

MAX LINK® On-Board Diagnostics

Owner's Manual



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MAX LINK Setup Instructions

If your MAXON liftgate comes equipped with the MAX LINK on-board diagnostics option, go to the Apple or Android APP store and download the MAX LINK App.



When you first open the app, you will be asked to enter your log-in credentials. At the log-in screen enter the credentials below.

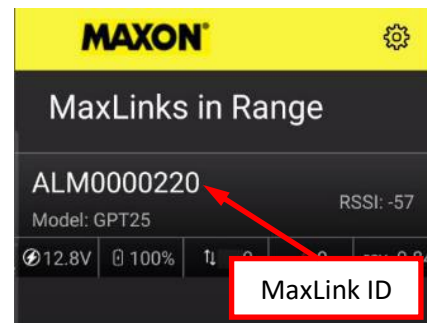
Email Address: **MAXLINK@maxonlift.com**

Password: **MaxLinkopen** (Password is case sensitive)

You can now see MAX LINK devices in range.

Tap on the unit of choice.

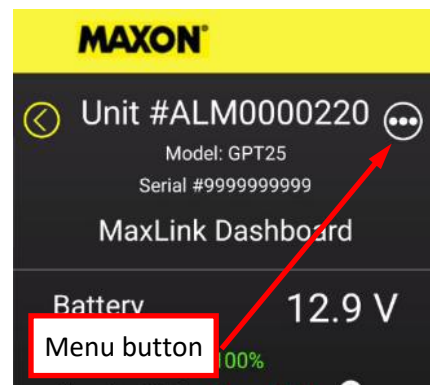
Note: If several liftgates with MAX LINK are nearby, ensure that the preset MAX LINK ID corresponds to the liftgate you want to set up.



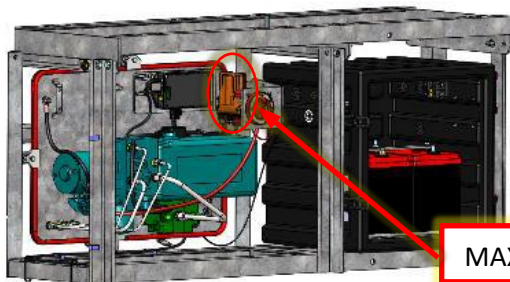
A Dashboard now appears that provides critical information about your Maxon liftgate. However, you must complete a final setup process to have full functionality.

Tap on the ☺ Menu button in the right upper corner and choose "Initial Setup." Follow the prompts and go through the final setup process:

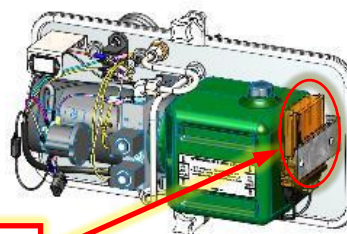
1. Decide the best unit identification number for your organization. The preset number corresponds with the MAX LINK ID number printed on the MAX LINK device inside the pump box. This number is typically replaced with your company's asset number for the specific vehicle or trailer.



MAX LINK device in BMR Pump Box



MAX LINK device in GPT Pump Box



2. The following fields are already pre-populated, and no further action is necessary:
 - a. Liftgate model
 - b. Liftgate serial number
 - c. Company Prefix
 - d. Number of pumps
3. The following section deals with the power supply to the liftgate. This section is pre-populated if Maxon supplied auxiliary batteries as part of the liftgate order. Otherwise, please input your data:
 - a. Is the liftgate running off auxiliary batteries or the chassis' starter batteries?
 - b. Enter the battery model – refer to the battery label for that information
 - c. Type of batteries – AGM or flooded?
 - d. Number of batteries
 - e. Reserve capacity – this information can be found on the specifications sheet of the respective battery
 - f. Battery Installation date
 - g. select 12 or 24 volts
4. After reviewing a summary page that displays the data you entered, tap the “Save” button and confirm all entries. If you detect any errors, go back into the setup process and make any necessary corrections.
5. Go back to the initial “MAX LINK’s in range” page. Check to ensure that your vehicle/trailer asset number is displayed correctly.
6. MAX LINK is ready to use.

