarge, amend or modify any warranty beyond that contained in this Limited Warranty. The dealer, servicing entity or representatives (including any and all employees) are not Pleasure-Way's agent. Pleasure-Way is not responsible for any undertaking, representation or warranty, made by any dealer, servicing entity, employee, representative or others beyond those expressly set forth within this Limited Warranty. TO THE EXTENT PERMITTED BY APPLICABLE LAW, ALL IMPLIED WARRANTIES AND CONDITIONS, INCLUDING IMPLIED OR STATUTORY WARRANTIES AND CONDITIONS OF MERCHANTABILITY, FITNESS FOR A PARTICULAR OR NORMAL PURPOSE, QUALITY, DURABILITY, AND AGAINST LATENT DEFECTS, ARE HEREBY DISCLAIMED. TO THE EXTENT IMPLIED WARRANTIES ARE NOT PERMITTED TO BE DISCLAIMED UNDER APPLICABLE LAW, THIS WARRANTY EXPRESSLY LIMITS ALL WARRANTIES, INCLUDING BUT NOT LIMITED TO, BOTH EXPRESS AND IMPLIED WARRANTIES, INCLUDING THE IMPLIED OR STATUTORY WARRANTIES AND CONDITIONS OF MERCHANTABILITY, FITNESS FOR A PARTICULAR OR NORMAL PURPOSE, QUALITY, DURABILITY, AND AGAINST LATENT DEFECTS, AND ALL OTHER LIABILITIES OF PLEASURE-WAY.

When you request and accept the performance of warranty repairs under the terms of this Limited Warranty, you are accepting all terms of this Limited Warranty, including by way of example, warranty limitations, time limits and disclaimers. If any term or condition in this Limited Warranty conflicts with your state's legislation, the provisions of your state's legislation are varied as allowed for by law.

This Limited Warranty is not a warranty that promises or extends to future performance of this Motorhome or any of its materials, components or parts because this Limited Warranty does not make a representation on how your Motorhome or any of its materials, components or parts will perform in the future but instead represents only what the remedy will be if a manufacturer's defect exists subject to the terms, exclusions and conditions herein.

Unless prohibited by law, repairs will not extend or suspend the time when you must commence a breach of warranty claim and shall not extend the warranty coverage period set out herein. Any performance of repairs after the warranty coverage ends or any performance of repairs to those portions of your Motorhome excluded from coverage shall be considered "good will" repairs and confers no obligation for other similar future repairs. Further, nothing in this Limited Warranty, including, but not limited to, "good will repairs" or any action of Pleasure-Way or its agents or representatives shall be interpreted as extending, waiving or altering the terms, limitations, exclusions and conditions of this Limited Warranty and shall not, under any circumstances whatsoever, extend the warranty coverage period or limitation period. Pleasure-Way is not obliged to notify you if repairs are considered "good will repairs."

WHAT THIS LIMITED WARRANTY DOES NOT COVER:

This Limited Warranty shall not apply to the following:

- In the event that the Motorhome has been altered outside our factory in any way so as, in our sole opinion and discretion, to affect its performance, stability, safety, operation or reliability.
- 2. Deterioration due to wear and tear or exposure, including but not limited to: upholstery, flooring, rust, corrosion, window, door and vent seals, oxidation, fading, and cosmetic blemishes.
- In the event that the Motorhome, in our sole opinion and discretion, has been subject to misuse, abuse, neglect, negligence, accident, improper load distribution or overloading.
- 4. In the event that the Motorhome was not purchased as a new retail unit from an authorized Pleasure-Way dealer.
- In the event that the Motorhome has been declared a total loss by an insurance company, or a motorhome title indicates that is designated as "salvage", "junk", or "rebuilt" or word of similar impact.
- 6. The automotive chassis and tires, which are covered solely and exclusively by their own manufacturers' warranties, including by way of example, but not limited to: power train, engine, brakes, axles, drive-train, and muffler. To learn more about the specific automotive chassis and tires not covered under the Pleasure-Way Limited Warranty, please contact your authorized selling Pleasure-Way dealer, Pleasure-Way Industries Ltd., or review your Mercedes Benz, Ford or Chrysler warranty package information provided with the Motorhome.
- 7. Appliances, parts and components not manufactured by Pleasure-Way or covered by their own warranties, including but not limited to: the microwave, refrigerator, stove, heater, television, toilet, batteries, awning, generator, fan, furnace, air conditioner, etc. To learn more about specific components, parts or appliances not covered under the Pleasure-Way Limited Warranty, please contact your authorized selling Pleasure-Way dealer, Pleasure-Way Industries Ltd., or review your warranty package information provided with the Motorhome.

- 8. Unauthorized repairs, alterations, customizations, additions or modifications and any defects or damage caused by such items or repairs
- Routine maintenance and service items, including without limitation: caulking, lubricants, sealants, tightening screws, latches, locks, combustion systems, changing fuses or light bulbs, winterization or storage preparations, maintaining the air conditioning, electrical, plumbing and heating systems, etc.
- 10. Imperfections that do not affect the suitability of the Motorhome for its intended purpose of recreational travel or camping use or items that are working as designed but which you are unhappy with because of the design or function.
- 11. Damages caused by any and all Acts of God and/or environmental factors, including but not limited to: hail, tornadoes, sandstorms, lightning, floods, earthquakes, hurricanes, airborne fallout, fire, rain, wind and all other environmental conditions, which may include but are not limited to, tree sap, tar, chemicals, oils, salts, ocean spray, road hazards, stone chips, infestations, and rodents
- 12. Damage, defects or repairs required, due to or arising from, including but not limited to: accident, negligence (whether foreseeable or not), collision, vandalism, theft, fire, flood, harsh chemicals or abrasive cleaners, de-icing agents, waxes or other chemicals applied to the Motorhome or its components, power washers, rust or corrosion, hydraulic leveling jacks or leveling system, unregulated water pressure, tank overfill, or plumbing system or electrical system modification or alteration, improper installation, addition, repair or modification, improper stowing of contents and equipment, overloading or improper balancing or distribution of the load, voltage/amperage irregularities such as low or high voltage, reverse polarity, open ground or neutral and lack of amperage to operate equipment, power surges, off-road use, abuse, neglect or misuse of the Motorhome and/or its equipment, appliances, components, and/or chassis, failure to properly winterize the Motorhome and/or its components, improper, untimely or inadequate maintenance or service of the Motorhome and its components, failure to follow instructions or maintenance outlined in the manuals supplied with the Motorhome, etc.

- 13. Failure to seek and obtain repairs in a timely manner. Damage caused by failure to address warranty issues in a timely fashion will not be covered by this warranty, additional expenses will be the responsibility of the owner.
- 14. Failure to use reasonable efforts to mitigate damage.
- 15. Odometer tampering or failure to comply with the instructions set forth in the owner's manuals.
- 16. Exterior storage compartments may not be moisture-free due to weather and humidity conditions. It is advised that you store items accordingly. Pleasure-Way is not responsible for goods damaged while stored in exterior storage compartments.
- 17. Condensation and the results of condensation including, but not limited to, water damage and the growth of mildew or mold inside or outside of the Motorhome. Mold and mildew inside and outside of the Motorhome are natural growths given certain environmental conditions and are not covered by the terms of this warranty.
- 18. Wheel alignments or adjustments to axles, tire wear or failure, and glass damage. Aluminum wheels are not warranted against corrosion or damage that is a result of road salt, sea salt, cleaning chemicals or harsh driving conditions and excessive pressure from power washers.
- 19. Improper electric power supply or improper vehicle hook up to other facilities and failure to properly ventilate the vehicle.
- Changes, modifications, or additions made to other Pleasure-Way motorhomes manufactured after this Motorhome. This is not an engineer upgrade warranty.
- 21. Failure of the Motorhome, tires and/or chassis and related components and parts resulting in incidental damages, costs, fees, or expenses, including but not limited to: loss or damage to personal property, items or goods stored both inside and outside the Motorhome, loss of use and equipment of Motorhome, loss of time, inconvenience, commercial loss (including loss of wages or profits), cost of rental vehicle, cost of accommodations, travel expenses (including taxi, bus, air fares), towing, fuel, meals, telephone, internet and any and all other miscellaneous and incidental expenses. Some provinces and states do not allow exclusions or limitations of incidental or consequential damages, so the above limitations or exclusions may be limited or may not apply to you.

- 22. This Motorhome is not designed for four season use. Failure to properly winterize your Motorhome or operating your Motorhome in freezing conditions may cause damage to your Motorhome that is not covered under this Limited Warranty.
- 23. This Motorhome has been designed solely for its intended purpose of recreational camping and personal use; it is not intended for use as a full-time quarters or permanent residence. Pleasure-Way makes no warranty whatsoever with regard to any Motorhome that has been used other than for temporary recreation purposes, including, but not limited to, use of the Motorhome for residential, commercial, rental, revenue generating or business purposes, or any Motorhome not registered and regularly used in the United States or Canada. For the purposes of this Limited Warranty, it shall be deemed conclusive evidence of commercial, rental or business purposes if the Motorhome is licensed, titled. registered or insured in the name of any corporation, LLC, partnership, or any other form of business or commercial entity. If the Motorhome owner or user files a tax form claiming a business or commercial tax benefit or income related to the Motorhome, it shall be irrefutable that the Motorhome has been used for rental, commercial or business purposes.
- 24. The importing or exporting or shipping of the Motorhome out of the country of original licensing or titling (Canada or United States) voids this Limited Warranty from the time the Motorhome is imported or exported and at all times thereafter. Costs, expenses, and damages arising from or related to the following are not covered by this Limited Warranty.

THE CONDITIONS OF THIS LIMITED WARRANTY SHALL NOT APPLY TO DEGENERATION DUE TO WEAR AND TEAR AND EXPOSURE AFTER THESE LIMITATIONS:

For **NINETY (90) DAYS** from the original retail purchase date by the original retail purchaser from an authorized Pleasure-Way dealer: any and all adjustments to compartment door or cabinet latches and hinges. Also fuses, remotes and smoke detector batteries.

For **ONE (1) YEAR** from the original retail date purchase date or 12,000 miles/20,000 kilometers, whichever comes first, by the original retail purchaser from an authorized Pleasure-Way dealer:

- Lithium batteries
- Control touch panels and control boards
- All seat, curtain, door panel, ceiling and wall fabrics used in the coach
- Blinds
- · Window seals and caulking
- Exterior latches and locks
- Exterior doors and hatches, including but not limited to, utility centre door and power cable hatch
- · City water fill and exterior shower
- · Porch light and interior LED lighting
- Exterior cable TV outlet
- · GFCI outlet
- Carpet
- Linoleum
- Black and grey water termination valves, sewer hose and connections
- · Table legs and base
- · Fridge vents
- · Cabinet latches and hardware
- · Shower pan, window and fan shrouds
- Propane regulator
- · Generator exhaust brackets
- · Exterior striping
- Painted plastic exterior body molding and bumpers. Please
 note that painting exterior moldings magnifies the original
 equipment manufacturer condition of the plastic molding.
 Some conditions of the plastic, such as but not limited to, body
 attachment points, imperfections and differences in texture
 may be more visible when painted. These are considered
 normal and are not covered under this Limited Warranty.

For **TWO (2) YEARS** or 24,000 miles or 40,000 kilometers, whichever comes first, by the original retail purchaser from an authorized Pleasure-Way dealer:

- Ultraleather fabrics
- Propane lines
- · Foam used in cushions

For **THREE (3) YEARS** or 36,000 miles or 60,000 kilometers, whichever comes first, by the original retail purchaser from an authorized Pleasure-Way dealer;

• Exterior painted fiberglass surfaces.

It cannot be emphasized enough that it is your responsibility as the Owner of your Motorhome to review all manuals and warranties regarding your Motorhome, its components, appliances and chassis for your safety and for the proper operation and maintenance of your Motorhome, its components and appliances and the chassis. In particular, we remind you that heavier items should not be stored in upper cabinets. Please ensure weight is distributed evenly in the cabinet and storage areas. Use caution when opening doors and cabinets as items may have shifted during travel. When storing your motorhome, ensure there is adequate ventilation to eliminate high humidity, heat and extreme dry conditions. In cool/cold conditions, ensure that there is adequate ventilation to exhaust humidity and off gassing of appliances. Please note that Pleasure-Way Motorhomes are not intended for four season use and failure to properly winterize or using the Motorhome in freezing conditions may cause damage that is not covered under warranty. For example and without limiting the generality of the foregoing, the Tofino roof struts and fabric can be damaged if the roof is lifted during freezing conditions.

FORD WARRANTY

BASIC LIMITED WARRANTY

- Coverage 3 years or
- 36,000 miles/60,000 kms

POWERTRAIN LIMITED WARRANTY

- 5 years
- 60,000 miles / 100,000 kms

ROADSIDE ASSISTANCE

- 5 years
- 60,000 miles / 100,000 kms

SAFETY

For your safety while traveling with your Pleasure-Way Motorhome, we have provided safety components throughout the vehicle. In order for your vehicle to maintain the safest possible conditions, these components must be tested and maintained on a regular basis, according to the detailed manufacturer's operating instructions.

All Pleasure-Way Motorhomes in Canada are CSA (through QAI) and CMVSS certified, and may exceed the approved installation criteria.

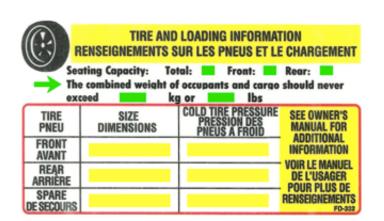
All Pleasure-Way Motorhomes in the United States are FMVSS certified and bear the R.V.I.A. seal of approval, and may exceed the individual state requirements.

