

# PLEASURE-WAY MERCEDES SPRINTER ASCENT



Lithium Batteries and Charging System

OWNER AND OPERATION MANUAL





## **WARNING**

### **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.



## **WARNING**

### **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.



## **DANGER**

### **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 gain.

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



## **WARNING**

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.**

## **PLEASURE-WAY INDUSTRIES LTD.**

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 Ascent including operation, maintenance and warranties. **We strongly advise you to take time to read this manual, the Mercedes Sprinter chassis owners 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 in 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!

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## Pleasure-Way Industries Ltd. Five-Year Limited Motorhome Warranty

### CUSTOMER RESPONSIBILITY

It is important you read and understand the information provided to you in the package containing all the manuals and information pertaining to your Pleasure-Way Motorhome.

Familiarize yourself with the applicable warranties. You are responsible for ensuring the procedures for obtaining warranty repairs are followed properly. It is your responsibility and obligation to return your motorhome to your authorized Pleasure-Way dealership for warranty service repairs.

As the owner of the Motorhome, you are responsible for regular and proper maintenance performed in accordance with the Pleasure-Way and OEM manuals provided. Regular and proper maintenance will help prevent conditions arising from neglect that are not covered under warranty.

### WHAT THIS LIMITED WARRANTY COVERS:

Pleasure-Way Industries Ltd. warrants the specified new 2017 Motorhome free from defects in material and craftsmanship on portions manufactured by Pleasure-Way Industries Ltd. under normal use and service. Pleasure-Way Industries' obligation, under this limited warranty, shall be limited to 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. Warranty shall be fulfilled by an Authorized Pleasure-Way Dealer or Authorized Pleasure-Way service facility. *This Pleasure-Way Warranty is non-transferable to subsequent owners.*

### WHAT THIS LIMITED WARRANTY DOES NOT COVER:

This limited warranty shall not apply to the following:

- If the Motorhome has been altered outside our factory in any way so as, in our sole opinion and discretion, to affect its stability, operation or reliability.
- Deterioration due to wear and or exposure, including but not limited to rust: corrosion, oxidation and cosmetic blemishes.
- If the Motorhome, in our sole opinion and discretion, has been subject to misuse, negligence, or accident.
- If 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.
- The automotive chassis is covered by its own manufacturer’s warranty, including by way of example, but not limited to: power train, engine, drive-train, tires and muffler. To learn more about the specific automotive chassis not covered under the Pleasure-Way warranty please contact your authorized selling dealer, Pleasure-Way Industries Ltd. or review your Ford, Mercedes Benz or GM warranty package information provided with the coach.
- Appliances and components covered by their own manufacturer’s warranties, including but not limited to: the microwave, refrigerator, stove, heater, television, generator and roof air conditioners. To learn more about specific component parts or appliances not covered under the Pleasure-Way warranty please contact your selling dealer, Pleasure-Way Industries or review your warranty package information provided with the coach.
- Unauthorized repairs, alterations or modifications.
- Routine maintenance.
- Items that are working as designed but which you are unhappy with because of the design or function.
- Damages caused by, but not limited to: hail, tornadoes, lightning, floods, earthquakes, hurricanes, fire, rain, and all other environmental conditions, which include but are not limited to, tree sap, tar, chemicals, oils, salts, road hazards, stone chips, infestations, rodents and /or acts of God.
- Defects or repairs required, as an example but not limited due to; improper loading, load distribution, accident, collision, vandalism, abuse, neglect, improper maintenance, rust or corrosion.
- Failure to seek and obtain repairs in a timely manner.
- Failure to use reasonable efforts to mitigate damage caused by defects.
- Failure to comply with the instructions set forth in the owner’s manual.
- 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.
- Condensation and the results of condensation including, but not limited to, water damage and the growth or mildew or mold. Mold and mildew are natural growths given certain environmental conditions and are not covered by the terms of this warranty
- Failure of the coach and /or chassis resulting in incidental damages, such as but not limited to: goods stored both inside and outside the coach; loss of use and equipment of Motorhome; inconvenience; cost of rental vehicle; cost of accommodations; travel expenses; towing; meals; and other miscellaneous incidental expenses. Some states do not allow exclusions or limitation of incidental or consequential damages, so the above limitations or exclusion may or may not apply to you.

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, adjustments to compartment door latches, light bulbs, fuses, remote 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;  
All seat, curtain, door panel and wall fabrics used in the coach.  
Window seals and caulking.  
Exterior power cable hatch.  
City water fill.  
Porch light.  
Exterior cable TV outlet  
Carpet  
Linoleum.  
Black and grey water termination valves; and  
Exterior striping.

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.  
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 surfaces.

This warranty is expressly in lieu of all other warranties, expressed or implied, and all other obligations or liabilities for alleged representation or negligence. Pleasure-Way Industries Ltd. neither assumes nor authorizes any other person to assume for us any liability in connection with the sale of our Motorhomes other than expressed above.

All correspondence should be directed to the authorized Pleasure-Way dealer from whom the Motorhome was purchased and must specify the serial number and date of purchase of Motorhome in question.

Pleasure-Way Industries Ltd. reserves the right to make changes in Motorhomes built and/or sold by it at any time without incurring any obligations to make the same or similar changes on motorhomes previously built and/or sold by Pleasure-Way Industries Ltd.

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, at its option, replace or repair free of charge any defective part, including labor. The purchaser shall notify their authorized Pleasure-Way Dealer within the warranty period.

If you obtain warranty repairs from a non-authorized RV service facility without Pleasure-Way pre authorization, it is at Pleasure-Way's sole discretion whether or not to reimburse the claim.

In the event that this Motorhome is used for commercial or rental fleet purposes, the warranty coverage shall be limited to one (1) year 12,000 miles / 20,000 Km (whichever comes first) from the date of original purchase.

#### Obtaining Warranty Repairs:

To obtain warranty repairs, you must contact your authorized Pleasure-Way dealer and schedule an appointment. It is best if you have a written list of 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 maintain the Motorhome as required or recommended are not covered by warranty.

Note: 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.

#### Warranty Policies

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

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.

Pleasure-Way Industries Ltd. will not reimburse any claims for work done on any components or appliances 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: refrigerator, microwave, roof air-conditioning, water pump, furnace, TV etc.

All warranty work required to be done on the chassis must be taken to an authorized Ford , Mercedes Benz, Chrysler or Chevrolet dealership (depending on your chassis make) and processed through their warranty procedures. Pleasure-Way Industries Ltd. will not reimburse any claims regarding the chassis. Pleasure-Way Industries Ltd. will pay for the removal and reinstallation of motorhome components only if absolutely necessary to perform Chassis warranty repairs. Pleasure-Way Industries Ltd. will not reimburse any costs in the removal and reinstallation of these components if it is: out of the warranty period; non-warranty repairs; and /or routine maintenance or service.

## **SAFETY**

For your safety while travelling 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 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.

### **1) Smoke Detector (image 1)**

A smoke detector is provided 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 to the manufacturer's instructions.

