MANUAL CHANGES

This supplement contains important information for correcting manual errors and for adapting the manual to instruments containing improvements made after the printing of the manual.

To use this supplement:

Make all ERRATA corrections

Make all appropriate serial number related changes indicated in the tables below.

Serial Prefix or Number	Make Manual Changes	Serial Prefix or Number	Make Manual Changes
1208A	1		
1215A	1,2		
▷ 1323A	1,2,3		

▷ NEW ITEM

ERRATA

Page 8-19, Figure 8-17:

    Change wire 92 to 934.

CHANGE 1

Pages 6-3 through 6-5, Table 6-2, change to read as follows:

A2R29	0757-0465	R:FXD MET FLM 100K OHM 1% 1/8W.
A2R36	0757-0439	R:FXD MET FLM 6.81K OHM 1% 1/8W.
A4A1C2	0160-3456	C:FXD CER 1000 PF 10% 250 VDCW.
A7	08444-60019	OSCILLATOR ASSY: 1.55 GHz NOT RECOMMENDED FOR FIELD REPAIR.
A7C1	0160-3827	C:FXD PORC 1 PF 500 VDCW.
A7C4	0160-2437	C:FXD CER 5000 PF +80-20% 200 VDCW.
A7R1	0698-7230	R:FXD MET FLM 562 OHM 2% 1/8W.
C3	0160-0155	C:FXD MY 0.0033 UF 10% 200 VDCW.
R5	0757-0438	R:FXD MET FLM 5.11K OHM 1% 1/8 W.

NOTE
A7C4 is item number 30 on Figure 8-19.

Page 8-15, Figure 8-12, Service Sheet 3:
Replace wi th attached figure.

Page 8-21, Figure 8-19:
Replace with attached figure.

NOTE

Manual change supplements are revised as often as necessary to keep manuals as current and accurate as possible. Hewlett-Packard recommends that you periodically request the latest edition of this supplement. Free copies are available from all HP offices. When requesting copies quote the manual identification information from your supplement, or the model number and print date from the title page of the manual.

HEWLETT hp PACKARD

Printed in U.S.A.

CHANGE 1 (cont'd)
Pages 5-3 through 5-6, Paragraph 5-9 and Figure 5-2, change to read as follows:

5-9. 1.55 GHz Oscillator Power Level, Frequency Check and Adjustment

REFERENCE: Service Sheet 3.

DESCRIPTION: The 1.55 GHz local oscillator is checked for power output level and frequency tuning range. Oscillator frequency is determined primarily by the LO cavity, with tuning range determined by the drive voltage from the oscillator driver. The oscillator is checked first for power level and then for frequency and tuning range.
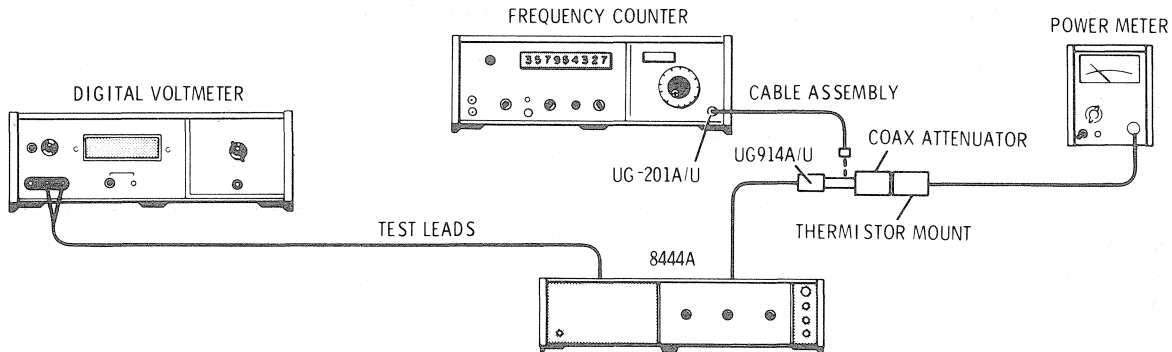

Figure 5-2. 1.55 GHz LO Power Level and Frequency Check and Adjustment Test Setup

EQUIPMENT:

