WESCOM 7371

DIAL LONG LINE REPEATER GROUND START MODULE

IDENTIFICATION, INSTALLATION, AND TESTING

1. GENERAL

1.01 This section covers identification, installation, and testing of WESCOMs 7371 Dial Long Line (DLL) Repeater Ground Start Module.

1.02 Information presented in this section is based on the manufacturers' manual provided by WESCOM, Inc.

1.03 This module (7371) is required, in addition to the WESCOM 7370 or 7375 DLL module, when the output of the associated equipment (eg, a PBX central office trunk unit) is ground start.

1.04 The module plugs into a WESCOM 400-type universal mounting assembly.

2. DESCRIPTION

2.01 WESCOMs 7371 DLL Repeater Ground Start Module is a plug-in, printed-circuit module. It is used to convert the WESCOM 7370 or 7375 DLL Repeater from loop start to ground start application.

Features

2.02 The main features provided are:

(a) Transistorized circuitry and other state-of-the-art components, used whenever possible to reduce space requirements, power consumption, and maintenance, while increasing reliability.

(b) The plug-in module construction allows application of the substitution approach which assures rapid servicing of the equipment and provides for minimum down-time.

Specifications

2.03 Electrical and physical characteristics are:

- **OPERATING DELAY OF K2 RELAY:** 80 milliseconds nominal.

- **RELEASE DELAY OF K2 RELAY:** 800 milliseconds nominal.

- **MAXIMUM LOOP LIMITS:** 3000 ohms, -48 Vdc operation.

- **RINGING VOLTAGE:** 90 to 130 Vac, 20 to 66 Hz superimposed on -48 Vdc.

- **POWER REQUIREMENTS:** At -48 ±4 Vdc at 10 mA (idle), 70 mA (busy).

- **OPERATING ENVIRONMENT:** Temperature 60 to 110° F; humidity, 10 to 100% (no condensation).

3. INSTALLATION

Mounting

3.01 The module will mount in various size capacities of WESCOM 400-type mounting assemblies.

**3.02** WESCOM 400-type assemblies are available in module capacities of one to 13.

(a) Type 400-1 (one-module) through 400-9 (nine-module) mounting assemblies can be mounted on 19- or 23-inch relay racks or in Key Telephone Unit (KTU) apparatus cabinets. These types of mounting assemblies must be installed with mounting bars and require 7-inches of vertical space.

(b) Type 400-10 (ten-module) and 400-11 (eleven-module) mounting assemblies are provided with mounting brackets. These types of mounting assemblies can be mounted on 19-inch relay racks and require 6-inches of vertical space.

(c) Type 400-12 (twelve-module) and 400-13 (thirteen-module) mounting assemblies are provided with mounting brackets. These types of mounting assemblies can be mounted on 23-inch relay racks and require 6-inches of vertical space.

Connections

3.03 Wire connections are made to a 56-pin wire wrap card connector provided as part of the mounting assembly. (See Table A for connection information.)
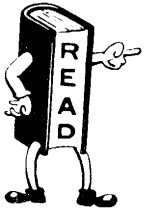
Note: Do NOT *make any wire connections with power applied to the equipment or modules installed in the mounting assembly.*

TABLE A
WIRING CONNECTIONS

WIRE OR LEAD	TERM OF 7370 OR 7375 DLL	TERMINAL
TIP-C O SIDE		51
RING-C O SIDE		33
RING – 7370 OR 7375 DLL	33	37
TIP-STATION SIDE		41
RING-STATION SIDE		49
TIP – 7370 OR 7375 DLL	41	39
RING – 7370 OR 7375 DLL	49	43
LINE CURRENT SENSE–7370 OR 7375 DLL	2	1
LINE CURRENT SENSE–7370 OR 7375 DLL	4	3
DROP CURRENT SENSE–7370 OR 7375 DLL	6	5
–48V DC BATTERY		35
DC GROUND		17

*Note:* Connect on 56-pin connector mounting assembly.

Modules

3.04 When all connections and options are made, the module may be inserted into the mounting assembly.

Note: Do NOT force any module into the mounting assembly. If the module encounters excessive resistance while being inserted, remove it and check the card guides and connector for alignment and/or foreign particles.

4. TESTING

4.01 If problems are encountered in operation, check the following:

1. Verify that all wire connections and features have been properly completed. (See Table A.)

2. Verify that the module is making good electrical connection with the mounting assembly card connector. Move module out and in several times from mounting assembly.

