

ILP - Series

Troubleshooting: ILP – Dual Cylinder Folding Unit

<u>Table of content:</u>	<u>Page</u>
1) Gate overview	2
2) Gate does not lower down.....	3
3) Gate is not lifting up.....	4
4) Electrical schematic.....	5
5) Hydraulic schematic.....	6

Tools needed:

- 1.) Voltmeter
- 2.) Test light
- 3.) 8" jumper cable (16ga. or smaller)
- 4.) Screw driver flat head
- 5.) 13mm (1/2") wrench

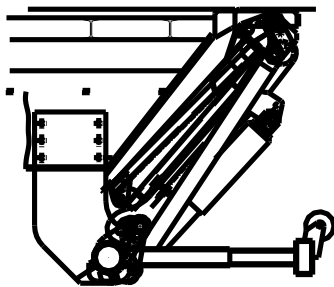
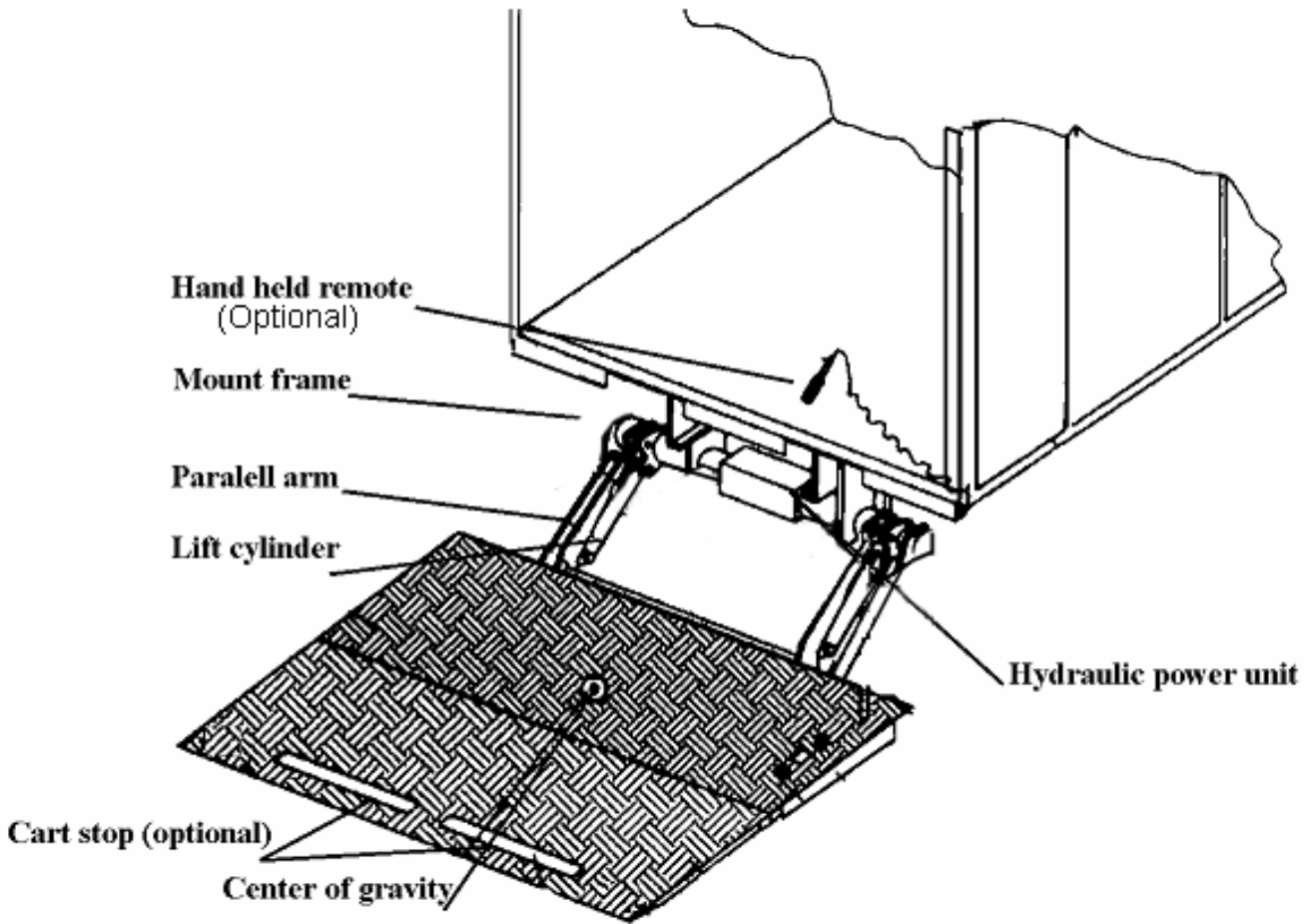
*******MAKE SURE YOUR BATTERIES ARE FULLY CHARGED
AND IN GOOD CONDITION*******



