



A Division of Hearth Technologies Inc.

VALVE TEST PROCEDURES MUST BE FILLED OUT COMPLETELY AND RETURNED WITH THE WARRANTY CLAIM FORM FOR APPROVAL.

GAS VALVE TEST PROCEDURES: SIT VALVE

STOVE MODEL: _____ NG/LP

TOOLS NEEDED:

- FLATHEAD SCREWDRIVER
DIGITAL MULTIMETER
MANOMETER
JUMPER WIRE

A) GAS INLET PRESSURE:

NG: _____ (4.5-7.0 WC)

LP: 11.5 (11-14 WC)

B) VALVE MANIFOLD PRESSURE:

NG: LOW _____ (1.5 WC)

HIGH _____ (3.5 WC)

LP: LOW 5.5 (5.8 WC)

HIGH 9.5 (10 WC)

C) THERMOCOUPLE MILLIVOLT READING: NORMAL---15 TO 30 mV

_____ mV

D) THERMOPILE MILLIVOLT READING: NORMAL--500 TO 750 mV

616 mV

E) OPEN CIRCUIT MILLIVOLT READING: NORMAL--500 TO 750 mV

262 mV

F) CLOSED CIRCUIT W/ JUMPER WIRE MILLIVOLT READING:

***PUT A JUMPER ON (TPTH & TH) NORMAL---300 mV OR HIGHER---

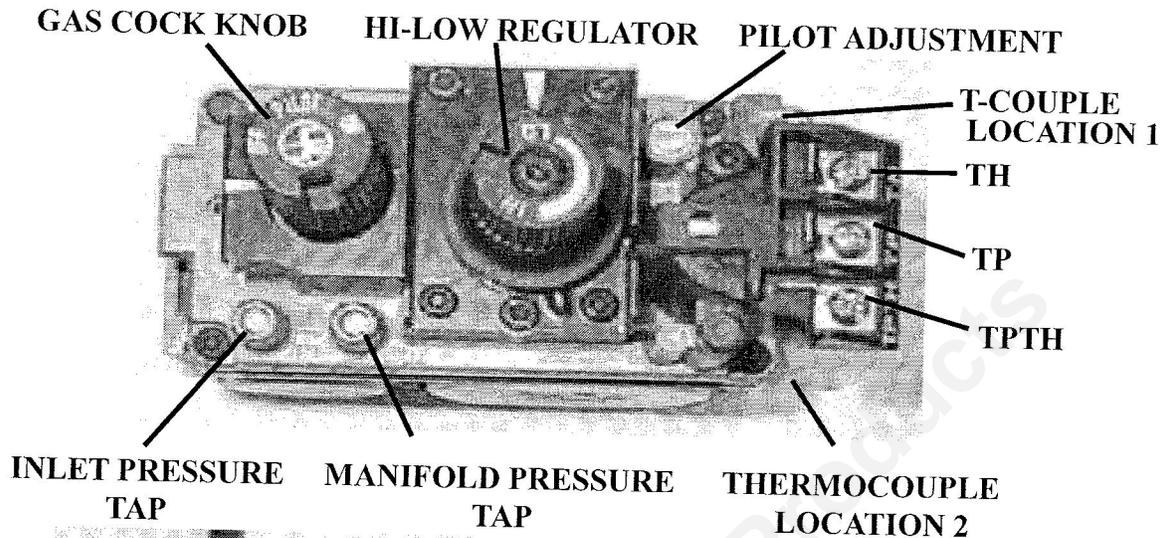
10 mV

G) CLOSED CIRCUIT W/ THERMOSTAT MILLIVOLT READING:

