

New or Revised Item

This Manual Change Sheet contains important information for correcting manual errors and for adapting the manual to instruments which contain modifications made after the printing of the manual.

Change and correction information in this supplement is itemized by page numbers corresponding to the original manual pages.

To use this supplement:

1. Make all manual ERRATA changes.
2. Make all additional changes that pertain to your instrument serial number.

Errata

Page 1-1a, Figure 5-1 a. Change the figure number and title to Figure 1-1 -hp-3561A With Accessories Supplied.

Page 2-23, step 1, -hp-3561A, TRIGger SElect. Change range from 10% to 25%

Page 2-25, Figure 2-9. Change the figure number from 2-9 to 2-10.

Page 2-26, Figure 2-10. Change the figure number from 2-10 to 2-9.

Page 2-35, step 10. Change frequency from 94 kHz to 95 kHz.

Page 2-42, Figure 2-16. Change the illustration to show that the frequency synthesizer is connected to the -hp- 3561A rear panel EXT SAMPLE CONNECTOR rather than the -hp- 3561A front panel connector.

Page 6-10, top heading. Change AD/DC COUPLING to AC/DC COUPLING.

Page 6-17/6-18, Table 6-8. Change the tolerance of the +24V supply from $\pm 0.12V$ to $\pm 1.2V$.

Page 6-85, first paragraph. Change the part number of the 5-1/4 inch floppy disc from 03561-69400 to 03561-19400 (two places).

Page 7-19/7-20, A10a schematic, Amplifier #3 E. Change the title of Block E from Amplifier #3 to Amplifier #1.

Page 7-21/7-22, A10b Schematic, Change inverter U403c to U404c. Change R17, 100 ohm to R517, 100 ohm (located in the 15VI supply).

Page 7-35/7-36, A15a Schematic, 100KHz low Pass Filter A. Change the value of C2 to 750 pF.

Page 7-35/7-36, A15a Schematic, Second Pass ADC H. Change -15V14 to -15V15 going to U102(19).

Page 7-35/7-36, A15a Schematic, 8-BIT ADC O. Change pin U206(17) to U206(11) signal ADBO.

Page 7-37/7-38, A15b Schematic, +5V supply. Change L500 to L501.

Page 7-63/7-64, A20a Schematic, DMA Channel Control J. Change the input pin numbers of U109a,b as follows: U109a(14) to 13, U109a(3) to 14, U109b(2) to 3, U109b(3) to 2.

Page 7-67/7-68, A20c Schematic, Timing and Control Counter Y. Change the input source of U202(30) from V to U

Page 7-69/7-70, A20d Schematic, Clock Generator FF. Change R10 to R5 (U2(1)). Change R6 to R12 (U3(6)).

Page 7-85, Table 7-25. Change the failed ram test codes as follows:

Chip code	Failed RAM
4	U300
5	U301
6	U302
7	U303
8	U207
9	U208
A	U209
B	U210
C	U306

Page 7-91/7-92, A30a Schematic, RAM access State Machine E. Change TP202 to TP203. Change TP203 to TP202.

Page 7-91/7-92, A30a Schematic, RAM Read/Write Generator K. Change the source of U401c(10) from P32(B7) to P31(B7).

Page 7-93/7-94, A30b Schematic, FFT Processor O. Change the signal name at U100 (9) from FFTOSA to FFTDSA.

Page 7-109, Table 7-32. Change all of the Return Codes from x 1 xx to x 8 xx.

Page 7-115/7-116, A40a Schematic, Control/Address Buffer L. Change input pin of U501(3) PA2 to U501(13) PA2.

Page 7-115/7-116, A40a Schematic. Interchange J100 pins 4 and 5 with J100 pin 3. J100 pins 4 and 5 now go to the 68000 IC pin 48 and J100 pin 3 now goes to the 68000 IC pin 6.

Page 7-149/7-150, A50b Schematic, NOISE SOURCE SYNC GENERATOR EE. Connect U500a(12) to U304(14).

Page 7-149/150, A50b Schematic, D/A Converter AA. Change the value of C401 to 27pF.

Page 7-199/7-200, A65 Schematic, Bubble Coil Drivers J. Connect U100(2) and U1(2) to ground. Connect U100(13) and U1(13) and U1(13) to +12V

Page 7-217/7-218, A70a Schematic. Change the revision from REV A to REV B.

Page 7-217/7-218, A70a Schematic, PS Overvoltage Comparators G. Change U202a,b,c,d to U502a,b,c,d.

