

Western Electric Co., Incorporated,  
Engineering Dept.,  
New York.

(2 Pages) Page #1.  
Issue 1 - BT-431180.  
Replacing all previous issues.  
April 9, 1920.

METHOD OF OPERATION  
SIGNAL CIRCUIT

Message Register.

FULL MECHANICAL SWITCHING SYSTEM

GENERAL DESCRIPTION

1. This circuit is used with zero operator's and zero and intercepting operator's cord circuit.
2. When the coin collect and message register key in the associated cord circuit is operated, with the plug of the answering cord inserted in the jack of a zero or 2 number operator's trunk circuit, the message register signal lamp lights, indicating that the message register in the connected individual line switch has operated. When the key is released, the signal lamp is extinguished.

DETAILED DESCRIPTION

OPERATION

3. When the coin collect and message register key in the associated cord circuit is operated, a marginal relay in the sleeve of the zero and two number operator's trunk circuit and the B9 relay operate in series. The marginal relay operated causes the message register in the connected individual line switch circuit to operate. The B9 relay (MR-1) operated, connects ground to the winding of the special #162-E relay (MR) which operates, lighting the message register signal lamp. The special #162-E relay is slow acting to prevent the lighting of the signal lamp before the message register has been allowed time to operate. When the coin collect and message register key is released, the B9 relay and the special #162-E relay release, the signal lamp is extinguished and the circuit is restored to normal.

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(2 Pages) Page #2.  
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CIRCUIT REQUIREMENTS

	<u>OPERATE</u>	<u>NON-OPERATE</u>	<u>RELEASE</u>
D9 (MR)	Test .089 amp. Readj. .061 amp.		Test .0057 amp. Readj. .006 amp.
Spl. #162-E D-20987 (MR-1)	Test .023 amp. Readj. .021 amp.	Test .016 amp. Readj. .017 amp.	

ENG.--WHL-RV.  
7/22/21.

CHK'D.--FAB.

APPROVED - C.L.SLUYTER, G.M.L.