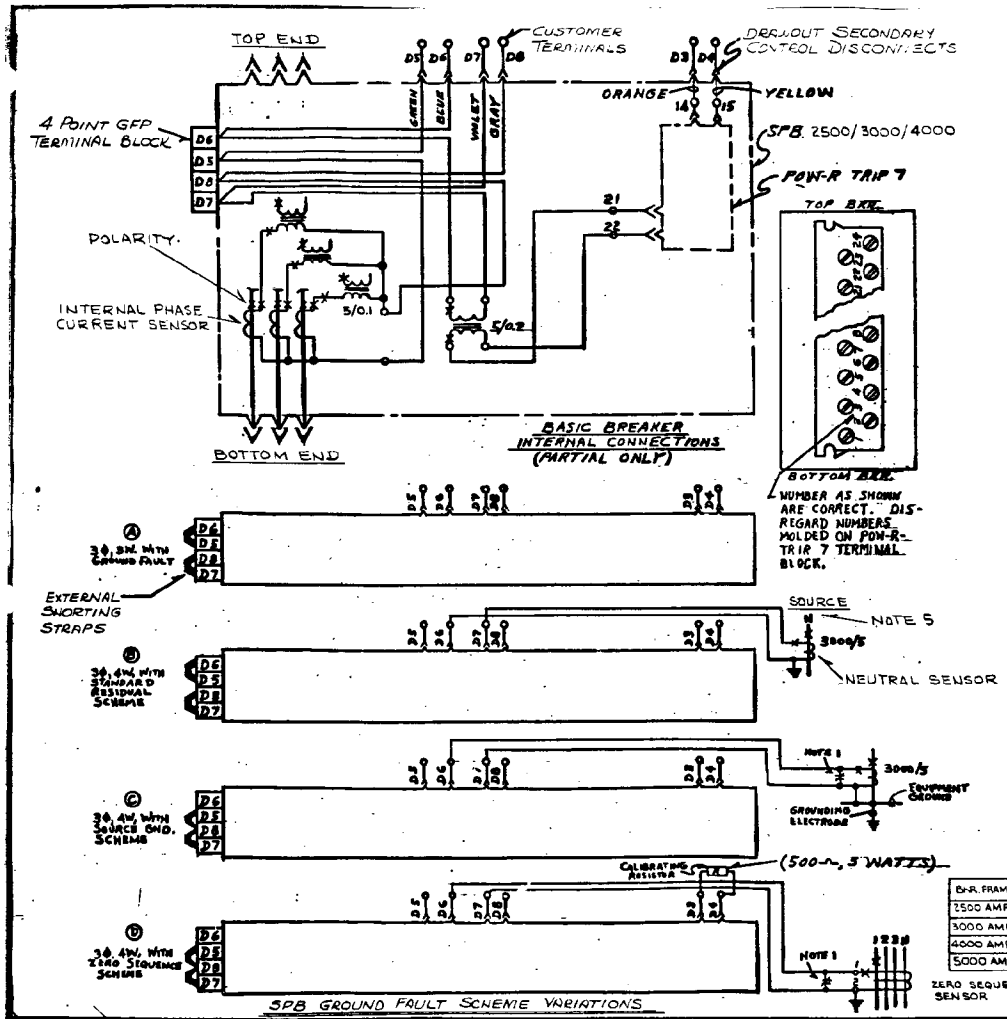

SPB GROUND FAULT SCHEME VARIATIONS

BKR. FRAME	RESISTOR R.
2500 AMP.	500Ω, 5W.
3000 AMP.	500Ω, 5W.
4000 AMP.	78Ω, 5W.
5000 AMP.	35Ω 3W

BASIC GFP TERMINAL BLOCK CONNECTIONS FOR SPB FRAMES RATED 2500 A. MINIMUM (SEE NOTE 1)

CAUTION

FIG. 1 RESIDUAL

YELLOW LEAD (PRIMARY INJECTION TEST POSITION)

D6 D5 D8 D7

SHORTING STRAPS

YELLOW LEAD (OPERATING POSITION)

BREAKER MUST NOT BE ENERGIZED WITHOUT SHORTING STRAPS CONNECTED AS INDICATED IN EITHER FIG. 1 OR 2. FAILURE TO INSTALL THESE SHORTING STRAPS WILL CAUSE DAMAGE TO BREAKER SENSING ELEMENTS.