Page 7-217/7-218, A70a Schematic, Isolated PS Overvoltage Comparators H. Change U204a,b to U402a,b.

Page 7-231/7-232, A80 Schematic, Address I/O Decoding A. Change the output of U7(14) from LED SELECT2 to LED SELECT1. Change TP LED2 to LED1. Change the output of U7(13) from LED SELECT1 to LED SELECT2. Change TP LED1 to LED2.

Page 7-249/7-250, A90 Schematic, Video Drive A. Change Q202, Q203, Q205 from PNP to NPN.

Page 7-249/7-250, A90 Schematic, Fast Sweep Vertical Drive D. Change the pin numbers of U501d as follows: U501d(1) to (11), U501d(2) to (12), U501d(3) to (13).

Page 7-249/7-250, A90 Schematic, High Voltage F. Replace R307 270K with a short circuit. Install R307 270K between CR300/R201 and R300.

Change 1 for all Serial Numbers.

Page 1-1a, Figure 1-1. Change the part number for the cable to the NEMA 5-15P Plug from 8120-1521 to 5041-5820.

Page 1-6, Table 1-3. Change Reseed Module part number from 1818-33-5 to 0960-0708.

Page 1-12, Table 1-5, -hp-3561A Service Kit. Under Critical Specifications heading, change the reference from Table 1-2 to Table 1-3.

Page 4-5, A10 Parts List. Change the part number of A10C301 to 0160-6664.

Page 4-5, A10 Parts List. Change the part numbers of A10C501, A10C503, and A10C508 to 0160-6688.

Page 4-5, A10 Parts List. Change the part number of A10C510 to 0160-6689.

Page 4-6, A10 Parts List. Change A10R202 to 2100-3210 (10K). Change A100R204 to 0757-0451 (24.3K).

Page 4-7, A10 Parts List. Change A10R511 to 0698-3540 (15.4K).

Page 4-7, A10 Miscellaneous Parts List. Change screw 0515-0158 to 0515-0573.

Page 4-7, A10 Parts List. Change the part number of the CONNECTOR - RF SM-SLD in the A10 MISCELLANEOUS PARTS to 1250-1255.

Page 4-7, A10 Parts List. Change the part number of the CONNECTOR - RF SMB in the A10 MISCELLANEOUS PARTS to 1250-2142.

Page 4-9, A15 Parts List. Change the part number of A15J001 to 1250-1255.

Page 4-10, A15 Parts List. Change A15R226 to 0698-8959.

Page 4-12, A20 Parts List. Change the revision from REV B to REV C.

Page 4-13, A20 Parts List. Change A20U501 to 1820-1191 (74S175N).

Page 4-14, A20 Miscellaneous Parts List. Change screw 0515-0064 to 2200-0149. Change nut 0590-1095 to 0590-0526.

Page 4-15, A30 Parts List. Delete A30R406.

Page 4-16, A30 Parts List. Delete A30R407 and A30R411.

Page 4-16, A30 Parts List. Change A30U100 to 1820-3974.

Page 4-18, A40 Parts List. Change the revision from REV B to REV C.

Page 4-20, A40 Parts List. Change the part number of A40U006 to 1820-3532.

Page 4-20, A40 Parts List. Delete part number 0340-0944 INSULATOR IC NYLON BLACK from A40 MISCELLANEOUS PARTS.

Page 4-24, A50 Parts List. Change A50U606 to 1820-3507.

Page 4-26, A60 Parts List. Change A60U806 to 1820-1216.

Page 4-27, A60 Parts List. Add 03561-0091 GROUNDING SPRING as a miscellaneous part.

Page 4-28, A65 Parts List. Change the part numbers of A65C001, A65C002, A65C008, A65C100, A65C200, and A65C204 to 0180-3812.

Page 4-29, A65 Parts List. Add 1400-1296; Qty.1; Screw Set, Bubble Memory

Page 4-30, A66 Parts List. Delete 4040-0753; Green Extractor from the list. Change the Qty of 4040-0754; Blue Extractor from 1 to 2.

Page 4-33, A70 Parts List. Add 4330-0952 CERAMIC BEAD, quantity 2.

Page 4-33, A70 Parts List. Add 4330-0496 GLASS BEAD, quantity 2.

Page 4-34, A71 Parts List. Change the part number of A71R101 to 8159-0005.

Page 4-34, A71 Parts List. Change the part numbers of A71C003 and A71C101 to 0160-6510.

