SAFETY

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

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

On steep hills it is possible for vehicles to coast at greater than normal speeds encountered on a flat surface. To prevent loss of vehicle control and possible serious injury, speeds should be limited to no more than the maximum 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.

For towing/transporting vehicle, refer to “TRANSPORTING VEHICLE”.

Signs similar to the ones illustrated should be used to warn of situations that could result in an unsafe condition.

Be sure that this manual remains as part of the permanent service record should the vehicle be sold. Throughout this guide NOTE, CAUTION and WARNING will be used.

Observe these NOTES, CAUTIONS and WARNINGS; 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.

**NOTE**
A NOTE indicates a condition that should be observed.

**CAUTION**
A CAUTION indicates a condition that may result in damage to the vehicle.

**WARNING**
A WARNING indicates a hazardous condition that could result in severe injury or death.

**WARNING**
Engine exhaust from this product contains chemicals known, in certain quantities, to cause cancer, birth defects, or other reproductive harm.

The exhaust emissions of this vehicle’s engine complies with regulations set forth by the Environmental Protection Agency (EPA) of the United States of America (USA) at time of manufacture. Significant fines could result from modifications or tampering with the engine, fuel, ignition or air intake systems.

Battery posts, terminals and related accessories contain lead and lead compounds. Wash hands after handling.

This spark ignition system meets all requirements of the Canadian Interference-Causing Equipment Regulations.

Ce système d’allumage par étincelle de véhicule respecte toutes les exigences du Règlement sur le matériel brouilleur du Canada.

(NOTES, CAUTIONS AND WARNINGS CONTINUED ON INSIDE OF BACK COVER)
The 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 leased/sold previously.

The information contained in this Manual may be revised periodically by the E-Z-GO Division, and therefore is subject to change without notice.

The E-Z-GO Division DISCLAIMS LIABILITY FOR ERRORS IN THIS MANUAL, and the E-Z-GO Division SPECIFICALLY DISCLAIMS LIABILITY FOR INCIDENTAL AND CONSEQUENTIAL DAMAGES resulting from the use of the information and materials in this Manual.

TO CONTACT US

NORTH AMERICA:
TECHNICAL ASSISTANCE & WARRANTY PHONE: 1-800-774-3946, FAX: 1-800-448-8124
SERVICE PARTS PHONE: 1-888-GET-EZGO (1-888-438-3946), FAX: 1-800-752-6175

INTERNATIONAL: PHONE: 001-706-798-4311, FAX: 001-706-771-4609

E-Z-GO DIVISION OF TEXTRON, INC., 1451 MARVIN GRIFFIN ROAD, AUGUSTA, GEORGIA USA 30906-3852
GENERAL INFORMATION

This vehicle has been designed and manufactured in the United States of America (USA) as a ‘World Vehicle’. 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

All batteries will self discharge over time. The rate of self discharge varies depending on the ambient temperature and the age and condition of the batteries.

A fully charged battery will not freeze in winter temperatures unless the temperature falls below -75°F (-60°C).
# TABLE OF CONTENTS

SAFETY ................................................................................................................................. inside covers

GENERAL INFORMATION .............................................................................................................. ii

SAFETY INFORMATION ............................................................................................................. v

BEFORE INITIAL USE ................................................................................................................ 1

Fig. 1 Initial Service Chart ............................................................................................................. 1

CONTROLS AND INDICATORS .................................................................................................. 1

KEY ........................................................................................................................................... 2

Fig. 2 Key Switch ......................................................................................................................... 1

LOW OIL PRESSURE INDICATOR LIGHT ..................................................................................... 2

FUEL GAUGE .............................................................................................................................. 2

DIRECTION SELECTOR ................................................................................................................ 2

Fig. 3 Direction Selector .............................................................................................................. 2

CHOKE ...................................................................................................................................... 2

Fig. 4 Choke ................................................................................................................................ 2

ACCELERATOR PEDAL ................................................................................................................ 2

Fig. 5 Accelerator, Brake and Horn Controls .............................................................................. 3

COMBINATION BRAKE AND PARK BRAKE PEDAL ................................................................. 3

OPERATING THE VEHICLE ....................................................................................................... 3

RUN-IN ....................................................................................................................................... 4

Fig. 6 Check Oil Level on Dipstick .............................................................................................. 4

Fig. 7 Clean Entire Dipstick ........................................................................................................ 4

COLD STARTING .......................................................................................................................... 4

STARTING AND DRIVING .......................................................................................................... 4

STARTING THE VEHICLE ON A HILL ....................................................................................... 5

COASTING .................................................................................................................................. 5

FUEL ......................................................................................................................................... 5

Fig. 8 Fueling ............................................................................................................................... 6

BATTERY ..................................................................................................................................... 6

LABELS AND PICTOGRAMS ....................................................................................................... 6

SUN TOP AND WINDSHIELD .................................................................................................... 6

VEHICLE CLEANING AND CARE ............................................................................................ 7

VEHICLE CLEANING .................................................................................................................. 7

REPAIR ....................................................................................................................................... 7

LIFTING THE VEHICLE .............................................................................................................. 7

Fig. 9 Lifting the Vehicle ........................................................................................................... 8

WHEELS AND TIRES .................................................................................................................. 8

WHEEL INSTALLATION .............................................................................................................. 9

Fig. 10 Wheel Installation .......................................................................................................... 9

VEHICLE WITH A DISCHARGED BATTERY ............................................................................. 9

TRANSPORTING VEHICLE ...................................................................................................... 10

TOWING ..................................................................................................................................... 10

NEUTRAL LOCK ........................................................................................................................ 10

Fig. 11 Neutral Lock ................................................................................................................... 10

HAULING ................................................................................................................................... 10

SERVICE AND MAINTENANCE ............................................................................................... 11

SERIAL NUMBER PLATE AND LOCATION .............................................................................. 12

Fig. 12 Serial Number Plate & Location .................................................................................... 12

PERIODIC SERVICE SCHEDULE ............................................................................................. 13

Fig. 13 Periodic Service Schedule ............................................................................................ 13

TIRE INSPECTION ...................................................................................................................... 15

FOUR CYCLE ENGINE .......................................................................................................... 15

ENGINE SPECIFICATIONS ....................................................................................................... 15

ENGINE DESCRIPTION ............................................................................................................. 15

