

0 1 2 3 4 5 6 7 8 9

31

DOUBLE SIDED 1/X

FRONT											
NO. 5 XBR SYS TBL RCDR CARD											
TROUBLE INDICATION											
TROUBLE LOCATION 2TR											
TROUBLE FOUND OR ACTION TAKEN											
CLRD BY TIME RECD DATE											
TIME CLRD DATE											
CLASS REPORT TROUBLE CODE											
TICKET NO.											
SEE CD-25805-01 FOR DESCRIPTION											

MONTH
YEAR
OFFICE

MADE IN U.S.A.

BACK											
NO. 5 CROSSBAR SYSTEM TROUBLE RECORDER CARD											
TROUBLE INDICATION											
TROUBLE LOCATION 2TR											
TROUBLE FOUND OR ACTION TAKEN											
CLED BY TIME RECD DATE											
TIME CLRD DATE											
CLASS REPORT TROUBLE CODE											
TICKET NO.											
SEE CD-25805-01 FOR DESCRIPTION											

MONTH
YEAR
OFFICE

MADE IN U.S.A.

READ / TURN OVER

TYPE OF EQUIPMENT REQUESTING TROUBLE RECORD

TYPE OF CALL

CALLING LINE IDENTIFICATION

SUB TYPE OF CALL

TEST CALLS

DOUBLE SIDED 1/X
TROUBLE CARD

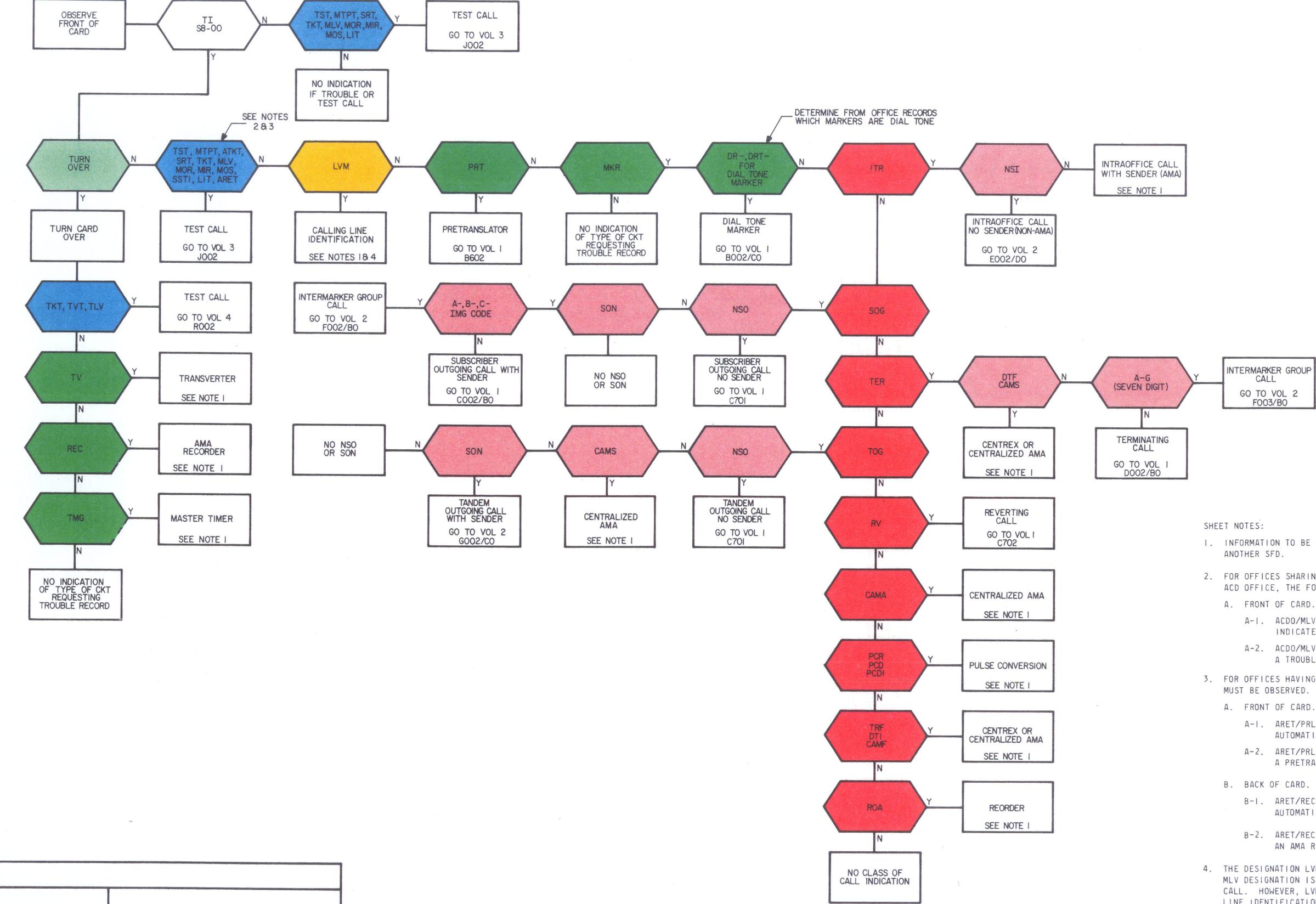
SFD-10-01-A205

DWG SIZE
6S

PRINTED IN U.S.A.

FLOW CHART
DOUBLE SIDED I/X TROUBLE CARD

0 1 2 3 4 5 6 7 8 9



SHEET NOTES:

