

§ 7.308

30 CFR Ch. I (7-1-00 Edition)

minimum of 150 psig and the pressure maintained for a minimum of 10 seconds.

(2) Following the pressure hold, the pressure shall be removed and the pressurizing agent removed from the enclosure.

(b) *Acceptable performance.* (1) The enclosure during pressurization shall not exhibit—

(i) Leakage through welds or casting; or

(ii) Rupture of any part that affects the explosion-proof integrity of the enclosure.

(2) The enclosure following removal of the pressurizing agent shall not exhibit—

(i) Visible cracks in welds;

(ii) Permanent deformation exceeding 0.040 inches per linear foot; or

(iii) Clearances, in excess of those specified in this subpart, along accessible flame-arresting paths, following any necessary retightening of fastenings.

§ 7.308 Lockwasher equivalency test.

(a) *Test procedure.* (1) Each test sample shall be an assembly consisting of a fastening with a locking device. Each standard sample shall be an assembly consisting of a fastening with a lockwasher.

(2) Five standard samples and five test samples shall be tested.

(3) Each standard and test sample shall use a new fastening of the same specifications as being used on the motor assembly.

(4) A new tapped hole shall be used for each standard and test sample. The hole shall be of the same specifications as used on the motor assembly.

(5) Each standard and test sample shall be inserted in the tapped hole and continuously and uniformly tightened at a speed not to exceed 30 rpm until the fastening's proof load is achieved. The torquing device shall not contact the locking device or the threaded portion of the fastening.

(6) Each standard and test sample shall be engaged and disengaged for 15 full cycles.

(b) *Acceptable performance.* The minimum torque value required to start removal of the fastening from the installed position (minimum breakway torque) for any cycle of any test sample shall be greater than or equal to the average breakway torque of each removal cycle of every standard sample.

§ 7.309 Approval marking.

Each approved motor assembly shall be identified by a legible and permanent approval plate inscribed with the assigned MSHA approval number and a warning statement as specified in § 7.306(d) of this part. The plate shall be securely attached to the motor assembly in a manner that does not impair any explosion-proof characteristics.

§ 7.310 Post-approval product audit.

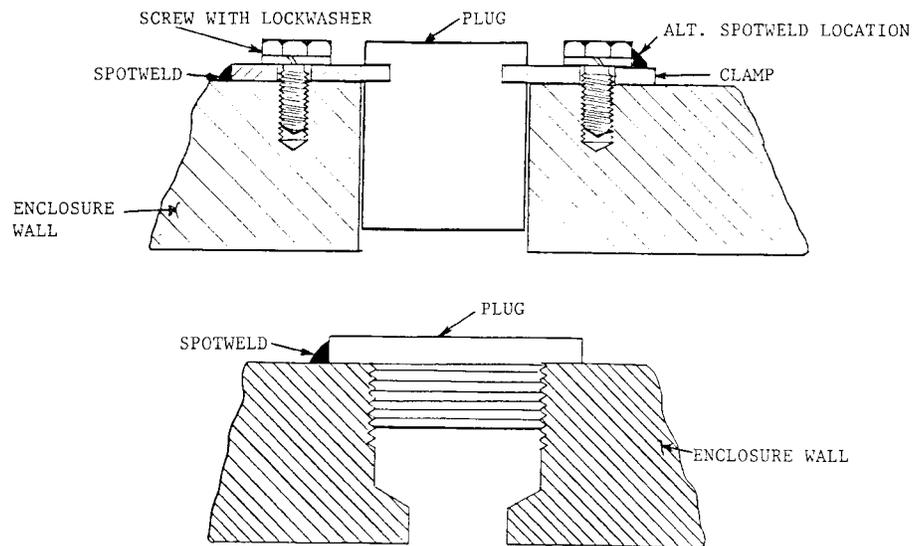
Upon request by MSHA but not more than once a year, except for cause, the approval holder shall make a motor assembly available for audit at no cost.

§ 7.311 Approval checklist.

Each motor assembly bearing an MSHA approval marking shall be accompanied by a list of items necessary for maintenance of the motor assembly as approved.