CHECKING OIL LEVEL .............................................................................................................. 15
## TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHANGING THE OIL</td>
<td>16</td>
</tr>
<tr>
<td>Fig. 16 Oil Viscosity Chart</td>
<td>16</td>
</tr>
<tr>
<td>Fig. 17 Cleaning Top of Engine</td>
<td>16</td>
</tr>
<tr>
<td>Fig. 18 Remove Oil Filter</td>
<td>16</td>
</tr>
<tr>
<td>Fig. 19 Inspect Oil Filter</td>
<td>17</td>
</tr>
<tr>
<td>Fig. 20 Oil Drain Plug</td>
<td>17</td>
</tr>
<tr>
<td>Fig. 21 Add Engine Oil</td>
<td>17</td>
</tr>
<tr>
<td>Fig. 22 Check Belt Tension with Guage</td>
<td>18</td>
</tr>
<tr>
<td>Fig. 23 Check Belt Tension Manually</td>
<td>18</td>
</tr>
<tr>
<td>Fig. 24 Adjust Belt Tension</td>
<td>18</td>
</tr>
<tr>
<td>ADJUSTING THE BELT</td>
<td>18</td>
</tr>
<tr>
<td>Fig. 25 Preparing Acid Neutralizing Solution</td>
<td>19</td>
</tr>
<tr>
<td>Fig. 26 Typical Brake Performance Test</td>
<td>19</td>
</tr>
<tr>
<td>BATTERIES CLEANING</td>
<td>18</td>
</tr>
<tr>
<td>Fig. 27 Cleaning Cooling System with Air</td>
<td>20</td>
</tr>
<tr>
<td>REAR AXLE</td>
<td>20</td>
</tr>
<tr>
<td>Fig. 28 Add, Check and Drain Rear Axle Lubricant</td>
<td>21</td>
</tr>
<tr>
<td>AIR CLEANER INSPECTION AND REPLACEMENT</td>
<td>21</td>
</tr>
<tr>
<td>Fig. 29 Air Cleaner</td>
<td>21</td>
</tr>
<tr>
<td>LUBRICATION</td>
<td>22</td>
</tr>
<tr>
<td>Fig. 30 Lubrication Points</td>
<td>22</td>
</tr>
<tr>
<td>Fig. 31 Gapping the Spark Plug</td>
<td>22</td>
</tr>
<tr>
<td>SPARK PLUGS</td>
<td>22</td>
</tr>
<tr>
<td>Fig. 32 Capacities and Replacement Parts</td>
<td>23</td>
</tr>
<tr>
<td>PROLONGED STORAGE</td>
<td>22</td>
</tr>
<tr>
<td>CAPACITIES AND REPLACEMENT PARTS</td>
<td>23</td>
</tr>
<tr>
<td>Fig. 33 Torque Specifications and Bolt Grades</td>
<td>24</td>
</tr>
<tr>
<td>GENERAL SPECIFICATIONS</td>
<td>25</td>
</tr>
<tr>
<td>Fig. 34 Vehicle Dimensions, Incline Specifications</td>
<td>27</td>
</tr>
<tr>
<td>Fig. 35 Vehicle Incline Specifications &amp; Turning Clearance Diameter</td>
<td>28</td>
</tr>
<tr>
<td>LABELS AND PICTOGRAMS</td>
<td>Appendix A</td>
</tr>
<tr>
<td>VEHICLE WARRANTIES</td>
<td>Appendix B</td>
</tr>
<tr>
<td>DECLARATION OF CONFORMITY</td>
<td>Appendix C</td>
</tr>
</tbody>
</table>

---

**Page iv**

Owner’s Manual and Service Guide
SAFETY INFORMATION

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:

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 20mph. 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, in addition, 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. On behalf of E-Z-GO, I am directing that E-Z-GO Branch personnel, Distributors and Dealers advise all customers to adhere to this SAFETY RESTRICTION, in connection with the use of all 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 website for the U.S. Department of Transportation - at Dockets and Regulation, then to Title 49 of the Code of Federal Regulations (Transportation).

GENERAL

Many vehicles are 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 warnings can take the place of 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. The manufacturer strongly suggests that all users and maintenance personnel read this entire manual paying particular attention to the CAUTIONS and WARNINGS contained therein.

If you have any questions regarding this vehicle, contact your closest representative or write to the address on the back cover of this publication, Attention: Product Service Department.

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

The manufacturer is not liable for errors in this manual or for incidental or consequential damages that result from the use of the material in this manual.
SAFETY INFORMATION

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.

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 specification. Such modifications can cause serious personal injury or death. Modifications that increase the speed and/or weight of the vehicle will extend the stopping distance and may reduce the stability of the vehicle. Do not make any such modifications or changes. The manufacturer prohibits and disclaims responsibility for any such modifications or any other alteration which would adversely affect the safety of the vehicle.

Vehicles that are capable of higher speeds must limit their speed to no more than the 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.

GENERAL OPERATION

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.
• 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:

• Maintain the vehicle in accordance with the manufacturer’s periodic service schedule.
• Ensure that repairs are performed by those that are trained and qualified to do so.
• Follow the manufacturer’s maintenance procedures for the vehicle. Be sure to disable the vehicle before performing any maintenance. Disabling includes removing the key from the key switch and removal of a battery wire.
• Insulate any tools used within the battery area in order to prevent sparks or battery explosion caused by shorting the battery terminals or associated wiring. Remove the battery or cover exposed terminals with an insulating material.
SAFETY INFORMATION

• 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.
• Empty the fuel tank or plug fuel hoses to prevent fuel leakage.
• 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. All tests must be conducted in a safe area that is free of both vehicular and pedestrian traffic.
• Replace damaged or missing warning, caution or information labels.
• Keep complete records of the maintenance history of the vehicle.

The manufacturer cannot anticipate all situations, therefore people attempting to maintain or repair the vehicle must have the skill and experience to recognize and protect themselves from potential situations that could result in severe personal injury or death and damage to the vehicle. Use extreme caution and, if unsure as to the potential for injury, refer the repair or maintenance to a qualified mechanic.

VENTILATION

Always store gasoline vehicles in a well ventilated area. Ventilation prevents gasoline fumes from accumulating.

Never fuel a vehicle in an area that is subject to flame or spark. Pay particular attention to natural gas or propane water heaters and furnaces.

Never work around or operate a vehicle in an environment that does not ventilate exhaust gases from the area. Carbon monoxide is a dangerous gas that can cause unconsciousness and is potentially lethal.
Thank you for purchasing this vehicle. Before driving the vehicle, we ask you to spend some time reading this Owner’s Manual and Service 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 pictorial views may not represent your vehicle. Physical differences in controls will be illustrated.

This vehicle has been designed and manufactured as a ‘World Vehicle’. Some countries have individual requirements to comply with their specifications; therefore, some sections may not apply in your country.

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.

Service Parts Manuals and Technician’s Repair and Service Manuals are available from a local Distributor, an authorized Branch or the Service Parts Department. When ordering parts or requesting information for your vehicle, provide vehicle model, serial number and manufacture code.

BEFORE INITIAL USE

Read, understand and follow the safety label on the instrument panel. Be sure you understand how to operate the vehicle, its equipment and how to use it safely. Maintaining good performance depends to a large extent on the operator.

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 (Ref Fig. 1 on page - 1).

Vehicle battery must be fully charged before initial use. Check for correct tire inflation. See GENERAL SPECIFICATIONS.

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 protective clear plastic, that protect the seat bottom and back rest during shipping, before placing the vehicle in service.

<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 (see SPECIFICATIONS)</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>

Fig. 1 Initial Service Chart

CONTROLS AND INDICATORS

Vehicle controls and indicators consist of:

- key
- direction selector
- choke
- fuel gauge
- low oil pressure indicator light
- accelerator pedal
- combination service and park brake pedal

KEY

To prevent inadvertent operation of the vehicle when left unattended, the key should be turned to the ‘OFF’ position and removed (Ref Fig. 2 on page - 2).

LOW OIL PRESSURE INDICATOR LIGHT

A low oil pressure indicator light is located on the dash panel (Ref Fig. 2 on page - 2). The light illuminates when the oil pressure is low. Check oil level. If oil level is between ADD and FULL mark on dipstick, a mechanical problem exists within the engine and the vehicle must not be driven. Contact a local distributor or authorized branch.
CAUTION

To prevent engine damage, do not operate engine until oil pressure is corrected. Do not over fill engine. Too much oil may cause smoking or allow oil to enter the filter enclosure.

If oil level is below ADD mark on dipstick, add oil to bring level to FULL mark. Drive Vehicle a short distance and check oil pressure. If oil light does not come on, continue to use vehicle.

FUEL GAUGE

The fuel gauge (if equipped) will either be located on the dash panel (electric) (Ref Fig. 2 on page - 2) or directly on the fuel tank (mechanical).

NOTICE

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

DIRECTION SELECTOR

CAUTION

To reduce the possibility of component damage, the vehicle must be completely stopped before moving the direction selector.

Located on the seat support panel, this lever permits the selection of either ‘F’ (forward) or ‘R’ (reverse) (Ref Fig. 3 on page - 2). Vehicle should be left in ‘F’ when unattended.

CHOKE

The choke is used to aid cold starting (Ref. Fig. 4 on page 2). See COLD STARTING section for operating instructions.

ACCELERATOR PEDAL

WARNING

Unintentional movement of the accelerator pedal will release the park brake and may cause the vehicle to move which could result in severe injury or death.

