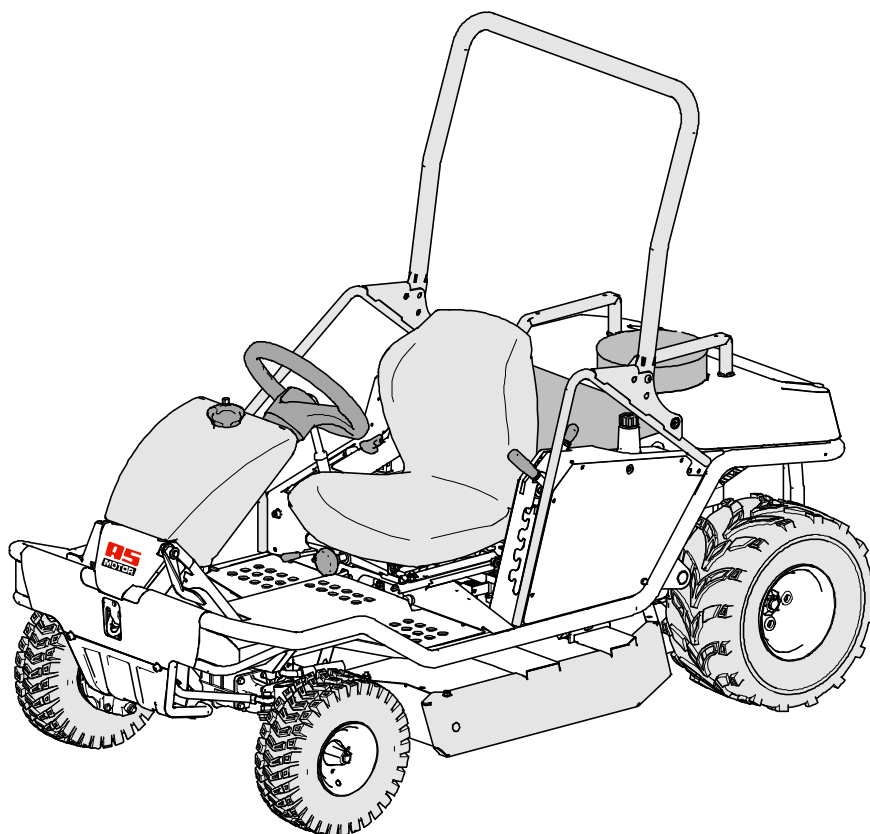




Operating Instructions

Ride-on-Allmäher®

AS 940⁴ Sherpa



From serial number:

021910030001

Issued:

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EN-Translation of the Original Operating Instructions

Preface

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

Serial number:

Engine number:

Date of purchase:

Address of dealer:

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.

Read these operating instructions carefully and attentively so that your device operates smoothly and you and others are safe from any hazards. If you have questions concerning your device, please contact your dealer or call our customer service (telephone +49/(0)7973/9123-0). For international AS partners, please see: www.as-motor.de/worldwide.

“AS-Motor Germany” wishes you much joy with your new device.

Intended use

The device is intended for cutting and mulching grass or similar vegetation in agriculture, forestry, and landscape conservation.

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

Any use exceeding this purpose is inadmissible. The manufacturer is not responsible for any damage resulting from this. Observe the required maintenance and repair measures.

The user of the device is responsible for accidents or damage to other persons or their property!

The device **must not** be used:

- To cut hard objects, rocks, rubble, or pieces of wood.
- To trim bushes, hedges, and shrubbery.
- To cut vegetation on building roofs.
- 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

Preface	2	Transport rack	17
Intended use	2	Starting	18
Explanation of the symbols	4	Safety switches	18
Symbols in the instructions.....	4	Starting the engine	18
Symbols on the device	4	Engaging the blade	18
Safety instructions	6	Oil pressure switch	19
Get informed!.....	6	Driving	19
User restrictions and hours of operation ...	6	Braking	19
Safe handling of fuel.....	6	Driving	19
Check the device prior to use	7	Differential lock.....	19
Use caution during operation	7	Switching off and parking	20
Prior to mowing.....	7	Maintenance and cleaning	21
Use caution when mowing	8	Preparations	23
Caution when using accessories	9	Cleaning the device.....	23
When work is completed	9	General inspection	23
Use caution during maintenance and		Checking the parking brake.....	23
repair	9	Checking the foot brake	23
Device description	11	Checking the blade.....	24
Control elements	12	Maintaining the engine	25
Front area	12	Opening the engine cover	25
Control lever at seat	12	Checking the engine oil level	25
Drive/idle mode.....	14	Checking the spark plugs	26
Rollbar	14	Cleaning the air filter	26
Transport	15	Checking and charging the battery	26
Transport on pallets.....	15	Hydrostat transmission.....	26
Transport of ready-to-use device	15	Storage	27
Assembly	16	Storing the device.....	27
Scope of delivery	16	Longer storage	27
Unpacking.....	16	Restarting	28
Mounting.....	16	Spare parts	28
Information on mowing	16	Wear parts	28
Prior to starting	17	Accessories	28
Checking the oil level	17	Disposal	28
Fuel.....	17	Warranty	28
Tanking up.....	17	Troubleshooting	29
Adjusting the seating position.....	17	Technical data	33
Adjusting the seat suspension.....	17	Declaration of conformity	35
Putting up the rollbar	17		

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.



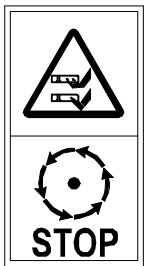
Directive sign.
These symbols denote required protective measures.

Symbols on the device

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



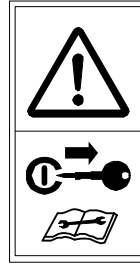
Risk of injury!
Make sure that no one is within the danger zone of the device. Objects may be ejected. The danger zone extends for at least 50 metres.



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.



Risk of tipping!
When positioned sideways to the slope, the device is stable up to 15°(in accordance with the standard measuring method).



Prior to any repair and maintenance work, remove the ignition key.



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!



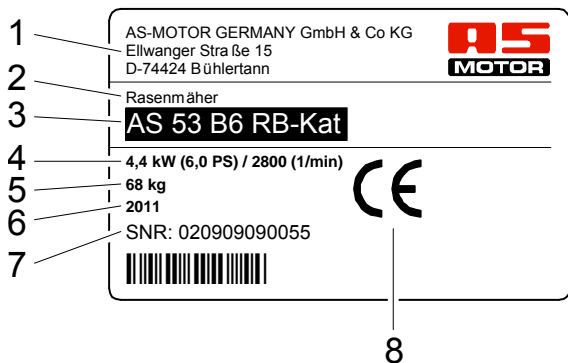
Noise is causing health problems. Use personal ear protection to avoid hearing damage.



