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If the mower is unexpectedly stolen, it is important to notify your dealer of this. Provide the serial number of the mower so that it can be registered as stolen in the central systems at Husqvarna AB. It is an important step in theft protection procedure which reduces interest in the buying and selling of stolen mowers.

www.automower.com
1. Introduction and safety

1.1 Introduction

Congratulations on your choice of an exceptionally high quality product. To get the best results from your Husqvarna Automower® requires knowledge of its function. This Operator's Manual contains important information about the mower, how it must be installed and how to use it.

As a complement to this Operator's Manual, there is more information available on the Automower® website, www.automower.com. Here you can find more help and guidance in its use.

Husqvarna AB has a policy of continuous product development and therefore reserves the right to modify the design and appearance and function of products without prior notice.

The following system is used in the Operator's Manual to make this easier:

- Text written in *italics* is a text that is shown on the mower's display or is a reference to another section of the Operator's Manual.
- Words written in **bold** are one of the buttons on the mower's keypad.
- Words written in **UPPERCASE** and *italics* refer to the position of the main switch and the different operating modes on the mower.

**IMPORTANT INFORMATION**

Read through the Operator's Manual carefully and understand the content before using your Automower®.

**WARNING**

Automower® can be dangerous if incorrectly used.
1. INTRODUCTION AND SAFETY

1.2 Symbols on the product

These symbols can be found on the robotic lawn mower. Study them carefully.

- Read through the Operator’s Manual carefully and understand the content before using your Automower®. The warnings and safety instructions in this Operator’s Manual must be carefully followed if the mower is to be used safely and efficiently.

- Automower® can only start when the main switch is moved to the 1 position and the correct PIN code has been entered. Inspection and/or maintenance must be carried out with the main switch set to 0.

- Remain at a safe distance from the Automower® when it is running. Keep your hands and feet away from the rotating blades. Never place your hands or feet close to or under the body when Automower® is in operation.

- Do not ride on Automower®.

- It is not permitted to dispose of this product as normal household waste when it has reached the end of its useful life. Ensure that the product is recycled in accordance with local legal requirements.

- Never use a high-pressure washer or even running water to clean Automower®.

Other symbols/decals on the machine refer to special certification requirements for certain markets.
1. INTRODUCTION AND SAFETY

1.3 Symbols in the Operator's Manual

These symbols can be found in the Operator’s Manual. Study them carefully.

- Turn the main switch to 0 before carrying out any inspections and/or maintenance.

- Always wear protective gloves when working with the mower’s underframe.

- Never use a high-pressure washer or even running water to clean Automower®.

- A warning box indicates a risk of personal injury exist, especially when the stated instructions are not followed.

- An information box indicates a risk of material damage exist, especially when the stated instructions are not followed. The box is also used where there is a risk of user error.
1.4 Safety instructions

Use

- This robotic lawn mower is designed to mow grass in open and level ground areas. It may only be used with the equipment recommended by the manufacturer. All other types of use are incorrect. The manufacturer's instructions with regard to operation, maintenance and repair must be followed precisely.
- The robotic lawn mower may only be operated, maintained, and repaired by persons that are fully conversant with its special characteristics and safety regulations. Please read the Operator's Manual carefully and make sure you understand the instructions before using the robotic lawn mower.
- It is not permitted to modify the original design of Automower®. All modifications are made at your own risk.
- Check that there are no stones, branches, tools, toys or other objects on the lawn that can damage the blades and cause the mower to stop. Start Automower® according to the instructions. When the main switch is in the 1 position make sure to keep your hands and feet away from the rotating blades. Never put your hands and feet under the mower.
- Never lift up Automower® or carry it around when the main switch is in the 1 position.
- Do not let persons who do not know how Automower® works and behaves use the mower.
- Never use Automower® if persons, especially children, or pets, are in the immediate vicinity.
- Do not put anything on top of Automower® or its charging station.
- Do not allow Automower® to be used with a defective blade disc or body. Neither should it be used with defective blades, screws, nuts or cables.
- Do not use Automower® if the main switch does not work.
- Always switch off the Automower® using the main switch when the mower is not in use. Automower® can only start when the main switch is set to 1 and the correct PIN code has been entered.
- Automower® must never be used at the same time as a sprinkler. In this case use the timer function, see 6.3 Timer (1) on page 43, so the mower and sprinkler never run simultaneously.
- Husqvarna AB does not guarantee full compatibility between Automower® and other types of wireless systems such as remote controls, radio transmitters, buried electric animal fencing or similar.
1. INTRODUCTION AND SAFETY

Transport
The original packaging should be used when transporting Automower® over long distances.

To safely move from or within the working area:

1. Press the **STOP** button to stop the mower. If security is set to the medium or high level (see 6.5 Security (3) on page 47), the PIN code has to be entered. The PIN code has four digits and is chosen when the mower is started for the first time, see 3.8 First start-up and calibration on page 32.

2. Set the main switch to position 0.

3. Carry the mower by the handle at the rear under the mower. Carry the mower with the blade disc away from the body.

**IMPORTANT INFORMATION**

Do not lift the mower when it is parked in the charging station. This may damage the charging station and/or the mower. Open the cover and instead first pull the mower out of the charging station before lifting it.

Maintenance

**WARNING**

When the mower is turned upside down the main switch must always be set to the 0 position.

The main switch should be set to the 0 position during all work on the mower’s underframe, such as cleaning or replacing the blades.

- Inspect Automower® each week and replace any damaged or worn parts.

Check especially that the blades and blade disc are not damaged. Replace all blades and screws at the same time if necessary so that the rotating parts are balanced, see 8.7 Blades.
2. Presentation

This chapter contains information that is important to be aware of when planning the installation.

An installation of Husqvarna Automower® includes four main components:

- The Automower® is a robotic lawn mower that mows the lawn by essentially operating in a random pattern. The mower is powered by a maintenance-free battery.

- Charging station, where your Automower® returns when the charge level in the battery becomes too low. The charging station has three functions:
  - To send control signals along the boundary wire.
  - Sending control signals in the guide wire so that Automower® can find the charging station.
  - To charge Automower® battery.

- Transformer, which is connected between the charging station and a 120V(230V) wall socket. The transformer is connected to the wall socket and to the charging station using a 33 ft (10 m) long low voltage cable. The low voltage cable must not be shortened or extended.

- Wire, laid in a loop around Automower® working area. The boundary wire is laid around the edges of the lawn and around objects and plants that the mower must not run into. The wire is also used as the guide wire.

The wire supplied with the installation is 1300 ft (150 m) long. If this is not sufficient more wire can be purchased, with a connector, and spliced onto the existing wire.

The maximum permitted length for the loop wire is 820 feet (250 m).
2. PRESENTATION

2.1 What's what?

The numbers in the picture correspond to:

1. Body
2. Cover to display, keypad and cutting height adjustment
3. Stop button/Lock button for opening the cover
4. Contact strip
5. LED for operation check of the charging station, boundary wire and guide wire
6. Charging station
7. Handle
8. Battery cover
9. Blade disc
10. Chassis box with electronics, battery and motors
11. Main switch
12. Rear wheel
13. Charging strip
14. Keypad
15. Display
16. Loop wire for boundary wire and guide wire
17. Low voltage cable
18. Connector for the loop wire
19. Nails for securing the charging station
20. Transformer
21. Staples
22. Measurement gauge for help when installing the boundary wire (the measurement gauge is broken loose from the box)
23. Coupler for the loop wire
2. PRESENTATION

2.2 Function

Capacity
The Automower® is recommended for lawns up to 0.12 acre (500 m²) in size.

How big an area Automower® can keep cut depends primarily on the condition of the blades and the type, growth and moisture of the grass. The shape of the garden is also significant. If the garden mainly consists of open lawns, Automower® can mow more per hour than if the garden consists of several small lawns separated by trees, flower beds and passages.

A fully charged Automower® mows for 40 to 50 minutes, depending on the age of the battery and how thick the grass is. Then the mower will charge for approx. 80 to 100 minutes. The charging time can vary depending on, among other factors, the ambient temperature.

Mowing technique
The mowing system used by Automower® is based on an effective and energy efficient principle. Unlike normal robotic lawn mowers, Automower® cuts the grass instead of striking it off.

We recommend you allow Automower® to mainly mow in dry weather to obtain the best possible result. Automower® can even mow in the rain, however, wet grass easily collects on the mower and the risk of slipping on steep slopes is greater.

If there is risk for thunder, the transformer should be disconnected from the power, and the boundary wire and the guide wire from the charging station.

The blades must be in good condition to obtain the best mowing result. In order to keep the blades sharp for as long as possible it is important to keep the lawn free from branches, small stones and other objects.

Replace the blades regularly for the best mowing result. It is very easy to replace the blades. See 8.7 Blades on page 56.
Working method
Automower® automatically mows the lawn. It continuously combines mowing and charging.

The mower starts to search for the charging station when the battery charge becomes too low. Automower® does not mow when it is searching for the charging station.

When Automower® searches for the charging station, it first searches irregularly for the guide wire. Then it follows the guide wire to the charging station, turns around just in front of the station and backs into it.

When the battery is fully charged, the mower leaves the charging station and starts mowing in a randomly selected direction within the 90° to 270° exit sector.

In order to ensure an even cut, even in parts of the garden that are hard to reach, there are a number of manual settings for how the mower is to leave the charging station, see 6.4 Installation (2).

When Automower® body hits an obstacle, the mower reverses and selects a new direction.

Two sensors, one at the front and one at the back on Automower®, sense when the mower approaches the boundary wire. Automower® overruns the wire by up to 11" (28 centimetres) before it turns.

The STOP button on the top of Automower® is mainly used to stop the mower when it’s running. When the STOP button is pressed a cover opens, behind which there is a control panel. The STOP button remains depressed until the cover is closed again. This acts as start inhibitor.
The control panel on the top of Automower® is where you manage all the mower settings. Open the control panel cover by pressing down the STOP button.

When the main switch is set to position 1 for the first time, a start-up sequence begins which includes:

- Language selection, time format, date format and the four-digit PIN code and setting the time and date, see 3.8 First start-up and calibration on page 32.

After this, the selected PIN code must be entered every time the main switch is set to 1. See 6.5 Security (3) on page 47 for more information on theft protection.

**Movement pattern**

The mower’s movement pattern is irregular and is determined by Automower® itself. A movement pattern is never repeated. This mowing system means the lawn is mown equally without any mowing lines.

