# Operator's manual Rider 11 Rider 11 C Rider 13 C Rider 13 AWD Rider 15 C



**English** 

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

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# Operator's Manual for Rider 11, Rider 11 C, Rider 13 C, Rider 13 AWD and Rider 15 C

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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

# INTRODUCTION

#### 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 machines 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 a plate that is riveted to the fan cover. The plate 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



Neutral















Cutting height





Forwards





Oil pressure





Clutch in



Clutch out





Brake



Clutch Warning



Use hearing protection







Ignition







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.



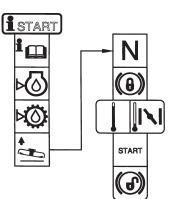
Never carry passengers on the machine or equipment.



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



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.



#### 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.



Read the operator's manual before starting the machine.

8010-047



Clear the area of objects before mowing.

6003-002



Never carry passengers.

8010-052



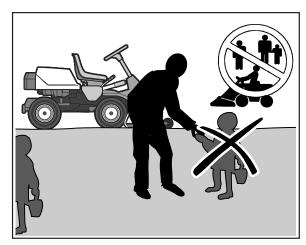
#### **WARNING!**

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

- 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.

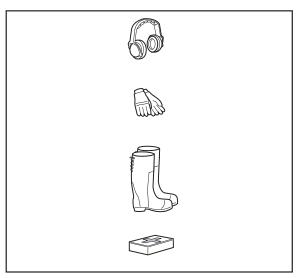
6003-006



#### **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.



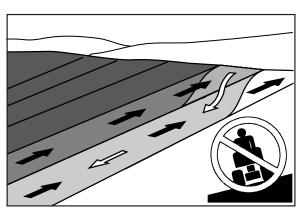
Personal protective equipment

#### **Driving on slopes**

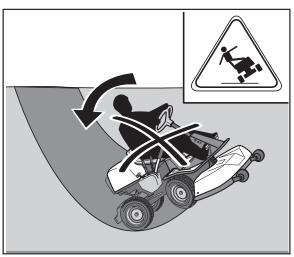
Driving on slopes is one of the operations where the risk of the driver losing control of the machine or of it overturning is the greatest; this can result in serious injury or death. All slopes demand extra care. If you cannot reverse up a slope or if you feel unsure, do not mow it.

#### 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.



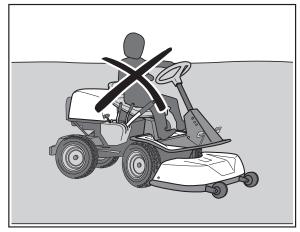
Mow upwards and downwards on slopes, not sidew@pqsq04



Be especially careful when driving on slopes.

#### 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.

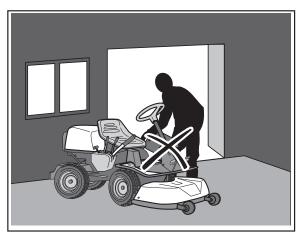


Never allow children to operate the machine.

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.



Never fill the fuel tank indoors.

8010-058

- 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.



#### WARNING!

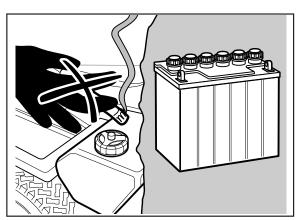
The engine and the exhaust system become very hot during operation.

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.

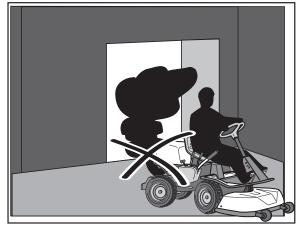


Do not smoke when carrying out maintenance.

- 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, shutoff the fuel supply 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.

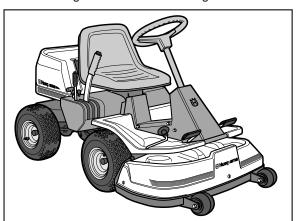
# **PRESENTATION**

#### Presentation

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

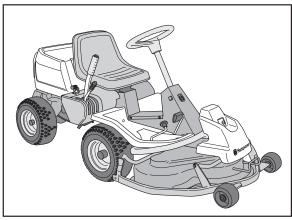
Four models equipped with engines from Briggs & Stratton are described in this operator's manual.

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

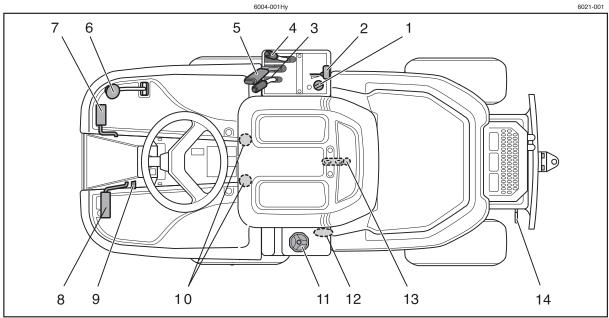


On the Rider 13 C, Rider 13 AWD and Rider 15 C the power transmission from the engine is handled by a hydrostatic gearbox which enables stepless variation of the speed.

Rider 13 AWD also features all wheel drive.



6021-001



Location of the controls

- Ignition lock
- Throttle/Choke lever 2.
- Gear lever on 11 and 11 C
- Adjustment of cutting height
- 5. Lifting lever, cutting unit
- Speed control for reversing (only on 13 C, 13 AWD and 15 C)
- Speed limiter for driving forwards on 13 C, 13 AWD and 15 C Parking brake on 11 and 11 C
- 8. Parking brake on 13 C, 13 AWD and 15 C Clutch pedal on 11 and 11 C

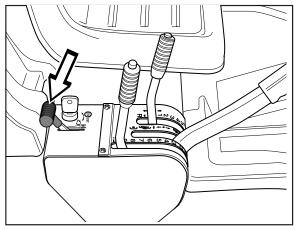
- Lock button for parking brake (left side on 13 C, 13 AWD and 15 C, right side on 11 and 11 C)
- 10. Seat adjustment
- 11. Fuel tank cap
- 12. Lever to disengage the driving front axle, 13 AWD
- 13. Main lock (under seat)
- 14. Lever for disengagement of drive (only on 13 C and 15 C) Lever to disengage the driving rear axle, 13 AWD

# PRESENTATION RIDER 11, 11 C

#### 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.

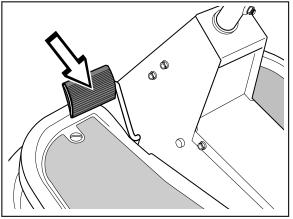


6004-004

#### Clutch pedal

The clutch pedal disengages the engine and stops forward movement.