OCCUPANT AND CARGO CARRYING CAPACITY

The Tire and Loading Information label, found on the driver side door pillar, states the OCCC of your motorhome. This figure states the maximum allowable weight of all occupants (including the driver), plus the weight of all food, tools, full fresh water tanks, and personal belongings. The tongue weight of a towed trailer also counts as cargo. If you are traveling with water in your holding tank, weight can be calculated by using this ratio: 1 kg/L or 8.3 lb/gal.

The OCCC of your motorhome was calculated by adding the weight of: the full LP fuel tank, the full vehicle fuel tank and the dry weight of the motorhome (as shipped from the factory) and subtracting that number from the Gross Vehicle Weight Rating (GVWR).

NOTE: All US units include a second OCCC label on the inside of the passenger door.



SMOKE DETECTOR

A smoke detector is located on the ceiling of your unit near the front. Smoke detectors may give you a warning of fire and smoke, but only if used and maintained in accordance with the manufacturer's instructions.

This device should be tested after each time your vehicle has been in storage, before each trip, and at least once each week during your travels.

Do not block air circulation in the area where the smoke detector is located. Ensure you connect the battery inside the detector upon receiving your new unit. (9 volt battery located inside the unit.) Install a fully charged fresh battery at least once a year.



LP/CARBON MONOXIDE DETECTOR

A liquid propane (LP) / carbon monoxide (CO) gas detector is located near the floor level, mounted to the drivers side ottoman base. This detector will operate to detect liquid propane & carbon monoxide gas as well as other gases that are heavier than air. Your components that require LP gas are provided with complete ventilation to the exterior and are sealed off to the interior for your added safety. This detector is powered by the auxiliary battery and is operating at all times unless the battery is disconnected or the red disconnect switch is turned off.

The LP/CO gas detector should be tested after each time your vehicle has been in storage, or before each trip and weekly while the vehicle is in use. The test procedure should be performed in accordance with the manufacturer's instructions. Do not block air circulation in the area where the LP/CO gas detector is located.

NOTE: The LP/CO detector will sound to indicate a low coach battery voltage.





FIRE EXTINGUISHER

A 3-pound capacity fire extinguisher is provided and located at the side door main entrance for ease of accessibility from the interior or exterior.

WARNING: This fire extinguisher is a type "ABC", which will extinguish flammable liquids and electrical fires, but not wood, paper and cloth fires. You should inspect the extinguisher at least once a month according to the manufacturer's instructions.





GFCI OUTLET

A ground fault circuit interrupter (GFCI) 110-volt receptacle located on the driver side ottoman provides protection against line-to-ground electrical shock hazards that could be harmful or even fatal. The outlets that are on this circuit are the exterior, kitchen and rear bench receptacles. The GFCI receptacle must be tested at least once a month in accordance with the manufacturer's instructions.

The GFCI for the microwave and cooktop are located in the cabinet above the TV.





REFUELING

Open the driver door of the vehicle to access the fuel fill door. Close the driver side door and windows to prevent fumes from entering the vehicle. The Transit is equipped with a cap-less easy-fill fuel tube. Select the correct fuel and insert the nozzle into the tube. When refueling your fuel tank or your propane system, ensure that your vehicle and your main LP valve is shut off. Some appliances in your vehicle have auto ignition. Ensure the appliances are shut off so ignition will not activate.

WARNING: Even with the main LP valve shut off there is enough LP gas in the lines for the appliances to ignite.





GENERATOR

Please refer to the manufacturer's operation instructions for further information.

When launching a boat or some form of watercraft with your Pleasure-Way motorhome, it is imperative to not submerge the generator in water. Please refer to the generator owner / operating manual for proper use and maintenance information. The generator is located behind the rear axle, between the frame rails. The generator access door faces the rear of the vehicle.

NOTE: Your motorhome is equipped with underside holding tanks, waste tanks, plumbing lines, propane lines and other RV related items. Please be careful when driving your motorhome on uneven or poorly maintained roadways.



FILLING THE LP GAS FUEL CYLINDER

The LP fill is located below the rear bumper on the passenger side. The propane tank valve must be closed and appliances must be turned off during refueling of the motor fuel and/or the propane fuel tank. Only qualified personnel should refuel your propane tank.

NOTE: Do not refuel the propane tank to more than 80% of its capacity. Liquid will appear at the breather valve at 80%. To reduce the danger of fire and/or explosion, do not store gasoline or other flammable liquids inside your vehicle.

WARNING: Ensure the propane system valve is turned off when the vehicle is in motion. It is not safe to travel while propane appliances are in use. The propane switch is located in the driver side utility center.





A DANGER

All pilot lights, apptiances and their igniters (see operating instructions) shall be turned off before refuelling of motor fuel tanks and/or propane containers. Can cause ignition of flammable vapors, which can lead to a fire or explosion and result in death or serious injury.

AWARNING

Do not fill propane container(s) to more than 80 percent of capacity. A properly filled container contains approximately 80 percent of its volume as liquid propane.

Overfilling the propane container(s) can result in uncontrolled propane flow, which could lead to a fire or propagate and result in death or serious later.

AWARNING

This propane piping system is desligned for use with propane only. Do not connect natural gas to this system. Securely cap liniet when not connected to use. After turning on propane, except after norms cylinder replacement, test propane piping and connections to appliances for leakage with scepy water or bubble solution. Do not use products this contain ammonia or chlorine to test for leaks. Car lead to a fire or explosion, which could result in death or serious injury.

APPLIANCES

It is not safe to use cooking appliances to heat the interior of the coach due to the danger of asphyxiation. It is recommended that you read all of the appliance owner / operating manuals prior to using the appliances.



TV

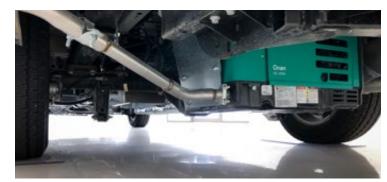
When the vehicle is in motion, it is necessary to have the flat screen television locked into travel position to prevent damage to the flat screen, bracket and to the cabinets.





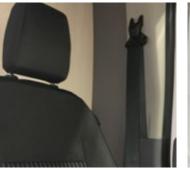
VEHICLE GROUND CLEARANCE

Your motorhome is equipped with underside holding tanks, waste tanks, plumbing lines, propane lines and other RV related items. Please be careful when driving your motorhome on uneven or poorly maintained roadways.



SEAT BELTS

Only seats equipped with factory installed seatbelts are to be occupied while the vehicle is in motion. All passengers must be seated in these seats only, with the seat belts fastened while the vehicle is in motion. If the power sofa is occupied while the vehicle is in motion, the sofa must be in a full upright position.





EMERGENCY ESCAPE

If the need to make an emergency escape from the interior of your motorhome arises, all exterior doors are equipped with access latches. Your choices of escape routes are as follows: the main entrance at the side door, the driver and passenger side front doors and the rear doors.



MOTORHOME EXTERIOR

CHASSIS PAINT CODES (FORD TRANSIT CODES)

Ingot Silver Metallic - UX | Bright White - YZ | Magnetic - J7 Paint codes located on the driver side door pillar.

| Description |



MOTORHOME DIMENSIONS AND CAPACITIES

3.5 litre GTDI (ECO Boost) V6 310 HP @ 5500 RPM / 400 LB-FT Torque @ 2500 RPM 10-speed SelectShift® transmission and 3.5L EcoBoost® engine 148" Wheel Base

Your motorhome is larger than your standard van, so please be careful when entering underpasses, garages, parkades, etc. Towing capacity is based on GCWR 11,200– GVWR 9,070 = 2150 pounds if the vehicle when loaded is less than 9,070 pounds. This weight can be added to the towing capacity up to the Ford Transit hitch rating, rear axle and Ford Transit limitations as listed in the Ford Transit manual. The hitch tongue weight must be included in the loaded weight of the vehicle.

DIMENSIONS

Length Bumper to Bumper	236" - 19' 8"	598.1 cm
Height with AC	120"- 10'	304.8 cm
Width with Mirrors Extended	97.5"- 8' 1.5'	247.7 cm
Width at Running Boards	84.5" - 7' 0.5"	214.6 cm
Interior Standing Height	78" - 6'6"	198.1 cm
Towing Capacity	2150 lbs	975 kg

CAPACITIES

Fuel	25 US gal	95 litres	155.5 lbs
Fresh Water Tank (Potable)	25 US gal	95 litres	209 lbs
Grey Water Tank (Sinks / Shower)	15 US gal	56.8 litres	125.1 lbs
Black Water Tank (Toilet)	11 US gal	41.6 litres	91.5 lbs
Liquid Propane (LPG) (at 80%)	12 US gal	45.4 litres	50.4 lbs

CHASSIS SPECIFICATIONS

GVWR	9070 lbs	4114 kg
GCWR	11,200 lbs	5080 kg
GAWR Front	4130 lbs	1873 kg
GAWR Rear	5515 lbs	2502 kg
Tires (all)	235/65R16C	E – weight rating
Rims (all)	16 X 6.5 J	
Tire Pressure Front	52 psi	360 KPA
Tire Pressure Rear	75 psi	520 KPA
Tire Pressure Spare	67 psi	460 KPA

2.8HGLAA-8302A Generator Onan RV QG 2800i Fridge 3.2 cu ft. 90 L Norcold N1090BR Microwave High Pointe EM925RCW Air Conditioner 640312CXX1CO Dometic Air Conditioner Lower Dometic 3310741.016 Tru Induction TI-1B - 1800W/DC 180 Amps Induction Cooktop Shurflo Water Pump 4008-101-A65 Water Heater Truma AguaGo Comfort Plus DLE60CP Toilet Thetford Aqua Magic II 42051 **Furnace** Truma Vario Heat Comfort US **Awning** Fiamma F65 Eagle 10' 6" #06693F13R

MANUFACTURER

Carmanah 100 watt

Xantrex Freedom XC 2000

Progressive Dynamics

Eco-lon Lithium 100 AH

Go Power

LG

Bose

Xantrex

Ford

Winegard

Mastervolt

LG Smart TV

MODEL

CTI - 100m

24LM530S

BP350

Solo 5

5100

Sync 3 LifePO4

817-2080

808-0817-01

Mac Plus 12/12-50

Rayzar RZ-7535

FV8300LWUSF81

GP-RVC-30-MPPT

NOTE: All measurements and capacities are approximations. Every effort has been made to be as accurate as possible.

Fan-Tastic Vent® Fan / Dometic

PLEASE NOTE:

APPLIANCES

Solar Panel

Solar Control

TV

Blu-Ray

Soundbar

Inverter Control

DC to DC Charger

Dual Coach Batteries

ATS Switch

Antenna

Roof Vent

Inverter / Converter / Charger

In Dash Stereo/Nav/ Rear Cam

- Appliances and options may change without notice and some appliances and equipment may be optional.
- Due to Pleasure-Way's policy of continuous improvement, Pleasure-Way Industries Ltd. reserves the right to make product changes at any time without incurring obligation.
- The chassis manufacturer may make mechanical and option changes without Pleasure-Way Industries Ltd. incurring any obligation.
- Pleasure-Way Industries Ltd. cannot be held responsible for changes made to an appliance supplied by another distributor or manufacturer
- Pleasure-Way Industries Ltd. cannot be held responsible for dealer installed options.

TIRE AND LOADING INFORMATION

The tire and loading information is located on the driver side door pillar. On this label you will find your tire size as well as cold tire pressure rating. Also found on this label is the seating capacity along with the occupant and cargo carrying capacity of your motorhome. Please refer to your specific label for accurate information.

PROPANE FILL, BREATHER VALVE AND BBQ QUICK CONNECT

Propane fill, breather valve and BBQ quick connect are located on the driver side rear, exterior corner of the vehicle. This fill valve and breather valve allow the on board propane tank to be filled, once fluid appears from the breather valve the tank is filled to 80%. The gauge inside will read 100% at 80% full.

SEWER DUMP COMPARTMENT

Located on the driver side, mid body below the running board. The sewer hose storage container is located on the driver side in front of the rear wheels.

(for more information see page 18)

UTILITY CENTER

Located on the driver side main wall panel, this compartment contains four main components used in your RV:

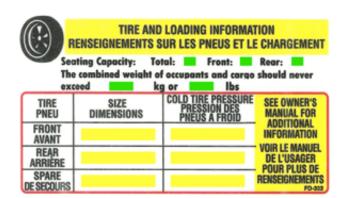
- 1. Shore power hook-up
- 2. Cable TV hook-up
- 3. Pressurized city water hook-up
- 4. LP electric valve switch

WATER HEATER VENT / ACCESS DOOR

Located mid-body on the driver's side. This vent door gives you access to the exterior working components of the Truma AquaGo on demand water heater

During regular operation, the ON/OFF switch should be in the ON position; the water heater will only come on when hot water is being used or when the water is being recirculated in comfort mode. Turn your water heater OFF and drain the water heater tank when the motorhome is in storage.

NOTE: Keep this vent clear from all obstructions.

















EXTERIOR SHOWER

Located beside the vehicle fuel fill door, this compartment contains a retractable shower head and hot/cold water taps. You will have to be hooked up to city water or have your water pump in the on position to use this port.

NOTE: When winterizing your motorhome be sure to winterize this tap and the shower hose/spray port.





FRESH WATER HOLDING TANK FILL

Located behind the sliding door, this compartment allows you to fill the fresh water holding tank. It also contains the vent tube for your fresh water holding tank.





FURNACE VENT

Located mid body on the driver side. This vent gives off the exhaust of the furnace.

NOTE: Ensure this vent is free and clear of obstructions at all times.

CAUTION: Surface may be hot when the furnace is running.



EXTERIOR 110-VOLT PLUG

Located on the passenger side panel behind the rear wheel, this plug will only function if power is supplied through the generator or shore power. This plug is controlled by the GFCI on the driver side ottoman.