**Locating the charging station**

Automower® runs irregularly until it reaches the guide wire. The mower then follows the guide wire in to the charging station.

The guide wire is a cable that is laid from the charging station towards, for instance, a remote part of the working area or through a narrow passage to be then connected with the boundary wire. For more information, see 3.6 Installation of the guide wire.
3. INSTALLATION

3. Installation

This chapter describes how you install the Husqvarna Automower®. Before starting the installation read the previous chapter 2. Presentation.

Read also through this entire chapter before beginning the installation. How the installation is made also affects how well Automower® will work. It is therefore important to plan the installation carefully.

Planning is simplified if you make a sketch of the working area, including all obstacles. This makes it easier to see the ideal positions for the charging station, the boundary wire and the guide wire. Draw on the sketch where the boundary and guide wires should be routed.

In chapter 7. Garden examples, there are examples of installations.

Visit also www.automower.com for further descriptions and tips regarding installation.

Carry out the installation in the following steps:

3.1 Preparations.
3.2 Installation of the charging station.
3.3 Charging the battery.
3.4 Installation of the boundary wire.
3.5 Connecting the boundary wire.
3.6 Installation of the guide wire.
3.7 Checking the installation.
3.8 First start-up and calibration
3.9 Test docking with the charging station

The charging station and boundary and guide wires must be connected to be able to carry out a complete start-up.

3.1 Preparations

1. If the lawn in the proposed working area is taller than 4" (10 cm), mow it using a normal robotic lawn mower. Then collect the clippings.
2. Read carefully through all the steps before the installation.
3. Check that all parts for the installation are included:
   The numbers in brackets refer to the detail diagram 2.1 What's what?.
   • Operator’s Manual (24)
   • Automower®
3. INSTALLATION

- Charging station (6)
- Loop wire for the boundary wire and guide wire (16)
- Transformer (20)
- Low voltage cable (17)
- Staples (21)
- Connector for the loop wire (18)
- Screws for the charging station (19)
- Measurement gauge (22)
- Solderless coupler for the loop wire (23)

During installation you will also need:
- Hammer/plastic mallet to simplify putting the staples in the ground
- Combination pliers for cutting the boundary wire and pressing the contact units together.
- Edge cutter/straight spade if the boundary wire must be buried. Installation of the charging station

3.2 Installation of the charging station

Ideal position of the charging station

Take the following aspects into consideration when identifying the best location for the charging station:

- Allow for 10 feet (3 metres) of free space in front of the charging station
- It must be possible to lay at least 4.9 feet (1.5 metres) of boundary wire straight out to the right and left of the charging station.
- Close to a wall socket. The supplied low voltage cable is 33 feet (10 metres) long.
- A level surface on which to place the charging station.
- Protection from water spray, for instance from irrigation
- Protection from direct sunlight
- Place in the lower part of a working area that has a major slope
- Possible requirement to keep the charging station out of sight of outsiders
- Any aesthetic preferences

For examples of where best to install the charging station, See 7. Garden example on page 50.
3. INSTALLATION

The charging station must be positioned with a great deal of free area in front of it (at least 10 ft/3 metres). It should also be centrally placed in the working area so that Automower® finds it easier to reach all areas in the working area.

Do not put the charging station in confined spaces in the working area. There must be a straight boundary wire, at least 5 feet (1.5 metres) long, to the right and left of the charging station. The wire must be laid straight out from the rear end of the charging station. Any other locations can mean that the lawn mower enters the charging station sideways and will have difficulty docking.

Do not put the charging station in a corner in the working area.

The charging station must be positioned on relatively level ground. The front end of the charging station must be a maximum of 1.5" (3 cm) higher than the back end. The front end of the charging station must never be lower than the back end.

The charging station must not be positioned so that its plate bends.
3. INSTALLATION

If the installation is done in a working area with a steep slope (such as around a house on a hill), the charging station should be placed in the area at the bottom of the slope. This makes it easier for the lawn mower to follow the guide wire to the charging station.

The charging station should not be placed on an island as this limits the laying of the guide wire in an optimal way. If the charging station has to be installed on an island, the guide wire also has to be connected to the island. See the picture opposite. Read more about islands in chapter 3.4 Installation of the boundary wire.

Connecting the transformer

Take the following into consideration when planning where to place the transformer:

- Close to the charging station
- Protection from rain
- Protection from direct sunlight

If the transformer is connected to an electrical socket outdoors, this must be approved for outdoor use. The low voltage cable for the transformer is 33 feet (10 metres) long, and may not be shortened or extended.

It is possible to let the low voltage cable cross the working area. The low voltage cable must be stapled down or buried, and the cutting height should be such that the blades on the blade disc can never come in contact with the low voltage cable.

The transformer must be placed where it is well ventilated and is not exposed to direct sunlight. The transformer must be placed under a roof.

It is recommended to use an earth fault-breaker when connecting the transformer to the wall socket.

For best performance, the transformer must not be exposed to direct sunlight.
3. INSTALLATION

The transformer shall be mounted on a vertical surface, for example a house wall. Mount the transformer with screws in the two attachment points. Securing screws are not included. Choose screws suitable for the wall material.

Mount the transformer at a height such that there is no risk the transformer can become submerged in water (minimum 12\"/30 cm from the ground). The transformer must never be placed on the ground.

**IMPORTANT INFORMATION**
The low voltage cable must not be shortened nor extended.

**IMPORTANT INFORMATION**
Place the low voltage cable so that the blades on the blade disc can never come in contact with it.

**Installation and connecting the charging station**

1. Position the charging station in a suitable spot.
2. Connect the low voltage cable to the charging station.
3. Connect the transformer's power cable to a 230 V wall socket. If the wall socket is outdoors, it is important that the transformer is protected from direct sunlight.

4. Attach the charging station to the ground using the supplied screws. Ensure the screws are screwed all the way down in the countersink.

**IMPORTANT INFORMATION**
It is not permitted to make new holes in the plate. Only the existing holes may be used to secure the plate to the ground.
3.3 Charging the battery

As soon as the charging station is connected, it is possible to charge the mower. The mower can be charged as soon as the charging station is connected. Set the main switch to the 1 position.
Place Automower® in the charging station to charge the battery while the boundary and guide wires are being laid.

If the battery is empty, it takes around 3 hours to fully charge it.
If the battery charge is low, it takes around 80 to 100 minutes to fully charge it.

IMPORTANT INFORMATION
Automower® cannot be used before the installation is complete.
3. INSTALLATION

3.4 Installation of the boundary wire

The boundary wire can be installed in one of the following ways:

1. Securing the wire to the ground with staples.
   It is preferable to staple down the boundary wire if you want to make adjustments to the boundary wire during the first few weeks of operation. After a few weeks the grass will have grown over the wire making it no longer visible. Use a hammer/plastic mallet and the staples supplied when carrying out the installation.

2. Bury the wire.
   It is preferable to bury the boundary wire if you want to dethatch or aerate the lawn. If necessary both methods can be combined so one part of the boundary wire is stapled down and the remainder is buried. For instance, the wire can be buried using an edge cutter or a straight spade. Make sure to lay the boundary wire at least 0.4" (1 cm) and a maximum of 8" (20 cm) in the ground.

Plan where to lay the boundary wire

The boundary wire must be laid so it:

- Forms a loop around the working area for the robotic lawn mower. Only Husqvarna boundary wire must be used. It is specially designed to resist dampness from the soil that could otherwise easily damage the wires.
- The mower is never more than 49 feet (15 metres) from the wire at any point in the entire working area.
- The wire is no more than 820 feet (250 metres) long.
- 8" (20 cm) of extra wire is available to which the guide wire will be connected later. See 3.6 Installation of the guide wire on page 28.

Depending on to what the working area is adjacent, the boundary wire must be at laid at different distances from obstacles. The illustration below shows how the boundary wire must be laid around the working area and around obstacles. Use the supplied measurement gauge to obtain the correct distance (see 2.1 What's what? on page 11).
3. INSTALLATION

Boundaries for the working area

If a high obstacle, for example a wall or fence, borders the working area, the boundary wire should be laid 12” (30 cm) from the obstacle. This will prevent Automower® from colliding with the obstacle and reduce body wear.

About 8” (20 cm) around the fixed obstacle will not be mown.

If the working area borders against a small ditch, for example, a flower bed or a small elevation, e.g. a low verge (1” - 2”/3 - 5 cm), the boundary wire should be laid 8” (20 cm) inside the working area. This prevents the wheels from driving into the ditch or up onto the verge.

About 5” (12 cm) of grass along the ditch/stone edging will not be mown.

If the working area borders against a flat path or the like that lies level with the lawn, it is possible to allow Automower® to run a little over the path. The boundary wire should then be laid 2” (5 cm) from the edge of the path.

All the grass along the side of the pavement will be cut.

When the working area is divided by a flat slab path that is level with the lawn, it is possible to allow Automower® to run over the path. It can be an advantage to lay the boundary wire under the slabs. The boundary wire can also be laid in the joint between the slabs.

Note! The Automower® must never run over gravel, mulch or similar material which can damage the blades.

IMPORTANT INFORMATION

If the working area is adjacent to water bodies, slopes, precipices or a public road, the boundary wire must be supplemented with a fence or something similar. The height must then be at least 6” (15 cm). This will prevent Automower® from ending up outside the working area under any circumstances.
3. INSTALLATION

Boundaries within the working area

Use the boundary wire to demarcate areas inside the working area by creating islands around obstacles that can not withstand a collision, for example, flower beds and fountains. Run the cable out to the area, route it around the area to be demarcated and then back along the same route. If staples are used, the wire should be laid under the same staple on the return route. When the boundary wire to and from the island are close together, the mower can drive over the wire.

Obstacles that can withstand a collision, for example, trees or bushes higher than 6" (15 cm), do not need to be demarcated by the boundary wire. Automower® will turn when it collides with this type of obstacle.

To achieve careful and silent operation, it is recommended to isolate all fixed objects in and around the working area.

The boundary wire may not be crossed on its way to and from an island.

Obstacles that slope slightly, for example, stones or large trees with raised roots, should be demarcated or removed. Automower® can otherwise slide up onto this kind of obstacle causing the blades to be damaged.

Secondary areas

If the working area consists of two areas between which the mower has difficulty travelling, it is recommended to set up a secondary area. Instances of this are 25% slopes or a passage that is narrower than 24" (60 cm). Run the boundary wire then around the secondary area so that it forms an island outside of the main area.