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

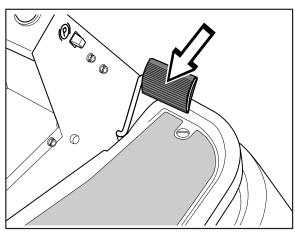


6004-005

#### 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.

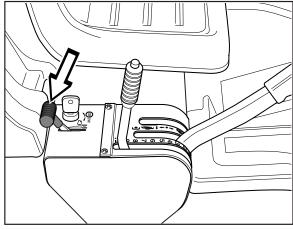


# PRESENTATION RIDER 13 C, 13 AWD, 15 C

#### 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

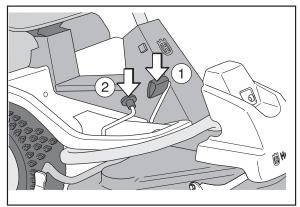
#### **Speed limiter**

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.



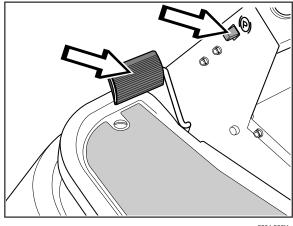
6021-002

## 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.
- Release up the brake pedal while holding the button pressed.

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

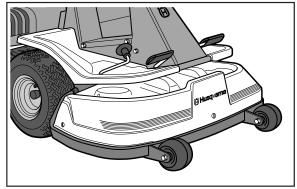


6004-006H

# **PRESENTATION**

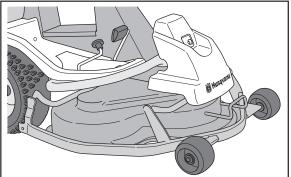
#### **Cutting unit**

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



6004-009Hv

Rider 11 C, Rider 13 C, Rider 13 AWD and Rider 15 C have a 3-blade BioClip cutting unit.



6021-003

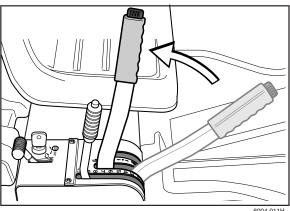
#### Lift lever for cutting unit

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).

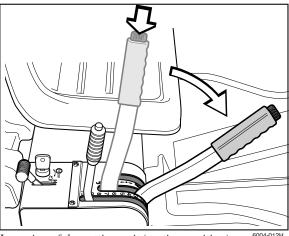
If the lock button is pressed and the lever is moved forward the unit will be lowered and the blades will automatically start rotating (cutting position).

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



*Lifting of the cutting unit (transport position)* 

6004-011H



Lowering of the cutting unit (cutting position)

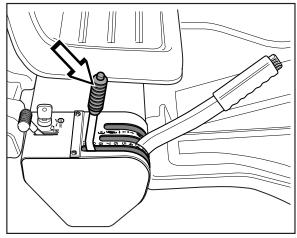
6004-012H

# **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 Combi-unit, (1 9/16" - 3 9/16")



6004-013H

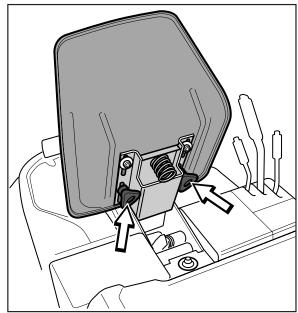
#### Seat

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.

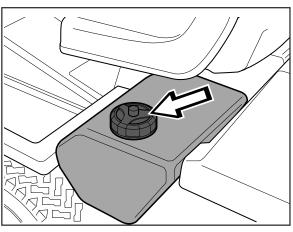
Do not use petrol that contains methanol.

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



WARNING!

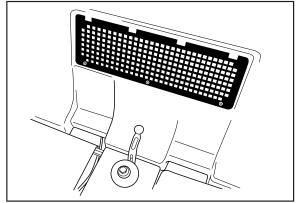
Petrol/gasoline is highly inflammable. Observe care and fill up with fuel outdoors (see safety instructions).



#### 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.

#### Rider 13 AWD

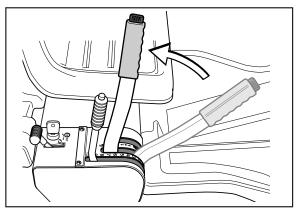
The engine can not be started if the parking brake is not pressed down.

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

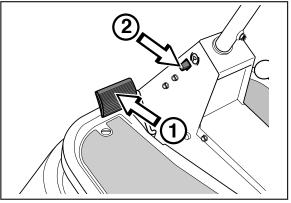
3. For Rider 11 and Rider 11 C: Set the gear lever to position "N" (neutral).

#### IMPORTANT INFORMATION

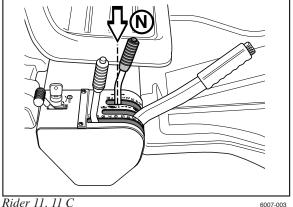
Do not press the reverse lock button on the lever when you select neutral. If you do, it could trigger the start lock.



6007-001H



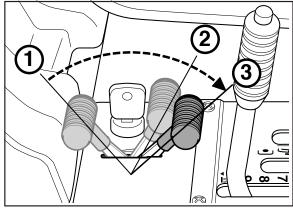
6007-002H



#### Cold engine:

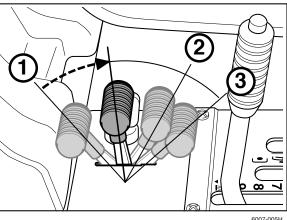
4. Push the throttle control to position 3 (choke position). In this position the engine receives a richer mixture so that the engine starts more easily.

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



#### Warm engine:

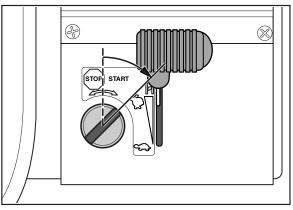
5. Set the throttle control midway between position 1 and 2.



**6.** Turn the ignition key to start position.

#### **IMPORTANT INFORMATION**

Do not run the starter for more than about 15 seconds at a time. If the engine does not start, wait about 10 seconds before trying again.



6007-006

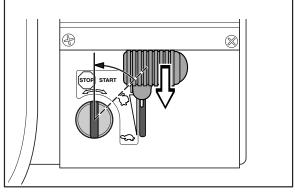
7. When the engine has started release the ignition key to neutral position.

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

#### To start an engine with a weak battery





#### WARNING!

Lead-acid batteries generate explosive gases. Keep sparks, flame and smoking materials away from batteries. Always wear eye protection when around batteries.