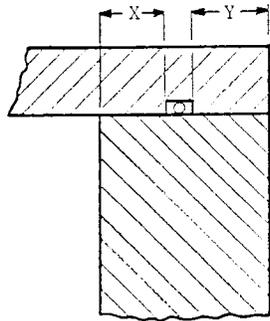
APPENDIX I TO SUBPART J OF PART 7

Appendix I to Subpart J—Figures J-1 through J-14



WELD (OR BRAZE) MAY BE ON PLUG, CLAMP, OR FASTENING

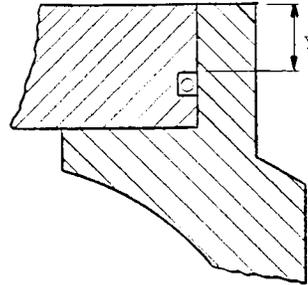
FIGURE J-1



$X + Y = \text{MIN. ACCEPTABLE FLAME-ARRESTING PATH LENGTH}$

$$Y = \frac{X + Y}{2}$$

FIGURE J-2



$Y = 1/2" \text{ MIN.}$

FIGURE J-3

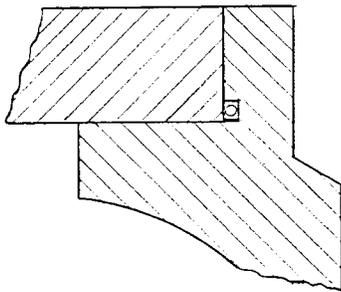
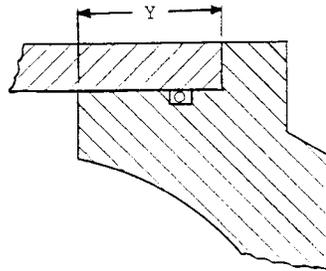
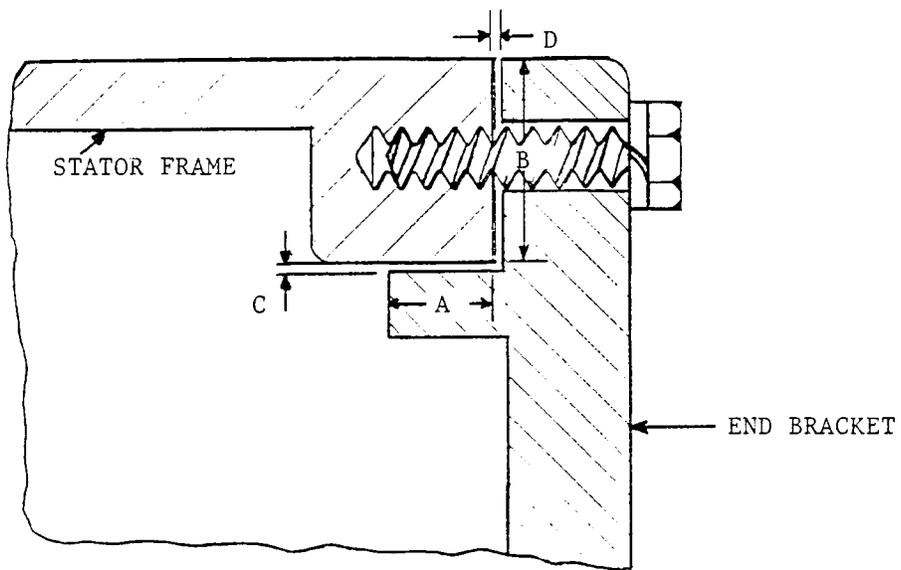


FIGURE J-4



O-RING CAN BE LOCATED ANYWHERE ALONG LENGTH OF (Y).