3. Verify that -48 Vdc, ±4 Vdc power has been applied to the module.

4. If none of the above items correct the problem, replace the module.

Schematic Diagram of WESCOM 7371 DLL Ground Start Module
Fig. 1
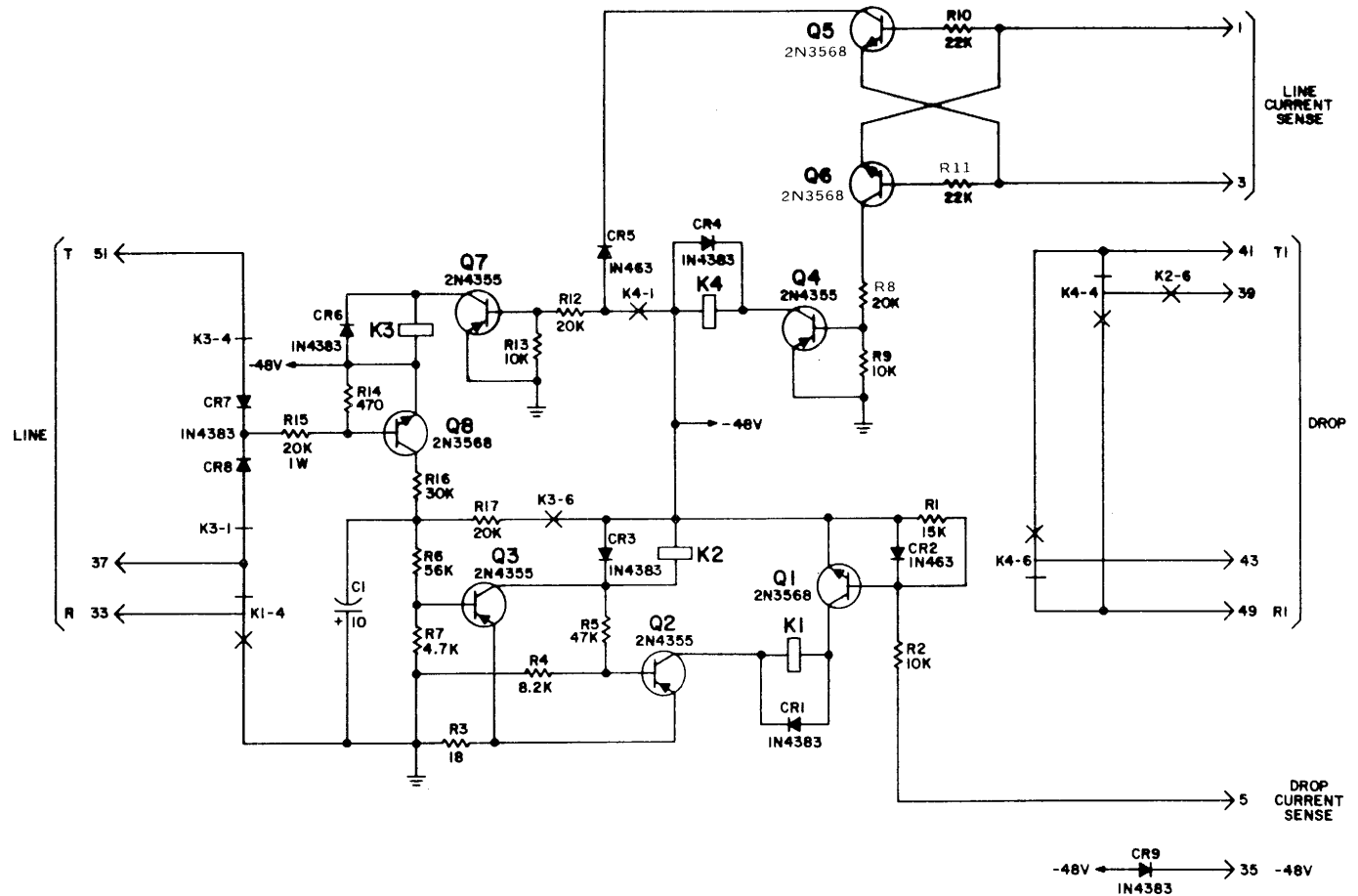
NOTES:
1. UNLESS OTHERWISE SPECIFIED:
   ALL RESISTORS ARE IN OHMS, ±5%, 1/2 WATT.
   ALL CAPACITORS ARE IN UF.

2. ———— DENOTES PRIMARY TRANSMISSION PATH.

3. ⊙ DENOTES FRONT PANEL TEST POINTS.

4. |xxx| DENOTES FRONT PANEL DESIGNATIONS.

5. ———— DENOTES FACTORY STRAPPING OPTION.
6. — — — DENOTES INSTALLER STRAPPING OPTION.
7. —✕— DENOTES NORMALLY OPEN RELAY CONTACT.
8. —⊥— DENOTES NORMALLY CLOSED RELAY CONTACT.