With the key switch ‘ON’, depressing the accelerator pedal starts the engine. When the pedal is released, the engine will stop (Ref Fig. 5 on page - 3). To stop the vehicle more quickly, depress the service brake.
Read all of Manual to become thoroughly familiar with this vehicle. Pay particular attention to all Notices, Cautions, Dangers and Warnings

OPERATION AND SERVICE INFORMATION

If key switch is 'ON' and park brake is set, depressing the accelerator inadvertently will release the park brake and will cause the vehicle to move which could cause severe injury or death.

Depressing the accelerator pedal will release the park brake if it is engaged. This is a feature to assure the vehicle is not driven with the park brake engaged. Depressing the accelerator pedal is not the preferred method of releasing the park brake.

Depressing the lower section of the brake pedal is the preferred method of releasing the park brake to assure the longest service life of brake components.

COMBINATION SERVICE AND PARK BRAKE PEDAL

The brake pedal incorporates a park brake feature (Ref Fig. 5 on page - 3). To engage, push down on the upper section of the pedal until it locks in place. The park brake will release when the service brake pedal is depressed. Use the lower section of the brake pedal to operate the service brake system.
park brake, move direction selector to forward position, turn key to ‘OFF’ position and remove key.

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

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

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

Check the area behind the vehicle before operating in reverse.

All occupants must be seated. 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 Periodic Service Schedule (Ref Fig. 13 on page - 13). Add oil if the level on the dipstick indicates that oil is in the add oil range (Ref Fig. 6 on page - 4).

\[\text{Fig. 6 Check Oil Level on Dipstick}\]

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

\[\text{To reduce the possibility of roll-back which could result in severe injury or vehicle damage, do not release service brake until engine has started.}\]
Read all of Manual to become thoroughly familiar with this vehicle. Pay particular attention to all Notices, Cautions, Dangers and Warnings.

To operate vehicle:
- Apply the service brake, place the key in the key switch and turn it to the ‘ON’ position.
- Move the direction selector to the direction desired.
- Release the park brake by depressing the service brake pedal until the park brake releases.
- Slowly depress the accelerator pedal to start the engine. Release service brake when engine starts.
- When the accelerator pedal is released, the ignition circuit is de-energized and the engine stops.

To start the vehicle on a hill:
- Do not release service brake until engine has started.
- Do not hold vehicle on hill by using accelerator and engine. This will cause premature and excessive wear to drive train components.

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.

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 severe injury or death from improper fuel handling:

Do not smoke near the fuel tank.

Do not refuel near open flame or electrical items which could produce a spark.

Always handle gasoline in a well ventilated area.

Inspect fuel cap, tank and other components for leaks or deterioration that could cause a hazardous condition.

The fuel tank is located under the seat on the passenger side of the vehicle (Ref Fig. 8 on page - 6). Fill the tank with fresh, clean, automotive grade gasoline (Ref Fig. 35 on page - 24). High altitude or heavy use/load applications may benefit from higher octane gasoline.

Do not use gasoline which contains Methanol.

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 greater than normal speeds encountered on a flat surface. To reduce the possible loss of vehicle control and severe drivetrain 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:

To reduce the possibility of severe injury or death from improper fuel handling:

Do not smoke near the fuel tank.

Do not refuel near open flame or electrical items which could produce a spark.

Always handle gasoline in a well ventilated area.

Inspect fuel cap, tank and other components for leaks or deterioration that could cause a hazardous condition.

The fuel tank is located under the seat on the passenger side of the vehicle (Ref Fig. 8 on page - 6). Fill the tank with fresh, clean, automotive grade gasoline (Ref Fig. 35 on page - 24). High altitude or heavy use/load applications may benefit from higher octane gasoline.

Do not use gasoline which contains Methanol.

CAUTION

Do not hold vehicle on hill by using accelerator and engine. This will cause premature and excessive wear to drive train components.

Coasting:

CAUTION

Some fuels, called oxygenated or reformulated gasoline, are gasoline blended with alcohols or ethers. Excessive amounts of these blends can damage the fuel system or cause performance problems. If any undesirable operating symptoms occur, use gasoline with a lower percentage of alcohol or ether.

Use fresh regular grade unleaded fuel. Ethanol blend fuel up to 10% is permissible.
Read all of Manual to become thoroughly familiar with this vehicle. Pay particular attention to all Notices, Cautions, Dangers and Warnings

**BATTERY**

**CAUTION**

Excessive use of accessories may drain the battery and leave insufficient reserve 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; therefore, operation of all accessories could result in the discharge of the battery even though the engine is 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 must 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.

**LABELS AND PICTOGRAMS**

Vehicles may be labeled with pictograms as a method of conveying information or warnings. Appendix A illustrates and explains pictograms that may appear on the vehicle. Not all pictograms shown in Appendix A will be found on your vehicle.

**SUN TOP AND WINDSHIELD**

**WARNING**

The sun top does not provide protection from roll over or falling objects.

**CAUTION**

To prevent damage to the vehicle, do not hold on to sun top struts and stand on body panels.

The sun top 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 sun top has not been designed to provide roll over protection. In addition, the sun top 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.
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.

**CAUTION**

When pressure washing exterior of vehicle, do not use pressure in excess of 700 psi. To reduce the possibility of cosmetic damage, do not use any abrasive or reactive solvents to clean plastic parts.

It is important that proper techniques and cleaning materials 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 in excess of 700 psi to wash exterior of vehicle.

Clean windshield with lots of 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 requires the use of a mild soap solution applied with a sponge or soft brush and wipe with a damp cloth.

Removal of oil, tar, asphalt, shoe polish, etc. will require the use of a 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 its 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, never the wires). Dry all connections with forced air. Reinstall the wires.

**REPAIR**

**LIFTING THE VEHICLE**

<table>
<thead>
<tr>
<th>Tool List</th>
<th>Qty. Required</th>
</tr>
</thead>
<tbody>
<tr>
<td>Floor jack</td>
<td>1</td>
</tr>
<tr>
<td>Jack stands</td>
<td>4</td>
</tr>
<tr>
<td>Chocks</td>
<td>4</td>
</tr>
</tbody>
</table>

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

**WARNING**

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

- Be sure the vehicle is on a firm and level surface.
- Never get under a vehicle while it is supported by a jack.
- Use jack stands and test the stability of the vehicle on the stands.
- Always place chocks in front and behind the wheels not being raised.
- Use extreme care since the vehicle is extremely unstable during the lifting process.

**CAUTION**

When lifting vehicle, position jacks and jack stands at the areas indicated only.

To raise the entire vehicle, install chocks in front and behind each front wheel (Ref Fig. 9 on page - 8). Center the jack under the rear frame crossmember. Raise the vehicle enough to place a jack stand under the outer ends of the rear axle.

Lower the jack and test the stability of the vehicle on the two jack stands.
Place the jack at the center of the front axle. Raise the vehicle enough to place jack stands under the frame crossmember as indicated.
Lower the jack and test the stability of the vehicle on all four jack stands.
If only the front or rear of the vehicle is to be raised, place the 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

Tire Repair

Tool List                          Qty. Required
Lug wrench, 3/4"                     1
Impact socket, 3/4", 1/2" drive        1
Impact wrench, 1/2" drive            1
Torque wrench, 1/2" drive            1

A tire explosion can cause severe injury or death. Never exceed inflation pressure rating on tire sidewall.

To reduce the possibility of tire explosion, pressurize tire with small amount of air applied intermittently to seat beads. Due to the low volume of the small tires, overinflation can occur in seconds. Never exceed the tire manufacturer’s recommendation when seating a bead. Protect face and eyes from escaping air when removing 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.

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

Do not use low inflation pressure tires on any E-Z-GO vehicle. Do not use any tire which has a recommended inflation pressure less than the inflation pressure recommended in Owner’s Manual.

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

Tire inflation should be determined by the condition of the terrain. See GENERAL SPECIFICATIONS section for recommended tire inflation pressure. 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 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 possibility of severe injury, be sure 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 85 ft. lbs. (115 Nm) torque.

**NOTICE**

It is important to follow the 'cross sequence' pattern when installing lug nuts. This will assure even seating of the wheel against the hub.

