

Operator's manual
Rider 11 Rider 13
Rider 11 Bio Rider 13 Bio

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



English

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Operator's Manual for Rider 11 and Rider 13 Rider 11 Bio and Rider 13 Bio

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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.

INTRODUCTION

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 (certain models) 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.

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

When your machine is equipped with a hydrostatic transmission you should, if necessary, only tow the machine over short distances and at a low speed, otherwise there is a risk of damaging the transmission.

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. Before the machine is delivered it undergoes inspection and is adjusted by your dealer.

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

This Operator's Manual belongs to machine with serial number:	Engine	Transmission

Serial number

The serial number can be found on the printed plate attached to the front, left-hand side under the seat. Stated on the plate, from the top are:

- The machine's type designation.
- The manufacturer's type number.
- The machine's serial number.

State the type designation and serial number when ordering spare parts.

The engine number is punched on the valve cover. The text states:

- Model.
- Type.
- Code.

Please state these when ordering spare parts.

The transmission's serial number on hydrostatic machines is stated on the barcode decal located on the front of the housing on the left-hand drive axle:

- Type designation is stated above the barcode and starts with the letter "K".
- The serial number is stated above the barcode and has the prefix "s/n".
- The manufacturer's type number is stated under the barcode and has the prefix "p/n".

State the type designation and serial number when ordering spare parts.

EXPLANATION OF SYMBOLS

These symbols are on the machine and in the operator's manual.
Study them carefully so that you know what they mean.



Read the operator's manual

R

Reverse

N

Neutral



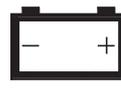
Fast



Slow



Engine off



Battery



Choke



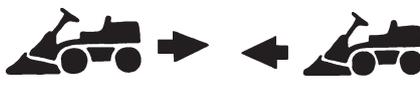
Fuel



Oil level



Cutting height

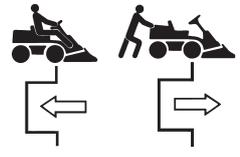


Backwards

Forwards



Ignition



Hydrostatic free wheel



Use hearing protection



Clutch in



Clutch out



Parking brake



Brake



Clutch



Warning



Noise emission to surroundings in accordance with the directive of the European Community. The machine's emission is indicated in the chapter TECHNICAL DATA and on the decal.



Warning! Rotating blades.



Warning! Risk that the machine can tip over



Never drive across a slope



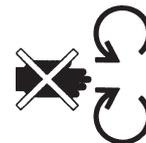
CE conformity marking



Never use the machine if persons, especially children, or animals, are in the vicinity.



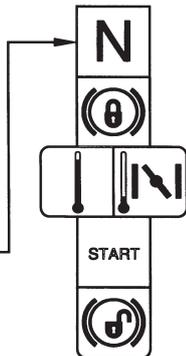
Never carry passengers on the machine or equipment.



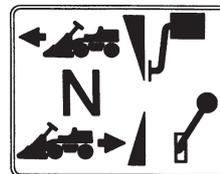
Keep hands and feet away from under the hood when the engine is running.



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

Safety instructions

These instructions are for your safety. Read them carefully.

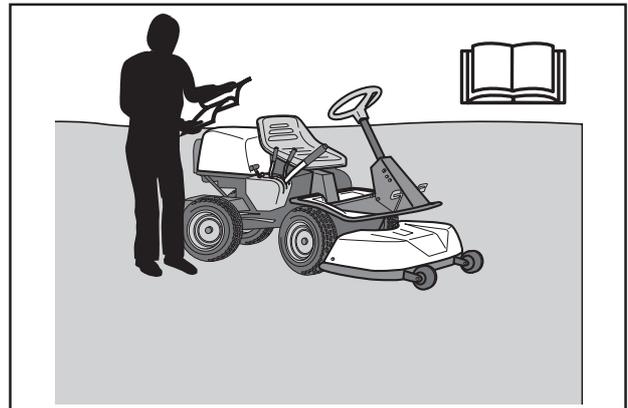


WARNING!

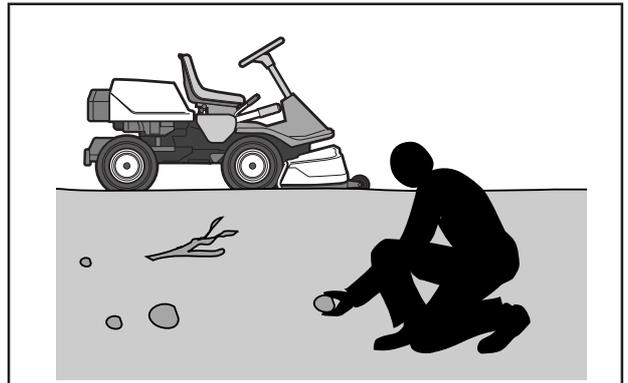
The inserted symbol means that important safety instructions need to be observed. It applies to your safety.

General use

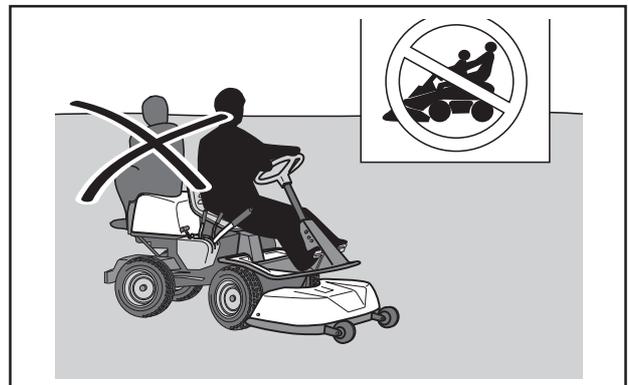
- Read all the instructions in this operator's manual and on the machine before you start it. Ensure you understand them and then observe them.
- Learn how to use the machine and its controls safely and learn to how to stop quickly. Also learn to recognize the safety decals.
- Only allow the machine to be used by adults who are familiar with its use.
- Make sure nobody else is in the vicinity of the machine when you start the engine, engage the drive or drive off.
- Make sure animals and people maintain a safe distance from the machine.
- Stop the machine if any one enters the working area.
- Clear the area of objects such as stones, toys, wires, etc. that may become caught in the blades and be thrown out.
- Look out for the ejector and do not direct it towards anyone.
- Stop the engine and prevent the engine from being started until you have cleaned the cutting unit or outlet channel.
- Remember the operator is responsible for danger or accidents.
- Never carry passengers. The machine is only intended to be used by one person.
- Always look downwards and backwards before and while reversing. Keep watch for both large and small obstacles.
- Slow before cornering.
- Switch off the blades when you are not mowing.



8010-047
Read the operator's manual before starting the machine.



6003-002
Clear the area of objects before mowing.



8010-052
Never carry passengers.



WARNING!

This machine can sever hands and feet as well as throw objects. Failure to observe the safety instructions can result in serious injuries.

SAFETY INSTRUCTIONS

- Take care when rounding a fixed object, so that the blades do not hit it. Never run the machine over foreign objects.
- Only use the machine in daylight or in other well-lit conditions. Keep the machine at a safe distance from holes or other irregularities in the ground. Pay attention to other possible risks.
- Never use the machine if you are tired, if you have consumed alcohol, or if you are taking other drugs or medication that can affect your vision, judgment or co-ordination.
- Keep an eye on the traffic when working close to a road or when crossing it.
- Never leave the machine unsupervised with the engine running. Always stop the blades, apply the parking brake, stop the engine and remove the keys before leaving the machine.
- Never allow children or other persons not trained in the use of the machine to use or service it. Local laws may regulate the age of the user.



WARNING!
Engine exhaust, some of its constituents and certain vehicle components contain or emit chemicals considered to cause cancer, birth defects or other reproductive impairment. The engine emits carbon monoxide, which is a colourless, poisonous gas. Do not use the machine in enclosed spaces.



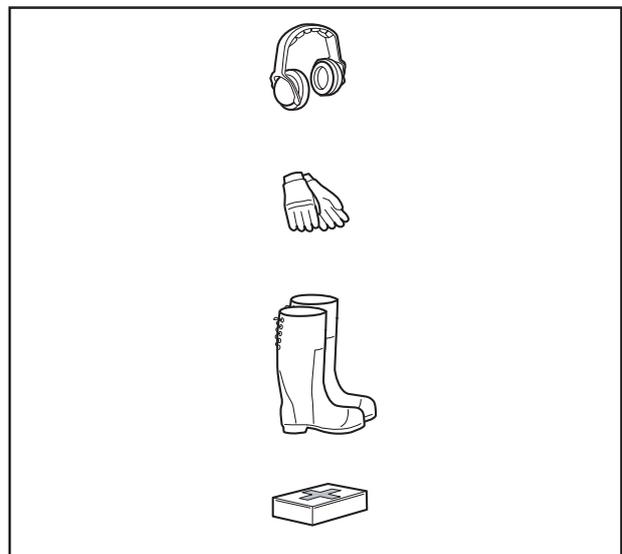
Keep children away from the area to be mowed.

6003-006



WARNING!
You must use approved personal protective equipment whenever you use the machine. Personal protective equipment cannot eliminate the risk of injury but it will reduce the degree of injury if an accident does happen. Ask your dealer for help in choosing the right equipment.

- Make sure that you have first aid equipment close at hand when using the machine.
- Never use the machine when barefoot. Always wear protective shoes or protective boots, preferably with steel toes.
- Wear approved protective glasses or full-face visor during assembly and when operating.
- Never wear loose fitting clothes that can catch in moving parts.
- Use ear protectors to eliminate the risk for impairment of hearing.



Personal protective equipment.

8011-292

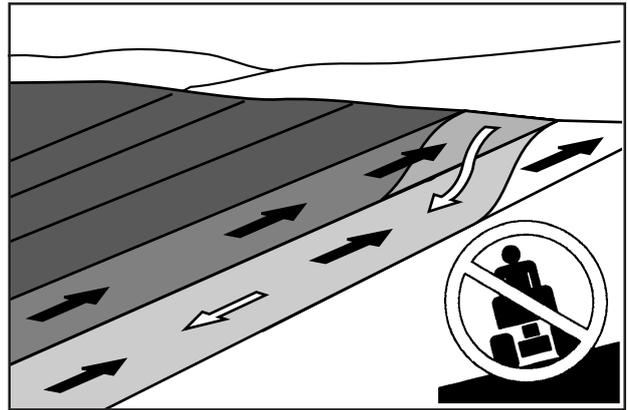
SAFETY INSTRUCTIONS

Driving on slopes

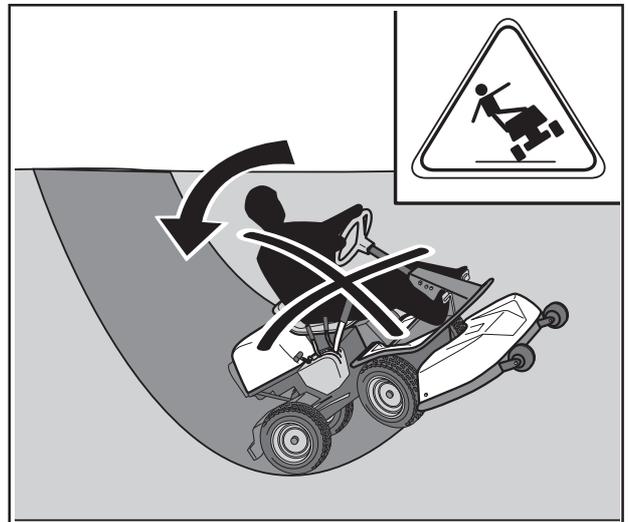
Driving on slopes is one of the operations where the risk of the driver losing control of the machine or of it overturning is the greatest; this can result in serious injury or death. All slopes demand extra care. If you cannot reverse up a slope or if you feel unsure, do not mow it.

Proceed as follows:

- Remove obstacles such as stones, branches, etc.
- Mow upwards and downwards, not sideways.
- Do not use the machine on ground that slopes more than 15°.
- Avoid starting or stopping on a slope. If the tyres start to slip, stop the blades and drive slowly down the slope.
- Always drive smoothly and slowly on slopes.
- Do not make any sudden changes in speed or direction.
- Avoid unnecessary turns on slopes, if necessary, turn slowly and gradually downwards if possible.
- Watch out for and avoid driving over furrows, holes and bumps. It is easier for the machine to overturn on uneven ground. Tall grass can hide obstacles.
- Drive slowly. Do not turn the wheel sharply. Rider 11: Select a low gear so that you will not need to stop to change gear. The machine engine-brakes even better in low gear.
- Take extra care if any attachments are fitted that can change the stability of the machine.
- Do not mow too close to edges, ditches or banks. The machine can suddenly overturn if one wheel comes over the edge of a steep slope or a ditch, or if an edge gives way.
- Do not mow wet grass. It is slippery, and tyres can lose their grip so that the machine skids.
- Do not try to stabilize the machine by putting your foot on the ground.
- When cleaning the chassis the machine must never be driven close to an edge or ditch.
- Follow the manufacturer's recommendations regarding wheel weights or counterbalance weights to increase stability.



Mow upwards and downwards on slopes, not sideways. 6003-004

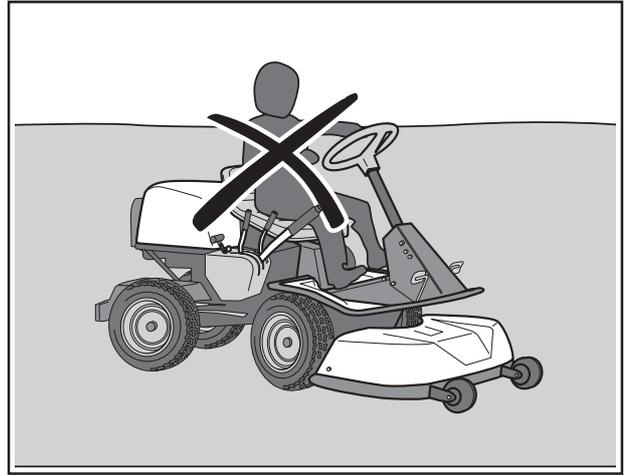


Be especially careful when driving on slopes. 8010-054

SAFETY INSTRUCTIONS

Children

- Serious accidents may occur if you fail to be on your guard for children in the vicinity of the machine. Children are often attracted to the machine and mowing. Never assume that children will remain where you last saw them.
- Keep children away from the area to be mowed and under close supervision by another adult.
- Keep an eye out and shut off the machine if children enter the work area.
- Before and during reversing procedures, look behind you and down for small children.
- Never allow children to ride along. They can fall off and seriously injure themselves or be in the way for safe manoeuvring of the machine.
- Never allow children to operate the machine.
- Be particularly careful near corners, bushes, trees or other objects that block your view.



Never allow children to operate the machine.

8010-057

Maintenance

- Stop the engine. Prevent starting by removing the ignition cable from the spark plug or remove the ignition key before making any adjustments or carrying out maintenance.
- Never fill the fuel tank indoors.
- Petrol and petrol fumes are poisonous and extremely flammable. Be especially careful when handling petrol, as carelessness can result in personal injury or fire.
- Only store fuel in containers approved for the purpose.
- Never remove the fuel cap and fill the petrol tank while the engine is running.
- Allow the engine to cool before refuelling. Do not smoke. Do not fill petrol in the vicinity of sparks or naked flames.
- Observe the risk of environmental damage when handling oil, fuel and the battery. Remember to follow local regulations concerning waste handling.
- Electric shocks can result in injury. Do not touch the ignition lead when the engine is running. Do not test the ignition system with your fingers.



Never fill the fuel tank indoors.

8010-058

SAFETY INSTRUCTIONS

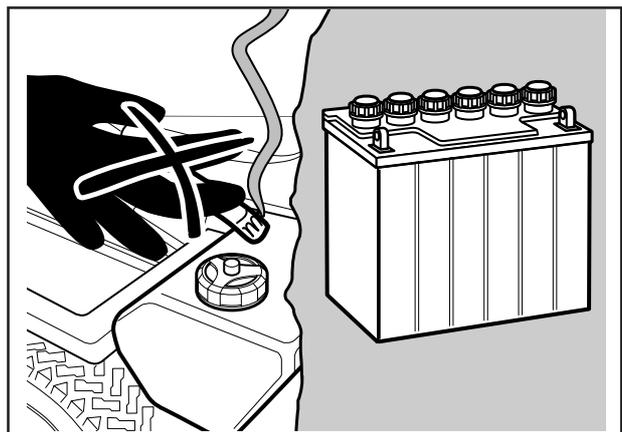
- If leaks arise in the fuel system, the engine must not be started until the problem has been resolved.
- Store the machine and fuel in such a way that there is no risk that leaking fuel or fumes can cause any damage.
- Check the fuel level before each use and leave space for the fuel to expand, because the heat from the engine and the sun may otherwise cause the fuel to expand and overflow.
- Avoid overfilling. If you spill petrol on the machine, wipe up the spill and wait until it has evaporated before starting the engine. If you spill petrol on your clothing, change your clothing.
- Allow the machine to cool before performing any actions in the engine compartment.
- Be especially careful when handling battery acid. Acid on the skin can cause serious corrosive injuries. In the event of spillage on the skin wash immediately with water.
- Acid in the eyes can cause blindness, contact a doctor immediately.
- Take care with battery maintenance. Explosive gases form in the battery. Never perform maintenance on the battery while smoking or in the vicinity of open flames or sparks. This can cause the battery to explode and cause serious injuries.
- Make sure all nuts and bolts are tightened correctly and that the equipment is in good condition.
- Do not modify safety equipment. Check regularly to be sure it works properly. The machine must not be driven if protective plates, protective covers, safety switches or other protective devices are not fitted or are defective.
- Do not change the setting of governors and avoid running the engine at excessively high revs. If you run too fast, you risk damaging the machine components.
- Observe the risk of injury caused by moving or hot parts if the engine is started with the engine cover opened or the protective covers removed.



