

POWER SYSTEMS  
POWER SUPPLY CIRCUIT  
FOR 756A PBX  
J86464SECTION I - GENERAL DESCRIPTION1. PURPOSE OF CIRCUIT

- 1.01 To provide power supplies for 756A PBX systems with or without battery reserve.

SECTION II - DETAILED DESCRIPTION

This circuit consists of an automatically regulated rectifier, a load capacitor, ringing and tone supplies, a ringing interrupter, and interconnections between these units when no battery for reserve is furnished.

Commercial ac power, 105-125 volts, is connected to the rectifier and distributed to the ringing and tone supplies and the ringing interrupter. Connections are shown for furnishing ringing, tones and interruptions to PBX circuits.

When no reserve battery is furnished, the rectifier is wired for "Z" option in which case two negative output leads, "Batt. A" and "Batt. B" are furnished. A 30,000 uf capacitor provides "Batt. A" loads with protection against momentary power failures. A diode separates the two output leads so that the capacitor discharges through the "Batt. A" lead only.

When a reserve battery is furnished, the rectifier is wired for "Y" option. In this case, the "Batt. A" and "Batt. B" leads are connected in the rectifier so that both outputs use a common fuse. The remaining fuse is used as a charging fuse for the reserve battery.

SECTION III - REFERENCE DATA1. WORKING LIMITS

- 1.01 Input: 105-125 Volts ac  
Output: 45-52.6 Volts dc  
Noise: 35 dba with Fla line weighting

2. FUNCTIONS

- 2.01 This circuit provides 45-52 volts dc for relay and talking power, ringing and tone power for PBX circuits, and ringing interruptions.
- 2.02 TOUCH-TONE dial tone is provided by the 404C tone generator.

3. CONNECTING CIRCUITS

- 3.01 Alarm, Transfer and Test Circuit - SD-66796-01
- 3.02 756A PBX CAD - SD-65746-01
- 3.03 Two-Way Trunk Circuits to Central Office - SD-65752-01
- 3.04 Dial Pulse Register Circuit - SD-65742-01

SECTION IV - REASON FOR REISSUE

## CHANGES

A. Changed and Added Functions

- A.1 The 404C tone generator (option "Y") was added to provide TOUCH-TONE dial tone and replaces the LT2 dial tone (option "Z").

B. Changes in Apparatus

- B.1 Added

404C Tone Generator

D. Description of Circuit Changes

- D.1 Options "Y" and "Z" were added to the drawing.

CD-81326-01 - ISSUE 6D

D.2 Notes 105, 106 and 202 were added to the drawing.

D.4 The title of the drawing was changed to delete the letter "E" from J86464.

D.3 SD-81577-01 was added to the replacement note.

D.5 Sheet -02 was added to the drawing.

BELL TELEPHONE LABORATORIES, INCORPORATED

DEPT 5153-HMK-DET-JJK