

TROUBLE INDICATOR RECORDS NO. 1 CROSSBAR OFFICES

1. GENERAL

1.01 Accurate Trouble Indicator Records are needed for good Qualitative Maintenance in a No. 1 Crossbar Office. This section describes the forms used to record trouble indications.

1.02 The reason for this reissue is to show changes in the forms. Arrows are omitted because this is a general revision.

1.03 Tables A and B show the forms to be used.

TABLE A

FORM	NAME	COLOR	SIZE	USE
E-2623	Originating Trouble Indicator Record No. 1 Crossbar Offices	White	10-7/8" x 16-7/8"	Logging up to 10 displays
E-2624	Terminating Trouble Indicator Record No. 1 Crossbar Offices	White	10-7/8" x 16-7/8"	Logging up to 15 displays
E-3110	Controller Trouble Indicator Record No. 1 Crossbar Offices	White	10-7/8" x 16-7/8"	Logging up to 50 displays
E-3464	Transverter Trouble Indicator Record No. 1 Crossbar Offices	White	10-7/8" x 16-7/8"	Logging up to 10 displays

Use the forms listed in Table A as log sheets. There is one form for each trouble indicator and it should be kept at that frame. Record completely every display as soon as possible. Action taken on a trouble indication is usually the result of at least two similar displays entered on a log sheet. Without these entries, clearing a trouble may be delayed, or a trouble that displays very infrequently may never be identified.

TABLE B

FORM	NAME	COLOR	SIZE	USE
E-2621	No. 1 Crossbar Offices Originating Trouble Indicator Record	Blue	4" x 6"	Recording Individual Display Investigations
E-2622	No. 1 Crossbar Offices Terminating Trouble Indicator Record	Pink	4" x 6"	"
E-3610	No. 1 Crossbar Offices Controller Trouble Indicator Record	Buff	4" x 6"	"
E-3463	No. 1 Crossbar Offices Transverter Trouble Indicator Record	Cherry	4" x 6"	"

Use the forms listed in Table B as trouble tickets for all indications you investigate. They are a basic element of Qualitative Maintenance. On each ticket, enter a serial number, all details of the display, the trouble you find — if any, and the final disposition of the trouble. All data must be accurate and complete to permit detailed analysis.

2. PREPARING FORMS

2.01 Figs. 1, 2, 3 and 4 show the log sheets for each trouble indicator frame. The column headings agree with the indicator lamps reading left to right and top to bottom. When recording a display, place a check mark under the column heading for a lighted lamp. Write in the designation where a column serves two or more lamps. Spaces are available for date, time, trouble register readings, etc.

2.02 When a display, or the analysis of several displays, indicates a trouble condition, prepare a ticket. These tickets are shown in Figs. 5, 6, 7 and 8. Use the front of the ticket to enter the display data from the log sheet or directly from the indicator frame. Complete the front of the ticket by filling in spaces at top and bottom.

2.03 Fig. 9 explains how to use the back of the ticket for recording found trouble information in greater detail for further analysis. The upper part identifies the apparatus in trouble. Use check marks on the lower part to

show the type of trouble found. Enter more details if needed in Remarks.

3. ORDERING FORMS

3.01 These forms are packaged as shown below:

FORM #	FORMS PER PACKAGE
E-2623	100
E-2624	100
E-3110	50
E-3464	100
E-2621	250
E-2622	250
E-3610	250
E-3463	250

Order in multiples of the package units. Word requisitions like this:

(Quantity) Form E-()

OFFICE _____
DATE _____ SHEET NO. _____

CONTROLLER TROUBLE INDICATOR RECORD
NO. 1 CROSSBAR OFFICES

NO.	TI	TC	EM	CRL EM	SLF	CRL	LLT	LLU	CH	CT	CU	SW	VF	DG	DSG	D	SG	SGP	S	ON	OC	DS	OH	GH	SL	LLHAB	H	DC	RL	ANALYSIS	BY	TICKET NO.	TIME	DATE	NO.	
1																																				1
2																																				2
3																																				3
4																																				4
5																																				5
6																																				6
7																																				7
8																																				8
9																																				9
10																																				10
11																																				11
12																																				12
13																																				13
14																																				14
15																																				15
16																																				16
17																																				17
18																																				18
19																																				19
20																																				20
21																																				21
22																																				22
23																																				23
24																																				24
25																																				25
26																																				26
27																																				27
28																																				28
29																																				29
30																																				30
31																																				31
32																																				32
33																																				33
34																																				34
35																																				35
36																																				36
37																																				37
38																																				38
39																																				39
40																																				40
41																																				41
42																																				42
43																																				43
44																																				44
45																																				45
46																																				46
47																																				47
48																																				48
49																																				49
50																																				50

