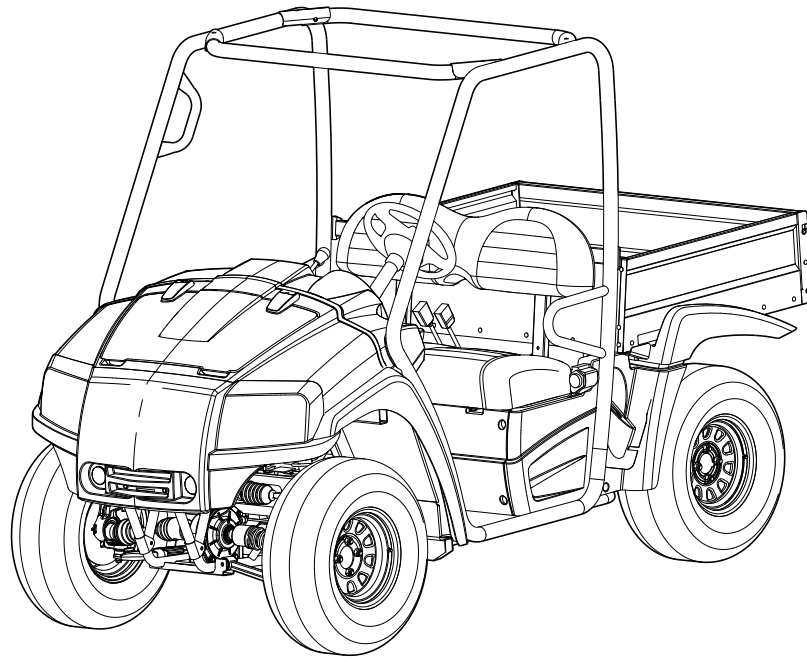




**2009 HUV 4214, HUV 4414, and
HUV 4414-XP Owner's Manual**

Gasoline Utility Vehicles



NOTICE

Warranty information appears at the end of this manual. No other warranties, express or implied, are contained herein. Your authorized representative checked the vehicle before it was delivered to you and will provide you a copy of the completed vehicle warranty registration form.

Husqvarna 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 manual contains proprietary information that is protected by copyright. All rights are reserved. No part of this manual may be photocopied, reproduced, or translated to another language without the written consent of Husqvarna, Inc.

The information contained in this document is subject to change without notice.

Husqvarna reserves the right to make design changes to vehicles without obligation to make these changes on units previously sold.

These vehicles do not conform to Federal Motor Vehicle Safety Standards for automobiles or to FMVSS 500 for low-speed vehicles, and are not equipped for operation on public streets, roads, or highways.



Husqvarna Professional Products, Inc.

7349 Statesville Rd.

Charlotte, NC 28269

USA

www.usa.husqvarna.com/huv

FOREWORD

Thank you for choosing Husqvarna, a world leader in outdoor products. You have chosen the finest utility vehicle on the market. Please protect your investment and ensure that your Husqvarna vehicle provides years of reliable, superior performance by reading and following the maintenance instructions in this manual.

Your comfort and safety are important to us, so we urge you to read and follow the step-by-step operating instructions and safety procedures in this manual. These instructions must be followed in order to avoid the risk of severe personal injury. If you rent or loan your vehicle to others, we recommend that you ask them to read this manual before they operate the vehicle.

Husqvarna products are backed by a customer support system designed to offer you fast, courteous service. In the event that your Husqvarna vehicle needs repairs or service, we recommend that your local authorized Husqvarna representative perform them. For the name and address of the Husqvarna representative nearest you, logon to our web site at www.usa.husqvarna.com. If you would prefer to write to us, direct your letter to: Husqvarna, Attention: Marketing Services, 7349 Statesville Rd., Charlotte, NC 28269 USA. Your local authorized Husqvarna representative can also provide technical advice, parts, and service manuals.

We hope you will consider this owner's manual a permanent part of your Husqvarna vehicle. If you sell the vehicle, please include the manual so that the next owner will have the important operating, safety, and maintenance information it contains. Translated owner's manuals can be downloaded from the Husqvarna web site at www.usa.husqvarna.com.

TABLE OF CONTENTS

Safety Decal and Feature Identification	5
Practice Safety	8
Proposition 65 – State of California	8
Safety Details	9
General Warnings	10
General Information	12
Model Identification	12
Controls and Indicators	13
Roll-Over Protective Structure and Seat Belts.....	18
Seat Latch and Adjustment	19
Pre-Operation and Daily Safety Checklist.....	20
Driving Instructions	21
Bed Latch	24
Bed Locking Pin	25
Rear Shock Absorbers.....	25
Loading and Unloading Cargo	26
Vehicle Load Capacities.....	26
Towing with the Vehicle	27
Transporting on a Trailer	28
Storage.....	28
Maintenance	30
Periodic Service Schedule.....	31
Periodic Lubrication Schedule	33
Brake Fluid Reservoir	34
Engine Oil	35
Gearcase Lubrication.....	40
Air Intake System	42
Fueling Instructions.....	43
Battery.....	44
Using A Booster Battery (Jump Starting)	45
Cleaning the Vehicle	46
Accessories.....	47

Subsequent Owner Registration 48

Vehicle Specifications 48

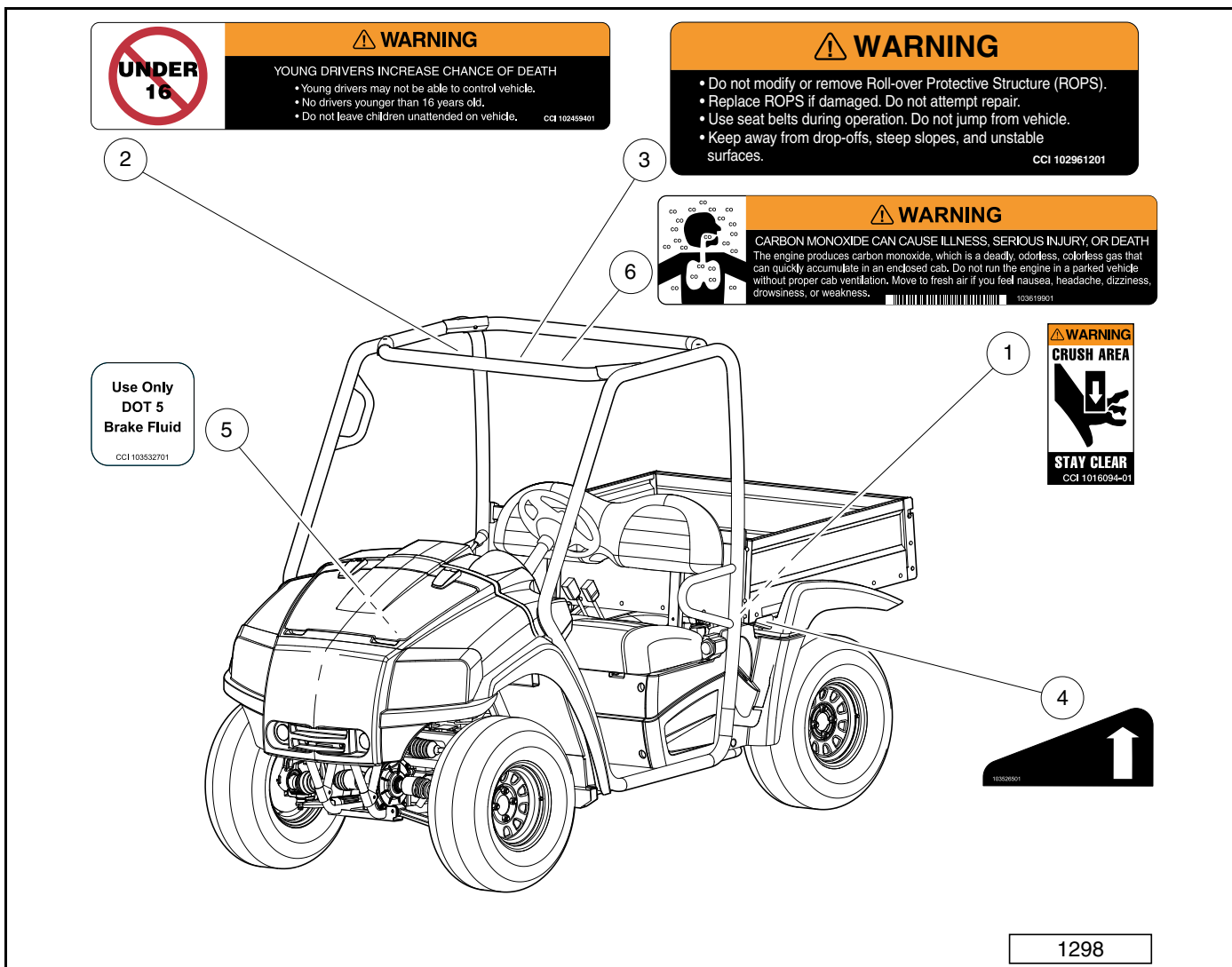
Warranties..... 50

Emissions Control..... 53

SAFETY DECAL AND FEATURE IDENTIFICATION

The following pages contain safety decal and feature identification information. For detailed information on specific features, read the appropriate section in this manual.

ALL HUV 4214 AND 4414 VEHICLES



1	101609401	Decal, Crush Area Warning (behind seat, near cargo bed, driver and passenger side)	6	103619901	Decal, Cab CO Warning (with cab door kit accessory)
2	102459401	Decal, Young Driver Warning (on ROPS)			
3	102961201	Decal, ROPS Warning (on ROPS)			
4	103526501	Decal, Bed Latch Operation (on bed latch)			
5	103532701	Decal, DOT 5 Brake Fluid (inside front cargo compartment)			

ALL HUV 4214 AND 4414 VEHICLES

OPERATING INSTRUCTIONS

- Read owner's manual and vehicle safety warnings.
- Study and understand controls.
- **FASTEN SEAT BELTS** before operating vehicle.

TO START ENGINE

- Place shift lever in NEUTRAL (N) and press brake pedal.
- Turn key to START and hold until engine starts.

TO OPERATE VEHICLE

- Turn wheels to desired direction and ensure path is clear.
- With vehicle stopped and engine at idle, select vehicle direction:
 - F - Forward N - Neutral R - Reverse
- Use lever to select 4 X 2 or 4 X 4, if so equipped.
- Use lever to lock or unlock the differential.
- Hold brake pedal and release park brake.
- Slowly press accelerator pedal to increase speed.
- Stop the vehicle before shifting to Forward or Reverse.
- Stop the vehicle before locking or unlocking the differential.

TO STOP VEHICLE

- Release accelerator pedal and push brake pedal.

BEFORE LEAVING VEHICLE

- Turn key to OFF and remove key.
- Place shift lever in NEUTRAL (N).
- Firmly set park brake.

WARNING

ROLLOVER OR FALLING OFF MAY CAUSE DEATH

- Read owner's manual and operating instructions.
- **FASTEN SEAT BELTS.** Remain seated while moving.
- Drive slowly in turns.
- Drive straight up and down slopes.
- Do not start vehicle until all occupants are seated.
- Two (2) persons per bench seat maximum.
- Operate from driver side only and not on public roads.
- Keep entire body inside vehicle while moving.
- Children requiring a child safety seat must not ride on vehicle. Comply with state and local laws pertaining to child safety.
- Do not operate while under the influence of alcohol or drugs.
- Unlock differential on paved surfaces to maintain steering control.
- Never attempt jumps.

WARNING

Negative frame ground. Can cause severe injury. Do not contact positive (+) battery post or cable to frame. Disconnect negative battery cable first.

WARNING

Excessive speed can cause severe injury or death. Do not tamper with engine governor adjustment. 10246201

WARNING

CAN CAUSE SEVERE INJURY
Rotating parts. KEEP CLEAR. CCI 10246201

WARNING

WINCH CABLE FRACTURE COULD RESULT IN SERIOUS INJURY OR DEATH.

- Do not use winch while persons are seated on the vehicle.
- Use remote operation switch for winch control.
- Stand to the side and away from the vehicle to operate winch.
- Read winch operator's manual before operating winch.

WARNING

GASOLINE EXPLOSION / FIRE

- Can cause severe injury or death.
- No smoking, sparks, or open flames.
- Stop engine, allow to cool before refueling.

VEHICLE LOADING

- Read owner's manual and warnings on dash.
- Maximum gross vehicle weight: 2355 lb. (1068 kg)
- Maximum cargo load: 400 lb. (181 kg)
- Includes cargo bed load and gross trailer weight.
- Maximum cargo load is reduced by the weight of optional equipment.
- Maximum trailer hitch tongue weight: 150 lb. force (667 N).

PREVENT VEHICLE ROLL-OVER:

- Place cargo forward in the cargo bed and distribute evenly side to side. Secure load.
- On uneven or steep terrain reduce speed and load. Avoid stopping on or backing down steep hills.
- Avoid top-heavy loads. See owner's manual.

WARNING

RIDING IN CARGO BED CAN CAUSE SEVERE INJURY OR DEATH.

- Do not ride in cargo bed.

NOTICE

MAXIMUM TONGUE WEIGHT - 150 lbs.
CCI 1011553

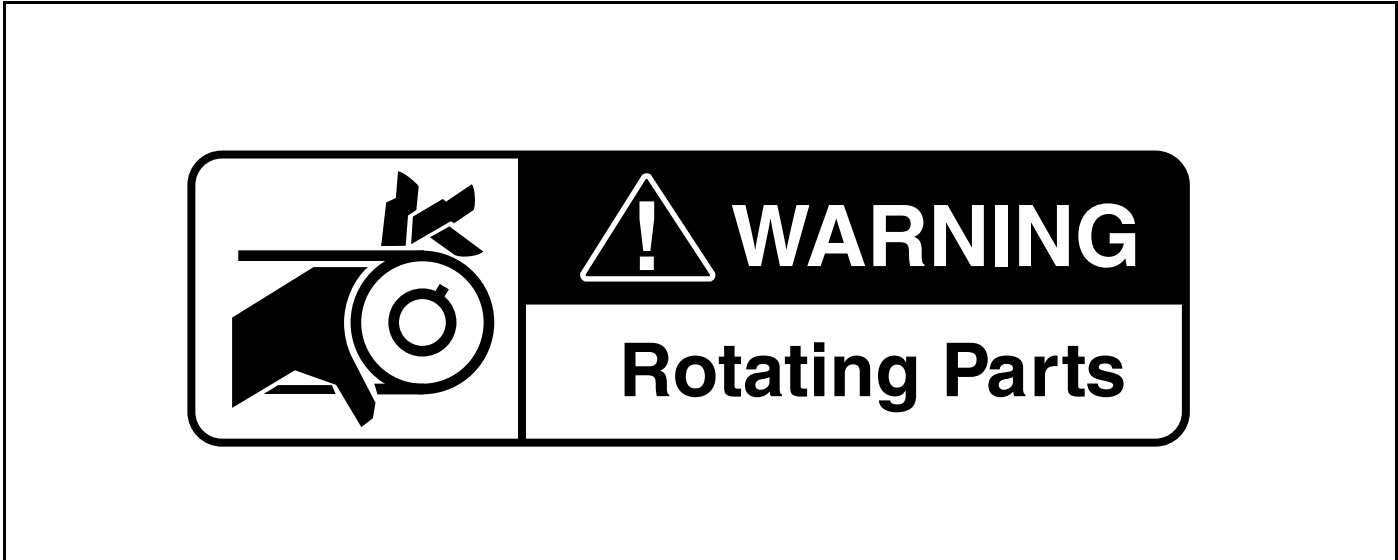
WARNING

CAN CAUSE SEVERE BURNS
Hot Surface CCI 102458901

949

1	1011553	Decal, Trailer Hitch Tongue Weight Notice (on trailer/receiver hitch)	7	103582401	Decal, Winch Safety Warning (with winch option)
2	102458901	Decal, Hot Parts Warning (on frame, driver side)	8	103596501	Decal, Ground Warning (on vehicle frame, near battery)
3	102460201	Decal, Rotating Parts Warning (on frame, driver and passenger side)			
4	103500701	Decal, Operating Instructions (on instrument panel)			
5	103526201	Decal, Vehicle Loading Instructions (on seat support)			
6	103579901	Decal, Fuel Loading Warning (on fender above fuel cap)			

PRACTICE SAFETY



399
Figure 1 Practice Safety

Safety signs like you see above may at first seem shocking, but their impact is mild compared with the reality of severe personal injury.

Your safety and satisfaction are of the utmost importance to us. That is why before operating the vehicle, we urge you to review the information in this manual. Understand and become familiar with the DANGER, WARNING, and CAUTION statements and procedures it contains, along with the safety decals that are affixed to your vehicle.

Take time to understand the language of safety. It is a language that can save your life.

PROPOSITION 65 – STATE OF CALIFORNIA

▲ WARNING

- This product contains or emits chemicals or substances that have been determined by the state of California to cause cancer and birth defects or other reproductive harm.

SAFETY DETAILS

WARNING

- This owner's manual should be read completely before attempting to drive or service the vehicle. Failure to follow the instructions in this manual could result in property damage, severe personal injury, or death.

It is important to note that some vital statements throughout this manual and on the decals affixed to the vehicle are preceded by the words DANGER, WARNING, or CAUTION. For your protection, we recommend that you take special notice of these safety precautions. Safety precautions are essential and must be followed.

If any of the operation or warning decals on the vehicle become damaged, have been removed, or cannot be easily read, they should be replaced immediately to avoid possible property damage, personal injury, or death. Contact your dealer.

