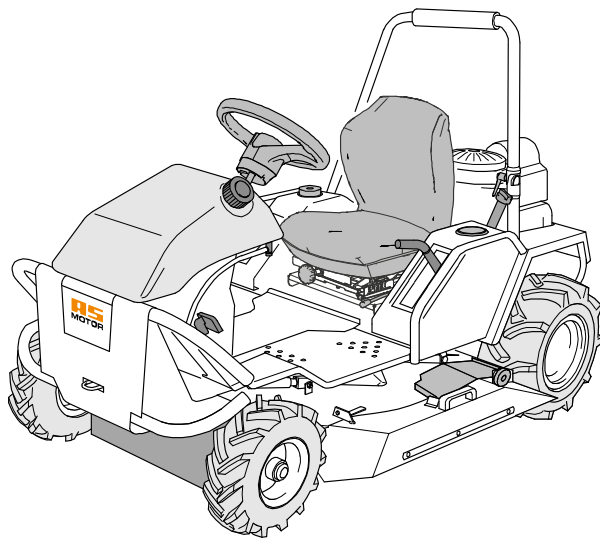




Operator's Manual



Ride-on-Allmäher®

AS 900 ENDURO, AS 915 ENDURO, AS 980 ENDURO

From serial number: AS 900: 021415010001, AS 915: 018215010015,
AS 980: 030217110001

Issued: 22 Dec 2017, V22.1

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 operating instructions before using the device. Share these operating instructions and the operating instructions of the engine with other users of the device.

Contact

If you have questions concerning your device, please contact your 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.

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.

The device **must not** be used:

- To cut hard objects, rocks, rubble, or pieces of wood.
- To trim bushes, hedges, and shrubbery.
- To cut plants in flower pots or planters or 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.

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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

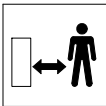
The following symbols are placed on the device to inform you must be careful and attentive when using the device:



Working with the device requires extreme caution. The quickly rotating blade of the device can cause life-threatening injuries or major property damage



Read the operating instructions before you use the device.



Make sure that no one is within the danger zone of the device.



Hot surfaces or components. Do not touch the engine or the silencer.



Risk of injury due to running belt drive! When the engine is running, never reach into the belt drive.



Risk of injury caused by rotating components!



Danger of bursting while tires are inflated. Observe the admissible tire pressure (see Technical data).



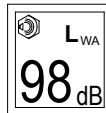
The device generates poisonous exhaust fumes as soon as the engine is running. Some of these gases are odourless and invisible. Never let the engine run in closed rooms.



Risk of tipping!



When positioned sideways to the slope, the device is stable up to 20°(in accordance with the standard measuring method).



Sound level on the device.



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



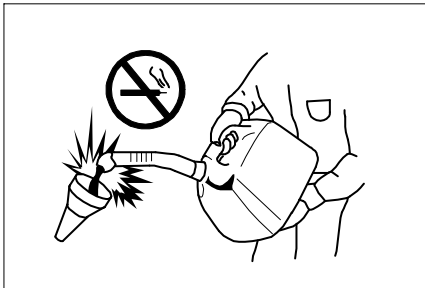
Do not clean the device with water spray or high-pressure cleaner!



Warning!

Risk of injury caused by rotating blades or parts.

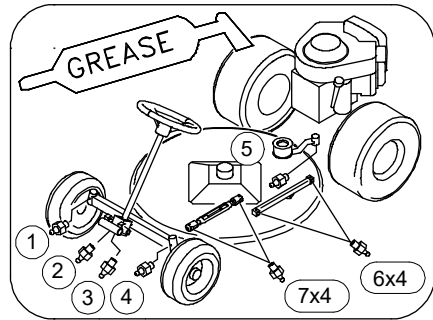
Objects can be ejected. Make sure that no one is within the danger zone of the blade (at least 50 metres).



Warning!

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

Observe the safety instructions regarding the fuel!

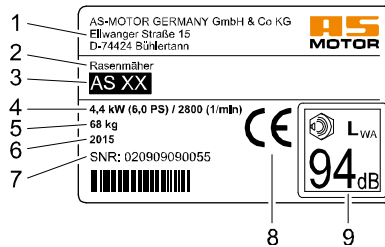


Lubrication chart

Position of grease nipples for grease lubrication. Observe the maintenance instructions.

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
- 9 Sound level L_{WA}

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.

Have skilled personnel who were trained by AS-Motor show you the safe handling of the device before you work with it for the first time.

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 and 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.



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 each use, check the blade, protection skirt, impact protection, covers, 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.

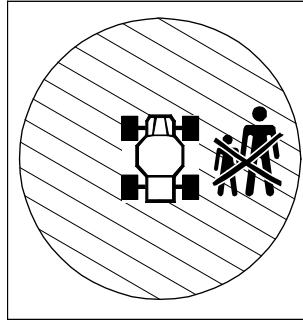
Do not remove, change or override any safety devices or control elements.

Have an authorised service centre check your device if the blade does not stop within 5 seconds.

Observe the maintenance instructions (see Maintenance).

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

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

On slopes, the device can topple over and slide towards persons or run them over.

Make sure

- that nobody else is in the area that will be mowed.
- that people are never positioned in the direction of travel in front of the device.
- that nobody is positioned on the slope below the device.
- that you have a complete overview of the danger area at all times.
- that you keep your hands and feet away from the rotating parts.

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!).
- When 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.
- 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 ignition key

- 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

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.

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 objects are in the danger area.

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

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, dikes and water edges.

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

When the device is used 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

- 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 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 mowing slopes

If the device, while in use, stops on slopes or the engine cuts out, the device can roll away. Immediately activate the parking brake to prevent the device from rolling away.

Sliding and tipping risk



Risk of injury during mowing on slopes due to tipping over or sliding. Please observe the following notices.

- Do not mow excessively steep slopes. For safety reasons, use the device only on a less than 20° slopes.
- Please observe the following information on the danger area.
- Use a clinometer if you are not familiar with the slope (see accessories).
- Never unlock the drive on a 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.
- 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.
- Drive with the bar flipped up. 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 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, water edges 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.