If your battery is too weak to start the engine, it should be recharged.

If "jumper cables" are used for emergency starting, follow this procedure:

#### IMPORTANT INFORMATION

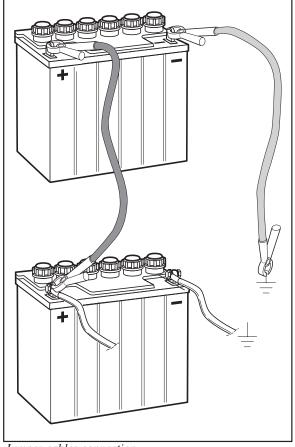
Your mower is equipped with a 12-volt negative grounded system. The other vehicle must also be a 12-volt negative grounded system. Do not use your mower battery to start other vehicles.

#### To attach jumper cables

- Connect each end of the RED cable to the POSITIVE (+) terminal on each battery, taking care not to short against chassis.
- Connect one end of the BLACK cable to the NEGATIVE (-) terminal of the fully charged battery.
- Connect the other end of the BLACK cable to a good CHASSIS GROUND, away from the fuel tank and battery.

#### To remove cables, reverse order

- BLACK cable first from chassis and then from the fully charged battery.
- · RED cable last from both batteries.



Jumper cables connection

#### **Driving the machine**

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

#### 2. For Rider 13 C, Rider 13 AWD and Rider 15 C

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 C

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.

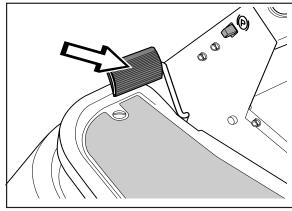
#### IMPORTANT INFORMATION

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

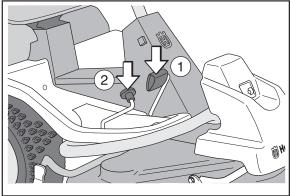
The clutch must be used for each gear change.

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

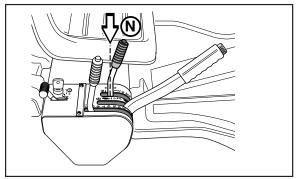
Never use force to engage a gear. If a gear will not engage directly release and push down the clutch again, and then try to engage the gear again.



6007-010H



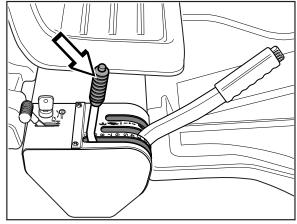
6021-002



6007-003

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).

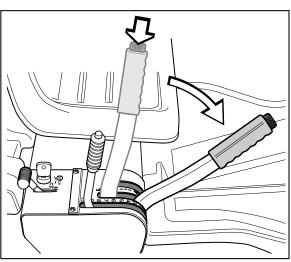


6007-008H

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

#### IMPORTANT INFORMATION

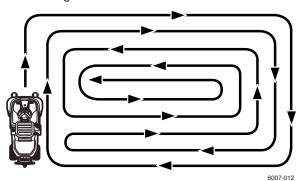
The service-life of the drive belts increases considerably if the engine is run at low speed when engaging the blades. For this reason do not increase the throttle until the cutting unit has been lowered to the cutting position.



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 moving result.



Mowing pattern

- 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.



#### WARNING!

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

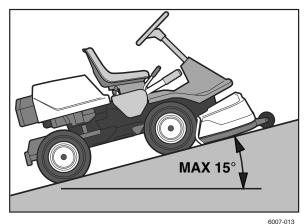


#### **WARNING!**

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

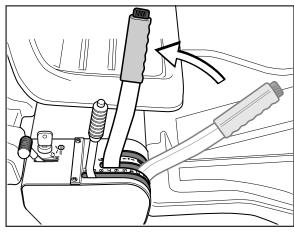
- 1. Press down the parking brake.
- 2. Push the throttle control to full throttle position.
- 3. Push down the clutch and engage first gear.
- 4. Carefully release the clutch.
- 5. When the engine starts to pull, release the parking brake.



#### 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.

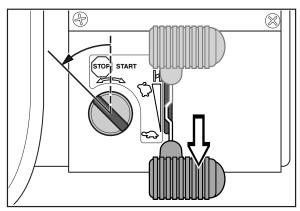


6007-014H

2. Rider 11 and Rider 11 C: 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 C and Rider 15 C: Pull back the throttle lever and turn the ignition key to the "STOP" position.

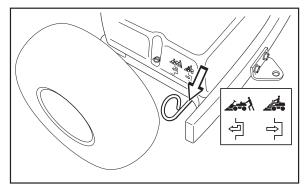
3. When the rider mower is stationary, hold down the parking brake and push in the lock button.



6007-015

# Release lever Rider 13 C, Rider 13 AWD and Rider 15 C

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



8009-574

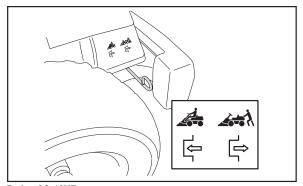
#### Release lever Rider 13 AWD

Rider 13 AWD has one control for the front axle and one control for the rear axle.

Pull the controls to their end positions. Do not use an intermediate position.

#### **Rear Axle**

- · Control pulled out, drive system disengaged.
- · Control pushed in, drive system engaged.



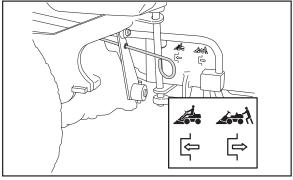
Rider 13 AWD rear

6021-028

#### **Front Axle**

The control is positioned on the inside of the left front wheel.

- Rear control (pulled out), drive system disengaged.
- Front control (pushed in), drive system engaged.