DANGER

- A DANGER indicates an immediate hazard that will result in severe personal injury or death.

WARNING

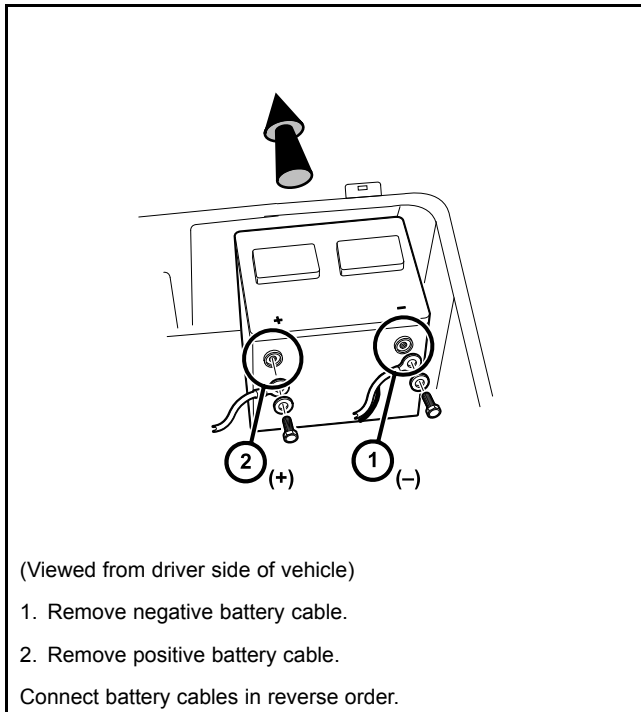
- A WARNING indicates an immediate hazard that could result in severe personal injury or death.

CAUTION

- A CAUTION with the safety alert symbol indicates a hazard or unsafe practice that could result in minor personal injury.

CAUTION

- A CAUTION without the safety alert symbol indicates a potentially hazardous situation that could result in property damage.



821

Figure 2 Battery Cable Removal

GENERAL WARNINGS

The following safety statements must be heeded whenever the vehicle is being operated, repaired, or serviced. **See Safety Decal and Feature Identification on page 5.** Other specific safety statements appear throughout this manual and on the vehicle.

⚠ DANGER

- **Battery – Explosive gases! Do not smoke. Keep sparks and flames away from the vehicle and service area. Ventilate when charging or operating vehicle in an enclosed area. Wear a full face shield and rubber gloves when working on or near batteries.**
- **Gasoline – Flammable! Explosive! Do not smoke. Keep sparks and flames away from the vehicle and service area. Service only in a well-ventilated area.**
- **Do not operate gasoline vehicle in an enclosed area without proper ventilation. The engine produces carbon monoxide, which is an odorless, deadly poison.**
- **The vehicle will not provide protection from lightning, flying objects, or other storm-related hazards. If caught in a storm while driving this vehicle, exit the vehicle and seek shelter in accordance with applicable safety guidelines for your location.**

▲ WARNING

- The engine produces carbon monoxide, which is a deadly, odorless, colorless gas that can quickly accumulate in an enclosed cab. Do not run the engine in a parked vehicle without proper cab ventilation. Move to fresh air if you feel nausea, headache, dizziness, drowsiness, or weakness.
- Follow the procedures exactly as stated in this manual, and heed all DANGER, WARNING, and CAUTION statements in this manual as well as those on the vehicle.
- Do not leave children unattended on vehicle.
- Children requiring a child safety seat must not ride on the vehicle. Comply with state and local laws pertaining to child safety.
- The driver and passenger must be restrained at all times with the seat belts provided to help prevent injury in the event of sudden braking, collision, or roll-over.
- No more than two persons per bench seat at one time. Do not allow people to ride in any part of the vehicle that is not equipped with a seat and a seat belt. Do not allow a passenger to hold a child in his or her lap while the vehicle is moving.
- Prior to leaving the vehicle unattended or servicing the vehicle, set the park brake, place the Forward/Reverse handle in the NEUTRAL position, turn the key switch to the OFF position, and remove the key. Chock the wheels when servicing the vehicle.
- Improper use of the vehicle or failure to properly maintain it could result in decreased vehicle performance, severe personal injury, or death.
- Any modification or change to the vehicle that affects the stability or handling of the vehicle, or increases maximum vehicle speed beyond factory specifications, could result in severe personal injury or death.
- The diameter of all tires on the vehicle must be equal; otherwise the four-wheel drive system will not operate as intended and could result in severe personal injury or death. Never install tires of different diameters on the vehicle.
- Check the vehicle for proper location of all vehicle safety and operation decals and make sure they are in place and are easy to read.
- For vehicles with cargo beds, remove all cargo before raising the bed or servicing the vehicle. If the vehicle is equipped with a prop rod, ensure that it is securely engaged while bed is raised. Do not close bed until all persons are clear of cargo bed area. Keep hands clear of all crush areas. Do not drop cargo bed; lower gently and keep entire body clear. Failure to heed this warning could result in severe personal injury or death.
- Only trained technicians should service or repair the vehicle. Anyone doing even simple repairs or service should have knowledge and experience in electrical and mechanical repair. The appropriate instructions must be used when performing maintenance, service, or accessory installation.
- To avoid unintentionally starting the vehicle:
 - Disconnect battery cables, negative (–) cable first (Figure 2).
 - Disconnect the spark plug wires from the spark plugs.
- Frame ground – Do not allow tools or other metal objects to contact frame when disconnecting battery cables or other electrical wiring. Do not allow a positive wire to touch the vehicle frame, engine, or any other metal component.
- Wear safety glasses or approved eye protection when servicing the vehicle. Wear a full face shield and rubber gloves when working on or near batteries.
- Do not wear loose clothing or jewelry such as rings, watches, chains, etc., when servicing the vehicle.
- Use insulated tools when working near batteries or electrical connections. Use extreme caution to avoid shorting of components or wiring.
- When servicing the vehicle with part of the vehicle on jack stands, do not operate the engine with the Forward/Reverse handle in either the FORWARD or REVERSE position. The four-wheel drive system may engage any wheel(s), front or rear, depending on the mode selected (Figure 3).



795

Figure 3 4x4 Drive Warning

GENERAL INFORMATION

This manual includes operating procedures, maintenance, and regular servicing information for all HUV 4214, HUV 4414, and HUV 4414-XP vehicles. All operating procedures, maintenance, and regular servicing are identical unless otherwise noted.

MODEL IDENTIFICATION

The serial number of each vehicle is printed on a bar code decal mounted on the frame below the steering wheel (Example: RC0601-123456) (**Figure 4**). There is also a second serial number decal mounted on the rear body frame above the engine. **See following NOTE.**

NOTE: Have the vehicle serial number available when ordering parts or making inquiries.



190

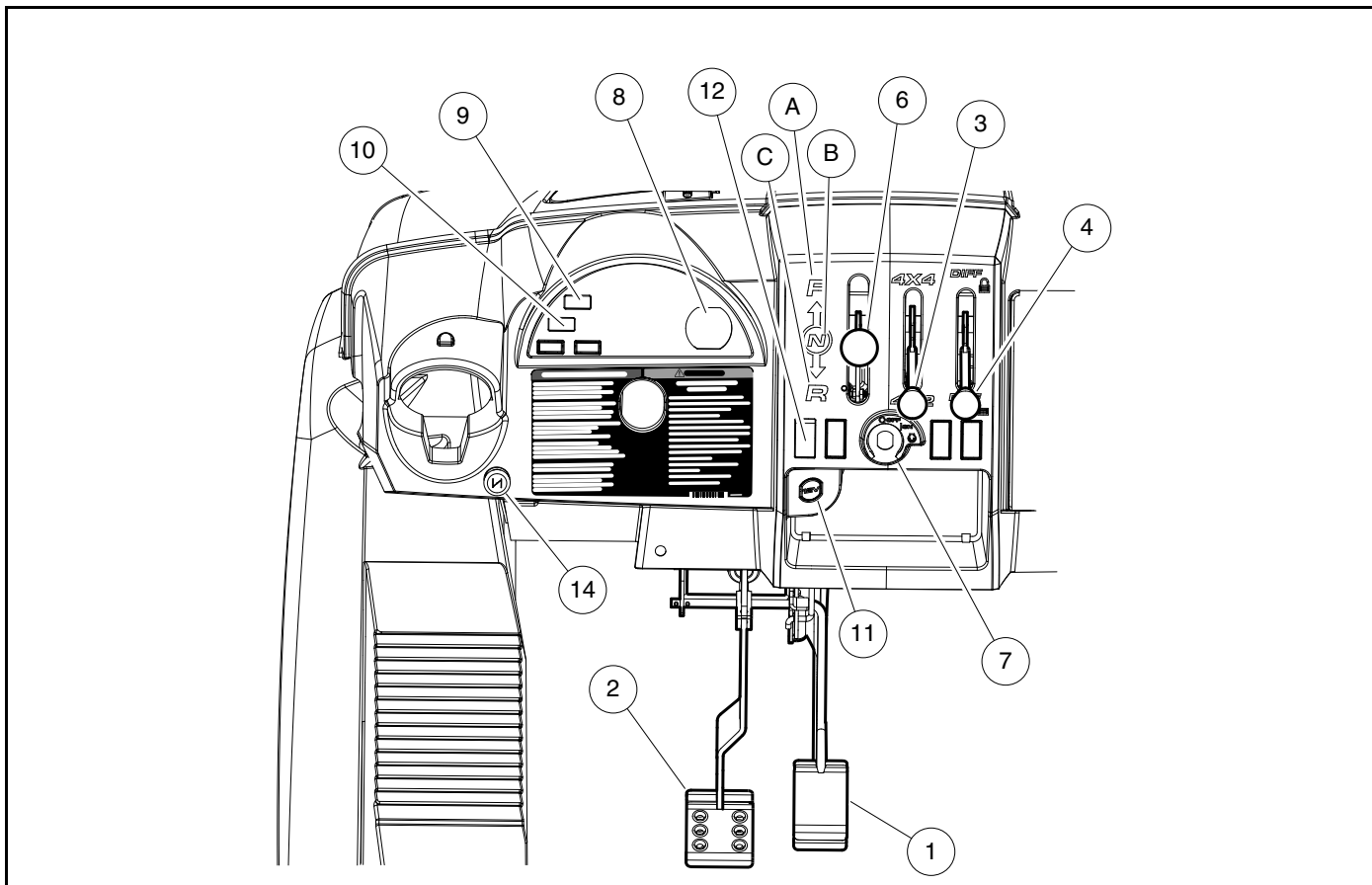
Figure 4 Serial Number

CONTROLS AND INDICATORS

See General Warnings on page 10.

⚠ WARNING

- Before allowing anyone to drive the vehicle, make sure the driver is familiar with all controls and operating procedures.
- Do not shift the Forward/Reverse handle while the vehicle is in motion.
- Engine must be at idle before shifting the Forward/Reverse handle. Failure to do so may result in injury to inattentive passengers and (or) damage to the vehicle.
- To avoid unintentionally starting or rolling the vehicle, set the park brake, place the Forward/Reverse handle in the NEUTRAL position, turn the key switch to the OFF position, and remove the key when leaving the vehicle.



829

Figure 5 Instrument Panel

KEY SWITCH

The key switch (7) is mounted on the instrument panel to the right of the steering column (**Figure 5**). It has three positions: OFF, ON, and START.

To start the vehicle, place the Forward/Reverse handle in the NEUTRAL position and turn the key to the START position, and hold it there until the engine starts. Activate the choke (14) as necessary. If the engine does not start after 10-15 seconds, release the key and repeat the procedure. Once the engine starts, release the key and it will return to the ON position. The engine will idle in neutral. The engine will continue to idle until the key is turned to the OFF position. **See following WARNING, CAUTION, and NOTE.**

▲ WARNING

- **Moving parts! Keep clear of the engine compartment while the engine is running.**

CAUTION

- **Do not shift the Forward/Reverse handle while the accelerator pedal is pressed. Shift the handle only when the vehicle is at a complete stop and the engine is at idle. Failure to heed this caution could result in damage to the transmission.**

NOTE: The key can be removed only when the key switch is in the OFF position.

FORWARD/REVERSE CONTROL

The Forward/Reverse handle (6) is located on the right side of the instrument panel (**Figure 5**). The handle has three distinct positions: FORWARD (A), NEUTRAL (B), and REVERSE (C). Push the handle up to operate the vehicle in the forward direction, or pull the handle down to operate the vehicle in reverse. The engine can be started only when the handle is in the NEUTRAL (middle) position. The engine must be at idle before shifting the Forward/Reverse handle. **See preceding WARNINGS and CAUTION.**

This vehicle operates at a reduced speed in reverse.

ACCELERATOR PEDAL

The accelerator pedal (1) is the pedal farthest to the right (**Figure 5**).

With the engine running and the Forward/Reverse handle in the FORWARD or REVERSE position, vehicle speed will increase as the accelerator pedal is pressed. When the accelerator pedal is released, it will return to the original position and the engine will idle. **See preceding WARNINGS and CAUTION.**

BRAKE PEDAL

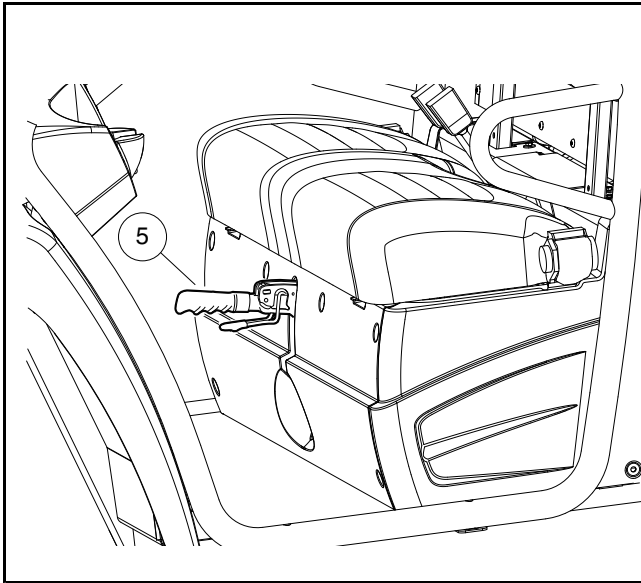
The brake pedal (2) is located to the immediate left of the accelerator pedal (**Figure 5**). To slow or stop the vehicle, press the brake pedal.

PARK BRAKE HANDLE

The park brake handle (5) is located between the driver and passenger seats (**Figure 6**). To engage the park brake, first apply pressure to the brake pedal, then pull up on the park brake handle until handle latches into place. To disengage, lift lever beneath handle, then push handle down. For adjustment of park brake, **see Performance Inspection on page 20. See following WARNING.**

WARNING

- The park brake has an over-center locking feature and should be firmly locked to prevent the vehicle from rolling.



797

Figure 6 Park Brake Handle

PARK BRAKE WARNING LIGHT

The park brake warning light (10) is located on the instrument panel just to the left of the steering column (**Figure 5**). The warning light indicates that the park brake has been engaged. The vehicle should never be driven with the park brake engaged. If the warning light remains on after the park brake has been fully disengaged, have a trained technician check the vehicle.

FRONT AXLE CONTROL

The front drive unit engagement lever (3) is located on the right side of the instrument panel (**Figure 5**). The handle has two positions marked 4X4 and 4X2. Push the handle up to engage the front wheel drive unit or push the handle down to disengage the unit. The engagement lever was designed to be shifted while the vehicle is in motion so momentum is not lost while operating on slippery terrain. The lever should also be disengaged while the vehicle is in motion.

⚠ WARNING

- **Do not operate the vehicle on improved surfaces (concrete, asphalt, etc.) in “4X4” mode. Doing so increases steering effort, tire wear, and shifting effort.**

DIFFERENTIAL LOCK CONTROL

The rear differential lock control handle (4) is located on the right side of the instrument panel (**Figure 5**). The handle has two positions marked DIFF with a locked padlock icon and DIFF with an unlocked padlock icon. Push the handle up to engage the differential lock or pull the handle down to disengage the differential lock.