***REMOVE JUMPER WIRE AND HOOK UP THERMOSTAT (NORMAL--175mV)

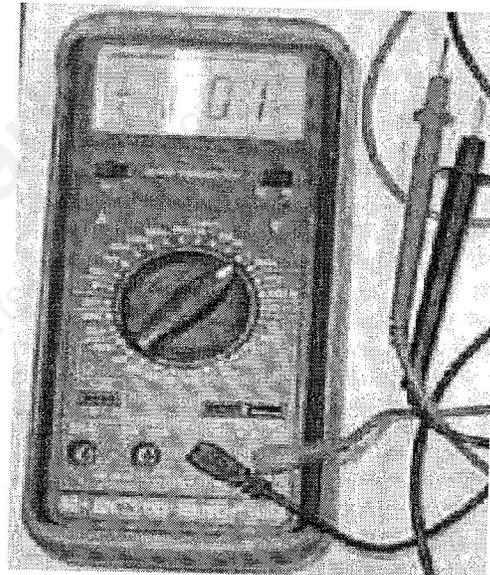
17 mV

44K TEST 1.7 OHMS



DIGITAL MANOMETER

TOOLS NEEDED



DIGITAL MULTIMETER

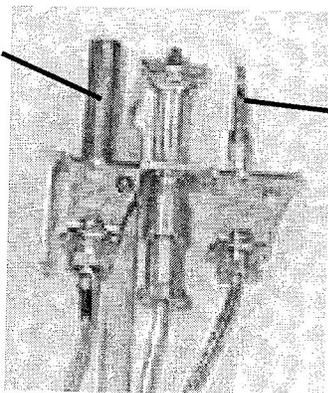
STEP A: CHECKING INLET GAS PRESSURE

- 1) TURN OFF SUPPLY GAS
- 2) LOOSEN INLET PRESSURE TAP (DO NOT REMOVE)
- 3) ATTACH MANOMETER HOSE
- 4) TURN SUPPLY GAS ON
- 5) ENGAGE PILOT AND BURNER FOR AN ACCURATE READING

STEP B: CHECKING MANIFOLD PRESSURE

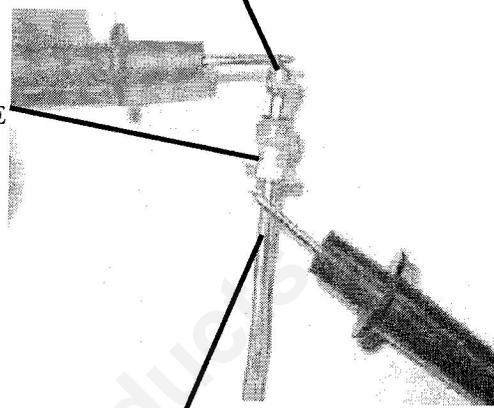
- 1) TURN OFF SUPPLY GAS
- 2) LOOSEN MANIFOLD PRESSURE TAP (DO NOT REMOVE)
- 3) ATTACH MANOMETER HOSE
- 4) TURN SUPPLY GAS ON
- 5) ENGAGE PILOT AND BURNER
- 6) TURN HI-LOW REGULATOR FROM LOW TO HIGH FOR READING

THERMOPILE



THERMOCOUPLE

THERMOCOUPLE TIP



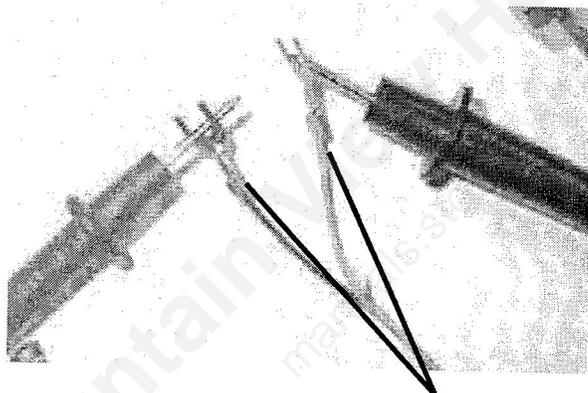
COPPER WIRE

STEP C: TESTING THE THERMOCOUPLE

- 1) REMOVE THERMOCOUPLE WIRE FROM VALVE
- 2) PLACE THE RED PROBE ON THE TIP OF THE THERMOCOUPLE WIRE
- 3) PLACE THE BLACK PROBE ON THE COPPER WIRE
- 4) LIGHT THE PILOT AND OBSERVE THE MILLIVOLT READING (mVDC)

