



Start Up Instructions

for HV55

ADESCO.LLC
01/09/2010

Starting Instructions - **Extremely important**, if not followed, pump package **can and or will be damaged.**



Illustration #1

Arrow indicates air cleaner. Oil style

Perform walk around from the same place every time

Check daily:

- **Engine oil, Air Cleaner, Visually Inspect Tires, check for other damages**

Grease PTO bearing slightly every eight (8) hour, shown by white on illustration #2 arrows. Other zerks grease slightly at 250 hour service.



Illustration #2

Grease pump bearings every eight (8) hours (Illustration #3)



Illustration #3

Before starting the following must be in the proper position:

PTO must be in the disengaged position. See below



All four Jacks must be in the down position before the engine can be started. No exceptions



Control System

Starting Instructions for Engine Startup:



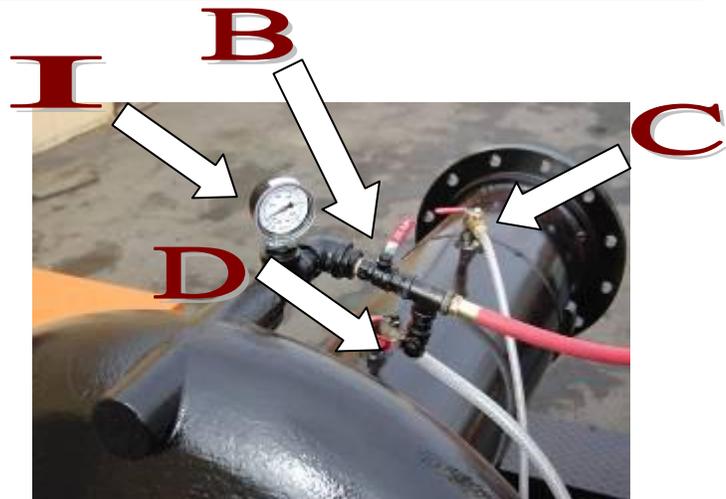
Starting Procedure:

1. Ensure PTO is not engaged
2. Ensure all jacks are down and minimal pressure to prevent vibrations from the pump and engine. All four jacks must have equal pressure on them.
3. To start the engine, ensure throttle is in the idle position.
4. Pump fuel primer on fuel pump
5. Turn key to the pre-heat position for at least 10 seconds
6. Start engine
7. Allow at least 5 minutes to warm up.

Control System Starting Instructions for Pump Priming System:



Before working the priming system all valves need to be in the proper position:



1. Butterfly valve (A) closed
2. Ball valve (B) open
3. Ball Valve (C) closed
4. Ball Valve (D) closed
5. Ball Valve (E) open, next page (7) on pressure vessel
6. Ball Valve (F) closed
7. Ball Valve (G) and (X) closed, page 8

8. Pump Switch (H) off



Before you engage Vacuum Pump increase engine RPM to 1400 RPM and then back down to 1000 RPM. This gives the alternator a chance to build voltage to support the pump and battery.

9. Turn Pump Switch (H) on.

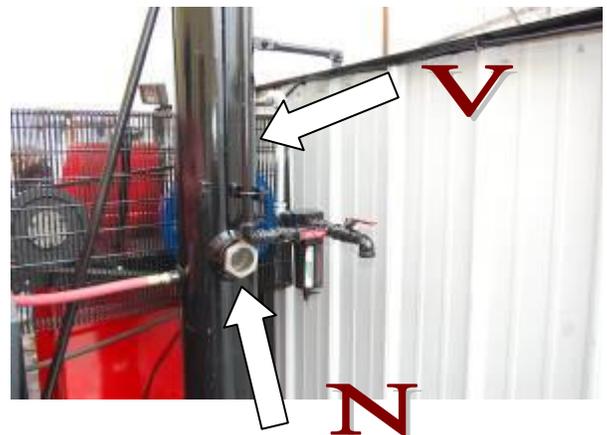
Pressure gauge (I) (page 6) & (Z) should show a negative when vacuum pump is running, if not the system has an air leak. Negative vacuum may take as long and two (2) to five (5) minutes.

