



VARIABLE SPEED PUMPING SYSTEM START UP CHECK LIST

LOCATION:

Is the Pre- Start Checklist complete? _____

Is System operating or is this initial start up? _____

Start up date:	Project :	Serial #:	
Discharge Pressure Reading _____ PSI	Suction Pressure Reading _____ PSI	Boost Pressure _____ PSI	Total GPM _____ GPM
Phase _____ Hz _____ Volts _____	Started by:		
Pump Model:	Motor : ODP / TEFC HP: _____ RPM: _____	Smartdrive S/N#:	

- | | | |
|--|----|---|
| | 1 | Check overload settings against motor nameplate. (Parameters 1-20 to 1-29) |
| | 2 | Check inside the drives. Ensure all wiring and components are present & firmly installed. Re-tighten all control wires. |
| | 3 | Record pressure at the suction side before running any pumps. |
| | 4 | Check the system for any leaks and correct now |
| | 5 | Check the incoming voltage with a voltmeter.
L1- L2 _____ V L1- L3 _____ V L2- L3 _____ V |
| | 6 | Confirm that all pump switches are in the OFF position. Turn on the main power. |
| | 7 | Bump all motors individually and confirm rotation as indicated on the pumps. Close coupled pumps should rotate clockwise when viewed from the 'top' of the motor |
| | 8 | Check amperage on all three legs with each pump running individually. The discharge valves should still be closed and the amperaged quite low but balanced
P#1 L1 _____ A, L2 _____ A , L3 _____ A
P#2 L1 _____ A, L2 _____ A , L3 _____ A
P#3 L1 _____ A, L2 _____ A , L3 _____ A |
| | 9 | Program setpoint on the controller. Desired Set point: _____ PSI / C (Parameter 20-21) |
| | 10 | Calibrate VFD parameters to match actual system pressure |
| | 11 | Check for pump alternation. (Turn off lead pump and check if lag pump switches to lead pump) |
| | 12 | Record: Ramp UP Time _____ S Ramp DOWN Time _____ S (Parameters 3-41/42 and 3-51/52) |
| | 13 | Record Frequency of Motor: Min Frequency: _____ Hz Max Frequency: _____ Hz |
| | 14 | Is a hydro-tank piped & connected to the booster system? |
| | 15 | Is the hydro- tank (if applicable) charged to the correct pressure?
If the tank is located next to the booster, it should be charged 5 psi below the system pressure
If the tank is located at the top of the building, it should be charged to 35-40PSI. Start up cannot be completed unless the tank is properly installed and charged. |
| | 16 | Press "AUTO" button on all drives for booster package to run in Auto mode. Refer to drive manual for further inquires. |

Sign when completed

Name _____

Date _____