

Model #: \_\_\_\_\_

Serial #: \_\_\_\_\_

DATE: \_\_\_\_\_

Gas Type:		Cylinders installed:	
# Left Connections:		# Right Connections:	
Left Storage:	High pressure or Liquid	Right Storage:	High pressure or Liquid
Header supported:	Yes or No	Header supported:	Yes or No
Cylinders secured:	Yes or No	Cylinders secured:	Yes or No
Left Valve installed:	Yes or No	Right Valve installed:	Yes or No
Check valves in all header ports:	Yes or No	Correct pigtails:	Yes or No
Correct CGA:	Yes or No	Source Valve installed:	Yes or No

\* Open cylinders and valves slowly, then apply power to manifold

**Basic High Pressure x High Pressure Manifold:**

LEDs working:		Checked for Leaks:	
Left Bank Gauge:		Right Bank Gauge:	
Left Intermediate Gauge:		Right Intermediate Gauge:	
Left Discharge Gauge:		Right Discharge Gauge:	

**Intelliswitch Manifold:**

Left Setting:	HP / 230 / 350 / 500	Right Setting:	HP / 230 / 350 / 500
Left Vent installed:		Right Vent installed:	
Left Inlet Pressure:		Right Inlet Pressure:	
Outlet Pressure:		Units:	PSI or BAR or MPa
Switchover Pressure:		Reserve Alarm Connected:	

- A vent should be installed if more than one liquid dewar is on a side (ties all vents together)
- Lookback (Liq x Liq): Will look back 30 minutes after changeover to see if anything left on last side
- Switchback Delay (Liq x Liq): If switchback is <10 min, changeover occurs and no more lookback
- Economizer: Manifold uses gas from each side rather than releasing to atmosphere, unless can't use

DIP SWITCH SETTINGS (Intelliswitch only):

SW1									SW2		SW3		SW4				SW6			
1	2	3	4	5	6	7	8	9	1	2	1	2	1	2	3	4	1	2	3	4

LED's and Displays Working Properly:

Left Ready:		Right Ready:		Left Type:		Output:		Power:	
Left Replace:		Right Replace:		Right Type:		Left Supply:		PSI or BAR:	
Left In-use:		Right In-use:		Output Fault:		Right Supply:			

**Reserve Manifold:**

Is a High Pressure Reserve Installed? \_\_\_\_\_ How many connections? \_\_\_\_ Wired to Alarm Panel? \_\_\_\_\_

**Master Alarm Testing** (Number shown are for Intelliswitch only):

Changeover tested (3/4 & 15/16):		If liquid, only activates after Lookback ends; test in HP.
Reserve-in-use tested (5/6 & 17/18):		Reserve Low tested (on pressure switch)*:
Reserve Low tested: (7/8 & 19/20)		High Pressure tested (on pressure switch)*:

\* Pressure switch is connected downstream of the source valve.

**Useful information about equipment:**

- **SLOWLY** open valves on each side

**Basic High Pressure Manifold:**

- Switchover pressure is 250 psig
- If new cylinder pressure <350 psig, then it will NOT change from Replace to Ready
- Three (3) identical connections for CHANGEOVER (NO/C/NC)
- NO, CO<sub>2</sub>, and Carbogen have different valve seat materials
- N<sub>2</sub> and Instrument Air are designed for higher pressure delivery (180psig)
- Intermediate pressure readings:      Right Side: 250-300 psig;      Left Side: 230-242 psig

**Intelliswitch:**

- Lookback:                      Looks back at “empty bank” after 30 minutes to see if useful gas still available
- Switchback Delay:      When “Looking Back”, if pressure last <10 minutes, defines bank as EMPTY.
- Economizer:                      Switches to other bank to use gas rather than venting to atmosphere

Dewar Relief Pressure Valve	Economizer Activation Pressure	Normal Value to Switch Back
230 PSI	210 PSI	190 PSI
350 PSI	325 PSI	300 PSI
500 PSI	475 PSI	450 PSI

Note: For 230 psi dewar, standard settings can be changed to 135 psig switchover pressure w/ reserve set to 115 psig.

- Standard delivery and switchover pressures
  - 55 psig Delivery pressure uses 155 psig Switchover pressure
  - 180 psig Delivery pressure uses 240 psig Switchover pressure (N<sub>2</sub>, IA, other)
- Reserve default pressure after regulator should be set to 20 psig below switchover pressure
  - Default:      135-140 psig (55psig delivery); 215-220 psig (180 psig delivery)
- RESET button must be pressed after changing out dewars (not required for high pressure gas)
- If any DIP Switches are changed, SW4-3 must be set to OFF (Remote Setup when ON)
- FAIL SAFE:      Inlet valves open allowing sourcing from both sides; all alarms activate