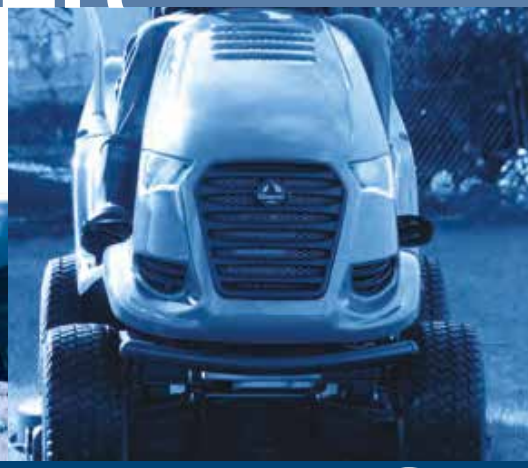
Masport®

RIDE-ON LAWNMOWER





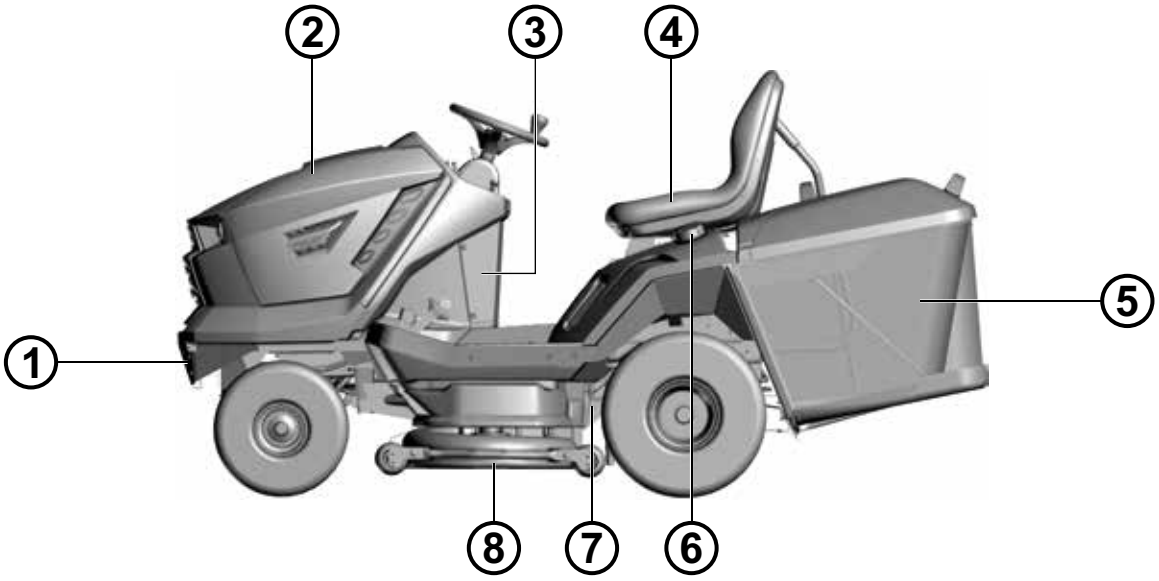
OWNER'S MANUAL

www.masport.com

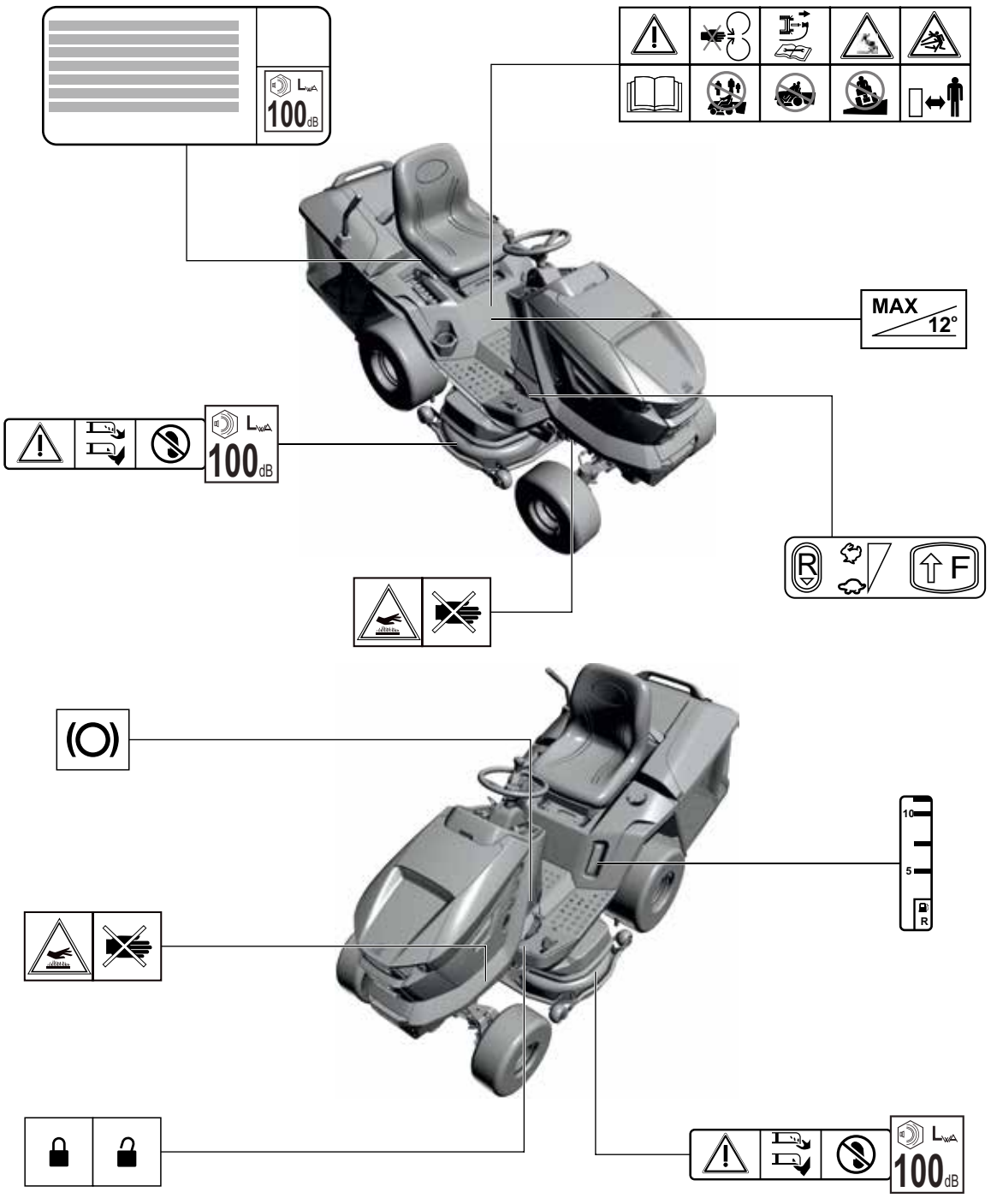
IMPORTANT: Keep these instructions and the engine booklet in a safe place for future reference. They contain important information about your mower.

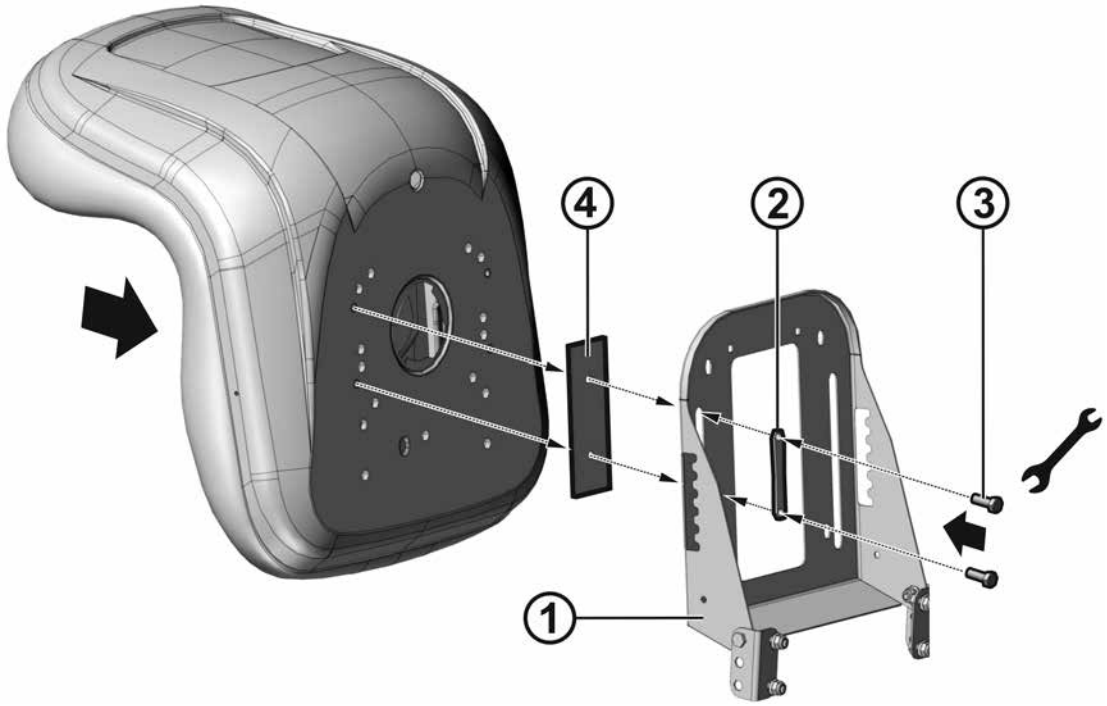
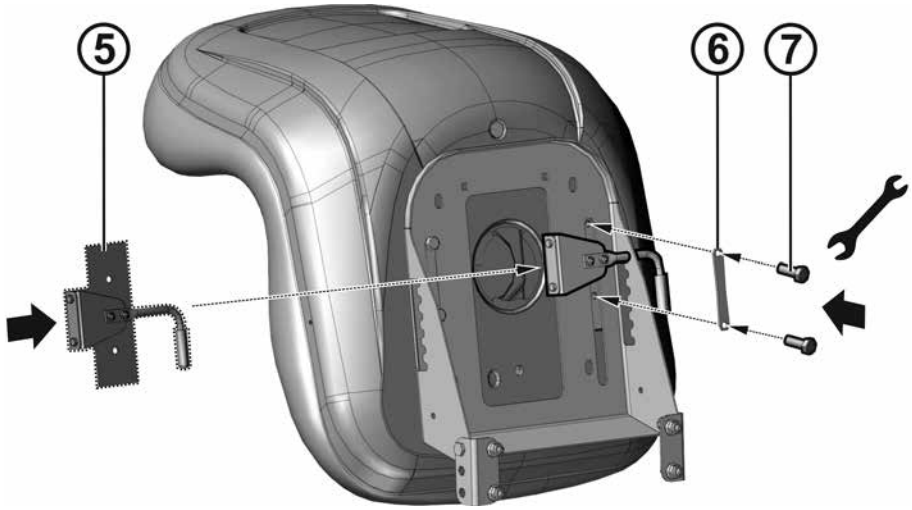
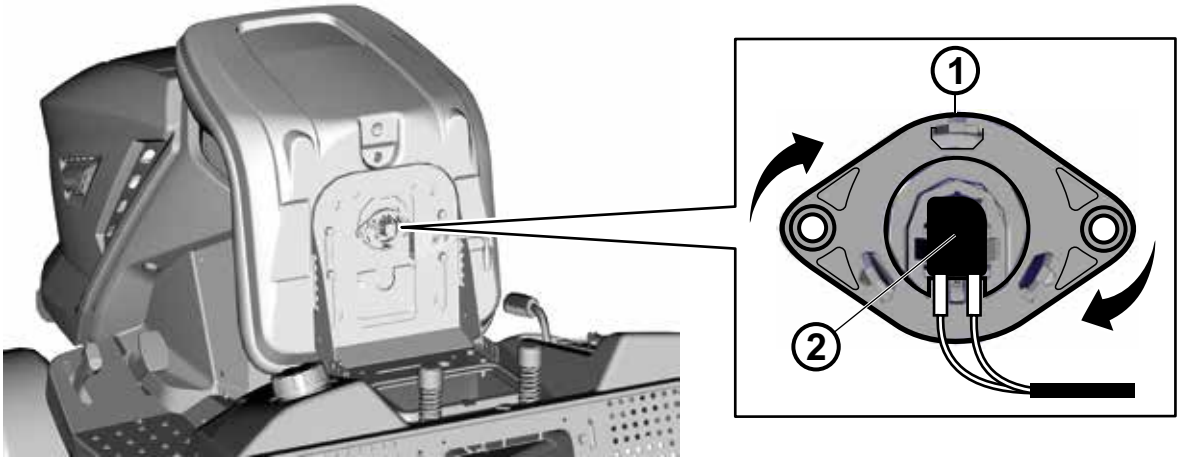
Part No: 543805.A.0

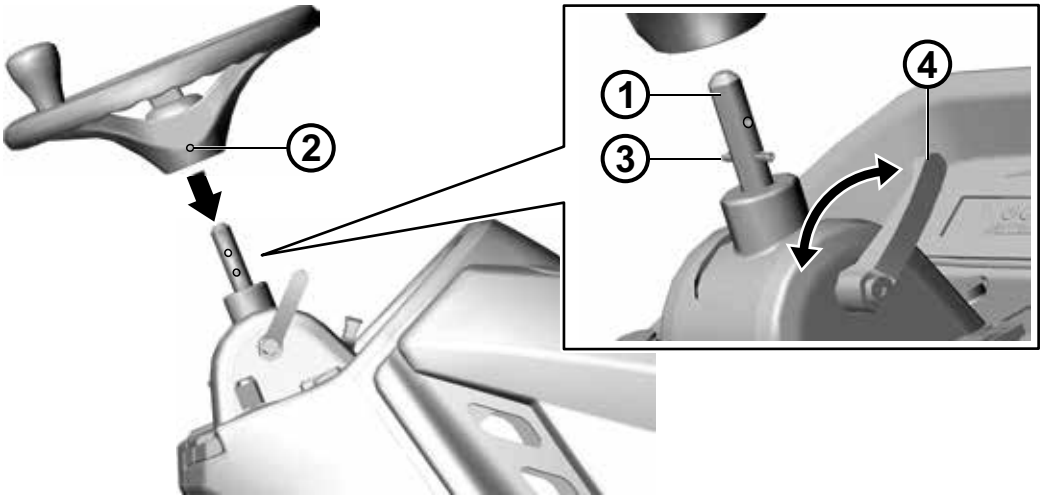
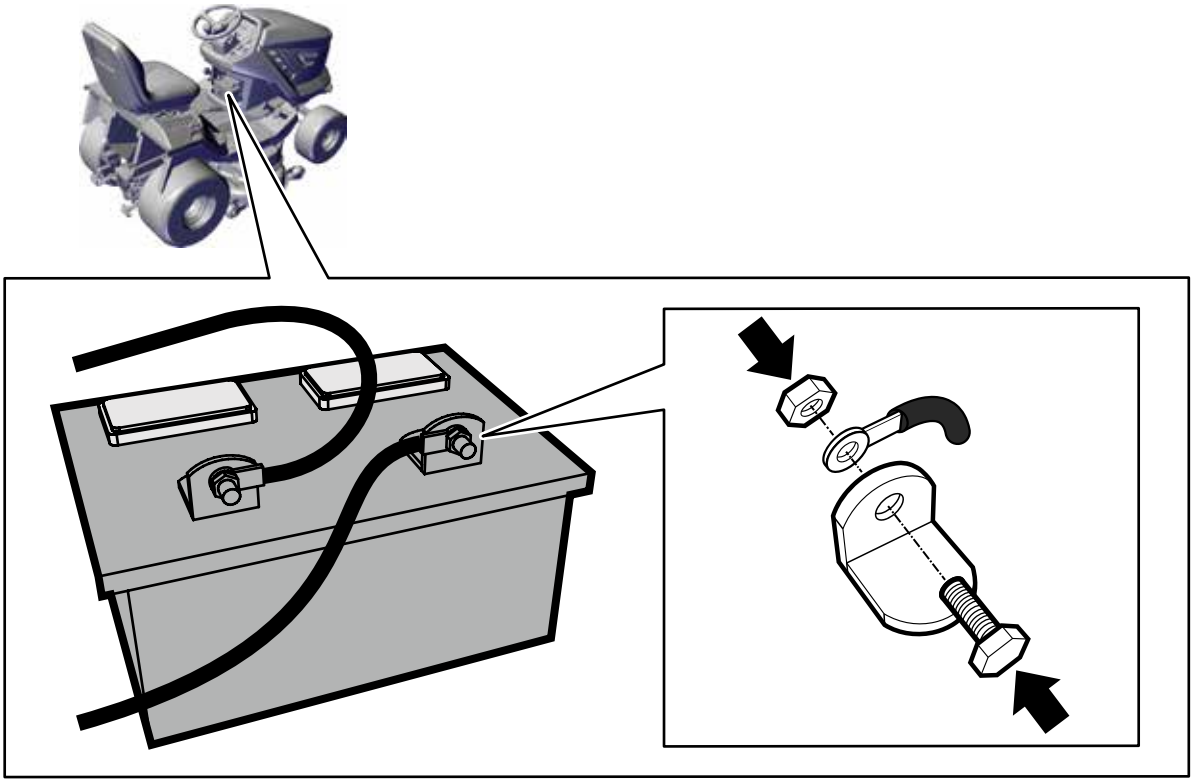
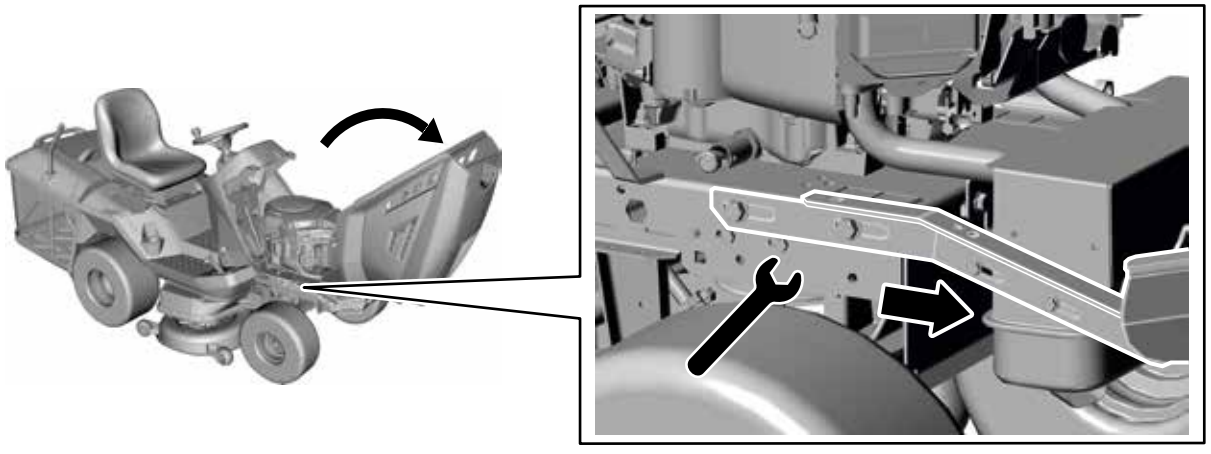
1.2

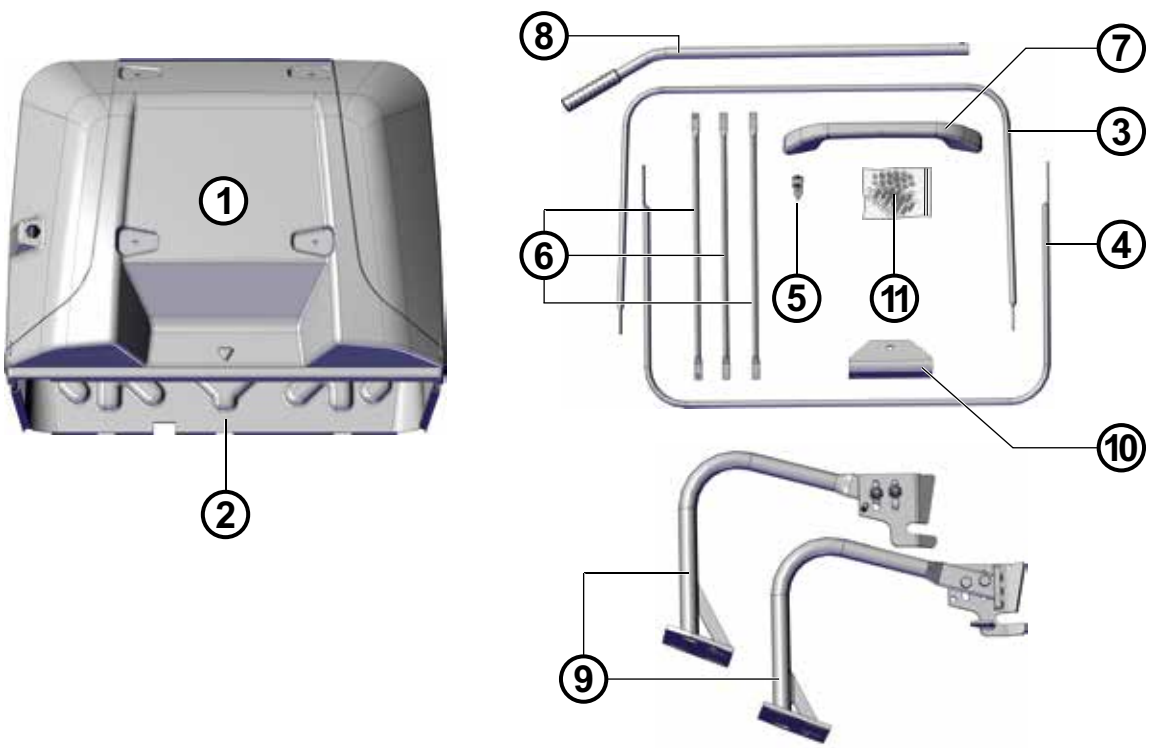
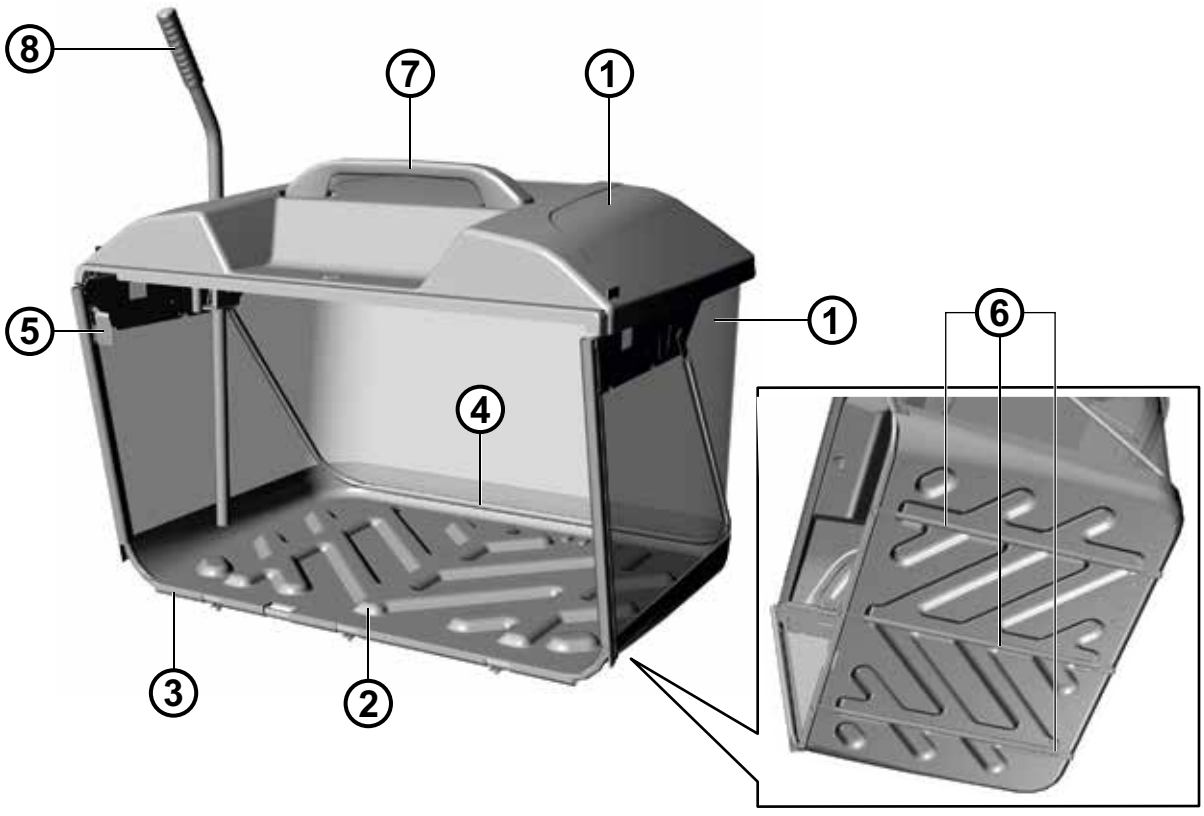


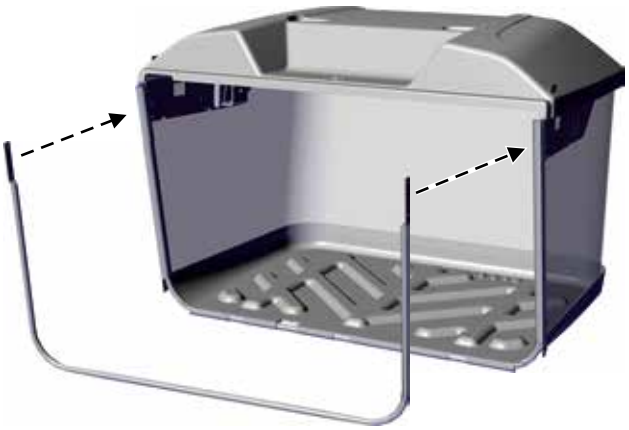
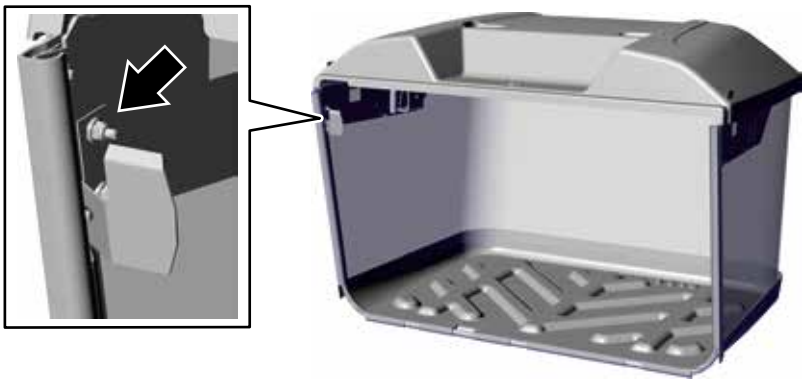
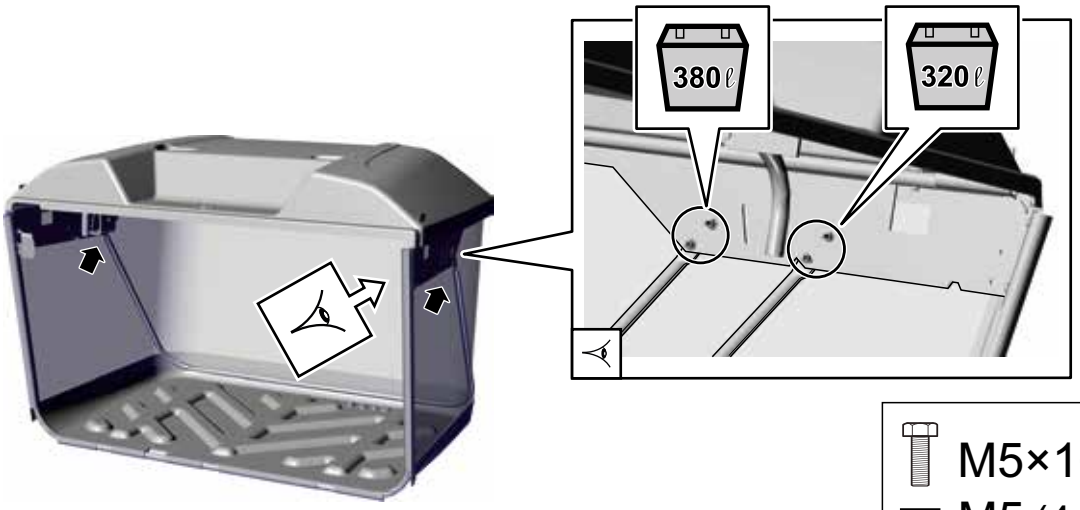
1.3



