

ILR - Series

Troubleshooting: ILR – Single Cylinder Folding Unit

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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*****

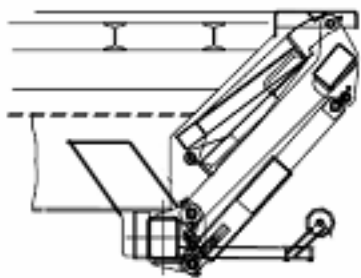
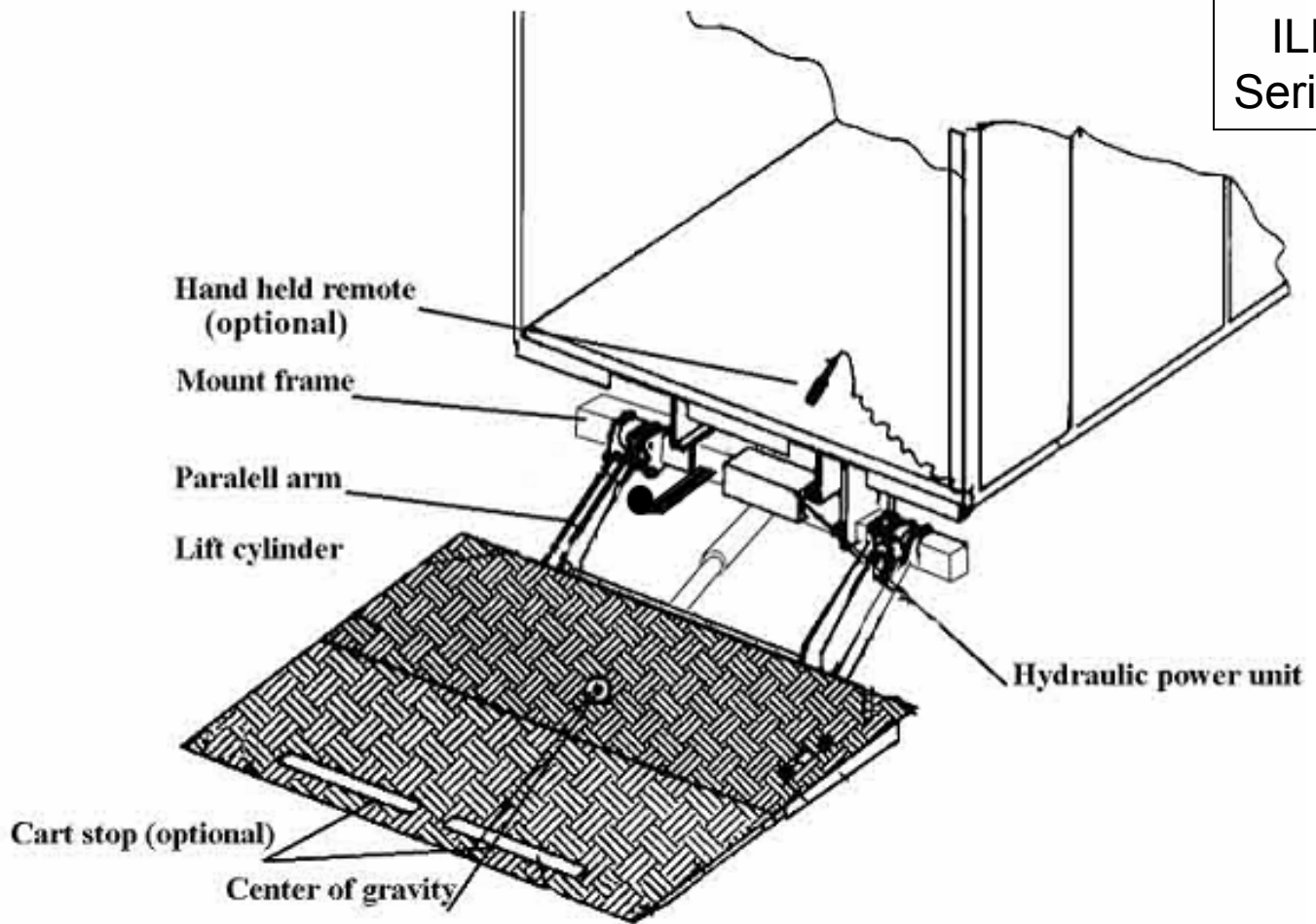


