

SOME WORDS ABOUT RESPONSIBLE OPERATION AND RIDER SAFETY

The following pages present important information and recommendations to help you operate your vehicle responsibly and safely. Forming good habits and developing driving skills is an ongoing process. Even if you are an experienced driver, take time to become familiar with the controls, handling characteristics, capabilities, size and weight of your vehicle. Please read through these pages thoroughly.

Qualifications for Utility Vehicle (UTV) Users

This vehicle is restricted to use by operator and passenger with a minimum age of thirteen (16) years as indicated on the vehicle and vehicle specific literature. UTV's are intended for use by operators who meet the physical and cognitive capabilities set out by the manufacturer in this manual and in the material provided with the vehicle.

Consumer Responsibility for Safe Use and Maintenance of a UTV

1. **UTV's shall not be modified from the manufacturer's original design and configuration.**
2. **UTV's shall not be used to perform racing, stunt riding, jumps, spinouts, donuts, or other maneuvers as they may cause loss of control. As such, these activities are likely to result in possible injury to the operator, passenger, bystanders, or all.**
3. **Prior to each use, the operator shall perform the pre-operational checks specified by the manufacturer, and further verify:**
 - a. Smooth throttle operation and positive return of the throttle linkage to a closed throttle position when released;
 - b. That the throttle cable and linkages operate properly and the throttle cable or other linkages are adjusted properly;
 - c. That the steering mechanism(s) is adjusted and operates smoothly;
 - d. That the engine stop switch is properly functioning;
 - e. That all guards originally supplied by the manufacturer are in proper place in serviceable condition;
 - f. That engine idle speed is below the point of clutch or torque converter engagement;
 - g. That the gas tank is in good condition and the proper gas cap is fastened securely;
 - h. That the braking system is functioning properly;
 - i. That all safety labels are in place, legible and understood;
 - j. That any and all guards, torque converter covers, or other covers or guards supplied by the manufacturer are in place and in serviceable condition;
 - k. That tires are in good condition, inflated properly, (we recommend 12 p.s.i. for full size UTVs) and have sufficient tread remaining; and
 - l. That all fasteners are in place and tightened securely.
4. **UTV engines shall not be started unless the operator is seated and restrained in proper position for vehicle operation and the brake is fully engaged and locked with the park brake mechanism.**
5. **Long hair, loose clothes, or jewelry can get caught in moving parts below the seat or surrounding environment. Remove or tie back anything loose that can reach below or behind the seat before riding.**
6. **UTV's shall only be fueled by personnel knowledgeable with regard to proper fuel selection and fueling techniques.**
7. **UTV operators and passengers shall adhere to all manufacturer's recommendations and instructions, as well as comply with all laws and ordinances, and the following:**
 - a. Operators shall stay seated with both hands on the steering wheel and both feet in the vehicle at all times, whether moving or stationary, unless the vehicle is stopped completely and the engine has been shut off.
 - b. Passengers shall remain seated with arms and legs inside the vehicle at all times during operation.
 - c. Shall observe minimum age restrictions.
 - d. Shall not allow smoking in the vehicle.
 - e. Persons under the influence of drugs, alcohol, or intoxicants shall not supervise, operate, or ride in a UTV.
 - g. UTV's shall operate only on a surface or terrain recommended by the UTV's manufacturer.
 - h. UTV's shall not be operated on roads, streets, highways, or any other location where road vehicles are intended to travel.
8. **Persons with the following conditions shall not ride in or operate a UTV:**
 - a. Those with heart conditions
 - b. Pregnant women
 - c. Persons with head, back, or neck ailments, or prior surgeries to those areas of the body.
 - d. Persons with any mental or physical conditions, which may make them susceptible to injury or impair their physical dexterity or mental capabilities to recognize, understand, and perform all of the safety instructions, and be able to assume the hazards inherent in motor vehicle use.
9. **No operator or other person shall contact any portion of the engine, wheels, or drive train for any purpose including maintenance until the engine has been turned off and allowed to cool, and the UTV is in a stable and stationary position.**
10. **Passenger restraints must be used in accordance with, and limited to, the manufacturer's guidelines.**
11. **UTV components shall be maintained and repaired in accordance with the manufacturer's specifications and utilizing only the manufacturer's authorized replacement parts with installation performed by designated dealers or other skilled persons.**

WARNING

Long hair, loose clothes, or unsecured cargo can get caught in moving parts below and behind the seat or surrounding environment. Remove or tie back anything loose that can reach below or behind the seat before riding.

