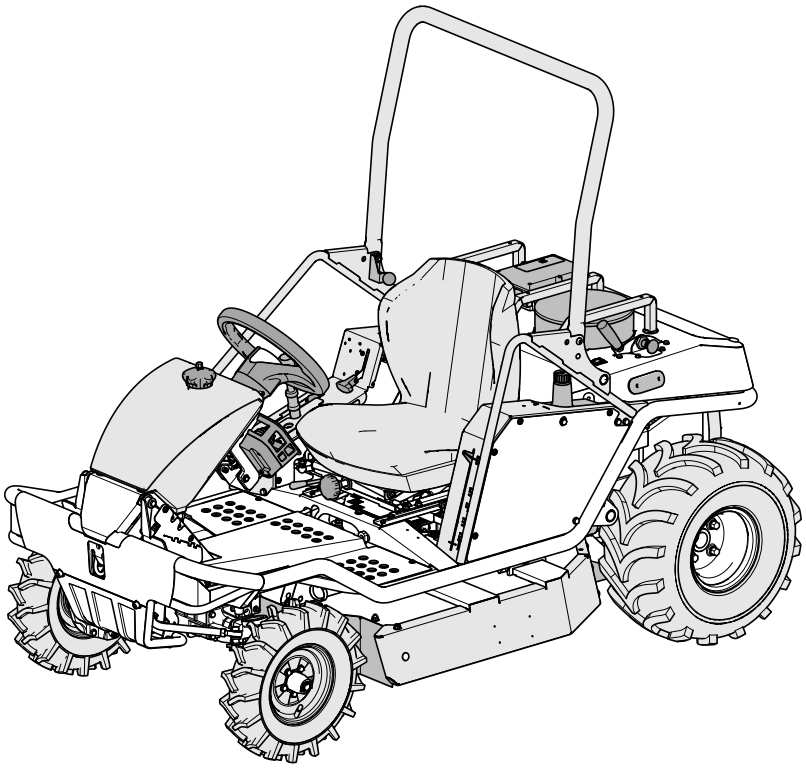
Operator's Manual



Ride-on-Allmäher®

AS 940 Sherpa 4WD RC

From serial number: 027417080036
Issued: 17.08.2017, V5.1
en-Translation of the Original Operator's Manual

Notes on the operating manual

Dear customer,

Congratulations on your purchase. You have acquired a reliable quality product by “AS-Motor Germany”.

This product has been manufactured according to modern manufacturing methods and comprehensive quality assurance measures. Only when you are satisfied with your device, we have attained our goal.

These operating instructions contain important information to help you avoid hazards and to increase the reliability and the life span of the device.

Read the operator’s manual before using the device. Share this operator’s manual and the operator’s manual of the engine manufacturer with other users of the device.

Contact

If you have questions concerning your device, please contact you dealer or call our customer service (+49 7973 9123-0).

For international AS partners, please see: www.as-motor.de.

Device data

Please fill in all data referring to your device. When ordering spare parts, provide your dealer with the serial and engine numbers.

Serial number (see manufacturer’s certificate or type plate):

Engine number:

Date of purchase:

Address of dealer:

Intended use

The device is intended for cutting and mulching grass or similar vegetation in agriculture, forestry, and landscape conservation. Woody growth must not be older than maximally one year.

The device can be used in the ride-on operation (MC) as well as the remote control operation (RC).

Only use attachments and cutting tools authorised by “AS-Motor Germany”.

Any other use exceeding this purpose is inadmissible.

Observe the instructions chapter for Maintenance. Otherwise, operational safety is endangered.

The user of the device is responsible for accidents or damage that can happen to other persons or their property.

In particular, the device **must not** be used:

– as a toy.

– to transport people.

– to cut hard objects, stones, rubble, or pieces of wood.

– to trim bushes, hedges, and shrubbery.

– to cut plants on rooftops.

– to clean (vacuum) footpaths.

– as shredder for shredding tree and hedge cuttings.

– as drive unit for work tools and any type of tool sets that are not authorised by “AS-Motor Germany”.

The device is not licensed for driving on public roads.

Contents

Explanation of the symbols

Symbols in the instructions

In these operating instructions, the following symbols are used to denote special dangers.

Warning.
These symbols denote special dangers.

Prohibition sign.
These symbols denote inadmissible procedures.

Directive sign.
These symbols denote required protective measures.

Symbols in the text

1. A numbered text requests you to act or shows a process sequence.
   ⇨ An indented arrow marks the result of a step.

⇨ An arrow that is not indented refers to the result of a sequence of actions.

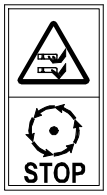
Notice: An additional piece of information is marked by the work "Notice" written in bold letters.

Symbols on the device

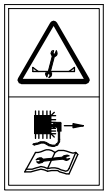
The following symbols are placed on the device to inform you must be careful and attentive when using the device:

Working with the device requires extreme cautiousness.
Read the operating instructions before you use the device.

Risk of injury!
Make sure that no one is within the danger zone of the device. Objects may be ejected.



The quickly rotating blade can cause life threatening injuries or immense property damage! Be especially careful to keep your hands and feet away from the blade when the device is put into operation.



Prior to any repair and maintenance work, pull off the spark plug connector.

Risk of tipping!
In the ride-on mode (MC), when positioned sideways to the slope, the device is stable up to 21° (in accordance with the standard measuring method).

Prior to repair and maintenance work, pull off the key.

Risk of tipping!
In the ride-on mode (MC), when positioned sideways to the slope, the device is stable up to 21° (in accordance with the standard measuring method).

Risk of tipping!
In the remote control mode (RC), when positioned sideways to the slope, the device is stable up to 33°.

Danger to life!
On slopes, the device can topple over and slide towards you or run you over.
Never stay below the device when on a slope.

Clean the ventilation grid! The cooling air of the motor is sucked in through the ventilation grid of the engine cover. Always keep the entire surface open and free!

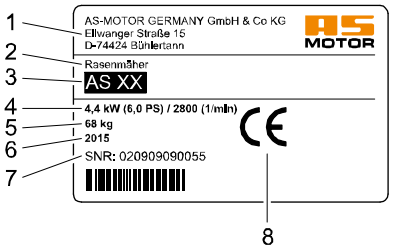
Noise is causing health problems. Use personal ear protection to avoid hearing damage. Wear safety glasses.

Hot surface. Do not touch the engine or the silencer. These parts become very hot during operation and you can get burned.

Do not clean the device with water spray or high-pressure cleaner!

Type plate

The type plate on the device provides you with information on the device type and the technical data.



1 Name and address of the manufacturer
2 Device designation
3 Type designation
4 Rates power output in kW / engine speed
5 Weight
6 Year of manufacture
7 Serial number
8 CE marking

Safety instructions

Get informed!

For your safety, read these operating instructions carefully. Familiarize yourself with the control elements and the proper use of the device. Share these operating instructions with other users of the device.

Also read the operating instructions of the transmitter and receiver.

Before starting to work: Have skilled personnel who were trained by AS-Motor show you the safe handling of the device.

Get familiar with the device in a wide, open and flat terrain first.

User restrictions and hours of operation

Never allow children or persons who are not familiar with the operating instructions to use the device. Persons under 18 years of age may operate the device only under proper supervision. Local regulations determine the minimum age of the operator und the operating times.

Unsuitable for operation of the device are persons who

– are under the influence of alcohol, drugs or reaction retarding medicines.

– have physical and mental/emotional impairments.

– are tired or sick.

Persons with pace makers must not touch live parts of the ignition system.

Safe handling of fuel

Fuel is toxic and highly flammable. There is a burn and explosion hazard!

Keep fuel away from ignition sources and do not smoke during handling.

Do not inhale fuel vapours, they are dangerous to your health.

Use glove and avoid skin contact with the fuel.

Always refuel outdoors when the engine is cold and standing still. When doing so, always use a filler spout or a funnel.

Do not spill any fuel or do not let fuel enter canalisation or drain away.

When fuel has overflown, do not start the device until the fuel vapours have evaporated (wipe dry). Move the device away from the spilled fuel.

Always close the tank cap tightly and do not open it while the engine is running or the device is still hot.

Empty the fuel only when outdoors. Use the approved container for this or run the fuel tank empty.

Store the fuel away from children and keep it in a suitable container in a dark, cool and dry place.

Never store the device when there is fuel in the tank inside a building where fuel vapours might come into contact with open fire or sparks.

Immediately replace the fuel tank or tank cap if they are damaged (authorised service centre).

First aid

When swallowing fuel or inhaling fuel vapours, do not force vomiting and immediately consult a doctor.

In case of skin contact, immediately wash with water and soap. Change your soiled clothing as soon as you can.

Measures in case of a fire

In case of a fire, use foam, dry powder extinguisher, or carbon dioxide (CO_2). Never douse with water!

Check the device prior to use

Prior to each use, check the blade, protection skirt, ejection rubber, drive and fastening parts, cables and cable connections for proper working condition and firm seating by visual inspection.

Never use the device if covers, impact protection, ejection rubber or protection skirt are defective or not mounted.

Do not remove, change or override any safety devices or control elements.

Observe the maintenance instructions (see Maintenance).

Prior to use, check RC functions and safety functions of the device (see Maintenance) to ensure safe operation of the device.

General danger area

Within the danger area of the device, there is a risk of injury. The rotating knife can cause injuries and objects can be thrown out. On slopes, the device can topple over and slide towards you or run you over.

Also when in the RC mode, always keep away from the danger zone of the device. When you approach the device to change the operating mode, always do so coming from the left rear.

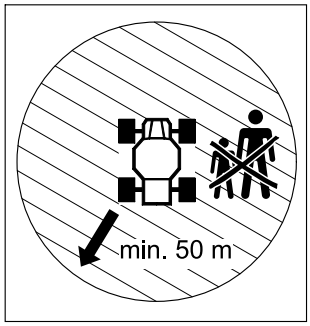
Make sure

– that nobody else is in the area that will be mowed.

– that you or another person are never positioned in the direction of travel in front of the device.

– that you have a complete overview of the danger area at all times.

Danger area for persons other than the operator



– A 50 metre radius around the device.

– On the entire area to be mowed.

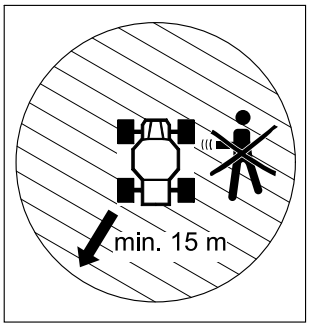
Additional danger area in the RC mode

Due to incorrect or unintended steering or driving movements, dangerous situations can result. Persons or obstacles can be hit or run over. The device can flip over or slide down. First, get familiar with the device in the MC mode. Practise the RC mode before you work with it.

Danger area for the operator with unclutched blade

– A 5 metre radius around the device.

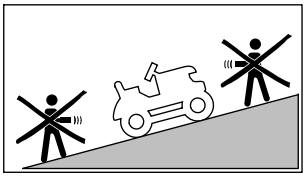
Danger area for the operator with running blade

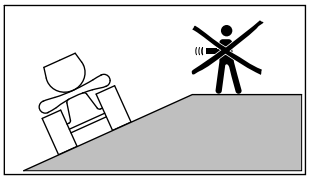


– A 15 metre radius around the device.

– The area in front of and to the right of the device is especially dangerous.

Additional danger zone at the slope

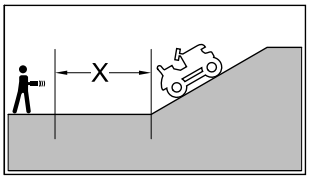




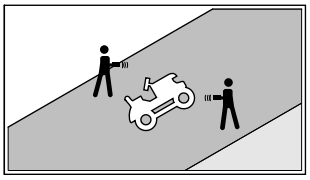
– Below the device.

– Above the device.

Recommended position for the operator at the slope



X = danger area



Outside the danger area, on the side of the device.

Use caution during operation

Danger of injury during motor start

The motor must not be started:

– When fuel was spilled.

– In closed or badly ventilated rooms (danger of poisoning!).

– In the MC mode: When other persons are in close proximity.

– In the RC mode: When you or other persons are in close proximity.

Risk of injury when the blade is running

Switch off the blade and wait until the blade stops

– when you drive on surfaces other than grass.

– when you do not mow.

– before you enter the danger area.

– when you cannot overlook completely the area to be mowed.

– when the device must be manoeuvred out of a dangerous position.

– when the trafficability of the area to be mowed is too unsafe.

Risk of injury when the motor is running

Switch off the engine, wait for the blade and the engine to stop and remove the key at the start-stop switch

– before you transport the device.

– before you step away from the device, even for just a short time.

– before you clean or check the device or before you carry out work on the device.

– before you unblock or unclog the discharge area.

Risk of injury due to uncontrolled rolling

In the MC mode, actuate the parking brake after each stop and before shutting off the engine. By doing so, you can prevent the device from rolling away in an uncontrolled way.

In the RC mode, never switch off the engine via the main switch. Otherwise, the parking is not activated any longer and the device can roll away.

Risk of burns

Do not touch the muffler, the engine, and the gearbox. These parts become very hot during operation and you can get burned. If a jumpy movement occurs, the risk of additional injuries can result.

Prior to mowing

Personal protective measures

During mowing, always wear safety shoes with good grip and long trousers. Do not mow with open sandals or while shoeless.

Wear safety gloves to protect yourself against injuries and vibrations.

Noise is causing health problems. Use personal ear protection to avoid hearing damage. Wear safety glasses and headgear.

Ask your specialised dealer about suitable protective equipment.

Preparing the mowing area

Prior to mowing, carefully check the perimeter of the lawn. Remove rocks, pieces of wood, bones, wires, and other objects that could be picked up and thrown out by the device.

Use caution when mowing

Risk of injury

Stay within shouting distance to other people who can help you in case of an emergency.

Risk of injury caused by ejected objects. Never mow when persons, children, pets or material assets are in the danger area.

Make sure that neither the operator of the device nor other persons are in the danger area.

Keep your hands and feet away from the rotating parts.

Only mow during daylight or with adequate artificial lighting. Never mow in the event of uncertain weather conditions and risk of lightning.

Be especially carefully when mowing on soft ground, nearby landfills, ditches and dikes.

Do not transport any person on the device.

Be extremely cautious when moving in reverse.

Pay attention to traffic when working close to roads.

Vibrations

If you use the device over a longer period of time, the vibrations can cause circulatory disorders. A generally accepted usage time cannot be determined.

– Use gloves.

– Change between MC mode and RC mode.

– Take breaks on time.

Have an authorised service centre check the device

– when the blade has hit an object.

– if the device starts to vibrate unusually severely.

Mowing surfaces with fire hazard

– Carry a sufficient amount of suitable extinguishing media.

– If the device leans too much to the side, fuel can leak from the carburetor or the tank. This presents a fire hazard!

– Observe the moved area even after mowing to make sure that no fire breaks out.

To prevent a fire hazard, always keep the following components free of dirt, grass, hay, leaking oil, grease, etc.:

– engine, ventilation grid

– silencer (manifold, protection, spaces)

– battery, cable connections, electric drive units

– area around the fuel tank

– belt drives

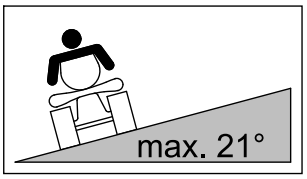
Caution when mowing slopes

If the device, while in use, stops in steep terrain or the engine cuts out, the device can roll away. Immediately actuate the parking brake to prevent the device from rolling away.

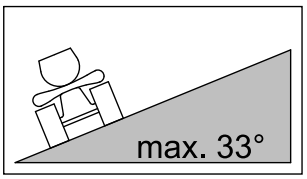
Observe the information regarding the oil pressure switch in chapter Starting.

Sliding and tipping risk

Risk of injury during mowing downhill due to tipping over or sliding. Please observe the following information.



– Use the device in the ride-on mode (MC) only on less than 21° slopes.



– Use the device in the remote control mode (RC) only on less than 33° slopes.

– Observe the notices for the danger area and the operating modes.

– Never unlock the drive at the slope because the device can roll away.

– Always mow uphill and downhill, avoid mowing in horizontal direction.

– Never drive on a slope that you cannot drive up backwards without sliding.

– Be extremely cautious when changing the direction.

– Do not turn on a slope.

– Prior to entering the slope, always actuate the differential lock. Move on slopes only when the differential lock is actuated.

– Always keep the speed low when moving on slopes.

– Do not start abruptly and do not brake abruptly.

– In the MC mode, hold the steering wheel tightly so that the device does not swerve.

– In both operating modes, drive with the bow raised. If the device tips over, the bar can prevent the device from overturning.

When the uphill wheels encounter obstacles such as roots, branches, rocks, mounds etc., the device can tilt or slip.

– Only mow when the terrain is clear of obstacles and you are familiar with it.

– Pay attention to bumps, holes, and other visible hazards.

– Do not mow close to danger zones (e.g. walls, steep declines, etc.).

Danger due to uncontrolled slipping

Only park the device on flat surfaces.

Proceed with extreme caution in case the ground is wet or loose. The danger of slipping is very high on cut growth, no matter if it is wet or dry.

If the mower starts to slide you cannot regain control by actuating the brake.