Always use CAUTION and allow SAFE distance from moving parts

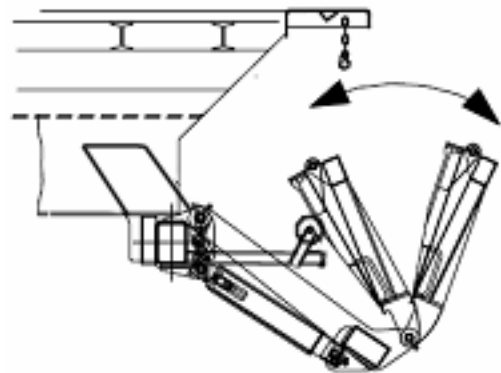
Practice SAFETY, using common sense and good judgment

Gate overview

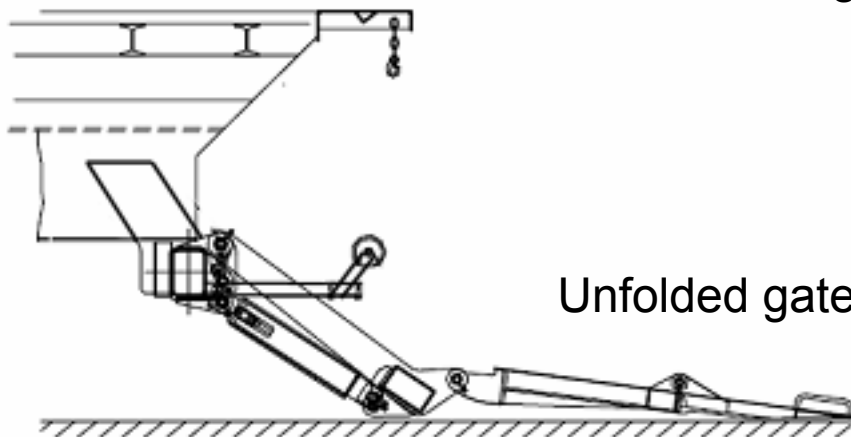
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Stored position



Folding process



Unfolded gate

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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 valve 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 at 2wire release valve harness to toggle switch
- d) Connect female end #2 and male end #6 to energize release valve.
 - 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 release valve wiring for damaged spots
 - b) Unscrew plug of valve – stick voltmeter or test light into connectors and hit the down function
 - a) See light or read voltage – cable is ok
 - b) See no light or 0 V – damaged wire
 - c) Remove plastic cap of release valve – 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.

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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 valve visually for mechanical damage – bent or damaged ??
- b) Open up Lid at hydraulic power unit and unplug cable #2 at black 3 wire harness.
- c) Jump female end #2 to small positive connector (switch cable #5 attached) on motor solenoid.