With the valve stem to the outside, mount the wheel onto the hub with lug nuts. Finger tighten lug nuts in a 'cross sequence' pattern (Ref Fig. 10 on page 9). Tighten lug nuts in the 'cross sequence' pattern by torquing in 20 ft. lbs. (30 Nm) increments following the 'cross sequence' pattern.

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

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

TOWING

⚠️ WARNING

This vehicle is not designed to be towed.

It is recommended that the vehicle be moved by placing the entire vehicle on a trailer, flatbed truck or other suitable transport.

NEUTRAL LOCK

To prevent the driven clutch from turning the rear wheels during service operations, a neutral lock is located on the direction selector.

To operate:

Turn key switch to ‘OFF’ and lift seat. Pull out and rotate the neutral lock pin handle so that the pointed portion of the handle is to the side of the direction selector cam (Ref Fig. 11 on page - 10). Move direction selector towards the area between ‘F’ and ‘R’. During that motion, the pin will snap into the hole in the direction selector cam preventing any movement. When in this position, the direction selector remains locked in the neutral position. 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.

Fig. 11 Neutral Lock

HAULING

⚠️ WARNING

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

Secure the vehicle and contents.
Never ride on vehicle being transported.
Always remove windshield before transporting.

Maximum speed with sun top installed is 50 mph (80 kph).

If the vehicle is to be transported at highway speeds, the sun top must be removed and the seat bottom secured. When transporting vehicle below highway speeds, check for tightness of hardware and cracks in sun top 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. Lock the park brake and 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 and understanding all notes, 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.

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 the possibility of a dropped wrench ‘shorting out’ a battery, which could result in an explosion.

Reduce the possibility of accidental starting by removing and grounding spark plug wires and disconnecting battery at negative terminal before servicing.

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 1/4 cup (60 ml) sodium bicarbonate (baking soda) dissolved in 1 1/2 gallons (6 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 (Ref Fig. 13 on page - 13). Refer to Lubrication Points for appropriate lubrication locations (Ref Fig. 30 on page - 22).

⚠️ 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, frequent use with maximum load.

To access powertrain for routine maintenance, lift or remove seat. For major repair, refer to appropriate Technician’s Repair and Service Manual. Some service procedures may require the vehicle to be lifted. Refer to LIFTING THE VEHICLE for proper lifting procedure and safety information.
SERIAL NUMBER PLATE AND LOCATION

Two serial number and manufacture date code label are on the vehicle. One is placed on the body below the driver side seat. The other is located on the chassis under the seat (Ref Fig. 12 on page - 12).
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.
PERIODIC SERVICE SCHEDULE

- **Check**
- **Clean, Adjust, etc.**
- **Replace**

To perform service that is listed in this schedule but not described in this manual, contact a local Service Representative or see the Repair and Service Manual for this vehicle.

**NOTE:** Some maintenance items must be serviced more frequently on vehicles used under severe driving conditions.

---

### 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>Category</th>
<th>Task</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>Category</th>
<th>Task</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 (MECHANICAL BRAKES)</td>
<td>✓ Conduct brake performance test</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>Category</th>
<th>Task</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>

Fig. 13  Periodic Service Schedule
## OPERATION AND SERVICE INFORMATION

raud all of Manual to become thoroughly familiar with this vehicle. Pay particular attention to all Notices, Cautions, Dangers and Warnings

| 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)

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

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

| FRONT WHEEL BEARINGS | ✓ Check and adjust as required, see Technician’s Repair and Service Manual  
| REAR AXLE | ✓ Check lubricant, add lubricant (Ref. Fig. 32 on page -23) as required  
| SERVICE BRAKES | ♦ Clean and adjust, see Technician’s Repair and Service Manual  
|            | ✓ Check brake shoe linings, see Technician’s Repair and Service Manual  
| FUEL FILTER | ▲ Replace  
| SPARK PLUG | ▲ Replace, gap new plug (Ref. Fig. 32 on page -23)  
| MUFFLER/EXHAUST | ✓ Check mounting hardware; check for leaks at head and muffler gaskets  
| VALVES | ✓ Check cold (intake/exhaust) per Technician’s Repair and Service Manual  

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

| CARBURETOR | ♦ Clean  
| CYLINDER HEAD AND PISTON | ♦ Remove carbon from cylinder head and piston  
|            | ✓ Check valve seats for carbon buildup and clean as required  

Fig. 13  Periodic Service Schedule
TIRE INSPECTION

Tire condition should be inspected per the Periodic Service Schedule (Ref. Fig. 13 on page 13). Inflation pressures should be checked when the tires are cool. Be sure to install the valve dust cap after checking or inflating.

FOUR CYCLE ENGINE

Engine Specifications

<table>
<thead>
<tr>
<th>Specification</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Engine model</td>
<td>FJ400D</td>
</tr>
<tr>
<td>Type</td>
<td>Four cycle, OHV</td>
</tr>
<tr>
<td>Number of cylinders</td>
<td>1</td>
</tr>
<tr>
<td>Displacement</td>
<td>401 cc</td>
</tr>
<tr>
<td>Rated horsepower</td>
<td>13 hp</td>
</tr>
<tr>
<td>Spark plug type</td>
<td>NGK BPR2ES</td>
</tr>
<tr>
<td>Spark plug gap</td>
<td>.028&quot; - .031&quot; (.70 - .80 mm)</td>
</tr>
<tr>
<td>Cooling</td>
<td>Forced air cooled</td>
</tr>
<tr>
<td>Oil Filter</td>
<td>Cartridge type full flow filter</td>
</tr>
<tr>
<td>Oil Pump</td>
<td>Positive displacement pump</td>
</tr>
</tbody>
</table>

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. The vehicle should be on a level surface with the parking (PARK) brake engaged. Allow adequate time for oil to drain into the crankcase before checking.

Remove the dipstick and wipe off the entire area with a lint free cloth (Ref Fig. 14 on page - 15).

---

**NOTICE**

When adding oil between oil changes, do not mix brands and viscosity grades of oil.

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.

---

*Fig. 14 Clean Entire Dipstick*

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

*Fig. 15 Check Oil Level on 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** (Ref Fig. 15 on page - 15). Check that the oil cap is firmly in place.
Changing the Oil

Tool List                                        Qty. Required
Socket, 3/8" drive ........................................................1
Ratchet, 3/8" drive .......................................................1
Extension, 3/8" drive, 8" ..............................................1
Oil drain pan ................................................................1
Wrench, 3/4"................................................................1

For maximum performance and longevity, the engine oil should be replaced after the first 8 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 (Ref Fig. 16 on page - 16).

> **Fig. 16 Oil Viscosity Chart**

**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. This will 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 (Ref Fig. 17 on page - 16). Remove the oil fill cap.

**Fig. 17 Cleaning Top of Engine**

Clean the area around filter. Using a filter wrench, strap wrench or other suitable wrench, remove the filter (B) from the engine and allow the oil to drain. The ‘O’ rings may remain on engine (A) or filter (B) (Ref Fig. 18 on page - 16)

**Fig. 18 Remove Oil Filter**

Inspect the filter. Make sure the ‘O’ ring is not left on the engine surface.
Read all of Manual to become thoroughly familiar with this vehicle. Pay particular attention to all Notices, Cautions, Dangers and Warnings

**OPERATION AND SERVICE INFORMATION**

**Read all of Manual to become thoroughly familiar with this vehicle. Pay particular attention to all Notices, Cautions, Dangers and Warnings**

---

**WARNING**

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

Drain the oil by removing the drain plug found at the rear of the engine base. Remove using a 3/4" wrench. 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.