- This device should be tested after each time your vehicle has been in storage, before each use, 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 of your new unit. (9 volt battery located inside the unit. )
- Install a fully charged fresh battery at least once a year.

### **2) Fire Extinguisher (image 2 )**

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 "BC", 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.**

Image 1



Image 2



### CO Gas Combination Detector

A liquid propane (LP) gas detector/ Carbon Monoxide (CO) is provided near the floor level at the rear of the motorhome interior. This detector will operate to detect liquid propane & Carbon Monoxide gasses as well as other gasses 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 red disconnect is turned off.

- The LP/CO gas detector should be tested weekly while vehicle is in use.
- Do not block air circulation in the area where the LP/CO gas detector is located.

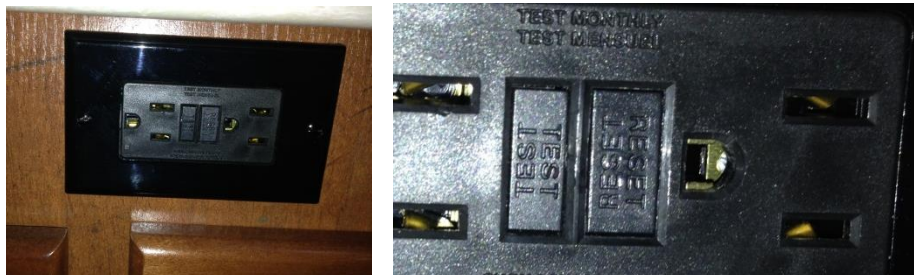
**Note: The LP/CO Gas Detector will sound to indicate a low coach battery charge.**

**(Driver side ottoman)**



### **3) GFCI Outlet**

A ground fault circuit interrupter (GFCI) 110-volt receptacle located on the lower Kitchen cabinet 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 receptacle, the galley receptacle, the kitchen rear receptacle and the fridge receptacle. The GFCI receptacle are to be tested at least once a month in accordance with the manufacturer's instructions.



## Refueling

**When you are refueling your fuel tank or your propane system, ensure that your vehicle is shut off and your main LP valve is shut off. Ensure that your pilot lights have been extinguished.**

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 gas in the LP gas in the lines for the ignition process to take place.**



## Filling the LP Gas Fuel Cylinder

When you are filling the LP Gas Fuel Cylinder, the propane tank valve must be closed, all pilot lights, appliances, along with their igniters must be turned off during refueling of motor fuel and / or the propane fuel tank. Only qualified personnel should refuel your propane tank.

Do not refuel the propane tank to more than 80% of its capacity. Liquid will appear at the breather valve at 80%

Do not store gasoline or other flammable liquids inside your vehicle.

**NOTE: Ensure the propane system valve is fully shut when vehicle is in motion. It is not safe to travel while propane appliances are in use. Propane switch located in the driver Utility Center.**



## Seat Belts

Only forward-facing 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. Seat belts must be fastened while the vehicle is in motion.

## **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 owners / operating manuals prior to using the appliances.

## **TV Flat Screen**

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 and to the TV cabinet.



## **Generator**

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.



## **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.

## **Emergency Escape**

If the need to make an emergency escape from the interior of your motorhome arises, all interior doors are equipped with interior 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

### Paint Codes

Mercedes Paint code Silver – 9744; Mercedes Paint code Grey White – 9136  
Mercedes paint code (30<sup>th</sup> Anniversary Champagne) Pearl Silver Metallic -9764

### Motorhome Dimensions & Capacities

<b>Dimensions</b>		
Length Bumper to Bumper	235" - 19' 7"	594 cm
Length Bumper to Tire Carrier	249" - 20' 9"	632 cm
Height with AC	115" - 9' 7"	292 cm
Width with mirrors Extended	95" - 7' 11"	241 cm
Interior Standing Height	75" - 6' 3"	190 cm
Towing Capacity	5000 pounds	2268 kg

Towing capacity is based on GCWR 13,550– GVWR 8,550 = 5000 pounds if the vehicle when loaded is less than 8550, this weight can be added to the towing capacity up to the Mercedes hitch limitations, rear axle and Mercedes Sprinter limitations as listed in the Mercedes Sprinter manual. The hitch tongue weight must be included in the loaded weight of the vehicle.

Bed Area: 70 " wide X 72" Kitchen and Fridge partition to the back doors

<b>Capacities</b>			<b>Weight</b>
Fuel	26 USA gallons	98 litres	185 pounds
Fresh Water / Potable Water	20 USA gallons	75 litres	166.8 pounds
Grey Water ( Sinks and Shower)	15 USA gallons	57 litres	125 pounds
Black Water (Toilet)	10 USA Gallons	38 litres	83.4 pounds
Liquid Propane (LPG) (at 80%)	10 USA gallons	38 litres	42 pounds

<b>Chassis Specs</b>		
GVWR	8550 lbs	3878 kg
GCWR	13550 lbs	6146 kg
GAWR Front	3970 lbs	1801 kg
GAWR Rear	5360 lbs	2431 kg
Tires (all)	LT245/75R16	
Rims (all)	6.5j x16"	
Tire Pressure Front	47psi	320 KPA
Tire Pressure Rear	70 psi	480 KPA
Tire Pressure Spare	70 psi	480 KPA

<b>Appliances</b>	<b>Manufacturer</b>	<b>Model</b>
Generator	ONAN RV QG 2500 LP	2.5HGJBB-1121A
Fridge 3.8 cu ft.	DOMETIC (3 way)	RM8505
Microwave	HIGH POINT	EM925RCW
Air Conditioner	DOMETIC	640312CXX1CO
Air Conditioner Lower	DOMETIC	3310742.014
Cook Top	SMEV/DOMETIC	P18022
Water Pump	SHURFLO	4008-101-A65
Water Heater	Girard	GSWH-1M or GSWH-2
Toilet	Thetford Aqua Magic II	42051
Furnace	Atwood	AFSD16121
Awning	Care Free	BY1188D25TM
Solar Panel	Carmanah (95 watt)	CTI - 95
TV	LG	24 LB 4510
DVD	LG	BP340
Inverter	XANTREX	450
Converter	INTELLI POWER	PD9145 AL
ATS Switch	PROGRESSIVE DYNAMICS	5100
In dash stereo/nav	Mercedes	Becker
Coach Batteries	ECO-ION LITHIUM 100AH	Life PO4
Roof Vent	Fantastic Fan	2200

Pleasure-Way reserves the right to make product changes at any time without prior notice and without incurring obligations.

**NOTE:** Remember that the height of your Motorhome may vary depending upon the tire pressure level, and optional components mounted on the roof. The width of your vehicle will vary with the position of the outside mirrors. In addition, all measurements are approximations.

**Tire and Loading Information**

Located on the driver door pillar.

### **Driver Rear Propane Fill, Breather valve and Quick Connect**

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 interior gage will read 100%.



### **Driver's Side Sewer Dump Compartment**

Located on the driver side running board the storage compartment is behind the driver door entrance step. This compartment gives ease of access to the Gray and Black dump handles, as well as the sewer connection. The sewer hose container is to the right hand side of the black water dump handle mounted below the driver running board.



