

ROBOTIC MOWER SERVICES

CHARGING ISSUE DIAGNOSTIC CHART

Email to TechSupport@RoboticMowerServices.com when completed

Mower Model Number: _____ **Mower Serial Number:** _____

1) Place mower in the charging station. Make sure the mower is powered on.

1A) *For models 310, 315, 315X, 415X, 430X, 430XH, 450X, & 450XH:* With mower display on home screen or menu screen, press and hold “0” button on keypad to access “Quick Info” menu. Select INFO, then select BATTERY. At the top of the screen, select “BATT 1” and record the following information. If mower is a 450X or 450XH, select “BATT 2” and record that info as well.

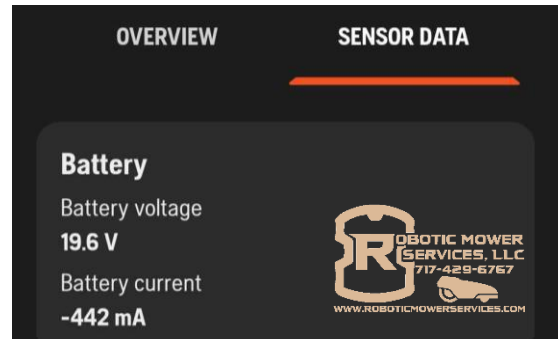
Batt 1	Batt 2
Voltage: _____	_____
Charges: _____	_____
Charge Level: _____	_____
Current: _____	_____
Temp: _____	_____
Capacity: _____	_____



1B) *For models 435X, 520, 520H, 535AWD, 550, 550H, and EPOS models 450X, 450XH, 520, 520H, 550, 550H:* While standing by the mower, connect to the mower via the Automower Connect app. On the mower status screen select the MORE option. Then select MY MOWERS, then select MOWER DETAILS and then SENSOR DATA. Record the following information.

Battery Voltage: _____

Battery Current: _____



2) **Measure Resistance:** Set multimeter to measure OHMS and record OHM values for the following individual components. Components must be completely disconnected from all other components during these tests. Ω

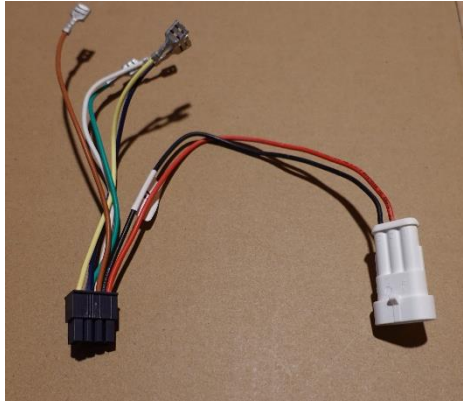
2A) Low Voltage Cable	Black Wire: _____	Black/White Wire: _____
2B) Charging Station Harness	Red Wire: _____	Black Wire: _____
2C) Charging Station Charging Contact Harness	Red Wire: _____	Black Wire: _____
2D) Mower Charging Contact Harness (*NOTE!)	Brown Wire: _____	Blue Wire: _____
2E) Inner Charging Harness (*NOTE!)	Brown Wire: _____	Blue Wire: _____
2F) 415X / 435X / 535 Adapter Harness	Red Wire: _____	Black Wire: _____
2G) Batt. to Main/Application Board Harness	Red Wire: _____	Black Wire: _____
Batt. To Main Board Harness (#2)	Red Wire: _____	Black Wire: _____

*SEE NOTE ON NEXT PAGE! *

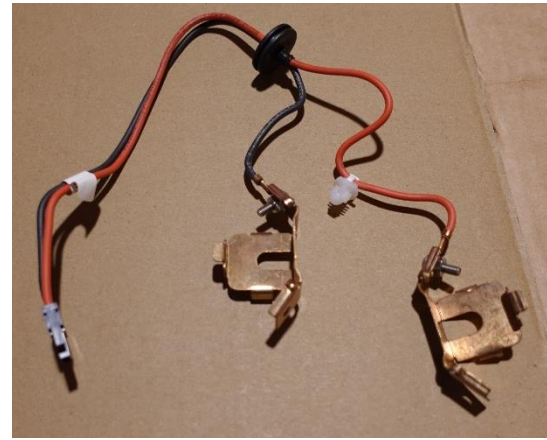
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2A) Low Voltage Cable



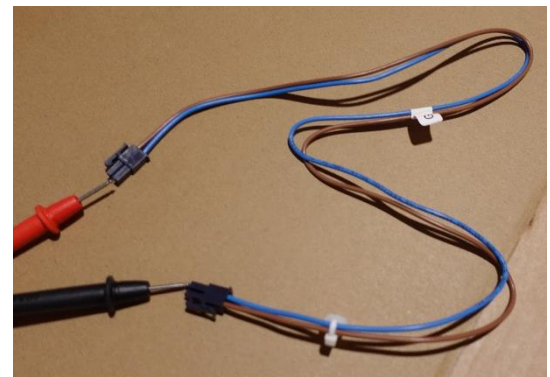
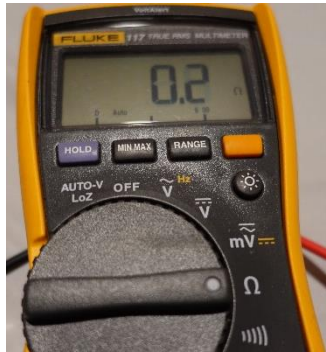
2B) Charging Station Harness



