J99343GL 2-2 WIRE INTERMEDIATE REPEATER (NL/NL) / (LS/GS) CFU MTC2360

DATA SHEET

METALLIC FACILITY TERMINAL

The J99343GL unit is a 2-2 wire intermediate repeater/loop signaling repeater combined function unit (CFU). The GL CFU provides the functions of the J99343AF loop signaling repeater unit and the J99343PD 2-2 wire intermediate repeater (NL-NL). The GL CFU provides regeneration of ground-start signals and hybrid balance for the nonloaded facilities on the A-side and B-side. The GL unit also provides loop-start signaling except with systems which use floating battery.

The GL CFU can be used in either a single- or a double-module mounting arrangement. This unit can be mounted in any slot of a single-module shelf or in the transmission slot of a double-module shelf. When the GL CFU is used in the double-module arrangement, the unit is mounted in the transmission slot and the companion signaling unit slot must be vacant. For detailed description of this unit, see Section 332-912-160 and drawings CD- and SD-X050-01 (CPS 24). Figure 1 illustrates the block diagram and lead plan of the J99343GL unit. Figure 2 shows the location of the switches.

GAIN ADJ and 8DB: Five miniature switches (GAIN ADJ) and a group of four internal switches (8DB) control the gain of the repeater. The GAIN ADJ switches, accessible through the front panel, are labeled .25, .50, 1.0, 2.0, and 4.0. These switches are ganged to provide the same gain in both directions of transmission. The 8DB switches, located on the printed wiring board, can provide 8 dB of additional gain in each direction. The maximum gain, including equalizer gain, should be limited to 12 dB for intermediate repeater applications.

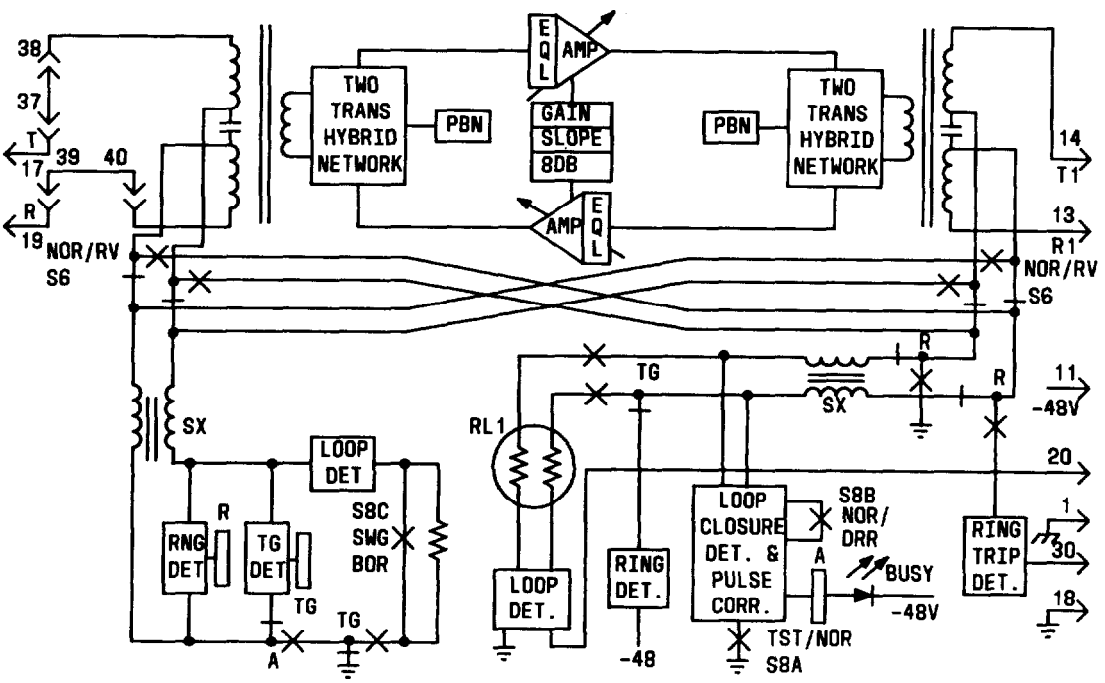
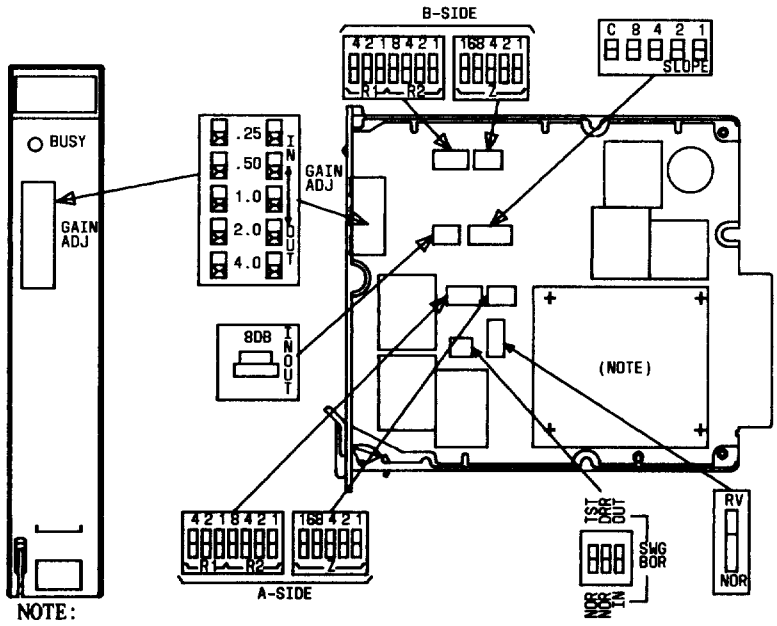


Fig. 1 -Block Diagram of J99343GL CFU



NOTE:
1. Daughter printed wiring board using Bergstik connector contain ground-start components.

Fig. 2—Illustration of J99343GL Showing Location of Switches

SLOPE: The slope control consists of five rocker switches. The slope control adjusts the slope equalization in both directions of transmission simultaneously. The slope adjustments can be found in Section 332-912-211.

PBN: The PBN controls consist of 12 switches. These switches are labeled R2, R1, and Z. The adjustments can be found in Section 332-911-212.

TST-NOR: In the TST position, continuous power is supplied to the transmission portion of the repeater. In the NOR position, the power to the transmission portion is controlled by the signaling section. The NOR position is used during normal operation.

NOR-RV: In the NOR position, the switching equipment signaling interface is on the A-side and the station line feed is on the B-side. In the RV position, the A- and B-sides are interchanged. This switch only affects the signaling path.

NOR-DRR: The distinctive ringing reject (DRR) switch selects the ringing mode. In the NOR position, which is recommended for most applications, the unit will detect and regenerate all standard ringing patterns. In the DRR position, ring pings are ignored and any ringing signaling exceeding 140 milliseconds in duration, including distinctive ringing patterns, will be converted into a standard 2-second ringing interval.

SWG BOR: When this switch is operated to the IN position, switch-side loop current is limited. When operated to the OUT position, maximum signaling range is provided.