FALSELY GROUNDED SUBSCRIBER SENDER LINK DC LEAD
NO. 1 CROSSBAR OFFICES

1. GENERAL

1.01 This section covers methods to be followed in connection with troubles due to a grounded DC lead in the subscriber sender link.

2. INDICATIONS OF TROUBLE CONDITION

2.01 Originating trouble indicator records.

3. REACTIONS DUE TO TROUBLE

3.01 The individual call involved fails to complete.

3.02 During busy-hour periods this trouble may cause an overload of the originating traffic.

4. IMMEDIATE PROCEDURE TO FOLLOW

4.01 Analyze trouble indications.

4.02 Make the district junctors involved busy.

5. ANALYSIS OF TROUBLE

5.01 A false ground on the DC lead of a particular linkage in the subscribers' sender link causes the F relay of the district junctor to operate and in turn operates the LC relay of the district link and connector circuit. Whenever any call is originated from this frame, this false ground will cause additional LC and F relays to lock, until the call associated with the link involved releases. This causes the marker to return a trouble release and summon the trouble indicator.

6. SUGGESTED PROCEDURE FOR LOCATING AND CLEARING TROUBLE

6.01 Analyze trouble indicator record.

6.02 Check linkage for false ground.

7. TROUBLE CONDITIONS CAUSING REACTIONS MAY BE LISTED BELOW

7.01 Grounded DC lead between the primary and secondary switches of the subscriber sender link.

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FORM-2623(7-39)

ORIGINATING TROUBLE INDICATOR RECORD
CROSSBAR OFFICES

OFFICE _____

DATE _____ SHEET NO. ____

NO.	TI	CT	DT	DR	GO	G 100	DL-GO	DL-G100	CF	CN	SN	OF	TL	KEL	KOL	KER	KOR	G	GT1	GT3	GS	DF	DM	M	JC	P	CHL	CHR	Z	ZCK	ZO	ZL	ZK	PS1	NC1	OT1	TC1	TCK	TP1	RP1	TPK	ZR	A	B	C	D	F	AR
1	✓			2			0,1		3	0	6	4	10		1			2				3	2,4	0,4	9	0											✓		✓				2	4	3	4	3	
2	✓			1			0,2		2	1	5	2	0			6		8				3	0,2	1,2	4	8	2										✓			✓			2	4	3		4	
3	✓			0			1,2		3	1	9	0	0		8			4				12	5	5	1	2	0										✓			✓			2	4	4	8	3	
4	✓			2			0,1		2	1	7	0	0	1				3				3	2,8	0	0	3											✓			✓			2	4	3	5	0	
5	✓			1			0,2		3	1	9	1	10				2	5				3	1,2	6,8	3	4											✓			✓			2	4	3	1	3	
6																																																
7																																																
8																																																
9																																																
10																																																

Column A - Trouble indication.
Columns B and D - Any marker, sender or trunk.
Column C - Same sender subgroup with XDC lamp indicating in column O indicates sender group involved.
Column F - Same district junctor group indicates group involved.
Columns E,G,H,I,J,K,L,N,P - Have no significance.

A | B | C | D | E | F | G | H | I

NO.	OF	TP	EA	LA	SGR	CKG	K4	K5	SPE	SPO	NSE	NSO	DK	AK	TKE	TK	SR	RL	MS	CK	BK	CHE	A	C	S	SL	B	MR	S1K	MRL	ZS	Z	OT	TC	TP2	NM	RO	TB5	CRL	DT3	MR1	TRL	EC	X	SDT	OB	SD	SD1	OG	SO	CR	CL	TW	TIME
1		✓				✓	✓	✓			✓	✓	✓	✓	✓	✓			✓	✓		✓																						✓	XSM1			✓	✓		✓	3,4	1		10:50
2						✓	✓	✓			✓	✓	✓	✓		✓	✓		✓	✓	✓																						✓	XSM1			✓	✓		✓	3,4	1		10:52
3						✓	✓	✓			✓	✓	✓	✓		✓	✓		✓	✓	✓																						✓	XDC			✓	✓		✓	3,4	1		10:54
4						✓	✓	✓			✓	✓	✓	✓		✓	✓		✓	✓	✓																						✓	XSM1			✓	✓		✓	3,4	1		10:56
5						✓	✓	✓			✓	✓	✓	✓		✓	✓		✓	✓	✓	✓																					✓	XDC, XSM1			✓	✓		✓	3,4	1		10:59
6																																																								
7																																																								
8																																																								
9																																																								
10																																																								

Analysis of Indication: The XSM1 lamp display occurs when a marker attempts to operate two selecting magnets. The XDC lamp display occurs when a sender with a grounded DC lead selects a marker. Therefore, since district junctor group 2 is always involved on XSM1 displays and sender subgroup 3-1-9 on all XDC lamp displays, the false ground must be on the linkage connecting this equipment.

Immediate Procedure to Follow: Make district junctor group involved busy.

Procedure to Locate and Clear Trouble: Check linkage for false ground.

J | K | L | M | N | O | P