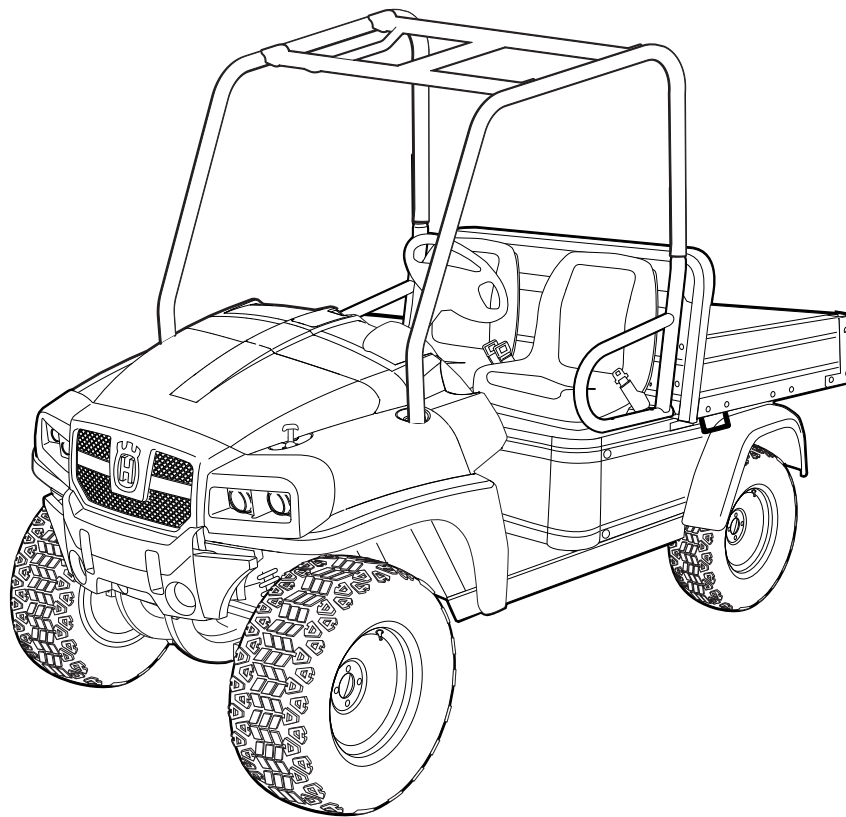




# **HUV 5420 DX All-Wheel Drive CE Mark Diesel Vehicle Owner's Manual**

**[Refer to back cover for applicable build code range]**





## NOTICE

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This manual is valid for vehicles manufactured in the build code range provided on the back cover of this manual. If the vehicle build code is different from that shown on the back cover of this manual, please contact your nearest dealer or go to [www.husqvarna.com](http://www.husqvarna.com) to retrieve the proper owner's manual for the vehicle. See also Model Identification in this manual.

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. No other warranties, express or implied, are contained herein.

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.

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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 utility vehicles are four-wheel, general-purpose vehicles intended to transport people and cargo.

If in English, this manual is the Original Instructions provided by the manufacturer. If in any language other than English, this manual is a translation of the Original Instructions.



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## FOREWORD

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Thank you for choosing Husqvarna, the name most widely recognized as the industry leader in vehicle efficiency and long-lasting value. You have chosen the finest utility vehicle on the market. Please protect your investment and ensure that your Husqvarna vehicle(s) 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 your Husqvarna vehicle needs repairs or service, please contact your local authorized Husqvarna dealer or distributor; he will be able to provide technical advice, perform warranty work, and sell parts and service manuals.

For the name and address of the authorized Husqvarna dealer or distributor nearest you, logon to our web site at [www.husqvarna.com](http://www.husqvarna.com).

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.

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## 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.

### HUSQVARNA HUV 5420 DX DIESEL CE MARK VEHICLES

**WARNING**  
DIESEL FUEL EXPLOSION / FIRE.  
• Can cause severe injury or death.  
• No smoking, sparks, or open flame.  
• Stop engine, allow to cool before refueling. CCI 102459201

**WARNING**  
CAN CAUSE SEVERE INJURY  
HOT manifold  
KEEP CLEAR CCI 102459001

**WARNING**  
WINCH CABLE FRACTURE COULD RESULT IN SERIOUS INJURY OR DEATH.  
• Do not use winch while persons are seated on the vehicle.  
• Use remote operator switch to winch forward.  
• Stand to the side and away from the winch to operate winch.  
• Read winch operator manual before operating winch. 10222881

**WARNING**  
CAN CAUSE SEVERE BURNS  
Hot Surface CCI 102458901

**WARNING**  
Negative frame ground. Can cause severe injury. Do not contact positive (+) battery post or cable to frame. Disconnect negative (-) battery cable first. CCI 102459101

**WARNING**  
CAN CAUSE SEVERE INJURY  
Rotating parts. KEEP CLEAR.

**WARNING**  
CAN CAUSE SEVERE INJURY  
Hot manifold and muffler. KEEP CLEAR. CCI 102459501

**OPERATING INSTRUCTIONS**  
• Read owner's manual and vehicle safety warnings. Study and understand controls.  
**TO START ENGINE**  
• Place shift lever in NEUTRAL (N) and press brake pedal.  
• Turn key to START and hold until engine starts.  
**Drive/Wheelie Only**  
• If required, turn key to PREHEAT and hold for 10-15 seconds.  
• Place shift lever in NEUTRAL (N) and press brake pedal.  
**TO OPERATE VEHICLE**  
• Ensure wheels are turned in desired direction and path is clear.  
• With vehicle stopped and engine at idle, select vehicle direction.  
• Forward (F) Neutral (N) Reverse (R) (Buzzer sound)  
• Release park brake and slowly press accelerator pedal to increase speed.  
• All-wheel drive will automatically drive appropriate wheel(s).  
**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. CCI 102459301

**WARNING**  
Crush area. Can cause severe injury. Stay clear when closing bed. CCI 102459301

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1	102231601	Decal, Winch Safety Warning (on vehicle body, below seat) (with winch option)	5	102459201	Decal, Diesel Fuel Warning (on frame, near fuel tank)
2	102458901	Decal, Hot Surface Warning (on coolant pipes and underside of seats) (on bed seal)	6	102459301	Decal, Bed Latch Warning (on vehicle body, below bed latch)
3	102459001	Decal, Hot Manifold Warning (on engine, near manifold)	7	102459501	Decal, Rotating/Hot Parts Warning (on frame near battery)
4	102459101	Decal, Ground Warning (on vehicle frame, near battery)	8	102884301	Decal, Operating Instructions (on instrument panel)

# HUSQVARNA HUV 5420 DX DIESEL CE MARK VEHICLES

**WARNING**  
**ROLLOVER OR FALLING OFF MAY CAUSE DEATH**

- Read owner's manual and operating instructions.
- Fasten seat belts and remain seated while moving.
- Children requiring a child safety seat must not ride on vehicle. Comply with state and local laws pertaining to child safety.
- Drive slowly in turns and straight up and down slopes.
- Do not start vehicle until all occupants are seated.
- Two (2) persons per bench seat maximum.
- One (1) person per bucket seat maximum.
- Operate from driver side only and not on public roads.
- Keep entire body inside vehicle while moving.
- Do not operate while under the influence of alcohol or drugs.
- Never attempt jumps and avoid extreme braking in reverse.

CC# 102884401

**UNDER 16**  
**WARNING**  
**YOUNG DRIVERS INCREASE CHANCE OF DEATH**

- Young drivers may not be able to control vehicle.
- No drivers younger than 16 years old.
- Do not leave children unattended on vehicle.

CC# 102459401

**WARNING**  
**Do not modify or remove Roll-over Protective Structure (ROPS).**

- Replace ROPS if damaged. Do not attempt repair.
- Use seat belts during operation. Do not jump from vehicle.
- Keep away from drop-offs, steep slopes, and unstable surfaces.

CC# 102961201

**WARNING**  
**Rotating Parts**

CC# 102224001

**NOTICE**  
**MAXIMUM TONGUE WEIGHT - 150 lbs.**

CC# 1011553

**WARNING**  
**CRUSH AREA**  
**STAY CLEAR**

CC# 101609401

**WARNING**  
**RIDING IN CARGO BED CAN CAUSE SEVERE INJURY OR DEATH.**

- Do not ride in cargo bed.

**VEHICLE LOADING**

- Read owner's manual and warnings on dash.
- Maximum gross vehicle weight: 2750 lb. (1247 kg)
- Maximum cargo load: 800 lb. (363 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.

CC# 103202601

**WARNING**  
**RIDING IN CARGO BED CAN CAUSE SEVERE INJURY OR DEATH.**

- Do not ride in cargo bed.

**HIGH CAPACITY VEHICLE LOADING**

- Read owner's manual and warnings on dash.
- Maximum gross vehicle weight: 3012 lb. (1366 kg)
- Maximum cargo load: 1050 lb. (476 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.**

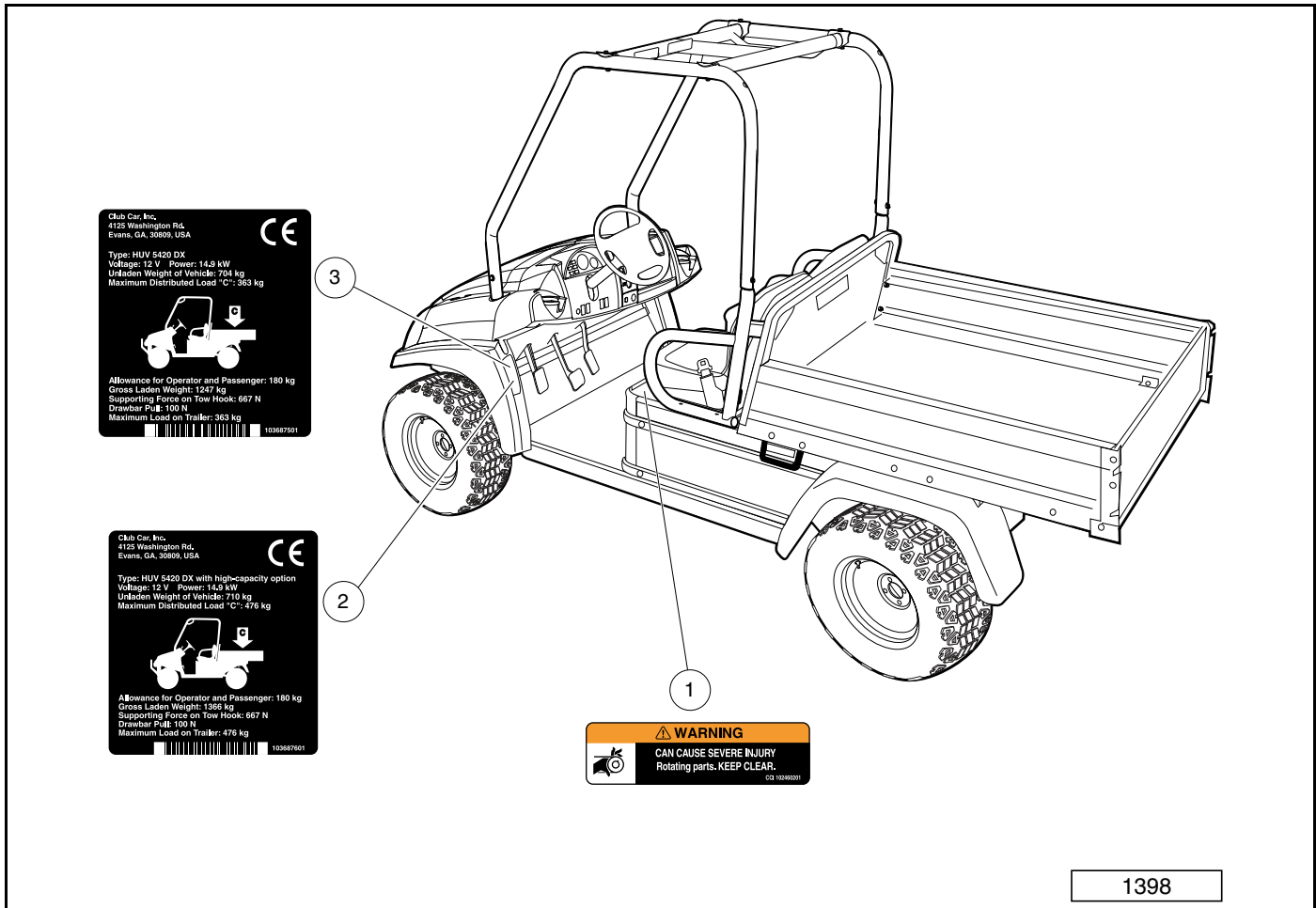
- Place cargo forward in the cargo bed and distribute evenly side to side. Secure load.
- On uneven or steep terrain reduce speed and load.
- Avoid stopping on or backing down steep hills.
- Avoid top heavy loads. See owner's manual.

