

TROUBLE TICKETS STEP-BY-STEP OFFICES

1. GENERAL

1.01 This issue describes trouble tickets used for recording trouble data in Step-by-Step offices.

1.02 This section has been reissued to show changes in the trouble tickets. Arrows are omitted because this is a general revision.

1.03 Table A shows the forms used:

TABLE A

FORM	NAME	COLOR	SIZE	USE
E-4004	Step-by-Step Trouble Ticket	White	4" x 6"	To record reported troubles
E-4278	Step-by-Step Routine Trouble Ticket	Green	4" x 6"	To record routine troubles
E-2384	Referred Trouble Ticket	Yellow	4" x 6"	For an employee to refer information to another employee in same office

1.04 These trouble tickets are used for recording troubles, handling reports, clearing troubles, and recording detailed information on found trouble. It is important that *all* data pertinent to the handling of the report and trouble found be recorded on the ticket. This will permit detailed analysis for a good Qualitative Maintenance job.

1.05 **Class of Report:** To identify their origin, reports are classified as listed below:

- A — Customer Reports
- B — Reports from the Traffic Department
- D — Alarms
- J — Reports from Other Offices or Sources

1.06 **Issuing Trouble Tickets:** Tickets should be issued on all cases of trouble. These may be serially numbered. Use Step-by-Step

Trouble Ticket, Form E-4004, Fig. 1, to record reports made by customers, employees, another department or office, and to record alarms. Step-by-Step Routine Trouble Ticket, Form E-4278, is used to record troubles disclosed by routines, samplings, or observations. It may be used to record troubles which are disclosed by the use of Form E-338, Test and Inspection Record. If few troubles are indicated as a result of these tests, individual routine trouble tickets should be prepared. If a large number of troubles are indicated, essential details may be recorded on one blanket routine trouble ticket. These tickets should be cross-referenced to the Central Office Daily Log Sheet, Form E-4095, or to Form E-338. A Referred Trouble Ticket, Form E-2384, Fig. 3, may be issued when a defect is referred within the office for correction or for transmittal of other information to another employee in the same office.

SECTION 226-010-000

1.07 Trouble tickets may be used for recording tracing information on permanent signals and tracing connections incoming to, or outgoing from an office. These should be considered memoranda, and so designated in the "Trouble Found and Cause" space of the ticket. Exclude them from the trouble data unless a central office trouble condition is found.

2. PREPARATION OF FORMS

2.01 The front of Forms E-4004 and E-4278 provides space for information concerning the report or indication, equipment information, and a detailed description of the trouble found. It also provides spaces for reference of troubles, elapsed time, trouble codes, etc.

2.02 The back of the trouble ticket is arranged for recording found trouble data in greater detail for better analysis. The upper portion identifies the equipment in trouble while in the lower portion space is provided to show the nature of the trouble found. More details may be entered under "REMARKS."

2.03 Referred Trouble Ticket, Form E-2384, Fig. 3, provides space for recording the equipment in trouble, the trouble found and its cause, the removal of equipment from service, its referral and disposition and information referred to another employee. An associated ticket or job number may be recorded in order that the original ticket can be cleared from the Daily Log Sheet or job card.

2.04 Figures 1, 2, 3 and covering notes explain the entries to be made on the various tickets.

3. ORDERING FORMS

3.01 These forms are packaged as shown below:

FORM NO.	FORMS PER PACKAGE
E-4004	100
E-4278	100
E-2384	100

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

(Quantity) Form E-()

STEP BY STEP TROUBLE TICKET										OFFICE	TKT. NO.
	BAY OR GROUP	SWITCH	LEVEL	TRUNK OR TERMINAL	ASSOCIATED PARTY NOS.	DATE	TIME	REPT BY	CLASS OF REPT		
L.F. OR P.L.S.						←	←	←	←		
S.L.S. TAN OR TOLL SEL.						←	←	←	←		
1 SEL.					BUNCHING BLOCK						
2 SEL.					SWITCHBOARD						
					POS. CORD PAN & JK						
3 SEL.					OUT OR REP TRUNK						
4 SEL.					CABLE & PAIR - TRUNK						
5 SEL.					REPEATER OR LL EQ						
CONN.					MISCELLANEOUS						
REFERRED				LOCATED - CLEARED				CODE		POSTED	
TO	TIME	DATE	BY	TIME	DATE	BY	TIME SPENT	CENT OFF	STROKE REC	BY	DATE
←	←	←	←	←	←	←	←	←	←	←	←

