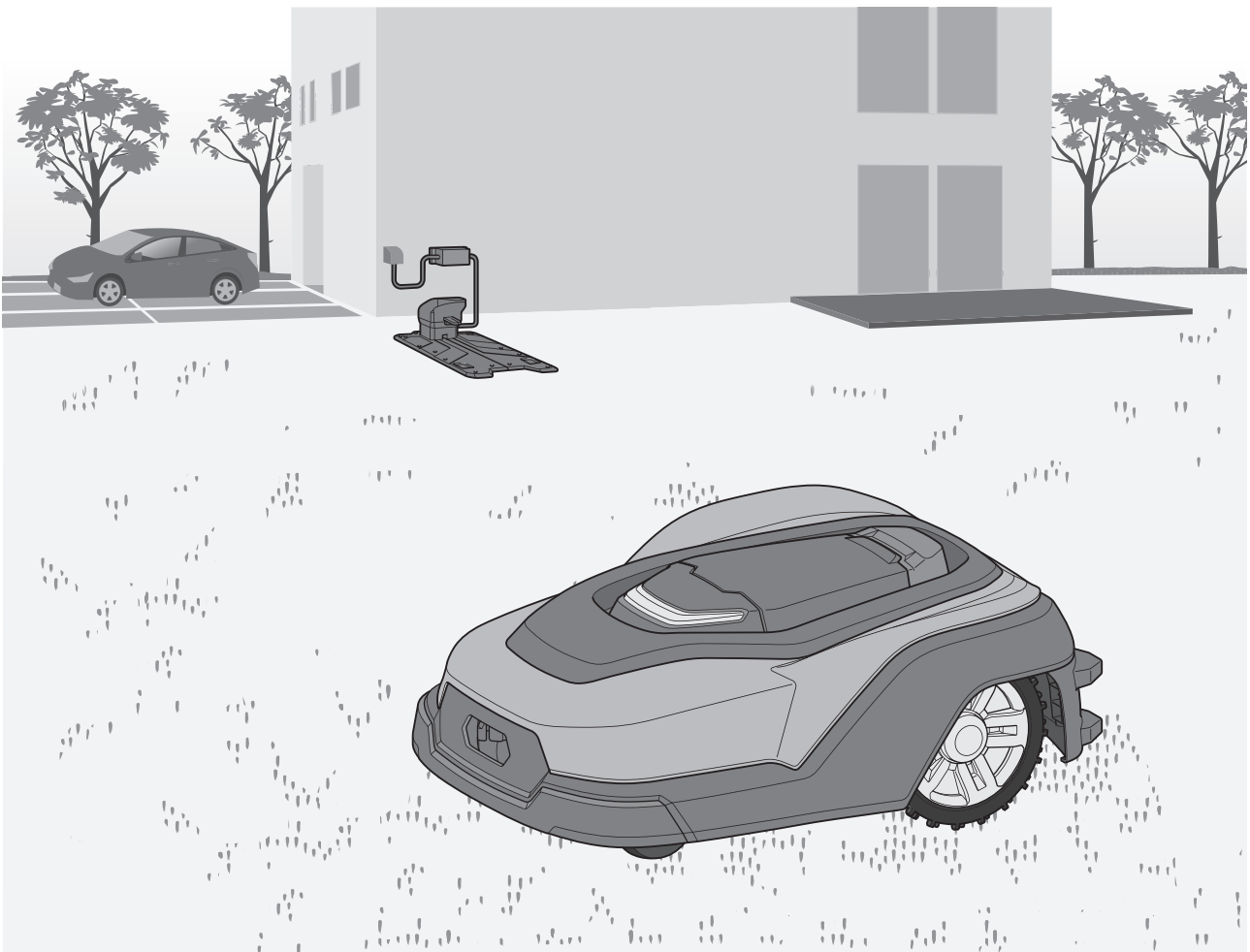




Robotic Mower Setup Guide

RM350D

Original instructions



This manual summarizes the preparations needed to use this product. Please read it together with the enclosed Instruction Manual.

Introduction

This manual is the Robotic Mower Setup Guide. This manual describes the procedures for installation of charging station, installation of boundary wire, installation of guide wire, and initial setting of the Robotic Mower. Be sure to check the Instruction Manual of this product regarding precautions for use.

About the Robotic Mower

Robotic Mower performs laborious lawn mowing automatically. This product has following main components.

- **Robotic Mower**
This is the main unit that mows the lawn. It is charged by the charging station and automatically mows the lawn within the work area.
- **Charging station**
This charges the Robotic Mower and flows signals in the boundary wire and guide wire.
- **Boundary wire**
This wire is installed around the outermost side of the work area. It lets the Robotic Mower recognize the work area in which to mow the lawn.
- **Guide wire**
This wire leads the Robotic Mower to the charging station. This wire also guides the lawn mower to areas that the lawn mower works less frequently due to topographical reasons, etc. (Installation of the guide wire is optional.)

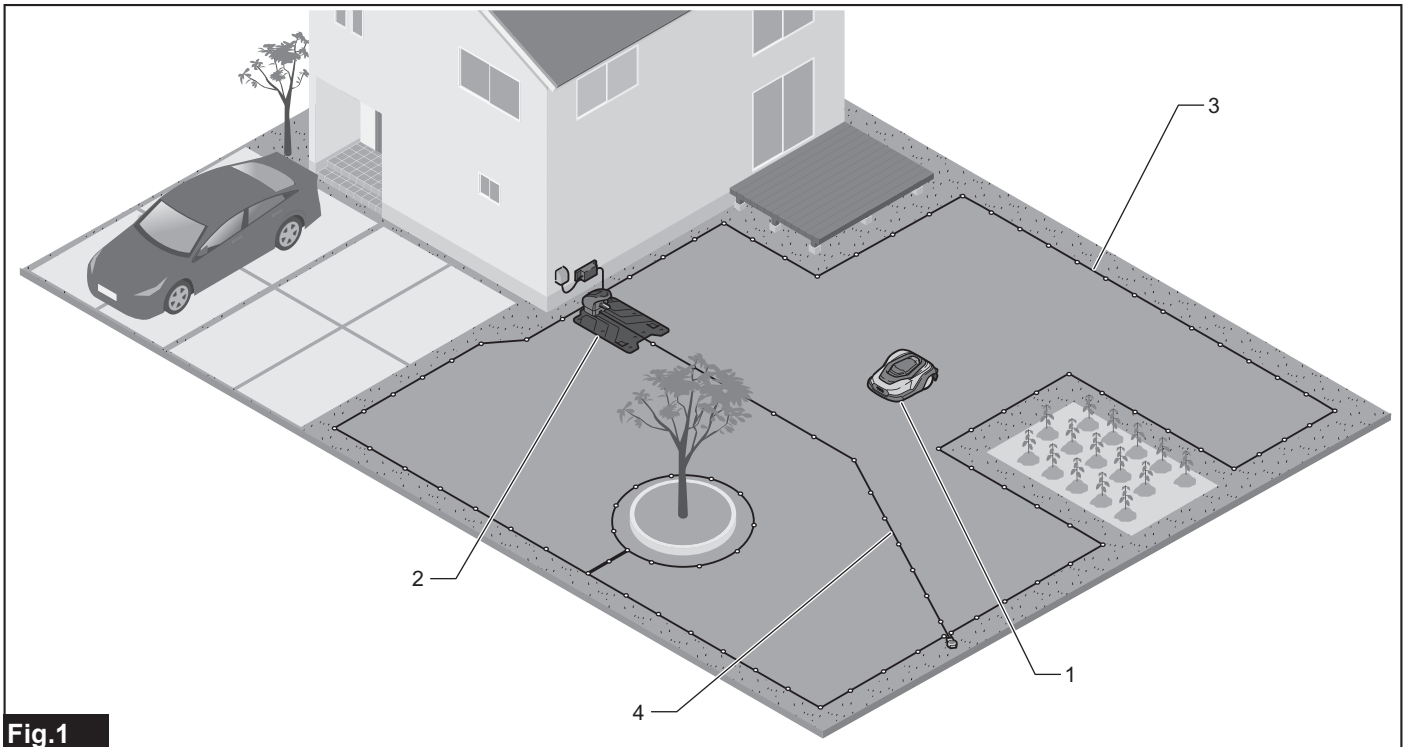


Fig.1

► 1. Robotic Mower 2. Charging station 3. Boundary wire 4. Guide wire

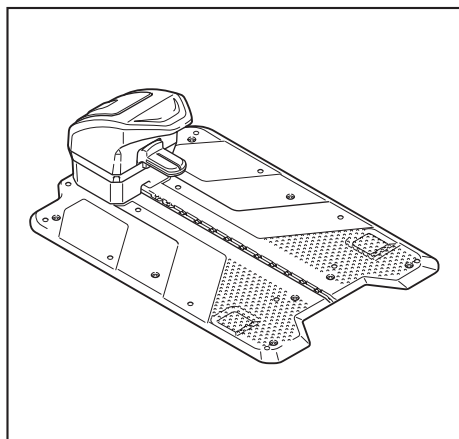
NOTE: It is recommended to make an installation drawing of the work area as illustrated above before performing the wire installation work.

Description of manuals

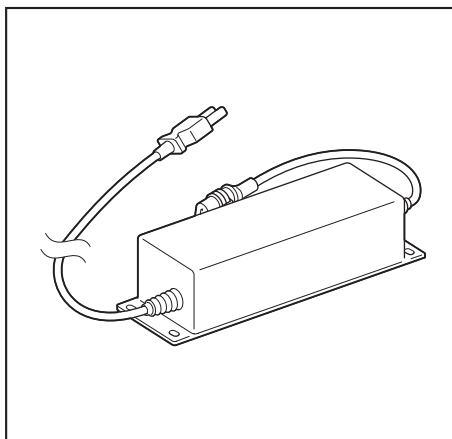
- **Setup Guide**
This describes the procedures for installation of charging station, installation of boundary wire, installation of guide wire installation, and initial setting of the Robotic Mower.
- **Instruction Manual of this product**
This describes the main functions, safety precautions, various settings, and maintenance of the Robotic Mower.

Confirming the Contents in the Package

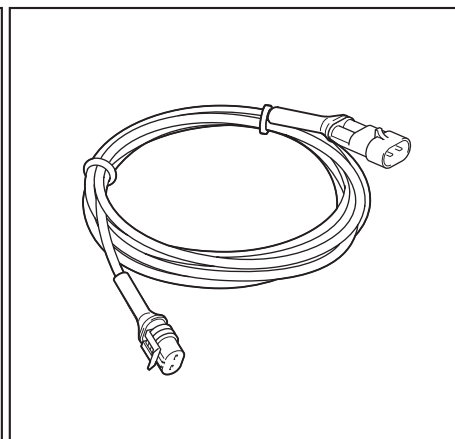
Charging station



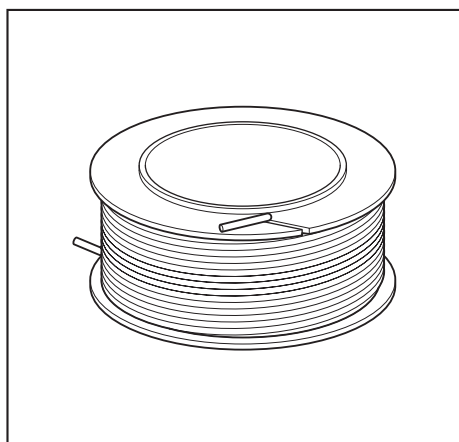
AC adapter
(The shape of the plug of the AC adapter differs depending on the country.)



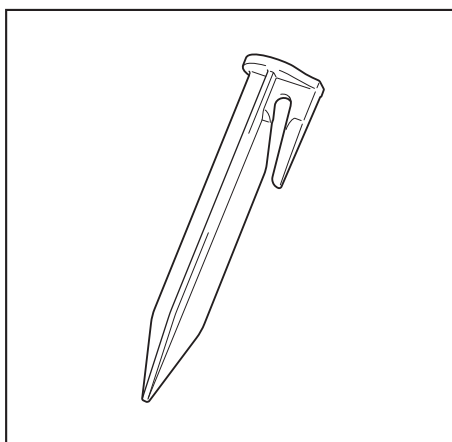
Cable



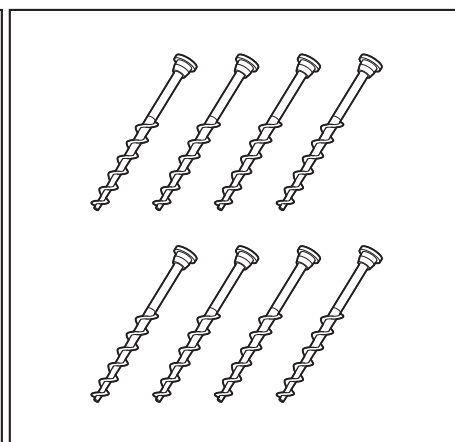
Wire (150 m)



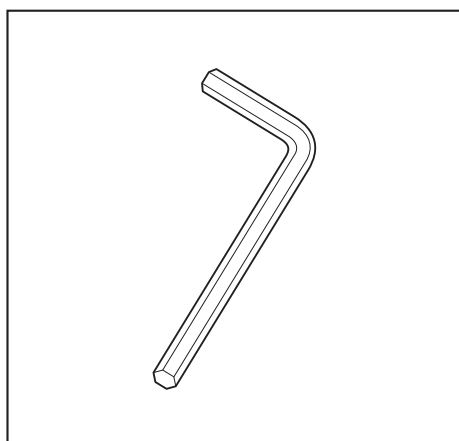
Peg (for fixing wires) 150 pcs



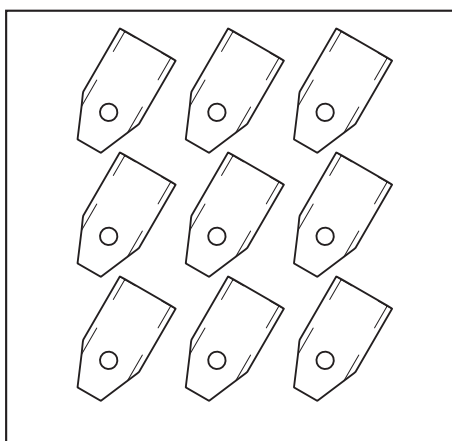
Screw peg (for fixing the charging station) (8 pcs)



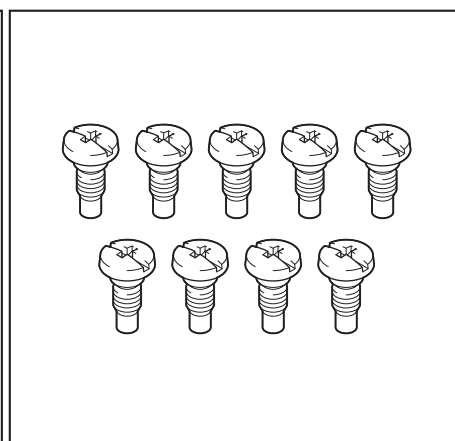
Hex wrench 6 (1 pc)



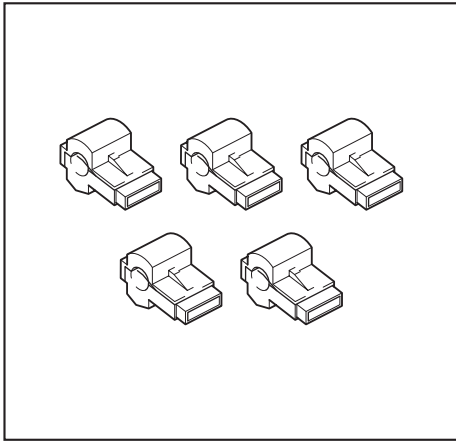
Mower blade
(total 12 pcs., 3 pcs. are installed, 9 pcs. for spare)



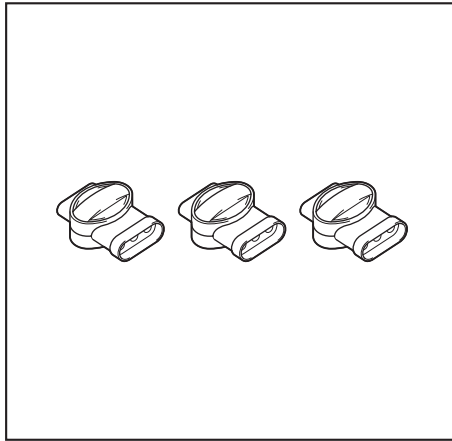
Screw (for fixing the mower blade)
(total 12 pcs., 3 pcs. are installed, 9 pcs. for spare)



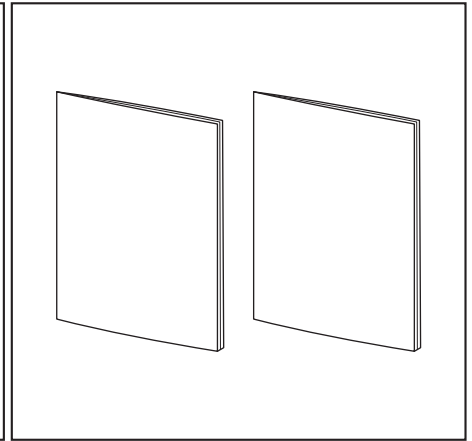
Connector (5 pcs)



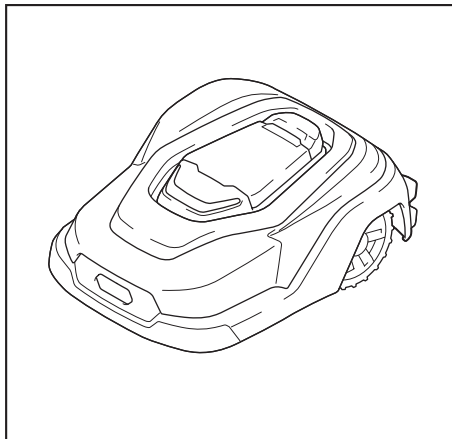
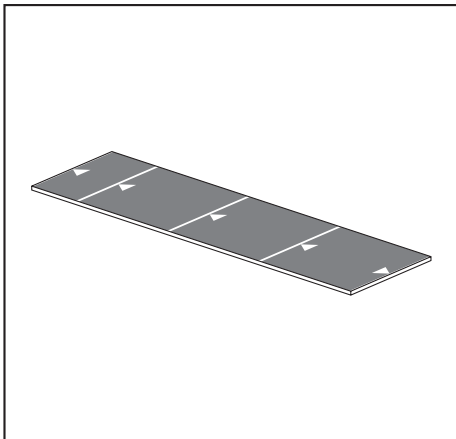
Coupler (3 pcs)



Instruction manual
Setup Guide

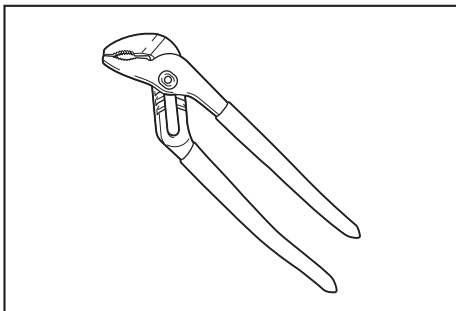


Measuring gauge (Trim out along the perforation from the package) Robotic Mower

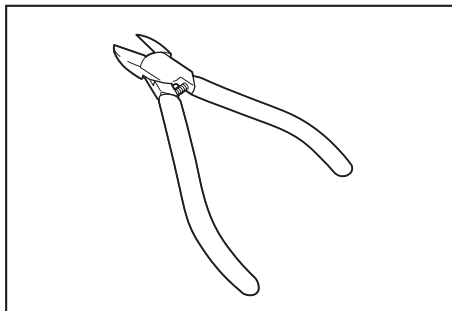


Tools Needed for Installation

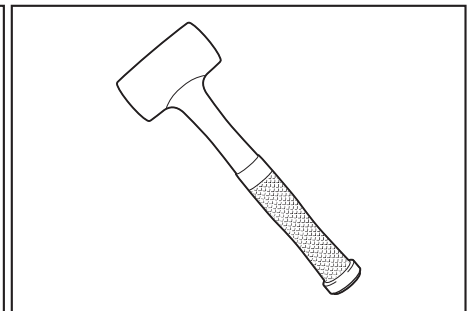
Pliers



Nippers



Plastic hammer



Carrying the Robotic Mower

- ⚠WARNING:** Make sure that the power switch of the Robotic Mower is off.
- ⚠WARNING:** Do not hold other than the grip when carrying the Robotic Mower.
- ⚠WARNING:** Do not hold the Robotic Mower with the mower blades facing you.
- ⚠WARNING:** Do not operate the Robotic Mower while other people are touching it.

1. If the Robotic Mower is operating, press the "STOP" button. The display cover opens and the Robotic Mower stops.
2. Close the display cover and press the O side of the power switch.

3. Hold the grip and lift up the Robotic Mower.

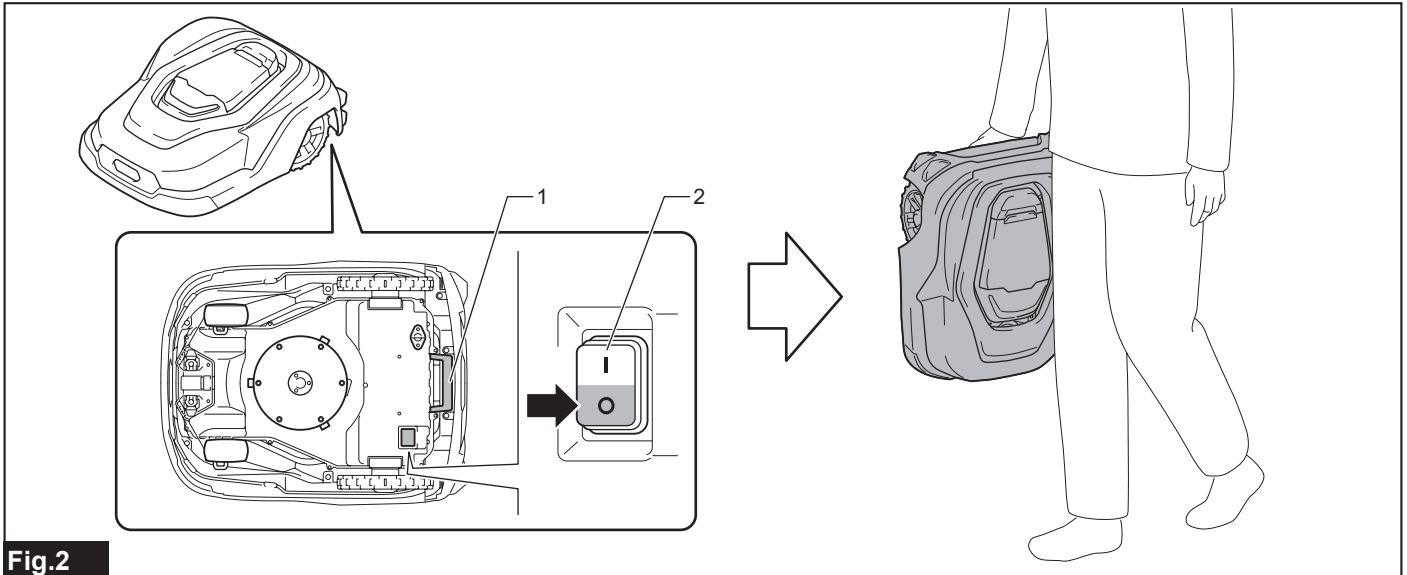


Fig.2

► 1. Grip 2. Power switch

Preparing the Work Area

Prepare as follows so as not to obstruct the auto mowing of the Robotic Mower.

- Clear away sticks, stones, and other largish objects from the work area.
- If the lawn height exceeds 65 mm, cut it down to that height or less.
- Fill in and smooth any sunken areas or places where puddles form.

Installing the AC Adapter

Choose a well-ventilated shaded place where raindrops do not fall into. Place the AC adapter keeping 30 cm or more height from the ground. It is recommended to fix the AC adapter on the wall using screws.

