12.9 Fixed Obstacle

A fixed obstacle within the mowing area does not have to be blocked off by a restricted area if the obstacle is at least 10 cm high. The obstacle will be detected by the ultrasound sensors and the bump sensor.



 A fixed obstacle with a minimum height of a = 4 in. (10 cm) does not need to be blocked off.

12.10 Confined Area



The robotic mower can travel automatically though narrow passages, provided the minimum wire clearances are maintained.

- Route the perimeter wire (1) as illustrated and make sure that the following dimensions have been maintained:
- Minimum distance between the perimeter wires in the confined section: a = 6.6 ft. (2 m)
- If the confined section is restricted by side obstacles: Include an additional distance of b = 14.5 in, (37 cm) (length: 1x iMOW[®] Ruler)
- If the minimum distance a = 6.6 ft. (2 m) between the perimeter wires cannot be maintained:

Route a guide wire through the middle of the confined section.

Confined area with guide wire



A guide wire (2) directs the robotic mower through the confined area, provided the minimum wire clearances are maintained.

To complete the installation, the installer must place a starting point (3) behind the confined section and set the starting point's approach frequency. Otherwise, the robotic mower will not find its way through the confined section. Starting points can be set using the MYiMOW[®] app.

- Route the perimeter wire (1) as illustrated and make sure that the following dimensions have been maintained:
- Minimum distance between the perimeter wires in the confined section: a = 21.75 in. (55 cm).
- If the confined section is restricted by side obstacles: Include an additional distance of b = 14.5 in. (37 cm) (length: 1x iMOW[®] Ruler)
- Route the guide wire (2) in the middle of the confined section.
- If the side distance b = 14.5 in. (37 cm) (length: 1x iMOW[®] Ruler) is not possible: Install a corridor to be able to guide the robotic mower to another mowing area III 12.11 or block off the confined section from the mowing area.

28

12.11 Corridor

Functional Description



Install a corridor (1) to define passageways and allow the mower to navigate confined sections of the mowing area. The corridor divides the mowing area into a main mowing area (A) and another mowing area (B).

The perimeter wire (2) is installed without interruptions. It forms the corridor at the passage from the main mowing area (A) to the mowing area (B).



Wire loops (4) signal to the robotic mower that a corridor is starting or ending.

A guide wire (3) must be installed through the center of the corridor (1).

To complete the installation place a starting point (5) in the mowing area (B). Without it, the robotic mower will not find its way from the main mowing area (A) through the corridor to the other mowing area (B). Starting points and the starting point's approach frequency can be set using the MYiMOW[®] app.

There is no mowing within a corridor.

General Requirements



- Make sure that the following dimensions have been maintained:
 - A corridor must have a minimum length of a = 29.1 in. (74 cm).
 - A corridor must have a minimum width of b = 21.75 in. (55 cm) between the perimeter wires.
 - If the confined section is restricted by side obstacles: Include an additional minimum distance of c = 6 in. (15 cm)



- Make sure that the following dimensions have been maintained:
 - The guide wire must be routed before the corridor for a length of at least d = 14.5 in.
 (37 cm) (length: 1x iMOW[®] Ruler) in a straight line and at a right angle (90°) to the corridor.
 - The guide wire (3) must be routed after the corridor for a length of at least d = 6.6 ft.
 (2 m) in a straight line and at a right angle (90°) away from the corridor into the mowing area (B).
- If the distances and dimensions cannot be maintained: Block off the mowing area (B) from the main mowing area (A) and install a secondary area.

Installing the Corridor



- Route the perimeter wire (2) as illustrated from the main mowing area (A) to the other mowing area (B).
- If the corridor is installed in a curve: Route the perimeter wire (2) over a length of c = 29.1 in. (74 cm) (length: 2x iMOW® Ruler) at the beginning and end of the corridor straight and at a right angle (90°) to the mowing area.
- Guide the perimeter wire (2) clockwise around the mowing area (B) and back to the corridor.



- Route the perimeter wire (2) for a length of c = 14.5 in. (37 cm) (length: 1x iMOW[®] Ruler) parallel and close together without the perimeter wires crossing each other.
- Route the perimeter wire (2) with a distance of at least a = 21.7 in. (55 cm) parallel in direction to the main mowing area (A).

- If the corridor is installed in a curve: Route the perimeter wire (2) over a length of a = 29.1 in. (74 cm) (length: 2x iMOW® Ruler) at the beginning and end of the corridor straight and at a right angle (90°) to the mowing area.
- Complete the wire installation on the main mowing area (A).



- Route the guide wire (3) on the main mowing area (A) before the corridor for a length of at least c = 14.5 in. (37 cm) (length: 1x iMOW[®] Ruler) in a straight line and at a right angle (90°) to the corridor.
- Route the guide wire in the center of the corridor.
- Route the guide wire (3) after the corridor for a length of at least d = 6.6 ft. (2 m) in a straight line and at a right angle (90°) away from the corridor into the mowing area (B).

12.12 Inclines / Slopes

The robotic mower is designed to mow inclines up to 45%. With the iMOW[®] traction wheels available in STIHL Upgrade Kit 10, gradients of up to 60 % can be mowed (EVO version with extended cutting height: 50%). The STIHL Upgrade Kit 10 is available from your dealer as a special accessory.



If there is an incline/slope up to 27% within the mowing area: Install perimeter wire normally.



To allow the robotic mower to navigate the transition between level ground and an incline greater than 27 %:

- Ensure that the perimeter wire has a section at least a = 3.9 ft. (1.20 m) before and after the slope.
- Ensure that the distance to the ground does not exceed c = 4 in. (10 cm) when checking the radius at the beginning of the slope with an object that is b = 3.3 ft. (1 m) long.

12.13 Secondary Area

A secondary area is an area that iMOW® cannot physically drive to. It cannot be mowed automatically. The robotic mower must be picked up and carried to the secondary area and brought back to the primary area when mowing is complete.

A guide wire must not be installed in an secondary area.