WARNING!
The engine and the exhaust system become very hot during operation.
Risk of burn injuries if touched.



WARNING!
The battery contains lead and lead pollutants, chemicals that are considered to cause cancer, birth defects or other reproductive impairment. Wash your hands after touching the battery.



Do not smoke when carrying out maintenance.

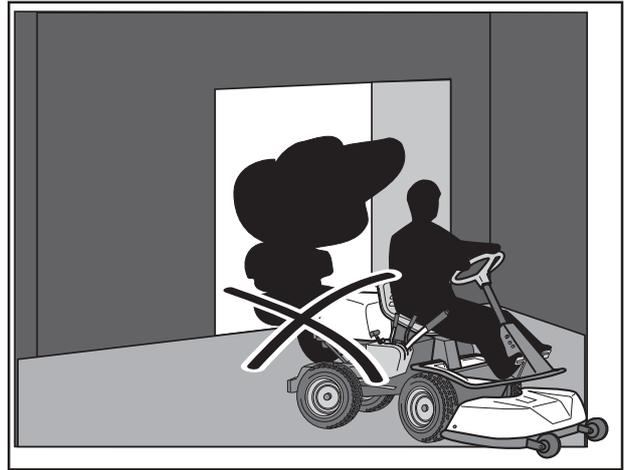
6003-009

SAFETY INSTRUCTIONS

- Never use the machine indoors or in spaces lacking proper ventilation. Exhaust fumes contain carbon monoxide, an odourless, poisonous and highly dangerous gas.
- Stop and inspect the equipment if you run over or into anything. If necessary, make repairs before starting.
- Never make adjustments with the engine running.
- The machine is tested and approved only with the equipment originally provided or recommended by the manufacturer.
- The blades are sharp and can cause cuts. Wrap the blades or wear protective gloves when handling them.
- Check regularly that the parking brake works. Adjust and maintain as required.
- The mulching unit should only be used where better quality mowing is required and in known areas.
- Reduce the risk of fire by removing grass, leaves and other debris that may have fastened on the machine. Allow the machine to cool before putting it in storage.

Transport

- The machine is heavy and can cause serious crush injuries. Be especially careful when it is loaded in or out of a car or on and off of a trailer.
- Use an approved trailer to transport the machine. Activate the parking brake and secure the machine using approved fasteners, such as tension belts, chains or ropes when transporting.
- Check and observe local road traffic regulations before transporting or driving the machine on roads.



Never run the machine in an enclosed area.

8009-467



Regularly clean grass, leaves and other debris from the machine.

8010-061

IMPORTANT INFORMATION

The parking brake is not sufficient to lock the machine during transport. Ensure you secure the machine firmly to the transporting vehicle. Reverse the machine on to the transporting vehicle to prevent it from overturning.

PRESENTATION

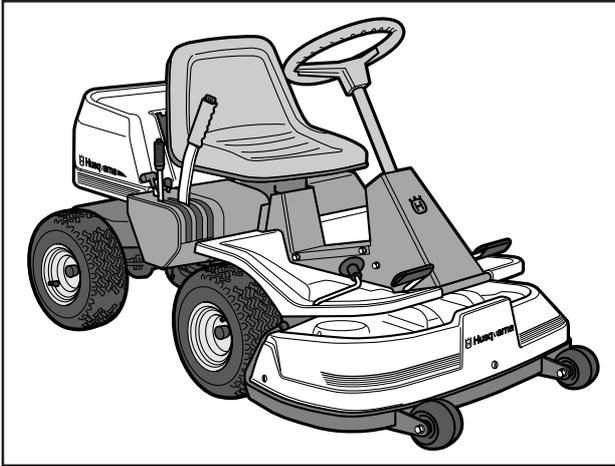
Presentation

Congratulation on your choice of a first-class quality product.

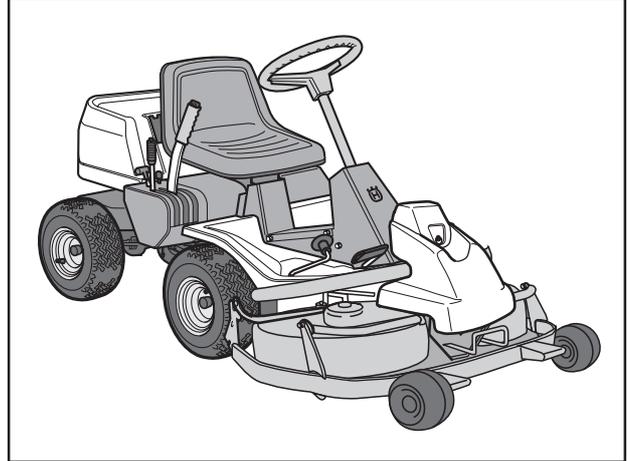
Four models equipped with engines from Briggs & Stratton are described in this operator's manual.

Rider 11 and Rider 11 Bio has an in-line gearbox with five forward gears and one reverse gear.

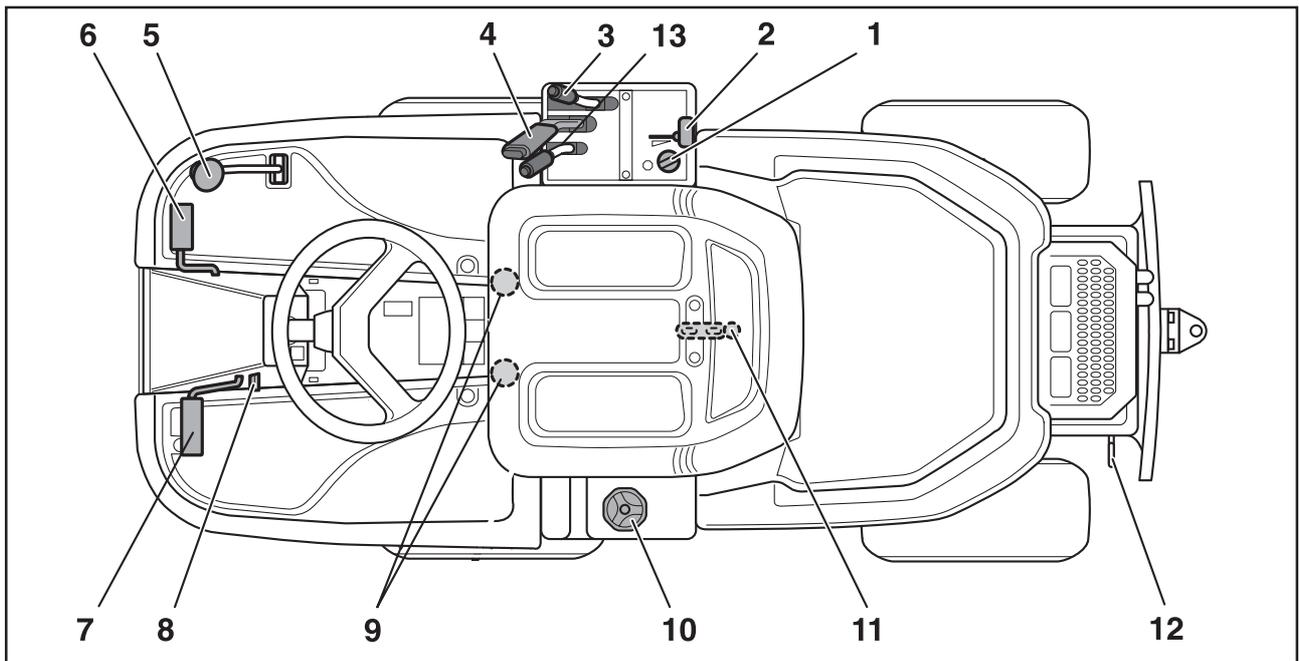
On the Rider 13 and Rider 13 Bio the power transmission from the engine is handled by a hydrostatic gearbox which enables stepless variation of the speed.



6004-001Hy



6017-213



8009-573

Location of the controls

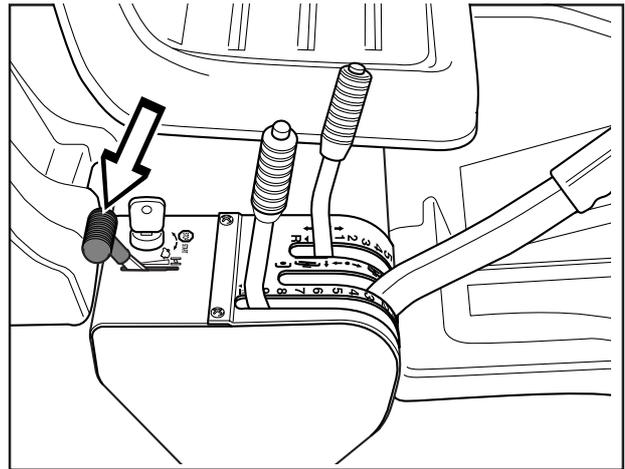
- | | |
|--|--|
| 1. Ignition lock | 7. Parking brake on 13 and 13 Bio
Clutch pedal on 11 and 11 Bio |
| 2. Throttle/Choke lever | 8. Lock button for parking brake (left side on 13 and 13 Bio, right side on 11 and 11 Bio) |
| 3. Adjustment of cutting height | 9. Seat adjustment |
| 4. Lifting lever, cutting unit | 10. Fuel tank cap |
| 5. Speed control for reversing (only on 13 and 13 Bio) | 11. Main lock (under seat) |
| 6. Speed limiter for driving forwards on 13 and 13 Bio
Parking brake on 11 and 11 Bio | 12. Lever for disengagement of drive (only on 13 and 13 Bio) |
| | 13. Gear lever on 11 and 11 Bio |

PRESENTATION RIDER 11 / 11 BIO

Throttle and Choke lever

The engine speed is adjusted with the throttle control, and thereby also the rotation speed of the blades.

The control is also used to activate the choke function. When the choke is used the engine receives a richer mixture of fuel and air, which simplifies cold start.

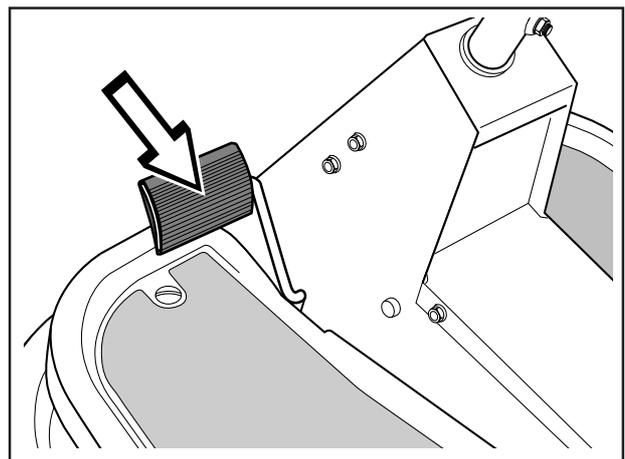


6004-004

Clutch pedal

The clutch pedal disengages the engine and stops forward movement.

The blades are *not* affected by the clutch pedal.

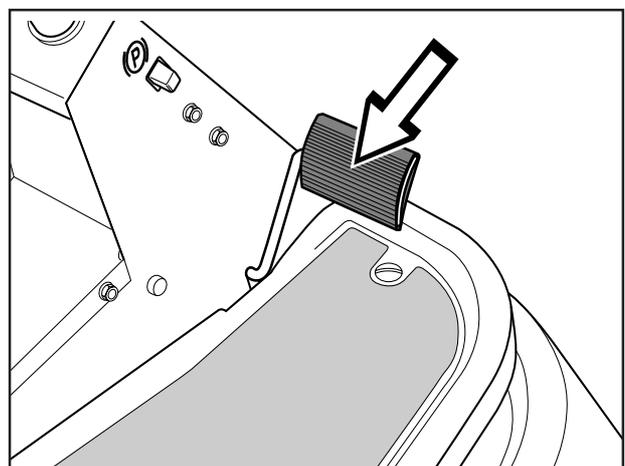


6004-005

Brake pedal / Parking brake

The brake pedal activates a disc brake which is placed on the gearbox and brakes the drive wheels. When braking the clutch pedal should also be pushed down to achieve best braking power.

The brake pedal also operates as a parking brake if the lock button is pressed in when the pedal is pressed.



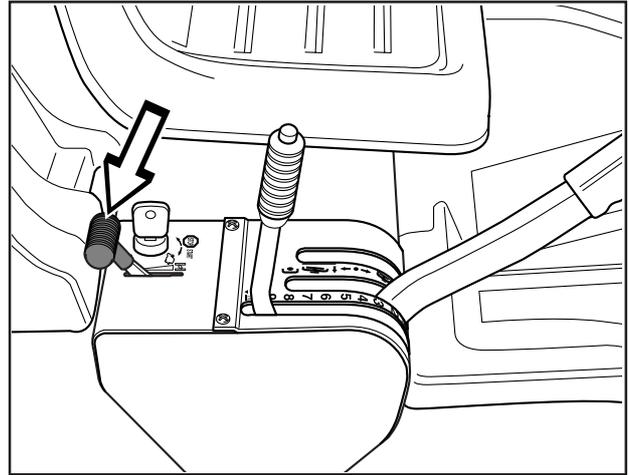
6004-006

PRESENTATION RIDER 13/13 BIO

Throttle and Choke lever

The engine speed is adjusted with the throttle control, and thereby also the rotation speed of the blades.

The control is also used to activate the choke function. When the choke is used the engine receives a richer mixture of fuel and air, which simplifies cold start.



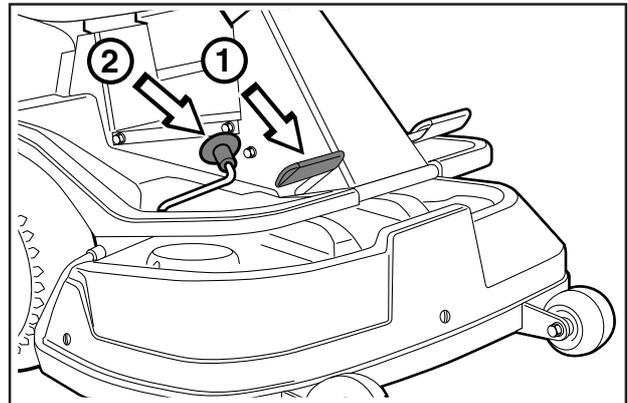
6004-004H

Speed limiter

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



WARNING!
Make sure that branches do not obstruct the pedals when mowing under bushes, otherwise you may lose control.



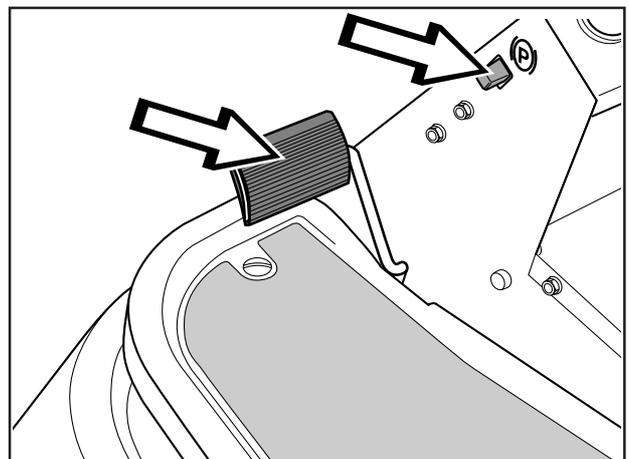
8009-572

Parking brake

The parking brake is applied as follows:

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

The lock on the parking brake automatically disconnects when the brake pedal is pressed.

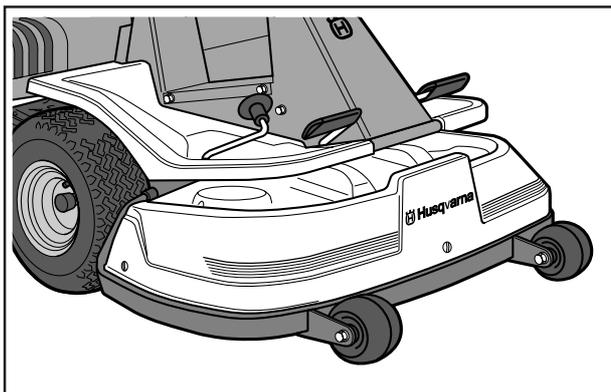


6004-006H

PRESENTATION

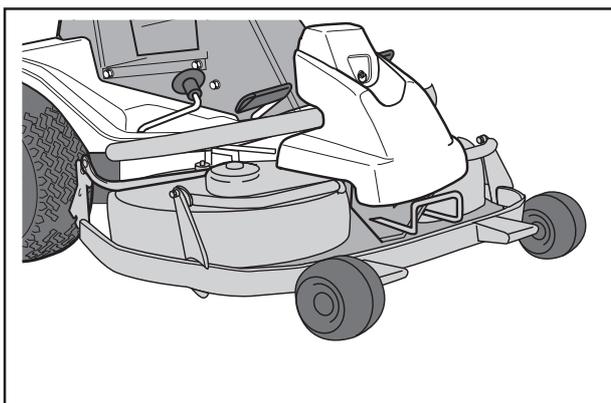
Cutting unit

Rider 11 and Rider 13 have a cutting unit with rear ejection, i.e. the grass cuttings are thrown out behind the cutting unit.



6004-009Hy

Rider 11 Bio and Rider 13 Bio have a twin-blade BioClip cutting unit.



