Errata

Title & Document Type: 5110B Synthesizer Driver Operating and Service Manual

Manual Part Number: 05110-90001

Revision Date: December 1970

About this Manual

We've added this manual to the Agilent website in an effort to help you support your product. This manual provides the best information we could find. It may be incomplete or contain dated information, and the scan quality may not be ideal. If we find a better copy in the future, we will add it to the Agilent website.

HP References in this Manual

This manual may contain references to HP or Hewlett-Packard. Please note that Hewlett-Packard's former test and measurement, life sciences, and chemical analysis businesses are now part of Agilent Technologies. The HP XXXX referred to in this document is now the Agilent XXXX. For example, model number HP8648A is now model number Agilent 8648A. We have made no changes to this manual copy.

Support for Your Product

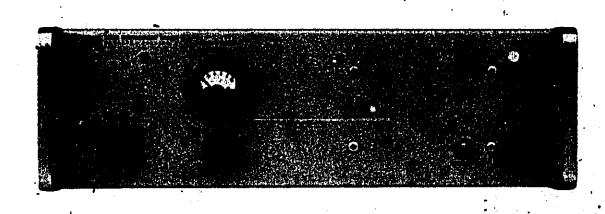
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SYNTHESIZER DRIVER 5110B



HEWLETT hp PACKARD

CERTIFICATION

The Hewlett-Packard Company certifies that this instrument was thoroughly tested and inspected and found to meet its published specifications when it was shipped from the factory. The Hewlett-Packard Company further certifies that its calibration measurements are traceable to the U.S. National Bureau of Standards to the extent allowed by the Bureau's calibration facility.

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Service contracts or customer assistance agreements are available for Hewlett-Packard products that require maintenance and repair on-site.

For any assistance, contact your nearest Hewlett-Packard Sales and Service Office. Addresses are provided at the back of this manual.

SYNTHESIZER DRIVER 5110B

SERIALS PREFIXED: 1048A

This manual applies directly to HP Model 5110B Synthesizer Drivers with serial number prefix 1048A. See Paragraph 1-7 for serial numbering system.

MANUAL CHANGES AND OPTIONS

Options 01 through 04 (multiple outputs for driving up to four Frequency Synthesizers) are discussed in Section VII. Older 5110B instruments are also documented in Section VII.

MODEL 5110A

The Model 5110A Frequency Synthesizer is similar to the Model 5110B, and this Operating and Service Manual also applies to Model 5110A instruments. Differences are explained in Section VIII at the back of this manual.

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Printed: DEC 1970



MANUAL CONTENT

This manual is supplied to help you make the best use of your Synthesizer Driver. The manual covers nine sections of information as follows:

Section I is an introduction to the instrument. Electrical and mechanical specifications are given, plus information on accessories and applications.

Section II covers inspection, power, mounting, packing, shipping, and connection.

Section III outlines operating procedures.

Section IV discusses technical details of oir cult operation.

Section V provides performance check, trouble-shooting, and adjustment procedures.

Section VII includes information on instrument options.

Section VIII is backdating information for older Model 5110A instruments.

Section IX contains circuit diagrams with component location.

HOW TO ORDER MANUALS

To order an Operating and Service Manual, contact your nearest Hewlett-Packard Sales and Service Office. Give complete model, name, and 8-digit serial number. The serial plate is on the rear panel (see Paragraph 1-8 for serial number system). Comments on this manual are welcome at any Sales and Service Office.

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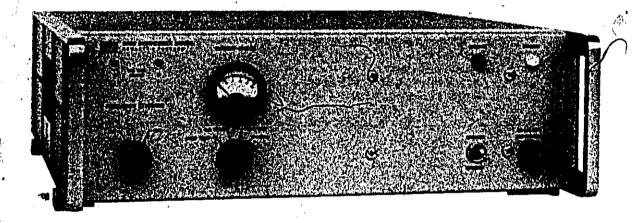
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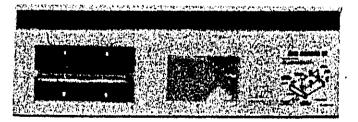
Model 5110B

model 5110B



power cord

rack_mounting kit



SECTION I GENERAL INFORMATION

1-1. INTRODUCTION.

1-2. DESCRIPTION.

- 1-3. The Hewlett-Packard Model 5110B Synthesizer Driver (Figure 1-1) is part of a frequency synthesizer system consisting of the 5110B and the Hewlett-Packard Model 5105A Frequency Synthesizer.
- 1-4. The Synthesizer Driver provides the 22 fixed frequencies necessary to drive the 5105A. The Driver derives all these frequencies from an internal 1 Mc frequency standierd which is stable to ±3 parts in 109 per day. The filtered 1 Mc signal is fed to a comb or harmonic generator.
- 1-5. Immediately after the harmonic generator, the third harmonic is filtered off, amplified, and refiltered. The remainder of the harmonic rich signal is passed through a 24 to 39 Mc bandpass filter, amplified, and then fed to active filtering, synchronously tuned transistor-tank stages which select out the 24 Mc and 30 through 39 Mc components. The filtered components lying between 30 Mc and 39 Mc are also fed to frequency dividers to provide the low frequency spectrum output of 3.0, 3.1, 3.2, 3.3, 3.4, 3.5, 3.6, 3.7, 3.8, and 3.9 Mc.
- 1-6. The 5110B thus provides the 5105A Frequency Synthesizer, by means of rear panel BNC connectors, very stable and clean signals of 20 Mc, 24 Mc, 3.0 through 3.9 Mc in 100-kc steps, and 30 through 3.9 Mc in 1 Mc steps.

1-7. INSTRUMENT IDENTIFICATION.

1-8. Hewlett-Packard uses a two-section, eight-digit serial number to identify instruments. The serial number is located on the rear panel of the instrument. The first three digits (serial prefix) identify a series of instruments; the last five digits refer to a specific instrument in that series. Later instruments use a nine-digit serial number and the last five digits refer to a specific instrument. If the first three digits of your instrument serial number do not appear on the title page of this manual, there are differences between the manual and your instrument which are described in Section VII (Serial Prefix 976 and below) or in a change sheet included with the manual. If the change sheet is missing, the information can be supplied by your nearest Hewlett-Packard field or sales office.

1-9. SPECIFICATIONS.

1-10. Table 1-3 lists the technical specifications for the Model 5110B Synthesizer Driver.

1-11. OPTIONS.

1-12. The \oplus 5110B Synthesizer Driver is capable of driving up to four \oplus 5105A Frequency Synthesizers. The following options are available:

Option 02: outputs for driving 2 \$\&\pi 5105A\$ Synthesizers Option 03: outputs for driving 3 \$\&\pi 5105A\$ Synthesizers Option 04: outputs for driving 4 \$\&\pi 5105A\$ Synthesizers

Note

Outputs provided for driving more than one \$\&\phi\$5105A Synthesizer must be terminated in 50 ohms when not connected to a synthesizer if full specified spurious performance is required. See Table 1-2 for 50-ohm terminations and special cables available.

Table 1-1. Equipment Supplied

Equipment	Description	Part No.
Synthesizer Driver	See Table 1-3	Model 5110B
AC Power Cable	Three conductor, 7.5 feet long	8120-1348
Rack Mount Kit	Hardware for conversion from bench to rack model	5060-0775

Table 1.3. Equipment Available

Table 1.5. Adaptitute it valuable				
Equipment	Description	🏶 Part No.		
Termination	50 ohm BNC term- ination for unused outputs (see note, Paragraph 1-12)	1250-0207		
Cable	Low frequency in- terconnect cable \$5110B to 5105A	05105-6054		
Cable	High frequency interconnect cable \$5110B to 5105A	05100-6213		
Cable	Special intercon- necting cable for connecting 5110B to 5105A; avail- able in lengths from 5 to 50 feet in multiples of 5, feet	C05-5110B specify con- figuration and length		
-Joining Bracket Kit	Brackets for join- ing 5105A and . 5110B when stacked /	5060-0216		

5110B SYNTHESIZER DRIVER

OUTPUT FREQUENCIES:

Provides 22 fixed frequencies for the 5105A Frequency Synthesizer; 3.0 through 3.9 Mc in 0.1 Mc steps (50 mv + 1, -3 db) 30 through 39 Mc in 1 Mc steps, 24 Mc, and 20 Mc (100 mv ± 1.5 db), 50-ohm system.

1 Mc buffered output (1 volt \pm 1.5 db into a 50-ohm resistive load) available at rear panel connector.

INTERNAL FREQUENCY STANDARD

TYPE: 1 Mc Quartz Oscillator.

AGING RATE: Less than ±3 parts in 109 per

STABILITY:

As a function of ambient temperature: $\pm 2 \times 10^{-10}$ per °C from 0°C to +55°C. As a function of line voltage:

As a function of line voltage: $\pm 5 \times 10^{-11}$ for a $\pm 10\%$ change in line voltage (rated at 115 or 230 volts rms line voltage).

RMS FRACTIONAL FREQUENCY DEVIATION:

Average Time	1 Mc Output Frequency
10 millisec	6 x 10 ⁻¹⁰ 1 x 10 ⁻¹¹
1 800-	1 + 10-11

SIGNAL-TO-PHASE NOISE RATIO: ** > 85 db

SIGNAL-TO-AM NOISE RATIO:** > 80 db

HARMONIC SIGNALS: > 40 db below the output (with proper termination)

PHASE LOCKING CAPABILITY:

A voltage control feature allows 5 parts in 108 frequency control for -5 to +5 volts applied externally.

EXTERNAL FREQUENCY STANDARD

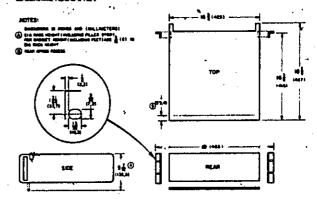
INPUT REQUIREMENTS:

1 Mc or 5 Mc, 0.2 vrms min., 5 v max across 500 ohms. Stability and spectral purity of 5105A Synthesizer will be partially determined by the characteristics of the external standard if used. Filtering is provided for broadband noise cleanup.

WEIGHT:

Net: > 54 lbs (25 kg) Shipping: 60 lbs (27 kg)

DIMENSIONS:



OPTIONAL FEATURES:

The 5110B Synthesizer Driver is capable of driving up to four 5105A Frequency Synthesizers.

Option 02: Outputs for driving two 5105A's. Option 03: Outputs for driving three 5105A's. Option 04: Outputs for driving four 5105A's.

Note:

If Option 02-04 is selected, the additional outputs must be terminated in 50 ohms when not connected to a 5105A Synthesizer if full specified spurious performance is required.

Accessory Available: 50 ohm BNC termination. Stock No. 10510A (22 required for each set of outputs not connected; e.g., max requirement would be 66 when Option 04 is selected but only one 5105A is being driven).

- 2. A special interconnecting cable may be req'd for driving additional 5105A Synthesizers. If a special length cable assembly is required, order spec C05-5110A. Specify configuration and length (max separation 50 feet). Cable is supplied in 5-foot sections only.
- 3. Small phase jumps (less than 1 radian) will be experienced on one 5105A output when another 5105A, connected to the same 5110B, is switched from one frequency to another.

GENERAL

OPERATING TEMP RANGE: 0° to 55°C.

INTERFERENCE: Complies with MIL-I-26600, Class 1 and 3, MIL-1-6181D. ***

SUSCEPTIBILITY: Complies with MIL-I-26600, Class 1 and 3, MIL-I-6181D.

POWER: 115 or 230 v ± 10%, 50 to 400 cycles, 35 watts.

^{*} After 72 hours of continuous operation.

^{**}In a 30 Kc band centered on the carrier, excluding a 1 cps band centered on the carrier.

^{***}Interference compliance requires that the and 5110B are connected by a low inductance path such as adjacent rack mounting.

SECTION III INSTALLATION

2-1. INITIAL INSPECTION.

- 2-2. Mechanical Check. If damage to the shipping carton is evident, ask that the carrier's agent be present when the instrument is unpacked. Inspect the instrument for mechanical damage (scratches, dents, broken knobs, etc.) Also check the cushioning material for signs of severe stress.
- 2-3. Performance Check. The electrical performance of Model 5110B should be verified as soon as possible after receipt. A performance check that is suitable for incoming inspection is given in Paragraph 5-5.
- 2-4. Claim for Damage. If Model 5110B is mechanically damaged or fails to meet specifications on receipt, notify the carrier and the nearest Hewlett-Packard lied office immediately. (A list of field offices is at the back of this manual.) Retain the shipping carton and the padding material for the carrier's inspection. The field office will arrange for the repair or replacement of your instrument without waiting for the claim against the carrier to be settled.

2,5. STORAGE AND SHIPMENT.

- 2-6. PACKAGING. To protect valuable electronic equipment during storage or shipment always use the best packaging methods available. Your Hewlett-Packard field office can provide packing material such as that used for original factory packaging. Contract packaging companies in many cities can provide dependable custom packaging on short notice. Here are two recommended packaging methods:
- a. RUBBERIZED HAIR. Cover painted surfaces of instrument with protective wrapping paper. Pack instrument securely in strong corrugated container (350 lb/sq in. bursting test) with 2-inch rubberized hair pads placed along all surfaces of the instrument. Insert fillers between pads and container to ensure a snug fit. Mark the box "Delicate Instrument" and seal with strong tape or metal bands.
- b. EXCELSIOR. Cover painted surfaces of instrument with protective wrapping paper. Pack instrument in strong corrugated container (350 lb/sq in. bursting test) with a layer of excelsior about 6 inches thick packed firmly against all surfaces of the instrument. Mark the box "Delicate Instrument" and seal with strong tape or metal bands.

2-7. RACK INSTALLATION.

2-8. The Model 5110B is ready for bench operation as shipped from the factory. Additional parts necessary for rack mounting are packaged with the instrument. To convert for rack installation, refer to Figure 2-1 and proceed as follows:

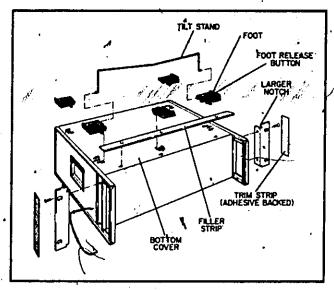


Figure 2-1. Conversion for Rack Mounting

- a. Remove tilt stand.
- b. Remove feet (press the foot-release button, slide foot toward center of instrument, and lift off).
- c. Remove adhesive-backed trim strips at front end of sides.
- d. Attach filler strip along bottom edge of front panel.
- e. Attach flanges to front end of sides (larger conner notch toward bottom of instrument). Instrument is now ready to mount in standard rack.

2-9. POWER CONNECTION,

2-10. LINE VOLTAGE. The \$5110B may be operated from either 115- or 230-volt (±10%) power lines. A slide switch on the rear panel permits quick conversion for operation from either voltage. Insert a narrow-blade screwdriver in the switch slot and slide the switch up for 115-volt operation ("115" marking exposed) or down for 230-volt operation ("230" marking exposed).

Note

Prior to ac power application, be sure correct fuse is installed (.5 amp 115V/.25 amp 230V).

- 2-11. POWER CABLE. The Model 5110B is equipped with a detachable 3-wire power cable. Proceed as follows for installation:
- a. Connect flat plug (3-socket connector) to ac line jack at rear of instrument.

b. Connect plug (2-blade with round grounding pin) to 3-wire (grounded) power outlet. Exposed portions of instrument are grounded through the round pin of the plug for safety; when only 2-blade outlet is available, use connector adapter (@ part no. 1251-0048), then connect short wire from side of adapter to ground.

Note

To maintain oscillator stability, crystal oven circuits are energized continuously when the Model 5110A is connected to the power line. Proper operation of the oven maybe verified by use of the CIRCUIT CHECK meter. Place CIRCUIT CHECK switch in the OVEN TEMP position and note indication on the meter when the power cord is connected to the power line. The meter should pin down scale for approximately 15 to 30 minutes (ambient about 22 °C). then rise to upper part of the scale. After a few minutes the needle will come down scale. It will then slowly oscillate and settle down in the green area. If the instrument has been in a much colder environment than 22°C, the needle will stay pinned down scale for a longer time. After the oven has come up to temperature, indicated by a meter reading in the green area of the CIRCUIT CHECK meter, it should stay there as long as the power is connected to the instrument. If the needle should go up scale or stay up scale after the instrument has been on for 1 hour, disconnect the power and look for a malfunction in the oven controller circuits.

2-12. INSTRUMENT INTERCONNECTION.

2-13. Connect the Model 5110B to the Model 5105A with cable assemblies provided as shown in Figure 2-2. Cables and connectors are marked for proper connection. Output may be taken directly from the rear panel output connectors. A joining bracket kit is available for lastening the 5110B and 5105A together. The part number is 5060-0216.

2-14. The Model 5110B can be provided with additional fixed frequency outputs which enable it to drive up to four Frequency Synthesizers. This is done by removing plug buttons and installing additional, output connectors in the filter divider modules (see Figure 2-3). When extra outputs are installed, internal 49.9 ohm terminating resistors are also installed as determined by the number of outputs desired (see Section VII, Options). When any output from the filter divider or filter assemblies in the Model 5110B is not used, it must be terminated with a 50-ohm load.

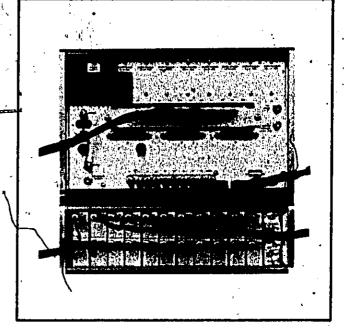


Figure 2-2. 5105A and 5110B Cable Interconnections

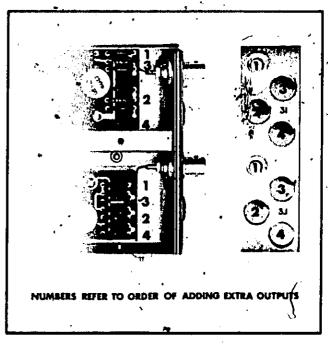


Figure 2-3. Adding Extra Outputs to the 5110B

SECTION III

≾-1. GENERAL

3-2. Figures 3-1 and 3-2 indicate the location and briefly explain the function of the Model 5110B controls, indicators, and connectors. Section IV gives a more detailed circuit description of the Synthesizer Driver.

3-3. OPERATION.

3-4. POWER.

3-5. Set the slide switch on the rear panel to the position corresponding to your ac line voltage (115 or 230 volts). Apply line voltage to the three-pin ac line input jack on rear panel using the power cord supplied with the instrument. The instrument has no power switch and voltage is applied to the crystal oven and oven control circuits any time the power cord is connected to the line. To maintain internal oscillator stability, the 5110B should be connected to the line at all times.

3-6. CIRCUIT CHECK SWITCH AND METER

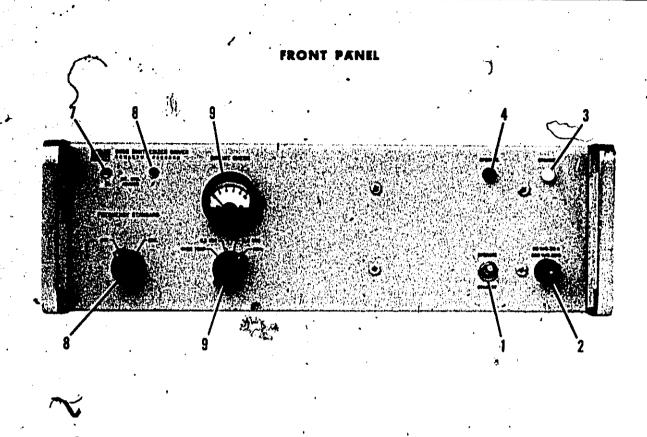
3-7. The CIRCUIT CHECK switch and meter provide a convenient means of checking the operation of the Driver circuits. Set the CIRCUIT CHECK switch for each position and observe the meter indication. The meter indication for all positions of the CIRCUIT CHECK switch is factory-set to read in the green when operation is normal.

3-8. FREQUENCY STANDARD.

3-9. The FREQUENCY STANDARD INT. EXT. switch gives the operator a choice of using the internal 1 Mc frequency standard which is stable to ±3 parts in 109 per day, or an external 1 Mc or 5 Mc standard.

3-10. GENERAL FREQUENCY CHECK.

3-11. The 22 fixed frequencies can be quickly checked by connecting an \$\&\phi\$ 5245L Electronic Counter with an \$\&\phi\$ 5261 Video Amplifier plug-into each of the labeled outputs on the rear panel of the 5110B and reading the frequency directly on the Counter.

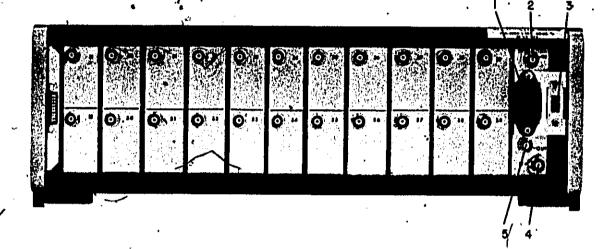


- 1. OPERATE-STANDBY switch.
- 2. Fuse provides overload protection; should be 0.5 ampere for 115-volt operation; 0.25 ampere for 230-volt operation.
- 3. White light when OPERATE-STANDBY switch is in STANDBY.
- 4. Red light when OPERATE-STANDBY switch is in OPERATE.
- CIRCUIT CHECK meter. The needle reads in the green section in all positions of the CIRCUIT CHECK switch if the 5110B is operating properly.

Note: Needle will not read in the green section in the OVEN TEMP position unless the 5110B has been connected to the power line for at least an hour.

- 6. Fine Frequency Adjust. Permits adjustment of internal standard frequency of about 5 parts in 10^8 .
- Medium Frequency Adjust. Permits adjustment of internal standard frequency of about one part in 106.
- 8. FREQUENCY STANDARD switch. Allows operator the choice of using either an internal or external standard.
- 9. CIRCUIT CHECK switch. Allows a quick check to see if the 5110B circuits are operating properly.

DEAD DAMES



- 1. AC line connector connects to flat plug on power cable.
- 2. 1 Mc or 5 Mc input. If an external standard is used it is connected to this BNC connector.
- Line-voltage slide switch. Permits selection of either 115- or 230-vac line; insert narrow blade screwdriver and slide up for 115v; slide down for 230 v.
- 4. DC control input. A -5 to +5 volts applied here from a phase detector allows voltage control of the internal frequency standard of 5 parts in 108.
- 5. A 1 Mc buffered output is continuously available here.

SECTION IV THEORY OF OPERATION

4-1. GENERAL

- 4-2. The 5110B Synthesizer Driver is part of a frequency synthesizer system consisting of the 5110B and the 5105A Frequency Synthesizer. The 5110B provides the 22 fixed frequencies necessary to drive the 5105A Frequency Synthesizer. A buffered, 1 volt, 1 Mc signal is also supplied.
- 4-3. Following is a discussion of the theory of operation of the Synthesizer Driver. Overall operation is treated first. This is followed by a discussion of the theory of operation of each module in order of its module designation. For example, Input Amplifier/Buffer Amplifier A1 is discussed first.
- 4-4. A block diagram of the 5110B is shown in Figure 9-2. The synthesis process always starts with a 1-Mc signal. The operator is given the choice of using the internal 1-Mc Frequency Standard A2 which is stable to ±3 parts in 109 per day, or an external 1-Mc or 5-Mc standard. If an external Mc standard is employed, it is accepted straight through, white a 5-Mc signal is divided to 1 Mc. A -5 to +5 volts applied at a rear panel connector allows frequency control (±5 parts in 108) of the internal crystal oscillator.
- 4-5. The internal Frequency Standard A2 includes a 1-Mc quartz resonator with associated circuits in a modified Pierce configuration. The rystal and a temperature sensing thermistor bridge circuit are housed in an oven having proportional temperature control.
- 4-6. The instrument is designed for minimum noise and to this end a crystal filter A3 is placed between the frequency standard and the Comb Generator A4 and immediate the lowing the Selector Switch A18. This filter effectively limits the bandwidth of the standard so that any noise outside of this band is eliminated. The filtered 1-Mc signal is fed through a buffer amplifier and is made available at the rear panel. This signal may be used for synchronous operation in various tests performed on the system.
- 4-7. The filtered 1-Mc signal is also fed to comb generator module A4. The comb generator contains a driver amplifier, a step-recovery diode (harmonic generator), eleven filter networks, and eleven tuned amplifiers.
- 4-8. Immediately following the step-recovery diode, 20 Mc is filtered off, amplified, refiltered and made available at the rear panel.
- 4-9. The remainder of the signal is passed through a 24 to 39 Mc band-pass filter, amplified, and then fed to synchronously tuned fransistor-tank stages. The stages select out the 24 Mc and 30 through 39 Mc components and feed these components to more active filtering before being made available at the rear panel.

- 4-10. The filtered components from 30 to 39 Mc are also fed to filter/dividers. The stored-charge divideby-two, and regenerative-divide-by-five types provide the low frequency spectrum output of 3.0, 3.1, 3.2, 3.3, 3.4, 3.5, 3.6, 3.7, 3.8, and 3.9 Mc.
- 4-11. The 5110B thus provides the 5105A Frequency Synthesizer, by means of rear panel connectors, very stable and clean signals of 20 Mc, 24 Mc, 3.0 through 3.9 Mc in 100-kc steps, and 30 through 39 Mc in 1-Mc steps.

4-12. INPUT AMPLIFIER/ BUFFER AMPLIFIER

4-13. INPUT AMPLIFIER A1.

- 4-14. The input amplifier is designed to accept signals of 1°Mc or 5 Mc. When either a 1-Mc or 5-Mc external standard is used to drive the 5110B the signal is connected to rear panel connector labeled IN. Refer to Figure 9-3 during the following discussion.
- 4-15. The signal sees two broad-tuned circuits; one (L1-C1) tuned to 1-Mc and the other (L2-C2) tuned to 5-Mc. CR1 and CR2 are limiters which are followed by amplifier Q1. More limiting by CR3 and CR4 follows amplifier Q1. The signal is amplified again by Q2. The signal is again amplified by Q3 if it is 1 Mc.
- 4-16. If the input is 5 Mc, Q3 acts as a divider. Its output circuit is tuned to 1 Mc and a portion of the signal is fed back to the emitter of Q3 to complete the loop and generally favor only a 1 Mc signal or simply to amplify every fifth pulse of a 5 Mc signal.
- 4-17. The signal sees more limiting in CR5 and CR6 and is amplified again by Q4 whose output is tuned to 1 Mc. A 1-Mc, 1-volt rms signal results at A1J4.

4-18. BUFFER AMPLIFIER A1A2.

4-19. The buffer amplifier receives (from A3) the crystal filtered signal of either the internal frequency standard or the external standard from the input amplifier and provides a buffered 1 Mc signal at the rear panel.

4-20. FREQUENCY STANDARD A2

4-21. GENERAL.

4-22. Crystal oven assembly A2A1, part of oven control assembly A2A3, and oscillator assembly A2A2 generate an extremely stable 1-Mc signal. Another part of A2A3 provides buffering and amplifies the 1-Mc from A2A2.

4-23. CRYSTAL OVEN ASSEMBLY A2A1.

4-24. The crystal oven assembly is a thermally insulated chamber which contains a heating element, a

temperature sensing circuit, and a 1-Mc plezo-electric crystal.

4-25, "OVEN CONTROL ASSEMBLY A2A3.

4-26. The oven control assembly includes oscillator Q1 which produces a 3-kc output whose amplitude is controlled by the temperature-sensing element in the oven. The oscillator output is amplified by Q2 and detected to produce a dc level whose amplitude is inversely proportional to oven temperature. The dc level is amplified and applied to the heating element in the oven. On the Oven Control assembly there is an ambient temperature sensing circuit which monitors the oventemperature and makes the necessary circuit compensations so that the meter will read in the green region over a wide ambient temperature range as long as the crystal oven is operating properly. Also on the Oven Control assembly is a 2-stage amplifier circuit which buffers the 1-Mc signal from \$2A2. Any time that the 5110B power cord is connected to the line the oscillator oven is on.

4-27. OSCILLATOR ASSEMBLY A2A2.

4-28. The oscillator assembly includes the Q1 oscillator circuit which is connected to the 1-Mc crystal in A1. The 1-Mc oscillator output is amplified by Q2, Q3, and Q4. A portion of the Q4 output is detected and applied to Q1 as AGC so that power dissipation in the crystal can be held at a constant low value.

4-29. Varying the voltage at the cathode of varactor CR2 allows a frequency control of the crystal oscillator. Applying -5 to +5 volts do at a rear panel connector allows a frequency control of ±5 parts in 108.

4-30. CIRCUIT DETAILS.

4-31. Refer to the schematic diagram, Figure 9-4, for circuit details. The oscillator A2A3Q1 is controlled by the Wien bridge in A2A1. Positive feedback from the A2A3Q2 emitter through A2A1R1-A2A1C6 to the A2A3Q1 emitter maintains oscillation at the frequency of maximum feedback, which occurs at that frequency for which the A2A1R1-A2A1C6 phase shift equals the A2A1R2-A2A1C7 phase shift (about 3 kc). Degenerative feedback is provided from the A2A3Q2 emitter and the A2A1RT1-A2A1R3-A2A1R4 divider to the A2A3Q1 base; an increase in oven temperature lowers the resistance of RT1, thus increasing degenerative feedback to produce decreased oscillator output. This results in a lower detected do level at the base of A2A3Q3 and hence a reduction in current through the Oven Heater A2A1HR1. The reverse process occurs for a decrease in oven temperature. The detector is a voltage doubler circuit; A2A3C4 charges fully through the negative half cycle, and then discharges through A2A3CR2 in series with the driving source during the positive half cycle. Capacitor A2A3C9 between the collector and base of A2A3Q4 dampens sudden de voltage swings and filters any ac component from the detected signal.

4-32. The A2A2Q1 oscillator is a modified Pierce oscillator; its base is maintained at a dc level from the A2A2R7-A2A2R8 junction; AGC current is supplied to its emitter from the A2A2CR3-A2A2CR4 detector

(voltage doubler) which is referenced to the A2A2R7-A2A2R8 junction. A2A3Q3 is a driver amplifier for the tuned gain stage A2A3Q6. A2A3L2, A2A3C15, and A2A3C16 comprise a tuned pi-matching network to provide an output impedance of approximately 50-ohms.

4-33. CRYSTAL FILTER A3.

4-34. It is necessary to generate a number of frequencies of high spectral purity for use by the 5105A Frequency Synthesizer. The design of the 5110B accounts for sources of noise and minimizes any unavoidable noise that is generated. One of the steps taken to achieve this end is to place a crystal filter after the switch which selects the frequency standard to be used. This filter effectively limits the bandwidth of the standard so that any noise outside of this band is eliminated.

4-35. Refer to Figure 9-3 during the following discussion. AA 1 Mc signal from a 50-ohm source is presented to the input of the crystal filter. T1 transforms this impedance to the image impedance at its secondary, approximately 2000 ohms. Capacitors C1 through C4 form an impedance balancing network with C4 tuning out Y1 capacitance. L1 helps transform the output impedance to 100 ohms. Crystal filter bandwidth is about 100 cycles.

4-36. COMB GENERATOR A4.

4-37. The filtered 1-Mc signal from Crystal Filter A3 is connected to A4J1. After limiting by CR2, CR3, and CR4 the signal is amplified by power amplifier Q1. A portion of the 1-Mc signal is sampled at the base of Q1 and connected to the front panel meter. L1, C3, and C5 are tuned to 1 Mc. C3 is a temperature compensating capacitor.

4-38. The 1-Mc signal at the collector of Q1 is applied to step recovery diode CR6. R6 is a bias adjust and L3 is an rf choke. R5, GR5, Q2, R7, and RT1 form a temperature control circuit which keeps the temperature ground the step-recovery diode CR6 constant.

4-39. The step recovery diode is suited for high frequency generation due to its ability to maintain high reverse conduction for a period immediately following forward conduction. For every cycle of the 1-Mc signal, the ending of conduction results in the generation of a very sharp spike which is rich in 1-Mc harmonics. R8, L5, and C1 couple the 20Mc harmonic to pin 7 of A4J15. C10, E2, and E3 are used to suppress UHF harmonic signals.

4-40. L4, C10, and L6 form a high pass filter which will pass frequencies above 20 Mc.

4-41. After passing through the high pass filter the harmonic rich spikes are presented to pulse amplifier Q3 where they are amplified 20 db. CR7 serves as a reverse current limiter for Q3 and thus is a protecting device for Q3. L8 is a dc pass and also provides some tuning of the load seen by Q3. R9 reduces the "Q" of L8 and the load.

4-42. C12 and T1 form a parallel tuned circuit resonating at 39 Mc. C37 limits the reverse current through Q4. R15 and C22 are decoupling components. C27 and T12 form another parallel funed circuit which is resonant at 39 Mc.

4-43. The rest of the circuits are similar tuned transistor stages which select the 24 Mc and 30 through 38 Mc components.

4-44. FILTER/DIVIDERS A5-A14.

4-45. 30-39 MC FILTERS A5A1-A14A1.

4-46. A signal of about 10 millivolts with sidebands down almost 15 db is brought to pin 3 of P1. Pin 3 is connected to the emitter of Q1, a common base amplifier whose collector circuit provides about 15 db filtering of 1 Mc sidebands. The signal on the collector of Q1 after filtering is lightly coupled to Q2 by C31. Each following stage operates similarly with some limiting in each stage. Note the thermistor in Q7 emitter circuit. This makes Q7 operate as a function of ambient temperature and controls its output level. L12 is a current source and also suppresses undesirable harmonics. It is adjusted to provide about 150 millivolts at its output. At this point the signal sees an impedance of about 18 ohms. L1 stops any undesirable signals that are on the -12,6 volt line coming in at pin 1 of P1. L1, L2, and L3 are RF chokes which decouple the -12.6 vdc line. L21, L22, and L23 serve the same purpose for the +6.3 line.

4-47. 3.0-3.9 MC DIVIDERS A5A2-A14A2.

4-48. A portion of the signal is coupled through C36 and brought to the emitter of Q51 in the divider. Q51 and Q52 are amplifiers whose output circuits are tuned to the filter's (A1) frequency. CR51 selects only the negative peaks of the signal. L55 is tuned to provide the proper amount of current leak-off so that Q53 will function as a stored-charge divider. R66 and C76 form a self-biasing circuit which assures that Q53 will operate in the range of L55..

4-49. The divided signal on the collector of Q53 goes to regenerative divider Q54 where it is amplified. The output circuit of Q54 is tuned to the output frequency at J5. The fourth narmonic of the output frequency is tapped off between C58 and C69 and fed back to the

emitter of Q54 where its fourth harmonic is formed and mixed at the base. C77, CR52, CR53, and C81 form'a limiting network. The signal is coupled to Q55 where it is amplified. The collector circuit of Q55 is tuned to the desired output frequency. L59 is adjusted to provide 75 millivolts at its output.

4-50.20/24 MC FILTER A15.

4-51. 24 MC FILTER A15A1.

4-52. The same theory applies to A15A1.as that in Paragraph 4-44, discussing A5A1-A14A1 Filter theory.

4-53. 20 MC FILTER A15A2.

4-54. A15A2 theory is generally the same as that discussed in Paragraph 4-45.

4-55: POWER SUPPLY RECTIFIER A16.

4-56. A1CR1 through A1CR12 rectify the voltage on the secondary of T1. C1 and C2 filter this rectified voltage. Q1 and Q4 are series regulators with Q2 and Q3 acting as their drivers, respectively. A2Q1 and A2Q2 are current limiters which are normally biased off. They sense heavy current changes at the output and limit current through Q1 and Q4. A1C1, A1R1, and A1C2, A1R2 are filters and A1CR13, A1CR14 is a stage of preregulation. A1Q1 is an emitter follower which acts as a buffer between pre-regulation stages A1CR13, A1CR14, and A1CR15, A1CR16, A1CR17, and A1CR18. A1CR19, A1CR20, A1CR23, and A1CR24 are temperature compensating diodes. A1CR21 and A1CR22 are zeners which maintain the necessary voltages at pin 7 and pin 6 of A1.

4-57. POWER SUPPLY REGULATOR A17.

4-58. Q5, A1Q1 and Q6, A1Q4 are series regulators connected in a Darlington configuration. A1Q5 and A1Q6 are differential pairs and form part of a feedback loop. The gain of the feedback amplifier is approximately 500 at low frequencies. A1Q5A, A1Q5B and A1Q6A, A1Q6B are housed in the same package to provide equal tracking over the operating temperature range. A1CR1 and A1CR2 are reference diodes on one side of the differential amplifiers. A1R8 and A1R10 are on the other side and are adjusted to give +6.3 volts and -12.6 volts at the output of A17. A1R5 and A1R6 are in the emitter circuits of Q2 and Q3 and provide the correct temperature coefficient over the operating range.