The screenshot shows the 'Initial Setup' screen for a MAXON device. The screen is divided into several sections: 'Details', 'Pumps', and 'Batteries'. The 'Details' section includes fields for 'Unit Number' (ALM0000220), 'Liftgate Model' (GPT25), 'Liftgate Serial Number' (9999999999), and 'Company Prefix' (MXL). The 'Pumps' section includes a 'Count' field (Single). The 'Batteries' section includes a 'Liftgate Battery Source' field (Truck), a 'Model' field (Manufacturer Type #), a 'Type' field (AGM), a 'Count' field (2), a 'Reserve Capacity (per battery)' field (190), an 'Installation Date' field (01-01-2020), and a 'Voltage' field (12). At the bottom, there are 'Save' and 'Cancel' buttons.

Note: MAXON will send out firmware updates that can be accessed via “Edit MAX LINK Details.” Be aware that a firmware update typically takes up to 4 minutes for the data transfer to the MAX LINK device on the liftgate and then another 4-5 minutes to update itself. It is critical not to operate the liftgate and that the unit’s power supply is not interrupted during this process.

MAXLINK Operating Instructions

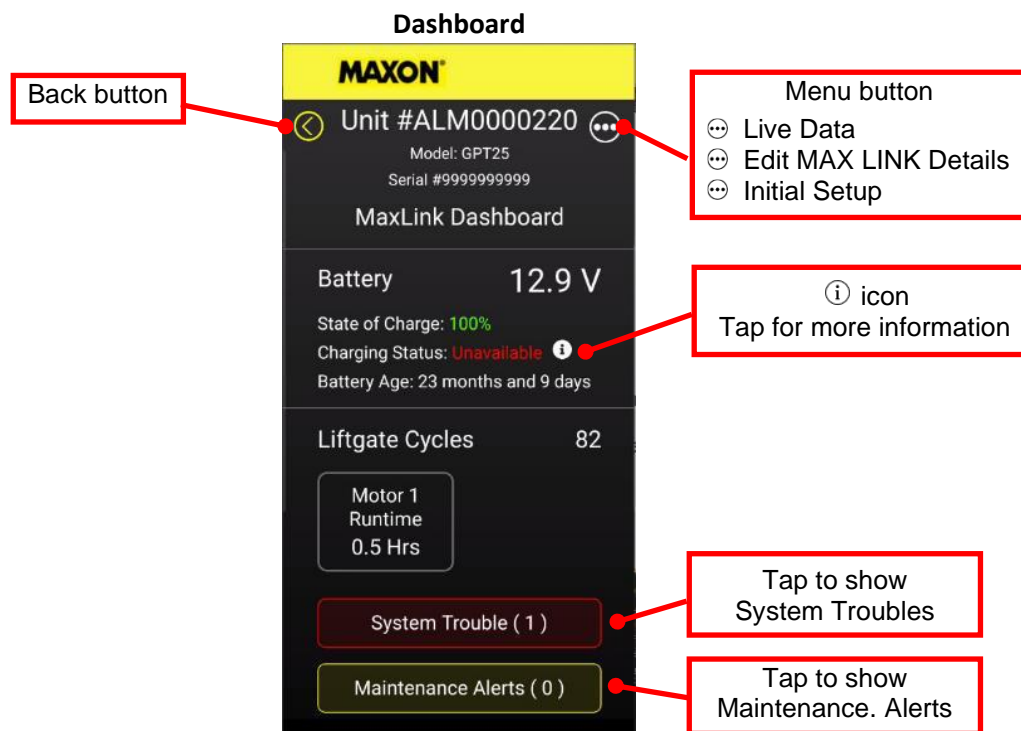
Open MAX LINK App. The app will open to the MAX LINK's in range" page.

Select the liftgate that you want to check.

1. Dashboard:

The Dashboard shows important liftgate and battery status information such as:

- Battery Voltage and State of Charge
- Charging status: Note that this metric needs at least 72 hours of data to display charging status. Tapping the ⓘ icon next to Charging Status takes you to the battery charging log to review a specific unit's charging pattern.
- Battery Age
- Liftgate Cycles
- Motor Runtimes

