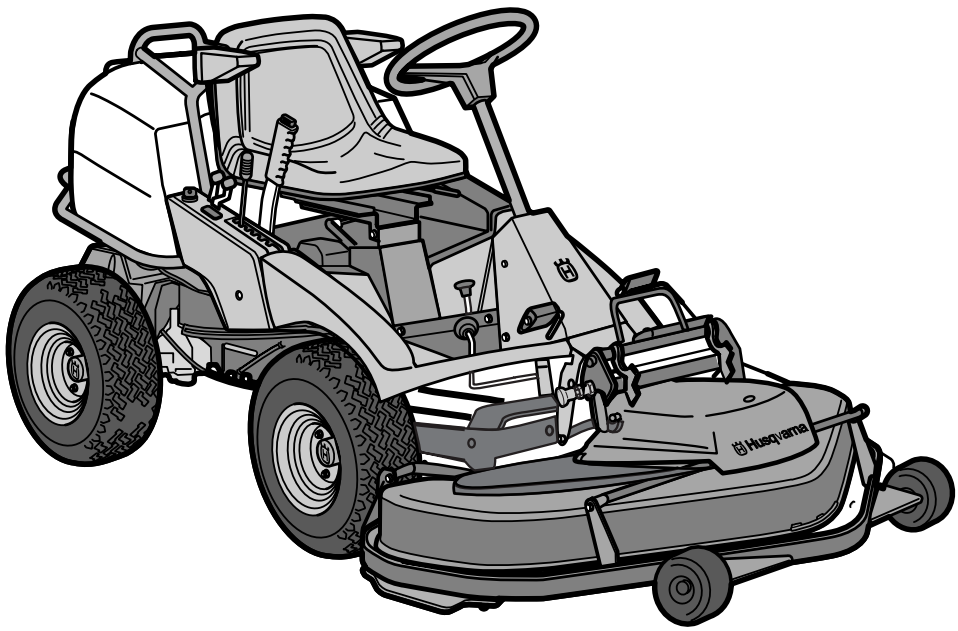


Rider 20 ProFlex

Operator´s manual

Please read these instructions carefully and make sure you understand them before using the machine.

101 90 83-26

CONTENTS

Operator's Manual for Rider 20 ProFlex

IMPORTANT INFORMATION

Read through these instructions carefully so that you know how to use and maintain the machine before using it.

For servicing other than described in this manual contact an authorised dealer for parts and service.

INSTRUCTION

Dear customer

Thank you for choosing a Husqvarna Rider. Husqvarna Riders are built to a unique design with a front-mounted cutting unit and a patented rear-wheel steering system. Riders are designed for maximum efficiency even in small or confined areas. The closely grouped controls and pedal-operated hydrostatic transmission also contribute to the performance of this machine.

We hope you will find this operator's manual very useful. By following its instructions (on operation, service, maintenance, etc.) you will significantly extend the life of the machine and even its second-hand value.

When you sell your Rider, make sure you pass on the operator's manual to the new owner. The last chapter in the operator's manual consists of a Service Journal. Make sure that all service work and repairs are recorded. A well-documented service history reduces the costs of seasonal maintenance and influences the second-hand value of the machine. Remember to take along the operator's manual when you take the Rider to the workshop for servicing.

Travel and transport on public roads

Check the relevant road traffic regulations before driving the machine on a public road. If transporting the machine on another vehicle always use approved securing devices and make sure that the machine is securely held.

Towing

If your machine has a hydrostatic transmission you should only tow it very short distances at low speed if absolutely necessary, otherwise the transmission may be damaged.

Intended use

This machine is designed solely for cutting grass on conventional lawns and other cleared and leveled ground without obstacles, as rocks, stumps etc., and, in conjunction with accessories supplied by the manufacturer even for other special tasks for which instructions are delivered with the accessory. Use in any other way is considered as contrary to the intended use. Compliance with and strict adherence to the conditions of operation, service and repair as specified by the manufacturer also constitute essential elements of the intended use.

This machine should be operated, serviced and repaired only by persons who are familiar with its particular characteristics and who are acquainted with the relevant safety procedures.

Accident prevention regulations, all other generally recognised regulations on safety and occupational medicine, and all road traffic regulations must be observed at all times.

Any arbitrary modifications carried out to this machine may relieve the manufacturer of liability for any resulting damage or injury

SAFETY INSTRUCTIONS

Good service

Husqvarna products are sold all over the world and only through servicing dealers. This is to ensure that you, the customer, get the best support and service. For example, before this machine was delivered it was inspected and adjusted by your dealer. See the certificate in the Service Journal in this manual.

When you need spare parts or advice on service issues, warranty terms, etc., contact:

This operator’s manual applies to Riders with the following manufacturer’s serial numbers:

EXPLANATION OF SYMBOLS

These symbols are on the machine and in the instructions.
Study them carefully so that you know what they mean.

Read the instructions.

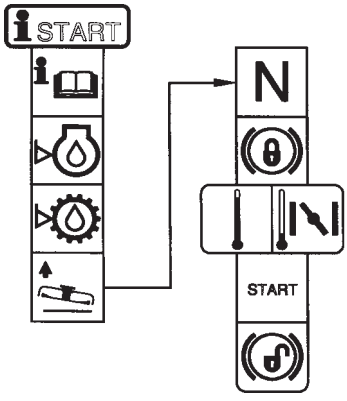
Reverse | Neutral | Fast | Slow | Engine off | Battery | Choke | Fuel

Oil pressure | Cutting height | Backwards | Forwards | Ignition

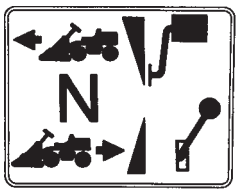
Use hearing protection | Hydrostatic freewheel | Parking brake | Brake | Warning

Sound level | Warning! Rotating blades | Warning! Risk that the machine can tip over | Never drive across a slope | European standard for machine safety

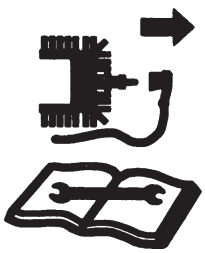
Never use the machine if persons, especially children, or animals, are in the vicinity | Never carry passengers on the machine or equipment | Keep hands and feet away from under the hood when the engine is running | Drive very slowly without the cutting unit



Starting instructions
Read the instructions
Check the engine's oil level
Check the hydrostat's oil level
Lift up the cutting unit
Put the gear shift/hydrostat pedal in neutral
Brake
If the engine is cold use the choke
Start the engine
Release the parking brake before driving



Speed limiter pedal forwards
Neutral
Speed limiter pedal reverse



Switch off the engine and take off the ignition cable before repairs or maintenance

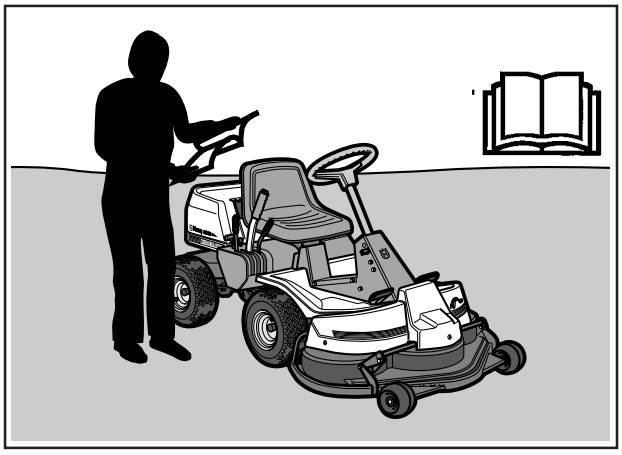
SAFETY INSTRUCTIONS

These instructions are for your safety. Read them carefully.

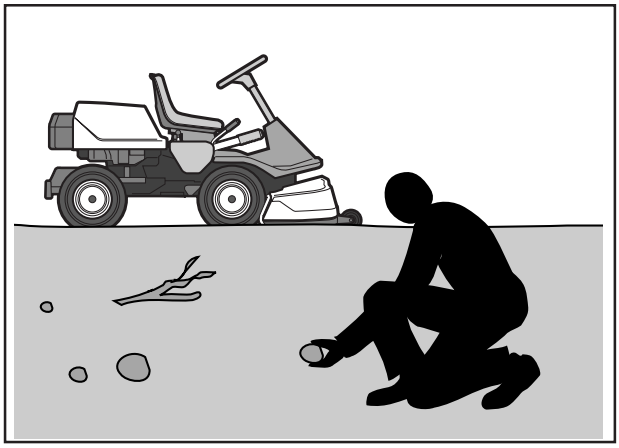
This symbol implies that important safety rules are applicable. This is for your safety and the operating reliability of the machine.

General use:

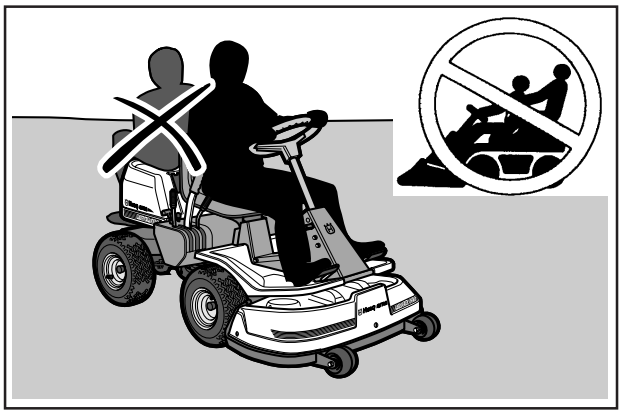
- Make yourself familiar with the controls and how to stop quickly.
- Read all the instructions in Operator's Manual and on the machine before starting it. Make sure you understand them, and then follow them.
- Only allow adults who are familiar with the machine to use it.
- Wear approved safety glasses or a visor during assembly and driving.
- Never use the machine barefoot. Always wear heavy-duty shoes, preferably toe-capped.
- Never wear loose fitting clothes which can fasten in moving parting.
- Clear the area of objects such as stones, toys, and wires, etc. which can be caught up by the blades and thrown out.
- Check that there are no other persons in the area before starting to cut.
- Stop the machine if anyone comes into the work area.
- Never carry passengers.
- Do not cut backwards unless absolutely necessary.
- Always look down and behind before and during reversing.
- Keep an eye on the ejected grass and do not direct it towards anyone.
- Slow down before turning.
- Never leave the machine unattended when the engine is running. Always switch off the blades, pull on the parking brake, stop the engine and take out the keys before leaving the machine.
- Switch off the blades when you are not cutting.
- Only cut in daylight or good artificial lighting.
- Never use the machine when you have consumed alcohol, drugs, or certain medicines.



Read the instructions before starting the machine.



Clear the area from stones etc. before cutting.



Never carry passengers.

WARNING!
This machine can cut off hands and feet, and eject objects. Failure to follow the safety instructions can lead to severe injury.

- Watch out for traffic when working close to a road, or crossing one.
- Be careful when rounding a fixed object so that the blades do not hit it. Never drive intentionally over a foreign object.
- The machine is heavy and can cause very severe crush injuries. Be extra careful when loading it on a trailer or truck.
- Be careful when pulling a load or using heavy equipment.

  a. Only use approved tow hooks.

  b. Limit the load to what you can manage safely.

  c. Do not make sharp turns. Be careful when reversing.

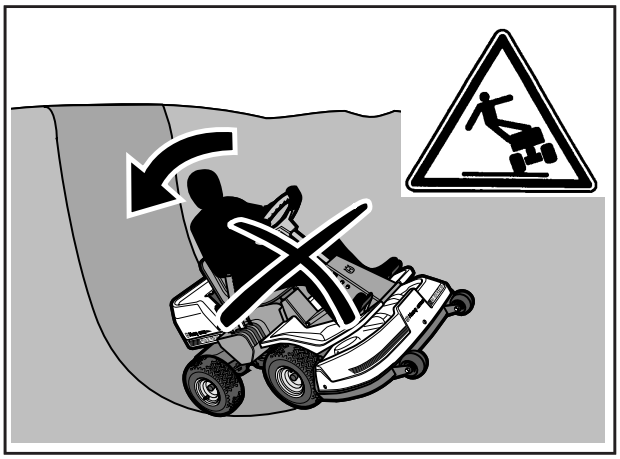
  d. Use counterweights or wheel weights when indicated in the instructions.

Driving on slopes

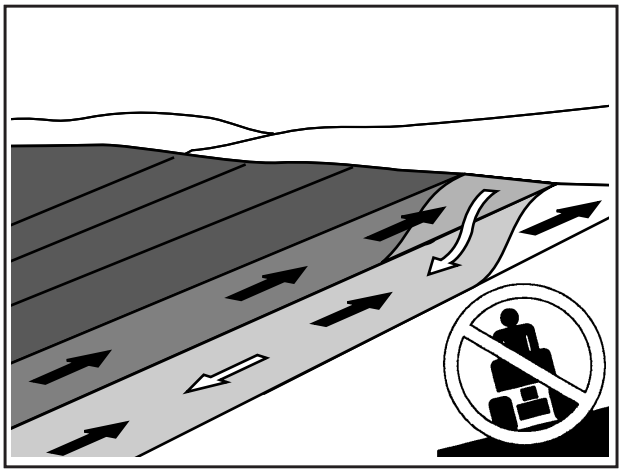
Driving on slopes is one of the situations where there is the most serious risk that the driver can loose control or that the machine tips over, which can cause severe injuries or be fatal. All slopes require extra care. If you cannot reverse up the slope or if you feel uncertain avoid cutting it.

Do as follows:

- Remove obstacles such as stones and branches etc.
- Cut upwards and downwards, not sideways.
- Look out for and avoid driving over furrows, holes or mounds. On uneven surfaces it is easier for the machine to tip over. High grass can conceal obstacles.
- Drive slowly. Select a low gear to avoid having to stop and changing gear. It is also easier to use the gear to brake in a low gear.
- Follow the manufacturer's recommendations on wheel weights or counterweights to increase stability.
- Be extra careful with the grass collector or other equipment which can alter the stability of the machine.
- Always drive smoothly and slowly on slopes. Avoid sudden changes of speed or direction.
- Avoid starting or stopping on a slope. If the tyres begin to skid switch off the blades and drive slowly down the slope.
- Avoid unnecessary turns on slopes, and if turning is necessary turn slowly and gradually, downwards if possible.



Be extra careful when driving on slopes.



Cut slopes upwards and downwards, not sideways.

- Do not cut close to edges, ditches or banks. The machine can suddenly tip over if a wheel goes over the edge of a drop or a ditch, or if a bank gives way.
- Do not cut wet grass. It is slippery and the tyres can loose their grip so that the machine slides.
- Do not try to stabilise the machine by placing one foot on the ground.
- The Rider lawn mower must **never** be driven close to an edge or ditch when cleaning the chassis.

Children

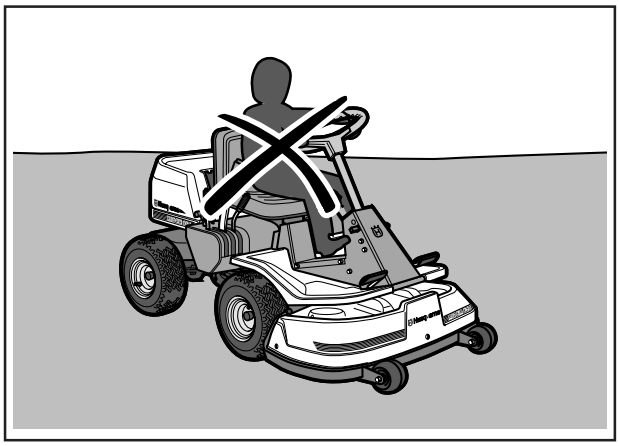
Tragic accidents can occur if the driver does not pay attention to children in the vicinity. Children are often attracted to the machine and the work of mowing. Never assume that children stay where you last saw them.

- Keep children away from the mowing area and under the supervision of another adult.
- Be on your guard and switch off the machine if children come into the work area.
- Before and during reversing look behind and down for small children.
- Never allow children to ride on the machine. They can fall off and become seriously injured or obstruct an otherwise safe manoeuvre of the machine.
- Never allow children to steer the machine.
- Be extra careful close to corners, bushes, trees or other objects which obstruct your view.

Maintenance

- Petrol and petrol fumes are toxic and highly inflammable. Be extra careful when handling petrol.
- Store the fuel in containers approved for this purpose.
- Never fill up the machine with petrol when the engine is running. Let the engine cool before filling up with petrol. Do not smoke, or fill up with fuel in the vicinity of naked flames or sparks.
- Never fill up with fuel indoors.
- If leakage has occurred in the fuel system the engine must not be started until this is rectified.
- Never store the machine or fuel containers indoors if there are naked flames, such as in a boiler room or where there is electrical equipment which can emit sparks.

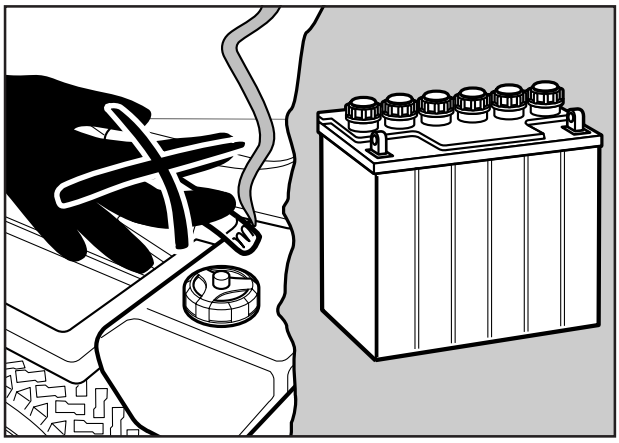
Keep children away from the mowing area.



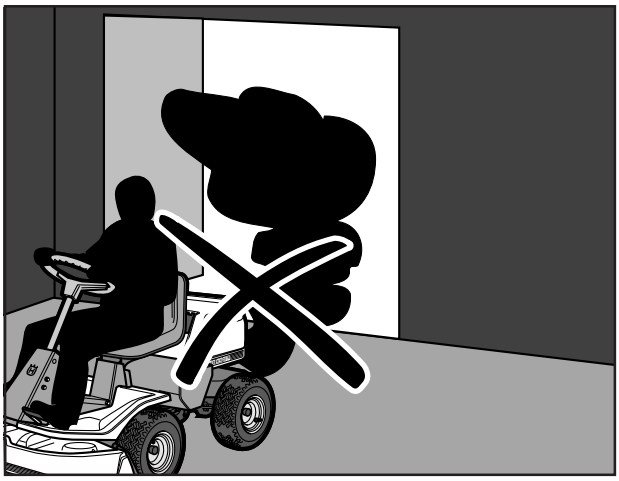
Never allow children to drive the machine.

Never fill up with fuel indoors.

- Check the fuel level each time before using the machine, and leave space for the fuel to expand since the heat from the engine and hot sun can cause the fuel to run over.
- Avoid overfilling. If petrol has been spilt on the machine wipe it up and wait until it has evaporated before starting the engine. If petrol is spilt on clothes, change them.
- Be extra careful when handling battery acid. Spilling acid on the skin can cause severe burn injuries. Rinse immediately with water. If acid gets into the eyes this can cause blindness. Contact a doctor.
- Be careful with the maintenance of the battery. Explosive gas is formed in the battery. Never handle the battery when smoking or in the vicinity of naked flames or sparks. Otherwise the battery can explode and cause severe injuries.
- Never drive the machine in an enclosed space. The exhaust fumes contain carbon monoxide, an odourless, toxic and fatal gas.
- Make sure that bolts and nuts, especially attachment bolts for the blade units are properly tightened and that the equipment is in good order.
- Never alter the safety devices. Check regularly that they function. The machine must not be driven with defective or unmounted safety devices.
- Do not alter the setting of the governor and do not race the engine.
- Reduce the fire risk. Keep the machine clean from grass, leaves and other refuse which fastens in it. Allow the machine to cool before placing it in the storage area.
- Stop and inspect the equipment if you drive over an object. If necessary repair the machine before starting.
- Never make adjustments with the engine running.
- The parts on the grass collector can become worn, damaged and aged, so that moving parts are exposed or so that an object can be thrown out. Check the parts regularly and if necessary replace them with spare parts recommended by the manufacturer.
- The machine is tested for safety and approved only for equipment supplied or recommended by the manufacturer.
- The blades are sharp and can cause cutting injuries. Wrap over the blades or use protective gloves when handling them.
- Check the functioning of the brakes regularly. Adjust and maintain them as necessary.