The Automower® must be moved manually between the main and secondary area when the lawn in the secondary area has to be cut. The MAN operation mode must be used as the lawn mower cannot travel on its own from the secondary area to the charging station. See 5.1 Operation selection on page 39. In this mode, the Automower® will never look for the charging station but will mow until the battery runs out. When the battery charge is low, the mower will stop and the 'Needs manual charging' message will appear in the display. Then place the mower in the charging station to charge the battery. If the main working area has to be cut after charging, it is appropriate to switch the operation mode to Auto before placing the mower in the charging station.
3. INSTALLATION

Passages when mowing
Long and narrow passages and areas narrower than 5 – 7 feet (1.5 - 2 metres) should be avoided. When the Automower® mows there is a risk that it will travel around in the passage or area for a period of time. The lawn will then look flattened.

Slopes
The boundary wire can be laid across a slope that slants less than 10 %.

The boundary wire should not be laid across a slope that is steeper than 10 %. There is a risk of Automower® finding it difficult to turn there. The mower will then stop and show the fault message Outside working area. The risk is at its greatest in damp weather conditions, as the wheels can slip on the wet grass.

However, the boundary wire can be laid across a slope steeper than 10 % when there is an obstacle that Automower® can be permitted to collide with, for example, a fence or a dense hedge.

Automower® can mow areas inside the working area that slope up to 10" (25 cm) per distance metre (25 %). Areas that slope more must be demarcated by the boundary wire.

When any part of the working area's boundary slopes more than 4" (10 cm) per distance metre (10 %), the boundary wire must be routed about 8" (20 cm) in on flat ground before the slope starts.
3. INSTALLATION

Laying out the boundary wire
If you intend to staple down the boundary wire:

- Cut the grass very low with a standard robotic lawn mower or a trimmer where the wire is to be laid. It will then be easier to lay the wire close to the ground and the risk of the mower cutting the wire or damaging the wire's insulation is reduced.

- Make sure to lay the boundary wire tight to the ground and secure the staples close together with approximately 30" (75 cm) between each staple. The wire must generally lie close to the ground so, as not to be cut off before the grass roots have grown over it.

- Use a hammer to knock down the staples in the ground. Exercise care when knocking in the staples and make sure the wire is not under strain. Avoid forming the wire in sharp bends.

If the boundary wire is to be buried:

- Make sure to place the boundary wire at least 0.4" (1 cm) and a maximum of 8" (20 cm) into the ground. For instance, the wire can be buried using an edge cutter or a straight spade.

Use the supplied measurement gauge as a guide when you lay out the boundary wire. This helps you to easily set the correct distance between the boundary wire and the boundary/obstacle. The measurement gauge has broken loose from the box.

IMPORTANT INFORMATION
Extra wire must not be placed in coils outside the boundary wire. This can disrupt Automower®.

Loop for connecting the guide wire
To facilitate the connection of the guide wire to the boundary wire, it is recommended to create a loop with about 8" (20 cm) of extra boundary wire at the point where the guide wire will later be connected. It is a good idea to plan where the guide wire will be placed before laying out the boundary wire. See 3.6 Installation of the guide wire on page 28.
3. INSTALLATION

Laying the boundary wire in towards the charging station

The boundary wire must be laid in line with the rear end of the charging station. If the boundary wire is laid in any other way, the robotic lawn mower may find it hard to find the charging station.

In many cases, the straight wire section to the left of the charging station can be reduced to 3 feet (1 metres).

Depending on how the boundary wire is laid in the rest of the installation, in certain cases, the straight wire section to the right of the charging station may need to be extended.

Joining the boundary wire

Use an original connector if the boundary wire is not long enough and needs to be spliced. It is waterproof and gives a reliable electrical connection.

Insert both wire ends into the connector. Check that the wires are fully inserted into the connector so that the ends are visible through the transparent area on the other side of the connector. Now press down fully on the button on top of the connector. Use a pair of pliers if the button on the connector is difficult to press down by hand.

IMPORTANT INFORMATION

Twinned cables, or a screw terminal block that is insulated with insulation tape are not satisfactory splices. Soil moisture will cause the conductors to oxidise and after a while result in a broken circuit.
3. INSTALLATION

3.5 Connecting the boundary wire

Connect the boundary wire to the charging station:

**IMPORTANT INFORMATION**
The boundary wire must not be crossed when connecting to the charging station. The end of the right hand wire must be connected to the right hand pin on the charging station and the end of the left hand wire to the left hand pin.

1. Place the cable ends in the connector:
   - Open the connector.
   - Place the wire in the connector grip.

2. Press the connector together using a pair of pliers. Press until you hear a click.

3. Cut off any surplus boundary wire. Cut 0.4" - 0.8" (1 - 2 cm) above respective connectors.

4. Press the connector onto the contact pin, marked A, on the charging station.

**IMPORTANT INFORMATION**
The right hand connector must be connected to the right hand metal pin on the charging station and the end of the left hand wire to the left connector.
3. INSTALLATION

3.6 Installation of the guide wire

The guide wire is a wire that is laid away from the charging station, for instance out towards a remote part of the working area or through a narrow passage and then connected with the boundary wire.

The guide wire is used by the mower to find its way back to the charging station but also to guide the mower to remote areas of the garden.

To ensure an even cut over the entire lawn, the mower can follow the guide wire from the charging station to the guide wire connection in the boundary wire and start mowing there. Depending on the garden layout, one should adjust how often the mower is to follow the guide wire from the charging station. See 6.4 Installation (2) on page 44.

The mower must be run at varying distances from the guide wire to reduce the risk of tracks forming when the mower follows the guide wire to/from the charging station. The area beside the wire which the mower then uses is called the Corridor.

The mower always runs to the left of the guide wire as seen facing the charging station. Thus the corridor is to the left of the guide wire. The corridor is 20” (50 cm) wide. Therefore, when installing, it is important to have at least 30” (75 cm) of free space to the left of the guide wire and at least 10” (25 cm) free space to the right of the guide wire, as seen facing the charging station.

It is not allowed to lay the guide wire closer than 12” (30 cm) from the boundary wire.

Similar to the boundary wire, the guide wire can be stapled to or buried in the ground.

**IMPORTANT INFORMATION**

Make sure that there is always at least 30” (75 cm) of free space to the left of the guide wire as seen facing the charging station.
3. INSTALLATION

Placement and connection of the guide wire

1. Draw the wire through the slot in the bottom of the charger plate.

2. Fit the connector to the guide wire in the same way as for the boundary wire in 3.5 Connecting the boundary wire. Connect it to the contact pin on the charging station that is labelled “guide”.

3. Route the guide wire at least 7 ft (2 metres) straight out from the front edge of the charging plate.
   If the guide wire must be laid in a passage:
   - the mower follows the guide wire on the same side of the wire to and from the charging station. This means that the guide wire is to the right of the mower when the mower travels to the charging station while it is to the left of the mower when the mower travels away from the station.
3. INSTALLATION

- In the passage, the guide wire must therefore be placed so that the mower has as much space in which to run as possible. The distance between the boundary wire and the guide wire must however be at least 12" (30 cm).

If the guide wire has to be installed on a steep slope, it is an advantage to lay the wire at an angle to the slope. This makes it easier for the mower to follow the guide wire on the slope.

Avoid laying the wire at sharp angles. This can make it difficult for the mower to follow the guide wire.

4. Run the guide wire to the spot on the boundary wire where you want to make the connection.

5. Lift out the boundary wire. Cut off the boundary wire using a pair of wire cutters.
6. Connect the guide wire to the boundary wire with the help of a solderless coupler:

Insert the boundary wire in each of the holes in the coupler. Insert the guide wire in the center hole in the connector. Check that the wires are fully inserted into the connector so that the ends are visible through the transparent area on the other side of the connector.

Use pliers to completely compress the button on the connector.

It does not matter which holes are used to connect each wire.

7. Staple down/bury the connector in the lawn.

---

**IMPORTANT INFORMATION**

The function of the guide wire varies depending on how the working area appears. It is therefore recommended to test the installation with the help of the function Test IN (2-3-1), see 6.4 Installation (2).

**IMPORTANT INFORMATION**

The guide wire may not cross the boundary wire, for instance a boundary wire that is laid out to an island.

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### 3.7 Checking the installation

Check the loop signal by inspecting the indicator lamp on the charging station.

- **Steady green light** = good signals.
- **Flashing blue light** = interruption in the boundary wire, no signal.
- **Flashing yellow light** = interruption in the guide wire, no guide signal.
- **Flashing red light** = interruption in the charging station's antenna plate, no remote signal available. The fault should be rectified by an authorized dealer.
- **Steady blue light** = weak signal. This may depend on the boundary wire being over 820 ft (250 m) in length or that the wire is damaged. If the mower still works, this is not a problem.
- **Steady red light** = fault in a circuit board in the charging station. The fault should be rectified by an authorized dealer.

See 9.2 Indicator light on the charging station on page 61 if the light is not a solid green.
3.8 First start-up and calibration

Before the mower is operated, a start-up sequence in the mower’s menu must be carried out as well as an automatic calibration of the guide signal. The calibration is also a good test to see that the installation of the guide wire has been done in such a way that the mower can easily follow the guide wire from the charging station.

1. Set the main switch to the 1 position.
2. Open the control panel cover by pressing the STOP button.

A start-up sequence begins when the Automower® is started for the first time. The following is requested:
- Language
- Time format
- Current time
- Date format
- Date
- Four digit PIN code. All combinations except 0000 are permitted.

IMPORTANT INFORMATION

Use Memo on page 4 to make a note of the PIN code.

3. Place the mower in the charging station as requested in the display. The mower will now start the guide calibration, by leaving the charging station and following the guide wire to the point where the guide wire is connected to the boundary wire to begin mowing there. Check that the mower can follow the guide wire all the way. If it cannot, this may be due to an incorrectly installed guide wire. In this case, check that the installation is performed as described in chapter 3.6 Installation of the guide wire on page 28.
3. INSTALLATION

3.9 Test docking with the charging station

Before using the mower, check that it can follow the guide wire all the way to the charging station and easily dock with the charging station. Perform the test below.

1. Open the control panel cover by pressing the STOP button.

2. Place the mower close to the point where the guide wire is connected to the boundary wire. Place the mower about 7ft (2 metres) from the guide wire, facing the guide wire.

3. Select Home mode by pressing the house symbol key and pressing OK when the cursor is at Home. Press Start and close the cover.