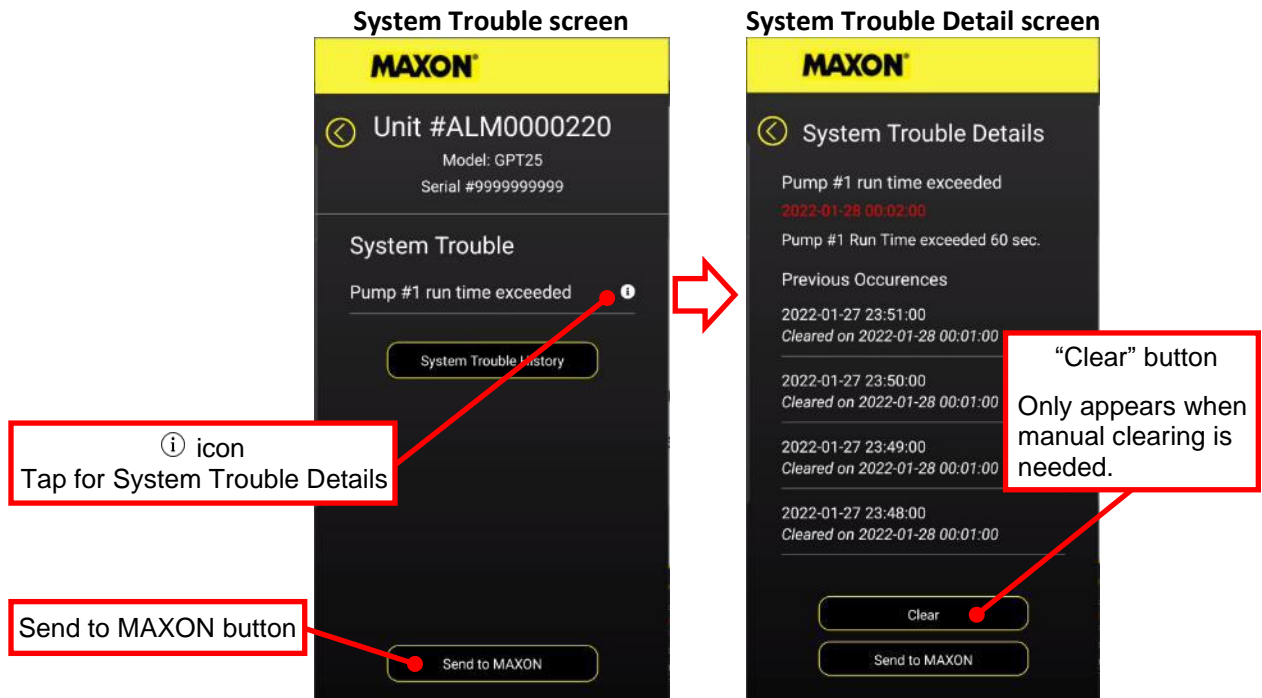


2. System Trouble:

If there are liftgate or battery charging issues, you will see a notification via the "System Trouble" field. Additionally, an amber LED light on the outside of the pump box lights up to flag you that MAX LINK has a notification.

- Tapping on the System Trouble field opens a System Trouble screen allowing you to get more information on the problem.
- Tapping the ⓘ icon to the right of the system trouble description opens a System Trouble Detail screen where you can see the history of how many times a problem has occurred.
- Most System Trouble codes self-clear when the problem is fixed. For instance, when you reset a tripped circuit breaker. However, other system trouble codes, such as "run time exceeded," require manual clearing. There

will be a “Clear” button at the bottom of the System Trouble Details screen for problems that require manual clearing.