Fig. 3 - Controller Trouble Indicator Record, Form E-3110

E-2621 (6-60) PRINTED IN U.S.A.														NO. 1 CROSSBAR OFFICES ORIGINATING TROUBLE INDICATOR RECORD - NO. D										CODE					
OFFICE A														TIME B										DATE C		E			
TI	CT	DT	DR	GO	G100	RTR	DL-GO	DL-G100	SDT	CF	CN	CC	SN	OF															
TL	KEL			KOL		KER		KOR		G	GT1	GT3	GS	DF	SW														
M	JC			P		CHL		CHR		MI OR Z		MIPS OR ZJ1		MICK OR ZCK		ZO	ZL	ZK											
PS1	NC1	OT1	TC1	TCK	TP1	RP1	TPK	ZR	A	B	C	D	F																
AR	OF	TP	EA	LA	SGR	TDVK	CKG	K4	K5	SPE	SPO	NSE	NSO																
DK	AK	TKE	TK	SR	RL	MS	CK	BK	CHE	A	C	S	SL	B	MR	SIK	MRL	TK1											
ZS	Z	OT	TC	TP2			TM6	NM	RO	TB5	CRL	DT3	MR1	TRL	EC	X		SDT											
ANI	PTK	IT		AN	GO		G100		OB1	OB2	OB4	SD	SD1	OG1	OG2	OG4	OG5	SO	OBT										
BM		7DG		SK2	SK3	SG5	OB5	CR	CL	TW	MIO	M11	M12	M14	M17	ZL	MIN												
TROUBLE INDICATED G														TROUBLE FOUND H															
I CLEARED BY				TIME				DATE				TIME SPENT LOCATING AND CLEARING																	

Fig. 5

E-2622 (6-60) PRINTED IN U.S.A.														NO. 1 CROSSBAR OFFICES TERMINATING TROUBLE INDICATOR RECORD-NO. D										CODE					
OFFICE A														TIME B										DATE C		E			
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	ALG	LCF		LLG	LOG	HF	RF	TF																
CA	CB		IF	LC	M	CH	LJ	JPN	JP	JG																			
FS	MAN	TOL	CN	RC	RV	RP	TC	LIN	LTI	TIN	TTI	CF	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			EX	XOS	XALG	SDT	TCT	TRL	FCG											
XIK	X	XFC	XC	XHG	XIN	XOB	XR	XRL	XS	XSM	XTI	XTB	XTL	XL	XP	XF	XHB	XPS	XT-MB										
TROUBLE INDICATED G														TROUBLE FOUND H															
I CLEARED BY				TIME				DATE				TIME SPENT LOCATING AND CLEARING																	

Fig. 6

- NOTE
- A Office name or designation
 - B Time record is prepared
 - C Date record is prepared
 - D Trouble ticket serial number
 - E Central office trouble code

- NOTE
- F Spaces provided for display indications
 - G Trouble indicated
 - H Trouble found
 - I Trouble clearing details

E-3410 (6-60) PRINTED IN U.S.A.											NO. 1 CROSSBAR OFFICES CONTROLLER TROUBLE INDICATOR RECORD-NO. _____ (D)		CODE	
OFFICE _____ (A)			TIME _____ (B)				DATE _____ (C)				(E)			
TI	TC	EM	CRL EM	SLF	CRL	LLT	LLU	CH	CT	CU				
SW	VF	OG	DSG	D 0 1 2 3 4 5 6 7 8 9						SG	SGP			
S		ON	OC	DS	OH	GH	SL	LLH	AB	H	DC	RL		
TROUBLE INDICATED							TROUBLE FOUND							
(G)							(H)							
CLEARED BY _____ (I)			TIME _____		DATE _____		TIME SPENT LOCATING AND CLEARING _____							