Never smoke in the vicinity of the battery or the fuel.



Never drive the machine in an enclosed space.

Clean the machine regularly from grass, leaves and other waste.

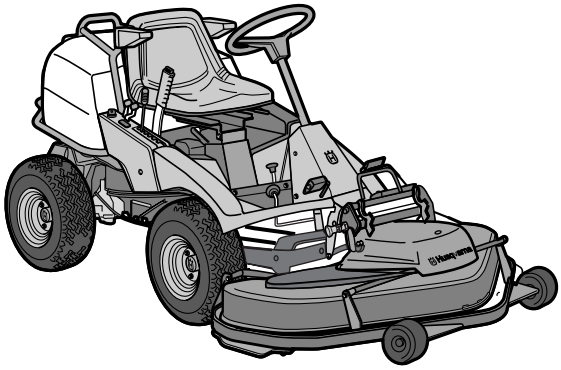
PRESENTATION

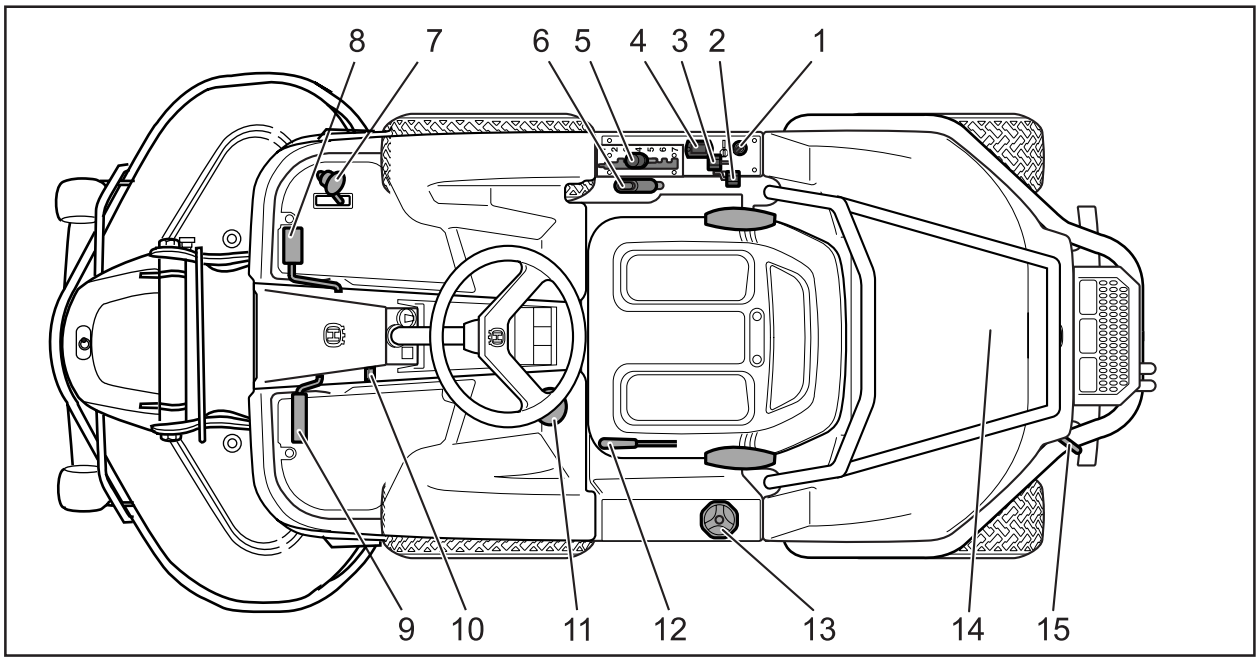
Presentation

These instructions describe the Rider 20 ProFlex.

The Rider 20 ProFlex is equipped with a 20 horsepower Vanguard V-Twin engine from Briggs & Stratton.

The power transmission from the engine is handled by a hydrostatic gearbox, which enables variable speed by using the pedals. One pedal for driving forward and one for reverse.





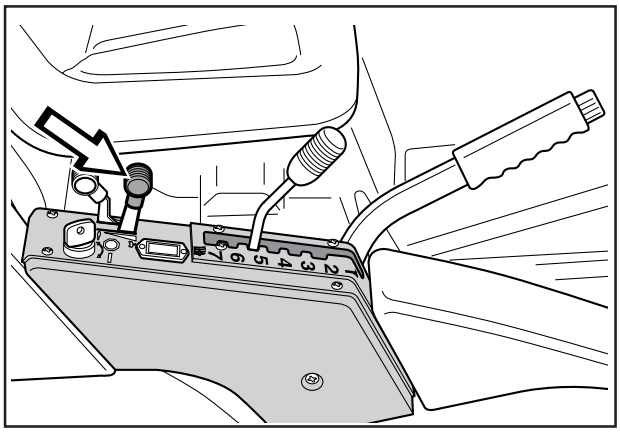
Location of the controls

1. Ignition lock
2. Choke lever
3. Throttle control
4. Counter
5. Lever for adjustment of cutting height
6. Lifting lever for cutting unit with lock button
7. Speed limiter for reversing
8. Speed limiter for driving forward
9. Brake pedal
10. Lock button for parking brake
11. Differential lock
12. Lever for adjustment of seat
13. Fuel tank cap
14. Main lock
15. Lever to disengage the drive

Throttle control

The throttle control regulates the engine speed, and thereby also the rotation speed of the blades.

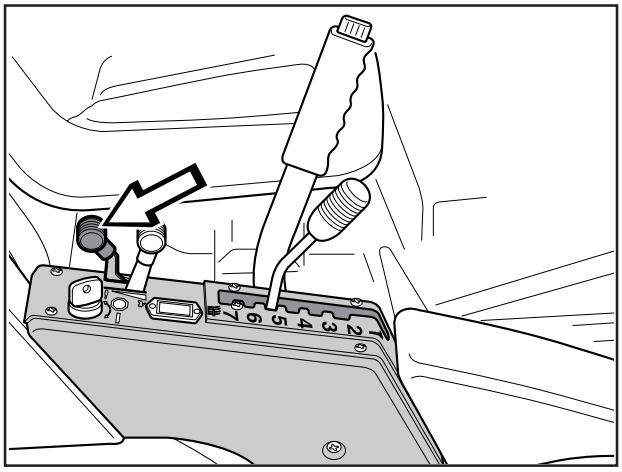
To increase or reduce the engine speed the control is moved forwards or backwards.



Choke lever

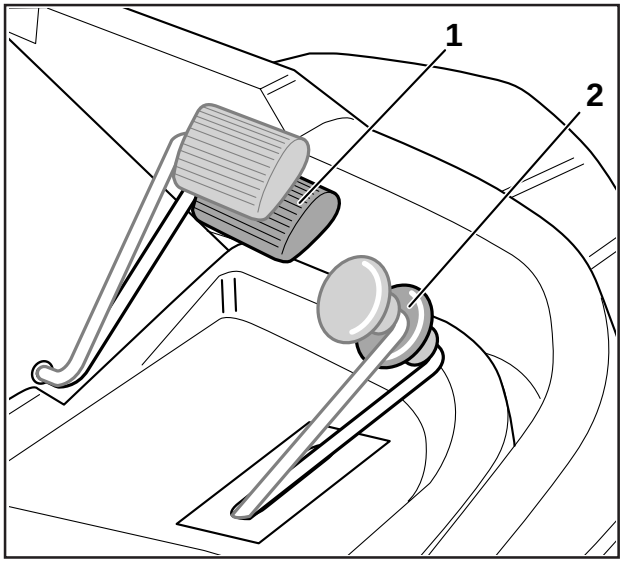
The choke lever is used for cold starting and to give the engine a richer fuel mixture.

For cold starting the lever is moved backwards to its end position.



Speed limiter

The speed of the machine is steplessly regulated with two pedals. Pedal (1) is used to drive forwards, and pedal (2) to reverse.



Cutting unit

Rider 20 ProFlex can be equipped with numerous attachments.

The BioClip unit finely cuts the lawn by cutting the grass several times before returning the clippings to the lawn as fertiliser.

The cutting unit with side or rear ejection, that is, the clippings are ejected to the side or behind the unit.

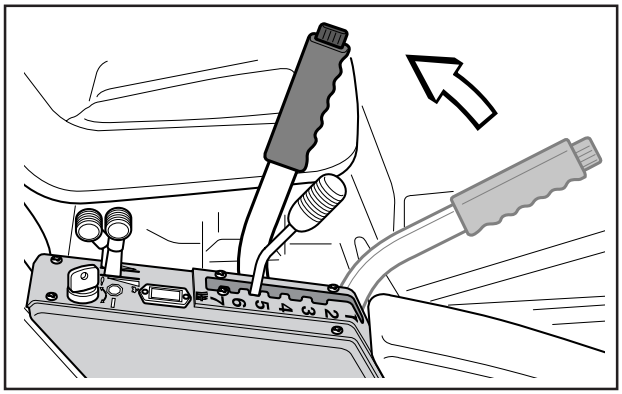
Examples of the accessories for Rider:

- Brush
- Snow plough
- Wheel weights
- Snow chains
- Dozer
- Edger
- Electric attachment lift
- BioClip cutting unit
- Gravel rake
- Trailer

Lift lever for cutting unit

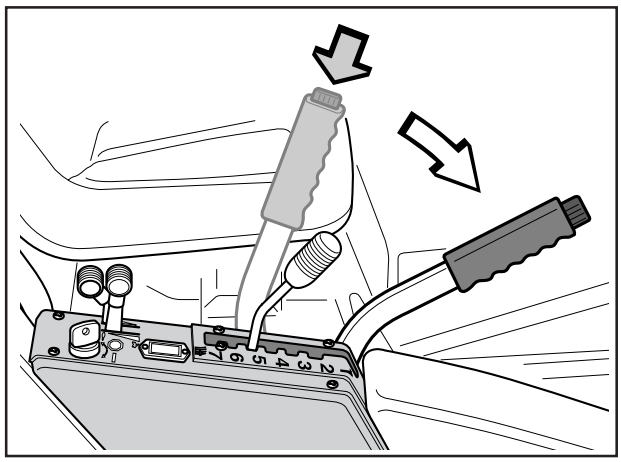
The lift lever is used to set the cutting unit in transport or mowing position.

1. Pull back the lever to the locked position for transport.
   The cutting unit will lift up and the blades stop rotating.



Lifting of the cutting unit

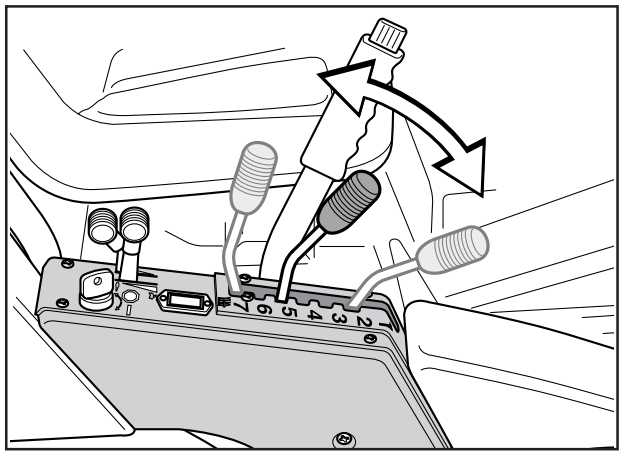
2. Press in the lock button and move the lever forwards for the mowing position.
   The unit will lower down and the blades start to rotate.
3. The lever can also be used to temporarily regulate the cutting height, e.g. for a small mound in the lawn.



Lowering of the cutting unit

Lever for adjustment of the cutting height

The cutting height can be adjusted to 7 different positions with the cutting height lever.
To achieve an even cutting height it is important that the tyre pressures are the same on the front wheels (60 kPa).

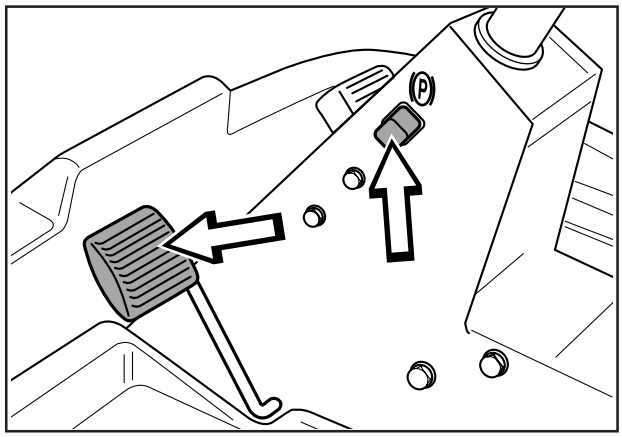


Parking brake

The parking brake is applied as follows:

1. Push down the brake pedal.
2. Push in the lock button on the steering column.
3. Release the brake pedal while holding the button pressed.

The parking brake lock disengages automatically when the brake pedal is pressed.

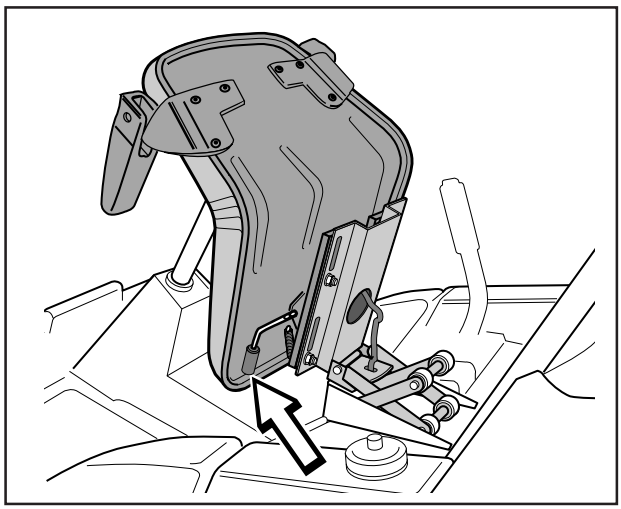


Seat

The seat has a jointed attachment on the front edge and can be tipped forward.

The seat can also be adjusted lengthways.

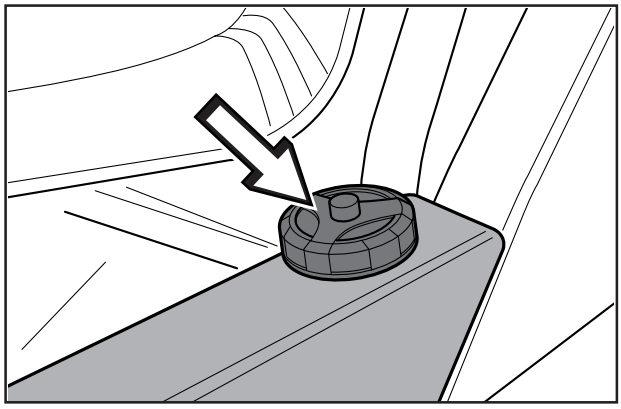
To adjust move the lever under the front edge of the seat to the left, so that the seat can be moved forward or backwards to the required position.



Fuelling

The engine should be run on 85 octane (or higher) unleaded petrol/gasoline (no added oil). Environmentally adapted alkylate fuel, such as Aspen, is also recommended.

WARNING!
Petrol is highly inflammable.
Exercise care and refuel outdoors (see safety instructions).

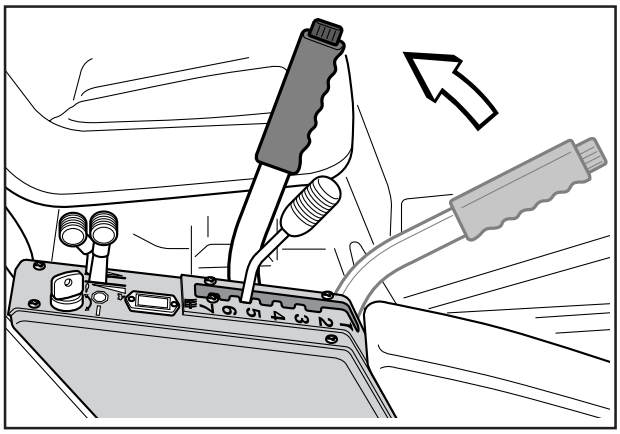


Before starting

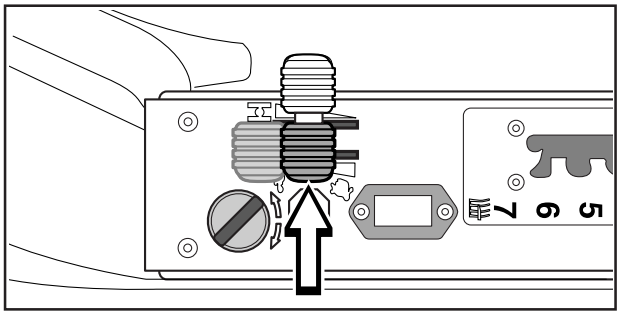
- Read the sections headed “Safety instructions” and “Presentation” before starting the mower.
- Carry out daily maintenance before starting (see “Maintenance schedule” in the chapter on “Maintenance”).
- Adjust the seat to the required position.

Starting the engine

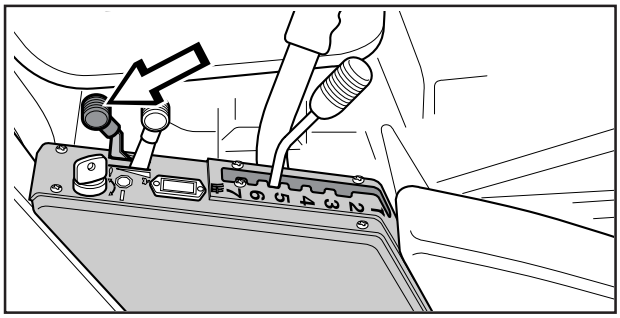
1. Lift up the cutting unit by pulling the lever backwards to locked position (transport position) and apply the parking brake.



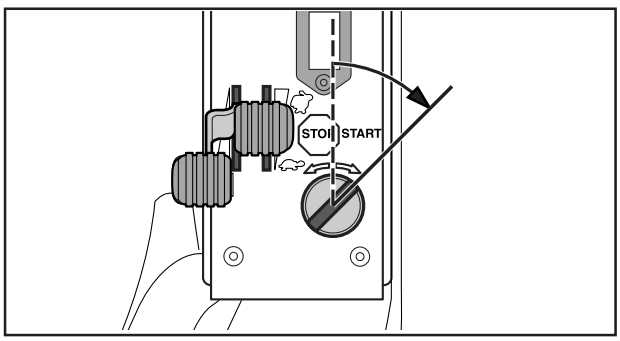
2. Move the throttle control to the middle position.



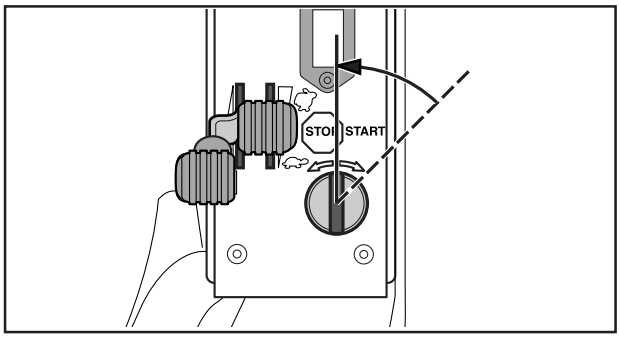
3. If the engine is cold move the choke lever backwards to its end position.



4. Turn the ignition key to the start position.



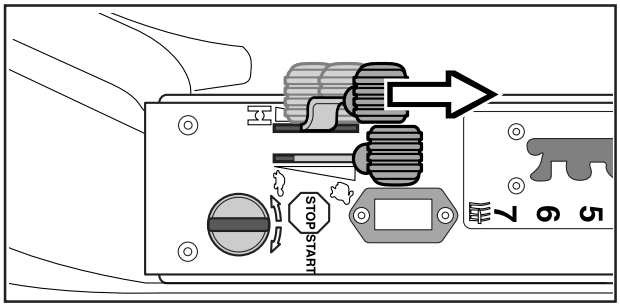
5. When the engine starts release the ignition key immediately back to neutral position.



