

## TRAFFIC USAGE RECORDER SD-95738-01

### CROSS-CONNECTION AND ASSIGNMENT DATA FORMS

#### 1. GENERAL

**1.01** This section describes suggested forms for recording cross-connection and assignment data for the traffic usage recorder (TUR). The forms show register switch, auxiliary measuring circuit, and detector cross-connections, location of subscriber lines and trunk groups on which use is being measured, assignment of trunk tie cables, and TUR converter encoder assignment.

**1.02** This section replaces Section 201-414-301, Issue 2. The existing E- forms have been cancelled and covered as suggested forms. New suggested forms have been added to cover the TUR converter encoder.

**1.03** The suggested forms are:

◆Fig. 1 and 1A◆ —Register Switch Cross-Connection Record

◆Fig. 2◆ —Detector Cross Connections

◆Fig. 3 and 3A◆ —Auxiliary Measuring Circuit Cross Connections

◆Fig. 4 and 4A◆ —Trunk Group Locating Chart and Sub Line Locating Chart

◆Fig. 5◆ —Assignment of Trunk Tie Cable

◆Fig. 6◆—Encoder Assignment Chart◆

**1.04** ED-92813-01 provides page-size charts for Western Electric Company recording of all permanently cabled items.

#### 2. CROSS-CONNECTION RECORD

◆Fig. 1 and 1A◆ —Register Switch Cross-Connection Record

**2.01** This form provides a record of the cross connections for each terminal in the group of 100 terminals associated with a particular TUR

switch and contact number. Prepare one form for each contact used on a switch, a maximum of six forms per switch.

#### Headings

**2.02** *TUR Frame*: Enter the number of the TUR frame.

**2.03** *Switch*: Enter the number of the associated pair of scan and register switches.

**2.04** *Contact*: Identify the individual contact number.

**2.05** *RG*: When register grouping is provided, indicate the number of the RG- key which must be operated to associate the traffic registers with this group of 100 terminals.

**2.06** *Trunk Group, Sub Line Loc or Eqpt Frame No.*: Identify the type of connecting circuit associated with each contact of each crosspoint of the switch.

**2.07** *Ckt No.*: Enter the individual circuit or trunk number.

**2.08** ◆*CO EQUIP—TS-PCHG*◆: Enter terminal number and punching number of central office equipment.◆

**2.09** *VXC, HXC Pchg*: This space shows the common interswitch punchings used where the grouping of leads extends over more than one switch.

**2.10** *Reg Pchg*: Indicate the number of the register punching used at the TUR frame.

**2.11** ◆*Inductor/Diode No.*◆: (Fig. 1A only) Show the number assigned to the inductor/diode pair for each encoder input which is paralleled by a traffic register.◆

## SECTION 252-122-301

**2.12** **Encoder—P-No.—G-Term.:** (Fig. 1A only)  
Show the encoder P lead number and G terminal number assigned.¶

**2.13** **TR Reg:** Show the number of the traffic register assigned.

### ¶Fig. 24 —Detector Cross-Connections

**2.13** This form provides a record of all cross-connections associated with the detectors of one TUR frame.

#### Headings

**2.15** **TUR Frame:** Enter the number of the TUR frame.

#### **2.16** **Detector Inputs and outputs:**

**DA- to S-:** Show the cross-connection of the detector input terminals (DA-) to the scan switch terminals (S00-55). See DA- to XTA-. The first of the two digits listed in the S- column represents the contact number; the second of the two digits listed in the S- column represents the switch number.

**DA- to XTA-:** Where one or more of the scan switch terminals associated with a particular contact are cross-connected to the DA- punching of one of the detectors 6 through 11, show the cross-connection of the XTA- punching of this detector to the DA- punching of the detector to which the other scan switch terminals associated with the contact are connected.

**D- to R-:** Show the cross-connection of the detector output terminals (D-) to the register switch terminals (R00-55). The first of the two digits listed in the R- column represents the contact number; the second of the two digits listed in the R- column represents the switch number. When the association of a detector output with one or more register switch leads is controlled by the register grouping or limited scan feature, a check (✓) is placed in the "See RG/LS" column. Show the cross-connection details on the Register Grouping and Limited Scan Control chart (see 2.14).

