







A Textron Company

602080

REVISED DATE: JAN. 2007

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. See APPENDIX A.

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 drive train 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.

Be sure that this manual remains as part of the permanent service record should the vehicle be sold.

For towing/transporting vehicle, refer to "TRANSPORTING VEHICLE".

NOTES, CAUTIONS AND WARNINGS

Throughout this guide **NOTE, CAUTION** and **WARNING** will be used.



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

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

may result in damage to the vehicle.



A WARNING indicates a hazardous condition that could result in severe

injury or death.

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.



Engine exhaust from this product contains chemicals known, in certain

quantities, to cause cancer, birth defects, or other reproductive harm.





Battery posts, terminals and related accessories contain lead and lead

compounds. Wash hands after handling.

NOTE 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.



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



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 effect 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.

(NOTES, CAUTIONS AND WARNINGS CONTINUED ON INSIDE OF BACK COVER)

OWNER'S MANUAL AND SERVICE GUIDE

GASOLINE POWERED UTILITY VEHICLE

ST 4x4

STARTING MODEL YEAR 2005

E-Z-GO Division of TEXTRON, Inc. 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.

E-Z-GO Division of TEXTRON, Inc. 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.

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: 010-1-706-798-4311, FAX: 010-1-706-771-4609

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).

SAFETY	inside covers
GENERAL INFORMATION	ii
SAFETY INFORMATION	vi
WELCOME	
BEFORE INITIAL USE	
Fig.1 Initial Service Chart	
CAPABILITIES	
TERRAIN	
VEHICLE CAPACITY	1
MODIFICATIONS TO VEHICLE	
COMMON SENSE OPERATION	
RUN-IN	
CONTROLS & INDICATORS	
SERVICE BRAKE PEDAL	
Fig. 2 Service Brake Pedal	
Fig. 3 Park Brake and Indicator CHOKE	
Fig. 4 Choke	
IGNITION SWITCH	
Fig. 5 Ignition Switch	
DIRECTION SELECTOR Fig. 6 Direction Selector and Differential Locks	
2WD/4WD SELECTOR	5
Fig. 7 2WD/4WD Selector	
DIFFERENTIAL LOCK	
ACCELERATOR	
Fig. 9 Accelerator Pedal	
FUEL	
FUEL GAUGE	
Fig. 10 Fuel Tank and Gauge LOW OIL PRESSURE INDICATOR LIGHT	ī
Fig. 11 Low Pressure Oil Light	
LIGHT SWITCHES	7
Fig. 12 Light Switches	
12 VOLT POWER OUTLET Fig. 13 Power Outlet	
STARTING AND DRIVING	
STARTING VEHICLE ON A HILL	
COASTING	
LOAD BED	8
TAILGATE	ç
MANUAL LIFT BED	
Fig. 14 Manual Lift Bed Release ELECTRIC LIFT BED OPERATION	
Fig. 15 Electric Lift Bed Switch	
WINCH	
WINCH APPLICATIONS	
Fig. 16 Do Not Pull at Angle	
WINCH MOUNTING Fig. 17 Mounting Winch	
WINCH OPERATION	
Fig. 18 Use Nylon Sling and Install a Damper when Winching	
Fig. 19 Winch Operation	

TOP AND WINDSHIELD	12
TRANSPORTING VEHICLE	
HAULING	
TOWING A TRAILER	
OPENING THE COWL (HOOD)	
Fig. 20 Unlatching Cowl	
DATA LABEL LOCATION	13
MAINTENANCE	14
PERIODIC SERVICE SCHEDULE	
Fig. 21 Periodic Service Schedule	
BASIC SERVICE PARTS	
Fig. 22 Basic Service Parts	
LIFTING THE VEHICLE Fig. 23 Lifting the Vehicle	
OIL	
Fig. 24 Recommended Oil	
OIL LEVEL CHECK	
Fig. 25 Oil Fill and Level Check OIL CHANGE	
Fig. 26 Oil Change	
OIL FILTER CHANGE Fig. 27 Oil Filter Change	
SPARK PLUGS	
ALTERNATOR BELT	
ADJUSTING BELT	
Fig. 28 Adjusting Alternator Belt	
CANISTER TYPE AIR CLEANER CLEANING AIR FILTER ELEMENT	
Fig. 29 Air Cleaner	
FUEL FILTER	
Fig. 30 Fuel Filter	
LUBRICATION POINTS Fig. 31 Lubrication Points	
BATTERY	
BATTERY CLEANING	
Fig. 32 Cleaning Battery	
JUMP STARTING	
Fig. 33 Jump Starting	
VEHICLE CLEANING AND CARE	
CLEANING	
LABELS AND PICTOGRAMS	23
WHEELS AND TIRES	24
REMOVAL AND INSTALLATION Fig. 34 Wheel Tightening Sequence	
· · · · · · · · · · · · · · · · · · ·	

LIGHT BULB REPLACEMENT	
Fig. 35 Headlight Replacement	
FUSE REPLACEMENT	
SPARK ARRESTER	
Fig. 36 Cleaning Spark Arrester	
PROLONGED STORAGE	
FRONT AND REAR AXLES	
CHECKING LUBRICANT LEVEL	-
Fig. 37 Checking Axle Lubricant	
TRANSFER CASE	
CHECKING LUBRICANT LEVEL	
Fig. 38 Checking Transfer Case Lubricant	26
AIR INTAKE AND COOLING FINS	
Fig. 39 Cleaning Air Intake and Cooling Fins	27
BRAKES	
PERIODIC BRAKE TEST FOR HYDRAULIC BRAKES	27
CAPACITIES	
Fig. 40 Capacities	27
HARDWARE	
Fig. 41 Torque Specifications and Bolt Grades	28
GENERAL SPECIFICATIONS	
Fig. 42 Vehicle Dimensions	
Fig. 43 Vehicle Incline Specifications	
Fig. 44 Vehicle Turning Clearance Diameter and Intersecting Aisle Clear	
VEHICLE WARRANTIES	
EMISSION CONTROL SYSTEM WARRANTY STATEMENT	
ENGINE OWNER WARRANTY POLICY	
INTERNATIONAL WARRANTY STATEMENT	
DECLARATION OF CONFORMITY (EUROPE ONLY)	
LABELS AND PICTOGRAMS	A - 1
Fig. 45 Label Locations	
Fig. 46 Pictogram Definitions	
Fig. 47 Pictogram Definitions Fig. 48 Pictogram Definitions	Appenaix A - 5 Δρρεραίχ Δ - 6
Fig. 49 Pictogram Definitions	

Notes:	

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:

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.

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.
- 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.

Notes:	

Read all of manual to become thoroughly familiar with this vehicle. Pay particular attention to all Notes, Cautions and Warnings

GENERAL

The following text is provided as recommended by part II of SAE J2258 DEC 2003. E-Z-GO strongly endorses the contents of this specification.

B.1 PART II FOR THE CONTROLLING PARTY

B.1.1 Maintenance and Operations

B.1.1.1 Introduction

B.1.1.1 Like other machines, light utility vehicles can cause injury if improperly used or maintained. Part II contains broad safety practices applicable to vehicle operations. Before operation, the controlling party shall follow such additional specific safety practices as may reasonably be required for safe operation.

B.1.1.1.2 Safety Survey-The controlling party shall perform a safety survey of their premises periodically, and as conditions warrant, identify areas where vehicles should not be operated and to identify possible hazards.

(a) Steep Grade-In areas where steep grades exist, vehicle operation should be restricted to the designated vehicle's pathways where possible, and shall be identified with a suitable warning giving the following information: "Warning, steep grade, descend slowly."

(b) Wet Areas-Wet areas could cause a vehicle to lose traction and could affect steering, stability and braking.

(c) Sharp Turns, Blind Corners, Bridge Approaches-Sharp turns, blind spots, bridge approaches, and other potentially hazardous areas shall be identified with a suitable warning to the operator of the nature of the hazard and stating the proper precautions to be taken to avoid the hazard.

(d) Loose Terrain-Loose terrain could cause a vehicle to lose traction and could affect steering, stability, and braking.

B.1.1.1.3 Utility Vehicle/Pedestrian Interference Areas-Areas where pedestrian and vehicle traffic could interfere should be avoided by rerouting the vehicle or the pedestrian traffic to eliminate the interference. If elimination of the interference is not possible or is highly impractical, signs shall be erected warning pedestrians and vehicle operators of traffic conditions and to use caution. **B.1.1.1.4** The controlling party shall train vehicle operators to adhere strictly to the operating instructions stated in vehicle operator's manual and those additional operating instructions provided by controlling party.

B.1.1.1.5 The controlling party shall survey specific operating conditions and environment, establish safety practices, and train vehicle operators to comply with these practices.

B.1.1.2 Operation Experience has shown that vehicles which comply with the provisions stated in 7.8 are stable when properly operated in accordance with specific safety rules and practices established to meet actual operating terrain and conditions. However, improper operation, faulty maintenance, or poor housekeeping may contribute to a condition of instability and defeat the purpose of the standard. Some conditions which could affect stability are failure of the operator to follow safety practices, surface conditions, grade, speed, loading, braking, turning, improper loads, towing, attachments, dynamic forces, and the judgment exercised by the vehicle operator.

B.1.1.3 Nameplates, Markings, Capacity, And Modifications.

B.1.1.3.1 The controlling party shall maintain in a legible condition all nameplates, warnings, and instructions which are supplied by the vehicle manufacturer.

B.1.1.3.2 The controlling party shall not perform any modification or addition which affects capacity or safe operation, or make any change not in accordance with the vehicle manual(s) without the vehicle manufacturer's prior written authorization. Where authorized modifications have been made, the controlling party shall ensure that capacity, operation, warning, and maintenance instruction plates, tags, or decals are changed accordingly.

B.1.1.3.3 As required under B.1.1.3.1 or B.1.1.3.2, the vehicle manufacturer shall be contacted to secure new nameplates, warnings, or instructions which shall then be affixed in their proper place on the vehicle.

