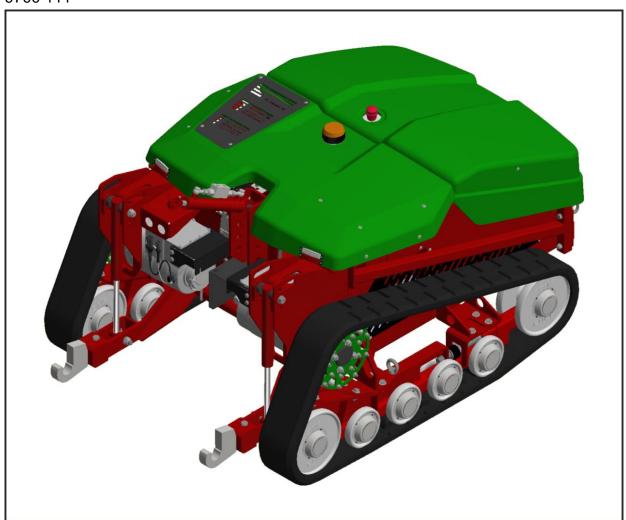


## **Translation of the original Operating Instructions**

## **Remote-controlled All-electric Tool Carrier** agria 9700e

9700 111





Before commissioning please read the operating instructions and note the safety and warning information!





## **Nameplate**

#### Please enter here:

fachine art. no.:	
D/machine no.:	
Pate of purchase:	

For nameplate see page 4, Fig. A/18

Please provide this information for each spare parts order, to prevent errors in delivery.

Only use genuine Agria spare parts!

The technical data, illustrations and dimensions provided in these operating instructions are non-binding. No claims may be derived from them. We reserve the right to make improvements without amending this manual.

## Scope of delivery (please check):

- Remote-controlled rechargeable battery implement carrier
- Remote control including original operating instructions, rechargeable battery and carrying strap
- · Spare battery and battery charger
- USB flash drive for diagnostics
- Original Operating Instructions
- Machine identity card (in envelope on the machine)

Please complete the machine identity card and return to Agria-Werke.

2 agria 9700e

## **Symbols**



Warning symbol, reference to danger point



Attention



Important information



Machine stop



Fast



Slow



Hydraulic height adjustment



Attachment point for recovery, lashing, towing



See separate engine operating instructions



Operating instructions



The information on the battery and in these operating instructions must be complied with.



Wear eye protection



Wear protective gloves



No smoking!



Fire, naked flame and smoking prohibited!



Keep children away from acid, batteries and chargers!



Warning of hot surfaces



Explosive substances



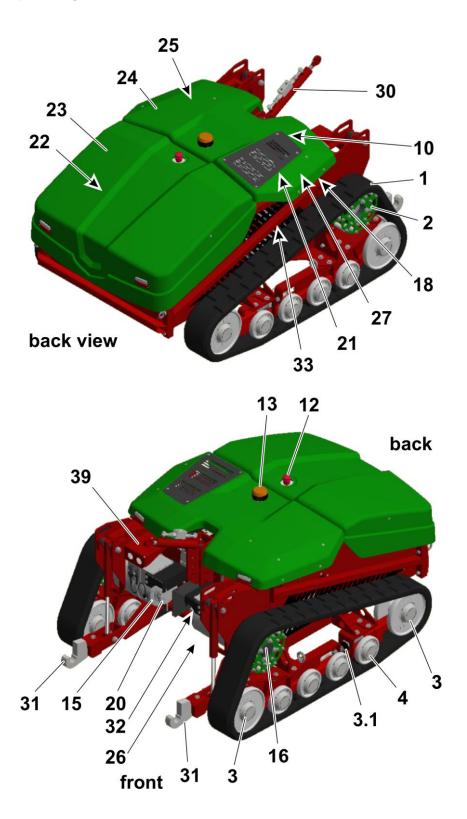
Do not dispose of as domestic waste



Send to recycling facility for disposal

<sup>-</sup> agria-Service - = contact your agria service centre

## Designation of parts Fig. A



## Legend:

Leader lines refer to a directly visible component.

Arrows refer to the position of functional units that are concealed in the view.



Fig. A:	
1	Crawler track
2	Driving wheel
3	Guide wheel
3.1	Clamping nut
4	Travelling wheel
10	Aerial
12	EMERGENCY STOP switch
13	Signal light
15	Drive motor
16	Transmission
18	Nameplate (ID/machine no.)
20	Safety brake
21	Air filter box
22	Rechargeable battery box
23	Cover hood rechargeable battery box
24	Service flap
25	Electrical box
26	Lower maintenance flap
27	Charging plug
Three- point hitch:	
30	Upper link
31	Lower link catch hook
32	PTO shaft with electric drive
33	Hydraulic unit
39	Option: Additional hydraulic connection



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## 1 Safety Instructions

Before commissioning, please read the operating instructions and note:

#### Warning symbol



This symbol has been used throughout these operating instructions to highlight all sections relevant to your safety. Also pass on all safety instructions to other users.

#### Intended use

The machine meets the current state of the art and complies with the applicable safety regulations at the time of marketing within the context of the approved use. In terms of design it was not possible to eliminate either the foreseeable misuse or the remaining risk without limiting the functionality in accordance with the regulations.

The remote-controlled implement carrier **agria 9700e** is a machine that is used to mount and operate approved mounted implements (intended use).

The machine is intended for working on gradients of up to 50°, under ideal conditions.

Any other use is considered to be contrary to the intended purpose. The manufacturer is not liable for any damages resulting from such use and the risk is entirely the user's own.

Intended use also includes observance of the operating, servicing and maintenance conditions stipulated by the manufacturer.

Unauthorized changes to the machine, especially to the safety equipment, may lead to increased levels of danger, which would rule out any manufacturer liability for resulting damage.

Damages resulting from the use of unapproved batteries are expressly excluded from the warranty.

The machine must be operated as directed in the operating instructions. Other operators must given instruction if required.

Any improper use or execution of activities of the machine not described in these instructions constitutes unauthorized misuse and is not within the statutory limits for liability of the manufacturer.

Improper use of the machine can endanger people and may result in damage to the machine or other property of the operator. It can also impair the functionality of the machine.

#### Reasonable foreseeable misuse

Foreseeable misuse and improper handling include inter alia:

Transport of people and objects

- Removal or manipulation of protective and safety devices
- Failure to observe maintenance intervals
- Failure to replace wearing parts
- Incorrectly executed maintenance or repair work
- Improper use

## General safety and accident prevention regulations

Familiarise yourself with the entire contents of these operating instructions before commissioning the machine.

Be aware of the local conditions when using the machine and always distinguish between safe and unsafe use.

Please observe the relevant accident prevention regulations as well as the generally recognized rules pertaining to safety, occupational health and traffic laws.

The use of public transportation routes is subject to the Road Traffic Act in its latest version.

Please check the traffic and operating safety of the machine before each commissioning!

The machine may only be used, serviced and repaired by persons who are familiar with it and have been instructed in the hazards involved.

The implement may only be used by responsible adults who know these operating instructions and are familiar with the implement. It must not be used by inexperienced persons or children.

Never use the machine in the presence of children or animals.

Never let children play with the machine, it is not a toy.

Only use the machine when there is sufficient ambient light and never use it when under the influence of alcohol, medications or drugs.

The affixed warning and information signs provide important information for safe operation; please observe them for your own safety!

The mounted implement must be switched off for transport on motor vehicles or trailers and outside the working area.

Be careful with rotating tools - keep the specified safety distance!

Be careful with coasting tools. Before working on coasting tools, wait until they have come to a complete standstill!

There is a risk of crushing and shearing on poweroperated parts!

Riding on the implement during operation is not permitted.



Match the operating speed to the respective conditions.

### Working area and danger zone

The working area is the entire area to be worked on. The user is responsible for third parties in the working area.

Staying in the danger zone of the machine is not permitted (see page 29).

Keep children and third parties away from the working area of the machine. Stop the machine immediately if people approach the working area.

Before you start work, check the entire working area for foreign objects (stones, cables and hoses etc.) and remove them. Parts thrown up by the mounted implement can hit people and cause serious injuries.

Watch out for further foreign objects, e.g., stones, tree stumps, bottles etc. during operation and when passing over the area and if necessary, remove them in good time.

For operation in enclosed areas, ensure that a safety distance is kept from edges to prevent damage to the machine.

#### **Operation and protective devices**

#### Before you start work

Familiarise yourself with the equipment and operating elements and their functions. Above all, learn how to turn the machine off quickly and safely in an emergency!

Ensure that all protective devices are mounted and properly adjusted!

Before each start-up check the functioning of all parts and protective devices. Replace any damaged parts - have this done by a specialist workshop if necessary. For your own safety, only use original Agria spare parts.

Suitable shoes must be worn depending on the type of ground surface (vegetation, humidity ...), so that the operator does not slip or fall.

#### Startup

Before starting the machine, attentively read the instruction manual.

The remote control must be switched on and fully charged before use.

When starting the machine, do not stand in the machine's path, but always to the side of the machine.

#### Operation

Only work in light conditions that guarantee an adequate view of both machine and working area.

Do not operate the machine during a thunderstorm.

Familiarize yourself with the implement and remote control on flat, even surfaces first of all, and operate the control slowly. Ensure that you have plenty of room and operate the various functions such as forward/reverse, direction changes and ascending/descending slopes slowly.

Avoid dangerous spots and operation on wet or damp surfaces where water may collect unseen. Always bear in mind that the implement is equipped with live electrical and electronic components.

The remote control has a range of around 300 m.

Always keep eye contact with the machine while it is in operation. Your view of the machine can be concealed by banks, bushes, hills and the like. If you lose visual contact with the machine, stop the machine's movement. Failure to do so will endanger persons, animals and objects in the machine's danger zone.

Keep a suitable distance from the machine during operation. Do not approach the running mounted implement and never place your hands or feet underneath the base unit or the mounted implement.

Keep a proper footing and hold the remote control firmly in your hand, to avoid losing control of the implement.

Set up the operating conditions of the machine so that the machine is not overloaded. Reduce the speed if necessary.

Never put yourself or the machine in a position where the machine could slip or tip over and run over you.

Never approach the machine from below on sloping terrain.

Always move the machine so that the three-point mounting bracket is not directed at people or obiects.

Wear safety goggles and a dust mask when working on dusty surfaces.

Wear hearing protection if this is prescribed in the mounted implement's operating instructions.

Use protective gloves when carrying out work on the machine.

Before cleaning and other work on the machine, switch off the machine proper and the implement. Wait until the implement has stopped.

Important: Actuation of the EMERGENCY STOP switch on the remote control immediately switches off the machine's traction drive, the implement drive and the implement adjustment.

The implement also cuts out immediately if the distance between the remote control and the machine is too great or in the event of disturbances in the transmission frequency. Always keep your distance



to the machine so that you can safely monitor, control and influence it at all times.

Remove any plugging on the machine after the implement has come to a standstill and with switched off remote control. Do not use your hands under any circumstances, but use a stick or a suitable tool instead.

If the machine encounters a foreign object, switch off the machine and remote control and wait for the mounted implement to come to a standstill. Check the machine for any damage and repair it before you switch on the implement again.

Always keep the implement in a clean, well-kept and properly maintained condition. This will maintain its efficiency and ensure safe operation. Keep the remote control clean and dry and avoid oil and grease residues.