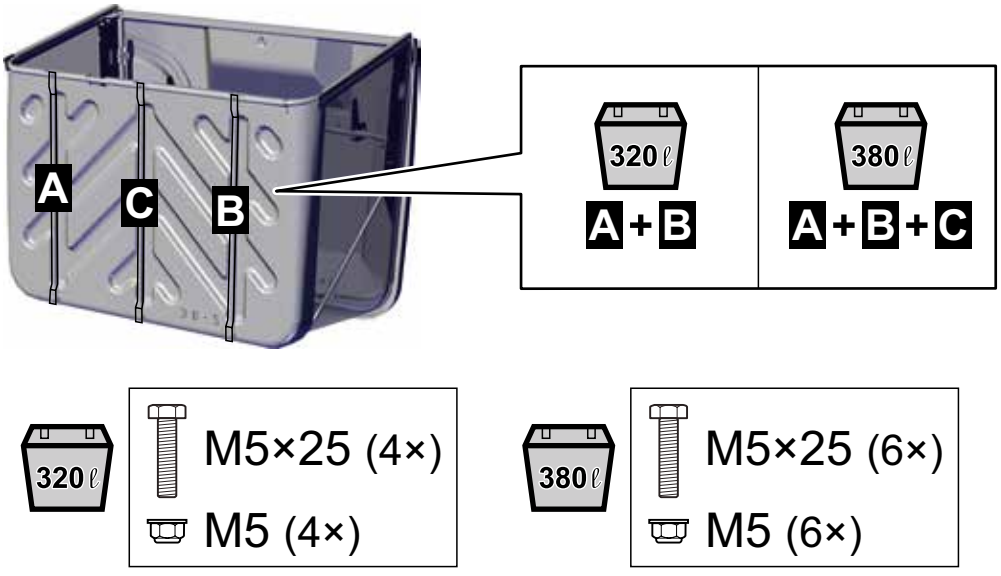
3.6.1a	
3.6.1b	
3.6.1c	

3.6.1d	
3.6.1e	
3.6.1f	

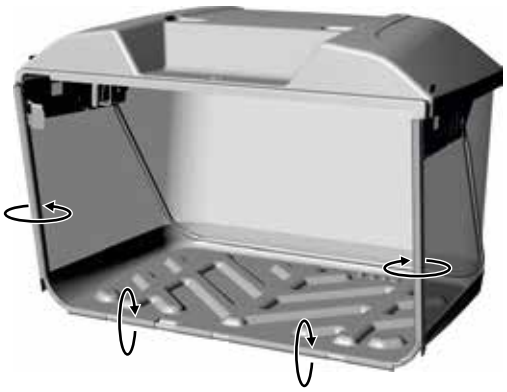
3.6.2a	 1 2 8 7 3 6 5 11 4 10 9
3.6.2b	 8 7 1 5 1 6 4 3 2

3.6.2c	 M5×16 (4×) M5 (4×)
3.6.2d	 M5×16 (2×) M5 (2×)
3.6.2e	 M5×16 (4×) M5 (4×)

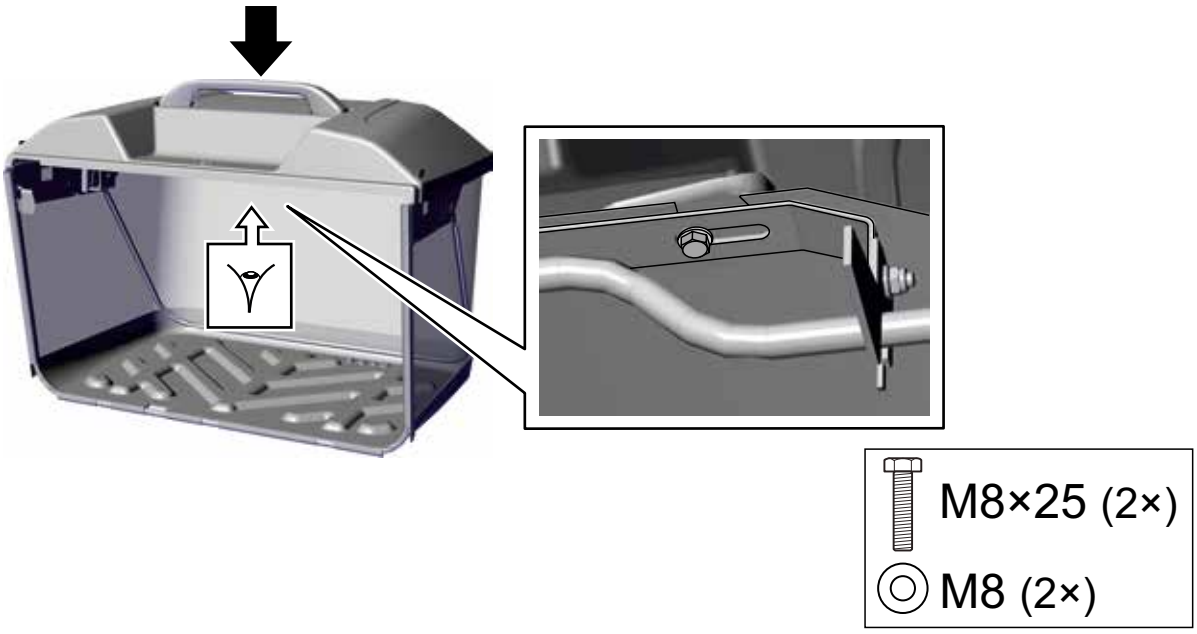
3.6.2f

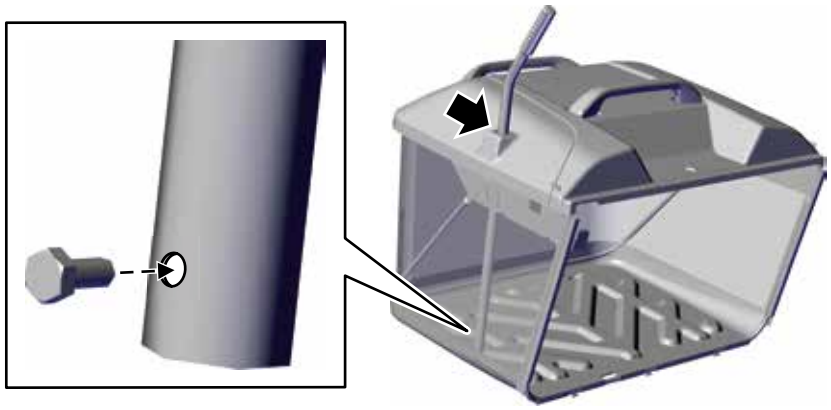
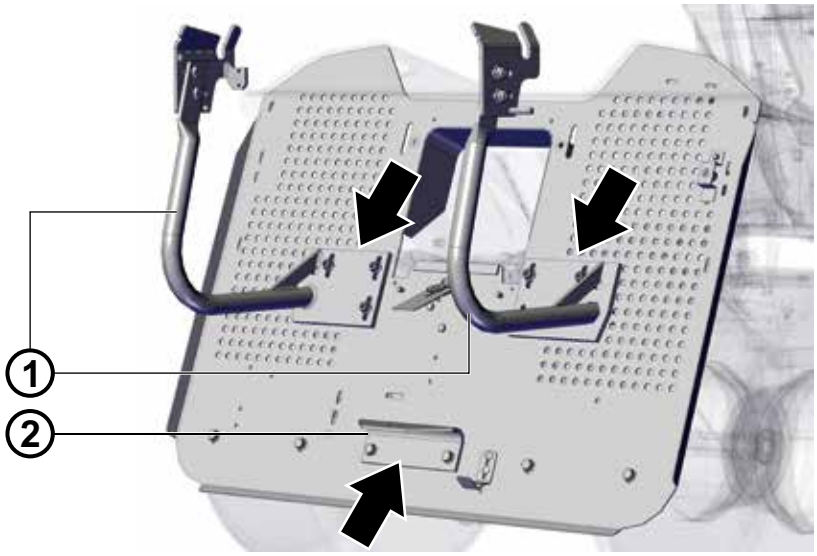
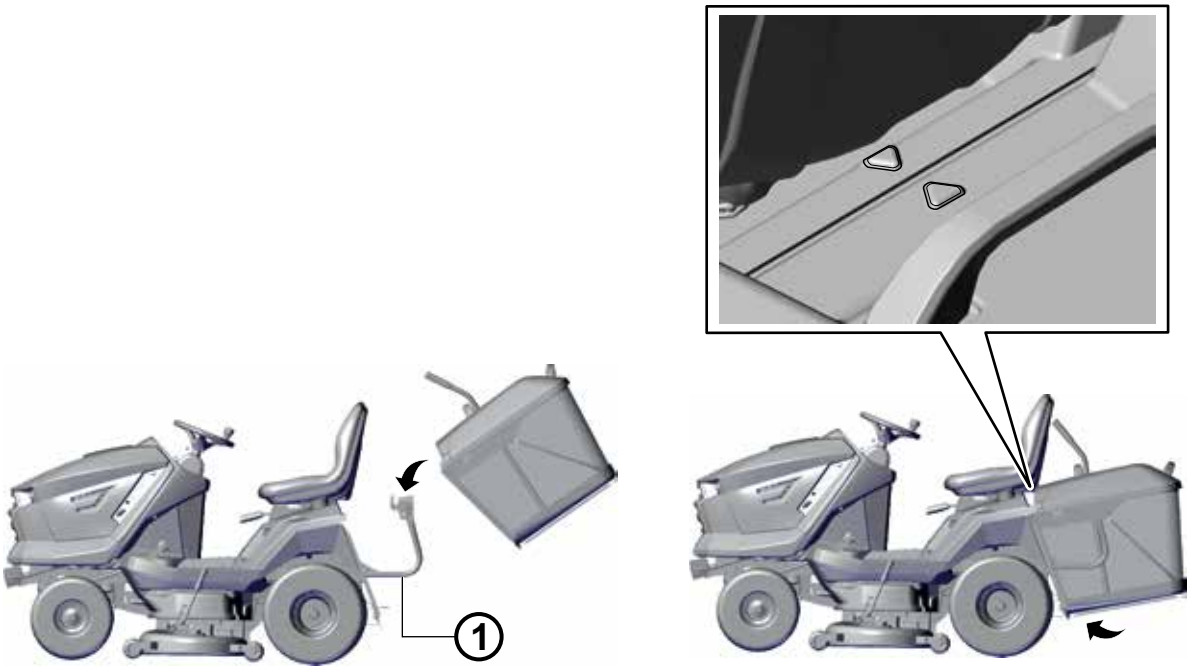


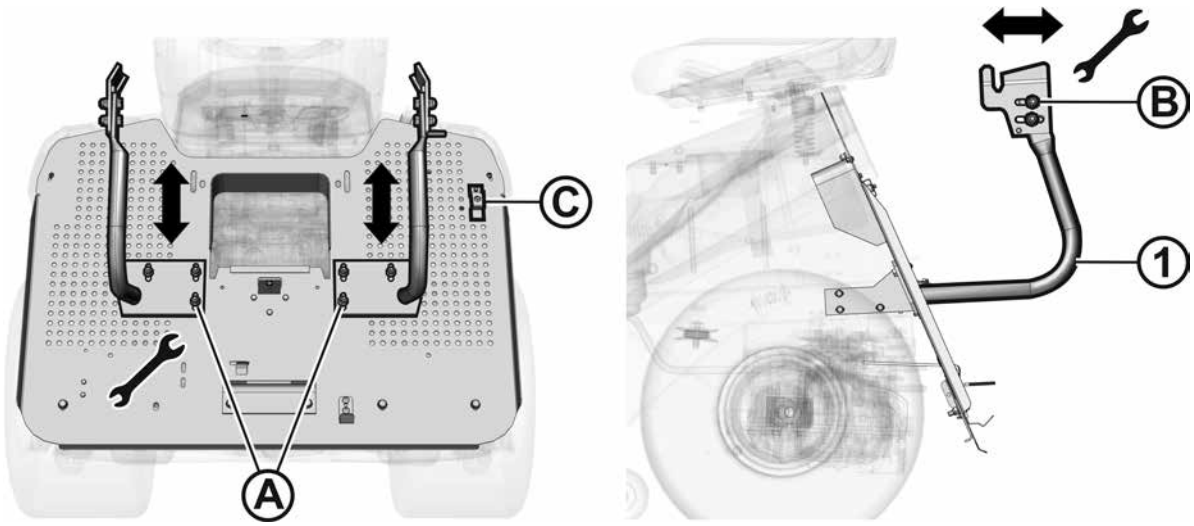
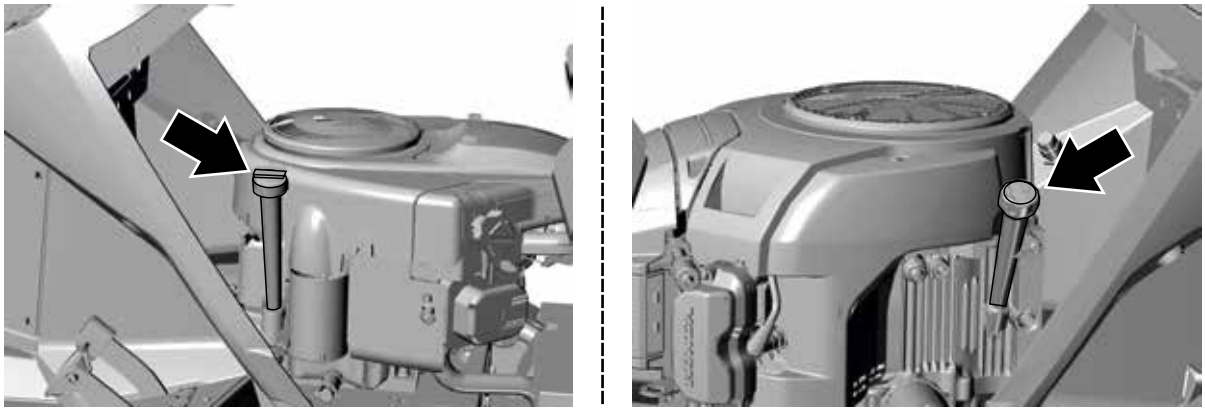
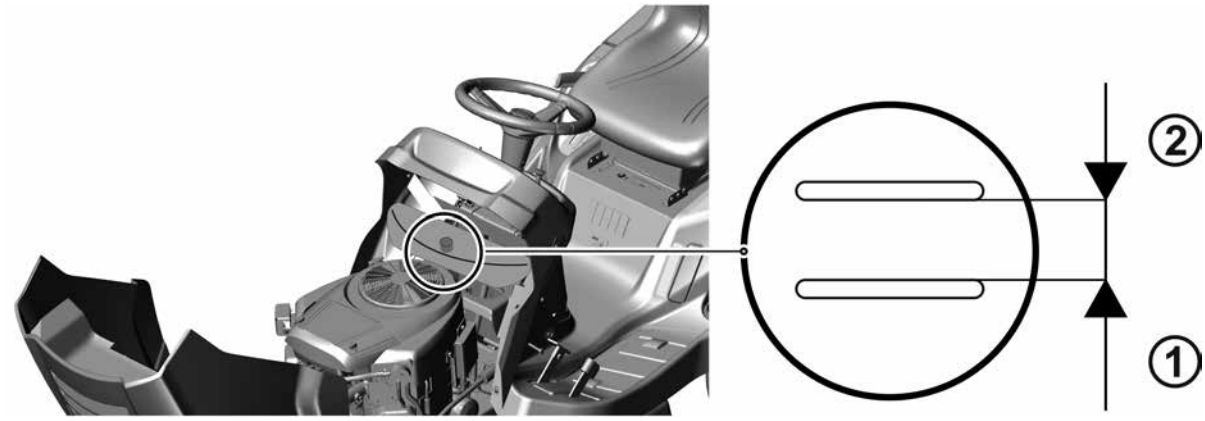
3.6.2g



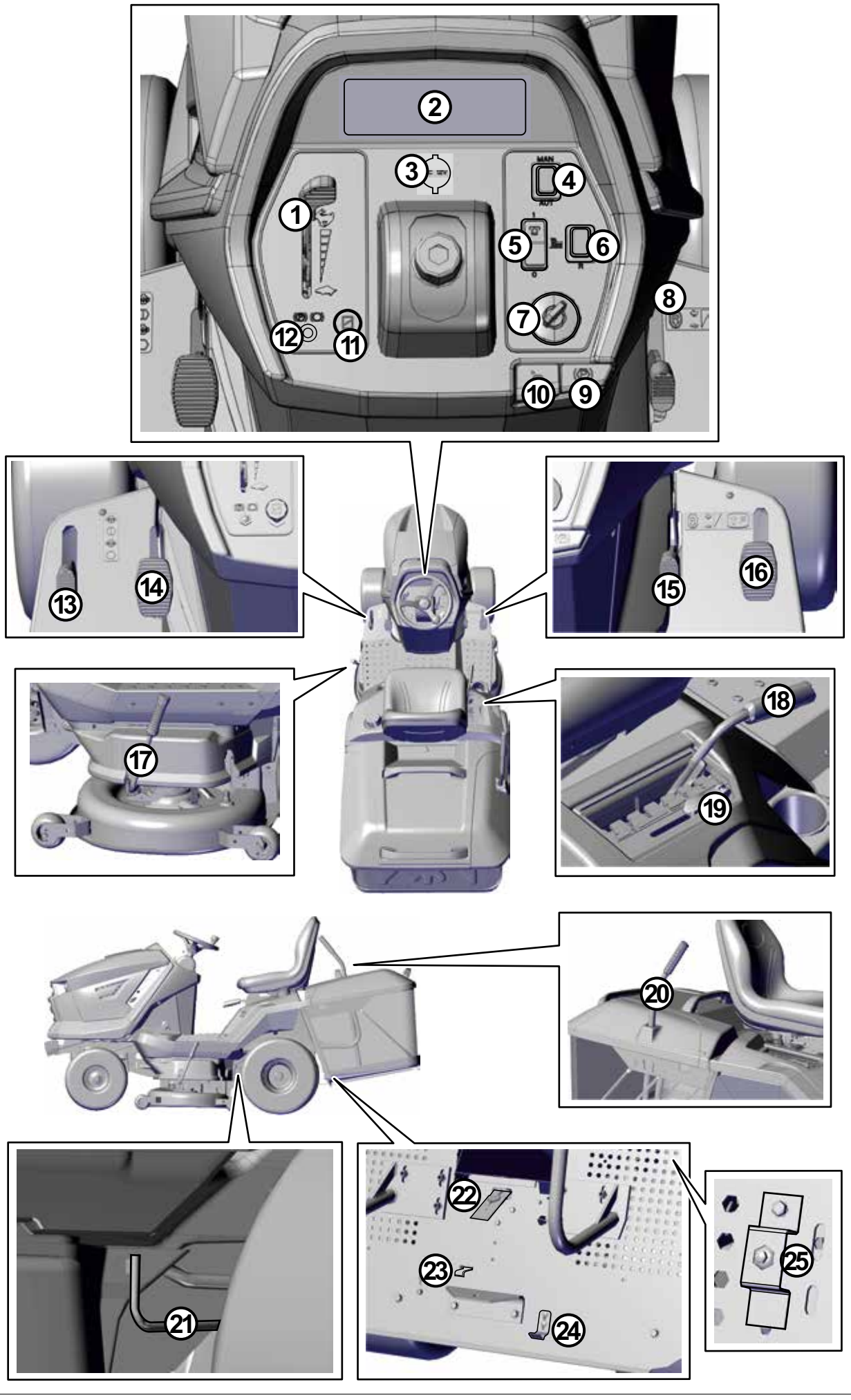
3.6.2h



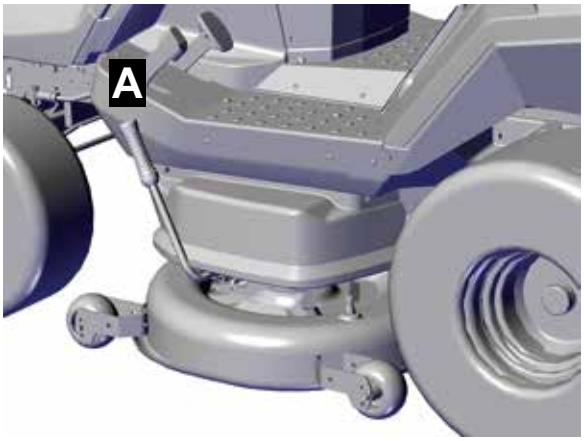
3.6.2i	
3.6.2j	
3.6.2k	

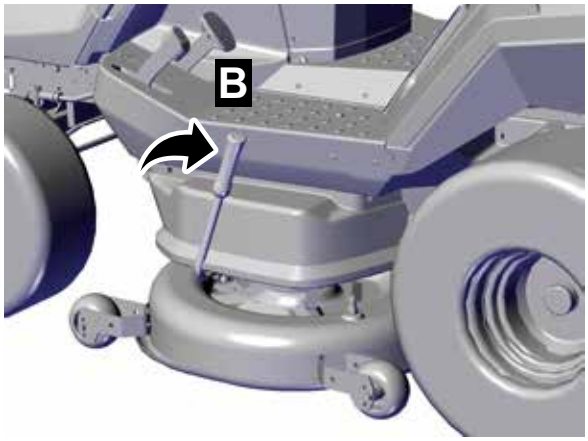
3.6.2l	
3.7.1	
3.7.5	

4.1a

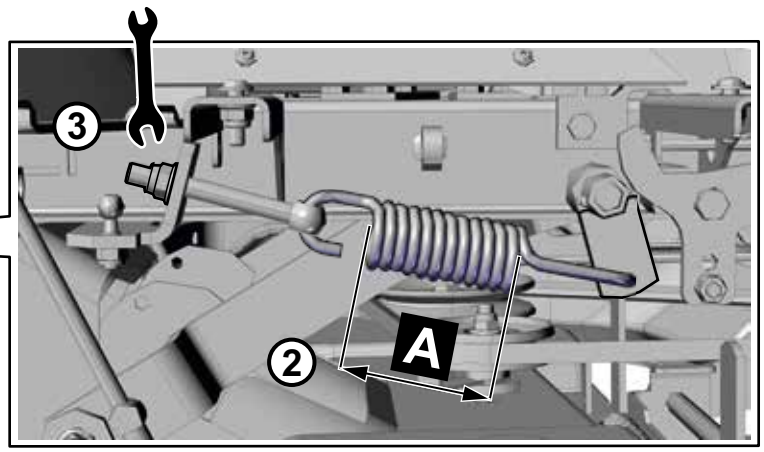


4.1b



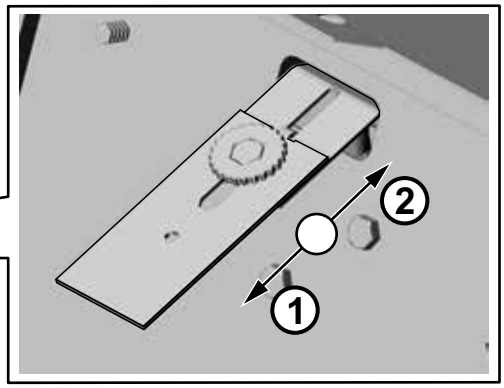


5.4.4

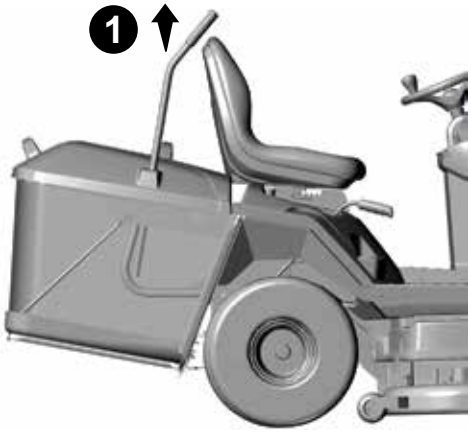


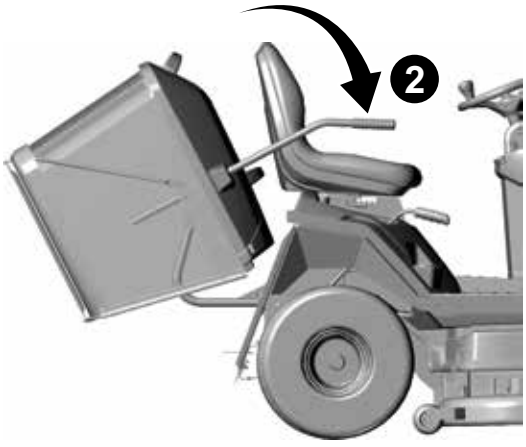
A UJ102: 93 ± 1 mm
UJ110: 115 ± 1 rnm
UJ122: 95 ± 1 mm

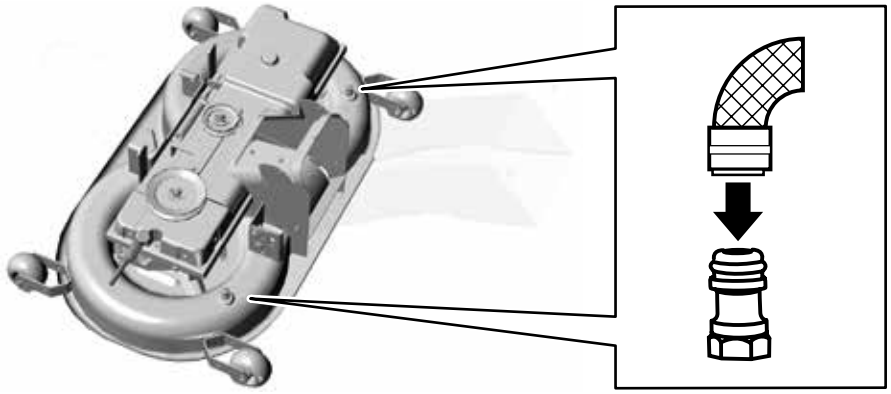
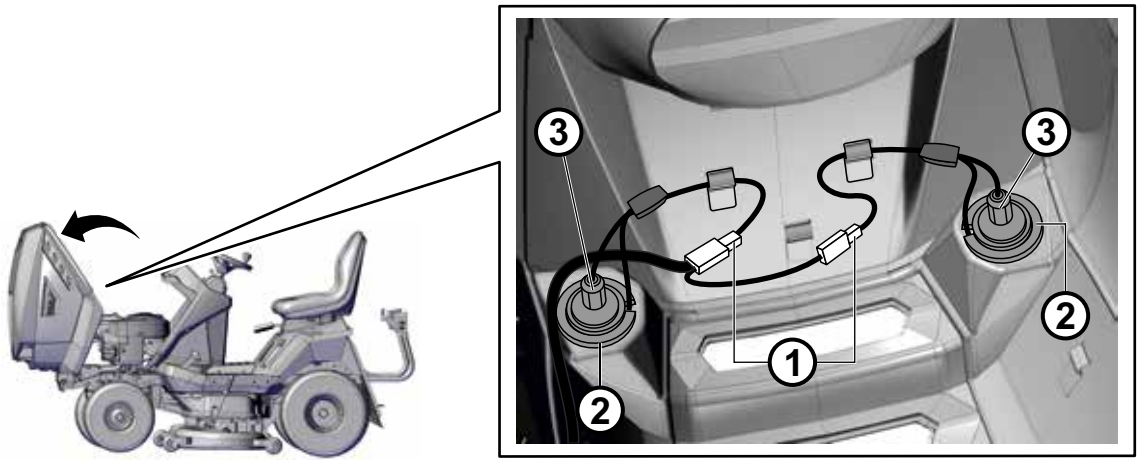
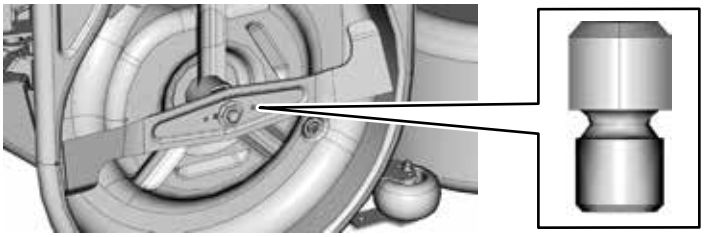
5.6a



