Thank you for purchasing this vehicle. Before driving the vehicle, we ask you to spend some time reading this Owner’s Guide. This guide contains the information that will assist you in maintaining this highly reliable vehicle. Some illustrations may show items that are optional for your vehicle. This guide covers the operation of several vehicles; therefore, some illustrations may not represent your vehicle. Physical differences in controls will be illustrated.

Most of the service procedures in this guide can be accomplished using common, automotive hand tools. Contact your service representative on servicing the vehicle in accordance with the Periodic Service Schedule.

Repair or replacement parts are available through your E-Z-GO retailer or Genuine E-Z-GO Service Parts Department.

The following information is needed when contacting E-Z-GO concerning service or parts for your vehicle:

Vehicle Model: _______________________________________________________

VIN or Serial Number: _________________________________________________
CALIFORNIA Proposition 65 Warning

WARNING: Engine exhaust, some of its constituents, and certain vehicle components contain or emit chemicals known to the State of California to cause cancer and birth defects or other reproductive harm. In addition, certain fluids contained in vehicles and certain products of component wear contain or emit chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

Never modify the vehicle in any way that will alter the weight distribution of the vehicle, decrease its stability or increase the speed beyond the factory specifications. Such modifications can cause serious personal injury or death. E-Z-GO Division of Textron Inc. prohibits and disclaims responsibility for any such modifications or any other alteration which would adversely affect the safety of the vehicle.
E-Z-GO Division of Textron Inc. reserves the right to incorporate engineering and design changes to products in this manual, without obligation to include these changes on units sold previously.
The information contained in this manual may be revised periodically by E-Z-GO, and therefore is subject to change without notice.
E-Z-GO DISCLAIMS LIABILITY FOR ERRORS IN THIS MANUAL, and SPECIFICALLY DISCLAIMS LIABILITY FOR INCIDENTAL AND CONSEQUENTIAL DAMAGES resulting from the use of the information and materials in this Manual.
These are the original instructions as defined by 2006/42/EC.
This vehicle has been designed and manufactured in the United States of America (USA). The Standards and Specifications listed in the following text originate in the USA unless otherwise indicated.

The use of non-Original Equipment Manufacturer (OEM) approved parts may void the warranty.

Overfilling battery may void the warranty.

Tampering with or adjusting the governor to permit vehicle to operate at above factory specifications will void the vehicle warranty.

When servicing engines, all adjustments and replacement components must be per original vehicle specifications in order to maintain the United States of America Federal and State emission certification applicable at the time of manufacture.

BATTERY PROLONGED STORAGE

Batteries self-discharge over time. The rate of self-discharge varies depending on the ambient temperature, the age and condition of the batteries.

Fully charged batteries will not freeze in winter temperatures unless the temperature falls below -75°F (-60°C).

BATTERY DISPOSAL

Lead-acid batteries are recyclable. Return whole scrap batteries to distributor, manufacturer or lead smelter for recycling. For neutralized spills, place residue in acid-resistant containers with absorbent material, sand or earth and dispose of in accordance with local, state and federal regulations for acid and lead compounds. Contact local and/or state environmental officials regarding disposal information.
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Notes:
SAFETY

GENERAL

For any questions on material contained in this manual, contact an authorized representative for clarification.

Read all labels located on the vehicle. Always replace any damaged or missing labels.

On steep hills it is possible for vehicles to coast at fast speeds. To prevent loss of vehicle control and possible serious injury, speeds should be limited to no more than the maximum attainable speed on level ground. See GENERAL SPECIFICATIONS. Limit speed by applying the service brake. Catastrophic damage to the drivetrain components due to excessive speed may result from driving the vehicle above specified speed. Damage caused by excessive speed may cause a loss of vehicle control, is costly, is considered abuse and will not be covered under warranty.

If the vehicle is to be used in a commercial environment, signs similar to the ones illustrated should be used to warn of situations that could result in an unsafe condition.

NOTICES, CAUTIONS, WARNINGS, AND DANGERS

Throughout this guide NOTICE, CAUTION, WARNING, and DANGER will be used. Please observe these and be aware that servicing a vehicle requires mechanical skill and a regard for conditions that could be hazardous. Improper service or repair may damage the vehicle or render it unsafe.

**NOTICE**
Addresses practices not related to personal injury.

**CAUTION**
Indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.

**WARNING**
Indicates a hazardous situation which, if not avoided, could result in death or serious injury.

**DANGER**
Indicates a hazardous situation which, if not avoided, will result in death or serious injury.
SAFETY

Read all of SAFETY and this section before attempting any procedure. Pay particular attention to Notices, Cautions, Warnings and Dangers.

This manual has been designed to assist in maintaining the vehicle in accordance with procedures developed by the manufacturer. Adherence to these procedures and troubleshooting tips will ensure the best possible service from the product. To reduce the chance of personal injury or property damage, the following must be carefully observed:

**CAUTION**

Certain replacement parts can be used independently and/or in combination with other accessories to modify an E-Z-GO-manufactured vehicle to permit the vehicle to operate at or in excess of 20 mph. When an E-Z-GO-manufactured vehicle is modified in any way by the Distributor, Dealer or customer to operate at or in excess of 20mph, UNDER FEDERAL LAW the modified product will be a Low Speed Vehicle (LSV) subject to the strictures and requirements of Federal Motor Vehicle Safety Standard 571.500. In these instances, pursuant to Federal law the Distributor or Dealer MUST equip the product with headlights, rear lights, turn signals, seat belts, top, horn and all other modifications for LSV’s mandated in FMVSS 571.500, and affix a Vehicle Identification Number to the product in accordance with the requirements of FMVSS 571.565. Pursuant to FMVSS 571.500, and in accordance with the State laws applicable in the places of sale and use of the product, the Distributor, Dealer or customer modifying the vehicle also will be the Final Vehicle Manufacturer for the LSV, and required to title or register the vehicle as mandated by State law.

E-Z-GO will NOT approve Distributor, Dealer or customer modifications converting E-Z-GO products into LSV’s.

The Company recommends that all E-Z-GO products sold as personal transportation vehicles BE OPERATED ONLY BY PERSONS WITH VALID DRIVERS LICENSES, AND IN ACCORDANCE WITH APPLICABLE STATE REQUIREMENTS. This restriction is important to the SAFE USE AND OPERATION of the product.

All customers should adhere to this SAFETY RESTRICTION, in connection with the use of all E-Z-GO products, new and used, the Distributor or Dealer has reason to believe may be operated in personal transportation applications.

Information on FMVSS 571.500 can be obtained at Title 49 of the Code of Federal Regulations, section 571.500, or through the Internet at the web site for the U.S. Department of Transportation - at Dockets and Regulation, then to Title 49 of the Code of Federal Regulations (Transportation).

All vehicles can be used for a variety of tasks beyond the original intended use of the vehicle; therefore, it is impossible to anticipate and warn against every possible combination of circumstances that may occur. No warning can replace good common sense and prudent driving practices.

Good common sense and prudent driving practices do more to prevent accidents and injury than all of the warnings and instructions combined. E-Z-GO strongly suggests that all users and maintenance personnel read this entire manual paying particular attention to the CAUTIONS, WARNINGS and DANGERS contained therein.

If you have any questions regarding this vehicle, contact your E-Z-GO/CUSHMAN dealer or write to the address on the back cover of this publication, Attention: Customer Care Department.

E-Z-GO reserves the right to make design changes without obligation to make these changes on units previously sold. The information contained in this manual is subject to change without notice.

E-Z-GO IS NOT LIABLE FOR ERRORS IN THIS MANUAL. E-Z-GO IS NOT LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES THAT RESULT FROM THE USE OF THE MATERIAL IN THIS MANUAL.

This vehicle conforms to the current applicable standard(s) for safety and performance requirements.

These vehicles are designed and manufactured for off-road use. They DO NOT conform to Federal Motor Vehicle Safety Standards of the United States of America (USA) and are not equipped for operation on public streets. Some communities may permit these vehicles to be operated on their streets on a limited basis and in accordance with local ordinances.

Refer to GENERAL SPECIFICATIONS for vehicle seating capacity.

**WARNING**

Never modify the vehicle in any way that will alter the weight distribution of the vehicle, decrease its stability, extend the stopping distance, or increase the speed beyond the factory specification. Such modifications can result in serious personal injury or death.
SAFETY

Read all of SAFETY and this section before attempting any procedure. Pay particular attention to Notices, Cautions, Warnings and Dangers.

Never modify the vehicle in any way that will alter the weight distribution of the vehicle, decrease its stability, extend the stopping distance, or increase the speed beyond the factory specification. E-Z-GO prohibits and disclaims responsibility for all such modifications which would adversely affect the safety of the vehicle.

Vehicles capable of higher speeds must be limited to no more than speed of other vehicles when used in a golf course environment. Additionally, speed should be further moderated by the environmental conditions, terrain and common sense.

Operation of the vehicle is limited to persons above the height of 59 inches (150 cm).

GENERAL OPERATION

Read the following warnings before attempting to operate the vehicle.

WARNING

To prevent personal injury or death, observe the following:

When vehicle is to be left unattended, turn key to OFF position and remove from switch.
Drive vehicle only as fast as terrain and safety considerations allow. Consider the terrain and traffic conditions. Consider environmental factors which effect terrain and operators ability to control vehicle.
Avoid driving fast downhill. Sudden stops or change of direction may result in a loss of control. Use brake to control speed when traveling down an incline.
Use extra care and reduced speed when driving in poor conditions or on poor surfaces.
Stay in designated areas where provided and avoid steep slopes.
Keep feet, legs, hands, and arms inside vehicle at all times.
Avoid extremely rough terrain.
Check area behind the vehicle before operating in reverse.
Make sure the direction selector is in correct position before pressing accelerator pedal.
Slow down before and during turns.
Always bring vehicle to a complete stop before shifting the direction selector.
See GENERAL SPECIFICATIONS for vehicle load and seating capacity.

NOTICE

Read the following text and warnings before attempting to service vehicle.

In any product, components may eventually fail to perform properly as the result of normal use, age, wear, or abuse. It is impossible to anticipate all possible component failures or the manner in which each component may fail.

A vehicle requiring repair is no longer functioning as designed, and therefore potentially hazardous. Use extreme care when working on a vehicle. When diagnosing, removing, or replacing components that are not operating correctly, consider the safety of yourself and others in area.

Some components are heavy, spring-loaded, highly corrosive, explosive, may produce high amperage, or reach high temperatures. Exposure to battery acid and hydrogen gas could result in serious bodily injury. Ensure protection of hands, face, feet, and body from injury.

Always use the appropriate tools listed in the tool list and wear the recommended approved safety equipment.
SAFETY

Read all of SAFETY and this section before attempting any procedure. Pay particular attention to Notices, Cautions, Warnings and Dangers.

WARNING

Before working on the vehicle, remove all jewelry.

Be sure no loose clothing or hair can contact moving parts.

Use care not to touch hot objects.

Wear eye protection when working on or around the vehicle. In particular, use care when working around batteries, using solvents or compressed air.

ALWAYS:

• Use the vehicle in a responsible manner and maintain the vehicle in safe operating condition.
• Read and observe all warnings and operation instruction labels affixed to the vehicle.
• Follow all safety rules established in the area where the vehicle is being operated.
• Leave the vehicle and seek shelter when there is a risk of lightning.
• Reduce speed to compensate for poor terrain or conditions.
• Apply service brake to control speed on steep grades.
• Maintain adequate distance between vehicles.
• Reduce speed in wet areas.
• Use extreme caution when approaching sharp or blind turns.
• Use extreme caution when driving over loose terrain.
• Use extreme caution in areas where pedestrians are present.

MAINTENANCE

ALWAYS:

• Replace damaged or missing warning, caution or information labels.
• Maintain the vehicle in accordance with the manufacturer’s periodic service schedule.
• Ensure that repairs are performed by trained and qualified personnel.
• Follow the manufacturer’s maintenance procedures.
• Insulate any tools used within the battery area in order to prevent sparks or battery explosion.
• Use specified replacement parts, NEVER use replacement parts of lesser quality.
• Use recommended tools.
• Determine that tools and procedures not specifically recommended by the manufacturer will not compromise the safety of personnel nor jeopardize the safe operation of the vehicle.
• Support the vehicle using wheel chocks and jack stands. NEVER get under a vehicle that is supported by a jack. Lift the vehicle in accordance with the manufacturer’s instructions.
• Maintain the vehicle in an area away from exposed flame or persons who are smoking.
• Be aware that a vehicle that is not performing as designed is a potential hazard and must not be operated.
• Test drive the vehicle after any repairs or maintenance in a safe area that is free of both vehicular and pedestrian traffic.
• Keep complete records of the maintenance history of the vehicle.
LABELS AND PICTOGRAMS

Authorized Representative in EC is:
RANSOMES JACOBSEN LTD.
WEST ROAD, IPSWICH,
SUFFOLK, IP3 9TT, UK

WARNING
Keep entire body inside car.