PORCH LIGHT

Located on the 10" touchscreen control panel next to the main entrance door. Select the porch light button to turn ON/OFF the porch light. This button can be on the home screen and/or the lighting page.





POWER AWNING

Please refer to the manufacturer's operating instructions for further information.

Located on the passenger side of the roof, this is a 10' 6" Fiamma electric awning controlled by the switches located on the touch screen panel. The battery power switch must be in the ON position to operate the awning.

Select the mechanical symbol at the bottom of the touchscreen control panel. Select and hold the EXTEND or RETRACT button to extend/retract the awning.

The awning is a legless self-supporting awning with a seismic sensor that will automatically retract the awning in windy conditions. The awning is equipped with a LED light strip located on the extension rail of the awning. This light strip is controlled by the touchscreen controls lighting page.

CAUTION: Never leave the awning extended when you are away from your motor home. The seismic sensor will react to windy conditions, however a sudden large gust of wind may not trigger the awning's retract feature before damage occurs.

NOTE: The awning will not operate if the vehicle ignition is in the on position.











AIR CONDITIONER

Your vehicle is equipped with the 11,000 BTU low profile Dometic air conditioner. From the ground to the top of the air conditioner it measures 10'. This is the highest point on your vehicle. Ensure you allow for this clearance when proceeding under overhead items. The controls for the air conditioner are located on the home page of the touchscreen control panels.

(for more information see page 43)





SOLAR PANEL PACKAGE

Your vehicle may be equipped with Carmanah solar panels. The solar panels are located over the driver's door and behind the rooftop AC unit. The controls for the solar panel are located on the POWER MANAGEMENT page of the touchscreen control panels. The MPPT controller is located beside the battery box at the rear of the coach.





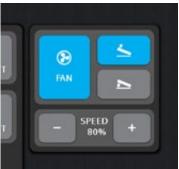
(for more information see page 44)

FAN-TASTIC VENT® FAN

This fan's vent is located on the roof-top close to the bathroom door, in the kitchen area of the interior. This fan will assist in exhausting the odors and steam from the bathroom and cooking area. This fan is equipped with a rain sensor. The controls for the fan are located on the 10" touchscreen control panels on the HOME or MECHANICAL page.

(for more information see page 44)





TV ANTENNA

Located beside the awning on the passenger side near the front of the rooftop. This antenna features a dome enclosure, a booster and a search for frequencies. The control switch for the antenna booster is located in the cabinet above the TV.

(for more information see page 45)





NON-CAPPED SEWER VENT PIPES

Located on the driver's side above the bathroom. These vent stacks are sealed and connected directly to the black and grey water tanks.



MAINTAINING YOUR MOTORHOME

It is recommended that you regularly maintain your Pleasure-Way Motorhome in order to get the maximum benefits from your unit. The life and performance of each component depends upon proper use, operation and maintenance.

With a regular maintenance schedule you should be able to identify any components that may need attention, allowing you to have many years and miles of trouble-free traveling.

NOTE: Please refer to your Ford Owner's manual for chassis mechanical maintenance.

HELPFUL HINTS

- To maintain your exterior painted fiberglass and metal surfaces we suggest you thoroughly clean and wax these pieces regularly. All fiberglass surfaces are painted with automotive paint.
- When storing your Pleasure-Way motorhome it is recommended that you park the vehicle on a level surface. Avoid parking in a front end down position as rain or snow may collect in the air conditioner area, allowing moisture to enter the vehicle through the air conditioner. Damage to the motorhome as a result of incorrect parking will not be covered under warranty.
- When storing your Pleasure-Way motorhome, ensure all holding tanks are emptied and flushed, the water system is completely drained, including the water heater, the LP gas valve is turned off, the 12 volt battery disconnect switch is switched to the OFF position, and all electrical appliances are turned off.

- When storing your Pleasure-Way motorhome it is recommended that you run your vehicle engine once a month to allow the engine starting battery to recharge and the vehicle fluids to flow through the engine. Please refer to your vehicle operation manual for more details.
- It is recommended that you run your generator for ½
 hour under load each month. This will allow the system to
 maintain fresh fuel, the engine to be lubricated and the
 electronic components to avoid corrosive build up.
- It is recommended that once a year that you check all seals around the roof components such as antenna, roof vent, plumbing stacks, etc. and side wall items such as furnace vent, fridge vent, etc., of the vehicle.
- It is recommended that you lubricate with a dry lubricant all awning joints and window cranks yearly.



ULTRALEATHER CLEANING AND CARE

(Information taken from the Ultrafabrics website.)

Our fabrics are engineered to be long-lasting, with surfaces that maintain their top-quality look and feel long after application. To keep any of our materials looking their best, we do recommend regular care and cleaning, especially to keep dirt from accumulating. Below is a general outline to help keep your fabrics looking their best.

INDOOR/OUTDOOR FABRIC CARE INSTRUCTIONS

(Information taken from the Ultrafabrics website.)

- All our Indoor/Outdoor products should be stored in a dry, well-ventilated area
- Our mildew resistant surfaces do not promote mildew growth, however, mildew may grow on dirt and other foreign substances that are not removed from the fabric
- The frequency of cleaning will vary greatly depending upon the local outdoor environment in which the product is used
- Cushions should not remain wet or be covered, as this will increase the chances of mildew growth occurring
- All of our High UV products perform best when they are paired with an open cell, reticulated, quick drying foam and/ or a waterproof, anti-mildew barrier between the fabric and foam and utilize air vents and/or a mesh, open weave fabric bottom

TIPS

- · Clean with soap and water or alcohol based cleaners
- Sanitize using 1:5 bleach/water solution, hydrogen peroxide based, or quaternary-based disinfectants*
- For stubborn stains, wipe the stain off with isopropyl (rubbing alcohol) as soon as possible
- · Rinse all solution residue with water

ULTRALEATHER PRO STAIN CARE

Restaurant & Food Service	Ketchup, Mayo, Mustard,** Coffee, Red Wine, Tea
Healthcare	Blood, Urine, Betadine
Contract & High Traffic Areas	Ballpoint Pen Ink**

Clean with soap and water, or alcohol-based cleaners

*This information is not a guarantee. Please use all cleaning and disinfecting agents safely and as instructed.

**For tough stains, clean using isopropyl/rubbing alcohol. Rinse the surface with water and dry. Prompt attention is important for successful removal of any stain.

A variety of clothing and accessories may contain dyes that could transfer to lighter colors, depending upon variations in temperature and humidity. Dye transfer is difficult to control, not always fully preventable, and may be irreversible.

TRAVEL PREPARATION

BEFORE YOU LEAVE

Prior to heading off on your adventures, you should always check to ensure that:

- The LP gas is off at the main valve switch
- All black and gray waste water tanks are empty, with the dump handles closed
- All electrical cords and exterior hoses are stored back into their respective compartments
- · Chassis fluid levels are at recommended levels
- · Chassis tire pressures are at recommended levels
- Chassis exterior lighting is functional
- · All exterior components are secure and closed
- All interior doors and drawers are closed and locked into position
- All interior components are secure and in place
- The furnace control switch on the touch screen is off
- The TV swing-out is locked into the stow position
- · Vents are in a closed & locked position
- · All cabinet doors are closed
- The driver and passenger cab seats are in the forward facing, locked position
- The campsite is left in better condition than when you arrived
- The Lagun table is stored away or locked into travel position

WHILE IN MOTION

While in motion, set the refrigerator to operate in DC mode. Use of any other appliance is not recommended while the motorhome is in motion.

- Always wear your seat belt when the vehicle is in motion.
- Only forward facing seats are equipped with seat belts.
- There are only four designated seating areas with seat belts that are safe to use while the vehicle is in motion.
- Ensure the power sofa is in the full upright position when using the rear seating locations.

WARNING: Do not use LP appliances while the vehicle is in motion.

UPON ARRIVAL AT YOUR SITE

Once you arrive at a site:

- Ensure your motorhome is parked in a level position so that your components will work at optimum performance. (Place a bubble level in the freezer shelf of the fridge to use as a base and level accordingly).
- Ensure all exterior vents are clear from obstructions.
- Ensure the black and gray water waste tank valves are closed. Hook up your 110 volt power cord to your coach and then to the site receptacle (if supplied at site). A surge protector is recommended.
- Hook up your fresh water hose to the city water pressure connection (if supplied at site), it is recommended for pressurized city water that you use a pressure regulator.
- · Turn the LP gas on.
- · Turn the water heater on.
- · Connect park cable (if supplied).

MOTORHOME SYSTEMS

LIQUID PROPANE GAS SYSTEM

LP appliances: Water Heater and Furnace.

Your motorhome is equipped with a Liquid Propane (LP) gas system that provides a fuel source to the appliances which are designed to use this gas for operation. The LP storage tank is located under the chassis in front of the rear axle on the driver side. Access to the LP tank and regulator is under the vehicle. The regulator is above the generator.

The water heater and furnace appliances require propane.

An LP gas regulator must always be installed with the diaphragm vent facing downward. Regulators that are not in compartments have been equipped with a protective cover. Make sure that the regulator vent faces downward and that the cover is kept in place to minimize vent blockage that could result in excessive gas pressure, causing fire or explosion.

The main propane shut-off switch is located in the driver side utility center. The propane fill and breather valve are located under the rear bumper on the passenger side.

NOTE: Your LP gas appliances may not light on the first try. There may be air in the LP gas lines that will dissipate as the gas pressurizes the lines.

IF YOU SMELL GAS:

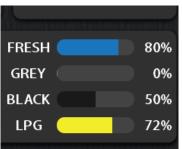
- 1. Extinguish any open flames and all smoking materials.
- 2. Do not touch any electrical switches.
- 3. Shut off the gas supply at the tank valve or gas supply connection.
- 4. Open all the doors and other ventilating openings.
- 5. Leave the area until the odor clears and you are sure there is no further risk to you.
- 6. Have the gas system checked and leakage source corrected before using it again.













WARNING: Do not bring or store LP gas containers, gasoline or other flammable liquids inside the vehicle because a fire or explosion may result. LP gas containers are equipped with safety devices that relieve excessive pressure by discharging gas into the atmosphere.

WARNING: It is not safe to use cooking appliances for comfort heating. Cooking appliances need fresh air for safe operation. Unlike homes, the amount of oxygen supply in the unit is limited due to the size of the vehicle. Proper ventilation when using the cooking appliance(s) will avoid the dangers of asphyxiation, explosion and CO poisoning.

WARNING: Do not use portable fuel burning equipment, including wood and charcoal grills and stoves inside the motorhome. The use of this equipment inside the recreational vehicle may cause fire or asphyxiation.

LP FILL VALVE & LP BLEEDER VALVE

The propane fill and breather valve are located on the driver's side behind the rear wheel. The breather valve must be open to fill the propane tank. Liquid will appear through the breather valve when the tank is 80% full.

WARNING: DO NOT FILL LP CONTAINER TO MORE THAN 80% CAPACITY. Overfilling the LP gas container can result in uncontrolled gas flow, which can cause a fire or explosion. A properly filled container will contain approximately 80% of its volume of LP gas.

BBQ QUICK CONNECT

The Propane quick connect is below the passenger side running board in front of the rear wheels. This is a regulated quick connect.

The BBQ quick connect is directly connected to the RV LP system. It is equipped with it's own shut-off valve (black handle). The quick connect is a regulated (low pressure) LP line that is supplied from the onboard LP tank. The BBQ quick connect works with the standard, full-flow male quick connect fitting. You will need a BBQ that is set-up for a low pressure LP source.

BASIC OPERATION:

- 1. Ensure the black valve is in the OFF position.
- 2. Remove the yellow cap and ensure the opening is clean.
- 3. Pull the sleeve of quick connect back and insert the male quick connect fitting.
- 4. Push the male fitting until the sleeve snaps forward, locking the fitting into the socket.
- 5. Connect your BBQ.
- 6. Turn the black valve ON to allow propane to flow to the connected BBQ.
- 7. Ensure the main LP switch in the Utility Center is ON.

LP TANK GAUGE

This gauge indicates how full the LP tank is. The LP gauge is located on the tank with a sending unit that sends levels to the touchscreen control panels. The panel will indicate full or 100% when the LP tank is 80% full.

HOW TO USE THE LP APPLIANCES

Turn ON the 12 volt battery disconnect switch, located below the entrance touchscreen control panel.

Turn ON the LP electric valve. (located in the driver side utility center).



ADANGER

All pilot lights, appliances and their lighters (see operating instructions) shall be tunned off before refueling of motor feet tunks and/or propane containers. Can cause ignition of flammable vapors, which can lead to a fire or explosion and result in death or serious

AWARNING

Do not fill propane containents) to more than 80 percen of capacity. A properly filled container contains approximately 80 percent of its volume as liquid propane.

Prentiting the propane container(s) can result is incontrolled propane flow, which could lead to a fire or explosion and result in death or serious injury.

AWARNING







NOTE: Propane will only flow from the BBQ quick connect when there is a hose connected. This is a safety feature of this component. The black valve must be in the OFF position to release the hose from the quick connect.









WATER HEATER

Please refer to the manufacturer's operating instructions for further information.

The water heater is located under the driver side ottoman cushion. You will have to remove the front ottoman cushion and cover panel to inspect water lines or adjust bypass valves. Access to the working mechanism of the water heater is through the outside, vent door located mid-body on the driver side.

TRUMA AQUAGO® COMFORT PLUS (DLE60CP)

The Truma AquaGo® Comfort Plus water heater is a hybrid water heater that combines the instant hot water source with a ½ gallon water tank, and a recirculation system to provide a continuous flow of hot water.