NOTICE: To prevent the connector from being deformed or damaged, connect the connector straight without tilting it.

NOTE: Household power supply for outdoor location that is not exposed to rain is required.

NOTE: If the installation location lacks sufficient load-bearing strength, reinforce it.

NOTE: After installing the AC adapter, unplug the power plug of the AC adapter.

NOTE: Do not chain the plural cable cables.

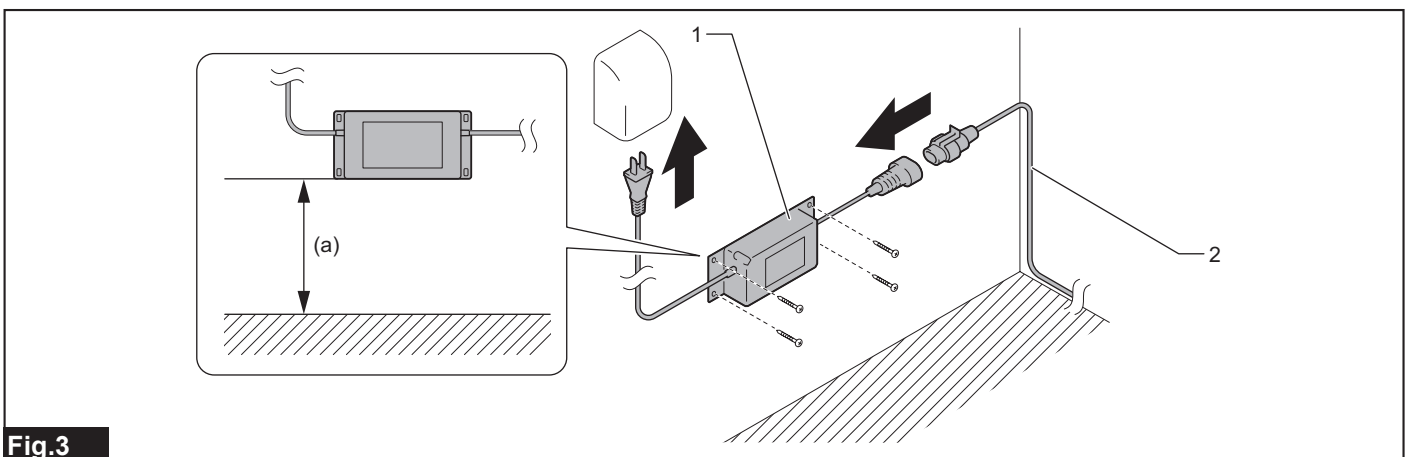


Fig.3

► 1. AC adapter 2. Cabtire cable

► a) 30 cm or more above the ground

Locating the charging station

The charging station charges the Robotic Mower and flows signals in the boundary wire and guide wire.

Charging station installation conditions

NOTICE: Do not bend the station base.

- Choose a possibly level place near from power source (within $\pm 5^\circ$).

- The place where the front end curvature of the station base is within ± 5 cm or less, and the both sides end curvatures of the station base are within ± 2 cm or less, as shown in the figure.
- Choose a place which is protected against direct sunlight.
- If the charging station is placed on the lawn, the area to be placed should be mowed short.
- There is a space of 3 m or more in front of the boundary wire.

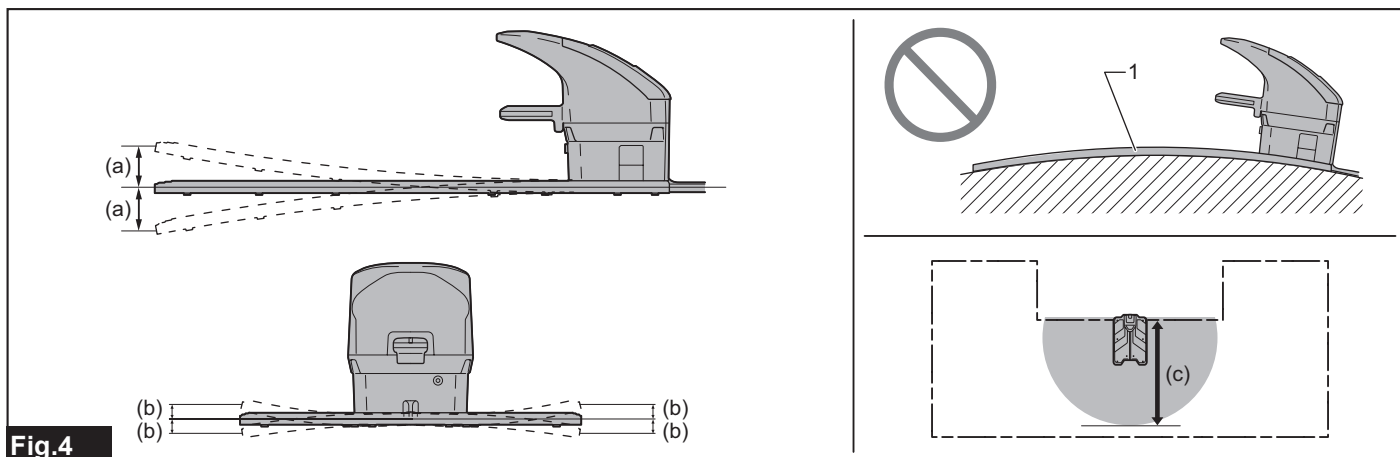


Fig.4

▶ 1. Station base

▶ a) 5 cm or less b) 2 cm or less c) 3 m or more

Determining the position of the charging station

Determine the position of the charging station by following the installation conditions.

Install the charging station so that the distance from the charging station to the power source is sufficient for the cable (10 m).

NOTE: Do not fix the charging station. You only have to decide the position of the charging station in this step.

Installing the Boundary Wire

- The boundary wire is installed around the outermost side of the area where the Robotic Mower will perform the mowing work. Install the boundary wire so that it encloses the work area in a single, unbroken line and connect both ends of the boundary wire to the charging station.
- The Robotic Mower will not operate properly if the boundary wire is not installed correctly. Be sure to install the boundary wire by following the instructions on this manual.
- If there is a metal object such as steel bar on the ground, the metal object interferes the loop signal and cause stoppage.

NOTE: There are two ways to install the boundary wire; fixing with pegs or burying in the ground (up to 20 cm). This instruction manual explains the installation using pegs.

Boundary wire installation conditions

You can set the boundary overreach of the Robotic Mower between 20 - 50 cm. This manual describes the conditions at the default setting (32 cm). For details on the setting, refer to the chapter "Navigation Preferences" in the instruction manual.

Image	Condition
<p>a) 5 cm or more b) About 35 cm</p>	<p>Separate by about 35 cm from obstacles with a height of 5 cm or more. (An area of about 25 cm from the obstacle will be left unmowed.) Use the supplied measuring gauge for making an appropriate distance from the obstacles. (Trim out the measuring gauge along the perforation from the package.)</p>
<p>a) Less than 5 cm b) About 30 cm</p>	<p>Separate by about 30 cm from obstacles with a height of less than 5 cm. (An area of about 20 cm from the obstacle will be left unmowed.)</p>

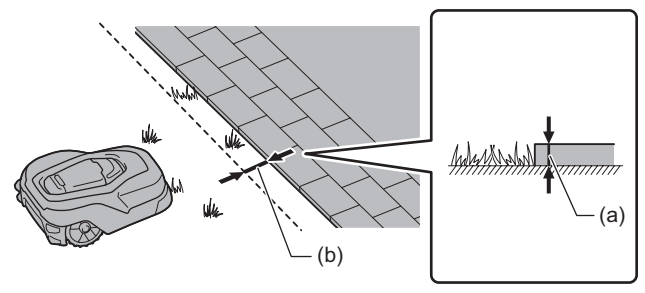
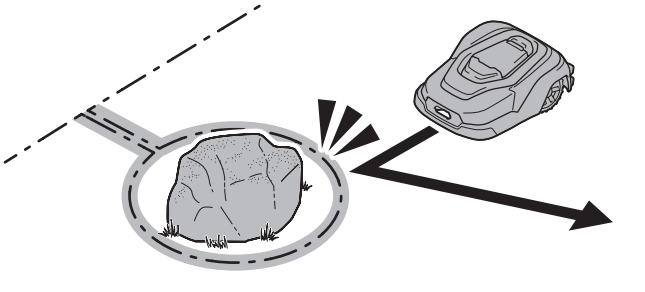
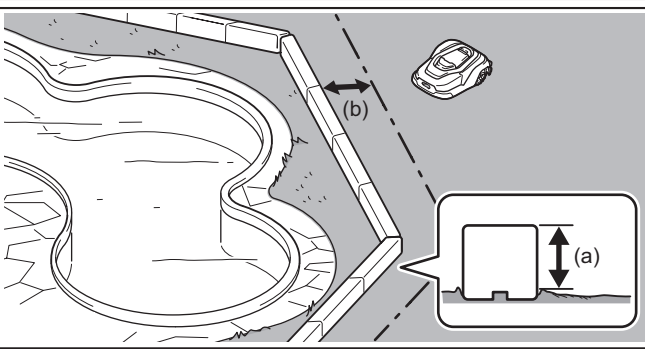
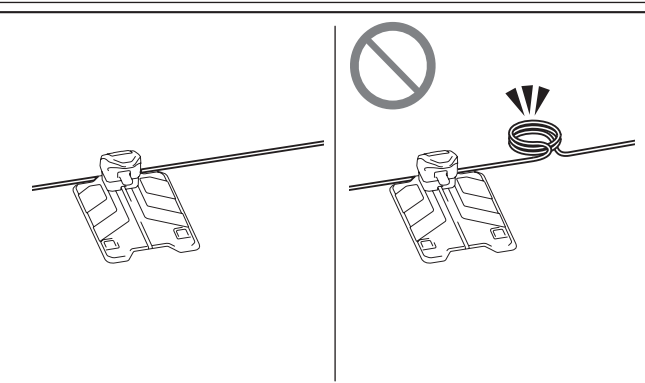
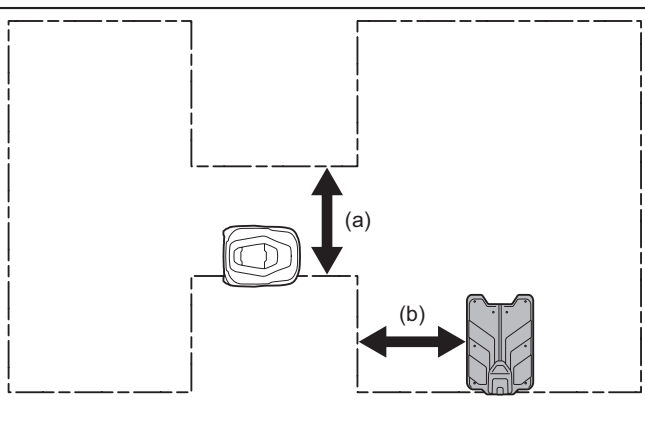
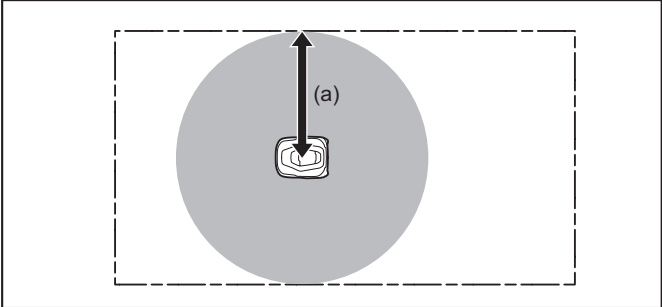
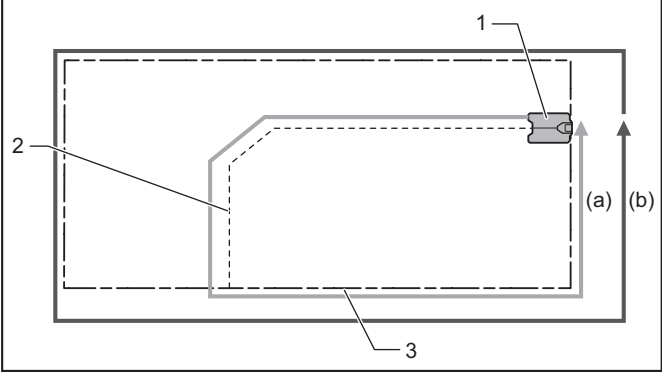
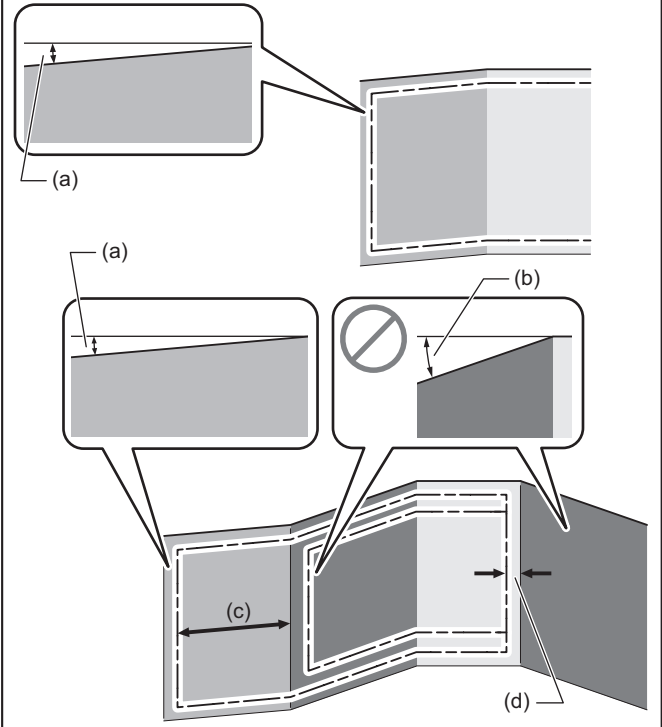
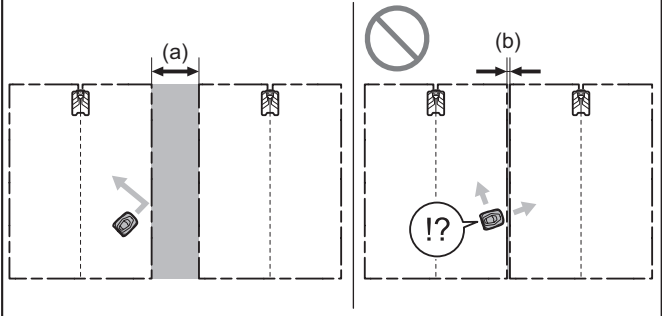
Image	Condition
 <p>a) Less than 1 cm b) About 10 cm</p>	<p>Separate by about 10 cm from obstacles with a height of less than 1 cm. (No area will be left unmowed.)</p>
	<p>If there are areas that the Robotic Mower should not enter or obstacles that the Robotic Mower should not encounter, exclude the area by installing the boundary wire around there. Refer to "Making an island" (page11) for details.</p>
 <p>a) 15 cm or more b) 35 cm or more</p>	<p>Place partitions (obstacles) with a height of 15 cm or more around the areas that the Robotic Mower should never enter. In addition, install the boundary wire 35 cm or more away from the partition in order to prevent contact with the partition. (An area of about 25 cm will be left unmowed.)</p>
	<p>Do not bundle cables and wires. Doing so may intensify the signal and the Robotic Mower will not operate properly.</p>
 <p>a) 1.5 m or more b) 1.5 m or more</p>	<ul style="list-style-type: none"> - The width of the work area should be at least 1.5 m or more. The Robotic Mower returns to the charging station by following the boundary wire in counterclockwise. - Ensure that the boundary wire is at least 1.5 m from the side of the charging station.

Image	Condition
 <p>a) 35 m or less</p>	<p>Place the boundary wire so that the distance from the boundary wire to the Robotic Mower is less than 35 m. If the distance from the nearest boundary wire to the Robotic Mower is more than 35 m, the Robotic Mower will not work properly.</p>
 <p>1. Charging station 2. Guide wire 3. Boundary wire</p> <p>a) 400 m or less b) 800 m or less</p>	<ul style="list-style-type: none"> - The maximum length of the route starting from the charging station, guide wire, boundary wire, and back in the charging station as illustrated in the figure should be 400 m or less. - The allowable space that you can limit by laying the boundary wire is up to 3,500 m². - The maximum length of the boundary wire is up to 800 m including the islands and sub areas.
 <p>a) Less than 10° b) 10° or more c) 1 m or more d) About 20 cm</p>	<ul style="list-style-type: none"> - If there is a slope in the work area, lay the boundary wire on a slope of less than 10°. - If you lay a boundary wire on a slope of more than 10°, lay an area of less than 10° below the slope for at least 1 m. - You cannot lay a boundary wire on a slope of more than 10° in the outermost work area. - Lay the boundary wire about 20 cm away from the boundary between the slope and the flat.
 <p>a) 1 m or more b) Less than 1 m</p>	<p>When using multiple stations and preparing multiple work areas, install the boundary wires so that they are separated by distance of 1 m or more.</p>

Installing the boundary wire

NOTE: The boundary wire should be extended straight 1.5 m or more from both sides of the charging station.

NOTE: For details such as the installation distance from obstacles, refer to "Connecting the Wires to the Charging Station" (page 18).

1. Drive the first peg near the charging station using a plastic hammer and place the boundary wire.

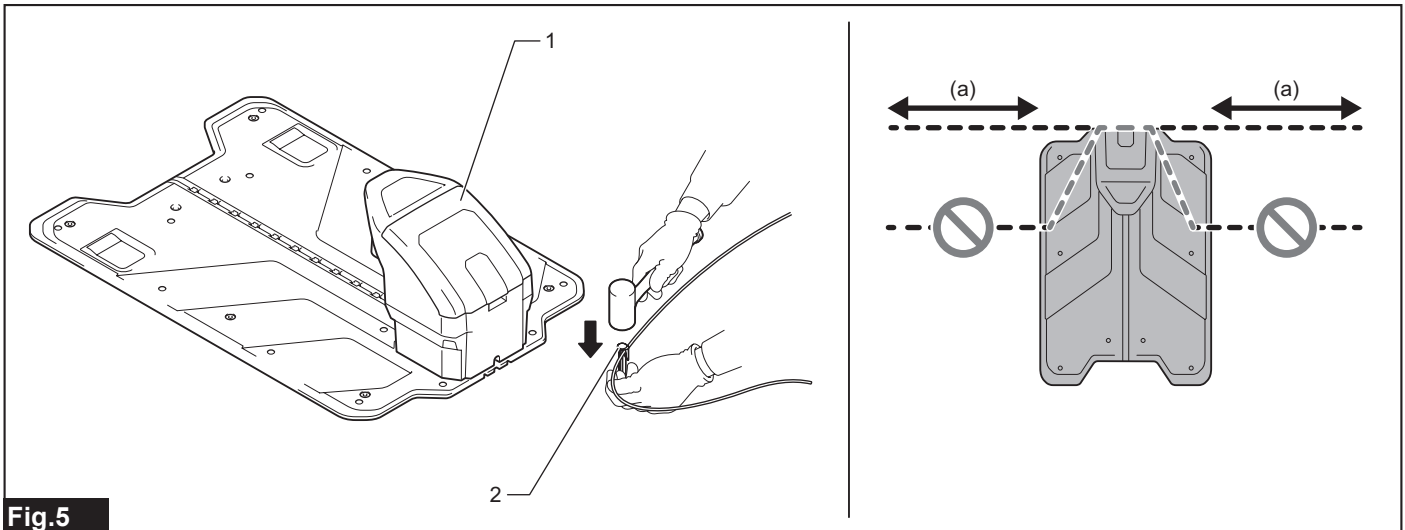


Fig.5

- ▶ 1. Charging station 2. Peg
- ▶ a) 1.5 m or more

2. Tension the boundary wire so as not to let it float from the ground, and then drive the next peg leaving about 1 m interval from the former one.

NOTE: If the boundary wire floats, use a narrower peg interval.

NOTE: For details such as the installation distance from obstacles, refer to "Boundary wire installation conditions" (page 6)

3. Make a loop (eyelet) of about 20 cm to provide slack in the boundary wire at the planned boundary wire - guide wire connection site for easier connection later.

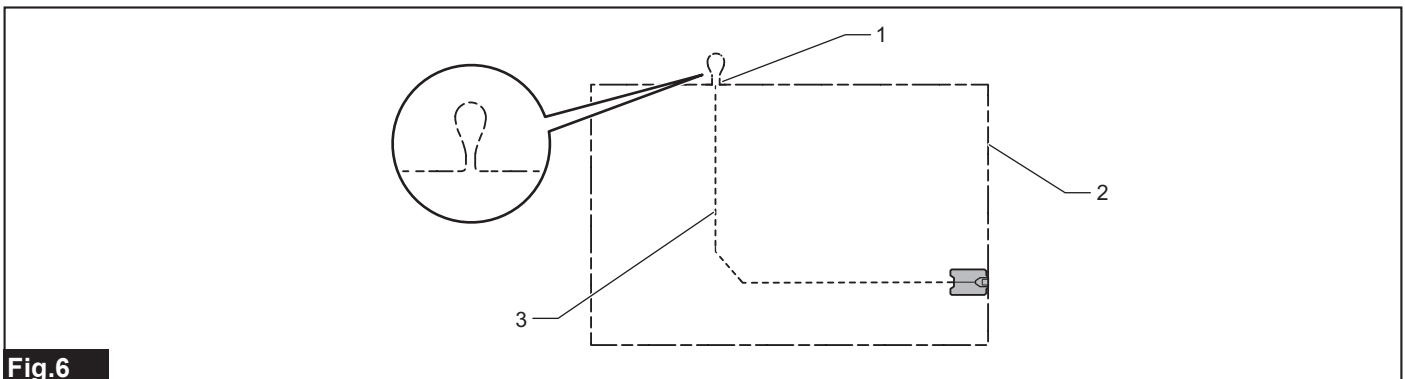


Fig.6

- ▶ 1. Planned connection site 2. Boundary wire 3. Guide wire

NOTE: The guide wire guides the Robotic Mower when it returns to the charging station. For details on connection with the guide wire, refer to "Installing the guide wire" (page 14).

4. If there are areas that the Robotic Mower should not enter or obstacles that the Robotic Mower should not encounter, exclude the area by installing the boundary wire around there.

NOTE: For details, refer to "Making an island" (page 11).

5. After installing the boundary wire up to the charging station, drive the peg near the opposite side of the peg at the starting point using a plastic hammer.