Keep the safety signs and instruction manual in good condition; exchange or replace them if necessary.

#### **Operation on slopes**

Do not work on slopes where the implement could slip or tip over. This could cause serious damage to the implement or other objects and injuries to bystanders.

Work across the slope along the contour line and in an upwards direction when turning, if possible.

Watch out for holes, furrows, elevations and other objects, to prevent slipping or tipping over.

Bear in mind that high grass can conceal obstacles, hazards and small animals.

Avoid working on wet ground in steep terrain. Special care should be taken in the area of ditches and river banks.

## Additional safety instructions for children and animals

Children can easily mistake this implement for a toy. Therefore, never leave the machine or the remote control unattended.

Bear in mind that children and animals may appear in places where you don't expect them. Be particularly careful when approaching areas that are not open to view, bushes, trees or other objects, which could obstruct your view of children or animals.

#### Finishing work

Never leave the machine unattended as long as the machine is ready for operation.

Press both emergency stop switches - on the remote control and on the machine - when leaving the machine.

Take care not to park the hot machine in the blazing

To protect against unauthorized use, remove the keys from the remote control and protect the machine against rolling away.

#### **Implements**

Attach an implement only when engine and implement drive are switched off.

Prior to attaching and starting the implement, read and observe the operating instructions of the implement.

Use adequate tools and wear gloves to replace implements and parts thereof.

Put the supporting equipment to the proper position and ensure stability when you attach or remove an implement.

Secure machine and implements against rolling away (parking brake - if installed, wheel chocks).

There is a risk of injuries when you attach an implement. Take special care.

Attach an implement in accordance with the regulations and only at the specified fixtures.

Always switch off the working tools during a transport ride or when you drive to adjacent working areas.

Secure machine and implement against unauthorized use and rolling away when you leave it. If necessary, install transport or safety equipment, and put it in protective position.

#### Maintenance

Only trained specialist personnel, who can carry out professional maintenance and repair, may carry out this work.

Do not carry out maintenance and cleaning work with the mounted implement running.

Protective devices and tools that are subject to wear and tear must be regularly inspected and replaced if necessary!

Do not carry out repairs such as welding, grinding or sharpening, drilling etc. on structural, safety-relevant parts!

Disconnect the battery before commencing welding work.

During welding work, make sure that the electrical and electronic components of the machines are not influenced.

Keep the machine and attachments clean, to avoid the risk of fire.

Regularly check nuts and bolts for tightness and retighten if necessary.



After maintenance and cleaning, ensure that the protective devices are re-installed and properly adjusted!

Only use genuine Agria spare parts.

Carry out a functional and safety test after completing the work.

Observe the prescribed maintenance intervals.

#### **Storage**

Never store the machine in rooms with open heating.

If the machine is stored indoors, keep a safety distance of 2.5 m to flammable materials.

#### **Hydraulic system**

The hydraulic system is at high pressure.

Ensure that the hydraulic hoses are connected correctly when you connect hydraulic components.

High-pressurized hydraulic oil can penetrate your skin and cause severe injuries. Danger to life! See a doctor immediately when you are hurt. Risk of infection!

Prior to working on the hydraulic system depressurize it and switch off the engine (specialized workshop).

To avoid injuries, use suitable devices when you try to locate leaks (specialized workshop).

Check hydraulic hose lines at regular intervals for leaks and ageing. Replace them as necessary. Always replace them after the specified intervals at the latest.

Only use genuine Agria hydraulic hoses.

#### **Electrical system and battery**

Be careful with battery gases - risk of explosion! Avoid sparks and naked flames in the vicinity of batteries.

Remove the plastic cover (if installed) before you recharge a battery. This avoids the accumulation of highly explosive gases!

Caution when handling battery acid - caustic!

Only use specified fuses. If the rating of the fuses used is too high, the electrical system can be irreparably damaged - there is danger of fire!

#### Additional safety instructions for batteries

Never charge the implement in the rain or in damp rooms. Only use the batteries specified in these instructions. The batteries must not be opened or damaged, or stored near heat sources. Any leaking substances are corrosive and can cause damage to eyes and skin. Do not inhale vapours or gases, as they may be toxic.

When handling batteries always take care that tools, rings, bracelets or keys do not inadvertently cause a short circuit across the terminals. This may result in burns.

Danger: The substances contained in batteries are electrically conductive and corrosive and damaging to eyes and skin. Wear safety goggles and protective clothing to protect your eyes and skin. Wash hands thoroughly after contact. After contact with the eyes, immediately rinse the eyes with plenty of water and consult a doctor.

ATTENTION: Only use genuine batteries. Other batteries can cause damage to the machine or personal injury. The batteries supplied with this machine are sealed and maintenance-free and can be overturned without any risk of fluid leakage. Several hours may be required to charge a completely discharged battery. Only use original agria battery chargers.



## Description of warning and mandatory symbols



Warning of hand injuries! Wait for the mounted implement to come to a standstill, observe the operating instructions.



Warning - do not open the rechargeable battery box.



Caution - live parts! Do not touch damaged parts!



Caution - hot parts! Allow the machine to cool down after use before carrying out any care and maintenance work.



Marking emergency stop switch



Warning of hand injuries!



Do not hose down parts with water!



Attachment point for lashing or lifting the machine

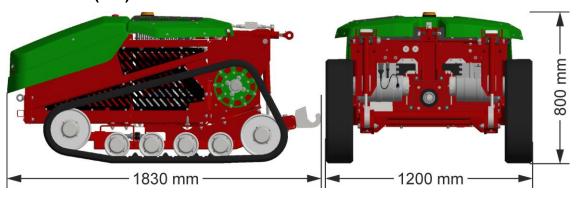


## 2 Technical Data

## 2.1 Remote-controlled implement carrier

Traction drive:	Infinitely variable electrical drive for crawler track 48 V
Travel speeds:	Forward 0 - 10 km/h
	Reverse 0 - 10 km/h
	Lithium-ion rechargeable battery
	24.8 kWh / 480 Ah
Charging time:	5-10 h, depending on battery charger
	Electro-mechanical safety brake
	251 g/cm² (18.1 kPa)
	infinitely variable electrical drive 48 V
	7.4 kW continuous output, 20 kW peak output
Speed PTO shaft:	100-1000 rpm, clockwise, anticlockwise rotation
Mounting bracket:	3-point, category 1
	300 kg
Control:	electrical, remote control with joystick
•	max. 300 m
Normal working range of remote control:	max. 100 m
•	5 to +40 °C
•	L <sub>WA</sub> = 78 dB according to EN ISO 3744
-	= 66 dBA in idle mode at 1 m distance, ear height 1.5 m
•	L <sub>p</sub> = 71 dBA when running at <b>3 m</b> distance
•	Permanent lubrication
Hydraulic oil:	
· · · · · · · · · · · · · · · · · · ·	Synthetic Ester Base: HEES
	Viscosity grade according to ISO: VG 46
	Matrol-Bi
	HEES 46
<b>3</b> .	approx. 1.3 l
• • • • • • • • • • • • • • • • • • • •	780 kg
Ground clearance:	205-215 mm

## Dimensions (mm):



## 3 Devices and Operating Elements

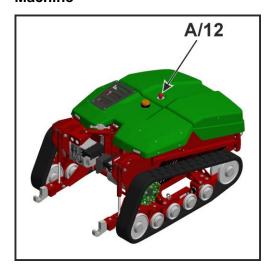
## 3.1 Preparation of the machine



- Remove the machine from the packaging.
- Packaging should be recycled in an environmentally friendly manner.

#### 3.2 Basic functioning of the system

#### **Machine**



The complete unit comprises two main components: the implement carrier and the radio remote control.

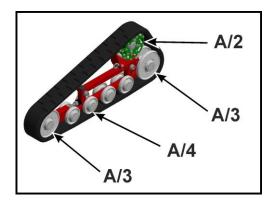
The implement carrier is intended for the attachment and operation of mounted implements

The energy to operate the machine is stored in the machine's rechargeable battery. The rechargeable battery can be charged by means of battery chargers that are available from Agria-Werke GmbH. The rechargeable battery supplies energy to the electric traction motors and the electric drive motor of the mounted implements.

The control unit and the radio receiver are located in a covered electric box.

The machine is equipped with an EMERGENCY STOP switch (A/12).

#### 3.3 Traction drive



#### **Crawler drives**

The machine is driven by crawler drives. The crawler tracks run on the drive sprockets (A/2), guide wheels (A/3), and travelling wheels (A/4). The crawler tracks are tensioned with the rear guide wheels. The crawler track tension is adjusted with the tightening screws on the adjustable retainers of the guide wheels, see page. 44.

If the machine is frequently used on slopes with gradients from 40° (when used with heavy mounted implements already from 30°), we recommend to equip the machine with crawler tracks with field cleat profile (agria art.-no. 9620 011).

#### Transmissions and electric motors

The driving wheels (A/2) of the crawler tracks are fastened on the planetary gears (A/16). The transmissions are driven by the drive motors. The speed of the drive motors and thus the travel speed of the machine are controlled via the remote control and the power electronics.



#### 3.4 Remote control

The machine is controlled via the remote control.

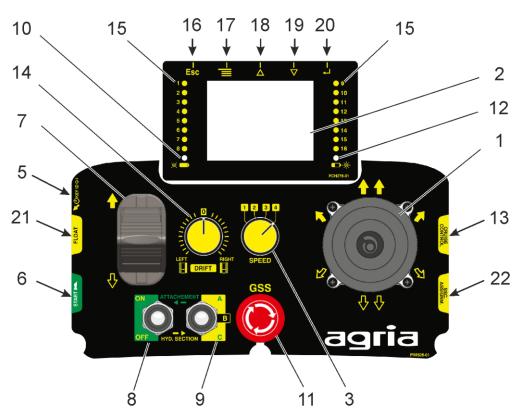
The implement uses the frequencies approved in the country of use.

The range of the remote control is around 300 m maximum with optimal conditions such as battery level, obstacles in the radio link, disturbances and interference from the environment etc.

The usual working range of the remote control is approx. 100 m, depending on the conditions.

In the interests of safety the remote control is set so that the engine is switched off as soon as the machine leaves the range. This distance can therefore vary under different conditions.

The remote control is equipped with a tilt sensor. The remote control can only be operated in a horizontal position. If the remote control is moved into an inclined position, the machine is switched off. A restart of the machine is necessary.



#### (1) Joystick

The travel direction and travel speed are controlled with the joystick.

#### (2) Display

Different settings and states of the machine are shown on the display.

#### (3) Travel speed range

The machine's top speed is adjusted in four levels with the travel speed selector switch. Levels 1, 2 and 3 are intended for working, level 4 for transport rides.

#### (4) Not assigned

## (5) Key switch

The remote control is switched on and off with the key switch.

#### (6) Release

The 'release' button activates or restarts the radio contact between the remote control and the machine.

#### (7) Moving the hydraulic functions

The analogue lever is used to operate the working height, the angles of slope and the additional hydraulic unit of the mounted implement.

#### (8) Mounted implement on/off



The mounted implement on/off switch is used to switch the mounted implement on and off. Keep the lever depressed for two seconds to switch on the PTO shaft.

#### (9) Hydraulic control circuits

The selector lever (B/8) is used to switch the mounted implement on or off.

The selector lever (B/9) is used to select the hydraulic control circuit.