    Power Meter with HP 8478B Thermistor Mount . . . . HP 432A
    Frequency Counter with HP 5254C Plug-in HP5245L
    Digital Voltmeter with HP 3443A Plug-in . . . . HP 3440A
    Test Leads (dual banana plug to probe and alligator clip) . . . . . . HP 11003A
    Cable Assy, SMA male to BNC male . . . . HP 08555-60076
    Cable Assy, male BNC connectors . . . . HP 10503A
    Coaxial Attenuator, Option 010 . . . . HP 8491A
    Adapter BNC barrel (HP Part Number 1250-0080) . . . . UG 914A/U
    Adapter (BNC to Type N) . . . . UG 201A/U

PROCEDURE:

1. Perform Power Supply Check and Adjustment, paragraph 5-8.

2. Apply power to Tracking Generator and allow 1 hour for instrument to warm up and stabilize.

3. Disconnect Cable W8 at Isolator AT3 J2 (see Figures 8-4 and 8-12).

4. With test setup as indicated in Figure 5-2, connect Power Meter to Isolator AT3 J2 via 08555-60076 cable, 10 dB attenuator and UG 914A/U adapter.

5. Rotate TRACK ADJ control throughout its tuning range while noting power level indicated on Power Meter.

6. Minimum power output must be greater than +5 dBm.

                                                                    >+5 dBm _____

7. Connect Frequency Counter to Isolator AT3 J2 via 08555-60076 cable, UG 914A/U adapter and BNC to BNC cable.

CHANGE 1 (cont'd)

8. Rotate TRACK ADJ control fully counterclockwise and record oscillator frequency.

    1,548,000 ±500 kHz _____

9. Rotate TRACK ADJ control fully clockwise and record oscillator frequency

    1,552,000 ±500 kHz _____

10. Record frequency tuning range (frequency recorded in step 9 minus frequency recorded in step 8).

    4,000 ±500 kHz _____

11. If data recorded in steps 8, 9, and 10 is within tolerance no adjustment is required.

12. If data recorded in steps 8, 9, or 10 is not within tolerance proceed with step 13.

13. Connect Digital Voltmeter to test point A2TP5.

14. Set TRACK ADJ control fully clockwise. Set "MAX" TUNE potentiometer A2R26 and "MIN" TUNE potentiometer A2R27 fully counterclockwise. Measure voltage at A2TP5. Voltage should be +1 ± 0.1 Vdc.

    +0.9 _____ +1.1 Vdc

15. Measure and record oscillator frequency.

    _____

16. Adjust "MAX" TUNE potentiometer A2R26 to increase oscillator frequency 4,000 ±50 kHz above frequency recorded in step 15. Record oscillator frequency.

    _____

17. Set TRACK ADJ control to center of tuning range recorded in steps 15 and 16 above. Record oscillator frequency.

    _____

18. If frequency recorded in step 17 is not within ±500 kHz of 1.550 GHz adjust A7ADJ 1 to tune oscillator freuqency to 1.550 GHz ±100 kHz.

19. If oscillator frequency is adjusted, repeat steps 15 through 18.

20. Disconnect Power Meter and connect W8 Cable to Isolator AT3 J2.

21. Replace right side panel cover.

CHANGE 2

Page 1-2, Table 1-1, change Spectral Purity: Harmonic Distortion specification to read:
Harmonic Distortion: Typically 25 dB below output level.

Page 4-13, Paragraph 4-20, Harmonic Distortion, change SPECIFICATION to read:
Harmonic Distortion: Typically 25 dB below output level. Nonharmonic (spurious) signals: >40 dB below output level.

Page 4-15, Paragraph 4-20, change to read:
12. Note and record maximum amplitude level of harmonic and spurious signals.

