

TM2 LEAK CHECK 2015-06-30

AT CONDITIONING STATION

HELIUM PRESSURE TEST AT 70 PSI, 2 min each circuit

A Target oven (+) BLR: 0.0×10^{-9} atm.cc/sec

BP: 0.0×10^{-4} torr

No Response

B Target oven (-) BLR: 0.0×10^{-9} atm.cc/sec

BP: 0.0×10^{-4} torr

No Response

C Tube heater (-) BLR: 0.0×10^{-9} atm.cc/sec

BP: 0.0×10^{-4} torr

No Response

D Tube heater (+) BLR: 0.0×10^{-9} atm.cc/sec

BP: 0.0×10^{-4} torr

No Response

P Q Coil 2

$$BLR = 0.0 \times 10^{-9} \text{ atm. cc/sec}$$

$$BP = 0.0 \times 10^{-4} \text{ torr}$$

No Response

Q J Heat shield (L) BLR: $0.0 \times 10^{-9} \text{ atm. cc/sec}$

$$BP = 0.0 \times 10^{-4} \text{ torr. No Response}$$

Heat shield (R) BLR: $0.0 \times 10^{-9} \text{ atm. cc/sec}$

$$BP = 0.0 \times 10^{-4} \text{ torr No Response}$$

R U Coil 1

$$BLR = 0.0 \times 10^{-9} \text{ atm. cc/sec}$$

$$BP = 0.0 \times 10^{-4} \text{ torr.}$$

Leak detector climbed to $1.0 \times 10^{-8} \text{ atm. cc/sec}$ right away. I ~~reat~~ released helium in 5 seconds

and the leak rate back to $0.0 \times 10^{-9} \text{ atm. cc/sec}$

No change on BP

It will be tested at last again.

Q E MSP

$$BLR = 0.0 \times 10^{-9} \text{ atm. cc/sec}$$

$$BP = 0.0 \times 10^{-4} \text{ torr}$$

No Response .

I EE

BLR: 0.0×10^{-9} atm.cc/sec

BP: 0.0×10^{-4} torr

No Response

M: GE

BLR: 0.0×10^{-9} atm.cc/sec

BP: 0.0×10^{-4} torr.

No Response

W = window

BLR: 0.0×10^{-9} atm.cc/sec

BP: 0.0×10^{-4} torr

No Response

air to vacuum leak check:

sprayed helium to all service cap panels, turbo-pumps

gauges, bellow, seals on water connections. They are

~~all~~ all good. No response on leak detector.

R, U Test again (coil 1) at 40 psi first

BLR: 0.0×10^{-9} atm.cc/sec

BP: 0.0×10^{-4} torr

BLR climbed to 5.0×10^{-9} atm.cc/sec in 10 seconds,

and kind of balanced at $5.0 \sim 6.0 \times 10^{-9}$ atm.cc/sec

Released helium pressure, the LR Back to 0.0×10^{-9}

R.U. TEST at 16 psi helium

No leak

at 20 psi helium.

1.4×10^{-9} atm cc/sec

at 25 psi

2.3×10^{-9} atm cc/sec

at 30 psi helium

2.4×10^{-9} atm cc/sec

at 35 psi helium

4.0×10^{-9} atm cc/sec

at 40 psi:

5.0×10^{-9} atm cc/sec

at 50 psi:

7.1×10^{-9} atm cc/sec

at 60 psi:

9.4×10^{-9} atm cc/sec