- Route the perimeter wire (1) from the main area (A) to the secondary area (B).
 Minimum distance to the perimeter wires a = 29.25 in. (74 cm)
- Make sure that the length of the perimeter wire does not exceed 2789 ft. (850 m).
- Route the perimeter wires in parallel and close to each other back to the mowing area (A) without allowing them to cross.

12.14 Small Mowing Area

The STIHL AKM 100 small area module must be used for a small mowing area where less than 65.5 ft. (20 m) of perimeter wire is required.

The STIHL AKM 100 stabilizes the wire signal and is incorporated into the perimeter wire by means of wire connectors.

13 Completing the Perimeter Wire Installation

13.1 Completing the Routing of the Perimeter Wire

Docking station on the edge of the mowing area, docking station on the edge of the lawn area



- Directly attach the perimeter wire (1) on the base plate (2) with a wire stake (3).
- Use the perimeter wire to measure two times the width of the base plate and then cut the perimeter wire to length with a wire cutter.



 Install the perimeter wire (1) in the base plate so that the guide wire lies flat in the wire channel and is secured by the hook (4).



 Insert the perimeter wire (1) into the left conduit (5) and feed it through.

Push the wire end upward inside the docking station.



► Mark the wire end (1) near the housing using the matching cable marker (6).

Docking station outside the mowing area



 Route the perimeter wire (1) close to the already routed perimeter wire and secure with a wire stake (2).



- Route the perimeter wire (1) parallel and closely to the other perimeter wire for 37 cm (length: 1x iMOW[®] Ruler) back to the docking station without crossing over the perimeter wires.
- Route the perimeter wire back to the edge and further toward the base plate (3).



- ► Attach the perimeter wire (1) directly on the base plate (3) with a wire stake (4).
- Use the perimeter wire to measure two times the width of the base plate and then cut the perimeter wire to length with a wire cutter.



Install the perimeter wire (1) in the base plate so that the guide wire lies flat in the wire channel and is secured by the hook (5).



13 Completing the Perimeter Wire Installation

 Insert the perimeter wire (1) into the left conduit (6) and feed it through.

Push the wire end upward inside the docking station.



► Mark the wire end (1) near the housing using the matching cable marker (7).

The installer must define a starting point within the mowing area to complete the installation. Otherwise, the robotic mower will not find its way to the mowing area. Starting points can be set using the MYiMOW[®] app.

Docking station in the center of the mowing area



- Route the perimeter wire (1) close to the already routed perimeter wire.
- Route the perimeter wire parallel and close to the other perimeter wire back to the docking station without crossing over the perimeter wires.
- Route the perimeter wire toward the front around the base plate (3) at a distance of 14.5 in. (37 cm) (length: 1x iMOW[®] Ruler).



- Attach the perimeter wire (1) directly on the base plate (2) with a wire stake (3).
- Use the perimeter wire) to measure two times the width of the base plate and then cut the perimeter wire to length with a wire cutter.



Install the perimeter wire (1) in the base plate so that the guide wire lies flat in the wire channel and is secured by the hook (4).



Insert the perimeter wire (1) into the left conduit (5) and feed it through.

Push the wire end upward inside the docking station.



 Mark the wire end (1) near the housing using the matching cable marker (6).

14 Installing the Guide Wire

14.1 Installing the Guide Wire

Take into account the position of all guide wires when installing the perimeter wire.

Take into account the general guidelines for installing the guide wire III 12.2.



Insert the beginning of the guide wire (1) into the middle conduit (2) and feed the wire through.

Push the guide wire upward inside the docking station.



 Feed the guide wire (1) through until it protrudes upward for a = 14.5 in. (37 cm) (length: 1x iMOW[®] Ruler).



 Using the appropriate cable marker (3), mark the guide wire (1) near the housing. Marking will facilitate the subsequent connection to the correct terminal.



Install the guide wire (1) in the base plate so that the guide wire lies flat in the wire channel and is secured by the hook (4).



 Attach the guide wire (1) directly at the base plate (5) with a wire stake (6).



- Route the guide wire (1) for b = 6.6 ft. (2 m) in a straight line and at a right angle (90°) from the docking station to the mowing area.
- Route the guide wire to the wire loop (7) at the edge of the mowing area. The distance to perimeter wire (8) must be at least c = 10.75 in. (27.5 cm).



 Route the guide wire diagonally on inclines. The distance to the perimeter wire must be at least c = 10.75 in. (27.5 cm).



- Route guide wire (1) for at least e = 14.5 in. (37 cm) (length: 1x iMOW[®] Ruler) in a straight line and at a right angle (90°) to the wire loop (7).
- Route the guide wire through the center of the wire loop.
- Using a wire cutter, cut through the guide wire at the end of the wire loop and make all wire ends the same length.



- To reduce serious or fatal injury or property damage from fire or electric shock, use only wire connectors authorized by STIHL.
- Insert the unstripped ends of the perimeter wires (8) and the guide wire (1) in the wire connector (9) up to the limit stop.
- Press the wire connector together up to the limit stop using suitable pliers.



- Route the perimeter wires (8) and guide wire (1) parallel and close to each other without the wires touching.
- Secure the wires using additional wire stakes.

15 Electrically Connecting the Docking Station

15.1 Connecting the Perimeter Wire and Guide Wire

To reduce the risk of fire, electric shock and other personal injury, unplug the power supply from the electrical outlet before attempting to connect the perimeter wire and guide wire to the docking station. Always unplug the unit before removing the cover from the docking station.

NOTICE

Make sure that all contacts are clean and not corroded.



Slightly tension the wire ends (1) and cut to length along the edge (2) with a wire cutter.



- Use a suitable tool to strip a = 0.4 in. (10 mm) of the wire ends.
- Twist the wire strands so that no individual strands stick out.



- Assign the labeled wire ends to the respective terminals.
- Fold the lever of the corresponding terminal (3) backward.
- Insert the insulated wire end into the corresponding terminal and fold the lever forward again to close.
- Secure the perimeter wires and guide wire in the cable holders as shown and press toward the right.



 Fold the cover (4) toward the front. The cover engages with an audible and noticeable click.