Take special care when pulling loads

- Only use hitches approved by “AS-Motor Germany”.
- Note the maximum load (Technical data).
- Observe the safety information in the operator’s manual of the hitch manufacturer.
- Only transport loads that you can control reliably.
- Only drive on slopes up to max. 10°.
- Do not take tight corners.
- Be cautious when moving in reverse.

When work is completed

After mowing, always close both fuel valves.

Prior to leaving the device, wait until the engine comes to a standstill and pull off 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 inside a building when there is fuel in the tank or where fuel vapours might come into contact with open fire or sparks.

Hydraulic components

The device contains hydraulic components.

In case of improper repair or damage to the hydraulic components, pressurised hydraulic fluid may leak. The fluid may enter the skin and thus cause severe injuries.

- Only carry out maintenance work as described in these operating instructions.
- If hydraulic fluid has entered your skin, contact a doctor immediately.

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.

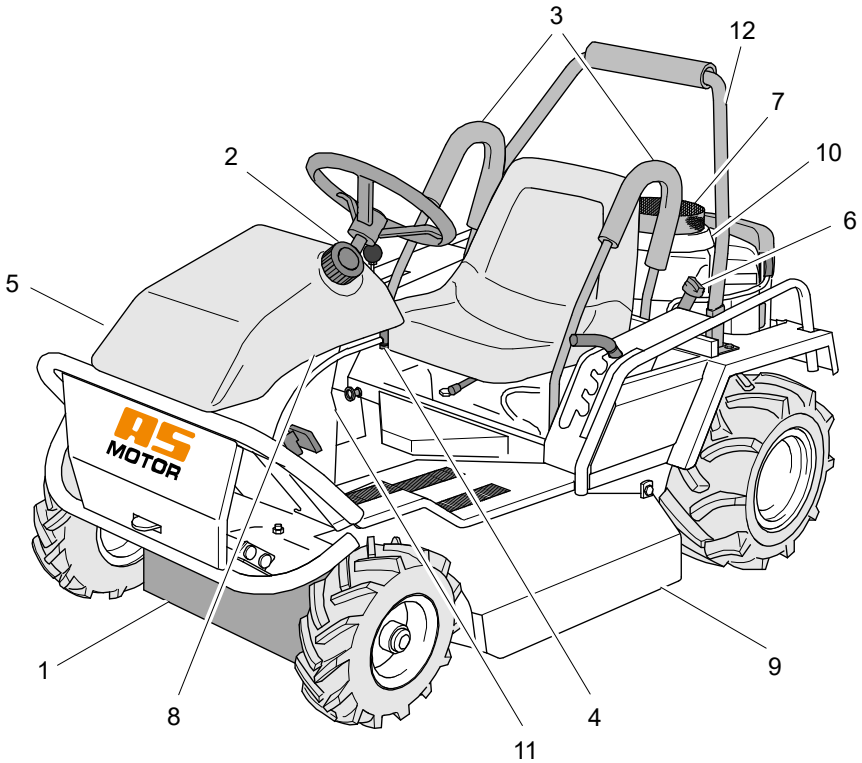
We explicitly point out that, in accordance with the Product Liability Act, we are not liable for damages that were caused by our devices if

- 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

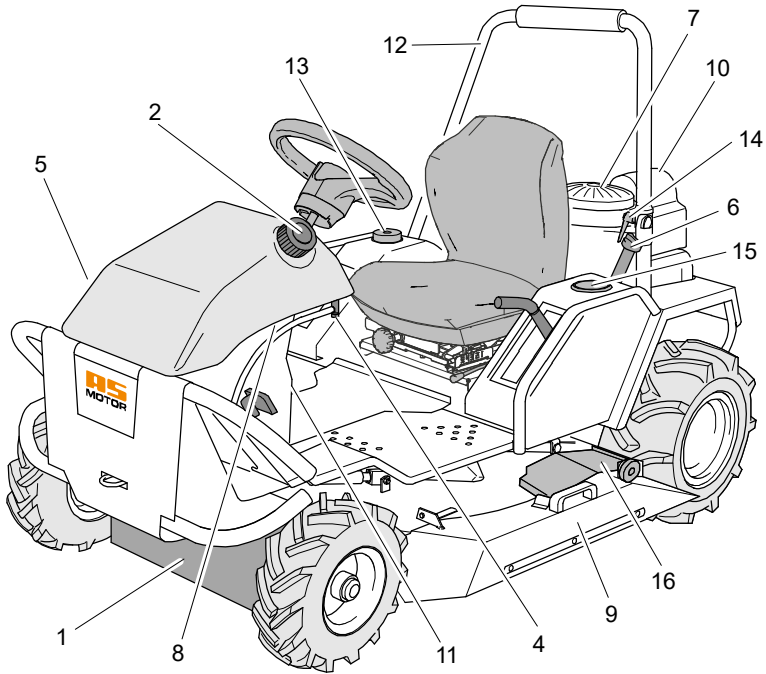
Figure shows AS 915 ENDURO



- 1 Impact protection front
- 2 Tank cap
- 3 Lateral supports
- 4 Fuel valve 1
- 5 Fuel valve 2
- 6 Engine oil filler neck
- 7 Ventilation grid
- 8 Fuses circuit protection
- 9 Side plates impact protection/cover
- 10 Engine
- 11 Type plate
- 12 Bar (only AS 915)

Device description

Figure shows AS 980 ENDURO

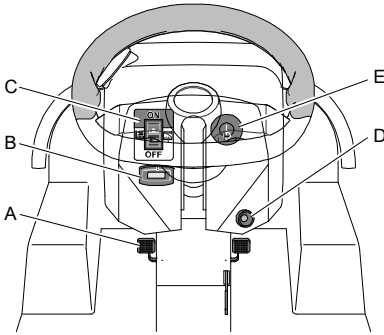


- 1 Impact protection front
- 2 Tank cap
- 3 (not existing)
- 4 Fuel valve 1
- 5 Fuel valve 2
- 6 Engine oil filler neck
- 7 Ventilation grid
- 8 Fuses circuit protection
- 9 Side plates impact protection/cover
- 10 Engine
- 11 Type plate
- 12 Bar
- 13 Hydrostat transmission oil filler neck
- 14 Clamping lever
- 15 Cup holder
- 16 Mulching kit in holder

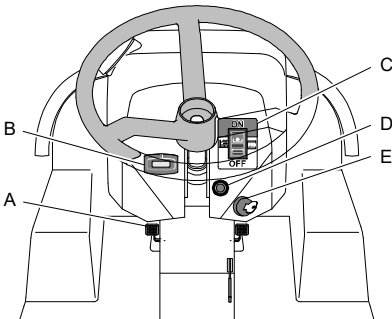
Control elements

Front area

AS 980



AS 900, AS 915



Differential lock (A)

With the left foot pedal, actuate the differential lock.