Off-Road Use Only:

Your UTV and its tires are designed and manufactured for off-road use only and not for use on paved surfaces. Driving on paved surfaces can affect the handling, control, and cause excessive wear to your tires.

When driving off-road, also remember to always obey local off-road driving laws and regulations. Obtain permission to drive on private property. Avoid posted areas and obey "NO TRESPASSING" signs.

Unless equipped for such, you should never drive your vehicle on public streets, roads or highways, even if they are not paved. Drivers of street vehicles may have difficulty seeing and avoiding you, which could lead to a collision.

! WARNING

- ***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.***
- ***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.***

Keep Hands and Feet on Controls

When driving your vehicle, always keep both hands on the steering wheel. It is important to remain alert and remain focused when driving the vehicle. Removing hands or feet from the controls can reduce your ability to react and maintain control of the vehicle.

! WARNING

- ***Removing your hands from the steering wheel or feet from the foot controls during operation can reduce your ability to control the vehicle and could result in a collision. Always keep both hands on the steering wheel during operation.***
- ***Keep hands, feet, and all body parts in the vehicle at all times.***
 - ***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.***

Control Speed

Driving at excessive speeds increases the likelihood of an accident. In choosing an appropriate speed, you must consider the capability of your vehicle, the terrain, visibility, and other operating conditions, in addition to the skill and experience of the driver.

! WARNING

Operating this vehicle at excessive speeds increases your chances of losing control, resulting in an accident. Always drive at a speed that is appropriate for your skill, your vehicle, the terrain, visibility and other operating conditions.

Use of this Vehicle on Unfamiliar or Rough Terrain

Before driving in an unfamiliar area, always check the terrain thoroughly. Don't drive fast on unfamiliar terrain or when visibility is limited (it is often difficult to react to hidden obstructions like rocks, bumps, or holes).

Never drive past the limit of visibility. Maintain a safe distance between your vehicle and other off-road vehicles. Always exercise caution and use extreme care on rough, slippery and loose terrain.

⚠ WARNING

- ***Failure to use extra care when operating this vehicle on unfamiliar terrain could result in the unit overturning or going out of control. Go slowly and use extreme caution when operating on unfamiliar terrain. Always be alert to changing terrain conditions when operating the vehicle.***
- ***Failure to use extra care when operating on excessively rough, slippery or loose terrain could cause loss of traction or vehicle control, resulting in an accident or overturn. Do not operate on excessively rough, slippery or loose terrain until you have learned and practiced the skills necessary to control the vehicle on such terrain. Always be especially cautious on these types of terrain.***
- ***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 a steep up-hill increases the risk of the front tires leaving the ground and the vehicle over-turning.***

Do Not Perform Stunts

You should always operate your vehicle in a safe and reasonable manner. When driving, always keep all four wheels on the ground.

⚠ WARNING

Attempting wheelies, jumps, and other stunts increase the chances of an accident, including an overturn. Never attempt stunt riding of any type and ride responsibly. Don't try to show off.

⚠ WARNING

Operating this vehicle without your seat belt could cause you to be thrown from the vehicle, causing serious injury or death.

NO ALCOHOL OR DRUGS

Alcohol, drugs, and UTV's DO NOT mix. Even a small amount of alcohol can impair your ability to operate this vehicle safely. Likewise, drugs, even if prescribed by a physician, can be dangerous while operating a UTV. Consult your doctor to be sure it is safe to operate a vehicle after taking medication.

⚠ WARNING

Operating this vehicle after consuming alcohol or drugs can seriously affect your judgment, cause you to react more slowly, affect your balance and perception, and could result in serious injury or death. Never consume alcohol or drugs before or while operating this vehicle.

REPLACEMENT PARTS, ACCESSORIES AND SERVICE

Most replacement parts and accessories are typically available from your dealer. Because of immediate availability and convenience, it is recommended that items be ordered from an authorized dealer. Take this manual and all supplements to the dealer when ordering parts in person.

If replacement parts are not available from a dealer, they may be ordered directly from American SportWorks by contacting ASW at 1-800-643-7332 or online at www.amsportworks.com. Orders may be subject to a minimum fee. A listing of authorized service center locations in your area is also available from our Customer Service department.

Record the Model, Vehicle Identification Number (VIN) and Serial Number in the spaces provided at the front of this Manual.

Periodic Checks & Services

The general maintenance intervals in the following table are based upon average driving conditions. Driving in unusually dusty areas may require more frequent servicing. Refer to the engine operation manual for detailed information specific to engine maintenance.