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

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 Rated 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 with care. Familiarize yourself with the control elements and the proper use of the device. Share these operating instructions with other users of the device.

Before you use the device for the first time, let the dealer instruct you regarding safe use.

Practise operating the mower first in a wide, open, and flat terrain without the blade drive.

User restrictions and hours of operation

Never give your children or other persons who are not familiar with the operation instructions permission to use the device. Persons under 18 years old may operate the device only under supervision. Local regulations will determine the minimum age of the user and the hours of operation.

Unsuitable for the operation of the device are persons

- Who are under the influence of alcohol, drugs, or medicine that slows down reaction time.
- With physical and mental impairments.



People fitted with pace makers are not allowed to touch any current carrying parts of the ignition system.

Safe handling of fuel



Danger!

Fuel is toxic and highly inflammable.



Danger of fire and explosion!

Keep the fuel away from ignition sources and do not smoke while handling the device.

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



Use gloves and avoid skin contact with the fuel.

Fuel up outdoors only when the engine is cool and not running. Use a filler or funnel.

Do not spill any fuel and do not let the fuel get into the canalisation or ground water.

If you spilled fuel, do not start the device until the fuel vapours have evaporated (wipe dry). Move the device away from the area where the fuel was spilled.

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

Drain the fuel tank only when outdoors. Use a suitable container or run the tank empty.

Keep the fuel away from children and store it in a suitable container in a dark, cool, and dry location.

Never park the device with fuel in the tank inside a building where fuel vapours could come in contact with open fire or sparks.

Immediately replace a damaged fuel tank or tank cap (authorised dealership).

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 (CO₂). Never douse with water!

Check the device prior to use

Prior to use, check by visual inspection blade, protection skirt, ejection rubber, drive and fastening parts for proper condition and firm seating.

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

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

Observe the maintenance instructions and replace damaged or worn parts immediately.

Check the blade brake for proper function by switching off the blade clutch. The blade must come to a standstill from full speed within less than 5 seconds.

Check the parking brake for proper function (see Maintenance).

Use caution during operation

Do not start the engine:

- if fuel was spilled.
- in closed or poorly ventilated rooms (danger of poisoning!).
- if there are other persons nearby.

After every stop and before you shut down the engine, actuate the parking brake. This prevents the device from accidentally rolling away.

Do not touch the exhaust, the engine, and the gearbox. They become very hot during operation and you can get burned. Resulting unintentional movements constitute an additional injury hazard.

Switch off the blade and wait until the blade comes to a standstill,

- when you drive on surfaces other than grass.

Switch off the engine and wait until the blade comes to a standstill and remove the ignition key

- before you transport the device.
- if 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.

Prior to mowing

Personal protective measures



While mowing, always wear sturdy footwear with good grip, long trousers, and gloves. Do not mow in open sandals or bare feet.



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

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

Always stay within hearing range to other persons who can assist you in case of an emergency.



Danger!

Risk of injury caused by thrown out objects.

Never mow while persons, children, pets, or property are in the vicinity.



The danger zone extends for at least 50 metres.

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

Keep your hands and feet away from rotating parts.

Mow only in daylight or good artificial light.

Do not transport any person on the device.

Be extremely cautious when moving in reverse.

Pay attention to traffic when working close to roads.

When using the device over a longer period of time, vibrations can cause disturbances in the blood supply of the hands. A generally accepted usage time cannot be determined. Use gloves.

Take breaks on time.

Have an authorised service centre check the device immediately

- if the blade hit an object.
- if the device starts to vibrate unusually severely.

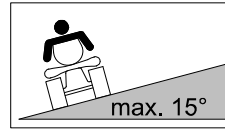
Caution when mowing slopes



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.



When mowing slopes, there is slip hazard and a risk of tipping!

- Do not mow excessively steep slopes. For safety reasons, the device can only be used for slopes up to 15°.
- Use a clinometer if you are not familiar with the slope (see accessories).
- Always mow up- and downwards, never in horizontal directions.
- Always move upwards first. If you are unsuccessful at moving upwards first, you must not mow the slope. Never move downwards if you were not successful at moving upwards.
- Be extremely careful when changing the direction.
- Do not turn on a slope.
- Only mow when you are familiar with the terrain and the terrain is clear of obstacles.
- Pay attention to bumps, holes, and other visible hazards.
- Do not mow close to danger zones (e.g. walls, steep declines, etc.).
- 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.
- Hold the steering wheel tightly so that the device does not swerve.

Only park the device on flat surfaces.

Drive has good braking efficiency which can only provide sufficient grip on a non-slip surface!

If the mower starts to slide, you can regain control by actuating the brake. Uncontrolled handling is due to:

- poor tire grip.
- speeding.
- abrupt braking.
- an inappropriate task for the device.
- poor knowledge of the area.
- slope angles that are too steep.

Risk of tilting

If the wheels facing uphill encounter obstacles such as roots, branches, rocks, bumps, etc., the mower can tilt or slide.

When the transport rack is loaded, there is an increased risk of tilting. Observe the information regarding the transport rack.

Risk of slipping

When the ground is wet or loose, use extreme caution to prevent the mower from slipping. Use extreme caution when moving downhill. On cut plant material, no matter if wet or dry, the risk of slipping is high.

Mowing surfaces with fire hazard

- Carry a sufficient amount of suitable extinguishing agent.
- If side inclination is too great, fuel may leak from the carburetor or the tank. This poses a fire hazard!
- Observe the mowed surface also after moving is completed to ensure that no fire will start.

To avoid risk of fire, keep the following components free of dirt, grass, hay, leaking oil, grease, etc:

- Engine
- Silencer (manifold, guard, clearances)
- Battery
- Area around the fuel tank

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 mowing, always close the fuel valve and the tank ventilation.

Prior to leaving the device, wait until the blade comes to a standstill and remove the ignition key.