### **Driver's Side Utility Center**

Located in the middle of the driver 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



## Driver's Side Water Heater Vent

Located on the driver's side mid body below the fridge vents, this vent door gives access to the water heater electronics and storage shut off switch.

**NOTE:** For water heater efficiency, keep this vent free and clear from obstructions at all times.



## Driver's Side Exterior Shower Compartment (TS only)

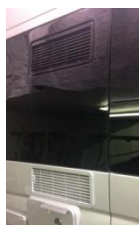
Located beside the vehicle fuel fill door, this compartment contains a retractable shower head and hot and cold water taps.

- When winterizing your Motorhome be sure to winterize this tap and the shower hose.



## Driver's Side Fridge Vents

Located mid body on the driver side of the vehicle. These fridge vent covers house the back side of the fridge, the fridge electrical connections and the fridge propane system. Keep these vents free and clear from debris.



### **Passenger's Side Fresh Water Holding Tank Fill**

Located behind the passenger 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.



### **Driver's Side Furnace, Fresh Air and Exhaust Vent (photo 1)**

Located in front of the driver rear wheel next to the water heater, this vent gives off the exhaust of the furnace. **NOTE:** Ensure this vent is free and clear of obstructions at all times.



### **Passenger's Side Exterior 110-Volt Plug (see above photo 2)**

Located on the passenger's 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 GFI in the kitchen face frame.

### **Passenger's Side Exterior Porch Light (see above photo 3)**

Located above the passenger sliding door, this light is controlled by the switch on the kitchen end gable.

### **Passenger's Side Power Awning**

Located at the roof line of the passenger side this 10' awning is controlled by the power switch located on the passenger seat base.



### Roof top Solar Panel

Your vehicle can be equipped with a 95 watt or two 95 watt Carmanah solar panels. The solar panels are located over the driver door and behind the roof top AC unit. The charge control panel is located above the TV under the rear shelf.



### Roof top Air Conditioner

The vehicle is equipped with the 11,000 BTU Penguin Duo-Therm low profile air conditioner. From the ground to the top of the air conditioner it is 9' 7". Ensure you have enough clearance before entering areas with height limitations. The control panel for the air conditioner is located in the rear interior of the vehicle.

Ensure all air conditioner vents are kept clear on the roof of the vehicle.



### Roof top Fantastic Fan roof vent

Located on the center portion of the roof. This is an exhaust fan. It is recommended that you run the fan when the shower and cooking appliances are being used. The controls for the fan are located on the inside of the vehicle.



### Roof Top Winegard TV Antenna

Located above the passenger side door. This antenna is a dome style antenna with the auto search mode for reception.



## **Roof Top Non Capped Sewer Vent Pipes**



## **Maintaining Your Motor Home**

- 1) 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.)
- 2) When storing your Pleasure-Way 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. Damages to the motorhome as a result of incorrect parking will not be covered under warranty.
- 3) When storing you 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 battery disconnect is switch to the off position, and all electrical appliances are turned off.
- 4) 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.
- 5) It is recommended that you run your generator (if equipped) 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

## **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
- 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 pressure levels are at recommended levels
- chassis exterior lighting is functional
- all exterior components are secure and closed
- the refrigerator power switch is changed to 12-Volt
- all interior compartments and drawers are closed and latched
- all interior components are secure and in place
- the furnace control switch underneath the thermostat is off
- the TV swing-out is locked into the closed position
- the site is left in better condition than when you arrived.
- the TV antenna is lowered and rotated to the travel position

### **While In Motion**

- Do not use any appliances while the vehicle is in motion.
- **Warning:** Do not use any propane appliances while the vehicle is in motion.
- For your safety ensure that the main propane valve is in the off position.
- While you are in motion, you will have power to all 12-Volt components such as the dome lights, water pump, roof vent, 12-Volt receptacle, and theatre system.
- You will not have power to the microwave, 110-Volt receptacles, coffee maker and roof air conditioner.
- You will have power to all 110-Volt and 12-Volt if your motorhome is equipped with an operating generator.
- Always remain seated with your seat belt fastened.

### **Upon Arrival at Your Site**

Once you arrive at a site, please ensure that:

- your motorhome is parked in a level position so that your components will be at their optimum performance ( place a bubble level in the freezer shelf of the refrigerator to use as a base and level your unit according to this)
- all exterior vents are clear from obstructions
- the black and gray water waste tank valves are closed
- hook up your AC power cord to the site receptacle (120 volt 30 amp)
- hook up your fresh water line to the city fill (if supplied at site) or fill fresh water tank
- turn the LP gas on
- turn the refrigerator switch power to 110-Volt power
- turn the water heater on

## MOTORHOME SYSTEMS

### Propane Gas System

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 storage tank is located under the chassis between the hitch rails . Access to the propane/LP tank and regulator is from under the vehicle. The regulator is on the driver side generator bracket.



Regulator

An Propane 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.

Propane Switch ; Main shut-off valve is located in the Diver side Component Compartment.



Propane fill and Breather Valve; located on the passenger rear exterior corner of the vehicle. The breather valve must be open to fill the propane tank. Liquid will appear through the breather valve when the tank is 80% full.



The propane gage is located inside your coach on the rear electrical switch and display panel. The panel will indicate full when the LP tank is at 80%



- **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 should not be placed or stored inside the vehicle as 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 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 a long period of time. Therefore, before operation, be sure to open a source of ventilation.
- **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.

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

**If you smell gas:**

1. Extinguish any open flames, pilot lights 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 or others.
  6. Have the gas system checked and leakage source corrected before using again.
- Do not place the cooktop cover on the stove when the cooktop is lit, or when the burner knobs are in the on position. Allow cooktop to cool before closing the glass cover.

Propane/ LP appliances are: Fridge, Cook Top, Water Heater and Furnace.

**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.*

## Fresh Water System

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 p.s.i. 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.

## Fresh water fill and Drain

To fill the fresh water tank, use the gravity water fill located on the passenger's side of the van beside the sliding door. 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 located inside your coach; (2) when water starts coming back through the gravity fill. NOTE: If you notice water running out from underneath the van, there is a drain tap located on the side of the fresh water tank ensure the valve is closed. This tap is there to help you drain your fresh water tank without having to open the taps and pump it out.



## City Water Connection

The city water connection is located in the driver's side utility center. The city water connection is a convenience for you when you have access to an outside pressurized water source. To hook up the city water connection you should make sure that the water pump switch is turned off inside the coach and that all faucets are shut. Attach your water hose and turn on the water supply. 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. 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 (if you do not open a faucet to relieve some of the pressure, when you unhook the water line, water may spray out), then unhook the water line.

**NOTE:** In different areas the water pressure may vary. It is advisable to use a water pressure regulator because excessive pressure may result in water-line damage.



## Fresh Water System Drains

The Fresh water tank drain is located under the passenger side running board just under the sliding door. 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 below the center of the vehicle just in front of the fuel tank on the driver side. To use these drains ensure all water taps and toilet valve are in an open position.