A: Moving the upper link

B: Moving the lower links

C: Optional additional function

Use the analogue lever to move the links (B/7).

#### (10) Green LED, radio connection

Quick flashing of the LED indicates that the radio connection is interrupted or is being restored, slow flashing indicates that the radio connection is present.

#### (11) EMERGENCY STOP switch

The machine is switched off when the EMERGENCY STOP switch is pressed.

#### (12) Red LED, function of the transmission unit and battery condition

Illumination of the red LED indicates insufficient battery charge of the remote control or another error within the remote control.

#### (13) Cruise control

To activate the cruise control, accelerate the machine to the desired speed. Press the cruise control button on the left side of the remote control. Hold the joystick in any travel position; the machine will continue to travel at your desired speed. As soon as you release the joystick or hold it in neutral, the cruise control is deactivated.

#### (14) Drift

With the help of drift it is possible to make one crawler track run faster than the other. Thus, the influence of the mounted implement can be compensated on slopes.

#### (15) Warning lamps

The warning lamps light up in case of errors.

#### (16) Escape

Switch on the backlight.

## (17) **Menu**

Page change.

#### (18) "up"

Moves the cursor upwards, increases values.

#### (19) "down"

Moves the cursor downwards, reduces values.

#### (20) **Enter**

Change settings.

#### (21) Floating position

As soon as you have lifted the mounted implement, you can activate the floating position with this button.

#### (22) Not assigned



## 3.5 Display on the remote control

Menu page 1 Machine specifications



The following machine data and states are shown on the display:

- (1) Travel speed
- (2) Residual charge of the battery
- (3) Remaining run time
- (4) Hours of operation
- (5) Power reduction PTO (power take off shaft drive)
- (6) Power reduction in Watt
- (7) Residual charge of the battery in the remote control
- (8) Direction of rotation PTO shaft with display on/off
- (9) Set target speed of the PTO shaft
- (10) Floating position
- (11) Signal strength of the radio remote control



#### Menu page 1 Essential information and alarms



If a field in the menu shines red, there is an alarm or a malfunction.

The following machine data and alarms are shown on the display:

- (1) Travel speed
- (2) Residual charge of the battery
- (3) Remaining run time
- (4) Hours of operation
- (5) Power reduction
- (6) Power reduction in Watt
- (7) The PTO shaft function monitoring signals a fault.
- (8) The charge condition of the machine's rechargeable battery is low.
- (9) A temperature exceeds the warning limit.

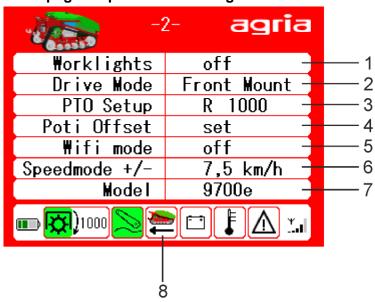
Switch off the PTO shaft, allow the machine to stand still while it is still switched on so that the electronic components continue to be cooled. Check the temperatures on menu page 3 of the remote control.

(10) An error message is pending.

Check the error codes on page 4 of the remote control, or -agria-Service-



#### Menu page 2 Options and settings



Here you can see additional options and setting possibilities of the remote control:

- (1) Option: LED working lights not assigned
- (2) Driving direction setting

Navigate with the arrow keys (B/18, B/19) to the field Drive Mode and press Enter (B/20) to change the driving direction setting.

The position lamps indicate the driving direction. Red position lamps indicate a reverse driving direction and white position lamps a forward driving direction.

(3) Adjustment sense of rotation and speed

Navigate with the arrow keys (B/18, B/19) to the field R/L and press Enter (B/20) to change the sense of rotation right to left.

Navigate with the arrow keys (B/18, B/19) to the numeric field and press Enter (B/20) to switch on the PTO shaft speed with the arrow keys (B/18, B/19). Press Enter (B/20) to confirm your entry.

(4) Drift potentiometer

Adjusting the drift potentiometer: Move the cursor with the arrow keys (B/18, B/19) to the position Potentiometer offset - Move the drift potentiometer (B/14) to the mechanical centre position - Press Enter (B/20)

- (5) Option Wi-Fi mode not assigned
- (6) Adjustment travel speed

Navigate with the arrow keys (B/18, B/19) to the field Speed mode +/-. Press Enter (B/20) to confirm. Select the required driving position with (B/3).

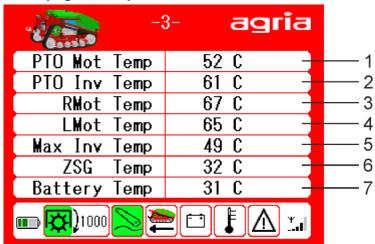
Driving position 1 ranges up to 2.5 km/h, driving positions 2 and 3 are individually adjustable. Using the arrow keys (B/18, B/19), set the selected driving position and press Enter (B/20) to confirm.

- (7) Model
- (8) Note driving direction

The arrow indicates the set driving direction.



### Menu page 3 Temperatures



The display shows the temperature on several components:

- (1) Temperature mounted implement motor
- (2) Temperature mounted implement inverter
- (3) Temperature right drive motor
- (4) Temperature left drive motor
- (5) Maximum temperature inverter drive motor
- (6) Temperature central control unit
- (7) Temperature battery

#### **Temperature values**

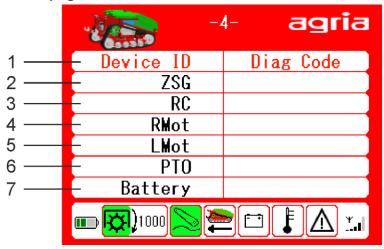
Designation	Component	Warning from	Power reduction from	Shutdown from
PTO Mot Temp	Mounted imple- ment drive motor	85°C	longer period of overload	excessively long overload
PTO Inv Temp	Mounted imple- ment drive inverter	80°C	longer period of overload	excessively long overload
RMot Temp	Wheel motor right	125°C	135°C	145°C
LMot Temp	Wheel motor left	125°C	135°C	145°C
Max Inv Temp	Traction drive inverter	80°C	longer period of overload	excessively long overload
ZSG Temp	Central control unit	70°C	75°C	85°C
Battery Temp	Rechargeable battery	50°C	59°C	59°C

The travel speed is reduced if the temperature of a component is above the threshold for power reduction. The machine is switched off completely when a shutdown temperature is reached.

Warning symbols and error codes are displayed on page 1 and 3 of the remote control.



### Menu page 4 Error codes



The display shows error codes of individual components in the hexadecimal system:

- (1) Central control unit
- (2) Remote control
- (3) Wheel motor right
- (4) Wheel motor left
- (5) PTO shaft drive
- (6) Battery

There may be temporary errors, or errors with little effect.

You can reset these errors without switching off the machine completely:

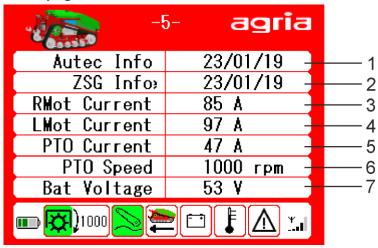
- Stop the machine, ensure a safe stand and a clear environment.
- Press the green release button (6) on the remote control.
- After three seconds, the error memories of all drives are reset.
- The machine is steerable again and can continue to be operated as usual.
- If the machine does not continue to run, contact the **-agria Customer Service-** or read out the errors and report them to your dealer, see page 53.

If the errors cannot be remedied with this procedure, -agria-Service-

The complete list of error codes can be found in the repair manual or at -agria-service-



## Menu page 5 Information



The display shows additional information about the machine:

- (1) Version of the software in the remote control
- (2) Version of the software in the central control unit
- (3) Current at the wheel motor right
- (4) Current at the wheel motor left
- (5) Current at the PTO shaft drive
- (6) Actual PTO shaft speed
- (7) Battery voltage

#### Warning driving direction



If this display field appears on the display when the machine is started, the travel direction if set to trailed mounted implements. The machine is thus reversing compared to the standard setting.

(1) Take note of the pre-set travel direction.

You can acknowledge the message with the Enter (B/20) key.

(2) Schematic depiction of the travel direction

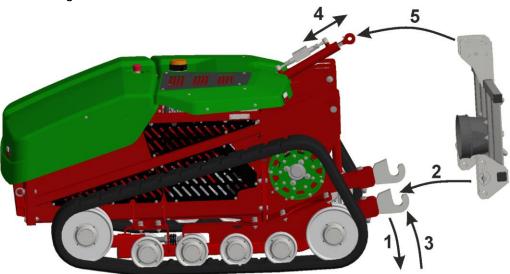


## 3.6 Installing and removing implements

Prior to attaching and starting the mounted implement, read and observe the operating instructions of the mounted implement.

#### Attachment:

- The contact surfaces of machine and mounted implement must be clean.
- · Leave the machine switched on.
- Make sure that the machine's PTO shaft is switched off.
- Ensure that the mounted implement to be attached has a secure stand.
- Make sure you keep at a distance to the machine while the lower link is moving. These is a risk of bruising.



(1) Move the lower link to the bottommost position.



- (2) Open the catch hooks. The catch hooks must be able to receive the bottom coupling points of the mounted implement's three-point mounting bracket.
- (3) Lift the lower link until the balls are seated in the catch hooks and the safety catches are locked in closed position.



- (4) Set the correct link of the upper link to be able to attach your mounted implement.
- (5) Connect mounted implement and upper link.

Connect the drive shaft. Observe the operating instructions of the drive shaft manufacturer.

Note the speed and sense of rotation specified by the manufacturer when starting the mounted implement. The mounted implement is now ready for use.



#### Dismantling:

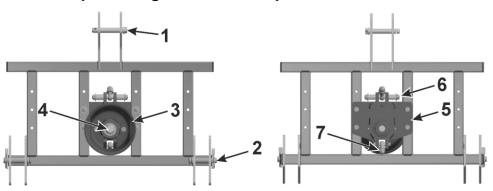
To dismantle the mounted implement, put down the mounted implement paying attention that the mounted implement cannot tilt or slip after it has been dismantled. First dismantle the implement drive shaft. Disconnect the upper link from the implement. Open the catch hooks. Lower the lower link so that you can move the machine to the side.

#### Notes:

Do not use any damaged or even defective mounted implements. Worn mounted implements or mounted implements that no longer move freely can increase wear and operating temperature of the base machine or the operating temperature of the machine or can have a negative effect on the rechargeable battery runtime.

Only use the drive shafts delivered for Agria mounted implements.

## 3.6.1 Adapter for agria mounted implements



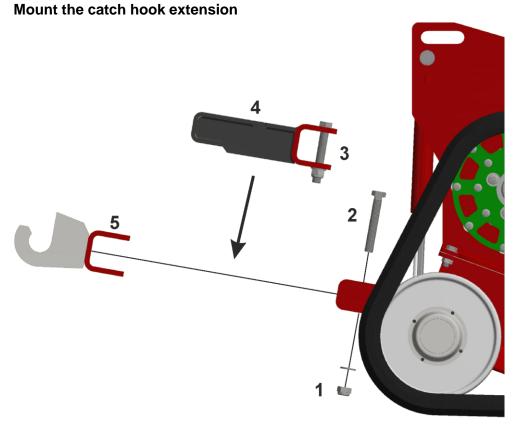
- 1. Connection upper link
- 2. Connection lower link
- 3. Protection cap
- 4. PTO shaft (direction of base machine)
- 5. Agria flange (direction of mounted implement)
- 6. Agria flange attachment for catch hook with cap nut (AF 24)
- 7. Agria flange fixing screw with cap nut (AF 24)

With the adapter for agria mounted implements (agria art.-no. 9755 111) you can operate agria mounted implements with your agria 9700e.