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

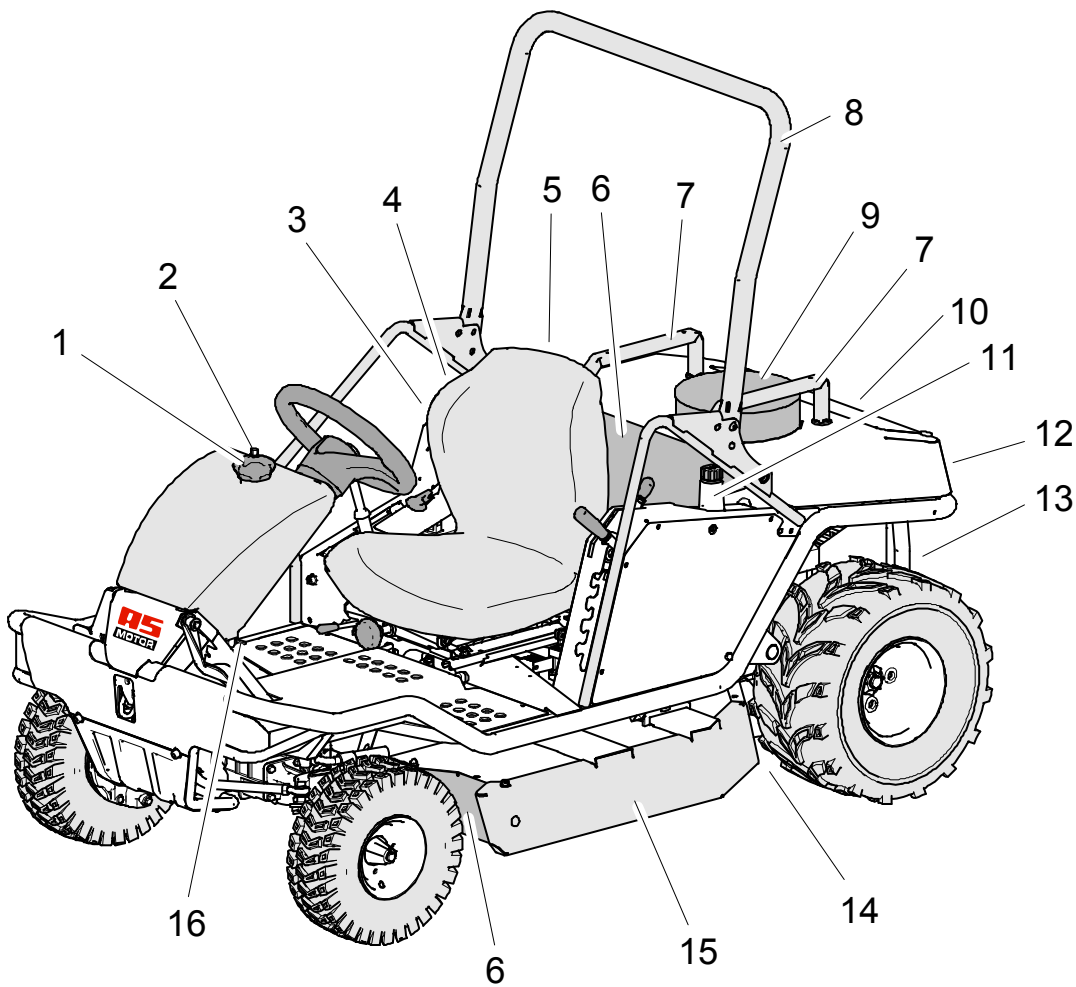
Prior to starting any maintenance work, wait until the engine comes to a standstill and pull off the spark plug connectors.

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 use were not used.
- the repair work was not carried out by an authorised service station.

The same applies for spare parts and accessories.

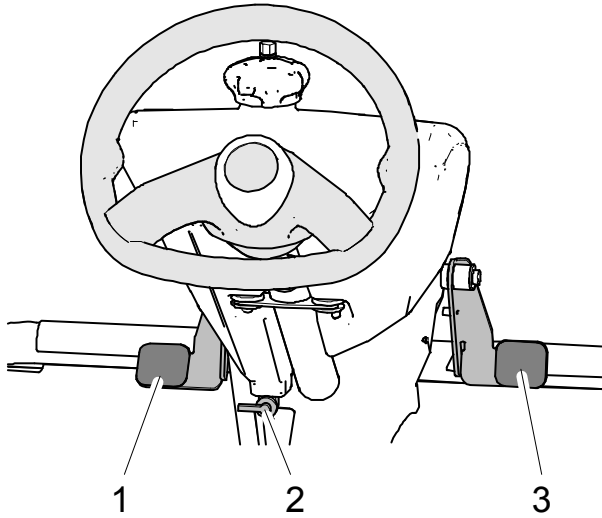
Device description



- | | | | |
|----|------------------------------|----|-------------------------------|
| 1 | Tank cap | 12 | Gearbox fan |
| 2 | Tank ventilation | 13 | Unlocking device drive |
| 3 | Fuses for circuit protection | 14 | Ejection rubber |
| 4 | Type plate | 15 | Side plates impact protection |
| 5 | On-board supply socket | 16 | Fuel valve |
| 6 | Protection skirt | | |
| 7 | Transport rack | | |
| 8 | Rollbar | | |
| 9 | Ventilation grid | | |
| 10 | Silencer grid | | |
| 11 | Oil surge tank | | |

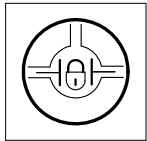
Control elements

Front area



Differential lock (1)

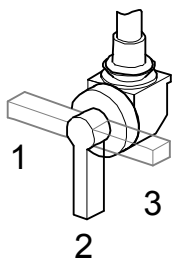
With the left foot pedal, actuate the differential lock.



Pedal is actuated:
Differential lock is on

Pedal in top position:
Differential lock is off

Fuel valve (2)



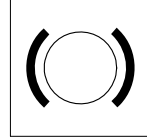
1: Reserve

2: Open

3: Closed

Foot brake/parking brake (3)

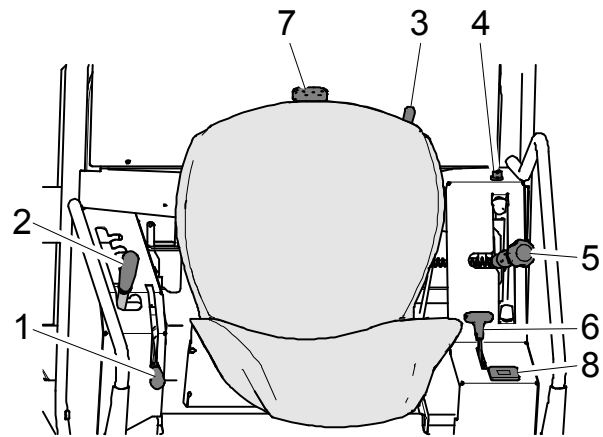
By stepping on the right foot pedal, the parking brake is actuated. Use the actuation via foot pedal only in exceptional circumstances because the mower stops abruptly.