## Water Pump



The water pump is located in the kitchen in the lower shelf.

If the pump will not prime, please check:

- make sure there is water in the holding tank
- make sure that the battery is not run down
- make sure the waterlines are tight to the pump and to the filter
- check for leaks at inlet fitting and filter (if air is leaking into inlet fittings, tighten fittings or apply clamps as necessary)
- the inline flow filter, located beside your water pump.

If the water pressure drops:

- make sure faucet aerators are clean
- check to make sure there is water in the holding tank
- check to make sure the battery is not run down
- check faucets and connections for leaks.

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

- make sure there is water in the holding tank
- check all faucets and fixtures to make sure they are all shut off and not leaking
- check line for leaks

## Water Heater

Your motorhome is equipped with a Girard instant water heater located on the driver side mid body. Please refer to the manufacturer's instruction manual for lighting and maintenance instructions. You must ensure there is water is available before turning the burner on to heat the water. The LP gas switch must be in the on position, LP gas is automatically supplied to the main burner to heat water to a desired temperature and then automatically shuts off when the hot water is not in use. A regulated mixture of gas and air is ignited automatically providing a flame, which is directed into the heating tube. The heating assembly is sealed off from the RV interior and is vented to the outside.



The instantaneous water heater does not have a by-pass, you can run antifreeze through the water heater to ensure it is winterized. The exterior water heater switch should be in the off position when the vehicle is in storage or in a winterized state. If antifreeze is used for winterizing run clean water through the water heater before you turn the power switch on to the water heater. You can run water through the water heater by pumping water through the hot water taps in the vehicle.

For best practices with the instant water heater turn you hot water tap to the medium flow, then adjust the water heater temperature control to the desired temperature. Do not blend with cold water unless the water heater temperature is too high.

**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.*

### **Toilet Foot Flush**



Please refer to the manufacturer's operating instructions.

#### **Toilet Trouble Shooting:**

##### **1. Water keeps running in the bowl:**

- check to see if all the levers are turned all the way back. Sticking may be caused by foreign material on the waste valve blade seal at the bottom of the bowl. If the problem persists, you may need to replace the water valve.

##### **2. The Toilet leaks, there is water on the floor:**

- if the leak is in 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 for tightness.

##### **3. Poor flush pressure:**

- the levers must be held fully open during the flush. A good 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 gallons per minute to ensure an adequate flush.

### **Waste System**

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

You vehicle is equipped with two waste holding tanks, the black water holding tank in which waste water from the toilet is stored and the grey water tank in which the waste water from your sinks and shower are stored.

## Draining Waste Holding Tanks

1. Be sure the holding tank valve is closed, then remove the termination cap.
2. Join the sewer hose to the coupling on the main drain outlet.
3. Place the end of the sewer hose into the sanitary dumping station opening. Make sure the hose does not sag or create a p-trap.
4. Open the termination valve on the solid waste holding tank. Once this tank is empty, then open the valve for the gray waste tank. 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.
6. Deodorize the empty tank by adding one gallon of water and commercial holding tank deodorizer through the tank.

**NOTE:** If the black water holding tank is allowed to overflow, the overflow may back up through the toilet.

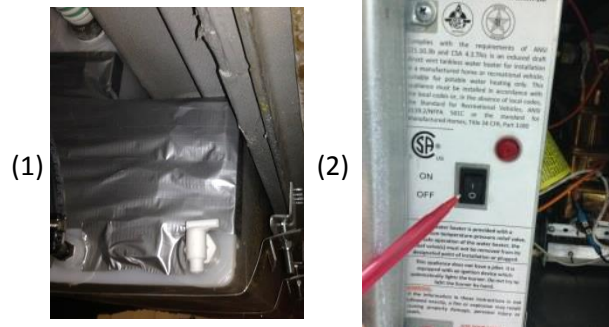
The drainage from the sinks and shower is collected in a separate gray water holding tank. This tank has its own dump valve but ties into the same termination valve outlet as the waste holding tank. Drain the gray water holding tank in the same way after draining the waste holding tank. This will help flush out the solids out of the sewer hose.

**NOTE:** If the gray water tank is allowed to overflow, the overflow may back up through the shower drain. 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 open the drain. The large quantity of waste flow will provide more effective drainage and reduce tank stoppages.



## How to Winterize Your Pleasure-Way Motorhome

- 1) Drain your fresh water tank. The fresh water tank is located behind the passenger cab entrance door. Open the drain spigot by turning the top lever and let the water drain (there may be a small amount of water left in the tank after it is drained.).

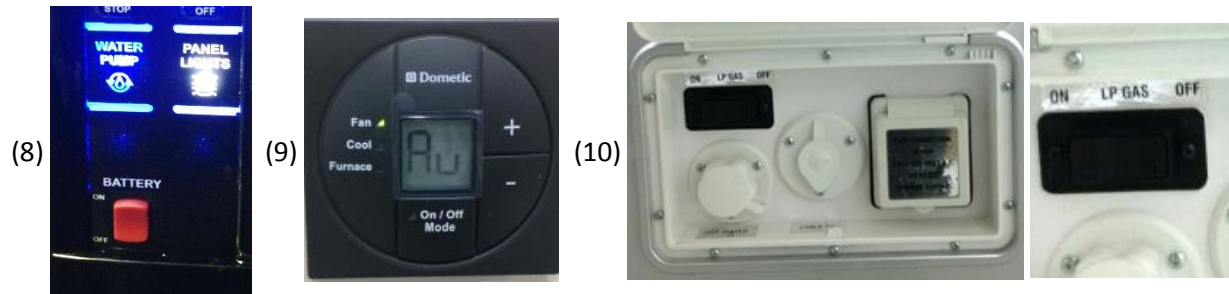


- 2) Turn off the hot water tank. (See picture (2) above)
- 3) Remove the water line from the inlet side of the water pump (this is the clear plastic line going into the water pump filter.) Connect a siphon hose to the inlet side of the water pump place the other end in a container RV non-toxic antifreeze. Turn on you're the pump. This will pump non-toxic RV antifreeze through all of your fresh water lines.

*NOTE: Siphon hose consists of 40" of 1/2" clear tubing with a fitting to attach to the water pump. The fitting can be purchased through an RV dealer.*



- 6) Open the kitchen and bathroom faucets one at a time allowing the antifreeze to flow through both the hot and the cold sides. Be sure to also open the toilet valve and exterior shower faucet. Turn off the water pump and disconnect the siphon hose, reattach the original fresh water supply fitting.
- 7) Pour 1/2 cup of RV antifreeze down each drain (kitchen sink, bathroom sink and shower drain).
- 8) Fully charge your auxiliary coach battery and turn off and remove the red disconnect. The red disconnect is located in the passenger rear storage compartment in the small door above the battery access door.



9) Turn your thermostat to the off position. (see picture (9) above)

10) Turn your propane tank off. (see picture (10) above)

11) Place your fridge door in a slightly open position for air to circulate through the fridge..