CC# 103210401

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1	1011553	Decal, Trailer Hitch Tongue Weight Notice (on trailer/receiver hitch)	6	102961201	Decal, ROPS Warning (on ROPS)
2	101609401	Decal, Crush Area Warning (behind seat, near cargo bed)	7	103202601	Decal, Vehicle Loading Instructions (on cargo bed)
3	102224001	Decal, Rotating Parts Warning (on frame)	8	103210401	Decal, Vehicle Loading Instructions (on cargo bed)
4	102459401	Decal, Young Driver Warning (on ROPS)	9		Serial Number
5	102884401	Decal, Rollover Warning (on instrument panel)	15		

## HUSQVARNA HUV 5420 DX DIESEL CE MARK VEHICLES



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1	102460201	Decal, Rotating Parts Warning (on vehicle body, under seat)	3	103687501	Decal, CE Mark Husqvarna HUV 5420 DX (on front fender)
2	103687601	Decal, CE Mark Husqvarna HUV 5420 DX HD (on front fender)			



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**PRACTICE SAFETY**

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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.

## SAFETY DETAILS

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### **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.

## GENERAL WARNINGS

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The following safety statements must be heeded whenever the vehicle is being operated, repaired, or serviced. **See Safety Decal and Feature Identification on page 4.** 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.**
- **Diesel – 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 engine 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 a Husqvarna vehicle, exit the vehicle and seek shelter in accordance with applicable safety guidelines for your location.**

## **▲ WARNING**

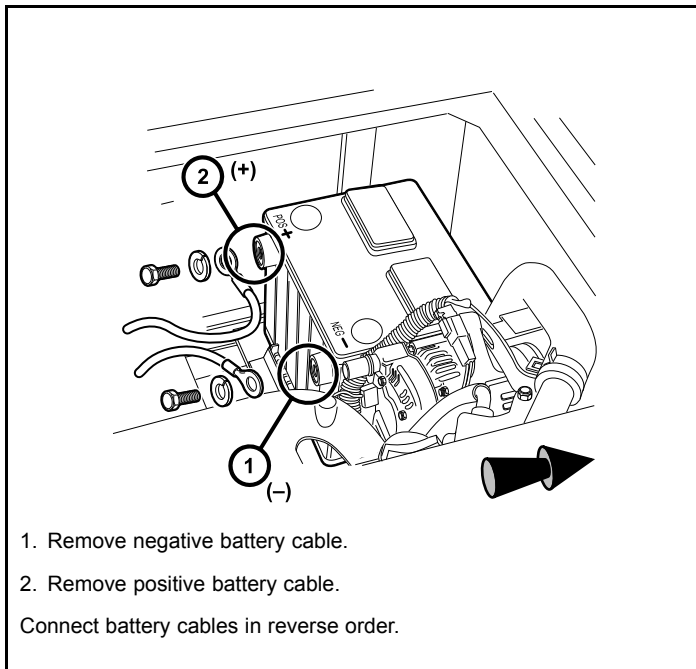
- Follow the procedures exactly as stated in this manual, and heed all DANGER, WARNING, and CAUTION statements in this manual as well as those on the vehicle.
- Do not leave children unattended on vehicle.
- Children requiring a child safety seat must not ride on the vehicle. Comply with state and local 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 one person per bucket seat at one time. 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.
- 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. See Disconnecting the Battery – Diesel Vehicles on page 10.
- 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 all-wheel drive system will engage any wheel(s), front or rear, with traction.

## **DISABLING THE VEHICLE**

1. Set the park brake.
2. Turn the key switch OFF and remove the key.
3. Place the Forward/Reverse control in the NEUTRAL position.
4. In addition, chock the wheels if servicing or repairing the vehicle.

## DISCONNECTING THE BATTERY – DIESEL VEHICLES

1. Disable the vehicle. See **Disabling the Vehicle** on page 9.
2. Disconnect the battery cables, negative (-) cable first, as shown (**Figure 2**).



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**Figure 2 Battery Cable Removal**

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**Figure 3 All-Wheel Drive Warning**

## CONNECTING THE BATTERY – DIESEL VEHICLES

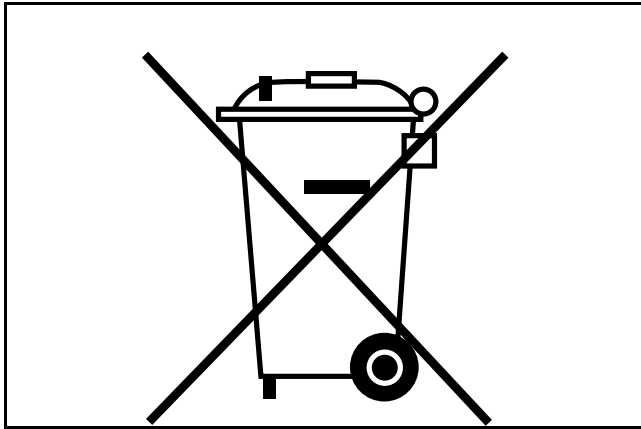
1. Connect the battery cables, positive (+) cable first.
2. Tighten battery terminals to 80 in-lb (9 N·m).
3. Coat terminals with Battery Terminal Protector Spray (P/N 603 00 00-03) to minimize corrosion.

## RECYCLING LEAD-ACID BATTERIES

### **⚠ WARNING**

- **Lead-acid batteries contain lead (Pb), other metals, acids and other compounds. If improperly handled, they can contaminate both water and soil, causing environmental damage and personal injury.**

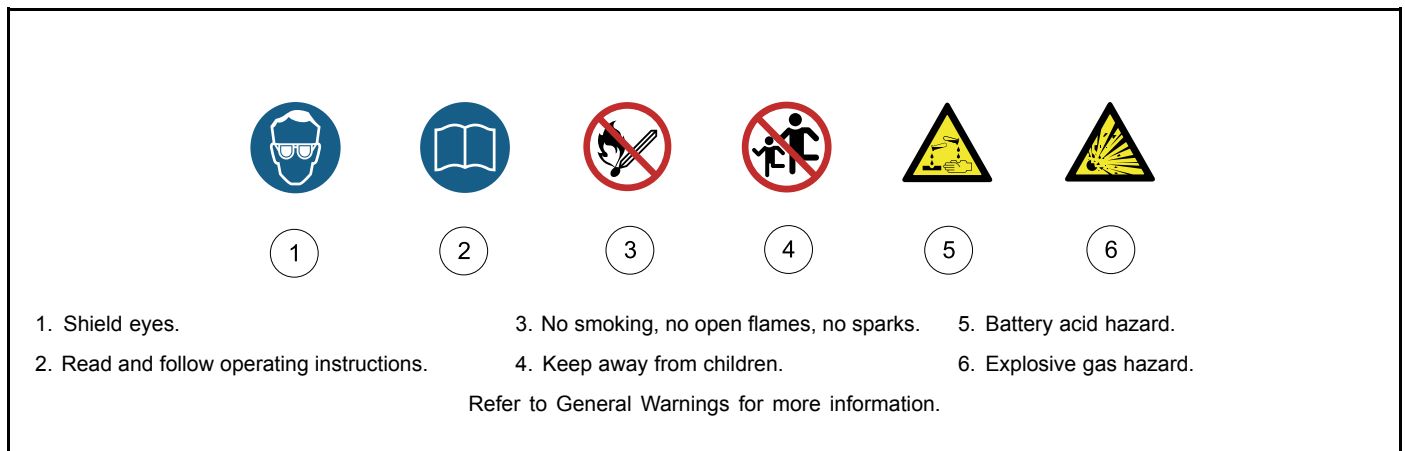
Lead-acid batteries are identified by the symbol shown below and should be properly recycled (**Figure 4**). They cannot be disposed as municipal waste and must be collected separately. Responsibility for environmental protection must be shared, not only by the manufacturers of the batteries, but by people who use the batteries as well. Please contact your nearest Husqvarna dealer or distributor for information on how to properly recycle your batteries.



1403 **Figure 4 Dispose of Lead-acid Batteries Properly**

## INTERNATIONAL SAFETY SYMBOLS ON BATTERIES

Anyone using, repairing, or servicing the vehicle must understand and heed the safety symbols on the vehicle battery or batteries.



1642 **Figure 5 International Safety Symbols on Batteries**

## GENERAL INFORMATION

This manual includes operating procedures, maintenance, and regular servicing information for all diesel Husqvarna HUV 5420 DX vehicles. All operating procedures, maintenance, and regular servicing are identical unless otherwise noted.

## MODEL IDENTIFICATION

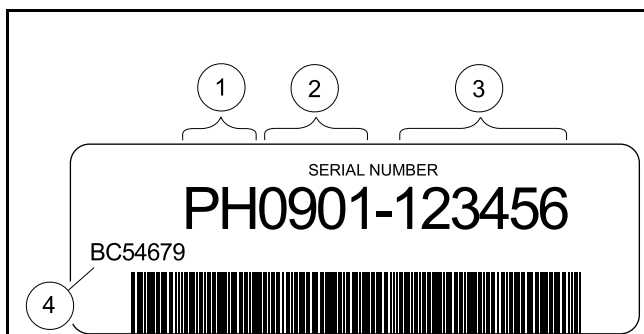
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The serial number of each vehicle is printed on a bar code decal mounted either below the passenger side cup holder or above the accelerator or brake pedal (Example: PH0901-583947) (**Figure 6**).

The two letters (1) at the beginning of the serial number indicate the vehicle model. The following four digits (2) indicate the model year and production week during which the vehicle was built. The six digits (3) following the hyphen represent the unique sequential number assigned to each vehicle built within a given model year. **See following NOTE.**

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

**Build Code:** The build code (4) is a five-digit number that appears on the vehicle serial number decal. The build code exists to enable the user to identify the correct owner's manual for a vehicle. This owner's manual is valid for the build code range indicated on the back cover of this owner's manual.