Near Fuel Tank

On Battery Under Seat

Engine Compartment

NOTICE
Do not tamper with or attempt to change the adjustment of the governor. Governor tampering can result in serious personal injury and will void the vehicle warranty.

WARNING

MIN 150 cm

< 14°  25%
SAFETY

Read all of SAFETY and this section before attempting any procedure. Pay particular attention to Notices, Cautions, Warnings and Dangers.

1. **WARNING** READ MANUAL

2. **WARNING** READ MANUAL FOR MAXIMUM LOAD BED CAPACITY.

3. **WARNING** USE CAUTION IN INCLEMENT WEATHER

4. **WARNING** DO NOT OPERATE UNDER THE INFLUENCE OF DRUGS OR ALCOHOL

5. **WARNING** MAXIMUM CROSS HILL/RAMP ANGLE AS SPECIFIED

6. **WARNING** MAXIMUM CROSS HILL/RAMP ANGLE AS SPECIFIED

7. **WARNING** LOAD WITH HIGH CENTER OF GRAVITY COULD RESULT IN TIP OVER

8. **WARNING** LOAD CENTER OF GRAVITY, MAXIMUM HEIGHT

9. **WARNING** MAXIMUM CROSS HILL/RAMP ANGLE AS SPECIFIED

10. **WARNING** SECURE LOAD AS FAR FORWARD AS POSSIBLE. MAXIMUM LOAD BED CAPACITY

11. **WARNING** DO NOT RIDE IN LOAD BED

12. **WARNING** DANGER OF EXPLOSION DO NOT FILL GAS CAN IN LOAD BED

13. **WARNING** MAXIMUM LOAD & CENTER OF GRAVITY. KEEP LOAD AS FAR FORWARD AS POSSIBLE. DO NOT RIDE IN LOAD BED

14. **WARNING** KEEP HANDS & FINGERS AWAY FROM DUMP BED. DO NOT STAND BEHIND DUMP BED
Read all of SAFETY and this section before attempting any procedure. Pay particular attention to Notices, Cautions, Warnings and Dangers.

| 15. | ![Icon](image1) | UNLEADED GASOLINE | 28. | ![Icon](image2) | DO NOT DISPOSE OF BATTERIES IN LANDFILL |
| 16. | ![Icon](image3) | DO NOT SPILL FUEL ON A HOT ENGINE |
| 17. | ![Icon](image4) | GROUND FUEL PUMP |
| 18. | ![Icon](image5) | LOW OIL PRESSURE |
| 19. | ![Icon](image6) | NEGATIVE GROUND BATTERY |
| 20. | ![Icon](image7) | DO NOT CONNECT POSITIVE BATTERY TERMINAL TO GROUND |
| 21. | ![Icon](image8) | SHORTING BATTERY TERMINALS MAY CAUSE EXPLOSION |
| 22. | ![Icon](image9) | NO TAMPERING. KEEP HANDS OUT |
| 23. | ![Icon](image10) | WARNING CORROSIVE |
| 24. | ![Icon](image11) | WARNING EXPLOSIVE |
| 25. | ![Icon](image12) | WARNING LETHAL VOLTAGE |
| 26. | ![Icon](image13) | DO NOT EXPOSE TO FLAME |
| 27. | ![Icon](image14) | CLEAN UP GASOLINE SPILLS WITH WATER BEFORE STARTING ENGINE |
| 28. | ![Icon](image15) | DO NOT DISPOSE OF BATTERIES IN LANDFILL |
| 29. | ![Icon](image16) | DO NOT DRIVE ON HIGHWAY |
| 30. | ![Icon](image17) | WINDSHIELDS DO NOT PROVIDE PROTECTION FROM FLYING OBJECTS |
| 31. | ![Icon](image18) | BATTERIES ARE HEAVY. USE CARE LIFTING |
| 32. | ![Icon](image19) | USE INSULATED TOOLS |
| 33. | ![Icon](image20) | WEAR EYE PROTECTION |
| 34. | ![Icon](image21) | NO SMOKING |
| 35. | ![Icon](image22) | HOT SURFACE |
| 36. | ![Icon](image23) | OPERATE FROM DRIVERS SIDE ONLY |

Owner's Guide
Notes:
GENERAL SPECIFICATIONS

MODEL: REFRESH® FS4
TYPE: GASOLINE POWERED REFRESHMENT VEHICLE
MODEL YEAR: 2014
Part No: 639075

PRODUCT SPECIFICATION

CONFIGURATION HIGHLIGHTS

Refresher Unit Overview: Refresher unit designed for inventory of unopened, pre-packaged, non-perishable foods for distribution through daily use. This Refresher unit is not meant for long term food storage or storage of opened food and beverage items. Adherence to local food handling regulations.

Each Refresher Unit Consists Of: Windshield with Frame; Struts and Side Canopy; 4 Insulated Sliding Drawers with Locks; Slide out Trash/recycle storage bin system, 2 plastic removable bins; Lower Rear Corner Storage Sections - both sides of endcap; Locking System for Holding & Changing Modules; Polar White Counter top; Left & Right Side Mirrors.

Accessories: Drawer Dividers (2); Consumable Ice Bin (1); Candy & Sandwich Tray (1).

Modules: 6” Snack module with one dual-sided pullout polycarbonate pegboard, hooks (6), baskets (2) and chip strips (2); 18” Display Module with 4 adjustable shelves; 18” Cup & Display Module with 2 adjustable shelves/1 cup tray with 4 adjustable beverage boxes.

Upper Rear Endcap: Reversible insert for airports and bottles; 3.0 liter airpots (2); shelves for napkins and bottles on back panel (3); shelves on inside of doors (6); Coffee/Creamer serving caddy (2).

Engine: 13 hp (9.7 kW) Exceeds SAE J1940 Standard, 4 cycle, 24.5 ci (401 cc) single cylinder, air-cooled by Kawasaki

Valve Train: Overhead valve

Lubrication: Pressurized oil system, spin-on oil filter

Balancer: Internal counter rotating balance shaft

Electrical: Generator, solid-state regulator, 12 Volt maintenance free battery (425 CCA, 60 minute reserve)

Drive Train: Automatic, continuously variable transmission (CVT)

Brakes: Dual rear wheel mechanical self-adjusting drum brakes. Single point park brake release with self-compensating system

Transaxle: Differential with helical gears, ground speed governor, forward/reverse

Canopy: Sunbrella®

Beverage Unit: 5000 Series Aluminum, Super Durable TGIC Polyester Powder Coating

Beverage Unit Storage Capacity:
- Cold Storage Cabine: 4
- Merchandising Capacity: 21.1 cu ft (.59 m3)
- Trash Bin Volume: 3.4 cu ft (0.96 m3)
- Work Space: 13 ft2 (4 m2)

PRODUCT OVERVIEW

Dimensions
- Overall Length: 147 in (366 cm)
- Overall Width: 54 in (137 cm)
- Overall Height (No Canopy): 49 in (124 cm)
- Overall Height (With Canopy): 80 in (203 cm)
- Overall Wheelbase (in): 100 (254 cm)
- Overall Width (in): 137 (349 cm)
- Overall Height (in): 93.5 (235 cm)
- Front Wheel Track: 39.6 in (100 cm)
- Rear Wheel Track: 39.5 in (100 cm)
- Ground Clearance @ Differential: 4.5 in (11 cm)
- Ground Clearance @ Differential:

Vehicle Power
- Power Source: 4 Cycle 24.5 cu in (401 cc)
- Valve Train: Single Cylinder OHV
- Horsepower (kW): 13 hp (10.1 kW) Exceeds SAE J1940 Std.
- Electrical System: Starter/Generator, solid state regulator, 12 Volt maintenance free battery (425 CCA, 60 minute reserve)
- Batteries (Qty, Type): One, 12 Volt Maintenance Free
- Key or Pedal Start: Pedal
- Air Cleaner: Industrial Rated Dry Filter
- Lubrication: Pressurized Oil System
- Oil Filter: Spin-On
- Cooling System: Air Cooled
- Fuel Capacity: 6.2 Gallon (23.5 L) early production tank
- Drive Train: Continuously variable transmission (CVT)
- Transaxle: Differential with helical gears
- Gear Selection: Forward-Reverse
- Rear Axle Ratio: 17.2:1 (Forward) 17.1:1 (Reverse)

Performance
- Seating Capacity: 1 Person Std, 2 Persons Optional
- Dry Weight: 1470 lb (661 kg)
- Towing Capacity: N/A

Steering & Suspension
- Steering Wheel: Self-compensating rack and pinion
- Front Suspension: Leaf springs with hydraulic shock absorbers
- Rear Suspension: Heavy Duty leaf springs with hydraulic shocks
- Service Brake: 4 Wheel hydraulic, front disc/rear drum
- Parking Brake: Mechanical hand brake
- Front Tires: Load Star 205/65-10
- Rear Tires: Load Star 205/65-10

Body & Chassis
- Frame: Welded steel with DuraShield™ powder coat
- Front Body & Finish: Injection molded TPO
- Rear Body & Finish: Steel; Base coat/clear coat
- Standard Color: Forest Green

Noise & Vibration
- Noise: Sound pressure; continued A-weighted equal to or less than 76 db(A).
- Vibration, WBV: Highest RMS value of weighted acceleration is less than 2.5 m/s2.
- Vibration, HAV: Highest RMS value of weighted acceleration is less than 2.5 m/s2.

Measurement methods were applied per the ISO 2631 and ISO 5349 standards under conditions of typical vehicle surfaces.

Some items shown may be optional equipment.
Refresher Unit Dimensions

<table>
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<th>Item</th>
<th>Std</th>
<th>Opt</th>
<th>Field</th>
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</thead>
<tbody>
<tr>
<td>Refresher Unit Length</td>
<td>66.5 in (169 cm)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Refresher Unit Width</td>
<td>51 in (130 cm)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Refresher Unit Height</td>
<td>55.5 in (140 cm)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Refresher Unit Weight</td>
<td>565 lb (256kg)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Canopy</td>
<td>Pebble Platinum</td>
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<td></td>
</tr>
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<td>Standard Color</td>
<td>Sunbrella®</td>
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</tr>
<tr>
<td>Standard Module Configuration</td>
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<td>Refresher Unit Dimensions Cont.</td>
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<td>Maximum Merchandising Capacity</td>
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<td>Cold Storage Drawer Vol. (Total)</td>
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<tr>
<td>Cold Storage Drainage</td>
<td>Single Drain Per Drawer</td>
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<tr>
<td>Cold Storage Capacity</td>
<td>12 oz cans: 400</td>
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<tr>
<td>Trash Bin Volume</td>
<td>3.4 cu ft (0.96 m³)</td>
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<td>U Shaped Work Space</td>
<td>13 ft² (1.2 m²)</td>
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<tr>
<td>Beverage Unit</td>
<td>5000 Series Aluminum</td>
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<td>Visible Product Doors w/Locks</td>
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<td>Refresher Unit Weight</td>
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<td>Cold Storage Capacity</td>
<td>12 oz cans: 400</td>
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<td>Canopy Sunbrella®</td>
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<tr>
<td>Trash Bin Volume</td>
<td>3.4 cu ft (0.96 m³)</td>
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<td>Standard Color</td>
<td>Pebble Platinum</td>
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<td></td>
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<tr>
<td>Standard Module Configuration</td>
<td>42&quot; (106 cm)</td>
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<tr>
<td>Refresher Values Length</td>
<td>66.5 in (169 cm)</td>
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<td>Refresher Values Width</td>
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<td>Refresher Values Height</td>
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<tr>
<td>Refresher Values Weight</td>
<td>565 lb (256kg)</td>
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<td>Canopy Sunbrella®</td>
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<tr>
<td>Trash Bin Volume</td>
<td>3.4 cu ft (0.96 m³)</td>
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<td>Standard Color</td>
<td>Pebble Platinum</td>
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<tr>
<td>Standard Module Configuration</td>
<td>42&quot; (106 cm)</td>
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OPTIONS & FIELD INSTALLED ACCESSORIES (Installation not included)*

