

05/15/2019

**MOTOR CONTROLLER**

With the incorporation of a Motor Controller to the Skyjack Vertical Mast and S.JIII DC Electric Scissor Lifts, several things are different from the Hydraulic Proportional units. Operationally, the Hydraulic Proportional units control the speed of the functions by varying the flow of oil through the proportional valve. For the Motor Controlled units, the speed of the pump motor is varied to regulate the oil flow.

One of the first things you will notice is that the Motor Controlled units have an 'MC' decal on the machine frame and on the control box. The 'MC' control box can only be used with a Motor Controller unit. The reason for this is that the MC units use a different joystick. The MC joystick is physically very similar to the Hydraulic Proportional joysticks, but the variable speed output signal (wire 59) is different. Both joysticks will interchange physically, but the machine will not work properly if an incorrect joystick is installed.

The Hydraulic Proportional joystick output on wire 59 is from 0 to 14 volts. The MC joystick output on wire 59 is 0 to 5 volts. The Motor Controller will shut down when the wire 59 speed signal exceeds 5 volts. Using the Hydraulic proportional joystick on an MC unit will result in the Motor Controller shutting down when the handle is moved somewhere past half way. If an MC joystick is used on a hydraulic proportional unit, the pump motor will run, but the function speeds will be slow or not work at all.

The older Hydraulic Proportional joystick part number is 159108.  
The newer Motor Controller (MC) joystick part number is 159111.

Be sure to use the Motor Controller MC appendix in the service or parts manual to order the correct parts for motor controller machines. Skyjack recommends using only quality original or manufacturer-approved parts and components.

If you have any questions regarding your Skyjack product, please contact Skyjack Product Support at 1-800-275-9522 or email [service@skyjack.com](mailto:service@skyjack.com) for assistance. Visit our website [www.skyjack.com](http://www.skyjack.com) for access to product information and technical manuals, or contact product support at 1-800-275-9522 if you have any questions.