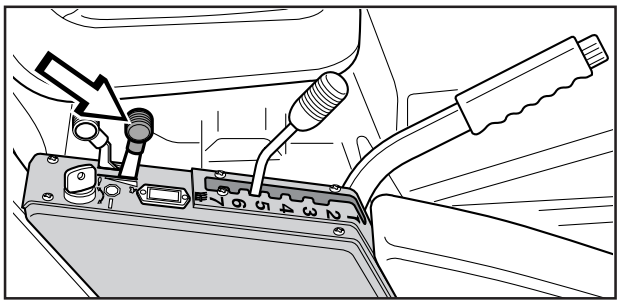
IMPORTANT INFORMATION

Do not run the starter for more than about 5 seconds at a time. If the engine does not start, wait about 10 seconds before trying again.

6. Push the choke lever gradually forward when the engine has started.



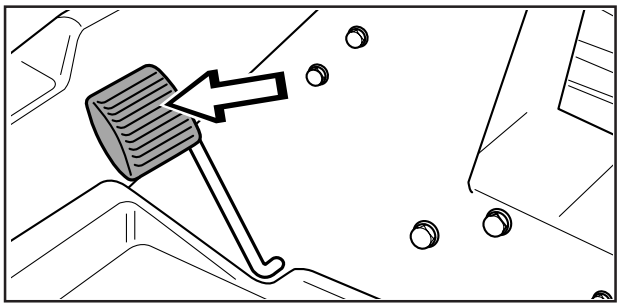
7. Set the required engine speed with the throttle control.



WARNING!
Never run the engine indoors, in enclosed or poorly ventilated areas. The exhaust fumes contain toxic carbon monoxide.

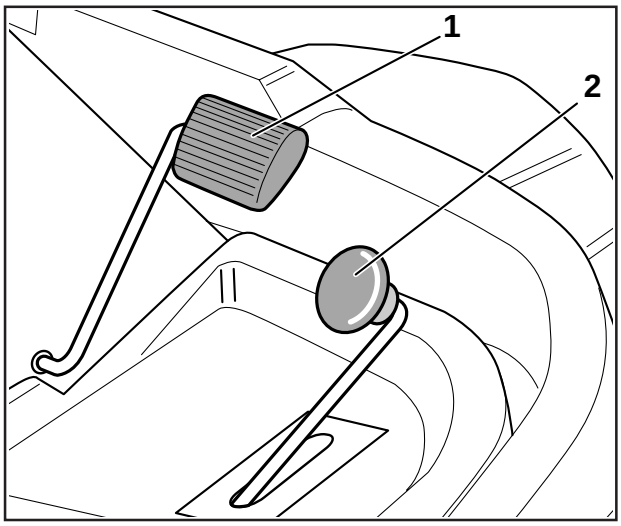
Driving the machine

1. Release the parking brake by pressing the brake pedal.

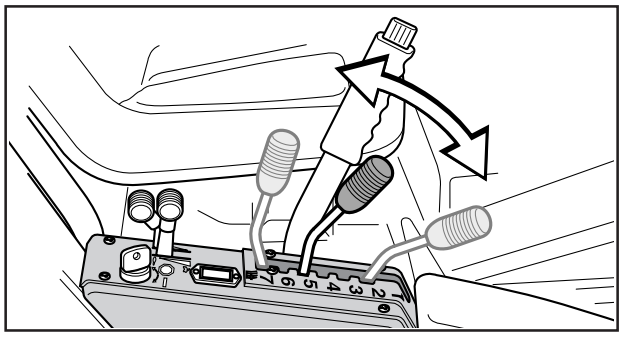


2. Carefully press down one of the pedals until the required speed is obtained.

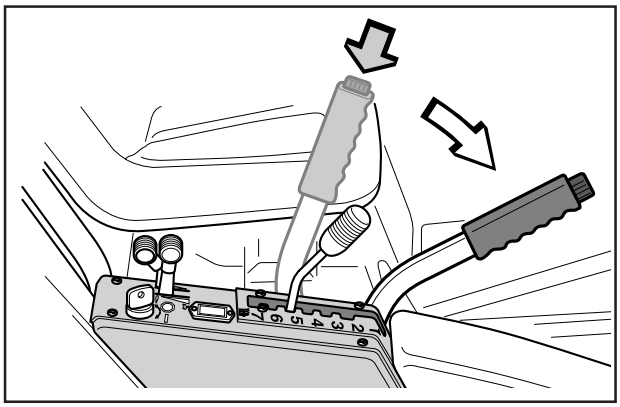
   To drive forward press down pedal (1), or to reverse pedal (2).



3. Select the required cutting height (1–7) with the cutting height lever.

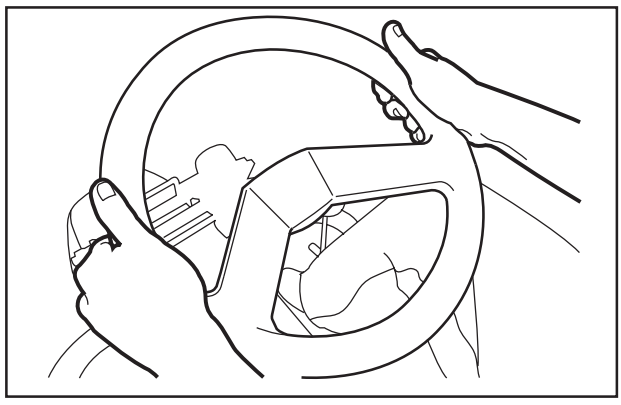


4. Push in the lock button on the lift lever and lower down the cutting unit.



Differential lock

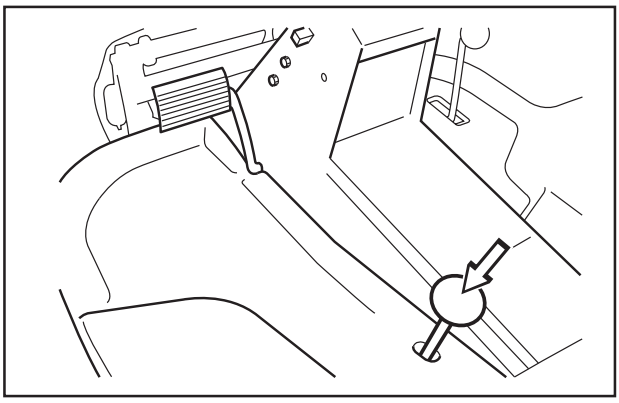
WARNING!
Don’t rest your thumbs inside the steering wheel. The wheel could jerk suddenly when the differential lock is engaged.



The differential lock can be engaged while moving using the pedal on the left.

To avoid getting stuck you should engage it just before you reach an obstacle.

1. Engage the differential lock when necessary by pressing the pedal. If one of the wheels spins, lighten the pressure on the accelerator slightly.
2. Make sure the differential lock disengages when the pedal is released. Make small steering movements or reverse a short distance until the pedal returns to its normal position.

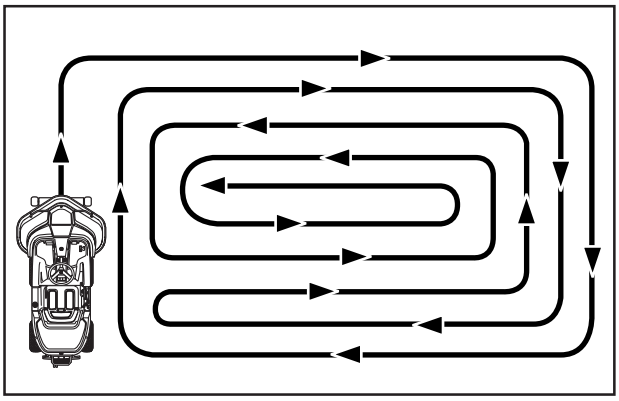


Cutting tips

WARNING!
Clear the lawn from stones and other objects which can be thrown out by the blades.

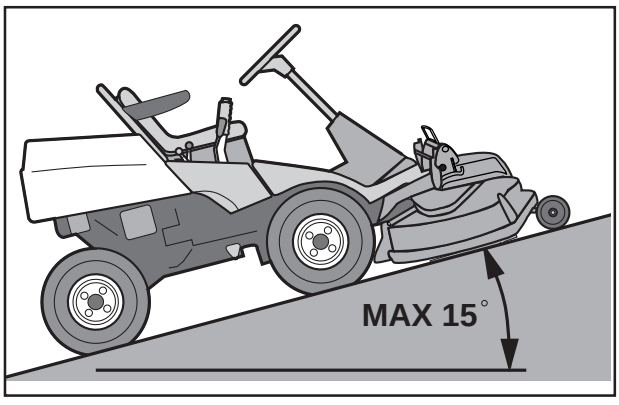
- Localise and mark stones and other fixed objects to avoid collision.
- Start with a high cutting height and reduce down until the required mowing results are obtained.
- The mowing results are best with a high engine speed (fast rotating blades) and low driving speed (slow moving machine). If the grass is not too high and thick the driving speed can be increased or the engine speed reduced without noticeably affecting the mowing results.
- The best lawns are achieved if the grass is cut often. Mowing becomes more uniform and the grass cuttings become more evenly distributed over the surface.

  The total time consumption is not greater since it is possible to select a higher driving speed without inferior mowing results.
- Avoid mowing a wet lawn. The mowing results are inferior since the wheels sink down into the soft lawn.
- Hose down the cutting unit with water underneath each time it is used. The cutting unit should be raised into the service position when cleaning.



Mowing pattern

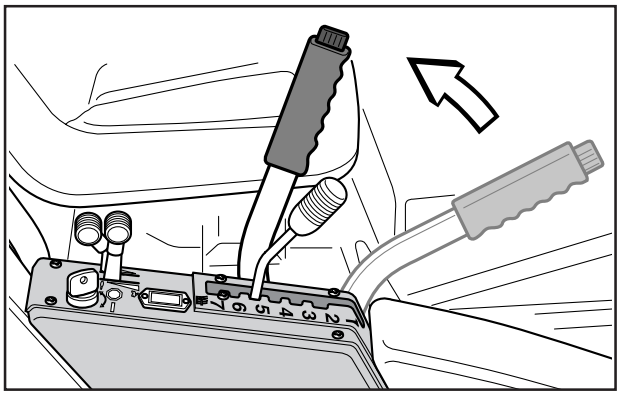
WARNING!
Never drive the machine on ground at an angle of more than 15°. Mow slopes upwards and downwards, never across. Avoid sudden changes in direction.



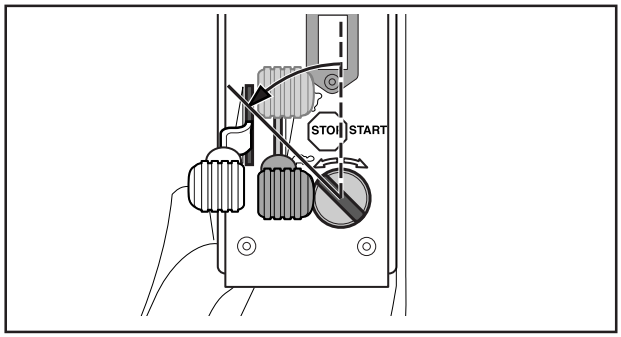
Stopping the engine

Preferably allow the engine to idle for a minute to obtain normal working temperature before stopping it if it has been working hard.

1. Lift up the cutting unit by pulling the lever back to the locked position.

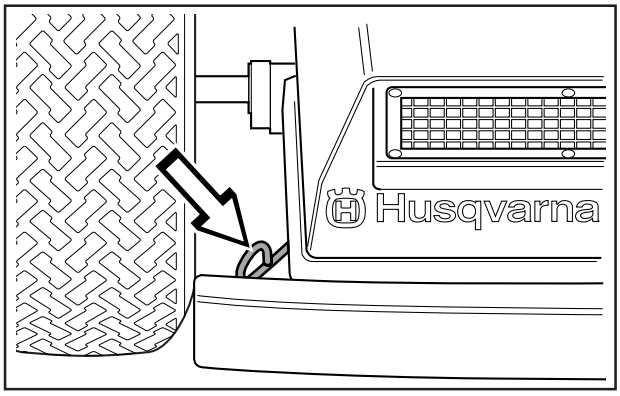


2. Move the throttle control to the MIN. position. Turn the ignition key to the STOP.



Disengage lever

To move the machine when the engine is switched off the disengage lever must be pulled backwards.



Maintenance schedule

The following is a list of the maintenance which should be conducted on the machine. For the items which are not described in these instructions go to an authorised service workshop.

Maintenance	Page	Daily maintenance before	Daily maintenance after	Weekly[3] maintenance	At least once a year	Maintenance interval in hours 25	50	100	300
Check for fuel and oil leakage	-	❍							
Check the parking brake	24	●							
Check the engine oil level (when you refuel)	21	●							
Check the fuel pump air filter	22	●							
Check the seat safety switch	24	●							
Check the lift lever safety switch	24	●							
Check the parking brake safety switch	24	●							
Check/clean the engine cooling air intake	21		●						
Check the cutting unit:	28		●						
• blades are secure	30		●						
• condition of blades (sharpness, shape, etc.)	30		●						
• blade synchronisation (90° between BioClip)	30		●						
Check steering wires (for play, etc.)	23		●						
Check fasteners (screws, nuts, etc.)	-		❍						
Start engine and blades, listen for noise	-		❍						
Clean underside of cutting unit	30		●						
Clean transmission air intake	22		●						
Check battery acid level	24			●					
Check transmission oil level	22			●					
Check condition of V-belts, pulleys, etc.	-			❍					
Check for damage	-			❍					
Check tyre pressures (60 kPa)	41			●					
Check for damage to wire guide at articulated joint	-			❍					
Clean thoroughly around engine	-			❍					
Clean air filter (pre-filter)	25			●					
Clean thoroughly around transmission	-			❍					
Clean all belts, pulleys, etc.	-			❍					
Lubricate pivot (nipple)	38			●					
Lubricate belt tensioner (nipple)	38			●					
Lubricate triangle link (nipple)	38			●					
Lubricate seat suspension	-			❍					
Lubricate all wires	38			●					
Lubricate safety lock on cutting unit	29			●					
Lubricate inner stud on cutting unit	29			●					
Lubricate slot for cutting unit tool frame	29			●					
Lubricate bearing surfaces on cutting unit	29			●					
Clean inside frame tunnel	-			❍					
Lubricate pedal mechanism inside frame tunnel	-			❍					

MAINTENANCE

Maintenance	Page	Daily maintenance before	Daily maintenance after	Weekly[3] maintenance	At least once a year	Maintenance interval in hours 25	50	100	300
Lubricate throttle control	-			❍					
Lubricate choke control	-			❍					
Smörj styrkedja i ramtunnel.	-			❍					
Lubricate steering chain inside frame tunnel	-			❍					
Clean engine cooling air intake	21				●	●			
Clean pre-filter or oil-foam element, if fitted	25				●	●			
Clean air filter cartridge[2]	25				●	●		●	
Change engine oil[1]	37				●		●		
Check/adjust cutting height setting	28				●		●		
Check/adjust parking brake	24				●		●		
Inspect flame guard/spark arrestor (optional equipment)	-				❍		❍		
Replace engine oil filter	38				●			●	
Clean/replace spark plugs	-				❍			❍	
Replace fuel filter in pipe	41				●			●	
Clean pulse-air filter	41				●			●	
Clean cooling system	-				❍			❍	
Check engine valve clearance[4]	-				❍			❍	
Check whether oil change[4] or filter change[4] are necessary for K66 gearbox (every 500 hrs)	-				❍			❍	
Replace air filter (pre-filter)[2]	25				●				●
Replace air filter (paper filter)[2]	25				●				●
Carry out 300 hour service[4]	-				❍				❍

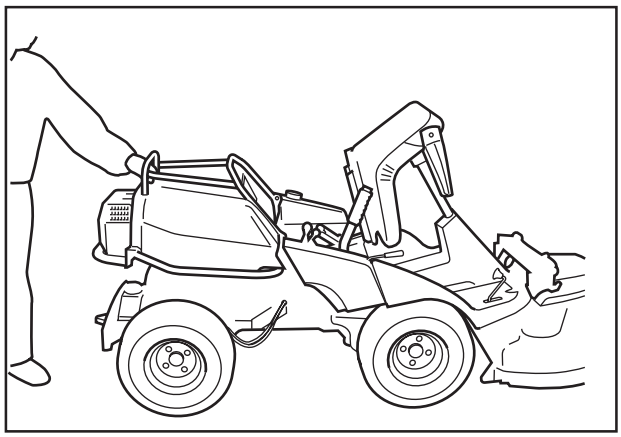
[1] First change after 5 hours. [2]When driving with a heavy load or when the ambient temperature is high, replace every 25 hours. Clean every 25 hours if pre-filter is not fitted. Clean and replace the filter more often in dusty conditions. [3] For daily use of the machine lubrication should be conducted twice a week. [4] Conducted by authorised service workshop.

● = Described in these instructions.
❍ = Not described in these instructions.

WARNING!
No service procedures must be conducted on the engine or cutting unit unless:

- **The engine is switched off.**
- **The ignition key is removed.**
- **The ignition cables are removed from the plugs.**
- **The parking brake is applied.**
- **The cutting unit is disengaged.**

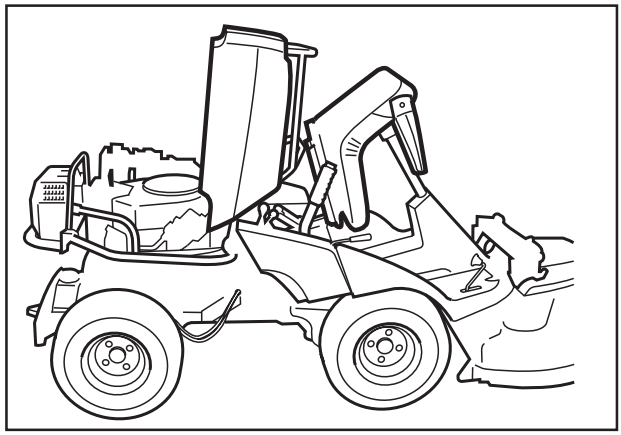
Dismantling of the machine hoods



Engine hood

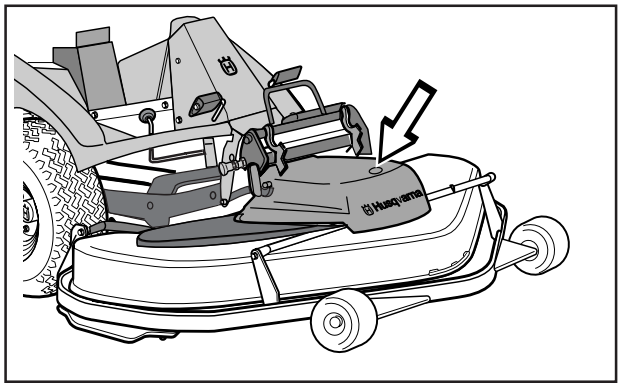
1. Tip up the seat.
2. Turn the main catch on top of the engine hood 1/4 turn anti-clockwise.
3. Lift up the engine hood.

If necessary the engine hood can be removed by taking out the hinge pins.



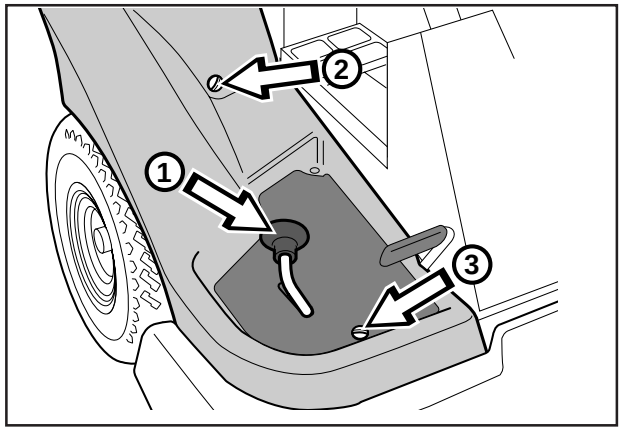
Nose

Loosen the quick-action lock and lift off the nose.