<table>
<thead>
<tr>
<th>Item</th>
<th>Std</th>
<th>Opt</th>
<th>Field</th>
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<tbody>
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<tr>
<td>Refresher Unit</td>
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<td>Base Unit, for FS4 - Pebble Platinum</td>
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<tr>
<td>Base Unit, for FS4 - Desert Stone</td>
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<tr>
<td>Canopy - Slate (standard for Pebble Platinum unit)</td>
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<tr>
<td>Canopy - Walnut Tweed (standard for Desert Stone unit)</td>
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<tr>
<td>Canopy - Additional Color Options</td>
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<tr>
<td>Refresher CounterTop - Polar White</td>
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<td>Refresher CounterTop - Mercury Gray, Sand Shade</td>
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<td>End Cap with Trash &amp; Recycle</td>
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<tr>
<td>Windshield</td>
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<tr>
<td>Side Mirrors</td>
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<tr>
<td>Refresher Accessories</td>
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<td>6&quot; Snack Module with Hooks Kit</td>
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<td>6&quot; Cup Holder Module - 5 internal Racks</td>
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<td>12&quot; Snack Module with Hooks Kit</td>
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<td>12&quot; Wedge Shelves - 2 Pack</td>
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<td>12&quot; Single Airpot Holder -White</td>
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<td>18&quot; Module with 4 Adjustable Shelves</td>
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<td>18&quot; Cup &amp; Display Module</td>
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<td>18&quot; Standard Shelves - 2 Pack</td>
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<td>18&quot; Wedge Shelves - 2 Pack</td>
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<td>18&quot; Dual Airpot Holder - White</td>
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<td>18&quot; Food Warmer Module</td>
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<td>24&quot; Keg Module</td>
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<td>Food Warmer Bags</td>
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<td>Consumable Ice Drawer Insert, SS, 10x10x20</td>
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<td>3.0 Liter Airpot (2 Standard)</td>
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<td>Reversible Insert For Airports/Bottles</td>
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<td>Coffee/Creamer Serving Caddy - 2 Pack</td>
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<td>Mini Bottle Holder Shelves - 3 Pack w/Hardware</td>
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<td>Snack Module Kit (6HKS, 2 Clip Strips, 2 Baskets)</td>
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<td>Mini Tray Set - 3 Pack</td>
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<td>Humidor</td>
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<td>Front &amp; Rear:</td>
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<td>Body Color Forest Green</td>
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<td>Body Color Ivory</td>
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<td>Body Color White</td>
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<td>Body Color Yellow</td>
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<td>Body Color Orange</td>
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<tr>
<td>Body Color Black</td>
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<td>Body Color Platinum</td>
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<td>Body Color Blue</td>
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<td>Body Color (upon request)</td>
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<td>Seating:</td>
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<tr>
<td>Seat Color (Gray) Driver Only</td>
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<td>Additional Seat Colors: Tan, White or Black</td>
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<tr>
<td>OTHER PERFORMANCE:</td>
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<tr>
<td>Ash Tray</td>
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<td>Front Bumper &amp; Guard (Black)</td>
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<tr>
<td>Limited Slip Differential</td>
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<td>High Altitude Jetting 3 - 6K ft (900 - 1800 m)</td>
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<td>Horn</td>
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<td>Low Oil Indicator</td>
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<td>Glove Box Door (Locking) Driver &amp; Passenger Sides</td>
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<td>Glove Box Door (Locking) Passenger Side</td>
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<td>ELECTRICAL:</td>
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<td>Brake Lights</td>
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<td>LED Headlights</td>
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<tr>
<td>Turn Signals with 4-Way Flashers</td>
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<tr>
<td>Unique Individual Key Switch</td>
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<tr>
<td>12 Volt Outlet</td>
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<td></td>
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</tr>
<tr>
<td>Hour Meter</td>
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</tr>
</tbody>
</table>
VEHICLE DIMENSIONS

80 in. (203 cm)

49 in. (124 cm)

Front

39.6 in. (100 cm)

Rear

39.5 in. (100 cm)

93.5 in. (235.0 cm)

147.0 in. (365.0 cm)

54 in. (137 cm)
GENERAL SPECIFICATIONS

Read all of SAFETY and this section before attempting any procedure. Pay particular attention to Notices, Cautions, Warnings and Dangers.

TURNING DIAMETER AND INCLINE INFORMATION

TURNING CLEARANCE DIAMETER
26.8 ft. (8.1 m)

RECOMMENDED MAX RAMP GRADE
25% or 14° MAX

RECOMMENDED MAX SIDE TILT
25% or 14° MAX
Notes:
GENERAL SPECIFICATIONS

Read all of SAFETY and this section before attempting any procedure. Pay particular attention to Notices, Cautions, Warnings and Dangers.

Notes:
INTRODUCTION

REFRESHER FS4 VEHICLE OVERVIEW

The Refresher FS4 unit is designed for inventory of unopened, pre-packaged, non-perishable foods for distribution through daily use. It is not intended for long term food storage or storage of opened food and beverage items. Adherence to local food handling regulations is required.

Please read the entire manual to become thoroughly familiar with this vehicle and the Refresher unit. Pay particular attention to all Notices, Cautions, Warnings, and Dangers.

Refer to Operating Instructions and Maintenance sections of this manual for more information specific to the Refresher FS4 unit.

Refresher FS4 Unit Weight (Empty): 595 lbs. (270 kg)
Food/Beverage Maximum Capacity: 1,015 lbs. (460 kg)

VEHICLE FEATURES

General Information

NOTICE

*If vehicle is equipped with factory installed custom accessories, some accessories remain operational with the key switch in the ‘OFF’ position.*
INTRODUCTION

Read all of SAFETY and this section before attempting any procedure. Pay particular attention to Notices, Cautions, Warnings and Dangers.

1. **Key / Light Switch**
   Located on the dash panel, the combination key/light switch controls the basic electrical system of the vehicle, as well as the front and rear lights. The switch has three positions; OFF, ON, and LIGHTS.

2. **Fuel Gauge with Low Oil Pressure Indicator**
   The fuel gauge indicates the amount of gasoline in the fuel tank. ‘F’ indicates a full tank and ‘E’ indicates an empty fuel tank. The fuel gauge has a low oil pressure indicator. A low engine oil pressure condition is shown with an indicator light.

   The low oil pressure indicator light on early model vehicles is located beside the fuel gauge on the dash, and not part of the fuel gauge.

3. **12V Outlet**
   The 12 volt outlet is located above the cupholder and is protected by a removable cover. It allows use of electronic devices such as cell phone, GPS, etc.

4. **Direction Selector**
   Located on the seat wrap panel, the direction selector permits the selection of either ‘F’ (forward), ‘R’ (reverse) or ‘N’ (neutral). A reverse warning buzzer will activate when moved to the “R” position.

5. **Accelerator Pedal**
   The accelerator pedal is on the floorboard to the right of the brake pedal. It’s function is to accelerate and control the speed of the vehicle.

6. **Brake and Park Brake**
   The brake pedal is located on the floor to the left of the accelerator pedal. The brake pedal is a combination brake and park brake. The brake pedal function is to slow or stop the vehicle. When engaged, the park brake prevents the vehicle from rolling.

7. **Horn**
   The horn button is located on the driver side floorboard, and activates the horn when pressed.

8. **Rear View Mirror**
   Rear view mirrors are attached to the front struts at each side of the windshield.

9. **Cup Holder**
   A cup holder is provided for the convenience of both the driver and passenger.

10. **Choke**
    Located on the seat wrap panel, the choke function is to aid with cold starting.

11. **Steering Wheel**
    The steering wheel, located in front of the driver seat, is used to control the vehicle direction of travel.

12. **Seat**
    The vehicle is equipped with an operator seat; it is not designed to carry more than one occupant.

13. **Hip Restraint**
    The hip restraint is designed to keep the operator properly positioned in the event of sudden vehicle position changes.

14. **Glove Box**
    Glove box compartments, one on each side of the instrument panel, provide storage space for small items. Glove box may be equipped with optional doors.
Read all of SAFETY and this section before attempting any procedure. Pay particular attention to Notices, Cautions, Warnings and Dangers.

Notes:
INTRODUCTION

Read all of SAFETY and this section before attempting any procedure. Pay particular attention to Notices, Cautions, Warnings and Dangers.

Notes:
SERIAL NUMBER LOCATION

Three serial number and manufacture date code labels are on the vehicle. Part 'A' and 'B' are located on the crossmember section of the chassis on the driver side. Part 'C' is placed below the driver side of the seat underneath the choke intake adapter. And part 'D' is placed on the rear frame cross tube.

Design changes take place on an ongoing basis. In order to obtain correct components for the vehicle, the manufacture date code, serial number and vehicle model must be provided when ordering service parts.
OPERATING PROCEDURES

Read all of SAFETY and this section before attempting any procedure. Pay particular attention to Notices, Cautions, Warnings and Dangers.

BEFORE INITIAL USE

Read and follow the safety label on the instrument panel. Be sure to understand safe operation of the vehicle and its equipment.

⚠️ WARNING

Hydrogen gas is generated as a natural part of the lead acid battery charging process. A 4% concentration of hydrogen gas is explosive and could cause severe injury or death. Charging must take place in an area that is adequately ventilated (minimum of 5 air exchanges per hour).

To reduce the chance of battery explosion that could result in severe injury or death, never smoke around or charge batteries in an area that has open flame or electrical equipment that could cause an electrical arc.

Before a new vehicle is put into operation, the items shown in the INITIAL SERVICE CHART must be performed.

Vehicle battery must be fully charged before initial use.
Check for correct tire inflation (45 - 55 psi (310 - 379 kPa)).
Check for oil or fuel leaks that could have developed in shipment from the factory.
Determine and record braking distance required to stop vehicle for future brake performance tests.
Remove the clear plastic (used to provide protection during shipping) from the seat.

<table>
<thead>
<tr>
<th>ITEM</th>
<th>SERVICE OPERATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Battery</td>
<td>Charge battery</td>
</tr>
<tr>
<td>Seats</td>
<td>Remove protective plastic covering</td>
</tr>
<tr>
<td>Brakes</td>
<td>Check operation and adjust if necessary</td>
</tr>
<tr>
<td></td>
<td>Check hydraulic brake fluid level if equipped</td>
</tr>
<tr>
<td></td>
<td>Establish acceptable stopping distance</td>
</tr>
<tr>
<td>Tires</td>
<td>Check air pressure (45 - 55 psi (310 - 379 kPa))</td>
</tr>
<tr>
<td>Fuel</td>
<td>Fill tank with correct fuel</td>
</tr>
<tr>
<td>Engine</td>
<td>Check oil level</td>
</tr>
</tbody>
</table>

INITIAL SERVICE CHART

OPERATING THE VEHICLE

⚠️ CAUTION

Improper use of vehicle or lack of proper maintenance may result in damage or decreased performance.

Read and understand the following warnings before attempting to operate the vehicle.

⚠️ WARNING

To reduce the possibility of severe injury or death resulting from loss of vehicle control, the following warnings must be observed:

When driving vehicle, consider the terrain, traffic conditions and the environmental factors which effect the terrain and the ability to control the vehicle.
Vehicle is intended for use on improved surfaces.
Use extra care and reduced speed when driving on poor surfaces, such as loose dirt, wet grass, gravel, etc.
Stay in designated areas and avoid extremely rough terrain.
Maintain a safe speed when driving downhill. Use the service brake to control speed when traveling down an incline. A sudden stop or change of direction may result in loss of vehicle control.

Slow down before and during turns. All turns should be made at reduced speed.

Never drive vehicle up, down, or across an incline that exceeds 14° (25% grade).

To reduce the possibility of severe injury or death resulting from improper vehicle operation, the following warnings must be observed:

Refer to GENERAL SPECIFICATIONS for seating capacity.

Pressing accelerator pedal will release foot operated park brake and may cause inadvertent vehicle movement. Turn the key to the ‘OFF’ position whenever the vehicle is parked.

To prevent inadvertent movement when the vehicle is to be left unattended, engage the park brake, move direction selector to forward position, turn key to ‘OFF’ position and remove it from switch.

Make sure direction selector is in correct position before attempting to start vehicle.

Always bring vehicle to a complete stop before shifting direction selector.

Do not take vehicle out of ’gear’ while in motion (coast).

Check area behind vehicle before operating in reverse.

All occupants must remain seated while vehicle is moving. Keep entire body inside vehicle and hold on while vehicle is in motion.

Run-In

Check for oil or fuel leaks that could have developed in shipment from the factory. Avoid full throttle starts and rapid acceleration until the engine has achieved operating temperature.

All engines consume more oil than normal during the first hours of operation. As internal moving parts are run-in, oil consumption should gradually decrease until the rate of consumption stabilizes.

Check the oil level per the MAINTENANCE section. Add oil if necessary.

Cold Starting

Starting a cold engine may require use of the choke. Press the accelerator approximately 1” (2.5 cm) or until the starter just begins to operate. Pull choke out if required. Accelerate slowly and push choke in completely when engine runs smoothly.

