FAILURE OF NUMBER GROUP CONNECTOR HB RELAY
NO. 1 CROSSBAR OFFICES

1. GENERAL

1.01 This section covers methods to be followed in connection with troubles due to failure of an HB 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 busy-hour periods this trouble causes a backup of terminating traffic.

3.02 Service to one hundred lines will be affected.

4. IMMEDIATE PROCEDURE TO FOLLOW

4.01 Analyze trouble indicator records.

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

4.03 Connect the secondary winding provided if necessary.

5. ANALYSIS OF TROUBLE

5.01 With an open winding of an HB relay all calls to the hundred numbers associated with the relay will be denied service and the marker will be forced to time out.

6. SUGGESTED PROCEDURE FOR LOCATING AND CLEARING TROUBLE

6.01 Check the operation of the HB relay.

7. TROUBLE CONDITIONS CAUSING REACTIONS MAY BE LISTED BELOW

7.01 Open winding of HB relay.

7.02 Loose connection at winding terminal of HB relay.

© American Telephone and Telegraph Company, 1941
Printed in U.S.A.

PRINTED IN U.S.A.

FORM-2624(7-39)

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	0	1	3	0	5	3	5	2				0	5	2				✓										2	4	0		6	✓		A	✓							
2	✓				1	0	0	1	0	0	5	2	0	4				0	5	2				✓										4	3	6		6	✓		A	✓							
3	✓				0	2	0	2	2	0	5	7	1	2				0	5	8					✓									2	7	1		6	✓		A	✓							
4	✓				1	0	1	1	5	0	5	8	0	3				0	5	9					✓									3	0	1		6	✓		A	✓							
5																																																	
6																																																		
7																																																		
8																																																		
9																																																		
10																																																		

Column A - Trouble indication.
Columns B and C - Any marker or sender.
Column D - Any number in hundred block.
Column E - NGC-C lamp and no TBK lamp in column M indicates an open circuit in the HB operating path.
Columns F,G,H,I,J,K,L,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																							✓	✓	✓	✓		✓	✓	✓				✓																	✓									12:21
2																							✓	✓	✓	✓		✓	✓	✓				✓																	✓									12:24
3																							✓	✓	✓	✓		✓	✓	✓				✓																	✓									12:25
4																							✓	✓	✓	✓		✓	✓	✓				✓																	✓									12:27
5																																																										
6																																																										
7																																																										
8																																																										
9																																																										
10																																																										

Analysis of Indication: With the number group connected and no TBK lamp on numbers spanning 100 an open circuit in the path to operate an HB relay is indicated.

Immediate Procedure to Follow: Plug TRO jacks to prevent back up of terminating traffic.

Procedure for Locating and Clearing Trouble: Check operating path of HB relay. If relay is open, connect emergency winding of relay, if required.

J	K	L	M	N	O	P	Q	R	S