B.1.1.4 Fuel Handling

B.1.1.4.1 The controlling party shall supervise the handling of liquid fuels (when used) to be certain that it is in accordance with appropriate sections of ANSI/NFPA 505 and ANSI/NFPA 30 or as required by local ordinance.

Read all of manual to become thoroughly familiar with this vehicle. Pay particular attention to all Notes, Cautions and Warnings

B.1.1.4.2 The controlling party shall supervise the handling of liquefied petroleum gas fuels (when used) to be certain it is in accordance with appropriate sections of ANSI/NFPA 505 and ANSI/NFPA 58 or as required by local ordinance.

B.1.1.5 Charging Storage Batteries

B.1.1.5.1 The controlling party shall require batterycharging procedures to be in accordance with appropriate sections of ANSI/NFPA 505, ISO 3691, or local ordinance and meet any other requirements such as OSHA.

B.1.1.5.2 The controlling party shall periodically review procedures to be certain that appropriate sections of ANSI/ NFPA 505 or local ordinance and OSHA are strictly complied with, and shall familiarize vehicle operators with it.

B.1.1.6 Lighting For Operating Areas

B.1.1.6.1 The controlling party, in accordance with his responsibility to survey the environment and operating conditions, shall determine if the vehicle requires lights and, if so, shall equip the vehicle with appropriate lights in accordance with the vehicle manufacturer's recommendations.

B.1.1.7 Warning Device(s)

B.1.1.7.1 The controlling party shall make periodic inspections of the vehicle to be certain that the sound-producing and visual device(s), if so equipped, are maintained in good operating conditioning condition.

B.1.1.7.2 The controlling party shall determine if operating conditions require the vehicle to be equipped with additional sound-producing and/or visual devices compatible with the vehicle manufacturer's recommendations, and be responsible for providing and maintaining such devices, in accordance with the vehicle manufacturer's recommendations.

B.1.1.8 Safety Interlocks

B.1.1.8.1 The controlling party shall make periodic inspections of the vehicle to be certain that the safety interlock system, if so equipped, is operating properly.

B.2 Operating Safety Rules and Practices

B.2.1 Operator Qualifications

B.2.1.1 Only persons who are trained in the proper operation of the vehicle shall be authorized to operate the vehicle. Operators shall be qualified as to visual, auditory, physical, and mental ability to safely operate the vehicle according to Section 5 and all other applicable parts of this document and vehicle operator's manual.

B.2.2 Operator's Training

B.2.2.1 The controlling party shall develop and conduct an operator training program.

B.2.2.2 Successful completion of the operator training program by the operator shall be required before operation of the vehicle. The program shall be presented in its entirety to all new operators and not condensed for those claiming previous experience.

B.2.2.3 The controlling party should include, as a minimum, in the operator training program the following:

(a) Instructional material provided by the vehicle manufacturer, including vehicle operator's manual.

(b) Emphasis on safety of passengers, vehicle operator, and other persons.

(c) Safe loading practice, including securing material loads.

(d) General safety rules contained within this document and the additional specific rules determined by the controlling party in accordance with this document, and why they were formulated.

(e) Introduction of equipment, control locations, and functions, and explanation of how they work when used properly and the consequences of improper use; explanation of surface conditions, grade, and other conditions of the environment which could affect vehicle operation.

(f) Operator competency evaluations.

B.2.3 Operator Responsibility

B.2.3.1 Read and follow operator's manual.

B.2.3.2 Do not operate vehicle under the influence of drugs or alcohol.

B.2.3.3 Safeguard the pedestrians at all times. Do not drive vehicle in a manner that could endanger other persons.

Read all of manual to become thoroughly familiar with this vehicle. Pay particular attention to all Notes, Cautions and Warnings

B.2.3.4 Riding on the vehicle by persons other than the operator is authorized only on seat(s) provided by the vehicle manufacturer. All parts of each person's body shall remain within the plan view outline of the vehicle while the vehicle is in motion.

B.2.3.5 When a vehicle is to be left unattended, stop vehicle, apply the parking brake, turn off the control or ignition circuit, and remove the key if provided. Block the wheels if vehicle is on an incline.

B.2.3.6 Maintain a safe distance from potential hazards.

B.2.3.7 Use only approved vehicles in hazardous locations, as defined in the appropriate safety standards.

B.2.3.8 Report all accidents involving personnel, building structures, and equipment.

B.2.3.9 Do not add to, or modify, the vehicle.

B.2.3.10 Slow down or stop, as conditions dictate, and activate a sound-producing warning device, if so equipped, at intersections and when visibility is obstructed at other locations.

B.2.3.11 Ascend or descend grades slowly, avoid turning if possible; normally travel straight up and down.

B.2.3.12 Under all travel conditions, operate vehicle at speeds that will permit it to be brought to a stop in a safe manner.

B.2.3.13 Use caution and slow down when approaching or on wet or slippery surfaces, loose or unfamiliar terrain.

B.2.3.14 Avoid sudden starts, stops, turns, or direction reversals so as not to shift the load, endanger passengers, or lose control of the vehicle.

B.2.3.15 Do not operate vehicle in a dangerous manner, such as stunt driving or horseplay.

B.2.3.16 Avoid running over loose objects, potholes, and bumps.

B.2.4 Loading

B.2.4.1 Refer to operator's manual for loading instructions.

B.2.4.2 Transport only stable and safely arranged loads secured to prevent movement. Avoid loads which cannot be centered.

B.2.4.3 Transport only loads within the gross vehicle weight capacity.

B.2.4.4 Avoid material loads exceeding the physical dimensions of the vehicle or as specified by the vehicle manufacturer.

B.2.5 Operator Care of Light Utility Vehicles

B.2.5.1 Follow Operator's Manual.

B.2.5.2 At the beginning of each operating period during which the vehicle will be used, the operator shall check the vehicle condition and inspect the tires, warning devices, safety interlocks, lights, battery(s), fuel system, speed and directional controllers, brakes, and steering mechanism. If the vehicle is found to be in need of repair, or in any way unsafe, the matter shall be reported immediately to the controlling party and the vehicle shall not be operated until it has been restored to safe operating condition.

B.2.5.3 If during operation the vehicle becomes unsafe in any way, the matter shall be reported immediately to the controlling party, and the vehicle shall not be operated until it has been restored to safe operating condition.

B.2.5.4 Repairs and adjustments shall only be performed by specifically trained and authorized persons.

B.3 Maintenance Practices

B.3.1 Maintenance Procedures

B.3.1.1 Maintenance and inspection of all vehicles shall be performed in conformance with the vehicle manufacturer's recommendations and the following practices, if applicable. Only trained and authorized personnel shall be permitted to maintain, repair, adjust, and inspect vehicles.

(a) A scheduled preventive maintenance, lubrication, and inspection system shall be followed.

(b) Before undertaking maintenance or repair, follow the vehicle manufacturer's recommendations for immobilizing the vehicle.

(c) Chock wheels and block chassis before working underneath it.

(d) Before disconnecting any part of the fuel system of a gasoline-powered vehicle, be sure shutoff valve, if so equipped, is closed, and run engine until fuel system is depleted, engine stops running, and is allowed to cool. Before disconnecting any part of the engine fuel system of a diesel-powered vehicle, be sure shutoff valve, if so

Read all of manual to become thoroughly familiar with this vehicle. Pay particular attention to all Notes, Cautions and Warnings

equipped, is closed, following vehicle manufacturer's recommended practice.

(e) Before disconnecting any part of the fuel system of LP/CNG powered vehicles, close the fuel cylinder valve and run the engine until fuel in the system is depleted, the engine stops running, and is allowed to cool

(f) Disconnect battery(s).

(g) Operation to check performance of the vehicle shall be conducted in an authorized area where suitable conditions exist, free of vehicular and pedestrian traffic.to cool.

(h) Before returning the vehicle to service, follow the vehicle manufacturer's recommended procedures.

(i) Avoid fire hazards and have fire protection equipment present in the work area. Do not use an open flame to check level or leakage of fuel, battery electrolyte, or coolant.

(j) Properly ventilate the work area in accordance with applicable regulations or local ordinances.

(k) Handle fuel cylinders carefully. Physical damage, such as dents, scrapes, or gouges, may dangerously weaken cylinders and make them unsafe for use.

(I) Brake mechanisms, steering mechanisms, speed and directional control mechanisms, warning devices, electrical systems, governors, guards, exhaust system, and safety devices shall be inspected regularly and maintained in accordance with the vehicle manufacturer's recommended procedures.

(m) Vehicles or devices designed and approved for hazardous area operation shall be inspected to ensure that maintenance preserves the original approved operating features.

(n) Fuel systems shall be checked for leaks and condition of parts. If a leak is found, action shall be taken to prevent the use of the vehicle until the cause of the leak has been repaired.

(o) The vehicle manufacturer's capacity, operation, and maintenance instruction plates, tags, and safety labels shall be maintained in legible condition.

(p) Batteries, motors, speed and directional controllers, limit switches, protective devices, electrical conductors/insulators, and connections shall be inspected and maintained in accordance with vehicle manufacturer's recommended procedures.

(q) Vehicles shall be kept in a clean condition to minimize fire hazards and facilitate the detection of components needing service. (r) Hydraulic systems, if so equipped, shall be checked for leaks and condition of parts. Keep body and hands away from pin hole leaks or nozzles that eject hydraulic fluid under high pressure. Use paper or cardboard, not hands, to search for leaks.

(s) Modifications and additions which affect capacity and safe machine operation shall not be performed without vehicle manufacturer's prior written authorization. Where authorized modifications have been made, the controlling party shall ensure that capacity, operation, warning, and maintenance instruction plates, tags, and safety labels are changed accordingly.

(t) Care shall be taken to ensure that all replacement parts are interchangeable with the original parts and of a specification at least equal to that provided in the original equipment.