Put on the hood (5).
 The hood engages with an audible click.

15.2 Mounting the Power Supply on a Wall

To reduce the risk of fire and electric shock, install the docking station's power supply at least one foot off the ground and ensure that there is no risk that it may be immersed in water or other liquids. Do not place the power supply on the ground or at ground level. Always install the power supply on a stable surface.

NOTICE

When mounting, ensure that no electrical cables, pipes or other service lines run in the wall behind the power supply. The power supply is rated for outdoor use. For longer service life, STIHL recommends protecting the power supply from direct sunlight and damp or wet conditions.

To mount the power supply:



- Install the power supply outside the mowing area at least one foot above the ground and never at ground level or in any location where it could be immersed in water or other liquids.
- Use appropriate screw-in wall anchors or other similar mounting devices if an appropriate wall stud is not available.
- Ensure that no electrical cables, pipes or other service lines (a) run in the wall behind the power supply.
- Route the power supply cord outside the mowing area, out of working range of the mowing blades, and secure it to the ground or route it through a cable duct.
- Direct the power supply cord away from the docking station in order to avoid electrical interference with the perimeter wire signal. Make sure that it will not be in the cutting path of the robotic mower.
- 15.3 Installing the Power Supply Cord and connecting the Power Supply



 Route the connecting cord (1) to the location of the power supply (2).

- Choose the power supply location so that the following conditions are met:
 - The power supply and the power supply cord are outside of the mowing area.
 - A suitable electrical outlet is within reach of the power supply.
 - The power supply unit can be mounted at a height greater than 1 foot (0.3 m) from the ground surface.
 - If possible, protect the location against adverse weather conditions and direct sunlight.
- Route the connecting cord so that the following conditions are met:
 - The connecting cord (1) is outside of the mowing area.
 - The connecting cord is routed so that people cannot trip over it.
 - The connecting cord is not under tension or tangled.
 - The connecting cord is completely unwound and is not under the docking station.
 - The connecting cord is not on a permanently wet surface.
- Connect the connecting cord with the plug (3) of the power supply.



 Plug the mains plug (4) into a correctly installed electrical outlet (5).
 The LED on the docking station lights up green.

Connect the docking station only to a covered Class A GFCI receptacle that matches the voltage and electrical frequency stated on the power supply. It must have an enclosure that makes it weatherproof both when the plug cap is inserted and when it is removed.

16 Charging the Robotic Mower

16.1 Charging the Robotic Mower

Read and follow the safety precautions and instructions for the robotic mower and docking station in this manual, 25.4 and 27. Be alert for signs that the battery may be damaged. To reduce the risk of personal injury from short circuit, fire and explosion, never use or charge a robotic mower if the hood or housing is cracked, deformed or excessively hot, if battery fluid is leaking from the battery compartment, or if the battery is otherwise damaged, 26.

 To reduce the risk of electric shock, charge the robotic mower only in the docking station.
 Do not remove the battery or attempt to charge it using an external power supply.



 Push the robotic mower into the docking station up to the limit stop.
 The robotic mower carries out a system start and begins charging.

The charging time depends on various factors, e.g. the battery temperature or the ambient temperature. For optimum performance, observe the recommended temperature ranges, **(III)** 26.7.



The LED (1) on the docking station lights up white. An LED (2) lights up white on the light strip of the robotic mower.

After the initial charging, the robotic mower will begin charging automatically when it returns to the docking station at the end of the mowing operation and its energy level is below a certain value.

Energy efficient charging

To charge the robotic mower's battery with a minimum amount of energy, you have the option to utilize the "energy efficient charging" mode.



If the theft protection function in the MYiMOW[®] app is activated, you must first deactivate theft protection before switching to energy efficient charging mode.

Press the following key combination one after the other:

- ► Press STOP (3).
 - The robotic mower is stopped and locked.
- Press and hold STOP (3) until the light strip (4) fully lights up red.
- ► Press STOP.

The light strip flashes twice. The disabling device of the robotic mower is activated.

 Press and hold STOP until the light strip fully lights up red and finally flashes red twice.
 "Energy efficient charging" mode is activated.
 All extra features are deactivated.

After charging is complete, the robotic mower must be activated so that it is operational again:

Press START (5).
 The robotic mower is operational.

17 Closing the Bluetooth® Interface

17.1 Closing the Bluetooth[®] Interface

The robotic mower emits a Bluetooth[®] signal to enable a connection with a mobile device. At the time of sale, the Bluetooth[®] interface is not password protected.

- Download the MYiMOW[®] in the app store of your mobile device and create an account.
- Add the robotic mower to the account.
- Follow the instructions on the screen and secure the Bluetooth[®] interface with a password.

After the password is assigned, the mobile device is authorized to control and configure the robotic mower.

Use the same password to connect additional mobile devices to the robotic mower.

- 18 Light Patterns on the Robotic Mower and Docking Station
- 18.1 Light Strips on the Robotic Mower



The matrix display (1) and the light strips (2 and 3) indicate the robotic mower's status and any faults.

White light pattern:

- No active mowing.
- Green light pattern:
- Active mowing.

Blue light pattern:

- The robotic mower is receiving a system update or the system is restarting.
- Red light pattern:
- Device is locked.
- Fault message.

18.2 LED on the Docking Station



The LED (1) indicates the docking station status and faults.

LED lights up white:

The docking station is operational.

- The robotic mower is in the docking station without active mowing.
- The robotic mower is charging without active mowing.

The LED lights up green.

- The robotic mower is being charged and the mowing job remain active. Mowing will continue after the charging process is completed.
- LED lights up red.
- There is a fault.
- LED lights up blue:
- Active Bluetooth[®] connection with the robotic mower.

19 Operating and Adjusting the Robotic Mower

19.1 Control Panel



Use the buttons (1 to 5) to operate the robotic mower's basic functions. The full scope of functions is available in the MYiMOW[®] app.

Starting the mowing process

 Press START (3). The robotic mower starts mowing and later automatically returns to the docking station.

Stopping the mowing process and locking the robotic mower

 Press STOP (1). The robotic mower and the blades stop. The robotic mower is locked.

