

Workshop manual

FS4600G II



English

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1 Introduction

1.1 Document description

This manual gives a full description of how to do maintenance and repair on the product. It also gives safety instructions that the personnel must obey.

1.2 Target group

This manual is for personnel with a general knowledge of how to do repair and do servicing. All personnel that do repair or do servicing on the product must read and understand the manual.

1.3 Revisions

Changes to the product can cause changes to the maintenance work and spare parts. Separate information is sent out for each change.

Read the manual together with all received information about changes to maintenance and spare parts for the product.

1.4 Safety



WARNING: All personnel that repair or do servicing on the product must read and understand the safety instructions in this workshop manual.

1.5 Servicing tools

The manual gives information about necessary servicing tools. Always use original tools from Husqvarna.

2 Safety

2.1 Safety definitions

Warnings, cautions and notes are used to point out specially important parts of the manual.



WARNING: Used if there is a risk of injury or death for the operator or bystanders if the instructions in the manual are not obeyed.



CAUTION: Used if there is a risk of damage to the product, other materials or the adjacent area if the instructions in the manual are not obeyed.

Note: Used to give more information that is necessary in a given situation.

2.2 General safety instructions

- Read and obey this workshop manual.
- Obey the local safety regulations when you repair or do servicing of the product.
- The safety equipment you use must obey local regulations.
- Use only the equipment that the manufacturer recommends.
- Use personal protective equipment.
- Use protective gloves and safety glasses. The safety glasses must obey the ANSI Z87.1 for US or EN166 for EU countries.
- Use earmuffs when the product is in operation.
- Always stop the product before you repair or do servicing of the product.
- Remove flammable materials from the work area. The product can cause sparks.
- Do not use the product if the power cord or cables are damaged.
- Disconnect the product from the mains socket.
- If possible, keep the power cord disconnected when you repair or do servicing of the product.
- Use cables adapted to outdoor operation.
- Do not touch the wires when the product is on. An electrical shock can cause injury.
- Do not point compressed air to your body. Compressed air can go into the blood stream.
- Always tighten the nuts and the bolts on the product correctly.
- Do not use the power cord to lift the product. Do not pull the power cord to disconnect the product.
- Do checks of the product for warning labels that are damaged. Replace the warning labels that are damaged.
- Always read the warning labels of product supplies.
- Obey the local waste regulations.

2.3 Special safety instructions

- When you use compressed air, do not point the airflow in the direction of your body. Air can go into the blood circulation and kill you.
- Use eye protection when you do work on springs that have tension.
- Do not use accessories that are not approved by the manufacturer. Do not do changes that are not approved by the manufacturer. This can cause injury or death to the operator or other persons.
- Always use original spare parts and accessories.
- Use approved hearing protection. Noise from the product can result in permanent hearing loss.

2.4 Symbols on the product



WARNING: This product can be dangerous and cause serious injury or death to the operator or others. Be careful and use the product correctly.



Read the operator's manual carefully and make sure that you understand the instructions before you use this product.



Use hearing protection, eye protection and respiratory protection.



The dust can cause health problems. Use an approved respiratory protection. Do not breathe exhaust fumes. Do not use a combustion engine product indoors or in areas that do not have sufficient airflow.



Risk of cut injuries. Keep all body parts away from the cutting blade.



The blade guards must always be installed on the product. Do not let more than 180° of the cutting blade show.



Keep body parts away from the cutting blade and other moving parts.



Make sure that the cutting blade is not blunt or has damages, such as cracks.



Make sure that the cutting blade is applicable to the same speed or a higher speed than the value given on the product. A cutting blade that is operated at too high speed can break and cause injury or damage.



Do not use the product near flammable material or gases.



Always lift the product at the lifting eye.



The arrow on the blade guard shows the direction of rotation of the cutting blade.



Risk of injury. Be careful around the electric fan and other moving parts.



Risk of injury. Be careful around the belt and other moving parts.



Keep body parts away from the moving parts of the product.



Dimension of the cutting blade.



Dipstick.



Engine start.



Machine stop.

RPM



Speed adjustment.



On/off switch for the light kit (option).



On/off switch for the water pump (option).



Unleaded gasoline only.



Rear axle freewheel function.



Differential locking function.



Lever for the water cooling system.



Stop position for speed control lever.



Lever for cutting depth, lower cutting blade.



Lever for cutting depth, lift cutting blade.



Depth indicator and calibration wheel.



Blade shaft wrench.



Hammer.



Screwdriver (not included).

Note: Other symbols/decals on the product refer to certification requirements for some markets.

2.5 Symbols on the display



Engine fault indicator. The operation cannot continue. Refer to the engine manual for more information.



Alternator charge indicator. The alternator does not charge the battery. Refer to the engine manual for more information.



High engine coolant temperature indicator. The temperature is too high. Refer to the engine manual for more information.



Low oil pressure indicator. The oil pressure is too low. Refer to the engine manual for more information.



Check engine indicator. Comes on when engine fault indicator or engine warnings indicator is on. Refer to the engine manual for more information.



Engine alarm indicator. Refer to the engine manual for more information.



Engine input temperature.



Engine speed.



Hour meter for engine operation.



Engine load.



Battery voltage.



Engine coolant temperature.



Menu button.



Arrow key to scroll up in the menus.



Arrow key to scroll down in the menus.



Enter button to enter the menu structure or to make a selection.

3 Prepare and do servicing on the product

3.1 Maintenance schedule

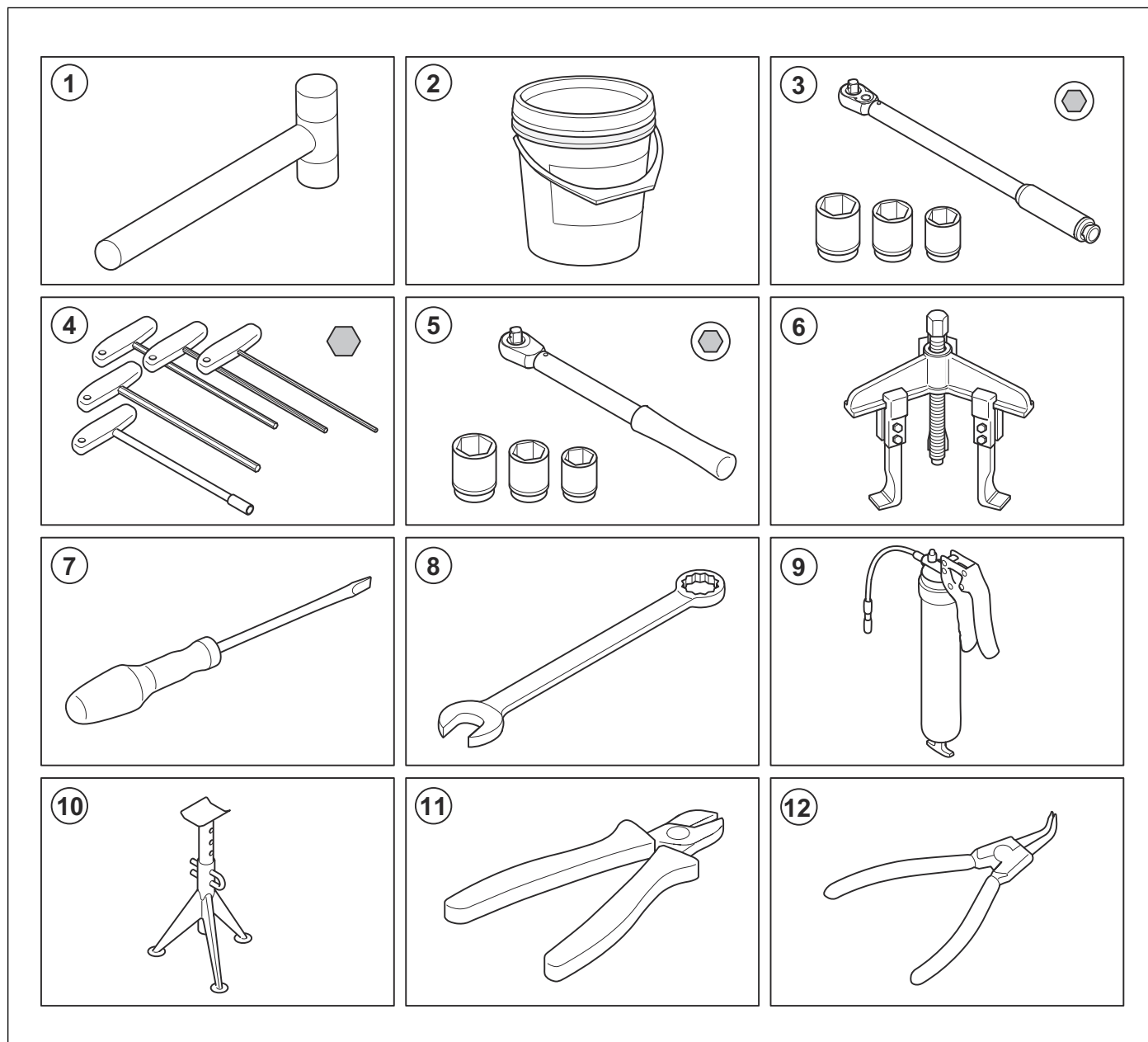
Note: If more than 1 time interval is identified in a table row, the shortest time interval is for the first maintenance only.

| Maintenance | Daily | 50 h | 100 h | 250 h | 500 h | Yearly |
|---|-------|------|-------|-------|-------|--------|
| Do a check for fuel and oil leakage. | X | | | | | |
| Do a check of the radiator coolant level. | X | | | | | |
| Do a check of the engine oil level. | X | | | | | |
| Examine all hoses and hose clamps. If it is necessary, tighten and replace the hoses and the hose clamps. | X | | | | | |
| Do a check of the air filter indicator. Clean the outer air filter if the air filter indicator is red. | X | | | | | |
| Do a check of the protective covers and the blade guards. | X | | | | | |
| Drain water from the gearbox when the ambient temperature is below 32°F/0°C. | X | | | | | |
| Do a check of the water supply to the cutting blade. | X | | | | | |
| Clean the product. | X | | | | | |
| Replace the engine oil and the engine oil filter. | | X | X | | | |
| Replace the oil filter for the hydraulic propulsion system. | | X | | X | | |
| Do a check of the pump belt for the hydraulic propulsion system. | | X | | | | |
| Do a check of the engine belt. | | X | | | | |
| Do a check of the drive belts. | | X | | | | |
| Lubricate the pivot on the hydraulic cylinder. | | X | | | | |
| Lubricate the front wheels. | | X | | | | |
| Lubricate the bearings on the front axle. | | X | | | | |
| Lubricate the bearings on the rear axle. | | X | | | | |
| Do a check of all fittings and nut bolts. Make sure that they are installed correctly. | | X | | | | |
| Do a check of the inner blade flange, the outer blade flange and the blade nut. | | X | | | | |
| Replace the fuel filter. | | | X | | | |
| Do a check of the hydraulic oil level for the drive system. | | | X | | | |
| Do a check of the hydraulic oil level for the hydraulic lift pump. | | | X | | | |
| Do a check of the gearbox oil level. | | | X | | | |
| Do a check of the rear axle oil level. | | | X | | | |

| Maintenance | Daily | 50 h | 100 h | 250 h | 500 h | Yearly |
|---|-------|------|-------|-------|-------|--------|
| Examine the wheels and wheel hubs for damage and make sure that they are installed correctly. | | | X | | | |
| Examine the air filter hose and hose clamps. | | | X | | | |
| Replace the oil of the drive system. | | | | | X | |
| Replace the oil of the hydraulic lift pump. | | | | | X | |
| Replace the rear axle oil. | | | | | X | |
| Replace the gearbox oil. | | | | | X | |
| Replace the radiator coolant. | | | | | X | |
| Replace the air filters. | | | | | X | |
| Do a check that the coolant mixture is correct. Refer to <i>To do a check of the coolant mixture on page 15.</i> | | | | | | X |
| Lubricate the P1 and P2 male motor connectors. | | | | | | X |

4 Servicing tools

4.1 Servicing tools overview

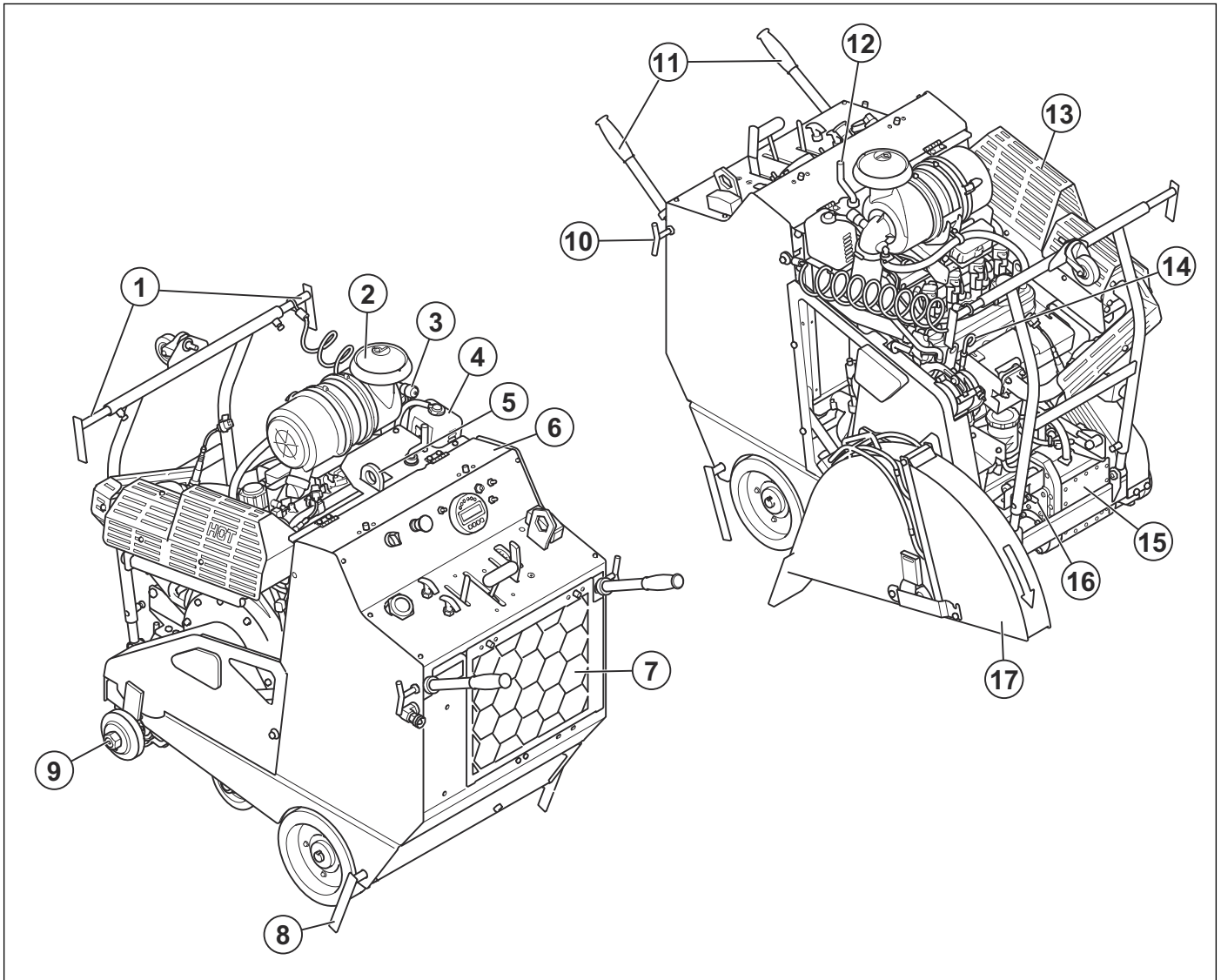


| Item | Description | Use | Article number/Source |
|------|-----------------------------------|--------------------------------|------------------------------------|
| 1 | Soft hammer | For general use. | N/A |
| 2 | Grease | For general use. | Grease DIN 51825, K2K-30 or K3K-30 |
| 3 | Torque wrench | For general use. | N/A |
| 4 | Hex key, 3mm, 4mm | For general use. | N/A |
| 5 | Socket wrench, 10mm | For general use. | N/A |
| 6 | Puller | To remove flanges and pulleys. | N/A |
| 7 | Screwdriver PH/S2, flat-blade 3mm | For general use. | N/A |
| 8 | Wrench, 13mm, 15mm, 16mm | For general use. | N/A |
| 9 | Grease gun | To lubricate the product. | N/A |

| Item | Description | Use | Article number/Source |
|------|------------------|--|-----------------------|
| 10 | Supports | To put below the product for supports. | N/A |
| 11 | Wire cutter | For general use. | N/A |
| 12 | Snap ring pliers | For general use. | N/A |

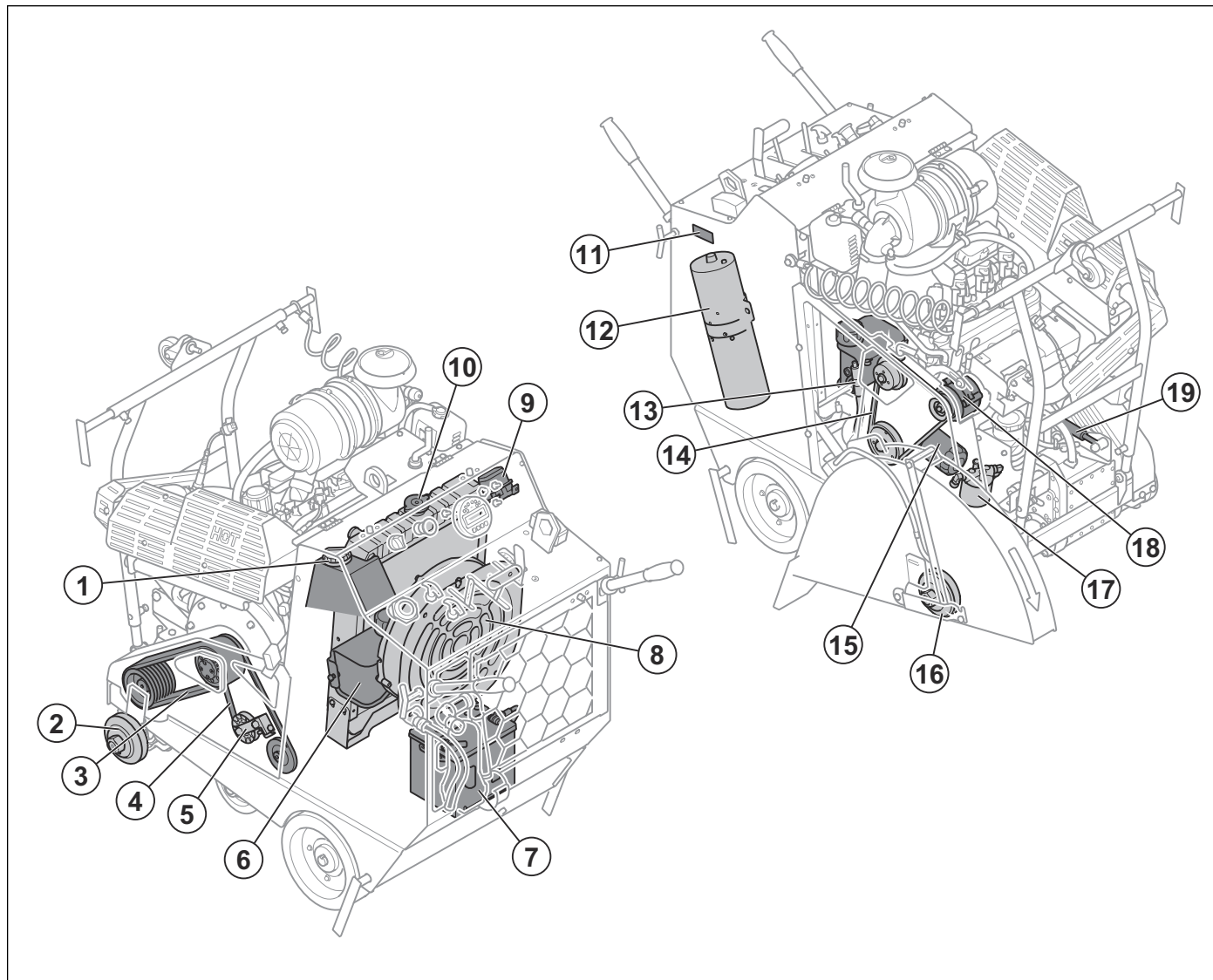
5 Product overview for repair and servicing

5.1 Product overview



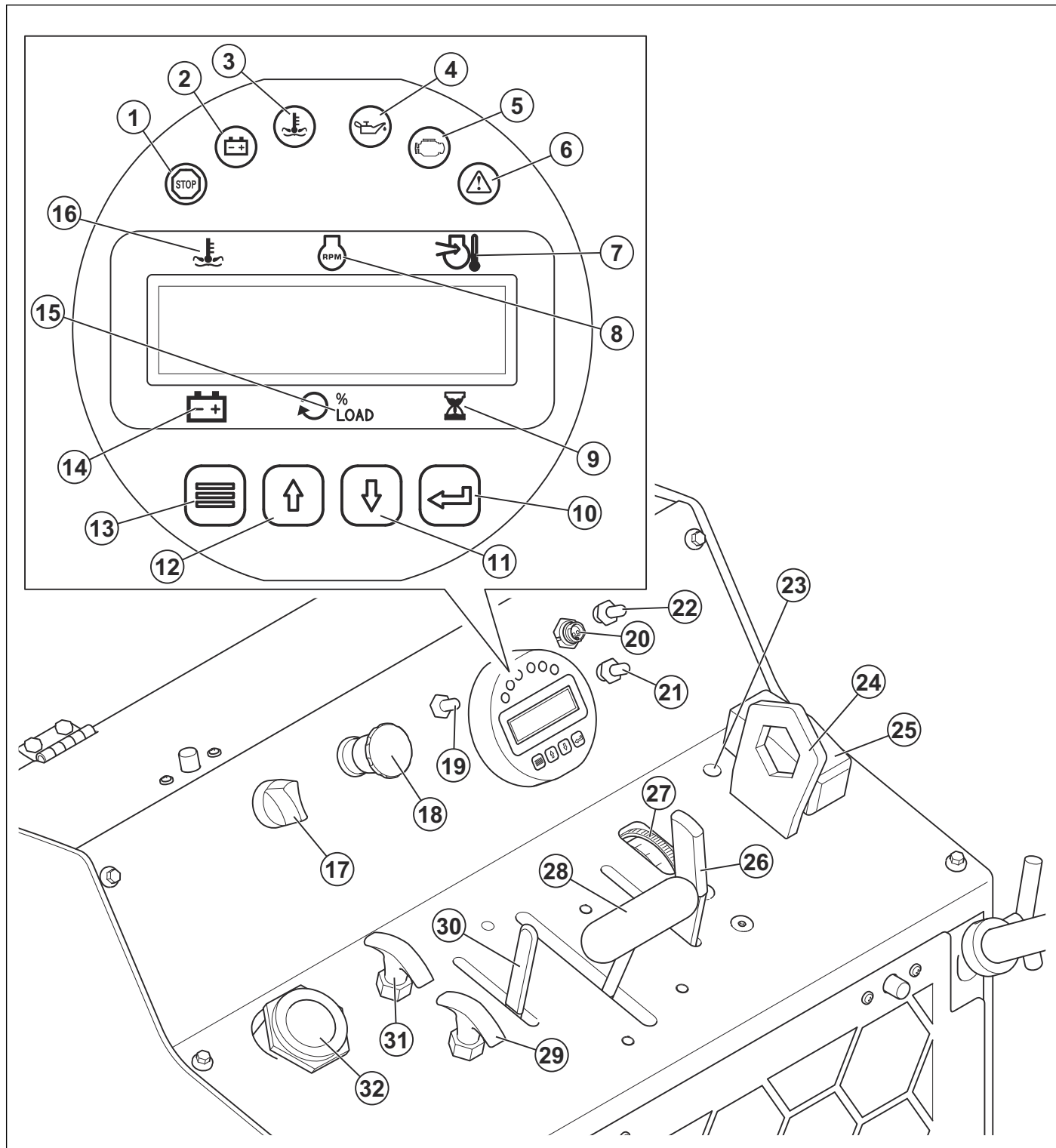
- | | |
|--|--|
| 1. Adjustable pointer | 10. Locking knob for operation handles |
| 2. Air filter | 11. Operation handles |
| 3. Air filter indicator | 12. Blade depth stop |
| 4. Expansion tank for radiator coolant | 13. Muffler |
| 5. Lifting eye | 14. Engine oil dipstick |
| 6. Top hatch | 15. Gearbox |
| 7. Rear hatch | 16. Gearshift lever |
| 8. Left rear pointer | 17. Blade guard |
| 9. Blade flange | |

5.2 Product overview, inner parts



- | | |
|--|--|
| 1. Fuel tank cap | 11. Type plate |
| 2. Blade flange | 12. Hydraulic lift pump and reservoir |
| 3. Drive belts (x6) | 13. Drain hose for engine oil |
| 4. Pump belt for the hydraulic propulsion system | 14. Engine belt |
| 5. Pump belt tension for the hydraulic propulsion system | 15. Engine oil filter |
| 6. Oil reservoir for the hydraulic propulsion system | 16. Blade flange |
| 7. Battery | 17. Oil filter for the hydraulic propulsion system |
| 8. Electric fan | 18. Alternator |
| 9. Fuse box | 19. Bolt for drive belt tension |
| 10. Radiator coolant lid | |

5.3 Overview of the controls and the display



- | | |
|--|---|
| 1. Engine fault indicator | 12. Arrow key to move up in the menu |
| 2. Alternator charge indicator | 13. Menu button |
| 3. High engine coolant temperature indicator | 14. Battery voltage |
| 4. Low oil pressure indicator | 15. Engine load |
| 5. Check engine indicator | 16. Temperature warning of the engine coolant |
| 6. Engine alarm indicator | 17. Ignition key |
| 7. Engine input temperature | 18. Machine stop button |
| 8. Engine speed | 19. Throttle control switch |
| 9. Hour meter for engine operation | 20. 12 V connector (for light kit option) |
| 10. Enter button to enter the menu structure or to make a selection. | 21. Water pump switch |
| 11. Arrow key to move down in the menu | 22. Light kit switch |
| | 23. Screwdriver (not included) |

- 24. Blade shaft wrench
- 25. Hammer
- 26. Lever for cutting depth adjustment
- 27. Depth indicator and calibration wheel
- 28. Lever for speed control. Forward, rearward and stop position.
- 29. Differential locking knob
- 30. Lever for the water cooling system for the cutting blade
- 31. Knob for rear axle freewheel function
- 32. Fuel gage

6 Repair and servicing

6.1 To do a check of the fixtures, nuts and bolts

- Make sure that all fixtures are correctly tightened. Tighten the fixtures if it is necessary.
- Make sure that bolts and nuts are correctly tightened. Tighten the bolts and nuts if it is necessary.

6.2 To do a check of the coolant mixture

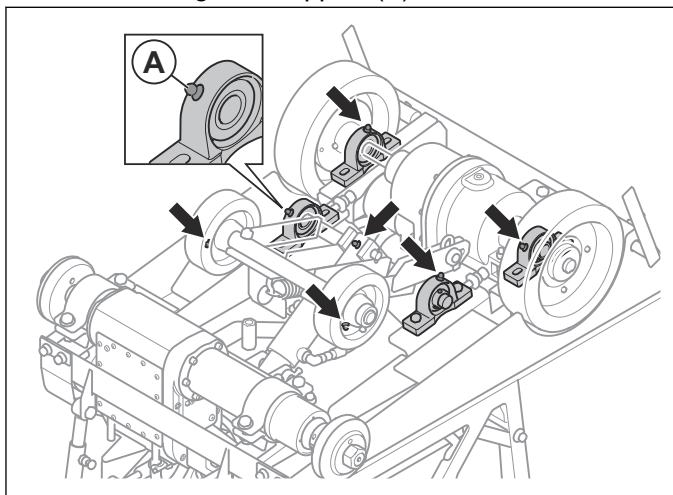
The coolant mixture must be ethylene glycol and water, 50/50 mixture.

Note: Use only ethylene glycol in this engine.

- Do not mix the coolant mixture in the tank for the coolant mixture. Mix the coolant mixture in a separate container.

6.3 To lubricate the product

1. Clean the 7 grease nipples (A).



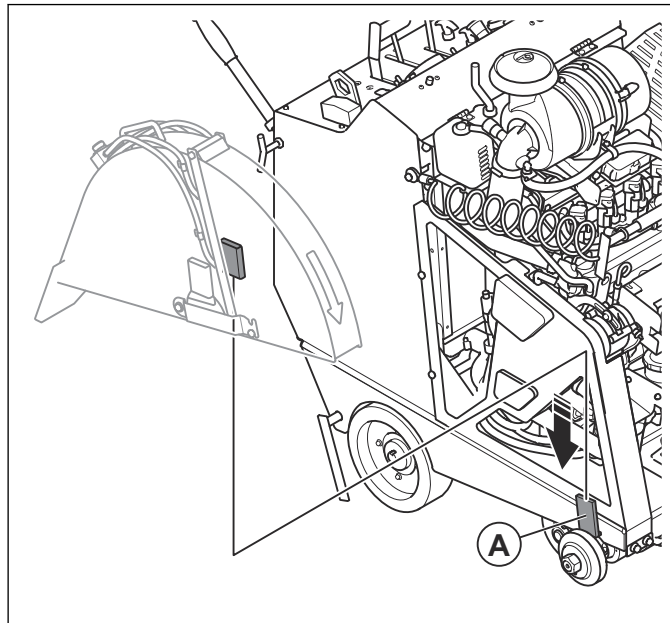
2. Replace broken or blocked grease nipples.
3. Lubricate the front wheels.
4. Lubricate the pivot bearings of the front axle.
5. Lubricate the pivot pin on the hydraulic cylinder.
6. Lubricate the rear axle bearings.

For more information about lubrication, refer to *Technical data on page 70*.

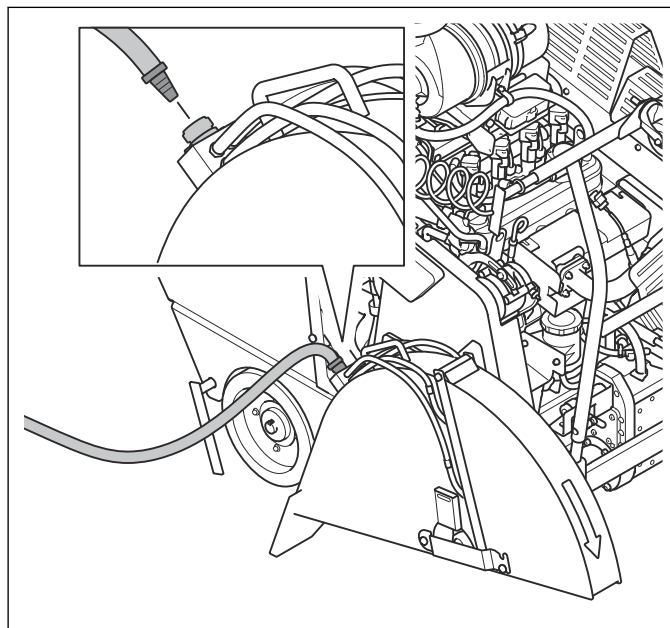
6.4 Blade

6.4.1 To install a blade guard

1. Install the blade guard onto the support (A).



2. Connect the water hose.



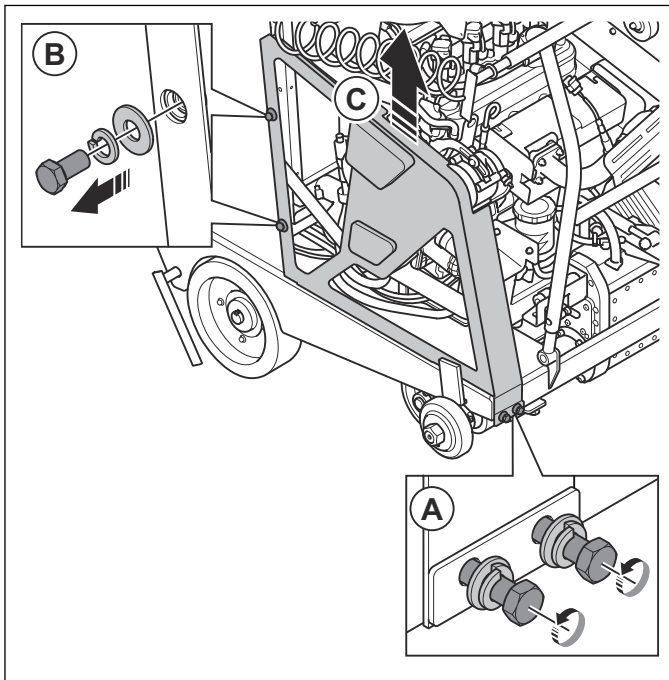
6.4.2 To remove the blade guard

- Remove the blade guard in the opposite sequence of how it was installed. Refer to *To install a blade guard on page 15*.

6.5 Covers

6.5.1 To remove and install the right side cover

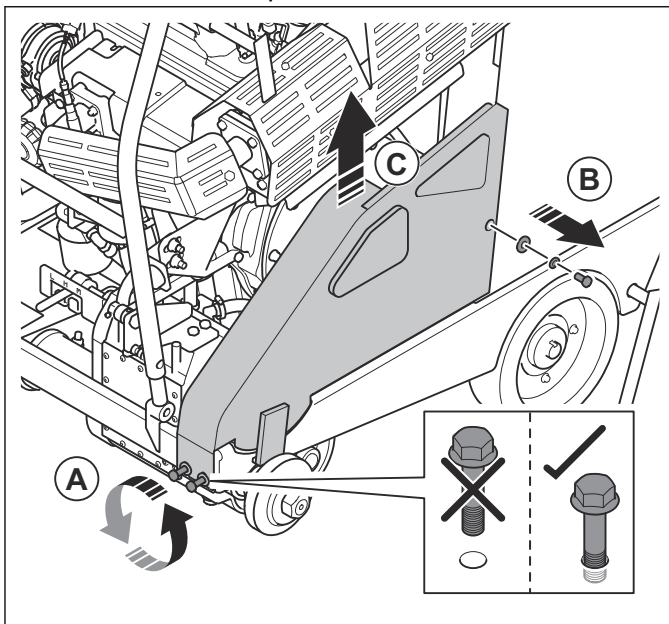
1. Remove the blade guard. Refer to *To remove the blade guard on page 15*.
2. Loosen the 2 bolts (A) from the protective cover on the right side of the product.



3. Remove the bolts and the washers (B) from the protective cover.
4. Remove the protective cover (C).
5. Install in the opposite sequence.

6.5.2 To remove and install the left side cover

1. Loosen the 2 bolts (A) from the protective cover on the left side of the product.



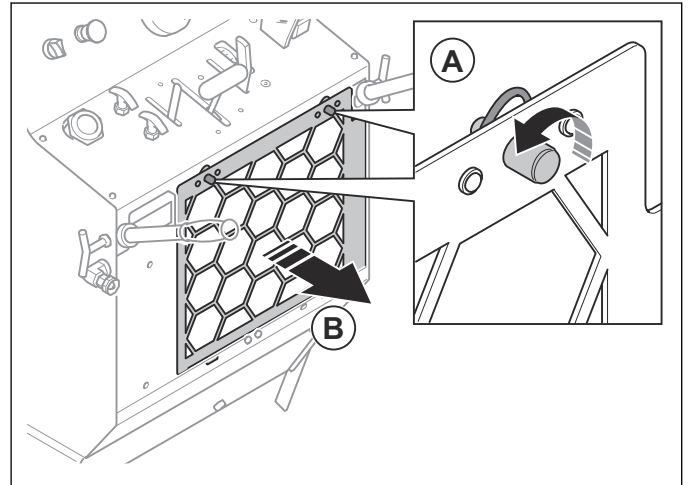
2. Remove the bolt and the washers (B) from the protective cover.

3. Remove the protective cover (C).

4. Install in the opposite sequence.

6.5.3 To remove and install the rear hatch

1. Turn the 2 rear hatch latches (A) and remove the rear hatch (B).

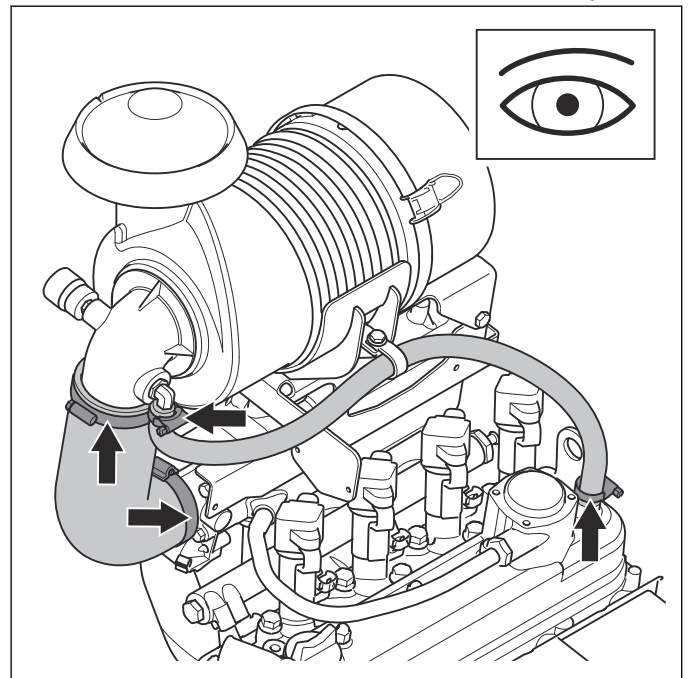


2. Install in the opposite sequence.

6.6 Air filter

6.6.1 To do a check of the air filter hose and hose clamps

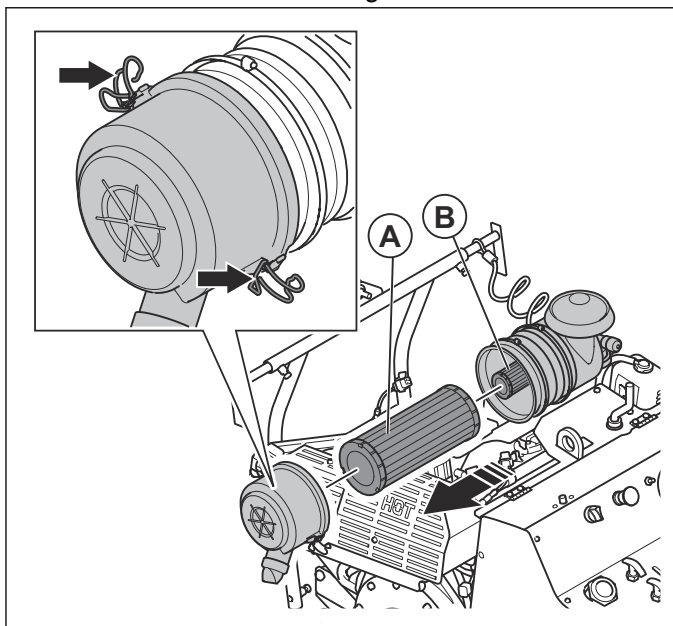
1. Examine the air filter hose and the hose clamps.



2. Replace damaged parts.
3. Tighten loose clamps.

6.6.2 To replace the air filters

1. Clean the area around the air filter housing.
2. Open the 2 clamps on the air filter housing and remove the air filter housing.



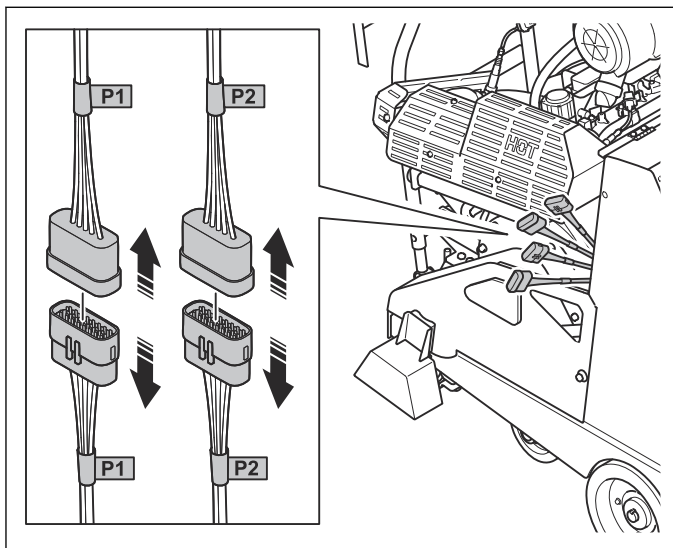
3. Replace the outer air filter (A) and the inner air filter (B).
4. Install the air filters and close the 2 clamps.

Note: If the 2 clamps of the air filter housing cannot be closed, the air filters are not correctly installed.

6.7 Electrical system

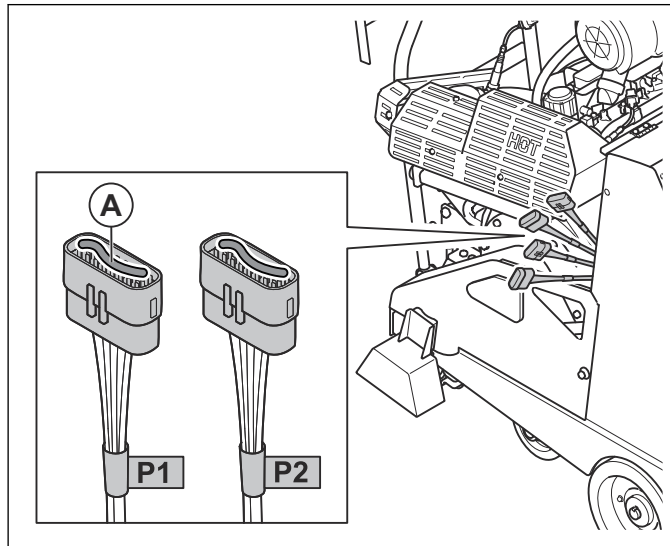
6.7.1 To lubricate the male motor connectors

1. Find and hold the P1 and P2 motor connectors.



2. Disconnect the P1 and P2 motor connectors.

3. Lubricate (A) the 2 male motor connectors.

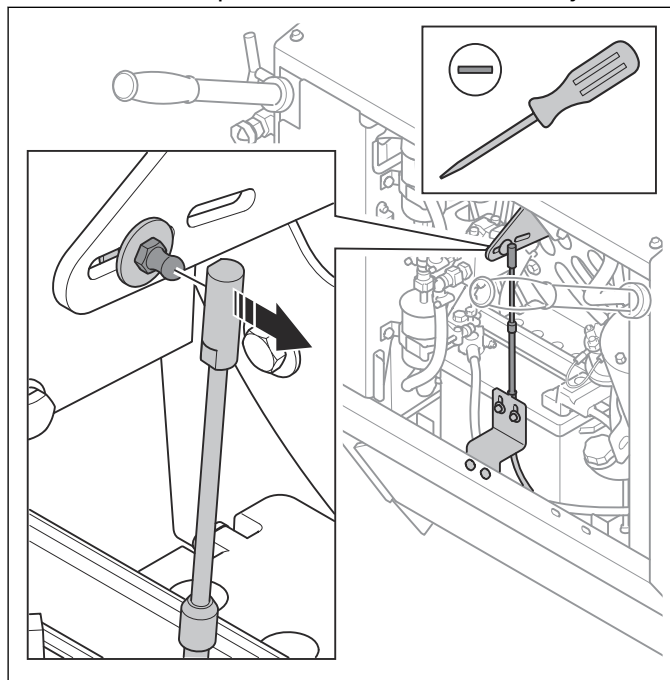


4. Connect the 2 motor connectors.
5. Put the 2 motor connectors back into the product.

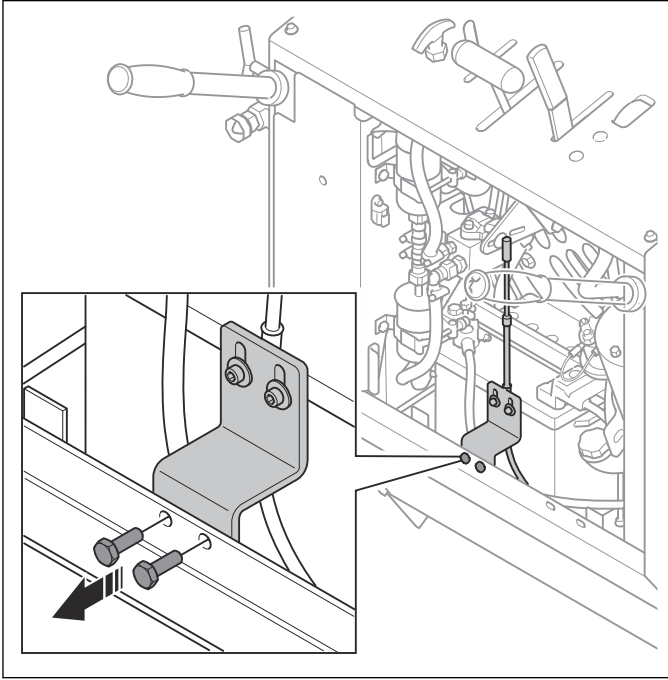
For more information about lubrication, refer to *Technical data on page 70*.