End of SAE J2258 DEC 2003, Part II

Read all of manual to become thoroughly familiar with this vehicle. Pay particular attention to all Notes, Cautions and Warnings

WELCOME

Thank you for purchasing this utility vehicle. Before driving vehicle, we ask you to spend some time reading this Owner's Manual and Service Guide and the Owner's Manual provided by Honda Motor Co., Ltd. These manuals contain information to assist you in safe operation of vehicle. They will also assist you in maintaining vehicle. Some illustrations may show items that are optional.

Most service procedures in this guide can be accomplished using common automotive hand tools. Otherwise, contact your service representative to schedule maintenance performed by a technician. Any servicing must be done per the Periodic Service Schedule found in this manual and the Maintenance Schedule found in the engine manual.

Service Parts Manuals, Technician's Repair and Service Manuals and engine Repair 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 date code.



Ref Int 1

BEFORE INITIAL USE

ITEM	SERVICE OPERATION
Seats	Remove protective plastic covering
Brakes	Check operation and brake fluid level
Tires	Check air pressure (see SPECIFICATIONS)
Fuel	Fill tank with correct fuel
Engine	Check oil level
Keys	Record key number and store in a safe location

Fig. 1 Initial Service Chart

Read, understand and follow safety label on driver side fender well (Ref Appendix A). Be sure you understand how to safely operate vehicle and its equipment. Maintaining good performance depends, to a large extent, on owner/operator.

To reduce possibility of severe injury or death, do not use vehicle

improperly such as engaging in horseplay or attempting to perform tasks for which it is not designed.

This vehicle is a utility vehicle. It is NOT a toy or an all terrain vehicle (ATV).

Before new vehicle is put into operation, items shown in INITIAL SERVICE CHART must be performed (Ref. Fig. 1 on page 1).

CAPABILITIES

TERRAIN

To reduce possibility of severe injury or death while driving, be aware

of the following:

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

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

Vehicle is designed for: improved roads (not public highways), established trails, open terrain free from stumps, large rocks or holes, crossing water no deeper than 8 inches (20 cm).

Slow down when: traveling unfamiliar terrain, cresting a hill.

Be aware of hazards such as: steep slopes, overhanging limbs, danger of fire when vehicle is operated over dry combustible organic material.

On steep slopes: do not turn vehicle or stop and turn around, always travel straight up and down, control speed with service brake when going downhill.

Vehicle stopping distance increases: when driving on wet grass, dirt roads or loose surfaces, when crossing streams or bodies of water that soak the brakes. Remember to **lightly** apply brakes and use friction to dry braking surfaces.

VEHICLE CAPACITY



To reduce possibility of severe injury or death due to the variety of

Read all of manual to become thoroughly familiar with this vehicle. Pay particular attention to all Notes, Cautions and Warnings

ways the vehicle may be used, it is important the operator consider any potential hazards before use to prevent serious injury or death.

See GENERAL SPECIFICATIONS section of this manual for load and seating capacity.

Never carry passengers in load bed.

The weight of driver and passenger plus any options or accessories must be deducted from total payload rating to determine load bed capacity.

Stopping distance increases as vehicle load increases.

Load weight can be misleading. Loads consisting of dry sand, fertilizer, sod, etc. will, when wet, grossly overload vehicle and increase potential for roll over and vehicle damage.

Towing a loaded trailer reduces capacity of vehicle load bed. (Ref. TOWING A TRAILER on page 12)

MODIFICATIONS TO VEHICLE



Changes to weight distribution or center of gravity may make vehicle

unstable or prone to roll over which could result in injury or death to operator or passenger.

Do not modify vehicle in any manner that will change weight distribution.

Changes to weight distribution or center of gravity may make it unstable or prone to roll over which could result in injury or death to operator or passenger.

Do not tamper with governor. It is set for maximum safe vehicle speed.

Do not tamper with exhaust system. It is matched with engine for optimum performance.

Removal of muffler or other modifications to exhaust system will: annoy others, not improve performance of vehicle, increase possibility of starting a fire.

COMMON SENSE OPERATION



To reduce possibility of severe injury or death to operator, passenger or

bystanders, do not operate vehicle improperly and/or irresponsibly.

If vehicle is operated improperly and/or irresponsibly, severe injury or death to operator, passenger or bystanders can occur.

All operators should possess a valid driver's license.

Children may not have the skill, judgement or strength to operate this or similar vehicles and should not be permitted to do so.

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

If the vehicle is to be used in areas where steep slopes, overhanging limbs or other adverse conditions may be encountered, protective clothing and an approved motorcycle helmet are recommended for both operator and passenger.

Plan carefully before using vehicle to go significant distances over questionable terrain. Remember that a one hour drive may take many hours to walk out should vehicle run out of fuel or be stranded by becoming stuck on unsuitable terrain.

Respect private property and comply with all local laws and regulations governing use of utility vehicles.

RUN-IN

Check for oil or fuel leaks that could have developed in shipment from factory. Avoid full throttle starts and rapid acceleration until 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 rate of consumption stabilizes.

Check oil level See OIL LEVEL CHECK on page 18. Add oil if level on dipstick is at lower hole.

CAUTION

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

NOTE

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 becoming contaminated and/or being discharged into the engine compartment.

Oil should be changed, while engine is warm, at end of run-in period (Ref. Periodic Service Schedule on page 15).

Read all of manual to become thoroughly familiar with this vehicle. Pay particular attention to all Notes, Cautions and Warnings

CONTROLS & INDICATORS

SERVICE BRAKE PEDAL



Fig. 2 Service Brake Pedal

The service brake is a hydraulic front disc/rear drum brake system.

Push foot operated service brake pedal to activate wheel brakes, slowing or stopping vehicle (Ref. Fig. 2 on page 3).

PARKING BRAKE

CAUTION Drive vehicle with park brake fully released. Failure to do so will prema-

turely wear rear brakes.

The park brake is a mechanical system using rear drum service brakes.

To engage, pull park brake handle up. An indicator light will illuminate in gauge cluster reminding operator to release park brake before driving (Ref. Fig. 3 on page 3).

To disengage, pull up slightly and push in release button at end of handle, then fully lower park brake handle.



Fig. 3 Park Brake and Indicator

CHOKE

Starting a cold engine may require use of choke. To use, pull choke knob out and hold while starting engine (Ref. Fig. 4 on page 4). Once started and engine begins to warm, release choke knob.

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

IGNITION SWITCH

Ignition switch has three positions: 'OFF', 'ON' and 'START' (Ref. Fig. 5 on page 4).

Insert key into switch and turn clockwise to 'ON' to enable starting system.

Continue to turn clockwise to "START" to activate starter.

Once engine starts, release key allowing return to 'ON'.

To prevent inadvertent operation of vehicle when left unattended, turn key to 'OFF' position and remove key.

Read all of manual to become thoroughly familiar with this vehicle. Pay particular attention to all Notes, Cautions and Warnings



Fig. 4 Choke

NOTE If vehicle is equipped with factory installed custom accessories, some accessories remain operational with key switch in 'OFF' position.



To prevent draining the battery, always place differential lock switches in the

'unlocked' position, turn the key switch to 'off' and remove the key.

If one or both of the differential locks is engaged and the key left in the 'on' position, the differential lock solenoid(s) will be activated (Ref. Fig. 6 on page 4) and (Ref. Fig. 8 on page 5). Over time the solenoids will drain the battery to a point where the vehicle will be unable to be started.

DIRECTION SELECTOR



Direction selector offers choice of three positions: forward, neutral and reverse (Ref. Fig. 6 on page 4).

Selector must be in neutral to start engine.



Fig. 5 Ignition Switch



Fig. 6 Direction Selector and Differential Locks

Always bring vehicle to a complete stop before changing selection.

Read all of manual to become thoroughly familiar with this vehicle. Pay particular attention to all Notes, Cautions and Warnings

Place direction selector in forward and set park brake when leaving vehicle unattended.

2WD/4WD SELECTOR

CAUTION

To reduce possibility of drivetrain damage, vehicle must completely stop before switching between two wheel and four wheel drive.

This lever allows choice of two wheel or four wheel drive (Ref. Fig. 7 on page 5).

Always bring vehicle to a complete stop before changing selection.

When four wheel drive is selected, an indicator light in gauge cluster will illuminate to verify engagement.

Vehicle should be left in two wheel drive when unattended.



Fig. 7 2WD/4WD Selector

DIFFERENTIAL LOCK



To reduce possibility of severe injury or death from loss of control



Fig. 8 Differential Lock

while vehicle is in motion, do not engage front differential lock while turning steering wheel. Lock engagement may abruptly force steering wheel to center causing loss of grip on wheel.

Front and rear differentials are equipped with electrically actuated locks (Ref. Fig. 8 on page 5). With a differential unlocked, if one tire looses traction, the vehicle will likely become stuck. With a differential locked, power is distributed to both tires at all times and greatly increases traction. Locks are not intended to be engaged at all times. They are intended to free or prevent vehicle from being stuck as terrain demands, ideally for short runs at slow speeds. Always disengage differential locks as terrain and conditions allow.

Differential locks should only be used when NOTE additional traction is required. Continued use of rear differential lock may cause excessive wear to tires. Continued use of front differential lock may increase steering effort.

Vehicle must be completely stopped CAUTION before engaging or disengaging differential lock. Failure to stop may damage differential.

Read all of manual to become thoroughly familiar with this vehicle. Pay particular attention to all Notes, Cautions and Warnings

To prevent draining the battery, always place differential lock switches in the 'unlocked' position, turn the key switch to 'off' and remove the key.

To engage rear differential lock, stop vehicle and push upper portion of rear differential lock switch. To engage front and rear differential lock, stop vehicle and push upper portion of both differential lock switches. Indicator lights in gauge cluster illuminate to remind operator when locks are engaged.