Page 4-34, A71 Parts List. Change the part numbers of A71CR303 and A71CR305 to 1901-1244.

Page 4-35, A71 Parts List. Reverse Reference Designators A71U001 and A171U100. A71U001 now becomes 1826-0527. A71U100 now becomes 1826-0393.

Page 4-35, A71 Parts List. Add 4330-0496 GLASS BEAD, quantity 2.

Page 4-39, A82 Parts List. Change the part number of A82J006 to 1250-2142.

Page 4-40, A90 Parts List. Change the part number and description of A90R005 to 0757-0413 RESISTOR 392 1% .25W.

Page 4-41, A90 Parts List. Change the part number and description of A90R102 to 0757-0408 RESISTOR 243 1% .25W.

Page 4-43, A99 Parts List. Change the part number of the 220pF padding capacitor A99C5 to 0160-2544; change the 220pF value to 270pF.

Page 4-43, A99 Parts List. Change the part numbers of A99C202, A99C204, A99C206, A99C208, A99C300, A99C302, and A99C304 to 0160-6509.

Page 4-44, A99 Parts List. Change the part number of A99J300 to 1250-1255.

Page 4-44, A99 Parts List. Change the part number of A99R100 and A99R101 to 0699-1541.

Page 4-44, A99 Parts List. Change A99R101 to 0699-1541.

Page 4-44, A99 Parts List. Add 4330-0496 GLASS BEAD, quantity 2.

Page 4-45, Mechanical Parts List. Change MP008 to 03561-44702. Change MP009 to 03561-44701. Change MP010 to 03561-44703.

Page 4-45, Mechanical Parts Lists. Change MP014 to 03561-63701. Change MP019 to 03561-63703

Page 4-45, Replaceable Parts List. Change the part number of MP034 to 03561-43601.

Page 4-45, Replaceable Parts List. Change the part number of MP036 to 03561-43602.

Page 4-45, Replaceable Parts List. Change the part number of MP067 to T-53676.

Page 4-45, Mechanical Parts List. Change MP053 to 03561-60614. Change MP066 to 03561-01235.

Page 4-46, Replaceable Parts List. Change the part number of S2 to 3101-2306.

Page 4-46, Mechanical Parts List. Delete MP078.

Page 4-47, Hardware Parts List. Add the following parts:

0515-0074	Screw	Line Switch Mounting	2
0380-1362	12mm Standoff	Line Switch Mounting	2
2190-0004	Lock Washer	Line Switch Mounting	2
0515-0055	Screw	Line Switch Mounting	2

Page 6-92, TEST DESCRIPTION. Change the Reseed Module part number from 1818-3304 to 0960-0708.

Page 6-92, RESEED ROUTINE OPERATING PROCEDURE, Step 2. Change the part number of the Reseed Module from 1818-3304 to 0960-0708.

Page 7-19/7-20, A10a Schematic, Cal Signal Generator B. Change the value of R511 to 15.4K. Change the value of R410 to 32.4 ohm.

Page 7-19/7-20, A10a Schematic, A-Weight Filter K. Change the value of RR204 to 24.3K. Change the value of R202 to 10K

Page 7-69/7-70, A20d Schematic, Low Frequency Clock Generator GG. Remove the RESET line connecting U709(14) and U708b(13) connects the schematic 20A(H) RESET (NOT).

Page 7-115/7-116, A40a Schematic, Interrupt Vector Generator K. Remove the line connected to U3a(1) (I/O PORT #7). Connect U3a(1) to + 5V2. Change U3a(5) to U3a(6). Change U3a(6) to U3a(5). Change the revision of all four A40 Schematics from REV B to REV C.

Page 7-121/7-122, A40d Schematic, 20.48 Oscillator U. Change the value of R200 to 47. Change the value of R201 to 510. Change the value of R205 to 475. Change the value of R208 to 475. Change the value of C205 to 12pF.

Page 7-121/7-122, A40d Schematic, Clock Output Buffer V. Change the connection of L101 from U103a(13) to U103a(14).

Page 7-219/7-220, A70b Schematic, Rectifier Filter M. Change the values of C100 and C101 to 1300.

Page 7-249/7-250, A90 Schematic, SLOW SWEEP HORIZONTAL DRIVE B. Change the value of R102 to 243. Change the value of R5 to 392.

CHANGE 2 for Instruments With REV C A50 Assemblies

Page 4-24, A50 Parts List. Add A50U309, 1820-3507, SN74S74N, 1820-3507.

