



GM33

Ford F600

VEHICLE ID NUMBER: _____

OWNER'S MANUAL

WWW.GRECHMOTORS.COM

INTRODUCTION



Dear Grech Motors Bus Owner,

Thank you for purchasing a Grech motors product. Your decision to own a true luxury vehicle is what drives our efforts every day and we appreciate your vote of confidence. A substantial investment has been made and we want to ensure that your experience is priceless.

We believe in one direction: **Forward**. We strive to deliver the most innovative, highest-quality commercial vehicles by having more than 30 years of experience in high-end bus and coach manufacturing.

An unwavering commitment to constant innovation through research and development, the use of high quality materials and hand-crafted construction makes our buses unrivaled in the ground transportation industry.

We are committed to excellence throughout our entire bus line and stand behind our expert craftsmanship with industry's best warranty and after-sale support experience.

The outcome of our uncompromising efforts is a product of beauty, reliability and longevity that will help you grow your business with confidence.

Since the inception of Ford's Qualified Vehicle Modifier or "QVM" certification more than 25 years ago, we have been honored with this merit consistently every year since.

It is important to carefully read and understand this manual to assure yourself and your loved ones one of the best possible experiences. To accomplish this, we recommend to take the time to become fully acquainted with the vehicle before ever taking it on the open road.

OWNER'S MANUAL

In this Owner's Manual you will find several suggestions and information that will make your ownership a long and enjoyable one! This manual's main objective is to serve as a reference document for the operations and maintenance procedures that will be required throughout the life of your vehicle.

It contains vital information used to identify your specific vehicle and the safety features that must be understood and followed in order to operate this vehicle safely. This manual is not intended to serve as a maintenance manual. It provides the basic procedures, along with a comprehensive overview of your new motor home's operating systems.

There are many safety notices that appear throughout the manual that alert you to items that require your attention and/or understanding to assure the safety of you and your passengers as well as other drivers on the road.

We urge you to take the time to completely understand your bus, so you can drive with confidence as you explore new places with family and friends.

The information contained in this document is intended to reflect standard and optional equipment included in a typically equipped model at the time of delivery to the initial retail owner. In the case that you are not the initial retail owner of the unit, this document will not reflect modifications that may have been performed by previous owners.

It is the policy of **GRECH MOTORS**, to incorporate product improvements whenever possible or practical to do so. We reserve the right to make changes and or improvements at any time without incurring any obligation to make such changes on previously sold products. The information and specifications contained in this manual are subject to change at any time, without notice.

If there is any question or doubts regarding what is written and disclosed in this handbook for your bus feel free to call Grech Motors at **(855)-994-GRECH (7324)**.

In the event that you require any type of service concerning any difficulty with the bus be sure to have your Vehicle Identification Number (VIN) and mileage available before you call.

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NOTICES & DISCLAIMERS



The information and specifications contained in this manual are current at time of printing. Subsequently, **all information contained in this manual is subject to change at any time, without notice.** Please note that this manual applies to the **GRECH MOTORS GM33 FORD F600** and explains standard equipment as well as many options and may include equipment not presently installed on your vehicle.

NOTICE

For your safety and the safety of others, we ask that you completely familiarize yourself with this manual, and all other operators manuals before you operate this vehicle for the first time.

PLEASE NOTE: Updates to all manuals are online at www.grechmotors.com

WARNING

- Breathing diesel engine exhaust exposes you to chemicals (engine exhaust, carbon monoxide, phtalates, and lead) known to the State of California to cause cancer and birth defects or other reproductive harm.
- Wear gloves or wash your hands frequently when servicing your vehicle.
- 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 visit:
www.P65warnings.ca.gov/diesel
FAILURE TO COMPLY COULD RESULT IN DEATH OR INJURY.

NOTICE

Product information and specifications are shown herein as of the time of printing. The motorhome manufacturer reserves the right to change product specifications, designs and standard equipment without notice and without incurring obligation.

PLEASE NOTE: Updates to all manuals are online at www.grechmotors.com

DANGER

NO STANDEES ARE ALLOWED AT ANY TIME, WHILE THE VEHICLE IS IN MOTION.

Discontinue operation of vehicle if any person stands in the bus while the vehicle is in motion.

WARNING

Discontinue operation of the vehicle if:

- Any critical item on the pre-tip inspection list fails to pass, or until all problems have been resolved.
- If the door warning buzzer/door ajar light is illuminated while vehicle is in motion.

If a door ajar warning light is lit, check all doors for proper closure. Never operate this vehicle until the problem has been resolved.

Discontinue operation of vehicle if a door or emergency exit should open while the vehicle is in motion.

WARNING

The bus is not designed to tow another vehicle or trailer. DO NOT attempt to tow or pull another vehicle with this bus.

CAUTION

The bus seating configuration in this vehicle has been installed in accordance with the design parameters determined by Grech Motors engineering department.

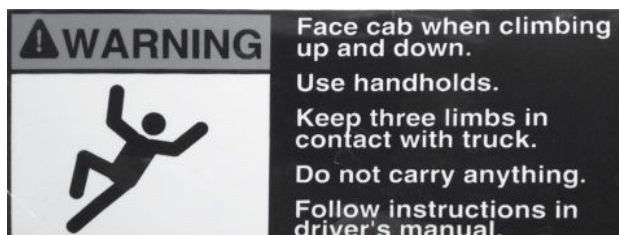
The adding, moving, or removing of the original seating, is strictly prohibited without the authorization of Grech Motors engineering department.

WARNING

Modifying the seating arrangement of your vehicle without proper engineering specifications can change the weight distribution / payload characteristics of the vehicle and potentially endanger the passengers by creating an unsafe operating condition.

CAUTION

Do not alter, add or change any components installed in this vehicle. Adding or changing components may adversely affect vehicle stability creating an unsafe vehicle.



SERIAL NUMBERS

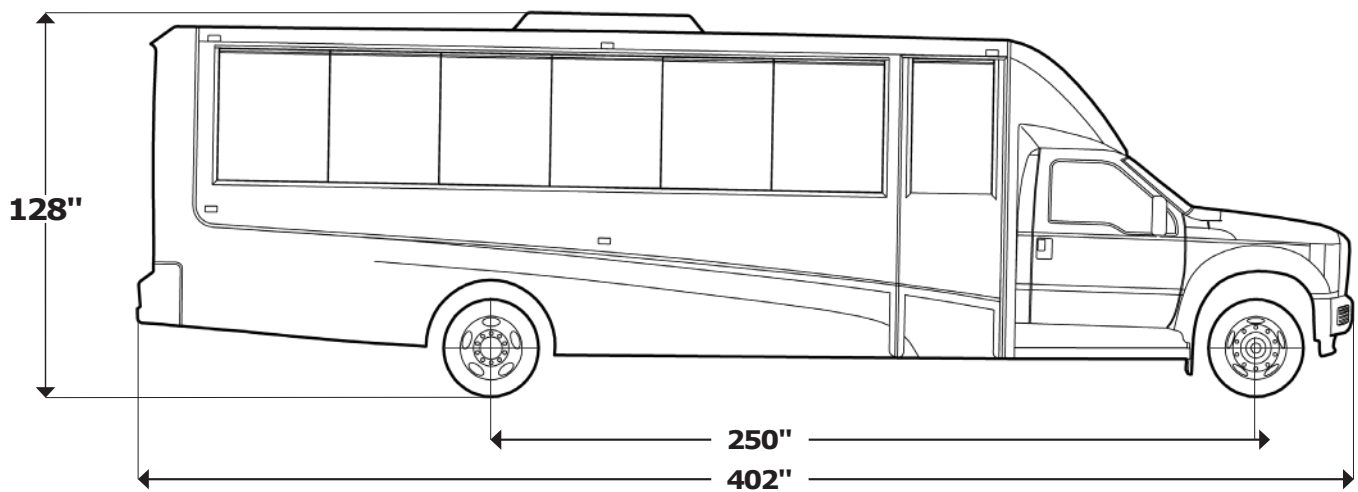
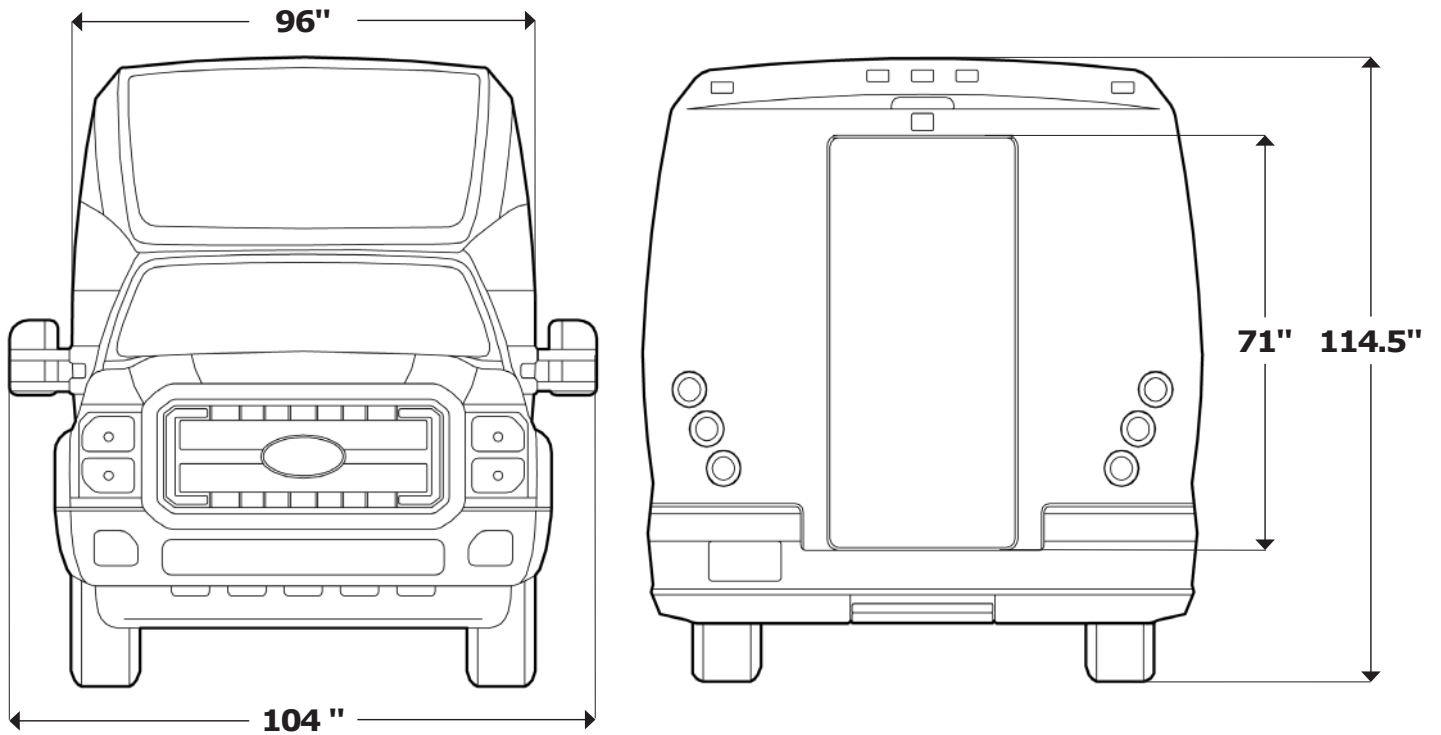
This section below provides a convenient place to identify and record component information that may be needed if in a situation a problem should arise with a product. Serial numbers are important for both the manufacturer and the vehicle's owner to know. They are unique and individual numbers found on each component or only to one camper, and it allows an owner or insurance company to look up the history of the bus.

- **BUS-** Serial Number: _____
- **BUS-** Federal Vehicle ID Number: _____
- **ENTRY DOOR-** Key Number: _____
- **ROOF AIR CONDITIONER (s)-** Model: _____
 - **Serial Number:** _____
- **INVERTER-** Model: _____
 - **Serial Number:** _____



BUS DIMENSIONS

GM33 FORD F600 FRONT AND REAR VIEW



ABOUT GM33 FORD F600

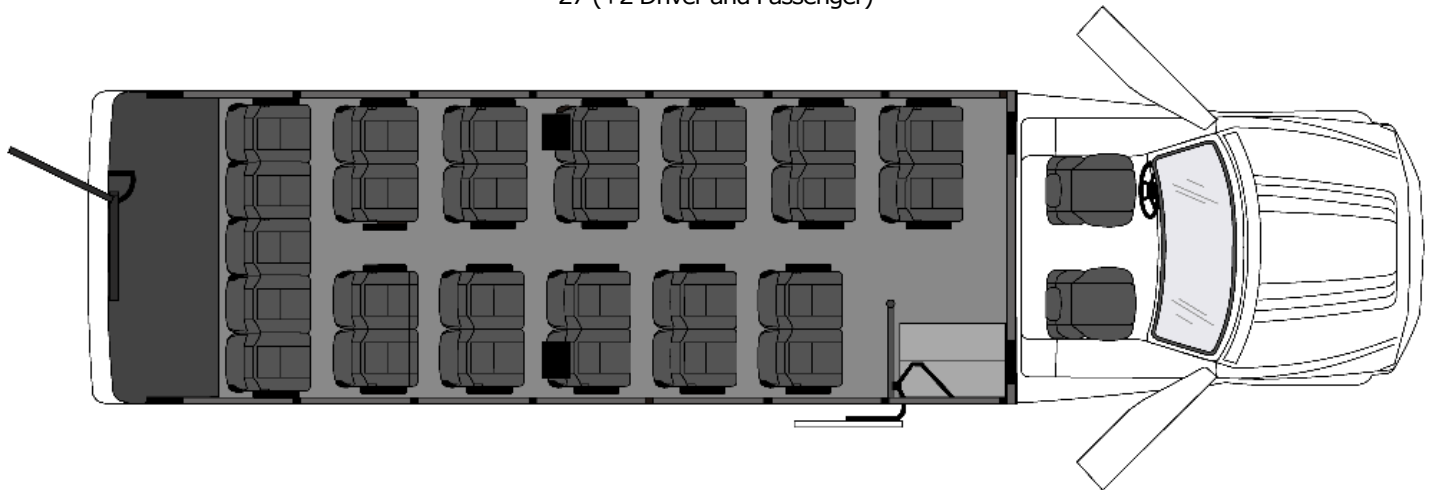
The **GM Ford F600** takes innovation to the next level by being the **world's first luxury** bus built on the next-gen Ford chassis. The bus is perfect for road warriors, corporate travelers, and everything in between.

It delivers a perfect blend of **luxury** and **comfort** that guarantees passengers will enjoy a **VIP experience**. The ambient LED accent lighting is paired with the ultra-luxurious Grech leather seating to ensure that no matter how long the ride might be, the passengers will feel comfortable and have a good time.

The **GM33 Ford F600** meets the highest standards of quality, design, and engineering. In fact, the pure **luxury** and **top-tier quality** of the interior design can be seen in each detail. Moreover, the GM33 Ford F600 features a passenger capacity of **28** (or **32** without rear luggage). This makes it the perfect vehicle for important events.