Attach the adapter like a mounted implement, see page 22.



## 3.6.2 Mounted implements und accessories for mounted implements

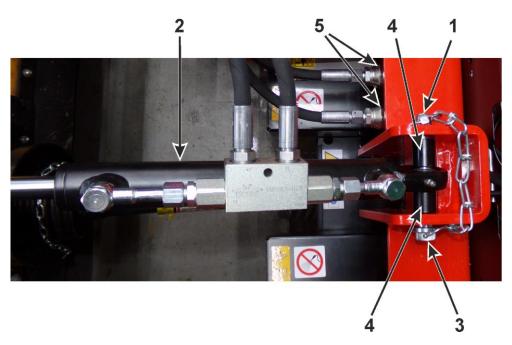


You can extend the lower links of the 9700e. Use the catch hook extensions (agria art.-no. 9740 131).

- 1. Open the nut (1) (AF24).
- 2. Remove the screw (2).
- 3. Remove the catch hooks (5).
- 4. Open the nut of the screw on the extensions (3) (AF24).
- 5. Insert the extension (4) instead of the catch hooks. Mount the catch hooks on the extensions.
- 6. Fasten the extensions and the catch hooks with the screws provided.



#### Mounting/exchanging the upper link extension



You can install an upper link of long design (agria art.-no. 9740 111) on the 9700e.

The hydraulic lines are pressurised. Hydraulic oil could leak when uncoupling the upper link.

Pay attention that the upper link is depressurised during the exchange. If a mounted implement is attached, place it on the ground. Adjust the length of the upper link so that both ball joint bearings at the ends of the upper link are no longer under tension. The hydraulic lines are depressurised and can be easily disconnected from the hydraulic connections. If no mounted implement is attached, the upper link is also depressurised. Inverting the connections will lead to the functions being reversed.

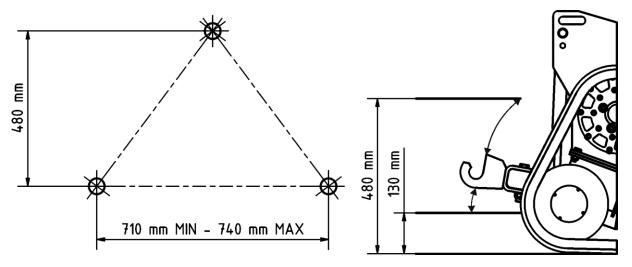
- 1. Uncouple the hydraulic lines from the base unit.
- 2. Dismantle the upper link (2) from the mounted implement.
- 3. Open the lynch pin (1).
- 4. Pull the bolt (3).
- 5. Remove the sleeves (4).
- 6. You can now mount the other upper link in reverse order.



#### **Recommended mounted implements**

Mounte	d implement - base unit	Combination necessary	Extension/adapter	
agria no.	Article		agria no.	Article
9756 731	Flail tiller 120 cm	No		
9756 741	Flail tiller 140 cm	No		
9749 731	Wear insert 120 cm	No		
9749 741	Wear insert 140 cm	No		
9756 111	Sickle chopper 150 cm	Yes	9740 111	Upper link in longer version
			9740 131	Extension catch hook
5546 261	Gantry mower 125 cm	Yes	9755 111	Adapter for agria mounted implements
5546 271	Gantry mower 140 cm	Yes	9755 111	Adapter for agria mounted implements
5546 281	Gantry mower 160 cm	Yes	9755 111	Adapter for agria mounted implements
5546 291	Gantry mower 205 cm	Yes	9755 111	Adapter for agria mounted implements

## 3.6.3 Kat. 1 connection dimensions



With the agria 9700e, you can also use many mounted implements that are equipped with a KAT.1 mounting frame.

The distance of the lower link mounting brackets ranges from 710 mm to 740 mm.

The minimum height of the catch hooks is 130 mm.

Mounted implements can be lifted to a height of 480 mm.

Please observe the drive shaft manufacturer's operating instructions if you need to cut off a drive shaft to use your mounted implement on the agria 9700e.

Only use mounted implements with a dead weight of max. 300 kg! Attaching a mounted implement influences the machine's point of gravity and its suitable for working on slopes. Observe the mounted implement manufacturer's operating instructions.



# 3.7 Instructions for correct conditioning of the rechargeable batteries for the remote control



- 1. To achieve the optimum autonomy values for the rechargeable batteries you should initially carry out three completely charge/discharge cycles.
- 2. Charge the rechargeable batteries again for at least 12 hours before first commissioning.
- 3. To preserve the conditioning state, charge the rechargeable batteries every two months, even if they have not been used.
- 4. Charge the rechargeable batteries in a dry, ventilated area. Never charge the rechargeable batteries in proximity to moisture, heat sources, open flames or chemical products.
- 5. Do not allow rechargeable batteries to discharge completely before recharging if possible.
- 6. Store rechargeable batteries in frost-free conditions.

The remote control is powered by a Li-lon rechargeable battery. The charger as well as a spare rechargeable battery necessary for this are enclosed.

Only use original agria or autec rechargeable batteries.

An insufficient battery charge level leads to errors in the radio transmission.

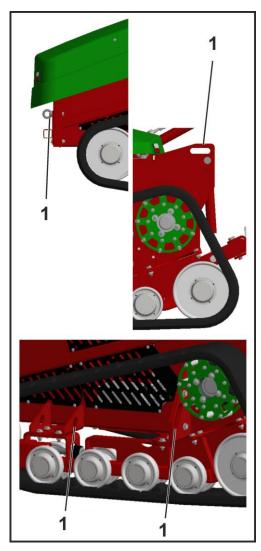
#### 3.7.1 Rechargeable battery charger



Only charge the rechargeable batteries of the remote control using the battery charger provided.

The electrical cables of the battery charger must be intact. Damaged cables must be replaced by specialised personnel immediately.

## 3.8 Attachment points



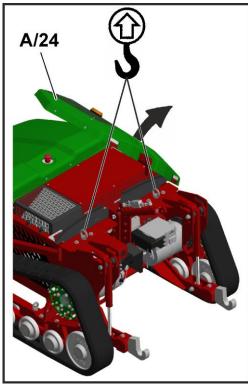
# Only lash the machine at the specified points (1). Lashing to other points can cause damage to the machine.

Loading straps must be fastened to the attachment points (1) for towing, recovery, and lashing for safe transport and loading the machine.

Check the loading straps for damage and replace them if necessary!

Do not use sharp-edged load carrying equipment (e.g. sharp-edged hooks, eyes etc.)!

As soon as a mounted implement has been attached to the machine, pay attention that for transporting purposes, the mounted implement is placed on the floor of the means of transport. Also lash the mounted implement to avoid transport damage. Observe the mounted implement's operating instructions for this.



Only hang the machine on a lifting device at the marked points. Attaching it to other points can cause damage to the machine.

Unscrew the service flap (A/24) at the centre of the machine to lift the machine with a crane. Undo the five half-round screws TX30

Please note that the machine can tilt when it is lifted, especially if no mounted implement is attached to the machine. The weight of the mounted implement also influences whether and how far the machine will tilt when it is lifted.

As soon as the machine no longer needs to be lifted, mount the hood and tighten the five half-round screws TX30 handtight.

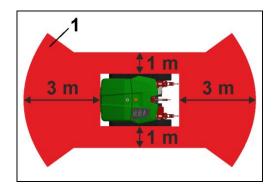


Never stay under a suspended load and never pass underneath it. Danger to life!

## 4 Commissioning and Operation

#### 4.1 Danger zone





Staving in the danger zone of the machine during startup and operation is not permitted.

If the operator notices that people or animals are in the working area, the machine must be switched off immediately and not restarted until this area is clear.

The user is responsible for third parties in the working area (entire area to be worked on).

## Danger zone (1) Remote-controlled implement carrier:

3 m in front of and 3 m behind the machine, as well as 1 m to the left and right of the machine:

Be sure to observe the danger zone of the mounted

Observe the mounted implement manufacturer's operating instructions. The entire danger zone can be considerably enlarged thereby.

Never stay below the machine on sloping terrain. Never approach the machine from below on sloping terrain.

#### 4.2 Before starting the machine

Only put the machine into operation after all protective devices have been mounted, are functional, and in protection position.

## 4.2.1 Charging the machine

To charge the machine, the machine must be switched off. Press the EMERGENCY STOP switch of the machine (A/12) and the EMERGENCY STOP switch of the remote control (B/11).

The rechargeable batteries of the machine are not completely charged before delivery. Completely charge the machine before working with it the first time.

Avoid soiling of the charging plug with oily or greasy substances. If the plug is soiled with oily or greasy substances, switch off the machine and remove any oil or grease from the plug.

In case of coarse soiling, for example with mowing residues or foliage, switch off the machine and use compressed air to blow out the plug.



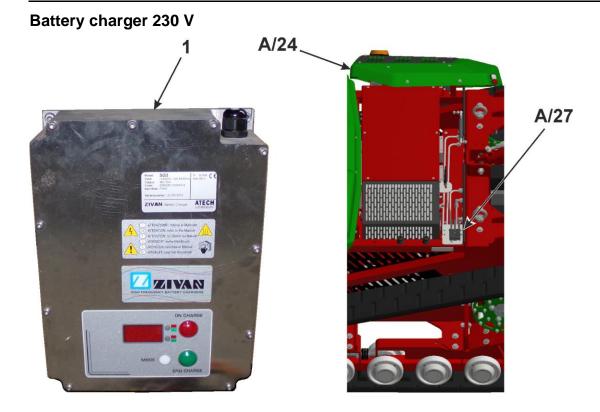
Do not use any conductive tools to clean the plug of soiling. There is a risk of electric shock.



Do not make any changes to the battery charger settings!



Only store the machine in uninhabited and non-serviced rooms.



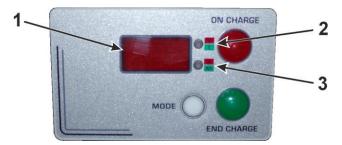
To charge the machine, first connect the battery charger (1) with the standard plug to the socket of the 230 V supply grid.

Open the service flap (A/24).

Connect the charging plug of the machine (A/27) to the battery charger.

The battery charger powers up automatically. You need not make any adjustments.

The rechargeable battery of the machine is now charged.

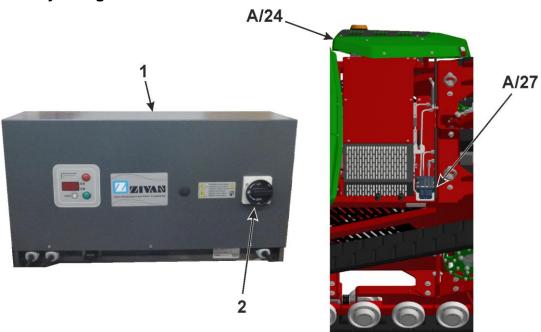


The display (1) of the battery charger displays four values in succession. They alternate at short intervals. If the top LED (2) shines red, the voltage is displayed in Volt (V). If it shines green, the expired charging time in hours (h) is displayed.