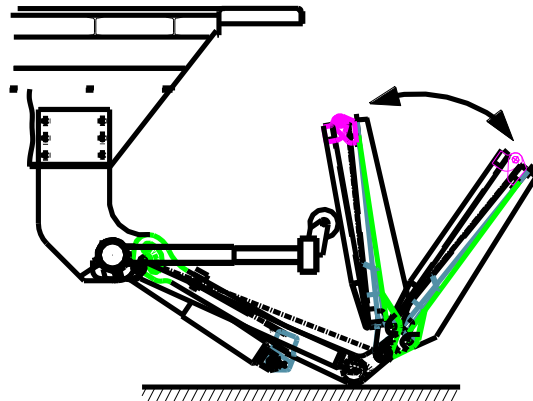
**Always use CAUTION and
allow SAFE distance from moving parts**

Practice SAFETY, using common sense
and good judgment

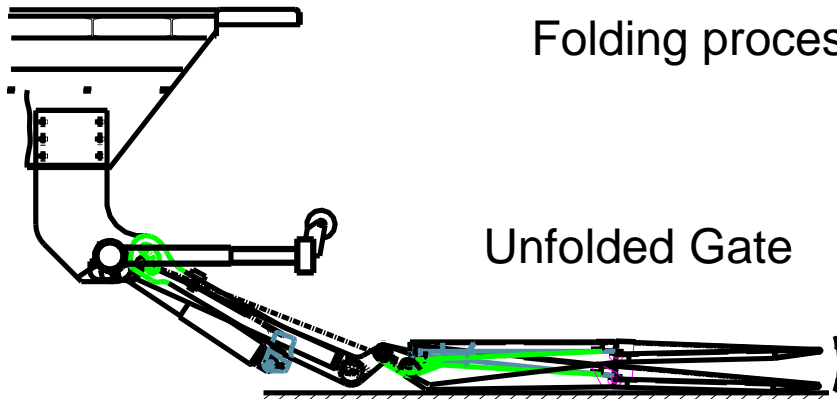
Gate overview



Stored position



Folding process



Unfolded Gate

1) GATE DOES NOT LOWER DOWN

1.1) Check Battery Power

- a) Check if Cab Cut of switch is pulled out – “ON” position
- b) Check resettable Circuit Breaker on top of batteries → Push Reset Tab back in, if popped out
- b) Check fuse at pump & motor (qty 1) in box for hydraulic power unit
- c) Start truck and run engine in fast idle for charging the battery
→ if lift gate starts working, recharge batteries → test batteries and truck/trailer charging system
- d) Check for a solid ground connection from the motor post to box of hydraulic power unit

1.2) Check controls

- a) Check the valves visually for mechanical damage – bent or damaged ??
- b) Open up Lid at hydraulic power unit and unplug red cable #2 with the inline fuse.
- c) Unplug cable #6 to both 2 wire release valve harnesses.
- d) Connect female end #2 and male end #6 to energize release valves.
 - a) Gate is lowering down – check switch and grey 3 wire harness to switch for damaged spots
 - b) Gate is not lowering down
 - a) Check both release valve wirings for damaged spots
 - b) Unscrew plugs of valves – stick voltmeter or test light into connectors and hit the down function - each valve at a time.
 - a) See light or read voltage – cable is ok
 - b) See no light or 0 V – damaged wire
 - c) Remove plastic cap of release valves – keep coil in place - and hold a screwdriver close to steel valve stem while hitting the down function – screwdriver did not get magnetically pulled towards valve, bad coil.

1) GATE DOES NOT LIFT UP

1.1) Check Battery Power

- a) Check if Cab Cut of switch is pulled out – “ON” position
- b) Check resettable Circuit Breaker on top of batteries → Push Reset Tab back in, if popped out
- b) Check fuse at pump & motor (qty 1) in box for hydraulic power unit
- c) Start truck and run engine in fast idle for charging the battery
→ if lift gate starts working, recharge batteries → test batteries and truck/trailer charging system
- d) Check for a solid ground connection from the motor post to box of hydraulic power unit

1.2) Check controls

- a) Check the valves visually for mechanical damage – bent or damaged ??
- b) Open up Lid at hydraulic power unit and unplug red cable #2 with the inline fuse.
- c) Jump female end #2 to small positive connector (switch cable #5 attached) on motor solenoid.