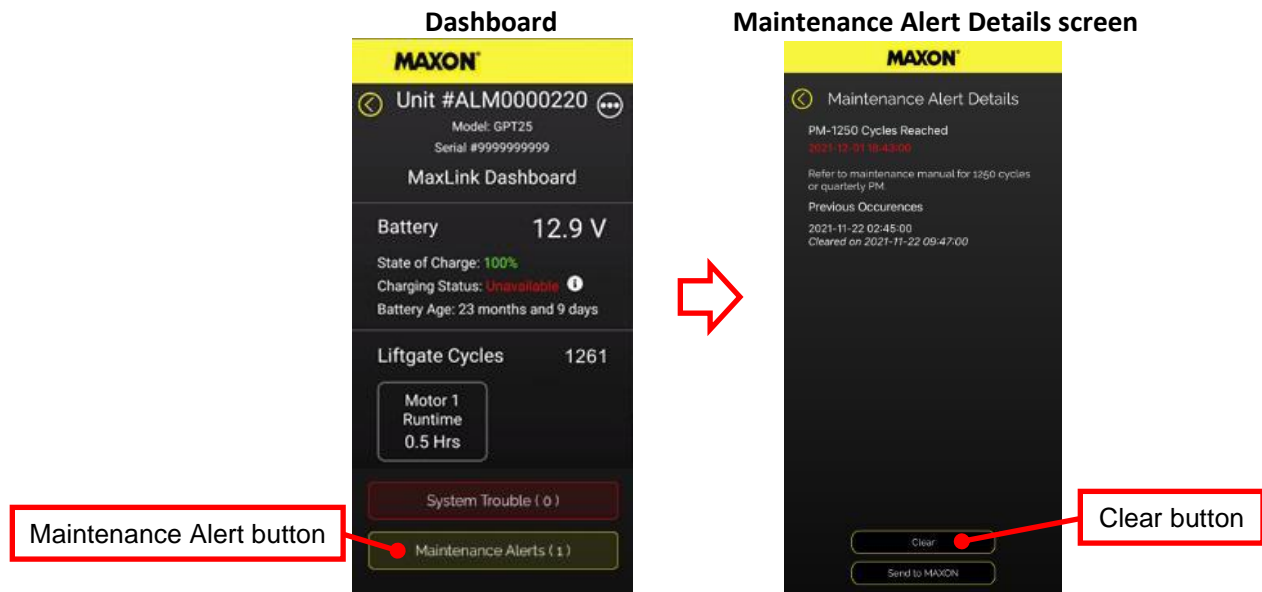
- d. MAX LINK also allows you to send information to Maxon Technical Services for repair guidance. Tap the “Send to Maxon” button, where available, to send data to Maxon.

3. Maintenance Alerts:

Maintenance alerts are critical for a preventive maintenance program. These alerts are crucial to maximize the uptime of your Maxon liftgate.

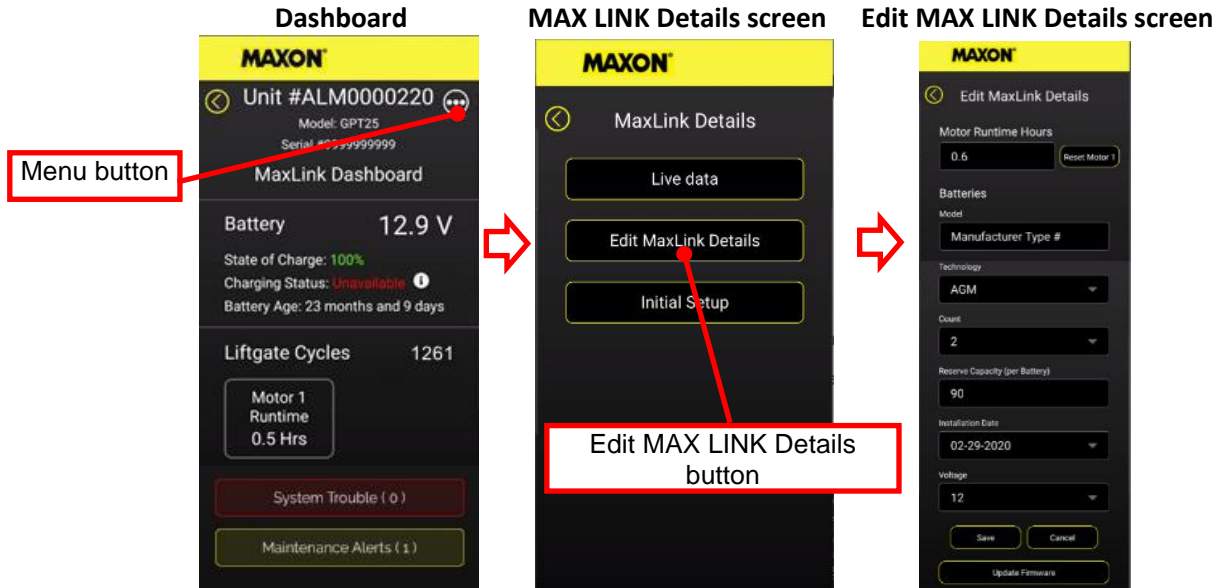
Maintenance Alerts need to be manually cleared after the task has been performed.