---

**Fig. 19 Inspect Oil Filter**

---

**Fig. 20 Oil Drain Plug**

Wipe the area around the drain plug mount with a lint free cloth and inspect the drain plug (A) for damage; replace if necessary. Replace the "O"-ring (B) with a new one and tighten to 61 in. lbs. (7.0 Nm) torque. Apply engine oil to the oil filter seal 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 23. 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 (Ref Fig. 21 on page - 17). Check oil level on dipstick. Oil should be slightly below ‘H’ to allow for expansion. If necessary, continue to add oil slowly and allow for time for oil to flow down into engine. Check oil level on dipstick. **Do not overfill.**

---

**CAUTION**

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

---

**Fig. 21 Add Engine Oil**

---

**NOTICE**

*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**

<table>
<thead>
<tr>
<th>Tool</th>
<th>Qty. Required</th>
</tr>
</thead>
<tbody>
<tr>
<td>Belt tension gauge</td>
<td>1</td>
</tr>
<tr>
<td>Wrench, 3/4&quot;</td>
<td>1</td>
</tr>
<tr>
<td>Wrench, 9/16&quot;</td>
<td>2</td>
</tr>
<tr>
<td>Ratchet, 3/8&quot; drive</td>
<td>1</td>
</tr>
<tr>
<td>Socket, 3/4&quot;, 3/8&quot; drive</td>
<td>1</td>
</tr>
</tbody>
</table>
The starter/generator belt tension should be checked after the first 15 - 20 hours and set to 75 - 80 lbs. (34 - 36 kg).

**NOTICE**

*Fig. 22 Check Belt Tension with Gauge*

A loose belt can cause audible vibration and squeal.

Tighten a new starter/generator belt to 115 - 125 lbs. (52-57 kg) tension when a gauge is applied half way between the two pulleys (Ref Fig. 22 on page - 18).

**Fig. 23 Check Belt Tension Manually**

A new belt may be checked manually. A maximum deflection of 3/8" (10 mm) is acceptable (Ref Fig. 23 on page - 18). 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 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 (Ref Fig. 24 on page - 18).

**BATTERY CLEANING**

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 (Ref. Periodic Service Schedule on page 13). 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.

Use of 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.
To reduce the possibility of 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 (Ref Fig. 25 on page - 19). 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 the solution to sit for at least three minutes; use a soft bristle brush or cloth to wipe the tops of the battery to remove any residue that could contribute to the self discharge of the battery. Rinse the entire area with low pressure clear water. Do not use a pressure washer.

**WARNING**

**BRAKES**

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.

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 For Mechanical Brakes

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. For fleets of vehicles, several vehicles should be tested when new and the range of stopping locations or distances recorded.

Over time, a subtle loss of performance may take place; 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 (Ref Fig. 26 on page - 19). Quickly depress the brake pedal to latch the parking brake at the line or marker in the test area and 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 'normal' range of stopping distances. If the vehicle stops 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.

AIR INTAKE AND COOLING FINS

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.

Fig. 27 Cleaning Cooling System with Air

REAR AXLE

The rear axle is provided with a lubricant level check plug located on the driver side at the rear of the housing (Ref Fig. 28 on page - 21). 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>
</tr>
</thead>
<tbody>
<tr>
<td>Socket, 13 mm, 3/8&quot; drive</td>
<td>1</td>
</tr>
<tr>
<td>Ratchet, 3/8&quot; drive</td>
<td>1</td>
</tr>
<tr>
<td>Funnel</td>
<td>1</td>
</tr>
</tbody>
</table>

Clean the area around the check and fill plugs. Remove the check plug. The correct lubricant level is just below the bottom of the threaded hole (Ref Fig. 28 on page - 21). 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 the check plug and the fill plug. In the event that the lubricant is to be replaced, a drain plug is provided at the bottom of the differential housing.
Read all of Manual to become thoroughly familiar with this vehicle. Pay particular attention to all Notices, Cautions, Dangers and Warnings.

OPERATION AND SERVICE INFORMATION

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; doing so 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 (Ref Fig. 29 on page - 21). 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.

---

**Fig. 28 Add, Check and Drain Rear Axle Lubricant**

**Fig. 29 Air Cleaner**

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.
Read all of Manual to become thoroughly familiar with this vehicle. Pay particular attention to all Notices, Cautions, Dangers and Warnings

**LUBRICATION**

**CAUTION**

Do not use more than three (3) 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 (Ref Fig. 30 on page - 22).

**SPARK PLUG**

**Tool List**

<table>
<thead>
<tr>
<th>Tool List</th>
<th>Qty. Required</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spark plug socket, 13/16&quot;, 1/2&quot; drive</td>
<td>1</td>
</tr>
<tr>
<td>Ratchet, 1/2&quot; drive</td>
<td>1</td>
</tr>
<tr>
<td>Plug gauge, wire type</td>
<td>1</td>
</tr>
<tr>
<td>Anti-seize compound</td>
<td>AR</td>
</tr>
<tr>
<td>Torque wrench, 1/2&quot; drive, ft. lbs</td>
<td>1</td>
</tr>
</tbody>
</table>

**CAUTION**

Use care not to 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 (Ref Fig. 13 on page - 13). Spark plug should be properly gapped (Ref Fig. 31 on page - 22). Tighten to 16 ft. lbs. (22 Nm) torque.

**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) calls for a few simple steps to prevent a build up of varnish and gum in the carburetor and corrosion in the engine.

- Raise the rear of the vehicle and support on jack stands. Refer to ‘Lifting the Vehicle’ for proper lifting procedure and safety information.
- Disconnect the fuel hose at the fuel tank and plug hose.
- With proper ventilation, depress the accelerator pedal and allow engine to run until it stops due to lack of fuel.
- Remove spark plug and pour about 1 oz. (30 ml) of engine oil into the cylinder. Replace spark plug, ground spark plug wire and use starter to turn engine over a few seconds to distribute oil.
- Add a gasoline additive to the tank in accordance with the manufacturer’s recommendations.
- Reattach fuel line to tank and drive the vehicle for several minutes to circulate the additive through the carburetor.
- While engine is still warm, change oil.
- Clean body, chassis and engine of debris, mud, chaff or grass.

CAPACITIES AND REPLACEMENT PARTS

<table>
<thead>
<tr>
<th>Item</th>
<th>Capacity/Part Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fuel Tank / Fuel</td>
<td>5.3 gal (20.0 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></td>
<td>.028&quot; - .031&quot; (.7 mm - .8 mm) Gap</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>
</tbody>
</table>

Fig. 32 Capacities and Replacement Parts
HARDWARE
Periodically, the vehicle should be inspected for loose fasteners. Fasteners should be tightened in accordance with the Torque Specifications table (Ref Fig. 33 on page - 24).

Use care when tightening fasteners and refer to the Technician's Repair and Service Manual for specific torque values.

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 (Ref Fig. 33 on page - 24).

---

ALL TORQUE FIGURES ARE IN FT. LBS. (Nm)

Unless otherwise noted in text, tighten all hardware in accordance with this chart.
This chart specifies 'lubricated' torque figures. Fasteners that are plated or lubricated when installed are considered 'wet' and require approximately 80% of the torque required for 'dry' fasteners.

<table>
<thead>
<tr>
<th>BOLT SIZE</th>
<th>1/4&quot; (Grade 2)</th>
<th>5/16&quot; (Grade 2)</th>
<th>3/8&quot; (Grade 2)</th>
<th>7/16&quot; (Grade 2)</th>
<th>1/2&quot; (Grade 2)</th>
<th>9/16&quot; (Grade 2)</th>
<th>5/8&quot; (Grade 2)</th>
<th>3/4&quot; (Grade 2)</th>
<th>7/8&quot; (Grade 2)</th>
<th>1&quot; (Grade 2)</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 (Grade 2)</th>
<th>M5 (Grade 2)</th>
<th>M6 (Grade 2)</th>
<th>M8 (Grade 2)</th>
<th>M10 (Grade 2)</th>
<th>M12 (Grade 2)</th>
<th>M14 (Grade 2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Class 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>
<td>55 (76.4)</td>
</tr>
<tr>
<td>(Grade 2)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Class 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>
<td>97 (131)</td>
</tr>
<tr>
<td>(Grade 5)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Class 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>
<td>136 (184)</td>
</tr>
<tr>
<td>(Grade 8)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Ref Fig. 33 Torque Specifications and Bolt Grades
GENERAL SPECIFICATIONS

Read all of Manual to become thoroughly familiar with this vehicle. Pay particular attention to all Notices, Cautions, Dangers and Warnings.