Pedal is actuated:
Differential lock is on

Pedal is not actuated:
Differential lock is off

Operating hours counter (B)

The operating hours are counted as soon as the engine is running. The display remains visible also when the engine is standing still.

Observe the information in chapter Maintenance.

Blade clutch switch (C)

The blade clutch switch is a protective device. If you declutch the blade the blade comes to a standstill within 5 seconds.



Clutching blade:

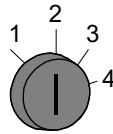
Press the lock at the bottom part of the rocker switch upwards and press the rocker switch upward (ON).

Declutching blade:

Press the switch down (OFF).

Ignition lock (E)

The ignition lock has three/four positions.



1: **AS 900, AS 915:** not existing

AS 980: Ignition off.
The key can be removed.

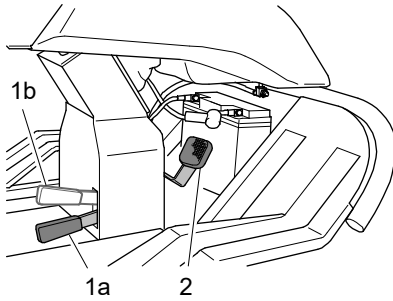
2: **AS 900, AS 915:** Ignition off.
The key can be removed.

AS 980: without function.

3: Ignition on.
Indicator lamp (D) lights up.

4: Electric starter on.

Brake



foot brake

Brakes:

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

Parking brake



Release parking brake:

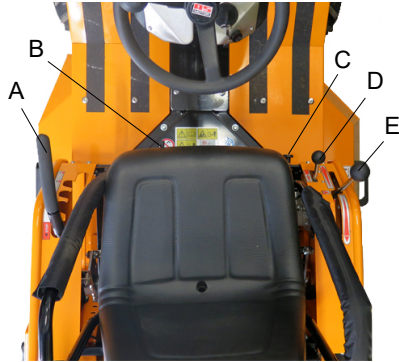
Press the right foot pedal down, press the locking lever (1a) down.

Apply parking brake:

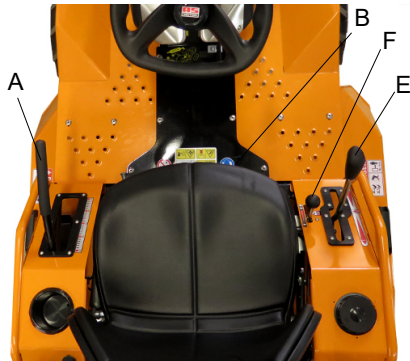
Press the right foot pedal down and pull the locking lever (1b) all the way up. Afterwards, the foot pedal remains down.

Control lever at seat

View of driver's position: AS 900, AS 915



View of driver's position: AS 980



Cutting height adjustment (A - AS 900, AS 915)



The cutting height can be set to four positions.

Position "STOP" is the transport position.

Cutting height adjustment (A - AS 980)



The cutting height of the lawn can be continuously adjusted.

Press the lever to the right and adjust the lever. Release the lever at the desired cutting height.

Position "5" is the transport position.

Seating position (B)

Press the lever (B) to the right and move the seat to the desired position.

Lever for choke (C)

AS 900, AS 915

The choke is closed only for start up the cold engine. As soon as the engine is running, open the choke.



Close choke:
Pull out the lever for the choke (C) to the front.



Open choke:
Push the lever for the choke (C) backward.

Accelerator lever with choke (F)

AS 980

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).



MIN: Minimum speed (idling).
Pull the accelerator lever all the way up.

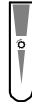
MAX: Maximum speed (full throttle).

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

Acceleration lever (D)

AS 900, AS 915

Using the accelerator lever, you change the engine speed.



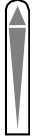
Highest speed (full throttle):
Press the accelerator lever all the way down.

Lowest speed (idling):
Pull the accelerator lever all the way up.

Drive lever (E)

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.

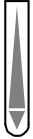
The drive lever automatically goes to neutral position when it is released from the position "Driving in reverse". This prevents accidental reversing.



Moving forward



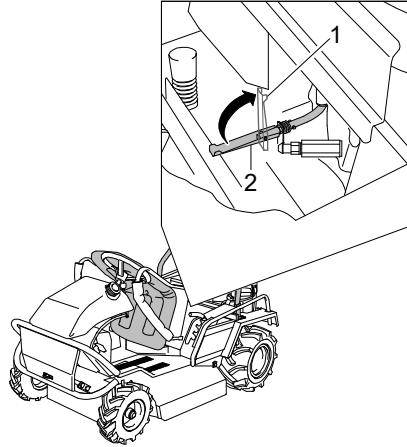
Stopping (neutral position)



Reversing

Moving the device without drive

To push the mower without engine drive, unlock the drive below the driver's seat and release the parking brake. The mower then can only be braked via the foot brake.

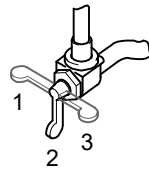


1: = Locked

2: = Unlocked

Fuel valve

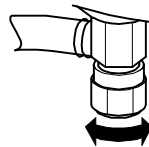
On the bottom of the tank, there is a fuel valve positioned on both the left rear and right front.



