

## **SB "Software MSW 4.02 release", GARDENA R40Li, R45Li, R70Li, 2014-01**

### **Affected models**

GARDENA R40Li, R45Li, R70Li

### **Serial Numbers Affected**

All GARDENA R40Li, R45Li, R70Li

### **Description (general)**

New software has been released for GARDENA R40Li, R45Li, R70Li. The new software contains the following changes:

- *ECO mode* has been introduced
- Reminder that the product must not be washed with water has been introduced
- A reminder to fully charge the battery before storing for the winter has been introduced
- *Country* setting has been introduced
- New battery problem fault messages introduced
- Reduced risk of *Battery problem 30* fault message
- Reduced risk of *Electronic problem 501* fault message
- Reduced risk of *Lifted* and *Collision* fault message when the mower is to leave the charging station
- Several minor software improvements (not described in detail in this SB)

The new software was introduced into production from the start of model year 2014 (from and including serial number 134800001).

Use Automatic programming in Autocheck EXP to update older GARDENA R40Li, R45Li, R70Li models.

#### **Important information**

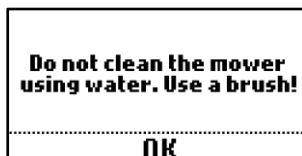
There is an information sheet attached to this SB which must be handed over to the end user once the lawnmower has been updated with the new software. This is to keep the customer informed of the new features in the new software which are not mentioned in older operator's manuals.

### **Detailed Description**

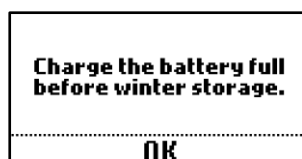
#### ***ECO mode* has been introduced**

This function automatically turns off the loop signal in the boundary wire, the guide wire and the charging station when the robotic lawnmower is not mowing. I.e. when the lawnmower is charging or is not allowed to mow due to timer settings. This function is deactivated in the factory settings and can be activated from the *Settings* -> *ECO mode* menu.

Refer to the accompanying operator's manual supplement for more information concerning the use of *ECO mode*.

**Reminder that the product must not be washed with water has been introduced**

It is very important that water, pressurized or even running water, is not used to wash the product in order to avoid damaging electronic components. This message is displayed automatically every six weeks. The message is displayed only when the stop button is pressed and the display hatch is opened. The message will not halt the mower in any way. This is therefore not a fault message but only a reminder to the customer in order to avoid any damage that may arise if the product is cleaned incorrectly.

**A reminder to fully charge the battery before storing for the winter has been introduced**

To guarantee battery functionality and service life, it is very important to fully charge the mower before storing it away for the winter. This message is shown automatically every two weeks from September 1 to December 31 (from March 1 to June 30 in Australia, New Zealand and South Africa). The message is displayed only when the stop button is pressed and the display hatch is opened. The message will not halt the mower in any way. This is therefore not a fault message but only a reminder to the customer in order to avoid any damage to the battery.

**Country setting has been introduced**

The *Country* setting has been introduced to simplify the earlier *Date format* and *Time format*. The mower will adapt itself to the correct date and time formats after selecting the *Country* setting. The *Country* setting also affects the date when the reminder is shown for charging the battery ahead of winter storage.

The *Country* setting is done during the startup sequence but can be changed later from the *Settings* menu.

**New battery problem fault messages introduced**

To make troubleshooting easier and reduce the risk of replacing fault-free components, an improved self-diagnosis has been introduced. Part of the improvement is a number of new fault messages for faults caused by batteries and battery charging. See the table below. Note that the previous "Battery problem 30" has been renamed to "Charging system problem 30" to indicate that the problem is probably not in the battery.

Message in the mower and Autocheck EXP	Code	Description in Technical Manual	Message type	Mower stops due to message
Charging system problem	30	Charging system problem	Fault	Yes
Temporary battery problem	58	Battery type resistor invalid value	Information	No
Temporary battery problem	60	Battery temperature sensor invalid value	Information	No
Temporary battery problem	62	Temperature in battery too high/low	Information	No
Battery problem	66	No battery detected	Fault	Yes

**Reduced risk of *Battery problem 30* fault message**

There was a risk in earlier software versions (MSW 3.X) that the *Battery problem 30* fault message would be displayed without there being a fault in the battery or the charging system.

**Reduced risk of *Electronic problem 501* fault message**

There was a risk in earlier software versions (MSW 3.X) that the *Electronic problem 501* fault message would be displayed without there being a fault in the main circuit board, the display board or the cables.

**Reduced risk of *Lifted* and *Collision* fault message when the mower is to leave the charging station**

There was a risk in earlier software versions (MSW 3.X) that the *Lifted* or *Collision* message is shown when the mower leaves the charging station without there being a fault in the collision or lifting sensors.

**The new software consists of the following versions:**

- Main Software (MSW): 4.02.00 (new)
- MMI Software (MMI): 4.00.00 (new)
- Sub System Software (SSW): 4.00.00 (new)

**Warranty report**

- Updating the software ahead of a sale can *not* be subject to any warranty claims. This should be considered as a normal part of the PDI. Warranty claims will not be accepted.
- Updating the software in conjunction with winter service can *not* be subject to any warranty claims. This should be considered a normal part of the winter service for which the customer pays. Warranty claims will not be accepted.

### 1.1 Introduction

Your GARDENA robotic lawnmower has been updated with new software. This software entails a number of changes from the Operator's manual that was supplied with the product. These changes are described in this document.

### 1.2 New functions

The following functions can be accessed from the *Settings* menu.

#### **ECO mode**

This function automatically turns off the loop signal in the boundary wire, the guide wire and the charging station when the robotic lawnmower is not mowing. I.e. when the lawnmower is charging or is not allowed to mow due to timer settings.

ECO mode is suitable to use where there is other wireless equipment not compatible with the robotic lawnmower, e.g. certain hearing loops or garage doors.

When the loop signal is turned off due to the ECO mode, the indicator lamp in the charging station flashes green. When the indicator lamp flashes green the robotic lawnmower can only be started in the charging station and not out in the working area. In ECO mode, it is very important to always press the **STOP** button before removing the robotic lawnmower from the charging station. In ECO mode it is otherwise not possible to start the robotic lawnmower. If the lawnmower has been removed by mistake without first pressing the **STOP** button, it must be placed back in the charging station and the **STOP** button pressed. Only then can the robotic lawnmower be started inside the working area.

#### **IMPORTANT INFORMATION**

Always press the **STOP** button before removing the robotic lawnmower from the charging station. In *ECO mode* the robotic lawnmower otherwise will not start inside the working area.

Select *ECO mode* and press **OK** to activate ECO mode.

#### **Country**

Select the country in which the robotic lawnmower will operate with this function. Place the cursor at the required country and press **OK**.

### 1.3 Reminder about winter storage

#### **IMPORTANT INFORMATION**

Charge the battery fully before winter storage.

To guarantee battery functionality and service life, it is very important to fully charge the mower before storing it away for the winter. Place the mower in the charging station with the hatch open until the battery icon in the display shows that the battery is fully charged. Then set the main switch to **0**. The mower is now ready for winter storage.