▲ WARNING

- **Unlock differential on paved surfaces to maintain steering control.**

CAUTION

- **The differential lock should only be engaged when the vehicle is stopped. Damage to the transaxle may occur if there is a large amount of relative motion between the two driving wheels.**

LOW OIL PRESSURE WARNING LIGHT

The low oil pressure warning light (9) is located on the instrument panel just to the left of the steering column (**Figure 5**). If the warning light comes on while the engine is running, the oil level should be checked and oil added to the engine as necessary before vehicle use continues. The vehicle should never be driven when the low oil pressure warning light remains lit. If the warning light goes on and off, the vehicle may be driven, but oil should be added at the first opportunity. If the oil level is correct and the warning light remains lit, have a trained technician check the vehicle. **See following CAUTION.**

CAUTION

- **Failure to add oil immediately when the low oil warning light stays on may result in permanent engine damage.**

FUEL GAUGE/HOUR METER

The fuel gauge and hour meter (8) are housed together on the right side of the instrument panel (**Figure 5**). The fuel gauge operates when the key switch is in the ON position and allows the operator to monitor the fuel level in the vehicle. The hour meter operates only when the engine is running, and should be used by the trained technician to track vehicle usage and determine when periodic service procedures are required. **See Periodic Service Schedule on page 31.**

HEADLIGHT CONTROL

The headlight control (12) is located on the left side of the instrument panel (**Figure 5**). Press the headlight rocker switch to turn the headlights on or off. **See following NOTE.**

NOTE: *Using the headlights for extended periods while the engine is either off or idling will discharge the battery.*

ROLL-OVER PROTECTIVE STRUCTURE AND SEAT BELTS

The vehicle is equipped with a Roll-Over Protective Structure (ROPS) and seat belts for each occupant. **See following WARNING.**

⚠ WARNING

- **The ROPS must be properly installed before operating the vehicle. Husqvarna strongly urges that the vehicle's occupants be properly restrained at all times with the seat belts provided.**

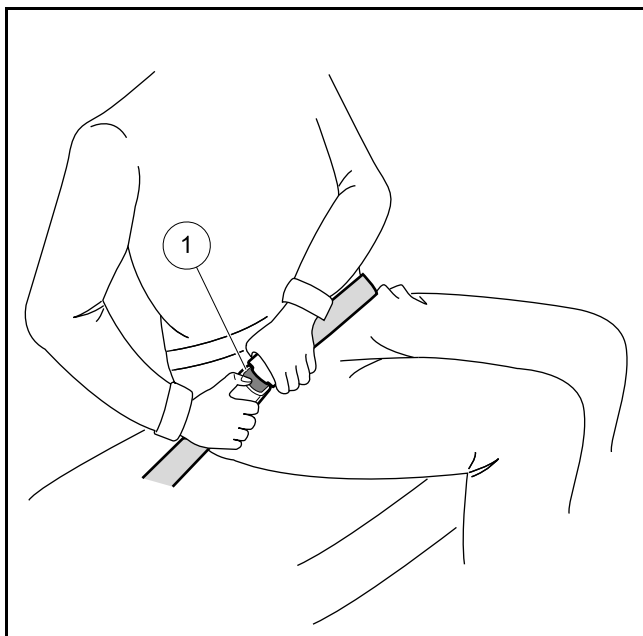
Pregnant woman: Consult your doctor for specific recommendations. The seat belt should be worn securely and as low as possible over the hips and not on the waist.

Injured person: Depending on the injury, first check with your doctor for specific recommendations.

To secure the seat belt, sit up straight and well back in the seat. Pull the seat belt out of the retractor and insert the tab into the buckle. A click will be heard when the tab locks into the buckle. Position the lap belt as low as possible on the hips – not on the waist.

The retractor will lock the belt during a sudden stop. A slow, easy motion will allow the belt to extend, and the occupant can move freely. If the seat belt cannot be pulled out of the retractor, firmly pull the belt and release it. It should then pull smoothly out of the retractor.

To release the seat belt, press the buckle release button (1) and allow the belt to retract (**Figure 7**). If the belt does not retract smoothly, pull it out and check for kinks or twists. Then make sure it remains free of twists as it retracts.



827

Figure 7 Release Seat Belt

⚠ WARNING

- **Do not operate the vehicle with the ROPS removed. Doing so could result in property damage, personal injury, or death.**
- **Do not remove or modify any component of the ROPS structure. Doing so will result in voiding the ROPS certification and could weaken the ROPS, resulting in serious injury or death.**

WARNING CONTINUED ON NEXT PAGE

WARNING

- Do not operate the vehicle if the ROPS is damaged. If the ROPS is damaged, replace the structure. Do not attempt repair.
- The driver and passenger must be restrained at all times with the seat belts provided to help prevent injury in the event of sudden braking, collision, or roll-over.
- In the event of a roll-over, do not attempt to jump or otherwise exit the vehicle. Remain seated with seat belt fastened and with arms and legs inside the vehicle.
- After inserting the tab, make sure the tab and buckle are locked and that the belt is not twisted.
- Loose fitting seat belts could increase the chance of injury due to sliding under the belt if sudden braking should occur. Keep the seat belt snug and positioned as low on the hip bone as possible.
- Use a single seat belt for one person at a time. Do not use a single seat belt for two or more people – this includes children.
- No more than two persons per bench seat at one time. Do not allow people to ride in any part of the vehicle that is not equipped with a seat and a seat belt. Do not allow a passenger to hold a child in his or her lap while the vehicle is moving.
- This vehicle is not designed to meet child seat compatibility requirements. Children requiring a child safety seat must not ride on the vehicle. Comply with state and local laws pertaining to child safety.

CAUTION

- Be careful not to damage the seat belt webbing or hardware.
- Inspect the seat belt system periodically. Check for cuts, fraying, and loose parts. Damaged parts should be replaced immediately. Do not disassemble or modify the system.
- Keep seat belts clean and dry. If cleaning is necessary, use a mild soap and lukewarm water solution. Do not use bleach, dye or abrasive cleaners as they may severely weaken the seat belts.
- Do not insert coins, clip, etc. in the buckle as this may prevent the tab from locking into the buckle properly.
- If the seat belt does not function normally, contact your dealer/distributor or trained technician immediately. Do not occupy the seat until the seat belt is repaired.

SEAT LATCH AND ADJUSTMENT

The vehicle seat(s) are hinged to allow easy access to the engine compartment. To raise the seat bottom, grasp the rear side of the seat bottom, and pull firmly in a forward/upward direction. **See following WARNING.**

WARNING

- Make sure seat hinges and latches are securely engaged before operating the vehicle.

PRE-OPERATION AND DAILY SAFETY CHECKLIST

Each vehicle has been thoroughly inspected and adjusted at the factory; however, upon receiving your new vehicle(s), you should become familiar with the controls, indicators, and operation. Carefully inspect each vehicle to ensure that it is in proper working condition before accepting delivery.

Use the following list as a guide to inspect the vehicle. This list should be used daily and in conjunction with the Performance Inspection on page 20 and the Periodic Service Schedule on page 31 to ensure that the vehicle is in proper working condition. Any problems should be corrected by a dealer/distributor or a trained technician.

- **General:** All the parts should be in place and properly installed. Be sure that all nuts, bolts, and screws are tight. Check hose clamps for tight fit.
- **Safety and information decals:** Check to ensure that all safety and information decals are in place and can be read easily. **See Safety Decal and Feature Identification on page 5.**
- **ROPS:** Check to ensure the ROPS is not damaged and all hardware is secure. **See Roll-Over Protective Structure and Seat Belts on page 18.**
- **Seat belts:** Visually inspect for cuts, fraying, and loose parts. **See Roll-Over Protective Structure and Seat Belts on page 18.**
- **Tires:** Check for proper tire pressure. Visually inspect tires for wear, damage, and proper inflation on a daily basis. **See Vehicle Specifications on page 48.**
- **Battery:** Check electrolyte to ensure it is at the proper level (**Figure 30**). Check battery posts. Wires should be tight and free of corrosion, and battery should be fully charged.
- **Engine:** Check for proper engine oil and coolant levels and leaks. **See Engine Oil on page 35.** Check air filter and replace if necessary.
- **Fuel:** Check fuel level. **See Fueling Instructions on page 43.** Check fuel tank, lines, fuel cap, pump, and fuel filters for fuel leakage.
- **Exhaust system:** Check for leaks.
- **Hydraulic brakes:** Check fluid level. Fill with DOT 5 brake fluid only. **See Brake Fluid Reservoir on page 34.** Wear in the brakes before initial vehicle operation. On a flat, open surface, accelerate the vehicle to moderate speed, then apply the brakes under modest, steady pressure. Repeat this procedure five times. **See following NOTE.**

NOTE: Perform the wear-in procedure when the vehicle has been in operation for less than a week, or when the brake pads or rotor have been replaced.

- **Performance Inspection:** Inspect as instructed. **See Performance Inspection on page 20.**

PERFORMANCE INSPECTION

After you have familiarized yourself with the vehicle controls and have read and understood the driving instructions, take the vehicle for a test drive.

Use the following list, in addition to the Pre-Operation and Daily Safety Checklist on page 20, as a guide to inspect the vehicle daily for proper operation. Any problems should be corrected by a dealer/distributor or a trained technician.

- **Forward/Reverse Control:** Check for proper operation. **See Controls and Indicators on page 13.**
- **Brakes:** Be sure the brakes function properly. When brake pedal is fully pressed under moderate pressure, the vehicle should come to a smooth, straight stop. If the vehicle swerves or fails to stop, have the brake system checked and serviced as required. When the brake pedal is fully pressed under heavy pressure, the pedal should feel firm and the distance between the back of the pedal and the floorboard should be a minimum of 1.25 inches (3.2 cm). Brakes must be maintained so the brake pedal cannot be pressed to the floorboard under any circumstance.

- **Park brake:** When latched, the park brake should lock the wheels and hold the vehicle stationary on an incline of 20% or less. To adjust park brake, remove rubber handle cover (**Figure 6**) and turn slotted adjustment screw one revolution at a time, checking each time until park brake locks wheels and holds the vehicle stationary on an incline of 20% or less.
- **Reverse buzzer:** If equipped with a reverse buzzer, the reverse buzzer should sound as a warning when the Forward/Reverse handle is in the REVERSE position.
- **Steering:** The vehicle should be easy to steer and should not have any play in the steering wheel.
- **Accelerator:** After starting the engine with the key switch and placing the Forward/Reverse handle in the FORWARD position, the vehicle should accelerate smoothly to full speed as the accelerator pedal is pressed. When the pedal is released it should return to the original position, and the engine should idle. This vehicle operates at a reduced speed in reverse.
- **Governor:** Check maximum vehicle speed. The vehicle should operate in forward at a maximum speed of 25 mph (40 km/h) on a level surface.
- **Differential Lock Control:** Check for proper operation. **See Controls and Indicators on page 13.**
- **Front Axle Disconnect Control:** Check for proper operation. **See Controls and Indicators on page 13.**
- **General:** Listen for any unusual noises such as squeaks or rattles. Check the vehicle's ride and performance. Have a dealer or a trained technician investigate anything unusual.

DRIVING INSTRUCTIONS

WARNING

- Only licensed drivers should be allowed to drive the vehicle.
- Before allowing anyone to drive the vehicle, make sure the driver is familiar with all controls and operating procedures.
- No one under the age of 16 years should be allowed to drive the vehicle.
- No more than two persons per bench seat at one time. Do not allow people to ride in any part of the vehicle that is not equipped with a seat and a safety belt. Do not allow a passenger to hold a child in his or her lap while the vehicle is moving.
- Do not allow riders in the cargo bed.
- For night use, the vehicle must be equipped with headlights, taillights, and reflectors.
- The vehicle is not specially equipped for handicapped persons:
 - Be sure all passengers are capable of securing themselves in a moving vehicle before allowing them to ride in one.
 - Be sure all persons can properly operate the vehicle prior to allowing them to drive the vehicle.
- Stop the vehicle before shifting the Forward/Reverse handle. Engine must be at idle before shifting the Forward/Reverse handle. Failure to do so may result in injury to inattentive passengers and (or) damage to the vehicle.
- To help avoid being struck, do not stand in front of or behind the vehicle.
- Do not leave children unattended on vehicle.
- Children requiring a child safety seat must not ride on the vehicle. Comply with state and local laws pertaining to child safety.
- Operate the vehicle from the driver seat only.

WARNING CONTINUED ON NEXT PAGE

▲ WARNING

- To help prevent falls from the vehicle, remain seated with seat belt fastened and hold on to hand holds at all times. Driver should keep both hands on the steering wheel when the vehicle is in motion.
- To help prevent the possibility of serious injury, keep entire body inside the vehicle.
- To help prevent overturning the vehicle, drive slowly in turns.
- To help prevent overturning the vehicle, drive slowly straight up and down slopes. Avoid driving the vehicle on slopes exceeding 20% incline.
- Avoid stopping a loaded vehicle on a hill. If a loaded vehicle must be stopped on a hill, avoid sudden starts or rolling backwards and stopping suddenly. Failure to heed this warning could result in overturning the vehicle.
- To help avoid possible injury to inattentive passengers and (or) damage to the vehicle, avoid sudden starts, sudden stops, and abrupt turns.
- To help avoid the possibility of losing control of or overturning the vehicle, reduce speed for adverse driving conditions such as wet grass or rough terrain.
- Do not use the vehicle on public roads. It is neither designed nor intended for street use and should not be licensed for use on public roads.
- The vehicle should be driven in only specified areas by trained drivers.
- Do not drive while under the influence of alcohol, drugs, or medications.
- Use brakes to reduce speed when coasting downhill.
- Never attempt jumps.
- Keep away from drop-offs, steep slopes, and unstable surfaces.
- Avoid extremely hard braking in reverse.

No one should drive the vehicle without first being instructed in the proper operation and use of vehicle controls. An experienced operator should accompany each first-time driver on a test drive before allowing the driver to operate the vehicle alone.

To ensure safe operation of the vehicle, follow exactly and in order all of the following procedures. Read and understand all instructions before driving the vehicle.

STARTING THE VEHICLE

1. Read safety warnings on the instrument panel and vehicle loading information located in the cargo bed.
2. Be sure load, if any, is secure.
3. Study and understand all controls.
4. Be sure all passengers are seated with their seat belts fastened and are holding on to hand holds. Driver should have both hands on the steering wheel.
5. Make sure wheels are turned in desired direction and nothing is in your path.
6. Make sure the Forward/Reverse handle is in the NEUTRAL position.
7. Press and hold the brake pedal.

NOTE: *If the air temperature is below 65°F, the choke will be required. At air temperatures above 65°F, it may not be necessary to use the choke to start the engine.*

8. **Start the vehicle:** Turn the key to the START position and hold it there until the engine starts. Activate the choke as necessary. If the engine does not start after 10-15 seconds, release the key and repeat the procedure. Once the engine starts, release the key and it will return to the ON position. The engine will idle in neutral.
9. Release the park brake.
10. Keep the brake pedal engaged, and select direction of travel by placing the shift handle in the desired position (**Figure 5, Page 14**). The engine must be at idle before the shift handle is moved.

11. Release the brake pedal completely, and then slowly press the accelerator pedal. As the accelerator pedal is pressed, the vehicle will begin to move. Vehicle speed will increase as the accelerator is pressed until full speed is reached. **See following WARNING.**

WARNING

- Operator must control vehicle speed when going downhill.
- Never shift the vehicle out of the FORWARD position while going downhill. If you do, you will not be able to shift into the REVERSE position or back into the FORWARD position until stopped.
- Press the brake pedal as necessary and press the accelerator pedal partially when descending a hill. With the accelerator pedal partially pressed, the governor will cause the engine to assist the brakes in controlling downhill speed.

DRIVE TRAIN OPERATION

The 4X2 vehicle features a drive train with a locking rear differential. The 4X4 vehicle also features an open front differential. In normal operation, the rear differential drives the two wheels at varying speeds as required. Under conditions with low traction, the differential lock may be engaged allowing both wheels to become locked and drive at the same speed. On the 4x4 vehicle, the front differential may also be engaged to provide additional traction in slippery conditions. **See following WARNING.**

WARNING

- When servicing the vehicle with part of the vehicle on jack stands, do not operate the engine with the Forward/Reverse handle in either the FORWARD or REVERSE position. The four-wheel drive system may engage any wheel(s), front or rear, depending on the mode selected. See (Figure 3).
- The diameter of all tires on the vehicle must be equal; otherwise the four-wheel drive system will not operate as intended and could result in severe personal injury or death. Never install tires of different diameters on the vehicle.
- Reduced steering control can occur when the front differential is locked.

STOPPING THE VEHICLE

To stop the vehicle, release the accelerator pedal and press the brake pedal until the vehicle comes to a complete stop. **See following WARNING and CAUTION.**

WARNING

- Driving through water may affect the brakes. After driving through water, check effectiveness of the brakes by gently pressing the brake pedal. If the vehicle does not slow down at the normal rate, continue to press the brake pedal until the brakes dry out and normal performance returns.

CAUTION

- When stopped on a hill, use the brake pedal to hold your position. Do not use the accelerator pedal to hold position.

PARKING AND LEAVING THE VEHICLE

1. After stopping the vehicle, firmly set the park brake. Make sure it is fully engaged. This will prevent the vehicle from rolling.
2. Turn the key switch to the OFF position, remove the key, and place the Forward/Reverse handle in the NEUTRAL position.

BED LATCH

See General Warnings on page 10.

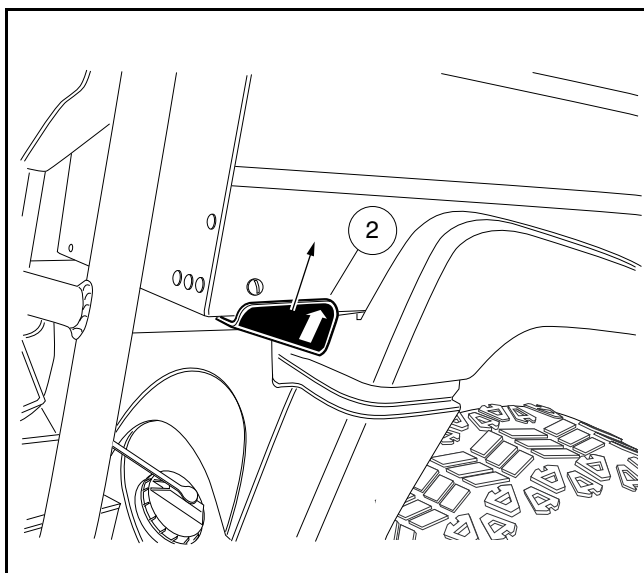
The bed latch (2) is located below the front lower corner of cargo bed on the driver's side (**Figure 8**). To lift the bed, pull the bed latch handle upward to unlatch and lift the bed. Raise the bed to the full up position. To close the bed, gently lower the bed until the latch engages and secures the bed in the down, locked position. DO NOT drop the bed. See following **DANGER** and **WARNING**.