**Note:** *It is recommended that you start and run your vehicle and generator once a month during the winter season.*

### 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 water, 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. Do not use your fresh water system.

- Keep in mind that as you add more water to the holding tanks the antifreeze will dilute more than the recommended amount and may start to freeze earlier at cold temperature.

### Quick Drain of the Water system

- 1) Open the fresh water tank drain.
- 2) Open the low point drain valves located under the driver side running board in front of the fuel tank.
- 3) Open all hot and cold taps on the vehicle.
- 4) Drain the black and grey holding tanks.



## 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. The 12-Volt auxiliary battery supplies power to the interior components (except the plug receptacles, roof air conditioner, microwave, fridge when on AC mode) for short-term use. This battery is automatically charged when the motorhome is running. For long term use, your vehicle may be powered by plugging into a 110-Volt external power source with the supplied 25-foot power cable. The 25-foot power cord supplied with your coach will have to be connected to your coach, in the driver's side component compartment and to a 110 volt 30 amp power supply. This will: supply 110-Volt power throughout the interior it will also supply power through a power converter to all 12-Volt components and charge the auxiliary battery. **NOTE:** Always connect the power cord to your coach first and then to the power source.

The furnace and range operate only on LP gas and the refrigerator can operate on all 3 sources ( propane, 12-Volt DC and 110-Volt AC ). The furnace fan operates on 12-Volts.

Your unit is equipped with a 110/12-Volt power converter. Its function is to take part of the 110-Volt current that is received when the unit is plugged into an external power source and change it to 12-Volts (which powers most of the motorhome components).

**NOTE:** The 12-Volt or DC power on your fridge should be used while in motion .

## Converter and Output Fuses



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

The Converter takes 110 volt power and converts it to operate the 12 volt system. This happens when plugged into shore power or operating off of the generator. The converter is plugged in to a 110 volt power outlet under the power sofa.

The converter also has a battery charger built in that is specific to Lithium Battery charging. This battery charger only charges the coach battery.

The converter fuses will blow if the coach battery is hooked up with reverse polarity. You will have to remove the screw and electrical resistor to access the fuses.

The fan on the converter will only operate once the converter reaches a designated temperature.

## DC Fuse Panel and Auto reset breaker Panel

Driver Ottoman fuse panel



MOD #	INST #	SWITCHED LOADS	AMP
1	SPARE 1		
2	SPARE 2		
3	WATER PUMP		10 BRKR
4	WATER HEATER		10 BRKR
5	GEN STOP		5 MNT
6	GEN START		
7	SOFA EXT		15 PTC
8	SOFA INT		15 PTC
REF #	CONSTANT LOADS		AMP
1	TV INVERTER #1		30 (MAX)
2	SPARE		60 (MAX)
3	SPARE		40 BRKR
4	SPARE		30 BRKR
5	DIMMER		20 BRKR
6	BOOSTER		15 BRKR
7	WATER PUMP		10 BRKR
8	AWNING		15 BRKR
9	SPARE		BRKR
10	CONVERTER/CHARGER		30 BRKR
11	FRIDGE		15 AMP
12	SPARE		5 MNT
13	SPARE		7.5 MNT
14	FURNACE		7.5 MNT
15	PROPANE		5 MNT
16	COILP		3 MNT
17	WATER HEATER		5 MNT
18	SPARE		MNT

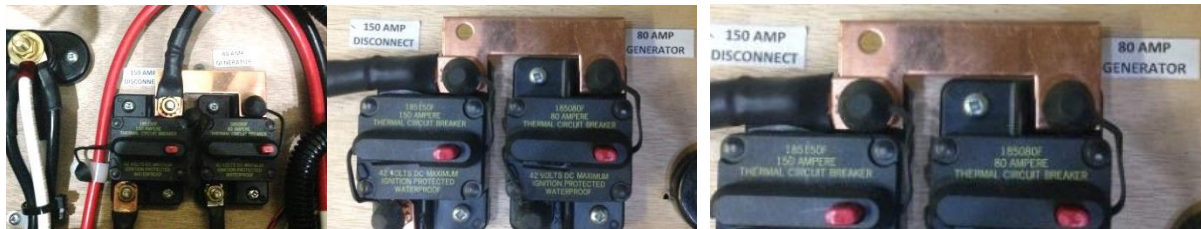
Kitchen upper fuse panel



MOD #	SWITCHED LOADS	FUSE SIZE	OUTPUT
1	LIVING ROOM LIGHTS	10 A	DIMMING
2	KITCHEN LIGHTS	10 A	DIMMING
3	COUNTER	10 A	DIMMING
4	UNDER CABINET	10 A	DIMMING
5	ENTRY LIGHTS	10 A	DIMMING
6	PORCH LIGHTS	10 A	NON DIMMING
7	READING LIGHT	10 A	DIMMING
8	SPARE	10 A	NON DIMMING
9	SPARE	10 A	NON DIMMING
10	BATH LIGHTS/FAN/TASTIC	10 A	CONSTANT

## DC breakers for Battery and Generator

These breakers are located below the cover panel under the driver side ottoman cushion. The battery disconnect breaker will disconnect battery input to the multi-plex wiring control center. The generator breaker disrupts the battery feed to the generator for the starter and generator fuel pump.



## DC / Battery Disconnect Switch

- Located on the kitchen end panel inside the sliding entrance door. This switch is used to eliminate all electrical draw from the auxiliary/coach batteries. This switch should be in the off position if the motor home is not being used for more than 48 hours. This switch must be in the on position to charge the auxiliary batteries from the converter source.



(1) (2) ottoman disconnect

- The disconnect in the driver ottoman door is a total battery disconnect used especially for service and winter storage. This battery disconnect will not allow the auxiliary batteries to be charge from the solar panels, converter or the vehicle alternator.

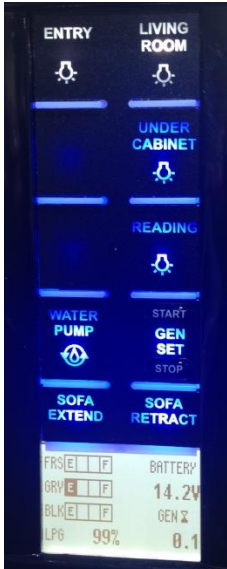
## Switch Panels and Controls

Kitchen End Switch Panel



Porch Light	Entry Light
	Living Room Lights
Generator start/Stop	Master/ All Light Switch
Water Pump	Panel Lights
Battery Disconnect	

Driver Rear Upper Switch Panel



Entry Lights	Living Room Lights
	Under Cabinet Lights
	Reading Lights
Water Pump Switch	Generator Switch
Sofa Extend Switch	Sofa Retract Switch
Monitor Panel and Generator Hour Meter	

Monitor Panel



## Trouble Shooting the DC/12 volt System

- 1) Ensure the battery disconnect is in the on position
- 2) Ensure there is 12 volt power from the coach battery ( Check battery voltage or start the vehicle engine)
- 3) Ensure the converter is plugged into the wall outlet
- 4) Ensure the 30 amp fuses on the converter are good
- 5) Ensure the converter breaker is not tripped in the AC breaker panel
- 6) To reset the Multi Plex wiring control system for the coach (this includes all switches and controls) Unplug the vehicle from shore power or shut off the generator. Turn off the battery disconnect switch allow the system to do a complete shutdown this will only take a couple of minutes. Turn on the disconnect switch and the system will be reset.

