

section 3 operation

See back cover for a pre-ride checklist

WARNING - BEFORE YOU DRIVE

1. **Always perform a pre-ride inspection of the vehicle using the checklist provided on the back cover of this manual.**
2. **Check tire pressure before each use.**
 - a. Prior to operating the vehicle check and adjust tire pressure to the proper operating pressure as indicated on the sidewall of each tire or in the Specifications section of the Operator's Safety Manual. A "low pressure" tire gauge is required to obtain accurate readings.
3. **Check fuel supply before each use.**
 - a. NEVER fill fuel tank while the engine is running or hot.
 - b. DO NOT overfill tank.
 - c. ALWAYS allow at least ½" of expansion space at the top of tank.
 - d. There should not be any fuel in the filler neck.
 - e. Replace cap tightly to prevent a fuel spillage fire hazard.

NOTE: Always use an original gas cap or OEM (Original Equipment Manufacturer) replacement.

 - f. NEVER fill fuel tank while the vehicle is inside a building.
 - g. After filling the tank, ensure that no fuel has spilled around the vehicle. If there is spilled fuel present, move the vehicle at least ten feet before attempting to start the engine.
4. **NEVER start the engine without the operator properly seated and the restraint system properly adjusted and secured with the brake applied and the vehicle in neutral.**
5. **Be sure the passenger restraint system (i.e. Seat Belt) is properly adjusted and fastened at all times during operation.**
 - a. If the passenger restraint system is not properly used by the operator and/or passenger, loss of control and possible personal injury and/or vehicle damage may occur.
6. **When there is no passenger in the vehicle, the passenger seatbelt must be securely fastened within the vehicle.**
 - a. If the passenger restraint system is not properly used by the operator and/or passenger, loss of control and possible personal injury and/or vehicle damage may occur.
7. **Keep the engine free of dirt and debris, especially in the throttle linkage area.**
8. **NEVER start the engine without checking to see that the throttle control is in idle position.**
9. **ALWAYS use extreme caution when starting the engine.**
 - a. Hot engine, muffler, shields, or drive components can burn on contact.
10. **NEVER operate the machine while under the influence of alcohol, drugs, or medication of any kind.**
 - a. Such operation is dangerous to yourself and/or others.
11. **NEVER use hand held electronic devices or items that can distract from safe driving practices.**
 - a. Driving while distracted can result in loss of vehicle control, accident and injury.
12. **Long hair, loose clothes, or jewelry can get caught in moving parts below and behind the seat or surrounding environment.**
 - a. Remove or tie back anything loose that can reach below and behind the seat before riding.



