

**STUCK SENDER TRUNK IDENTIFICATION**  
**AUTOMATIC TROUBLE ANALYSIS—TROUBLE REFERENCE GUIDE**  
**NO. 1 CROSSBAR SYSTEM**

	CONTENTS	PAGE
1. GENERAL . . . . .		1
2. BIN LISTING . . . . .		1
3. BIN DESCRIPTIONS . . . . .		1

**1. GENERAL**

**Scope**

**1.01** This section provides information to help in understanding the nature of troubles reported by either trouble indicator lamps, or by automatic trouble analysis (ATA) exception reports. Information about each trouble category, or bin, is contained in a short narrative description covering the key circuit operations at the time that the trouble is detected. This section also contains specific reference to source documents which may be useful in troubleshooting.

**1.02** Whenever this section is reissued, the reason for reissue will be listed in this paragraph.

**1.03** This issue of this section corresponds to:

Issue 1 of SD-28101-01—Trunk Scan Control Circuit for use with Stuck Sender Trunk Identification System

Issue 2 of SD-28102-01—Sender Test Connector Control Circuit

**Description of Bin Format**

**1.04** The following format will be used to describe each bin.

(a) **Bin Name**—Consists primarily of alpha characters which identify the trouble category.

(b) **Description of Circuit Operation**—Description of the key circuit operations at the time that the trouble is detected.

(c) **Description of Failure**—Description of the circuit operation which failed to occur and caused a trouble record to be generated. This could also be a positive indication of troubles such as cross-detecting troubles.

(d) **Sequence of Operation**—Sequence charts showing normal circuit operations at the time of the failure are referenced in this paragraph.

(e) **Reference Documents**—SD numbers, associated FS numbers and SC numbers, CD numbers and paragraph numbers are referenced here and correspond to the circuit issues listed in 1.03.

**2. BIN LISTING**

**2.01** The following index is a listing of all of the trouble categories, or bins, associated with the stuck sender trunk identification feature.

BIN NAME	PAGE
SS*INV-SDR-DATA	2
SS*INV-TRK-DATA	3
SS*SNT	4
SS*TRK-FND	5

**3. BIN DESCRIPTIONS**

**3.01** The following pages contain the descriptions of the bins listed in Part 2.

**NOTICE**

Not for use or disclosure outside the  
Bell System except under written agreement

## SECTION 216-600-306

### BIN NAME

SS\*INV-SDR-DATA

### DESCRIPTION OF CIRCUIT OPERATION

SSTI—Invalid Sender Data: Stuck sender data generated by the sender test connector control (STCC) circuit and accessed by the MDT in parallel with the stuck sender data leads to the printer and printer control (PCC) at the (STCC), is validated in the SCC Analysis I program. A stuck sender is registered by the (STCC) from a sender make-busy frame SS lamp. The sender data delivered to the MDT and printer is derived from the (STCC) sender register relays which are checked on a 1/10 or 1/3 basis within the (STCC). The 1/10 and 1/3 checks on the sender register must pass before the sender data is delivered to the MDT and printer.

### DESCRIPTION OF FAILURE

The zero sort information of the exception report will indicate either mutilated or missing sender data. Comparison with the SSTI local printout will aid in determining whether the fault lies with the STCC or in the maintenance data transmitter (MDT).

Additional support information includes:

SGL—Indicates subscriber sender subgroup denied access to SSTI.

MTS—(Match Trap Sender) indicates that the sender (or subgroup) number set at the SSTI trap circuit (SD-28120-01) has been involved in a trace and the associated sender subgroup locked out of SSTI after preventing the release of the offending sender.

MTT—(Match Trap Trunk) indicates that the trunk (or trunk level) number set at the SSTI trap circuit (SD-28120-01) has been involved in a trace and the associated sender subgroup locked out of SSTI after preventing the release of the sender/trunk connection.

STLO—(Sender Trap Lockout) indicates that a previously trapped sender remains stuck (for examination by craft). The associated subgroup continues to be denied access to SSTI.

TTLO—(Trunk Trap Lockout) indicates that a previously trapped trunk remains connected to a stuck sender so that the trunk may be examined. The associated subgroup continues to be denied access to SSTI.

### SEQUENCE OF OPERATION

See sequence chart: SD-28101 Sh. E3, SC7, Loc. V20

CD-28102-01 Sec. II, Par. 3.08

**BIN NAME****SS\*INV-TRK-DATA****DESCRIPTION OF CIRCUIT OPERATION**

SSTI—Invalid Trunk Data: Trunk data from the trunk scan control circuit (TSCC) is validated in the SCC program.