Rider 13 AWD front

#### 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		Daily mainte-	once	Maintenance interval in hours			
waintenance	Page	nance before start	a year	25	50	100	200
Cleaning	24	•					
Check the engine's oil level	42	•					
Check the engine's cooling air inlet	35	•					
Check the fuel pump's air filter	32	•					
Check the steering wires	27	•					
Check the brakes	28	•					
Check the battery	32	•					
Check the safety system	33	•					
Check screws and nuts	-	0					
Check for fuel and oil leakage	_	0					
Clean around the silencer	_	0					
Inspecting the silencer	26			•			
Change the engine oil 1)	42			<b>1</b> )	<b>1</b> )		
Clean the air filter's pre-filter 2)	31			•			
Check the cutting unit	36			•			
Check the tyre pressures (60 kPa / 8.5 PSI)	35			•			
Lubricating the belt adjuster <sup>3)</sup>	43			•			
Lubricate joints and shafts 3)	44			•			
Adjust the brakes Rider 11 and Rider 11 C	28			•			
Check the V-belts	_			0			
Check the transmission's cooling flanges							
Rider 13 C, Rider 13 AWD and Rider 15 C	_			0			
Check the transmission's oil level							
Rider 13 C, Rider 13 AWD and Rider 15 C	43	•					
Adjust the brakes Rider 13 C and Rider 15 C	28				•		
Adjust the brakes Rider 13 AWD	29				•		
Check and adjust the throttle wire	30				•		
Clean the cooling flanges on the engine and							
transmission <sup>2,4)</sup>	_				0		
Replace the air filter's pre-filter and paper filter 2)	31					•	
Replace the fuel filter	30					•	
Replace the plug	32					•	
Check the valve clearance 4)	_					o	
Check the need of an oil change 4,5) in							
the gearbox/hydraulic system	-		0				0

<sup>&</sup>lt;sup>1)</sup> First change after 5 hours. Replace after every 25 hours with heavy loads or high temperatures. <sup>2)</sup> During dusty conditions cleaning and replacement should be more frequent. <sup>3)</sup> For daily use of the machine lubrication should be conducted twice a week. <sup>4)</sup> Conducted by authorised service workshop. <sup>5)</sup> Rider 13 AWD only. Replace first after 8 hours.

- = Described in these instructions.
- O = 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 parking brake is applied.

• The ignition key is removed.

- The cutting unit is disengaged.
- The ignition cable is removed from the plug.

#### Cleaning

Clean the machine directly after use.

It is much easier to wash off grass cuttings before they dry.

Oily dirt can be removed using a cold degreasing agent. Spray on a thin layer.

Rinse at normal water pressure.

Do not direct the jet towards electrical components or bearings.

Do not rinse hot surfaces, for example, the engine and exhaust system.

It is recommended that you start the engine and run the mower for a short period after cleaning, so that any remaining water is blown off.

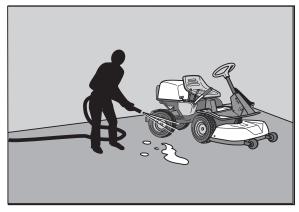
Lubricate the machine if necessary after cleaning.

Carry out extra lubrication when the bearings have been exposed to a degreaser or a water jet.

#### **IMPORTANT INFORMATION**

Avoid using a high pressure washer or a steam cleaner

There is a major risk of water penetrating into bearings and electrical connections. Corrosion attack can result, which will lead to running problems. Cleaning additives generally aggravate the damage.



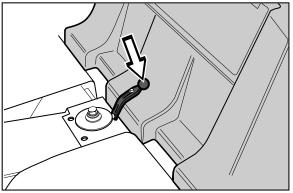
8009-741

# Dismantling of the machine hoods

#### **Engine hood**

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

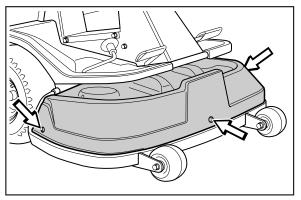
Tilt the seat forward, release the rubber strap under the seat, and tilt the hood backwards.



6008-001

#### Front hood Rider 11

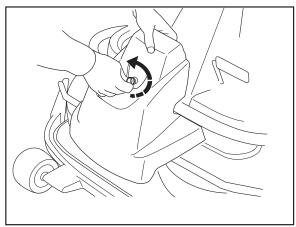
Release the screws in the front hood (3) and lift off the hood.



8009-575

# Front hood Rider 11 C, Rider 13 C, Rider 13 AWD and Rider 15 C

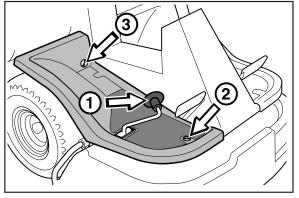
Release the catch and lift off the hood.



6021-006

#### Right-hand fender

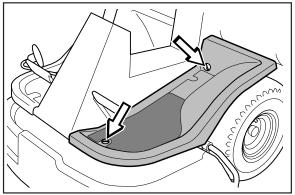
Remove the screws (2 and 3) from the fender. On the Rider 13 C, Rider 13 AWD and Rider 15 C the knob (1) must also be removed.



8009-576

#### Left-hand fender

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



8009-577

#### Inspecting the silencer

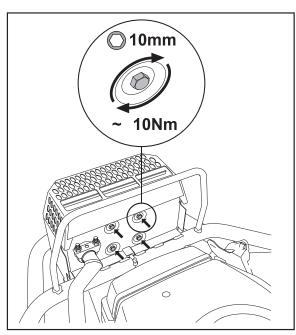
Check regularly that the silencer is complete and secured correctly.

Temperature variations and vibrations can mean that the tightening torque for the screws drops. The screws should be checked when servicing to guarantee the correct torque. The tightening torque should be about 10 Nm. Never use a defective silencer.



#### **WARNING!**

The muffler gets very hot in use and remains so for a short time afterwards. Contact can result in burns. Remember the risk of fire.



8009-683

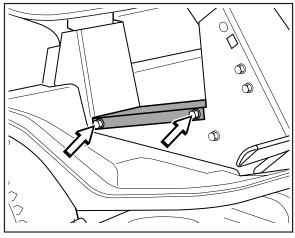
# Checking and adjustment of the steering wires

The steering is controlled by means of wires.

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

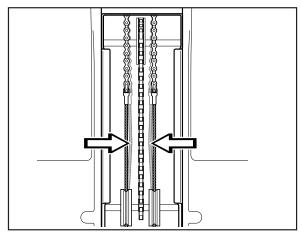
Check and adjust the steering as follows:

**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.



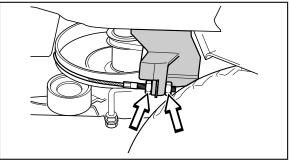
6008-009

 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 only tension 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.

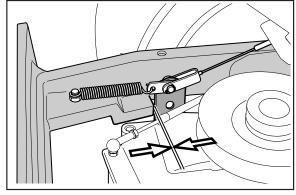


# Checking the brake Rider 11 and Rider 11 C

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.

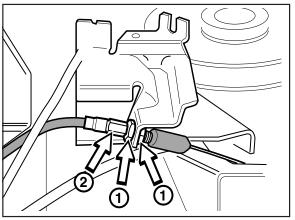
The distance should be 0–1 mm (0-0.040") when the brake is not applied.