4. Check that the mower follows the guide wire all the way to the charging station and that it docks with the charging station. The test is approved only if the mower is able to follow the guide wire the entire distance to the charging station and docks at the first attempt. If the mower is unable to dock on the first attempt, it will automatically try again. The installation is not approved if the mower needs two or more attempts to dock with the charging station. In this case, check that the charging station, the boundary wire and the guide wire are installed in accordance with the instructions in Chapters 3.2, 3.4 and 3.6.

5. The mower will stay in the charging station until Auto or Man mode is selected. See 5.1 Operation selection on page 39.

The guide system must first be calibrated if the above test is to provide a satisfactory result. See 3.8 First start-up and calibration on page 32.
4. Use

4.1 Charging a discharged battery

When Husqvarna Automower® is new or has been stored for a long period the battery will not be charged and needs to be charged before starting. Charging takes approximately 80 to 100 minutes.

1. Set the main switch to the 1 position.
2. Place Automower® in the charging station. Open the cover and slide the mower in as far as possible to ensure proper contact between the mower and the charging station.

3. The display shows a message that charging is in progress.

---

WARNING

Read the safety instructions before you start your Automower®.

WARNING

Keep your hands and feet away from the rotating blades. Never put your hands or feet close to or under the body when the motor is running.
4. USE

4.2 Using the timer

The lawn should not be cut too often to obtain the best mowing result. Use the timer function (see 6.3 Timer (1) on page 43 to avoid a downtrodden lawn and to get the maximum life from your Automower®. When setting the timer, calculate that the Automower® mows around 30 m² (323 sq ft) per hour. For example; if the working area is 359 square yards (300 m²), the mower must operate for 10 hours a day.

The factory setting for the timer is 07:00-23:00 and it can operate every day of the week. This setting is suitable for a working area of about 598 square yards (500 m²).

The Automower® has an inbuilt rest period of at least 8 hours a day. For instance, the rest period provides a good opportunity to water the lawn or to play games on the lawn.

If the timer setting is divided into two work periods, the rest period can be divided into a number of periods. The maximum operating time can however be a maximum of up to 16 hours. When in operation, the mower alternates between mowing and charging.

Example 1
Work period 1: 07:00 - 23:00
Weekdays: All days
The factory setting ensures that the mower begins cutting the lawn at 07:00. The mower is parked in the charging station from 22:00 and rests until it starts cutting again at 07:00

Example 2
Work period 1: 08:00 - 16:00
Work period 2: 20:00 - 23:00
Weekdays: All days
The mower will operate for the times specified in the work period as long as the total operating time is 11 hours and does not exceed the maximum of 16 hours.

Example 3
Work period 1: 20:00 - 06:00
Weekdays: Monday to Saturday
The mower will operate from Monday 00:01 to Monday 06:00. It starts again on Monday 20:00 and mows at night until 06:00. It continues to mow at night until Saturday 23:59. It rests on Sunday and starts again on Monday 00:01.

The above times are approximate. For instance, the times depend on the grass quality, blade sharpness and the age of the battery.

If the size of the working area allows it, the quality of the grass can be further improved if it is cut every other day instead of a few hours every day. In addition, the grass benefits from resting completely during at least a three-day period once a month.
4. USE

4.3 Starting

1. Set the main switch to the 1 position.
2. Press the STOP button to open the control panel cover.
3. Enter the PIN code.
   The PIN code request can be disabled. For more information about theft protection, see 6.5 Security (3).
4. Push the Start button.
5. Shut the cover within 10 seconds.

If the mower is parked in the charging station, it will only leave the charging station when the battery is fully charged and if the timer is set to allow the mower to operate.

Before the blade disc starts, 5 beeps are heard for 2 seconds.

4.4 Stopping

1. Press the STOP button.
   Automower® stops, the blade motor stops and the control panel cover opens.

Restart

1. Push the Start button.
2. Shut the cover within 10 seconds. Automower® starts automatically.

4.5 Switching off

1. Press the STOP button.
2. Set the main switch to the 0 position.

Always switch Automower® off using the main switch if it requires maintenance or if the mower must be moved outside the working area.
4. USE

4.6 Adjusting the cutting height

The cutting height can be varied from MIN 0.8" (2 cm) to MAX 2" (5 cm).

During the first week after a new installation, the cutting height must be set to MAX to avoid damaging the loop wire. After this, the cutting height can be lowered one step every week until the desired cutting height has been reached.

If the grass is long it is appropriate to let Automower® start mowing at the MAX cutting height. Once the grass is shorter, you can gradually lower the cutting height.

To adjust the cutting height:

1. Press the STOP button to stop the mower and open the cover.

2. Turn the height adjustment knob to the required position. The selected position is indicated by the orange column that can be seen by the knob through the window.
   • Turn anti-clockwise to raise the cutting height.
   • Turn clockwise to lower the cutting height.
5. Control panel

All forms of commands and settings for Husqvarna Automower® are made via the control panel. All functions are accessed via a number of menus.

The control panel consists of a display and a keypad. All information is shown on the display and all input is done using the buttons.

When the stop button has been pressed and the cover is opened, the operation window appears to display the clock, selected operating mode, number of mowing hours, battery status and timer setting.

- The clock shows the current time.
- Date shows the current day.
- The number of operating hours indicates the number of hours since the day of manufacture that Automower® has been in operation. The time that Automower® has spent mowing or looking for the charging station is counted as operating time.
- The texts AUTO, MAN or HOME show which mode of operation is selected.
- The battery status shows the remaining battery charge.
- The clock icon indicates when the timer settings are set. The clock icon is black when the mower is not allowed to mow due to a timer setting and it is white when the mower is allowed to cut.
- The MENU text illustrates that the main menu can be reached by pressing the multi-choice button that is located under the text.

The keypad consists of four groups of buttons: operation selection button, multi-choice buttons, numbers and start button.
5. CONTROL PANEL

5.1 Operation selection

The operation selection button is symbolised by a house. When the button has been pressed, the selected operation mode is shown in the display. By consecutively pressing the button many times, one can choose between three different operation modes.

1. **HOME:**
   Sends the mower to the charging station. It remains here until another operation mode is selected. The text *Home* is shown in the operation window. When the battery is fully charged, the mower will remain parked in the charging station.
   
   The Home setting is also used after a new installation or after changes are made to an existing installation to test if the mower can follow the guide wire and dock with the charging station. See 3.9 Test docking with the charging station on page 33.

2. **AUTO:**
   The standard, automatic operation mode where Automower® mows and charges automatically.

3. **MAN:**
   When cutting secondary areas (see 3.4 Installation of the boundary wire on page 21) the MAN setting must be used.
   
   If MAN is selected and the mower is started when it is out on the lawn, it will mow until the battery runs down. It will then stop and the 'Needs manual charging' message will appear. The mower must then be moved manually to the charging station and then started manually after charging.
   
   If the mower charges in the MAN mode, it will fully charge, move about 8" (20 cm) out of the charging station and then stop. This indicates that it is charged and ready to start mowing.
   
   If the main working area has to be cut after charging, it is appropriate to switch the operation mode to Auto before placing the mower in the charging station.

5.2 Multi-choice buttons

The three multi-choice buttons offer various functions, among others depending on where in the menu structure you are. The button function is shown at the very bottom of the display.

Example: If you are in the main menu, the left button can be used to go back, the middle button confirms any selections and the right button helps you to scroll the menu.
5.3 Numbers

The number keys are used for instance to enter the PIN code or time settings.

The number keys can also be used to enter a number series for shortcuts to the various menus. For more information on number series, see 6.1 Main menu on page 41.

5.4 Main switch

Set the main switch in the 1 position to start Automower®.

Set the main switch in the 0 position when the mower is not in use or work is being carried out on the blade disc.

When the main switch is set in the 0 position the motors on the mower cannot start.
6. Menu functions

6.1 Main menu

The main menu consists of four options:

- **Timer (1)**
- **Installation (2)**
- **Security (3)**
- **Settings (4)**

There are a number of submenus under each option. You can access all the functions to set Automower® settings via these.

**Browse between menus**

Browse the main menu and submenus using the multi-choice buttons. Enter values and times using the number keys and confirm each selection with the multi-choice button marked OK. Press the multi-choice button with the return arrow to go up a step in the menu or keep the Home button pressed in for 2 seconds to go directly back to the main menu.

**Number series**

A number series can be used as a shortcut to a certain function.

The first number in the series refers to the selection in the main menu. The second number refers to the first sub-menu, etc.

For example: Press 2 followed by 1 in the main menu to show the submenu Guide width.

The headings on the following pages include respective number series within brackets.

**Submenus**

Certain submenus contain options that are ticked off to the left. This means that these options are selected.

In some of the submenus there is information to the right of specific rows. This information indicates which selection has been made for the function.
6. MENU FUNCTIONS

6.2 Menu structure

- **Timer**
  - Work period 1
  - Work period 2
- **Installation**
  - Guide width
  - Test settings
  - Drivepast Wire
- **Security**
  - Change PIN code
  - Security level
  - New loop signal
- **Language**
  - Time & Date
  - Date format
  - Set date
  - Set time
- **Settings**
  - Return to customer settings
  - Date & Time
  - Language
  - Set PIN code
- **Timer**
  - Work period 1: 2 days
  - Work period 2: 2 days
- **Drivepast Wire**
  - Test in
  - Test out
  - Distance
  - Proportion
  - Drivepast Wire
- **Guide width**
  - Narrow
  - Medium
  - Wide
  - Never
  - Occasionally
  - Often
  - Always
- **Security level**
  - Low
  - Medium
  - High
- **Language**
  - Set date
  - Set time
  - Time format
  - Date format

- **Timer**
  - Work period 1
  - Work period 2
  - Work period 1: 2 days
  - Work period 2: 2 days
  - Drivepast Wire
  - Test in
  - Test out
  - Distance
  - Proportion
  - Drivepast Wire
  - Guide width
  - Narrow
  - Medium
  - Wide
  - Never
  - Occasionally
  - Often
  - Always
  - Security level
  - Low
  - Medium
  - High
  - Date & Time
  - Date format
  - Time format
  - Language
  - Set date
  - Set time
  - Change PIN code
  - Security level
  - New loop signal
  - Return to customer settings