DAINIENANCE

Table 5-1. Recommended Test Equipment

Instrument Type	Characteristics	Use	Instrument Recommended
		<u> </u>	resconniciased .
Frèquency Synthesizer	Precision signal source .01 cps to 500Mc(certified spurious down 100 db)	Performance Check	₱ 5105A/5110B
High Frequency Signal Generator	100 kc to 10 Mc 606A Specifications	Circuit Adjustment Troubleshooting	€ 606A
Oscilloscope	Bandwidth to 40 Mc	Circuit Adjustment Troubleshooting	∲ 175A
Electronic Counter	Measure frequency to 40 Mc ±1 count	Performance Check	♦ 5245 L
Differential Voltmeter	0 to 100 vdc . 01% accuracy	Circuit Adjustment Troubleshooting	₹ 740 A
RF Millivoltmeter	1 mv to 500 mv to 50 Mc 3% accuracy	Circuit Adjustment Troubleshooting	
Balanced Mixer	Frequency to 1 Mc, N.F. < 7 db	Performance Check	€ 10514A
DC Null Voltmeter	Dc null detection ±2%	Circuit Adjustment Performance Check	€ 413A `
Frequency Standard	1 Mc sine wave	Performance Check	№ 105A/B •
DC Voltmeter	10 megohm input Z, 1% accuracy ± 50 volts	Troubleshooting	⊕ 412A
Low Noise Amplifier	40 db ampl. , N.F. < 6 db	Performance Check	
AC Voltmeter	1 cps to 1 Mc ± 3%	Performance Check	€ 403A with 500 across meter,
Variable Delay Line	Delay signal over frequency range	Performance Check	`
Strip Chart Recorder	0.2% accuracy, full scale	Performance Check	Moseley 680
Tuned Voltmeter	1000 cps bandwidth 13 to 130 cps	Performance Check	€ 415E
Transistor Power Supply	0 to 40 volts DC	Circuit Adjustment Troubleshooting	€ 723 B
Variable AC Voltage Supply	0 to 300 VAC	Circuit Adjustment . Troubleshooting	
Attenuator	0 to 110 db th 10 db steps coaxial	Circuit Adjustment Troubleshooting	€ 355D
Feed-thru Termination	59-ohm feed-thru	Circuit Adjustment Performance Check	€ 11048B
Termination	50-ohm BNC	Circuit Adjustment Performance Check	€ 1250-0207 _.
Connector	BNC Tee (4 required)	Circuit Adjustment Performance Check	© 1250-0072
Connector	BNC to clip leads	Circuit Adjustment Performance Check	See Figure 5-7
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SECTION V MAINTENANCE

5-1. INTRODUCTION.

5-2. This section provides maintenance and service information for the Model 5110B Synthesizer Driver. Included are a table of recommended test equipment, troubleshooting aids, adjustment procedures, and an in-cabinet performance check which may be used to verify proper operation of the 5110B.

5-3. TEST EQUIPMENT.

5-4. Recommended test equipment for performance checking and troubleshooting is listed in Table 5-1. Other test instruments may be used if their specifications equal or exceed the required characteristics. The recommended measuring systems must be composed of a number of standard and special instruments connected together. Therefore the performance of the measurement system is being checked as well as the performance of the Synthesizer Driver. The following measurement systems-will require a considerable amount of effort to duplicate and also to verify that an "out of specification" reading is traceable to the instrument under test or to the test equipment.

5-5. IN-CABINET PERFORMANCE CHECK.

- 5-6. GENERAL. The In-Cabinet Performance Checks, Table 5-2, and Performance Check Test Card (to be filled out during incoming inspection) page 5-6a, verify specifications and provide a permanent record of performance of each instrument. The In-Cabinet Performance Check verifies proper operation of all circuits in Model 5110B Synthesizer Driver and may be used:
- a. As part of an incoming inspection check of instrument specifications:
- b. Periodically, for instruments used in systems where maximum reliability is of utmost importance;
- c. as part of a troubleshooting procedure to locate malfunctioning circuits, and
- d. after any repairs or adjustments, before returning instrument to regular service.
- 5-7. OPERATION. A check of general operation is made by noting the circuit check meter indication as the switch is rotated through its four positions. All readings should be in the green area.

5-8. MODULE DESIGNATIONS.

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5-9. Table 5-3 gives the reference designations and names of all modules used in the Synthesizer Driver.

5-10. INSTRUMENT COVER REMOVAL.

5-11. For access to modules in the Synthesizer Driver remove top and bottom instrument covers.

Remove the four screws from the cover and slide cover toward the rear of the instrument.

5-12. TROUBLESHOOTING.

5-13. The best approach to isolating trouble in the Model 5110B is first to obtain all possible information from the controls, indicators, and connectors; then logically apply this information to locate the defective unit or module. Figures 3-1 (Front Panel Controls and Indicators), 3-2 (Rear Panel Connectors and 115-280 v control), 5-11 (Component Location) 9-2 (Overall Block Diagram) can be used to help understand operation and locate modules and parts. To further ald in analysis each position of the CIRCUIT CHECK switch is discussed in the following paragraphs. Table 5-4 (Troubleshooting Aids) lists basic trouble indications and checks for their cause. The In-Cabinet Performance Check, Table 5-2, is a good trouble-shooting aid.

5-14. CIRQUIT CHECK SWITCH.

- 5-15. OVEN TEMP POSITION. The meter signal is supplied from the Frequency Standard A2. If the meter reading is in the green section it is an indication that the oven circuits have brought the crystal up to operating temperature. The meter monitors the output of oscillator A2A3Q2. When the oven circuits have reached operating temperature this sampling gives a reading in the green section.
- 5-16. 6.3 VDC. The meter signal is supplied from the +6.3 volt lead on Power Supply Regulator Assembly A17. The meter reading has been normalized to read in the green section if the +6.3 volts is present.
- 5-17. 12.6 VDC. The meter signal is supplied from the -12.6 volt lead from Power supply Regulator Assembly A17. The meter reading has been normalized to read in the green section if -12.6 volts is present.
- 5-18. 1 MHz. The meter signal is supplied from the base of A4A1Q1 in Comb Generator module A4. The meter reading has been normalized to read in the green section if 1 Mc at the proper amplitude is present.

5-19. ADJUSTMENTS.

5-20. GENERAL.

5-21. The only periodic adjustment necessary for proper operation is the front panel INT. STD. ADJUST for standardizing the oscillator. All other internal adjustments, especially the power supply voltages, should not be adjusted until checks prove operation of the Synthesizer Driver is out of specifications. The power supply in this instrument is extremely stable for long periods of time. If the voltages are essentially correct (\pm 100 mv for 6.3 volts and \pm 200 mv for -12.6 volts) and regulate within \pm 100 microvolts between low and high line voltage, there is no reason to make an adjustment. Do not make adjustments with a 1% voltmeter.

Table 5-2. In Cabinet Performance Check

1. OUTPUT FREQUENCIES: Provides 22 fixed frequencies for the 5105A Frequency Synthesizer;
3. 0 through 3. 9 Mc in .1 Mc steps (50 mv +1, -3 db) 30 through 39 Mc in 1 Mc steps,
24 Mc, and 20 Mc (100 Mv ±1.5 db), 50-ohm system.

OUTPUT LEVELS: Connect a 50-ohm load to each output in turn and check output levels with an \$411A RF Millivoltmeter

OUTPUT FREQUENCIES: Connect an & 5245L Electronic Counter to each output in turn and note that the output frequency is correct. A consistent one or two cycle variation indicates the time bases of the instruments are offset. In order to check the low level outputs (3.0 to 3.9 Mc), they must be connected to the & 5261A Video Amplifier plug-in of the Counter.

SIGNAL-TO-PHASE NOISE RATIO, SIGNAL-TO-SPURIOUS RATIO ON THESE OUTPUT FREQUENCIES.

Although they are not part of the specifications, it is advisable to measure the signal-to-phase noise ratio and the signal-to-spurious ratio to verify acceptable operation. These ratios are checked indirectly when the 5110B Synthesizer Driver is used to drive the 5105A Frequency Synthesizer and the overall signal-to-phase noise ratio and the signal-to-spurious ratio are checked; however in some cases it is desirable to verify proper operation of the 5110B directly.

Figures 5-1 and 5-2 are general block diagrams which show the setup required to make the measurements. Test equipment specifications are shown. Some of the units may not be commercially available:

SIGNAL-TO-PHASE NOISE RATIO:

30 to 39 Mc, 20 Mc & 24Mc: Greater than 68db (30 kc bandwidth) for 24, 30 to 32 and 34 Mc. Greater than 78db (30 kc bandwidth) for 33, 35 to 39 Mc. All 30 kc bandwidths exclude a 1 cps band centered on signal.

Make the measurements using setup shown in Figure 5-1 and the following general procedure:

- 1. Channect equipment as shown except for the phase control to the reference unit.
- 2. Connect the same frequency fo, from the reference unit to the mixer as the frequency to be measured.
- 3. Set the calibration generator to the frequency being checked plus one hundred cycles; and to the same amplitude as the output level of the 5110B.
- 4. Disconnect the 5110B and connect the Calibration generator in its place.
- 5. Adjust voltmeter for an on-scale reading. Note the range setting and the meter reading in db. This is the reference signal level.
- 6. Reconnect the 5110B to the circuit. Vary the delay for minimum de indication on the phasemeter, which indicates the desired condition of phase quadrature.
- 7. Connect the phase control lead to the reference unit. This insures phase lock during the measurement.
- 8. Adjust the AC voltmeter for an on-scale reading. Note this reading in db and add one db for correction of the average reading meter to rms. The difference in this sum and the reference reading is the signal-to-noise ratio. It is in a 0.5 cps to 15 kc bandwidth. Since a demodulated bandwidth is equal to half the RF spectrum bandwidth, the measurement is of a 30 kc bandwidth centered on the signal, excluding a one cps band centered on the signal.

3_0 TO 3. 9(MC:

Greater than 73 db (30 kc bandwidth) for 3, 0 to 3, 9 Mc.

The same circuit and procedure is used as for the 24 and 30 to 39 Mc frequencies except that amplifiers 1 and 2 must have 6 db more gain to compensate for the lower output levels of the 3.0 to 3.9 Mc frequencies.

Table 5-2. In-Cabinet Performance Check (cont'd)

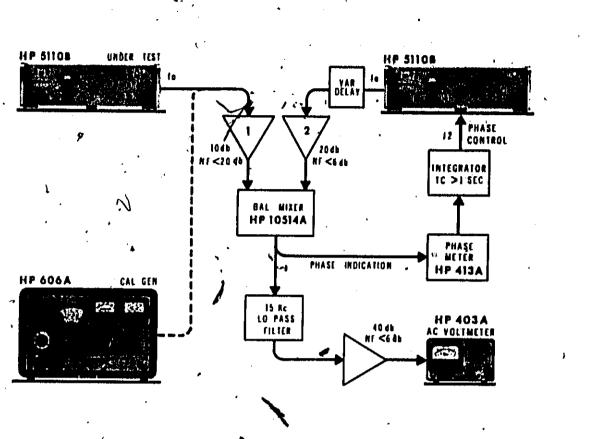


Figure 5-1. Test Setup - Signal-to-Phase Noise Measurements

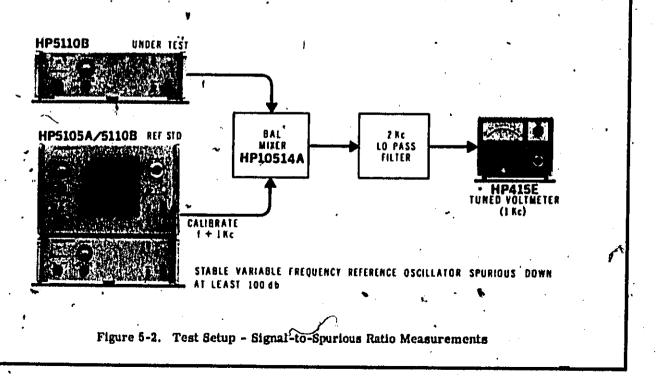


Table 5-2. In-Cabinet Performance Check (cont'd)

SIGNAL-TO-SPURIOUS SIGNAL RATIO: .

30 TO 39 MC AND 24 MC:

At least 105 db.

Make the measurements using setup shown in Figure 5-2 and the following procedure:

- 1. Connect the equipment as shown in Figure 5-2.
- 2. With the reference oscillator offset 1 kc from the frequency under test, adjust the tuned voltmeter for an on-scale reading. Note the meter reading and range setting in db. This is the reference reading.
- 3. Offset the reference oscillator ± 1 Mc plus 1 kc from the frequency under test. Adjust the voltmeter for an on-scale reading. The difference between this reading and the reference reading is the signal-to-spurious signal ratio for a sperious signal 1 Mc away from the frequency under test.

Note

The tuned voltmeter is calibrated for an input from a square law device (output voltage proportional to power input). The db reading must be doubled when using the voltmeter in the circuit of Figure 6-2. That is, an indication of 40 db is really 80 db in this application.

The most pronounced spurious signals are plus and minus 1 Mc from the frequency under test. If these spurious signals are down 105 db, any other spurious signals may be expected to be down 105 db.

2. INTERNAL FREQUENCY STANDARD: Type - 1/Mc Quartz Oscillator.

Aging Rate: less than ± 3 parts in 10^9 per 24 hours (after 72 hours of continuous operation).

The frequency accuracy and drift rate may be checked by comparison with the standard time broadcasts from the National Bureau of Standards' station WWVB in Fort Collins, Colorado.

After 72 hours of continuous operation, the 1 Mc output from the 5110B (marked OUT on rear panel) is connected to the 1 Mc Local Standard input of the VLF Comparator (H03-117A).

Make a phase comparison as described in the operating manual for the Comparator. The 5110B Oscillator offset will be plotted out on the self-contained strip chart recorder.

The oscillator may be set on frequency by adjustment of the M and F screwdriver Internal Standard controls on the front panel of the Synthesizer Driver. A course adjustment is available under the left front side cover of the 6110B. Removal of the cover will expose a plug button under which is the course adjustment control. If it is necessary to use it, the M and F controls should first be set to the center of their range (slots horizontal).

The drift rate is checked by noting the average offset at two different times several hours apart, determining the difference in average offset and dividing it by the time between observations. This gives the rate of change of frequency per unit time. It is then necessary to convert it to the total-change for a 24-hour period to find the aging rate of the standard for a 24-hour period.

Example: Reading #1 average offset is +3 parts in 10^{10} about 10 AM. Reading #2 average offset is +7 parts in 10^{10} about 4 PM. Difference in average offset is 7-3 = 4 parts in 10^{10} .

Time between observations is 4 PM - 10 AM = 6 hours.

Average rate of change is $\frac{4 \times 10^{10}}{6}$ = 6.666 parts in 10^{11} per hour.

Total change for a 24-hr period is: 6.66 parts in $10^{11} \times 24 = 1.6$ parts in 10^9 .

Two coherent measurements of offset may be made 24 hours apart and the difference will be the aging rate directly.

3. INTERNAL FREQUENCY STANDARD:

STABILITY: As a function of ambient temperature: $\pm 2 \times 10^{-10}$ per °C from 0°C to ± 55 °C.

As a function of line voltage: $\pm 5 \times 10^{-11}$ for a $\pm 10\%$ change in line voltage (rated at 115 or 230 volts rms line voltage).

Measure the stability of the internal standard using the circuit in Figure 5-3 and the following procedure:

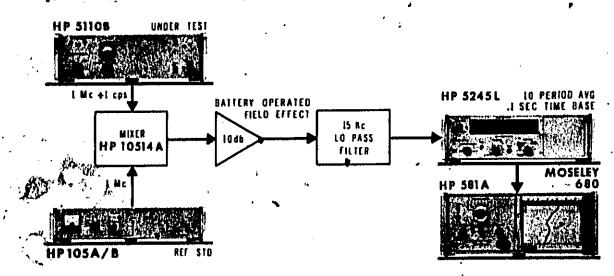


Figure 5-3. Test Setup - Stability Measurements

TEMPERATURE:

- 1. Place the 5110B in a temperature-controlled environment. The rest of the circuit should be in a constant temperature environment.
- Set the digital to analog converter to analog columns 4, 5, and 6. This gives a full scale plot on the strip chart recorder of 10 parts in 109.
- 3. Make a reference plot with unit at room temperature. Lower the temperature of the 5410B ambient to 0°C and allow 3 hours for the unit to reach thermal equilibrium. Make a plot of the output. Increase the temperature gradually to +55°C and allow 3 hours for thermal equilibrium. Make a plot of the output. Note that the change in frequency shall not exceed ±2 parts in 1010 per °C change of ambient temperature.

LINE VOLTAGE:

- 1. Connect the 5110B to a variable voltage power line source. Using the circuit of Figure 5-3 and with the column selector of the digital to analog recorder set to columns 3, 4, and 5 make a plot with the line voltage at 115v rms (full scale is 10 parts in 1010). Lower the line voltage 10% to 103v rms and make a second plot. Set the line voltage to 10% above normal line (127 v rms), and make a third plot.
- 2. Note that the frequency change is less than ± 5 parts in 10¹¹ from the first reference plot.
- 4. INTERNAL FREQUENCY STANDARD: SIGNAL-TO-PHASE NOISE RATIO > 85 db

Use Figure 5-1 to check the signal-to-phase noise ratio. The same general procedure used to check the signal-to-phase noise ratio on the output frequencies may be employed.

5. INTERNAL FREQUENCY STANDARD: HARMONIC SIGNALS - > 40 db below the output with 50-ohm termination.

Use circuit of Figure 5-2 to measure the harmonic signals. There should be a 40 db attenuation between the frequency standard and the signal input of the Mixer. A 5105A/5110B may be used as the reference standard. Use same general procedure for checking the second, third, and fourth harmonics of the 1 Mc fundamental as was used in checking signal-to-spurious ratio on the output frequencies.

- INTERNAL FREQUENCY STANDARD: PHASE LOCKING CAPABILITY A voltage control allows 5 parts in 10⁸ frequency control for -5 to +5 volts applied externally (J2 on rear panel).
 - 1. Connect ali & 721A Variable Power Supply to rear BNC connector J2.
 - 2. Use circuit of Figure 5-3 with the digital to analog column selector set to columns 5, 5, and 7 (full scale is 10 parts in 108).
 - 3. Make a reference plot with the power supply set to 0 volks.
 - 4. Set the power supply voltage to -5 volts and make a second plot.
 - 5. Set the power supply voltage to +5 volts and make a third plot.
 - 6. Note that the frequency has changed at least 5 parts in 10⁸ between the 2nd & 3rd plots.
- 7. EXTERNAL FREQUENCY STANDARD: INPUT REQUIREMENTS 1 Mc or 5 Mc, 0, 2 v rms minimum, 5 v maximum across 500 ohms. Stability and spectral purity of 5105A Frequency Synthesizer will be partially determined by the characteristics of the external standard if used. Filtering is provided for broadband noise cleanup.
 - 1. Apply a 1 Mc or 5 Mc signal, level 0.2v to 5v rms to rear panel BNC connector marked IN.
 - 2. Note a 1-Mc signal at 1 volt, ± 0.1 volt rms at rear panel BNC connector marked OUT.

Table 5-3. Assembly or Module Identification

Asa'y No.	Function	∉ Part No.
No	Input Amplifier/Buffer Amplifier Frequency Standard Crystal Filter Comb Generator 39/3. B Mc Filter/Divider 38/3. B Mc Filter/Divider 37/3. 7 Mc Filter/Divider 36/3. 6 Mc Filter/Divider 35/3. 5 Mc Filter/Divider 34/3. 4 Mc Filter/Divider 33/3. 3 Mc Filter/Divider	No. 05110-6015 05110-6014 05110-6081 05110-6102 05110-6099 05110-6098 05110-6098 05110-6098 05110-6098
A11 A12 A13 A14 A15 A16 A17 A18	32/3.2 Mc Filter/Divider 32/3.2 Mc Filter/Divider 31/3.1 Mc Filter/Divider 30/3.0 Mc Filter/Divider 20/24 Mc Filter Power Supply Rectifier Power Supply Regulator Selector Switch	05110-6093 05110-6093 05110-6091 05110-6101 05110-6018 05110-6017

5-22. Adjustments should not be attempted until it is verified that the module in question is at fault. In the following paragraphs normal operation of each module or assembly is described first followed by adjustment procedure. The input level, frequency, power to the module, and the measuring technique should all be checked before assuming the module is in need of adjustment or repair. See Figures 5-10, 5-11 for location of modules and assemblies.

5-23. INPUT AMPLIFIER A1A1.

5-24. NORMAL OPERATION. Input Amplifier output is 1 Mc at 1 ± 0.1 volt rms into 50 ohms with an input of either 1 or 5 Mc, 0.2 to 5 volts rms.

- 5-25. 1 MC ADJUSTMENTS. Using the 4 Model 411A RF Millivoltmeter to measure input and output levels proceed as follows:
- a. Set output level of \$\ointilde{C}\$. 606A Signal Generator to 1 volt and 1 Mc (use CRYSTAL OSCILLATOR) and apply to J3. Use extender cable to get module out of unit where adjustments can be made.
 - b. Adjust L5 for maximum output at J4.
 - c. Adjust L4 for maximum output at J4.
- d. Adjust R14 for 1 volt output at J4.
 - e. Reduce input level until output falls to about 0.5v.
 - f. Adjust L1 for maximum output. This adjustment will be very broad.
 - 5-26. 5 MC ADJUSTMENTS. Using Signal Generator and € 175A Oscilloscope, proceed as follows:
 - a. Use crystal éakibrator to set 606A at 5 MC, then tune 606A to 4,85 MC.
- b. Set input level from 600A to 0, 2 volt and connect to J3,
- c. Connect vertical input of Oscilloscope to J3 and horizontal input to J4.
- d. Observing lissajous pattern on the Oscilloscope, adjust LA so that the divider Q3 pulls into synchronism at 4.85 Mc when tuning towards Mc from a lower frequency, and at 5.3 Mc or higher ween tuning towards 5 Mc from a higher frequency.
- e. It may be necessary to adjust R14 again for a 1 volt output. This should be done at 5 Mc.
- f: Reduce input signal level until output falls to approximately 0, 5 volt.
- g. Adjust L2 for maximum output. This adjustment will be very broad.
 - h. Using 0, 2 volt input, repeat step d.

5-B

Hewlett-Packard	Model	5110B
Instrument Serial	No	-

•	
Date	
Performed by	

PERFORMANCE CHECK TEST CARD

Description	Check
1. OUTPUT FREQUENCIES	Signal-to-Phase Noise Signal-to-Spurious Amplitude
24 MC	>60 db >105 db
30 MC	db 100 mv
31 MC	db . 100 my
32 MC	
33 MC	db 100 mv
34 MC	db / 100 mv
√ 35 MC	db 100 my
√36 MC	db 100 my
37 MC	db 100 my
38 MC 🧗	db 100 my
39 MC	db 100 mv
20 MC	100 mv
3,0 MC	db 50 mv
, 3.1 MC	db . 50 mv
3.2 MC	db 50 mv
3.3 MC	db 50 mv
3, 4 MC	db 🦸 50 mv
3.5 MC 3.6 MC	db 6 50 mv
3.0 MC	db 50 mv
3. 8 MC	
3.9 MC	db 50 mv
	db50 mv
2. INTERNAL FREQUENCY STANDARD	
1 MC AGING RATE (after 72 hrs of	Parts in 10 ⁷ (frequency offset at beginning of test)
continuous operation)	±3 parts in 10 ⁹ per 24 hrs (frequency offset 24 hrs later at same temperature)
3. STABILITY: As a function of temperature:	
0°C to +55°C	± 2 parts in 10 ¹⁰ /°C
As a function of ± 10% line voltage change	± 5 parts in 10 ¹¹
4. , SIGNAL-TO-PHASE NOISE RATIO	85 db
6. HARMONIC SIGNALS	40 db below output
6. PHASE LOCKING CAPABILITY	
-5 to +5 volts applied at rear panel BNC J2	5 parts in 10 ⁸
7. EXTERNAL FREQUENCY STANDARD	
INPUT REQUIREMENTS: 1 Mc or 5 Mc	
0.2 volts rms minimum 5 volts rms maximum across 500-chm load	1 volt ± 1.5 db into 50-ohm resistive load

Table 5-4. Troubleshooting Aids

Symptom	Procedure	-	Proper Indication		
No output	Check to see if OPERATE light is o	Check to see if OPERATE light is on			
, ,	Rotate CIRCUIT CHECK switch thru	all its positions	A green reading in		
	Check to see if FREQUENCY STANDARD switch is in INT		all positions		
	Check Crystal Filter Assembly A3		1 Mc		
•	Check Frequency Standard A2		1 Mc		
Output OK with FREQUENCY STAN-	Check to see if 1 or 5 Mc, at . 2 to 1 connected to BNC labelled IN on r				
DARD switch in INT but no output when	Check Input Amplifier/Buffer Ampli	lfier A1	1 Mc		
switch in EXT.	Check FREQUENCY STANDARD sw. Switch A18)	itch (Selector	1 Mc		
1 Mc output OK, no other output	Check Comb Generator A4	,			
No 30 Mc	Check Filter Divider A14				
No 31 Mc	Check Filter Divider A13				
No 32 Mc	Check Filter Divider A12	Check outputs	Filter section		
No 33 Mc	Check Filter Divider A11	from Comb Gen-	outputs are 100 my		
No 34 Mc	Check Filter Divider A10	erator A4 (14 mv into 50 ohms)	into 50 ohms		
No 35 Mc	Check Filter Divider A9	nito so omnis)			
No 36 Mc	Check Filter Divider A8				
No 37 Mc)	Check Filter Divider A7		· · ·		
No 38 Mc	Check Filter Divider A6				
No 39 Mc	Check Filter Divider A5				
No 3.0 Mc	Check 30 Mc from A14				
No 3. 1 Mc	Check 31 Mc from A13	·			
No 3. 2 Mc	Check 32 Mc from A12		•		
No 3.3 Mc	Check 33 Mc from A11	If filter output	Divider section		
No 3.4 Mc	Check 34 Mc from A10	is present,	outputs are 50 my		
No 3.5 Mc	Check 35 Mc from A9	Divider section is at fault	into 50 ohms		
No 3, 6 Mc	Check 36 Mc from A8	to at their	<u>;</u>		
No 3, 7 Mc	Check 37 Mc from A7		•		
No 3.8 Mc	Check 38 Mc from A6		ų.		
No 3. 9' Mc	Check 39 Mc from A5				
No 24 Mc	Check 24 Mc Filter A15J1	Par	Normal output from filter is 100 my		
•	Check Comb Generator A4J15 (3)	• · .	Normal output from A4J15 (3) is > .12 m into 50 ohms		

Table 5-4. Troubleshooting Aids (cont'd)

Symptom	ymptom Procedure	
No 20 Mc	Check 20 Mc Filter A15J2	Normal output from A15J2 (3) is, 100 mV into 50 ohms
	Check Comb Generator A4J15 (7)	Normal output from A4J15(7)1s, 3 mv
No 1 Mc, all other frequencies present	Check Input Amplifier/Buffer Amplifier A1	Normal output from Buffer Amplifier A1J6 is 1 volt
Power Supply Rectifier A16	Open S2; Short emitter to base of Q4 Short emitter to collector of A2Q1	Output should go to zero Output should go to zero

5-27. 1 MC SYNCHRONISM TEST. Observe the lissajous pattern on the Oscilloscope. The pattern should rotate smoothly with no abrupt jumps as the Signal Generator frequency is changed. The output should remain synchronized over frequency range from 0.9 Mc to 1.10 Mc, with an input level range of 0.2 volt to 5.0 volts.

5-28. OUTPUT LEVEL CHECK.

- ca. Set the Signal Generator to 1 Mc using CRYSTAL CALIBRATOR.
 - b. Vary input level from 0.2 volt to 5.0 volts.
- c. Monitor output level at J4 with RF Millivoltmeter; level should be between 1.0 and 1.1 volts.
- d. Set Signal Generator to 5 Mc using CRYSTAL CALIBRATOR.
 - e. Vary input level to J3 from 0.2 v to 5.0 v.
 - f. Output should be between 0.95 and 1.05 volts.

5-29. BUEEER AMPLIFIER A1A2.

- 5-30. NORMAL OPERATION. Buffer Amplificant-put is 1 Mc at $1v \pm 1/5$ db into 50 ohms with a 1 Mc, 1.2 volt rms input.
- 5-31. If adjustments are necessary proceed as follows:
- a. Set Signal Generator output to 1 Mc using CRYSTAL CALIBRATOR.
- b. Set Signal Generator output level to 1.2v rms and connect to J5.
 - c. Adjust L2 for maximum output at J6.
 - d. Adjust R8 for 1.0 volt into 50 ohms at J6.

5-32. FREQUENCY STANDARD A2.

- 5-33. NORMAL OPERATION.
 - a. Generates 1 Mc, 1 volt rms into 50 ohms signal.
- b. Coarse, medium and fine frequency adjustments.
- c. Oven controller circuit controls the oven temperature.
- d. Phase locking An external \pm 5 volts dc applied at J2 on rear panel will vary frequency a total of 5 parts in 10^8 .
- 5-34. -21 VOLT ADJUST. Connect instrument to a power source set to 115 volts (normal line) and leave it on for at least an hour. Measure the dc volts at the +10 and -16 volt terminal on the Frequency Standard module. Having verified these voltages connect the voltmeter between the +10 volt terminal and the test point on the module. The negative lead is connected to the +10 volt terminal. The voltmeter must have a floating input to avoid grounding the +10 volt line. Adjust the -21 volt control (bottom side of Frequency Standard module) so that the meter indicates -21 volts.
- 5-35. OVEN CONTROLLER TEST. Start with an instrument that has been disconnected from the power line for at least 5 minutes. Turn the Circuit Check switch to Oven Temp: Connect the power cord to the power line. Note the meter indication. When power is first applied, the meter will pin down scale. After about 15 minutes, depending on how long the oven has been off, the meter indication will go up scale to or near maximum. It will stay up scale for approximately one minute, then go down scale below the green area. It will then rise again and slowly oscillate about the green area until the oven comes to its operating temperature. At that time the needle will settle down in the green area. It should stay in the green area as long as the instrument is connected to the power line. If at any time the needle is not in the green area after warmup, oven controller circuits should be checked.

5-36. OUTPUT LEVEL. Connect an ac voltmeter with a 50-ohm load to J2 of the Frequency Standard module A2. J2 is located under the Crystal Filter Assembly A3. Adjust R18 Level Adjust control for an output of 1 volt rms.

5-37. FREQUENCY SETTING.

- a. Allow oven temperature to stabilize crystal for 24 hours and instrument to warm up for at least two hours.
- b. Connect a 1 Mc signal from a frequency standard to the EXT AC trigger input of an oscilloscope.
- c. Connect the output of the Frequency Standard to the vertical input of the oscilloscope. The output may be obtained either directly from the Frequency Standard output connection A2J2 or from the rear connector marked OUT. (The Frequency Standard switch must be in the INT position.)
 - d. Set the oscilloscope sweep speed to 0.1 μ sec.
- e. Center the M and F INTERNAD STANDARD AD-JUST controls on the front panel, (They are centered when their slots are horizontal.)
- f. Adjust the coarse frequency control (located behind the left front side panel of the unit under a plug button)until the pattern on the scope is approximately stationary. Use the M and F controls, if necessary, to make the drift of the scope pattern zero. With the external standard frequency of 1 Mc and the sweep speed of 0.1 μ sec/cm, a drift of one centimeter per second is equal to a frequency offset of one part in 10^{12} . An average drift rate of one centimeter in 10^{13} seconds is equal to a frequency offset of one part in 10^{13} . (1 Mc off by 0.001 cycle per second.) A more accurate method of setting the Frequency Standard on frequency is explained under IN CABINET PERFORMANCE CHECKS, Internal Frequency Standard.

5-38. CRYSTAL FILTER ASSEMBLY A3.

- 5-39. NORMALOPERATION. Tuned to 1 Mc. Lower frequency, -3 db point is between 999.935 kc and 999.965 kc. Upper frequency, -3 db point is between 1000.035 kc and 1000.065 kc.
- 5-40. ADJUSTMENTS. If adjustments are necessary proceed as follows:
- a. Connect Crystal Filter output J4 (vertical BNC on top side of A3) to an AC voltmeter with a 100-ohm load resistor.
- b; Ising a 50-ohm coax cable connect the output of the Frequency Standard A2J2 directly to the 1 Mc input connector J1 on the Comb Generator A4. It is the BNC connector with a "T" on it located at the left end of the Comb Generator as seen from the top of the instrument. Remove the T connector and connect the jumper coax. This allows the use of the Synthesizer Driver to drive a 5105A Frequency Synthesizer which is needed to complete this adjustment.
 - c. Set Frequency Synthesizer to 1000.000 kc.

- d. Connect this signal to the Crystal Filter input connector (90° BNC next to output BNC).
- e. The AC Voltmeter should indicate the output of the Synthesizer, approximately 1.2 volts rms. Note the level in db. This is the reference reading.
 - f. Change the Synthesizer frequency to 1016.000 kc.
- g. Output should be less than 5 mv. Adjust C4 for less than 5 mv output. C4 is on the Crystal Filter Assembly facing the top of the instrument.
- h. Set the frequency to 999. 945 kc.
- i. Vary the Synthesizer frequency to locate the upper and lower -3 db frequencies.
- j. The upper -3 db frequency should be between 1000.035 kc and 1000.065 kc; the lower between 999.935 kc and 999.965 kc.
- k. Check the output at 1005.00 kc and 995.000 kc. It should be at least 30 db below the reference output.
 - i. This completes the adjustments and tests.

5-41. COMB GENERATOR MODULE A4.

- 5-42. NORMAL OPERATION. Input 1 Mc, 1 volt rms into 50 ohms (from Crystal Filter Assembly A3). Output is 24 and 30 to 39 Mc in 1 Mc steps; at least 12 mv into 50 ohms. 20Mc output is greater than 5 mv into 50 ohms. Spurious ±1 Mc side band signals at least 13 db below output level on 24 and 30 to 39 Mc outputs. Phase Noise: 24, 30 to 32, and 34 Mc outputs at least 60 db below signal level. All in a 30 kc bandwidth centered in the signal, excluding a 1 cps band centered on the signal.
- 5-43. ADJUSTMENTS AND TESTS. Remove filter/divider assemblies to expose tuning holes of tank circuits in the comb generator. Verify proper input by putting CIRCUIT CHECK meter into 1 Mc position. The 1 Mc is sampled from the input stage of the comb generator. A reading in the green area of the meter indicates a satisfactory 1 Mc input to the comb generator circuits.
- 5-44. 24 AND 30 TO 39 MC OUTPUTS. Fabricate an extension cable as shown in Figure 5-4. Verify that the output is tuned to the correct frequency with an electronic counter and a video amplifier (5245L & 5261A). Use the extension cable to make the connection between the comb generator and the video amplifier, counter combination. The output level is normally about 14 mv.
- 5-45. The correct frequency for each comb generator output is listed in Table 5-5.

Table 5-5. Comb Generator Frequencies

Conn. No.	Freq.	Input Trans.	Output Trans.
¥ A5	39 Mc	Ti	T12
MAS .	38 Mc	T2	T13
7	- 37 Mc	T3	T14
1	: 36 Mc	T4	T15
7.79	35-Mc	775	T16
A10	34 Mc	T 6	T17
. A11	33 Mc	T7	T18
A12	32 Mc	Т8	T19
A13: .)	31/Mc	T9	√ T20
A14	30 Mc	T10	T21
. A15	24 Mc	T11	T22

a. If an output is not the proper frequency (1 Mc high or low), tune the indicated input and output transformers.

Turn the instrument up on its front panel, and put a drop of acetone on the slug that is to be adjusted. This will loosen the dope that holds it in place. After adjustments are completed, re-dope the slugs to prevent any movement.