To disengage differential locks, stop vehicle and push lower portion of switches. After unlocking, the differential may remain locked if driving is resumed in a straight line. This is a normal occurrence caused by pressure remaining against the gears and not allowing the locking mechanism to release. To avoid this, simply turn vehicle as acceleration begins or accelerate in reverse.

ACCELERATOR

With engine running, push accelerator pedal to accelerate in direction selected (Ref. Fig. 9 on page 6). Release pedal to slow vehicle and engine will idle. To stop vehicle quickly, apply service brake.

FUEL



To reduce possibility of severe injury or death from improper fuel han-

dling:

Do not smoke near the fuel tank.

Do not refuel near open flame or electrical items, including cellular phones, which could produce a spark.

Never fill a gas can in the bed of a vehicle. Static discharge could ignite gasoline vapor and cause an explosion.

Always handle gasoline in a well ventilated area.

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

Always allow adequate space for the expansion of gasoline. Leave at least 1" (2.5 cm) space below bottom of filler neck.

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

Fuel cap is located on passenger side panel of vehicle beside seat (Ref. Fig. 10 on page 7). Fuel tank is located



Fig. 9 Accelerator Pedal

under passenger side of seat. Fill tank with fresh, clean, automotive grade gasoline. High altitude or heavy use/ load applications may benefit from higher octane gasoline.

Do not use gasoline which contains Methanol.

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.

Do not overfill the fuel tank. Allow adequate space for the expansion of gasoline. Leave at least 1" (2.5 cm) space below bottom of filler neck.

FUEL GAUGE

An electric fuel gauge is located left of steering wheel in gauge cluster (Ref. Fig. 10 on page 7). It indicates amount of fuel in tank.

Read all of manual to become thoroughly familiar with this vehicle. Pay particular attention to all Notes, Cautions and Warnings





Low oil pressure indicator light is located in gauge cluster at left of dash panel. Indicator light is activated if oil pressure drops below 1.5 psi (.11 kg/cm²) (Ref. Fig. 11 on page 7). Check oil level See 'OIL LEVEL CHECK' on page 18. If oil level is between ADD and FULL mark on dipstick, a mechanical problem exists within engine and vehicle **must not be driven**. Contact a local Distributor or authorized Branch.



Fig. 11 Low Pressure Oil Light

CAUTION To reduce possibility of engine damage, do not operate engine until oil pressure is corrected. Do not overfill engine. Too much oil may cause smoking or allow oil to enter air 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 pressure light does not come on, continue to use vehicle.

LIGHT SWITCHES

Headlight switch is located to left of steering wheel on dash panel (Ref. Fig. 12 on page 7). Headlights operate independently of ignition switch.



Fig. 12 Light Switches

Accessory switch is located to right of headlight switch. It may operate accessory items, (if equipped), independently of headlights and ignition switch.

12 VOLT POWER OUTLET



Fig. 13 Power Outlet

Read all of manual to become thoroughly familiar with this vehicle. Pay particular attention to all Notes, Cautions and Warnings

Overuse of accessories may drain bat-CAUTION tery and leave insufficient reserve to start vehicle.

A 12 volt power outlet, rated at 15 amps, is located left of ignition switch (Ref. Fig. 13 on page 7). It provides constant power for accessories equipped with a 12 volt plug

STARTING AND DRIVING

To reduce possibility of roll-back which could result in severe injury or

vehicle damage, do not release service brake until engine has started.

To operate vehicle:

- Apply service brake.
- Place direction selector in neutral.
- Insert key into ignition switch and turn it to 'ON' position.
- ٠ Apply choke if needed and turn key to 'START' position just long enough for engine to start.
- Release choke once engine runs smoothly.
- Place direction selector in forward or reverse.

If equipped, a warning signal will sound while NOTE direction selector is in reverse.

- ٠ Release park brake.
- Release service brake and apply accelerator.
- When accelerator pedal is released, engine will idle.
- Apply service brake pedal to slow or stop vehicle.
- Move direction selector only after vehicle has • completely stopped.

STARTING VEHICLE ON A HILL



To reduce possibility of roll-back which could result in severe injury or

vehicle damage, 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 permanent damage to the drive system, it is important to prevent excessive rollback when starting the vehicle on a hill.

Release park brake while depressing accelerator with right foot and release the service brake by lifting left foot.

COASTING



To reduce 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 possibility of drivetrain damage or loss of vehicle control, speeds should be limited to no more than the maximum governed speed on level ground (See GENERAL SPECIFICATIONS). Limit speed by applying service brake.

LOAD BED

A manual lift bed is standard. An electric lift is optional.

WARNING

To reduce possibility of severe injury or death, read, understand and fol-

low Warning label affixed inside load bed. See Appendix A.

Failure to follow label may result in vehicle tipping over.

Operate vehicle with awareness of load.

Do not permit anyone to ride in load bed.

Before operating, verify no one is behind vehicle.

Never fill a gas can while it is in load bed. Static discharge could ignite gasoline vapor causing an explosion.

A load bed warning label is affixed to inside front of bed. See Appendix A. For safe operation of vehicle, this label must be understood.

See load bed warning label for maximum load. Load must be positioned in bed as far forward as possible, distributed in such a way that its center of gravity must not be higher than height noted on label, and secured.

Failure to follow these instructions may result in severe injury and/or vehicle damage resulting from rollover. Use extra care when operating loaded vehicle.

Do not permit anyone to ride in load bed.

Do not drive vehicle with load bed raised or tailgate unsupported.

Avoid backing up to the edge of a drop off, such as a loading dock or ravine. A misjudgment of distance or an unstable surface could result in vehicle falling backwards.

Read all of manual to become thoroughly familiar with this vehicle. Pay particular attention to all Notes, Cautions and Warnings

Before operating, verify no one is behind vehicle.

Always place a gas can on ground for filling. Never fill a gas can in load bed of vehicle. Built up static electricity could discharge during fueling process and ignite gaso-line vapor.

TAILGATE

To open tailgate (Early Production): Lift taillgate straight up with a sharp upward pull to lift out of closed position and swing out. Maximum load is 100 lbs. (45 kg).

To open tailgate (Late Production): Pull latches out from recess in tailgate. Slide both latch handles toward the center of the tailgate and pivot tailgate out to open position. Maximum load is 100 lbs. (45 kg).

To remove tailgate, remove side cables from load bed and lower tailgate until it is straight down, lift tailgate straight up to remove from pins and remove from load bed. Assemble in reverse order.

MANUAL LIFT BED



To reduce possibility of severe injury, exercise caution while manually d. Fingers or other body

lifting or lowering load bed. Fingers or other body parts could be trapped under falling bed.

To raise manual lift bed, locate latch handle at front left side of bed, pull handle up with one hand to release and lift bed with other hand (Ref. Fig. 14 on page 9).



Fig. 14 Manual Lift Bed Release

A gas strut located underneath will assist in raising bed when empty and will keep it raised when empty.

NOTE Over time, the gas strut may allow the truck bed to slowly lower. If this condition is evident, replacement of gas strut is required.

To lower manual lift bed, push down on bed until latch catches. **Be sure hands are not trapped by load bed.**

ELECTRIC LIFT BED OPERATION



To reduce possibility of severe injury, exercise caution while lifting or

lowering load bed. Fingers or other body parts could be trapped under bed.

The electric lift toggle switch is located at left side of dash panel (Ref. Fig. 15 on page 9). Push top part of switch to raise load bed and bottom part to lower.



Fig. 15 Electric Lift Bed Switch

WINCH

An optional winch is available. Read, understand and follow all following information on operation and use of winch before attempting to operate it.

WINCH APPLICATIONS



To reduce possibility of severe injury or death, the following must be

observed:

Have all persons and pets leave area while operating winch. Never allow anyone to remain in vehicle.

Make sure object to which cable is attached cannot be damaged or pulled over onto vehicle and it's occupants. If attaching winch to a dead tree, a section or limb could fall.

Read all of manual to become thoroughly familiar with this vehicle. Pay particular attention to all Notes, Cautions and Warnings

Do not pull at an angle (Ref. Fig. 16 on page 10). This will cause cable to pile up on one end, jamming and damaging winch. The winch cable could also break from being overstressed and strike someone. Pulling vehicle at an angle can cause damage to front suspension and may cause vehicle to overturn. When pulling vehicle, pull straight only.

If vehicle is being used as an anchor to winch a load, it should have park brake set and wheels chocked.

Never use winch to lift people or other overhead loads. The winch is not intended to be used in any hoisting operation.

Do not use winch to secure loads. Use a tie down designed for the job.

Do not apply shock loads to winch.

Do not attempt to modify or weld winch.

Rolling load capacity of winch decreases with steepness of slope.

Winch is designed for intermittent duty only. The electric motor should not be allowed to become excessively hot. If motor becomes uncomfortably hot to touch, stop and allow motor to cool.



Fig. 16 Do Not Pull at Angle

Winch may be used for a number of purposes, including pulling vehicle if it loses traction on unsuitable terrain or becomes stuck or 'hung up' on an obstruction.

It is impossible to predict all conditions a winch could be used; therefore, the following warnings should not be considered as complete. Before operating winch, consider possible dangers and take precautions to protect yourself, your passenger and any bystanders.

When pulling vehicle with winch, pull straight only. Do not permit cable to contact side of drum.

WINCH MOUNTING

Winch can be mounted at front, or rear (if vehicle is equipped with optional rear hitch) of vehicle to accommodate different situations. At front, winch is mounted in receiver of frame below cowl (Ref. Fig. 17 on page 11). At rear, winch is mounted in hitch receiver below load bed.



Unplug winch remote control before working on winch drum in order

to prevent inadvertent operation.

Before moving winch, unplug winch connector from wire harness. To move winch from one end of vehicle to other, remove spring pin, pull out clevis pin and pull winch mount tube out of receiver. Move to opposite end of vehicle and install winch mount tube in receiver. Secure by inserting clevis pin and securing with spring pin. Plug winch connector into wire harness.