▲ DANGER

- Use caution when working under bed. Be sure cargo bed is secure. Otherwise the bed will fall, resulting in severe personal injury or death.

▲ WARNING

- Remove all cargo before raising the bed or servicing the vehicle. Ensure that cargo bed is secure in the full upright position. Do not close bed until all persons are clear of cargo bed area. Keep hands clear of all crush areas. Do not drop cargo bed; lower gently and keep entire body clear. Failure to heed this warning could result in severe personal injury or death.



799

Figure 8 Bed Latch

BED LOCKING PIN

See General Warnings on page 10.

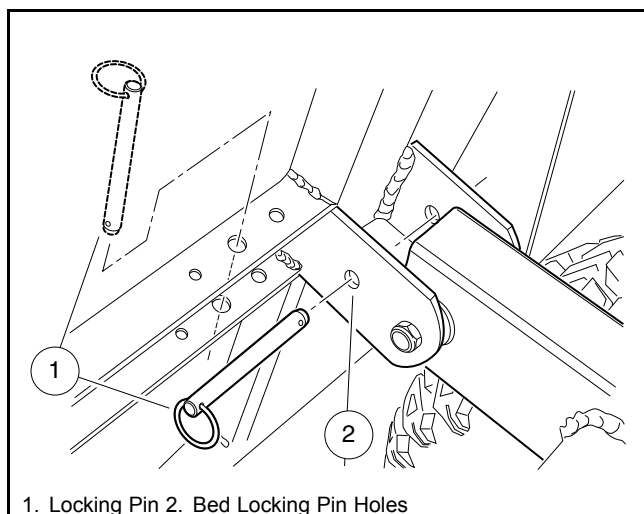
While holding the bed in the fully raised position, remove the bed locking pin from its stowed position under the bed and insert it into the bed locking pin holes in the bed hinge plates (**Figure 9, Page 25**). Prior to lowering the bed, remove the bed locking pin from the bed locking pin holes in the bed hinge plates and return it to its stowed position under the bed. See following **DANGER** and **WARNING**.

▲ DANGER

- Use caution when working under bed. Be sure bed is secured with locking pin. Otherwise the bed could fall, resulting in severe personal injury or death.

▲ WARNING

- For vehicles with cargo beds, remove all cargo before raising the bed or servicing the vehicle. If the vehicle is equipped with a locking pin, ensure that it is securely installed. Do not lower bed until all persons are clear of cargo bed area. Keep hands clear of all crush areas. Do not drop cargo bed; lower gently and keep entire body clear. Failure to heed this warning could result in severe personal injury or death.



k-00221

Figure 9 Bed Locking Pin

REAR SHOCK ABSORBERS

The vehicle arrives from the factory with the rear coil-over shocks pre-adjusted for optimum vehicle performance.

CAUTION

- Do not adjust the rear shock absorbers. Damage to the shock absorbers could result.

LOADING AND UNLOADING CARGO

⚠ WARNING

- Engage park brake before loading vehicle.
- Do not allow riders in the cargo bed.
- Reduce vehicle load and speed when driving up or down slopes or on uneven terrain.
- Do not exceed rated vehicle capacity. Rated capacity is for level surfaces only.
- Overloading can affect vehicle handling or cause component failure, resulting in loss of control of vehicle and possible severe personal injury or death.
- Do not load tailgate. The tailgate should be in the upright position and latched securely while the vehicle is in motion.
- To help avoid shifting vehicle load and possibly overturning the vehicle, avoid sudden starts, sudden stops and abrupt turns. Make sure cargo is well secured.
- Avoid top-heavy loads. The center of gravity of load should never exceed 15 inches (38 cm) above the bottom of the cargo bed.
- The cargo's center of gravity may affect handling, steering, and braking of the vehicle. When the vehicle is loaded, reduce speed and drive slowly in turns.
- Unload cargo bed before raising vehicle with a lift, hoist, or jack.
- Avoid stopping on a hill when loaded. If you must stop on a hill, avoid sudden starts, or rolling backwards and stopping suddenly. Failure to heed this warning may cause vehicle to overturn, possibly resulting in severe personal injury.
- Reduce speed and avoid sudden stops when backing up. Failure to do so may cause the vehicle to overturn or flip over backwards.
- Maximum cargo load must be reduced by the weight of optional equipment.

Center and secure cargo as far forward as possible in the cargo bed. Do not overload the vehicle. See **Vehicle Load Capacities** on page 26 for vehicle capacities.

VEHICLE LOAD CAPACITIES

Maximum Occupant Capacity

The maximum occupant capacity is the maximum allowable weight for occupants (operator and passengers) to operate the vehicle safely.

Gross Trailer Weight

Gross trailer weight is the combination of the trailer weight and the trailer load weight.

Maximum Payload Capacity

The maximum payload capacity is the maximum amount of load that the vehicle can haul in the front cargo compartment and cargo bed and/or tow in a trailer. The combined weight of the front cargo compartment, bed load and gross trailer weight cannot exceed the vehicle's stated maximum payload capacity.

Vehicle Rated Capacity

The vehicle rated capacity is the maximum amount of weight the vehicle can carry, haul, and tow. This capacity includes weight of occupants, front cargo compartment, bed load, and gross trailer weight.

Maximum Gross Vehicle Weight

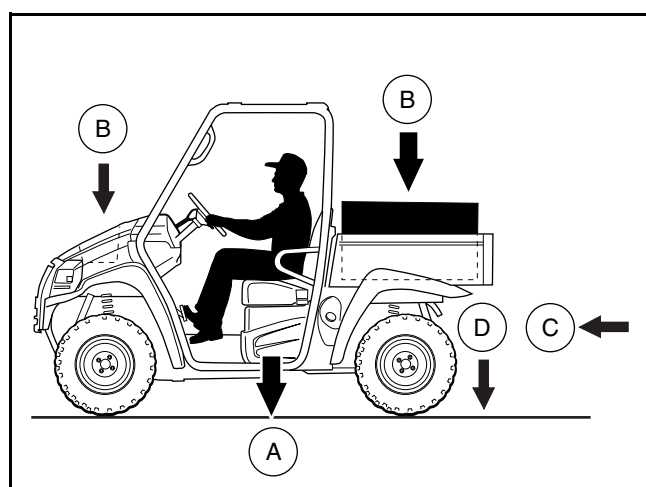
The maximum gross vehicle weight is the combination of the vehicle weight and the maximum vehicle capacity. The stated maximum gross vehicle weight must not be exceeded to maintain safe vehicle operation.

Maximum payload capacity must be reduced accordingly when any option or accessory is installed on the vehicle. See **following NOTE**.

NOTE: A standard vehicle with a cab accessory that weighs 235 lb. (107 kg) must reduce its maximum payload capacity by 235 lb. (107 kg).

Refer to Figure 10 for the following specifications.

	HUV 4214	HUV 4414
A: Maximum occupant capacity	500 lb. (227 kg)	500 lb. (227 kg)
B: Maximum cargo capacity [front cargo compartment (25 lb.) + cargo bed (400 lb.)]	425 lb. (193 kg)	425 lb. (193 kg)
B + C: Maximum payload capacity	425 lb. (193 kg)	425 lb. (193 kg)
D: Trailer tongue weight	150 lb. force (667 N)	150 lb. force (667 N)
A + B + C: Maximum vehicle capacity	925 lb. (420 kg)	925 lb. (420 kg)
A + B + C + Vehicle Weight: Maximum gross vehicle weight	2135 lb. (968 kg)	2135 lb. (968 kg)



822

Figure 10 Vehicle Load Capacity

TOWING WITH THE VEHICLE

⚠ WARNING

- Do not tow a vehicle or trailer on public streets or highways.
- Normal vehicle operating speed should be reduced when towing.
- Extreme caution should be used when towing.
- Do not allow riders in the vehicle or trailer being towed.
- Avoid sudden starts, sudden stops, and tight turns when towing.
- Avoid stopping on a hill when towing. If you must stop on a hill, avoid sudden starts, or rolling backwards and stopping suddenly. Failure to heed this warning may cause vehicle to overturn, possibly resulting in severe personal injury.

Towing another vehicle or a trailer can have adverse effects on vehicle handling. Be especially cautious when towing other equipment with this vehicle. **See Vehicle Load Capacities on page 26 for vehicle capacity information.**

Parking the vehicle with a trailer on a hill should be avoided. If you must park on a hill, apply the brakes and have someone chock the trailer tires. The brakes should be released to allow the chocks to absorb the trailer load. After the trailer tires have been chocked, engage the park brake.

TRANSPORTING ON A TRAILER

WARNING

- Turn fuel shut-off valve to the closed (OFF) position (Figure 11).
- Do not allow riders in the trailer being towed.
- Avoid sudden starts, sudden stops, and tight turns when towing.
- Avoid stopping on a hill when towing. If you must stop on a hill, avoid sudden starts, or rolling backwards and stopping suddenly. Failure to heed this warning could cause the vehicle to overturn, possibly resulting in severe personal injury.
- Reduce normal driving speed when transporting a vehicle on a trailer.
- For use on public roads, the trailer must meet all federal, state, and local requirements such as taillights, brake lights, etc.
- Never tow a vehicle behind a passenger vehicle or truck on a public road unless it is on an approved trailer.
- The vehicle to be transported should be tied securely to the trailer, with the Forward/Reverse handle in the NEUTRAL position, the key switch in the OFF position, and the park brake firmly engaged.
- Because of the added length of the trailer, use caution when making turns.
- Do not transport the vehicle on a trailer with a load in the vehicle cargo bed.
- Remove the vehicle windshield and secure seats before transporting on a trailer.

If the vehicle must be transported over long distances or on public highways, it should be transported on an approved trailer that has an approved load rating of 2000 lb. (908 kg) per vehicle being transported. **See following NOTE.**

NOTE: A two-car trailer should be rated at 2 x 2000 lb. = 4000 lb. (2 x 908 kg = 1816 kg).

STORAGE

See General Warnings on page 10.

DANGER

- Never attempt to drain gasoline when the engine is hot or while it is running.
- Be sure to clean up any spilled gasoline before operating the vehicle.
- Store fuel in an approved fuel container only. Store in a well-ventilated area away from sparks, open flames, heaters, or heat sources.
- Keep fuel out of the reach of children.
- Do not siphon fuel from the vehicle.

WARNING

- Turn the key switch to the OFF position, remove the key, and leave the Forward/Reverse handle in the NEUTRAL position during storage. This is to prevent unintentionally starting the vehicle or a fire hazard.

WARNING CONTINUED ON NEXT PAGE

⚠ WARNING

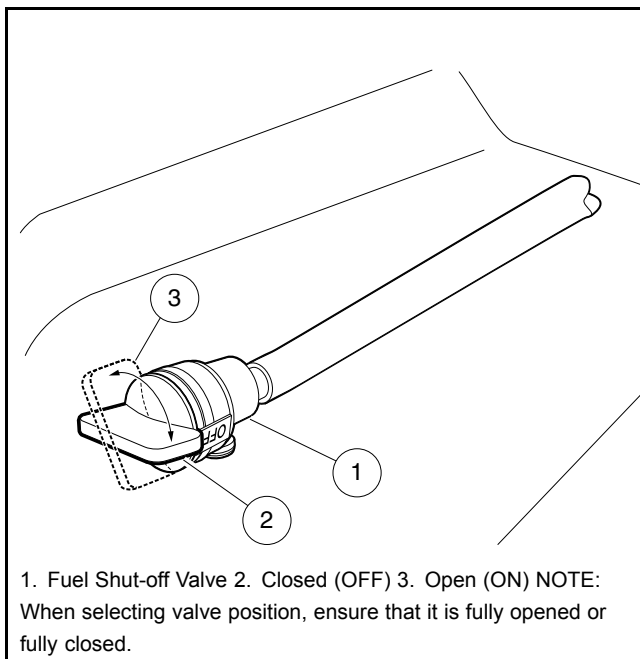
- Turn the fuel shut-off valve (1) the closed (OFF) position (Figure 11, Page 29).
- Do not attempt to charge frozen batteries or batteries with bulged cases. Discard the battery. Frozen batteries can explode.

⚠ CAUTION

- Batteries in a low state of charge will freeze at low temperatures.

PREPARING THE VEHICLE FOR EXTENDED STORAGE

1. Unload the vehicle so that the tires are supporting only the weight of the vehicle.
2. Store the vehicle in a cool, dry place. This will minimize battery self-discharge. If the battery appears to be weak, have it charged by a trained technician. Use an automotive-type 12-volt battery charger rated at 10 amps or less. Check electrolyte level after charging and add distilled water if necessary.
3. Make sure the key switch is in the OFF position and the Forward/Reverse handle is in the NEUTRAL position. Chock the wheels.
4. Prepare the fuel tank.
 - 4.1. Fill the tank with fresh fuel.
 - 4.2. Following the manufacturer's directions, add a commercially available fuel stabilizer (such as Sta-Bil®). Run the engine in a well-ventilated area to allow treated fuel to replace untreated fuel in the carburetor.
 - 4.3. Turn the fuel shut-off valve (1) to the closed (OFF) position (**Figure 11, Page 29**).



823

Figure 11 Fuel Shut-off Valve

- 4.4. Disconnect the fuel vent line from the fuel tank vent nipple.

- 4.5. Plug the fuel tank vent nipple so that it is air tight. Husqvarna recommends using a slip-on vinyl cap.
5. Remove both spark plugs, and pour 1/2 ounce (14.2 mL) of SAE 10 weight oil through each of the two spark plug holes. Rotate the engine crankshaft by hand several times, then install both spark plugs.
6. Change engine oil. **See Engine Oil and Filter Change on page 36.**
7. Disconnect the battery cables, negative (–) cable first. **See WARNING “To avoid unintentionally starting...” in General Warnings on page 10.**
8. The battery should be clean and free of corrosion. Wash the battery top and terminals with a solution of baking soda and water (1 cup (237 mL) baking soda per 1 gallon (3.8 L) of water). Rinse the solution off the battery. Do not allow this solution to enter the battery. Be sure the terminals are tight. Let the terminals dry and then coat them with Battery Terminal Protector Spray (P/N 603 00 00-03).
9. Adjust the tires to the recommended tire pressure. **See Vehicle Specifications on page 48.**
10. Perform semiannual periodic lubrication. **See Periodic Lubrication Schedule on page 33.**
11. Thoroughly clean the front body, rear body, seats, cargo bed, engine compartment, and underside of vehicle.
12. Do not engage the park brake. Chock the wheels to prevent the vehicle from rolling.

RETURNING THE STORED VEHICLE TO SERVICE

1. Make sure the key switch is in the OFF position and the Forward/Reverse handle is in the NEUTRAL position. Chock the wheels.
2. Restore the fuel system to operation.
 - 2.1. Remove the plug from the fuel tank vent.
 - 2.2. Connect the vent tube to the fuel tank vent.
3. Connect the battery cables, positive (+) cable first, and tighten the terminals to 80 in-lb (9 N·m). Coat terminals with Battery Terminal Protector Spray (P/N 603 00 00-03).
4. Completely open the fuel shut-off valve (**Figure 11, Page 29**). Ensure the valve is fully open. A partially closed fuel shut-off valve combined with the use of the choke can result in a fouled spark plug and engine failure.
5. Place the Forward/Reverse handle in the NEUTRAL position. Crank the engine until fuel is pumped into the carburetor and the fuel lines and the engine starts. Turn the engine off. **See following NOTE.**

NOTE: Due to the oil added to the gasoline engine in preparation for storage, the engine may smoke excessively for a short time when it is run for the first time after storage.

6. Perform the Pre-Operation and Daily Safety Checklist and the Performance Inspection on page 20.

MAINTENANCE

See General Warnings on page 10.

Maintenance, replacement, or repair of the emissions control devices and systems may be performed by any non-road engine repair establishment or individual. However, to obtain “no charge” emissions control service, the work must be performed by a factory authorized dealer. See the Emissions Warranty.

To ensure trouble-free vehicle performance, follow an established preventive maintenance program. Regular and consistent maintenance can prevent vehicle downtime and expensive repairs. Use the Pre-Operation and Daily Safety Checklist on page 20, the Performance Inspection on page 20, and the following Periodic Service Schedule and Periodic Lubrication Schedule to keep the vehicle in proper working condition.

Any vehicle not functioning correctly should not be used until it is properly repaired. This will prevent further damage to the vehicle and help prevent injury to occupants resulting from unsafe conditions.

Contact your local dealer/distributor for repairs and semiannual and annual periodic service.