Braking:

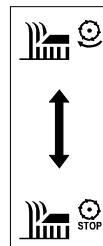
Release the drive lever and press down the right foot pedal (3).

Control lever at seat



Blade clutch lever (1)

The blade clutch lever is a protective device. When you declutch the blade, the blade comes to a standstill within 5 seconds.



Declutching the blade:

Set the accelerator lever to MIN. Guide the blade clutch lever backwards.

Clutching the blade:

Slowly pull forward the lever.

Cutting height adjustment (2)



The cutting height for the lawn can be set to five positions.

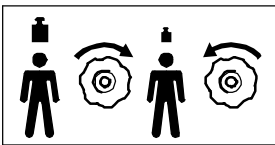
The top position is the transport position.

Sitting position

Press the lever (3) to the right, move the seat to the desired position, and engage it.

Seat suspension (7)

The seat suspension can be adjusted to the driver's weight.

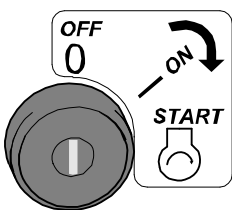


Heavier drivers: Turn clockwise.

Lighter weight drivers: Turn anti-clockwise.

Ignition lock (4)

The ignition lock has three positions.



OFF: Ignition off. The key can be removed.

ON: Ignition on.

START: Electric starter on.

Drive lever with parking brake (5)

The drive lever is needed to drive forward and in reverse as well as to stop 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 actuated.



Moving forward

Stopping (neutral position/parking brake)

Moving in reverse

Accelerator lever with choke (6)

Via the accelerator lever, you change the engine speed and control the engine performance. When you want to start the device when the engine is cold, move the accelerator lever to choke position (choke is closed).



MAX: Full throttle position.

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

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

Operating hours counter (8)

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

Drive/idle mode



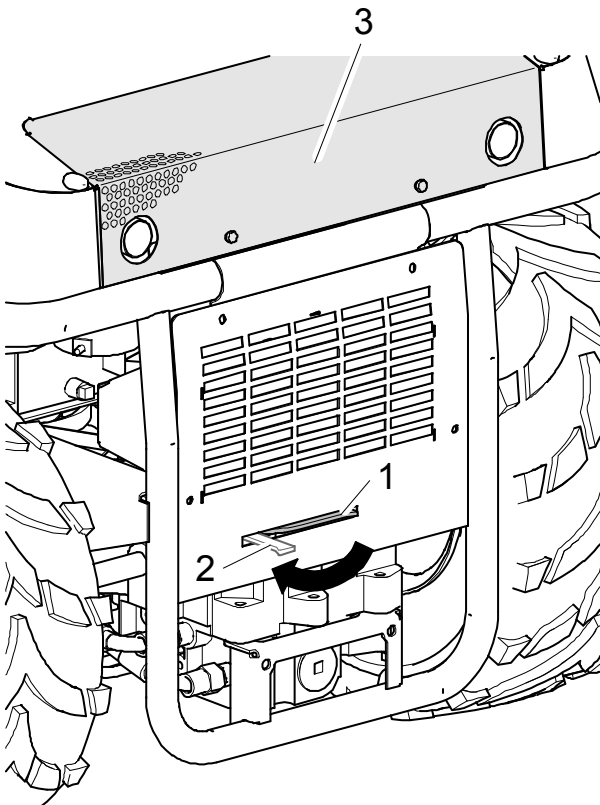
Warning!

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.



Caution!

Engine startup with unlocked drive can destroy the hydraulic drive.
Never start the engine when the drive is unlocked.

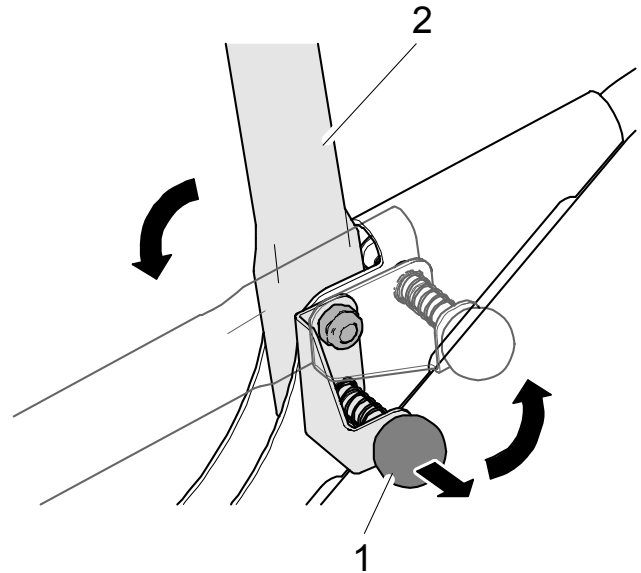


To push a mower without engine drive, unlock the drive at the rear of the device and release the parking brake. In this condition, the mower can only be braked with the parking brake.

1: Locked

2: Unlocked (idling)

Rollbar



Putting down the rollbar

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

Putting up the rollbar

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

Transport

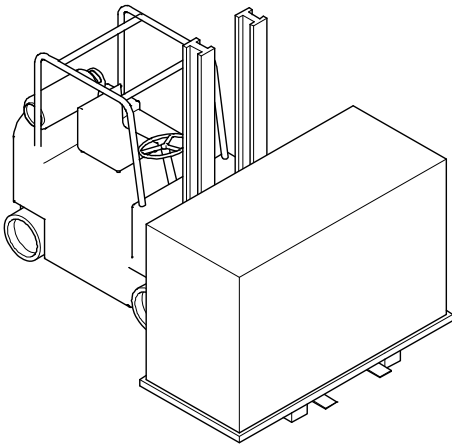
Transport the device on a freight vehicle or a trailer which is designed for a carrying capacity of at least as great as the empty weight of the device.

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.

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

Loading

Use suitable ramps for loading that

- can carry the empty weight of the device + 100 kg.
 - are wider than the device.
 - have a slip-free surface.
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 with belts to the frame elements that can hold the weight.
 4. Secure the device against rolling, sliding, tilting, and fuel and oil leakage.