Uncontrolled sliding can occur because of:

– slope angles that are too steep.

– slippery ground.

– poor tire grip.

– speeding.

– abrupt braking.

– an inappropriate task for the device.

If the device tilts or slips

– Never try to stop a tilting or sliding device. Severe injuries can result.

– Remove leaking fluids (oil, fuel, battery acid) from the device and the floor. Deposit of contaminated soil environment friendly according to the local regulation.

– Undetectable damage may have occurred to the device. In case of malfunctions, there is a risk of injury. Have an authorised service centre check the device.

Caution when using accessories

Be careful when pulling loads:

– Only use tow-bars authorized by “AS-Motor Germany”.

– Observe the maximum load carrying capacity (Technical data).

– Observe the safety instructions in the operating instructions of the tow-bar.

– Only transport loads that you can handle safely.

– Only drive on slopes up to 10°.

– Do not take tight corners.

– Be extremely cautious when moving in reverse.

When work is completed

After each mowing, close the fuel valve and the tank ventilation.

Before you leave the device, wait for the blade and engine to stop and pull off the key at the start-stop switch.

After switching it off, let the device cool down for at least 20 minutes before you store it in a dry, closed, sufficiently ventilated room.

Never store the device when there is fuel in the tank inside a building where fuel vapours might come into contact with open fire or sparks.

Use caution during maintenance and repair

Only carry out work as described in these operating instructions. Have an authorised service centre perform all other work.

Only use the blades and spare parts authorised by “AS-Motor Germany”. Unauthorised blades and spare parts can cause severe injuries.

Prior to all maintenance work, wait until the engine comes to a standstill and pull off the spark plug connector.

We explicitly point out that, in accordance with the Product Liability Act, we are not liable for damages that were caused by our devices if

– worn or damaged parts were not repaired or replaced on time.

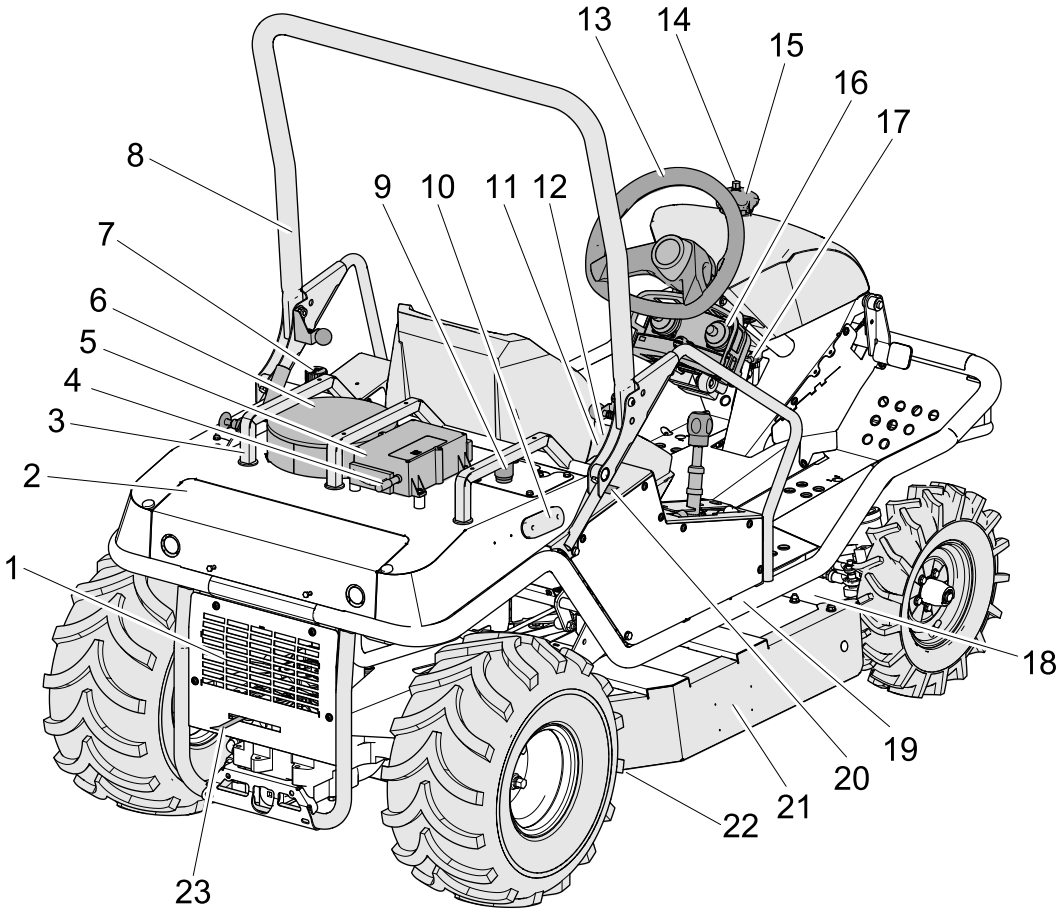
– these damages were caused by improper repair.

– when changing a part, our original parts or parts authorised by us were not used.

– the repair work was not carried out by an authorised service station.

The same applies for spare parts and accessories.

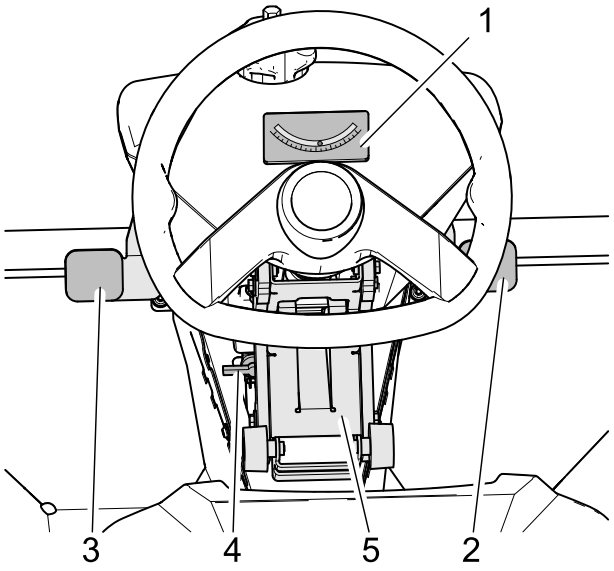
Device description



1 Gearbox fan
2 Silencer grid
3 Transport deposit
4 Antenna
5 Receiver
6 Ventilation grid
7 Oil surge tank
8 Bow
9 Emergency stop
10 Status indicator (on both the right side and the left side of the device)
11 Power socket
12 Fuse circuit (see Technical data)
13 Steering wheel
14 Tank ventilation
15 Tank cap
16 Transmitter in transmitter holder
17 Fuel valve
18 Protection skirt
19 Frame
20 Type plate
21 Side plates impact protection
22 Ejection rubber
23 Unlocking drive

Control elements at the device

Front area

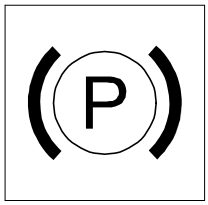


Clinometer (1)

The clinometer shows the lateral inclination of the device.

Foot brake/parking brake (2)

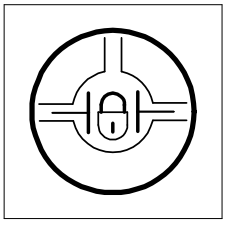
When you actuate the right foot pedal, the parking brake is applied. Press the foot pedal for activation of the brake only in exceptional situations because the mower stops abruptly.



Brakes:
Release the drive lever and press the right foot pedal (2) down.

Differential lock (3)

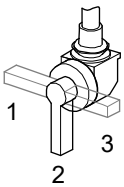
With the left foot pedal, actuate the differential lock.



Pedal is actuated:
Differential lock is on

Pedal is not actuated:
Differential lock is off

Fuel valve (4)



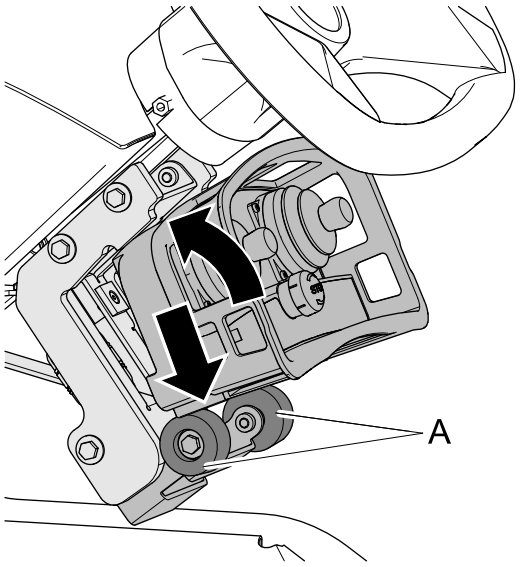
1: Reserve

2: Open

3: Closed

Transmitter holder (3)

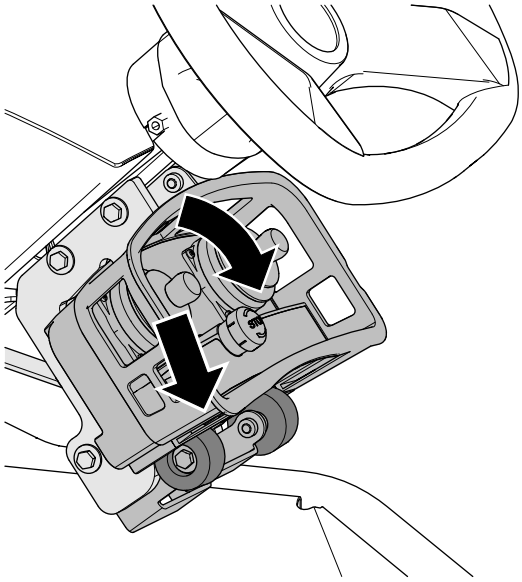
Insert the transmitter into the transmitter holder



1. Place the transmitter onto the rollers (**A**) and press down.
2. Insert the transmitter completely into the holder and swing forward.

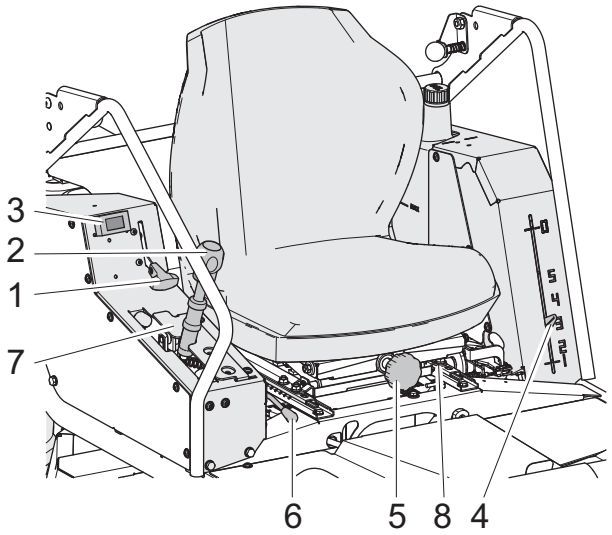
⇨ The transmitter engages in the transmitter holder.

Remove the transmitter from the transmitter holder



1. Press the transmitter down.
2. Swing the transmitter back.

Control lever at seat



Accelerator lever with choke (1)

With the accelerator lever, you can change the engine speed and thus control the engine output. When you start the device when the engine is cold, move the accelerator lever to choke position (choke is closed).

Choke: Choke closed (only for engine start when engine is cold). Press the accelerator lever all the way down.

MAX: Full throttle position.

MIN: Idling speed. Pull the accelerator lever all the way up.

Drive lever with parking brake (2)

The drive lever is required for moving the mower forward, reversing as well as stopping the mower. The further you move the lever in one or the other direction, the faster the device moves.

In the neutral position, the parking brake is active.

Moving forward

Stopping (neutral position/parking brake)

Reversing

In the RC mode, the crank (7) flips up.

Operating hours counter (3)

The operating hours are counted as soon as the engine is running.

Display:

– When engine is running: engine speed

– When engine is off: operating hours

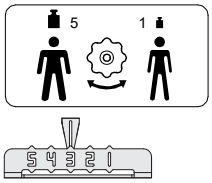
Cutting height indicator (4)

The top position (0) is the transport position.

The cutting height of the lawn can be continuously adjusted from 1 to 5.

Seat suspension (5)

The seat suspension can be adjusted continuously from 1-5 to the driver's weight. Read the setting from the scale (8) on the seat.



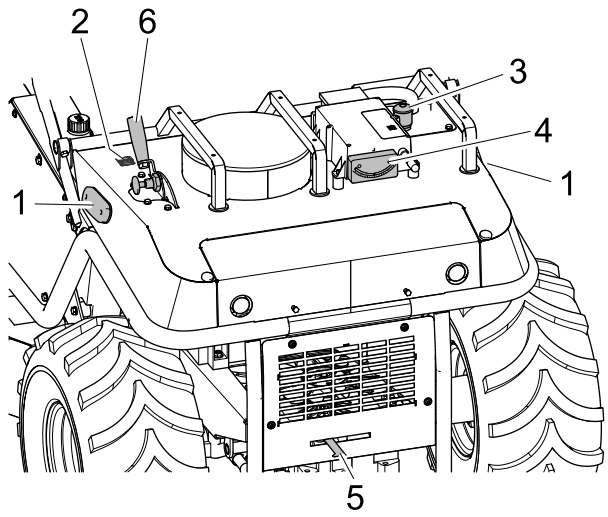
Heavy drivers:
Turn clockwise. The indicator moves towards 5. The seat suspension becomes stiffer.

Light drivers:
Turn counterclockwise. The indicator moves towards 1. The seat suspension becomes softer.

Sitting position

Press the lever (6) to the right, move the seat to the desired position, and engage it.

Rear part



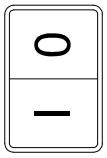
Status indicators (1)

The status indicators on the device flash when the blade is engaged.

For meaning of the other signals, see chapter Optical signals.

Main switch (2)

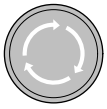
You can switch on/off the circuit of the control with the main switch.



0: OFF

I: ON

Emergency stop (3)



Actuate Emergency stop:
Press the switch.

Revoke Emergency stop:
Turn the switch in the direction of the arrow.

Clinometer (4)

The clinometer shows the lateral inclination of the device.

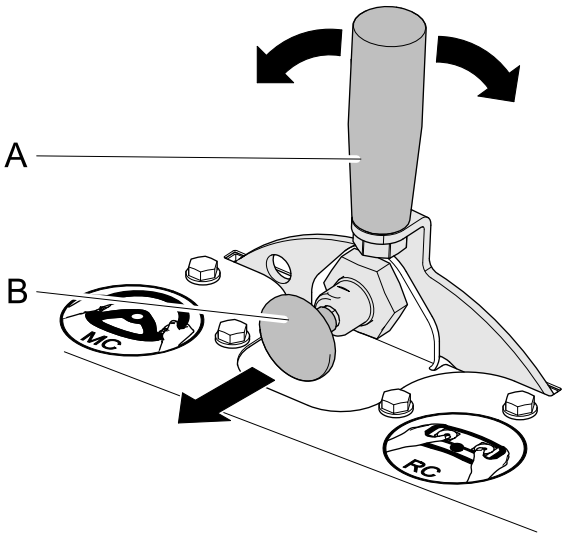
Moving the device without drive (5)

To push the mower without engine drive, unlock the drive at the rear of the device and release the parking brake.

Unlocking drive:
Slide the lever (5) to the left. 5

Locking drive:
Slide the lever (5) to the right. 5

Selection lever operating modes (6)



Read the selection lever position at the stickers to the left and right of the selection lever.

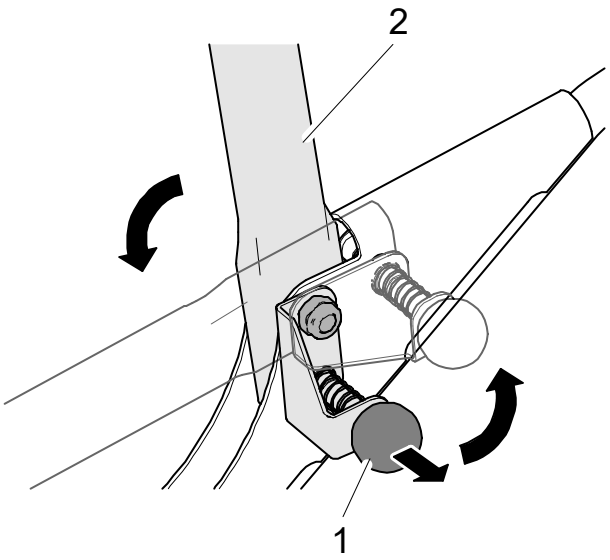
Operating mode MC (ride-on mode):

Operating mode RC (remote control mode):

Switching from RC to MC:
Pull out the latch knob (B). Move lever (A) to MC.

Switching from MC to RC:
Move lever (A) to RC.