1400

Figure 6 Serial Number Decal

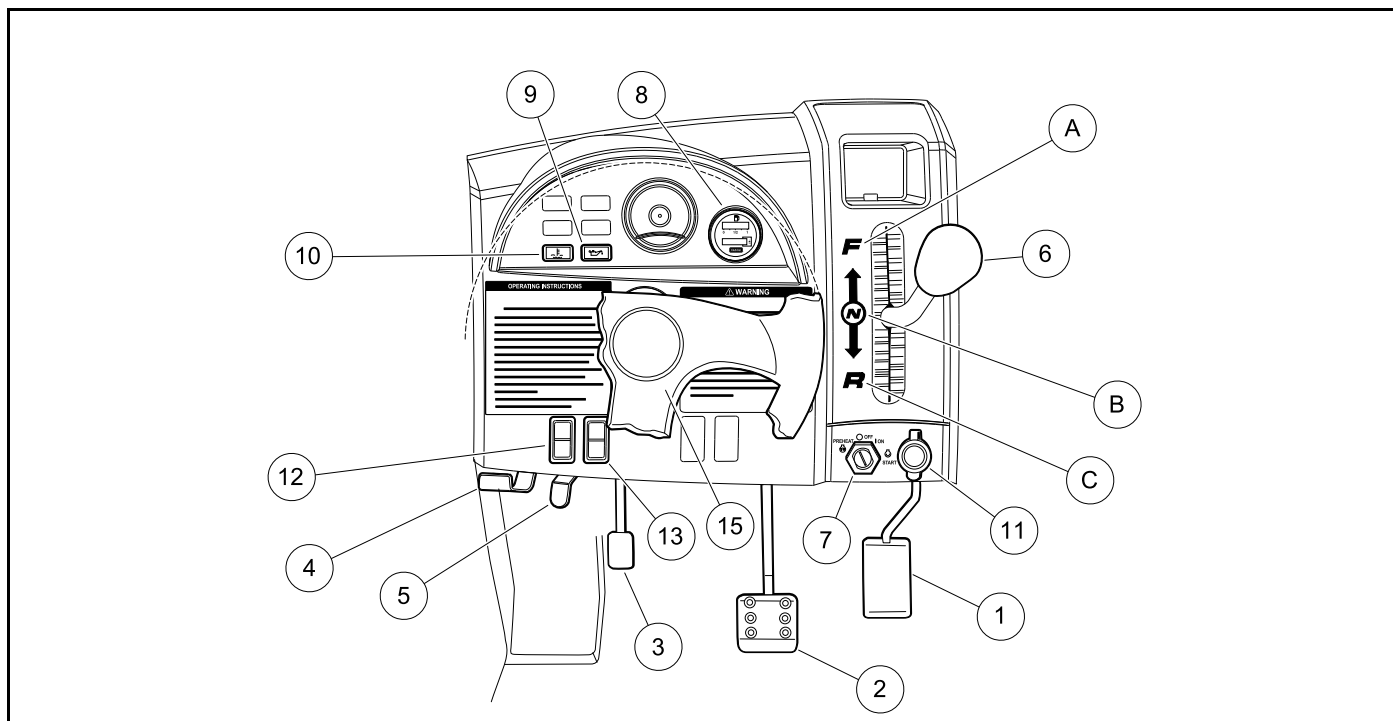
## CONTROLS AND INDICATORS

---

See General Warnings on page 8.

### **⚠ WARNING**

- Before allowing anyone to drive the vehicle, make sure the driver is familiar with all controls and operating procedures.
- Do not tamper with the high idle speed setting on the diesel vehicle. Doing so will void the warranty, as well as damage the engine and other components, and could result in property damage, personal injury, or death due to unsafe speeds.
- 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.



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Figure 7 Instrument Panel – Diesel Vehicles

## **⚠ 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.

## **KEY SWITCH – DIESEL VEHICLES**

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

Use the PREHEAT feature if the temperature falls below  $-5^{\circ}\text{C}$  ( $23^{\circ}\text{F}$ ). Do not hold the key in the PREHEAT position longer than 20 seconds. To preheat the glow plugs in cold weather, turn the key to the PREHEAT position, and hold it there for 10-15 seconds. Then turn the key to the START position, and hold it there until the engine starts. If the engine does not start after 10-15 seconds, turn the key to the OFF position 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 previous WARNING, CAUTION, and NOTE.**

## FORWARD/REVERSE CONTROL

The Forward/Reverse handle (6) is located on the right side of the instrument panel (**Figure 7**). 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 WARNING and CAUTION.**

Husqvarna vehicles operate at a reduced speed in reverse. The reverse buzzer will sound as a warning when the Forward/Reverse handle is in the REVERSE position.

## HORN

The horn button is located on the on the left side of the steering column. Press the button to sound the horn. **See Safety Decal and Feature Identification on page 4.**

## ACCELERATOR PEDAL

The accelerator pedal (1) is the pedal farthest to the right (**Figure 7**).

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 WARNING and CAUTION.**

## BRAKE PEDAL

The brake pedal (2) is located to the immediate left of the accelerator pedal (**Figure 7**). To slow or stop the vehicle, press the brake pedal.

## PARK BRAKE

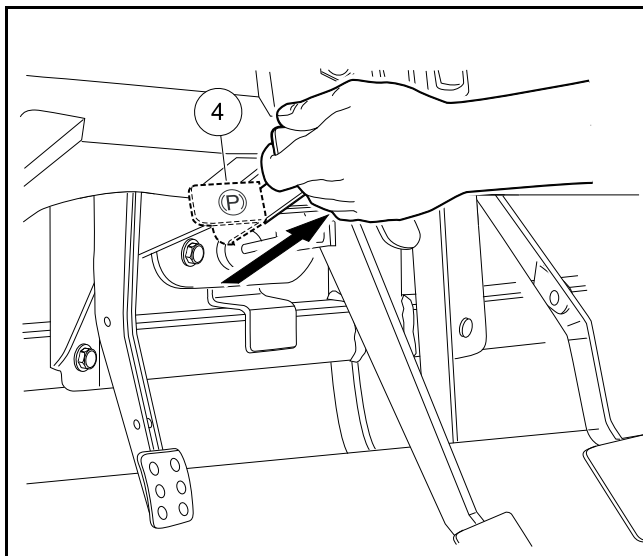
The park brake pedal (3) is located to the left of the brake pedal (**Figure 7**). To engage the park brake, first apply pressure to the brake pedal, then firmly press the park brake pedal until it latches into place. To disengage the park brake, pull the park brake release handle (4) (**Figure 8**). **See following WARNING.**

### **WARNING**

---

- The park brake has multiple locking positions and should be firmly locked to prevent the vehicle from rolling.





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**Figure 8 Park Brake Release**

## STEERING ADJUSTMENT LOCK

The steering wheel position is adjustable. To adjust the steering wheel position, press down on the steering adjustment lock lever (5), then move the steering wheel to the desired position (**Figure 7**). While holding the steering wheel in the desired position, pull up on the steering adjustment lock lever to firmly lock the steering column in position. **See following WARNING.**

### **▲ WARNING**

- Ensure that the steering wheel lock is fully engaged before operating the vehicle.

## 12-VOLT ACCESSORY OUTLET

The 12-volt accessory outlet (11) is located to the right of the key switch (**Figure 7**). It provides a constant 12VDC with the key switch in the ON or OFF position. **See following NOTE.**

**NOTE:** *Extended use of this accessory outlet can cause the battery to become heavily discharged.*

## LOW OIL WARNING LIGHT

The low oil warning light (9) is located on the instrument panel just to the left of the steering column (**Figure 7**). If the warning light comes on, oil should be checked and added to the engine as necessary before vehicle use continues. The vehicle should never be driven when the low oil warning light remains lit. If the warning light comes 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 7**). 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 30.**

## **HEADLIGHT CONTROL**

The headlight control (12) is located on the left side of the instrument panel (**Figure 7**). Press the headlight rocker switch to turn the headlight 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.*

## **ELECTRIC BED LIFT**

### **Vehicles with Electric Bed Lift Option**

The electric bed lift switch (13) is located on the instrument panel to the left of the key switch (**Figure 7**). **See following NOTE.**

**NOTE:** *Remove cargo before raising the bed.*

To lift the bed, push up and hold the rocker switch in the upper position. Release the switch to stop the lifting operation. To close the bed, press down and hold the switch in the lower position. The bed lift will make a loud clicking sound to signal that the bed is in the rest position.

## **HIGH-TEMPERATURE WARNING LIGHT (DIESEL VEHICLES ONLY)**

The high-temperature warning light (10) is located on the instrument panel to the left of the steering column, next to the low oil warning light (9) (**Figure 7**). The diesel engine is liquid-cooled; if the engine coolant has exceeded its normal safe operating temperature, the warning light will illuminate. If the warning light comes on, stop the vehicle and allow it to idle for approximately five minutes before stopping the engine. Contact a Husqvarna dealer/distributor or a trained technician. **See following WARNING.**

## **WARNING**

- **Allow the engine to cool before servicing the engine coolant system. Engine coolant can cause severe burns.**

## **ROLL-OVER PROTECTIVE STRUCTURE AND SEAT BELTS**

---

The Husqvarna HUV 5420 DX vehicles are 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.**

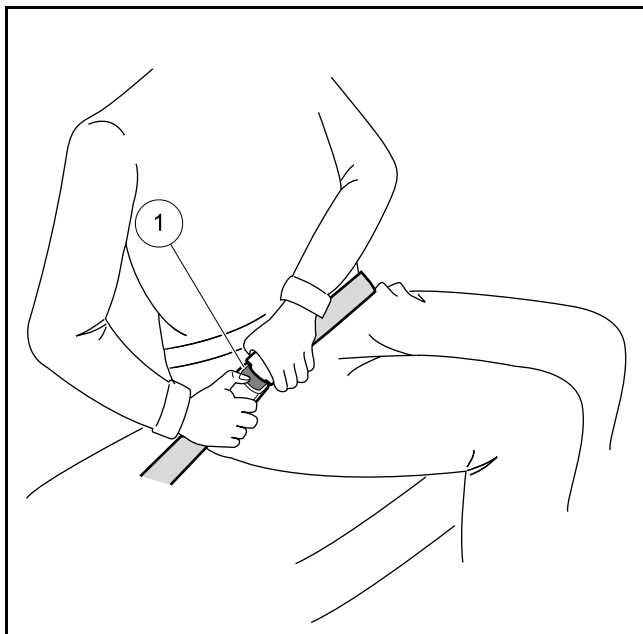
Pregnant woman: Consult your doctor for specific recommendations. The seat belt should be worn securely and as low as possible over the hips and not on the waist.

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. It also may lock if the occupant leans forward too quickly. 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 9**). 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.



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Figure 9 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.**
- **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.**

WARNING CONTINUED ON NEXT PAGE

## **WARNING**

- 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 one person per bucket seat at one time. 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.
- The Husqvarna 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**

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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.**

**Vehicles with bucket seat option:**

The driver-side bucket seat is adjustable and can be moved forward or backward to accommodate the driver. To adjust this seat, push the lever located under the driver seat to the left (towards outside of the vehicle). Position the seat, and return the lever to its original position. **See following WARNING.**

## **WARNING**

- **Do not adjust the driver-side seat while the vehicle is in motion.**

To adjust the passenger-side seat

1. Remove the seat from the vehicle.
2. Remove the four bolts and washers from the bottom of the seat mounting plate.
3. Align the mounting plate holes with holes in the seat to achieve the desired seat position.

