tellabs
technical manual
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rev A

practice section 819906
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9906 Reverse Battery Adapter Subassembly

contents

1. description/application

1.01 The Tellabs 9906 Reverse Battery Adapter Subassembly (figure 1) is designed to regenerate reverse battery signals from the office end of a trunk circuit toward the station end. Currently, the 9906 Adapter is used exclusively on the Tellabs 7503 Dial Long Line (DLL) module to extend the range of reverse battery supervision on long loop Foreign Exchange (FX) or Off-Premise-Extension (OPX) circuits.

1.02 The 7503 DLL Module, when optioned with the 9906 Subassembly, regenerates signaling and supervision to increase the range of a loop-start central office or PBX line circuit, or a ground-start PBX-to-central-office trunk. The 9906 is most commonly used on the 7503 in toll diversion and answer supervision applications. For a more detailed description of the 7503 Module, refer to the Tellabs' 7503 DLL Module Practice.

1.03 The reverse-battery sensing circuitry of the 9906 Subassembly requires a minimum of 15mA of current from the central office, or from the next switching-side 9906 when used in tandem applications. This current requirement may therefore limit the 7503's maximum signaling range, which, when the 9906 is not provided, is determined by the range of the central office equipment.

1.04 As a subassembly, the 9906 Adapter mounts in "piggyback" fashion to the printed circuit board of the 7503 DLL module. Mounting the 9906 to the 7503 module is accomplished via two connectors (one 6-pin and one 3-pin) that provide electrical as well as physical connection. The 9906 Subassembly derives both its input power and extended reverse battery power from the host (7503) module.

2. installation

inspection

2.01 The 9906 Reverse Battery Adapter Subassembly should be visually inspected upon arrival in order to find possible damage incurred during shipment. If damage is noted, a claim should immediately be filed with the carrier. If stored, the module should be visually inspected again prior to installation.

mounting

2.02 Installing the 9906 consists of plugging the Subassembly, via its two connectors, onto the 7503 module. The mating receptacles are located immediately behind the front panel of the 7503 module. Ensure that the connector pins are firmly seated in the receptacles.

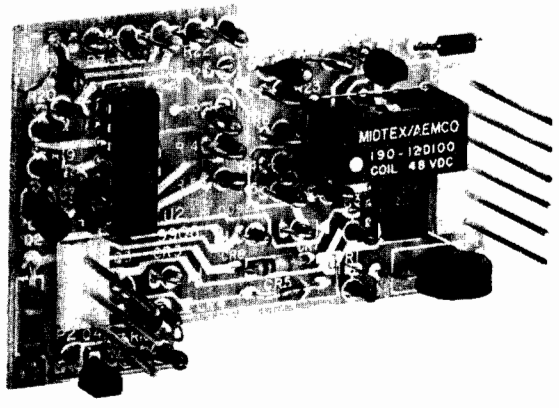


figure 1. 9906 Reverse Battery Adapter Subassembly

2.03 The 9906 Subassembly has no options and requires no alignment. However, the 7503 module must be switch-optioned for use with or without the 9906. Switch *S9* should be set to the *in* position if the 9906 Subassembly is used and to the *out* position if the Subassembly is not required. Refer to the 7503 DLL module Practice for more detailed information regarding switch optioning.