Bar



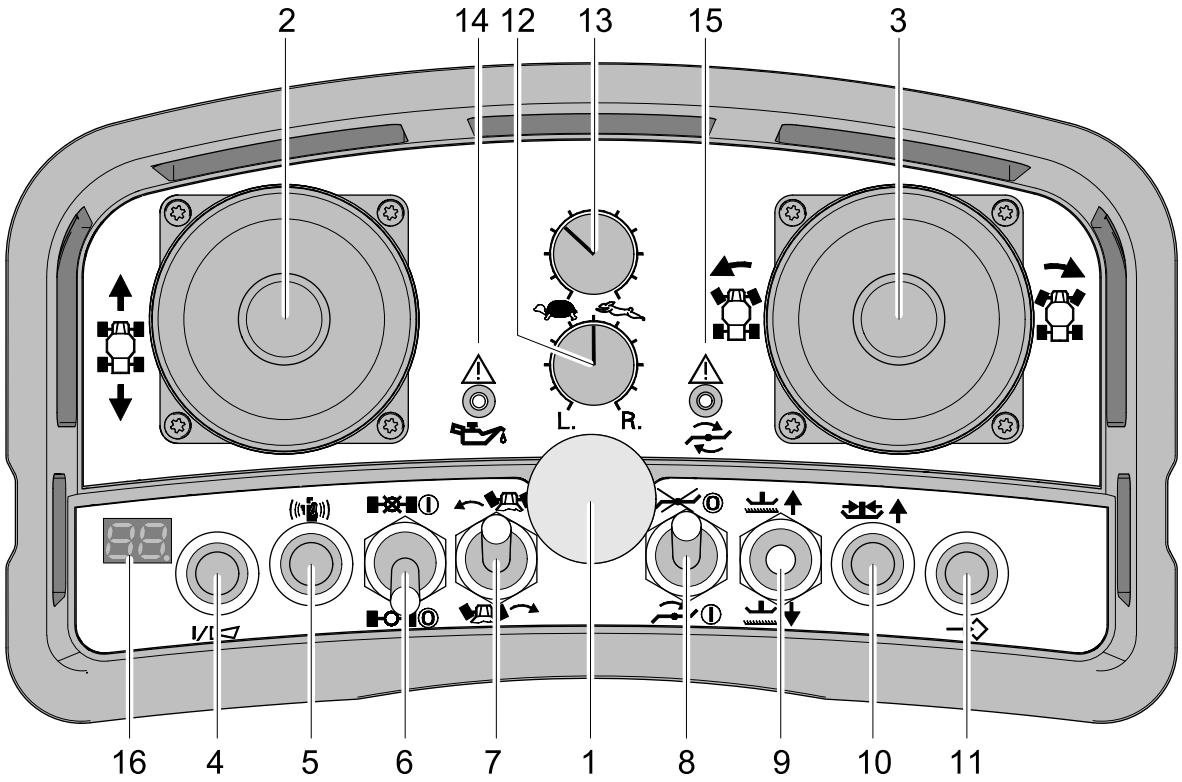
Putting down the bar

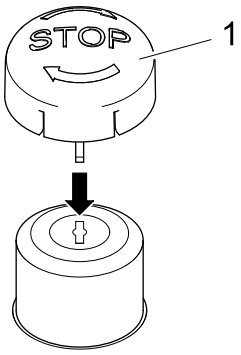
1. Pull out the lever (**1**).
2. Put down the bar (**2**).
3. Swivel the lever forwards and engage the lever.

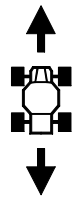
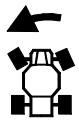
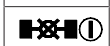
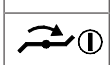
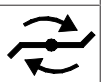
Putting up the bar

1. Pull out the lever (**1**).
2. Put up the bar (**2**).
3. Swivel the lever down and engage the lever.

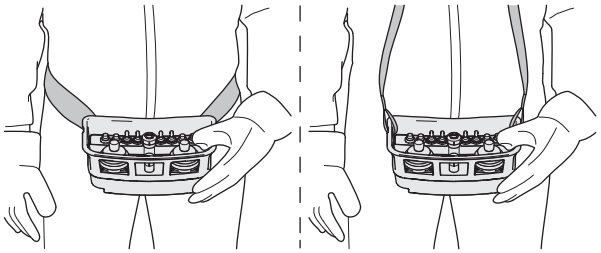
Control elements at the transmitter





Pos.	Symbol	Function	Type	Active in operating mode
1	-	Start-stop switch with key	Switch with key	RC+MC
2		Drive forward	Joystick	RC
		Drive backward:		
3		Steering to the left	Joystick	RC
		Steering to the right		
4		Horn/acknowledge	Button	RC+MC
5		Engine start	Button	RC+MC
6		Differential lock off	Toggle switch	RC
		Differential lock on		
7		Steering normal position	Toggle switch	RC
		Steering reversing		
8		Disengaging blade	Toggle switch	RC+MC
		Engaging blade		
9		Higher cutting height	Toggle switch	RC+MC
		Lower cutting height		
10		Transport position blade	Button	RC+MC
11		Displaying frequency	Button	RC+MC
12	L. R.	Trimming steering	Rotary knob	RC
13		Fast maximum speed	Rotary knob	RC
		Slow maximum speed		
14		Oil pressure	Control lamp	RC+MC
15		Blade engaged	Status indicator	RC+MC
16	-	Display	-	RC+MC

Carrying the transmitter



Fasten the belt to the transmitter in the desired way:

– Hip belt

– Carrying strap

Acoustic signals

Signals of the device

– Single honk signal after the transmitter is switched on: Radio connection between transmitter and receiver was successfully established.

– Horn sounds at intervals: Receiver is in operation. No radio contact to transmitter. Warning of battery consumption.

– Horn sounds at intervals in RC mode: The device sits in a too inclined position.

Signals of the transmitter

– Horn sounds twice when the transmitter is switched on: Transmitter is ready for operation.

– Horn sounds for a long time when the transmitter is switched off: Transmitter is switched off.

Optical signals

Status indicators on the device

– Continuous light: Receiver is in operation. Receiver waits for radio contact to transmitter to be established.

– Continuous light: An Emergency stop has occurred.

– Flashing: Beware, blade is engaged.

Lamps on the transmitter

– Control lamp oil pressure lights up: No oil pressure.

– Status indicator “blade engaged” is flashing: Beware, blade is engaged.

Display on the transmitter

Frequency: After a radio contact has been established between transmitter and receiver, the frequency number is briefly displayed.

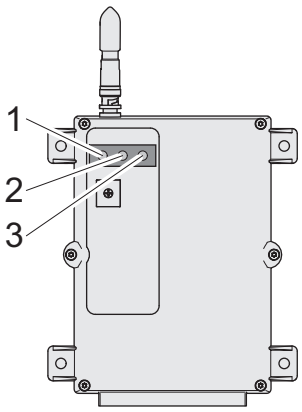
Transmitter in operation: Red dot jumps here and there.

Warning battery capacity: Quick flashing of an “L”. As soon as the display appears, the transmitter can be operated for another approx. 30 minutes.

Error code: When the control detects an error, the error code is displayed. For meaning of this code, see chapter Error codes.

Energy saving mode: If you do not actuate a button over a longer period of time, the transmitter switches off automatically.

LED display on the receiver



Description	LED 1	LED 2	LED 3
No supply	Off	Off	Off
Supply is ok and ready	Green light	Flashing weak green	Green light
Some type of radio signal was received (not necessarily by the corresponding transmitter)	Green light	Flashing orange when signal is received	Green light
Connection to the corresponding transmitter was correctly established	Green light	Flashing orange	Flashing green
Disturbance in HF channel (while radio connection is established)	Green light	Flashing orange	Flashing red
Fault while checking the EMERGENCY OFF relay	Green light	Flashing orange	Slowly flashing red
Other error sources	Off	(undefined)	Lights up or flashing red

Operating modes

The device can either be operated via remote control (Remote Control = RC mode) or while riding on the device (Manual Control = MC mode).

You can switch between operating modes at any time. However, it requires a great degree of knowledge to avoid faults and risks. Please read the corresponding chapter carefully. First, familiarize yourself with the device in the MC mode and practise the procedures on a spacious, obstacle-free and flat area.

Ride-on mode (MC):

We recommend working in the ride-on mode, for example,

- to efficiently mow big, flat areas.
- to precisely navigate around sensitive obstacles.
- to easily detect obstacles and foreign objects and thus be safe from ejected parts.
- to easily detect obstacles and foreign objects and thus avoid damage of the device.

Remove control mode (RC)

We recommend working in the remote control mode, for example,

- when you want to protect yourself against noise, physical strain, vibrations, exhaust fumes, dust, sun, or rain.
- at inaccessible places such as in the undergrowth, low branches or thorns.
- on slopes.
- to have a better overview of the danger area and thus avoid accidents.
- at the water's edge or in the proximity of edges with a risk of falling.
- on soft, sensitive grounds.
- to keep insects or pollen away.

Safety functions

To ensure safe operation at all times, the device is equipped with safety functions. To make the engine and the blade run, depending on the operating mode, certain requirements need to be fulfilled. These requirements are described in the corresponding chapters.

Driving on steep terrain

Danger!

Driving on the slope is dangerous. There is a tilting and slipping hazard.

Have skilled personnel who were trained by AS-Motor show you the safe handling of the device before you mow on steep terrain.

Observe the safety instructions regarding mowing on slopes and the danger area.

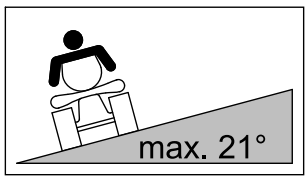
Move on slopes only when the differential lock is actuated.

Always check via the clinometer to see your device's sloping angle.

Checking the slope

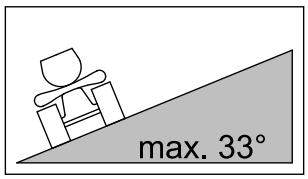
1. If the slope is unknown, check first in the RC mode.
2. On a level part, drive with disengaged blade parallel to the slope.
3. Stop the device.
4. Read the cross slope at the clinometer at the rear of the device.
5. If the slope is in the admissible range, move to a steeper part and repeat the cross slope test.
6. In the MC mode, read the slope at the clinometer on the tank.

Suitability on slopes in the MC mode:



– Use the device in the ride-on mode (MC) only on less than 21° slopes.

Suitability on slopes in the RC mode:



– Use the device in the remote control mode (RC) only on less than 33° slopes.

When you are positioned sideways to the slope at an angle of more than 33°, the horn of the device sounds at intervals. Move on to flatter ground.

Oil pressure switch

Danger!

If the engine shuts down while you are mowing, the device can roll away.

Immediately actuate the parking brake to prevent the device from rolling away.

The oil pressure switch ensures that the engine is not damaged when the device is used in steep terrain.

The oil pressure switch switches off the engine when damage to the engine may occur due to lack of oil pressure. This may occur when:

– Oil level is too low.

– The device is in too steep a sloping position while in steep terrain.

How steep the gradient for the oil pressure switch to switch off the engine may be depends on the engine type, direction of inclination, and the oil level.

After a drop in oil pressure

When the device detects an oil pressure drop,

– the oil control lamp at the transmitter lights up.

– the blade is switched off after 3 seconds.

– the engine is switched off after 13 seconds and “OL” is displayed.

1. Start the engine.
2. Move the device to a flat terrain in the vicinity.
3. **Oil control lamp at the transmitter is off:**
   ⇨ The device was in a too inclined position.
   ⇨ The oil pressure restored and you can continue to work.
4. **Oil control lamp at the transmitter lights up:**
   ⇨ The oil pressure of your device is still too low.
   ⇨ The blade cannot be engaged.

If the oil pressure of your device is still too low:

1. Switch off the engine.
2. Check the oil level.
3. If the oil control lamp lights up even though the oil level is sufficient, contact an authorised service centre.

Beware: If you drive for several minutes without oil pressure, engine damage will result.

Differential lock

The differential lock connects the two rear wheels rigidly to each other. This improves traction. Actuate the differential lock when a wheel slips.

Always actuate the differential lock when moving downhill. This improves the driving stability of the device. The risk of sliding or swerving of the rear is reduced and safe braking is possible.

Driving in curves while the differential lock is actuated is only possible with limitations.

Information on mowing

Prior to mowing, check your device for completeness, proper functioning, and cleanliness. A dirty ventilation grid causes overheating of the engine, this can damage the engine. A dirty protective grid at the silencer poses a fire hazard.

Frequent engagement and disengagement of the clutch increases wear of the blade drive belt and the blade brake. Especially in case of high grass, clutch engagement leads to overload.

To keep the area well maintained, mow frequently and keep the grass short.

Only mow with a sharp and undamaged blade. Have the blade sharpened and balanced regularly (by authorised service centre).

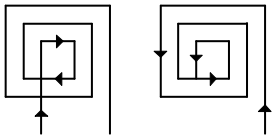
Do not mow when the grass is wet or when it is raining. The turf may be damaged and there is a danger of slipping!

Turn the device around only in already mown sections. Do not leave the device unattended while the engine is running.

Set the cutting height so that the blade does not touch the ground even in case of terrain unevenness.

Always set the blade to transport position when you do not mow.

For mowing, always turn the accelerator lever to full throttle to achieve the best mowing performance.



To avoid blockage during the ejection of grass, we recommend, for flat terrain, to proceed according to the mowing patterns. Mulch is shredded into much smaller pieces when you mow the terrain once again in the opposite direction.

Prior to starting

Checking the oil level

Caution! Before mowing, always check the engine oil level and the oil level in the hydrostat (see Maintenance).

Fuel

As fuel, use unleaded petrol (see operating instructions of the engine manufacturer).

You can use E10 petrol. Do not store E10 petrol longer than 30 days.

Tanking up

Danger!

Fuel is ignited by hot engine parts.

Prior to filling up, switch off the engine and wait for at least 20 minutes until the engine has cooled down. Observe the safety instructions regarding the fuel!

Filling up with fuel

1. For filling, use a canister with filler spout or a funnel.
2. Open the canister carefully so that existing excess pressure is slowly reduced.
3. Open the tank cap carefully so that existing excess pressure is slowly reduced and no fuel sprays out.
4. Fill the fuel tank.
5. Tightly close the tank cap again.

Checking and changing the battery at the transmitter

When working, always carry an extra battery.

If the batteries in the transmitter are charged too low or the batteries are unsuitable, these can be the consequences:

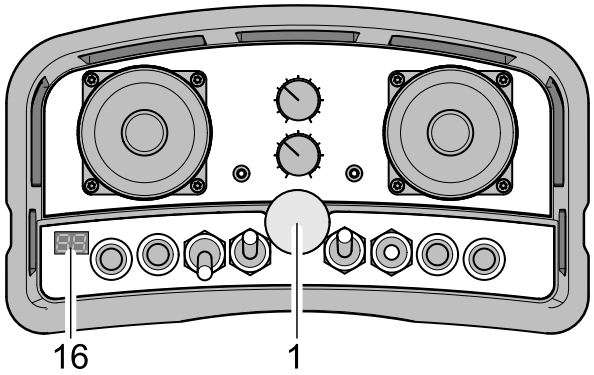
– The range of the radio contact drops.

– The radio contact becomes unreliable.

– An Emergency stop is triggered.

– The device cannot be operated any longer, also in the MC mode.

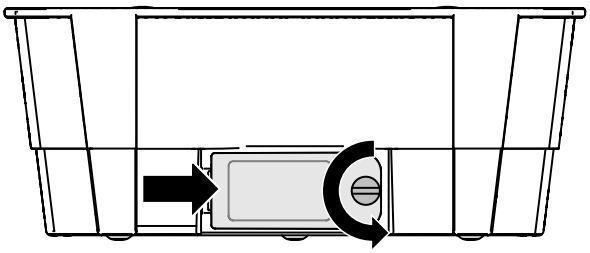
Checking the battery



1. Switch on the transmitter at the start-stop switch (1).
   ⇨ In the display (16) the frequency number is briefly shown.
   ⇨ In the display (16) a dot jumps back and forth: The battery is ok.
   ⇨ The display (16) flashes an “L”: Warning low battery capacity. You can continue to operate the transmitter for approx. 30 minutes.

Notice: If the batteries are unsuitable or faulty, this test can produce an incorrect result. In that case, please replace the batteries.

Changing the batteries



1. Move the device to a safe position and switch it off.
2. Loosen the locking screw at the battery compartment and remove the cover.
3. Replace the batteries with 2 new batteries or 2 charged batteries.
4. Close the cover and tighten the locking screw.
5. Switch on the transmitter via the start-stop switch.
6. Check if a dot is jumping on the display.

Adjusting the seating position

Adjust the seat in the longitudinal direction until your feet are positioned on the inclined support plates and you sit comfortably.

Adjusting the seat suspension

The seat suspension should be adjusted to the driver's weight and the terrain features. You will sit most comfortably when the spring travel is fully made use of.

The seat suspension should be set as soft as possible to keep it from going coil-bound during normal operation. You can read the current setting from the scale on the seat.

If the seat goes coil-bound during normal operation, turn the handwheel clockwise. The indicator moves towards 5. The seat suspension becomes stiffer.

If the seat suspension is stiff during normal operation and thus uncomfortable, turn the handwheel anticlockwise. The indicator moves towards 1. The seat suspension becomes softer.