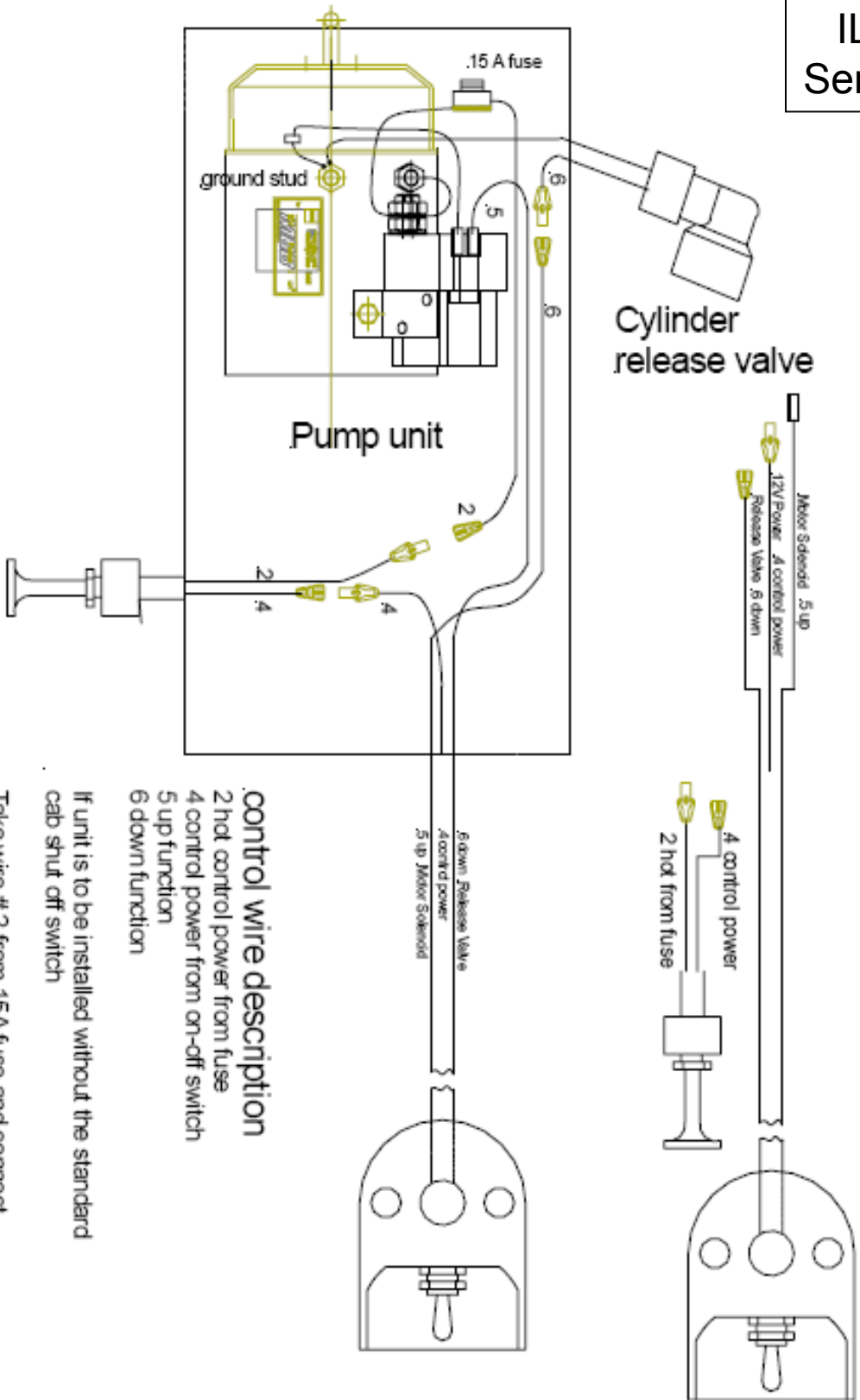
WARNING – Do not stay between platform and truck body – gate will raise up



- d) Gate is lifting 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 studs to ground
 - a) 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, bad brushes or ground
 - b) No power at motor stud – Check connection to solenoid

Electrical schematic

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control wire description

- 2 hot control power from fuse
- 4 control power from on-off switch
- 5 up function
- 6 down function

If unit is to be installed without the standard cab shut off switch

Take wire # 2 from 15A fuse and connect directly to # 4 control power on the control switch

Understand that the lift is relying on the electric locks on the cylinder where the power is shut off by the on-off switch. If the on-off switch is removed a back up mechanical lock (chain) is required

Hydraulic schematic

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Functions:

S1 = Release Valve for lowering function

R1 = 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