- b. After the proper frequency output is verified, connect an RF Voltmeter (411A) to output using a 11048B 50-ohm feed-thru termination.
- c. Tune the related input and output transformers for a maximum. Be careful not to tune the transformers too far. They might peak on an adjacent frequency. Output level must be at least 12 mv into 50 ohms.
 - d. Repeat for all frequencies of 24, and 30 to 39 Mc.
- e. There is some interaction between the input fransformers. Their adjustment should be repeated until they are all peaked. The output transformers need be set only once.
- 5-46. 20 MC OUTPUT. There is no adjustment for the 20Mc output. Its level should be at least 5 mv into 50 ohms.
- 5-47. POWER AMPLIFIER AND STEP RECOVERY DIODE BIAS. If any of the outputs cannot be tuned to the correct level or if some components in the power amplifier or step recovery diode circuits are changed the following adjustments should be made.
- 5-48. Connect an RF Voltmeter (411A) with an & 11048B 50-ohm feed-thru termination to the 39 Mc connector A5 of the comb generator using the special connector shown in Figure 5-4 and a 50-ohm coax. Tune L1 for maximum output, input Amplifier/Buffer module A1 must be removed. Be sure to keep the 1 Mc connection intact from the Crystal Filter to the Comb Generator.
- 5-49. The cover of the Comb Generator Module must be removed to adjust the bias of the step recovery diode. Proceed as follows:

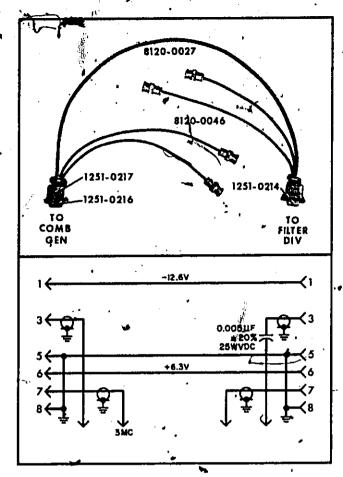


Figure 5-4. Extension Cable used to Check Comb Generator and Filter/Divider Modules

- a. Remove the side covers and the 3 screws on each side of the instrument that mount the assembly.
- b. Remove the screws along the top and bottom edge of the assembly.
- c. Remove the cover. The bias adjust pot R6 is located in the lower left hand corner on the end that the BNC connector is on.
 - d. Connect the RF Voltmeter to the 39 Mc output, A5.
- e. Turn-R6 maximum clockwise, then counterclockwise and set on the first stable peak in the 39 Mc output.
 - f. Tune L1 for maximum output.
- g. Replace the cover using all the screws and making sure they are all tight.
- 5-50. SPURIOUS SIGNALS. The circuit in Figure 5-5 may be used to measure the spurious signal levels. They should be at least 13 db below the signal level on the 24 and 30 to 39 Mc outputs.
- 5-51. Connect the equipment as shown in Figure 5-5. With the reference oscillator offset 1 kc from the frequency under test, adjust the tuned voltmeter for an

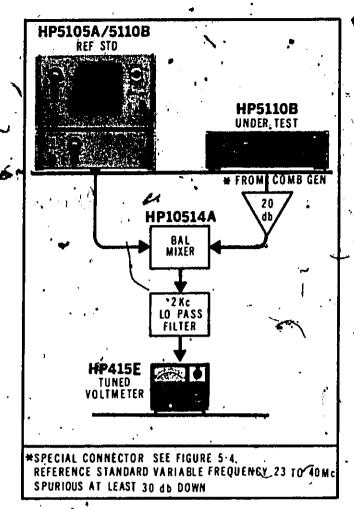


Figure 5-5. Spurious Signal Test Setup

on-scale reading. Note the meter reading and range setting in db. This is the reference reading.

5-52. Offset the reference oscillator ± 1 Mc plus 1 kc from the frequency under test. Adjust the voltmeter for an on-scale reading. The difference between this reading and the reference reading is the signal to spurious signal voltage ratio for a spurious signal 1 Mc away from the frequency under test.

Note

The tuned voltmeter is calibrated for an input from a square law device (output voltage proportional to power input). The db reading must be doubled when using the voltmeter in the circuit of Figure 5-7 (i.e. an indication of 40 db is really 80 db in this application.

5-53. The most pronounced spurious signals are plus and minus 1 Mc from the frequency under test. If these spurious signals are within specifications, any other spurious signals may be expected to be within specifications.

5-54. PHASE NOISE. The circuit of Figure 5-1 in the In-Cabinet Performance Checks may be used to measure the phase noise in the comb generator assembly with the following changes:

- a. Amplifier #1 must have 20 db of gain and the extension cable of Figure 5-4 is used to make the connection from the Comb Generator module to the amplifier input cable.
- b. The 24, 30 to 32, and 34 Mc (A15, A14 to A12and A10) outputs typically have a signal to phase noise ratio of at least 60 db.
- c. The 33, 35 to 39 Mc (A11, A9 to A5) outputs typically have a signal to phase noise ratio of at least 58 db.

5-55. FILTER/DIVIDER MODULES A5-A14.

5-56. NORMAL OPERATION. With normal input from the Comb Generator A4 (100 mv, spurious down 13 db, and phase noise at least 60 db down on the 24, 30 to 32, and 34 Mc inputs; and at least 58 db down on the 33, and 35 to 39 Mc inputs) the outputs should be the input frequency and 1/10th the input frequency. The output levels are typically 100 mv and 50 mv respectively into 50 ohms. The signal to ±1 Mc spurious ratio is typically 103 db for 24, and 30 to 39 Mc outputs. The signal-to-phase noise ratio is typically greater than 68 db for 24, 30 to 32 and 34 Mc outputs; greater than 78 db for 33, and 35 to 39 Mc; and greater than 73 db for the 3.0 to 3.9 Mc outputs. All massurements made in a 30 kc bandwidth centered on the signal and excluding a 1 cps band centered on the signal.

5-57. OPERATIONAL CHECK, To quickly check to see if the Filter Divider is operating properly proceed as follows:

- a. Remove the module to be checked from the 5110A and supply it with power using the fabricated cable shown in Figure 5-4.
- b. Connect an \$\&\phi\$ 411A to Filter output J1, using an \$\&\phi\$11048B 50-ohm feed-thru termination.
- c. Connect 606 A set to fo (fo is frequency associated with filter under test) with an output level of 100 mv, to input BNC on extension cable.
 - d. Tune 606A for peak at Filter output J1.
- e. Connect 606A output to input of 5246L Electronic Counter and note frequency.
- f. If frequency of 606A is f_0 after peaking, and output level at J1 of Filter is 100 mv, ± 1.5 db, the Filter is operating properly.
- g. Connect 606A to input BNC on extension cable and check Divider output J5 with 411A and 5245L. Use an & 11048B 50-ohm termination.

h. If output requency is 1/10th of f_0 and level is 50 mv, +1-3 db, the Divider is operating properly.

5-58. ALIGNMENT OF FILTERS. If it is necessary to align Filters, proceed as follows:

a. Remove the Filter/Divider Module from the instrument and connect it to its normal input with the extension cable diagrammed in Figure 5-4. Remove cover from Filter/Divider module.

Note

To effectively align filters it is necessary to keep the input level at about 3 mv. For this reason, the attenuator is placed between the Comb Generator output and the input to the Filters. If the normal input from the Comb Generator is used, set the 355C Aitenuator to 12 db. If the 606A is used with a 100 mv level; set the 355D Attenuator to 30 db.

b. Connect the output frequency fo from the special cable to Variable Aftenuator. The other side of the Attenuator is connected to the Filter/Divider by the special cable.

- c. Connect an \$11048B 50-ohm feed-thru termination to Filter output J1.
- set output of about 20 my. Align the Filter by starting at the output tuned circuit L11 and moving toward the input tuned circuit L5, adjusting each coil for maximum output. After adjusting each tuned circuit, adjust attenuator to keep output of Filter at about 20 my.

Note

The slugs in the tuning coils have all been set with a drop of dope. Rather than freeing all these slugs with a drop of acetone, it would be wise to compare the outputs of the various stages first, to see if the troublesome stage can be localized.

- e. Set the attenuator to 12 db and realign the tuned circuit as before.
- f. Set Attenuator to 0 db. If more than one Filter output is provided, put 50-ohm terminations (& Part No. 1250-0207) on the other outputs.
- g. Adjust L12 to set output level to $100 \text{ my } \pm 4 \text{ mv}$. Adjusting L12 detunes the last stage and L11 must be readjusted every time L12 is adjusted.
- h. Connect a 606A set to foat a 100 mv level to input of 355D set to 0 db. Connect output of 355D to input of Filter.
- j. Reduce the input signal by 30 db. The output should drop no more than 15 db. This indicates the proper amount of limiting is present.
- 5-59. ALIGNMENT OF DIVIDERS. To align Divider section of the Filter/Dividers, proceed as follows:

Note

The output of the Filter should not be used as the input signal when aligning the Dividers.

- a. Remove the cover from the Filter/Divider.
- b. Connect power to it by using the extension cable (Figure 5-4) plugged into the Comb Generator connector normally occupied by the Filter/Divider.

- c. Divide by 2: Connect appropriate frequency f_0 (f_0 is frequency of Filter associated with the Divider) at 100 mv level from a 606A Signal Generator to the input on the extension cable.
- d. Connect Oscilloscope channel A probe to base of Q52 and adjust L54 for maximum.
- e. Touch the probe to the can of T51 and adjust T51 for maximum signal.
- f. If L55 has been replaced adjust for minimum inductance by turning the tuning slug clockwise until it bottoms. Do not use excessive force. Normally L55 should not be adjusted unless divider bandwidth (see step s below) cannot be adjusted using L57.
- h. Divide by 5: Use the same connections as for the divide-by-two adjustment.
- j. Check for proper operation of the divide-by-5 circuit as indicated by the waveform at the junction of R67 and L56. The proper waveform is "a" in Figure 5-6.
- k. Connect the oscilloscope (175A) channel B probe to the output of the signal generator (use a BNC "T"). Set scope channel selector to A-B.
- m. Remove the signal generator cable from the Filter/Divider. Put "T" on cable and terminate one side with 50 chms and attach BNC end of Test Clip Lead Assembly to the other. The Test Clip Lead Assembly is shown in Figure 5-7.
 - n. Set the Signal Generator to 0.6 volts output.
- p. Connect the alligator clip with the 10 pf capacitor in series to base of Q52. Connect the other alligator clip to ground.
- q. An overall division ratio of 10:1 should be seen on the 175A. See Figure 5-8. Adjust L57, if necessary, to obtain this ratio.
- s. Vary frequency of the 606A about for to check the divider bandwidth. See Figure 5-9. The band edge should always be determined by the transition point when going from unsynchronized operation.
- t. Adjust L57, if necessary, so that the divider bandwidth is centered about f_0 . Use procedure which follows as check on bandwidth.
- u. Reduce the 606A level 10 db below 0.6 volt and check divider bandwidth. Divider must stay synchronized over a frequency range of f_0 + or 400 kc.
- v. Increase 606A level to 0.6 volt and check divider bandwidth. Divider must stay synchronized over a frequency range of fo + or -800 kc.
- w. Increase the 606A level 10 db above 0.6 volt and check divider bandwidth. Divider must stay synchronized over a frequency of f_0 + or -400 kc.

.5-12

Figure 5-6. Divider Waveforms

SWEEP TIME: O.I JISEC/CM VERT SENSITIVITY: 500MV/CM

DIVIDE BY: 5-OPERATIVE

2-INOPERATIVE

- x. Set 606A to 10 db above 0.6 volt and at fo+400 kc. Use 606A vernier to smoothly reduce level to 10 db below 0.6 volt level. The divider should remain synchronized over the full range of level variation.
- y. Set 606A to 10 db below 0.6 volt level and at for 400 kg. Use 606A vernier to smoothly increase level to 30 db above 0.6 volt. The divider should remain synchronized over the full range of level to the full
- z. T51 and L57 may have to be readjusted slightly for divider to meet all test limits. Recheck all limits after making final adjustments.

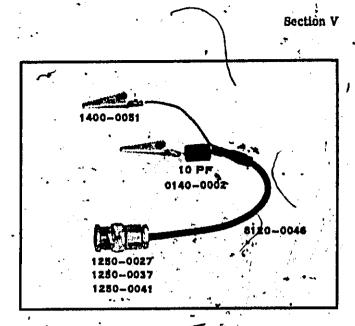


Figure 5-7. Test Clip Lead Assembly

- 5-60. OUTPUT LEVEL. To adjust output level proceed as follows:
- a. Connect 411A to the divider output (J5). The 11048B termination should be connected to the 411A "Tee" probe.
- b. If more than one divider output is provided, put 50-ohm terminations on the other outputs.
- c. Adjust L59 to set output level to 50 mv ± 2 mv. Adjusting L59 detunes the last stage and L58 must be readjusted after each adjustment of L59.
- d. Replace cover and recheck output level. Readjust L59 and L58 if necessary.

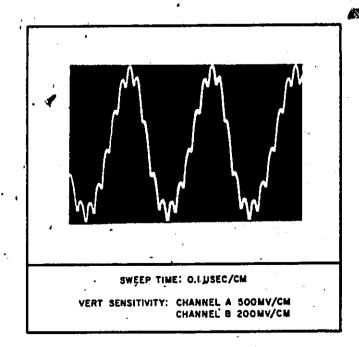


Figure 5-8. Divider Output Synchronized with Input

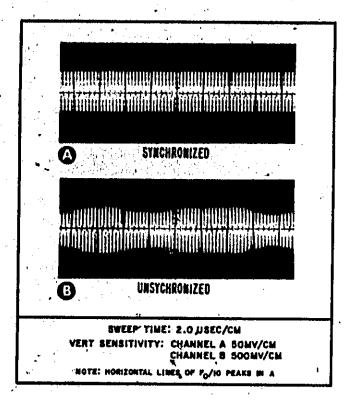


Figure 5-9., Divider Output at Edge of Band

5-61. TESTS,

Spurious Signals: See In-Cabinet Performance Test.

Phase Noise: See In-Cabinet Performance Test.

5-63, 20/24 MC FILTER A15.

5-64. NORMAL OPERATION.

Inputs: 24 Mc is 12 mv into 50 ohms

20 Mc is 5 my into 50 ohms

Outputs: 24 Mc is 100 ±4 mv into 50 ohms

20 Mc is 100 ±6 mv into 50 ohms

Spurious signals 1 Mc from 24 Mc are typically 103 db below output level.

5-65. OPERATIONAL CHECK. The same general procedure may be used as described in Paragraph 5-57.

5-66. 24 MC FILTER A15A1 ALIGNMENT. If it is necessary to align this Filter remove the 3/24 Mc Filter module from the 5110A and proceed as follows:

a. Connect Filter to its normal input with the extension cable diagrammed in Figure 5-4. Remove cover from module.

b. Connect a variable attenuator in the 27 Mc signal line using BNC connectors of extension cable,

- c. Connect an @ 11048B 50-ohm Feed-Thru termination to Filter output Jl.
- d. Align the Filter (see Paragraph 5-58, d) by starting at L11 and moving forward to L5, adjusting each coil for maximum output.
- e. Set the attenuator to 12 db, and again adjust the Filter starting at L11.
 - f. Set the Attenuator to 0 db.
- g. If more than one 24 Mc output is provided, put 50-ohm terminations on the other outputs.
- h. Adjust 142 to set output level to 100 mv ± 4 mv, Adjusting L12 detunes the last stage and L11 must be readjusted every time L12 is adjusted.
- i. Connect a 606A set to 24 Mc at a 100 my level to input of 355D set to 0 db. Connect output of 355D to input of 24 Mc Filter.
- k. Reduce input signal by 30 db. The output should drop no more than 15 db. This indicates the proper amount of limiting is present. Put drop of dope on slugs to lock adjustment. Replace cover and recheck output level. Readjust L11 and L12 if necessary.
- 5-67. 20 MC FILTER A15A2 ALIGNMENT. If it is necessary to align this filter, remove the 20/24-Mc module from the 5110B and proceed as follows:
- a. Remove cover of 20/24 Mc module and connect Filter to its normal input with the extension cable diagrammed in Figure 5-4.
- b. Connect a variable attenuator in 20-Mc signal line using 20Mc BNC connectors of extension cable.
 - c. Set Attenuator 355C to 4 db.
 - d. Adjust L11 through L5 for maximum output.
 - e. 'Set Attenuator to 0 db.
- f. If more than one 20-Mc output is provided, put 50-ohm terminations on other terminals.
- g. Adjust L6 to set the output level at 100 mv ±6 mv. Adjusting L12 detunes the last stage and L11 must be re-adjusted after each adjustment of L12.
- h. Connect a 606A set to 20 Mc at a 100 mv level to input of 355D set to 0 db. Connect output of 355D to input of 20 Mc Filter.
- i. Reduce input signal by 10 db. The output should drop no more than 5 db. This indicates the proper amount of limiting is present. Put drop of dope in slugs to lock adjustments. Replace cover and recheck output level. Readjust L11 and L12 if necessary.
- 5-68. TESTS. For spurious signals and phase noise checks, see Table 5-2 .

5-69. NOWER SUPPLY RECTIFIER ASSEMBLY A16.

5-70. GENERAL. Check the voltages at the output of Regulator Assembly A17 first and if they are essentially correct (± 100 mv for +6.3 volt and ± 200 mv for -12.5 volt) and regulate within ± 100 microvolts between low and high line voltage, there is no reason to suspect trouble with the Rectifier Assembly A16.

5-71. NORMAL OPERATION.

- a. Line Current (normal line) approximately 0.25 amp (standby); 035 amp (operate).
 - b. Input Voltage: Between pins 4 & 5, 21.2 v rms
 Between pins 10 & 11, 15.3 v rms
 Between pins 12 & 13, 72 v rms
 50 to 400 cps line frequency

Voltages are measured with assembly in normal circuit connection.

d. Ripple: less than 1, 2 volt peak-to-peak.

5-72. TESTS.

- a. Line Current Commect the power cord to a variable ac source that has a 0-1 amp meter. Set it to normal line (115 v). Note that Synthesizer Driver draws approximately 0.25 amps in Standby. Switch to operate. Line current should be approximately 0.5 amp.
- b. Input Voltage: Set line voltage to Synthesizer Driver Unit at normal line (115V) using an AC voltmeter with ungrounded leads. Measure the input ac voltages to the Rectifier Board assembly. Be careful not to short connector pins. Proper values are shown below:

A16 Rectifier Pins 4 to 5 at least 21.2 v rms
Assembly Connector 10 to 11 at least 15.3 v rms
12 to 13 at least 72 v rms

c. Output Voltage: Connect an accurate (.02%) DC Differential Voltmeter (740A) as indicated below.

to check the dc output voltages. The low side of the voltmeter is connected to pin 8. Be careful not to short any of the pins together or to ground.

High lead to:

Pin No.	Voltage Range
14	at least +13
9	-15.80 to -17.60
7	+15.41 to +16.59
. 6	-20, 28 to -21, 82
ق کشنے	+11, 05 to +12, 35
7 2	-18.85 or less
•	

5-73. Voltages are measured with power line at normal line (115V) and normal load on Rectifier Assembly.

Check rectifier voltage by connecting hot side of voltmeter to the plus side (top end when viewed from top of instrument) of either C1 or C2 on rectifier board assembly (see Figure 5-4). Voltage is generally between +26,05 and +29,15 volts. Turn instrument off and use 15-pin Extender Board (\$\sigma \$5060-0049\$) to locate rectifier board so that high side of voltmeter can be placed on the base of the transistor. Turn instrument on. Voltage is generally -31,6 to -35,4 volts.

5-74. RIPPLE. Connect the probe of an oscilloscope to pin 14 (+13V) of the rectifier asgembly board. Ground should be connected to pin 8. The ripple typi cally does not exceed 1.2 volts peak-to-peak. Connect probe to pin 2 (-18V). Ripple typically does not exceed 1.2 volts peak-to-peak.

5-75. POWER SUPPLY REGULATOR ASSEMBLY A17.

5-76. NORMAL OPERATION.

- a. Input voltages: +10 volts on White-Red-Orange wire at collector of Q5 +15.9 volts at pin 4 of A1 -16.0 volts on White-Orange-Violet at collector of Q6
- b. Output voltages: +6.300 v, ±100 mv on red wire
 -12.600 v, ±200 mv on violet
 wire
- c. Ripple: 5 microvolts or less of 60 and 120 cps components on the +6.3 and -12.6 volt outputs.
- d. Line Regulation: Less than 100 $\mu\nu$ change on +6.3 or -12.6 velt outputs from low line to high line.
- 5-77. POWER SUPPLY ADJUSTMENTS. There are only two adjustments on the Power Supply and they are on Regulator Board Assembly A17A1. To make these adjustments, proceed as follows:
- a. Connect Differential Voltmeter @740A to -12.6 volt output (violet wire).

Note

As +6.3 v output uses -12.6 v output as reference, -12.6 v output should be adjusted first.

- b. Adjust R10 for -12,600 v, ±10 mv.
- c. Connect 740A to +6.3 volt output (red wire).
- d. Adjust R8 for +6.300 volt, ± 10 mv.

Note

R8 and R10 are wirewound potentiometers and discrete voltage steps of about 10 mv will be observed. Adjust R8 and R10 to the center of one of these steps closest to the required voltage.

5-78. LINE REGULATION TEST.

a. Connect Differential Voltmeter to either +6.3 v or -12.6 volt output and set "null" to most sensitive position.

b. Vary input line voltage quickly from 102 VAC to 128 VAC and observe instantaneous deflection of meter. Maximum deflection is typically less than 100 microvolts on +6.3 or -12.6.

5-79. RIPPLE TEST.

- a. Connect 30 db amplifier, 50 to 150 cps, noise referred to input less than 1 microvolt, to either +6.3 v or -12.6 v output. Connect output of amplifier to input of Wave Analyzer @302A.
- b. Measure 60 cps and 120 cps ripple components on both +6.3 v and -12.6 v outputs. Maximum ripple is typically less than 10 microvoltarms on +6.3 v or -12.6 v.
- 5-80, NOISE IN 3 KC BANDWIDTH TEST. To check for noise in 3 kc bandwidth, proceed as follows:
- a. Connect same amplifier used in ripple test, Paragraph 5-78 to output of either +6.3 v or -12.6 v outputs.
- b. Connect output of amplifier to input of low pass filter.

- c. Connect output of filter to input of 403 (put a 500 μ f capacitor across meter terminals of 603A) in 1 cps position.
- d. Measure the noise voltage. It is typically less than 30 microvolts in the 3 kc bandwidth on +6.3 volt and -12.6 volt outputs.
- e. Monitor the character of noise on the Oscilloscope. There should be no discrete steps of voltage a discernible. Picture should show only "grass".
- 5-81. SHORT TERM STABILITY TEST. To check the short term stability of the power supply, proceed as follows:
- a. Connect output of either +6.3 volts or -12.6 volts from Regulator A17 to input of Differential Voltmeter \$710A. Connect Recorder output of 740A to input of Moseley 680 Recorder.
- b. Adjust 740A to null out +6.3 v or -12.6v and set Moseley 680 on 1 v full scale and 4 inches per minute.
- c. Run Moseley 680 Strip Chart Recorder for one and one-half minutes.
- d. Read chart to determine peak-to-peak excursions. Maximum peak-to-peak excursion is typically less than 250 microvolts for both +6.3 v and -12.6 v.

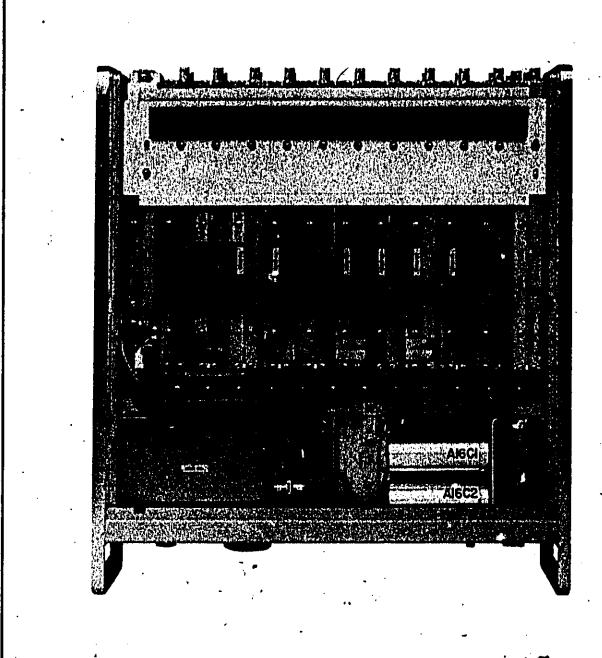


Figure 5-10. Top View of 5110B - Modules, Assemblies, Components

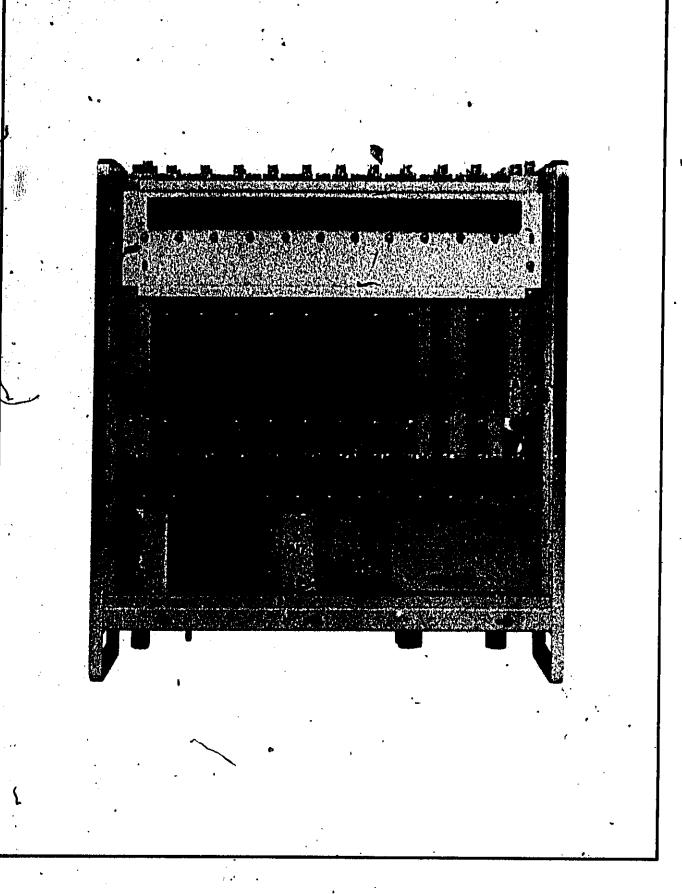


Figure 5-11. Bottom View of 5110B - Modules, Assemblies, Components

PARTS LIST

SECTION VI REPLACEABLE PARTS

6-1. INTRODUCTION.

- 6-2. This section contains information for ordering replacement parts. Tables 6-1 through 6-14 list parts in alpha-numerical order of their reference designators and indicate the description and & stock number of each part, together with any applicable notes. Table 6-15 lists parts in alpha-numerical order of their & stock number and provides the following information on each part:
- a. Description of the part (see list of abbreviations below).
- b. Typical manufacturer of the part in a five-digit code, see list of manufacturers in Table 6-16.
 - c. Manufacturer's part number.
 - d. Total quantity used in the instrument (TQ column).

6-3. Miscellaneous parts are listed at the end of each table.

6-4. ORDERING INFORMATION.

- 6-5. To obtain replacement parts, address order or inquiry to your local Hewlett-Packard Field Office (see lists at rear of this manual for addresses). Identify parts by their Hewlett-Packard stock numbers.
- 6-6. To obtain a part that is not listed, include:
 - a. Instrument model number.
 - b. Instrument serial number.
 - c. Description of the part.
 - d. Function and location of the part.

			REFERENCE DE	SIGNATORS			
A	Assembly	F	lune	MP	mechanical part	ι	integrated circuit
В	motor	F1.	tilter	Ρ	plug	v	vacuum, lube, nec
HT	twittery	IC"	integrated circuit	ن	li anniator	•	bulb, photocell, e
C	Apacitor	ī	rack	Ř	testalor	VR -	
CF.	oupler	ĸ	relay	kT.	thermiator	W	cable
CH	dicale	ï.	Inductor	8	witch	x	Nucket
DI	delay line	حنا	loud apraker	ř	Iranaformer	Ŷ.	cryatal
US	device signaling (lamp)	M	meter	TH.	lerminal hoard	ż	luned cavily.
ŀ	mise electronic part	MK	mtr rophone	TP	test point	•	network
			ABBREVIA	TIONS			
A	amper ea	н	henstea	N ² O	normally open	RUMO	rack mount only
AFU	automatic frequency control	HDW	hardware	NUM	nominal		root mean square
AMPL	4mplifter	HEX	hexagonal	NPO	negative positive zero	RW V	Leasing morphis
	•	HG	mercury	0	(zero temperature		voltage
BFO	beat frequency oscillator	HR	hour(s)		coefficient)		-
BECL	beryllium copper	H.Z	heste	NPN	negative positive	S - B	slow-blow
вн	binder head		71.11.	141.14	uekative bouidee	SCH,	• c r ew
BP	handpass	t F	intermediate freq	NRFR	not recommended for	SE O	reientum
Blob	brass	IMPG	impregnated	MATA	field replacement	arcı -	section(s)
BW O	backward wave oscillator	INCD	incandescent	NSR		SEMICON -	semiconductor
.,	22. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2.	INCL	include(a)	non	· not separately	SI .	stitcon
'C \	counter - clockwise	INS	insulation(ed)		replaceable	SIL .	silves
LH	ceramic	INT .	internal	OBD	 order by description 	SL .	stide .
'MO	cabinet misual only	1111	писты	OH	oval head	SPG -	spring
OFF	coefficient	κ .	kik: 1000	OX	unide	SPL ·	special
OM .	common					SST -	stainiess steel
OMP		ГH	left hand	P	peak	SR .	solit ring
OMP L	composition	ΠŅ	hnear taper	PC	printed circuit	STL .	steel
	complete	LK WASH	lock washer	PF	picofarada - 10 ⁻¹²		
	connector	LOG	logarithmic taper		farada	TA •	tantalum
Έ.	cadmium plate	LPF	kiw pass filter	PH BRZ	phosphur brunze	TD -	time delay
`RT -	cathode-ray tube		•	PH I.	Phillips	TGL -	toggle
₩.	clockwine	М -	aitīji 10 3	PIV	 peak inverse voltage 	THD .	thread
		MEG -	- meg 10 ⁶	PNP	positive negative	Tî ·	ប្រែស្នេច
FFFO	deposited carbon	MET FLM	metal film		positive	TOL .	tolerance
R ·	drive	MET OX	metalisc oxide	PΌ	· part of	TRIM •	lrimmer
LECT	electrolytic	MFR -	manufacturer	POLY	- polystyrene	TWT •	traveling wave tub
NCAP -	encapsulated	MHZ -	mega herta	PORC	porcelain	u .	micro + 10-6
XT .	reternal	MINAT	miniature	PO6	- position(s)	υ •	micro · to ·
-	- · ·	MOM -	momentary	POT	potentiometer	VAR -	variable 1
	larada	MO6	metal ozide substrate	PP	- peak to-peak	VDCW -	de working volts
	flat head	MTG	mounting	PT	point		•
ILH -		MY :	"mylaz"	PW V	peak working voltage	w′ -	with
'XD -	fixed	,	-			w -	watts
	giga (10 ⁹)	N -	nano (10 ⁻⁹)	RECT	· rectifier	wrv -	working inverse
L .	germanium	N C	normally closed	RF	· radio frequency		voltage
iL .	glass	NE .	neon	RH	round head or	ww .	wis ewound .
RD ,	ground(ed)	NI PL			right hand	w /o	without
1194-14		4					

Table 6-1 Change Parts

Reference	Stock No.	Table 6-1. Chassis Parts	,	N a4
Designation	# Stock No.	/ Description #		Note
			*	}
	,			Ì
A1	05110-6015	INPUT AMPYBUFFER AMP. ASSIY.	4	ŀ
A2	05110-6014	FREQUENCY STD. ASSIY.		1
A3	05110-6081	FILTER ASSEMBYICRYSTAL	_	
A4	05110-6102	COMB GENERATOR ASSIY.	•	
. =				
A5	05110-6100	FILTER/DIVICER ASSY: 39/3.9 MC		
A6	05110-6099	FILTER/DIVICER ASSY: 38/3.8 MC		
A7	05110-6098	FILTER/DIVICER ASSY: 37/3.7 MC		
AB	05110-6097	FILTER/DIVICER ASSY: 36/3.6 MC		i
A9	05110~6096	FILTER/DIVICER ASSY: 35/3.5 MC		ŀ
A10	05110-6095	FILTER/DIVICER ASSYI 34/3.4 MC		
A11	05110-6094	FILTER/DIVICER ASSYL 34/3+4 HC		
A12		FILTER/DIVIDER ASSYI 33/3.3 MC		
A13	05110-6093	FILTER/DIVICER ASSY1 32/2.2 MC		
	05110-6092	FILTER/DIVICER ASSIY: 31/3.1 HC		-
A14	05110-6091	FILTER/DIVICER ASS'YI 30/3.0 MC		
A15	05110-6101	FILTER ASSYI 20 /24 MC		-
A16	03110-6027	RECTIFIER ASSY. I POWER SUPPLY		
A 17	05110-6018	REGULATOR ASSY. POWER SUPPLY		İ
A 18	05110-6017	SWITCH ASSY. SELECTOR		
•			••]
วัรเ	1450-0094	LIGHT FINDICATOR WHITE 109 13MA		
)S2	0510-0123 1450-1701	FASTENER! PUSH-ON TYPE		
J32		LIGHT: INDICATOR GREEN 10V 13 MA	•	
	0510-0123	FASTENER PUSH-ON TYPE		
1	2110-0012	FUSE CARTRICGE 1/2AMP 250V		
FLI	9110-3112	FILTERIAC LINE (INCLUDES J1)		
	5110-3112	PILIERIAC LINE (INCLUDES JI)	•	
		115 VAC OR 230 VAC		
11	1120-0152	MICROAMMETERITOO MICROAMPERES		
				1
31	0727-0215	BIFXD DEPC 123K OHM 1/2% 1/28	e	
12	0757-0270	RIFXD MET FLM 249K OHM 1% 1/8%		
51	3101-1234	Sh. 700	•	
52		SWITCH ISLICE OPCT	•	
3	3101-0036	SWITCHITOGGLE DPOT 3 AMP 125V		
,	3100-0707	SWITCH-ROT 4 POS		
1	8120-1348	CABLE POWER 7.5FT.	21	
-	3120 1030	CAUCE OWEN /#3rl*	44	
F1 '	1400-0084	FUSEHOLDER EXTRACTOR POST TYPE	•	
	,	MISCELLANEOUS		
	05110-0082	BRACKET: POWER INPUT		1
	05110-0001	BRACKET: POWER INPUT		
	05110-0003	BRACKET: FREQ. STD. HTG.	•	1
	05110-6034	CABLE ASSY . I POWER SUPPLY		1
	-5210 0057	INCLUDES SOITCH 52		1
ļ	05110-6035	CABLE ASSY. I AC	_	ſ
l	05110-6041	CABLE ASSY . (BUFFER INPUT)	*	
	05110-6042	CABLE ASSY. (COMB INOUT)		
	1250-0781	CONNECTORIRE BNC T 2-FEMALE 1-MALE		
	05100-6061	COVER ASS'Y. BOTTOM		
	05100-6062	COVER ASSIY. I TOP		
	05110-0028	COVER FRONT SIDE		
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Table 6-1. Chassis Parts (Cont'd)

		Table 6-1. Chassis Parts (Cont'd)	
Reference Designation	Stock No.	Description #	Not
`	05110-0029 5060-0767 5060-0732 0900-0034 05110-0002	MISCELLANEOUS (CONT'D) COVER: REAR SIDE FOOT ASSY-SNAP ON FRAMEISIDE 5 1/4 IN GASKETISILICONE RUBBER 1-7/1610 GUARUIAC INPUT	
	05110-2030 5060-0763 5060-0775 0370-0112 05110-0025	GUIDEIM AND F FREQ ADJ HANDLE ASSY-SIDE:2 REQ'D KITIRACK MOUNTING KNOB PANELIFRONT	,
,	05110-0030 " 4324-0007 4324-0008 05110-0060	RETAINERT HANDLE RUBBER STRIPINEOPRENE 1213x3/16 ACROSS FILTER MODULES RUBBER STRIPINEOPRENE 1213x3/8 SPACERICOMB GEN MODULE	
	05110-0058 1490-0030 05110-0020 5000-0051	SPRING! GROUNDING+FILTER/DIVIDER STAND:TILT STRAP! POWER SUPPLY TRIM STRIP:ALUM W/ADHESIVE BACK	
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Table 6-2. A1 Input Ampl/Buffer Ampl (05110-6015) (prefix all parts A1)