6.7.2 To remove and install the battery

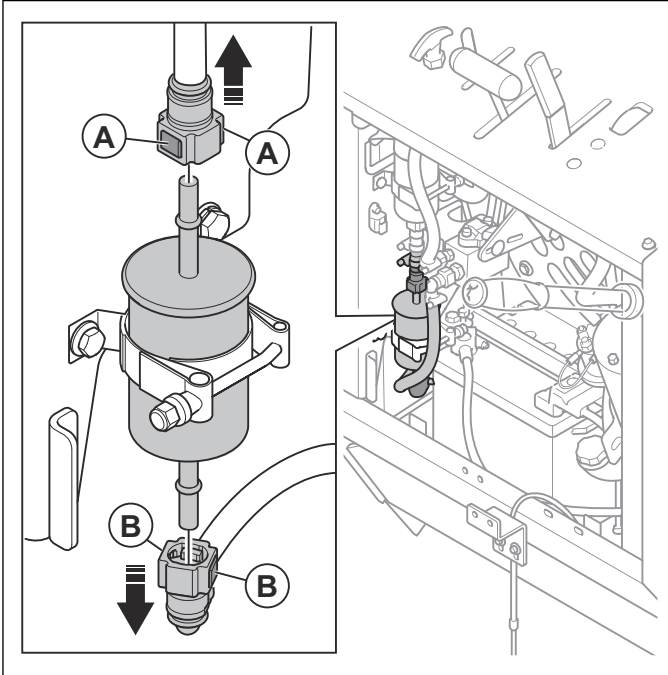
1. Remove the rear hatch. Refer to *To remove and install the rear hatch on page 16*.
2. Remove the speed control rod from the ball joint.



3. Remove the 2 screws from the bracket.

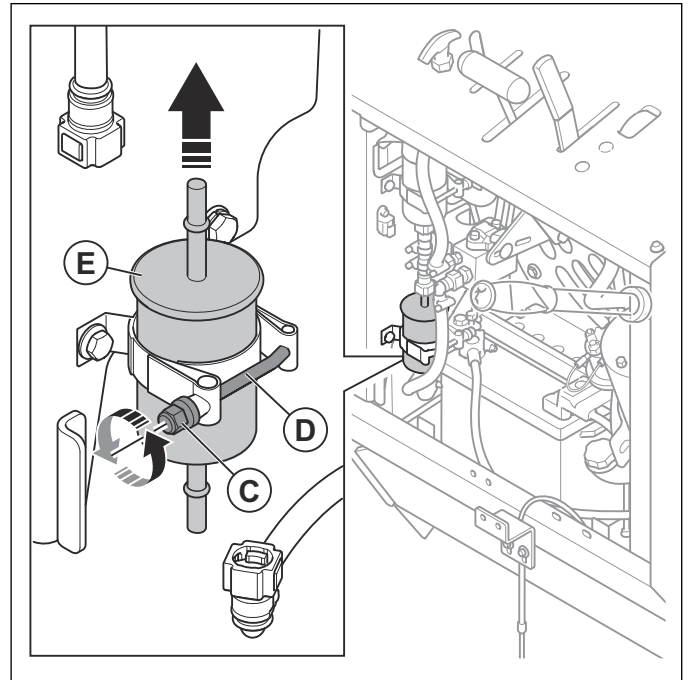


4. Push in the 2 tabs (A) on the connector and remove the connector from the fuel filter.



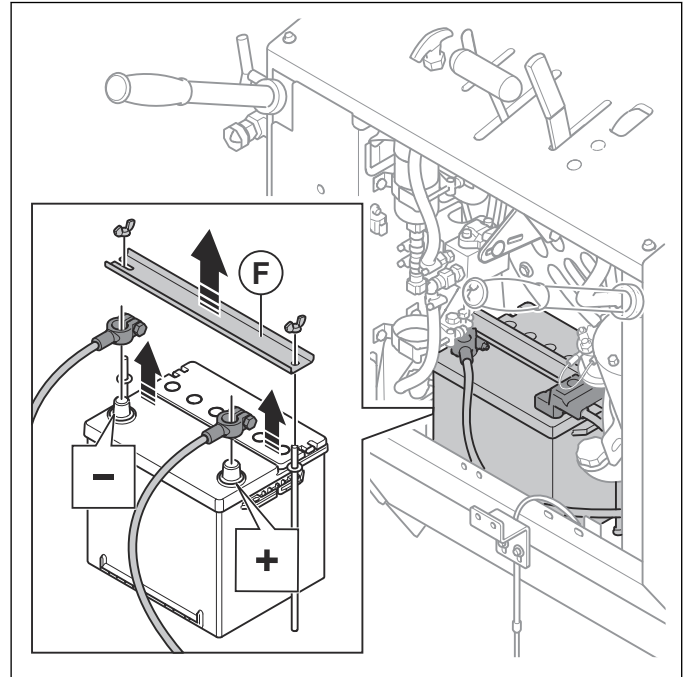
5. Push in the 2 tabs (B) on the connector and remove the connector from the fuel filter.

6. Remove the nut (C) and the bolt (D) on the fuel filter holder.



7. Remove the fuel filter (E).

8. Remove the battery holder (F).



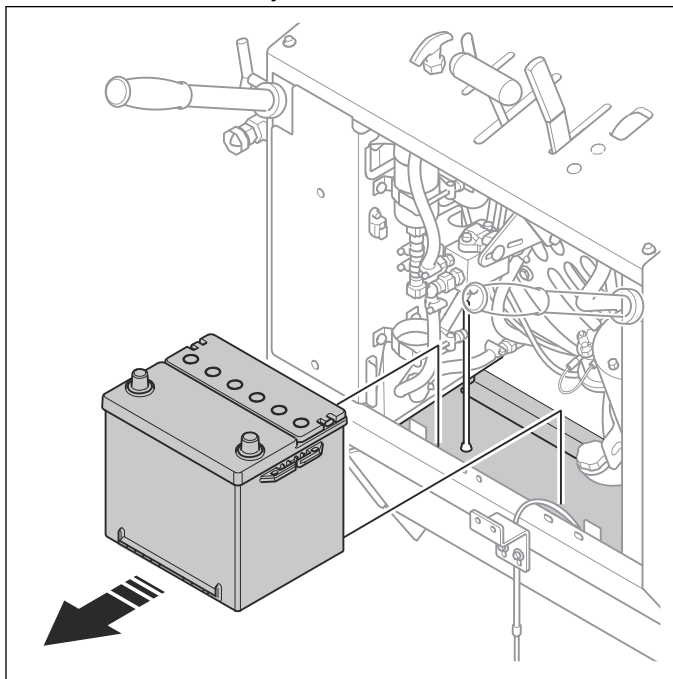
9. Disconnect the black battery cable from the NEGATIVE (-) battery terminal on the battery.



WARNING: Always disconnect the NEGATIVE (-) battery terminal first.

10. Disconnect the red battery cable from the POSITIVE (+) battery terminal on the battery.

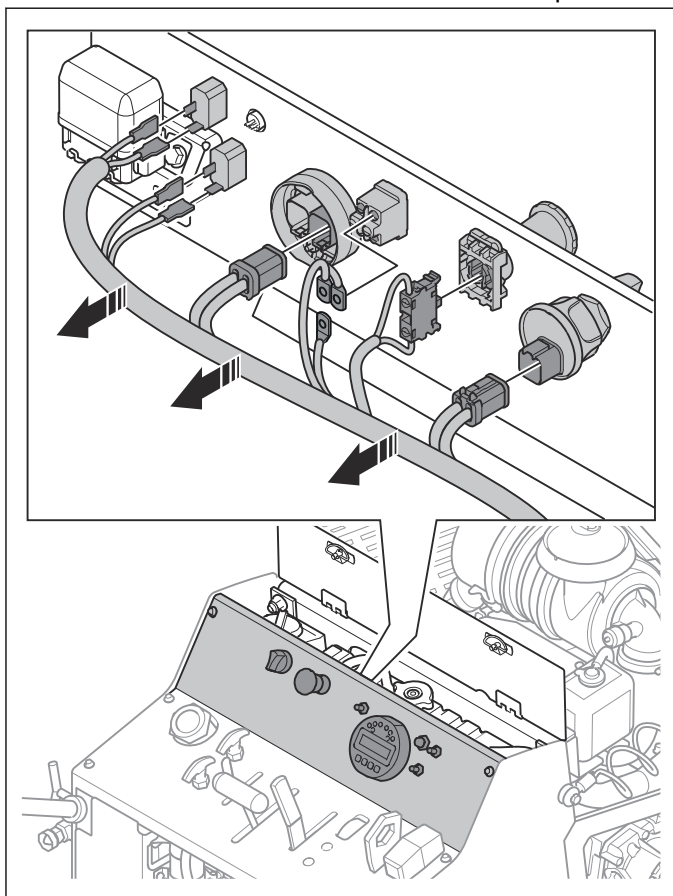
11. Remove the battery.



12. Install in the opposite sequence.

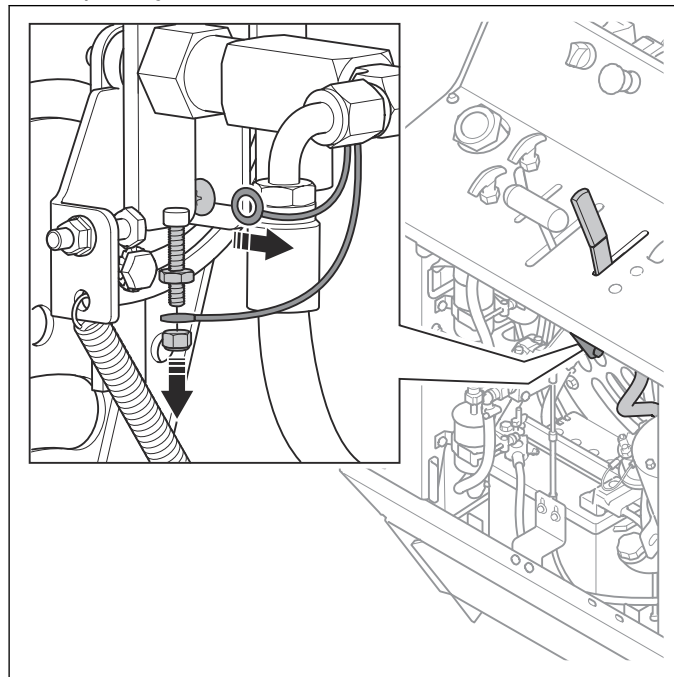
6.7.3 To disconnect and connect the wiring harness

1. Open the top hatch.
2. Disconnect all connectors from the control panel.

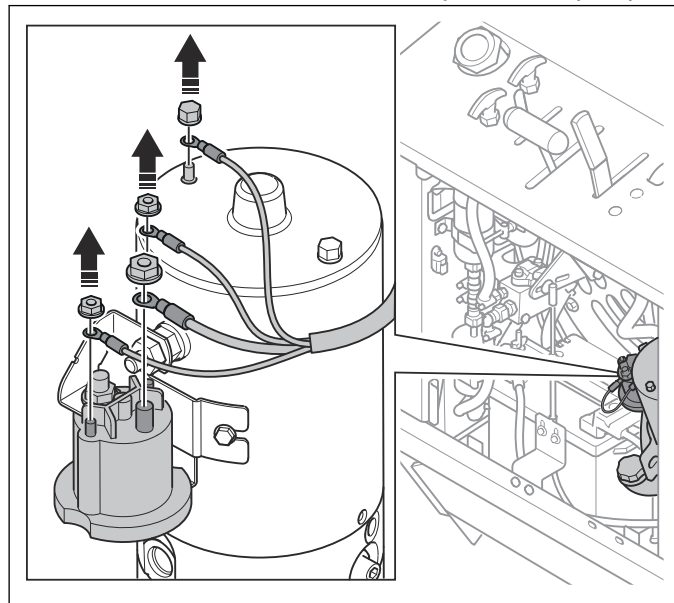


3. Remove the rear hatch. Refer to *To remove and install the rear hatch on page 16*.

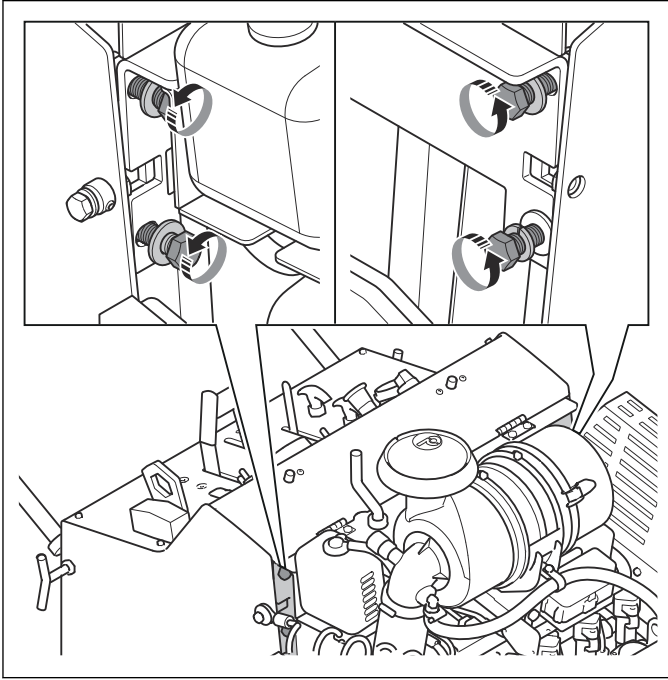
4. Disconnect the cables from the lever for cutting depth adjustment.



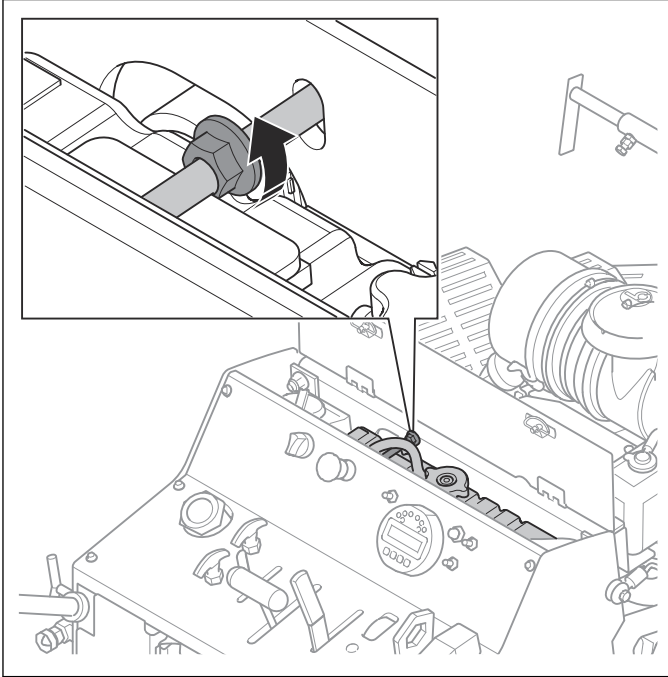
5. Disconnect the cables from the hydraulic lift pump.



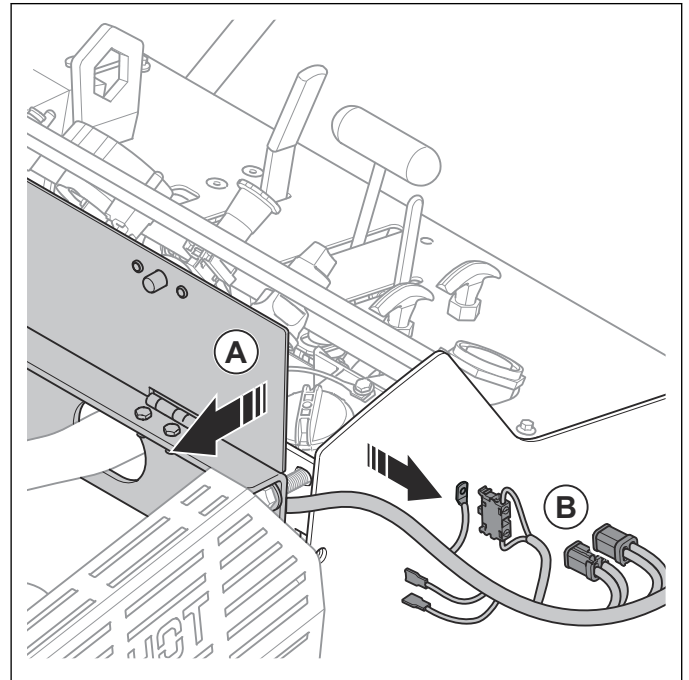
6. Remove the 4 bolts.



7. Loosen the nut.

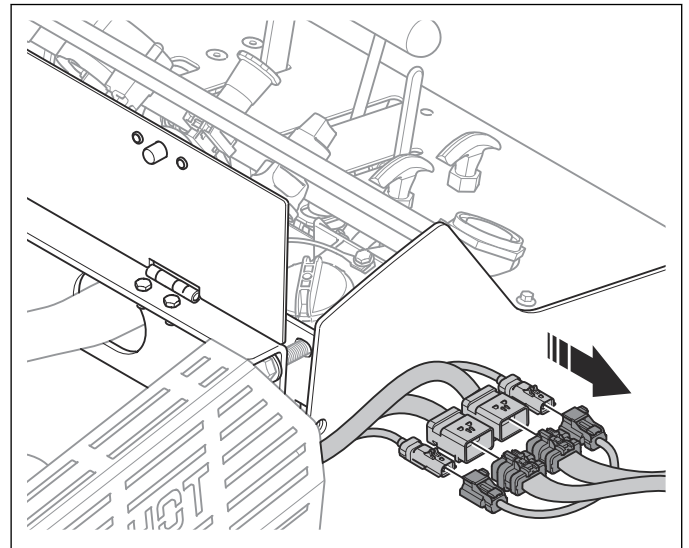


8. Move the panel behind the radiator coolant container forward (A).



9. Disconnect the wiring harness (B).

10. Disconnect the wiring harness.



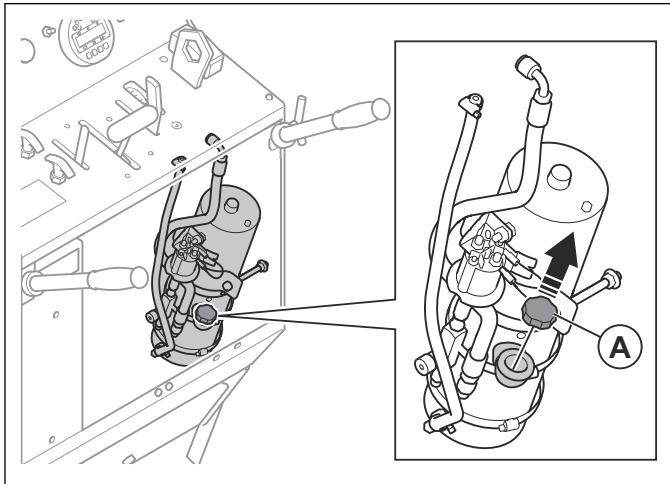
11. Connect the wiring harness in the opposite sequence.

6.8 Hydraulic system

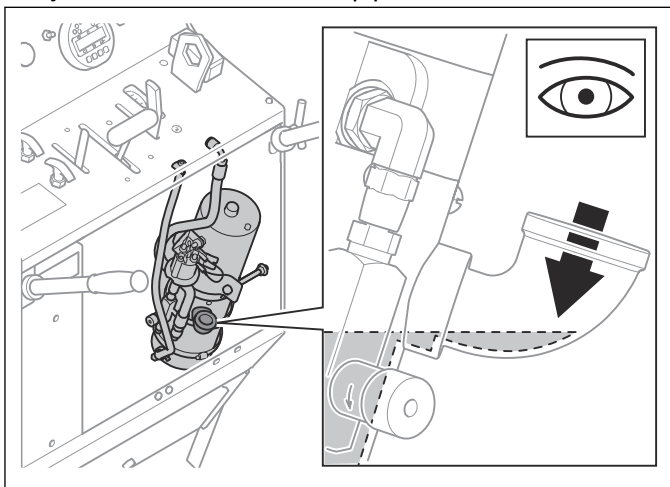
6.8.1 To do a check of the oil level for the hydraulic lift pump

1. Make sure that the product is level when you examine the oil level for the hydraulic lift pump.
2. Remove the rear hatch. Refer to *To remove and install the rear hatch on page 16*.

3. Remove the oil filler cap (A) from the hydraulic lift pump.



4. Examine the oil level. The oil level is correct when you can see the oil in the pipe.

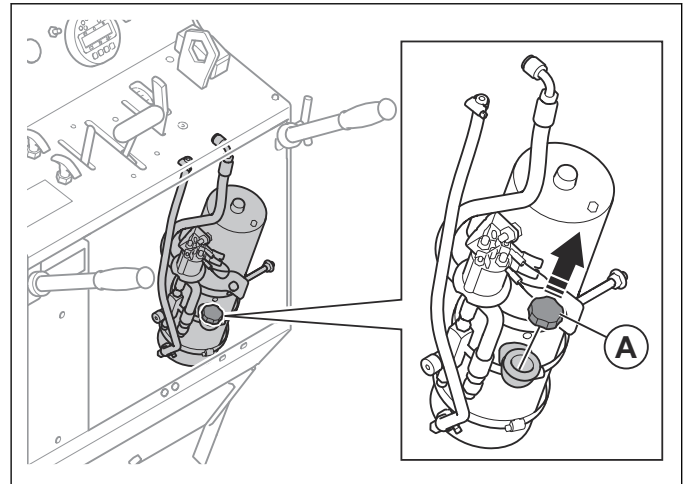


5. If the oil level is low, fill with oil in the pipe. Do a check of the oil level again. Refer to *Technical data on page 70* for the correct type of oil.
6. Tighten the oil filler cap.
7. Install the rear hatch.

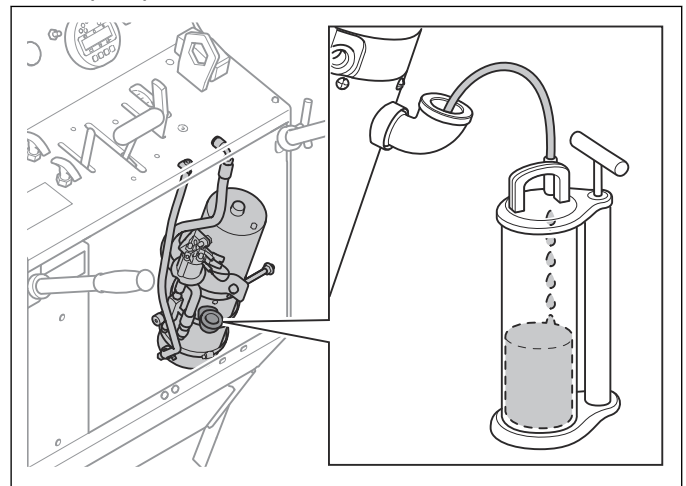
6.8.2 To replace the oil of the hydraulic lift pump

1. Remove the rear hatch. Refer to *To remove and install the rear hatch on page 16*.

2. Remove the oil filler cap (A).



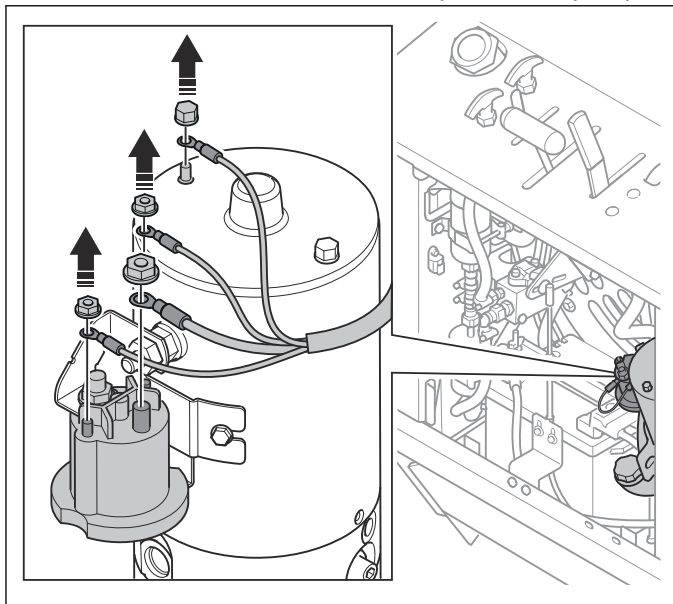
3. Drain the oil of the hydraulic lift pump with a manual oil pump.



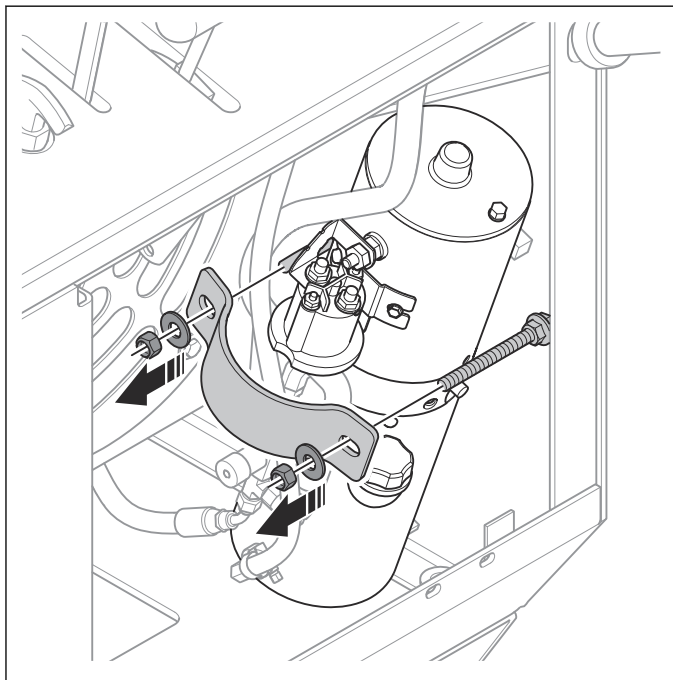
4. Fill with new oil. For the correct type of oil, refer to *Technical data on page 70*.
5. Do a check of the oil level in the hydraulic lift pump. Refer to *To do a check of the oil lever for the hydraulic lift pump on page 20*.
6. Tighten the oil filler cap.
7. Install the rear hatch and turn the 2 rear hatch latches.

6.8.3 To remove and install the hydraulic lift pump

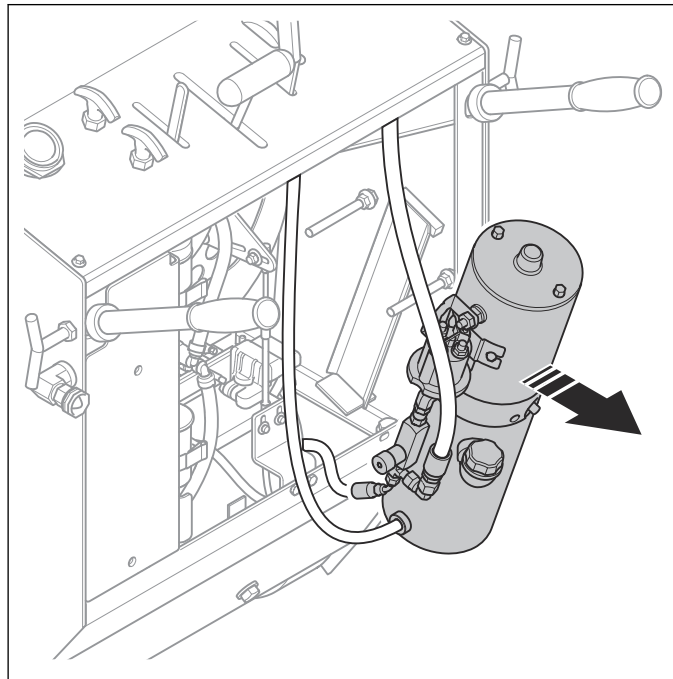
1. Remove the rear hatch. Refer to *To remove and install the rear hatch on page 16*.
2. Disconnect the cables from the hydraulic lift pump.



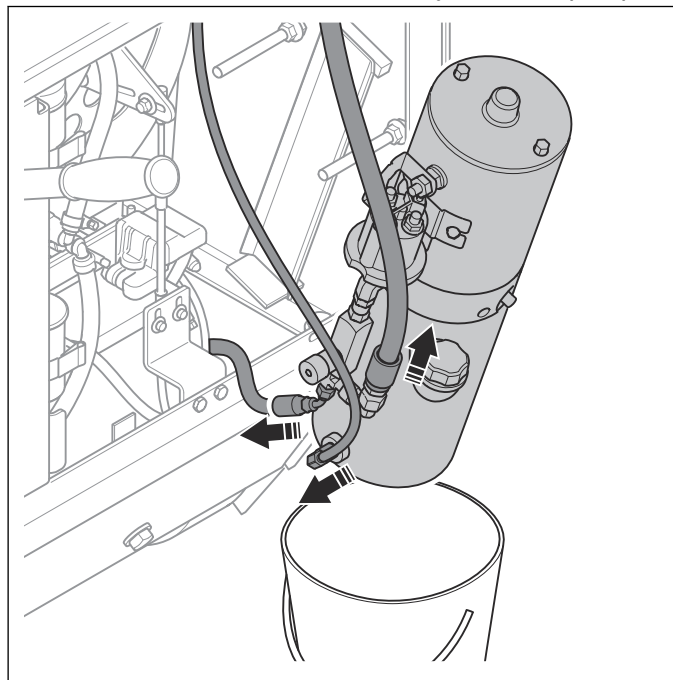
3. Remove the nuts, the washers and the bracket.



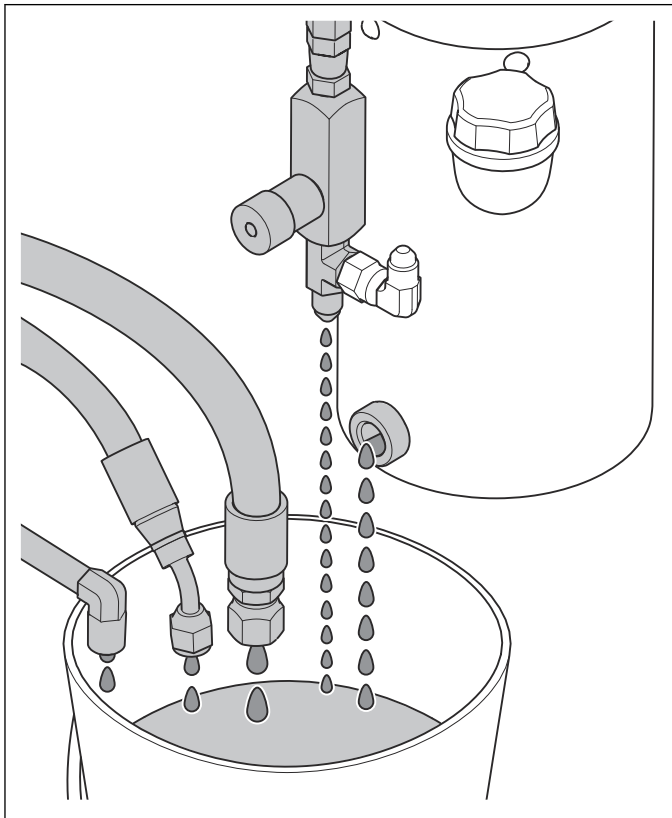
4. Remove the hydraulic lift pump.



5. Put a container below the hydraulic lift pump.
6. Disconnect the hoses from the hydraulic lift pump.



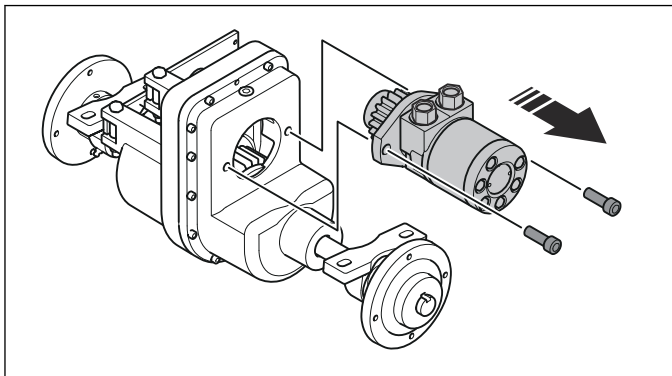
7. Drain the oil into the container.



8. Install in the opposite sequence. Fill with new oil, refer to *Technical data* on page 70.

6.8.4 To remove and install the hydraulic drive motor

1. Remove the rear axle. Refer to *To remove and install the rear axle* on page 64.
2. Remove the 2 screws and the hydraulic drive motor.

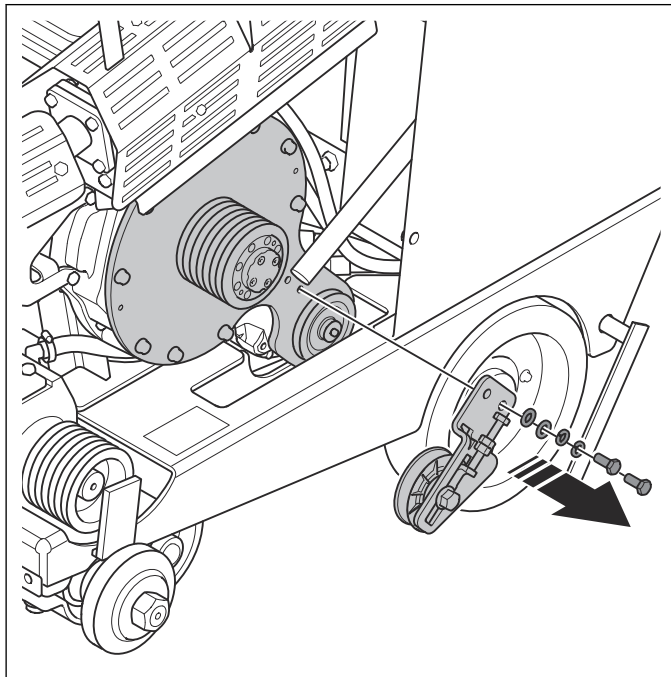


3. Install in the opposite sequence.

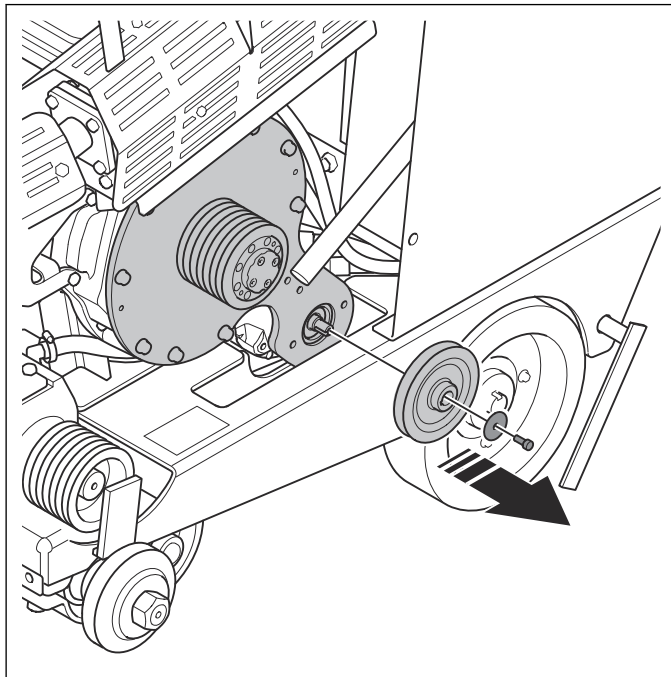
6.8.5 To remove and install the drive pump for the hydraulic propulsion system

1. Remove the drive belts. Refer to *To remove and install the drive belts* on page 50.
2. Remove the pump belt for the hydraulic propulsion system. Refer to *To install the pump belt for the hydraulic propulsion system* on page 54.

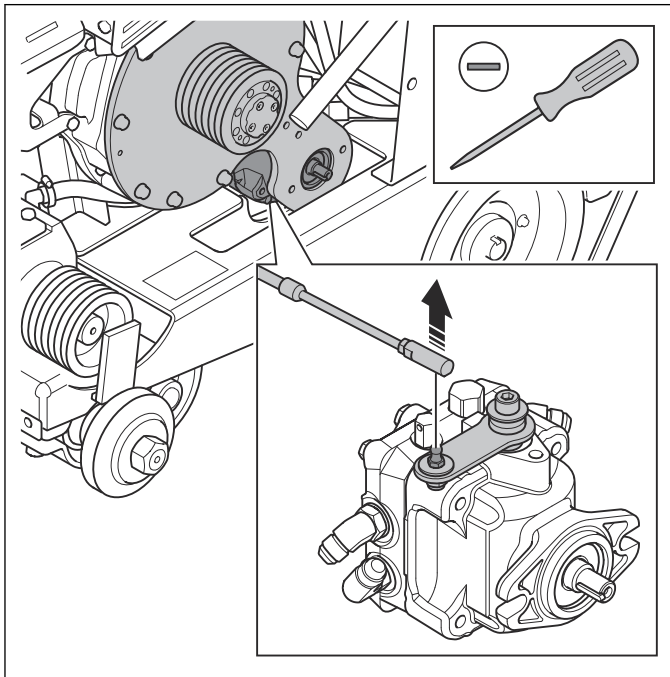
3. Remove the belt tensioner.



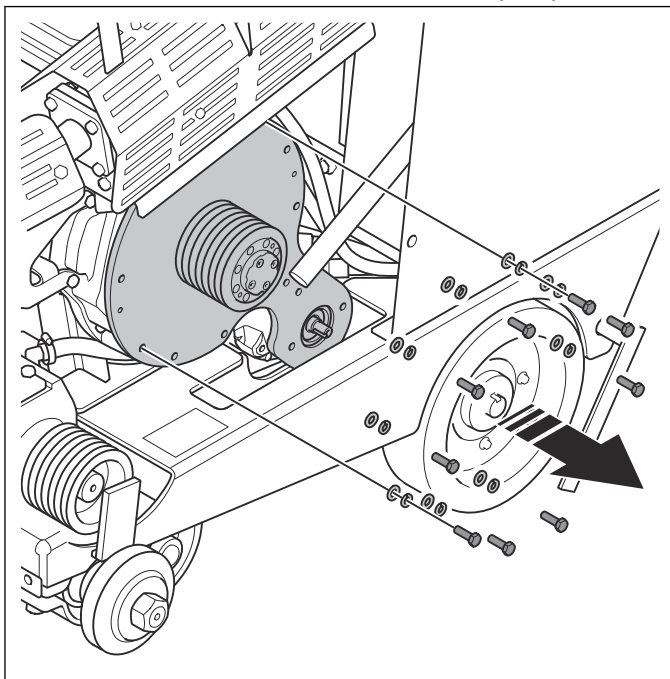
4. Remove the pulley wheel.



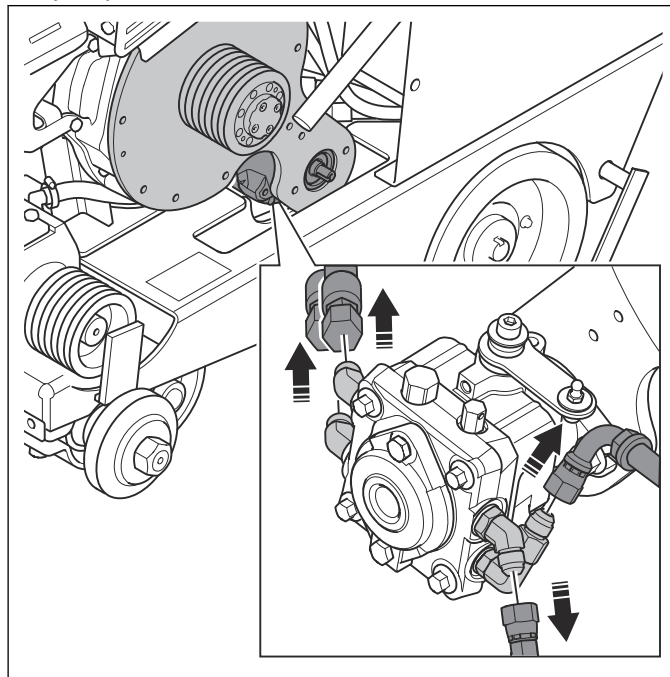
5. Disconnect the wire with a screwdriver.



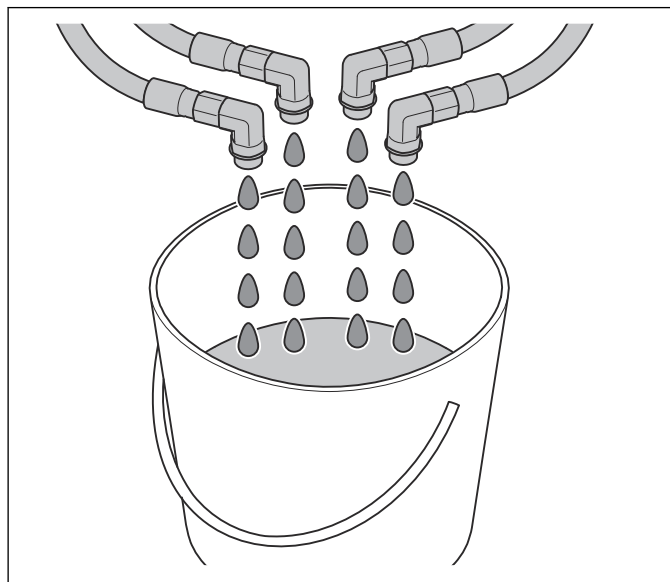
6. Remove the 10 screws from the drive pump cover.



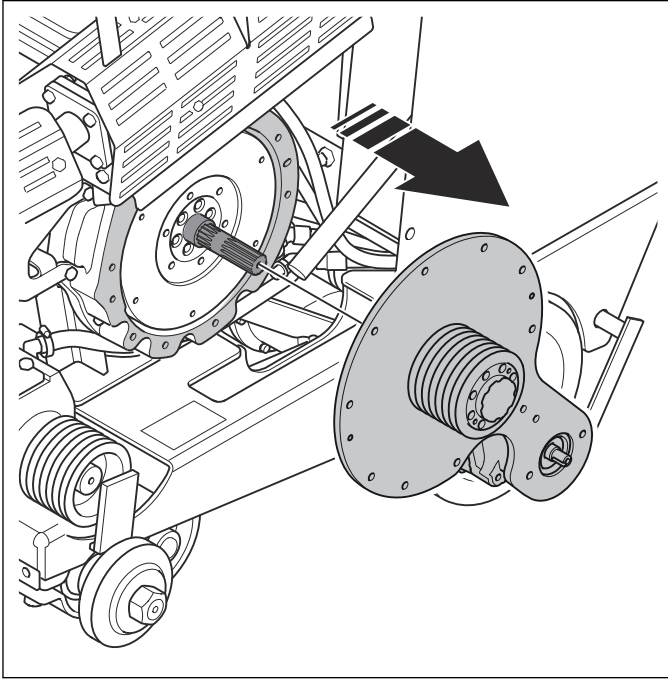
7. Disconnect the 4 hydraulic hoses from the drive pump.



