

## Lippert 6 Point Hydraulic Level Up and Hyd Slide Manual Override

### **Tools Required:**

1. **Cordless drill**
2. **1/4 " hex head bit..needs to be about 6" long or a flexible shaft extension**
3. **1/8 " allen wrench with short right angle on one end**

**Locate the hydraulic pump motor and locate the 1/4" hex head end of motor shaft..  
May need to remove plastic access plugs on inside of cargo bay behind pump**



**This is where you will insert the 1/4 " hex head bit and use cordless drill to rotate pump CW or CCW to extend or retract slides and hyd leveling legs**

**To Manually retract or extend the hydraulic slide outs you need to locate the manifold coming from hydraulic pump that has 3 solenoids on top.. The first two solenoids are for your curbside (CS) Passenger side (PS) middle and rear leveling legs**



**Here is what my 2014 Keystone Alpine pressure side manifold looks like.. Hoses are orange indicating "pump pressure" side.. From left to right the 1st solenoid with purple wire is CS solenoid and 2nd solenoid with darker blue wire is PS**

**solenoid. The third solenoid is the one you will need to manually open to allow your hydraulic slides to be manually retracted or extended.**

**To retract the hydraulic slide outs insert  $\frac{1}{8}$  " allen wrench into the top of the 3rd solenoid and gently turn the end of the valve CW to open the hyd slide out valve**

**Next insert  $\frac{1}{4}$  alle head bit into back side of hydraulic pump and operate cordless drill CCW to retract all hydraulic slide outs.**

**Now gently turn previously opened solenoid valve in CCW direction until you feel the valve screw seat.. Dont over tighten**



**Another view of he 3 solenoids..there is just enough room to insert  $\frac{1}{8}$  allen wrench into the top of these solenoids to manually turn them..**

**To retract the CS and PS hydraulic leveling legs open the remaining two solenoid valves... one at a time by turning the end of the solenoid valve CW with  $\frac{1}{8}$  allen wrench.**

**Use cordless drill with 14" apex head bit and run pump CCW to retract CS leveling legs.. Insert  $\frac{1}{8}$  Allen wrench into previously opened solenoid vavle end and gently turn back CCW until screw is snug**

**Now do same procedure as a above for PS leveling legs.**

**Now to manually extend/retract your Front LG legs locate the solenoid for the two front legs... it will be on the passenger side front LG ONLY..**



**Insert 1/8 " allen wrench into this solenoid and gently turn CW to open valve. Now insert cordless drill with 1/4" apex bit into end of hydraulic pump motor and turn CW to raise fifth wheel high enough to hook up to tow vehicle hitch..**

**Turn pump motor CCW to retract Frt LG just enough so that you can verify proper engagement latching of your fifth wheel receiver..**