10. Once negative vacuum is established watch for water in site glass (N).

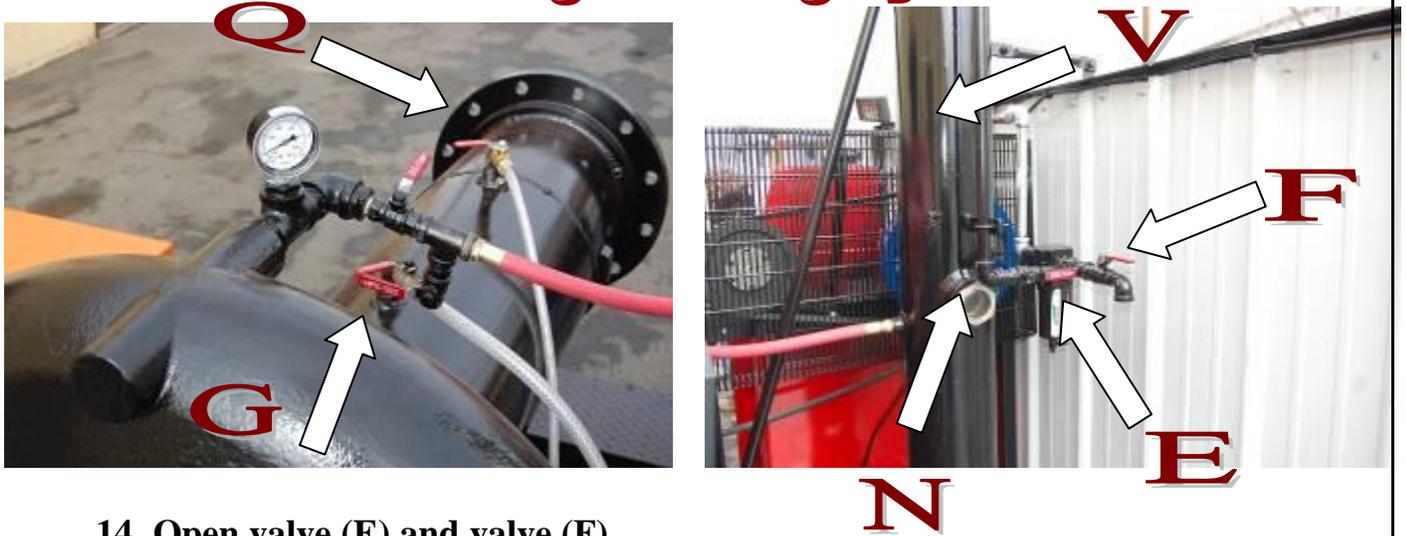
11. Once water is established, turn off switch (H), close valve (E) and (B), page 6. B can be done later if needed.

12. Slow engine to idle and engage PTO, **watch pressures and flows.**

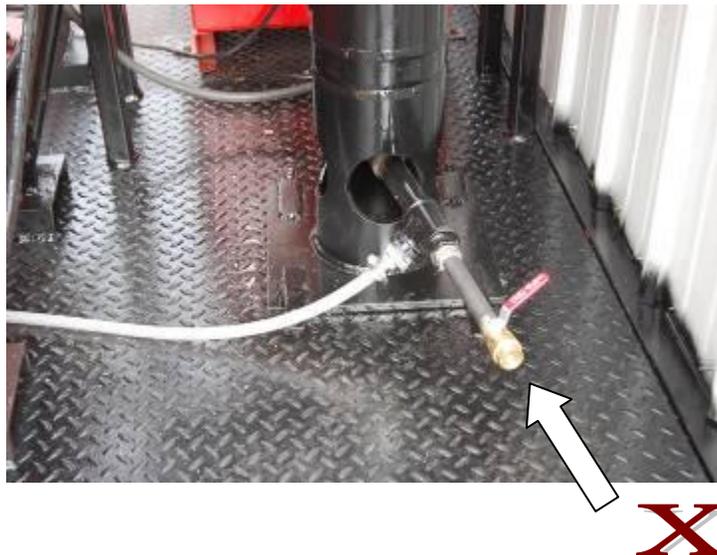
13. Make sure PTO is locked in. The lever should snap in with quite of bit of force. If not call technician. Damage to PTO can occur. **Watch fingers due to close contact.** Begin moving water. **Watch pressure as the engine gains in RPM, watch for excessive pressures and make sure you are not exceeding site parameters. Check for excessive vibration!!**



Draining Priming System:



14. Open valve (E) and valve (F)
15. Crack valve (G) and this will create a negative pressure on the suction vessel (V) pulling the fluids out to suction side of pump (Q).
16. Be careful not to allow too much air to enter suction side (Q) of MCM Pump, you may lose the prime and have to start over.
17. Once the majority of the water has been removed close valve (G). Make sure this valve is closed.
18. Drain remaining fluids from valve (X). Leaving valves (E) & (F) open.



Shutting down unit.

1. Slow engine down to idle RPM
2. Disengage PTO
3. Allow engine to cool down, turn engine off
4. Follow all winterization procedures. No exceptions.

Customer is responsible for all damages to package due to lack of following the above instructions.

If in doubt, call the ADESCO Water Consultant, or your fellow team mate.

Remember “When in Doubt, Just Step Back and Stop”

“Safety First”

“No Spills”