4. Install washers and bolts, and tighten to 96 in-lb (10.8 N·m).
5. Install the seat. **See preceding WARNING “Make sure seat hinges and latch...”**

## PRE-OPERATION AND DAILY SAFETY CHECKLIST

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Each Husqvarna 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 19 and the Periodic Service Schedule on page 30 to ensure that the vehicle is in proper working condition. Any problems should be corrected by a Husqvarna 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 4.**
- **ROPS:** Check to ensure the ROPS is not damaged and all hardware is secure. **See Roll-Over Protective Structure and Seat Belts on page 16.**
- **Seat belts:** Visually inspect for cuts, fraying, and loose parts. **See Roll-Over Protective Structure and Seat Belts on page 16.**
- **Tires:** Check for proper tire pressure. Visually inspect tires for wear, damage, and proper inflation on a daily basis. **See Vehicle Specifications on page 49.**
- **Battery:** Check electrolyte to ensure it is at the proper level (**Figure 29**). 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 42.** Check fuel tank, lines, fuel cap, pump, and fuel filters for fuel leakage. Drain water from the fuel filter (diesel vehicle). **See Draining Water from Fuel Filter on page 43.**
- **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 8-12 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 19.**

## 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*, as a guide to inspect the vehicle daily for proper operation. Any problems should be corrected by a Husqvarna dealer/distributor or a trained technician.

- **Forward/Reverse shifter:** Check for proper operation. **See Controls and Indicators on page 12.**
- **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 adjusted 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). Brake adjustment 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.
- **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. Be sure the steering wheel adjustment lever is securely locked into position.
- **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. Husqvarna vehicles operate at 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.
- **General:** Listen for any unusual noises such as squeaks or rattles. Check the vehicle's ride and performance. Have a Husqvarna dealer or a trained technician investigate anything unusual.

## DRIVING INSTRUCTIONS

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### **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 one person per bucket seat at one time. 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.
- 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 Husqvarna 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.
- This vehicle is not intended to be used where risk of falling objects exists. If your vehicle will be used in such an environment, contact your local dealer.

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.
8. Start the vehicle.
  - 8.1. **Diesel vehicles:** To preheat glow plugs in cold weather, turn the key to the PREHEAT position and hold it there for 10-15 seconds. Turn the key to the START position and hold it there until the engine starts. If the engine does not start after 10-15 seconds, turn the key to the OFF position 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 7**). The engine must be at idle before the shift handle is moved. A buzzer will sound as a warning when the Forward/Reverse handle is in the REVERSE position.
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. All-wheel drive will automatically drive the appropriate wheel(s) as required. **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.**

## **ALL-WHEEL DRIVE (AWD) OPERATION**

All Husqvarna HUV 5420 DX vehicles feature an all-wheel drive (AWD) system. The AWD system automatically directs power to the wheel, or wheels, that have the most traction, providing optimum traction at all times. For example, if all wheels except the rear passenger-side wheel lose traction, then power will be directed to the rear passenger-side wheel. The all-wheel drive vehicle can adapt traction for a wide variety of driving surfaces and 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 all-wheel drive system will engage any wheel(s), front or rear, with traction (Figure 3).**
- **The diameter of all tires on the vehicle must be equal; otherwise the all-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.**

Under most circumstances the driver will not need to do anything to engage the AWD system; however, the front differential may become locked (rotate at the same speed regardless of the terrain) under certain conditions. If the front differential becomes locked, drive slowly in reverse for at least 10 feet (3 meters), then brake gently. **See following WARNING.**

### **WARNING**

- **Reduced steering control can occur if the front differential becomes locked. To help prevent this condition, avoid extremely hard braking in reverse.**

## **MUD TIRES**

Husqvarna HUV 5420 DX All-wheel drive (AWD) vehicles are equipped with mud tires and 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.**



## **▲ 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 all-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.

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

## **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 AND PROP ROD

See General Warnings on page 8.

The bed latch (**Figure 10**) has an automatically engaging prop rod and prop rod track (**Figure 11**) as standard features. To lift the bed, pull the bed latch handle toward the rear of the vehicle and lift the bed. The prop rod will come to rest in one of the notches in the prop rod track. To close the bed, lift the bed so that the prop rod is no longer supported in one of the track notches. Push the prop rod toward the front of the vehicle to free it from the track notch and gently lower the bed. **DO NOT** drop the bed. See following **DANGER**, **WARNING**, and **NOTE**.

### **⚠ DANGER**

- Use caution when working under bed. Be sure prop rod is secure. Otherwise the bed will 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 prop rod, ensure that it is securely engaged. 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.

**NOTE:** Husqvarna HUV 5420 DX vehicles are equipped with an automatically engaging prop rod (**Figure 11**), unless equipped with the electric bed lift accessory.

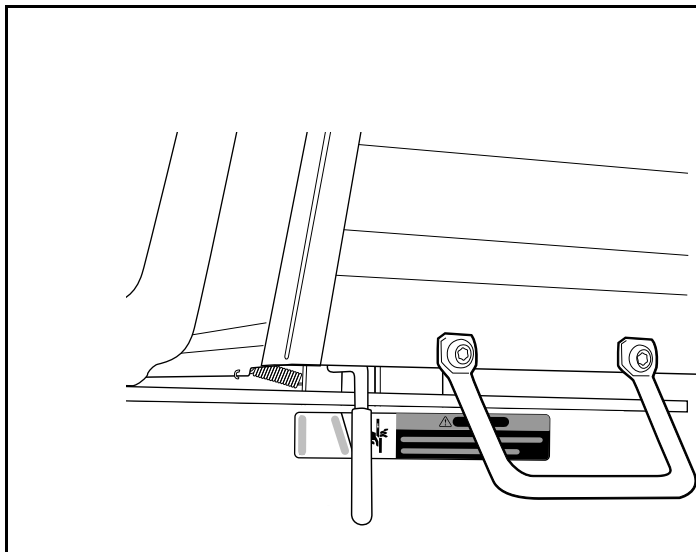


Figure 10 Bed Latch

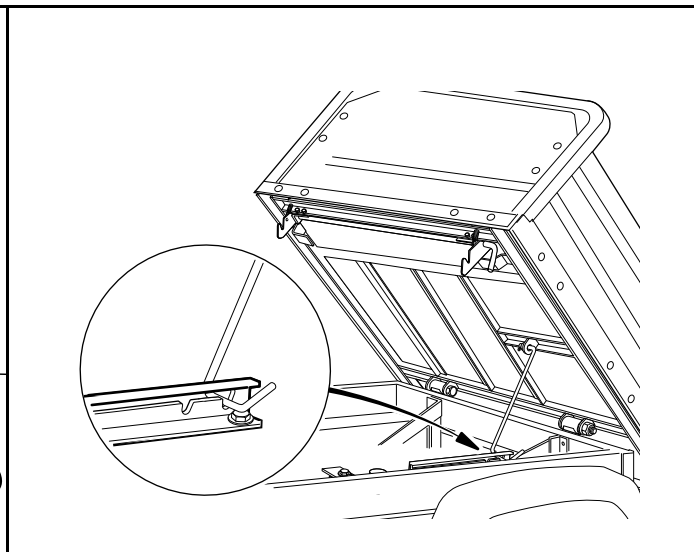


Figure 11 Prop Rod

## LOADING AND UNLOADING CARGO

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### **WARNING**

- Firmly 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 cargo bed and/or tow in a trailer. The combined weight of 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, bed load, and gross trailer weight.

### Maximum Gross Vehicle Weight

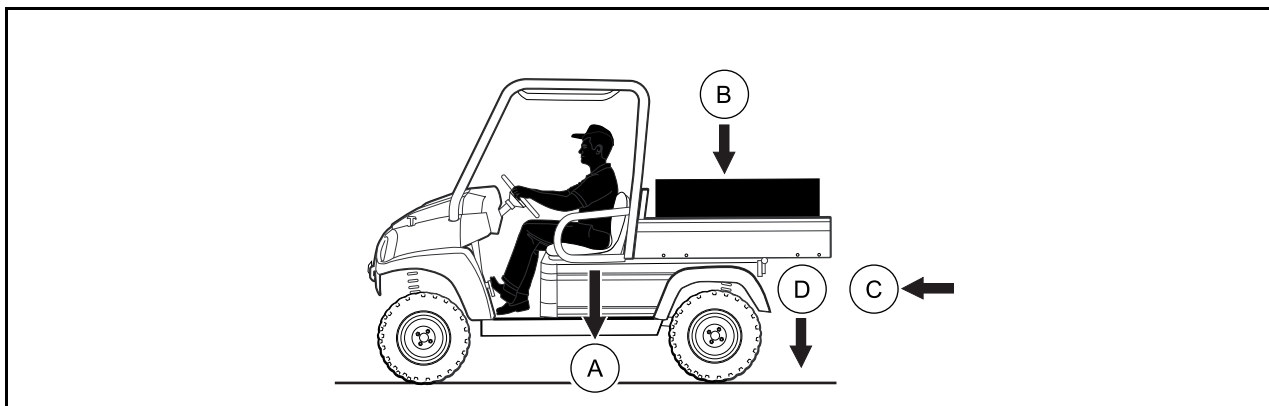
The maximum gross vehicle weight is the combination of the vehicle weight and the maximum vehicle capacity. The stated maximum gross vehicle weight must not be exceeded to maintain safe vehicle operation.

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 12 for the following specifications.

	Husqvarna HUV 5420 DX Diesel - CE MARK Vehicle	Husqvarna HUV 5420 DX Diesel - CE MARK Vehicle with High Capacity Option
<b>A: Maximum occupant capacity</b>	400 lb. (181 kg)	400 lb. (181 kg)
<b>B + C: Maximum payload capacity</b>	800 lb. (363 kg)	1050 lb. (476 kg)
<b>D: Trailer tongue weight</b>	150 lb. force (667 N)	150 lb. force (667 N)
<b>A + B + C: Maximum vehicle capacity</b>	1200 lb. (544 kg)	1450 lb. (657.6 kg)
<b>A + B + C + Vehicle Weight: Maximum gross vehicle weight</b>	2750 lb. (1247 kg)	3012 lb. (1366 kg)



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Figure 12 Vehicle Load Capacity – Two-Passenger Vehicles

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## TOWING WITH THE VEHICLE

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### **⚠ 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 Husqvarna vehicle or a trailer can have adverse effects on vehicle handling. Be especially cautious when towing other equipment with a Husqvarna 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.

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## TRANSPORTING ON A TRAILER

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### **⚠ WARNING**

- 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 Husqvarna 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

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See General Warnings on page 8.

### **⚠ DANGER**

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- Do not attempt to drain fuel when the engine is hot or while it is running.
- Clean up any spilled fuel 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**

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- 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.
- Do not attempt to charge frozen batteries or batteries with bulged cases. Discard the battery. Frozen batteries can explode.

### **⚠ CAUTION**

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- 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. If the battery is dead, see Using A Booster Battery (Jump Starting) on page 46.
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. **Diesel vehicles: If Biodiesel fuel is used, see Biodiesel Fuel (Diesel Vehicles Only) on page 42.** Prepare the fuel tank.
  - 4.1. Fill the fuel tank with fresh fuel.
  - 4.2. Disconnect the fuel vent line from the fuel tank vent nipple (**Figure 26**).
  - 4.3. Plug the fuel tank vent nipple so that it is air tight. Husqvarna recommends using a slip-on vinyl cap.
5. Change engine oil. **See Engine Oil and Filter Change on page 36.**
6. Disconnect battery. **See Disconnecting the Battery – Diesel Vehicles on page 10.**
7. 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).
8. Adjust the tires to the recommended tire pressure. **See Vehicle Specifications on page 49.**
9. Perform semiannual periodic lubrication. **See Periodic Lubrication Schedule on page 33.**
10. Thoroughly clean the front body, rear body, seats, cargo bed, engine compartment, and underside of vehicle.