Figure 1
Step-by-Step Trouble Ticket, Form E-4004
Front of Form

Note

Explanation

- A** Office name or designation
- B** Serial number
- C** Details of trouble report including Line Concentrator information
- D** Details concerning found trouble
- E** Referred and clearing time information
- F** Test center trouble code
- G** Central office trouble code for stroke record
- H** Posting information
- I** Spaces provided for recording report or tracing information

Step-by-Step Routine Trouble Ticket, Form E-4278 (Green), is similar to Form E-4004 (with the exception of the Class of Report space), and the above explanations also apply to the Routine Ticket.

TROUBLE FOUND IN THIS OFFICE																																																																															
APPARATUS IN TROUBLE																																																																															
EQUIPMENT _____	RELAY, SWITCH, OTHER SPRING ASSEMBLY, BANK & WIPER WIPER CORD, ETC.	TUBE _____	OTHER _____																																																																												
FRAME-BAY _____	DESIGNATION _____	_____	_____																																																																												
L. CONC. _____	CODE _____	_____	_____																																																																												
UNIT SW. CKT. _____	SPRINGS _____	_____	_____																																																																												
S.D. NO. _____	_____	_____	_____																																																																												
MFG. DATE (IF ANY) _____	_____	_____	_____																																																																												
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th style="width: 25%;">CONTACT TROUBLE (D)</th> <th style="width: 25%;">ADJUSTMENT TROUBLE-ELECTRICAL (E)</th> <th style="width: 25%;">DEFECTIVE APPARATUS (G)</th> <th style="width: 25%;">WIRING (H)</th> </tr> <tr> <td>WEAR _____</td> <td>OPERATE _____</td> <td>OPEN WINDING _____</td> <td>OPEN _____</td> </tr> <tr> <td>LOCK _____</td> <td>HOLD _____</td> <td>SHORT CKT. WINDING _____</td> <td>LOOSE _____</td> </tr> <tr> <td>OPEN (DIRT) _____</td> <td>NON OPERATE _____</td> <td>STOP PIN _____</td> <td>SOLDER CROSS _____</td> </tr> <tr> <td>BRIDGE _____</td> <td>RELEASE _____</td> <td>ARMATURE _____</td> <td>WIRE CROSS _____</td> </tr> <tr> <td>LARGE EROSION _____</td> <td>OTHER _____</td> <td>TRAVEL STUD _____</td> <td>INCORRECT WIRING _____</td> </tr> <tr> <td>BUILD UP _____</td> <td></td> <td>ARMATURE _____</td> <td>APPARATUS TERMINAL _____</td> </tr> <tr> <td>MISALIGNMENT _____</td> <td></td> <td>TRAVEL NUT _____</td> <td>TERMINAL STRIP _____</td> </tr> <tr> <td>CONTACT MISSING _____</td> <td></td> <td>PILE-UP CROSS _____</td> <td>SWITCHBOARD CABLE _____</td> </tr> <tr> <td>OTHER _____</td> <td></td> <td>SPOOLHEAD _____</td> <td>LOCAL CABLE _____</td> </tr> <tr> <td></td> <td></td> <td>CARD _____</td> <td>SURFACE WIRING _____</td> </tr> <tr> <td></td> <td></td> <td>SPRING STUD _____</td> <td>BARE WIRE _____</td> </tr> <tr> <td></td> <td></td> <td>COIL SPRING _____</td> <td>EQUIP. FR. X CONN. _____</td> </tr> <tr> <td></td> <td></td> <td>WIPER _____</td> <td>DISTRIB. FR. X CONN. _____</td> </tr> <tr> <td></td> <td></td> <td>BANK _____</td> <td>APPARATUS TERM. _____</td> </tr> <tr> <td></td> <td></td> <td>OTHER _____</td> <td>DIST. FR. TER. STRIP _____</td> </tr> <tr> <td></td> <td></td> <td></td> <td>EQUIP. FR. TER. STRIP _____</td> </tr> <tr> <td></td> <td></td> <td></td> <td>SOLDER TYPE _____</td> </tr> <tr> <td></td> <td></td> <td></td> <td>SOLDERLESS TYPE _____</td> </tr> </table>				CONTACT TROUBLE (D)	ADJUSTMENT TROUBLE-ELECTRICAL (E)	DEFECTIVE APPARATUS (G)	WIRING (H)	WEAR _____	OPERATE _____	OPEN WINDING _____	OPEN _____	LOCK _____	HOLD _____	SHORT CKT. WINDING _____	LOOSE _____	OPEN (DIRT) _____	NON OPERATE _____	STOP PIN _____	SOLDER CROSS _____	BRIDGE _____	RELEASE _____	ARMATURE _____	WIRE CROSS _____	LARGE EROSION _____	OTHER _____	TRAVEL STUD _____	INCORRECT WIRING _____	BUILD UP _____		ARMATURE _____	APPARATUS TERMINAL _____	MISALIGNMENT _____		TRAVEL NUT _____	TERMINAL STRIP _____	CONTACT MISSING _____		PILE-UP CROSS _____	SWITCHBOARD CABLE _____	OTHER _____		SPOOLHEAD _____	LOCAL CABLE _____			CARD _____	SURFACE WIRING _____			SPRING STUD _____	BARE WIRE _____			COIL SPRING _____	EQUIP. FR. X CONN. _____			WIPER _____	DISTRIB. FR. X CONN. _____			BANK _____	APPARATUS TERM. _____			OTHER _____	DIST. FR. TER. STRIP _____				EQUIP. FR. TER. STRIP _____				SOLDER TYPE _____				SOLDERLESS TYPE _____
CONTACT TROUBLE (D)	ADJUSTMENT TROUBLE-ELECTRICAL (E)	DEFECTIVE APPARATUS (G)	WIRING (H)																																																																												
WEAR _____	OPERATE _____	OPEN WINDING _____	OPEN _____																																																																												
LOCK _____	HOLD _____	SHORT CKT. WINDING _____	LOOSE _____																																																																												