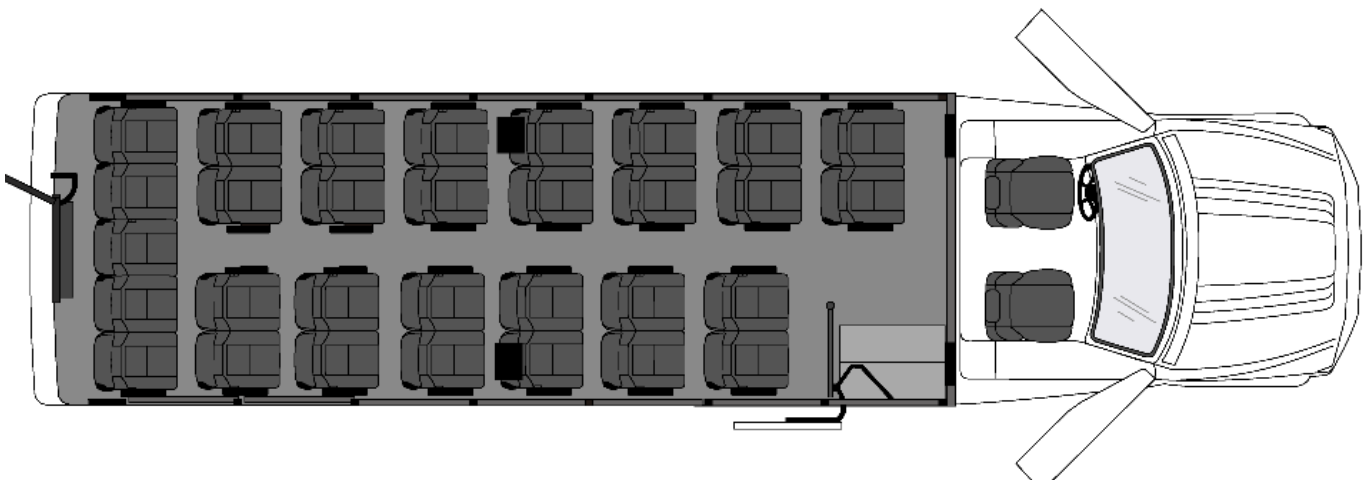
GM33 FORD F600 WITH REAR LUGGAGE SPACE

Seats up to
27 (+2 Driver and Passenger)



GM33 FORD F600 WITHOUT REAR LUGGAGE SPACE

Seats up to
31 (+2 Driver and Passenger)



SPECIFICATIONS CHART



GM 33 FORD F600	
NAME	DIESEL ENGINE CHARACTERISTICS
POWER TRAIN	Ford 6.7L Power Stroke V-8 Diesel Engine
TRANSMISSION	TorqShift 6-Speed Automatic (with overdrive)
ALTERNATORS	Dual Alternators
CHASSIS	Ford F600
CAPACITY	Up to 28 passengers with rear luggage / 32 passengers without.
STEERING WHEEL LOCATION	Left Side
WHEELBASE	250 in
OVERALL EXTERIOR LENGTH	33.5 ft / 402 in
OVERALL EXTERIOR HEIGHT	10ft 6in / 126 in (Including AC)
OVERALL EXTERIOR WIDTH (MIRRORS FOLDED IN)	8.33 ft / 100 in
EXTERIOR OVERALL WIDTH (MIRRORS EXTENDED)	9.58 ft / 115 in
INTERIOR HEIGHT	6.47 ft / 77 3/4 in
INTERIOR WIDTH	8 ft 96 in
GROSS VEHICLE WEIGHT RATING (GVWR)	9979 kg 22,000 lbs
FRONT GROSS AXLE WEIGHT RATING (GAWR FRONT)	3402 kg 7500 lbs
REAR GROSS AXLE WEIGHT RATING (GAWR REAR)	7031 kg 15500 lbs
TURNING RADIUS	36.2 ft
GROUND CLEARANCE	11 1/2 in
CLEAR DOOR OPENING- ENTRY DOOR	91 in X 32 3/4 in
CLEAR DOOR OPENING- LUGGAGE DOOR	30 1/2 in x 68 1/2 in
TIRES	245/70RX 19.5 G DUAL
RIMS	19.5 x 6.75 (Front: 90 PSI 620 kPa/COLD) (Rear: 100 PSI 690 kPa/COLD)
MEDIA PLAYERS	AM/FM/DVDPlayer/MP3/BT
A/C SYSTEM	110,000 BTU Roof-Mounted HVAC
CAGE	Fully Welded Steel Tube Cage
BODY	Riveted Aircraft-Grade Aluminum Body
SKIRTS AND FLOOR/REAR CAPS	Reinforced Fiberglass Skirts and Front & Rear Caps
FRONT AND REAR BUMPERS	Chrome steel with front grained top cover and black lower air dam
HEADLAMPS	Dual Beam Halogen Headlamps
SIDEWALLS	Aluminum Exterior Side Walls
SEAT BELTS	Color coordinated with height adjustment
LIGHTING	LED Interior / Exterior Lighting
FLOORING	Altro Wood-Look Flooring
SUBFLOOR	3/4" Composite Sub Floor



UNDERSTANDING THE WARRANTY'S POLICY



GETTING THE SERVICES YOU NEED

Warranty repairs to your vehicle must be performed by an **authorized dealer**. While any authorized dealer handling your vehicle line will provide **warranty service**, we recommend you return to your selling **authorized** dealer who wants to ensure your continued **satisfaction**.

Please note that certain warranty repairs require special **training** and **equipment**, so not all **authorized** dealers are authorized to perform all warranty repairs. This means that, depending on the warranty **repair** needed, you may have to take your vehicle to another authorized dealer.

A reasonable **time** must be allowed to perform a repair after taking your vehicle to the **authorized** dealer. Repairs will be made using Grech Motors **parts**, or **remanufactured** or other parts that are authorized by Grech Motors.

AWAY FROM HOME

If you are away from home when your vehicle needs **service**, contact the **Grech Customer Relations** or use the **online resources** listed below to find the nearest authorized dealer.

► In the United States:

Mailing address
Grech Motors
Customer Relationship
6915 Arlington Avenue
Riverside, California 92504

► Telephone:

1-855-994-7324

► Online:

- **Base Curb Weight:** These are some of the items that can be found online:
 - U.S. dealer locator by Dealer Name, City/State, or Zip Code
 - Owner Manuals
 - Maintenance Schedules
 - Recalls

ADDITIONAL ASSISTANCE

If you have **questions** or **concerns**, or are **unsatisfied** with the service you are receiving, follow these steps:

1. Contact your **Sales Representative** or **Service Advisor** at your selling/servicing authorized dealer.
2. If your **inquiry** or **concern** remains **unresolved**, contact the Sales Manager, Service Manager or Customer Relations Manager.
3. If you require **assistance** or **clarification** on Grech Motors policies, please contact the **Grech Customer Relationship Center**.

In order to help you serve you better, please have the following information available when contacting a **Customer Relationship Center**:

- Vehicle Identification Number
- Your Telephone Number (Home and Business)
- The name of the authorized dealer and city where located.
- The vehicle's current odometer reading.

In some states, you must directly notify **Grech Motors** in writing before pursuing **remedies** under your state's **warranty laws**. Grech Motors is also allowed a **final** repair attempt in some states.

In the United States, a warranty dispute must be **submitted** to the **BBB AUTO LINE** before taking action under the **Magnuson-Moss Warranty Act**, or to the extent allowed by state law, before pursuing **replacement** or **repurchase** remedies provided by certain state laws. This dispute handling procedure is not required prior to enforcing **state** created **rights** or other rights which are **independent** of the Magnuson-Moss Warranty Act or state replacement or repurchase laws.

REPORTING SAFETY DEFECTS (U.S. 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 the **National Highway Traffic Safety Administration** (NHTSA) in addition to notifying Grech Motors.

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

To contact **NHTSA**, you may call the **Vehicle Safety Hotline** toll-free at **1-888-327-4236 (TTY: 1-800-424-9153)** or go to <http://www.safercar.gov> or write to: Administrator 1200 New Jersey Avenue, Southeast Washington, D.C. 20590

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

REPORTING SAFETY DEFECTS (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.

TRANSPORT CANADA CONTACT INFORMATION

► Website:

<http://www.tc.gc.ca/eng/roadsafety/menu.htm>

► Phone: 1-800-333-0510

UNDERSTANDING THE WARRANTY'S POLICY



OBTAINING PARTS

When parts are required for a **warranty repair**, all parts will be handled by the **Grech Motors Service Department**.

All other **Non-Warranty parts** needs can be handled by contacting the **Grech Motors Parts Department**, directly at **1-855-994-7324**. In order to expedite your parts order, please have your Grech Motors **serial number**, which starts with **G-#####**, and is located on the drivers door jamb of all our vehicles.

UNDERSTANDING WARRANTY POLICY

Should your bus require service related to the converted areas of the vehicle, **read this section first**, before taking any action. By doing so, you will clearly understand the **Grech Motors Service Process**, and avoid possible **delays**.

NOTICE

Never initiate a warranty repair without prior approval from the **Grech Motors Service Department**. You **must** obtain a **R.A.N** (Repair Authorization Number) before any warranty repair is honored.

WARNING

Not following this procedure could VOID your warranty reimbursement for that particular repair.

If there is any doubt as to whether or not a repair is related to the **Grech Motors Warranty**, call the Grech Motors Service Department at **1-855-944-7324**, this may save you time wasted at a chassis dealer or another shop, for a problem appropriately solved by contacting **Grech Motors Service Department**.

If the problem is **conversion** related, then it can either be repaired at our Riverside California facility, or by a shop that we recommend in your area, or by a shop of your choice. This **procedure** is true of both **warranty** and **non-warranty** repairs. Depending on the nature of the problem, it may be necessary to have the warranty **repair** done at our Riverside, California facility.

CAUTION

If it becomes necessary to tow your bus, a **flat bed rig** is preferred. **UNDER NO CIRCUMSTANCES**, should the bus be towed by lifting the **rear** end, serious frame **damage** can occur.

WARRANTY VERSUS NON-WARRANTY

Whether a particular problem is covered under the Grech Motors depends, in some cases, on several factors. The Grech Motors Service Department determines coverages ahead of time on a case by case basis, either over the phone or at our Riverside, California facility.

HAVING NON-WARRANTY REPAIRS PERFORMED

If the service manager has determined that the repair is not covered, or you are sure that it is not covered, we would be happy to recommend a shop in your area, or schedule an appointment with the Grech Motors Service Department, whichever is more convenient.

HAVING WARRANTY REPAIRS PERFORMED

There are **three (3) methods**:

1. Repair is done at the **Grech Motors Service Department**, in Riverside, California.
2. Repair is done at a Grech Motors **authorized service facility** near you.
3. Repair is done at a shop of your **choice**, with prior approval of the Grech Motors Service Department.

If either method 2 or 3 as described, are to be used, you must obtain **pre-authorization** and a Grech Motors Service Department **Repair Authorization Number** (R.A.N), in advance of performing any repairs. Both requirements may be accomplished from a single phone call to the Grech Motors Service Department, at **1-855-994-7324**.

Send all **invoices** to the service manager at:

Grech Motors
Attn: Service Department Manager
6915 Arlington Avenue
Riverside, California 92504

UNDERSTANDING THE WARRANTY'S POLICY



GRECH MOTORS LIMITED WARRANTY

Applies to 2017 and later models

Grech Motors Inc., (hereinafter referred to as Grech Motors) is the final stage manufacturer of an **incomplete vehicle**, which is manufactured and separately warranted by the incomplete vehicle manufacturer. This limited warranty thus **does not** extend to **any part** or **portion** of the incomplete vehicle except as specifically required by any applicable **federal law** or **regulation**.

Original Equipment Manufacturer (**OEM**) chassis may have been **modified** by Grech Motors Inc. from the **original** configuration.

BODY STRUCTURE

Grech Motors Warrants to the original purchaser of each new Grech Motors bus, the **body structure** which is defined as: the cage, skin, front and rear caps, and floor structure to be **free from defects**, in material and workmanship under normal use and service for: **five (5) years** or **100,000** miles, whichever comes first, from the date of purchase by the original retail customer.

NOTICE

In the event of a Warranty claim, Grech Motors reserves the right to replace or repair the defective part.

FREE FROM DEFECTS

Grech Motors further warrants to the original purchaser of each new Grech Motors bus, that **all parts** (except electronic parts and HVAC system which are warranted by their original manufacturer) installed by Grech Motors will be **free** from **defects** in **material** and **workmanship** under normal use and service for **five (5) years**, or **100,000** miles, whichever comes first, from the date of purchase by the original retail customer.

EXTERIOR PAINT

Grech Motors warrants to the original purchaser of each new Grech Motors bus, the **exterior paint** for **five** 5 years or **100,000** miles (2 years or 50,000 miles on custom color changes) whichever comes first from the date of purchase by the original retail customer.

WHAT WE'LL DO TO CORRECT PROBLEMS

Provided that **prior authorization** was obtained from the Warranty Department of Grech Motors, all **labor costs** associated with the **repair** or **replacement** of defective parts will be paid by Grech Motors. Grech Motors reserves the right to make a **physical inspection** of the bus by authorized factory personnel following any complaint prior to any **repair**.

Grech Motors shall have **no liability** for any **defect** or **damage** caused by the original owner's use of parts or services which are **not authorized** by Grech Motors or for any parts or paint which have been subject to **misuse**, **neglect** or **accidents**, or have been subject to external **mechanical** or **chemical** influences, especially stone chips, airborne rust or industrial fall-out.

NOTICE

This Limited Warranty DOES NOT cover loss to time, inconvenience, loss of use of any vehicle, cost of rented replacement vehicle, or lodging or mileage expense in connection with any warranty repairs.

The original retail customer **MUST** obtain, prior to performing any work: a **Repair Authorization Number** (R.A.N) on any Grech Motors Bus.

The original customer should contact the **Warranty Department of Grech Motors**.

NOTICE

No person is authorized to alter or change in any way the terms and conditions of the above stated limited warranty.

It is the policy of Grech Motors, to incorporate product **improvements** to our products whenever possible or practical to do so.

We reserve the right to make **changes** and/or **improvements** at any time without incurring any obligation to make such changes on previously sold products. Additionally, the **information** and **specifications** contained within this manual are current at time of printing. Subsequently all information contained in this manual is subject to change **at any time**, without notice.

PRE-TIP INSPECTION



Any item not passing inspection, must be reported immediately, before operating vehicle. Failure of highlighted item(s) to pass inspection will cause vehicle to be grounded.

INSPECTION PROCEDURE CHECKLIST

ITEM	INSPECTION PROCEDURE	PASS	FAIL
1	Check preventative maintenance schedule for services due at present mileage.		
2	Calculate Load Carrying/Payload Capacity.		
3	Check Side Passenger Entry Door- Emergency Exit Operation & Obstruction Sensing System.		
4	Check operation of drivers seat and seat belt.		
5	Check operation of steering wheel and shift levers.		
6	Check operation of turn indicators.		
7	Check operation of foot pedals and parking brake.		
8	Check operation of all gauges, for normal readings with engine running.		
9	Check operation of dash indicator lights with key on, engine not started, then again with engine started.		
10	Check operation of ventilation system: heating, defrosters, fans and air conditioning.		
11	Check: Horn, wipers, washers, and mirrors for cleanliness, adjustment, operation and damage.		
12	Check condition of fire extinguisher, warning reflectors and first aid kit.		
13	Check all doors, glass and windows for operation, cleanliness, and damage.		
14	Check all emergency exits for operation, warning devices, markings, to be free and clear.		
15	Check interior lighting: for operation and damage.		
16	Check Side Passenger Entry Door for damage and proper closing operation.		
17	Check exterior lighting: for operation and damage.		
18	Check exterior for cleanliness, markings and damage.		
19	Check fuel cap in place and secure.		
20	Check all tires and wheels for tread depth, cracks and bulges, missing lug nuts and air pressure 95 psi for F-600		
21	Check oil level.		
22	Check transmission fluid level.		
23	Check engine coolant level.		
24	Check power steering fluid level.		
25	Check brake fluid level.		
26	Check belts for tension and wear.		
27	Check operation of cameras, if applicable.		
28	Check operation of PA system, if applicable.		
29	Check operation of audio and video system, if applicable.		
30	Check wheelchair lift for proper function damage and securement station equipment.		

EMERGENCIES

Your vehicle is designed with **features** that allows the driver and occupants to resolve some emergencies or failures while **traveling**. Review this section to become familiar with the recommended procedures to **resolve** these **conditions** or **situations**.

