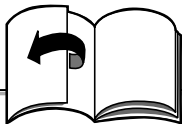


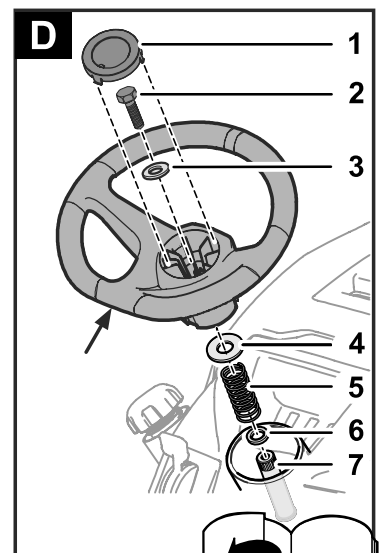
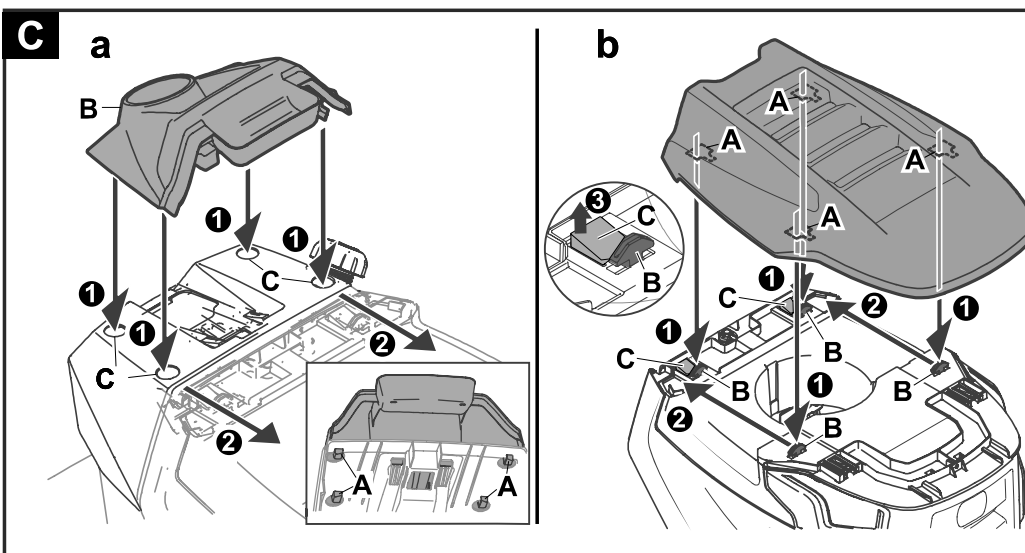
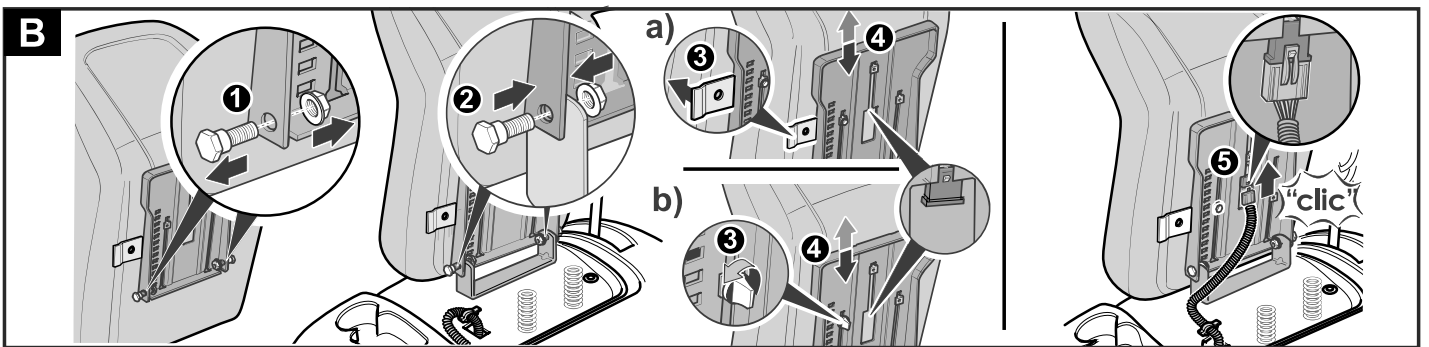
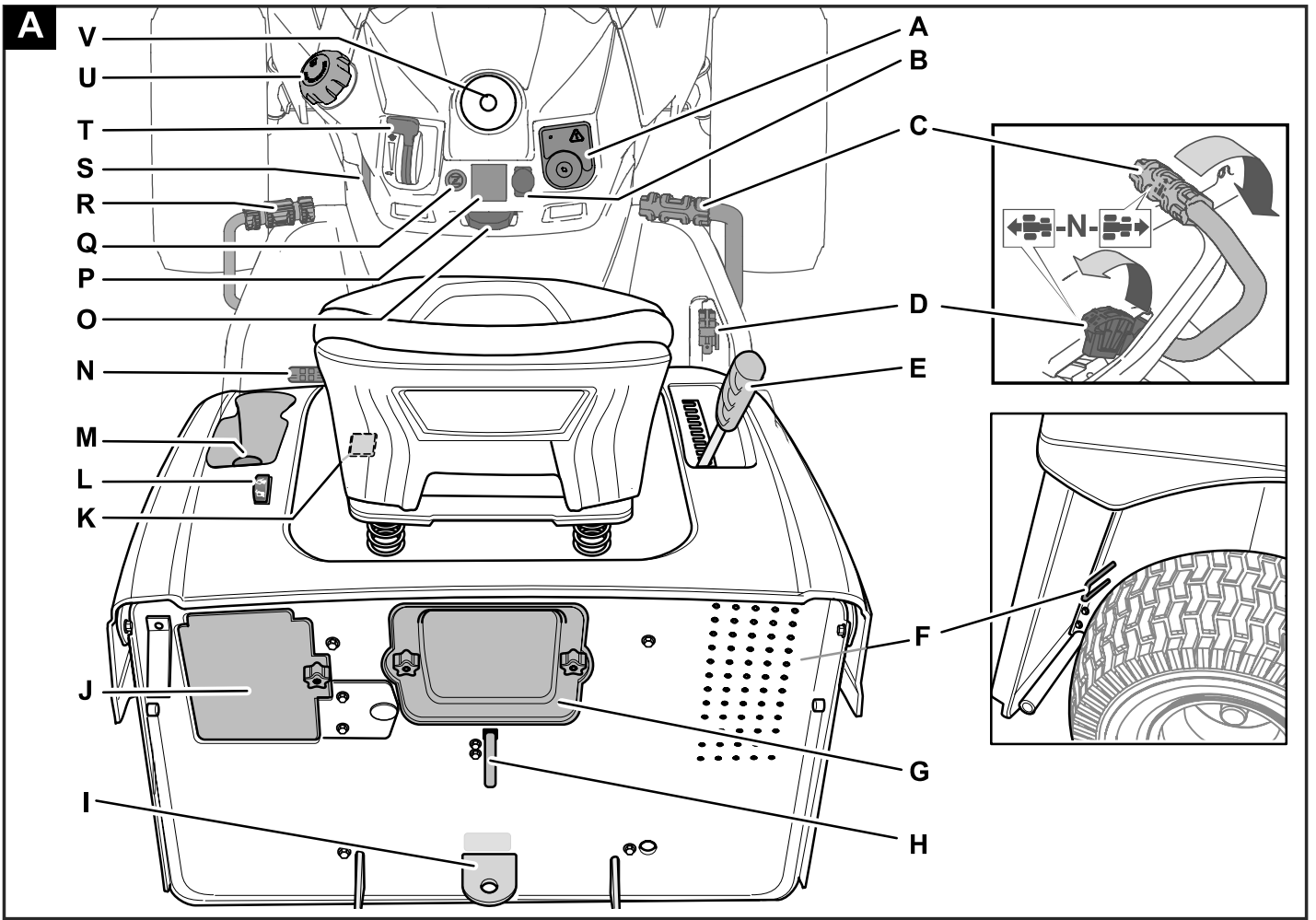
Cub Cadet[®]