Do not allow starter to operate continuously for more than 10 seconds. Allow 30 seconds between starting attempts. If the vehicle does not start on the third attempt, turn the key switch to ‘off’, engage park brake and determine cause of problem.

If the vehicle had been running and the engine will not start within 10 seconds, use the choke to help start.
OPERATING PROCEDURES

Read all of SAFETY and this section before attempting any procedure. Pay particular attention to Notices, Cautions, Warnings and Dangers.

STARTING AND DRIVING

To reduce the possibility of roll-back, which could result in severe injury or vehicle damage, do not release service brake until the engine has started.

To operate vehicle:
1. Press service brake pedal, place key in switch, and turn key to ‘ON’ position.
2. Move direction selector to desired direction.
3. Release park brake by pressing the service brake pedal until the park brake releases.
5. When accelerator pedal is released, the ignition circuit is de-energized and the engine stops. To stop the vehicle more quickly, press the service brake pedal.

When the direction selector is in the reverse position, a warning signal will sound to indicate that the vehicle is ready to run in reverse.

Starting the Vehicle on a Hill

To reduce the possibility of roll-back, which could result in severe injury or vehicle damage, do not release service brake until engine has started.

Use the brake pedal to hold vehicle on a hill. Do not hold vehicle on hill using accelerator and engine. This will cause premature and excessive wear to drive train components.

To reduce the possibility of permanent damage to the drive system, it is important to prevent excessive roll-back when starting the vehicle on a hill.

Place left foot on service brake and release the park brake. Press accelerator with right foot and release the service brake by lifting left foot.

Coasting

To reduce the possibility of severe injury or death from coasting at above recommended speeds, limit speed with service brake.

On steep hills, it is possible for the vehicle to coast at faster speeds than those attainable on a flat surface. To reduce possible loss of vehicle control and severe drive train damage, speeds should be limited to no more than the maximum governed speed on level ground (see GENERAL SPECIFICATIONS). Limit speed by applying service brake.
Fuel

**WARNING**

To decrease the risk of severe injury or death from improper fuel handling:

*Do not smoke near the fuel tank.*

*Do not add fuel near open flame or electrical items that can cause a spark.*

*Always handle gasoline in a well ventilated area.*

*Always wear eye protection to protect against splashed fuel and fuel vapors.*

*Inspect the fuel cap, tank and other components for leaks or damage that can cause a hazardous condition.*

**CAUTION**

*Oxygenated or reformulated gasoline, is mixed with alcohols or ethers. Excessive amounts of these blends can damage the fuel system or cause performance problems. If any operating problems occur, use gasoline with a lower percentage of alcohol or ether.*

*Use clean regular grade unleaded fuel. The Ethanol blend fuel up to 10% is permitted.*

Do not use gasoline that contains methanol.

High altitude or heavy use/load applications can benefit from higher octane gasoline.

**Fuel Tank**

The fuel tank is found below the seat on the passenger side of the vehicle. Fill the tank with clean, automotive grade gasoline.

**Early Production Fuel Tank**

**WARNING**

*Always allow enough space for the expansion of gasoline. Leave at least 1-inch (2.5 cm) of space below bottom of filler neck.*

Early production fuel tanks can be identified by the location of the fuel cap which is located in the middle of the top of the tank as shown.

Early production fuel tanks require enough space for the expansion of the gasoline. Leave at least 1-inch (2.5 cm) of space below the bottom of the filler neck.
Late Production Fuel Tank

Late production fuel tanks can be identified by the location of the fuel cap which is located in the rear of the top of the tank as shown.

Late production fuel tanks are designed to allow for fuel expansion and do NOT require space below bottom of filler neck.

Battery

**CAUTION**

*Excessive use of accessories may drain the battery and leave insufficient charge to start the vehicle.*

The vehicle uses a combination starter/generator to both start the engine and charge the battery. The engine will not idle; therefore, the battery cannot be charged while the vehicle is stopped. Do not operate accessory items (such as lights) excessively while the vehicle is stopped.

The generator is capable of supplying 35 amps. Operation of multiple accessories could result in discharge of the battery even with the engine running and the generator operating. Discharging the battery is known as deep cycling. The battery is not a deep cycle model, but is a starting battery. Multiple deep cycling will result in the premature failure of the battery.

If the vehicle battery has become discharged, it can be charged using a 12 volt charger that is rated at 10 amps or less and in accordance with all instructions provided by the manufacturer of the charger.

12 Volt Power Outlet

**CAUTION**

*Overuse of accessories may drain the battery and leave insufficient reserve to start the vehicle.*

Vehicle may be equipped with an optional 12 volt power outlet. Outlet is rated at 15 amps, and is located to the left of key/light switch.

Canopy and Windshield

**WARNING**

*The canopy does not provide protection from roll over or falling objects.*

*The windshield does not provide protection from tree limbs or flying objects.*
To prevent damage to the vehicle, do not hold on to sun top struts and stand on body panels.

The canopy and windshield provide some protection from the elements; however, they will not keep the operator and passenger dry in a downpour. This vehicle is not equipped with seat belts and the canopy has not been designed to provide roll over protection. In addition, the canopy does not protect against falling objects nor does the windshield protect against flying objects and tree limbs. Keep arms and legs inside of vehicle while it is moving.

REFRESHER VEHICLE OVERVIEW

The Refresher FS4 unit consists of:

- windshield with frame
- struts and canopy
- four (4) lockable, insulated, sliding drawers
- slide out trash compartment system
- two (2) removable plastic bins
- two (2) lower, rear, corner storage compartments
- locking system for holding and changing modules
- countertop
- left and right side mirrors
- 42” of module space to meet adjustable storage needs
- shelves in upper rear end-cap

The Refresher unit is designed for inventory of unopened, pre-packaged, non-perishable foods for daily distribution. It is not intended for long term food storage or storage of opened food and beverage items. Adherence to local food handling regulations is required.

Serial Number Location

The Refresher unit serial number is located on the inside of the right, rear door of the end cap.

Emissions Labels and Engine Access

A pull up plate is located beneath the lower side drawers for access to the engine compartment.

Slide side drawers out and set aside to expose pull up plate.

When reinstalling drawers, align both drawer hinges to the slides in the chassis. DO NOT FORCE THIS INSTALLATION. Use extreme caution when installing drawers to avoid damage to the slides.

The emission labels are visible when the engine compartment is accessed.
OPERATING PROCEDURES

Read all of SAFETY and this section before attempting any procedure. Pay particular attention to Notices, Cautions, Warnings and Dangers.

REFRESHMENT UNIT OPERATION

Lockdown Mechanism

1. **Countertop**: The passenger side countertop is removable for module replacement. To remove, lift countertop up and remove from hinge support. Removing the countertop allows the modules to slide out after releasing the module clamps (see next section for module clamp operation).

![](image1.png)

2. **Module Clamps**: The Refresher unit modules are secured by module clamp that place a downward force on the modules. Release the clamp by turning the rotating mechanisms on both sides of unit toward the left. Raise the clamp high enough so that a module can be lifted up and out of unit. The clamp must be released on BOTH sides of module before it can be removed from unit.

![](image2.png)

Module Removal and Installation

The standard FS4 unit features:

- One (1) 6" pull out module
- One (1) 18" cup and display module
- One (1) 18" display module with shelves

Units may be equipped with optional modules of various sizes and designs not specifically described in this manual. The basic removal and installation process for all modules is similar.

---

**WARNING**

The countertop and all modules must be properly installed before operating the vehicle.
No tools are needed for module removable and installation.

Passenger side countertop must be removed and module clamps released prior to removal of any module.

1. **6" Pull Out Module**: The standard unit 6" pull out module and all other 6" modules are the same size and similar weight. Modules are positioned in place with four dimples on the bottom surface. To remove, remove the passenger
side countertop and release module clamps (refer to lock down mechanism). Gently pull the module up and out using the door handle and or top end of module.

Passenger side countertop must be removed and module clamp released before attempting module removal.

Removal of 18” modules may require a second person to assist with support and lifting.

3. **18” Modules**: 18” modules are positioned in place with four dimples on the bottom surface. Remove passenger side countertop and release module clamps. Apply a slight upward force, along with a pulling force to nudge dimples free and slide module out. Ensure that it is adequately secured before completely removing from unit.
Slide Out Compartments

1. **Hanger Board**: The pull out module has a hanger board inside that is equipped with slide rails to allow for cleaning and/or refilling. The board inside can be removed after the slide locks are released.

2. **Slide Out Trash Compartment**: The slide out trash compartment (located in the end cap) is equipped with a 10 lb. rated latch. A pulling force exceeding 10 lbs. is required to release the latch to allow the trash can housing to slide out of the unit.
Removable Shelves and Inserts

1. **Rear End Cap (above Trash Compartment)**
   a. **Bottom Insert**: This insert has two functional sides; one side for beverage canisters and miscellaneous accessories, opposite side for various bottles/accessories. The insert can be pulled up and out of its position. Rotate to its opposite side and place back into position.

2. **12” and 18” Modules (unit may not be equipped with all modules)**
   a. **12” and 18” Module with Shelves**: The shelves can be adjusted for custom compartment spacing or can be removed completely. 12” or 18” modules are equipped with two shelves.
   b. **18” Cup and Display Module**: This 18” module is equipped with two adjustable/removable shelves, one cup tray with four slots and one beverage box.

   **To remove shelf:**
   1. Push/pull up
   2. Push down slightly to release shelf
3. **6” and 12” Pull Out Modules (unit may not be equipped with all modules)**
   a. **Hanger Inserts:** Hangers are located on the hanger board inside the 6” pull out module. The hangers can be placed in any position using holes provided on board.
   
   b. **Basket:** Two baskets are also provided with the hanger board. They can be placed in any position on the board or removed completely.

4. **Side Drawers**
   a. **Tray Insert:** An aluminum slide-able storage tray is located inside the side drawer.
      
      To remove drawer from unit, pull drawer out, press down levers on each side to release pins and take entire drawer off slide rails.
Operating Procedures

Read all of SAFETY and this section before attempting any procedure. Pay particular attention to Notices, Cautions, Warnings and Dangers.

Compartment Storage

Unit may not be equipped with all modules described in this section.

1. **Rear End Cap (above Trash Can Compartment):** The door interiors can be used for mini bottles, snacks, chips etc. The main portion of the unit can be used for bottles, snacks, chips, napkins, etc. **Unopened, prepackaged non-perishable food only.**

   - Removable shelving inserts for customized storage
   - Base insert can be flipped over to accommodate different size containers.

2. **Pull Out Module:** This module is designed to hold snacks, chips, etc. on the hanger board. Hanger inserts and baskets can be placed as desired to accommodate specific product layout. **Unopened, prepackaged non-perishable food only.**

   - Wire basket provides storage for products
   - Hanger inserts to hang and store products
3. **6" Cup Module**: This module has five cup racks and is designed for empty cup storage only. It is not intended for products requiring temperature cooling or heating. The cup racks are removable for refilling and cleaning purposes.

   This module is recommended for empty cup storage only.

4. **12” and 18” Modules with Shelves**: These modules can be used for various storage options to accommodate needs or service. Modules are not temperature regulated or insulated and are not designed for cooling and/or heating of any products or food. **Unopened, prepackaged non-perishable food only.**

5. **18” Cup and Display Module (not pictured)**: This module is similar to the 18” module with shelves with the difference being narrower shelves and an added cup rack feature.

   Module provides two adjustable shelves for various storage options and racks for empty cup storage. Modules are not temperature regulated or insulated and are not designed for cooling and/or heating of any products or food. **Unopened, prepackaged non-perishable food only.**

6. **Rear Corner Compartment (at each corner of end cap)**: Two corner compartments provide storage options for miscellaneous product needs. Compartments are not temperature regulated or insulated, so products needing to be cooled and/or heated should not be stored here. Dry food and beverage products are also not recommended for this area. **Unopened, prepackaged non-perishable food only.**
7. **Side Drawers**: The side drawers are designed for cold product storage, such as ice and beverages. Each drawer has a drain for emptying and cleaning purposes.

An optional, removable, sliding tray is available for additional storage requirements. **Unopened, prepackaged non-perishable food only.**

**Drawer Operation**

To open side drawer, use two hands in the open palm position with finger tips under the bar. Apply force by pulling up with fingers and slide out the drawer to the distance needed. The bar lever is spring loaded and upon release, locks the drawer from moving.

Pull up and out with BOTH HANDS.
Trash Compartment Operation
The trash compartment is equipped with slide rails on each side for pull out access. Inside the pull out compartment are two removable trash bins. Remove trash bins from compartment to empty and/or clean.