WINCH OPERATION



To reduce possibility of severe injury or death, the following warnings

must be observed before attempting to operate winch:

Always wear thick leather gloves when handling wire cable.

Replace frayed wire cable with a direct factory replacement only.

Never operate winch with less than five (5) full turns of cable around drum (Ref. Fig. 19 on page 12).

If winch motor stalls from overloading, do not continue applying power to winch. The wire cable may become overstressed.

Do not attempt to pull loads exceeding 1500 lbs. (680 kg).

To pull out cable, free spool clutch knob must be used. Pull out and rotate knob. If cable is under any load, clutch may not release easily. Jog out some cable to release tension and operate clutch.

Read all of manual to become thoroughly familiar with this vehicle. Pay particular attention to all Notes, Cautions and Warnings



Fig. 17 Mounting Winch

Pull out desired amount of cable and secure. Engage drum by rotating knob until it snaps in place. Never operate winch unless clutch is engaged.

To prevent damage to wire cable, never hook cable to itself. Always use a nylon sling (Ref. Fig. 18 on page 11).

Stay clear of winch, cable and cable hook. Place a heavy cloth, jacket or blanket over cable to act as a damper should cable break when operating winch (Ref. Fig. 18 on page 11).

Remember that winch operation with engine off will drain battery and may leave insufficient power to start vehicle. Always let engine idle while using winch.

When operating winch, keep entire area in view.

Never release free spool clutch while cable is under load.

Never work around winch drum or cable under tension.



Fig. 18 Use Nylon Sling and Install a Damper when Winching

Unplug winch remote control before working on winch drum in order to prevent inadvertent operation.

Take up slack in cable slowly. Stop winch before cable becomes tight and inspect all attachments such as winch attachment, hook attachment, nylon sling (if required) and load attachment.

Plug winch remote control into receptacle located on dash panel (Ref. Fig. 19 on page 12).

To unwind cable, locate clutch knob on winch (Ref. Fig. 19 on page 12). Pull out knob and rotate 90° to lock out. Using handsaver bar, pull cable from winch drum. Leave at least five turns of cable on drum. Engage drum by turning clutch knob 90°, returning it to original position.

To wind cable, use handsaver bar to keep tension on cable while activating remote. When winding cable, make sure it winds tightly and evenly onto drum leaving no gaps that could cause premature wear to cable. When using winch under a load, operate remote control as far

Read all of manual to become thoroughly familiar with this vehicle. Pay particular attention to all Notes, Cautions and Warnings

as possible from side of vehicle. Do not operate winch while sitting in passenger seat. Read 'Winch Applications' section before attempting to operate winch.



Fig. 19 Winch Operation

TOP AND WINDSHIELD



The sun top does not provide protection from falling objects.

The windshield does not provide protection from tree limbs or flying objects.

Sun top and windshield can only be used with ROPS (Roll Over Protection System) equipped vehicles.

Sun top and windshield provide some protection from the elements; however, they will not keep operator and passenger dry in a downpour. An optional Cab provides protection from the weather, utilizes an optional windshield wiper which is also available with the windshield equipped ROPS unit. The sun top has been designed to provide roll over protection and requires the ROPS system to be installed. 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.

TRANSPORTING VEHICLE

TOWING



This vehicle is not designed to be towed.

It is recommended that

vehicle be moved by placing entire vehicle on a trailer, flatbed truck or other suitable transport.

HAULING



To reduce possibility of severe injury or death while transporting vehi-

cle:

Secure 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 vehicle is to be transported at highway speeds, the sun top must be removed. When transporting vehicle below highway speeds, check for tightness of hardware and cracks in sun top at mounting points. It is recommended that the windshield be removed when transporting. Always verify vehicle and contents are adequately secured before transporting. Rated capacity of trailer or truck must exceed weight of vehicle (see GENERAL SPECIFICATIONS for vehicle weight) and load. Lock park brake and secure vehicle using ratchet tie downs.

TOWING A TRAILER

To reduce possibility of severe injury or death, trailer weight is never to

exceed 1500 lbs. (680 kg).

CAUTION To reduce possibility of vehicle damage, do not exceed 1500 lbs. (680 kg) trailer weight nor 150 lbs. (68 kg) tongue weight.

Read all of manual to become thoroughly familiar with this vehicle. Pay particular attention to all Notes, Cautions and Warnings

Vehicle may be equipped with a receiver that accepts a standard 2" ball hitch. Trailer range of motion is limited by the ball and hitch and should not be used on rough trails or over objects such as logs, large rocks, holes, etc.

Never install non-factory baskets or extensions in hitch receivers (front or rear). Such items change performance characteristics of vehicle and result in unsafe handling, possible roll over or vehicle damage.

Remember a loaded trailer always reduces overall capacity of vehicle.

At no time should tongue weight be more than 150 lbs (68 kg).

The maximum weight that can be towed on a trailer is 1500 lbs. (680 kg).

OPENING THE COWL (HOOD)

To lift cowl (Ref. Fig. 20 on page 13):

- Pull down and out on both latches to clear receivers mounted to frame
- Lift cowl up fully to allow catch to rest on crossmember and release cowl

To lower cowl:

- Lift cowl up fully with one hand to remove weight from catch
- Pull catch away from crossmember with other hand
- Lower cowl until catch clears crossmember and continue lowering cowl with both hands
- Once seated on rubber bumpers, secure with latches

DATA LABEL LOCATION

Serial number label is located on body just below air intake louvers near choke knob.

Manufacture date code and repeat of serial number are on data labels located on frame crossmember under bed. See LOAD BED on page 8.

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



Fig. 20 Unlatching Cowl

Read all of manual to become thoroughly familiar with this vehicle. Pay particular attention to all Notes, Cautions and Warnings

MAINTENANCE



To reduce 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.



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

Turn off all electrical loads from battery before removing battery wires.



 Wrap wrenches with vinyl tape to reduce possibility of a dropped wrench 'shorting

out' a battery, which could result in an explosion.

Remove and ground spark plug wires and disconnect battery at negative terminal before servicing.

Treat all electrolyte spills to body and eyes with extended flushing with clear water. Contact a physician immediately. Any electrolyte spills should be neutralized with a solution of 2 teaspoons (10 ml) sodium bicarbonate (baking soda) dissolved in 1 quart (1 liters) of water and flushed with water.

Insulate metal aerosol containers of battery terminal protectant to reduce chance of contacting battery terminals which could result in an explosion.

Always place entire vehicle on jack stands, disengage four (4) wheel drive and unlock front and rear differentials when performing a procedure requiring engine to run with vehicle in place and tires off ground. Failure to do so will allow vehicle to pull itself off when supported by only two jack stands.

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

This vehicle will give years of satisfactory service, providing it receives regular maintenance. For appropriate service intervals: See PERIODIC SERVICE SCHEDULE on page 15. For appropriate locations See 'LUBRICATION POINTS' on page 21.

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 reduce possibility of vehicle damage when servicing:

- Do not lift vehicle by placing jack under front or rear aluminum differential cases: See 'Lifting the Vehicle' on page 17.
- Always place entire vehicle on jack stands, select two (2) wheel drive and unlock both differentials when performing procedures requiring engine to run with vehicle in place and tires off ground. Failure to do so will allow vehicle to pull itself off when supported by only two jack stands.
- Do not operate engine with CVT drive belt removed since engine speed is governed by the transfer case. Doing so allows engine to exceed its maximum revolutions per minute (RPM).

To access powertrain for routine maintenance, lift seat. Additional access may be obtained by raising or removing load bed. For major repair, refer to appropriate Technician's Repair and Service Manual.

Some service procedures may require vehicle to be lifted. For proper lifting procedure and safety information: See 'LIFTING THE VEHICLE' on page 17.

Read all of manual to become thoroughly familiar with this vehicle. Pay particular attention to all Notes, Cautions and Warnings

PERIODIC SERVICE SCHEDULE

ITEM		BEFORE EACH USE	WEEKLY	EVERY 20 HOURS	EVERY 50 HOURS	EVERY 100 HOURS	EVERY 200 HOURS	EVERY 300 HOURS	EVERY 500 HOURS	
Service Brake (Pedal Pressure)	Check	x								
(Fluid Level)	Check				х					
(Pads & Shoes)	Inspect					х				
(Rotors & Drums)	Clean					х				
Park Brake	Clean	х			х					
Tires	Check	х	х							
Overall Vehicle Condition	Check	х								
Wheels	Check		х							
Fuel Gauge	Check		х							
Alternator Belt	Check		х							
Engine Fan and Cooling Fins	Clean			х						
CVT Enclosure (Blockage)	Clean			х						
(Damage)	Repair/ Replace			х						
Wiring	Check			х						
Accelerator	Check			х						
Choke	Check			х						
Carburetor Linkage	Check			х						
Direction Selector	Check			х						
Engine Oil	Check	х								
	Change			X **		х				
Engine Oil Filter	Replace			X **		х				
Air Filter	Check	х								
	Clean				X#					
	Replace					X#				
Spark Plugs	Check					х				
	Replace							x		
Idle Speed	Check				X**					
Valve Clearance	Check				X**		х			
Fuel Filter	Check					х				
	Replace							х		
Combustion Chamber	Clean								x	
Steering	Check			x						

Fig. 21 Periodic Service Schedule

ITEM		BEFORE EACH USE	WEEKLY	EVERY 20 HOURS	EVERY 50 HOURS	EVERY 100 HOURS	EVERY 200 HOURS	EVERY 300 HOURS	EVERY 500 HOURS	
Tie Rods/Linkages	Check			х						
Rear Axle	Check			X**			х			
	Replace								х	
Muffler/Exhaust	Check						х			
Spark Arrester	Clean					х				
Front Axle	Check			X**			х			
Front Knuckles	Check								х	
Front Struts	Check					х				
Front Wheel Alignment	Check					х				
Rear Shock Absorbers	Check								х	
Fuel Tank	Clean								х	
Throttle/Governor Linkage	Check				х					
Hardware And Fasteners	Check					х				
	Tighten					х				
Battery	Clean					х				
Drive Belt	Check					х				
Front Wheel Bearings	Check								х	
Drive shafts	Lubricate					х				
C.V.Joints and Boots	Check					х				