Page 7-149 through 7-152, A50 Schematics. Change the revision from B to C.

Page 7-149/7-150, A50B Schematic, CLOCK N. Add U309 circuits in Figure 1 to the A50B Schematic.

CHANGE 3 for Serial Numbers 2338A01970 and greater.

Page 4-20, A40 Parts List. Change the part numbers for the following components:

Reference Designator	Part Number
U106	1818-3577
U200	1818-3578
U201	1818-3579
U202	1818-3580
U203	1818-3581
U303	1818-3562
U502	1818-3563
U600	1818-3564
U601	1818-3565
U602	1818-3566
U603	1818-3567
U701	1818-3568

Page 4-20, A40 Parts List. Delete the following components: U300, U301, U302, U304, U305, U306, U700, U702, U703, U704, U707, U708.

Page 5-4, Section 5-7 part numbers for the A40 Processor/ROM Assembly Backdating. Add the following text:

Page 7-107, Table 7-31 A40W2 Test Signatures. Change the ROM Address Decoding signatures to:

U605(7)	550H	U606(7)	HIGH
U605(9)	5732	U606(9)	HIGH
U605(10)	551H	U606(10)	HIGH
U605(11)	5772	U606(10)	HIGH
U605(12)	AC18	U606(12)	HIGH
U605(13)	AU66	U606(13)	HIGH
U605(14)	AC38	U606(14)	HIGH
U605(15)	AUP7	U606(15)	HIGH

Page 7-108, Table 7-31 A40W2 Test Signatures. Change the Power on Test ROMs (U160, U502) and Processor Data Bus signatures to:

+5V	755U		
U106(11)	C2C8	U502(11)	9P3F
U106(12)	7633	U502(12)	0U5P
U106(13)	FU74	U502(13)	964P
U106(15)	FCP3	U502(15)	U125
U106(16)	993C	U502(16)	11UU
U106(17)	1034	U502(17)	2286
U106(18)	H18F	U502(18)	5A7F
U106(19)	4PFC	U502(19)	UCCA

Page 7-109, Table 7-32 Power-on Test ROM Return Codes. Replace Table 7-32 with:

Return Code	Failed ROM	Return Code	Failed ROM
0 8 01	U502	0 8 16	U202
0 8 02	U106	0 8 17	U603
0 8 03	U502	0 8 18	U203
0 8 04	U106	0 8 19	U603
0 8 05	U600	0 8 20	U203
0 8 06	U200	0 8 21	U303
0 8 07	U600	0 8 22	U701
0 8 08	U200	0 8 23	U303
0 8 09	U601	0 8 24	U701
0 8 10	U201		
0 8 11	U601		
0 8 12	U201		
0 8 13	U602		
0 8 14	U202		
0 8 15	U602		

CHANGE 4 for Serial Numbers 2549A03090 and greater.

Page 4-25, A60 Parts List. Add A60C999 0160-6517 CAPACITOR-FXD 100pf, 20% 220V.

Page 4-27, A60 Parts List. Add A60X605 1200-0639 20 PIN SOCKET to the A60 miscellaneous parts.

Page 7-177/7-178, A60b Schematic, COPY/COMPLIMENT DATA FEEDBACK P. Add C999 at 100pF between U605(11) and ground.

CHANGE 5 for Serial Numbers 2549A03145 and greater.

Page 7-179/7-150, Schematic A50b, LOCAL OSCILLATOR/NOISE SOURCE MIXER W/LOCAL OSCILLATOR INTERFACE X. Add 2 OR gates from U10 between U201(2) and U704(1) as illustrated in figure 2.

CHANGE 6 for Serial Numbers 2549A03547 and greater.

Page 4-5, A10 Replacable Parts. Change the part number of A10CR001 to 1906-0325 and delete A10CR002.

Page 7-19/7-20, A10a Schematic, INPUT PROTECTION D. Change the reference designator CR2 to CR1.

CHANGE 7 for Serial Numbers 2549A03585 and greater.

Page 4-10, A10 Replaceable Parts. Change the part number and description of A15R115 to 2100-3502 RESISTOR TRMR 200. Delete the part number for A15R123 and change the description to PART OF A15U102. Change the part number and description of A15U102 to 03562-62501 D/A 16-BIT AND MATCHING RESISTOR.