MODEL: TXT FLEET GOLF CAR
TYPE: GASOLINE POWERED FLEET GOLF CAR
MODEL YEAR: 2010
Part No.: 614164

ENGINE

- 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

FUEL SYSTEM

- Fuel System: Fixed float bowl with remote pulse fuel pump
- Ignition: Electronic spark/magneto
- Air Cleaner: Replaceable dry cartridge

ELECTRICAL

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

TRANSMISSION

- Drive Train: Automatic, continuously variable transmission (CVT)
- Brakes: Dual rear wheel mechanical self-adjusting drum brakes. Automatic single point park brake release with self-compensating system
- Transaxle: Differential with helical gears, ground speed governor, forward/reverse
- Capacity: Seating for 2 persons.

PERFORMANCE

- Overall Height (No Canopy) 46.5 in (118 cm) (Top of steering wheel)
- Overall Height (With Canopy) 68.0 in (173 cm) (Top of Sun Canopy)
- Wheel Base 66 in (168 cm)
- Front Wheel Track 34 in (86 cm)
- Rear Wheel Track 38.5 in (97 cm)
- Overall Height (With Canopy) 68.0 in (173 cm) (Top of Sun Canopy)
- Overall Height (No Canopy) 46.5 in (118 cm) (Top of steering wheel)

PRODUCT SPECIFICATION

- Power Source 4 Cycle 24.5 cu in (401 cc). Low E OHV
- Valve Train Single Cylinder OHV
- Horsepower (kW) 13 hp (9.7 kW) Exceeds SAE J1940 Std.
- Electrical System Starter/Generator, Solid State Regulator
- Battery (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 5.3 gallons (20 L) tank
- Drive Train Continuously variable transmission (CVT)
- Transaxle Differential with helical gears
- Gear Selection Forward-Reverse
- Rear Axle Ratio 11.42:1 (Forward) 15.78:1 (Reverse)

Specifications are subject to change without notice

* Do not use low inflation pressure tires on any E-Z-GO vehicle. Do not use any tire which has a recommended inflation pressure less than the inflation pressure recommended in Owner’s Manual.
Read all of Manual to become thoroughly familiar with this vehicle. Pay particular attention to all Notices, Cautions, Dangers and Warnings

**Fig. 35 Vehicle Dimensions**

- **Front:** 34 in. (86 cm)
- **Rear:** 38.5 in. (97 cm)
- **Height:** 68.0 in. (173 cm)
- **Ground Clearance:** 4.25 in. (10.8 cm)
- **Width:** 66.0 in. (168 cm)
- **Length:** 91.0 in. (231 cm)
Fig. 36 Vehicle Incline Specifications and Turning Clearance Diameter
NOTES:
LABELS AND PICTOGRAMS
SAFETY AND OPERATION INSTRUCTIONS

Operate from the driver’s side only. For golf course and non-highway use only. Recommended to be operated only by authorized drivers (with valid drivers license) in designated areas. All occupants must be seated, keep entire body inside vehicle and hold on when vehicle is in motion.

Maximum vehicle payload is 800 lbs. (363 kg) including a maximum of 2 persons, golf bags, options and/or accessories.

Be sure occupants are seated, move direction selector to desired position, apply service brake, turn key ‘ON’ and accelerate smoothly.

To release parking (PARK) brake, depress service (lower) brake pedal. To stop, release accelerator pedal and apply service brake.

Before leaving vehicle, turn key ‘OFF’, move the direction selector to forward position and engage parking (PARK) brake.

Drive slowly straight up and down slopes and in turns. Use extreme care in reverse, in congested areas or on wet or loose terrain.

Do not operate under the influence of drugs or alcohol. Vehicle must be serviced by qualified personnel only.

See label below driver’s side storage compartment.

WARNING
FAILURE TO FOLLOW THESE INSTRUCTIONS MAY RESULT IN SEVERE PERSONAL INJURY.

Keep entire body inside car.

WARNING
Windshields do not provide protection from golf balls or other flying objects.

AUTHORIZED REPRESENTATIVE IN EC IS:
RANSOMES JACOBSEN LTD.
WEST ROAD, IPSWICH,
SUFFOLK, IP3 9TT, UK

www.ezgo.com

RAILWAY TIME REGULATIONS

To Prevent Roll-Back
On a Hill From a Stopped Position
1. Fully Release Park Brake
2. Apply Service Brake With Left Foot
3. Depress Accelerator While Releasing Service Brake As Vehicle Starts
4. To Prevent Roll-Back On a Hill From a Stopped Position

AVOID STANDING IN FRONT OF OR BEHIND VEHICLE.

WARNING

RAILWAY TIME REGULATIONS

To Prevent Roll-Back
On a Hill From a Stopped Position
1. Fully Release Park Brake
2. Apply Service Brake With Left Foot
3. Depress Accelerator While Releasing Service Brake As Vehicle Starts
4. To Prevent Roll-Back On a Hill From a Stopped Position

AVOID STANDING IN FRONT OF OR BEHIND VEHICLE.

WARNING
### LABELS AND PICTOGRAMS

<table>
<thead>
<tr>
<th></th>
<th>Pictogram</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td><img src="image1.png" alt="Pictogram" /></td>
<td>WARNING</td>
</tr>
<tr>
<td>2.</td>
<td><img src="image2.png" alt="Pictogram" /></td>
<td>READ MANUAL</td>
</tr>
<tr>
<td>3.</td>
<td><img src="image3.png" alt="Pictogram" /></td>
<td>WARNING USE CAUTION IN INCLEMENT WEATHER</td>
</tr>
<tr>
<td>4.</td>
<td><img src="image4.png" alt="Pictogram" /></td>
<td>WARNING DO NOT OPERATE UNDER THE INFLUENCE OF DRUGS OR ALCOHOL</td>
</tr>
<tr>
<td>5.</td>
<td><img src="image5.png" alt="Pictogram" /></td>
<td>MAXIMUM CROSS HILL/RAMP ANGLE AS SPECIFIED</td>
</tr>
<tr>
<td>6.</td>
<td><img src="image6.png" alt="Pictogram" /></td>
<td>WARNING MAXIMUM CROSS HILL/RAMP ANGLE AS SPECIFIED</td>
</tr>
<tr>
<td>7.</td>
<td><img src="image7.png" alt="Pictogram" /></td>
<td>LOAD WITH HIGH CENTER OF GRAVITY COULD RESULT IN TIP OVER</td>
</tr>
<tr>
<td>8.</td>
<td><img src="image8.png" alt="Pictogram" /></td>
<td>MAX XXX in. XXX cm LOAD CENTER OF GRAVITY, MAXIMUM HEIGHT</td>
</tr>
<tr>
<td>9.</td>
<td><img src="image9.png" alt="Pictogram" /></td>
<td>WARNING READ MANUAL FOR MAXIMUM LOAD BED CAPACITY, MAXIMUM RAMP/HILL</td>
</tr>
<tr>
<td>10.</td>
<td><img src="image10.png" alt="Pictogram" /></td>
<td>MAX XXX lbs. XXX kg</td>
</tr>
<tr>
<td>11.</td>
<td><img src="image11.png" alt="Pictogram" /></td>
<td>WARNING MAXIMUM LOAD &amp; CENTER OF GRAVITY. KEEP LOAD AS FAR FORWARD AS POSSIBLE. DO NOT RIDE IN LOAD BED</td>
</tr>
<tr>
<td>12.</td>
<td><img src="image12.png" alt="Pictogram" /></td>
<td>WARNING DANGER OF EXPLOSION DO NOT FILL GAS CAN IN LOAD BED</td>
</tr>
<tr>
<td>13.</td>
<td><img src="image13.png" alt="Pictogram" /></td>
<td>MAX LOAD XXX LBS XXX KG</td>
</tr>
<tr>
<td>14.</td>
<td><img src="image14.png" alt="Pictogram" /></td>
<td>KEEP HANDS &amp; FINGERS AWAY FROM DUMP BED. DO NOT STAND BEHIND DUMP BED</td>
</tr>
</tbody>
</table>