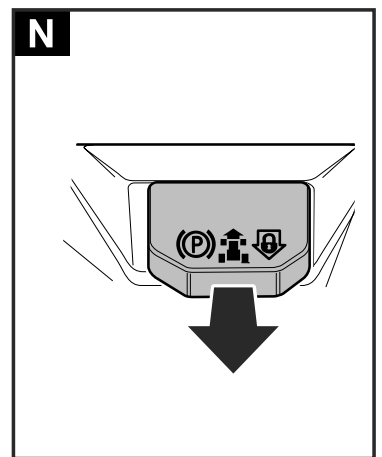
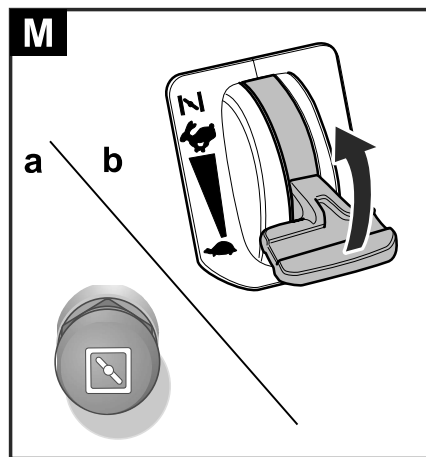
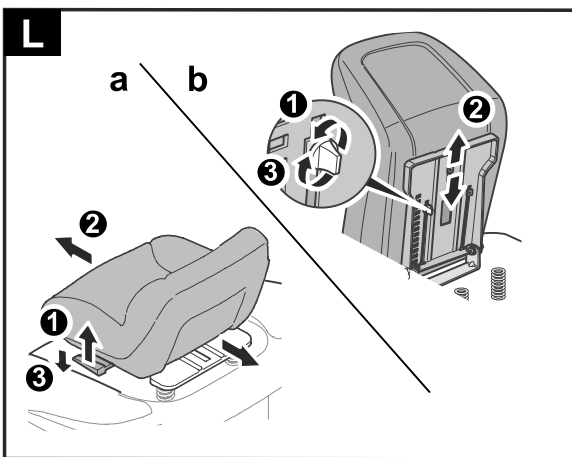
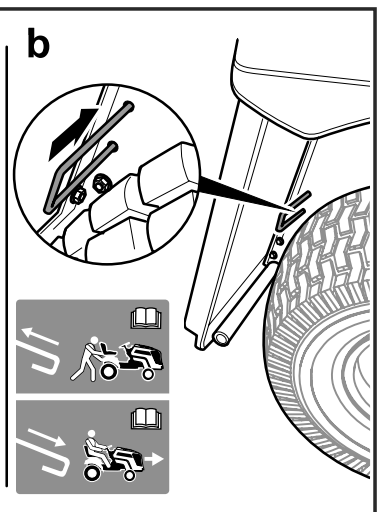
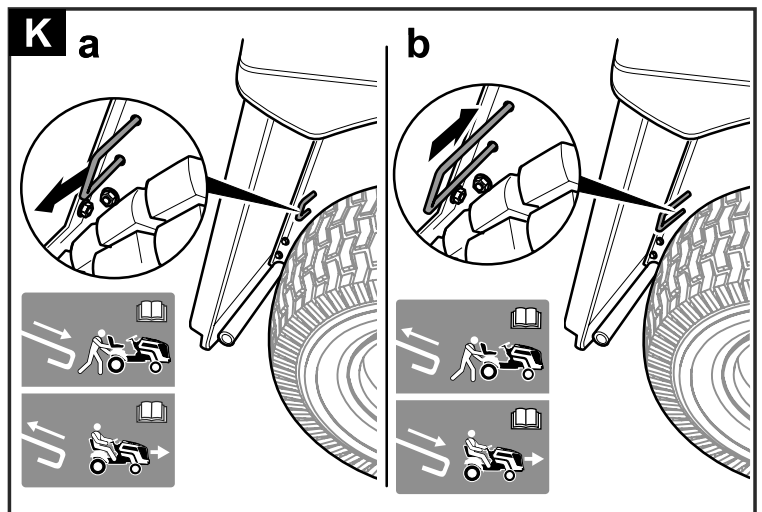
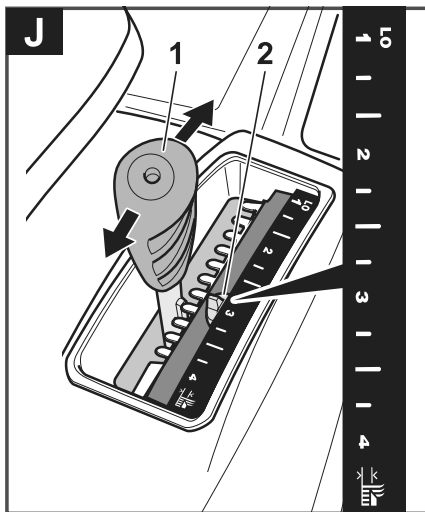
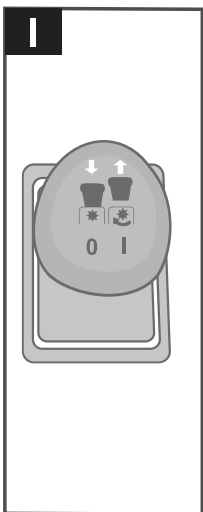
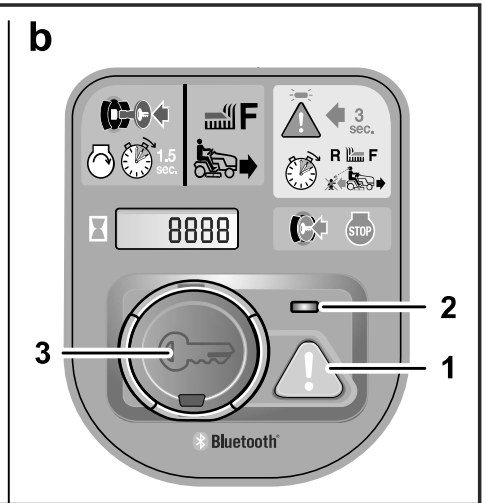
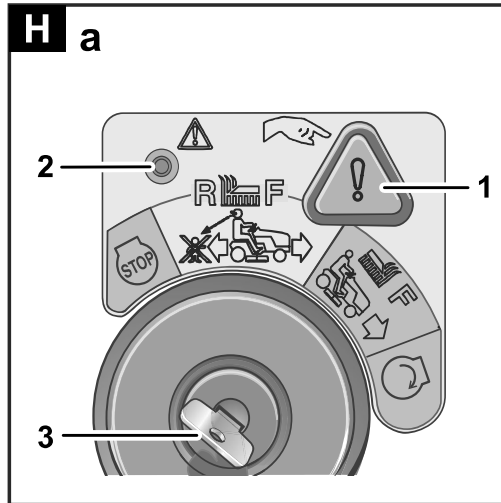
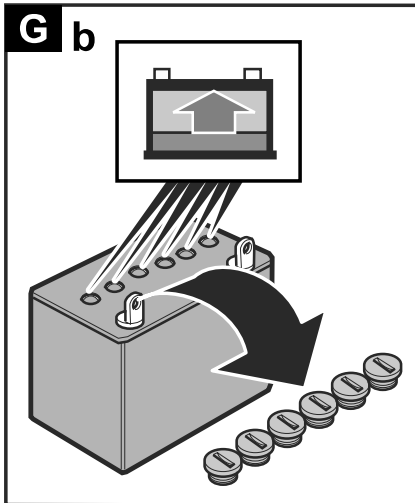
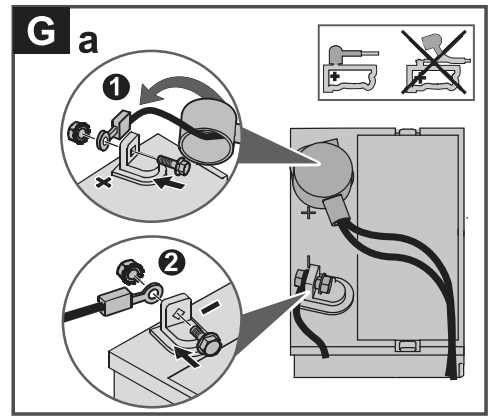
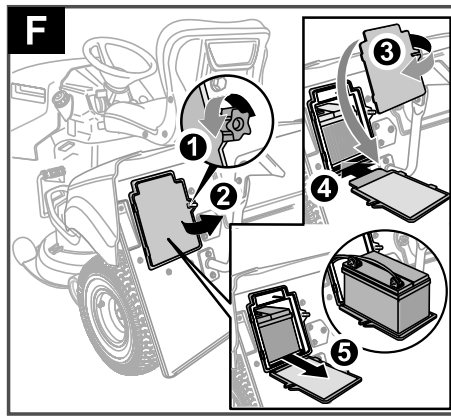
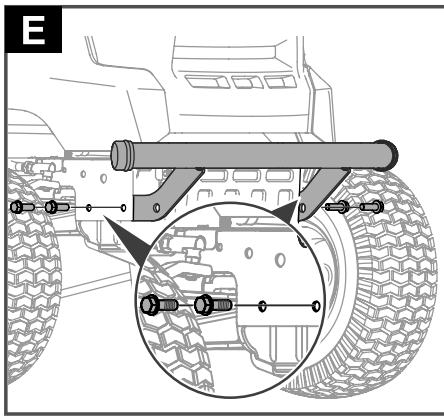