Unloading the device

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

Assembly

Scope of delivery

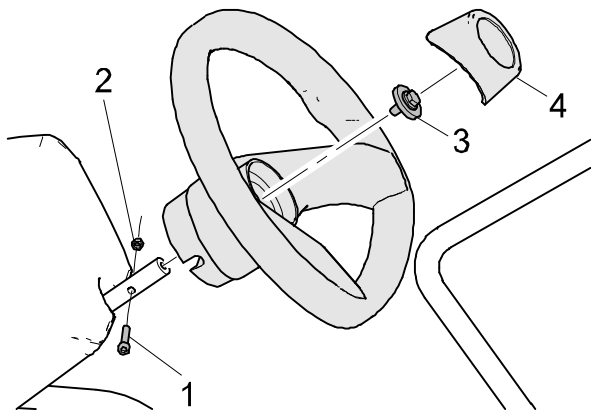
The device is delivered in a carton on a pallet. The scope of delivery includes:

- The device.
- These operating instructions.
- Warranty card.
- Tool bag with small items.
- Steering wheel.
- Ignition key.
- Operating instructions of the engine manufacturer.

Unpacking

1. Remove the carton.
2. Check the air pressure of the tires (see Technical data).

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).

Information on mowing

Prior to mowing, check your device for completeness, proper functioning, and cleanliness. A dirty ventilation grid can damage the engine and 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).

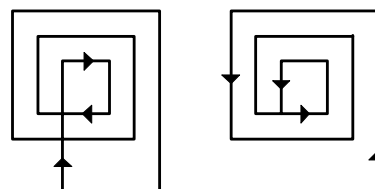
Do not mow when the grass is wet or when it is raining. The turf may be damaged and there is a danger of slipping!

Turn the device around only in already mown sections.

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).

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 in the fuel:

1. For filling, use a canister with a filler spout or use as funnel.
2. Open the canister carefully so that the existing overpressure is discharged slowly and no fuel spurts out.
3. Open the tank cap carefully so that the existing overpressure is discharged slowly and no fuel spurts out.
4. Fill the fuel tank.
5. Screw the tank cap on tightly.

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

To provide the ultimate seating comfort, spring deflection should be fully utilized, if possible. Adjust the handwheel so that the

seat does not contact the floor during normal operation.

Putting up the rollbar

For safety reasons, always use the device with the rollbar put up and locked. If the device falls over, the rollbar prevents the device from flipping over.

Only when driving on an even terrain, you can use the device with the rollbar put down.

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 motor cover.

Caution! Load the transport rack so that the ventilation grid underneath it remains uncovered. Otherwise there is the danger that the motor overheats and is damaged.

Loading limits

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

Starting



Danger!

During startup, there is a risk of injury caused by the rotating blade. Make sure that no one is within the danger zone of the blade.

Safety switches

The device is equipped with safety switches. To start the engine, the following requirements must be met:

- A driver sits in the driver seat.
- The blade clutch is switched off.
- The lever for cutting height adjustment is in transport position.
- The drive lever is in neutral position.

If the engine is running and the driver leaves the seat, the engine is shut off.

If the engine was shut down due to a safety switch, turn the ignition key to position "Ignition off". By this, you will avoid discharging the battery.

Starting the engine

Start the device only when it is positioned on even and firm terrain

1. Open the fuel valve.
2. Open the tank ventilation.
3. Sit down on the driver seat.
4. Turn off the blade clutch.
5. Move the lever for the cutting height adjustment to transport position.
6. Move the drive lever to neutral position.
7. When the engine is cold:
Move the accelerator lever to cold start position (choke).
When the engine is warm:
Move the accelerator lever to middle position.

8. Turn the ignition key to starting position.
9. Once the engine has started, release the ignition key.
10. Only for cold start:
Move the accelerator lever to middle position.
11. For mowing, set the accelerator lever to the maximum speed.

If the engine does not start after 5 seconds, release the key. Wait for approx. 15 seconds before trying to start the device again.

Engaging the blade

Only engage the blade when it turns freely and does not come into contact with objects or the floor.

Do not engage the blade in uncut grass because the blade drive otherwise becomes overloaded, can be damaged, or can wear prematurely.

1. Start the engine.
2. Move the lever for the cutting height adjustment to the highest cutting position.
3. Pull the blade clutch lever slowly forward - the blade starts up.
4. Set the desired cutting height.

If you set the cutting height to transport position during mowing, the blade is automatically disengaged.

Disengaging the blade when running over paths:

1. Quickly pull the blade clutch lever rearwards.

Oil pressure switch



Danger!

If the engine cuts out while the device is used, the device can roll away.

Immediately actuate the parking brake so that the device does not roll away.

The oil pressure switch of the engine shuts off the engine if damage of the engine caused by inadequate oil pressure is likely to occur. This can be the case when:

- The oil level is too low.
- The device is in an extremely inclined position in excessively steep terrain.

To restart the engine, the device must be positioned on an even surface. Always check the oil level.

Driving



Danger!

Mowing on a slope is dangerous. There is a risk of tilting and slipping.

Observe the safety instruction for mowing on slopes.

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

Braking



Warning!

The brake does not work if you continue to hold the drive lever while braking.

Release the drive 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. Start the engine.
2. Release the parking brake.
3. Slowly move the drive lever to the desired driving direction. The further the lever is moved away from the neutral position, the faster the mower moves.
4. To stop, move the drive lever slowly to neutral position or step on the foot brake.

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.

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

1. Move the drive lever slowly to neutral position.
2. Turn the accelerator lever to idle speed.
3. Switch off the blade clutch.
4. Move the lever for the cutting height adjustment to transport position.
5. Actuate the parking brake.
6. Turn the ignition key to "ignition off".
7. Wait until the blade comes to a standstill before you step away from the device.



Warning!

Risk of injury in case of unauthorised use.

Always remove the ignition key when you do not use the device.

8. Remove the ignition key.
9. Close the fuel valve.
10. Close the tank ventilation.

Maintenance and cleaning

Regular maintenance keeps your device ready for use.

If you do not observe the maintenance notices, faults may occur that are not covered

by the warranty. Operational safety is endangered as well.

Contact your authorised service centre for checkup if you detect problems during maintenance.