8009-580

# Adjusting the brake Rider 11 and Rider 11 C

- 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 C and Rider 15 C

Check that the brakes are correctly adjusted by placing the rider mower on a shallow downhill slope and applying the brake.

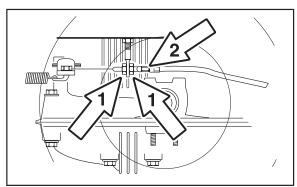
If the rider mower begins to move then the brakes must be adjusted.

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).
- On completion of the adjustment the brake should be re-checked.



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



6008-239H

#### Adjusting the Parking Brake Rider 13 AWD

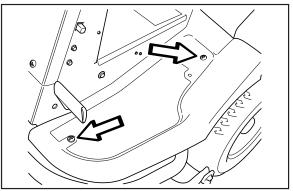
Check that the parking brake is adjusted correctly by placing the machine on a slope with the front and rear axles disengaged. Apply and lock the parking brake. When the machine does not stand still, the parking brake should be adjusted according to the following.

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

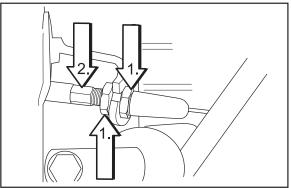


#### **WARNING!**

A poorly adjusted parking brake can result in reduced braking ability.



3009-501



#### Adjustment of the throttle wire

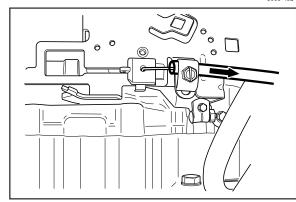
If the engine does not respond as it should when the throttle lever is moved, or if it produces black smoke or does not reach top speed, the throttle wire may need adjusting.

1. Release the clamping screw (see arrow) and push the throttle control to the choke position.



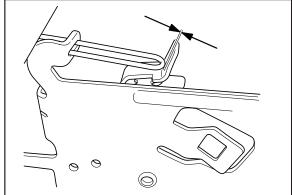
8009-402

- 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.



8009-403

 Pull the throttle control back to the full throttle position and check that the choke is no longer activated.



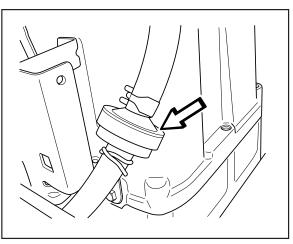
8009-404

#### 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

#### 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.

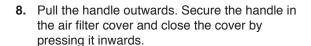
Replace the paper filter if it is clogged with dirt.

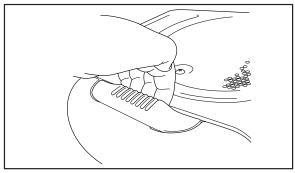


Do not use compressed air to clean the paper filter.

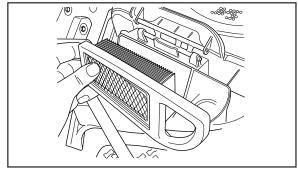
Filters should not be oiled. They should be assembled dry.

- 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. nsert 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.

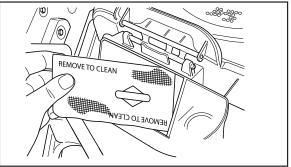




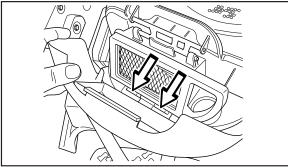
8009-406



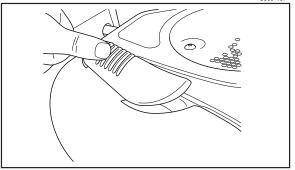
8009-409



8009-408



8009-407



#### 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 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

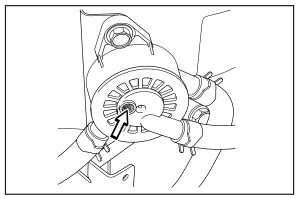
milk. Contact a doctor as soon as

possible.

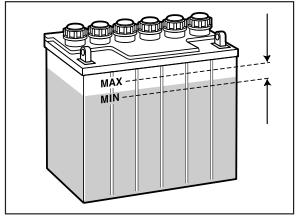
**Eyes:** Rinse well with plenty of water.

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.



8009-411



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.

- 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.
- 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.
- 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 1/8–1/4 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.

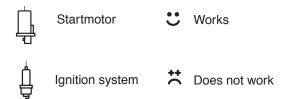
#### Inspecting the safety system

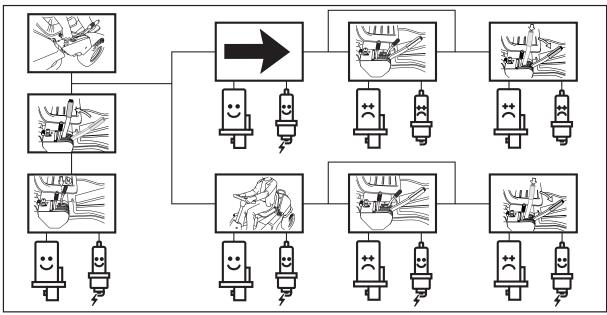
The Rider is equipped with a safety system that prevents starting or driving under the following conditions:

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.

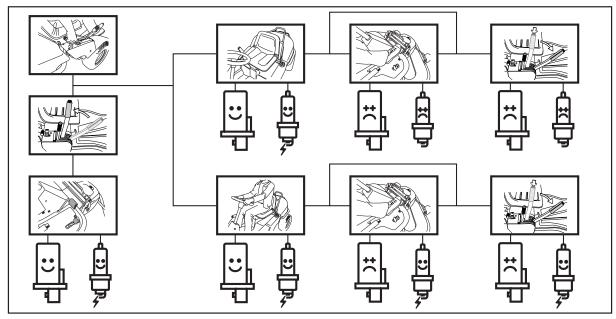
The driver does not need to be seated in the driver's seat.

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.





Rider 11 Rider 11 C



Rider 13 C Rider 15 C

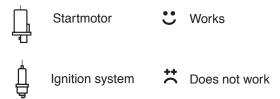
#### Inspecting the safety system

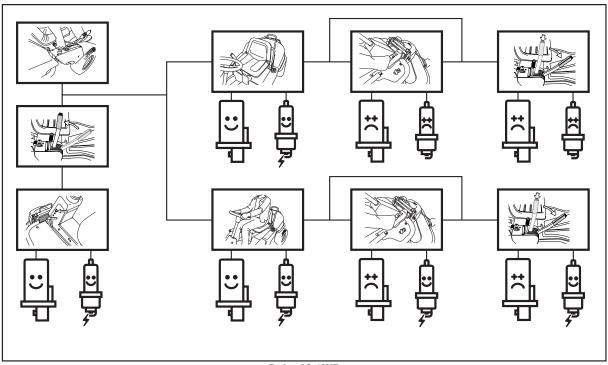
The Rider is equipped with a safety system that prevents starting or driving under the following conditions:

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.