1: Reserve (R)

2: Open

3: Closed (C)



Turning to the left: Open

Turning to the right: Closed

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).

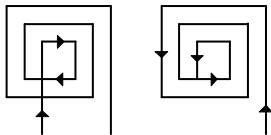
Do not mow when the grass is wet or when it is raining. The turf may be damaged and there is a danger of slipping!

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.

Mowing with standard mulching kit

When the mulching kit is mounted to the AS 980 ENDURO, the rear discharge opening is reduced. Consequently, it is possible to mulch the mowing material to even finer pieces.

The use of the mulching kit is recommended for low grass up to a height of approx. 30 cm. If the grass is too tall or dense, clumping or clogging of the mowing deck can result. In that case, reducing the mowing speed can be helpful.

Make sure that the created mulching layer is neither too thick nor too dense. The layer can affect the gas-air-exchange of the turf and result in rotten spots.

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.

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.

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 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 (AS 900, AS 915)

Start the device only when on level and firm terrain.

1. Open the two fuel valves.
2. Sit down in the driver's seat.
3. Switch off the blade clutch.
4. Move the drive lever to neutral position.
5. Move the accelerator lever to middle position.
6. Pull out the lever for the choke.
7. Turn the ignition key to starting position.
8. When the engine has started, release the ignition key and press the lever for the choke back in.
9. For mowing, set the accelerator lever to the maximum speed.

If the engine has not started after 5 seconds, release the key. Wait for approx. 15 seconds before you try to restart the device.

Starting the engine (AS 980)

Start the device only when on level and firm terrain.

1. Open the two fuel valves.
2. Sit down in the driver's seat.
3. Switch off the blade clutch.
4. Move the drive lever to neutral position.
5. Move the accelerator lever to the cold start position (choke).
6. Turn the ignition key to starting position.
7. Once the engine has started, release the ignition key and move the accelerator lever to middle position.
8. For mowing, set the accelerator lever to the maximum speed.

If the engine has not started after 5 seconds, release the key. Wait for approx. 15 seconds before you try to restart the device.

Engaging the blade (AS 900, AS 915)

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 when overloaded, the blade can be damaged or wear prematurely.

1. Start the engine.
2. Move the lever for the cutting height adjustment to the highest cutting position.
3. Move the accelerator lever to middle position.
4. Switch on the blade brake clutch – the blade starts up.
5. Set the desired cutting height.

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

Re-engaging:

1. Switch off the blade clutch lever.
2. Move the lever for the cutting height adjustment to the highest cutting position.
3. Move the accelerator lever to middle position.
4. Switch on the blade brake clutch – the blade starts up.
5. Set the desired cutting height.

Engaging the blade (AS 980)

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 when overloaded, the blade can be damaged or wear prematurely.

1. Start the engine.
2. Move the lever for the cutting height adjustment to the highest cutting position.
3. Move the accelerator lever to middle position.
4. Switch on the blade brake clutch – the blade starts up.
5. Set the desired cutting height.

When crossing over paths, disengage the blade

1. Switch off the blade clutch lever.

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.

In order to restart the engine, let the device roll to terrain that is less steep while in idle state. In every case, check the oil level.

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.

Driving



Warning!

Device can move jerkily. If you are standing on the device, injuries can result.

Do not stand up while the device is moving.

Do not drive while standing up.



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 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 or step on the foot brake.

The foot brake acts on the rear wheels. When the foot brake is actuated, the drive moves to direction "STOP" (neutral position). When the foot brake is pressed quickly and fully, the drive lever swivels all the way to neutral position.

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.

When you actuate the foot brake and switch on the drive, you can hear an alarm tone.

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.

The drive lever automatically goes to neutral position when it is released from the position "Driving in reverse". This prevents accidental reversing.

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



Warning!

Risk of injury in case of unauthorised use.

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

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 engine comes to a standstill before you step away from the device.
8. Remove the ignition key.
9. Close both fuel valves.

Transport

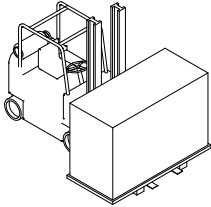
Transport the device on a freight vehicle or a trailer which is designed for a carrying capacity of at least as great as the empty weight of the device.

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 valves.

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.



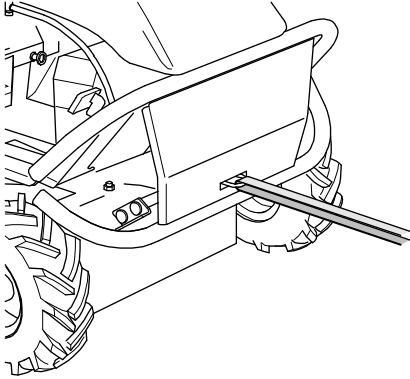
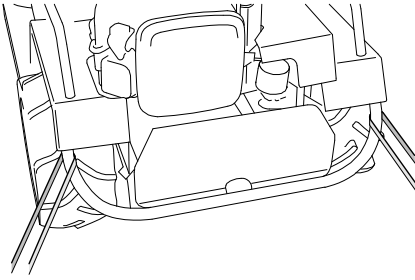
Notice!

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. Slacken the transport attachments.
2. Carefully drive the device over the ramps off the loading area.

Maintenance



Warning!

Risk of injury due to unexpected movement. When inspections are carried out, the device can move unexpectedly.

Make sure that no persons or objects are in the danger area of the blade.

Make sure that no further hazards result from an unexpected movement.



Warning!

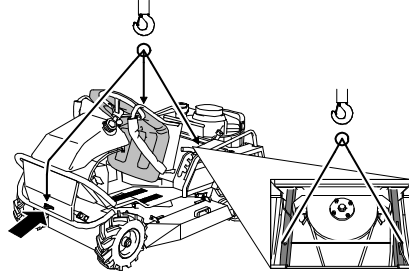
Risk of injury during maintenance and cleaning work when the engine is running.

Perform maintenance tasks only then with a running engine if this is required in the Maintenance table.