4. specifications

input power
−48Vdc, 40mA maximum

loop current detector sensitivity
minimum 15mA loop current

reverse battery detection delay
100ms

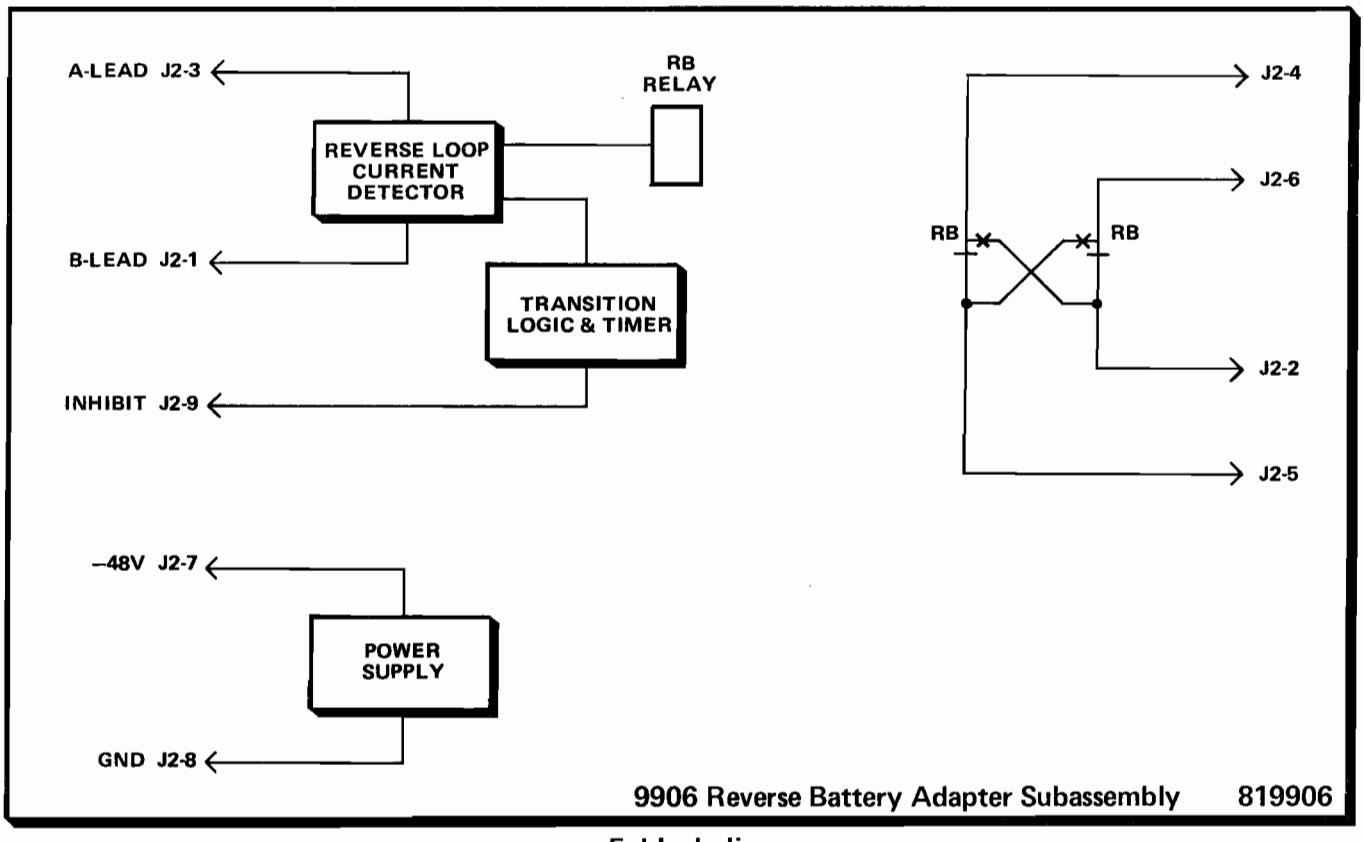
weight
1.5 ounces (42 grams)

dimensions
2.0" (5.1cm) x 3.0" (7.6cm) x 0.6" (1.5cm)

mounting
mounts as subassembly on Tellabs 7503 Module

5. testing and troubleshooting

5.01 This Testing Guide may be used to assist in the installation, testing or troubleshooting of the 9906 Reverse Battery Adapter Subassembly. The Testing Guide is intended as an aid in the localization of trouble to a specific unit. If a unit is suspected of being defective, a new unit should be substituted and the test conducted again. If the



5. block diagram

substitute unit should be considered defective and returned to Tellabs for repair or replacement. It is strongly recommended that no internal (component level) testing or repairs be attempted on the 9906. Unauthorized testing or repairs may void the 9906 warranty.

5.02 To test the 9906 Subassembly, the Subassembly must be installed and tested in conjunction with the 7503 Module. Refer to the 7503 Module's Testing Guide Checklist for detailed information on testing procedures relevant to the 9906 Subassembly.

5.03 If a situation arises that is not covered in the Checklist, contact Tellabs Customer Service at (312) 969-8800 for further assistance.

5.04 If a 9906 is diagnosed as defective, the situation may be remedied by either *replacement* or *repair and return*. Because it is the more expedient method, the *repacement* procedure should be followed whenever time is a critical factor (e.g., service outages, etc.).

replacement

5.05 If a defective 9906 is encountered, notify Tellabs via telephone [(312) 969-8800], letter [see below], or twx [910-695-3530]. Notification should include all relevant information, including the 8X9906 part number (from which we can determine the issue of the 9906 in question). Upon notificiation, we shall ship a replacement 9906 to you. If the warranty period of the defective unit has not elapsed, the replacement unit will be shipped at no charge. Package the defective 9906 in the replacement unit's carton; sign the packing list included with the replacement 9906 and enclose it with the defective unit (this is your return authorization); affix the preaddressed label provided with the replacement unit to the carton being returned; and ship the equipment prepaid to Tellabs.

repair and return

5.06 Return the defective 9906 Subassembly shipment prepaid, to: Tellabs Incorporated
4951 Indiana Avenue
Lisle, Illinois 60532
Attn: repair and return dept.
Enclose an explanation of the unit's malfunction. Follow your company's standard procedure with respect to administrative paperwork. Tellabs will repair the unit and ship it back to you. If the unit is in warranty, no invoice will be issued.

Tellabs Incorporated
4951 Indiana Avenue, Lisle, Illinois 60532
telephone (312) 969-8800 twx 910-695-3530