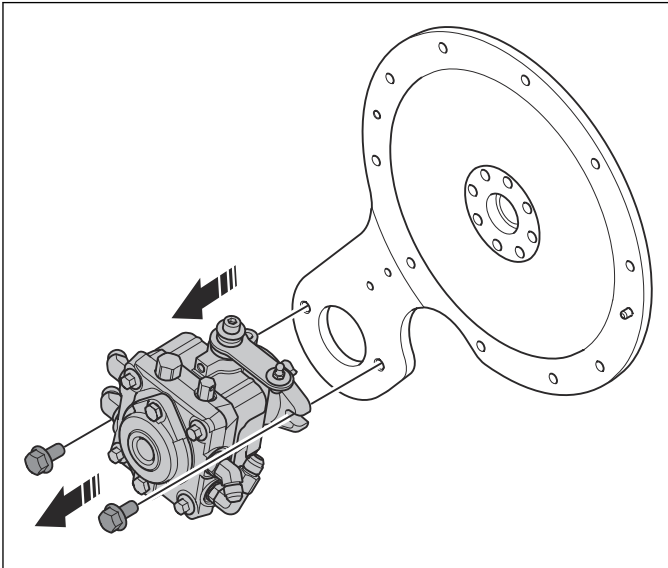
8. Drain the oil from the hydraulic hoses into a container.



9. Remove the drive pump cover.



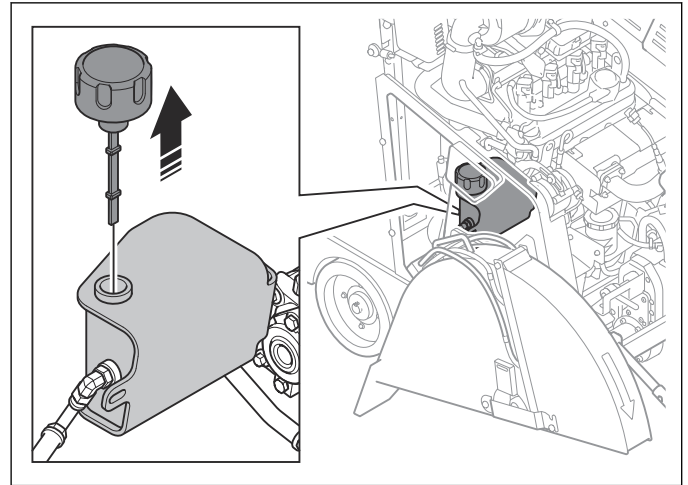
10. Remove the 2 screws and the drive pump from the drive pump cover.



11. Install in the opposite sequence.

6.8.6 To replace the hydraulic propulsion system oil

1. Remove the hydraulic reservoir cap.

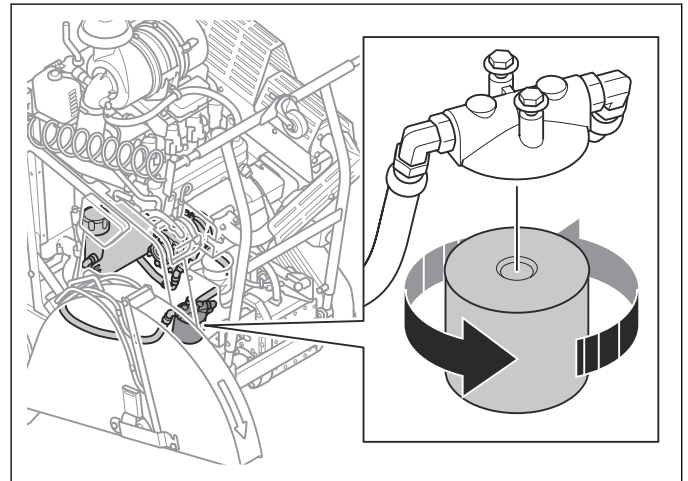


2. Use a manual oil pump to drain the oil through the hydraulic reservoir cap opening on the hydraulic reservoir.

3. Replace the oil filter. Refer to *To replace the oil filter for the hydraulic propulsion system* on page 25.

6.8.7 To replace the oil filter for the hydraulic propulsion system

1. Remove the oil filter and discard it.



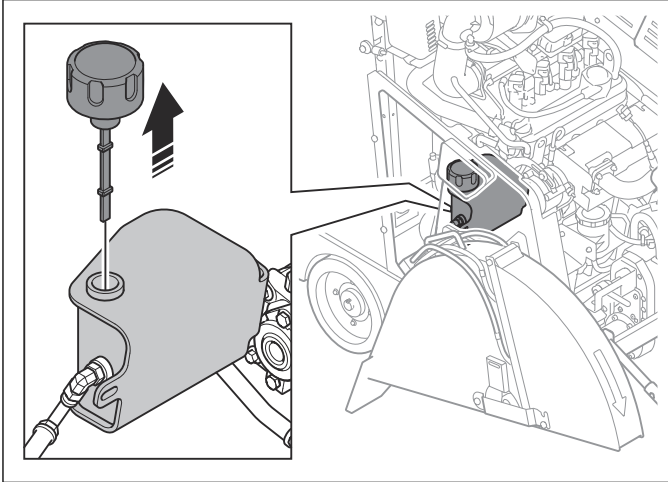
2. Fill a new oil filter with oil. Refer to *Technical data on page 70* for the correct type of oil.

3. Lubricate the seal with some drops of oil.

4. Install the oil filter.

5. Make sure that the product is level.

6. Remove the hydraulic reservoir cap and fill with new oil to the correct oil level. Refer to *Technical data on page 70*.

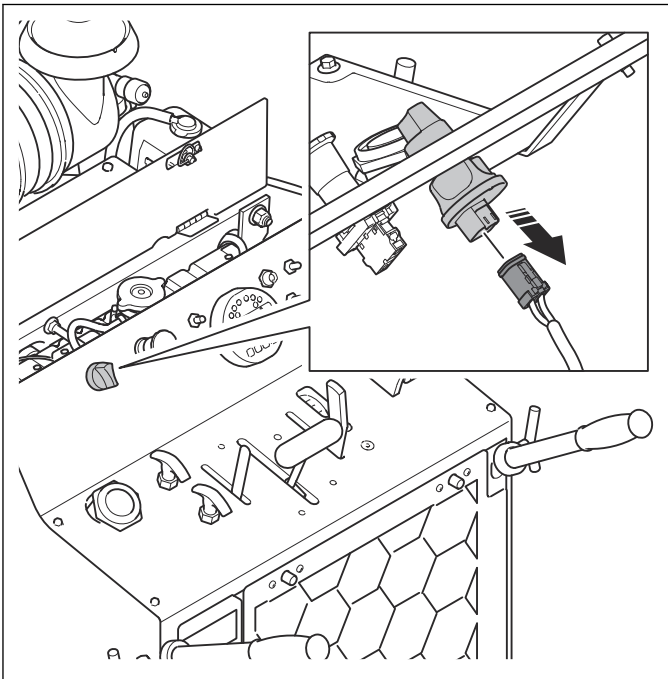


7. Install the hydraulic reservoir cap.

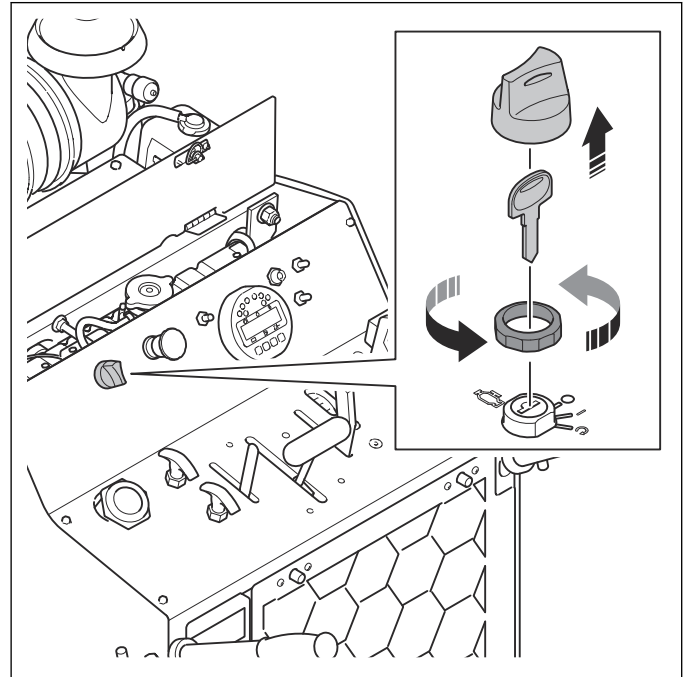
6.9 Control panel and compartment

6.9.1 To remove and install the ignition switch

1. Open the top hatch.
2. Disconnect the connector.



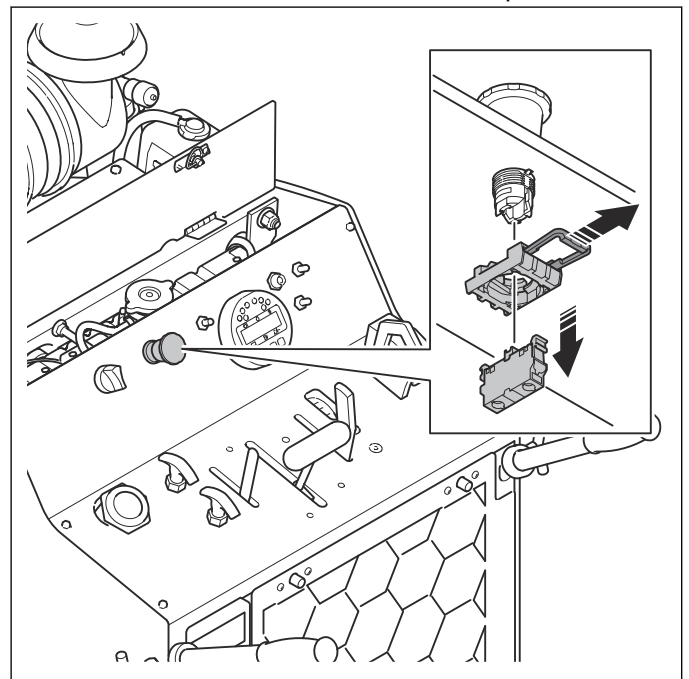
3. Remove the nut.



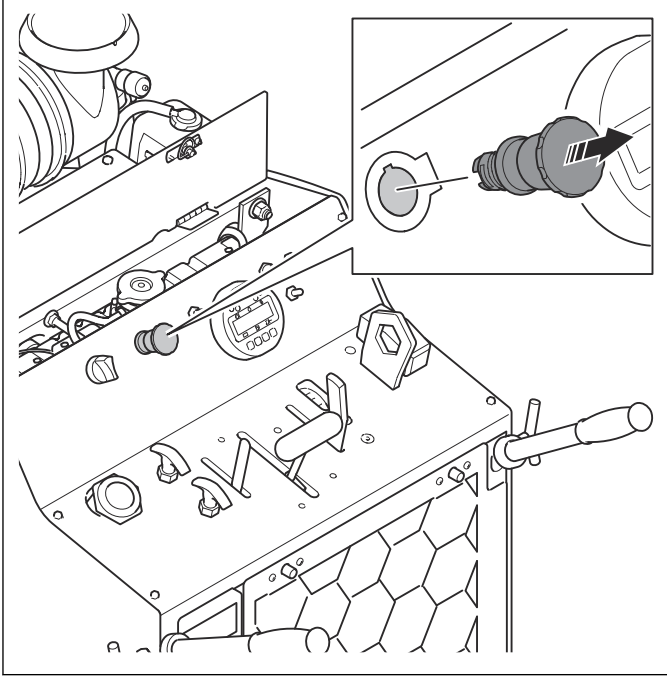
4. Push the ignition switch through the control panel.
5. Install in the opposite sequence.

6.9.2 To remove and install the machine stop button

1. Open the top hatch.
2. Disconnect the connector and the adapter.



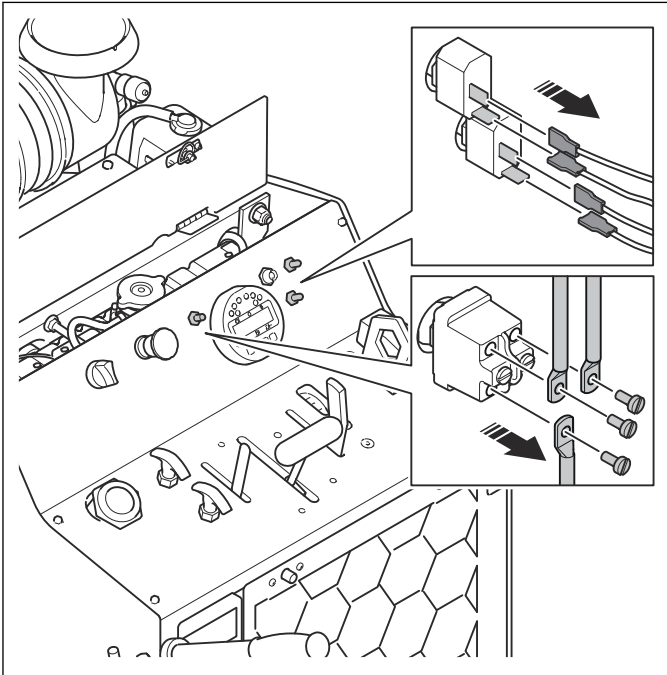
3. Remove the machine stop button.



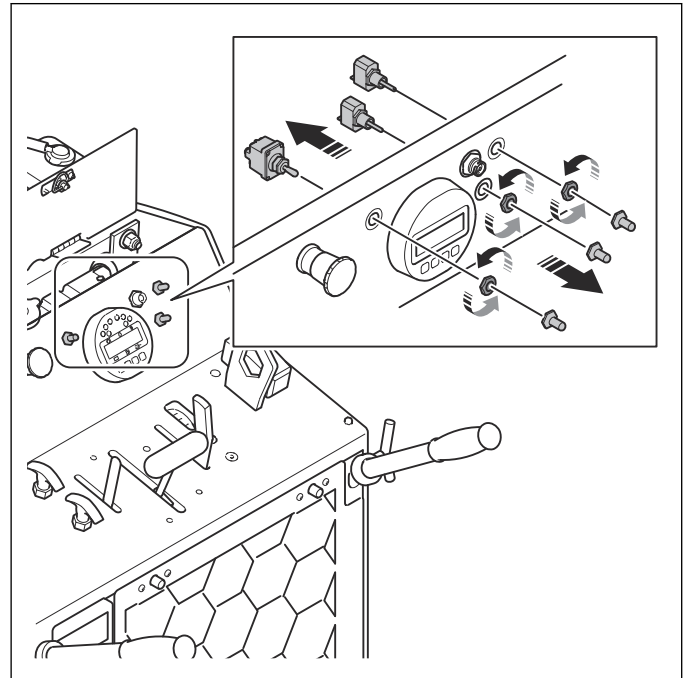
4. Install in the opposite sequence.

6.9.3 To remove and install the throttle control switch, the water pump switch and the light kit switch

1. Open the top hatch.
2. Disconnect the wires from the switches.



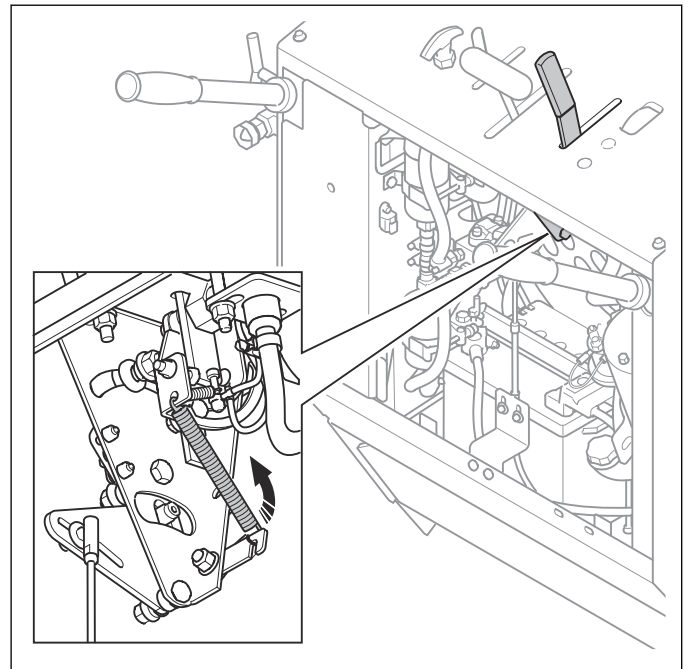
3. Remove the rubber covers, the nuts and the switches.



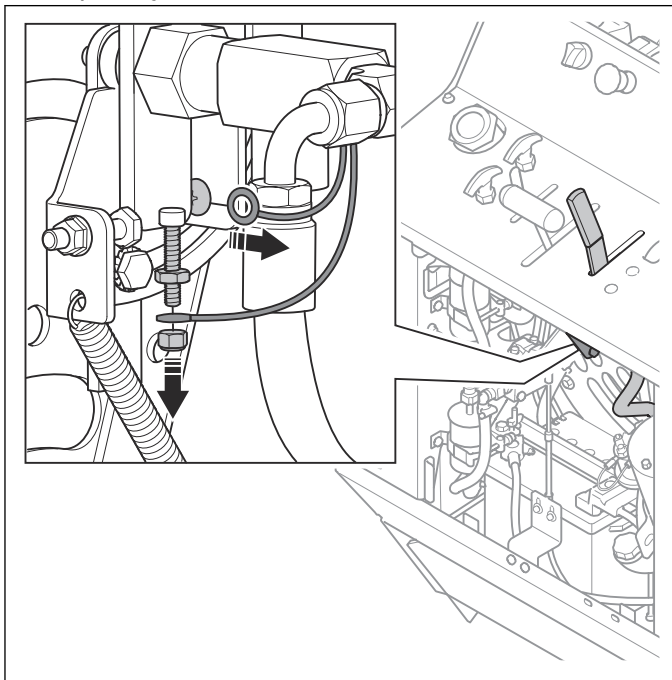
4. Install in the opposite sequence.

6.9.4 To remove and install the lever for cutting depth adjustment

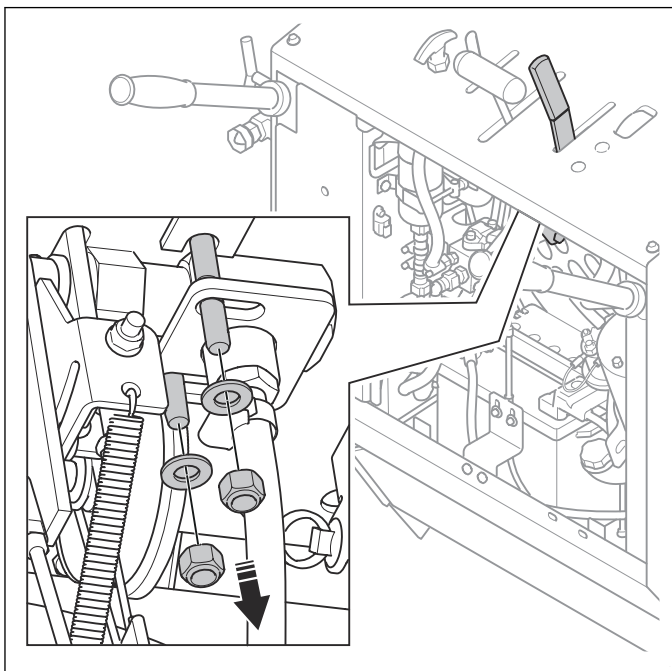
1. Remove the rear hatch. Refer to *To remove and install the rear hatch on page 16*.
2. Remove the spring from the bracket.



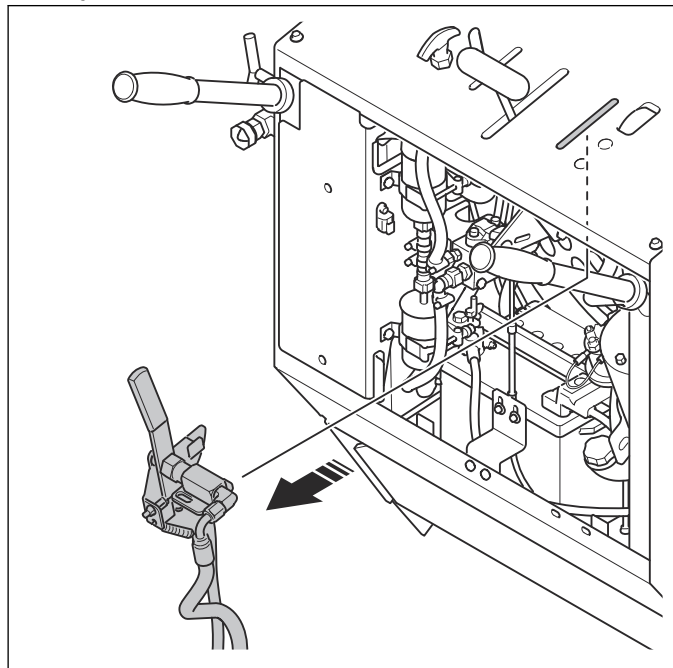
3. Disconnect the cables from the lever for cutting depth adjustment.



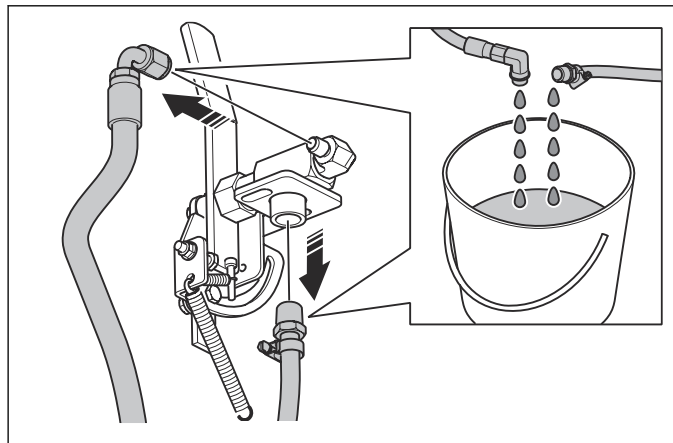
4. Remove the nuts and the washers.



5. Remove the assembly for the lever for cutting depth adjustment.



6. Disconnect the 2 hoses and drain the oil from the hoses into a container.

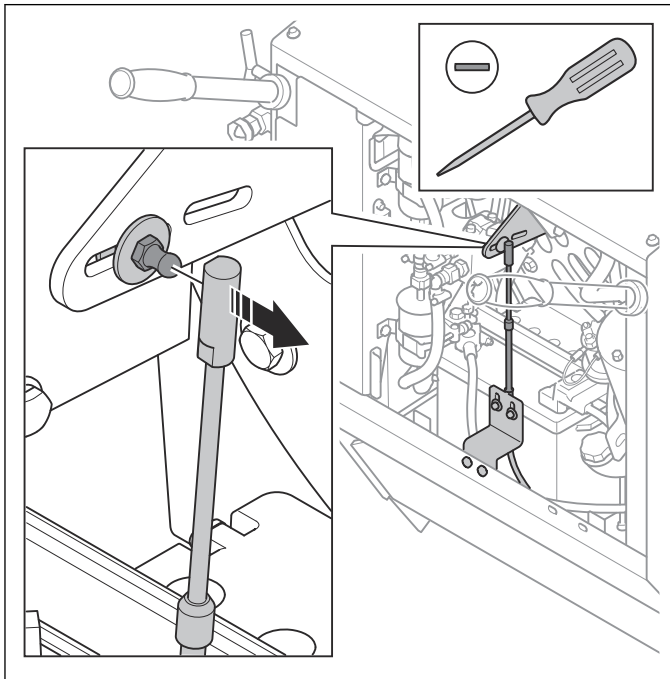


7. Install in the opposite sequence.

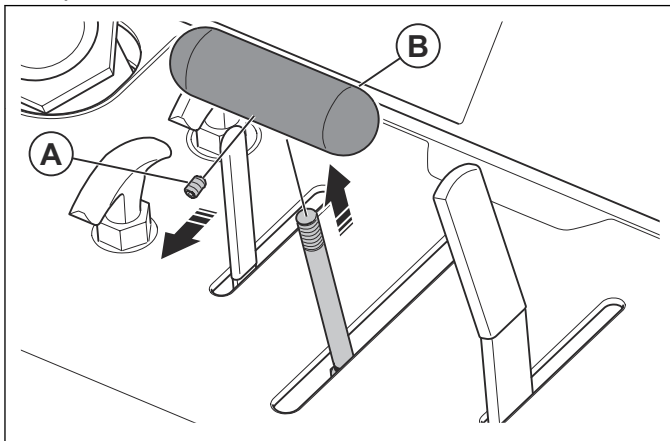
6.9.5 To remove the speed control lever

1. Remove the rear hatch. Refer to *To remove and install the rear hatch on page 16*.
2. Remove the left side cover. Refer to *To remove and install the left side cover on page 16*.

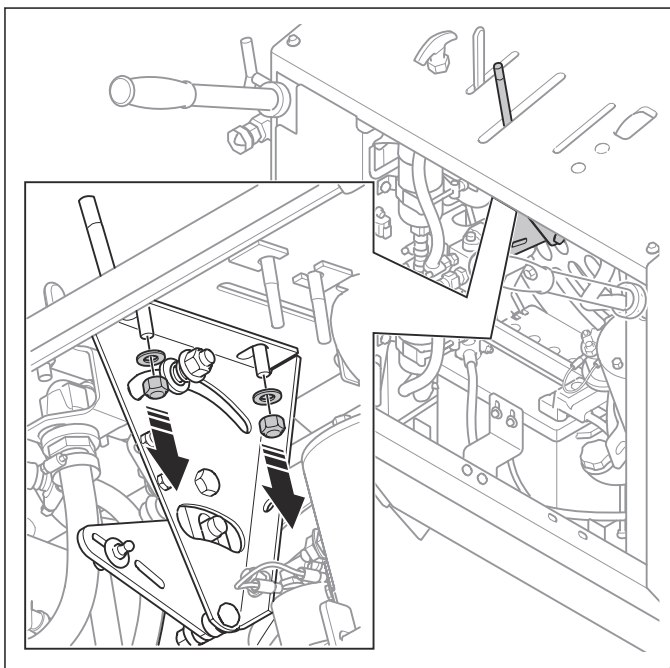
3. Remove the speed control rod from the ball joint.



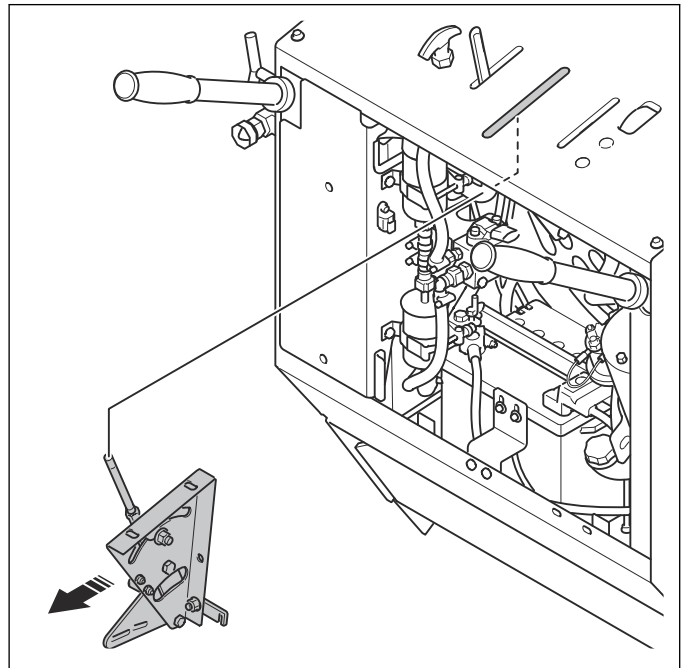
4. Remove the pin (A) and the handle (B) from the speed control lever.



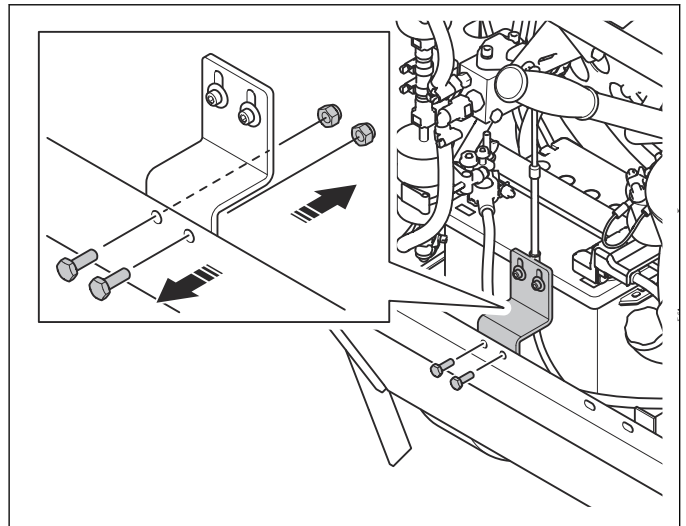
5. Remove the nuts and the washers.



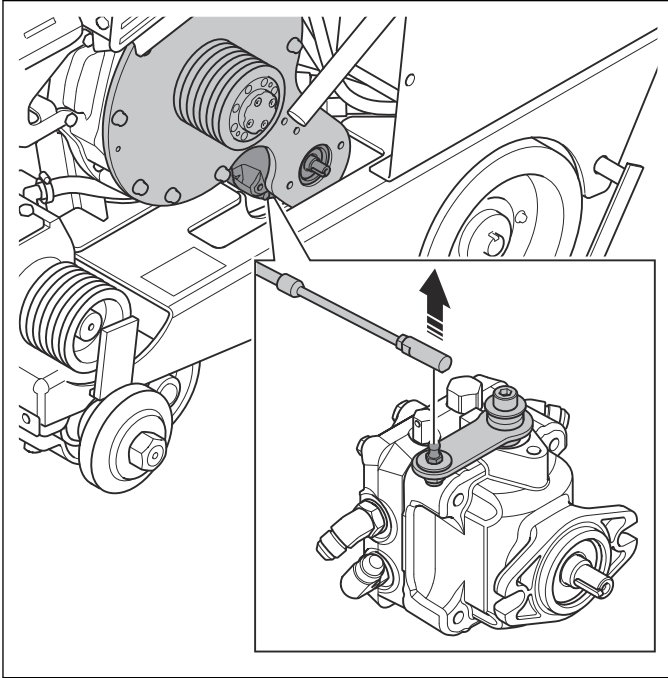
6. Remove the assembly for the speed control lever.



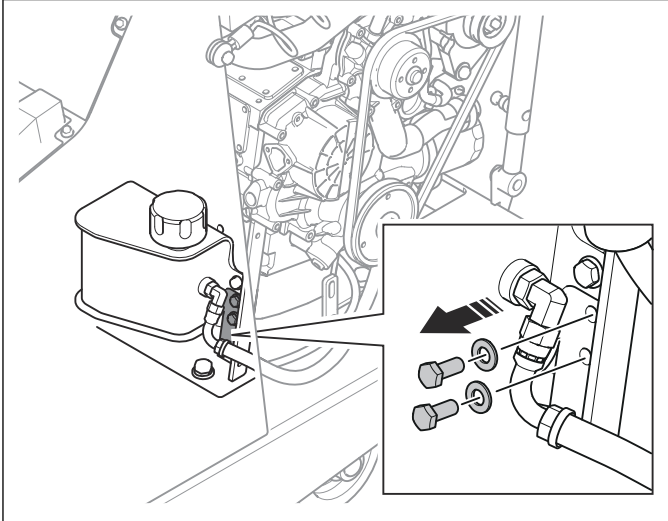
7. Remove the bolts and nuts from the bracket.



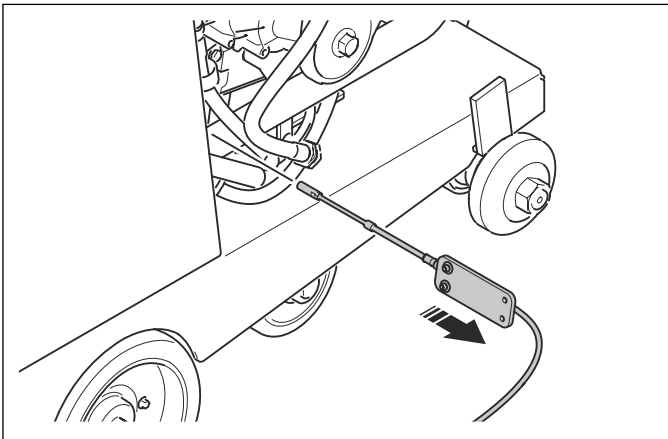
8. Disconnect the wire with a screwdriver.



9. Remove the bolts and the washers.



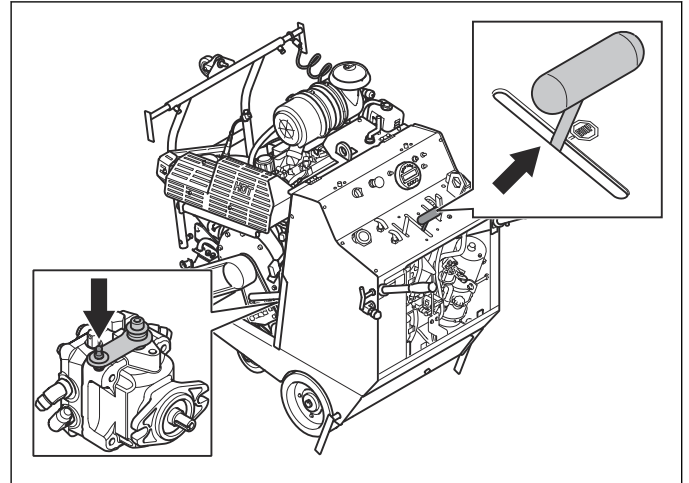
10. Remove the wire assembly.



11. To install the speed control lever, refer to *To install the speed control lever on page 30*.

6.9.6 To install the speed control lever

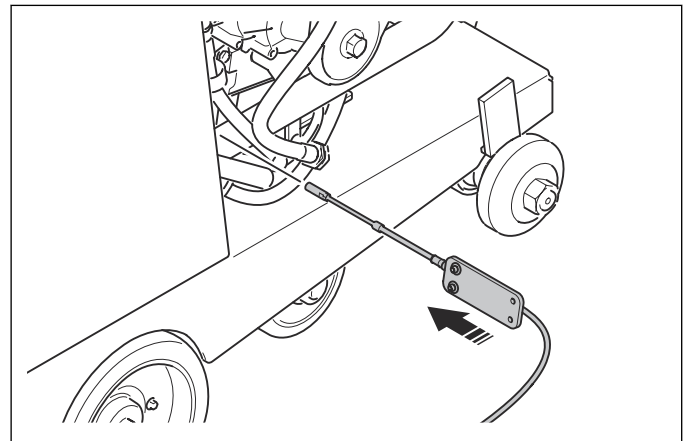
1. Make sure that the lever for the hydraulic pump and the speed control lever are set in neutral position. The levers must be synchronized.



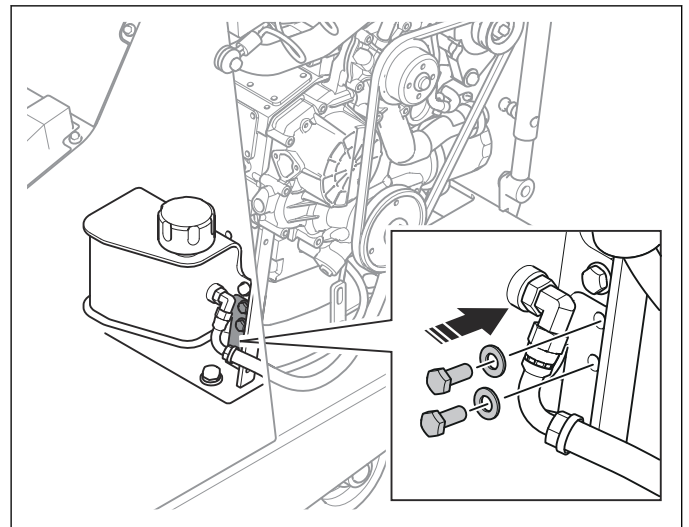
2. Remove the rear hatch. Refer to *To remove and install the rear hatch on page 16*.

3. Remove the left side cover. Refer to *To remove and install the left side cover on page 16*.

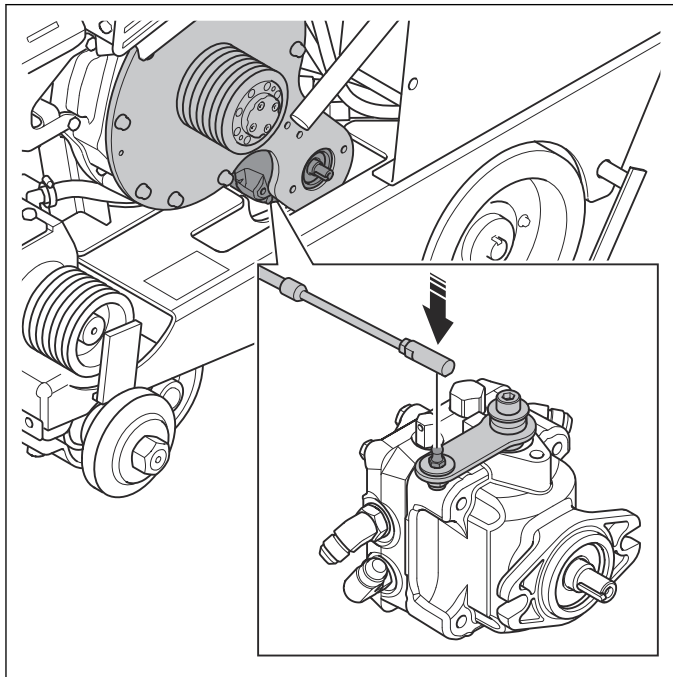
4. Install the wire assembly.



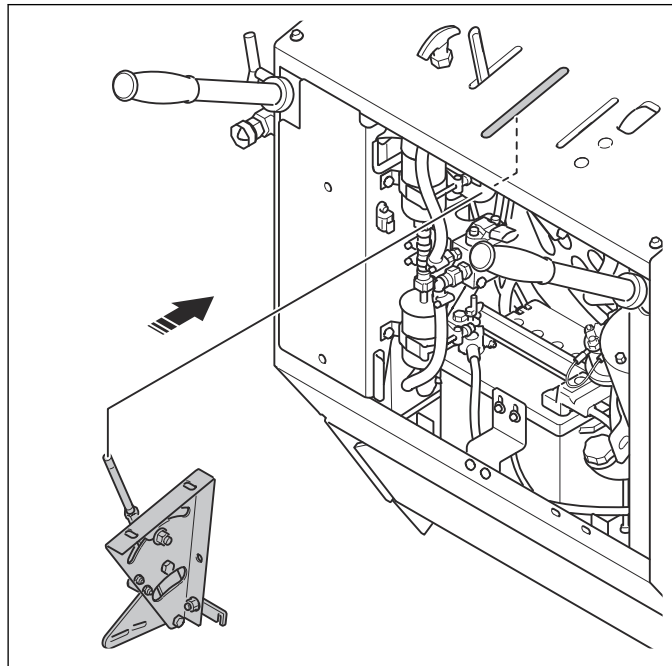
5. Install the bolts and the washers.



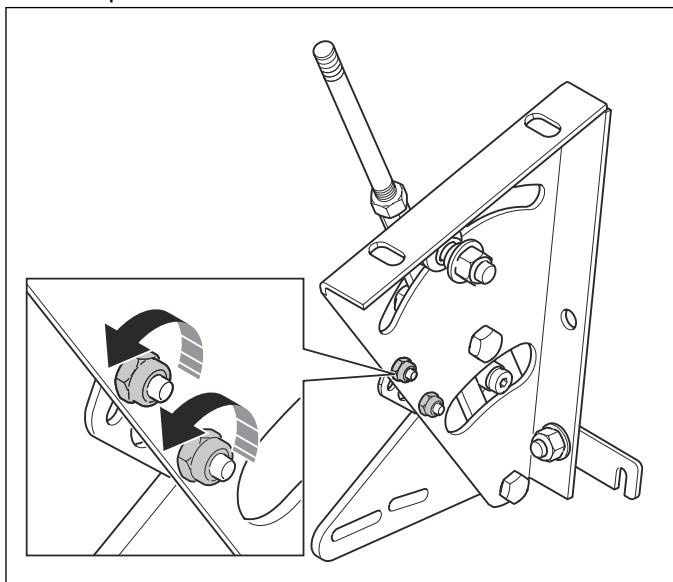
6. Install the wire on the hydraulic pump lever.



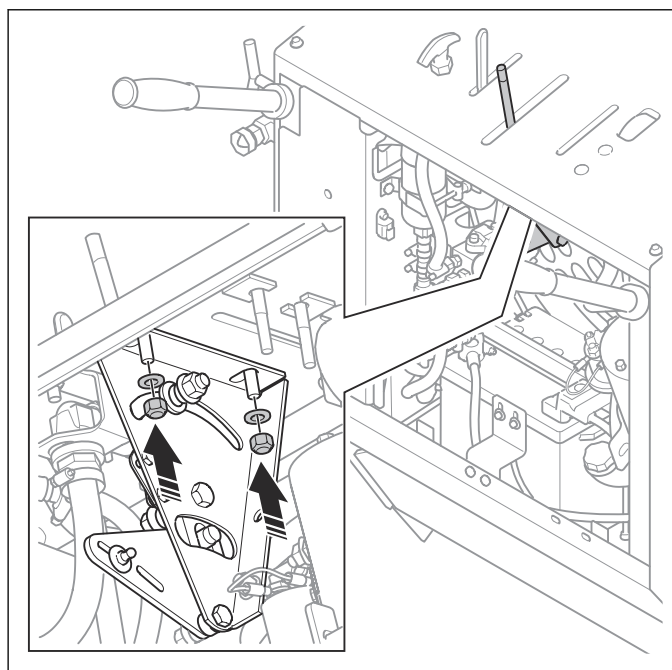
8. Install the assembly for the speed control lever.



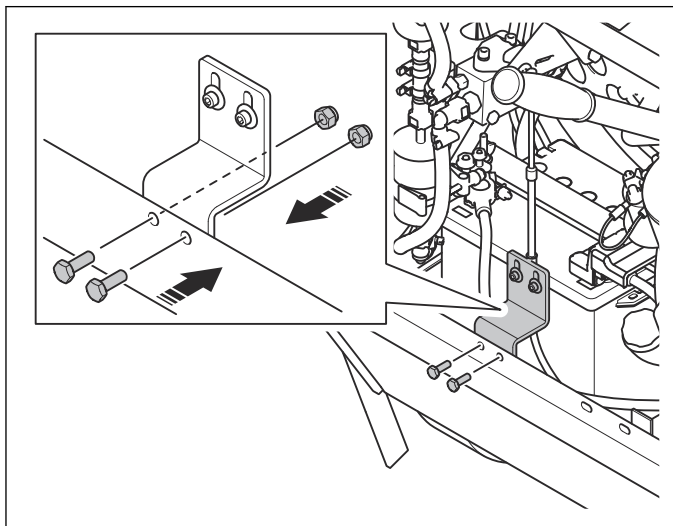
7. Loosen the 2 adjustment screws on the assembly for the speed control lever.



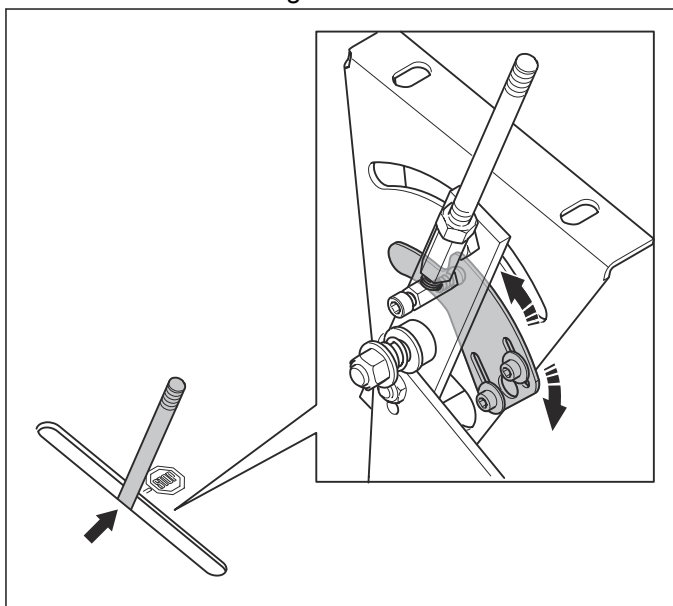
9. Install the nuts and the washers.



