ILT - Series

Troubleshooting: ILT – Twinfold Dual 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

ILT Series

Main frame
Roller
Parallel arm
Lift cylinder
Lift arm
Platform
Main section
Platform
Tip section
Bed extension
Slide in power pack
Under ride guard
Coil Spring

Stored position
Folding process
Unfolded Gate
1) GATE DOES NOT LOWER DOWN

1.1) Check Battery Power

- Check if Cab Cut of switch is pulled out – “ON” position
- Check resettable Circuit Breaker on top of batteries → Push Reset Tab back in, if popped out
- Check fuse at pump & motor (qty 1) inside Main tube on passenger side behind rubber cover
- 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
- Check for a solid ground connection from the motor post to the main frame of the lift gate

1.2) Check controls

- Check the valves at the cylinders visually for mechanical damage – bent or broken ??
- Open up rubber cover on passenger side to get access to the hydraulic power unit, unscrew the hex head bolt to slide out the power unit and unplug red cable #2 with the inline fuse.
- Unplug cable #6 to both 2 wire release valve harnesses.
- Connect female end #2 and male end #6 to energize release valves.
  - Gate is lowering down – check switch and grey 3 wire harness to switch for damaged spots
  - Gate is not lowering down
    - Check both release valve wires for damaged spots
    - Unscrew plugs of valves – stick voltmeter or test light into connectors and hit the down function - each valve at a time.
      - See light or read voltage – cable is ok
      - See no light or 0 V – damaged wire
    - 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 stem, 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) inside main tube on passenger side behind rubber cover
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 main frame of the lift gate

1.2) Check controls

a) Check the valves at the cylinders visually for mechanical damage – bent or broken??
b) Open up rubber cover on passenger side to get access to the hydraulic power unit, unscrew the hex head bolt to slide out the 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 studs 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
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

Access for pressure gauge
Restrictor Valve R5
Flow Divider

Pressure Relief
2850 PSI
200 bar

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