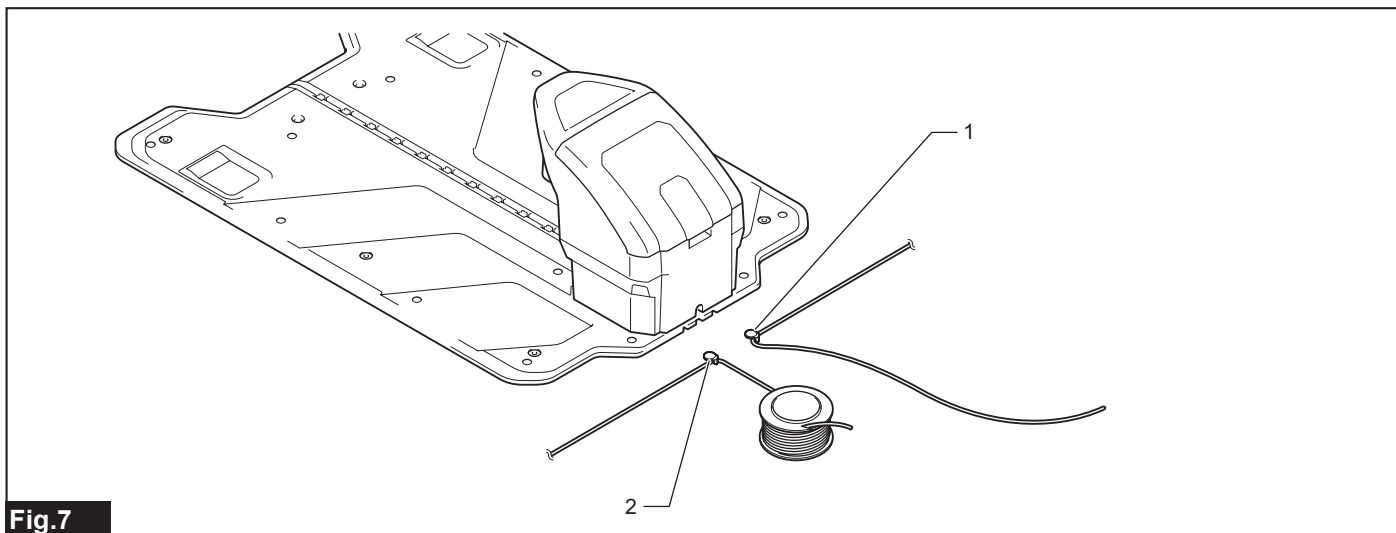


Fig.7

► 1. Peg at starting point 2. Peg at ending point

6. Cut the wire, leaving a length of wire that can be connected to the charging station.

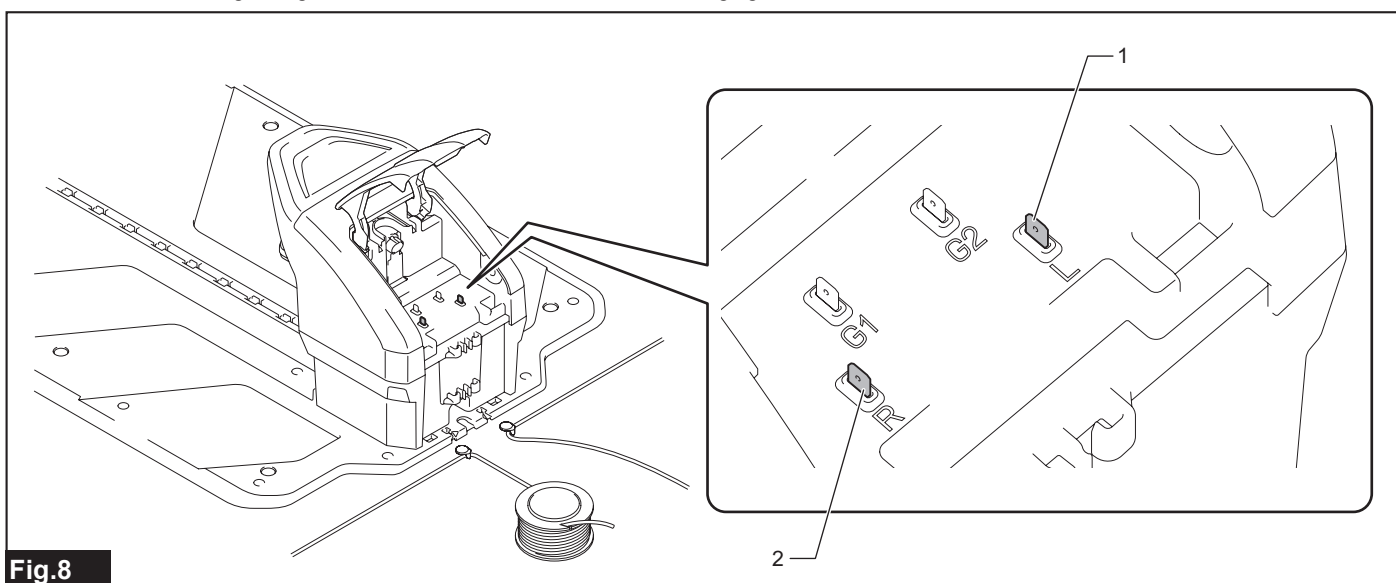


Fig.8

► 1. Terminal L 2. Terminal R

7. At the point where the connector can reach to the terminal, align the boundary wire with the groove of supplied connector and then bind them firmly using pliers.

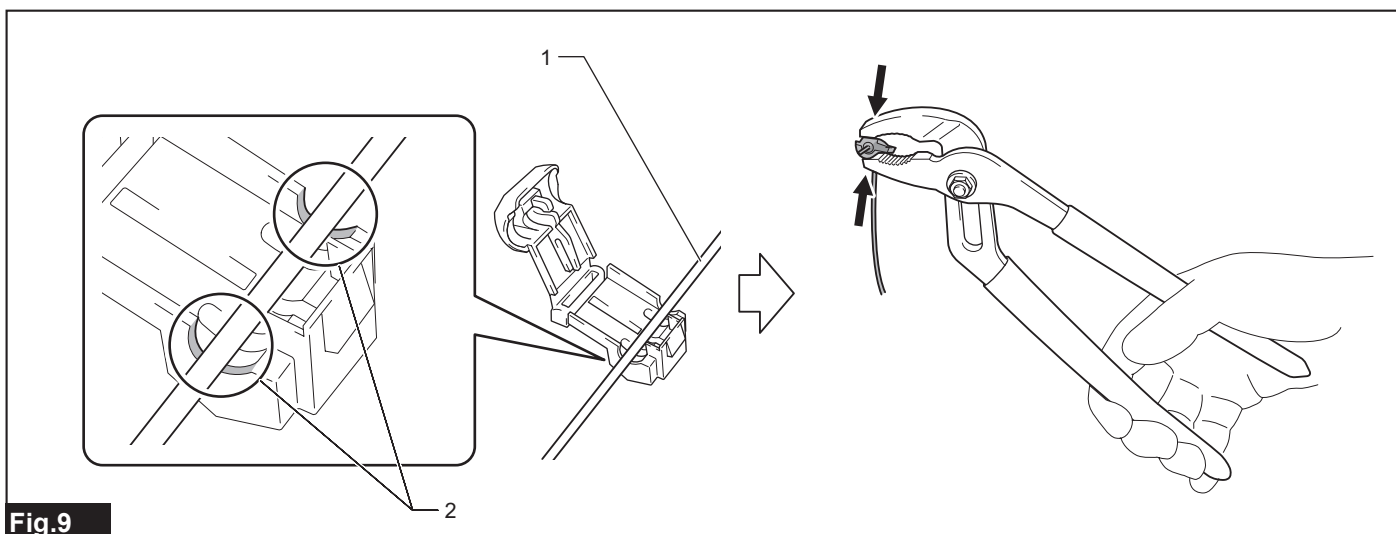


Fig.9

► 1. Boundary wire 2. Groove in the connector

8. Cut the excess boundary wire using nippers leaving 1 cm of it from the connector.

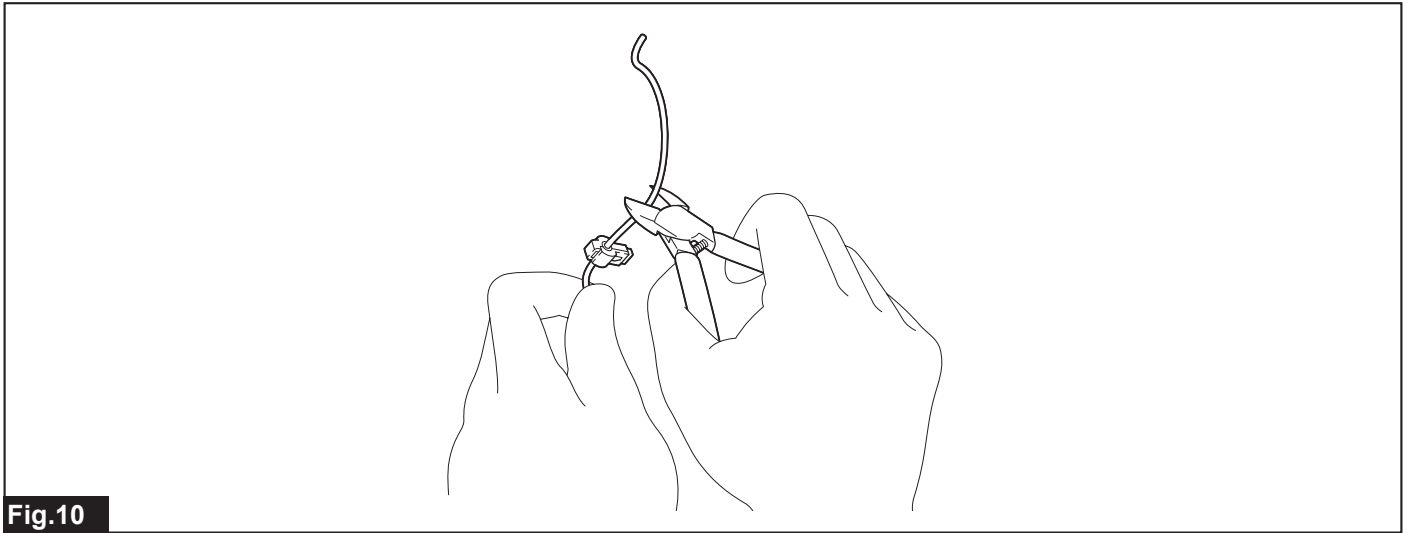


Fig.10

9. Attach a connector to the other boundary wire in the same manner.

NOTE: Mark the ends of the wires with "G1", "G2", "L", and "R", respectively. This will help ensure accurate wire connections when re-installing after the long-term storage.

NOTE: Do not connect the connectors to the charging station at this time. The connection with the charging station is explained later in "Connecting the Wires to the Charging Station" (page 18).

Making an island

If there are obstacles such as trees or rocks that cannot be cleared away in the mowing area, surround them with the boundary wire to make islands.

- Install the boundary wire around obstacles to make islands. Use a narrow peg interval so that the distance from the obstacle is about 35 cm.
- Install two lines of the boundary wire going forth and back from the island close together (gap 0 cm). This will let the Robotic Mower traverse the wires.
 - Insert the two lines of boundary wire to the same peg.

NOTICE: Do not let the two lines of boundary wire cross each other. The Robotic Mower will stop due to an error.

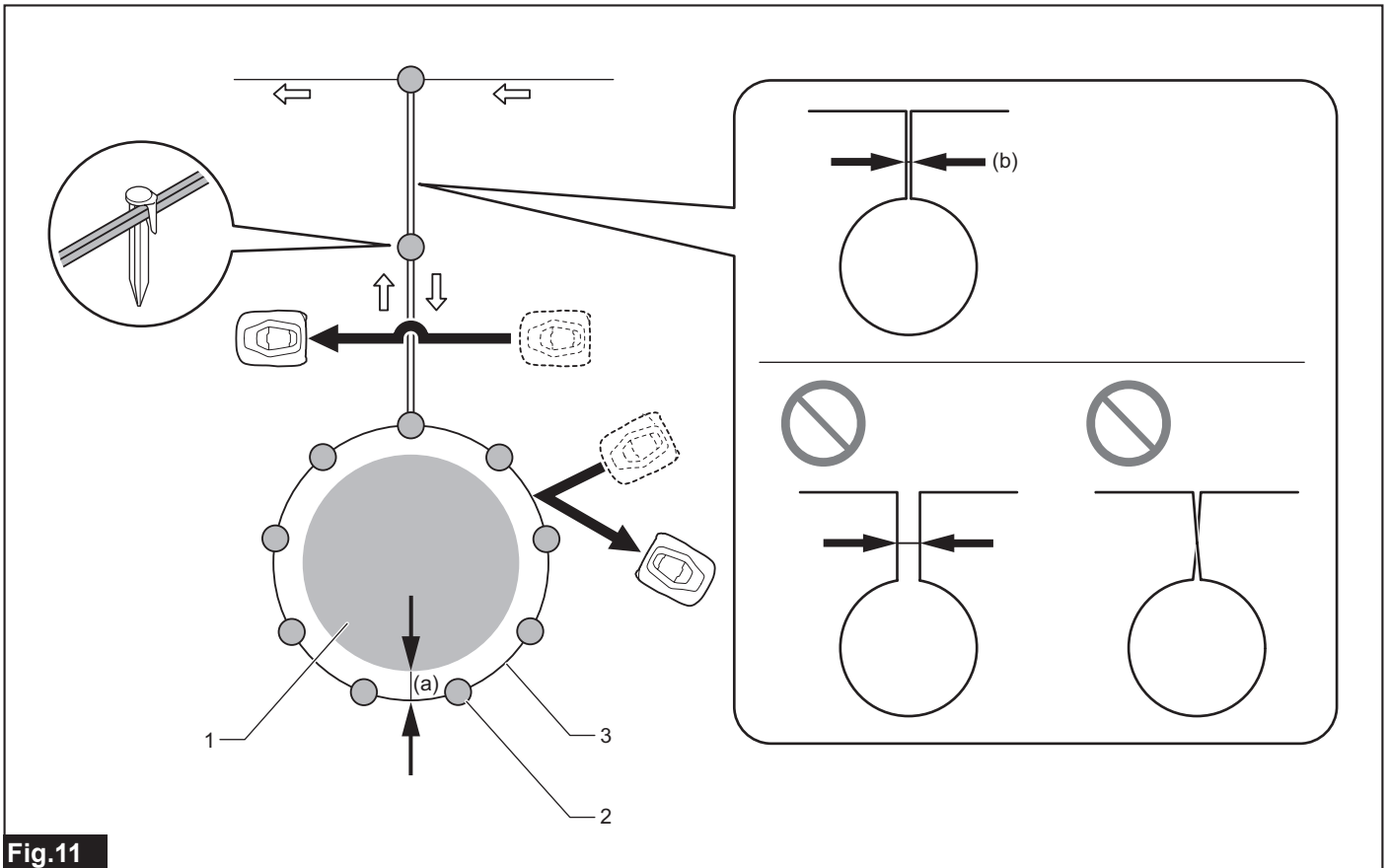


Fig.11

▶ 1. Obstacle 2. Peg 3. Boundary wire

▶ a) About 35 cm b) Close together (gap 0 cm)

- Make multiple islands as follows.

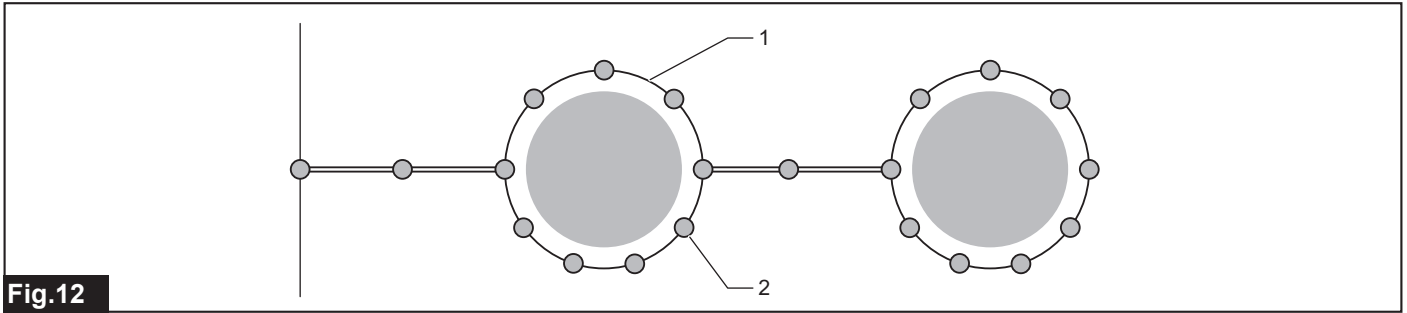


Fig.12

- ▶ 1. Boundary wire 2. Peg

- If the charging station is positioned within the boundary wire that makes the island, lead the guide wire to the same island.
If the charging station is positioned outside the boundary wire that makes the island, do not lead the guide wire to neither the island nor the two lines of the boundary wire.

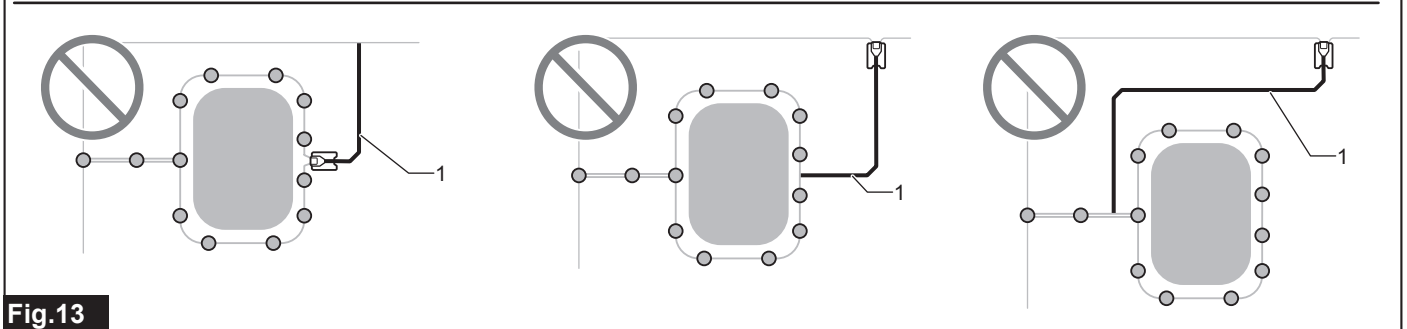
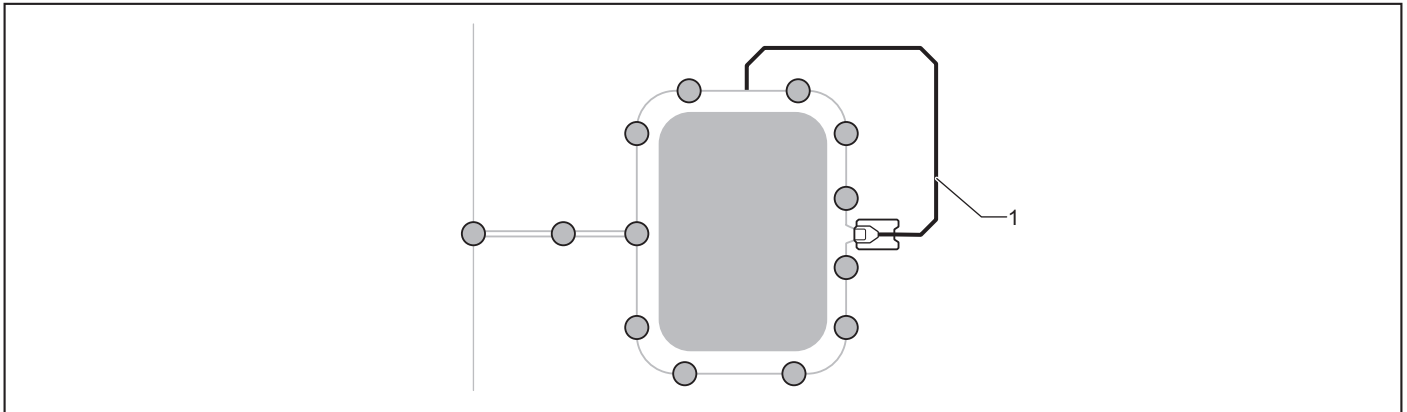


Fig.13

- ▶ 1. Guide wire

Making a sub area

If there is a separate work area to which a path that enables the Robotic Mower to navigate automatically from the charging station cannot be provided, that work area is designated as a sub area (b). The area with the charging station is the main area (a).

- It is necessary to turn off the power of the Robotic Mower and move the Robotic Mower by hand between the main area and the sub area.
- Place the boundary wire so that the path width between the main area and the sub area is 10 cm or less.
- The boundary wire must be laid in a single, unbroken line around the entire work area ((a) and (b)).
- When mowing the sub area, it is necessary to change the Robotic Mower settings. For details, refer to the Instruction Manual of this product.

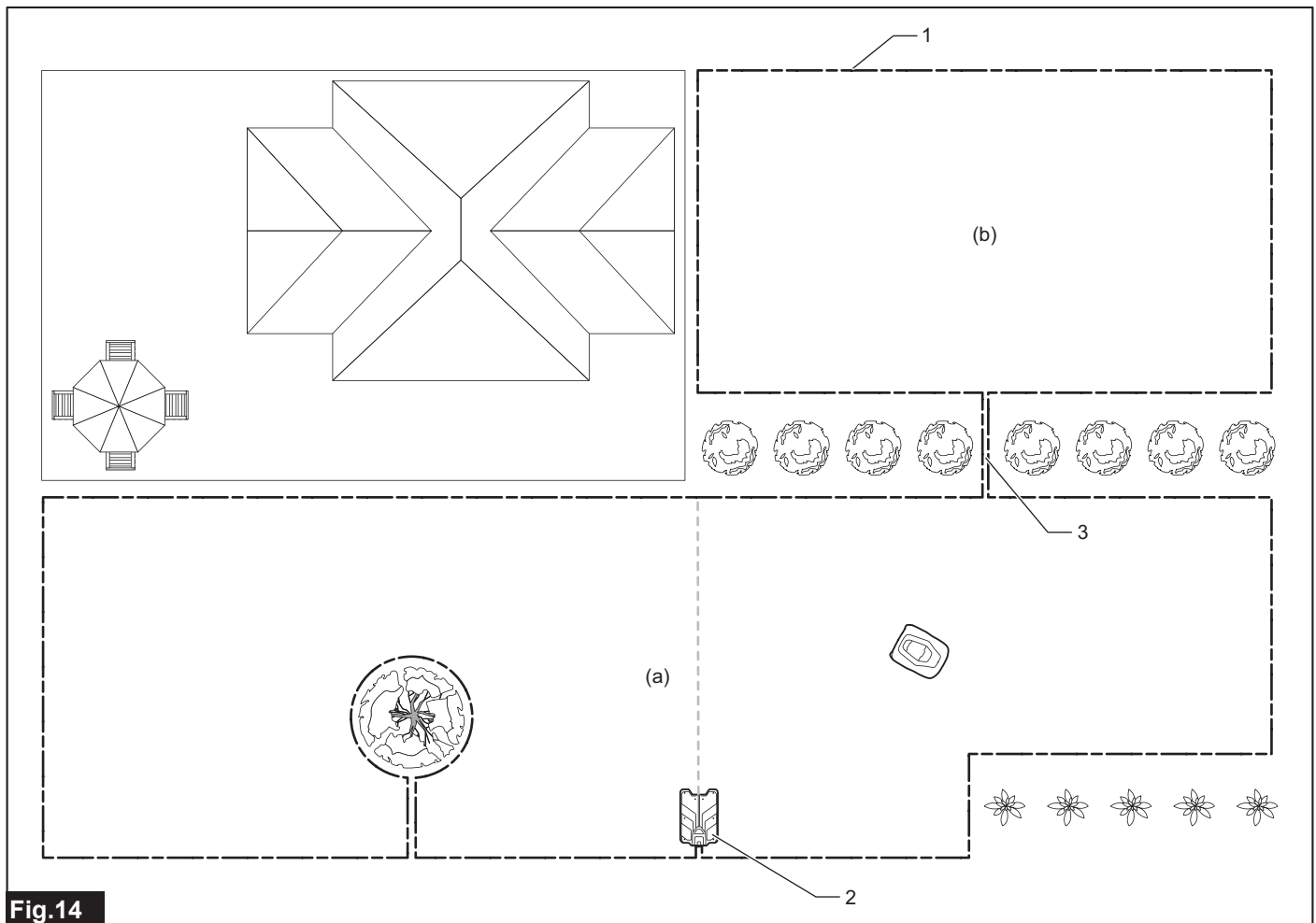


Fig. 14

▶ 1. Boundary wire 2. Charging station 3. 10 cm or less

▶ a) Main area b) Sub area

Installing the Guide Wire

The guide wire leads the Robotic Mower to the charging station. This wire also guides the Robotic Mower to areas that the Robotic Mower works less frequently due to topographical reasons, etc.