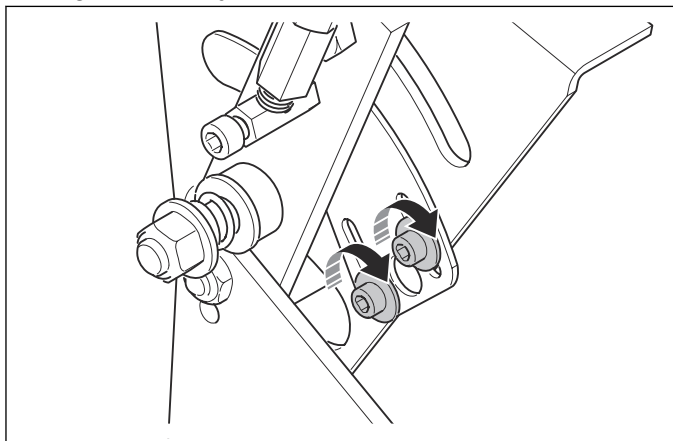
10. Install the bolts and the nuts.



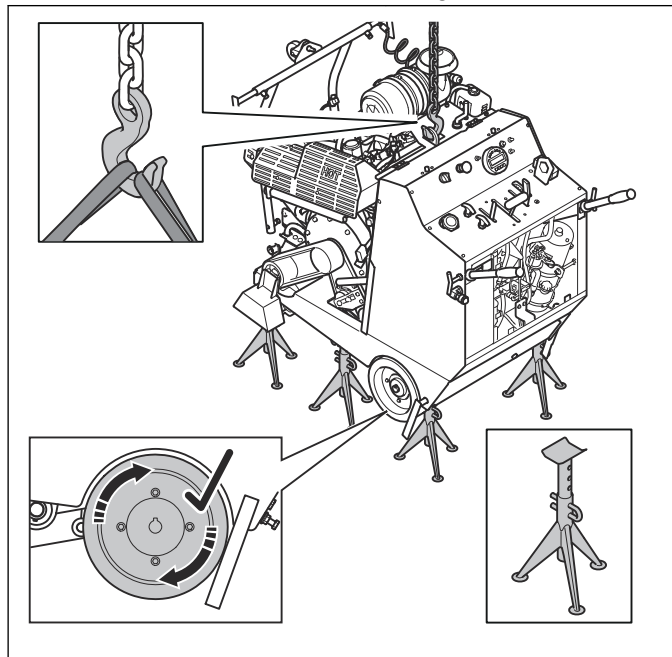
11. Adjust the assembly for the speed control lever. The lever must be in the stop position when the spring loaded ball is in the groove.



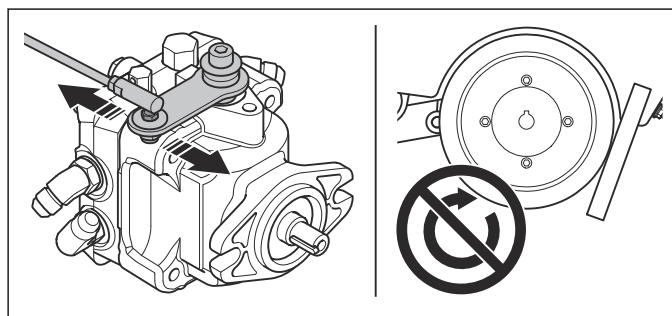
12. Tighten the adjustment screws.



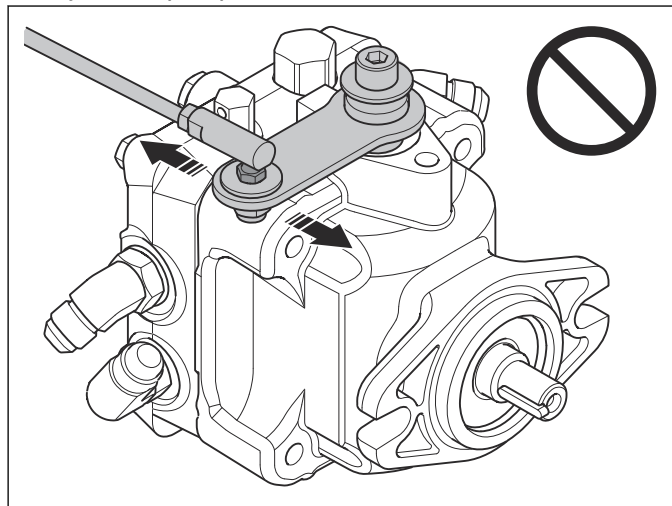
13. Lift the product and put supports below the product. The rear wheels must be off the ground.



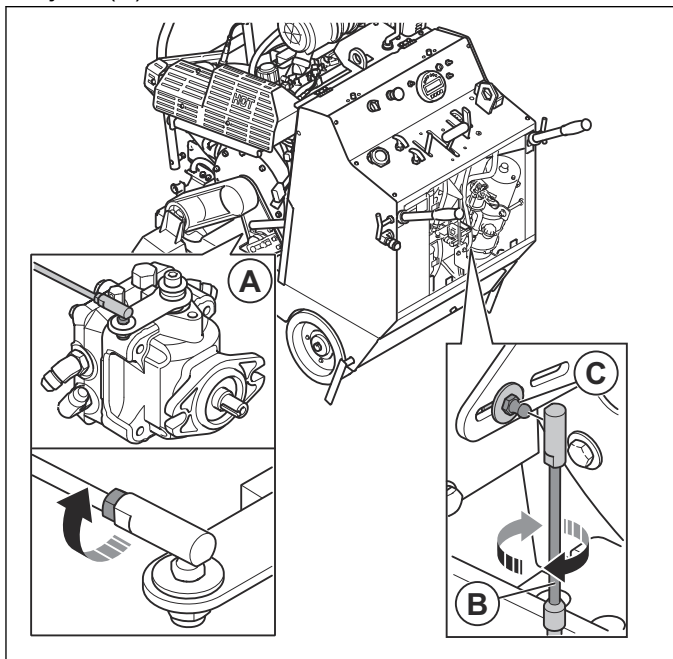
14. Start the product and set the lever at the hydraulic pump in the neutral position. Make sure that the wheels do not move.



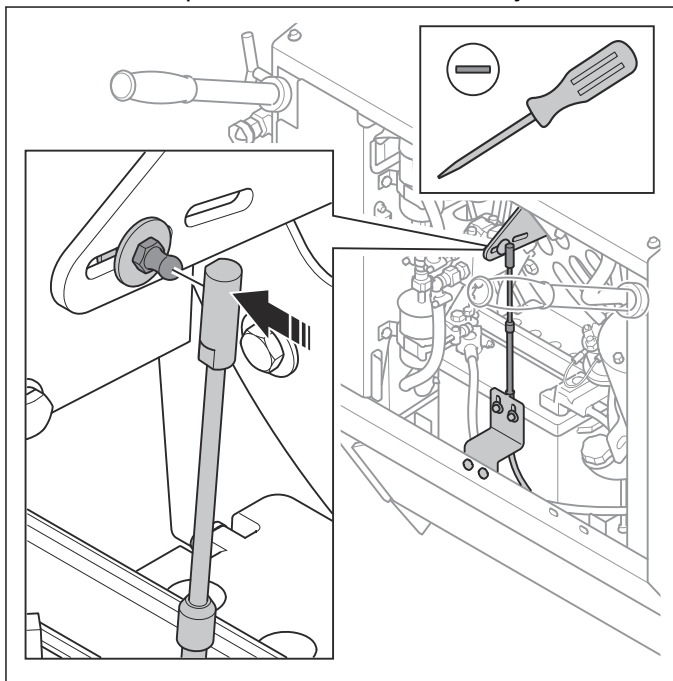
15. Stop the product and make sure that the lever at the hydraulic pump does not move.



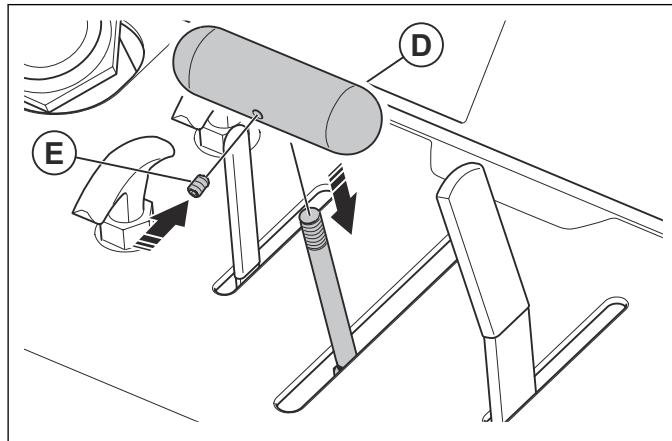
16. Adjust the rod at the hydraulic pump lever (A) and at the assembly for the speed control lever (B). The hole in the rod must be at the same level as the ball joint (C).



17. Install the speed control rod on the ball joint.



18. Install the handle (D) and the pin (E).

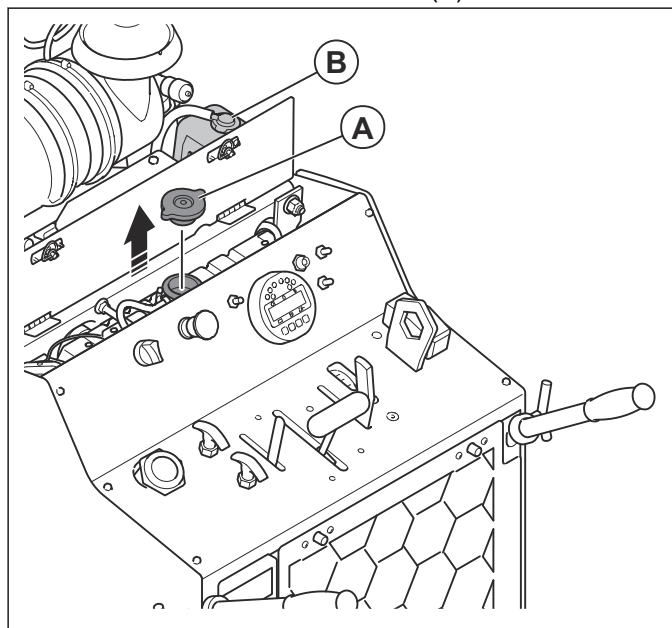


6.9.7 To do a check of the radiator coolant level



WARNING: Risk of burn injuries. Let the engine become cool before you open the radiator coolant lid.

1. Make sure that the product is level when you examine the radiator coolant level.
2. Open the top hatch.
3. Remove the radiator coolant lid (A).



4. If there is radiator coolant in the expansion tank (B), the radiator coolant flows back into the radiator coolant container.
 - a) Wait until the radiator coolant is back in the radiator coolant container.

Note: It is not possible to fully empty the expansion tank. There is always some radiator coolant in the expansion tank.

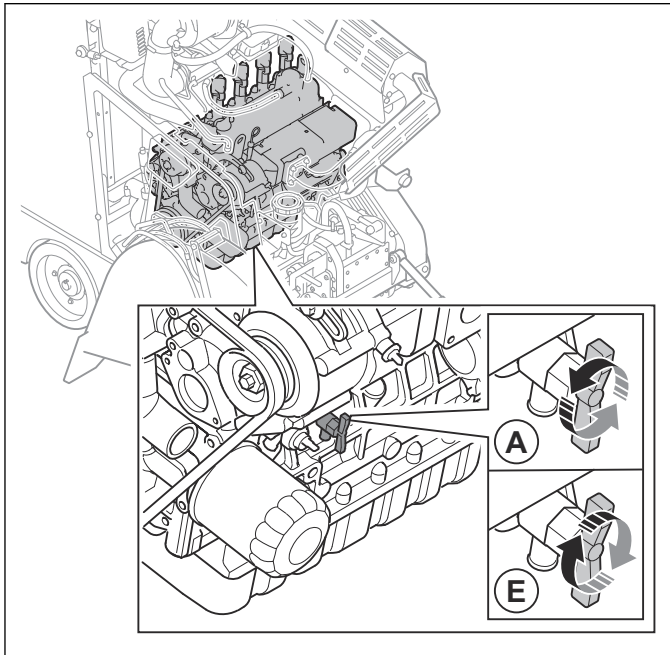
5. Examine the radiator coolant level in the radiator coolant container. The radiator coolant level is correct when the radiator coolant is immediately above the heatsinks in the radiator coolant container.
6. If the radiator coolant level is low, fill until the radiator coolant level is correct. Refer to *Technical data on page 70* for the correct radiator coolant type and mixture.

6.9.8 To replace the radiator coolant



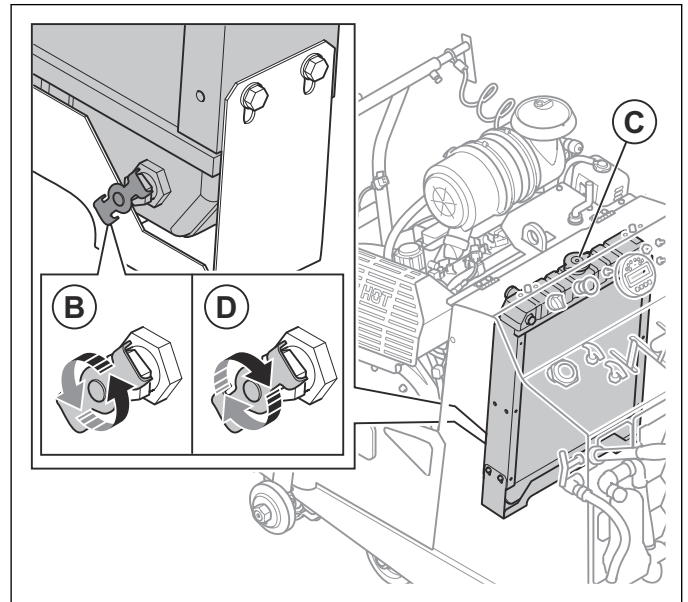
WARNING: Risk of burn injuries. Let the engine become cool before you open the radiator coolant lid.

1. Put a container below the valve on the engine.
2. Open the valve (A) on the engine.



3. Put a container below the valve on the radiator coolant container.

4. Open the valve (B) on the radiator coolant container.

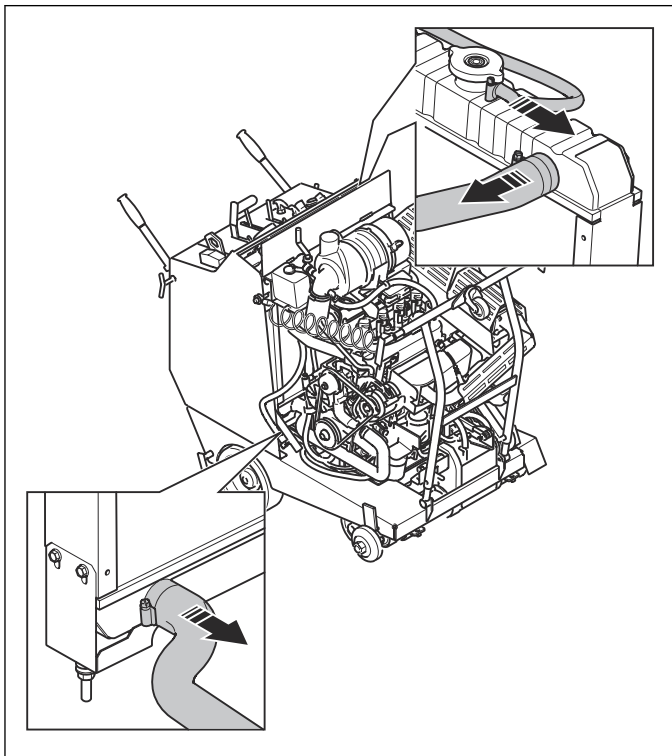


5. Remove the radiator coolant lid (C). The radiator coolant drains from the system.
6. Close the valve (D) on the radiator coolant container.
7. Close the valve (E) on the engine.
8. Fill with radiator coolant until the radiator coolant level is correct. Refer to *To do a check of the radiator coolant level on page 33*.
9. Install the radiator coolant lid.

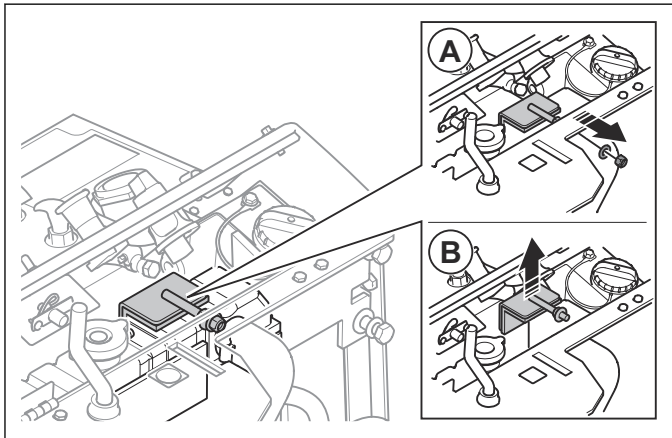
6.9.9 To remove and install the radiator coolant container

1. Open the top hatch.
2. Drain the radiator coolant container. Refer to *To replace the radiator coolant on page 34*.

3. Disconnect the 3 hoses from the radiator coolant container.

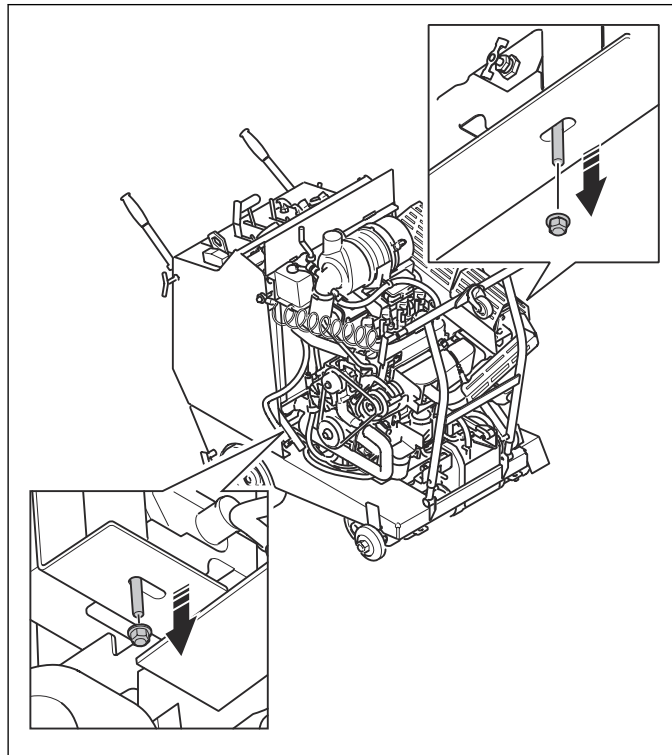


4. Remove the nut and washer (A).

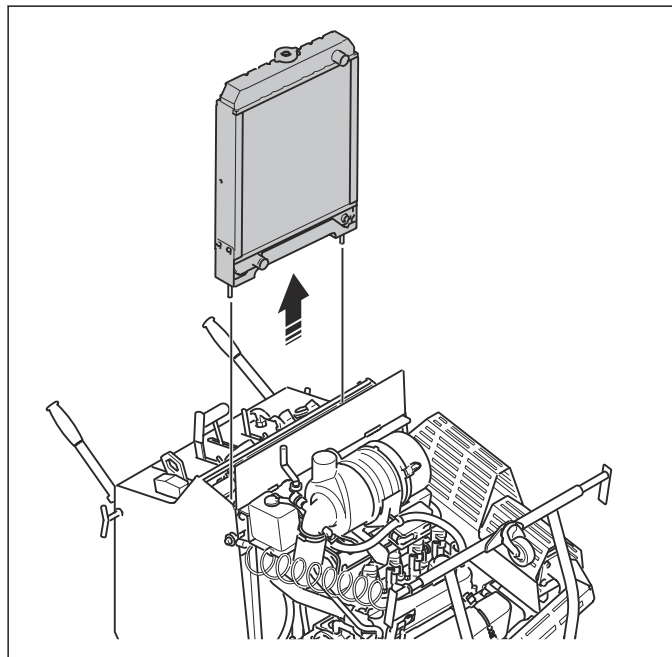


5. Remove the bracket (B).

6. Remove the 2 nuts.



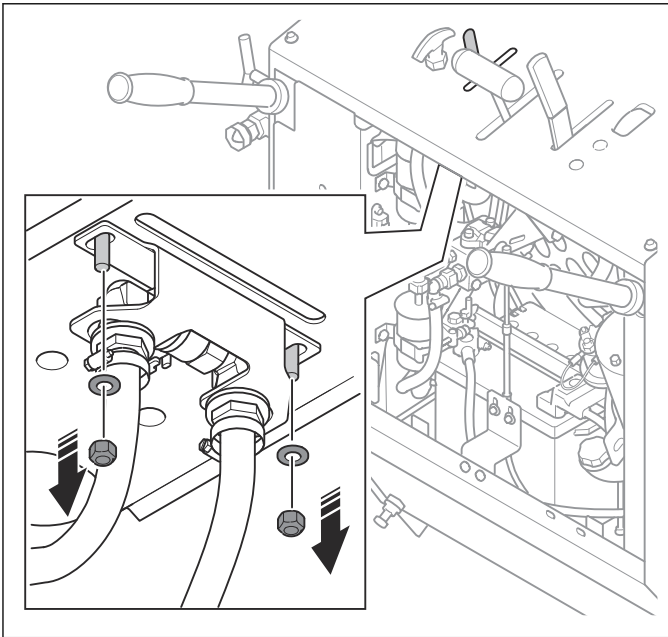
7. Remove the radiator coolant container.



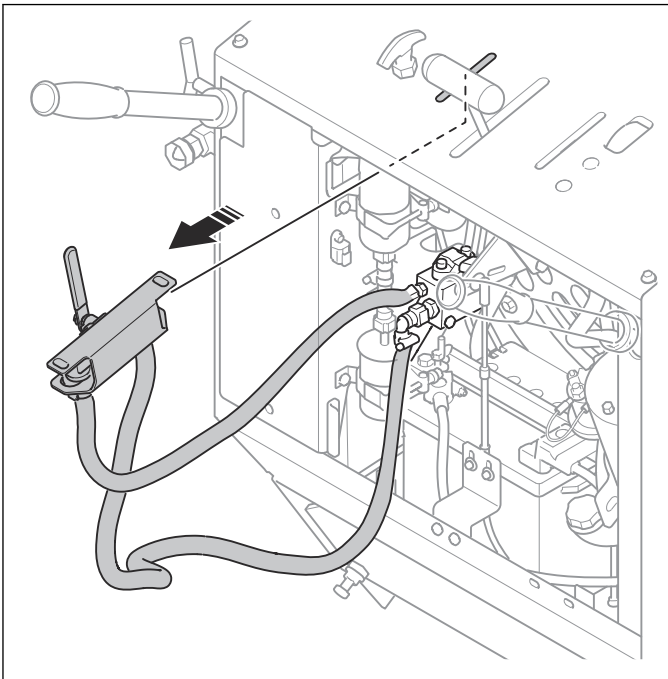
8. Install in the opposite sequence.

6.9.10 To remove and install the water valve lever

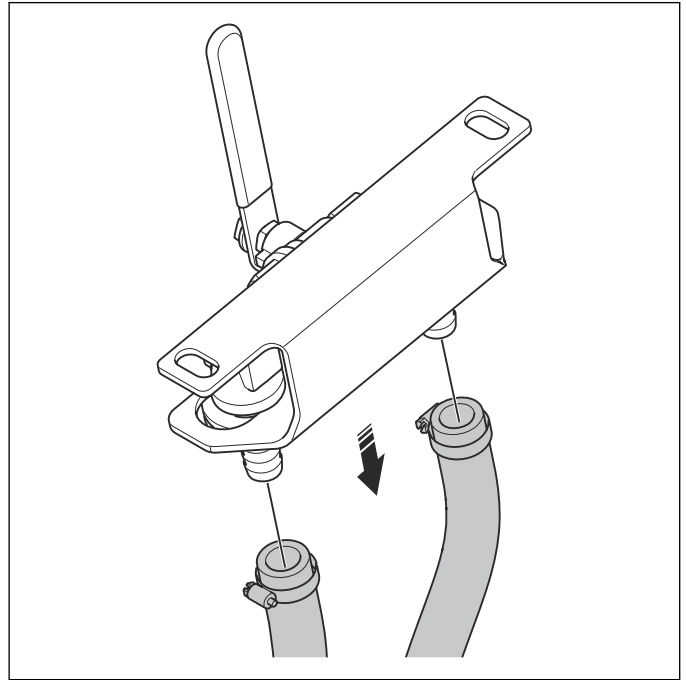
1. Remove the rear hatch. Refer to *To remove and install the rear hatch on page 16*.
2. Remove the nuts and washers.



3. Remove the assembly for the water valve lever.



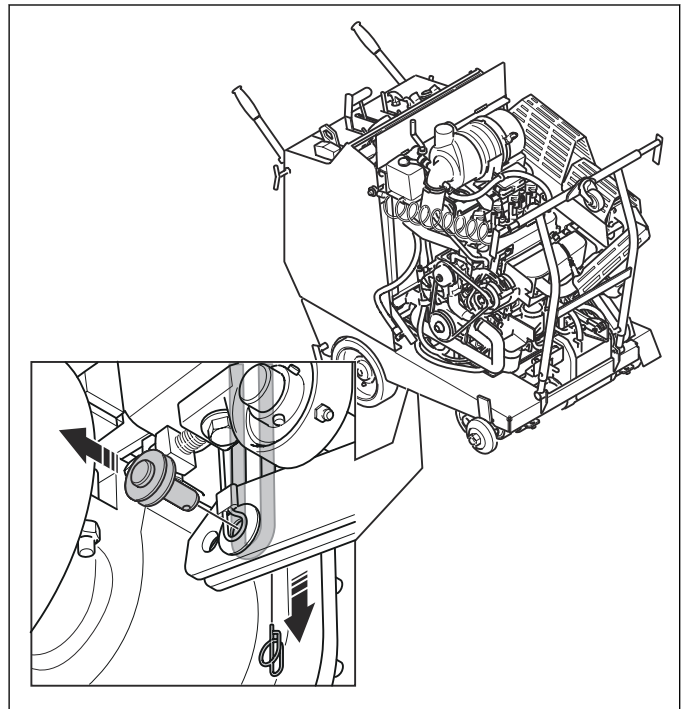
4. Disconnect the 2 hoses.



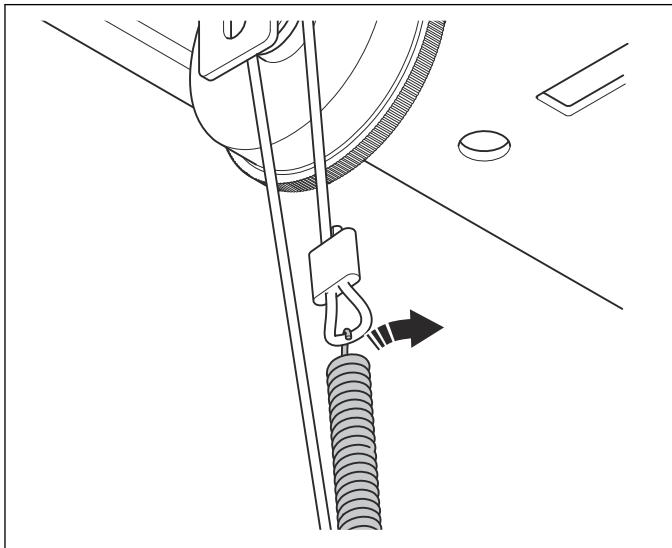
5. Install in the opposite sequence.

6.9.11 To remove and install the depth indicator

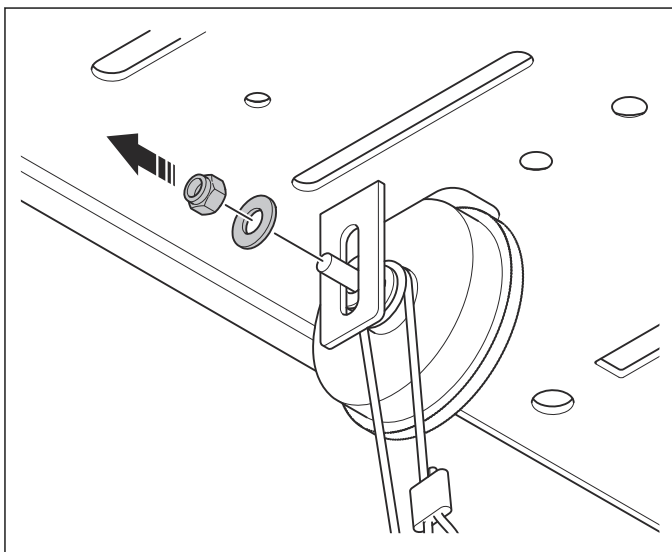
1. Remove the rear hatch. Refer to *To remove and install the rear hatch on page 16*.
2. Remove the pin.



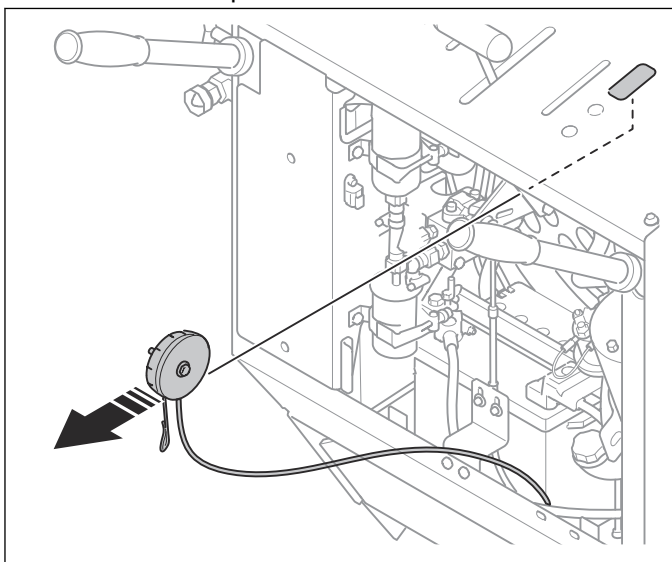
3. Remove the spring.



4. Remove the nut and the washer.



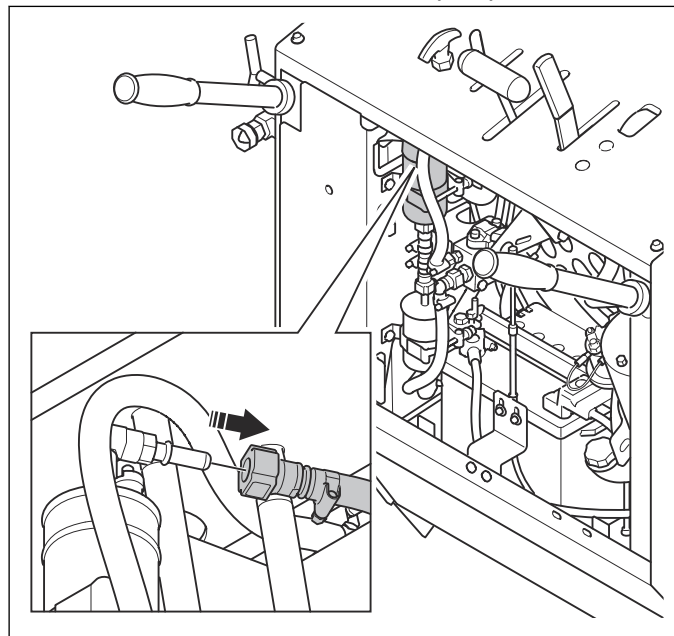
5. Remove the depth indicator.



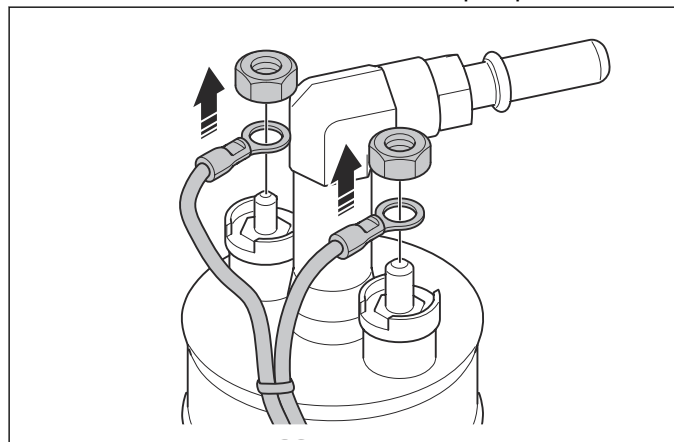
6. Install in the opposite sequence.

6.9.12 To remove and install the electric fan

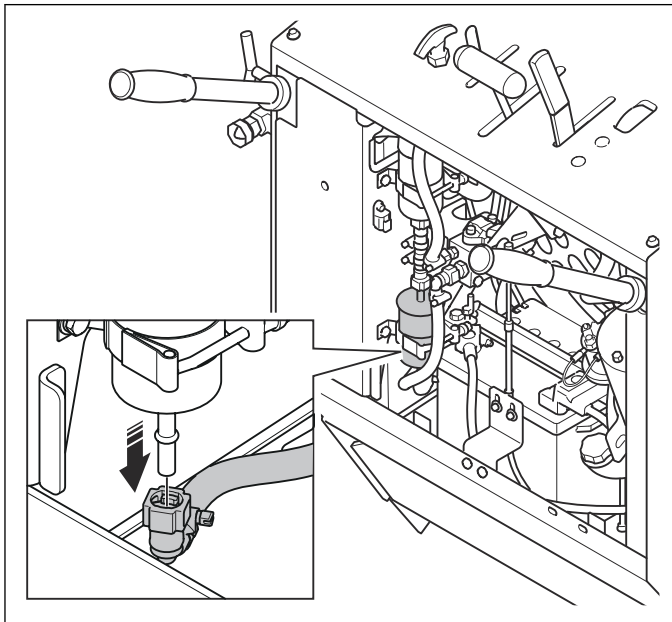
1. Remove the rear hatch. Refer to *To remove and install the rear hatch on page 16*.
2. Remove the water valve lever. Refer to *To remove and install the water valve lever on page 36*.
3. Remove the depth indicator. Refer to *To remove and install the depth indicator on page 36*.
4. Remove the speed control lever. Refer to *To remove the speed control lever on page 28*.
5. Remove the lever for cutting depth adjustment. Refer to *To remove and install the lever for cutting depth adjustment on page 27*.
6. Remove the fuel manifold. Refer to *To remove and install the fuel manifold on page 47*.
7. Remove the hydraulic lift pump. Refer to *To remove and install the hydraulic lift pump on page 22*.
8. Disconnect the hose for the fuel pump.



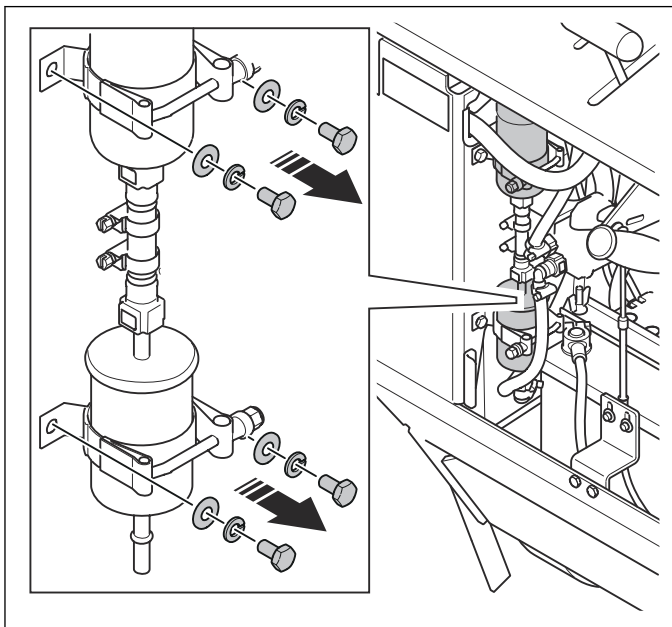
9. Disconnect the wires from the fuel pump.



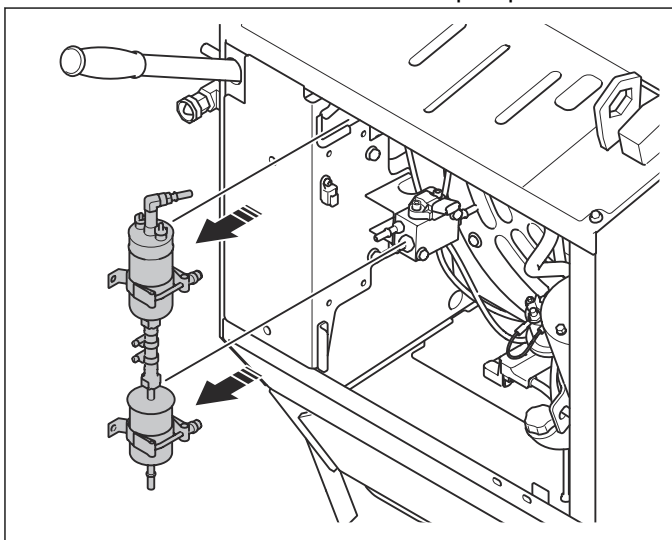
10. Disconnect the hose for the fuel filter.



11. Remove the screws and the washers.

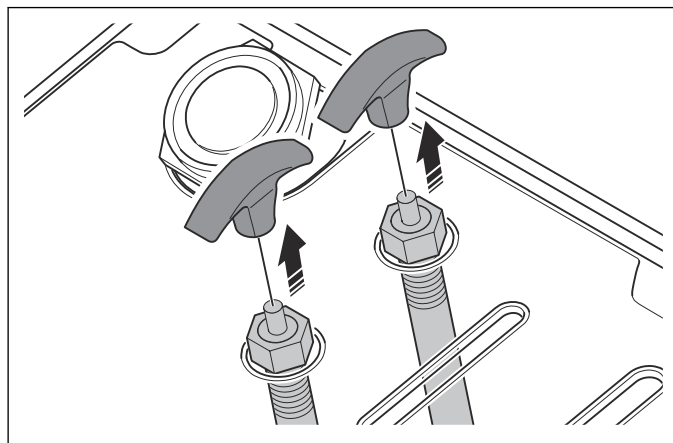


12. Remove the fuel filter and the fuel pump.

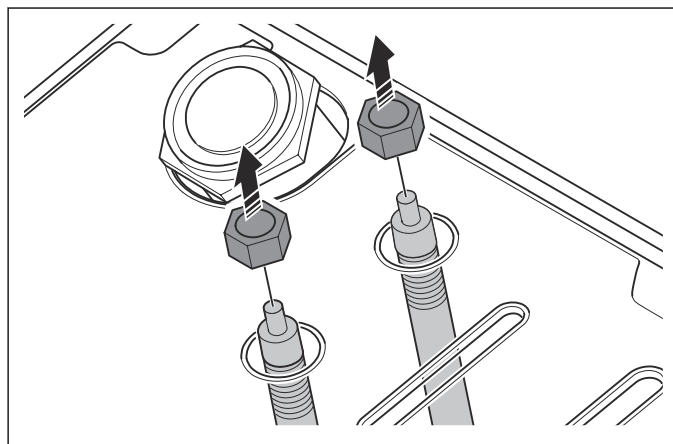


13. Remove the battery. Refer to *To remove and install the battery* on page 17.

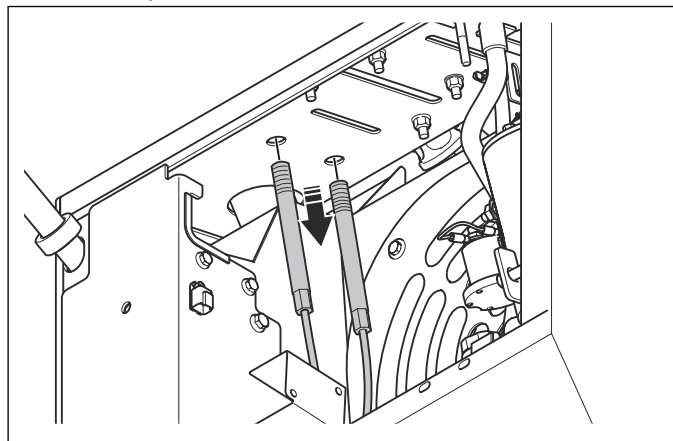
14. Remove the differential locking knob and the knob for rear axle freewheel function.



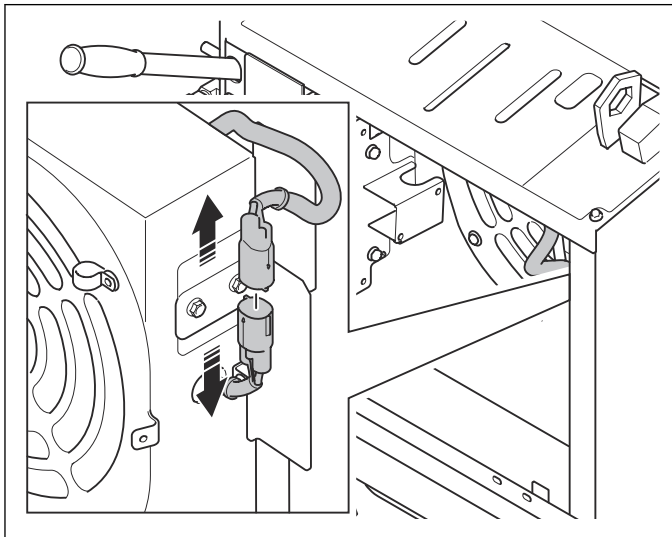
15. Remove the 2 nuts.



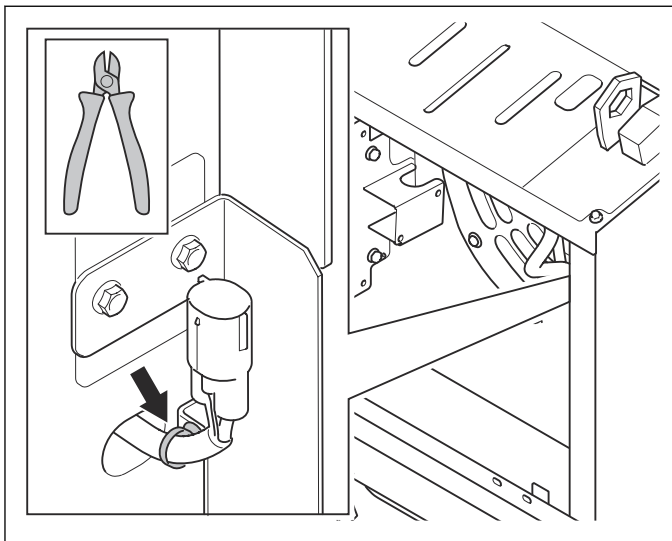
16. Lower the wires and put the wires at the bottom of the compartment.



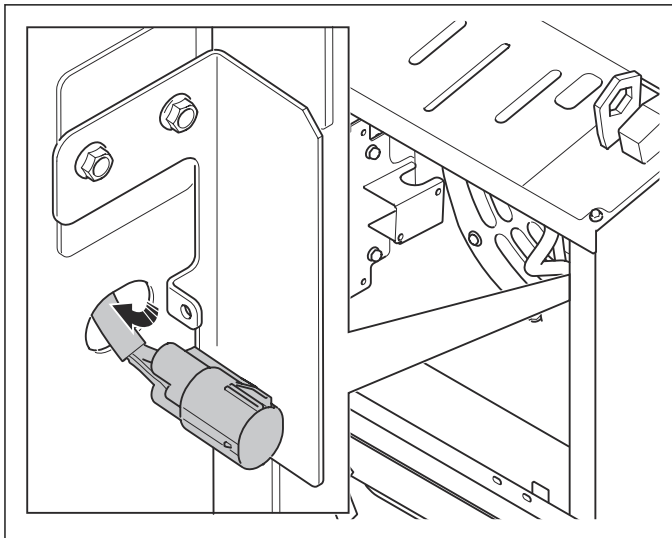
17. Disconnect the wiring harness.