6017-214

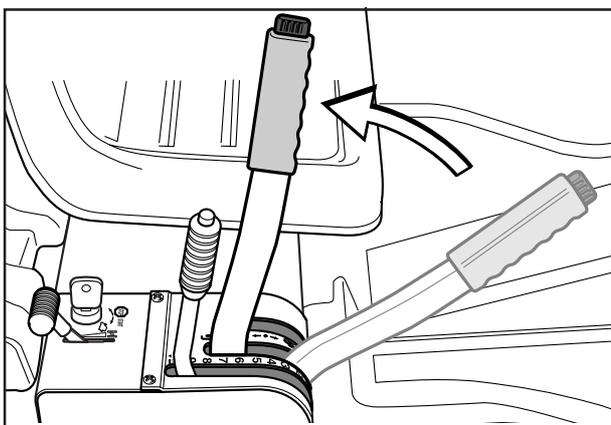
Lift lever for cutting unit

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

If the lever is pulled back the unit will lift up and the blades will automatically stop rotating (transport position).

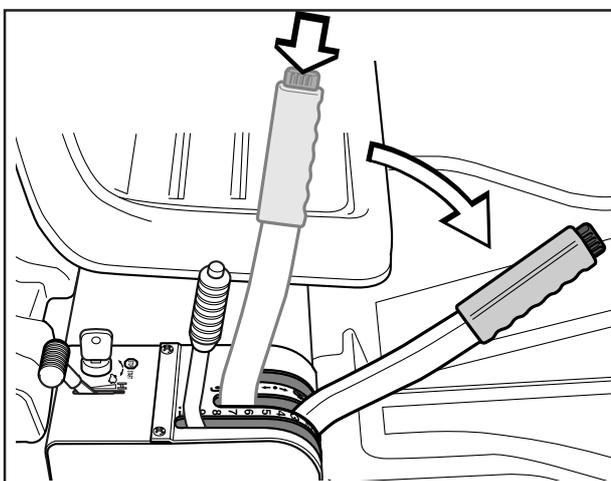
If the lock button is pressed and the lever is moved forward the unit will be lowered and the blades will automatically start rotating (cutting position).

The lever can also be used to temporarily regulate the cutting height, e.g. for a small mound in the lawn.



6004-011H

Lifting of the cutting unit (transport position)



6004-012H

Lowering of the cutting unit (cutting position)

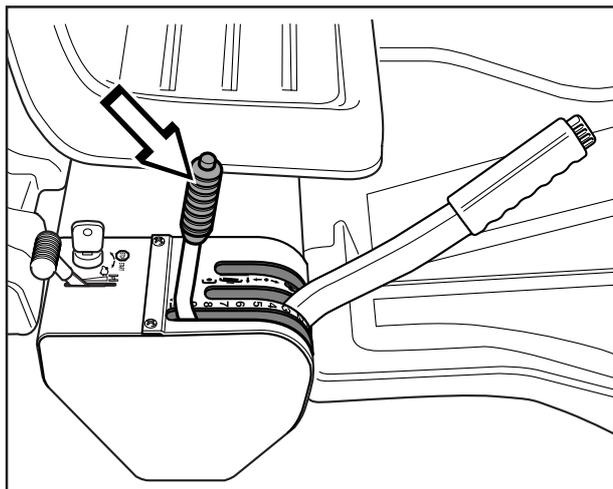
PRESENTATION

Lever for adjustment of cutting height

With this lever the cutting height can be adjusted to 9 different positions.

Cutting unit with rear ejection, 40-90 mm
(1 9/16" - 3 9/16")

BioClip cutting unit, 45-95 mm
(1 3/4" - 3 3/4")



Rider 13 H

6004-013H

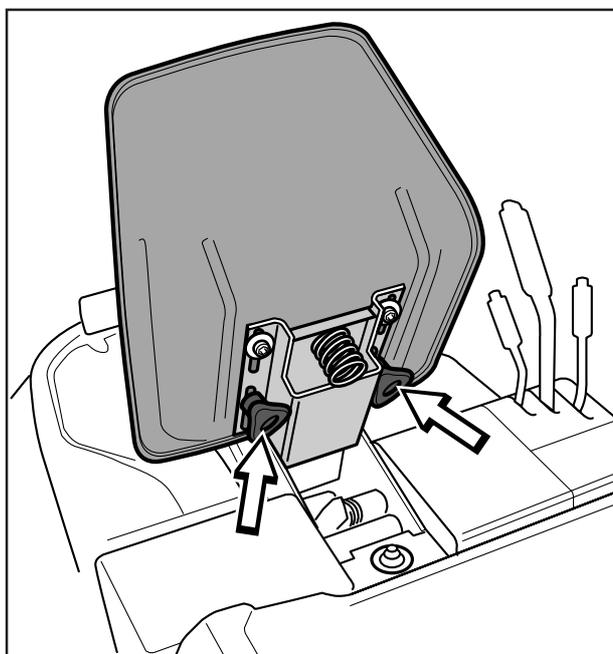
Seat

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

The seat can also be adjusted lengthways.

Release the knobs under the seat and adjust it forwards or backwards to the required position.

Lock the adjustment with the wheels.



6004-014

Fuelling

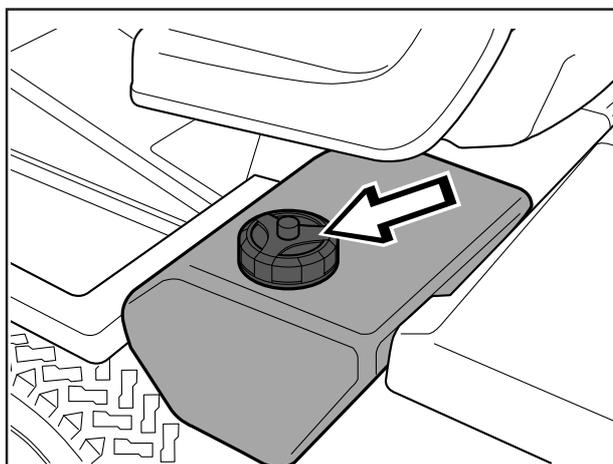
The engine should be run on 85 octane unleaded petrol/gasoline (no added oil). Environmentally adapted alkylate fuel is also recommended.

Do not use petrol that contains methanol.

Do not fill the tank completely, leave an expansion area of at least 2.5 cm (1").



WARNING!
Petrol/gasoline is highly flammable. Observe care and fill up with fuel outdoors (see safety instructions).



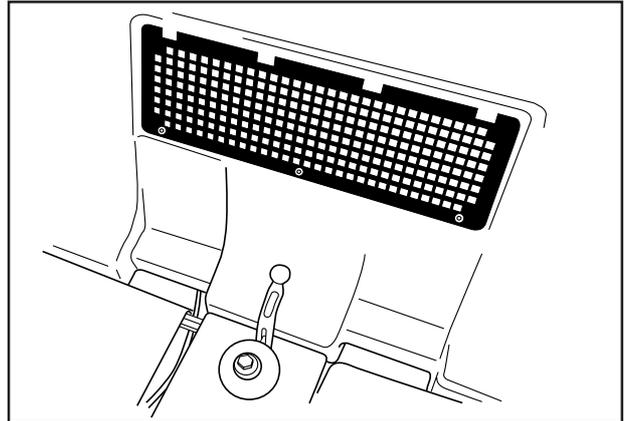
6004-015

DRIVING

IMPORTANT INFORMATION

The air intake grille in the engine cover behind the driver's seat must not be blocked by, for example, clothing, leaves, grass or dirt.

Impaired cooling of the engine. Risk of major engine damage.



8009-431

Before starting

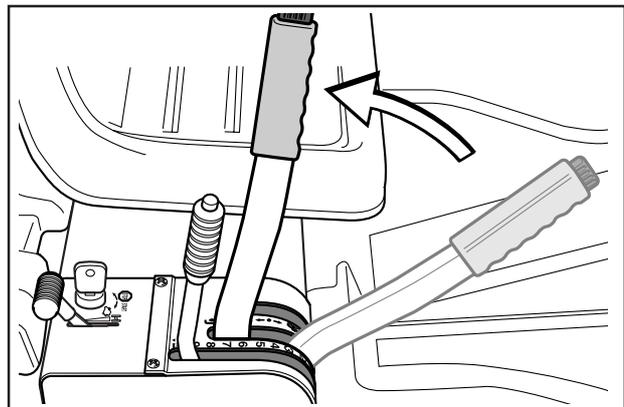
- Read the safety instructions and information on the location and function of the controls before starting (see pages 5-15).
- Conduct daily maintenance before starting (see maintenance schedule on page 21). Adjust the seat to the required position.

Starting the engine

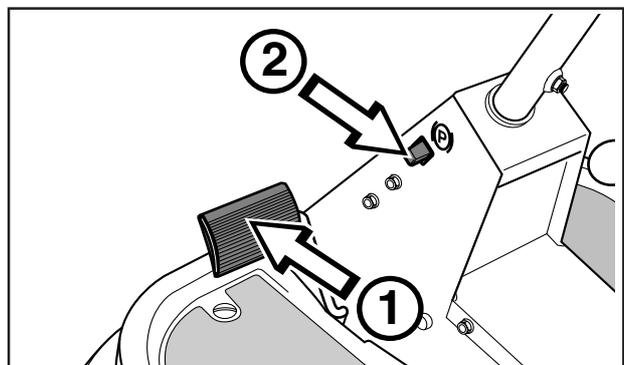
1. Lift up the cutting unit by pulling the lever backwards to locked position (transport position).
2. Apply the parking brake. This is done as follows:
 - Press down the brake pedal (1).
 - Press in the lock button on the steering column (2).
 - Release the brake pedal while the button is held pressed.

The parking brake lock disconnects automatically when the brake pedal is pressed down.

On the Rider 11 and Rider 11 Bio the brake pedal and lock button are on the right side.



6007-001H



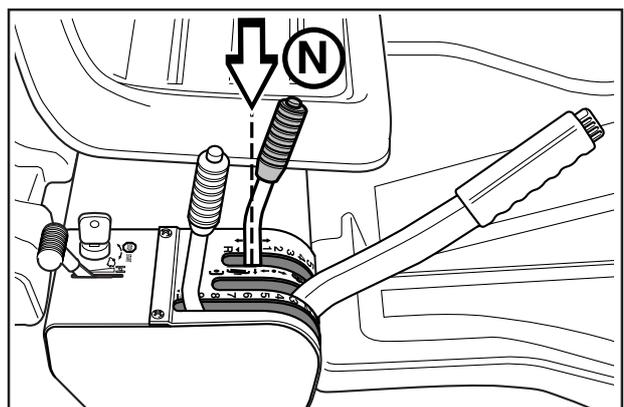
Rider 13

6007-002H

3. For Rider 11 and Rider 11 Bio: Set the gear lever to position "N" (neutral).

IMPORTANT INFORMATION

Do not press the reverse lock button on the lever when you select neutral. If you do, it could trigger the start lock.



Rider 11

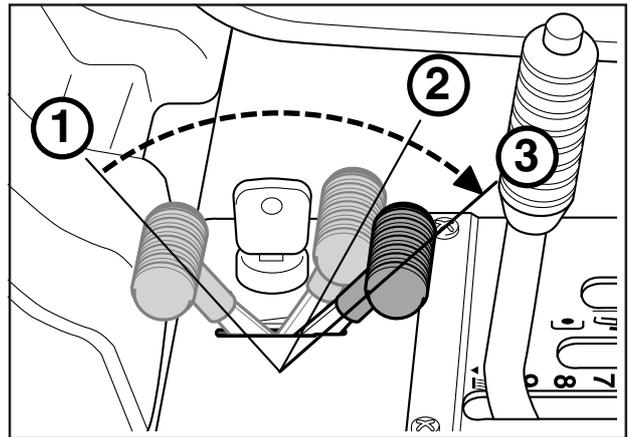
6007-003

DRIVING

Cold engine:

4. Push the throttle control to position 3 (choke position). In this position the engine receives a richer mixture so that the engine starts more easily.

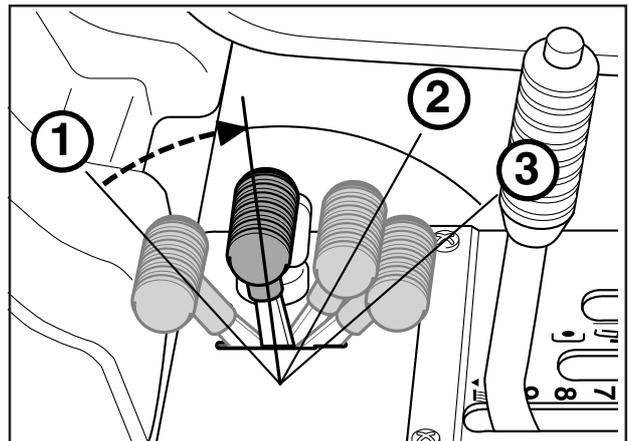
The throttle must be moved to the side (towards the ignition key) to reach the choke position.



6007-004H

Warm engine:

5. Set the throttle control midway between position 1 and 2.

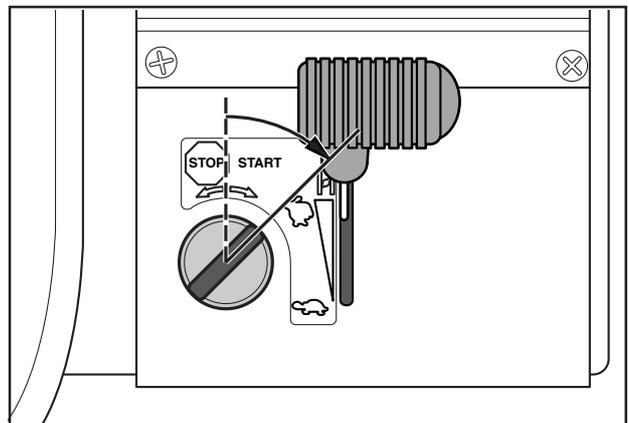


6007-005H

6. Turn the ignition key to start position.

IMPORTANT INFORMATION

Do not run the starter motor for more than 15 seconds at a time. If the engine does not start wait about 1 minute before trying again.



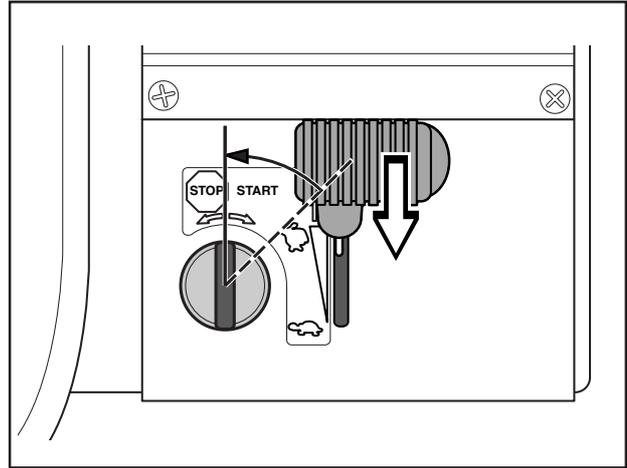
6007-006

DRIVING

7. When the engine has started release the ignition key to neutral position.
Push the throttle control to the required speed.
For cutting 3/4 to full throttle.



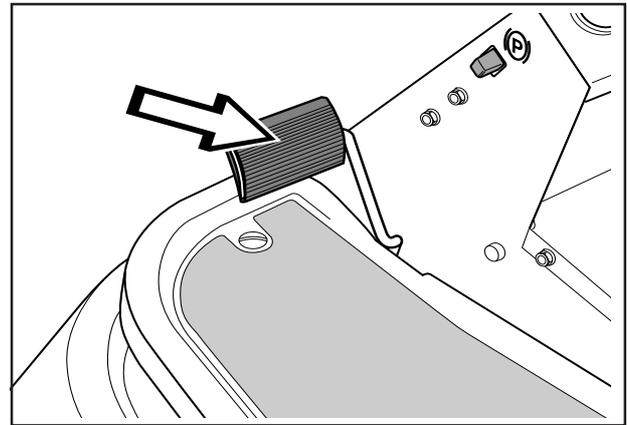
WARNING!
Never run the engine indoors, in enclosed or poorly ventilated areas. The exhaust fumes contain toxic carbon monoxide.



6007-007

Driving the machine

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



Rider 13

6007-010H

2. For Rider 13 and Rider 13 Bio

Carefully press down one of the pedals until the correct speed is reached.

To drive forwards: press down pedal (1).

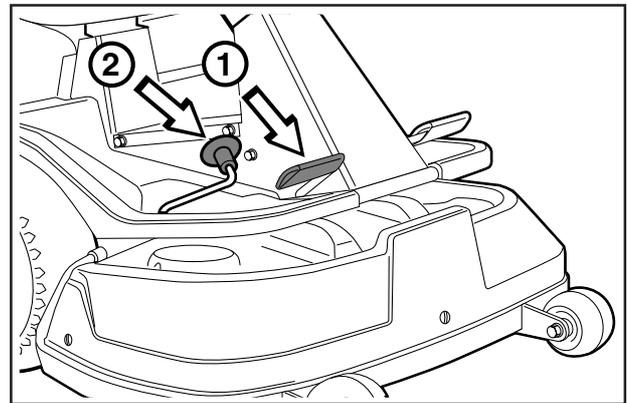
To reverse: press down pedal (2).

For Rider 11 and Rider 11 Bio

Press the clutch and engage the required gear.
To engage reverse gear the lock button must be pressed down.

- Gears 1–4 are used for mowing.
- Gears 4–5 are used for transport.

Starting is possible irrespective of which gear is engaged.



Rider 13

8009-572

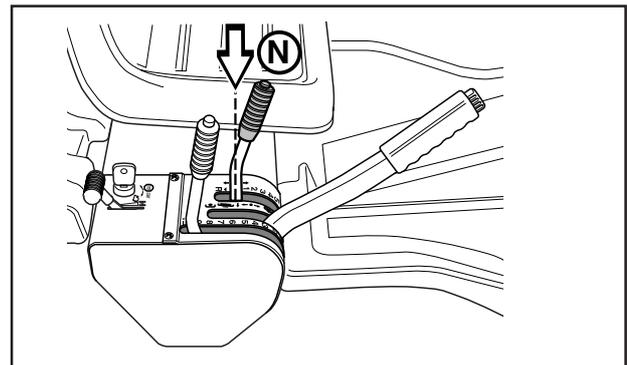
IMPORTANT INFORMATION

Do not change gear from forward drive to reverse while the machine is moving.