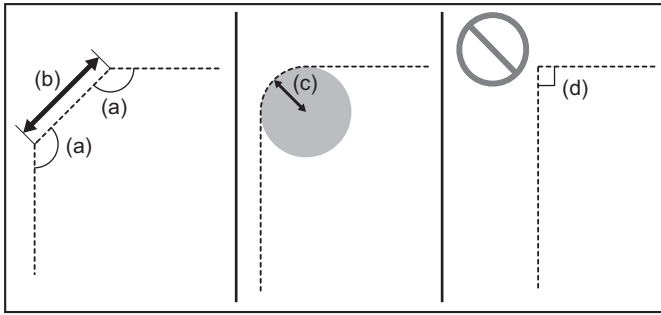
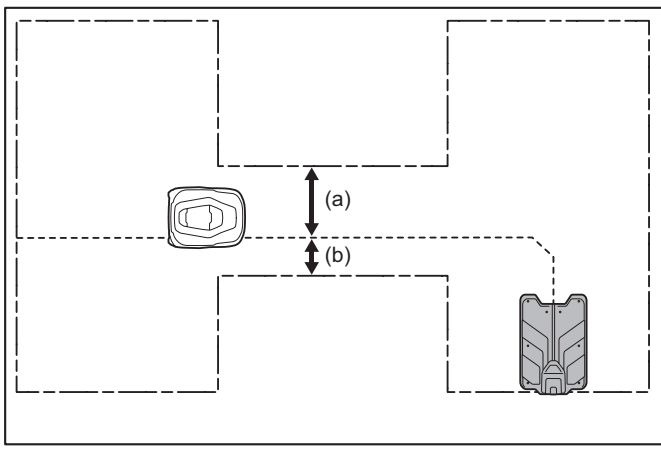
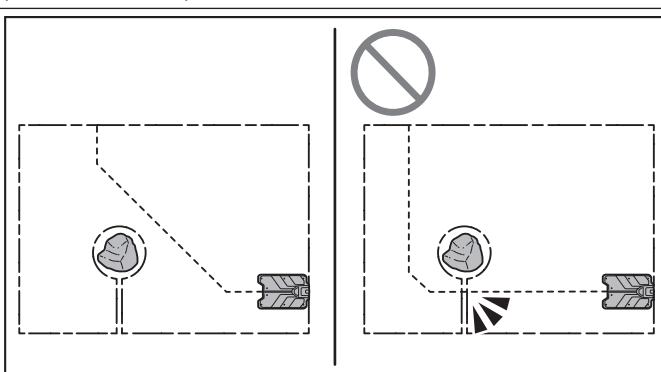
NOTE: The Robotic Mower can be used without installing the guide wire.

NOTE: Up to 2 guide wires can be installed.

NOTE: Do not branch the guide wire.

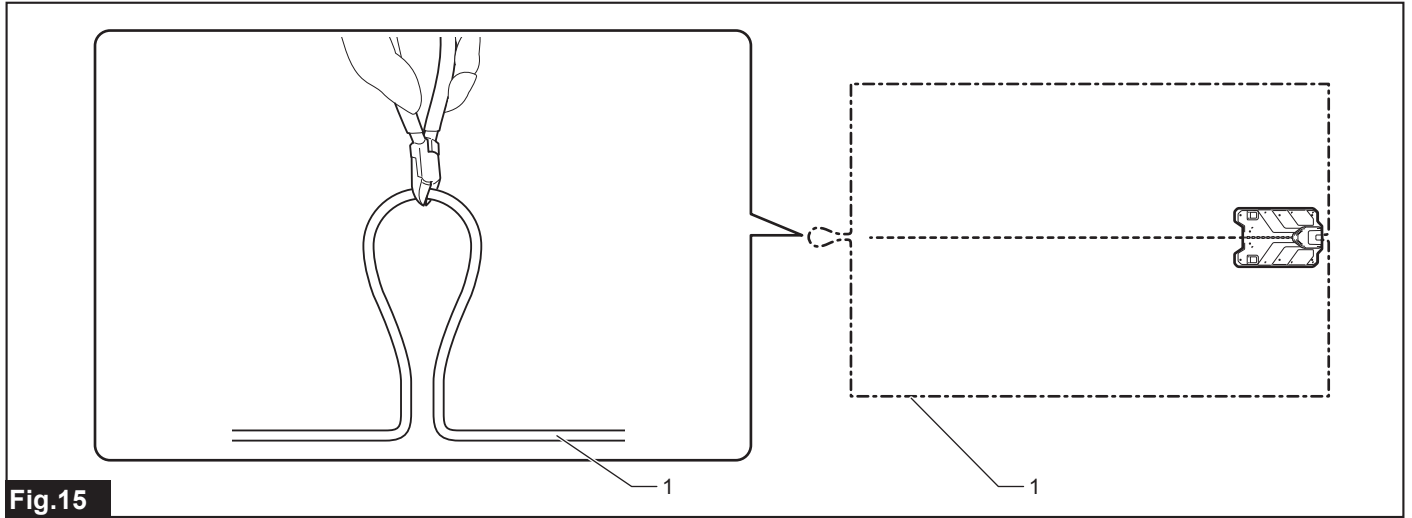
Guide wire installation conditions

Image	Condition
<p>a) 2 m or more</p>	<p>As shown in the figure, lay the guide wire at least 2 m straight from the charging station. The Robotic Mower may not be able to return to the charging station.</p>

Image	Condition
 <p>a) About 135° b) 50 cm or more c) 1 m or more d) 90° or less</p>	<ul style="list-style-type: none"> - When making a curve, install the guide wire at an angle about 135°. The Robotic Mower may not be able to return to the charging station at an angle less than 90°. - Make sure that the straight diagonal line is at least 50 cm. - If the guide wire is to be laid in a curved line, lay it so that the bend radius is 1 m or more.
 <p>a) 100 cm or more b) 50 cm or more</p>	<p>The width of the work area should be 1.5 m or more. Make sure that the space on the left side of the guide wire is wide because the Robotic Mower passes through the left side of the guidewire and returns to the charging station.</p>
	<p>Do not let the guide wire cross the boundary wire.</p>

Installing the guide wire

1. Cut the boundary wire loop (eyelet) made in advance at the boundary wire - guide wire connection site.



2. Insert the guide wire to the center port and the boundary wires to the left and right ports of the three connection ports of the supplied coupler.

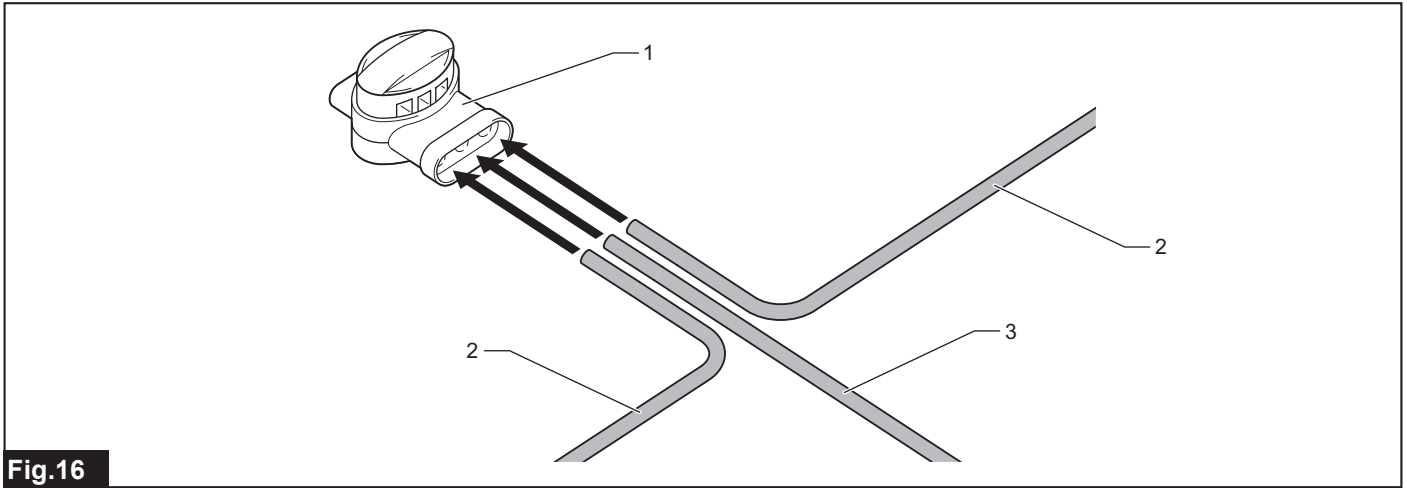


Fig.16

► 1. Coupler 2. Boundary wire 3. Guide wire

NOTE: Insert all three wires as far as they will go.

3. Clamp the coupler with pliers to fix the wires.



Fig.17

CAUTION: Secure the coupler with pegs so that there is no gap between the coupler and the ground. Otherwise wires and couplers may be damaged by the robotic mower.

4. Drive the pegs on both sides of the connecting point using a plastic hammer.

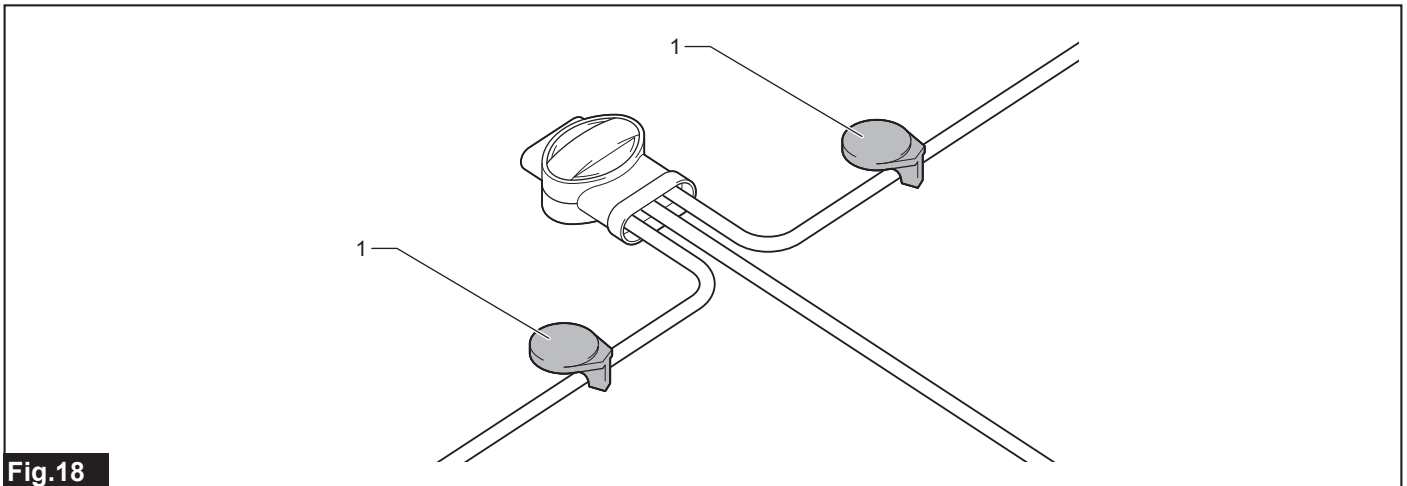


Fig.18

► 1. Peg

NOTE: Make sure that the connection between the guide wire and the boundary wire is approximately 90°.

5. Install the guide wire by driving the pegs up to the charging station using a plastic hammer.
 - Drive the pegs at intervals of about 1 m, but use a narrower interval if the guide wire floats.
 - When making a curve, install the guide wire at an angle about 135°.
 - Install the guide wire in a straight line for 2 m or more in front of the charging station.
 - For other guide wire installation conditions, refer to “*Guide wire installation conditions*” (page 13).

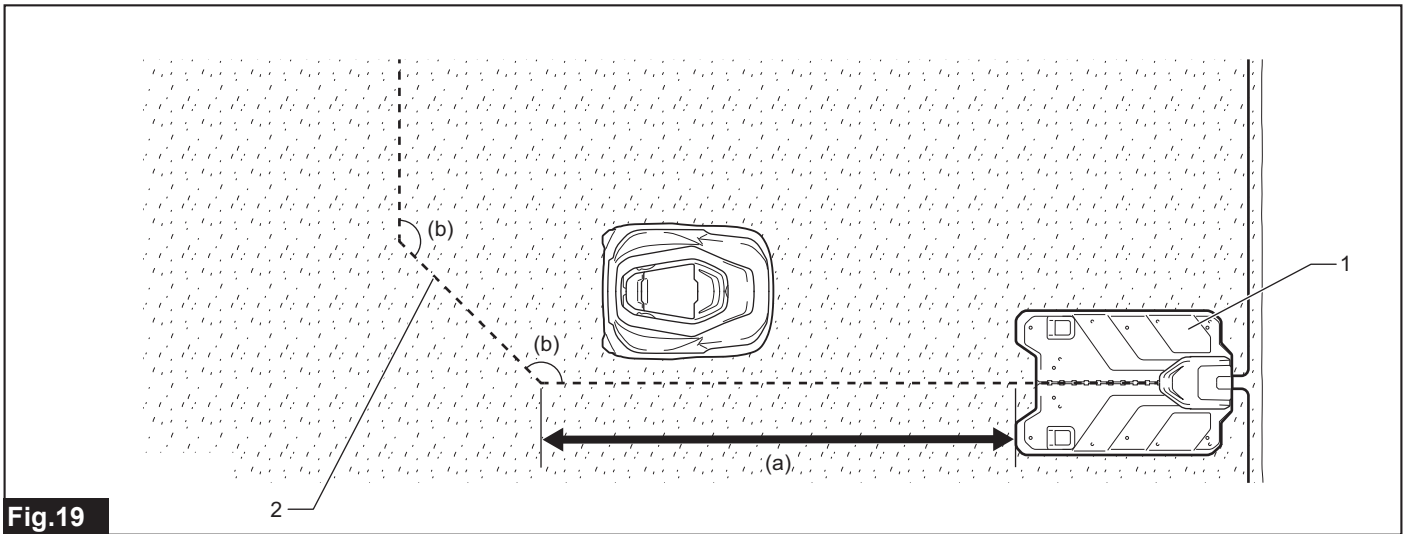


Fig.19

- ▶ 1. Charging station 2. Guide wire
- ▶ a) 2 m or more b) About 135°

6. When finished installing the guide wire up to the charging station, pass the guide wire to the back of the charging station through the hole at the bottom of the charging station tower.

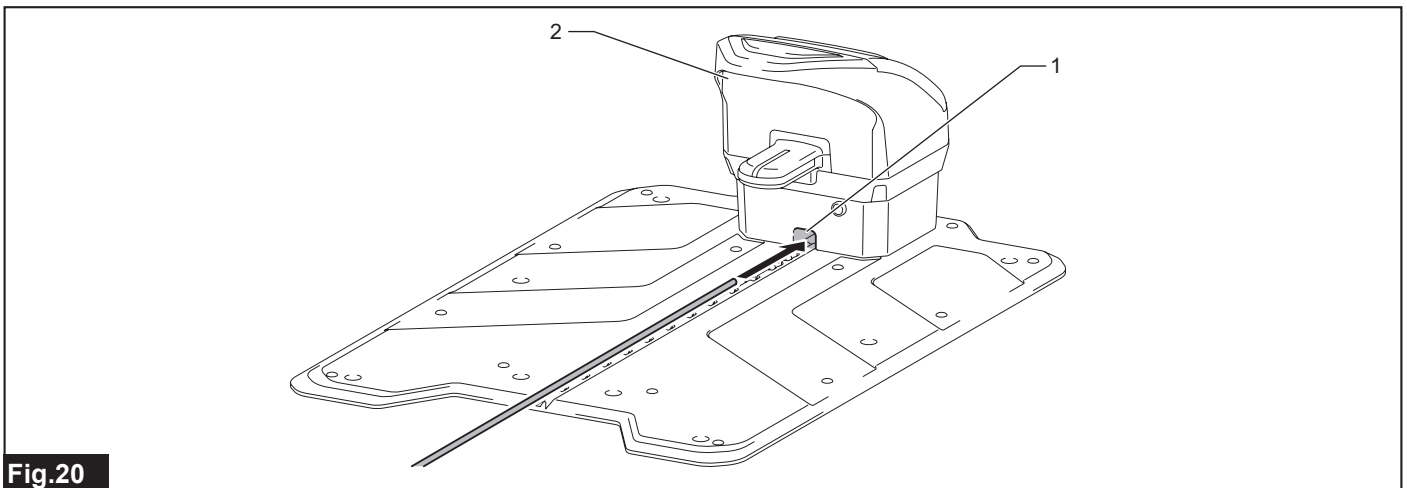


Fig.20

- ▶ 1. Hole 2. Tower

NOTE: Cut the guide wire so that about 30 cm or more is left extending from the back of the charging station.

7. Insert and fix the guide wire in the groove in the center of the station base.

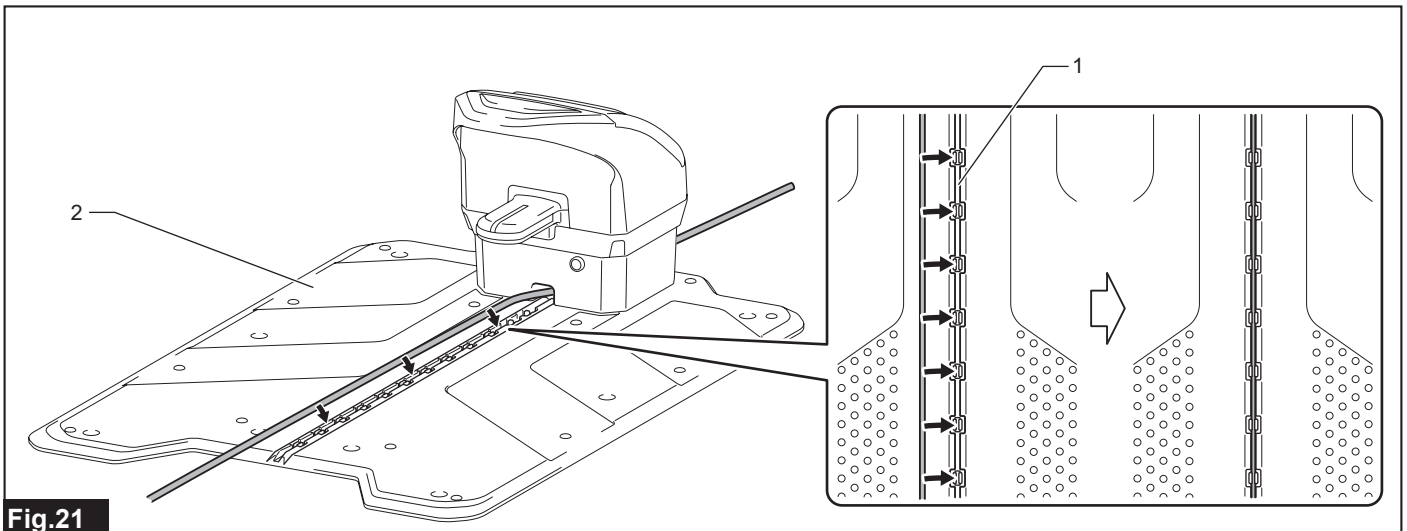


Fig.21

- ▶ 1. Groove 2. Station base

8. Attach a connector to the tip of the guide wire.

NOTE: Refer to page 10 for how to attach the connector.

9. When installing a second guide wire, repeat steps 1 through 8.

NOTE: For details of connection with the charging station, refer to "Connecting the Wires to the Charging Station" (page 18).

Extending a Wire

When extending a wire, use a supplied coupler to connect the two wires.

CAUTION: Secure the coupler with pegs so that there is no gap between the coupler and the ground. Otherwise wires and couplers may be damaged by the robotic mower.

1. Insert the wires to the left and right of the three connection ports of the supplied coupler.

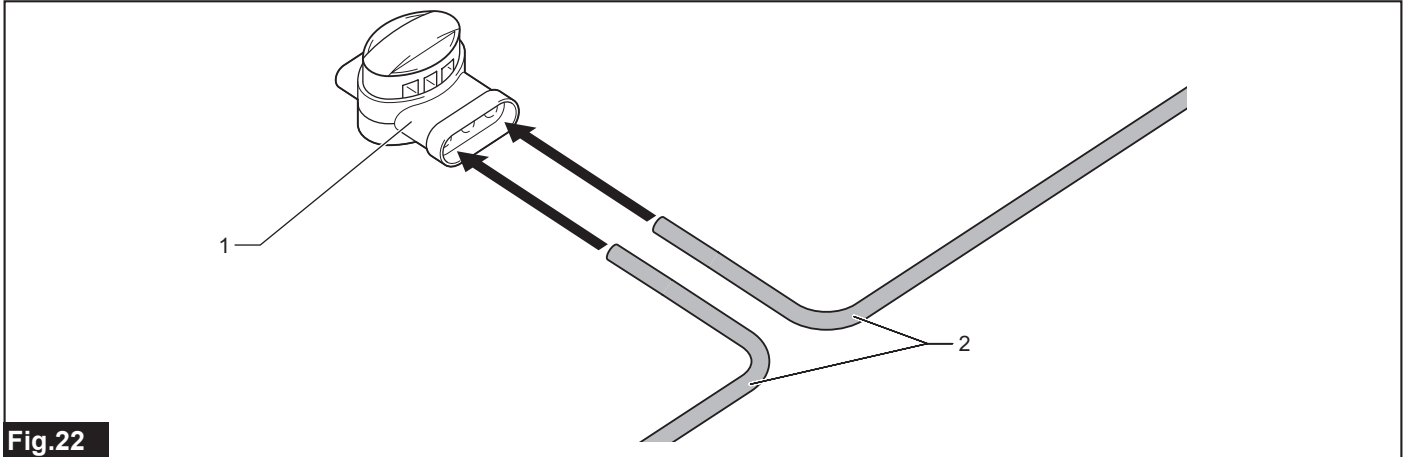


Fig.22

► 1. Coupler 2. Wire

NOTE: Insert both wires as far as they will go.

NOTE: Wire extension is possible by inserting into any two of the connection ports, but it is recommended to use the left and right connection ports in order to extend in a straight manner.

2. Clamp the coupler with pliers to fix the wires.



Fig.23

Securing the charging station

Make sure that the cabtire cable can reach to the charging station and then secure it with screw pegs (8pcs) using the hex wrench 6.

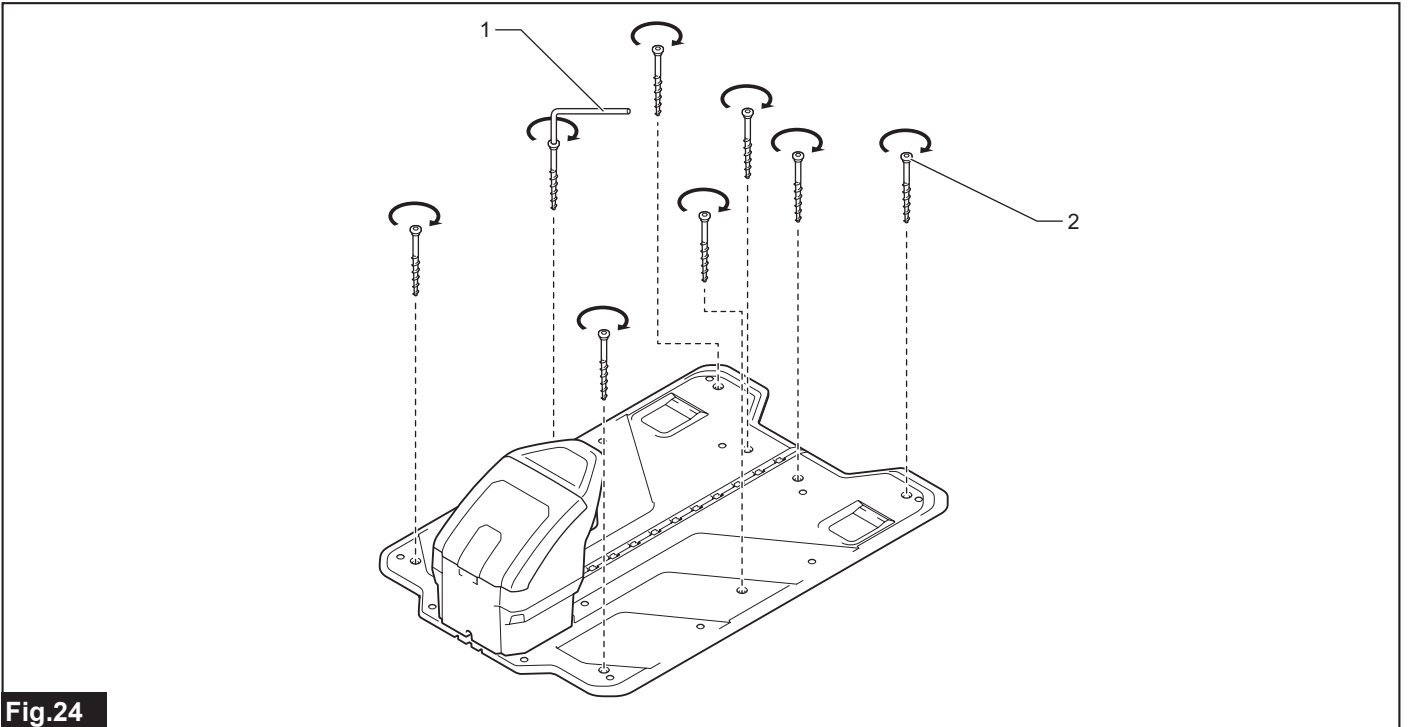


Fig.24

- 1. Hex wrench 2. Screw peg (for fixing the charging station) (8 pcs)

Connecting the Wires to the Charging Station

When finished installing the wires, connect the boundary wire, guide wire, and cabtire cable to the charging station.