## AC (110-120 volt) Power

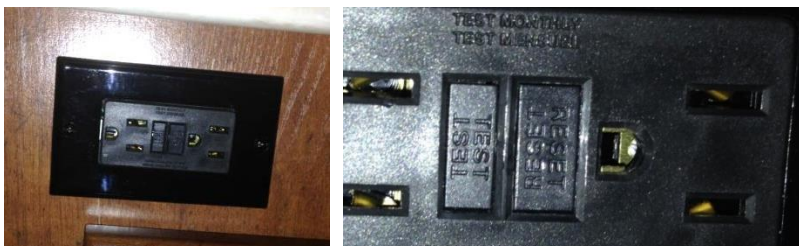
A 25- foot, 30-amp power cord is provided under the rear sofa. In order to activate all power circuits, connect the yellow power cord to your coach in the driver's side component compartment and to an adequate 110-Volt power source. The connector is rated for 30-amp capacity. NOTE: The male end of the power cord is a 30-amp plug, therefore you may require an adapter to convert the plug into the 110-15Amp style. Most RV parks are equipped with 30-amp plug-ins. Remember to always attach the power cord to your coach first, and then to the power source.



## Trouble Shooting AC power:

Step 1 – Ensure you have a known good power source for your power cord to plug into. Test the plug with another appliance. Ensure your power cord is properly attached to your Motor Home.

Step 2 – Ensure the GFCI has not been tripped. Press the test button and then reset the GFCI. If the light is on in the middle of the CFCI it indicates it is tripped.



Step 3 – Ensure the breakers in your distribution panel have not been tripped.



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

Step 4: Ensure the breaker on the generator is not tripped.



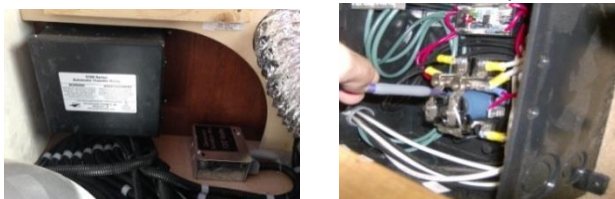
If you have power from your generator, but not from shore power.

Step 5 – Check your shore power source (Step 1)

Ensure your Automatic transfer switch is snapping shut. There are several different methods to do this. Inside the transfer switch there is a set of points that are spring loaded on occasion the points will not make proper contact.

Method 1: Restart your generator, have your power fully engaged by the generator, switch off the generator and plug your power cord into a 120 volt electrical outlet. (You may have to repeat this step a couple of times, always ensure that you unplug your power cord before starting your generator.)

Method 2: Turn off your generator and unplug your Motor Home from shore power. Locate the transfer switch, open the transfer switch, move the points back and forth making sure they have free movement. Check for debris between the points.



AC or 120 volt Appliances	
Converter AC –DC with charger	Microwave
Air Conditioner	All AC or 120 volt wall receptacles
Fridge When on AC	TV/DVD when plugged into AC

If an individual appliance is not working ensure that the appliance is plugged in and check the breaker for the individual appliance.

**Note:** The fridge plug, kitchen plug, and exterior plug is controlled by the GFCI

## Batteries

**The engine starting battery or chassis battery please refer to the Mercedes Sprinter Manual.**

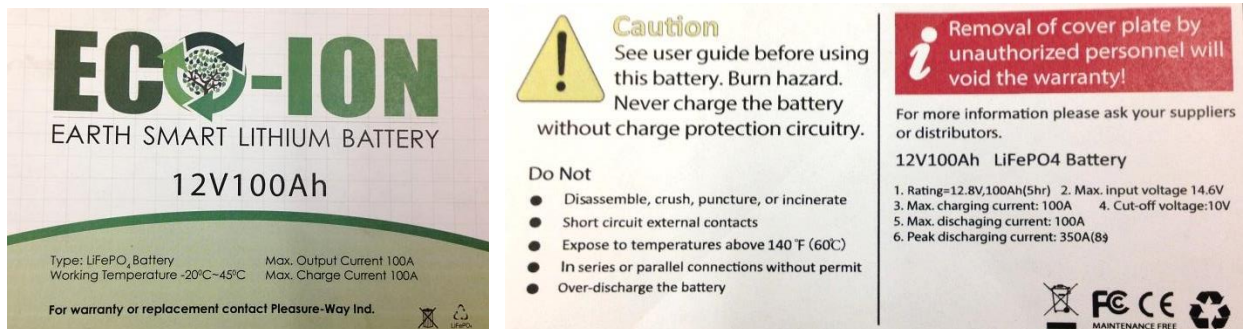
Your motorhome is equipped with two auxiliary coach batteries located under the rear sofa. Your motor home is equipped with one engine starting (chassis) battery located under the driver floor board. All batteries will charge from the alternator in order to provide 12-Volt power to your interior components and the chassis portion of the motor home. The Chassis and coach batteries are separated by a control module located under the driver seat. This module will only engage when the vehicle is running.

### Lithium Batteries and Charging System

Your vehicle is equipped with two Lithium Ion Batteries and a special Converter with a built in Lithium Charge control.

#### **Battery Type: Eco-Ion (LiFePO4) 12 volt 100 Ah**

**\*WARNING:** The OEM batteries can only be replaced with identical Lithium Ion type batteries. The charging system is set up for Lithium Ion cells. Replacing the Lithium Ion batteries with a Lead Acid, Gel, AGM, Etc. battery may result in damage to the vehicle, coach, batteries and electrical system. These damages may result in a thermal incident such as fire, electrical short, melting, off gassing, Etc.



**\*WARNING:** Do not charge your batteries below 32 degrees F or 0 degrees C. When placing your vehicle into storage always ensure your batteries are fully charged and the battery disconnect switch is in the off position. Your vehicle may also be equipped with a charge line disconnect from the vehicle alternator.

Battery position will vary with the build and chassis or the vehicle.

Access to the batteries is through the rear doors. The batteries are located under the power sofa. ( Lower the spare tire for full access the rear doors).

- 1) Remove the blue 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. Ensure the solar panels are covered.

For all batteries note the warning symbols.



All coach batteries are fused with 150 amp fuses for the protection of your coach and the battery system. These fuses are located in the battery area and at the charging source.



## Converter: Progressive Dynamics PD 9145 AL with charger

This converter is only to be used with the Lithium Ion Batteries. The Lithium Ion batteries charge at a high amperage rate, the converter is designed for this purpose. The converter is the Intelli Power 9145 A with a lithium module located above the converter fuses.



**\*Warning:** Solar panels will have to be covered before working on and disconnecting the batteries. Keep the solar panels covered until the batteries are installed and connected to the coach system.