**DESCRIPTION OF FAILURE**

The zero sort information of the exception report will indicate either mutilated or missing trunk data. Comparison with the SSTI local printout will aid in determining whether the fault lies with the TSCC or in the maintenance data transmitter (MDT).

Additional support information includes:

SGL—Indicates subscriber sender subgroups denied access to SSTI.

MTS—(Match Trap Sender) indicates that the sender (or subgroup) number set at the SSTI trap circuit (SD-28120-01) has been involved in a trace and the associated sender subgroup locked out of SSTI after preventing the release of the offending sender.

MTT—(Match Trap Trunk) indicates that the trunk (or trunk level) number set at the SSTI trap circuit (SD-28120-01) has been involved in a trace and the associated sender subgroup locked out of SSTI after preventing the release of the sender/trunk connection.

STLO—(Sender Trap Lockout) indicates that a previously trapped sender remains stuck (for examination by craft). The associated subgroup continues to be denied access to SSTI.

TTLO—(Trunk Trap Lockout) indicates that a previously trapped trunk remains connected to a stuck sender so that the trunk may be examined. The associated subgroup continues to be denied access to SSTI.

**SEQUENCE OF OPERATION**

See sequence chart: SD-28101-01 Sh. E3, SC7, Loc. V20

**REFERENCE DOCUMENTS**

CD-28101-01 Sec. II, Par. 10.07  
SD-28101-01

**SECTION 216-600-306**

**BIN NAME**

**SS\*SNT**

**DESCRIPTION OF CIRCUIT OPERATION**

SSTI—Sender No Trunk: A sender only record that indicates no trunk could be found attached to this sender.

**DESCRIPTION OF FAILURE**

The subgroup that contains the affected sender is locked out from access to SSTI, and a SGL- number will appear in the exception report. SSTI makes no release of this sender, and a manual trace is required in response to the MTR lamp. A linkage problem should be suspected as the cause of these records. SG1- numbers will also appear in the exception report to indicate manual lockout, permanent stuck senders, or trap circuit operation.

Additional support information includes:

MTS—(Match Trap Sender) indicates that the sender (or subgroup) number set at the SSTI trap circuit (SD-28120-01) has been involved in a trace and the associated sender subgroup locked out of SSTI after preventing the release of the offending sender.

STLO—(Sender Trap Lockout) indicates that a previously trapped sender remains stuck (for examination by craft). The associated subgroup continues to be denied access to SSTI.

TTLO—(Trunk Trap Lockout) indicates that a previously trapped trunk remains connected to a stuck sender so that the trunk may be examined. The associated subgroup continues to be denied access to SSTI.

**SEQUENCE OF OPERATION**

See sequence chart: SD-28101-01 Sh. E3, SC7

**REFERENCE DOCUMENTS**

CD-28101-01 Sec. II, Par. 8

CD-28102-01 Sec. II, Par. 2.06

**BIN NAME****SS\*TRK-FND****DESCRIPTION OF CIRCUIT OPERATION**

SSTI—Trunk Found: Sender and trunk data from the SSTI circuits indicate the problem trunk or sender to receive maintenance attention. Separate trunk or sender thresholds discriminate between trunk and sender troubles. A special threshold is provided to signal an impending trunk group failure by sorting on TG- and TS- data only.

SGL—Indicates subscriber sender subgroups denied access to SSTI.

MTS—(Match Trap Sender) indicates that the sender (or subgroup) number set at the SSTI trap circuit (SD-28120-01) has been involved in a trace and the associated sender subgroup locked out of SSTI after preventing the release of the offending sender.

MTT—(Match Trap Trunk) indicates that the trunk (or trunk level) number set at the SSTI trap circuit (SD-28120-01) has been involved in a trace, and the associated sender subgroup locked out of SSTI after preventing the release of the sender/trunk connection.

STLO—(Sender Trap Lockout) indicates that a previously trapped sender remains stuck (for examination by craft). The associated subgroup continues to be denied access to SSTI.

TTLO—(Trunk Trap Lockout) indicates that a previously trapped trunk remains connected to a stuck sender so that the trunk may be examined. The associated subgroup continues to be denied access to SSTI.

**DESCRIPTION OF FAILURE**

Not applicable

**SEQUENCE OF OPERATION**

See sequence chart: SD-28101 Sh. E3, SC7 Loc. V20

**REFERENCE DOCUMENTS**

CD-28101-01 Sec. II, Par. 10.07  
SD-28101-01