Read all of manual to become thoroughly familiar with this vehicle. Pay particular attention to all Notes, Cautions and Warnings

Fig. 21 Periodic Service Schedule

** First occurrence only [#] More frequently in dusty conditions

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

NOTE

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

BASIC SERVICE PARTS

To order parts, SERVICE PARTS Department contact information is as follows:

In USA, Phone: 1-800-241-5855; Fax: 1-800-448-8124

Outside USA, Phone: 010-1-706-798-4311; Fax: 010-1-706-771-4609

E-Z-GO Division of TEXTRON, Inc., 1451 Marvin Griffin Road, Augusta, Georgia USA 30906-3852

Air Filter Element	72944-G01
Oil Filter	15400-POH-305PE
Spark Plugs	ZGR5A (NGK) J16CR-U (DENSO)
Optional Alternator Belt	73561-G01
CVT Belt	73965-G01
Fuse	15 amp (P/N 35212-G01) 20 amp (P/N 35212-G02)
	7.5 amp (P/N 35212-G05)
Headlight Bulb	20209-G3
Tail Light Bulb	#1157 (P/N 21759-G1)

Fig. 22	Basic	Service	Parts
---------	-------	---------	-------

Read all of manual to become thoroughly familiar with this vehicle. Pay particular attention to all Notes, Cautions and Warnings

LIFTING THE VEHICLE

Tool List	Qty. Required
Floor jack	
Jack stands	
Chocks	4

To prevent possible injury or death resulting from vehicle falling off

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



CAUTION To prevent possible injury or death from operating engine while vehicle is raised, disengage 4 wheel drive and unlock front and rear differentials. To reduce possibility of vehicle damage:

Do not raise vehicle by placing jack under front or rear aluminum differential cases.

Do not operate engine with 4 wheel drive or either differential locks engaged.

Never operate engine with CVT drive belt removed.

Some servicing operations may require entire vehicle to be raised (Ref. Fig. 23 on page 17).

Install chocks in front and behind each front wheel. Center jack under flange on long axle tube. Raise vehicle and locate a jack stand under outer ends of rear axle tubes.

Lower jack and test stability of vehicle on two jack stands.

Center jack under front of frame. Raise vehicle and position jack stands under frame as shown.

Lower jack and test stability of vehicle on four jack stands.

Lower vehicle by reversing lifting sequence.

OIL

Use detergent motor oil designed for 4 stroke engines.

The oil must be of high quality and meet API SF, SG standards.

For most conditions, 10W30 oil is recommended (Ref. Fig. 24 on page 17).



Fig. 23 Lifting the Vehicle

See chart for viscosity allowed in extreme temperatures (Ref. Fig. 24 on page 17).



Fig. 24 Recommended Oil

Read all of manual to become thoroughly familiar with this vehicle. Pay particular attention to all Notes, Cautions and Warnings

OIL LEVEL CHECK

CAUTION To reduce possibility of engine damage, do not run engine with oil level too low.

Park vehicle on level surface, shut off engine and wait a minute for oil to settle.

Lift seat, remove dipstick and wipe clean (Ref. Fig. 25 on page 18).

Replace dipstick and remove again. Observe level indicated and:

if it is between upper and lower holes, oil level is correct

if it is at or below the lower hole, remove oil fill cap and add oil until level reaches upper hole

When finished, return dipstick and oil fill cap and lower seat.



Fig. 25 Oil Fill and Level Check

OIL CHANGE

With engine warm, park vehicle on level surface, shut off engine, remove key, set park brake and wait a minute for oil to settle.

Lift seat, wipe oil fill cap clean with a cloth and remove fill cap (Ref. Fig. 25 on page 18).



Fig. 26 Oil Change

Remove drain plug from base of engine (Ref. Fig. 26 on page 18).

Once oil has drained, replace drain plug and, if due, change oil filter at this time (Ref. OIL CHANGE on page 18).

Fill engine to upper hole on dipstick with appropriate oil (Ref. Fig. 24 on page 17).

Return oil fill cap and dipstick and lower seat.

OIL FILTER CHANGE

Place drain pan under engine.

Drain oil (Ref. OIL CHANGE on page 18).

Clean oil filter and its mount (Ref. Fig. 27 on page 19).

Place drain pan under engine and, being careful not to damage oil pressure switch, remove oil filter.

Wipe sealing surface of filter mount clean.

Apply clean, fresh oil to seal of new filter and screw filter on by hand until seal contacts filter mount. Tighten 7/8 of a turn more. Torque specification is 16 ft. lbs. (22 Nm).

Read all of manual to become thoroughly familiar with this vehicle. Pay particular attention to all Notes, Cautions and Warnings



Fig. 27 Oil Filter Change

Fill engine to upper hole on dipstick with appropriate oil (Ref. OIL CHANGE on page 18).

Return oil fill cap and dipstick and lower seat.

Start engine and check for leaks.

Shut engine off, check oil level and add, if necessary, to bring level to upper hole on dipstick.

SPARK PLUGS



To reduce possibility of engine damage:

Only use recommended spark plugs.

Tighten spark plugs as instructed. Too loose can overheat engine and too tight can damage threads in cylinder head.

Inspect and replace spark plugs at intervals indicated in Periodic Service Schedule. See 'PERIODIC SERVICE SCHEDULE' on page 15.

Remove plug wires and clean area around plugs to prevent debris falling into cylinders. Use a 13/16" spark plug wrench to remove plugs.

Inspect electrodes for wear and insulator for cracks or chips. Fouled spark plugs are indicated by a wet, black appearance. This could be caused by a dirty air filter element or other restrictions in air intake system. Incorrectly adjusted valves, spark plug wires which are in poor condition or poor quality fuel could also contribute.

If reusing spark plugs, clean with wire brush.

Check gap. Gap should measure .028 - .031" (.70 - .80 mm). If necessary, adjust gap being careful not to damage plug.

If replacing spark plugs, use only recommended type. (Ref. Fig. 22 on page 16). New plugs must be properly gapped before installation.

Install plugs by hand to reduce chance of cross-threading.

- When plug seats against engine:
- Tighten used plugs an additional 1/8 to 1/4 turn.
- Tighten new plugs an additional 1/2 turn.

ALTERNATOR BELT

Vehicle may be equipped with an optional hi-output alternator (Ref. Fig. 28 on page 20). It provides power necessary to run a variety of equipment such as electric powered tools, hi-intensity lighting, radio and winch.

ADJUSTING BELT

Hardware involved: 1/2" and 9/16" hex

Special Tools Required Qty.

Torque wrench, ft. lbs 1	
Belt tension gauge1	

Inspect belt for cracking or wear. Replace if required.

Loosen top nut.

Loosen bottom bolt.

By hand or using a pry bar, pull alternator belt tight and hand tighten bottom bolt.

Check belt tension. Tighten to (Ref. Fig. 28 on page 20):

75 - 80 lbs. (34 - 36 kg) tension for an **existing** belt or 90 - 110 lbs. (41 - 50 kg) tension for a **new** belt when using a belt tension gauge. Apply gauge half way between the two pulleys.

-or-

a maximum deflection of 1/2" (13 mm) for an **existing** belt or 3/8" (1 cm) for a **new** belt when gauging by hand.

Tighten bolt to 9 - 11 ft. lbs. (12 - 15 Nm) torque and nut to 18 - 20 ft. lbs. (25 - 27 Nm).

Read all of manual to become thoroughly familiar with this vehicle. Pay particular attention to all Notes, Cautions and Warnings



Fig. 28 Adjusting Alternator Belt

AIR CLEANER

CANISTER TYPE AIR CLEANER

Air cleaner element is accessible by unsnapping two clips on air canister and removing cover and air filter element (Ref. Fig. 29 on page 20).

Clean inside of cover and canister.

Install element and cover the same way they were removed. Be sure positioning arrow on cover is pointing up and all clips are fastened securely.

CLEANING AIR FILTER ELEMENT



Do not use compressed air to clean air filter; doing so will damage filter which may result in damage to engine.

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



Fig. 29 Air Cleaner

FUEL FILTER



To reduce possibility of an explosion, do not smoke near fuel tank or

in an area where gasoline is being handled. Do not perform procedures involving fuel system near open fire or electrical items which could produce a spark.

Do not handle gasoline in an area that is not adequately ventilated.

Always wear safety glasses to prevent possible eye injury from gasoline or gasoline vapor.

Fuel filter is located at front of engine above fan cover (Ref. Fig. 30 on page 21).

Inspect it for dirt and/or water. Replace if significant amount is found.

To replace, use a pair of pliers to move clamps off ends of filter.

Remove hose coming from fuel tank first and plug.

Remove filter from hose going to fuel pump and discard.



Orient direction of new fuel filter according to FLOW arrow on side of filter.

Install new fuel filter and reposition clamps over inlet and outlet.
Read all of manual to become thoroughly familiar with this vehicle. Pay particular attention to all Notes, Cautions and Warnings



Fig. 30 Fuel Filter

LUBRICATION POINTS

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.

Add no more than two or three pumps of grease to fittings shown (Ref. Fig. 31 on page 21). More than three pumps in a grease fitting could damage seals allowing contamination of grease-sensitive components.

BATTERY

CAUTION To reduce possibility of discharging battery and leaving insufficient reserve to start vehicle, do not use accessories excessively while engine is off.

Failure to promptly charge a discharged battery will shorten its life span.