Call back the robotic mower to the docking station

 Press HOME (4). The robotic mower returns to the docking station.

Unlocking the robotic mower

- Press UNLOCK (2).
- Press the key combination displayed to unlock the mower.

Accessing information

▶ Press INFO (5).

The robotic mower reports audible information about the current status.

19.2 MYiMOW® App

For convenient use of the robotic mower, the MYiMOW[®] app is required. It is available on the App Store^{®1} and on Google Play^{TM2} for download to your mobile device, tablet or computer. The robotic mower can be operated and configured using the MYiMOW[®] app. The robotic mower can be connected to a mobile device via a wireless network connection (Wi-Fi), mobile phone connection or Bluetooth[®]. The robotic mower can be operated and configured from a desktop computer using the MYiMOW[®] web app.

Data Transmission

Cellular data transmission to and from the robotic mower is included in the purchase price.

Data transmission is not continuous, and there may be a lag between mowing activity and the information displayed in the app.

Your wireless plan's standard usage and data rates will apply when accessing the STIHL MYi-MOW® app on your smartphone, tablet or other mobile device.

The use and availability of wireless cellular and GPS connections depend on third-party products and services. The performance of these third-party products and services may impact the way your STIHL connected product operates. STIHL makes no representation or warranty about the operation, use, safety or reliability of any third-party products and services. STIHL is not responsible for damages or losses due to the operation of third-party products and services, including any personal injury, property damage, interruption of service, downtime, data loss or any other harm or loss arising from or relating to your use of any third-party products and services or apps.

NOTICE

If the connection between the robotic mower and the cellular network is lost, the unit will remain active, but the operator will not receive email, SMS or in-app notifications. The GPS protection feature will remain active.

Main Functions of the MYiMOW® app

- Starting and stopping the mowing process
- Mowing plan
 - Configuring mowing times (with a wizard or manually)
 - Configuring starting points (optional)
 - Selecting zones (optional)
- Setting the cutting height
- Remote access to the robotic mower via a wireless network connection (Wi-Fi)
- Remote access to the robotic mower via a cellular data connection.
- Support and troubleshooting help.

To reduce the risk of personal injury, keep bystanders, especially children, and pets out of the mowing area during operation. Never allow children to approach or play with the robotic mower. Do not operate the mower when children or pets are or may be in the mowing area or vicinity. Keep in mind mowing starts automatically when the mowing plan is active.

NOTICE

If you have a sprinkler system, program the robotic mower to avoid active watering times to reduce the likelihood of damage to the sprinkler heads from contact with the blades. The mower and sprinkler system should never be run at the same time.

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20 Stopping the Robotic Mower and Activating the Disabling Device

20.1 Stopping the Robotic Mower and Activating the Disabling Device



The robotic mower is equipped with several devices to help reduce the risk of personal injury or property damage during use. If a safety device has a malfunction, do not operate the robotic mower. Take it to an authorized STIHL iMOW[®] servicing dealer to be repaired before use.

- Unintentional starting may result in personal injury or property damage. To reduce the risk of personal injury and property damage from unintentional starting:
 - Stop the robotic mower and activate the disabling device before assembling, transporting, adjusting, inspecting, cleaning, servicing, maintaining or storing the robotic mower.



Press STOP (1).

The robotic mower is stopped and locked.

- Press STOP and hold it depressed until the light strip (2) fully lights up red.
- Press STOP.

The light strip flashes twice. The disabling device of the robotic mower is activated.

21 Transporting

21.1 Transporting the Robotic Mower



- Always activate the disabling device before lifting or transporting.
- ► Wear heavy-duty, non-slip work gloves.
- When carrying the robotic mower by hand, hold it by the front (1) and the rear (2) handles with the mowing blades pointing away from you. Never attempt to carry the robotic mower by its flap.
- When transporting the robotic mower in a vehicle, position and secure the robotic mower to prevent turnover, impact and damage. Fasten the machine using suitable fastening materials (straps, ropes) (see illustration above).
- Secure components being transported (e.g. docking station, small components) to prevent turnover, impact and damage.

A Note on Battery Transport

The battery inside this robotic mower complies with the requirements set forth in UN-Manual ST/SG/AC.10/11/Rev.5/Part III, Subsection 38.3.

Commercial air, vessel and ground transportation of lithium ion cells and batteries contained in equipment is regulated. The battery inside this robotic mower is classified as a UN 3481, Class 9, packaging group II product. Shipping it requires compliance with all applicable shipping regulations. Check with the ground, vessel, air cargo or passenger airline to determine if transport is prohibited or subject to restrictions or exemptions prior to shipping or travel.

Normally, no further conditions have to be met by the user in order to transport this robotic mower by road to the operating site. Check and comply with any special regulations that may apply to your situation.

For further information please go to www.stihlusa.com/battery-transportation-safety.

22 Storing the Robotic Mower and Docking Station

22.1 Preparing the Robotic Mower for Storage

STIHL recommends when the robotic mower is not used for longer periods of time, e.g., winter break, to put it into "hibernation." Hibernation deactivates certain features of the robotic mower and reduces discharge of the battery.



 If the theft protection function in the MYiMOW[®] app is activated, you must deactivate theft protection before storing.

Press the following key combination one after the other:

- Press STOP (3). The robotic mower is stopped and locked
- Press and hold STOP until the light strip (4) fully lights up red.
- ► Press STOP.

The light strip flashes twice. The disabling device of the robotic mower is activated.

 Press and hold STOP until the light strip fully lights up red and finally flashes red twice. The hibernation mode is activated. The robotic mower's battery gets fully charged. All extra functions are deactivated.

After the winter break, the robotic mower must be activated so that it is operational again:

- Place the robotic mower in the mowing area.
- Press START (5).
 "Hibernation" mode is deactivated and the robotic mower is ready for operation.

22 Storing the Robotic Mower and Docking Station

22.2 Storing the Robotic Mower

After the mowing season is over, or any time the robotic mower is not available for mowing operations, store the iMOW[®] indoors in a dry, secure place that is inaccessible to children and other unauthorized users, ^Q 8.1. Improper storage can result in unauthorized use and damage to the robotic mower, ^Q 8.1. Never place or store objects on the robotic mower.