FIGURE J-5



A = Width of Axial Portion

B = Width of Clamped Radial Portion

C = Clearance of Axial Portion

D = Clearance of Radial Portion

Total Width of Flamepath = A + B

FIGURE J-6

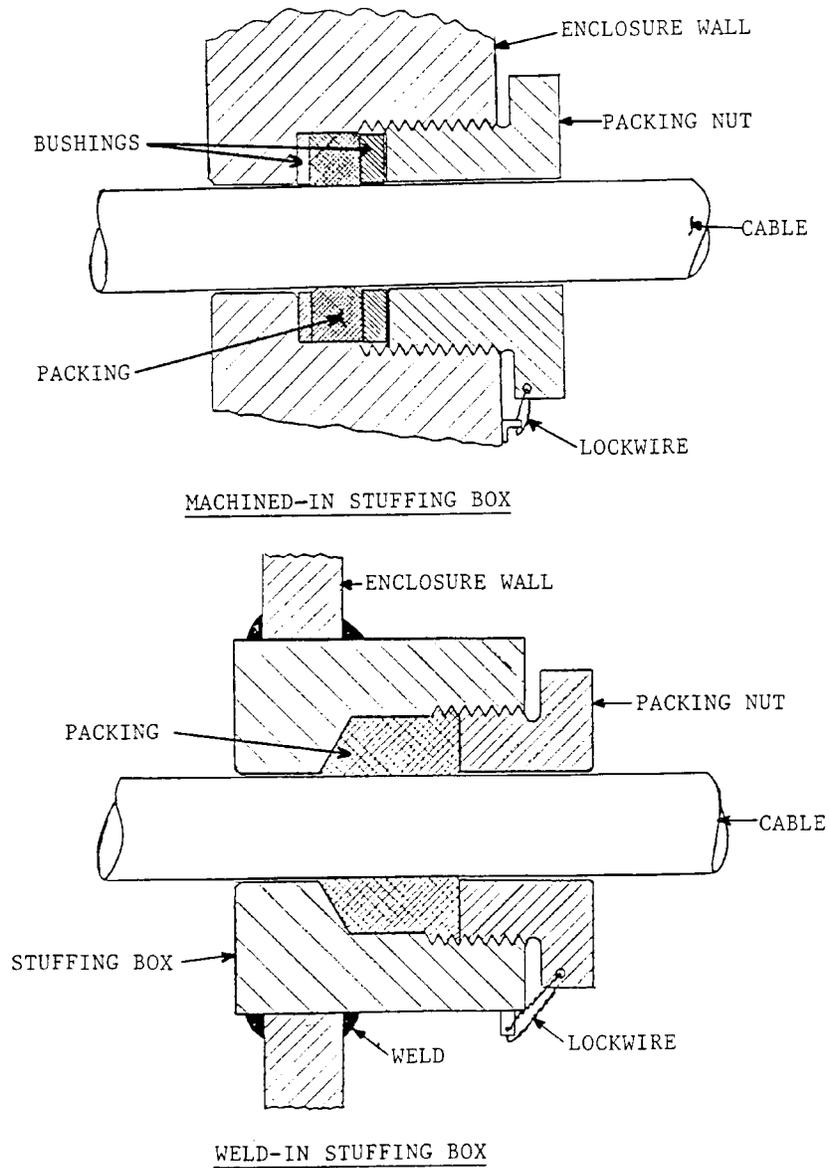
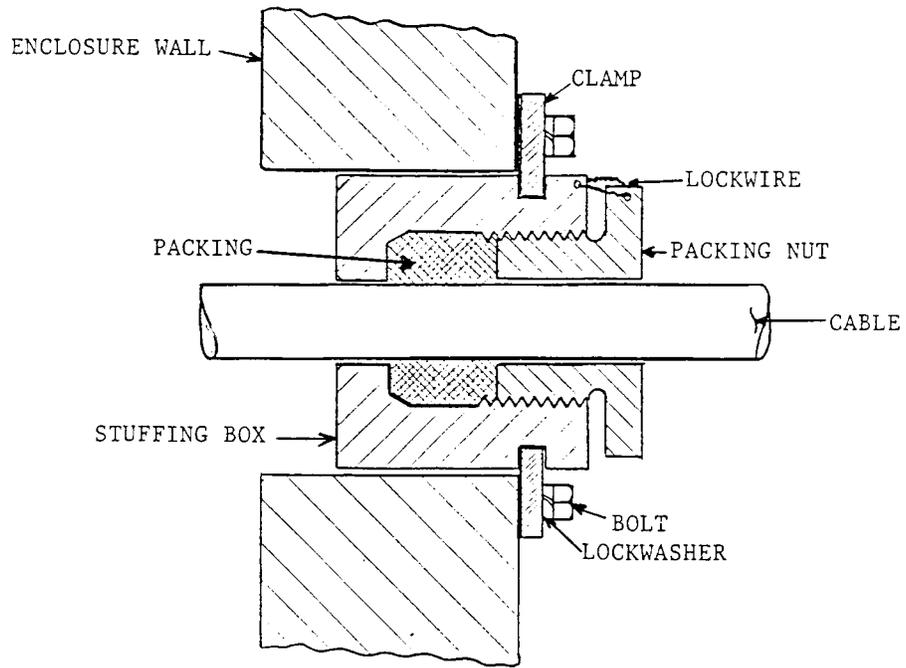


