

6601 RINGING GENERATOR

CONTENTS

	Page
1. GENERAL	1
2. SPECIFICATIONS	1
3. INSPECTION	1
4. MOUNTING	1
5. INSTALLER CONNECTIONS	2
6. CIRCUIT DESCRIPTION	2
7. TESTING	2

1. GENERAL

1.1 This section provides a circuit description, installation and basic testing information for the San/Bar 6601 Ringing Generator (Fig. 1). The 6601 is designed for the San/Bar 6600 KTS with up to a 12 line system and is compatible with all types of key telephone systems working in conjunction with central office or PBX/PABX equipment.

2. SPECIFICATIONS

2.1 List of applicable drawings:

- (a) Schematic Drawing: SD-6601-000 (Fig. 2)
- (b) Assembly Drawing: ED-6601-100 (Fig. 3)

2.2 Electrical Characteristics

- (a) Input Power Requirements: 20-26 VDC at 500 mA maximum current.
- (b) Output Voltages: 90-115 VRMS @ 30 Hz
- (c) Output Current: 50 mA nominal
- (d) Operating Environment: Temperature from 0°C to 50°C. Humidity to 90%.

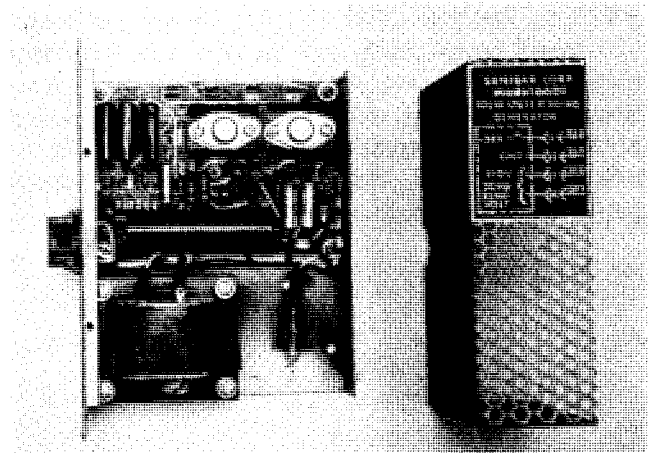


Fig. 1 6601 Ringing Generator

2.3 Physical Characteristics

- (a) Dimensions: Overall Size: 7"H x 2-1/16"W x 6-3/4"D. Mounting Depth (frontside): 5-1/4". Mounting Depth (backside): 1-1/2" (This includes the quick-connect connector and clearance for the installation wiring).
- (b) Weight: 2 lbs. 15 oz.

3. INSPECTION

3.1 Inspect the unit thoroughly, as soon as possible after delivery. If any part of the unit has been damaged in transit, report the extent of damage to the transportation company immediately. If the unit is to be stored for some time before installation, make an operational check at once. The purpose of this check is to make sure that there is no damage as a result of shipping. If the check indicates satisfactory performance, the unit may be stored for the future installation.

4. MOUNTING

4.1 Standard 6-1/2" Western Electric vertical mounting centers. The overall width is 2-1/16" with a mounting center in the middle. The

unit may be wall mounted by pushing the quick-connect connector through the notched area in the perforated cover.

5. INSTALLER CONNECTIONS

5.1 The San/Bar 6601 Ringing Generator is supplied with male and female quick-connect connectors for ease of installation and maintenance. In addition, 4 ft. pigtail leads are supplied on the male connector for feature block wiring on non San/Bar KTS installations. The male mating half is discarded on San/Bar installations.

Pin Assignment:

Pin	Function	Pigtail Wire Code
1	24 VDC B-Battery	Red
11	105 VAC Ring Signal	Vio
12	24 VDC ground	Blk
14	105 VAC return	Gry

6. CIRCUIT DESCRIPTION

See Schematic Drawing: SD-6602-000 as shown in Fig. 2.

6.1 A Twin T oscillator consisting of Q₂ and the band reject filter C₂, C₃, C₄, R₅, R₆ and frequently adjust R₇ provides a nominal 30 Hz signal. The oscillator is supplemented by an emitter follower Q₁ to eliminate loading variations. The bias for the oscillator is through R₃ and regulated by zener diode CR1. The 30 Hz signal is fed into a high gain amplifier stage Q₃ with adjustable gain

provided by R22. From the amplifier the signal goes through a buffer stage Q₄, Q₅, Q₆, Q₇, providing additional power gain and then into the power transformer T1 to provide the 105 VAC ringing signal. The ringing generator is protected from electrical overload by a self-resetting 1 amp circuit breaker CB1.