BASIC OPERATION:

- 1. Turn on the 12 volt battery disconnect switch.
- 2. Turn on the LP gas switch.
- 3. Turn on the water heater switch inside the exterior water heater door.
- 4. Turn the water heater switch to eco mode or comfort mode (see the Truma manual to determine which is right for you).
- 5. Start the water flow on hot at a medium flow and adjust to the desired temperature.





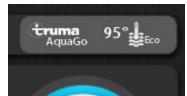












WATER HEATER BYPASS VALVES

OPEN: the handle is parallel to the water line. *CLOSED:* the handle is 90 degrees to the water line.

SUMMER MODE

OPEN the bypass valve on the red line (hot water), blue line (cold water) and white line (circulation).

CLOSE the bypass valve that connects the blue line from the bottom to the red line from the top.

WINTER MODE

CLOSE the bypass valve on the red line (hot water), blue line (cold water) and white line (circulation).

OPEN the bypass valve that connects the blue line from the bottom to the red line from the top.

SUMMER MODE



For winterizing instructions see page 23.

WINTER MODE



NOTE: Remove the water heater filter for winter storage.

FURNACE

Please refer to the manufacturer's operating instructions for further information.

Your vehicle is equipped with a Truma VarioHeat Comfort LP gas auto ignition furnace. The furnace is located under the driver side ottoman cushion. The thermostat control sensor is located above the sliding entrance door.

- 1. Ensure that there is propane supplied to the coach.
- 2. Ensure there is 12V power to the coach.
- 3. Turn on the Truma control from the touchscreen toggle through the MODE button options and select TRUMA VARIOHEAT.
- 4. The furnace fan will come on, the furnace will auto ignite and cycle through the fan and heating process. The furnace will maintain the desired temperature.

(see Truma VarioHeat manual for setting information)

NOTE: The furnace fan may come on when the air conditioner engages. Set the fan mode (on the touchscreen control panel) to automatic to prevent this from happening.

FAN AUTO





FRESHWATER SYSTEMS

The water system built into your motorhome provides full service similar to the system in your home. A 12-Volt self- priming pump draws pressurized water from the fresh water tank to all cold faucets and the water heater. An automatic pressure switch located in the water pump maintains a positive line pressure between 20 to 30 psi. The fresh and gray water tanks are located underneath the floor of the vehicle. The black water tank is located above the floor directly under the toilet.



To fill the freshwater tank, use the gravity water fill located midbody on the passenger side of the van. First, unlock the water fill compartment and remove the large cap; then place the water hose into the fill. Turn on the water to medium flow. There are two ways of knowing when your water tank is full:

- 1. By checking the monitor panel inside your coach.
- 2. When water flows back through the gravity fill.

FRESHWATER FILL AND DRAIN

NOTE: If you notice water running out from underneath the van, check the drain tap located on the side of the fresh water tank to ensure the valve is closed. This tap is there to help you drain your fresh water tank.







WARNING: Ensure you remove the key and close the fresh water fill door prior to closing the sliding side door.

FRESH WATER SYSTEM DRAINS

The fresh water tank drain is located under the passenger side at the rear of the vehicle. This drain is connected directly to your fresh water tank and will allow you to drain the fresh water tank when the vehicle is not in use.

The vehicle is also equipped with low point drain valves. These valves will allow you to drain all the fresh water lines in the vehicle. The low point drains are located on the driver's underside of the chassis at the water heater location. To use these drains ensure all water taps and the toilet valve are in an open position. There will three low point drain valves:

RED: Hot water line **BLUE:** Cold water line

WHITE: Recirculation line

CITY WATER CONNECTION

The city water connection is located in the driver side utility center. The city water connection is a convenience for you when you have access to an outside, pressurized water source. The city water system bypasses the fresh water holding tank and feeds the water lines directly so that you will not have to use the water pump. When hooking up the city water connection you should make sure that the water pump switch is turned OFF and that all water faucets are CLOSED.

- 1. Open the driver side utility center.
- 2. Remove the insert from the city water connection
- 3. Attach a garden hose to the connection using a rubber washer to ensure the fitting is tight.
- 4. Turn the water source on to medium pressure.
- 5. Check for leaks at the city water connection, as you may have to re-tighten this connection.

To disconnect the city water system, first turn off the water source, then open a faucet to relieve some of the pressure in the lines, and then unhook the water line.

DRAINING THE WASTE HOLDING TANKS

The black and grey water drain is located mid-body below the running board on the driver's side.

- 1. Press in the black and gray dump valve handles to ensure the valves are closed.
- 2. Remove the black termination cap.
- Remove the sewer hose from the storage container located on the driver side in front of the rear wheels. Connect the sewer hose to the drain outlet, and put the opposite end into an appropriate sewer dump outlet.









NOTE: It is advisable to use a water pressure regulator because excessive pressure may result in water line damage.



NOTE: Dump your black water first to allow your gray water to flush the black water through the sewer hose.

4. Open the termination valve on the black water holding tank (black handle). Once this tank is empty, open the valve for the gray water holding tank (grey handle).

NOTE: A garden hose may be left running into the toilet with the valve open to further rinse the tank and sewer hose.

- 5. Close the termination valves and replace the cap. Rinse and replace your sewer hose back in its compartment.
- 6. Deodorize the empty tank by adding one gallon of water mixed with commercial holding tank deodorizer to the tank.

NOTE: If the black water holding tank is allowed to overfill, the overflow may back up through the toilet drain. If the gray water tank is allowed to overfill, the overflow may back up through the shower drain.

NOTE: If the gray water tank is allowed to overfill, the overflow may back up through the shower drain.

NOTE: If you are using a sewer hookup in a RV park, keep the valve closed until the holding tank is at least partially full, then drain. The large quantity of waste flow will provide more effective drainage and reduce tank stoppages.

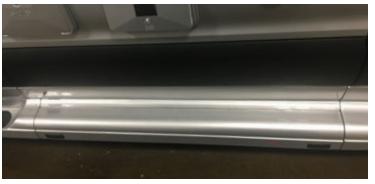
NOTE: Before using your black water holding tank, deodorize it by adding one US gal of water and commercial tank deodorizer through the toilet.

WASTE SYSTEM

Your motorhome is equipped with two waste tanks:

- 1. A black water tank is located below the toilet above the floor of the vehicle. Only the toilet water and solid waste enter this tank. This tank is approximately: 11 US gal/41.6 L.
- 2. A gray water tank is located in the driver side of the vehicle. This tank holds wastewater from the sinks and shower. This tank is approximately 15 US gal/56.8 L.

Before using your black water holding tank, deodorize it by adding one gallon of water and commercial tank deodorizer through the toilet.





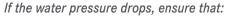


WATER PUMP

Remove drawer under microwave to access. The water pump has a removable filter that should be checked regularly.

The inline flow filter is located on the inlet side of the water pump. If the pump will not prime, ensure:

- · there is water in the holding tank
- that the battery is not run down
- the water lines are tight to the pump and to the filter
- there are no leaks at the inlet fitting and filter (if air is leaking into inlet fittings, tighten fittings or apply clamps as necessary)
- · the inline flow filter is clean



- · the faucet aerators are clean
- there is water in the holding tank
- the battery is not run down
- · the faucets and connections are free of leaks

If the pump runs when there is no apparent demand for water, ensure that:

- there is water in the holding tank
- · all faucets and fixtures are shut off and not leaking
- · the water lines are free of leaks

TOILET

Please refer to the manufacturer's operating instructions for further information.

TOILET TROUBLE SHOOTING:

WATER KEEPS RUNNING IN THE BOWL:

check to see if the foot lever is all the way up. Sticking may be caused by foreign material on the waste valve blade seal at the bottom of the toilet bowl. If the problem persists, you may need to replace the water valve.

THE TOILET LEAKS AND THERE IS WATER ON THE FLOOR:

if the leak is at the back of the toilet, check the water supply line connection and refer to the manufacturer's installation instructions. If the leak is at the toilet flange area (where the toilet mounts to the floor), check the toilet flange nuts and tighten them if necessary.

POOR FLUSH PRESSURE:

the lever must be held fully down during the flush. An adequate flush should be obtained within 2 to 3 seconds. If the problem persists, remove the water supply line and check the water supply. The water supply rate should be at least 10 litres/2.5 US gal per minute to ensure an adequate flush.



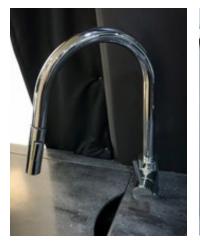






KITCHEN FAUCET (DEHCO HCO 82H37-CHR)

With the faucet handle in the OFF position, the faucet may continue to drip for a short period of time or when the vehicle is moving. Water is retained in the faucet spout.





COOKTOP

Please refer to the manufacturer's operating instructions for further information.

The vehicle is equipped with an induction cooktop located in the kitchen countertop. The GFCI for the induction cooktop is located in the cabinet above the TV.



MICROWAVE

Please refer to the manufacturer's operating instructions for further information.

Your microwave operates off of 110 volt AC power only. To use your microwave you must be plugged into shore power, have the generator operating, or use the 2000 watt inverter. The GFCI for the microwave is located in the cabinet above the TV.

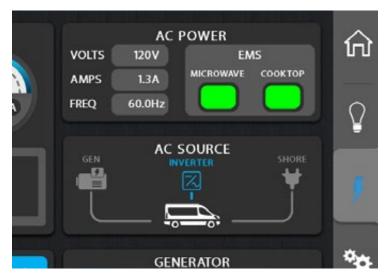
NOTE: You will not be able to run your microwave at the same time as your rooftop air conditioner if you are running on generator power.



THE EMS (ENERGY MANAGEMENT SYSTEM)

The EMS monitors two of the heavy amperage draw appliances (MICROWAVE/CONVECTION OVEN and the INDUCTION COOKTOP) installed in the coach. This ENERGY MANAGEMENT SYSTEM will limit the combined amperage draw of these two appliances. If the amperage draw exceeds the parameters of the management system, the microwave GREEN display will turn to RED and the microwave will be shut OFF. Once the amperage draw from the cooktop drops below the threshold, the microwave will return to green and the microwave can be reactivated.

NOTE: The microwave will turn back on (green light will turn on) after approx. 60 seconds if the cooking power is reduced, or if the induction is turned off.



REFRIGERATOR

Please refer to the manufacturer's operating instructions for further information.

Your vehicle is equipped with a Norcold N1090BR refrigerator. The power and temperature settings are located at the top of the fridge. To adjust temperature, select the snow flake at the top of the fridge.

NOTE: It is recommended that you keep the vehicle level for best cooling results.



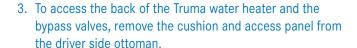


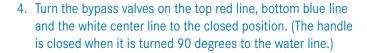


WINTERIZING

WINTERIZING THE WATER SYSTEMS

- 1. Drain the fresh water tank by opening the drain tap on the fresh water tank.
- 2. Drain and flush the black and gray water holding tanks.





Open the valve that is located where the blue line coming up from the bottom and the red line coming down from the top are connected.

5. Open the exterior door to the Truma water heater. Turn the electrical switch to the OFF position. Open the water heater drain by lifting the black latch on the top of the yellow easy drain lever. Lower the drain lever until the water filter opens.

- 6. With the filter removed, inspect and clean the water filter. Inspect the "O" rings on the filter as found on page 16 of the Truma water heater manual. Remove the filter for winter.
- * Please follow the Truma recommendations for decalcification of the water heater. These instructions can be found on page 16 of the Truma water heater manual.





















7. Remove the water line from the inlet side of the water pump (this is the clear plastic line going into the water pump filter). Connect a siphon hose to the inlet side of the water pump and place the other end in a container of non-toxic, RV antifreeze. Turn on the pump to pump non-toxic RV antifreeze through all of your fresh water lines.

NOTE: Siphon hose consists of 40" of ½" clear tubing with a fitting to attach to the water pump. The fitting can be purchased through an RV dealer.

- 8. Open the kitchen faucet, exterior shower faucet and interior bathroom shower one at a time allowing the antifreeze to flow through both the hot and the cold sides. Open the toilet valve, allowing the antifreeze to flow into the toilet bowl. Turn off the water pump and disconnect the siphon hose. Reattach the original fresh water supply fitting.
- 9. Pour ½ cup of non-toxic, RV antifreeze down each drain (kitchen sink and shower drain).
- 10. Open the low point drain valve on the white water line for water heater recirculation. The low point drains are located behind the waste holding tanks (driver side).
- 11. Open your grey and black water tank valves one last time to ensure all water from the holding tanks is completely drained. Once drained, close your grey and black tank valves for winter.













OPTIONAL WINTERIZING FOR MILDER CLIMATES

Follow steps above #1-6

- 7. Open all three low point drain valves in the locations listed in step 9.
- 8. Connect a blowout valve to the city water inlet. Connect an compressed air source.
- Open each tap (bathroom, kitchen, exterior shower, and toilet) both hot and cold. Allow the air to blow the remaining water out of the taps and valves. Fully drain the system. Leave all taps, toilet valve and drain valves in an open position.
- 10. Pour $\frac{1}{2}$ cup of non-toxic, RV antifreeze down each drain.

WINTER USE

We recommend that the water system not be used when the outside temperature drops below the freezing point. You should ensure that your unit is completely winterized by that time. If it is necessary to use the water system, we suggest that you bring containers of fresh water with you and add non-toxic, RV antifreeze to the gray and black water holding tanks.

NOTE: Keep in mind that as you add more water to the holding tanks the antifreeze will dilute beyond the recommended amount and may start to freeze earlier at cold temperatures. Do not use the exterior shower.