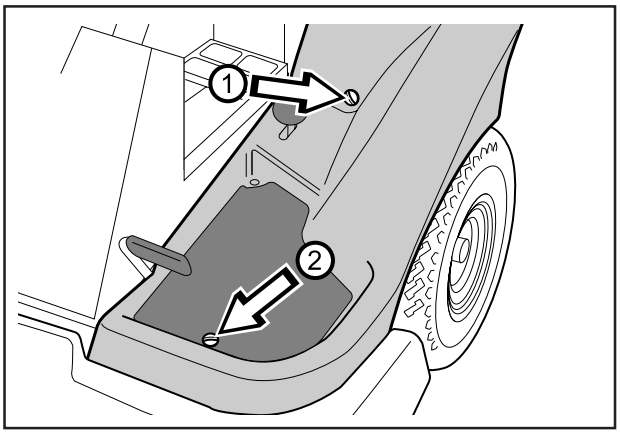


Right-hand fender

Dismantle the foot-plate (1), screws (2 and 3), and lift off the fender.



Left-hand fender
Disengage the wire from the differential lock pedal. Dismantle the screws (1 and 2), and lift off the fender.



Check the engine's oil level

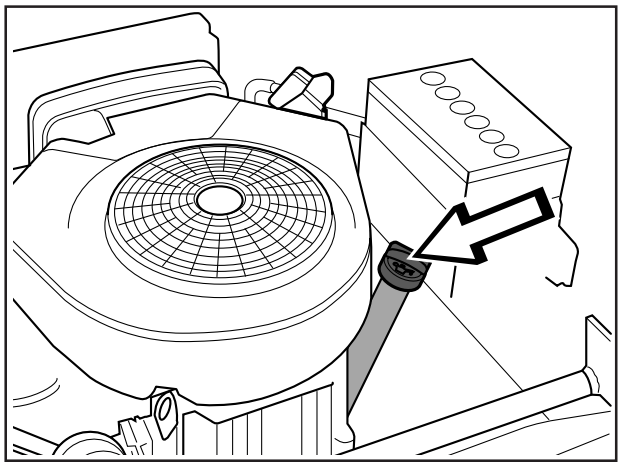
Check the oil level in the engine when the machine is horizontal.

Open the engine hood.

Take out the dip stick, wipe off the oil, and insert again.

The dip stick must be fully screwed down.

Now take out the dip stick again and check the oil level.

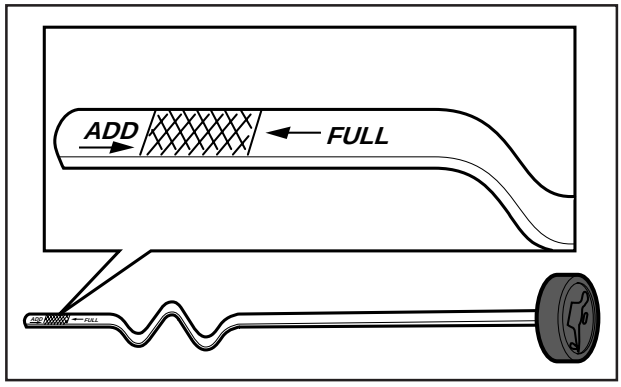


The oil level should lie between the markings on dip stick. If the level approaches the ADD mark, top up with oil to the FULL mark on the dip stick.

The oil is filled in the same hole as the dip stick is in.

Use engine oil SAE 30 or SAE 10W-30, class CD–CF (over 0°). Use engine oil SAE 5W-30, class CD–CF (below 0°).

The total oil volume in the engine is 1.4 litres.

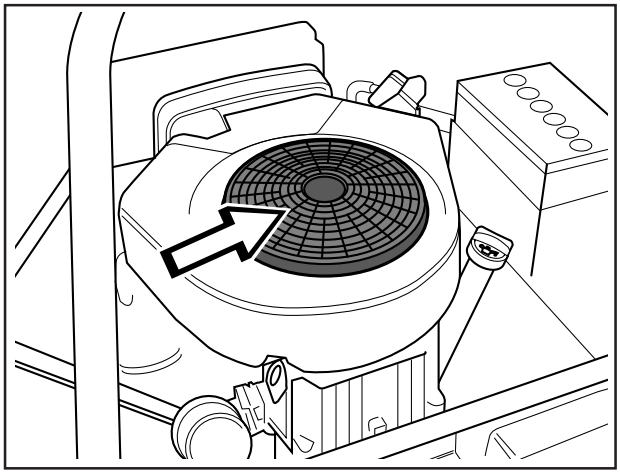


Check the engine's cooling air intake

Open the engine hood.

Check that the cooling intake is free from leaves, grass and dirt.

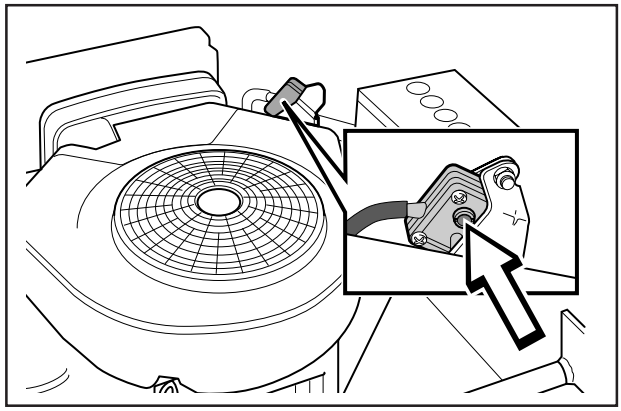
If the cooling intake is blocked this will interfere with the cooling of the engine, which can damage the engine.



Checking of the fuel pump's air filter

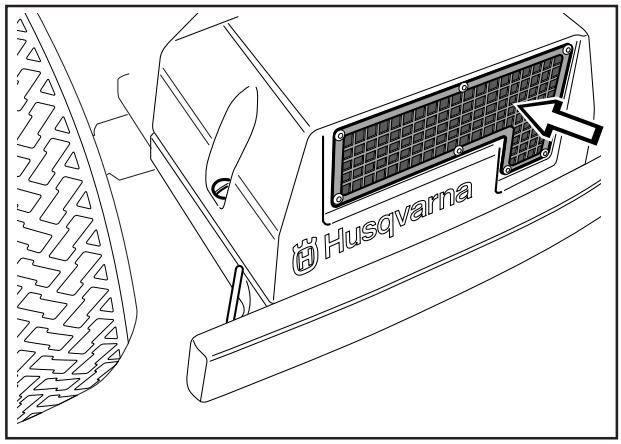
Check regularly that the fuel pump's air filter is free from dirt.

The filter can when necessary be cleaned with a brush.



Check the transmission's air intake

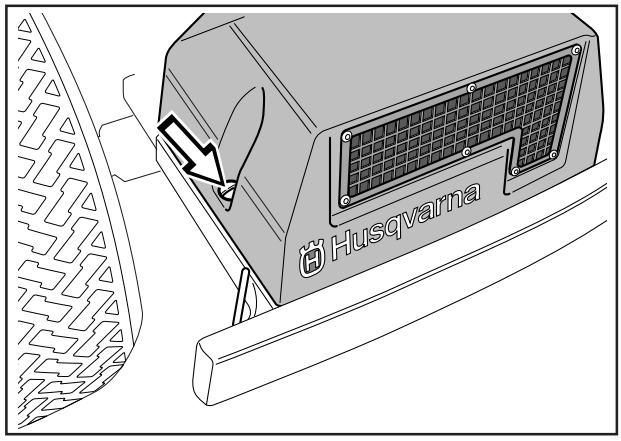
Check that the transmission's air intake in not blocked.



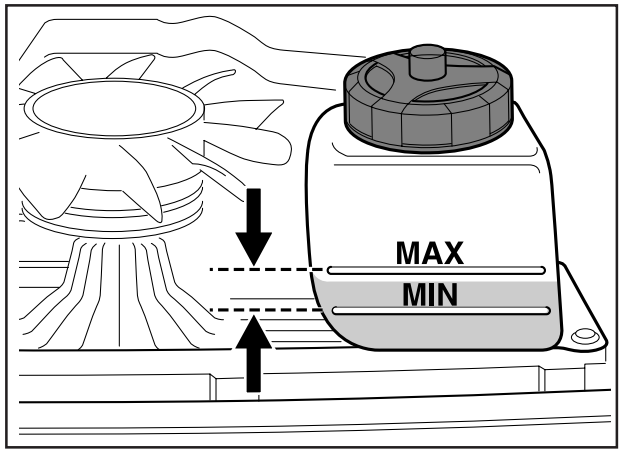
Check the transmission's oil level

1. Check the transmission's oil level by looking through the mesh on the air intake. The oil level should lie between the MIN and MAX markings on the oil canister at 20° C.

   If oil needs to be added the transmission cover must be dismantled first. Release the two screws (one on each side) and then lift off the transmission cover.



2. Screw off the oil canister cap and top up with engine oil SAE 10W/30, class CD–CF, until the oil level reaches the MAX marking. Screw the oil canister cap back on, and fit the transmission cover.



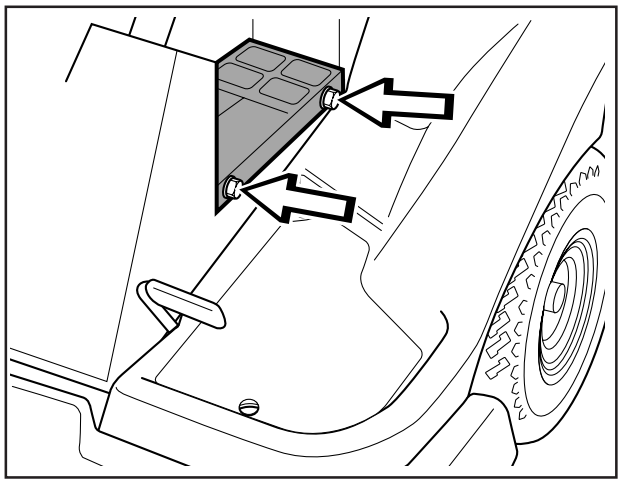
Checking and adjustment of the steering wires

The steering is controlled by means of wires.

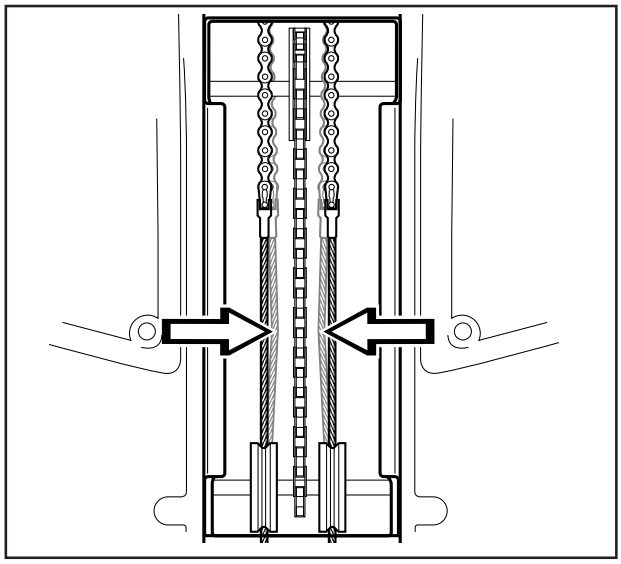
These can in time become slack, which implies that the adjustment of the steering becomes altered.

Check and adjust the steering as follows:

1. Dismantle the frame-plate by releasing the screws (two on each side).

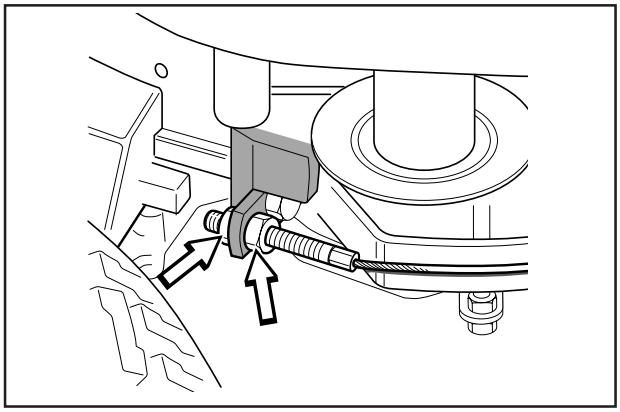


2. Check the tension of the steering wires by pushing them together (at the arrows).
   It should be possible to push them together so that the distance between them is half as much, without using unnecessary force.



3. When necessary the wires can be tensioned by tightening the adjusting nuts (one on each side of the machine).
   Do not tension the wires too tightly, they should only be *tightened up* to the steering rim.

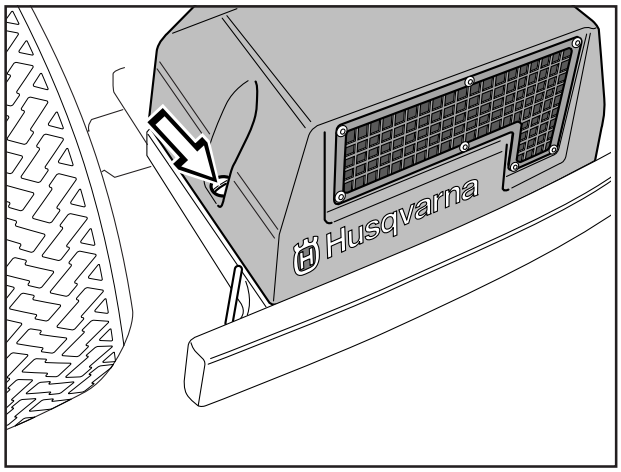
   Check the wire tension on completion of the adjustment as per item 2.



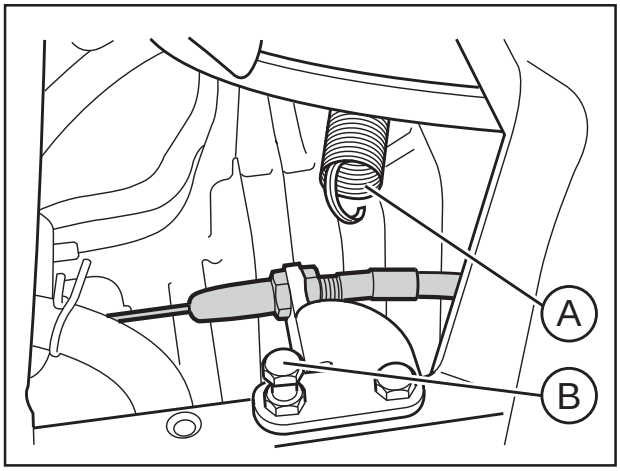
Adjusting the brakes

The parking brake (on the right) is adjusted as follows:

1. Remove the transmission cover. Unscrew the two screws (one on each side) and lift off the transmission cover.
2. Unhook the spring (A) from the screw (B).



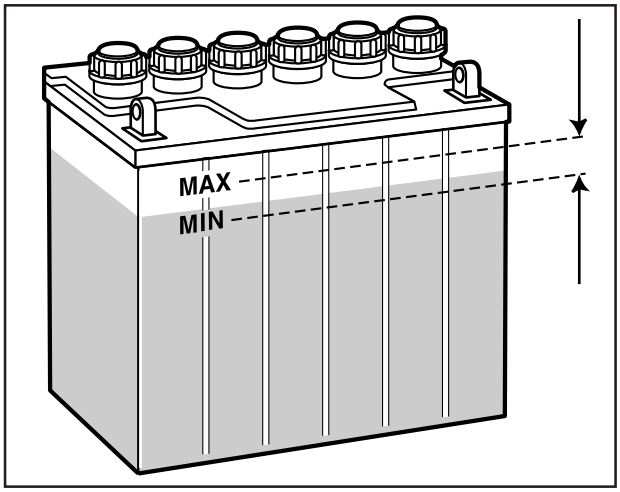
3. Make sure the parking brake is released.
4. Adjust so there is 1 mm play between the outer cable and the adjuster screw when you pull the outer cable.
   Adjust the adjuster screw using the nuts.
5. Tighten the nuts carefully to prevent damaging the adjuster screw.
6. Refit the spring (A).



WARNING!
Poorly adjusted brakes can result in reduced braking power.

Check the level of the battery acid

Check that the level of the battery acid lies between the markings. Top up the cells with distilled water *only*.



WARNING!
Procedures on contact with acid

External: Rinse well with plenty of water.

Internal: Drink large quantities of water or milk. Contact a doctor as soon as possible.

Eyes: Rinse well with plenty of water. Contact a doctor as soon as possible.

Batteries emit explosive gas. Sparks, flames and cigarettes must absolutely not be brought into the vicinity of the battery.

Check the safety system

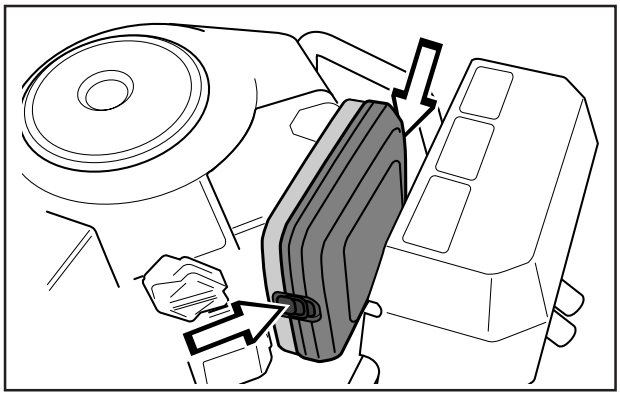
The machine is equipped with a safety system which prevents starting or driving the machine unless someone is sitting in the seat. It must not be possible to start the engine if the brake is not engaged or if the cutting unit drive is engaged. Check daily that the safety system functions.

Replacing the air filter

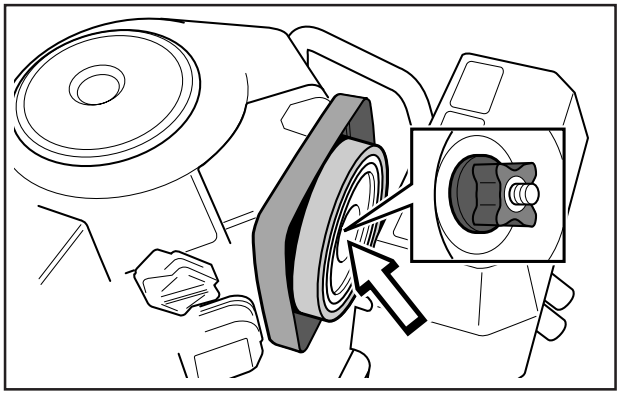
If the engine seems to lack power or does not run smoothly this may be because the air filter is clogged.
It is therefore important to replace the air filter at regular intervals (refer to maintenance schedule for correct service interval).

The air filter is replaced as follows:

1. Open the engine hood.
2. Fold out the two snap-locks and lift off the cover on the air filter housing.



3. Release and remove the wing-nut in the centre of the air filter and lift off the paper filter with pre-filter.

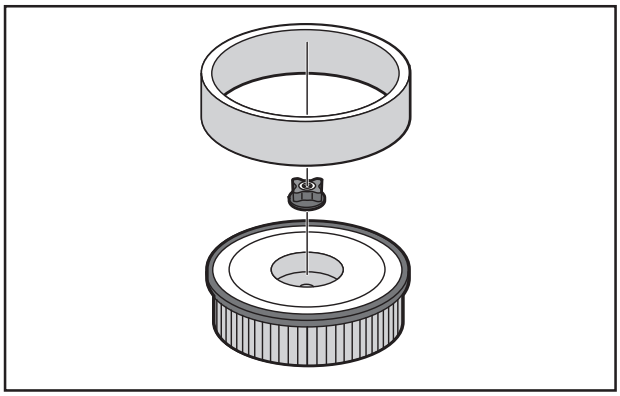


4. Pull off the foam plastic pre-filter from the paper filter and wash clean in mild detergent.

   Squeeze it dry in a clean cloth.

   Drench it with new engine oil. Wrap the filter in an absorbent cloth and squeeze out excess oil.

   If the paper filter is heavily soiled it should be replaced.



