10

COMMON SYSTEMS
OUTGOING TRUNK TEST FRAME
TEST AND MAKE BUSY JACK CIRCUIT
FOR OUTGOING TRUNKS
SXS, NO. 1 WITH AMA, CROSSBAR NO. 5
CROSSBAR NO. 1, PANEL, PANEL TANDEM
OR CROSSBAR TANDEM OFFICE

CHANGES

D. Description of Changes

D.1 Lead S1 is added to Fig. 5 for panel outgoing trunks that have a separate sleeve lead and require a separate make-busy jack.

D.2 Changes are made in CAD Fig. 80 and 86.

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DEPT 5412-MDT-TNL-JNC

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CHANGES

D. Description of Changes

D.1 Figure 4 and Fig. 80 are modified by the addition of lead S, S option, to the T jack sleeve to provide means to make-busy panel system outgoing trunks under control of the dynamic overload control feature. This control is exercised through the trunk make-busy circuit, which grounds lead S for each trunk to be made busy. The dynamic overload control feature causes, on a pre-arranged basis, certain trunks or groups of trunks to be made busy when predetermined traffic levels at a crossbar tandem or toll office has been reached.

F. Changes in Description of Operation

F.1 Add the following under 3. FUNCTIONS:

3.4 Provides means for connecting to the S leads of outgoing trunk circuits from panel offices arranged for the dynamic overload control feature.

F.2 Add the following after 4.046 of 4. CONNECTING CIRCUITS:

4.047 Trunk Make-Busy Circuit - SD-96448-01.

F.3 Add the following under 8. FIGURE 4:

The T wiring is added in Fig. 4 to provide for operating a particular trunk switching relay, EMT for connecting that trunks E and M signaling leads to Fig. 15.

The S wiring is added to provide means to make-busy outgoing trunks from panel offices under control of the dynamic overload control feature. The S leads are grounded by the trunk make-busy circuit under control of the route transfer control circuit which is controlled from a crossbar tandem or toll office in response to the detection of predetermined traffic levels.

Caution: In order to prevent unnecessarily locking up calling customers talking over trunks being made busy (as above) and using trunks requiring talking-to-operator talking selections (such as SD-21972-01 or SD-21974-01), the S lead should be connected only to the T jack sleeve connected to the trunk cable side (outward end).

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CHANGES

B. Changes In Apparatus

B.1 Added

T and MB - 92 Jack, Fig. 16

TO - 92 Jack, Fig. 16

MB - 322A Plug, Fig. 16

D. Description Of Circuit Changes

D.1 This circuit is reissued to provide test access for testing crossbar No. 1 TSP/TSPS ANI (with or without LAMA) E and M trunks; recording completing E and M trunks.

D.2 Figure 16 is added and reference to it is added to record of figures table.

D.3 Cabling Fig. 87 added.

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DEPT 5412-LG-TNL-PK

WECo DEPT 335-LG-PKP

N
A

If an auxiliary O.G.T. is to be tested, test cords are inserted into the T and MB jacks.

13. FIGURE 9

If a DP auxiliary O.G.T. is to be tested, a test cord is inserted into the D jack in addition to the T and MB jacks noted in Paragraph 12.

14. FIGURE 10

The insertion of the MB plug into the make-busy jack connects ground to the sleeve of the trunk, making it busy. If a test is to be made on the trunk, a test cord is inserted into the T jack.

BELL TELEPHONE LABORATORIES, INCORPORATED

DEPT 2364-BEM-BDG

COMMON SYSTEMS
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OR CROSSBAR TANDEM OFFICE

CHANGES

B. Changes in Apparatus

B.1 Added

(3) 229 Jacks

D. Description of Circuit Changes

D.1 This circuit is reissued to provide centralized test access to the signaling leads of panel systems E and M type outgoing trunk circuits.

D.2 T wiring is added in Fig. 4 to provide for operating a particular trunk switching relay (EMT) for connecting that trunk E and M signaling lead to Fig. 15.

D.3 Jack designations of Fig. 12 are changed and jack designations are added in Fig. 14.

D.4 Miscellaneous nomenclature corrections are made.

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DEPT 5623-MDT-TNL-BA

3N
12A

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OR CROSSBAR TANDEM OFFICE

CHANGES

B. Changes in Apparatus

B.1 Added

Fig. 12, (3) 92 Jacks
Fig. 13, (1) 92 Jack and (1) 2Y Lamp
Fig. 14, (2) 229 Jacks

D. Description of Circuit Changes

D.1 Figures 12, 13, and 14 are added to this circuit to provide make-busy privileges at the OGT board when trunks to AIC are added to the office maintenance requirements.