To extend the life of your Lithium Ion batteries it is recommend that the batteries be fully charge and kept above freezing temperatures when in storage. This may involve removing the Lithium Ion batteries from the coach and moving the batteries to a warm location for winter storage.

**NOTE:** Please see the battery manufacturer's instructions for detailed maintenance recommendations.

### **Chassis Battery**

The engine starting battery is located below the driver foot board in the cab area of the vehicle. The engine starting battery and the coach battery are separated by the Mercedes battery control system located under the driver seat.

**NOTE:** The chassis battery is only charged through the alternator when the motor is running. The converter will not charge the engine starting battery. Please refer to the Mercedes Sprinter manual for maintaining and storing the batteries.

### **Generator**

If your unit is equipped with a generator, it will be located at the rear of the vehicle. Access to the generator is from underneath the chassis. There is no access through the interior so as to prevent exhaust gases from seeping into the living compartment. The generator will provide an added source of power to run the electrical system when you are not plugged into a 110-Volt power source. To start your generator you will see a start/stop switch located on both switch panels. Simply push the button until the generator starts, it may take a few seconds initially for it to start. Your generator is an LP generator it draws its fuel supply from your LP tank, ensure the LP switch is on before starting the generator. Once the generator is running, it supplies power to the entire electrical system, just as if your unit were plugged into a 110-Volt power source.

**NOTE:** If your unit is equipped with a generator, it is essential that you run your generator at least ½ hour a month under load (microwave, AC, coffee maker, etc.) to keep the generator fuel from damaging the carburetor, the oil to be circulated through the cylinder and the electrical components from build up of corrosion.

**NOTE:** For your safety and protection, all generator or generator-ready units are equipped with an automatic transfer switch that will allow your coach to receive power from either shore power or your generator



## **MOTORHOME INTERIOR**

### **Interior Cockpit Map Light**

**\*Note:** This is the Mercedes Sprinter map light system, refer to the vehicle manual for operation.

**\*Note:** The cockpit map lights operate off the chassis/engine starting battery.

### **Appliances**

#### **COOK TOP:**

The vehicle is equipped with a two-burner flush mount cook top located in the kitchen counter top.

- 1) Lift the glass cover.
- 2) Turn the selected burner knob to the ignite (flame) position. This allows propane to flow to the selected burner.
- 3) Depress the middle ignition spark knob until the burner ignites.
- 4) Turn the burner knob to adjust the flame to the appropriate heat setting.
- 5) When you have finished using the cook top, turn the burner knob to the off position allow the burner to cool before closing the cook top cover.

Please consult the stovetop owner's manual for complete operating and cleaning instructions.



## **FURNACE:**

Your vehicle is equipped with a 16,000 BTU Suburban LP gas Auto Ignition Furnace. The furnace is located near the floor below the fridge. The thermostat control is located above the interior TV.

- 1) Ensure that there is propane supplied to the coach.
- 2) Ensure there is 12V power to the coach.
- 3) Turn the thermostat to the on position and set the thermostat to the desired temperature.
- 4) The Furnace will auto ignite and cycle through fan and heating. The furnace will cycle keeping the desired temperature.

**Note:** *When the furnace is not in use, turn the thermostat switch to the off position.*



## **REFRIGERATOR:**

Your vehicle is equipped with a Dometic three way fridge/freezer (LP gas , AC & DC).

Please refer to the fridge manuals included with your vehicle.



## **MICROWAVE OVEN :**

Your Microwave oven operates off of 110 volt AC power only. To use your microwave you must be plugged into shore power or have the generator running.

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

*Please refer to the manufactures operating instructions for maintenance, operation and cooking.*



## Water Heater

Your motorhome is equipped with a Girard instant water heater located on the driver side mid body. Please refer to the manufacturer's instruction manual for lighting and maintenance instructions. You must ensure there is water is available before turning the burner on to heat the water. The LP gas switch must be in the on position, LP gas is automatically supplied to the main burner to heat water to a desired temperature and then automatically shuts off when the hot water is not in use. A regulated mixture of gas and air is ignited automatically providing a flame, which is directed into the heating tube. The heating assembly is sealed off from the RV interior and is vented to the outside.



The instantaneous water heater does not have a by-pass, you can run antifreeze through the water heater to ensure it is winterized. The exterior water heater switch should be in the off position when the vehicle is in storage or in a winterized state. If antifreeze is used for winterizing run clean water through the water heater before you turn the power switch on to the water heater. You can run water through the water heater by pumping water through the hot water taps in the vehicle.

For best practices with the instant water heater turn you hot water tap to the full open position, then adjust the water heater temperature control to the desired temperature.

Please refer to the Girard manual for more information.

**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.*

## TV AND DVD

Your motor home 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 or shore power)

**NOTE:** Your DVD is a player only as it will not record. To play a CD or MP3 the TV flat screen must be in the on position.

## **24" THEATRE SYSTEM**

### **BASIC OPERATING PROCEDURE**

For addition TV, DVD, Antenna, or Inverter for additional information please refer to the appliance owner manuals.

#### A) COMPONENTS:

- 1) 24" Flat Screen Monitor
- 2) Blu-Ray DVD player
- 3) Inverter for 12 volt operation
- 4) Antenna with booster

Rear entertainment center

TV on rear closet wall, DVD above the closet, inverter on the upper closet shelf, TV booster on the front TV cabinet.



#### B) BASIC TV OPERATION:

TV antenna (rotate the TV antenna for best reception) or hook up to park cable

12 Volt Operation

- 1) Turn the inverter on. The inverter is located in the cabinet directly above the DVD player. The OFF/ On Switch is located beside the fan on the back of the inverter opposite end as the plug outlet). Ensure the TV and DVD player are plugged into the inverter and the inverter.

Off/On  
Switch

(1)



(2)



- 2) Turn the antenna booster on by pressing the black button on the Winegard wall plate
- 3) Turn the TV on and select DTV-TV using the input button on your TV or remote.
- 4) Using the menu button select - TV, select -Channels, select - Scan Channel. This will 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 booster off on you TV antenna follow step (4) for auto programing.
- 6) For DVD operation turn on the DVD player. Using the source button on you TV or TV remote select HDMI 1. Insert a DVD or Blu-Ray Disc allow the Disc to load and press play.
  - To save power while watching TV ensure the DVD player is switched off. Only turn your DVD player on when in use.

120 volt Operation

(Generator or Shore Power):

Plug the TV and DVD player into the outlet located above the inverter. Switch the inverter off (Switch is located beside the fan on the back of the inverter opposite end as the plug outlet).. Use the same programing procedures as the 12 volt operation.

### **Antenna**

The antenna is a dome style antenna designed for digital signal. The antenna inside wall control features a search option for bringing in the best reception possible.



\*Note: When travelling the TV should remain in the locked position.

## **Bed Layout**

- 1) Lay the power sofa into the extend position by pressing the extend button on the panel above the TV.



- 2) Remove the bed boards from behind the driver seat



- 3) Place the two bed board on the ottoman rails .