1. INFORMATION TO BE COVERED IN A LATER ISSUE OF THIS SFD, OR IN ANOTHER SFD.
2. FOR OFFICES SHARING THE TROUBLE RECORDER WITH A CO-LOCATED ACD OFFICE, THE FOLLOWING MUST BE OBSERVED.
 - A. FRONT OF CARD.
 - A-1. ACD/MLV AND EITHER LVF OR LVM PERFORATED INDICATES A MARKER LINE VERIFICATION TEST CALL.
 - A-2. ACD/MLV PERFORATED WITHOUT LVF OR LVM INDICATES A TROUBLE RECORD FROM THE CO-LOCATED ACD OFFICE.
 - B. BACK OF CARD.
3. FOR OFFICES HAVING AUTOMATIC RANGE EXTENSION, THE FOLLOWING MUST BE OBSERVED.
 - A. FRONT OF CARD.
 - A-1. ARET/PRL AND MKR BOTH PERFORATED INDICATES AN AUTOMATIC RANGE EXTENSION TEST CALL.
 - A-2. ARET/PRL PERFORATED WITHOUT A MKR PUNCH INDICATES A PRETRANSLATOR REQUESTED THE RECORD.
 - B. BACK OF CARD.
 - B-1. ARET/REC AND ARET BOTH PERFORATED INDICATES AN AUTOMATIC RANGE EXTENSION TEST CALL.
 - B-2. ARET/REC PERFORATED WITHOUT A REC PUNCH INDICATES AN AMA RECORDER REQUESTED THE RECORD.
4. THE DESIGNATION LVM STANDS FOR LINE VERIFICATION MATCH IF THE MLV DESIGNATION IS PUNCHED INDICATING A LINE VERIFICATION TEST CALL. HOWEVER, LVM WITHOUT MLV IS USED TO INDICATE A CALLING LINE IDENTIFICATION CARD.

