Easy Flow System Troubleshooting Guide

Below you will find troubleshooting steps for common trap system issues and their solutions.

- ## Easy Flow system will not power on.

Indicates no voltage to the control box

1. Make sure that the 2-pole power cord is plugged into the trailer and has the proper polarity & voltage to the trap system.
2. Turn on the trap system by pressing the (Open) & (Close) buttons on the front hopper for 3-5 seconds until the green LED illuminates.
3. Test the remote functions of the trap system by pressing the (Open) & (Close) buttons on the remote when on mode 2 (second light) for 3-5 seconds to verify if control box button failure has occurred.
4. Check for grease, dirt, and corroded connections at the battery terminals, circuit breaker and also at the trailer power receptacle plug and outlet.
5. Inspect the connections inside junction box in the nose of the trailer for corrosion/moisture and damage to wires.
6. Check for proper voltage at the BAT+ side on the back of the control box while inspecting the control box wiring for breakage, moisture or corrosion on the terminals.
7. Try connecting battery power with jumper cables directly to the control box to determine trailer/truck wiring issues.

➢ Replace defective control box. Test functions before re-installation to verify.

- ## Easy Flow system powers off while running the doors.

Indicates a poor ground

1. Remove, clean & reinstall all ground connections including from control box to the frame rail, 2-pole connector to Z-post & junction box to Z-post, check for looseness and corrosion as well.
2. Check connections at the tractor battery for looseness and corrosion.
3. Inspect the pigtail connector for the 2-pole trailer connection for looseness and corrosion.
4. Try connecting battery power with jumper cables directly to the control box to determine trailer/truck wiring issues.

➢ Replace defective control box. Test functions before re-installation to verify.

- ## Trap doors or motor/pump runs slow.

Indicates clogged pump intake or a bad motor/pump

1. Inspect all connections for corrosion or looseness from the tractor battery to control box.
2. Check the wiring harness from the control box to the motor for corrosion or looseness.
3. Inspect/replace hydraulic reservoir vent cap if clogged.
4. Remove hydraulic reservoir from the pump unit and inspect intake screen for debris, clean as necessary and replace dirty hydraulic fluid with new. PM maintenance kit (part # 101316) is available.

5. If doors struggle to open when hauling heavier than normal commodity, please follow the pressure relief adjustment option below.
6. If motor/pump is not engaging, tap on the motor housing noting if the motor then runs indicating the brushes are bad.
7. Using hydraulic pressure gauges, measure the pressure output from the motor. Newer style power units (2015 and above) should be set at 2000psi or above from factory. Older power units (2014 and below) are set at 1000psi.

➢ Replace the defective hydraulic power unit.

- **Trap doors "stutter" while using the remote but not buttons on the control box.**

Indicates a bad ground or RF signal interference

1. Remove, clean & reinstall all ground connections including from control box to the frame rail, 2-pole connector to Z-post & junction box to Z-post, check for looseness and corrosion as well.
2. Try connecting battery power with jumper cables directly to the control box to determine trailer/truck wiring issues.

➢ Replace defective control box.

- **Trap doors open on own or can also stutter while opening.**

Indicates air in the system

1. Bleed the hydraulic system at the furthest points on the cylinders until the air has been evacuated.

➢ Replace old hydraulic oil and bleed entire system.

- **Motor runs but doors do not open/close.**

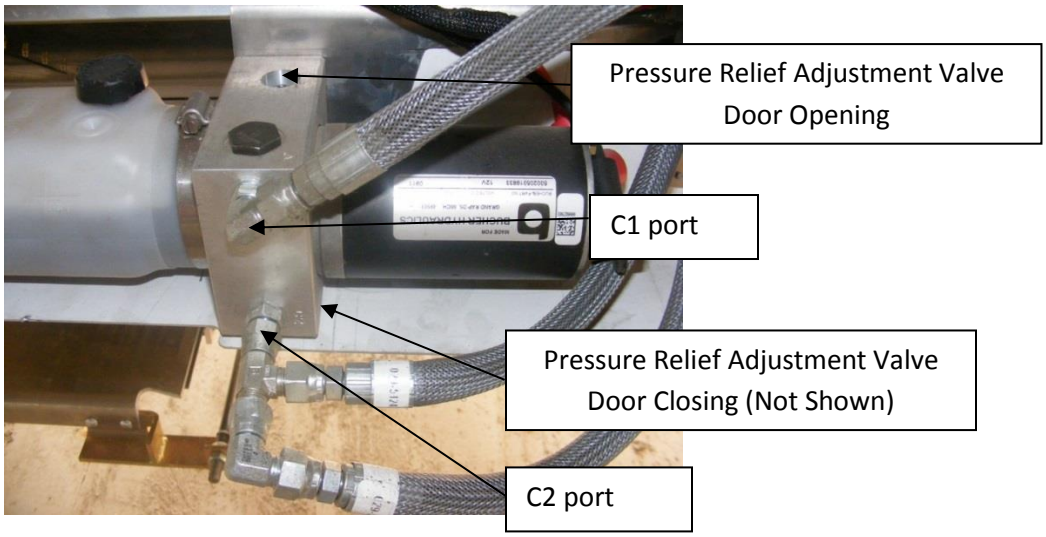
Indicates blocking valve or wire harness issues