**NOTE:** All Pictograms may not apply to your product.
NOTE: All Pictograms may not apply to your product.
LABELS AND PICTOGRAMS

37. KEEP ARMS AND LEGS WITHIN VEHICLE

38. TO OPERATE VEHICLE IN FORWARD:
   Q TURN KEY TO ON
   Q MOVE DIRECTION SELECTOR TO FORWARD
   Q DEPRESS ACCELERATOR PEDAL AND ACCELERATE SMOOTHLY

39. TO OPERATE VEHICLE IN REVERSE:
   Q TURN KEY TO ON
   Q MOVE DIRECTION SELECTOR TO REVERSE
   Q AN AUDIBLE DEVICE WILL SOUND
   Q DEPRESS ACCELERATOR PEDAL AND ACCELERATE SMOOTHLY

40. TO LEAVE A GASOLINE POWERED VEHICLE IN PARK:
   Q APPLY PARKING BRAKE
   Q TURN KEY TO OFF
   Q MOVE DIRECTION SELECTOR TO FORWARD

41. TO LEAVE AN ELECTRIC POWERED VEHICLE IN PARK:
   Q APPLY PARKING BRAKE
   Q TURN KEY TO OFF
   Q MOVE DIRECTION SELECTOR TO NEUTRAL

42. KEEP CLEAR HAND OR FINGERS CAN BE TRAPPED

43. ON POSITION

44. OFF POSITION

45. HEADLIGHTS

46. UNLOCKED

47. LOCKED

48. DIFFERENTIAL LOCKED

49. WARNING KEEP ENTIRE BODY INSIDE CAR

50. MAXIMUM TAILGATE LOAD

51. START

52. LEAVE VEHICLE WHEN LIGHTNING IS IN THE AREA

53. MINIMUM HEIGHT TO OPERATE VEHICLE

NOTE: All Pictograms may not apply to your product.
LABELS AND PICTOGRAMS

Notes:

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________
VEHICLE WARRANTIES

DOMESTIC WARRANTY
(U.S. AND CANADA)

To obtain a copy of the limited warranty applicable to the vehicle, call or write a local Distributor, authorized Branch or the Warranty Department with vehicle serial number and manufacturer date code.
CALIFORNIA EMISSION CONTROL WARRANTY STATEMENT
YOUR WARRANTY RIGHTS AND OBLIGATIONS

The California Air Resources Board and E-Z-GO are pleased to explain the evaporative emission control system warranty on your 2010 vehicle. In California, new vehicles must be designed, built and equipped to meet the State's stringent anti-smog standards. E-Z-GO must warrant the EECS on your vehicle for the period of time listed below provided there has been no abuse, neglect or improper maintenance of your vehicle.

Your EECS may include parts such as the carburetor, fuel-injection system, the ignition system, catalytic converter, fuel tanks, fuel lines, fuel caps, valves, canisters, filters, vapor hoses, clamps, connectors, and other associated emission-related components.

Where a warrantable condition exists, E-Z-GO will repair your vehicle at no cost to you including diagnosis, parts and labor.

MANUFACTURER’S WARRANTY COVERAGE:

This evaporative emission control system is warranted for two years. If any evaporative emission-related part on your equipment is defective, the part will be repaired or replaced by E-Z-GO.

OWNER’S WARRANTY RESPONSIBILITIES:

As the vehicle owner, you are responsible for performance of the required maintenance listed in your owner's manual. E-Z-GO recommends that you retain all receipts covering maintenance on your vehicle, but E-Z-GO cannot deny warranty solely for the lack of receipts.

As the vehicle owner, you should however be aware that E-Z-GO may deny you warranty coverage if your vehicle or a part has failed due to abuse, neglect, or improper maintenance or unapproved modifications.

You are responsible for presenting your vehicle to E-Z-GO Division of Textron Inc. distribution center or service center as soon as the problem exists. The warranty repairs should be completed in a reasonable amount of time, not to exceed 30 days. If you have a question regarding your warranty coverage, you should contact your nearest authorized E-Z-GO service center or call the E-Z-GO Warranty Department at 1-800-448-7476.

GENERAL EMISSIONS WARRANTY COVERAGE:

E-Z-GO warrants to the ultimate purchaser and each subsequent purchaser that the vehicle is:

Designed, built and equipped so as to conform with all applicable regulations; and

Free from defects in materials and workmanship that cause the failure of a warranted part to be identical in all material respects to that part as described in E-Z-GO’s application for certification.

The warranty period begins on the date the vehicle is delivered to an ultimate purchaser or first placed into service. The warranty period is two years.

Subject to certain conditions and exclusions as stated below, the warranty on emission-related parts is as follows:

(1) Any warranted part that is not scheduled for replacement as required maintenance in the written instructions supplied, is warranted for the warranty period stated above. If the part fails during the period of warranty coverage, the part will be repaired or replaced by E-Z-GO according to subsection (4) below. Any such part repaired or replaced under warranty will be warranted for the remainder of the period.

(2) Any warranted part that is scheduled only for regular inspection in the written instructions supplied is warranted for the warranty period stated above. Any such part repaired or replaced under warranty will be warranted for the remaining warranty period.
VEHICLE WARRANTIES - CALIFORNIA

(3) Any warranted part that is scheduled for replacement as required maintenance in the written instructions supplied is warranted for the period of time before the first scheduled replacement date for that part. If the part fails before the first scheduled replacement, the part will be repaired or replaced by ABC, Inc. according to subsection (4) below. Any such part repaired or replaced under warranty will be warranted for the remainder of the period prior to the first scheduled replacement point for the part.

(4) Repair or replacement of any warranted part under the warranty provisions herein must be performed at a warranty station at no charge to the owner.

(5) Notwithstanding the provisions herein, warranty services or repairs will be provided at all of our distribution centers that are franchised to service the subject engines or equipment.

(6) The vehicle owner will not be charged for diagnostic labor that is directly associated with diagnosis of a defective, emission-related warranted part, provided that such diagnostic work is performed at a warranty station.

(7) E-Z-GO is liable for damages to other engine or equipment components proximately caused by a failure under warranty of any warranted part.

(8) Throughout the vehicle warranty period stated above, E-Z-GO will maintain a supply of warranted parts sufficient to meet the expected demand for such parts.

(9) Any replacement part may be used in the performance of any warranty maintenance or repairs and must be provided without charge to the owner. Such use will not reduce the warranty obligations of E-Z-GO.

(10) Add-on or modified parts that are not exempted by the Air Resources Board may not be used. The use of any non-exempted add-on or modified parts by the ultimate purchaser will be grounds for disallowing a warranty claims. E-Z-GO will not be liable to warrant failures of warranted parts caused by the use of a non-exempted add-on or modified part.

WARRANTED PARTS:

The repair or replacement of any warranted part otherwise eligible for warranty coverage may be excluded from such warranty coverage if E-Z-GO demonstrates that the vehicle has been abused, neglected, or improperly maintained, and that such abuse, neglect, or improper maintenance was the direct cause of the need for repair or replacement of the part. That notwithstanding, any adjustment of a component that has a factory installed, and properly operating, adjustment limiting device is still eligible for warranty coverage. The following emission warranty parts list are covered:

1. Fuel Tank
2. Fuel Cap
3. Fuel Line
4. Fuel Line Fittings
5. Clamps
6. Pressure Relief Valves
7. Control Valves
8. Control Solenoids
9. Electronic Controls
10. Vacuum Control Diaphragms
11. Control Cables
12. Control Linkages
13. Purge Valves
14. Vapor Hoses
15. Liquid/Vapor Separator
16. Carbon Canister
17. Canister Mounting Brackets
18. Carburetor Purge Port Connector
FEDERAL EMISSIONS COMPONENT DEFECT WARRANTY

EMISSIONS COMPONENT DEFECT WARRANTY COVERAGE - This emission warranty is applicable in all States, except the State of California

Kawasaki Heavy Industries Ltd. and E-Z-GO Division of Textron Augusta, Georgia, (herein “E-Z-GO”) warrant(s) to the initial retail purchaser and each subsequent owner, that this Non-road engine (herein “engine”) has been designed, built, and equipped to conform at the time of initial sale to all applicable regulations of the U.S. Environmental Protection Agency (EPA), and that the engine is free of defects in materials and workmanship which would cause this engine to fail to conform with EPA regulations during its warranty period.