OPEN (DIRT) _____	NON OPERATE _____	STOP PIN _____	SOLDER CROSS _____																																																																												
BRIDGE _____	RELEASE _____	ARMATURE _____	WIRE CROSS _____																																																																												
LARGE EROSION _____	OTHER _____	TRAVEL STUD _____	INCORRECT WIRING _____																																																																												
BUILD UP _____		ARMATURE _____	APPARATUS TERMINAL _____																																																																												
MISALIGNMENT _____		TRAVEL NUT _____	TERMINAL STRIP _____																																																																												
CONTACT MISSING _____		PILE-UP CROSS _____	SWITCHBOARD CABLE _____																																																																												
OTHER _____		SPOOLHEAD _____	LOCAL CABLE _____																																																																												
		CARD _____	SURFACE WIRING _____																																																																												
		SPRING STUD _____	BARE WIRE _____																																																																												
		COIL SPRING _____	EQUIP. FR. X CONN. _____																																																																												
		WIPER _____	DISTRIB. FR. X CONN. _____																																																																												
		BANK _____	APPARATUS TERM. _____																																																																												
		OTHER _____	DIST. FR. TER. STRIP _____																																																																												
			EQUIP. FR. TER. STRIP _____																																																																												
			SOLDER TYPE _____																																																																												
			SOLDERLESS TYPE _____																																																																												
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th style="width: 25%;">TUBE (I)</th> <th style="width: 25%;">ADJUSTMENT TROUBLE-MECHANICAL (F)</th> <th colspan="2"></th> </tr> <tr> <td>OPEN _____</td> <td>FOLLOW _____</td> <td colspan="2">STOP PIN WEAR _____</td> </tr> <tr> <td>CONTACT _____</td> <td>TENSION _____</td> <td colspan="2">SPRING _____</td> </tr> <tr> <td>INACTIVE _____</td> <td>CONTACT SEPARATION _____</td> <td colspan="2">STUD WEAR _____</td> </tr> <tr> <td></td> <td>SPRING CLEARANCE _____</td> <td colspan="2">ARMATURE _____</td> </tr> <tr> <td></td> <td>STUD GAP _____</td> <td colspan="2">HINGE WEAR _____</td> </tr> <tr> <td></td> <td>CARD GAP _____</td> <td colspan="2">POLE GAP _____</td> </tr> <tr> <td></td> <td>SNAG _____</td> <td colspan="2">MATERIAL _____</td> </tr> <tr> <td></td> <td>PAWL _____</td> <td colspan="2">IN POLE GAP _____</td> </tr> <tr> <td></td> <td>SHAFT _____</td> <td colspan="2"></td> </tr> <tr> <td></td> <td>DOG _____</td> <td colspan="2"></td> </tr> <tr> <td></td> <td>WIPER _____</td> <td colspan="2">SPRING _____</td> </tr> <tr> <td></td> <td>BANK _____</td> <td colspan="2">OTHER _____</td> </tr> </table>				TUBE (I)	ADJUSTMENT TROUBLE-MECHANICAL (F)			OPEN _____	FOLLOW _____	STOP PIN WEAR _____		CONTACT _____	TENSION _____	SPRING _____		INACTIVE _____	CONTACT SEPARATION _____	STUD WEAR _____			SPRING CLEARANCE _____	ARMATURE _____			STUD GAP _____	HINGE WEAR _____			CARD GAP _____	POLE GAP _____			SNAG _____	MATERIAL _____			PAWL _____	IN POLE GAP _____			SHAFT _____				DOG _____				WIPER _____	SPRING _____			BANK _____	OTHER _____																									
TUBE (I)	ADJUSTMENT TROUBLE-MECHANICAL (F)																																																																														
OPEN _____	FOLLOW _____	STOP PIN WEAR _____																																																																													
CONTACT _____	TENSION _____	SPRING _____																																																																													
INACTIVE _____	CONTACT SEPARATION _____	STUD WEAR _____																																																																													
	SPRING CLEARANCE _____	ARMATURE _____																																																																													
	STUD GAP _____	HINGE WEAR _____																																																																													
	CARD GAP _____	POLE GAP _____																																																																													
	SNAG _____	MATERIAL _____																																																																													
	PAWL _____	IN POLE GAP _____																																																																													
	SHAFT _____																																																																														
	DOG _____																																																																														
	WIPER _____	SPRING _____																																																																													
	BANK _____	OTHER _____																																																																													
REMARKS (J)																																																																															

