S E R V I C E N O T E

SUPERSEDES: None

HP 5383A Frequency Counter

Service replacement of 1820-0633 and 1820-0634

Serial Numbers: 0000A00000 / 2324A05826

Duplicate Service Notes: 5382A-04

To Be Performed By: Customer/HP Qualified Personnel

Parts Required:

For 1820-0633 replacement:

HP Part No.	Qty.	Description
1820-2318	1	IC Dig Time Base
0683-1055	1	Resistor, 1 MOhm
0160-0576	1	Capacitor, 0.1 UF
1200-0473	1	Socket-IC 16-Cont Dip Sldr

Continued

DATE: 23 May 1991

ADMINISTRATIVE INFORMATION

SERVICE NOTE CLASSIFICATION:				
MODIFICATION RECOMMENDED				
ACTION CATEGORY:	☐ IMMEDIATELY ■ ON SPECIFIED FAILURE ☐ AGREEABLE TIME	STANDARDS: LABOR: 2.0 Hours	3	
LOCATION CATEGORY:	■ CUSTOMER INSTALLABLE■ ON-SITE■ HP LOCATION	= :-::::	USED ☐ RETURN PARTS: ■ SCRAP ☐ SEE TEXT	
AVAILABILITY:	PRODUCT'S SUPPORT LIFE	RESPONSIBLE UNTIL: May 1994		
AUTHOR: Amy Ims	ENTITY: 0200	ADDITIONAL INFORMATION:		

© 1991 HEWLETT-PACKARD COMPANY PRINTED IN U.S.A.



Page 2 SERVICE NOTE 5383A-06

For 1820-0634 replacement:

HP Part No.	Qty.	Description
1820-2316	1	IC Dig Hex Dec
1200-0473	1	Socket-IC 16-Cont Dip Sldr
9140-0114	1	Coil, Fixed RF 10UH
1853-0217	1	Transistor, PNP
1854-0574	1	Transistor, NPN

Tools Required:

Soldering iron, solder Needle-nosed pliers Jumper wire

The 1820-0633 (A1U4) and 1820-0634 (A1U14) on the 05382-60004 Bd Ay-Main have been obsoleted. The recommended replacement parts are 1820-2318 (A1U4 and 1820-2316 (A1U14), however the following modifications are required:

For service replacement of the 1820-0633 with 1820-2318 on the 05383-60001 or -60003:

- 1.Using the soldering iron, remove A1U11 (1820-0633) and solder a 16 pin socket (1200-0473) into the motherboard location of A1U11.
- 2.Install a jumper wire from pins A1U11 (2,5) to the groung test pad near C18.
- 3.Desolder R27 (0683-1035) and replace it with a 1 MOhm resistor (0683-1055).
- 4.Desolder C20 (0160-3879) and replace it with a 0.1 UF capacitor (0160-0576).

For service replacement of the 1820-0634 with 1820-2316 on 05383-60001 or -60003:

- 1.Using the soldering iron, remove A1U18 and solder a 16 pin socket (1200-0473) into the motherboard location of A1U18.
- 2.Break the -14V trace at A1U18(5) and solder a jumper wire from Gnd going to the A2 board to pin A1U18(5).
- 3.Break the +5V trace between A1U24 and U18 on the circuit side.
- 4.Install L8 (9140-0114) between the + plate through holes near U24 and U18(13).
- 5. Add C51 (0160-0576) between U18 pins and 13.
- 6.Add #2 ground wires between the two plated through holes near A2Q14 and 16 to either end of the A1 "SPARE FUSE" legend.
- 7. Change Q20 to 1853-0217 (PNP with 0.2 V Vce (SAT). Connect the collector lead of Q20 to ground at the emitter of Q19. (Refer to schematic for emitter locations.)
- 8. Change Q21 to 1854-0574 (NPN darlington).