Guide values for driver's weight for flat terrain:

kg	Scale
50	≥ 2
90	≥ 3
130	≥ 4

Putting up the bar

For safety reasons, always use the device with the bar folded up and locked. If the device tips over, the bar can prevent the device from overturning. Serious damage to the device can be thus avoided.

The device may only be used with the bar folded down on level ground.

Transport rack

Danger!
During the loading process, there is an increased risk of tilting.
Do not drive up or down steep slopes when the transport rack is loaded. Observe the permissible loading limits.

The device has a transport rack above the engine cover.

Warning!
Risk of accident due to inaccessible control elements at the rear end.
Make sure that the Emergency stop and the selector lever operating modes are always freely accessible.

Beware! Only load the transport rack so that the ventilation grid that is located below it is not covered. Otherwise there is a danger that the engine overheats and is damaged.

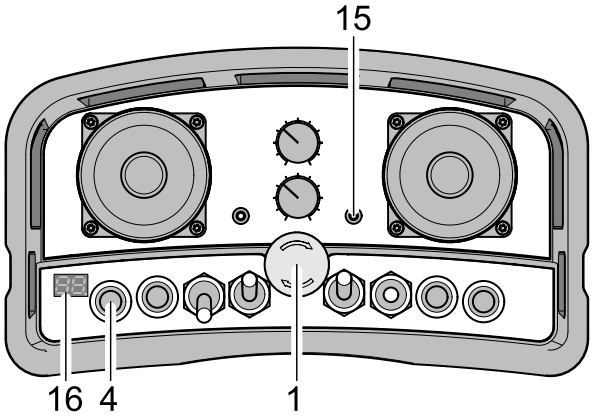
Loading limits

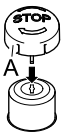
Maximum load:	5 kg
Maximum height:	18 cm
Maximum width:	45 cm
Maximum length:	30 cm

Switching on receiver and transmitter

No matter in which operating mode you want to work, you must switch on the receiver first.

1. Switch on the main switch on the device.
   ⇨ When the control has booted, the status indicators on the device light up.





2. Place the key (A)on the start-stop switch (1).
3. Turn the start-stop switch (1) clockwise to switch on the transmitter.
4. Wait until the horn of the device sounds once.
   ⇨ In the display (16) the frequency number is briefly displayed.
   ⇨ The status indicators at the device and at the transmitter (15) go out.
5. Press the button "Horn" (4) at the transmitter to get the device ready for operation.

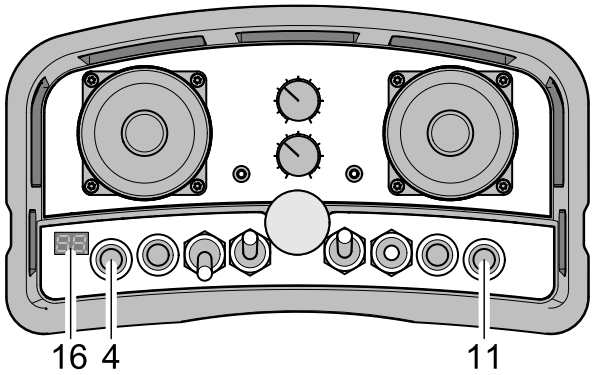
⇨ The horn signals that the device is ready for operation.

Selecting radio frequency

When you switch on the transmitter, the receiver automatically searches a suitable frequency.

If several remote controlled devices are operated at the same time or when another transmitter is located close by, faults in the radio contact can occur. If this is the case, change the frequency.

Changing the radio frequency



1. Continue to press the button “Horn/acknowledge” (4).
2. Press the button “Display frequency” (11).

⇨ In the display (16) the frequency number is briefly displayed.

⇨ When the transmitter has set a new frequency, the horns sounds and the device is ready for operation.

Working in the MC mode

Requirements

– The selection lever operating mode is set to MC mode.

– The transmitter is in the transmitter holder.

– There is a driver on the driver’s seat.

Starting the engine in the MC mode

Requirements

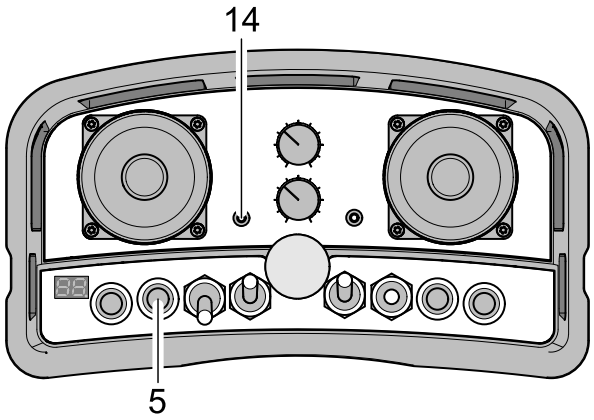
– The fuel valve is open.

– The tank ventilation is open.

– The drive lever at the device is in neutral position.

– Receiver and transmitter are switched on and ready for operation.

Starting



1. **When the engine is warm:**
   Move the accelerator lever to middle position (full throttle).
   When the engine and outside temperatures are cold (cold start):
   Move the accelerator lever to cold start position (Choke).
2. Press the key “Engine start” (5) at the transmitter.

   ⇨ Engine is started.

   ⇨ The oil control lamp (14) at the transmitter goes out.
3. **Only after cold start:**
   Move the accelerator lever to middle position (full throttle).

Steering in the MC mode

In the MC mode, steer with the steering wheel.

The joystick for the steering, trimming and steering reversing are in the MC mode without function.

Driving in the MC mode

Danger!
Mowing on the slope is dangerous. There is a tilting and slipping hazard.
Observe the safety instructions regarding mowing on slopes.
Observe the instructions in chapter “Driving on steep terrain”

In case of a hazardous situation, switch off the drive and declutch the blade.

Brakes

Warning!
The foot brake does not take effect if you hold on to the accelerator lever during braking.
Release the accelerator lever when you actuate the foot brake.

To stop, move the drive lever slowly to neutral position.

The parking brake acts on the rear wheels. When the foot brake is actuated, the drive lever swivels all the way to neutral position/parking brake.

Use the actuation via foot pedal only in exceptional circumstances because the mower stops abruptly.

Driving

1. Release the parking brake.
2. Move the drive lever slowly to the desired driving direction. The more you move the lever away from the neutral position, the faster the mower moves.
3. To stop move the drive lever slowly to neutral position or step on the foot brake.

Reversing

Danger!
Danger of injury when reversing.
Make sure that your path is clear of obstacles and that no other persons stand behind your device.

Always reverse slowly. Be especially cautious when the blade is engaged.

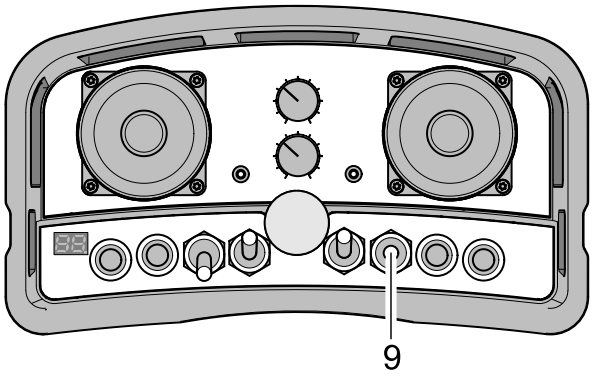
1. Release the parking brake.
2. Slowly move the drive lever to the rear. The more you move the lever away from the neutral position, the faster the mower moves.
3. To stop move the drive lever slowly to neutral position or step on the foot brake.

Standing up while driving

If you stand up during driving, the blade is disengaged and the engine is switched off.

When you sit down again or move the drive lever back to neutral position before the engine stops, the engine continues to run.

Setting the cutting height



Continuously adjust the cutting height with the toggle switch (9).

Highest cutting height: Out of the transport position, move the toggle switch once briefly back.
Lower cutting height: Continue to press back the toggle switch until the desired cutting height is reached.

Higher cutting height: Continue to press forward the toggle switch until the desired cutting height is reached.

Engaging the blade in the MC mode

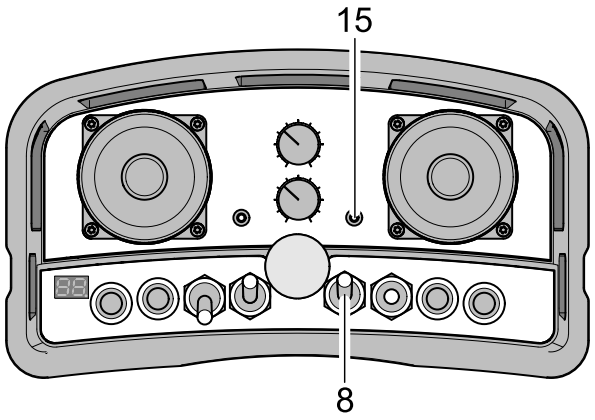
Warning!
Risk of injury due to rotating blade.
Make sure that no persons, children, animals or objects are in the danger area.

Only engage the blade when it can rotate freely and does not touch objects or the ground.

Do not engage the blade in uncut grass because the blade drive is overloaded, can be damaged or wears prematurely.

Requirements

– The transmitter is in the transmitter holder.
– There is a driver on the driver’s seat.
– The engine is running.
– The oil control lamp is off.
– The blade is not in transport position.



Engaging blade:
Toggle switch (8) to “I”.

Disengaging blade:
Toggle switch (8) “0”.

Notice: For safety reasons, the blade is never engaged automatically. If, prior to engaging the blade, the toggle switch is set to "I", it must be set to "0".

Engaging blade:

1. For mowing, set the accelerator lever to the maximum speed.
2. Set the highest cutting height.
3. Set the blade clutch switch (8) to “I”.
   - ⇨ The blade is engaged.
   - ⇨ Status indicator at the device flashes.
   - ⇨ Status indicator at the transmitter (15) flashes.
4. Set the desired cutting height.

When crossing over paths, disengage the blade.

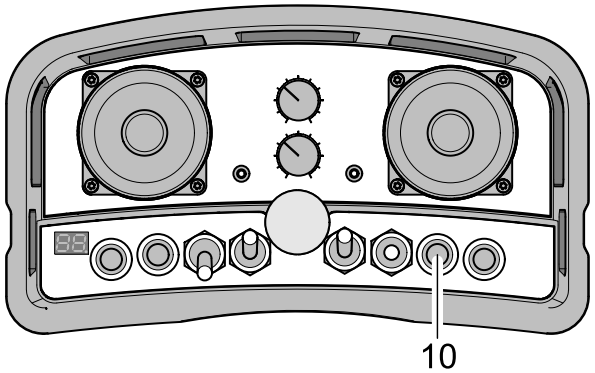
1. Set the blade clutch switch (8) to “0”.

⇨ The blade is disengaged.

⇨ The status indicators do not flash any longer.

Moving blade to transport position

The blade can be moved to transport position out of any position.



Moving blade to transport position: Press button (10).

1. Briefly press the button (10) to move the blade to transport position.

⇨ The blade is immediately disengaged.

⇨ The blade is moved to transport position.

Actuating the differential lock in the MC mode

To actuate the differential lock, fully depress the left pedal.

To avoid excessive wear,

– actuate the differential lock only when the device is stopped, if possible.

– always step on the pedal all the way.

– release the differential lock when it is no longer absolutely needed.

Switching off and parking in the MC mode

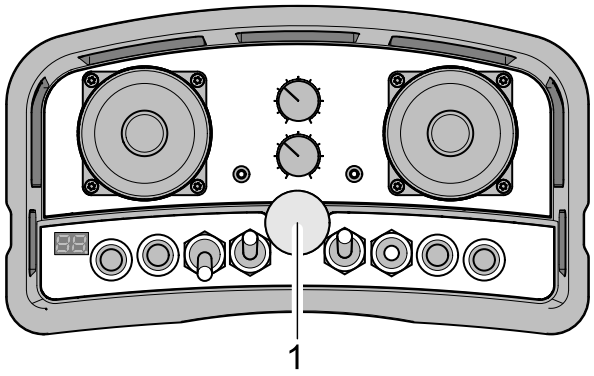
Warning!
Risk of injury due to device that is no longer controllable.

If you switch off the main switch at the device first, the receiver is no longer active. The blade is decelerated by the stopping engine. Otherwise, the parking is not activated any longer and the device can roll away.

Always switch off the device in the order described in the following section.

Warning!
There is a risk of injury in case of unauthorised use.

Press the start-stop switch at the transmitter, remove the key and switch off the main switch when you do not use the device any longer.



1. Move the drive lever slowly to neutral position/parking brake.
2. Move blade to transport position.
3. Press the start-stop switch (1) at the transmitter.
   - ⇨ The engine is switched off.
   - ⇨ After 10 seconds, the horn sounds with interval.
   - ⇨ The status indicators at the device go on (continuous lighting).
4. Switch off the device at the main switch.
5. Wait for the blade to stop before you step away from the device.
6. Remove the key at the start-stop switch (1) of the receiver. Close the fuel valve.
7. Close the tank ventilation.

Notice: If you do not switch off the main switch at the device, the receiver continues to consume power. After 10 seconds, the horn sounds with interval. Switch off to the main switch so that the battery is not discharged.

Switching from the MC mode to the RC mode

Warning!
Risk of injury due to rotating blade.
Always disengage the blade and wait for the blade to stop before you step away from the device.

You can switch to the RC mode while the engine is running.

Switching

1. Move the device to a flat terrain that is not slippery.
2. Disengage the blade.
3. Remove the transmitter from the transmitter holder.
4. Step off via the left side of the device.
   ⇨ The engine continues to run.
5. Set the selector lever operating modes at the rear of the device to RC mode.
   ⇨ The RC mode is switched on.
6. Leave the danger area of the blade (see chapter Danger area).

Emergency stop in the MC mode

Warning!
After an Emergency stop on steep terrain, the device can roll away.
Immediately actuate the parking brake to prevent the device from rolling away.

Causes of the Emergency stop

– The transmitter is not in the transmitter holder and the blade is engaged.
– Loss of radio contact between transmitter and receiver.
– Press the Emergency Stop switch on the device.
– The device has tipped.

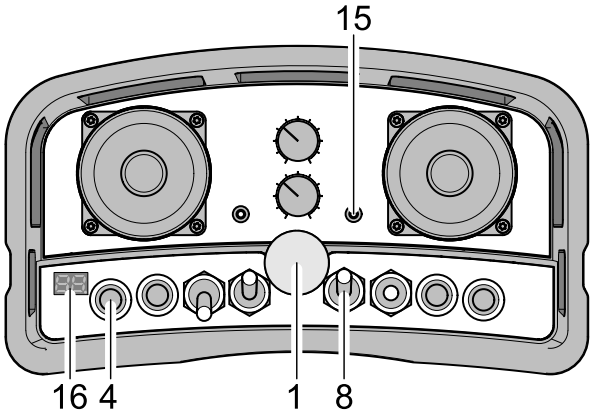
Notice: When the control detects an error, the error code is displayed. For meaning of this code, see chapter Error codes.

Consequences of an Emergency Stop

The device is brought into a safe state.

– Blade is disengaged.
– Engine is switched off.
– Status indicators go on.
– The control function of the transmitter is switched off.

Procedure after an Emergency stop



After an Emergency Stop, the following starting procedure must be carried out.

1. Check and eliminate the cause for the Emergency Stop.
2. Switch off the transmitter by pressing the start-stop switch (1) and wait 5 seconds.
3. Turn the start-stop switch (1) clockwise to switch on the transmitter.
4. Wait until the horn of the device sounds once.
   ⇨ In the display (16) the frequency number is briefly displayed.
5. The status indicators at the device and at the transmitter (15) go out.
6. Press the button “Horn” (4) to get the device ready for operation.
   ⇨ The horn signals that the device is ready for operation.
7. The blade is disengaged in case of an Emergency Stop. However, the toggle switch “Blade clutch“ (8) remains in the position that was selected last. Therefore, set the toggle switch “Blade clutch“ (8) manually to “0”.

Practising the RC mode

Danger!
Risk of injury due to rotating blade.
Make sure that nobody is in the danger area.
Always disengage the blade before you approach the device.

Danger!
Risk of injury caused by ejected objects.
Never mow when persons, children, pets or material assets are in the danger area.

Limit the maximum speed via the rotary knob at the transmitter. Make sure that you know at all times how to stop the device.

First practise driving and steering while the blade is switched off on a big, open and flat terrain.

Practise driving around obstacles. Never steer the device towards yourself.

Test out steering with the steering reversing. Only use the steering reversing if you feel safer with it.

First mow on a flat and open terrain, gradually increase the level of difficulty (uneven terrain, obstacles, slight slope inclinations).

Move on to difficult terrain and slopes only after you have safely mastered the device.

Working in the RC mode

Requirements

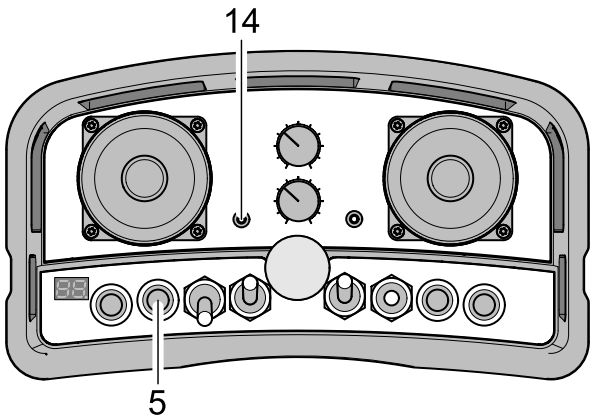
– The selection lever operating mode is set to RC mode.
– There is no driver on the seat.
– The transmitter is not in the transmitter holder.

