

METHOD OF OPERATION
SIGNAL CIRCUIT

Auxiliary - Special Outgoing Trunk Test Board - Machine Switching System.

GENERAL DESCRIPTION

1. This drawing outlines auxiliary signal circuits terminating at the sender monitoring and outgoing trunk test positions of the outgoing trunk test board and is used in connection with individual line switch circuits.

DETAILED DESCRIPTION

OPERATION

2. A line switch normally has no ground on the test brush while the switch is rotating. If the test brush becomes grounded, however, while the switch is rotating, the E200 (LSA) relay will operate and lock under control of the key at the monitoring board. The operation of the E200 relay closes a circuit through the LSA lamp at the sender monitoring board in series with the B10, (PULA, LA LSA) relay, lighting the lamp as an indication to the operator on which bank the trouble is located. When the B10 relay operates in series with the LSA lamp or the associated line, pick-up etc. lamps, a circuit is closed through the line, pick-up, and line switch alarm lamp in series with the B10 (AB) or (AD) relay which in turn closes a circuit to ring either the Faraday bell or the bell in the #43-F subscriber's set, depending upon the battery used. The operation of the #390-B key releases the E200 relay releasing the B10 relays (PULA, LA, LSA) and (AB) or (AD), extinguishing the lamps, and silencing the bell. The B10 (AB) or (AD) relay also operates, causing the bell to ring, if any of the associated miscellaneous pilot lamps light. When all the lamps are extinguished the relay is released silencing the bell.

3. When the lamp associated with the "C.I.M.B." circuit lights, the associated B10 relay operates in series with it. The operation of the B10 relay closes a circuit to ring the bell as a signal to the attendant of mechanical trouble. The operation of the CIH key will light the CIMB lamp in series with the B10 (AC) relay. If the plugs of the attendant's telephone set are not inserted in the telephone jacks the operation of the B10 (AC) relay closes a circuit to silence the bell.

4. When a sender becomes stuck in a position, a circuit is closed through the coin or time measure alarm circuit to operate the B10 (CN) relay which lights the "A" sender lamp in series with the B10 (AR) or (AD) relay which in turn rings the bell to notify the attendant of the condition.

5. Figure #1 is used to give the sender monitor a signal when a call comes in over the incoming call circuit when the sender monitor is busy on another circuit. This circuit is also used to denote the progress of calls on the cordless sender circuit.

CIRCUIT REQUIREMENTS

OPERATE

NON-OPERATE

RELEASE

B10 After a soak of
 approximately .3 amp:
 Test .024 amp.
 Re-adj. .022 amp.

After a soak of approx-
imately .3 amp:
Test .0019 amp.
Readj. .002 amp.

E200 Test .026 amp.
 Re-adj. .015 amp.

Test .0038 amp.
Re-adj. .004 amp.

ENG.--MGL-VL.
9/21/21.

CHK'D.--EGL.

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