The clutch must be used for each gear change.

Stop the machine before changing for forward drive to reverse, otherwise the gearbox can be damaged.

Never use force to engage a gear. If a gear will not engage directly release and push down the clutch again, and then try to engage the gear again.



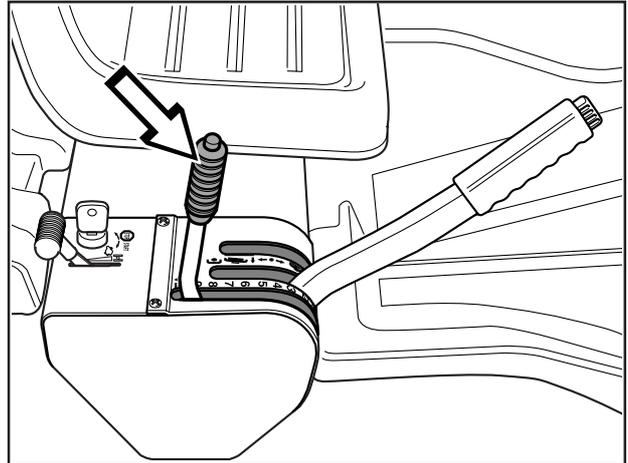
Rider 11

6007-003

DRIVING

3. Select the required cutting height (1-9) with the cutting height lever.

To obtain a uniform cutting height it is important that the tyre pressures are equal on both front wheels 60 kPa (8,5 PSI).

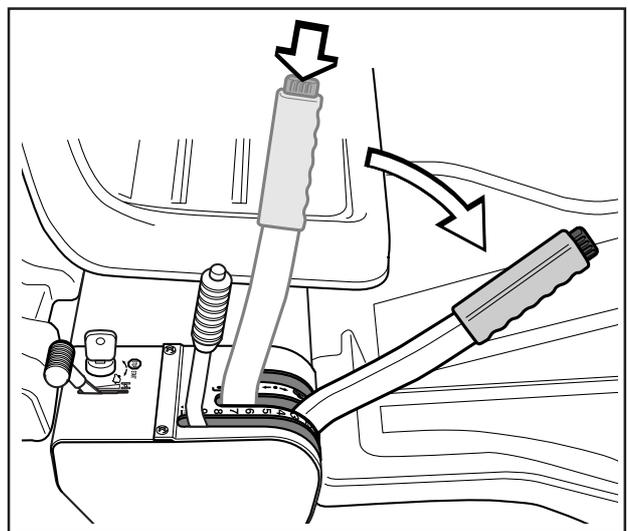


6007-008H

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

IMPORTANT INFORMATION

The service-life of the drive belts increases considerably if the engine is run at low speed when engaging the blades. For this reason do not increase the throttle until the cutting unit has been lowered to the cutting position.

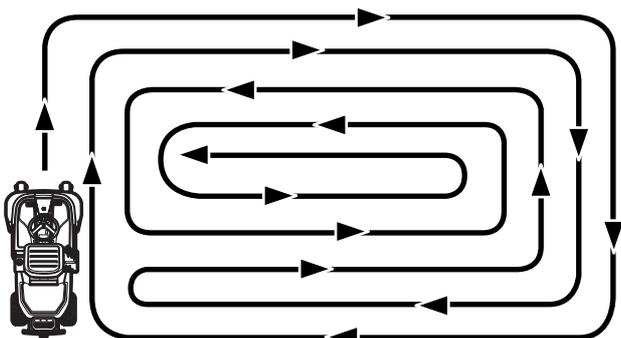


6007-009H

Cutting tips

- Localise and mark stones and other fixed objects to avoid collision.
- Start with a high cutting height and reduce down until the required cutting result are obtained.
- The cutting 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 without noticeably depreciating the mowing result.

- 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. Put the cutting unit in the service position first.
- If you use the BioClip unit it is important to mow the grass regularly.



6007-012

Mowing pattern



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

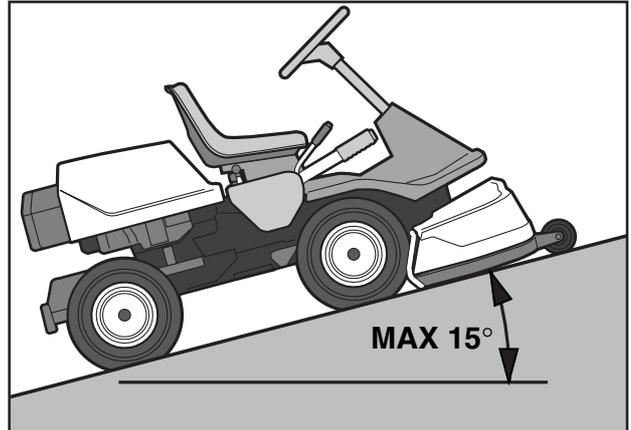
DRIVING



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

Hill start, manual gearbox

1. Press down the parking brake.
2. Push the throttle control to full throttle position.
3. Push down the clutch and engage first gear.
4. Carefully release the clutch.
5. When the engine starts to pull, release the parking brake.

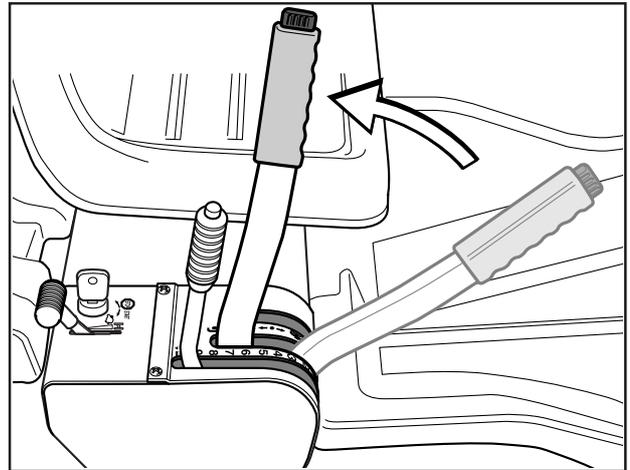


6007-013

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 end position.

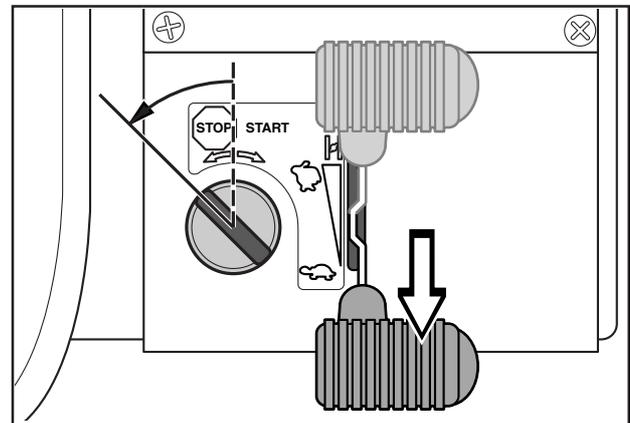


6007-014H

2. **Rider 11 and Rider 11 Bio:** Pull back the throttle control and put the gear lever into neutral "N" without pressing the reverse lock button. Turn the ignition key to the "STOP" position.

Rider 13 and Rider 13 Bio: Pull back the throttle lever and turn the ignition key to the "STOP" position.

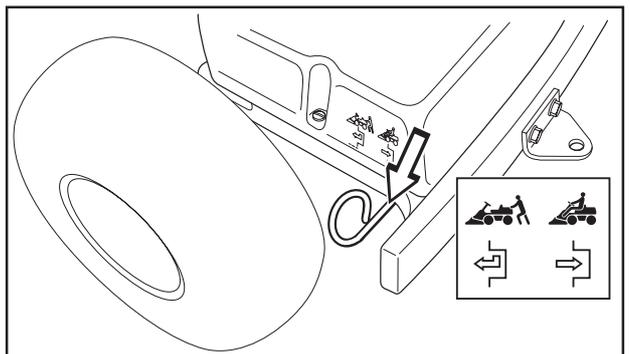
3. When the rider mower is stationary, hold down the parking brake and push in the lock button.



6007-015

Release lever Rider 13 and Rider 13 Bio

In order to move the machine when the engine is switched off the release lever must be pressed down and forwards.



8009-574

MAINTENANCE

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 start	Maintenance interval in hours		
			25	50	100
Check the engine's oil level	37	●			
Check the engine's cooling air inlet	30	●			
Check the fuel pump's air filter	28	●			
Check the steering wires	24	●			
Check the brakes	25	●			
Check the battery	28	●			
Check the safety system	29	●			
Check screws and nuts	–	○			
Check for fuel and oil leakage	–	○			
Clean around the silencer	–	○			
Change the engine oil ¹⁾	37	●	● ¹⁾	● ¹⁾	
Replace the air filter's prefilter ²⁾	27	●	●		
Check the cutting unit	31	●	●		
Check the tyre pressures (60 kPa/8,5 PSI)	30	●	●		
Lubricating the belt adjuster ³⁾	38	●	●		
Lubricate joints and shafts ³⁾	38	●	●		
Adjust the brakes – Rider 11 and Rider 11 Bio	25	●	●		
Check the V-belts	–	○	○		
Check the transmission's cooling flanges – Rider 13 and Rider 13 Bio	–	○	○		
Check the transmission's oil level – Rider 13 and Rider 13 Bio	38			●	
Adjust the brakes – Rider 13 and Rider 13 Bio	25			●	
Check and adjust the throttle wire	26			●	
Clean the cooling flanges on the engine and transmission ^{2,4)}	–			○	
Replace the air filter's pre-filter and paper filter ²⁾	27				●
Replace the fuel filter	26				●
Replace the plug	28				●
Check the valve clearance	–				○

¹⁾ First change after 5 hours. Replace after every 25 hours with heavy loads or high temperatures. ²⁾ During dusty conditions cleaning and replacement should be more frequent. 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 cable is removed from the plug.
- The parking brake is applied.
- The cutting unit is disengaged.

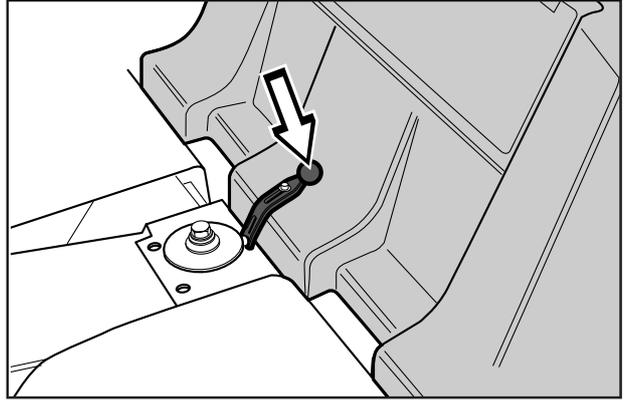
MAINTENANCE

Dismantling of the machine hoods

Engine hood

The engine is accessible for servicing when the engine hood is lifted up.

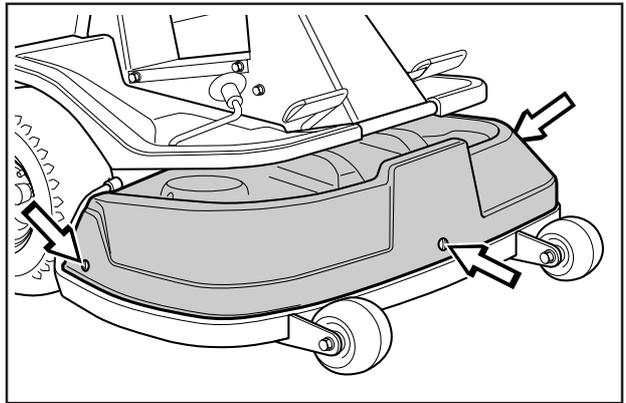
Tilt the seat forward, release the rubber strap under the seat, and tilt the hood backwards.



6008-001

Front hood Rider 11 and Rider 13

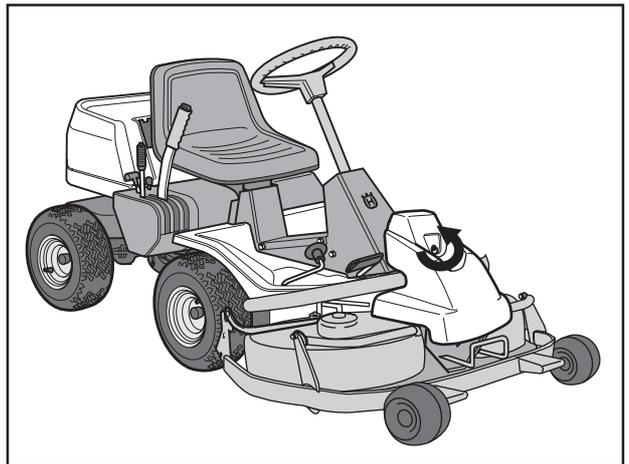
Release the screws in the front hood (3) and lift off the hood.



8009-575

Front hood Rider 11 Bio and Rider 13 Bio

Release the catch and lift off the hood.

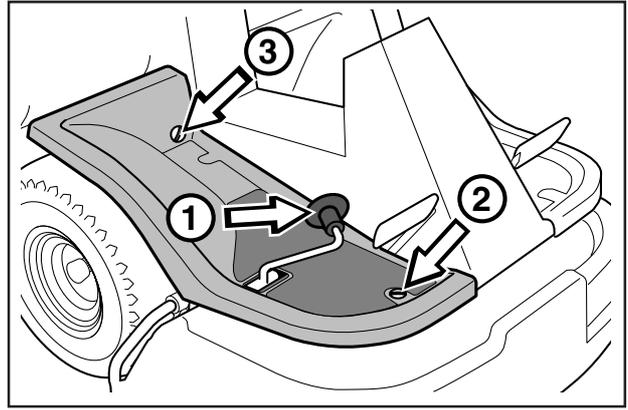


6017-215

MAINTENANCE

Right-hand fender

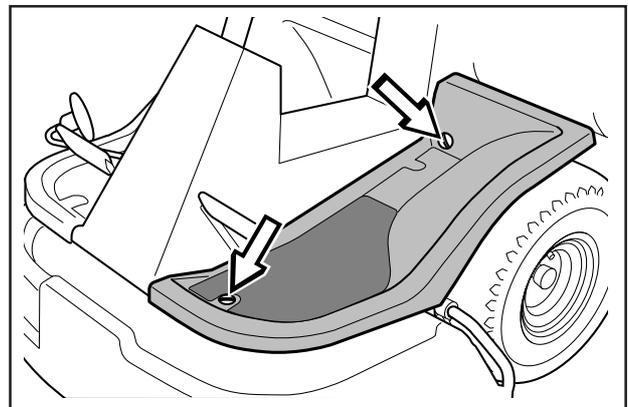
Remove the screws (2 and 3) from the fender. On the Rider 13 and Rider 13 Bio the knob (1) must also be removed.



8009-576

Left-hand fender

Release the screws in the fender and lift off the fender.



8009-577

MAINTENANCE

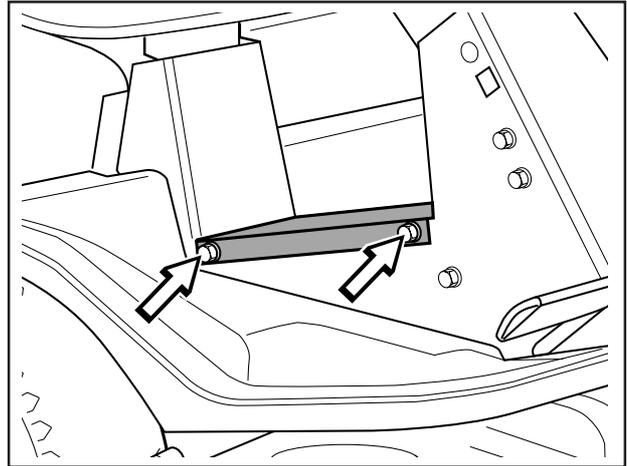
Checking and adjustment of the steering wires

The steering is controlled by means of wires.

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

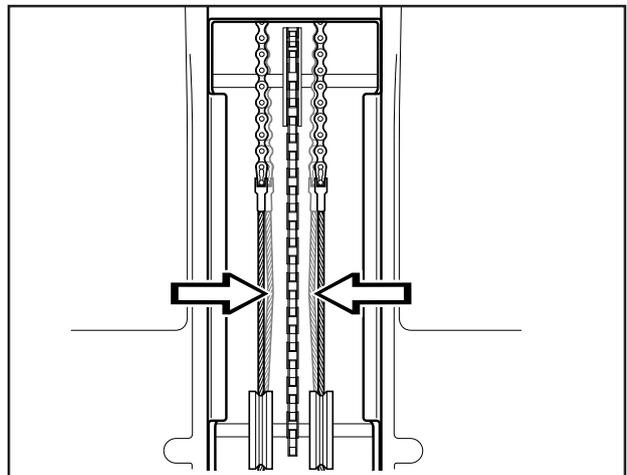
Check and adjust the steering as follows:

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



8009-578

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



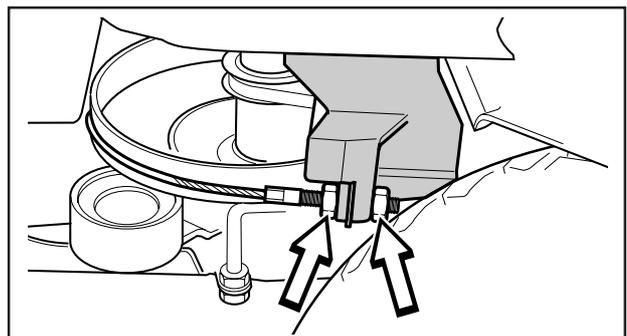
6008-009

3. If necessary, the wires can be adjusted by tightening the adjuster nuts on each side of the steering collar. Do not tension the wires too much, they should only be *tightened* against the steering collar.