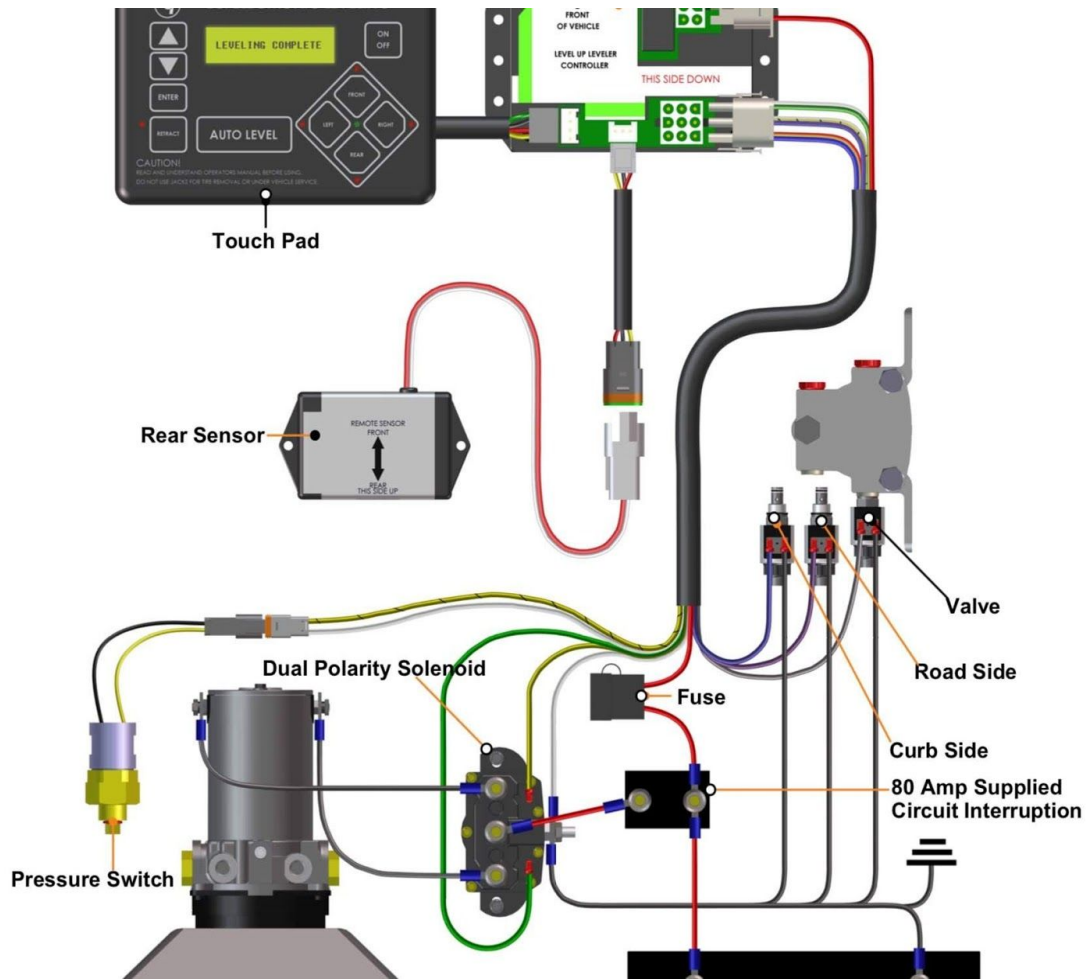
**Once you are sure tow vehicle hitch is secured to fifth wheel continue retracting Frt LG of fifth wheel by running cordless drill CCW until Frt LG are fully retracted. Last step is to use 1/8" allen wrench and now manually close previously opened valve on passenger side Frt LG by gently turning valve screw CW gently until just snug.**

**You are now ready to continue on with your journey.. Above process can be reversed to manually extend Frt LG and leveler legs as well as slides. Just be gently with the 1/8 allen wrench and don't over tighten any of the solenoid valves.. They just need to be "SNUG"..**

**NOTE.. my Alpine fifth wheel hydraulic pump/motor and all solenoids, etc are located inside my battery compartment... Other Keystone fifth wheel hydraulic pump/motor and solenoids may be located slightly differently depending on the Keystone make/model**