If the bottom LED (3) shines red, the amperage made available by the battery charger is displayed in Ampere (A). If the LED shines green, the charge quantity with which the machine was charged is displayed in Ampere hours (Ah).

Code 6C1 indicates the charging program.

#### Battery charger 400 V



To charge the machine, first connect the battery charger (1) with the CEE high-voltage plug to the 400 V supply grid.

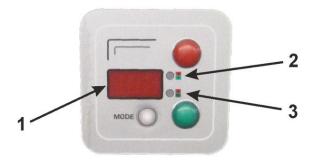
Open the charging flap on the hood of the rechargeable battery box (A/24).

Connect the charging plug of the machine (A/27) to the battery charger.

Switch on the battery charger (1) with the main switch (2).

The battery charger powers up automatically. You need not make any adjustments.

The rechargeable battery of the machine is now charged.



The display (1) of the battery charger displays four values in succession. They alternate at short intervals. If the top LED (2) shines red, the voltage is displayed in Volt (V). If it shines green, the expired charging time in hours (h) is displayed.

If the bottom LED (3) shines red, the amperage made available by the battery charger is displayed in Ampere (A). If the LED shines green, the charge quantity with which the machine was charged is displayed in Ampere hours (Ah).

Code 6C1 indicates the charging program.

#### 4.3 Starting the machine - basic actions



Check the tightness of nuts and bolts.

< 3 m



The acoustic pressure level is less than 85 dB(A) from a distance of more than 3 m. If you are regularly closer to the machine than 3 m you should use protective ear plugs. Observe the operating instructions of the mounted implement manufacturer.



Before starting the machine, make sure that no children or animals are in the working area.



The working area must also be free of objects which could come into contact with rotating parts of the mounted implement. These could cause serious personal injuries and damage to property or to the implement itself.

Check that the safety devices provided are functioning properly before commencing work.

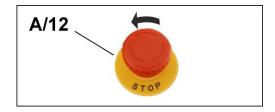
- Interference could be caused by third parties in the vicinity using the same frequency. Make sure that no active transmitters in the same frequency band are present in your vicinity.
- Make sure that the battery of the remote control is fully charged.
- Make sure that the fan filter is free of mowing residues or other soiling.
- Before starting the mounted implement drive, make sure that the mounted implement is not blocked. A mounted implement blocked (by foreign objects) can cause damage to the mounted implement or the mounted implement drive.
- Observe the sense of rotation and the speed the manufacturer prescribes for the mounted implement.



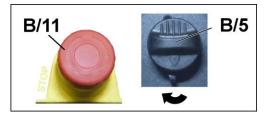
Carefully read the operating instructions of the remote control and of the mounted implement before use.



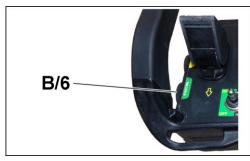
## 4.4 Starting the machine



• Unlock the EMERGENCY STOP switch (A/12) on the machine (turn it to the left).



② Unlock the EMERGENCY STOP switch (B/11) on the radio remote control (turn it to the right). Switch on the radio remote control with the key switch (B/5) on the left-hand side (turn key to the right).



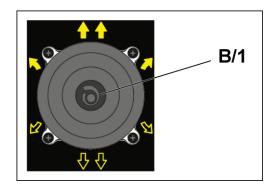
3 Press the release button (B/6) on the left-hand side of the remote control. The green LED of the remote control (B/10) flashes rapidly. The display starts up on the display screen. The strength of the radio signal is indicated by the bar at the bottom right of the display.

Press the green release button (B/6) again; if a radio connection has been established, the green LED of the remote control (B/10) now flashes slowly. The machine now unlocks in succession the traction drive and the PTO shaft drive. This takes approx. 5 sec. The radio system shows the machine data on the display. Wait until all fields of the display are filled with the respective data.

The machine is now ready for use.



#### 4.5 Working with the machine



Move the machine to the working area and stop with the mounted implement over a clear space.

Use the joystick (B/1) to adjust the travel speed of the machine and steer it.

From the perspective of the operator standing behind the machine in the direction of travel, slowly move the joystick:

- up = forward
- down = reverse
- to the left = left, to the right = right.

The machine's speed depends on the position of the joystick (B/1) and the travel speed selector switch (B/3).

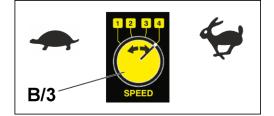
Use the joystick on the remote control carefully and avoid sudden changes of direction.

Observe the pre-set direction of travel.

Move the machine slowly, so that you can become familiar with the machine and check that the commands are executed correctly. Note that the direction commands must be executed in reverse when driving backwards.

Avoid driving downhill for longer periods when the rechargeable battery is fully charged. Recuperation can create a high load on the batteries; the machine switches off for component protection reasons.

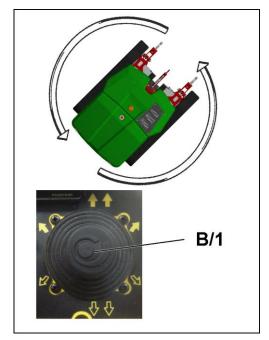
Select the travel speed range with the travel speed selector switch (B/3). Work in position 1 to 3 depending on the load of the mounted implement. Use position 4 only for driving when the mounted implement is not switched on. You can adjust the speed ranges, see page 18.



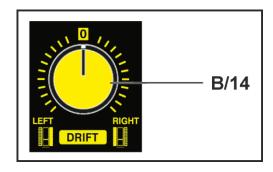
The machine can be turned on the spot (zero-turn).

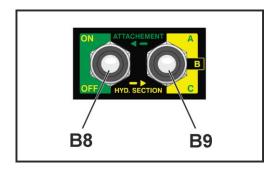
The zero turn is only possible if you specify a direction and the speed simultaneously with the joystick (B/1).

To do so, move the joystick (B/1) all the way to the right or left and somewhat up or down.









The drift (B/14) assists you in driving a straight contour line on a slope. The longer you drive a contour line across the slope, the more the machine tends to drive downhill, especially when it is pushing a heavy mounted implement. With the drift, you can countersteer this movement and drive in a straight line across the slope. Turn the rotary switch to the right to prevent the machine from sagging downhill to the left. Turn the rotary switch to the left if you do not want the machine to sag downhill to the right. The drift is changed automatically when the driving direction changes; you can continue to operate the machine as usual.

#### Three-point mounting bracket:

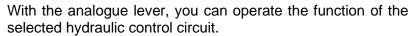
You switch on the PTO shaft with the selector switch (B/8).

The selector lever (B/9) is used to select the hydraulic control circuit.

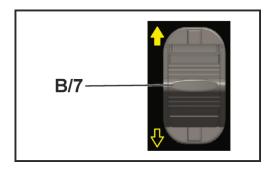
Use the analogue lever for moving (B/7) as described in the following section.

The hydraulic control circuits are:

- A: With hydraulic control circuit A you can retract and extend the upper links.
- B: With the hydraulic control circuit B you can adjust the height of the lower links.
- (Optional) C: With the hydraulic control circuit C you can operate the hydraulic additional function of your mounted implement, for example a lateral adjustment. Do not connect a hydraulic motor to hydraulic control circuit C.



The speed of adjustment depends on the deflection of the analogue lever



#### 4.5.1 Recommended operation mode:

#### Floating position

You can use the 'floating position' function to operate mounted implements on uneven soils. The floating position compensates the unevenness and guarantees a neat work result.

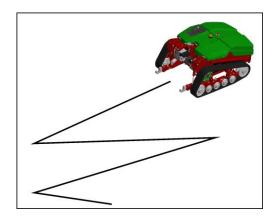
Before activating the floating position, lift the mounted implement to the maximum height of your desired working area.

Use the FLOAT (B21) key to activate the floating position. Activating the floating position limits the upward movement of the mounted implement up to the point at which you have activated the floating position (B21). Ensure adequate travel or activate the floating position at the highest point of lifting.

Lift the mounted implement at the end of the row if you turn the machine after you have processed a row with the mounted implement in floating position. Turn the machine. Activate the floating position (B21) and the mounted implement will sink to ground level.

When the floating position is activated it may take a moment until the hydraulic system reacts to a command given via the analogue lever (B/7).





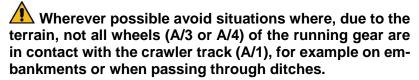
To prevent undue damage to ground and vegetation, avoid abrupt steering manoeuvres.

Improve your skills in handling the machine on slopes with a smaller gradient first of all, and only tackle steeper slopes when you have more experience.

If you hear a knocking sound that adapts to the travel speed, this may be the result of an undue load on the crawler tracks on a steep slope. Do not approach the machine. Do not stand underneath the machine as there is a risk of the machine slipping. Move the machine slowly and in a controlled manner into a less steep working area.

## Adapt your driving style to the ambient conditions!

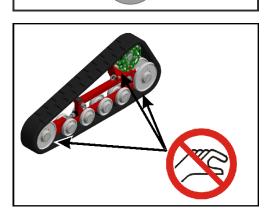
- Steep slopes: Ride in a layered line (across the slope) so that there is a wide zig-zag line, so to speak. Avoid turning manoeuvres whenever possible. The specified 50° slope suitability refers to optimum ambient conditions. Moisture and the nature of the soil can have a negative influence on the suitability for slopes.
- Bear in mind that the weight distribution of the machine depends on the weight and position of the attachment and thus influences slope capability and driving behaviour. Ensure sufficient safety distances during turning manoeuvres. Depending on the attachment, the machine must be lifted out before turning manoeuvres.



There is an increased risk that the machine may slip off the crawler tracks and the crawler tracks may jam on the machine.

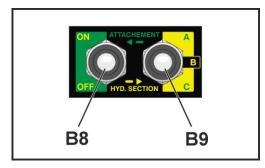
As you can see opposite, such a situation always arises when the machine inclination and the contact area of a crawler track are at different angles.

Note that the crawler tracks with field cleat profile react more strongly to extreme situations than crawler tracks with standard profile.

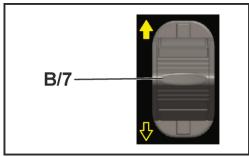


Keep your hands away from the crawler track mechanisms while the machine is in operation.

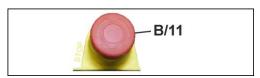
#### 4.6 Stopping the machine



• Switch off the PTO shaft of the machine (B/8).

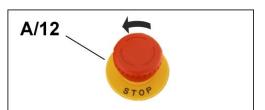


2 Park the machine in a safe place. Place the mounted implement on the ground (B/7).



#### Switching off the machine with the remote control:

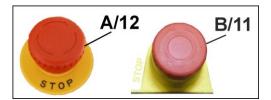
You can stop the machine with the remote control by pressing the EMERGENCY STOP switch (B/11) or by switching off the remote control with the key switch (B/5).



#### Switching off the machine at the machine:

Press the EMERGENCY STOP switch (A/12).

Only pressing the EMERGENCY STOP switch (A/12) on the machine will switch off the rechargeable batteries of the machine. The position of the machine are switched off.



Pay attention that the EMERGENCY STOP switches (A/12 and B/11) of the remote control and machine are pressed and leave them pressed down, as the rechargeable batteries may gradually self-discharge under certain circumstances.