When traveling with your vehicle there would be certain **situations**, **emergencies** or **failures** that the driver and passengers should know how to handle and resolve. Review this section to **familiarize** yourself with the recommended procedures to resolve any particular emergencies or problems you may **encounter**.

Before beginning any trip with an **extended** duration, ensure you are thoroughly familiar with the **operation** and **conditions** of your vehicle. Make sure you know all about the **components**, **features** and **limitations**.

Potential emergencies are always an **issue** when you are dealing with **passengers**, **traffic**, **weather** and **road conditions**. We want to help you as a driver, achieve the highest level of **safety** not only for your passengers but also for the people around and near the vehicle.

EMERGENCY PREPARATION

Emergencies can happen anytime, anywhere and when they strike, you may not have much time to react. Emergency planning may not prevent emergencies, but it can help protect lives. By knowing where the safety equipment is located and understanding the operations of the equipment supplied you will be helping to ensure a safe trip.

NOTICE

If the decals and/or signs have been removed or erased please contact Grech Motors Customer Service to obtain new decals.

HAZARD WARNING LIGHTS

Your vehicle is equipped with a **hazard warning light system**. Front and rear turn signals flash in **unison** when the system is turned **on**. The button is located on the dashboard



- **To switch on/off:** Press the **Hazard Warning Lamp Switch**. If you have indicated a turn while the hazard warning lamps are switched **on**, only the turn signal lamps on the side of the vehicle selected will **light** up.
- The hazard warning lamps will switch **on automatically** if:
 - An air bag is **deployed**.
 - You brake **sharply** and bring the vehicle to a **halt** from a **speed** of more than **45 mph** (70 km/h).

If the **hazard** warning lamps have been switched **on** automatically, press the Hazard Warning Lamp Switch to switch them **off**.

NOTICE

Hazard warning lamps work even when the ignition is switched off.

Activate the **hazard warning lights** whenever the vehicle is stopped on the **side** of the road or near moving **traffic**. The hazard warning lights **alerts** other drivers of a potential **hazard** and to take extra **precautions**. The Hazard Warning Lights will continue **flashing** when the switch is **on**, even when the key is in the **off** position or **removed** from the ignition.

ESCAPE ROUTES

It is the driver's **responsibility** to make sure everyone is familiar with and understands the **escape routes** of the bus. It is also their responsibility to make sure the exits are clearly **marked**, the components are **functional** and the passageways are not **obstructed** in any way.

The **F-600 GM33 27+2** model and the **F-600 GM33 31+2** has **6** egress windows on each side of the bus, a rear emergency door and a roof hatch. Please check through your bus to locate all of the **emergency exits** available to you and your passengers.



CAUTION

It is highly recommended that decals not be used on the front windshield. The use of decals may cause discoloration over time, and thereby permanently discolor the area beneath the decal.

WARNING

Unless all Emergency Exits are clearly marked, working properly, and the instructions are intact do not carry passengers. The inability to find, access, and/or operate the emergency exits will put your passengers in great danger if an accident occurs. The result of injuries can be much worse and/or result in death if an evacuation is necessary and the escape routes are altered or prohibited.

EMERGENCIES AND SAFETY



NOTICE

Emergency exits must always be visible and clearly identified with the operating instructions written on or close to each exit feature.

BEFORE EACH TRIP INSPECT EMERGENCY EXITS

The emergency exits in your bus are at **windows, rear door, and roof hatch**.

- Check to see that all emergency exits are clearly **marked** with a proper "**Emergency Exit**" sign or label and that all instructions are intact for each component.
- Check that all emergency exits are in **proper working order**.
- Check that the passageways are not **obstructed**.
- Inspect all hardware such as **latches, handles, and brackets** to ensure they are not loose, broken, or damaged.
- Check all windows and doors to ensure they do not have **loose, cracked, or damaged** glass.

EMERGENCY EGRESS WINDOW

The Emergency Egress Windows are designed to allow the passengers to **release** the latch(s) and push the window to **crawl** out in case of an emergency situation.

All emergency windows are equipped with one **bright red handle** along with the instructions on how to open them in an emergency.

CAUTION

Check exit operation **DAILY**.



HANDLE IN
CLOSED POSITION



HANDLE IN
OPEN POSITION

NOTICE

Windows with Emergency Exit stickers are designated Emergency exits. Follow the directions on the sticker. Rotate handle and push window out.

This vehicle is equipped with (multiple) **Emergency Egress Windows**. These windows serve as **supplemental exit** points in the event of an **emergency**. The vehicle has (multiple) **Emergency Egress Windows** on the passenger side and the driver's side of the vehicle.

The **Emergency Egress Windows** are a vital component in the vehicle's emergency exit system. As such the vehicle **driver** should **test** the every day before putting the vehicle into service.

EMERGENCY EGRESS WINDOW OPERATION

To test the system, the vehicle driver should check the following items:

- Each **Emergency Egress Window** is marked by an **Emergency Exit sticker** on the right side of the window, half way up, next to the **Emergency Handle**. Confirm that each Emergency Egress Window is equipped with the **sticker** designating that window as an **emergency exit**. If the Emergency Egress Window is missing the Emergency Exit designation sticker, call the **Grech Motors Service Department** at **1-855-994-7324** and do not operate the vehicle.
- **2)** Each **Emergency Egress Window** is secured by **one latch**, on the right side of the window, half way up. Actuate the Emergency Egress Window by **rotating** the handle, the latch is in the **released** position when the handle moves from the **vertical** to the **horizontal** position, and **releases** the window to be pushed **open**.
- **3)** When **Emergency Egress Window Latch** is released, the user can **open** the window by **pushing** on the bottom of the **window frame**. The Emergency Egress Window should **swing out** and away from the vehicle.
- **4)** If the **Emergency Egress Window** does not **swing open** when the latches are **released** and the window frame is pushed, call the **Grech Motors Service Department** at **1-855-994-7324** and do not operate the vehicle.
- **5)** When properly closing the **Emergency Egress Window** back to a **secured** position, the handles will return to the **vertical locked** position. Each latch should be in the **locking** position when the user moves the latch to the **vertical** position. Check to **ensure** the Emergency Egress Window is secured against the coach by pushing **against** the window frame while the latch is in the **locked vertical** position.

CAUTION

FRONT WINDSHIELD CAUTION! It is highly recommended that decals not be used on the front windshield. The use of decals may cause discoloration over time, and thereby permanently discolor the area beneath the decal.

EMERGENCY EGRESS WINDOW MAINTENANCE

It is important to do **daily inspections** of all emergency windows. Here are some important points to check when making an inspection on the Emergency Egress Windows:

- Check the **operation** of each egress window. Open all handles and push out the window to ensure it is working **properly** do not extend the window beyond **40 degrees**. Pushing any window out **too far** can cause it to release and fall out; as it would in an **emergency** situation.
- Inspect the **latches** and **mechanisms** if they are **damaged**, **worn** or have **loose** parts, **replace** as necessary.
- **Lubricate** any hard to move latches with **white lithium grease**.
- Inspect the glass for **cracks** and **chips**, replace if **damaged**.
- Windows on **bus doors** should be cleaned on a regular basis to ensure **visibility** and passenger **safety**.
- Clean **interior** and **exterior** glass surfaces daily using a household **ammonia** solution or other **glass cleaner** and a **soft, nonabrasive cloth, sponge, or chamois** to remove any dirt or film.
- All **emergency windows** are labeled as **Emergency Exits** and the instructions are provided by each handle.
- Inspect the **seals** for **damages** and **worn** or **loose** areas and replace as **necessary**.
- Clean and apply silicone lubricant to the window groove every 2 months, or as needed, to help keep sliding window's action smooth.

⚠ WARNING

Check for proper operations and ensure that the instruction labels are intact. Serious injury and or death could occur if the window operations fail and people are not able to escape during an emergency.

⚠ WARNING

Do not drive with the egress windows unlocked/unlatched or allow someone to open them while the unit is in motion. Driving a bus with the egress windows unlocked could result in the window blowing open and falling out. The window also could become airborne. Either condition could lead to serious injury or death.

EMERGENCY ROOF HATCH EXIT

An Emergency Ewscape Hatch is an **exit** used when the primary means of escape or exit from the vehicle are **blocked, unusable** or **unavailable**. The Emergency Hatch is a common option available in case of an emergency to be used as an exit.

It is important to understand how the hatch works.

- To **open hatch**, turn the **red knob 90° clockwise**.
- To **exit hatch**, then press firmly on the **red knob**.
- Press the knob **in**, as you would a button, until the catch **releases** and the hatch **opens** freely.

The Emergency Roof Hatch is located in the vehicle's **roof**, above the **passenger walkway**.

ⓘ NOTICE

The roof escape hatch can also be used for ventilation, simply push up at the sides of the escape hatch and it will pop up for ventilation. Pull down and it will snap shut to close.



EMERGENCY ROOF HATCH EXIT MAINTENANCE

- Periodically inspect attaching fasteners to ensure that they are secure.
- To clean use a mild soap and water.
- Do not use solutions containing acetone, ether, lacquer thinner or other solutions that can destroy the properties of composites and plastics.

ⓘ CAUTION

When removing graffiti, it is the customers responsibility to ensure cleaning solutions are compatible with the materials used on Safety Vents. Solutions containing, acetone, ether, lacquer thinner, or other solvents can destroy the high strength properties of many engineering plastics. **AVOID these cleaners.**

EMERGENCIES AND SAFETY



EMERGENCY ROOF HATCH EXIT SYSTEM

The Emergency Roof Hatch is a **vital** component in the **vehicle's emergency exit system**. As such the vehicle driver should test the Emergency Roof Hatch every day before putting the vehicle into service.

To **test the system**, the vehicle driver should check:

- **1)** Ensure that the Emergency Roof Hatch is marked by an **Emergency Exit sticker**. Confirm that the Emergency Roof Hatch is equipped with the sticker designating the **hatch** as an **emergency exit**. If the Emergency Roof Hatch Exit is **missing** the Emergency Exit designation sticker, call the Grech Motors Service Department at **1-855-994-7324** and **do not** operate the vehicle.
- **2)** The Emergency Roof Hatch is secured by **one latch**. Actuate the Emergency Roof Hatch by turning its handle from the **"LATCHED"** position to the **"TO EXIT"** position.
- **3)** When Emergency Roof Hatch latch is **released**, the user can open the hatch by **pushing it away** from the vehicle. The Emergency Roof Hatch should swing **out** and **away** from the vehicle.
- **4)** If the Emergency Roof Hatch does not swing **open** when the latch is **released** and the hatch is **pushed**, call the Grech Motors Service Department at **1-855-994-7324** and **do not** operate the vehicle.
- **5)** **Close** Emergency Roof Hatch and **secure** it by returning the handle to the **"LATCHED"** position. Check to ensure the Emergency Roof Hatch is **secured** against the vehicle by **pushing** against the hatch while the handle is in the **"LATCHED"** position.

⚠ WARNING

Check for proper operations and ensure that the instruction labels are intact. Serious injury and or death could occur if the window operations fail and people are not able to escape during an emergency.

⚠ CAUTION

Use the emergency handle only in an emergency situation when you must get out of the vehicle quickly.

TOWING

⚠ CAUTION

If it becomes necessary to tow your bus, a flat bed rig is preferred. **UNDER NO CIRCUMSTANCES**, should the bus be towed by lifting the rear end, serious frame damage can occur.

ⓘ NOTICE

Do not tow with a sling belt. Ford Motor Company has not approved a sling belt towing procedure. Vehicle damage may occur if towed incorrectly, or by any other means.

ⓘ NOTICE

Your chassis manufacturer produces a towing manual for all authorized tow truck operators and for proper hook-up and towing procedures for your vehicle. Please refer to your chassis manual for towing information.

FRONT TOW HOOKUP

- **1)** Disconnect battery ground cable.
- **2)** If vehicle is to be lifted and towed, remove drive axle shaft.

⚠ WARNING

Failure to remove the drive axle shaft when towing the vehicle with the rear wheels on the ground could result in damage to the transmission and other components.

- **3)** Attach to towing device.
- **4)** Lift the bus and secure the safety towing chains. If additional clearance is need, remove the front wheels.

⚠ WARNING

Before releasing the parking brake, make sure the connection to the towing vehicle is secured, or chock the disable vehicle's tires. Failure to do so could result in hazardous conditions.

- **5)** Connect clearance, tail and signal lights to the towing vehicle's wire harness. Connect any special towing lights required by local regulations.
- **6)** Release the parking brake.

⚠ CAUTION

Due to the many variables that exist in towing, positioning the lifting and towing devices is the sole responsibility of the towing-vehicle operator, who must be familiar with industry towing procedures and safety standards.

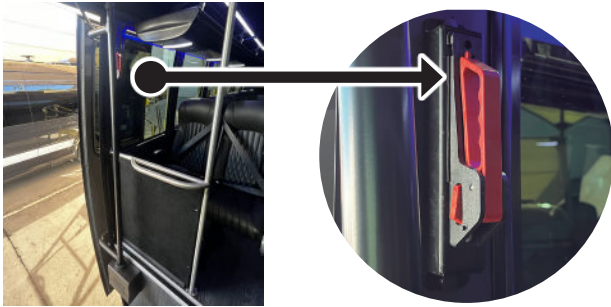
⚠ WARNING

This bus is not designed to tow another vehicle or trailer. Do not attempt to tow or pull another vehicle with this bus.



EMERGENCY RELEASE LEVER SYSTEM

This vehicle is equipped with an **emergency release lever** that, when actuated, will allow passengers to open the door. It is actuated by **pulling** the red handle to a **90°** position. The lever will then open the door and will make a **loud** sound to warn the driver and all passengers.



⚠ WARNING

The vehicle user should conduct a daily check of each of the following systems when operating a vehicle with an electric actuated passenger door.

EMERGENCY KIT

Your bus includes a **box** in the the **rear compartment** of your bus. It includes a First Aid Kit and a Fire Extinguisher.



FIRST AID KIT

- The First Aid Kit comes with **250** pieces of comprehensive first aid treatment products.
- Manufactured by the leading manufacturer of First Aid Kits in the USA.
- Meets or exceeds OSHA and ANSI 2009 guidelines for **50 people**.
- Fully organized interior compartments provides **quick access**.
- Rugged, sturdy hard **plastic** case which is **impact resistant**.



FIRE EXTINGUISHER

- The box also contains a **Fire Extinguisher**.
- Make sure you know how it operates **before** you start your trip and read all the **tips** before using it, as it is too late when you are in an **emergency**.
- The Fire Extinguisher comes with its one **security box**, easy to **access** and **protects** it from external **debris** or possible **damage** to it.

⚠ WARNING

Failure to properly evacuate the bus or follow the manufacturers instructions and/or information for the fire extinguisher could result in serious injury or death.

⚠ WARNING

Location of the fire extinguisher may vary when driving the bus if the driver or owner of the bus changes locations. Make sure all passengers are informed of the locations of the emergency kit and/or the fire extinguisher, in case of an emergency



EMERGENCIES

FIRE EXTINGUISHERS

Portable fire extinguishers save lives, RV fires are not an uncommon occurrence, so **preparation** and **prevention** are key.

The operation of a fire extinguisher is simple, however it must be properly handled in times of emergency.

Be sure you know where the Fire Extinguisher is located and how it operates before you start your trip.

It is very important that you read the manufacturers instructions on the label and their sheets or manuals for operation and maintenance of a Fire Extinguisher before using the bus as it is too late when you are in an emergency.

⚠ WARNING

Fire Extinguishers are recommended for **small fires only**. If any portion of a pbus is on fire, safely stop the bus and evacuate immediately.

⚠ WARNING

If you chose to fight a fire it is recommended that you stand at least 8 ft back from the fire, make sure your back is to an unobstructed escape route. Always follow the fire extinguisher manufacturer's instructions.