D.2 Figure 2, connecting information was changed to show connection to repeated supervision trunks going to DSA switchboards.

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DEPT 5624-RLC-RCN-RP

COMMON SYSTEMS
OUTGOING TRUNK TEST FRAME
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CROSSBAR NO. 1, PANEL, PANEL TANDEM
OR CROSSBAR TANDEM OFFICE

CHANGES

D. Description of Changes

D.1 The note associated with the "S" lead on Fig. 55 of the drawing is revised to remove the restrictions limiting its usage. Prior to this issue, the note read, "Run only for ANI MF OGT circuits to 4A toll". This note is revised to read, "Run only for ANI MF OGT circuits".

BELL TELEPHONE LABORATORIES, INCORPORATED

DEPT 5624-RWH-RCN-VD

COMMON SYSTEMS
OUTGOING TRUNK TEST FRAME
TEST AND MAKE BUSY JACK CIRCUIT
FOR OUTGOING TRUNKS
SXS NO. 1 WITH AMA, CROSSBAR NO. 5
CROSSBAR NO. 1, PANEL, PANEL TANDEM
OR CROSSBAR TANDEM OFFICE

CHANGES

D. Description of Changes

D.1 Provision is made on Fig. 8 for control of the test relays in operator tandem and LDN or intercept trunk circuits to allow testing of timers in those circuits from the master test frame.

D.2 Figure 11 is added to provide test and make busy jacks for incoming CAMA trunks. This is required when the test and make busy jack capacity of crossbar No. 5 master test frame jack bay is exceeded and the outgoing trunk test frame jack bay is provided for additional jack capacity.

F. Changes in Description of Operation

F.1 Add as connection circuits:

4.084 LDN or Intercept Trunk Circuit - SD-27747-01.

4.085 Operator Tandem Trunk Circuit SD-27732-01.

F.2 Add as third paragraph under heading: 12. Figure 8.

The insertion of a ring-to-sleeve shorting plug into the T jack connects leads "B1" and "R2" together. This operates a relay in the trunk circuit which connects the necessary leads to the master test frame to allow testing of the timer in the trunk under test.

F.3 Add a heading 16. Figure 11.

The insertion of the MB plug into the make busy jack connects lead "B1" and "B2" together making the trunk busy. If a test is to be made on the trunk, a test cord is inserted into the T jack.

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OR CROSSBAR TANDEM OFFICE

CHANGES

D. DESCRIPTION OF CIRCUIT CHANGES

D.1 Provision is made on Figure 2 (T&MB) jack for connection to the "S" lead of No. 1 Crossbar ANI MF Outgoing Trunk Circuits to 4A toll.

1. PURPOSE OF CIRCUIT

1.1 This circuit is used in a crossbar, crossbar tandem or panel office to provide means for making trunks busy and for making tests on all classes of outgoing interoffice trunks.

2. WORKING LIMITS

2.1 None.

3. FUNCTIONS

3.1 Provides means for making outgoing trunks busy at the outgoing trunk test frame.

3.2 Provides a means for connecting to the tip, ring, and other control leads of outgoing trunks and outgoing trunk equipment for the purpose of making tests.

3.3 Provides means for connecting to the "S" leads of crossbar office trunk circuits.

4. CONNECTING CIRCUITS

When this circuit is shown on a key-sheet, follow keysheet.