IMPORTANT INFORMATION

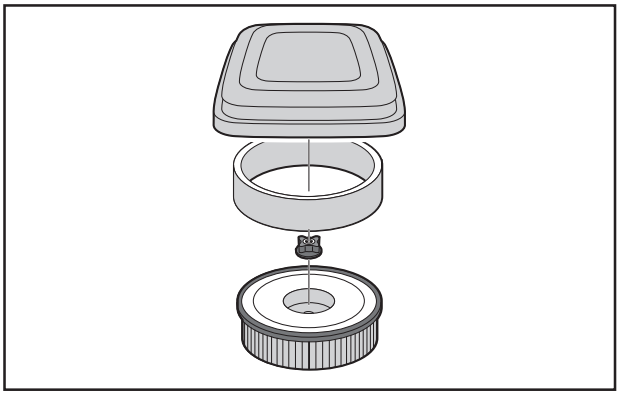
Do not use compressed air to clean the paper filter.

5. Fit the air filter as follows:

   Push the pre-filter over the paper filter.

   Fit the paper filter with pre-filter in the air filter housing and tighten the wing-nut in the centre.

   Replace the cover over the air filter housing and clamp the two snap-locks tight.

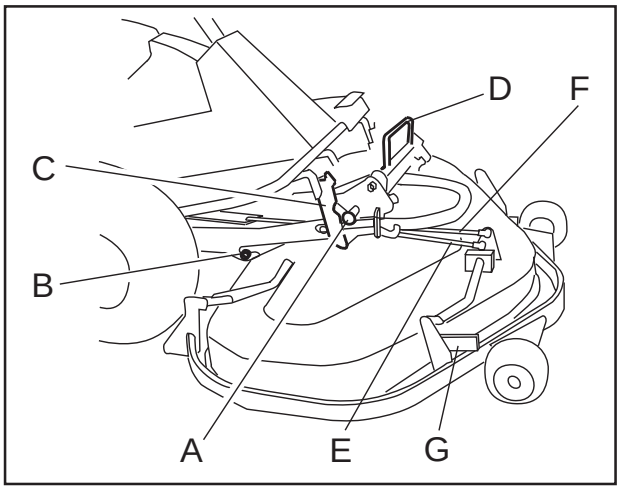


The parts of the cutting unit

A cutting unit with a rear ejector has been used in the instructions below, however, the same procedure applies to other units if not otherwise stated.

The parts mentioned are:

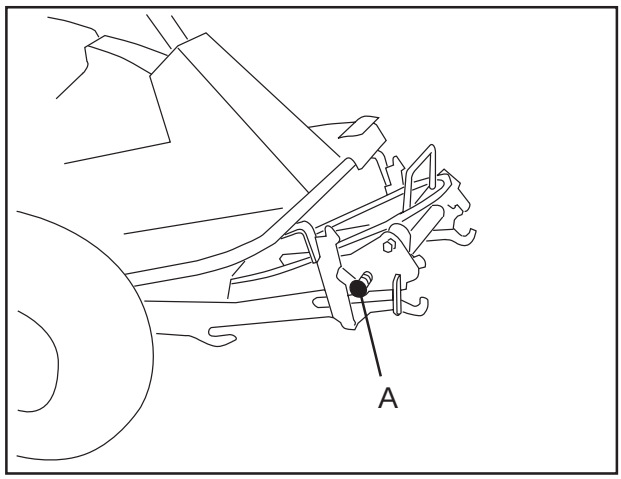
A. Catch
B. Inner pin
C. Hook guard
D. Handle
E. Height setting arm
F. Parallelism arm
G. Lowest height setting stop



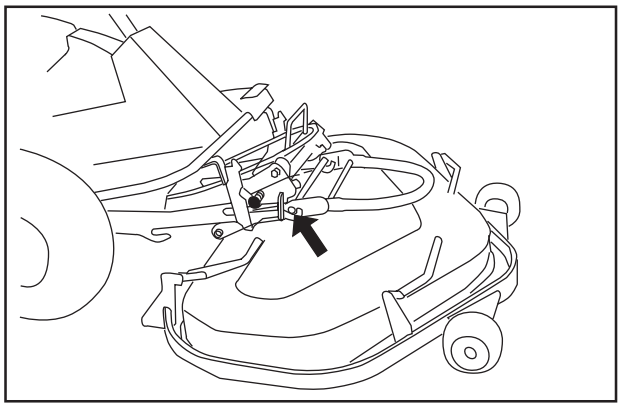
Fitting the cutting unit

Starting point for fitting the unit:

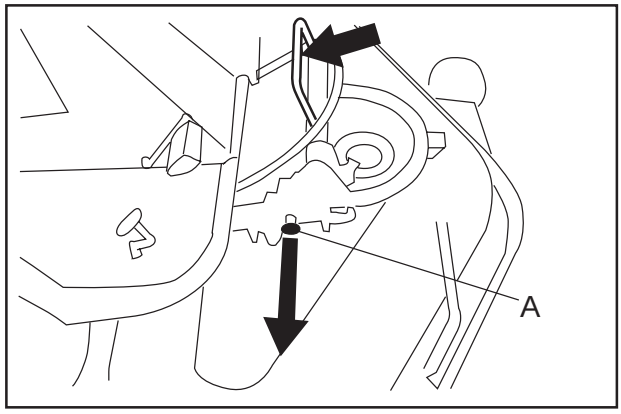
- Place the Rider on a level surface.
- Apply the brakes by pressing down the pedal and lock using the pushbutton.
- The attachment frame in the lowered position.
- The attachment frame locked with the hook guard and the catch (A) in the loaded position.



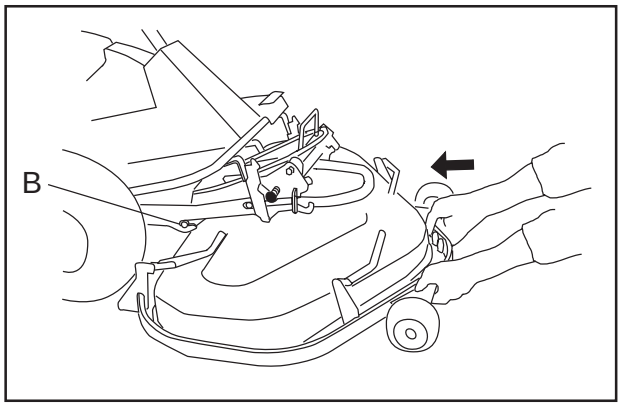
1. Fit the unit in the attachment frame's outer hooks.



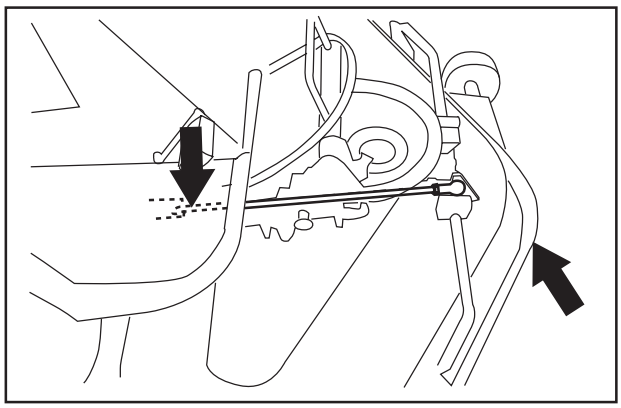
2. Pull out the catch (A) and release the hook guard by sliding its handle backwards.
3. Lift the attachment by pulling up the lever located on the driver's right-hand side.



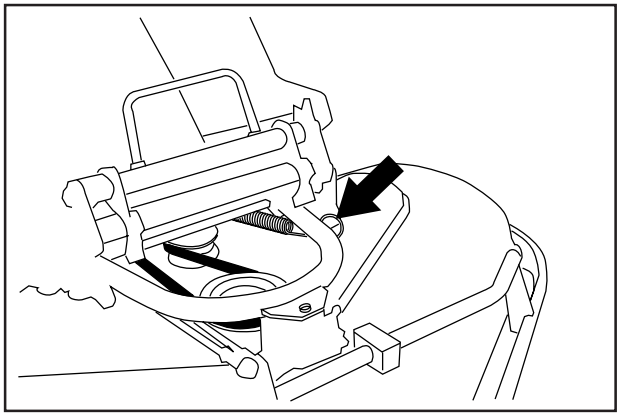
4. Slide in the unit so that the inner pins (B) bottom in the attachment frame's groove.



5. Fit the height setting arm's rear bracket when fitting the attachment. Off-load the arm by pulling the front of the frame upwards.



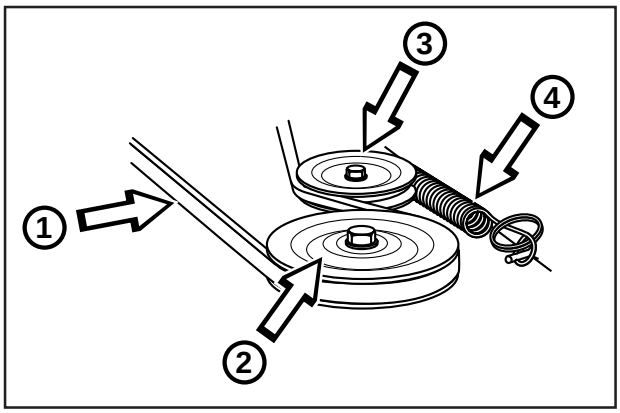
6. Remove the belt adjuster's spring and fit the belt on the front belt pulley.
7. Hook on the belt adjuster's spring again.



Note!
Check that the belt is fitted around the tension roller.

Belt diagram

1. Drive belt
2. Drive pulley
3. Tension roller
4. Spring



Setting the parallelism and height for the cutting unit with rear ejector and BioClip unit

The base unit is adjusted at the factory. When one of the attachments is fitted, the parallelism and height need to be adjusted.

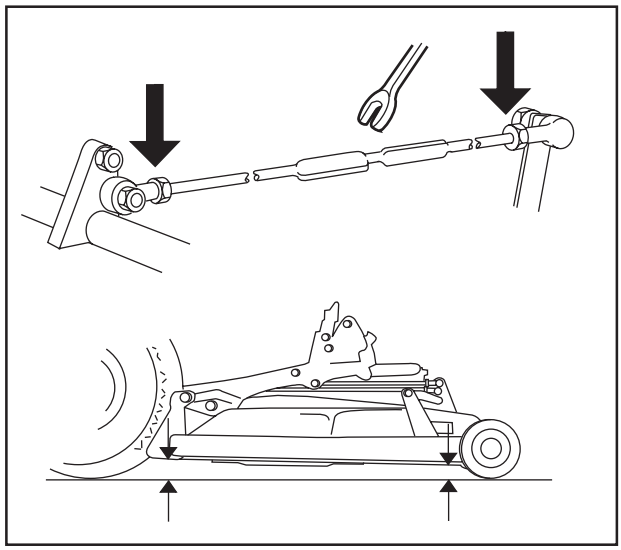
Starting point:

1. The cutting unit should be lowered on a level surface.
2. The height setting lever should be set for the lowest cutting height.

Parallelism

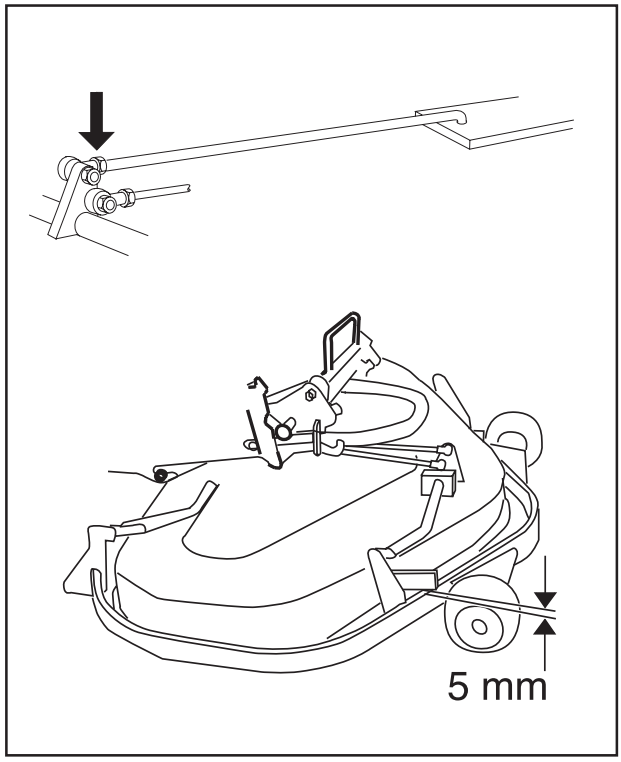
Always start by adjusting the parallelism.

1. Loosen the two nuts on the arm.
2. Measure the distance between the ground and the front edge of the unit, at the front and rear of the hood.
3. Place a wrench on the bevelled section in the centre of the arm and turn so that the rear edge of the cutting unit sits 2-4 mm higher than the front edge of the unit.
4. Check the measurements.
5. Now tighten the two nuts on the arm.



Cutting height

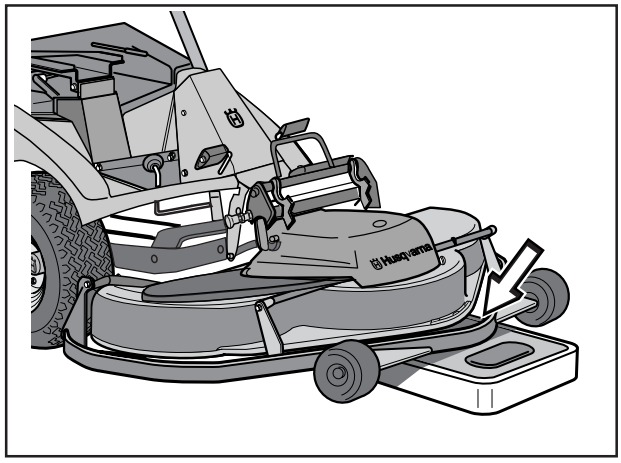
1. Loosen the nuts on the height setting arm.
2. Adjust so that the distance between the stop for the lowest height setting and the protective frame is 5 mm.
3. Tighten the nuts.
4. Check that the parallelism has not changed. If it has changed, the parallelism must be readjusted again.
5. Check and, if necessary, adjust the cutting unit's ground pressure as described in the next section.
6. Fit the nose.



NOTE!
The parallelism and height must be adjusted again when changing the cutting unit.

Checking and adjustment of the cutting unit's ground pressure

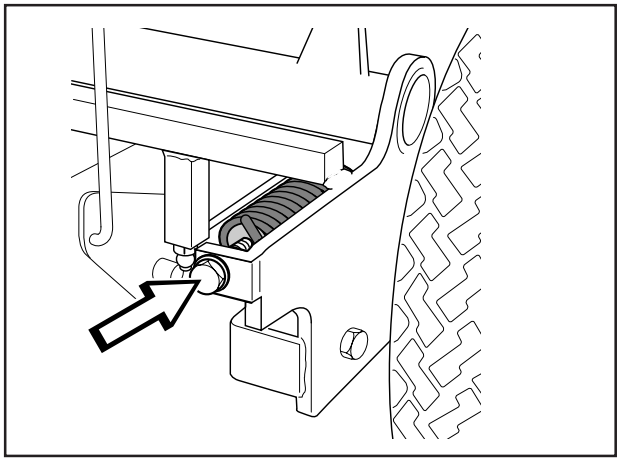
To achieve the best cutting results the cutting unit should follow the underlying surface without pressing too hard against it.
The pressure is adjusted with a screw on each side of the machine.



Adjusting of the cutting unit's ground pressure is conducted as follows:

1. Place a set of bathroom scales under the cutting unit's frame (front edge) so that it rests on the scales. If necessary a block can be placed between the frame and scales so that the support wheels do not bear any weight.
2. Adjust the unit's ground pressure by screwing in or out the adjusting screws located behind the front wheels on both sides.

   The ground pressure should be between 12 and 15 kg.



Lubricating the cutting unit

Remove the front hood

Lubricate using an oil can:

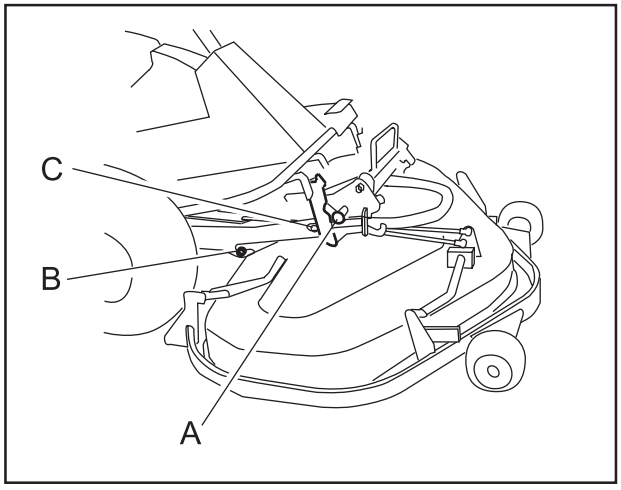
A. Safety catch

- Joints and bearings

Lubricate with grease:

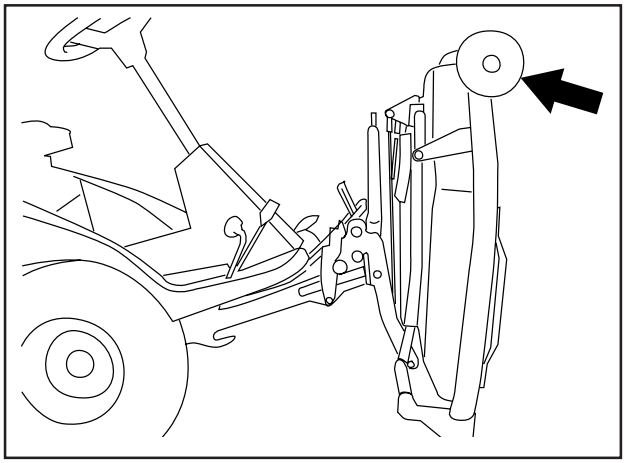
B. Inner stud

C. Slot for tool frame



Service position for the cutting unit

The cutting unit can be set in a service position to provide good access for cleaning, servicing and repair. The service position means that the unit is raised and locked in the vertical position.

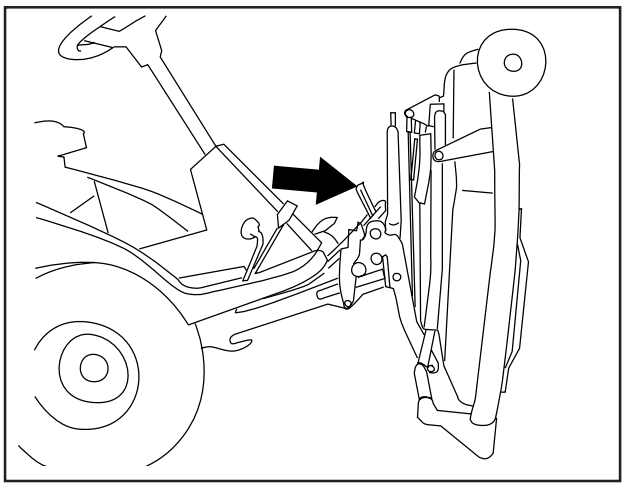


Placing in the service position

1. Position the unit so it hangs over the outer hooks by carrying out sections 1–11 under “Dismantling the unit”.
2. Take hold of the front edge of the unit and lift it vertically. The unit is automatically locked in the vertical position.

Releasing from the service position

1. Loosen the top edge of the unit (move it backwards), move the handle forwards and slowly lower the unit to its horizontal position.
2. Slide the unit into its working position by carrying out sections 4–8 under “Assembling the unit”.

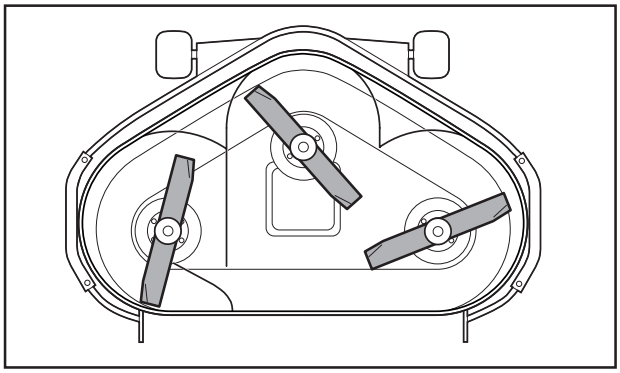


Checking the blades

To achieve the best mowing results it is important that the blades are undamaged and well-sharpened.