    Harmonics Typically ⩽−25 dBm _____
    Spurious ⩽−40 dBm _____

▶ CHANGE 3

Page 1-2, Table 1-1:
    Change "Nonharmonic (Spurious) Signals" under Spectral Purity to >35 dB below output level.
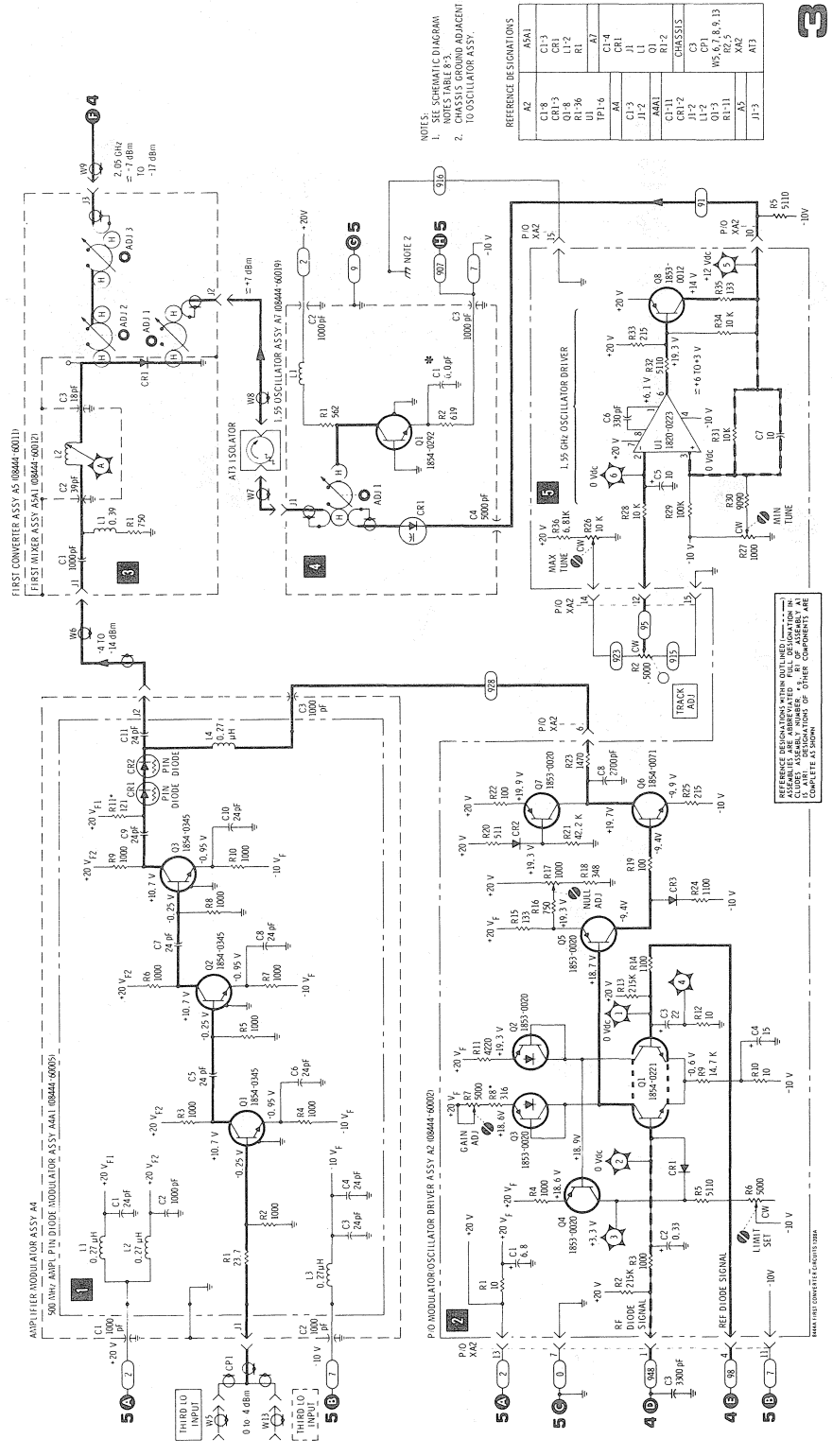
Page 4-13, Paragraph 4-20:
    Change "Nonharmonic (Spurious) Signals" in Specification to read:
    >35 dB below output level.

Page 4-15, Paragraph 4-20, Step 12:
    Change spurious to ≤−35 dBm.

Page 4-16, Table 4-1:
    Change −40 to −35 for paragraph 4-20, Spurious Signal Level.