Keys and Locks
Two different keys are provided with the unit; one for door locks and one for drawer locks. All doors and drawers are lockable except the trash compartment.

Cleaning the Refresher Unit
Refresher unit should be maintained and cleaned after each use.

- **Side Drawers:** Side drawers should be maintained and cleaned after use. Commercial safe detergent is recommended.
- **Trash Compartment:** The trash bins should be emptied as necessary and cleaned after each use. The entire trash compartment should be cleaned after each use. Commercial safe detergent is recommended.
- **All Other:** Clean all used areas of Refresher unit with commercial safe detergent.
CHANGING THE CANOPY

Remove canopy before trailering or shipping vehicle.

1. Open the Velcro closures on all sides of canopy to release it from the frame.

2. Remove canopy top from frame.

3. To reattach canopy, start with one end and cover corners around the frame.

4. Pull all edges of canopy tight and secure with Velcro.
Notes:
Notes:
MAINTENANCE

VEHICLE CLEANING AND CARE

Vehicle Cleaning

**WARNING**

To reduce the possibility of severe injury or vehicle damage, read and understand all instructions supplied by manufacturer of pressure washer prior to use.

**CAUTION**

Do not exceed 700 psi when pressure washing exterior of vehicle.

*Using abrasive or reactive solvents for cleaning plastic parts may result in cosmetic damage.*

It is important that proper techniques and cleaning materials to be used. Using excessive water pressure may cause severe injury to operator or bystander, damage to seals, plastics, seat material, body finish or electrical system. Do not use pressure exceeding 700 psi on exterior of vehicle.

Clean windshield with water and a clean cloth. Minor scratches may be removed using a commercial plastic polish or Plexus® plastic cleaner available from the service parts department.

Normal cleaning of vinyl seats and plastic or rubber trim can be done with a mild soap solution applied with a sponge or soft brush and wiped with a damp cloth.

Oil, tar, asphalt, shoe polish, etc. can be removed with commercially available vinyl/rubber cleaner.

The painted surfaces of the vehicle provide attractive appearance and durable protection. Frequent washing with lukewarm or cold water and mild detergent is required to preserve the painted surfaces.

Occasional cleaning and waxing with non-abrasive products designed for ‘clear coat’ automotive finishes will enhance the appearance and durability of the painted surfaces.

Corrosive materials used as fertilizers or for dust control can collect on the underbody of the vehicle. These materials will cause corrosion of underbody parts unless flushed occasionally with plain water. Thoroughly clean any areas where mud or other debris can collect. Sediment packed in closed areas should be loosened to ease removal, taking care not to chip or otherwise damage paint.

**NOTICE**

*If the engine does not start or runs improperly after washing, remove the spark plug wires (by pulling the spark plug boots, not the wires). Dry all connections with forced air. Reinstall wires.*

Refresher Unit Cleaning

Regular cleaning is required to obtain optimum use of the FS4 Refresher unit. Remove all merchandise and product prior to cleaning. Clean countertops, module units, side drawers, end cap, and trash compartment with commercial cleaners. A standard all-purpose antibacterial cleaner is sufficient for most of the surfaces. Ensure all surfaces are dried and free of cleaner residue. Drawers and drawer drains must be cleaned and dried after each use.
COMMON SENSE OPERATION

THIS VEHICLE IS NOT A TOY. If not operated properly and responsibly, it can cause severe injury or death to the operator, passengers or bystanders. All operators should possess a valid drivers license. Children should not be permitted to operate the vehicle since they may not have the skill, judgment or strength to operate this or similar vehicles.

Alcohol, drugs and many over the counter medications reduce the ability of the driver to operate the vehicle safely. Always review side effects of any medication with a doctor or pharmacist before operating vehicle.

When driving at full speed on dirt road, loose surface or wet grass, the distance required to stop vehicle will increase. If the vehicle is fully loaded, it will require more distance to stop than with no load. When operating vehicle in wet weather conditions, remember that the brakes may need to be lightly applied in order to provide enough friction to dry the brake unit. Wet brakes lose much of their effect.

Slow down when in unfamiliar terrain. Slow down when cresting a hill in an unfamiliar area.

Some hills are too steep to climb. If attempting to climb a hill that is too steep or if unable to achieve adequate traction, do not attempt to turn around on the hill. Slowly back straight down the hill using the service brake to control speed.

ENVIRONMENTAL CONCERNS

WARNING

Respect all wildlife and their habitat.

Respect private property and comply with local laws and regulations governing the use of light duty utility vehicles.

To prevent severe injury or death while driving, be aware of the following:

Environmental hazards such as steep slopes, overhanging limbs, etc.

Danger of fire when vehicle is operated over dry combustible organic material.

When operating vehicle, be aware of environmental hazards such as steep slopes, overhanging limbs, etc. Be aware of the danger of fire when the gasoline powered vehicle is driven over dry combustible organic material.

REPAIR

Some servicing operations may require the front wheels, the rear wheels, or the entire vehicle to be raised.

WARNING

To reduce the possibility of severe injury or death from a vehicle falling from a jack:

Use caution since the vehicle is extremely unstable during the lifting process.
Be sure the vehicle is on a firm and level surface for the lifting process.
Never get under a vehicle while it is supported by a jack only.
Use jack stands and test stability of the vehicle on stands prior to getting underneath.
Place chocks in front and behind wheels not being raised.
Lifting the Vehicle

Remove load from vehicle before lifting. No person(s) should be in or on the vehicle while lifting.

To raise the entire vehicle:
1. Install chocks in front and behind each front wheel.
2. Center the jack under the rear frame crossmember.
3. Raise the vehicle enough to place a jack stand under the outer ends of the rear axle as shown in illustration.
4. Lower the jack and test the stability of the vehicle on the two jack stands.
5. Place the jack at the center of the front axle.
6. Raise the vehicle enough to place jack stands under the frame crossmember as shown in illustration.
7. Lower the jack and test the stability of the vehicle on all four jack stands.

If only one end of the vehicle needs to be raised, place chocks in front and behind each wheel not being raised to stabilize the vehicle.

Lower the vehicle by reversing the lifting sequence.

WHEELS AND TIRES

A tire explosion can cause severe injury or death. Do not exceed the inflation pressure rating on the tire sidewall.

To reduce the possibility of tire explosion, pressurize tire with small amounts of air applied intermittently to seat beads. Due to the low volume of the small tires, over-inflation can occur in sec-
MAINTENANCE

Read all of SAFETY and this section before attempting any procedure. Pay particular attention to Notices, Cautions, Warnings and Dangers.

Do not exceed the tire manufacturer’s recommendation when seating a bead. Protect face and eyes from escaping air when removing a valve core.

To reduce the possibility of severe injury caused by a broken socket when removing wheels, use only sockets designed for impact wrench use.

DO NOT use low inflation tires on a Cushman vehicle. DO NOT use any tire which has a recommended inflation pressure less than 45 - 55 psi (310 - 379 kPa).

Use caution when inflating tires. Over-inflation could cause the tire to separate from the wheel or cause the tire to explode, either of which could cause severe injury.

Tire Repair

<table>
<thead>
<tr>
<th>Tool List</th>
<th>Qty.</th>
<th>Tool List</th>
<th>Qty.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lug Wrench, 3/4&quot;</td>
<td>1</td>
<td>Impact Socket, 3/4&quot;</td>
<td>1</td>
</tr>
<tr>
<td>Impact Wrench</td>
<td>1</td>
<td>Torque Wrench</td>
<td>1</td>
</tr>
</tbody>
</table>

Use caution when inflating tires. Due to the low volume of the small tires, over-inflation can occur in seconds. Over inflation could cause the tire to separate from the wheel or cause the tire to explode.

The recommended tire inflation pressure is 45 - 55 psi (310 - 379 kPa). Tire inflation should be determined by the condition of the terrain.

For outdoor applications with major use on grassy areas, the following should be considered:

- On hard turf, it is desirable to have a slightly higher inflation pressure.
- On very soft turf, a lower pressure reduces the possibility of tires cutting into the turf.
- For vehicles being used on paved or hard surfaces, tire inflation pressure should be in the higher allowable range, but under no condition should inflation pressure be higher than recommended on tire sidewall.

All four tires should have the same pressure for optimum handling characteristics. Be sure to install the valve stem dust cap after checking or inflating.

The vehicle is fitted with low pressure tubeless tires mounted on one piece rims; therefore, the most cost effective way to repair a puncture in the tread is to use a commercial tire plug.

**NOTICE**

Tire plug tools and plugs are available at most automotive parts outlets and have the advantage of not requiring the tire be removed from the wheel.

If the tire is flat, remove the wheel and inflate the tire to the maximum recommended pressure for the tire. Immerse the tire in water to locate the leak and mark with chalk. Insert tire plug in accordance with manufacturer’s instructions.

**WARNING**

To reduce the possibility of severe injury, be sure the mounting/demounting machine is anchored to floor. Wear OSHA approved safety equipment when mounting/demounting tires.

If the tire is to be removed or mounted, the tire changing machine manufacturer's recommendations must be followed in order to reduce possibility of severe injury.
Wheel Installation

CAUTION

To reduce the possibility of component damage, do not tighten lug nuts to more than 100 ft. lbs. (136 Nm) torque.

NOTICE

It is important to follow the ‘cross sequence’ pattern when installing lug nuts to ensure even seating of the wheel against the hub.

With the valve stem to the outside, mount the wheel onto the hub with lug nuts (1). Finger tighten the lug nuts and tighten lug nuts in a ‘cross sequence’ pattern as shown, to a torque of 40 - 60 ft. lbs. (54 - 81 Nm). Finally, tighten the lug nuts to torque of 80 - 100 ft. lbs. (108 - 136 Nm).

LIGHT BULB REPLACEMENT

CAUTION

To reduce possibility of premature bulb failure, do not touch new bulbs with bare fingers. Use clean, dry tissue or paper towel to handle the glass portion of bulb.

Locate bulb socket on backside of headlight housing and turn bulb socket a quarter turn counterclockwise to unlock and pull out bulb and socket. Insert new bulb and rotate socket a quarter turn clockwise to secure.

To replace the turn signal bulb, locate bulb socket on backside of headlight housing and turn bulb socket a quarter turn counterclockwise to unlock and pull out bulb and socket. Insert new bulb and rotate socket a quarter turn clockwise to secure.

To replace the taillight bulb, roll the rubber bezel from around the edge of the taillight and remove lens. Install replacement bulb and replace lens.

Light bulbs are available from a local distributor, an authorized branch or the service parts department.

FUSE REPLACEMENT

Locate the fuse block under the drivers seat. Pull out old fuse and replace with a new automotive type fuse. Fuses are available from a local distributor, an authorized branch or the service parts department.
VEHICLE WITH A DISCHARGED BATTERY

**WARNING**

*To reduce the possibility of severe injury or death from inadvertent motion, do not attempt to 'jump start' a vehicle.*

The vehicle is equipped with a starter/generator and does not idle. When starting the engine, the starter/generator functions as a starter and with the engine running, it functions as a generator.

With the short running times associated with this kind of vehicle, the generator is more than adequate to maintain the battery charge level. The generator is not designed to charge a discharged battery.

When the engine starts, the clutches engage and cause the vehicle to move making 'jump starting' both dangerous and impractical.

If the vehicle battery has become discharged, it can be charged using a 12 volt charger that is rated at 10 amps or less. Read and understand all instructions provided by the manufacturer of the charger.

TRANSPORTING VEHICLE

**WARNING**

*This vehicle is not designed to be towed.*

Do not tow this vehicle. The vehicle should be moved by placing the entire vehicle on a trailer, flatbed truck or other suitable transport.

Neutral Lock

A neutral lock is located on the direction selector to prevent the driven clutch from turning the rear wheels during service operations.

To operate neutral lock:

1. Turn key switch to 'OFF' and lift seat bottom.
2. Pull out (1) and rotate (2) the neutral lock pin handle so that the pointed portion of the handle is to the side of the direction selector cam.
3. Move direction selector towards the area between ‘F’ and ‘R’. During that motion the pin will snap into the hole in the direction selector mounting bracket preventing any movement. When in this position, the direction selector remains locked in the neutral position.
4. To unlock the direction selector, pull the neutral lock pin handle out and rotate until the pointed portion of the handle fits into the hole in the direction selector cam.
MAINTENANCE

Read all of SAFETY and this section before attempting any procedure. Pay particular attention to Notices, Cautions, Warnings and Dangers.

![WARNING]

To reduce the possibility of severe injury or death while transporting the vehicle:

Secure the vehicle and contents.
Do not ride on a vehicle being transported.
Remove windshield before transporting.
Remove the removable countertop section.
Ensure unit drawers and module doors are locked.
Ensure unit is empty to avoid weight shifting.
Remove canopy if transporting at highway speeds.