DOUBLE SIDED I/X TROUBLE CARD (E4393)
FLOW CHART INDEX FOR ANALYSIS

ISSUE 5 DWG SIZE 6S

SFD-10-01-

A204

BELL LABORATORIES

0 1 2 3 4 5 6 7 8 9

A

A

B

B

C

C

D

D

E

E

F

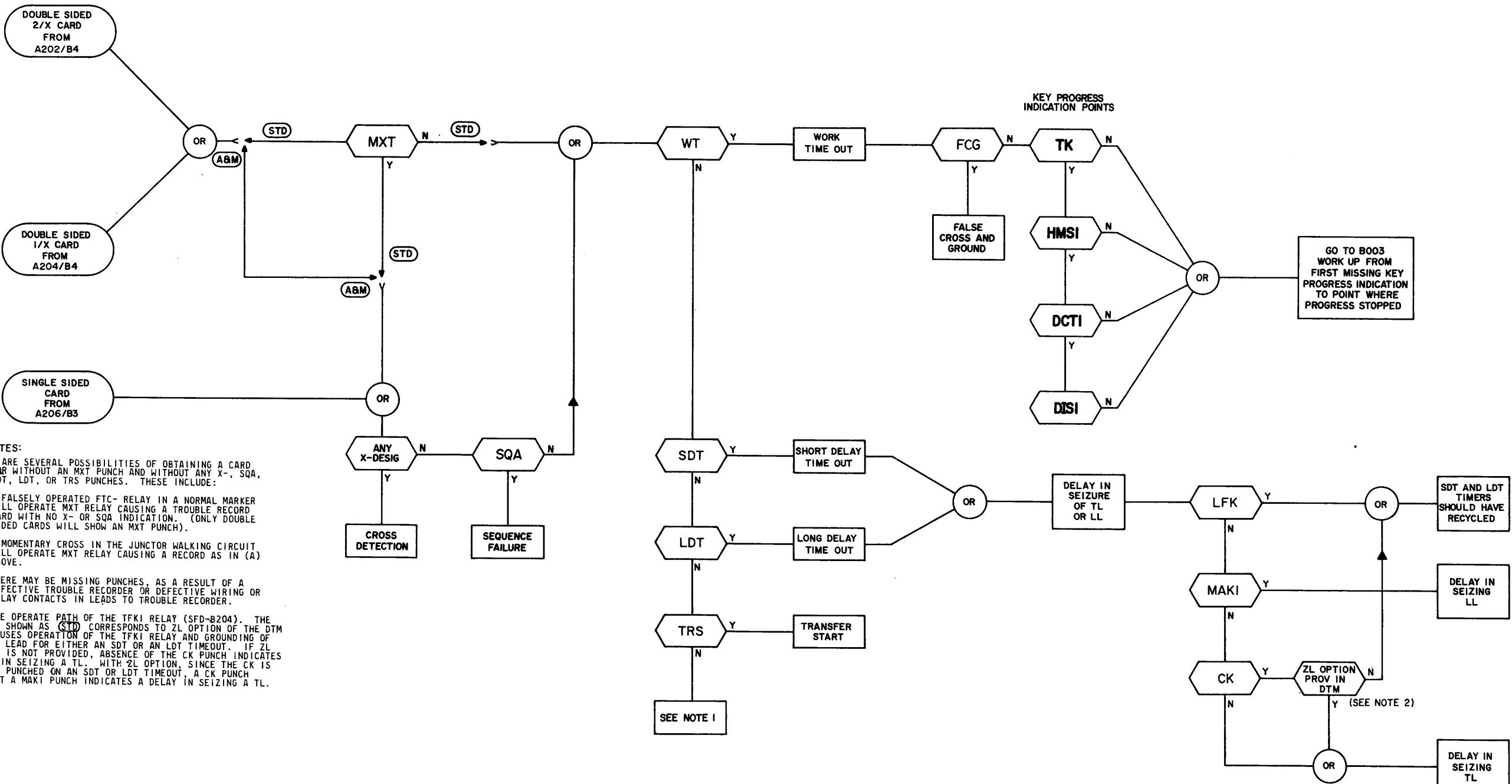
F

G

G

H

H



ISSUE
4

SFD-10-01-B002

FLOW CHART FOR ANALYSIS
OF TROUBLE CARD FOR
DIAL TONE CLASS OF CALL

0

1

2

3

4

5

6

7

8

9

SFD-10-01-B002

31

1

2

3

4

5

6

7

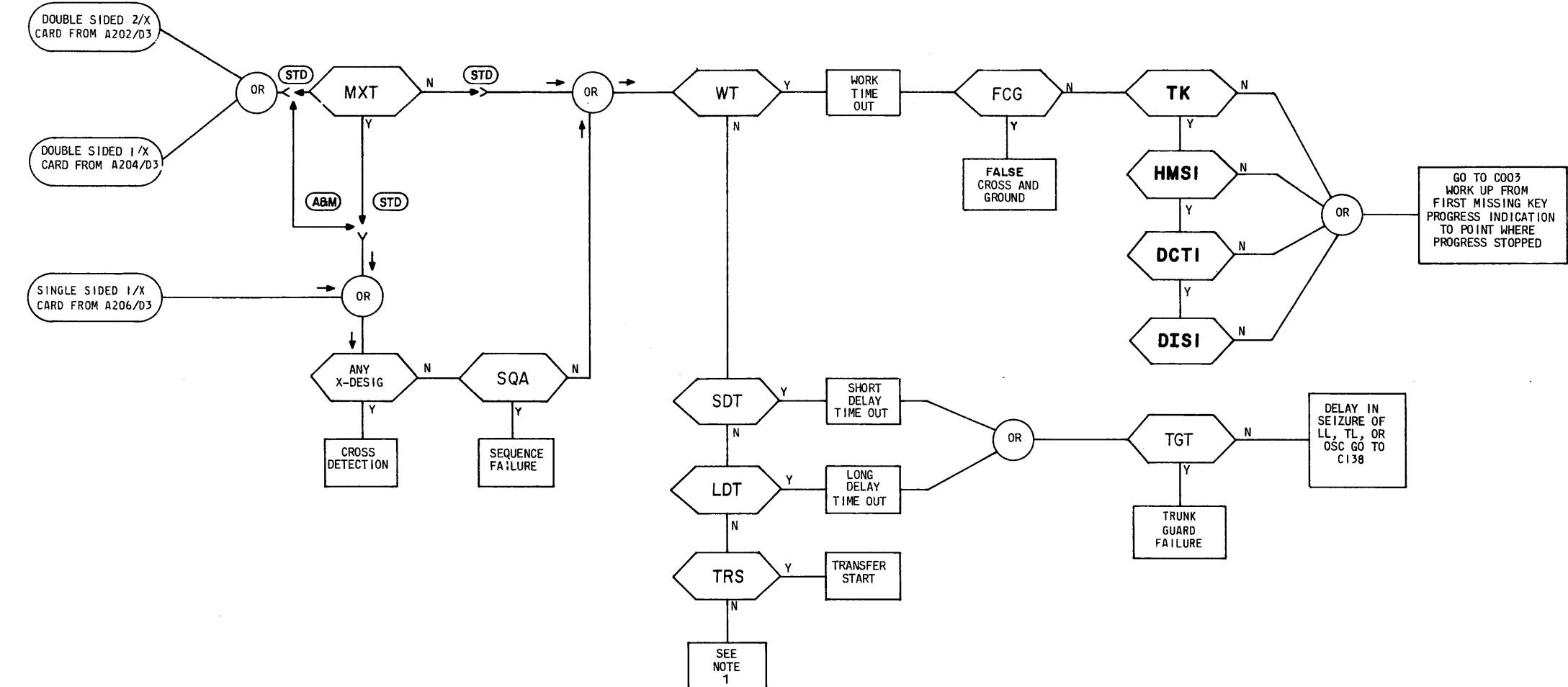
8

9

PRINTED IN U. S. A.
6S BELL TELEPHONE LABORATORIES
INCORPORATED

0 1 2 3 4 5 6 7 8 9

A



SHEET NOTES:

1. THERE ARE SEVERAL POSSIBILITIES OF OBTAINING A CARD WITH OR WITHOUT AN MXT PUNCH AND WITHOUT ANY X-, SQA, WT, SDT, LDT, OR TRS PUNCHES. THESE INCLUDE:
 - A. A FALSELY OPERATED FTC- RELAY IN A NORMAL MARKER WILL OPERATE MXT RELAY CAUSING A TROUBLE RECORD CARD WITH NO X- OR SQA INDICATION. (ONLY DOUBLE SIDED CARDS WILL SHOW AN MXT PUNCH)
 - B. A MOMENTARY CROSS IN THE JUNCTOR WALKING CIRCUIT WILL OPERATE MXT RELAY CAUSING A RECORD AS IN (A) ABOVE.
 - C. THERE MAY BE MISSING PUNCHES, AS A RESULT OF A DEFECTIVE TROUBLE RECORDER OR DEFECTIVE WIRING OR RELAY CONTACTS IN LEADS TO TROUBLE RECORDER.