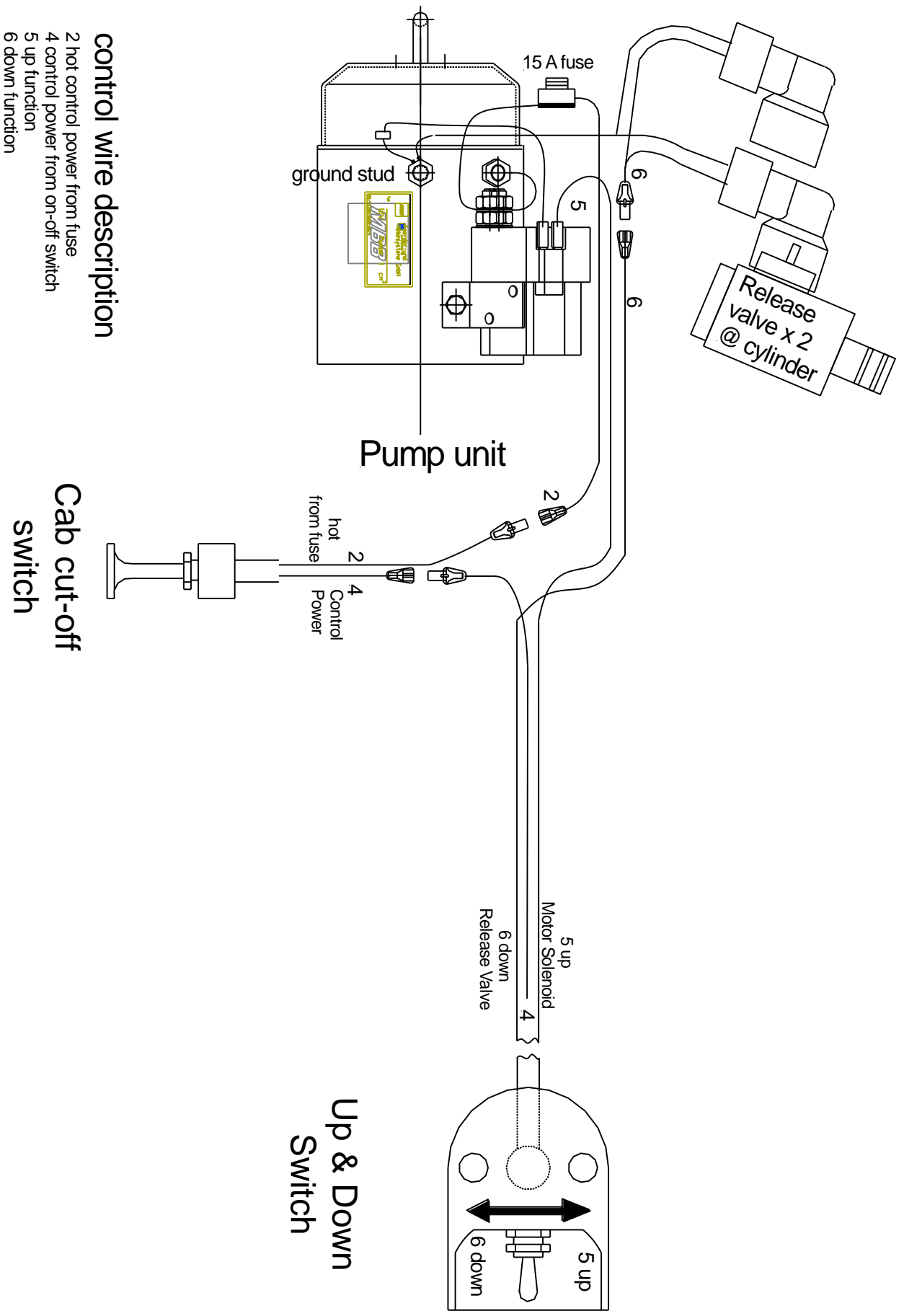


WARNING – Do not stay between platform and truck body – gate will raise up



- d) Gate is raising up – check switch and grey 3 wire harness to switch for damaged spots
 - a) Gate is not raising up
 - a) Check motor solenoid for proper function – hear clicking??
 - a) No clicking – motor solenoid or thermo switch at motor is bad
 - b) Hear clicking – check for voltage on both big positive stud to ground
 - a) Have Voltage – solenoid is ok
 - b) No voltage – solenoid is not connecting internally – bad solenoid
 - b) Motor solenoid is ok
 - a) Check for power on large positive motor stud
 - a) Have power – bad motor or bad brushes
 - b) No power at motor stud – Check connection to solenoid