Starting the engine in the RC mode

Requirements

– The fuel valve is open.
– The tank ventilation is open.
– Receiver and transmitter are switched on and ready for operation.

Starting



1. **When the engine is warm:**
   Move the accelerator lever to middle position (full throttle).
   When the engine and outside temperatures are cold (cold start):
   Move the accelerator lever to cold start position (Choke).
2. Press the key “Engine start” (5) at the transmitter.
   ⇨ Engine is started.
   ⇨ The oil control lamp (14) at the transmitter goes out.
3. **Only after cold start:**
   Move the accelerator lever to middle position (full throttle).

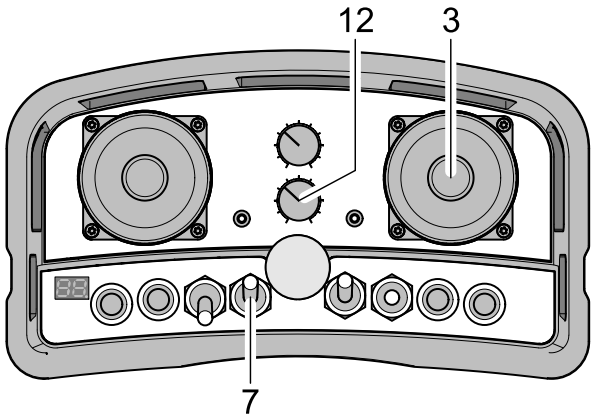
Steering in the RC mode

Warning!

Risk of injury due to steering reversing.

If you do not know in which position the toggle switch "Reversing steering" is, the device might steer in an unexpected direction.

Prior to steering, check the position of the toggle switch “Reversing steering”.



Steer the device with the right joystick (3).

When you release the joystick, the device steers straight forward.

Steering direction

The steering direction depends on the position of the toggle switch “Reversing steering” (7) starting from.

Toggle switch front (normal position)

Steering to the left: Pressing joystick to the left

Steering to the right: Pressing joystick to the right

Toggle switch rear (reversing)

Steering to the left: Pressing joystick to the right

Steering to the right: Pressing joystick to the left

Only use the steering reversing if you feel safer with it.

Trimming steering

If the device does not drive straight in spite of the middle position of the steering, adjust it with the rotary knob "Trimming steering" (12).

Turning

When turning the device, make sure that the device always moves away from you.

Driving in the RC mode

Danger!

Mowing on the slope is dangerous. There is a tilting and slipping hazard.

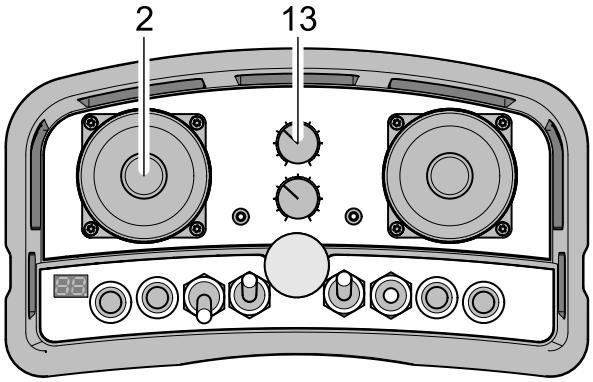
Observe the safety instructions regarding mowing on slopes.

Observe the instructions in chapter “Driving on steep terrain”

Danger!

Danger of injury when reversing.

Make sure that your path is clear of obstacles and that no other persons stand behind your device.



Control the speed and the driving direction with the left joystick (2).

The more you press the joystick the faster the device moves.

Moving forward: Pressing joystick forward

Stopping (neutral position/parking brake): Releasing the joystick

Reversing: Pressing joystick backward

Always reverse slowly. Be especially cautious when the blade is engaged.

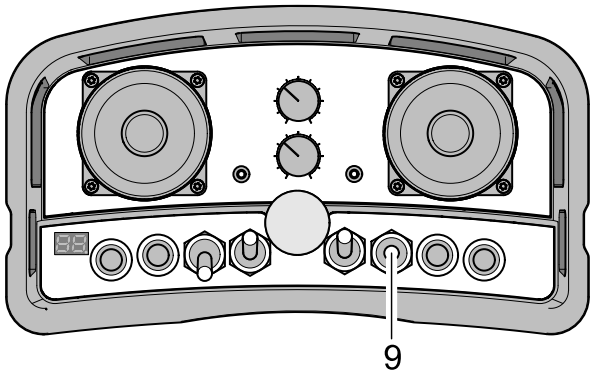
Limiting the speed

Fast maximum speed

Slow maximum speed

Limit the speed with the rotary knob (13) to the speed at which you safely master the device. The speed is reached when you press the joystick for the speed all the way.

Setting the cutting height



Continuously adjust the cutting height with the toggle switch (9).

Highest cutting height: Out of the transport position, move the toggle switch once briefly back.

Lower cutting height: Continue to press back the toggle switch until the desired cutting height is reached.

Higher cutting height: Continue to press forward the toggle switch until the desired cutting height is reached.

Engaging the blade in the RC mode

Warning!

Risk of injury due to rotating blade.

Make sure that no persons, children, animals or objects are in the danger area.

Only engage the blade when it can rotate freely and does not touch objects or the ground.

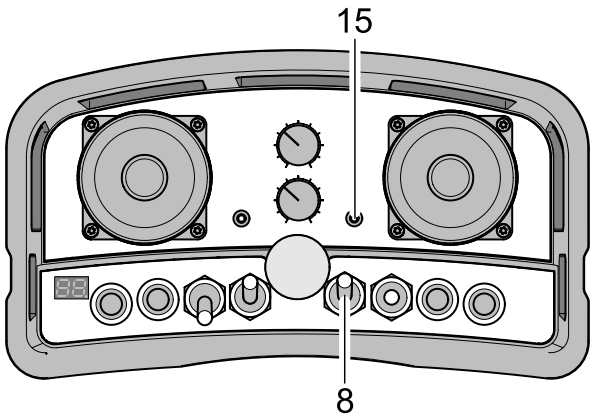
Do not engage the blade in uncut grass because the blade drive is overloaded, can be damaged or wears prematurely.

Requirements

– The engine is running.

– The oil control lamp is off.

– The blade is not in transport position.



Engaging blade:
Toggle switch (8) to “I”.

Disengaging blade:
Toggle switch (8) “0”.

Notice: For safety reasons, the blade is never engaged automatically. If, prior to engaging the blade, the toggle switch is set to "I", it must be set to "0".

Engaging blade:

1. For mowing, set the accelerator lever to the maximum speed.
2. Set the highest cutting height.
3. Set the blade clutch switch (8) to “I”.
   ⇨ The blade is engaged.
   ⇨ Status indicator at the device flashes.
   ⇨ Status indicator at the transmitter (15) flashes.
4. Set the desired cutting height.

When crossing over paths, disengage the blade.

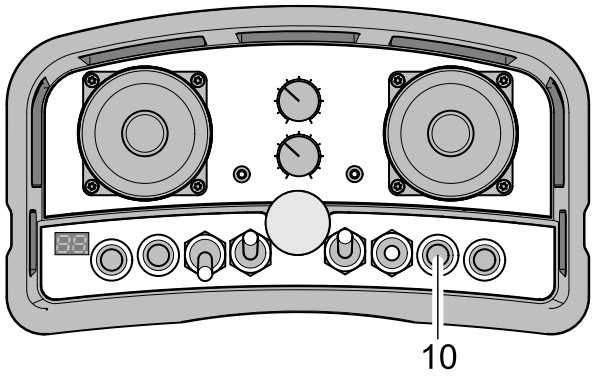
1. Set the blade clutch switch (8) to “0”.

⇨ The blade is disengaged.

⇨ The status indicators do not flash any longer.

Moving blade to transport position

The blade can be moved to transport position out of any position.



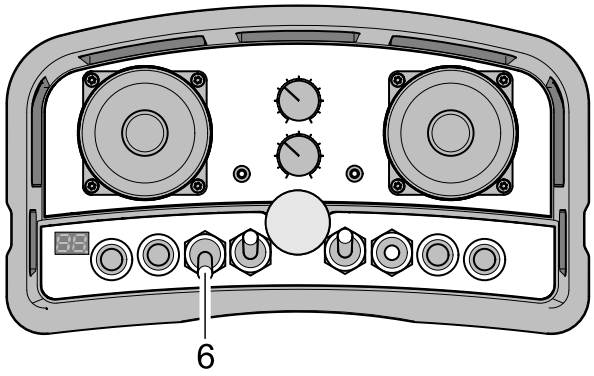
Moving blade to transport position: Press button (10).

1. Briefly press the button (10) to move the blade to transport position.

⇨ The blade is immediately disengaged.

⇨ The blade is moved to transport position.

Actuating the differential lock in the RC mode



Switching on the differential lock: Toggle switch (6) to “I”.

Switching off the differential lock: Toggle switch (6) “0”.

To avoid excessive wear,

– actuate the differential lock only when the device is stopped, if possible.

– release the differential lock when it is no longer absolutely needed.

Switching off and parking in the RC mode

Warning!

There is a risk of injury in case of unauthorised use.

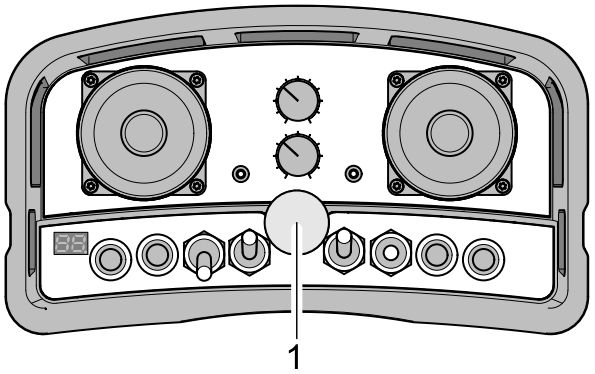
Press the start-stop switch at the transmitter, remove the key and switch off the main switch when you do not use the device any longer.

Warning!

Risk of injury due to device that is no longer controllable.

If you switch off the main switch at the device first, the receiver is no longer active. The blade is decelerated by the stopping engine. Otherwise, the parking is not activated any longer and the device can roll away.

Always switch off the device in the order described in the following section.



1. Release both joysticks.
2. Move blade to transport position.
3. Press the start-stop switch (1) at the transmitter.
   ⇨ The engine is switched off.
   ⇨ The drive goes to neutral position, the parking brake is active.
   ⇨ After 10 seconds, the horn sounds with interval.
   ⇨ The status indicators at the device go on (continuous lighting).
4. Wait for the blade to stop before you approach the device.
5. Switch off the device at the main switch.
   ⇨ The sounding of the horn in intervals is finished.
   ⇨ The status indicators at the device go out.
   ⇨ The receiver is now currentless.
6. Remove the key at the start-stop switch (1) of the receiver.
7. Close the fuel valve.
8. Close the tank ventilation.

Notice: If you do not switch off the main switch at the device, the receiver continues to consume power. After 10 seconds, the horn sounds with interval. Switch off to the main switch so that the battery is not discharged.

Switching from the RC mode to the MC mode

Warning!
Risk of injury due to rotating blade.
Make sure that nobody is in the danger area.
Always disengage the blade before you approach the device.

Warning!
Risk of injury caused by ejected objects.
Never mow when persons, children, pets or material assets are in the danger area.

You can switch to the MC mode while the engine is running.

Switching

1. Move the device to a flat terrain that is not slippery.
2. Disengage the blade and wait until it stops.
3. Approach the device from the left rear.
4. Set the selector lever operating modes on the rear of the device to MC mode.
5. Sit down in the driver's seat.
6. Insert the transmitter into the transmitter holder below the steering wheel.

⇨ The engine continues to run.

⇨ The MC mode is switched on.

Notice: When you switch to MC mode without disengaging the blade, an Emergency Stop will be triggered due to safety reasons.

Emergency stop in the RC mode

Causes of the Emergency stop

– There is a driver in the driver's seat.

– The transmitter is in the transmitter holder.

– Loss of radio contact between transmitter and receiver.

– Press the Emergency Stop switch on the device.

– The device has tipped.

Notice: When the control detects an error, the error code is displayed. For meaning of this code, see chapter Error codes.

Consequences of an Emergency Stop

The device is brought into a safe state.

– Blade is disengaged.

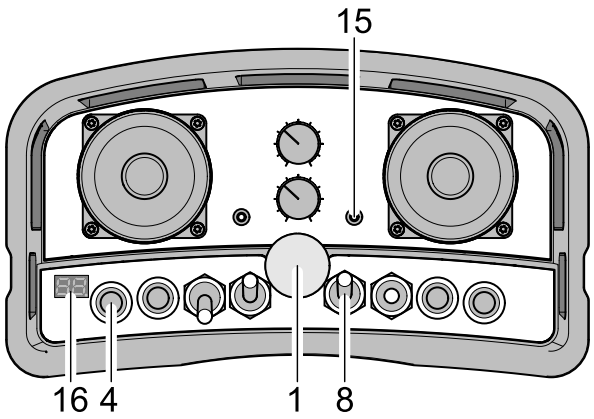
– Engine is switched off.

– Drive goes to neutral position, the parking brake is active.

– Status indicators go on.

– The control function of the transmitter is switched off.

Procedure after an Emergency stop



After an Emergency Stop, the following starting procedure must be carried out.

1. Check and eliminate the cause for the Emergency Stop.
2. Switch off the transmitter by pressing the start-stop switch (1) and wait 5 seconds.
3. Turn the start-stop switch (1) clockwise to switch on the transmitter.
4. Wait until the horn of the device sounds once.
   ⇨ In the display (16) the frequency number is briefly displayed.
5. The status indicators at the device and at the transmitter (15) go out.
6. Press the button "Horn" (4) to get the device ready for operation.
   ⇨ The horn signals that the device is ready for operation.
7. The blade is disengaged in case of an Emergency Stop. However, the toggle switch "Blade clutch" (8) remains in the position that was selected last. Therefore, set the toggle switch "Blade clutch" (8) manually to "0".

Transport

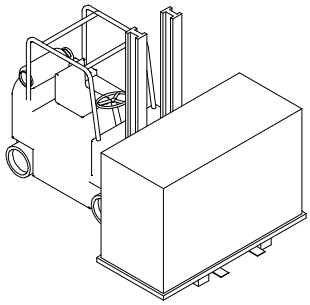
Transport the device on a freight vehicle or a trailer which is designed for a carrying capacity of at least as great as the empty weight of the device.

Transport on pallets

For transport over short distances, use a fork lift or a lift truck.

For longer distances, load the device with a fork lift onto a freight vehicle or trailer.

The user must be authorised to operate a fork lift. When the machine is lifted, all persons must step away from the working area of the fork lift.



Notice! Drive the fork lift completely under the longitudinal beams of the wooden pallets.

Transport of ready-to-use device

Warning!
Risk of injury due to the heavy weight of the device. The device can fall over and fall down and cause severe injuries.
Observe the following notices.

Do not stay in the tilting area of the device.

Prior to each transport, let the device cool down for at least 20 minutes. Close the fuel valve and the tank ventilation.

Loading

Use suitable ramps for loading that

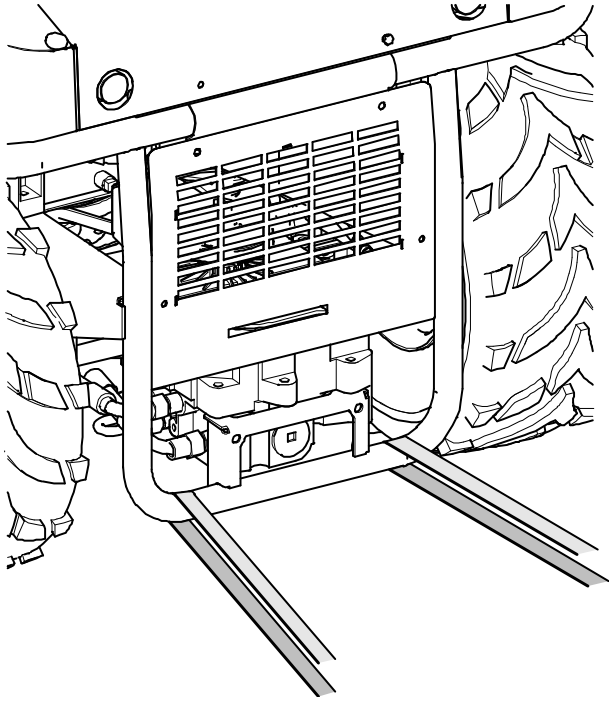
– can carry the empty weight of the device + 200 kg.

