

# J99343FB-1, L1 DX OR E&M TO LOOP START SIGNALING CONVERTER

## DATA SHEET

### METALLIC FACILITY TERMINAL

The J99343FB-1, L1 is a duplex or E&M to loop start signaling converter. The unit is used in conjunction with DX or E&M signaling units at the subscriber end of a loop start special service circuit. For a detailed description of this unit, see Section 332-911-105, CD-1C359-01, and SD-1C359-01 (CPS 35). A block diagram is shown in Fig. 1 and switch locations are shown in Fig. 2.

**ERV:** When in the NOR position, with screw switches ML1 and ML2 down, type I interface is provided. The RV position is used with certain carrier systems to invert the facility input signals.

**R BAL:** These screw switches select the variable portion of balance resistance. This resistance is the

sum of the conductor loop resistance plus the resistance of the associated and far end transmission units. When the switches are down, the resistors are shorted. Resistance is added by turning the screw switches up.

**C BAL:** These screw switches adjust the balance capacitance. The balance capacitance is equal to the sum of the loop conductor capacitance, plus transmission unit midpoint capacitance, plus 1  $\mu$ F. When the screw switches are up, the capacitors are open-circuited. Capacitance is added to the circuit by turning the screw switches down.

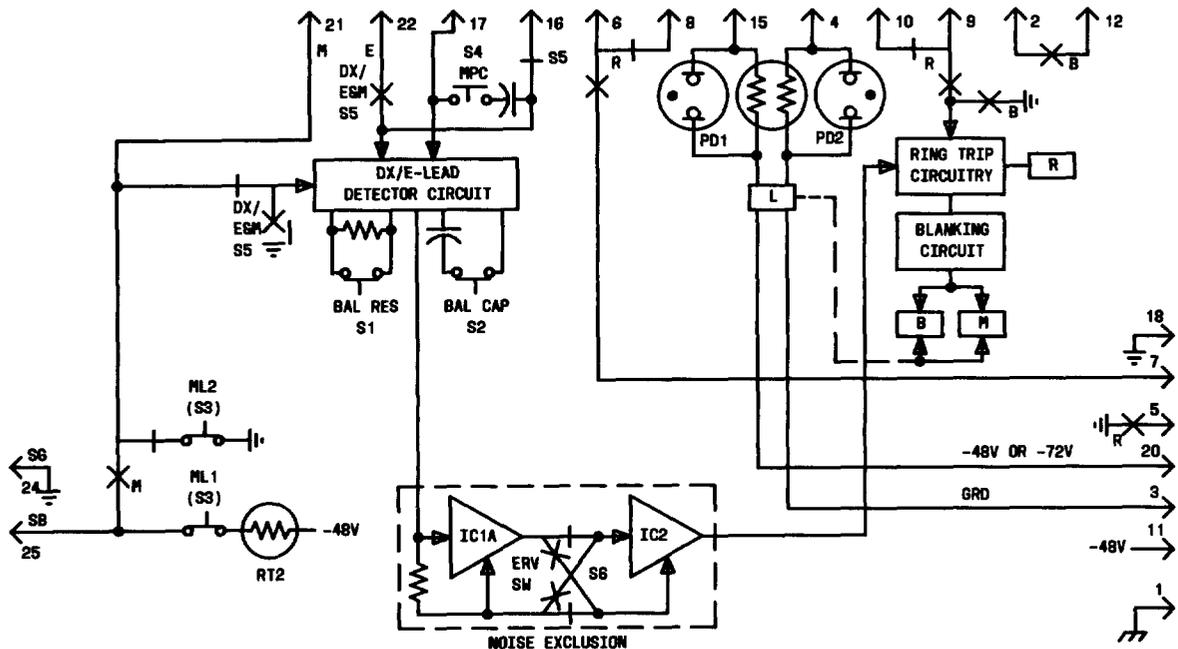


Fig. 1 — J99343FB-1, L1 Block Diagram

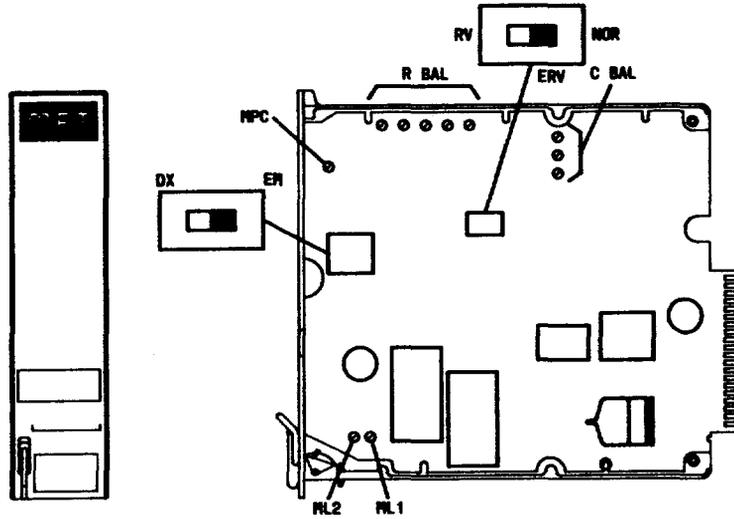


Fig. 2—J99343FB-1, L1 Component Layout

**MPC:** This switch connects a 4  $\mu$ F midpoint capacitor across the DX signal path (A&B leads). This capacitor should be used when transmission unit midpoint capacitance is less than 2  $\mu$ F or with 4-wire circuits. When the screw switch is down, the capacitor is connected. The capacitor is disconnected when the screw switch is up.

**DX/EM:** This switch is used to select either DX or E&M mode. The ML1 and ML2 screw switches must be set properly for DX or E&M mode.

**ML1 and ML2:** These screw switches are used in conjunction with the DX/EM switch. The switches should be set as shown in Table A.

TABLE A			
SIGNALING MODE	SWITCH POSITION		
	ML1	ML2	DX/EM
DX	DOWN	DOWN	DX
TYPE I E&M	DOWN	DOWN	E&M
TYPE II E&M	UP	UP	E&M