- **Timer**
  - Work period 1
  - Work period 2
  - Work period 1: 2 days
  - Work period 2: 2 days
  - Drivepast Wire
  - Test in
  - Test out
  - Distance
  - Proportion
  - Drivepast Wire
  - Guide width
  - Narrow
  - Medium
  - Wide
  - Never
  - Occasionally
  - Often
  - Always
  - Security level
  - Low
  - Medium
  - High
  - Date & Time
  - Date format
  - Time format
  - Language
  - Set date
  - Set time
  - Change PIN code
  - Security level
  - New loop signal
  - Return to customer settings

- **Timer**
  - Work period 1
  - Work period 2
  - Work period 1: 2 days
  - Work period 2: 2 days
  - Drivepast Wire
  - Test in
  - Test out
  - Distance
  - Proportion
  - Drivepast Wire
  - Guide width
  - Narrow
  - Medium
  - Wide
  - Never
  - Occasionally
  - Often
  - Always
  - Security level
  - Low
  - Medium
  - High
  - Date & Time
  - Date format
  - Time format
  - Language
  - Set date
  - Set time
  - Change PIN code
  - Security level
  - New loop signal
  - Return to customer settings

- **Timer**
  - Work period 1
  - Work period 2
  - Work period 1: 2 days
  - Work period 2: 2 days
  - Drivepast Wire
  - Test in
  - Test out
  - Distance
  - Proportion
  - Drivepast Wire
  - Guide width
  - Narrow
  - Medium
  - Wide
  - Never
  - Occasionally
  - Often
  - Always
  - Security level
  - Low
  - Medium
  - High
  - Date & Time
  - Date format
  - Time format
  - Language
  - Set date
  - Set time
  - Change PIN code
  - Security level
  - New loop signal
  - Return to customer settings

- **Timer**
  - Work period 1
  - Work period 2
  - Work period 1: 2 days
  - Work period 2: 2 days
  - Drivepast Wire
  - Test in
  - Test out
  - Distance
  - Proportion
  - Drivepast Wire
  - Guide width
  - Narrow
  - Medium
  - Wide
  - Never
  - Occasionally
  - Often
  - Always
  - Security level
  - Low
  - Medium
  - High
  - Date & Time
  - Date format
  - Time format
  - Language
  - Set date
  - Set time
  - Change PIN code
  - Security level
  - New loop signal
  - Return to customer settings

- **Timer**
  - Work period 1
  - Work period 2
  - Work period 1: 2 days
  - Work period 2: 2 days
  - Drivepast Wire
  - Test in
  - Test out
  - Distance
  - Proportion
  - Drivepast Wire
  - Guide width
  - Narrow
  - Medium
  - Wide
  - Never
  - Occasionally
  - Often
  - Always
  - Security level
  - Low
  - Medium
  - High
  - Date & Time
  - Date format
  - Time format
  - Language
  - Set date
  - Set time
  - Change PIN code
  - Security level
  - New loop signal
  - Return to customer settings
6. MENU FUNCTIONS

6.3 Timer (1)

The lawn should not be cut too often to obtain the best mowing result. Consequently, it is important to limit the operating time using the timer function if the working area is less than the mower’s working capacity. When Automower® is allowed to mow too much, the lawn may appear flattened. Besides, the mower is subjected to unnecessary wear.

The timer function is also an ideal means to control during which periods Automower® should not mow, for example, when the children are playing in the garden.

The factory setting is 07:00 - 23:00 and it allows mowing every day of the week. This is normally a suitable setting for a 598 square yard (500 m²) working area.

When setting the timer, calculate that the robot lawn mower mows about 323 square feet (30 m²) per hour and day.

- **Work hours 1**
  to set start and stop times for operating period 1. Enter each required time in hours and minutes and press **OK** to confirm the entered time.

- **Work hours 2**
  to set start and stop times for operating period 2. Enter each required time in hours and minutes and press **OK** to confirm the entered time.
  Bypass timer (2-1)

- **Work days (2-3)**
  to select the days the mower must work. Automower® will work during the days that are ticked off.

- **Reset timer (2-4)**
  resets values to the factory settings.

To inactivate Work period 1 or Work period 2, enter the time 00:00 - 00:00 to reset the timer to --:-- - --:--.

A clock icon is displayed on the start page when the timer settings are set. The clock icon is black when the mower is not allowed to mow due to a timer setting and it is white when the mower is allowed to cut.

The mower has an inbuilt rest period of at least 8 hours a day. The mower is parked in the charging station during this period. See **4.2 Using the timer** on page 35.
6.4 Installation (2)

The following operating settings are available via this selection in the main menu.

- **Guide width (2-1)**
  to select the distance from the guide wire the mower is allowed to travel when it follows this to and from the charging station.

- **Remote start (2-2)**
  to control the mower so that it can easier reach remote parts of the garden.

- **Test settings (2-3)**
  to check the above settings.

- **Drive past wire (2-4)**
  to set the distance over the boundary wire that the mower should drive.

For examples of garden settings, see 7. *Garden example*

**Guide width (2-1)**

The guide width is a measure of how far from the guide wire the mower is allowed to travel when it follows the guide wire to and from the charging station. The area beside the wire which the mower then uses is called the Corridor.

Automower® has a default setting for medium wide corridors. To further reduce the risk of tracks forming, it is recommended to select a wide corridor in working areas where it is possible to do so.

### IMPORTANT INFORMATION

*Always use as wide a guide width as possible. The Narrow setting must only be used when none of the other settings can be used in the working area in question.*

**Wide (2-1-1)**

In a wide corridor, Automower® mows at various distances to the guide wire.

A garden that is open and free of narrow passages should have a wide corridor to minimise the risk of tracks forming.

**Medium (2-1-2)**

In a medium wide corridor, Automower® travels close to and far away from the guide wire, but not as far away from the guide wire as is the case when a wide corridor is selected.

The medium corridor setting should be selected for a garden with obstacles close to the guide wire and/or passages that do not allow for a wide corridor.
Narrow (2-1-3)

With a narrow corridor, Automower® runs straight over the guide wire.

The Narrow corridor setting is not normally recommended, but in a garden with one or many narrow passages, a narrow corridor may be the only option. The Narrow corridor setting increases the risk for tracks forming along the guide wire.

IMPORTANT INFORMATION

The distance the mower maintains from the guide wire varies depending on the layout of the working area. Use the Test IN (2-3-1) function to ensure that the wide corridor setting can be used in the garden in question.

Remote start (2-2)

One important function with the guide wire is the capacity to steer the mower to remote garden areas when required. This function is very useful in gardens where, for instance, the front and back are joined by a narrow passage.

With this function activated, (any option other than Never is selected) the mower will at times follow the guide wire from the charging station to the remote area and begin cutting there.

• Proportion (2-2-1)
  How often the mower must follow the guide wire from the charging station is selected as a proportion of the total number of times it leaves the charging station. At all other times, the mower leaves the charging station in the standard manner and starts to cut.

  The following five options can be selected;
  - Never (0 %)
  - Rarely (approx. 20 %)
  - Average (approx. 50 %)
  - Often (approx. 80 %)
  - Always (100 %)

  Select the percentage that corresponds to the size of the remote area relative to the total working area. For instance, if the remote area is less than half of the total working area, then Rarely must be selected. For example, if the remote area is half of the total working area, Average must be selected. Compare with the examples in 7. Garden example on page 50.

  The default setting is Rarely.
6. MENU FUNCTIONS

- Distance (2-2-2)
  Enter the distance in metres from the charging station along the guide wire to the remote area where the mower begins mowing.
  Tip! Use the Test OUT (2-3-2) function to determine how far it is to the remote area. The distance, stated in metres, will be shown in the mower display.

Test settings (2-3)

In the Test settings menu, it is possible to test settings for Remote start (2-2) and to test that the selected guide width works for the garden in question.

Test IN (2-3-1)

The Test IN (2-3-1) function allows you to test how well the Automower® docks with the charging station.

Test IN (2-3-1) can only be performed after Test OUT (2-3-2) has been performed.

Selecting this function causes the mower to travel directly along the guide wire towards the charging station and dock with it. The test is approved only if the mower is able to dock with the charging station at the first attempt. If the mower is unable to dock on the first attempt, it will automatically try again. The installation is not approved if the mower needs two or more attempts to dock with the charging station.

Test OUT (2-3-2)

The Test OUT (2-3-2) function is used to test exit settings and to calculate the distance from the charging station to a remote area.

To test the settings for Remote start (2-2):

Park Automower® in the charging station and select Test OUT (2-3-2). The mower will then leave the charging station straight away along the guide wire and begin mowing after the designated distance.

If there is a passage that the mower cannot get through, the settings in Guide width (2-1) should be changed from Wide to Medium. If required, the setting can also be changed to Narrow. The Narrow guide width setting should only be used if none of the other settings work for this installation. When the Test OUT function is activated, the mower travels the farthest distance from the wire which is allowed by the selected guide width.

The figure here shows how the Automower® travels through a passage when Guide width is set to Medium and not to Wide.

To find out the distance from the charging station to a remote area:
State a distance that easily exceeds the true distance. The maximum distance that can be stated is 165 ft (500 metres). Place Automower® in the charging station and select Test OUT (2-3-2). The mower will immediately leave the charging station. The distance will be shown on the display, stated in metres, as the mower runs. Stop the mower at the required position and note the distance. Enter the number of metres shown in Distance for the area in question.

**Drive past wire (2-4)**

The front of the mower always passes the boundary wire by a specific distance before the mower turns. The default distance is 10” (25 cm), but this can be changed if required. The minimum value is 10” (25 cm) and the maximum value is 12” (30 cm).

Now specify the number of centimeters you want the mower to pass the boundary wire and press OK.

**6.5 Security (3)**

Through this selection, settings relating to security and the connection between the mower and the charging station can be made.

**Change PIN code (3-1)**

Enter the new PIN code and press **OK**. Enter the same code again and confirm by pressing **OK**. When the PIN code is changed, a message stating that the PIN code has been changed appears in the display momentarily.

Make a note of the new PIN code on the designated line in Memo on page 4.

**Security levels (3-2)**

There are three security levels to choose from: low, medium and high. Low and medium security prohibits access to Automower® if the PIN code is unknown. High security also includes a warning that sounds if the correct PIN code is not entered after a designated time period.
6. MENU FUNCTIONS

<table>
<thead>
<tr>
<th>Function</th>
<th>Low</th>
<th>Medium</th>
<th>High</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time lock</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>PIN request</td>
<td></td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Alarm</td>
<td></td>
<td></td>
<td>X</td>
</tr>
</tbody>
</table>

**IMPORTANT INFORMATION**

We recommend using the High security level at all times.