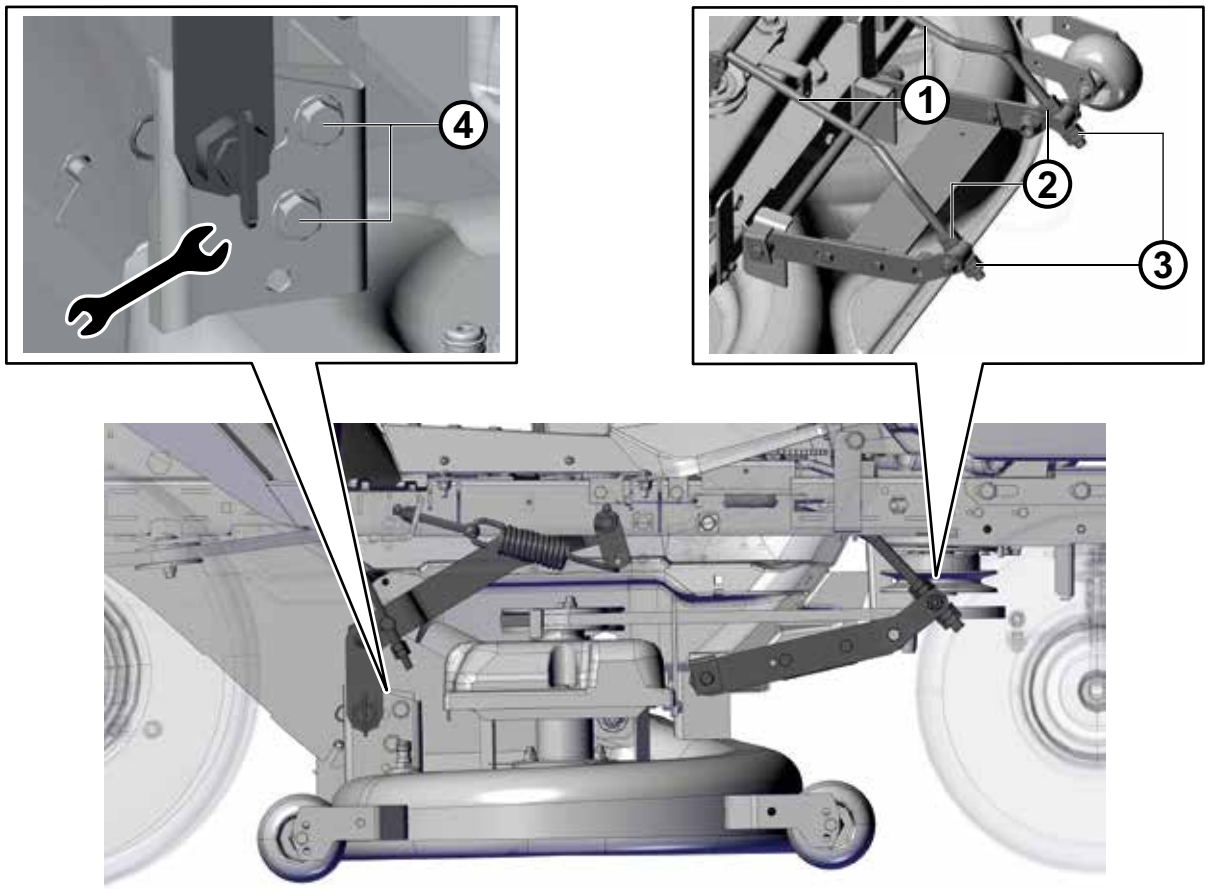
5.6b



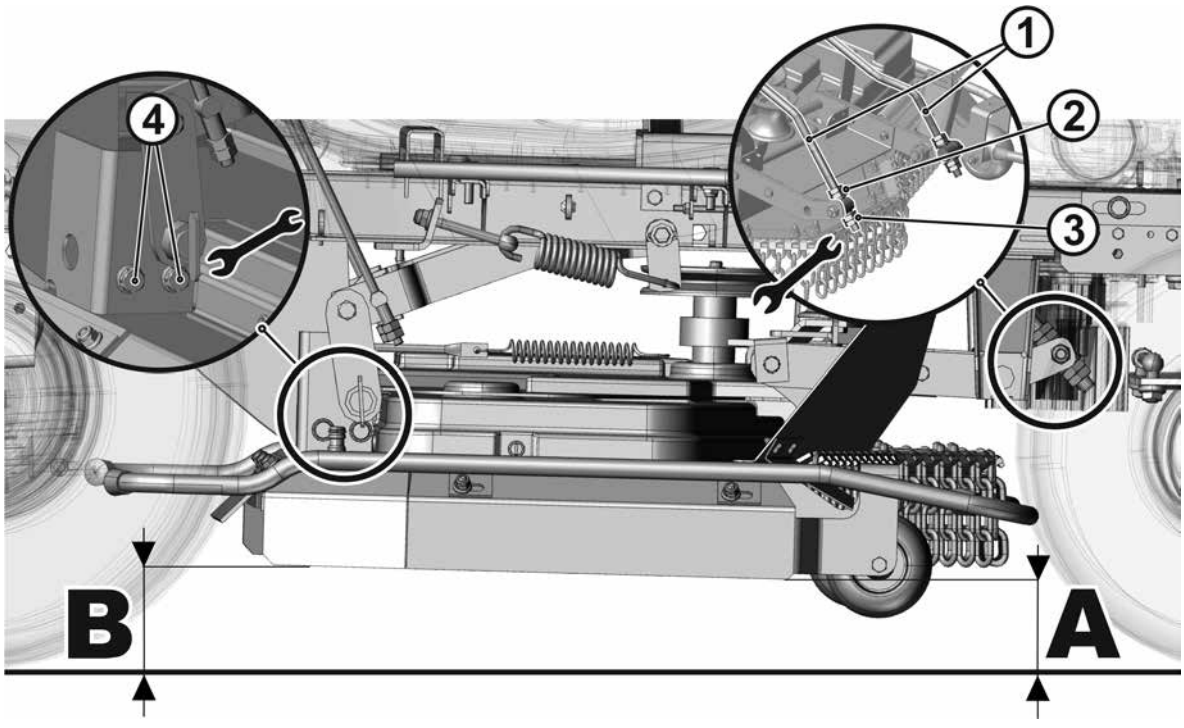


6.2.2	
6.3.3	
6.3.6a	
6.3.6b	

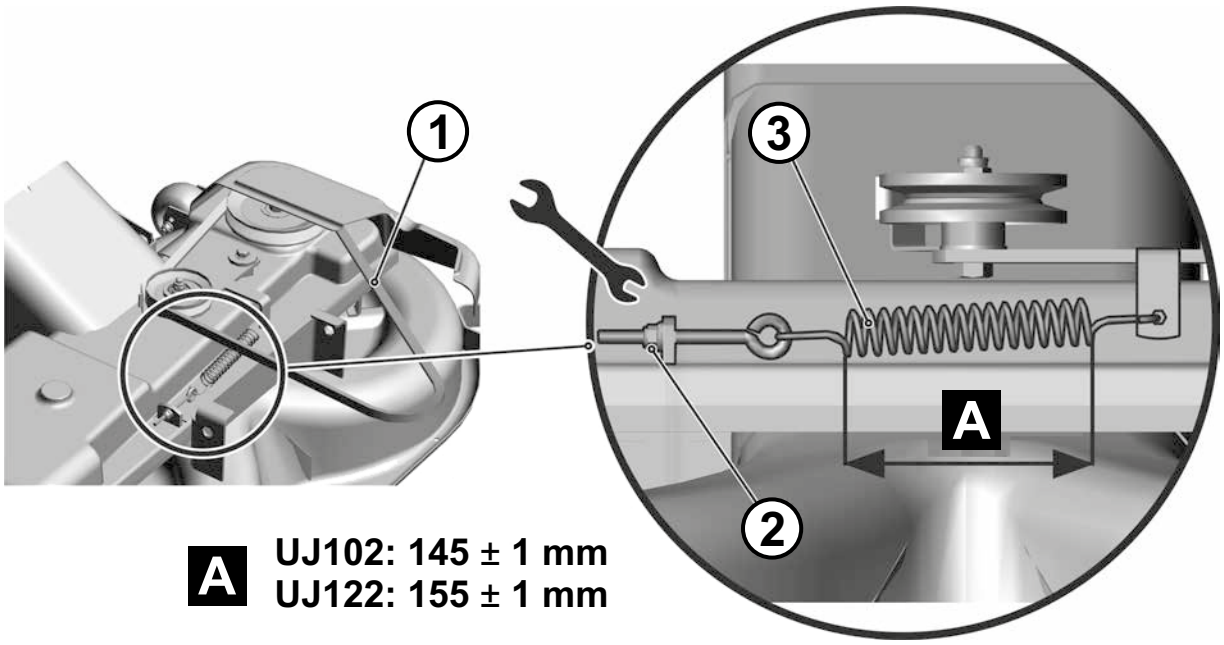
6.3.7a



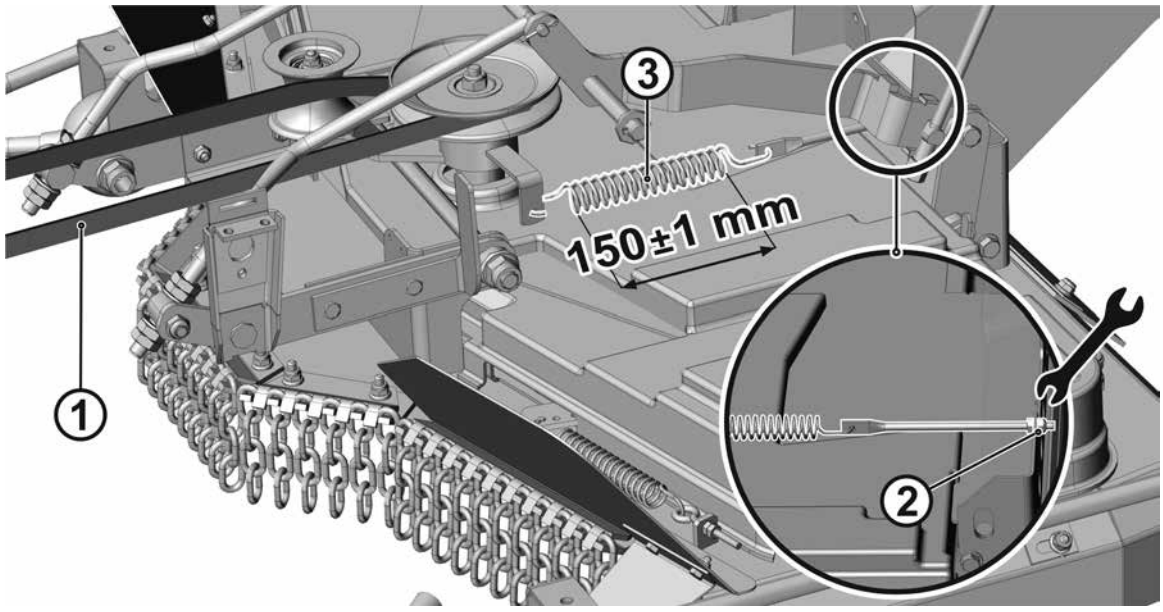
6.3.7b



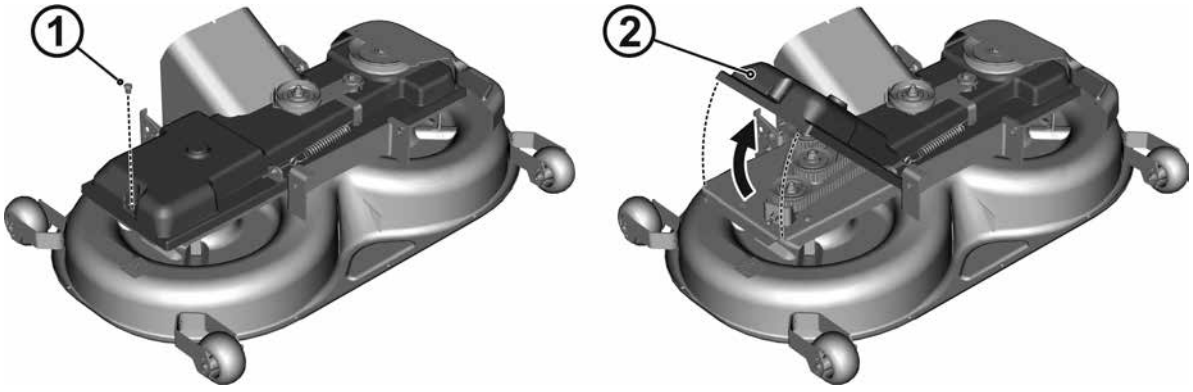
6.3.8a

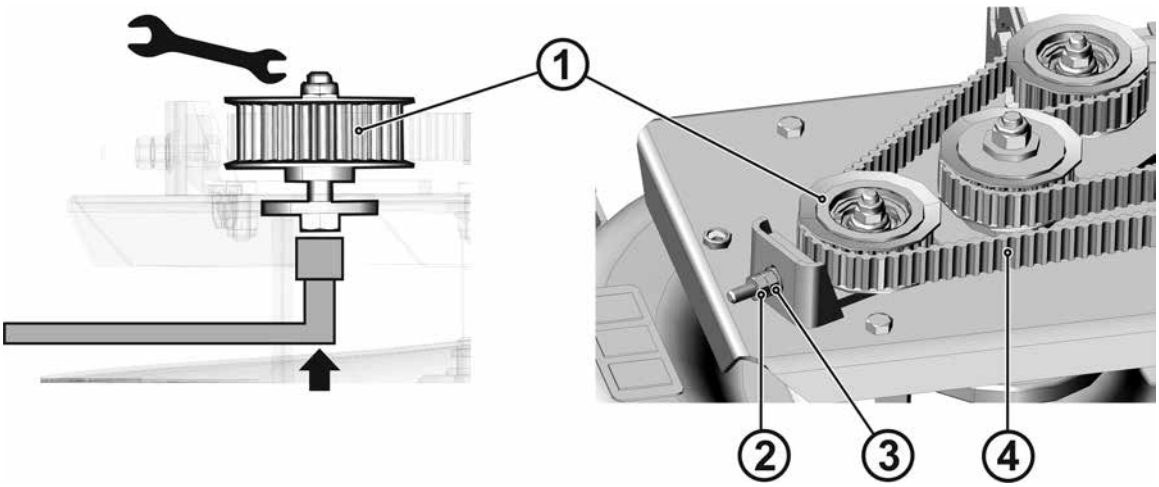
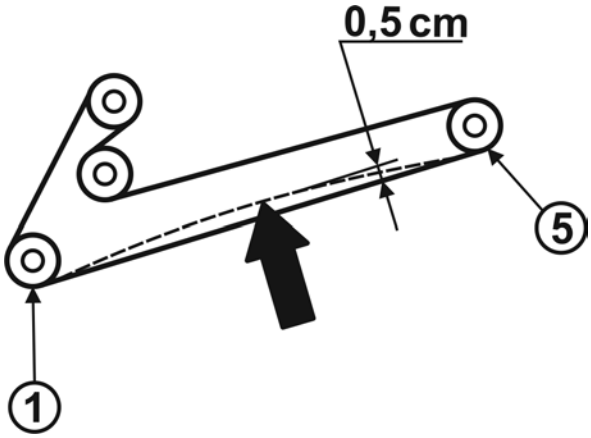
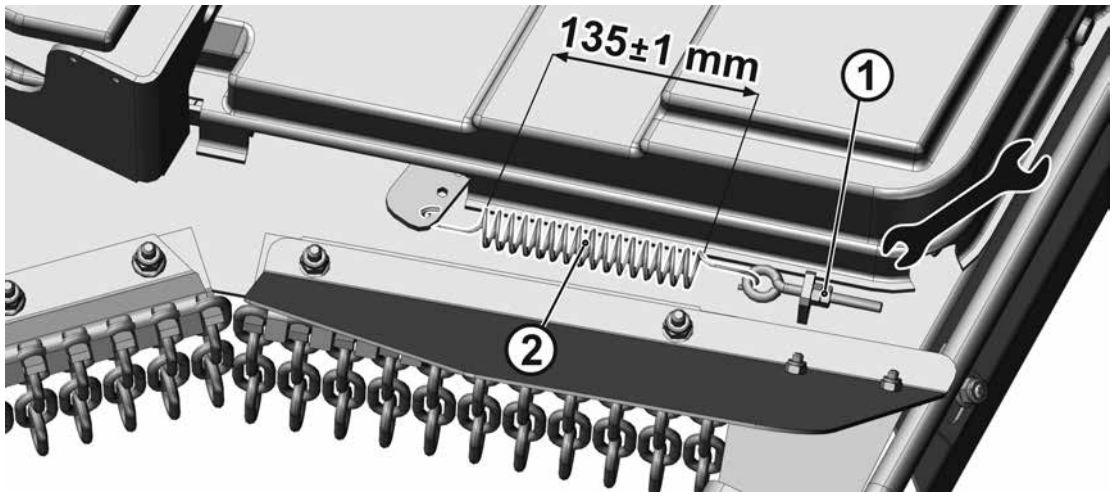


6.3.8b

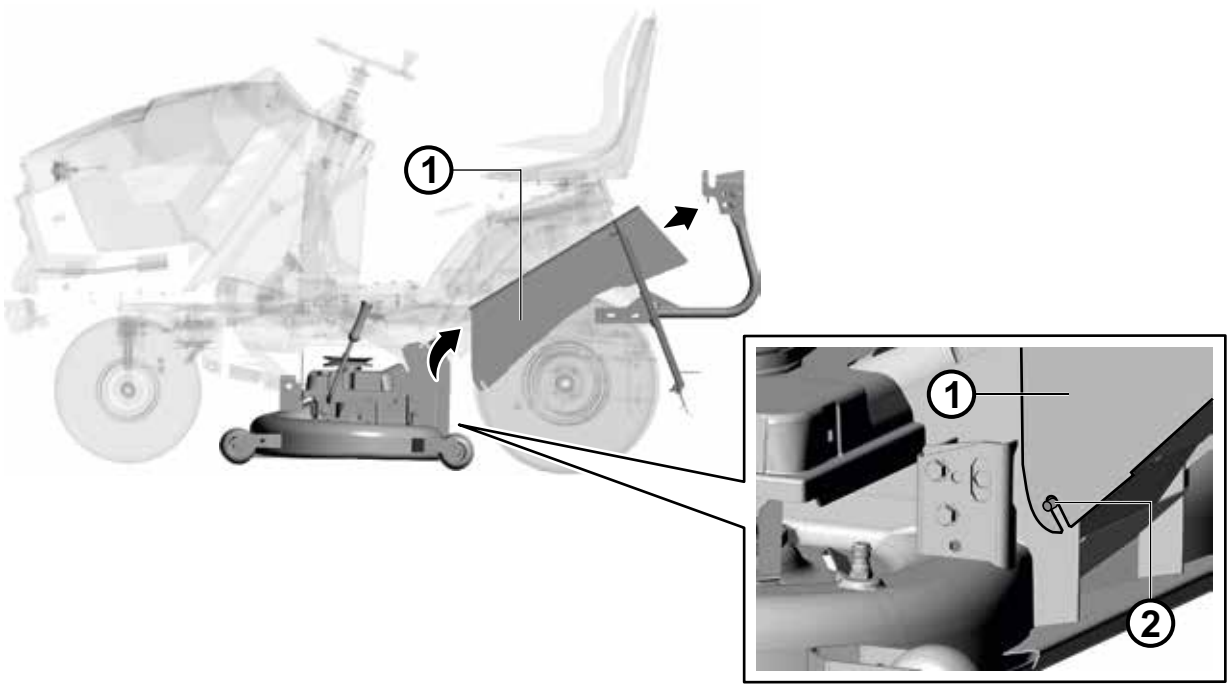


6.3.9a

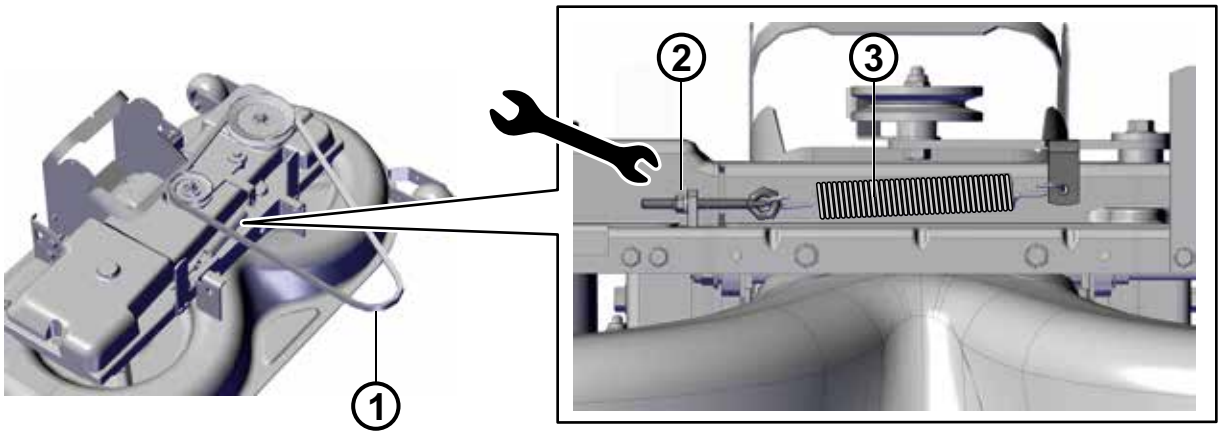


6.3.9b	
6.3.9c	
6.3.9d	

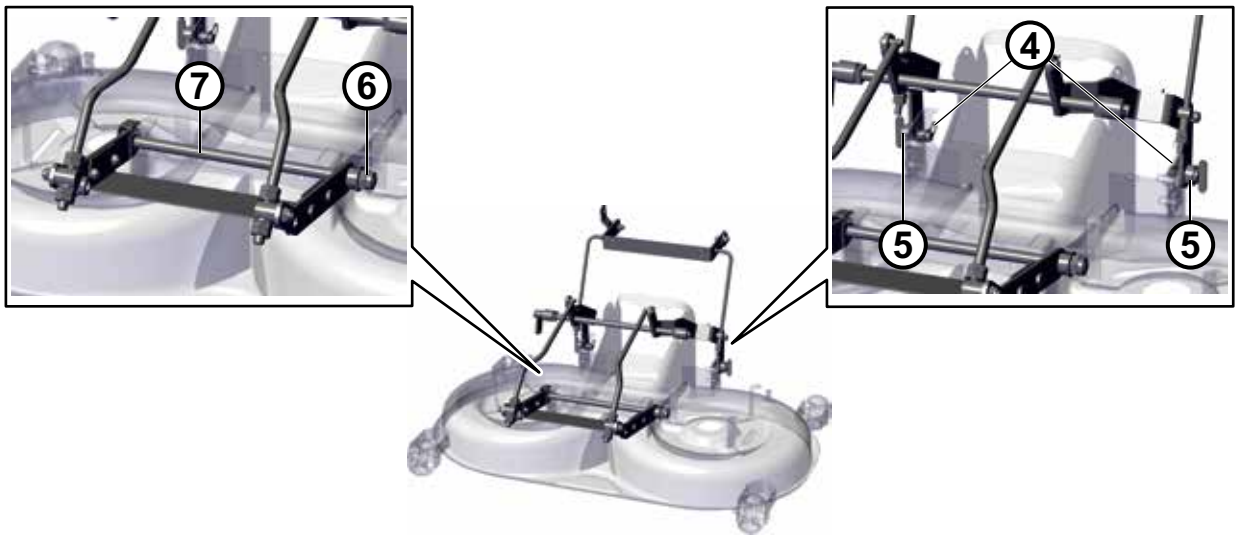
6.3.10a

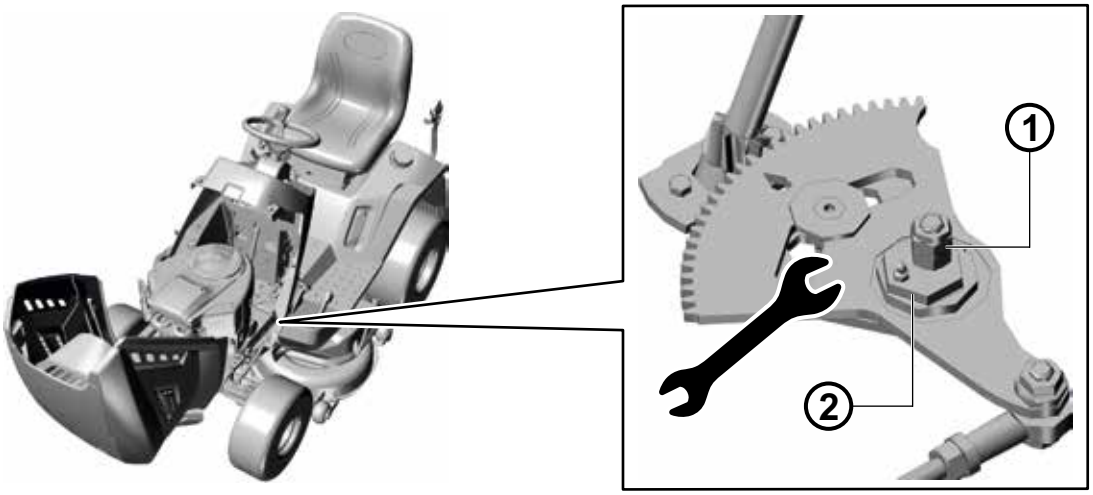
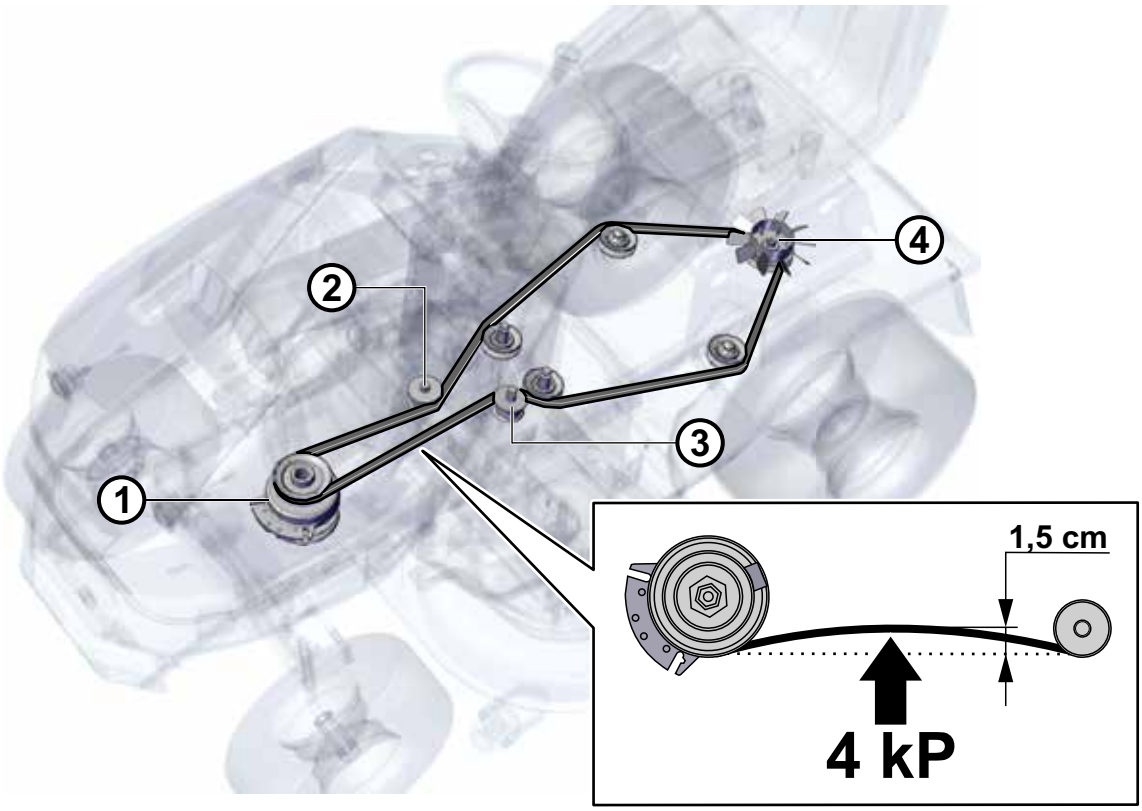