- a. From the Dashboard, tap on the “Maintenance Alert” button to go to the “Maintenance Alert Detail screen”. Tap the “Clear” button.



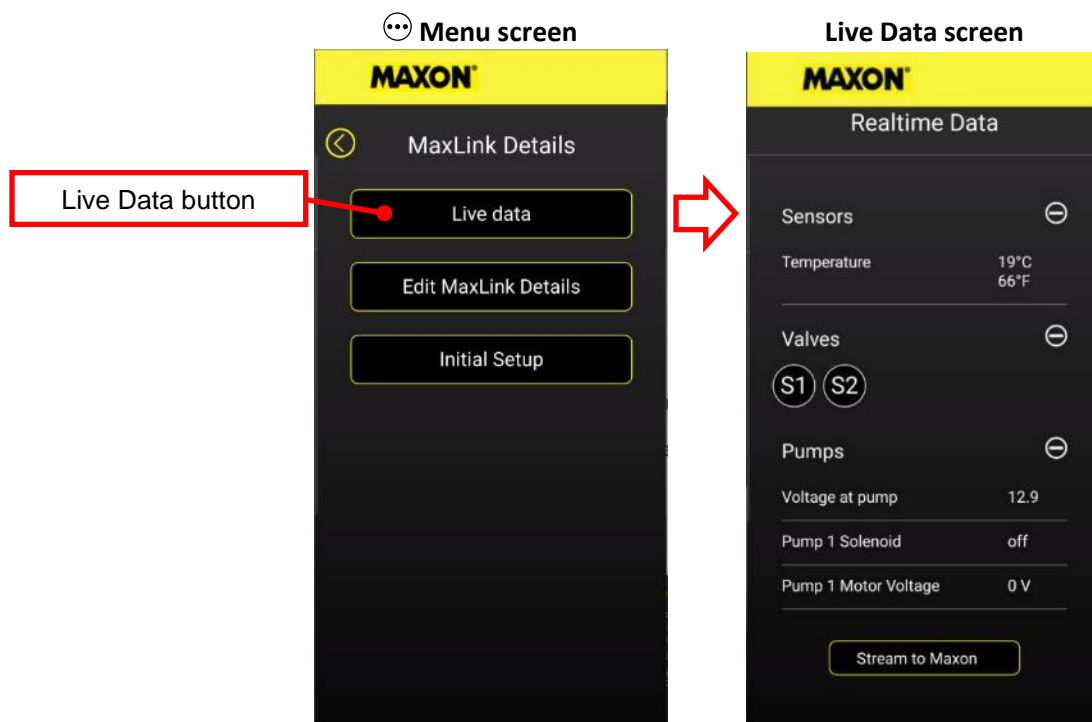
When replacing a motor or batteries without a “Maintenance Alert”, you need to reset the motor hours or battery information and installation date as shown below

- a. From the Dashboard, tap on the ☰ “Menu” button to go to the “MAX LINKS Details” screen, then tap on the “Edit MAX LINK Details” button to go to the Edit MAX LINK Details screen. Reset motor hours when replacing a motor and update battery information and installation date when replacing batteries and tap on the “Save” button.



4. Live Data

Another valuable MAX LINK diagnostics option is to look at Live Data. If needed, you can also stream this data to Maxon Technical Services by tapping the “Stream to Maxon” button. Live data displayed includes key metrics such as system voltage, valve activity, solenoid switch activity, and solenoid switch voltages.



