

APPENDIX B

PROCEDURES TO BE FOLLOWED TO PLACE GAS EQUIPMENT IN OPERATION

Note: Portions of this chapter have been reproduced in their entirety from Chapter 11 NFPA 54-2002 (ANSI Z223.1)

B.1.0 Adjusting the Burner Input.

B.1.1 Adjusting Input. The input shall be adjusted to the proper rate in accordance with the equipment manufacturer's instructions by changing the size of a fixed orifice, by changing the adjustment of an adjustable orifice, or by readjusting the gas pressure regulator outlet pressure (where a regulator is provided). Overfiring shall be prohibited.

B.1.2 High Altitude. Ratings of gas utilization equipment are based on sea level operation and shall not be changed for operation at elevations up to 2,000 feet (600 m). For operation at elevations above 2,000 feet (600 m), equipment ratings shall be reduced in accordance with one of the following methods:

- (1) At the rate of 4 percent for each 1,000 feet (300 m) above sea level before selecting appropriately sized equipment.
- (2) As permitted by the Authority Having Jurisdiction.
- (3) Listed appliances derated in accordance with the terms of the listing shall be permitted.

B.2.0 Primary Air Adjustment. The primary air for injection (Bunsen)-type burners shall be adjusted for proper flame characteristics in accordance with the manufacturers' instructions. After setting the primary air, the adjustment means shall be secured in position.

B.3.0 Safety Shutoff Devices. Where a safety shutoff device is provided, it shall be checked for proper operation and adjustment in accordance with the manufacturer's instructions. Where the device does not function properly to turn off the gas supply in the event of pilot outage, it shall be properly serviced or replaced with new equipment.

B.4.0 Automatic Ignition. Gas utilization equipment supplied with means for automatic ignition shall be checked for proper operation. If necessary, proper adjustments shall be made.

B.5.0 Protective Devices. All protective devices furnished with the gas utilization equipment, such as a limit control, fan control to blower, temperature- and pressure-relief valve, low-water cutoff device, or manual operating features, shall be checked for proper operation.

B.6.0 Checking the Draft. Vent-connected gas utilization equipment shall be operated for several minutes and checked to see that the combustion

products are going up the chimney or gas vent properly by passing a lighted match or taper around the edge of the relief opening of the draft hood. Where the chimney or gas vent is drawing properly, the match flame will be drawn into the draft hood. Where not, the combustion products will tend to extinguish this flame. Where the combustion products are escaping from the relief opening of the draft hood, the equipment shall not be operated until proper adjustments or repairs are made to provide adequate draft through the chimney or gas vent.

B.7.0 Operating Instructions. Operating instructions shall be furnished and shall be left in a prominent position near the equipment for the use of the consumer.

TABLE B-1-1
Gas Input to Burner in Cubic Feet per Hour

Seconds for One Revolution	Size of Test Meter Dial			
	1/2 ft. ³	1 ft. ³	2 ft. ³	5 ft. ³
10	180	360	720	1800
11	164	327	655	1636
12	150	300	600	1500
13	138	277	555	1385
14	129	257	514	1286
15	120	240	480	1200
16	112	225	450	1125
17	106	212	424	1059
18	100	200	400	1000
19	95	189	379	947
20	90	180	360	900
21	86	171	343	857
22	82	164	327	818
23	78	157	313	783
24	75	150	300	750
25	72	144	288	720
26	69	138	277	692
27	67	133	267	667