2C) Charging Station Charging Contacts



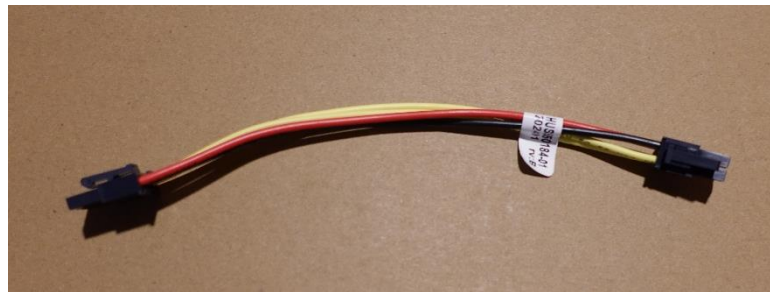
2D) Mower Charging Contact Harness ***SEE NOTE BELOW! ***



2E) Inner Charging Harness ***SEE NOTE BELOW! ***



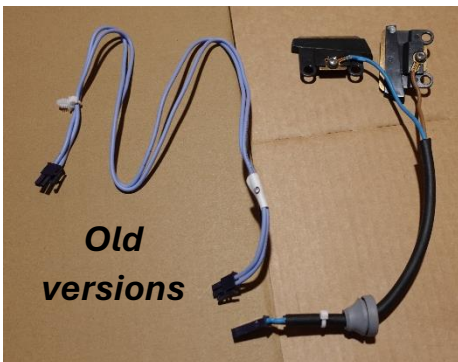
2F) 415X/435X/535 Adapter Harness



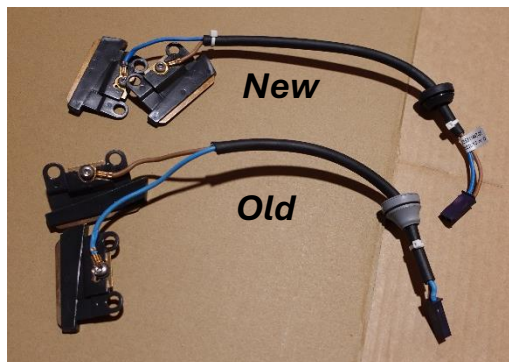
2G) Batt. to Main/Application Board Harness

*** NOTE ***

If your mower charging contact harness has a gray grommet on it or if you have the double blue wire (double brown wire in 300 series) inner charging harness they should be replaced. The updated charging contact harness has black grommet. The updated inner charging harness has a brown wire and a blue wire.



Old versions



New

Old



NEW

Old

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3) **Measure Resistance of Connected Components:** Connect the following components and record the OHM values for the following combinations.

3A) Low Voltage Cable / Charging Station Harness

Red Wire: _____ Black Wire: _____

3B) Charging Contact Harness / Inner Charging Harness

Brown Wire: _____ Blue Wire: _____

3C) Charging Contact Harness / Adapter Harness (415X/AWD's)

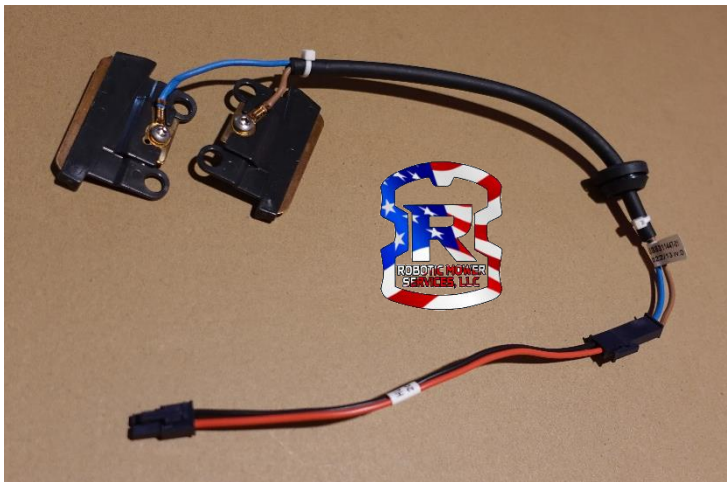
Red Wire: _____ Black Wire: _____



3A) Low Voltage Cable Connected To Charging Station Harness



3B) Mower Charging Contact Harness Connected To Inner Charging Harness



3C) Mower Charging Contact Harness Connected To Adapter Harness (415X, 435X, 535 AWD)

4) Battery Information:

Battery Serial Number (Printed on battery) _____

Battery Serial Number (2nd battery 450/550 variants) _____

Battery color: Blue or Black _____

Carefully visually inspect all wires, circuit boards, connectors, and plugs. Replace ANY components that have signs of corrosion, distortion, or any other type of damage.

Examples of damage to charging circuit components