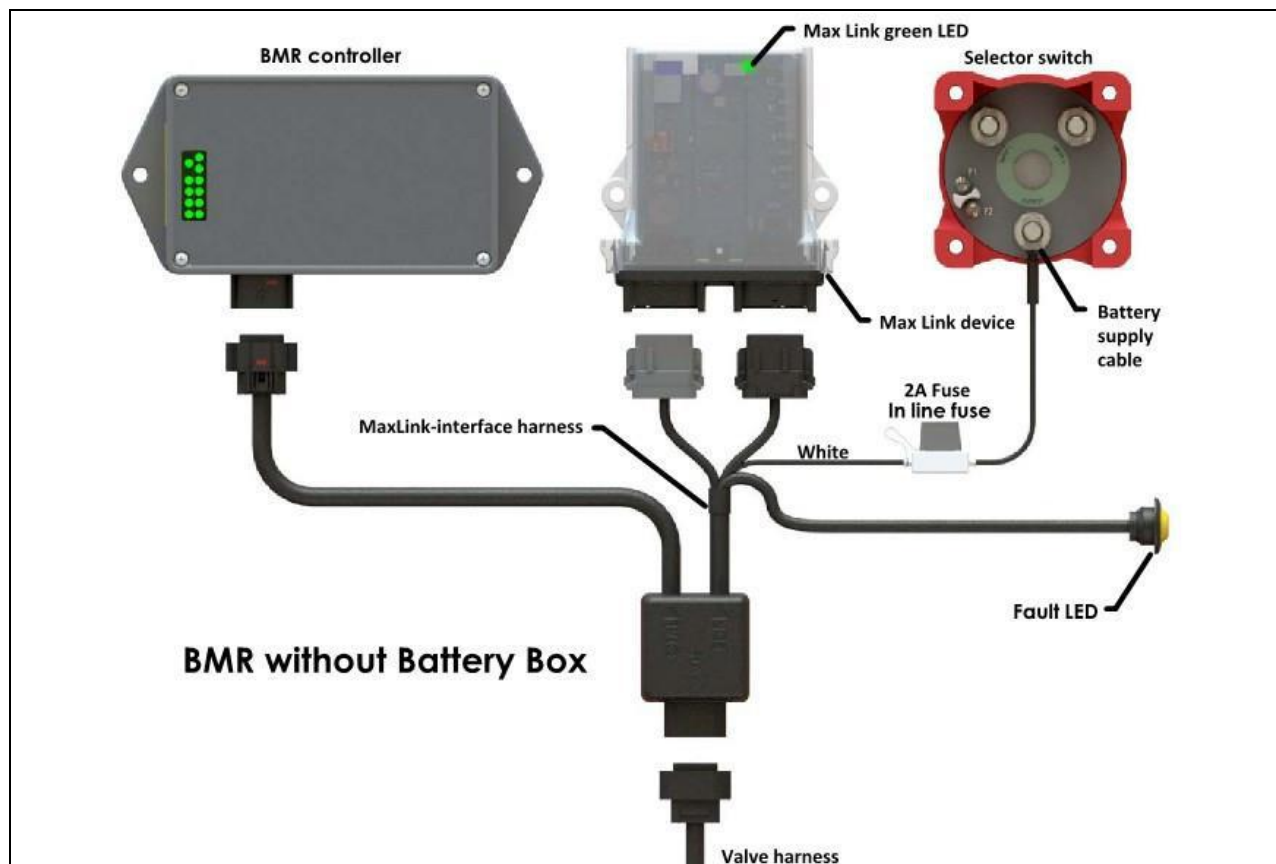
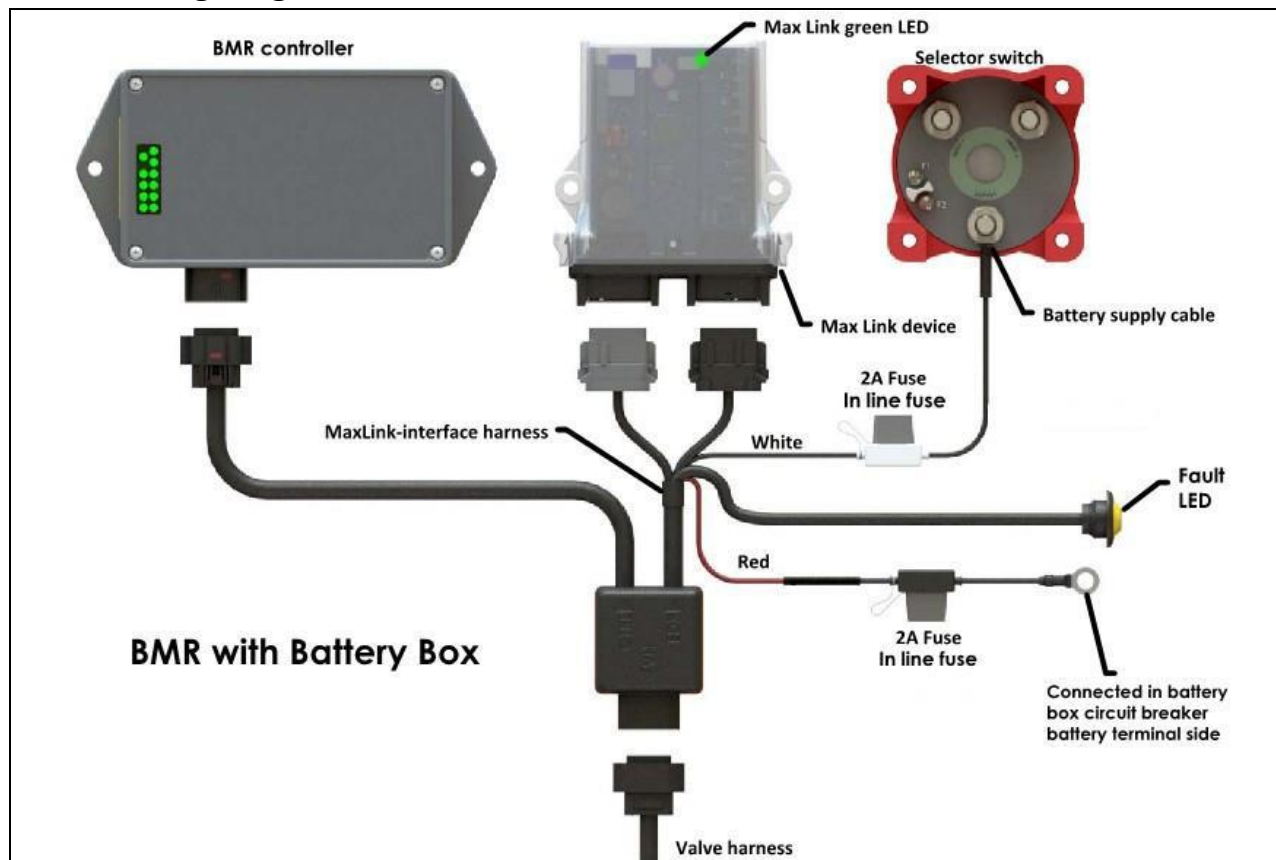
Troubleshooting Chart

