



Pressure Test Gauge Kit

Kit # (128812)



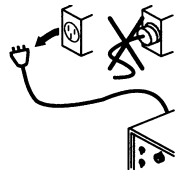
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		<p>WARNING ELECTRIC SHOCK CAN KILL</p>
		<p>Disconnect electrical power before performing any maintenance. All work requiring removal of the power supply cover must be performed by a qualified technician. See <i>Section 1</i> of the Operator Manual for more safety precautions.</p>

Introduction

Purpose

This kit provides the tools needed to check and verify back-pressures in the field.

Kit # 128812 contents

Description	Qty
Gauge and hose assembly – right hand fittings	1
Gauge and hose assembly – left hand fittings	1

Gas system back pressure checks

Use the back pressure checks to find leaks or restrictions in the gas lines and gas components such as valves. The checks can be done when the system is in the test cut or test preflow mode. In the **Test** mode, select a process from the table below. **Back pressures in the Run mode may be different than those in the Test modes.** For a low pressure, check for a leak. For a high pressure, check for a restriction in the gas line or a consumable problem.

HPR HD3070 back pressures

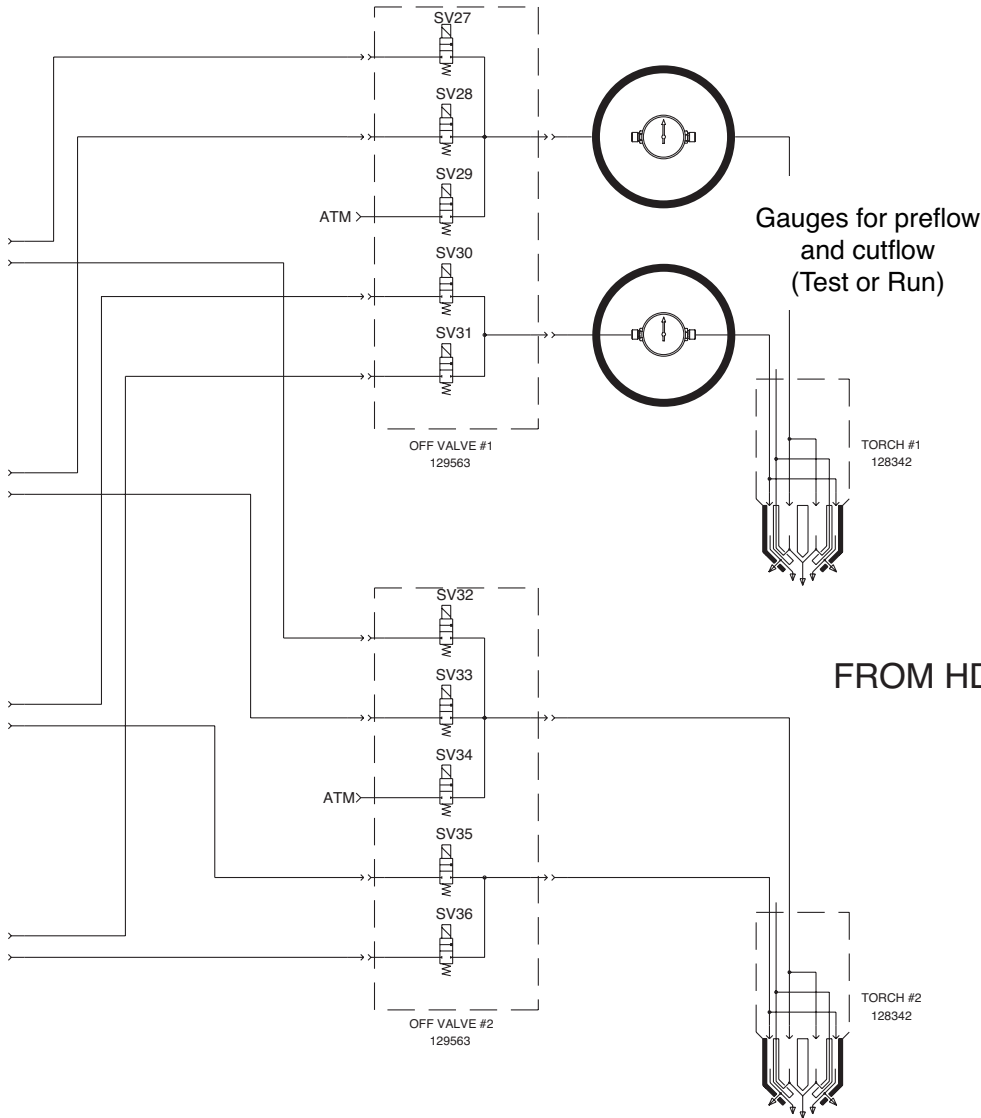
Process	Off-valve Preflow		Off-valve Cutflow		Gas console Cutflow	
	Plasma	Shield	Plasma	Shield	Plasma	Shield
30A mild steel (1mm - 0.036")	58	57	73	17	75	18
80A mild steel	24	22	28	27	30	36
100A mild steel (10mm - 3/8")	17	17	28	24	35	33
45A stainless steel (N2/N2)	37	35	33	52	34	70
100A stainless steel (10mm - 3/8")	19	18	55	45	60	56

Plasma system	Process	Plasma preflow	Plasma cutflow	Shield preflow	Shield cutflow
HD4070	200A mild steel	36 psi	56 psi	57 psi	63 psi
HD4070	70A mild steel	88 psi	80 psi	77 psi	25 psi
HD4070	Mild steel marking	52 psi	41 psi	31 psi	35 psi
HD4070	200A SST-H35/N2	31 psi	75 psi	59 psi	59 psi
HD4070	45A SST-N2/N2	86 psi	90 psi	68 psi	68 psi
HD4070	SST marking H5/N2	88 psi	79 psi	33 psi	37 psi
HD4070	200A AL-H35/N2	30 psi	75 psi	52 psi	52 psi
HD4070	30A AL-Air/Air	68 psi	72 psi	35 psi	37 psi
HD4070	AL marking H5/N2	89 psi	43 psi	33 psi	36 psi
HT2000	200A mild steel	45 psi	62 psi	N/A	N/A
HT2000	HySpeed 200A MS	27 psi	53 psi	N/A	N/A
HySpeed HT2000	100A mild steel	30 psi	63 psi	N/A	N/A
HT4001	340A mild steel	40 psi	85 psi	N/A	N/A
HT4001	260A mild steel	40 psi	80 psi	N/A	N/A

Note: The gauge assemblies can also be used on HT4400 and HPR systems. Use the gauges to verify the readings on the system's gas consoles.

Procedure

1. Attach the gauges to the output side of the off-valve plasma and shield lines. HD4070 shown below for reference.



2. Turn the system ON.
3. During preflow the pressures should be the same as the preflow readings shown in the table on page 2 (+/-10%).
4. During cutflow the plasma gas pressure will increase to line pressure and the shield gas will stabilize.