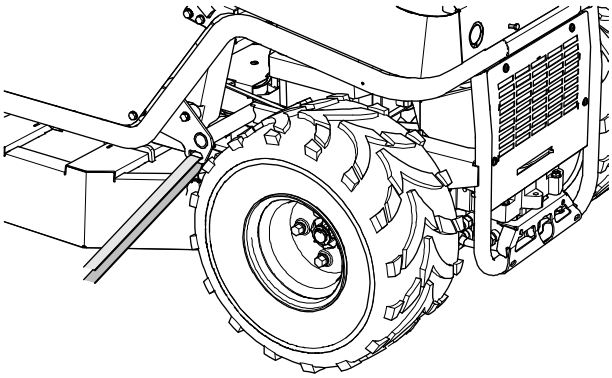
– are wider than the device.

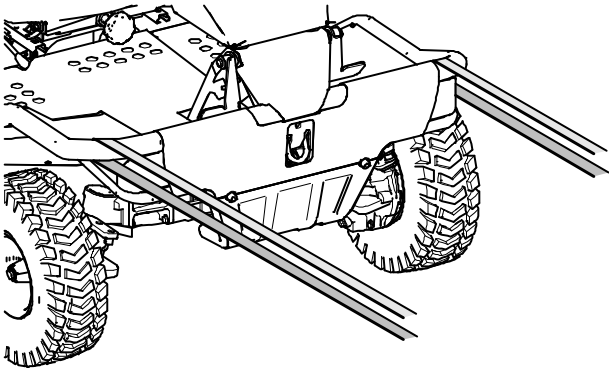
– have a slip-free surface.

Notice!
Risk of damage due to incorrect fastening of straps.
Fasten the straps only at the points shown in the figure.
Do not overtighten the straps.

1. Put the device in front of the ramps and make sure that the ramps
   – are as wide as the wheel gauge of the device.
   – are tightly secured to the platform.
   – are not steeper than 15°.
2. Carefully drive the device via the ramps onto the platform.
3. Secure the device against rolling, sliding, tilting, and fuel leakage. Use straps that support the weight of the device.







4. Secure the device with belts to the frame elements that can hold the weight.

Unloading the device

1. Undo the transport fastenings.
2. Drive the device carefully down the ramps of the platform.

Towing

Danger!

The device can roll away without the drive.

Never unlock the drive in steep terrain without securing the device against rolling away.

If the engine cannot be started again, the device must be towed.

1. While using the brakes, let the device roll to terrain that is less steep.
2. Secure the device against rolling away or sliding.
3. Secure the device with a cable winch that has got enough load capacity.
4. For towing unlock the drive and release the parking brake.

Disconnecting the drive

Warning!

Hot silencer grid.

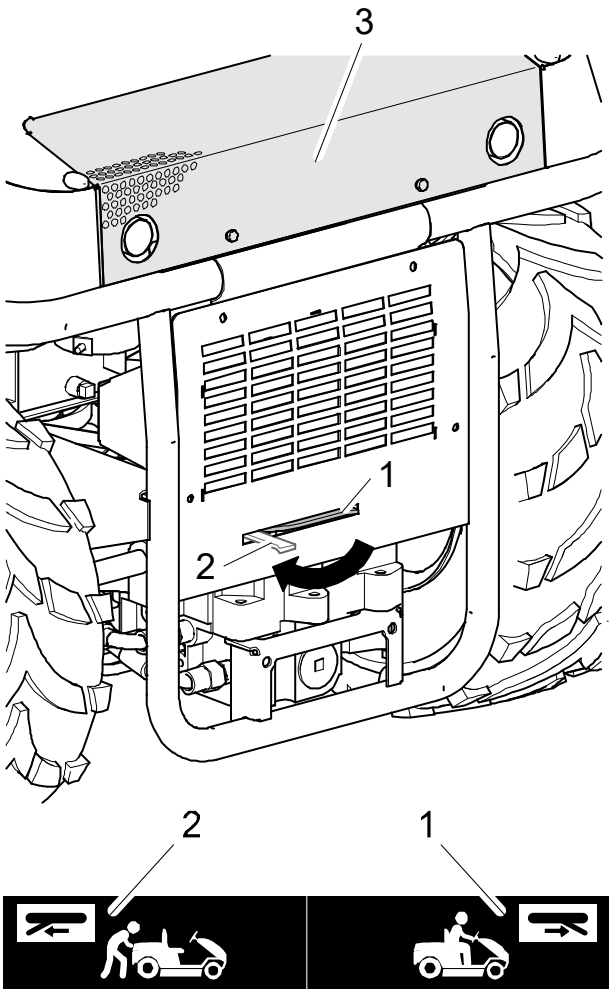
Do not touch the silencer grid (**3**) when you are pushing the device. The grid gets very hot during operation and you can get burned.

Notice!

When the engine is started while the drive is unlocked, the hydraulic drive can be destroyed.

Never start the engine when the drive is unlocked.

To push the mower without engine drive, unlock the drive at the rear of the device and release the parking brake. The mower can only be braked via the parking brake.



1: = Locked

2: = Unlocked

Maintenance

Improper maintenance can make the device unsafe for operation and result in accidents. Regular maintenance keeps you device ready for use.

Service the device according to the following maintenance instructions.

Contact an authorised service centre if problems during maintenance occur or if you determine deficiencies during one of the following inspections.

Component	Action	Maintenance interval	
		A	B
Device	Clean.	■	
	Perform basic inspection.	■	
	Checking the RC functions.	■	▲
	Checking the safety functions.		▲
Fuel	Check fuel level.	■	
	Is the tank cap closed?	■	
Tank, fuel valve, and fuel line	Check parts for leaks and check for good condition.	■	▲
Ventilation grid	Clean.	■	▲
Engine cooling	Clean.		▲
Spark plug	Check/replace.		▲
Air filter	Maintain.	■	■▲
Blade and fastening components	Check for wear and damage. See chapter Checking the blade.	■	▲
	Change.		▲
	Clean the screw-on point of the knife blade.	■	
Blade brake	Does the blade function safely and does the blade come to a standstill within 5 seconds?	□	▲
Drive lever	Does the device stop when the lever is in neutral position (parking brake)?	□	▲
	If the lever moves to neutral position when the foot brake is actuated?	■	▲
V-belt	Are the belts tensioned correctly, without fissures, and in good condition?		▲
Bowden cables	Check for proper function and ease of movement.	■	▲
Acceleration lever	Check for proper function.	□	▲
Chassis and impact protection	Check for rust and fissures and check the welding seams.	■	▲
	Are all protective devices and covers in place, fastened correctly and properly functioning?	■	▲
Label	Condition of the labels.	■	▲
Engine	For reliable information, see the operating manual of the engine manufacturer.	■	▲
	Check oil level (see operating instructions of the engine manufacturer).	■	▲
	Oil change.		▲
	Oil filter change.		▲
Parking brake	Check.	■	▲
Check the foot brake	Check the foot brake.	■	▲

Flammable material	Remove easily flammable debris buildup from the engine and the device.	■	▲
Steering	Check the clearance.	■	▲
Tyres	Check tyres and, if necessary, the tyre pressure.	■	▲
Emergency stop switch	Check.	□	▲
Start-stop switch with key	Check.	□	▲
Selection lever operating mode	Check.		▲
Hydrostatic transmission	Check oil level.	■	▲
	Repair leaks.		▲
	Oil change after 50 h and every 200 h thereafter.		▲
Battery of the device	Check the charging conditions.		▲

A Before and after each use.
B Once a year or every 50 h.
■ By the operator when the engine is not running.
□ By the operator when the engine is running.
▲ By the authorised service centre.

Prior to maintenance and cleaning

Danger!
Risk of injury during maintenance and cleaning work when the engine is running.
Perform maintenance tasks only when the engine is running if this is required in the corresponding chapter.

Prior to all maintenance and cleaning work when the engine is not running:

1. Let the device cool down for at least 20 minutes.
2. Close the fuel valve and the tank ventilation.
3. Disconnect the negative pole of the battery.

Maintenance and cleaning position

Warning!
Risk of injury due to the heavy weight of the device. The device can fall over and fall down and cause severe injuries.
Observe the following notices.

To perform maintenance, repair or cleaning tasks at the bottom of the device, you can lift or tilt the device.

– Lift the device only when on level and firm terrain.
– Use only lifting gear or ramps that are suitable for the weight of the device.
– Attach the lifting gear only to the main frame because only the main frame can carry the weight.
– Secure the device always against tilting, falling down or slipping.
– Do not stay in the tilting area of the device.
– Do not tilt the device more than indicated in the safety instructions regarding driving on the slope. Otherwise the device can tilt and the device can be damaged or contaminations can occur due to leaking fluid.
– Do not carry out tasks that can result in tilting, falling down or slipping of the device.

Cleaning the device

After each use, you should clean the device thoroughly, especially the bottom side and the blade.

Stuck grass or dirt affect the grass discharge and the cutting quality. For a sufficient engine cooling, keep the engine cover, ventilation grid, and the engine clean.

For sufficient cooling of the hydrostat transmission, keep the gearbox casing and the area around the gearbox fan clean.

Fire hazard! Pay special attention so that components at the silencer are clean.

For cleaning use a hand brush. Remove stubborn soiling with a wooden or plastic spatula. Clean the outer housing parts with a cloth.

Do not rinse off the device with a water jet or high pressure cleaner! Do not use aggressive cleaning agents.

General inspection

To make sure that the device can be operated safely, check all nuts, bolts, screws, connection of fuel lines, air filters etc. regularly for firm seating. Check the ignition wire and the spark plug connectors for damage.

Immediately replace damaged or worn parts, especially covers, protection skirt, silencers or fuel tank (authorised service centre).

Check all parts that that contain fluids for leaks and proper condition. These can be: Fuel tank, fuel valve, fuel lines, carburetor, engine, gears, battery, hydraulic system.

In case of leaks, contact an authorised service centre.

Checking the RC functions

Checking when the engine is not running

1. Set the selector lever operating modes on the rear of the device to RC mode (remote control mode).
2. Switch on the transmitter and the receiver.
3. Set the toggle switch “Steering direction reversal” to normal position.

Checking the steering

1. Press the right joystick to the left.
   ⇨ Steering steers to the left without delay.
2. Release the right joystick.
   ⇨ The steering moves to the middle position without delay.
3. Press the right joystick to the right.
   ⇨ Steering steers to the right without delay.
4. Release the right joystick.
   ⇨ The steering moves to the middle position without delay.

Checking the drive lever

1. Set the rotary knob “maximum driving speed” to the rabbit.
2. Press the left joystick forward.
   ⇨ The drive lever moves forward without delay.
3. Release the left joystick.
   ⇨ The drive lever moves to neutral position/parking brake without delay.
4. Press the left joystick backwards.
   ⇨ The drive lever moves backwards without delay.
5. Release the left joystick.
   ⇨ The drive lever moves to neutral position/parking brake without delay.

Checking the cutting height

1. Press the toggle switch “Lower cutting height” backwards until the cutting height adjustment stops by itself.
   ⇨ The cutting height display must be set to 1.
2. Press the toggle switch “Higher cutting height” forward until the cutting height adjustment stops by itself.
   ⇨ The cutting height display must be set to 5.
3. Briefly press the button “Transport position blade”.
   ⇨ The blade is moved to transport position.
   ⇨ The cutting height display must be set to 0.
4. Briefly press the toggle switch “Lower cutting height”.
   ⇨ The cutting height moves independently from transport position to the highest cutting height.
   ⇨ The cutting height display must be set to 5.

Checking when the engine is running

1. Start the engine.
   ⇨ The device must be stopped.
2. Pull the accelerator lever all the way up.
   ⇨ The engine is idling.
3. Repeat the test procedures for steering, drive lever and cutting height.
   ⇨ Function is as described in the respective point.
   ⇨ The device must drive forward when you press the right joystick forward.
   ⇨ The device must drive backwards when you press the right joystick backwards.
   ⇨ The device must stop without delay when you press the right joystick backwards.

Checking the safety functions

Magnetic contact switch at the transmitter holder

1. Select the operating mode MC.
2. Sit down on the driver’s seat.
3. Switch on the transmitter and the receiver.
4. Start the engine.
5. Turn the accelerator lever to neutral position.
6. Remove the transmitter from the transmitter holder.
7. Turn the accelerator lever forward to slow speed.

⇨ The engine must stop.

Seat contact switch

1. Select the operating mode MC.
2. Insert the transmitter into the transmitter holder.
3. Sit down on the driver’s seat.
4. Switch on the transmitter and the receiver.
5. Start the engine.
6. Turn the accelerator lever forward to slow speed.
7. Carefully relieve the driver’s seat.

⇨ The engine must stop.

Magnetic contact switch at the transmitter holder and seat contact switch

1. Select the operating mode MC.
2. Insert the transmitter into the transmitter holder.
3. Sit down on the driver’s seat.
4. Switch on the transmitter and the receiver.
5. Start the engine.
6. Turn the accelerator lever forward to slow speed.

⇨ The motor must not be stopped.

Checking the Emergency stop switch

1. Select the operating mode MC.
2. Sit down on the driver's seat.
3. Switch on the transmitter and the receiver.
4. Start the engine.
5. Move on a terrain where the blade can rotate freely and does not touch objects or the ground.
6. Make sure that nobody is in the danger area of the device.
7. Engage the blade.
8. Press the Emergency stop switch at the device.
   - ⇨ The blade must come to a standstill from full speed in less than 5 seconds.
   - ⇨ The engine must stop.
   - ⇨ The status indicators at the device must be permanently lit.

Checking the start-stop switch with key

1. Select the operating mode RC.
2. Switch on the transmitter and the receiver.
3. Start the engine.
4. Drive on large, open and level terrain.
5. Make sure that nobody is in the danger area of the device.
6. Drive slowly forward.
7. Press the start-stop switch.

⇨ The accelerator lever must go to neutral position/parking brake.

⇨ The engine must stop.

⇨ The status indicators at the device must be permanently lit.

Checking the transport position of the blade

1. Select the operating mode MC.
2. Sit down on the driver's seat.
3. Switch on the transmitter and the receiver.
4. Start the engine.
5. Move on a terrain where the blade can rotate freely and does not touch objects or the ground.
6. Make sure that nobody is in the danger area of the device.
7. Move blade to transport position.

⇨ Now the blade should not engage.

Checking the parking brake

Danger!

If the parking brake is incorrectly adjusted, the device can roll away.

Make sure that the parking brake is always functioning properly.

1. Place the device on a surface with a good grip (e.g. concrete or asphalt).
2. Switch off the engine.
3. Let the device cool down for at least 20 minutes.
4. Select the operating mode MC.
5. Unlock the drive.
6. Actuate the parking brake.
7. Try to push the device.

If the rear wheels lock up, the parking brake is set correctly. If the device can be pushed, the parking brake must be readjusted by an authorised service centre.

Check the foot brake

Check in the MC mode if the accelerator lever goes back to neutral position (parking brake) when the brake pedal is actuated.

Checking the blade

Danger!

Improperly mounted and maintained blades pose a severe injury hazard.

Work at the blade shall only be performed by an authorised service centre.

Use solid gloves when you check the blade.

Work at the blade requires specific expertise because an unbalance inspection is necessary and the torques must be observed.

Check the blade and all fastening elements for wear, damage and cracks

– each time before and after you mow.

– if there are noticeable changes.

All shown blade parts and their fastening elements must be changed

– if damage or cracks are detected.

– at least once a year or every 50 operating hours, no matter if wear does exist or not. The material weakens, can suffer cracks, endangering people and material assets.

Vibrations are an indication that

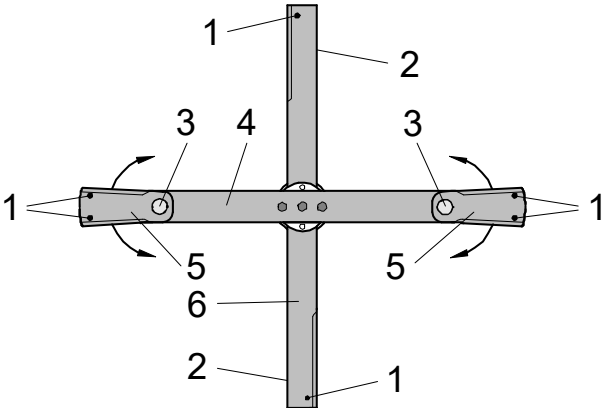
– the blade is worn excessively or on one side or

– damage to the engine or cutter deck fastening.

Blades that are sharpened improperly increase the workload of the devices and can result in vibration cracks or breaks.

Ejected broken pieces can cause severe injuries.

Changing the blade



Cutting blades (5)

The cutting blades should move easily. To ensure this, always keep the pivotal point (**3**) clean. Never mow when the cutting blades are stuck.

Caution! To prevent unbalance replace or reverse the cutting blades in pairs only!

The cutting blades are reversing blades. Reverse both cutting blades

– when one of the wear marks (**1**) was reached.

– when the second cutting edge of the cutting blade has not been used yet.

It is absolutely necessary to change the cutting blades and the fastening parts

– when one of the wear marks (**1**) of the second cutting edge was reached.

– when the thickness of the cutting blade at any point is below 1 mm (exception: cutting edge).

Mulching blade (6)

The mulching blade and the fastening parts must be changed

– when one of the wear marks (**1**) was reached.