FIG. 2 ZERO SEQUENCE OR SOURCE GROUND

PRIOR TO PRIMARY INJECTION TESTING

YELLOW LEAD (TEST POSITION)

D6 D5 D8 D7

SHORTING STRAPS

YELLOW LEAD (OPERATING POSITION)

TO DISABLE GROUND FAULT DURING SINGLE POLE TESTS, CONNECT YELLOW LEAD BETWEEN D6 AND D7 AS SHOWN IN EITHER FIG. 1 OR FIG. 2.

FAILURE TO DISCONNECT THIS YELLOW LEAD WILL VOID GFP WHEN RETURNED TO SERVICE.

NOTE 1: WHEN USED AS A MAIN OR TIE BREAKER IN A MULTI-SOURCE SYSTEM REFER TO DRAWING 1273C41 SHEET 3 FOR ALTERNATE CONNECTIONS.

N. P. 2325P1080001

THIS NAMEPLATE IS LOCATED UNDER 4 POINT GFP TERMINAL BLOCK ON LEFT SIDE OF BREAKER.

NOTE 1 - ON MULTIPLE SOURCE SYSTEMS, USE CELL POSITION SWITCH TO AVOID VOLTAGE SURGES ON GND. FAULT CURRENTS WITH BREAKER IN TEST OR WITH DRAWN POSITIONS. (SWITCH SHOWN IN TEST OR WITHDRAWN POS.)

NOTE 2 - SEE SHEET 3 FOR MULTIPLE SOURCE, MULTIPLE GROUND RESIDUAL SCHEME WIRING FOR MAIN AND TIE BREAKERS.

NOTE 3 - DRAWING IS SHOWN CORRECT FOR DRAWOUT BREAKERS. IF FIXED MOUNTED BREAKERS ARE USED, OMIT D/O SECONDARY CONTROL DISCONNECTS, CUSTOMER TERMINALS, CELL POSITION SWITCHES AND USE TERMINAL BLOCK "D" PER FIG. C OF 1366D30.

NOTE 4 - PRIOR TO DOING FIELD TESTING USING PRIMARY INJECTION METHOD ON DRAWOUT BRK. REMOVED FROM CELL, CONSULT FACTORY.

NOTE 5 - ON REVERSE FEED BKR'S.. i.e. BREAKERS THAT HAVE BOTTOM SIDE AS SOURCE END, SWITCHBOARD MFR. SHOULD PROPERLY IDENTIFY THIS REVERSE FEED BKR.. IN A RESIDUAL SCHEME THE POLARITY OF THE REMOTE MTD. NEUTRAL SENSOR MUST BE INSTALLED IN THE SAME DIRECTION AS THE POLARITY OF THE BKR'S. INTERNAL CURRENT SENSORS WITH RESPECT TO THE POWER SOURCE TO INSURE PROPER GROUND FAULT OPERATION. ALL POLARITY MARKINGS MAY BE EITHER TOWARDS THE SOURCE OR AWAY FROM THE SOURCE AS LONG AS ALL FOUR ARE THE SAME, REGARDLESS OF THE DIRECTION OF THE POWER SOURCE.

2	D3EC 85075-DW WAS OUTLINE-NB WAS NOT ON NAMEPLATE WAS UPDATED	4	NOTE 6 WAS NOT ON	12/14/77	5	BREAKER FRAME CHART WAS WRONG 4000 & 5000 A. RAT. WAS NOT ON N.P. DETAIL ON UPPER 2500 A. MIN. IN HEADING WAS 2000 A. A.N.N.	10-25-78	11-3-78				

M	B	P	ROUTING
	1		24
	1		ST. LOUIS DED
	1		CAN
	1		VISALIA DED

Westinghouse Electric Corporation

TITLE SPB WIRING DIAGRAM EXTERNAL GROUND CONNECTIONS - 2500/3000/4000/5000 AMP.

D SPEC. 89C075-W1

ENGINEERING IN INCHES | SCALE

DR. LESSEK 7/13/79 APPR. J. J. Mc Ginley

CHECK. APPR.

1273C41

SHEET 2 OF 3

CONTROL EQUIPMENT GROUP — BEAVER, PA. U.S.A.

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