7. TESTING

7.1 If trouble is encountered with the operation of the 6601 Ringing Generator, check that all installer connections have been properly made. Make certain that the 6601 Ringing Generator quick-connect connector is fully engaged. Visually inspect pin terminals for frayed or broken wires.

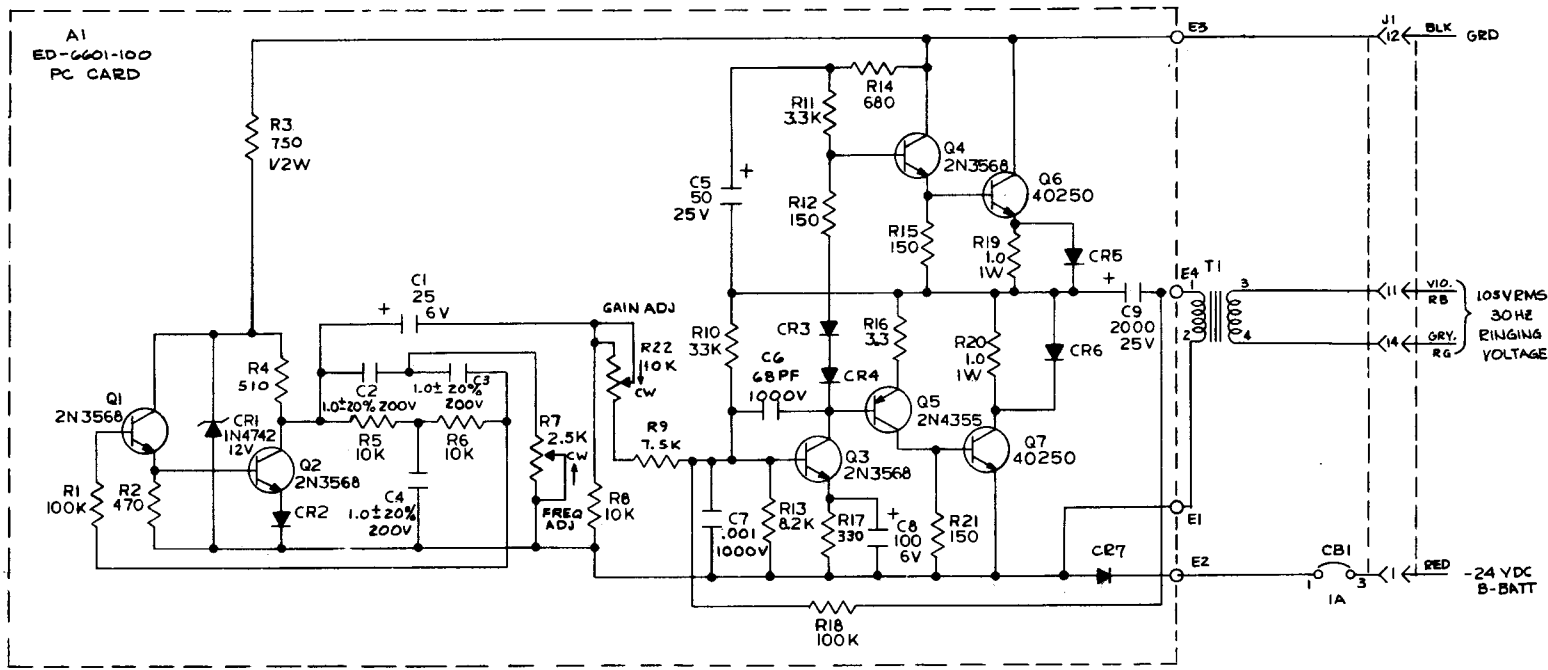
7.2 If the trouble persists remove the cover and test the 6601 as follows:

(a) Connect the multimeter (set to the 30 VDC scale) across terminals E3 (+) and E2 (-). The multimeter should indicate 20-26 VDC.

(b) Connect the multimeter (set to the 150 VAC scale) across terminals E1 and E4 on the printed circuit card. The multimeter should indicate 90-115 VDC.

7.3 Field repairs involving replacement of components within an assembly are not recommended. The 6601 Ringing Generator has a one (1) year warranty. Return to San/Bar Corporation, 17422 Pullman Street, Santa Ana, CA 92705. For technical assistance, call (714) 546-6500.