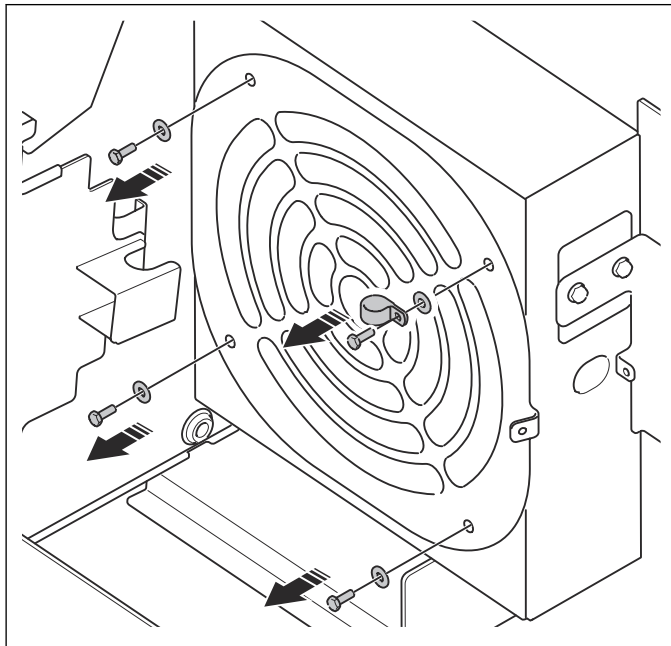
18. Remove the cable tie.



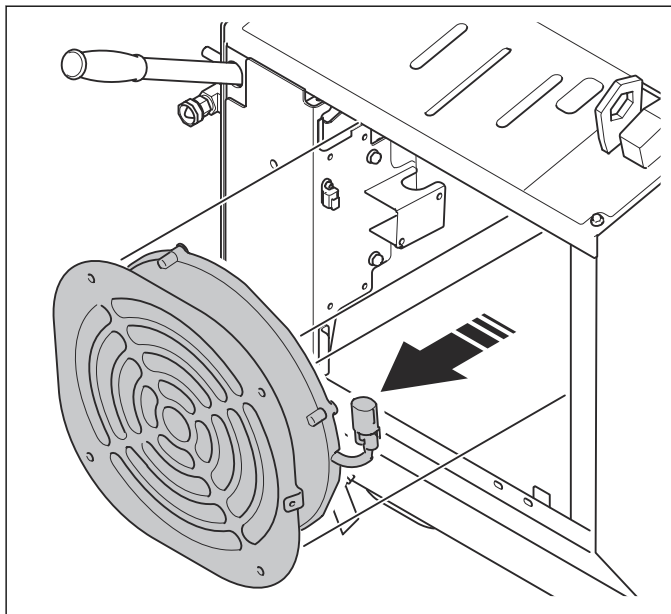
19. Push the connector through the hole.



20. Remove the 4 screws for the electric fan.



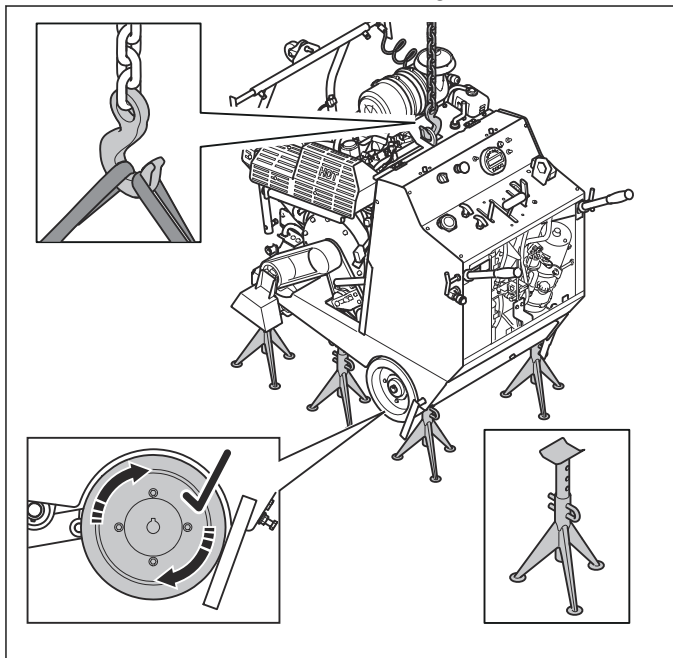
21. Remove the electric fan.



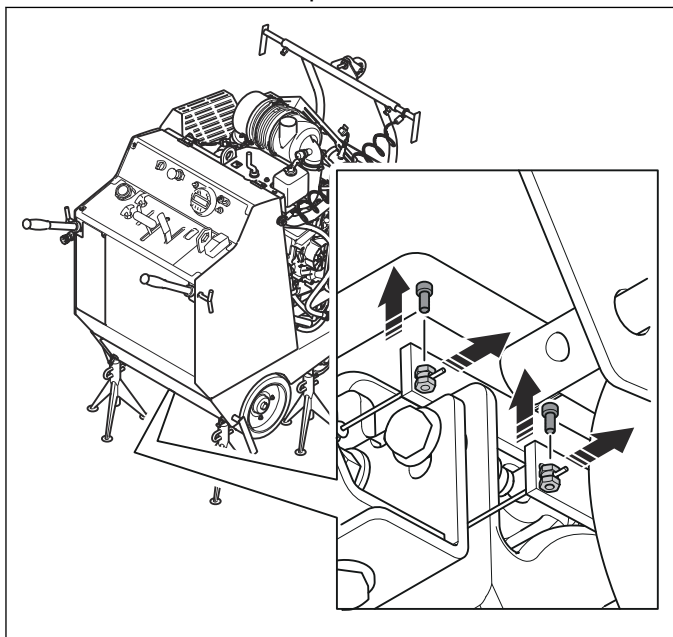
22. Install in the opposite sequence.

6.9.13 To remove and install the knob for rear axle freewheel function

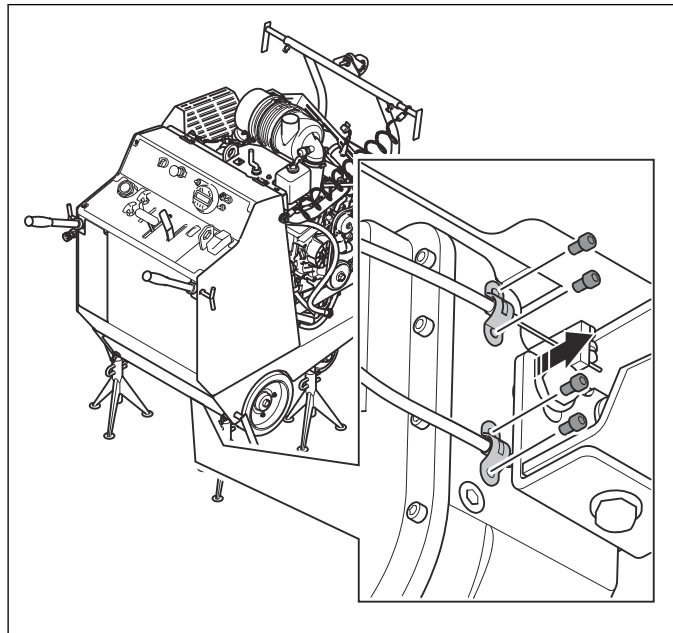
1. Remove the battery. Refer to *To remove and install the battery on page 17*.
2. Lift the product and put supports below the product. The rear wheels must be off the ground.



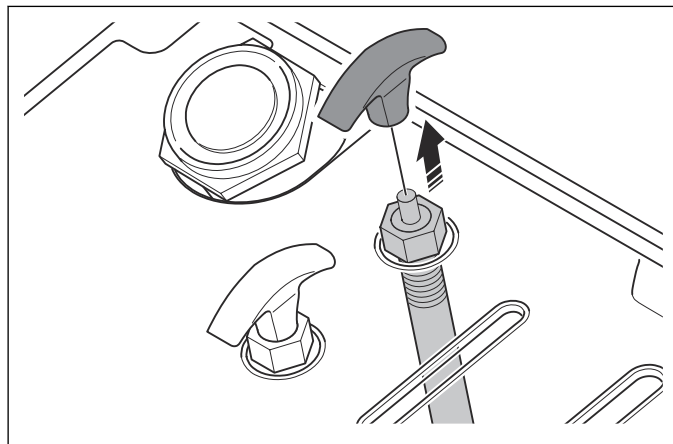
3. Remove the cable stop.



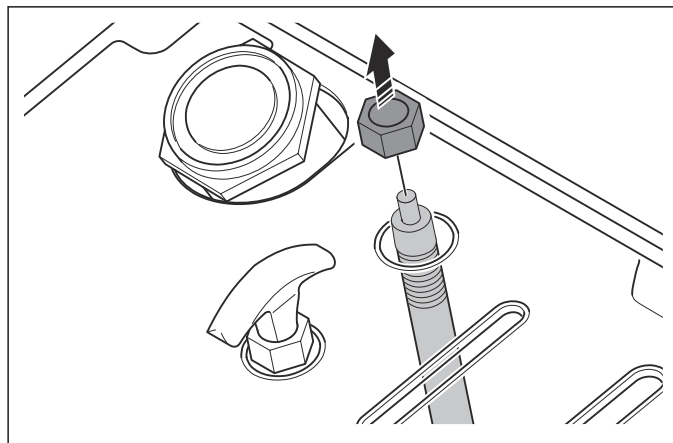
4. Remove the 4 screws and the 2 brackets.



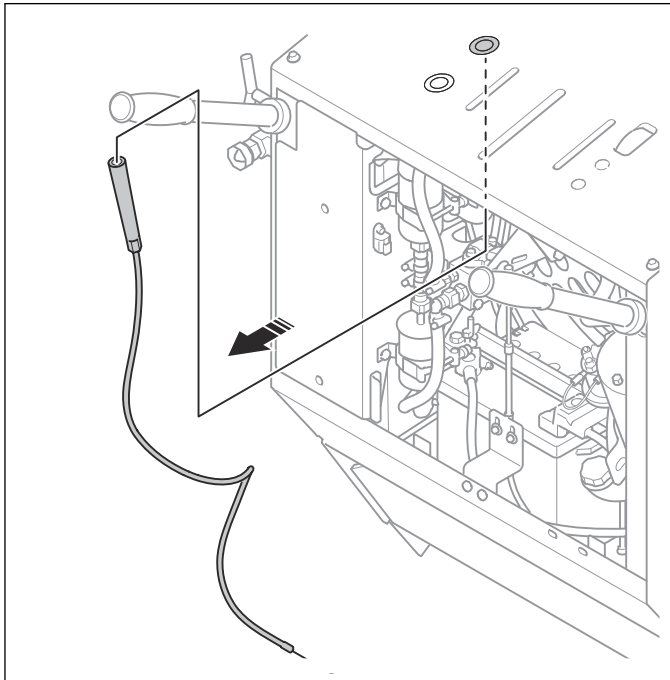
5. Remove the handle.



6. Remove the nut.



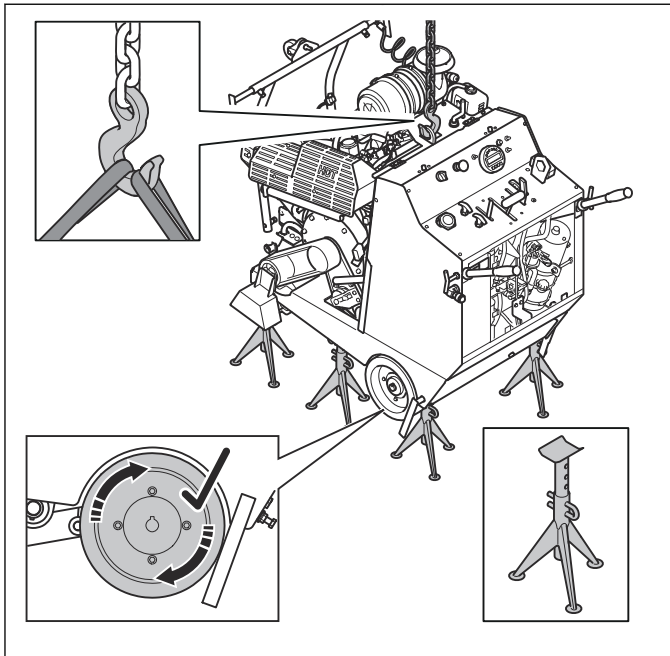
7. Remove the wire for the knob for rear axle freewheel function.



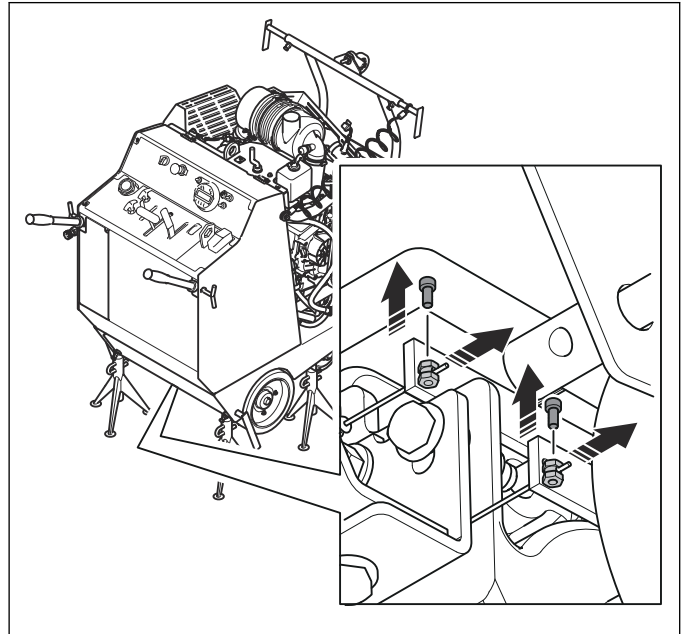
8. Install in the opposite sequence.

6.9.14 To remove and install the differential locking knob

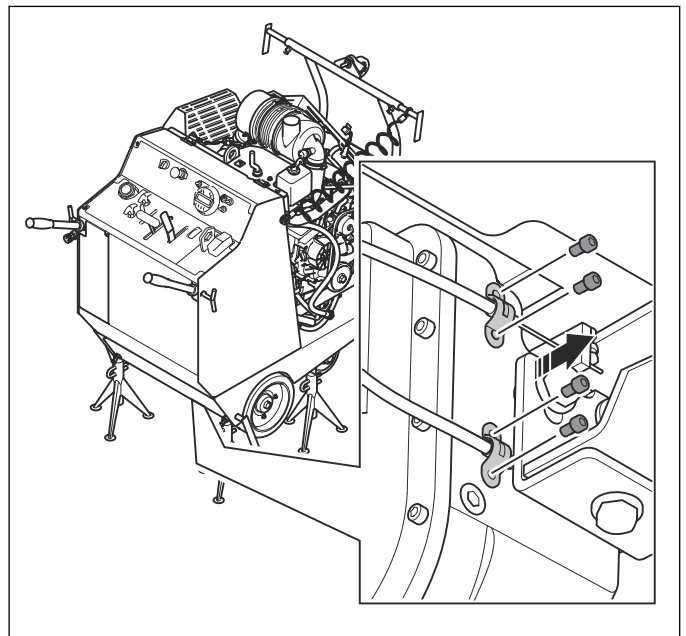
1. Remove the battery. Refer to *To remove and install the battery on page 17.*
2. Lift the product and put supports below the product. The rear wheels must be off the ground.



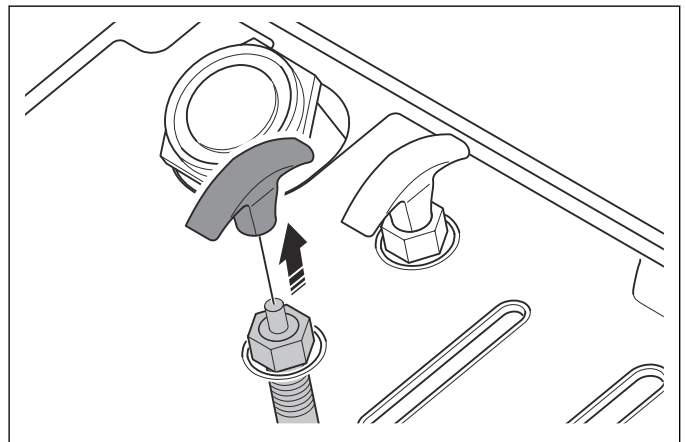
3. Remove the cable stop.



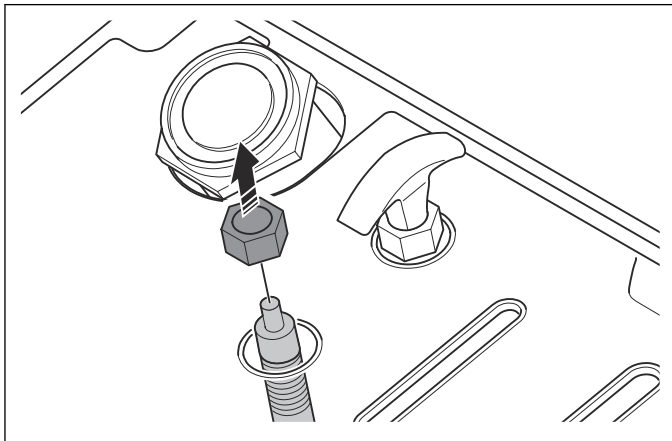
4. Remove the 4 screws and the 2 brackets.



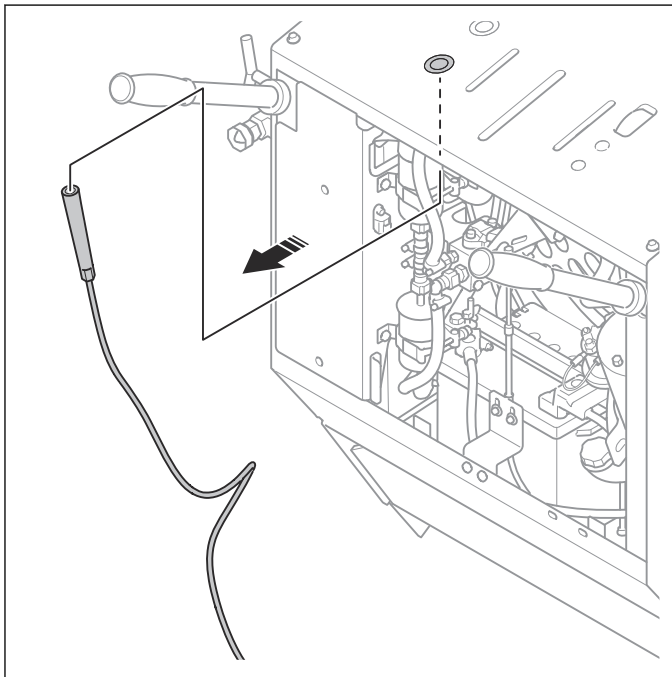
5. Remove the handle.



6. Remove the nut.



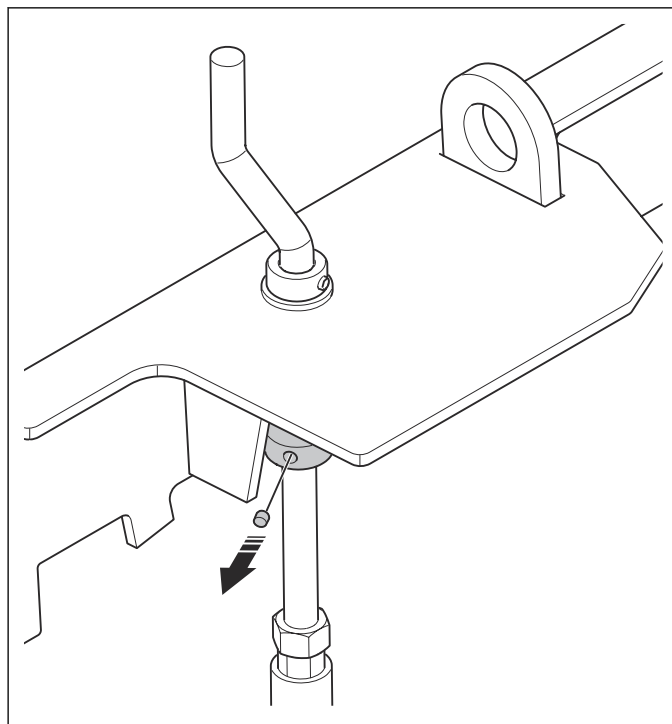
7. Remove the wire for the differential locking knob.



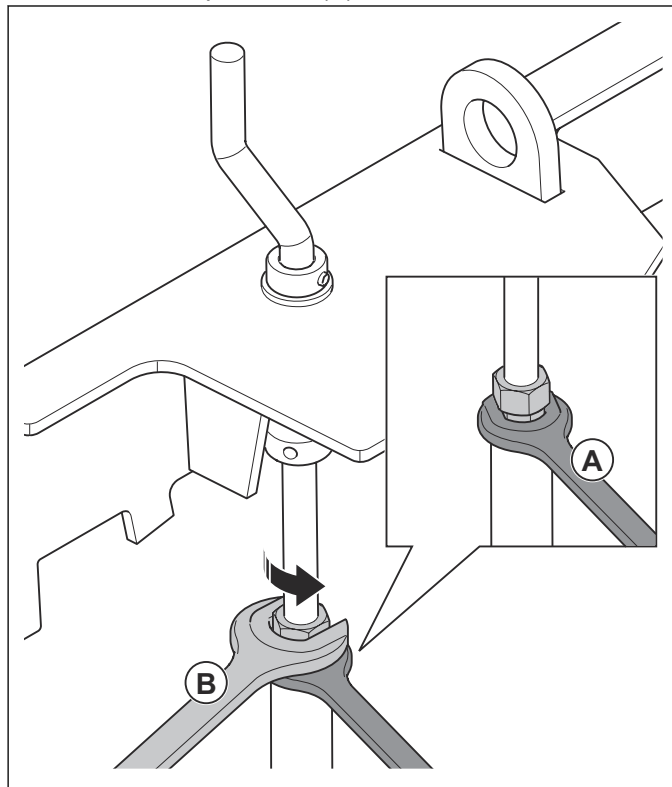
8. Install in the opposite sequence.

6.9.15 To remove and install the blade depth stop

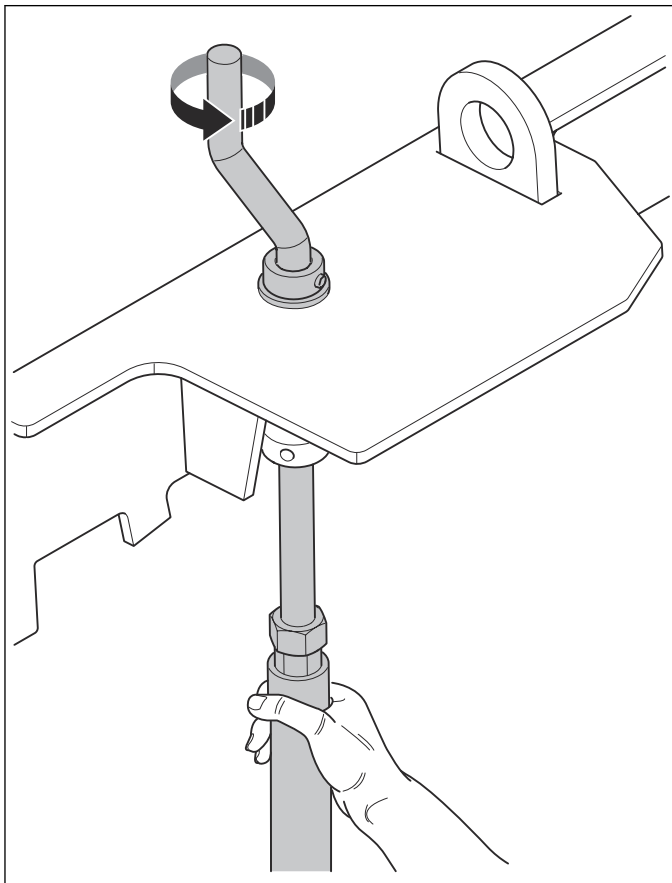
1. Remove the set screw.



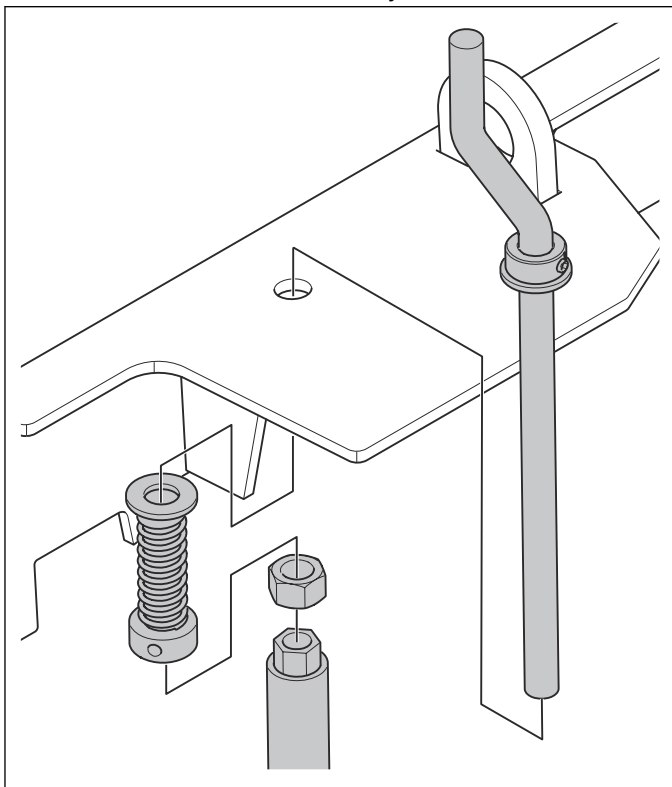
2. Lock the lower locknut (A) with a wrench. Then loosen the top locknut (B) with a different wrench.



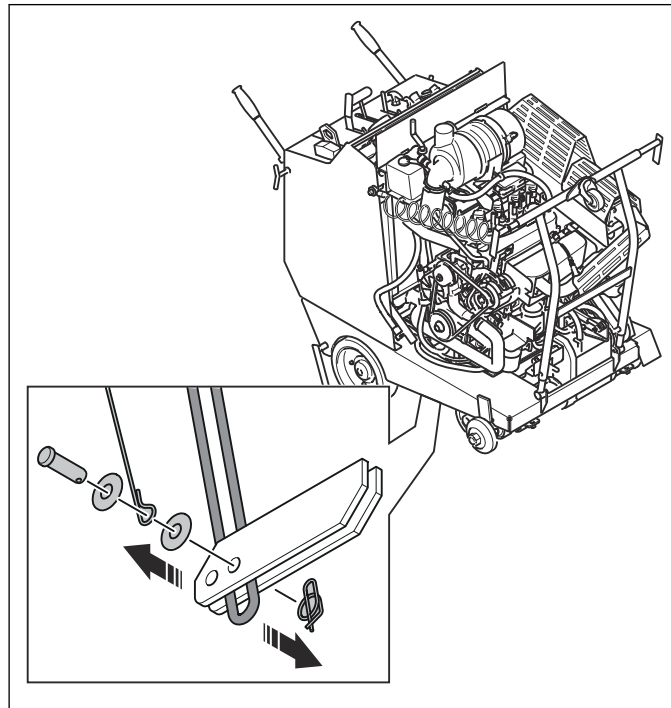
3. Turn the handle counterclockwise. Make sure that the rod below the handle does not rotate.



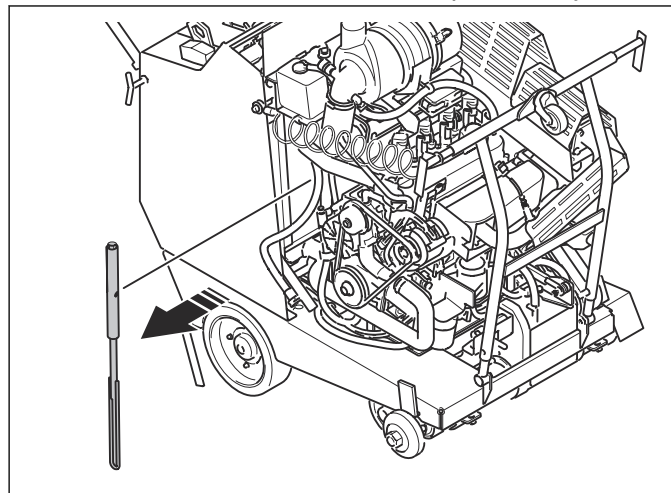
4. Remove the handle assembly.



5. Remove the safety pin and the clevis pin.



6. Remove the threaded rod and loop assembly.



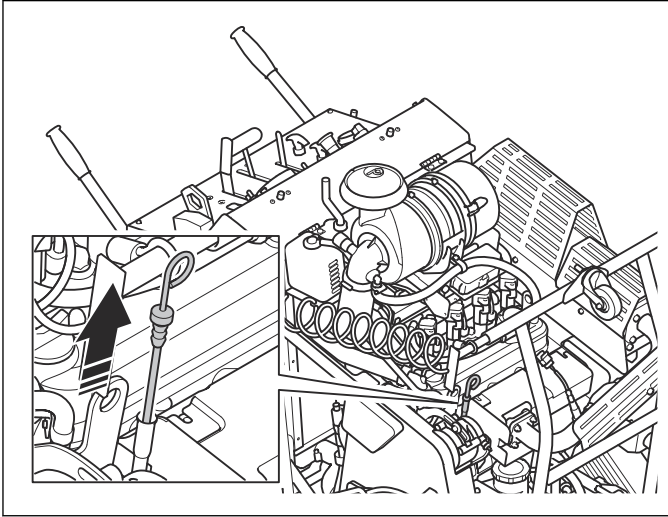
7. Install in the opposite sequence.

6.10 Engine

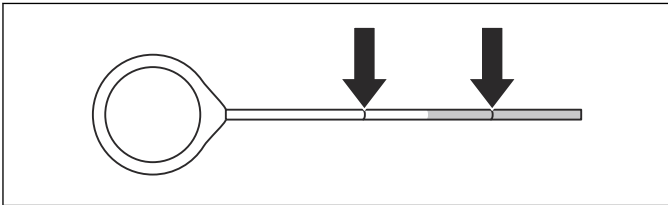
6.10.1 To do a check of the engine oil level

1. Make sure that the product is level.
2. Stop the product. The engine oil flows back into the oil tank.
3. If the product has been in operation or moved, wait 10 minutes until the engine oil is back.

4. Remove the dipstick from the oil tank.



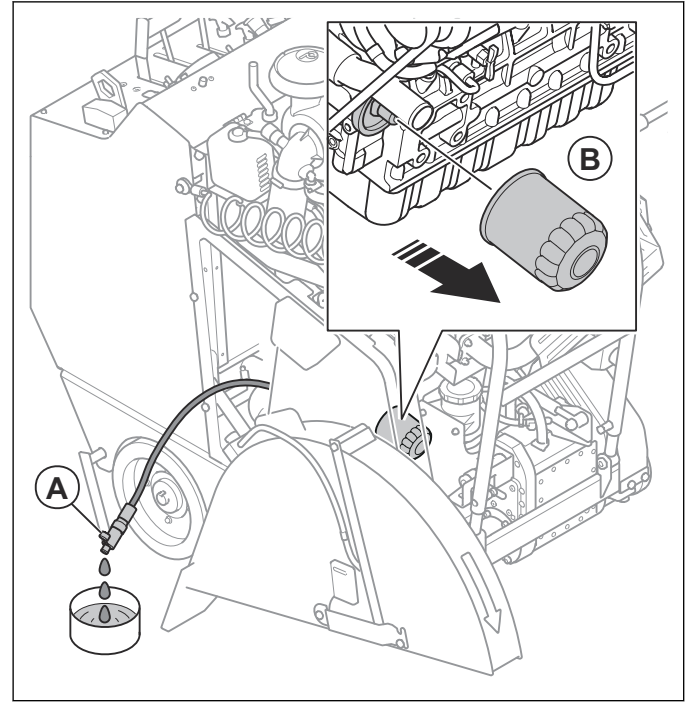
5. Clean the oil from the dipstick.
6. Put the dipstick back fully into the oil tank.
7. Remove the dipstick.
8. Examine the oil level on the dipstick. Make sure that the level of engine oil is between the marks on the dipstick.



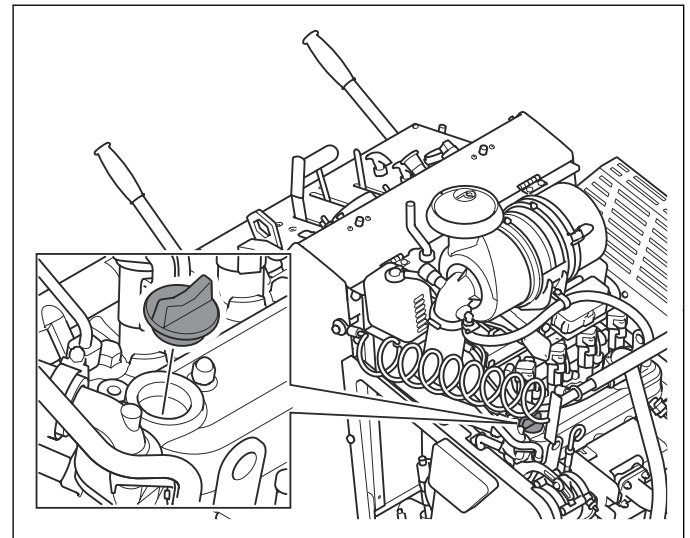
9. If the oil level is low, fill with engine oil and do a check of the oil level again. Refer to *Technical data on page 70* for correct engine oil type.

6.10.2 To replace the engine oil and engine oil filter

1. Remove the cap (A) from the oil drain hose for engine oil.

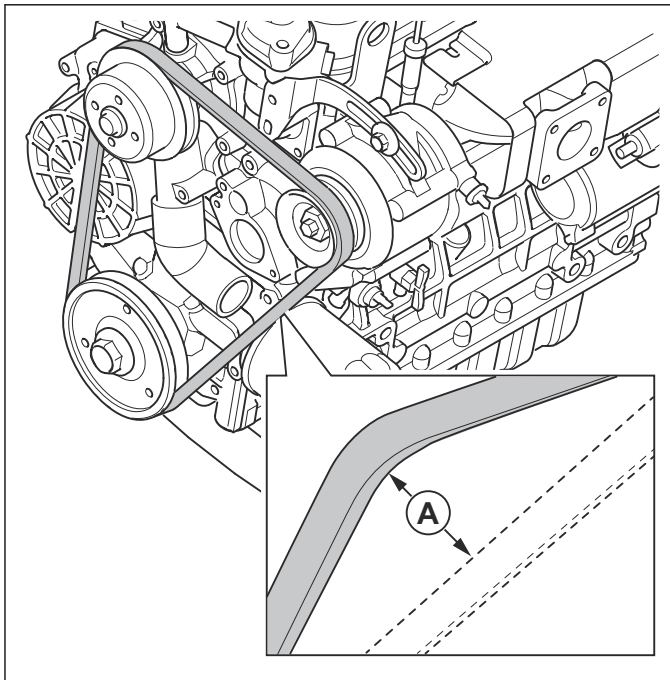


2. Open the valve and bend the hose down to drain the engine oil.
3. Remove the engine oil filter (B) and discard it.
4. Close the valve.
5. Lubricate the seal with some drops of engine oil.
6. Install the engine oil filter on the product.
7. Open the oil tank cap and fill the system with engine oil. Refer to *Technical data on page 70*.

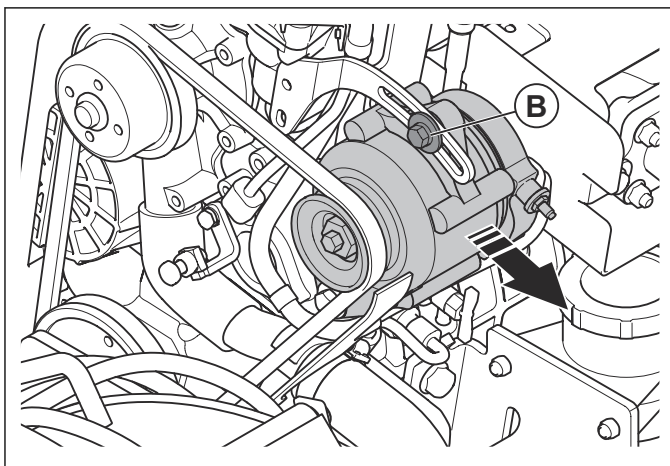


6.10.3 To do a check of the engine belt

1. Remove the right side cover. Refer to *To remove and install the right side cover on page 16*
2. Push the middle of the engine belt. The tension of the engine belt is correct when the engine belt can be pushed 0.28–0.35 in./7–9 mm (A).



- a) If the tension of the engine belt is too low, loosen the bolt for the alternator (B) and push the alternator forward to increase the belt tension.



- b) Tighten the bolt for the alternator.
c) Do this procedure until the engine belt tension is correct.

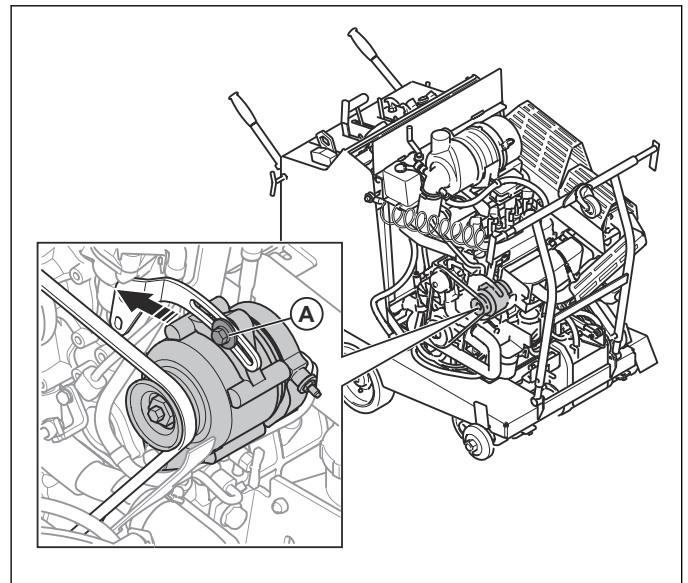


CAUTION: Do not adjust the tension of the engine belt too much.

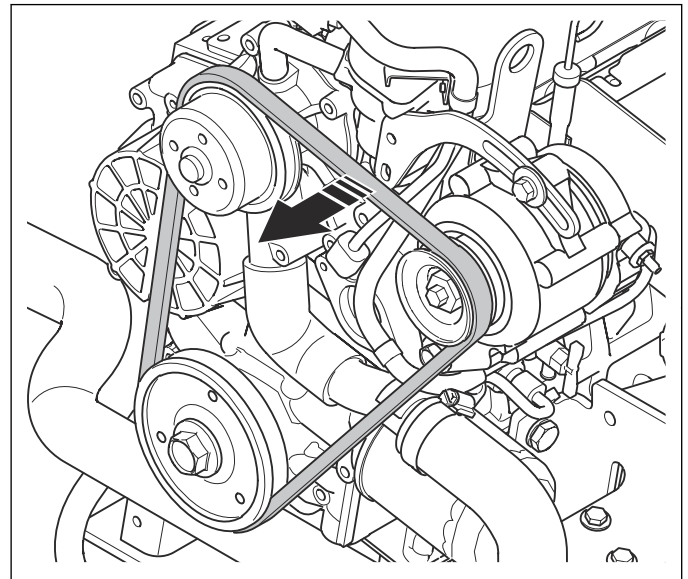
3. Install the right side cover.

6.10.4 To replace the engine belt

1. Remove the right side cover. Refer to *To remove and install the right side cover on page 16*.
2. Loosen the bolt for the alternator (A) and push the alternator rearward to decrease the belt tension.



3. Remove the engine belt.



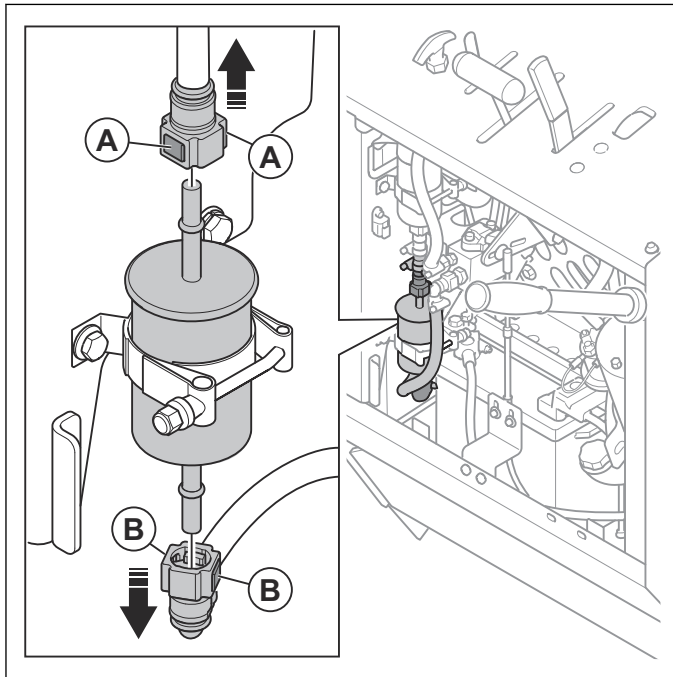
4. Install in the opposite sequence. Adjust the belt tension of the engine belt. Refer to *To do a check of the engine belt on page 45*.

6.10.5 To replace the fuel filter

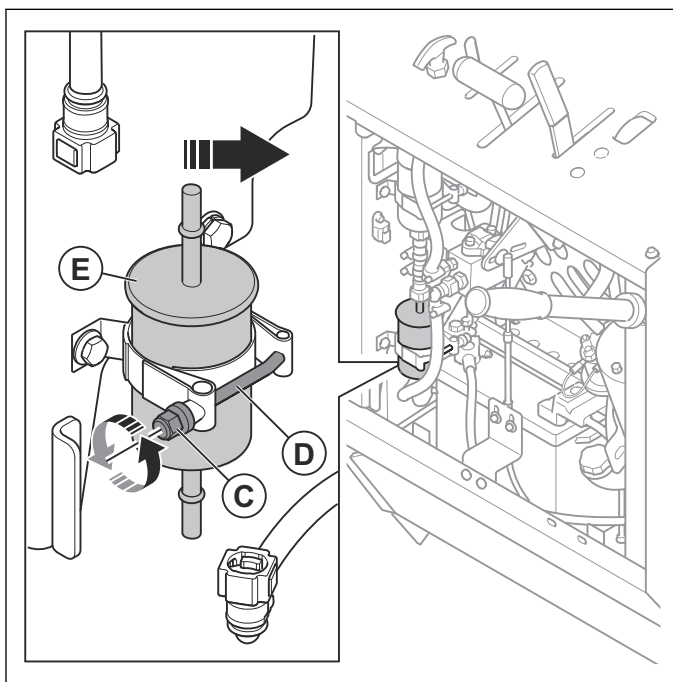


WARNING: Use protective gloves to prevent skin irritation. Fuel can come from the fuel filter and onto your skin.

1. Remove the rear hatch. Refer to *To remove and install the rear hatch on page 16*.
2. Push in the 2 tabs (A) on the connector and remove the connector from the fuel filter.



3. Push in the 2 tabs (B) on the connector and remove the connector from the fuel filter.
4. Remove the nut (C) and the bolt (D) on the fuel filter holder.

