

GAS TRAIN SCHEMATICS

CSA and CGA REQUIREMENTS



FOR GAS TRAINS ASSEMBLED IN THE FIELD

CAUTION

REGULATORS WITH INTERNAL CONTROL require a minimum length of five (5) pipe diameters of straight uninterrupted pipe on the outlet side for proper regulation and performance.

REGULATORS WITH AN EXTERNAL CONTROL LINE require a minimum length of eight (8) pipe diameters of straight uninterrupted pipe on the outlet side plus eight (8) pipe diameters of straight uninterrupted pipe downstream of the control line.

The outlet screwed connection must be free of excess thread engagement and conform to good piping practice.

The top cap at the regulator spring must be in place or unstable operation may occur.

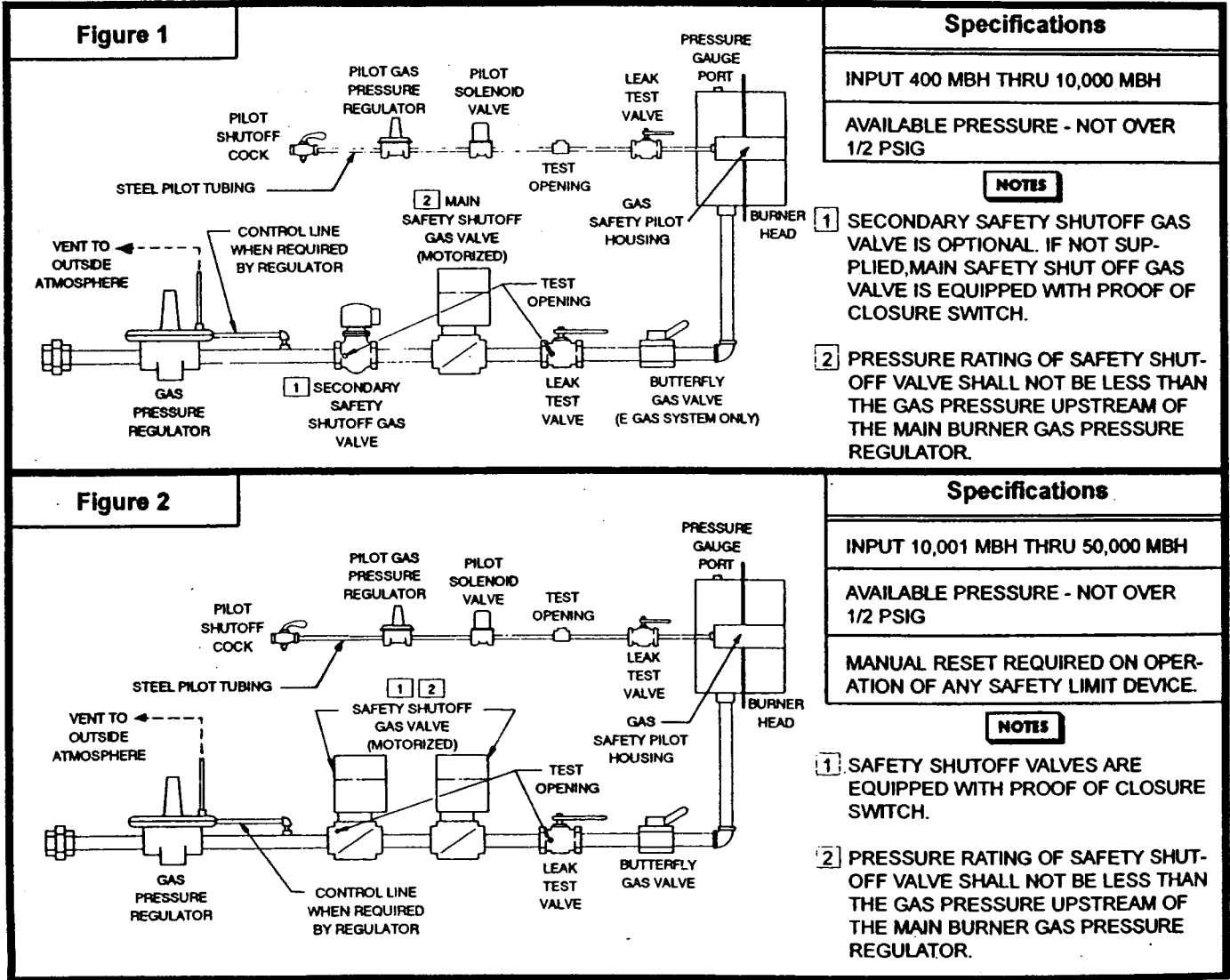
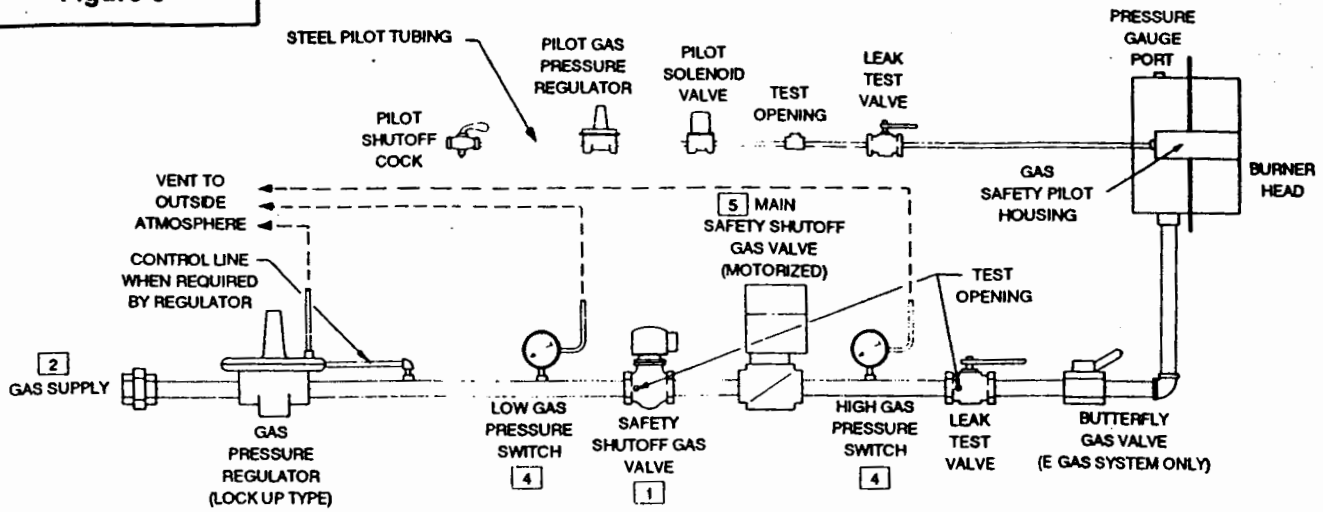