If the robotic mower is damp or wet, dry it thoroughly before storing to reduce the risk of short circuit and electric shock, III 8.1.

 High temperatures may cause the battery to generate heat, rupture, leak, ignite or explode, resulting in severe or fatal personal injury or property damage, 2 6. Store the robotic mower only within the specified ambient temperature limits, 2 26.6

When storing the robotic mower for longer periods of time (e.g. winter break):

- ► Prepare the robotic mower for storage and set it into hibernation mode, 🛄 8.1.
- Clean the robotic mower, III 23.
- Store the robotic mower indoors in a dry and secure location, out of the reach of children and other unauthorized persons.

The robotic mower can also be stored on a STIHL wall holder. The wall holder is available as an accessory.

NOTICE

 Charging the battery fully before storage will help prevent damage and prolong its useful life.

NOTICE

Avoid contacting the perimeter wire when dethatching or aerating the lawn. Also use caution when operating a line trimmer near the perimeter wire. De-thatching, aerating and trimming operations can result in a cut or damaged perimeter wire. Refer to your sketch of the mowing area and take special care to avoid the perimeter wire when performing these operations.

22.3 Storing the Docking Station and Power Supply

Store the docking station and the power supply indoors in a dry, secure place that is inaccessible to children and other unauthorized users, 11 7. Improper storage can result in unauthorized use and damage to the docking station or the power supply, 11 7. Never place or store objects on the docking station.

To reduce the risk of electric shock, always unplug the power supply from the electrical socket before removing the cover of the docking station.

The docking station, charging cable and power supply can remain in the mowing area during longer periods of non-use, e.g., winter break.

- Disconnect the power supply's mains plug from the electrical outlet.
- Protect the plug against weather conditions.
- Clean all components III 23.



Cover the electrical components of the docking station with an all-weather container.



 Secure the container on the ground with four ground stakes.

Dismantling the Docking Station and Power Supply

For storage on a STIHL wall holder (available as an accessory) or if the docking station can't be covered, the docking station, charging cable and power supply can also be removed.

- Disconnect the power supply's mains plug from the electrical outlet.
- Clean all components III 23.
- Disconnect the power supply cord from the docking station and power supply and coil it.
- Remove the power supply and coil up the connecting cord.
- Disconnect the perimeter wire and guide wire from the docking station.
- Remove the docking station.
- Grease the wire ends to protect against corrosion and weather conditions.
- Protect the loose wire ends from the docking station by wrapping a generous amount of insulating tape or storing them in a container with grease so that they are protected from the elements.
- Store the docking station and the power supply indoors in a dry and secure location, out of the reach of children and other unauthorized persons.

23 Cleaning

23.1 Cleaning the Robotic Mower

To reduce the risk of personal injury from unintended activation, activate the disabling device. Disconnect the power supply from the electrical outlet before carrying out any cleaning work, 2 8. Users of this robotic mower should carry out only the cleaning described in this manual. To help prevent injuries, always wear heavy-duty work gloves when handling the mowing blades.

To clean the robotic mower and the docking station:

Stop the robotic mower and activate the disabling device.



- Grab the robotic mower at the front handle (1) and the rear handle (2).
- Place the robotic mower on its side and secure it against toppling over.
- Check the plug of the diagnostic socket (3) for damage and tight fit.
- Remove the blade disk (4), if it is very dirty.



- Remove built-up dirt with a wooden rod or a soft brush. If necessary, use a pH-neutral cleaning agent.
- Rinse off loose dirt with a gentle water jet.
- Clean the underside of the robotic mower with a damp cloth.
- Clean the charging contacts (5) with a damp cloth.
- Clean the hood and control panel with a damp cloth.

NOTICE

 Place the robotic mower on a firm and level surface. The robotic mower can topple over when it is in the cleaning position.

NOTICE

Never use a pressure washer to clean the robotic mower. Spraying the mower with other liquids could lead to permanent damage. The blade disk must be cleaned more frequently if the iMOW[®] regularly operates in wet weather. Dirt deposits between the blade disk and the mowing deck housing can create friction and lead to increased power consumption.

23.2 Cleaning the Docking Station and Power Supply

- Disconnect the power supply's mains plug from the electrical outlet.
- Clean the docking station, power supply and charging cable with a damp cloth.
 - If necessary, remove built-up dirt with a soft brush.
- Clean plug connections with a dry, lint-free cloth.
 - If necessary, remove built-up dirt with a brush.

NOTICE

Never use a hose or pressure washer to clean the docking station or power supply. Spraying the docking station or power supply with water or other liquids could lead to permanent damage.

24 Inspection and Maintenance

24.1 Visual Inspection

 To reduce the risk of laceration injuries, always wear heavy-duty work gloves when inspecting the blades or blade disk, III 5.3.

- To reduce the risk of personal injury from thrown or flung objects, replace a broken or damaged blade disk.
- Regularly check the robotic mower:
 - Cleanliness of the charging contacts
 - Check the hood and protective strip for damage
 - Check that the wheels run smoothly
 - Check the blades for damage, wear, cracks and freedom of movement.



- Check the blade disk for damage and wear.
 If the wear marks (1) are worn through and a hole has appeared, replace the
 - blade disk.



 Check the plug (2) of the diagnostic socket for damage and tight fit.

24.2 Replacing the Mowing Blades

Cracked, damaged or worn out mowing blades may shatter at high speeds and cause serious injury. To reduce the risk of injury from broken parts, check the condition of the blades at regular intervals. Do not mount a worn, broken or damaged blade. Replace all mowing blades if a blade is cracked, damaged or worn.



The mowing blades have sharp edges. If they contact your flesh, they will cut you, even if they are not moving. Always wear heavy-duty work gloves when mounting or otherwise handling the blades, 2 5.3.



 Never attempt to sharpen the mowing blades. All blades must be replaced at the same time if one of them becomes dull or damaged.