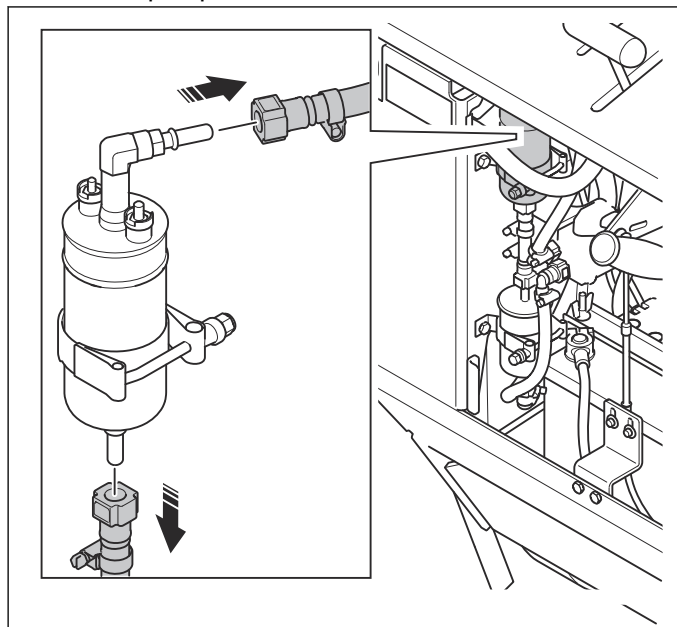


5. Replace the fuel filter (E).
6. Install the fuel filter in the fuel filter holder.

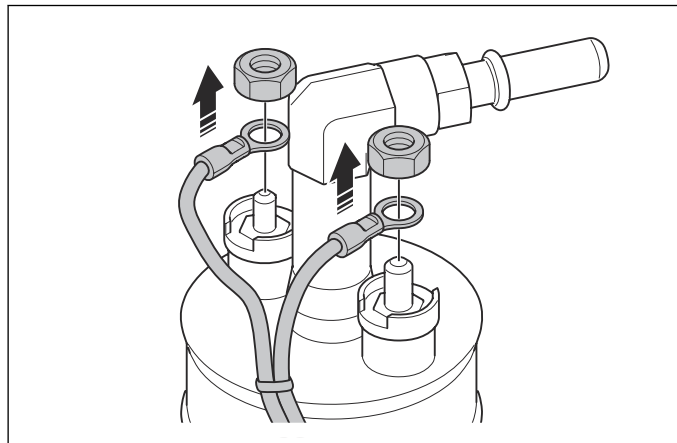
7. Install the bolt and the nut on the fuel filter holder.
8. Install the connectors. The connectors will lock into position when you hear a click.
9. Install the rear hatch.

6.10.6 To remove and install the fuel pump

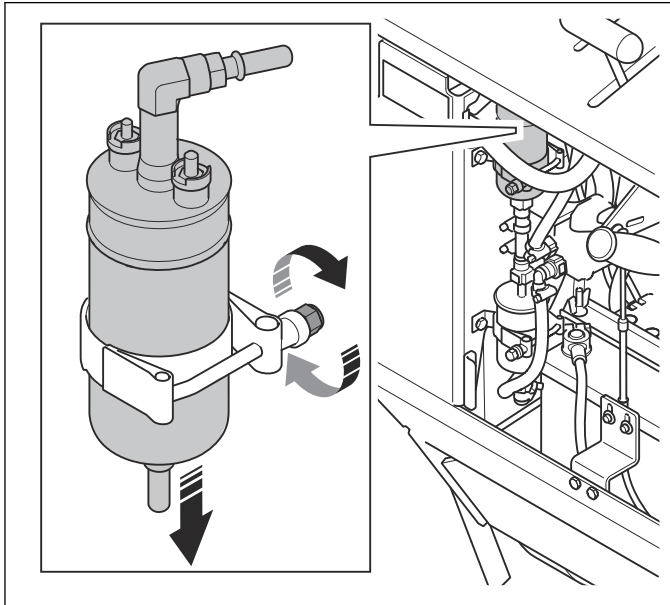
1. Remove the rear hatch. Refer to *To remove and install the rear hatch on page 16*.
2. Disconnect the hose and remove the connector from the fuel pump.



3. Disconnect the wires from the fuel pump.



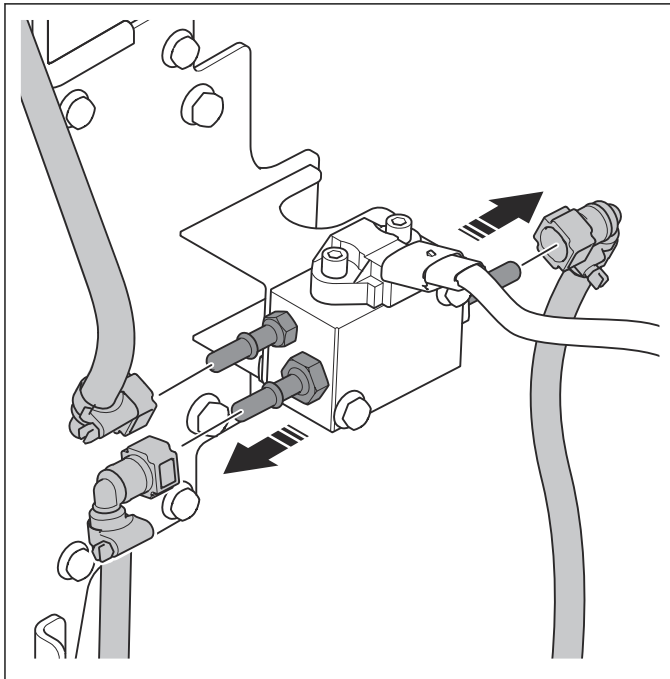
4. Loosen the nut and remove the fuel pump.



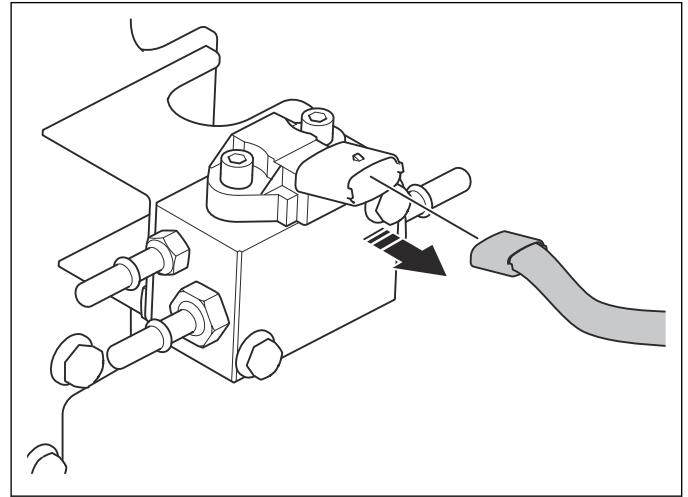
5. Install in the opposite sequence.

6.10.7 To remove and install the fuel manifold

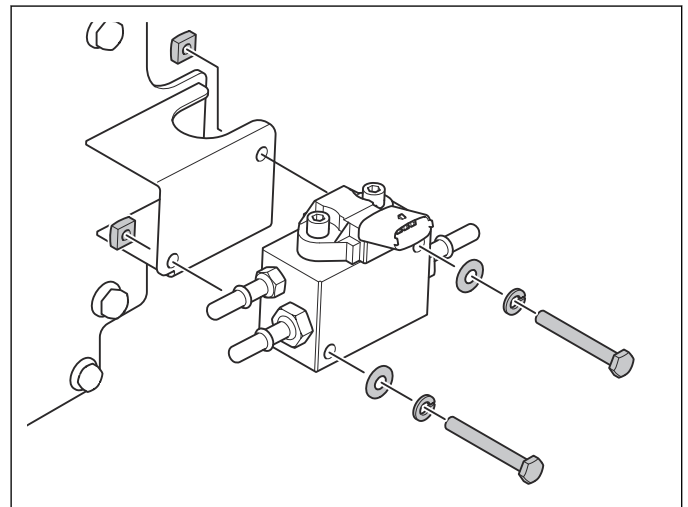
1. Remove the rear hatch. Refer to *To remove and install the rear hatch on page 16*.
2. Disconnect the hoses.



3. Remove the connector.



4. Remove the bolts, the washers and the fuel manifold.

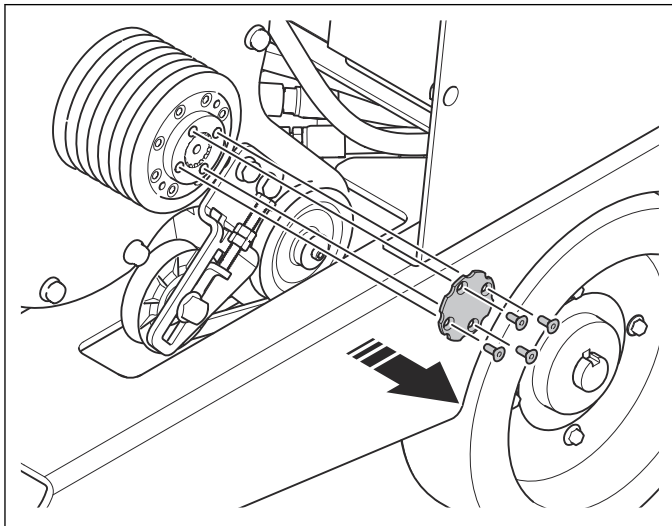


5. Install in the opposite sequence.

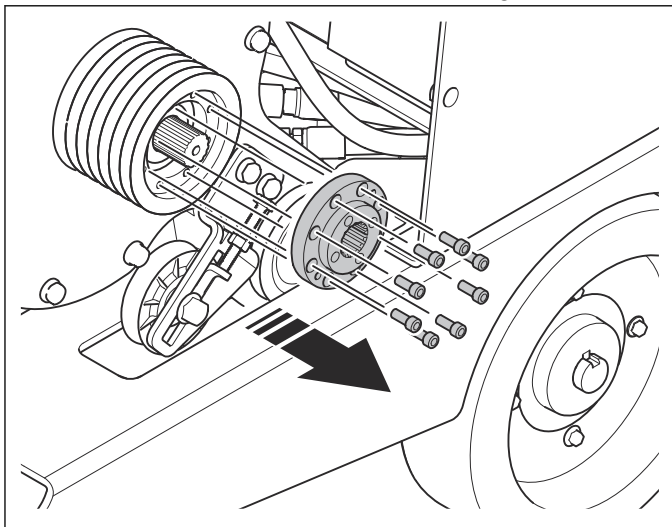
6.10.8 To remove and install the engine pulley

1. Remove the drive belts. Refer to *To remove and install the drive belts on page 50*.
2. Remove the pump belt for the hydraulic propulsion system. Refer to *To install the pump belt for the hydraulic propulsion system on page 54*.

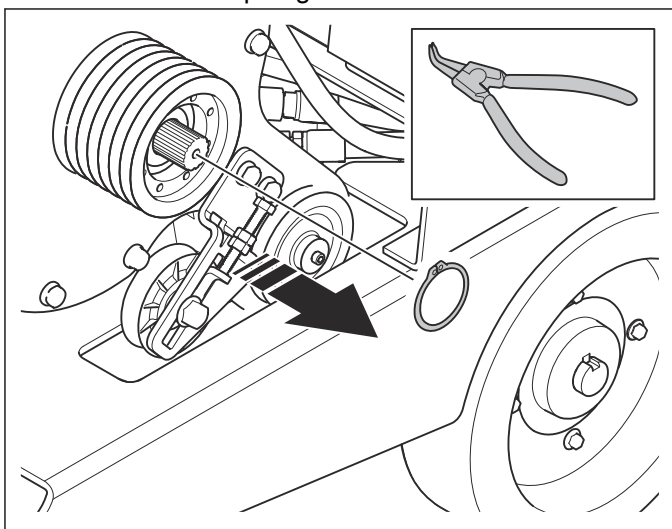
3. Remove the screws and the outer flange.



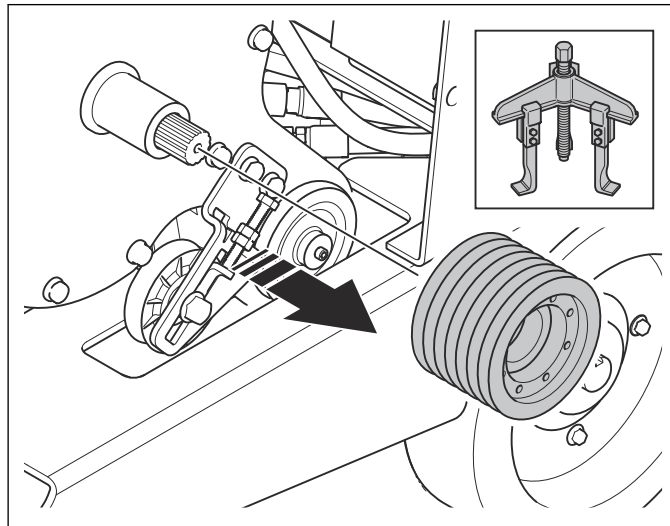
4. Remove the screws and the inner flange.



5. Remove the snap ring.

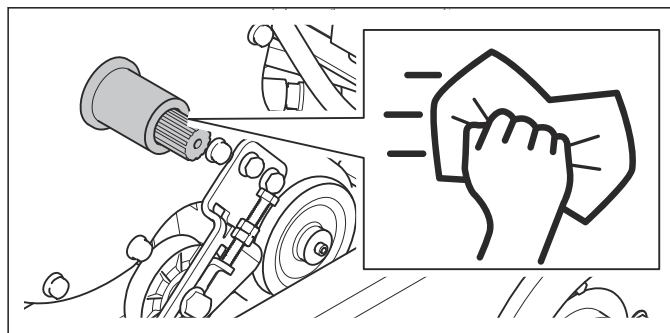


6. Remove the engine pulley.

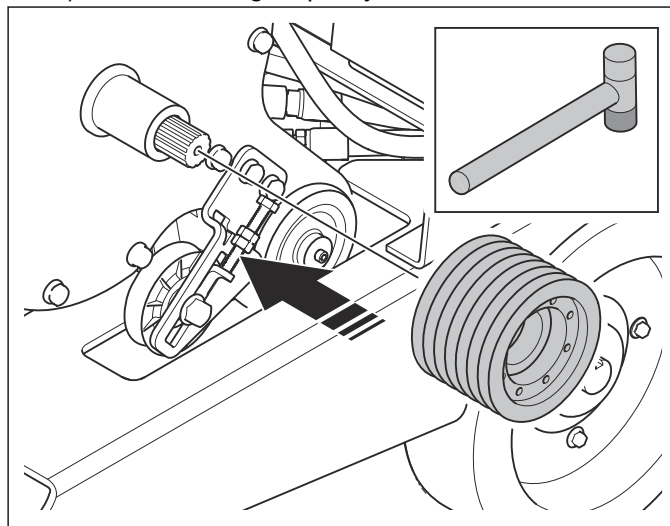


7. Install in the opposite sequence.

a) Before you install the engine pulley, make sure that the shaft is clean.



b) Install the engine pulley with a soft hammer.



6.11 Gearbox and blade shaft

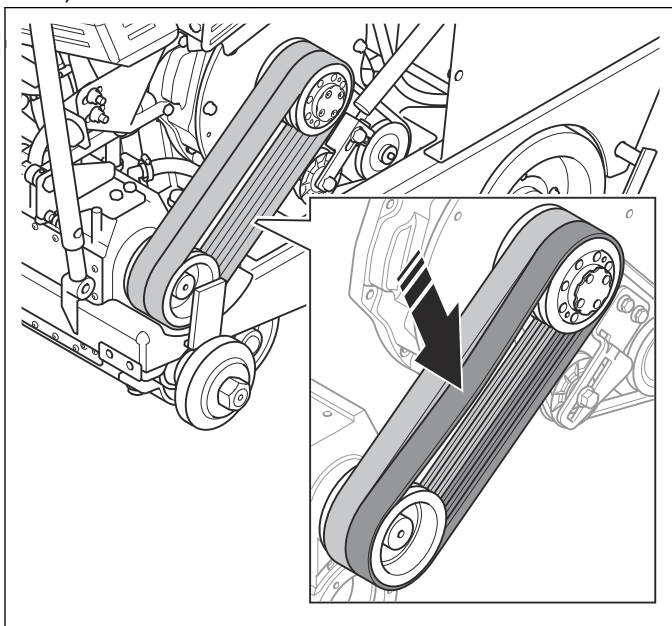
6.11.1 To do a check of the drive belts

1. Remove the left side cover. Refer to *To remove and install the left side cover on page 16*.
2. If you examine the tension of the drive belts with a frequency test, do the procedure that follows.

- a) Do a check of the frequency of the drive belts.
The tension of a new drive belts is correct when the drive belt frequency is 110 Hz. The tension of a used drive belt is correct when the drive belt frequency is 95–110 Hz.

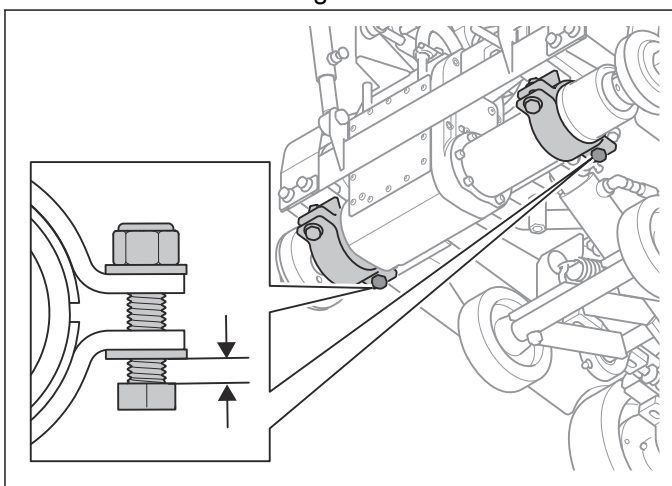
3. If you examine the tension of the drive belts without a frequency test, do the procedure that follows.

- a) Push the middle of the first drive belt.

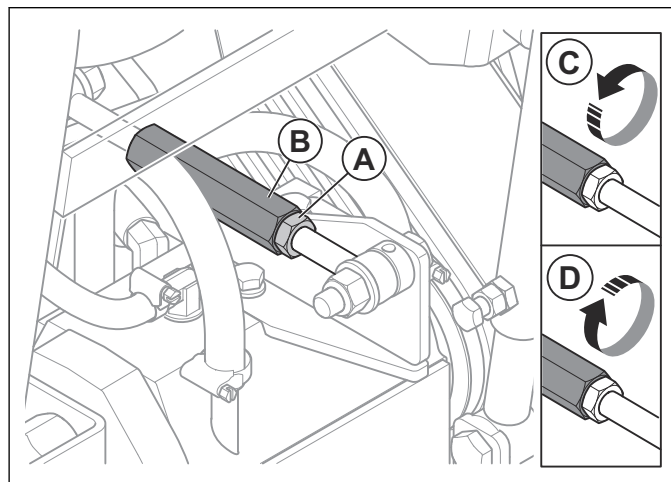


- b) If the top side of the first belt is level with the lower side of the second drive belt, the tension is correct.
- c) If the top side of the first drive belt is below the lower side of the second drive belt, the tension is too low.
- d) If the top side of the first drive belt is above the lower side of the second belt, the tension is too high.

4. If the tension is not correct, loosen the bolts for the brackets for the blade gearbox.



5. Loosen the locknut (A) and then turn the nut (B) for the belt tension. Turn the nut for belt tension counterclockwise (C) to decrease the drive belt tension. Turn the nut for belt tension clockwise (D) to increase the drive belt tension.



6. Do a check of the drive belts.
 - a) If the tension of the drive belt is too low or too high, turn the nut for the belt tension some more.
 - b) Do this procedure again until the drive belts tension is correct.



CAUTION: Do not adjust the tension of the drive belts too much.

7. Hold the nut for belt tension tightly and at the same time tighten the locknut.
8. Examine the drive belts for wear and damages. Replace damaged drive belts.

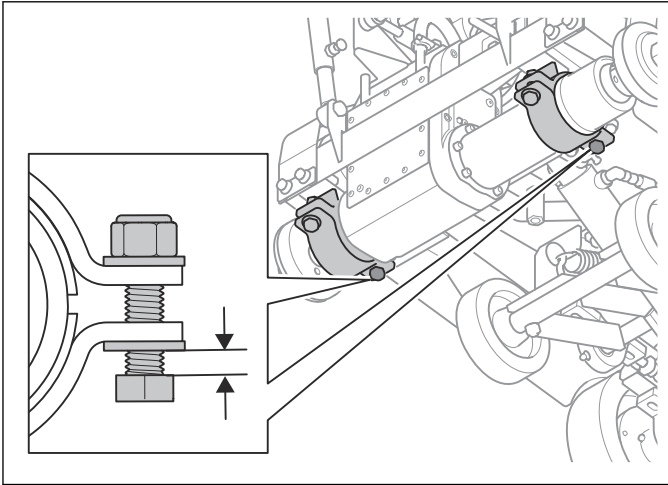


CAUTION: Do not replace only 1 of the drive belts. Always replace all drive belts at the same time.

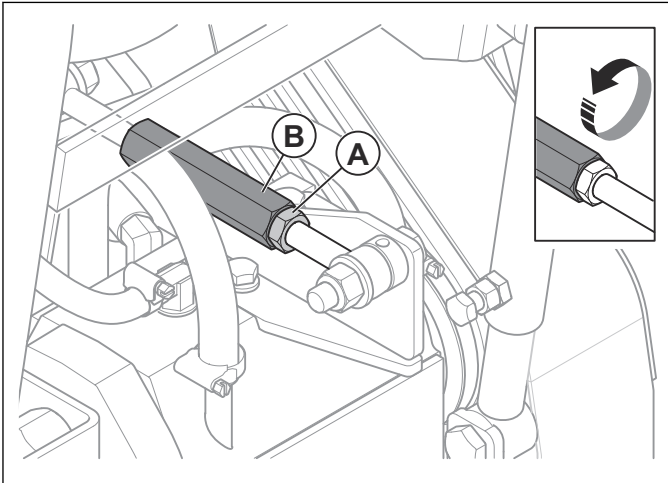
9. Install the left side cover.

6.11.2 To remove and install the drive belts

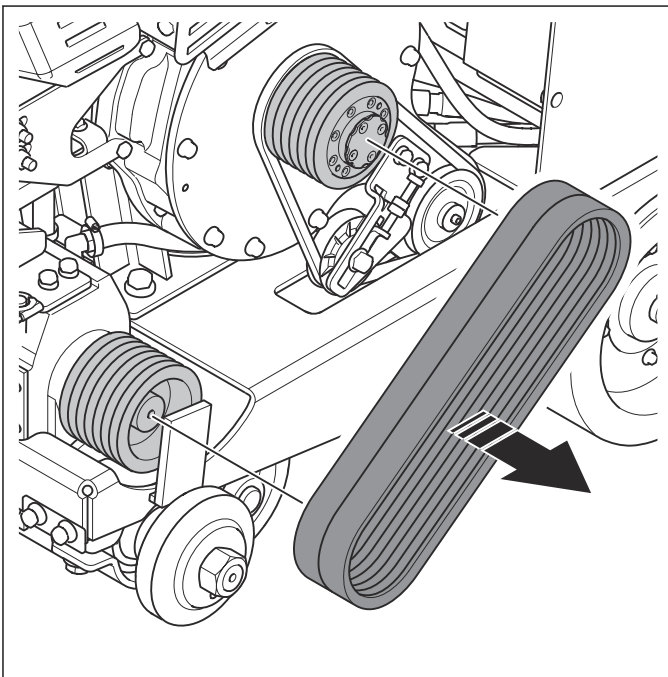
1. Remove the left side cover. Refer to *To remove and install the left side cover on page 16*.
2. Loosen the bolts for the brackets for the blade gearbox.



3. Loosen the locknut (A) and then turn the nut (B) counterclockwise to decrease the drive belt tension.



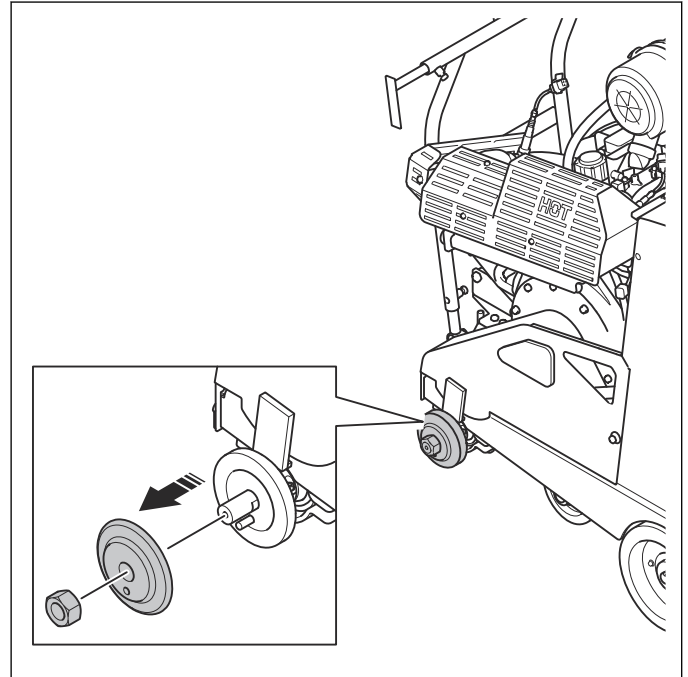
4. Remove the drive belts.



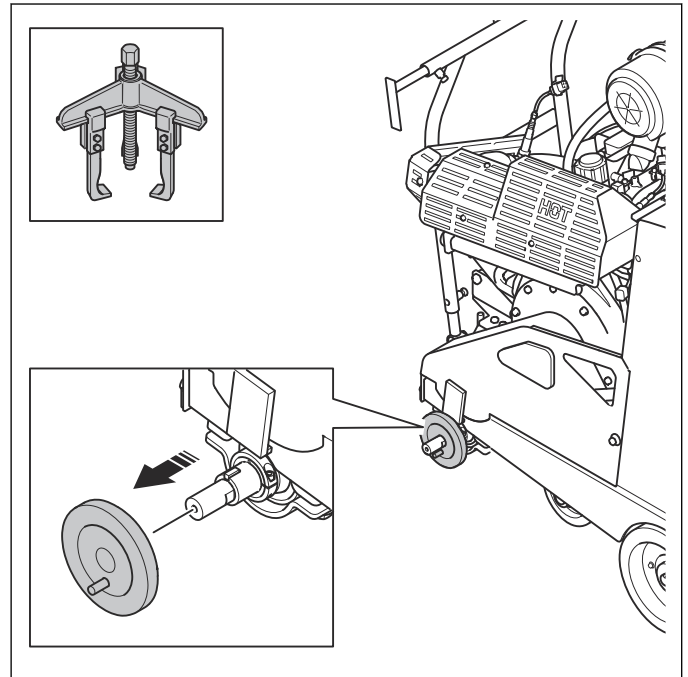
5. Install in the opposite sequence. Adjust the belt tension of the drive belts. Refer to *To do a check of the drive belts on page 48*.

6.11.3 To remove the gearbox pulley

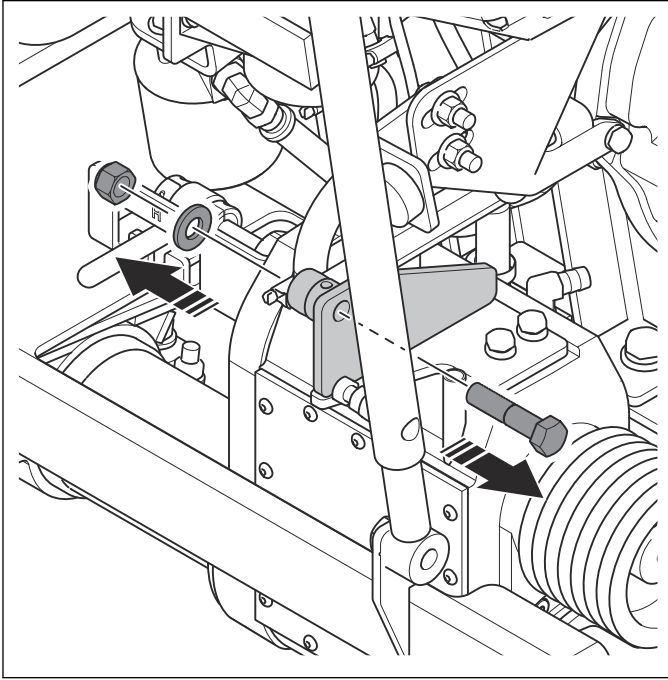
1. Remove the drive belts. Refer to *To remove and install the drive belts on page 50*.
2. Remove the blade nut and the outer blade flange.



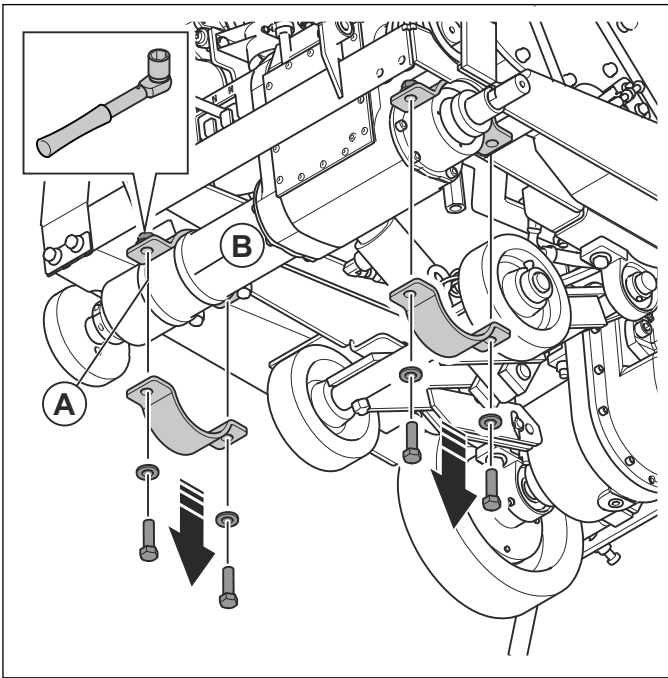
3. Remove the inner flange with a puller.



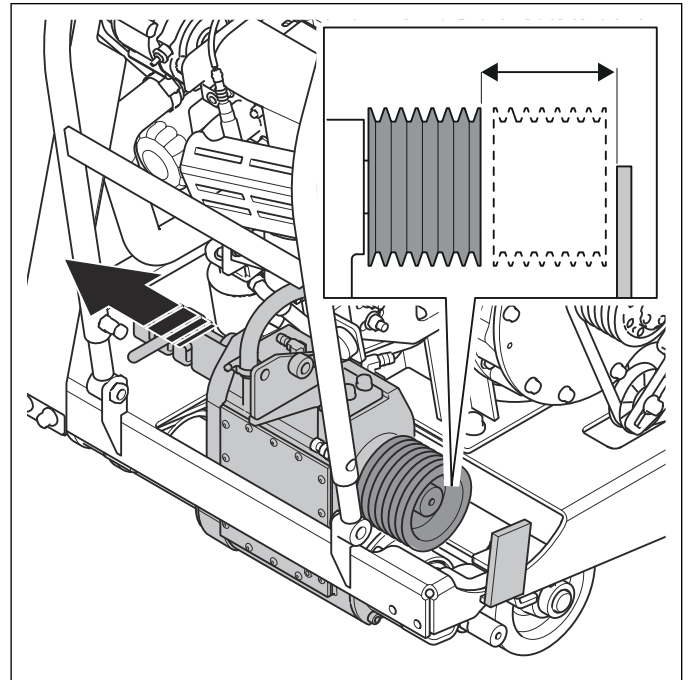
4. Remove the bolt, the washer and the nut.



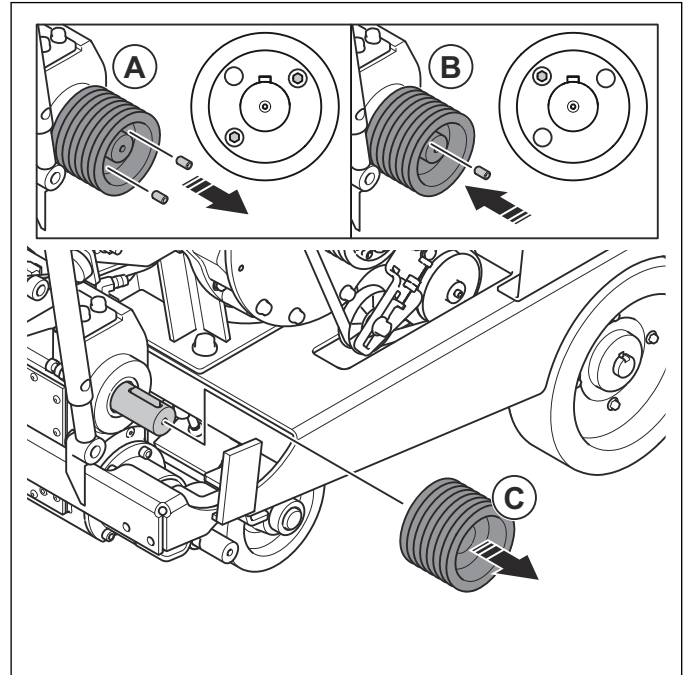
5. Remove the bolts, the washers and the brackets. Make sure that the clamps (A) and (B) do not move. The clamps give the correct position of the shaft when it is installed.



6. Push the gearbox to the left until you can remove the pulley wheel.



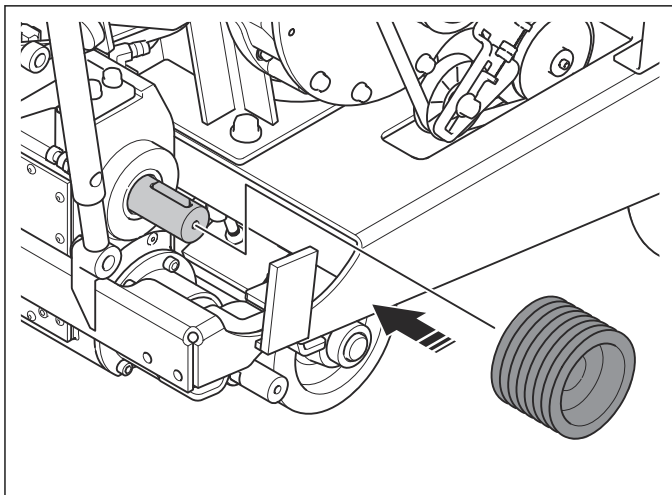
7. Remove the 2 set screws (A).



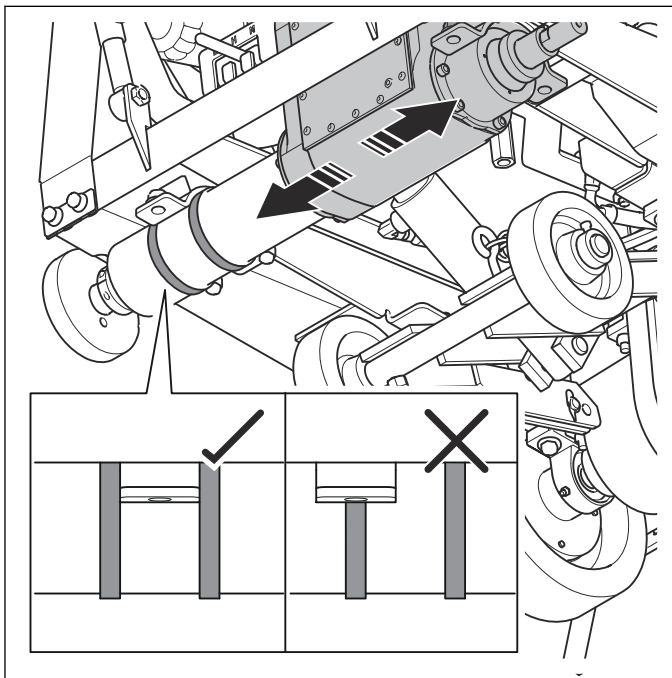
8. Put 1 of the set screw into the 3 hole (B) in the gearbox pulley. Tighten the set screw.
9. Remove the gearbox pulley (C).
10. To install the gearbox pulley, refer to *To install the gearbox pulley on page 52*.

6.11.4 To install the gearbox pulley

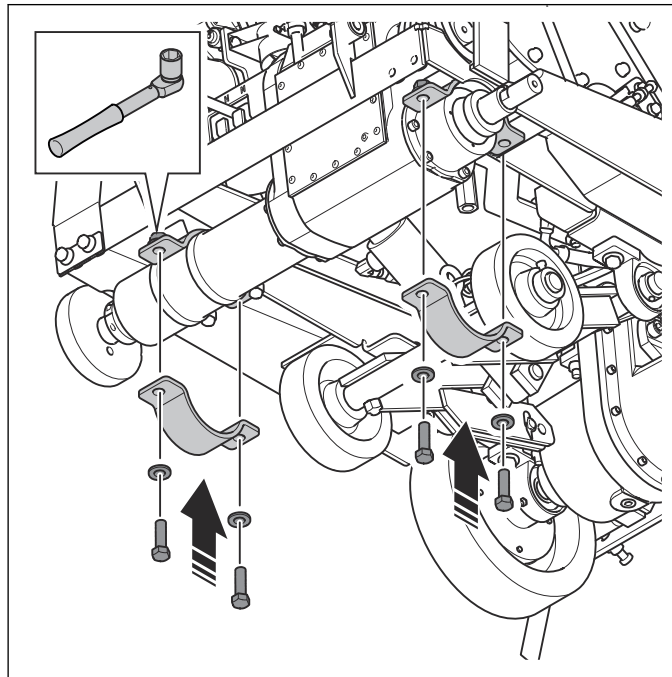
1. Install the gearbox pulley. Do not install the set screws.



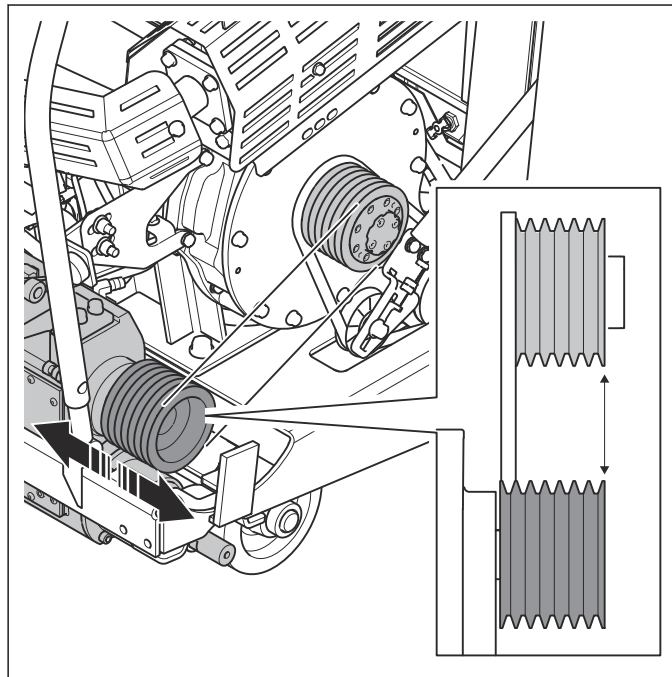
2. Align the gearbox. Make sure that the clamps are on each side of the bracket.



3. Install the brackets, the washers and the bolts.

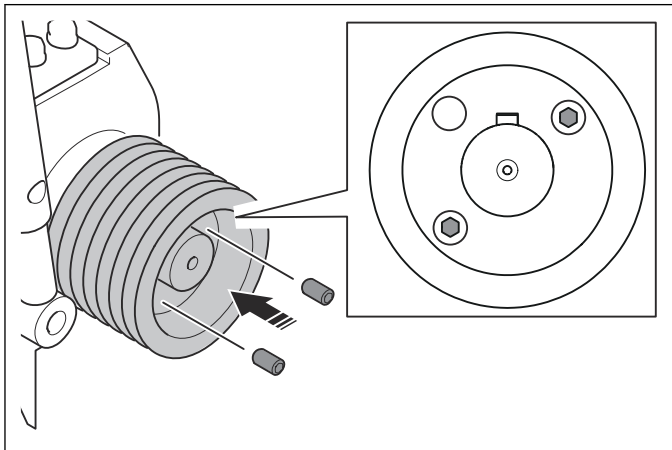


4. Align the gearbox pulley with the engine pulley.

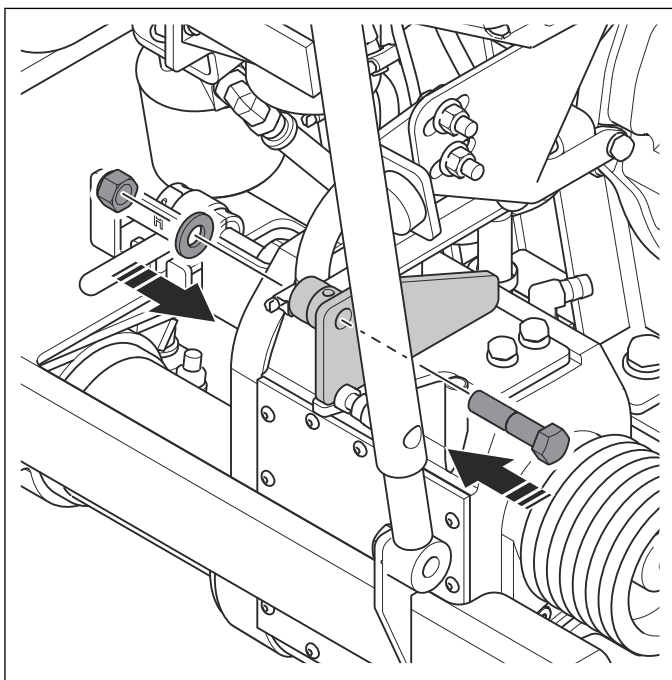


Note: Make sure that you measure from the side of the engine pulley, not the flange.

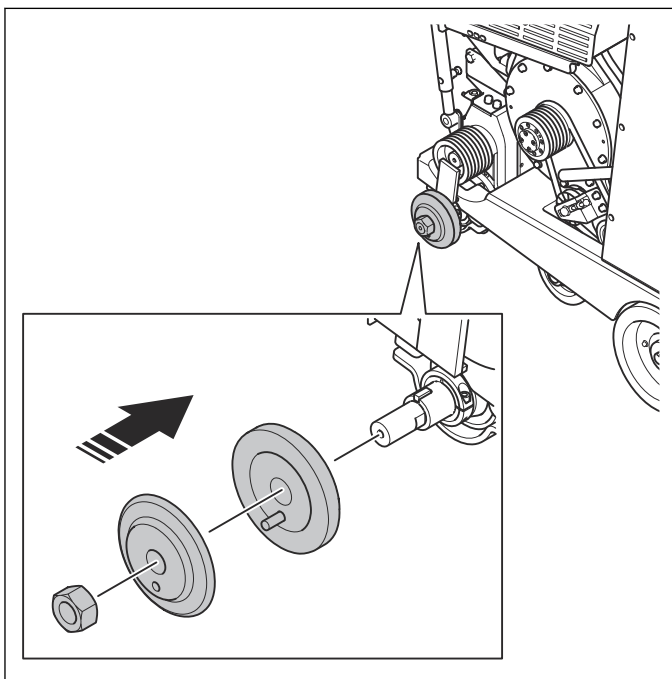
5. Install the 2 set screws.



6. Install the bolt for the drive belt tension.



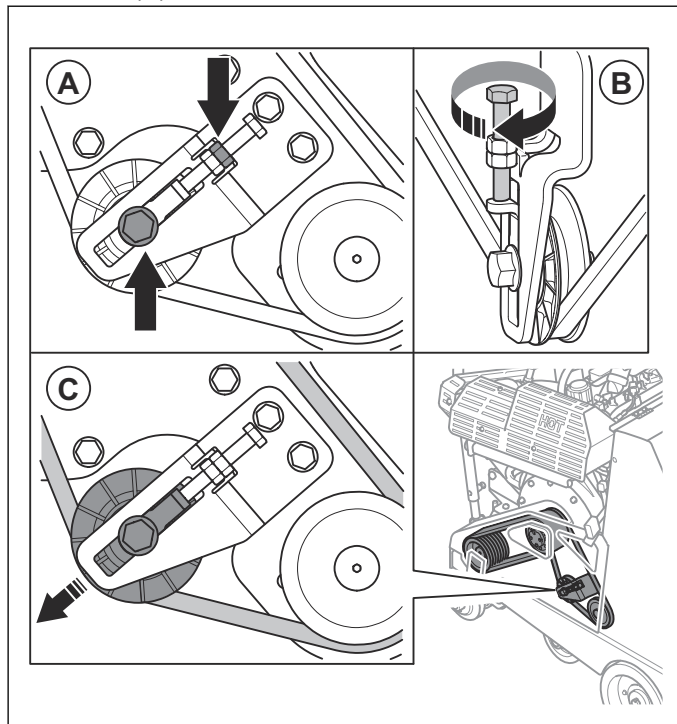
7. Install the inner flange, outer blade flange and the blade nut.



