



**98-035 REV B**  
**2 May, 2007**

### **M701 REPAIR KIT**

#### **SCOPE:**

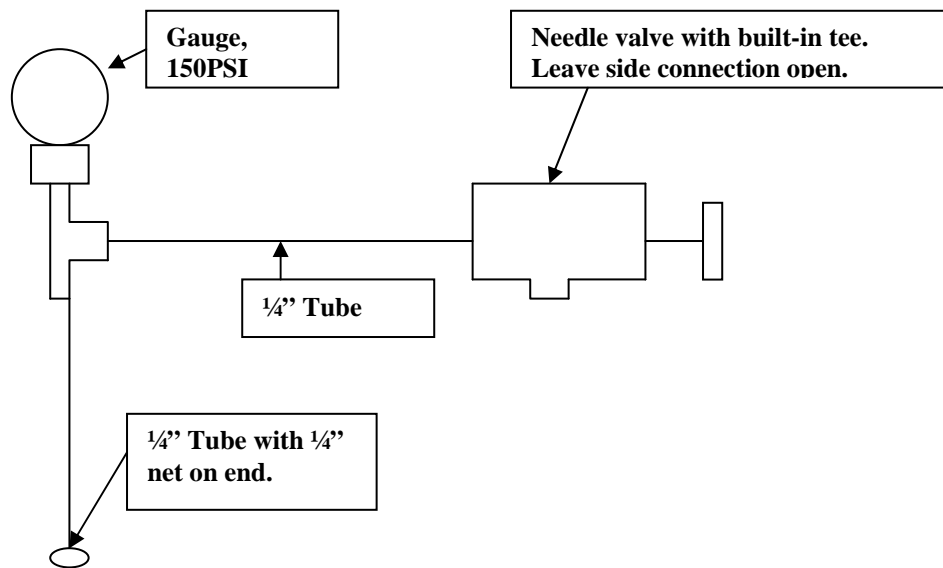
This document defines the recommended parts to be purchased by the customer to allow troubleshooting of pressure problems in the M701.

#### **TOOLS:**

API PN# KIT60

2 Adjustable wrenches.

The KIT should be assembled as follows:



#### **PROCEDURE:**

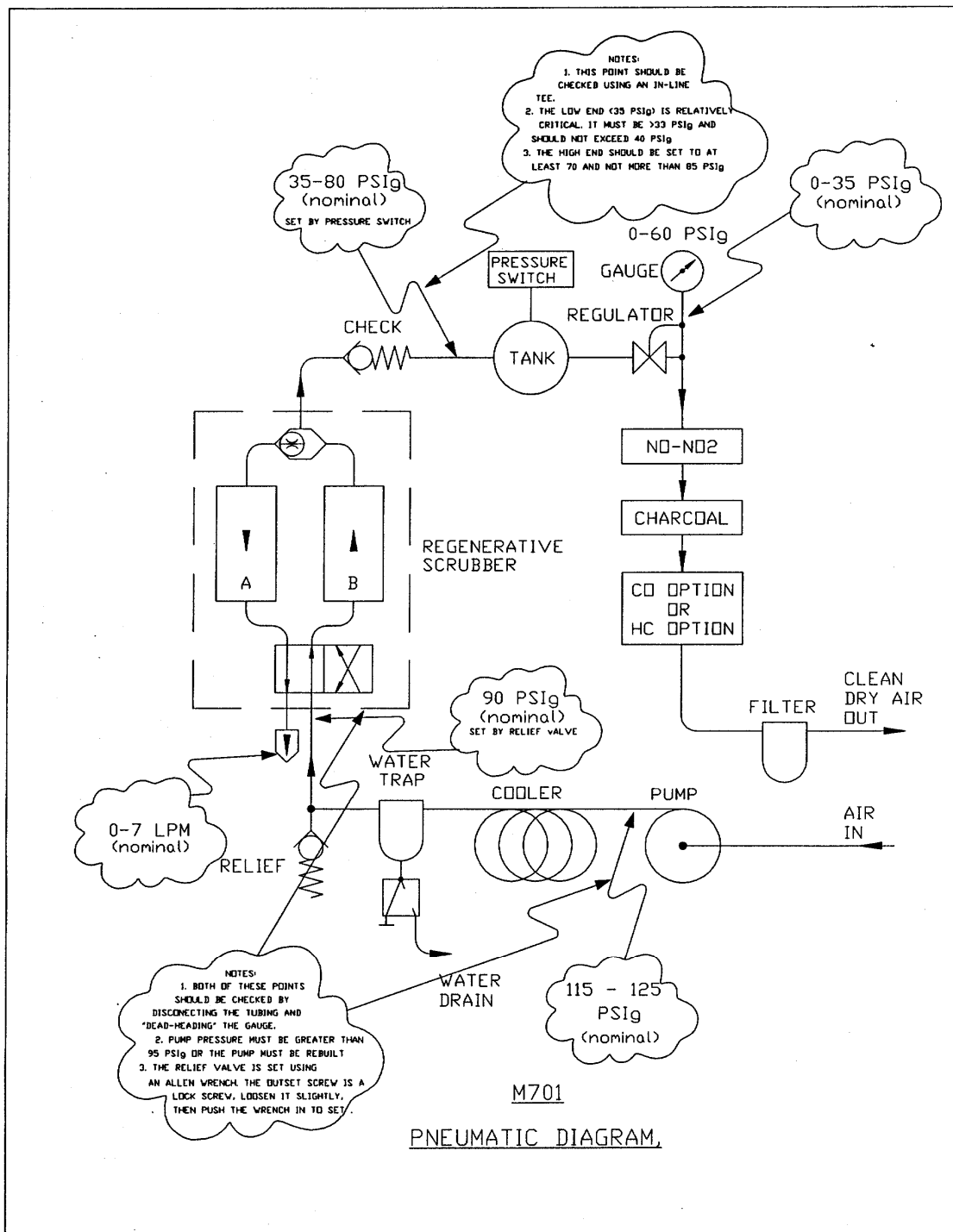
To troubleshoot low pressure problems in M701's follow these steps:

**NOTE: Please refer to attached drawing while performing these steps.**

1. Turn the pump power off. Do NOT proceed until front panel pressure gauge reads zero.
2. Disconnect fittings at pump outlet side. Connect tube end from 150 PSI gauge to pump outlet. Close needle valve. Apply power to M701 and allow the pump to pressurize the gauge. This pressure must be higher than 95 PSI or pump must be rebuilt. Order API PN# PU-23. You will need a quantity of 2 of this part because PU-23 is for one piston. Turn power off and open the needle valve to bleed pressure off before disconnecting gauge.

3. Remove tubing from output of check valve, upstream of the tank. Attach tube from 150 PSI gauge to output of check valve. Connect tube which you removed from the check valve to the needle valve tee. Open the needle valve all the way. Connect the M701 to a calibrator and apply power to the M701. Generate zero air from the calibrator at a rate of 2.5 LPM. The pressure on the 150 PSI gauge should increase to 80 PSI, then the pump should shut off. Pressure should drop to about 35 PSI, then the pump should turn on. This cycle should continue with a cycle time of about 80-100 seconds. If the pressure is not reaching 80 PSI, or if it suddenly drops off when the dryer switches columns, then the dryer has a bad valve and needs replacing. Remove power to M701 and allow pressure to drop to zero before removing 150 PSI gauge from M701.
4. If the above tests pass, but the M701 still cannot produce 10 LPM at 30 PSI, check for leaks at the tank, the scrubbers and the output filter. Also check your external connections and calibrator for leaks.

If you have questions about this or any API product, please contact an API Customer Service Representative.



**"M701 REPAIR KIT"**

Service Note 98-035

Page 3 of 3