⚠ WARNING

Failure to properly evacuate the bus or follow the manufacturers instructions and/or information for the fire extinguisher could result in serious injury or death.

FIRE PREVENTION SUGGESTIONS:

- **DO NOT** overload electrical wiring.
- **DO NOT** replace a fuse with one of a higher amp rating.
- **DO NOT** store flammable liquids inside the vehicle.
- **DO NOT** park over papers, leaves, dry grass or other things that can be ignited if touched by hot exhaust parts under your vehicle.

⚠ WARNING

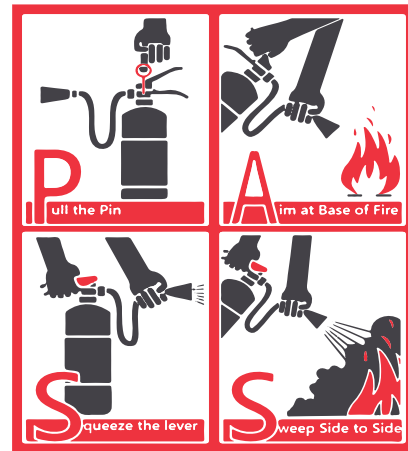
Stay a safe distance from a fire and near an exit. Stay close to the floor to avoid heat and fumes. The chemical from the fire extinguisher will shoot at least 10 feet (3m). Passengers should move at least 100 ft or more from the bus and remain there until it is safe. escape route.

FIRE EXTINGUISHERS OPERATION

An easy way to remember the **proper** and **correct** way to use a fire extinguisher is the acronym **P.A.S.S**, this stands for:

- **P-Pull:** Pull the pin that is located at the top of the extinguisher and hold the extinguisher upright.
- **A-Aim:** Aim the nozzle at the base (bottom) of the fire and stand six feet away
- **S-Squeeze:** Squeeze the handle/lever to discharge the agent.
- **S-Sweep:** Sweep from side to side until the fire is extinguished.

Make sure to stand about **8 to 10 feet away** from the fire, this gives you enough space for you to be **safe** from burning and to put out the fire. If the fire is not able to be **controlled quickly**, it'll be time to **evacuate** the vehicle and **call 911**. Do not try to extinguish fires that are **large** or **out of control**.



⚠ WARNING

After the fire is out, beware of flashback. Flashback occurs when flammable vapors from combustible liquids spread back to the ignition source and reignite the fire.

Once the fire is **out** is completely extinguished, **discharge** the fire extinguisher entirely and get it **recharged** or **replaced immediately**.

⚠ CAUTION

Remember to save lives first and property second. Get yourself and the passengers to safety before attempting to extinguish any fire. Only if you can, without endangering yourself or others, should you use firefighting aids on hand. Re-emphasize to everyone aboard that objects can be replaced, people can't. NEVER re-enter a burning vehicle to retrieve anything. **Get out and stay out.**

⚠ WARNING

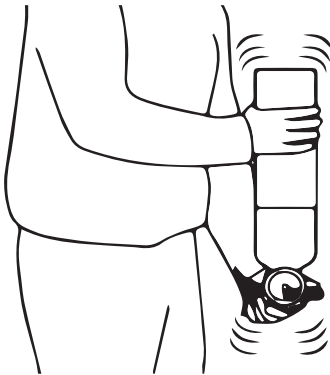
Remember to not fight a fire, unless you call the fire department first. A fire extinguisher is no substitute for the fire department.

FIRE EXTINGUISHER'S MAINTENENCE

It is not required to have **professional inspections** for the portable fire extinguishers in the vehicle but it is important to have **visual inspections** on regular basis. Look for signs of **damage** and check to see that the **gauge** is still set to **green**, if the fire extinguisher has been used in a previous occasions it is necessary to **replace** it.

It is recommended that the fire extinguisher is inspected at least **once a month**. It will need to be inspected more frequently if the extinguisher is exposed to **high temperatures** or possible **tampering**. Do not test the extinguisher by **partially discharging** since this will cause that the **internal pressure** escapes and the fire extinguisher will need to be replaced.

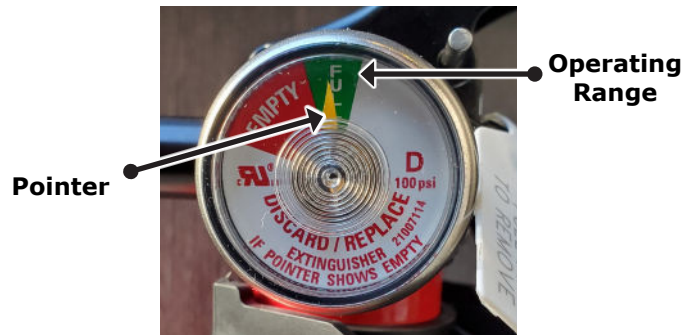
The **powder** in some extinguishers can **compress**, that over course of time will **settle** and **harden** at the bottom almost like concrete, making them **unusable**. A good and effective way to solve this is by **inverting** and/or **shaking** the fire extinguisher. Sometimes you will not listen the powder **fall**, if this happens you can **slightly** hit the fire extinguisher so the powder moves and **loosen up** you will know when the powder **falls** because you will feel it and listen.



NOTICE

Extinguishers need an annual check-up to make sure fire extinguishers still work properly when there is a need to be used. You want to check that the pin and tamper seal are intact and that the pressure is still in the green. In reference to Home Renovation site "Make it Right", they suggest: "Tip is upside down. The agent inside the extinguisher can settle at the bottom—it has the consistency of flour and can easily get packed over time. Turn the fire extinguisher upside down a few times to break up the agent inside."

Periodically check the **pressure gauge** on your fire extinguisher. If it loses pressure, the dry chemical will not **effectively discharge**. Do not operate or occupy the vehicle without a **fully charged** fire extinguisher.



NOTICE

If the pointer on the pressure gauge is not in the operating range (pointer in the green portion of the gauge), immediately replace the extinguisher. Record the inspection date on the tag provided.

WARNING

TIPS TO AVOID FIRE ACCIDENTS

Before hitting the road, it is crucial that all passengers know about **safety tips** when travelling.

- Show everyone where the fire extinguisher is **located** and **how** and **when** to use it.
- When there is a fire emergency you have to **act fast** and be **prepared** because time is **limited** depending on what started the fire and what components are near.
- Ensure that your fire extinguisher is **working properly**.
- Immediately clean up any **fuel spills**. Gasoline and propane can **combust quickly**. While diesel, although less flammable, it will evaporate more **slow** and pose a **risk** for longer.
- Make sure all small batteries are **kept secure** in a plastic container so that they cannot roll or bounce around the RV. Loose batteries that can move or fall can **split** or **combine** in a way that induces **fire**.
- Your stove will continue to **emit propane** even with the flame extinguished. To **avoid** the risk of an explosion, double check that it is turned off properly when you're finished and **never** heat your rv with the stove.
- Have your fuel-burning appliances **checked** at the beginning of each camping season to ensure they are properly **vented, working well** and **free** of any obstructions such as cobwebs, bitds, nests, etc.
- Maintain the RV's **mechanical systems**, such as radiators hoses, fuel lines, brake systems, transmissions, etc., in **good working order** to eliminate the risk of any **leaks** or **malfunctions** that may result in fire.
- Never leave cooking **unattended**.
- Store all **linens** and other **combustibles** well away from the **kitchen area**. In RVs compact kitchens components such as paper towels and curtains are likely to be closer to the stove, exercise even greater **caution** than you do at home when cooking in your RV.
- Keep all lighters and matches safely out of reach of children.

SEAT RESTRAINTS SAFETY

The driver's seat and all other seats which are designed to carry passengers while the vehicle is in **motion**, are equipped with **safety seat belts**. To fasten a seat belt, pull belt from the retractor and insert it into the buckle until it clicks.

Seat Belts are designed to secure a person in the vehicle helping to **reduce** the chance of **injury** or the amount of injury resulting from **accidents** or **sudden stops**.

You never know if you will be involved in an accident or crash so please make sure that you and all your passengers use the seat belt **while your vehicle is in motion**.

⚠ DANGER

NOT USING THE SAFETY RESTRAINTS PROVIDED COULD RESULT IN INJURY OR DEATH.



NHTSA SEAT BELT USE INFORMATION

The following seat belt use information was derived by the National Highway Traffic Safety Administration website.

USING SEAT BELTS (as per NHTSA Web Site)

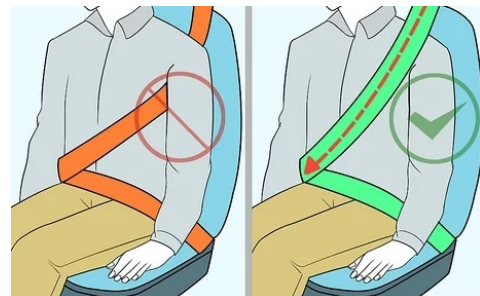
Before you drive away always **fasten your seat belt** and make sure **all** your passengers are using seat belts or child restraints. Also, remember to **lock** the vehicle's doors and turn on the childproof locks if children are in the vehicle.

Studies have shown that if you are in a crash while using seat belts, your chances of being **hurt** or **killed** are greatly **reduced**. Seat belts will **move** with you and lock up if a crash **occurs**. They keep you from being **thrown** from the vehicle and against parts inside of your vehicle.

In addition to **protecting** you from injury as a driver, seat belts help you keep **control** of the vehicle. If you are struck from the side or make a quick turn, the force could push you **sideways** and therefore you cannot **steer** the vehicle if you are not behind the wheel. In many states it is **illegal** to drive or to be a front-seat passenger, **without** wearing seat belts. Seatbelts may be **required** under graduated driver licensing for drivers or all occupants of the vehicle.

Wear a seat belt **all the time**, not just on long trips or high-speed highways. **More than half** of the crashes that cause injury or death happen at speeds less than **40 mph** and within **25 miles** from home. It is important to wear the seat belt correctly.

- A **shoulder harness** is worn across the shoulder and chest with minimal, if any **slack**. The shoulder harness **should not** be worn under the arm or behind the back. Wearing the harness the wrong way could cause serious **internal injuries** in a crash.
- The **lap belt** should be adjusted so that it is **snug** and lies low across your hips after fastening. If you have an **automatic** shoulder belt, be sure to buckle your lap belt as well. Otherwise, in a **collision** you could slide out of the belt and be **hurt** or **killed**.
- You should be seated **upright** with your back against the **seat** and **feet** on the floor. **Improper seating positions**, such as slouching or resting one's feet on the dashboard can result in reduced **effectiveness** of the vehicle's restraint system and possibly result in **injury**.
- Seat belts should be worn even if the vehicle is equipped with **air bags**. While air bags are **good protection** against hitting the steering wheel, dashboard or windshield, they **do not protect** you if you are hit from the side or rear or if the vehicle rolls over. In addition, an air bag **will not keep** you **behind** the wheel in these situations.
- The law requires that all children under the **age of 12** must be secured in the **rear seat** and wear appropriate seat restraints while the vehicle is in motion.



SEAT RESTRAINTS MAINTENANCE

- Inspect belts frequently to ensure they are not cut, frayed, damaged, or contaminated by oils or chemicals.
- Check each buckle to ensure proper function.
- Keep the seat belts **clean** and **dry**; to clean, use mild soap and lukewarm water. Never use bleach, lye or abrasive cleaners as they may weaken the belt.
- Inspect the belts periodically.
- Replace the belt(s) assembly if involved in a severe impact, even if visual damage is not apparent.

LOAD LIMIT

Vehicle Loading (With and without a trailer)

This section will guide you in the proper **loading** of your vehicle, trailer or both, to keep your loaded vehicle weight with its **design rating capability**, with or without a trailer. Properly loading your vehicle will provide **maximum** return of vehicle design performance.

Before loading your vehicle, familiarize yourself with the following terms for determining your **vehicle's weight ratings**, with or without a trailer, from the Vehicle's Payload Information Label or Safety Compliance Certification Label:

- **Base Curb Weight:** Is the weight of the vehicle including a full tank of fuel and all standard equipment. It does not include passengers, cargo or optional equipment.
- **Vehicle Curb Weight:** Is the weight of your new vehicle when you picked it up from your authorized dealer plus any aftermarket equipment.
- **Payload:** Is the combined weight of cargo and passengers that the vehicle is carrying. The maximum payload for your vehicle can be found on the Payload Information Label on the B-Pillar or the edge of the driver door (Vehicles exported outside the US and Canada may not have a Payload Information Label). Look for "**The Combined Weight of Occupants and Cargo should never exceed XXX kg or XXX lb.**" for maximum payload.

PAYLOAD INFORMATION SEE OWNERS MANUAL FOR ADDITIONAL INFORMATION

The combined weight of occupants and cargo should never exceed
kg. lbs.

NOTICE

The payload listed on the Payload Information Label is the maximum payload for the vehicle as built by the assembly plant.

WARNING

If you install any aftermarket or authorized-dealer installed equipment on the vehicle, you must subtract the weight of the equipment from the payload listed on the Payload Information Label in order to determine the new payload.

VEHICLE'S MANUFACTURERS ID LABEL EXAMPLE

The label below is an example of the label in your vehicle which specifies the proper **tire loading limits** which must be followed to insure the safe operation of your vehicle. Both labels shown below have the exact same **information** the only difference is that one is by the **white** label is by Ford Motor Company and the **black** label is by Grech Motors.

The image shows two examples of vehicle manufacturer ID labels. The top label is a white one from Ford Motor Company, and the bottom label is a black one from Grech Motors. Both labels contain similar information including VIN, GWR, GAWR, and tire specifications. A circular inset image shows a close-up of a label on a vehicle's B-pillar.

NOTICE

The information shown above in the white label is NOT the information of your unit or any Grech Motors model. The information on the labels is just an example of the label in your bus.

WARNING

The appropriate loading capacity of your vehicle can be limited either by volume capacity (how much space is available) or by payload capacity (how much weight the vehicle should carry). Once you have reached the maximum payload of your vehicle, do not add more cargo, even if there is space available. Overloading or improperly loading your vehicle can contribute to loss of vehicle control and vehicle rollover.

- **Cargo Weight:** Includes all weight added to the Base Curb Weight, including cargo and optional equipment. When towing, trailer tongue load or king pin weight is also part of cargo weight.
- **GAW (Gross Axle Weight):** Is the total weight placed on each axle (front and rear) including vehicle curb weight and all payload.
- **GAWR (Gross Axle Weight Rating):** Is the maximum allowable weight that can be carried by a single axle (front or rear). T door-latch post, next to the driver's seating position.

WARNING

The total load on each axle must never exceed its Gross Axle Weight Rating.

WARNING

Do not exceed the GAWR or the GAWR specified on the Safety Compliance Certification Label.

⚠ WARNING

Exceeding the Safety Compliance Certification Label vehicle weight rating limits could result in substandard vehicle handling or performance, engine, transmission and/or structural damage, serious damage to the vehicle, loss of control and personal injury.

⚠ WARNING

Do not use replacement tires with lower load carrying capacities than the original tires because they may lower the vehicle's GVWR and GAWR limitations. Replacement tires with a higher limit than the original tires do not increase the GVWR and GAWR limitations.

⚠ WARNING

Exceeding any vehicle weight rating limitation could result in serious damage to the vehicle and/or personal injury.

STEPS FOR DETERMINING THE CORRECT LOAD LIMIT

1. Locate the statement "The combined weight of occupants and cargo should never exceed XXX kg or XXX lb." on your vehicle's placard.

2. Determine the combined weight of the driver and passengers that will be riding in your vehicle.

3. Subtract the combined weight of the driver and passengers from XXX kg or XXX lb.

4. The resulting figure equals the available amount of cargo and luggage load capacity. For example, if the "XXX" amount equals **1,400 lb.** and there will be five **150 lb.** passengers in your vehicle, the amount of available cargo and luggage load capacity is **650 lb.**

$$(1400 - 750 (1400 - 750 (5 \times 150) = 650 \text{ lb.})$$

5. Determine the combined weight of luggage and cargo being loaded on the vehicle. That weight may not safely exceed the available cargo and luggage load capacity calculated in the previous step.