Page 7-35/7-36, A15a Schematic, Second Pass ADC H. Change the value of R115 to 200. Change the value of R123 to MATCHED TO U102.

CHANGE 8 for Instruments with 03561-66599 Revision B Motherboard Assemblies.

Page 4-44, A99 Parts List. Add A99R305 8159-0005 RESISTOR ZERO OHM. Change the part number of A99T100 to T-53677.

CHANGE 9 for Instruments with A41 or A42 assembly.

Page 4-20, Replaceable Parts List. Insert the replacement pages 4-20A through 4-20H.

Page 7-95, Section 7-16 A40 PROCESSOR/ROM ASSEMBLY. Add the following:

Note

In instruments with the A41 or A42 assembly, the A40 assembly circuits are modified to use CMOS memory as non-volatile mass storage in place of the bubble memory components. Instruments with the nonvolatile memory option have the 03561-66542 (A42) assembly installed, while those without the option have the 3561-66541 (A41) assembly installed. For simplicity, the A40 designator is used to identify the old A40, and the new A41 and A42 assemblies; use the designator appropriate for the instrument being serviced. Instruments with the A41 or A42 assemblies do not contain either the A65 or A66 assemblies; components for these assemblies are now contained on the A41 or A42 assembly and the A41/A42 references should be substituted for A65 or A66 as appropriate.

Page 7-113/7-114, A40 Component Locator. Replace page containing the A40 component locator with the attached replacement page 7-113/7-114.

Page 7-115/7-116, A40a Schematic. Replace the A40a schematic with the attached A40a replacement schematic.

Page 7-117/7-118, A40b Schematic. Replace the A40b schematic with the attached A40b replacement schematic.

Page 7-119/7-120, A40c Schematic. Replace the A40c schematic with the attached A40c replacement schematic.

Page 7-121a/7-122a, Add the A40e Schematic.

Page 7-181, Section 7-25 A65/A66 BUBBLE MEMORY ASSEMBLY. Add the following:

Note

In instruments with the A41 or A42 assembly, the A40 assembly circuits are modified to use CMOS memory as non-volatile mass storage in place of the bubble memory components. These instruments have the CMOS memory and support circuits on the A41 or A42 assembly. Substitute the A41 and A42 designators as required for references to the A65 and A66 assemblies. Schematics and troubleshooting information for the nonvolatile memory components can be found in the A40 PROCESSOR ROM service section.