Electrical schematic



Hydraulic schematic

Functions:

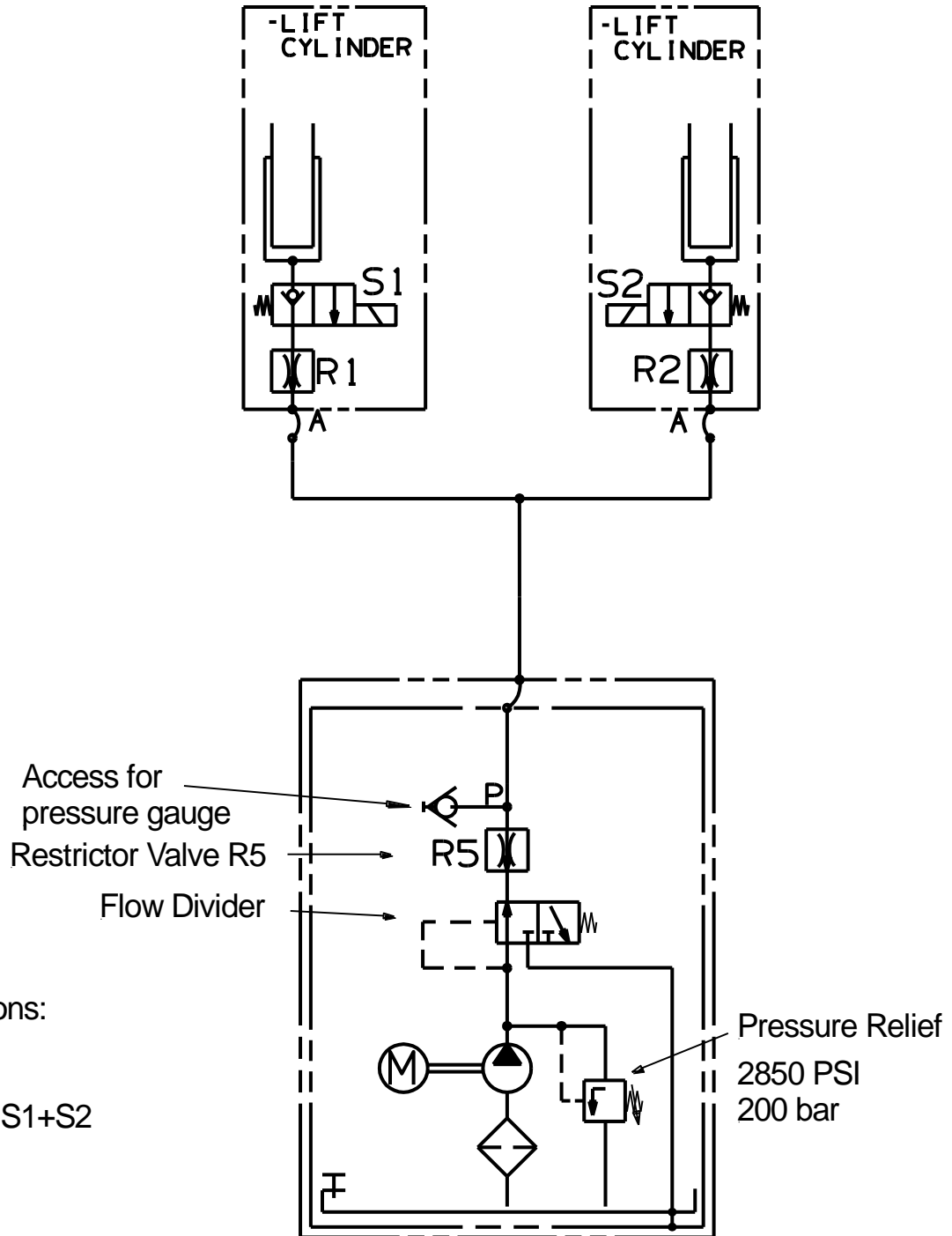
S1 and S2 = Release Valve for lowering function

R1 and R2 = Flow Restrictor located inside hose adaptor on lift cylinder

R5 = Restrictor Valve located in power pack

Flow Divider is activated, when fluid is going back into the power pack

If Flow Divider is loose or hanging up the fluid is circulated back in to tank



Functions:

Lift: M

Lower: S1+S2