SFD-10-01-C002

ISSUE
4

FLOW CHART FOR ANALYSIS OF TROUBLE
CARD FOR SUBSCRIBER OUTGOING CALL

SFD-10-01-C002

PRINTED IN U.S.A.
6S

BELL TELEPHONE LABORATORIES
INCORPORATED

0

1

2

3

4

5

6

7

8

9

A

A

B

B

C

C

D

D

E

E

F

F

G

G

H

H

0

1

2

3

4

5

6

7

8

9

		FLOW CHARTS FOR ANALYSIS OF TROUBLE CARDS	
ISSUE 5	DWG SIZE 6S		
SFD-10-01-		J002	BELL LABORATORIES

K&E 101153 2-77 418079

0

1

2

3

4

5

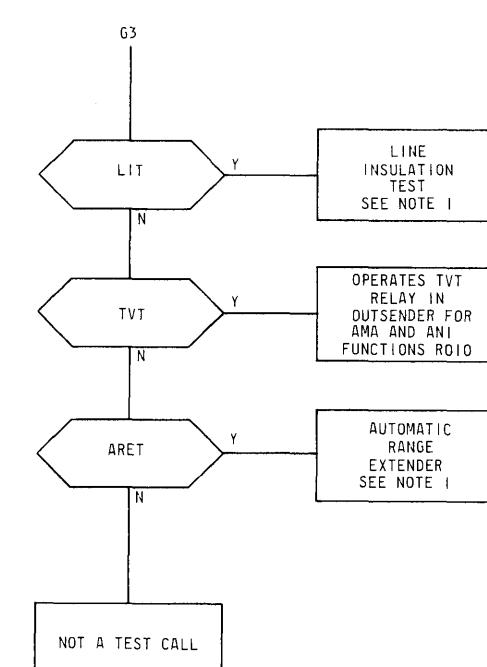
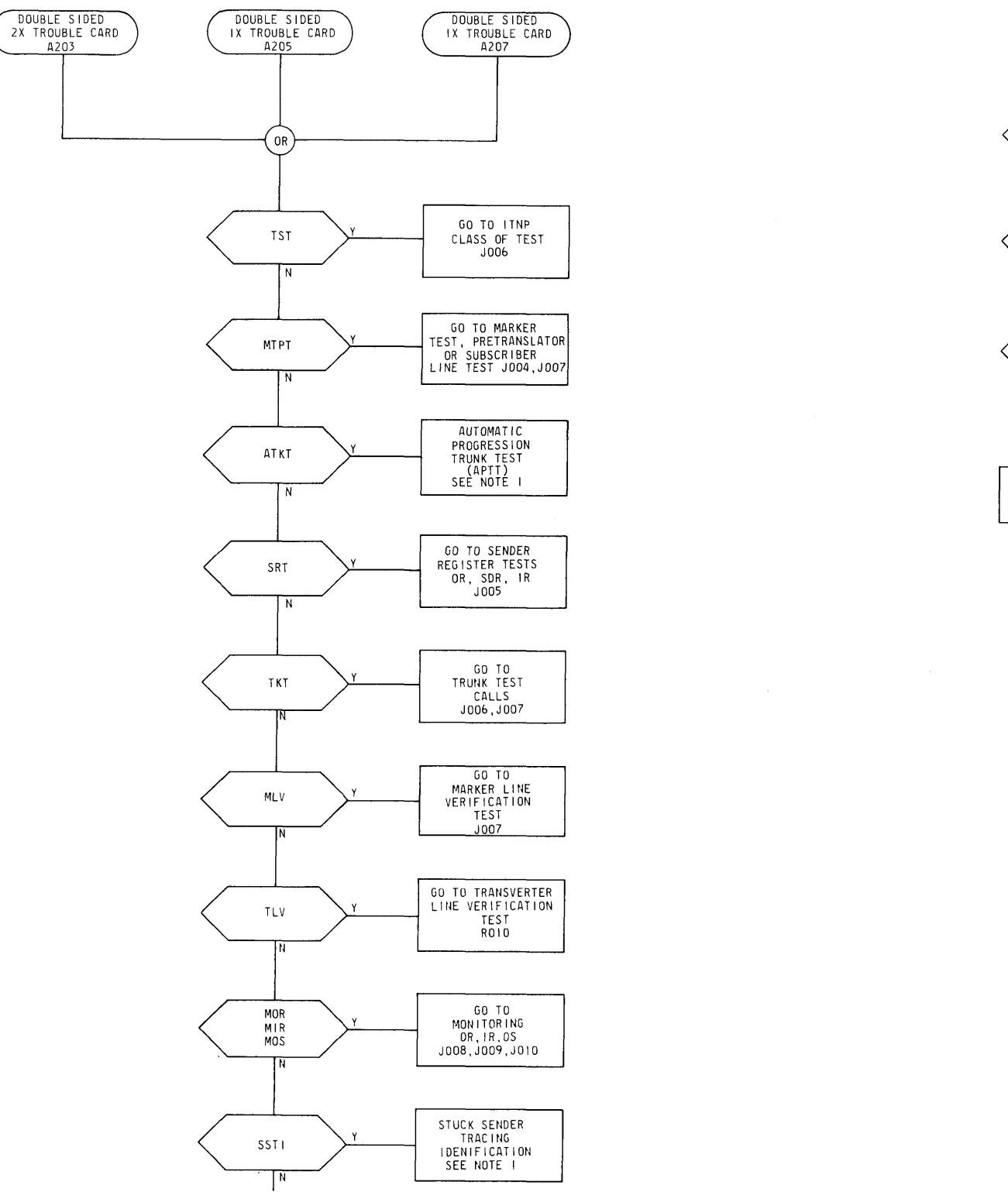
6