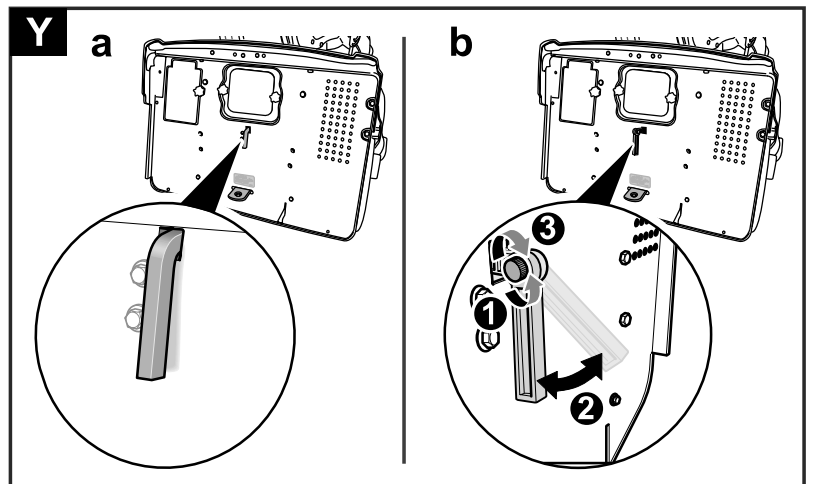
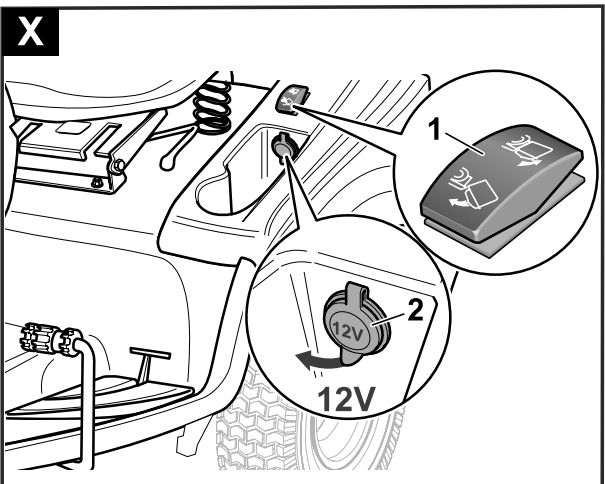
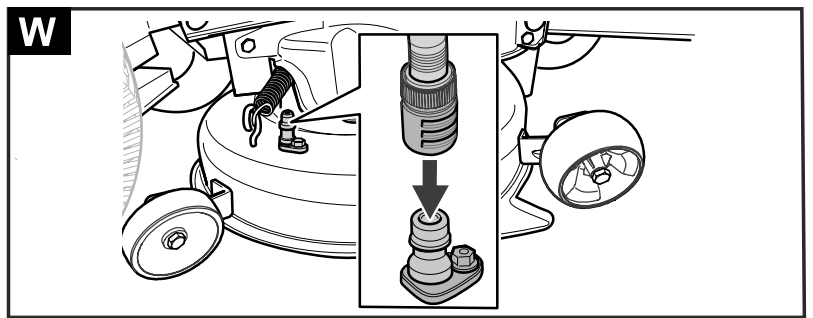
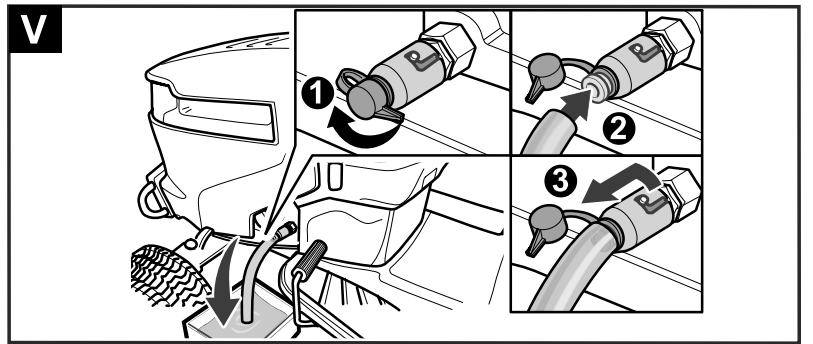
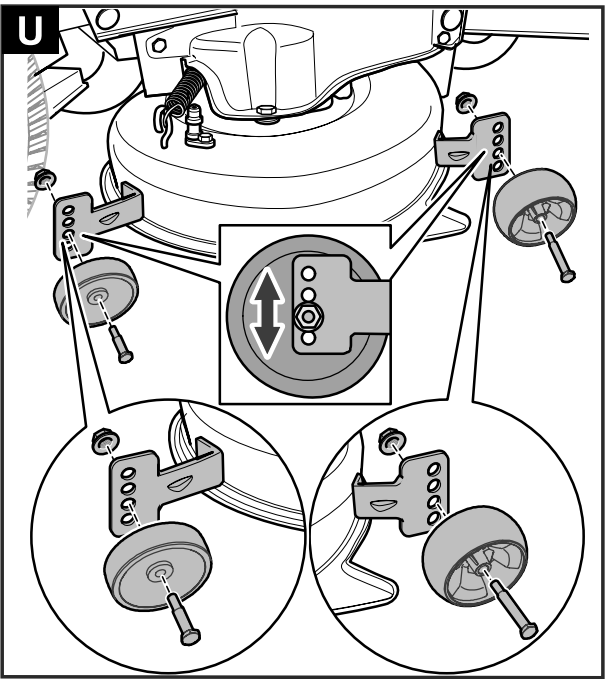
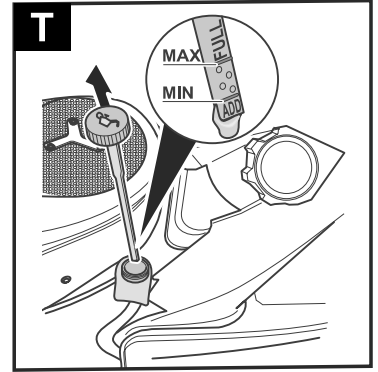
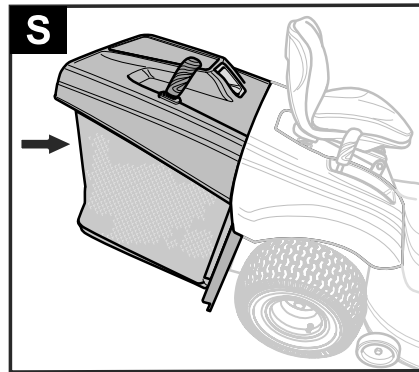
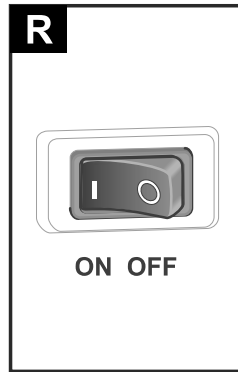
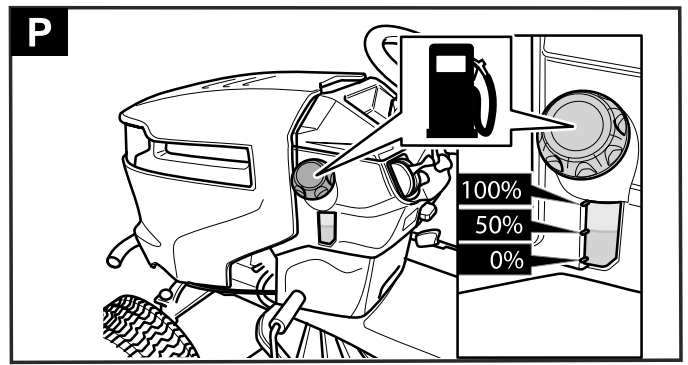
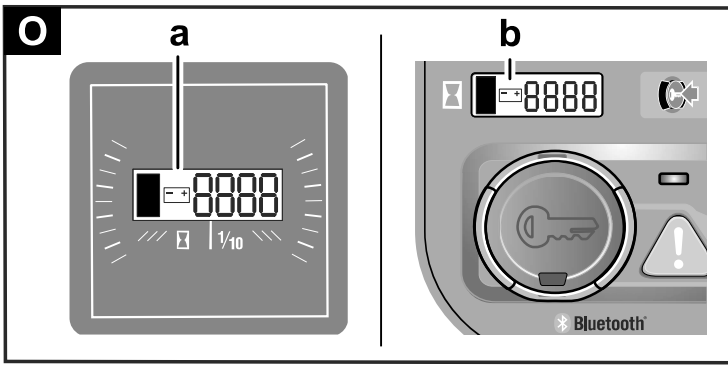
G20
769-11724D

MTD Products Aktiengesellschaft • Saarbrücken • Germany











EN	English (Original operating instructions)	8
FR	Français (Notice d'instructions d'origine)	27
DE	Deutsch (Originalbetriebsanleitung)	48
NL	Nederlands (Originele gebruiksaanwijzing)	68
IT	Italiano (Istruzioni per l'uso originali)	88
ES	Español (Instrucciones de funcionamiento originales)	108
SV	Svenska (Originalbruksanvisning)	129
DA	Dansk (Originale driftsvejledning)	148
NO	Norsk (Originale driftsanvisningen)	167
FI	Suomi (Alkuperäinen käyttöohjekirja)	186
PT	Português (Instruções de serviço originais)	205
EL	Ελληνικά (Αυθεντικές οδηγίες χειρισμού)	226
HU	Magyar (Eredeti üzemeltetési útmutató)	246
PL	Polski (Oryginalna instrukcja obsługi)	265

Contents

Meaning of the symbols.....	8
For your safety.....	9
Safety information.....	10
Intended use.....	13
Identification plate.....	13
Safety devices	13
Assembly	14
Operating controls	16
Start-up.....	16
Operation.....	16
Display cluster (depending on the model; optional).....	20
Servicing.....	22
Removing/installing and adjusting the cutter deck.....	24
Storage	24
Transport	25
Troubleshooting.....	25
Information on the engine.....	26
Warranty	26
CE Declaration of Conformity.....	26
Environmentally-friendly disposal.....	26

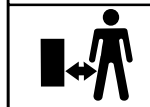
Meaning of the symbols



Warning!
Read the operating manual prior to installation and start-up.



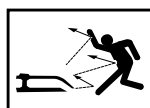
Caution! Bystanders
Keep third parties out of the danger area.