FIGURE J-7



SLIP-FIT STUFFING BOX

FIGURE J-7

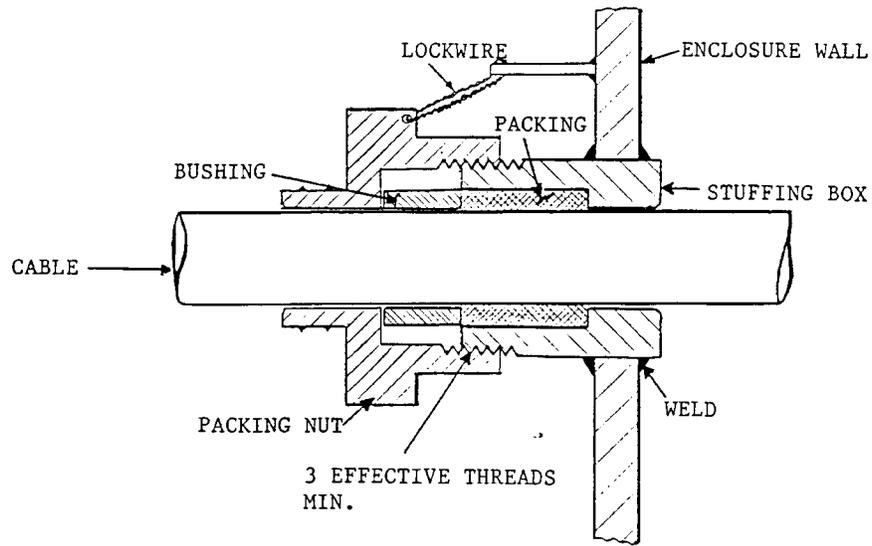


FIGURE J-8

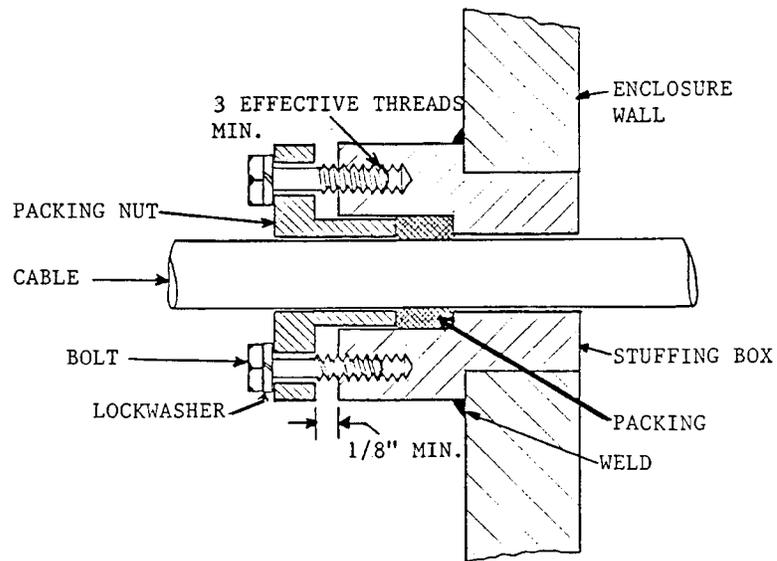


FIGURE J-9