You have now switched off the machine.

Pressing an EMERGENCY STOP switch (A/12 or B/11) in case of emergency causes the machine and the mounted implement drive to switch off immediately.

Attention: The braking distance of the machine depends on the ambient conditions. This is particularly important when you drive downhill! The parking brake takes effect when the machine has come to a standstill.



# 5 Maintenance and Repair

As well as observing the operating instructions valid for the machine, it is equally important to pay due attention to the following instructions on care and maintenance.

Larger maintenance and repair tasks may only be carried out by trained specialist personnel who can carry out professional maintenance and repair.

You should only undertake smaller maintenance and repair tasks yourself if you have the relevant tools and training for machinery and electronic components.

Only use genuine Agria spare parts.

Carry out a functional and safety test after completing the work.

#### Lubricants and anti-corrosive agents

We recommend using **bio-anti-corrosive oil** to preserve machines and attachments (do not apply on painted covers). The oil can be brushed or sprayed on.

Bio-lubricants and bio-anti-corrosive agents are environmentally friendly, as they are quickly biodegradable.

By using bio-lubricants and bio-anti-corrosive oil you act environmentally responsible, protecting the environment and promoting the well-being of humans, animals and plants.





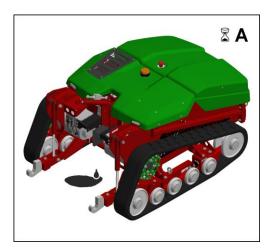
Ensure that the machine is switched off and the key is removed from the remote control prior to carrying out all service and maintenance work!



When working with oil, fuel and grease, wear suitable protective gloves and use skin care products if necessary.

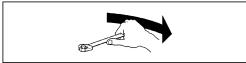


#### 5.1 General



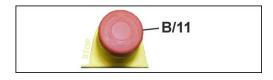
Before each start-up check for escaping oil and eliminate the cause.

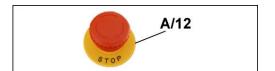
- agria-Service -



Regularly check nuts and bolts for tightness and retighten if necessary.

#### 5.1.1 Check EMERGENCY STOP switches





# Check EMERGENCY STOP switch on the remote control at each start-up

Unlock the EMERGENCY STOP switch on the machine and switch on the remote control. Pressing the EMERGENCY STOP switch (B/11) on the remote control must cause the remote control and the machine to switch off.

# Check the EMERGENCY STOP switch on the machine at each start-up

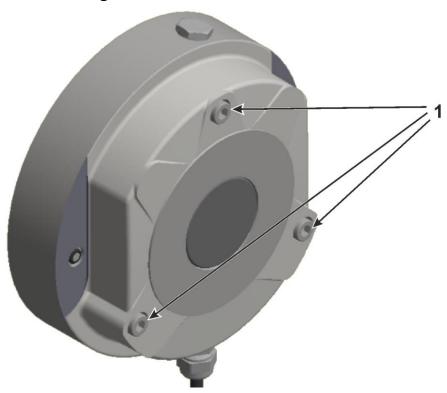
Unlock the EMERGENCY STOP switch on the machine and switch on the remote control. When you press the EMERGENCY STOP switch (A/12) on the machine, the machine must switch off and the green LED of the remote control (B/10) will flash rapidly.

On no account continue working with the machine if the EMERGENCY STOP switches are not functioning correctly. In that case contact:

- agria-Service -



## 5.2 Moving the machine



In the event of a breakdown, park the machine in a safe place, see page 37.

It is forbidden to dismantle the safety brakes even in the event of a recovery until the machine standstill has been secured in a twofold manner. It is recommended to recover the machine without dismantling the safety brakes and to use heavy recovery equipment.

If the machine needs to be moved after a breakdown and all safety precautions have been taken, the safety brake can be dismantled by removing the three screws (1).

Driving without safety brake is dangerous to life! You must absolutely ensure that the brake is remounted with the screws (1) after maintenance.



## 5.3 Lithium-ion rechargeable battery

#### Using the rechargeable battery

- The maximum usable capacity of the rechargeable battery can only be exploited after several charging cycles.
- The display of the usable residual charge (state of charge) requires a few charging cycles to adapt, see page 16.

#### Charging the rechargeable battery



Only use original agria battery chargers.

#### Maintenance of the rechargeable battery

- Keep the rechargeable battery box clean and dry on the outside.
- Do not open the rechargeable battery box! Have repairs in the rechargeable battery box always carried out by a **-agria- specialist workshop-**.
- Avoid sparks and naked flames in the vicinity of the rechargeable battery box. Do not damage the housing! Fire hazard!

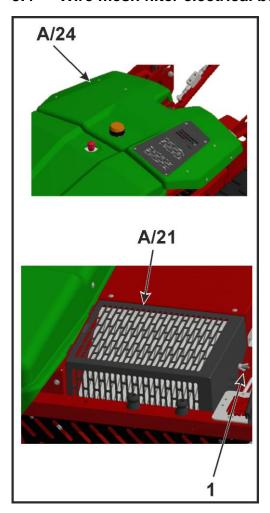
## Disposal of the rechargeable battery

- Never dispose of batteries in domestic waste!
- If the capacity of the rechargeable battery is too low or if its performance decreases due to its runtime, you can have it replaced at your -agria- specialist workshop-. In addition, contact the -agria- customer service to organise the return of the used rechargeable battery.
- If the rechargeable battery signals an error via the remote control, contact the **-agria- customer ser- vice** to organise the return and inspection of the rechargeable battery.
- If rechargeable batteries are mechanically damaged, contact the **-agria- customer service** to agree on the further procedure. Further information can be found on our homepage www.agria.de.

#### Conduct in the event of fire

- You must under no circumstances open the rechargeable battery box; contact the -agria-Service-.
- Only extinguish fires inside the rechargeable battery box with a fire extinguisher approved for extinguishing lithium rechargeable batteries.

#### 5.4 Wire mesh filter electrical box



The cooling air for the E-box is cleaned by a wire mesh filter on the right-hand side. The cooling capacity is reduced if the wire mesh filter is soiled.

Always keep the wire filter mesh and the wire mesh filter free from mowing residues and dirt.

Clean the wire mesh filter before each start-up.

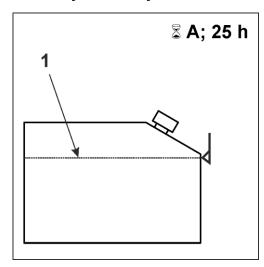
Open the green service flap (A/24).

Undo the wing nut (1) on the filter cover of the air filter box (A/21) and remove the filter cover. Clean the wire mesh filter by blowing out or with water.

Re-insert the fire mesh filter after cleaning and close the filter cover.

Close the green service flap. Pay attention that the service flap is firmly seated in the rubber ball cups.

## 5.5 Hydraulic system



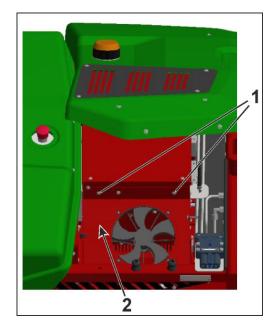
#### Checking the oil level

You can check the fill level (1) of the hydraulic oil on the right-hand side of the machine, see (A/33).

Check the oil level every 25 operating hours.

When exchanging the mounted implement, some hydraulic oil may remain inside the mounted implement. Check the oil level more often when the mounted implements are frequently exchanged to ensure that there is always enough liquid in the reservoir.



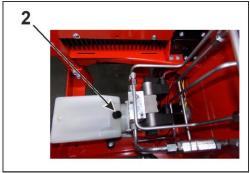


# Topping up the oil level

Dismantle the filter cover of the air filter box (A/21) as shown on page 42.

Remove the wire mesh filter.

Dismantle the two round head hexagon socket screws (TX30) (1). Carefully lift the air box. Pull off the fan plug (2). You can now remove the air box.

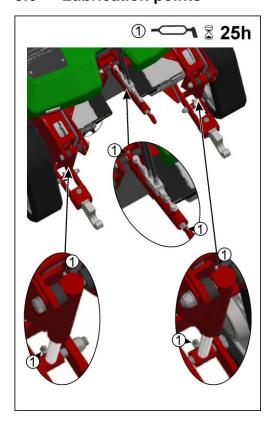


Open the screw plug (2) to top up with hydraulic oil as shown on page 42.



Only carry out maintenance work on the hydraulic system when the machine has cooled down.

#### 5.6 **Lubrication points**

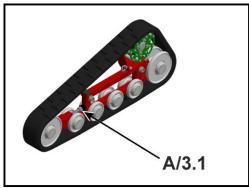


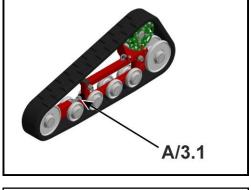
#### **Lubrication points**

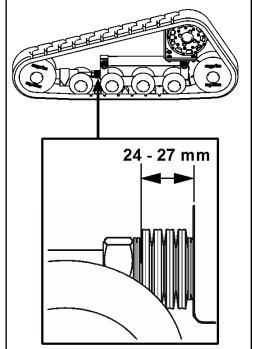
Lubricate the lift cylinder of the upper link and the two lift cylinders of the lower link every 25 operating hours with a grease gun.



#### **Crawler tracks** 5.7







#### Check the crawler track tension every day

The crawler tracks must be firmly positioned on the wheels. They may need to be tensioned or loosened.

#### Setting the crawler track tension

Then set the crawler track tension using the clamping nut (A/3.1).

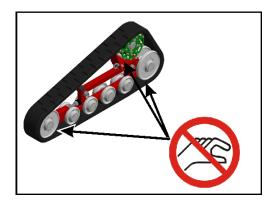
Use the open-ended spanner AF 36.

Set the tension of the crawler tracks so that a dimension of 24 - 27 mm is reached, measured from the cup spring assembly at the front to the frame.

(i) Insufficient track tension is the main cause of loosing

Intensive sun radiation during work leads to a significant elongation of the crawler tracks and thus to a reduction of the track tension.





#### Checking the crawler tracks for damage

Keep your hands away from crushing points when moving the machine!

Check the crawler tracks (A/1) only when the machine is switched off and the key has been removed from the remote control. If the crawler tracks are partly inaccessible, move out of the machine's danger zone, start the machine and move the machine forward, so that you can check the other part of the crawler tracks. Switch off the machine again and remove the key from the remote control. Now you can check the other part of the crawler tracks.

Repeat the instructions above, until you have checked the entire length of both crawler tracks. Have the crawler tracks changed if they are damaged.

The crawler tracks must only be changed by a specialist workshop

or by - agria-Service -.



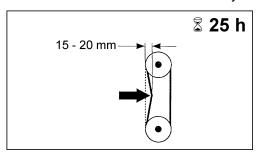
#### 5.8 V-belt for mounted implement drive

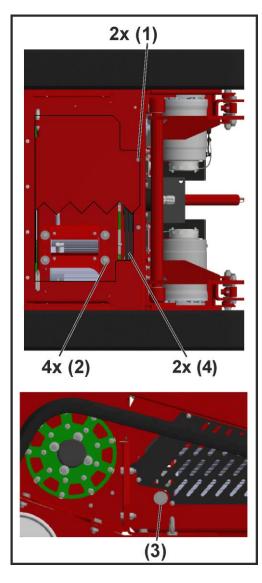
#### Check the V-belt tension on the mounted implement drive and exchange

Make sure that the implement is switched off.