⚠ WARNING

- Only trained technicians should service or repair the vehicle. Anyone doing even simple repairs or service should have knowledge and experience in electrical and mechanical repair. The appropriate instructions must be used when performing maintenance, service, or accessory installation.
- If any problems are found during scheduled inspection or service, do not operate vehicle until repairs are made. Failure to make necessary repairs could result in fire, property damage, severe personal injury, or death.
- Do not wear loose clothing or jewelry such as rings, watches, chains, etc., when servicing the vehicle.
- Turn key switch to the OFF position, remove the key, place the Forward/Reverse handle in the NEUTRAL position and chock the wheels prior to servicing.
- Moving parts: Do not attempt to service vehicle while engine is running.
- Hot! Do not attempt to service hot engine or exhaust system. Failure to heed this warning could result in severe burns.
- For vehicles with cargo beds, remove all cargo before raising the bed or servicing the vehicle. If the vehicle is equipped with a prop rod, ensure that it is securely engaged while bed is raised. Do not close bed until all persons are clear of cargo bed area. Keep hands clear of all crush areas. Do not drop cargo bed; lower gently and keep entire body clear. Failure to heed this warning could result in severe personal injury or death.
- Do not work on vehicle powertrain or under cargo bed when it is loaded.
- Turn fuel shut-off valve to the closed (OFF) position (Figure 11).
- To avoid unintentionally starting the vehicle:
 - Disconnect battery cables, negative (–) cable first (Figure 2).
 - Gasoline vehicles only: Disconnect the spark plug wires from the spark plugs.
- If wires are removed or replaced make sure wiring and wire harness are properly routed and secured. Failure to properly route and secure wiring could result in vehicle malfunction, property damage, personal injury, or death.
- Lift only one end of the vehicle at a time. Use a suitable lifting device (chain hoist or hydraulic floor jack) with 1000 lb. (454 kg) minimum lifting capacity. Do not use lifting device to hold vehicle in raised position. Use approved jack stands of proper weight capacity to support the vehicle and chock the wheels that remain on the floor.
- When servicing the vehicle with part of the vehicle on jack stands, do not operate the engine with the Forward/Reverse handle in either the FORWARD or REVERSE position. The four-wheel drive system may engage any wheel(s), front or rear, depending on the mode selected. See Figure 3.

PERIODIC SERVICE SCHEDULE

See General Warnings on page 10.

⚠ WARNING

- Service, repairs, and adjustments must be made per instructions in the appropriate maintenance and service manual.

NOTE: *If the vehicle is constantly subjected to heavy use or severe operating conditions, the preventive maintenance procedures should be performed more often than recommended in the Periodic Service and Lubrication Schedule.*

Both the Periodic Service Schedule and the Periodic Lubrication Schedule must be followed to keep vehicle in optimum operating condition.





PERIODIC SERVICE SCHEDULE			
REGULAR INTERVAL	SERVICE		
Daily service by owner	Pre-Operation and Daily Safety Checklist	See Pre-Operation and Daily Safety Checklist on page 20.	
	Performance Inspection	See Performance Inspection on page 20.	
	Engine/exhaust area	Remove/clean grass and debris from area	
Daily service by owner or trained technician	Engine	Check engine oil level; add if necessary. See Engine Oil Level Check on page 35.	
	Brakes	Check brake fluid; add if necessary. Check brake pedal for proper operation. See Performance Inspection on page 20.	
Monthly service by owner or trained technician	Engine	Check engine circulating air passage; visually inspect unshrouded area around engine exhaust for grass and debris and clean if necessary.	
	Tires	Check air pressure and adjust if necessary. See Vehicle Specifications on page 48.	
	Transmission and differentials	Check lubricant levels. Add if necessary. See Lubrication Level Check – Front Differential and Rear Transaxle on page 40.	
	General vehicle	Wash engine compartment and underside of vehicle. Do not wash engine when hot.	
Semiannual service by trained technician only (or every 50 hours of operation, whichever comes first)	Battery	Clean terminals and wash dirt from casing; check electrolyte level. Add distilled water if necessary. See page 44.	
	Front wheel alignment and toe-in	Check and adjust if necessary. See Steering and Front Suspension Section in the appropriate maintenance and service manual.	
	Electrical wiring and connections	Check for tightness and damage.	
	Brake system		Inspect master cylinder, brake lines, and hoses for damage or leakage.
			Check park brake cables for damage; replace if necessary.
			Check brake pads and discs; replace if necessary. For brake wear-in procedure, see Hydraulic Brakes in the Pre-Operation and Daily Safety Checklist on page 20. See also Brake System in the maintenance and service manual.
Spark arrestor	Inspect spark arrestor for damage		
Engine air intake system	Clean pre-cleaner and air filter element. See Air Intake System on page 42.		

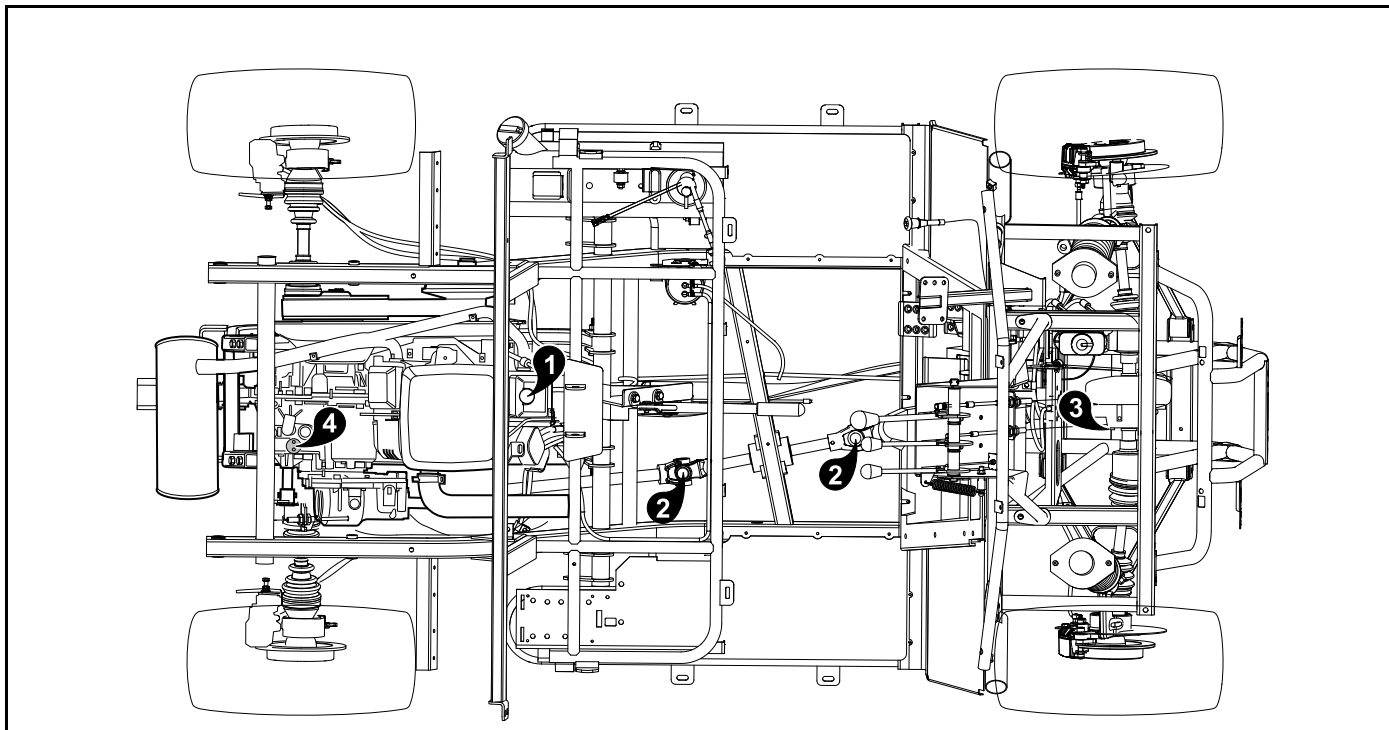
PERIODIC SERVICE SCHEDULE		
REGULAR INTERVAL	SERVICE	
Annual service by trained technician only (or every 100 hours of operation, whichever comes first)	Engine	Check for leaks around gaskets, fill plugs, etc.
		Adjust valve clearance. See Briggs and Stratton Vanguard Model 2900000 Service Manual.
		Inspect, clean, and gap spark plug; replace if necessary. See authorized dealer or trained technician for service.
	Engine air intake system	Replace air filter element. See Air Intake System on page 42.
		Check clamps for tightness; check hose for cracks.
	General vehicle	Check for loose hardware and tighten if necessary.
	Fuel filters	Replace. Dispose of used filters properly.
Clutch cover vent inlet filter (if equipped)	Replace. Dispose of used filters properly.	

⚠ WARNING

- If any problems are found during scheduled inspection or service, do not operate vehicle until repairs are made. Failure to make necessary repairs could result in fire, property damage, severe personal injury, or death.

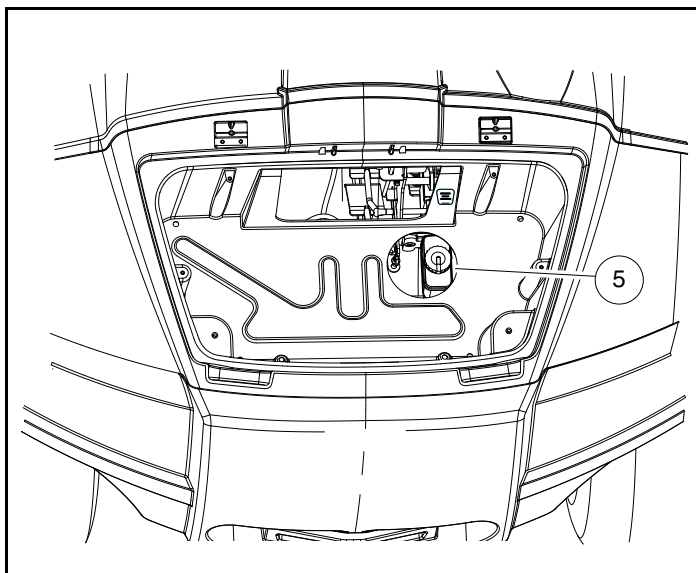
PERIODIC LUBRICATION SCHEDULE

PERIODIC LUBRICATION SCHEDULE			
REGULAR INTERVAL	SERVICE	LUBRICATION POINTS	RECOMMENDED LUBRICANT
First change 5 - 8 hours – additional change every 100 hours of operation or annually, whichever comes first	Change engine oil and oil filter		1 - 1/2 qt. (1.4L) with filter, 10W-30 API classification SJ See Oil Viscosity on page 39.
Change every 50 hours of operation or semiannually whichever comes first	Driveshafts and bearing blocks		Chassis Lube (EP NLGI Grade 2)
Change every 100-400 hours of operation or semiannually whichever comes first	Change front differential lubricant		5 oz. (170 mL) 80W90 Gear Oil
First change 50 hours – additional change every 100 hours of operation or annually, whichever comes first	Change rear transaxle lubricant		1 gal. (3.79 L) 10W-30 SF, SG, SH



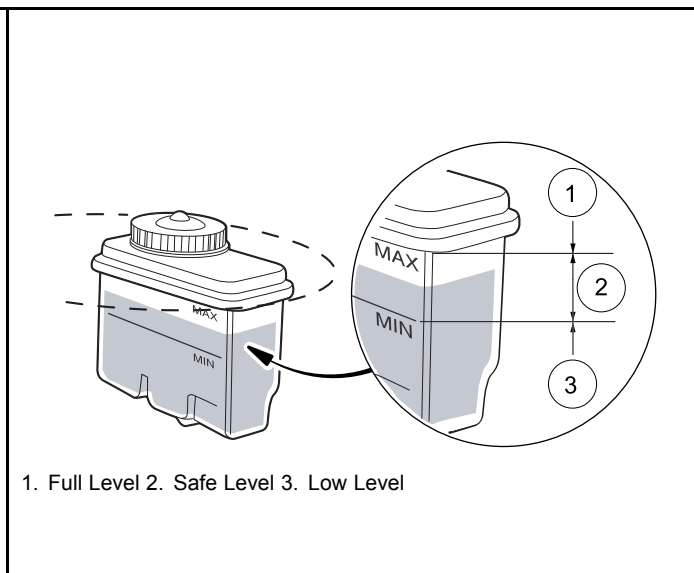
801
Figure 12 Lubrication Points

BRAKE FLUID RESERVOIR



1297

Figure 13 Brake Fluid Access



803

Figure 14 Brake Fluid Reservoir

The brake fluid reservoir (5) is located under the hood and under the round access panel (**Figure 13**). Raise the hood and remove the round access panel to check the brake fluid level.

During the brake fluid level inspection, also inspect the following:

- The presence of brake fluid on the exterior surface of the master cylinder indicates a leak.
- The brake fluid reservoir diaphragm (located in the cap) should not have holes or other damage.

BRAKE FLUID

Brake fluid level should be within 1/4-inch (6 mm) from the top of the reservoir (**Figure 14**). Also, brake fluid should be clean with no residue in the bottom of the reservoir or other evidence of contamination.

⚠ CAUTION

- Use only DOT 5 (silicone) brake fluid. Use of any other type brake fluid is not recommended.

ENGINE OIL

Even though the low oil pressure warning light on the instrument panel should illuminate if the oil level becomes low, the engine oil level should be checked daily. The vehicle should be on a level surface when the oil is checked. Do not overfill the engine with oil.

ENGINE OIL LEVEL CHECK

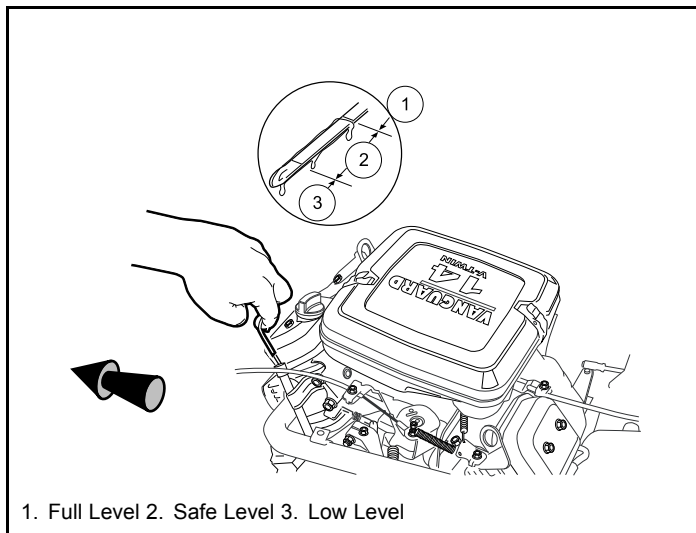
1. Remove the oil level dipstick from the oil filler tube and wipe oil from the dipstick (**Figure 15**). **See following CAUTION.**

⚠ CAUTION

- Do not remove dipstick while engine is running.
2. Check oil level by fully inserting the dipstick into the tube and immediately removing it.
 3. If the oil level is at or below the low level mark on the dipstick gauge, add oil to the engine until the level is between low and full levels (safe level). **See following CAUTION.**

CAUTION

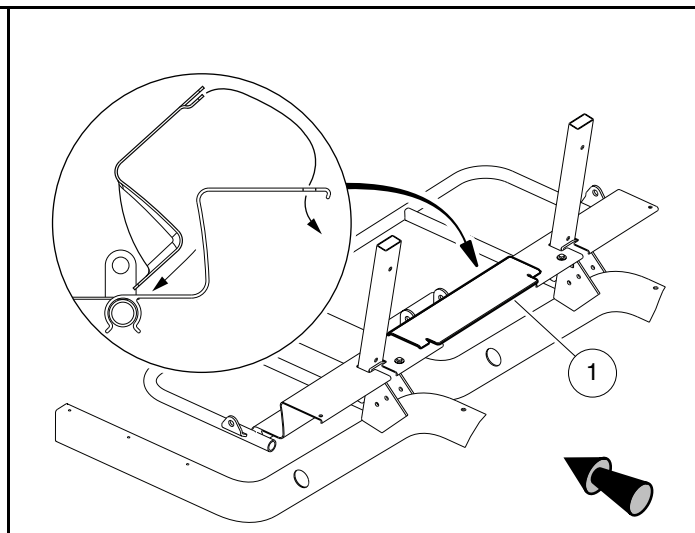
- Do not exceed recommended oil capacity. Doing so will decrease engine performance or result in damage to the engine.



1. Full Level 2. Safe Level 3. Low Level

804

Figure 15 Engine Oil Level Check



818

Figure 16 Center Access Panel

ENGINE OIL AND FILTER CHANGE

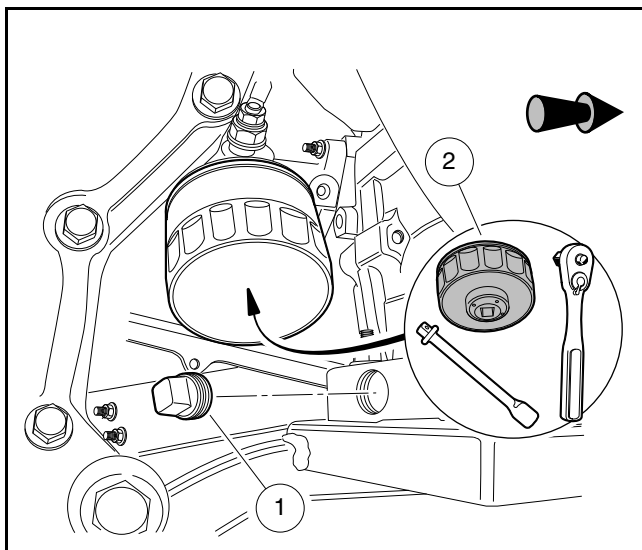
Engine oil and oil filter should be changed after the first 5 to 8 hours of operation. After that, the oil should be changed every 100 hours of operation or annually, whichever comes first.