1. Inspect solenoid harness connections to the blocking valve for breakage, corrosion or looseness.
2. Unplug the solenoid connectors and use a voltmeter to determine if sufficient voltage is being supplied to the solenoid connector while pressing the open or close buttons on the control box.
3. While pushing the open or close buttons on the control box, and while motor is running, push down on either of the two solenoid button valves, located on top of the solenoid near the connector, to verify door movement.

➢ Replace bad harness or blocking valve once failure has been determined.

PRESSURE RELIEF ADJUSTMENT OPTION

The hydraulic power unit has two pressure relief valves; pressure relief on the "C1" side, top, sets the pressure for opening the hopper doors and the relief on the"C2" side, bottom, sets the pressure for closing the hopper doors.



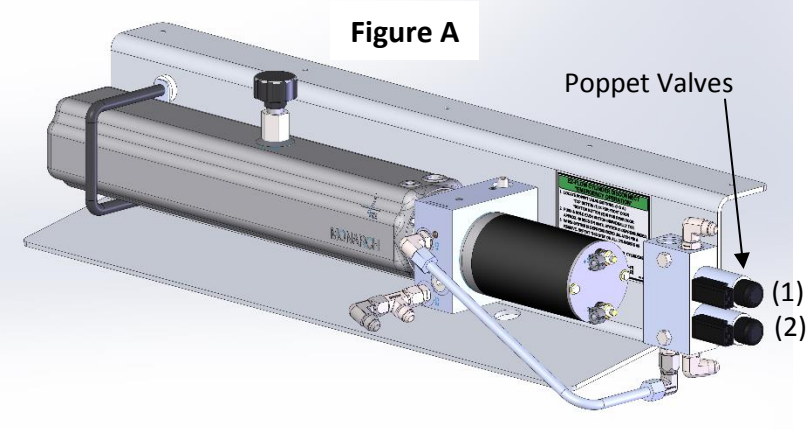
Setting Reliefs for hauling Frac Sand:

1. A Pressure Relief valve is located on each side of the pump as shown above photo. Using a 9/16" socket, loosen the jam nut on the relief valve. Do not remove relief valve jam nut.
2. Use a 3/16" hex head wrench and turn the relief inward (clockwise) ½ turn on C1 port.
3. While holding the relief in place tighten jam nut on the relief valve that has just been adjusted.
4. Repeat steps above for other relief valve.

Note: Approximately ¼ turn or 90 degrees equals approximately 250 psi adjustment.

EZ Flow Cylinder Disconnect *Emergency Operation*(if equipped)

1. Locate poppet valve buttons. (Fig A)
   a. Top Button (1) is for front door
   b. Bottom Button (2) is for rear door
2. Push & hold each button individually for approx. 15 secs or until system is depressurized.
3. When system has been depressurized, unlatch quick release pin & remove. (Fig B) Repeat this step on all cylinders as needed.



4. Door(s) are now disconnected from the cylinders and can now be operated manually.

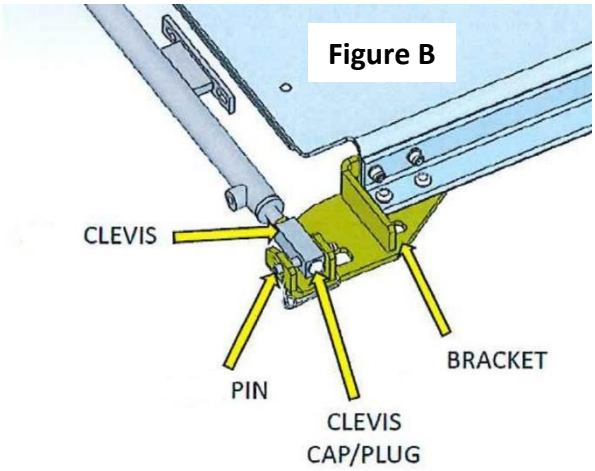


Figure B