WINTER STORAGE ELECTRICAL

- 1. Fully charge your engine starting and coach batteries.
- 2. Turn OFF the charge line disconnect switch.
- 3. Turn OFF the battery disconnect switch on the entrance touchscreen control panel.
- It is recommended that you start and run your vehicle for a short period of time each month.
- It is recommended that you start and run your generator under load for at least a ½ hour per month.
- It is recommended that the fridge door be left slightly open to allow air to circulate through the fridge cabinet during a storage period.
- It is recommended that the vehicle be driven or moved forward or backward, if possible, to avoid flat spotting of the vehicle tires.
- The lithium batteries should not be charged if the battery thermostat is reading below freezing (32 F or 0 C).
- If the interior of the coach is below freezing, you must warm
 the inside up to bring the temperature of the interior batteries
 above freezing before exercising the generator. Opening the
 battery box door will help the batteries warm up faster.





LIVING AREA ELECTRICAL SYSTEM

The motorhome living area, electrical system is designed for convenience. It is capable of supplying the vehicle with at least two sources of power: 12 volt DC power and 110-120 volt AC power.

The 12 volt auxiliary batteries supply power to the interior components (except the roof air conditioner) for short-term use. The 12 volt or DC power supplies an AC 110-120 volt current to the interior plug outlets, the entertainment center and the microwave through the 2000 watt Pure-sine wave inverter.

The auxiliary coach battery bank is charged when the chassis engine is running the red key disconnect switch is in the ON position or when you are connected to a 110-120 volt power source (shore power or generator). Your vehicle may also be equipped with solar panels. These solar panels will charge the auxiliary coach battery if the red key disconnect switch is in the ON position.

For long term use, your vehicle may be powered by plugging into a 110-120 volt external power source with the supplied 25 foot power cable. The 25 foot power cable supplied with your coach must be connected and locked to your coach and then to a 110 - 120 volt power source (a 30 amp outlet is recommended). This will supply 110-120 volt power throughout the interior and supply power through a power inverter to all 12 volt components. Do not run the air conditioner unless you are plugged into a minimum 20 amp power source.

Your motorhome is equipped with a Pure-sine wave 2000 watt Xantrex Freedom XC Inverter Charger. The charging portion of the Freedom XC is set to LFP to charge the lithium ion phosphate batteries. The Freedom XC also converts 110 volt into 12 volt to operate 12 volt appliances when plugged into 110/120 volt power or while running the generator. The inverter takes the 12 volt or DC power from your batteries and inverts it up to 110-120 volt AC power. The inverter will enable you to use your 110-120 volt plug outlets, entertainment center and microwave when a shore power source or generator source is unavailable. This power source will be limited by the state of charge of your batteries and by the amount of current drawn by each appliance. The inverter has a built-in transfer switch that allows the 110-120 volt power to bypass the inverter and power the 110-120 volt plug outlets, entertainment center and microwave directly, when the motorhome is plugged into a shore power source or running on the generator.

110-120 VOLT OR AC EQUIPMENT

TV, Blu-ray player & soundbar when on a generator or shore power source

110/12 volt power Inverter/Charger

Microwave when on a generator or shore power source

Cooktop

Air Conditioner

110/12 volt power inverter/charger

12 VOLT OR DC EQUIPMENT

Touchscreen control panel

Inverter

Refrigerator

Solar controller

USB plugs

Water heater

Furnace

Water pump

Interior and exterior coach lights

TV atenna

LP gas & CO detector

Generator start

Power sofa

Fan-Tastic Vent® fan

Power awning

NOTE: Connect and lock the power cord to your coach first and then the external power source.

NOTE: All dash components including the in-dash radio and front map lights are powered through the starting (chassis battery. Prolonged use of these items when the vehicle is not running will deplete the engine starting battery.

AC 110-120 VOLT POWER

A 30 foot, 30 amp power cord is provided under the rear sofa. To activate all power circuits, connect and lock the power cord to your coach in the driver side utility center and to an adequate 110-120 volt power source. The power cord connections are rated for 30-amp 110-120 volts.

NOTE: The male end of the power cord is a 30 amp style plug, therefore, you may require an adapter to convert the plug into a 15 amp style plug or a 50 amp style plug.

NOTE: Most RV parks are equipped with 30-amp outlets. Remember to always attach the power cord to your coach first, and then to the power source.

WARNING: Ensure the power source for your vehicle is a 110-120 volt power source. A higher voltage or lower voltage outlet could do damage to your coach.



NOTE: Connect and lock the power cord to your coach first and then the external power source.

AUTOMATIC TRANSFER SWITCH

Please refer to the manufacturer's operating instructions for further information.

The automatic transfer switch is located under the ottoman cushion on the driver side. To access the transfer switch, remove the ottoman seat cushion and cover panel.

The automatic transfer switch will only allow your coach to get power from one source; either the generator or the shore power cord. This is a safety feature of this vehicle.



INVERTER/CHARGER

Please refer to the manufacturer's operating instructions for further information.

Your motorhome is equipped with a Pure-sine wave 2000 watt Xantrex Freedom XC Inverter Charger, located beneath the passenger side ottoman. The charging portion of the Freedom XC is set to LFP to charge the lithium ion phosphate batteries.

The Pure-sine wave inverter takes the 12 volt or DC power from your batteries and inverts it up to 110-120 volt AC power.

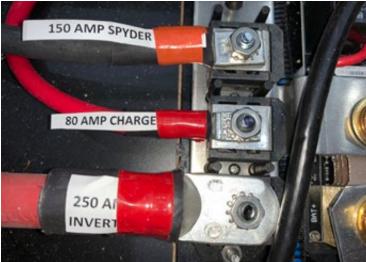
The inverter will enable you to use your 110-120 volt plug outlets, entertainment center, induction cooktop and microwave when a shore power source or generator source is unavailable. This power source will be limited by the state of charge of your batteries and by the amount of current drawn by each appliance. The inverter has a built-in transfer switch that allows the 110-120 volt power to bypass the inverter and power the 110-120 volt plug outlets, entertainment center, induction cooktop and microwave directly, when the motorhome is plugged into a shore power source or running on the generator.

The inverter has an automatic transfer switch built-into it so that if you are on shore power or generator power it bypasses the inverter. The inverter will draw .6 amps of DC power if it is turned on and no load is being drawn from the inverter. If no load is on the inverter it will turn itself off after 25 hours of continual operation.

The inverter is powered by the large red wires in the battery compartment. There is also a 250 amp mega- fuse in the system to protect the inverter and the coach.

CAUTION: Ensure all venting for the inverter is kept clear of blockage.







INVERTER/DISPLAY CONTROL PANEL

This control panel is located above the sliding door below the solar panel control.



Freedom XC Display Panel



Function Buttons

Button	Definition
ESC	return to default screen or exit setting mode
\Diamond	next screen or next selection
OK	to enter the setting mode or to confirm the setting
(h)	turns on inverter/charger operation or to Standby mode

NOTE: To turn the inverter on or off you must press and hold the power button on the inverter control panel for at least 1 second.

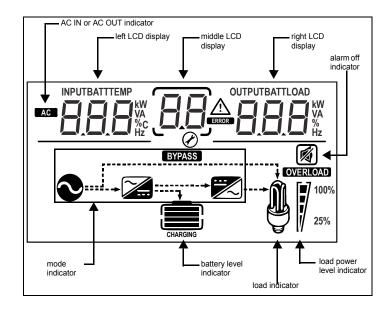
NOTE: This control panel will turn the inverter ON or OFF. The battery switch or charge line disconnect switch does not turn the inverter ON or OFF. Always confirm the inverter is in the OFF position when not in use.

The inverter/charger can draw .6 amps from your battery if left in the ON position while not in use.

Status LED Indicators

Indicator	Definition		
* # O solid green	Indicates grid mode in which shore power is available and passing through to the loads and charging the battery.		
* # O	Indicates Battery mode (Inverter mode) in which the inverter is running and supplying power to the loads from the battery.		
* ↑ ↑ ○ * □ ○ solid red	Indicates error or fault mode and is accompanied by an error code displayed on the LCD screen. For a list of error codes, see "Warning Messages" on page 64.		
# ↑ ↑ ↑ ∫lashing # □ ↑ flashing red	Indicates a Warning condition and is accompanied by an error code and a sounding alarm. For a list of error codes, see "Warning Messages" on page 64.		

The LCD Screen changes depending on the operating mode of the inverter.



AC ELECTRICAL DISTRIBUTION PANEL

Your motorhome is equipped with an AC distribution panel that houses the breakers for the 110-120 volt system. The distribution panel is located under the driver side ottoman. The breakers act like a household breaker; make sure the breaker is shut all the way off before you reset the breaker.

- 1. 30 Amp Inverter Input
- 2. 20 Amp Air Conditioner
- 3. 30 Amp Shore Power
- 4. 30 Amp Inverter Output
- 5. 20 Amp Microwave (GFCI Protected)
- 6. 15 Amp All Receptacles (GFCI Protected)
- 7. 20 Amp Induction Cooktop

NOTE: Check the GFCI for the individual appliance or plug outlets if the appliance is not operational.





GFCI OUTLETS

A ground fault circuit interrupter (GFCI) 110-volt receptacle located on the lower driver side ottoman provides protection against line-to-ground electrical shock hazards that could be harmful or even fatal. The outlets that are on this circuit are the exterior, kitchen and rear bench receptacles.

The GFCI receptacle must be tested at least once a month in accordance with the manufacturer's instructions.

The GFCI for the microwave and induction cooktop are located in the cabinet above the TV.

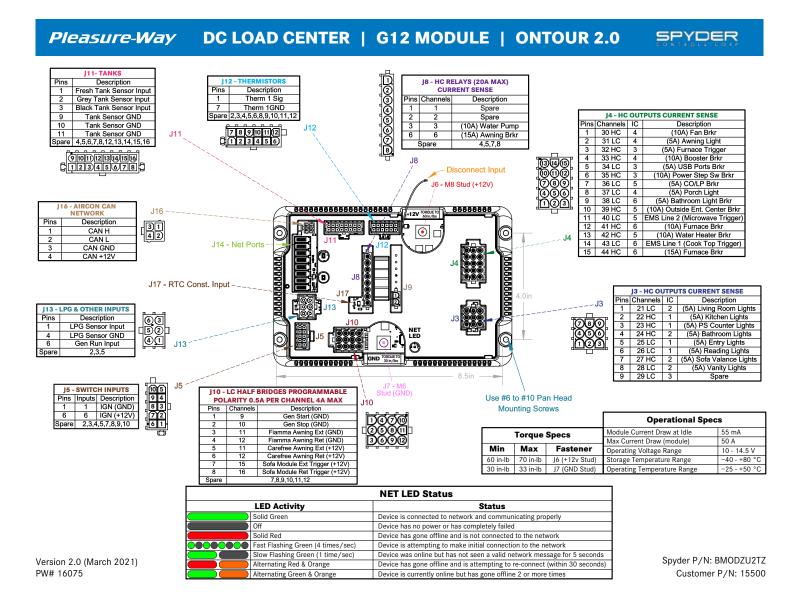
NOTE: The circuits must be powered to test or reset the GFCI. Check the GFCI for the individual appliance or plug outlets if the appliance is not operational.

DC LOAD CENTER

This load center is located in the cabinet below the driver side ottoman cushion. This DC load center controls all the multiplex wiring systems and the touch screen control panels.







DC BREAKERS

These are resettable breakers. When a breaker is tripped a black lever will swing out below the center bar. To reset the breaker, push the lever back up under the center bar.

To manually trip a breaker, press the red button.

50 AMP BATTERY DISCONNECT BREAKER

Located in the water heater bypass valve opening inside the driver side ottoman. Remove the cover panel to access. This breaker disconnects coach battery input to the DC load center.

80 AMP GENERATOR BREAKER

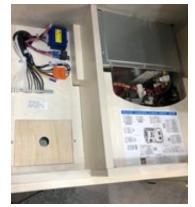
Located in the water heater bypass valve opening inside the driver side ottoman. Remove the cover panel to access. This breaker will disconnect the coach battery feed to the generator.

80 AMP INPUT AND OUTPUT BREAKERS FOR THE MASTERVOLT DC-DC CHARGER

These are located on top of the coach battery box, lift the cover panel next to the charge line disconnect switch (red key).

The 80 Amp Input breaker will disconnect the 150 amp charge line (from the alternator) to the Mastervolt DC-DC Charger.

The 80 Amp Output breaker will disconnect the Mastervolt DC-DC Charger to the charge line disconnect switch as well as the coach batteries.





80 AMP GENERATOR BREAKER







12 VOLT BATTERY DISCONNECT SWITCH

There is a 12 volt battery disconnect switch located by the main entrance door on the touchscreen control panel. This switch will stop all 12 volt power supplied to your coach from the auxiliary batteries.

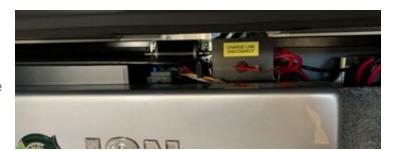
NOTE: If your vehicle is going to be parked and not in use for longer than a 48 hour period, turn this switch to the OFF position as the LP/CO detector is hard wired into the coach batteries and will eventually drain the batteries.

BATTERY

CHARGE LINE DISCONNECT

The charge line disconnect switch (red key) is located above the battery box. Access is through the driver side rear door. This charge line disconnect switch will not allow the batteries to charge from the alternator or solar panels. This battery disconnect can be used during battery servicing. It is off when the red key can be removed from the switch.

ON POSITION: red key is locked into the switch OFF POSITION: red key can be removed from the switch





MASTERVOLT DC-DC CHARGER

The DC to DC charger is located under the power sofa on the driver side of the battery box. Access to the charger is through the driver side rear door of the vehicle. Remove the battery cover and pull the carpet covered panel at the top near the battery box.

The charger takes 12 volt charge from the alternator and converts it to optimal charging for the battery bank.

