

J99343FA-1, L2 LOOP START TO DX OR E&M SIGNALING CONVERTER

DATA SHEET

METALLIC FACILITY TERMINAL

The **J99343FA-1, L2** is a loop start to duplex (DX) or E&M signaling converter. The unit is used in conjunction with DX or E&M signaling units at the central office 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 49). A block diagram is shown in Fig. 1 and switch locations are shown in Fig. 2.

BOR: This switch adds 511 ohms to the central office loop when the switch is up.

MRV NOR/RV: This switch is used to interchange the GRD/BATT signaling state of the M-lead. When the switch is set to NOR, the M lead is grounded. When the switch is set to RV, the M-lead is connected to the battery.

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 μF . When the screw switches are up, the capacitors are **open-circuited**. Capacitance is added to the circuit by turning the screw switches down.

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

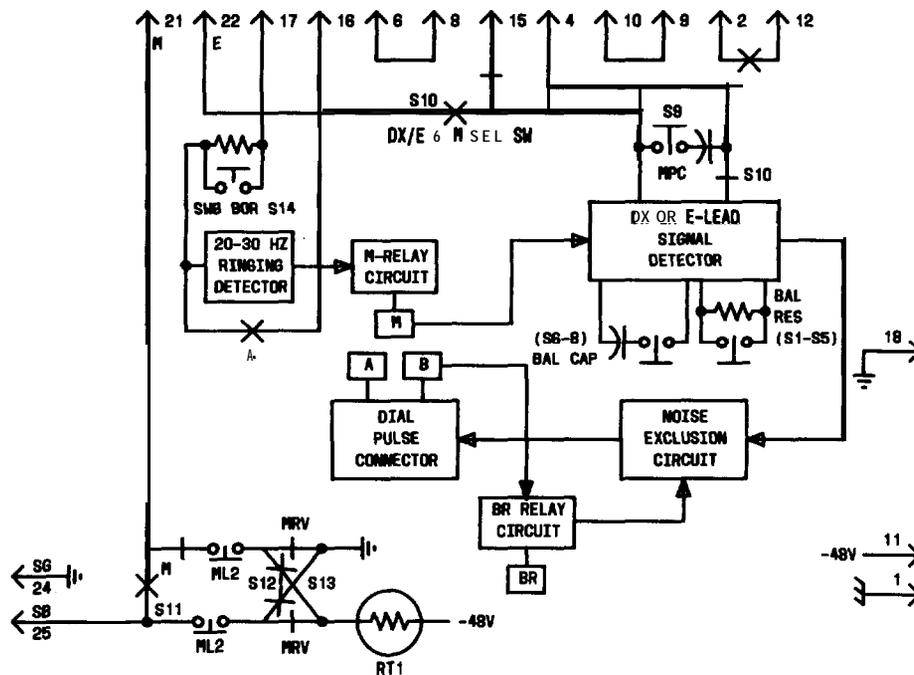


Fig. 1 — J99343FA-1, L2 Block Diagram

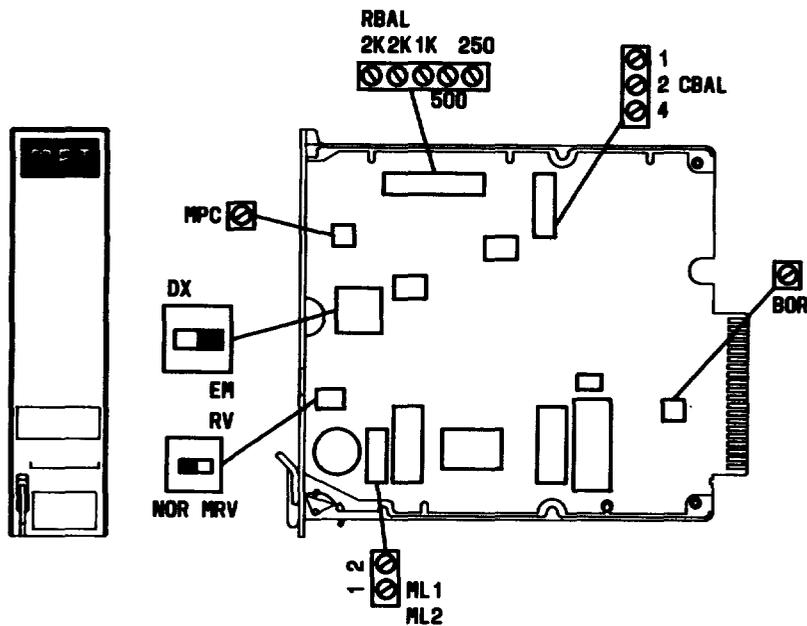


Fig. 2—J99343FA-1, L2 Component Layout

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.

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 TYPE I E&M TYPE II E&M | DOWN DOWN UP | DOWN DOWN UP | DX E&M E&M |