Fig. 31 Lubrication Points

Unless equipped with optional high output alternator, the vehicle uses a charge coil to charge battery. Battery is charged while engine is running. Do not operate accessory items (such as accessory lights, radios, winch, etc.) excessively while engine is off. The charge coil is capable of supplying 20 amps; therefore, operation of all accessories could result in discharge of battery even though engine is running.

Discharging and recharging a battery is known as deep cycling. The battery is not a deep cycle model, but is a starting battery that is intended to maintain a full charge from the charging circuit. Multiple deep cycles will result in premature failure of battery.

If battery becomes discharged, vehicle can be jump started. See JUMP STARTING on page 22. After starting, promptly charge battery using a 12 volt charger rated at 10 amps or less and in accordance with all instructions provided by the manufacturer of charger.

Read all of manual to become thoroughly familiar with this vehicle. Pay particular attention to all Notes, Cautions and Warnings

BATTERY CLEANING



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

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

Cleaning should take place per PERIODIC SERVICE SCHEDULE See 'PERIODIC SERVICE SCHEDULE' on page 15.

When cleaning outside of 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 top of battery to other parts of vehicle or storage facility where it will attack metal, concrete or asphalt. Additionally, a conductive residue will remain on battery and will contribute to its discharge.



To reduce 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 battery.

Correct cleaning technique is to spray top and sides of battery with solution of sodium bicarbonate (baking soda) and clear water (Ref. Fig. 32 on page 22). Solution should consist of amounts shown in diagram and is best applied with a garden type sprayer equipped with a non metallic spray wand or a plastic spray bottle. In addition, special attention should be paid to metal components adjacent to battery which should also be sprayed with solution. Allow solution to sit for at least three minutes. Use a soft bristle brush or cloth to wipe battery; removing any residue that could contribute to self discharge of battery. Rinse entire area with clean water. Do not use a pressure washer.

JUMP STARTING



To reduce possibility of severe injury or death, follow jump starting

instructions explicitly.

To reduce possibility of permanent damage to battery, promptly charge a discharged battery.

Turn key switch to OFF.



Fig. 32 Cleaning Battery

Place direction selector in neutral.

Attach one end of red positive cable to positive post of weak battery and other end to positive post of strong battery (Ref. Fig. 33 on page 23).

Attach one end of black negative cable to negative post of strong battery and other end to vehicle frame.

Start vehicle as usual. Once started, disconnect cables in reverse order.

Charge battery as soon as possible (Ref. BATTERY on page 21).

VEHICLE CLEANING AND CARE

CLEANING



To reduce possibility of severe injury or vehicle damage, read and under-

stand all instructions supplied by manufacturer of pressure washer.

To reduce possibility of damage, do not CAUTION use pressure in excess of 700 psi (4826 kPa) when pressure washing exterior of vehicle and 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 sys-

Read all of manual to become thoroughly familiar with this vehicle. Pay particular attention to all Notes, Cautions and Warnings



Fig. 33 Jump Starting

tem. Do not use pressure in excess of 700 psi (4800 kPa) to wash exterior of vehicle.

Clean windshield with lots of water and a clean cloth.

Normal cleaning of vinyl seats and plastic or rubber trim requires 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 use of a commercially available vinyl/rubber cleaner.

Painted surfaces require frequent washing with lukewarm or cold water and mild detergent.

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 underbody of 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 it's removal, taking care not to chip or otherwise damage paint. **NOTE** If engine does not start or runs improperly after washing, remove spark plug wires (by pulling the spark plug boots, never the wires). Dry all connections with forced air. Reinstall wires.

CARE PRODUCTS

To help maintain the vehicle there are several products available through local Distributors, authorized Branches, or the Service Parts Department.

- Touch-up paint specially formulated to match vehicle colors for use on both metal and molded plastic bodies. (P/N 28140-G** and 28432-G** for solid colors; 75831-G** for camouflage colors)
- Battery Protectant formulated to form a long-term, flexible, non-tacky, dry coating that will not crack, peel or flake over a wide temperature range. (P/N 75500-G01)
- White Lithium Grease designed to provide lubrication protection in areas where staining or discoloring is a problem, or in areas of extreme temperature ranges. (P/N 75502-G01)
- Penetrant/Lubricant, a 4-in-1 product that penetrates seized parts, lubricates leaving a light lubricating film, reduces corrosion by adhering to wet or dry surfaces and displaces moisture, sealing against future moisture return. (P/N 75503-G01)
- Multi-purpose Cleaner and Degreaser that contains natural, environmentally safe solvents. (P/N 75504-G01)
- Multi-purpose Hand Cleaner is an industrial strength cleaner containing no harsh solvents, yet gently lifts grease off hands. May be used with or without water. (P/N 75505-G01)
- Battery Cleaner that neutralizes battery acids and dissolves terminal corrosion and can be rinsed with water. (P/N 75506-G01)
- Biodegradable Cleaner that breaks down grease to be easily wiped or rinsed away. (P/N 75507-G01)
- Multi-purpose Value Pack sampler includes 4 ounce (118 ml) aerosol cans of Battery Protector, Penetrant/Lubricant, White Lithium Grease, and Carburetor and Choke Cleaner. (P/N 75508-G01)

LABELS AND PICTOGRAMS

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

Read all of manual to become thoroughly familiar with this vehicle. Pay particular attention to all Notes, Cautions and Warnings

WHEELS AND TIRES

Tires are uni-directional and should never be NOTE moved from one side of vehicle to the other.

This vehicle comes standard with low pressure, tubeless, uni-directional tires mounted on one piece wheels (Ref. Fig. 34 on page 24). Left side tires should always remain on left side of vehicle. Right side tires should always remain on right side of vehicle. Uni-directional tires have an arrow on their sidewall indicating direction of rotation when moving forward.

TIRE INSPECTION AND INFLATION



To reduce possibility of severe injury or death from tire separating from

wheel or exploding, use caution when inflating tires and never exceed maximum pressure rating on sidewall of tire. Overinflation can occur quickly.

Tire condition should be inspected per the PERIODIC SERVICE SCHEDULE See 'PERIODIC SERVICE SCHEDULE' on page 15. Examine for cuts, punctures and excessive wear. Repair or replace as necessary.

Air pressure should be checked when tires are cool. If air needs to be added, see GENERAL SPECIFICATIONS section of this manual. Standard and optional tires should be inflated to pressure designated. If pressure is not designated, inflate to pressure recommended on sidewall of tire. Under no condition should inflation pressure be higher than maximum pressure listed on sidewall of tire. All four tires should have the same pressure for optimum handling characteristics.

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

Be sure to install valve dust cap after checking.

REMOVAL AND INSTALLATION



impact wrench use.

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

Hardware involved: 3/4" hex lug nut

To remove, loosen lug nuts. If using an impact wrench, use only impact sockets with it. Regular sockets are not designed for impact pressures exerted by power tools.

Raise vehicle. See LIFTING THE VEHICLE on page 17.

Remove lug nuts and wheel.



To reduce possibility of damage, tighten lug nuts to no more than 85 ft. lbs.

Qty.



Use 'cross sequence' pattern when tightening lug nuts to assure even seating of wheel against hub.

Special Tools Required

Torque wrench, ft. lbs.1

To install, place wheel onto studs with valve stem facing away from hub (Ref. Fig. 34 on page 24). Be sure to position wheel on hub correctly with arrow on tire indicating direction of rotation when moving forward.

Add lug nuts and finger tighten.

Secure wheel by tightening lug nuts in a 'cross sequence' pattern to 50 - 85 ft. lbs. (70 - 115 Nm) torque in 20 ft. lbs. (30 Nm) increments.

Lower vehicle



Fig. 34 Wheel Tightening Sequence

Read all of manual to become thoroughly familiar with this vehicle. Pay particular attention to all Notes, Cautions and Warnings

LIGHT BULB REPLACEMENT



Fig. 35 Headlight Replacement

Replacement bulbs are available from a local Distributor, an authorized Branch or the Service Parts Department (Ref. Fig. 22 on page 16).

Locate two screws on backside of cowl that secure headlight (Ref. Fig. 35 on page 25).

Remove screws, pull headlight out and disconnect wires.

Connect wires to new headlight, install in cowl and secure with screws previously removed.

FUSE REPLACEMENT

Fuses are available from a local Distributor, an authorized Branch or the Service Parts Department (Ref. Fig. 22 on page 16).

To replace fuses, locate fuse block or individual water resistant fuses mounted to plate under cowl (late production).

Pull out failed fuse and replace with a fuse of same type and load rating.

SPARK ARRESTER



To reduce possibility of severe injury or death, allow muffler to cool before servicing and never operate vehicle without

spark arrester in good condition and in place.

Raise load bed.

Remove screw securing spark arrester and pull arrester from muffler (Ref. Fig. 36 on page 25).

Brush off carbon deposits from arrester screen without damaging screen. Screen must be intact. Replace spark arrester if screen is breached.

Install arrester on muffler and secure with screw.



Fig. 36 Cleaning Spark Arrester

PROLONGED STORAGE



To reduce possibility of severe injury or death resulting from a possi-

ble explosion:

Do not handle fuel in an area that is not adequately ventilated. Do not smoke near 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 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.

Preparing vehicle 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 carburetor and corrosion in engine.

- · Clean body, chassis and engine of debris, mud, chaff or grass (Ref. AIR INTAKE AND COOLING FINS on page 26).
- Disconnect fuel hose at fuel tank and plug hose.
- With proper ventilation, start engine and allow it to run until it stops due to lack of fuel.

Read all of manual to become thoroughly familiar with this vehicle. Pay particular attention to all Notes, Cautions and Warnings

- Add fuel stabilizer to fuel tank following instructions on stabilizer container.
- Attach fuel line to tank and drive vehicle for several minutes to circulate fuel stabilizer through carburetor.
- While engine is still warm, change oil (Ref. OIL CHANGE on page 18).
- Remove spark plugs (Ref. SPARK PLUGS on page 19) and pour about 1 oz. (30 ml) of engine oil into each cylinder. Replace spark plugs, ground spark plug wires and use starter to turn engine over a few seconds to distribute oil.