– when the thickness of the blade at the rear edge (**2**) or at any other point is below 1 mm (exception: cutting edge).

Original blade

An original AS-blade is engraved with:

AS GXXXXXXXX or EXXXXX

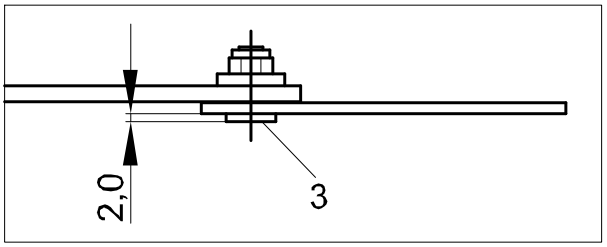
This corresponds to the spare part number.

Checking the condition of the cutting blade screws

Danger!

When a screw head is worn, the cutting blades can become loose.

Check all screws used for fastening the cutting blades!



The screw head (3) wears off during mowing and must be replaced at the latest when it is down to a thickness of 2 mm.

To prevent unbalance replace the cutting blade screws in pairs only!

Checking the blade clutch

1. Select the operating mode MC.
2. Sit down on the driver's seat.
3. Switch on the transmitter and the receiver.
4. Start the engine.
5. Move on a terrain where the blade can rotate freely and does not touch objects or the ground.
6. Make sure that nobody is in the danger area of the device.
7. Engage the blade.
8. Disengage the blade.
   - ⇨ The blade must come to a standstill from full speed in less than 5 seconds.
   - ⇨ The status indicators at the device must go out.

Maintaining the engine

Danger!

If the speed of rotation is set too high, objects can be ejected. The engine can be damaged and noise pollution increases.

Do not change the basic setting of the carburetor or the speed control.

The engine manufacturer has prepared the operating manual of the engine. The manual contains all maintenance requirements and warranty conditions for the engine. If warranty work at the engine is required, contact your authorised service centre or the next authorised dealer for engines.

To ensure a long service life of the engine, sufficient engine cooling is required.

Keep the
- engine cover (ventilation grid),
- silencer (protective grid) and
- cooling fins of the engine

clean at all times.

Opening the engine cover

Warning!

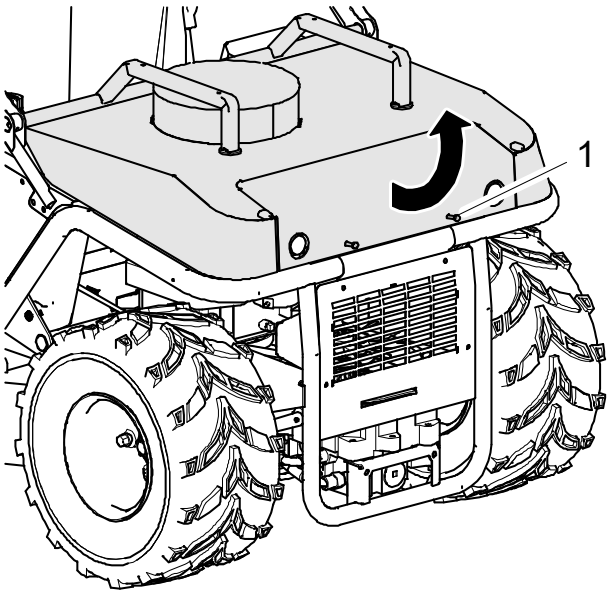
The engine cover can accidentally close.

Make sure that the engine cover stays open while you carry out work at the engine. Close the engine cover immediately after you have completed maintenance work at the engine.

Warning!

Burn hazard from hot surfaces.

Let the device cool down for at least 20 minutes before you open the engine cover.



To carry out maintenance work at the engine, slacken the screws (**1**) and open up the engine cover.

Checking the engine oil level

Never allow the oil level to be too low otherwise the engine can be damaged. Never fill in too much oil. Otherwise, there is the risk that the oil enters and destroys the air filter.

For this, observe the attached operating instructions of the engine.

Checking the spark plug

Danger!

The ignition system generates an electromagnetic field.

Wearers of pacemakers must not work on live parts.

Soiled spark plugs reduce the engine output. Clean the electrode of the spark plug with a brass wire brush. Check the electrode gap (see operating instructions of the engine manufacturer). Make sure that the insulator around the electrode is not damaged. Never use a damaged spark plug.

Tighten the spark plug using the correct torque (see operating instructions of the engine manufacturer).

Always check both spark plugs.

Maintaining the air filter

Danger!

Cleaning agents pose a fire and explosion hazard.

Never clean the air filter with flammable solvents.

Make sure that the air filter is always clean. A dirty air filter reduces the engine power and leads to increased engine wear and fuel consumption. Independent of the operating hours, change the filter insert at least once a year. Do not operate the engine without air filter.

For this, observe the attached operating instructions of the engine.

Checking and charging the battery of the device

Danger!
When the battery is being charged, explosive gases escape.

Never charge the battery close to flames. Avoid sparking and do not smoke.

Caution!
When the battery is connected, there is a risk of short circuit.

Do not put tools or metal objects onto the battery. Observe the assembly order when connecting and disconnecting the battery.

Beware: Risk of damage. Switch off the main switch at the device before you start working at the battery.

If the starter does not get the engine going or only insufficiently, charge the battery.

The battery is maintenance-free and gas-tight.

Use electronically controlled charging systems. These charging systems detect the connected battery and charge it with the required charging current and terminate the charging process when the battery is full.

Use a charger that is equipped with a 12 V connection for standard norm outlets. Insert the plug for charging into the standard norm outlet.

Charge the battery before you put the device away for winter storage. A fully charged battery lasts for approx. 4 months before it needs to be recharged.

Beware! Never confuse the plus and minus terminals.

1. Disconnect the black cable (-).
2. Disconnect the red cable (+).
3. Dismantle the battery from the device.
4. Charge the battery.
5. Mount the battery into the device.
6. Connect the red cable (+).
7. Connect the black cable (-).

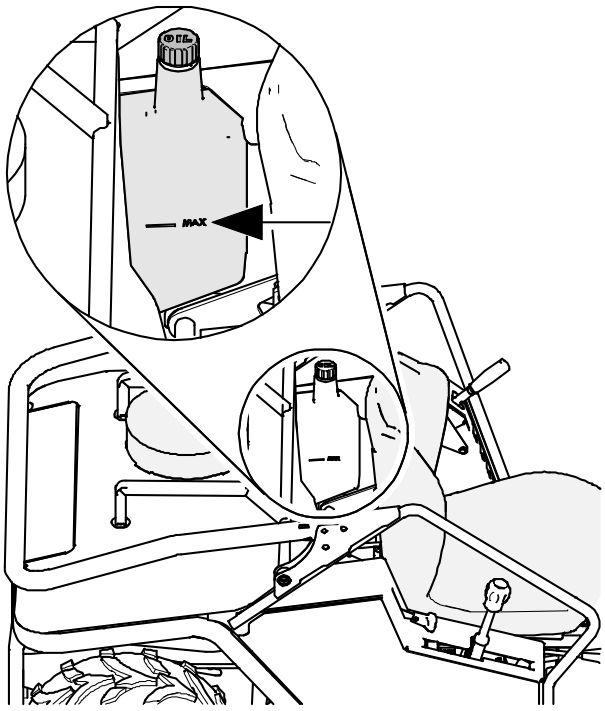
Hydrostat transmission

Danger!
Risk of injury caused by high pressure (up to 410 bar) in the hydraulic system.

Check the hydraulic hoses for leaks, damage, and chafe marks.

Caution!
If oil leaks, there is a risk of environmental pollution.

Check the hydraulic drive system for leaks before and after mowing.



At operating temperature, the oil level must be at the marking “MAX”. At ambient temperature, the oil level can be below, at high temperature slightly above the marking.

Make sure that sufficient oil is always available in the surge tank so that air does not enter the hydraulic system.

The oil change must be carried out by an authorised service centre (see maintenance table).

Check that the gearbox fan is undamaged.

The hydraulic drive generates a permanent operating noise that gets louder when the load (e.g. on steep terrain) is heavier. If the operating noise changes by becoming irregular or very loud, let the hydrostatic drive cool down and check the oil level.
If the changed operating noise persists, have the device checked by an authorised service centre.
It is possible that the hydraulic system must be bled or the oil must be changed. For refilling, only use fully synthetic engine oil 5 W50.

Assembly

Scope of delivery

The device is shipped in a carton on a pallet. The scope of delivery included:

– The device.

– The transmitter with batteries, belts and 2 keys for the start-stop switch.

– Steering wheel.

– Tool bag with small parts.

– This operating manual.

– Manufacturer’s certificate.

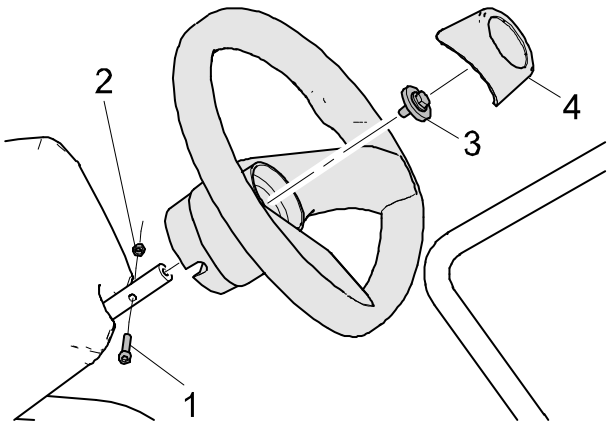
– Operator’s manual of the engine manufacturer.

– Operating instructions for receiver and transmitter.

Unpacking

1. Remove the box.
2. Check the air pressure of the tires (see Technical data).
3. Insert the batteries into the transmitter (see Checking and changing the battery).
4. Attach the belt to the transmitter.
5. Remove the spare key and keep it in a safe place.

Mounting



Mount the steering wheel:

1. Insert the screw (**1**) through the steering wheel and the steering column.
2. Tighten the central fixing screw (**3**).
3. Screw the nut (**2**) onto the screw (**1**).
4. Fit the cap (**4**).

Storage

Storing the device

Keep the device in a closed, dry, and well ventilated room and out of reach of children. Always eliminate all problems of the device before you store it so that the device is always in a safe-to-operate state. Let the engine cool down before you store the device in closed rooms.

Also observe the notices on storage in the attached operating instructions by the engine manufacturer.

Longer storage

1. Observe the safety instructions for handling the fuel.
2. Emptying fuel tank: Place a piece of hose onto the fuel valve and let the fuel run into an approved fuel container.
3. Emptying carburetor: Start the engine and let it run until it stops by itself.
4. Thoroughly clean the device.
5. Touch up any possible damage to the paint finish (for paint, see Accessories).
6. Preserve the engine.
   – Unscrew the two spark plugs.
   – Fill into each spark plug opening a tablespoon of engine oil.
   – Briefly actuate the choke (oil distribution in the cylinder).
   – Screw the spark plugs back in.
   – Do not put on the spark plug connector!
7. Remove the key at the transmitter and store it separately from the device.
8. Remove the batteries from the transmitter.

Have an authorised service centre check the device in the fall.

Also observe the notices on storage in the attached operating instructions by the engine manufacturer.

Restarting

If you want to start the device after a longer storage, carry out the tasks described in chapter Maintenance.

Spare parts

The reliable and safe operation of the device also depends on the quality of the spare parts used. Only use original spare parts and accessories that were approved by “AS-Motor Germany”. When foreign parts are installed, the warranty and guarantee shall be void for the foreign part and for the device and for any resulting damage.

Inform your authorised service centre about the device type and serial number of your devices when you order spare parts.

Wear parts

Some parts are wear parts. They wear during use and must be replaced. The warranty does not cover the following parts:

Blades, cutting blades, cutter bars, blade bolts, sliding plates, V-belt, chains, Bowden cables, starter ropes, pressure plates, air filters, spark plugs, disc springs, lock washers, fuses, discs, thrust plates, pressure discs, protection skirts, impact protection, wheels, tires.

Tyres

Warning!

If wheels with different diameters are used or if standard wheels and accessories are mixed, damage of the all-wheel drive system can result. There is a risk of accident.

Only use the set of tyres authorized by “AS-Motor Germany”.

Only the following wheels may be used:

– AS standard tyres (big wheels)

Always mount front and rear tyres in pairs.

For tyre designation, see the Technical data.

Disposal

The device cuts and shreds the growth in a single operation. Shredded plant material decomposes quickly and can be used as fertilizer and, therefore, be left on the ground.

Dispose of waste oil and fuel in accordance with the local regulations or return it to an oil shop.

Packaging, device, and accessories are made of recyclable materials and must be disposed of accordingly.

The transmitter as well as its batteries must not be thrown away with regular household rubbish. Dispose of the transmitter via the local take-back system for waste electrical and electronic equipment. Dispose of the batteries at your local battery collection point.

Warranty

Please see our AS-Motor website for warranty information.

Please print out the documents that you receive during the online registration. Keep them together with your sales receipt.

Troubleshooting

If a fault occurs, first it is recommended to switch off the transmitter at the start-stop switch and the device at the main switch. Wait 10 seconds and restart the device. If required, also change the frequency (see Selecting radio frequency [▶ 25]).

If the fault persists, the following table and the table error codes will help to inform you about the faults that occur most frequently and how to eliminate them.

If the fault cannot be eliminated, contact your closest authorised service centre.

For authorised service centres, see our homepage under www.as-motor.de.

Problem	Possible cause	Remedy
No connection between transmitter and receiver	Battery at the transmitter is empty.	Replace battery.
	Battery at the device is empty.	Charge the battery (see Checking the battery) or have authorised service centre do so.
	Radio range exceeded.	Reduce distance between transmitter and receiver.
	Radio interference due to other transmitters (radio equipment, garage door opener, vehicle key).	Switch off transmitter and receiver, restart after 10 seconds.
		Switch the radio channel.
		Increase the distance to the disturbance source. Remove the disturbance source.
	Actuate the Emergency stop switch at the device.	Unlock the Emergency stop switch.
	Antenna loose, damaged or no longer existent.	Fasten or replace antenna.
Starter does not turn	MC mode: Safety switches are not actuated.	Move drive lever to neutral position.
		Put driver in seat to activate seat contact switches.
		Insert the transmitter into the transmitter holder.
	An Emergency stop situation occurred.	Eliminate the Emergency stop situation.
	Fuse is defective.	Replace (if necessary, have authorised service centre do so).
	Battery at the device is empty.	Charge the battery (see Checking the battery) or have authorised service centre do so.
	Battery at the device is defective.	Replace battery (authorized service centre).
Engine does not start	Fuel valve is closed.	Open fuel valve.
	Tank ventilation screw is closed.	Open tank ventilation screw.
	No fuel is in the tank.	Refill fuel.
	Choke is open.	Close the choke.
	Device was tilted – oil leaked into the air filter.	Replace air filter, unscrew spark plug and start several times when the fuel valve is closed, dry the spark plug and screw it back in.
	Engine was flooded due to too many start attempts.	Unscrew spark plugs and start several times when the fuel valve is closed, dry the spark plugs and screw them back in.

	Spark plug connector is pulled off.	Observe the safety instructions! Put spark plug connector back on.
	Air filter is dirty.	Maintain air filter (see Maintenance).
	Spark plugs are dirty, damaged, or incorrect electrode gap.	Clean spark plugs and check electrode gap (see Maintenance). Replace spark plugs if necessary.
	Housing of the mower is jammed.	See Maintenance.
	No oil pressure: Not enough engine oil.	Check engine oil level, refill.
	No oil pressure: Slope is too steep.	Bring the device to a level position.
	Poor quality, dirty, or old fuel.	Clean fuel system (authorised service centre). Always use fresh fuel.
Engine starts badly or runs irregularly	Choke is closed.	Open the choke.
	Air filter is dirty.	Maintain air filter (see Maintenance).
	Poor quality, dirty, or old fuel.	Always use fresh fuel.
	Spark plug is dirty, damaged, or incorrect electrode gap.	Clean spark plug and check electrode gap (see Maintenance). Replace spark plug if necessary.
Engine stops during mowing	No oil pressure: Too little engine oil.	Check engine oil level, refill.
	No oil pressure: Slope too steep.	Move the device to a more level position.
Device does not move	RC mode: Rotary knob limit speed is set to “0”.	Adjust rotary knob limit speed.
	The drive is unlocked.	Lock the drive.
	Hydrostatic drive is overheated.	Cool down (see Maintenance).
Blade cannot be engaged	The engine is not running.	Start the engine
	Move blade to transport position.	Move blade to desired cutting position.
	No oil pressure: Too little engine oil.	Check engine oil level, refill.
	No oil pressure: Slope too steep.	Move the device to a more level position.
	MC mode: Safety switches are not actuated.	Move drive lever to neutral position.
		Put driver in seat to activate seat contact switches.
		Insert the transmitter into the transmitter holder.
Blade disengages during mowing	No oil pressure: Too little engine oil.	Check engine oil level, refill.
	No oil pressure: Slope too steep.	Move the device to a more level position.
The blade does not rotate	V-belt is insufficiently tensioned or damaged.	Authorised service centre.
	Bowden cable is defective.	Authorised service centre.