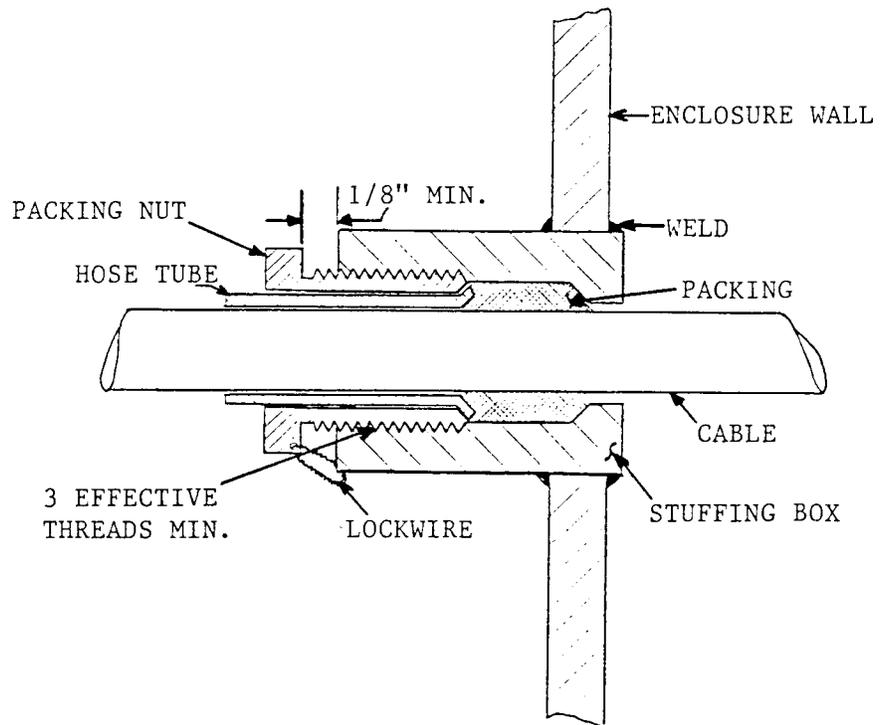


FIGURE J-10

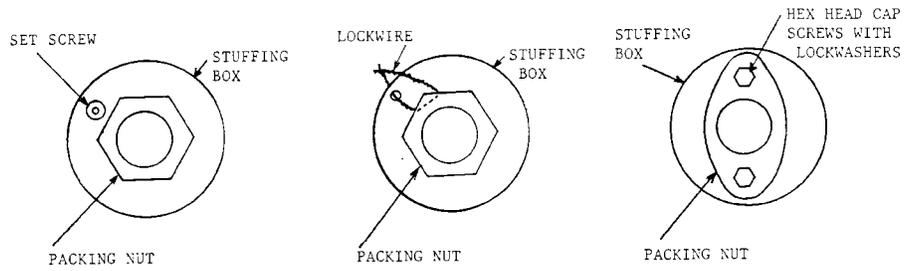
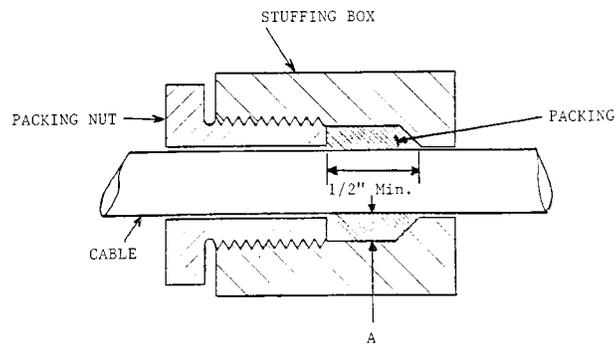
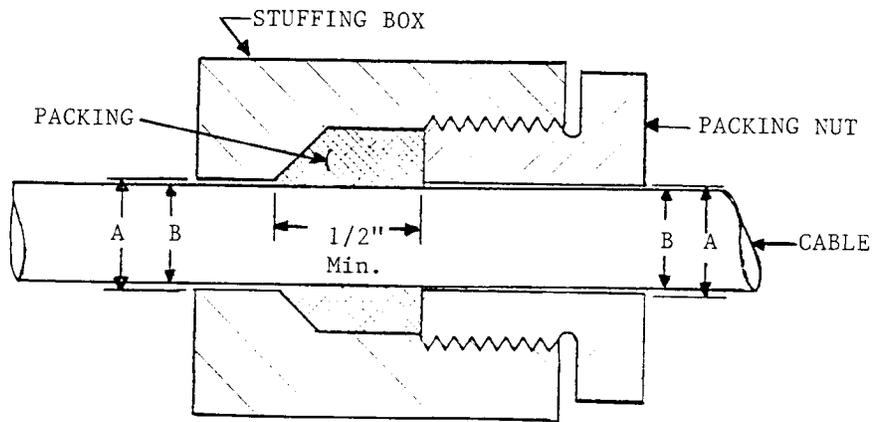