Connecting the boundary wire

1. Open the terminal cover and remove the wire cover of the charging station.

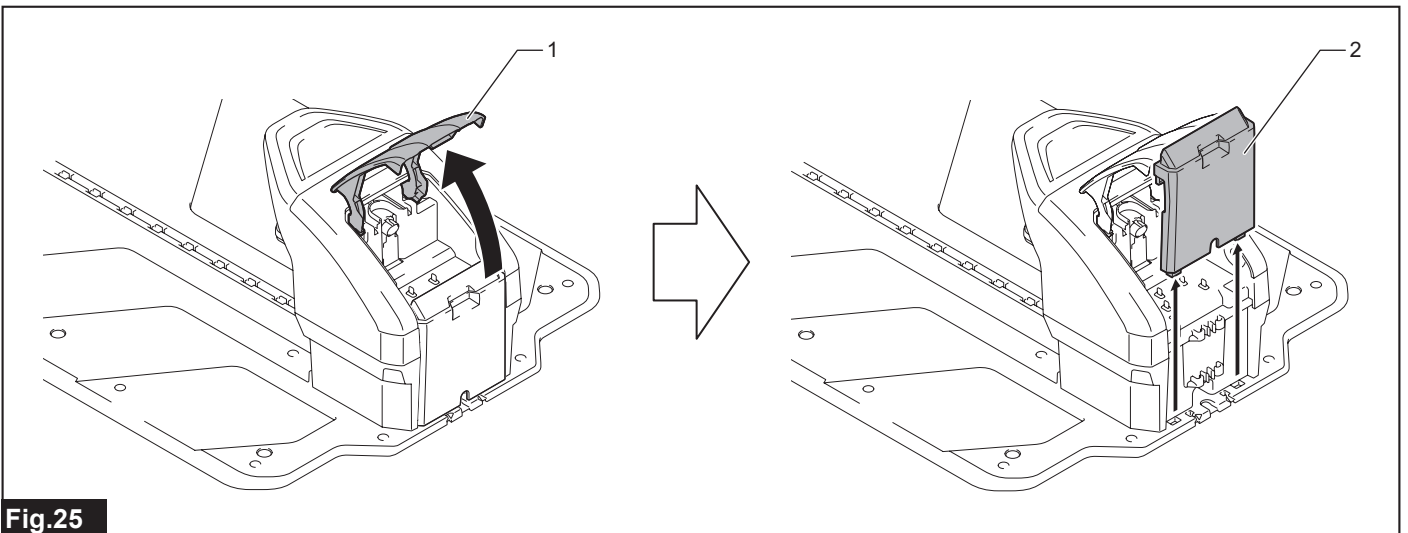


Fig.25

- 1. Terminal cover 2. Wire cover

2. Stand behind the charging station and pass the boundary wire coming from the left through the hook on the left side (3 hooks) from the bottom.

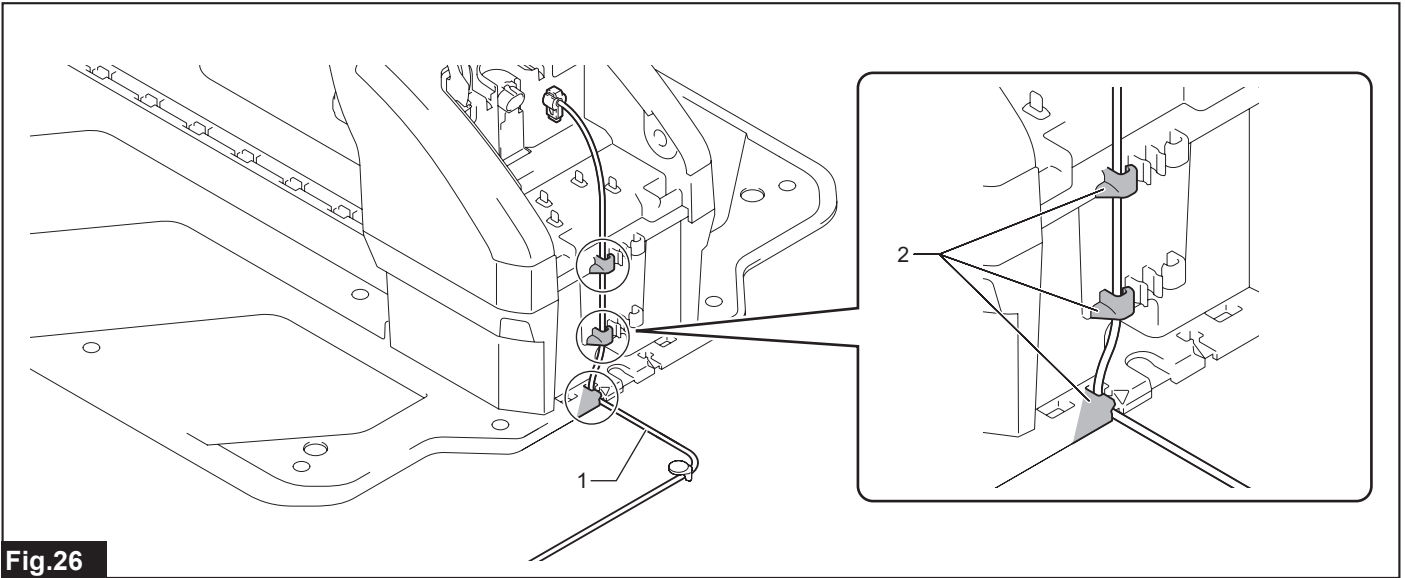


Fig.26

- 1. Boundary wire coming from the left side 2. Left-side hooks (three places)

3. Insert the connector at the tip of the wire onto the terminal R.

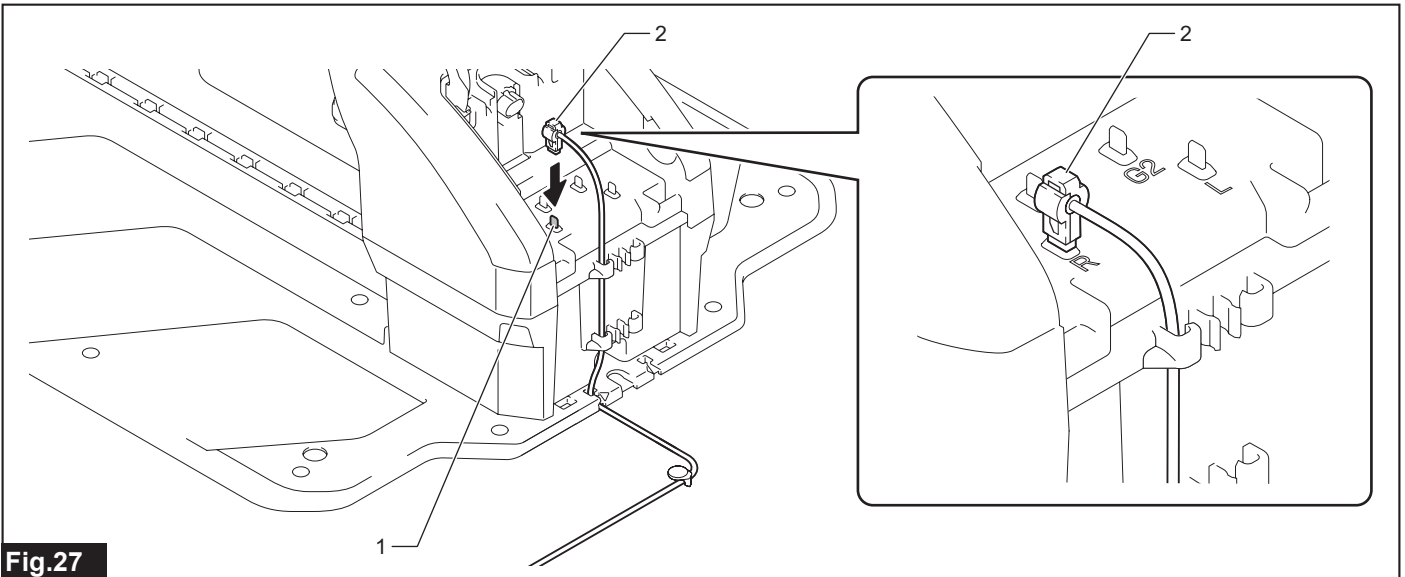


Fig.27

- 1. Terminal R 2. Connector of boundary wire coming from the left side

NOTICE: To prevent the connector from being deformed or damaged, connect the connector straight without tilting it.

4. Likewise, pass the boundary wire coming from the right side through the right-side hooks (three places) in order from the bottom and insert the connector onto the terminal L.

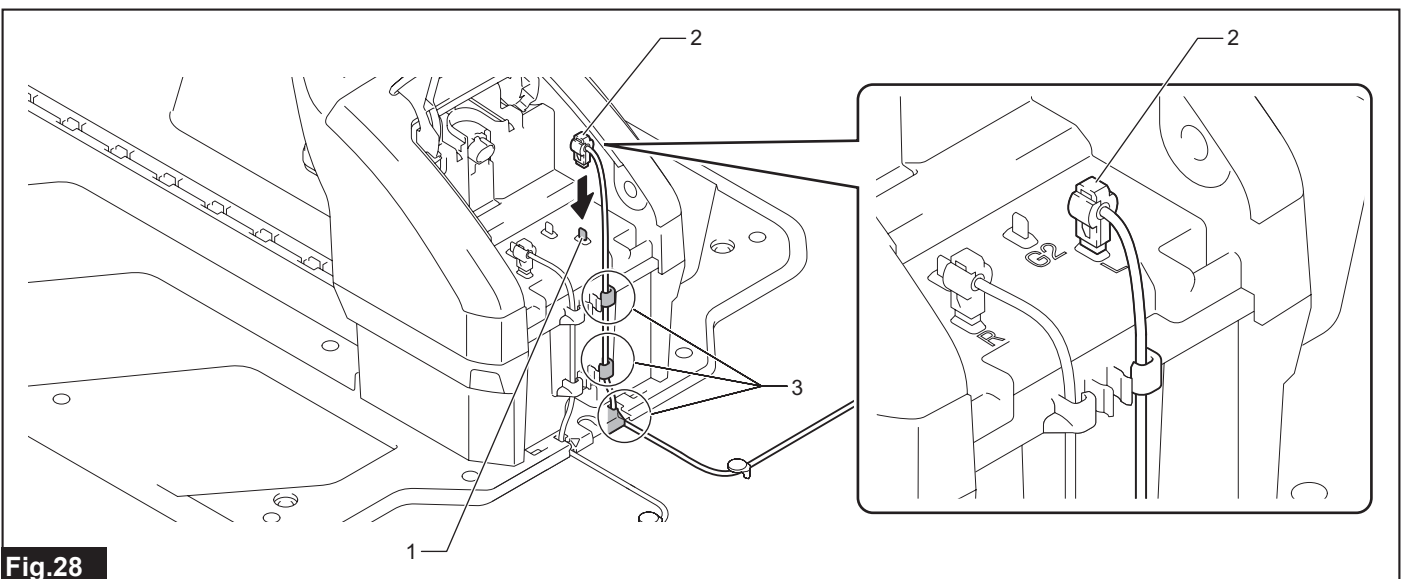


Fig.28

- 1. Terminal L 2. Connector of boundary wire coming from the right side 3. Right-side hooks (three places)

NOTICE: Check that the boundary wires are connected to the proper terminals. If the boundary wires are connected to the wrong terminals, the Robotic Mower will be unable to recognize the work area.

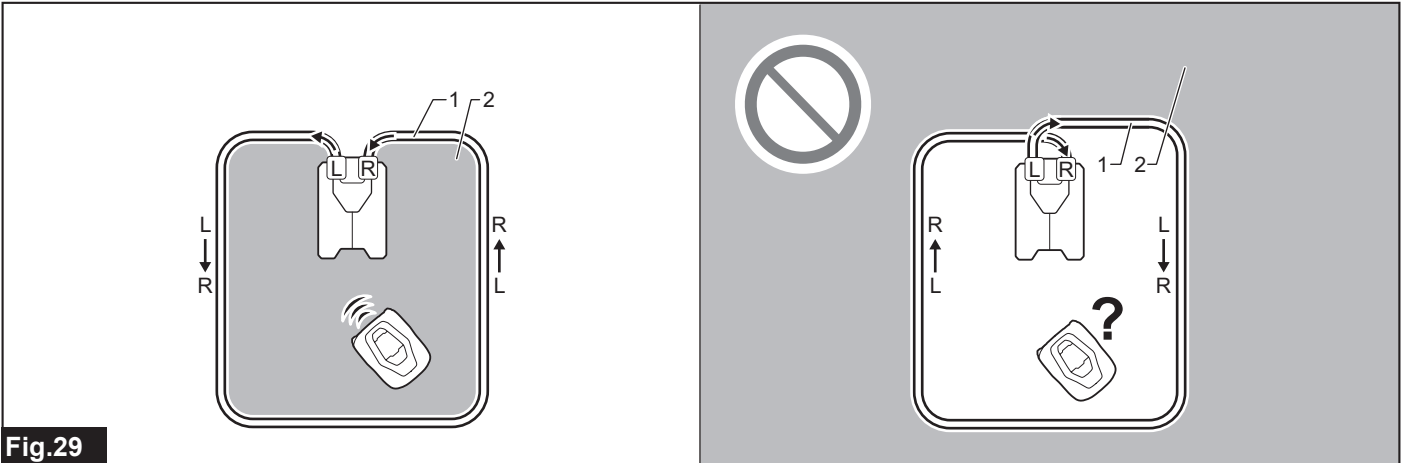


Fig.29

► 1. Boundary wire 2. Work area

Connecting the guide wire

Pass the guide wire through the right-side or left-side hooks (two places) and attach the connector at the tip of the wire to the terminal G1 or G2.

NOTICE: To prevent the connector from being deformed or damaged, connect the connector straight without tilting it.

NOTE: The guide wire connector can be attached to either terminal G1 or G2.

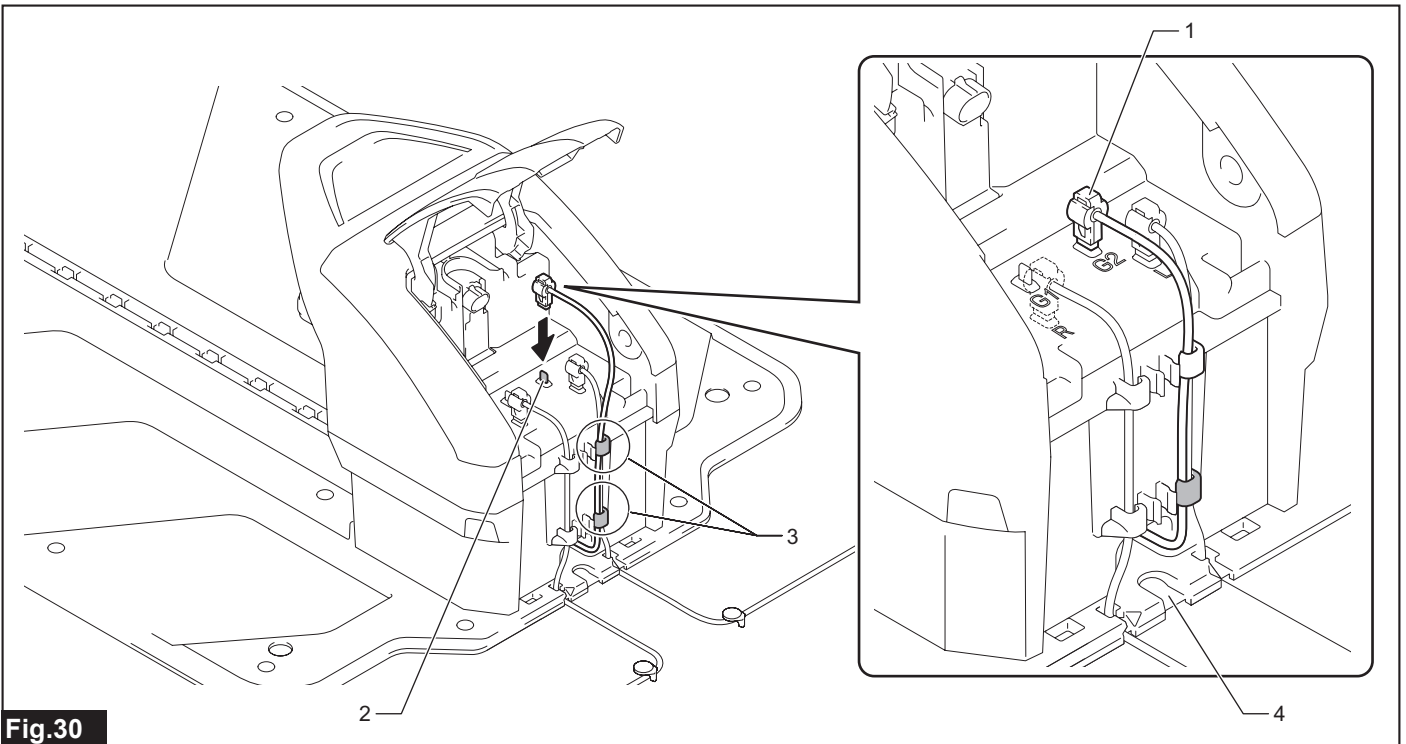


Fig.30

► 1. Guide wire connector 2. Terminal G2 3. Right-side hooks (two places) 4. Notch (Do not pass the guide wire through here)

NOTE: If there is a second guide wire, connect it to the open terminal G1 or G2 by the same procedure.

Connecting the cabtire cable

1. Connect the cabtire cable connector to the socket.

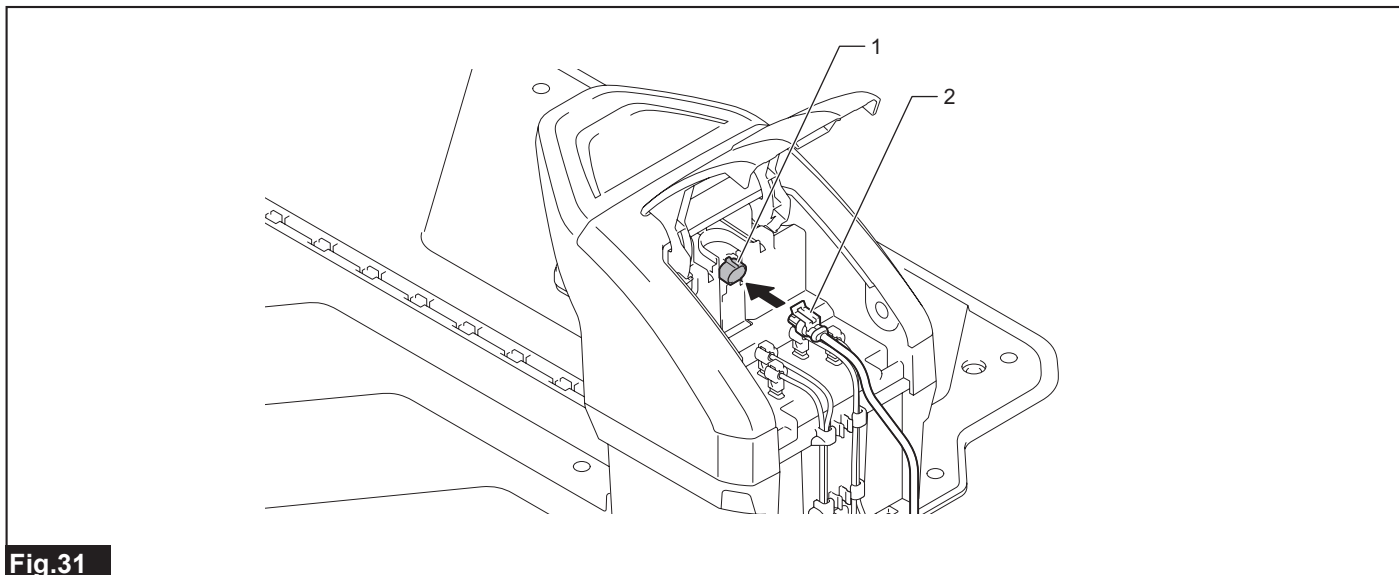


Fig.31

- 1. Socket 2. Cabtire cable connector

NOTICE: To prevent the connector from being deformed or damaged, connect the connector straight without tilting it.