- 4) Place the ottoman backrests in between the seat cushions. To complete the bed make up.



## **Counter Top Extension Front kitchen and Rear Kitchen**



Lift the extension until it locks in the full upright position.

To fold down the extension press the locking levers on the end of the extension arm.

## **TABLE**



- 1) Remove the table and table leg from behind the driver seat
- 2) Insert the T end of the table pole into the table base
- 3) Turn the table pole clock wise until it is tight and locked into place
- 4) Press the table down onto the table pole.

## **Solar Panel**

Your vehicle is equipped with a 95 watt or 190 watt Carmanah solar panel package in the center of the roof. The solar panel is controlled by charge control system located in the driver closet face or rear panel. This control shows battery voltage, charge, and solar amps.



(Shown with three panels 190 watts)

(Battery Voltage)(Battery Charge %)(Solar Charge Rate)

- 1) The solar panels will charge the coach batteries when the panel disconnect is in the off position.
- 2) To fully disconnect solar panels from charging coach batteries you must turn off disconnect in the driver side ottoman.



(1)



(2)

Ensure the solar panels are clean for optimal charging output.

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



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National Highway Traffic Safety  
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# **TIRE SAFETY**

## **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. Underinflated 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

- Step 1: Locate the recommended tire pressure on the vehicle's tire information placard, certification label, or in the owner's manual.
- Step 2: Record the tire pressure of all tires.
- Step 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.

- Step 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.
- Step 5: At a service station, add the missing pounds of air pressure to each tire that is underinflated.
- Step 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 underinflated, 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 underinflated 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 underinflated 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 treadwear 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

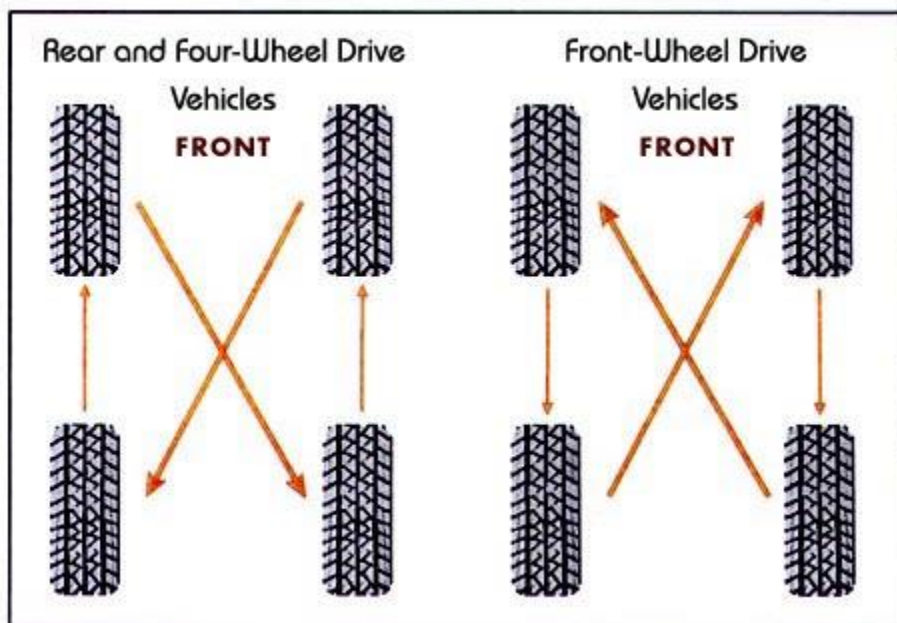
To avoid vibration or shaking of the vehicle when a tire rotates, the tire must be properly balanced. This balance is achieved by positioning weights on the wheel to counterbalance heavy spots on the wheel-and-tire assembly. A wheel alignment adjusts the angles of the wheels so that they are positioned 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.

## 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.

### A Tire Rotation Example

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



## 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.

## Uniform Tire Quality Grading System (UTQGS)

To help consumers compare a passenger car tire's treadwear 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".

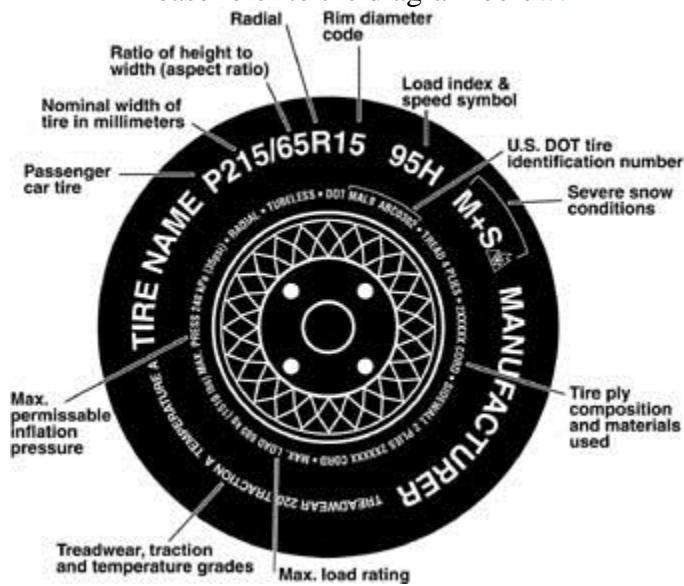
Temperature grades are an indication of a tire's resistance to heat. Sustained high temperature (for example, driving long distances in hot weather), can cause a tire to deteriorate, leading to blowouts and tread separation. From highest to lowest, a tire's resistance to heat is graded as "A", "B", or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

## **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.

### **Information on Passenger Vehicle Tires**

Please refer to the diagram below.



## d

### 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
T	118 mph
U	124 mph
H	130 mph
V	149 mph
W	168* mph
Y	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

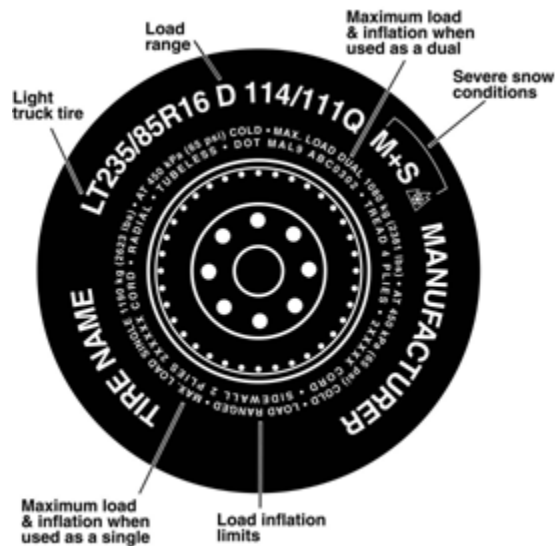
This letter indicates a tire's ability to stop on wet pavement. A higher graded tire should allow you to stop your car on wet roads in a shorter distance than a tire with a lower grade. Traction is graded from highest to lowest as "AA", "A", "B", and "C".

### 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

Please refer to diagram below.



d

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.



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