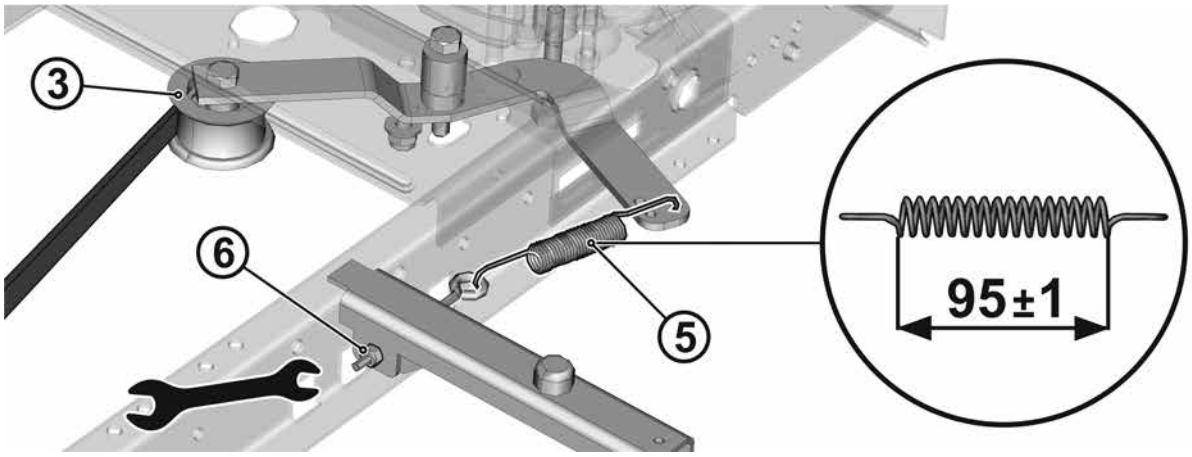
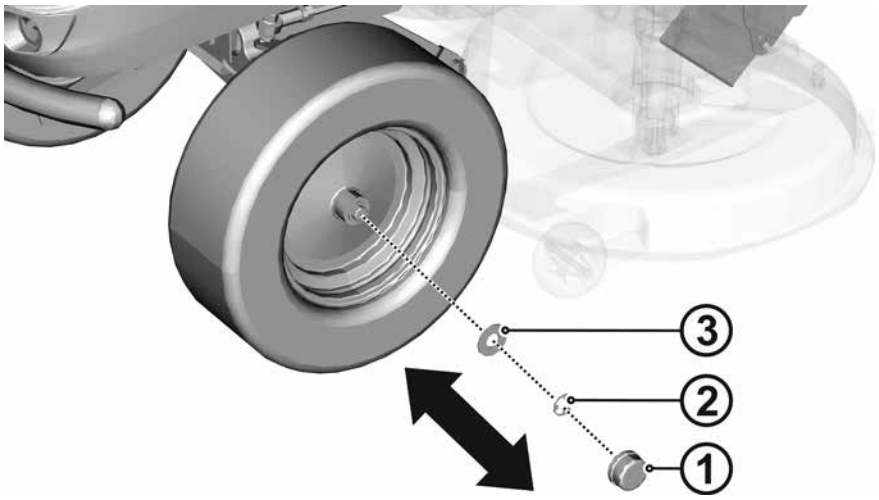
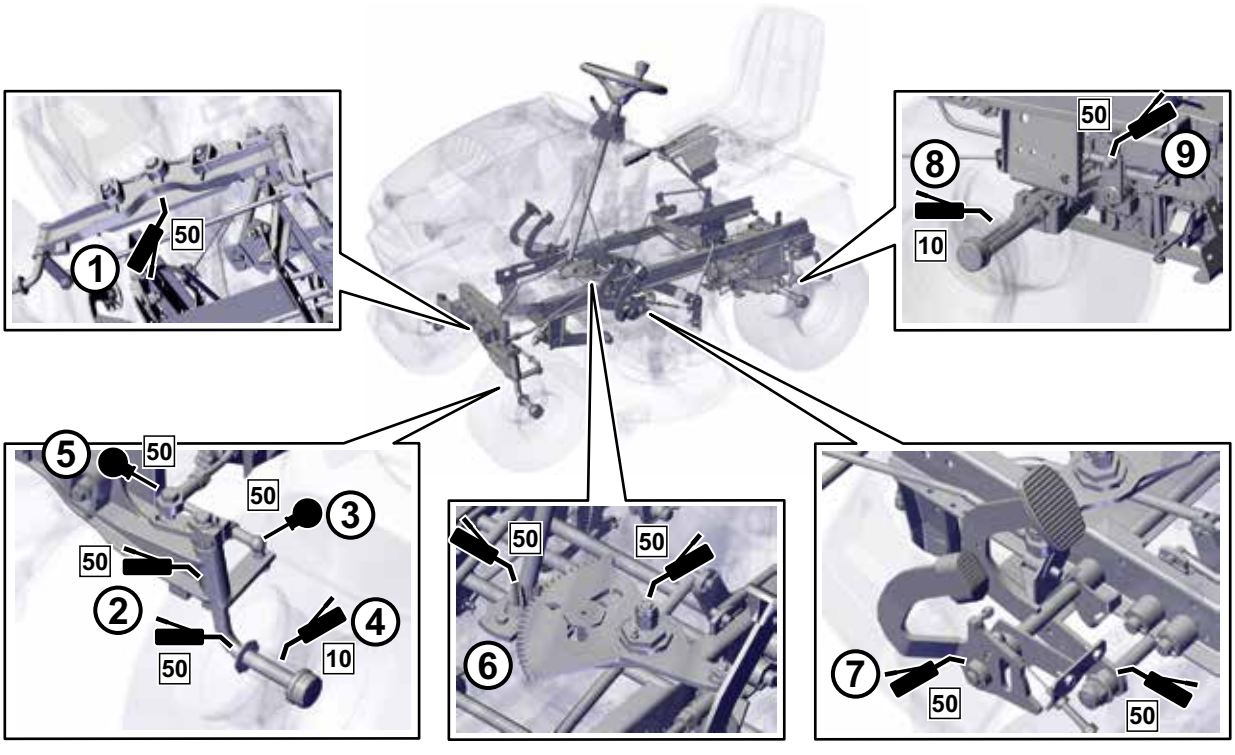
6.3.10b

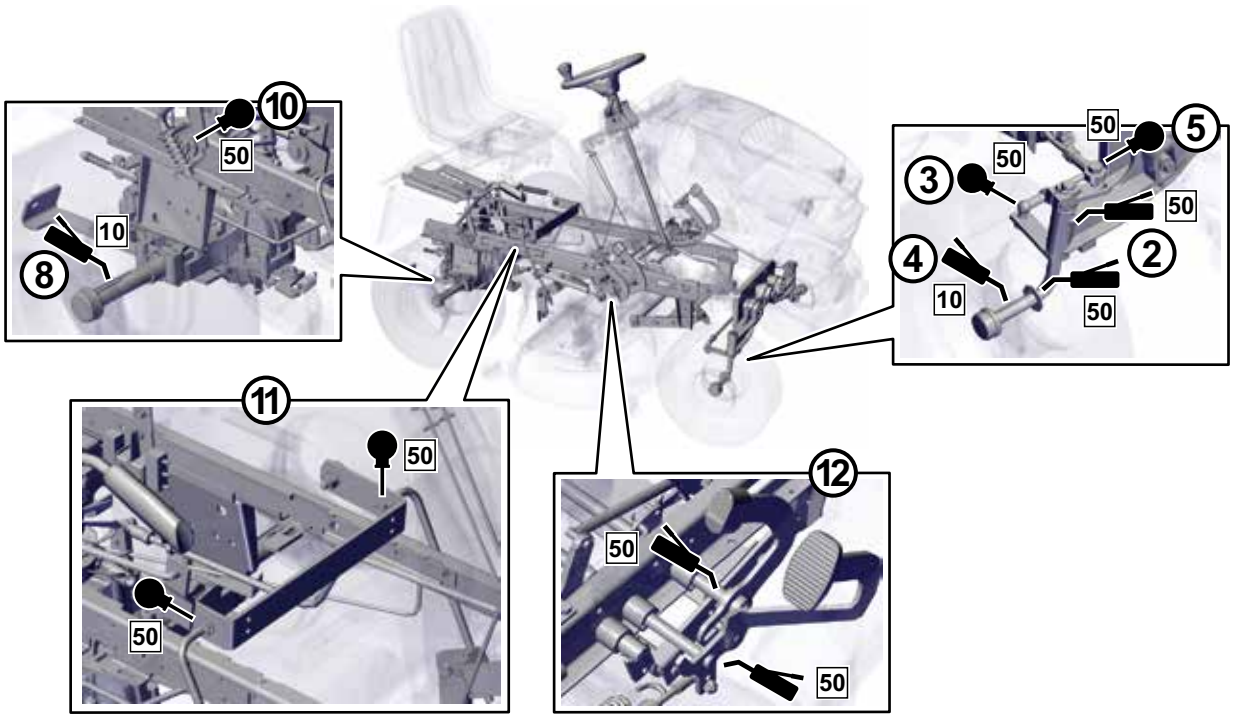


6.3.10c



6.3.10d	
6.3.11	
6.3.12a	

6.3.12b	
6.3.14	
6.4a	

6.4b	 10 50 10 8 11 50 50 50 5 50 3 50 4 2 10 50 12 50 50

ABOUT THIS MANUAL

PURPOSE OF THE MANUAL

This manual should guide you through, in the most simple way possible, the safe installation, operation and maintenance of your mower and provide information about its options and capabilities. It is therefore intended for all persons that will come into contact with the mower during its installation, operation and maintenance.

Please carefully study the manual before doing anything with the mower. Follow the instructions contained in this user's manual precisely so that operating the mower is easier and that it is used optimally and has a long lifetime.

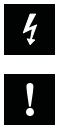
VALIDITY OF THE MANUAL

The manual is valid for the following mower models
- UJ102 and UJ102 4x4
- UJ110
- UJ122

The differences between the models are provided in the technical specifications.

SYMBOLS USED IN THIS MANUAL

In this manual, you will find symbols with the following meanings:

SYMBOL	MEANING
	These symbols mean "ATTENTION" and "WARNING", they inform you about things that may damage your mower and/or cause serious injury to the user.
	This symbol indicates an important instruction, property, procedure or issue, which you need to be aware of and adhere to during assembly, operation and maintenance of the mower.
	This symbol indicates useful information relating to the mower or to its accessories.
	This symbol is a reference to an image in the front part of the user's manual. It is always accompanied by the number of the image.
	This symbol is a reference to another chapter in this or another user's manual and most often it is shown together with the number of the chapter to which it refers.

IMPORTANT NOTICES

It is essential that the manual is considered as a part of the riding mower, which must not be separated from it. For this reason, store it for future use.

Do not put the mower into operation until you have thoroughly read all the instructions, restrictions and recommendations contained in this user's manual, paying particular attention to chapter 3 HEALTH PROTECTION AND SAFETY DURING WORK.

The illustrations and pictures contained in this user's manual may not always correspond to reality, their purpose is the description of the main principles of the device. Texts, drawings, photographs and other elements here provided are protected by copyright. Each misuse or non-permitted copying is a criminal offence.

RELATED DOCUMENTATION

In addition to this manual, the mower comes with further documentation drawn up by the manufacturer of the mower and the manufacturers of certain mower parts. The full list of documentation is provided in chapter MOWER DOCUMENTATION.

WHEN IN DOUBT

In practice, unforeseeable situations frequently arise that cannot be included and described in this user's manual. Therefore, if you are ever unsure about a procedure or if anything is unclear or you have questions, do not hesitate to contact one of our more that 100 authorised, professionally-equipped service centres located all over Europe, where trained and tested experts will be ready to assist you.

VERSION OF MANUAL

Number of manual: MULTI v2 (02.2023)

1 TECHNICAL INFORMATION

1.1 USE

CORRECT USE

This riding mower is designed for mowing even, maintained grass areas e.g. in parks, gardens and sports fields, possibly on minor slopes, on which there are no foreign objects (fallen branches, rocks, solid items, etc.).

The maximum height of the mowed vegetation may be 10 cm, the slope incline must not exceed 12° (21%); when 4x4-drive is used the slope incline must not exceed 15° (27%).

IMPROPER USE

Any use of this riding mower, which is not described in this user's manual and which goes beyond the use here described is considered to be in contradiction to its intended purpose or use. The manufacturer of the mower is not responsible for damages arising from such use; the risk is borne by its user.

Incorrect use of the mower also includes its operation, maintenance and repairs by untrained or unauthorised persons, the use of unapproved accessories, operation of the mower with a malfunction or fault, and operating it with removed, modified or non-functioning safety elements. The use of unauthorised accessories will, furthermore, result in the warranty becoming immediately null and void.

1.2 MAIN PARTS AND DESCRIPTION

The riding mower consists of the following basic sections:

1.2

(1) FRAME WITH A BUMPER

The frame with bumpers serves as a bearing element for most of the main parts of the mower.

(2) FAIRING

The fairing is a combination of plastic and metal covers which appropriately cover the engine and electrical and **mechanical** components of the mower. It also includes the lights for day- and night-time lighting.

(3) BATTERY AND FUSE COVER

This cover under the steering wheel enables easy access to the mower's battery and fuses.

(4) DRIVER'S LOCATION

The comfortable seat enables easy access to all control elements on the mower.

(5) GRASS CATCHER

The grass catcher consists of a tubular metal frame, lid, textile sack and a dump lever handle.

(6) FUEL TANK

Enables easy refilling of fuel and verification of the fuel level.

(7) GRASS EJECTION CHUTE

It connects the mowing deck with the grass catcher. The grass passes through it to the grass catcher.

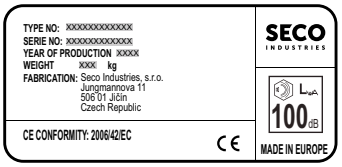
(8) MOWING DECK

The mowing deck mows and collects the grass. It consists of a cover, main plate and two mowing blades.

1.3 LABELS ON THE MOWER

It is strictly **forbidden to remove or damage labels and symbols** attached to the mower. In the event of damage or illegibility of the label, please contact the supplier or mower manufacturer and request a replacement.

MODEL IDENTIFICATION PLATE (A)



The type plate is located underneath the driver's seat and contains basic identification details and technical specifications for the mower.

WARNING LABELS

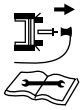
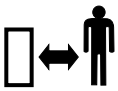
				
Danger	Attention! Hot surface!	Do not leave the mower while driving it	Caution, deflected objects	Do not touch

	
Do not touch during operation!	Rotary tools! Limb injury hazard!

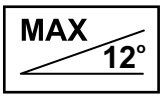
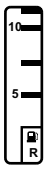
PROHIBITORY LABELS

			
Do not mow near other people	Do not take on passengers	Do not ride perpendicular to the slope	Do not step on

COMMAND LABELS

	
Follow the manual when repairing	Keep unauthorised persons at a safe distance

INFORMATION LABELS

			
Read the user's manual and follow the instructions	Maximum working incline	Guaranteed acoustic power level according to directive 2000/14/EC	Fuel tank capacity

				
Brake	Travel reverse	Travel forward	Fast	Slow

	
Differential lock engaged	Differential lock disengaged

1.4 TECHNICAL PARAMETERS

PARAMETER	UJ 102	UJ 102 4x4	UJ 110	UJ 122
MOWER				
Dimensions of the mower (length × width × height)	242 × 106 × 116 cm		210 × 116 × 125 cm (1)	258 × 127 × 129 cm
Weight of the mower (without fuel, oil and driver)	271 kg	330 kg	297 kg (1)	303 kg
Wheelbase	120 cm			
Wheel gauge (front / rear)	76 / 73 cm	83 / 73 cm	76 / 73 cm	76 / 73 cm
Wheel dimensions (front / rear)	16 × 6.50-8" / 20 × 10-8"			
Travel speed forward / reverse	9 / 4.5 km/h			
Tyre pressure (front and rear)	80–140 kPa			
Fuel tank capacity	13 l			
Fuel type	Lead-free petrol Natural 95			

(1) = without the grass catcher

MOWING DECK			
Mowing height	25–95 mm	35–90 mm	25–90 mm
Mowing width (coverage)	102 cm	110 cm	122 cm

GRASS CATCHER		
Volume	320 l	380 l

ELECTRICAL SYSTEM		
Type of battery (capacity / voltage)	12 V – 28 Ah	12 V – 32 Ah
Fuses in the storage compartment underneath the steering wheel	10 A / 20 A	

Oil types are specified in chapter 6 MAINTENANCE AND ADJUSTMENT

TIGHTENING TORQUE OF BOLT CONNECTIONS	
MOWING DECK	
Central blade bolt	**30 ± 3 Nm**
Nuts M12 on the mowing drive pulleys	**45 - 55 Nm**
Bolt 10x25 KL 100 RIPP on the arm of the mowing drive belt tensioning pulley	**55 - 65 Nm**
STEERING	
Bolt M8x30 of the steering segment	**15 - 25 Nm**
M12 nut of steering segment	**35 - 45 Nm**
ENGINE	
Bolt of the electromagnetic clutch	**60 - 70 Nm**
Bolt of the travel belt pulley holder	**25 - 35 Nm**

When lock nuts are removed and then returned they need to be replaced with new ones.

NOISE AND VIBRATION LEVEL

UJ102					
Engine	**Speed (min^{-1})**	**Declared emission level of acoustic pressure at the place of operation LpAd (dB) EN ISO 5395-1**	**Guaranteed acoustic power level L_{WAG} (dB) according to directive 2000/14/EC**	**Declared vibration level ($m.s^{-2}$) EN ISO 5395- 1**	
				total vibrations a_{wd}	**transferred to the hand - arm a_{hvd}**
B&S Vanguard 23 HP (3867)	2700	84 + 4	99	1.6 + 0.6	< 2.5
B&S 7220 PXi (40U8)	2700	84 + 2	100	0.9 + 0.4	6.0 + 2.4
B&S 7220 EXi (40N8)	2700	84 + 2	100	0.9 + 0.4	6.0 + 2.4
B&S 7220 CXi (40T8)	2800	84 + 4	100	0.9 + 0.5	< 2.5
B&S 8240 PXi (44U6)	2800	84 + 2	100	1.0 + 0.4	2.7 + 1.4
B&S 8260 CXi (44C7)	2800	83 + 4	100	1.0 + 0.5	< 2.5
Kawasaki FS 600V	2700	83 + 1	99	1.3 + 0.5	3.4 + 1.8
Loncin LC1P92F	2700	85 + 4	99	0.8 + 0.4	2.6 + 1.3
Loncin LC2P77F	2700	83 + 4	99	0.8 + 0.4	4.14 + 2.1

UJ110					
Engine	**Speed (min^{-1})**	**Declared emission level of acoustic pressure at the place of operation L_{pAd} (dB) EN ISO 5395-1**	**Guaranteed acoustic power level L_{WAG} (dB) according to directive 2000/14/EC**	**Declared vibration level ($m.s^{-2}$) EN ISO 5395- 1**	
B&S 7220 PXi (40U8)	2900	84 + 2	99	0.9 + 0.4	6.0 + 2.4
B&S 7220 EXi (40N8)	2900	84 + 2	99	0.9 + 0.4	6.0 + 2.4
B&S 8240 PXi (44U6)	2900	84 + 2	99	1.0 + 0.4	2.7 + 1.4
Loncin LC2P77F	2900	83 + 4	100	0.8 + 0.4	4.14 + 2.1

UJ122					
Engine	**Speed (min^{-1})**	**Declared emission level of acoustic pressure at the place of operation L_{pAd} (dB) EN ISO 5395-1**	**Guaranteed acoustic power level L_{WAG} (dB) according to directive 2000/14/EC**	**Declared vibration level ($m.s^{-2}$) EN ISO 5395- 1**	
B&S 7220 PXi (40U8)	3000	84 + 2	104	0.9 + 0.4	6.0 + 2.4
B&S 7220 CXi (40T8)	2800	84 + 4	105	0.9 + 0.5	< 2.5
B&S 8260 CXi (44C7)	3000	83 + 4	104	1.0 + 0.5	< 2.5
Loncin LC2P77F	3000	83 + 4	104	0.8 + 0.4	4.14 + 2.1

The values measured according to EN ISO 5395-1 correspond to values according to EN 836+A4.

Explanations:

Engines	Transmissions
B&S Vanguard 23 HP (3867) = Briggs & Stratton Vanguard 23 HP B&S 7220 PXi (40U8) = Briggs & Stratton V-TWIN 7000PXi SERIES B&S 7220 EXi (40N8) = Briggs & Stratton V-TWIN 7000EXi SERIES B&S 7220 CXi (40T8) = Briggs & Stratton V-TWIN SERIES 7 COMMERCIAL SERIES B&S 8240 PXi (44U6) = Briggs & Stratton V-TWIN 8000PXi SERIES B&S 8260 CXi (44C7) = Briggs & Stratton SERIES 8 COMMERCIAL SERIES	TT46 = TUFF-TORQ K46 TT62 = TUFF-TORQ K62 TT664 = TUFF-TORQ K664 + KXH 10 HG T2 = Hydro-Gear T2 HG T3 = Hydro-Gear T3

2 WORK SAFETY AND HEALTH

This riding mower is designed and built in accordance with international norms and regulations that are valid for the production of such machines. Electrical elements conform to international regulations for protection against dangerous contact voltage. All electrical elements either have the respective protection class prescribed by norms or are located in enclosed areas that by their cover meet the directives of these norms.

If this mower is used properly and according to the user's manual, it is **very safe**.

2.1 SAFETY INSTRUCTIONS

The person primarily responsible for their own safety and the safety of others during the operation of the riding mower is its user. The manufacturer takes no responsibility for the injury of persons or damage to the mower and ecological damage resulting from the mower not being used and operated in accordance with all safety instructions included in this user's manual.

! **In the event that work safety is not adhered to and all warnings in this manual are not respected, this riding mower may cut off hands, legs or deflect objects and so may cause serious injury or death to persons, damage or destructions of the mower or one of its parts or accessories.**

2.1.1 GENERAL SAFETY INSTRUCTIONS

! This mower may only be driven by a person over 18 years of age that has read this user's manual. Never allow this mower to be operated or serviced or maintained by persons that are not competent for the respective activity.

! The user of the mower is responsible for the safety of persons in the vicinity of the work area of the mower.

! It is not permitted to perform any technical modifications to the mower and its accessories without the manufacturer's written consent. Unauthorised modifications may lead to hazardous work safety conditions and void the warranty.

! Adhere to all requirements relating to fire safety (🕮 ***2.4***).

! Do not remove safety stickers or labels from the mower.

! Do not stay in the vicinity of the mower or under it, if it is lifted and is not sufficiently secured against falling or tipping over in the lifted position.

! The components of the grass catcher are subject to strain and may suffer damage, the function of the grass catcher may deteriorate and contents may fall out of it. Therefore, regularly perform an inspection according to the recommendations provided in this user s manual.

! Always turn off the mowing deck and engine and take the key out of the ignition, when:
- you are cleaning the mower
- you are removing accumulated grass from the mowing deck
- you have driven over a foreign object and it is necessary to check whether the mower has been damaged or it is necessary to remedy the damage
- the mower is vibrating with unusual force and it is necessary to identify the cause of the vibrations
- you are repairing the engine or other moving parts (also disconnect cables from the spark plugs)

2.1.2 CLOTHING AND PROTECTIVE AIDS OF THE DRIVER

! When operating the mower, always use appropriate work attire. Never wear loose clothing and short pants.

! When operating the mower, always wear firm, closed footwear, ideally with non-slip soles. Never operate the mower when wearing sandals or barefoot.

! Noise and vibration values at the location of the operator provided in this manual (🕮 ***1.4***) are closely related to the requirements of directives EU 2003/10/ES (exposure to noise) and 2002/44/ES (exposure to vibrations), that regulate the conditions for use of personal protective aids against noise and vibrations and also the reduction of exposure time of the operator by means of appropriate work breaks. **The mower manufacturer recommends always using hearing protection when operating the mower. Not adhering to these instructions may result in permanent health damage!**

2.1.3 BEFORE USING THE MOWER

! Do not use the riding mower if it is damaged or if any of its protective elements are missing. All covers and other protective elements must always be in their place. Therefore, do not remove or put out of operation any of the mower's protective elements. Regularly check that these elements are working correctly.

! Do not work with the mower after consuming alcohol, drugs or medication affecting your perception.

! Do not work with the mower if you suffer from dizziness, fainting or if you are weakened or distracted in any other way.

! Before putting the mower into operation, thoroughly learn about all the control elements and ensure that you can control them in such a way that if necessary you can immediately stop or turn off the engine.

! Do not adjust the engine regulator or the engine speed limiter.

! Before you start working with the mower, remove from the surface of the area you will be mowing, all stones, pieces of wood, wire, bones, fallen branches and other items, which could be deflected during the mowing process. Always use protective gloves during this.

! Remedy all defects before further use. Before starting work, thoroughly check that the belts are tensioned, the blades are sharp and that the area inside the mowing deck is clear.

2.1.4 WHILE OPERATING THE MOWER

! The mower must not be used for work on slopes with an incline greater than **12°** (**21%**), and when using the 4x4-drive on slopes with an incline greater than **15°(27%)**.

! Transport of other passengers, animals or loads directly on the mower is forbidden. Transport of loads is only permitted on trailers approved by the mower's manufacturer.

! Even when leaving the mower for a short time, always remove the key from the ignition.

! If you are driving the mower away from the work area where you are mowing, always disengage the mowing deck and lift it to the transport position.

! When travelling, firmly hold the steering wheel with both hands. Pay particular attention when travelling over grass areas and other uneven locations – the steering wheel may spontaneously turn as a result of impacts with holes, bumps, impacts, etc.

! Always attentively watch the area in front of the mower. Be especially careful of obstacles so that you can avoid them in time. Carefully watch out for recesses (holes) in the terrain and other hidden hazardous locations. It is easy to overlook obstacles in tall grass. Always travel at an appropriate speed.

! Pay special attention in broken terrain such as bushes, trees and similar obstacles behind which there could be other people, in particular children or animals.

! When an unauthorised person enters the area being mowed, immediately stop the the mower and turn off the mowing deck.

! Do not mow near piles of material, holes or banks. The riding mower may suddenly roll over if the wheel goes over the edge of a hole, trench or an edge that may collapse.

! When working, avoid mole mounds, concrete supports, tree stumps, garden bed and footpath kerbs, which must not come into contact with the blades and so cause damage to the mowing deck and the mower's mechanism.

! Always try to drive around hidden objects such as lawn sprinklers, stakes, water valves, foundations, electrical cables, etc. that are buried in the grass turf. Never ride over these objects.

! In the event of an impact into a rigid object, stop and turn off the mowing deck and engine and inspect the entire mower, particularly the steering mechanism. If necessary perform repairs before starting up the engine again.

! Whenever possible avoid using the mower in wet grass. Reduced traction may lead to skidding.

! Avoid obstacles (e.g. sudden change in the incline of a slope, ditches, etc.) on which the mower could roll over.

! Do not attempt to maintain the stability of the mower by stepping on the ground.

! Only use the mower in daylight hours or with good artificial lighting.

! Do not work with the mower during rain, during a storm and especially when there is a risk of a lightning strike. Lightning can cause serious injury or death. Do not use the machine when a storm is approaching and lightning flashes can be seen or thunder can be heard, find safe shelter.

! Driving the mower on public roads is not permitted.