Strong vibrations during operation	Unbalance at the blade caused by incorrect sharpening or chips on the blade.	Have blade resharpened and balanced by an authorised service centre. Replace a damaged blade immediately.
	Blade drive shaft is bent due to collisions with foreign objects.	Authorised service centre.
	Engine fastening is loose.	Authorised service centre.
	Blade fastening is loose.	Authorised service centre.
Irregular noises	Loose fastening elements.	Authorised service centre.
	Muffler is defective.	Authorised service centre.
	Hydrostatic drive is overheated.	Cool down (see Maintenance).
Horn sounds at intervals during operation although admissible slope inclination was adhered to.	Warning of excessive load of the device due to ground unevenness.	Reduce speed.
Engine is smoking	Air filter is dirty or drenched with oil.	Maintain or replace air filter (see Maintenance).
	Oil level is too high.	Have authorised service centre lower the oil level up to the marking.
Engine gets hot	Ventilation grid is dirty.	Clean ventilation grid.
	Oil level in the engine is too low.	Refill engine oil (see operating instructions of the engine manufacturer).
	Cooling fins of the engine are dirty.	Have cooling fins cleaned by authorised service centre.
Uneven cut, lawn becomes unsightly	Blade is dull or worn.	Have blade resharpened and balanced by an authorised service centre. Replace a damaged blade immediately.
	Speed is too high proportionately to the cutting height.	Reduce speed and/or select the correct cutting height.
	Housing of the mower is heavily contaminated.	Clean.
	Different tire pressure.	Check the tire pressure.
	Mower housing is not parallel to the ground.	Adjust (authorised service centre).
Mulching result with high plant material not satisfactory	Speed is too high.	Reduce speed.
Mulching result with low plant material not satisfactory	Plant material is ejected too quickly.	Increase speed.
Housing is jammed	Mowed grass was too long or too damp.	Adjust cutting height and mowing speed to the mowing conditions.
	Blade is worn.	Authorised service centre.
	Engine speed is too low despite full power.	Authorised service centre.
The device does not stop when the brake is actuated	Brake is adjusted incorrectly, worn, or defective.	Authorised service centre.
The engine does not switch off	Switching off system is defective.	Close the fuel valve. Authorised service centre.
The tires become flat	Thorns or sharp objects damage the tires.	If necessary, use tire protection gel (authorised service centre).

Differential lock cannot be activated	MC mode.	Actuation only possible by hand via the foot pedal.
	RC mode: An Emergency stop situation occurred	Eliminate the Emergency stop situation.
Cutting height cannot be adjusted	MC mode: Safety switches are not actuated.	Put driver in seat to activate seat contact switches.
		Insert the transmitter into the transmitter holder
Emergency stop during changing of the operating mode (RC to MC)	Selection lever operating mode is not completely flipped over.	Fold the selection lever operating mode all the way.
	Blade engaged.	Disengage the blade before you switch the operating mode.
Emergency stop during changing of the operating mode (MC to RC)	Selection lever operating mode is not completely flipped over.	Fold the selection lever operating mode all the way.
	Transmitter in transmitter holder.	Remove the transmitter from the transmitter holder.
	Seat contact switch actuated.	Clear the seat.
Device does not drive straight forward	RC mode: Trimming of the steering is misadjusted.	Adjust trimming with rotary knob trimming steering to the transmitter (if required, authorised service centre).

Error codes

When the control detects an error, the error code is displayed.

The following table lists the most frequent error codes. Contact an authorised service centre when an error code is displayed that you cannot find in this table.

Display	Designation	Reasons	Remedy
A1	Seat contact closed in the RC mode	Seat contact actuated by driver in the RC mode.	No passengers allowed in the RC mode.
		Seat contact actuated by third person in the RC mode.	No passengers and passenger transportation allowed in the RC mode.
		Seat contact actuated by objects in the RC mode.	Remove objects from the seat.
		Selection lever operating modes is not completely set to MC.	Fold the selection lever operating mode all the way.
A2	Transmitter in transmitter holder in the RC mode	Transmitter in transmitter holder in the RC mode	Remove the transmitter from the transmitter holder.
		Actuate the magnetic switch with a magnet at the transmitter bottom.	Remove the magnet.
		Selection lever operating mode is not completely set to MC.	Fold the selection lever operating mode all the way.
A3	Emergency stop switch at the machine actuated	Emergency stop switch actuated.	Unlock the Emergency stop switch by turning clockwise.
		Fuse no. 5 (10 A) has blown.	Eliminate cause for triggering the fuse and replace fuse.
A4	Blade engaged when operating mode is changed (RC->MC)	Blade was engaged while the selection lever was switched from RC to MC.	Prior to switching, disengage the blade.
A5	Transmitter not in transmitter holder and drive lever not in middle position (MC)	Transmitter not in transmitter holder.	Insert the transmitter into the transmitter holder.
		Transmitter not properly in transmitter holder.	Properly insert the transmitter into the transmitter holder (see operating manual).
A7	Transmitter not in transmitter holder and blade not engaged (MC)	Transmitter not in transmitter holder.	Insert the transmitter into the transmitter holder.
		Transmitter not properly in transmitter holder.	Properly insert the transmitter into the transmitter holder (see operating manual).
A8	Seat contact not closed and drive lever not in middle position (MC)	Driver does not sit on driver’s seat in MC mode.	Have the driver sit down on the seat.
		Driver does not sit properly on driver’s seat in MC mode.	Have the driver sit down properly on the seat.
		Driver does not weigh enough to actuated the seat contact.	Select a suitable driver.
		Fuse no. 5 (10 A) has blown.	Eliminate cause for triggering the fuse and replace fuse.
A9	Emergency stop caused by inclined position	Emergency stop caused by inclined position (device tipped over).	Recover device.
		Emergency stop caused by strong vibrations and impacts.	Drive slower in uneven terrain. Lower tire pressure, if required.
		Bonnet loose or opened.	Close/fasten the bonnet.

Display	Designation	Reasons	Remedy
C1	Microswitch transport position does not switch	Fuse no. 5 (10 A) has blown.	Eliminate cause for triggering the fuse and replace fuse.
		Fuses nos. 1-3 (10 A) have blown.	Eliminate cause for triggering the fuse and replace fuse.
		Cutting height adjustment is blocked.	Remove blockage.
F1	Drive lever does not work (RC)	Drive lever / rods blocked.	Remove blockage.
		Selection lever operating mode is not completely set to RC.	Fold the selection lever operating mode all the way.
		Fuses nos. 1-3 (10 A) have blown.	Eliminate cause for triggering the fuse and replace fuse.
F2	Drive lever does not move to middle position (RC)	Drive lever / rods blocked.	Remove blockage.
		Fuses nos. 1-3 (10 A) have blown.	Eliminate cause for triggering the fuse and replace fuse.
		Selection lever operating mode is not completely set to RC.	Fold the selection lever operating mode all the way.
F3	Angle sensor driving	Fuses nos. 1-3 (10 A) have blown.	Eliminate cause for triggering the fuse and replace fuse.
F4	Steering does not work (RC)	Steering is blocked by the ground.	Steer in accordance with the ground properties.
		Steering / rods blocked.	Remove blockage.
		Fuses nos. 1-3 (10 A) have blown.	Eliminate cause for triggering the fuse and replace fuse.
		Selection lever operating mode is not completely set to RC.	Fold the selection lever operating mode all the way.
F5	Angle sensor steering	Fuses nos. 1-3 (10 A) have blown.	Eliminate cause for triggering the fuse and replace fuse.
F6	Blade is not properly engaged or disengaged	Fuse no. 5 (10 A) has blown.	Eliminate cause for triggering the fuse and replace fuse.
		Fuses nos. 1-3 (10 A) have blown.	Eliminate cause for triggering the fuse and replace fuse.
F7	Blade status unclear	Fuse no. 5 (10 A) has blown.	Eliminate cause for triggering the fuse and replace fuse.
		Fuses nos. 1-3 (10 A) have blown.	Eliminate cause for triggering the fuse and replace fuse.
F8	Engine status unclear	Engine status unclear, device is not safe for operation.	Authorised service centre.
F9	Microswitch Highest cutting height does not switch	Fuse no. 5 (10 A) has blown.	Eliminate cause for triggering the fuse and replace fuse.
		Fuses nos. 1-3 (10 A) have blown.	Eliminate cause for triggering the fuse and replace fuse.
		Cutting height adjustment is blocked.	Remove blockage.

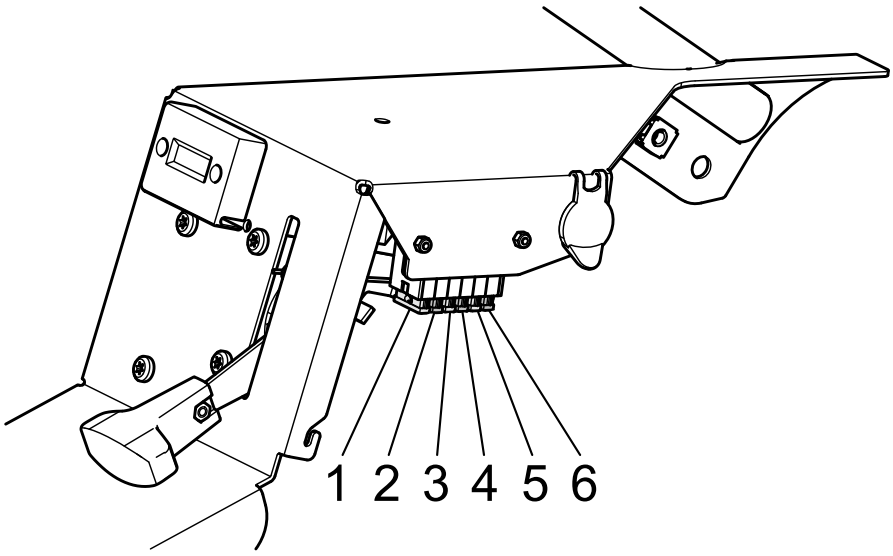
Display	Designation	Reasons	Remedy
FU	Interruption of radio transmission	Battery at the transmitter is empty.	Replace battery.
		Battery at the device is empty.	Charge the battery (see Checking the battery) or have authorised service centre do so.
		Radio range exceeded.	Reduce distance between transmitter and receiver.
		Radio interference due to other transmitters (radio equipment, garage door opener, vehicle key).	Switch off transmitter and receiver, restart after 10 seconds.
			Switch the radio channel.
			Increase the distance to the disturbance source. Remove the disturbance source.
		Antenna loose, damaged or no longer existent.	Fasten or replace antenna.
OL	Switching off engine due to lack of oil	Lack of oil pressure due to inclined position.	Reduce inclined position. Check oil level, if required. Refill oil
		Lack of oil pressure due to lack of oil.	Check oil level, if required. Refill oil.
L	Warning low battery capacity	Battery capacity at the transmitter low.	Replace battery at the transmitter.

Technical data

Type	**AS 940 Sherpa 4WD RC**
Range of application (temperature)	0 - 30 °C For temperatures below 5 °C, observe the engine manufacturer's information regarding the engine oil.
Engine, type Manufacturer Type Cylinder capacity Performance Engine speed	Two cylinder four stroke OHV engine Briggs & Stratton 44 Professional Series 8, V-Twin 724 cm^3 16.5 kW (22.4 PS) 3300 min^{-1}
Starting device	Electric start
Battery **Device** **Transmitter**	 12 V, approx. 30 Ah 2xAA 1.5V or 2xAA Mignon 1.2V NiMH batteries (not included in scope of delivery)
Drive Rear Front Speed forward Speed reverse	Permanent all-wheel drive Rear axle with differential lock Pendular portal axle, with two hydraulic engines and upright shafts 0 to 6.7 km/h 0 to 6.5 km/h
Maximum area coverage	approx. 6000 m^2/h
Turning radius	approx. 1.2 m
Seat	Movable, spring mounted, adjustable to the driver’s weight.
Cutting device, type Cutting width Continuous cutting height Transport position Drive of cutting tool Clutch of cutting tool Growth height	Cutter bar with screwed-on reversing blades and mulching blades 90 cm 80 to 135 mm, electrical 160 mm, electrical V-belt Belt clutch, electrical up to approx. 150 cm
Measures and weights Weight Transport size with packaging L/W/H max. tyre dimensions L/W/H Height when rollbar is folded down max. towing load max. vertical load	 310 kg 195/111/112 cm 191/106/156 cm approx. 103 cm 100 kg 25 kg
Capacities Fuel tank Engine oil Transmission oil (hydrostat)	 15 litres including reserve (unleaded regular petrol) approx. 1.9 litres 5 W50 fully synthetic engine oil (see also Checking the oil level). approx. 6.8 litres 5 W50 fully synthetic engine oil
Tyre pressure Front Rear	 1.6 bar 0.8 bar
Tyre designation Front Rear	Big wheels 4.80/4.00-8 20x10.00-8
Range of transmitter	up to approx. 300 m

Operating mode	MC	RC
Sound level according to DIN EN 12733 Measured sound level L_{WA} Sound level L_{pA}at working place Sound level L_{pA}For distance of 15 metres Measurement uncertainty k	 102.0 dB 91 dB - 3.0 dB (A)	 102.0 dB - 81 db 3.0 dB (A)
Vibration emission value according to DIN EN 12733 Hand-arm-vibrations $a_{h,W}$ Measurement uncertainty U Whole body vibration $a_{h,W}$ Measurement uncertainty U	 2 m/s^2 2 m/s^2 0.8 m/s^2 0.5 m/s^2	 0 m/s^2 0 m/s^2 0 m/s^2 0 m/s^2
Stability	21°(in accordance with the standard measuring method)	33°
Angle at which the device flips over	35°	39°

Fuses



The fuses are next to the power socket.

Pos	Rating	Designation	Supplied
1	25A	Main fuse 1	Receiver
2	25A	Main fuse 2	Receiver
3	25A	Main fuse 3	Receiver
4	25A	Fuse controller generator	Controller generator
5	10A	Fuse safety switch	Emergency stop switch Seat contact switch Monitoring blade clutch Monitoring cutting height
6	10A	Fuse main switch	Main switch power socket

Accessories

Steering wheel knob:	G06980011
Trailer:	G06800003
Trailer hitch:	G06900002
Snow remover blade without adaptor:	G06837006
Adaptor snow remover blade AS 940 and AS 920:	G06937014
Adaptor snow blade AS 940 and AS 920 with weatherproof cabin:	G06900005
Weatherproof cabin:	G06928001
Twin tires:	G06921016
Mulching kit:	G06926034
Spray paint 400 ml, colour orange:	G00011050

AS-Motor Germany GmbH & Co. KG
Ellwanger Straße 15
D-74424 Bühlertann
www.as-motor.de

Declaration of conformity

We declare that the grassland mower type with serial number	AS 940 Sherpa 4WD RC starting from 027417080036
as brought into circulation by us conforms to all relevant safety and health requirements of the EC directives listed.	- 2006/42/EC, - 2014/30/EC - 1999/5/EC
Function: The device is intended for cutting and mulching grass or similar vegetation in agriculture, forestry, and landscape conservation.	
Applied standards:	DIN EN 12733

Place where all technical records are filed:
AS-Motor Germany GmbH & Co. KG
Ellwanger Straße 15
D-74424 Bühlertann

Bühlertann, August 2017

Eberhard Lange
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By proxy Frank Einsiedler
Head of development

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THE HIGH GRADE MOWER AND 2 STROKE ENGINE MANUFACTURE

AS-Motor is your premium manufacturer for lawn and high grass mowers as well as 2 stroke engines. We offer our customers professional technology for steep slopes, rough terrain, and lawn care. Our extensive product range which includes hand-held entry-level devices up to the world's first all-wheel ride-on mower with remote control will always offer private customers, municipalities service providers the right product. For more than 55 years, we have been developing and producing with a high production depth in Southern Germany and supply our dealer network in more than 30 countries all over the world.

Mulching mower	Mulching mower – the time-saving alternative! AS-Motor mulching mowers shred the grass to create such a fine mulch, almost an "invisible" fertiliser, that sinks right away back into the lawn. Disposal of the cuttings is not required.
Professional lawn mower	Professional lawn mowers with rear discharge for all every requirement, even with all-wheel drive, brake and reverse gear.
Brush cutter®	An agile lawn mower for maintenance of extensive grassed areas. The Allmäher® reliably mows and mulches metre-high grass, brushes and weeds.
Flail mower	High grass with undergrowth, steep slope or extensive areas in unknown terrain? The movably mounted flail blades of the AS-Motor flail mower give way to rocks and obstacles and chop the cuttings several times over.
Ride-on brush cutter	If extensive areas, weeds and undergrowth up to 1.2 m, the AS-Motor all-wheel mowers are also perfect for steep and even extremely steep terrain. Ease of use and high area performance combined in one compact ride-on mower. For more safety, comfort and efficiency in difficult terrain we have developed the innovative and the world's first remote controlled ride-on mower.
Rotary mower	The cost-effective alternative to the cutter-bar mower. Also ideal for feed production. The grass is not shredded but deposited in straight rows as a windrow next to the machine.
Weed remover	Careful and chemical-free weed removal. The AS-Motor weed removers "Weed-Hex" mechanically clean paved areas and curb stones from growing weeds – quickly, safely, and efficiently.