7

8

9

PRINTED IN U.S.A.



SHEET NOTES:

1. NOT COVERED IN SFD OR SCD. REFER TO RESPECTIVE SD OR CD FOR INFORMATION CONCERNING THESE FUNCTIONS.

0 1 2 3 4 5 6 7 8 9

31

SUBSCRIBER OUTGOING
I/X DOUBLE SIDED TROUBLE CARD

E-4393(1-73F)												NO. 5 XBR SYS TBL RCDR CARD											
A												B											
B												C											
C												D											
D												E											
E												F											
F												G											
G												H											
H												A											
A												B											
B												C											
C												D											
D												E											
E												F											
F												G											
G												H											
H												A											
A												B											
B												C											
C												D											
D												E											
E												F											
F												G											
G												H											
H												A											
A												B											
B												C											
C												D											
D												E											
E												F											
F												G											
G												H											
H												A											
A												B											
B												C											
C												D											
D												E											
E												F											
F												G											
G												H											
H												A											
A												B											
B												C											
C												D											
D												E											
E												F											
F												G											
G												H											
H												A											
A												B											
B												C											
C												D											
D												E											
E												F											
F												G											
G												H											
H												A											
A												B											
B												C											
C												D											
D												E											
E												F											
F												G											
G												H											
H												A											
A												B											
B												C											
C												D											
D												E											
E												F											
F												G											
G												H											
H												A											
A												B											
B												C											
C												D											
D												E											
E												F											
F												G											
G												H											
H												A											
A												B											
B												C											
C												D											
D												E											
E												F											
F												G											
G												H											
H												A											
A												B											
B												C											
C												D											
D												E											
E												F											
F												G											
G												H											
H												A											
A												B											
B												C											
C												D											
D												E											
E												F											
F												G											
G												H											
H												A											
A												B											
B												C											
C												D											
D												E											
E												F											
F												G											
G												H											
H												A											
A												B											
B												C											
C												D											
D												E											
E												F											
F												G											
G												H											
H												A											
A												B											
B												C											
C												D											
D												E											
E												F											
F												G											
G												H											
H												A											
A												B											
B												C											
C												D											
D												E											
E												F											
F												G											
G												H											
H												A											
A												B											
B												C											
C												D											
D												E											
E												F											
F												G											
G												H											
H												A											
A												B											
B												C											
C												D											
D												E											
E												F											
F												G											
G												H											
H												A											
A												B											
B												C											
C												D											
D												E											
E												F											
F												G											
G												H											
H												A											
A												B											
B												C											
C												D											
D												E											
E												F											
F												G											
G												H											
H												A											
A												B											
B												C											
C												D											
D												E											
E												F											
F												G											
G												H											
H												A											
A												B											
B												C											
C												D											
D												E											
E												F											
F												G											
G												H											
H												A											
A												B											
B												C											
C												D											
D												E											
E												F											
F												G											
G												H											
H												A											
A												B											
B												C											
C												D											
D												E											
E												F											
F												G											
G												H											
H												A											
A												B											
B												C											
C												D											
D												E											
E												F											
F												G											
G												H											
H												A											
A												B											
B												C											
C												D											
D												E											
E												F											
F												G											
G												H											
H												A											
A												B											
B												C											
C												D											
D												E											
E												F											
F												G											
G												H											
H												A											
A												B											
B												C											
C												D											
D												E											
E												F											
F												G											
G												H											
H												A											
A												B											
B												C											
C												D											
D												E											
E												F											
F												G											
G												H											
H												A											
A												B											
B												C											
C												D											
D												E											
E												F											
F												G											
G												H											
H												A											
A												B											
B												C											
C												D											
D												E											
E												F											
F												G											
G												H											
H												A											
A												B											
B												C											
C												D											
D												E											
E												F											
F												G											
G												H											
H												A											
A												B											
B												C											
C												D											
D												E											
E												F											
F												G											
G												H											
H												A											
A												B											
B												C											
C												D											
D												E											
E												F											
F												G											
G												H											
H												A											
A												B											
B												C											
C												D											
D												E											
E												F											
F												G											
G												H											
H												A											
A												B											
B												C											
C												D											
D												E											
E												F											
F												G											
G												H											
H												A											
A												B											
B												C											
C												D											
D												E											
E												F											