ITEM	EACH USE	FIRST 10 HOURS	EVERY 20 HOURS	EVERY 40 HOURS
Tire Pressure / Wear (12 p.s.i. recommended for full size UTVs)	INSPECT			
Brake System	INSPECT			
Brake Fluid	INSPECT			REPLACE
Chassis	INSPECT		CLEAN	
Fastener Tightness	INSPECT			
Air Cleaner	INSPECT		CLEAN	REPLACE
Engine Oil Level	INSPECT			
Cables	INSPECT			ADJUST / LUBRICATE
Engine Oil		REPLACE		REPLACE
Carburetor				CLEAN
Spark plug			CLEAN / ADJUST	REPLACE
Drive Belt				INSPECT

Air Filter Elements Replacement Parts

Description	Part No.
Briggs & Stratton Air Filter	16170
Honda Paper Filter Element	2-20153
Honda Foam Filter Element	2-20154
Subaru Paper & Foam Element (653cc)	2-20158
Subaru Paper & Foam Element (265cc)	12374
Kohler Air Filter / Pre Cleaner (277cc)	15771

Oil Filter Replacement Parts

Description	Part No.
653cc Spin-on	2-20159

Spark Plug Replacement Parts

Description	Part No.
BRIGGS & STRATTON 479cc	
NGK	BPR6ES
HONDA 390cc	
NGK	BPR6ES
CHAMPION	RN9YC
AUTOLITE	4263 / 63
DENSO	W20EPR-U
SUBARU 265cc	
NGK	BR6HS
CHAMPION	RLH6C
SUBARU 653cc	
NGK	BPR2ES
KOHLER 277cc	
CHAMPION	RC12YC
NGK	BCP5EV

Gasoline Utility Vehicles

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

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.
4. Turn ignition key fully clockwise and hold to start engine.
5. Release ignition key to run position and choke to normal operating position immediately after engine starts.
6. 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.

For convenience, on some models a back-up pull-rope starter mechanism is provided 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. Depress the button on the park brake control lever to release the park brake.

4WD Models

This section covers the additional features, operation and maintenance of the 4x4 Utility Vehicles.

Operation of Four Wheel Drive Features

The rear axle is equipped with a manually operated differential lock on all models except for the LM700 with Independent Rear Suspension which features an auto locking differential. It is engaged (locked) by moving the differential lever to the left and down. Locking the differential sends equal power to both rear wheels for better traction. It may be used in both 2WD and 4WD modes.