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.

Beware! For repair and maintenance work, lift the device only by its frame.



You can use the spots marked with arrows at the front of the towing lug and the frame below the seat as suspension points.

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

Maintenance overview

Component	Action	Maintenance interval	
		A	B
Device	Check for safe working condition (basic inspection).	■	▲
	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 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?	□	▲
Release the drive lever	Does the device stop when the lever is in neutral position (STOP)?	□	▲
	Does the lever move to neutral position when the foot brake is actuated?	■	▲
	Does the lever move to neutral position when it was released from position "Driving in reverse"?	□	▲
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.	■	▲
Safety switches	Check the switches at the driver seat, cutting height adjustment, and drive for proper function.	■	▲
Ignition lock	Check for proper function.	□	▲
Hydrostatic transmission	Check oil level.	■	▲
	Repair leaks.		▲
	Oil change after 50 h and every 200 h thereafter.		▲
Differential gear	Perform oil change.		▲
	Check for oil contamination.	■	▲
Battery	Check the charging conditions.		▲
Lubrication	See chapter grease lubrication.	■	▲ ■

- A Before and after each use.
 B Annually or every 50 h.
 ■ By the user when the engine is not running.
 □ By the user when the engine is running.
 ▲ By the authorised service centre.

Cleaning the device

Depending on use, clean the device thoroughly, especially the bottom and the blade.

Grass cuttings and dirt that are stuck interfere with the grass ejection and impair the cutting quality. To sufficiently cool the engine, keep the engine cover, ventilation grid and engine clean.

Fire hazard! Take particular care that the components at the silencer are clean.

For cleaning, use a hand brush. Remove stubborn dirt with a wooden or plastic spatula. Clean the outside housing parts with a cloth.

Do not clean the device with water spray or high-pressure cleaner! Do not use any aggressive cleaning agents.

General inspection

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

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

Check all parts 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 safety functions

Check the safety switches for proper function. It must not be possible to start the engine when:

- there is no driver on the driver's seat.
- The blade clutch is switched on.
- The drive lever is not in neutral position.

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

Operating hours counter

When you press the button at the operating hour counter, the display will alternate between:

- Operating hours
- Hours before the next engine oil change (OIL)
- Hours before the next grease lubrication of the device (LUBE).

The intervals in the maintenance table and in the operating instructions of the engine manufacturer apply.

The specifications for the next engine oil change and the next grease lubrication at the operating hour counter serve only as additional reminder.

If the display flashes showing the text "OIL" or "LUBE", check the information in the maintenance table regarding oil change or lubrication.

Checking the parking brake



Warning!

If the parking brake is not properly adjusted, the device can roll away.

Make sure that the parking brake always functions correctly.

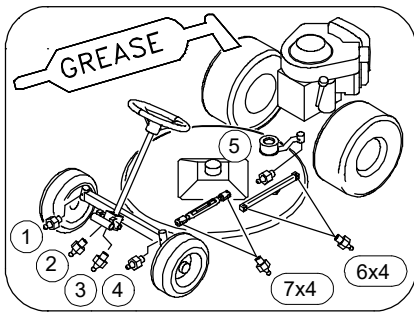
1. Place the device on a surface with a good grip (e.g. concrete or asphalt).
2. Switch off the engine.
3. Let the device cool down for at least 20 minutes.
4. Unlock the drive.
5. Activate the parking brake.
6. Try to push the device.

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.

Checking the foot brake

Check if the drive lever return to STOP when the brake pedal is actuated.

Grease lubrication



On the lubrication chart, the position of the grease nipples are marked.

1. Clean the grease nipples.
2. Lubricate the grease nipples with a hand grease gun (1-2 strokes).
3. Remove any excess grease that has squeezed out from the bearing points.

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.

Cutting blades

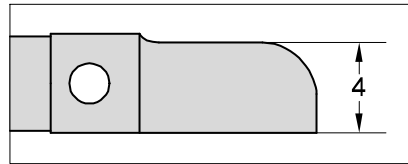
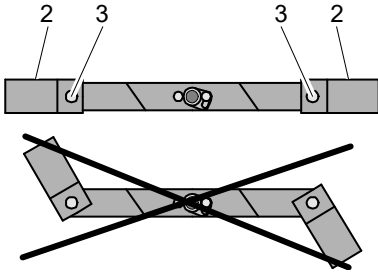
If the cutting blades strike a foreign object, they can be twisted (overload protection).

Never mow when the cutting blades are twisted.

Turn the cutting blades back to their initial position. If the cutting blades cannot be turned back, have the cutting mechanism checked for damage and the cutting blades turned back or replaced by an authorised service centre.

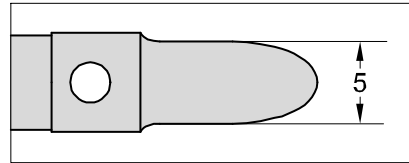
To prevent unbalance replace or reverse the cutting blades (2) in pairs only!

Cutting blades (AS 900, AS 980)



The cutting blades (2) are reversible blades. Reverse both blades

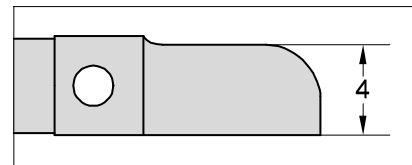
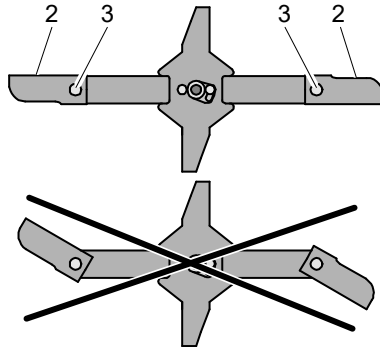
- when the width (4) of a cutting blade is smaller than 55 mm and
- when the other side of the cutting blade has not yet been used.



The cutting blades and fastening parts must be changed

- when the width (5) of a cutting blade is smaller than 40 mm and the other side of the cutting blade has already been used.
- when the thickness of the cutting blade at any point is below 1 mm (except cutting edge).