6. If your vehicle will be towing a trailer, load from your trailer will be transferred to your vehicle. Consult this manual to determine how this reduces the available cargo and luggage load capacity of your vehicle.

The following gives you a few examples on how to calculate the available amount of cargo and luggage load capacity:

➤ Suppose your vehicle has a 1400-pound (635-kilogram) cargo and luggage capacity.

➤ You decide to go golfing.

- Is there enough load capacity to carry you, four of your friends and all the golf bags? You and four friends average **220 pounds** (99 kilograms) each and the golf bags weigh approximately **30 pounds** (13.5 kilograms) each.

- The calculation would be:

$$1400 - (5 \times 220) - (5 \times 30) =$$

$$1400 - 1100 - 150 = 150 \text{ pounds}$$

- Yes, you have enough load capacity in your vehicle to transport four friends and your golf bags.

- In metric units, the calculation would be:

$$635 \text{ kilograms} - (5 \times 99 \text{ kilograms}) - (5 \times 13.5 \text{ kilograms}) =$$

$$635 - 495 - 67.5 = 72.5 \text{ kilograms}$$

- Yes, you have enough load capacity in your vehicle to transport four friends and your golf bags.

- In metric units, the calculation would be:

$$635 \text{ kilograms} - (5 \times 99 \text{ kilograms}) - (5 \times 13.5 \text{ kilograms}) =$$

$$635 - 495 - 67.5 = 72.5 \text{ kilograms}$$

➤ Suppose your vehicle has a 1400-pound (635-kilogram) cargo and luggage capacity.

- You and one of your friends decide to pick up cement from the local home improvement store to finish that patio you have been planning for the past two years.

- Measuring the inside of the vehicle with the rear seat folded down, you have room for twelve 100-pound (45-kilogram) bags of cement. Do you have enough load capacity to transport the cement to your home?

- If you and your friend each weigh 220 pounds (99 kilograms), the calculation would be:

$$1400 - (2 \times 220) - (12 \times 100) =$$

$$1400 - 440 - 1200 = -240 \text{ pounds}$$

- No, you do not have enough cargo capacity to carry that much weight. In metric units, the calculation would be:

$$635 \text{ kilograms} - (2 \times 99 \text{ kilograms}) -$$

$$(12 \times 45 \text{ kilograms}) =$$

$$635 - 198 - 540 = -103 \text{ kilograms}$$

- You will need to reduce the load weight by at least **240 pounds** (104 kilograms).

- If you remove three **100-pound** (45-kilogram) cement bags, then the load calculation would be:

$$1400 - (2 \times 220) - (9 \times 100) = 1400 - 440 - 900 = 60 \text{ pounds}$$

- Now you have the load capacity to transport the cement and your friend home. In metric units, the calculation would be:

$$635 \text{ kilograms} - (2 \times 99 \text{ kilograms}) - (9 \times 45 \text{ kilograms})$$

$$= 635 - 198 - 405 = 32 \text{ kilograms}$$

- The above calculations also assume that the loads are positioned in your vehicle in a manner that does not overload the **Front** or the **Rear Gross Axle Weight Rating** specified for your vehicle on the **Safety Compliance Certification Label**. The label shall be affixed to either the **door hinge pillar**, **door-latch post**, or the **door edge** that meets the door-latch post, next to the driver's seating position.

DIESEL EXHAUST FLUID (DEF)

Your vehicle requires Diesel Exhaust Fluid. The operator should monitor the DEF level on the dash and replenish the DEF fluid as needed. It is never acceptable to run the vehicle out of DEF.

ULTRA LOW SULFUR DIESEL FUEL ONLY

Ultra-low Sulfur Diesel (ULSD) is **diesel fuel** containing a maximum of **15 parts per million (ppm)** of **sulfur**.

Serious **damage** could occur if Ultra Low Sulfur Diesel Fuel is **not used**. Sulfur in diesel fuel must be lowered to become compatible with modern **pollution-control technology** installed on later model diesel engines. This equipment will reduce fine **particulates** (soot) and **pollutants** in diesel exhaust by over **90%**.

FUEL FILLING

- Clean the exterior of the **fuel cap** and **filler spout** before removing cap.
- Remove the **fuel cap**, place the **fuel nozzle** in the **filler spout**, and proceed with **fueling** the vehicle. When **full**, remove the **fuel nozzle**, replace the **fuel cap**, and tighten.
- Remove any **spilled fuel** from the bus body by cleaning the **area** with soap and water.

⚠ WARNING

Incorrectly fueling an engine with High Sulfur Diesel Fuel will damage the emission controls. The catalyst will be rendered useless and the emissions will not be controlled. Excess sulfur will plug the particulate trap which may cause a back pressure and possibly damage the engine. It could void the engine warranty and is against federal law.

ⓘ NOTICE

Failure to remove spilled fuel from the bus body may result in paint damage. Use of unauthorized lubricants, filters, fluids, fuels, or parts and/or neglect of scheduled maintenance may void Ford Warranties for your vehicle.



FUEL TANK SAFETY

Always use the **recommended fuel** listed in your Chassis Manual. Any type of fuel can be dangerous if **misued**.

⚠ WARNING

Mixing gasoline with diesel fuel can cause an explosion. The wrong type of fuel will also cause damage to the engines emission system.

When dealing with fuel it is important that you take **steps** to protect you, your passengers and the people around the vehicle. Improper handling of fuel can result in a **fire** or **explosion**.

While high levels of **concentrated gasoline vapors** are potentially dangerous even the lower gasoline vapors can be **harmful** to human health.

To ensure **safe** handling before and while **fueling** your bus, please follow the suggestions below:

- Turn **off** your engine before fueling.
- Never leave your vehicle **unattended** while the pump is **running**.
- Do not **smoke** or **light** matches or lighters.
- Try not to breathe the **fumes** by standing **upwind** of the nozzle while **refueling**.
- Do not **top off** your tank. Even little drips that fall onto the pavement can **contaminate** soil, groundwater, or surface water.

ⓘ NOTICE

It is very important that you review your Chassis Owners Manual in regards to fuel and fueling information. Pay special attention to the safety information and procedures.

⚠ WARNING

Improper handling of fuel could result in serious injury or death caused by fire, explosion, or asphyxiation. Refer to your chassis manuals for fuel to use in your vehicle as well as all of the proper procedures and safety information.

ⓘ NOTICE

Using the wrong fuel in your vehicle can cause damage to the engines emission system. This damage could result in a costly repair that would not be covered under warranty.

OTHER SAFETY TIPS

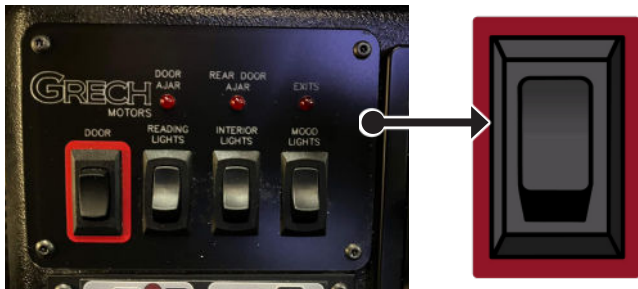
Again we ask that you review this manual, the chassis owner's manual, the chassis owner's manual, components and all other information supplied concerning the chassis operations and features. Pay special attention to the safety dangers and cautions.

Below are a few other tips in regards to safety:

- Do not overload the electrical system or alter any wiring without expressed written permission of the manufacturer.
- Never disconnect safety devices installed on your bus.
- Always use proper procedures when restraining wheelchairs, review the manuals provided to understand the prop-er installation and restraint system for your vehicle.
- If you have passengers who require special loading and unloading procedures, be sure you know the proper way to move, secure and respond to the special needs of your passengers.
- Steps, running boards or ramps may become slippery during wet, snowy or icy conditions. Be sure to keep the steps clear of debris and/or ice. Make customers aware of the potential hazards such as slippery steps or ramp when entering and exiting the bus.
- Never place or carry portable fuel burning equipment, including wood and charcoal grills/stoves inside the bus. This type of equipment may cause asphyxiation or create a fire hazard.
- Review the maintenance schedule required for all safety items to ensure they have been properly maintained.

ELECTRIC ENTRY DOOR

The electric door system allows entering and exiting the vehicle. It is equipped with an opening command by a button placed on the dashboard and it is operated by a control box placed on the upper area next to the door, including an electrical harness and connection.



DESCRIPTION OF THE FUNCTIONS

► Opening Function:

- To fully open the door just press the **button** on the **dashboard** of the vehicle.
- By pressing the button, the door begins to **descend** into its **compartment**, freeing himself from the anchoring plates and continues to rotate until it's fully **opened**.
- The **opening** rotation is stopped by the opening **limit switch** or (in case of failure of the micro) by the abutment of the **buffer** on the swing arm.
- If the door meets an **obstacle** while opening, it will automatically stop even if the driver is still pushing the button.

► Closing Function:

- Simply push the **same** button with one pulse in order to **fully close** the door. When the door is almost at **closing**, touching the **door compartment** will not open the door and the door will start to **lift** up.
- The rotation of the motor is **stopped** by the **closing limit switch**. If during the closing phase the door meets an **obstacle**, it re-opens **automatically** (even if the driver is still pushing the button) and the opening button will be excluded for the whole time of **reopening** until the door is completely re-opened.
- If during the **re-opening**, the door encounters an obstacle again, it will automatically **stop**.

ⓘ NOTICE

You can stop the door at any time, both during the opening and during the closing phase, by pressing the button again.

OBSTRUCTION SENSING SYSTEM

The Electric Actuated Passenger Door System is designed to detect an **obstruction** that may interfere with door's operation while closing and opening.

The electric door is equipped with 2 anti-squashing systems: if the door is in closing phase and it encounters an obstacle, it will re-open. If it's in opening phase, it will stop.

- The **first anti-squashing system** is based on the micro switch that detects the **vertical movement** of the door during closing or opening phase.
- The **second anti-squashing system** is based on the micro switch that detects the **vertical movement** of the door during **closing** or **opening** phase.

The electric door is also equipped with a micro switch which excludes the **anti-squashing system**. This micro is activated by the motor only during the rotation in closing phase and only when the door is next to the compartment. This excludes the 2 anti-squashing systems.

ⓘ NOTICE

The control box feeds the motor for maximum 25 seconds after every pulse received on the button.

ⓘ NOTICE

If the electric motor doesn't work or it's electrically disconnected, the control box detects the problem and stops feeding the motor.

OBSTRUCTION SENSING SYSTEM TEST PROCEDURE

The vehicle driver should test the **Obstruction Sensing System** every day before putting the vehicle into service. To test the system, the vehicle driver should:

- **1)** Activate the **Door Command Button** to move the door into its fully opened position.
- **2)** While keeping the passenger doorway **clear** of objects and passengers, the vehicle driver should create an **obstruction** in the **doorway** by placing a piece of **wood** or other **debris** in the door's **path**.
- **3)** Next, the vehicle driver should attempt to **close** the passenger door by activating the **Door Command Button**.
- **4)** If the **passenger door** contacts the **obstruction** and fails to stop once it makes contact, call the Grech Motors Service Department at **1-855-994-7324** and do not operate the vehicle.
- **5)** If the passenger door stops and re-opens without seeming to contact an **obstruction**, call the Grech Motors Service Department at **1-855-994-7324** and do not operate the vehicle.

- **6)** If the passenger door contacts an **obstruction**, stops, re-opens and closes, and if it continues repeating this process **without stopping** in the open position after the third cycle, call the Grech Motors Service Department at **1-855-994-7324** and do not operate the vehicle.
- **7)** If the passenger door **fails to close** when the operator puts the vehicle into gear, call the Grech Motors Service Department at **1-855-994-7324** and **do not** operate the vehicle.

PILLAR

The pillar is composed by a **vertical pillar** and **two arms**, horizontally **welded**, where the door is anchored.

The **swing arm** encloses a mechanism which allows to change the **rotary movement** of the motor box to a vertical movement; in this way the door will vertically move as soon as it meets an obstacle, both in **opening** and **closing** sense.

The **vertical** movement of the door has **two functions**:

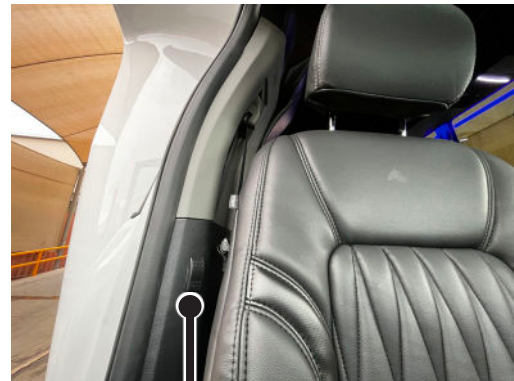
- **1)** Detect the presence of an obstacle
- **2)** Make sure that the door, in the closing phase, when it is next to the entry door space, begins to lift up and inserts itself in the appropriate anchoring plates to ensure a perfect closure.

Inside the pillar there is a **spring** that can be regulated during **installation** and **maintenance**; this regulation is very important as it is intended to confer the required **stability** of the door during its operation even with the vehicle position in the **downhill** or **uphill**.

ELECTRIC DOOR SWITCH OPERATION

This vehicle is equipped with an **auxiliary door switch**. It allows the operator to **open** the electric entry door from the **passenger's seat**. It is located on the **pillar** behind the passenger seat in the driver's compartment.

In case of an **emergency** or other **inconvenience** regarding the **electric** door, the door can be opened **manually** from the inside; the **red emergency handle** is installed next to the door.



DOOR OPERATION SWITCHES

This Control Panel includes switches for all lights in the bus and shows status of the doors and exits.



STANDARD DOOR SWITCH

This switch controls status of the front entrance door. This switch must be pressed, when the driver makes sure there is no danger for the passengers near the door. (Entering or leaving the vehicle).



STANDARD READING LIGHTS SWITCH

This switch operates reading lights.



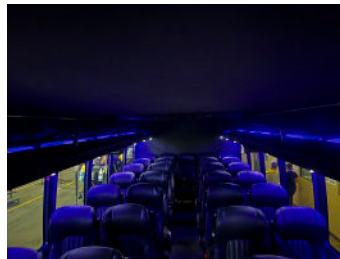
STANDARD INTERIOR LIGHTS SWITCH

This switch controls the interior white light bar lights on the roof area between the roof and overhead parcel racks on either side of the bus. These lights are preferably used when passengers need to get off the bus when the trip is over or a stop needs to be made.



STANDARD MOOD LIGHTS SWITCH

This switch controls some lights in the bus, dimmed blue light in the overhead parcel racks and white light at the top of each passenger seat. These lights are preferably used on the road at night.



DOOR AJAR SIGNAL

- **1) Door Ajar:** When the light is bright red it means ENTRY door is open.
- **2) Rear Door Ajar:** When the light is bright red it means REAR door is open.
- **3) Exits:** When the light is bright red it means EXITS are open.

REAR BACKUP CAMERA

The camera is located on the **rear** of the vehicle. The camera's system operation consists of two major components:

- **Indash LCD Monitor:** Located inside the RV on the **cockpit** of the RV which will be a **tool** on the road for the driver.
- **Sensors:** They are located on the front and rear part of the RV. They detect near objects that could interfere with the driving and backing up process of the driver.

The system may be connected two ways:

- **1) Manual:** Requiring the power button on the LCD Monitor to be pushed to energize the system and activate the monitor.
- **2) Automatic:** Which activates the monitor whenever the ignition is turned on or the engine is started and in reverse.