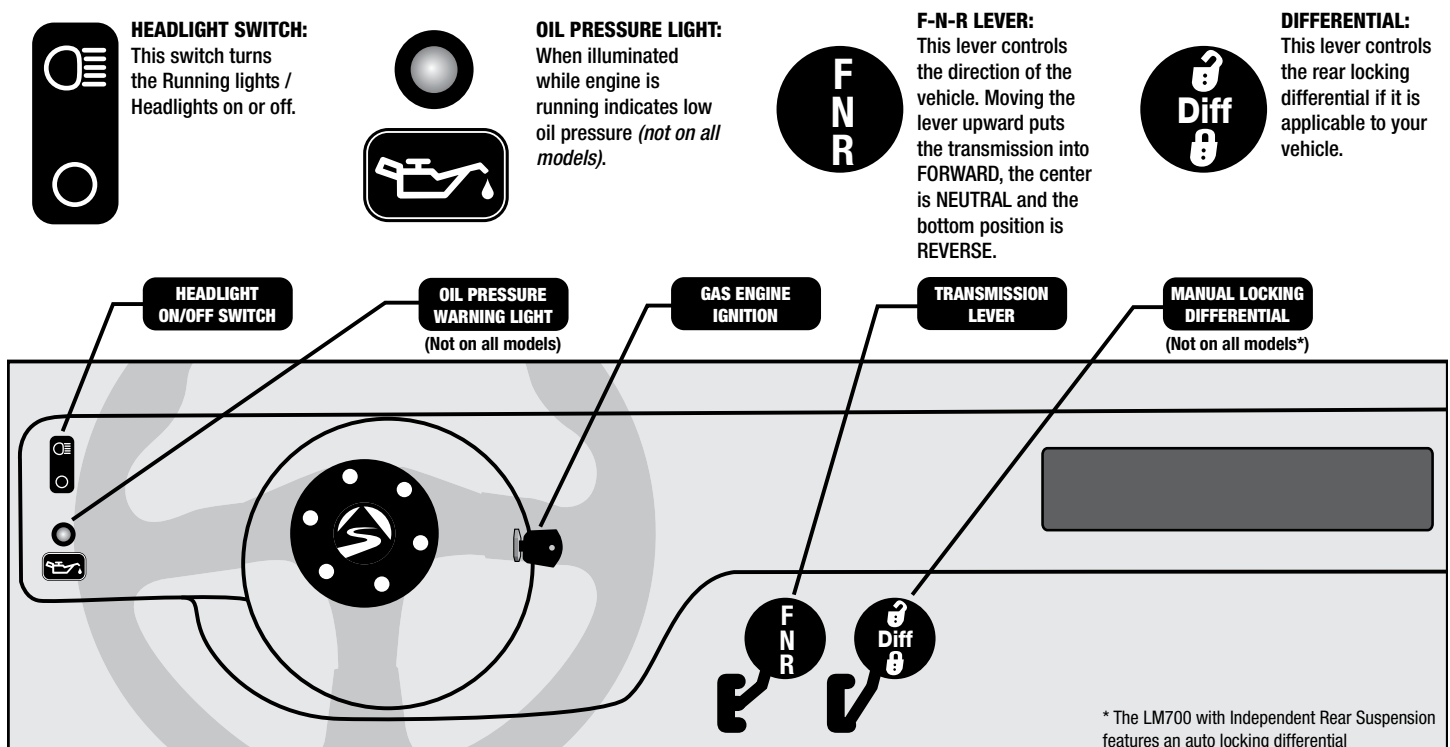
NOTE

Locking the differential on paved or hard surfaces may increase steering effort and tire wear. To switch to four wheel drive, the front wheels are engaged simply by flipping the dashboard switch to 4WD. In 4WD mode power is automatically sent to the front wheels when the rear wheels lose traction.

WARNING

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

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



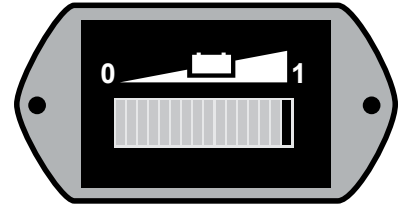
Electric Utility Vehicles

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

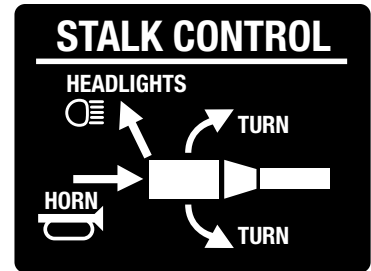
Some ASW models are configured as street legal Low Speed Vehicles (LSV). Low Speed Vehicles may be used on public roads (check local ordinances). Low Speed Vehicles do NOT have comparable crash protection to a car or truck. Follow all safety procedures. Avoid roads with considerable traffic. Avoid driving 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.



BATTERY GAUGE: Showing a full charge.



Multi Function Stalk

Turn Signal / Horn / Headlights

The Multi-Function Stalk is a multiple feature control. It is located on the left side of the steering wheel and functions similar to an automobile for turn signaling but also includes the headlamp and horn control.

Turn Signal

Pushing down on the stalk indicates a left turn, pushing up indicates a right turn. **Note: the turn signal stalk will not automatically return to the off position after a turn. The operator should move the stalk to the center position after completing each turn.**



HEADLIGHT SWITCH: This switch turns the Running lights / Headlights on or off.