The charger has a 2amp trigger fuse located on the right hand side of the Mastervolt. The charge line breakers are located under the cover panel on top or the battery box next to the disconnect switch.

(for more information see page 37)







TOUCHSCREEN CONTROL PANEL

Please refer to the touchscreen control panel manual for further information.

Your motorhome is equipped with two touchscreen control panels. They are located on the kitchen end panel next to the entrance and above the entertainment center in the rear lounge/bed area. Both touchscreen control panels control the living area functions of the motor home.

The menu buttons are located on the right hand side of the screen. There are five menu buttons to choose from: HOME, LIGHTS, POWER, MECHANICAL and SETTINGS.

LIGHTS

Each lighting area has its own button in the LIGHTS page. Select a light button to turn ON or OFF lighting associated with the area. Buttons will display in light blue when activated. Buttons with a sliding bar are capable of dimming.

REAL TIME LOSS/GAIN METER

This meter gives you the amperage draw of the components that you are using at any given time. It takes into consideration gain from the solar panel and other items that may be charging your batteries.

BATTERY METER

This battery voltage is for the coach batteries, the battery voltage will vary depending on the load being drawn and the state of charge. For example when the microwave is being used with the inverter, the voltage will drop and then return to a normal reading once the microwave is shut off.

TROUBLE SHOOTING THE DC/12 VOLT SYSTEM

- 1. Confirm that the 12 volt battery disconnect switch is in the ON position.
- 2. Confirm that there is 12 volt power from the coach battery (check battery voltage or start the vehicle engine).
- 3. Confirm that the inverter breaker is not tripped in the AC breaker panel.
- 4. To reset the DC load center for the coach (this includes all switches and controls), unplug the vehicle from shore power or shut off the generator. Turn off the 12 volt battery disconnect switch and allow the system to do a complete shutdown (this will only take a couple of minutes). Turn on the 12 volt battery disconnect switch and the system will be reset.











TROUBLE SHOOTING THE AC POWER

- Double check that you have a reliable power source to plug your power cord into. Verify that your power cord is properly attached to your motorhome. Test the outlet with another appliance.
- 2. Ensure that the GFCI has not been tripped. Press the TEST button and then reset the GFCI.
- 3. Confirm that the breakers in your distribution panel have not been tripped.

If you have power from shore power (electrical plug), but not from your generator:

4. Confirm that the breaker on the generator is not tripped.

If you have power from your generator, but not from shore power:

- 5. Check your shore power source (step 1).
- Ensure your automatic transfer switch is snapping shut.
 Inside the automatic transfer switch there is a set of points that are spring loaded. On occasion these points will not make proper contact.

Two methods to see if the automatic transfer switch is working properly are:

METHOD 1: START the generator. Wait for power in your coach to be fully engaged by the generator and then STOP the generator. Now, plug your power cord into a 110-120 volt electrical outlet. You may have to repeat this method a few times. (Always ensure that you unplug your power cord before starting your generator.)

METHOD 2: STOP the generator and unplug your motorhome from shore power. Locate and open the automatic transfer switch. Move the contact points back and forth to confirm they have free movement. Check between the points for any debris.

NOTE: If an individual appliance is not working ensure that the appliance is plugged in, check the breaker and GFCI for the individual appliance



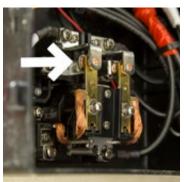












CHASSIS BATTERY

Please refer to the Ford Transit manual for information on maintaining and storing the chassis battery.

The engine starting battery is located below the driver's seat in the cab area of the vehicle. The engine starting battery and the coach battery are separated by the Mastervolt control system located at the rear of the coach.

NOTE: The chassis battery is only charged through the alternator when the motor is running. The inverter will not charge the engine starting battery.





COACH BATTERIES

ECO-ION EARTH SMART LITHIUM IRON PHOSPHATE (LIFEPO4) 12 VOLT 100 AH

Your motorhome is equipped with two coach batteries located under the rear sofa. These Eco-lon Earth Smart batteries consist of cells using lithium iron phosphate (LiFePO4) technology. Lithium iron phosphate battery chemistry is one of the safest on the market today.

Lithium batteries are different from lead-acid batteries. Lithium batteries voltage remains relatively constant while discharging, while voltage for a lead-acid battery decreases. A lithium battery can use 100% of its storage capability (measured as Amp-Hour, Ah); while a lead-acid battery typically only uses 50%. Lithium batteries power level will not drop-off, and it will last longer. When the lithium battery runs out of power it does so abruptly.

Access to the coach batteries is through the rear doors. The batteries are located under the power sofa.

- 1. Remove the Eco-lon cover panel (this panel is held by magnets).
- 2. Turn the thumb latches and fold down the battery door.

WARNING: Do not work on the batteries with the vehicle running, generator running or the vehicle plugged into shore power.







BATTERY MANAGEMENT SYSTEM

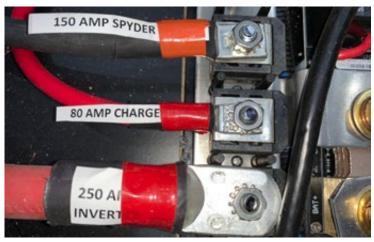
The Eco-lon Earth Smart batteries feature a built-in battery management system (BMS). The BMS automatically provides:

- Short circuit protection
- · Low voltage protection
- Cell balancing
- Overcharge protection
- Temperature protection

CHARGING

The Freedom XC inverter/charger and the Mastervolt DC-DC charger have been programmed to charge the coach batteries. The Go Power Solar panel charging system has been set to Lithium.

Both Eco-lon lithium batteries are fused with 150 amp fuses for the protection of your coach and the battery system. These fuses are located on top of the battery area and at the charging source.



MASTERVOLT DC-DC CHARGER



Alternator



80 Amp Charger **Input Breaker**



Mastervolt DC to DC Charger



80 Amp Charger **Output Breaker**



Charge Line Disconnect (red key)



Battery Shunt Fuse



Coach Batteries

INVERTER DC CHARGING SYSTEM



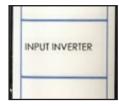
Shore Power or Generator



Automatic Transfer Switch



Distribution Panel



Distribution Panel Shore Power Breaker Input Inverter Breaker



Inverter DC Output



Battery Shunt Fuse



Coach Batteries

SOLAR PANEL CHARGING SYSTEM



Solar Panel Charging **System**



10 - 30 Amp **Fuse**



Touchscreen Control Panel



30 Amp Fuse



Charge Line Disconnect (red key)



Battery Shunt Fuse



Coach Batteries

WARNING: Do not charge your batteries below 32 degrees F or 0 degrees C. Charging the batteries when below these conditions may cause damage to the lithium cells and shorten the lifespan of the batteries. If you are using your coach in freezing temperatures turn the charge line disconnect switch OFF. This will disconnect the engine alternator and solar panels from charging the coach batteries. The coach batteries will continue to discharge and power your coach as normal in conditions up to -20 C or -4 F.

Caution

See user guide before using this battery. Burn hazard. Never charge the battery

without charge protection circuitry.

Do Not

- Disassemble, crush, puncture, or incinerate
- Short circuit external contacts
- Expose to temperatures above 140 °F (60°C)
- In series or parallel connections without permit
- Over-discharge the battery



For more information please ask your suppliers

12V100Ah LiFePO4 Battery

- Rating=12.8V,100Ah(5hr) 2. Max. input voltage 14.6V
 A. Cut-off voltage:10V
- Max. charging current: 100A
 Max. dischaging current: 100A
- 6. Peak discharging current: 350A(8)



STORAGE

When placing your vehicle into storage always ensure your coach batteries are fully charged and the 12 volt battery disconnect switch is in the OFF position. To extend the life of your lithium batteries it is recommended that the batteries be fully charged and kept above freezing temperatures when in storage. This may involve removing the lithium batteries from the coach and storing them in temperatures above freezing for winter storage.

WARNING: If the original lithium batteries need to be replaced, they must be replaced with LiFPo lithium batteries. The charging profiles of the coach are designed specifically for this type of lithium battery. Any replacement lithium batteries must have High/Low voltage protection, Short circuit protection, Over current protection and High temperature protection. You must not replace original lithium batteries with Lead Acid, Gel or AGM batteries. Failure to follow this warning can lead to a fire or explosion and result in death or serious injury.

AS MULTIPLE 12V SOURCES EXIST IN YOUR VEHICLE, ALL 12V SOURCES MUST BE TURNED OFF BEFORE SERVICING COACH **BATTERIES. DISCONNECTING COACH BATTERIES MAY NOT DE-ENERGIZE COACH BATTERY. REFER SERVICING TO** QUALIFIED TECHNICIANS.



THIS 12 VOLT ELECTRICAL SYSTEM HAS BEEN DESIGNED TO USE ECO ION LITHIUM ION BATTERIES ONLY.

DO NOT USE OR REPLACE WITH LEAD ACID, AGM OR GEL BATTERIES. DOING SO WILL CAUSE SEVERE DAMAGE AND VOID THE WARRANTY.

WARNING

This battery area/compartment is designed for the use of non-vented batteries only. Do not place a battery that requires venting into this area/compartment.

Vented batteries can release poisonous and flammable gases.

Can lead to a fire or explosion and result in death or serious injury.

GENERATOR

(ONAN RV QG 2800i - 2.8 HGLAA - 8302A)

The GENERATOR module will allow you to START and STOP the generator, check the HOUR METER and set the parameters and activate the AGS (AUTO GENERATOR START) system.

AUTOMATIC GENERATOR START (AGS)

This feature can be used to charge the coach batteries and/or for climate control in your coach.

To operate the AGS system the vehicle must be turned OFF, the 12V battery disconnect switch must be ON, propane switch ON, and the fuel must be on or at the appropriate level.

For the Ontour models, there must be at least 1/4 tank of gasoline.



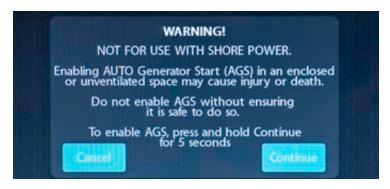


Select the AGS button to enable the AUTOMATIC GENERATOR START function. A display will appear with a warning and instructions. Touch and hold CONTINUE for 5 seconds to activate the AGS system. Once the system is activated it will return to the main POWER MANAGEMENT PAGE and the AGS will be in blue.

NOTE: It is recommended that you manually start the generator allowing it to run a short period of time before setting the AGS system. This will ensure adequate fuel and operation of the generator before relying on the AGS system to start the generator and power the appliances.

WARNING: Do not use the AUTOMATIC GENERATOR START if you are plugged into shore power, or if you are in an area where running the generator is prohibited.

WARNING: Ensure all windows and doors are closed on the vehicle while operating your generator. This will eliminate generator exhaust from entering your coach.





ARM DOWN INDICATES TRIPPED BREAKER

AGS EASY SETUP

Select EASY SETUP for a quick set up of the START parameters.

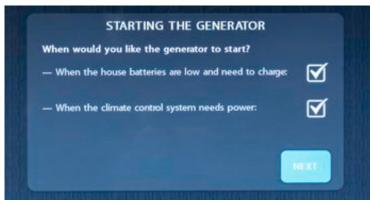
By touching EASY SETUP it will allow you to choose which items will trigger the AGS system. You can choose BATTERY CHARGING or CLIMATE CONTROL. To ACTIVATE or DEACTIVATE the systems touch the box next to the system you want to activate the AGS. A CHECK MARK symbol will appear when the system is active.

STARTING THE GENERATOR

The first page displayed will ask when you want the generator to AUTO START. Select the boxes to check or uncheck the reason to enable.

Select the NEXT button to continue.





STARTING CONDITIONS FOR LOW BATTERY

This page will enable you to set the PERCENTAGE OF BATTERY CHARGE when the AGS system is activated. The generator when running will charge the coach batteries through the inverter/charger.

Use the + and - buttons to adjust the settings.

Select the NEXT button to continue.

STOPPING CONDITIONS FOR LOW BATTERY

This page will enable you to set the PERCENTAGE OF BATTERY CHARGE at which point the generator will turn OFF.

Use the + and - buttons to adjust the settings.

Select the NEXT button to continue.

GENERATOR RUN LIMITS

This page will enable you to set the parameters for RUN TIME for the air conditioner settings. Once the air conditioner has brought the coach down to the chosen temperature and cycled off, the generator should continue to run for ten minutes.

It will also allow you to set the MAXIMUM run time for the generator.

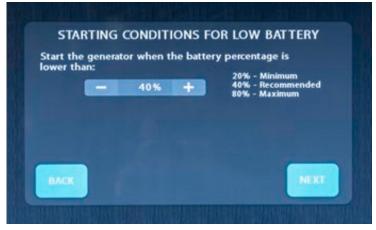
Use the + and - buttons to adjust the settings. Select the NEXT button to continue.

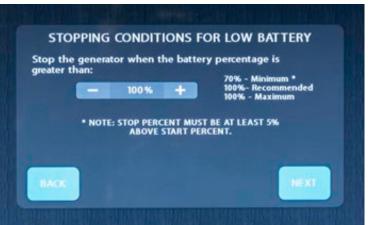
QUIET TIME SETTINGS

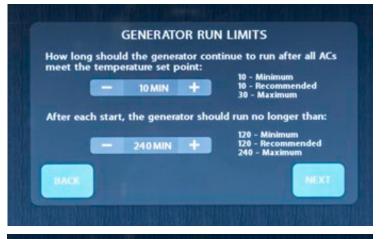
Select the box in the top right hand corner to enable or disable QUIET TIME settings. QUIET TIME settings allow you to determine when the generator will not be allowed to run.