2. Pass the cabtire cable through the center hooks (three places) in order from the top.

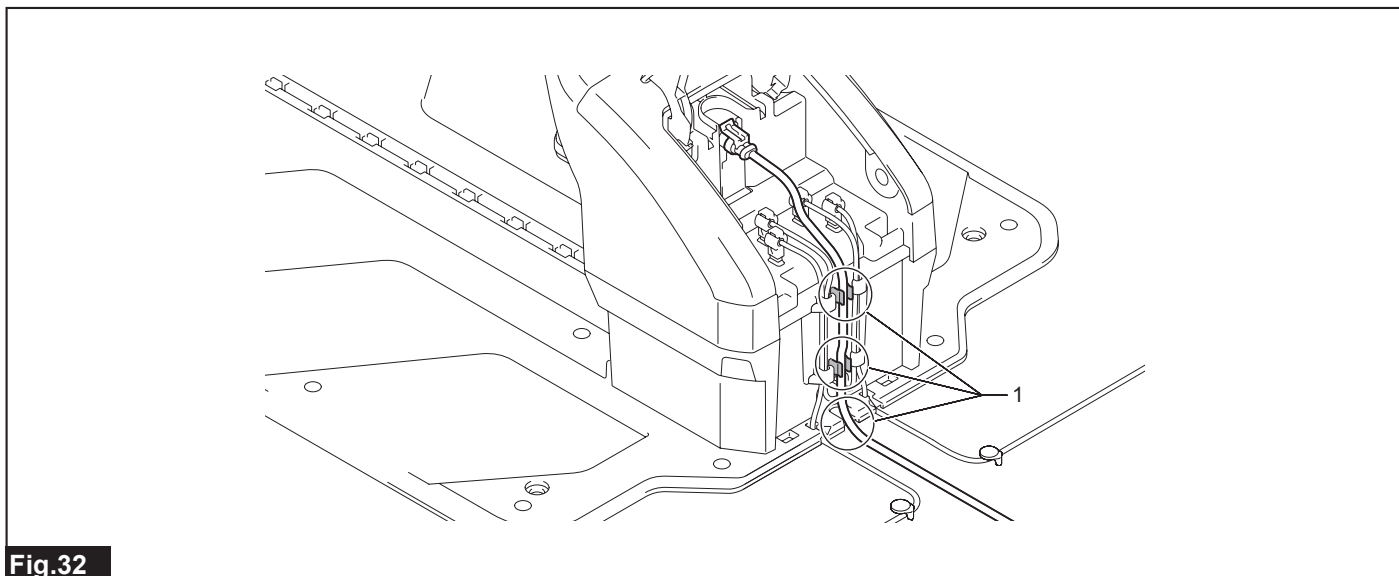


Fig.32

- 1. Center hooks (three places)

3. Attach the wire cover.
- Pass the cable through the notch in the wire cover.

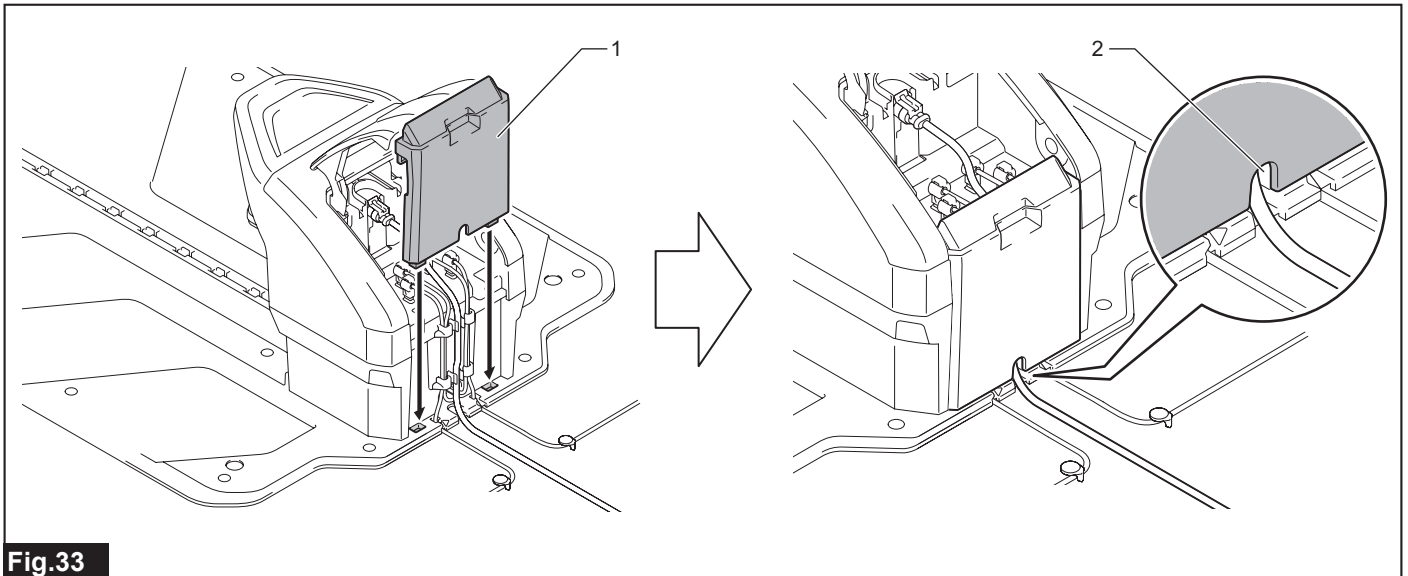


Fig.33

- ▶ 1. Wire cover 2. Notch

4. Close the terminal cover and connect the power plug of the AC adapter to a power outlet.

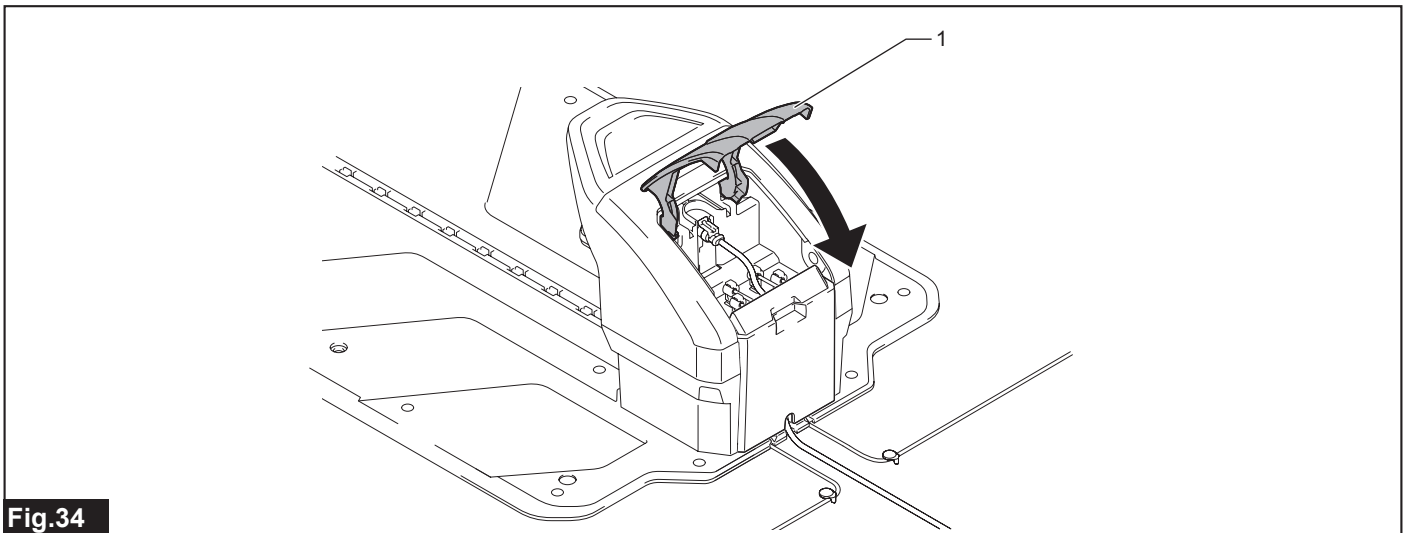


Fig.34

- ▶ 1. Terminal cover

5. Check that the station indicator lights up green.
- If the boundary wire is connected properly, the station indicator will light up green.
 - If there is a connection error, the station indicator will blink red. Remove any abnormalities in the charging station connection part or each wire, and check the station indicator again.

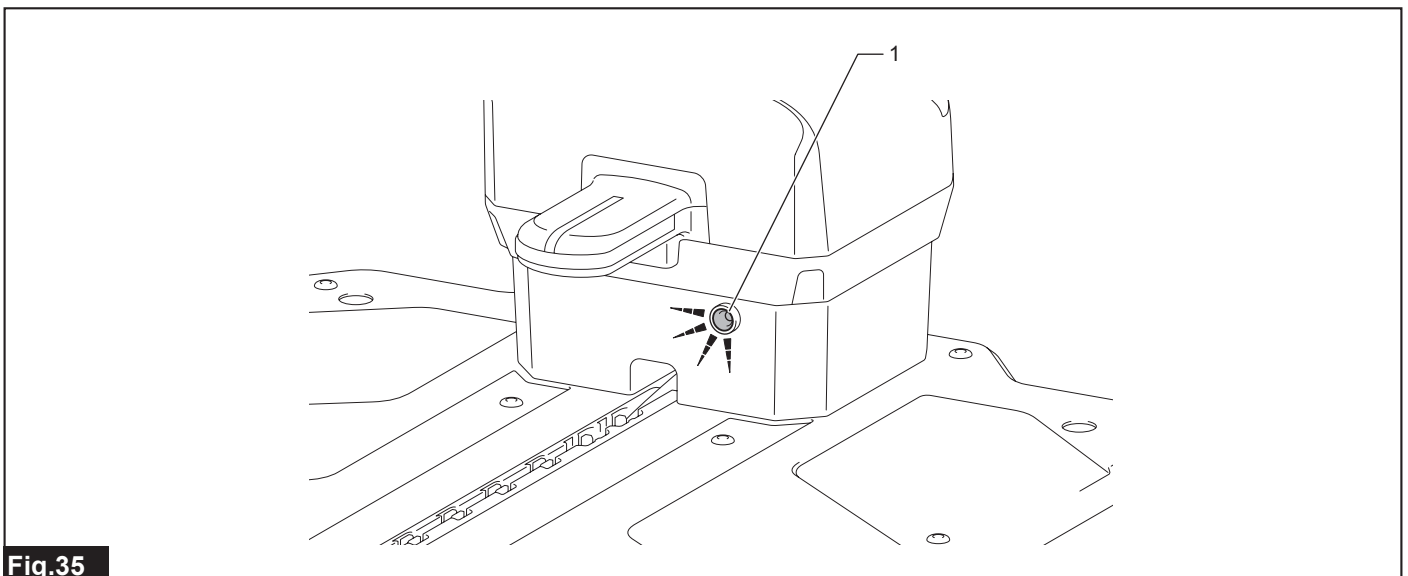


Fig.35

- ▶ 1. Station indicator

6. Check the connection of the guide wire.

Check the guide wire connection by the following steps.

1. Confirm that the boundary wire is connected successfully. (Check that the station indicator lights up green.)
2. Pull out the one of the boundary wire connectors from the terminal L or R.
3. Pull out the one of the guide wire connectors from the terminal G1 or G2, and then insert this connector onto the free terminal for the boundary wire.
4. Check that the station indicator lights up green.
5. Always return to the original wire connections after the check.

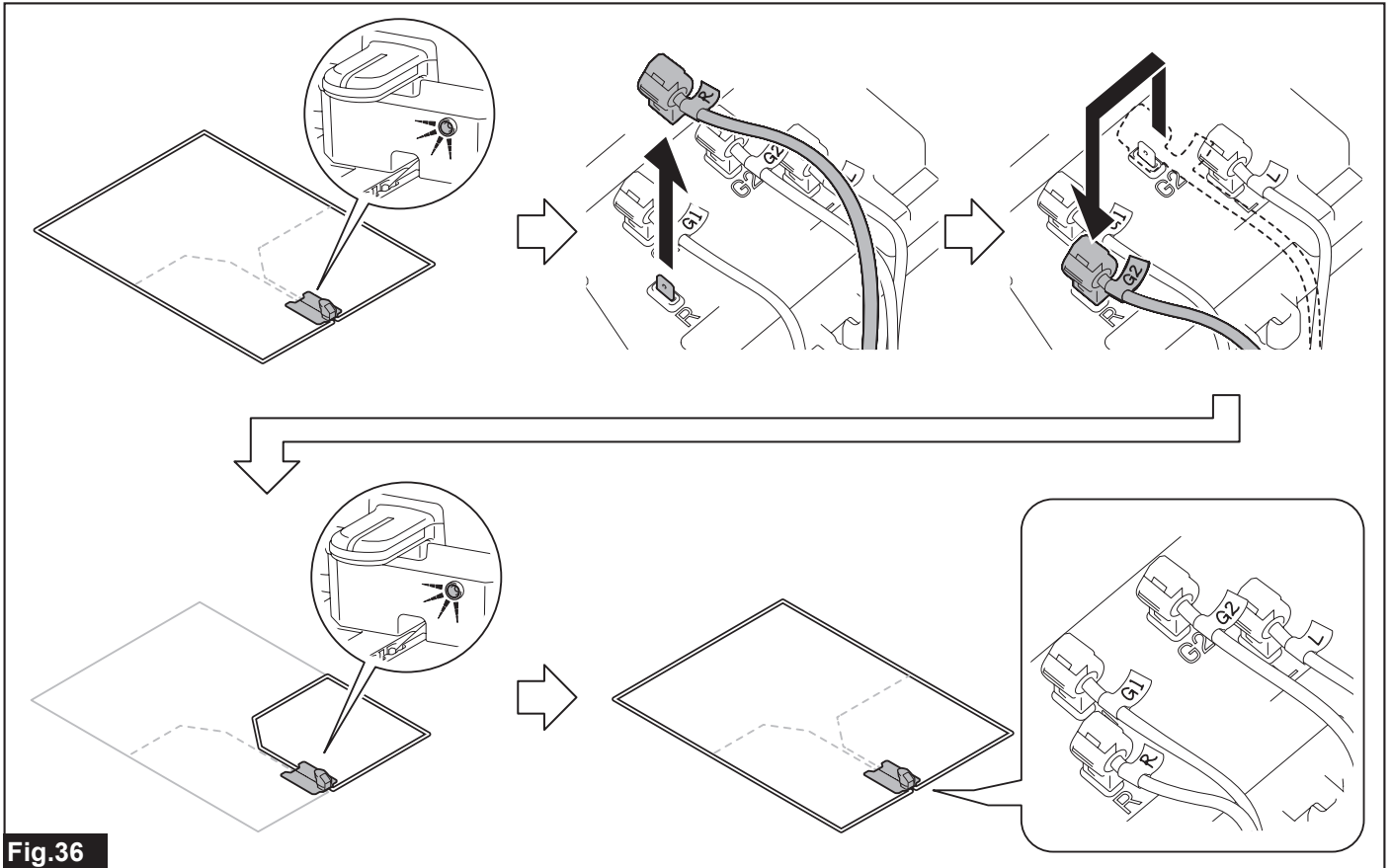


Fig.36

Charging the Robotic Mower

1. Press the I side of the power switch of the Robotic Mower and turn on the power.

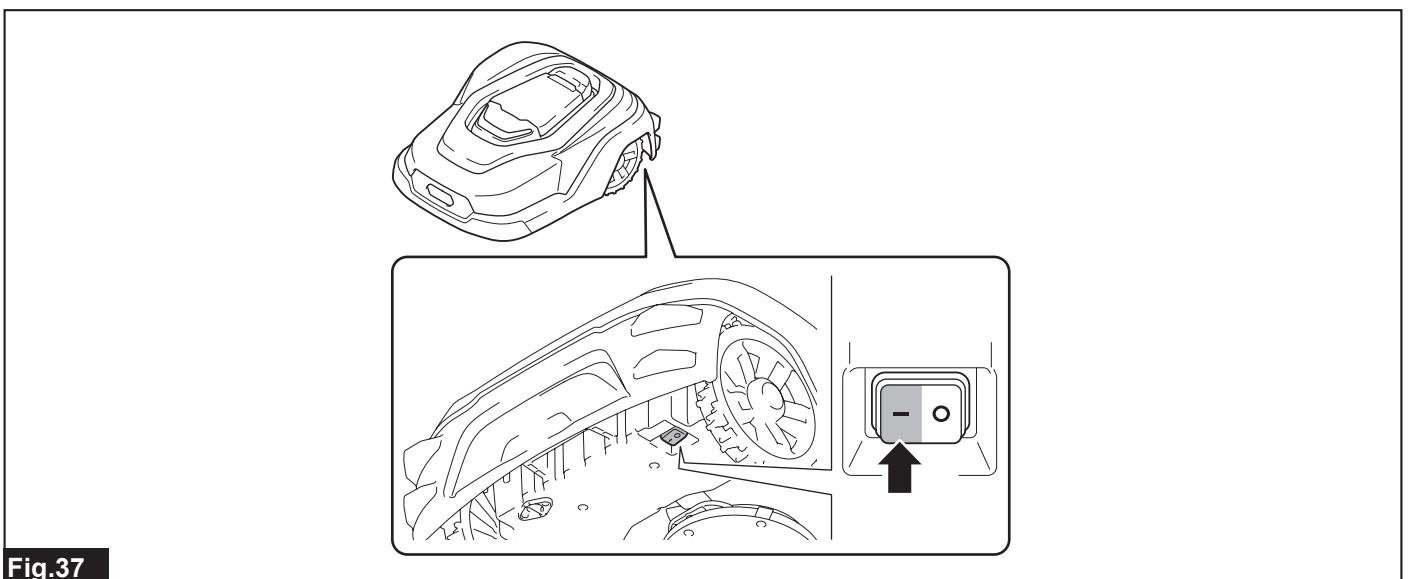


Fig.37

NOTE: It is necessary to turn on the power when charging the Robotic Mower.

2. Dock the Robotic Mower with the charging station.

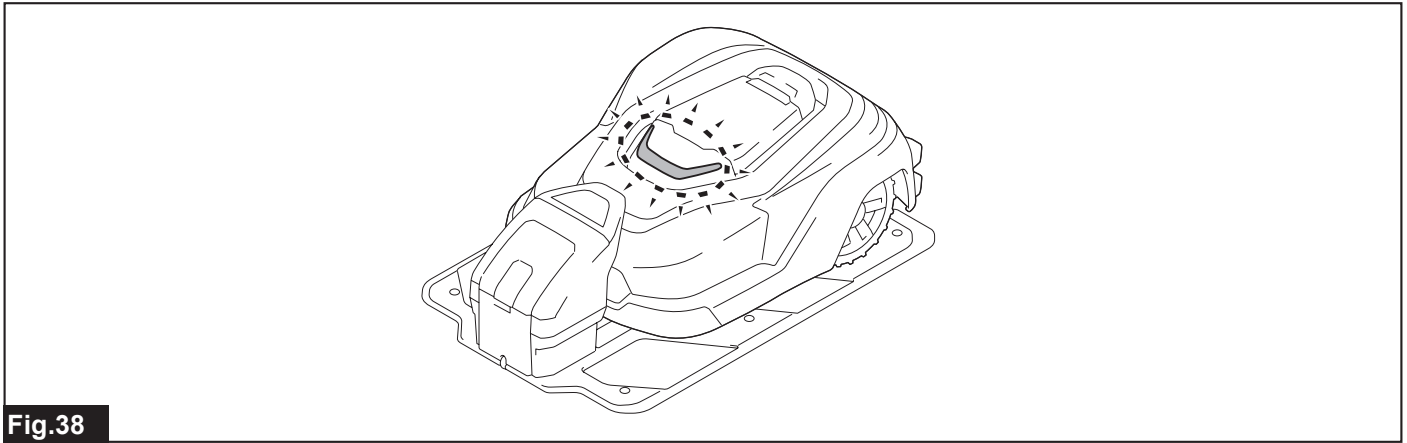


Fig.38

NOTE: When charging starts, the LED of the Robotic Mower blinks green. When charging is complete, the LED turns off.

NOTE: If the battery is fully charged, the charging will not start and the LED of the Robotic Mower will not blink green.

NOTE: The station indicator light does not change depending on the charging status.

NOTE: The charging is possible even if the boundary wire or guide wire is not connected to the charging station.

Initial Setting

NOTE: Peel off the protective sheet from the control part before use.

When the power of the Robotic Mower is turned on for the first time, the initial setting screen shown below appears. Enter the display language, date and time, mowing area, and PIN code.

1. Press the "STOP" button of the Robotic Mower and open the display cover.

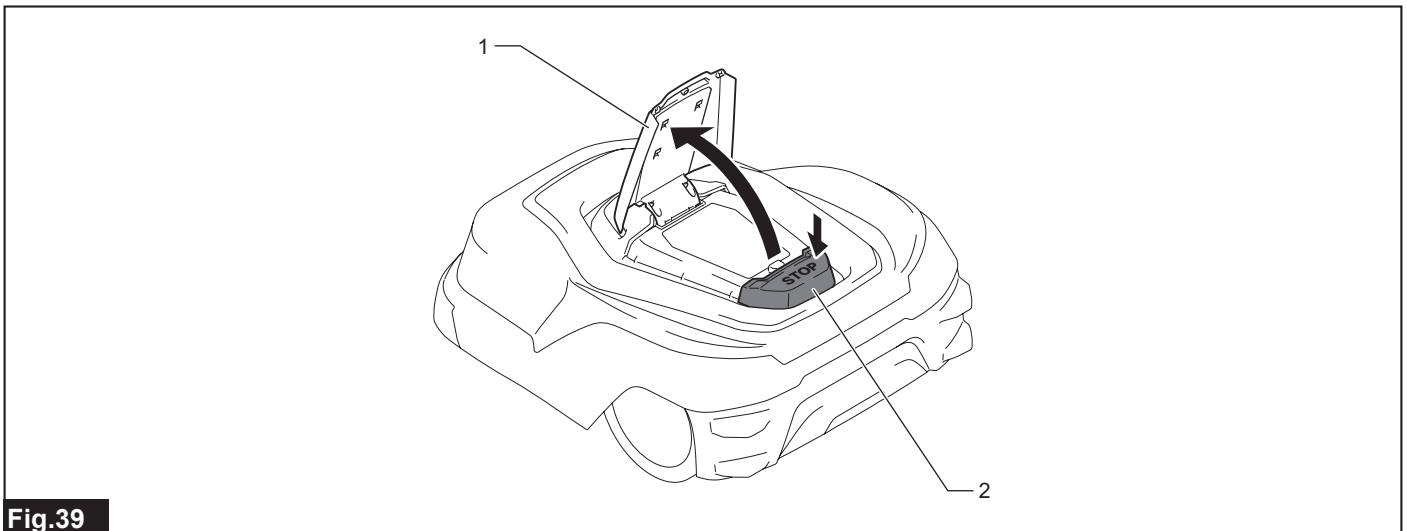


Fig.39

- ▶ 1. Display cover 2. "STOP" button

2. Select the language to use with the / keys, and press the key.

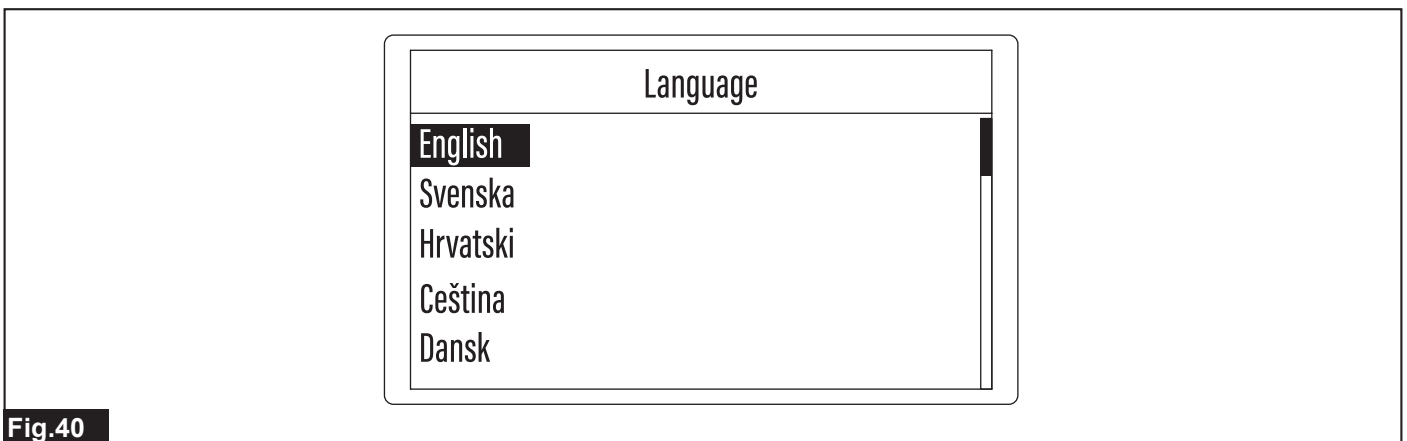


Fig.40

3. Select the desired date and time display formats with the >/ > keys.

4. Select [Next] with the     keys, and press the  key.

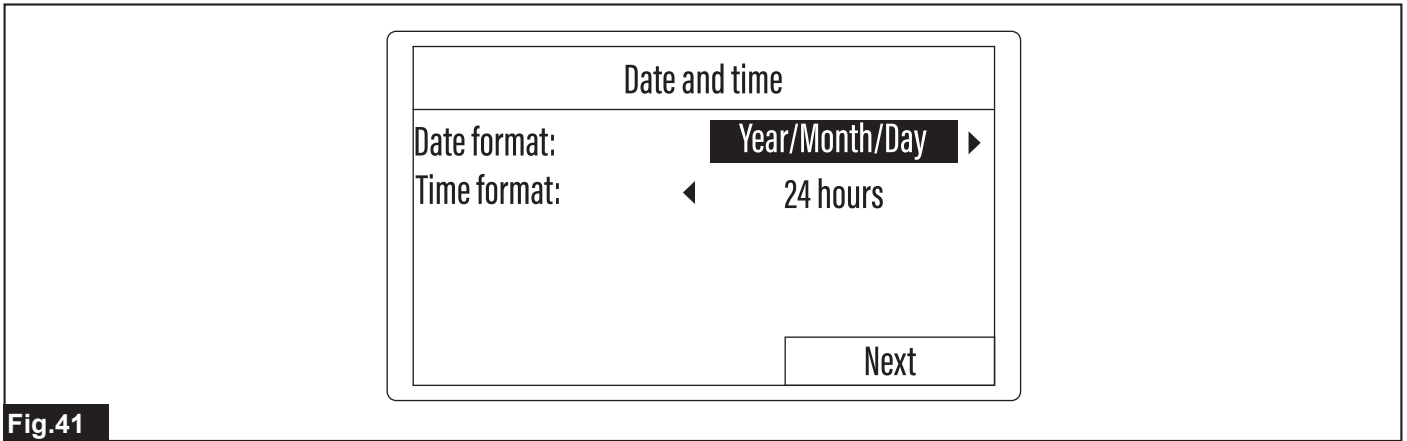













Fig.41

5. Press     keys to select the item and enter the date and time by pressing  to  keys.
6. Select [Verify] with the     keys, and press the  key.

