

(i) *Nozzle*. A nozzle must maintain the fuel pressure to yield a nominal 6.0 gal/hr (0.378 L/min) fuel flow. A Monarch-manufactured 80° PL (hollow cone) nozzle nominally rated at 6.0 gal/hr at 100 lb/in² (0.71 MPa) delivers a proper spray pattern.

(ii) *Fuel Rail*. The fuel rail must be adjusted to position the fuel nozzle at a depth of 0.3125 inch (8 mm) from the end plane of the exit stator, which must be mounted in the end of the draft tube.

(iii) *Internal Stator*. The internal stator, located in the middle of the draft tube, must be positioned at a depth of 3.75 inches (95 mm) from the tip of the fuel nozzle. The stator must also be positioned such that the integral igniters are located at an angle midway between the 10 and 11 o'clock

position, when viewed looking into the draft tube. Minor deviations to the igniter angle are acceptable if the temperature and heat flux requirements conform to the requirements of paragraph VII(e) of this appendix.

(iv) *Blower Fan*. The cylindrical blower fan used to pump air through the burner must measure 5.25 inches (133 mm) in diameter by 3.5 inches (89 mm) in width.

(v) *Burner cone*. Install a 12 +0.125-inch (305 ±3 mm) burner extension cone at the end of the draft tube. The cone must have an opening 6 ±0.125-inch (152 ±3 mm) high and 11 ±0.125-inch (280 ±3 mm) wide (see figure 3).

(vi) *Fuel*. Use JP-8, Jet A, or their international equivalent, at a flow rate of 6.0 ±0.2 gal/hr (0.378 ±0.0126 L/min). If this fuel

is unavailable, ASTM K2 fuel (Number 2 grade kerosene) or ASTM D2 fuel (Number 2 grade fuel oil or Number 2 diesel fuel) are acceptable if the nominal fuel flow rate, temperature, and heat flux measurements conform to the requirements of paragraph VII(e) of this appendix.

(vii) *Fuel pressure regulator*. Provide a fuel pressure regulator, adjusted to deliver a nominal 6.0 gal/hr (0.378 L/min) flow rate. An operating fuel pressure of 100 lb/in² (0.71 MPa) for a nominally rated 6.0 gal/hr 80° spray angle nozzle (such as a PL type) delivers 6.0 ±0.2 gal/hr (0.378 ±0.0126 L/min).