The V-belts are located behind the three-point mounting bracket on the rear of the partition panel. The belts can be accessed via the maintenance flow on the underside of the machine.

Check the V-belt tension after every **25 hours of operation**. For correct V-belt tension see section below.





# (i) Correct V-belt tension:

The V-belt gives way by approximately 15 to 20 mm when you press it down with your thumb.

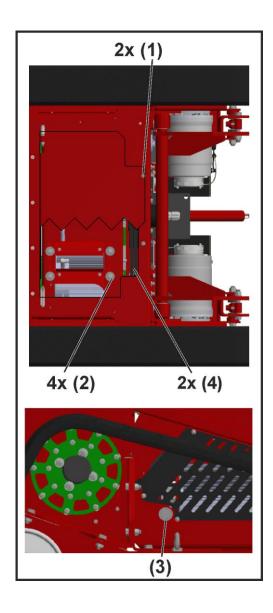
Adjustment and belt replacement should be carried out by a specialist workshop or by

- agria-Service -

#### To tension the V-belts, proceed as follows:

- 1. Undo the two screws (1) of the maintenance flap below the machine (AF13).
- 2. Undo the four screws (2) of the electric motor carriage (AF19).
- 3. Set the V-belt tension (4) with the adjusting screw (3) on the left-hand side of the machine (AF24).
- 4. Once the desired V-belt tension (4) is reached, fix the carriage and close the maintenance flap.
- 5. Once more secure the screw (3) by lightly tightening it.





#### To exchange the V-belts, proceed as follows:

- 1. Undo both screws (1) of the maintenance flap at the underside of the machine (AF13).
- 2. Undo the four screws (2) of the electric motor carriage (AF19).
- 3. Slacken the V-belts with the adjusting screw (3) on the left-hand side of the machine (AF24).
- 4. Replace the V-belts (4) should they be damaged.
- 5. Tension the V-belts (4), fix the carriage and close the maintenance flap.
- 6. Replacement of the belts should only be carried out by a specialist workshop or by  **agria-Service -**.



#### 5.9 Remote control



#### Charging the rechargeable battery of the remote control

Charge the rechargeable battery of the remote control daily after finishing work using the battery charger provided.

The battery is located on the bottom of the remote control. You can remove the rechargeable battery by pushing it towards the contacts and then lifting it up and out. Install the rechargeable battery by pushing it towards the contacts and inserting it downwards. Ensure that the rechargeable battery is placed correctly.

#### Replacing the rechargeable battery of the remote control

If the rechargeable battery of the remote control no longer maintains an adequate charge or runs down too quickly, it must be replaced. The expected service life of a rechargeable battery is 3 to 6 years. This also depends on the conditioning.

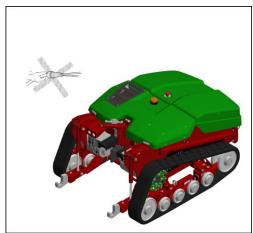
Further information on the remote control



Remote control

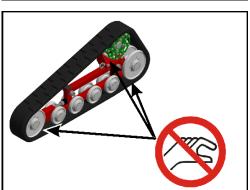


#### 5.10 Cleaning



#### Machine

Sweep thoroughly immediately after each use. Do not wash the machine with a high-pressure cleaner.



Clean the track running gear of grass and other residues.

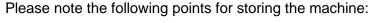
Clean the drive sprockets, guide wheels and travelling wheels of the crawler track of grass and plant debris with a stick or other suitable tool.



#### Never use your hands!

Clean the machine, particularly the charging plug and fan grille of grass, leaves and other objects.

#### 5.11 **Storage**



- Clean the machine thoroughly as described.
- Switch off the machine, actuate the EMERGENCY STOP switches on machine and remote control and leave them pressed down, as under certain circumstances the batteries may gradually self-discharge. Remove the batteries from the remote control.
- Secure the machine against rolling away and unauthorised
- Remove the key from the remote control (B/5).
- Store the machine in a clean, dry area. The area should be free of corrosive substances such as fertilizer or salt, well ventilated and safe from access by children or third parties.
- Do not cover the machine with a plastic sheet or similar. The moisture accumulating underneath can lead to greater corrosion.

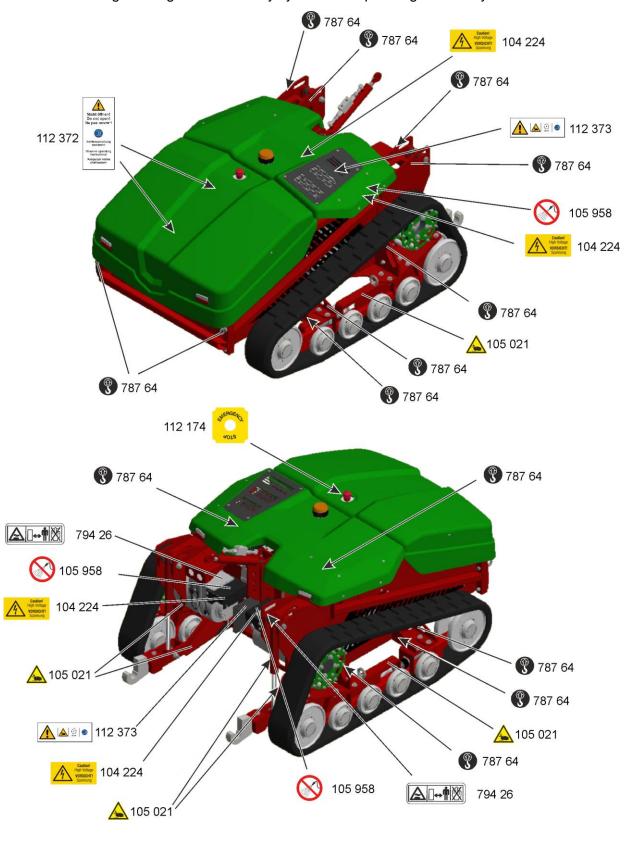






## 5.12 Labels

Worn and missing warning and mandatory symbols for operating and safety instructions must be replaced.





787 64	Attachment point
794 26	Warning symbol for hot parts
105 021	Warning of hand injuries
105 958	Spraying water is prohibited
104 224	Sign Caution! Voltage
112372	Sign Do not open
112373	Sign Caution! Hand injuries
112174	Sign Emergency Stop switch



# 6 Troubleshooting and Remedies

Observe the safety instructions! Have faults on the machine that make a major intervention necessary always repaired by a specialist agria workshop that has the necessary tools. Any improper intervention can cause damage to the machine or override safety equipment, thus increasing the risk of injury when using the machine.

#### 6.1 Implement carrier

Fault	Possible cause	Remedy	Page
Mounted implement shaft does	V-belt of mounted implement drive too loose	Re-tension V-belt	46
not turn	V-belt of mounted implement drive defective	Replace the V-belt	47
	Mounted implement blocked by foreign object	Remove foreign object	
The crawler tracks do not move when the joystick is ac-	Crawler tracks are blocked by grass residues or other foreign objects	Remove residues or blockage	49
tuated	Wiring on electric motors defective	Check wiring and replace if necessary	
The crawler tracks run more slowly than they should	Crawler tracks are hampered by grass residues or other foreign objects	Remove residues or blockage	
Radio connection is interrupted during operation	Distance between remote control and machine is too great	Do not allow the distance to become too great	
Excessive vibration	Fixing screws loose	Tighten fixing screws	39

# 6.2 Hydraulic system

Fault	Possible cause	Remedy	
Lower link does not move	Inadequate hydraulic oil level	Check hydraulic oil level and top up if necessary	42
	Hydraulic lines defective	Check hydraulic lines and replace if necessary	
	Lower link blocked by foreign object	Remove foreign object	
Upper link does not move	Inadequate hydraulic oil level	Check hydraulic oil level and top up if necessary	42
	Hydraulic lines defective	Check hydraulic lines and replace if necessary	
Hydraulic unit does not oper-	Inadequate hydraulic oil level	Check hydraulic oil level and top up if necessary	42
ate	Electric activation defective	Check electric cables	



#### 6.3 USB diagnostics



In case you get errors displayed on the remote control, you can read and save the errors on the controller. You can send this data to your agria dealer for diagnostic purposes. To do this, proceed as follows:

- Unlock the emergency stop switch on the machine. To carry out a diagnosis, the remote control must be connected but the machine must not be ready to travel.
- Open the service flap (A/24).
- Undo the six hexagon socket screws (M5) of the hood of the electric box.
- Put the hood aside so that you can work well on the electrical box.
- Connect the USB flash drive (111562) to the USB interface X17 cable (110430).
- Connect the USB interface X17 cable to the central controller at slot X17 as shown in the figure above.
- Note the LEDs of the central controller, they are marked with the red circle in the figure above. At first they glow briefly. Then they flash at short intervals, after which they light up permanently again.
- You can now reactivate the emergency stop switch of the machine and disconnect the USB interface
   X17 cable and the USB flash drive from the controller.
- The data is now stored on the USB flash drive; the file name is: "Logfile.txt".
- Attach the hood of the electric box with the six hexagon socket screws.
- Connect the USB flash drive to your PC and send the "Logfile.txt" file to your agria dealer.



## **Error codes**

Error code	Name	Description	Instructions
Power electr	onics		
0x4DC3	Critical power supply	Battery voltage below undervoltage limit	Check the power supply on the corresponding motor controller.
0x4602	Motor controller too hot	Power reduction due to excessive temperature at the inverter	Wait until motor controller has cooled down to standard temperature
0x52C2	Overcurrent	Motor current was above maximum permissible value	Check the mechanical components for power transmission to the mounted implement, e.g. its ease of movement and the mechanical soundness.
0x4981	Wrong operation joystick	Joystick is deflected by more than 20% when the machine is switched on	Do not operate the joystick during the activation procedure.
0x45C3	Shutdown due to undervoltage	Battery voltage below undervoltage limit	Charge battery or reduce current consumption
0x4603	Thermal power reduction engine	An excessive engine temperature has lead to a power reduction	Wait until engine has cooled down to standard temperature.
Remote cont	trol		
0x8120	CAN error		
0x8130	Heartbeat error	Heartbeat was not received	Check CAN bus connection. Are all network participants active. Check status LEDs of the individual components.
0x2000	Current	Overcurrent	Check the cables on the receiver and the receiver itself.
0x3000	Voltage	Voltage	Check the voltage supply of the receiver.
Central cont	rol unit		
0x8130	Heartbeat error	Heartbeat was not received	Check CAN bus connection. Are all network participants active. Check status LEDs of the individual components.
0x5001	Total current consumption max.	Total current of the CCU has been exceeded	Check for short circuit at the CCU outputs.
0x5022	CCU temperature warning	The temperature of a component from the table page 19 has exceeded the warning threshold	Check the temperatures on page 3 of the remote control. If the error occurs frequently at light load, clean the air filter and check the cable.
0x5023	CCU temperature warning	"The temperature of a component from the table page 19 has exceeded the threshold for power reduction"	
0x5044	CCU temperature warning	"The temperature of a component from the table page 19 has exceeded the critical temperature threshold"	Switch off the machine and wait until the corresponding component has cooled down.
Rechargeabl	e batteries		
0xXXaX	Not all rechargeable bat- teries in the system are ac- tive		- agria customer service -
0x4200	Low temperature charging		- agria customer service -
0x4201	High temperature charging		- agria customer service -
0x4202	Low temperature discharging		- agria customer service -
0x4203	High temperature dis- charging		- agria customer service -
0x2000	Overcurrent		- agria customer service -
0x2001	Short circuit		- agria customer service -
0x3000	Overvoltage		- agria customer service -



