Western Electric Company, Inc.,
Engineering Department,
New York.

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METHOD OF OPERATION SIGNAL CIRCUIT

Line or Cord Auxiliary Relays -- For Use with Line Circuits Requiring Grounded Auxiliary Relays -- Alarm Type Puses In Section -- Special "A" Switchboard Full Mechanical Power Driven System.

GENERAL DESCRIPTION

- 1. This circuit provides an auxiliary line or cord signal and when desired, and audible night alarm signal, when used with special "A" operators' cord circuits or magneto cord circuits. It is so arranged that if the fuse which protects the auxiliary relay operates, a lamp will be lighted at the section in which the relay is located and also a lamp will be lighted at the main alarm board.
- 2. The auxiliary signal circuit is at the main alarm board which, in connection with this lamp, contains an alarm bell, also, in case an additional alarm bell is desired, in addition to the one associated with the main alarm board, the circuit is so arranged that the second alarm may be provided.

DETAILED DESCRIPTION

- 3. When the line signal lamp or the cord signal lamp in a non-multiple board is lighted, the AUX. relay operates, in turn lighting the auxiliary signal lamp. If the night alarm key is operated, the relay in the night alarm circuit will operate when the auxiliary signal lamp is lighted. The operation of the latter relay rings the night alarm bell.
- 4. The AUX-1 relay performs the same function as the AUX. relay. The AUX-1 relay is used for multiple line lamps while the AUX. relay is used with a non-multiple line lamp where there are both types of lines in the same panel.
- 5. In case the fuse which protects the AUX. and AUX-1 relays operates, a lamp is lighted at the section in which the fuse is located. The operation of the fuse also operates the FA relay, which lights a lamp and rings an alarm bell at the main alarm board. When an additional alarm signal is desired, the FAB relay is used, which will ring an additional alarm bell.
- 6. When the line signal lamp or cord signal lamp is extinguished the AUX. or AUX-1 relay is released, extinguishing the auxiliary lamp and restoring the circuit to normal.
- 7. When an operated fuse is replaced, the FA and FAB relays release, extinguishing the associated fuse alarm lamp, silencing the bell and restoring the circuit to normal.

CIRCUIT REQUIREMENTS

READJUST VALUES ARE FOR MAINTENANCE PURPOSES ONLY (2 Pages) Page 2 Issue 1 BT-502841

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SEE SPECIFICATION X-70087 FOR EXPLANATION OF FORM.

APPARATUS

SPEC.NO. APPARATUS

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SPEC.NO.

	FLAYS	SPEC.	CHANICAL SKETCH	CONT.		TEST TES		TEST	READJ S		IRCUIT PREPARATI	DATA	TEST SE	e remarks
CODE	DESIG.	NUMBER	NUMBER	PRESS.	TRVL	WDG. FOR	SOAK	AMPS.	AMPS. P	os. BL	OCK CONN.BAT. C	ONN.GRD.	PREP NOTE	3
В9	(AUX)	X-70056	1	dan	and	OR		.068	.058 .016		R wdg(AUX)		Bat.	
B9	(AUX-1)	X-70056	1		ates	O R		•068 •015	.058 .016		R wdg(AUX-1) R wdg(AUX-1)		Bat.	
B9	(FA)	X-70056	1	400	-	0 R		.068 .015	.058 .016			63 ()	G G	
В9	(FAB)	X-70056	good.	-	**	. 0 R		.068 .015	.058 .016			wdg(FAB)		

ENG .-- JLS-MM.

CHK'D. -- WJT-WHL.

APPROVED - J.L. DOW., G.M.L.