COMMON SYSTEMS
TIMING CIRCUIT
FOR PLUGGING UP FRAME
IN CROSSBAR, STEP-BY-STEP OR PANEL OFFICE
SERVED BY A
CENTRAL "A" SWITCHBOARD

CHANGES

D. DESCRIPTION OF CIRCUIT CHANGES

D.1 The rating is changed from "AT&TCo. Standard" to "A&M Only".

All other headings, no change.

BELL TELEPHONE LABORATORIES, INCORPORATED

DEPT. 2325-TJP-EWO-RO

COMMON SYSTEMS TIMING CIRCUIT FOR PLUGGING UP FRAME IN CROSSBAR, STEP BY STEP OR PANEL OFFICE SERVED BY A CENTRAL "A" SWITCHBOARD

CHANGES

D. DESCRIPTION OF CIRCUIT CHANGES

D.1 The cross-connections have been changed.

D.2 Prior to issue 3-D the third line of the title was:

"For Plugging Up Circuit Panel".

All other headings, No change.

BELL TELEPHONE LABORATORIES, INC.

DEPT. 352

EBS)
FJS) IN

COMMON SYSTEMS
TIMING CIRCUIT
FOR PLUGGING UP CIRCUIT PANEL
IN CROSSBAR, STEP BY STEP OR PANEL OFFICE
SERVED BY A
CENTRAL "A" SWITCHBOARD

CHANGES

D. DESCRIPTION OF CIRCUIT CHANGES

D.1 Prior to issue 2-D the information in the box was "Misc. Ckt. for Misc. Int. Frame". In note 103 the .4, .1, .5 and 14 sec. interrupter is designated. Panel and times for crossbar added.

D.2 Prior to issue 2-D note 102B was as follows:

"Provide "Y" wiring and apparatus for use in Panel Offices."

D.3 Prior to issue 2-D the title was as follows:

COMMON SYSTEMS
TIMING CIRCUIT
FOR PLUGGING UP CIRCUIT PANEL
IN PANEL OR STEP BY STEP OFFICE
SERVED BY A
CENTRAL "A" SWITCHBOARD

All other headings under "Changes", no change.

1. PURPOSE OF CIRCUIT

1.1 This circuit provides a means for timing the period during which a line trouble is cleared.

There is a time period of 18 to 48 seconds in step-by-step offices, 14 to 29 seconds in panel offices, and 28 to 58 seconds in crossbar offices to correct the line trouble, and reestablish service to that line.

2. WORKING LIMITS

2.1 None.

3. FUNCTIONS

3.1 This circuit connects battery to the "B" lead whenever the "PU1" lead or "F" lead is closed.

3.2 This circuit connects ground to the "A" lead whenever the "A1" lead or "B" lead is closed.

3.3 This circuit prevents false operation of the connecting circuits if battery is connected to the "B" lead by some other circuit.

4. CONNECTING CIRCUITS

4.1 Plugging up line circuit arranged for automatic cut-through.

4.2 Common timing circuit, when used in step-by-step offices.

4.3 Misc. circuit for misc. int. frame, when used in panel offices.

4.4 Interrupter frame circuit in crossbar office.

DESCRIPTION OF OPERATION

5. "X" wiring is used in step-by-step offices and is indicated in the following by "PU1" and "A1" leads.

"Y" wiring is used in panel and crossbar offices and is indicated in the following by "F" and "B" leads.

Each time the "PU1" lead or "F" lead is closed, the (B) relay operates and removes ground from the "B" lead and substitutes battery. This operates a relay in the associated plugging-up line circuit. When the "PU1" lead or "F" lead is opened, the (B) relay releases, removing the battery and restoring the ground to the "B" lead. The ground on the "B" lead makes ineffective any battery closure from the connecting circuits. When used in step-by-step offices, eighteen seconds after "PU1" lead is opened the "A1" lead closes operating the (A) relay. When used in panel offices fourteen seconds after the "F" lead is opened the "B" lead closes, operating the (A) relay. When used in crossbar offices, 28 seconds after the "F" lead is opened the "B" lead closes, operating the (A) relay. The (A) relay operated connects ground to the "A" lead to cause the plugging-up line circuit to reestablish the subscriber's service. When the "A1" lead or "B" lead opens, the (A) relay releases and removes ground from the "A" lead.

BELL TELEPHONE LABORATORIES, INC.

DEPT. 332

EBS)
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