Fig. 7

E-3463 (6-60) PRINTED IN U.S.A.											NO. 1 CROSSBAR OFFICES TRANSVERTER TROUBLE INDICATOR RECORD-NO. _____ (D)		CODE						
OFFICE _____ (A)			TIME _____ (B)				DATE _____ (C)				(E)								
TI	CT	TT	GR	G-O	G-100	DR	DRTE	DRTO	ORR	TRT	TRU	GT	GU						
RST	ST-MR		CF	CN	SN	DNT	DNU	CH	CT	CU									
SW	VF	AS	DOF	DTH	DH	DT	DU	A	B										
C	OT	TH	H	T	U	STA	F	CS	SGR	SL									
MI	XA	EXA	LA	TP	RP	PS	LV	2L	NSD	NCH	LO	MA	MB	MC					
MD	ME	MF	AA	XB	TV	IPA	OTO	HRI	AT	A	B	D	E	SP	ET				
XC	TEN	SDT	DST	TM	CKG	CK1	CK2	CK4	RGL	RK	DNK	ICK	TOK	CI4	CI3	CI2	IRY	CI1	
CI0	PS	RL	ARL	TRL	C	P	DTK	PT1	DTN	PT	PAK	PI	LC	DS	RD	TBL	PTS	TM2	TGR
OV	TCT	BSP	SPA	ASP	SKP	DA	HR	SC	RN	MO	MG	SY	NS	RT	LOL	LON	TA	LS	HL
CO	CI5	X	AM	VM	V3L	PA	CL	PSA	FT	NT	X	G-O		G-100					
											DL	DLT	DLR						
TROUBLE INDICATED							TROUBLE FOUND												
(G)							(H)												
CLEARED BY _____ (I)			TIME _____		DATE _____		TIME SPENT LOCATING AND CLEARING _____												

Fig. 8

- | | | | |
|------|------------------------------|------|---|
| NOTE | EXPLANATION | NOTE | EXPLANATION |
| (A) | Office name or designation | (F) | Spaces provided for display indications |
| (B) | Time record is prepared | (G) | Trouble indicated |
| (C) | Date record is prepared | (H) | Trouble found |
| (D) | Trouble ticket serial number | (I) | Trouble clearing details |
| (E) | Central office trouble code | | |

TROUBLE FOUND IN THIS OFFICE							
APPARATUS IN TROUBLE		RELAY	SWITCH NUMBER			OTHER APPARATUS	
FRAME NO.	DESIG.		LINE LINK	HOR.	HOLD ON		
UNIT NO.	CODE		SEN. LINK	VERT.	SEL. ON		
SD NO.	SPRING NOS.		OFF. LINK	SPRING NOS.			
APPARATUS DATE OF MANUFACTURE (IF ANY)			INC. LINK				
CONTACT TROUBLE (D)		ADJUSTMENT TROUBLE-ELECTRICAL (E)		DEFECTIVE APPARATUS (G)		WIRING (H)	
LOCK	OPERATE	NON OPERATE	OPEN WINDING	OPEN			
OPEN (DIRT)	HOLD	RELEASE	SHORT CKT. WINDING	LOOSE			
BRIDGE		OTHER	STOP PIN	SOLDER CROSS			
LARGE EROSION			ARMATURE	WIRE CROSS			
BUILD UP	ADJUSTMENT TROUBLE-MECHANICAL (F)		TRAVEL STUD	INCORRECT WIRING			
MISALIGNMENT	FOLLOW	STOP PIN WEAR	ARMATURE	APPARATUS TERMINAL			
CONTACT MISSING	TENSION	SPRING	TRAVEL NUT	TERMINAL STRIP			
OTHER	CONTACT SEPARATION	STUD WEAR	PILE-UP CROSS	SWITCHBOARD CABLE			
TUBE (I)	SPRING CLEARANCE	ARMATURE	SPOOLHEAD	LOCAL CABLE			
OPEN	STUD GAP	HINGE WEAR	CARD	SURFACE WIRING			
CONTACT	CARD GAP	POLE GAP	SPRING STUD	BARE WIRE			
INACTIVE		MATERIAL	COIL SPRING	EQUIP. FR. X CONN.			
OTHER		IN POLE GAP	SELECT FINGER	DISTRIB. FR. X CONN.			
		SEL. FINGER	OTHER	SOLDERLESS CONN.			
REMARKS:				POWER			
(J)				MOTOR			
				DRIVE MECH.			
				OTHER			

Fig. 9

Back of Forms E-2621, E-2622, E-3610, E-3463

NOTE	EXPLANATION	NOTE	EXPLANATION
(A)	Identity of equipment or apparatus in trouble	(F)	Adjustment trouble detail, mechanical
(B)	Cause of trouble	(G)	Defective apparatus detail
(C)	S.D. number and date of manufacture when required	(H)	Wiring trouble detail
(D)	Contact trouble detail	(I)	Tube trouble detail
(E)	Adjustment trouble detail, electrical	(J)	Details not covered above