Rider 13 AWD 8009-153

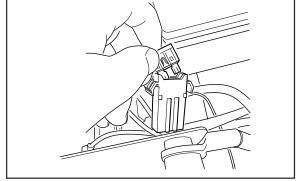
#### Main fuse

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 pro ect 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

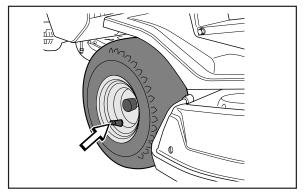
#### Checking the tyre pressure

The tyre pressure should be 60 kPa (0,6 kp/cm<sup>2</sup> / 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.



8009-581

#### Check the engine's cooling air intake

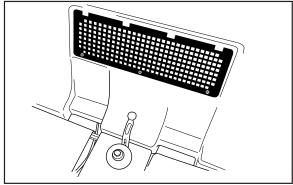
Clean the air intake grille in the engine cover behind the driver's seat.

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.



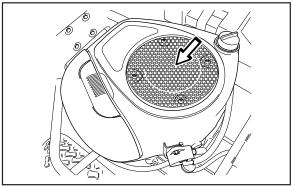
Air intake grille

8009-431



#### WARNING!

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



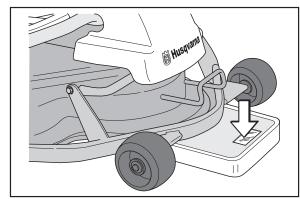
Cooling air intake

# Checking and adjustment of the cutting unit's ground pressure on Rider 11 C, Rider 13 C, Rider 13 AWD and Rider 15 C

To achieve the best cutting results the cutting unit should follow the underlying surface without pressing too hard against it.

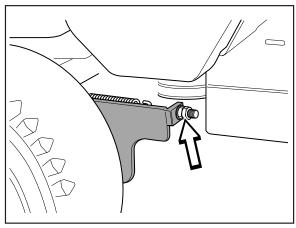
The pressure is adjusted with a screw on each side of the machine.

- Check the tyre air pressure. It should be 60 kPa (0,6 kp/cm²/8,5 PSI).
- 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.



6021-004

- 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).

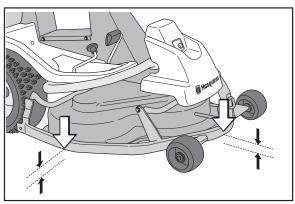


8009-582

#### Checking the cutting unit's parallelism

Check the parallelism of the cutting unit as follows:

- 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.
- 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.



6021-005

# Adjustment of the cutting unit's parallelism for the Rider 11

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

# Adjusting the parallelism of the Cutting deck on Rider 11 C, Rider 13 C, Rider 13 AWD, Rider 15 C

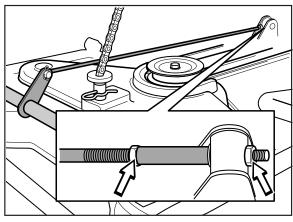
- Check that the tyres' air pressure is 60 kPa (0.6 kp/cm²/8.5 PSI).
- Remove the front cover and the right-hand wing cover.
- 3. Loosen the parallelism stay's nuts.
- 4. Screw out (extend) the stay to raise the rear edge of the cover. Screw in (shorten) the stay to lower the rear edge of the cover.
- 5. Tighten the nuts after adjustment.
- 6. The parallelism should be checked again after the adjustment has been made.
- 7. Fit the right-hand wing cover and the front cover.

#### Removing the mulching plug

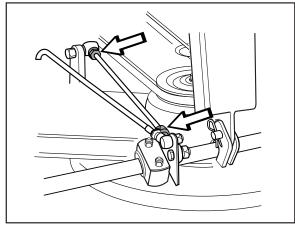
In order to change a combi unit from the mulching function to a cutting unit with rear ejection, remove the mulching plug located under the cutting unit using the knob.

- 1. Put the cuttin deck in the service position, see "Placing in the service position".
- 2. Loosen the knob holding the mulching plug and remove the plug.
- 3. Return the unit to the normal position.

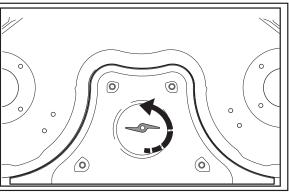
To fit the mulching plug, follow the instructions in the reverse order.



6008-026H



6017-155



6021-02

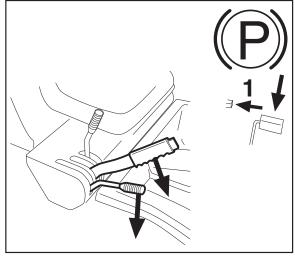
# **MAINTENANCE RIDER 11C,13C, 13 AWD,15C**

#### 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.

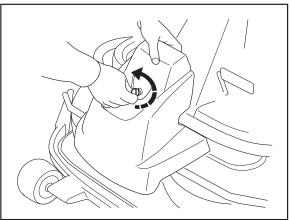
#### Placing in service position

 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.



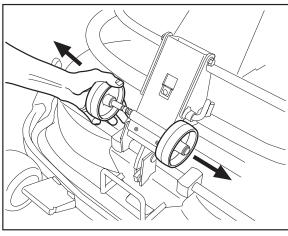
6017-218

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



6021-006

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



# **MAINTENANCE RIDER 11C,13C, 13 AWD,15C**

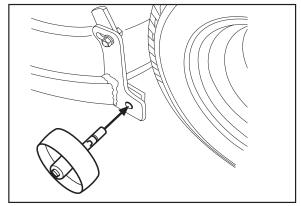
4. Fit the support wheels on either side of the rear of the cutting unit.



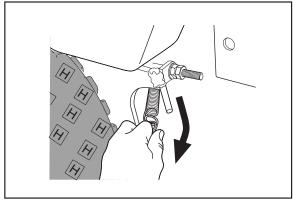
#### **WARNING!**

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

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

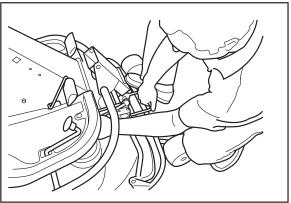


6017-221



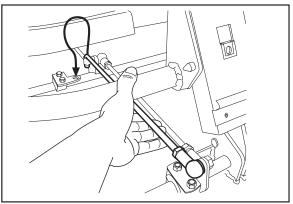
8009-583

**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.



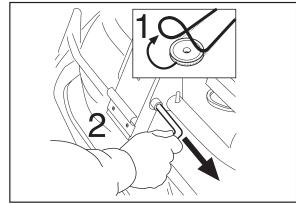
# **MAINTENANCE RIDER 11C,13C, 13 AWD,15C**



WARNING!