WARNING - WHILE OPERATING THIS VEHICLE



- 1. NEVER place hands, feet, hair or any body parts or clothing near the engine, wheels, and other rotating parts of the vehicle while riding or running the engine.**
 - a. Use caution in performing required maintenance on or near operating engine.
 - b. Use caution after the engine has been running, since the engine and other drive components may be extremely hot.
- 2. Wet, slippery, rough, or sloped terrain is potentially dangerous and may result in injury if proper caution is not observed.**
 - a. ALWAYS SLOW DOWN
 - b. Operator must use mature judgment, skill, and experience to choose a speed suitable for terrain and riding conditions in protecting operator, passenger, and/or any bystanders.
 - c. Operator must use mature judgment, skill and experience in choosing suitable terrain for individual operational capabilities.
- 3. ALWAYS SLOW DOWN when turning.**
 - a. This vehicle is not a passenger car. High-speed turning and failure to operate this vehicle correctly may cause loss of control, vehicle rollover and/or possible death or injury to the vehicle occupant(s).
 - b. Turning on a slope increases the risk of rollover.
 - c. Practice driving in a safe open area to develop a feel for the vehicles performance and handling characteristics, size and weight.
 - d. Always reduce speed when carrying cargo or bed loads.
- 4. When turning on pavement, loose gravel, or similar surfaces, there is an increased risk of loss of control. ** ALWAYS SLOW DOWN! ****
- 5. Operating the vehicle in conditions where water, mud, snow, dirt, sand, or other debris can get into the throttle cable conduit and/or on the throttle mechanism may cause binding of the cable and/or the throttle mechanism.**
 - a. This may result in the throttle sticking which can cause the engine to continue to run and result in loss of control.
- 6. Keep hands, feet, and all body parts in the vehicle at all times.**
 - a. In the event of a vehicle roll-over, do NOT extend arms, legs or any other extremity outside the vehicle as possible personal injury can occur.
- 7. Keep hands and feet on controls**
- 8. STOP the vehicle and back slowly down any hill that the vehicle lacks the power or traction to climb. Do NOT turn across the slope or try to turn around.**
 - a. Turning on a slope increases the risk of rollover.
 - b. Control the descent speed with the brake (left foot pedal).
 - c. Re-applying the throttle when facing up a steep hill increases the risk of the front tires leaving the ground and the vehicle over-turning.
- 9. STOP the engine if the machine makes unusual noises or vibrations.**
 - a. Check the vehicle for damage.
 - b. Excessive noise or vibration is a sign of loose or worn parts.
 - c. Do not attempt to use the vehicle until it has been serviced to correct the issue.
- 10. Operating this UTV on paved surfaces may seriously affect handling and control of the vehicle, and may cause the vehicle to go out of control.**
- 11. Operating this UTV on public streets, roads or highways could result in a collision with another vehicle. Never operate this UTV on any public streets, roads or highways, whether they are dirt, gravel or paved surfaces unless properly equipped.**
- 12. Always remove the ignition key when the vehicle is not in use to prevent theft or unauthorized use.**

Gasoline Utility Vehicles (Continued on next page)

This section covers the operation of the gasoline powered 2WD and 4WD Utility Vehicles.



NOTE

Perform a Pre-Ride Inspection using the list on the back cover of this book before each use to ensure that your vehicle is in proper working order

General Operation - All Gas Models

Start your Utility Vehicle by following the starting procedures as noted below.

1. Depress brake pedal with your foot and hold. Pull firmly up on the park brake lever with your hand until the lever is tight.
2. Place gearshift in neutral.
3. Apply choke fully when engine is cold (carbureted models only).
4. Turn ignition key fully clockwise and hold to start engine (see note for EFI priming at right).
5. Release ignition key to run position and choke (if applicable) to normal operating position immediately after engine starts.
6. Release parking brake.
7. Turn ignition key counterclockwise to stop engine.

Driving is as easy as driving a car with an automatic transmission. A simple forward and reverse shifter provides direction control. Never shift while the vehicle is moving, as damage to the drive train may occur.

For convenience, some models include a back-up pull-rope starter mechanism on the engine.

Braking is accomplished by simply releasing the throttle pedal and depressing the brake pedal that is located on the floorboard left of the accelerator. A lever action parking brake control is mounted on the center console located between the operator and passenger seats. Pull up on the lever and depress the button on the park brake control lever to release the park brake.