Warning! Rotating blades
Risk of injury posed by rotating blades or parts



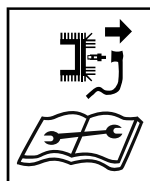
Warning! Rotating blades
Keep hands and feet away from rotating parts. Keep hands and feet away from the mower.



Caution! Projectile debris
Debris picked up by the mower may be ejected at high speed.



Warning! Risk of falling
Do not operate the device on slopes with a gradient greater than 20 %.



Danger! Unintended activation
Prior to working on the device, pull the spark plug connector. Keep hands and feet away from rotating parts.



Danger! Risk of explosion

For your safety



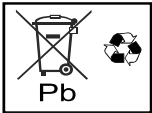
Warning! Risk of chemical burns from battery acid



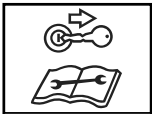
Caution!
Wear safety goggles.



Danger! No fires, sparks, naked flames or smoking



Attention!
Do not dispose of used batteries with domestic waste.



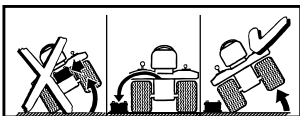
Danger! Unintended activation
Prior to working on the device, remove the ignition key. Follow the instructions in this manual.



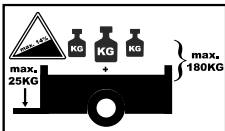
Attention!
Do not stand on the cutter deck.



Warning! Hot surface



Caution!
Before tipping the device, remove the battery.



Warning!
If operating with an attached trailer, do not exceed the following maximum values:

max. gradient: 14 %
max. support load on the trailer coupling: 25 kg
max. trailer load (trailer and load): 180 kg



Note
Always keep these symbols in a legible condition. Replace damaged or illegible symbols.

For your safety

Danger levels of warning information

The following danger levels are used in this instruction manual, to indicate potentially dangerous situations:

⚠ DANGER!



A dangerous situation is highly likely and, if the measures are not followed, will result in severe injury and even death.

⚠ WARNING!



A dangerous situation may occur and, if the measures are not followed, will result in severe injury and even death.

⚠ CAUTION!



A dangerous situation may occur and, if the measures are not followed, will result in slight or minor injuries.

Attention!

A possibly harmful situation may occur which if not avoided will result in property damage.

Safety information content

⚠ DANGER!



Type and source of the danger!
 ↻ Consequences of non-observation
 ➤ Measure for preventing the danger

Safety information



Before using your device for the first time, read this instruction manual carefully and observe the instructions. Please store away this operating manual for later use or future owners.

- Before using for the first time, you must read the safety information!
Failure to observe the instruction manual and the safety instructions can result in damage to the mower and danger for the operator and other persons.
- Make sure that you are familiar with all controls and how to use them correctly.
- All persons involved with the initial set-up, operation and servicing of the mower, must have appropriate qualifications.

The making of unauthorised changes or conversions is not permitted

Do not make any changes to the mower or convert it to make other machinery. Such changes can result in personal injury and incorrect operation.

- Repairs to the mower must only be performed by trained persons who have been instructed to do so. When doing so always use original spare parts. This ensures that the safety of the mower is maintained.

Information symbols in this manual

The signs and symbols in this manual should help you to use the manual and mower quickly and safely.



Note

Information to ensure the most effective and practical use of the mower.

→ Action step

Prompts you to perform an action.

✓ Result of action

Here you can find the result of an action sequence.

[1] Item number

Item numbers are indicated in the text by square brackets [].

A Illustration label

Illustrations are numbered with letters and identified in the text.

① Step number

The defined sequence of steps is numbered and identified in the text.

Protection of yourself and others

- Do not let children or persons who have not read these usage instructions use the device.
- Do not permit children under the age of 16 to handle this power tool or perform other work on the device, such as maintenance, cleaning, adjustment, etc. Local regulations may determine the minimum age for users.
- Any person intending to operate this mower must not be under the influence of intoxicants such as alcohol, drugs or medicines.
- Do not use the mower if you have not received appropriate training or are tired or ill.
- Exercise caution and do not reach into the cutter blades.
- Remember that the operator is responsible for accidents involving other persons and/or their property.
- This device may be used by persons with limited physical, sensory and mental abilities or a lack of experience and knowledge if they are being supervised or have been trained in how to use the device safely and they understand the dangers associated with it.
- Do not put the device in operation if there are people (especially children) or animals in immediate proximity.
- Ensure children do not play with the device.
- Stop moving if you notice that persons (especially children) or animals are nearby.
- Always wear sturdy shoes and long trousers as well as other appropriate personal protective equipment (safety glasses, ear defenders, safety gloves etc.) when working with the device. Wearing personal protective equipment reduces the risk of injuries. Avoid the wearing of loose clothing or clothing with hanging cords or belts. Working without ear protection may result in loss of hearing.

Safety information

Before use

- **Before you begin work, make sure that you are familiar with the device, its controls and how to operate it.**
- **Check whether all fixing elements (nuts, bolts and screws, etc.) are tightly fit to ensure that the device is operated safely.**
- **Only operate the device in a technically faultless state.** Never change the engine settings pre-configured in the factory. Have damage repaired by a qualified technician or service centre.
- **Remove the adjustment tool or wrench before switching on the device.** A tool located in the rotating cutting tools area may lead to injuries.
- **Never use a device with damaged or missing guards.** They must be repaired or replaced by a qualified expert or workshop.
- **Never use the machine without protective devices, and do not remove them!** The protective equipment forms part of the device.
- **Never use the device with defective or damaged safety equipment.** Safety equipment is designed for your protection and must always be in functioning order. You must never make any modifications to safety equipment or bypass their functions.
- **Check the grass catcher for damage and correct mounting.**
- **Before mowing, make sure that the lawn is free from branches, stones, wire etc. and look out for such objects the whole time when mowing.** Items may be seized and flung out.
- **Check (by means of visual inspection) whether the cutting blades and their fixings are blunt, damaged or deformed.**
- **Connect trailers or attachment devices carefully.** Driving performance, especially steering, braking capability, and overall stability are affected by attachments, towed items, ballast weights and the weight of a grass catcher when full.

Tips for use

- **Do not mow lawns which have grass blades longer than 25 cm.**
- **Drive carefully.** Reduce your speed before turning.
- **Do not use the device in potentially explosive atmospheres containing flammable liquids, gases or dusts.** The tool can generate sparks which could ignite dust or vapours. Prevent naked flames, formation of sparks, and do not smoke.
- **Pay particular attention when you are mowing or driving in reverse.** To prevent accidents, drive slowly and glance at the ground behind you as you do so.
- **Adjust the cutting height only with the engine switched off and the cutting tool at a standstill.**
- **Never remove the grass catcher or the optional deflector while the engine is running.**
- **Never drive over gravel or footpaths with the cutters running.** There is a risk of stone chips.
- **Do not mow over overgrown, dry grass (e.g. pasture grass) or over dry heaps of leaves. Do not park the device on dry grass or leaves.** Risk of fire from contact with hot exhausts and when dry grass or leaves gather on the hot mower.
- **Pay attention to traffic when working on roads or when crossing them.** The device is not designed for use on public roads.
- **Never empty the grass catcher while the cutters are running.** While emptying the grass catcher attachment, you or other persons may be injured by cut grass and objects being flung out.
- **Take extra care with opening and closing the grass catcher; there is a risk of crushing.**
- **When mowing close to lawn edges (e.g. close to particularly steep slopes, pits, or under trees, and by bushes and hedges), maintain a safe distance at all times.**
- **If a foreign object (like a stone) comes into contact with the cutting mechanism, or if the device starts to vibrate unusually, switch the motor off immediately.** Inspect the device for damage before continuing operation. If necessary, take it to a service centre.

Safety information

- **Never stand in front of the grass discharge openings.**
- **Switch the engine off and remove the ignition key before you clear the ejector channel of blockages or other hindrances.**

Mowing on steep slopes

- **Do not mow or drive on slopes with an incline greater than 20 %.**
- **Always mow up and down slopes and not across them. Do not turn on slopes.** Working on slopes is dangerous. The device could tip over or slip.
- **Always drive on slopes as gently as possible and brake carefully.** When descending, keep the engine engaged and drive slowly. Exercise particular caution when changing direction.
- **Do not use any heavy add-on devices on slopes of more than 9%, such as transport trailers or lawn rollers.**

After use

- ➔ **If you leave the seat of the device, always switch off the engine.** Always remove the ignition key and engage the parking brake.
- **Ensure that ventilation slots are free from dirt.**
- **Let the engine cool down before you store the device.**

Before carrying out any work on the mower

- **Protect yourself against injury by doing the following prior to all performing work on the device:**
 - Switch off the engine
 - Remove the ignition key
 - Engage the parking brake
 - Wait until all rotating parts have come to a stand-still
 - Wait until the engine has cooled down
 - Pull the spark plug connector off the engine so that the engine cannot inadvertently start.

General safety instructions

- **Never let the engine run when in buildings or poorly ventilated spaces.** Risk of fatality from carbon monoxide poisoning!