11. 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 (**Figure 26**).
  - 2.1. Remove the plug from the fuel tank vent.
  - 2.2. Connect the vent tube to the fuel tank vent.
3. Connect battery. **See Connecting the Battery – Diesel Vehicles on page 10.** Coat terminals with Battery Terminal Protector Spray (P/N 603 00 00-03).
4. Place the Forward/Reverse handle in the NEUTRAL position. Crank the engine until fuel is pumped into the fuel lines (all vehicles) and the engine starts. Turn the engine off. **See following NOTE.**
5. Perform the Pre-Operation and Daily Safety Checklist on page 19 and the Performance Inspection on page 19.

## MAINTENANCE

**See General Warnings on page 8.**

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 19, the Performance Inspection on page 19, 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 Husqvarna 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.**

WARNING CONTINUED ON NEXT PAGE

## **WARNING**

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- To avoid unintentionally starting the vehicle, disconnect battery. See **Disconnecting the Battery – Diesel Vehicles** on page 10.
- 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 all-wheel drive system will engage any wheel(s), front or rear, with traction (Figure 3).

## **PERIODIC SERVICE SCHEDULE**

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See General Warnings on page 8.

## **WARNING**

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- 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 <b>Pre-Operation and Daily Safety Checklist on page 19.</b>
	Performance Inspection	See <b>Performance Inspection on page 19.</b>
Daily service by owner or trained technician	Engine	Check engine oil level; add if necessary. See <b>Engine Oil Level Check on page 35.</b>
		<b>Diesel vehicles:</b> Check engine coolant; add if necessary. See <b>Engine Coolant Level Check on page 40.</b>
	Fuel filters	<b>Diesel vehicles:</b> Drain water from fuel filter. See <b>Draining Water from Fuel Filter on page 43.</b>
	Brakes	Check brake fluid; add if necessary. Check brake pedal for proper operation. See <b>Performance Inspection on page 19.</b>
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. <b>Diesel vehicles:</b> Check for grass and debris around the radiator.
	Tires	Check air pressure and adjust if necessary. See <b>Vehicle Specifications on page 49.</b>
	Transmission and differentials	Check lubricant levels. Add if necessary. See <b>Lubrication Level Check for Front Differential, Transmission, and Rear Differential on page 39.</b>
	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 <b>page 44.</b>
	Front wheel alignment and toe-in	Check and adjust if necessary. See <b>Steering and Front Suspension Section in the appropriate maintenance and service manual.</b>
	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. <b>For brake wear-in procedure, see Hydraulic Brakes in the Pre-Operation and Daily Safety Checklist on page</b>	

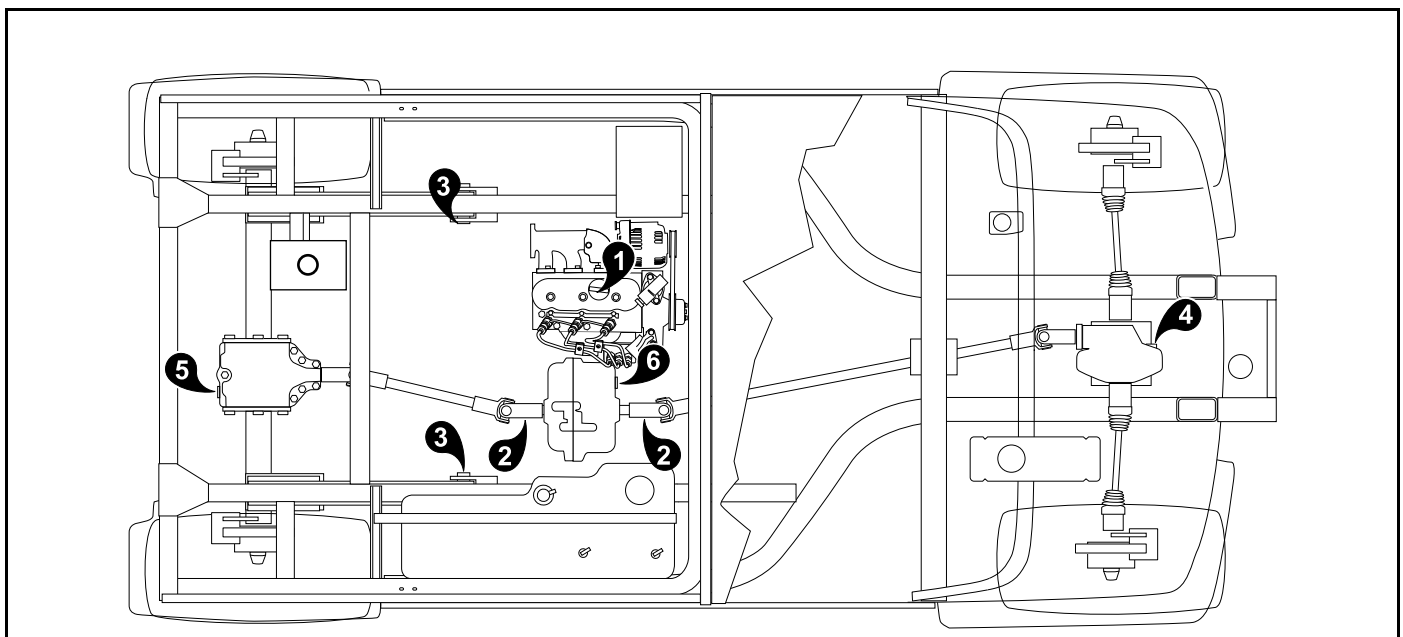
PERIODIC SERVICE SCHEDULE		
REGULAR INTERVAL	SERVICE	
		<b>19. See also Brake System Section in the appropriate maintenance and service manual.</b>
Annual service by trained technician only (or every 100 hours of operation, whichever comes first)	Engine	Check for leaks around gaskets, fill plugs, etc.
		<b>Diesel vehicles:</b> Check the v-belt for proper tension or damage. Adjust or replace if necessary.
		<b>Diesel vehicles:</b> Change engine coolant. <b>See Radiator and Cooling System Section in the maintenance and service manual.</b>
	Radiator	<b>Diesel vehicles:</b> Check clamps for tightness; check hoses for cracks. Replace if necessary.
	Engine air intake system	Replace air filter element. <b>See Air Intake System on page 41.</b>
		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.	

**⚠ 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.

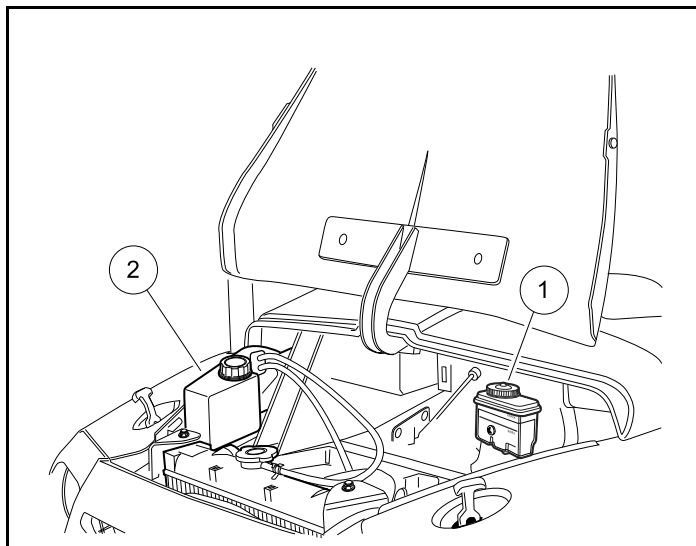
## PERIODIC LUBRICATION SCHEDULE

PERIODIC LUBRICATION SCHEDULE			
REGULAR INTERVAL	SERVICE	LUBRICATION POINTS	RECOMMENDED LUBRICANT
Diesel vehicle: First change 50 hours – additional change for both every 100 hours of operation or annually, whichever comes first.	Change engine oil and oil filter	1	Diesel vehicles: 3 qt. (2.8 L) with filter See Oil Viscosity on page 38.
Monthly by owner or trained technician	Driveshaft	2	Chassis Lube (EP NLGI Grade 2)
Semiannually by owner or trained technician (or every 50 hours of operation, whichever comes first)	Rear suspension (2 fittings)	3	Chassis Lube (EP NLGI Grade 2)
First change 50 hours – additional change every 100 hours of operation or annually, whichever comes first	Change front differential lubricant	4	5 oz. (150 mL) Mobil 424, Exxon Hydraul 560, or Esso Hydraul 56 lubricant
First change 50 hours – additional change every 300 hours of operation or annually, whichever comes first	Change rear differential lubricant	5	20 oz. (600 mL) Mobil 424, Exxon Hydraul 560, or Esso Hydraul 56 lubricant
	Change transmission lubricant	6	20 oz. (600 mL) Mobil 424, Exxon Hydraul 560, or Esso Hydraul 56 lubricant

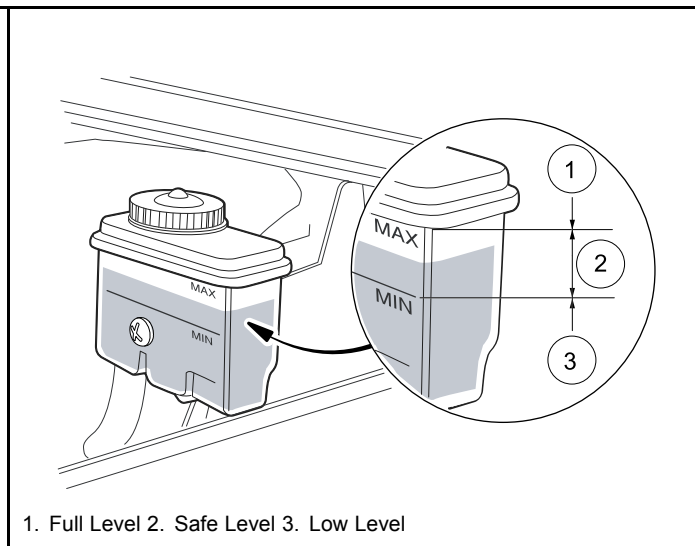


200  
Figure 13 Lubrication Points – Diesel Vehicles

## BRAKE FLUID RESERVOIR



201  
**Figure 14 Brake Fluid and Coolant Access (diesel vehicle shown)**



202  
**Figure 15 Brake Fluid Reservoir**

The brake fluid reservoir (1) is located under the hood (**Figure 14**). Raise the hood 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 15**). 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 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

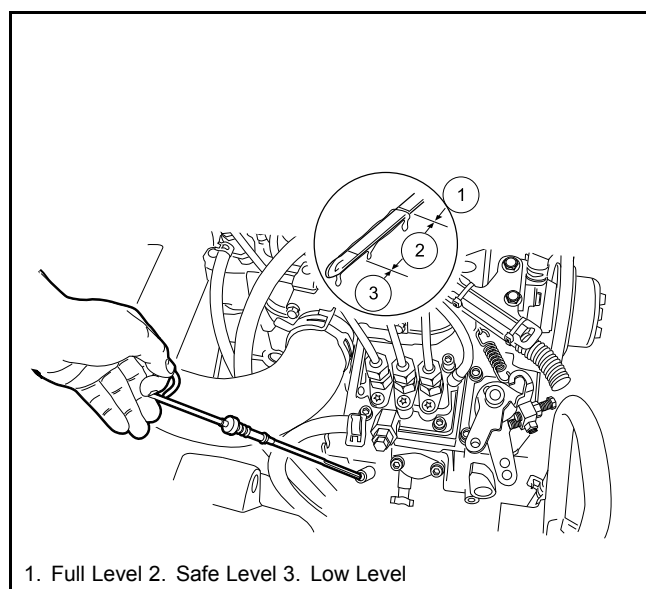
1. Remove the oil level dipstick from the oil filler tube and wipe oil from the dipstick (**Figure 16**). **See following CAUTION.**

#### **⚠ 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.



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**Figure 16** Engine Oil Level Check – Diesel Vehicles With Passenger-side Dipstick

## ENGINE OIL AND FILTER CHANGE

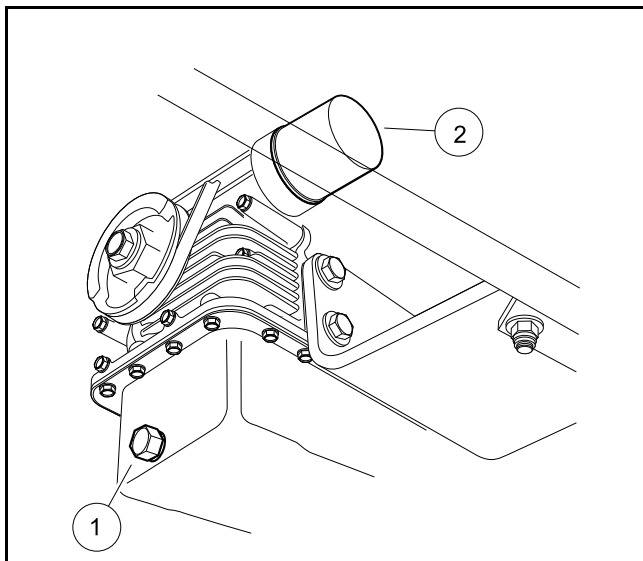
Engine oil and oil filter should be changed after the first 50 hours of operation (diesel). After that, they should be changed every 100 hours of operation or annually, whichever comes first.