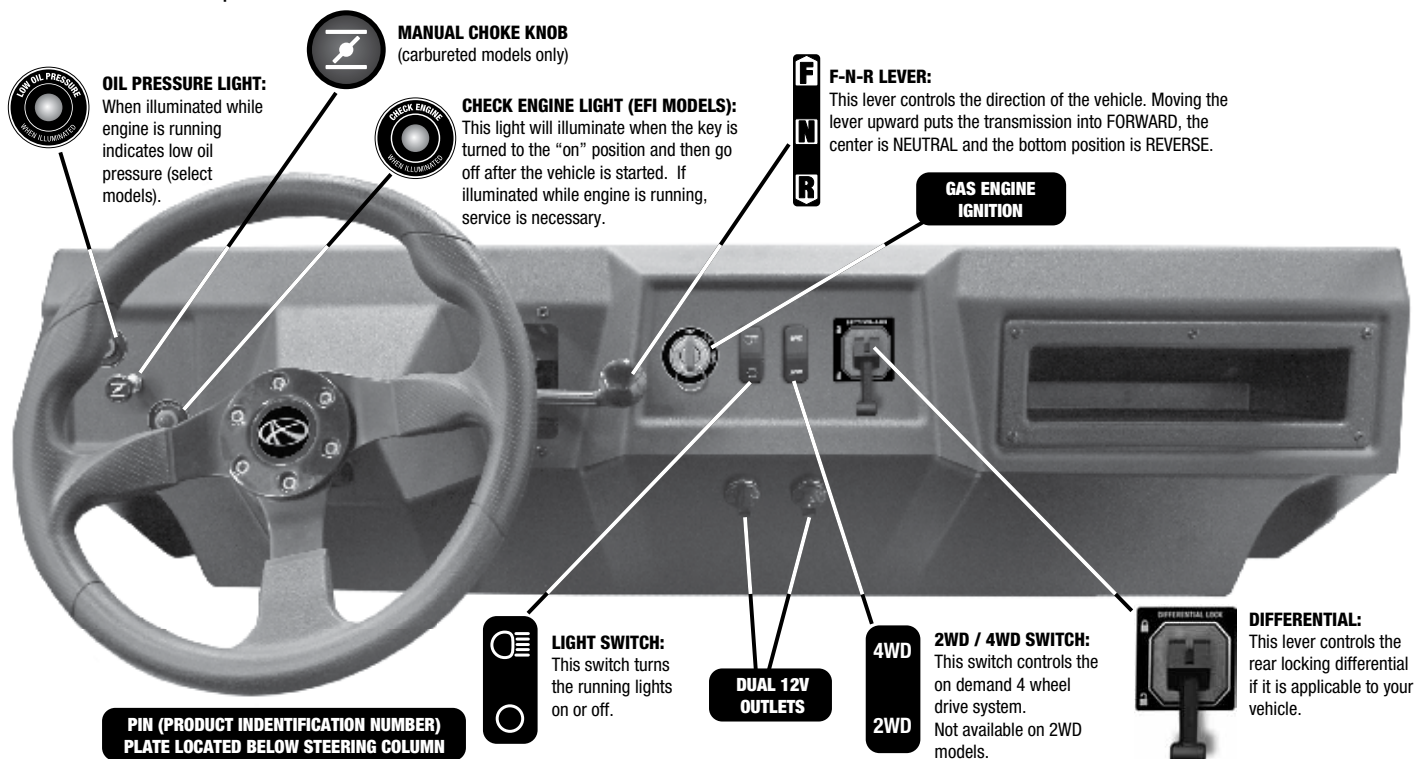
Operation of the rear axle differential lock

The rear axle on select models is equipped with a manually operated differential lock (independent rear suspension models feature an auto locking differential - this will sense wheel slip and automatically engage the differential lock). It is engaged (locked) by moving the dash mounted differential lever to the up position. Locking the differential sends equal power to both rear wheels for better traction. It may be used in both 2WD and 4WD modes.



NOTE - EFI PRIMING

EFI equipped vehicles that are being started for the first time after purchase or have had their fuel tanks refilled after having run out of fuel will need to have their fuel systems primed. This is because the EFI unit uses two fuel pumps. The first is a pulse pump which is operated by engine rotation drawing fuel from the fuel tank and supplying the second pump which is electric. The electric fuel pump pressurizes the fuel and delivers it to the engine. It operates when the ignition key is placed in the RUN position. Begin priming the system by turning the key switch to RUN for one minute. Allow electric fuel pump to cycle. Turn key switch to START and crank engine continuously, cycling the pulse fuel pump, until the engine starts but for not more than 10 seconds should it not start. Allow a 60 second cool down period and attempt to start the engine again. (Failure to follow these guidelines can burn out the starter motor.) This procedure may need to be repeated as many as 4 times. If after 4 times, the engine does not start, contact American LandMaster Customer Service.



General Operation - All Gas Models (continued)

CAUTION

Engine should be at idle before selecting 4WD mode. Sudden engagement of 4X4 switch under power may damage the drive train. Failure to do so may void warranty.

NOTE

Locking the differential on paved or hard surfaces may increase steering effort and tire wear.

