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PROPORTIONAL JOYSTICK TESTS

When testing the joystick output for the drive or lift function on a Skyjack Vertical Mast or Electric Scissor lift model, you need to know the joystick has two outputs. One output is a system voltage output to operate the pump motor, valve coils, and relays. The other output is the speed, or proportional signal. This is a variable output signal relating to the speed desired for the function.

To test the system voltage output, locate the 'A' and 'B' wires at the LIFT-OFF-DRIVE function selector switch. The 'A' output is a purple/white color wire and it should have system voltage on it when the joystick handle is moved backward for reverse drive or platform lowering. The 'B' output is a solid red color wire and has power when the joystick handle is moved forward for forward drive or platform lift. If no power is seen at the selector switch, look for a diode inline on the 'A' and 'B' wires. A shorted open diode would prevent power reaching the selector switch. If no power is found, try operating the steer function to verify that the enable circuit is working. If no steer, test the enable switch circuit.

To test the proportional output, check power at the orange/black color wire 59 at the joystick 9-pin connector. You should read a proportional output that increases as the handle is moved farther away from neutral. For the SJIII hydraulic proportional units, the wire 59 output will vary from zero to 13.5/14volts at full handle throw on a properly adjusted joystick. For the Vertical Mast and SJIII Motor Controller (MC) units, the output will vary from zero to 4.6 at the joystick connector.

Please note that all the joysticks are not the same. Different models and configurations have different part number joysticks. Please consult the correct service or parts manual for the serial number of the model you are working on for the correct replacement joystick. Manuals are accessible at our website www.skyjack.com, or an updatable flash drive available from our parts department. Part number 167847.

If you have questions regarding your Skyjack aerial lift or telehandler, please contact Skyjack Product Support at 1-800-275-9522 or email service@skyjack.com.