FRONT AND REAR AXLES

Rear axle is provided with a lubricant level check/fill plug located on side of differential case. Unless leakage is evident, an annual lubricant check is sufficient.

CHECKING LUBRICANT LEVEL

Hardware involved: 7/16" hex head plug

Clean check/fill plug and area around it (Ref. Fig. 37 on page 26).

Remove plug.

Correct lubricant level is **just** below bottom of threaded hole. If lubricant is to be added, use a funnel and add correct type lubricant slowly until it starts to seep from hole See 'Checking Axle Lubricant' on page 26.

Install plug and tighten to 18 ft. lbs. (25 Nm).

To replace lubricant, a drain plug is provided at bottom of differential case.



Fig. 37 Checking Axle Lubricant

TRANSFER CASE

The transfer case is provided with an oil level check/fill plug located on passenger side at rear of case. Unless leakage is evident, an annual check is sufficient.

CHECKING LUBRICANT LEVEL

Hardware involved: 9/16" hex head plug

Clean check/fill plug and area around it (Ref. Fig. 38 on page 26).

Remove plug.

Correct lubricant level is **just** below bottom of threaded hole. If lubricant is to be added, use a funnel and add correct type lubricant slowly until it starts to seep from hole See 'Checking Transfer Case Lubricant' on page 26..

Install plug and tighten to 20 - 25 ft. lbs. (27 - 34 Nm).

To replace lubricant, a drain plug is provided at bottom of transfer case.



Fig. 38 Checking Transfer Case Lubricant

AIR INTAKE AND COOLING FINS

To reduce possibility of fire, engine parts should be kept clean to reduce

risk of overheating and ignition of accumulated debris.

Read all of manual to become thoroughly familiar with this vehicle. Pay particular attention to all Notes, Cautions and Warnings



Fig. 39 Cleaning Air Intake and Cooling Fins

After every off road use, allow to cool and then check for build up of dirt and debris in air intake and cooling fins (Ref. Fig. 39 on page 27). 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.

BRAKES

PERIODIC BRAKE TEST FOR HYDRAULIC BRAKES



To reduce possibility of severe injury or death, always evaluate pedal

travel before operating a vehicle to verify some braking function is present.

It is important to periodically check and maintain proper brake fluid level in master cylinder (Ref. BRAKES on page 27). Master cylinder is located under cowl. When checking fluid, wipe off any dirt from fill cap before removing it to reduce possibility of contamination. Fluid level should be maintained at mark molded into reservoir. If fluid must be added, use only DOT 3 brake fluid and inspect system for fluid leaks.

Push brake pedal. Pedal should have some free travel and then become hard. A brake pedal that has no free travel, excessive free travel or a spongy feel indicates that a brake inspection is required. A brake pedal that offers little resistance after it is applied indicates a leak in system.

CAPACITIES

Fuel Tank	6.7 gal (25.4 liters) unleaded, 87 octane or higher
Engine Oil	1.59 quarts (1.5 liters) crankcase only 1.90 quarts (1.8 liters) crankcase and filter 10W30 usually. See OIL on page 17.
Front Differential	15.2 ± 1 oz. (450 ml) of 80 - 90W GL5
Rear Axle	15.2 ± 1 oz. (450 ml) of 80 - 90W GL5
Transfer Case	24 oz. (700 ml) MOBILFLUID 424

Fig. 40 Capacities

Read all of manual to become thoroughly familiar with this vehicle. Pay particular attention to all Notes, Cautions and Warnings

HARDWARE

Periodically, vehicle should be inspected for loose fasteners. Fasteners should be tightened in accordance with the Torque Specifications table (Ref. Fig. 41 on page 28).

Use care when tightening fasteners and refer to Technician's Repair and Service Manual for specific torque values. Generally, three grades of hardware are used in vehicle. Grade 5 hardware can be identified by three marks on the hexagonal bolt head and grade 8 by six marks. Unmarked hardware is Grade 2.

		Unless o his chart spe d are consid	therwise no ecifies 'lubri	oted in text, cated' torqu	ie figures. Fa	ardware in a asteners tha	accordance at are plated	or lubricate	d when	5.
BOLT SIZE	1/4"	5/16"	3/8"	7/16"	1/2"	9/16"	5/8"	3/4"	7/8"	1"
Grade 2	4 (5)	8 (11)	15 (20)	24 (33)	35 (47)	55 (75)	75 (102)	130 (176)	125 (169)	190 (258)
Grade 5	6 (8)	13 (18)	23 (31)	35 (47)	55 (75)	80 (108)	110 (149)	200 (271)	320 (434)	480 (651)
Grade 8	6 (8)	18 (24)	35 (47)	55 (75)	80 (108)	110 (149)	170 (230)	280 (380)	460 (624)	680 (922)
BOLT SIZE	M4	M5	M6	M8	M10	M12	M14			
Class 5.8 (Grade 2) 5.8	1 (2)	2 (3)	4 (6)	10 (14)	20 (27)	35 (47)	55 (76.4)			
Class 8.8 (Grade 5) 8.8	2 (3)	4 (6)	7 (10)	18 (24)	35 (47)	61 (83)	97 (131)			
Class 10.9 (Grade 8) 10.9	3 (4)	6 (8)	10 (14)	25 (34)	49 (66)	86 (117)	136 (184)			

Fig. 41	Torque	Specifications and Bo	olt Grades
---------	--------	-----------------------	------------

Г

GENERAL SPECIFICATIONS

ST 4X4

STANDARD EQUIPMENT:

CHASSIS	Welded steel, hot-dip galvanized, front hitch receiver
BODY (Front)	Flexible, Impact Resistant DuraShield [™] Injection Molded TPE
	(Thermoplastic Elastomer) with Base Coat/Clear Coat
BODY (Rear)	Lightweight, replaceable steel panels, plastic rear fenders
BATTERY	One 12 Volt Maintenance Free (340 CCA, 38 Minute Reserve)
ENGINE	Honda 18 H.P. (13.4 kW) 37.5 ci (614 cc) Twin Cylinder, Air Cooled, Overhead Valve,
	Replaceable Oil Filter, Replaceable Dry Cartridge Air Filter with Remote Air Intake,
	Transistorized Magneto, Fixed Jet Bowl Carburetor, Pulse Fuel Pump
TRANSFER CASE	Helical geared with Forward, Reverse and Ground Speed Governor
TRANSMISSION	Automatic Continuously Variable Transmission (CVT)
FUEL TANK	6.7 Gallon (25.4 Liters) Tank
BRAKES (FRONT)	Dual Front Wheel, Hydraulic 8" (203 mm) Disc Brakes
BRAKES (REAR)	Dual Rear Wheel, Hydraulic 6.3" (160 mm) Drum Brakes
PARK BRAKE	Hand Operated Lever with Indicator Light
FRONT SUSPENSION	Independent with Hydraulic Struts
REAR SUSPENSION	Leaf Springs with Hydraulic Shock Absorbers
STEERING	Single Reduction Rack & Pinion
SEATING	Cushion Foam/Vinyl Cover, Hip Restraint/Hand Hold
SEATING CAPACITY	Operator & 1 Passenger
TOTAL LOAD CAPACITY	1500 lbs. (545 kg) Including Operator, Passenger, Accessories & Cargo
SPEED	25 mph (40 kph)
STANDARD COLOR	Recon Green
DASH PANEL	Scuff Resistant Glass Fiber Reinforced Plastic (Thermoplastic Olefin) with 2 Drink Holders
TIRE	Carlisle AT489, 25 x 11 - 12 (Uni-directional)
TIRE PRESSURE	16 - 20 psi (110 - 138 kPa)
WEIGHT (Without fuel)	1250 lbs. (567 kg)
BED	Rotomolded Load Bed, Inside Dimensions: 42 3/4" L X 54" W X 11" H (109 X 137 X 27 cm)
OPERATING CONTROLS &	Removable Key, Direction Selector, Electric Fuel Gauge, 4WD/2WD Selector with Indicator Lights
INSTRUMENTATION	Electric Front & Rear Differential Locks with Indicator Lights, Hour Meter, Volt Meter
MAXIMUM TRAILER WEIGHT	1500 lbs. (680 kg)

GENERAL SPECIFICATIONS



Fig. 42 Vehicle Dimensions





GENERAL SPECIFICATIONS



Fig. 44 Vehicle Turning Clearance Diameter and Intersecting Aisle Clearance

VEHICLE WARRANTIES

EMISSION CONTROL SYSTEM WARRANTY STATEMENT (Owner's Defect Warranty Rights and Obligations)

Refer to the HONDA Emission Control System Warranty sheet, provided with vehicle, for information.

ENGINE OWNER WARRANTY POLICY

Refer to the Warranty sheet, provided with vehicle, for Engine Warranty information.

INTERNATIONAL WARRANTY STATEMENT

Refer to the International Warranty sheet, provided with vehicle, for information.

VEHICLE WARRANTIES

Notes:	

DECLARATION OF CONFORMITY (EUROPE ONLY)

Declaration of Conformity is packaged with vehicle. For additional information, contact:

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

DECLARATION OF CONFORMITY

Notes:	

Notes:	



Fig. 45 Label Locations



Fig. 46 Pictogram Definitions



Fig. 47 Pictogram Definitions



Fig. 48 Pictogram Definitions



Fig. 49 Pictogram Definitions

Notes:	

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.



To prevent personal injury or death, observe the following:

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 entire 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.



E-Z-GO Division Of Textron, Inc., 1451 Marvin Griffin Road, Augusta, Georgia USA 30906-3852

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: 010-1-706-798-4311, FAX: 010-1-706-771-4609

Copyrighted Material This manual may not be reproduced in whole or in part without the express permission of E-Z-GO Division of Textron, Inc. Technical Communications Department



P/N 602080 ISSUED: April 2005