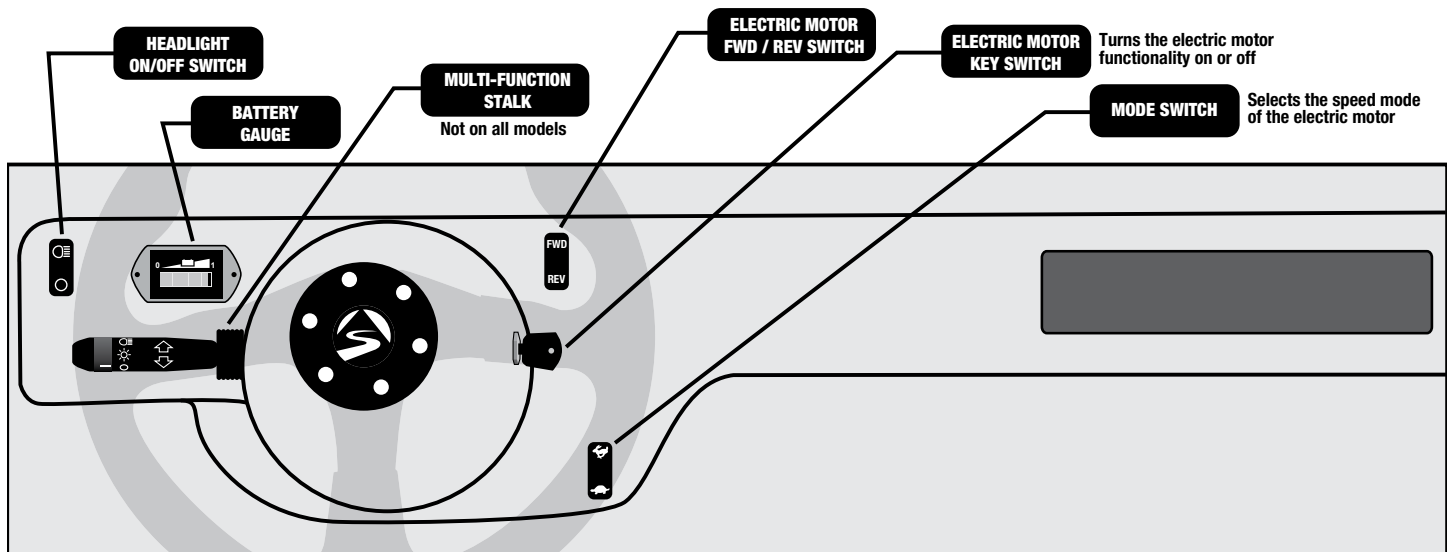


MODE SWITCH: This switch is used for "FAST" mode (M1) with speeds up to 18 mph, or "SLOW" mode (M2) with speeds up to 10 mph. "SLOW" mode has a more gentle acceleration and a greater vehicle range.

Note: on some models this switch may be labeled as M1 and M2.



FWD / REV 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.**



Hybrid Utility Vehicles

This section covers the operation of the Gas/Electric 4WD Hybrid Utility Vehicles.

There are 4 different modes to use when operating an ASW Hybrid Utility Vehicle:

- **GAS ONLY MODE:** utilizes the gasoline engine only with the rear wheels.
- **ELECTRIC ONLY MODE:** utilizes the 48v motor only with the front wheels.
- **GAS / REGEN MODE:** utilizes the gasoline engine only with the rear wheels while recharging the 48v motors batteries.
- **4WD MODE:** utilizes both the gasoline engine and the 48v motor in tandem for superior power with all 4 wheels.



HEADLIGHT SWITCH:

This switch turns the Running lights / Headlights on or off.



F-N-R LEVER:

This lever controls the direction of the vehicle. Moving the lever upward puts the transmission into FORWARD, the center is NEUTRAL and the bottom position is REVERSE.



DIFFERENTIAL:

This lever controls the rear locking differential if it is applicable to your vehicle.



OIL PRESSURE LIGHT:

When illuminated while engine is running indicates low oil pressure.



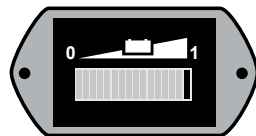
DRIVE

DRIVE / REGEN SWITCH: When switched to "DRIVE" and the electric motor keyswitch to "ON", vehicle is ready to run on electric power. When switched to REGEN with the electric motor in Neutral the batteries are recharged as the vehicle moves



FWD

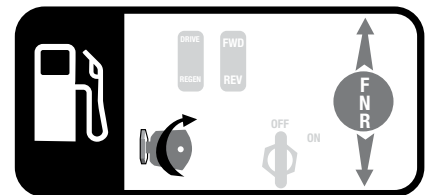
FWD / REV SWITCH: selects the direction of the vehicle. when the keyswitch is turned to the "RUN" position. The operator must select the proper switch position before applying the throttle. **NOTE: When the switch is set to the center position, the vehicle is in NEUTRAL.**



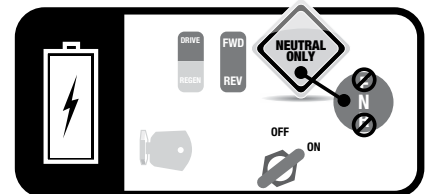
BATTERY GAUGE:

Showing a full charge.

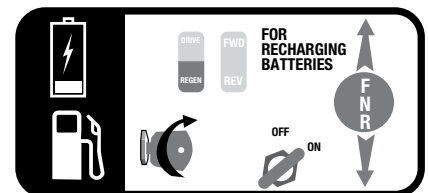
GAS ONLY MODE



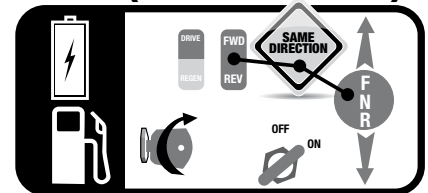
ELECTRIC ONLY MODE



GAS / REGEN MODE



4WD (GAS + ELECTRIC)



APPLICABLE CONTROLS / ACTIONS SHOWN IN DARK GREY