Check that the blades’ attachment screws are tight, (45–60 Nm, 33–44 lb.ft)

The spring washer and break-pin should also be replaced when replacing the blades.



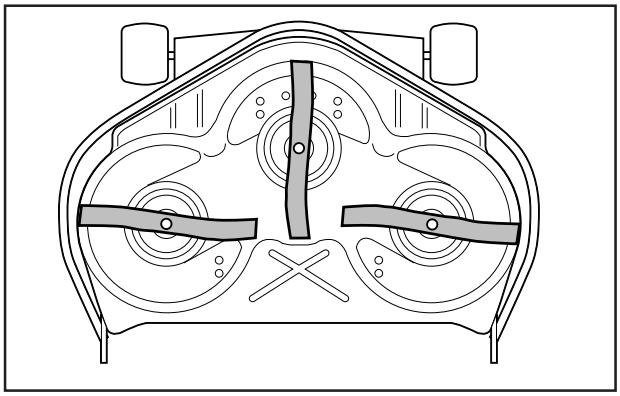
Cutting unit with rear ejector

IMPORTANT INFORMATION

Replacing or sharpening the blades should be conducted by an authorised service workshop.

IMPORTANT INFORMATION

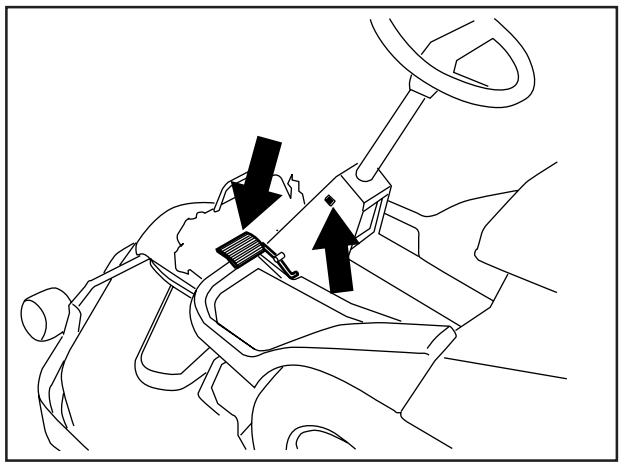
The Bioclip unit should always have the blades in the relative positions shown in the diagram, with a 90° angle between the blades. Otherwise the blades can go against each other and cause serious damage to the unit.



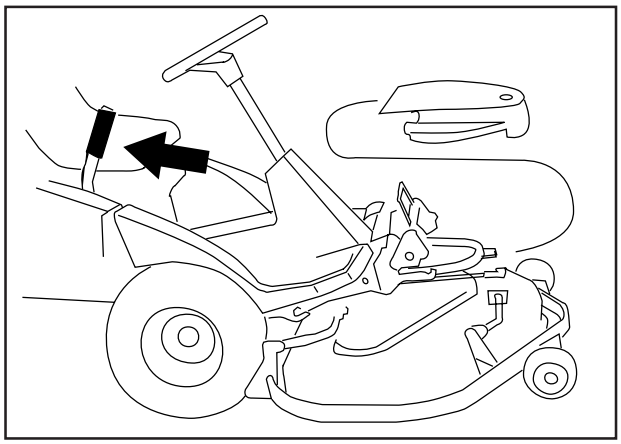
BioClip unit

Dismantling the cutting unit

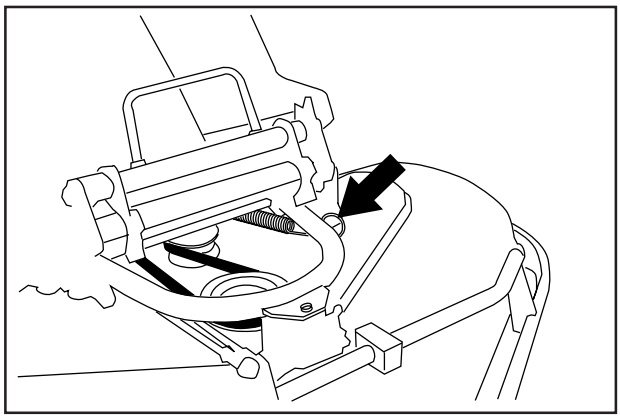
1. Place the Rider on a level surface.
2. Apply the brakes by pressing down the pedal and lock using the pushbutton.



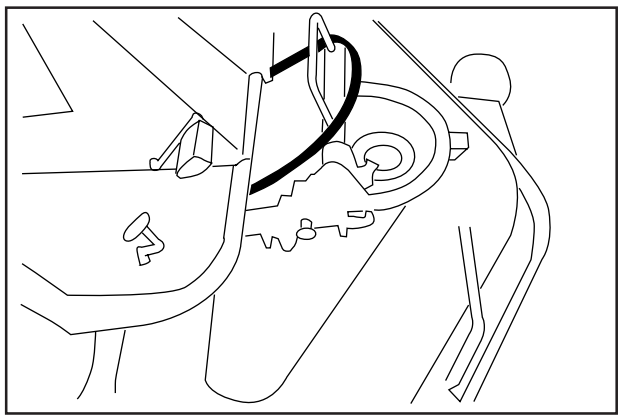
3. Lift up the unit using the lifting lever.
4. Remove the nose.



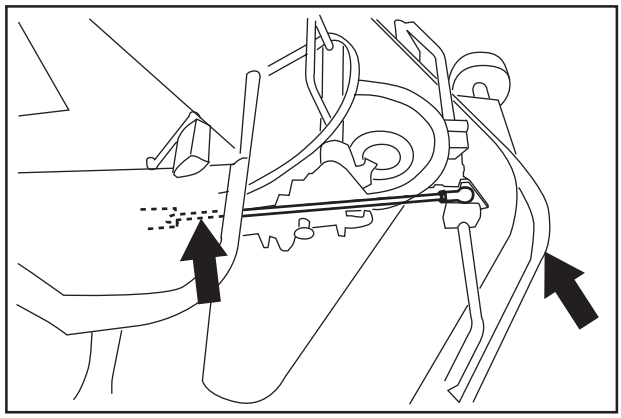
5. Remove the belt adjuster's spring.
6. Lift off the belt from the belt pulley.
7. Hook on the belt adjuster's spring again.



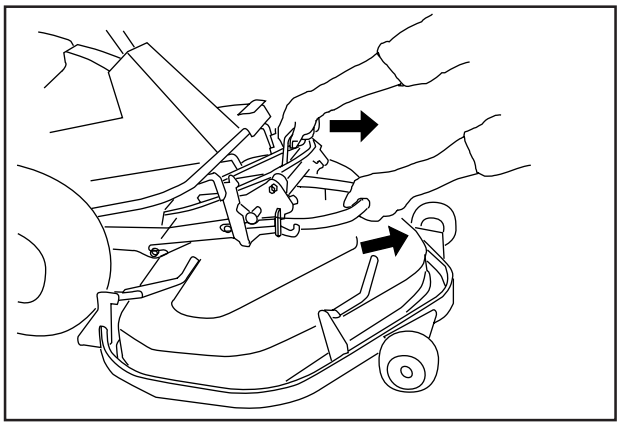
8. Hang the belt around the handle.



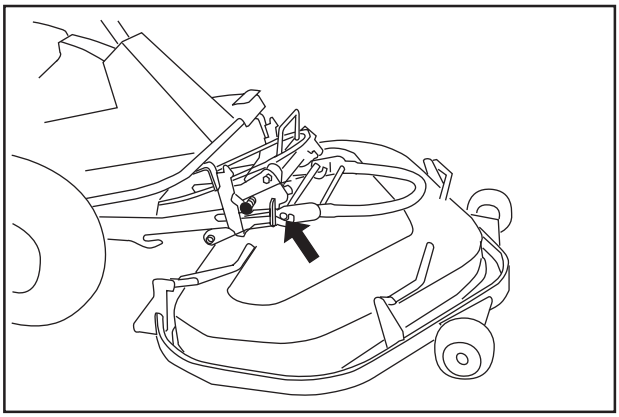
9. Loosen the height setting arm by moving the rear section upwards. When dismantling the cutting unit, off-load the arm by pulling the frame's front section upwards.



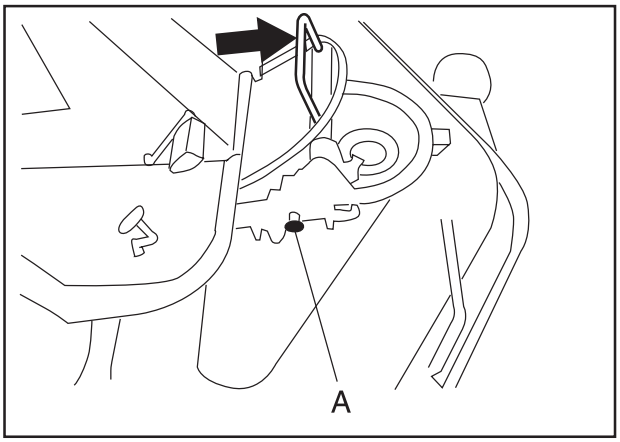
10. Pull the handle and unit simultaneously. Release the handle when the unit has come out a little.



11. Pull out the unit so that it engages in the outer hooks.
12. Lower the unit using the lever on the right-hand side of the driver.



13. Pull the handle so that the hook guard locks. Check that the catch (A) is in its loaded position.
14. Lift the unit off of the Rider.



Dismantling the belt

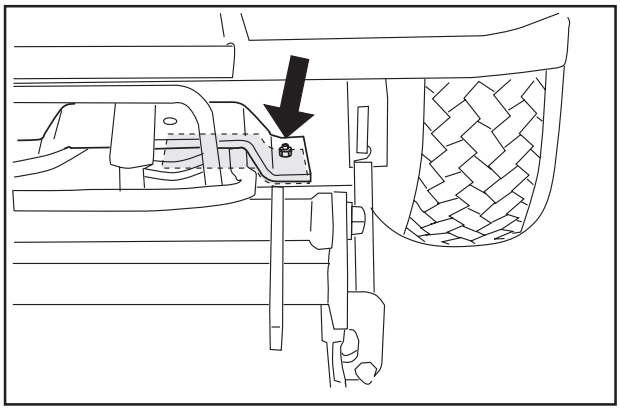
Starting point when dismantling the belt:

- No unit attached to the Rider.
- The front of the belt is hung around the hook guard’s handle.

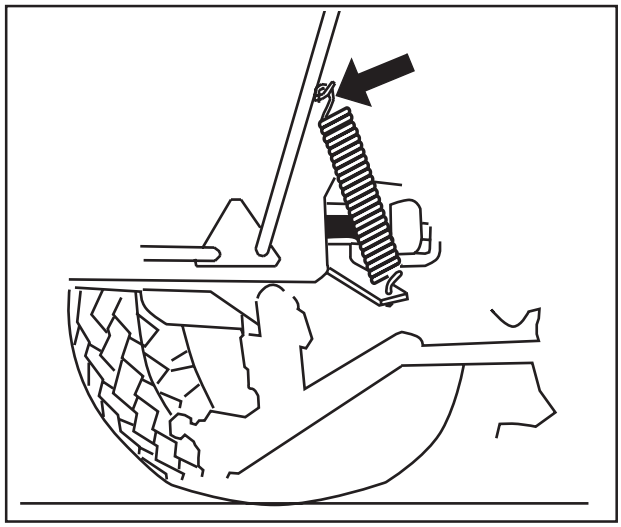
The method of disengaging the front section of the belt from the front pulley is described in steps 5–8 under “Removing the cutting unit”.

The entire belt is only dismantled as set out below, when the snow plough is fitted on the Rider.

1. Dismantle the steering plate under the support wheel. Use two 13 mm socket spanners.

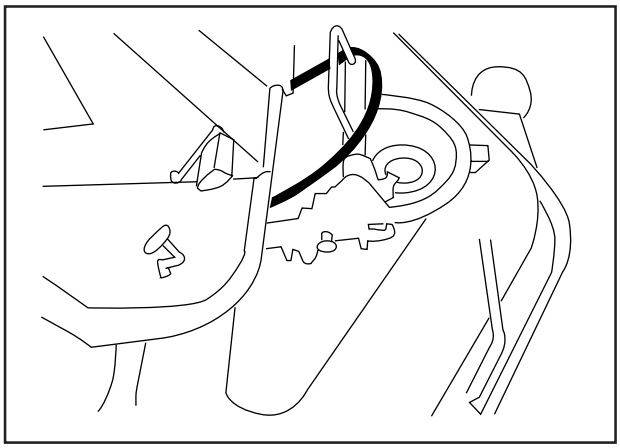


2. Unhook the spring on the blade brake.
3. Pry off the belt from the intermediate pulley and remove the belt.

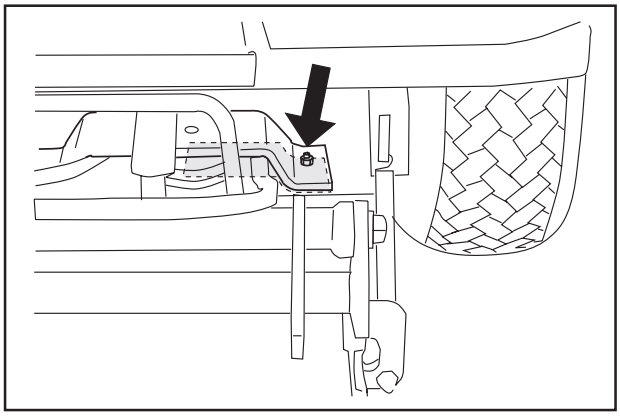


Assembling the belt

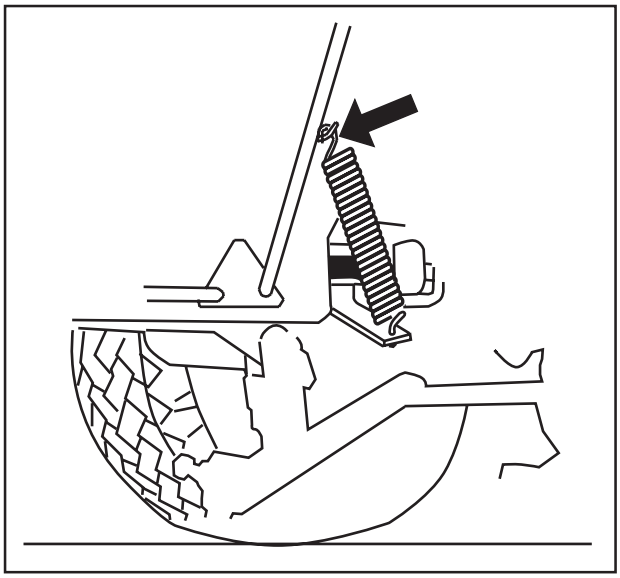
1. Position the belt from the front and let the front end of the belt hang around the hook guard's handle.
2. Fit the belt on the intermediate pulley and against the support wheel.



3. Fit the steering plate under the support wheel and tighten the bolts using two 13 mm socket spanners.



4. Hook on the spring for the blade brake.



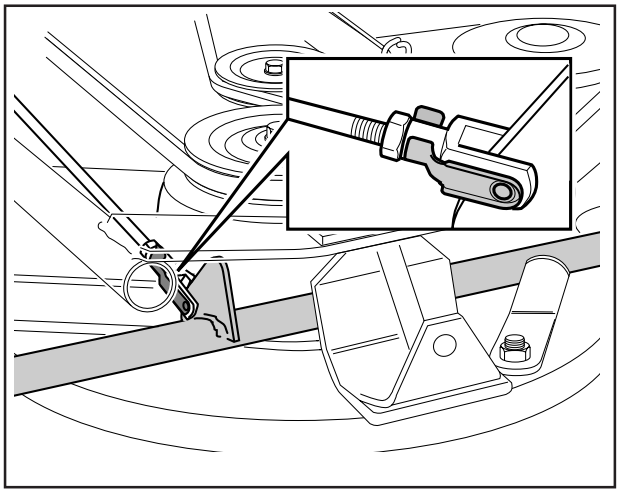
The method of fitting the belt over the front pulley is described in steps 6–7 under "Fitting the cutting unit".

Replacing the cutting unit's belts

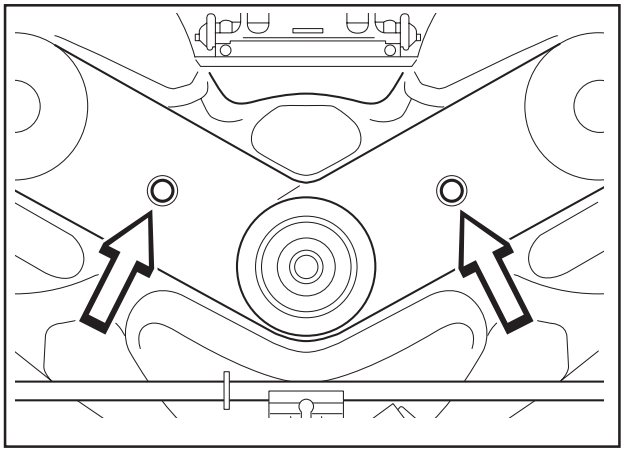
Belt replacement on the BioClip unit

Two transmission belts that synchronise the rotation of the blades power a BioClip unit. The belts are located under a hood on the cutting unit.

1. Loosen the parallelism arm's front pin/bolt and fold the arm backwards.



2. Loosen the two bolts holding the protective hood and then lift off the hood.

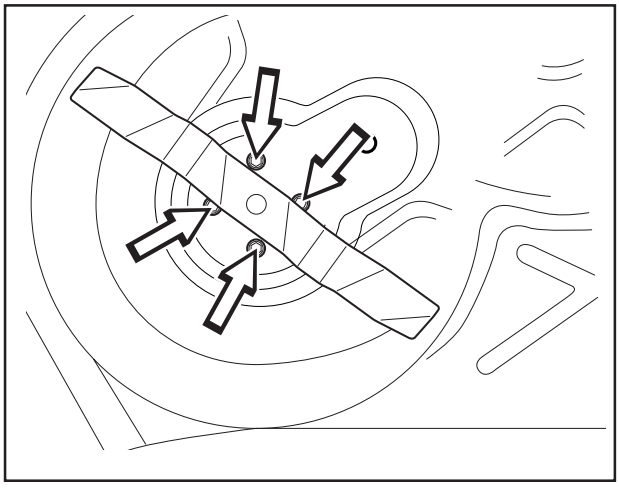


3. Loosen the nuts on the eccentric plate and turn this away.

   Loosen the four nuts (see diagram) holding the outer blade bearing enough so that the bearing can be moved.

   Slide the blade bearing in towards the centre bearing and pry off the upper belt.

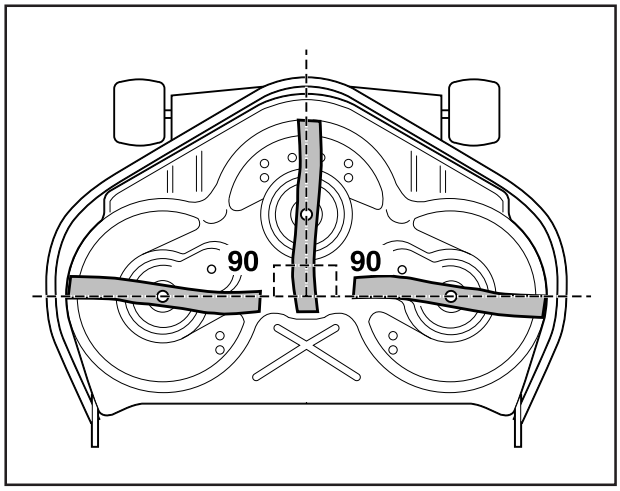
   Repeat the procedure for the lower belt.



WARNING!
Protect your hands by wearing gloves when working with the blades.

IMPORTANT INFORMATION

The blades on a BioClip deck should be set at 90 degrees to each other. In all other cases the blades can collide and cause serious damage to the cutting unit.



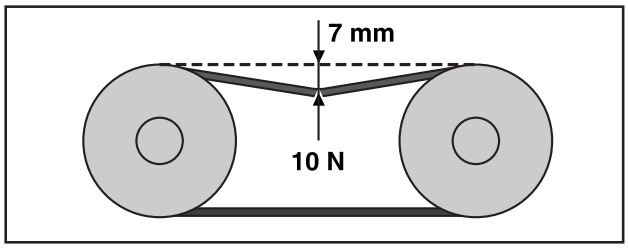
4. Assembly: First fit the lower belt and then the upper belt.