4WD Operation

Four wheel drive models are equipped with an electronically activated “On Demand” 4WD system. To engage the 4WD system, simply flip the dash mounted switch to 4WD. Engagement of the system should always be done with the vehicle stopped and the engine at idle speed.

This Hilliard™ system is an “On Demand” 4WD system. When rear tire slip is sensed, an overrunning clutch in the front differential will engage the front wheels. Note that even though you may be in 4WD, the front wheels may not be engaged until a demand is placed on them due to loss of traction at the rear wheels.

Because the power transfer is automatic, you may operate the vehicle in 4WD mode continuously without affecting steering effort or tire wear.

Electric Utility Vehicles

This section covers the operation of the Electric 2WD Utility Vehicles.

Some ASW models are configured as street legal Low Speed Vehicles (LSV). Low Speed Vehicles may be used on public roads (check local ordinances). Low Speed Vehicles do NOT have comparable crash protection to a car or truck. Follow all safety procedures. Avoid roads with considerable traffic. Avoid driving on public roads at night or in low visibility. Never drink and drive. Check local laws and ordinances about the use of LSV's in your area.

NOTE

Keyswitch must be in the “RUN” position for vehicle to operate.

General Operation - Electric Models

Start your Utility Vehicle by following the starting procedures as noted below.

1. Depress brake pedal with your foot and hold. Pull firmly up on the park brake lever with your hand until the lever is tight.
2. Place FWD/REV switch to neutral position.
3. Turn keyswitch to RUN position.
4. Select desired direction with the FWD/REV switch.
5. Release parking brake.

Driving is as easy as driving a car with an automatic transmission. A simple forward and reverse shifter provides direction control. Never shift while the vehicle is moving, as damage to the drive train may occur.

Braking is accomplished by simply releasing the throttle pedal and depressing the brake pedal that is located on the floorboard left of the accelerator. A lever action parking brake control is mounted on the center console located between the operator and passenger seats. Pull up on the lever and depress the button on the park brake control lever to release the park brake.

Turn Signal / Horn

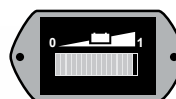
Select models may be equipped with a horn and/or turn signals.



MODE SWITCH:

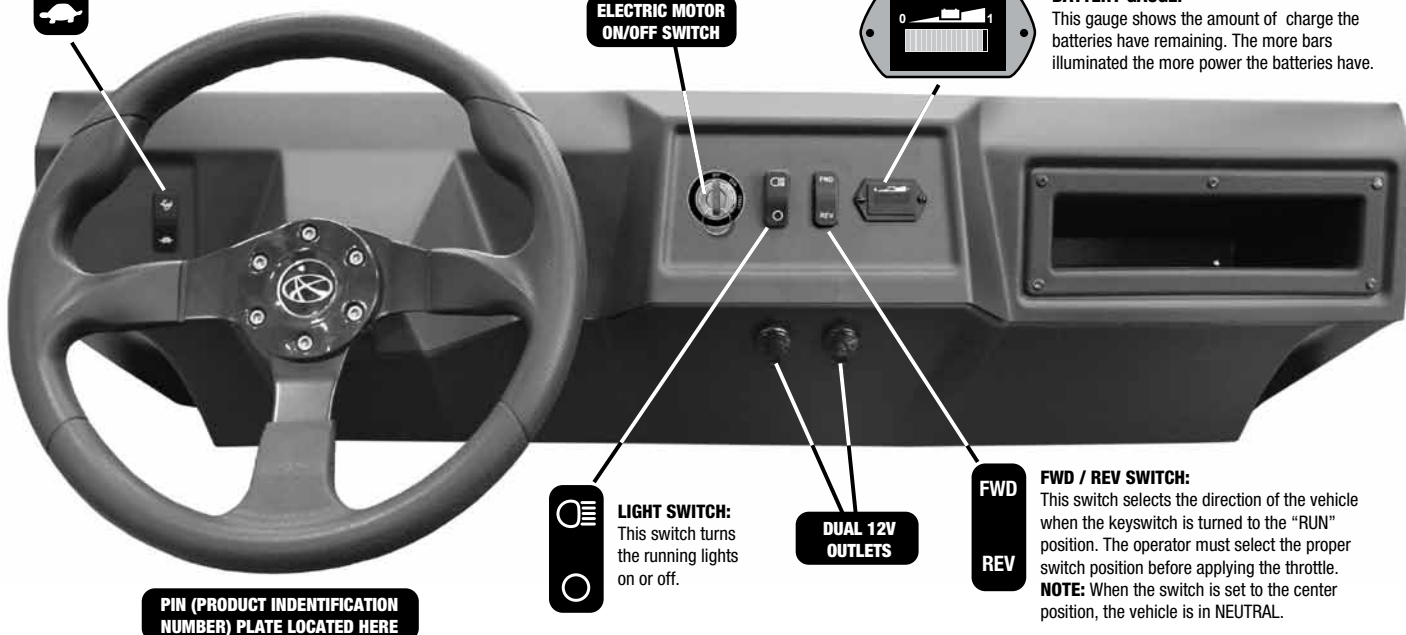
This switch is used for “FAST” mode (M1) with speeds up to 22 mph, or “SLOW” mode (M2) with speeds up to 10 mph. “SLOW” mode has a more gentle acceleration and a greater vehicle range.