A

B

C

D

E

F

G

H

SFD-10-01-C806

SINGLE SIDED I/X TROUBLE RECORD CARD (E3638)				KEY(S) OR SWITCH(ES) USED TO SIMULATE TROUBLE RECORD			
FUNCTION		SEE NOTE	DESIGNATION PERFORATED	LOCATION ON CARD	KEY DESIGNATION	SWITCH	KEY DESIGNATION
TYPE OF CALL			SOG	S7,7	ORIG/OGT/ MISC/ITDO/SDR	DESIGNATION	POSITION
CLASS OF CALL	ORIG		OR	S4,9		TSTA	ORIG/SDR
	FACD		FAC	S4,14	FACD	TSTB	OGT/MISC/ITDO
TRANSLATOR CLASS	LT		LT	S4,0		CL	OR-DP/MF FAC-DP/MF
	LTI		LTI	S4,15			LT
	LT2		LT2	R4,42			LTI
	2DT		2DT	S7,4			LT2
	XII		XII	S4,3			2DT
	II		II	S4,4			XII
	FVD		FVD	S4,2			II
MARKER	TENS		MKR	S8,15			FVD
	UNITS	7	DRT-	S7,19-20	MT(0-11)		
			DR-	S8,19-28			
CALLED DIGITS A-L (0-9)			A-L(2/5)	S0,0-29,R7,0-24	A-L(0-9)	MTU	0-9
LINE LOCATION	FRAME	TENS	FT-(1/4)/FT-(2/4)	R1,0-3	FT(0-3)	A-L	0-9
		UNITS	FU-(2/5)	R1,4-8	FU(0-9)	FT	0-3
	VERTICAL GROUP		VG-(2/6)	R1,9-14	VG(0-13)	FU	0-9
	HORIZONTAL GROUP		HG-(2/5)	R1,15-19	HG(0-9)	VGU	0-9
	VERTICAL FILE		VF-(1/5)	R1,20-24	VF(0-4)	HG	0-9
CLASS OF SERVICE	30 OR 60 CLASSES	TENS	CT-(1/3)	R1,25-27	CST(0-9)	VF	0-4
		UNITS	CU-(2/5)	R0,25-29	CSU(0-9)	CST	0-9
	60 CLASSES	0-29	CGA	S3,42		CSU	0-9
		30-59	CGB	S3,43	CGB		
TRUNK LINK	FRAME	TENS	FS(0-19)	S1,30-49	FG(0-1)	CGB	
		UNITS			FS(0-9)	FG(0-1)	
					FS	0-9	
TRUNK	TENS				FS OR NTFS		
	UNITS	2	TS(0-19)	S0,30-39	TS(10-19)	FS OR NTFS	
TRUNK ALLOTTER	GROUP A				TS(0-9)	TSTI	
	GROUP B		GPA	R5,38	GPA	TSU	0-9
OUTGOING SENDER	SENDER GROUP		GPB	R5,39	GPB		
	GROUP A	5			OSS	TS OR NTTS	
	GROUP B					GPA	
	SENDER		OS(0-4)	S1,8-12	OS(0-4)	GPB	