**Last two pictures depict the Lippert hydraulic level up wiring and hydraulic component layouts..**

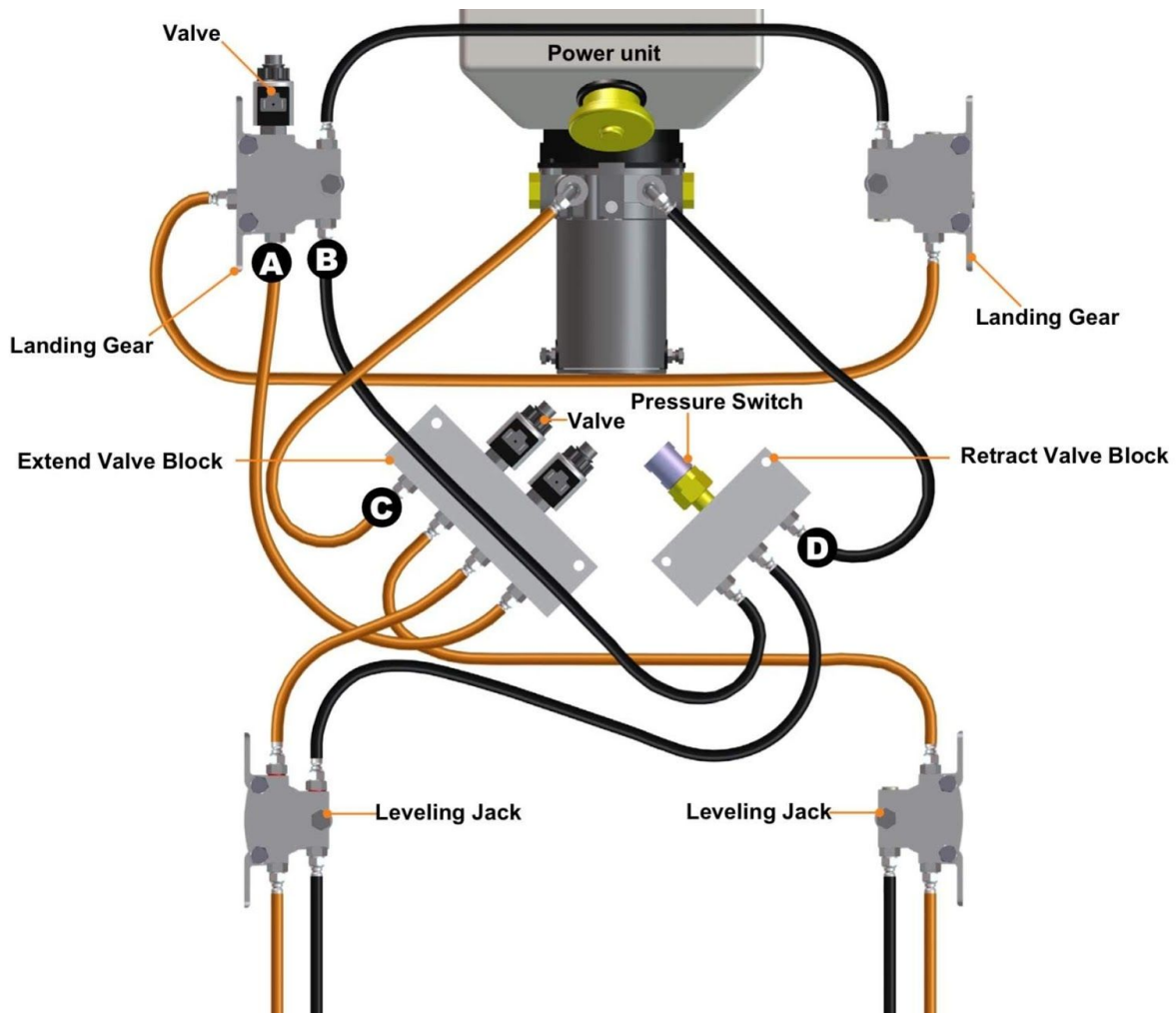
**These may be useful for further trouble shooting of the system when time permits**



If your level up control panel or system is not working you can use multimeter and verify you have 12 volts DC at the control module.. This will be located inside the front compartment up high.. Locate the plug that has 1 RED wire going to it and using multimeter insert positive lead into end of red wire and negative lead of multimeter to ground.. You must read 12.2 volts DC or higher for the level up system to function properly.. If you are reading zero volts check the inline fuse holder located on the red wire coming from level up control module to the battery.

**NOTE:** if hooked to shore power and converter is running the DC voltage should read around 13.4 volts DC at the red wire on control module.





Typical layout of Lippert 6 point hydraulic level up system... Orange colored lines are Pressure side..black lines are return lines on hyd system...

There are typically 3 electric solenoid valves for the level up gear... The front LG solenoid will be located on passenger side...this controls BOTH front LG

There are 2 solenoids located on a manifold block that will control curb side and passenger side middle and rear level up legs..

Additionally there will be one more solenoid on that manifold block that controls ALL hydraulic slide outs

The pressure switch shown in this diagram senses when pressure reaches a preset amount ..around 3000 psi and will send a shutoff signal to the hyd pump motor if switch is kept pressed.. Same with “in command” tablet button