Figure 2
Back of Form E-4004

- | Note | Explanation | Note | Explanation |
|----------|---|----------|---------------------------------------|
| A | The purpose of the upper portion of this form is to provide specific identification of the equipment or apparatus in trouble. | D | Contact trouble detail |
| B | The lower portion of the form provides a means whereby the cause of the trouble can be identified by one or more checks or crosses. | E | Adjustment trouble detail, electrical |
| C | S.D. number and manufacturing date should be filled in only when specifically required. | F | Adjustment trouble detail, mechanical |
| | | G | Defective apparatus detail |
| | | H | Wiring trouble detail |
| | | I | Tube trouble detail |
| | | J | Details not covered above |

Step-by-Step Routine Trouble Ticket, Form E-4278 (Green), is similar to Form E-4004, and the above explanations also apply to the Routine Ticket.

FORM E-2384 (3-61)

REFERRED TROUBLE TICKET

TKT. NO.

OFFICE (A)		DATE (B)		TIME (C)		ISSUED BY (D)			
REFERRED FROM				(H) TROUBLE FOUND AND CAUSE					
TICKET NO.		ROUTINE JOB NO.						OTHER	
T		(E)							
R									
I									
EQUIPMENT (F)				(H)					
TROUBLE (G)									
REMOVED FROM SERVICE			(O) TIME SPENT	CLEARED					
BY (I)	DATE (J)	TIME (K)		BY (P)	DATE (Q)	TIME (R)			
REFERRED				RESTORED TO SERVICE					
TO (L)	DATE (M)	TIME (N)	BY (S)	DATE (T)	TIME (U)				

PRINTED IN U.S.A.

Figure 3
Referred Trouble Ticket, Form E-2384

- | | |
|--|---|
| <p>Note</p> <p>A Name of office</p> <p>B Date report referred</p> <p>C Time report referred</p> <p>D Initials of person issuing ticket</p> <p>E Ticket or job from which referred</p> <p>F Designation of equipment in trouble</p> <p>G Trouble details</p> <p>H Details of trouble found and its cause</p> <p>I Initials of person who removes equipment from service</p> <p>J Date equipment removed from service</p> | <p>Note</p> <p>K Time equipment removed from service</p> <p>L Initials of person to whom referred</p> <p>M Date trouble is referred</p> <p>N Time trouble is referred</p> <p>O Total time spent clearing trouble</p> <p>P Initials of individual who cleared trouble</p> <p>Q Date trouble cleared</p> <p>R Time trouble cleared</p> <p>S Initials of person who restored service</p> <p>T Date equipment restored to service</p> <p>U Time equipment restored to service</p> |
|--|---|