To replace the mowing blades:

Stop the robotic mower and activate the disabling device.



- Grab the robotic mower at the front handle (1) and the rear handle (2).
- Turn the robotic mower on its back.



- Press and hold the lever (3).
- Rotate the nut (4) counterclockwise until it can be removed.



- Remove the nut (4).
- Remove the blade disk (5).



- Push the blade carrier (6) in the direction indicated by the arrow 𝔄. The blade carrier is unlocked.
- Remove the blade carrier.



Detach all old mowing blades (7).



 Clean, blade disk (5), blade carrier (6) and nut (4).



 Attach new mowing blades (8). Insert only one blade per pin (9).



- Put on the blade carrier (6).
- Push the blade carrier in the direction of the arrow ^(b) and make sure that all three arms (10) underneath the pins (9) are positioned. The blade carrier is locked.
- Position the blade disk (5) on the robotic mower.
- Press and hold the lever (3).

- Turn the nut (4) clockwise.
- Release the lever and tighten nut securely clockwise.

The levers engage audibly.

24.3 Extending or Repairing the Perimeter Wire or Guide Wire

To reduce serious or fatal injury or property damage from fire or electric shock, use only wire connectors authorized by STIHL. Unplug the power supply before attempting to expand or repair the perimeter wire or guide wire.

Wire connectors are designed to link two loose ends of perimeter wire and guide wire to extend the perimeter wire and guide wire or to connect loose wire ends caused by a breakage. They are filled with gel to prevent premature wear or corrosion of the wire ends.

 Make sure that the overall length of the perimeter wires does not exceed the maximum length of 2789 ft. (850 m).



- Insert the unstripped ends of the wires (2) in the wire connector (1) up to the limit stop.
- Press the wire connector together up to the limit stop using suitable pliers.



 Route perimeter wires at least for a length a = 2 in. (5 cm) parallel and close together without the perimeter wires crossing.

25 Troubleshooting Guide

25.1 Robotic Mower

Always activate the disabling device before carrying out any inspection, cleaning or maintenance.

Most faults are visible in the MYiMOW[®] app and indicated by red light patterns on the robotic mower or docking station.

Proceed as follows for troubleshooting:

Follow the instructions in the MYiMOW[®] app.

or

► Press the INFO pushbutton on the control panel and follow the audible instructions.

0 1111			
Condition	Light strips on the robotic mower or dock- ing station	Possible Cause	Remedy
The robotic mower stops on the way back to the docking sta- tion.		The battery is dis- charged.	 Make sure that the length of the perimeter wire does not exceed 850 m. Optimize routing of the guide wire. Install another guide wire within the mowing area. Carry the robotic mower to the docking station for charging. If possible, in a mowing area with a slope, position the docking station in the lower area of the slope.
The robotic mower fails to start the mowing process as expected.	Illuminated strips light up blue.	The robotic mower is restarting.	 Wait until the restart has been comple- ted. The robotic mower then automatically starts the mowing process.
	Light strips light up red. The LED on the docking station lights up red.	There is a fault on the perimeter wire or guide wire.	 Make sure that the perimeter wire and guide wire are undamaged. Make sure that the perimeter wire and guide wire are correctly connected to the docking station. Make sure that the perimeter wire and guide wire are correctly connected to the wire connector. Follow the instructions in the MYiMOW[®] app.
The robotic mower is not charging.	Light strips light up red. The LED on the docking station lights up red.	There is a fault in the robotic mower, bat- tery, power supply or docking station.	 Make sure that the charging contacts on the docking station and robotic mower are clean. Follow the instructions in the MYiMOW[®] app. If the fault persists: Do not attempt to fur- ther charge the robotic mower, remove the mains plug of the connecting cable from the electrical outlet and contact an authorized STIHL iMOW[®] servicing dealer.

26 Specifications

26.1 STIHL iMOW[®] 5.0 EVO, 6.0 EVO, 7.0 EVO Robotic Mower

Specifications

- Cutting width: 11 in. (28 cm)

- Cutting height - electric:

- iMOW[®] 5.0 EVO: 0.79 in. to 2.4 in. (20 mm to 60 mm)
- iMOW[®] 6.0 EVO: 0.79 in. to 2.4 in. (20 mm to 60 mm)
- iMOW[®] 6.0 EVO (with extended cutting height): 2.4 in. to 3.9 in. (60 mm to 100 mm)
- iMOW[®] 7.0 EVO (with extended cutting height): 2.4 in. to 3.9 in. (60 mm to 100 mm)
- Speed of the blade disk: 2400 rpm
- Mowing speed: 1.1 mph (0.5 m/s)
- Dimensions:
 - Height: 11.5 in. (291 mm)
 - Height (versions with extended cutting height): 13 in. (331 mm)
 - Width: 20.7 in. (525 mm)
 - Length: 27.8 in. (705 mm)
- Weight:
 - iMOW[®] 5.0 EVO: 33.1 lbs. (15 kg)
 - iMOW[®] 6.0 EVO: 33.1 lbs. (15 kg)
 - iMOW[®] 6.0 EVO (with extended cutting height): 35.3 lbs. (16 kg)
 - iMOW[®] 7.0 EVO (with extended cutting height): 37.5 lbs. (17 kg)
- Insulation: Class III (designed to be supplied from a separated/safety extra-low voltage (SELV) power source)
- Protection rating: IP56
- Maximum mowing surface:
 - iMOW[®] 5.0 EVO: 16145 sq. ft. (1500 m²)
 - iMOW[®] 6.0 EVO: 32291 sq. ft. (3000 m²)
 - iMOW[®] 6.0 EVO (with extended cutting height): 25833 sq. ft. (2400 m²)
 - iMOW[®] 7.0 EVO (with extended cutting height): 43055 sq. ft. (4000 m²)
- Active time 10763 sq. ft. (1000 m²) (per week)
 - iMOW[®] 5.0 EVO: 35 h
 - iMOW[®] 6.0 EVO: 30 h
 - iMOW[®] 7.0 EVO: 20 h
- Maximum length of the perimeter wire: 2788 ft. (850 m)
- Maximum gradient: 45%