   Ensure the blades are positioned as set out in the diagram, at 90 degrees to each other, otherwise the belts must be adjusted. When the blade bearings are loose the belts can be moved around to the next tooth.

   Tighten the nuts enough so that the bearings rest against the cutting hood but still can be moved.

   Tension the belt by turning the eccentric adjuster on top of the cutting hood. Tighten the nut.

   Tighten all nuts on the blade bearings.

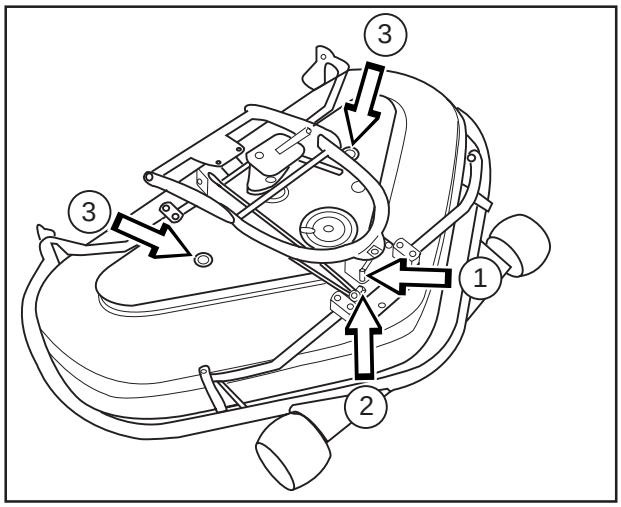


5. When the belt can be moved 7 mm inwards using a force of 10 N the belt is adjusted correctly.

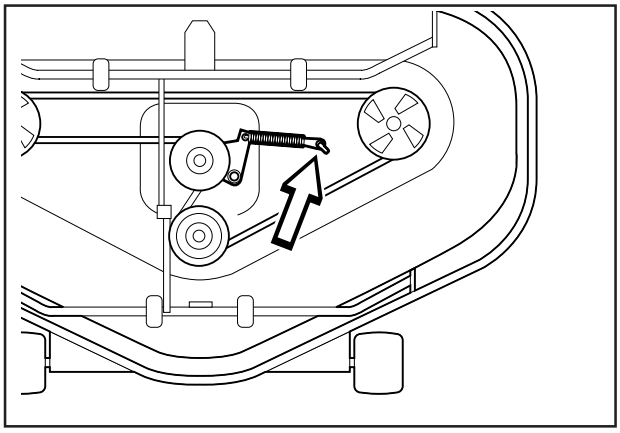
   Fit the protective cover over the belts and replace the parallelism arm.

Belt replacement on cutting unit's with side or rear ejectors

Cutting units with side or rear ejectors are powered by *one* V-belt. Proceed as follows to replace the V-belt:



1. Loosen the unit frame (1), the bolt on the parallelism arm (2) and the two bolts on the hood (3). Lift off the cutting unit's hood.



2. Loosen the spring that tensions the V-belt and pry off the belt.

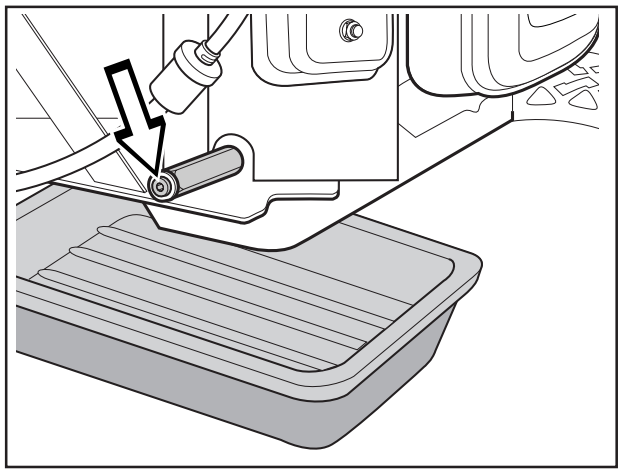
   To fit a new belt, follow the instructions above in the reverse order.

Changing the oil

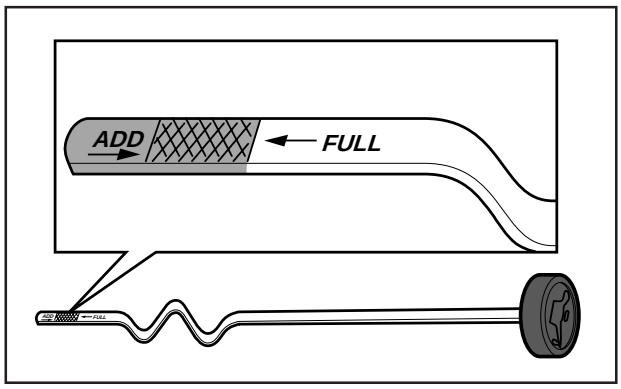
The oil should be changed for the first time after 8 hours of running time. Thereafter it should be changed every 50 hours of running time. If the engine is run hard or during high temperatures the oil should be changed every 25 running hours.

WARNING!
Engine oil can be very hot if it is drained off directly after the engine is stopped. Therefore allow the engine to cool down first.

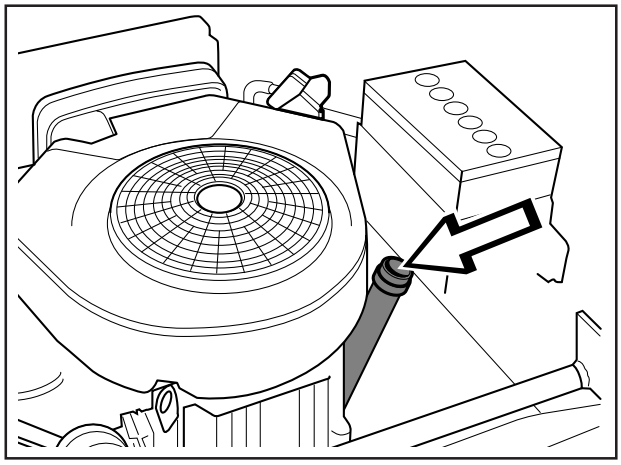
1. Open the engine hood.
2. Place a receptacle under the engine's drain plug.
3. Remove the dip stick. Remove the drain plug on the left-hand side of the engine.
4. Let the oil run out into the receptacle.
5. Fit the oil plug and tighten well.



6. Fill up with oil to the FULL mark on the dip stick. Use engine oil SAE 30 or SAE 10W-30, class CD–CF (over 0°). Use engine oil SAE 5W-30, class CD–CF (below 0°). The total oil volume in the engine is 1.3 litres.
7. Run the engine warm and then check that there is no leakage from the oil plug.



The oil is filled in the same hole as the dip stick.



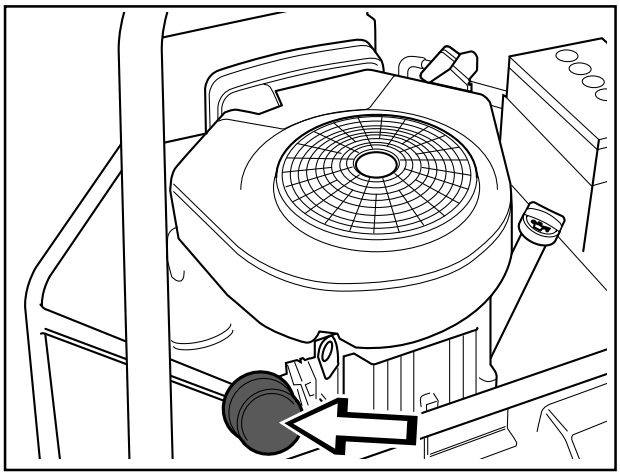
IMPORTANT INFORMATION

Used engine oil is hazardous to health

and must by law not be poured out on the ground or in the nature, but shall be handed in to a workshop or special environmental station. Avoid skin contact, wash with soap and water in the event of spillage.

Replacement of the oil filter

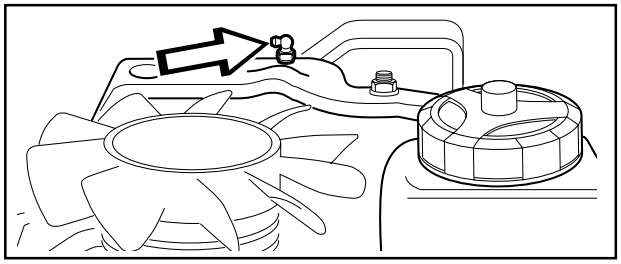
1. Open the engine hood.
2. Drain off the engine oil according to the work description “Changing of engine oil”.
3. Dismantle the oil filter. If necessary use a filter extractor.
4. Apply new, clean engine oil on the seal for the new filter.
5. Fit the filter and tighten by hand.
6. Run the engine warm and check that there is no leakage round the oil filter seal.



Lubrication

The following three lubrication points shall be lubricated regularly with graphite grease of good quality.

In the event of daily use lubrication should be conducted twice a week.



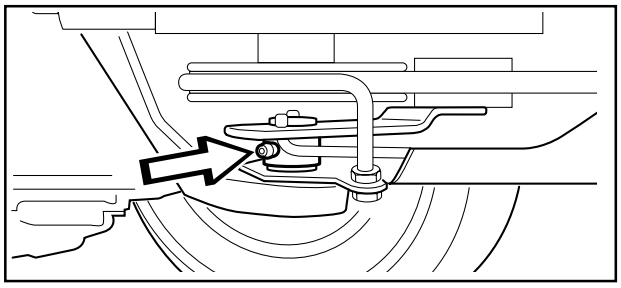
General lubrication

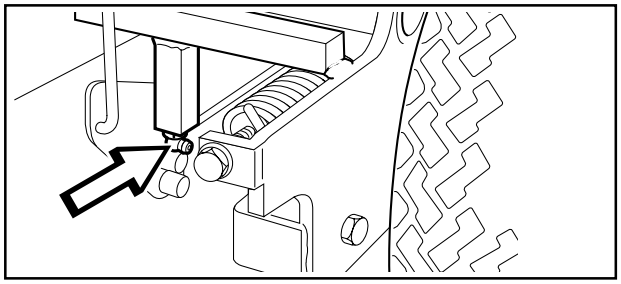
All joints and bearings are lubricated on manufacture with molybdenum sulphide grease.

Re-grease with same type of grease.

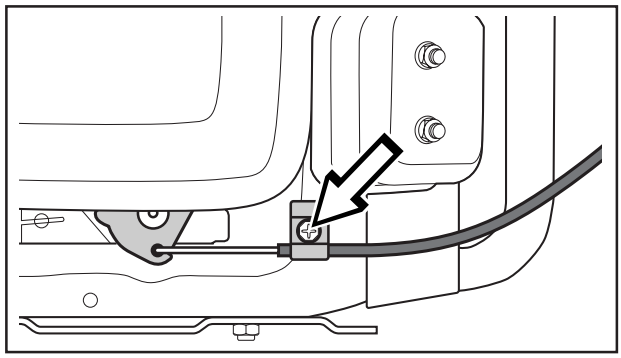
Lubricate the steering and control wires with engine oil.

Conduct this lubrication regularly: during daily use of the machine it should be lubricated twice a week.





Checking and adjustment of the throttle wire

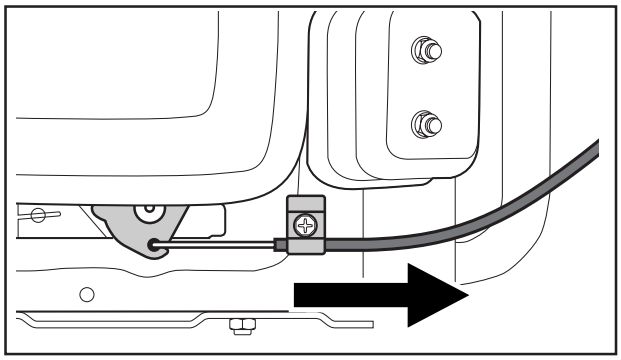


Check that the engine responds to the throttle control and that the correct engine speed is achieved at full throttle.

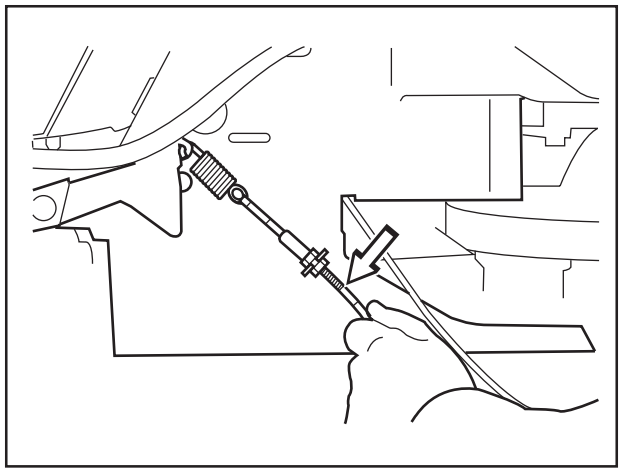
If in doubt, contact the service workshop

If necessary the following adjustment can be made:

1. Release the clamping screw and push the throttle control to full throttle position.
2. Pull the throttle wire's outer casing to the right and tighten the clamping screw.



Adjusting the differential lock



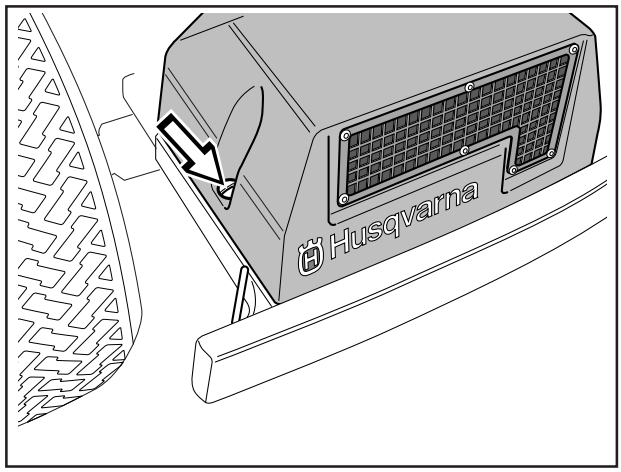
The differential lock (on the left) is adjusted as follows:

1. Make sure the differential lock is disengaged, with the pedal fully raised.
2. Adjust so there is zero play between the outer cable and the adjuster screw, using the two nuts on the adjuster screw. You should not feel any play when you pull the outer cable.
3. Tighten the nuts carefully to avoid damaging the adjuster screw.

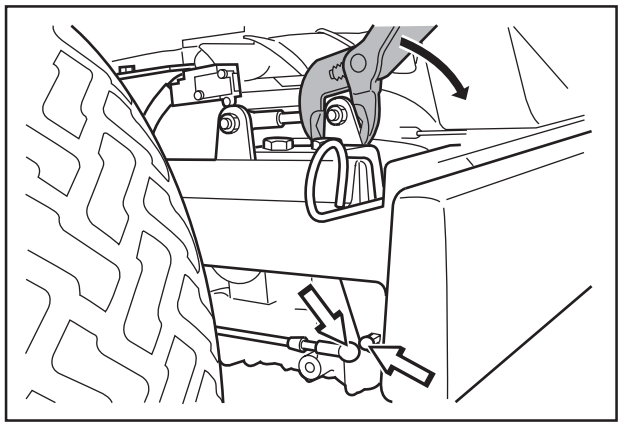
Adjusting the hydrostatic wire

The hydrostatic wire (on the left) is adjusted as follows:

1. Remove the transmission cover. Unscrew the two screws (one on each side) and lift off the transmission cover.
2. Separate the lower ball joint, which is secured with a spring clip.
3. Make sure the forward drive pedal is fully depressed.



4. Raise the arm as far as possible and check that the ball and socket of the lower ball joint match up.
5. Adjust the socket on the wire if required.
6. Reassemble the low ball joint.
7. Refit the ball joint spring clip.



Checking the tyre pressure

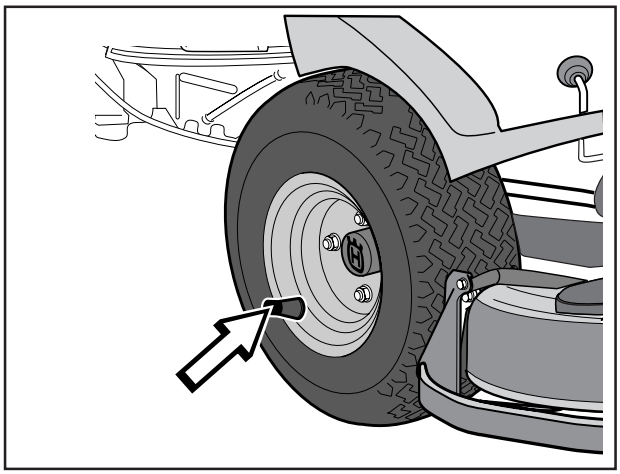
The tyre pressure should be 60 kPa (0.6 kp/cm^2) all round.

To improve driving the pressure on the rear tyres can be reduced to 40 kPa (0.4 kp/cm^2).

The maximum tyre pressure is 100 kPa (1.0 kp/cm^2).

IMPORTANT INFORMATION

Different tyre pressures on the front tyres will result in the blades cutting the grass at different heights.

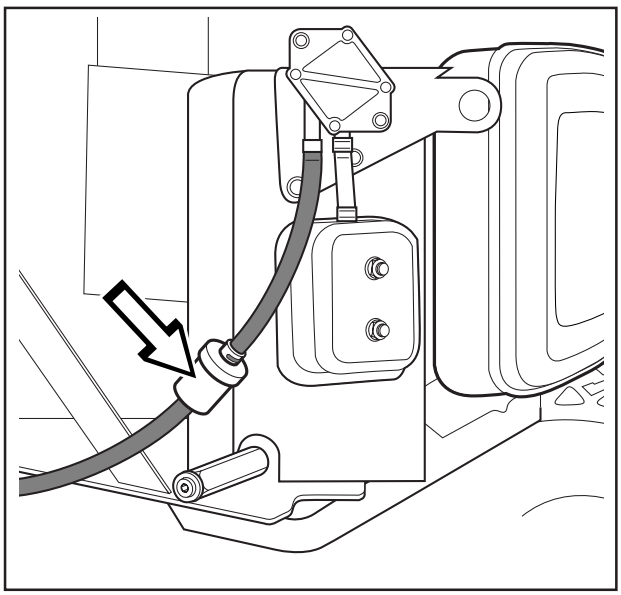


Replacement of the fuel filter

Replace the fuel filter every 100 running hours (once per season) or more frequently if it is clogged.

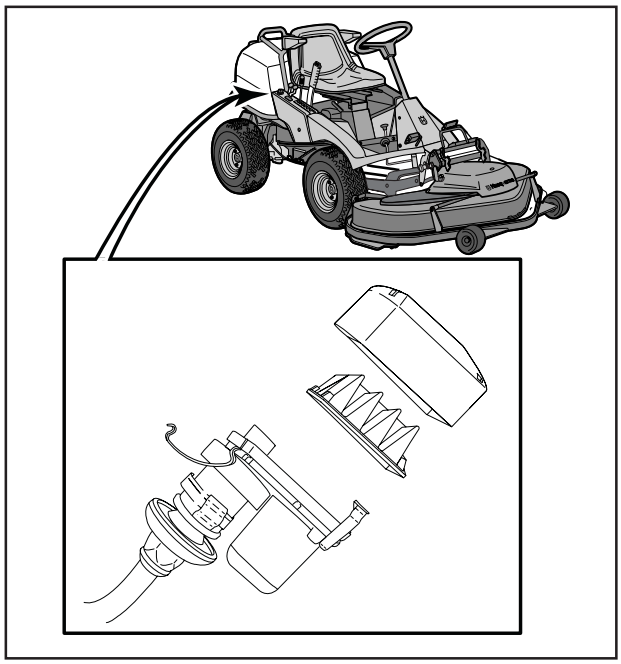
Replace the filter as follows:

1. Open the engine hood.
2. Move the hose clips away from the filter. Use a pair of flat pliers.
3. Pull off the filter from the hose ends.
4. Press in the new filter on the hose ends. If necessary soap solution can be applied on the filter ends to simplify fitting.
5. Push the hose clips back on the filter and tighten.