Figure 3



Specifications

INPUT 400 MBH THRU 10,000 MBH

AVAILABLE PRESSURE - OVER 1/2 PSIG

NOTES

- 1 SECONDARY SAFETY SHUTOFF GAS VALVE IS OPTIONAL. IF NOT SUPPLIED, MAIN SAFETY SHUTOFF GAS VALVE IS EQUIPPED WITH PROOF OF CLOSURE SWITCH.

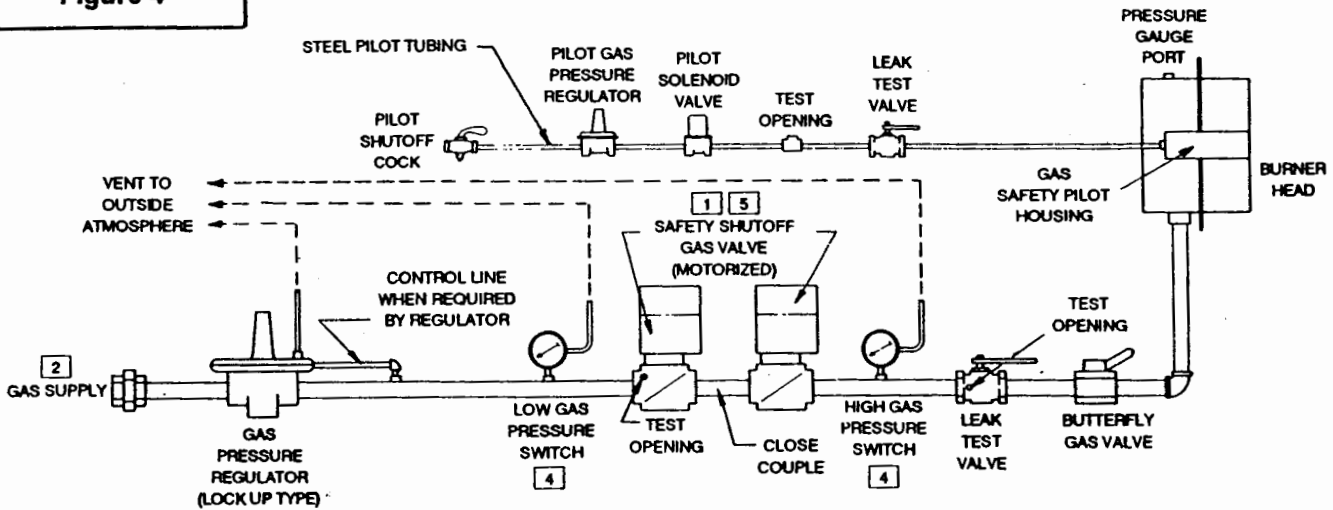
- 2 WHERE AVAILABLE GAS PRESSURE TO BURNER GAS TRAIN EXCEEDS COMPONENT RATINGS, A GAS PRESSURE RELIEF VALVE (BY OTHERS) MUST BE INSTALLED DOWNSTREAM OF BURNER GAS TRAIN REGULATOR. RELIEF VALVE MUST BE SET BELOW RATING OF LOWEST RATED COMPONENT.

- 3 ON COMBINATION GAS-OIL BURNERS, PILOT GAS LINE CONNECTION MUST BE UPSTREAM OF THE MAIN MANUAL GAS SHUTOFF VALVE.

- 4 GAS PRESSURE SWITCHES ARE MANUAL RESET TYPE WITH POSITION INDICATORS.

- 5 PRESSURE RATING OF SAFETY SHUTOFF VALVE SHALL NOT BE LESS THAN THE GAS PRESSURE UPSTREAM OF THE MAIN BURNER GAS PRESSURE REGULATOR.

Figure 4



Specifications

INPUT 10,000 MBH THRU 50,000 MBH

AVAILABLE PRESSURE - OVER 1/2 PSIG

MANUAL RESET REQUIRED ON OPERATION OF ANY SAFETY LIMIT DEVICE.

NOTES

- 1 SAFETY SHUTOFF VALVES ARE EQUIPPED WITH PROOF OF CLOSURE SWITCH.

- 2 WHERE AVAILABLE GAS PRESSURE TO BURNER GAS TRAIN EXCEEDS COMPONENT RATINGS, A GAS PRESSURE RELIEF VALVE (BY OTHERS) MUST BE INSTALLED DOWNSTREAM OF BURNER GAS TRAIN REGULATOR. RELIEF VALVE MUST BE SET BELOW RATING OF LOWEST RATED COMPONENT.

- 3 ON COMBINATION GAS-OIL BURNERS, PILOT GAS LINE CONNECTION MUST BE UPSTREAM OF THE MAIN MANUAL GAS SHUTOFF VALVE.

- 4 GAS PRESSURE SWITCHES ARE MANUAL RESET TYPE WITH POSITION INDICATORS.

- 5 PRESSURE RATING OF SAFETY SHUTOFF VALVE SHALL NOT BE LESS THAN THE GAS PRESSURE UPSTREAM OF THE MAIN BURNER GAS PRESSURE REGULATOR.