	CHANNEL		CH(0-9)	R7,50-59	CH(0-9)	OSS	
JUNCTOR STEP			STPI/STP2	R5,30-31	STPI/STP2	SG	0-10
JUNCTOR GROUP		3	JG(0-4)	R6,40-44	JSQ(0-5)	SGA	
ROUTE ADVANCE		6	RA,GS(1-5)	S8,54,R5,32-36	RA(0-3)	SGB	
OBSERVED CALL			OBS	S3,8	OBS	OS	0-4
						CH	0-9

ISSUE
3SIMULATION OF OUTGOING
CALLS WHICH PRODUCE I/X
SINGLE SIDED TROUBLE RECORD
CARDS (E3638)

SFD-10-01-C806

PRINTED IN U. S. A.

6S

BELL TELEPHONE LABORATORIES
INCORPORATED

CBL-266(10-75)

SHEET NOTES:

- THE CONNECTION ESTABLISHED BY THE MARKER IS FROM THE LINE LINK LOCATION TO AN OUTGOING TRUNK. THE OPERATION OF THE LINE HOLD MAGNET IS SIMULATED IF THE NTC KEY IS NOT OPERATED. IF THE NTC KEY IS OPERATED, THE NO-TEST HOLD MAGNET IN THE ASSOCIATED HORIZONTAL GROUP IS OPERATED TO EXTEND THE CHANNEL CONNECTION BACK TO THE MASTER TEST CONTROL CIRCUIT.
- USE FS AND TS RATHER THAN NTFS AND NTTs KEYS UNLESS TRUNK TO BE SELECTED IS MADE BUSY.
- CONSULT JUNCTOR SEQUENCE TABLE ON C808 FOR SETTING OF JSQ KEY OR SWITCH FOR PARTICULAR JG- AND STP- DESIGNATIONS PERFORATED.
- SG KEY OR SWITCH IS LOCATED ON AMRST PANEL AND IS USED ON A SENDER TYPE OF TEST (SFDC814) TO DIRECT THE MARKER TO A PARTICULAR SENDER GROUP.
- THE OSS KEY OPERATED ENABLES THE MARKER TO SELECT A PARTICULAR SENDER CHOSEN BY THE SGA/B KEY AND OS- KEY OR SWITCH.
- THE GSI-5 INDICATES THE GROUND SUPPLIES FROM WHICH THE CALL HAS ROUTE ADVANCED.
- OBSERVE DRTO/I AND DR 0-9 AND CONSULT OFFICE RECORDS TO DETERMINE WHETHER RECORD WAS PRODUCED BY A COMPLETING MARKER.

0

1

2

3

4

5

6

7

8

9

0 1 2 3 4 5 6 7 8 9