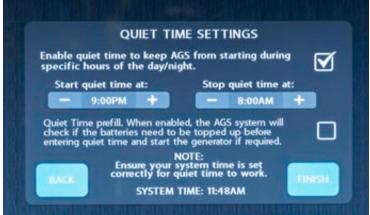
Select the box above the FINISH button to enable or disable a battery top up just before the system goes into QUIET TIME settings.

Select the FINISH button to complete EASY SETUP.









AGS MANUAL SETUP

Select MANUAL SETUP for more in depth set up choices, this will allow you to set all parameters for the AGS system. You can choose BATTERY or HVAC system to trigger the AGS. You can choose your RUN TIMES, QUIET TIMES and BATTERY CAPACITY for shut down parameters.

Touch FINISH when complete to return to the POWER MANAGEMENT main page. Touch AGS to enable the AGS system. Hold CONTINUE for 5 seconds to trigger the AGS system.

NOTE: If both the LOW BATTERY VOLTAGE and the HVAC LOADS are activated, whichever one needs the most run time to acquire the desired result will override the other setting.

NOTE: When AGS is used for the HVAC system (air conditioning), the appliance must be selected on the HOME page, the temperature must be selected and set on the HOME page, and the fan on the HOME page should be set to FAN AUTO.

START TRIGGERS

Select LOW BATTERY VOLTAGE or HVAC LOADS to turn on the required triggers for AUTO GEN START. Buttons will display in light blue when activated.

Use the + and - buttons to adjust the settings for:

- GENERATOR START PERCENTAGE
- NUMBER OF RESTART TRIES

RUNNING

Use the + and - buttons to adjust the settings for the GENERATOR RUN TIME. This applies to the HVAC setting.

STOPPING

Use the + and - buttons to adjust the settings for the PERCENTAGE OF BATTERY CHARGE before the generator will shut OFF. This applies to the LOW BATTERY VOLTAGE setting.

QUIET TIME

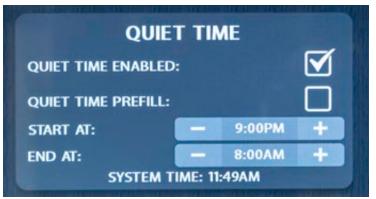
Select QUIET TIME button to set the parameters for the QUIET TIME settings.

Use the + and - buttons to adjust the settings.









MOTORHOME INTERIOR

INTERIOR COCKPIT MAP LIGHT

This is the Ford Transit light system. Please follow the vehicle manufacturer's instructions for operating procedures. This light is powered by the chassis (engine starting) battery and prolonged use will deplete the engine starting ability.

COOKTOP

The vehicle is equipped with an induction cooktop located in the kitchen countertop.

(for more information see page 21)





FURNACE

Your vehicle is equipped with a Truma Vario Heat Comfort US LP gas Auto Ignition Furnace. The furnace is located below the fridge and drawers, controlled through the 10" touchscreen.

(for more information see page 17)





REFRIGERATOR

Your vehicle is equipped with a Norcold N1090BR fridge.

(for more information see page 22)



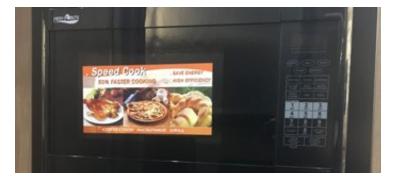


MICROWAVE

Please refer to the manufacturer's operating instructions for further information.

Your microwave operates off of 110 volt AC power only.

(for more information see page 21)



WATER HEATER

The water heater is located under the fridge next to the furnace vent.

(for more information see page 16)

(for winterizing instructions see page 23)

THERMOSTAT

Your vehicle is equipped with a Truma thermostat that controls the operation of the furnace and the water heater. The thermostat is operated from the 10" touchscreen.

(for more information see page 16 & 17)







AIR CONDITIONER

Please refer to the manufacturer's operating instructions for further information.

Your vehicle is equipped with the 11,000 BTU low profile Dometic air conditioner. From the ground to the top of the air conditioner it measures 10'. This is the highest point on your vehicle. Ensure you allow for this clearance when proceeding under overhead items.

The controls for the air conditioner are located on home page of the touchscreen control panels. Choose A/C on the touchscreen, set the chosen temperature and the fan speed for your comfort. If you wish for the A/C to cycle on and off choose auto for the fan speed. By choosing fan low or high the fan will continue to run and will not cycle on and off.

NOTE: When running the A/C in high heat or high humidity it is recommended the fan speed be set to HIGH and open all vents on inner ceiling assembly. This will help avoid condenser freeze up.





KITCHEN FAUCET

The vehicle is equipped with a Dehco HCO 82H37-CHR faucet, located in the galley.

(for more information see page 21)





FAN-TASTIC VENT® FAN

Please refer to the manufacturer's operating instructions for further information.

Located on the roof near the bathroom door, the fan assists in exhausting odors and steam from the bathroom and cooking area. This fan is an exhaust fan used to draw air out of the coach. The controls for the fan are located on the 10" touchscreen controls on the mechanical page, it's also controlled by the thermostat. Ensure the temperature of the thermostat is higher than the inside temperature. Choose the + and – buttons to increase/decrease the speed of the fan. To open/close the fan, select the LID UP or LID DOWN button. Select the FAN button to start the fan.

NOTE: The fan is equipped with a rain sensor so the fan cannot be operated when it is raining. The fan cannot be operated when the fan lid is closed.







SOLAR PANEL PACKAGE

Please refer to the manufacturer's operating instructions or your touchscreen manual for further information.

Your vehicle is equipped with 200 watt Carmanah solar panel package located on the roof. The Go Power solar panel info is displayed on the touchscreen under the POWER MANAGEMENT page. The MPPT controller is located near the coach batteries.

The solar panels will charge the coach batteries even when the 12 volt battery disconnect is in the OFF position. To prevent the solar panels from charging coach batteries you must turn OFF the charge line disconnect (red key).

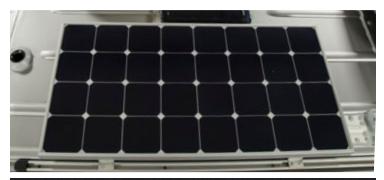
There are 2 solar panel fuses. They are located:

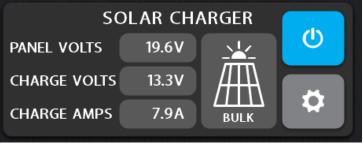
- 1. In the cabinet above the fridge (30 Amp). Remove the back wall of the cabinet to access this fuse.
- 2. Next to the charge line disconnect switch. (30 Amp)

NOTE: Ensure the solar panels are clean for optimal charging output.

CAUTION: To ensure your solar panels are not active when servicing the batteries it is advised to cover the solar panels.

CAUTION: Turn OFF the charge line disconnect if the vehicle is going to be in storage for a period of time or in sustained freezing conditions without internal heat.











USB CHARGING PORT

Your motorhome is equipped with 2 USB charging ports. The driver and passenger side rear ottoman each feature a USB charging port.

Each charging port features 2 USB slots that will fit a USB type A connector. The 12 volt battery disconnect switch must be ON to power the USB ports. The USB ports are protected by the Spyder Controls G12 panel.





TV AND BLU-RAY

Please refer to the manufacturer's operating instructions for further information.

Your motorhome is equipped with TV and Blu-ray/DVD components. You will find these located in the entertainment center. These two components are powered by a 110 volt power source (inverter, shore power or generator).

COMPONENTS:

- 1. 24" Smart LED TV
- 2. Blu-ray /DVD player
- 3. Bose® Solo 5 soundbar w/Bluetooth®
- 4. Antenna with booster

The antenna is a dome style antenna designed to receive digital signals. The antenna control is located inside the closet below the Blu-ray player, it features a search option for bringing in the best reception possible.

Antenna should remain off if you are connected to park cable.

NOTE: Your Blu-Ray player is a player only and will not record. To play a CD or MP3 the TV flat screen must be in the on position.

NOTE: When traveling, the TV should be in the locked position.





12 VOLT OR DC OPERATION

- 1. Turn the inverter ON. Ensure the TV and Blu-ray player are plugged into the wall outlet located above the Blu-ray player in the cabinet.
- 2. Turn the antenna booster ON by pressing the black button on the antenna booster. Press the search button.
- 3. Turn the TV ON and select DTV-TV using the input button on your TV or remote.
- 4. Press the SETTINGS button (gear symbol) > All Settings > Channels > Channel Tuning > Auto Tuning to bring in all local air channels.
- 5. For Cable TV connect a cable extension cord from the cable hookup in the component compartment to the park cable outlet. Turn the TV antenna booster off. Follow step (4) for auto programming.
- For Blu-ray operation, turn ON the Blu-ray player. Using the source button on the TV or TV remote, select HDMI 1. Insert a DVD or Blu-ray disc and allow the disc to load and press play.

FOR 120 VOLT OR A/C OPERATION

When using a generator or shore power, the inverter will switch to grid mode. Use the same programming procedures as the 12 volt operation.

TABLE

The Lagun Table leg system is constructed of heavy anodized aluminum, and swivels 360 degrees.

- 1. Remove the table and leg from behind the driver seat.
- 2. Remove the table leg from the base of the table by loosening off the black locking handle.
- 3. Slide the leg into the leg support located on the passenger side ottoman and tighten the locking handle.
- 4. Press the table top onto the leg and tighten the locking handle.
- 5. You can now adjust the table to the desired height and location, ensuring the locking handles are locked in place while the table is in use.

WARNING: Ensure Lagun table is stored or locked into travel position when driving.







NOTE: To save power while watching TV ensure the Blu-ray player is switched OFF. Only turn your Blu-ray player on when in use.

NOTE: Turn ON the inverter. The inverter will be used if you are not plugged into shore power.











FRONT CAB PRIVACY SHADES

Fully form fitting to your windshield and cab doors, these shades provide total privacy up front when needed.

- 1. Driver and passenger shades are magnetic.
- 2. Windshield shade is held in place with the visors.



BED LAYOUT

- Adjust the sofa position by pressing the EXTEND or RETRACT button on your touchscreen control panel (above the TV).
 The SOFA settings are under the MECHANICAL page.
- 2. Remove the bed boards from the closet
- 3. Place the two bed boards on the ottoman rails.
- 4. Place the ottoman backrests between the seat cushions.

WARNING: Do not EXTEND or RETRACT while in use











JACK AND JACK TOOLS

The jack and jack tools are located under the passenger seat and in the compartment in the passenger step well. The flat repair kit is located below the sofa at the rear of the coach.

NOTE: There is no spare tire included with this vehicle. For your convenience a flat repair kit that includes a tire repair liquid and an air compressor has been provided under the rear sofa against the outside wall.





TIRE SAFETY





The following information has been acquired from the NHTSA website.

EVERYTHING RIDES ON IT

Studies of tire safety show that maintaining proper tire pressure, observing tire and vehicle load limits (not carrying more weight in your vehicle than your tires or vehicle can safely handle), avoiding road hazards, and inspecting tires for cuts, slashes, and other irregularities are the most important things you can do to avoid tire failure, such as tread separation or blowout and flat tires. These actions, along with other care and maintenance activities, can also:

- Improve vehicle handling
- Help protect you and others from avoidable breakdowns and accidents
- Improve fuel economy
- Increase the life of your tires.
- This booklet presents a comprehensive overview of tire safety, including information on the following topics:
- Basic tire maintenance
- Uniform Tire Quality Grading System
- · Fundamental characteristics of tires
- Tire safety tips.
- Use this information to make tire safety a regular part of your vehicle maintenance routine. Recognize that the time you spend is minimal compared with the inconvenience and safety consequences of a flat tire or other tire failure.

SAFETY FIRST-BASIC TIRE MAINTENANCE

Properly maintained tires improve the steering, stopping, traction, and load-carrying capability of your vehicle. Under-inflated tires and overloaded vehicles are a major cause of tire failure.

Therefore, as mentioned above, to avoid flat tires and other types of tire failure, you should maintain proper tire pressure, observe tire and vehicle load limits, avoid road hazards, and regularly inspect your tires.

FINDING YOUR VEHICLE'S RECOMMENDED TIRE PRESSURE AND LOAD LIMITS

Tire information placards and vehicle certification labels contain information on tires and load limits. These labels indicate the vehicle manufacturer's information including:

- Recommended tire size
- Recommended tire inflation pressure
- Vehicle capacity weight (VCW-the maximum occupant and cargo weight a vehicle is designed to carry)
- Front and rear gross axle weight ratings (GAWR- the maximum weight the axle systems are designed to carry).
- Both placards and certification labels are permanently attached to the vehicle door edge, door post, glove-box door, or inside of the trunk lid. You can also find the recommended tire pressure and load limit for your vehicle in the vehicle owner's manual.

UNDERSTANDING TIRE PRESSURE AND LOAD LIMITS

Tire inflation pressure is the level of air in the tire that provides it with load-carrying capacity and affects the overall performance of the vehicle. The tire inflation pressure is a number that indicates the amount of air pressure—measured in pounds per square inch (psi)—a tire requires to be properly inflated. (You will also find this number on the vehicle information placard expressed in kilopascals (kPa), which is the metric measure used internationally.)

Manufacturers of passenger vehicles and light trucks determine this number based on the vehicle's design load limit, that is, the greatest amount of weight a vehicle can safely carry and the vehicle's tire size. The proper tire pressure for your vehicle is referred to as the "recommended cold inflation pressure." (As you will read below, it is difficult to obtain the recommended tire pressure if your tires are not cold.)

Because tires are designed to be used on more than one type of vehicle, tire manufacturers list the "maximum permissible inflation pressure" on the tire sidewall. This number is the greatest amount of air pressure that should ever be put in the tire under normal driving conditions.

