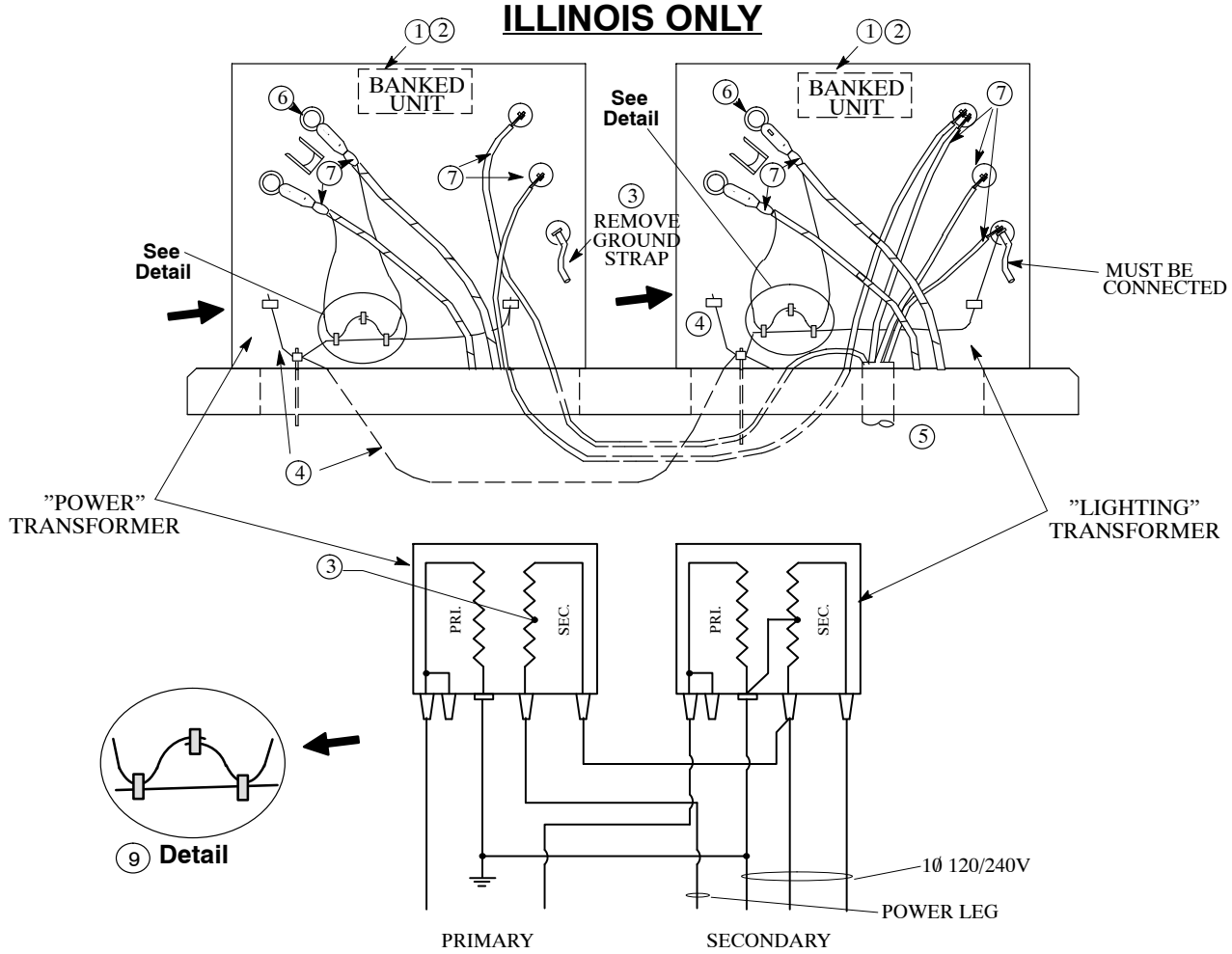
ILLINOIS ONLY

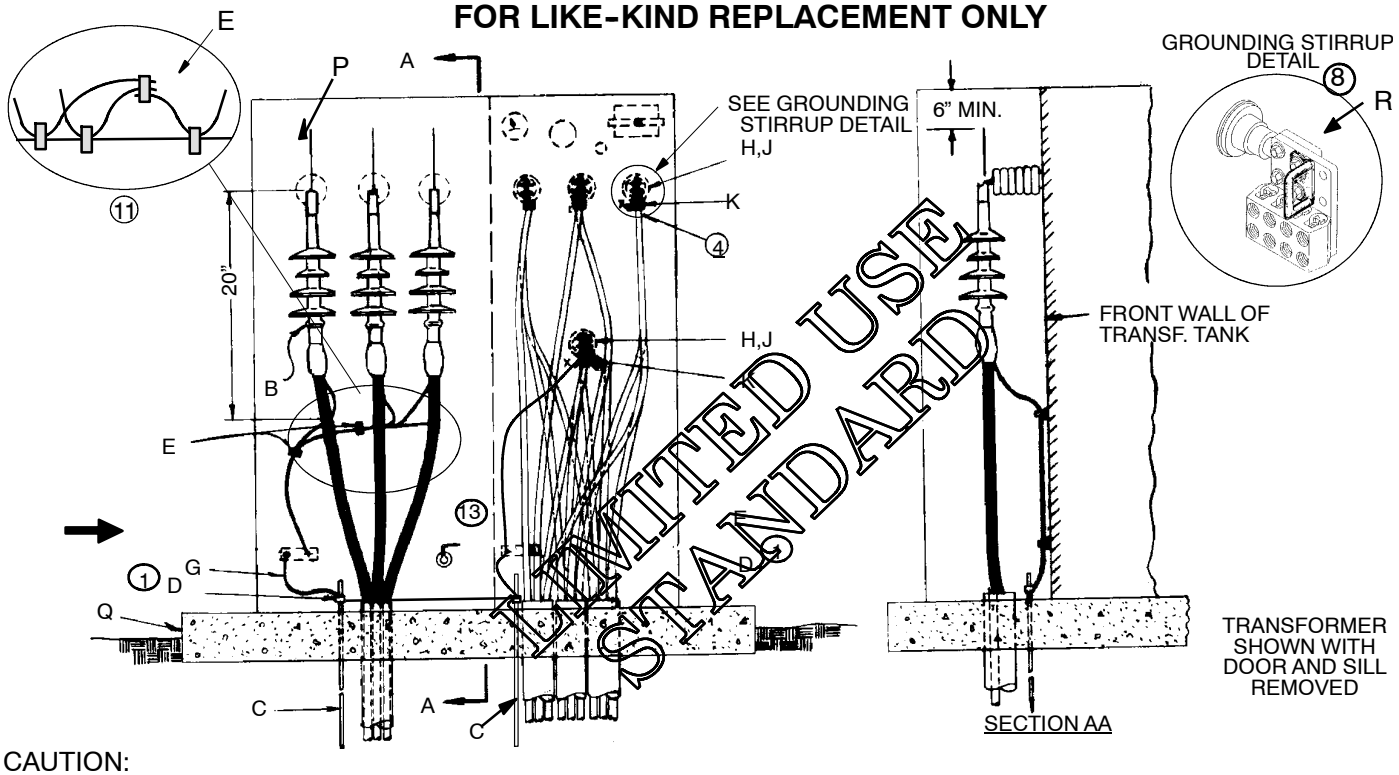


NOTES:

1. This installation should only be used where three primary phases are not available. 120/240 volt, 3–phase, 4–wire, open delta service is provided with this connection.
2. Apply “BANKED UNIT” label in secondary compartment of both transformers. Use label stock #16–04–979.
3. REMOVE THE GROUND STRAP FROM THE SECONDARY NEUTRAL LUG OF THE POWER TRANSFORMER AND INSULATE THE NEUTRAL TERMINAL LUG WITH TAPE. If the transformer does not have an insulated secondary neutral terminal (no bushing), do not use as power transformer because this would require getting inside the transformer and disconnecting the secondary neutral winding.
4. Primary concentric neutral shall be grounded to ground rod and transformer case.

   CAUTION: The transformer cases and ground rods must be interconnected before the transformers are energized.
5. The customer must supply wire of sufficient length to extend from the lighting to the power transformer.
6. When primary loop is normally left open, use a parking stand arrester (Stk.# 10–01–151) in the parking stand and install an elbow arrester (Stk. # 10–01–138) on the unused transformer bushing.
7. Install transformer identification numbers and cable identifiers.
8. Primary cable risers and terminators should originate from the same pole. Cables should run along the same route and in the same trench if possible.
9. Connect cable concentric neutrals to the #2 bare CU ground and then end–to–end using 3 split bolts.

FOR LIKE-KIND REPLACEMENT ONLY



CAUTION:
YOU MUST MAINTAIN A 6" CLEARANCE FROM THE TOP OF THE STINGER TO THE CABLE COMPARTMENT ROOF. ON SOME SMALLER SIZE TRANSFORMERS, IT MAY BE NECESSARY TO CUT OFF ABOUT 1" OF THE STINGER TO ACCOMPLISH THIS. THE STINGER SHOULD EXTEND ABOVE THE EYEBOLT, NOT BELOW, TO REDUCE STRAIN ON THE AL. CABLE.