Engine Oil Draining

1. Turn the key switch to the OFF position and remove the key. Place the Forward/Reverse handle in the NEUTRAL position. Chock the front wheels.
2. Disconnect the battery cables, negative (-) cable first. **See WARNING “To avoid unintentionally starting...” in General Warnings on page 10.**
3. Raise the cargo bed, locate and remove the center access panel (1) (Figure 16).
4. Remove the oil filler cap to allow the oil to drain properly.
5. Position a pan designed for oil changes under the drain plug.
6. From the underside of the vehicle, use a socket or wrench to remove the drain plug (1) (Figure 17). Turn the plug counterclockwise and drain the engine oil into the pan. **See following WARNING.**

⚠ WARNING

- **Do not attempt to change engine oil when the engine is hot or even warm. Hot engine oil can burn skin.**
 - **Wear safety glasses or approved eye protection when servicing the vehicle. Wear rubber gloves when handling oil drain plug, oil filter, and oil drain pan.**
7. Clean the oil drain plug threads with solvent to remove oil and oil residue. Make sure that the compression washer or sealing o-ring remains on the drain plug. Inspect the compression washer or the sealing o-ring and replace if necessary.
 8. Use a socket or wrench to replace the oil drain plug (1) (Figure 17). Turn the plug clockwise and tighten to 14.5 ft-lb (20 N·m).
 9. Replace the oil filler cap.
 10. Replace the center access panel (1) (Figure 16), then lower and latch the cargo bed.



815

Figure 17 Engine Oil Drain Plug and Oil Filter Wrench

Engine Oil Filter Change

1. Drain the engine oil. **See Engine Oil Draining on page 36.**
2. Place the oil drain pan under the engine oil filter (**Figure 18**).
3. Remove the engine oil filter. Turn it counterclockwise and drain the residual oil in the filter port and filter into the oil drain pan. **See following NOTE.**

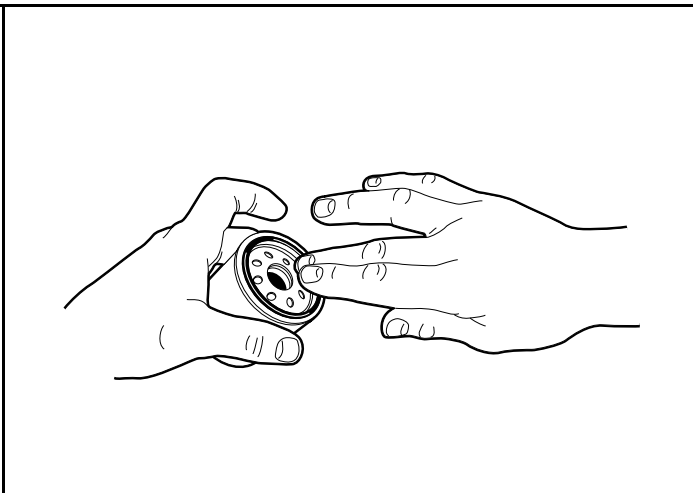
NOTE: We recommend using an oil filter wrench of the type shown (2) (**Figure 17**) (Ampro® P/N T70413785A255 or equivalent). An oil drip guard can be used to prevent excess oil from dripping onto the engine base plate (**Figure 18**). Use an empty quart (one liter) container and cut the bottom off at an angle, then slide the open area of the container up and under the oil filter before removal. Position the port of the plastic container so oil will be directed into the oil pan. A drip guard can be made by folding a piece of cardboard, thin metal, or plastic under the oil filter, forming a channel to direct the filter port oil into the drain pan.

Dispose of used oil according to the environmental laws and regulations for your area.



26

Figure 18 Remove Engine Oil Filter



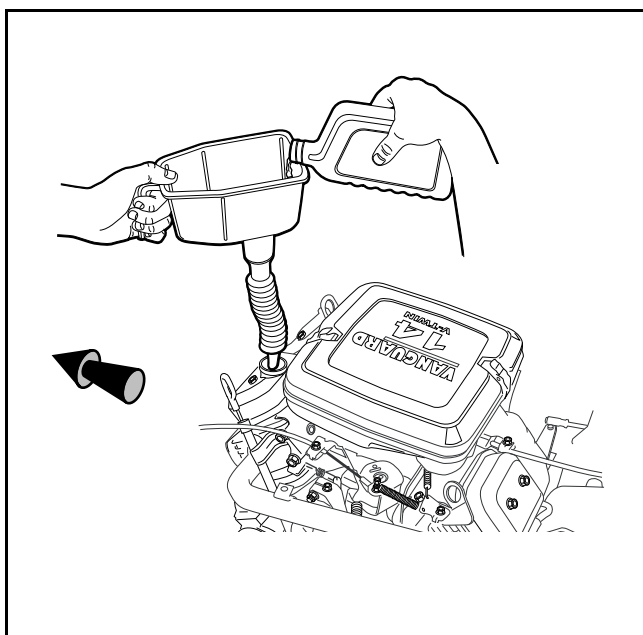
27

Figure 19 Coat Rubber Seal

4. Use a clean, lint-free rag to wipe the oil filter port flange surface clean where the oil filter gasket seats.
5. To help seal the new oil filter to the oil port flange, apply a light coat of white lithium NLGI Number 2 grease (Dow Corning® BR2-Plus or equivalent) or new engine oil to the rubber seal around the outside surface of the filter before attaching it to the oil filter port (**Figure 19**). Install the new oil filter onto the engine oil filter port. **See following NOTE.**

NOTE: Use only engine-compatible oil filters designed for your engine.

6. Tighten the oil filter by hand 2/3 turn after gasket contact. Do not use a band wrench or channel lock pliers.



806

Figure 20 Add Engine Oil

Engine Oil Filling

1. Add engine oil; use a funnel or pour spout to direct the oil into the opening (**Figure 20**). With filter change, the engine requires 1-1/2 qt. (1.4 L) of oil per change.
2. Refer to oil viscosity guidelines for selection of oil grade (**Figure 21**). See following **CAUTION**.

CAUTION

- **Do not exceed recommended oil capacity. Doing so will decrease engine performance or result in damage to the engine.**

1. Connect the battery cables, positive (+) cable first, and tighten terminals to 80 in-lb (9 N·m). Coat terminals with Battery Terminal Protector Spray (P/N 603 00 00-03).
2. With the Forward/Reverse handle in the NEUTRAL position, start and run the engine for a few minutes. Observe both the drain plug and the oil filter from under the vehicle and watch for oil leaks. If a leak is detected, check the tightness of the oil filter and drain plug. Tighten, repair, and/or replace components as necessary. See following **NOTE**.

NOTE: Wait five minutes after turning off the engine before removing the dipstick.

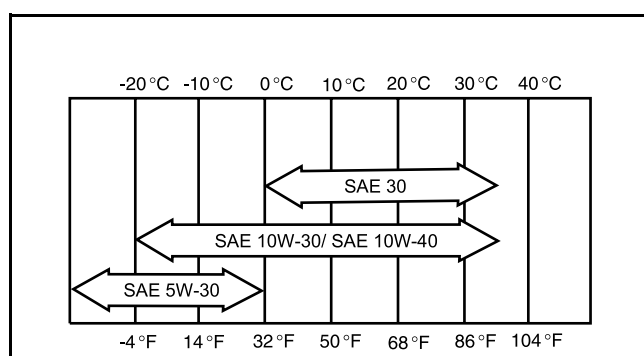
3. Remove the dipstick and check the engine oil as a final step. Replace the dipstick.

OIL VISCOSITY

Choose the viscosity according to the temperature as shown in the appropriate oil viscosity chart (**Figure 21**). See following **NOTE**.

NOTE: Use a high quality detergent engine oil with API classification SF, SG, SH, SJ or higher for gasoline engines. See **Briggs and Stratton Vanguard Model 2900000 Service Manual for further information regarding oil recommendation.**

Using multi-grade oils (5W-30, 10W-30, and 10W-40) may increase oil consumption. If multi-grade oil is used, check the oil level more frequently.



826

Figure 21 Oil Viscosity Chart

GEARCASE LUBRICATION

NOTE: Dispose of used oil according to the environmental laws and regulations for your area.

LUBRICATION LEVEL CHECK – FRONT DIFFERENTIAL AND REAR TRANSAXLE

The front differential is equipped with two oil port plugs (1 and 2) (**Figure 22**). When the vehicle is on a level surface, use the level indicator hole (upper plug) (1) as a lubricant level indicator. Lubricant level should be even with the bottom of level indicator hole (1).

The rear transaxle is equipped with a fill plug/dipstick (1) located on the top of the rear transaxle (**Figure 24**). When the vehicle is on a level surface, use the fill plug/dipstick (1) to determine the lubricant level (**Figure 25**) and (**Figure 26**).

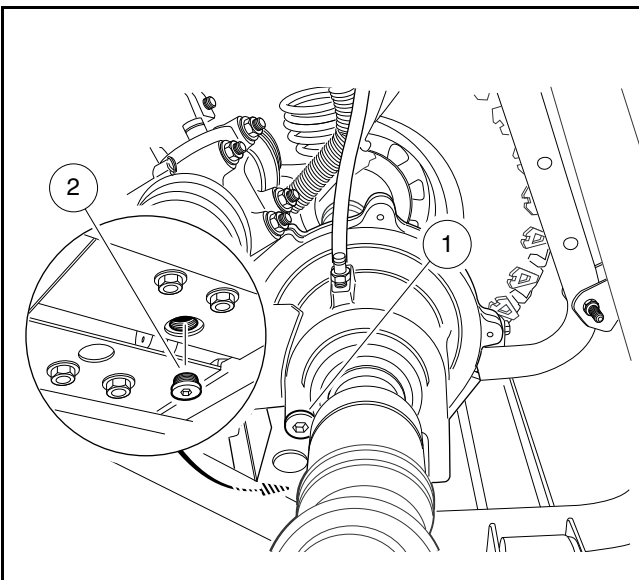
LUBRICATION CHANGE – FRONT DIFFERENTIAL AND REAR TRANSAXLE

Use the lower plug (2) for drainage (**Figure 22**) and (**Figure 23**). Remove both plugs to allow the lubricant to drain faster. **See preceding NOTE.**

Metal particles may be discovered in the fluid or on the magnetic drain plug when changing the differential or transmission fluid. These particles are normal and expected for the first few fluid changes. This is a result of the gears being “net forged,” meaning the gears are forged to a shape very close to the final gear size but the teeth are not finish machined prior to assembly. The “finish machining” occurs when the gears make contact under load during vehicle operation. The magnetic drain plug is included in the design to collect the metal particles generated from the gear break in process. This is an established process and is not detrimental to gear service life.

Front differential:

Clean and install the drain plug (2) and washer before filling the front differential with new lubricant (**Figure 22**). Tighten the drain plug to 106 in-lb (12 N·m). Use a funnel when filling the front differential through the lubricant level indicator hole (1). **See Periodic Lubrication Schedule on page 33.** Tighten the level indicator plug to 10 ft-lb (14 N·m).

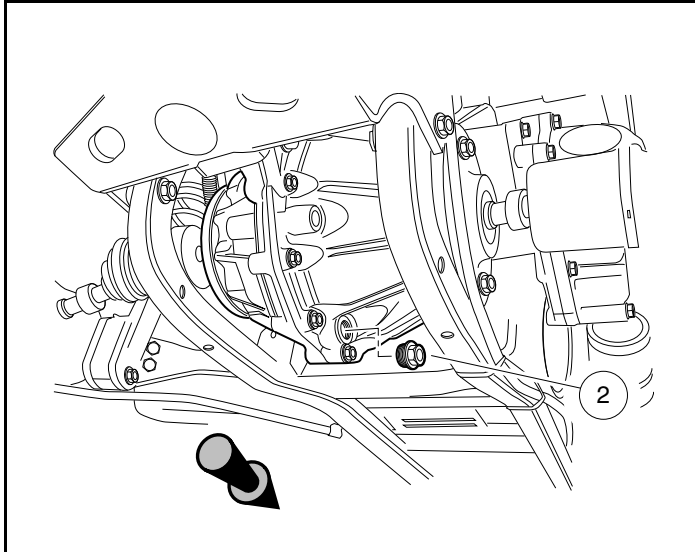


807

Figure 22 Front Differential Lubrication

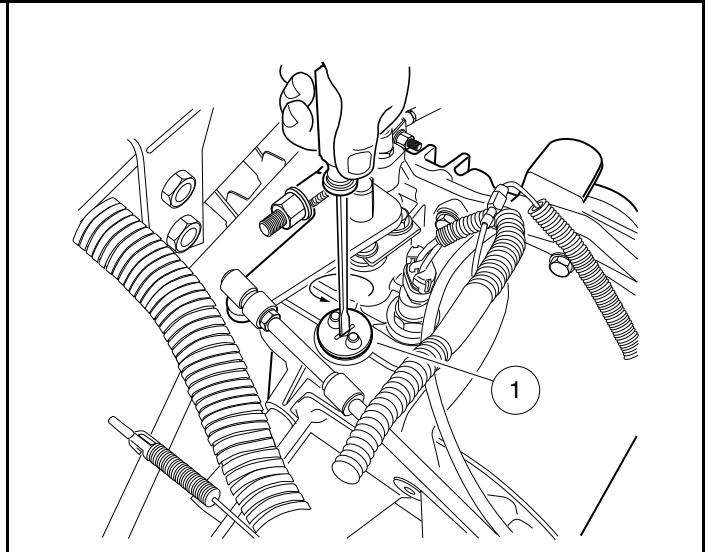
Rear transaxle:

Clean and install the drain plug (2) and washer before filling the rear transaxle with new lubricant (**Figure 23**). Tighten the drain plug to 8 ft-lb (10.8 N·m). Remove the fill plug/dipstick (2) (**Figure 25**). Use a funnel and tube to fill the transaxle through the fill plug/dipstick hole (1) located on the top of the rear transaxle (**Figure 24**). **See Periodic Lubrication Schedule on page 33.** Replace rear transaxle dipstick and tighten to 35 in-lb (4 N·m).



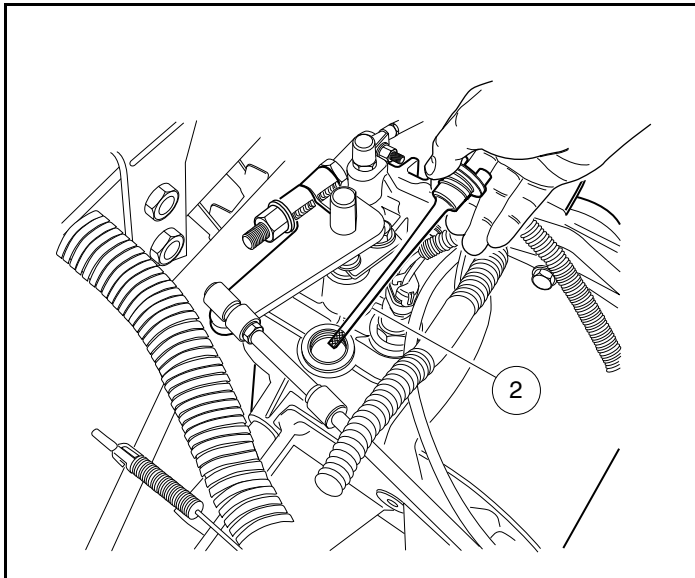
808

Figure 23 Rear Transaxle Drain Plug



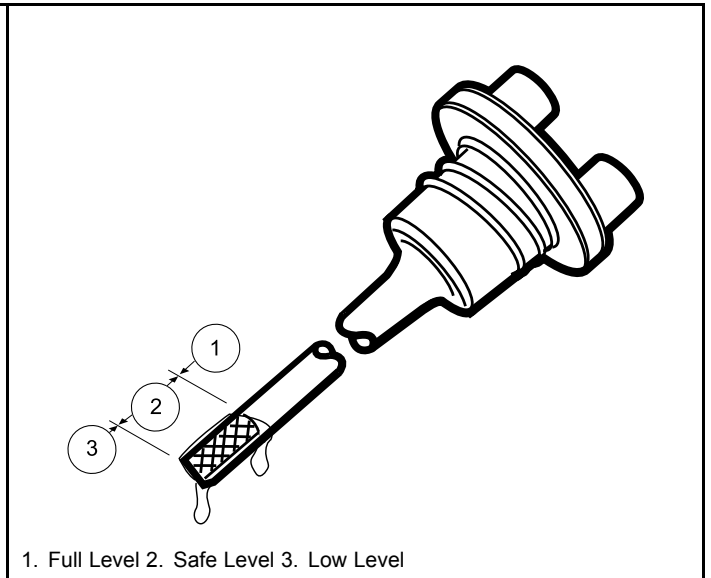
819

Figure 24 Rear Transaxle Check/Fill Plug



820

Figure 25 Rear Transaxle Dipstick



824

Figure 26 Rear Transaxle Lubricant Level Check

AIR INTAKE SYSTEM

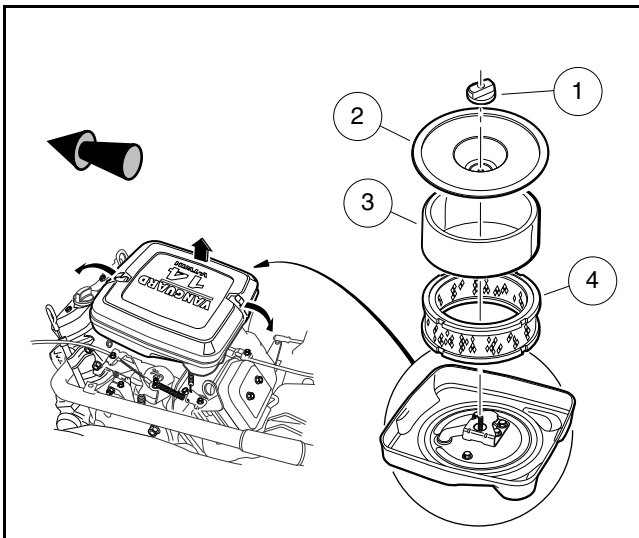
AIR FILTER REPLACEMENT

The air filter should be inspected periodically and replaced when necessary. Filter changes should not exceed the recommended interval. **See Periodic Service Schedule on page 31.** More frequent service may be required in extremely dirty operating environments. In the event of a loss of power, sluggish acceleration, or a roughly running engine, service the air filter immediately.