! Do not leave the engine running in closed areas. The exhaust fumes contain substances that are odourless but are fatally poisonous.

! Do not put your hands or legs underneath the mowing deck cover. Never put any part of your body near the rotating or moving parts of the mower. Do not attempt to use your hands or other temporary items to stop or slow down moving cutting blades!

! Do not start the engine without an exhaust pipe.

! Always pay full attention to driving and other activities performed with the mower. The most common causes of loss of control over the mower are for example:
- Loss of wheel traction.
- Excessive speed, not adjusting speed to current conditions and terrain properties.
- Sudden breaking where the wheels lock up.
- Using the mower for purposes for which is was not designed.

2.1.5 AFTER FINISHING WORK WITH THE MOWER

! Always park the mower on a level surface. Before getting off the mower, ensure that it has come to a complete stop. Keep in mind that the mowing blades will continue rotating several seconds after the engine is turned off before coming to a stop. Always maintain the mower and its accessories clean and in good technical condition.

! The rotating blades are sharp and may cause injuries. Whenever handing the blades always use protective gloves or wrap the blades.

! Regularly check the nuts and bolts securing the blades so that they are tightened with the appropriate amount of torque (🕮 ***6.3.6***).

! Pay special attention to lock nuts. After the nut is loosened a second time its locking capability is reduced and therefore it needs to be replaced with a new one.

! Regularly inspect all components and if necessary replace those that need to be replaced based on the manufacturer's recommendations.

2.2 SAFETY INSTRUCTIONS FOR WORK ON SLOPES

! Slopes are the main cause of accidents, loss of control over the mower or subsequent roll-overs, which may lead to serious injuries or death. Mowing on slopes always requires an increased level of attention. If you are not sure, or it exceeds your ability, do not mow on slopes.

! Riding mowers can be used on slopes with a maximum incline up to **12° (21%)** and when 4x4-drive is used on slopes with a maximum incline of **15°(27%)** and only in the direction of the fall line, i.e. upwards or downwards. More information 🕮 ***5.5.4.***

! When changing direction increased care is needed. Do not turn on a slope unless it is absolutely necessary.

! Watch out for holes, roots, uneven terrain. Uneven terrain may cause the mower to turn over. High grass may conceal hidden obstacles. Therefore, remove all foreign objects from the area where you wish to mow in advance.

! Select such a speed so that you do not need to stop when on a hill.

! Be very careful when attaching the grass catcher or making other connections. It may lead to a reduced stability of the mower.

! Perform all movements on a slope slowly and smoothly. Do not make sudden changes to speed or direction.

! Avoid starting up or stopping on a slope. In the event that the wheels lose traction, turn off the power to the blades and drive slowly down the hill.

! Start driving very carefully and slowly when on a slope so that the mower does not "skip". Always reduce the mower's driving speed before a slope, and especially when driving down a hill lower the driving speed to minimum to take advantage of the braking effect of the gearbox.

2.3 CHILD SAFETY

If the riding mower operator is not prepared for the presence of children then a tragic accident may happen. The movement of a riding mower attracts the attention of children. Never assume that children will remain in the location where you last saw them.

! Do not allow children without supervision in areas where you are mowing grass.

! Always be prepared - if children approach you then turn off the mower.

! Before and while reversing look behind you and at the ground.

! Never transport children, they may fall and seriously injure themselves, or they may dangerously interfere with the riding mower controls. Never allow children to operate the mower.

! Pay increased attention in places with limited visibility (near trees, bushes, walls, etc.).

2.4 FIRE SAFETY

When reversing the riding mower it is necessary to adhere to fundamentals and regulations for work safety and fire protection relating to work with this type of mower.

! Regularly remove flammable substances (dry grass, leaves, etc.) from the area around the exhaust, engine, battery and anywhere, where they could come into contact with petrol or oil and subsequently catch on fire and so result in a fire on the mower.

! Allow the riding mower engine to cool down before parking it in an enclosed location.

! Pay increased attention when working with petrol, oil and other flammable substances. These are very flammable substances, the vapours of which are explosive. Do not smoke during this work. Never unscrew the petrol tank cap and refill with petrol while the engine is running, if the engine is hot or if the mower is in a closed location.

! Check the petrol lines before using and do not fill the petrol all the way up to the bottleneck of the tank. The heat generated by the engine, sun and the expansion of the fuel may lead to the fuel overflowing and a subsequent fire. For storing flammable substances use containers designed for this purpose. Never store a canister with petrol or the mower inside a building near any source of heat. Pay increased attention when working with the battery. The gas inside the battery is highly explosive, therefore do not smoke in the vicinity of the battery and do not use an open flame so as to avoid serious injuries.

2.5 DANGEROUS PARTS OF THE MOWER - RESIDUAL HAZARDS

! The riding mower is designed so that when properly operated in perfect technical condition, it poses no danger to the driver and his/her surroundings. Nevertheless, there may arise situations during operation, maintenance and adjustment that pose a danger to workers if they are not aware of them and do not adhere to the safety instruction here provided. These hazards represent so-called residual hazards – they are hazards that remain even after all preventive and protective measures have been considered and implemented. Residual hazards are present during use, maintenance and adjustment of the mower. Therefore, every person that comes into work contact with the mower must know these hazards and must adhere to all recommendations for their mitigation.

MOWING BLADES

! Rotating mowing blades are very sharp and coming into contact with them creates a serious risk of injury to limbs. Therefore, do not put your hands or legs underneath the mowing deck cover. Never put any part of your body near the rotating or moving blades. Do not attempt to use your hands or other temporary items to stop or slow down moving mowing blades!

MOVING AND HOT PARTS

! When the engine is running, there are parts that are rotating and may cause serious injury to various parts of the body. When performing maintenance or adjustment of mower parts located underneath the hood or underneath the raised mower, it is thus necessary to pay increased attention and never to bring any part of the body in the vicinity of moving parts. Only a person with perfect knowledge of the principles of motion of these parts may perform their maintenance and adjustment. During operation, parts located under the hood heated up and when touched with an unprotected part of the body may result in serious burns. Therefore, before opening the hood for the purpose of performing maintenance or servicing tasks, always allow the mower to cool down and use safety gloves for protection.

DRIVER'S LOCATION

! In the driver's location, there is a risk of falling from the platform or slipping as a result of inattentiveness. Therefore, always be careful when getting on or getting off the mower. Another hazard for the driver is fatigue, stress or erroneous behaviour caused by work overload, insufficient illumination of the mowed area or noise during operation. It is, therefore, necessary to always use hearing protection while using the mower, do not overload yourself and take breaks.

FUEL TANK

! The fuel in the fuel tank is a highly flammable substance the vapours of which are explosive. When working with fuel or in the vicinity of the fuel tank (even when closed), never smoke, never come close with an open flame or with items that generate high temperatures.

3 PREPARATION FOR PUTTING INTO OPERATION

This chapter primarily serves the needs of the vendor's mechanics that prepare the mower for the user within the scope of pre-sale service.
In the event that you have received your mower already assembled and ready for operation, please skip directly to chapter 4.
In the event that you have unpacked the mower yourself, then it is necessary to prepare it for operation according to the instructions contained in this chapter. In the event that you are unsure about the procedure or you have insufficient equipment, tools or experience, please do not hesitate to contact the vendor of the mower for assistance.
We recommend performing all assembly works in a team of at least two people.

3.1 UNPACKING AND INSPECTING THE CONTENTS

The riding mower is supplied on a wooden pallet in a package made from wooden boards. Assemblies that had to be removed for transportation reasons are packaged in individual packages.

Inspect immediately after delivery that the riding mower has not been damaged. In the event of damage inform the carrier. If the complaint is not lodged in time, no potential demands can be claimed.
Check that the mower model is the same as you ordered. In the event of an irregularity do not unpack the mower and immediately report this discrepancy to the supplier.

3.2 HANDLING THE DELIVERY

The package must only be handled by means of a forklift truck or pallet mover. Slide the forks into the hole in the pallet and move the mower to your selected location for its assembly or storage. Always transport only a single package.

The minimum load bearing capacity of the handling equipment is: **500 kg**

The wooden crate is not intended to be lifted by means of a crane.
Only persons with relevant authorisation and experience with the operation of the handling equipment may use it.
Due to the considerable weight of the packaged mower, we recommend at least two people for its handling.

3.3 STORAGE BEFORE UNPACKING

In the event that the mower will not be unpacked and assembled immediately upon deliver, store it under the following conditions:
- Store the mower in its original packaging in a dry area protected against the effects of weather, which could result in the damage of the packaging and deterioration of condition.
- Do not tilt the wooden package on its side or, worse still, turn it upside down. Do not place any items on to the package from which liquids could potentially leak.
- Do not disassemble the mower from the pallet and do not turn it on its side and do not lean it in a diagonal position.
- Do not place any other items or materials on to the packed mower.
- When storing multiple packaged mowers then no more than two packages may be stacked on top of each other.

Recommended storage location specifications:

Temperature	from -10 °C to +35 °C
Air humidity	<80 % at 21 °C
Air cleanliness	Dust-free environment
Other	Dry storage location

3.4 UNPACKING

► First remove the wooden boards using a suitable tool (crowbar, hammer, etc.), remove all the separately packaged assemblies and then finally remove all the securing elements and packaging materials. Ensure that no part of the mower or its assemblies are damaged.
►Visually inspect the mower and the separate assemblies for damage that may have occurred during transport. In the event of any type of damage, immediately contact the supplier and do not continue with the assembly of the mower.

After unpacking everything, ensure that the packaging material is properly disposed of. The disposal must conform to relevant waste disposal laws valid in your country. In the event that you are unsure about the disposal procedure, have this performed by a specialised company.

SEPARATELY PACKAGED ASSEMBLIES

Unpack the following separately packaged assemblies:
- Steering wheel
- Seat
- Seat arm rests
- documentation(see the following chapter)
- The grass catcher (is partially disassembled in a cardboard box, with hitches and joining material)

DISPOSAL OF PACKAGING MATERIALS

After unpacking everything, ensure that the packaging material is properly disposed of. The disposal must conform to relevant waste disposal laws valid in your country.

In the event that you are unsure about the disposal procedure, have this performed by a specialised company.

3.5 MOWER DOCUMENTATION

The mower is supplied with the following documentation:
- Packaging note
- User's manual
- User's manual for the engine
- User's manual for the battery
- Service log book

3.6 STORAGE BEFORE UNPACKING

Due to the technical nature of this task, the mower is prepared for operation by the vendor of your riding mower (according to the following instructions).

Before starting the installation, remove all covering protective materials, locate the riding mower on an even surface and align the front wheels to face forward.

3.6.1 SEAT, STEERING WHEEL AND BATTERY

3.6.1a

a) Attach the seat to the tilting console:
- Tilt out the seat console (**1**) by approximately 90° upwards.
- Into the holes in the small plate (**2**), insert screws (**3**) and put the plate from the underside of the console against the left groove.
- From the top side of the console, slide the large plate (**4**) on to the screws (**3**).
- Put the seat up against the console and attach it using screws (**3**). Tighten the screws only lightly, the seat must remain mobile at this time.

3.6.1b

b) Install the seat sliding mechanism:
- Slide the seat positioning mechanism (**5**) into the edge of the inner opening of the console.
- From the underside of the console, put the plate (**6**) against the mechanism and insert screws (**7**) into its holes. Tighten them lightly.
- Adjust the position of the seat and tighten the screws (**3**) and (**7**).
- Tilt the seat together with the console down to the working position and using the sliding mechanism lever, set the appropriate seat position for your body size.

3.6.1c

c) Connect the cable of the safety switch:
- Tilt out the seat with the console.
- Insert the sensor into the hole in the bottom side of the seat and secure it in place by turning it clockwise. If the electric cable is not connected to the connector of the switch, connect it.

3.6.1d

d) Install the steering wheel:

- Steering wheel rod (1) has two holes enabling the steering wheel to be set to two heights. Select the hole based on your body dimensions and individual preferences, put the steering wheel on to the rod and turn it so that the hole (2) in the steering wheel overlaps the selected hole in the rod. Then insert the pin (3) into the hole and knock it in using a hammer.
- If necessary, adjust the angle of the steering wheel using the clamping levers (4). Release the lever by pulling it towards yourself, set the steering wheel to the desired position and then lock in the lever by pushing it away from yourself.

If your mower is equipped with a seat with armrests, install the armrests according to the user's manual of the seat manufacturer. The manual is supplied together with the other documentation that came with the mower.

3.6.1e

e) Connect the battery:

- Remove the cover beneath the steering wheel. The battery is located in the area behind the cover.
- Loosen the bolts on the pole terminals of the battery.
- Place the **red wire** on the (**+**) pole of the battery and secure in place with the bolt.
- Place the **brown wire** on the (**-**) pole of the battery and secure in place with the bolt.

When connecting a battery, it is always necessary to first connect the positive cable (+).
The location of the terminals may differ based on the battery's manufacturer, therefore always first check which side the terminal is located on.
When putting the battery into operation, proceed according to the instructions provided in the included user's manual of the battery. Adhere to all safety instructions provided by the manufacturer.

In exceptional cases, it is possible that for transportation reasons, the bumper bar of the mower is released and slides back towards the seat. In such a case, proceed as follows:

3.6.1f

f) Fit the bumper bar in the correct position:

- Open the hood.
- Slide the bumper bar consoles away from the seat – the correct position is clearly marked on the frame.
- Properly tighten the bolts of the consoles on both sides of the mower and close the hood.

3.6.2 GRASS CATCHER

The grass catcher is supplied packed in a separate box. For transportation reasons some of its parts are demounted and they first need to be assembled.

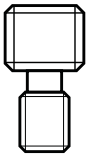
UNPACKING AND INSPECTING THE PACKAGE CONTENTS

Remove all packaging materials and carefully arrange the unpacked parts according to figure 3.6.2a.

3.6.2a

1) Lid with top frame and sack
(2) Base
(3) Front tube
(4) Rear tube
(5) Contact spring of full grass catcher sensor
(6) Lower braces
(7) Top handle of the lid
(8) Dump lever handle
(9) Grass catcher hitches
(10) Lower hitch (for trailer)
(11) Joining material

A part of the grass catcher package are also spare break pins for the cutting blades (4 pcs). Keep these pins for future use.



VIEW OF THE ASSEMBLED GRASS CATCHER

Positions correspond to the numbers in illustration **3.6.2a**.

3.6.2b

(1) Lid with top frame and sack
(2) Base
(3) Front tube
(4) Rear tube
(5) Contact spring of full grass catcher sensor
(6) Lower braces
(7) Top handle of the lid
(8) Dump lever handle

ASSEMBLING THE GRASS CATCHER

3.6.2c

- Screw the front tube under the lid of the top frame.

3.6.2d

- Attach the contact spring for the full grass catcher sensor on the left side of the top frame plate.

3.6.2e

- Screw in the rear tube into the grass catcher. For a grass catcher with a capacity of 320 l use the holes closer to the front tube; for the grass catcher with a capacity of 380 l use the holes farther away from the front tube.

3.6.2f

- Tilt the grass catcher by 90o and from the bottom side screw on the lower braces. Attach one side of the braces to the front tube and the second side to the rear tube. For the 320 l grass catcher use two braces, for the 380 l grass catcher use three braces.

3.6.2g

- Tilt the grass catcher by 90 and from the bottom side screw on the lower braces. Attach one side of the braces to the front tube and the second side to the slanting tube. For the **320 l** grass catcher use two braces, for the **380 l** grass catcher use three braces.

3.6.2h

- From above, put the top handle against the lid and screw it in from the underside using two screws with washers, inserted from the underside into the grooves of the lid braces.

3.6.2i

- Insert the dump lever handle into the hole in the grass catcher lid.
- Into the holes in the bottom end of the lever, screw in a bolt from the outside.

3.6.2j

- Screw the grass catcher hinges (1) on to the rear plate. For this purpose use the installation markings on the plate indicating the correct position of the hitches.
- Only screw on the lower hitch (2) if you will be using a trailer (optional equipment).

ADJUSTMENT OF THE GRASS CATCHER POSITION AFTER INSTALLATION

3.6.2k

- Hang the grass catcher on the hitches (**1**) on the rear plate of the mower.
- Check that the grass catcher and the mudguards match up. The arrow tips stamped on the lid of the grass catcher and the mower's fairing must point to each other while the distance between the grass catcher and the grass catcher plate must be no greater than 3 mm.

3.6.2l

- If the grass catcher does not align, it means that the hitches (1) are not in the correct position.
- Remove the grass catcher and adjust the position of the hitches relative to the direction that it did not align with the mower:
  - loosen screws (A) to move the hitches up and down
  - loosen screws (B) to move the hitches forwards and backwards
- After adjusting the position, tighten the screws and again hang the grass catcher and check that it is in the correct position.
- Also check the position of the contact spring of the full grass catcher sensor (10) – the spring must be touching the switch (C), otherwise the mowing deck will not function.

3.7 CHECKS PRIOR TO STARTING UP

3.7.1 CHECKING THE MOTOR OIL

3.7.1

- Position the mower on a horizontal surface.
- Open the hood and find the oil dipstick. Depending on the type of engine, the dipstick is either on the left or on the right side.
- Screw out the oil dipstick, wipe it clean using a dry cloth, reinsert it and screw it in. Then again screw it out and check the oil level. The oil level must be between the two marks on the dipstick. If it is not, fill up with motor oil so that it reaches the top mark.

A more detailed description including the type of oil can be found in the user's manual of the engine's manufacturer.

3.7.2 CHECKING THE BATTERY

Check the battery charge level according to the user's manual of the battery. Respect all the manufacturer's instructions especially when checking and charging the battery.

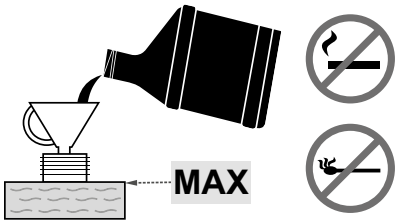
3.7.3 FILLING THE FUEL TANK WITH FUEL

Depending on the design of the mower, the fuel tank is located either under the front hood or in the left mudguard. The capacity of the tank is provided in the technical specifications. The fuel type is indicated in the separate user's manual of the engine

Use only the fuel specified in the user's manual of the engine. Defects caused by the use of incorrect fuel are not covered by the warranty.
Only add fuel with the engine turned off and when the engine is cold. Fill up the fuel tank in a well ventilated location.
When handling fuel, do not eat, smoke or use an open flame.
For filling, use a funnel designed for refilling fuel.
Respect the maximum permitted fuel tank level, i.e. the fuel level is in the lower level of the filler. Never fill up the fuel tank above this maximum level.
Ensure that fuel is not spilled when refilling. Spilled fuel can very easily catch on fire. If fuel does spill, thoroughly wipe dry.
Always store the fuel out of the reach of children.
Never start up the mower without the fuel tank cap screwed on.

Procedure for filling up:

- Open the fuel tank lid. Open it slowly because there may be overpressure in the fuel tank caused by petrol vapours.
- Insert a funnel into the fuel tank opening and start to pour the fuel from the canister. The fuel level must under no condition be above the bottom level of the filler.
- After filling up the fuel tank always wipe dry the area around the fuel tank opening as well as the fuel tank opening itself. It is good to check the condition of the fuel lines.



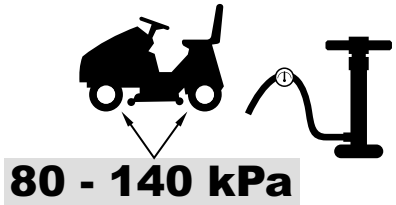
It is recommended to regularly also clean out the actual fuel tank because impurities found in the fuel may cause an engine malfunction.

3.4.7 CHECKING THE AIR PRESSURE IN THE TYRES

Before putting the mower into operation, check the air pressure in the tyres.

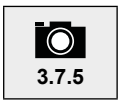
The air pressure **in the front and rear** tyres must be in the range **80 - 140** kPa.

The difference between the individual tyres may be **± 10 KPa**.



Do not exceed the maximum pressure marked on the tyres that are being used.

3.7.5 CHECKING THE OIL LEVEL IN THE HYDRAULIC CIRCUIT (only on mower UJ102 4x4)


3.7.5

The mower UJ102 4x4 is supplied with a bled hydraulic circuit and with an equalisation tank with the prescribed amount of oil. The oil level in the tank may decline during transport. The equalisation tank is located under the hood at the steering column

- Check that the oil level is between the two marks on the equalisation tank, if necessary fill up with the necessary amount of the prescribed oil (📖 6.3.16).

Wipe clean the area around the tank opening and the tank opening itself. Also regularly clean the entire tank, because any dirt in the oil reduces the lifespan of the oil filter and may possibly cause a malfunction.

3.7.6 BLEEDING AIR FROM THE HYDRAULIC CIRCUIT (ONLY ON UJ102 4x4 MOWERS)

The hydraulic system is fully bled during the first couple of hours of driving the mower – we recommend that you "run the mower in" with a mild load for 1 to 2 hours. In the event that during the initial "run in" the character of the hydrophone sound changes, then the front axle may be aerated. Air may be bled by loosening the plug on the left and right side of the front axle. When oil starts to flow continuously, retighten the plug.

3.7.7 CHECKING THE TIGHTNESS OF THE HYDRAULIC CIRCUIT (ONLY ON UJ102 4x4 MOWERS)

Visually check the hydraulic circuit for oil leaks, namely the locations where fittings are connected to the transmissions. If you discover any leaks, inform your service centre.

3.7.8 DRIVING THE MACHINE FROM THE PALLET

After performing all the assembly works and inspections specified in the preceding chapters, it is possible to drive the mower off the pallet. For this purpose, arrange for suitable ramps that are placed in front of the front wheels of the mower.

- Start up the mower according to 5.2 STARTING UP THE ENGINE and slowly and carefully drive the mower down off the pallet. Driving the mower, see chapter 5.5 DRIVING THE MOWER.
- It is also possible to drive the mower off the pallet without starting it up. For this, it is necessary to disengage the rear wheel drive. Further details, see 4.2 DESCRIPTION AND FUNCTIONS OF THE CONTROL ELEMENTS / (21) AND (22) BYPASS LEVER – FREE MOVEMENT OF THE REAR WHEELS.

If you decide to drive down off the pallet using the bypass, be very careful that the mower does not accelerate when travelling down the ramps and crash into people or equipment in the room.

4 OPERATING THE MOWER

4.1 LOCATION OF THE MAIN CONTROL ELEMENTS AND INDICATORS

4.1a

(1) Throttle lever

(2) Information panel (optional accessory)

(3) 12V socket (optional accessory)

(4) AUT/MAN switch - control of the function of mowing when the grass catcher is full (optional accessory)

(5) Mowing deck engagement switch

(6) Deactivation of the mowing deck disengagement for reversing

(7) Main power switch

(8) Buzzer

(9) Parking brake

(10) Cruise control (optional accessory)

(11) Choke

(12) Brake pedal and parking brake indicator light

(13) Differential lock pedal

(14) Brake pedal

(15) Reverse travel pedal

(16) Forward travel pedal

(17) Mulching flap lever

(18) Mowing deck elevation adjustment lever

(19) Mowing deck position lock lever

(20) Grass catcher dump lever handle

(21) Bypass lever for the K62 transmission

(22) Bypass lever for the K46 transmission

(23) Full grass catcher flap

(24) Spring for retaining the grass catcher in position when travelling in terrain

(25) Full grass catcher spring sensor

4.2 DESCRIPTION AND FUNCTIONS OF THE CONTROL ELEMENTS

The shown locations of control elements may differ from their actual locations depending on the selected configuration of the mower.

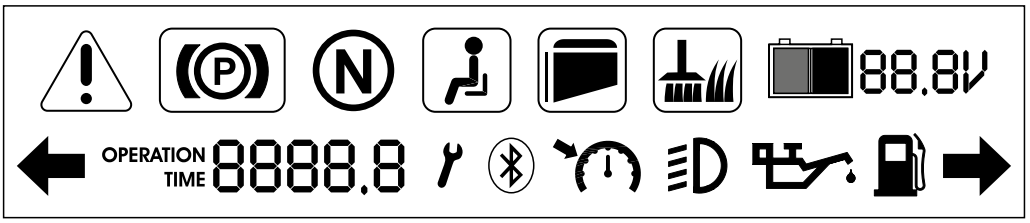
(1) THROTTLE LEVER

Serves to regulate the engine speed. It has the following three positions:

CHOKE*	Starting a cold engine
MAX	Maximum engine speed
MIN	Minimum engine speed (idle)

* Only on mowers with a BS15, BS17, KO15, TE17 and HO16 engines

(2) INFORMATION PANEL (optional accessory**)**



The information panel comprises of the display and indicator lights that together serve to signal the status of the mower's main functions and to display basic information.

	WARNING TRIANGLE It is lit when the conditions for starting up are not met or when the mowing deck is engaged.
	PARK BRAKE AND DRIVING BRAKE It is lit: When the brake pedal is stepped on or when the parking brake is engaged. It is flashing while the warning triangle is lit: A starting-up condition has not been met (push down the brake pedal).
	NEUTRAL INDICATOR LIGHT It is flashing while the warning triangle is lit: A starting-up condition has not been met (take your foot off the travel pedal).
	PRESENCE OF THE DRIVER It is lit: The driver is not present. It is flashing while the warning triangle is lit: A starting-up condition is not met (sit down on the seat).
	INDICATOR LIGHT FOR PRESENCE AND FULL LEVEL OF THE GRASS CATCHER It flashes simultaneously with the mowing deck indicator light: The mowing deck was automatically turned off when the grass catcher became full (AUT function). It is flashing while the warning triangle is lit: Starting-up condition for the mowing deck are not met (put on the grass catcher).
	MOWING DECK It is lit: The mowing deck is engaged. It is flashing while the warning triangle is lit: A starting-up condition has not been met (turn off the mowing deck). It flashes after the mowing deck is turned off: The mowing deck is running down.
88.8V	**CHARGING THE BATTERY*** The numerical value shows the current battery voltage. Empty pictogram: The battery is OK (12.6 - 14 V) and is recharging correctly. Blue colour: The battery voltage is over 14V, if it remains lit for a long time while the mower is in operation, check the engine's recharging system. Red colour: The battery has a low voltage (up to 12.6 V), check the engines 's recharging system.
	NOT USED The symbol is prepared for a future version of the panel.

OPERATION TIME 8888.8	**COUNTER OF MOTOR HOURS**** Displays the number of motor hours.
8888.8	**MOTOR SPEED** [rpm]*** When the mower is started up, the motor speed is shown for about 10 seconds.
	**SERVICE / EMERGENCY MODE** Mower requires a servicing task.
	**NOT USED** The symbol is prepared for a future version of the panel.
	**CRUISE CONTROL INDICATOR LIGHT** It is lit when cruise control is activated.
	**HEADLIGHT INDICATOR LIGHT** It is lit when the mower's headlights are lit.
	**MOTOR OIL PRESSURE** It lights up red when the motor oil pressure drops. Check the motor oil level and fill it up if necessary.
	**FUEL INDICATOR LIGHT** It lights up when the fuel level is low. (on some models, this indicator light is not active).
	**NOT USED** The symbol is prepared for a future version of the panel.

* = In the event that after starting the engine and running the mower at maximum rpm without the mowing deck engaged and without the lights turned on, when after approximately 1 minute of operation the red indicator light does not turn off or possibly a blue indicator does not turn on, then this indicates a malfunction of the recharging circuit and it is necessary to seek out a professional service centre.

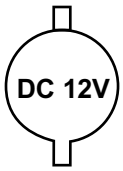
** = Tampering with the motor hours counter (sensing cable on the spark plug) results in loss of warranty.

*** = The text "OPERATION TIME" is not shown.

ATTENTION:
In the event that for any reason the motor speed sensing cable is not connected (on the engine's spark plug), the engine will shut off after 30 seconds and the entire display will start to flash intermittently. In this case, it is possible to utilise the emergency travel function.

(3) 12V SOCKET (optional accessory)

The 12 V socket is located underneath the information panel.



The socket can, for example, be used for the following tasks:

- connecting/recharging a mobile telephone
- connecting a portable flashlight

The socket cannot be used for recharging the battery!