If vehicle is to be transported at highway speeds, the canopy and removable countertop must be removed and the seat bottom secured. When transporting vehicle below highway speeds, check for tightness of hardware and cracks in canopy at mounting points. Always remove windshield when transporting. Always check that the vehicle and contents are adequately secured before transporting. The rated capacity of the trailer or truck must exceed the weight of the vehicle (see GENERAL SPECIFICATIONS for vehicle weight) and load plus 1000 lbs. (454 kg). Secure the vehicle using ratchet tie downs.

SERVICE AND MAINTENANCE

![WARNING]

To reduce the possibility of severe injury or death from improper servicing techniques:

DO NOT attempt any type of servicing operations before reading all notices, cautions and warnings in this manual.

Any servicing requiring adjustments to be made to the powertrain while the engine is running must be made with both drive wheels raised and vehicle properly supported on jack stands.

To reduce the possibility of engine damage, never operate vehicle at full throttle for more than 4 - 5 seconds while vehicle is in a ‘no load’ condition.

Reduce the possibility of accidental starting by disconnecting battery at negative terminal before servicing.

Wear eye protection when working on the vehicle. Use extra care when working around batteries, or using solvents or compressed air.

To reduce the possibility of causing an electrical arc, which could result in a battery explosion, turn off all electrical loads from the battery before removing battery wires.
Wrap wrenches with vinyl tape to reduce possibility of a dropped wrench ‘shorting out’ a battery, which could result in an explosion.

The electrolyte in a battery is an acid solution which can cause severe burns to the skin and eyes. Treat all electrolyte spills to the body and eyes with extended flushing with clear water. Contact a physician immediately.

Any electrolyte spills should be neutralized with a solution of 2 teaspoons (10 ml) sodium bicarbonate (baking soda) dissolved in 1 quart (1 liters) of water and flushed with water.

Aerosol containers of battery terminal protectant must be used with extreme care. Insulate metal container to reduce the possibility of can contacting battery terminals which could result in an explosion.

It is in the best interest of both vehicle owner and service technician to carefully follow the procedures recommended in this manual. Preventative maintenance, applied at recommended intervals, is the best guarantee for keeping the vehicle both dependable and economical.

This vehicle will give years of satisfactory service, providing it receives regular maintenance. Refer to the Periodic Service Schedule for appropriate service intervals.

**ROUTINE MAINTENANCE**

**CAUTION**

To prolong vehicle life, some maintenance items must be serviced more frequently on vehicles used under severe driving conditions such as extreme temperatures, extreme dust/debris conditions, or frequent use with maximum load.

For information on accessing the powertrain for routine maintenance, refer to “Emissions Labels and Engine Access” on page 25.

Some service procedures may require the vehicle to be lifted. Refer to “Lifting the Vehicle” on page 41 for proper lifting procedure and safety information.

**Tire Inspection**

Tire condition should be inspected per the Periodic Service Schedule. Inflation pressures should be checked when the tires are cool. Be sure to install the valve dust cap after checking or inflating.

**Rear Axle**

The only maintenance required for the first five years is the periodic inspection of the rear axle for lubricant leakage. Unless leakage is evident, the lubricant need only be replaced after five years. Refer to the Service and Repair Manual for the fluid replacement procedure.

**FOUR CYCLE ENGINE**

**Engine Specifications**

<table>
<thead>
<tr>
<th>Engine Model</th>
<th>FJ400D</th>
<th>Spark Plug Type</th>
<th>NGK BPR2ES</th>
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<tbody>
<tr>
<td>Type</td>
<td>Four Cycle, OHV</td>
<td>Spark Plug Gap</td>
<td>.028” - .031” (.70 - .80 mm)</td>
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<td>Number of Cylinders</td>
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<td>Displacement</td>
<td>401 cc</td>
<td>Oil Filter</td>
<td>Cartridge Type Full Flow</td>
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<tr>
<td>Rated Horsepower</td>
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<td>Oil Pump</td>
<td>Positive Displacement</td>
</tr>
</tbody>
</table>
Maintenance

Read all of SAFETY and this section before attempting any procedure. Pay particular attention to Notices, Cautions, Warnings and Dangers.

Engine Description

The engine is an air cooled, 4-stroke, OHV, single cylinder gasoline engine. It incorporates a pressure fed lubrication positive displacement oil pump with a cartridge type full flow oil filter and a counter rotating balance shaft.

Checking the Oil Level

**CAUTION**

_Do not overfill engine. Too much oil may cause engine to smoke or cause spark plug fouling._

_Do not overfill engine. Too much oil may cause smoking or allow oil to enter the air filter enclosure._

The oil should be checked with the engine warm and vehicle parked on a level surface with the parking brake engaged. Allow oil to drain into crankcase before checking.

Remove the dipstick and wipe off the entire area with a lint free cloth.

Insert the dipstick fully into the dipstick hole and then remove it. Examine the level of the oil on the dipstick.

The engine can be operated safely as long as oil is within the safe operating range as indicated on the dip stick. **Do not operate vehicle if oil level is below the safe area indicated on the dipstick.**

Oil should be added to bring the level into the safe operating range. Remember that oil expands as it gets hot, **Do not overfill.** Check that the oil cap is firmly in place.

**NOTICE**

_The oil dipstick/fill cap must be in place before operating the engine. Failure to install the dipstick/fill cap will result in oil becoming contaminated and/or oil being discharged into the engine compartment._

Changing the Oil

<table>
<thead>
<tr>
<th>Tool List</th>
<th>Qty.</th>
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</thead>
<tbody>
<tr>
<td>Socket, 19 mm</td>
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<td>Ratchet</td>
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<tr>
<td>Extension, 8”</td>
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</table>

<table>
<thead>
<tr>
<th>Tool List</th>
<th>Qty.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oil Filter Wrench</td>
<td>1</td>
</tr>
<tr>
<td>Oil Drain Pan</td>
<td>1</td>
</tr>
</tbody>
</table>

Maximum Oil Level

For Hot Engine

Do Not Overfill

Fill Cold Engine

To This Point

Safe Operating Range

Hot Engine

Add Oil
MAINTENANCE

Read all of SAFETY and this section before attempting any procedure. Pay particular attention to Notices, Cautions, Warnings and Dangers.

For maximum performance and longevity, the engine oil should be replaced after the first eight hours of operation. After the initial oil change, it should be changed every 125 hours of operation or semi-annually, whichever comes first.

The selection of oil is dependent upon the service that the vehicle will perform. Most vehicles require 10W-30 oil, whereas vehicles used at capacity or near capacity load applications will utilize 10W-40 oil after a break-in period of 100 hours.

**NOTICE**

If vehicle is to be stored over winter months, it can be stored with old oil left in engine. The oil should be changed as part of spring maintenance to remove any moisture that has accumulated during storage.

**WARNING**

Be aware that engine fluids may be hot and contact to the skin may cause severe burns. Wear rubber gloves to protect skin from exposure to the old oil and degreaser.

The oil should be changed with engine warm. Park vehicle on a level surface, engage parking brake and remove key. Place a drain pan under engine. Wipe top of the engine clean with a cloth. Remove the oil fill cap.

**WARNING**

Be careful of hot oil when drained. It may be hot enough to burn you severely

Place the oil drain pan under the oil drain plug (1) found at the rear of the engine base.

Remove the drain plug (1) and allow the oil to drain into the pan. At the first oil change, small metal chips and lint may be found. This is normal, resulting from the break-in period. Inspect the filter at every oil change. The presence of large metal chips could indicate possible damage to the engine. Before installing the drain plug, clean the area around the drain hole with a lint free cloth and inspect the drain plug (1) for damage; replace if necessary. If the O-ring (2) on the drain plug is damaged replace it with a new one. Tighten the drain plug to 62 in. lbs (7 Nm) torque.
Read all of SAFETY and this section before attempting any procedure. Pay particular attention to Notices, Cautions, Warnings and Dangers.

Clean the area around filter. Use a filter wrench (3) to remove the filter (4) from the engine and allow the oil to drain.

The O-ring (5) may have remained on engine (6) or filter (7). If the O-ring (5) remained on the engine surface (6), remove it and discard with the filter (7).

Inspect the new oil filter for any defects, apply engine oil to the oil filter O-ring (5) and install oil filter onto the engine until the seal contacts mounting surface of the engine. Then turn the filter 2/3 to 3/4 rotations by HAND(S). Pour in the specified type and amount of oil. See “CAPACITIES AND REPLACEMENT PARTS” on page 56.

Oil capacity is 1-1/3 quarts (1.3 liters). Add slightly less than 1-1/3 quarts (1.3 liters) to allow for possible residual oil left in engine. The oil must be high quality oil that meets or exceeds API SF, SG, CC standards. Check oil level on dipstick. Oil should be slightly below ‘H’ to allow for expansion. If necessary, continue to add oil slowly and allow time for oil to flow down into engine. Check oil level on dipstick. Do not overfill.

Do not overfill engine. Too much oil may cause smoking or allow oil to enter the air filter enclosure.

Both the oil dipstick and fill cap must be in place before operating the engine. Failure to install the dipstick and fill cap will result in oil being discharged into the engine compartment.

As a final check, check the oil level again with the vehicle on level ground. Like all liquids, oil increases in volume when warm. The full ‘H’ mark on the dipstick is calibrated for an engine at operating temperature. When the engine is cold, the oil will be below the full mark. The engine can be operated safely as long as the oil is within the safe operating range as indicated on the dipstick. Do not operate vehicle if oil level is below the safe area indicated on the dipstick.
STARTER/GENERATOR BELT TENSION

Tool List | Qty. Required | Tool List | Qty. Required
--- | --- | --- | ---
Belt Tension Gauge | 1 | Ratchet | 1
Wrench, 3/4" | 1 | Socket, 3/4" | 1
Wrench, 9/16" | 2

The starter/generator belt tension should be checked after the first 15 - 20 hours and set to 75 - 80 lbs. (34 - 36 kg).

**WARNING**

*Belt tension should never exceed 160 lbs (73 kg) at any point during belt installation process.*

**CAUTION**

*At the time of installation, the belt must not be rolled over the installed edges of the starter/generator or drive clutch pulleys. Excessive stretch in belt may cause cord failure.*

**NOTICE**

*A loose belt can cause audible vibration and squeal.*

Tighten a **new** starter/generator belt to 110 - 130 lbs. (50 - 59 kg) tension when a gauge is applied half way between the two pulleys.

A **new** belt may be checked manually. A maximum deflection of 3/8" (10 mm) is acceptable. Tighten an **existing** belt to 75 - 80 lbs. (34 - 36 kg) tension using the same technique and inspect for cracking or wear. A maximum deflection of 1/2" (13 mm) is acceptable.

**Adjusting the Belt**

Loosen the starter/generator pivot bolt.

While holding the lower adjusting nut with a wrench, loosen the upper jam nut with another wrench. Move the lower nut up or down the adjustment bolt until proper belt tension is achieved. Hold the lower nut in place and tighten the upper jam nut against it.

Tighten the starter/generator pivot bolt.

**BATTERY CLEANING**

**CAUTION**

*To reduce the possibility of damage to vehicle or floor, neutralize acid before rinsing battery.*

*To reduce the possibility of damage to electrical components while cleaning, do not use a pressure washer.*

Cleaning should take place per the Periodic Service Schedule on page 59

When cleaning the outside of the battery and terminals, first spray with a solution of sodium bicarbonate (baking soda) and water to neutralize any acid deposits before rinsing with clear water.
Using a water hose without first neutralizing any acid, will move acid from the top of the battery to another area of the vehicle or storage facility where it will attack the metal structure or the concrete/asphalt floor. Additionally, a residue will be left on the battery which is conductive and will contribute to the discharge of the battery.

**WARNING**

To reduce the possibility of a battery explosion that could result in severe injury or death, do not use metallic spray wand to clean battery and keep all smoking materials, open flame or sparks away from the battery.

The correct cleaning technique is to spray the top and sides of the battery with a solution of sodium bicarbonate (baking soda) and water. This solution is best applied with a garden type sprayer equipped with a non metallic spray wand or a plastic spray bottle. The solution should consist of the amounts of sodium bicarbonate (baking soda) and clear water shown below. In addition to the battery, special attention should be paid to metal components adjacent to the battery which should also be sprayed with the sodium bicarbonate (baking soda) solution.

Allow solution to sit for at least three minutes; use a soft bristle brush or cloth to wipe the top of battery to remove any residue that could contribute to the self discharge of the battery. Rinse entire area with low pressure clear water. Do not use a pressure washer.