NOTE: HOLD THE PILOT BUTTON DOWN ON THE VALVE WHILE DOING THE TEST

- 5) REINSTALL THE THERMOCOUPLE TO THE VALVE



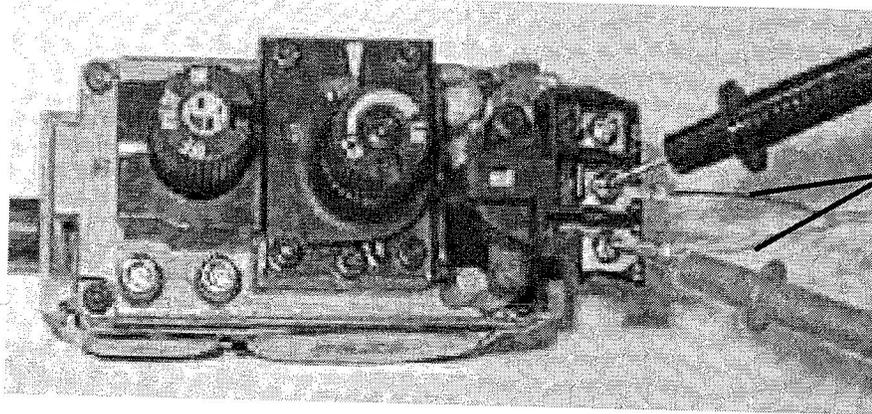
THERMOPILE WIRES

STEP D: TESTING THE THERMOPILE

- 1) DISCONNECT THERMOPILE FROM THE VALVE
- 2) LIGHT THE PILOT AND WAIT 3 MINUTES

NOTE: LEAVE THE GAS COCK IN THE PILOT POSITION

- 3) PUT A PROBE ON EACH WIRE OF THE THERMOPILE
- 4) OBSERVE THE MILLIVOLT READING (mVDC)
- 5) RECONNECT THE THERMOPILE TO THE VALVE



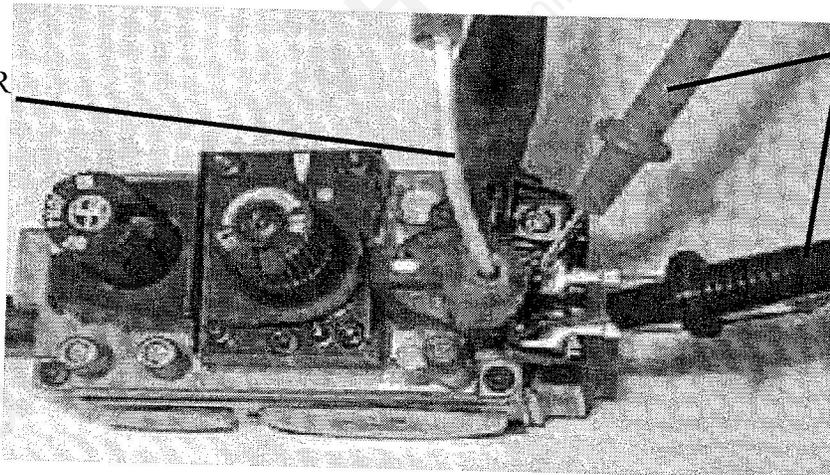
THERMOPILE
WIRES

STEP E: CHECKING OPEN CIRCUIT MILLIVOLTS

- 1) LIGHT THE PILOT AND WAIT 3 MINUTES

NOTE: LEAVE THE GAS COCK IN THE PILOT POSITION

- 2) REMOVE THERMOSTAT WIRES FROM VALVE
- 3) WITH THE THERMOPILE CONNECTED TO THE VALVE, TAKE
A mV READING ACROSS THE "TP" AND "TPTH" TERMINAL (mVDC)
- 4) RECONNECT THE THERMOSTAT WIRES TO THE VALVE



JUMPER
WIRE

TEST PROBE

STEP F: CHECKING CLOSED CIRCUIT MILLIVOLTS

- 1) LIGHT THE PILOT AND WAIT 3 MINUTES

NOTE: LEAVE THE GAS COCK KNOB IN THE PILOT POSITION

- 2) PLACE A JUMPER WIRE ON "TH" AND "TPTH" TERMINAL
- 3) TAKE mV READING ACROSS THE "TP" AND "TPTH" TERMINAL

STEP G: CHECKING CLOSED CIRCUIT WITH THERMOSTAT ENGAGED

- 1) LIGHT THE PILOT AND WAIT 3 MINUTES

NOTE: LEAVE THE GAS COCK KNOB IN THE PILOT POSITION

- 2) HOOK UP THERMOSTAT WIRES TO VALVE AND TURN T-STAT ON
- 3) TAKE mV READING ACROSS THE "TP" AND "TPTH" TERMINAL