*REV D SCHEMATIC IS IDENTICAL TO REV C

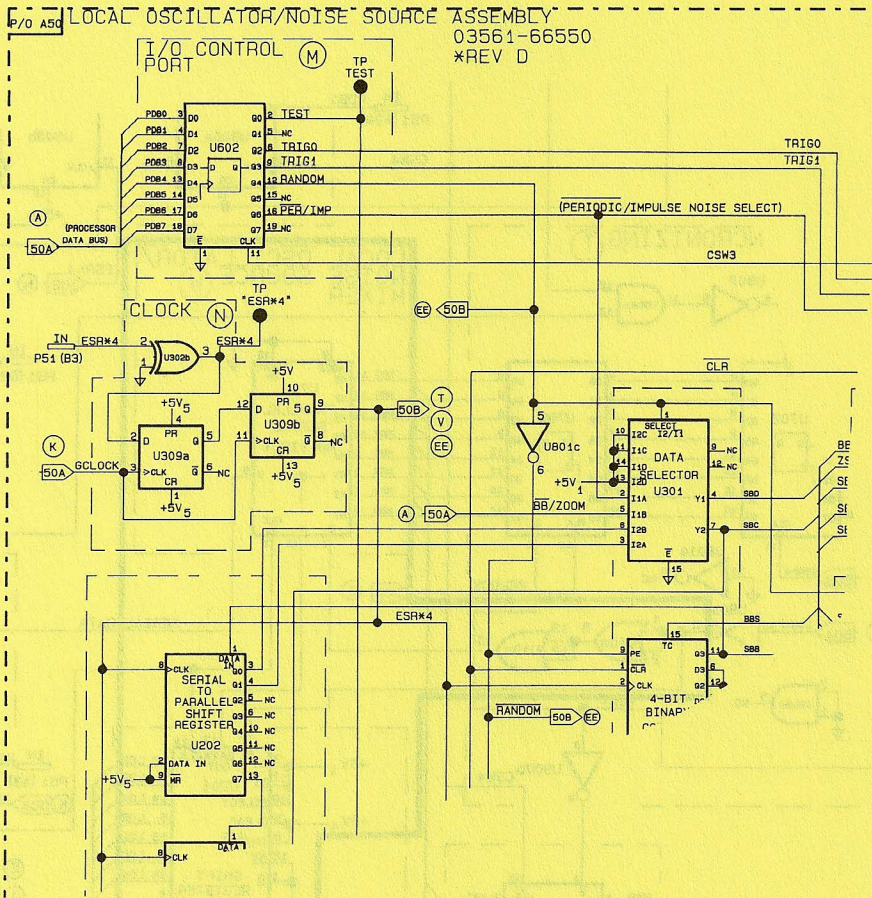


Figure 1. Circuit addition to A508, CLOCK N.

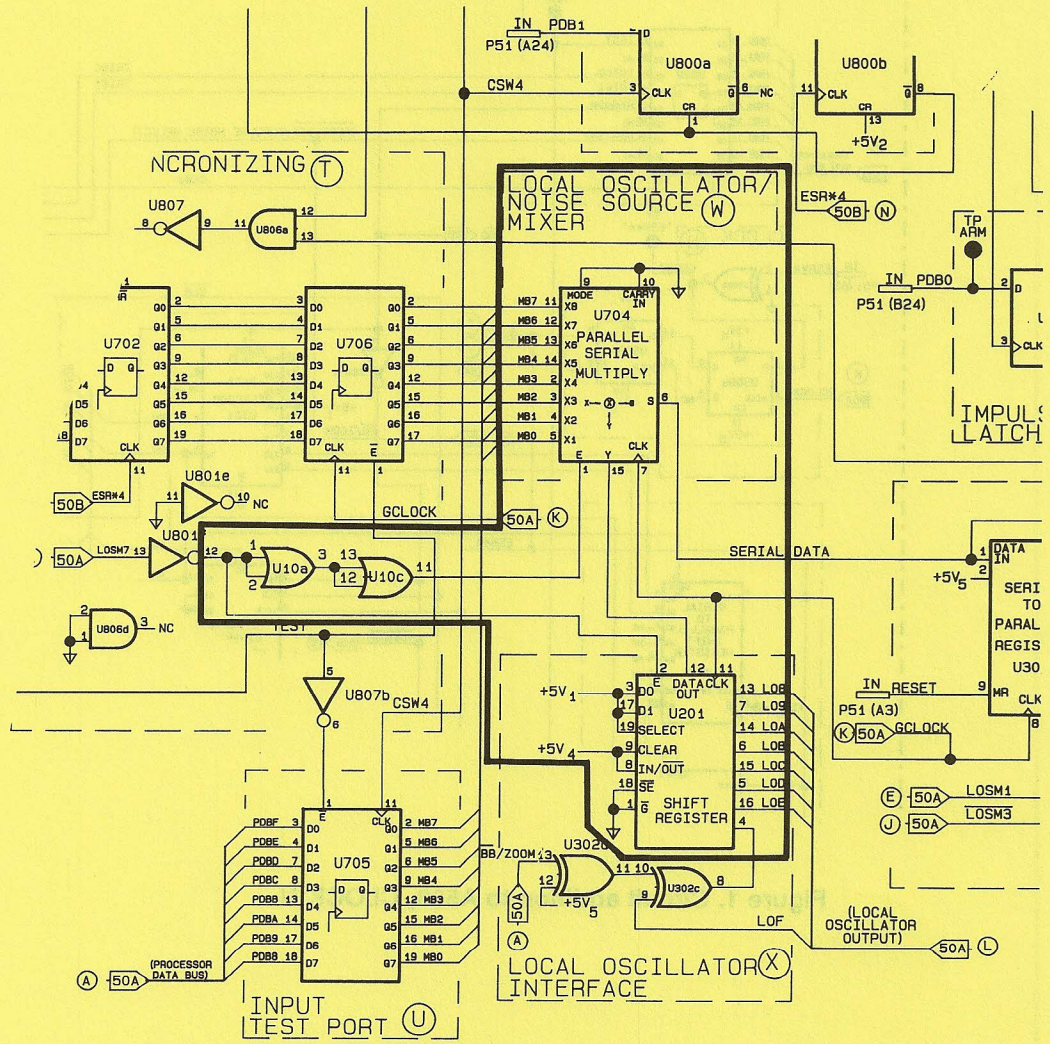


Figure 2. Circuit addition to A508, Local Oscillator/Noise Source Mixer W and Local Oscillator Interface X