### AIR INTAKE AND COOLING FINS

**WARNING**

To prevent possible burns, engine parts should be kept clean to reduce risk of overheating and ignition of accumulated debris. After every off road use, allow to cool and then check for a build up of dirt and debris in the air intake and cooling fins. Dirt and debris may clog the engine’s air cooling system. **Clean areas shown to prevent engine damage. Keep linkages, springs and controls clean. Keep area around muffler free of any combustible material.**

At least once a year, (or more often under adverse conditions) the cooling system should be cleaned. Cleaning will assure an adequate supply of air to the cooling fins. Compressed air may be used for routine cooling system maintenance.
REAR AXLE

The rear axle is provided with a lubricant level check plug located on the driver side at the rear of the housing. Unless leakage of rear axle lubricant is evident, an annual lubricant check is sufficient.

Checking the Lubricant Level

<table>
<thead>
<tr>
<th>Tool List</th>
<th>Qty. Required</th>
<th>Tool List</th>
<th>Qty. Required</th>
</tr>
</thead>
<tbody>
<tr>
<td>Socket, 13 mm</td>
<td>1</td>
<td>Funnel</td>
<td>1</td>
</tr>
<tr>
<td>Ratchet</td>
<td>1</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Clean area around the check and fill plugs. Remove check plug. The correct lubricant level is just below bottom of threaded hole. If lubricant is to be added, remove the fill plug and add lubricant using a funnel. Add lubricant slowly until lubricant starts to seep from the check plug hole. Install check plug and fill plug. In the event that lubricant is to be replaced, a drain plug is provided at the bottom of the differential housing.

AIR CLEANER INSPECTION AND REPLACEMENT

The air cleaner unit on the vehicle is a dry unit. Do not use oil on the filter element or any part of the unit. To aide installation and sealing, petroleum jelly may be applied to back side of cover tabs and each side of filter seal.

Cleaning the Air Filter Element

⚠️ CAUTION

Do not use compressed air to clean the air filter. Compressed air will damage the filter which may result in damage to the engine.
The air cleaner element is accessible by unsnapping the clips on the air canister and removing the cover and air filter element. Clean inside of cover, canister and dust collector. Install the element and cover the same way they were removed. Be sure the positioning arrow on cover is pointing upward and all clips are fastened securely.

If the element is in acceptable condition, loose dirt may be removed by tapping the filter lightly. Do not use oil on the filter element or any part of the unit.

### SPARK PLUG

<table>
<thead>
<tr>
<th>Tool List</th>
<th>Qty. Required</th>
<th>Tool List</th>
<th>Qty. Required</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spark Plug Socket, 13/16&quot;</td>
<td>1</td>
<td>Anti-Seize Compound</td>
<td>AR</td>
</tr>
<tr>
<td>Ratchet</td>
<td>1</td>
<td>Torque Wrench, ft. lbs.</td>
<td>1</td>
</tr>
<tr>
<td>Plug Gauge, Wire Type</td>
<td>1</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**CAUTION**

*Do not over-tighten the plug. Over-tightening can cause damage to the aluminum cylinder head threads.*

Remove and inspect the spark plug at intervals indicated in the Periodic Service Schedule. Spark plug should be properly gapped. Tighten to 16 ft. lbs. (22 Nm) torque.

A fouled spark plug is indicated by a wet, black appearance. This could be caused by a dirty air filter element or other restrictions in the air intake system. Incorrectly adjusted valves, a spark plug wire in poor condition, or poor quality fuel could also contribute to the problem.

### BRAKES

**WARNING**

*To reduce the possibility of severe injury or death, always evaluate pedal travel before operating a vehicle to verify some braking function is present.*

*All driving brake tests must be done in a safe location with regard for the safety of all personnel.*

**NOTICE**

*A subtle loss of performance may take place over time; therefore, it is important to establish the standard with a new vehicle.*
The Periodic Brake Performance test should be performed regularly as an evaluation of braking system performance. It is useful as a method of identifying subtle loss of performance over time.

**Periodic Brake Test**

*WARNING*

Unit should be empty, all drawers and cabinet doors secured, and passenger side countertop removed prior to performing the periodic brake test.

The purpose of this test is to compare the braking performance of the vehicle to the braking performance of new or 'known to be good' vehicles or to an established acceptable stopping distance. Actual stopping distances will be influenced by weather conditions, terrain, road surface condition, actual vehicle weight (accessories installed) and vehicle speed. No specific braking distance can be reliably specified. The test is conducted by latching the park brake to eliminate different pedal pressures and to include the affects of linkage mis-adjustment.

Establish the acceptable stopping distance by testing a new or 'known to be good' vehicle and recording the stopping location or stopping distance.

*A subtle loss of brake performance may occur over time; therefore, it is important to establish the standard with a new vehicle.*

Drive the vehicle at maximum speed on a flat, dry, clean, paved surface.

Quickly press the brake pedal to latch the parking brake at the line or marker in the test area; remove foot from pedal. The vehicle should stop aggressively. The wheel brakes may or may not lock.

Observe the vehicle stopping location or measure the vehicle stopping distance from the point at which the brakes were latched. The vehicle should stop within the ‘acceptable stopping distance’ range of stopping distances. If the vehicle requires more than 4 ft. (1.2 m) beyond the acceptable stopping distance, or pulls to one side, the vehicle has failed the test and should be tested again.

If the vehicle fails the second test, it should immediately be removed from service. The vehicle must be inspected by a qualified mechanic who should refer to the TROUBLESHOOTING section in the Technician’s Repair and Service Manual.
LUBRICATION

**CAUTION**

*Do not use more than three pumps of grease in any grease fitting at any one time. Excess grease may cause grease seals to fail or grease migration into areas that could damage components.*

Putting more than three pumps of grease in a grease fitting could damage grease seals and cause premature bearing failure.

PROLONGED STORAGE

**WARNING**

*To reduce the possibility of severe injury or death resulting from a possible explosion:*

*Do not handle fuel in an area that is not adequately ventilated. Do not smoke near the fuel tank or refuel near open flame or electrical items which could produce a spark.*

*Store vehicle in a clean, dry area. Do not store in same area as a stove, furnace, water heater, or other appliance that uses a pilot light or has a device that can create a spark.*

*When refueling, inspect the fuel cap for leaks or breaks that could result in fuel spillage. Always wear safety glasses while refueling to prevent possible eye injury from gasoline or gasoline vapor. Keep hands, clothing and jewelry away from moving parts. Use care not to contact hot objects. Raise the rear of the vehicle and support on jack stands before attempting to run the engine.*

Preparing the engine for a prolonged storage period (30 days or more) requires a few simple steps to prevent a build up of varnish and gum in the carburetor and corrosion in the engine.

1. Turn the key switch to OFF position.
2. Perform all required routine maintenance per the Periodic Service Schedule.
3. Properly inflate tires to recommended pressure (psi) stated on sidewall of tires.
4. Place forward/reverse handle in NEUTRAL position.
5. Engage neutral lock.
6. Turn fuel shut-off valve to closed (OFF) position.

7. In a properly ventilated area, run engine until remaining fuel in carburetor and fuel lines is depleted and the engine stalls.

8. Return neutral lock to OPERATE position.

9. Loosen (do not remove) the carburetor drain screw. Allow any remaining fuel to drain into an approved container and pour the fuel collected into the vehicle fuel tank.

10. Add Sea Foam (4 oz. for a full tank of fuel) to stabilize fuel and install the tank cap securely.

11. Tighten carburetor drain screw.

12. Remove spark plug and pour approximately 1/2 oz. (15 ml) of SAE 10 - 30 weight oil or fogging oil into the cylinder.

13. Rotate the crankshaft by hand several times, then install the spark plug.

14. Do not engage the park brake, but secure the car from rolling.

15. Change oil while engine is still warm.

16. Clean body, chassis and engine of debris, mud, chaff or grass.

---

**CAPACITIES AND REPLACEMENT PARTS**

<table>
<thead>
<tr>
<th>Fuel Tank Capacity (Early Production)</th>
<th>6.0 gal (22.7 liters) / 87 Octane Min</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fuel Tank Capacity (Late Production)</td>
<td>5.2 gal (19.8 liters) / 87 Octane Min</td>
</tr>
<tr>
<td>Engine Oil</td>
<td>1.4 US qt (1.3 liters)</td>
</tr>
<tr>
<td>Oil Filter</td>
<td>P/N 607454</td>
</tr>
<tr>
<td>Air Filter</td>
<td>P/N 28463G01</td>
</tr>
<tr>
<td>Spark Plug</td>
<td>NGK BPR2ES (P/N 607462)</td>
</tr>
<tr>
<td>.028&quot; - .031&quot; (.7 mm - .8 mm) Gap</td>
<td></td>
</tr>
<tr>
<td>Starter/Generator Belt</td>
<td>P/N 26414G1</td>
</tr>
<tr>
<td>Clutch Belt</td>
<td>P/N 618630</td>
</tr>
<tr>
<td>Rear Axle Oil</td>
<td>51 oz (1.5 liters) / SAE 30</td>
</tr>
<tr>
<td>Fuse</td>
<td>15 amp (P/N 18392G1)</td>
</tr>
<tr>
<td>LED Bulb</td>
<td>(P/N 619101)</td>
</tr>
<tr>
<td>Headlight Bulb</td>
<td>(P/N 619100)</td>
</tr>
<tr>
<td>Turn Signal Bulb</td>
<td>(P/N 619102)</td>
</tr>
<tr>
<td>Taillight Bulb</td>
<td>#1157 (P/N 611242)</td>
</tr>
<tr>
<td>Friction Modifier (Rear Axle)</td>
<td>2 oz (60 mL) (P/N 625753)</td>
</tr>
</tbody>
</table>
HARDWARE

Periodically, the vehicle should be inspected for loose fasteners. Fasteners should be tightened in accordance with the Torque Specifications table.

Generally, three grades of hardware are used in the vehicle. Grade 5 hardware can be identified by the three marks on the hexagonal head and grade 8 hardware is identified by 6 marks on the head. Unmarked hardware is Grade 2.

<table>
<thead>
<tr>
<th>BOLT SIZE</th>
<th>1/4&quot;</th>
<th>5/16&quot;</th>
<th>3/8&quot;</th>
<th>7/16&quot;</th>
<th>1/2&quot;</th>
<th>9/16&quot;</th>
<th>5/8&quot;</th>
<th>3/4&quot;</th>
<th>7/8&quot;</th>
<th>1&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grade 2</td>
<td>4 (5)</td>
<td>8 (11)</td>
<td>15 (20)</td>
<td>24 (33)</td>
<td>35 (47)</td>
<td>55 (75)</td>
<td>75 (102)</td>
<td>130 (176)</td>
<td>125 (169)</td>
<td>190 (258)</td>
</tr>
<tr>
<td>Grade 5</td>
<td>6 (8)</td>
<td>13 (18)</td>
<td>23 (31)</td>
<td>35 (47)</td>
<td>55 (75)</td>
<td>80 (108)</td>
<td>110 (149)</td>
<td>200 (271)</td>
<td>320 (434)</td>
<td>480 (651)</td>
</tr>
<tr>
<td>Grade 8</td>
<td>6 (8)</td>
<td>18 (24)</td>
<td>35 (47)</td>
<td>55 (75)</td>
<td>80 (108)</td>
<td>110 (149)</td>
<td>170 (230)</td>
<td>280 (380)</td>
<td>460 (624)</td>
<td>680 (922)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>BOLT SIZE</th>
<th>M4</th>
<th>M5</th>
<th>M6</th>
<th>M8</th>
<th>M10</th>
<th>M12</th>
<th>M14</th>
</tr>
</thead>
<tbody>
<tr>
<td>Class 5.8 (Grade 2)</td>
<td>5.8</td>
<td>1 (2)</td>
<td>2 (3)</td>
<td>4 (6)</td>
<td>10 (14)</td>
<td>20 (27)</td>
<td>35 (47)</td>
</tr>
<tr>
<td>Class 8.8 (Grade 5)</td>
<td>8.8</td>
<td>2 (3)</td>
<td>4 (6)</td>
<td>7 (10)</td>
<td>18 (24)</td>
<td>35 (47)</td>
<td>61 (83)</td>
</tr>
<tr>
<td>Class 10.9 (Grade 8)</td>
<td>10.9</td>
<td>3 (4)</td>
<td>6 (8)</td>
<td>10 (14)</td>
<td>25 (34)</td>
<td>49 (66)</td>
<td>86 (117)</td>
</tr>
</tbody>
</table>
Notes:
**PERIODIC SERVICE SCHEDULE**