	Reference	⊕ Stock No.	Description #	Note
!	Désignation	φ σιστά πο.	Dober picor v	11000
	·	<u>.</u> .		ļ
	A1	05110-6088	BOARD ASS'Y INPUT AMP'.	;
•		05110-2038	BOARD-INPUT AMP.	'
	AICT	0140-0178	CIFXO MICA 300 PF ZN 300 VDCN	
	AICZ AICS	0140-0207	CIFXD MICA 330PF 5% 500VDCW CIFXD CER 0-1UF 50 VDCW	
	AICA AICS	0160-0127 0160-0161	CIFXO CER 1UF 20% 25VDCW	
	<i>\</i>	-	0	
	A1C6 NA1C7	0160-0168	C:FXD 0.1UF 10%	
	A1C8 -	0160-0161	CIFXD 0.01UF 108	
	AIC9 AICIO	0160-0161 0150-0117	C SFRD 0.01UF 10N C SFRD CER 100PF 10N 500VDCW	
	AIC[1	1 1	\	
	AICIZ (0140-0178 0140-0152	C:FXD MICA 560 PF 28 300 VDC# C:FXD MICA 1000 PF 5% 300 VDCW	
	A1C13 '	0140-0206	C1FXD MICA 270PF 5% 500VDC%	
	AICIS	0190-0198 0190-0191	C:FXD 0.10F 10%	
	AICT6	0140-0162	CIFXD MICA 4700 PF 10% 300 VDE	
	AIC17	0150-0117	CIFXD CER 100PF 10% 500VDCW	
	· AICI8 AICI9	0140÷0184 0140-0184	C:FXD MICA 8200 PF 1% 100 VDCW	
	A1C20	0190-0198	CIFXD 0.1UF ION	
	AICRI	1910-0022	SEMICON DEVICE IDIODE GE 100MA 6PIV 3.5NS	
ĺ	A1CR2 A1CR3	1910-0022 1901-0040	SEMICON DEVICE:DIODE GE 100MA 6PIV 3.5NS SEMICON DEVICE:DIODE SILICON	
	A1CR4	1901-0040	SEMICON DEVICE IDIODE SILICON	
	A1CR5	1901-0040	SEMICON DEVICE IDIODE SILICON	
l	A1CR6	1901-0040	SEMICON DEVICE + DIODE SILTICON	
	A1L1	05110-6073	COIL-VARIABLE 50-100UH	
	A1L2 A1L3	05110-6071 9140-0137	COIL-VARIABLE 4.5-7UH	
	AIL4 (05110-6073	COIL-VARIABLE 50-100UH	
	A1L5	05110-6971	COIL-VARIABLE 4.5-7UH	
	A1L6	9140-0129	COILIFAD RF 220 UH	
	AlgI	1853-0009	TRANSISTORISTLICON PNP	
	A1Q2 A1Q3	1853-0009 1853-0009	TRANSISTOR:SILICON PNP TRANSISTOR:SILICON PNP	
	A1Q4	1853-0009	TRANSISTOR STLICON PNP	
	AIRI	0758-0054	RIFXD MET FLM 330 OHM 5% 1/2%	
	A1R2 A1R3	0758-0012 0758-0005	RIFXD MET FLM 12K OHM 5% 1/2% RIFXD MET CX 4700 OHM 5% 1/2%	
	AIRA	0758-0003	RIFXD MET FLM 1000 OHM 5% 1/2%	
	A1R5	0758-0008 /	RIFXD MET FLM 390 OHM 5% 1/2%	
ļ	AIRÓ	0758-0057	RIFXO MET FLM 5600 OHM 5% 1/29	
	AIR7 AIR8	0758-0003 0758-0015	RIFXD MET FLM 1000 OHM 5% 1/2W RIFXD MET FLM 220 OHM 5% 1/2W	
	AIR9 AIR10	0757-0316	R-FXD MET FLM 42.2 OHM 18 1/88	
	21/10	0758-0024	RIFXO MET FLM 100 OHM 5% 1/2#	
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Table 6-2. A1 Input Ampl/Buffer Ampl (05110-6015) (Cont'd) (prefix all parts A1)

f	•	(prefix all parts A1)	
Reference Designation	Stock No.	Description #	Note:
			Note
AIRII	0758-0002	RIEVO MET ELM MAG ANNI EN L	i
AIRT2	0758-0009	RIFXD MET FLM 500 OHM 5% 1/2W RIFXD MET FLM 6800 OHM 5% 1/2W	ŀ
AIR13	0758-0010	RIFXO HET OF FLM 3300 OHN 5% 1/2%	
AIRI4	2100-0277	RIVAR COMP 100 OHM 20% LIN 0.3%	
, A1R15	0758-6015	RIFXD MET FLM 220 OHM 5% 1/2#	
A2	05110-6089	BOARD ASSTY BUFFER AMP.	ĺ
	05110-2039	BOARD-BUFFER AMP.	
1	10110	DOARD-BOFFER AMP.	
AZCI	0160-0161	CIFXO 0.01LF 10H	
A2C2	0160-0161	C:FXD 0.01UF 10m	
A2C3 A2C4	0150-0121	CIFXD CER 0.1UF 50 VDCW	ı
A2C5	0150-0121 0160-0168	CIFXD CER 0.1UF 50 VDCW	ı
7203	0100-0100	C:FXD 0.10F 10%	
A2C6	0140-0162	CIEXD MICA 4700 PF 10% 300 VDCM	- 1
A2C7	0140-0176) CIPAD MICA 100 PF 2% 300 VDCW	
A2C8	0140-0184	C*FXD MICA 8200 PF 1% 100 Uncw	
A2C9 A2C10	0140-0184	CIFXD MICA 8200 PF 1% 100 VDC#	
72010	0160-0168	CIFXD 0.10F 10%	
A2C11	0150-0121	CIFXD CER O-1UF 50 VDC#	`
1			
A2L[9140-0137	COILIFXD RF 160 UHY	'
A2L2 A2L3	05110-6071	COIL-VARIABLE	
4263	9140-0137	COILIFXD RF 100 UHY	1 1
AZQI	1853-0009	TRANSISTORISTLICON PNP	
A2Q2	1853-0009	TRANSISTORISILICON PNP	
4304		!	1
A2R1	0758-0029	RIFXD MET FLM 470 9HM 5% 1/2#	
A2R2 A2R3	0758-0029	RIFXD MET FLM1470 OHM 5% 1/2m	
A2R4	0758-0048 0758-0005	RIFXD MET FLM 8200 OHM 5% 1/28	l i
A2R5	0758-0002	RIFXO MET CX 4700 OHM 5% 1/2% RIFXO MET FLM 560 OHM 5% 1/2%	1 1
1		WALKO UET LEW 200 ONN 28 1/58	
A2R6	0758-0020	RIFXD MET FLM 22K OHM 5% 1/2#	
A2R7	0758-0044	REFXD MET FLM 2200 OHM 5% 1/2W	
A2R8 A2R9	2100-0277	RIVAR COMP 100 ORM 20% LIN OLEM	
A2RIO	0758-0054 0758-0003	RIFXD MET FLM 330 OHM 5% 1/2#	1 1
	0.30-0003	RIFXO MET FLM 1000 OHM 5% 1/2%	
			1 1
Cı	0160-0345	6.5 H	1 1
1 33	0100-0343	CIFNO CER 1000PF +80%-20% 500VDCW FEEDTHRU	1 1
J3	1250~0118	CONNECTORIBAC	1
J4	1250-0149	CONNECTORIRE COAXIAL BNC RT-ANGLE RECEPT	1
J5	1250-0149	CONNECTORIRE COAXIAL BNC RT-ANGLE RECEPT	
J6	1250-0118	CONNECTORIBAC	1 1
MP1	05110-0017	INPUT CKT. HOUSING	
MP2	05110-0018	COVERS INPUT CKT.	1 1
MP3	05110-0019	BRACKET: DIVIDER	1 1
MP4	05110-0031	BRACKET! MOUNTING	1 1
MP5	05110~0057	SHIELD: SPRING	1
MP6	05110-2001	CDACCRA FILTER AND	
MP7	05110-2001	SPACERI FILTER SMIELD CAPI FRONT	
MPS	05110-2028	CAPI FRONT	1
	,	,	1
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Table 5-2. Al Input Ampl/Buffer Ampl (05110-5015) (Cont'd) (prefix all parts Al)

Reférence Designation	♦ Stock No.	Description #	Note
49 -	0340-0038- 05110-6039 0340-0039 0510-0124 1250-0102	MISCELLANEOUS TERMINALISTUD CABLE ASSY! DC FREQ. CONTROL INSULATOR:BUSHING NUTICAPTIVE 6-32 ST CP CONNECTOR:BNC	1
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Table 6-3. A2 Frequency Standard Module (05110-6014) (prefix all parts A2)

Reference Designation	Stock No.	Description #	Note
3000		Deacisption *	Note
•		r	
A1	05110 4005		
^ :	05110-6043	OVEN ASSEMBLY-CRYSTAL . PARTS IN THIS ASSY: N.S.R.	, i
A2	05110-6030	OSCILLATOR BOARD ASSIY.	
	05110+2024	BLANK BOARD IOSCILLATOR	'
A2C I	0150-0121	CIFXO CER 0-1UFT50 VDCW	
A2C2	0160-0182	CIFXD MICA 47PF SW 300VDCW	
A2C3	0150-0121	CIFXD CER 0.1UF 50 VDCW	
A2C4 A2C5	0150-0121 0150-021	CIFXO CER O.TUF 50 VDCW	
,	0130-421	CIFXD CER G.1UF 50 VDCW	
A2C6	0150-0121	CIFXD CER 0-1UF 50 VDC#	
A2C7 A2C8	0150+0121	CIFXO CER O.TUF 50 YDCW	
A2C9 THRU	0150-0121	CIFXD CER 0.1UF 50 VDCW	
A2CIO	1 -	NOT ASSIGNED	
A2C[1	0150-0121	CIFXO CER 0.1UF 50 VDCB	()
A2C12	0170-0084	CIFXD MY 0.068UF 20% SOVDCW	
A2C13	0150-0098	C FXD CER 0.01 UF 1000 VOC#	
A2C [4 A2C [5	0150-0098	CIFXD CER 0.01 UF 1000 VDC#	
A2C [6	0150-0098	C:FXD CER C.O.1 UF 1000 VDCB C:FXD MY 0.C68UF 20% 50VDCW	
	1		
A2C17 A2C18	Q150-0121	CIFXO CER G.TUF 50 VDCW	
A2C [9	0140-0190 0150-0098	CIFXD MICA 39 PF 5% 300 VDCW CIFXD CER 0.01 UF 1000 VDCW	İ
A2C20	0150-0121	CIFXD CER 0.10F 50 VOCW	
A2C21	0150~0121	CIFXO CER GILUF SO VOCH	
A2C22	0150-0121	CIFXD CER C.1UF 50 VOCW	
A2C23	0150-0121	CIFXD CER C-1UF 50 VOCW	
A2C24	0150-0098	CIFXD CER 0.01 UF 1000 VDCW	ļ
A2CR1	1901-0025	SEMICON DEVICE DIODE JUNCTION	j
A2CR2	0122-0005	CIVAR VOLTAGE 39 PF AT -4V]
12CR3 12CR4	1910-0016	SEMICON DEVICE (DIODE GERMANIUM	İ
12CK4	1910-0016	SEMICON DEVICE DIODE GERMANIUM]
\2L1	05110-6072	COIL: FIXEC IBSUM	Ì
12L2 12L3	9140-0137	COILIFXD RF 100 UH	
264	9140-0137 9140-0129	COILIFXD RF 100 UH	
	-140-0127	COILIFXD RF 220 UH	,
1201 1202	1850-0091	TRANSISTORIGERMANIUM 2N2048 PRP	
203	1850-0091 1850-0091	TRANSISTORIGERMANIUM 2N204A PNP	
204	1850-0091	TRANSISTORIGERMANIUM 2N2048 PNP TRANSISTORIGERMANIUM 2N2048 PNP	
201			1
2R1 2R2	0758-0006 0683-4735	RIFXU MET FLM 10K OHM 5% 1/2W	
2R3	0758-0006	RIFXD COMP 47K OHM 58 1/48 RIFXD MET FLM 10K OHM 58 1/28	
2R4	0683-1035	RIFXO COMP 10K OHM 5% 1/4#	
2R5	0683-4735	RIFXD COMP 47K OHM 5% 1/4W	'
2R6	0683-2735	RIFXD COMP 27K OHM 5% 1/4W	
2R7	0758-0035	RIFXD MET FLM 3000 OHM St 1/2#	ĺ
2R8 2RQ THRU	0758-0017	RIFXD MET FLM 1500 OHM 5% 1/2W	
2R10		NOT ASSIGNED	
1			1 .
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Table 6-3. A2 Frequency Standard Module (05110-6014) (Cont'd) (prefix all parts A2)

		(prefix all parts A2)	t
Reference Designation	Stock No.	Description #	Note
DC DIQUECION	<u> </u>	•	
			١.
4 2 2 T .	0407 4715	7.546 6.46 4.76 6.44 7.7	
A2RT1	0683-4715	RIFXO COMP 470 OMM 5% 1/4W	
AZRI2	0683-4715	RIFXO COMP 470 OHM 5% 1/4W	
A2R[3	0683-4715	RIFXD COMP 470 OHM 5% 1/4W	
A2R14	0683-4715	R#FXD COMP 470 OHM 5% 1/4W R#FXD COMP 1000 OHM 5% 1/4W	
A2R15	0683-1025	KIPAD COMP 1000 OM 5% 1748	
A2R16	0758-0045	RIFXO MET FLM 3900 OHM 5% 1/2%	
A2RI7	0683-1335	RIFXD COMP 13K OHM 5% 1/4W	
A2RI8	0683-4725	RIFXD COMP 4700 OHM 5% 1/4%	
AZREG	0683-2725	R#FXD COMP 2760 OHM 58 1/48	
A2R2O	0683-2025	RIFXD COMP 2000 OMM 5% 1/4W	
A2R21	0683-1235	RIFXD COMP 12K OHN 5% 1/4W	
A2R22	0683-3025	RJAXD COMP 3000 OHM 5% 1/4%	
Á2R23 THRU A2R24		NOT ASSIGNED	
A2R25	0683-2215	RIFXD COMP 220 OHM 5% 1/4W	
A2R26	0758-0013	R F F XD MET FLM 120 OHM 5% 1/2W	
*2R20	0758-0015	K-LYD UE1 LTU 150 OUU 28 1/58	
A2R27	0683-1825	RIFXD COMP 1800 DHM 5% 1/4W	
A2R28	0683-1025	RIFXD COMP 1000 OHM 5% 1/4%	
A2R29	0683-1235	RIFXD COMP 12K ORM 5% 1/4W	
A2R30	0683-2725	RIFXD COMP 2700 OHM 5% 1/4%	
A2R31	0683-1025	R#FXD COMP 1000 OHM 5% 1/4%	1
N2R32	0683-3915	RIFXD COMP 390 OHM 5% 1/4W	
\2R33	0758-0013	RIFXD MET 0X 120 OHM 5% 1/2W	
13	05110-6031	OVEN CONTROL BOARD ASSY.	
	05110-2025	BOARD OVEN CONTROL BLANK	
N3C1	0160-0162	C:FXD MY 0.022UF 10%	
13C2	0180-0100	CIFXO ELECT TA 4.7UF 10% 35VOC#	
\3C3	0180-0100	CIFXD ELECT TA 4.7UF 10% 35VOC#	
\3C4	0180-0100	CIFXO ELECT TA 4.7UF 10% 35VOC#	
\3C5	0150-0121	C:FXO CER 0-1UF 50 VDCW	
1366	410-4100	CLEVO FLECT TA A THE LOW THUSE	
13C6 13C7	0180-0100	CIFXO ELECT TA 4.7UF 10% 35VDC#	
308	0180-0100 0150-0121	C:FXD ELECT TA 4.7UF 10% 35VOC#	1
320	0180-0121	C:FXD CER 0.1UF 50 VDCW C:FXD ELECT TA 4.7UF 10% 35VDCW	
3C10	0150-0121	CIFXO CER 0.1UF 50 VOCW	
	-170-0141	STING CEN VILLE BY TOUR	1
3C I 1	0150-0093	C : FXD CER 0.01 UF +80-20% 100VDC%	
3C12	0150-0121	CIFXD CER O.LUF 50 VOCW	
3C13	0150-0121	CIFXO CER O. TUF 50 VDCW	ĺ
3C [4	0150-0093	C : FXD CER 0.01 UF +80-20% 100VDC#	
3C15	0160-0217	CIFXD MICA 2300 PF 1% 300VDCW	
3 6.4	8114 8155	6.575 11.64 6.11 6.11	
3C16	0140-0189	C1FXD MICA 5825 PF 28 300VDCW	
3C17	0150-0121	CIFXD CER O. TUF 50 VDCW	
3C18 3C19	0150-0121 0150-0121	CIFXO CER U.1UF 50 VDCW	
	V130-0121	ALLYA OFU ASTAL BO SOCK	
3CŘ1	T901-0025	SEMICON DEVICE DIODE JUNCTION	
3CR2	I901-0025	SEMICON DEVICE DIODE JUNCTION	
3C43	I910-0016	SEMICON DEVICE DOLOGE GERMANIUM	
3CR4	1910-0016	SEMICON DEVICE DIODE GERMANIUM	
3CR5	1901-0025	SEMICON DEVICE DIODE JUNCTION	
3004	Too		
3CR6	1901-0026	SEMICON DEVICE IDIODE SILICON 200PIV	
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[#] See list of abbreviations in introduction to this section

Table 6-3. A2 Frequency Standard Module (05110-6014) (Cont'd) (prefix all parts A2)

Reference Designation	Stock No. '	Description #	Note
Designation	V 3000	Description 1	
ን ዜ፤	9140-0137	COILIFXD RF IMH 5%	
3L2	05110-6060	COIL: VARTABLE 13.5-19.0UH	4
362	9170-0106	CORE ADJUSTABLE TUNING POWDERED IRON	
33	9140-0129		
364	9140-0129	COILIFXD RF 220 UH	
301	1850-0054	TRANSISTOR GERMANIUM 2N652A PNP	
302			
303	1853-0001	TRANSISTORIPHP SILICON JOV 900HW	
	1850-0054	TRANSISTORIGERMANIUM 2N652A PNP	
394 395	1853-0001	TRANSISTORIPHP SILICON 30V 900HW	
. Ju j	1853-0016	TRANSISTORISTLICON PNP	1 /
396	1853-0009	TRANSISTORISILICON PNP 2N3250	
3R≱ [™]	0683-2205	RIFXD COMP 22 OHM 5% 1/4#	
. 3 ત્વે <u>ક</u>	0683-4325	RIFXO COMP 4300 OHM 5% 1/4%	/
343°	0683-4325	RIFXD COMP 4300 OHM 5% 1/4#	1/
3R4	0683-1515 /	RIFXD COMP 150 OHM 5% 1/4W	
3R5	0683-R215	RIFXD COMP B20 OHM 5% 1/4W	f
3R6	0758-0015	RIFXD MET FLM 220 OHM 5% 1/2%	
3R7	2100-0328	RIVAR WW 500 OHM 10% LIN 1W	1
3R8	0683-1035	RIFXO COMP 10K OHM 5% 1/4W	
3R∳	0727-0405	R-FXO DEPC 57.46K OHM 1/2# 1/2#	
3RIO	0727-0167	RIFXU DEPE 37.4K OHM 18 1/28	
JRI 1	0683-2035	RIFXQ COMP 20K OHM 5% 1/4W	
JRI2	0727-0221	RIFXD DEPC 200K OHM 18 1/28	
JRIJ	2100-0094	RIVAR COMP 50K OHM 30% LIN 1/5W	
3R14	0689+0565	RIFXD COMP 5.6 OHM 58 1W	
3R15	0757-0924	PIETO MET SIM 1000 OUN SW 100	1
	U191-0724	RIFXO MET FLM 1000 OHM 2% 1/8#	
3R I 6	0757-0940	RIFXD MET FLM 4700 OHM 2% 1/8#	1
3R17	0757-0949	RIFXD MET FLM 11K OHM 28 1/88 /	1
SR[8	2100-0151	RIVAR COMP 500 OHM 28 LIN 1/88	
3R19	0757-0917	RIFAD MET FLM 510 OAM 28 1/88	1
3R20	0757-0937	RIFXD MET FLM 3600 OHM 2% 1/88	1
3RŽ 1	0757-0922	RIFXD MET FLM 820 OHM 28 1/88	1
3R22	0757-0936	RIFXD MET FLM 3300 OHM 28 1/88	1
3R23	0757~0899	RIFXD MET FLM 91 OHM 2% 1/8%	
3A24	0757-0908	RIFXD MET FLM 220 OHM 28 1/88	
3R25	0757-0924	RIFXD MET FLM 1000 OHM 2% 1/8#	
			1
SRT1	0839-0012	THERMISTOR: SOK OWN LOS	
	0121-0013	CIVAR AIR 6-100.5PF	
2	0130-0003	CIVAR CER 1.5-7PF 500VDCm	
ا بد	1250-0083	CONNECTOR I BNC	
	1250-0083	CONNECTORIBAC	1 .
21	05110-0014	HOUSING! FREQ. STD.	1
12	05110-0015	COVERI FREG. STD.	1
23	1200-01150	BRACKETI BOTTOM	
14	05110-0022 05110-0023	BRACKET: TOP LEFT BRACKET: TOP-RIGHT	
46			[
•	05110-0024	BRACKET: SIDE	
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I			1

Table 6-3. A2 Frequency Standard Module (05110-6014) (Cont'd) (prefix all parts A2)

Reference Designation	Stock No.	Description #	Note
1	1850-0090 1200-0076 1200-0087 1200-0092	TRANSISTOR:GERMANIUM 2N11838 PNP INSULATOR:TRANSISTOR CLAMP:TRANSISTOR BUSHING:TRANSISTOR	
₽ 1	1251-0131	CONNECTOR SOCKET FEMALE 1-PIN	
		MISCELLANEOUS	
	0340-0039 0510-0124	INSULATOR BUSHING NUTICAPTIVE 6-32 ST CP	
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Table 6-4. Crystal Filter Assembly A3 (05110-6081)(Prefix all parts in this table A3)

Reference Designation	HP Stock No.	Description	
C1	0130-0001	C:VAR CER 7-45 pF 500 VDCW	
C2	0150-0116	C:FXD CER 47 pF 10% 500 VDCW	
C3	0160-0950	C:FXD MICA 60 pF 5%	
C4	0160-0950	C:FXD MICA 60 pF 5%	
C5	0130-0006	C:VAR CER 5-20 pF 500 VDCW	
C6	0160-0952	C:FXD MICA 220 pF 1%	
C7	0150-0117	C:FXD CER 100 pF 10% 500 VDCW	
J3	1250-0149	CONNECTOR: RF COAX BNC RT-ANGLE RECEPT	
J4	1250-0083	CONNECTOR: BNC	
LI	9140-0238	COIL: FXD RF 82 μH 5%	
TI	05110-6082	TRANSFORMER ASSEMBLY	
Y1	05110-6074	CRYSTAL ASSEMBLY	
	05110-0061	HOUSING: CRYSTAL FILTER	
	, 0340-0110	INSULATOR: STANDOFF MELAMINE 2-56 0.4 INCH	

Table 6-5. A4 Comb Generator Module (05110-6102) (prefix all parts A4)

	1	
05110-6110 05110-2021	BOARD ASSY . I COMB GEN. BLANK BOARD ICOMB	
0160-2055	C+FXD CER 0.01UF +80-20% 100 VOCW	
	1	
	- · · ·	
0140-0182	C1FXD MICA 5000 PF 28 300 VDCW	
0140-0180	CIFXD HICA 2000 PF 28 300 VDCW	
0160-0166	· · · · · · · · · · · · · · · · · · ·	
· ·		
0140-0205	CIFXD MICA 62PF 5% SOOVDCW	
0160-0161	CIFXD MY 0+01 UF 10% 200VDCW	
0160-0357	CIFXO CER DISK 85PF 5%	
	1 • ::	
0160-0358	CIFXD CER DISK 94PF 5%	
0160-0359	C-FXD CER GISK 103PF 58	
0140-0204	CIFXD MICA 47PF 5% NPO 500VDCW	
	- I	
0140-0204	CIEXD MICA 47PF 5% NPO 500VDCW	
0140-0204	CIFND MICA 47PF 5% NPO 500VDCW	
0160-2055	C1F/XD CER 0+01UF +80-20% 100 VDCM	
Q160-2055	Z (FXD CER 0.01UF +80-20% 100 VDCW	
0160-2035	C+FXD CER C+01UF +80+20% 100 VDCW	
0160-0357	CIFXD CER DISK 85PF 5%	
_ '		
0160-0358	CIFXD CER DISK 94PF 5%	
0160-0359	CIFXD CER DISK 103PF 58	
0150-0042	C:FXD TI 4.7 PF 5% 500 VDC%	
0150-0042	CIFXD TI 4.7 PF 5% 500 VDCW	
0150-0042	CIFXD TI 4.7 PF 5% 500 VDCW	
0160-0179	CIFXD MICA 33PF 5% 300VDCW	
0160-0179		
0160-0179	CIFAD MICA 33PF 5% 300VDCW	
	CIFXD MICA 33PF 5% 300VDCW	
0150÷0047	C1FXD T1 6.8 PF 10% 500 VDCW	
1910-0016	SEMICON DEVICE IDIODE GERMANIUM	
1901-0050	SEMICON DEVICE IDIODE SILICON	
1901-0050	SEMICON DEVICE IDIODE SILICON	
1910-0016	SEMICON DEVICE : DIODE GERMANIUM	
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	"	
	•	
	05110-2021 0160-2055 0160-0168 0150-0110 0150-0121 0140-0182 0140-0182 0140-0183 0150-0121 0150-0121 0150-0121 0150-0121 0160-0357 0160-0358 0160-0358 0160-0358 0160-0358 0160-0359 0140-0204 0140-0204 0140-0204 0140-0204 0140-0205 0140-0205 0160-2055 0160-2055 0160-2055 0160-2055 0160-357 0160-357 0160-357 0160-357 0160-357 0160-357 0160-357 0160-0358 0160-0358 0160-0359 0150-0042 0150-0042 0150-0042 0150-0042 0150-0042 0150-0042 0150-0042 0150-0042 0150-0042 0150-0042 0150-0042 0150-0042 0150-0042 0150-0042 0150-0042 0150-0042 0150-0042 0150-0042 0150-0042	09110-2021 BLANK BOARDICOMB 100-2055 CIFXD CER 0,01UF +80-20% 100 VOCW CIFXD CER 470PF 5% 300VDCW 0130-0110 CIFXD CER 470PF 5% 300VDCW 0130-0122 CIFXD MICA 2000 PF 2% 300 VDCW 0140-0180 CIFXD MICA 2000 PF 2% 300 VDCW 0140-0180 CIFXD MICA 2000 PF 2% 300 VDCW 0150-0121 CIFXD CER 0,1UF 30 VDCW 0150-0121 CIFXD CER 0,1UF 30 VDCW 0150-0121 CIFXD CER 0,1UF 30 VDCW 0160-0205 CIFXD MICA 2000 PF 2% 300 VDCW 0160-0205 CIFXD MICA 2000 PF 2% 300 VDCW 0160-0357 CIFXD CER CISK 85PF 5% 0160-0358 CIFXD CER CISK 85PF 5% 0160-0358 CIFXD CER CISK 85PF 5% 0160-0358 CIFXD CER DISK 94PF 5% 0160-0359 CIFXD CER DISK 103PF 5% 0160-0204 CIFXD MICA 47PF 5% NPO 500VDCW 0140-0204 CIFXD MICA 47PF 5% NPO 500VDCW 0140-0204 CIFXD MICA 47PF 5% NPO 500VDCW 0140-0204 CIFXD MICA 47PF 5% NPO 500VDCW 0140-0205 CIFXD CER 0.01UF +80-20% 100 VDCW 0160-2055 CIFXD CER 0.01UF +80-20% 100 VDCW 0160-0357 CIFXD CER CISK 103PF 5% 0160-0358 CIFXD CER CISK 103PF 5% 0160-0359 CIFXD CER CISK 103PF 5% 0160-0359 CIFXD CER CISK 103PF 5% 0160-0359 CIFXD CER CISK 103PF 5% 0160-0359 CIFXD CER CISK 103PF 5% 0160-0359 CIFXD CER CISK 103PF 5% 0160-0359 CIFXD CER CISK 103PF 5% 0160-0359 CIFXD CER CISK 103PF 5% 0160-0359 CIFXD CER CISK 103PF 5% 0160-0359 CIFXD CER CISK 103PF 5% 0160-0359 CIFXD CER CISK 103PF 5% 0160-0042 CIFXD TI 4.7 PF 5% 500 VDCW CIFXD TI 4.7 PF 5% 500 VDCW 0150-0042 CIFXD TI 4.7 PF 5% 500 VDCW 0150-0042 CIFXD TI 4.7 PF 5% 500 VDCW 0150-0042 CIFXD TI 4.7 PF 5% 500 VDCW 0150-0042 CIFXD TI 4.7 PF 5% 500 VDCW 0150-0042 CIFXD TI 4.7 PF 5% 500 VDCW 0150-0042 CIFXD TI 4.7 PF 5% 500 VDCW 0150-0042 CIFXD TI 4.7 PF 5% 500 VDCW 0150-0042 CIFXD TI 4.7 PF 5% 500 VDCW 0150-0042 CIFXD TI 4.7 PF 5% 500 VDCW 0150-0042 CIFXD TI 4.7 PF 5% 500 VDCW 0150-0042 CIFXD TI 4.7 PF 5% 500 VDCW 0150-0042 CIFXD TI 4.7 PF 5% 500 VDCW 0150-0042 CIFXD TI 4.7 PF 5% 500 VDCW 0150-0042 CIFXD TI 4.7 PF 5% 500 VDCW 0150-0042 CIFXD MICA 33PF 5% 300VDCW 0160-0179 CIFXD MICA 33PF 5% 300VDCW 01

Table 6-5. A4 Comb Generator Module (05110-6102) (Cont'd) (prefix all parts A4)

Reference	S Stock No	Description #		Note
Designation	Stock No.	Description #		11000
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ICR6	ļ	NOT RECOMMENDED FOR FIELD REPLACEMENT	`	
1CR7	1910-0022	SEMICON DEVICE DIODE GE 100MA 6PIV 3.5NS		
		,		
IEI .	05110-6049	DIODE OVEN ASSY. INCLUDES CR6: R7: RT1		
1E2	9170-0029	CORET FERRITE BEAD		- (
(IES	9170-0029	CORET FERRITE BEAD		١,
				,
111	05110-6048	COIL: VARIABLE 2.6-4.7UR		
	9170-0106	CORE ADJUSTABLE TUNING POWDERED IRON		√
1L2	9140-0129	COILIFXD RF 220 UH	•	
11.3	9140-0181	COILIFXO RF 22UH 5%		1
114	9100-1790	INDUCTORIRE 0.36 UH 5%		
115	9140-0111	COILIEXO RE 3.3 UH 10%		
116	9100-1790	INDUCTORIRE 0.36 UH 5%		1
11.7	9140-0179	COIL-FXD R.F. 22 UH 10% 275 MA		-
ILA	9140-0179	COIL-FXD R.F. 22 UH 10% 275 MA		
16	9140-0129	COLLIFXD RF 220 UH		
	İ			}
101	1853-0001	TRANSISTORIPHP SILICON BOV 900HW		
102	1850-0062	TRANSISTORIGERMANIUM ALLOY JUNCTION		
103	1850-0020	TRANSISTOR GERMANIUM 2N1143 PNP		
104	1850-0138	TRANSISTORISPLANASAO PNP GERMANIUM MADT		
195	1850-0138	TRANSISTORISPL2N2360 PNP GERMANIUM HADT		
196	1850-0138	TRANSISTORISPLENESSO PNP GERMANIUM MADT		
107	1850-0138	TRANSISTORISPLENESSO PAP GERMANIUM MADI		
108	1850-0138	TRANSISTORISPLENESSO PNP GERMANIUM MADT		
		The supplier of the parameter of the parameter of the control of t		
181	0757-0349	RIFXD DEPC 22.6K OHM 1% 1/8W		
182	0757-0316	RIFXD MET FLM 42.2 OHM 1% 1/8W		1
IR3	0757-0316	RIFXD MET FLM 42.2 OHM 1% 1/89		
1R4	0758-0096	RIFXD MET FLM 110 OHM 5% 1/2m		
1R5	0758-0035	RIFXU MET FLM 3000 OHM 5% 1/28	•	
1R6	2100-0737	REVAR WE 200 OHM TYPE H CONFIGURATION		
187	2100 0731	NOT RECOMMENDED FOR FIELD REPLACEMENT		
1R8	0758-0029	RIFXO MET FLM 470 0HM 5% 1/2#		
1R9	0758-0066	RIFXD MET FLM 620 OHM 5% 1/2W		
1810	0758-0009	RIFXD MET FLM 6800 OHM 5% 1/2W		
1R[1	0758-0009	RIFXD MET FLM 6800 OHM 5% 1/2W		
1R12	0758-0009	. RIFXD MET FLM 6800 OHM 5% 1/2W		
1R13	0758-0009	RIFXD MET FLM 6800 OHM 5% 1/2W		1
1R14	0758-0009	RIFXD MET FLM 6800 OHM 5% 1/2W		1
1815	0683-3925	RIFXD COMP 3900 DHM 5% 1/4%		-
IR16	0683-3925	RIFXD COMP 3900 OHM 5% 1/4%		
1R17	0683-3925	RIFAD COMP 3900 OHM 5% 1/4%		
1R16	0683-3925	R:FXD COMP 3900 OHM 5% 1/4#		
1819	0683-3925	RIFXD COMP 3900 OHM 5% 1/4%		
	-			
IRT1		NOT RECOMMENDED FOR FIELD REPLACEMENT		1
	05118 4000	TRANSFORMS P.		
171	05110-6044	TRANSFORMER:		
	9170-0105	CORE LADJUSTABLE TUNING		
172	05110-6044 9170-0105	TRANSFORMERI		
175	05110-6044	CORE ADJUSTABLE TUNING TRANSFORMER		1
	-5110 0000	1 cares and market market		
	9170-0105	COREFADJUSTABLE TUNING		
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Table 6-5. A4 Comb Generator Module (05110-5102) (Cont'd) (prefix all parts A4)

Reference	1 ,	/ (prefix all parts A4)	
Designation	Stock No.	Description #	Note
•		•	
114	05110-6044	TRANSFORMER	
	9170-0105	CORETADJUSTABLE TUNING	1
1175	05110-6044	TRANSFORMER	
1176 THRU	9170-0105	CORE ADJUSTABLE TUNING	بدا
AITII,		NOT RESIGNED	190
•	•	NOT ASSIGNED .	
ALTI2	05110-6044	TRANSFORMER	i
	9170-0105	CORE. PUUSTABLE TUNING	
1113	05110-6044	TRANSFURHERI	ĺ
	9170-0105	CORE:ADJUSTABLE YUNING	
11734	05110-6044	TRANSFORMER	
•	9170-0105	CORE LAD HISTARI & TIMITAIC	
N1T15	05110-6044	CORE:ADJUSTABLE TUNING TRANSFORMER:	
	9170-0105	CORE ADJUSTABLE TUNING	
1716	05110-6044	TRANSFORMER	
	9170-0105	CORE: ADJUSTABLE TUNING	
_			
.2	05110-6025	BOARD ASST. 1 COMB GEN.	
	05110-2020	BOARD: COME. GEN.	
2C1	0150-0121	CHEND CES O THE NO MOCH	
2C2	0150-0121	CIFXD CER C.OIUF 50 VDCW CIFXD CER C.OIUF +80-20% 100 VDCW	
203	0160-2055	CIFXD CER 0.01UF +80-20% 100 VDCW	İ
2C4	0160-2055	CIFKD CER CISK 103PF 5%	
205	0160-0360	CIFAD CER CISK 120PF 5%	
	,		
206	0160-0360	CIFXD CER DISK 120PF 5%	1
207	10160-0361	CIFXD CER.DISK 140PF 58 500VDC8	
2C \$	0160-0361	CIFXD CER DISK 140PF 5% 500VDC#	
2C 9	0160-0357	CIFXD CER DISK 85PF 5N	
2010	0140-0204	CIFXO MICA 47PF 5% NPO 500VDCW	
2C [1 ·	0140-0204	CIFXD MICA 47PF 5% NPO 500VDCM	
2C12	0140-0204	CIFXO MICA 47PF 5% NPO 500VDCW	
2C13	0140-0204	: CIFXO MICA 47PF 5% NPO BOOVOCM	
2C14	0140-0204	CIFXD MICA 47PF 5% NPD SOOVDCW	
2C15	0140-0204	CIFXO MICA 47PF 5% NPO SOOVDCW	
2C16	0140 3055	, ,	
2C 17	0160-2055	C1FXO_CER 0.01UF +80-20% 100 VOC#	
8019	0160-2055 0160-2055	CIFXD CER 0-01UF +80-20% 100 VDC% CIFXD CER 0-01UF +80-20% 100 VDC%	
2C19	0160-2055	##FXO CER C.01UF +80-20% 100 VDC%	1
C20 #	0160-2055	C1FXD CER 0.01UF +80-20% 100 VDC%	
5C\$ 1	0160-2955	CIFXD CER 0.01UF +80-20% 100 VDCW	
3C\$2	0160-0359	CIFXO CER LISK 103PF 5%	
C23	0160-0360	CIFXD CER CISK 120PF 5%	1
C24	0160-0360	CIFXU CER, CISK 120PF 58	
2C25	0160-0361	CIFXD CER CISK 140PF 5% 500VDCW	
1026	0160-0361	CIFXD CER CISK 140PF 5% 500VDC#	
C27	0160-0357	CIFXO CER CISK 85PF 5%	1
C28	0150-0044	C1FXQ TI 5.6 PF 5N 500 VDCN	1
2C29	0150-0044	CIFXD TI 5.6 PF 5% 500 VDC%	
2030	0150-0044	C1FXU TI 5.6 PF 5N 500 VDCW	
<u>, , , , , , , , , , , , , , , , , , , </u>		,	
2C31	0150-0047	C1FXD TI 6.8 PF 10% 500 VDCW	1
5C35	0150-0047	CIFXD TI 6.8 PF 10% 500 VOCW	
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[#] See list of abbreviations in introduction to this section

Table 6-5. A4 Comb Generator Module (05110-6102) (Cont'd)

y (prefix all parts A4)