ELECTRIC MOTOR ON/OFF SWITCH



BATTERY GAUGE:

This gauge shows the amount of charge the batteries have remaining. The more bars illuminated the more power the batteries have.



LIGHT SWITCH:
This switch turns the running lights on or off.

DUAL 12V OUTLETS



FWD / REV SWITCH:

This switch selects the direction of the vehicle when the keyswitch is turned to the “RUN” position. The operator must select the proper switch position before applying the throttle. **NOTE:** When the switch is set to the center position, the vehicle is in NEUTRAL.

DRIVING RECOMMENDATIONS



DRIVING WITH A PASSENGER(S)

- Passengers must be tall enough to comfortably and safely sit in a passenger seat with the seat belt secured, and with the ability to grasp the hand hold
- Ensure all passengers are wearing proper protective clothing, including helmet and eye protection.
- Do not exceed the recommended number of passengers for your vehicle. See specifications section. Vehicles equipped with the rear facing flip seat can safely carry an additional (2) passengers.
- All passengers must ride in passenger seats equipped with proper restraints and safety gear.
- Always slow down. Avoid aggressive maneuvers that will cause discomfort or injury to a passenger.
 - a. Operator must use mature judgment, skill and experience to choose a speed suitable for terrain and riding conditions in protecting operator, passenger, and/or bystanders.
 - b. This vehicle is not a passenger car. High-speed turning and failure to operate the vehicle correctly may cause loss of control, vehicle rollover and/or possible death or injury to the vehicle occupant(s).
- Handling of the vehicle may change with passengers and/or cargo. Increase time and distance for braking.
- Read, understand and follow all instructions and warnings in this manual and on the safety decals located on the utility vehicle.

DRIVING ACROSS A HILLSIDE

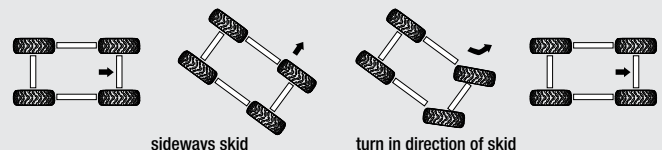
- Avoid driving across hillside slopes whenever possible. Slow down and exercise extreme caution. Improper driving technique or crossing an excessively steep grade could result in rollover and injury or death
- Keep hands and feet and all body parts in the vehicle at all times
- Do not cross hills that exceed 15 degrees or 26% grade
- Keep front wheels straight when crossing a hillside. Steep slopes may require turning the front wheels slightly uphill to maintain a straight line of travel
- If the vehicle begins to tip while crossing a hillside, immediately turn the front wheels in the downhill direction to regain stability and control.
- Do not stop or start suddenly or over accelerate on hills. Loss of control and rollover could result.