Component	Action	Maintenance interval	
		Before and after each use	Annually or every 50 h
Device	Check for safe working condition.	■	▲
	Clean.	■	
	Customer service.		▲
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 plugs	Check/adjust.	■	
	Replace.		■▲
Air filter	Check/clean.	■	▲
	Replace.		■▲
Blade and fastening components	Check for wear and damage. See chapter Checking the blade.	■	▲
	Change.		▲
	Clean the mounting position of the cutting blade.	■	
Blade brake	Does the brake function properly 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)?	□	▲
	Does the lever move to neutral position when the foot brake is actuated?	□	▲
V-belt	Are the V-belts tensioned correctly, without		▲

Component	Action	Maintenance interval	
		Before and after each use	Annually or every 50 h
	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 device fastened correctly and properly functioning?	■	▲
Label	Condition of the labels.	■	▲
Engine	See operating instructions of the engine manufacturer.	■	▲
	Check oil level (see operating instructions of the engine).	■	▲
	Oil change.		▲
	Oil filter change.		▲
Parking brake	Check the parking brake.	■	▲
Foot brake	Check the foot brake.	□	▲
Flammable material	Remove easily flammable debris buildup from the engine and the device.	■	▲
Steering	Check the clearance.	■	▲
Tires	Check tires and tire pressure if necessary.	■	▲
Safety switches	Check the switches at the driver seat, cutting height adjustment, and drive for proper function.	■	▲
Ignition lock	Check for proper function.	□	▲
Hydrostat transmission and tubes	Check oil level.	■	▲
	Remove leakages and chafe marks, if necessary.		▲
	Oil change after 50 h and every 200 h thereafter.		▲
Battery	Check the charging condition.		▲

- By the user when the engine is not running.
- By the user when the engine is running.
- ▲ By the authorised service centre.

Preparations

Prior to all maintenance and cleaning work:

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

Caution! During repair and maintenance work, lift the device only by the frame.

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 ensure proper working order of the device, regularly check all nuts, bolts, screws, fuel line connections, air filters, etc. for firm seating. Check the ignition cable and the spark plug connectors for damages.

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

Check the safety switches for proper function. The engine must not be started when:

- There is no driver in the driver seat.
- The blade clutch is switched on.
- The lever for the cutting height adjustment is not in transport position.
- The drive lever is not in neutral position.

If the engine is running and the driver leaves the seat, the engine must shut down.

Contact an authorised service centre if one of these conditions is not met.

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. Put the device on a non-slip surface (e.g. concrete or asphalt).
2. Unlock the drive.
3. Actuate the parking brake.
4. Try to move the device.

If the rear wheels lock, the parking brake is correctly adjusted. If you can move the device, the parking brake must be re-adjusted by an authorised service centre.

Checking the foot brake

Check if the drive lever returns 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.

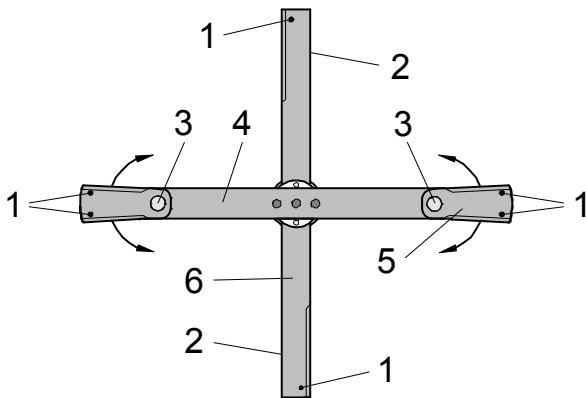
Work on the blade requires special qualifications because an unbalance test is required and the torques must be observed.

Before and after each mowing operation and in case of significant changes, check for wear, damages, and cracks.

Vibrations indicate that the blade is worn excessively or on one side only.

Improperly sharpened blades increase the device load and result in fatigue cracks and breakage!

Ejected pieces can cause severe injuries.



Cutting blades (5)

The cutting blades must be easy to move. To achieve this, always keep the pivot point (3) clean. Never mow when the cutting blades are stuck.

Caution! To avoid unbalance, the cutting blades must be replaced in pairs only!

The cutting blades are reversing blades. Turn both cutting blades over

- When one of the wear markings (1) was reached.

- When the other side of the cutting blades has not been used yet.

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

- When one of the wear markings (1) was reached.
- When the thickness of the cutting blade at any point is below 1 mm (exception: cutting edge).
- At the least once per year or every 50 operating hours, whether there is wear or not.
- When the cutting blades are damaged or bent.

Cutter bars (4)

The cutter bar (4), the cutting blades (5) and the fastening parts must be changed

- If damages were detected.
- At the least once per year or every 50 operating hours, whether there is wear or not. The material deteriorates, may show cracks and this can endanger persons and material goods.

Mulching blade (6)

A change of the mulching blade and the fastening parts is required,

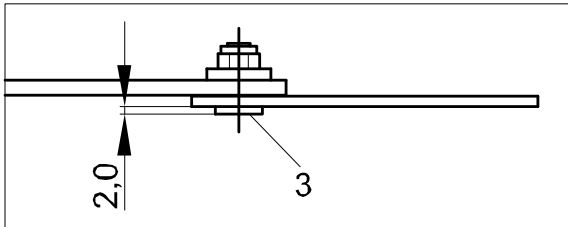
- When one of the wear markings (1) was reached.
- When the thickness of the blade at the rear edge (2) or at another point is below 1 mm (exception: cutting edge).
- At the least once per year or every 50 operating hours, whether there is wear or not. The material deteriorates, may show cracks and this can endanger persons and material goods.

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) experiences wear during mowing and must be replaced at the latest when the thickness is 2 mm.

To avoid unbalance, the cutting blades must be replaced in pairs only.

An original AS blade can be recognised by these imprints:



XXXX corresponds to the spare part number.

Checking the blade clutch

Check the blade clutch for proper function by declutching the blade. The blade must come to a standstill from full speed within less than 5 seconds. Contact an authorised service centre if this is not the case.

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 operating instructions of the engine are prepared by the engine manufacturer. They contain the maintenance instructions and the warranty conditions for the engine. If warranty work for the engine is required, please contact your authorised service centre or the nearest authorised engine dealer.