4.01 Figure 1

4.011 Office Link and Connector Circuit - SD-25033-01.

4.02 Figure 2

4.021 Sub. Recording Completing Trunk Circuit - SD-25218-01.

4.022 Outgoing K.P. Trunk as SD-25127-01.

4.023 Outgoing Trunk to Sender Tandem for Dial Coin Zone Service - SD-96336-01.

4.024 Tandem Outgoing Repeater Circuit to SXS - SD-25634-01.

4.025 Outgoing Trunk Circuits ANI - SD-26209-01 and SD-26210-01.

4.03 Figure 3

4.031 Office Link and Connector Circuit SD-25033-01.

4.04 Figure 4

4.041 A. Switchboard K.P. District as SD-21784-01.

4.042 A. Switchboard Dialing District as SD-21779-01.

4.43 Outgoing Trunk as SD-21179-01.

4.044 O.G.T. for SXS No. 1 with AMA - SD-32204-01.

4.045 Outgoing Trunk Circuits ANI - SD-21972-01 and SD-21974-01.

4.046 Traffic Usage Recorder Circuit - SD-95738-01.

4.05 Figure 5

4.051 Permanent Signal Holding Trunk Circuit as SD-21442-01.

4.052 Trunk Finder and Outgoing Trunk Circuit as SD-21560-01.

4.06 Figure 6

4.061 Outgoing Trunk MF Key Pulsing - SD-95425-01.

4.07 Figure 7

4.071 Office Link of Connector Circuit - SD-25033-01.

4.072 Two-Way Intertoll Trunk Circuit - SD-27000-01.

4.073 Auxiliary Outgoing Trunk Circuit - SD-27039-01, SD-27040-01.

4.08 Figure 8

4.081 Outgoing Trunk Circuit or Junctor Circuit - SD-26085-01.

4.082 Junctor, Outgoing Trunk or Subscriber to Trunk Intermarker Group Trunk Circuit - SD-25840-01.

4.083 Two-Way Trunk Circuit - SD-27500-01, SD-25843-01.

4.09 Figure 9

4.091 Outgoing Trunk Circuit or Junctor Circuit - SD-26085-01.

4.10 Figure 10

4.101 Outgoing Trunk Circuit to CAMA Position - SD-96481-01.

4.11 Patched Connections

4.111 O.G.T. Test Frame Test Trunk - SD-96367-01.

4.112 O.G.T. Test Frame Test Trunk from Local Test Desk - SD-25177-01.

4.113 O.G.T. Test Frame Test Circuit for Continuity and Reversals - SD-96370-01.

4.114 Manual O.G.T. Test Circuit - SD-95476-01.

4.115 Test Circuit for O.G.T. to CAMA Positions - SD-95849-01.

DESCRIPTION OF OPERATION

5. FIGURE 1

The insertion of the MB make-busy plug into the make-busy jack connects ground to the "S1" lead of the trunk, making it busy. If a test is to be made on the trunk, a test cord is inserted into the T jack.

6. FIGURE 2

The jacks in Figure 2 are used when the cable side of the following trunks are to be tested.

Recording completing trunks.

"A" Switchboard trunks to panel, panel tandem, of crossbar, or crossbar tandem offices.

Special service outgoing trunks to central "A" switchboard.

Outgoing trunks to panel sender tandem for dial coin zone service.

Trunks and outgoing repeaters to step-by-step office in crossbar tandem offices.

No. 1 crossbar automatic number identification outgoing trunk circuits. The trunks are made busy by the insertion of a make-busy plug in the make-busy jack. If it is desired to test a recording completing trunk, or a No. 1 crossbar automatic number identification outgoing trunk circuit MF pulsing to 4A toll, for all its functions the TEST cord and MB cord of the OG Trunk Frame - Trunk and Line test circuit are connected, respectively to the (T) jack Figure 1 and T and MB jack Figure 2 associated with the trunk under test.

If only the cable side of the trunks are to be tested, the test cord is connected to the TO jack.

7. FIGURE 3

The jack in Figure 3 is for testing the "S" lead of trunk circuits.

8. FIGURE 4

The insertion of the MB plug into the make-busy jack connects ground to the sleeve of the trunk, making it busy. If a test is to be made on the trunk, a test cord is inserted into the T jack.

9. FIGURE 5

The insertion of the MB plug into the make-busy jack connects ground to the sleeve of the trunk, making it busy.

10. FIGURE 6

The jack in Figure 6 is used when the cable side of a multifrequency key pulsing outgoing trunk is to be tested. The trunk will be made busy by inserting the plug of a plugging up cord into the outgoing jack of the trunk.

11. FIGURE 7

The insertion of the MB plug into the make-busy jack makes the two-way trunk busy by connecting ground to the OS lead to operate the OS relay.

This figure permits taking a two-way trunk out of service and still use standard test procedure with or without a plug in the make-busy jack.

12. FIGURE 8

The insertion of a MB plug into the make-busy jack connects leads B1 and B2 together. If the trunk is not in use ground on the B1 lead is applied to the B2 lead making the trunk busy.

RN

If an auxiliary O.G.T. is to be tested, test cords are inserted into the T and MB jacks.

13. FIGURE 9

If a DP auxiliary O.G.T. is to be tested, a test cord is inserted into the D jack in addition to the T and MB jacks noted in Paragraph 12.

14. FIGURE 10

The insertion of the MB plug into the make-busy jack connects ground to the sleeve of the trunk, making it busy. If a test is to be made on the trunk, a test cord is inserted into the T jack.

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