FIGURE J-11



A \leq 150% of Packing Material Diameter or Width

FIGURE J-12



$A - B \cong 75\%$ of Packing Material Diameter or Width

FIGURE J-13

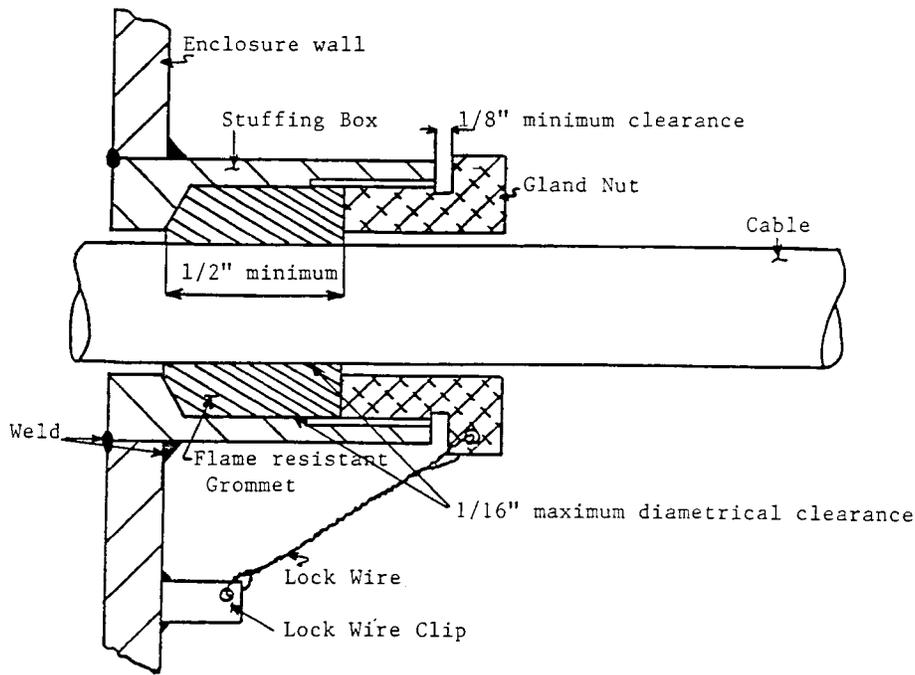


FIGURE J-14

Subpart K—Electric Cables, Signaling Cables, and Cable Splice Kits

SOURCE: 57 FR 61220, Dec. 23, 1992, unless otherwise noted.

§ 7.401 Purpose and effective date.

This subpart establishes the flame-resistant requirements for approval of electric cables, signaling cables and cable splice kit designs. Applications for approval or extension of approval submitted after February 22, 1994 shall meet the requirements of this subpart.

§ 7.402 Definitions.

The following definitions apply in this subpart.

Component. Any material in a cable splice kit which becomes part of a splice.

Conductor. A bare or insulated wire or combination of wires not insulated from one another, suitable for carrying an electric current.

Electric Cable. An assembly of one or more insulated conductors of electric current under a common or integral jacket. A cable may also contain one or more uninsulated conductors.

Jacket. A nonmetallic abrasion-resistant outer covering of a cable or splice.

Power Conductor. An insulated conductor of a cable assembly through which the primary electric current or power is transmitted.

Signaling Cable. A fiber optic cable, or a cable containing electric conductors of a cross-sectional area less than #14 AWG used where the circuit cannot deliver currents which would increase conductor temperatures beyond that established for the current-carrying capacity of the conductors.