**D- to XTB-:** Show the cross-connection of the detector output terminals to the XTB- terminals of detectors 6 through 11. See DA- to XTA-.

**See RB/LS:** Place a check (✓) in this column when a detector output is controlled by the register grouping or limited scan feature. See D- to R-.

#### **2.17** **Register Grouping and Limited Scan Control:**

**D- or LS- to GA1-, GB1-, GC1-, GD1-, R-:** Show the cross-connection of the detector output terminals (D-) or the limited scan terminals (LS-) to the register grouping key input terminals (GA1- to GD1-) or to the register switch terminals (R00-55).

**GA- to R-, GB- to R-, GC- to R-, GD- to R-:** Show the cross connection of the register grouping key output terminals (GA- to GD-) to the register switch terminals (R00-55).

#### **2.18** **Detector Group Usage:**

**DU- to DGU-:** These spaces show the cross-connection of the detector usage punchings (DUA- and DUB-) to the detector group usage register punchings (DGU-).

**DR- to A, B, or DGU-:** These spaces show the cross-connection of the detector usage punchings (DR-) to punchings (A, B, or DGU-).

**A- or B- to DGU-:** These spaces show the cross-connection of punchings (A0-5 and B0-5) to the detector group usage register punchings (DGU-).

### ¶Fig. 3 and 3A¶ —Auxiliary Measuring Circuit Cross Connections

**2.19** This form provides a record of cross-connections associated with auxiliary measuring circuit.

#### Headings

**2.20** **TUR FR:** Enter the number of the TUR frame.

**2.21** **AUX MEAS CKT:** Indicates the number of the auxiliary measuring circuit. The number of the auxiliary measuring circuit and associated pair of scan and register switches should be the same.

**2.22** **SW:** Indicates the number of the switch pair.

- 2.23 RG-:** When register grouping is provided, indicate the number of the RG- key which must be operated. When register grouping is not provided, enter the digit 1.
- 2.24 TR REG-:** Enter the number of the traffic register.
- 2.25 P-No.:** (Fig. 3A only) Enter encoder P lead number.◀
- 2.26 G-Term.:** (Fig. 3A only) Enter encoder G terminal number.◀
- 2.27 TRUNK:** Enter the trunk group number and the trunk number.
- 2.28 1ST APPR:** Enter three digits for trunk's first appearance on the switch: the first digit is the contact number, the second digit is the switch level number, and the third digit is the switch vertical number.
- 2.29 2ND APPR:** Enter three digits for trunk's second appearance. See 2.24.

### 3. ASSIGNMENT DATA RECORD

#### ▶Fig. 4 and 4A◀ —Trunk Group Locating Chart—Sub Line Locating Chart

**3.01** This form provides a record of each trunk group designation or each subscriber line location on which use is being measured and the location of each on the TUR frame. For the exact terminal location of a particular trunk or subscriber line, refer to ▶Fig. 1 or 1A◀ covering the individual frame, switch, and contact number involved.

#### Headings

**3.02 Trunk Group or Sub Line Location:** List each trunk group designation or subscriber line location associated with the TUR; list trunk groups in alphabetical order and subscriber line locations in numerical order by columns.

**3.03 Trk or Line No:** Show the trunk numbers for each trunk group or the subscriber line number. Where a trunk group appears on two or more switches at the TUR frame, list the trunk numbers associated with each appearance separately.

**3.04 TUR Location—Fr, Sw, and Cont:** List the TUR location by frame, switch, and contact number of each trunk group or subscriber line being measured.

**3.05 Encoder—P-No.—G-Term.:** (Fig. 4A only) Show the encoder P lead number and G terminal number assigned.◀

**3.06 TR REG:** Show the number of the traffic register assigned.

#### ▶Fig. 5◀ —Assignment of Trunk Tie Cable

**3.07** This form provides a record of the outgoing or incoming trunk group designation and trunk number assigned to each lead in the tie cable. It will cover 100 leads in the tie cable between a given TUR switch and a distributing frame.