CHECKING TIRE PRESSURE

It is important to check your vehicle's tire pressure at least once a month for the following reasons:

- Most tires may naturally lose air over time.
- Tires can lose air suddenly if you drive over a pothole or other object or if you strike the curb when parking.
- With radial tires, it is usually not possible to determine underinflation by visual inspection.
- For convenience, purchase a tire pressure gauge to keep in your vehicle. Gauges can be purchased at tire dealerships, auto supply stores, and other retail outlets.
- The recommended tire inflation pressure that vehicle
 manufacturers provide reflects the proper psi when a
 tire is cold. The term cold does not relate to the outside
 temperature. Rather, a cold tire is one that has not been
 driven on for at least three hours. When you drive, your tires
 get warmer, causing the air pressure within them to increase.
 Therefore, to get an accurate tire pressure reading, you must
 measure tire pressure when the tires are cold or compensate
 for the extra pressure in warm tires.

STEPS FOR MAINTAINING PROPER TIRE PRESSURE

- 1. Locate the recommended tire pressure on the vehicle's tire information placard, certification label, or in the owner's manual.
- 2. Record the tire pressure of all tires.
- 3. If the tire pressure is too high in any of the tires, slowly release air by gently pressing on the tire valve stem with the edge of your tire gauge until you get to the correct pressure

- 4. If the tire pressure is too low, note the difference between the measured tire pressure and the correct tire pressure. These "missing" pounds of pressure are what you will need to add.
- 5. At a service station, add the missing pounds of air pressure to each tire that is underinflated.
- 6. Check all the tires to make sure they have the same air pressure (except in cases in which the front and rear tires are supposed to have different amounts of pressure).

If you have been driving your vehicle and think that a tire is under-inflated, fill it to the recommended cold inflation pressure indicated on your vehicle's tire information placard or certification label. While your tire may still be slightly under-inflated due to the extra pounds of pressure in the warm tire, it is safer to drive with air pressure that is slightly lower than the vehicle manufacturer's recommended cold inflation pressure than to drive with a significantly under-inflated tire. Since this is a temporary fix, don't forget to recheck and adjust the tire's pressure when you can obtain a cold reading.

TIRE SIZE

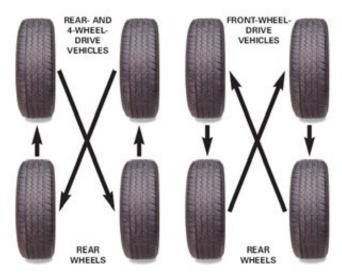
To maintain tire safety, purchase new tires that are the same size as the vehicle's original tires or another size recommended by the manufacturer. Look at the tire information placard, the owner's manual, or the sidewall of the tire you are replacing to find this information. If you have any doubt about the correct size to choose, consult with the tire dealer.

TIRE TREAD

The tire tread provides the gripping action and traction that prevent your vehicle from slipping or sliding, especially when the road is wet or icy. In general, tires are not safe and should be replaced when the tread is worn down to 1/16 of an inch. Tires have built-in tread wear indicators that let you know when it is time to replace your tires. These indicators are raised sections spaced intermittently in the bottom of the tread grooves. When they appear "even" with the outside of the tread, it is time to replace your tires. Another method for checking tread depth is to place a penny in the tread with Lincoln's head upside down and facing you. If you can see the top of Lincoln's head, you are ready for new tires.

TIRE BALANCE AND WHEEL ALIGNMENT

To avoid vibration or shaking of the vehicle when a tire rotates, the tire must be properly balanced. This balance is achieved by positioning weights on the wheel to counterbalance heavy spots on the wheel-and-tire assembly. A wheel alignment adjusts the angles of the wheels so that they are positioned correctly relative to the vehicle's frame. This adjustment maximizes the life of your tires and prevents your car from veering to the right or left when driving on a straight, level road. These adjustments require special equipment and should be performed by a qualified technician.



A TIRE ROTATION EXAMPLE

For maximum mileage, rotate your tires every 5,000 miles. Follow correct rotation patterns.

TIRE ROTATION

Rotating tires from front to back and from side to side can reduce irregular wear (for vehicles that have tires that are all the same size). Look in your owner's manual for information on how frequently the tires on your vehicle should be rotated and the best pattern for rotation.

TIRE REPAIR

The proper repair of a punctured tire requires a plug for the hole and a patch for the area inside the tire that surrounds the puncture hole. Punctures through the tread can be repaired if they are not too large, but punctures to the sidewall should not be repaired. Tires must be removed from the rim to be properly inspected before being plugged and patched.

TIRE FUNDAMENTALS

Federal law requires tire manufacturers to place standardized information on the sidewall of all tires. This information identifies and describes the fundamental characteristics of the tire and also provides a tire identification number for safety standard certification and in case of a recall.

UNIFORM TIRE QUALITY GRADING SYSTEM (UTQGS)

To help consumers compare a passenger car tire's tread wear rate, traction performance, and temperature resistance, the federal government requires tire manufacturers to grade tires in these three areas. This grading system, known as the Uniform Tire Quality Grading System, provides guidelines for making relative comparisons when purchasing new tires. You also can use this information to inquire about the quality of tires placed on new vehicles.

Although this rating system is very helpful when buying new tires, it is not a safety rating or guarantee of how well a tire will perform or how long it will last. Other factors such as personal driving style, type of car, quality of the roads, and tire maintenance habits have a significant influence on your tire's performance and longevity.

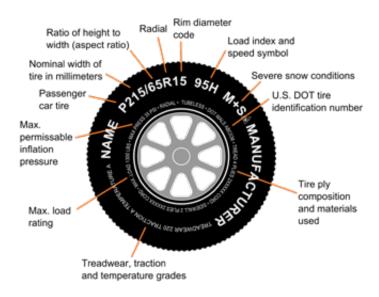
Treadwear grades are an indication of a tire's relative wear rate. The higher the treadwear number is, the longer it should take for the tread to wear down. For example, a tire grade of 400 should wear twice as long as a tire grade of 200.

Traction grades are an indication of a tire's ability to stop on wet pavement. A higher graded tire should allow you to stop your car on wet roads in a shorter distance than a tire with a lower grade. Traction is graded from highest to lowest as "AA", "A", "B", and "C".

Temperature grades are an indication of a tire's resistance to heat. Sustained high temperature (for example, driving long distances in hot weather), can cause a tire to deteriorate, leading to blowouts and tread separation. From highest to lowest, a tire's resistance to heat is graded as "A", "B", or "C".

INFORMATION ON PASSENGER VEHICLE TIRES

Please refer to the diagram below.



P

The "P" indicates the tire is for passenger vehicles.

NEXT NUMBER

This three-digit number gives the width in millimeters of the tire from sidewall edge to sidewall edge. In general, the larger the number, the wider the tire.

NEXT NUMBER

This two-digit number, known as the aspect ratio, gives the tire's ratio of height to width. Numbers of 70 or lower indicate a short sidewall for improved steering response and better overall handling on dry pavement.

R

The "R" stands for radial. Radial ply construction of tires has been the industry standard for the past 20 years.

NEXT NUMBER

This two-digit number is the wheel or rim diameter in inches. If you change your wheel size, you will have to purchase new tires to match the new wheel diameter.

NEXT NUMBER

This two- or three-digit number is the tire's load index. It is a measurement of how much weight each tire can support. You may find this information in your owner's manual. If not, contact a local tire dealer. Note: You may not find this information on all tires because it is not required by law.

M+S

The "M+S" or "M/S" indicates that the tire has some mud and snow capability. Most radial tires have these markings; hence, they have some mud and snow capability.

SPEED RATING

The speed rating denotes the speed at which a tire is designed to be driven for extended periods of time. The ratings range from 99 miles per hour (mph) to 186 mph. These ratings are listed below. Note: You may not find this information on all tires because it is not required by law.

Letter Rating	Speed Rating
Q	99 MPH
R	106 MPH
S	112 MPH
Ţ	118 MPH
U	124 MPH
Н	130 MPH
ν	149 MPH
W	168 MPH
Υ	186 MPH

For tires with a maximum speed capability over 149 mph, tire manufacturers sometimes use the letters ZR. For those with a maximum speed capability over 186 mph, tire manufacturers always use the letters ZR.

U.S. DOT TIRE IDENTIFICATION NUMBER

This begins with the letters "DOT" and indicates that the tire meets all federal standards. The next two numbers or letters are the plant code where it was manufactured, and the last four numbers represent the week and year the tire was built. For example, the numbers 3197 means the 31st week of 1997. The other numbers are marketing codes used at the manufacturer's discretion. This information is used to contact consumers if a tire defect requires a recall.

TIRE PLY COMPOSITION AND MATERIALS USED

The number of plies indicates the number of layers of rubber-coated fabric in the tire. In general, the greater the number of plies, the more weight a tire can support. Tire manufacturers also must indicate the materials in the tire, which include steel, nylon, polyester, and others.

MAXIMUM LOAD RATING

This number indicates the maximum load in kilograms and pounds that can be carried by the tire.

MAXIMUM PERMISSIBLE INFLATION PRESSURE

This number is the greatest amount of air pressure that should ever be put in the tire under normal driving conditions.

UTQGS INFORMATION

TREADWEAR NUMBER

This number indicates the tire's wear rate. The higher the treadwear number is, the longer it should take for the tread to wear down. For example, a tire graded 400 should last twice as long as a tire graded 200.

TRACTION LETTER

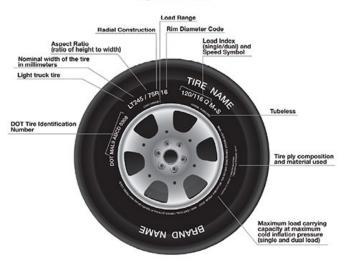
This letter indicates a tire's ability to stop on wet pavement. A higher graded tire should allow you to stop your car on wet roads in a shorter distance than a tire with a lower grade. Traction is graded from highest to lowest as "AA", "A", "B", and "C".

TEMPERATURE LETTER

This letter indicates a tire's resistance to heat. The temperature grade is for a tire that is inflated properly and not overloaded. Excessive speed, underinflation or excessive loading, either separately or in combination, can cause heat build-up and possible tire failure. From highest to lowest, a tire's resistance to heat is graded as "A", "B", or "C".

ADDITIONAL INFORMATION ON LIGHT TRUCK TIRES

Light Truck Tire



Tires for light trucks have other markings besides those found on the sidewalls of passenger tires.

LT

The "LT" indicates the tire is for light trucks.

MAX. LOAD DUAL KG(LBS) AT KPA(PSI) COLD

This information indicates the maximum load and tire pressure when the tire is used as a dual, that is, when four tires are put on each rear axle (a total of six or more tires on the vehicle).

MAX. LOAD SINGLE KG(LBS) AT KPA(PSI) COLD

This information indicates the maximum load and tire pressure when the tire is used as a single.

LOAD RANGE

This information identifies the tire's load-carrying capabilities and its inflation limits.

SNOW TIRES

In some heavy snow areas, local governments may require true snow tires, those with very deeply cut tread. These tires should only be used in pairs or placed on all four wheels. Make sure you purchase snow tires that are the same size and construction type as the other tires on your vehicle.

REPORTING SAFETY DEFECTS

If you believe that your vehicle has a defect which could cause a crash or could cause you injury or death, you should contact Pleasure-Way immediately.

PLEASURE-WAY CONTACT INFORMATION

To contact Pleasure-Way, you may call us toll-free at 1-800-364-0189; go to www.pleasureway.com; or write to:

Pleasure-Way Industries Ltd. 302 Portage Avenue Saskatoon SK, Canada S7J 4C6

Please refer to the vehicle/chassis owners' manual for more information on your chassis manufacturer. Please contact them if you feel that there is a chassis safety issue.

If your problem is not resolved to your satisfaction, please contact either NHTSA (U.S.) or Transport Canada (CA):

NHTSA (U.S. ONLY)

The following text is published as required of manufacturers under Title 49, Code of U.S. Federal Regulations, Part 575 pursuant to the "National Traffic and Motor Vehicle Safety Act of 1966"

If you believe that your vehicle has a defect which could cause a crash or could cause you injury or death, you should immediately inform the National Highway Traffic Safety Administration (NHTSA) in addition to notifying Pleasure-Way.

If NHTSA receives similar complaints, it may open an investigation, and if it finds that a safety defect exists in a group of vehicles, it may order a recall and remedy compaign. However, NHTSA cannot become involved in individual problems between you, your dealer or Pleasure-Way.

NHTSA CONTACT INFORMATION

To contact NHTSA, you may call the Vehicle Safety Hotline toll-free at 1-888-327-4236 (TTY:1-800-424-9153); go to <u>www.safercar.gov</u>; or write to:

Administrator 1200 New Jersey Avenue SE Washington, D.C. 20590

You can also obtain other information about motor vehicle safety from <u>www.safercar.gov</u>.

TRANSPORT CANADA (CANADA ONLY)

If you believe that your vehicle has a defect which could cause a crash or could cause injury or death, you should immediately inform Transport Canada in addition to notifying Pleasure-Way.

TRANSPORT CANADA CONTACT INFORMATION

Website: https://tc.canada.ca/en/road-transportation/defects-recalls-vehicles-tires-child-car-seats/report-potential-safety-defect-vehicles-tires-child-car-seats (English)

Website: https://tc.canada.ca/fr/transport-routier/defauts-rappels-vehicules-pneus-sieges-auto-enfant/signaler-defaut-potentiel-lie-securite-vehicules-pneus-sieges-auto-enfant (French)

Phone: 1-800-333-0510

MAINTENANCE LOG

MODEL:	VIN#:		
YEAR:	DATE PURCHASED:		

DATE	WORK PERFORMED	ВҮ	MILEAGE	NOTES

DATE	WORK PERFORMED	ву	MILEAGE	NOTES