Cleaning the pulse air filter

1. Open the engine hood.
2. Loosen the four quick-action clips and lift off the cover and remove the filter.
3. Blow out the filter using compressed air.
4. Replace the filter in the cover and secure the cover using the quick-action clips. Replace the engine hood.



TROUBLE SHOOTING SCHEDULE

Problem	Procedure
Engine will not start.	• Fuel tank empty. • Plugs defective. • Plug connections defective. • Dirt in carburettor or fuel pipe.
Starter does not pull round engine.	• Battery flat. • Bad contact between cables and battery terminals. • Lift lever for cutting unit in wrong position. • Main fuse blown. The fuse is located in front of the battery under the battery cover. • Ignition lock faulty. • Brake not engaged • Gear shift/hydrostat pedal not in neutral.
Engine does not run smoothly.	• Plugs defective. • Carburettor incorrectly set. • Air filter clogged. • Fuel tank vent blocked. • Ignition setting defective. • Dirt in fuel pipe.
Engine seems to have no power.	• Air filter clogged. • Plug defective. • Dirt in carburettor or fuel pipe. • Carburettor incorrectly set.
Engine overheats.	• Engine overloaded. • Air intake or cooling flanges blocked. • Fan damaged. • Too little or no oil in engine. • Ignition defective. • Plugs defective.
Battery does not charge.	• One or more cells in the battery faulty. • Bad contact between battery terminals and cables.
Machine vibrates.	• Blades are loose. • Engine is loose. • Imbalance on one or more blades, resulting from damage or inferior balancing after sharpening.
Uneven mowing.	• Blades blunt. • Cutting unit set skew. • Long or wet grass. • Grass blockage under hood. • Different tyre pressures on right and left sides. • Over-speeding • Drive belts slipping.

STORAGE

Winter storage

At the end of the season the machine should immediately be put in order for storage, also if it is going to stand idle for more than 30 days. Fuel which is left to stand for long periods (30 days or more) can leave tacky deposits which can block the carburettor and interfere with the engine.

Fuel stabiliser is an acceptable alternative to avoid tacky deposits during storage. If alkylate petrol (Aspen) is used stabiliser is not necessary since this fuel is stable. However, one should avoid changing from standard to alkylate petrol since sensitive rubber parts can harden. Add stabiliser to the fuel in the tank or the storage container. Always use the mixing ratios indicated by the manufacturer. Run the engine for at least 10 minutes after adding the stabiliser so that it will reach the carburettor. Do not empty the fuel tank and carburettor if stabiliser has been added.

WARNING!
Never place an engine with fuel in the tank indoors or in poorly ventilated areas where petrol fumes can come into contact with naked flames, sparks or pilot flames in boilers, hot water heaters, or drying cabinets, etc. It is highly inflammable and negligent usage can cause severe person injury and material damage. Drain off the fuel in an approved container outdoors and well clear of naked flames. Never use petrol for cleaning purposes. Use degreasing agents and hot water instead.

To put the machine in order for storage follow these instructions:

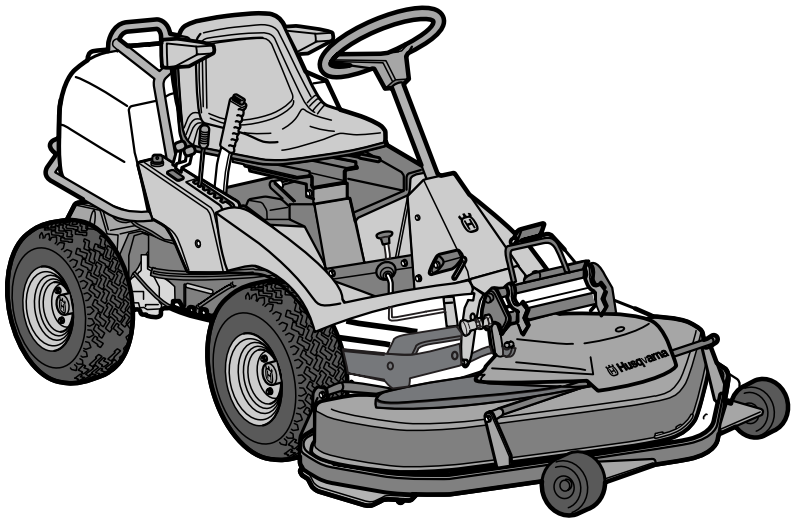
1. Carefully clean the machine, especially under the cutting unit. Touch-up paint damage to avoid rust.
2. Inspect the machine for worn or damaged parts and tighten loose screws and nuts.
3. Change the oil, and take care of the waste oil.
4. Empty the fuel tank. Start the engine and run it until the carburettor is emptied of fuel.
5. Remove the plugs and pour in a tablespoon of engine oil in each cylinder. Pull round the engine to distribute the oil and screw the plugs back on.
6. Grease all grease nipples, joints and axles.
7. Remove the battery. Clean it, charge it, and store it in a cool place. Protect the battery from low temperatures (below freezing point).
8. Store the machine in a clean and dry place and cover it over for extra protection.

Service

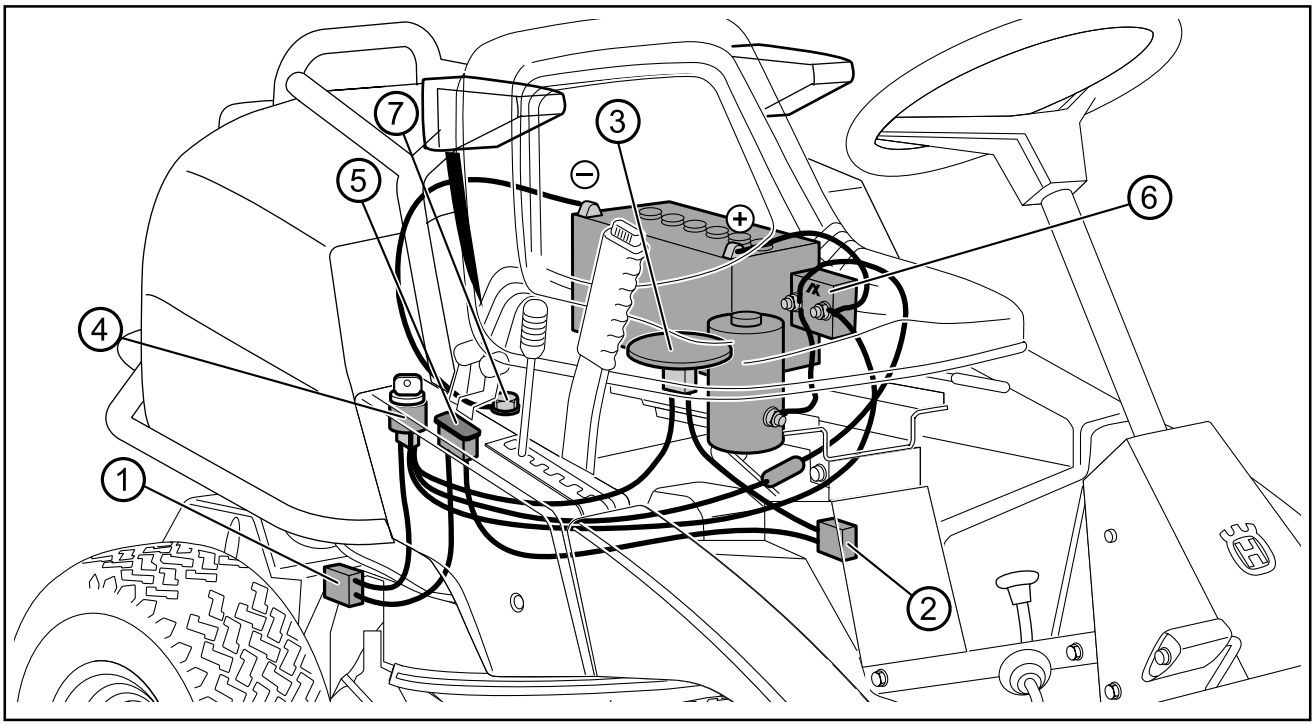
When ordering spare parts state the purchase year, model, type, and serial number.

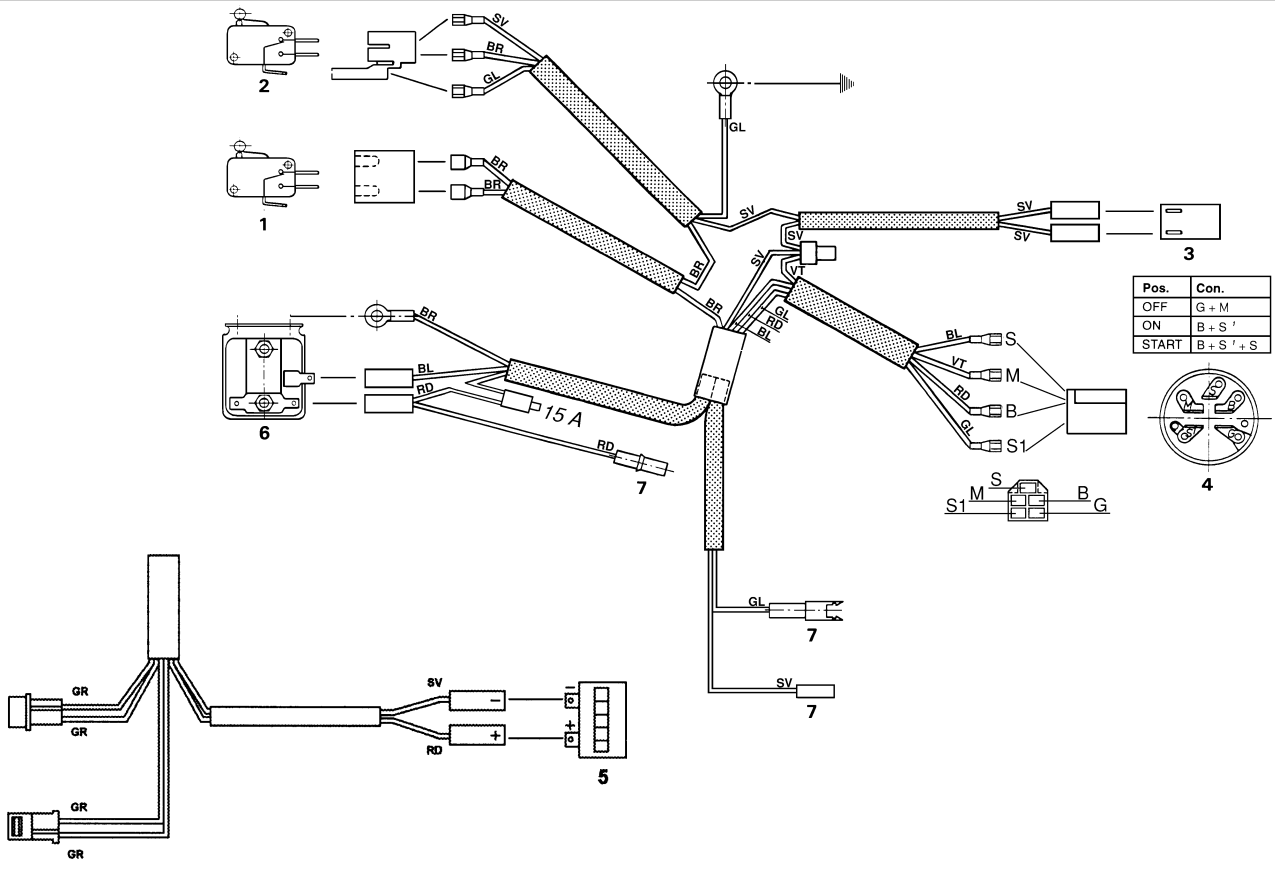
Always use genuine parts.

Annual inspection or trimming by an authorised service workshop is a good way of getting the best out of your machine the next season.



WIRING DIAGRAM





1. Microswitch, hydrostat
2. Microswitch, cutting unit
3. Microswitch, seat
4. Ignition lock
5. Counter
6. Start relay
7. Engine

Explanation of colour abbreviations in wiring diagram.

RD = Red
BL = Blue
VT = White
SV = Black
GL = Yellow
GR = Grey
BR = Brown

TECHNICAL DATA

Rider ProFlex

Dimensions	**Rider 20 ProFlex**
Length, base machine	2 030 mm
Width, base machine	900 mm
Height	1 100 mm
Kerb weight, base machine	334 kg
Wheelbase	940 mm
Track	720 mm
Tyre size	18 x 7.50 x 8
Tyre pressure, front & rear	60 kPa (0,6 kp/cm^2)
Max. gradient	15°

Engine	
Manufacture	Briggs & Stratton Vanguard V-Twin model 351777, type 1130, trim E1
Power	14.7/20 kW/hk
Displacement	570 cm^3
Fuel	min 85 octane unleaded
Tank volume	10 litres
Oil	SAE 30 or SAE 10W/30, class CD - CF
Oljevolym	1,4 litres
Oil volume incl. filter	1,6 litres
Start	Electric starter

Electrical system	
Type	12 V, negative earthed
Battery	12 V, 24 Ah
Spark plug	Champion RC12YC, electrode gap = 0.7-0.8 mm

Transmission	
Manufacture	Tuff Torq K 66
Oil	SAE 10W/30, class CD - CF
Oil capacity, total	2,5 litres

When the service life of this product has been served and it is no longer used it should be returned to the dealer or to an applicable station for recycling.

TECHNICAL DATA

Cutting unit

	Rear ejector 120	BioClip 103
Cutting width	1 200 mm	1 030 mm
Cutting heights	7 settings, 40-100 mm	7 settings, 45-105 mm
Blade length	440 mm	410 mm
Sound level	100 dB(A)	100 dB(A)
Width	1 305 mm	1 115 mm
Weight	60 kg	53 kg
Length with cutting unit	2 390 mm	2 310 mm

	Side ejector 97	Rear ejector 97
Cutting width	970 mm	970 mm
Cutting heights	7 settings, 40-80 mm	7 settings, 40-100 mm
Blade length	350 mm	350 mm
Sound level	100 dB(A)	100 dB(A)
Width	1 300 mm	1 075 mm
Weight	53 kg	49 kg
Length with cutting unit	2 380 mm	2 370 mm

We reserve the right to change technical specifications without prior notice.

Note that no legal claims are valid on the basis of information in this manual.

Use only genuine parts for repairs. The warranty is not valid if non genuine parts are used.

EU declaration of conformity (Only applies to Europe)

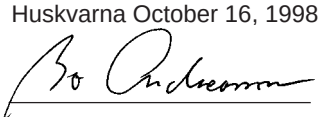
(Directive 89/392/EEC, Annex II, A)

We, **Husqvarna AB,** S-561 82 Huskvarna, Sweden, tel. +46 36-146500, declare under sole responsibility that the **rider mower Husqvarna Rider 20 ProFlex** from 1998's serial numbers and onwards (the year is clearly stated in plain text on the type plate with subsequent serial number), is in conformity with the following standards or other normative documents following the provisions in the COUNCIL'S DIRECTIVES:

- of June 14 1989 "relating to machinery" **89/392/EEC,** and applicable supplements.
- of March 22 1984 "relating to permitted sound power levels for lawn mowers" **84/538/EEC,** and applicable supplements.
- of May 3 1989 "relating to electromagnetic compatibility" **89/336/EEC,** and applicable supplements.

The following standards have been applied: **EN292-2, EN836.**

Huskvarna October 16, 1998



Bo Andréasson, Development manager

SERVICEJOURNAL

Work done	Date, mileage, stamp, sign
Pre-delivery service	
1. Top up battery with acid and recharge for four hours.	☐
2. Fit steering wheel, seat and any optional equipment.	☐
3. Fit cutting unit.	☐
4. Adjust cutting unit:	
Adjust lift springs (effective weight of cutting unit should be 12–15 kg, or set to maximum lift if brush is to be fitted).	☐
Adjust cutting unit so that rear edge is about 2–4 mm higher than front edge.	☐
Adjust cutting unit height setting so that cutting height limit is 5 mm above the frame of the unit at the lowest cutting height.	☐
5. Check that engine has correct amount of oil.	☐
6. Check and adjust tyre pressure (60 kPa, 0.6 bar).	☐
7. Connect battery.	☐
8. Fill with fuel and start engine.	☐
9. Check that machine does not move in neutral.	☐
10. Check:	
Forward drive.	☐
Reverse drive.	☐
Operation of blades.	☐
Seat safety switch.	☐
Lift lever safety switch.	☐
Parking brake safety switch.	☐
11. Check engine revs 3,000–3,100 rpm.	☐
12. Tell customer about:	☐
Need and benefits of following the service schedule.	Pre-delivery service carried out.
Need and benefits of having machine serviced every 300 hours.	No outstanding problems.
Servicing and the influence of this journal on the second-hand value of the machine.	Certified:
Range of applications for BioClip.	
13. Complete proof of sale, etc.	
After first 5 hours	
1. Change engine oil.	☐

SERVICEJOURNAL

Work done	Date, mileage, stamp, sign
25 hour service 1. Change engine oil (50 hours). (25 hours if operating conditions severe). 2. Clean/replace air pre-filter or oil-foam element if fitted (25 hours). (more regularly in dusty working conditions) 3. Clean/replace air filter cartridge (25 hours, 100 hours if pre-filter fitted). (more regularly in dusty working conditions) 4. Clean engine cooling air intake.	

SERVICEJOURNAL

Work done	Date, mileage, stamp, sign
50 hour service 1. Change engine oil. 2. Clean/replace air pre-filter or oil-foam element if fitted. 3. Clean/replace air filter cartridge (25 hours, 100 hours if pre-filter fitted) (more regularly in dusty working conditions) 4. Clean engine cooling air intake. 5. Check/adjust cutting height setting. 6. Check/adjust parking brake. 7. Inspect flame guard/spark arrestor (optional equipment)	

SERVICEJOURNAL

Work done	Date, mileage, stamp, sign
100 hour service 1. Change engine oil. 2. Clean/replace air pre-filter or oil-foam element if fitted. 3. Clean/replace air filter cartridge (25 hours, 100 hours if pre-filter fitted). (more regularly in dusty working conditions) 4. Check/adjust cutting height setting. 5. Check/adjust parking brake. 6. Inspect flame guard/spark arrestor (optional equipment) 7. Replace engine oil filter. 8. Clean/replace spark plug. 9. Replace fuel filter in fuel line. 10. Clean pulse-air filter. 11. Clean cooling system. 12. Check engine valve clearance. 13. Check need for oil change and filter change for K66 gearbox (every 500 hours).	

SERVICEJOURNAL

Work done	Date, mileage, stamp, sign
300 hour service 1. Change engine oil. 2. Replace air filter (pre-filter). 3. Replace air filter (paper). 4. Check/adjust cutting height setting. 5. Check/adjust parking brake. 6. Inspect flame guard/spark arrestor (optional equipment) 7. Replace engine oil filter. 8. Clean/replace spark plug. 9. Replace fuel filter in fuel line. 10. Clean pulse-air filter. 11. Clean cooling system. 12. Check engine valve clearance. 13. Check need for oil change and filter change for K66 gearbox (every 500 hours). 14. Carry out 300 hour service at authorised dealer.	

SERVICEJOURNAL

Work done	Date, mileage, stamp, sign
At least once a season 1. Change engine oil (50 hours). (25 hours in severe operating conditions). 2. Clean/replace air pre-filter or oil-foam element if fitted (25 hours). (more regularly in dusty working conditions) 3. Clean/replace air filter cartridge (25 hours, 100 hours if pre-filter fitted). (more regularly in dusty working conditions) 4. Check/adjust cutting height setting. 5. Check/adjust parking brake. 6. Inspect flame guard/spark arrestor, optional equipment (50 hours). 7. Replace engine oil filter (100 hours). 8. Clean/replace spark plug (100 hours). 9. Replace fuel filter in fuel line (100 hours). 10. Clean pulse-air filter. 11. Clean cooling system (100 hours). (more regularly in dusty working conditions) 12. Check engine valve clearance (100 hours). 13. Replace oil and filter in K66 gearbox (every 500 hours). 14. Carry out 300 hour service at authorised dealer.	

SERVICEJOURNAL

Work done	Date, mileage, stamp, sign

SERVICEJOURNAL

Work done	Date, mileage, stamp, sign

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