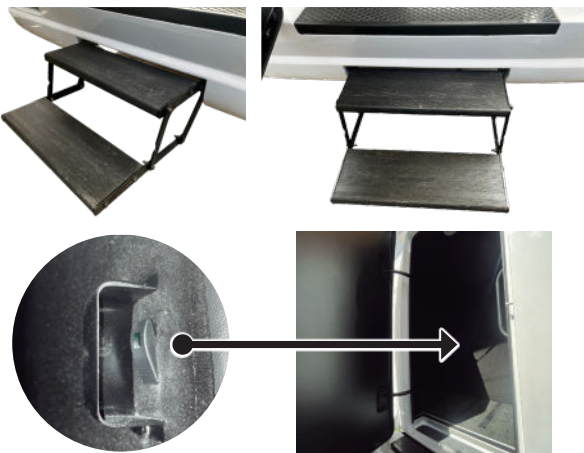


REAR STEP OPERATION

For the double rear step the operation is simple. There is a **power switch** inside the **storage compartment** at the rear side of the bus. This **power switch** allows you to **enable** or **disable** step operation. When the **switch** is enabled, opening the **rear door** will **automatically** extend step.

NOTICE

See Manufacturers literature regarding periodic lubricant requirements.



ELECTRIC BOX

The Grech Motor's electrical panel is located behind the driver's seat panel, below the driver's side TV.

This panel contains the relays and fuses that control power to the various devices and components installed on the bus. Any alterations or modifications to this panel should only be done by a trained service technician.



NOTICE

Due to the complexity of the system, wiring repairs should only be done by qualified technicians. Consult Grech Motors before performing any electrical or in general other repairs. Unauthorized repairs may void bus warranties.

CAUTION

Electrical power is always ON/WORKING in the electric box / power distribution center. Use caution when performing repairs or when the protective door is not closed.

CAUTION

Do not operate the vehicle if the protective door is not closed. Doing so may endanger passengers and could short out the vehicle's electrical system.

WARNING

Never replace a fuse with circuit breakers or fuses with a higher amperage than originally installed. As well as never replace any fuse or circuit breaker with automatic resetting fuses, or circuit breakers. Over-fusing, or installing auto reset fuses/circuit breakers may cause the circuit wires to get hot, and start a fire which could result in serious injury or death.

NOTICE

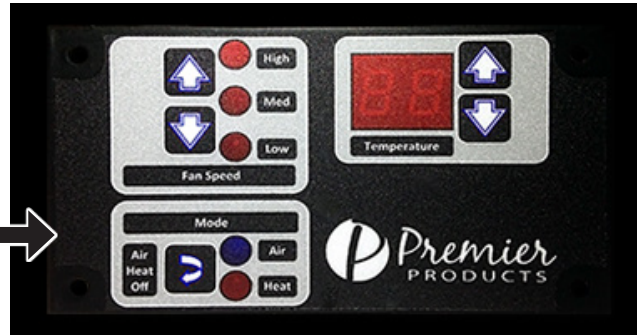
Due regular check ups/ maintenance of the wiring connections and circuits making sure they have not become loose or broken. Check that ground cables are clean, undamaged, and tight.

If you still have any questions or repairs need to be made regarding the electrical box, call the Grech Motors Service Department at **1-855-994-7324** and **do not** operate the vehicle.

DRIVERS OVERHEAD CONTROL PANEL: MANUAL OPERATION

► AIR CONDITIONER CONTROLS

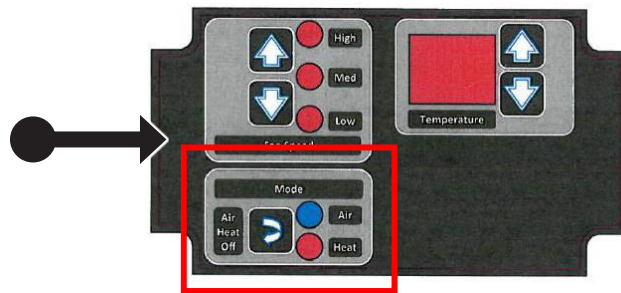
An air conditioner system is considered a major element in a bus. It ensures a comfortable climate experience for the passenger. The condition of the air is characterized by temperature, pressure and humidity. The control panel is located on the cockpit in between of the driver and the passenger.



MANUAL FAN CONTROL OPERATION

► Set Mode:

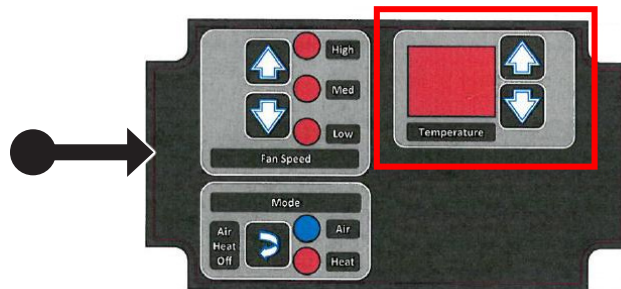
- **A)** Locate the mode selection button on the display controller face.
- **B)** When the mode selection button is pressed once, the blue air LED will illuminate, indicating air mode has been set.
- **C)** When mode selection button is pressed twice, the red heat LED will illuminate, indicating heat mode has been set.
- **D)** When mode selection button is pressed three times, both LEDs will extinguish, indicating the system is off.



► Set Desired Temperature:

• Setting the temperature thermostat:

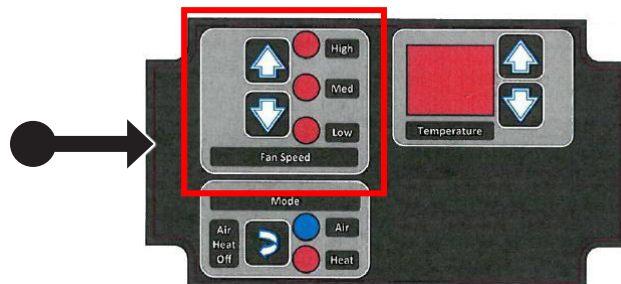
- **A)** Locate the temperature selectin buttons on the display controller face.
- **B)** While the system is active (Set air or heat), the current temperature will be displayed.
- **C)** To adjust the thermostat, press the up arrow to increase or down arrow to decrease the current temperature.
- **D)** The temperature display will show the new desired temperature for three seconds before displaying the current temperature once more.



► Set Desired Temperature:

• Setting the fan speed (low, med, high):

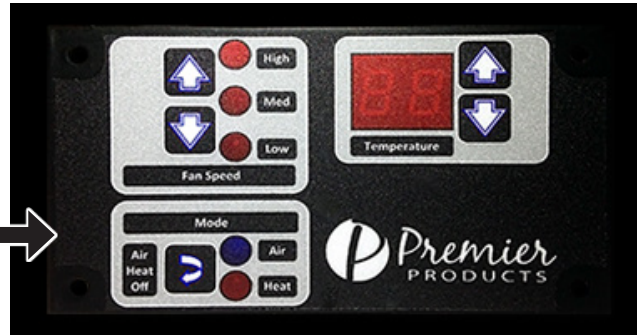
- **A)** Locate the fan speed buttons on the display controller face.
- **B)** While the system is active (Set to air or heat), the current fan speed LED will be illuminated.
- **C)** To adjust the fan speed, press the up arrow to increase or down arrow to decrease the current fan speed.
- **D)** The new selected fan speed LED will illuminate, extinguishing the previous fan speed LED.



DRIVERS OVERHEAD CONTROL PANEL: AUTOMATIC OPERATION

► AIR CONDITIONER CONTROLS

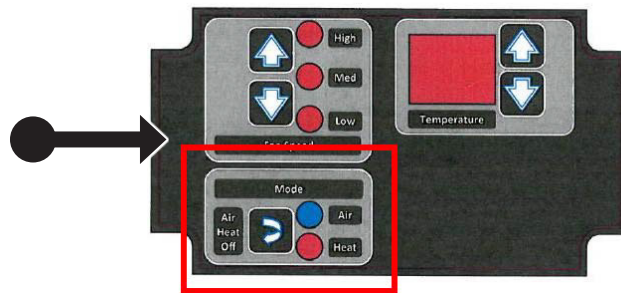
An air conditioner system is considered a major element in a bus. It ensures a comfortable climate experience for the passenger. The condition of the air is characterized by temperature, pressure and humidity. The control panel is located on the cockpit in between of the driver and the passenger.



AUTOMATIC FAN CONTROL OPERATION

► Set Mode:

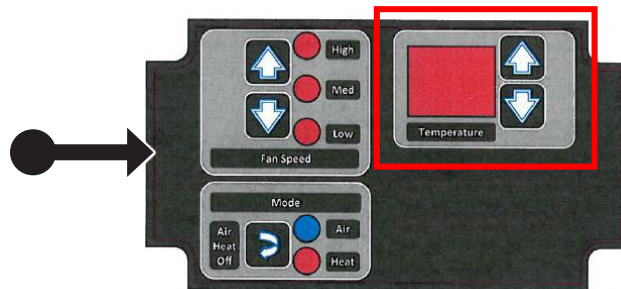
- **A)** Locate the mode selection button on the display controller face.
- **B)** When the mode selection button is pressed once, the blue air LED will illuminate, indicating air mode has been set.
- **C)** When mode selection button is pressed twice, the red heat LED will illuminate, indicating heat mode has been set.
- **D)** When mode selection button is pressed three times, both LEDs will extinguish, indicating the system is off.



► Set Desired Temperature:

• Setting the temperature thermostat:

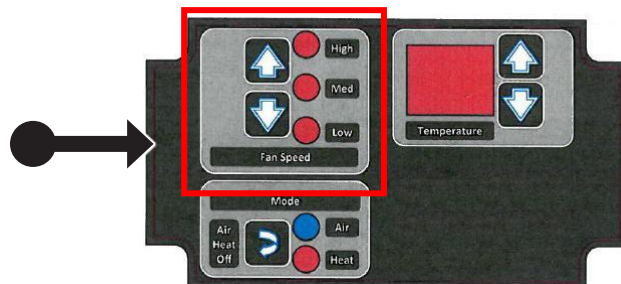
- **A)** Locate the temperature selectin buttons on the display controller face.
- **B)** While the system is active (Set air or heat), the current temperature will be displayed.
- **C)** To adjust the thermostat, press the up arrow to increase or down arrow to decrease the current temperature.
- **D)** The temperature display will show the new desired temperature for three seconds before displaying the current temperature once more.



► Set Desired Temperature:

• Setting the fan speed (low, med, high):

- **A)** Locate the fan speed buttons on the display controller face.
- **B)** When the system is actively heating/cooling, the fan speed may be adjusted to automatically resume at that fan speed when needed again.
- **C)** To adjust the fan speed, press the up arrow to increase or down arrow to decrease the current fan speed.
- **D)** The new selected fan speed LED will illuminate, extinguishing the previous fan speed LED.

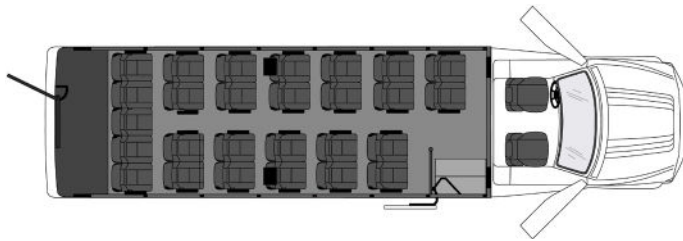


SEATING AREA

Grech Motors offers two floor plan layout for your GM33 with two seating alternatives, with luggage space or without luggage space.

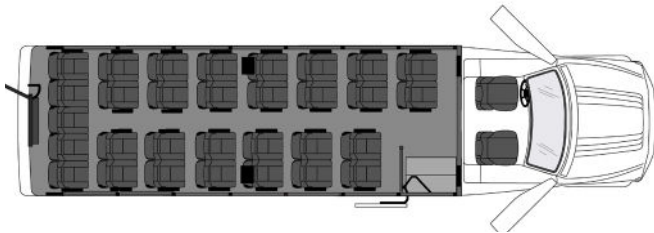
GM33 FORD F600 WITH REAR LUGGAGE SPACE

Seats up to
27 (+2 Driver and Passenger)



GM33 FORD F600 WITHOUT REAR LUGGAGE SPACE

Seats up to
31 (+2 Driver and Passenger)



⚠ WARNING

The bus seating configuration in this vehicle has been installed in accordance with the design parameters determined by Grech Motors Engineering Department.

⚠ WARNING

The adding, moving or removing of the original seating, is strictly prohibited without the authorization of Grech Motors Engineering Department.

⚠ WARNING

Modifying the seating arrangement of your vehicle without proper engineering specifications can change the weight distribution/payload characteristic of the vehicle and potentially endanger the passengers by creating an unsafe operating condition.

⚠ CAUTION

Do not alter, add, change any components installed in this vehicle. Adding or changing components may adversely affect vehicle stability creating an unsafe vehicle.

SEATBELTS

Seatbelts should be worn by the **driver**, and **passengers** seated in a seat equipped with **restraints**.

Every passenger seat except for the **rear seats**, has a **seat recline button**. Press the button and rest your back in the backrest until **desired** inclination. Once you want your back rest in its **original** position, press the button and sit at a **90°** angle to allow seat to go back in place.



SEATING AREA MAINTENANCE

- Inspect the seating area daily for tears, rips, or stains.
- Check seats for secure attachment and tighten any loose bolts to assure safety and to prevent rattling.
- Vinyl seats should be wiped down once or twice each month with a soap and water solution or other cleaning agent recommended for vinyl.

NOTICE

Use of stronger solvents on vinyl seats is not recommended as they reduce the strength of the vinyl and cause premature cracking.

- Check seat belts for latching mechanism operation, cuts in webbing, damage to seat belt tabs and buckles and stains on the webbing.
- Check fastener torque two times a month or everytime that the unit is in for other repairs.

DAILY INSPECTION CHECKLIST

- Check the **retractors** by pulling out the **webbing** to ensure they are **locking** properly.
- Check to ensure **webbing** is not cut, frayed, damaged, or contaminated by polishes, oils, or chemicals.
- Check that **metal parts** are not worn, broken, or cracked.
- Check **pin connector bushing** to ensure they are not cracked, broken, or missing.
- Check that all **mounting hardware**, such as nuts and bolts are secure.
- Check **floor anchorages** to ensure cleanliness and securement.
- Check **shoulder belt anchorages** for proper securement and operations.
- Check **lap** and **shoulder belt webbing** to ensure it is not cut, frayed, damaged, or contaminated with oils or chemicals.
- Check **buckles** for damage and ensure proper **operation**.
- Check **male buckle pin connector bushing** to ensure it is not cracked, brocked, or missing.
- Check any **other** parts of the **securement system** and accesories that may not be specifically indicated in this checklist, but are pertinent to a **safe** operational system.

OVERHEAD PARCEL RACK

Racks are located in the **passenger area** of the bus, this space let passengers stow their personal items as they enter the bus-without the assistance from the driver. This type of storage is similar to compartments found on commercial aircraft and offers the same time saving, self-service convenience.

WARNING

Drivers should make sure that the items stowed will not fall into the aisle during transit or otherwise obstruct egress and entry.

NOTICE

It is important to check fasteners, screws, etc. on the interior luggage fixtures on a regular basis to make sure they are tight, and the fixture is in sound operating condition.

CAUTION

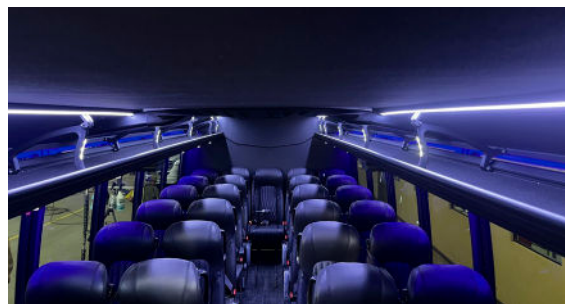
Do not overload parcel racks. Do not fasten parcels to retainer bars.