8. Install the drive belts. Refer to *To remove and install the drive belts on page 50*.

6.11.5 To do a check of the pump belt for the hydraulic propulsion system

1. Remove the left side cover. Refer to *To remove and install the left side cover on page 16*.
2. Do a check of the tension of the pump belt.
3. If the tension of the pump belt is too low, loosen the 2 nuts (A).



4. Turn the screw for the belt tension (B) clockwise. The idler pulley (C) moves in the direction of the belt to increase the belt tension.
5. Tighten the 2 nuts (A).
6. Do this procedure again until the pump belt tension is correct.

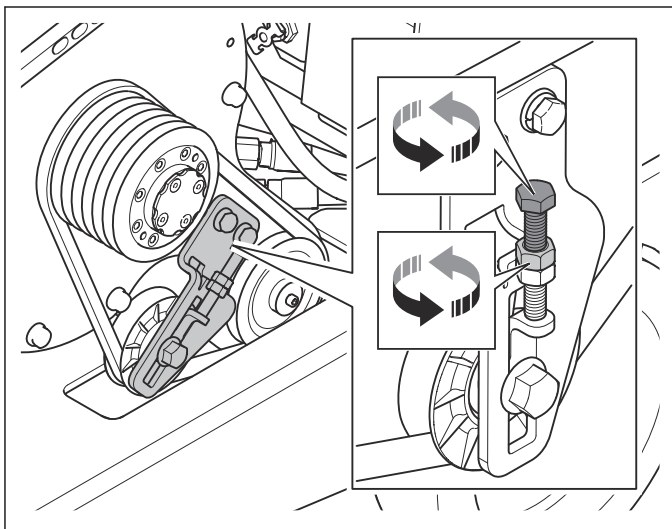


CAUTION: Do not adjust the tension of the pump belt too much.

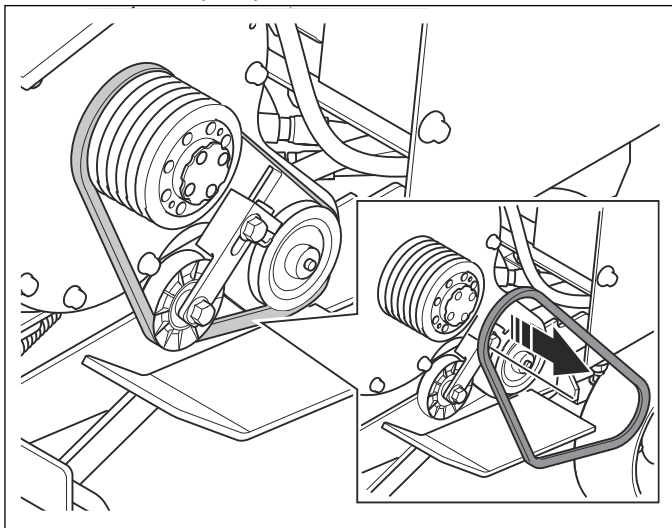
7. Install the left side cover.

6.11.6 To install the pump belt for the hydraulic propulsion system

1. Remove the drive belts. Refer to *To remove and install the drive belts on page 50*.
2. Loosen the nut and screw for the belt tension.



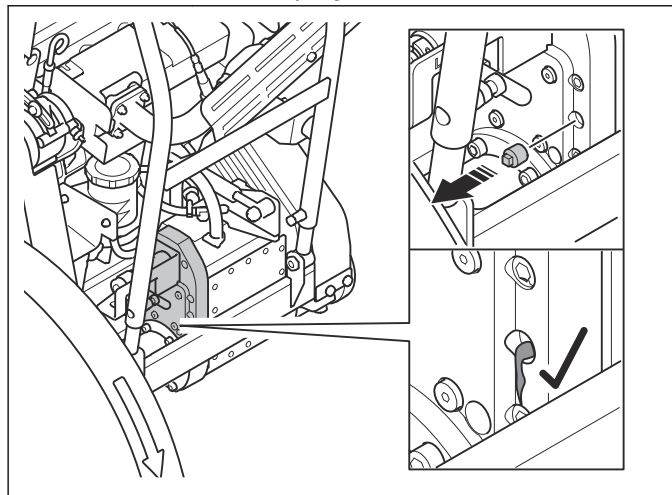
3. Remove the pump belt.



4. Install in the opposite sequence. Adjust the belt tension of the pump belt. Refer to *To do a check of the pump belt for the hydraulic propulsion system on page 53*.

6.11.7 To do a check of the oil level in the gearbox

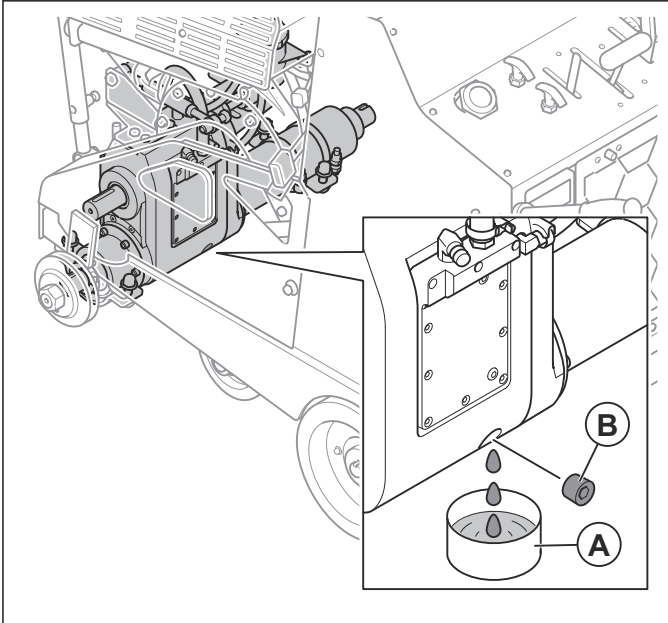
1. Make sure that the product is level when you examine the oil level in the gearbox.
2. Remove the oil refill plug.



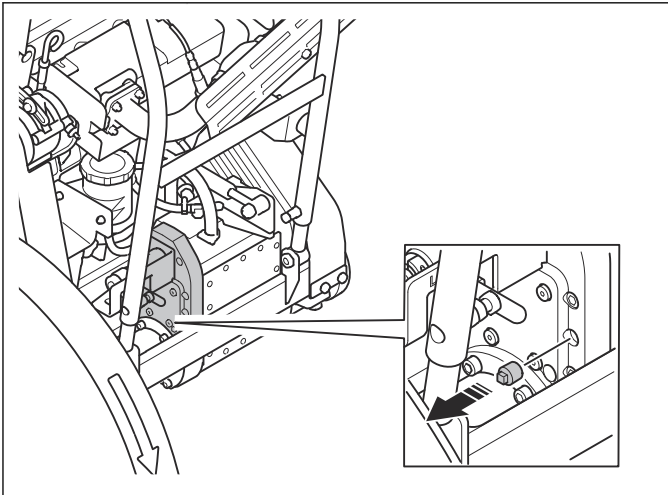
3. Do a check of oil level. The correct oil level is when the oil comes out from the hole for the oil refill plug.
 - a) If no oil comes out, fill new oil into the hole for the oil refill plug. Use a manual oil pump. Fill until you see that the oil level is correct.
4. Install the oil refill plug.

6.11.8 To replace the oil in the gearbox

1. Put a container (A) below the gearbox.

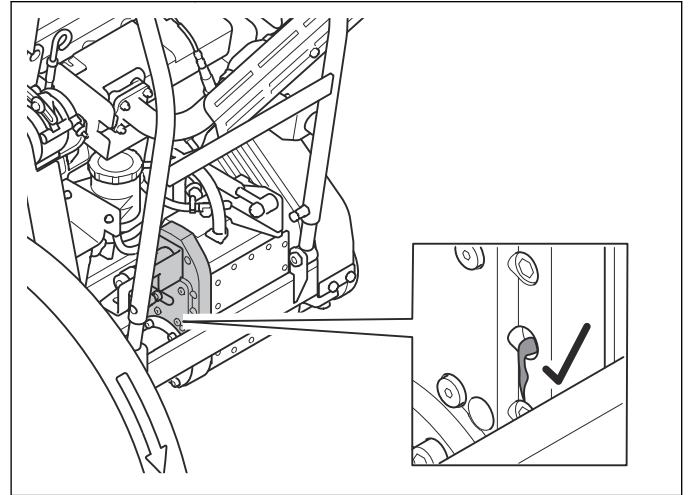


2. Remove the oil refill plug.



3. Remove the oil drain plug for the gearbox (B) and let the oil drain into the container.
4. Install the oil drain plug for the gearbox.
5. Fill new gearbox oil into the hole for the oil refill plug with a manual oil pump.

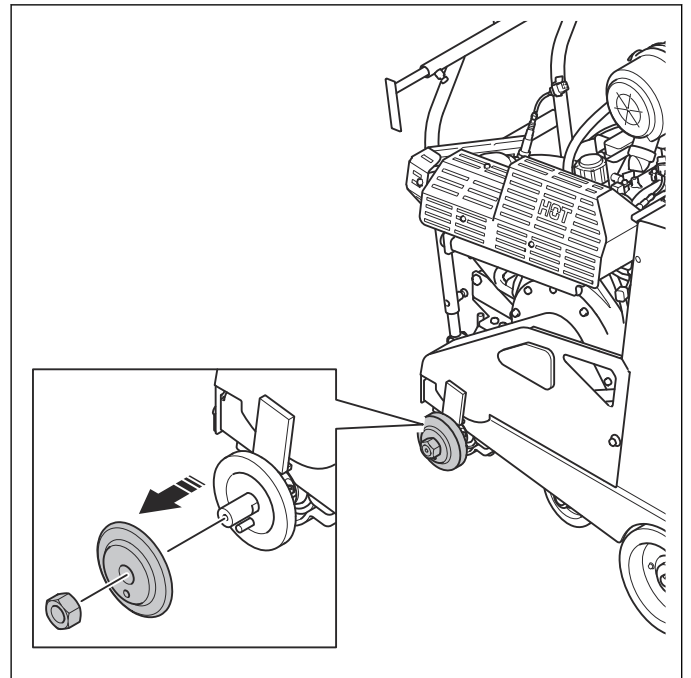
6. Fill until you see that the gearbox oil level is correct. The correct gearbox oil level is when the gearbox oil comes out from the hole for the oil refill plug.



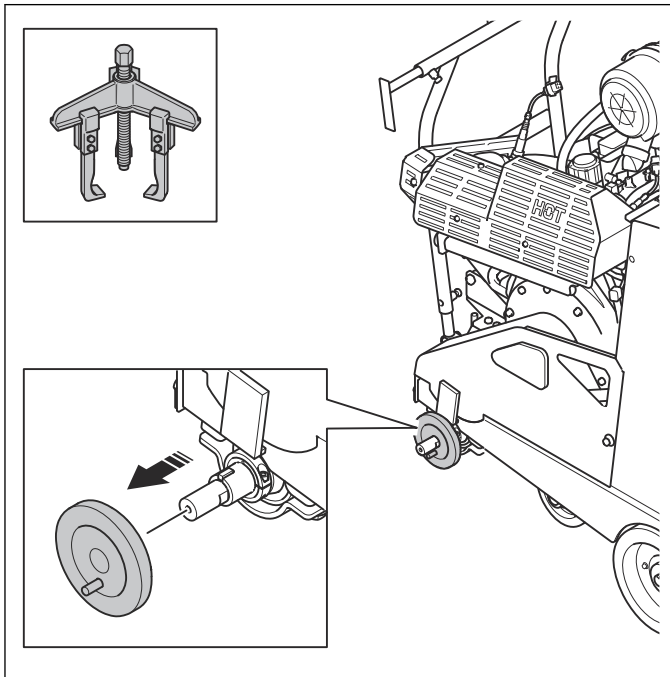
7. Install the oil refill plug.

6.11.9 To remove and install the gearbox

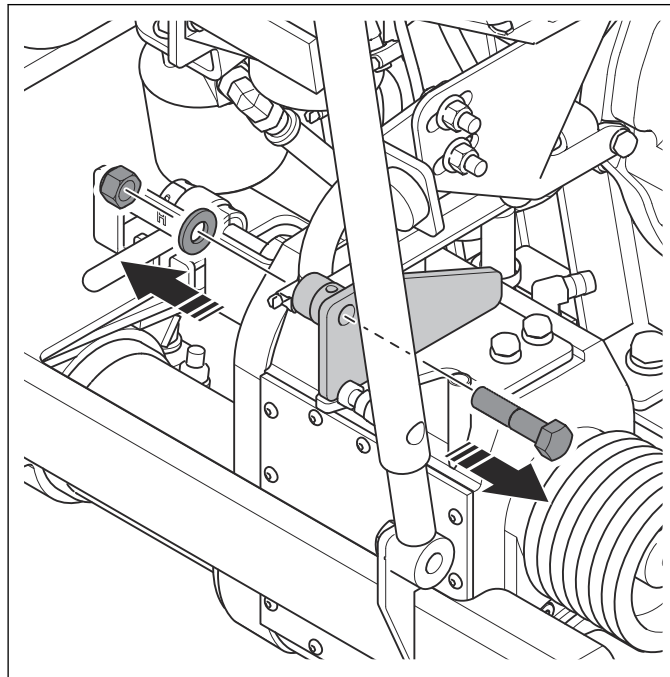
1. Remove the drive belts. Refer to *To remove and install the drive belts on page 50*.
2. Remove the blade nut and the outer blade flange.



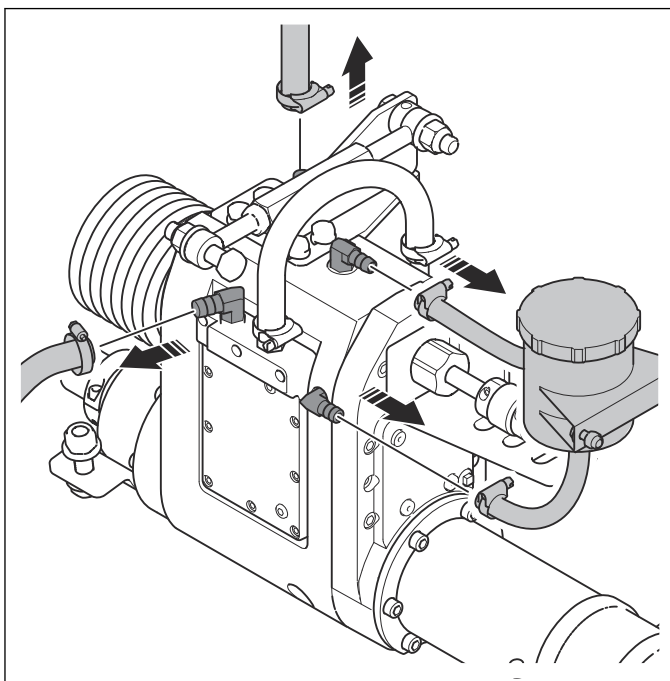
3. Remove the inner flange with a puller.



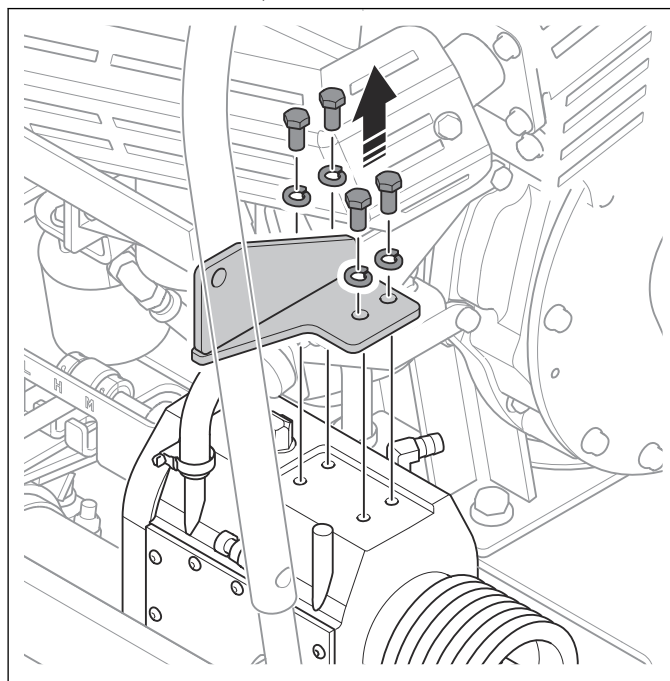
5. Remove the bolt, the washer and the nut.



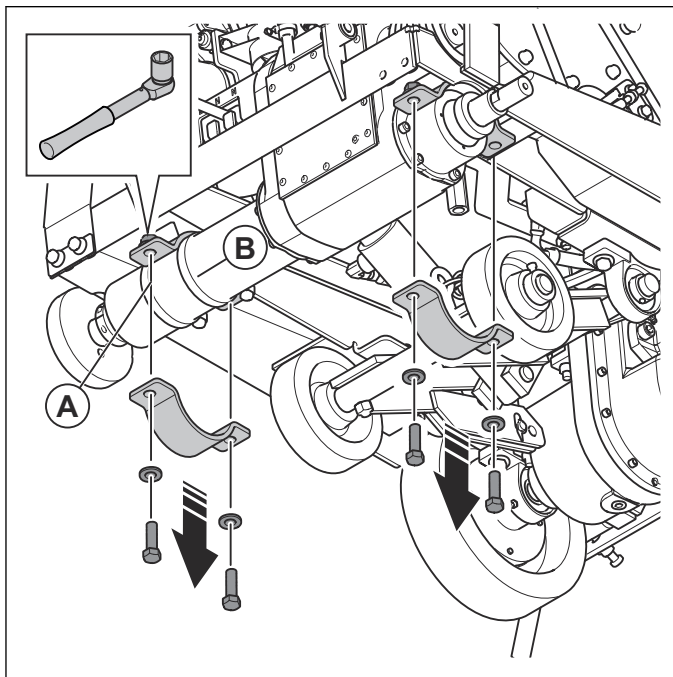
4. Disconnect the 4 hoses.



6. Remove the bolts, the washers and the bracket.

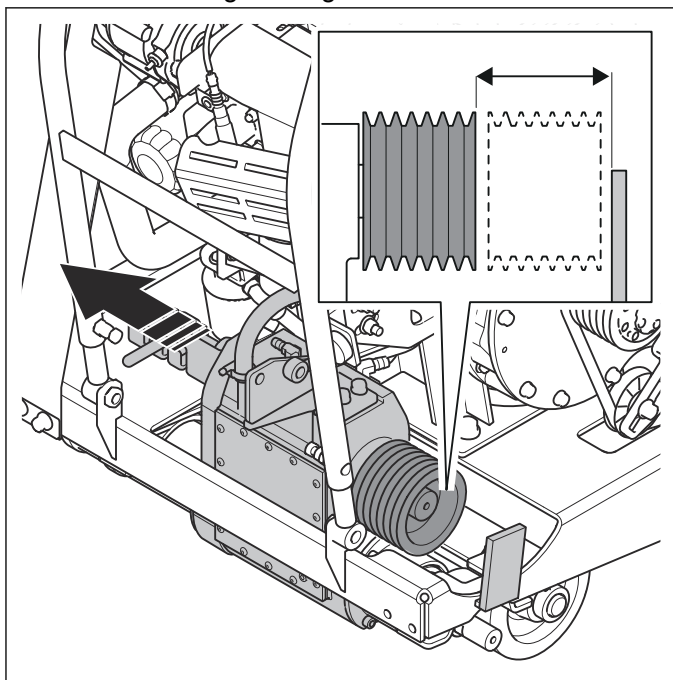


7. Remove the bolts, the washers and the brackets. Make sure that the clamps (A) and (B) do not move. The clamps give the correct position of the shaft when it is installed.

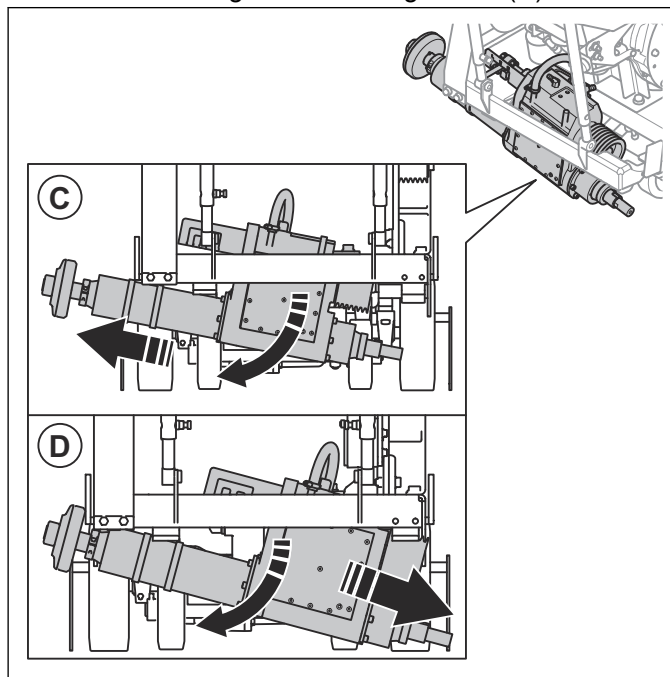


8. Remove the gearbox.

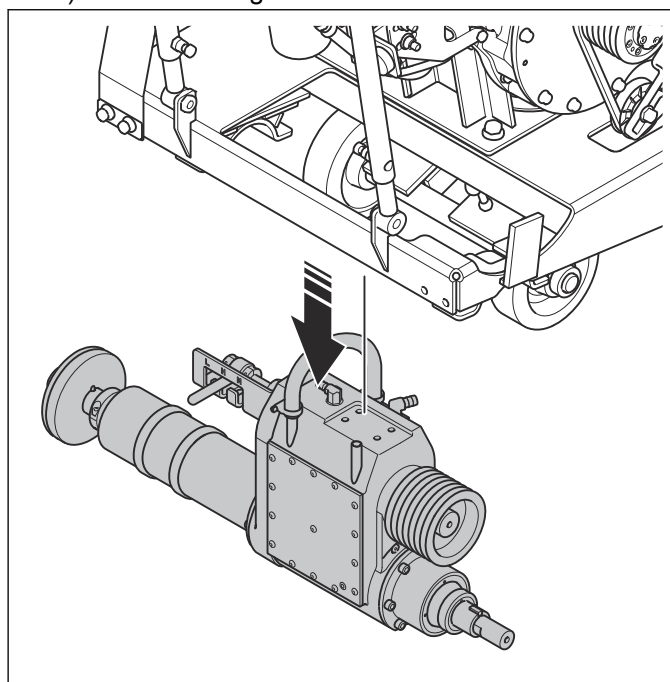
- a) Push the gearbox to the left until the pulley wheel can go through the hole in the frame.



- b) When the gearbox is in the correct position, lower the right side of the gearbox (C).



- c) Push the gearbox to the right. The bracket for the gear lever must go through the hole in the frame (D).
d) Remove the gearbox.

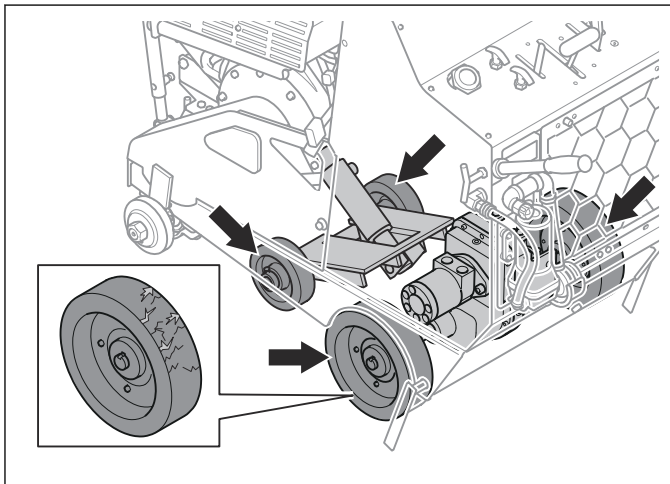


9. Install in the opposite sequence.

6.12 Frame and wheels

6.12.1 To examine the wheels

- Examine the wheels for wear or damage. Replace wheels and hubs if they are damaged or worn out.



- Examine if the rear wheel hubs and wheels are loose. Tighten loose screws and nuts.

6.12.2 To lift the product



WARNING: Make sure that the lifting equipment has the correct dimension.



WARNING: Do not lift a damaged product. Make sure that the lifting eye is correctly installed and not damaged.



WARNING: Do not walk or stay below or near a lifted product.



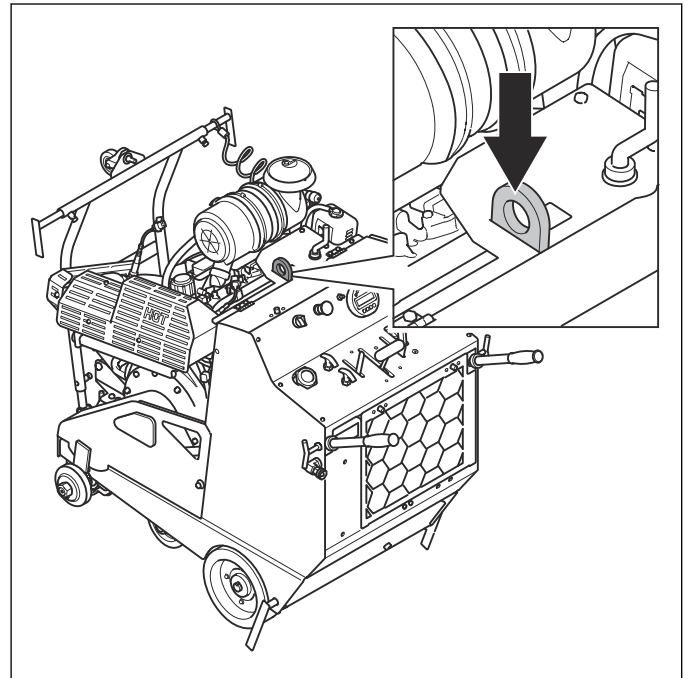
CAUTION: Do not use the operation handles to lift the product.



WARNING: Be careful when you put the product on rough level surface or on slopes. The product can easily tilt rearward or start to move

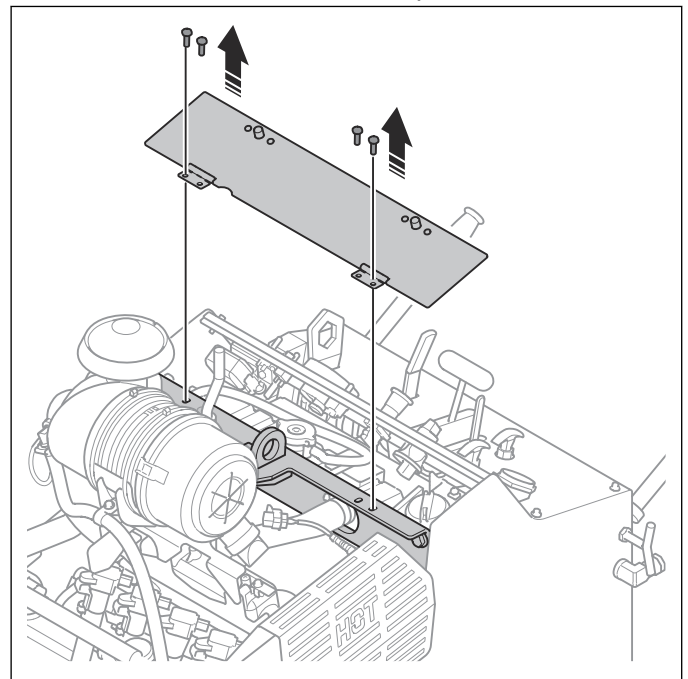
and cause injury or damage. Stay behind the product until the product is on a level surface.

- Attach the lifting equipment through the lifting eye.

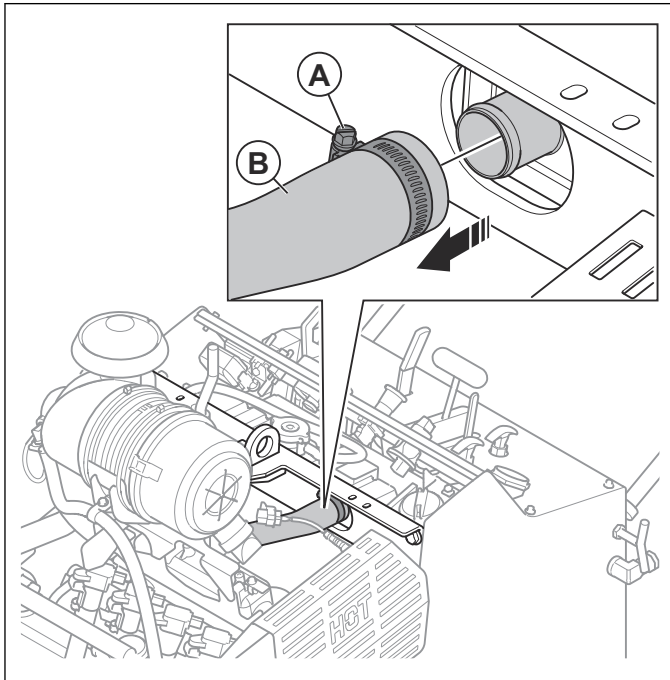


6.12.3 To remove and install the lifting eye

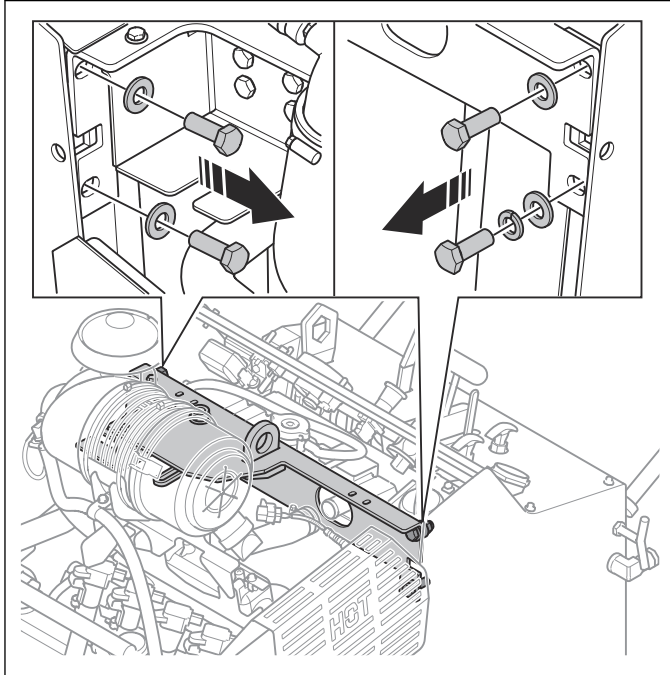
- Remove the blade depth stop. Refer to *To remove and install the blade depth stop* on page 42.
- Remove the screws and the top hatch.



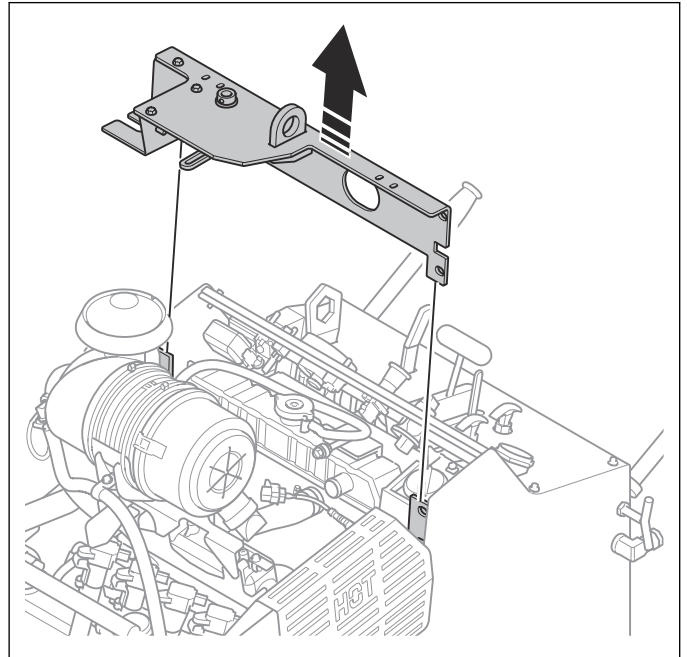
3. Remove the hose clamps (A) and disconnect the hose.



4. Remove the bolts and the washers.



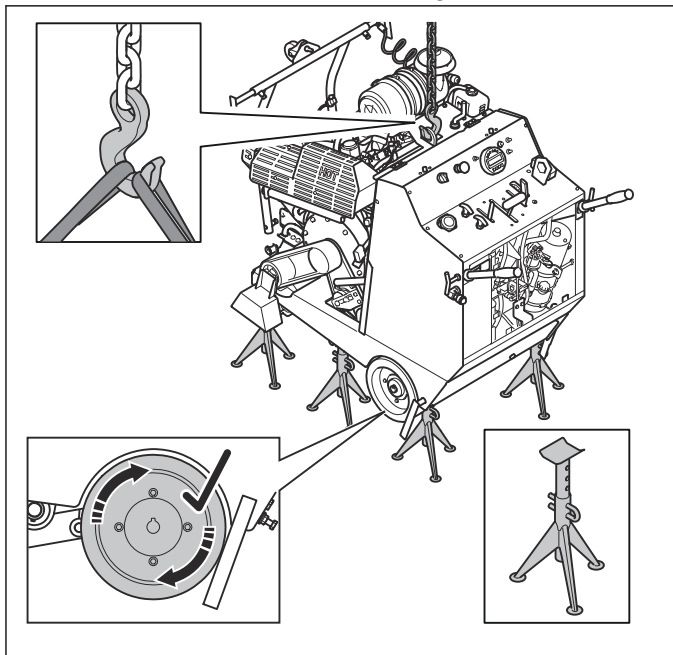
5. Remove the lifting eye assembly.



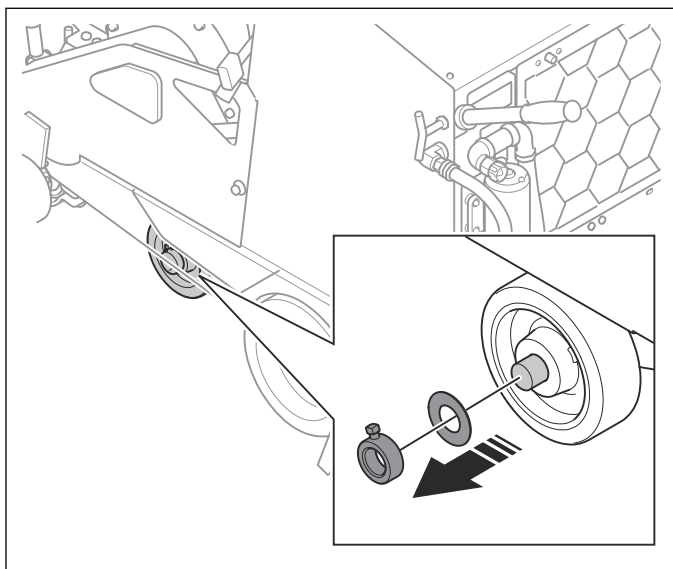
6. Install in the opposite sequence.

6.12.4 To remove and install the front wheels

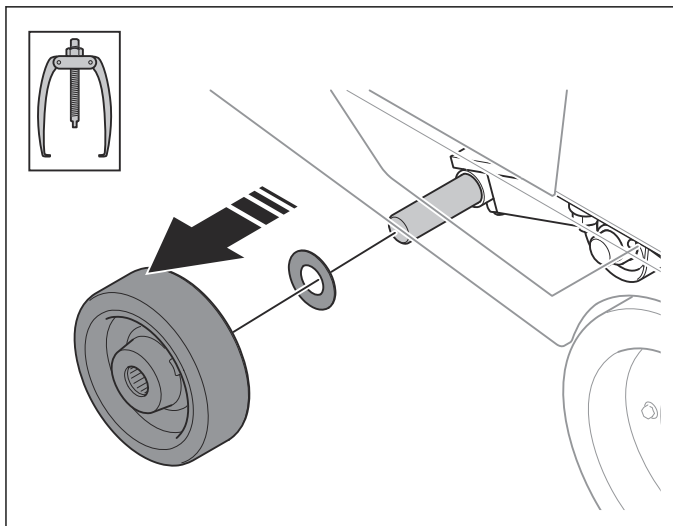
1. Lift the product and put supports below the product. The rear wheels must be off the ground.



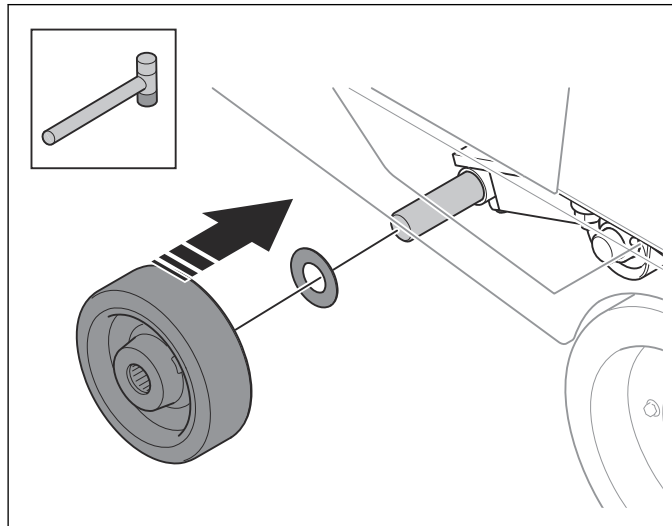
2. Remove the hub lock and outer washer.



3. Remove the wheel and the inner washer.

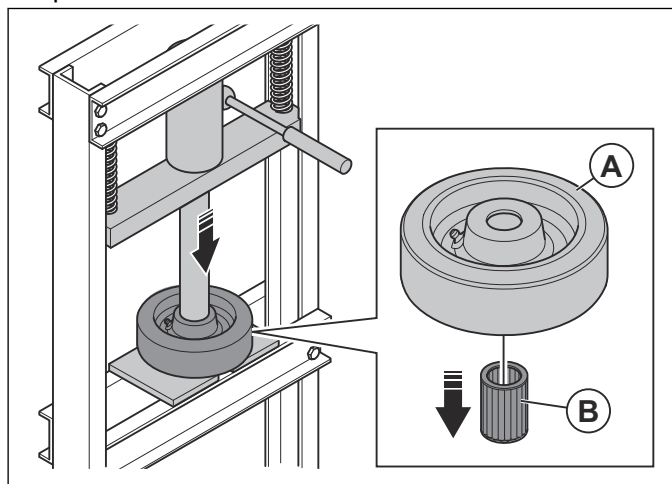


4. Install in the opposite sequence. Use a soft hammer.



6.12.5 To remove the front axle bearings

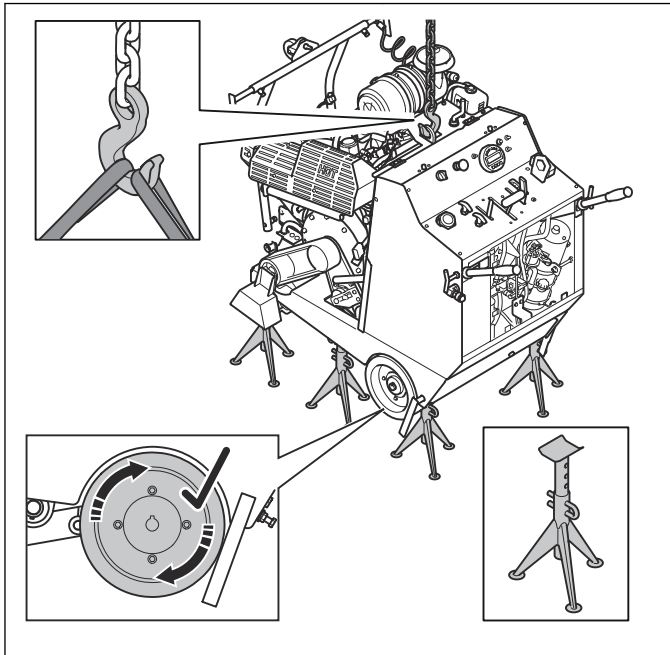
1. Remove the front wheels. Refer to *To remove and install the front wheels on page 60*.
2. Put the front wheel (A) in a bearing press.
3. Remove the front axle bearing (B) with the bearing press.



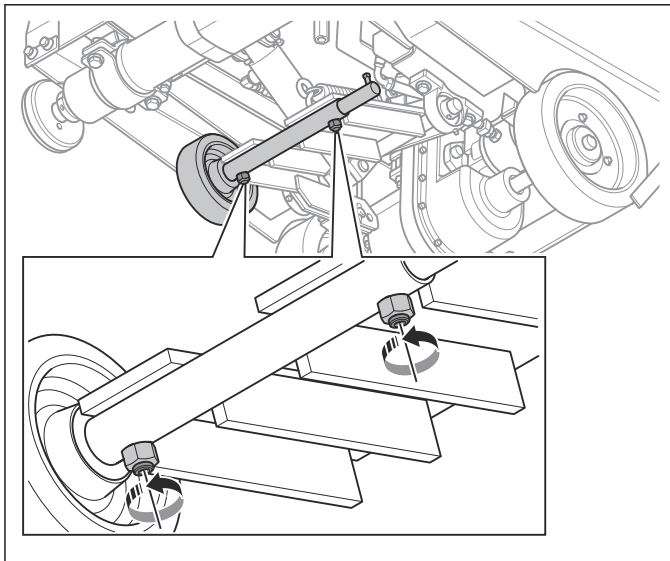
6.13 Front axle and rear axle

6.13.1 To remove and install the front axle

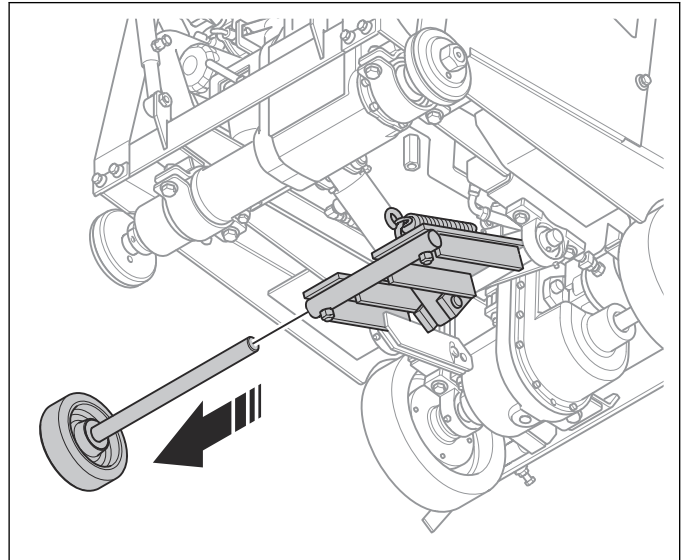
1. Lift the product and put supports below the product. The rear wheels must be off the ground.



2. Lower the front axle.
3. Remove 1 of the front wheels. Refer to *To remove and install the front wheels on page 60.*
4. Loosen the 2 set screws.



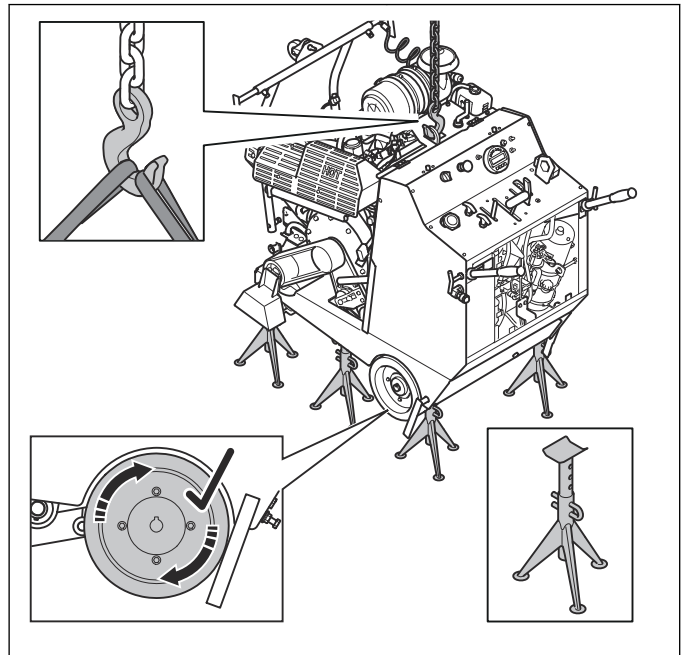
5. Remove the front axle.