Air Filter Removal

1. Raise the cargo bed, remove the center plastic access panel (1) (**Figure 16**) and locate the air filter housing.
2. Release both housing retaining clips (**Figure 27**).
3. Lift the housing cover up off of the air filter housing.
4. Remove knob (1) and plate (2). Carefully remove the foam pre-cleaner (3) and air filter cartridge (4) assembly to prevent debris from entering carburetor. **See following NOTE.**

NOTE: To clean foam pre-cleaner, separate it from cartridge and wash in liquid detergent and water. Squeeze dry in a clean cloth. The air filter cartridge and foam pre-cleaner are specifically designed for this engine. Use only engine-compatible air filter cartridges and foam pre-cleaners designed for your engine. Do not oil the foam pre-cleaner.



817

Figure 27 Air Filter Element

Air Filter Installation

1. Reassemble clean (or new) pre-cleaner on clean (or new) cartridge.
2. Place the air cleaner assembly into the air filter housing.
3. Place the housing cover on the top of the air filter housing.
4. Secure the housing cover with both retaining clips.
5. Replace the center plastic access panel (1) (**Figure 16**) and lower and latch the cargo bed.

FUELING INSTRUCTIONS

See General Warnings on page 10.

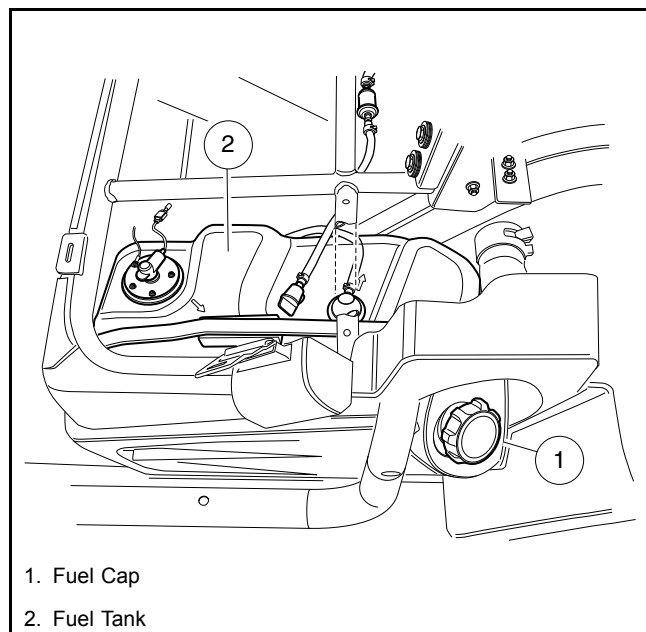
⚠ DANGER

- Turn the key switch to the OFF position before fueling.
- Do not pour fuel into the fuel tank when the engine is hot or while it is running.
- To avoid electric arc caused by static electricity, the fuel storage/pumping device must be grounded. If the pump is not grounded, the vehicle must be grounded to the pump before and during the fueling operation.
- To avoid the possibility of fire, clean up any spilled fuel before operating the vehicle.

1. Remove the fuel cap and fill the tank with fuel. See preceding DANGER and following NOTE.

NOTE: Use unleaded gasoline only. Whenever possible, avoid using oxygenated fuels and fuels that are blended with alcohol.

2. Replace the fuel cap. Ensure that the cap is tightened securely.
3. Clean any spilled fuel from the cap or around the fuel cap area.



816

Figure 28 Fuel Tank

BATTERY

See General Warnings on page 10.

⚠ DANGER

- **Battery – Explosive gases! Do not smoke. Keep sparks and flames away from the vehicle and service area. Ventilate when charging or operating vehicle in an enclosed area. Wear a full face shield and rubber gloves when working on or near batteries.**
- **Battery – Poison! Contains acid! Causes severe burns. Avoid contact with skin, eyes, or clothing. Antidotes:**
 - **External: Flush with water. Call a physician immediately.**
 - **Internal: Drink large quantities of milk or water followed with milk of magnesia or vegetable oil. Call a physician immediately.**
 - **Eyes: Flush with water for 15 minutes. Call a physician immediately.**
- **Tools, wires, and metal objects can cause sparks when shorted across a battery.**

⚠ WARNING

- **Wear safety glasses or approved eye protection when servicing the vehicle.**
- **Follow all instructions carefully when working with batteries.**
- **When jumping from a booster battery make final (negative) connection at engine frame.**
- **Do not jump start or charge a frozen or damaged battery. Unplug charger before connecting or disconnecting cables to the battery. Never lean over battery while boosting, testing, or charging.**

The battery in this vehicle is a 12-volt, low-maintenance battery that requires infrequent checks (**Figure 29**). Electrolyte level should be checked semiannually.

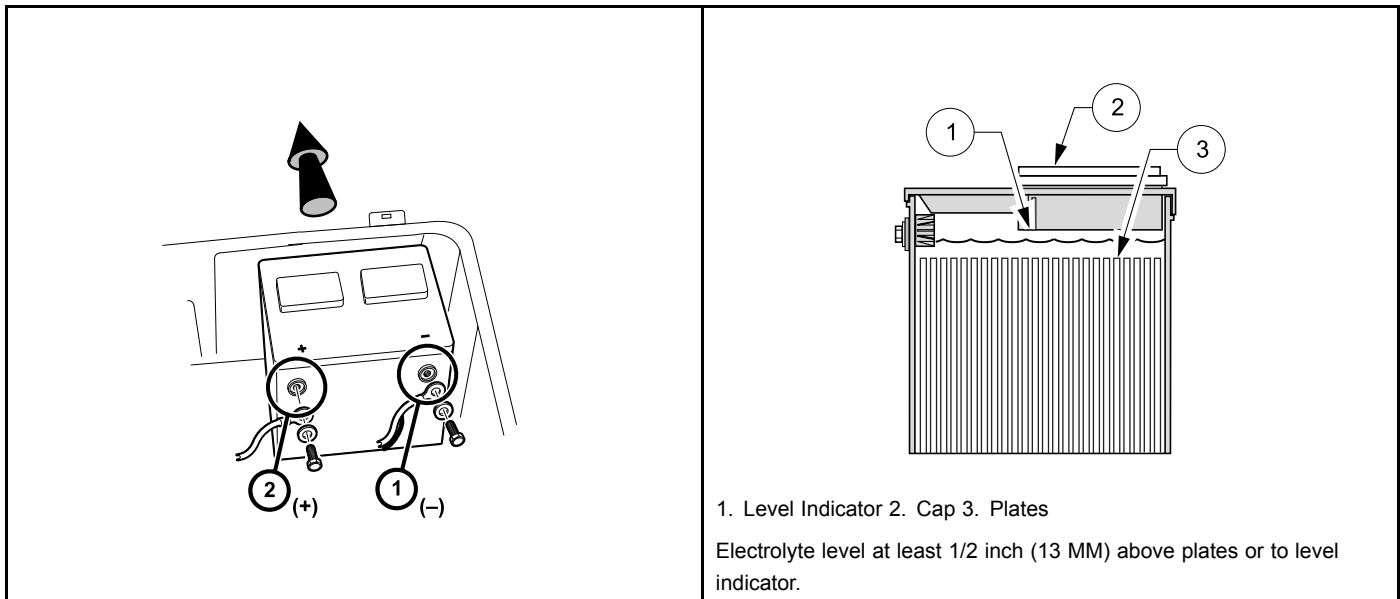


Figure 29 Battery

Figure 30 Battery Electrolyte Level

1. Turn the key switch to the OFF position and remove the key. Place the Forward/Reverse handle in the NEUTRAL position. Chock the wheels.
2. Access the engine compartment. **See WARNING “For vehicles with cargo beds...” in General Warnings on page 10.**
 - 2.1. Remove the seat bottom.
3. Disconnect the battery cables, negative (–) cable first. **See WARNING “To avoid unintentionally starting...” in General Warnings on page 10.**
4. Use a flat-blade screwdriver, and carefully remove the battery cell caps from the battery. **See following WARNING.**

⚠ WARNING

- **Wear safety glasses or approved eye protection when servicing the vehicle. Wear a full face shield and rubber gloves when working on or near batteries.**
5. Carefully check the electrolyte level and add distilled water if necessary. Do not fill the battery cells above the designated fill line. Replace battery cell caps.
 6. Clean both battery terminals with a solution of baking soda and water (1 cup (237 mL) baking soda per 1 gallon (3.8 L) of water). Rinse thoroughly. Do not allow this solution to enter the battery. Tighten battery terminals to 80 in-lb (9 N·m). Let the terminals dry and then spray them with Battery Terminal Protector Spray (P/N 603 00 00-03). **See following WARNING.**

⚠ WARNING

- **If battery wire terminals are damaged or corroded, replace or clean them as necessary. Failure to do so may cause them to overheat during operation and could result in a fire, property damage, or personal injury.**

Be sure the battery hold-down clamp is properly tightened. Tighten to 71 in-lb (8 N·m). A loose clamp may allow the battery to become damaged from vibration or jarring.

If battery appears weak, have it charged by a trained technician. The battery should never be left discharged any longer than absolutely necessary (do not leave discharged overnight).

USING A BOOSTER BATTERY (JUMP STARTING)

See General Warnings on page 10.

⚠ WARNING

- **Wear safety glasses or approved eye protection when servicing the vehicle. Wear a full face shield and rubber gloves when working on or near batteries.**
- **When jumping from a booster battery, make the final connection the negative (-) cable.**
- **Do not jump start or charge a frozen or damaged battery. Unplug charger before connecting or disconnecting cables to the battery. Never lean over battery while boosting, testing, or charging.**

If it is necessary to use a booster battery to start the engine, BE CAREFUL!

1. Turn the key switch to the OFF position. Place the Forward/Reverse handle in the NEUTRAL position, engage the park brake and chock the wheels.
2. Ensure the booster battery is 12-volt. **See following NOTE.**

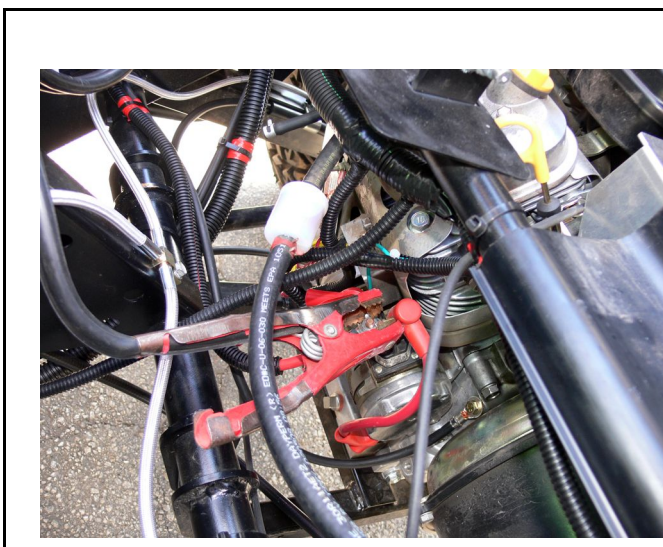
NOTE: A starting battery is recommended but a deep cycle battery can be used if necessary.

3. Access battery by removing the seat bottom.

4. Locate the vehicle battery on the passenger side of the vehicle.
5. Connect the end of the first cable to the positive (+) terminal of the booster battery. Connect the other end of the same cable to the positive (+) terminal of the solenoid (**Figure 31, Page 46**). See following **DANGER**.

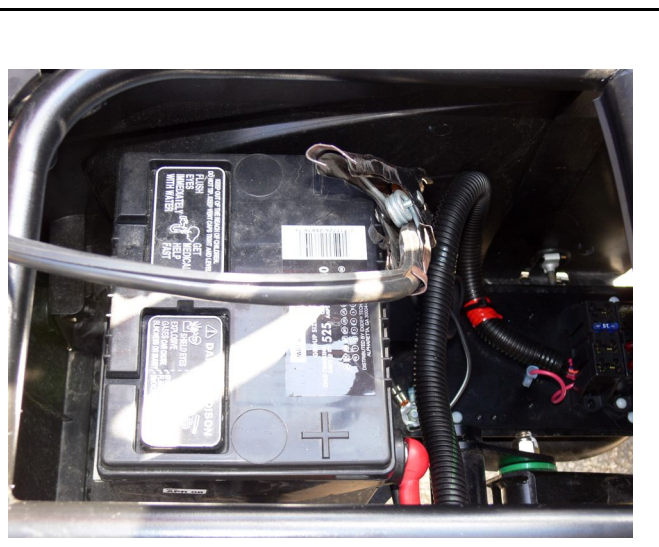
⚠ DANGER

- **Battery – Explosive gases! Do not smoke. Keep sparks and flames away from the vehicle and service area. Ventilate when charging or operating vehicle in an enclosed area. Wear a full face shield and rubber gloves when working on or near batteries.**
6. Connect the end of the second cable to the negative (-) terminal of the booster battery. Connect the other end of the same cable to the negative (-) terminal of the disabled vehicle battery (**Figure 32, Page 46**).
 7. Start the engine. After the engine has started, remove the cable from the negative (-) terminal of the disabled vehicle battery first. Remove the cable from the positive (+) terminal of the solenoid. Then remove the cables from the booster battery.



947

Figure 31 Positive (+) Cable to Solenoid



948

Figure 32 Negative (-) Cable to Negative Terminal of Weak Battery

CLEANING THE VEHICLE

Each vehicle is equipped with hand-washable front and rear bodies. The vehicle has a powder-coated steel cargo bed. Use commercial automotive cleaning solutions with a sponge or soft cloth for normal cleaning. A garden hose at normal residential water pressure is adequate.

The manufacturer does not recommend any type of pressure washing or steam cleaning. Such a process will expose electrical components to moisture. Moisture entering electrical components can result in water damage and subsequent component failure.

Use non-abrasive wax products. Battery acid, fertilizers, tars, asphalt, creosote, paint, or chewing gum should be removed immediately to prevent possible stains.

The seats of the vehicle will last longer with proper cleaning. Use a solution of 10% liquid soap and warm water applied with a soft cloth. For imbedded dirt, a soft bristle brush may be used. For heavy soiling, difficult stains, or scratches, blemishes, or other body damage, see the appropriate maintenance and service manual. **See following NOTE.**

NOTE: *Dispose of waste water properly.*

ACCESSORIES

There is a complete line of accessory equipment available from our dealers/distributors.

Care should be taken that these accessories are properly installed by trained technicians and that they are used in the manner for which they were designed. **See following WARNING and CAUTION.**

▲ WARNING

- **Custom cab assemblies, canopy tops, weatherproof enclosures, and windshields will not protect occupants from flying objects.**

ELECTRIC WINCH ACCESSORY

If your vehicle is equipped with an electric winch, read and follow all manufacturer safety warnings and instructions in the winch operator manual, as well as the following WARNING and CAUTION statements. Make sure a winch warning decal is affixed to the vehicle on the seat support panel next to the receptacle for the remote operation switch.

The winch kit available includes a remote operation switch, which enables the operator to move away from the vehicle and cable. **See following WARNING and CAUTION.**

▲ WARNING

- **Before beginning a winch operation:**
 - Turn key switch to the OFF position, put Forward/Reverse handle in the NEUTRAL position, and engage the park brake.
 - Do not use winch while persons are seated on the vehicle.
- Stand to the side and away from the vehicle to operate winch.

CAUTION

- Use of the winch for an extended period of time could discharge the battery. Keep winch operations as short as possible, and drive the vehicle for several minutes after the winch operation to recharge the battery.

MUD TIRE OPTION

4x4 vehicles equipped with optional mud tires are intended only for off-road operation; they are not designed for use on paved surfaces such as asphalt and concrete. Frequent driving on paved surfaces will significantly decrease the life of the mud tires. Vehicle performance will also be reduced when driving on paved surfaces. **See following WARNING and CAUTION.**

▲ WARNING

- To avoid the risk of rollover when operating a vehicle equipped with mud tires on a paved surface: reduce speed, use extreme caution, and drive slowly in turns.
- The diameter of all tires on the vehicle must be equal; otherwise the four-wheel drive system will not operate as intended and could result in severe personal injury or death. Never install tires of different diameters on the vehicle.

CAUTION

- **Optional mud tires (off-road) are directional and must be installed according to the directional arrow mark (arrow indicates forward rotation of the tire) on the side-wall of each tire, or the tread performance will be severely compromised.**

The tires are made specifically for the vehicle; therefore, Husqvarna recommends that only tires purchased from Husqvarna be used on your vehicle.

SUBSEQUENT OWNER REGISTRATION

In the event a vehicle is bought as a used vehicle, we strongly urge the new owner to register the vehicle with Husqvarna. This will enable us to contact you if the need arises. Please send your name, address, and serial number of the vehicle to Husqvarna, 7349 Statesville Rd., Charlotte, NC 28269, Attention: Vehicle Registration.