**Time lock**

This function entails that Automower® cannot be started after 30 days without first entering the correct PIN code. When the 30 days has passed Automower® will continue to mow as normal, but the *Enter PIN code* message appears when the cover is opened. Enter your code again and press **OK**.

**PIN request**

This function means that the mower requests a PIN code when the main switch is set to 1 and each time the cover is opened. The correct PIN code must be entered to use the mower.

If the wrong PIN code is entered 5 times in succession the mower will be blocked for a period. The blockage time is extended for every new incorrect attempt.

**Alarm**

This function means that an alarm sounds if the PIN code is not entered within 10 seconds after the STOP button has been pressed or the mower has been lifted up for any reason. A ticking noise indicates that the PIN code must be entered to prevent triggering the alarm. The alarm can be turned off at any time by entering the correct PIN code.

**New loop signal (3-3)**

The loop signal is randomly selected to create a unique link between the mower and the charging station. In rare cases, there may be a need to generate a new signal, for instance if two adjacent installations have a very similar signal.

- Park the mower in the charging station.
- Select New loop signal in the menu and press **OK**.
6. MENU FUNCTIONS

6.6 Settings (4)

The following operating settings are available via this selection in the main menu.

- **Time & Date (4-1)**
  to set the current time and date, and the required time and date format.

- **Language (4-2)**
  to select which language is to be used in the menus.

- **Reset customer settings (4-3)**
  to reset the mower to the settings it had when it left the factory.

**Time & Date (4-1)**

- This function allows you to set current time and required time format in Automower®.

- **Time (4-2-1)**
  Enter the correct time and press OK to exit.

- **Time format (4-2-2)**
  Place the cursor at the required time format: 12h 24h. Press OK to exit.

- **Date (4-3-1)**
  Enter correct date and press OK to exit.

- **Date format (4-3-2)**
  Place the cursor at the required date:
  YYYY-MM-DD (year-month-day)
  MM-DD-YYYY (month-day-year)
  DD-MM-YYYY (day-month-year).
  Press OK to exit.

**Language (4-2)**

Set language with this function.

To select language: Place the cursor at Language and press OK. Place the cursor at the required language and press OK.

**Reset customer settings (4-3)**

This function allows you to reset Automower® to the default settings it had when it left the factory.

- Select **Reset customer settings** in the menu and press OK. Enter the correct PIN code and press OK.
7. Garden example

- Proposed installation and settings

The mower’s behaviour is controlled to a certain extent by what settings are made. Adapting the mower’s garden settings according to the shape of the garden makes it easier for the mower to regularly reach all parts of the garden and in doing so achieve a perfect mowing result.

Different gardens require different settings. The following pages outline a number of examples of gardens with installation and setting proposals.

There are more garden examples on www.automower.com.

For more detailed information about the various settings, see chapter 6. Menu functions.

**IMPORTANT INFORMATION**

The default setting for the robotic lawn mower has been chosen to work in as many different gardens as possible. The settings only need to be adjusted when special installation conditions exist.

### Proposals for installation and settings

<table>
<thead>
<tr>
<th>Area</th>
<th>180 square yards (150 m²). Open and level area.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Timer</td>
<td>07:00 - 17:00 Monday, Tuesday, Wednesday, Friday</td>
</tr>
<tr>
<td>Proportion</td>
<td>Never</td>
</tr>
<tr>
<td>Guide width</td>
<td>Wide</td>
</tr>
<tr>
<td>Remarks</td>
<td>The timer should be used to prevent the grass looking trampled since the area is less than the maximum capacity of the mower.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Area</th>
<th>598 square yards (500 m²). Open area.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Timer</td>
<td>07:00 - 23:00 (factory setting) Monday-Sunday</td>
</tr>
<tr>
<td>Proportion</td>
<td>Never</td>
</tr>
<tr>
<td>Guide width</td>
<td>Wide</td>
</tr>
<tr>
<td>Remarks</td>
<td>Open area without difficult obstacles.</td>
</tr>
</tbody>
</table>
## 7. GARDEN EXAMPLE

### Proposals for installation and settings

<table>
<thead>
<tr>
<th>Area</th>
<th>Timer</th>
<th>Proportion</th>
<th>Guide width</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>598 square yards (500 m²)</td>
<td>07:00 - 23:00 (factory setting) Monday-Sunday</td>
<td>Rarely (factory setting)</td>
<td>Medium</td>
<td>Place the charging station in the lower part of the working area. Lay the guide wire at an angle over the steep slope.</td>
</tr>
<tr>
<td>240 square yards (200 m²)</td>
<td>07:00 - 23:00 Monday, Tuesday, Wednesday, Friday</td>
<td>Often</td>
<td>Medium</td>
<td>As most of the working area can easily be reached by the mower following the guide wire out from the charging station, select Proportion: Often.</td>
</tr>
<tr>
<td>300 square yards (250 m²)</td>
<td>07:00 - 23:00 Monday - Friday</td>
<td>Medium</td>
<td>Medium</td>
<td>The guide wire must be placed along the narrow passage to ensure the mower can locate the charging station with ease from the left hand side of the working area. As the left hand area is nearly half of the total area, select Proportion: Medium.</td>
</tr>
</tbody>
</table>
## 7. GARDEN EXAMPLE

### Proposals for installation and settings

<table>
<thead>
<tr>
<th>Area</th>
<th>180 square yards (150 m²). Unsymmetrical working area with a narrow passage and a number of islands.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Timer</td>
<td>07:00 - 17:00 Monday, Tuesday, Wednesday, Friday</td>
</tr>
<tr>
<td>Proportion</td>
<td>Rarely (factory setting)</td>
</tr>
<tr>
<td>Guide width</td>
<td>Medium</td>
</tr>
<tr>
<td>Remarks</td>
<td>The guide wire must be placed along the narrow passage to ensure the mower can locate the charging station with ease from the right hand side of the working area. As the right hand area is a small fraction of the total area, select <em>Proportion: Rarely.</em></td>
</tr>
</tbody>
</table>

### Area

| 240 square yards + 60 square yards (200 m² + 50 m²) in a secondary area. |
| 07:00 - 18:00 Monday, Tuesday, Thursday, Friday |
| *Proportion: Never* |
| *Guide width: Wide* |
| *Remarks: The secondary area is cut using the MAN mode on Wednesday and Saturday.* |
8. Maintenance

Check and clean Husqvarna Automower® regularly and replace worn parts if necessary to improve operating reliability and to ensure a longer service life. See 8.5 Transport and removal on page 55 for more details on cleaning.

When Automower® is first used, the blade disc and blades should be inspected once a week. If the amount of wear during this period has been low, the inspection interval can be increased.

It is important that the blade disc rotates easily. The edges of the blades should not be damaged. The product life of the blades varies immensely and depends for instance on:

- Operating time and size of the working area.
- Type of grass.
- Type of soil.
- The presence of objects such as cones, windfalls, toys, tools, stones, roots and the like.

The normal life is 1 to 3 months when used in areas more than 360 square yards (300 m²) in size and longer for smaller areas. See 8.7 Blades on page 56 on how to replace the blades.

**IMPORTANT INFORMATION**

Working with dull blades gives a poorer mowing result. The edges of the grass are not cut clean and more energy is needed resulting in Automower® not mowing such a large area.

8.1 Winter storage

Automower®

Automower® must be cleaned carefully before putting it away for the winter, see 8.4 Cleaning on page 54. Charge the battery fully before winter storage. Then set the main switch to 0.

Inspection of components for wear such as mower blades and rear wheel bearings. Rectify if necessary to make sure the mower is in good condition prior to the next season.

Store the mower upright in a dry area free from frost, preferably in the mower's original packaging.
8. MAINTENANCE

Charging station
Store the charging station and transformer indoors. The boundary wire and the guide wire can be left in the ground. The ends of the wires should be protected from dampness by putting them in a container with grease.

8.2 Service
Leave your Automower® to a dealer for service prior to winter storage. This is essential in order to keep the mower in a good condition.
• Service usually includes the following:
  • Thorough cleaning of the body, the chassis, the blade disc and all other moving parts.
  • Testing of the mower’s function and components.
  • Checking and if required replacement of wear items such as blades and bearings.
  • Testing of the mower’s battery capacity as well as a recommendation of change if necessary.
  • If necessary the dealer can also load Automower® with new software, possibly including newly added features.

8.3 After winter storage
During a service the dealer can clean the mower thoroughly, test its function and components as well as replace wear parts if necessary. If the charging strips or contact strips appear to be burnt, clean them using fine grade emery cloth. Check that the mower’s time and date are correct.

8.4 Cleaning
It is important to keep Automower® clean. A mower with large amounts of grass stuck to it will not cope as well with slopes. It is recommended to clean using a brush and a spray with water.

IMPORTANT INFORMATION
Never use a high-pressure washer or even running water to clean Automower®. Solvent must never be used when cleaning.

Underframe and blade disc
1. Set the main switch to the 0 position.
2. Wear protective gloves.
3. Lift Automower® onto its side.
4. Clean the blade disc and underframe using, e.g. a dish-brush.

At the same time, check that the blade disc rotates freely in relation to the foot protection cover.

If long blades of grass or other objects find their way in, these may impede the blade disc. Even a slight braking effect leads to a higher consumption of energy and longer mowing times, and at the worst will prevent the mower from being able to mow a large lawn. The blade disk must be removed to carry out a more thorough cleaning. If necessary, contact your dealer.

Chassis
Clean the underside of the chassis. Brush or wipe with a damp cloth.

Wheels
Clean around the front wheels and rear wheel as well as the rear wheel support unit.

Body
Use a damp, soft sponge or cloth to clean the body. If the body is very dirty it may be necessary to use a soap solution or washing-up liquid.

Charging station
Clean the charging station regularly of grass, leaves, twigs and other objects which may impede docking.

8.5 Transport and removal
Secure the machine during transport. It is important that Automower® does not move when it is being transported, for instance, between lawns.

8.6 In the case of thunderstorms
To reduce the risk of damage to components in the Automower®, we recommend that all connections to the charging station be disconnected (power supply, boundary wire and guide wire) if there is a risk of a thunderstorm.
8. MAINTENANCE

8.7 Blades

**WARNING**

Always use original blades and screws when replacing.
Only replacing the blades and reusing the screw can result in the screw wearing during mowing and shearing off. The blades can then be thrown out and cause serious injury.

