F. Working clearances from energized equipment

All parts of equipment such as switches, fuses, transformers, surge arresters, luminaires and their support brackets, etc., or other connections that may require operation or adjustment while energized and exposed at such times, shall be so arranged with respect to each other, other equipment, vertical and lateral conductors, and portions of the supporting structure, including supporting platforms or structural members, that in adjustment or operation no portion of the body, including the hands, need be brought closer to any exposed energized parts or conductors than permitted in Part 4, Rule 441 or 446 of this Code.

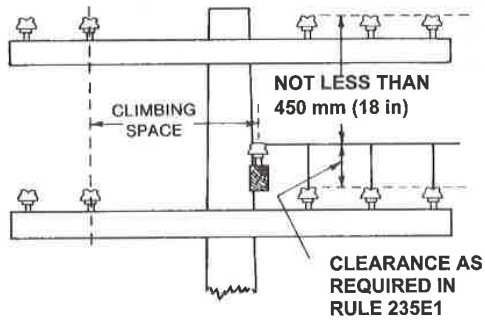

Figure 237-1—Obstruction of working space by buckarm

238. Vertical clearance between certain communications and supply facilities located on the same structure

A. Equipment

For the purpose of measuring clearances under this rule, equipment shall be taken to mean non-current-carrying metal parts of equipment, including metal supports for cables or conductors, metal support braces that are attached to metal supports or are less than 25 mm (1 in) from transformer cases or hangers that are not effectively grounded, and metal or nonmetallic supports or braces associated with communication cables or conductors. Antennas shall be considered equipment for the purpose of measuring clearances under this rule.

B. Clearances in general

Vertical clearances between supply conductors and communications equipment, between communication conductors and supply equipment, and between supply and communications equipment shall be as specified in Table 238-1, except as provided in Rule 238C and 238D.

C. Clearances for span wires or brackets

Span wires or brackets carrying luminaires, traffic signals, or trolley conductors shall have at least the vertical clearances in millimeters or inches from communications equipment set forth in Table 238-2.

D. Clearance of drip loops of luminaire or traffic signal brackets

If a drip loop of conductors entering a luminaire, a luminaire bracket, or a traffic signal bracket is above a communication cable, the lowest point of the loop shall be at least 300 mm (12 in) above the highest communication cable, through bolt, or other exposed conductive objects.

EXCEPTION: The above clearance may be reduced to 75 mm (3 in) if the loop is covered by a suitable nonmetallic covering that extends at least 50 mm (2 in) beyond the loop.

E. Communication worker safety zone

The clearances specified in Rules 235C and 238 create a communication worker safety zone between the facilities located in the supply space and facilities located in the communication space, both at the structure and in the span between structures. Except as allowed by Rules 238C, 238D, and 239, no supply or communication facility shall be located in the communication worker safety zone.

Table 238-1—Vertical clearance between supply conductors and communications equipment, between communication conductors and supply equipment, and between supply and communications equipment

(Voltages are phase to ground for effectively grounded circuits and those other circuits where all ground faults are cleared by promptly de-energizing the faulted section, both initially and following subsequent breaker operations. See the definitions section for voltages of other systems. See also Rule 238B.)

Supply voltage (kV)	Vertical clearance	
	(m)	(in)
1. Grounded conductor and messenger hardware and supports	0.75	30
2. 0 to 8.7	1.00	40 ①
3. Over 8.7	1.00 plus 0.01 per kV in excess of 8.7 kV	40 plus 0.4 per kV ① in excess of 8.7 kV

①Where non-current-carrying parts of supply equipment are effectively grounded and the associated neutral meeting Rule 230E1 or supply cables meeting Rule 230C1 (including the support brackets) are bonded to communication messengers at intervals meeting Rule 92C through out well-defined areas and where communication is at lower levels, clearances may be reduced to 0.75 m (30 in).