Current Gen. ABS Valve Test System

J. Maltby

9/4/14

**Utility Requirements**

Electric: 230VAC 60Hz Single Phase (2 independent circuits)

Water: For filling the tank and occasional top offs.

-The ABS room of the reliability lab currently meets our requirements without any modification.

**Hazards**

-There are no user accessible moving parts in the test system

-High Voltage, the control box will be sealed and labeled as such.

-The system will have an emergency stop button which kills power to the entire structure.

-Pressure. They system will be energized to 100PSI. There is an emergency relief valve in the event that the pressure spikes too high.

**Operation**

The entire system is controlled via 5 buttons on the E-Box.

Emergency Stop: This kills power to the entire machine

Power On: Turns machine on.

Power Off: Turns machine off.

Pump On: Activates the pump, after a 10 second delay the ABS valves begin to fire.

Pump Off: Turns off the pump as well as the ABS valves.

The machine is programed to run for 84,000 cycles per the test result. Following the completion of the cycles the machine goes into an idle state allowing the tester to recalibrate the flow rate.

Ultimately, the test will be concluded after the valves have been cycled 1,000,000 times.