**DAILY**

BEFORE USE:
- ✓ Check service brake general operation
- ✓ Check park brake operation - does it hold on a hill.
- ✓ Check warning device function in reverse
- ✓ Check tire pressure, condition of tires & rims.
- ✓ Check smooth operation of accelerator.
- ✓ Check for loose or missing hardware.
- ✓ Check Battery - state of charge, condition, loose terminals, corrosion, hold down & hardware
- ✓ Check overall vehicle condition

**WEEKLY** (includes items listed in previous table & the following)

<table>
<thead>
<tr>
<th>Component</th>
<th>Task Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>TIRES</td>
<td>✓ Examine for cuts, excessive wear and pressure (See GENERAL SPECIFICATIONS)</td>
</tr>
<tr>
<td>WHEELS</td>
<td>✓ Check for bent rims, missing or loose lug nuts</td>
</tr>
<tr>
<td>COOLING FAN</td>
<td>✓ Check for build-up of foreign matter inside blower housing and fins, clean if required</td>
</tr>
<tr>
<td>ENGINE OIL</td>
<td>✓ Check and add if required - DO NOT OVERFILL</td>
</tr>
<tr>
<td>STARTER/GENERATOR BELT</td>
<td>✓ Check for tension, wear, cracks</td>
</tr>
</tbody>
</table>

**MONTHLY - 20 HOURS** (includes items listed in previous table & the following)

<table>
<thead>
<tr>
<th>Component</th>
<th>Task Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>WIRING</td>
<td>✓ Check all wiring for loose connections and broken/missing insulation</td>
</tr>
<tr>
<td>ACCELERATOR</td>
<td>✓ Check for smooth movement - DO NOT LUBRICATE CABLE</td>
</tr>
<tr>
<td>SERVICE BRAKE</td>
<td>✓ Conduct brake performance test</td>
</tr>
<tr>
<td>(MECHANICAL BRAKES)</td>
<td></td>
</tr>
<tr>
<td>PARK BRAKE</td>
<td>✓ Check brake performance and adjust if required</td>
</tr>
<tr>
<td>CHoke CABLE</td>
<td>✓ Check for smooth movement and adjustment - DO NOT LUBRICATE CABLE</td>
</tr>
<tr>
<td>CARBURETOR LINKAGE</td>
<td>✓ Check attachment, adjust as required</td>
</tr>
<tr>
<td>DIRECTION SELECTOR</td>
<td>✓ Check attachment, adjust as required</td>
</tr>
<tr>
<td>ENGINE</td>
<td>✓ Check for unusual noise, vibration, acceleration, oil leaks</td>
</tr>
<tr>
<td>COOLING FAN</td>
<td>✓ Check for build-up of foreign matter inside blower housing and fins, clean if required</td>
</tr>
<tr>
<td>STEERING ASSEMBLY</td>
<td>✓ Check for abnormal play, tightness of all hardware</td>
</tr>
<tr>
<td>TIE ROD/LINKAGES</td>
<td>✓ Check for excessive play, bent components or loose connections</td>
</tr>
<tr>
<td>REAR AXLE</td>
<td>✓ Check for leakage, add SAE 30 oil as required</td>
</tr>
</tbody>
</table>

**QUARTERLY - 60 HOURS** (includes items listed in previous tables & the following)

<table>
<thead>
<tr>
<th>Component</th>
<th>Task Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>FRONT AXLE</td>
<td>✓ Check for damage to axle and loose or missing hardware</td>
</tr>
<tr>
<td>FRONT SHOCK ABSORBERS</td>
<td>Check for oil leakage and loose fasteners</td>
</tr>
<tr>
<td>FRONT SPRINGS</td>
<td>✓ Check for loose hardware, cracks at attachments</td>
</tr>
<tr>
<td>FRONT WHEEL ALIGNMENT</td>
<td>✓ Check for unusual tire wear, align if required</td>
</tr>
</tbody>
</table>

---

**NOTES:** Some maintenance items must be serviced more frequently on vehicles used under severe driving conditions.
PERIODIC SERVICE SCHEDULE

Read all of SAFETY and this section before attempting any procedure. Pay particular attention to Notices, Cautions, Warnings and Dangers.

### PARK BRAKE
- ✔ Check for bent/binding linkage rod
- ✔ Check for damage or wear to latch arm or catch bracket
- ♦ Lubricate as required, use light oil. DO NOT LUBRICATE CABLES OR BRAKE LATCH

### REAR SHOCK ABSORBERS
- ✔ Check for oil leakage, loose mounting hardware

### ENGINE ELECTRICAL SYSTEM
- ✔ Check coil/spark plug wires for cracks/loose connections

### FUEL SYSTEM
- ✔ Check for leaks at tank, cap, system lines, filters, pump, carburetor
- ✔ Check system lines for cracks/deterioration

### THROTTLE/GOVERNOR LINKAGE
- ✔ Check operation and governed speed

### HARDWARE AND FASTENERS
- ✔ Check for loose or missing hardware and components
- ♦ Tighten or replace missing hardware

#### SEMI-ANNUAL - 125 HOURS (includes items listed in previous tables & the following)

<table>
<thead>
<tr>
<th>Component</th>
<th>Action(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>BATTERY</td>
<td>♦ Clean battery &amp; terminals</td>
</tr>
<tr>
<td>DIRECTION SELECTOR</td>
<td>✔ Check for wear and smooth movement (lubricate shaft with light oil if required)</td>
</tr>
<tr>
<td>KING PINS</td>
<td>✔ Check for excessive play and tightness of retaining nuts</td>
</tr>
<tr>
<td>STEERING ASSEMBLY</td>
<td>✔ Check bellows and pinion seal for damage or grease leakage</td>
</tr>
<tr>
<td>RACK END BALL JOINT</td>
<td>♦ Lubricate, use wheel bearing grease</td>
</tr>
<tr>
<td>REAR AXLE</td>
<td>✔ Check for unusual noise and loose or missing mounting hardware</td>
</tr>
<tr>
<td>AIR FILTER ELEMENT</td>
<td>✔ Check filter element, clean/replace as required</td>
</tr>
<tr>
<td>OIL FILTER</td>
<td>▲ Replace (at oil change)</td>
</tr>
<tr>
<td>ENGINE OIL</td>
<td>▲ Replace with SAE 10W-30 or 10W-40 that meets or exceeds SF, SG, CC oil, DO NOT OVERFILL</td>
</tr>
<tr>
<td>DRIVE BELT</td>
<td>✔ Check for cracks, fraying and excessive wear</td>
</tr>
</tbody>
</table>

#### ANNUAL - 250-300 HOURS (includes items listed in previous tables & the following)

<table>
<thead>
<tr>
<th>Component</th>
<th>Action(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>FRONT WHEEL BEARINGS</td>
<td>✔ Check and adjust as required, see Technician’s Repair and Service Manual</td>
</tr>
<tr>
<td>REAR AXLE</td>
<td>✔ Check lubricant, add lubricant as required</td>
</tr>
<tr>
<td>SERVICE BRAKES</td>
<td>♦ Clean and adjust, see Technician’s Repair and Service Manual</td>
</tr>
<tr>
<td></td>
<td>✔ Check brake shoe linings, see Technician’s Repair and Service Manual</td>
</tr>
<tr>
<td></td>
<td>✔ Check level, add if required (DOT 3) and check for leakage</td>
</tr>
<tr>
<td>FUEL FILTER</td>
<td>▲ Replace</td>
</tr>
<tr>
<td>SPARK PLUG</td>
<td>▲ Replace, gap new plug</td>
</tr>
<tr>
<td>MUFFLER/EXHAUST</td>
<td>✔ Check mounting hardware; check for leaks at head and muffler gaskets</td>
</tr>
<tr>
<td>VALVES</td>
<td>✔ Check cold (intake/exhaust) per Technician’s Repair and Service Manual</td>
</tr>
</tbody>
</table>

#### 500 HOURS (includes items listed in previous tables & the following)

<table>
<thead>
<tr>
<th>Component</th>
<th>Action(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CARBURETOR</td>
<td>♦ Clean</td>
</tr>
<tr>
<td>CYLINDER HEAD AND PISTON</td>
<td>♦ Remove carbon from cylinder head and piston</td>
</tr>
<tr>
<td></td>
<td>✔ Check valve seats for carbon buildup and clean as required</td>
</tr>
</tbody>
</table>

Periodic Service Schedule (Continued)
Notes:
Read all of SAFETY and this section before attempting any procedure. Pay particular attention to Notices, Cautions, Warnings and Dangers.

Notes:
APPENDIX A

DECLARATION OF CONFORMITY
DECLARATION OF CONFORMITY • ДЕКЛАРАЦИЯ ЗА СЪОТВЕТСТВИЕ • PROHLÁŠENÍ O SHODE • OVERRUSTEMESELLESERKLÆRING • CONFORMITÉSVERKLARING • VASTAVUSDEKLARATSION • VAATIMUSTENMUKAISUUSYVAKUTUS • DECLARACIÓN DE CONFORMIDAD • KONFORMITÄTSSERKLÄRUNG • ΔΗΛΩΣΗ ΣΥΜΜΟΡΦΩΣΗΣ • MEGFELELŐSÉGI NYILATKOZAT • DICHIARAZIONE DI CONFORMITÀ • ATBILĪBIJAS DEKLARĀCIJA • ATTESTIERTE DEKLARATION • DJAKARJAZIONI TL- KONFORMITÀ • ДЕКЛАРАЦИЯ ЗГОДНОСТИ • ДЕКЛАРАЦІО О КОМПОРІСТВІ • ДЕКЛАРАЦІЯ ДО ЗОВНІШНІХ ПОМОЩІ • ÅTERSTÄMMLIGHETSDeKLARATION • DECLARACIÓN DE CONFORMIDAD • VYHLÁSENÍ O ZHODE • IZJAVA O SKLADNOSTI • DECLARACIÓN DE CONFORMIDAD • DEKLARACIÓ NÖVÉNYIPAROS LAZÁRÁS • UYGNULUNAK BEYANI • ДЕКЛАРАЦИЯ ПРО ВІДПОВІДНІСТЬ

Read all of SAFETY and this section before attempting any procedure. Pay particular attention to Notices, Cautions, Warnings and Dangers.
Read all of SAFETY and this section before attempting any procedure. Pay particular attention to Notices, Cautions, Warnings and Dangers.
Notes:
Read the following warnings before operating vehicle:

⚠️ **WARNING**

To prevent personal injury or death, observe the following:

When vehicle is to be left unattended, engage park brake, move direction selector to neutral, turn key to OFF position and remove from key switch.

Drive vehicle only as fast as terrain and safety considerations allow. Consider environmental factors which effect the terrain and the ability to control the vehicle.

Avoid driving fast down hill. Sudden stops or change of direction may result in loss of control. Use service brake to control speed when traveling down an incline.

Use extra care and reduced speed when driving on poor surfaces, such as loose dirt, wet grass, gravel, etc.

All travel should be directly up or down hills; use extra care if ever forced to drive across an incline.

Stay in designated areas and avoid steep slopes. Activate the park brake when the vehicle is parked.

Keep feet, legs, hands and arms inside vehicle at all times.

Avoid extremely rough terrain.

Check area behind the vehicle before operating in reverse.

Make sure direction selector is in desired position before starting the vehicle.

Slow down before and during turns. All turns should be executed at reduced speed.

Always bring vehicle to a complete stop before shifting direction selector.

See GENERAL SPECIFICATIONS for vehicle load and seating capacity.

Read the following information and warnings before operating vehicle:

⚠️ **WARNING**

In any product, components will eventually fail to perform properly as the result of normal use, age, wear or abuse.

It is virtually impossible to anticipate all possible component failures or the manner in which they may fail.

A vehicle requiring repair indicates that it is no longer functioning as designed and therefore should be considered potentially hazardous.

Use extreme care when working on vehicle. When diagnosing, removing or replacing any components that are not operating properly, take time to consider the safety of yourself and others around you should the component move unexpectedly.

Some components are heavy, spring loaded, highly corrosive, explosive, may produce high amperage or reach high temperatures. Battery acid and hydrogen gas could result in serious bodily injury to the technician/mechanic and bystanders if not treated with utmost caution. Be careful not to place hands, face, feet or body in a location that could expose them to injury should an unexpected situation occur.

Always use the appropriate tools listed in the tool list and wear approved safety equipment.

Before working on vehicle, remove all jewelry (rings, watches, necklaces, etc.).

Be sure no loose clothing or hair can contact moving parts.

Use care not to touch hot objects.

Raise rear of vehicle and support on jack stands before running or adjusting powertrain.

Wear eye protection when working on or around the vehicle. In particular, use care when working around batteries, using solvents, or compressed air.

Hydrogen gas forms when charging batteries. Do not charge batteries without adequate ventilation.

Do not permit open flame or smokers in an area being used for charging batteries. A concentration of 4% hydrogen gas or more is explosive.