0x3001	Undervoltage	- agria customer service -
0x3002	Strong undervoltage	- agria customer service -
0xFF00	End-of-life	- agria customer service -
0xFF01	Pre-discharge	- agria customer service -
0xFF02	Communication with BQ failed	- agria customer service -
0xFF03	Miscellaneous charge fault	- agria customer service -
0xFF04	Miscellaneous discharge fault	- agria customer service -
0xFF05	Pack parallel error	- agria customer service -

The complete list of error codes can be found in the repair manual or at:

- agria customer service -



# 6.4 Remote control

Fault	Possible cause	Remedy	Page
The green LED of the FB does not light up when pressing the release button. The rechargeable battery and the key switch are inserted.	The rechargeable battery is flat	Insert charged rechargeable battery.	48
The green LED of the remote control flashes rapidly.	No radio connection	Move the transmitter closer to the receiver unit	14
The red LED of the remote control illuminates for 2 seconds and then the remote control switches off.	The transmitter is not working correctly.	Save the address: - Press EMERGENCY STOP - Press and hold release button until green LED goes out - Release EMERGENCY STOP - agria-Service -	
The red LED of the remote control flashes once during startup.	The EMERGENCY STOP switch is actuated or defective.	d or Deactivate EMERGENCY STOP switch. If the message remains - agria-Service -	
The red LED of the remote control flashes twice during startup.	At least one of the operating elements relating to the commands D2-D20 and SAFETY is active or defective.		
The red LED of the remote control flashes three times during startup.	The rechargeable battery is flat.	Insert charged rechargeable battery.	
The red LED of the remote control flashes four times during startup.	At least one of the operating elements relating to the commands A1-A8, L1-L8, H1-H8 and SAFETY is active or defective.  See remote control operating instructions	Return the operating elements to idle position. If the message remains - agria-Service -	

RC = remote control

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# 7 Decommissioning / Disposal

If the machine will not be further used, it must be correctly decommissioned.

To avoid injuries during decommissioning, park the machine in a stable position and protect it against tipping over and rolling away.



Wear protective gloves.

After decommissioning, drain the remaining oil filling of the hydraulic system and dispose of the oil in a correct and environmentally compatible manner.

The machine consists of valuable raw materials, which can be recycled and reused.

Take the machine including the remaining technical fluids to a recycling facility for disposal.

Dispose of old batteries, old rechargeable batteries and electrical/electronic parts in accordance with the applicable legal provisions. Do not dispose of as domestic waste.

If you have any questions regarding the disposal of rechargeable batteries, please contact the **-agria customer service-**.



## **Inspection and Maintenance Overview**

		After every operating hours (h)			Page
	A	25	100	J	
Wire mesh filter, clean electrical box	K	W			39
Emergency stop switch machine: Check function	К	W			39
Emergency stop switch remote control: Check function	К	W			39
Check operating functions of remote control	К	W			37
Check nuts and bolts for tightness	К	W			39
Check crawler track tension	К	W			44
Check oil level hydraulic system	К	W			43
Lubricate grease nipple hydraulic cylinder	К	W			43
Check crawler tracks for damage	К	W			45
Check V-belt for damage and belt tension	К	W			46, 52
Check heat sink/air filter box for soiling	К	W			42
Clean heat sink/air filter box	К	W			42
Check surrounding area of hydraulic pump for soiling	К	W			49
Clean surrounding area hydraulic pump	К	W			49
Clean the entire machine	К	W			49
Visual inspection of three-point mounting bracket	К	W			
Check screw connections of the rechargeable batteries for tightness and retighten if necessary		(W)		W1	39
Check hydraulic lines		W			
Check hydraulic hoses		W			60
Check cables and electrical system for damage			W		
Exchange hydraulic hoses				W6	60

A = before each start-up

J = at least yearly

K = inspection and maintenance tasks can be performed by the operator

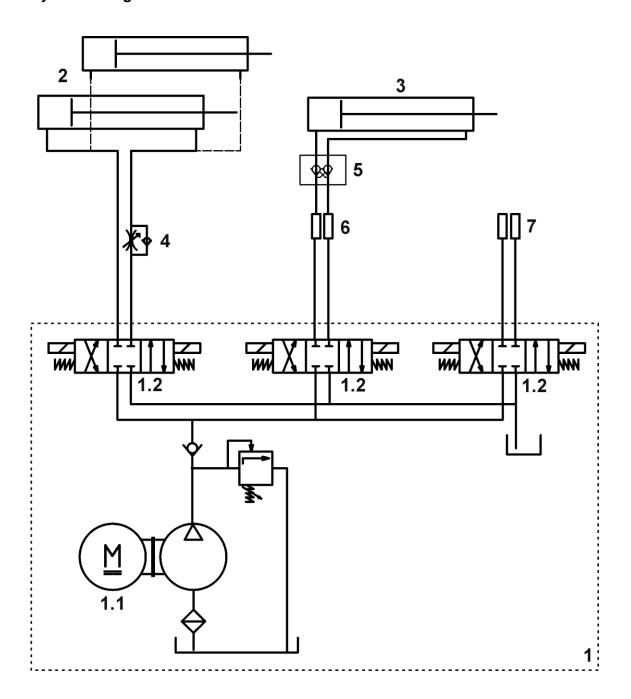
W = maintenance tasks that are to be performed by a specialist workshop

(W) = maintenance tasks that are performed by a specialist workshop during the first maintenance

W1 = once a year W6 = every 6 years

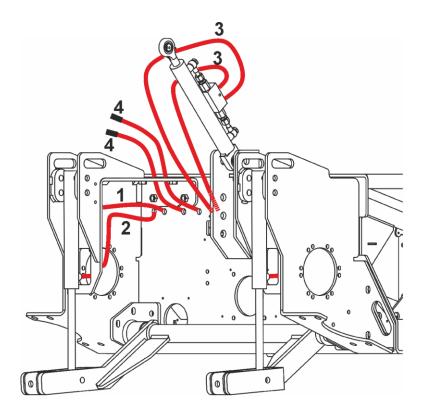
! = pay attention to execution

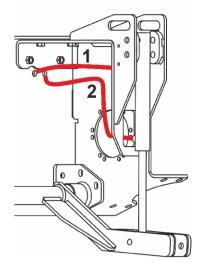
# Hydraulic diagram



- (1) Hydraulic unit
  - (1.1) Electric motor / hydraulic pump
  - (1.2) 4/3-way valve
- (2) Lower link lift cylinder
- (3) Upper link lift cylinder
- (4) Throttle check valve
- (5) Lock valve
- (6) Quick-action coupling upper link
- (7) Quick-action coupling optional connection

#### Agria order numbers hydraulic hoses





Hoses lower link lift cylinder

Item 1: 112297

Item 2: 112298

Hoses upper link lift cylinder

Item 3: 112282

Hoses optional hydraulic connection

Item 4: 112302

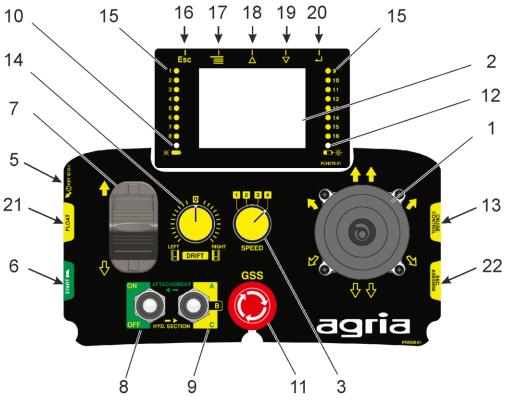
Pay attention that you mount the hydraulic hoses in the same direction as the lines have been mounted in the original state.

Check the hydraulic hoses after **25** operating hours for leaks, damage and ageing. Replace the hydraulic hoses after **6 years**. Use only new (not older than 2 years) genuine agria hydraulic hoses.

Hydraulic oil escaping under high pressure can penetrate your skin and cause severe injuries. Danger to life!

To avoid injuries, use suitable devices when you try to locate leaks or contact the agria specialised workshop!

# Designation of parts Fig. B



- 1 Joystick
- 2 Display
- 3 Travel speed range
- 5 Key switch
- 6 Unlocking/restart
- 7 Moving the selected hydraulic functions
- 8 Mounted implement on/off
- 9 Hydraulic control circuits
- 10 Green LED, radio connection
- 11 EMERGENCY STOP switch
- 12 Red LED
- 13 Cruise control
- 14 Drift
- 15 Warning lamps
- 16 Escape
- 17 Menu page change
- 18 "up"
- 19 "down"
- 20 Enter
- 21 Floating position
- 22 Not assigned



# Paints, Charger, Wear parts

Agria order no.

_	_		
ъ.	_:	4	
•	ลเ	nı	. C

181 03	Spray paint birch green	Spray can	400 ml
712 98	Spray paint red, RAL 2002	Spray can	400 ml
509 68	Spray paint black, RAL 9005	Spray can	400 ml

# Wear parts:

	Machine	
112 337	Bio hydraulic oil	Container 5 I
110 394	V-belt for mounted implement drive	Pay attention to version!
104 961	Crawler track	Piece
9620 011	Crawler track field cleat profile	Pair
105 469	Remote control battery	

#### **Declaration of Conformity**

Declaration of conformity according to EC Machinery Directive (2006/42/EG,

Appendix II 1. A)

-Original- (en)

The manufacturer

Agria-Werke GmbH Dr. Goetz Viering - Geschäftsführer Bittelbronner Straße 42 74219 Möckmühl CE

declares under its sole responsibility that the machine

Designation: Remote-controlled All-Electric-Tool-Carrier

Type: agria 9700e

Variant: 111

Serial number: from 97001110001 Year of manufacture: from 2023

complies with all relevant provisions of the Directive 2006/42/EC - Machinery Directive. The machine continues to comply with all provisions of the following directives:

Directive 2014/30/EU on electromagnetic compatibility

The following harmonised standards were applied:

Standard	Title
EN ISO 12100:2010	Safety of machinery — General principles for design — Risk assessment and risk reduction (ISO 12100:2010)
EN 62133-2:2017 + A1:2021	Secondary cells and batteries containing alkaline or other non-acid electrolytes - Safety requirements for portable sealed secondary cells, and for batteries made from them, for use in portable applications - Part 2: Lithium systems ( IEC 62133-2:2017 + AMD1:2021)

The following other technical standards and specifications have been applied:

- UL 2580:2020-03-11 Batteries for use in electric vehicles
- UL 2271:2018-09-07 Batteries for use in Light Electric Vehicle (LEV) applications

Representative for the compilation of technical documentation Mr. Sascha Hönig

Signatory and details of the signatory: Mr. Sascha Hönig - Design Manager Signatory and details of the signatory: Mr. Dr. Goetz Viering - Managing Director

Mr. Sascha Hönig

Place, date: 74219 Möckmühl 14.02.2023

Signature:

Mr. Dr. Goetz Viering

Place, date: 74219 Möckmühl 14.02.2023

Signature:



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