Designation	CIFXD TI 6.8 PF 10% 500 VDCW CIFXD MICA 33PF 5% 300VDCW COIL-FXD R.F. 22 UH 10% 275 MA CCIL-FXD R.F. 22 UH 10% 275 MA CCIL-FXD R.F. 22 UH 10% 275 MA TRANSISTORISPL2N2360 PNP GERMANIUM MADT
A2C34 A2C34 A2C35 A2C35 A2C36 A2C36 A2C37 A2C38 A2C38 A2C39 A2C39 A2C39 A2C39 A2C39 A2C39 A2C39 A2C3 A2C3 A2C3 A2C3 A2C3 A2C3 A2C3 A2C3	C:FXD MICA 33PF 5% 300VDCW C:FXD MICA 33PF 5% 300VDCW C:FXD MICA 33PF 5% 300VDCW C:FXD MICA 33PF 5% 300VDCW C:FXD MICA 33PF 5% 300VDCW C:FXD MICA 33PF 5% 300VDCW C:FXD MICA 33PF 5% 300VDCW C:FXD MICA 33PF 5% 300VDCW C:FXD MICA 33PF 5% 300VDCW C:FXD MICA 33PF 5% 300VDCW C:FXD MICA 33PF 5% 300VDCW C:FXD MICA 33PF 5% 300VDCW C:FXD MICA 33PF 5% 300VDCW C:FXD MICA 33PF 5% 300VDCW C:FXD MICA 33PF 5% 300VDCW C:FXD MICA 33PF 5% 300VDCW C:FXD MICA 33PF 5% 300VDCW C:FXD MICA 33PF 5% 300VDCW C:FXD MET FL NOW 275 MA TRANSISTOR:SPL2N2360 PNP GERMANIUM MADT TRANSISTOR:SPL2
A2C34	C:FXD MICA 33PF 5% 300VDCW C:FXD MICA 33PF 5% 300VDCW C:FXD MICA 33PF 5% 300VDCW C:FXD MICA 33PF 5% 300VDCW C:FXD MICA 33PF 5% 300VDCW C:FXD MICA 33PF 5% 300VDCW C:FXD MICA 33PF 5% 300VDCW C:FXD MICA 33PF 5% 300VDCW C:FXD MICA 33PF 5% 300VDCW C:FXD MICA 33PF 5% 300VDCW C:FXD MICA 33PF 5% 300VDCW C:FXD MICA 33PF 5% 300VDCW C:FXD MICA 33PF 5% 300VDCW C:FXD MICA 33PF 5% 300VDCW C:FXD MICA 33PF 5% 300VDCW C:FXD MICA 33PF 5% 300VDCW C:FXD MICA 33PF 5% 300VDCW C:FXD MICA 33PF 5% 300VDCW C:FXD MET FL NOW 275 MA TRANSISTOR:SPL2N2360 PNP GERMANIUM MADT TRANSISTOR:SPL2
A2C34	C:FXD MICA 33PF 5% 300VDCW C:FXD MICA 33PF 5% 300VDCW C:FXD MICA 33PF 5% 300VDCW C:FXD MICA 33PF 5% 300VDCW C:FXD MICA 33PF 5% 300VDCW C:FXD MICA 33PF 5% 300VDCW C:FXD MICA 33PF 5% 300VDCW C:FXD MICA 33PF 5% 300VDCW C:FXD MICA 33PF 5% 300VDCW C:FXD MICA 33PF 5% 300VDCW C:FXD MICA 33PF 5% 300VDCW C:FXD MICA 33PF 5% 300VDCW C:FXD MICA 33PF 5% 300VDCW C:FXD MICA 33PF 5% 300VDCW C:FXD MICA 33PF 5% 300VDCW C:FXD MICA 33PF 5% 300VDCW C:FXD MICA 33PF 5% 300VDCW C:FXD MICA 33PF 5% 300VDCW C:FXD MET FL NOW 275 MA TRANSISTOR:SPL2N2360 PNP GERMANIUM MADT TRANSISTOR:SPL2
A2C34	C:FXD MICA 33PF 5% 300VDCW C:FXD MICA 33PF 5% 300VDCW C:FXD MICA 33PF 5% 300VDCW C:FXD MICA 33PF 5% 300VDCW C:FXD MICA 33PF 5% 300VDCW C:FXD MICA 33PF 5% 300VDCW C:FXD MICA 33PF 5% 300VDCW C:FXD MICA 33PF 5% 300VDCW C:FXD MICA 33PF 5% 300VDCW C:FXD MICA 33PF 5% 300VDCW C:FXD MICA 33PF 5% 300VDCW C:FXD MICA 33PF 5% 300VDCW C:FXD MICA 33PF 5% 300VDCW C:FXD MICA 33PF 5% 300VDCW C:FXD MICA 33PF 5% 300VDCW C:FXD MICA 33PF 5% 300VDCW C:FXD MICA 33PF 5% 300VDCW C:FXD MICA 33PF 5% 300VDCW C:FXD MET FL NOW 275 MA TRANSISTOR:SPL2N2360 PNP GERMANIUM MADT TRANSISTOR:SPL2
A2C35 A2C36 A2C36 A2C36 A2C37 A2C38 A2C38 A2C39 A2C39 A2C39 A2C39 A2C39 A2C3 A2C3 A2C3 A2C3 A2C3 A2C3 A2C3 A2C3	C:FXD MICA 33PF 5% 300VDCW C:FXD MICA 33PF 5% 300VDCW C:FXD MICA 33PF 5% 300VDCW C:FXD MICA 33PF 5% 300VDCW C:FXD MICA 33PF 5% 300VDCW C:FXD MICA 33PF 5% 300VDCW C:FXD MICA 33PF 5% 300VDCW COIL-FXD R.F. 22 UH 10% 275 MA CCIL-FXD R.F. 22 UH 10% 275 MA TRANSISTOR:SPL2N2360 PNP GERMANIUM MADT TRANSISTOR:SPL2N2360 PNP GERMANIUM MADT TRANSISTOR:SPL2N2360 PNP GERMANIUM MADT TRANSISTOR:SPL2N2360 PNP GERMANIUM MADT TRANSISTOR:SPL2N2360 PNP GERMANIUM MADT TRANSISTOR:SPL2N2360 PNP GERMANIUM MADT R:FXD MET FLM 6800 OHM 5% 1/2W R:FXD MET FLM 6800 OHM 5% 1/2W R:FXD MET FLM 6800 OHM 5% 1/2W R:FXD MET FLM 6800 OHM 5% 1/2W R:FXD MET FLM 6800 OHM 5% 1/2W R:FXD MET FLM 6800 OHM 5% 1/2W R:FXD MET FLM 6800 OHM 5% 1/2W R:FXD MET FLM 6800 OHM 5% 1/2W R:FXD MET FLM 6800 OHM 5% 1/2W R:FXD MET FLM 6800 OHM 5% 1/2W R:FXD MET FLM 6800 OHM 5% 1/2W R:FXD MET FLM 6800 OHM 5% 1/2W R:FXD MET FLM 6800 OHM 5% 1/2W R:FXD MET FLM 6800 OHM 5% 1/2W R:FXD MET FLM 6800 OHM 5% 1/2W R:FXD MET FLM 6800 OHM 5% 1/2W R:FXD MET FLM 6800 OHM 5% 1/2W R:FXD MET FLM 6800 OHM 5% 1/2W
A2C36 A2C37 A2C37 A2C38 A2C39 A2C39 A2C39 A2L1 A2L2 A2L2 A2L2 A2L2 A2C3 A2C3 A2C3 A2C3 A2C3 A2C3 A2C3 A2C3 A2C3 A2C3 A2C4 A2C5 A2C6 A2C7 A2C8 A2C7 A2C8	C:FXD MICA 33PF 5% 300VDCW C:FXD MICA 34PF C:FXD MICA 34PF C:FXD MICA 34PF C:FXD MICA 34PF C:FXD MICA 34PF C:FXD MICA 34PF C:FXD MICA 34PF C:FXD MICA 34PF C:FXD MICA 34PF C:FXD MICA 34PF C:FXD MICA 34PF C:FXD MICA 34PF C:FXD MICA 34PF C:FXD MICA 34PF C:FXD MICA 34PF C:FXD MICA 34PF C:FXD MICA
A2C38 A2C39 O160-0179 A2C1 A2L1 9140-0179 A2L2 9140-0179 A2Q1 A2Q2 1850-0138 A2Q3 A2Q3 A2Q4 A2Q3 A2Q4 A2Q5 A2Q6 A2R1 O758-0009 A2R2 A2R8 O758-0009 A2R6 A2R7 A2R8 O758-0009 A2R7 A2R8	CIFXO MICA 33PF 5% 300VDCW CIFXO MICA 33PF 5% 300VDCW COIL-FXD R.F. 22 UH 10% 275 MA CCIL-FXD R.F. 22 UH 10% 275 MA TRANSISTORISPL2N2360 PNP GERMANIUM MADT TRANSISTORISPL2N2360 PNP GERMANIUM MADT TRANSISTORISPL2N2360 PNP GERMANIUM MADT TRANSISTORISPL2N2360 PNP GERMANIUM MADT TRANSISTORISPL2N2360 PNP GERMANIUM MADT TRANSISTORISPL2N2360 PNP GERMANIUM MADT RIFXD MET FLM 6800 OHM 5% 1/2W RIFXD MET FLM 6800 OHM 5% 1/2W RIFXD MET FLM 6800 OHM 5% 1/2W RIFXD MET FLM 6800 OHM 5% 1/2W RIFXD MET FLM 6800 OHM 5% 1/2W RIFXD MET FLM 6800 OHM 5% 1/2W RIFXD MET FLM 6800 OHM 5% 1/2W RIFXD MET FLM 6800 OHM 5% 1/2W RIFXD MET FLM 6800 OHM 5% 1/2W RIFXD MET FLM 6800 OHM 5% 1/2W RIFXD MET FLM 6800 OHM 5% 1/2W RIFXD MET FLM 6800 OHM 5% 1/2W RIFXD MET FLM 6800 OHM 5% 1/2W RIFXD COMP 3900 OMM 5% 1/4W
A2C39 0160-0179 A2L1 9140-0179 A2L2 9140-0179 A2Q1 1850-0138 A2Q2 1850-0138 A2Q3 1850-0138 A2Q4 1850-0138 A2Q5 1850-0138 A2Q6 1850-0138 A2Q6 1850-0138 A2Q6 1850-0138 A2R1 0758-0009 A2R2 0758-0009 A2R3 0758-0009 A2R4 0758-0009 A2R6 0758-0009 A2R6 0758-0009 A2R6 0758-0009 A2R6 0758-0009 A2R6 0758-0009 A2R6 0758-0009 A2R6 0758-0009 A2R6 0758-0009	CIFXO MICA 33PF 5% 300VDCW COIL-FXO R.F. 22 UH 10% 275 MA CCIL-FXO R.F. 22 UH 10% 275 MA TRANSISTORISPLENESSO PNP GERMANIUM MADT TRANSISTORISPLENESSO PNP GERMANIUM MADT TRANSISTORISPLENESSO PNP GERMANIUM MADT TRANSISTORISPLENESSO PNP GERMANIUM MADT TRANSISTORISPLENESSO PNP GERMANIUM MADT TRANSISTORISPLENESSO PNP GERMANIUM MADT TRANSISTORISPLENESSO PNP GERMANIUM MADT RIFXD MET FLM 6800 OHM 5% 1/2% RIFXD MET FLM 6800 OHM 5% 1/2% RIFXD MET FLM 6800 OHM 5% 1/2% RIFXD MET FLM 6800 OHM 5% 1/2% RIFXD MET FLM 6800 OHM 5% 1/2% RIFXD MET FLM 6800 OHM 5% 1/2% RIFXD MET FLM 6800 OHM 5% 1/2% RIFXD MET FLM 6800 OHM 5% 1/2% RIFXD MET FLM 6800 OHM 5% 1/2% RIFXD MET FLM 6800 OHM 5% 1/2% RIFXD MET FLM 6800 OHM 5% 1/2% RIFXD MET FLM 6800 OHM 5% 1/2% RIFXD MET FLM 6800 OHM 5% 1/2% RIFXD MET FLM 6800 OHM 5% 1/2% RIFXD COMP 3900 OMM 5% 1/4%
A2C39 0160-0179 A2L1 9140-0179 A2L2 9140-0179 A2Q1 1850-0138 A2Q2 1850-0138 A2Q3 1850-0138 A2Q4 1850-0138 A2Q5 1850-0138 A2Q6 1850-0138 A2Q6 1850-0138 A2Q6 1850-0138 A2Q6 0758-0009 A2R2 0758-0009 A2R3 0758-0009 A2R4 0758-0009 A2R6 0758-0009 A2R6 0758-0009 A2R6 0758-0009 A2R6 0758-0009 A2R6 0758-0009 A2R6 0758-0009 A2R6 0758-0009 A2R6 0758-0009	CIFXO MICA 33PF 5% 300VDCW COIL-FXO R.F. 22 UH 10% 275 MA CCIL-FXO R.F. 22 UH 10% 275 MA TRANSISTORISPLENESSO PNP GERMANIUM MADT TRANSISTORISPLENESSO PNP GERMANIUM MADT TRANSISTORISPLENESSO PNP GERMANIUM MADT TRANSISTORISPLENESSO PNP GERMANIUM MADT TRANSISTORISPLENESSO PNP GERMANIUM MADT TRANSISTORISPLENESSO PNP GERMANIUM MADT TRANSISTORISPLENESSO PNP GERMANIUM MADT RIFXD MET FLM 6800 OHM 5% 1/2% RIFXD MET FLM 6800 OHM 5% 1/2% RIFXD MET FLM 6800 OHM 5% 1/2% RIFXD MET FLM 6800 OHM 5% 1/2% RIFXD MET FLM 6800 OHM 5% 1/2% RIFXD MET FLM 6800 OHM 5% 1/2% RIFXD MET FLM 6800 OHM 5% 1/2% RIFXD MET FLM 6800 OHM 5% 1/2% RIFXD MET FLM 6800 OHM 5% 1/2% RIFXD MET FLM 6800 OHM 5% 1/2% RIFXD MET FLM 6800 OHM 5% 1/2% RIFXD MET FLM 6800 OHM 5% 1/2% RIFXD MET FLM 6800 OHM 5% 1/2% RIFXD MET FLM 6800 OHM 5% 1/2% RIFXD COMP 3900 OMM 5% 1/4%
A2L1 9140-0179 A2L2 9140-0179 A2L2 9140-0179 A2Q1 1850-0138 A2Q2 1850-0138 A2Q3 1850-0138 A2Q4 1850-0138 A2Q5 1850-0138 A2Q6 1850-0138 A2Q6 1850-0138 A2Q6 0758-0009 A2R2 0758-0009 A2R3 0758-0009 A2R4 0758-0009 A2R5 0758-0009 A2R6 0758-0009 A2R6 0758-0009 A2R7 0683-3925	COIL-FXD R.F. 22 UH 10% 275 MA CCIL-FXD R.F. 22 UH 10% 275 MA TRANSISTORISPL2N2360 PNP GERMANIUM MADT TRANSISTORISPL2N2360 PNP GERMANIUM MADT TRANSISTORISPL2N2360 PNP GERMANIUM MADT TRANSISTORISPL2N2360 PNP GERMANIUM MADT TRANSISTORISPL2N2360 PNP GERMANIUM MADT TRANSISTORISPL2N2360 PNP GERMANIUM MADT RIFXD MET FLM 6800 OHM 5% 1/2% RIFXD MET FLM 6800 OHM 5% 1/2% RIFXD MET FLM 6800 OHM 5% 1/2% RIFXD MET FLM 6800 OHM 5% 1/2% RIFXD MET FLM 6800 OHM 5% 1/2% RIFXD MET FLM 6800 OHM 5% 1/2% RIFXD MET FLM 6800 OHM 5% 1/2% RIFXD MET FLM 6800 OHM 5% 1/2% RIFXD MET FLM 6800 OHM 5% 1/2% RIFXD MET FLM 6800 OHM 5% 1/2% RIFXD MET FLM 6800 OHM 5% 1/2% RIFXD MET FLM 6800 OHM 5% 1/2% RIFXD MET FLM 6800 OHM 5% 1/2% RIFXD COMP 3900 OMM 5% 1/4%
A2L2 9140-0179 A2Q1 1850-0138 A2Q2 1850-0138 A2Q3 1850-0138 A2Q4 1850-0138 A2Q5 1850-0138 A2Q6 1850-0138 A2Q6 1850-0138 A2R1 0758-0009 A2R2 0758-0009 A2R3 0758-0009 A2R4 0758-0009 A2R5 0758-0009 A2R6 0758-0009 A2R6 0758-0009 A2R7 0683-3925	CCIL-FXD R.F. 22 UH 10% 275 MA TRANSISTORISPL2N2360 PNP GERMANIUM MADT TRANSISTORISPL2N2360 PNP GERMANIUM MADT TRANSISTORISPL2N2360 PNP GERMANIUM MADT TRANSISTORISPL2N2360 PNP GERMANIUM MADT TRANSISTORISPL2N2360 PNP GERMANIUM MADT TRANSISTORISPL2N2360 PNP GERMANIUM MADT RIFXD MET FLM 6800 OHM 5% 1/2W RIFXD MET FLM 6800 OHM 5% 1/2W RIFXD MET FLM 6800 OHM 5% 1/2W RIFXD MET FLM 6800 OHM 5% 1/2W RIFXD MET FLM 6800 OHM 5% 1/2W RIFXD MET FLM 6800 OHM 5% 1/2W RIFXD MET FLM 6800 OHM 5% 1/2W RIFXD MET FLM 6800 OHM 5% 1/2W RIFXD MET FLM 6800 OHM 5% 1/2W RIFXD MET FLM 6800 OHM 5% 1/2W RIFXD MET FLM 6800 OHM 5% 1/2W RIFXD MET FLM 6800 OHM 5% 1/2W
A2L2 9140-0179 A2Q1 1850-0138 A2Q2 1850-0138 A2Q3 1850-0138 A2Q4 1850-0138 A2Q5 1850-0138 A2Q6 1850-0138 A2Q6 1850-0138 A2R1 0758-0009 A2R2 0758-0009 A2R3 0758-0009 A2R4 0758-0009 A2R5 0758-0009 A2R6 0758-0009 A2R6 0758-0009 A2R7 0683-3925	CCIL-FXD R.F. 22 UH 10% 275 MA TRANSISTORISPL2N2360 PNP GERMANIUM MADT TRANSISTORISPL2N2360 PNP GERMANIUM MADT TRANSISTORISPL2N2360 PNP GERMANIUM MADT TRANSISTORISPL2N2360 PNP GERMANIUM MADT TRANSISTORISPL2N2360 PNP GERMANIUM MADT TRANSISTORISPL2N2360 PNP GERMANIUM MADT RIFXD MET FLM 6800 OHM 5% 1/2W RIFXD MET FLM 6800 OHM 5% 1/2W RIFXD MET FLM 6800 OHM 5% 1/2W RIFXD MET FLM 6800 OHM 5% 1/2W RIFXD MET FLM 6800 OHM 5% 1/2W RIFXD MET FLM 6800 OHM 5% 1/2W RIFXD MET FLM 6800 OHM 5% 1/2W RIFXD MET FLM 6800 OHM 5% 1/2W RIFXD MET FLM 6800 OHM 5% 1/2W RIFXD MET FLM 6800 OHM 5% 1/2W RIFXD MET FLM 6800 OHM 5% 1/2W RIFXD MET FLM 6800 OHM 5% 1/2W
A2Q1 1850-0138 A2Q2 1850-0138 A2Q3 1850-0138 A2Q4 1850-0138 A2Q5 1850-0138 A2Q6 1850-0138 A2Q6 0758-0009 A2R2 0758-0009 A2R3 0758-0009 A2R4 0758-0009 A2R5 0758-0009 A2R6 0758-0009 A2R7 0683-3925 A2R8 0683-3925	TRANSISTOR: SPL 2N2360 PNP GERMANIUM MADT TRANSISTOR: SPL 2N2360 PNP GERMANIUM MADT TRANSISTOR: SPL 2N2360 PNP GERMANIUM MADT TRANSISTOR: SPL 2N2360 PNP GERMANIUM MADT TRANSISTOR: SPL 2N2360 PNP GERMANIUM MADT TRANSISTOR: SPL 2N2360 PNP GERMANIUM MADT RIFXD MET FLM 6800 OHM 5% 1/2% RIFXD MET FLM 6800 OHM 5% 1/2% RIFXD MET FLM 6800 OHM 5% 1/2% RIFXD MET FLM 6800 OHM 5% 1/2% RIFXD MET FLM 6800 OHM 5% 1/2% RIFXD MET FLM 6800 OHM 5% 1/2% RIFXD MET FLM 6800 OHM 5% 1/2% RIFXD MET FLM 6800 OHM 5% 1/2% RIFXD MET FLM 6800 OHM 5% 1/2% RIFXD MET FLM 6800 OHM 5% 1/2% RIFXD COMP 3900 OMM 5% 1/4%
A2Q2 1850-0138 A2Q3 1850-0138 A2Q4 1850-0138 A2Q6 1850-0138 A2Q6 1850-0138 A2Q6 1850-0138 A2R1 0758-0009 A2R2 0758-0009 A2R3 0758-0009 A2R4 0758-0009 A2R6 0758-0009 A2R6 0758-0009 A2R7 0683-3925	TRANSISTOR: SPL2N2360 PNP GERMANIUM MADT TRANSISTOR: SPL2N2360 PNP GERMANIUM MADT TRANSISTOR: SPL2N2360 PNP GERMANIUM MADT TRANSISTOR: SPL2N2360 PNP GERMANIUM MADT TRANSISTOR: SPL2N2360 PNP GERMANIUM MADT TRANSISTOR: SPL2N2360 PNP GERMANIUM MADT RIFXD MET FLM 6800 OHM 5% 1/2W RIFXD MET FLM 6800 OHM 5% 1/2W RIFXD MET FLM 6800 OHM 5% 1/2W RIFXD MET FLM 6800 OHM 5% 1/2W RIFXD MET FLM 6800 OHM 5% 1/2W RIFXD MET FLM 6800 OHM 5% 1/2W RIFXD MET FLM 6800 OHM 5% 1/2W RIFXD MET FLM 6800 OHM 5% 1/2W RIFXD MET FLM 6800 OHM 5% 1/2W RIFXD MET FLM 6800 OHM 5% 1/2W RIFXD COMP 3900 OMM 5% 1/4W
A2Q2 1850-0138 A2Q3 1850-0138 A2Q4 1850-0138 A2Q4 1850-0138 A2Q6 1850-0138 A2Q6 1850-0138 A2Q6 0758-0009 A2R2 0758-0009 A2R3 0758-0009 A2R4 0758-0009 A2R6 0758-0009 A2R6 0758-0009 A2R7 0683-3925 A2R8 0683-3925	TRANSISTORISPLENESSO PNP GERMANIUM MADT TRANSISTORISPLENESSO PNP GERMANIUM MADT TRANSISTORISPLENESSO PNP GERMANIUM MADT TRANSISTORISPLENESSO PNP GERMANIUM MADT TRANSISTORISPLENESSO PNP GERMANIUM MADT RIFXD MET FLM 6800 OHM 5% 1/2W RIFXD MET FLM 6800 OHM 5% 1/2W RIFXD MET FLM 6800 OHM 5% 1/2W RIFXD MET FLM 6800 OHM 5% 1/2W RIFXD MET FLM 6800 OHM 5% 1/2W RIFXD MET FLM 6800 OHM 5% 1/2W RIFXD MET FLM 6800 OHM 5% 1/2W RIFXD MET FLM 6800 OHM 5% 1/2W RIFXD MET FLM 6800 OHM 5% 1/2W RIFXD MET FLM 6800 OHM 5% 1/2W
A2Q3	TRANSISTORISPL2N2360 PNP GERMANIUM MADT TRANSISTORISPL2N2360 PNP GERMANIUM MADT TRANSISTORISPL2N2360 PNP GERMANIUM MADT TRANSISTORISPL2N2360 PNP GERMANIUM MADT RIFXD MET FLM 6800 OHM 5% 1/2W RIFXD MET FLM 6800 OHM 5% 1/2W RIFXD MET FLM 6800 OHM 5% 1/2W RIFXD MET FLM 6800 OHM 5% 1/2W RIFXD MET FLM 6800 OHM 5% 1/2W RIFXD MET FLM 6800 OHM 5% 1/2W RIFXD MET FLM 6800 OHM 5% 1/2W RIFXD MET FLM 6800 OHM 5% 1/2W RIFXD COMP 3900 OMM 5% 1/4W
A2Q8 A2Q5 A2Q5 A2Q6 A2Q6 A2R1 A2R1 A2R1 A2R2 A2R3 A2R3 A2R4 A2R5 A2R5 A2R6 A2R7 A2R6 A2R7 A2R8 A2R8 A2R8 A2R8 A2R8 A2R8 A2R8 A2R9 A2R9 A2R9 A2R9 A2R9 A2R9 A2R9 A2R9	TRANSISTORISPL2N2360 PNP GERMANIUM MADT TRANSISTORISPL2N2360 PNP GERMANIUM MADT TRANSISTORISPL2N2360 PNP GERMANIUM MADT RIFXD MET FLM 6800 OHM 5% 1/2W RIFXD MET FLM 6800 OHM 5% 1/2W RIFXD MET FLM 6800 OHM 5% 1/2W RIFXD MET FLM 6800 OHM 5% 1/2W RIFXD MET FLM 6800 OHM 5% 1/2W RIFXD MET FLM 6800 OHM 5% 1/2W RIFXD MET FLM 6800 OHM 5% 1/2W RIFXD MET FLM 6800 OHM 5% 1/2W RIFXD COMP 3900 OMM 5% 1/4W
A295 1850-0138 A296 1850-0138 A2R1 0758-0009 A2R2 0758-0009 A2R3 0758-0009 A2R4 0758-0009 A2R5 0758-0009 A2R6 0758-0009 A2R7 0683-3925 A2R8 0683-3925	TRANSISTORISPLENESSO PNP GERMANIUM MADT TRANSISTORISPLENESSO PNP GERMANIUM MADT RIFXD MET FLM 6800 OHM 5% 1/2W RIFXD MET FLM 6800 OHM 5% 1/2W RIFXD MET FLM 6800 OHM 5% 1/2W RIFXD MET FLM 6800 OHM 5% 1/2W RIFXD MET FLM 6800 OHM 5% 1/2W RIFXD MET FLM 6800 OHM 5% 1/2W RIFXD MET FLM 6800 OHM 5% 1/2W RIFXD COMP 3900 OMM 5% 1/4W
A2Q6 1850-0138 A2R1 0758-0009 A2R2 0758-0009 A2R3 0758-0009 A2R4 0758-0009 A2R6 0758-0009 A2R6 0758-0009 A2R6 0758-0009 A2R8 0683-3925	TRANSISTOR SPL 202360 PNP. GERMANIUM MAOT RIFXD MET FLM 6800 OHM 5% 1/2W RIFXD MET FLM 6800 OHM 5% 1/2W RIFXD MET FLM 6800 OHM 5% 1/2W RIFXD MET FLM 6800 OHM 5% 1/2W RIFXD MET FLM 6800 OHM 5% 1/2W RIFXD MET FLM 6800 OHM 5% 1/2W RIFXD COMP 3900 OHM 5% 1/4W
A2R1 0758-0009 A2R2 0758-0009 A2R3 0758-0009 A2R4 0758-0009 A2R5 0758-0009 A2R6 0758-0009 A2R7 0683-3925 A2R8 0683-3925	RIFXD MET FLM 6800 OHM 5% 1/2W RIFXD MET FLM 6800 OHM 5% 1/2W RIFXD MET FLM 6800 OHM 5% 1/2W RIFXD MET FLM 6800 OHM 5% 1/2W RIFXD MET FLM 6800 OHM 5% 1/2W RIFXD MET FLM 6800 OHM 5% 1/2W RIFXD COMP 3900 OHM 5% 1/4W
A2R1 0758-0009 A2R2 0758-0009 A2R3 0758-0009 A2R4 0758-0009 A2R5 0758-0009 A2R6 0758-0009 A2R7 0683-3925 A2R8 0683-3925	RIFXD MET FLM 6800 OHM 5% 1/2W RIFXD MET FLM 6800 OHM 5% 1/2W RIFXD MET FLM 6800 OHM 5% 1/2W RIFXD MET FLM 6800 OHM 5% 1/2W RIFXD MET FLM 6800 OHM 5% 1/2W RIFXD MET FLM 6800 OHM 5% 1/2W RIFXD COMP 3900 OHM 5% 1/4W
A2R2 0758-0009 A2R3 0758-0009 A2R4 0758-0009 A2R5 0758-0009 A2R6 0758-0009 A2R7 0683-3925 A2R8 0683-3925	RIFXO MET FLM 6800 OHM 38 1/2W RIFXO MET FLM 6800 OHM 3W 1/2W RIFXO MET FLM 6800 OHM 3W 1/2W RIFXO MET FLM 6800 OHM 3W 1/2W RIFXO MET FLM 6800 OHM 3W 1/2W RIFXO MET FLM 6800 OHM 3W 1/2W RIFXO COMP 3900 OHM 5W 1/4W
A2R2 0758-0009 A2R3 0758-0009 A2R4 0758-0009 A2R5 0758-0009 A2R6 0758-0009 A2R7 0683-3925 A2R8 0683-3925	RIFXO MET FLM 6800 OHM 38 1/2W RIFXO MET FLM 6800 OHM 3W 1/2W RIFXO MET FLM 6800 OHM 3W 1/2W RIFXO MET FLM 6800 OHM 3W 1/2W RIFXO MET FLM 6800 OHM 3W 1/2W RIFXO MET FLM 6800 OHM 3W 1/2W RIFXO COMP 3900 OHM 5W 1/4W
A2R3 0758-0009 A2R4 0758-0009 A2R5 0758-0009 A2R6 0758-0009 A2R7 0683-3925 A2R8 0683-3925	RIFXD MET FLM 6800 OHM 5% 1/2W RIFXD MET FLM 6800 OHM 5% 1/2W RIFXD MET FLM 6800 OHM 5% 1/2W RIFXD MET FLM 6800 OHM 5% 1/2W RIFXD COMP 3900 OHM 5% 1/4W
A2R4 0758-0009 A2R5 0758-0009 A2R6 0758-0009 A2R7 0683-3925 A2R8 0683-3925	RIFXO MET FLM 6800 OHM \$% 1/2W RIFXO MET FLM 6800 OHM \$% 1/2W RIFXO MET FLM 6800 OHM 5% 1/2W RIFXO COMP 3900 OHM 5% 1/4W
A2R5 0758-0009 A2R6 0758-0009 A2R7 0683-3925 A2R8 0683-3925	RIFXD MET FLM 6800 OHM 5% 1/2W RIFXD MET FLM 6800 OHM 5% 1/2W RIFXD COMP 3900 OHM 5% 1/4W
A2R6 0758-0009 A2R7 0683-3925 A2R8 0683-3925	RIFXD MET FLM 6800 OHM 5% 1/2% RIFXD COMP 3900 OHM 5% 1/4%
A2R7 0683-3925 A2R8 0683-3925	RIFXD COMP 3900 OHM 5% 1/4%
A2R7 0683-3925 A2R8 0683-3925	RIFXD COMP 3900 OHM 5% 1/4%
AZRA 0683-3925	
400F_FRAN 09CA	
A2R10 0683-3925	RIFXD COMP 3900 OHM 5% 1/4%
:	14
A2R11 0683-3925	RIFXD COMP'3900 DHM 5% 1/4#
A2R12 0683-3925	RIFXD COMP 3900 OHM 5% 1/4%
2T6 05110-604	
₹2 76 05110-604	TRANSFORMERI VARIABLE
9170-0105	CORE:ADJUSTABLE TUNING ,
A2T7 05110-604	
9170-0105	
A2T8 05110-604	TRANSFORMERI VARIABLE
9170-0105	
A2T9 05110-604	
9170-0105	
A2T10 05110-604	
9170-0105	CORE : ADJUSTABLE TUNING
43711	TO A NEE COME DA MADA ADA E
A2T11 05110-606	•
9170-0105	CORETADJUSTABLE TUNING
A2T12 THRU A2T16	NOT ASSIGNED
A2716 A2717 05110-604	··· · · · · · · · · · · · · · · · · ·
9170-0105	· · · · · · · · · · · · · · · · · · ·
7170-0103	CONSTRUCTION OF THE
A2T18 05110-604	
9170-0105	
A2T19 9 05110-604	
9170-0105	
A2T20 05110-604	
9170-0105	CORETADJUSTABLE TUNING
,	
/	

Table 6-5. Ad Comb Generator Module (05110-6102) (Cont'd) (prefix all parts A4)

Reference	<u> </u>	(prafix all parts A4)	
Designation	Stock No.	Description #	Note
A2T21 A2T22	05116~6044 9170~0105 05110~6064 9170~0105	TRANSFORMER! VARIABLE CORE:ADJUSTABLE TUNING TRANSFORMER! VARIABLE CORE:ADJUSTABLE TUNING	
C1 C2 J1 J2 THRU	0160±8345 0160=0345 1250=0083	C-FXD CER 1000 PF +80-20% 500VDCW FEED-THR C-FXD CER 1000 PF +80-20% 500VDCW FEED-THR CONNECTORIBNC	
J4 J5 J6 J7	[251-0214 [251-0214 [251-0214	NOT ASSIGNED CONNECTORISUBMINAT TYPE D 9-CONTACT FEMALE CONNECTORISUBMINAT TYPE D 9-CONTACT FEMALE CONNECTORISUBMINAY TYPE D 9-CONTACT FEMALE	
)12)11)11 JB	T251-0214 T251-0214 1251-0214 1251-0214 1251-0214	CONNECTORISUBMINAT TYPE D 9-CONTACT FEMALE CONNECTORISUBMINAT TYPE D 9-CONTACT FEMALE CONNECTORISUBMINAT TYPE D 9-CONTACT FEMALE CONNECTORISUBMINAT TYPE D 9-CONTACT FEMALE CONNECTORISUBMINAT TYPE D 9-CONTACT FEMALE	
)13)14)15	1251-0214 1251-0214 1251-0214	CONNECTORISUBNINAT TYPE D 9-CONTACT FEMALE CONNECTORISUBNINAT TYPE D 9-CONTACT FEMALE CONNECTORISUBNINAT TYPE D 9-CONTACT FEMALE	
IP1 IP2	05110-0009 05110-0008	HOUSING: CCMB GENERATOR COVER! COMB GENERATOR # MISCELLANEOUS	
	0340-0038 0340-0039 0510-0124 0510-0208	TERMINALISTUD INSULATORIBUSHING NUTICAPTIVE 6-32 ST CP NUTICAPTIVE 8-32	
	•)		

Table 6-6. A5 Filter/Divider Module (05110-6100) A6 Filter/Divider Module (05110-6099) (prefix all parts A5, A6)

Reference			
Designation	Stock No.	Description #	Note
A1	05110-6115	ASSYIFILTER BOARD 38 OR 39 MC(UNTURED)	
i	05110~2043	BLANK BOARCIFILTER	
4.61	A140 2055	C. 1540 CER (1 0.11) 100 200 100 100 100 1	1
A1C1 A1C2	0160-2055 0160-2055	CIFXD CER U-01UF +80-20% 100 VDCW CIFXD CER U-01UF +80-20% 100 VDCW	1
A1C3	0160-2055	CIFXD CER 0.01UF +80-20% 100 VDCW	
A1C4	0160-2055	CIFXD CER 0.01UF +80-20% 100 VDC%	ŀ
AICS THRU	Age to to	NOT RESIDED	
A1C10	7 GO	NOT ASSIGNED	
A1CI1	0160-2055	CIFXD CER 0.04UF +80-20% 100 VDC%	
A1C12	0160-0357	CIFXD CER CISK 85PF 5%	
A1013 A1014	0160-2055 0160-0357	CIFXO CER 0.01UF +80-20% 100 VDC#	•
AIC15	0160-2055	CIFXD CER 0.01UF +80-20% 100 VDC#	
	0.40 0357		
A1C16 A1C17	0160-0357 0160-2055	CIFXD CER DISK 85PF 5% CIFXD CER 0.01UF +80-20% 100 VDC%	
AIC18	0160-0357	CIFXD CER CISK 85PF 5%	
A1C19	0160-2055	CIFXD CER 0.01UF +80-20% 100 VOCW	
A1C20	0160-0357	CIFXD CER CISK 85PF 5%	
A1C21	0160-2055	C *FXD CER 0.01UF +80-20% 100 VDCW '	
A1C22	0160-0357	CIFXD CER CISK 85PF 5%	
A1C23	0160-2055	C+FXD CER 0.01UF +80-20% 100 VOCM	
A1C24 A1C25 THRU	0160-0357	CIFXU CER DISK 85PF 5%	· •
A1C30		NOT ASSIGNED	
			