Bluetooth®

- Data transmission protocol: Bluetooth[®] 5.1. The mobile appliance must be compatible with Bluetooth[®] Low Energy 5.0 and support Generic Access Profile (GAP).
- Frequency band: ISM band 2.4 GHz
- Radiated maximum transmission power: 1 mW

- Bluetooth[®] signal range: maximum 33 ft. (10 m). The signal range may vary depending on ambient conditions. The Bluetooth[®] range may be limited when the signal is transmitted through metallic barriers (e.g., walls, shelving units, etc.) or near strong electromagnetic fields.
- Mobile appliance operating system requirements: go to info.myimow.stihl.com

Wireless Network / Access Point

- Network standard: IEEE 802.11b/g/n
- Frequency band: 2.4 GHz
- Radiated maximum transmission power: 100 mW

Mobile Internet Access (STIHL iMOW®)

- Format of the SIM card: eSIM
- Frequency bands
 - LTE-Cat-M1: B1, B2, B3, B4, B5, B8, B12, B13, B20, B28, B66
 - UMTS, HSDPA, HSPA+: B1, B2, B4, B5, B6, B8, B19
 - GSM, GPRS, EDGE: 850 MHz, 900 MHz, 1800 MHz, 1900 MHz
- Radiated maximum transmission power: 2 W
- Average data volume per month: see FAQs under https://support.stihl.com

Bluetooth® Trademark

The Bluetooth[®] word mark and logos are registered trademarks owned by Bluetooth SIG, Inc. These word mark/logos are used by STIHL under license.

The STIHL iMOW[®] is equipped with a Bluetooth[®] and a wireless network interface. The STIHL iMOW[®] is additionally equipped with a cellular data interface. Local operating restrictions (in aircraft or hospitals, for example) must be observed.

26.2 Mowing Blades

Number of blades: 3

26.3 STIHL AAI Battery

The battery has been installed in the robotic mower and may only be removed by an authorized STIHL iMOW[®] servicing dealer.

Approved power supply type: STIHL Docking Station in combination with DM160A-420A or DM210A-420A power supply

³Under ideal conditions (few obstacles, simple geometry and low gradients in garden, moderate growth of lawn)

- Battery technology: Lithium-Ion
- Voltage: 36 V
- Rated capacity in Ah⁴: see rating plate
- Stored energy in Wh⁵: see rating plate

26.4 STIHL Docking Station and DM160A-420A, DM210A-420A Power Supply

Docking Station

- Insulation: Class III (designed to be supplied from a separated/safety extra-low voltage (SELV) power source)
- Protection rating: IPX5
- Weight: 8.8 lbs. (4.0 kg)
- Perimeter wire and guide wire
 - Voltage: 42 V DC
 - Frequency range: 1.4 kHZ to 20 kHz

Power Supply DM160A-420A, DM210A-420A

- Mains voltage: See rating plate
- Frequency: see rating plate
- Rated power: see rating plate
- Charging current: see rating plate
- Insulation: Class II (Double Insulation)
- Protection rating for power body: IP67 (protected from total dust ingress)

26.5 Extension Cords

If an extension cord is necessary, only use a cord that is at least 35 ft. (10 m) long and meets the specifications below.

- Types: SJW or SJTW, round jacketed cords
- W marking on cable jacket must indicate that it is suitable for outdoor use

Minimum wire size for extension cords for 120 Volt appliances, using not more than 12 A:

- Cord length 35 ft. (10 m): AWG 16
- Cord length 50 ft. (15 m): AWG 14
- Cord length 100 ft. (30 m): AWG 12
- Cord length 150 ft. (46 m): AWG 10

Minimum wire size for extension cords for 120 Volt appliances, using not more than 15 A:

- Cord length 35 ft. (10 m): AWG 16
- Cord length 50 ft. (15 m): AWG 14
- Cord length 100 ft. (30 m): not recommended
- Cord length 150 ft. (46 m): not recommended

26.6 Ambient Temperature Limits

- Extreme temperatures can damage the battery and may also cause it to generate heat, rupture, leak, ignite or explode, resulting in severe or fatal personal injury or property damage. Never charge, use or store the battery outside the ambient temperature limits specified below.
 - Do not charge the battery below 41 °F (5 °C) or above 104 °F (40 °C).
 - -Do not use the robotic mower below 41 °F (5 °C) or above 104 °F (40 °C).
 - Do not store the robotic mower below 32 °F (0 °C) or above 104 °F (40 °C).
 - Do not store the docking station and power supply below - 4 °F (- 20 °C) or above 140 °F (60 °C).

26.7 Ambient Temperature Recommendations

For optimum performance, observe the following ambient temperature ranges for the robotic mower, battery and charger:

- Charging: 41 °F to 104 °F (5 °C to 40 °C)
- Use: 41 °F to 104 °F (5 °C to 40 °C)
- Storage robotic mower: 32 °F to 104 °F (0 °C to 40 °C)
- Storage docking station and power supply: -4 °F to 140 °F (- 20 °C to 60 °C)

Charging, using or storing the battery outside the recommended ambient temperature ranges may reduce performance.

26.8 Symbols

Meanings of symbols on the robotic mower, docking station, power supply or installed battery:



This symbol shows the diameter of the blade disk.

This symbol indicates the direction for unlocking the blade carrier when changing blades.

⁴Rated capacity calculated pursuant to IEC 61960. Usable energy available to the operator will be less.

⁵The battery is marked with its stored energy as provided by the cell manufacturer. Usable energy available to the operator will be less.



This symbol indicates the direction for locking the blade carrier when changing blades.

Protection class 2, double insulated.



Do not dispose of the product with domestic waste.

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The information next to this symbol indicates the energy content of the battery according to the cell manufacturer's specification. The energy content available during use is lower.



1 LED lights up red. The battery is too warm or too cold.



4 LEDs flash red. There is a fault in the battery.

26.9 Engineering Improvements

STIHL's philosophy is to continually improve all of its products. As a result, engineering changes and improvements are made from time to time. Therefore, some changes, modifications and improvements may not be covered in this manual. If the operating characteristics or the appearance of your machine differs from those described in this manual, please contact your STIHL dealer or the STIHL distributor in your area for assistance.