Support the wire so it does not twist.

If you tension only one side the steering wheel's centre position may change.

Check the wire tension as set out in point 2 after you have made the adjustment.



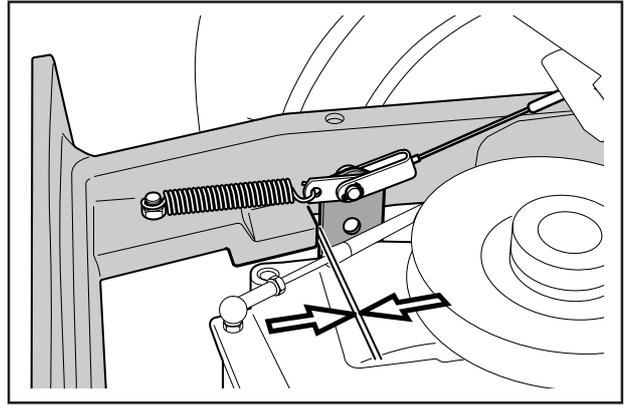
8009-579

MAINTENANCE

Checking the brake Rider 11 and Rider 11 Bio

The brake is of the disc brake type and is fitted on the gearbox.

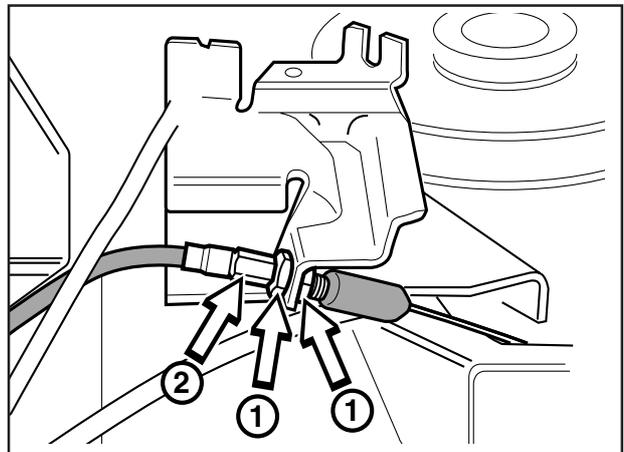
Check that the brake is correctly adjusted by measuring the distance between the brake lever and the front edge of the recess on the chassis. The distance should be 0–1 mm (0-0,040") when the brake is not applied.



8009-580

Adjusting the brake Rider 11 and Rider 11 Bio

1. Release the lock nuts (1).
2. Tension the wire with the adjusting screw (2) so that the distance between the brake lever and the front edge of the recess on the chassis is 1 mm (0,040").
3. Tighten the lock nuts (1) after adjustment.



6008-012

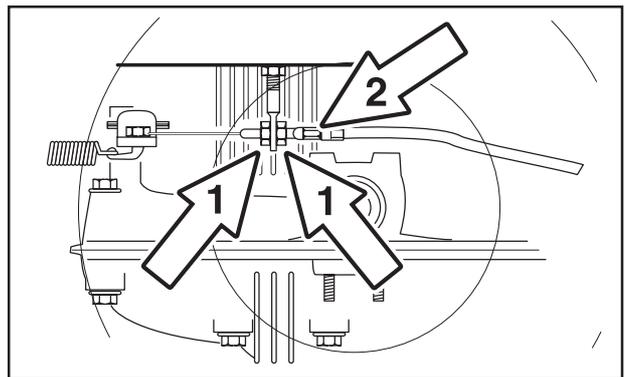
Check and adjust the brakes on Rider 13 and Rider 13 Bio

Check that the brakes are correctly adjusted by placing the Rider on a slight downhill slope with the clutch disengaged and activating the brake.

If the rider mower begins to move then the brakes must be adjusted.

The brake is adjusted as follows:

1. Release the lock nuts (1).
2. Tension the wire with the adjusting screw (2) until all the play in the wire is taken up.
3. Tighten the lock nuts (1).
4. On completion of the adjustment the brake should be re-checked.



6008-239H



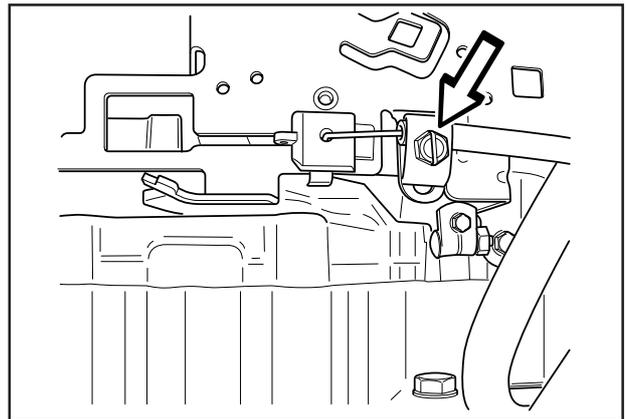
WARNING!
Poorly adjusted brakes can result in reduced braking power.

MAINTENANCE

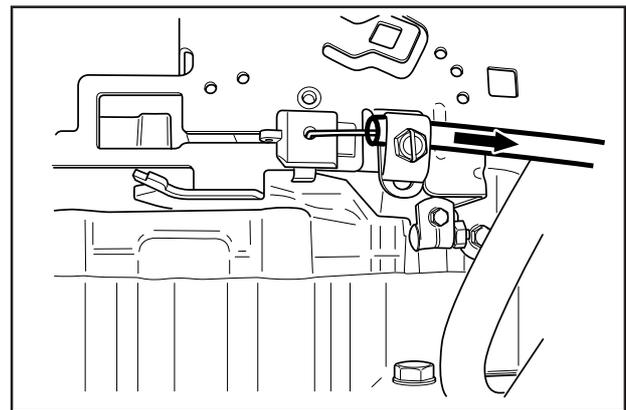
Adjustment of the throttle wire

If the engine does not respond as it should when the throttle lever is moved, or if it produces black smoke or does not reach top speed, the throttle wire may need adjusting.

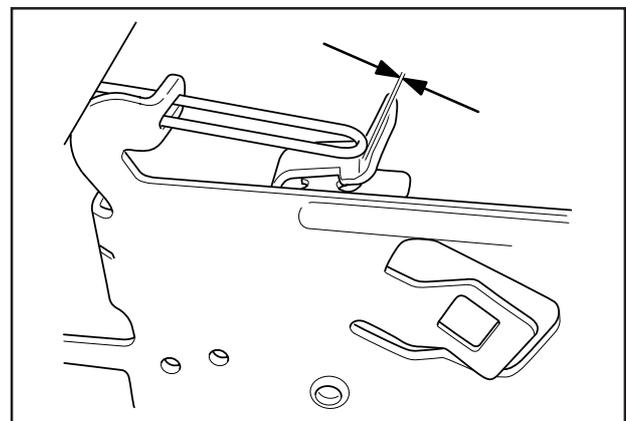
1. Release the clamping screw (see arrow) and push the throttle control to the choke position.
2. Pull the throttle wire's outer casing to the far right and check that the choke is fully activated.
3. Tighten the clamping screw.
4. Pull the throttle control back to the full throttle position and check that the choke is no longer activated.



8009-402



8009-403



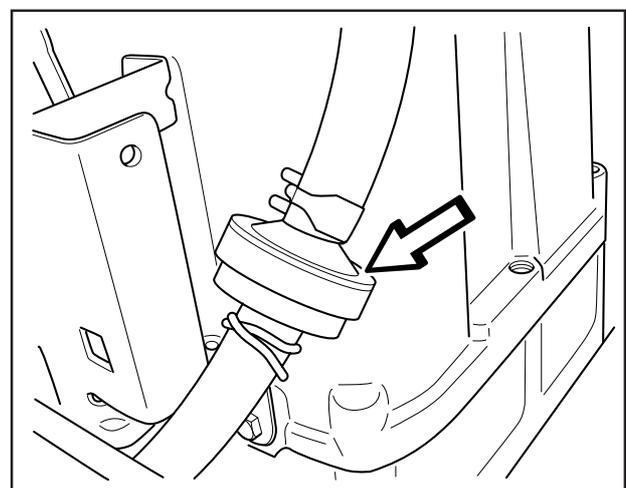
8009-404

Replacement of the fuel filter

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

Replace the filter as follows:

1. Raise the engine cover.
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.



8009-405

MAINTENANCE

Replacing the air filter

If the engine seems to lack power or goes irregularly the reason may be that the air filter is clogged.

It is therefore important to replace the air filter at regular intervals (see "Maintenance \ Maintenance Schedule" for correct service interval)

The air filter is replaced as follows:

1. Raise the engine cover.
2. Pull up the handle on the air filter cover, unhook and turn towards the engine.
3. Remove the air filter cover.
4. Lift out the air filter cartridge from the fan housing.

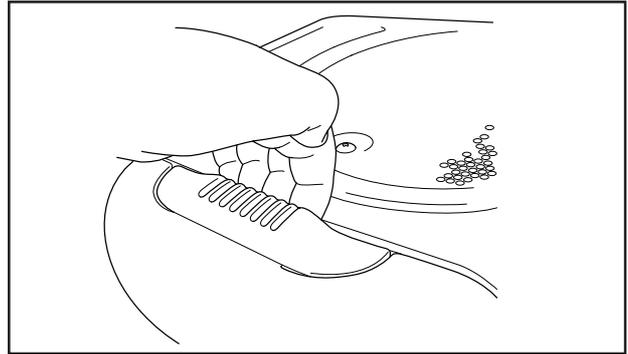
Replace the paper filter if it is clogged with dirt.

IMPORTANT INFORMATION

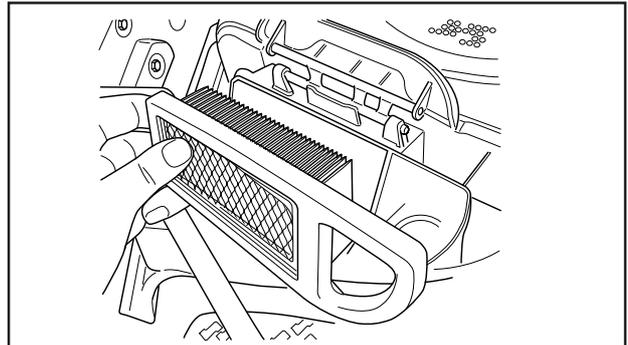
Do not use compressed air to clean the paper filter.

Filters should not be oiled. They should be assembled dry.

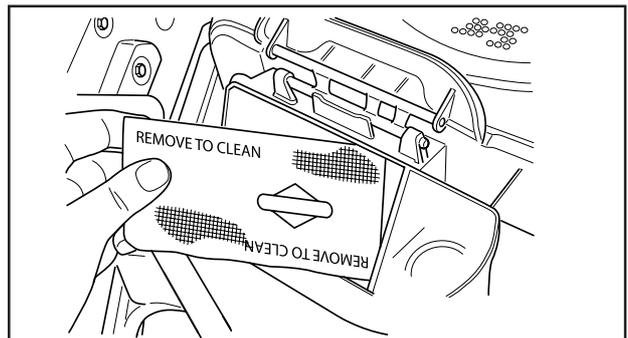
5. Carefully lift the precleaner out of the fan housing. Carefully clean the fan housing so that dirt does not fall down into the carburetor.
6. Insert a new precleaner and air filter cartridge in the fan housing.
7. Align the tabs on the cover with the slits in the housing and replace the air filter cover.
8. Pull the handle outwards. Secure the handle in the air filter cover and close the cover by pressing it inwards.



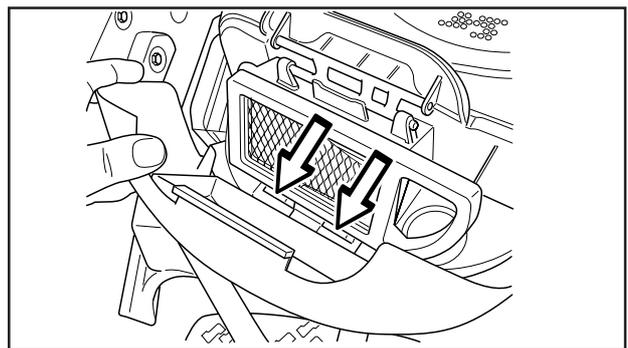
8009-406



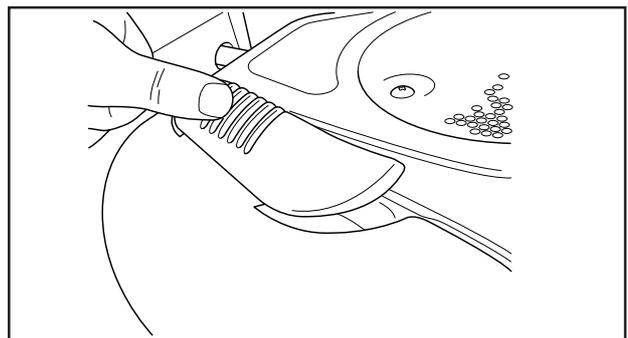
8009-408



8009-407



8009-409



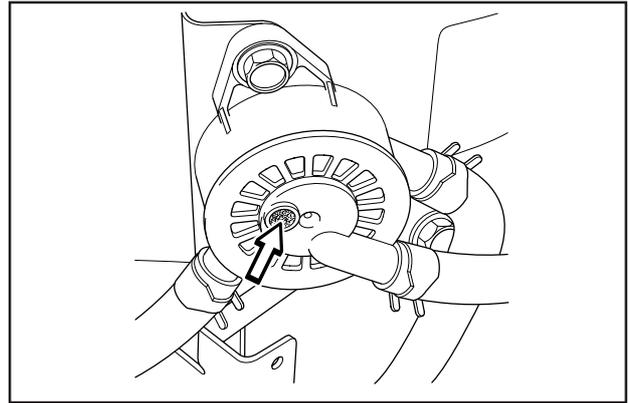
8009-410

MAINTENANCE

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.



8009-411

Check the level of the battery acid

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

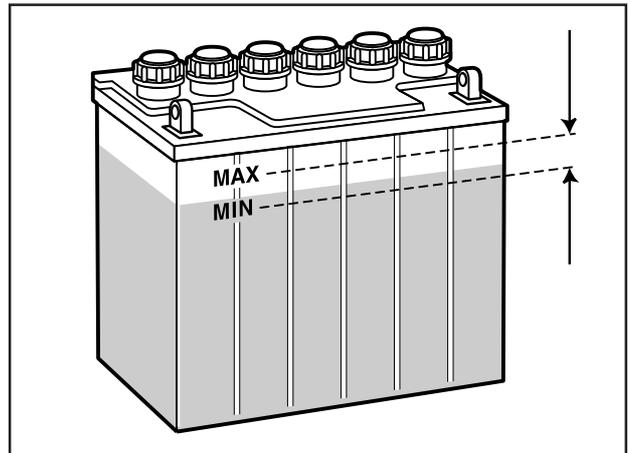
 **WARNING!**
Procedures on contact with acid

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.



6008-013

Ignition system

The engine is equipped with an electronic ignition system. Only the spark plug requires maintenance.

For recommended spark plug, see chapter "Technical data".

IMPORTANT INFORMATION

Fitting the wrong spark plug type can damage the engine.

1. Remove the ignition cable shoe and clean around the spark plug.
2. Remove the spark plug with a 5/8" (16 mm) spark plug socket wrench.
3. Check the spark plug. Replace the spark plug if the electrodes are burned or if the insulation is cracked or damaged. Clean the spark plug with a steel brush if it is to be reused.
4. Measure the electrode gap with a gapping tool. The gap should be 0.75 mm (0.030"). Adjust as necessary by bending the side electrode.
5. Reinsert the spark plug, turning by hand to avoid damaging the threads.

IMPORTANT INFORMATION

Inadequately tightened spark plugs can cause overheating and damage the engine. Tightening the spark plug too much can damage the threads in the cylinder head.

6. After the spark plug is seated, tighten it using a spark plug wrench so that the washer is compressed. A used spark plug should be turned 1/8 of a turn from the seated position. A new spark plug should be turned 1/4 a turn from the seated position.
7. Replace the ignition cable shoe.

IMPORTANT INFORMATION

Do not turn over the engine if the spark plug or ignition cable has been removed.

MAINTENANCE

Inspecting the safety system

The Rider is equipped with a safety system that prevents starting or driving under the following conditions:

The engine should only be possible to start when the cutting unit is in its raised position and the hydrostat pedals are in the neutral position.