REVISIONS				DATE	APPROVED
SHT	ZONE	LTR	DESCRIPTION		
A			FORMAL REL PER DCN 0183	7/27/73	[Signature]



1. RESISTORS ARE IN OHMS, 1/4W, ± 5%
 CAPACITORS ARE IN MICRO-FARADS
 DIODES ARE IN4002
 NOTES: UNLESS OTHERWISE SPECIFIED

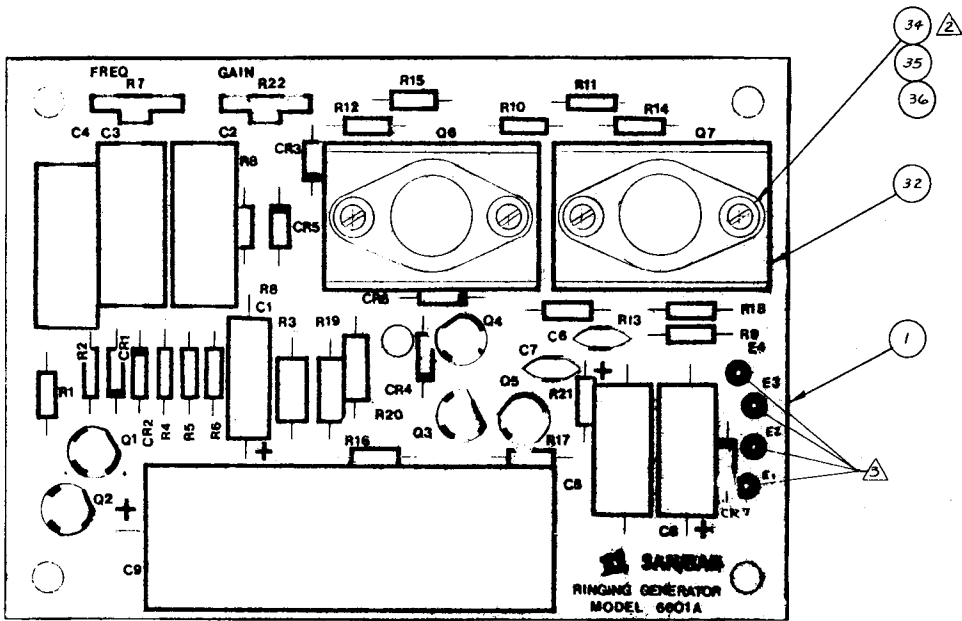
UNLESS OTHERWISE SPECIFIED DIM. IN INCHES TOLERANCES			CONTR. NO. DR [Signature]		SAN/BAR ELECTRONICS CORP. 17427 Pullman Street Santa Ana, Calif. 92711	
XX ± .015 XXX ± .010 ANGLES ± 0.5° MACH. FIN.			CHK		SCHEMATIC	
DASH NO.			ENGR [Signature] 7/27/73		RINGING GENERATOR	
NEXT ASSY			PROJ		MODEL 6601A	
USED ON			APPD		SIZE	CODE IDENT
APPLICATION			APPD		C	27412
					DWG NO.	SD-6601-000
					LTR	A
					SCALE	NONE
					SHEET 1 OF 1	

Figure 2

CD-66001-000A

SD-6601-000

REVISIONS			
LTR	DESCRIPTION	DATE	APPROVED
A	FORMAL REL PER DCND143	4/12/75	US



SEE SEPARATE BM-6601-100

- ⚠ MASK HOLES FROM FLOW SOLDER
- ⚡ INSTALL AFTER FLOW SOLDERED
- 1. P.C. BOARD TO BE FLOW SOLDERED

NOTES: UNLESS OTHERWISE SPECIFIED

DASH NO.	NEXT ASSY	USED ON
		APPLICATION

UNLESS OTHERWISE SPECIFIED DIM. IN INCHES TOLERANCES X ± .1 XX ± .03 XXX ± .010 ANGLES ± 0.5° MACH. FIN. ✓ BREAK ALL SHARP EDGES AND CORNERS		CONTR. NO. DR J.MILLER CHK US DSGN REL APPD	ENG. <i>[Signature]</i> PROJ. REL. DATE 4/12/75	SAN/BAR CORP. 17422 PULLMAN STREET SANTA ANA, CALIFORNIA 92715 EQUIPMENT DNG - RINGING GENERATOR, MODEL 6601A (P.C. CARD)	SIZE C SCALE 2/1	CODE IDENT. NO. 27412 DNG. NO. ED-6601-100	LTR A SHEET 1 OF 1
--	--	--	--	---	---------------------	---	-----------------------

Figure 3