DRIVING UPHILL AND DOWNHILL

- Avoid excessively steep hills, and inspect hill for slippery or loose surfaces before attempting to climb or descend.
- Keep hands and feet and all body parts in the vehicle at all times
- Note that towing, braking and traction are greatly diminished in hill climbing or descending.
- Keep front wheels straight when climbing and/or cresting and descending hills
- Do not stop or start suddenly or over accelerate on hills. Loss of control and rollover could result.
- If the vehicle loses power or traction and stops while climbing a hill, immediately engage the service brake and back slowly down the hill, maintaining a straight, downhill line of travel. Attempting to turn the vehicle could result in a rollover.
- When descending a hill, over application of the service brake may cause skidding and loss of control. Apply the brakes slightly to aid in slowing down.

DRIVING ON SLIPPERY SURFACES

- Note that towing, braking, steering function and traction are greatly diminished when driving on slick or slippery surfaces. Always slow down and exercise extreme caution.
- Do not operate the vehicle on excessively slick, rough or loose terrain
- Avoid sudden acceleration and deceleration of the vehicle as loss of control may occur
- Avoid sudden changes in direction as steering control is greatly diminished when driving on slick or slippery surfaces.
- Increase time and distance for braking.
- Never apply the brakes during a skid. Correct a skid by turning the steering wheel in the direction of the skid.



DRIVING RECOMMENDATIONS



DRIVING OVER OBSTACLES

- Always use caution when driving in unfamiliar terrain to avoid obstructions and obstacles that may be hidden from immediate view. Be constantly alert for hazards such as rocks, ruts, holes, logs and low hanging branches.
- Avoid crossing over large obstacles whenever possible. If unavoidable, use extreme caution and slow down. Damage to your vehicle may occur if the obstacle is larger than the ground clearance of your vehicle.
- Keep hands and feet and all body parts in the vehicle at all times
- Have passengers dismount and move away from the vehicle before attempting to drive over an obstacle that could cause rollover.
- When crossing items such as a log, approach the obstacle at 45 degrees to avoid high centering the vehicle.

DRIVING THROUGH WATER

- Avoid water crossings when possible and never cross a body of water where the depth is unknown. Water crossings present unfamiliar and hidden terrain and obstacles that may cause an accident or damage to your vehicle.
- Your American Landmaster UTV is capable of operating in water to a maximum depth equal to the ground clearance of the floorboards of your vehicle. Driving in deeper water will cause loss of power by submerging the drive system. Additionally, driving in deeper water will cause water ingestion into the engine cooling fan causing damage to the engine and voiding the manufacturer warranty.
- If you must cross a body of water, determine depth of water and current before entering
- Enter and exit the water where both banks have a gradual incline.
- Proceed slowly
- After crossing the water, brake function may be diminished. Apply light pressure to the brake system while driving slowly until the system returns to normal brake operation.
- Frequent water crossings will require more frequent inspection of the engine oil, transaxle oil, and lubrication points of the vehicle.

DRIVING IN REVERSE

- Take extra precautions when rear view is hindered by cargo. Remove or reposition cargo that may obstruct your view. Use a spotter if necessary to assist in avoiding obstacles or people.
- Always make sure the pathway is clear of all objects when backing up. Know the location of personnel around the vehicle and especially the location of small children.
- Avoid backing down hills
- Back up slowly and avoid sudden acceleration.
- Never turn at a sharp angle when driving in reverse. Sharp turns combined with higher speeds in reverse will result in a rollover and injury or death.

PARKING THE VEHICLE

- Always put the vehicle in the Neutral gear and apply the parking brake when leaving the unit unattended or parking the vehicle for any amount of time.
- Turn off the engine. Unattended vehicles should have the ignition key removed to avoid theft or unauthorized use of the vehicle.
- Park on a level surface whenever possible
- If parking the vehicle indoors, ensure that the structure is well ventilated and that the vehicle is not parked over any loose debris or flammable materials. Park well away from any potential ignition sources such as appliance pilot lights or source of sparks.
- Avoid parking on an incline whenever possible, if unavoidable see the following recommendations:
 - a. Always apply the parking brake
 - b. Chock the wheels on the downhill side with a wheel chock, rock or large object to prevent the vehicle from rolling.