26.10 FCC 15 Compliance Statement

This device contains a transmitter

(FCC ID: 2ALP8IA01) that complies with part 15 of the FCC Rules.

Operation is subject to the following two conditions:

- this device may not cause harmful interference.
- this device must accept any interference received, including interference that may cause undesired operation.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation.

If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- reorient or relocate the receiving antenna,
- increase the separation between the equipment and receiver,
- connect the equipment to an outlet on a circuit different from that to which the receiver is connected,
- consult an authorized STIHL servicing dealer or an experienced radio/TV technician for help.

Do not change or modify this product in any way unless specifically allowed in this manual, since this could void your authority to operate it.

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance of 8 in. (20 cm) between the radiator and your body.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

27 Replacement Parts and Equipment

27.1 Genuine STIHL Replacement Parts

STIHL recommends the use of genuine STIHL replacement parts. Genuine STIHL parts can be identified by the STIHL part number, the **STIHL** logo and, in some cases, by the STIHL parts symbol **S**. The symbol may appear alone on small parts.

28 Disposal

28.1 Disposal of the Robotic Mower, Docking Station and Power Supply

Even if believed to be discharged, the lithium ion battery integrated into the robotic mower may never totally discharge and still may deliver a dangerous short circuit current. Handle a discharged/depleted battery carefully. If damaged or exposed to high temperatures, it may leak, generate heat, catch fire or explode.

STIHL products must not be thrown in household trash or disposed of except as outlined in this manual.

- Take the robotic mower to an authorized STIHL iMOW® servicing dealer to have its integrated battery removed and recycled.
- Take the docking station, power supply, accessories and packaging to an approved disposal site for environmentally friendly recycling.
- Observe all federal, state and local disposal rules and regulations.
- Contact your authorized STIHL iMOW® servicing dealer for the latest information on disposal and recycling.



STIHL is committed to the development of products that are environmentally responsible. This commitment does not stop when the product leaves the authorized STIHL iMOW® servicing dealer. STIHL has partnered with the RBRC (Rechargeable Battery Recycling Corporation) to promote the collection and recycling of spent STIHL lithium ion batteries in the United States and Canada.

The RBRC seal indicates that STIHL has prepaid for battery recycling. RBRC has a toll free phone number (1-800-822-8837) that connects you to information on battery recycling locations and information on battery disposal bans or restrictions in your area.

29 Limited Warranty

29.1 STIHL Incorporated Limited Warranty Policy

This product is sold subject to the STIHL Incorporated Limited Warranty Policy, available at www.stihlusa.com/warranty.html. It can also be

obtained from your authorized STIHL dealer or by calling 1-800-GO-STIHL (1-800-467-8445).

30 Trademarks

30.1 Registered Trademarks

STIHL®	FARM BOSS®
STIHL	iCademy®
5 1.	MAGNUM®
The color combination	MasterWrench Service®
orange-grey (U.S. Registrations	MotoMix®
#2,821,860;	OILOMATIC®
#3,010,057, #3.010.058.	ROCK BOSS®
#3,400,477; and #3,400,476)	STIHL Cutquik [®]
AutoCut [®]	STIHL DUROMATIC®
YARD BOSS [®]	STIHL Quickstop [®]
STIHL ROLLO- MATIC [®]	STIHL WOOD BOSS®
WOOD BOSS [®]	TIMBERSPORTS®
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30.2 Common Law Trademarks

4-MIX™	HT Plus™
BioPlus™	STIHL PowerSweep™
Easy2Start™	STIHL Protech™
EasySpool™	STIHL MiniBoss™
ElastoStart™	STIHL MotoPlus 4™
Ematic™	Master Control Lever™
STIHL Precision Ser- ies™	STIHL OUTFITTERS™
FixCut™	STIHL PICCO™
Micro™	TrimCut™
Pro Mark™	STIHL M-Tronic™
Quad Power™	STIHL HomeScaper Ser- ies™
Quiet Line™	STIHL PolyCut™
STIHL Arctic™	STIHL RAPID™
STIHL Compact™	STIHL SuperCut™
STIHL Interchangea- ble Attachment Ser- ies™	STIHL Multi-Cut HomeS- caper Series™
TapAction™	STIHL Territory™
STIHL Injection	Team

This listing of trademarks is subject to change.

Any unauthorized use of these trademarks without the express written consent of ANDREAS STIHL AG & Co. KG, Waiblingen is strictly prohibited.

31 Addresses

31.1 STIHL Incorporated

STIHL Incorporated 536 Viking Drive P.O. Box 2015 Virginia Beach, VA 23452-2015

32 Open Source Software

32.1 Open source software

This product contains copyright protected open source software that has been published by the respective copyright holders under certain license terms such as GNU General Public License (GPL), GNU Lesser General Public License (LGPL). Apache License or similar licenses. If copyright protected notes, terms of use or license terms are contained in this User Manual that contradict the terms of an applicable open source license, they are not used in the User Manual. The use and dissemination of the contained open source software is subject exclusively to the respective open source license. Insofar as the applicable license grants you the right to the source code of this software and/or other additional data, you can obtain the source code from us during a period of three years after our last delivery of the product and if the license terms require it for as long as we offer customer support for the product. To obtain the complete corresponding source code from us. you can send your request with information of the product name, serial number and version of the corresponding software to the following address: ANDREAS STIHL AG & Co. KG. Open Source Team/Officer. Postfach 17 71. 71307 Waiblingen. Germany. We reserve the right to charge you the costs of the data carrier as well as shipping costs. You can find additional information at the following website: https://opensource stihl com

WARNING

This robotic lawn mower, docking station and power supply contain chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

ADVERTENCIA

Este robot cortacésped, esta estación de acoplamiento y esta fuente de alimentación contienen productos químicos considerados por el Estado de California como causantes de cáncer, defectos de nacimiento u otra toxicidad reproductora.