- **Spare parts and accessories must satisfy the requirements specified by the manufacturer.** Therefore use only original spare parts/ accessories or spare parts/accessories approved by the manufacturer. Always observe the installation instructions supplied with the parts during replacement. The use of spare parts or accessories not approved by the manufacturer can represent a significant safety risk.
- **Have repairs performed exclusively by a qualified technician or service centre.**
- **Do not carry passengers on the device.** The device is not approved for passenger transport.
- **This device is designed for looking after grass and lawns in a domestic environment.** The device must not be used for purposes other than those intended because of the risk of bodily injury to the user or other persons.
- **Only use the device in daylight or under bright artificial light.** Keep your work area clean and well illuminated.
- **Always have all maintenance work performed punctually to keep the device in a safe operating condition.**
- **The exhaust and engine get hot and can cause burns.** Do not touch!
- **Only use the device in dry weather conditions.** Keep the device away from rain or damp. If used on wet grass, the mower may slip because of reduced adhesion.
- **Do not use the device when raining or there is a risk of lightning.**
- **Never operate the device with the engine hood open or missing.**
- **Handle fuel with care. Fuel and petrol vapour is explosive and petrol is extremely flammable.** Never refuel the device with the engine running or hot. Only refuel the mower outside. Only store fuel in containers approved for that purpose and never within the proximity of sources of heat (e.g. furnaces or boilers). Have a damaged exhaust unit, fuel tank or fuel cap replaced.
- **Do not start the engine if fuel has overflowed.** Push the mower away from the area where the petrol was spilt and wait until the petrol fumes have evaporated.
- **In order to prevent a risk of fire, keep the engine, the battery and the fuel tank free of grass and discharging oil.**
- **Also pay attention to the notes in the engine manual.**

Intended use

This device is designed to be used

- As a lawn tractor for mowing grass areas of a house or gardens.
- With accessories explicitly approved for this lawn tractor.
- In accordance with the descriptions and safety instructions given in these operating instructions.

Any other use is classed as an unintended use. Improper use is not covered by the warranty and the manufacturer will reject any liability. The user is liable for injuries to third parties and damage to their property.

Unauthorised changes to the device exclude liability of the manufacturer for any resulting damage and/or injury.

This device is not approved for operation on public roads, nor for transporting people.

Identification plate

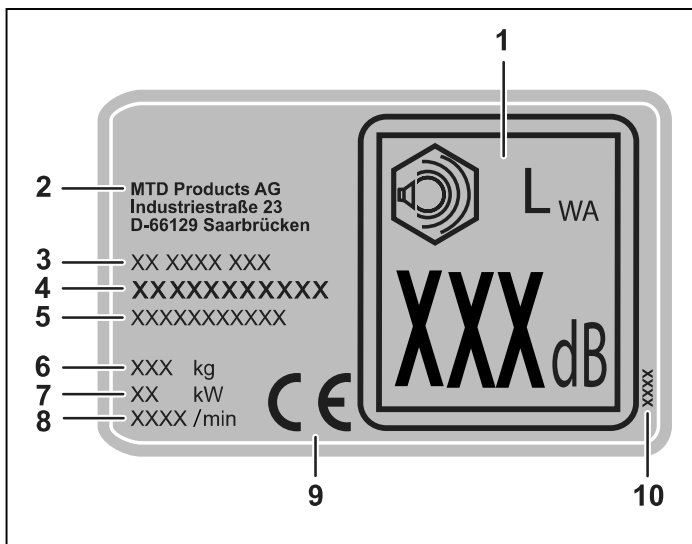
Position

The identification plate is located under / in front of the driver's seat.



Note

The identification is considered as a document. It must never be altered or obliterated.



Layout

- 1 Guaranteed sound level
- 2 Manufacturer
- 3 Model name
- 4 Model number
- 5 Serial number
- 6 Weight
- 7 Output
- 8 Engine speed in rpm
- 9 CE label
- 10 Year of manufacture

Safety devices

Grass catcher **S**

⚠ CAUTION!



Contact with the cutting blade and items flung out

➔ Risk of injury

➤ Only operate the device with the grass catcher attached or an optional deflector.

Safety locking system

The safety locking system will only allow the engine to start when

- The driver is sitting on the seat.
- The brake pedal has been depressed or the parking brake is in the park position.
- The accelerator pedal is at "N".
- the cutter deck has been switched off; i.e.: PTO switch set to "O/Aus/Off" (PTO = Power-Take-Off).

The safety locking system prevents mowing without the grass catcher attached or without the optional deflector attached (automatic engine or cutting mechanism deactivation).

In devices with a PTO switch (electromechanical PTO), the safety locking system automatically switches off the **cutting mechanism** once the operator leaves the seat with the cutting mechanism activated; irrespective of whether the parking brake was activated beforehand.

In devices without an OCR function or with a deactivated OCR function, the safety locking system prevents reversing with the cutting mechanism activated (automatic shutdown of engine or cutting mechanism).

➔ Prior to reversing on devices with PTO, switch off the cutting mechanism using the PTO switch.



Note on devices with a PTO switch

In the case of automatic shutdown through the safety locking system (e.g. reversing or leaving the seat with the cutting mechanism activated), first switch the switch off, and then back on again, to release the clutch lock (PTO).

Directional references

Directional references on the device (e.g. left, right, etc.) always refer to when facing forwards.

Assembly



Note

In order to be able to move the tractor, the gear release lever must be in the appropriate position. Refer to the section "Operation – Pushing the mower".

Attaching the seat **B**

- Remove the screws and nuts on the seat support **1**.
- Fix the seat support to the mounting bracket **2** using the previously removed screws and nuts.
- Press the adjustment lever or open the adjustment screw (depending on the model) **3**.
- Push the seat into a position in which you have good access to the seat connector **4**.
- Attach the connection cable to the seat connector **5**.
- Retighten the seat adjustment screw (depending on the model).



Note

The seat is equipped with a seat-occupation sensor, which belongs to the safety locking system. The device can thus only be operated correctly when the connection cable is correctly inserted into the seat connector.

Attaching the upper dashboard covering (model-dependent) **C a**

- Insert the tabs **(A)** of the dashboard covering **[B]** into the openings of the dashboard support **[C]** **1**.
- Press them forwards until the stop **2**.
- Check the covering fits firmly.

Attaching the engine hood covering (model-dependent) **C b**

- Place the engine hood covering with the recesses **[A]** on the retaining brackets **[B]** on the engine hood **1**.
- Press the covering backwards until the stop **2**.
- Press both clips **[C]** slightly upwards to lock the cover **3**.
- Check the covering fits firmly.

Attaching the steering wheel **D**

- Remove the cover cap **[1]** (design-dependent) on the steering wheel.
- Place the spacer **[6]**, the spring **[5]** and the washer **[4]** onto the steering shaft **[7]**.
- Place the steering wheel on the steering shaft.
- Fasten the steering wheel using the washer **[3]** and the screw **[2]** (tightening torque: 25-28 Nm).



Note

*Put on the washer **[3]** with the bulge facing upwards.*

- Put on the cover cap **[1]**.



Note

After disassembling the steering wheel screw, this must be replaced with a new original screw and screw retention.

Attaching the front bumper (model-dependent) **E**

- Remove the four screws from the front bumper.
- Fasten the front bumper to the tractor frame (inner side) using the previously removed four screws.

Putting the battery into operation

DANGER!



Risk of fire, explosion and corrosion caused by battery acid and gases emitted by battery acid

- Battery acid is corrosive. Immediately clean all parts of the device splashed by battery acid.
- Do not smoke; keep burning and hot objects away.
- Charge batteries in a well ventilated and dry room only.
- There is a risk of a possible short circuit when working with the battery. Do not place any tools or metal objects on the battery.

⚠ DANGER!

Risk of poisoning and injury from battery acid

- Wear safety goggles and protective gloves.
- Do not allow battery acid to come into contact with skin.
- If battery acid is sprayed in your face or eyes, wash it off immediately with cold water and seek medical attention.
- If you have swallowed battery acid, drink a lot of water and seek medical attention.
- Store batteries out of the reach of children.
- Never tilt the battery, as battery acid may run out.
- Bring the remaining, unused battery acid to your dealer or to a waste disposal company.

Attention!

- Disconnect and connect the battery in the correct sequence.
- Only operate the battery with the battery terminal cover fitted (depending on the model, as a cover flap on the positive terminal or a complete protective battery cover).

**Note**

The battery is located in the battery compartment on the rear of the device **F**.

To open the battery compartment, remove the two tommy nuts and take off the cover. Depending on the model, the removed cover may be used as a storage facility for the battery; e.g. when installing/removing the battery.

To make use of this option, insert the cover into the slot beneath the battery compartment **F**.

Installation **G a**

- ➔ First connect the red cable (+ / positive terminal) **1**.
- ➔ Then connect the black cable (- / negative terminal) **2**.
- ➔ Attach the battery terminal cover.

Removal

- ➔ Remove the battery terminal cover.
- ➔ First disconnect the black cable (- / negative terminal).
- ➔ Then disconnect the red cable (+ / positive terminal).

In the event of a maintenance-free / sealed battery (type 1) being supplied
(Battery without sealing plugs)**⚠ WARNING!**

Electrolyte fluid may even discharge from sealed batteries

- ➔ Risk of injury and fire
- ➔ Avoid tipping the battery over

- ➔ Before first putting into operation, charge the battery with a 12 Volt battery charger (maximum charging current 6 amps) for one to two hours.
- ➔ After charging the battery, first pull out the battery charger plug.
- ➔ Then disconnect the battery (see also operating instructions for the battery charger).

Attention!