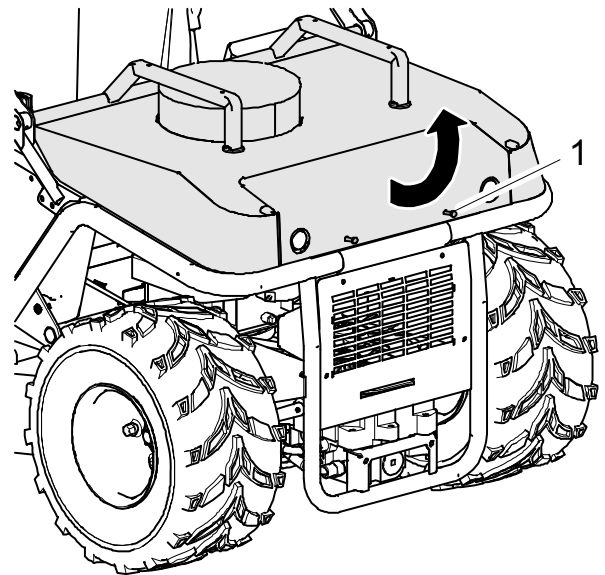
Opening the engine cover



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.



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

Checking the engine oil level

The oil level must remain between the two markings of the oil dipstick. Make sure that the oil level is never below the bottom marking; otherwise the engine can be damaged. Never fill in oil above the top marking. Otherwise, there is a risk that the oil enters and destroys the air filter.

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

Checking the spark plugs



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.

Cleaning the air filter



Danger!

Cleaning agents pose a fire and explosion hazard. Never clean the air filter with flammable solvents.

Always make sure that the air filter is clean. A dirty air filter affects the engine output and increases the fuel consumption. Independent from the number of operating hours the filter inserts should be changed at least annually. Do not operate the engine without air filter.

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

Checking and charging the battery



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.

If the starter does not turn the engine or turns it too weakly 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 charging system that is equipped with a 12 V connection for on-board supply sockets. For charging, insert the plug into the on-board supply socket.

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.

Hydrostat transmission



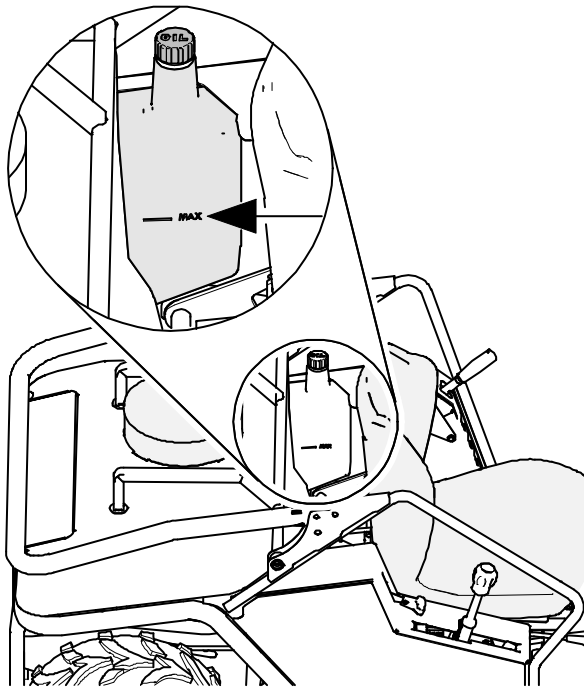
Danger!

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.

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.

Longer storage

1. Observe the safety instructions regarding the handling of fuel.
2. Draining fuel tank: Put a piece of a tube on the fuel valve and fill the fuel in an adequate fuel container.
3. Emptying carburetor: Start the engine and let it run until it stops on its own.
4. Clean the device thoroughly.
5. Touch up defects in painting (for spray paint, see Accessories).
6. Preserve the engine:
 - Unscrew the two spark plugs.
 - Fill a tablespoon of engine oil into each spark plug opening.
 - Briefly actuate the starter (oil is distributed in the cylinder).
 - Screw the spark plugs back in.
 - Do not put the spark plug connector on!
7. Remove the ignition key and keep it separate from the device.

In autumn, have your device checked by an authorised service centre!

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.

Accessories

Available accessories:

Trailer: E09311

Trailer hitch: E09323

Snow blade: E09324

Spray paint 400 ml, colour orange: E04606

Clinometer E11835

Disposal

The device cuts and shreds the plant material in a single operation. Shredded plant material decomposes quickly, can be utilized 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 off accordingly.

Warranty

The conditions of the warranty can be found on the reverse side of your warranty card. Send the filled-out warranty card immediately after the purchase of your device to "AS-Motor Germany" or the supplier. Otherwise, the warranty is no longer valid.

Preserve the proof of purchase or the warranty card that was filled out by the vendor.

Troubleshooting

You can find an authorised service centre on our home page www.as-motor.de.

The following table contains the most frequent problems and their elimination. If more problems occur, contact the closest authorised service centre.

Problem	Possible cause	Remedy
Starter does not turn	Safety switches are not actuated.	<ul style="list-style-type: none"> – Drive lever to neutral position. – Cutting height adjustment to transport position. – Put driver in seat to activate seat contact switches.
	Battery is empty: <ul style="list-style-type: none"> – Ignition key was not in position "Off". – Standstill period was too long. 	Charge the battery (see Checking the battery) or have authorised service centre do so.
	Fuse is defective.	Replace (if necessary, have authorised service centre do so).
	Battery is defective.	Replace the battery (authorised service centre).
Engine does not start	Fuel valve is closed.	Open the fuel valve.
	Tank ventilation screw is closed.	Open the tank ventilation screw.
	No fuel in the tank.	Refill fuel.
	Choke is open.	Close the choke.
	Device was tilted – oil leaked into the air filter.	Replace the air filter, unscrew the spark plugs, and start several times while fuel valve is closed, dry the spark plugs and screw them back in.
	Engine was flooded due to too many start attempts.	Unscrew spark plugs and start several times when fuel valve is closed, dry the spark plugs and screw them back in.
	Spark plug connector is pulled off.	Observe safety instructions! Put spark plug connector back on.
	Air filter is soiled.	Clean air filter (see also Maintenance and cleaning).