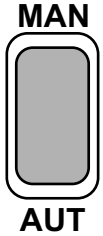
(4) SWITCH FOR CONTROLLING THE FUNCTION OF MOWING WHEN THE GRASS CATCHER IS FULL (optional accessory)

The AUT/MAN switch serves to activate and deactivate the control of the mowing function (mowing deck) when the grass catcher is full.

In the **MAN** position, mowing is activated permanently and when the grass catcher is full, grass clippings may accumulate in the ejection chute. For this reason this position is intended only for short term use to complete the mowing of very small remaining areas.

If the mower is equipped with an acoustic indicator (buzzer), then this function is automatically activated when the basket is full.

In the **AUT** position, the mowing function is automatically deactivated when the grass catcher is full.



Position	Grass catcher is full	Mowing deck
AUT	**NO**	**ENGAGED**
AUT	**YES**	**DISENGAGED**
MAN	**NO**	**ENGAGED**
MAN	**YES**	**ENGAGED**

(5) MOWING DECK ENGAGEMENT SWITCH

Switch R serves to disengage the automatic mowing deck disengagement function when reversing (symbol 5.5.1).

1	**ENGAGED**	Engagement of the mowing deck / the mowing deck is engaged
0	**DISENGAGED**	Disengagement of the mowing deck / the mowing deck is disengaged

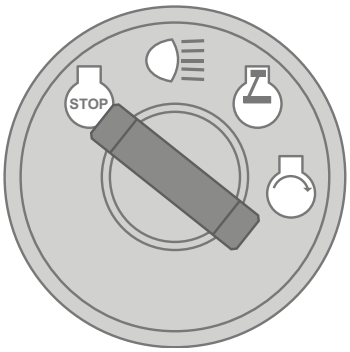
(6) DEACTIVATION OF THE MOWING DECK DISENGAGEMENT FOR REVERSING

Switch **R** serves to disengage the automatic mowing deck disengagement function when reversing (📖 5.5.1).

The switch needs to be pressed when the mowing deck has already been automatically disengaged but the blades have not yet stopped rotating (approx. 4 seconds) or when the mowing deck is started immediately before the reverse travel pedal is stepped on. Then with every subsequent change in the travel direction from reverse to forward, the disengagement of the mowing deck is again reactivated.

(7) MAIN POWER SWITCH

Serves to start up / shut off the engine. It has the following four positions:



Ignition off / turn off the ignition

Turn on / turn off the headlights on the hood

Ignition on- the engine is running

Start engine – starting position

(8) BUZZER

The buzzer makes a sound signal when the grass catcher is full.

After the sound signal indicating a full grass catcher, the mowing deck is not disengaged!

(9) PARKING BRAKE LEVER

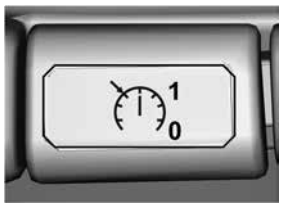
The parking brake has two positions. In the **pushed in** position the brake is not engaged, after **pulling it up** while stepping down on brake pedal the parking brake is engaged (will brake).

Stepping on the brake pedal will disengage the parking brake and the lever will automatically be released and shift to the pushed in position.

If the lever is in the braking position, never push it down by hand. Always step on the brake pedal.

(10) CRUISE CONTROL

Cruise control is only used when travelling in a long straight line. Before any change in direction it is necessary to deactivate the cruise control.



Cruise control is active only when the ignition is turned on.

Engaging cruise control:
1. Set the speed by stepping on the forward travel pedal.
2. Pull out the cruise control upwards.
3. Take your foot off the forward travel pedal.

Disengaging cruise control:
Step on the brake pedal or the forward travel pedal.

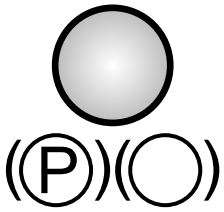
(11) CHOKE

Enables the starting of a cold engine.

Machines with 2V (V TWIN) engines are equipped with a separate choke, with the exception of engines with an electronic choke.

(12) BRAKE PEDAL AND PARKING BRAKE INDICATOR LIGHT

The indicator light serves to signal that the brake is being applied and that the parking brake is engaged.

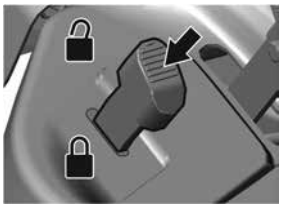


Parking brake engaged signal

Brake pedal applied signal

(13) DIFFERENTIAL LOCK PEDAL

The pedal is used only if necessary and only when driving directly forward.



When the pedal is pushed down the lock is engaged.

When the pedal is released the lock is automatically disengaged.

Never use the differential lock when changing travel direction. Otherwise there is a risk of serious damage to the transmission!

(14) BRAKE PEDAL

Stepping on the brake pedal will slow down the riding mower.

The pedal is also used when starting the mower – **it is only possible to start up with the brake pedal applied**.

(15) REVERSE TRAVEL PEDAL

The pedal controls the power going to the wheels and regulates the speed of the mower **backwards**.

The more the pedal is pushed towards the floor, the faster the mower will be and vice versa.

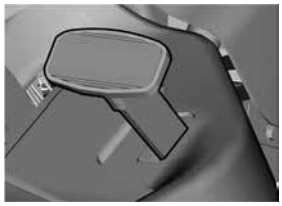
When the pedal is released it will automatically return to the neutral position and the mower will stop.

More information 🕮 ***5.5***.

Changing the travel direction forwards / reverse is only possible after stopping the mower!

(16) FORWARD TRAVEL PEDAL

The pedal controls the power going to the wheels and regulates the speed of the mower **forward**.



The more the pedal is pushed towards the floor, the faster the mower will be and vice versa.

When the pedal is released it will automatically return to the neutral position and the mower will stop.

More information 🕮 ***5.5***.

Changing the travel direction forwards / reverse is only possible after stopping the mower!

(17) MULCHING FLAP LEVER

The lever has two functions:

1) **Grass collection** – grass clippings are collected in the grass catcher
2) **Mulching** – grass clippings are spread out under the lawnmower

Prior to shifting the lever from the grass collection position to the mulching position (down), first stop the mower and allow the mowing deck to run approximately 20 seconds without the mowing function so that remaining glass clippings are blown out the ejection chute. Only then shift the lever to the mulching position and start travelling forward. Not adhering to this procedure may cause the incorrect function of the flap and the clogging of the ejection chute.

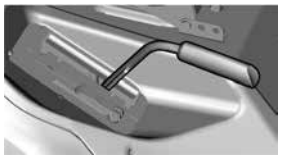
4.1b

Setting the lever to position **A** (closer to the front wheels) opens up the mulching flap and **grass is collected in the grass catcher**.
Setting the lever to position **B** (closer to the rear wheels) closes the mulching flap and **grass is spread out under the lawnmower**.

To ensure the correct function of the mulching flap, it is necessary to thoroughly clean out grass clippings and dirt from the mowing deck and the ejection chute at the end of the mowing session.

(18) MOWING DECK ELEVATION ADJUSTMENT LEVER

The lever serves to set the elevation height of the mowing deck from the ground.



The lever has **7** work positions, which correspond to a mowing height of **3 to 9.5 cm**.

The higher the number of the lever position, the higher vegetation height remains after mowing.

When travelling without mowing, the lever must be set to position **7**.

(19) MOWING DECK POSITION LOCK LEVER

The lever serves to lock the position of the mowing deck.

The lever can be used for the first four mowing deck positions. First tilt out the lock lever upwards, then set the mowing deck lever to the appropriate position and lock this position by tilting the lock lever downwards.

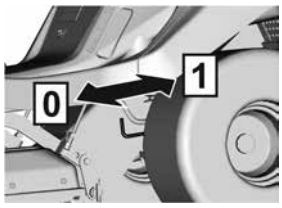
(20) GRASS CATCHER DUMP LEVER HANDLE

The lever serves to empty the grass catcher.

More information 🕮 ***5.6***.

(21) / (22) BYPASS LEVER – FREE MOVEMENT OF THE REAR WHEELS

The bypass lever serves to disengage the transmission for the rear wheel drive and is used to push or pull the mower without using the engine. Depending on the type of transmission used, it is located either behind the rear left wheel or on the rear plate of the mower. It has these positions:

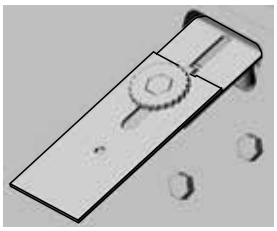


Position	Rear wheel drive	Use
[0]	**DISENGAGED**	When pushing the mower, the engine is still
[1]	**ENGAGED**	When driving, the engine is running

!

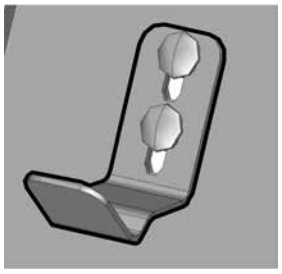
ATTENTION! The UJ102 4x4 mower **does not enable,** for construction reasons**, the disconnection of the front axle drive** – the hydraulic system is not equipped with a bypass valve. This significantly limits the option of moving the mower when the engine is not running. During such movement the front axle is significantly overloaded and may be damaged. In the event that it is necessary to move the mower with the engine turned off**, always push the mower with the front axle lightened!**
The bypass lever on this mower is primarily used to bleed the hydrostatic system. Due to the high demands on equipment, have this procedure performed by a specialised service centre.
The mower must not be used (gear shifted into drive) if the bypass lever is in the disengaged position – **there is a danger of damage to the transmissions!**

(23) FULL GRASS CATCHER FLAP



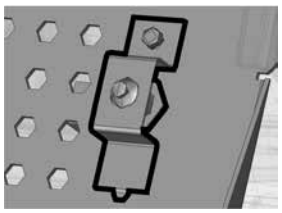
Indicates that the grass catcher is full.

(24) SPRING FOR RETAINING THE GRASS CATCHER IN POSITION WHEN TRAVELLING IN TERRAIN



Retains the grass catcher in position when travelling across uneven terrain.

(25) FULL GRASS CATCHER SPRING SENSOR



Engages the full grass catcher spring.

5 OPERATING AND HANDLING THE MOWER

Information which it is good to know before the riding mower is first turned on:

- The riding mower is equipped with safety contacts, which are engaged by:
  - a switch located under the seat
  - a switch on an attached grass catcher or deflector
  - a full grass catcher switch
  - a brake pedal switch
- The engine will automatically shut off when the driver leaves the seat and the mower is not secured using the parking brake.
- The engine can only be started when the mowing deck is turned off and the grass catcher is attached, or a deflector which during mulching prevents grass clippings from entering the exhaust chute that leads to the grass catcher is attached and the brake pedal is applied.

5.1 CHECKS PRIOR TO STARTING UP THE MOWER

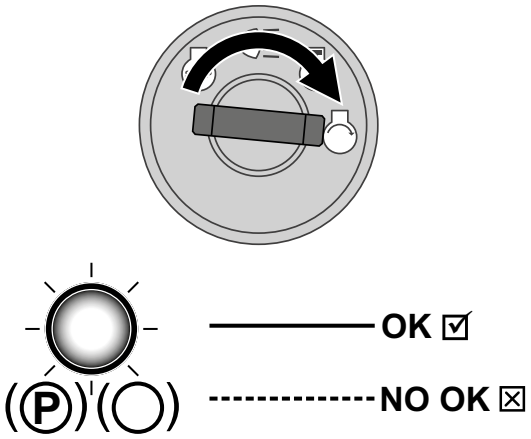
Before starting up the riding mower check the following:

- Oil level in the engine (🕮 ***3.4.1***)
- Battery charge level (🕮 ***3.4.2***)
- Fuel level (🕮 ***3.4.3***)
- Air pressure in the tyres (🕮 ***3.4.4***)
- That the bypass lever is in position "**1**"

5.2 STARTING UP THE ENGINE

The mower is equipped with a function that prevents the engine from starting if the following safety conditions are not met:

- The drive of the mowing deck is disengaged
- The travel pedal is not pushed down
- The driver is sitting on the seat of the mower
- The brake pedal is pushed down or the brake is engaged in the parking position



Meeting these conditions at the instant the engine is being started is indicated by the red brake pedal and parking pedal light being **permanently lit** (Ⓟ)(◯).

<u>The red signal light also works as a battery status signal!</u>
If the red signal light starts to flash even though you have not stepped on the brake pedal and have turned the key to "ignition OFF" position, it means the battery charge is low. If the signal light flashes while the engine is running, the battery charging system is not working properly. In that case, contact an authorized service facility as soon as possible.

Not meeting these conditions at the instant the engine is being started is indicated by the red brake pedal and parking pedal light being **intermittently lit (flashing)** (Ⓟ)(◯).

After meeting the described conditions, start the engine as follows:

1) Push down the brake pedal.
2) Set the mowing deck elevation adjustment lever to position "**7**".
3) Set the throttle lever as follows:
   - On mowers with a two-cylinder engine to position **"MAX"**
   - On mowers with a single-cylinder engine to position "**CHOKE**"
4) Pull out the choke *(only on mowers equipped with an independent choke)*
5) Turn the key to position "Ignition on" and wait **at least 1 second**. During this time, diagnostics of the mower's electronic system are performed. Then turn the key to position "**Start engine**" and the engine will start. After starting, release the key, the key will automatically return to the position "**Ignition on**".

As soon as the engine starts up, release the ignition key. **The duration of starting up must not exceed 10 seconds, otherwise there is danger of damage to the switch!**
Never use fixed external starters to start the mower. This could damage the electrical wiring. It is possible to connect a higher capacity 12V battery.

6) Push in the choke *(only on mowers with a two-cylinder engine)*.
7) Slowly move the throttle lever to position "**MIN**".

Allow the engine to run several minutes before turning on the mowing deck.

Never leave a started engine running in a closed or poorly ventilated area. Exhaust fumes contain substances that are harmful to your health.
Keep your hands, legs and clothing **away from** moving parts and the exhaust pipe.

5.2.1 EMERGENCY TRAVEL SYSTEM

The mower is equipped with a special emergency travel system that makes it possible to start the engine in an emergency and drive the mower back in the event of some kind of malfunction of the mower's electrical system that prevents the mower from being started after meeting all the starting conditions, see above.

Procedure for activating the emergency travel system:

- sit on the seat
- push down the brake pedal
- set the key in the switch box to position "ignition on" (electrical circuits connected)
- Press the R button 5 times

Subsequently, it is possible to start the mower and to drive to a location for transport to a service centre. It is not possible to engage the mowing deck when in the emergency travel mode!

5.3 TURNING OFF THE ENGINE

a) Move the throttle lever to position "**MIN**".
b) If the mowing deck is activated, deactivate it by pushing down the switch.
c) Turn off the engine by moving the key to position "**STOP**" and take the key out of the ignition.

If the engine is overheated, allow it to run for a while at minimum speed.

Never stop the engine by merely getting off the seat, while leaving the key in the ignition in the position "ON" as this may result in an electrical defect.

Always turn the key to the "OFF" position and remove it from the ignition. This will prevent an undesirable start up of the mower by an unauthorised person or children.
Before turning off the ignition, lower the engine speed to slow for the event of self-ignition. Not following this instruction may result in damage to the engine and exhaust.
Never disconnect the battery cables while the engine is running! This could damage the engine regulator.

5.3.1 LEAVING THE MOWER WHILE THE ENGINE IS RUNNING

If you want or need to leave the mower for a while (e.g. in order to remove obstacles, etc.) and you intend to then continue mowing, it is possible to **get off and leave the engine running**. This saves the mower's battery.

Conditions for getting off the mower with the engine running:

- the mowing deck is disengaged
- the throttle control lever is in position "**MIN**"
- the gear is in neutral and the hand brake is activated (the brake indicator light is on)

5.4 ENGAGING AND DISENGAGING THE MOWING DECK

5.4.1 ENGAGING THE MOWING DECK

Move the throttle lever to position "**MAX**".

- Using the mowing deck elevation adjustment lever set the position of the mowing deck and thereby the mowing height.
- Set the mowing deck activation switch to position "**ACTIVATED**".

Conditions for engaging the mowing deck:

- the driver is sitting in the seat of the mower
- the grass catcher, or the deflector or the exhaust chute cover is installed
- the AUT/MAN switch (optional accessory) is in position "**AUT**" and the grass catcher is empty
- the AUT/MAN switch (optional accessory) is in position "**MAN**".

5.4.2 DISENGAGING THE MOWING DECK

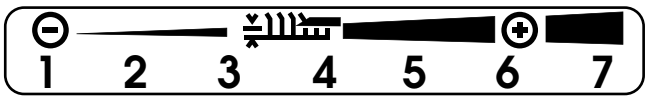
► Disengage the mowing deck by pushing down the engagement switch.

If the driver leaves the seat, the engine will automatically shut down and thereby the rotation of the mowing blades also.

However, never turn off the mowing deck by simply leaving the seat. If you do not move the key in the ignition from the position "ON" to position "STOP", then a part of the electrical installation will still be live and this may result in it being damaged. Also the motor hours counter remains activated.

5.4.3 SETTING THE HEIGHT OF THE MOWING DECK FOR MOWING

- If you wish to set the mowing deck **higher off the ground**, move the mowing deck elevation adjustment lever **upwards**.



- If you wish to set the mowing deck **closer to the ground**, move the mowing deck elevation adjustment lever **downwards**.

Position "**1**" is used to copy the unevenness of the terrain. Do not use this height permanently as this could lead to increased wear of parts on the mowing deck.
The mowing deck is fitted with four travel wheels, which in the event of uneven terrain lift the frame with the mowing deck and so protect the mowing blades against damage.

5.4.4 ADJUSTMENT OF THE CONTROL FORCE OF THE MOWING DECK ELEVATION ADJUSTMENT LEVER

5.4.4

If you need to expend a great deal of physical strength to move the mowing deck elevation adjustment lever from position to position then loosen the tension of the lever mechanism spring. The spring is located on the right side of the machine and its correct length is 93± 1 mm for UJ102, 115±1 mm for UJ110 and 95±1 mm for UJ122. During this, the mowing deck elevation adjustment lever must be in position 1. Use an appropriate spanner to loosen the nut and test whether the tension suits you.

If shifting the lever is too easy, tension the spring.

5.4.5 BALANCING THE MOWING DECK

To achieve the best mowing results, the cutting deck must be correctly vertically set. The adjustment procedure is described in chapter "**6.3.7 MOWING DECK - CHECKING AND BALANCING**" of this manual.

5.5 DRIVING THE MOWER

General warnings before driving:

- Make sure that the **parking brake is disengaged**. The parking brake lever must not stay in the extended position – the indicator light is lit (📖 ***4.2***). Stepping down on the operating brake automatically disengages the parking brake. In the event that the travel pedal is stepped on when the parking brake is engaged and the brake indicator is lit, the engine will stop immediately. This also applies while travelling, when the travel and brake pedals are stepped on simultaneously. **In this way, the hydraulic transmission is protected against damage!**
- The bypass lever must be set to position "**1**", i.e. **bypass** of the travel **must be activated**.
- When travelling to the mowing location, **the mowing deck must be disengaged and elevated to the highest position**, i.e. the mowing deck elevation adjustment lever is in position "**7**".
- **When travelling over obstacles** higher **than 8 cm** (kerbs, etc.) it is necessary to use **ramps** to avoid damaging the mowing deck and the gear box.
- **Avoid** hard **impacts** of the front wheels **against rigid obstacles**, this may result in damage to the front axle, particularly when the mower is travelling at a high speed.

5.5.1 TRAVELLING FORWARD / REVERSING

- Slowly move the throttle lever to position "**MIN**". This will lower the engine speed.
- Slowly step on the drive pedal depending on the desired direction of travel (forward or reverse).

Caution - risk of injury if the pedal is pushed down quickly!

- **Changing the direction** of travel **forward-reverse** is possible only **after stopping the machine.** If the mower is not still, there is a danger of damaging the transmission.
  Never use the travel pedal and the brake pedal at the same time - this may result in a malfunction of the transmission.

The system is equipped with an **automatic mowing deck disengagement for reversing** function at a speed higher than 0.3 m/s (approx. 1 km/hour).

In the event of intentional and controlled reversing with the mowing deck engaged, it is possible to disengage this safety function by pressing the **R** button located next to the steering wheel (*4.2 (6)*). Then with every subsequent change in the travel direction from reverse to forward, the disengagement of the mowing deck is reactivated.

When using the disengagement of this function with the R button, pay exceptional attention to the area behind the mower when reversing.

5.5.2 STOPPING TRAVEL

The forward/reverse travel of the mower is stopped by **gradually taking your foot off the travel pedal** and subsequently **stepping on the brake pedal**.

In the event that cruise control is engaged and the brake pedal is stepped on, it automatically moves to the neutral position. The braking distance is shorter than 2 m.

5.5.3 TRAVELLING SPEED AND MOWING GRASS

- It generally applies that **the wetter, higher and more dense the grass is**, **the lower the travelling speed** that should be used. When the mower is travelling at high speed or when under large load, the rotation speed of the blades is reduced, the quality of the cut is worse and the ejection chute may become clogged. Under such conditions always set the engine to maximum power.
- If the **grass is very high**, it is necessary to **mow it several times**. First mow at maximum elevation and with narrower mowing coverage width if necessary. The second run can then proceed at the required mowing height.
- In the event that the 110 cm mowing deck is used for mulching, it is necessary to **very carefully adjust the speed** to the height of the mulched vegetation respecting the significant load that this can place on the engine in this mode! The higher the grass, the lower the travelling speed.
- We recommend mowing **in the parallel or cross direction**. Covering the previous coverage of the mower increases the effectiveness of the blades and will improve the appearance of the mowed area.
- When travelling over uneven terrain the travelling speed may fluctuate.

Recommended travelling speeds of the mower based on conditions:

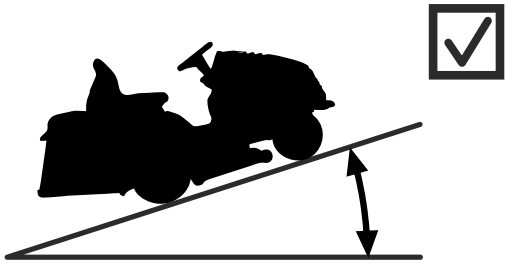
Condition of vegetation	Recommended speed
High, dense and wet	2 km/hour
Average conditions	3 – 5 km/hour
Low, dry vegetation	< 5 km/hour
Travelling without the mowing deck engaged	< 8 km/hour

5.5.4 TRAVELLING ON A SLOPE

This riding mower may work on slopes with an incline of up to **12° (21%)**, when **4x4** drive is used, the slope incline must to be greater than **15° (27%)**.
When working on a slope it is necessary to adhere to the following fundamentals:

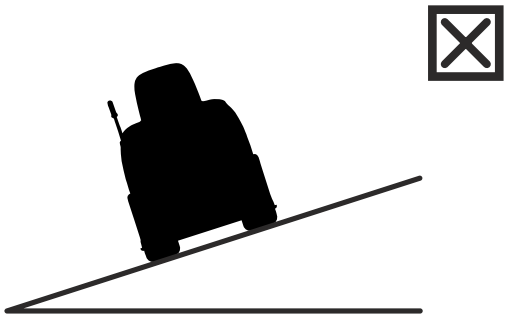
- Pay increased attention when travelling on a slope.
- Always use a slower travelling speed.
- Only travel perpendicular to the contour, i.e. up and down. Travelling in the direction of the contour is possible with extra attention only when turning the mower. If at all possible, avoid travelling along the contour.
- When turning ensure that a wheel does not drive over an elevated obstacle (rock, tree root, etc.).
- Travel slower when travelling down a slope or over obstacles. Pay special attention when turning and turning around on slopes.
- If you stop on a slope, always use the parking brake.

Correct



UJ102 / UJ110 / UJ122: **Max 12° (21%)**
UJ102 4x4: **Max 15° (27%)**

Wrong



When overloading the mower by travelling on slopes over the aforementioned values, there is a risk of serious damage to the transmission. The manufacturer is not responsible for damage caused in this way.

5.6 EMPTYING THE GRASS CATCHER

The full level of the grass catcher is signalled by the full grass catcher flap. It is possible to regulated the full level of the grass catcher by moving the sliding part of the flap (extending or shortening the arm) and thereby optimise its filling up for various types of collected vegetation (dry grass, wet grass, leaves, etc.).

(1) Sliding part extended = grass catcher filled to minimum

(2) Sliding part retracted = grass catcher filled to maximum

5.6a

Procedure for emptying:

- Drive the mower to the location where you wish to empty the grass catcher. Stop the mower and apply the brake. If on a slope, use the parking brake.

► Disengage the mowing deck by pushing down the engagement switch.

- If the AUT/MAN switch is installed on the mower, leave this switch in position "**AUT**".
- Set the throttle lever to position "**MIN**".
- Slide the grass catcher dump lever handle completely upwards (1) and tilt it down (2) to tip out the grass catcher, allow it to empty freely, slowly release it and tilt it back.

5.6b

6 MAINTENANCE AND ADJUSTMENT

Properly performed regular maintenance and inspection of the riding mower helps to increase its problem-free operating lifetime. Worn or damaged parts must be replaced in time. **When replacing parts, use only original spare parts, using non-original parts may damage the mower, endanger the health of the driver or other persons and during the warranty period it voids the warranty.** To order spare parts, always contact the mower's manufacturer or an authorised service centre.

Incorrectly performed or completely neglected maintenance may lead not only to problems with the operation of the riding mower, but may also cause injury to its operator.

All safety and protective elements that are removed during maintenance, must always be reinstalled to their correct location and tested for functionality.

6.1 OVERVIEW OF CHECKS AND MAINTENANCE

INTERVAL	ASSEMBLY	ACTIVITY	
BEFORE EVERY USE	Engine and transmission	Check oil level	*6.2.1* *6.3.16*
	Travel drive belt	Inspection and adjustment	*6.3.12*
	Brake	Inspection of controls	*6.2.1*
	Tyres	Inspection of pressure	*6.2.1*
	Cables	Inspection of mounting, inspection of quick coupler parts	*6.2.1*
	Bolt connections	Inspection, tightening if necessary	*6.2.1*
	Mowing deck	Inspection of tension of the cogged blade drive belt	*6.3.9*
	Safety switches and elements	Inspection of function	*6.2.1*
AFTER FIRST 2 HOURS	Engine and transmission	Check oil level	*6.2.1*
AFTER FIRST 5 HOURS	Travel drive belt	Inspection and adjustment[4]	*6.3.12*
	Mowing deck	Inspection of tension of the cogged blade drive belt[4]	*6.3.9*
		Inspection of the correct tension of the mowing deck drive V-belt[4]	*6.3.8*
AFTER EVERY USE	Mowing deck	Cleaning and washing	*6.2.2*
		Inspection of the correct tension of the mowing deck drive V-belt	*6.3.8*
	The entire mower	Cleaning	*6.2.2*
	Grass catcher	Cleaning of the textile sack	*6.2.2*
	Bolt connections	Inspection, tightening if necessary	*6.2.1*
AFTER 25 HOURS	Bolt connections	Inspection, tightening if necessary	*6.2.1*
	Travel drive belt	Inspection and adjustment	*6.3.12*
	Front axle and steering	Inspection and adjustment of play	*6.3.11*
	Mowing deck	Inspection of play, alignment of shafts, inspection and sharpening of blades[3]	*6.3.6* *6.3.7*
	Lubrication	Lubrication of parts according to lubrication plan	*6.4*

(continued)

INTERVAL	ASSEMBLY	ACTIVITY	
AFTER 50 HOURS	Air filter and spark plugs	Inspection, replacement if necessary[1,2]	*6.3.2*
	Lubrication	Lubrication of parts according to lubrication plan	*6.4*
AFTER 50 ENGINE HOURS	Hydrostatic transmission on 4x4 systems	Oil change	*6.3.16*
AFTER 100 HOURS	Engine, transmission, electromagnetic transmission	Inspection and adjustment of motion	*N*
AFTER 200 ENGINE HOURS	Hydrostatic transmission on 4x4 systems	Oil change	*6.3.16*
MONTHLY	Tyres	Inspection of pressure	*6.2.1*
	Mowing deck	Inspection of tension of the cogged blade drive belt	*6.3.9*
BEFORE THE SEASON	Fuel filter	Replacement	*N*
	Battery	Inspection of electrolyte and cleaning	*6.3.1*
	Travel drive belt	Inspection and adjustment	*6.3.12*
	Mowing deck	Inspection of tension of the cogged blade drive belt	*6.3.9*
		Inspection of the correct tension of the mowing deck drive V-belt	*6.3.8*
	Front axle and steering	Inspection and adjustment of play	*6.3.11*
AFTER THE SEASON (PUTTING OUT OF OPERATION)	Engine	Oil change	*6.3.2*
	Cables	Inspection of mounting, inspection of quick coupler parts	*6.2.1*
	Mowing deck	Cleaning	*6.2.2*

Explanations for table:
1 = Replace more frequently if the riding mower is under greater load or works in outdoor temperatures around 35°C or higher.
2 = If the mower works in a dusty environment, perform the inspection more frequently.
3 = Perform the inspection more frequently if the mower works in a sandy environment.
4 = Perform the inspection more often if a new belt has been fitted.
N = Manual of the manufacturer, supplied with the mower.