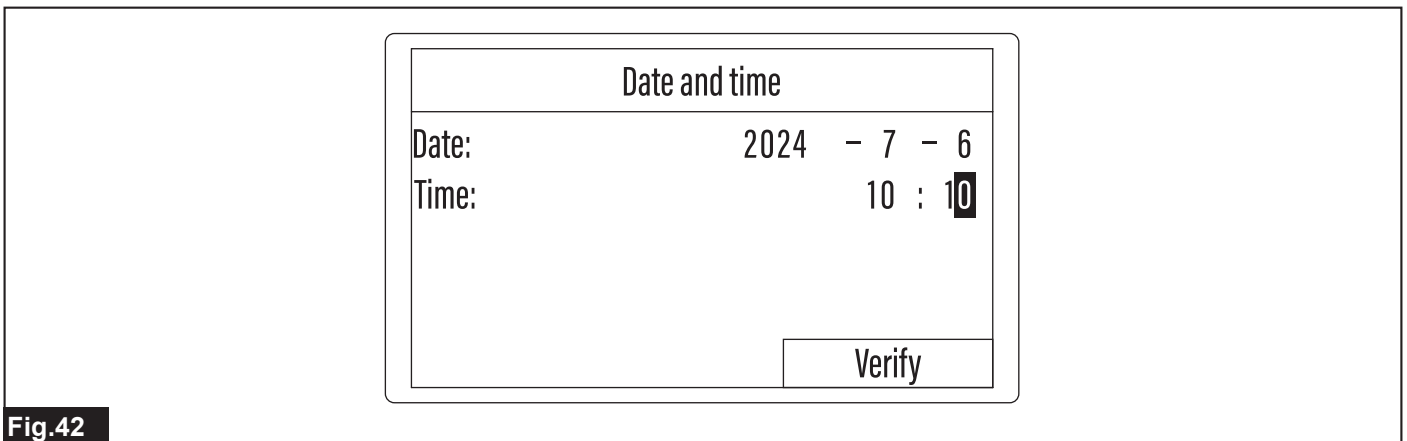


Fig.42

7. Select the mowing area with the   keys, and press the  key.

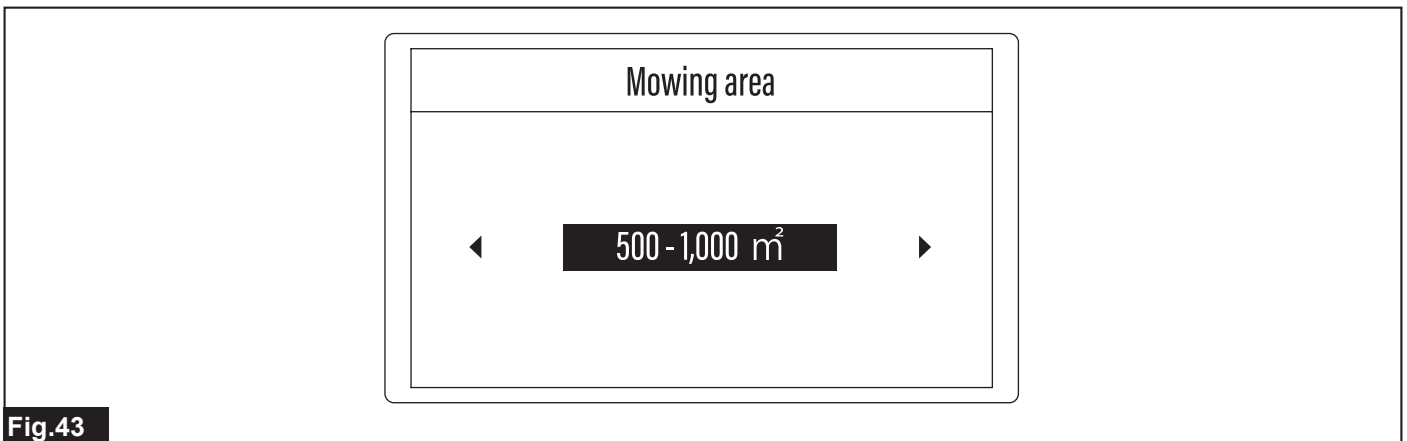


Fig.43

8. Press  to  keys to enter PIN code.

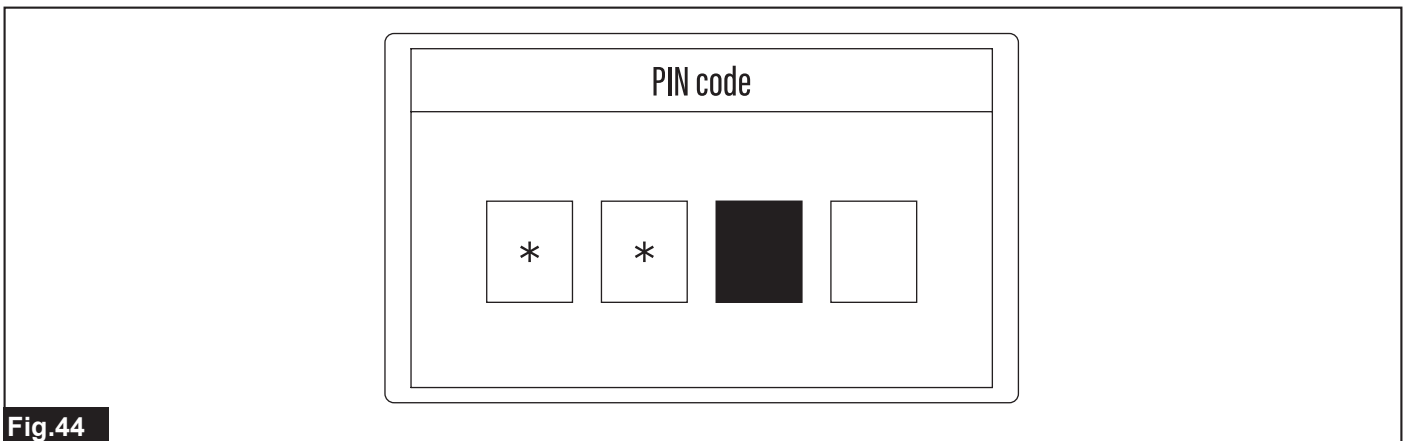


Fig.44

NOTE: In the initial state, no PIN code is set.

9. Enter the PIN code again for confirmation.

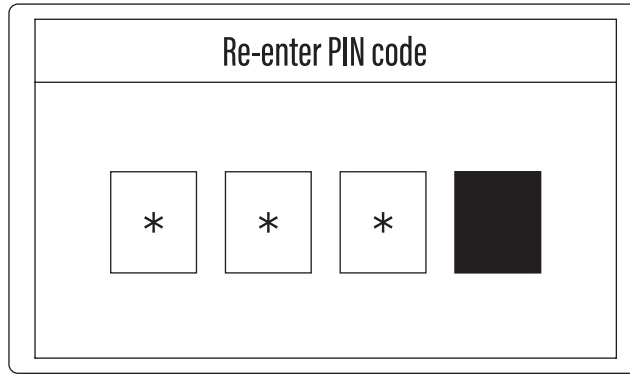


Fig.45

NOTE: Write down the PIN code and keep it in a safe place so that you do not forget it.

Memo:

--	--	--	--

NOTE: If you have forgotten your PIN code, contact our sales office or local dealer.

Checking the Wire Installation

Checking departure from the charging station

[Top menu] > [Main menu] > [Navigation preferences] > [Mower departing points]

Follow the procedure below and check that the Robotic Mower departs from the charging station. In departure operation, the Robotic Mower saves the magnetic field strength of the charging station in its memory to enable proper docking.

NOTICE: Be sure to check departure after installing the wires. Otherwise the Robotic Mower may navigate at slow speed on the guide wire or may not navigate at slow speed on the charging station.

NOTICE: Dock the Robotic Mower with the charging station before setting the departure method.

1. Press the  button on the control panel.




The [Main menu] appears.

2. Select  [Navigation preferences] on the display with the /  keys, and press the  key.

The sub menu appears.

3. Select [Mower departing points].

The menu select screen appears.

4. Select the profile number of the departure method that you want to set with /  keys, and press  key.

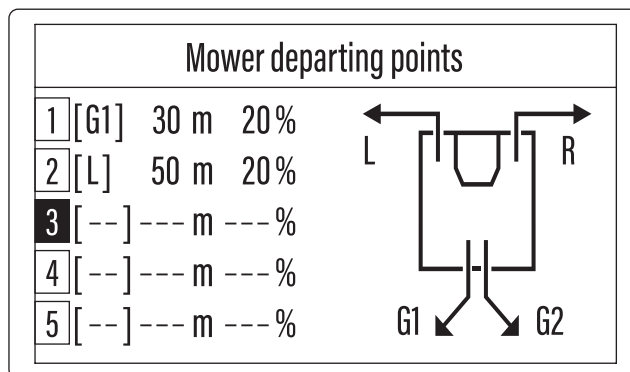


Fig.46

The option menu appears.

5. Use the keypad and enter the desired conditions to the option format fields displayed on the screen.

Option	Details
Wire to trace:	Select the type of wire that the Robotic Mower is to trace after departing from the charging station. Use the keys to display the desired wire type. To depart directly from the charging station without tracing a specific wire, select [--].
Departure position:	Enter the distance that the Robotic Mower is to move from the station before starting the mowing work. You can enter a distance of 0 to 800 m.
Probability	Enter the probability of executing the set profile as a percentage.

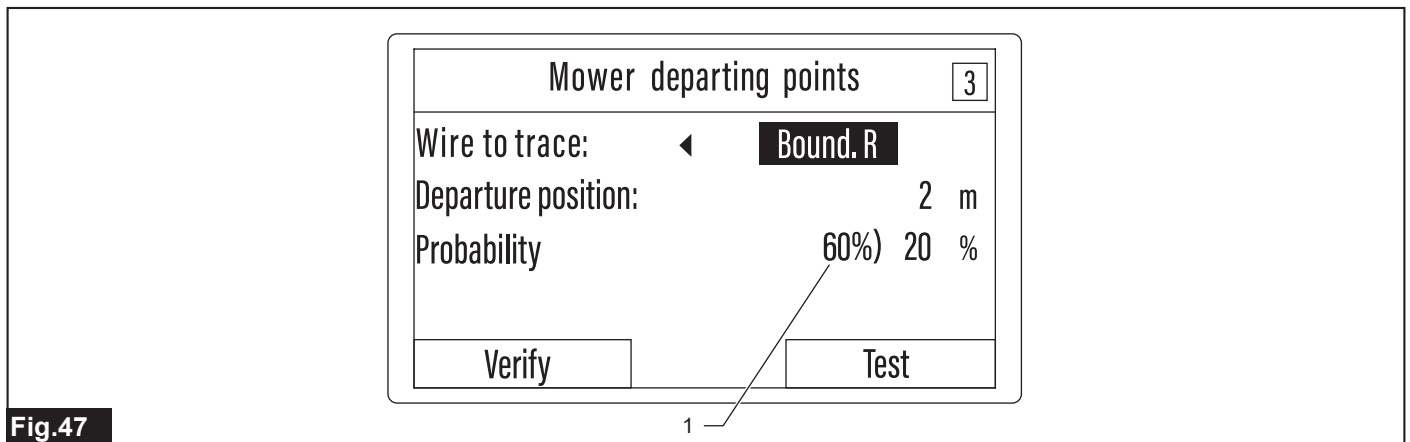


Fig.47

► 1. Maximum probability value that can be entered

NOTE: The maximum probability value that can be entered will be displayed in the left of entry area of each profile. Enter the value that is smaller than the maximum value. If you enter the value beyond the allowable value, it will be replaced with the maximum value.

6. Select [Test] and execute test operation before registering the settings.

The Robotic Mower travels along the selected wire.

The Robotic Mower stops automatically after the distance you enter.

NOTE: The confirmation is finished if the Robotic Mower departs from the charging station and stops at the designated point.

7. Press the "STOP" button.

The display cover opens.

8. Select [Yes] to register or [No] to cancel the registration when the confirmation screen asking whether to register the test run departure method is displayed.

If you select [No], you need to start the setting from the beginning again.

Checking boundary wire installation

Check that the boundary wire is installed correctly.

1. Hold the grip of the Robotic Mower and move the Robotic Mower by hand so that it faces the boundary wire.

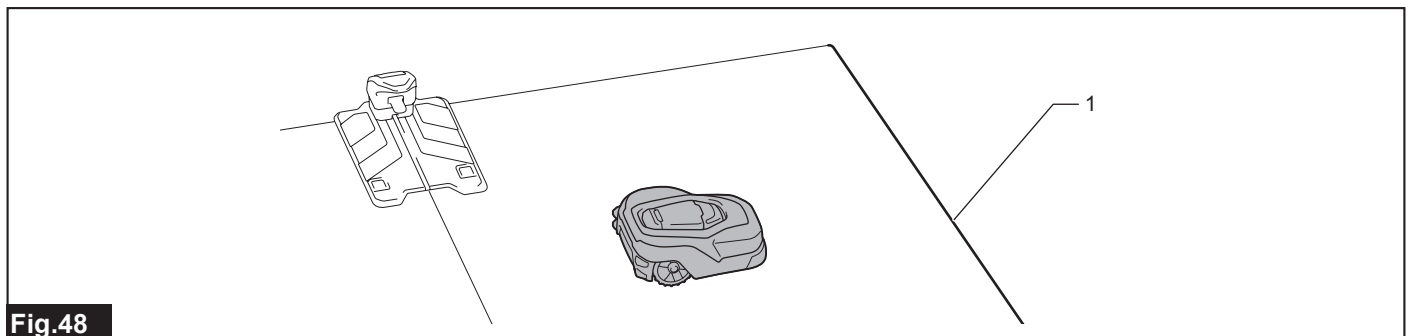


Fig.48

► 1. Boundary wire

2. Press the "STOP" button.

The display cover opens.

3. Press the button, select [Auto mowing] and press the key.

4. Close the display cover.

The Robotic Mower starts mowing and travels toward the boundary wire.

5. Check that the Robotic Mower changes direction at the boundary wire and continues mowing.

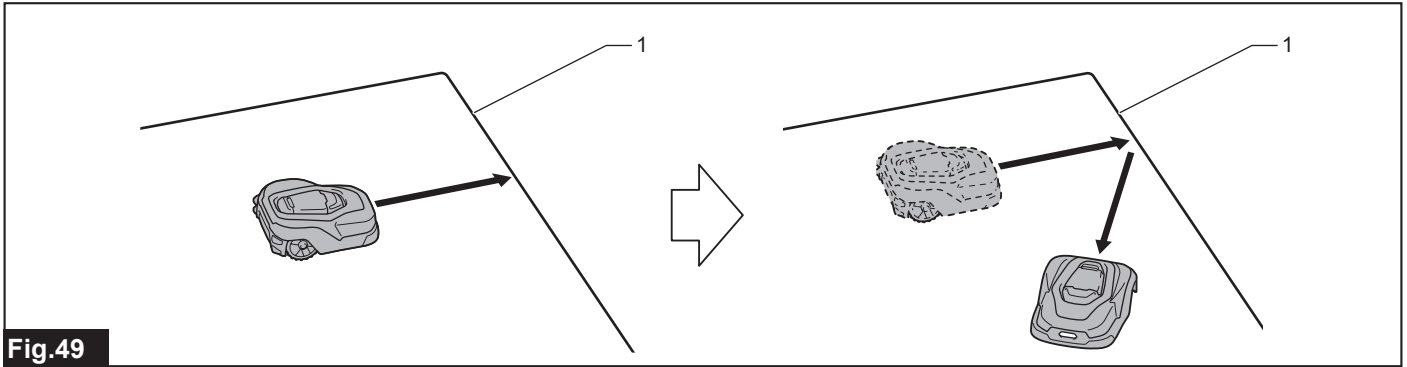


Fig.49

- ▶ 1. Boundary wire

6. Press the "STOP" button.

The Robotic Mower stops.

7. Turn off the power switch of the Robotic Mower and carry it to another place, and then turn on the switch. Check that the Robotic Mower operates similarly even at other boundary wire locations.

Returning the Robotic Mower to the charging station

[Top menu] > [Park] > [Stay at charging station]

This procedure is not necessary when a guide wire is installed. Proceed to [Checking guide wire installation]. Perform this procedure when using the Robotic Mower without installing a guide wire.

Return the Robotic Mower to the charging station.

NOTE: By default, the Robotic Mower preferentially searches for signals from the guide wire and returns to the charging station according to signals of the guide wire. Even if there is not any guide wire in your work area, the Robotic Mower first continues to search for signals from the guide wire for a preset priority search time. After the priority search time has elapsed, the Robotic Mower then researches for signals from the boundary wire and returns to the charging station according to signals of the boundary wire. If you do not want to lay down the guide wire, we recommend changing the priority search time for the guide wire. For details, see "Setting the active search period for the guide signal" in the instruction manual.

1. Press the  button on the control panel.

The sub menu appears.

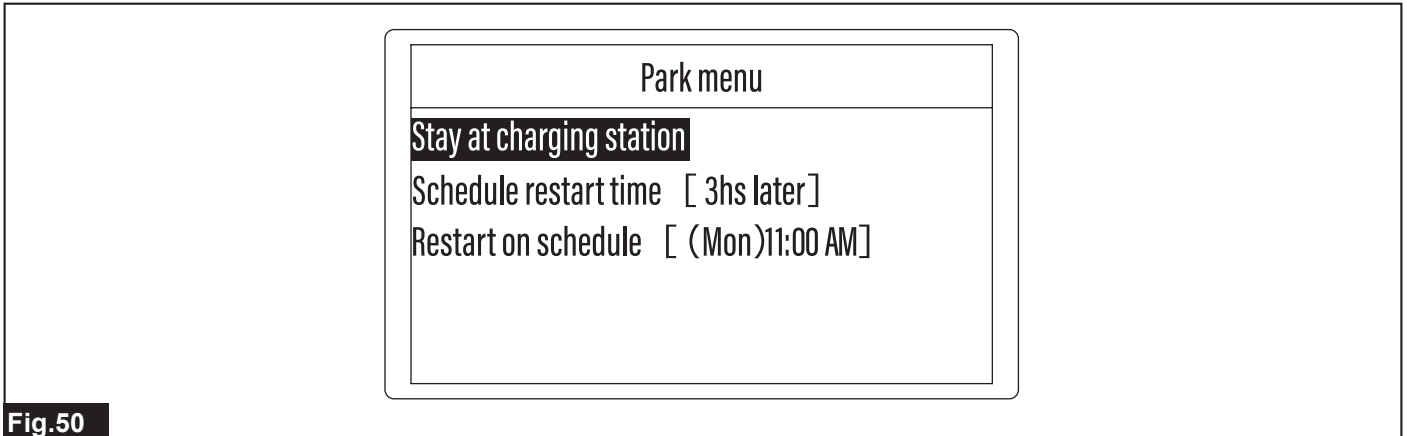


Fig.50

2. Select [Stay at charging station].

Press the  key, and the message [Close the display cover to return to the charging station.] appears.

3. Close the battery cover.

Check that the Robotic Mower returns to the charging station.

Checking guide wire installation

Check that the guide wire is installed correctly.

1. With the power turned off, hold the grip of the Robotic Mower and move the Robotic Mower by hand so that it faces the guide wire.

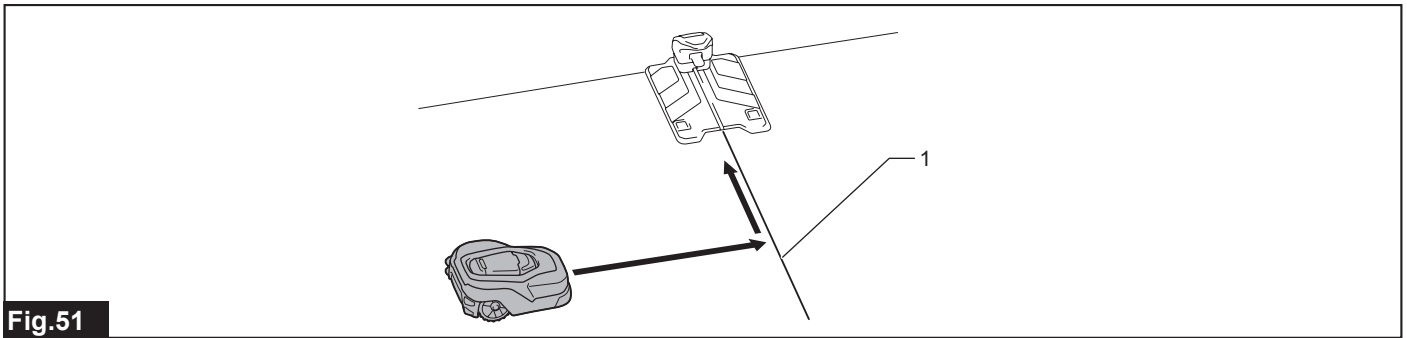




Fig.51

- ▶ 1. Guide wire

2. Press the "STOP" button.

The display cover opens.

3. Press the  button, select [Stay at charging station], and press the  key.

4. Close the display cover.

The Robotic Mower starts mowing navigation toward the guide wire.

5. Check that the Robotic Mower changes direction near the guide wire, navigates along the guide wire toward the charging station, and docks with the charging station.

NOTE: After the Robotic Mower detects the guide wire, it will run along the left side of the guide wire.

This completes the installation and operation checks. For the detailed usage of this product, refer to the Instruction Manual of this product.

CASES IN POINT

Here are some examples of installations and settings in use.

The details shown in the figures are only examples and to illustrate the different field scales where each case might be better suited. Make your arrangement more appropriate according to your preferences.

Personal garden area for a resident

A cosy courtyard or a small square garden in the backyard of your house, surrounded by small fencing, paths and trails.