A1C31 A1C32	0150-0011 0150-0031	CIFXD TI 1.5PF 20% 500VDCW	
A1C33	0150-0011	CIFXD TI 2PF 58 500VDCW	
AIC34	0150-0015	CIFXO TI 2.2 PF 5% 500VDC#	
A1C35	0150-0041	CIFXD T1 2.7 PF 5% 500VDCW	
A1C36	0150-0031	CIFED TI RPF 5% 500VDC#	
A1C37	0150-0041	: CIEXD TI 2.7PF 38 500VDC#	
	1	FACTORY SELECTED COMPITYPICAL VALUE GIVEN	· .
A1C38 A1C39	0160-2055	NOT ASSIGNED \\ CIFXD CER C.OLUF +80-20% 100 VDC%	
A1C40	0160-2055	CIFXO CER 0.01UF +80-20M 100 VDCM	
	_		
A1C41	0160-2055	C1FXD CER 0.01UF +80-20N 100 VDCB	
A1C42 A1C43	0160-2055 0160-2055	C:FXD CER 0.01UF +80+20% 100 VDCW C:FXD CER 0.01UF +80+20% 100 VDCW	
A1C44	0160-9179	CIFXO MICA 33PF 5% 300VOCW	ŀ
11C45	0160-0179	CHEXD MICA 33PF 5% 300VDCW	
1046	0160-0179	CIFXD MICA 33 PF 5M 300VDCM	
A1C47	0160-0179	CIFXD MICA 33 PF 5% 300VDCW	
11048	0160-0179	CIFXD MICA 33 PF 5N 300VDCN	
11049	0160-0179	CIFXD MICA 33 PF 5% 300VDCW	
NICI	9140-0179	COIL-FXD R.F. 22 UH 10% 275 MA	
\1L2	9140-0179	COIL-FXD R.F. 22 UH 10% 275 MA	
AL3	9140-0179	COIL-FXD R.F. 22 UH 10% 275 MA	
\1L\$ \1L5	05100-6186	NOT ASSIGNED COLL 0.17-0.20UH	1
	9170-0105	CORE! ADJUSTABLE TUNING	
	•		
		** then a	1 7

Table 6-6. A5 Filter/Divider Module (05110-6100) (Cont'd)
A6 Filter/Divider Module (05110-6099)
(prefix all parts A5, A6)

		(prefix all parts A5, A6)	•
Reference Designation	Stock No.	Description #	Note
		4)	
Ĭ]
AILÓ	05100-6186	COIL: 0.17-0.20UH	
A1L7	9170-0105 05100-6186	CORE ADJUSTABLE TUNING	
^10/	9170-0105	COIL: 0:17-0:20UH CORE:ADJUSTABLE TUNING	[
AILE	05100-6186	COIL: 0.17-0.20UH	
	9170-0105	CORE ADJUSTABLE TUNING	
AILÓ	05100-6186	COIL 1 0.17-0.20UH	
AILIO	9170-0105 05100-6186	CORETADJUSTABLE TUNING	.
, -00	9170-0105	CORE: ADJUSTABLE TUNING	
AILÍI	05100-6186	COIL1 0.17-C.20UH	İ
	9170-0105	CORE I ADJUSTABLE TUNING	
A1L12	9170-0106	COIL: VARTABLE 1.8-3.5UA CORE ADJUSTABLE TUNING POWDERED IRON	40
A1L13 THRU	/1/3 1110	CONT NOOS INCH TOTAL TOTAL	
A1L20	İ	NOT ASSIGNEC	
A1L21	9140-0179	COIL-FXD R.F. 22 UH 108 275 MA	
A1L22 A1L23	9140-0179	COIL-FXD R.F. 22 UH 10% 275 MA	
×1[2]	9140-0179	COIL-FXD R.F. 22 UH 10% 275 MA]
A1Q1	1653-0036	TRANSISTORISILICON PNP 2N3906	
A192 A193	1853-0036 1853-0036	TRANSISTOR:SILICON PNP 2N3906 TRANSISTOR:SILICON PNP 2N3906	
A 1/2 4	1853-0036	TRANSISTORISILICON PNP 2N3906	
A 105	1853-0036	TRANSISTORISTLICON PNP 2N3906	
A196	1853-0036	TRANSISTORISTLICON PNP 2N3906	
A107	1853-0036	TRANSISTORISTLICON PNP 2N3906	
A1R1	0683-3925	RIFXD COMP 3900 DHM 5% 1/4%	
A1R2 A1R3	0683-3925 0683-3925	RIFXD COMP 3900 OHM 5% 1/4%	
AIRG	0683-3925	RIFXD COMP 3900 OHM 5x 1/48 RIFXD COMP 3900 OHM 5x 1/48	
AIR5	0683-3925	RIFXD COMP 3900 OHM 5% 1/4%	,
AIR6	0683-3925	RIFXD COMP 3900 DHM 5% 1/4%	
A1R7	0683-1825	RIFXD COMP 1800 OHM 5% 1/4m	
A1RS A1RO THRU	0683-1825	RIFXD COMP 1800 OHM 5% 1/4#	
AIRIO		NOT ASSIGNED	
AIRII	0758-0046	RIFXD MET FLM 6200 OHM 5% 1/2%	
AIR12	0758-0057	RIFXD HET CX 5600 OHM 58 1/28	
ALRTS Alria	0758-0057 0758-0057	RIFXD MET CX 5600 OHM 5% 1/2#	
AIR15	0758-0057	RIFXO MET CX 5600 OHM 5% 1/2% RIFXD MET CX 56CO OHM 5% 1/2%	
A1RI6	0758-0057	RIFXO MET CX 5600 OHM 5% 1/2%	1 1
AIR17	0758-0004	RIFXD MET CX 2700 OHM 5% 1/2%	
AIR18 AIR19 THRU	0758-0004	RIFXO MET FLM 2700 OHM 5% 1/2%	
AIR20	•	NOT ASSIGNED	
A1R21	0757-0291	RIFXO MET FLM 24.9 OHM 1% 1/8W	
A1R22 ,	0757-0291 •	RIFXO MET FLM 24.9 OHM IN 1/89	
AIRTI	0839-0026	THERMISTOR : TOK OHM 10% 250	
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Table 6-6. A5 Filter/Divider Module (05110-6100) (Cont'd)
A6 Filter/Divider Module (05110-6099)
(prefix all parts A5, A6)

		(prefix all parts A5, A6)	
Reference Designation	∯ Stock No.	Description #	Note
A2	05110-6059	BOARD ASSY:DIVIDER 3.8 OR 3.9 MC(UNTUNED)	
	05110-2018	BLANK BOARCIDIVIDER	Ì
A2C51	0160-2055	CIFXD CER G.01UF +90-20% 100 VOCW	
A2C\$2	9150-0121	CIEXO CER ULLUF 50 VOCW	ľ
A2C53	0160-2055	CIFXO CER C+01UF +80-20% 100 .VOC%	
A2C54 A2C55	0150-0121	CIFXO CER C.IUF 50 VDCW C:FXD CER O.OIUF +80-20% 100 VDCW	,
A2C56	0150-0121	CIFXO CER C. LUF 50 VOCH	.]
A2C57 A2C58	0150-0121	CIFXD CER G.LUF ST VOCH CIFXD MICA 33PF 5% 300VDCW	
A2C59	0160-0179	CIFXD MICA 47PF 5% 300VDCW	,
12060	0150-0121	CIFXD CER G.TUF 50 VDCW	
vact i	0.000	4	'
42C61 A2C62	0140-0230 0150-0121	CIFXO MICA 420PF IN 300VDCH	Ī
12062 12063 THRU	0130-0121	CIFXD CER C-1UF 50 VDC#	
2070	1	NOT ASSIGNED	
2071	0160-0357	CIFXD CER CISK 85PF 5%	
2072	0150-0029	CIFXO TI IFF 10% 500VDCW	
12073	0160-2055	CIFXO CER C.01UF +80-20% 100 VUC#	
2074	0140-0145	CIFXO MICA 22 PF 5% 500 VCCW	
2075	0160-2055	CIFXU CER C.01UF +80-20% 100 VOCW	
2076	0140-0178	CIFXU MICA 560 PF 28 300 VDCW	
2077	0150-0121	. CIFXO CER C. LUF 50 VDCW	
2078	0140-0101	CIFXU MICA 15PF 5% 500 VOCH	· ·
2079	0150-0121	CIFXU CER C.1UF 50 VDCW	
2080	0150-0121	CIFXU CER C.TUF 50 VDCW	ì
12C81 12C82	0150-0121	CIFXD CER C.1UF 50 VDCW	
			ļ
12CR51	1910-0016	SEMICON DEVICEIDIODE GERMANIUM	
12CR52 12CR53	1910-0016 1910-0016	SEMICON DEVICE DIODE GERMANIUM	
2CR54	1901-0040	SEMICON DEVICEIDIODE GERMANIUM DIODEISILICON 30 MA AT 1V 30 PIV	
2CR55	1901-0040	DIODEISILICON 30 HA AT IV 30 PIV	Į
2CR56	1901-0040	DIODEISILICON 30 MA AT 1V 30 PIV	
2L\$1	9140-0179	COIL-FXD R.F. 22 UH 10% 275 MA	
2L52	9140-0129	COILIFXD RF 220 UH	
2153	9140-0129	COILIFXD RF 220 UH	
21.54	05100-6166	COILI VARIABLE	
	9170-0105	CORE LADJUSTABLE TUNING	
2L\$5	05100-6170	COILI VARTABLE 3.2-5.6UA	1
	9170-0106 .	CORE ADJUSTABLE TUNING POWDERFD IRON	
2L56	9140-0077	COILIFAD RFI 2.2UH	,
2L57	05110-6023 9170-0106	COILI VARIABLE 21-34UH CORE ADJUSTABLE TUNING POWDERED IRON	
	*110-0100	CAUS MODOLINGE INMING LOADENED THAN	
2L58	05110-6061	COIL! VARIABLE 3.5-6.0UH	
24.80	9170-0106	CORE ADJUSTABLE TUNING POWDERED IRON	
2159	05110-6024 9170-0106	COIL: VARIABLE 28-45UH CORE ADJUSTABLE TUNING POWDERED IRON	
2L60 THRU	7170 0100	4 A A A A A A A A A A A A A A A A A A A	
2L70		NOT ASSIGNED	
2L71	9140-0179	COIL-FXD R.F. 22 UH 10% 275 MA	
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[#] See list of abbreviations in introduction to this section

Table 6-6. A5 Filter/Divider Module (05110-6100) (Cont'd)/ A6 Filter/Divider Module (05110-6099) (Urafix all parts A5. A6)

		(prefix all parts A5, A6)	
Reference Designation	♦ Stock No.	Description #	Note
		·	
AZL72	9140-0129	COILIFXD RF 280 UH	
A2L73	9140-0129	COILIFAD RF 220 UH	
A2051	[850-0118	TRANSISTOR-PNP GERMANIUM EIA EN2360	
A2051 4/	1850-0118	TRANSISTOR-PHP GERMANIUM EIA 2N2360	
A2053	1850-0138	TRANSISTORISPLANASO PHP GERMANIUM MADT	
A2Q54 A2Q55	1850±0091 1850±0091	TRANSISTORIGERMANIUM 2N2048 PMP TRANSISTORIGERMANIUM 2N2048 PMP	
A2R51 .	0683-1025	RIFXD COMP 1000 OHM 5% 1/4%	
A2R52 A2R53	0683-1025 0683-1025	RIFXD COMP 1000 DHM 58 1/4%	
A2R54	0683-1025	RIFXD COMP 1000 OHM 5% 1/4% RIFXD COMP 1000 OHM 5% 1/4%	
A2R55	0683-1025	RIFXD COMP 1000 OHM 5% 1/4%	
AZRŠ6 THRU		200	
A2R60		NOT ASSIGNED	
A2R61 A2R62	0683-5625	RIFXD COMP 560 OHM 5% 1/4 m RIFXD COMP 10K OHM 5% 1/4 m	
A2R63	0683-3025	RIFXD CONF 3000 OHM 5% 1/4%	
A2R64	0683÷3915	RIFXD COMP 390 OHN 5% 1/4%	
A2R65	0683-1025	RIFXD COMP 1000 OHM SN 1/48	ļ
A2R66 A2R67	0683-5605 0683-7515	RIFXD COMP 56 OHM 58 1/48	
A2R68	0683-1825	RIFXD COMP 1800 OHM 5% 1/4%	
A2R69	0683-1525	RIFXO COMP 150 OHM 5% 1/4%	Ì
A2R70	0758-0035	RIFKO MET FLM 3000 OHM 5% 1/2W	
A2R71	0757-0291	RIFXD MET FLM 24.9 OHM 1% 1/8#	
A2R72	0757-0291	RIFXO MET FLM 24.9 OHM 18 1/8W	
A2T51	05100-6167	TRANSFORMER:	
JI	1250-0118	CONNECTORIBAC	
J2 THRU		,	
J4 J5	1250-0118	NOT ASSIGNED CONNECTORIBAD	
MP1 MP2	05110-0005 05110-0006	FILTER HOOSING FILTER COVER	
MP3	05110-0007	BRACKETI DIVIDER	
MP4 MP5	05110-2002 05110-2035	CAPI FRONT	
P1	1251-0216	CONNECTORIMALE 9-CONTACT TYPE D	
•	, 1131 0110		+
		MISCELLANEOUS	1
	0340-0038 0340-0039	TERMINALISTUD	(] ,
	0510-0207	NUTICAPTIVE 4-40 3/16 SST	A
	05110-2001	SPACERI FILTER	-7
			_/
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Table 6-7. A7 Filter/Divider Module (05110-6098)
A8 Filter/Divider Module (05110-6097)
- (prefix all parts A7, A8)

Reference	T		1
Designation	Stock No.	Description #	Not
A 1	05110-6114	ASSYIFILTER BOARD 36 OR 37 MC(UNTUNED)	
~ •	05110-2043	BLANK BOARC FILTER	ļ
		1	
A IC I	0160-2055	C:FXD CER 0.01UF +80-20% 100 VUCW	
A1C2	0160-2055	CIFXD CER G-01UF +80-20% 100 VDC%	
A1C3	0160-2055	CIFXO CER G.01UF +80-20% 100 VDCW	1
A1C4 E	0160-2055	CIFXD CER 0.01UF +80-20% 100 VOCW	1
AICS THRU		4	
A1C10		NOT ASSIGNED	
	_		
A1011 .0	0160-2055	C : FXU CER 0.01UF +80-20% 100 VDCW	,
A1C[2	0160-0358	CIFXD CER CISK 94PF 5%	
A1C13	0160-2055	CIFXO CER 0.01UF +80-20% 100 VDC	
A1014	0160-0358	CIFAD CER LISK 94PF 5%	
A 1C 15	0160-2055	C#FXD CER 0.01UF +80-20% 100 VD	1
41614	1 0140 0350	CITYO CER CITY OFFE ST	[
AICI6	0160-0358	CIFXU CER CISK 94PF 5%	!
AICI7	0160-2055	CIFXD CER 0.01UF +80-20% 100 VDC#	[
AICIB	160-0358	CIFXD CER CISK 94PF 5%	
A1C19	/OL60-2055	CIFXD CER 0.01UF +80-20% 100 VDC%	
A1C20	0160-0358	CIFAU CER CISK 94PF 5%	1
AIC21	0160-2055	CIFXD CER 0.01UF +80-20% 100 VDCW	!
A1C22	0160-0358	CIFXO CER UISK 94PF 5%	Ì
AIC23	0160-2055	CIFXD CER G.01UF +80-20% 100 VUCW	
41024	0160-0356	CIFAD CER DISK 94PF 5%	
ALCES THRU	0100-0330	CITAD CEN DISK THEF SE	
A1C30	:	NOT ASSIGNED	ļ
		THE RESERVED	1
A1C31	0150-0031	CIFXÚ TI ZFF 5% 500VDCW	•
A1C32	0150-0031	CIFAO TI RFF 5% 500VOCW	
A1C33	0150-0031	CIFXO TI RFF 5% 500VDCW	
A1C34	0150-0015	CIFXO T1 2.2 PF 5% 500VDCW	
A1C35	0150-0041	CIFXD TI E.7 PF 5% 500VDCW	
A1C36	0150-0031	CIFXD TI RFF 5% 500VDC1	
A1C37	0150-0041	CIFXD TI R. TPF 58 500VDC#	İ
		FACTORY SELECTED COMPICTYPICAL VALUE GIVEN	
A1C38		NOT ASSIGNED	
A1C39	0160-2055	CIFXD CER C.01UF +80-20% 100 VDCW	
AICAO	0160-2055	CIFXD CER 0.01UF +80-20% 100 VDCW	
AICAI	0160-2055	CIFXD CER 0.010F +80-20% 100 VDCW	
A1C42	0160-2055	CIFXO CER 0.01UF +80-20% 100 VDCW	
A1C43	0160-2055	CIFXO CER 0.01UF +80-20% 100 VDCW	. 1
A1C44	0160-0179	CIFAD MICA 33PF 5M 300VDCM	[
A1C45	0160-0179	CIFXD MICA 33PF 5% 300VDCW	1
41684	0140 0175		Į.
A1C46	0160-0179	CIFXO MICA 33 PF 5% 300VDCW	ĺ
A1C47	0160-0179	CIFAD MICA 33 PF 5% 300VDC%	ļ
A1C48	0160-0179	CIFXD MICA 33 PF 5% 300VDC%]
A1C49	0160-0179	CIFXO MICA 33 PF 5% 300VDCW	1
AILI	9180-0170	COT -FYD B.F. 33 (54 100 376 M4	1
*1L1 *1L2	9140-0179	COIL-FXD R.F. 22 UH 108 275 MA	
	9140-0179	COIL-FXD R.F. 22 UH 10% 275 MA	1
A1L5	9140-0179	COIL-FXD R.F. 22 UH 10% 275 MA	
11L9 11L5	05100-4104	NOT ASSIGNED	1
	05100-6186	COILI VARIABLE 0.17-0.20UH	1
	9170-0105	CORETADJUSTABLE TUNING	
		COURTINGOR INTERIOR	1
	İ		l
			1
			l
			1
	•		1
			1

Table 6-7. A7 Filter/Divider Module (05110-6098) (Cont'd)
A8 Filter/Divider Module (05110-6097)
(prefix all parts A7, A8)

Reference Designation	Stock No.	Description #	Note
17,27			
•	-		ļ
AILÒ	05100-6186	COIL: VARIABLE 0-17-0-20UH	
	9170-0105	CORE ADJUSTABLE TUNING	İ
A1L7	05100-6186	COIL! VARIABLE 0.17-0.20UH	
	9170-0105	CORE ADJUSTABLE TUNING	
AILS	05100-6186	COIL! VARIABLE 0.17-0.20UH	
		AARPAAR HISTARI E TIMIONA	
A1L9	9170-0105	CORE ADJUSTABLE TUNING	l
YILY '	9170-0105	COIL: VARIABLE 0.17-0.20UH CORE:ADJUSTABLE TUNING	
AIL10	05100-6186	COIL! VARIABLE 0.17-0.20UH	Ī
•	9170-0105	CORE: ADJUSTABLE TUNING	
_			
A1L11	05100-6186	COIL: VARIABLE 0.17-0.20UH	
41. 45	9170-0105	CORE ADJUSTABLE TUNING	
A1L12	9170-0106	COIL WARTABLE 1.8-3.5UH CORE MOUUSTABLE TUNING POWDERED IRON	
A1L13 THRU	7170-0100	CORE MAGOSTROLE INVITED PORDERED INON	
AIL20	-	NOT ASSIGNED	. !
_			
A1L21	9140-0179	COIL-FXD R.F. 22 UH 10% 275 HA	
A1L22	9140-0179	COIL-FXD R.F. 22 UH 108 275 MA	1
A1j.23	9140-0179	COIL-FXD R.F. 22 UH 10% 275 HA	
A101	1853-0036	TRANSISTORISTLICON PNP 2N3906	
A 102	1853-0036	TRANSISTORISILICON PNP 2N3906	
LOIA	1853-0036	TRANSISTORISTLICON PNP 2N3906	
A 104	1853-0036	TRANSISTORISILICON PNP 2N3906	
A105	1853-0036	TRANSISTORISTLICON PNP 2N3906	
			1
106 .	1853-0036	TRANSISTORISTLICON PNP 2N3906	
A107	1853-0036	TRANSISTORISILICON PNP 2N3906	
AIR1	0683-3925	RIFXD COMP 3900 OHM 5% 1/4%	
1R2	0683-3925	R1FXD COMP 3900 OHM 5% 1/4%	1
AIR3	0683-3925	RIFXO COMP 3900 OHM 5% 1/4%	i
AIRG	0683-3925	RIFXO COMP 3900 OHM 5% 1/4%	İ
A,IRS	0683-3925	RIFXD COMP 3900 OHM 5% 1/4%	
AIR6	0683-3925	PLEYO COMB TORO OUN FEE 1 485	
1R7	0683-1825	RIFXD COMP 3900 OHM 5% 1/4% RIFXD COMP 1800 OHM 5% 1/4%	
IRB	0683-1825	RIFXD COMP 1800 OHN 5% 1/4W	ľ
IRO THRU	1 5	7	
AIRIO)	NOT ASSIGNED	
IIRI I	0758-0046	RIFXD MET FLM 6200 OHM 5% 1/2W	
IRI2	0749 0057	BIEND MET EN BARR COM TO 1 TO	1
VIRIZ	0758-0057 0758-0057	RIFXD MET CX 5600 OHN 5% 1/2% RIFXD MET CX 5600 OHN 5% 1/2%	
IRI4	0758-0057	RIFXD MET CX 5600 OHM 5% 1/2#	
1815 LAND	0758-0057	RIFAD MET CX 5600 OHM 5% 1/2%	
IRIO	0758-0057	RIFXD HET CX 5600 OHH 5% 1/2#	}
			- [
1R17	0758-0004	RIFXO MET CX 2700 OHM 5% 1/2#	1
IRIS TERM	0756-0004	RIFXO MET FLM 2700 OHM 5% 1/2#	
IR19 THRU IR20		NOT ASSIGNED	- [
1821	0757-0291	RIFXD MET FLM 24.9 OHM 18 1/88	
1R22~	0757-0291	RIFXD MET FLM 24.9 OHM 18 1/8#	
			[
IRTI	0839÷0026	THERMISTOR : 10K OHM 108 25C	{
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= See list of abbreviations in introduction to this section

Table 6-7. A7 Filter/Divider Module (05110-6098) (Cont'd)
A8 Filter/Divider Module (05110-6097)
(grefix all parts A7, A8),

Reference	T	The state of the s	
Designation	Stock No.	Description #	Note
		AND AND AND AND AND AND AND AND AND AND	
	1		l l
		DOLLD LOCK DIMEDED T C OD T D MOCHINTUNED)	
A2	05110-6058	BUARD ASSYIDIVIDER 3.6 OR 3.7 MC(UNTUNED)	
	05110-2018	BLANK BOARC-DIVIDER	
	1	1	
A2C51	0160-2055	C +FXD CER C+01UF +80-20% 100 VDC#	ŀ
A2C52	1	CIFAD CER O. TUF 50 VDCW	
A2C53	0150-0121		
* 7	0160-2055	CIFXU CER C.01UF +80-20% 100 VOCW	
A2C54	0150-012)	CIFXD CER 0.1UF 50 VDCW	
A2C\$5	0160-2055	CIFXD CER 0.01UF +80-20% 100 VOCM	
A2C56	0150-0121	CIFXD CER C-1UF 50 VDCW	
A2C57	0150-0121	C:FAD CER O.TUF 50 VDCW	į
A2C58	1	CIFXD MICA 39 PF 5N 300 VDCW	
	0140-0190	CIPAD UICA 39 PF 58 300 APCM	
A2C59	0140-0191	CIFXD MICA 56 PF 5% 300 VDCW	ı
A2C60	0150-0121	CIFXO CER 0.1UF 50 VDCW	
	į		
A2C61	0140-0149	CIFXO MICA 470 PF 5% 300 VDCW	
A2C62	0150-0121	CIFXD CER OLLUF 50 VDCW	I
A2C63 THRU			1
A2C70		NOT ASSIGNED	1
_	6140 0375	NOT ASSIGNED	1
A2C71	0160-0358	CIFXO CER CISK 94PF 5%	1
A2C72	0150-0029	CIFXD T1 1PF 10% SOOVDCW	Ī
A2C73	0160-2055	C#FXO CER 0.01UF +80-20% 100 VDC#	
A2C74	0140-0145	CIEXO HICA 22 PE SK 500 VOCW	
A2C75	0160-2055	C+FXD CER 0.01UF +80-20% 100 VOC#	1
			- 1
A2C76	0140-0178	CIFXD MICA 560 PF 2% 300 VDCW	
A2C77	0150-0121	CIFXD CER O.TUF 50 VDCW	
	,		
A2C76	0140-0101	CIFXD MICA 15PF 5% 500 VDCh	
A2C79 /	0150-0121	CIFXO CER 0.1UF 50 VDCW	
A2C80 ·	0150-0121	CIFAO CER O. LUF 50 VDCW	J
A2C 6 1	0150-0121	CIFXD CER OLIUF SO VDCW	İ
			1
A2C62	0150-0151	CIFXD CER G.1UF 50 VDC#	
A2CR51	1910-0016	SEMIÇON DEVICE IDIODE GERMANIUM	
A2CR52	1910-0016	SEMICON DEVICE+DIODE GERMANIUM	l .
A2CR53	1910-0016	SEMICON DEVICE IDIODE GERMANIUM	_ ·
A2CR54	1901-0040	DIODE:51L1CON 30 MA AT 1V 30 PIV	1
A2CR55	1901-0040	DIODEISILICON 30 MA AT 1V 30 PIV	1
-20433	1401-0040	DIODE STEECON SO MA AT 14 30 PTA	
		*	
A2CR56	1901-0040	DIODEISILICON 30 MA AT IV 30 PIV	
_		· ·	
42L51	9140-0179	COIL-FXD R.F. 22 UH 108 275 MA	1
A2L52 .	9140-0129	COILIFXD RF 220 UM	1
A2L53	9140-0129	COIL FEXD RF 220 UH	
A2L54	05100-6166		
_		COIL: VARIABLE 0.17-0.20UH	
47	9170-0105	CORETADJUSTABLE TUNING	
· .			
12L55	05100-6170	COILI VARTABLE 3.2-5.6UR	
	9170-0106	CORE ADJUSTABLE TUNING POWDERED IRON	1
12L56	9140-0077	COILIFXD RFI 2.2UH	1
2L57	05110-6024	COIL! VARIABLE 28-45UH	1
	9170-0106		- 1
	4110-0100	CORE ADJUSTABLE TUNING POWDERED IRON	1
	82116 18::		1
12L58	05110-6061	COILI VARIABLE 3.5-6.0UH	1
	9170-0106	CORE ADJUSTABLE TUNING POWDERED IRON	- 1
2L59	05110-6024	COILI VARTABLE 28-45UH	- 1
	9170-0106	CORE ADJUSTABLE TUNING POWDERED IRON	, 1
LZL60 THRU		TO THE PROPERTY OF THE PROPERT	l
21.70		NOT ASSIGNED	
	,	HAI MASTALED	1
	0100 017-		1
12L71	9140-0179	COIL-FXD R.F. 22 UH 10% 275 MA	
			1
			1
Ì			1
	·	<u> </u>	

Table 6-7. A7 Filter/Divider Module (05110-6098) (Cont'd)
A8 Filter/Divider Module (05110-6097)
(prefix all parts A7, A8)

Reference Designation	😝 Stock No.	Description 4	· Note
			<u></u>
,			1
AZLTZ	9140-0129	COILIFAD RF 220 UH	
A2L73	9140-0129	COILIFAD RF 220 UH	1.
	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	CO15.170 [1. 220 OR	
A20\$1	1850-0118	TRANSISTOR-PNP GERMANIUM EIA ZN2360	
A2Q52	1850-0118	TRANSISTOR-PRP GERMANIUM EIA 2N2360	
A2053	1850-0138	TRANSISTORISPLANAGE PNP GERMANIUM HADT	
A2054)	1850-0091	TRANSISTORIGERHANIUM 2N2048 PNP	
	1850-0091	TRANSISTORIGERMANIUM 2N2048 PNP	
A2R51	0683∸1025	RIFXD COMP 1000 OHM 58 1/48	
A2R52 -	0683-1025	RIFXD COMP 1000 OHM 5% 1/4W	-
À2R53	0683-1025 -	RIFXD COMP 1000 OHM 5% 1/4%	ţ
A2R54	0683-1025	RIFXU_COMP_1000_OWN_5%_1/4%	
A2R\$5	0683-1025	RIFXD COMP 1000 OHH 5% 1/4%	
A2R56 THRU	,		1
A2R60	1.	NOT ASSIGNED	
A2R61	0683-5625	RIFXD COMP 560 DHM 5% 1/4%	
A2R62	0683-1035	RIFXD COMP 10K OHM 5% 1/4W	
A2R63	0683-3025	RIFXD COMP 3000 OHM 5% 1/4%	
12R6#	0683-3915	RIFXD COMP 390 OHN 5% 1/4%	
A2R65	0683-1025	RISTO COMP 1000 OUR BY 1 CUP	
2R66	0683-5605	RIFXD COMP 1000 OHM 5% 1/4#	
12R67	0683-7515	RIFXD COMP 750 OHM 5% 1/4W .	1
12R68	0683-1825	RIFXD COMP 1800 OHM 5% 1/4W	
2R69	0 3-1525	RIFXD COMP 150 OHM 58 1/4W	
2R70.	G 7	,	1
2R70.	₩58-0035 0757-0291	RIFXO MET FLM 3000 OHM 5% 1/2W	
2872	0757-0291	RIFXO MET FLM 24.9 OHM 1% 1/8W	
	AISI-AKA!	RIFXD MET FLM 24-9 OHM-18 1/88	
2151	05100-6167	TRANSFORMER	
٠		·	!
[•	İ
	1250-0118	CONNECTORIBLE	
12 THRU	-130-V110 ,	CONNECTORIENC	1
4	₹	NOT ASSIGNED	
15 .	1250 - 0118	CONNECTORIBAC	1
	84.44 ***	•	.
P1 P2	05110-0005	FILTER HOOSING	
P3	05110-0006 05110-0007	FILTER COVER	
P4	05110-0007	BRACKETÍ DIVIDER Capi Front	
P5 .	05110-2035	CAPI FRONT	,
1	1251-0216	CONNECTORIMALE 9-CONTACT TYPE U	
•		MISSEL AMERICA	•
	`	MISCELLANEOUS	
•	0340-0038	TERHINAL ISTUÓ	i
./	0340-0039	INSULATORIBUSHING].
6	0510-0207	MUTICAPTIVE 4-40 3/16 SST	1
	10-2001 c	SPACER: FILTER SHIELD	
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Table 6-8. A9 Filter/Divider Module (05110-6096) A10 Filter/Divider Module (05110-6095) (prefix all parts A9, A10)

`		(prefix all parts A9, A10)	
Reference	T		
Designation	Stock No.	Description #	Note
			
		· ·	
Al	05110-6113	ASSYIFILTER BOARD 34 OR 35 MC(UNTUNED)	· '
***	05110-2043	BLANK BOARC IFILTER	
AICI	0160-2055	CIFXD CER 0-01UF +80-20% 100 VOC#	
A1C2	0160-2055	C1FXO CER'G.01UF +80-20% 100 VDCW	
A1C3	0160-2055	CIFXD CER 0.01UF +80-20% 100 VUCW	
A1C4	0160-2055	C IFXD CER 0.01UF +80-20% 100 VDC#	
AICS THRU			
A1C10		NOT ASSIGNED	[
_			
AIC[1	0160-2055	CIFXD CER 0.81UF +80-20% 100 VUEW	
AICI2	0160-0359	CIFXD CER CIŞK 103PF 5%	
A1C13	0160-2055	C FXD CER 0.01UF +80-20% 100 VDCW	
A1CI4	0160-0359	CIFXD CER DISK 103PF 5%	
A1CI5	0160-2055	CIFXD CER 0.01UF +80-20% 100 VDC%	
41614	0140 0770	5.5% 650 B10. 4050 G	
AIC16	0160-0359	CIFXU CER DISK 103PF 5%	
A1C17	0160-2055	C1FXD CER 0.01UF +80-20% 100 VDCW	
AICIB	0160-0359	CIFXO CER DISK 103PF 5%	
11019	0160-2055	CIFXD CER 0.01UF +80-20% 100 VDCW	ļ
11020	0190-D328	CIFXO CER CISK 103PF 5%	
1021	0160-2055	LOSEN CER O ALUE AROLDON LOS MOCH	
1022	0160-2035	CIFXD CER 0.01UF +80-20% 100 VOCW CIFXD CER DISK 103PF 5%	
11023	0160-0334	C:FXD CER 0.01UF +80-20N 100 VDCN	1
1024	0160-0359	CIFAD CER CISK 103PF 5%	
LIC25 THRU	0160-0334	CIPAD CER DISK 103PF SH	
1030		NOT ASSIGNED	
-100		NOT ASSIGNED	
1631	0150-0015	CIFXD T1 2.2PF 10% 500VDCW	
A1C32	0150-0015	CIFXU T1 2.2PF 10W 500VDCW	
1033	0150-0015	CIFXO TI 2.2PF 10% 500VDCW	j
1034	0150-0041	CIFXO TI R.7 PF 5% 500VDCW	
11035	0150-0022	C1FXD TI 3-3 PF 108 500VDCW	1
	0.30-0022	C17 AD 11 313 PF 108 30040CB	
11036	0150-0015	CIFXD TI E.2PF 10% 500VDCW	
11037	0150-0022	CIFAD TI 3.3PF 10% 500VDCW	
	1122 4122	FACTORY SELECTED COMPI TYPICAL VALUE GIVEN]
1038		NOT ASSIGNED	- 1
1039	0160-2055	CIFXO CER 0.01UF +80-20% 100 VDCM	1
1040	0160-2055	C:FXD CER 0.01UF +80-20% 100 VDCW	
1			
1041	10160-2055	C:FXD CER G.01UF +80-20% 100 VDCW	1
1042 .	0160-2055	CIFXD CER 0.01UF +80-20% 100 VDCW	
1043	0160-2055	CIFXO CER 0.01UF +80-20% 100 VDC#	
1044	0160-0179	CIFXO HICA 33PF 58 300VDCW	İ
1045	0160-0179	CIFAD HICA 33PF SN 300VDCW	- 1
	• • •		ĺ
1046	0160-0179	CIFXO MICA 33 PF 5% 300VDCW	[
1047	0160-0179	CIFXD MICA 33 PF 58 300VDCW	i
1048	0160-0179	CIFXO HICA 33 PF 5% 300VDC%	I
1049	0160-0179	CIFXD MICA 33 PF SN 300VDCW	
	- -		
ILI	9140-0179	COÍL-FXD R.F. 22 UH 108 275 HA	- 1
1L2	9140-0179	COIL-FED R.F. 22 IM LOW 278 MA	1
11.3	9140-0179	COIL-FXD R.F. 22 UH 108 275 MA	l
164	₹	NOT ASSIGNED	ſ
iL5	05100-6186	COIL! VARIABLE 0-17-0-20UH	
i			1
•	9170-0105	CORELADJUSTABLE TUNING	
•			
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, 1			1
p 4	. /	,	1
1-	• '		1
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		j	1

Table 6-8. A9 Filter/Divider Module (05110-6096) (Cont'd) A10 Filter/Divider Module (05110-6096) (prefix all parts A9, A10)

(prefix all parts A9, A10)				
Reference Designation	Stock No.	Description #	Note	
	•	,		
A1L6	05100-6186	COIL: VARTABLE 0-17-0-20UH		
•	9170-0105	CORETADJUSTABLE TUNING COIL: VARIABLE 0.17-0.20UH		
A1L7	05100-6186 9170-0105	CORETADJUSTABLE TUNING		
AILB	05100-6186	COIL: VARIABLE 0-17-0-20UH	1	
•	9170-0105	CORE:ADJUSTABLE TUNING		
AILÓ	05100-6186	COIL! VARIABLE 0-17-0-20UH		
	9170-6105		1	
AILIO ,	05100-6186 9170-0105	COIL: VARIABLE 0.17-0.20UH CORE:ADJUSTABLE TUNING		
	7170-0105		1	
A1L11	05100-6186	COIL: VARIABLE 0.17-0.20UH CORE: ADJUSTABLE TUNING		
A1LT2	9170-0105 05110-6047	COIL VARIABLE 1.8-3.5UM		
~1616	9170-0106	CORE ADJUSTABLE TUNING POWDERED IRON		
ALLIS THRU		NOT ASSIGNED		
A1L20			1	
A1L21	9140-0179	COIL-FXD R.F. 22 UH 10% 275 MA		
A1L22 A1L23	9140-0179 ~	COIL-FXD R.F. 22 UH 10% 275 MA COIL-FXD R.F. 22 UH 10% 275 MA		
	1140-0111			
AIPI	1251-0216	CONNECTORINALE 9-CONTACT TYPE U		
AIQĪ	1853-0036	TRANSISTORISTLICON PNP 2N3906		
A102	1853-0036	TRANSISTORISILICON PNP 2N3906	!	
A103	1853-0036 1853-0036	TRANSISTORISILICON PNP 2N3906 TRANSISTORISILICON PNP 2N3906		
A1Q4 A1Q5	1853-0036	TRANSISTORISILICON PNP 2N3906	İ	
		TOTAL CANALIST TOOM DND 30/2004		
A106 A107	1853-0036 1853-0036	TRANSISTORISTLICON PNP 2N3906 TRANSISTORISTLICON PNP 2N3906		
		1.		
AIRI	0683-3925 0683-3925	RIFXD COMP 3900 OHM 5% 1/4% RIFXD COMP 3900 OHM 5% 1/4%	!	
A1R2 A1R3	0683-3925	RIFXO COMP 3900 OHM 5% 1/4%		
AIRG	0683-3925	RIFXD COMP 3900 OHM 5% 1/4%		
AIR5	0683-3925	RIFXD COMP 3900 OHM 5% 1/4%		
AIRĠ	0683-3925	RIFXD COMP 3900 OHM 5% 1/4%		
A1R7	0683-1825	RIFXD COMP 1800 DHM 5% 1/4# RIFXD COMP 1800 DHM 5% 1/4%		
AIRŠ AIRŠ THRU	0683-1825	KIPAO COM 1800 OM 3= 17-18		
AIR10		NOT ASSIGNED		
AIREI	0758-0046	RIFXD MET FLM 6200 OHM 5% 1/2#		
AIR12	0758-0046	81FXD MET FLM 6200 OHM 5% 1/2#		
AIRIS	0758-0046	RIFXO MET FLM 6200 OHM 59 1/2W		
A1R14 A1R15	0758-0046 0758-0046	RIFXD MET FLM 6200 OHM 5% 1/2# RIFXD MET FLM 6200 OHM 5% 1/2#		
AIRI6	0758-0057	RIFXD MET 0X 5600 OHM 5% 1/2%		
A1017	0758-0005	RIFXD MET CX 2700 OHM 5% 1/2#		
AIR17. AIR18	0758-0004	RIFXD MET FLM 2700 ONM 5% 1/2#		
AIRI9 THRU		,		
A1R20	0757-0291	NOT ASSIGNED RIFXD MET FLM 24.9 OHM 1% 1/8#		
A1R21 A1R22	0757-0291	RIFXD HET FLM 24.9 OHM 13 1/89		
	0000 0034	THE DWT STORE LOW OLDS LOS 250		
AIRTI	0839-0026	THERMISTOR F 10K OHM 10% 25C		
1		\ <u>'</u>		
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See list of abbreviations in introduction to this section