#### Headings

**3.08 TUR Frame:** Enter the number of the TUR frame.

**3.09 Switch:** Enter the number of the associated pair of scan and register switches.

**3.10 Contact:** Identify the individual contact number.

**3.11 D.F.:** Enter the letter identifying the distributing frame on which the tie cable block appears, i.e., M for main, I for intermediate, etc.

**3.12 Blk Loc.:** Show the location of the terminal block on the distributing frame by vertical and horizontal shelf designation.

**3.13 Ckt. No.:** Show the number of the tie cable circuit (conductor) at the distributing frame end.

**3.14 Trunk Group:** List the trunk group according to its appearance on the TUR.

**3.15 Trk No.:** Enter the trunk number.

#### ▶Fig. 6—Encoder and Register Assignment Chart◀

**3.16** ▶This form provides a record of the group of circuits or trunks assigned to each TUR

**SECTION 252-122-301**

converter encoder input listed by either encoder G terminal number or P lead number.♦

**Headings**

**3.17 ♦TUR Frame:** Enter the number of the TUR frame which contains the converter.♦

**3.18 ♦Converter:** Enter the number assigned to the converter.♦

**3.19 ♦Encoder—G-Term.—P-No.:** Enter each encoder G terminal number and P lead number in numerical order.♦

**3.20 ♦TR Reg:** Enter the number of the traffic register, if traffic register is provided.♦

**3.21 ♦Circuit or Trunk Group:** Identify the group of circuits or trunks associated with each encoder input.♦

**3.22 ♦No. Trks or Ckts in Group:** Enter the number of trunks or circuits that make up the group.♦

TRAFFIC USAGE RECORDER  
REGISTER SWITCH  
CROSS CONNECTION RECORD

TUR FRAME _____		SWITCH _____		CONTACT _____		RG. _____		OFFICE _____							
H-V	TRUNK GROUP, SUB LINE LOC OR EQPT FRAME NO.	CKT NO.	C.O. EQPT		VXC, HXC PCHG	REG PCHG	TR REG	H-V	TRUNK GROUP, SUB LINE LOC OR EQPT FRAME NO.	CKT NO.	C.O. EQPT		VXC, HXC PCHG	REG PCHG	TR REG
			TS	PCHG							TS	PCHG			
49								99							
48								98							
47								97							
46								96							
45								95							
44								94							
43								93							
42								92							
41								91							
40								90							
39								89							
38								88							
37								87							
36								86							
35								85							
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07								57							
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05								55							
04								54							
03								53							
02								52							
01								51							
00								50							

Fig. 1

CONVERTER ENCODER EQUIPPED  
 TRAFFIC USAGE RECORDER  
 REGISTER SWITCH  
 CROSS CONNECTION RECORD

TUR FRAME _____												SWITCH _____		CONTACT _____		RG. _____		OFFICE _____					
H-V	TRUNK GROUP, SUB LINE LOC OR EQPT FRAME NO.	CKT NO.	C.O. EQPT		VXC, HXC PCHG	REG PCHG	INDUCTOR/ DIODE NO.	ENCODER		TR REG	H-V	TRUNK GROUP, SUB LINE LOC OR EQPT FRAME NO.	CKT NO.	C.O. EQPT		VXC, HXC PCHG	REG PCHG	INDUCTOR/ DIODE NO.	ENCODER		TR REG		
			TS	PCHG				P- NO.	G-TERM.					TS	PCHG				P NO.	G-TERM.			
49											99												
48											98												
47											97												
46											96												
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44											94												
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00											50												

Fig. 1A











TRAFFIC USAGE RECORDER  
ASSIGNMENT OF TRUNK TIE CABLE

OFFICE \_\_\_\_\_

TUR FRAME _____ SWITCH _____ CONTACT _____ D.F.									
H-V	BLK LOC	CKT NO.	TRUNK GROUP	TRK NO.	H-V	BLK NO.	CKT NO.	TRUNK GROUP	TRK NO.
49					99				
48					98				
47					97				
46					96				
45					95				
44					94				
43					93				
42					92				
41					91				
40					90				
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01					51				
00					50				

Fig. 5

