FALSELY OPERATED NUMBER GROUP CONNECTOR TB RELAY
NO. 1 CROSSBAR OFFICES

1. GENERAL

1.01 This section covers methods to be followed in connection with troubles due to a falsely operated TB relay in a number group connector.

2. INDICATIONS OF TROUBLE CONDITION

2.01 Terminating trouble indicator records.

3. REACTIONS DUE TO TROUBLE

3.01 During a busy-hour period this trouble causes a backup of terminating traffic.

3.02 Practically all numbers in the number group will be affected.

4. IMMEDIATE PROCEDURE TO FOLLOW

4.01 Analyze trouble indicator records.

4.02 Insert make-busy plugs into the TRO (trouble reorder) jacks on the terminating trouble indicator.

5. ANALYSIS OF TROUBLE

5.01 With a TB relay mechanically locked operated a combination of F and C leads will be crossed thereby causing the marker to release on calls to all numbers in the number group except those in the TB relay involved.

6. SUGGESTED PROCEDURE FOR LOCATING AND CLEARING TROUBLE

6.01 Remove the covers from the TB relays in the number group and inspect for mechanically locked relays.

6.02 Use the terminating trouble indicator to determine which group of twenty lines do not cause reaction.

7. TROUBLE CONDITIONS CAUSING REACTIONS MAY BE LISTED BELOW

7.01 Armature on one half of a TB relay out of place causing the contacts to remain closed.

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TERMINATING TROUBLE INDICATOR RECORD
CROSSBAR OFFICES

OFFICE _____

DATE _____ SHEET NO. ____

NO.	TI	CT	DT	GR	DR	DL	CF	CN	SN	TH	H	T	U	F	TR2	RO	OAB	NGC	HB	HP	L	JF	JC	AL1	AL2	LCF	LLG	LOG	HF	RF	TF	CA	CB	IF	LC	M	CH	LJ	JPN	JP	JG	FS	MAN	TOL	CN	RC	RV	RP	TC
1	✓				0	1,2	1	1	3	8	8	8	0	0				4	8	8						All			✓	✓	✓			0	1	2		0	✓		A	✓				✓			
2	✓				1	0,2	0	3	2	8	6	8	8	8				4	6	8						0,2,3			✓	✓	✓			8	4	3		0	✓		A	✓				✓			
3	✓				1	0,2	1	2	3	8	3	0	0	1				4	3	0						All			✓	✓	✓			1	2	5		0	✓		A	✓				✓			
4	✓				0	1,2	1	2	4	8	8	7	2	3				4	8	7						1,3,6			✓	✓	✓			3	7	0		1	✓		A	✓				✓			
5	✓				2	0,1	1	1	3	8	4	5	9	2				4	4	4						All			✓	✓	✓			2	0	7		0	✓		A	✓				✓			
6																																																	
7																																																	
8																																																	
9																																																	
10																																																	

Column A - Trouble indication.
Columns B and C - Any marker or sender.
Column D - Any number in number group except those in the 20 block involved.
Column F - A number of LCF lamps with HG, RF, and TF lamps indicates more than 2 leads crossed in number group.
Columns G,H,I,J,K,L,M,N,O,P,Q,R,S - Have no significance.

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

NO.	LIN	LTI	TIN	TTI	OF	BB	SPL	NC	NT	NTX	NH	NHX	NN	NNX	NTT	GS	IP	IT	IPT	PN	TN	PTN	CKG	K1	K2	K3	TBK	LE	FC	AK	TK	LIL	RIL	TE	BC	GJ	SL	GC	GLH	CON	GT2	RL	PG	MKO	MK1	FL	NFL	AL	NAL	LTR	HTR	SDT	TCT	TRL	FCG	X	TIME
1																							✓	✓	✓	✓	✓	✓	✓	✓				✓																	✓							X, XF	10:21
2																							✓	✓	✓	✓	✓	✓	✓	✓				✓																	✓							X, XF	10:23
3																							✓	✓	✓	✓	✓	✓	✓	✓				✓																	✓							X, XF	10:24
4																							✓	✓	✓	✓	✓	✓	✓	✓				✓																		✓						X, XF	10:26
5																							✓	✓	✓	✓	✓	✓	✓	✓				✓																	✓							X, XF	10:27
6																																																										
7																																																										
8																																																										
9																																																										
10																																																										

Analysis of Indication: Whenever a number of leads are crossed as indicated by all LCF lamps, it is generally the result of a relay operated falsely. In this case it is a TB relay.

Immediate Procedure to Follow: Plug TRO or TMB jacks to prevent backup of terminating traffic. Locate trouble quickly.

Procedure for Locating and Clearing Trouble: Start inspecting relays and in the meantime use the terminating trouble indicator to determine relay operated falsely if possible.

J | K | L | M | N | O | P | Q | R | S