Table 6-8. A9 Filter/Divider Module (05110-6096) (Cont'd)
A10 Filter/Divider Module (05110-6095)
(prefix all parts A9, A10)

Reference Designation	Stock No.	Description #	Not
		,	
A2	05110-6057	BOARD ASST. I DIVIDER 3.4 OR 3.5 MC(UNTUNED)	
	05110-2018	BLANK BOARCIDIVIDER	
A2C51	0160-2055	C:FXD CER 0.01UF +80-20% 100 VDC#	
A2C52	0150-0121	CIFXD CER 0-1UF 50 VDCW	
A2C\$3	0160-2055	C1FXD CER 0.01UF +80-20% 100 VDCW	
A2C54 A2C55	0150+0121 0160+2055	C:FXD CER 0:1UF 50 VDCW C:FXD CER 0:01UF +80-20% 100 VDCW	i
~20,55	0100-2033	:	1
A2C56	0150-0121	CIFXO CER OLIUF 50 VOCW	
A2C57 A2C58	0150-0121 0140-0190	CIFXD CER 0.1UF 50 VDCW CIFXD MICA 39 PF 5% 300 VDCW	4
A2C59	0140-0205	CIFXD MICA 62PF 5% 300VDCW	ĺ
A2C60	0150-0121	CIFXO CER O'TUF 50 VDCW	,
A2C61	0160-0362	C-FXD MICA 510 PF 5%	3
A2C62	0150-0121	CIFXU CER GALUF SO VOCH	1
A2C63 THRU		, , , , , , , , , , , , , , , , , , ,	
A2C70 A2C71	. 0160-0350	NOT ASSIGNED C:FXD CER DISK 103PF 5%	*
A2C72	0160-0359 0150-0029	CIFXD TI 1PF 10% 500VDCW	
A2C73	0160-2055	CIFXU CER C:01UF +80-20% 100 VDCW	
A2C74 A2C75	0140-0145	C:FXU MICA 22 PF 5% 500 VDCW C:FXD CER G:01UF +80-20% 100 VDCW	
A2C76	0140-0178	C : FXD MI 560 PF 2% 300 VDC%	1
A2C77	0150-0121	CIFXO CER-ULLUF 50 VDC#	
2078	0140-0101	CIFXD MICA 15PF 5% 500 VDCW	
A2C79	0150-0121	CIFXO CER OLIUF 50 VOCH	
A2C80	0150-0121	CIFXD CER G. LUF 50 VDCW	~~
A2C81 A2C82	0150-0121 0150-0121	C:FXD CER 0.1UF 50 VDCW	· 1
A2CR51 A2CR52	1910-0016	SEMICON DEVICE:DIODE GERMANIUM SEMICON DEVICE:DIODE GERMANIUM	
A2CR53	1910-0016 1910-0016	SENTON DEVICE IDIODE GERMANIUM	1
A2CR54	1401-0040	DIODE:SILTON 30 MA AT IV 30 PIV	
AZCR55	∦901-0040	DIODE:SILTCON 30 MA AT 1V 30 PIV	
AZCR56	1901-0040	DIODEISILICON 30 MA AT 1V 30 PIV	
A2L51	9140-0179	COIL-FXD R.F. 22 UH 10% 275 MA	
A2L52	9140-0129	COILIFXD RF 220 UH	
A2L53 A2L54	9140-0129 05100-6166	COILIFXD RF 220 UM Sy.	
	9170-0105	CORE:ADJUSTABLE TUNING	
ÁZLSS		COTA MARTARIES DA A AMB	
AZLDD	محرر 6170-05100 9170-0106	COIL: VARIABLE 3.2-5.6UR CORE ADJUSTABLE TUNING POWDERED IRON	-
A2L56	9140-0077	COLLIFAD REI 2.2UH	
A2L57	05110-6024	COIL VARIABLE	
×	9170-0106	CORE ADJUSTABLE TUNING POWDERED IRON	
A2L58	05110-6061	COILF VARIABLE 3.5-6.0UH	
	9170-0106	CORE ADJUSTABLE TUNING POWDERED IRON	
A2L59	05110-6024	COILI VARIABLE	
A2L60 THRU	9170-0106	CORE ADJUSTABLE TUNING POWDERED IRON	
A2L70	- /	NOT ASSIGNED	
			1
			- 1
	•	<u> </u>	I

Table 6-8. A9 Filter/Divider Module (05110-6096) (Cont'd) A10 Filter/Divider Module (05110-6095) (prefix all parts A9, A10)



Reference	Stock No.	(prefix all parts A9, A10)	<u> </u>
Designation	To block No.	Description #	Note
A2L71	2.00		
AZL72	9140-0179	COIL-FXD R.F. 22 UH 10% 275 MA	
A2L73	9140 - 0129 9140-0129	COILIFXO RF 220 UH	
	1.44	COLLIFAD NF 220 UN	
A2051 A2052	1850-0118	TRANSISTOR-PNP GERMANIUM EIA 2N2360	
A2Q53	1850-0118	TRANSISTOR-PNP GERMANIUM ETA 2N2360	
A2034	1850-0138 1850-0091	TRANSISTOR: SPL2N2360 PNP GERMANIUM MADT	' [
A2055	1850-0091	TRANSISTORIGERMANIUM 2N2048 PNP TRANSISTORIGERMANIUM 2N2048 PNP	
A2RS1	044351025	· · · · · · · · · · · · · · · · · · ·	
AZRS2	0683±1025 0683=1025	RIFXD COMP 1500 OHK 5H 1/4H RIFXD COMP 1500 OHK 5H 1/4H	
12853	0683-1025	REFXD COMP 1000 OHM 5% 1/4% 25 1	
12R\$4	0683-1025	RIFXO COMP 1000 OHM 5% 1/4%	
2R\$5	0683-1025	RIFXD COMP 1000 DHM 5% 1/4%	İ
2RS6 THRU	•		
2R60	l _	NOT ASSIGNED	
2R61	0683-5625	R#FXD COMP 560 OHM 5% 1/4m	
2R62 2R63	0683-1035,	REFAD COMP 10K OHM 58 1/4 W	
2R64	0683-3025 0683-3915	RIFXD COMP 3000 OHM 58 1/48 RIFXD COMP 390 OHM 58 1/48	
2R65	<u> </u>		ļ
2R86	0683÷1025 0683=5605	RIFXD COMP 1000 OMM 5% 1/4W	
2867	0683-7515	RIFXD COMP 56 OHM.SX 1/4W RIFXD COMP 750 OHM 5X 1/4W	1.
2R68	0683-1825	RIFXD COMP 1800 DHM 5% 1/4%	ļ
2R69	0683-1525	RIFXD COMP 150 OHM 58 1/48,5	
2R70	0758-0035	RIFXD MET FLM 3000 OHM 5% 1/2W	
2R71	0797-0291	RIFXO MET FLM 24.9 OHM IN 1/8#	
A72	0757-0291	RIFXO MET FLM 24.9 OHM 18 1/8W	
ITS1	05100-6167	TRANSFORMER	
	,	MANUAL AUTOM	
j			
<u>.</u>	1250-0118	CONNECTORIBAC	
t THRU			ł
i i	1250-0118	NOT ASSIGNED	
		CONNECTOR ! BNC	
2	05110-0005	SHIELD: FILTER HOUSING	
2	05110-0006	SHIELDI FILTER COVER	<u> </u>
4	05110-0007 05110-2002	BRACKET: DIVIDER	
š	05110-2035	CAPI FRONT	
ļ	. •		
'	_	MISCELLANEOUS)
ĺ	0340-0038	TERHINAL ISTUO	/ ·
ļ	0340-0039	INSULATOR BUSHING	
	0510÷02Ö7 05110−2001	NUTICAPTIVE 4-40 3/16 SST	
	03110-5001	SPACERI FILTER SMIELD	[]
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[#] See list of abbreviations in introduction to this section

Table 6-9. All Filter/Divider Module (05110-6094) Al2 Filter/Divider Module (05110-6093) (prefix all parts All, Al2)

A1	Reference Designation	Stock No.	Description ✓	Note
A1	De arguerran			1
AICI		•	,	
AICI	A1	05110-6112	ASSYMPTILTER BOARD 32 OR 33 MC(UNTUNED)	
ALCI	_			ļ
AIC2 0160-2055 CIFRD CER 0.01UF +80-208 100 VOCE AIC3 CIFRD CER 0.01UF +80-208 100 VOCE AIC5 CIFRD CER 0.01UF +80-208 100 VOCE AIC5 CIFRD CER 0.01UF +80-208 100 VOCE AIC5 CIFRD CER 0.01UF +80-208 100 VOCE AIC11 O160-2055 CIFRD CER 0.01UF +80-208 100 VOCE AIC12 O160-2055 CIFRD CER 0.01UF +80-208 100 VOCE AIC13 O160-2055 CIFRD CER 0.01UF +80-208 100 VOCE AIC14 O160-0360 CIFRD CER 0.01UF +80-208 100 VOCE AIC16 O160-2055 CIFRD CER 0.01UF +80-208 100 VOCE AIC16 O160-2055 CIFRD CER 0.01UF +80-208 100 VOCE AIC18 O160-2055 CIFRD CER 0.01UF +80-208 100 VOCE AIC18 O160-2055 CIFRD CER 0.01UF +80-208 100 VOCE AIC18 O160-2055 CIFRD CER 0.01UF +80-208 100 VOCE AIC12 O160-2055 CIFRD CER 0.01UF +80-208 100 VOCE AIC21 O160-2055 CIFRD CER 0.01UF +80-208 100 VOCE AIC22 O160-3060 CIFRD CER 0.01UF +80-208 100 VOCE AIC22 O160-3060 CIFRD CER 0.01UF +80-208 100 VOCE AIC23 O160-2055 CIFRD CER 0.01UF +80-208 100 VOCE AIC24 O160-2055 CIFRD CER 0.01UF +80-208 100 VOCE AIC24 O160-2055 CIFRD CER 0.01UF +80-208 100 VOCE AIC24 O160-2055 CIFRD CER 0.01UF +80-208 100 VOCE AIC24 O160-2055 CIFRD CER 0.01UF +80-208 100 VOCE AIC25 O150-0041 CIFRD TI 2.7FF 58 500VOCE AIC36 O150-0041 CIFRD TI 2.7FF 58 500VOCE CIFRD CER 0.01UF +80-208 100 VOCE AIC37 O150-0041 CIFRD TI 2.7FF 58 500VOCE AIC38 O150-0041 CIFRD TI 2.7FF 58 500VOCE AIC39 O160-2055 CIFRD CER 0.01UF +80-208 100 VOCE AIC39 O160-2055 CIFRD CER 0.01UF +80-208 100 VOCE AIC39 O160-2055 CIFRD CER 0.01UF +80-208 100 VOCE AIC39 O160-2055 CIFRD CER 0.01UF +80-208 100 VOCE AIC39 O160-2055 CIFRD CER 0.01UF +80-208 100 VOCE CIFRD MICA 33PF 58 300VOCE CIFRD MICA 33PF 58 300VOCE CIFRD MICA 33PF 58 300VOCE CIFRD MICA 33PF 58 300VOCE CIFRD MICA 33PF 58 300VOCE CIFRD MICA 33PF 58 300VOCE CIFRD MICA 33PF 58 300VOCE CIFRD MICA 33PF 58 300VOCE CIFRD MICA 33PF 58 300VOCE CIFRD MICA 33PF 58 300VOCE CIFRD MICA 33	AlCI			
ALCS ALCS ALCS ALCS ALCS ALCS ALCS ALCS	A1C2		CIFAD CER 0.01UF +80-20% 100 VOC#	
AICS THRU AICS 0160-2055 CIFXD CER 0.01UF +80-208 100 VDCB AICS 0160-0360 CIFXD CER CISK 120FF 58 AICS 0160-0360 CIFXD CER 0.01UF +80-208 100 VDCB AICS 0160-0360 CIFXD CER 0.01UF +80-208 100 VDCB AICS 0160-0360 CIFXD CER 0.01UF +80-208 100 VDCB AICS 0160-0360 CIFXD CER 0.01UF +80-208 100 VDCB AICS 0160-0360 CIFXD CER 0.01UF +80-208 100 VDCB AICS 0160-0360 CIFXD CER 0.01UF +80-208 100 VDCB AICS 0160-0360 CIFXD CER 0.01UF +80-208 100 VDCB AICS 0160-0360 CIFXD CER 0.01UF +80-208 100 VDCB AICS 0160-0360 CIFXD CER 0.01UF +80-208 100 VDCB AICS 0160-0360 CIFXD CER 0.01UF +80-208 100 VDCB AICS 0160-0360 CIFXD CER 0.01UF +80-208 100 VDCB AICS 0160-0360 CIFXD CER 0.01UF +80-208 100 VDCB AICS 0160-0360 CIFXD CER 0.01UF +80-208 100 VDCB AICS 0160-0360 CIFXD CER 0.01UF +80-208 100 VDCB AICS 0160-0360 CIFXD CER 0.01UF +80-208 100 VDCB AICS 0160-0360 CIFXD CER 0.01UF +80-208 100 VDCB AICS 0150-0041 CIFXD T1 2.7PF 58 500VDCB AICS 0150-0041 CIFXD T1 2.7PF 58 500VDCB AICS 0150-0041 CIFXD T1 2.7PF 58 500VDCB AICS 0150-0041 CIFXD T1 3.9PF 108 500VDCB AICS 0150-0041 CIFXD T1 3.9PF 108 500VDCB AICS 0160-0205 CIFXD CER 0.01UF +80-208 100 VDCB AICS 0160-0205 CIFXD CER 0.01UF +80-208 100 VDCB CIFXD CER 0.01UF +80-208 100 VDCB CIFXD CER 0.01UF +80-208 100 VDCB CIFXD CER 0.01UF +80-208 100 VDCB CIFXD CER 0.01UF +80-208 100 VDCB CIFXD CER 0.01UF +80-208 100 VDCB CIFXD CER 0.01UF +80-208 100 VDCB CIFXD CER 0.01UF +80-208 100 VDCB CIFXD CER 0.01UF +80-208 100 VDCB CIFXD CER 0.01UF +80-208 100 VDCB CIFXD CER 0.01UF +80-208 100 VDCB CIFXD MICA 33 PF 58 300VDCB CIFXD MICA 33 PF 58 300VDCB CIFXD MICA 33 PF 58 300VDCB CIFXD MICA 33 PF 58 300VDCB CIFXD MICA 33 PF 58 300VDCB CIFXD MICA 33 PF 58 300VDCB CIFXD MICA 33 PF 58 300VDCB CIFXD MICA 33 PF 58 300VDCB CIFXD MICA 33 PF 58 300VDCB CIFXD MICA 33 PF 58 300VDCB CIFXD MICA 33 PF 58 300VDCB CIFXD MICA 33 PF 58 300VDCB CIFXD MICA 33 PF 58 300VDCB CIFXD MICA 33 PF 58 300VDCB CIFXD MICA 33 PF 58 300VDCB CIFXD MICA 33 PF 58 300VDCB CIFXD MICA 33 PF 58			CIFED CER 0.01UF +80-20% 100 VDCW 3	
ALCII 0160-2055 CIFXD CER 0.01UF +80-208 100 VDCB ALCI2 0160-0360 CIFXD CER DISK 120FF 58 ALCI4 0160-0360 CIFXD CER 0.01UF +80-208 100 VDCB ALCI5 0160-2055 CIFXD CER 0.01UF +80-208 100 VDCB ALCI6 0160-0360 CIFXD CER 0.01UF +80-208 100 VDCB ALCI7 0160-2055 CIFXD CER 0.15K 120FF 58 ALCI8 0160-0360 CIFXD CER DISK 120FF 58 ALCI8 0160-0360 CIFXD CER DISK 120FF 58 ALCI8 0160-0360 CIFXD CER DISK 120FF 58 ALCI9 0160-2055 CIFXD CER 0.01UF +80-208 100 VDCB ALCI2 0160-0360 CIFXD CER 0.01UF +80-208 100 VDCB ALC22 0160-0360 CIFXD CER 0.01UF +80-208 100 VDCB ALC23 0160-0360 CIFXD CER 0.01UF +80-208 100 VDCB ALC23 0160-0360 CIFXD CER DISK 120FF 58 ALC24 0160-0360 CIFXD CER DISK 120FF 58 ALC23 0160-0360 CIFXD CER DISK 120FF 58 ALC24 0160-0360 CIFXD CER DISK 120FF 58 ALC23 0160-0360 CIFXD CER DISK 120FF 58 ALC24 0160-0360 CIFXD TI 2.7FF 58 500VDCB ALC33 0150-0041 CIFXD TI 2.7FF 58 500VDCB ALC33 0150-0041 CIFXD TI 2.7FF 58 500VDCB ALC34 0150-0041 CIFXD TI 2.7FF 58 500VDCB ALC35 0150-0022 CIFXD TI 3.9FF 108 500VDCB ALC36 0150-0034 CIFXD TI 3.9FF 108 500VDCB ALC37 0150-0034 CIFXD TI 3.9FF 108 500VDCB ALC38 0150-0034 CIFXD TI 3.9FF 108 500VDCB ALC39 0160-2055 CIFXD CER 0.01UF +80-208 100 VDCB ALC39 0160-2055 CIFXD CER 0.01UF +80-208 100 VDCB ALC30 0160-2055 CIFXD CER 0.01UF +80-208 100 VDCB ALC31 0160-0179 CIFXD MICA 33 PF 58 300VDCB ALC32 0160-0179 CIFXD MICA 33 PF 58 300VDCB ALC33 0160-0179 CIFXD MICA 33 PF 58 300VDCB ALC34 0160-0179 CIFXD MICA 33 PF 58 300VDCB ALC35 O160-0179 CIFXD MICA 33 PF 58 300VDCB ALC36 0160-0179 CIFXD MICA 33 PF 58 300VDCB ALC37 0160-0179 CIFXD MICA 33 PF 58 300VDCB ALC38 O160-0179 CIFXD MICA 33 PF 58 300VDCB ALC39 O160-0179 CIFXD MICA 33 PF 58 300VDCB ALC39 O160-0179 CIFXD MICA 33 PF 58 300VDCB ALC39 O160-0179 CIFXD MICA 33 PF 58 300VDCB ALC30 O160-0179 CIFXD MICA 33 PF 58 300VDCB ALC30 O160-0179 CIFXD MICA 33 PF 58 300VDCB ALC30 O160-0179 CIFXD MICA 33 PF 58 300VDCB ALC30 O160-0179 CIFXD MICA 33 PF 58 300VDCB ALC30 O160-0179 CIFXD MICA 33 PF 58 300VDCB ALC30 O160-0179 CIFXD MICA 03 PF 58 300VDCB ALC30 O		0100-1033	CALVE OF CARGOL ARD-TON 100 ADCH	
ALCI2 0160-0360 CIFXO CER CISK 120PF 58 ALCI4 0160-0360 CIFXO CER O.01UF +80-208 100 VDCB ALCI5 0160-2055 CIFXO CER O.01UF +80-208 100 VDCB ALCI6 0160-0360 CIFXO CER DISK 120PF 58 ALCI6 0160-0360 CIFXO CER CISK 120PF 58 ALCI6 0160-0360 CIFXO CER CISK 120PF 58 ALCI6 0160-0360 CIFXO CER CISK 120PF 58 ALCI2 0160-0360 CIFXO CER CISK 120PF 58 ALCI2 0160-0360 CIFXO CER CISK 120PF 58 ALCI2 0160-0360 CIFXO CER CISK 120PF 58 ALCI2 0160-0360 CIFXO CER CISK 120PF 58 ALCI2 0160-0360 CIFXO CER CISK 120PF 58 ALCI2 0160-0360 CIFXO CER CISK 120PF 58 ALCI2 0160-0360 CIFXO CER CISK 120PF 58 ALCI2 0160-0360 CIFXO CER CISK 120PF 58 ALCI2 0160-0360 CIFXO CER CISK 120PF 58 ALCI2 0160-0360 CIFXO CER CISK 120PF 58 ALCI3 0150-0041 CIFXO TI 2.7PF 58 500VDCB AL	A1C16		NOT ASSIGNED	İ
AIC12 0160-0360 CIFXO CER CISK 120PF 58 AIC14 0160-0360 CIFXO CER 0.01UF +80-208 100 VDC8 AIC15 0160-2055 CIFXO CER 0.01UF +80-208 100 VDC8 AIC16 0160-0360 CIFXO CER 0.01UF +80-208 100 VDC8 AIC17 0160-2055 CIFXO CER 0.01UF +80-208 100 VDC8 AIC18 0160-0360 CIFXO CER CISK 120PF 58 AIC19 0160-2055 CIFXO CER CISK 120PF 58 AIC19 0160-2055 CIFXO CER DISK 120PF 58 AIC21 0160-2055 CIFXO CER DISK 120PF 58 AIC22 0160-0360 CIFXO CER DISK 120PF 58 AIC23 0160-0360 CIFXO CER DISK 120PF 58 AIC23 0160-0360 CIFXO CER DISK 120PF 58 AIC24 0160-0360 CIFXO CER DISK 120PF 58 AIC25 THRU AIC25 THRU AIC25 THRU AIC26 CIFXO CER CISK 120PF 58 AIC36 O150-0041 CIFXO T1 2.7PF 58 500VDC8 AIC37 0150-0041 CIFXO T1 2.7PF 58 500VDC8 AIC36 O150-0041 CIFXO T1 2.7PF 58 500VDC8 AIC37 0150-0041 CIFXO T1 2.7PF 58 500VDC8 AIC36 O150-0041 CIFXO T1 2.7PF 58 500VDC8 AIC37 0150-0041 CIFXO T1 2.7PF 58 500VDC8 AIC37 0150-0041 CIFXO T1 2.7PF 58 500VDC8 AIC36 O150-0041 CIFXO T1 2.7PF 58 500VDC8 AIC37 0150-0042 CIFXO T1 3.9 PF 108 500VDC8 AIC36 O150-0041 CIFXO T1 2.7PF 58 500VDC8 AIC37 0150-0034 CIFXO T1 3.9 PF 108 500 VDC8 AIC36 O150-0041 CIFXO T1 2.7PF 58 500VDC8 AIC37 0150-0034 CIFXO T1 3.9 PF 108 500 VDC8 AIC36 O150-0041 CIFXO T1 2.7PF 58 500VDC8 AIC37 0150-0034 CIFXO T1 3.9 PF 108 500 VDC8 AIC36 O150-0041 CIFXO T1 2.7PF 58 500VDC8 AIC37 0150-0034 CIFXO T1 3.9 PF 108 500 VDC8 AIC37 0150-0034 CIFXO T1 3.9 PF 108 500 VDC8 AIC38 O160-2055 CIFXO CER 0.01UF +80-208 100 VDC8 AIC39 O160-2055 CIFXO CER 0.01UF +80-208 100 VDC8 AIC39 O160-2055 CIFXO CER 0.01UF +80-208 100 VDC8 AIC39 O160-2055 CIFXO CER 0.01UF +80-208 100 VDC8 AIC39 O160-2055 CIFXO CER 0.01UF +80-208 100 VDC8 AIC39 O160-2055 CIFXO MICA 33 PF 58 300VDC8 AIC39 O160-2059 CIFXO MICA 33 PF 58 300VDC8 AIC30 O160-2079 CIFXO MICA 33 PF 58 300VDC8 AIC30 O160-2079 CIFXO MICA 33 PF 58 300VDC8 AIC30 O160-2079 CIFXO MICA 33 PF 58 300VDC8 AIC30 O160-2079 CIFXO MICA 33 PF 58 300VDC8 AIC30 O160-2079 CIFXO MICA 33 PF 58 300VDC8 AIC30 O160-2079 CIFXO MICA 33 PF 58 300VDC8 AIC30 O160-2079 CIFXO MICA 33 PF 58 300VDC8 AIC3	AICII	0160-2055	CIFXD CER 0.01UF +80-20% 100 VDC%	
AIC14 0160-0360 CIFXO CER DISK 120PF 38 AIC15 0160-2055 CIFXO CER 0-01UF +80-208 100 VOCB AIC17 0160-2055 CIFXO CER 0-01UF +80-208 100 VOCB AIC18 0160-0360 CIFXO CER 0-01UF +80-208 100 VOCB AIC19 0160-2055 CIFXO CER DISK 120PF 58 AIC19 0160-2055 CIFXO CER DISK 120PF 58 AIC21 0160-2055 CIFXO CER DISK 120PF 58 AIC22 0160-0360 CIFXO CER DISK 120PF 58 AIC23 0160-0360 CIFXO CER DISK 120PF 58 AIC24 0160-0360 CIFXO CER DISK 120PF 58 AIC25 O160-0360 CIFXO CER DISK 120PF 58 AIC26 O160-0360 CIFXO CER DISK 120PF 58 AIC27 O160-0360 CIFXO CER DISK 120PF 58 AIC28 O160-0360 CIFXO CER DISK 120PF 58 AIC39 O160-0360 CIFXO CER DISK 120PF 58 AIC30 O150-0041 CIFXO T1 2-7PF 58 500VDCW AIC31 O150-0041 CIFXO T1 2-7PF 58 500VDCW AIC34 O150-0042 CIFXO T1 3-7PF 58 500VDCW AIC35 O150-0041 CIFXO T1 2-7PF 58 500VDCW AIC36 O150-0041 CIFXO T1 2-7PF 58 500VDCW AIC37 O150-0041 CIFXO T1 2-7PF 58 500VDCW AIC37 O150-0041 CIFXO T1 3-7PF 58 500VDCW AIC38 O150-0041 CIFXO T1 3-7PF 58 500VDCW AIC39 O160-2055 CIFXO T1 3-7PF 58 500VDCW AIC39 O160-2055 CIFXO T1 3-7PF 58 500VDCW AIC39 O160-2055 CIFXO CER 0.01UF +80-208 100 VDCW AIC39 O160-2055 CIFXO CER 0.01UF +80-208 100 VDCW AIC41 O160-2055 CIFXO CER 0.01UF +80-208 100 VDCW AIC42 O160-2055 CIFXO CER 0.01UF +80-208 100 VDCW AIC43 O160-2055 CIFXO CER 0.01UF +80-208 100 VDCW AIC43 O160-2055 CIFXO CER 0.01UF +80-208 100 VDCW AIC43 O160-2055 CIFXO CER 0.01UF +80-208 100 VDCW AIC43 O160-2055 CIFXO CER 0.01UF +80-208 100 VDCW AIC43 O160-0179 CIFXO MICA 33 PF 58 300VDCW AIC44 O160-0179 CIFXO MICA 33 PF 58 300VDCW AIC46 O160-0179 CIFXO MICA 33 PF 58 300VDCW AIC47 O160-0179 CIFXO MICA 33 PF 58 300VDCW AIC48 O160-0179 CIFXO MICA 33 PF 58 300VDCW AIC49 O160-0179 CIFXO MICA 33 PF 58 300VDCW AIC49 O160-0179 CIFXO MICA 33 PF 58 300VDCW AIC49 O160-0179 CIFXO MICA 33 PF 58 300VDCW AIC40 O160-0179 CIFXO MICA 33 PF 58 300VDCW AIC40 O160-0179 CIFXO MICA 33 PF 58 300VDCW AIC40 O160-0179 CIFXO MICA 33 PF 58 300VDCW AIC40 O160-0179 CIFXO MICA 33 PF 58 300VDCW AIC40 O160-0179 CIFXO MICA 33 PF 58 300VDCW AIC40 O160-0179 CIFXO MI	A1C12		CIFXO CER CIŞK 120PF 5%	İ
AIC15 0160-2055 C1FXD CER 0-01UF +80-20% 100 VDC% AIC16 0160-0360 C1FXD CER 0-01UF +80-20% 100 VDC% AIC17 0160-2055 C1FXD CER 0-01UF +80-20% 100 VDC% AIC18 0160-0360 C1FXD CER 0-01UF +80-20% 100 VDC% AIC19 0160-2055 C1FXD CER 0-01UF +80-20% 100 VDC% AIC12 0160-2055 C1FXD CER 0-01UF +80-20% 100 VDC% AIC21 0160-2055 C1FXD CER 0-01UF +80-20% 100 VDC% AIC22 0160-0360 C1FXD CER 0-01UF +80-20% 100 VDC% AIC23 0160-2055 C1FXD CER 0-01UF +80-20% 100 VDC% AIC24 THRU AIC25 THRU AIC31 0150-0041 C1FXD T1 2-7PF 5% 500VDC% AIC32 0150-0041 C1FXD T1 2-7PF 5% 500VDC% AIC33 0150-0041 C1FXD T1 2-7PF 5% 500VDC% AIC34 0150-0041 C1FXD T1 2-7PF 5% 500VDC% AIC35 0150-0041 C1FXD T1 3-3PF 10% 500VDC% AIC36 0150-0041 C1FXD T1 3-3PF 10% 500VDC% AIC37 0150-0041 C1FXD T1 3-9 PF 10% 500 VDC% AIC38 0160-2055 C1FXD CER 0-01UF +80-20% 100 VDC% AIC39 0160-2055 C1FXD CER 0-01UF +80-20% 100 VDC% AIC39 0160-2055 C1FXD CER 0-01UF +80-20% 100 VDC% AIC42 0160-2055 C1FXD CER 0-01UF +80-20% 100 VDC% AIC43 0160-2055 C1FXD CER 0-01UF +80-20% 100 VDC% AIC45 0160-0179 C1FXD MICA 33 PF 5% 300VDC% AIC46 0160-0179 C1FXD MICA 33 PF 5% 300VDC% AIC48 0160-0179 C1FXD MICA 33 PF 5% 300VDC% AIC49 0160-0179 C1FXD MICA 33 PF 5% 300VDC% AIC40 0160-0179 C1FXD MICA 33 PF 5% 300VDC% AIC40 0160-0179 C1FXD MICA 33 PF 5% 300VDC% AIC40 0160-0179 C1FXD MICA 33 PF 5% 300VDC% AIC40 0160-0179 C1FXD MICA 33 PF 5% 300VDC% AIC41 0160-0179 C1FXD MICA 33 PF 5% 300VDC% AIC42 0160-0179 C1FXD MICA 33 PF 5% 300VDC% AIC43 0160-0179 C1FXD MICA 33 PF 5% 300VDC% AIC44 0160-0179 C1FXD MICA 33 PF 5% 300VDC% AIC45 0160-0179 C1FXD MICA 33 PF 5% 300VDC% AIC46 0160-0179 C1FXD MICA 33 PF 5% 300VDC% AIC47 0160-0179 C1FXD MICA 33 PF 5% 300VDC% AIC48 0160-0179 C1FXD MICA 33 PF 5% 300VDC% AIC49 0160-0179 C1FXD MICA 33 PF 5% 300VDC% AIC40 0160-0179 C1FXD MICA 33 PF 5% 300VDC% AIC41 0160-0179 C1FXD MICA 33 PF 5% 300VDC% AIC41 0160-0179 C1FXD MICA 33 PF 5% 300VDC% AIC41 0160-0179 C1FXD MICA 33 PF 5% 300VDC% AIC41 0160-0179 C1FXD MICA 33 PF 5% 300VDC% AIC41 0160-0			· · · · · · · · · · · · · · · · ·	
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A				
10.00			CIPAU CER 0.01UF +80-20% 100 VOCW	
NOT ASSIGNED NO	ICZJ		CIFXD CER 0.01UF +80-20% 100 VOC# "	
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1153		•	NOT ASSIGNED	
1032 0150-0041 CIFXD TI 2.7PF 58 SOOVDCW 1034 0150-0041 CIFXD TI 2.7PF 58 SOOVDCW 1035 0150-0041 CIFXD TI 2.7PF 58 SOOVDCW 1036 0150-0022 CIFXD TI 3.3PF 108 SOOVDCW 1036 0150-0034 CIFXD TI 3.3PF 108 SOOVDCW 1037 0150-0034 CIFXD TI 3.9 PF 108 SOOVDCW 1037 0150-0034 CIFXD TI 3.9 PF 108 SOOVDCW 1036 RACTORY SELECTED COMPITYPICAL VALUE GIVEN NOT ASSIGNED CIFXD CER 0.01UF +80-208 100 VDCW 1039 0160-2055 CIFXD CER 0.01UF +80-208 100 VDCW 1040 0160-2055 CIFXD CER 0.01UF +80-208 100 VDCW 1042 0160-2055 CIFXD CER 0.01UF +80-208 100 VDCW 1043 0160-2055 CIFXD CER 0.01UF +80-208 100 VDCW 1044 0160-0179 CIFXD MICA 33PF 58 300VDCW 1045 0160-0179 CIFXD MICA 33 PF 58 300VDCW 1046 0160-0179 CIFXD MICA 33 PF 58 300VDCW 1048 0160-0179 CIFXD MICA 33 PF 58 300VDCW 1049 0160-0179 CIFXD MICA 33 PF 58 300VDCW 1040 0160-0179 CIFXD MICA 33 PF	11031	0150-0041	CIFXO TI 2.7PF 5% 500VDCW	
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O160-2055			CIFXD CER 0.01UF +80-20% 100 VDC#	ľ
1042 1043 1044 1044 1040-0179 1045 1046 1046 1047 1047 1048 1049 1049 1049 1049 1040-0179 105100-6186 105100-6186 105100-6186 105100-6186 105100-0180 10510000000000000000000000000000000	1140	0160-2055	CIFXO CER 0.01UF +80-20% 100 VDC%	
C43			CIFXO CER 0.01UF +80-20% 100 VDC#	
1044 0160-0179 C:FXD MICA 33PF 58 300VDC8 C:FXD MICA 33PF 58 300VDC8 C:FXD MICA 33 PF 58			CIPRO CER 0.01UF +80-20% 100 VOCW	
1C45 1C46 1C47 1C48 1C48 1C49 1C49 1C49 1C49 1C49 1C40 1C49 1C40	1044	0160-0179	CIFXD MICA 33PF 58 300VDCW	
1047 1048 1049 1040-0179 1049 1040-0179 1040-0179 1040-0179 1040-0179 1040-0179 1040-0179 1040-0179 1040-0179 1040-0179 1040-0179 1040-0179 105100-6186 1051000-6186 1051000-6186 1051000-6186 1051000-6186 10510000-6186 1051000000000000000000000000	1045	0160-0179	CIFXD MICA 33PF 5% 300VDCW	
1047 1048 1049 1040-0179 1040-0179 1040-0179 1040-0179 1040-0179 1040-0179 1040-0179 1040-0179 1040-0179 1040-0179 1040-0179 105100-6186 1051000-6186 1051000-6186 1051000-6186 1051000-6186 1051000-6186 1051000-6186 1051000-6186 10510000-6186 10510000000000000000000000000000000000		0160-0179	CIFXD MICA 33 PF 58 300VDCE	
1L1 9140-0179 CIFXD MICA 33 PF 58 300V0CW 1L1 9140-0179 COIL-FXD R.F. 22 UH 108 275 MA 1L2 9140-0179 COIL-FXD R.F. 22 UH 108 275 MA 1L3 9140-0179 COIL-FXD R.F. 22 UH 108 275 MA 1L4 NOT ASSIGNEE COIL: VARTABLE 0.17-0.20UH			CIFXD MICA 33 PF 5% 300VDCW	
1LI 9140-0179 COIL-FXD R.F. 22 UH 108 275 MA 1L2 9140-0179 COIL-FXD R.F. 22 UH 108 275 MA 1L3 9140-0179 COIL-FXD R.F. 22 UH 108 275 MA 1L6 NOT ASSIGNED 1L5 05100-6186 COIL: VARTABLE 0.17-0.20UH		-	CIFXD MICA 33 PF 5% 300VDC%	
1L2 9140-0179 COIL-FXD R.F. 22 UH 10% 275 MA 1L3 9140-0179 COIL-FXD R.F. 22 UH 10% 275 MA 1L4 NOT ASSIGNED 1L5 05100-6186 COIL: VARTABLE 0.17-0.20UH	,,			
1L3 9140-0179 COIL-FXD R.F. 22 UH 108 275 MA NOT ASSIGNED 1L5 05100-6186 COIL: VARTABLE 0.17-0.20UH		· - · ·	COIL-FXD R.F. 22 UM 10% 275 MA	
1L5 05100-6186 COIL: VARTABLE 0.17-0.20UH	163		COIL-FXD R.F. 22 UH 108 275 MA	
9170-0105 CORETABLE TUNING		05100-6186		
		9170-0105	CORE ADJUSTABLE TUNING	