Cutting blades (AS 915)



The cutting blades (2) and the fastening parts must be changed

- when the width of the cutting blade (4) is under 50 mm.
- when the thickness of the cutting blade at any point is below 1 mm (except cutting edge).

Original blade

An original AS-blade is engraved with (only AS 915):

AS XXXXXXXX

The engraving shows the spare part number.

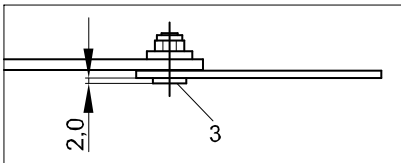
Checking the condition of the cutting blade screws



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

Check the blade clutch for proper function by disengaging the blade. The blade must come from full speed to a standstill in 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 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.

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



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 get the engine going or only insufficiently, charge the battery.

The battery is maintenance-free and gas-tight. For charging the battery, you require a special charging system. Battery chargers for car batteries are not suitable!

The charging current must not exceed the maximum of 3 ampere, otherwise, the battery heats up too much!

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

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 positive and negative poles.

1. Pull the tank out of the holders and put it to the right.
2. Disconnect the black cable (-).
3. Disconnect the red cable (+).
4. Dismantle the battery from the device.
5. Charge the battery.
6. Mount the battery into the device.
7. Connect the red cable (+).
8. Connect the black cable (-).
9. Remount the tank.

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.

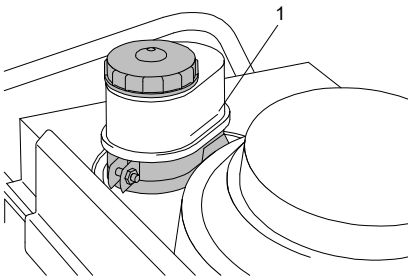


Caution!

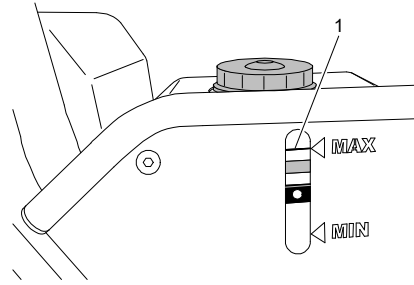
If oil leaks, there is a risk of environmental pollution.

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

AS 900, AS 915



AS 980



If the device remains out of use for several hours on level ground, the oil level must be reached the marking (1) of the oil container. If this is not the case, refill oil (see Technical data).

Only fill in as much oil until the oil level reached the marking of the oil container.

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

Check if the gearbox fan is undamaged.

The hydrostatic drive generates a monotone working noise that gets louder as the load is increased (e.g. in steep terrain). If the working noise changes, if it gets irregular or very loud, let the hydrostatic drive cool down.

If the change working noise still exists, have the device checked by an authorised service centre.

Assembly AS 900, AS 915

Scope of delivery

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

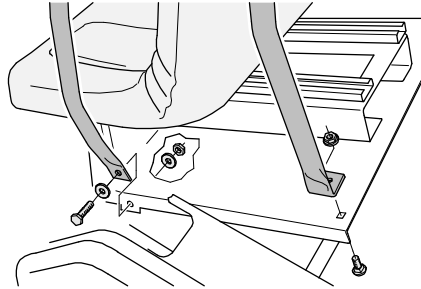
- The device.
- This operating manual.
- Manufacturer's certificate.
- Steering wheel.
- 2 lateral supports.
- 2 protective coverings for lateral supports.
- Bar (only AS 915).
- Protective covering for bar (only AS 915).
- Ignition key.
- Operator's manual of the engine manufacturer.
- Screws, nuts and discs for the assembly of the steering wheel, bar (only AS 915) and lateral supports.

Unpacking

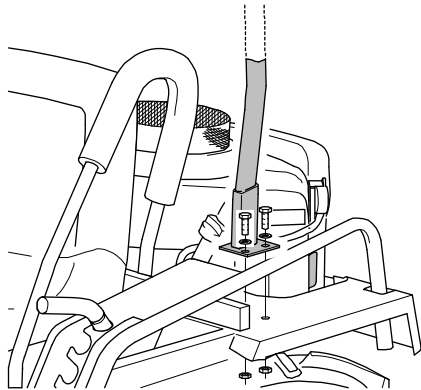
1. Remove the carton, the frame and the film.
2. Check the air pressure of all tires (see Technical data).

Mounting

Assembly of bar



1. Slide the protective coverings over the lateral supports and close the Velcro closures of the protective coverings.
2. Screw both lateral supports to the device.



AS 915

1. Slide the protective covering over the bar and close the Velcro closure of the protective covering.
2. Screw the bar to the device.

Connecting the battery



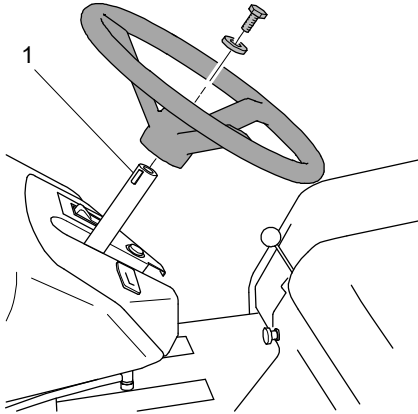
Caution!

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.

1. Connect the red cable (+) to the battery.
2. Connect the black cable (-) to the battery.

Mounting the steering wheel



Mount the assembly wheel. (observe the feather key (1)).

Unloading the device from the pallet

1. Remove the two metal transport securing devices (one metal hook each is screwed to the front and the rear).
2. Release the parking break, unlock the drive and push the mower off the pallet.
3. Relock the drive.

Assembly AS 980

Scope of delivery

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

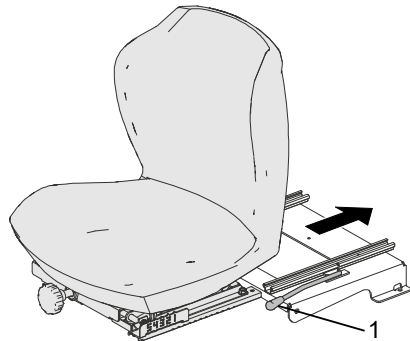
- The device.
- This operating manual.
- Manufacturer's certificate.
- Steering wheel.
- Ignition key.
- Operator's manual of the engine manufacturer.
- Screws, nuts and discs for the assembly of the steering wheel.