NOTICE

Maximum loading specification for both model parcel racks is either 20 lbs per foot or 5 lbs per passenger.

CAUTION

Passengers can easily be injured by objects falling from overhead storage. Drivers should make every effort to minimize this risk. One precaution is to warn passengers that heavy items should not be placed in the overhead storage compartments.



WHEELS AND TIRES

TIRE CARE

Information about Uniform Tire Quality Grading

Tire Quality Grades apply to new **pneumatic** passenger car tires. The Quality Grades can be found where applicable on the tire **sidewall** between **tread shoulder** and **maximum section width**. For example: Treadwear 200 Traction AA Temperature A.



These Tire Quality Grades are determined by **standards** that the United States Department of Transportation has set.

NOTICE

Tire Quality Grades apply to new pneumatic passenger car tires. They do not apply to deep tread, winter-type snow tires, light truck or LT type tires, tires with nominal rim diameters of 10 to 12 inches or limited production tires as defined in Title 49 Code of Federal Regulations Part 575.104 (c) (2).

U.S. Department of Transportation Tire quality grades:

The U.S. Department of Transportation requires Grech Motors to give you the following information about Tire Grades exactly as the government has written it.

TREADWEAR

The Treadwear Grade is a comparative rating based on the **wear rate** of the tire when tested under **controlled** conditions on a specified government **test course**.

For example, a tire graded **150** would wear **one and one-half** (1 ½) times as well on the government course as a tire graded **100**.

The relative **performance** of tires depends upon the actual **conditions** of their use, however, and may depart significantly from the norm due to variations in driving habits, service practices, and differences in road characteristics and climate.

TRACTION AA A B C

WARNING

The traction grade assigned to this tire is based on straight-ahead braking traction tests, and does not include acceleration, cornering, hydroplaning or peak traction characteristics.

The traction grades, from highest to lowest are **AA, A, B,** and **C**. The grades represent the tire's ability to stop on wet pavement as measured under **controlled conditions** on specified government test surfaces of **asphalt** and **concrete**. A tire marked C may have poor traction performance.

TEMPERATURE A B C

WARNING

The temperature grade for this tire is established for a tire that is properly inflated and not overloaded. Excessive speed, under-inflation, or excessive loading, either separately or in combination, can cause heat buildup and possible tire failure.

The temperature grades are **A** (the highest), **B** and **C**, representing the tire's **resistance** to the generation of **heat** and its ability to **dissipate** heat when tested under controlled conditions on a specified **indoor laboratory test wheel**.

Sustained high temperature can cause the material of the tire to **degenerate** and **reduce** tire life, and excessive temperature can lead to sudden tire failure.

The **grade C** corresponds to a level of performance which all passenger car tires must meet under the **Federal Motor Vehicle Safety Standard No. 139**.

Grades B and **A** represent higher levels of performance on the laboratory test wheel than the minimum required by law.

GLOSSARY OF TIRE TERMINOLOGY

► Tire Label:

- A label showing the original equipment tire sizes, recommended inflation pressure and the maximum weight the vehicle can carry.

► Tire Identification Number (TIN):

- A number on the sidewall of each tire providing information about the tire brand and manufacturing plant, tire size and date of manufacture. Also referred to as DOT code.

► Inflation Pressure:

- A measure of the amount of air in a tire.

► Standard Load:

- A class of P-metric or Metric tires designed to carry a maximum load at 35 psi [37 psi (2.5 bar) for Metric tires]. Increasing the inflation pressure beyond this pressure will not increase the tire's load carrying capability.

► Extra Load:

- A class of P-metric or Metric tires designed to carry a heavier maximum load at 41 psi [43 psi (2.9 bar) for Metric tires]. Increasing the inflation pressure beyond this pressure will not increase the tire's load carrying capability.

► kPa:

- Kilopascal, a metric unit of air pressure.

► PSI:

- Pounds per square inch, a standard unit of air pressure.

► Cold Tire Pressure:

- The tire pressure when the vehicle has been stationary and out of direct sunlight for an hour or more and prior to the vehicle being driven for 1 mile (1.6 kilometers).

► Recommended Inflation Pressure:

- The cold inflation pressure found on the Safety Compliance Certification Label (affixed to either the door hinge pillar, door-latch post, or the door edge that meets the door-latch post, next to the driver's seating position), or Tire Label located on the B-pillar or the edge of the driver's door.

► B-Pillar:

- The structural member at the side of the vehicle behind the front door.

► Bead Area of the Tire:

- Area of the tire next to the rim.

► Sidewall of the Tire:

- Area between the bead area and the tread.

► Tread Area of the Tire:

- Area of the perimeter of the tire that contacts the road when mounted on the vehicle.

► Rim:

- The metal support (wheel) for a tire and tube assembly upon which the tire beads are seated.

INFORMATION CONTAINED ON THE TIRE SIDEWALL

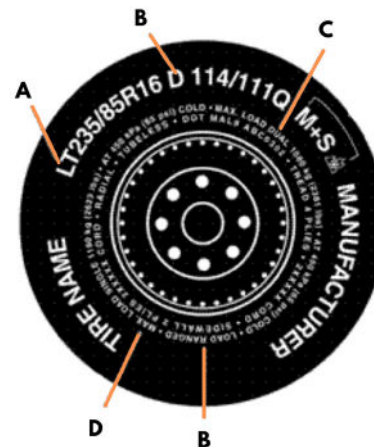
- Both United States and Canada Federal regulations require **tire manufacturers** to place **standardized** information on the **sidewall** of all tires.
- This information identifies and describes the **fundamental characteristics** of the tire and also provides a **U.S. DOT Tire Identification Number** for safety standard certification and in case of a recall.

INFORMATION ON LT TYPE TIRES

LT type tires have some additional information beyond those of P type tires. These differences are described below:

! NOTICE

Tire Quality Grades do not apply to this type of tire.



- **A) LT:** Indicates a tire, designated by the Tire and Rim Association, that is intended for service on light trucks.
- **B) Load Range and Load Inflation Limits:** Indicates the tire's load-carrying capabilities and its inflation limits.
- **C) Maximum Load Dual lb (kg) at psi (kPa) cold:** Indicates the maximum load and tire pressure when the tire is used as a dual; defined as four tires on the rear axle (a total of six or more tires on the vehicle).
- **D) Maximum Load Single lb (kg) at psi (kPa) cold:** Indicates the maximum load and tire pressure when the tire is used as a single; defined as two tires (total) on the rear axle.

LOCATION OF THE TIRE LABEL

You will find a Tire Label containing tire inflation pressure by tire size and other important information located on the B-Pillar or the edge of the driver's door.

INFLATING YOUR TIRES

Safe operation of your vehicle requires that your tires are **properly inflated**. Remember that a tire can lose up to **half** of its air pressure without appearing **flat**.

Every day before you drive, **check your tires**. If one looks lower than the others, use a **tire gauge** to check **pressure** of all tires and adjust if required.

At least **once a month** and before **long** trips, inspect each tire and check the **tire pressure** with a tire **gauge** (including spare, if equipped). Inflate all tires to the **inflation pressure** recommended by Grech Motors.

You are strongly urged to buy a reliable **tire pressure** gauge, as automatic service station gauges may be inaccurate. **Grech Motors** recommends the use of a **digital** or **dial-type** tire pressure gauge rather than a **stick-type** tire pressure gauge.

NOTICE

Use the recommended cold inflation pressure for optimum tire performance and wear. Under-inflation or over-inflation may cause uneven tread wear patterns.

WARNING

Under-inflation is the most common cause of tire failures and may result in severe tire cracking, tread separation or blowout, with unexpected loss of vehicle control and increased risk of injury. Under-inflation increases sidewall flexing and rolling resistance, resulting in heat buildup and internal damage to the tire. It also may result in unnecessary tire stress, irregular wear, loss of vehicle control and accidents. **A tire can lose up to half of its air pressure and not appear to be flat!**

NOTICE

Always inflate your tires to the Grech Motors recommended inflation pressure even if it is less than the maximum inflation pressure information found on the tire. The Grech Motors recommended tire inflation pressure is found on the Safety Compliance Certification Label or Tire Label (affixed to either the door hinge pillar, door-latch post, or the door edge that meets the door-latch post, next to the driver's seating position), or Tire Label located on the B-pillar or the edge of the driver's door. **Failure to follow the tire pressure recommendations can cause uneven tread wear patterns and adversely affect the way your vehicle handles.**

WARNING

Do not reduce tire pressure to change the ride characteristics of the vehicle. If you do not maintain the inflation pressure at the levels specified by Grech Motors, your vehicle may experience a condition known as shimmy. Shimmy is a severe vibration and oscillation in the steering wheel after the vehicle travels over a bump or dip in the road that does not dampen out by itself. Shimmy may result from significant underinflation of the tires, improper tires (load range, size, or type), or vehicle modifications such as lift-kits. **In the event that your vehicle experiences shimmy, you should slowly reduce speed by either lifting off the accelerator pedal or lightly applying the brakes. The shimmy will cease as the vehicle speed decreases.**

MAXIMUM INFLATION PRESSURE

The Maximum Inflation Pressure is the **tire manufacturer's maximum permissible pressure** and the pressure at which the maximum load can be carried by the tire.

This pressure is normally **higher** than the manufacturer's recommended **cold inflation pressure** which can be found on the **Safety Compliance Certification Label** (affixed to either the door hinge pillar, door-latch post, or the door edge that meets the door-latch post, next to the driver's seating position), or Tire Label located on the B-pillar or the edge of the driver's door.

The **cold inflation pressure** should **never** be set **lower** than the recommended pressure on the Safety Compliance Certification Label or Tire Label.

When weather temperature **changes** occur, tire inflation pressures also change. A **10°F (6°C)** temperature drop can cause a corresponding drop of **1 psi (7 kPa)** in inflation pressure. Check your tire pressures **frequently** and adjust them to the **proper** pressure which can be found on the Safety Compliance Certification Label or Tire Label.

TO CHECK THE PRESSURE IN YOUR TIRE(S):

- **1) Make sure the tires cool, meaning they are not from driving even a mile.**
 - If you are checking tire pressure when the tire is **hot**, (for example, driven more than 1 mile [1.6 kilometers]), never bleed or reduce air pressure. The tires are hot from driving and it is normal for pressures to increase above recommended cold pressures. A hot tire at or below recommended cold inflation pressure could be significantly underinflated.
 - If you have to drive a distance to get air for your tire(s), check and record the tire pressure first and add the appropriate air pressure when you get to the pump. It is normal for tires to heat up and the air pressure inside to go up as you drive.
- **2) Remove the cap from the valve on one tire, then firmly press the tire gauge onto the valve and measure the pressure.**
- **3) Add enough air to reach the recommended air pressure.**
 - If you overfill the tire, release air by pressing on the metal stem in the center of the valve. Then recheck the pressure with your tire gauge.
- **4) Replace the valve cap.**

WHEELS AND TIRES

➤ **5) Repeat this procedure for each tire, including the spare.**

➤ Some spare tires operate at a higher inflation pressure than the other tires. For T type mini-spare tires, (see the Dissimilar spare wheel and tire assembly information for a description. Store and maintain at 60 psi (4.15 bar). For full-size and dissimilar spare tires, see the Dissimilar spare wheel and tire assembly information for a description. Store and maintain at the higher of the front and rear inflation pressure as shown on the Safety Compliance Certification Label or Tire Label.

➤ **6) Visually inspect the tires to make sure there are no nails or other objects embedded** that could poke a hole in the tire and cause an air leak.

➤ **7) Check the sidewalls to make sure there are no gouges, cuts or bulges.**

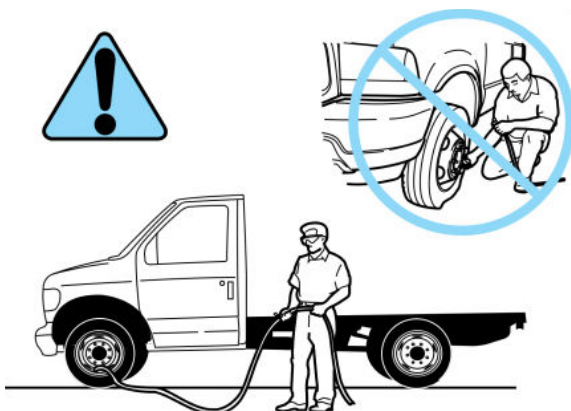
TIRE INFLATION INFORMATION

⚠ WARNING

An inflated tire and rim can be very dangerous if improperly used, serviced or maintained. To reduce the risk of serious injury, never attempt to re-inflate a tire which has been run flat or seriously under-inflated without first removing the tire from the wheel assembly for inspection. Do not attempt to add air to tires or replace tires or wheels without first taking precautions to protect persons and property.

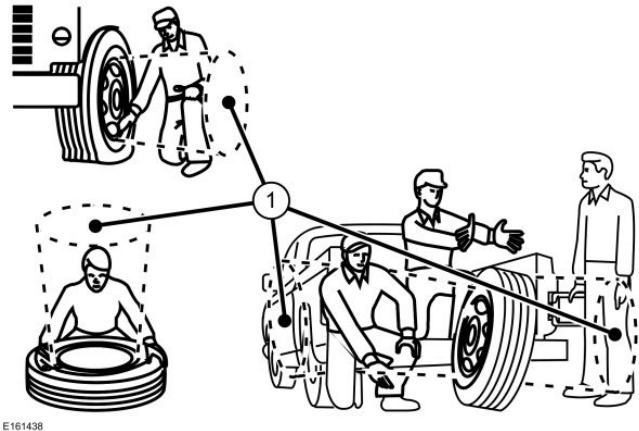
➤ **All tires with Steel Carcass Plies (if equipped):**

This type of tire utilizes steel cords in the sidewalls. As such, they cannot be treated like normal light truck tires. Tire service, including adjusting tire pressure, must be performed by personnel trained, supervised and equipped according to Federal Occupational Safety and Health Administration regulations. For example, during any procedure involving tire inflation, the technician or individual must utilize a remote inflation device, and ensure that all persons are clear of the trajectory area.



⚠ WARNING

Stay out of the trajectory as indicated in the illustration below.



INSPECTING YOUR TIRES AND WHEEL VALVE STEMS

Periodically inspect the **tire treads** for uneven or excessive wear and remove objects such as stones, nails or glass that may be wedged in the tread grooves.

Check the **tire** and **valve stems** for holes, cracks, or cuts that may permit **air leakage** and repair or replace the tire and replace the valve stem.

Inspect the **tire sidewalls** for cracking, cuts, bruises and other signs of damage or excessive wear. If internal damage to the tire is suspected, have the tire **demounted** and **inspected** in case it needs to be repaired or replaced. For your safety, tires that are **damaged** or show signs of **excessive** wear should not be used because they are more likely to **blow out** or **fail**.

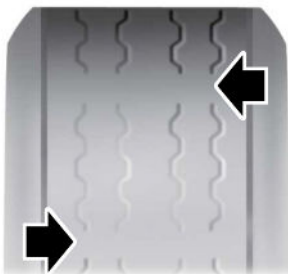
WHEN TO REPLACE YOUR TIRES

Improper or inadequate vehicle maintenance can cause tires to wear **abnormally**. Inspect all your tires, including the **spare**, frequently, and **replace** them if one or more of the following conditions exist:

► Tire Wear

When the tread is worn down to **one sixteenth** of an **inch** (**2 millimeters**), tires must be replaced to help prevent your vehicle from skidding and hydroplaning.

Built-in tread wear indicators, or wear bars, which look like narrow strips of **smooth rubber** across the tread will appear on the tire when the tread is **worn down** to one sixteenth of an inch (2 millimeters). When the tire tread wears down to the same **height** as these wear bars, the tire is worn out and must be **replaced**.