Apart from regular maintenance according to the above table, it is necessary to replace motor oil based on the recommendations in the manual drawn up by the engine manufacturer, which is included with the riding mower.

6.2 DAILY CHECKS AND MAINTENANCE

Before starting any maintenance or repair works, thoroughly reacquaint yourself with all instructions, restrictions and recommendations in this user's manual.

Always remove the key from the ignition and disconnect the spark plug cables before performing any cleaning, maintenance or repairs.

When working use suitable work clothing and work footwear. Use suitable gloves when handling a mowing blade or for activities where there is a risk of cuts.

Avoid spilling fuel, oils or other harmful substances.

Do not perform any major repairs if you do not have the necessary tools and a good knowledge about repairs of combustion engines!

Dispose of used oil, fuel or other hazardous substances and materials in accordance environmental protection regulations in force.

6.2.1 BEFORE STARTING WORK

CHECK THE TYRE PRESSURE

Maintain the prescribed tyre pressure and check it regularly. Maintaining the prescribed tyre pressure is important for even mowing. Various pressure values may cause difficulty in driving, or even loss of control over the mower.

The air pressure in the front and rear tyres must be in the range **80 - 140 KPa**, whilst the differences between individual tyres may be **± 10 KPa**.

CHECK THE OIL LEVEL IN THE ENGINE

Park the riding mower on a horizontal surface. Open the hood and unscrew the cap of the filling opening. Screw out the oil dipstick, wipe it dry, reinsert it and screw in. Then again screw it out and take the oil level reading.

The oil level must be between the two marks on the dipstick. If it is not, fill up with motor oil so that it reaches the "**FULL**" mark.

Further details about checking and filling of oil are included in a separate user's manual supplied by the engine's manufacturer.

CHECK CABLES AND BOLT CONNECTIONS

Visually inspect the condition of cables and manually check the tightness of bolt connections.

CHECK WORKING ORDER OF BRAKES

Check that the brakes work properly. Proceed as follows:

- Park the mower on an even surface and turn off the engine.
- Step on the brake pedal and engage the parking brake.
- Using the bypass lever disengage the rear wheel drive.
- Try to push the mower forward. If the rear wheels rotate, then the brakes need to be serviced. Contact an authorised service centre to have them adjusted.

INSPECTION OF THE WORKING ORDER OF SAFETY ELEMENTS

Before every use of the riding mower, check the working order of safety elements:

- switch under the seat
- switch on an attached grass catcher or deflector
- full grass catcher switch

6.2.2 AFTER FINISHING WORK

SETTING UP THE MOWER

After finishing mowing, elevate the mowing deck to the highest position and disable the drive for the mowing blades.

Turn off the ignition, step on the brake pedal and secure the mower in position with the parking brake. On mowers with a single cylinder engine (BS15, 15.5 HP) close the fuel supply.

CLEANING THE MOWER

Remove all dirt and grass remains from the surface of the tractor, the ejection chute and the mowing deck.

Thoroughly clean the textile sack of the grass catcher. When it is clogged with grass, the ability of the mower to fill the grass catcher is reduced.

WASHING THE MOWER

Before washing it, park the mower on a suitable even surface.

- Grass catcher:
  - remove the grass catcher from the mower, wash it and allow it to dry naturally.
- Plastic parts on the mower:
  - clean using a sponge and soapy water.
- Mowing deck:
  - wash the inside including the part of the ejection chute.
  - slide a hose of a suitable diameter on to the fittings on the mowing deck cover. Start the engine, engage the mowing deck and flush out the mowing deck with a current of water for 10 minutes.

  This flushing procedure needs to be performed at the end of every mowing session.

6.2.2

Avoid washing with water in the vicinity of electrical accessories on the control panel, battery, etc.
Do not spray pressurised water on to bearings or pulleys!
We do not recommend cleaning the mower and particularly the mowing deck using pressurised water. This can reduce the lifetime of bearings and other moving parts!

6.3 REGULAR CHECKS, MAINTENANCE AND ADJUSTMENT

6.3.1 BATTERY

Correct and regular maintenance of the battery will extend its lifespan. Therefore, regularly check its condition according to the manual supplied by the battery's manufacturer.

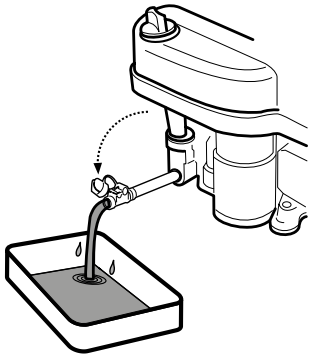
- Keep the battery contacts clean. If dirt accumulates on them, or they are rusty, clean them according to the recommendations of the battery's manufacturer. Interruption of the circuit caused by the oxidation of the contacts may lead to the malfunction of the recharging function of the engine!
- A flat battery needs to be recharged as soon as possible, otherwise its cells may be irreparably damaged.
- It is always necessary to charge the battery before:
  - first use
  - when not planning on using it for a long time
  - before starting up after a longer break
  - in other cases, specified in the user's manual of the battery drawn up by its manufacturer.
- If it is necessary to replace the battery, always use a battery of the same size and type. For mowers with engines up to 22 HP, use batteries with a capacity of 24 Ah; for mowers with 23 HP and more, use batteries with a capacity of 32 Ah.

Further details about checking and maintaining batteries are included in a separate user's manual supplied by the battery's manufacturer.

6.3.2 ENGINE

CHANGING OIL

Before changing the oil, prepare a container with a volume of at least **2 litres**. So that all the oil flows out of the engine we recommend that you place something (e.g. wooden blocks) under the side opposite the drain bolt. Drain the oil while it is still warm.



- Unscrew the filler opening of the oil so that the oil flows better and faster out of the engine.
- Clip out the drain hose from the holder on the side of the engine and screw out the plug.
- Tilt the hose towards the prepared container and allow the oil to drain completely.
- Screw the plug back on and clip in the hose. Fill the engine with the correct amount of the recommended oil (***User's manual for the engine***) and close the oil filler cap.
- Use the dipstick to check the correct oil level. If necessary fill up the oil so that the oil is at the correct level.

Further details about replacing oil as well as its type and amount are included in a separate user's manual supplied by the engine's manufacturer.

If you come into contact with used oil, we recommend that you thoroughly wash your hands with soap and water.
Dispose of used oil according to environment protection laws. It is appropriate to deliver the oil in a closed container to a used oil collection point. Under no circumstances should dispose of the used oil with other waste or pour it down the drain, on to waste or on the floor.

MAINTENANCE OF THE AIR FILTER

Never allow the engine to run without an air filter. This rapidly wears out the engine.

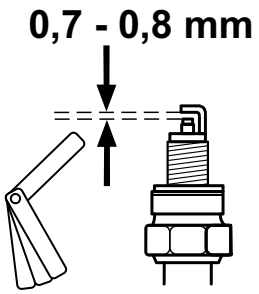
Maintain the air filter according to the instructions contained in the user's manual for the engine supplied by its manufacturer.

MAINTENANCE OF THE SPARK PLUG

For the engine to run perfectly the spark plug must be correctly set and clean from deposits.

- Always use only the spark plug specified by the engine's manufacturer!

If the engine was running shortly before the inspection or replacement, then the spark plug will be very hot. So be very careful not to burn yourself.



- Take off the spark plug cable and remove the spark plug using a wrench key.
- Visually inspect the exterior appearance of the spark plug. If the spark plug is visibly significantly worn out or if the insulator is cracked or it is peeling, it is necessary to replace it.
- If the spark plug is soiled or only slightly worn, it is necessary to carefully clean it with a suitable wire brush (copper).
- Using a gauge measure set the distance of the electrodes (***User's manual for the engine***).
- After performing maintenance on or replacing the spark plug, pull it tight in position. An incorrectly tightened spark plug heats up significantly and may cause serious damage to the engine.

Check, maintain and replace spark plugs according to the instructions contained in the user's manual for the engine supplied by its manufacturer.

REPLACEMENT OF THE FUEL FILTER

Never allow the engine to run without a fuel filter. This rapidly wears out the engine.

Replace the fuel filter according to the instructions contained in the user's manual for the engine supplied by its manufacturer.

6.3.3 REPLACING LIGHTS

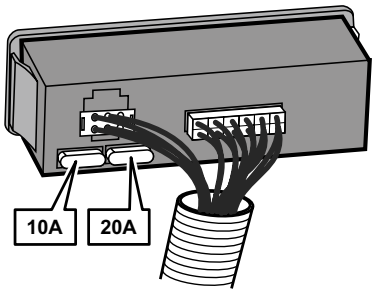
The lights are mounted inside the hood and are accessible after lifting the hood. In the event that they need replacing, consult the correct type of light with your supplier or the mower manufacturer based on the model of your mower.

6.3.3

- For replacement, disconnect the connector (1) of the light, with one hand hold the light from the outer side of the hood (so that it does not fall on the ground) and use the other hand to slide out the bulb socket (2). Then take out the light (3) through the hood. For installation proceed in the reverse sequence.

6.3.4 REPLACING A FUSE

If a fuse is damaged the engine will immediately shut off, the mowing deck will stop and all indicator lights on the dash board will turn off. In this case it is necessary to find the faulty fuse and replace it with a new one. Under no circumstances should you replace a faulty fuse with a fuse that has a higher current rating!
The fuses are accessible after the hood is lifted open.



- Remove the fuse and insert a new fuse with the same rating as the initial fuse, i.e. **20A** or **10A**. If even after replacing the fuse the engine or the mowing deck will not work, contact an authorised service centre.
- Certain mower models are equipped with a central switchboard. Under no condition should you tamper with the switchboard! The only exception is the replacement of fuses.

6.3.5 LIFTING THE MOWER

If you wish to lift the riding mower, use a jack and supports.
Proceed as follows:

- Place the jack underneath the gear box on the rear axle and lift the rear part of the mower.
- Insert two supports underneath the ends of the axles from the inner side of the rear wheels.
- Lift the front part of the mower and insert two supports under both ends of the front wheel axles.

Never lean the mower to the side where the carburettor is located. Oil could enter the air filter!

6.3.6 MOWING DECK - SHARPENING AND REPLACING THE BLADES

SHARPENING THE BLADES

The mowing blades must be sharp, statically balanced and straight. Blunt, incorrectly sharpened or damaged mowing blades cause grass to be torn out of the ground, damage to lawns and mediocre collection of mowed grass in the grass catcher.

Do not repair a blade that is deformed or otherwise damaged, replace it immediately.
Whenever handling the mowing blades, always use heavy-duty work gloves.

Sharpening procedure:

6.3.6a

- Remove the grass catcher, tilt the mower on to the right side and prop it up using suitable supports. It is recommended to invite another person to help with tilting the mower in order to prevent damaging a part of the mower or an injury.
- Unscrew both blades and clean them.
- First sharpen with a grinder and then with a file.
- On the 110 cm three-blade mowing deck each pair of blades is fastened using 3 bolts (blades are not equipped with break pins). We recommend that you mark the blades before removing them to avoid problems when putting them back.

Do not sharpen directly on the mowing deck.

- After sharpening the blades, do not install them yet, but check their balance, see procedure below.
- Prior to reinstalling the blades, check the condition of the break pins which serve as protection of the mowing deck. If the break pins are damaged, replace them immediately. Spare pins are supplied with the mower.

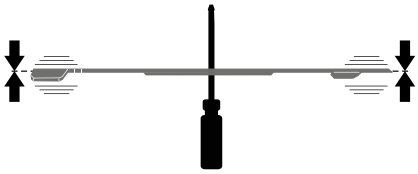
6.3.6b

- After checking the balance and the brake pins, screw the blades back in position. During installation, ensure that the bend of the blades points upwards into the mowing deck body. Do not interchange the left and right blades. The right blade has a bolt with a left thread.
- Carefully tighten the fastening bolts using a torque wrench using the prescribed tightening torque of 30 ± 3 Nm. This torque is achieved the moment when the tangential (convex) spring under the fastening bolt is fully compressed and from this point on the bolt is not tightened.

BALANCING THE BLADES

Pay increased attention to levelling and balancing the blades. The vibration of blades that are not levelled and balanced may damage the engine or the mowing deck.

When balancing, insert the screwdriver into the centring hole and set the blade into a horizontal position. If the blade remains in this position, it is balanced. If one of the ends is weighs down, grind this side until it is balanced. When balancing by grinding, do not shorten the length of the blade! The permitted static imbalance may not exceed 2g.



If you are not certain about the procedure, please contact an authorised service centre, where they will gladly provide advice.

REPLACING BLADES

If due to frequent use the blades are damaged, they cannot be balanced or sharpened properly, it is necessary to replace them. Proceed as follows:

- Remove the grass catcher, tilt the mower on to the right side and prop it up using suitable supports. It is recommended to invite another person to help with tilting the mower in order to prevent damaging a part of the mower or an injury.
- Screw out both blades.
- Prior to installing new blades, check the condition of the brake pins which serve as protection of the mowing deck. If the break pins are damaged, replace them immediately.
- Check that the blades are balanced, see above.
- Screw on the new blades. During installation, ensure that the bend of the blades points upwards into the mowing deck body. Do not interchange the left and right blades. The right blade has a bolt with a left thread.
- Carefully tighten the fastening bolts using a torque wrench using the prescribed tightening torque of 30 ± 3 Nm. This torque is achieved the moment when the tangential (convex) spring under the fastening bolt is fully compressed and from this point on the bolt is not tightened.

When the blades impact a solid obstacle, immediately stop the engine and check the blades! The break pins may be damaged or broken.
Whenever handling the mowing blades, always use heavy-duty work gloves.

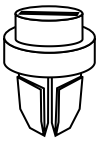
Always only use blades recommended by the manufacturer or supplier of the riding mower. The use of blades and/or fastening parts that are not recommended may result in improper mowing results, damage to the mower and in the event that they come off during operation also injury to people.

6.3.7 MOWING DECK - INSPECTION AND BALANCING

To achieve the best mowing results the mowing deck must be set at the correct mowing height and both sides of the deck must be level.
Before carrying the adjustment:

- Place the mower on an **optimally even surface**, **inflate all the tyres to the prescribed pressure** (80 - 140 kPa, ± 10 kPa difference between the individual tyres) and **secure the entire mower against movement** (e.g. using a suitable wedge, etc.).
- Move the mowing deck elevation adjustment lever to position **1**.

The mowing deck is equipped with plastic covers which prevent hand access to moving parts and to the mower drive parts of the mower.
The covers can be very quickly and easily removed using the quick coupling pins on the sides of the covers. Slide a screwdriver into the pin groove and turn it anticlockwise. Then take the cover off the mower.



6.3.7a

Machines UJ102, UJ102 4x4 and UJ122:

- Distance **A** is the front edge of the mowing deck in the travel direction and it must be **23-25 mm** above the ground. Check it on both sides of the mowing deck. If the height is different, loosen the lock nuts (**2**) on the respective draw rod (**1**) and adjust the height by the turning nuts (**3**). After setting the correct height, do not forget to tighten the lock nuts (**2**).
- Distance **B** is the rear edge of the mowing deck in the travel direction and it should be **28-30 mm** above the ground, i.e. the rear edge must be at least 5 mm higher than the front edge. If the height is different, adjust it by loosening nuts (**4**), setting the edge to the correct height and tightening the nuts with a torque of **55 – 65 Nm**.

6.3.7b

Machines UJ110:

- Distance **A** is the front edge of the mowing deck in the travel direction and it must be **30-34 mm** above the ground. Check it on both sides of the mowing deck. If the height is different, loosen the lock nuts (**2**) on the respective draw rod (**1**) and adjust the height by the turning nuts (**3**). After setting the correct height, do not forget to tighten the lock nuts (**2**).
- Distance **B** is the rear edge of the mowing deck in the travel direction and it should be **28-30 mm** above the ground, i.e. the rear edge must be at least 5 mm higher than the front edge. If the height is different, adjust it by loosening nuts (**4**), setting the edge to the correct height and tightening the nuts with a torque of **55 – 65 Nm**.

If you are not certain about this procedure, have it performed by a service centre.

6.3.8 MOWING DECK - CHECKING AND ADJUSTING THE V-BELT

6.3.8a
6.3.8b

Because of the demands placed on it, the tension of the mowing deck drive belt (**1**) declines over time and it is necessary to tension this belt. The belt is tensioned using bolts and a spring.

- Set the mowing deck to position 1.
- Using a suitable wrench, turn nut (**2**) so that spring (**3**) is tensioned to a value of :

Mowers UJ102 a UJ102 4x4: 145±1 mm.
Machines UJ110: 150±1 mm.
Machines UJ122: 155±1 mm.

6.3.9 MOWING DECK - ADJUSTING THE COGGED BLADE DRIVE BELT

Machines UJ102, UJ102 4x4 and UJ122:

6.3.9a

- Lower the mowing deck to the lowest position by moving the mowing height adjustment lever to position **1**.
- Release the quick coupling pins of the mowing deck side covers and take the covers out.
- Release the quick coupling pin (**1**) of the top cover (**2**) and approximately in its middle tilt the cover upwards.

6.3.9b

- Slide an appropriate spanner under the metal cover, from underneath place it on the belt pulley bolt (**1**). From above loosen the belt pulley nut.
- Loosen the lock nut (**2**) and nut (**3**). Then, using an appropriate wrench, turn nut (**3**) so that the cogged belt (**4**) is properly tensioned.

6.3.9c

- The belt is correctly tensioned when a force of **4 kPa** (**40 N; 72 Hz**) acting on the middle distance between the belt pulleys (**1**) and (**5**) results in the belt bending by approximately **0.5 cm**.

To measure force you can use a standard mechanical dynamometer available in stores selling such products.

- Tighten the lock nut (**2**) of the tensioning mechanism and again tighten the nut of the cogged belt pulley (**1**).
- Reattach the side and top cover and tighten them.

Machines UJ110:


6.3.9d

- The mowing deck drive belt is correctly tensioned when the length of the tensioning spring (**2**) is **135±1 mm**. If the length is different, adjust it by turning nut (**1**) of the tensioning draw bar.

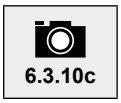
6.3.10 MOWING DECK - REMOVING IT FROM THE MACHINE


6.3.10a

- Set the mowing deck to the highest position by moving the mowing height adjustment lever to position **7**.
- Slightly lift up the grass ejection chute (1) and slide it off the two pins (2) that are welded on the frame of the mowing deck. Then either move the chute approx. 10 cm backwards and secure it in place, or completely take it out through the rear plate.


6.3.10b

- Using an appropriate wrench, turn nut (**2**) so that the tension on the spring (**3**) is completely released. Then remove the belt (**1**) from the belt pulley of the electromagnetic engine transmission.


6.3.10c

- Slide the spring pins (**4**) from both the rear mowing deck suspension shaft pins (**5**). Screw out the nut (**6**) from the front shaft pin and pull out the shaft pin (**7**). Using pliers, slide out both pins (**5**). For the the mowing deck mulching option, first remove the part of the mulching flap lever that extends above the floor of the mower.


6.3.10d

- Slowly pull out the mowing deck to one side of the mower.

6.3.11 MAINTENANCE OF STEERING


6.3.11

Regularly check that there is not excessive looseness between the cogged steering segment and the steering wheel pinion. If higher looseness is identified, it is necessary to limit it. Procedure for limiting (adjusting) looseness:

- Lift the hood.
- Loosen two nuts M12 (**1**) on the bolt of the eccentric.
- Place a suitable wrench on to the hexagon of the eccentric (**2**) and turn it until looseness is limited to a minimum.
- Tighten both nuts M12 (**1**) using a torque of 35 - 45 Nm.

Neglecting this maintenance may result in damage to steering components.

6.3.12 CHECKING AND ADJUSTING THE TRAVEL DRIVE BELT


6.3.12a

Regularly check the tension of the travel drive belt. The belt is correctly tensioned when a force of **4 kPa** acting on the middle distance between the belt pulleys (**1**) and (**3**) results in the belt bending by approximately **1.5 cm**.
When the amount of deflection increases, it is necessary to adjust the tension.
Positions in the picture are:

(**1**) Engine belt pulley
(**2**) Guide belt pulley
(**3**) Tensioning belt pulley
(**4**) Transmission belt pulley

To measure force you can use a standard mechanical dynamometer available in stores selling such products.


6.3.12b

Adjust the tension of the belt by tightening nut (6) so that the spring (5) is stretched to a length of **95±1 mm**.

Do not over-tension the belt above this level, this will reduce its lifetime and may also cause damage to the transmission!

6.3.13 REPLACING BELTS

Replacing the drive belts is a relatively demanding operation, which needs to performed by an authorised service centre.

6.3.14 REPLACING WHEELS

Before replacing one of the wheels, park the mower on a horizontal and rigid surface, turn off the engine and remove the key from the ignition. Perform the replacement as follows:


6.3.14

- Lift the mower using an appropriate jack on the side where you will perform the replacement. Locate the jack under a solid part of the frame or under the arm of the transmission. Using a wooden block, secure the mower to prevent it rolling off.
- Remove the protective cover (**1**) from the wheel (only the front wheels).
- Using a suitable screwdriver remove the retaining ring (**2**) and remove the washer (**3**).

When reattaching the wheel proceed in the reverse sequence to its removal. Before attaching the wheel clean all parts and lightly grease the shaft with a plastic lubricant. Especially for wheels on the rear axle this **lubrication is essential for the subsequent removal of the wheel. In the event that lubrication is not performed the subsequent attachment may be very difficult.**

When attaching the rear wheel pay attention to the mutual alignment of the pin on the shaft and the groove on the wheel.

6.3.15 REPAIRING A TYRE PUNCTURE

The mower is equipped with tubeless tyres. In the event of a puncture, have it repaired at a specialised tyre repair shop or at an authorised Seco mower service centre.

6.3.16 MAINTENANCE OF THE HYDROSTATIC TRANSMISSION

For the reliable operation of the transmission it is necessary to maintain the correct oil level. The filling openings on the transmissions are accessible after taking the ejection chute off the mower (🕮 ***6.3.10***). Prescribed values are provided in the following table.

Type of transmission	Oil type	Oil level
TUFF-TORQ K46	SAE 10W-40, API CD	at least to half the height of the equalisation tank
TUFF-TORQ K46 DE	SAE 10W-40, API CD	2 cm from the filling opening
TUFF-TORQ K62	SAE 10W-40, API CD	5-7 mark on the equalisation tank
TUFF-TORQ K664, KXH 10	SAE 5W-50, API CD	Between the marks on the filling bolt
HG T2	20W-50, API CD	1.5 - 3 cm from the filling opening
HG T3	20W-50, API CD	1.5 - 3 cm from the filling opening

Machines UJ102 4x4:
On mowers with the 4x4 system, the transmission oil must be changed after the first 50 engine hours, and then every 200 engine hours.
For the reliable operation of the transmission it is necessary to maintain the correct oil level. The filling opening of the transmissions is located under the hood of the mower (🕮 ***3.4.5***). Prescribed values are provided in the following table.

Type of transmission	Oil type	Oil level
TUFF-TORQ K 664	SAE 5W-50, API SG synthetic oil	according to the mark in the expansion tank (🕮 ***3.4.5***).
KANZAKI KXH 10 N	SAE 5W-50, API SG synthetic oil	according to the mark in the expansion tank (🕮 ***3.4.5***).

In the event of problems with the transmission immediately seek the help of an authorised service centre, there is a risk of serious damage.

6.4 LUBRICATION

Lubricate the mower according to the figures 6.4a/6.4b and the table below. In the event that the mower is operated in very dusty or sandy operating conditions, lubricate more frequently.
Ball bearings of the tension pulleys, guide pulleys and bearings on the mowing deck are self-lubricating.
Prior to starting lubrication, the engine must be turned off and all moving parts of the mower must be still.

6.4a
6.4b

Symbol	Explanation	Activity
	Plastic lubricant A00	---
	Oil SAE 30	---
50	Interval in hours	---
(1)	Rotating central pin of the axle housing	Lubricate through oiler
(2)	Bearings of both front wheels and pins of the axle housing	Lubricate through oiler
(3)	Angle joint connecting steering draw rods	Remove and lubricate
(4)	Front wheel pin	Lubricate through oiler
(5)	Angle joint connecting steering draw rods	Remove and lubricate
(6)	Cogged steering segment, eccentric and angle joint of the steering draw rod	Lubricate without removing
(7)	Rotating points of pedals on both sides of the mower	Lubricate without removing
(8)	Half axles of the rear wheels (transmissions)	Remove the wheel and lubricate
(9)	Steering draw rod ball pan	Lubricate without removing
(10)	Bolt of the mowing deck elevation draw rod	Lubricate without removing
(11)	Rotating points of the mowing deck elevation mechanism	Lubricate without removing
(12)	Rotating points of pedals on both sides of the mower	Lubricate without removing

Do not allow oil and lubricants to come into contact with the drive belts and their pulleys. Thoroughly wipe the area around the lubricated parts before and after lubricating.

Prior to putting the mower out of operation for an extended period of time, thoroughly lubricate all locations shown on the picture, **particularly however the half shafts of the front and rear axles**.

7 REMEDYING MALFUNCTIONS AND DEFECTS

Do not perform any repairs if you do not have the appropriate technical equipment and qualifications. The repairs described below may be performed by the user of the mower. Other repairs performed by the user that are not specified here will void the warranty. The manufacturer takes no responsibility for damages resulting from poorly performed unapproved repairs by the user.

ENGINE PROBLEMS		
PROBLEM	***POSSIBLE CAUSES***	***REMEDY***
ENGINE WILL NOT START	Not enough or no fuel in the fuel tank	▸ Add fuel
	Incorrect engine starting procedure	▸ Check the procedure according to 🕮 ***5.2***
	Burned fuse	▸ Replace the fuse
	Flat or defective battery	▸ Check the voltage on the battery terminals – must be 12 V. If it is not, charge the batter or install a new one. ▸ On a new mower: - check whether the battery was activated and charged - replace the spark plug and check that, as a result of poor handling, oil has accumulated on the cylinder
	Defective or clogged spark plug or incorrect gap between the electrodes	▸ Clean the spark plug, adjust the gap between the electrodes (🕮 ***6.3.2***).
	Loose or damaged electrical conductors, faulty switches of the electrical system	▸ Check that the conductors are tightened and tighten if necessary. ▸ Replace damaged conductors or faulty switches.
	Malfunction of engine or electrical system of the mower	▸ Check the engine again exactly according to the instructions in the User's manual of the engine manufacturer. ▸ Have the electrical system checked at a specialised workshop.
THE ENGINE IS TURNING BUT WILL NOT START UP	Incorrect engine starting procedure	▸ Check that the prescribed procedure for starting the engine was followed (🕮 ***5.2***). Check that the petrol in the petrol tank is clean.
	Clogged fuel filter	▸ Check the fuel filter and clean it if necessary.
	Closed fuel tap	▸ Check whether the fuel tap is open (only on mowers with a two-cylinder engine (V TWIN)).
	Choke was not pulled out	▸ Move the throttle lever to position "CHOKE".
	Malfunction of engine or electrical system of the mower	▸ Check the engine again exactly according to the instructions in the User's manual of the engine manufacturer. ▸ Have the electrical system checked at a specialised workshop.
THE ENGINE IS RUNNING, BUT THE MOWER DOES NOT MOVE WHEN THE TRAVEL PEDAL IS PUSHED	Travel belt is loose	▸ Check the tension of the belt and tension it if necessary (🕮 ***6.3.12***).
	Cut off or damaged grooves on the engine and transmission belt pulley	▸ Check the belt pulley of the engine and transmission, replace defective parts
	The parking brake is activated	▸ Deactivate the parking brake by pushing on the brake pedal.
THE ENGINE IS RATTLING OR KNOCKING	Insufficient amount of oil or incorrect type of oil	▸ Check the oil level in the engine (🕮 ***3.4.1***).