CAUTION: Do not troubleshoot during firmware updates. If troubleshooting is needed wait for 15 minutes after firmware updates is completed.

Problem	Possible Cause	Correction
MAX LINK device green LED is OFF (not flashing)	Battery positive or ground connections disconnected	Check and verify all MAX LINK-interface harness mating connections
	Blown 2A fuse or inline fuse terminal disconnect.	<p><u>With battery box:</u></p> <ul style="list-style-type: none"> • Check and verify inline fuse with red wire terminal connection to circuit breaker battery terminal side. • Check and verify inline 2A fuse continuity. <p><u>Without battery box:</u></p> <ul style="list-style-type: none"> • Check and verify the MaxLink-interface harness inline fuse on white wire is connected in the pump box. The inline fuse terminal must be connected to battery supply cable. • Check and verify inline 2A fuse continuity.
	MAX LINK device is not responding	<p>Power cycle MAX LINK device OFF-ON</p> <p><u>With battery box:</u> Disconnect and reconnect the 2A inline fuse on red wire connected to circuit breaker battery terminal side.</p> <p><u>Without battery box:</u> Disconnect and reconnect the 2A inline fuse on white wire in the MAX LINK-interface harness in pump box.</p>

MAX LINK device not communicating with APP	MAX LINK device Bluetooth not responding	<p>Confirm that Bluetooth is enabled on your smart device.</p> <p>Power cycle MAX LINK device OFF-ON</p> <p><u>With battery box:</u> Disconnect and reconnect the 2A inline fuse with red wire connected to circuit breaker battery terminal side.</p> <p><u>Without battery box:</u> Disconnect and reconnect the 2A inline fuse with white wire in the MAX LINK-interface harness in pump box.</p>
Fault LED is OFF when fault is present (With battery box units)	Blown 2A fuse or inline fuse terminal disconnect.	<ul style="list-style-type: none">• Check and verify the MAX LINK-interface harness inline fuse on white wire is connected in the pump box. The white wire inline fuse terminal must be connected to battery supply cable.• Check and verify inline 2A fuse continuity.

BMR Wiring Diagrams



GPT Wiring Diagrams