### 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 battery. **See Disconnecting the Battery – Diesel Vehicles on page 10.**
3. Remove the oil filler cap to allow the oil to drain properly.
4. Position a pan designed for oil changes under the drain plug (**Figure 17**).
5. From the underside of the vehicle, use a socket or wrench to remove the drain plug (1). 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 cause skin burns.
  - 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.
6. Clean the oil drain plug threads with solvent to remove oil and oil residue. Make sure that the compression washer remains on the drain plug. Inspect the compression washer and replace if necessary.
  7. Use a socket or wrench to replace the oil drain plug (1) (**Figure 17**). Turn the plug clockwise and tighten to 31 ft-lb (42 N·m) for diesel vehicles.



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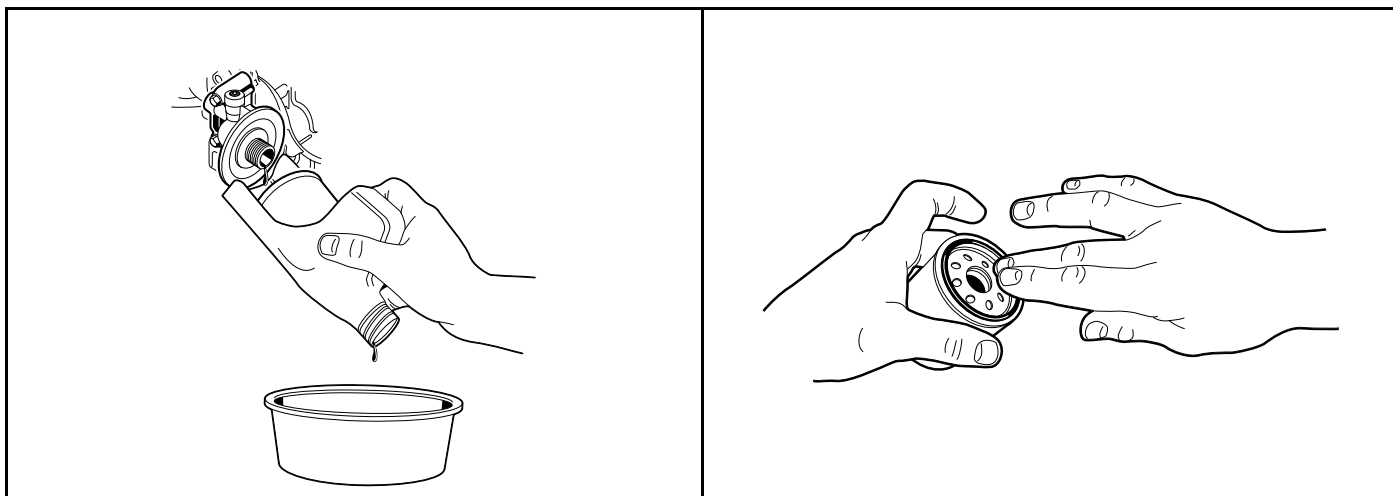
**Figure 17 Engine Oil Drain Plug and Oil Filter – Diesel Vehicles**

### 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 (2) (**Figure 17**).
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:** An oil drip guard (1) 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 (2) before removal. Position the port of the plastic container so oil will be directed into the oil pan (3). 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.



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Figure 18 Remove Engine Oil Filter

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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 (P/N 603 00 00-41) onto the engine oil filter port. **See following NOTE.**

**NOTE:** Use only Husqvarna 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.

### Engine Oil Filling

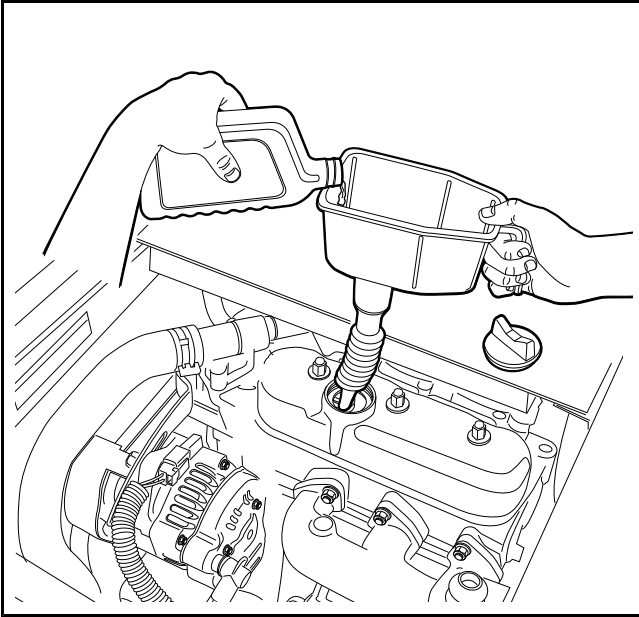
1. Add engine oil; use a funnel or pour spout to direct the oil into the opening (**Figure 20**). With filter change, the engine requires 3 qt. (2.8 L) of oil for diesel vehicles. Refer to oil viscosity guidelines for selection of oil grade (**Figure 21**). **See following CAUTION.**

## CAUTION

- **Do not exceed recommended oil capacity. Doing so will decrease engine performance or result in damage to the engine.**
2. Connect battery. **See Connecting the Battery – Diesel Vehicles on page 10.**
  3. 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.

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



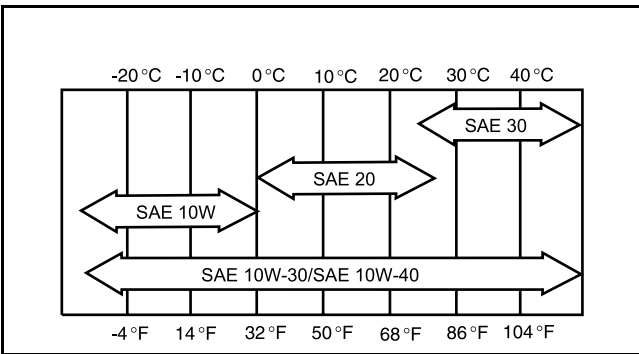
212 **Figure 20 Add Engine Oil – Diesel Vehicles**

### OIL VISCOSITY

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

**NOTE:** Use engine oil with API classification CF for diesel engines.

Using multi-grade oils (5W-20, 10W-30, and 10W-40) will increase oil consumption. If multi-grade oil is used, check the oil level more frequently.



214 **Figure 21 Oil Viscosity Chart – Diesel Vehicles**



## GEARCASE LUBRICATION

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

### LUBRICATION LEVEL CHECK FOR FRONT DIFFERENTIAL, TRANSMISSION, AND REAR DIFFERENTIAL

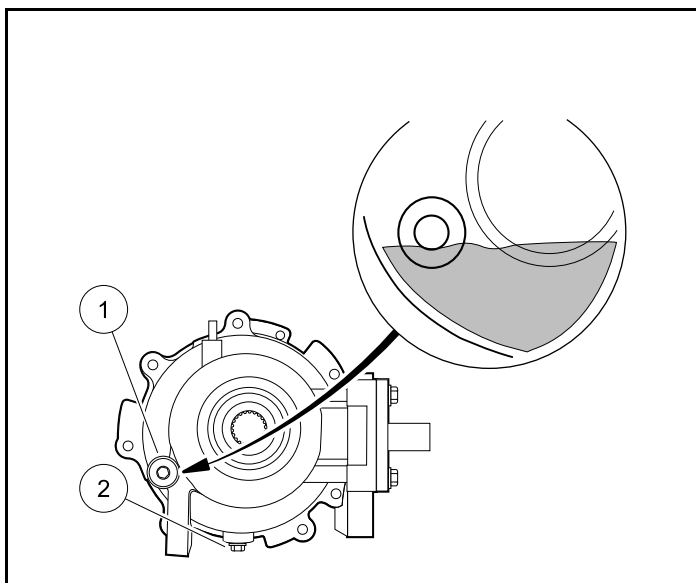
Each gearcase component is equipped with two oil port plugs (1 and 2) (**Figure 22**, **Figure 23**, and **Figure 24**). When the vehicle is on a level surface, use the level indicator hole (upper plug) (1) as a lubricant level indicator. Lubricant level should be even with the bottom of level indicator hole (1).

### LUBRICATION CHANGE FOR FRONT DIFFERENTIAL, TRANSMISSION, AND REAR DIFFERENTIAL

Use the lower plug (2) for drainage (**Figure 22**, **Figure 23**, or **Figure 24**). Remove both plugs to allow the lubricant to drain faster. **See preceding NOTE.**

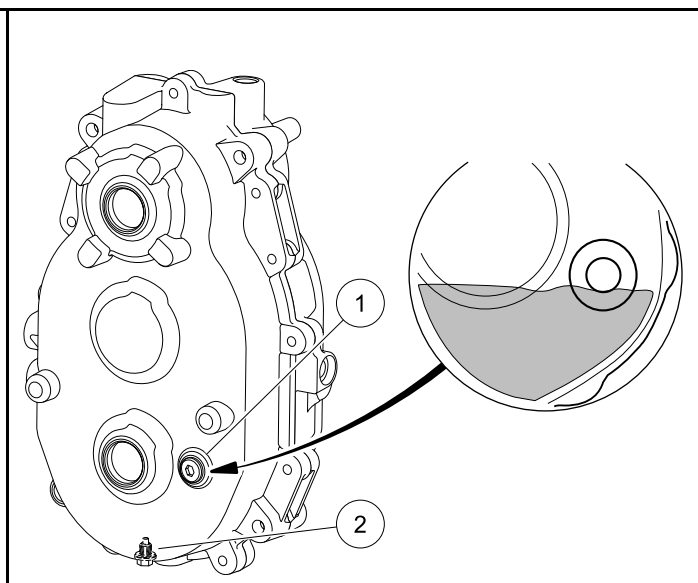
#### Front differential:

Clean and install the drain plug (2) and washer before filling the front differential with new lubricant (**Figure 22**). Tighten the drain plug to 108 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 120 in-lb (14 N·m).