There are three blades on Automower®, which are screwed into the blade disc. All three blades and screws must be replaced at the same time to obtain a balanced mowing system.

There are several different types of mower blades to choose from as accessories, with different features. Use Husqvarna AB approved blades only. Please contact your dealer for more information.

To replace the blades:
1. Set the main switch to the 0 position.
2. Wear protective gloves.
3. Turn Automower® upside down.
4. Remove the screw. Use a straight slot or cross-tip screwdriver.
5. Remove the blade and the screw.

8.8 Battery

The battery is maintenance-free, but has a limited life span of 2 - 4 years.

Battery life is dependent on the length of the season and how many hours per day the Automower® is used. A long season or many hours of use per day means that the battery must be replaced more often.

**IMPORTANT INFORMATION**

Fully charge the battery at the end of the season before winter storage.
Replacing the battery

If the operating times for the mower are shorter than normal between charges, this indicates that the battery is getting old and eventually needs replacing. The battery is fine as long as the mower maintains a well-cut lawn.

**IMPORTANT INFORMATION**

*Use Husqvarna's original battery only. Compatibility with other batteries cannot be guaranteed.*

1. Set the main switch to position 0.
2. Turn the mower upside down.
3. Clean around the battery cover.
4. Unscrew the four screws on the battery cover (Torx 20) and remove the battery cover.

5. Pull out the battery by pulling on the strap.
6. Set the main switch to position 0.
7. Turn the mower upside down.
8. Fit a new Husqvarna original battery. **NOTE!** Press on the contact strip to fit the battery in place.
9. Fit the battery cover. The sealing strip is reusable and does not have to be replaced.
10. Screw in place the four screws on the battery cover (Torx 20).
9. Trouble shooting

In this chapter, we have listed a number of messages which may be shown in the display if there is a malfunction. There is a proposal as to the cause and the steps to take for each message.

This chapter also presents some symptoms which can guide you if the mower does not work as expected.

More suggestions for steps to take in the event of malfunction or symptoms can be found on www.automower.com.

9.1 Messages

Below we have listed a number of messages which may be shown in the display of the Husqvarna Automower®. If the same message appears often: contact your dealer.

<table>
<thead>
<tr>
<th>Message</th>
<th>Cause</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>Left wheel motor blocked</td>
<td>Grass or other object has wrapped around the drive wheel.</td>
<td>Check the drive wheel and remove the grass or other object.</td>
</tr>
<tr>
<td>Right wheel motor blocked</td>
<td>Grass or other object has wrapped around the drive wheel.</td>
<td>Check the drive wheel and remove the grass or other object.</td>
</tr>
<tr>
<td>Blade disc blocked</td>
<td>Grass or other object has wrapped around the blade disc.</td>
<td>Check the blade disc and remove the grass or other object.</td>
</tr>
<tr>
<td></td>
<td>The blade disc lies in a pool of water.</td>
<td>Move the mower and if possible prevent the collection of water in the working area.</td>
</tr>
<tr>
<td>No loop signal</td>
<td>The transformer is not connected.</td>
<td>Check the wall socket connection and whether the miniature circuit-breaker has tripped. Check that the low voltage cable is connected to the charging station.</td>
</tr>
<tr>
<td></td>
<td>The boundary wire is not connected to the charging station.</td>
<td>Check that the boundary wire connector is fitted properly to the charging station. See 3.5 Connecting the boundary wire on page 27.</td>
</tr>
<tr>
<td></td>
<td>Boundary wire broken.</td>
<td>Find out where the break is. Replace the damaged section of the loop with a new loop wire and splice using an original connector.</td>
</tr>
<tr>
<td></td>
<td>The boundary wire is laid in the wrong direction around an island.</td>
<td>Check that the boundary wire has been laid according to the instructions in chapter 3. Installation.</td>
</tr>
<tr>
<td></td>
<td>The connection between Automower® and the charging station has been lost.</td>
<td>Park Automower® in the charging station and generate a new loop signal via Security -&gt; New loop signal (3-3).</td>
</tr>
<tr>
<td></td>
<td>Disturbances from metal objects (fences, reinforcement steel) or buried cables close by.</td>
<td>Try moving the boundary wire.</td>
</tr>
</tbody>
</table>
### 9. TROUBLE SHOOTING

<table>
<thead>
<tr>
<th>Message</th>
<th>Cause</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Trapped</strong></td>
<td>Automower® has got caught in something.</td>
<td>Free Automower® and rectify the reason for it getting trapped.</td>
</tr>
<tr>
<td></td>
<td>Automower® gets stuck behind a number of obstacles.</td>
<td>Check if there are any obstacles which make it hard for Automower® to move on from this place.</td>
</tr>
<tr>
<td><strong>Outside working area</strong></td>
<td>The boundary wire connections to the charging station are crossed.</td>
<td>Check that the boundary wire is connected correctly.</td>
</tr>
<tr>
<td></td>
<td>The boundary wire is too close to the edge of the working area.</td>
<td>Check that the boundary wire has been laid according to the instructions in chapter 3. <em>Installation</em>.</td>
</tr>
<tr>
<td></td>
<td>The working area slopes too much.</td>
<td>Check that the boundary wire has been laid according to the instructions in chapter 3. <em>Installation</em>.</td>
</tr>
<tr>
<td></td>
<td>The boundary wire has been routed the wrong way around an island.</td>
<td>Check that the boundary wire has been laid according to the instructions in chapter 3. <em>Installation</em>.</td>
</tr>
<tr>
<td></td>
<td>Disturbances from metal objects (fences, reinforcement steel) or buried cables close by.</td>
<td>Try moving the boundary wire.</td>
</tr>
<tr>
<td></td>
<td>The mower finds it hard to distinguish the signal from an Automower® installation close by.</td>
<td>Park A in the charging station and generate a new loop signal via <em>Security -&gt; New loop signal</em> (3-3).</td>
</tr>
<tr>
<td><strong>Low battery voltage</strong></td>
<td>Automower® cannot find the charging station.</td>
<td>Check that the charging station and the guide wire are installed as outlined in 3. <em>Installation</em> on page 15.</td>
</tr>
<tr>
<td></td>
<td>The guide wire is broken or not connected.</td>
<td>Check that the indicator light on the charging station flashes yellow. See the solution in 9.2 <em>Indicator light on the charging station</em> on page 61.</td>
</tr>
<tr>
<td></td>
<td>The battery is spent.</td>
<td>Replace the battery. See 8.8 <em>Battery</em> on page 56.</td>
</tr>
<tr>
<td></td>
<td>The charging station's antenna is defective.</td>
<td>Check if the indicator light on the charging station flashes red. See the solution in 9.2 <em>Indicator light on the charging station</em> on page 61.</td>
</tr>
<tr>
<td><strong>Wrong PIN code</strong></td>
<td>Wrong PIN code has been entered. Five attempts are permitted, and the keypad will then be blocked for five minutes.</td>
<td>Enter the correct PIN code. Contact the local dealer if you forget the PIN code.</td>
</tr>
</tbody>
</table>
## 9. TROUBLE SHOOTING

<table>
<thead>
<tr>
<th>Message</th>
<th>Cause</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>No drive</strong></td>
<td>Automower® has got caught in something.</td>
<td>Free the mower and rectify the reason for the lack of drive. If it is due to wet grass, wait until the lawn has dried before using the mower.</td>
</tr>
<tr>
<td></td>
<td>The working area includes a steep slope.</td>
<td>Maximum guaranteed slope is 25%. Steeper slopes should be isolated. See 3.4 Installation of the boundary wire on page 21.</td>
</tr>
<tr>
<td></td>
<td>The guide wire is not laid at an angle on a slope.</td>
<td>If the guide wire is laid on a slope, it must be laid at an angle across the slope. See 3.6 Installation of the guide wire on page 28.</td>
</tr>
<tr>
<td><strong>Charging station blocked</strong></td>
<td>The contact between the charging strips and contact strips may be poor and Automower® has made a number of charging attempts.</td>
<td>Place Automower® in the charging station and check that the charging strips and contact strips make good contact.</td>
</tr>
<tr>
<td></td>
<td>An object is obstructing Automower®.</td>
<td>Remove the object.</td>
</tr>
<tr>
<td><strong>Stuck in charging station</strong></td>
<td>There is an object in the way of Automower® preventing it from leaving the charging station.</td>
<td>Remove the object.</td>
</tr>
<tr>
<td><strong>Upside down</strong></td>
<td>Automower® leans too much or has turned over.</td>
<td>Turn the mower the right way up.</td>
</tr>
<tr>
<td><strong>Needs manual charging</strong></td>
<td>Automower® is set in MAN operating mode.</td>
<td>Park the mower in the charging station. This behaviour is normal; no action required.</td>
</tr>
<tr>
<td><strong>Next start hh:mm</strong></td>
<td>The timer setting prevents the mower from operating.</td>
<td>Change the timer settings. See 6.3 Timer (1) on page 43.</td>
</tr>
<tr>
<td></td>
<td>The rest period is in progress. The mower has to be in the charging station for at least 8 hours a day.</td>
<td>This behavior is normal and no action is required.</td>
</tr>
</tbody>
</table>
### 9. TROUBLE SHOOTING

#### 9.2 Indicator light on the charging station

For a fully functional installation, the indicator light on the charging station must emit a solid green light. If something else appears, follow the troubleshooting guide below.

There is more troubleshooting help on www.automower.com. If you still need help with troubleshooting, please contact the local dealer.