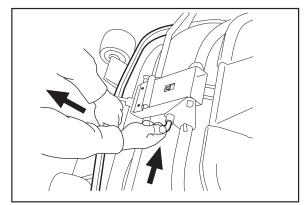
Take care not to get your hand trapped.

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



6017-225

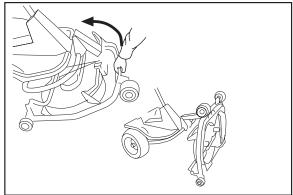
9. Pull the frame forwards and refit the pin.



6017-226

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

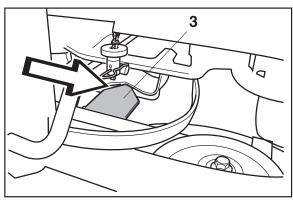
If the cylindrical bolt, which is now holding the cutting unit is removed, the cutting unit can be lifted off.



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" enters the loop correctly on the underside of the machine, see diagram.



#### Checking the blades

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

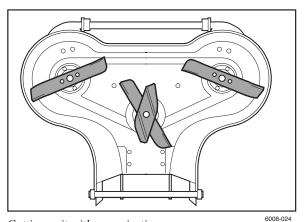
Check that the blades' attachment screws are tight.

#### **IMPORTANT INFORMATION**

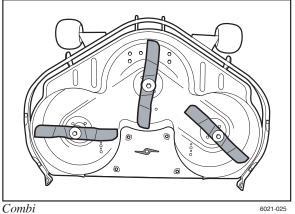
Replacing or sharpening the blades should be conducted by an authorised service workshop.

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.



Cutting unit with rear ejection



### LUBRICATION

#### Check the engine's oil level

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

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

Raise 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 lie 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 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°C (40°F).

Do not mix different types of oil.

#### 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.

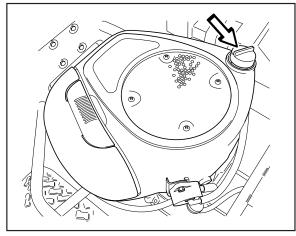
With heavy loads or high temperatures replace the oil after every 25 hours.



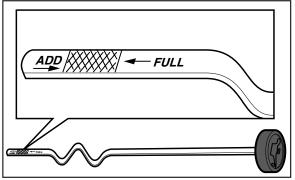
#### **WARNING!**

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.

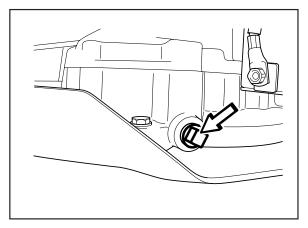
- Place a receptacle under the engine's drain plug, located on the left-hand side of the engine.
- 2. Remove the dip stick and drain plug.
- 3. Let the oil run out into the receptacle.
- 4. Fit the drain plug and tighten.
- 5. Fill up with oil to the "FULL" mark on the dip stick. The oil is filled in 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.



8009-413



6008-035



8009-414

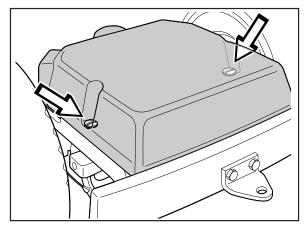
#### **IMPORTANT INFORMATION**

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.

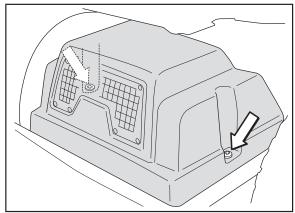
# **LUBRICATION**

### Check the transmission's oil level Rider 13 C, Rider 13 AWD and Rider 15 C

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



8009-585



6021-030

#### 2. Rider 13 C, Rider 15 C

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

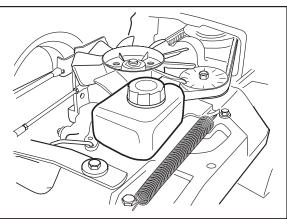
#### Rider 13 AWD

Check that there is oil in the transmission oil tank. Top up if necessary with engine oil SAE 10W/40 (class SF–CC).

The oil should be changed by an authorised service workshop, and is described in the Workshop Manual.

The filter is replaced at the same time as changing the oil.

Work on the system entails particular demands on cleanliness and the system must be vented before the machine is used.

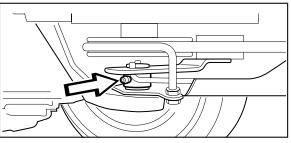


6008-240H

#### 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

## **LUBRICATION**

#### **Lubrication Rider 11 and Rider 11 C**

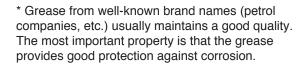
#### Lubrication of front wheel bearings

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.



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

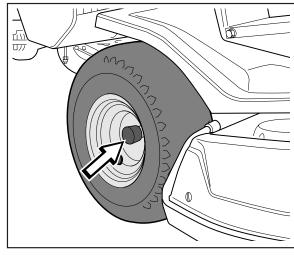


#### **General Iubrication**

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.



# TROUBLE SHOOTING SCHEDULE

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

# **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.

 $\bigwedge$ 

#### 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:

- Carefully clean the machine, especially under the cutting unit. Touch-up paint damage to avoid rust.
- 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.
- Empty the fuel tank. Start the engine and run it until the carburettor is emptied of fuel.
- 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 is a cool place.
- 8. Store the machine is a clean and dry place and cover it over for extra protection.

#### Cover

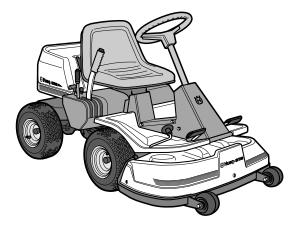
There is a cover to protect your machine during storage or transport. Contact your dealer for a demonstration.