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**Figure 22** Front Differential Lubrication Level



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**Figure 23** Transmission Lubrication Level

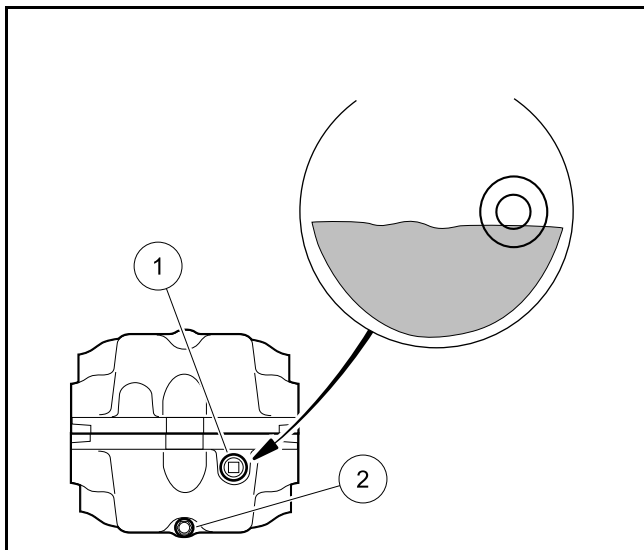
#### Transmission:

Clean and install the drain plug (2) before filling the transmission with new lubricant (**Figure 23**). Tighten the drain plug to 96 in-lb (11 N·m). Remove the fill plug from the top of the transmission case and use a funnel to fill the transmission with lubricant. **See Periodic Lubrication Schedule on page 33.** Apply Loctite 567 to the threads of the fill plug and tighten to 21 ft-lb (28 N·m).

Check the level of lubricant at the level indicator plug (1). Apply Loctite 567 to the threads of the level indicator plug and tighten to 21 ft-lb (28 N·m).

**Rear differential:**

Clean and install the drain plug (2) and washer before filling the rear differential with new lubricant (**Figure 24**). Tighten the drain plug to 96 in-lb (10.8 N·m). Use a funnel to fill the differential through the lubricant level indicator hole (1). **See Periodic Lubrication Schedule on page 33.** Apply Loctite 567 to the threads of the level indicator plug and tighten to 21 ft-lb (28 N·m).



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**Figure 24 Rear Differential Lubrication Level**

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## ENGINE COOLANT – DIESEL VEHICLES

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### ENGINE COOLANT LEVEL CHECK

The coolant reserve tank (2) is located under the hood on the passenger side (**Figure 14**). Raise the hood to check the coolant level before every operation.

1. Check the coolant level of the reserve tank (2). If the coolant is at or below the LOW mark, add pre-mixed coolant until the level reaches the FULL mark. If a leak is detected, have it checked by a trained technician. **See following WARNING.**

#### **⚠ WARNING**

- **Hot! Coolant reserve tank is pressurized. Do not remove cap when engine is hot.**

## AIR INTAKE SYSTEM

### CAUTION

- Do not drill into the driver-side frame. Failure to heed this caution could damage the engine by allowing excessive contamination to enter the air intake system.

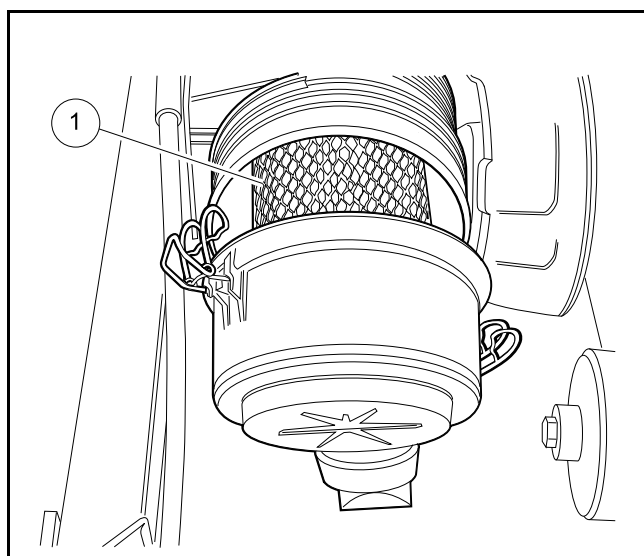
### AIR FILTER REPLACEMENT

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 30.** 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, and locate the air filter canister.
2. Release both canister tab locks (**Figure 25**).
3. Pull the canister cap away from the canister.
4. Remove the air filter cartridge (1). **See following NOTE.**

**NOTE:** The air filter cartridge is specifically designed for this engine. It only fits into the canister one way. Use only the Husqvarna part (P/N 603 00 00-10) designed for this engine.



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**Figure 25 Air Filter Cartridge**

#### Air Filter Installation

1. Push the new air filter cartridge onto the nozzle inside the canister.
2. Place the canister cap, marked TOP, on the top center of the canister.
3. Secure the canister cap with both tab locks.

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## FUELING INSTRUCTIONS

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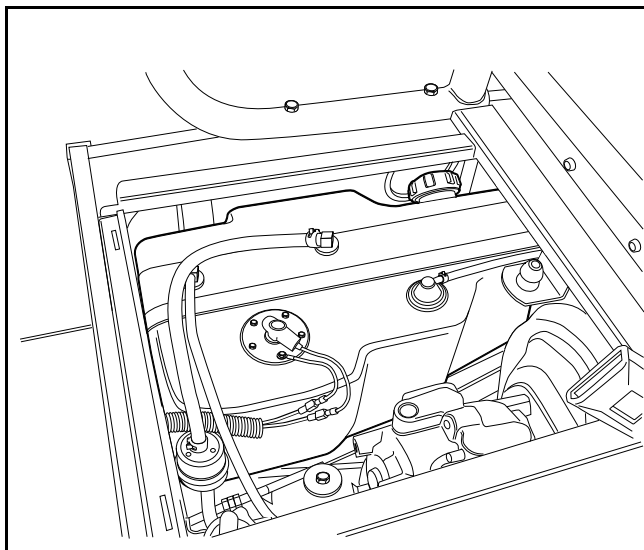
See General Warnings on page 8.

### **▲ 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. Diesel vehicles have a green fuel cap. **See preceding DANGER and following NOTE.**

**NOTE: Diesel vehicles:** Use only diesel fuel grade no. 2 with a cetane rating of 45 or higher.

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.



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**Figure 26 Fuel Tank – Diesel Vehicles**

### **BIODIESEL FUEL (DIESEL VEHICLES ONLY)**

Biodiesel has unique qualities that should be considered before it is used in the Kubota D722 diesel engine. During cold weather, plugged fuel lines, plugged fuel systems, hard starting, and other unknown failures can result from use of this fuel.

Biodiesel is an excellent medium for microbial growth and contamination. Microbial contamination can cause corrosion of the fuel system and prematurely plugged fuel filters. **See following NOTE.**

**NOTE:** Use of biodiesel may result in premature failure of fuel system components. Kubota has documented problems such as plugged fuel filters and deteriorated fuel lines during testing of biodiesel.

Biodiesel can damage painted surfaces. Be sure to remove all spilled fuel immediately to help prevent damage to painted surfaces.

If biodiesel will be used in the Kubota D722 engine, be sure that it meets the following requirements:

- The fuel blend should contain no more than 5% biodiesel by volume.
- The petroleum portion of the fuel blend must meet ASTM standard D975 and the biodiesel portion of the fuel blend must meet ASTM standard D6751.
- For Europe, the fuel blend must meet the EN590 standard. **See following CAUTION.**

## **CAUTION**

- **Never use any fuel that does not meet specifications or fuel in which the contents cannot be identified. Using blends higher than 5% biodiesel content can affect engine life and cause deterioration of hoses, tube lines, injectors, injector pump and seals.**
- **For more information on these fuel standards, please contact your nearest Kubota dealer.**

If biodiesel is used, be sure to apply the following guidelines:

- Ensure the fuel tank is as full as possible at all times to prevent moisture from collecting.
- Ensure that the fuel tank cap is securely tightened to prevent water from entering the fuel tank.
- Drain all water from the fuel filter daily before operating vehicle. **See *Draining Water from Fuel Filter*.**
- Check the engine oil level daily before the engine is started. **See *Engine Oil Level Check* on page 35.**
- Before vehicle storage, run the engine with conventional diesel fuel for at least 30 minutes to flush the biodiesel from the engine. **See *Preparing the Vehicle for Extended Storage* on page 28. See following NOTE.**

**NOTE:** Biodiesel does not have long-term stability and must not be left in engines longer than three months. This fuel type attracts moisture and may contain higher water content than conventional diesel fuel.

Fuel system maintenance, cleaning, and fuel line replacement are required more frequently for engines that are operated with biodiesel.

## **DRAINING WATER FROM FUEL FILTER**

### **Diesel Vehicles Only**

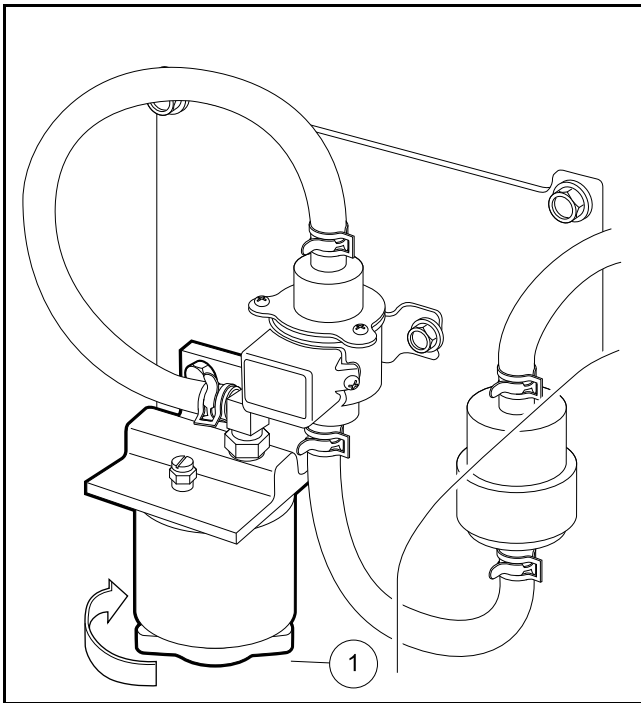
Water should be drained from the fuel filter daily. The fuel filter is mounted on a plate by the lower seat support panel (**Figure 27**).

1. Position a pan under the fuel filter.
2. Lift the passenger-side seat.
3. Locate the valve (1) on the underside of the filter. Turn the valve clockwise until water begins to stream from the filter.
4. Drain the water until it changes color (to fuel). **See following WARNING.**

## **⚠ WARNING**

- **Clean up spilled fuel. Keep sparks and flames away from the vehicle and service area. Failure to heed this warning could result in an explosion or fire, resulting in severe personal injury or death.**
5. Close the valve by rotating it counterclockwise until the valve is firmly sealed.
  6. To resupply the filter with fuel, turn the key switch to the ON position for 10 seconds. **See following NOTE.**

**NOTE:** Dispose of water according to the environmental laws and regulations for your area.



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Figure 27 Fuel Filter

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## BATTERY

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See General Warnings on page 8.