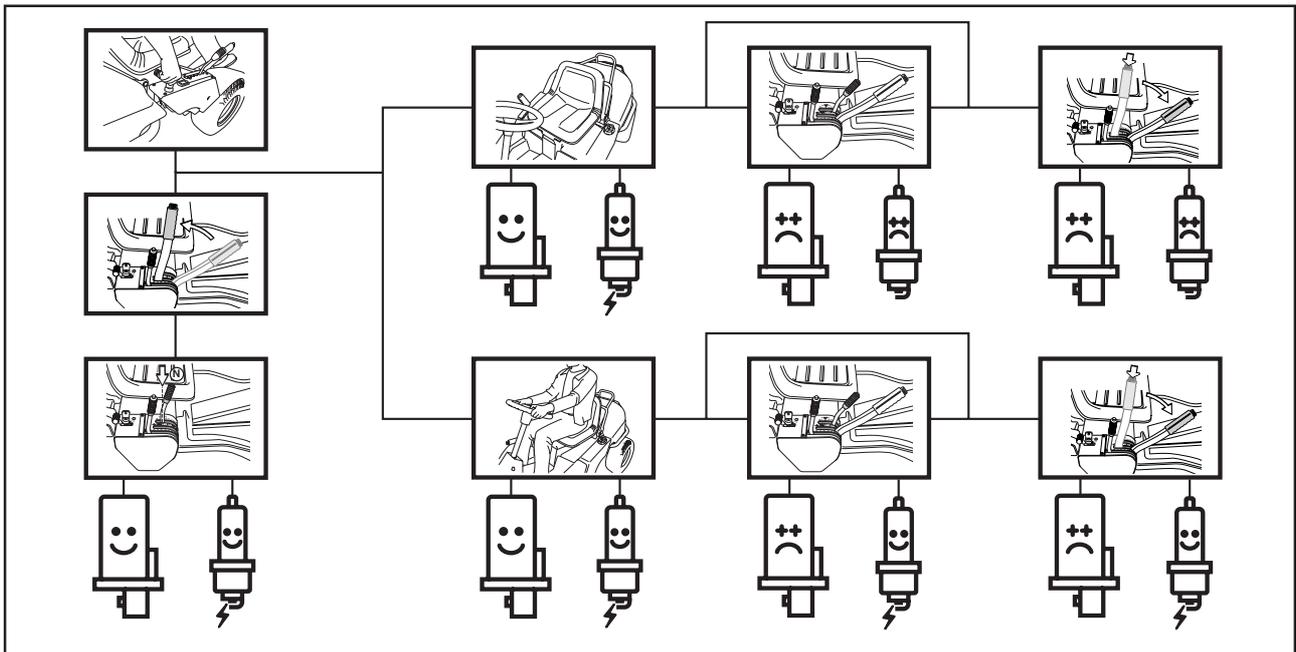
The driver does not need to be seated in the driver's seat.

Make daily inspections to ensure that the safety system works by attempting to start the engine when one of the conditions is not met. Change the conditions and try again.

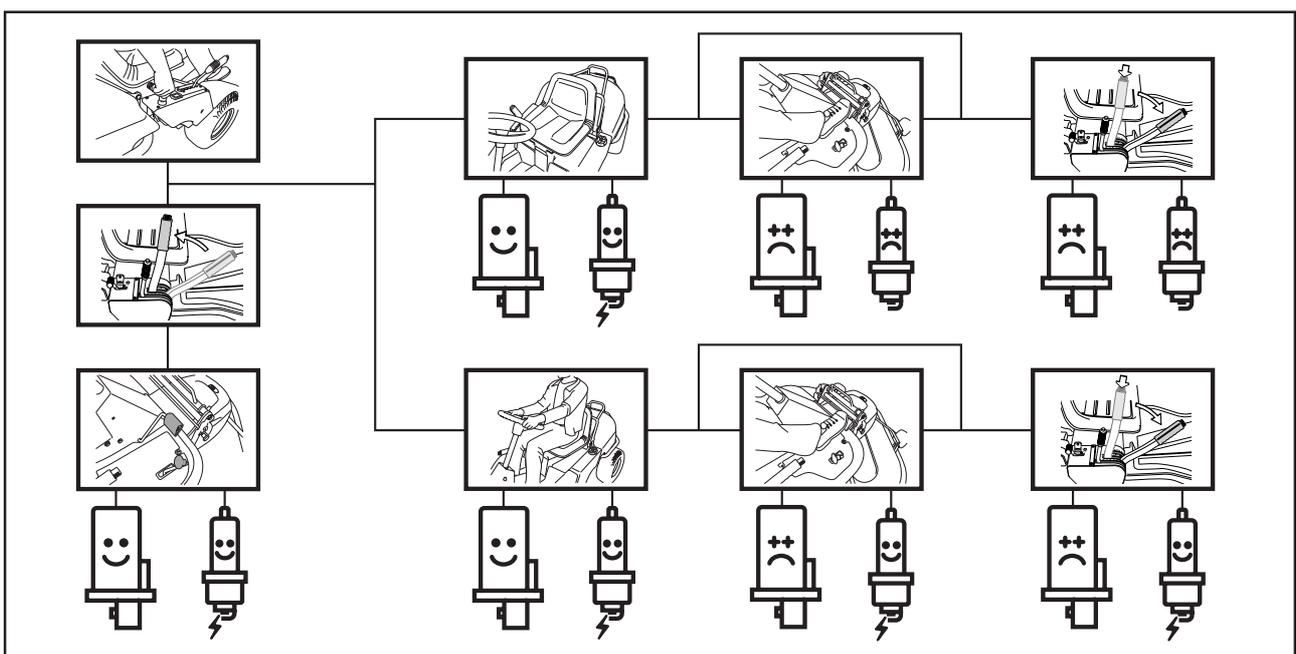
Check that the engine stops if you temporarily move out off the driver's seat while the cutting unit is lowered or the hydrostat pedals are not in the neutral position.

 Startmotor ☺ Works

 Ignition system ☹ Does not work



Rider 11



Rider 13

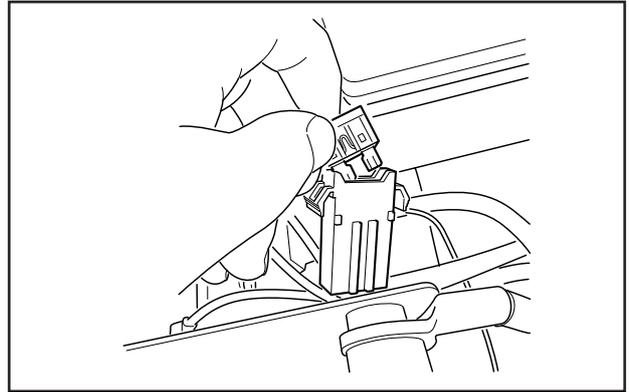
MAINTENANCE

Main fuse

The fuse is located in a loose holder under the battery case cover, in front of the battery.

Type: Flat-blade mounting, 15 A.

Do not use any other type of fuse when replacing. A blown fuse indicates that the mounting has burnt off. Pull the fuse out of the holder when replacing. The fuse is used to protect the electrical system. If it blows again shortly after replacing this is due to a short circuit, which must be rectified before the machine is used again.



8009-370

Checking the tyre pressure

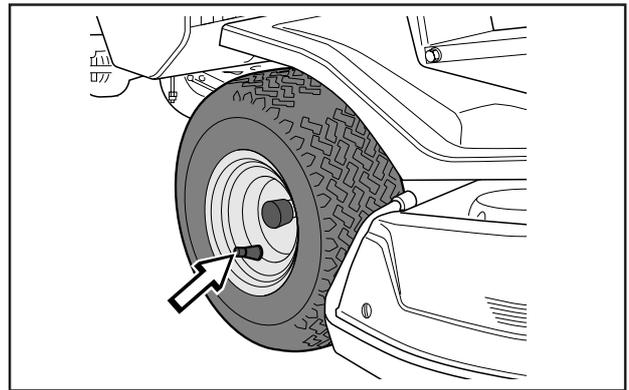
The tyre pressure should be 60 kPa (0.6 kp/cm²/8,5 PSI) all round.

To improve driving the pressure on the rear tyres can be reduced to 40 kPa (0.4 kp/cm²/5,6 PSI).

The maximum tyre pressure is 100 kPa (1.0 kp/cm²/14 PSI).

IMPORTANT INFORMATION

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



6008-030

Check the engine's cooling air intake

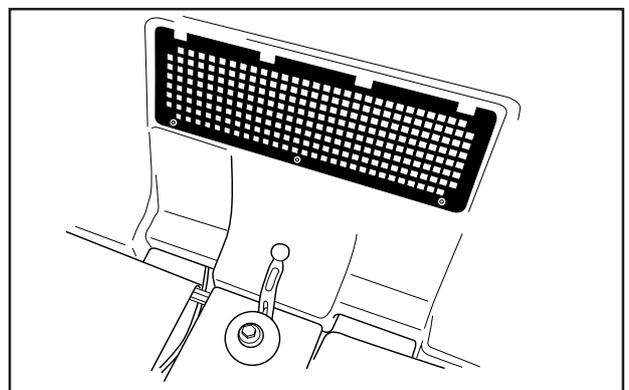
Clean the air intake grille in the engine cover behind the driver's seat.

Fold open the engine cover.

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

Check the air duct, located on the inside of the engine cover, ensure it is clean and does not rub against the cooling air intake.

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

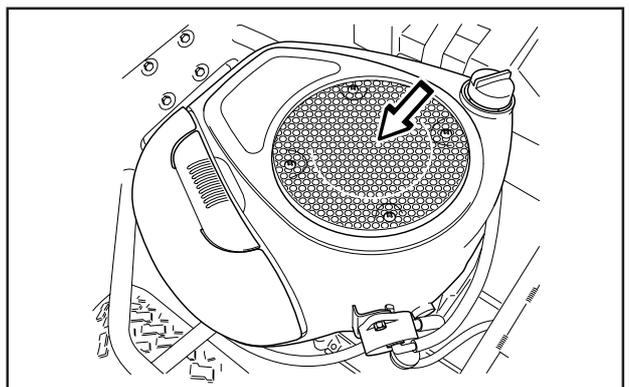


Air intake grille

8009-431



WARNING!
The cooling air intake rotates when the engine is running. Mind your fingers.



Cooling air intake

8009-412

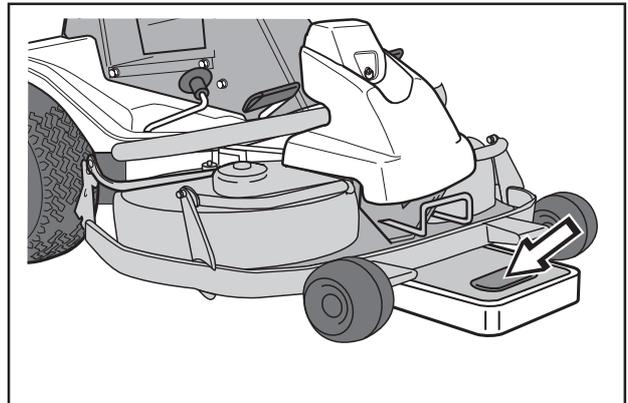
MAINTENANCE

Checking and adjustment of the cutting unit's ground pressure on Rider 11 Bio and Rider 13 Bio

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.

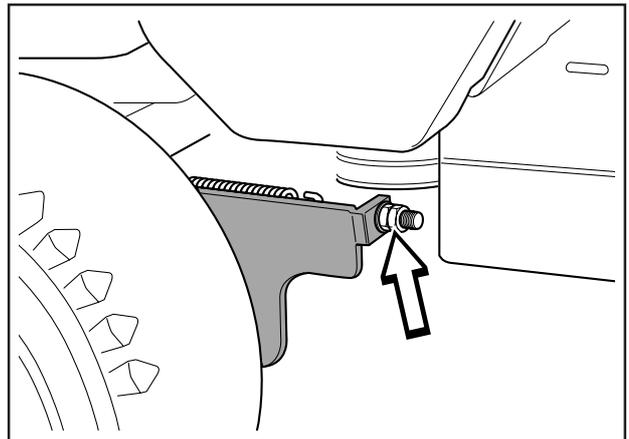
1. Check the tyre air pressure. It should be 60 kPa (0,6 kp/cm²/8,5 PSI).
2. Place a set of bathroom scales under the cutting unit's frame (front edge) so that it rests on the scales. If necessary a block can be placed between the frame and scales so that the support wheels do not bear any weight.



6017-216

3. 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 (26,5-33 lb).

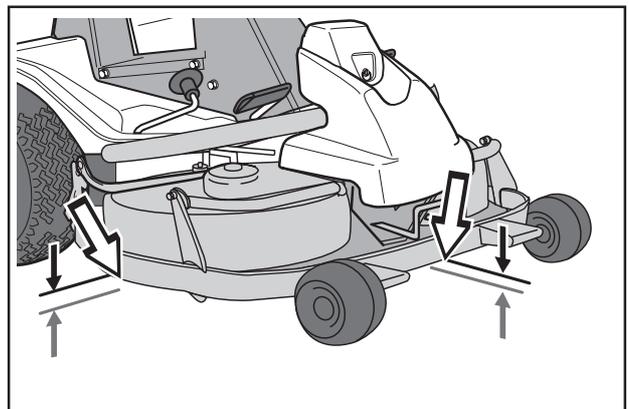


8009-582

Checking the cutting unit's parallelism

Check the parallelism of the cutting unit as follows:

1. Check the tyre air pressure. It should be 60 kPa (0,6 kp/cm²/8,5 PSI).
2. Place the machine on a level surface.
3. Measure the distance between the ground and the front and rear edges of the cutting unit hood. The cutting unit should slope forwards slightly so that the rear edge is 2-4 mm (1/8") higher than the front edge.

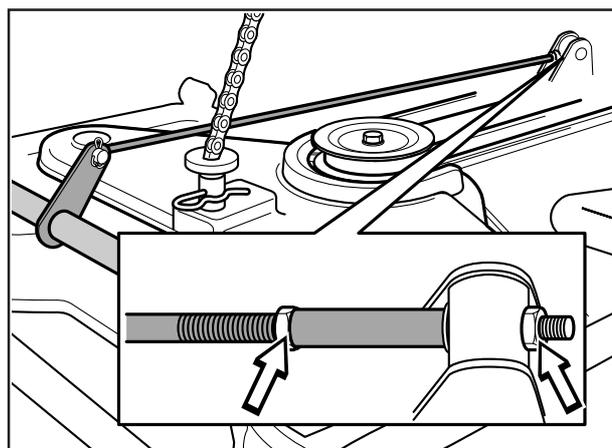


6017-217

MAINTENANCE

Adjustment of the cutting unit's parallelism for the Rider 11 Bio and Rider 13 Bio

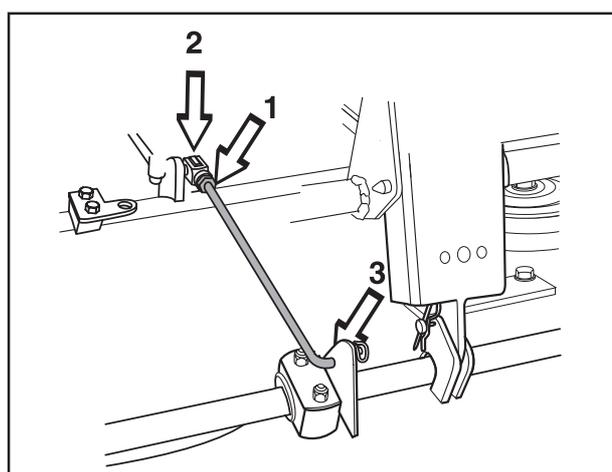
1. Check the tyre air pressure. It should be 60 kPa (0,6 kp/cm²/8,5 PSI).
2. Dismantle the front hood and right-hand fender as described on page 22-23.
3. Vertical adjustment of the cutting unit is made with the adjusting nuts on the back edge of the lift-strut.
4. Raise the cutting unit at the front edge by shortening the lift-strut. Lower the cutting unit at the front edge by lengthening the lift-strut.
5. Tighten the nuts against each other after the adjustment.
6. On completion of the adjustment the unit's parallelism should be re-checked.
7. Fit the right-hand fender and the front hood.



6008-026H

Adjusting the alignment of the cutting unit for the Rider 11 Bio and Rider 13 Bio

1. Check the tyre air pressure. It should be 60 kPa (0,6 kp/cm²/8,5 PSI).
2. Remove the front hood and right-hand fender as described on page 22-23.
3. Unscrew the nut (1) from the parallel strut. Remove the clip (2) and the parallel strut.
4. Turn the fork anticlockwise to raise the cover's rear edge, clockwise to lower the cover's rear edge.
5. Once adjustment is complete, refit the parallel strut and clip and tighten the nut.
6. Recheck the alignment of the cutting unit after adjustment.
7. Refit the right-hand fender and hood.



8009-138

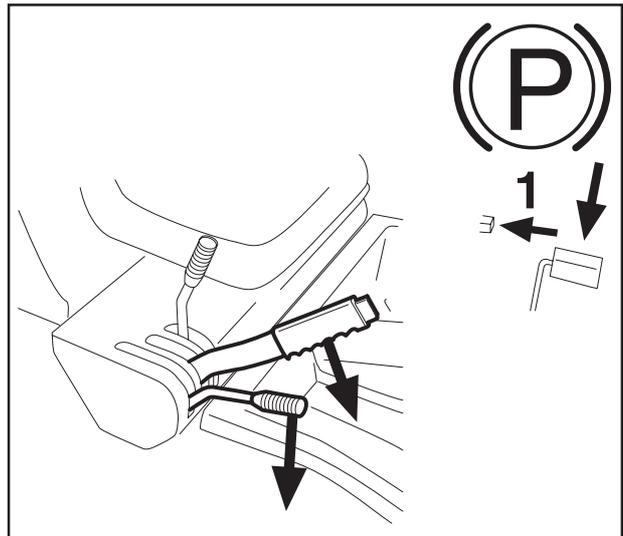
MAINTENANCE RIDER 11 BIO/13 BIO

Service position for BioClip 90

The cutting head can be placed in the service position to provide easy access for cleaning, repairs and servicing. In the service position the cutting unit is raised and locked in the vertical position.

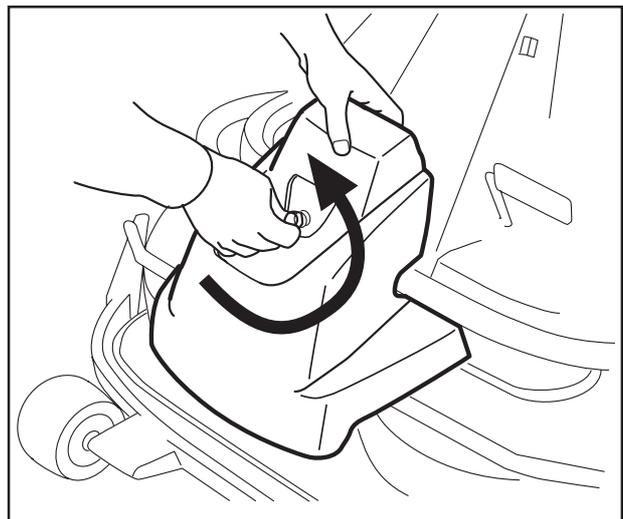
Placing in service position

1. Position the machine on flat ground. Apply the parking brake (1). Adjust the cutting unit to the lowest cutting height and lower the cutting unit.