PROBLEMS WITH TRAVEL		
PROBLEM	***POSSIBLE CAUSES***	***REMEDY***
A "SCREECHING" SOUND IS MADE WHEN TRAVELLING	Worn out or damaged belts, guide or tensioning pulleys	▸ Check the condition of the belts and the tensioning pulleys. If the problem persists, immediately contact an authorised service centre.
EXTREME VIBRATIONS OCCUR WHEN TRAVELLING	Damaged or deformed belt pulleys	▸ Check the condition of the belt pulleys. Replace them if necessary.
	The travel drive belt is damaged	▸ Check whether the belt has any burned spaces or other irregularities. Replace it if necessary.
	Travel belt is loose	▸ Check the tension of the belt (🕮 ***6.3.12***). Replace it if necessary.
	Unbalanced mowing blades	▸ Check that the mowing blades are balanced. Balance or replace them if necessary.

BELT PROBLEMS		
PROBLEM	***POSSIBLE CAUSES***	***REMEDY***
THE TRAVEL DRIVE BELT OF THE MOWER IS SLIPPING	The travel drive belt is insufficiently tensioned	▸ Check the tension of the belt and tension it if necessary (🕮 ***6.3.12***).
	The travel drive belt is damaged or worn out	▸ Check the condition of the belt and replace it if necessary.
	The engine belt pulley or transmission belt pulley is damaged.	▸ Check its condition and replace it if necessary.
	The clutch mechanism is blocked by a foreign object	▸ Check the clutch and remove any foreign objects.
THE TRAVEL DRIVE BELT OF THE MOWER IS CREAKING	The travel drive belt is insufficiently tensioned	▸ Check the tension of the belt and tension it if necessary (🕮 ***6.3.12***). ▸ Check the working order of the brake. If it is not in proper working order, have it adjusted at an authorised service centre.
THE TRAVEL DRIVE BELT JUMPS OUT DURING OPERATION	The travel drive belt is insufficiently tensioned	▸ Check the tension of the belt and tension it if necessary (🕮 ***6.3.12***).
	The route of the travel drive belt is incorrect	▸ Check the route of the belt. Adjust if necessary.
	Damaged belt pulleys	▸ Check whether the pulleys are damaged. Replace them if necessary.
	Large gap in the travel clutch mechanism	▸ Check the gap of the travel clutch mechanism. Deviations may result in the clutch bearing holder being bent out of shape. Replace it if necessary.
THE STEERING IS SLIPPING THROUGH OR LOOSE	The space between the segment and the pinion is too great	▸ Check that the space between the pinion and the segment is not too large. If yes, adjust the cogged segment.
	Worn out ball and socket joints	▸ Check for wear on the ball and socket joints. Replace the joints if necessary.

MOWING DECK PROBLEMS		
PROBLEM	***POSSIBLE CAUSES***	***REMEDY***
THE MOWING DECK MOWS UNEVENLY	Grass and dirt accumulated inside the mowing deck	▸ Remove the dirt from the underside of the mowing deck.
	Blunt or deformed blades	▸ Check the condition of the blades and sharpen or replace as necessary (🕮 ***6.3.6***).
	Damaged or worn out blade shaft	▸ Check the condition of the shaft.
	One or both the belts are insufficiently tensioned	▸ Check the tension and tension it if necessary (🕮 ***6.3.8*** *and* ***6.3.9***).
AN UNMOWED STRIP REMAINS BETWEEN THE BLADE ROTORS	Blunt or deformed blades	▸ Check the condition of the blades and sharpen or replace as necessary (🕮 ***6.3.6***).
	Damaged bearing housing	▸ Check the condition of the bearings and based on findings perform a repair or replacement. When mowing thick grass or grass that is too wet, an unmowed strip may remain. The travel speed should be adjusted to respect the mowing conditions by shifting into a suitable gear. The engine should not run with the throttle valve fully open.
THE MOWING DECK IS RIPPING OUT TURF	Bent blades	▸ Check the condition of the blades and replace as necessary (🕮 ***6.3.6***).
	Damaged bearing housing	▸ Check the condition of the bearings and based on findings perform a repair or replacement.
	The drive belt is insufficiently tensioned	▸ Check the tension of the drive belt (🕮 ***6.3.8*** *and* ***6.3.9***) and tension it if necessary.
	Inappropriate mowing height	▸ Check the mowing height and adjust if necessary. Turf is ripped out more frequently on uneven terrain.
THE MOWING DECK DOES NOT EJECT GRASS	Grass has accumulated inside the mowing deck	▸ Remove the grass from the underside of the mowing deck. In wet conditions, the ejection chute and the lower side of the outlet from the mowing deck may clog up with grass. Do not mow wet grass.
	The drive belt is insufficiently tensioned	▸ Check the tension of the drive belt (🕮 ***6.3.8*** *and* ***6.3.9***) and tension it if necessary.
	Inappropriate travel speed	▸ Adjust the travel speed to the mowing conditions. The engine should not run with the throttle valve fully open. When mowing high grass, first mow once at a high mowing height, then once more at the normal height. Follow the information in chapter **5.5.3**.
	Incorrectly installed blade	▸ Check, particularly after replacing blades, that the blade is installed correctly.

MOWING DECK PROBLEMS (continued)		
PROBLEM	***POSSIBLE CAUSES***	***REMEDY***
THE MOWING DECK DRIVE BELT STOPS DURING OPERATION	Damaged mowing deck drive belt	▸ Check the condition of the belt pulleys. Perhaps the belt jumped out of the belt pulley or it was damaged. Replace it if necessary.
	The drive belt is insufficiently tensioned	▸ Check the tension of the drive belt (🕮 ***6.3.8*** *and* ***6.3.9***) and tension it if necessary. Also check the route of the belt.
	Inappropriate mowing height	▸ Check the set mowing height, adjust if necessary.
	A foreign object is preventing the movement of the belt	▸ Check the movement of the belt and remove all foreign objects or dirt if necessary.
	Damaged belt pulleys	▸ Recheck all the belt pulleys. Buckled or cracked belt pulleys may cause problems. Replace if necessary. Also check the inside surface of the pulley on the engine. If it is coarse or has cracks, it is necessary to replace the pulley.
	Worn out parts of the tensioning mechanism	▸ heck the parts of the tensioning mechanism for wear and replace if necessary.
THE MOWING DECK DRIVE BELT IS SLIPPING THROUGH	The grass is too high or wet	▸ If the grass is too tall or wet, the mowing deck drive belt may slip through. Check that the belt is not worn out. If it is, replace it.
	The drive belt is insufficiently tensioned	▸ Check the tension of the drive belt (🕮 ***6.3.8*** *and* ***6.3.9***) and tension it if necessary.
	Worn out or damaged mowing belt tensioning spring	▸ Check the tensioning spring of the mowing belt tensioning mechanism. Replace the spring if it is overstretched or damaged.
THE MOWING DECK DRIVE BELT IS BEING EXCESSIVELY WORN OUT	A foreign object is preventing the movement of the belt	▸ Check all the points along the route of the belt. Check whether the movement of the belt is not prevented by a foreign object. If yes, remove the foreign object.
	Damaged belt pulleys	▸ Check the pulleys, if they are damaged, replace them.
	Inappropriate mowing height	▸ Check the set mowing height, adjust if necessary.
	The drive belt is insufficiently tensioned	▸ Check the tension of the drive belt (🕮 ***6.3.8*** *and* ***6.3.9***) and tension it if necessary.
THE BLADES CANNOT BE PUT INTO MOTION	Damaged or worn out blade drive belt	▸ Check the condition of the belt - replace it if necessary. If it is loose, tension it.
	Damaged spring of the tensioning mechanism	▸ Check the condition of the spring of the tensioning mechanism and replace if necessary.
	A foreign object is preventing the movement of the belt	▸ Check whether the movement of the belt is not prevented by a foreign object. If yes, remove the foreign object.
THE BLADES STOP WITH A DELAY	The drive belt is insufficiently tensioned	▸ Check the tension of the drive belt (🕮 ***6.3.8*** *and* ***6.3.9***) and tension it if necessary. If the belt cannot be tensioned due to its considerable wear, replace the belt.
	A foreign object is preventing the movement of the belt	▸ Check whether the movement of the belt is not prevented by a foreign object. If yes, remove the foreign object.
	Incorrectly functioning electromagnetic clutch	▸ Check that the electromagnetic clutch switches off properly. If the clutch is not working properly have it replaced or repaired at an authorised service centre.

MOWING DECK PROBLEMS (continued)		
PROBLEM	***POSSIBLE CAUSES***	***REMEDY***
BELTS VIBRATE EXTREMELY WHEN TURNING ON THE MOWING DECK	Damaged blades	▸ Check that the blades are not bent or twisted, also check that they are balanced. If they are deformed, replace them.
	Damaged blade drive belt	▸ Check that the belt does not have burned areas or irregularities, which could cause the vibrations. If the belt is damaged, replace it.
	Worn out or damaged blades	▸ Check the condition of the blades. Replace them if necessary.
	Incorrectly functioning electromagnetic clutch	▸ Check that the electromagnetic clutch switches properly. If the clutch is not working properly have it replaced or repaired at an authorised service centre.
	Damaged engine belt pulley	▸ Check the inside surface of the pulley on the engine. If it is coarse or has cracks, it is necessary to replace the pulley.
	Remove the accumulated material from the underside of the mowing deck	▸ Check whether grass has accumulated on the underside of the mowing deck. It is necessary to remove this grass.
	Engine mount fault	▸ Check whether the defect is not in the engine mount. Tighten bolts or replace as necessary.
	The drive belt is insufficiently tensioned	▸ Check the tension of the belt (🕮 ***6.3.8***). Replace it if necessary.

OTHER PROBLEMS		
THE MOWER CANNOT BE PUSHED OR ONLY WITH DIFFICULTY	The bypass lever is in the incorrect position	▸ Check the position of the bypass lever (must not be in position "**0**").
THE MACHINE IS HARD TO STEER OR CONTROL	Incorrect pressure in the tyres	▸ Check the tyre pressure (🕮 ***3.4.4***).
IT IS NOT POSSIBLE TO START THE MOWER IN THE NORMAL WAY	Malfunction of the electrical system	▸ Use the emergency travel system and drive the mower to a location from which it can be transported to a service centre (🕮 ***5.2.1***).

7.1 ORDERING SPARE PARTS

We recommend that you use exclusively original spare parts, which ensure safety and compatibility. Always order spare parts from an authorised distributor or service organisation, which is informed about the current technical changes performed on the products during manufacture.
For easy, fast and exact identification of the necessary spare part always provide in your order the serial number found on the second side of the cover of this publication. Also provide the year of manufacture as shown on the product identification label under the seat.

7.2 WARRANTY

Warranty conditions are provided on the warranty card, which is always provided together with the product by the vendor.

8 POST-SEASONAL MAINTENANCE, PUTTING THE MOWER OUT OF OPERATION

After the end of the season or if you will not be using your riding mower for more than 30 days, make sure to prepare your mower for storage as soon as possible. If fuel remains in the petrol tank without movement for more than 30 days, a sticky deposit may form, which can have a negative effect on the carburettor and cause poor engine operation. For this reason empty the petrol tank.

Never store the riding mower with a full petrol tank inside of buildings or poorly ventilated areas, where there are fuel vapours, open flames, sparking or lighting flames, furnaces, central heating, dry rags, etc. Handle fuels and lubricants with care, they are highly flammable and careless handling may lead to serious burns or damage to property.

Only empty the petrol tank into approved containers outdoors away from open flames.

Recommended procedure for preparing the riding mower for storage:

- Thoroughly clean the entire mower, especially inside the mowing deck (🕮 ***6.2.2***).

Never use petrol for cleaning. Use degreasing agents and warm water.

- Repair and paint dinted places to prevent corrosion from occurring.
- Replace faulty or worn out parts and tighten all loose nuts and bolts.
- Prepare the engine for storage according to the user's manual for the operation and maintenance of the engine.
- Lubricate all lubrication locations according to the lubrication diagram (🕮 ***6.4***).
- Release the V-belt driving the mowing deck (🕮 ***6.3.8***).
- Take out the battery, clean it and charge it fully. A battery that is not charged may freeze and crack. Store the battery in a cool, dry location, as necessary. Charge the battery every 30 days and regularly check its voltage.
- Store the riding mower covered in a clean and dry environment.

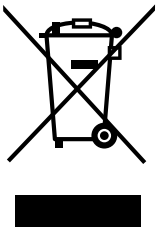
The best way to ensure the riding mower's ideal operating condition for the next season is to have it inspected and tuned at an authorised service centre every year.

9 DISPOSAL OF THE MOWER

After the operational life of the mower is over, the owner of the mower is responsible for its disposal. This may be performed in two ways:

a) Hand the mower over to an authorised company (scrap yard, secondary waste collection point, etc.). You will receive documented confirmation of the handover for disposal.

b) Dispose of the mower yourself. In this case we recommend the following procedure:



- Dispose of the product utilising recyclable material according to the applicable waste disposal law.
- Disassemble the entire mower.
- Parts that can be reused should be cleaned, preserved and stored for further use.
- Separate the remaining parts into those that are and are not environmentally friendly, e.g. rubber parts (gaskets), lubricant remains in the bearings or on gears. The environmentally harmful components must be handled according to the relevant waste disposal law applicable in the country of the user, e.g. in the Czech Republic it is the Waste Act No. 185/2001 Coll.
- Sort the waste according to the Wastes Catalogue in accordance with the relevant ordinance. Ecologically friendly waste shall be treated as reusable material.

Old tyre collection (applies only for the Czech Republic)
The price of the product includes costs related to the collection and disposal of used tyres.
The final user is obliged to hand over used tyres at the collection points of ELTMA s.r.o.
Collection points are listed at www.ELTMA.cz.

10 ES STATEMENT OF COMPLIANCE (original)

pursuant to: **EP and Council Directive No. 2006/42/EC (Government directive NV 176/2008 Coll.)**
EP and Council Directive No. 2014/30/EC (Government directive NV 117/2016 Coll.)
EP and Council Directive No. 2000/14/EC (Government directive NV 9/2002 Coll.)

A. We: Seco Industries, s.r.o., Jungmannova 11, Valdické Předměstí, 506 01 Jičín
ID No.: 05391423

issue the following statement:

B. Mechanical equipment

- name: Riding mower
- model: **UJ 102**
- serial number: **25,500-50,000**

Description:
The UJ 102 is a four-wheel self propelled lawnmower with Briggs & Stratton B&S Vanguard 23 HP (3867), B&S 7220 PXi (40U8), B&S 7220 EXi (40N8), B&S 7220 CXi (40T8), B&S 8240 PXi (44U6), B&S 8260 CXi (44C7), Kawasaki FS 600V, Loncin LC1P92F and LC2P77F engines. The power drive from the engine is transferred by V-Belts to the travel drive transmission on the rear axle with a continuously variable gear and through an electromagnetic clutch to the mowing deck. The mowing deck is a twin-blade assembly with a vertical axis of rotation and a coverage width of 102 cm that is driven by a double-sided cogged belt. The grass clippings are guided through a chute to the grass catcher or directed to the ground with the deflector. Instead of collection, the mower may perform mulching by blocking the ejection chute and using two mulching blades. The mower may be in a configuration of 4x2 or 4x4 with a front drive axis.

C. Legislation forming the basis for assessment of compliance:

ČSN EN ISO 12100, ČSN EN ISO 5395-1,3, ČSN EN ISO 14982:2009 **D**. Assessment of compliance was performed according to the designated procedure in:

- EP and Council Directive No. 2006/42/EC, Annex VIII (eqv.Annex no. 8, NV No. 176/2008 Coll.)
- EP and Council Directive No. 2014/30/EC, Annex II (eqv.Annex no. 2, NV No. 117/2016 Coll.)
- EP and Council Directive No. 2000/14/EC, Annex VI (eqv.Annex no. 5, NV No. 9/2002 Coll.)

Státní zkušebna strojů a.s. (SZS, a.s.), NB 1016
Třanovského 622/11
163 04 Prague 6 Řepy, Czech Republic

E. Assessment of compliance performed by:
Státní zkušebna strojů a.s. (SZS, a.s.)
Třanovského 622/11, 163 04 Prague 6 Řepy, Czech Republic

F. We confirm that:

- this mechanical equipment meets all respective provisions of the aforementioned directives (NV)
- measures have been taken to ensure the compliance of all products introduced to the market with the technical documentation and the requirements contained in technical regulations.
- guaranteed emission level of acoustic power L_{WA} is 100 dB(A)

Measured mean values of acoustic power depending on the engine used:

ENGINE	Speed (min^{-1})	Measured value of ac.power [dB(A)]
B&S Vanguard 23 HP (3867)	2700	99
B&S 7220 PXi (40U8)	2700	100
B&S 7220 EXi (40N8)	2700	100
B&S 7220 CXi (40T8)	2800	100
B&S 8240 PXi (44U6)	2800	100
B&S 8260 CXi (44C7)	2800	100
Kawasaki FS 600V	2700	99
Loncin LC1P92F	2700	99
Loncin LC2P77F	2700	99

Technical Documentation in the scope pursuant to annex VII for the Directive 2006/42/EC a pursuant to Directive 2000/14/EC is kept at the place of business of the manufacturer:

SECO Industries, s.r.o.
Jungmannova 11
Valdické Předměstí
506 01 Jičín

In Jičín, 1. 2. 2022

Ing. Aleš Housa
Mechanical Engineering Division Director

ES STATEMENT OF COMPLIANCE (original)

pursuant to: **EP and Council Directive No. 2006/42/EC (Government directive NV 176/2008 Coll.)**
EP and Council Directive No. 2014/30/EC (Government directive NV 117/2016 Coll.)
EP and Council Directive No. 2000/14/EC (Government directive NV 9/2002 Coll.)

A. We: Seco Industries, s.r.o., Jungmannova 11, Valdické Předměstí, 506 01 Jičín
ID No.: 05391423

issue the following statement:

B. Mechanical equipment

- name: Riding mower
- model: **UJ 102 4x4**
- serial number: **25,500-50,000**

Description:
The UJ 102 4x4 is a four-wheel self propelled lawnmower with Briggs & Stratton B&S Vanguard 23 HP (3867), B&S 7220 PXi (40U8), B&S 7220 EXi (40N8), B&S 7220 CXi (40T8), B&S 8240 PXi (44U6), B&S 8260 CXi (44C7), Kawasaki FS 600V, Loncin LC1P92F and LC2P77F engines. The power drive from the engine is transferred by V-Belts to the travel drive transmission on the rear axle with a continuously variable gear and through an electromagnetic clutch to the mowing deck. The mowing deck is a twin-blade assembly with a vertical axis of rotation and a coverage width of 102 cm that is driven by a double-sided cogged belt. The grass clippings are guided through a chute to the grass catcher or directed to the ground with the deflector. Instead of collection, the mower may perform mulching by blocking the ejection chute and using two mulching blades. The mower may be in a configuration of 4x2 or 4x4 with a front drive axis.

C. Legislation forming the basis for assessment of compliance:
ČSN EN ISO 12100, ČSN EN ISO 5395-1,3, ČSN EN ISO 14982:2009

D. Assessment of compliance was performed according to the designated procedure in:
- EP and Council Directive No. 2006/42/EC, Annex VIII (eqv.Annex no. 8, NV No. 176/2008 Coll.)
- EP and Council Directive No. 2014/30/EC, Annex II (eqv.Annex no. 2, NV No. 117/2016 Coll.)
- EP and Council Directive No. 2000/14/EC, Annex VI (eqv.Annex no. 5, NV No. 9/2002 Coll.)
  Státní zkušebna strojů a.s. (SZS, a.s.), NB 1016
  Třanovského 622/11
  163 04 Prague 6 Řepy, Czech Republic

E. Assessment of compliance performed by:
Státní zkušebna strojů a.s. (SZS, a.s.)
Třanovského 622/11, 163 04 Prague 6 Řepy, Czech Republic

F. We confirm that:
- this mechanical equipment meets all respective provisions of the aforementioned directives (NV)
- measures have been taken to ensure the compliance of all products introduced to the market with the technical documentation and the requirements contained in technical regulations.
- guaranteed emission level of acoustic power LwA is 100 dB(A)

Measured mean values of acoustic power depending on the engine used:

ENGINE	Speed (min^{-1})	Measured value of ac.power [dB(A)]
B&S Vanguard 23 HP (3867)	2700	99
B&S 7220 PXi (40U8)	2700	100
B&S 7220 EXi (40N8)	2700	100
B&S 7220 CXi (40T8)	2800	100
B&S 8240 PXi (44U6)	2800	100
B&S 8260 CXi (44C7)	2800	100
Kawasaki FS 600V	2700	99
Loncin LC1P92F	2700	99
Loncin LC2P77F	2700	99

Technical Documentation in the scope pursuant to annex VII for the Directive 2006/42/EC a pursuant to annex VI for the Directive 2000/14/EC is kept at the place of business of the manufacturer at the address:

SECO Industries, s.r.o.
Jungmannova 11
Valdické Předměstí
506 01 Jičín

In Jičín, 1. 2. 2022

Ing. Aleš Housa
Mechanical Engineering Division Director

ES STATEMENT OF COMPLIANCE (original)

pursuant to: **EP and Council Directive No. 2006/42/EC (Government directive NV 176/2008 Coll.)**
EP and Council Directive No. 2014/30/EC (Government directive NV 117/2016 Coll.)
EP and Council Directive No. 2000/14/EC (Government directive NV 9/2002 Coll.)

A. We: Seco Industries, s.r.o., Jungmannova 11, Valdické Předměstí, 506 01 Jičín
ID No.: 05391423

issue the following statement:

B. Mechanical equipment

- name: Riding mower
- model: **UJ 122**
- serial number: **25,500-50,000**

Description:
The UJ 122 is a four-wheel self propelled lawnmower with Briggs & Stratton B&S Vanguard 23 HP (3867), B&S 7220 PXi (40U8), B&S 7220 CXi (40T8), B&S 8260 CXi (44C7) and Loncin LC2P77F engines. The power drive from the engine is transferred by V-Belts to the travel drive transmission on the rear axle with a continuously variable gear and through an electromagnetic clutch to the mowing deck. The mowing deck is a twin-blade assembly with a vertical axis of rotation and a coverage width of 122 cm that is driven by a double-sided cogged belt. The grass clippings are guided through a chute to the grass catcher or directed to the ground with the deflector. Instead of collection, the mower may perform mulching by blocking the ejection chute and using two mulching blades. The mower may be in a configuration of 4x2 or 4x4 with a front drive axis.

C. Legislation forming the basis for assessment of compliance:
ČSN EN ISO 12100, ČSN EN ISO 5395-1,3, ČSN EN ISO 14982:2009

D. Assessment of compliance was performed according to the designated procedure in:

- EP and Council Directive No. 2006/42/EC, Annex VIII (eqv.Annex no. 8, NV No. 176/2008 Coll.)
- EP and Council Directive No. 2014/30/EC, Annex II (eqv.Annex no. 2, NV No. 117/2016 Coll.)
- EP and Council Directive No. 2000/14/EC, Annex VI (eqv.Annex no. 5, NV No. 9/2002 Coll.)

Státní zkušebna strojů a.s. (SZS, a.s.), NB 1016
Třanovského 622/11
163 04 Prague 6 Řepy, Czech Republic

E. Assessment of compliance performed by:
Státní zkušebna strojů a.s. (SZS, a.s.)
Třanovského 622/11, 163 04 Prague 6 Řepy, Czech Republic

F. We confirm that:

- this mechanical equipment meets all respective provisions of the aforementioned directives (NV)
- measures have been taken to ensure the compliance of all products introduced to the market with the technical documentation and the requirements contained in technical regulations.
- guaranteed emission level of acoustic power L_{WA} is 105 dB(A)

Measured mean values of acoustic power depending on the engine used:

ENGINE	Speed (min^{-1})	Measured value of ac.power [dB(A)]
B&S Vanguard 23 HP (3867)	3000	103
B&S 7220 PXi (40U8)	3000	104
B&S 7220 CXi (40T8)	3000	105
B&S 8260 CXi (44C7)	3000	104
LONCIN LC2P77F	3000	104

Technical Documentation in the scope pursuant to annex VII for the Directive 2006/42/EC a pursuant to Directive 2000/14/EC is kept at the place of business of the manufacturer:

SECO Industries, s.r.o.
Jungmannova 11
Valdické Předměstí
506 01 Jičín

In Jičín, 1. 2. 2022

Ing. Aleš Housa
Mechanical Engineering Division Director

ES STATEMENT OF COMPLIANCE (original)

pursuant to: **EP and Council Directive No. 2006/42/EC (Government directive NV 176/2008 Coll.)**
EP and Council Directive No. 2014/30/EC (Government directive NV 117/2016 Coll.)
EP and Council Directive No. 2000/14/EC (Government directive NV 9/2002 Coll.)

A. We: Seco Industries, s.r.o., Jungmannova 11, Valdické Předměstí, 506 01 Jičín
ID No.: 05391423

issue the following statement:

B. Mechanical equipment

- name: Riding mower
- model: **UJ 110**
- serial number: **25,500-50,000**

Description:
The UJ110 is a four-wheel self propelled lawnmower with Briggs & Stratton B&S Vanguard 23 HP (3867), B&S 7220 PXi (40U8), B&S 7220 EXi (40N8), B&S 8240 PXi (44U6) and Loncin LC2P77E engines. The power from the engine is transferred through an electromagnetic clutch using V-belts to the mowing deck and the travel transmission. The mowing mechanism is in a three-rotor arrangement with two blades on each rotor at two height levels. The blades are driven by a double-sided V-belt.

C. Legislation forming the basis for assessment of compliance:
ČSN EN ISO 12100, ČSN EN ISO 5395-1,3, ČSN EN ISO 14982:2009

D. Assessment of compliance was performed according to the designated procedure in:
- EP and Council Directive No. 2006/42/EC, Annex VIII (eqv.Annex no. 8, NV No. 176/2008 Coll.)
- EP and Council Directive No. 2014/30/EC, Annex II (eqv.Annex no. 2, NV No. 117/2016 Coll.)
- EP and Council Directive No. 2000/14/EC, Annex VI (eqv.Annex no. 5, NV No. 9/2002 Coll.)

Státní zkušebna strojů a.s. (SZS, a.s.), NB 1016
Třanovského 622/11
163 04 Prague 6 Řepy, Czech Republic

E. Assessment of compliance performed by:
Státní zkušebna strojů a.s. (SZS, a.s.)
Třanovského 622/11, 163 04 Prague 6 Řepy, Czech Republic

F. We confirm that:
- this mechanical equipment meets all respective provisions of the aforementioned directives (NV)
- measures have been taken to ensure the compliance of all products introduced to the market with the technical documentation and the requirements contained in technical regulations.
- guaranteed emission level of acoustic power LwA is 100 dB(A)

Measured mean values of acoustic power depending on the engine used:

ENGINE	Speed (min^{-1})	Measured value of ac.power [dB(A)]
B&S Vanguard 23 HP (3867)	2900	97
B&S 7220 PXi (40U8), EXi (40N8)	2900	99
B&S 8240 PXi (44U6)	2900	99
Loncin LC2P77F	2900	100

Technical Documentation in the scope pursuant to annex VII for the Directive 2006/42/EC a pursuant to annex VI for the Directive 2000/14/EC is kept at the place of business of the manufacturer at the address:

SECO Industries, s.r.o.
Jungmannova 11
Valdické Předměstí
506 01 Jičín

In Jičín, 1. 2. 2022

Ing. Aleš Housa
Mechanical Engineering Division Director

SECO INDUSTRIES
Jungmannova 11
Valdické Předměstí
506 01 Jičín
CZECH REPUBLIC