- ➔ Follow the instructions in the operating manual for your battery charger.

In the event of an unfilled battery being delivered (type 2)

(Battery with sealing plugs)

- ➔ Remove the sealing plugs from the battery cells **G b**.
- ➔ Fill each cell slowly with battery acid up to 1 cm below the fill opening.
- ➔ Leave the battery standing for 30 mins.
- ➔ Check the acid level, and top up with battery acid if necessary.
- ➔ Before first putting into operation, charge the battery with a 12 Volt battery charger (maximum charging current 6 amps) for one to two hours.
- ➔ After charging the battery, first pull out the battery charger plug.
- ➔ Then disconnect the battery.
- ➔ Attach the sealing plugs to the battery.
- ➔ Install the battery in the device.
- ➔ First connect the red cable (+), then the black cable (-).

Attention!

- ➔ Follow the instructions in the operating manual for your battery charger.

**Note**

Later only fill the battery with distilled water (inspect every two months).

Attaching the grass catcher

- ➔ Read and observe the separate operating instructions 'Grass Catcher'.

Operating controls

Overview **A**

- A** Ignition lock (model-dependent)
 - 1** Ignition lock with key for turning
 - 2** Ignition lock with key for pressing (also with a Bluetooth service function on certain models)
- B** PTO switch (model-dependent)
- C** Forward-drive pedal
- D** Reversing pedal
- E** Cutting height adjustment lever
- F** Gear release lever
- G** Discharge chute
- H** Fill level sensor for grass catcher (model-dependent)
- I** Trailer coupling
- J** Battery compartment
- K** Seat adjustment lever
- L** Switch for electric collection basket lifting mechanism (model-dependent)
- M** Storage compartment with cup holder, dependent on model with optional 12 volt socket
- N** Pedal for differential lock (model-dependent)
- O** Switch for parking brake / cruise control
- P** Indicator panel (model-dependent)
- Q** Choke (model-dependent)
- R** Braking pedal
- S** Tank level indicator
- T** Throttle / choke (model-dependent)
- U** Fuel tank
- V** Steering wheel (not visible)

Start-up

Before operating the unit, always

Check:

- All protective equipment
- The engine oil level (see the engine handbook)
- The fuel level
- Tyre pressure
- The side coverings, accessory equipment, the area around the air filter for dirt and grass

Fill up with fuel and check the oil level



Note

The engine has already been filled with oil in the factory – please check the oil, if required refill.

- Refuel with unleaded petrol **P**.
- Fill fuel tank up to max. 2 cm below the lower edge of the inlet nozzle.
- Seal the fuel tank tightly.
- Check the oil level **T**. The oil level must be between the "Full/Max" and "Add/Min" markings (also refer to the motor manual).

Check tyre pressure



Note

For reasons of manufacture, tyre pressure may be higher than required.

→ Check the tyre pressure and correct it where necessary.

Front	0.9 bar
Rear	0.7 bar

Adjusting the driver's seat **L**

→ Pull the lever and adjust the seat **L a**.

or

Release the adjusting screw, set the seat and tighten the adjusting screw once again **L b**.

Adjusting the cutting mechanism wheels **U**

The cutter wheels should never be lower than 6-12 mm above the ground at the lowest cutter position. The cutter wheels are not designed to bear the loads generated by the cutters and may have to be offset accordingly. They are used solely for compensating for floor unevenness.

→ Always move the cutting wheels so they line up evenly.

Operation

Attention!

- Also observe the information in the operating manual for the engine.



Note

Comply with the national/municipal regulations concerning the times when the appliance may be used (if required, contact your local authority).

Engaging / disengaging the parking brake **A N**



- To engage the parking brake, step down fully on the brake pedal **A R** and press the switch **N**.
- To disengage the parking brake, step on the brake pedal **A R** until the switch **N** is released.

Attention!



- Always switch on the parking brake before leaving the device.









Setting the engine speed



You can set the engine speed with infinite variability using the throttle.


Fast engine speed = 
Slow engine speed = 


Starting the engine

 **Note**
The choke  is used for starting the device when the engine is cold. Some models have no choke. The engine is automatically set to the particular starting process.

- Open the fuel tap (if present, see engine manual).
 - Sit down on the driver's seat.
 - Switch the cutter deck off.
 - Switch the parking brake on.
 - Set the throttle to .
 - **If the engine is cold**, pull the choke / set the throttle to .
 - Press the ignition key  (depending on the ignition lock):
 - Insert the ignition key into the ignition lock .
 - Turn the ignition key to  until the engine starts running. Release the ignition key.
 - The ignition key stays in the normal position.
 -   **F** (Mowing in a forward direction) **a**.
- or
- Insert the ignition key  in the ignition lock and press it downwards for at least 1.5 seconds until the engine starts running.
 - Release the ignition key.
 - ✓ The ignition key stays in the normal position.





  **F** (Mowing in a forward direction) **b**.

 **Note**
A start attempt should take a maximum of 5 seconds. Wait 10 seconds until the next attempt.

 **Note**
The OCR function must not be activated during the start process (see section "OCR function").

- Reset the choke / throttle slowly until the engine is running smoothly.

Stopping the engine

- Set the throttle to the middle position.
- Let the engine run for approx. 20 seconds.
- Set the ignition key (model-dependent) to   **a** or press the ignition key downwards and release it   **b**.
- Remove the ignition key.

Driving


WARNING!



Risk posed by abrupt starting, sudden stopping and driving at an excessively high speed.

- Risk of accidents
- Drive slowly and brake slowly.
- Do not drive at excessive speed.
- Never change the direction of travel without first bringing the unit to a standstill.

- Release the parking brake by pushing right through the brake pedal and then releasing it again.
- To drive away, step on the accelerator pedal.


 **Note**
The further you step on the accelerator pedal, the quicker the machine will go.

Driving with cruise control

- Press the switch while driving.
- ✓ The forward speed selected at this point (but not top speed) is maintained.
- ✓ You can take your foot off the accelerator pedal.
- To deactivate cruise control, step on the brake pedal / accelerator pedal until the switch is released again.



Stopping the device


- Take your foot off the accelerator pedal **C** or **D**.
- Step on the brake pedal **R** until the device comes to a standstill.

 **Note**
When you step on the brake pedal, you simultaneously switch the cruise control off.

Switching the cutting mechanism on/off

With the **PTO switch**, the cutting mechanism is switched on and off through an electromechanical coupling.

- To switch the cutting mechanism on, pull the PTO switch .
- To switch the cutting mechanism off, press the PTO switch .

 **Note on the PTO switch**
In the case of automatic shutdown through the safety locking system (e.g. reversing with the cutting mechanism activated), the switch must first be switched off and then back on again, to release the clutch lock.

Adjusting the cutting height

- To set the cutting height, press the cutting height adjustment lever **[1]**.



Note

"4" is the largest possible cutting height (approx. 10 cm); the cutting mechanism is located right at the top.
 "Lo/1" is the smallest cutting height (approx. 2.5 cm); the cutting mechanism is located right at the bottom.
 Depending on the model, the control panel is equipped with an adjustable position indicator **[2]**. This helps you find the required cutting height more quickly.

Mowing


CAUTION!



- Items flung out (cut grass, stones, etc.)
- Risk of injury
 - Only empty the grass catcher when the cutters are switched off.
 - Only operate the device with the grass catcher attached or an optional deflector.

Attention!

- If a foreign object (like a stone) comes into contact with the cutting mechanism, or if the device starts to vibrate unusually, switch the engine off immediately.
- Inspect the device for damage before continuing operation. In the event of damage, discontinue use of the device and have it repaired by a service centre prior to putting back into operation.
- Do not activate the cutter deck in high grass.

- Start the engine as indicated.
- Set the throttle to .
- Switch the cutter deck on and then lower it.
- Release the parking brake by pushing right through the brake pedal and then releasing it again.
- To drive off, press on the accelerator pedal.



Notes on mowing

Do not mow wet grass. Drive slowly at maximum engine speed.
 Mowing on tall or wet grass may lead to uneven grass accumulation / blockages in the discharge chute.



Notes on mowing

Depending on the model, the device may have a fill level indicator for the grass catcher. The fill level sensor **Y** measures the extent to which the grass catcher is filled during mowing. When the grass catcher is full, an acoustic signal sounds and, depending on the model, the cutting mechanism automatically, simultaneously switches itself. The grass catcher must then be emptied prior to further mowing. The sound signal is only deactivated after emptying the grass catcher.

Setting the fill level sensor (model-dependent) b

WARNING!



Risk of injury

- Only make adjustments to the fill level sensor when the engine is switched off, the parking brake is engaged, the ignition key is removed and the grass catcher has been detached.



Note

This kind of setting is only possible on devices equipped with an adjustable fill level sensor.

The measuring angle of the fill level sensor can be changed (multiple locking positions) and thus matched to the consistency of the grass cuttings. In this process, the degree of filling of the grass catcher is influenced at the same time.

- To reduce the measuring angle, undo the knurled screw of the fill level indicator **①**.
- Move the adjustable part of the fill level sensor forwards in the direction of the rear panel into the desired position **②**.
- Re-tighten the knurled screw **③**.
- ✓ The sound signal is triggered later; the cutting mechanism is deactivated later, depending on the model.



Note

Ideal for short, very dry grass cuttings.