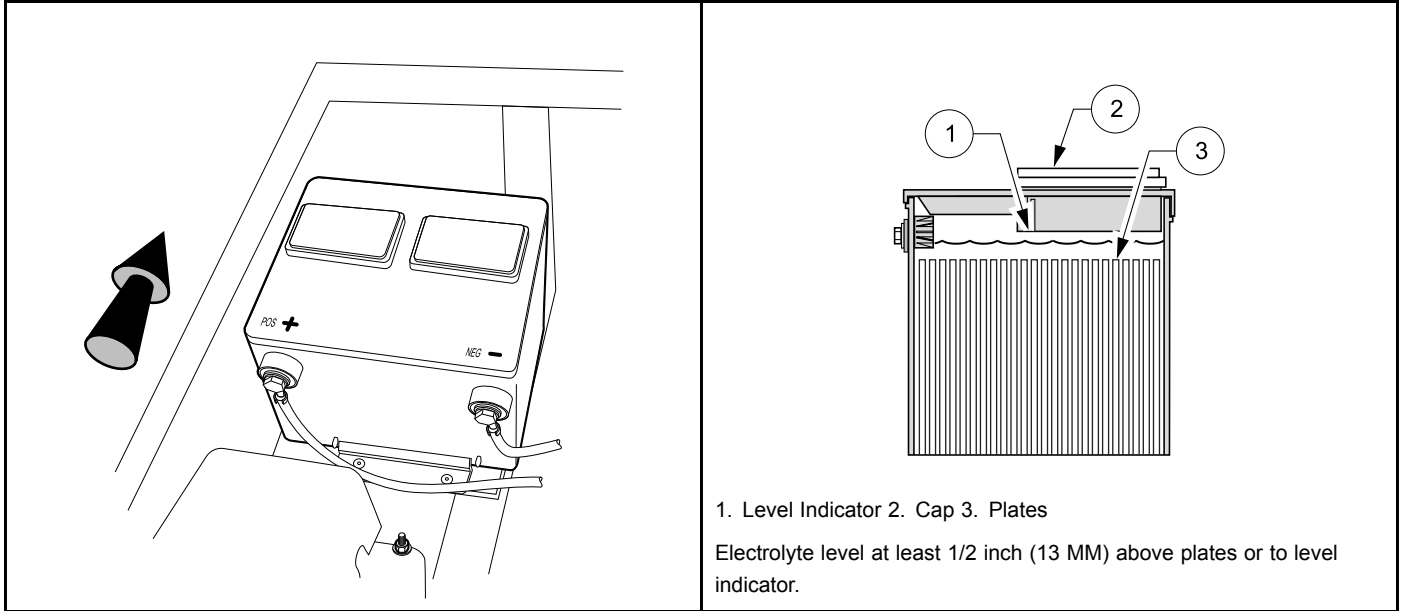
### **⚠ DANGER**

- **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 a Husqvarna vehicle is a 12-volt, low-maintenance battery that requires infrequent checks (**Figure 28**). Electrolyte level should be checked semiannually.



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**Figure 28 Battery**

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**Figure 29 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. Remove driver-side seat to access engine compartment. **See WARNING “For vehicles with cargo beds...” in General Warnings on page 8.**
3. Disconnect battery. **See Disconnecting the Battery – Diesel Vehicles 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. Be sure terminals are tight. Let the terminals dry and then spray them with Battery Terminal Protector Spray (P/N 603 00 00-03). **See Connecting the Battery – Diesel Vehicles on page 10. 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 108 in-lb (12.2 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)**

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### **⚠ 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 final connection (negative) 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.

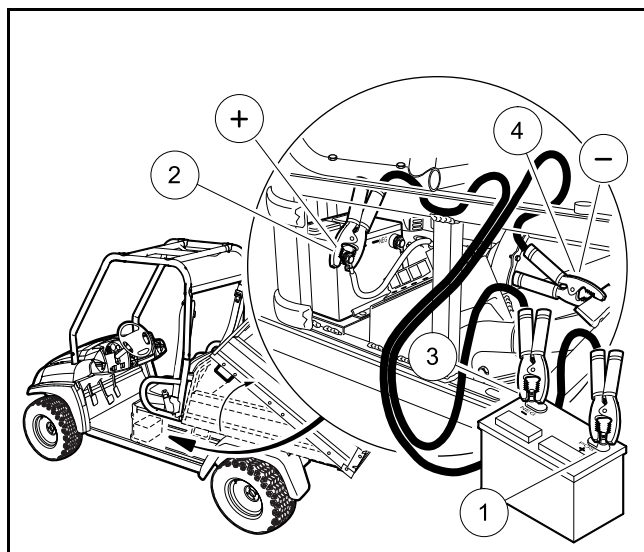
If it is necessary to use a booster battery to start the engine, BE CAREFUL!

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.
3. Access the engine compartment by raising the cargo bed. **See WARNING “For vehicles with cargo beds...” in General Warnings on page 8.**
4. Locate the vehicle battery on the driver’s side of the vehicle under the cargo bed (**Figure 30**).
5. Connect the end of the first cable (1) to the positive (+) terminal of the booster battery. Connect the other end of the same cable (2) to the positive terminal of the vehicle battery. **See DANGER “Battery – Explosive gases!...” in General Warnings on page 8.**
6. Connect the end of the second cable (3) to the negative (–) terminal of the booster battery. Connect the other end of the same cable (4) to the battery frame ground.
7. Sit in the driver’s seat and start the engine.
8. After the engine has started, remove the frame ground (–) cable (4) first. Remove the cable from the positive terminal (2). Then remove the cables from the booster battery. **See following CAUTION.**

### **CAUTION**

- The alternator can be damaged if the following actions occur:
  - Engine is operated with battery cables disconnected.
  - Booster cables are connected wrong.





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Figure 30 Jump Starting

## CLEANING THE VEHICLE

Each vehicle is equipped with hand-washable front and rear bodies. The vehicle has a powder-coated steel cargo bed (or optional aluminum flat 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. To remove oxidation or discoloration from aluminum, use a commercially available aluminum cleaner paste and fine grade (No. 00) steel wool.

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

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There is a complete line of accessory equipment available from Husqvarna and 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**

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- Custom cab assemblies, canopy tops, weatherproof enclosures, and windshields will not protect occupants from flying objects.
- If the vehicle is equipped with an electric-powered bed lift, remove the bed before servicing the bed lift system.

### **CAUTION**

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- Do not drill into the driver-side frame. Failure to heed this caution could damage the engine by allowing excessive contamination to enter the air intake system.

## 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 from Husqvarna includes a remote operation switch, which enables the operator to move away from the vehicle and cable. **See following WARNING and CAUTION.**

### **⚠ WARNING**

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- 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**

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- 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.

## VEHICLE SPECIFICATIONS

SPECIFICATIONS	HUSQVARNA HUV 5420 DX CE MARK VEHICLE
<b>POWER SOURCE</b>	Diesel
<b>Engine:</b> 4-cycle OHV, 719 cc, 15Kw (20.0 maximum HP) @3600 RPM (per SAE J 1940/1349), three-cylinder, liquid-cooled, with pressure lubrication system	•
<b>Fuel system:</b> Mechanical injection, fuel water separator, fuel filters, and electric fuel pump	•
<b>Governor:</b> internal to engine, mechanical, centrifugal ball	•
<b>Ignition:</b> Compression	•
<b>Transmission:</b> Forward and reverse with neutral (4.98:1 forward, 7.79:1 reverse)	•
<b>Electrical system:</b> 12 volt, 500 cca at 0 °F (-17.8 °C), 650 at 32 °F (0 °C). 105-minute reserve capacity and 35-amp charging capacity	•
<b>Torque converter:</b> Automatic, variable-speed, dry type	•
<b>STEERING/SUSPENSION/BRAKES</b>	
<b>Suspension:</b> <b>Front:</b> Independent double A-arms with coil-over shock absorbers <b>Rear:</b> Swing arms with coil-over shock absorbers	•
<b>Steering:</b> Self-adjusting rack and pinion, Ackerman	•
<b>Brakes:</b> Hydraulic brake system – brake pads and discs on each wheel with separate foot-operated park brake	•
<b>BODY/CHASSIS</b>	
<b>Frame/Chassis:</b> Box tube aluminum	•
<b>Side and rear body:</b> Plastic	•
<b>Cargo bed:</b> Powder-coated steel or aluminum	•
<b>Front body:</b> Geloy XTWM206	•
<b>Tires: All Terrain:</b> 25 x 10.5 – 12 front and rear; tubeless, 4-ply rated load range <b>Mud:</b> 25 x 10.5 – 12 front and rear; tubeless, 4-ply rated load range	•
<b>DIMENSIONS/WEIGHT</b>	
<i>NOTE: Items marked with an asterisk (*) indicate approximate values.</i>	
<b>*Overall length</b> (box bed configuration, without brush guard):	122 in. (309.9 cm)
<b>Overall width:</b> without mirror with mirror	58.5 in. (148.5 cm) 63.6 in. (161.5 cm)
<b>*Overall height</b> (with ROPS): with mud tires with all-terrain tires	82.3 in. (209 cm)
<b>Wheelbase</b>	81.5 in. (207 cm)
<b>Ground clearance:</b> under differential	8.2 in. (20.8 cm)

SPECIFICATIONS	HUSQVARNA HUV 5420 DX CE MARK VEHICLE
<b>Front and rear wheel tread</b>	48.8 in. (124 cm)
<b>*Weight:</b> 2-passenger diesel with electric bed lift, mud tires, and brush guard 4-passenger diesel with all-terrain tires	1597 lb. (724.2 kg)
<b>Forward speed</b>	25 mph (40 km/h)
<b>Governed RPM</b>	3825
<b>Turning Radius</b>	138 in. (350.5 cm)
<b>Load bed height</b>	34 in. (86.4 cm)
<b>Load bed size</b> (box bed inside dimensions)	48.0 x 49.8 x 10.9 in. (122 x 127 x 28 cm) (15.3 cubic feet)
<b>Maximum payload capacity</b> (level surface only)	800 lb. (363 kg) High capacity option: 1050 lb. (476 kg)
<b>Vehicle rated capacity</b> (payload, driver, and passenger; level surface only)	1200 lb. (544 kg) High capacity option: 1450 lb (658 kg)
<b>Maximum gross vehicle weight</b> (fully loaded vehicle, including accessories)	2750 lb. (1247 kg) High capacity option: 3012 lb. (1366 kg)
<b>Standard seating capacity</b>	2
<b>NOISE AND VIBRATION SPECIFICATIONS</b>	
<b>Drive-by noise level to operator</b>  Test method: EN 12053:2001	81.6 dBA (Noise Power Level: 102.6 dBA) Uncertainty: 2 dBA
<b>Vibration at driver's seat</b>  Test method: EN 13059:2002	.9 m/s <sup>2</sup> Uncertainty: 0.33 m/s <sup>2</sup>
<b>CLIMATIC EXTREMES</b>	
<b>Operating temperature range</b>	-20 to 40 °C (-4 to 104 °F)
<b>LIQUID CAPACITIES</b>	
<b>Engine crankcase with filter:</b> SAE 10W-30, API classification CF	3 qt. (2.8 L)
<b>Front differential:</b> Mobil 424, Exxon Hydraul 560, or Esso Hydraul 56 lubricant	5 oz. (150 mL)
<b>Rear differential:</b> Mobil 424, Exxon Hydraul 560, or Esso Hydraul 56 lubricant	20 oz. (600 mL)
<b>Transmission:</b> Mobil 424, Exxon Hydraul 560, or Esso Hydraul 56 lubricant	20 oz. (600 mL)
<b>Engine coolant:</b> mixture of 55% propylene glycol and 45% water	2 gal. (7.8 L)
<b>Brake fluid:</b> DOT 5 (silicone) brake fluid	8 oz. (240 ml)







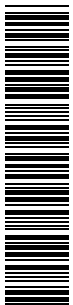


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