#### **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

### **TECHNICAL DATA**

1070 mm / 3.52 ft

Dimensions Rider 11 Rider 11 C

 Length without unit
 2010 mm / 6.58 ft

 Length with unit
 2040 mm / 6.69 ft
 2200 mm / 7.22 ft

 Width without unit
 900 mm / 2.89 ft

 Width with unit
 960 mm / 3.15 ft
 1114 mm / 3.65 ft

Height 1070 mm / 3.52 ft

Weight in working order

 with unit
 229 kg / 505 lb
 229 kg / 505 lb

 Wheel base
 820 mm / 2.69 ft
 855 mm / 2.8 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/cm² / 8.5 PSI) 60 kPa (0,6 kp/cm² / 8.5 PSI)

Max. gradient 15° 15°

**Engine** 

Manufacture Briggs & Stratton / 215907011E1 Briggs & Stratton / 215907011E1

Power 7,7/10,5 kW/h.p. 7,7/10,5 kW/h.p.

Displacement 344 cm<sup>3</sup> 344 cm<sup>3</sup>

Fuel minimum 85 octane unleaded minimum 85 octane unleaded

Tank volume 7 litres / 7.4 USqt 7 litres / 7.4 USqt

Oil SAE 5W/30 or SAE 10W/30 SAE 5W/30 or SAE 10W/30

class SJ-CF 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

**Electrical system** 

Type 12 V, negative earth 12 V, negative earth Battery 12 V. 24 Ah 12 V. 24 Ah

Spark plug Champion QC12YC Champion QC12YC

electrode gap = 0.75 mm / 0.030" 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 Peerless typ MST 205
Oil Peerless typ MST 205
SAE 10W/30, class SF–CC

No. of forward gears 5

No. of reverse gears 1

Speed in forward gears 1, 95,9,9 km/h 0,9 km

Speed in forward gears 1,85-8,9 km/h 0-9 km/h Speed in reverse 0-3 km/h 0-3 km/h

**Cutting unit** 

 Type
 3-blade unit with rear ejection
 3-blade unit Combi 940 mm

 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" 360 mm / 14 3/16"

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 13 C Rider 13 AWD

 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
 1114 mm / 3.65 ft
 1114 mm / 3.65 ft

 Height
 1070 mm / 3.52 ft
 1070 mm / 3.52 ft

Weight in working order

 with unit
 232 kg / 511 lb
 270kg / 595 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/cm² / 8.5 PSI) 60 kPa (0,6 kp/cm² / 8.5 PSI)

Max. gradient 15° 15°

**Engine** 

Oil volume

Start

Manufacture Briggs & Stratton / 219907011E1 Briggs & Stratton / 219907011 E1

Power 9,2/12,5 kW/h.p. 9,2 / 12,5 kW/h.p.

Displacement 465 cm<sup>3</sup> 465 cm<sup>3</sup>

Fuel minimum 85 octane unleaded minimum 85 octane unleaded

Tank volume 7 litres / 7.4 USqt 7 litres / 7.4 USqt

Oil SAE 5W/30 or SAE 10W/30 SAE 5W/30 or SAE 10W/30

class SJ-CF
1,4 litres 1.5 USqt
Electric starter

class SJ-CF
1,4 litres / 1.5 USqt
Electric starter

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
 940 mm / 3.08 ft
 940 mm / 3.08 ft

**Electrical system** 

Type 12 V, negative earth 12 V, negative earth Battery 12 V. 24 Ah 12 V. 24 Ah

Sattery 12 V, 24 An 12 V, 24 An

Spark plug Champion QC12YC Champion QC12YC

electrode gap = 0,75 mm / 0.030" electrode gap = 0,75 mm / 0.030"

Main fuse 15 A Flat-blade mounting 15 A Flat-blade mounting

**Transmission** 

Manufacture Tuff Torq K46 Tuff Torq

Oil SAE 10W/30, class SF–CC SAE 10W/40, class SF–CC

Speed in forward gears 0-9 km/h
Speed in reverse 0-6 km/h 0-6 km/h

**Cutting unit** 

Type 3-blade unit Combi 940 mm 3-blade unit Combi 940 mm Cutting height 9 pos. 40–90 mm / 1 3/4"-3 3/4" 9 pos. 40–90 mm / 1 3/4"-3 3/4"

Blade diameter 360 mm / 14 3/16" 360 mm / 14 3/16 "

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

# **TECHNICAL DATA**

Dimensions Rider 15 C

Length without unit

Length with unit

Width without unit

Width with unit

Width with unit

Height

2010 mm / 6.58 ft

2220 mm / 7.29 ft

880 mm / 2.89 ft

1114 mm / 3.65 ft

1070 mm / 3.52 ft

Weight in working order

 with unit
 249 kg / 549 lb

 Wheel base
 855 mm / 2.8 ft

 Track front
 715 mm / 2.34 ft

 Track rear
 625 mm / 2.05 ft

 Tyre size
 165/60 - 8

Tyre pressure, front & rear 60 kPa (0,6 kp/cm<sup>2</sup> / 8.5 PSI)

Max. gradient 15°

**Engine** 

Manufacture Briggs & Stratton / 282H070110E1

Power 9,2/12,5 kW/h.p.

Displacement 465 cm<sup>3</sup>

Fuel minimum 85 octane unleaded

Tank volume 7 litres / 7.4 USqt

Oil SAE 5W/30 or SAE 10W/30

class SJ-CF 1.4 litres 1.5 USa

Oil volume 1,4 litres 1.5 USqt Start Electric starter

Noise emissions and cutting width

Measured noise level 100 dB(A)
Guaranteed noise level 100 dB(A)
Cutting width 940 mm / 3.08 ft

**Electrical system** 

Type 12 V, negative earth

Battery 12 V, 24 Ah

Spark plug Champion QC12YC

electrode gap = 0,75 mm / 0.030"

Main fuse 15 A Flat-blade mounting

**Transmission** 

Manufacture Tuff Torq K46

Oil SAE 10W/30, class SF–CC

No. of forward gears - No. of reverse gears -

Speed in forward gears 0-9 km/h Speed in reverse 0-6 km/h

**Cutting unit** 

Type 3-blade unit Combi 940 mm Cutting height 9 pos. 40–90 mm / 1 3/4"-3 3/4"

Blade diameter 360 mm / 14 3/16"

## **EU-DECLARATION OF CONFORMITY**

# EU 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, Rider 11 C, Rider 13 C, Rider 13 AWD and Rider 15 C**, from 2005'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 emission of noise to surroundings" **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**, **01/901/039**, **01/901/040**, **01/901/041** 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 Novembre 3, 2005

Roger Andersson, Development Manager/Garden Products

# SERVICEJOURNAL

W	ork 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). Only applies to BioClip.					
	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.					
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).					
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				
Δf	ter first 5 hours					
	Change engine oil.					

# **SERVICEJOURNAL**

Work done	Date, mileage, stamp, sign	