VEHICLE SPECIFICATIONS

SPECIFICATIONS	HUV 4214	HUV 4414	HUV 4414-XP
POWER SOURCE	Gasoline	Gasoline	Gasoline
Engine: 4-cycle OHV, 480 cc, 14.0 maximum HP @3600 RPM (per SAE J 1940/1349), twin-cylinder, air-cooled, with pressure lubrication system	•	•	•
Fuel system: Down-draft carburetor with float bowl, fixed jets, fuel filters, and impulse fuel pump	•	•	•
Governor: Internal to engine, centrifugal	•	•	•
Ignition: Transistorized magneto	•	•	•
Transmission: Forward and reverse with neutral (18.19:1 forward, 34.37:1 reverse)	•	•	•
Electrical system: 12 volt starting battery: 525 cca at 0 °F (-17.8 °C). 80-minute reserve capacity (25-amp at 80 °F) 35 amp-hours	•	•	•
Torque converter: Automatic, variable-speed, dry type	•	•	•
STEERING/SUSPENSION/BRAKES			
Suspension:			
Front: MacPherson Strut	•	•	•
Rear: Independent with coil-over shock absorbers			
Steering: Self-adjusting rack and pinion, Ackerman	•	•	•
Brakes: Hydraulic brake system – brake pads and discs on each wheel with separate hand-operated park brake	•	•	•
BODY/CHASSIS			
Frame/Chassis: Box tube steel	•	•	•
Side and rear body: Polypropylene	•	•	•
Cargo bed: Powder-coated steel	•	•	•
Front body: TPO (ThermoPlastic Olefin)	•	•	•
Tires: All Terrain: 25 x 9 – 12 front and rear, tubeless, 4-ply rated load range	•		
Mud: 25 x 9 – 12 front and rear; tubeless, 4-ply rated load range			

SPECIFICATIONS	HUV 4214	HUV 4414	HUV 4414-XP
Tires: All Terrain: 25 x 9 – 12 front, 25 x 11 – 12 rear, tubeless, 4-ply rated load range Mud: 25 x 9 – 12 front, 25 x 11 – 12 rear; tubeless, 4-ply rated load range		.	.
DIMENSIONS/WEIGHT			
Overall length:	105 in. (266.7 cm)		
Overall width:	55.0 in. (139.7 cm)		
Overall height (with ROPS): with all-terrain tires	73.0 in. (185.4 cm)		
Wheelbase	69.5 in. (176.5 cm)		
Ground clearance: under transaxle	9.0 in. (22.9 cm)		
Front wheel track width	44 in. (111.8cm)		
Rear wheel track width	45 in. (114.3 cm)		
Weight: with all-terrain tires and without brush guard	1200 lb. (544.3 kg)	1210 lb. (548.8 kg)	1275 lb. (578.3 kg)
Forward speed	25 mph (40 km/h)		
Governed RPM	3950		
Turning Radius	139 in. (354 cm)		
Load bed height	32 in. (81.3 cm)		
Load bed size (box bed inside dimensions)	34 x 47 x 10 in. (86.4 x 119.4 x 25.4 cm) (9.25 cubic feet)		
Maximum payload capacity (level surface only)	425 lb. (193 kg)		
Vehicle rated capacity (payload, driver, and passenger; level surface only)	925 lb. (420 kg)		
Maximum gross vehicle weight (fully loaded vehicle, including accessories)	2135 lb. (968 kg)		
Standard seating capacity	2		
LIQUID CAPACITIES			
Engine crankcase with filter: SAE 10W-30, API classification SJ	1.5 qt. (1.4 L)		
Front differential: 80W90 gear oil	5.5 oz. (170 mL)		
Rear transaxle: 10W-30 SF, SG, SH	1 gal. (3.79 L)		
Brake fluid: DOT 5 (silicone) brake fluid	8 oz. (240 ml)		
Fuel tank: unleaded gasoline	5.2 gallons (19.7 L)		
TIRE PRESSURE			
All-terrain tread and mud tires	14 - 18 psi (0.75 - 1.00 Bars)		

WARRANTIES

HUSQVARNA® LIMITED TWO YEAR WARRANTY FOR 2009 TRANSPORTATION AND UTILITY VEHICLES

1. **WARRANTY:**

Husqvarna, Inc., ("Husqvarna") hereby warrants to the Original Retail Purchaser that its new 2009 Model Transportation and Utility Vehicles purchased from Husqvarna or an authorized dealer shall be free from defects in material and workmanship under normal use and service as a transportation or utility vehicle for the periods stated below, subject to the provisions, limitations and exclusions contained in this limited warranty.

LIMITED TWO YEAR / 2000 HOUR WARRANTY: The engine assembly, unitized transaxle assembly (gasoline vehicle), starter/generator (gasoline vehicle), motor, transaxle assembly (electric vehicle), main frame assembly, box bed hydraulic dump kit, Custom Cab assembly and doors, and Driving Range Protective Enclosure are warranted with respect to parts and labor against defects in material and workmanship for a period of two years or 2000 hours of operation, whichever first occurs, from the date of purchase.

LIMITED ONE YEAR / 1000 HOUR WARRANTY: All remaining components of the vehicle not specified otherwise, the Portable Refreshment Center, and all other original equipment options and accessories supplied by Husqvarna are warranted with respect to parts and labor against defects in material and workmanship for a period of one year or 1000 hours of operation, whichever first occurs, from the date of purchase.

This limited warranty covers material, workmanship and repair labor cost as to those items specifically listed above for the periods specified. Such repair labor shall be performed only by Husqvarna, its authorized dealers, or a service agency approved by Husqvarna.

IF THE WARRANTY REGISTRATION FORM IS NOT COMPLETED AND RETURNED TO HUSQVARNA AT THE TIME OF THE ORIGINAL RETAIL SALE, PURCHASER MUST PROVIDE PROOF OF DATE OF PURCHASE WITH ANY WARRANTY CLAIM.

2. **EXCLUSIONS:**

Excluded from any Husqvarna warranty are all fuses, filters, decals (except safety decals), spark plugs, light bulbs, lubricants, trim pieces, seats, routine wear items such as the charger plug and receptacle, brake shoes, belts, brushes, bushings, drive buttons, engine mounts, mats and pads, maintenance adjustments, cosmetic deterioration, and items which deteriorate or fail due to exposure or ordinary wear and tear. Batteries, battery charger, onboard computer, and solid-state speed controller are covered under separate Husqvarna warranties. Also excluded from any Husqvarna warranty is damage to a vehicle or component resulting from a cause other than a defect including unreasonable or unintended strain or use, improper installation of accessories, installation of parts or accessories that are not original equipment, overloading, accident, alteration, abuse or neglect.

Transportation expenses for warranty services are also excluded from this warranty.

3. **VOIDING OF WARRANTY:**

THIS AND ANY OTHER WARRANTY SHALL BE VOID IF THE VEHICLE IS ABUSED OR USED IN AN UNINTENDED MANNER OR SHOWS INDICATIONS THAT IT HAS BEEN ALTERED IN ANY WAY, INCLUDING, BUT NOT LIMITED TO, MODIFICATION OF THE SPEED GOVERNOR, BRAKING SYSTEM, STEERING, TRANSAXLE, OR OTHER OPERATING SYSTEMS OF THE VEHICLE TO CAUSE IT TO PERFORM OUTSIDE HUSQVARNA SPECIFICATIONS. THE WARRANTY IS LIKEWISE VOID IF THE VEHICLE INVOLVED SHOWS INDICATIONS THAT REASONABLE OR NECESSARY MAINTENANCE AS OUTLINED IN THE OWNER'S MANUAL AND MAINTENANCE AND SERVICE MANUAL WAS NOT PERFORMED AT THE TIME AND IN THE MANNER SPECIFIED IN SUCH MANUALS.

4. **SOLE REMEDY:**

Husqvarna's liability under this limited warranty, or in any action whether based upon warranty, contract, negligence, strict product liability or otherwise, shall be the repair or replacement, at Husqvarna's option, of the vehicle or component thereof that Husqvarna deems to be defective. Replacement shall mean furnishing, during the applicable limited warranty period, a new vehicle or factory-reconditioned vehicle or component thereof that is identical or reasonably equivalent to the warranted product or component at no cost to the purchaser. Repair shall mean remedying a defect in the vehicle or component thereof at no cost to the purchaser during the applicable limited warranty period. If Husqvarna elects to repair the vehicle, it may provide factory-reconditioned parts or components. All parts and components replaced under warranty shall become the property of Husqvarna.

5. HOW TO MAKE A WARRANTY CLAIM:

To make a warranty claim under this limited warranty, you must present the vehicle or defective component to an authorized Husqvarna dealer.

6. DISCLAIMER:

THIS LIMITED WARRANTY IS EXCLUSIVE. HUSQVARNA MAKES NO OTHER WARRANTY OF ANY KIND, EXPRESSED OR IMPLIED. ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE WHICH EXCEED THE OBLIGATIONS OR TIME LIMITS STATED IN THIS WARRANTY ARE HEREBY DISCLAIMED BY HUSQVARNA AND EXCLUDED FROM THIS WARRANTY. THE PURCHASER AND HUSQVARNA EXPRESSLY AGREE THAT THE REMEDY OF THE REPLACEMENT OR REPAIR OF THE DEFECTIVE VEHICLE OR COMPONENT THEREOF IS THE SOLE REMEDY OF THE PURCHASER. HUSQVARNA MAKES NO OTHER REPRESENTATION OR WARRANTY OF ANY KIND, AND NO REPRESENTATIVE, EMPLOYEE, OR DEALER OF HUSQVARNA HAS THE AUTHORITY TO MAKE OR IMPLY ANY REPRESENTATION, PROMISE OR AGREEMENT, WHICH IN ANY WAY VARIES THE TERMS OF THIS WARRANTY.

In the event that another pre-printed warranty document and/or certificate offered by or through Club Car at the time of sale of this vehicle (each an "Additional Warranty Document") is deemed to conflict with the limitations or exclusions contained herein, the limitations and exclusions contained herein shall continue to apply with respect to both this limited warranty statement and, to the maximum extent permitted by law, to each Additional Warranty Document.

7. NO CONSEQUENTIAL DAMAGES:

IN NO EVENT SHALL HUSQVARNA BE LIABLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES INCLUDING, BUT NOT LIMITED TO, LOSS RELATED TO PROPERTY OTHER THAN THE VEHICLE, LOSS OF USE, LOSS OF TIME, INCONVENIENCE, OR ANY OTHER ECONOMIC LOSS.

Some states allow neither limitation on the duration of an implied warranty nor exclusions or limitation of incidental or consequential damages. Therefore, the above limitations or exclusions may not apply to you.

This warranty gives you specific legal rights, and you may also have other rights, which vary from state to state.

8. INFORMATION:

For further information contact WARRANTY SERVICES, HUSQVARNA PROFESSIONAL PRODUCTS, INC., 7349 STATESVILLE ROAD, CHARLOTTE, NC 28269 OR CALL 1-800-487-5951.

9. WARNING:

Any modification or alteration of any vehicle beyond factory specifications, including those that affect the weight distribution, stability, or speed of the vehicle, can cause serious personal injury or death.

CALIFORNIA EMISSION CONTROL WARRANTY STATEMENT

YOUR WARRANTY RIGHTS AND OBLIGATIONS:

The California Air Resources Board ("CARB") and Husqvarna ("HUSQVARNA") are pleased to explain the emission control system warranty on your 2009 vehicle engine (the "emission warranty"). In California, new small off-road engines ("SORE") must be designed, built and equipped to meet the State's stringent anti-smog standards.

HUSQVARNA shall warrant the emission control system on the vehicle engine for the periods of time listed below provided there has been no abuse, neglect or improper maintenance of your small off-road engine.

Your emission control system may include parts such as the carburetor or fuel-injection system, the ignition system, the catalytic converter and related hoses, belts, connectors and other emission assemblies or components.

Where a warrantable condition exists, as defined herein, HUSQVARNA will repair your vehicle engine at no cost to you including diagnosis, parts and labor.

MANUFACTURER'S WARRANTY COVERAGE:

This emission control system is warranted for two years from the vehicles' date of purchase. If any emission-related part on your HUSQVARNA SORE is defective, the part will be repaired or replaced by HUSQVARNA.

OWNER'S WARRANTY RESPONSIBILITIES:

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

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

- You are responsible for presenting vehicle engine to a HUSQVARNA distribution center as soon as a problem exists. The warranty repairs should be completed in a reasonable amount of time, not to exceed 30 days. If you have any questions regarding your warranty rights and responsibilities, you should contact WARRANTY SERVICES, Husqvarna Professional Products, Inc., 7349 STATESVILLE ROAD, CHARLOTTE< NC 28269.

HUSQVARNA EXPLANATION OF EMISSION CONTROL WARRANTY:

1. WARRANTY:

HUSQVARNA warrants to the ultimate purchaser and each subsequent purchaser that the SORE and related emissions equipment is designed, built and equipped so as to conform with all applicable California environmental emission regulations; and free from defects in materials and workmanship that cause the failure of a warranted part to be identical in all material respects to that part as described in HUSQVARNA's application for certification with CARB. The warranty period begins on the date the engine or equipment is delivered to an ultimate purchaser or first placed into service. The warranty period is two years from the date of purchase.

2. COVERAGE:

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

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

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

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

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

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

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

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

(8) Throughout the engine or equipment warranty period stated above, HUSQVARNA will maintain a supply of warranted parts sufficient to meet the expected demand for such parts.

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

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

*HUSQVARNA, its authorized dealers, or a service agency approved by HUSQVARNA.

ITEMS COVERED BY THIS WARRANTY:

The repair or replacement of any warranted part otherwise eligible for warranty coverage may be excluded from such warranty coverage if HUSQVARNA demonstrates that the engine or equipment has been abused, neglected, or improperly maintained, and that such abuse, neglect, or improper maintenance was the direct cause of the need for

repair or replacement of the part. That notwithstanding, any adjustment of a component that has a factory installed, and properly operating, adjustment limiting device is still eligible for warranty coverage. The following emission warranty parts list are covered:

SYSTEMS COVERED PARTS DESCRIPTION

Fuel Metering Carburetor assembly, fuel injection pump, fuel injection nozzle, fuel regulator Exhaust Catalytic Converter, Exhaust Manifold Air Induction Air filter housing, air filter*, crankcase breather tube Ignition Flywheel magneto, ignition pulse generator, ignition coil assembly, ignition control module, spark plug cap, spark plug* Positive Crankcase Ventilation (PCV) System PCV valve, oil filler cap Evaporative System Fuel Tank, Fuel Cap, Fuel Lines, Fuel Line Fittings, Clamps, Pressure Relief Valves, Purge Valves, Vapor Hoses, Carbon Canister, Canister Mounting Brackets, Carbon Canister Purge Port Connector Misc. Parts Belts, hosing, tubing, fittings, seals, gaskets, clamps, and switches associated with the above systems.

Emission-related parts will vary between vehicles; therefore, certain vehicles may not include all of the listed parts or may include equivalent parts.

3. VOIDING OF WARRANTY:

THIS AND ANY OTHER WARRANTY SHALL BE VOID IF THE VEHICLE IS ABUSED OR USED IN AN UNINTENDED MANNER OR SHOWS INDICATIONS THAT IT HAS BEEN ALTERED IN ANY WAY, INCLUDING, BUT NOT LIMITED TO, MODIFICATION OF THE SPEED GOVERNOR, BRAKING SYSTEM, STEERING, TRANSAXLE, OR OTHER OPERATING SYSTEMS OF THE VEHICLE TO CAUSE IT TO PERFORM OUTSIDE HUSQVARNA SPECIFICATIONS.

4. HOW TO MAKE A WARRANTY CLAIM:

To make a warranty claim under this limited warranty, you must present the vehicle or defective component to an authorized HUSQVARNA dealer or send the defective component, freight prepaid, to WARRANTY SERVICES, Husqvarna Professional Products, Inc., 7349 STATESVILLE ROAD, CHARLOTTE, NC 28269.

EMISSIONS CONTROL

LOOK FOR RELEVANT EMISSIONS DURABILITY PERIOD AND AIR INDEX INFORMATION ON YOUR ENGINE EMISSIONS LABEL

Engines that are certified to meet the California Air Resources Board (CARB) Tier 2 Emission Standards must display information regarding the Emissions Durability period and the Air Index. Briggs & Stratton makes this information available to the consumer on our emission labels The engine emission label will indicate certification information.

The **Emissions Durability Period** describes the number of hours of actual running time for which the engine is certified to be emissions compliant, assuming proper maintenance in accordance with the Operating & Maintenance Instructions. The following categories are used:

Moderate:

Engine is certified to be emission compliant for 125 hours of actual engine running time.

Intermediate:

Engine is certified to be emission compliant for 250 hours of actual engine running time.

Extended:

Engine is certified to be emission compliant for 500 hours of actual engine running time. For example, a typical walk-behind lawn mower is used 20 to 25 hours per year. Therefore, the **Emissions Durability Period** of an engine with an **intermediate** rating would equate to 10 to 12 years.

Certain Briggs & Stratton engines will be certified to meet the United States Environmental Protection Agency (USEPA) Phase 2 emission standards. For Phase 2 certified engines, the Emissions Compliance Period referred to on the

Emissions Compliance label indicates the number of operating hours for which the engine has been shown to meet Federal emission requirements.

For engines less than 225 cc displacement.

Category C = 125 hours

Category B = 250 hours

Category A = 500 hours

For engines of 225 cc or more displacement.

Category C = 250 hours

Category B = 500 hours

Category A = 1000 hours.

Portions of this publication are subject to copyright of Briggs & Stratton Corporation. Content on this page has been reproduced with the written permission of Briggs and Stratton Corporation.

Publication Part Number 103472540

Edition Code 0109A00000



Husqvarna Professional Products, Inc.

7349 Statesville Rd.

Charlotte, NC 28269

USA

www.usa.husqvarna.com/huv

103472540

