CD-5D044-01
ISSUE 3AC
APPENDIX 6M
DWG ISSUE 9M
DISTN CODE BT13

5ESS® SWITCHING EQUIPMENT
RESISTOR PANEL
CIRCUIT

Description of Changes

1. App. Fig.2, Options X,Y,Z rated "DA"; Note 303 changed accordingly.

AT&T

DEPT ND9220300-PEW-PK

CD-5D044-01
ISSUE 3AC
APPENDIX 5B
DWG ISSUE 8B
DISTN CODE BT13

5ESS® SWITCHING EQUIPMENT
RESISTOR PANEL
CIRCUIT

DESCRIPTION OF CHANGES:

1. Add Option H to App. Fig. 3 and Note 302.
2. Add equipment information.
3. Misc. equipment changes.

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AT&T DEPT NA5380600-TOM-EJZ

5ESS® SWITCHING EQUIPMENT
RESISTOR PANEL
CIRCUIT

CHANGES

D. Description of Changes

D.1 Changed the value of Resistor on option J from 3.16k to 4.32k.

AT&T BELL LABORATORIES

DEPT NA5301200-PEW-RWK

5ESS® SWITCHING EQUIPMENT
RESISTOR PANEL
CIRCUIT

CHANGES

D. Description of Changes

D.1 APP FIG. 4 rating changed to "DA".

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AT&T-T DEPT 11NW527250-TOM-RWK

5ESS™ SWITCHING EQUIPMENT
RESISTOR PANEL
CIRCUIT

CHANGES

D. DESCRIPTION OF CHANGES

D.1 Added Group Reference Circuit required for PBX offices.

AT&T-T NETWORK SYSTEMS

DEPT 11NW527250-TOM-RWK

5ESS™ SWITCHING EQUIPMENT
RESISTOR PANEL
CIRCUIT

CHANGES

D. DESCRIPTION OF CHANGES

D.1 Made documentation in schematic drawing agree with the method of wiring in the field.

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DEPT 55611-JLB-EJT

Printed in U.S.A.

5ESS™ SWITCHING EQUIPMENT
RESISTOR PANEL
CIRCUIT

SECTION I - GENERAL DESCRIPTION

1. PURPOSE OF CIRCUIT

1.01 The Resistor Panel Unit supplies various paddle board assemblies that contain pluggable resistors used to limit current flow through distribute point relays. Resistance value and power rating depend on the load impedance and power requirements. A special paddle board containing a resistor and diode can be supplied to terminate Metallic Service Unit (MSU) diagnostics.

SECTION II - DETAILED DESCRIPTION

1. RESISTOR PANEL

1.01 The resistor panel consists of a backplane with a pin field large enough to accommodate 128 resistor assemblies on the apparatus side, and cables with attached connectors leading to the distribution frame on the reverse side. Cross connections are made at the distribution frame to connect the resistor assemblies to their respective equipment, i.e., signal distribute points, etc.

1.02 Three types of resistor assemblies can be connected. One type contains a single resistor. A second type contains a resistor in series with -48 volts connected to one output pin and -48 volts return connected to the other output pin. The third assembly type contains a resistor in series with a diode.

1.03 The single resistor assembly is used to limit current in a circuit that supplies a voltage source. The second assembly type is used to limit current in a circuit that does not supply a voltage source and to supply -48 volt power to that circuit as well. The resistor and diode assembly provides a diagnostic termination for Metallic Test Bus 15 (MTB) of every Metallic Access (MA) circuit pack in an MSU or Modular MSU (MMSU).

1.04 Each resistor assembly consists of a printed circuit on a paddle board supplied with a 2 by 6 Berg connector at one end which plugs into the pin field on the backplane. All of the 128 pin field locations are wired with -48 volts, -48 volts return, and two output terminals. The printed circuits on the paddle boards determine how the resistor-diode combination is connected.

1.05 The resistor assemblies are equipped with resistors of various values as required by each one's respective function. The values are listed as options in the option table shown in SD-5D044-01.

SECTION III - REFERENCE DATA

1. None

SECTION IV - REASONS FOR REISSUE

CHANGES

D. Description of Changes

D.1 Added details to supply a diode-resistor network (option Z) to be used as a termination for testing the protocol circuit.

D.2 Added details to supply a 10-ohm resistor option (P) required to light the RSM alarm status panel light.

D.3 Added details to supply a resistor option (W or M), the value of which is office engineered as needed to perform desired tests.

D.4 Changed and added information to clarify documentation.

D.5 Changed Feature and Option Table (Information Note 302), Record of App Figs, Wiring and Apparatus Changes (Information Note 303), and Information Note 306; and added Information Notes 307, 308 and 309 to describe the changes detailed in D.1 through D.3.

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DEPT 55614-WAW-CEJ