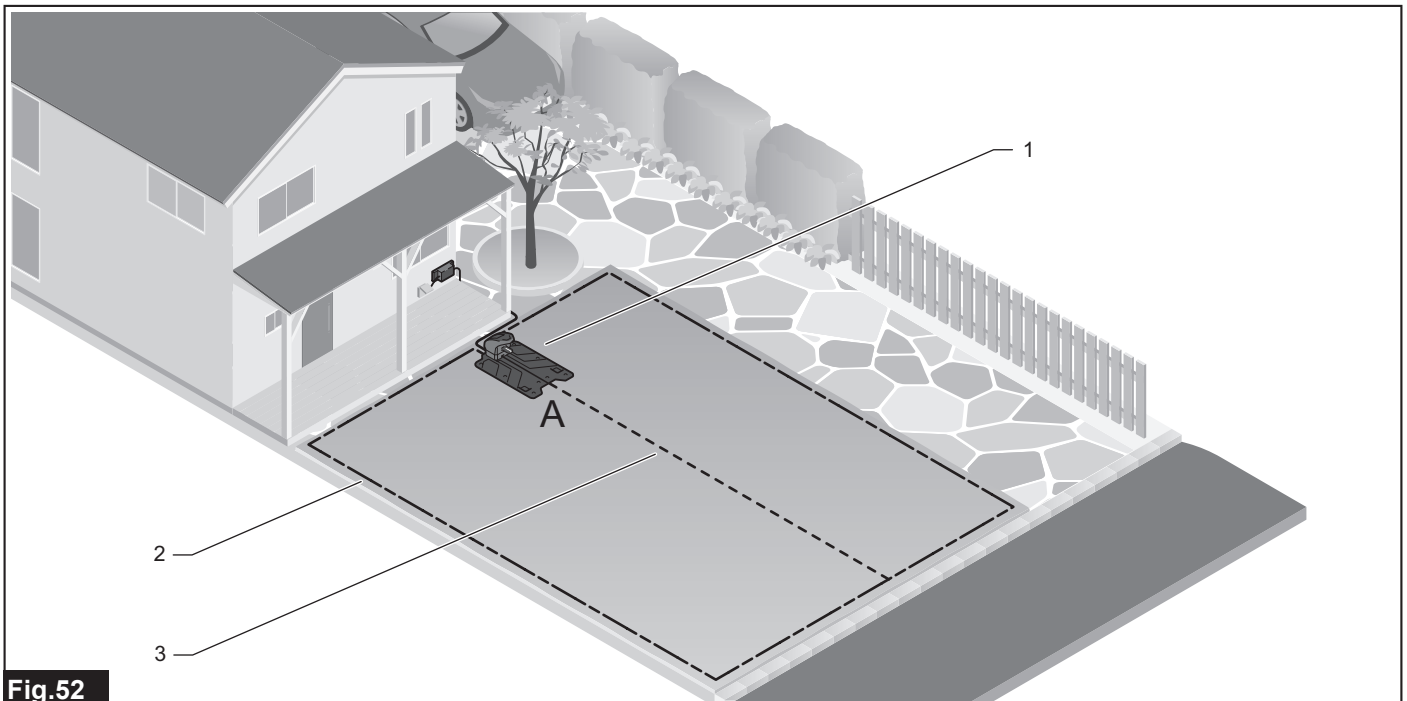


Fig.52

► 1. Charging station 2. Boundary wire 3. Guide wire

Practical guidance

Mowing area	500 m ²
Weekly working days and hours	4 hours on 6 days of the week 8 hours on 3 days of the week
Departure method from station [execution priority (%)]	Depart directly from the charging station at [100%]. Refer to the mower departing point "A" in the figure.
Need to create sub area settings	No
Tips for installations and settings	Place the charging station at the near end of the half line which divides the mowing area into two equal upper and lower areas. Install a guide wire along the half line which divides the mowing area into two equal upper and lower areas.

Home garden with a separate mowing work area

A wide open front garden that surrounds the house on two sides with a small separate area of lawn beside a mature planting garden or vegetable patch.

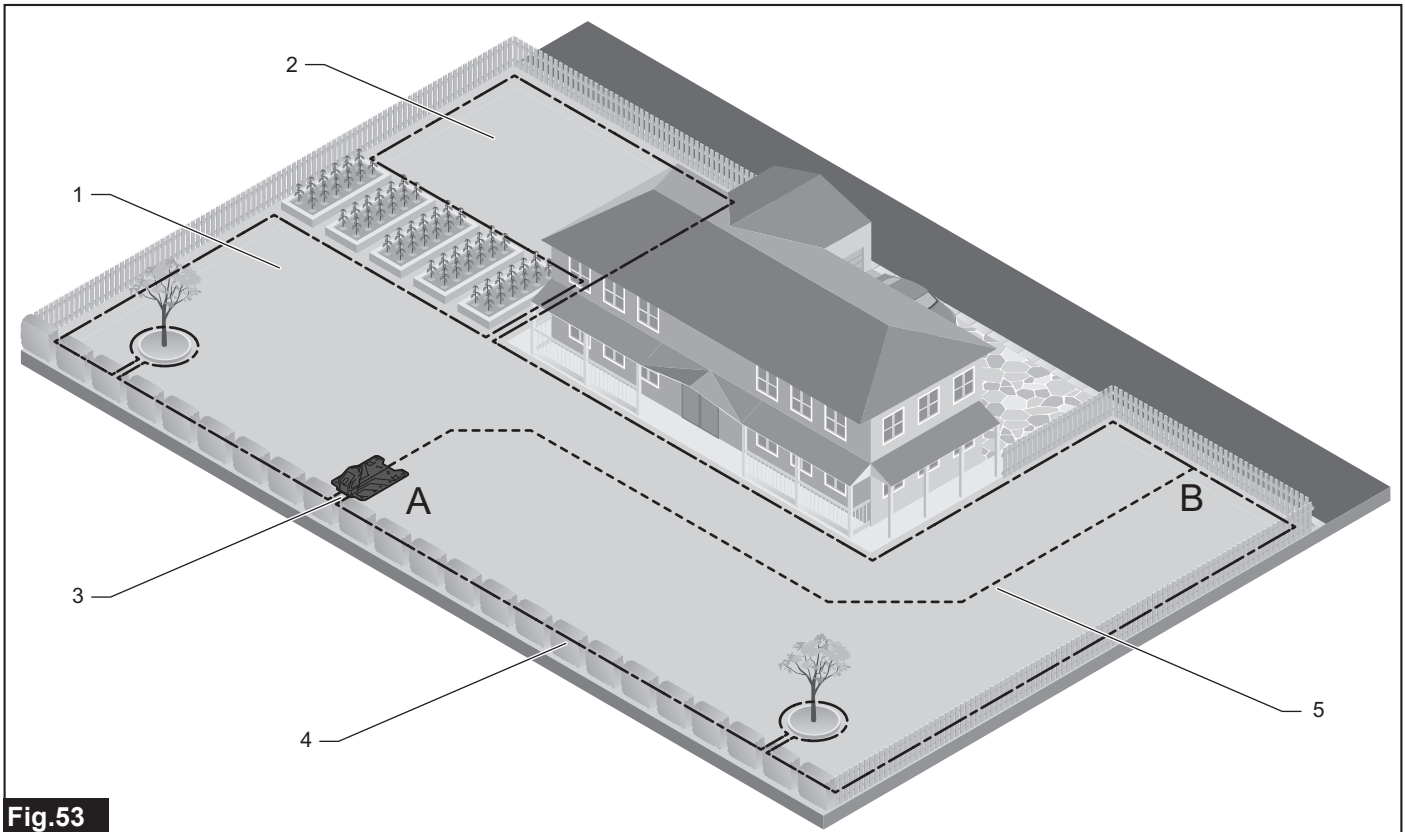


Fig.53

► 1. Main area 2. Sub area 3. Charging station 4. Boundary wire 5. Guide wire

Practical guidance

Mowing area	Main area	1,000 m ²
	Sub area	400 m ²
Weekly working days and hours	Main area	14 hours on 5 days of the week
	Sub area	12 hours on 2 days of the week
Departure method from station [execution priority (%)]	Main area	Depart directly from the charging station at [70%]. Refer to the mower departing point "A" in the figure.
	Sub area	Depart towards the far end of the main garden and start mowing from the guide wire termination area at [30%]. Refer to the mower departing point "B" in the figure.
Need to create sub area settings	Sub area	Move the Robotic Mower by hand from the main area to the sub area in advance. Then start mowing manually. Refer to the instructions under "Mowing without automatic charging" in the instruction manual for details.
		Yes
Tips for installations and settings		Place the charging station at the center of the front boundary of the main garden.
		Install a guide wire along the half line which divides the main area into two equal left and right areas.

Grass lawn fields on small hills

A hillside landscape of a green lawn in a park, golf course or the likes. The lawn grows at different heights and shades on one or more gentle and steep slopes with some sand and water features.

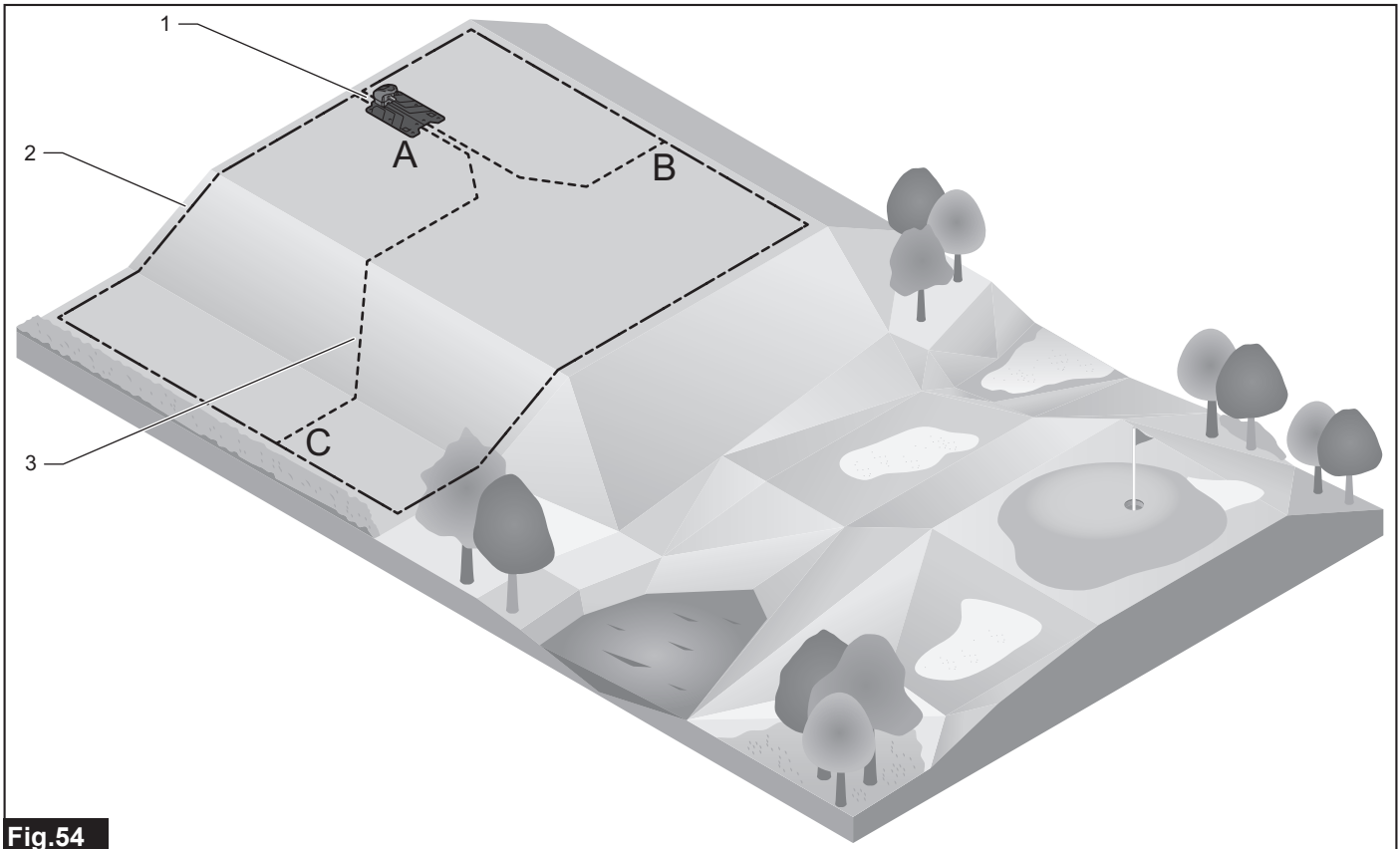


Fig.54

► 1. Charging station 2. Boundary wire 3. Guide wire

Practical guidance

Mowing area	2,500 m ²
Weekly working days and hours	24 hours on 7 days of the week
Departure method from station [execution priority (%)]	<p>Depart directly from the charging station at [40%]. Refer to the mower departing point "A" in the figure.</p> <p>Depart towards the one end of a level lawn surface on the hill and start mowing from the guide wire termination area at [30%]. Refer to the mower departing point "B" in the figure.</p> <p>Depart towards the far end of a slightly sloped lawn surface on the downhill and start mowing from the guide wire termination area at [30%]. Refer to the mower departing point "C" in the figure.</p>
Need to create sub area settings	No
Tips for installations and settings	<p>Place the charging station at the one end of the half way line which divides the level lawn surface on the hill into two equal left and right areas.</p> <p>Install two guide wires along the half way line which divides the mowing area into two equal upper and lower areas. One towards the one end of a level lawn surface on the hill, and the other towards the far end of a slightly sloped lawn surface on the downhill.</p> <p>Be sure to install a boundary wire on surfaces that are nearly flat or as less sloped as possible.</p> <p>Run a guide wire diagonally across a slope as it makes it easier for Robotic Mower to climb the slope.</p>

Well-designed garden with some hard-to-reach spots to get mowing work done

A fully fenced elaborate garden area that contains a large residence, water features and a wild assortment of plants and objects. The well-designed landscape helps keep the garden beautifully intact, but creates isolated spots for lawn maintenance.

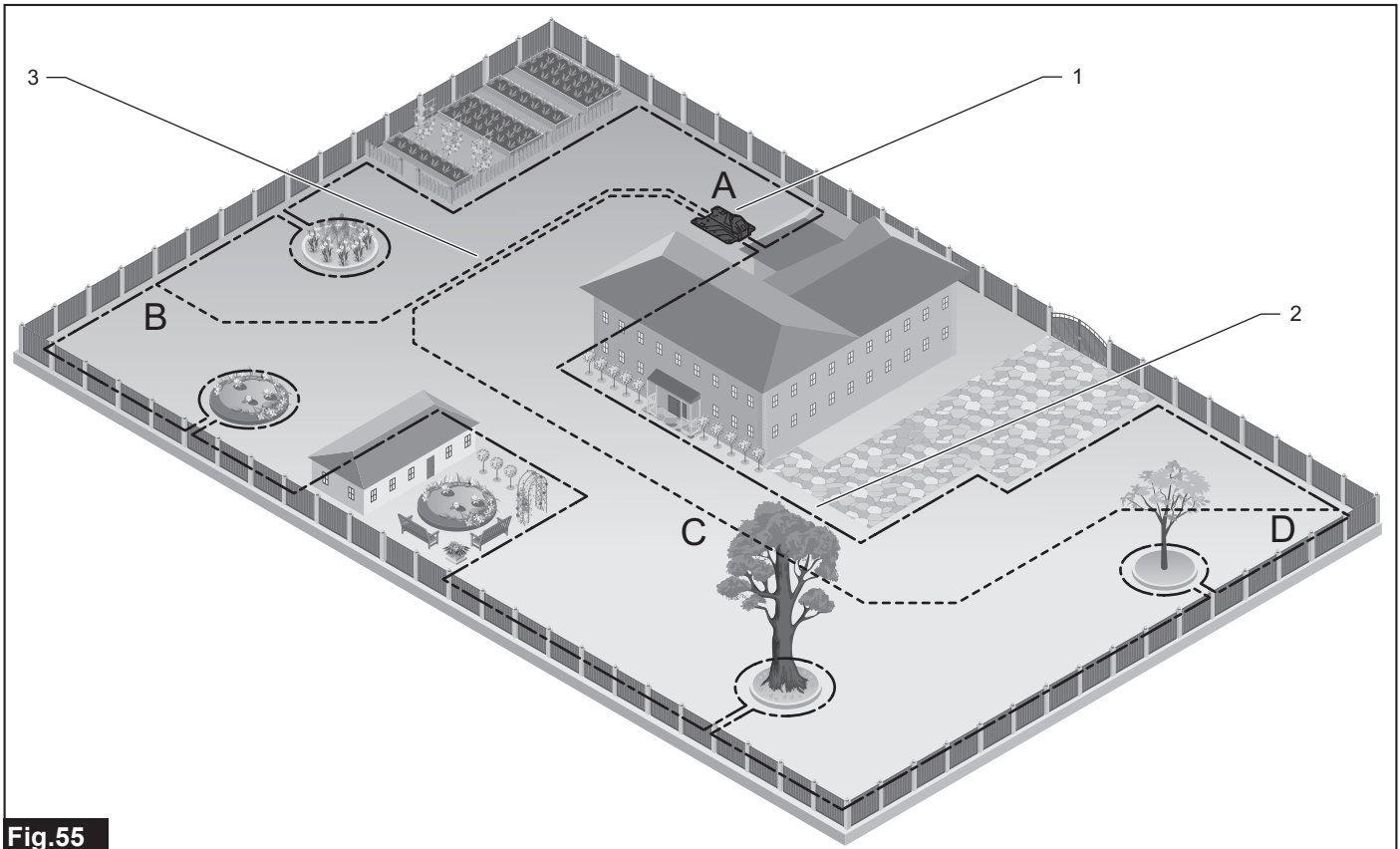


Fig.55

► 1. Charging station 2. Boundary wire 3. Guide wire

Practical guidance

Mowing area	2,500 m ²
Weekly working days and hours	24 hours on 7 days of the week
Departure method from station [execution priority (%)]	<p>Depart directly from the charging station at [30%]. Refer to the mower departing point "A" in the figure.</p> <p>Depart towards the near side end of the mowing work area and start mowing at a couple of strides ahead of the guide wire termination area at [20%]. Refer to the mower departing point "B" in the figure.</p> <p>Depart towards the far distant corner of the mowing work area and start mowing at around the middle of the guide wire length at [30%]. Refer to the mower departing point "C" in the figure.</p> <p>Depart towards the far distant corner of the mowing work area and start mowing at a couple of strides ahead of the guide wire termination area at [20%]. Refer to the mower departing point "D" in the figure.</p>
Need to create sub area settings	No
Tips for installations and settings	<p>Place the charging station in the backyard for a protection of the scenery and easy access to power supply.</p> <p>Install two guide wires to lead the Robotic Mower to two of least accessible mowing areas in the garden. One towards the near end of the garden running through between two garden objects, and the other towards far distant corner of the garden running through between the parking lot and the plants.</p> <p>Be sure to run guide wires a certain distance away from a boundary wire to avoid affecting robotic navigation.</p>

Open formal garden subdivided into asymmetric sections by hedges, wild plants, paths and garden objects

Settled in the middle of forest filled with lots of plants and trees, a commercial estate has an unobstructed view over the backyard garden, in which roughly subdivided into three lawn areas in different sizes and scales.

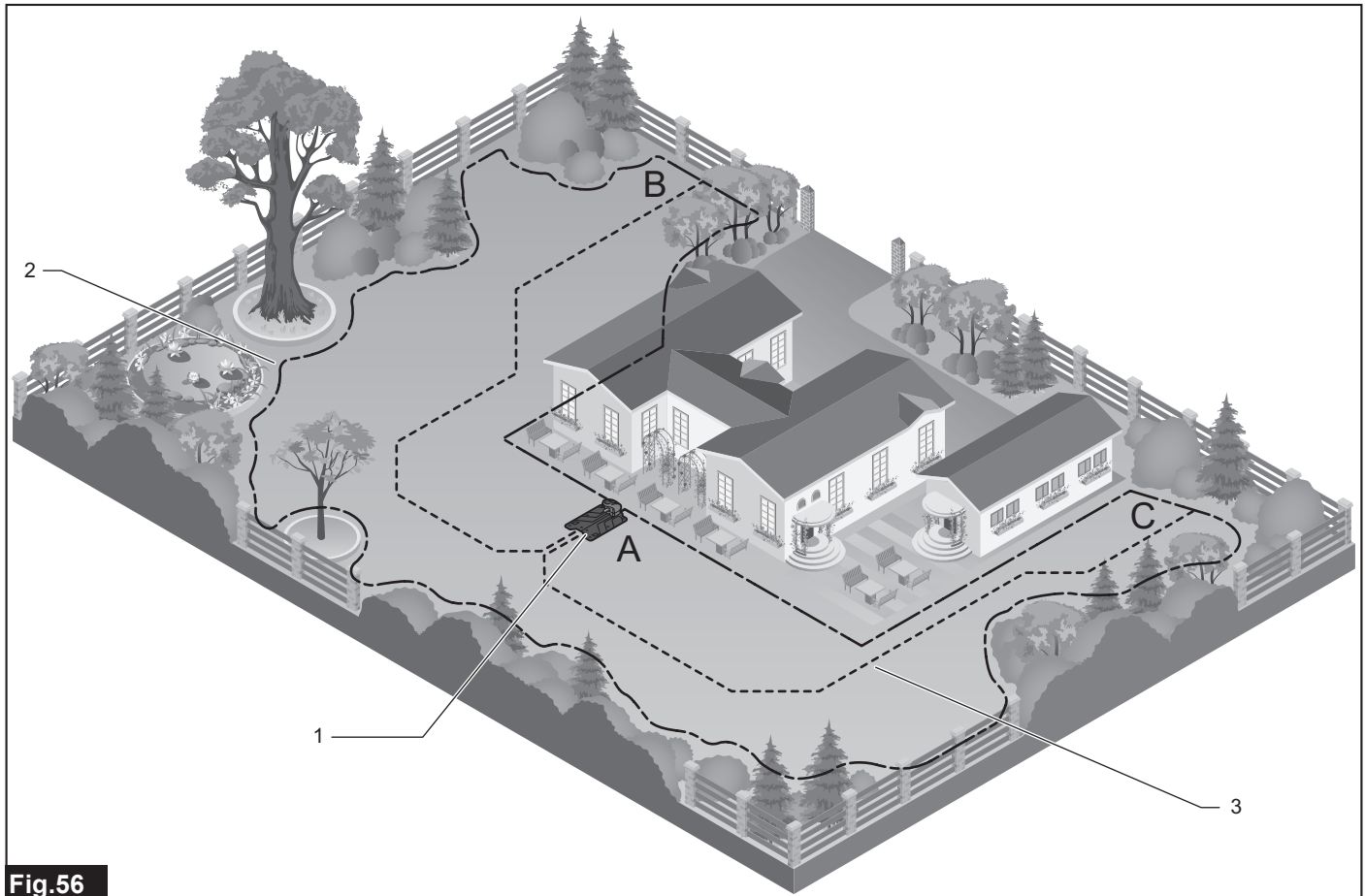


Fig.56

► 1. Charging station 2. Boundary wire 3. Guide wire

Practical guidance

Mowing area	1,500 m ² (Area-dividing ratio: approx. 55/30/15)
Weekly working days and hours	14 hours on 7 days of the week 24 hours on 4 days of the week
Departure method from station [execution priority (%)]	Sort out the execution priorities for mowing work in proportion to the sizes of the three areas. Depart directly from the charging station at [55%]. Refer to the mower departing point "A" in the figure. Depart towards the far end of the second largest mowing work area and start mowing from the guide wire termination area at [30%]. Refer to the mower departing point "B" in the figure. Depart towards the far end of the third largest mowing work area and start mowing from the guide wire termination area at [15%]. Refer to the mower departing point "C" in the figure.
Need to create sub area settings	No
Tips for installations and settings	Place the charging station at the near end of the half way line which divides the largest mowing area into two equal left and right areas. Install a guide wire along the half way line which divides the second largest mowing area into two equal left and right areas. Install a guide wire along the half way line which divides the third largest mowing area into two equal left and right areas.

Makita Europe N.V.

Jan-Baptist Vinkstraat 2, 3070 Kortenberg, Belgium

Makita Corporation

3-11-8, Sumiyoshi-cho, Anjo, Aichi 446-8502 Japan

www.makita.com



885A54A228
EN
20240304