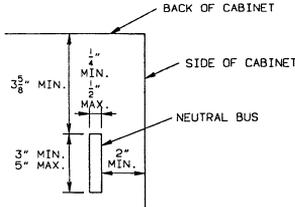
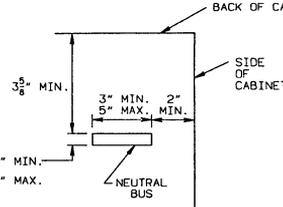


REVISIONS

13	11/25/92	ADDED NEUTRAL BUS AND NOTES 14 & 15. REDRAWN TO CAD. CHG'D. TITLE J.L. 11/25/92
14	1/8/01	V.FERGUSON CHANGED NOTE 12. G.D. 1/8/01

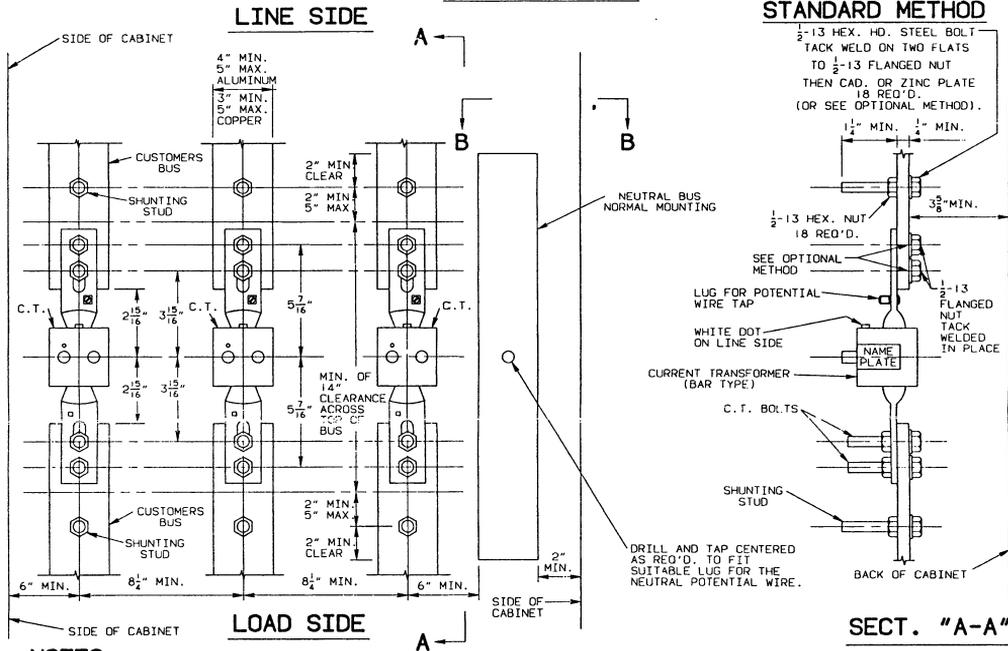
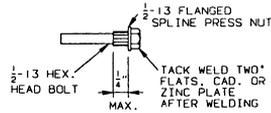


NEUTRAL BUS ALTERNATE MOUNTING



SECT. B-B NEUTRAL BUS NORMAL MOUNTING SEE ALTERNATE

OPTIONAL METHOD
USE APPROVED 1/2-13 STEEL SPLINE BOLTS WITH 1/2-13 FLANGED SPLINE PRESS NUT, 6 REQ'D. (SEE SECT. A-A).
FOR ALL OTHER BOLT LOCATIONS USE 1/2-13 HEX HEAD BOLTS TACK WELDED ON TWO FLATS TO 1/2-13 FLANGED NUTS. THEN CAD. OR ZINC PLATE. 12 REQ'D. (SEE SECT. A-A).



NOTES:

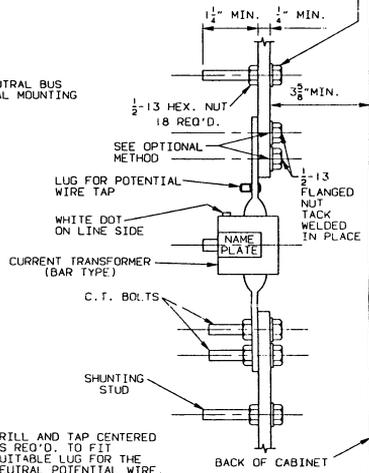
1. THE CUSTOMER'S BUS BARS ARE TO BE RIGIDLY SUPPORTED AND BE CAPABLE OF SUPPORTING THE WEIGHT OF THE TRANSFORMER (MAXIMUM 15 POUNDS).
2. ALUMINUM BUS, WHEN USED IS TO BE TIN OR SILVER PLATED AT THE CONTACT SURFACES ACCORDING TO ASTM B 253-53, RECOMMENDED PRACTICE FOR PREPARATION OF AND ELECTROPLATING ON ALUMINUM BUS.
3. FOR SERVICE OR LOAD CONNECTIONS WHERE THE CUSTOMER'S BUS BARS ARE ALUMINUM ALL CONNECTIONS ARE TO BE MADE USING CADMIUM PLATED STEEL BOLTS AND HEX NUTS WITH A BELLEVILLE WASHER UNDER EACH NUT AND EACH BOLT HEAD, WITH THE MARKED SIDE VISIBLE.
4. BELLEVILLE WASHERS ARE TO BE AS FOLLOWS: I.D. = 17/32", O.D. = 1 3/8" MAX. APPROX. CAPACITY 3,000 LBS. THE TOP (CONVEX SURFACE) OF EACH WASHER IS TO BE MARKED SO AS TO BE CONSPICUOUS WITH THE NUT OR CAP SCREW IN PLACE.
5. TRANSFORMERS ARE TO BE MOUNTED BY MEANS OF CADMIUM PLATED STEEL CAP SCREWS ON THE LINE DETAIL AND CADMIUM PLATED STEEL HEX NUTS ON THE LOAD DETAIL.
6. WHEN THE CUSTOMER'S BUS IS ALUMINUM, A BELLEVILLE WASHER IS TO BE PLACED UNDER THE CAP SCREW ON LINE DETAIL AND ANOTHER UNDER THE HEX NUT ON THE LOAD DETAIL, WITH THE MARKED SIDE VISIBLE. BOLTS AND NUTS ARE TO BE TIGHTENED UNTIL THE WASHERS ARE FLATTENED, THEN BACKED-OFF 1/8 TURN.
7. THE BUS DETAIL MAY BE ENCLOSED IN A SEPARATE CURRENT TRANSFORMER CABINET OR IN A COMBINED SERVICE DISCONNECT AND CURRENT TRANSFORMER CABINET.
8. THAT PART OF THE CABINET HOUSING THE TRANSFORMERS IS TO BE SEPARATED BY BARRIERS (1/8" THICK NON-FERROUS) FROM THE REMAINDER OF THE CABINET AND BE EQUIPPED WITH SEPARATE SEALABLE DOUBLE DOORS AND THREE-WAY CATCH. THE HANDLE IS TO HAVE FACILITIES TO ACCOMMODATE STANDARD COMPANY SEALS AND PADLOCKS WITH 5/16" HASP. THE DOOR OPENING IS TO GIVE A MINIMUM CLEARANCE HORIZONTALLY OF 4 INCHES FROM THE CENTER LINE OF OUTER TRANSFORMERS AND VERTICALLY OF 4 INCHES FROM THE CENTER LINE OF SHUNTING STUDS.
9. THE MINIMUM DEPTH OF THE CABINET IS TO BE SUCH AS TO ALLOW A CLEARANCE OF 7 INCHES FROM THE BUS TO THE DOORS OF THE CABINET.
10. THE MINIMUM CLEARANCE FROM THE CENTER LINE OF OUTER TRANSFORMERS TO THE SIDES OF THE CABINET OR TO THE NEUTRAL BUS IS TO BE 6 INCHES. THE NEUTRAL BUS MUST BE WITHIN THE CABINET AND 2 INCHES MINIMUM FROM THE SIDE OF THE CABINET, AND 3 5/8 INCHES MINIMUM FROM THE REAR OF THE CABINET.
11. THERE IS TO BE A CLEAR SPACE OF AT LEAST 3 FEET IN FRONT OF THE CURRENT TRANSFORMER ENCLOSURE.
12. CURRENT TRANSFORMERS ARE TO BE INSTALLED ON THE LINE SIDE OF SERVICE DISCONNECT WHEN A SINGLE CUSTOMER IS TO BE SUPPLIED BY THE SERVICE. WHEN PERMITTED BY REGULATORY AUTHORITIES HAVING JURISDICTION, EXCEPTION: 265/480 VOLT SERVICE REQUIRES A DISCONNECT SWITCH BEFORE THE CT CABINET UNLESS OTHERWISE DIRECTED BY CON EDISON.
13. ALL FLANGED NUTS REFERRED TO ON THIS DRAWING ARE TO BE FORCE FITTED IN THEIR RESPECTIVE HOLES.
14. 5 INCH COPPER BUS MAY NOW BE USED, TO COMPLY WITH N.E.C. CODE BULLETIN NO. 136.1 OF 1983. "BUS BARS SHALL HAVE A CURRENT DENSITY OF NOT MORE THAN 1000 AMPERES PER SQUARE INCH FOR COPPER AND 750 AMPS PER SQUARE INCH ALUMINUM".
15. 3-SETS OF 500 KCMIL CABLES REQUIRE 1/4" X 5" COPPER BUS, 4-SETS OF 500 KCMIL CABLES REQUIRE TWO 1/4" X 4" COPPER BUS, LAMINATES MUST BE INTERLEAVED WITH 1/4 INCH SPACE USING FILLERS AND NOT STACKED, TO COMPLY WITH NOTE 14.

REF. DWG:

WIRING DIAGRAM FOR 200-800 AMP. CT'S.-----MES NO. 195
LOW TENSION METERING INSTALLATIONS-----MES NO. 8

STANDARD METHOD

1/2-13 HEX. HD. STEEL BOLT TACK WELD ON TWO FLATS TO 1/2-13 FLANGED NUT THEN CAD. OR ZINC PLATE 18 REQ'D. (OR SEE OPTIONAL METHOD).



SECT. "A-A"

BUS AND CABINET DETAILS FOR INSTALLATION OF LOW VOLTAGE 400 OR 800 AMP. BAR TYPE CURRENT TRANSFORMERS

CONSOLIDATED EDISON COMPANY OF N. Y. INC.
DISTRIBUTION ENGINEERING DEPARTMENT

DATE 10/18 48	SPEC. NO.	MES 298	REV. 14
LAST REV. 1/8/01			

FIELD MANUAL NO. 4 SECTION 6 AND FIELD MANUAL NO. 16 SECTION 3