6. Install in the opposite sequence.

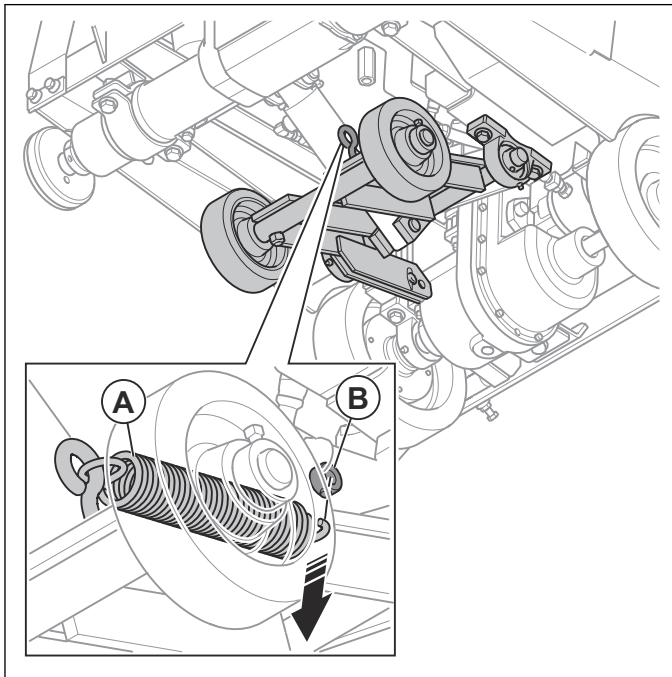
6.13.2 To remove and install the lift assembly and bearings brackets

1. Lift the product and put supports below the product. The rear wheels must be off the ground.

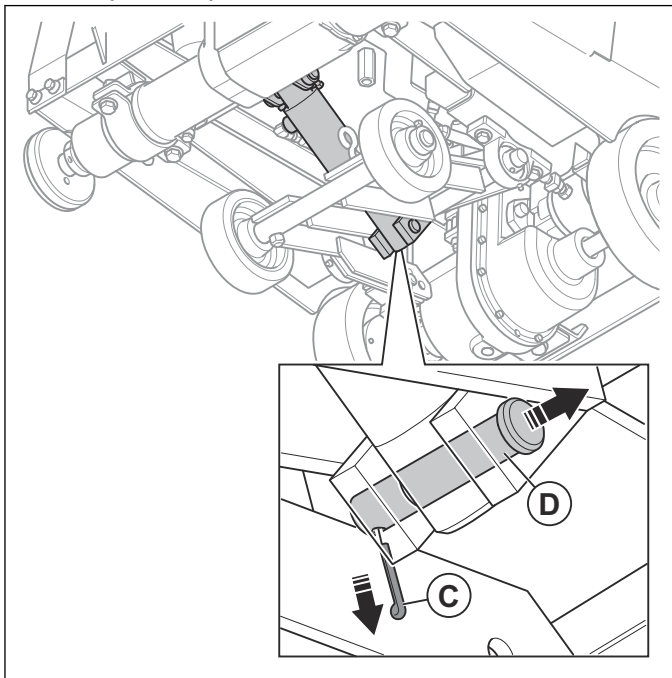


2. Lower the front axle.

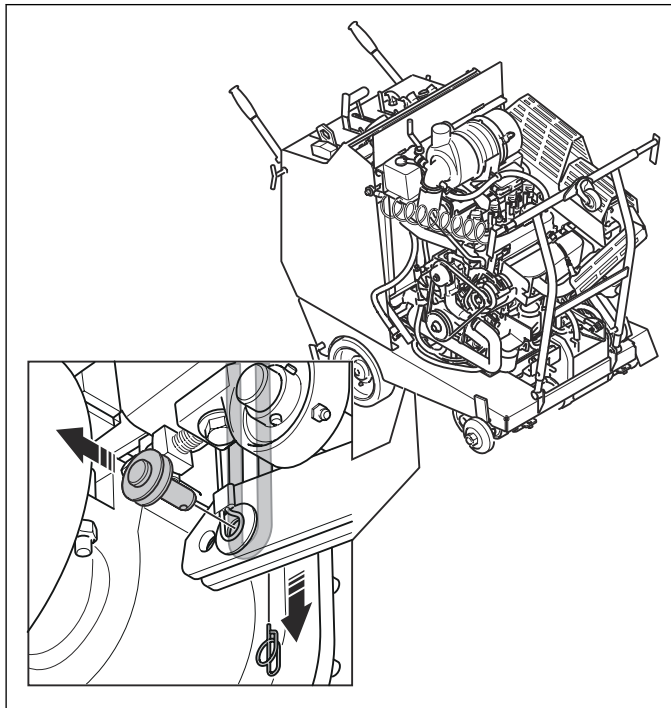
3. Remove the spring (A) from the top bracket (B).



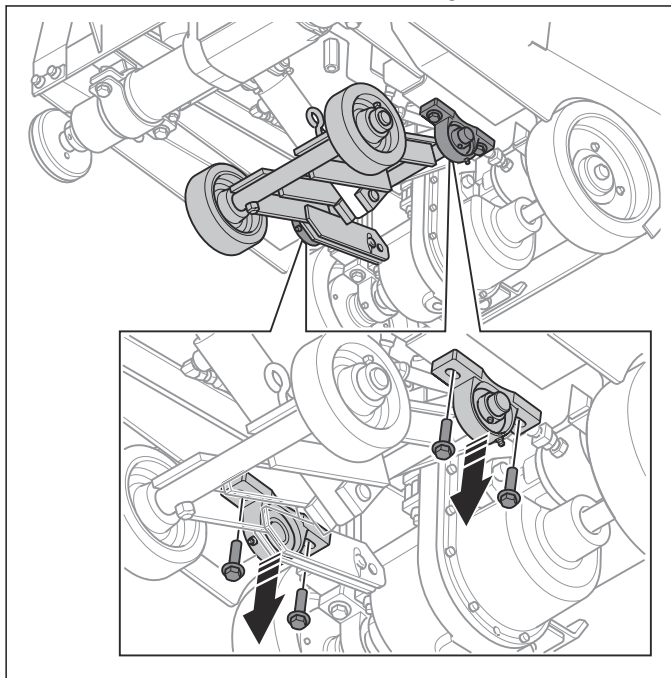
4. Remove the split pin (C) and the clevis pin (D) for the hydraulic piston.



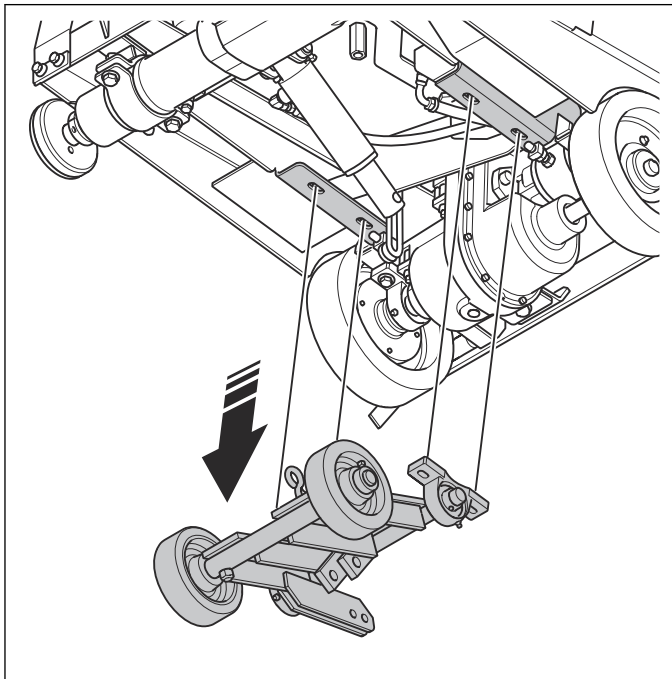
5. Remove the pin for the depth indicator.



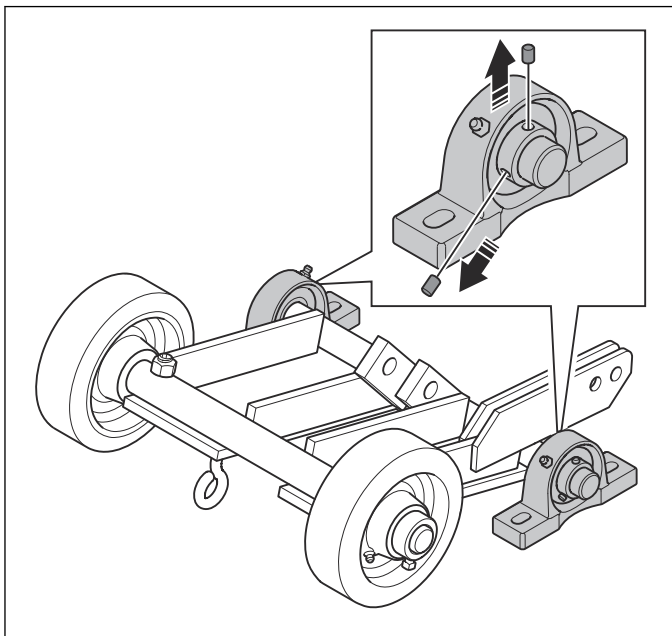
6. Remove the 4 bolts for the bearing brackets.



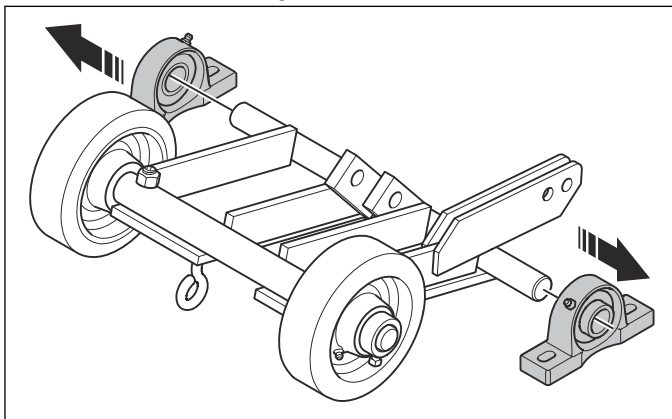
7. Remove the lift assembly.



8. Remove the set screws.



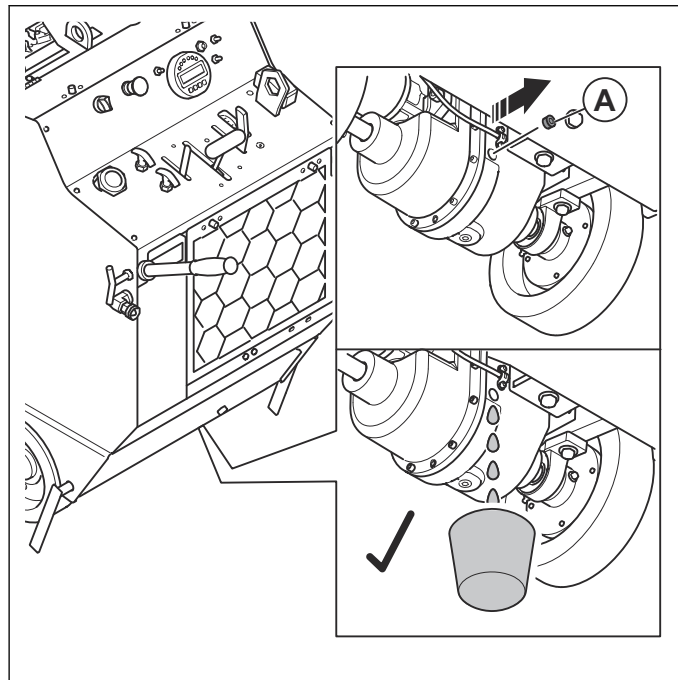
9. Remove the bearing brackets.



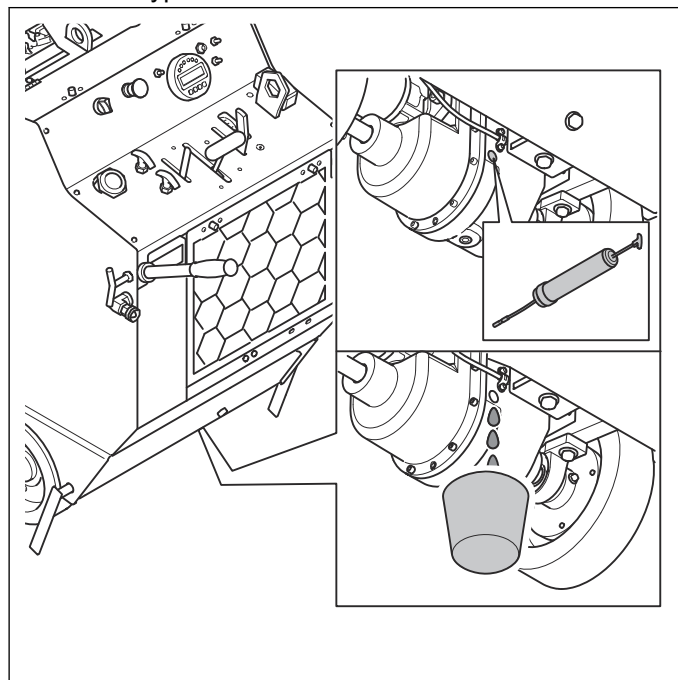
10. Install in the opposite sequence.

6.13.3 To do a check of the oil level in the rear axle

1. Make sure that the product is level when you examine the oil level in the rear axle.
2. Put a container below the oil drain hole.
3. Remove the plug (A) from the oil tank on the rear axle.



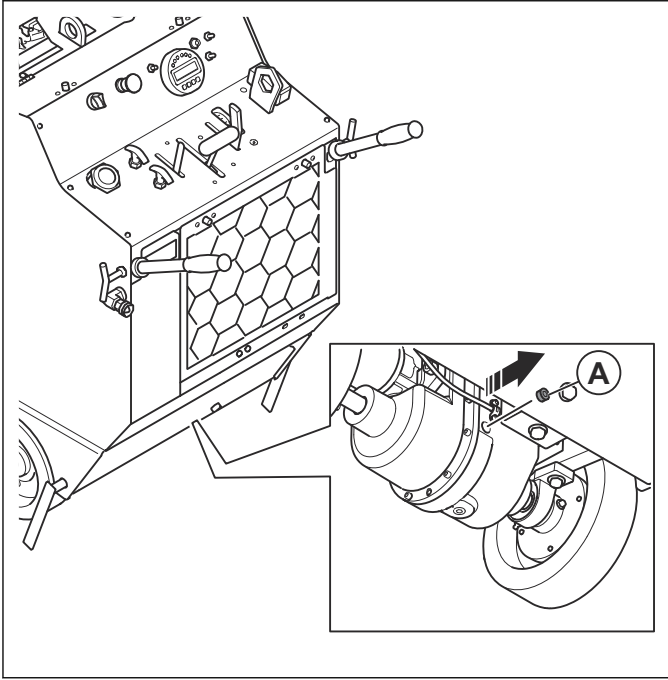
4. Examine the oil level in the rear axle. The correct oil level is when oil comes out from the hole for the plug.
5. If the oil level in the rear axle is low, fill with oil through the hole for the plug. Use a manual oil pump. Do a check of the oil level in the rear axle again. Refer to *Technical data on page 70* for the correct type of oil.



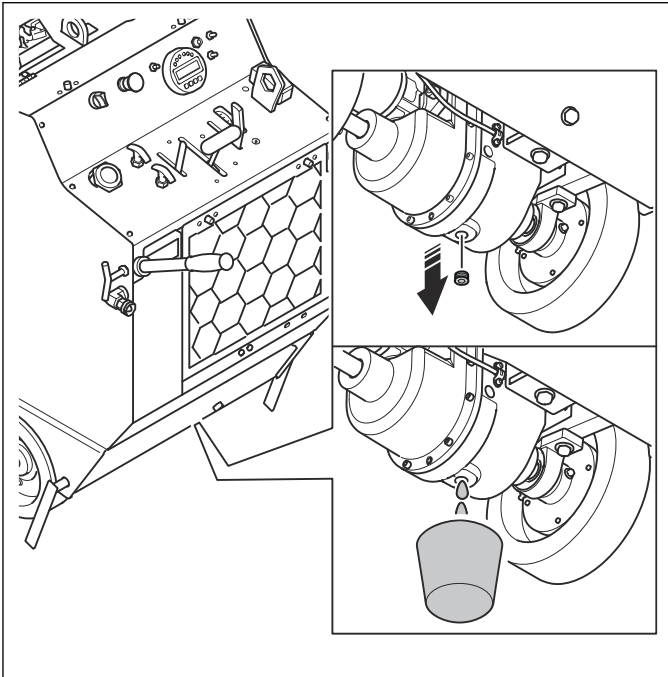
6. Install the plug.

6.13.4 To replace the oil in the rear axle

1. Put a container below the rear axle tank.
2. Remove the plug (A) from the rear axle tank.



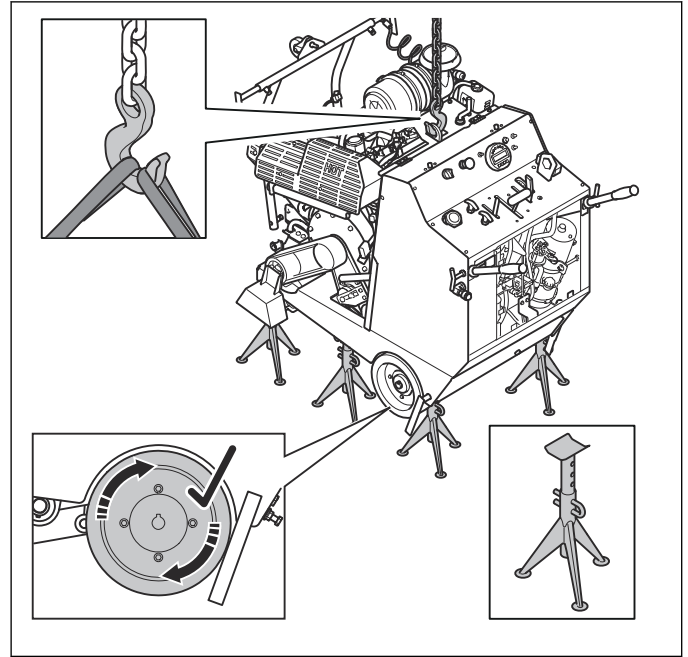
3. Remove the oil drain plug for the rear axle tank and let the oil drain into the container.



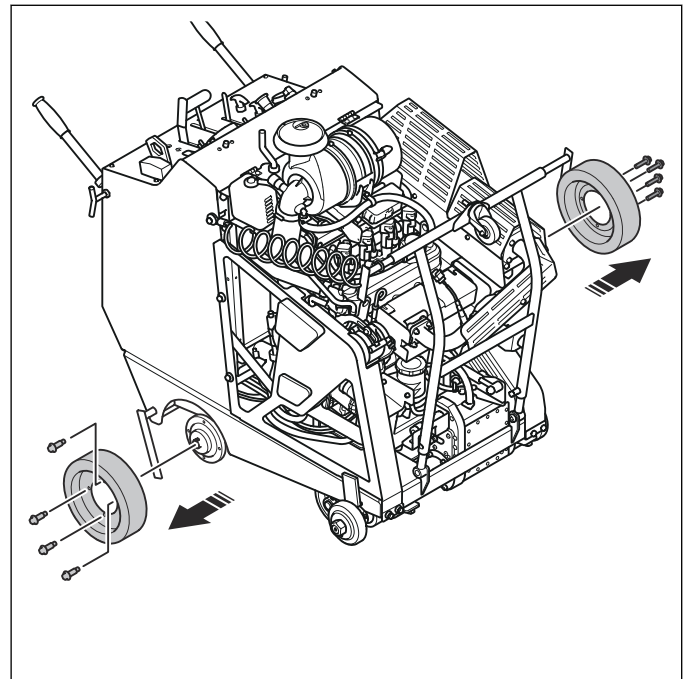
4. Install the oil drain plug for the rear axle tank.
5. Fill the rear axle tank with new oil. Refer to *To do a check of the oil level in the rear axle on page 63*.

6.13.5 To remove and install the rear axle

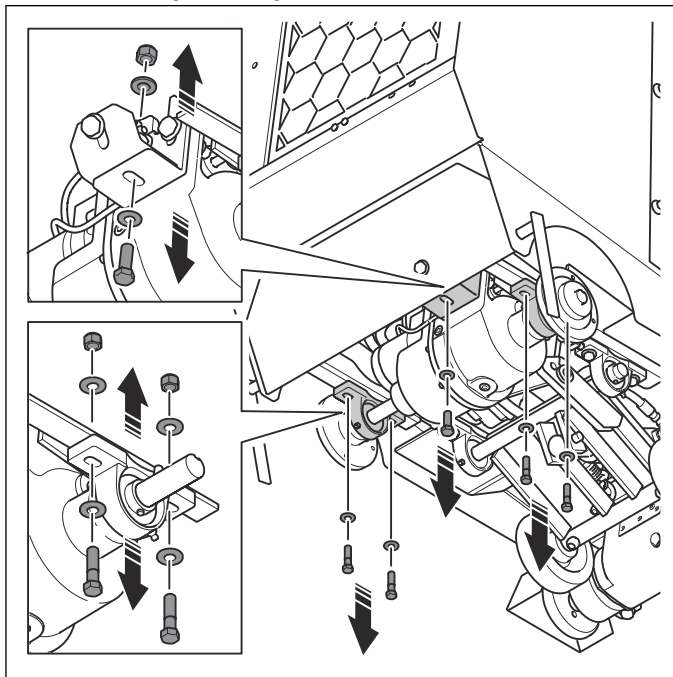
1. Lift the product and put supports below the product. The rear wheels must be off the ground.



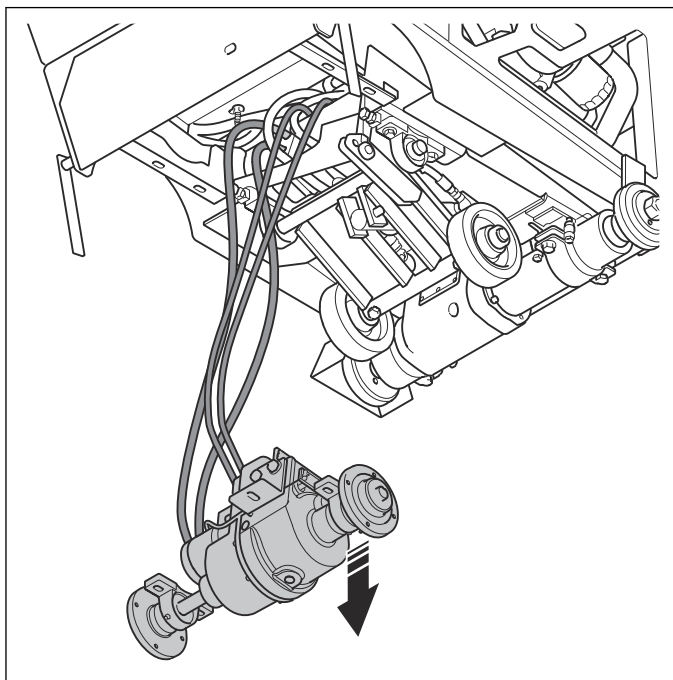
2. Remove the bolts and the wheels.



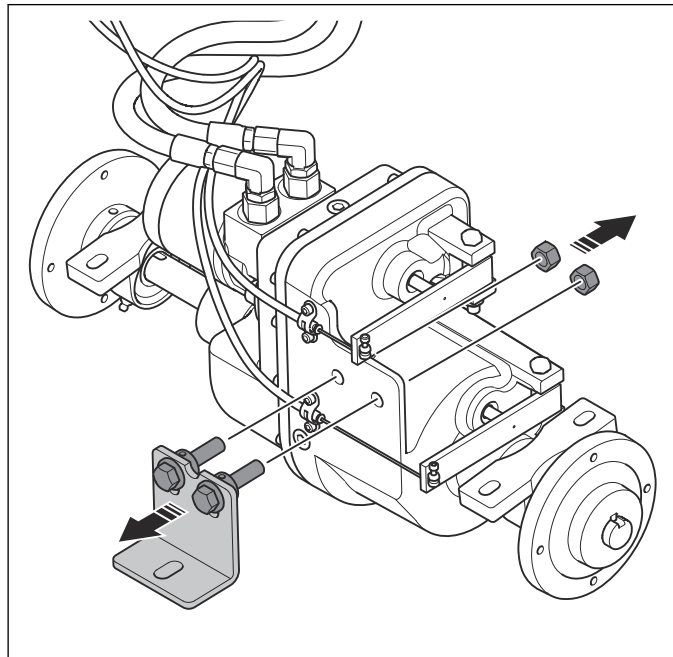
3. Remove the bolts, the washers and the nuts from the bearing housings and the bracket.



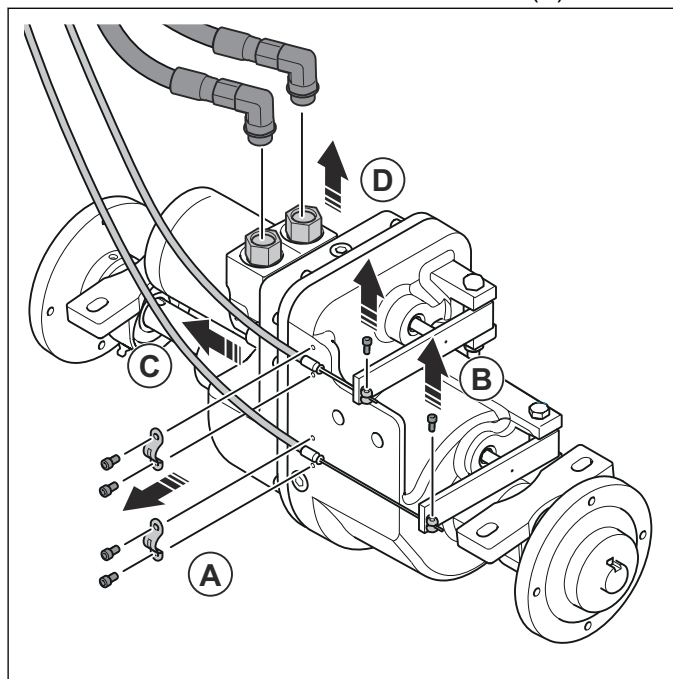
4. Lower the rear axle.



5. Remove the 2 bolts, the 2 nuts and the bracket.



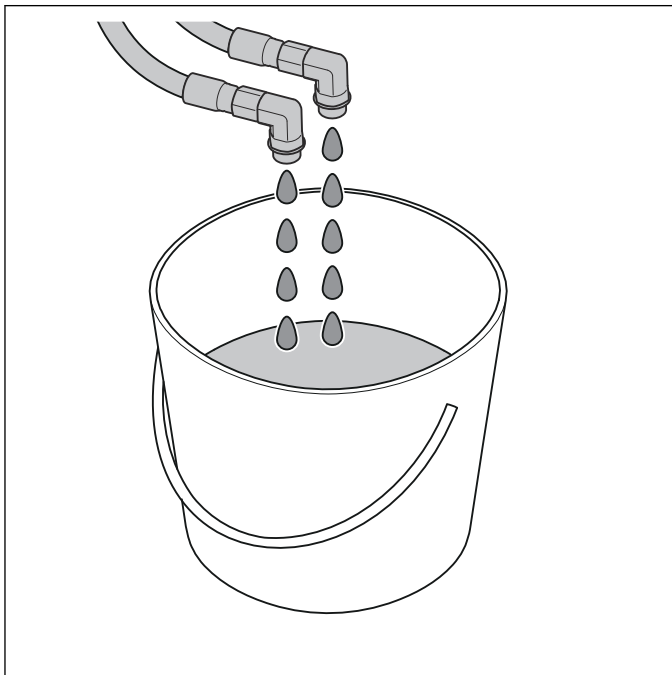
6. Remove the 4 screws and the 2 brackets (A).



7. Remove the 2 screws (B) and disconnect the 2 wires (C).

8. Disconnect the hydraulic hoses (D).

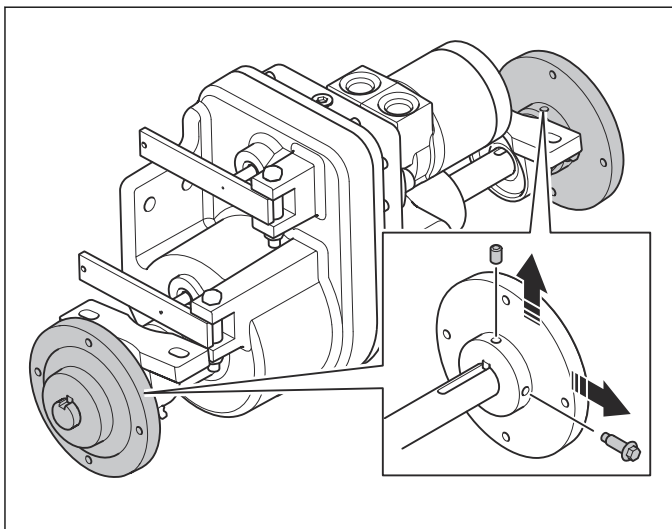
9. Drain the oil from the hydraulic hoses into a container.



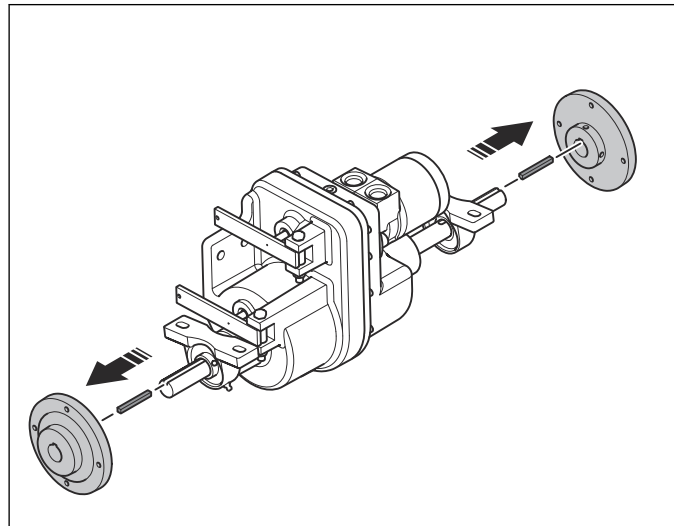
10. Install in the opposite sequence.

6.13.6 To remove and install the rear shaft bearing brackets

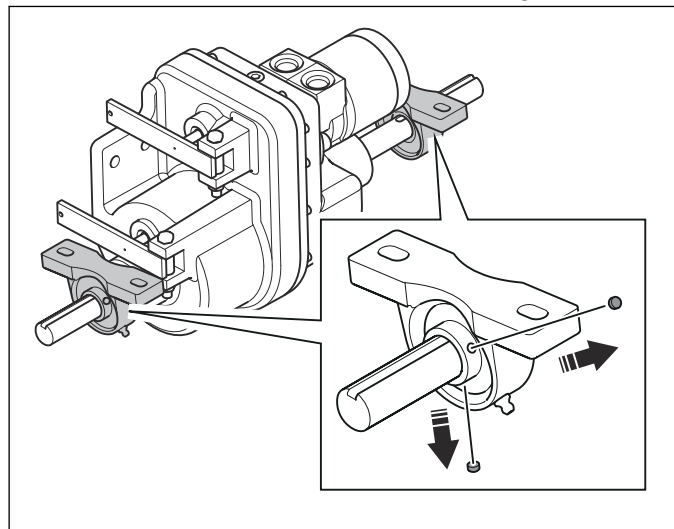
1. Remove the rear axle. Refer to *To remove and install the rear axle on page 64.*
2. Remove the 2 set screws.



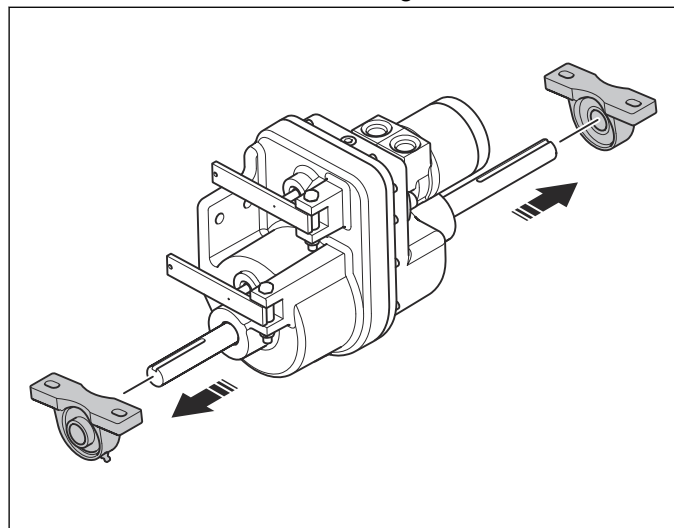
3. Remove the hubs and the shaft keys.



4. Remove the 2 set screws for the bearing brackets.



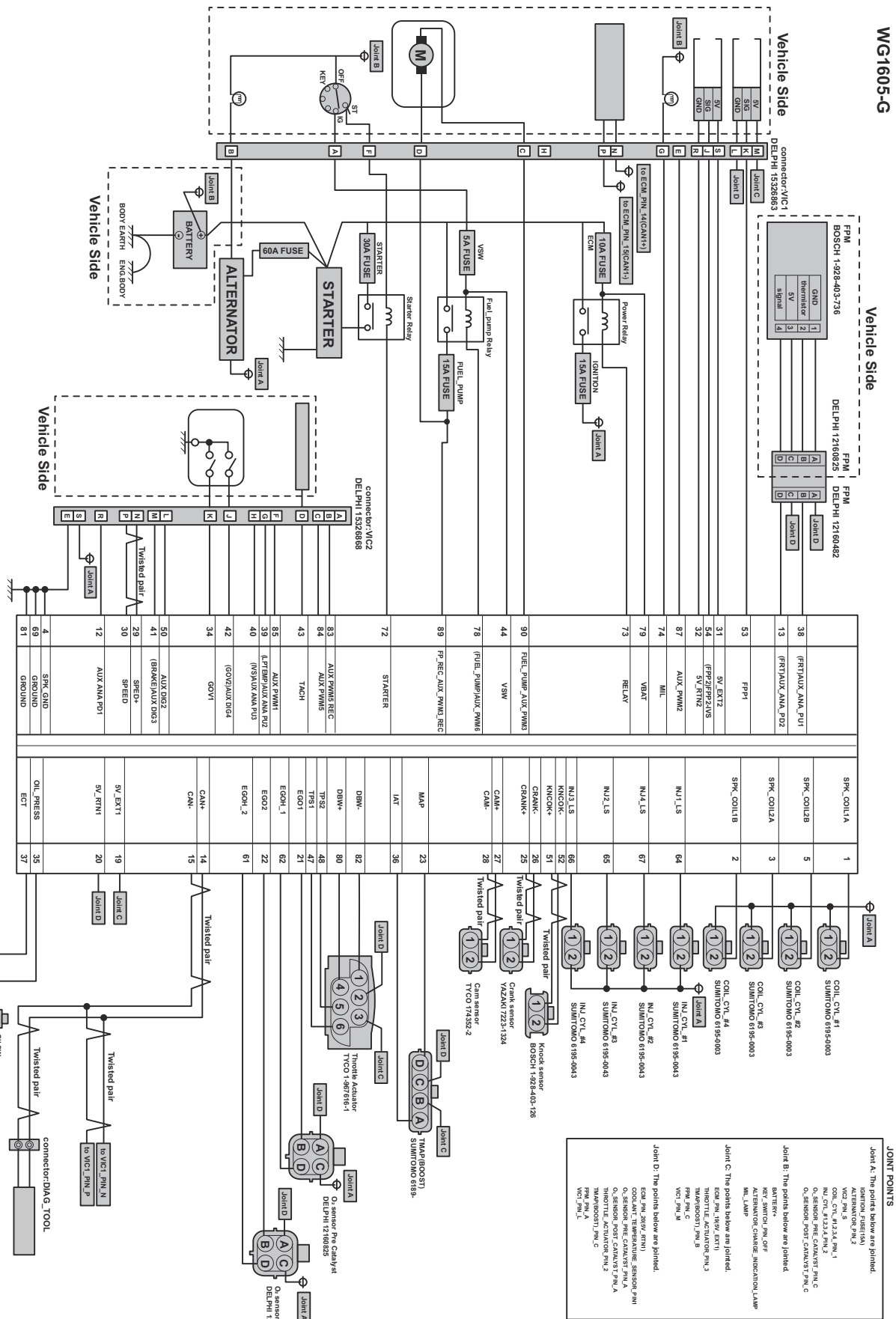
5. Remove the rear shaft bearing brackets.



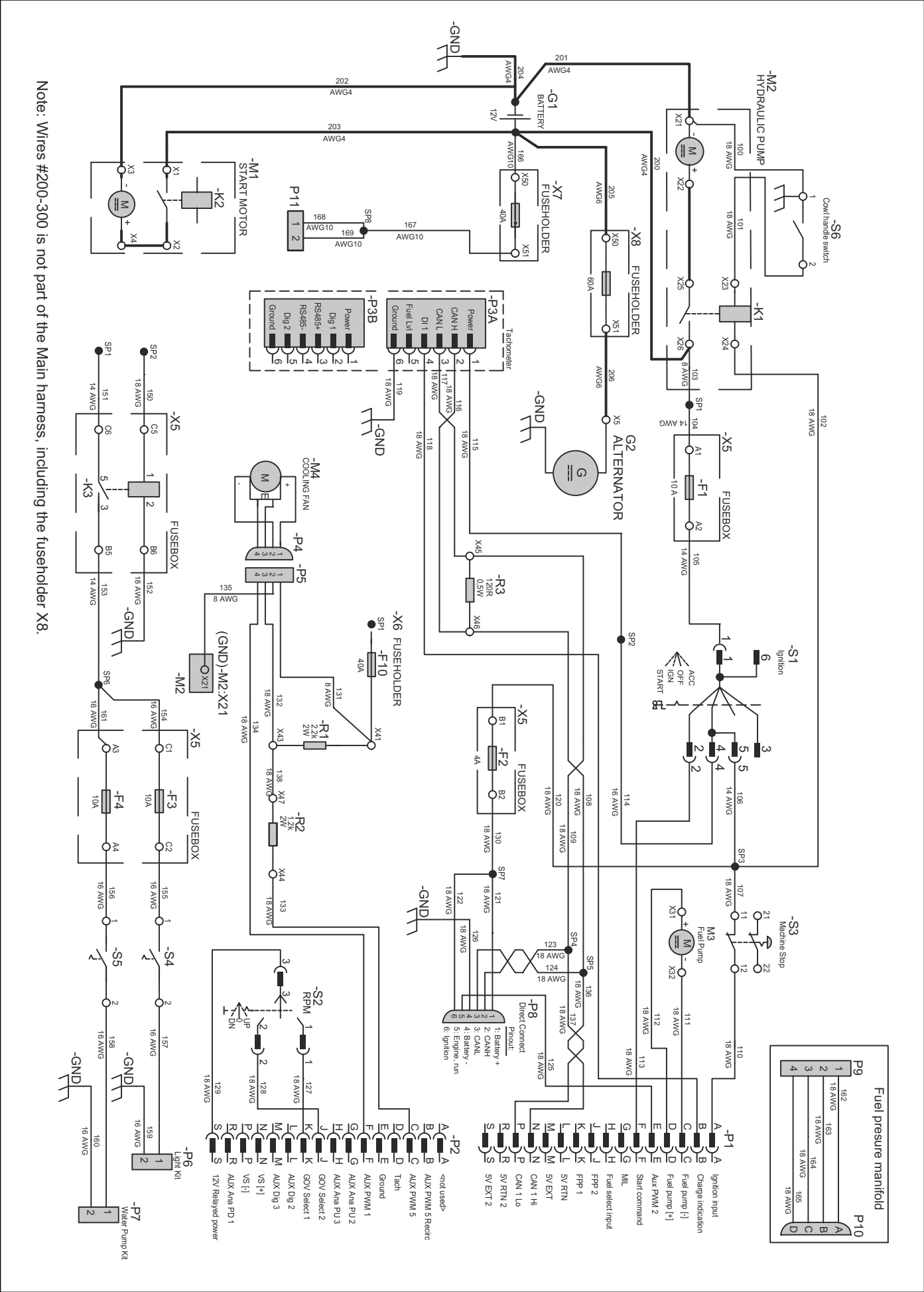
6. Install in the opposite sequence.

7 Diagrams

7.1 Electrical drawings, engine harness



7.2 Electrical drawings, cowl harness



8 Technical data


8.1 Technical data

| Engine * | |
|--------------------------------------|--|
| Engine brand, type | Kubota WG1605 |
| Engine power, kW/hp@rpm ¹ | 37.0/49.6@3000 |
| Displacement, cu.in./l | 93.79/1.537 |
| Cylinders | 4 |
| Air filter | Dry radial seal with pre-cleaner and restriction indicator |
| Starter | Electric |
| Fuel | Unleaded gasoline, E0–E10 |

* = For further information and questions about this specific engine, refer to the engine manual or the web site of the engine manufacturer.

container. Refer to table below for the correct quantity of oil contained in the engine.

Note: This engine is configured for this product and does not have standard dimensions on the engine oil

| Fuel and lubrication system | |
|---|--|
| Fuel tank capacity, gal/l | 4.8/18.0 |
| Engine oil capacity, qt/l | 4.4/4.2 |
| Engine oil | SAE 10W-40 or SAE 15W-40. API Class SL |
| Gearbox oil capacity, qt/l | 1.37/1.30 |
| Gearbox oil | AGMA 6 EP, ISO VG 320 - Gear oil (EP) |
| Rear differential axle oil capacity, qt/l | 1.0/0.95 |
| Rear differential axle oil | TO-4 SAE 50 |
| Hydraulic lift pump oil capacity, qt/l | 1.5/1.4 |
| Hydraulic lift pump oil | ATF DEXRON II |
| Hydraulic drive pump capacity, qt /l | 1.6/1.5 |
| Hydraulic drive pump oil | SAE 10W-40 or SAE 15W-40 API Class SL |
| Coolant fluid capacity, qt/l | 7.0/6.7 |
| Coolant fluid | Ethylene glycol and water, 50/50 mixture Note: Use only ethylene glycol in this engine.  CAUTION: Do not make the mixture directly in the tank. It is easier to get the correct 50/50 mixture if you make the mixture in a container. |
| Grease | NLGI 2, lithium based grease |
| Male motor connectors P1 and P2, grease | LOCTITE® dielectric, 37535 |

¹ As specified by engine manufacturer. Gross power rating as per SAE J1995, at specified rpm.

| | |
|-------------------------------|---------------------------------------|
| Battery | |
| BCI | Group 26R, 12V |
| CCA/CA | 540/665 |
| Reserve Capacity (minutes), A | (80), 25 |
| Weight, lbs/kg | 30/13.6 |
| Max. size L×W×H, in/mm | 8 ¾ × 6 ¾ × 8/222 × 171 × 203 |
| Positive post | On right (w/terminals closest to you) |

| | | | |
|---|--|---------------|---------------|
| Saw setup | 20/500 | 26/650 | 30/750 |
| Blade guard capacity, in./mm | 20/500 | 26/650 | 30/750 |
| Max. cutting depth, in./mm | 7.5/190 | 10.5/267 | 12.5/318 |
| Blade shaft, rpm | 3000 | 2000 | 1330 |
| Arbor size, in./mm | 1/25.4 | | |
| Blade flange diameter, in./mm | 5/127 | | |
| Drive belts | 6x 3VX365 | | |
| Blade coolant | Water | | |
| Blade guard attachment | Slip-on | | |
| Propulsion | Hydraulic | | |
| Max. ground speed, mph/ km/h | 2.24/3.6 | | |
| Nominal weight (uncrated), lb/kg | 1235/560 | | |
| Max. operating weight incl. optional accessories, lb/kg | 1301/590 | | |
| Blade flange | All 3-speed products are equipped with 5" blade flange for 20", 26" and 30" setup. | | |



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