- To increase the measuring angle, undo the knurled screw of the fill level indicator **①**.
- Move the adjustable part of the fill level sensor towards the rear into the desired position **②**.
- Re-tighten the knurled screw **③**.
- ✓ The sound signal is triggered earlier; the cutting mechanism is deactivated earlier, depending on the model.



Note

Ideal for lush, damp grass.


OCR function (model-dependent)

The ignition lock is fitted with an OCR function, which offers you user-controlled mowing, even when reversing.



Notes on mowing


Only use the OCR function if absolutely necessary.

- Start the engine.
- Turn the ignition key **[3]** anti-clockwise from normal position to reverse-mowing position  and press the switch **[1] a**.

or

Press the switch **[1] b** for 3 seconds.



- ✓ The indicator lamp **[2]** is lit. You can now mow both when moving forwards and when reversing.
- To terminate the OCR function, turn the ignition key clockwise to the normal position  **F**.
- or
- Press the switch **[1] b** downwards and then release it.
- ✓ The indicator lamp goes out.



Notes on the ignition lock

The OCR function is switched off automatically once the key is turned to the normal position or the engine is shut down (stop position or shutdown of the engine through the safety lock system).



Information about the ignition lock

The OCR function is switched off automatically once the OCR switch is pressed, the engine is shut down or the safety lock system automatically switches the engine or the cutting mechanism off.

Mulching

With mulching, the grass is cut into small pieces (approx. 1 cm) during mowing and is left on the ground. A lot of the nutrients in the cut grass are retained for the benefit of the lawn.


- Ask your specialist dealer for appropriate mulching accessories.

Emptying the grass catcher (model-dependent)

- Read and observe the separate operating instructions 'Grass Catcher'.



Note

Depending on the model, the device may have a fill level indicator for the grass catcher. The switch  **[1]** is used to open and close the grass catcher electromechanically. Operation – See separate "Grass Collector" operating instructions.

Tips on lawn care

A lawn comprises various grass types. If you mow more frequently, the growth of strongly-rooting grasses is favoured resulting in firm turf. If you mow only rarely, the growth of tall grasses and other weeds (e.g. clover, daisies) is encouraged. To ensure you lawn grows healthily and uniformly, without any lines, the cutting stripes must always overlap by a couple of inches/several centimetres.

- The normal height of the grass is 40–50 mm. Cut approximately one third of the overall height as soon as the lawn has reached a height of 60–70 mm.
- Do not cut the lawn shorter than 45 mm as otherwise the turf can be damaged during dry periods.
- Cut long grass in stages until normal height is reached.

Switching on the headlights (model-dependent)

- To turn the headlights on, set the switch to "ON".
- ✓ The headlights light up while the engine is running.



Note

The headlamps switch on and off automatically on models without a light switch.



Note

Depending on the model, the headlights stay lit up for approx. 10 seconds after the engine has shut down and then switch themselves off automatically.

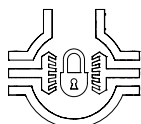
Switching the differential lock on and off (model-dependent)

WARNING!




An activated differential lock has a strong influence on the steering performance of the device.

- ➔ Risk of injury and damage to the device
- Only use the differential lock when absolutely necessary; e.g. on difficult terrain.
- Only activate the differential lock when the device is at a standstill.
- Do not use the differential lock on paved pathways or downhill.
- Only drive straight when the differential lock is activated.
- Only drive slowly with the differential lock activated.



With the differential lock activated, power is transmitted to both rear wheels. The differential lock intervenes if different wheel speeds are detected.


- ➔ Stop the device.
- ➔ To activate the differential lock, step on the pedal **N**.
- ➔ To deactivate the differential lock, take your foot back off the pedal **N**.

 **Note**
If the differential lock does not release immediately, reduce the speed of the device or bring the device to a standstill.

Switching the device off


- ➔ Stop the device.
- ➔ Switch the cutter deck off.
- ➔ Set the throttle to the middle position.
- ➔ Bring the cutter deck to the top position.
- ➔ Switch the engine off after 20 seconds.
- ➔ Switch the parking brake on.
- ➔ Remove the ignition key.

Pushing the device

 **Note**
The gear release lever is located between the rear panel and the device's right rear wheel.


Devices with differential lock a

- ➔ Switch the engine off.
- ➔ Switch the parking brake off.
- ➔ Pull the gear release lever out fully.
- ✓ You can now push the device.

 **Note**
Before you start the engine, press the gear release lever back in fully.


Devices without differential lock b

- ➔ Switch the engine off.
- ➔ Switch the parking brake off.
- ➔ Press the gear release lever in fully.
- ✓ You can now push the device.


 **Note**
Before starting the engine, pull the gear release lever out again fully.


12-volt socket (model-dependent)

The socket [2] is used for connection of a 12 volt battery charger or connection of miscellaneous 12 volt devices.

 **Note**
Observe the corresponding information of the battery charger or the 12 volt devices that are to be connected.

Display cluster (depending on the model; optional)

 **Note**
The indicators only come on when the engine is running.

 **Note**
If an oil change and air filter maintenance arise simultaneously, the oil change indicator lights up first, then the air filter indicator.

Depending on the design, the indicator panel may consist of the following elements:

Type 1 a in conjunction with the ignition lock a

Operating hour counter

When the ignition is switched on, the battery voltage indicator is displayed for a short period, which then changes to the operating hours indicator. The operating hours are always counted except for when the ignition key is in the "Stop" position or when it is removed.

Display cluster (depending on the model; optional)

Maintenance indicator



Note
TIME means: The total operating hours are displayed.

CHG - OIL - SOON - TIME Changing the oil

→ Change the engine oil immediately (see engine operating manual).

This indicator appears every 50 operating hours for a period of 2 hours.

LO - OIL - TIME Oil level

The engine oil level is too low.


→ If the indicator does not go out, switch the engine off immediately and check the engine oil level (see operating instructions for the engine). Top up the oil if required.

This indicator may appear briefly after the engine has started and then go out again.



Note
This function is only active for engines with an oil pressure switch.

LO - BATT - TIME Battery voltage

If you turn the ignition key to position , the battery voltage is displayed briefly and then the total operating hours.

→ Charge the battery as quickly as possible.
→ It may be necessary to have the charging system checked by a service centre for possible damage.

CLN - AIR - F I L T - TIME Air filter maintenance

→ Perform air filter maintenance immediately (see engine operating manual).

This indicator appears every 25 operating hours for a period of 7 minutes.

Type 2 b in conjunction with the ignition lock b



Note
Depending on the model, the indicator panel may come with a Bluetooth symbol. You can therefore have all of the functions listed below, as well as other ones, displayed on your smartphone. You only require our Connect™ app (available for the Android and iOS operating systems). The Connect™ app provides you with all the important information and notices concerning your device. For example, you are notified when the time comes to check the oil, air filter, battery, cutting blade, etc. or have them serviced.

You can find the Connect™ app at our website www.mtdproducts.eu for download.

Install the app onto your smartphone and follow the step-by-step instructions to synchronise your device to your phone.

Operating hour counter

When the inserted ignition key is pressed for less than 1.5 seconds, the battery voltage is briefly displayed and then changes to the operating hours indicator. Operating hours are only counted if the engine is running.

Maintenance indicator

CHG - OIL Changing the oil

→ Change the engine oil immediately (see engine operating manual).

This indicator appears every 50 operating hours for a period of 2 hours.

LO - OIL - PRESSURE Oil level

The engine oil level is too low.

→ If the indicator does not go out, switch the engine off immediately and check the engine oil level (see operating instructions for the engine). Top up the oil if required.

This indicator may appear briefly after the engine has started and then go out again.



Note
This function is only active for engines with an oil pressure switch.

Battery voltage

LO – BATT	Low (< 11 Volt)
HI – BATT	High (> 16 Volt)

During an engine start, the battery voltage is displayed briefly and then the total operating hours.

If battery voltage too low:

- ➔ Charge the battery as quickly as possible.
- ➔ It may be necessary to have the charging system checked by a service centre for possible damage.

If battery voltage too high:

- ➔ Switch the device off and have the charging system checked by a workshop.

CLN – AIR – F I L T Air filter maintenance

- ➔ Perform air filter maintenance immediately (see engine operating manual).

This indicator appears every 25 operating hours for a period of 7 minutes.

Other indicators in the display

br	Brake / parking brake not actuated during engine start attempt.
Pto	<ul style="list-style-type: none"> a) Mower not switched off during engine start attempt. b) OCR function was not activated prior to mowing in reverse.
SEAT	Operator not sitting on the driver's seat during engine start attempt.

Servicing

⚠ WARNING!



- Risk of injuries or material damage
- Only perform maintenance and cleaning work on the device with the engine at a standstill.
 - Remove the ignition key and the spark-plug connectors.
 - Wait until all moving parts have come to a complete stop and the engine has cooled down.
 - Never reach into the rotating cutter blades.
 - Only have repair and maintenance work and the replacement of safety components performed by a qualified specialist or a specialist service centre.
 - Only have the cutter blades replaced or re-sharpened by a specialist service centre.
 - Clean the device and all add-on and accessory parts after every instance of use.

Cleaning the device

Attention!

- Do **not** use high-pressure cleaners for cleaning the device.
- ➔ Park the mower on firm and level ground.
- ➔ Switch the parking brake on.
- ➔ Clean the device with a scrubbing brush, hand brush or a cloth.

Cleaning the cutter deck

⚠ DANGER!