Unpacking

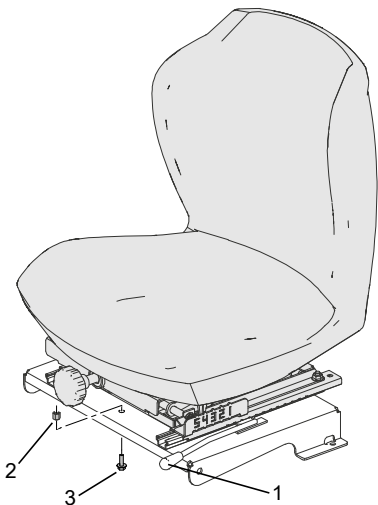
1. Remove the carton, the frame and the film.
2. Check the air pressure of all tires (see Technical data).

Mounting

Mounting the seat

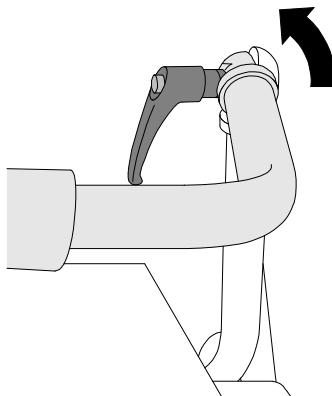


1. Place the seat onto the two guide bars.
2. Press the lever (1) towards the outside and push the seat on the guide bars all the way to the rear.
3. Release the lever.



4. Insert the screw (3) from the bottom through the crossbar.
5. Screw down the seat stop (2) with the screw (3).
6. Press the lever (1) towards the outside and push the seat forward.
7. Connect the seat contact switch by connecting the plugs at the seat and the frame.
8. Press the lever (1) towards the outside and move the seat to the desired position.

Putting up the folding bar



1. Unscrew the clamping levers on both sides.
2. Fold up the bar until it engages.
3. Tighten the clamping levers on both sides to lock the bar.

Connecting the battery



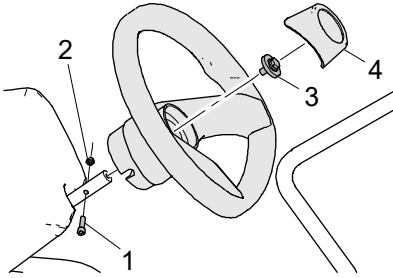
Caution!

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.

1. Connect the red cable (+) to the battery.
2. Connect the black cable (-) to the battery.

Mounting the steering wheel



1. Insert the screw (1) through the steering wheel and the steering column.
2. Tighten the central fixing screw (3) an.
3. Screw the nut (2) onto the screw (1).
4. Plug on the cap (4).
5. Release the parking break, unlock the drive and push the mower off the pallet.
6. Relock the drive.

Unloading the device from the pallet

1. Remove the two metal transport securing devices (one metal hook each is screwed to the front and the rear).
2. Release the parking break, unlock the drive and push the mower off the pallet.
3. Relock the drive.

Mounting the mulching kit

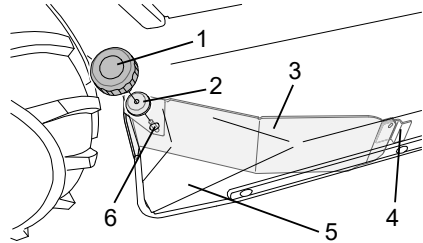


Caution!

If the mulching kit is mounted incorrectly, the device can be damaged.

Make sure that the mulching kit is between the support bracket and the cover and the knurled nut is tightened at all times.

1. Switch off the engine, wait for the blade and the engine to stop and remove the ignition key.
2. Slacken the knurled nut (1). Remove the knurled nut (1) and the washer (2).
3. Remove the mulching kit (3) from the holder.



4. Lift the side cover (5) on the opposite side of the device.
5. Remove the contamination in the installation area, especially on the support bracket (4).
6. Place the mulching kit (3) into the support bracket (4) located at the bottom of the cover.
7. Insert the screw (6) through the opening from below and screw the washer (2) and knurled screw (1) back down.
8. Lower the side cover (5) again.

Removal of the mulching kit is carried out in the reverse order of steps.

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 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.

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 of accordingly.

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

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

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

Problem	Possible cause	Remedy
Starter does not turn	Safety switches are not actuated.	<ul style="list-style-type: none"> – Move drive lever to neutral position. – Switch off blade clutch switch. – Move cutting height adjustment to transport position. – Put driver in seat to activate seat contact switches.
	Battery is empty: – 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 valves are closed.	Open fuel valves.
	No fuel is in the tank.	Refill fuel.
	Choke is open.	Close choke (see Starting the device).
	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.
	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 choke (see Starting the device).
	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.
Device does not move	The drive is unlocked.	Lock the drive.
	Hydrostatic drive is overheated.	Cool down (see Maintenance).
The blade does not rotate	Lever for cutting height adjustment in transport position.	Lower lever for cutting height adjustment to the desired cutting height.
	Electromagnetic clutch has insufficient voltage.	Let engine run for some time at medium speed or charge battery.
	V-belt is insufficiently tensioned or damaged.	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.
	Silencer is defective.	Authorised service centre.
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).