NOTES:

1. Install ground rod clamp 3" below top of rod to provide space for attaching ground set.
2. Stainless steel machine bolts and Belleville spring washers required for bolting aluminum lugs to secondary terminals. Clean lugs, terminals and use inhibitor. See DCS **59 52 00 43** for Belleville washer installation instructions. Everdur bolt and brass washer to be used for bolting copper lugs to secondary terminals.
3. Preferred number of secondary cables per terminal is six or less. In no case shall the number of cables per terminal exceed twelve.
4. Secondary connections as shown are for 208Y/120 or 480Y/277. For 480 volt three wire service, see the instructions below.
5. If 750 kcmil Al. cable is used on 1500-2500 KVA 4160 volt transformers, use terminator Stock #17-07-142 and pin terminal Stock #17-54-248.
6. See DCS **13 00 04 01** for typical dimensions, weights, and gallons of oil.
7. See DCS **34 21 05 04**, or **34 21 05 05** for pad installation.
8. If the grounding stirrup is installed, longer bolts may be required.
9. When installing secondary lugs use the maximum number of mounting holes that align with the spade holes.
10. Verfiy that lugs are available for specific operating company.G

480 VOLT THREE WIRE SERVICE FROM 480Y/277 VOLT FOUR WIRE TRANSFORMER

CAUTION: DO NOT MAKE THIS CONVERSION ON TRANSFORMERS CONNECTED WYE-WYE.

- If an external ground strap is connected to the secondary neutral (Xo) terminal, it must be removed.
- Tape the secondary neutral terminal to prevent accidental contact and any misunderstanding as to which terminals are being used and the type service being provided.
- Run a #2 copper lead from the "A" phase secondary terminal to the tank ground connector. Ground the transformer tank to a driven ground rod and to the common system neutral (if present).

- Before connecting the customer's cable, determine which cable the customer has grounded (if any) and connect that cable to the now grounded "A" phase secondary terminal.

CAUTION: After the "A" phase secondary terminal is energized, the taped neutral terminal is energized.

11. Connect cable concentric neutrals to the #2 bare CU ground, then connect end–to–end using 4 split bolt connectors.
12. The Aluminum lugs can be used for Aluminum or Copper conductors.
13. Run continuous length of #2 bare CU ground wire to connect an open port of the X0 connector to the two lower tank grounds and to the ground rods.

		Stnd. / Stk. No.	Description 51 12 01 **	02	04
@			Transformer, Three Phase	1	1
	B	17 07 145	Termination, 15kV, #2–4/0	3	3
	C	23 63 069	Rod, Ground, 5/8” x 8’	2	2
	D	17 52 032	Clamp, Ground Rod, 5/8” For #8 – 1/0	2	2
11	E	17 54 373	Connector, Split Bolt, #2 Str. CU.	3	3
		17 54 182	Connector, Split Bolt, 3–#2 Str. CU	1	1
13	G	18 52 025	Wire, Copper, #2 Solid, Soft Drawn	15	15
	H	21 56 078	Bolt, Machine, 1/2” x 2” Stainless	–	–
@2		21 53 022	Bolt, Machine, 1/2” x 1–3/4”, Everdur	–	–
		21 54 316	Bolt, Machine, 1/2” x 2–1/2”, Stainless	–	–
		21 56 075	Bolt, Machine, 1/2” x 1–1/2”, Stainless	–	–
@2	J	21 75 042	Washer, Round, 9/16”, Brass	–	–
		12 56 052	Washer, Belleville Spring, 1/2”, S.S.	–	–
		12 56 053	Washer, Flat, 1/2”, S.S. (2 ea. per Belleville)	–	–
	K	17 55 177	Lug, CU., 2 – #4/0 to 500 kcmil	–	–
		17 55 176	Lug, CU., 3 – #4/0 to 500 kcmil	–	–
		17 55 180	Lug, CU,. 3 – 500 to 1000 kcmil	–	–
@3,8,9,10,12		17 55 190	Lug, Alum., 1 – 1/0 to 1000 kcmil, Lay–In	–	–
		17 55 289	Lug, Alum., 2 –1/0–1000 kcmil, Lay–In	–	–
		17 55 209	Lug, Alum 3–1/0 to 1000 kcmil, Lay–In	–	–
		17 55 232	Lug, Alum., 6–1/0 to 1000 kcmil, Lay–In	–	–
		17 55 233	Lug, Alum., 6 – 1/0 to 500 kcmil, Lay–In	–	–
		17 55 343	Lug, Alum 1–1/0 to 750 kcmil	–	–
		17 55 344	Lug, Alum 2–1/0 to 750 kcmil	–	–
		17 55 345	Lug, Alum 4–1/0 to 750 kcmil	–	–
		17 55 346	Lug, Alum 5–1/0 to 750 kcmil	–	–
		17 55 349	Lug, Alum 6–1/0 to 750 kcmil	–	–
		17 55 350	Lug, Alum 8–1/0 to 750 kcmil	–	–
	P	17 54 232	Connector, Pin Terminal #2	3	
5		17 54 233	Connector, Pin Terminal 4/0		3
@7	Q	12 06 123 12 06 124	Pad, Composite, 75–750 kVA OR Pad, Composite, 1000–2500 kVA	1	1
@8	R	17 55 510	Stirrup, Grounding, Bolted	3	3