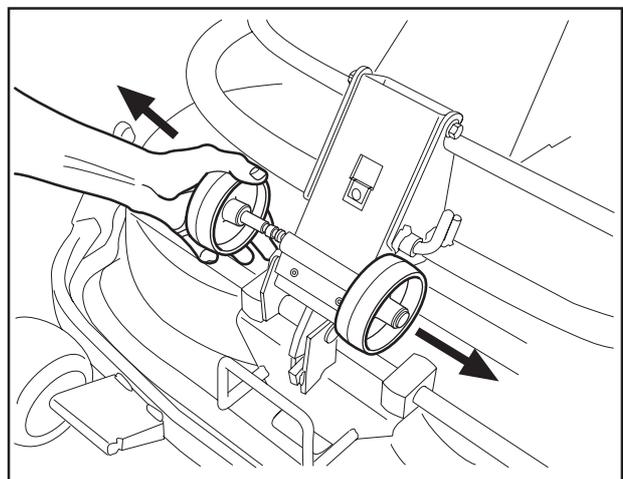
6017-218

2. Remove the front hood by removing the pin. (There are complete instructions on using the service position inside the front hood).



6017-219

3. Remove the two support wheels from under the front hood.



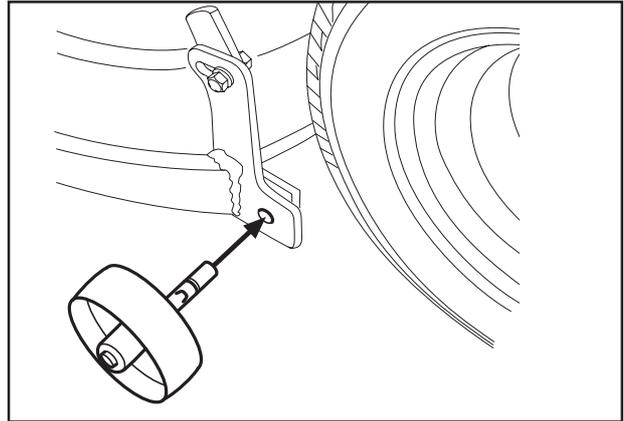
6017-220

MAINTENANCE RIDER 11 BIO/13 BIO

4. Fit the support wheels on either side of the rear of the cutting unit.

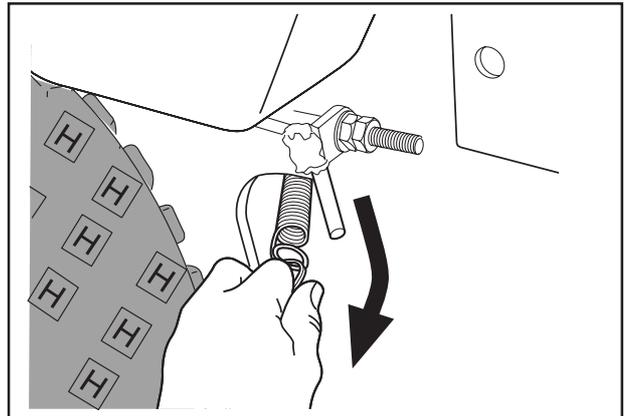


WARNING!
Wear protective glasses when dismantling the cutting unit. The spring which tensions up the belt can go off and cause personal injury.



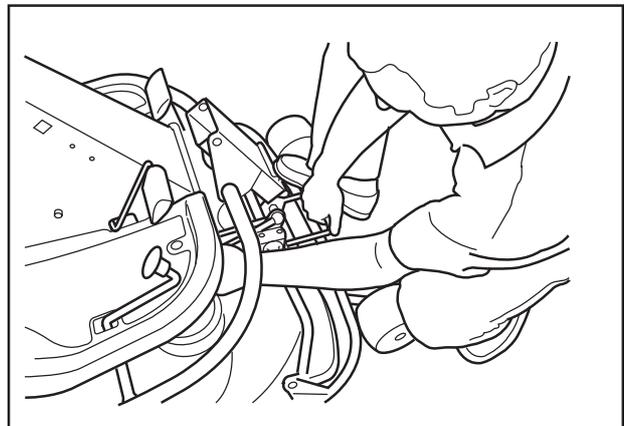
6017-221

5. Disengage the spring from the drive belt tensioning wheel.



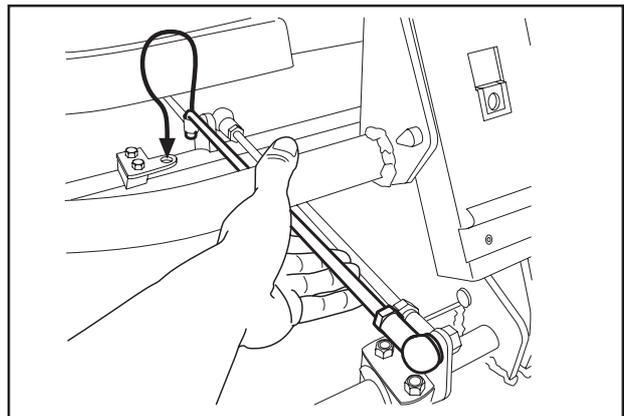
8009-583

6. Place a foot on the front edge of the cutting unit near the wheel and raise the front edge of the unit to make it easier to remove the lift strut.



8009-122

7. Engage the strut in the holder.



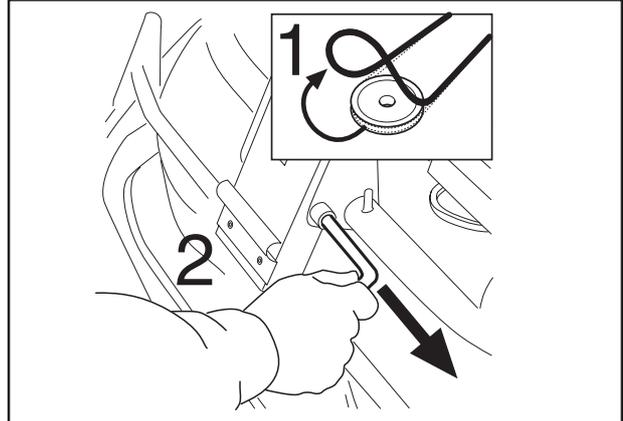
6017-223

MAINTENANCE RIDER 11 BIO/13 BIO



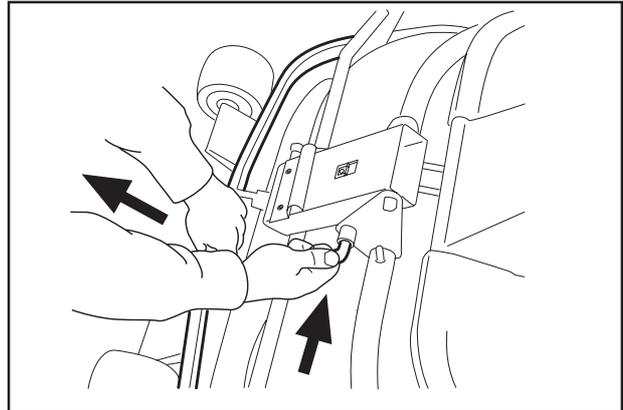
WARNING!
Take care not to get your hand trapped.

8. Lift off the drive belt (1).
Then pull out the pin (2).



6017-225

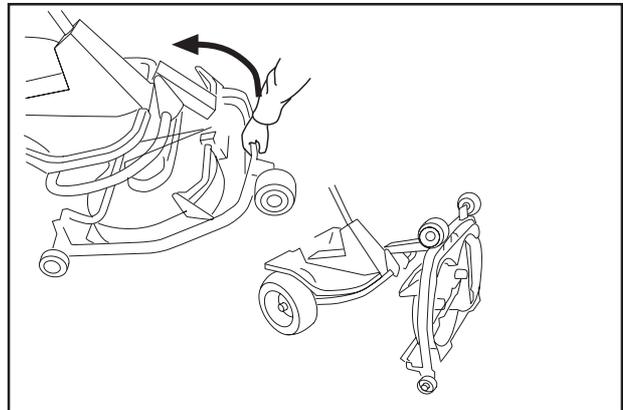
9. Pull the frame forwards and refit the pin.



6017-226

10. Grasp the front edge of the cutting unit, pull out and raise into the service position.

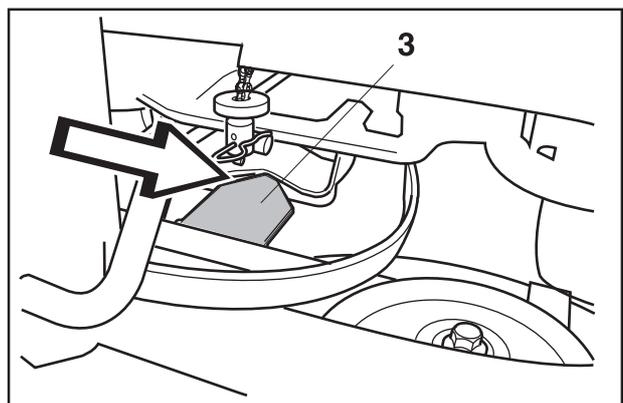
If the cylindrical bolt, which is now holding the cutting unit is removed, the cutting unit can be lifted off.



6017-227

Restoring from service position

To leave the service position, reverse the procedures set out in "Placing in the service position". Make sure that the cutting unit's "lug" (3) enters the loop correctly on the underside of the machine, see diagram.



8009-438

MAINTENANCE

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.

IMPORTANT INFORMATION

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

The blades should be balanced after sharpening.

Damaged blades should be replaced when hitting obstacles that result in a breakdown. Let the servicing dealer judge whether the blade can be repaired/ground or must be discarded.

IMPORTANT INFORMATION

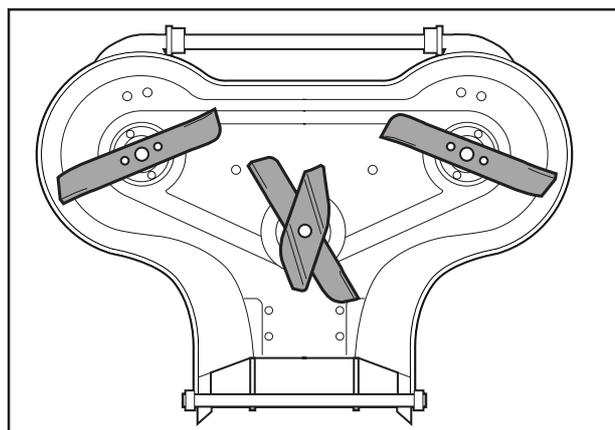
The blades of the BioClip unit should always be spaced as shown in the diagram at 90° intervals. If not, the blades may collide and cause damage to the cutting unit.

Replacing the break-pin (BioClip)

The blades are fitted with a break-pin to protect the BioClip unit and its drive when colliding with obstacles. A domed, spring friction washer is fitted to each blade bolt. The washer must always be replaced with a new washer when replacing the break-pin. Otherwise the break-pin can break causing the blades to collide.

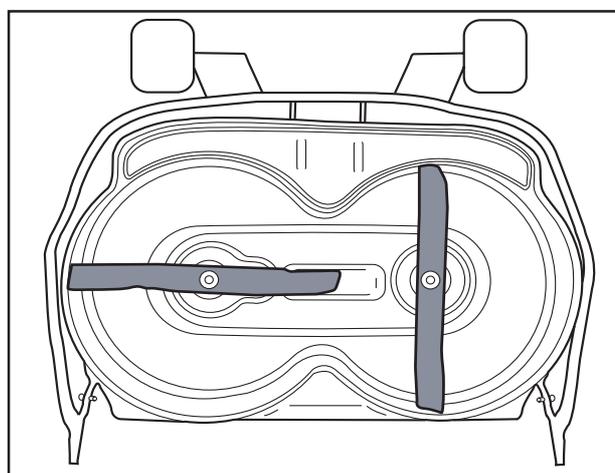
Only use original spare parts. A set containing a blade, break-pin and friction washer can be purchased from your dealer.

1. Put the cutting unit in the service position, see "Service position for the cutting unit\Placing in the service position".
2. Remove the blade (2A) by removing the blade bolt with washer and friction washer (2B).
3. Remove the remains of the broken break-pin (3).
4. Make sure the contact surfaces (4) on the blade and the blade mounting are free from metal. Clean if necessary.
5. Fit **one** new break-pin (5) in the blade mounting.
6. Fit the blade (6), make sure it is fitted as illustrated.
7. Fit a **new** friction washer (7) with the concave face turned towards the blade.
8. Fit the blade bolt with washer (8). Tightening torque 45-50 Nm (4,5-5 kpm/32-36 lbft).



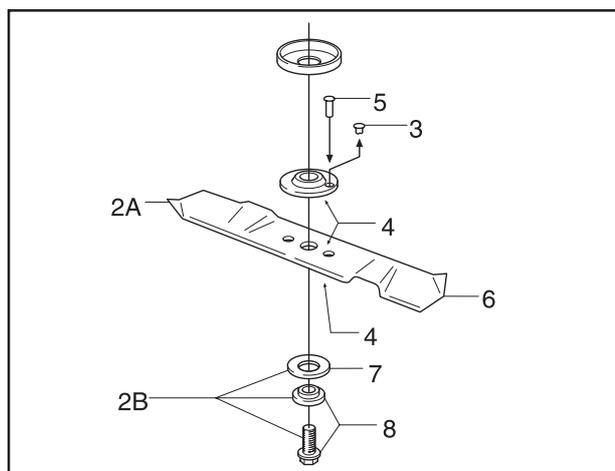
Klippaggregat (bakutkast)

6008-024



BioClip 90

6017-223



8009-137A

LUBRICATION

Check the engine's oil level

Check the oil level in the engine when the Rider stands horizontal with the engine switched off.

Fold open the engine cover.

Release the dip stick and pull out. Wipe off the oil and insert again.

The dip stick must be fully screwed down.

Now release the dip stick again and pull out. Check the oil level.

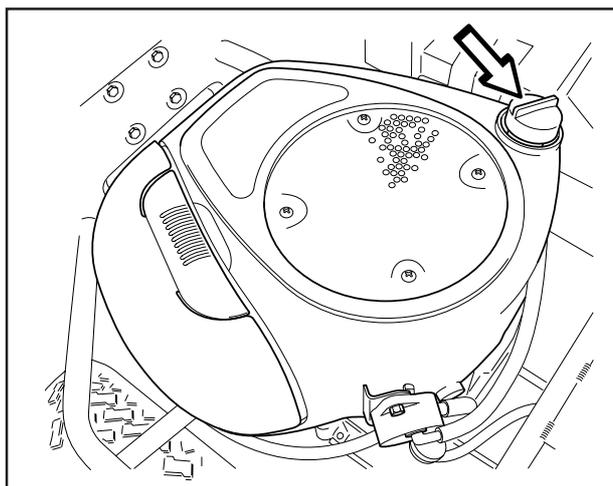
The oil level should be between the markings on dip stick. If the level approaches the ADD mark, top up with oil to the FULL mark.

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

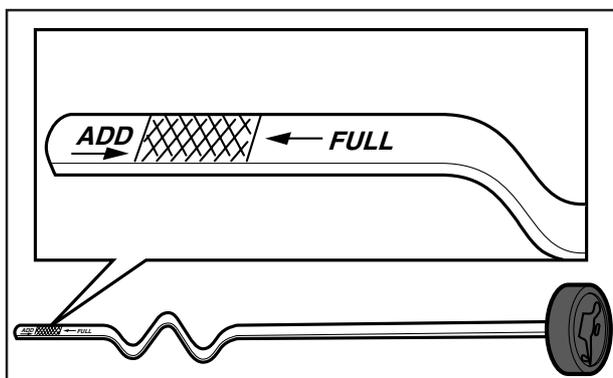
Fill the oil slowly. Tighten the dipstick correctly before starting the engine. Start and run the engine at idling speed for approx. 30 seconds. Turn off the engine. Wait 30 seconds and check oil level. If necessary fill so that the oil comes up to the "FULL" mark on the dipstick.

First and foremost use synthetic engine oil class SJ-CF 5W/30 or 10W/30 for all temperature ranges. Mineral oil SAE30, class SF-CC can be used at temperatures $> +5^{\circ}\text{C}$ (40°F).

Do not mix different types of oil.



8009-413



6008-035

Changing the oil

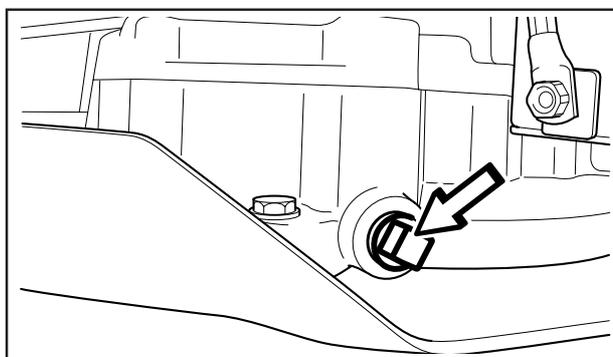
The oil should be changed for the first time after 5 hours of running time. Thereafter it should be changed every 50 hours of running time.