► Damage

Periodically inspect the tire **treads** and **sidewalls** for damage (such as bulges in the tread or sidewalls, cracks in the tread groove and separation in the tread or sidewall). If damage is **observed** or **suspected** have the tire inspected by a tire professional. Tires can be damaged during **off-road** use, so inspection after off-road use is also recommended.

► Age

⚠ WARNING

Tires degrade over time depending on many factors such as weather, storage conditions, and conditions of use (load, speed, inflation pressure) the tires experience throughout their lives.

In general, tires should be replaced after six years regardless of tread wear. However, heat caused by hot climates or frequent high loading conditions can accelerate the aging process and may require tires to be replaced more frequently.

You should replace your spare tire when you replace the road tires or after six years due to aging even if it has not been used.

U.S. DOT TIRE IDENTIFICATION NUMBER

Both United States and Canada Federal regulations require 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 **U.S. DOT Tire Identification Number** for safety standard certification and in case of a recall. 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** designating where it was manufactured, the next **two** are the **tire size code** and the last **four** numbers represent the **week** and **year** the tire was built. For example, the numbers 317 mean the 31st week of 1997. After 2000 the numbers go to four digits. For example, 2501 means the 25th week of 2001.

The numbers in between are **identification codes** used for **traceability**. This information is used to contact customers if a tire defect requires a recall.

TIRE REPLACEMENT REQUIREMENTS

Your vehicle is equipped with tires designed to provide a safe ride and handling capability

⚠ WARNING

Only use replacement tires and wheels that are the same size, load index, speed rating and type as those originally provided by Grech Motors. The recommended tire and wheel size may be found on either the Safety Compliance Certification Label or the Tire Label. If this information is not found on these labels then you should contact your authorized dealer as soon as possible. Use of any tire or wheel not recommended by Ford can affect the safety and performance of your vehicle, which could result in an increased risk of loss of vehicle control, vehicle rollover, personal injury and death.

⚠ WARNING

The use of non-recommended tires and wheels could cause steering, suspension, axle, transfer case or power transfer unit failure. If you have questions regarding tire replacement, contact your authorized dealer as soon as possible.

⚠ WARNING

To reduce the risk of serious injury, when mounting replacement tires and wheels, you should not exceed the maximum pressure indicated on the sidewall of the tire to set the beads without additional precautions listed below. If the beads do not seat at the maximum pressure indicated, re-lubricate and try again.

WHEELS AND TIRES

⚠ WARNING

When inflating the tire for mounting pressures up to 20 psi (1.38 bar) greater than the maximum pressure on the tire sidewall, the following precautions must be taken to protect the person mounting the tire:

1. Make sure that you have the correct tire and wheel size.
2. Lubricate the tire bead and wheel bead seat area again.
3. Stand at a minimum of 12 feet (3.6 meters) away from the wheel and tire assembly.
4. Use both eye and ear protection.

ⓘ NOTICE

For a mounting pressure more than 20 psi (1.38 bar) greater than the maximum pressure, a Grech Motors dealer or other tire service professional should do the mounting.

ⓘ NOTICE

Always inflate steel carcass tires with a remote air fill with the person inflating standing at a minimum of 12 feet (3.6 meters) away from the wheel and tire assembly.

ⓘ NOTICE

Remember to replace the wheel valve stems when the road tires are replaced on your vehicle. The two front tires or two rear tires should generally be replaced as a pair.

SAFETY PRACTICES

⚠ WARNING

If your vehicle is stuck in snow, mud, or sand, do not rapidly spin the tires; spinning the tires can tear the tire and cause an explosion. A tire can explode in as little as three to five seconds.

⚠ WARNING

Do not spin the wheels at over 35 mph (56 km/h). The tires may fail and injure a passenger or bystander.

Driving habits have a great deal to do with your tire mileage and safety:

- Observe posted speed limits
- Avoid fast starts, stops and turns
- Avoid potholes and objects on the road
- Do not run over curbs or hit the tire against a curb when parking

HIGHWAY HAZARDS

No matter how carefully you drive there's always the possibility that you may eventually have a **flat tire** on the highway. Drive slowly to the closest safe area out of traffic. This may further damage the flat tire, but **your safety is more important**.

If you feel a sudden **vibration** or ride **disturbance** while driving, or you suspect your tire or vehicle has been damaged, immediately **reduce your speed**. Drive with caution until you can safely pull off the road. Stop and inspect the tires for damage.

If a tire is **under-inflated** or **damaged**, deflate it, remove wheel and replace it with your spare tire and wheel. If you cannot detect a **cause**, have the vehicle towed to the nearest repair facility or tire dealer to have the vehicle **inspected**.

TIRE AND WHEEL ALIGNMENT

A bad **jolt** from hitting a curb or pothole can cause the front end of your vehicle to become **misaligned** or cause **damage** to your tires. If your vehicle seems to pull to one side when you're driving, the wheels may be **out of alignment**. Have an **authorized** dealer check the wheel alignment periodically.

Wheel **misalignment** in the front or the rear can cause **uneven** and **rapid tread wear** of your tires and should be corrected by an authorized dealer. **Front-wheel** drive vehicles and those with an independent rear suspension may require **alignment** of all **four** wheels.

The tires should also be **balanced periodically**. An unbalanced tire and wheel **assembly** may result in irregular tire wear.

TIRE ROTATION

ⓘ NOTICE

If your tires show uneven wear, ask an authorized dealer to check for and correct any wheel misalignment, tire imbalance or mechanical problem involved before tire rotation.

Your vehicle may be equipped with a **dissimilar** spare wheel and tire assembly. A dissimilar spare wheel and tire assembly is defined as a **spare wheel** and tire assembly that is different in brand, size or appearance from the road tires and wheels. If you have a dissimilar spare wheel and tire assembly it is intended for **temporary** use only and should not be used in a **tire rotation**.

After having your tires **rotated**, inflation pressure must be checked and adjusted to the vehicle requirements. Rotating your tires at the recommended **interval** will help your tires wear more **evenly**, providing better tire **performance** and longer tire **life**. Rear-wheel drive vehicles and four-wheel drive vehicles (front tires at left of diagram).

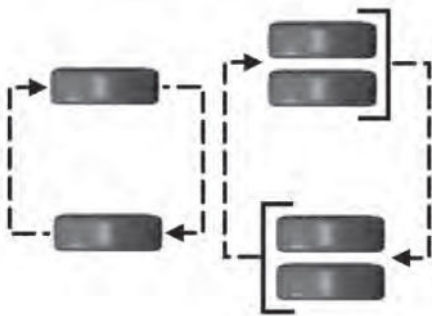
DUAL REAR WHEELS

If your vehicle is equipped with **dual rear wheels** it is recommended that the **front** and **rear** tires (in pairs) be rotated only **side to side**. We do not recommend splitting up the dual rear wheels. Rotate them side to side as a set. After tire rotation, inflation pressures must be adjusted for the tires new positions in accordance with vehicle requirements.

NOTICE

Sometimes irregular tire wear can be corrected by rotating the tires.

Six Tire Rotation (Front Tires at Left Side of Diagram)



USING SNOW CHAINS

WARNING

Snow tires must be the same size, load index, speed rating as those originally provided by Ford. Use of any tire or wheel not recommended by Grech Motors can affect the safety and performance of your vehicle, which could result in an increased risk of loss of vehicle control, vehicle rollover, personal injury and death. Additionally, the use of non-recommended tires and wheels could cause steering, suspension, axle, transfer case or power transfer unit failure.

NOTICE

Do not use snow chains on vehicles with 20 inch wheels and tires.

The tires on your vehicle have **all-weather treads** to provide **traction** in rain and snow. However, in some climates, you may need to use snow **tires** and **cables**. If you need to use cables, it is recommended that **steel** wheels (of the same size and specifications) be used, as cables may chip **aluminum** wheels.

NOTICE

The suspension insulation and bumpers will help prevent vehicle damage. Do not remove these components from your vehicle when using snow tires and chains.

Follow these **guidelines** when using snow tires and chains:

- If possible, avoid fully loading your vehicle
- Use only SAE Class S chains.
- Install chains securely, verifying that the chains do not touch any wiring, brake lines or fuel lines.
- Drive cautiously. If you hear the chains rub or bang against your vehicle, stop and retighten the chains. If this does not work, remove the chains to prevent damage to your vehicle.
- Remove the tire chains when they are no longer needed. Do not use tire chains on dry roads.

If you have any questions regarding snow chains or cables, please contact your authorized dealer.

The following **Maintenance Schedule** is provided as a convenient reference for the specified **systems** and **components**, which require **periodic** service.

These schedules are not intended to be a complete list of all possible **services** to be performed on a **regular basis**, nor is it suggested that more **frequent** services not be considered.

We suggest always referring to the **Original Chassis Manufacturers Suggested Maintenance Schedule**. Because of the various types of operations that coaches are subjected to, the **severity** of service must be considered when establishing maintenance **intervals**. Therefore, any such intervals noted in the following schedule must be **adjusted** according to the type of **operation** in which your specific vehicle will be used.

Additionally, the intervals given by Grech Motors on the following pages, are **recommendations** only, and should be considered as **maximum** intervals. It should be noted that maintenance **inspection** and service **operations** of shorter **duration** are always preferable to longer durations.

NOTICE

Check Your Original Owner's Guide Supplement(s), regarding special operating condition and maintenance requirements, that may be applicable due to your specific vehicle operating profile.

NOTICE

Regarding the Air Conditioning Charging, always refer to the "Charge Label" under the vehicle hood.

MAINTENANCE REQUIREMENTS

CHECK EVERYDAY:

- All items on Pre-Trip inspection section.
- Side passenger door emergency release operation.
- Side passenger entry door, operation, locking, damage, and obstruction sensing system.
- Emergency roof hatch.
- Emergency egress window latches
- Function of all interior and exterior lights
- Tire pressure F-600 has a 95 psi.
- Fluid leaks from, transmission, engine, power steering, engine coolant, gear oil, fuel.
- Check all seatbelts for proper function and damage.

CHECK EVERY MONTH:

- Door linkage and pivot arm lubrication and worn or damaged components.
- And lube rear Kwikiee step, (if equipped).
- And clean air intake filter for A/C system.

AT 5,000 MILES/600 HOURS DO THE FOLLOWING:

- Inspect tires for wear and inspect tread depth.
- Inspect torque specifications on Ultra Ride Suspension System (if equipped).
- Lube door seals with silicon spray, check for proper sealing
- Check the torque of all door hardware on Vapor door systems

PREVENTATIVE MAINTENANCE SCHEDULE

The following tips specify at how many miles and hours with a list of the minimum requirements that are necessary to maintain your vehicle's systems and components for a longer life span.

AT 15,000 MILES/1800 HOURS DO THE FOLLOWING:

- Re-inspect torque settings on Ultra Ride Suspension System (if equipped).
- Lube door seals with silicon spray, check for proper sealing.
- Check air system for leaks, and electrical connections.
- Check the torque of all door hardware on Vapor door systems.

AT 20,000 MILES/2400 HOURS DO THE FOLLOWING:

- Inspect tires for wear and inspect tread depth.
- Rotate tires.
- Inspect engine air filter.
- Clean battery terminals.
- Check the torque of all door hardware on Vapor door systems.

AT 25,000 MILES/3000 HOURS DO THE FOLLOWING:

- Inspect tires for wear and inspect tread depth.
- Rotate tires.
- Inspect engine air filter.
- Clean condenser coils.
- Check the torque of all door hardware on Vapor door systems.

AT 30,000 MILES/3600 HOURS DO THE FOLLOWING:

- Lube door seals with silicon spray, check for proper sealing.
- Re-inspect torque specifications on Ultra Ride Suspension System (if equipped).
- Check the torque of all door hardware on Vapor door systems.

AT 45,000 MILES/3600 HOURS DO THE FOLLOWING:

- Lube door seals with silicon spray, check for proper sealing
- Re-inspect torque settings on Ultra Ride Suspension System (if equipped).
- Check the torque of all door hardware on Vapor door systems.

AT 60,000 MILES/7200 HOURS DO THE FOLLOWING:

- Lube door seals with silicon spray, check for proper sealing.
- Re-inspect torque settings on Ultra Ride Suspension System (if equipped).
- Check the torque of all door hardware on Vapor door systems.

AT 75,000 MILES/9000 HOURS DO THE FOLLOWING:

- Lube door seals with silicon spray, check for proper sealing.
- Re-inspect torque settings on Ultra Ride Suspension System (if equipped).
- Check the torque of all door hardware on Vapor door systems.

AT 90,000 MILES/10800 HOURS DO THE FOLLOWING:

- Lube door seals with silicon spray, check for proper sealing.
- Re-inspect torque settings on Ultra Ride Suspension System (if equipped).
- Check the torque of all door hardware on Vapor door systems.

NOTICE

At 100,000 MILES re-implement the initial 5000 mile maintenance routine and follow each mileage milestone as you did in the beginning. Example 100,000 miles, 115,000 miles, 120,000 miles etc

BASIC TROUBLESHOOTING GUIDE

The following section details basic troubleshooting techniques that will help you to understand and determine the best course of action regarding some commonly encountered problems.

PROBLEM	POSSIBLE SOLUTIONS
VIBRATION: Noises or Vibration at high speeds only, or in a certain range of speeds.	A certain range of speeds indicates a damaged or otherwise out-of-balance drive line. Contact the Service Dept. Only SELECT drive line shops that are qualified to properly balance the multiple drive line extensions used in your bus. Grech Motors can recommend one near you.
REAR A/C BLOWER INOPERATIVE	Check to make sure all fuses are good. If the rear A/C is still not working, call the Service Department at Grech Motors.
EXTERIOR LIGHTING	One or all exterior clearance lights inoperative, please refer to the Ford Owner's Manual for fuse locations.
PAGING SYSTEM INOPERATIVE	Check the 5 amp fuse on the circuit board behind the driver. Wiring schematics and instructions for the paging system are located at the end of this manual.
EXTERIOR SEALANTS CRACKING OR LIFTING	If the exterior seams of the bus ever crack or start lifting, simply clean the area with rubbing alcohol or mineral spirits completely. After this has been done you can remove the old silicone by using a sharp knife or razor cutter. Clean the area again with the above cleaners and apply a thin bead of exterior silicone and smooth the bead with your finger for a smooth appearance.
REAR ELECTRIC STEP INOPERATIVE	Check to make sure the step switch is turned on. This switch is located inside the cargo area on the right hand sidewall. If this will not power up the step, check fuse in electrical panel behind the driver's seat. The rear step should be lubricated every 30 days to ensure proper operation of the step.
REAR STEREO/CD INOPERATIVE	Check to make sure all connections are tight. Also remove the stereo and check the fuse located on the backside of the stereo. Also check the fuses in the OEM fuse panel for Radio.
CANNOT REMOVE WATER FROM LAVATORY	Make sure fresh water tank has water in it and the water pump switch is in the on position. NOTE: Always be sure to turn the water pump switch off when not in use. Failure to do so could cause a steady drain on the auxiliary battery or could cause damage to the water pump. The fresh water fill is located under the bus at the rear of the vehicle.
PASSENGER LIGHTS INOPERATIVE	Check to make sure the switch on the overhead control panel is turned on. NOTE: There is a 5 minute light timer for the interior lights which will automatically turn them off when the door is open. The ignition switch needs to be turned on for at least 10 seconds to reset the timer.
BACK-UP ALARM INOPERATIVE	Check to make sure reverse lights are coming on, if not, check the fuse located in the FORD fuse panels.
SIDE ENTRY DOOR AJAR ALARM	Check to make sure the side door lock is engaged properly.

BASIC TROUBLESHOOTING GUIDE TEMPLATE

The following section is for you to write future troubleshooting techniques that will help you understand and determine the best course of action regarding some commonly encountered problems. You may print this page multiple times, depending on the information you require to have in your Bus Owner's Manual.

PROBLEM	POSSIBLE SOLUTIONS