<table>
<thead>
<tr>
<th>Light</th>
<th>Cause</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Solid green light</strong></td>
<td>Everything in order</td>
<td>No action required</td>
</tr>
<tr>
<td><strong>Blue flashing light</strong></td>
<td>The boundary loop is not connected to the charging station</td>
<td>Check that the boundary wire connector is fitted properly to the charging station. See 3.5 Connecting the boundary wire on page 27.</td>
</tr>
<tr>
<td></td>
<td>Break in the boundary loop</td>
<td>Find out where the break is. Replace the damaged section of the loop with a new loop wire and splice using an original connector.</td>
</tr>
<tr>
<td><strong>Yellow flashing light</strong></td>
<td>The guide wire is not connected to the charging station</td>
<td>Check that the guide wire connector is properly connected to the charging station. See 3.6 Installation of the guide wire on page 28.</td>
</tr>
<tr>
<td></td>
<td>Break in the guide wire</td>
<td>Find out where the break is. Replace the damaged section of the loop with a new loop wire and splice using an original connector.</td>
</tr>
<tr>
<td><strong>Red flashing light</strong></td>
<td>Interruption in the charging station's antenna</td>
<td>Contact the local dealer.</td>
</tr>
<tr>
<td><strong>Blue solid light</strong></td>
<td>Weak signal as the boundary wire is too long. Max length is 820 feet (250 metres).</td>
<td>No steps have to be taken if the mower operates as expected. Shorten the boundary wire by reducing the working area or replacing islands with barriers with which the mower can collide.</td>
</tr>
<tr>
<td></td>
<td>Weak signal due to damaged boundary wire</td>
<td>Since it is difficult to locate where the wire is damaged it is recommended to lay a new boundary wire for the entire working area.</td>
</tr>
<tr>
<td><strong>Red solid light</strong></td>
<td>Defective circuit card in the charging station</td>
<td>Contact the local dealer.</td>
</tr>
</tbody>
</table>
If your Automower® does not work as expected, follow the troubleshooting guide below.

There is a FAQ (Frequently Asked Questions) on www.automower.com which provides more detailed answers to a number of standard questions. If you still cannot find the reason for the fault, contact the local dealer.

<table>
<thead>
<tr>
<th>Symptom</th>
<th>Cause</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>The robotic lawnmower has difficulty docking with the charging station</td>
<td>The boundary wire is not laid in a long straight line that is far enough out from the charging station.</td>
<td>Check that the charging station has been installed according to the instructions in 3.2 Installation of the charging station on page 16.</td>
</tr>
<tr>
<td></td>
<td>The guide wire is not inserted in the slot at the bottom of the charging station.</td>
<td>It is absolutely critical for operation that the guide wire be perfectly straight and is in the correct position under the charging station. Therefore make sure that the guide wire is always in its slot in the charging station. See 3.6 Installation of the guide wire.</td>
</tr>
<tr>
<td></td>
<td>The charging station is on a slope</td>
<td>Place the charging station on a surface that is completely level. See 3.2 Installation of the charging station on page 16.</td>
</tr>
<tr>
<td>Uneven mowing results</td>
<td>Automower® works too few hours per day.</td>
<td>Increase the mowing time, see 6.3 Timer (1) on page 43.</td>
</tr>
<tr>
<td></td>
<td>The proportion setting is incorrect in relation to the layout of the working area</td>
<td>Check that the correct Proportion value is selected. See 6.4 Installation (2) on page 44.</td>
</tr>
<tr>
<td></td>
<td>Working area too large.</td>
<td>Try limiting the working area or extending the working time, see 6.3 Timer (1) on page 43.</td>
</tr>
<tr>
<td></td>
<td>Dull blades.</td>
<td>Replace all the blades and screws so that the rotating parts are balanced. See 8.7 Blades on page 56.</td>
</tr>
<tr>
<td></td>
<td>Long grass in relation to the set cutting height.</td>
<td>Increase the cutting height and then successively lower.</td>
</tr>
<tr>
<td></td>
<td>Accumulation of grass by the blade disc or around the motor shaft.</td>
<td>Check that the blade disc rotates freely and easily. If not, screw off the blade disc and remove grass and foreign objects. See 8.4 Cleaning</td>
</tr>
<tr>
<td>Automower® runs at the wrong time</td>
<td>The clock on Automower® needs to be set.</td>
<td>Set the clock, see 6.6 Settings (4) on page 49.</td>
</tr>
<tr>
<td></td>
<td>The start and stop times for mowing are incorrect.</td>
<td>Reset the start time and stop time settings for mowing, see 6.3 Timer (1) on page 43.</td>
</tr>
</tbody>
</table>
### 9. TROUBLE SHOOTING

<table>
<thead>
<tr>
<th>Symptom</th>
<th>Cause</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Automower® vibrates</strong></td>
<td>Damaged blades lead to imbalance in the cutting system.</td>
<td>Inspect the blades and screws and replace them if necessary. See 8.7 Blades on page 56.</td>
</tr>
<tr>
<td></td>
<td>Many blades in the same position lead to imbalance in the cutting system.</td>
<td>Check that only one blade is fitted at each screw.</td>
</tr>
<tr>
<td><strong>Automower® moves but the blade disc does not rotate</strong></td>
<td>Automower® is looking for the charging station.</td>
<td>No action. The blade disc does not rotate when the mower is searching for the charging station.</td>
</tr>
<tr>
<td><strong>The mower mows for shorter periods than usual between charges</strong></td>
<td>Grass or other foreign object blocks the blade disc.</td>
<td>Remove and clean the blade disc. See 8.4 Cleaning on page 54.</td>
</tr>
<tr>
<td><strong>Both the mowing and charging times are shorter than usual</strong></td>
<td>The battery is dead.</td>
<td>Replace the battery. See 8.8 Battery on page 56.</td>
</tr>
<tr>
<td></td>
<td>This behaviour is normal at low temperatures (gradual increase below 15 °C).</td>
<td>No action.</td>
</tr>
<tr>
<td><strong>The mower is parked for hours in the charging station.</strong></td>
<td>The mower must stand in the charging station for at least 8 hours a day so that the battery can rest. See 4.2 Using the timer on page 35.</td>
<td>No action.</td>
</tr>
</tbody>
</table>
9. TROUBLE SHOOTING

9.4 Finding breaks in the loop wire

Breaks in the loop wire are usually the result of unconscious physical damage to the cable such as when gardening with a shovel. In countries with ground frost, even sharp stones that move in the ground can damage the wire. Breaks can also be due to too much tension in the wire during installation.

Mowing the grass too low right after the installation can damage cable insulation. Certain damage to the insulation may not cause disruptions until several weeks or months later. To avoid this, always select the maximum cutting height the first weeks after installation and then lower the height one step at a time every second week until the desired cutting height has been reached.

A defective splice of the loop cable can also lead to disruptions during the first several weeks after the splice was made. A faulty splice can, for example, be the result of the original connector not being pressed together hard enough with a pair of pliers, or a connector of lower quality than the original connector has been used. Please first check all known splices before further troubleshooting is done.

A wire break can be located by gradually halving the distance of the loop where the break may have occurred until there is only a very short section of the wire left.

1. Make sure the indicator light in the charging station flashes blue, which indicates a break in the boundary loop. See 9.2 Indicator light on the charging station on page 61.

2. Check that the boundary wire connections to the charging station are properly connected and not damaged. Check that the indicator light in the charging station is still flashing blue.
9. TROUBLE SHOOTING

3. Connect the charging station to the power supply. Switch the connections between the guide wire and the boundary wire in the charging station.
   a) Switch connection A1 and Guide.
   If the indicator light flashes yellow, then the break is somewhere on the boundary wire between A1 and the point where the guide wire is connected to the boundary wire (thick black line in the illustration).
   
   b) Put A1 and Guide back in their original positions. Then switch A2 and Guide. If the indicator light flashes yellow, then the break is somewhere on the boundary wire between A2 and the point where the guide wire is connected to the boundary wire (thick black line in the illustration).
9. TROUBLE SHOOTING

4.  a) Assuming that the indicator light blinked yellow in test a) above. Reset all connections to their original positions. Then disconnect A2. Connect a new loop wire to A2. Connect the other end of this new loop wire somewhere at the centre of the installation.

If the indicator light is green or flashing yellow, then the break is somewhere in the wire between the disconnected end and the point where the new wire is connected (thick black line in the illustration below).

In that case, move the connection for the new wire closer to the disconnected end (roughly at the middle of the suspect wire section) and check again if the indicator light is green or flashes yellow.

Continue until only a very short section of the wire remains which is the difference between a flashing blue light and a solid green light.

b) If the indicator light flashed yellow in test 3b) above, a similar test is carried out but with the new loop wire connected to A1 instead.
5. When the break is found, the damaged section must be replaced with a new wire. The damaged section can be cut out if it is possible to shorten the boundary wire. Always use original connectors.
10. Technical data

<table>
<thead>
<tr>
<th>Data</th>
<th>Automower® 305</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dimensions</td>
<td></td>
</tr>
<tr>
<td>Length</td>
<td>22 (&quot;55 cm)</td>
</tr>
<tr>
<td>Width</td>
<td>15&quot; (39 cm)</td>
</tr>
<tr>
<td>Height</td>
<td>10&quot; (25 cm)</td>
</tr>
<tr>
<td>Weight</td>
<td>15 lbs (7 kg)</td>
</tr>
<tr>
<td>Electrical system</td>
<td></td>
</tr>
<tr>
<td>Battery</td>
<td>Specialised Lithium-Ion battery, 18 V/1.6 Ah</td>
</tr>
<tr>
<td>Transformer</td>
<td>120 V (230 V)/ 24 V</td>
</tr>
<tr>
<td>Mean energy consumption at maximum use</td>
<td>9 kWh/month with a working area of 0.12 acre (500 m²)</td>
</tr>
<tr>
<td>Noise emissions</td>
<td></td>
</tr>
<tr>
<td>Measured noise level</td>
<td>64 dB(A)</td>
</tr>
<tr>
<td>Guaranteed noise level</td>
<td>66 dB(A)</td>
</tr>
<tr>
<td>Mowing</td>
<td>Three, pivoted cutting knife blades</td>
</tr>
<tr>
<td>Blade motor speed</td>
<td>2900 rpm</td>
</tr>
<tr>
<td>Power consumption during cutting</td>
<td>20 W +/- 20 %</td>
</tr>
<tr>
<td>Cutting height</td>
<td>0.8&quot; - 2&quot; (2-5 cm)</td>
</tr>
<tr>
<td>Cutting width</td>
<td>7&quot; (17 cm)</td>
</tr>
<tr>
<td>Working capacity</td>
<td>0.12 acre (500m²) +/- 20%</td>
</tr>
</tbody>
</table>

Husqvarna AB does not guarantee full compatibility between the Automower® and other types of wireless systems such as remote controls, radio transmitters, buried electric animal fencing or similar.

11. Environmental information

The symbol on Husqvarna Automower® or its packaging indicates that this product may not be treated as household waste. It should instead be left at a suitable recycling centre to recycle its electronic components and batteries. Contact your dealer for a disassembly of the batteries.

By ensuring this product is disposed of correctly, you will help prevent potential negative consequences for the environment and human health, which could otherwise be caused by inappropriate waste handling of this product.

For more detailed information about recycling of this product, please contact your local council office, your household waste disposal service or the shop where you purchased the product.