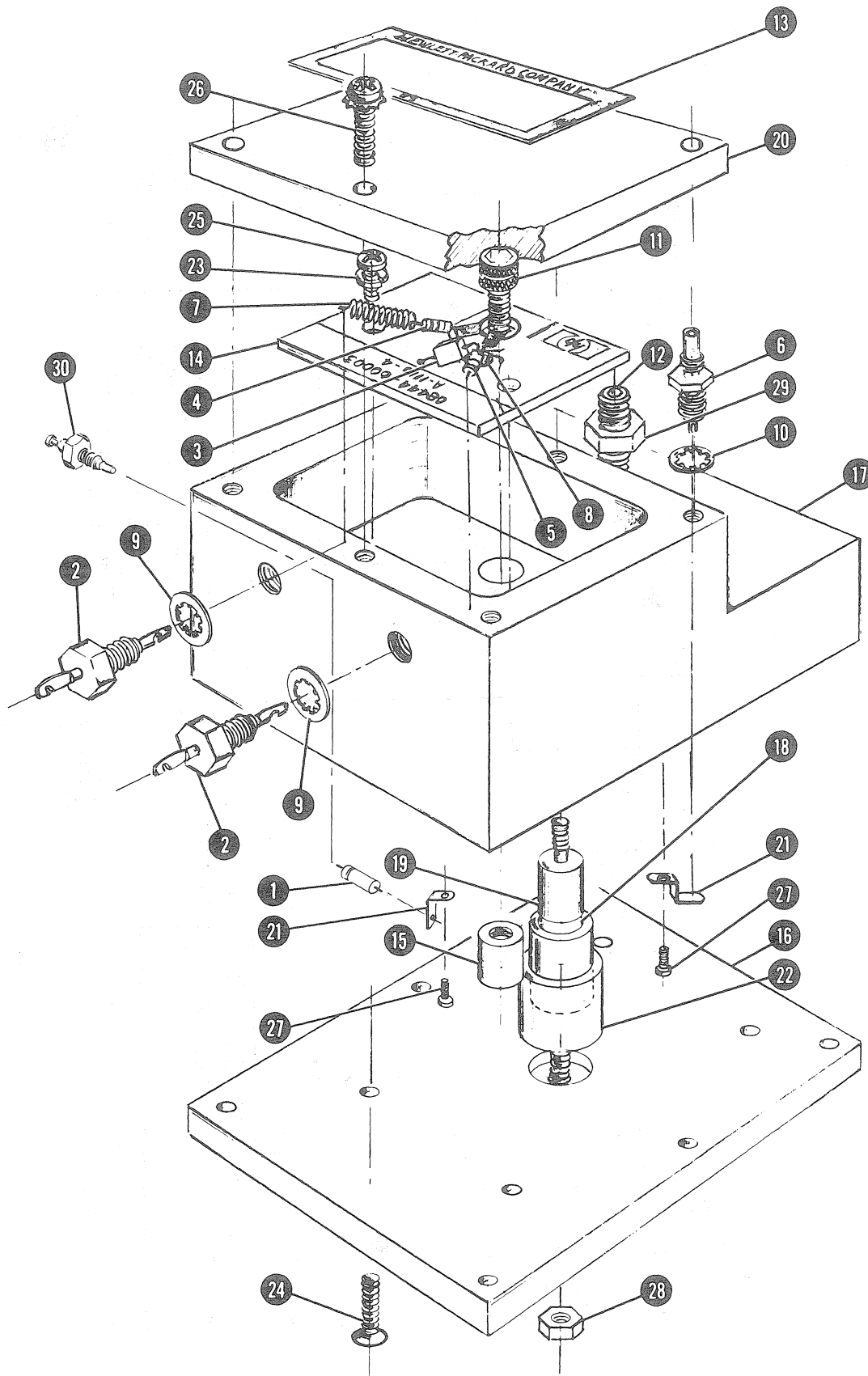*Figure 8-12. First Converter Circuits, Schematic Diagram (for CHANGE 1)*

*Figure 8-19. A7 1.55 GHz Oscillator Assembly, Illustrated
Parts Breakdown (1 of 2) (for CHANGE 1)*