VACUUM TESTING FUEL UNITS

ONE-PIPE SYSTEMS

1. REMOVE THE SUCTION LINE, **FILL THE FUEL UNIT WITH OIL,** AND INSTALL A VACUUM GAGE IN THE INLET PORT.

IF THE UNIT HAS RUN DRY, POUR OIL INTO THE PUMP BEFORE TESTING.

2. START THE BURNER AND OPEN THE BLEED VALVE.
3. WHEN VACUUM REACHES 15 in. hg CLOSE THE BLEED VALVE.
4. TURN THE BURNER OFF. THE FUEL UNIT SHOULD HOLD THE VACUUM LEVEL FOR 5 MINUTES.

TWO-PIPE SYSTEMS

1. REMOVE THE SUCTION LINE, **FILL THE FUEL UNIT WITH OIL,** AND INSTALL A VACUUM GAGE IN THE INLET PORT.

IF THE UNIT HAS RUN DRY, POUR OIL INTO THE PUMP BEFORE TESTING.

2. REMOVE THE RETURN LINE AND HAVE A RETURN PORT PLUG/BLEED VALVE READY TO PLUG THE RETURN PORT.
3. START THE BURNER.
4. WHEN VACUUM REACHES 15 in. hg, PLUG THE RETURN PORT AND TURN THE BURNER OFF. THE FUEL UNIT SHOULD HOLD THE VACUUM LEVEL FOR 5 MINUTES.

GENERAL "RULE OF THUMB" FOR ESTIMATING TWO-PIPE SYSTEM OPERATING VACUUM

- 1" OF VACUUM FOR EACH FOOT OF VERTICAL LIFT
- 1" OF VACUUM FOR EACH 10 FEET OF HORIZONTAL RUN

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BFPH PRESSURE SETTING AND CUT-OFF TESTING

1. DISCONNECT THE NOZZLE LINE AND INSTALL A PRESSURE GAGE IN THE NOZZLE PORT.

2. START THE BURNER AND BLEED THE SYSTEM. ALLOW TIME FOR ALL AIR TO LEAVE THE SYSTEM.

3. SET THE PRESSURE AS REQUIRED.

4. TURN OFF THE BURNER, THE PRESSURE SHOULD DROP TO APPROXIMATELY 80% OF THE SET PRESSURE INDICATING NOZZLE PORT CUT-OFF.
   EXAMPLE: 100 psi → 80 psi
   140 psi → 112psi
   IF THE PRESSURE DROPS BELOW 80% OF THE SET PRESSURE OR CONTINUES TO FALL, THE FUEL UNIT HAS A FAULTY CUT-OFF AND MUST BE REPLACED.

5. 5. IF THE PRESSURE CANNOT BE ADJUSTED IE. EXCESSIVE PRESSURE (150 psi +)
   THE PRESSURE REGULATING PISTON IS MOST LIKELY FROZEN IN POSITION. CHECK FOR WATER OR CONTAMINATION IN THE SYSTEM.

6. IF THE PRESSURE IS TOO LOW:
   - CHECK NOZZLE SIZING. IS IT TOO LARGE FOR THE CAPACITY OF THE FUEL UNIT?
   - CHECK THE PRESSURE GAGE

7. IF THE PRESSURE IS PULSATING:
   - CHECK THE SUCTION LINE FOR AN AIR LEAK OR POSSIBLE SYSTEM CONTAMINATION?