For the components listed under PARTS COVERED, the distributor, dealer, or service provider authorized by E-Z-GO will, at no cost to you, make the necessary diagnosis, repair, or replacement necessary to ensure that the engine complies with applicable U.S. EPA regulations.

EMISSION COMPONENT DEFECT WARRANTY PERIOD

The warranty period for this engine begins on the date of sale to the initial purchaser and continues for a period of 2 years.

PARTS COVERED

Listed below are the parts covered by the Emission Components Defect Warranty. Some of the parts listed below may require scheduled maintenance and are warranted up to the first scheduled replacement point for that part.

Fuel Metering System
- Carburetor and internal parts (and/or pressure regulator or fuel injection system)
- Air/fuel ratio feedback and control system, if applicable.
- Cold start enrichment system, if applicable.

Air Induction System
- Intake manifold, if applicable
- Air filter.

Ignition System
- Spark plugs.
- Magneto or electronic ignition system.
- Spark advance/retard system, if applicable.
- Exhaust manifold, if applicable

Miscellaneous Items Used in Above Systems
- Electronic controls, if applicable
- Hoses, belts, connectors, and assemblies.

OBTAINING WARRANTY SERVICE

To obtain warranty service, take your engine to the nearest authorized E-Z-GO distributor, dealer, or service provider. Bring your sales receipts indicating date of purchase for this engine. The distributor, dealer, or service provider authorized by E-Z-GO will perform the necessary repairs or adjustments within a reasonable amount of time and furnish you with a copy of the repair order. All parts and accessories replaced under this warranty become the property of E-Z-GO.

WHAT IS NOT COVERED

Conditions resulting from tampering, misuse, improper adjustment (unless they were made by the distributor, dealer, or service provider authorized by E-Z-GO during a warranty repair), alteration, accident, failure to use the recommended fuel and oil, or not performing required maintenance services.

The replacement parts used for required maintenance services.

Consequential damages such as loss of time, inconvenience, loss of use of the engine or equipment, etc.

Diagnosis and inspection charges that do not result in warranty-eligible service being performed.

Any non-authorized replacement part, or malfunction of authorized parts due to use of non-authorized parts.

OWNER’S WARRANTY RESPONSIBILITIES
VEHICLE WARRANTIES - FEDERAL

As the engine owner, you are responsible for the performance of the required maintenance listed in your owner’s manual. E-Z-GO recommends that you retain all receipts covering maintenance on your engine, but E-Z-GO cannot deny warranty solely for the lack of receipts or for your failure to ensure the performance of all scheduled maintenance.

As the engine owner, you should however be aware that E-Z-GO may deny warranty coverage if your engine or a part has failed due to abuse, neglect, improper maintenance or unapproved modifications.

You are responsible for presenting your engine to the nearest distributor, dealer, or service provider authorized by E-Z-GO when a problem exists.

If you have any questions regarding your warranty rights and responsibilities, you should contact the E-Z-GO Warranty Department at 1-800-241-5855 for the information.

THINGS YOU SHOULD KNOW ABOUT THE EMISSION CONTROL SYSTEM WARRANTY

MAINTENANCE AND REPAIRS

You are responsible for the proper maintenance of the engine. You should keep all receipts and maintenance records covering the performance of regular maintenance in the event questions arise. These receipts and maintenance records should be transferred to each subsequent owner of the engine. E-Z-GO reserves the right to deny warranty coverage if the engine has not been properly maintained. Warranty claims will not be denied, however, solely because of the lack of required maintenance or failure to keep maintenance records.

MAINTENANCE, REPLACEMENT OR REPAIR OF EMISSION CONTROL DEVICES AND SYSTEMS MAY BE PERFORMED BY ANY REPAIR ESTABLISHMENT OR INDIVIDUAL; HOWEVER, WARRANTY REPAIRS MUST BE PERFORMED BY A DISTRIBUTOR, DEALER OR, SERVICE PROVIDER AUTHORIZED BY E-Z-GO. THE USE OF PARTS THAT ARE NOT EQUIVALENT IN PERFORMANCE AND DURABILITY TO AUTHORIZED PARTS MAY IMPAIR THE EFFECTIVENESS OF THE EMISSION CONTROL SYSTEM AND MAY HAVE A BEARING ON THE OUTCOME OF A WARRANTY CLAIM.

If other than the parts authorized by E-Z-GO are used for maintenance replacements or for the repair of components affecting emission control, you should assure yourself that such parts are warranted by their manufacturer to be equivalent to the parts authorized by E-Z-GO in their performance and durability.

HOW TO MAKE A CLAIM

All repair qualifying under this limited warranty must be performed by a distributor, dealer, or service provider authorized by E-Z-GO. In the event that any emission-related part is found to be defective during the warranty period, you shall notify E-Z-GO Warranty Department at 1-800-241-5855 and you will be advised of the appropriate warranty service providers where the warranty repair can be performed.
DECLARATION OF CONFORMITY
(EUROPE ONLY)
DECLARATION OF CONFORMITY

This declaration is made on behalf of the manufacturer, HelixTech document and is authorized to compile the technical file, and who is responsible in the Community.

Name of the person responsible for the manufacturing of the device: HelixTech

The technical documentation is compiled by: HelixTech

The person responsible for the declaration is: Ronald L. Otten

206/62/EC Annex II A: 10

Ronald L. Otten
Technical Director
20th January 2010

Ransomes Jacobsen
Ltd, West Road, Ransomes Europark, Ipswich
England, IP3 9TT

Owner’s Manual and Service Guide
Appendix C - 3
DECLARATION OF CONFORMITY

NOTES:
Read and understand 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, engage parking brake, move direction selector to 'F' (forward) position, turn key to 'OFF' position and remove key.
- Drive vehicle only as fast as terrain and safety considerations allow. Consider the terrain and traffic conditions. Consider environmental factors which affect the terrain and the ability to control the vehicle.
- Avoid driving fast down hill. Sudden stops or change of direction may result in a 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 when driving the vehicle across an incline.
- Stay in designated areas and avoid steep slopes.
- Use the parking brake whenever 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 the direction selector is in correct position before attempting to start 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 the direction selector.
- See GENERAL SPECIFICATIONS for vehicle load and seating capacity.

**NOTE**

Read and understand the following text and warnings before attempting to service vehicle:

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 each component may fail.

Be aware that a vehicle requiring repair indicates that the vehicle is no longer functioning as designed and therefore should be considered potentially hazardous. Use extreme care when working on any vehicle. When diagnosing, removing or replacing any components that are not operating correctly, 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 or may produce high amperage or reach high temperatures. Gasoline, carbon monoxide, battery acid and hydrogen gas could result in serious bodily injury to the technician/mechanic and bystanders if not treated with the utmost caution. Be careful not to place hands, face, feet or body in a location that could expose them to injury should an unforeseen situation occur.

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

**WARNING**

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

Be sure that 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 attempting to run or adjust powertrain.

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

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

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

Engine exhaust gas (carbon monoxide) is deadly. Carbon monoxide is an odorless, colorless gas that is formed as a natural part of incomplete combustion of hydrocarbon fuels. Carbon monoxide is a dangerous gas that can cause unconsciousness and is potentially lethal.

The following are symptoms of carbon monoxide inhalation:
- Dizziness
- Vomiting
- Intense headache
- Muscular twitching
- Weakness and sleepiness
- Throbbing in temples

If any of these symptoms are experienced, get fresh air immediately. Never work around or operate a vehicle in an environment that does not ventilate exhaust gases from the area.