Problem	Possible cause	Remedy
	Spark plugs are sooted, damaged or incorrect electrode gap.	Clean spark plugs and check electrode gap (see also Maintenance and cleaning). If necessary, replace spark plugs.
	Housing of the mower is jammed.	See also Maintenance and cleaning.
	No oil pressure: Not enough engine oil.	Check engine oil level, refill.
	No oil pressure: Slope is too steep.	Move the device to a flat position.
	Fuel is of poor quality, dirty, or old.	Clean the fuel system (authorised service centre). Always use fresh fuel.
Engine starts badly or runs irregularly	Choke is closed.	Open the choke.
	Air filter is soiled.	Clean air filter (see also Maintenance and cleaning).
	Fuel is of poor quality, dirty, or old.	Always use fresh fuel.
	Spark plugs are sooted, damaged or incorrect electrode gap.	Clean spark plugs and check electrode gap (see also Maintenance and cleaning). If necessary, replace spark plugs.
Device does not move	The drive is unlocked.	Lock the drive.
	Hydrostatic drive is overheated.	Cool down (see also Maintenance and cleaning).
Blade cannot be engaged	Lever for cutting height adjustment and transport position.	Lower lever for cutting height adjustment to the desired cutting height.
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 balanced and re-sharpened by an authorised service centre. Replace a damaged blade immediately.
	Blade drive shaft is bent by collisions with foreign objects.	Authorised service centre.

Problem	Possible cause	Remedy
	Engine fastening is loose.	Authorised service centre.
	Blade fastening is loose.	Authorised service centre.
Unusually noises	Loose fastening elements.	Authorised service centre.
	Silencer is defective.	Authorised service centre.
	Hydrostatic drive is overheated.	Cool down (see also Maintenance and cleaning).
Engine is smoking	Air filter is soiled or drenched with oil.	Clean or replace the air filter (see also Maintenance and cleaning).
	Oil level is too high.	Have authorised service centre lower the oil level 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. Have a damaged blade immediately replaced.
	Speed is too high proportionately to the cutting height.	Reduce speed and/or select the correct cutting height.
	Housing of mower is heavily soiled.	Clean.
	Different tire pressures.	Check the tire pressures.
	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.

Problem	Possible cause	Remedy
	Blade is worn.	Authorised service centre.
	Engine speed too low despite full power.	Authorised service centre.
The device does not stop when 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 other sharp objects damage the tires.	If necessary, use tire protection gel (authorised service centre).

Technical data

Type	AS 940 ⁴ Sherpa
Range of application (temperature)	5 – 30°C
Engine, type Manufacturer Type Cylinder capacity Performance Engine speed	Two cylinder four stroke OHV engine Briggs & Stratton 44 ELS V-Twin 724 cm ³ 16.5 kW (22.4 PS) 3300 min ⁻¹ See also operating instruction of the engine manufacturer.
Starting device	Electric start
Battery	12 V, approx. 30 Ah
Fuses Main fuse Fuse regulator generator	25 A 25 A
Drive Rear Front Speed forward Speed reverse	Permanent all-wheel drive Rear axle with differential lock Pendular axle with two hydraulic motors and bevels. 0 to 6.2 km/h 0 to 6.0 km/h
Maximum area coverage	approx. 5500 m ² /h
Turning radius	approx. 1.4 m
Seat	Movable, spring mounted, adjustable to the driver weight.
Cutting device, type Cutting width Cutting height Transport position Drive of cutting tool Clutch of cutting tool Plant growth	Cutter bars with screwed on reversing blades and mulching blade. 90 cm 50 to 105 mm, 5 levels 130 mm V-belt Belt tension clutch up to approx. 150 cm

Type	AS 940 ⁴ Sherpa
Measures and weight Weight Transport size with packaging L/W/H max. tire dimensions L/W/H Height when down rollbar is pulled down max. towing load max. coupling load	290 kg 210/107/112 cm 191/98/152 cm 100 cm 100 kg 25 kg
Capacities Fuel tank Engine oil Drive oil (hydrostat)	15 litres including reserve (lead-free 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
Noise level Measured sound level L_{WA} Sound pressure level at working place L_{pA} Measurement uncertainty k	102 dB according to DIN EN 12733 91 dB according to DIN EN 12733 3.0 dB (A)
Vibrations emission value Hand-arm-vibrations $a_{h,w}$ Measurement uncertainty U Whole body vibration $a_{h,w}$ Measurement uncertainty U	2 m/s ² according to DIN EN 12733 2 m/s ² 0.8 m/s ² according to DIN EN 12733 0.5 m/s ²
Tire pressure Front Rear	0.9 to 1.2 bar 0.4 to 1.2 bar



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

Declaration of conformity

We declare that the lawnmower type
with serial number

AS 940⁴ Sherpa
starting from 021910030001

as brought into circulation by us conforms to all relevant
safety and health requirements of the EC directives listed.

- 2006/42/EG, L76, 16.03.2007
- 2004/108/EG, L390, 31.12.2004
- 97/68/EG, L59, 27.02.1998

Function:

The device is intended for cutting and mulching grass or
similar vegetation in agriculture, forestry, and landscape
conservation.

Applied standards:

EN 12733

Person authorised to compile the relevant technical documentation:::

Frank Einsiedler
AS-MOTOR GERMANY GmbH & Co. KG
Ellwanger Straße 15
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ppa. Frank Einsiedler
Leitung Entwicklung

Christoph Weber
Geschäftsführer

Bühlertann,
im Juli 2010



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

Professional technology for gardens and landscapes

Allmäher®	Manoeuvrable meadow mower for extensive green area care. The Allmäher reliably shreds high grass, scrub, and weeds also on steep slopes and in difficult terrain. The grass cuttings are left to fertilise the ground so there is no more raking grass.
Ride-on Allmäher®	Ease of use and high area coverage all combined in a compact lawn mower. Low centre of gravity, optimum weight distribution, and broad wheel base provide you with the best performance on slopes and power reserves for shredding high plant growth. Also available in an all-wheel version providing the extra traction for demanding applications and for superior safety on slopes.
Rear discharge mower	Professional lawn mower with rear discharge. With wheel drive and infinite speed regulation for exceptional cutting and catching performance in any situation.
Rotary mower	The economic alternative to bar mower. Ideal for fodder production. The grass is not shredded and placed into a pile on the side.
Flail mower	The flail mower blades are supported movably and avoid rocks and other obstacles and chop the cuttings several times. The steel housing is 3 mm thick and offers very high security against foreign objects that were ejected and blown around and catches them safely.
Side discharge mower	This solid allrounder has a side discharge, wheel drive, and a housing of 3 mm thick plastic-coated steel. Also available in an all-wheel drive version and infinite speed regulation (Variomatic).
WeedHex	Removes weeds carefully, quickly, and without the use of chemicals: on transport surfaces, walls, curbs, and between interlocking blocks. The patented pivoting brush system goes easy on surfaces and is environment-friendly regarding harmful herbicides.