- Sharp, moving cutting tools
- ➔ Risk of injury
 - Wear protective gloves.
 - Clean the cutting tools carefully.
 - Note that the movement of one cutting tool may lead to the rotation of other cutting tools.

Attention!

Fuel may run into the combustion chamber.

- ➔ Damage to engine
- The mower must not be tilted to an angle greater than 30°.

- ➔ Bring the cutter deck to the top position.
- ➔ Clean the cutting chamber with a scrubbing brush, hand brush or a cloth.

Cutting mechanism with cleaning nozzle (optional)

Cleaning

- ➔ Park the device on a clean and firm foundation.
- ➔ Switch the parking brake on.
- ➔ Use a commercially available quick-release coupling to attach a water hose.
- ➔ Start the engine.
- ➔ Lower the cutter deck and switch it on.
- ➔ Allow the engine and cutter deck to run for a few minutes.
- ➔ Switch the engine and cutter deck off.

**Note**

If available, repeat the steps for the second cleaning nozzle.

Drying

- ➔ Bring the cutter deck to the top position.
- ➔ Start the engine and switch the cutter deck on.
- ➔ To dry the cutter deck, allow the engine and cutter deck to run for a few minutes.
- ➔ Switch the engine and cutter deck off.

Cleaning the grass catcher**Attention!**

- Note the separate operating instructions for the grass catcher.

- ➔ Detach the grass catcher and empty it.
- ➔ Clean the grass catcher with a powerful water jet (e.g. with a garden hose).
- ➔ Allow the grass catcher to dry thoroughly before next use.

Starting the device

- ➔ Observe the servicing instructions in the engine manual.
- ➔ At the end of the season, have the mower inspected and serviced by a service centre.

**Note**

After changing the oil, take the waste oil to a waste oil collecting point or to a waste disposal company.

**Note**

Return used batteries to your dealer or a disposal company. Remove the battery in the device before the device is scrapped.

Using jump leads**⚠ DANGER!**

Risk of explosion / short-circuit

- Never bypass a defective or frozen battery with jump leads.
- Ensure that the units and the jump lead clips do not touch each other and that the ignitions are switched off.

- ➔ Attach the red jump lead to the positive terminal (+) of the discharged battery and to the positive terminal (+) of the donor battery.
- ➔ Connect the black jump lead first to the negative terminal (-) of the donor battery.
- ➔ Attach the other terminal on the frame near to the engine block of the lawn tractor as far away from the battery as possible.

**Note**

If the donor battery is installed in a vehicle, this vehicle must not be started during the jump starting process.

- ➔ Start the lawn tractor.
- ➔ Switch the parking brake on.
- ➔ Disconnect the jump leads in reverse sequence.

Tyre pressure**⚠ WARNING!**

Increased tyre pressure

- ➔ Risk of accident and damage to the device
- Never exceed the permitted tyre pressure (see tyre wall).


- ➔ Check the tyre pressure and correct it where necessary.


Front	0.9 bar
Rear	0.7 bar

**Note**

Excess tyre pressure reduces the service life of the tyres. Check tyre pressure prior to each journey.


After 5 operating hours

- Perform the first engine oil change (for intervals refer to the engine manual).
- Use the quick oil drain (optional) to drain the oil .

 **Note**
When draining the oil, use an appropriate collection container.

Every 25 operating hours

- Lubricate all pivot points and bearing points of the driving and braking pedals, of the cutting height adjustment lever and of the PTO lever with a few drops of light oil.
- Clean the battery pole.
- Lubricate all blade shafts, tensioning pulleys and tensioning pulley holders via the grease nipples using grease type 251H EP.

 **Note**
Arrange for this work to be carried out by a service centre.

- Lubricate the wheel bearings and front wheel axles at the lubricating nozzles using a multi-purpose grease.
- Lubricate the wheels of the cutting mechanism at the lubricating nozzles with a multi-purpose grease.
- Have the dirt and grass residue beneath the V-belt cover of the cutter deck removed by a service centre.

Every 50 operating hours

- Have dirt and grass residue removed from the drive gear by a workshop.
- Have drive belts, blade shafts and clamping rollers checked by a workshop for wear and damage.

Every 2 months

- Only for battery type 2: Fill the battery cells with distilled water up to 1 cm below the fill opening.

If required


Charge the battery:

- If you are not using the battery for lengthy periods, remove the battery from the device.
- Charge the battery every 6–8 weeks, as well as prior to putting back into operation following storage.

 **Note**
Follow the instructions in the operating manual for your battery charger.

Replace fuses:

- Replace defective fuses only with ones of an equal rating.

 **Note**
The fuse is located on the main cable harness between the battery and the engine. Only have a defective fuse replaced by a workshop.

Once a season

- Clean the spark plugs and set the electrode gap or replace the spark plug (see engine manual).
- The rear axles must be lubricated with a special-purpose, water-repellent grease by a service centre.
- Arrange for a specialist workshop to sharpen or replace the cutting tool.


Removing/installing and adjusting the cutter deck

CAUTION!



The hanger/lifting mechanism is spring-loaded and may spring upwards as soon as the cutterdeck is disconnected from the lifting mechanism.

When releasing the cutting height adjustment lever with the cutting mechanism removed, it can spring violently upwards.

 **Note**
Only have this work performed by a workshop.

Storage

Attention!

Damage to appliance materials

- Store the device in a clean, dry enclosed space.
- Protect the device from rust when storing it for lengthy periods of time.
- Protect the device from frost.

- Clean the device and the grass catcher.
- Wipe all metal parts down with an oily cloth or spray them with oil to protect them from rust.
- Charge the battery.
- Remove the battery in the event of long-term storage (e.g. over winter).
- Charge up the battery every 6–8 weeks in the event of long-term storage and before reinstalling.
- Drain the fuel and shut down the engine – see the engine manual.

Transport



Note

The device is not approved for public thoroughfares in accordance with national road legislation (StVO).

Short distances

→ To change the location of use, only drive short distances with the lawn tractor.

Long distances

⚠ WARNING!



Danger posed by unstable and unsecured ramps

- Risk of serious injury to people and severe damage to property
- If you are transporting the device on a trailer or in a lorry, first make sure that the ramp is stable and secure.

⚠ WARNING!



Danger posed by inadequate fastening

- Turbulence during transport
- If you are transporting the device in a trailer or lorry, fasten and secure it properly.

- Transport the device on a transport vehicle over long distances.
- Push the device by hand in idle into/onto the transport vehicle.
- Activate the parking brake and secure the device against slipping.

Troubleshooting


⚠ WARNING!



Risk of injuries or material damage

- In case of doubt always take your mower to a specialist workshop.
- Shut the device down prior to all checks and all work on the cutter deck.
- Protect yourself against injury by doing the following prior to all performing work on the device:
 - Switch off the engine
 - Remove the ignition key
 - Engage the parking brake
 - Wait until all rotating parts have come to a standstill
 - Wait until the engine has cooled down
 - Pull the spark plug connector off the engine so that the engine cannot inadvertently start.

Problem	Possible cause	Remedy
Starter does not turn.	Safety locking system has actuated.	Sit on the driver's seat. Depress the brake pedal fully and activate the parking brake. Switch the PTO off. Attach the grass catcher or the optional deflector to the device.
	Battery not connected correctly.	Connect red cable to the (+) battery terminal and the black cable to the (-) battery terminal.
	Discharged or low battery.	Check and charge the battery. If necessary, replace the battery.
Starter does not turn.	Fuse has tripped.	Replace the fuse. If the fuse trips repeatedly, look for the cause (usually short-circuit).
	Loose earth cable between engine and frame.	Connect the earth cable.

Problem	Possible cause	Remedy
Starter turns but engine does not start.	Choke and throttle in wrong position.	Actuate the choke. Set the throttle to  .
	Carburettor not receiving any fuel, fuel tank empty.	Top up fuel.
	Defective or dirty spark plug.	Check the spark plug (see engine manual).
	No ignition spark.	Arrange for the ignition to be checked in a service centre.
Engine producing smoke.	Too much engine oil in the engine.	Switch the device off immediately. Check the engine oil level.
	Engine defective.	Switch the device off immediately. Have the engine checked in a service centre.
Strong vibrations.	Damaged blade shaft or defective cutter.	Switch the device off immediately. Have defective parts replaced in a service centre.
Cutter deck does not discharge grass or cuts unevenly.	Engine speed too low.	Put your foot down further on the accelerator.
	Travelling speed too high.	Choose a lower driving speed.
	Cutting blade is blunt.	Have the cutting blades sharpened or replaced by a service centre.
Engine is running, cutter deck is not mowing.	V-belt torn.	Have the V-belt replaced in a service centre.

Information on the engine

The engine manufacturer is liable for all engine-related problems with respect to power, power measurement, technical specifications, warranty and service.

Information can be found in the owner's/user handbook supplied separately by the engine manufacturer.

Warranty

The warranty conditions of our local company or importer apply in all countries. Under the terms of the warranty we will repair faults on your device free of charge, insofar as material or manufacturing defects are the cause. To make a claim under warranty please contact your seller or your nearest branch.

CE Declaration of Conformity



Further details about the lawnmower are contained on the separately enclosed CE Declaration of Conformity, which forms part of this instruction manual.

Environmentally-friendly disposal



Dispose of any packaging residue, old devices, etc. which accrue in accordance with local regulations.