Technical data

Type	AS 900 ENDURO	AS 915 ENDURO
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	Two cylinder four stroke engine Briggs & Stratton	
Type	Intek, Series 7, V-Twin	Professional Series 7220
Cylinder capacity	656 cm ³	656 cm ³
Performance	11.1 kW (15.1 PS)	13.3 kW (18.0 PS)
Engine speed	3300 min-1	3300 min-1
Starting device	Electric start	
Battery	12 V, approx. 19 Ah	
Fuses Main fuse Generator	15 A 25 A	
Traction drive Speed forward Speed reverse	Hydrostatic transmission with differential lock 0 to 10 km/h 0 to 9.5 km/h	
Maximum area coverage	approx. 9000 m ² /h	
Turning radius	approx. 0.8 m	
Front axle	Pendulum mounted	
Seat	Moveable, spring-loaded	
Cutting device, type Cutting width Cutting height Drive of cutting tool Clutch of the cutting tool Growth height	Cutter bar with screwed on blades 90 cm 50 to 90 mm in 4 levels V-belts electromagnetic with brake up to approx. 120 cm	Cutter bar with screwed on blades and mulching blade 90 cm 50 to 90 mm in 4 levels V-belts electromagnetic with brake up to approx. 150 cm
Measures and weights Weight Transport sizes with packaging L/W/H Tyre dimensions L/W/H max. towing load max. vertical load	298 kg 186/107/101 cm 183/100/95 cm 100 kg 25 kg	307 kg 186/107/101 cm 183/96/105 cm 100 kg 25 kg

Type	AS 900 ENDURO	AS 915 ENDURO
Capacities Fuel tank Engine oil (see Checking the oil level) Transmission oil Oil in hydrostat	15 litres (unleaded regular petrol) approx. 1.9 litres SAE 30 1.9 litres 80 W90 1 litre SAE 15W50 or 20W50	
Sound level according to DIN EN ISO 5395 Measured sound level L_{WA} Guaranteed sound level L_{WA} Sound level at operator station L_{pA}	 98.0 dB 100 dB 88 dB	
Vibration emission value according to DIN EN ISO 5395 Hand-arm-vibrations $a_{h,w}$ Measurement uncertainty U Whole body vibration $a_{h,w}$ Measurement uncertainty U	 3.8 m/s ² 0.5 m/s ² 0.9 m/s ² 0.5 m/s ²	
Tyre pressure front rear	1 bar 1.5 bar	

Technical data

Type	AS 980 ENDURO
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 Capacity Performance Engine speed	Two cylinder four stroke engine Briggs & Stratton 8270 Series Commercial, V-Twin 724 cm ³ 14.3 kW (19.5 PS) 3300 min ⁻¹
Starting device	Electric start
Battery	12 V, approx. 19 Ah
Fuses Main fuse Generator	15 A 25 A
Traction drive Speed forward Speed reverse	Hydrostatic transmission with differential lock 0 to 10.5 km/h 0 to 7.0 km/h
Maximum area coverage	approx. 10300 m ² /h
Turning radius	approx. 1.3 m
Front axle	Pendulum mounted
Seat	Moveable, spring-loaded
Cutting device, type Cutting width Cutting height Drive of cutting tool Clutch of the cutting tool Growth height	Cutter bar with screwed-on reversing blades and mulching blades 98 cm 35 to 120 mm, freely adjustable V-belt electromagnetic with brake up to approx. 130 cm
Measures and weights Weight Tyre dimensions with packaging L/W/H Tyre dimensions L/W/H Operating dimensions L/W/H (with folded down bar) max. towing load max. vertical load	340 kg 207/120/110 cm 196/108/125 cm 196/108/95 cm 100 kg 25 kg

Type	AS 980 ENDURO
Capacities Fuel tank (with reserve) Engine oil (see Checking the oil level) Transmission oil Oil in hydrostat	15 litres (regular unleaded fuel) approx. 1.9 litres SAE 30, 10 W30, 5 W30 1.9 litres 80 W90 1.4 litres SAE 15 W50 or 20 W50
Sound level according to DIN EN ISO 5395 Measured sound level L_{WA} Guaranteed sound level L_{WA} Sound level at operator station L_{pA}	 98.0 dB 100 dB 88 dB
Vibration emission value according to DIN EN ISO 5395 Hand-arm-vibrations $a_{h,W}$ Measurement uncertainty U Whole body vibration $a_{h,W}$ Measurement uncertainty U	 3.8 m/s^2 0.5 m/s^2 0.9 m/s^2 0.5 m/s^2
Tyre pressure front rear	1 bar 1.5 bar

Accessories AS 900, AS 915

Trailer:	G06800003
Trailer hitch:	G06800005
Snow remover blade without adaptor:	G06837006
Adaptor snow removal blade:	G06637009
Snow tyres (set):	G06637006
Set of front lawn tyres:	G06621001
Set of rear lawn tyres:	G06621002
Spray paint 400 ml, colour orange:	G00011050
Seat suspension unit:	G06680124
Clinometer:	G06950027

Accessories AS 980

Trailer:	G06800003
Trailer hitch:	G06800005
Spray paint 400 ml, colour orange:	G00011050
Clinometer:	G06950027

Declaration of conformity

We declare that the lawnmowers

Type	AS 900 ENDURO	AS 915 ENDURO	AS 980 ENDURO
Cutting width	90 cm	90 cm	98 cm
starting from serial no.	021415010001	018215010015	030217110001

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

- 2006/42/EC
- 2000/14/EC
- 2014/30/EU

Function:

The device is intended for cutting and mulching grass or similar vegetation in well-maintained grounds that must be cut at least once a year.

Applied standards:

DIN EN ISO 5395

Applies to 2000/14/EC:

Applied conformity assessment procedure

Annex VI

Type	AS 900 ENDURO	AS 915 ENDURO	AS 980 ENDURO
Measured sound level	98,0 dB	98,0 dB	98,0 dB
Guaranteed sound power level	100 dB	100 dB	100 dB

Notified body: ECO CERTIFICAZIONI SPA, Via Mengolina 33, 48018 Faenza (RA), Italy

Place where all technical records are filed:

AS-Motor Germany GmbH & Co. KG
 Ellwanger Straße 15
 D-74424 Bühlertann

Bühlertann, in December 2017



Eberhard Lange
 Managing director



By proxy Frank Einsiedler
 Head of development



THE HIGH GRASS 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 “WeedHex” mechanically clean paved areas and curb stones from growing weeds – quickly, safely, and efficiently.