With heavy loads or high temperatures replace the oil after every 25 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. Place a receptacle under the engine's drain plug, located on the left-hand side of the engine.
2. Remove the dip stick and drain plug.
3. Let the oil run out into the receptacle.
4. Fit the drain plug and tighten.
5. Fill up with oil to the FULL mark on the dip stick. The oil is filled in the same hole for the dip stick. See "Checking the engine's oil level" above for filling instructions. The engine holds 1.4 litres (1.5 USqt) of oil.
6. Run the engine warm and then check that there is no leakage from the drain plug.



8009-414

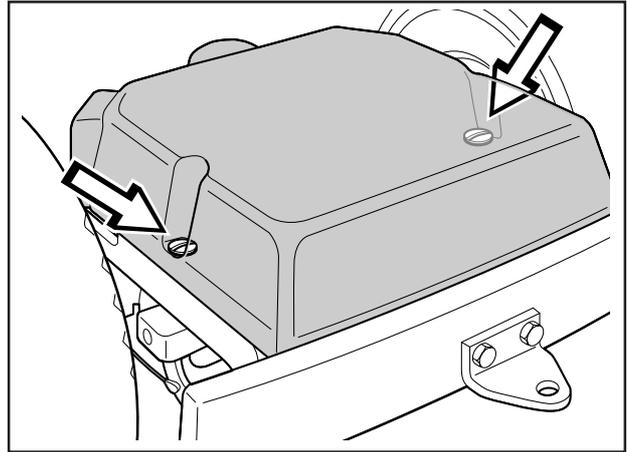
IMPORTANT INFORMATION

Used engine oil is hazardous to health and environment and must in accordance with the law not be poured out on the ground or in the nature, and must be handed in to a workshop or other designated station for treatment. Avoid skin contact, wash with soap and water in the event of spillage.

LUBRICATION

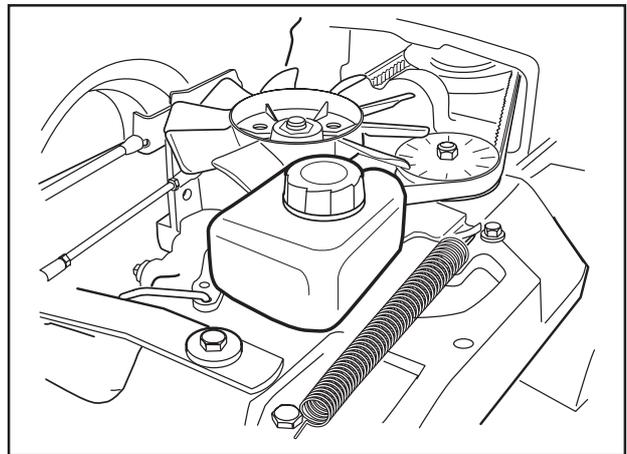
Check the transmission's oil level Rider 13 and Rider 13 Bio

1. Lift off the transmission cover. Release the two screws (one of each side) and lift off the transmission cover.



8009-585

2. Check that there is oil in the transmission oil tank. Top up if necessary with engine oil SAE 10W/30 (class SF-CC).



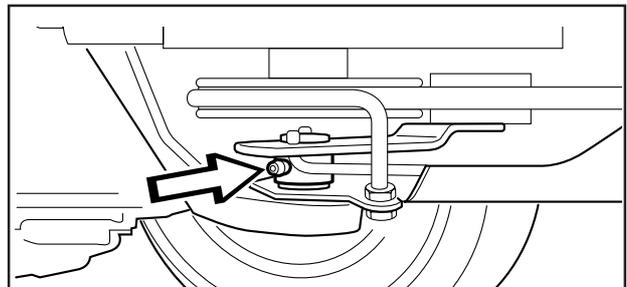
6008-240H

Lubrication of belt tensioner

The belt tensioner must be lubricated regularly with high-quality molybdenum sulphide grease*.

Inject grease into the nipple on the right side below the engine bottom pulley until grease is forced out.

With daily use lubrication should be conducted twice a week.



6008-232

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.

The machine should be lubricated regularly, and twice a week when used daily.

* Grease from well-known brand names (petrol companies, etc.) usually maintains a good quality. The most important property is that the grease provides good protection against corrosion.

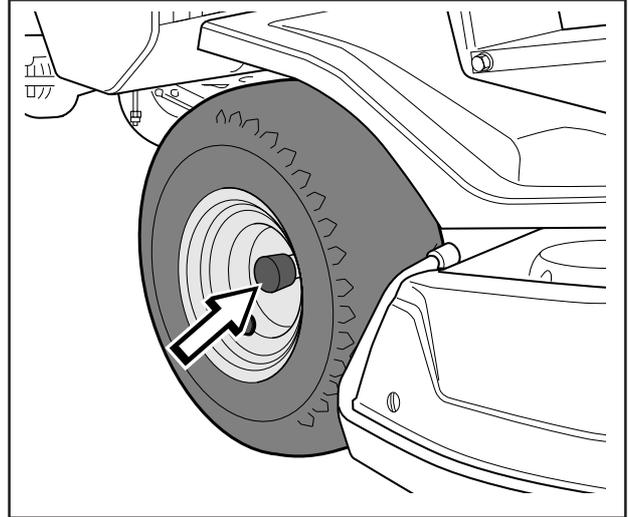
LUBRICATION

Lubrication Rider 11 and Rider 11 Bio

Lubrication of front wheel bearings

On Riders with rear ejection the hood and wings must be removed so that the bar can be raised to allow removal of the wheel.

1. Remove the plastic cover on the hub.
2. Remove the lock-ring and washer on the front wheel axle.
3. Lift off the wheel.
4. Grease the axle journal with molybdenum sulphide grease*.
5. Assemble the parts in the reverse order.



8009-584

IMPORTANT INFORMATION

Check that the lock-ring is correctly positioned in the slot.

* Grease from well-known brand names (petrol companies, etc.) usually maintains a good quality. The most important property is that the grease provides good protection against corrosion.

TROUBLE SHOOTING SCHEDULE

Problem	Procedure
Engine will not start	<ul style="list-style-type: none">• Fuel tank empty• Plug defective• Plug connection defective• Dirt in carburettor or fuel pipe
Starter does not pull round engine	<ul style="list-style-type: none">• Battery flat• Bad contact between cable and battery terminal• Lift lever for cutting unit in wrong position• Main fuse blown. The fuse is placed in front of the battery, under the battery cover.• Ignition lock faulty• Gear shift/hydrostat pedals not in the neutral position
Engine does not run smoothly	<ul style="list-style-type: none">• Wrong gear, too high• Carburettor incorrectly set• Air filter clogged• Fuel tank vent blocked• Ignition setting defective• Dirt in carburettor or fuel pipe• Choke activated or throttle wire incorrectly adjusted
Engine seems to have no power	<ul style="list-style-type: none">• Air filter clogged• Plug defective• Dirt in carburettor or fuel pipe• Carburettor incorrectly set• Choke activated or throttle wire incorrectly adjusted
Engine overheats	<ul style="list-style-type: none">• Engine overloaded• Air intake or cooling flanges blocked• Fan damaged• Too little or no oil in engine• Ignition defective• Plug defective
Battery does not charge	<ul style="list-style-type: none">• One or more cells faulty• Bad contact between battery terminals and cables.
Machine vibrates	<ul style="list-style-type: none">• Blades are loose• Engine is loose• Imbalance on one or more blades, resulting from damage or inferior balancing after sharpening
Uneven mowing	<ul style="list-style-type: none">• Blades blunt• Cutting unit skew• Long or wet grass• Grass blockage under hood• Different tyre pressures on right and left sides• Over-speeding• Drive belts slipping• The blade has a broken break-pin (BioClip)

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 spark plug and pour about a tablespoon of engine oil into the cylinder. Pull round the engine to distribute the oil and screw the plug 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.
8. Store the machine in a clean and dry place and cover it over for extra protection.

Cover

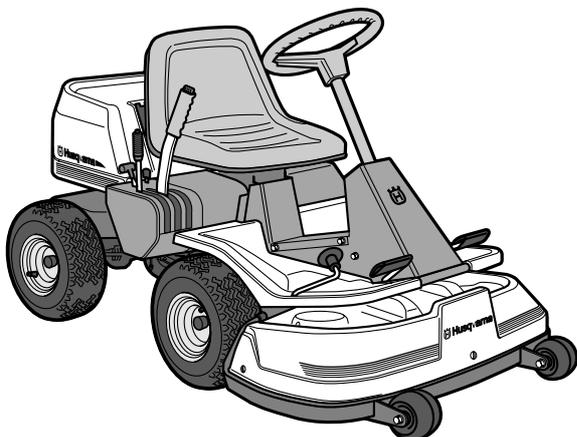
There is a cover to protect your machine during storage or transport. Contact your dealer for a demonstration.

Service

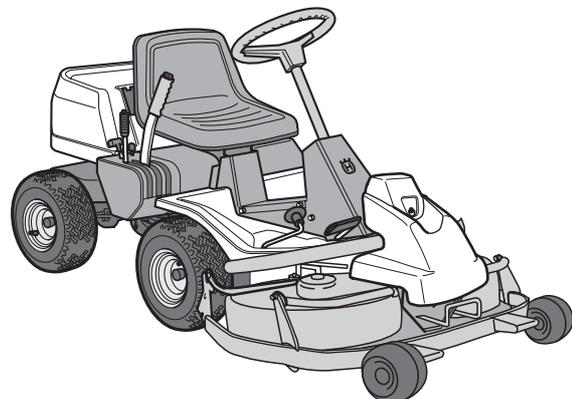
When ordering spare parts state the purchase year, model, type, and serial number.

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.



6004-001Hy



6017-213

TECHNICAL DATA

Dimensions

	Rider 11	Rider 13
Length with unit	2040 mm/6,69 ft	2040 mm/6,69 ft
Width with unit	960 mm/3,15 ft	960 mm/3,15 ft
Height	1070 mm/3,52 ft	1070 mm/3,52 ft
Weight in working order with unit	216 kg/475 lb	219 kg/481 lb
Wheel base	820 mm/2,69 ft	820 mm/2,69 ft
Track	610 mm/2 ft	625 mm/2,05 ft
Tyre size	165/60-8	165/60-8
Tyre pressure, front & rear	60 kPa (0.6 kp/cm ² /8,5 PSI)	60 kPa (0.6 kp/cm ² /8,5 PSI)
Max. gradient	15°	15°

Engine

Manufacture/model	Briggs & Stratton/215907011E1	Briggs & Stratton/219907011E1
Power	7.7/10.5 kW/h.p.	9.2/12.5 kW/h.p.
Displacement	344 cm ³	344 cm ³
Fuel	minimum 85 octane unleaded	minimum 85 octane unleaded
Tank volume	7 litres/7,4 USqt	7 litres/7,4 USqt
Oil synthetic	SAE 5W/30 or SAE 10W/30 class SJ-CF	SAE 5W/30 or SAE 10W/30 class SJ-CF
Oil volume	1.4 litres/1,5 USqt	1.4 litres/1,5 USqt
Start	Electric starter	Electric starter

Electrical system

Type	12 V, negative earth	12 V, negative earth
Battery	12 V, 24 Ah	12 V, 24 Ah
Spark plug	Champion QC12YC electrode gap = 0.75 mm/0,030"	Champion QC12YC electrode gap = 0.75 mm/0,030"
Main fuse	15 A flat-blade mounting	15 A flat-blade mounting

Noise emissions and cutting width

Measured noise level	100 dB(A)	100 dB(A)
Guaranteed noise level	100 dB(A)	100 dB(A)
Cutting width	850 mm/2,79 ft	850 mm/2,79 ft

Transmission

Manufacture	Peerless typ MST 205	Tuff Torq K46
Oil		SAE 10W/30, class SF-CC
No. of forward gears	5	
No. of reverse gears	1	
Speed in forward gears	1.85-8.9 km/h	0-9 km/h
Speed in reverse	2.5 km/h	0-6 km/h

Cutting unit

Type	3-blade unit with rear ejection	3-blade unit with rear ejection
Cutting height	9 pos. 40–90 mm/1 9/16"-3 9/16"	9 pos. 40–90 mm/1 9/16"-3 9/16"
Blade diameter	304 mm/12"	304 mm/12"

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.

TECHNICAL DATA

Dimensions	Rider 11 Bio	Rider 13 Bio
Length without unit	2010 mm/6,58 ft	2010 mm/6,58 ft
Length with unit	2220 mm/7,29 ft	2220 mm/7,29 ft
Width without unit	880 mm/2,89 ft	880 mm/2,89 ft
Width with unit	1000 mm/3,29 ft	1000 mm/3,29 ft
Height	1070 mm/3,52 ft	1070 mm/3,52 ft
Weight in working order with unit	226 kg/497 lb	229 kg/504 lb
Wheel base	855 mm/2,8 ft	855 mm/2,8 ft
Track front	715 mm/2,34 ft	715 mm/2,34 ft
Track rear	625 mm/2,05 ft	625 mm/2,05 ft
Tyre size	165/60-8	165/60-8
Tyre pressure, front & rear	60 kPa (0,6 kp/cm ² 8,5 PSI)	60 kPa (0,6 kp/cm ² 8,5 PSI)
Max. gradient	15°	15°
Engine		
Manufacture/model	Briggs & Stratton/215907011E1	Briggs & Stratton/219907011E1
Power	7,7/10,5 kW/h.p.	9,2/12,5 kW/h.p.
Displacement	465 cm ³	465 cm ³
Fuel	minimum 85 octane unleaded	minimum 85 octane unleaded
Tank volume	7 litres/7,4 USqt	7 litres/7,4 USqt
Oil synthetic	SAE 5W/30 or SAE 10W/30 class SJ-CF	SAE 5W/30 or SAE 10W/30 class SJ-CF
Oil volume	1,4 litres/1,5 USqt	1,4 litres/1,5 USqt
Start	Electric starter	Electric starter
Noise emissions and cutting width		
Measured noise level	98 dB(A)	98 dB(A)
Guaranteed noise level	100 dB(A)	100 dB(A)
Cutting width	900 mm/2,96 ft	900 mm/2,96 ft
Electrical system		
Type	12 V, negative earth	12 V, negative earth
Battery	12 V, 24 Ah	12 V, 24 Ah
Spark plug	Champion QC12YC electrode gap = 0,75 mm/0,030"	Champion QC12YC electrode gap = 0,75 mm/0,030"
Main fuse	15 A flat-blade mounting	15 A flat-blade mounting
Transmission		
Manufacture	Peerless typ MST 205	Tuff Torq K46
Oil		SAE 10W/30, class SF-CC
No. of forward gears	5	
No. of reverse gears	1	
Speed in forward gears	1,85-8,9 km/h	0-9 km/h
Speed in reverse	2,5 km/h	0-6 km/h
Cutting unit		
Type	2-blade unit BioClip 900 mm	2-blade unit BioClip 900 mm
Cutting height	9 pos. 45–95 mm/1 3/4" - 3 3/4"	9 pos. 45–95 mm/1 3/4" - 3 3/4"
Blade diameter	410 mm/16 1/8"	410 mm/16 1/8"

When this product is worn out or no longer used it should be returned to the dealer or other appropriate body for recycling.

EU-DECLARATION OF CONFORMITY

EC declaration of conformity (Only applies to Europe)

Husqvarna AB, SE-561 82 Huskvarna, Sweden, tel: +46-36-146500, declares under sole responsibility that **Husqvarna Rider 11/11 Bio and Rider 13/13 Bio**, from 2002's serial numbers and onwards (the year is clearly stated in plain text on the rating plate with subsequent serial number), complies with the requirements of the COUNCIL'S DIRECTIVES:

- of June 22, 1998 "relating to machinery" **98/37/EC, annex IIA.**
- of May 3, 1989 "relating to electromagnetic compatibility" **89/336/EEC**, and applicable supplements.
- of May 8, 2000 "relating to the noise emissions in the environment" **2000/14/EC.**

Information regarding noise emissions and the mowing width, see the Technical Data.

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

The registered body **0404, SMP Svensk Maskinprovning AB**, Fyrisborgsgatan 3, SE-754 50 Uppsala, Sweden has issued the report with number **01/901/001, 01/901/002, 01/901/003, 01/901/004** regarding the assessment of conformity according to annex VI to the COUNCIL'S DIRECTIVE of May 8, 2000 "relating to the emission of noise to surroundings" **2000/14/EC.**

Huskvarna January 3, 2002



Roger Andersson, Development Manager/Garden Products

SERVICE JOURNAL RIDER 11/13

Work done

Pre-delivery service

1. Top up battery with acid and recharge for four hours.
2. Fit steering wheel, seat and any optional equipment.
3. Adjust cutting unit:
 - Adjust the lifting springs (the "weight" of the cutting unit should be 12-15 kg/26,5-33 lb). Only applies to BioClip.
 - Adjust cutting unit so that rear edge is about 2–4 mm/1/8" higher than front edge.
 - Adjust cutting unit height setting so that cutting height limit is 5 mm/3/16" above the frame of the unit at the lowest cutting height.
4. Check that engine has correct amount of oil.
5. Check that the right amount of oil is in the transmission. (Not Rider 11)
6. Check and adjust tyre pressure (60 kPa/0,6 bar/8,5 PSI).
7. Connect battery.
8. Fill with fuel and start engine.
9. Check that machine does not move in neutral. (Not Rider 11)
10. Check:
 - Forward drive.
 - Reverse drive.
 - Operation of blades.
 - Seat safety switch.
 - Lift lever safety switch.
 - Safety switch for hydrostatic pedals/neutral setting.
11. Check engine revs 2 950 rpm.
12. Tell customer about:
 - Pre-delivery service carried out.
 - Need and benefits of following the service schedule.
 - No outstanding problems.
 - The need and advantages of leaving the machine for regular service.
 - Certified:
 - The effects of maintenance on the machine's second hand value.
 - Range of applications for BioClip.
13. Complete proof of sale, etc.

Date, mileage, stamp, sign

After first 5 hours

1. Change engine oil.

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