Table 6-9. All Filter/Divider Module (05110-6094) (Cont'd) Al2 Filter/Divider Module (05110-6093) (prefix all parts All, Al2)

Reference Designation	Ş Stock No.	Description #	Not
. *****		1	
	05100-4104	COTI A MARTARIA O ARIO SALII.	i
AIL6	05100-6186 9170-0105	COIL: VARIABLE 0.17-0.20UH	•
A1L7	05100-6186	COREIADJUSTABLE YUNING COIL! VARIABLE 0.17-0.20UH	
~ AC /	9170-0105	CORE ADJUSTABLE TUNING	ı
A1L8	05100-6186	COIL: VARIABLE 0.17-0.20UH	
~*60	03100-0100		_
	9170-0105	CORE ADJUSTABLE TUNING	~
AILÓ	05100-6186	CCILI VARIABLE 0.17-0.20UH	
	9170-0105	CORE: ADJUSTABLE TUNING	- 1
AILIO	05100-6186	COILI VARIABLE 0-17-0-20UH	İ
	9170-0105	CORETADJUSTABLE TUNING	1
A	05.00 4104	COST A MARIANTE O TOTAL ORDER	1
AIL11	05100-6186	COIL1 VARIABLE 0.17-0.20UH	ŀ
	9170-0105	CORELADJUSTABLE TUNING	
AIL12	05110-6047 9170-0106	CUILI VARIABLE 1.8-3.5UR CORE ADJUSTABLE TUNING POWDERED IRON	
AILI3 THRU	V170-0100	CORE ADJUSTABLE TORING PUNDERED TRUM	1
A1L20		NOT ASSIGNED	- 1
		,	
41L21	9140-0179	COIL-FXD R.F. 22 UH 108 275 HA	
11L22	9140-0179	COIL-FXD R.F. 22 UH 108 275 MA	
A1L23	9140-0179	COIL-FXD N.F. 22 UH 10% 275 MA	
	1857 0074	TO AND TOTAL TOTAL TOTAL THE BURGOS	
N1Q1 N1Q2	1853-0036	TRANSISTORISILICON PNP 2N3906 TRANSISTORISILICON PNP 2N3906	
1102	1853-0036 1853-0036	TRANSISTORISILICON PNP 2N3906	
105	1853-0036	TRANSISTORISILICON PNP 2N3906	
1195	1853-0036	TRANSISTORISILICON PNP 2N3906	
****	1033-0030	THANSISTON SICION FIRE ENJANG	
1106	1853-0036	TRANSISTORISILICON PNP 2N3906	
1107	1853-0036	TRANSISTORISILICON PNP 2N3906	
			•
IRÍ IRŽ	0683-3925	RIFXD COMP 3900 OHM 5% 1/4%	
IR3	0683-3925 0683-3925	RIFXD COMP 3900 DHM 58 1/48 RIFXD COMP 3900 DHM 58 1/48	
IR4	0683-3925	RIFXD COMP 3900 OHM 5% 1/4%	f
IRS	0683-3925	RIFXO COMP 3900 DHM 5% 1/4%	
IR6	0683-3925	*RIFXD COMP 3900 DHM 5% 1/4%	
187	0683-1825	RIFXD COMP 1800 DHM 5% 1/4%	
IR6	0683-1825	RIFXD COMP 1800 OHM 5% 1/4%	
IR9 THRU			
IRIO IRII	A75.0 -00#4	NOT ASSIGNED	ŧ
	0758-0046	RIFXD MET FLM 6200 OHH 5% 1/2W	
IRI2	0758-0046	RIFXD MET FLM 6200 OHM 5% 1/2#	ļ
IR[3	0758-0046	RIFXO MET FLM 6200 OHM 5% 1/28	
1R14	0758-0046	RIFXD MET FLM 6200 OHM 5% 1/2#	
1R15	0758-0046	RIFXD MET FLM 6200 OHM 5% 1/2W	
1RI6	0758-0057	RIFXD MET CX 5600 OHM 5% 1/2%	
1017	A756. 000#	BAENO MET ON AROA CON TO LIGHT	
1R17 1R16	0758-0004 0758-0004	RIFXO MET CX 2700 OHM 5% 1/2% RIFXD MET FLM 2700 OHM 5% 1/2%	
IRI9 THRU	0 730-0004	KILVO UET LEW \$100 OUW 2# 115#	
1R20		NOT ASSIGNED	1
1821	0757-0291	RIFXD MET FLM 24.9 OHM IS 1/88	ļ
1R22	0757-0291	RIFXD MET FLM 24.9 OHM IS 1/8W	1
1071	0010-0024		
IRTI	0839-0026	THERMISTOR : LOK OHM 10% 25C	
ر ا			
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		(prefix all parts A11, A12)	•
Reference Designation	Stock No.	Description #	Note
A2 ·	05110-60 56 05110-2018	BOARD ASSYIDIVIDER 3.2 OR 3.3 MC(UNTUNED) BLANK BOARDIDIVIDER	
A2C51 A2C52 A2C53 A2C54 A2C55	0160-2055 0150-0121 0160-2055 0150-0121 0160-2055	C:FXD CER 0.01UF +80-20% 100 YUCW C:FXD CER 0.1UF 50 YDCW C:FXD CER 0.01UF +80-20% 100 YDCW CMFXD CER 0.1UF 50 YDCW CMFXD CER 0.01UF +80-20% 100 YDCW	,
A2C56 A2C57 % A2C58 A2C59 A2C60	0150-0121 0140-0190 0140-0192 0150-Q121	CIFXD CER 0.1UF 50 VDCW CIFXD CER 0.1UF 50 VDCW CIFXD MICA 30 PF 5% 300 VDCW CIFXD MICA 68PF 5% 300VDCW CIFXD CER 0.1UF 50 VDCW	
A2C6! A2C62 A2C63 THRU	0140-0178 0150-0121	CIFXO MICA 560 PF 28 300 VDCW CIFXO CER 0.1UF 90 VDCW	
A2C70 A2C71 A2C72	0160-0360 -0150-0029	NOT ASSIGNED CIFXD CER CISK 120PF 5% CIFXD TI 1PF 10% 500VDCW	
A2C73 A2C74 A2C75 A2C76 A2C77	0160-2055 0160-0178 0160-2055 0140-0178 0150-0121	CIFXD CER 0.01UF +80-20% 100 VDCW CIFXU MICA 27PF 5% 300VDCW CIFXD CER 0.01UF +80-20% 100 VDC% CIFXD MICA 560 PF 2% 300 VDCW CIFXD CER 0.1UF 50 VDCW	,
A2C78 A2C79 A2C80 A2C61 A2C62	0140-0101 0150-0121 0150-0121 0150-0121 0150-0121	CIFXD MICA 15PF 3% 500 VDCW CIFXD CER 0.1UF 30 VDCW CIFXD CER 0.1UF 30 VDCW CIFXD CER 0.1UF 30 VDCW CIFXD CER 0.1UF 30 VDCW	
A2CR51 A2CR52 A2CR53 A2CR54 A2CR55	1910-0016 1910-0016 1910-0016 1901-0040 1901-0040	SEMICON DEVICE IDIODE GERMANIUM SEMICON DEVICE IDIODE GERMANIUM SEMICON DEVICE IDIODE GERMANIUM DIODE ISILICON 30 MA AT 1V 30 PTV DIODE ISILICON 30 MA AT 1V 30 PIV	
AZCR56	1901-0040	DIODEISILICON 30 MA AT 1V 30 PIV	
A2L51 A2L52 A2L53 A2L54	9140-0179 9140-0129 9140-0129 05100-6166 9170-0105	COIL-FXD R.F. 22 UH 10% 275 MA COIL:FXD RF 220 UH COIL:FXD RF 220 UH COIL: VARTABLE 0.16-0.23UH CORE:ADJUSTABLE TUNING	
A2L55 A2L56 A2L57	05100-6170 9170-0106 9140-0077 9170-0106 05110-6063	COILI VARIABLE 3.2-5.6UR CORE ADJUSTABLE TUNING POWDERED IRON COILIFXD RF1 2.2UM CORE ADJUSTABLE TUNING POWDERED IRON COILI VARIABLE 35-50UH	
AZL56	9170-0106 05110-6061	CORE ADJUSTABLE TUNING POWDERED IRON COIL: VARIABLE 3.5-6.00H	'
A2L59	9170-6106 05110-6024 9170-0106	CORE ADJUSTABLE TUNING POWDERED IRON COIL: VARIABLE TUNING POWDERED IRON	
A2L60 THRU A2L70		NOT ASSIGNED	
		•	

Table 6-9. All Filter/Divider Module (05110-6094) (Cont'd) All Filter/Divider Module (05110-6093) (prefix all parts All; Al2)

Reference Designation	Stock No.	, Description €	Not
2L71	9140-0179	COIL-FRO R.F. 22 UH 108 275 MA	
21,72	9140-0129	COILIFXD RF 220 UH	
2L73	9140-0129	COILIFXD RF 220 UN	
2051	1850-0118	TRANSISTOR-PNP GERMANIUM EIA 2N2360	
2052	1850-0118	TRANSISTOR-PMP GERMANIUM EIA 2N2360	
12953	1850-0138	TRANSISTORISPLANADO PNP GERMANIUM MADT	
2054	1850-0091	TRANSISTORIGERMANIUM 2N2048 PNP	
2055	1850-0091	TRANSISTORIGERMANIUM 2N2048 PMP	
2R\$1	0683-1025	, RIFXD COMP 1000 ONM 58 1/48	
2R52	0643-1025	RIFXD COMP 1000 OHM 5% 1/4%	
2853	0683-1025	RIFXO COMP 1000 ONN 5% 1/48	
12R\$4	0683-1025	RIFXD COMP 1000 ONN 5% 1/4%	
2855	0663-1025	RIFXD COMP. 1000 OHM 5% 1/4W	
2R56 THRU		•	
2R40		NOT ASSIGNED	
2R61	0683-5625	RIFXD COMP 560 OHM 58 1/4W	1
2R62	0643-1035	RIFXD COMP 10K OHM 5% 1/4 %	
2M63 /	0683-3025	RIFXD COMP 3000 DWM 58 1/48	
2R64 /	0683-3915	RIFXD COMP 398 OHM 5% 1/4%	
2865	0643-1025	RIFXD COMP 1000 OHM 58 1/49	
2R66	0683-\$605	RIFXD COMP 56 OHM 5% 1/4%	1
2R67	0683-7515	RIFXD COMP 750 OHM 58 1/49	
2R66 2R69	0683-1825 0683-1525	RIFXD COMP 1800 OHM 5% 1/4%	}
	_		
2R70	0758-0035	RIFXO MET FLM 3000 OHM 58 1/2W	
2871 2872	0757-0291 0757-0291	RIFXO MET FLM 24.9 OHM 1% 1/8W RIFXO MET FLM 24.9 OHM 1% 1/8W	
2751	05100-6167	TRANSFORMER	ĺ
	33100 010.		
1	1250-0116	CONNECTOR I BNC	
2 THRU		With the Contract of the Contr	
4	i	NOT ASSIGNED	
5	1250-0118	CONNECTORIBAC	
0 1			
Pi	05110-0005	FILTER HOOSING	
P2 P3 .	05110-0006	FILTER COVER	/
73 P4	05110-0007	BRACKETI DIVIDER	1
P4 P5	05110-2002 05110-2035	CAPI FRONT	,
1	1251-0216	CONNECTORIMALE 9-CONTACT TYPE D	
	,	MISCELLANEOUS	
	03400038	TERMINALISTUO	1
	0340-0039	INSULATOR I BUSH I NG	1
	05110-2001	SPACERI FILTER SHIELD	
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Figure 6-10. A13 Filter/Divider Module (05110-6092) A14 Filter/Divider Module (05110-6091) (prefix all parts A13, A14)

Reference	(a) Stock No.	Description #	Note
Designation	4. 2.00# 1.0t	Personal and a second a second and a second and a second and a second and a second and a second and a second and a second and a second and a second and a second and a second and a second and a second and a second	
		A	
1	05110-6111	ASSYIFTLITER BOARD 30 OR 31 MC(UNTUNED)	
	05110-2043	MANK BOARDIFILTER	
uct	0140-80 8 #	CITYO CER O ALUE AND DON 100	
11CI 11C2	0160-20 95 0160-2055	CIFXD CER 0.01UF +80-20% 100 VDCW C:FXD CER 0.01UF +80-20% 100 VDCW	*
163	0160-2055	CIFXO CER 0.01UF +80-20% 100 VOCW	
1104	0160-2055	C1FXD CER 0.01UF +80-208 100 VDCW	•
LICS THRU	***************************************	CANAD GEN GARAGO AND TOO ARCH	
1010		NOT ASSIGNED	
	_		
1011	0160-2055	CIFXD CER 0.01UF +80-20% 100 VDCW	
1012	0160-0361	CIFXO CER DISK 140PF 58 500VDC#	
1013	0160-2055	C 1FXO CER 0.01UF +80-208 100 VDC#	
1014	0160-0361	CIFXD CER CISK 140PF SN 500VDC# (
	0160-2055	C1FXD CER 0+01UF +80-20N 100 VDDW	
1C16	0160-0361	CIFXD CER DISK 140PF 5% 500VDCm	
1017	0160-2055	CIFXD CER 0.01UF +80-20N 100 VDCW	
1018	0160-0361	CIFXD CER GISK 140PF 5% 500VDC#	
1019	0160-2055	C : FXD CER 0.01UF +80-20% 100 VDCW	1
1020	0160-0361	CIFAD CER DIŠK 140PF 5% 500VDCM	
1021	0140-2084	CIETO CER O ALUE MAN-100 MAN MOST	
1021	0160-2055 0160-0361	CIFXD CER 0.01UF +80-20% 100 VOCW CIFXD CER DISK 140PF 5% 500VDCW	
1023	0160-0501	C F F XD CER 0.01UF +80-20% 100 VDCW	
1024	0160-0361	CUFAD CER GISH INOPE SE SOOVDCH	ļ
1C25 THRU			ĺ
1030		NOT ASSIGNED	1
		·	
1031	0150-0022	CIFAD TI 3.3PF 10% 500VDCW	
1032	0150-0022	CIFXO TI 3.3PF ION SUOVOCH	
1C33 1C34	0150-0022 0150-0022	CIFXD TI 3-3PF 10N 500VDCW	
1035	0150-0034	CIFXU TI 3-3PF 10% 500VDCW CIFXU TI 3-9 PF 10% 500 VDCW	
	0130-0034	1	
1036	0150-0022	C 1 FXO T1 3.3PF 10% 500VDCW	
1037	0150-0042	CIFXO TI 4.7 PF 5% 500 VDCm	
į		FACTORY SELECTED COMPITTPICAL VALUE GIVEN	
1C38		NOT ASSIGNED	
1039	0160-2055	CIFKD CER 0.01UF +80-20% 100 VDC%	i
1040	0160-1055	C : FXD CER 0.01UF +80-209 100 VDCW	
1641	0160-2055	C1FXD CER 0.01UF +80-20% 100 VDC%	
1042	0160-2055	CIFXD CER 0.01UF +80-20% 100 VDCW	
1643	0160-2055	CIFXD CER 0.01UF +80-20% 100 VDC%	
1044	0160-0179	CIFXD MICA 33PF SE 300VDCE	
1045	0160-0179	CIFXD MICA 33PF 38 300VDCW	
	A		
1046	0160-0179	C FXD MICA 33 PF SN 300VDCN	
1C47 1C48	0160-0179	CIFAD MICA 33 PF 58 300VDC8	
1048	0160-0179 0160-0179	CIFXD MICA 33 PF 5% 300VDC%	1
• • • • •	0100-01/A	CHEAD DICE 33 PE SH 300YUCH	
IL1	9140-0179	COIL-FXD R.F. 22 UH 108 275 MA	
162	9140-0179	COIL-FXD R.F. 22 UH 108 275 MA	
11.3	9140-0179	COIL-FXD A.F. 22 UH 108 275 MA	
IL4		NOT ASSIGNED	1
115	05100-6186	COIL VARIABLE 0.17-0.20UH	1
:	9170-0105	CORE I ADJUSTABLE TUNING	
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[#] See list of abbreviations in introduction to this section

Table 6-10. Als Filter/Divider Module (05110-6092) (Cont'd) A14 Filter/Divider Module (05110-6091) (prefix all parts A13, A14)

Reference Designation	Stock No.	Description #	Note
Į			
116. 0	5100-6186	COILI VARTABLE 0-17-0-20UH	
	170-0105	CORELADJUSTABLE TUNING	
	5100-6186	COLLI VARIABLE 0-17-0-20UH	
	170-0105 5100-6186	COREIADJUSTABLE TUNING COILI VARIABLE 0.17-0.20UH	
		•	
. 1	170-0105	CORETADJUSTABLE TUNING	
	5100-6186 170-0105	COIL1 VARIABLE 0.17-0.20UH Coreiadjustable tuning	1
* `	5100-6186	COIL: VARIABLE 0.17-0.20UH	
	170-0105	CORETADJUSTABLE TUNING	
יורוו ס	5100-6186	COIL! VARIABLE 0-17-0-20UH	
	170-0105	CORETADJUSTABLE TUNING	1
	5110-6047	COILI VARIABLE 1.8-3.5UR	[
	170-0106	CORE ADJUSTABLE TUNING POWDERED IRON	1
ILI3 THRU		NOT ASSIGNED	
	140-0179 140-0179	COIL-FXO R.F. 22 UH 108 275 MA	
	140±0179 140±0179	COIL-FXD R.F. 22 UH 108 275 MA COIL-FXD R.F. 22 UH 108 275 MA	
	853-0036 853-0036	TRANSISTORISILICON PNP ZÑ3906 Transistorisïlicon pnp zn3906	
	853~0036	TRANSISTORISILICON PNP 2N3906	
1 -	853-0036	TRANSISTORISILICON PNP 2N3906	
195 1	853-0036	TRANSISTORISTLICON PNP 2N3906	
196 1	853-0036	TRANSISTORISTLICON PMP 2M3906	
107	853-0036	TRANSISTORISILICON PNP 2N3906	
IRI O	683-3925	RIFXO COMP 3900 DHM 59 1/48	
1R2 0	683-3925	RIFXD COMP 3960 OHM 5% 1/4%	1
	683-3925 683-3925	RIFXD COMP 3900 OHM 5% 1/4% RIFXD COMP 3900 OHM 5% 1/4%	
	683-3925	RIFXD COMP 3960 OHM 58 1/48	
IR6 O	sa3-3925	RIFXO COMP 3900 OHM 58 1/4W	
1R7 00	683-1825	RIFXD COMP 1800 OHM 5% 1/4%	
	583-1825	RIFXD COMP 1860 DHM 5% 1/4%	
IRO THRU		NOT ASSIGNED	
	758-0046	RIFXO MET FLM 6200 OHM 5% 1/28	
1R12 0	75800#A	RIFXD MET FLM 6200 OHM 51 1/29	
	758-0046 758-0046	RIFXU MET FLM 6200 OMM 5% 1/2% RIFXD MET FLM 6200 OMM 5% 1/2%	
IRI4 6	758-0046	RIFXD MET FLM 6200 OHM SN 1/2W	
1 1	758-0046	RIFXD MET FLM 6200 OHM 5% 1/2W	
IR16 01	758-0057	RIFXD MET CX 5600 OHM 5% 1/2#	
	758-0004	RIFXO MET CA 2700 OHM 58 1/28	1
	758-0004	RIFXD MET FLM 2700 OHM 5% 1/2%	1
IR19 THRU IR20	,	NOT ASSIGNED	
	757-0291	RIFXO MET FLM 24.9 OHM IN 1/8W	1
	757-0291	RIFXO MET FLM 24.9 OHM IN 1/8W	
IRTI 00	39-0026	THERMISTOR : 10K DHM 108 25C	
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Figure 6-10. A13 Filter/Divider Module (05110-6092) (Cont'd)
A)4 Filter/Divider Module (05110-6091)
(prefix all parts A13, A14)

Reference Designation		Description #	Note
			<u> </u>
	06110 (066	BOARD ASSY DIVIDER 3.0 OR 3.1 MC(UNTUNED)	
12	05110-6055 05110-2016	BLANK BOARDIDIVIDER	
	_	t)	
2051	0160-2055	CIFXO CER G-01UF +80-20% 100 VOCW	
12C52	0150-0121 0160-2055	CIFXO CEN DAJUF 50 VOCH CIFXO CER DADIUF +80-20N 100 VOCH	1 093
2054	0150-0121	CIFXD CER O.TUF 50 VOCW	1
2035	0160-2055	GIFXD CER 0-01UF +80-208 100 VDC#	
			1
2056	0150-0121	CIFXO CER O. TUF SO VOCE	ļ
N2C57	0150-0121	CIFXD CER C.1UF 50 VDCW	İ
12C58 12C59	0140-0190 0140-0215	CIFXD MICA 39 PF 58 300 VDCW	1
2060	0150-0121	CIFAD CER G. TUF 50 VDC#	
12C61	0160-0363 0150-0121	CIFXO MICA 620 PF 5% CIFXO CER O. LUF 50 VOCW	ļ
12063 THRU	0.30 0.2.	1 .	
2070		NOT ASSIGNED	
12071	0196-0391	CIFAD CER CISK 140PF 5% 500VDCM	
2072	0150-0029	CIFXD T1 1PF 10% 500VDCW	
2073	0160-2055	CIFXU CER 0.01UF +80-20% 100 VOCW	
2074	0160-0179	CIFXO MICA 33PF SE 30QVDCE	
2075	0160-2055	CIFXD CER 0.01UF +80-20# 100 VDC#	
2076	0140-0178	CIFXD HICA 560 PF 28 300 VDC8	
2077	0150-0121	CIFXD CER C.1UF 50 VDCW	
2078	0140-0101	CIEXO MICA 15PF 5% 500 VOCW	
2079	0150-0121	CIFXO CER U-1UF 50 VOCE	
2000	0150-0121	CIFKO CER GILUF SO VOCE	
2C81	0150-0121 0150-0121	CIFXO CER C.1UF 50 VDCW CIFXO CER C.1UF 50 VDCW	
, ;	VIJOTOIEI .		
2CR51 \	1910-0016	SENICON DEVICE (DIODE GERHANIUM	
2CA52	1910-0016	SENICON DEVICE DIODE GERNANIUM	
2CR53	1910- 9 016 1901- 0 046	SEMICON DEVICE DIDDE GERMANIUM DIDDE: SILICON 30 MA AT 1V 30 PIV	
2CR55	1901-0040	DIODEISILICON 30 MA AT 1V 30 PIV	
2CR56	1901-0040	DIODEISILICON 30 MA AT 1V 30 PIV	
21 4 1	0140-0130		
2L51	9140-0179 9140-0129	COIL-FXD R.F. 22 UH 10% 275 MA	
2653	9140-0129	COILIFAD RF 220 UH	
2154	05100-6166	COLLI VARIABLE	
	9170-0105	CORE LADJUSTABLE TUNING	
ZL 55	05100-6170	COLLI VARIABLE 3.2-5.6UR	
	9170-0106	CORE ADJUSTABLE TUNING POWDERED TRON	-
2L56	9140-0077	COILIFXO RF1 2.2UH	1
	9170-0106	CORE ADJUSTABLE TUNING POWDERED IRON]
2157	05110-6063	COIL! VARIABLE 35-50UH	
j	9170-0106	CORE ADJUSTABLE TUNING POWDERED IRON	
2L58	05110-6061	COIL: VARTABLE 3.5-6.00H	1
	9170-0106	CORE ADJUSTABLE TUNING POWDERED IRON	1
2659	05110-6023 9170-0106	COIL: VARIABLE CORE ADJUSTABLE TUNING POWDERED IRON	
I		and the same of th	
2L60 THRU 2L70		NOT ASSIGNED	1
		INV. NOWS WIND	
			1
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Table 6-10. A13 Filter/Divider (Module (05110-6092) (Cont'd) A14 Filter/Divider Module (05110-6091) (prefix all parts A13, A14)

Reference Designation	Stock No.	Description #	Note
,			}
N2L71	9140-0179	COIL-FXD R.F. 22 UH 10% 275 MA	
	9140-0129	COILIFXO RF 220 DH	,
12173	8140-01EA	COIL IFXD RF 220 UN	
12051	1850-0118	TRANSISTOR-PHP GERMANIUM EIA 2M2360	
A2052 ·	1850-Q118	TRANSISTOR-PRP GERMANIUM EIA 2N2360	
A2Q\$J	1850-0138	TRANSISTORISPLANASOO PHP GERMANIUM MAOT	
A2Q54	1650-0091	TRANSISTOR I GERMANIUM 2N2048 PMP	
A2055	1850-0091	TRANSISTOR GERMANIUM 202048 PNP	
A2R51	0683-1025	RIFKO COMP. 1000 OHM 5% 1/4%	
A2R52	0643-1025	RIFXO COMP 1000 DHM 58 1/48	
A2RSJ	0683-1025	RIFXO COMP 1000 OHM 5% 1/4%	
A2R54	0683-1025	RIFXD COMP 1000 0HM 59 1/4W	
A2R55	0683-1025	RIFXD COMP 1000 DHM 5% 1/4%	
AZRS6 JHRU	1.		
AZRĢO] '	NOT ASSIGNED	
A2R61	0683-5625	RIFXD COMP 560 OHM 58 1/4W	
A2R62	0663-1035	RIFXD COMP 10K OHN 5N 1/4 W	
A2R63	0683-3025	RIFXD COMP 3000 DHM 5% 1/4% RIFXD COMP 396 DHM 5% 1/4W	
A2R64	0683-3915	REPAU COMP 390 ONN 38 1748	
A2R65	0683-1025	RIFXD COMP 1000 DHM 58 1/4%	ì
A2R66	0683-5605	RIFXD COMP 56 OHM 58 1/4W	
42R67	0683-7515	RIFXD COMP 750 OHM 5% 1/4%	•
A2R68	0683-1825	RIFXD COMP 1800 OM 5% 1/4%	
AZR69	0683-1525	RIFXD COMP 150 OHM 5% 1/4W	
A2R70	0758-0035	RIFXD WET FLM 3000 OHM 5% 1/2W	
A2R71 ·	0757-0291	RIFXD MET FLM 24.9 OHM IS 1/89	İ
A2R72	0757-0291	RIFXD MET FLM 24.9 OHM 1% 1/89	
A2T51	05100-6167	TRANSFORMER	
11	1250-0116	CONNECTORIBNC	
J2 THRU			<u> </u>
JĄ		NOT ASSIGNED	}
JS	1250-0118	CONNECTORIBAC	/
4P1	05110-0005	FILTER HOUSING	//
₩1 ₩2	05110-0006	FILTER COVER	/
(P)	05110-0007	BRACKETI DIVIDER	
4P4	05110-2002	CAPI FRONT	ļ
4P5	05110-2035	CAPI REAR	
) 1	1251-0216	CONNECTOR MALE 9-CONTACT TYPE U	
		MISCELLANEOUS	
	0340-0038	TERMINAL 15TLO	İ
	0340-0039	INSULATOR BUSHING	
	05110-2001	SPACER FILTER SHIELD	
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Table 6-11. A18 20/24 MHz-Filter Module (05110-6101) (prefix all parts A15)

Reference Designation	- 1 🚱 - Stock No.	Description #	Note
D. Grant Grant	·····	· · · · · · · · · · · · · · · · · · ·	
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	05.14 4100	DOLDO ARRES A DE MA DEL TRA	7
A1 -	05110~6109 05110-2043	BOARD ASSY.1 24 MC FILTER BLANK BOARD FILTER	
	05110 2015		
A1C1	0160-2055	CIFXO CER 0-01UF +80-20% 100 VUCH	,
A1C2	0160-2055	CIFXO CER 0.01UF +80-20% 100 VDC%	_
A1C3	0160-2055	CIFXD CER C.01UF +80-20% 100 VDC#	1
A1C4	0160-2055	C * FXD CER 0.01UF +80-20% 100 VDC%	
AICS THRU			
*1610		NOT ASSIGNED	-
AICTI	.0169-2055	C:FXO CER C:01UF +80-20% 100 VDCW	
AIC12	0160-0360	CIFXD CER 120 PF 5% 500VDC%	
AIC13	0160-2055	CIFXD CER 0.01UF +80-20% 100 VDC#	
ALC14	0190-0390	CIFXO CER 120 PF 5% VOCW ,	İ
AICI5	0160-2055	C1FXD CER 0.01UF +80-20% 100 VDC#	
A1C16	0160-0360	CIFXO CER 120 PF SE VOCE	
A1C17	0160-2055	CIFAD CER C.OLUF +80-20N 100 VDCH	
AICIB	0160-0360	CIFXO CER 120 PF 5% VDCW	
AIC19	0160-2055	CIFXD CER 0.01UF +80-20% 100 VOCM	
A1C20	0160-0360	CIFXO CER 120 PF 5% VDCW	
A1C21	dian 2055	CASTO CER O ALUE AND AND AND AND AND	
AIC22	0160-2055 0160-0360	CIFXD CER 0.01UF +80-20% 100 VDC% CIFXD CER 120 PF 5% VDCW	
A1C23	0160-2055	CIFXD CER 0.01UF +80-20% 100 VDCW	
A1C24	0160-0360	CIFAD CER 120 PF 5% VOCH	'
AIC25 THRU			1
A1C30		NOT ASSIGNED	1
41641	01-0 0011	4.570 7. 7. 7. 7. 7. 7. 7. 7. 7. 7. 7. 7. 7.	•
A1C31 A1C32	0150-0022 0150-0022	CIFAD TI 3.3 PF 108 500VDCR	1.
A1C33	0150-0041	CIFXO TI 3-3 PF 10% 500VDCW CIFXO TI 2-7 PF 5% 500VDCW	1
A1C34	0150-0041	CIFAD TI R.7 PF SN SOOVDCW	1
A1C35	0150-0041	CIFXO T1 2.7 PF 58 500VDCW	-
	0.50 000		
41C36	0150-6041	CIFXO TI R.7 PF 5% SOOVOCW	
AICST THRU	•	FACTORY SELECTED COMPITYPICAL VALUE GIVEN	1
A1C38		NOT ASSIGNED	1
A1C39	0160-2055	CIFAD CER 0.01UF +80-20% 100 VDCW	
A1C40	0160-2055	CIFAD CER C.OLUF +80-20% 100 VDC%	-
AICAI	0160-2055	CIFXD CER 0.01UF +80-20% 100 VDC#	
uca I	A140 2055	CAPACITA O BANG AND AND AND AND AND AND AND AND AND AND	
N1C42 N1C43	0160-2055 0160-2055	CIFXU CER 0.01UF +80-20% 100 VDCW	
A1C44	0160-2055	CIFXD CER 0.01UF +80-20% 100 VDCW CIFXD MICA 33FF 5% 300VDCW	ļ
1045	0160-0179	CIFXD MICA 33PF 5% 300VDCW	
11046	0160-0179	CIFXO HICA 33 PF 5% 300VDCW	
<u>. </u>	_		1
1047	0160-0179	CIFXD HICA 33 PF 58 300VDCW	
11C48 11C49	0160-0179	CIFXD NICA 33 PF 5% 300VDCW	
	0160-0179	CIFXD MICA 33 PF SN 300VDCW	
LILI	9140-0179	COIL-FXD R.F. 22 UH 108 275 MA	
11.2	9140-0179	COIL-FXD R.F. 22 UH 108 275 MA	
LIL3	9140-0179	COIL-FXD R.F. 22 UH 10% 275 HA	
11.4	08110-4055	NOT ASSIGNED	
VIL5	05110-6085	COILIVARIABLE .3447 UH	
	9170-0105	CORETADJUSTABLE TUNING	
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Table 6-11. A15 20/24 MHz Filter Module (05110-5101) (Cont'd) (prefix all parts A15)

Reference	A a:	Description 4	Note
Designation	Stock No.	Description #	11000
		*	
AIL6	05110-6085	COILIVARIABLE .3447 UH	
*	9170-0105	CORETADJUSTABLE TUNING	
AILT	05110-6085	COILIVARIABLE .3447 UH	
	9170-0105	CORE LADJUSTABLE TUNING	
AIL8	05110-6085	COILIVARIABLE .3447 UH	
	9170-0105	CORETADJUSTABLE TUNING	
AILO	05110-6085	COILIVARIABLE .3447 UR	
	9170-0105	CORE I ADJUSTABLE TUNING	
AIL10	05110-6085	COILIVARIABLE .3447 UH	
1	9170-0105	CORETADJUSTABLE TUNING	
• .	A	COLLIVARIABLE .3447 UH	
AILTI	05110-6085	CORE:ADJUSTABLE TUNING	,
	9170-0105	COILIVARIABLE 3.6-5.8 UR	,
A1Ļ12	05110-6086	CORE ADJUSTABLE TUNING POWDERED IRON	
A 2 1 4 T T LIBIT	9170-0106	CAUR MAGAGINATE CAUTING LANGUES AND	
A1L13 THRU A1L20		NOT ASSIGNED	
41F4A	İ		
A1L21	9140-0179	COIL-FXD R.F. 22 UH 10% 275 MA	
A1L22	9140-0179	COIL-FXD R.F. 22 UH 108 275 MA	
AIL23	9140-0179	COIL-FXO R.F. 22 UH 10% 275 MA	
	,		
AlQÍ	1853-0036	TRANSISTORISTLICON PNP 2N3906	
A192	1853-0036	TRANSISTORISILICON PNP 2N3906	1
A103	1853-0036	TRANSISTORISTLICON PNP 2N3906	
A104	1853-0036	TRANSISTORISILICON PNP 2N3906	
A105	1853-0036	TRANSISTORISTLICON PNP 2N3906	
•		TO A SECTION AND AND AND AND AND AND AND AND AND AN	
A106	1853-0036	TRANSISTORISTLICON PNP 2N3906	
A107	1853-0036	TRANSISTOR STLICON PNP 2N3906	
		DATE OF COMP TOOK OUR TO LAND	
AIRI	0683-3925	RIFXD COMP 3900 OHM 5% 1/4%	
A1R2	0683-3925	RIFXD COMP 3900 OHM 5% 1/4% RIFXD COMP 3900 OHM 5% 1/4%	
AIR3	0683-3925	RIFXD COMP 3900 SMM 5% 1/4%	
AIR4	0683-3925	RIFAD COMP 3900 OFR 5% 1/4%	
AIRS	0683-3925	KIEVO COUE SACO OUG SA 114#	+
4104	A443-3026	RIFXD COMP 3900 OHM 5% 1/4%	İ
A1R6 A1R7	0683-3925 0683-1825	RIFAD COMP 1800 OHN 5% 1/4%	
AIRS	0683-1825	RIFXO COMP 1800 OHM 5% 1/4%	
AIRO THRU	7007-1013	HALLING SOLD SOLD DA ST. M.	l .
AIRIO INCO		NOT ASSIGNED	′
LIRII	0758-0046	RIFXD MET FLM 6200 OHM 54 1/2#	
	J.JU-04-40	1	
AIRÍ2	0758-0046	RIFXD MET FLM 6200 OHM 5% 1/2W	ļ
AIRĪ3	0758-0046	RIFXO MET FLM 6200 OHM 5% 1/2W	1
AIRI4	0758-0046	RIFXO MET FLM 6200 OHM 5% 1/2#	i
AIRIS	0758-0046	RIFXO MET FLM 6200 OHM 5% 1/2#	
AIR16	0758-0057	RIFXO MET CX 5600 OHM 5% 1/2%	
3:: = =			
AIR17	0758-0004	RIFXD MET CX 2700 OHM 5% 1/2W	
AIRIS	0758-0004	RIFXD MET FLM 2700 OHM 5% 1/28	
AIR19 THRU			
A1R20		NOT ASSIGNED	Į.
A1R21	0757-0291	RIFXO MET FLM 24.9 OHM IN 1/8W	1
A1R22	0757-0291	RIFXO MET FLM 24.9 OHM IN 1/8W	
		THE PARTY TO BE A CONT. AND THE STATE OF THE	
AIRTI	0839-0026	THERMISTOR: TOK OHM 10% 25C	
	i		1
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Table 6-11. A15 20/24 MHz Filter Module (05110-6101) (Cont'd) (prefix all parts A15)

Reference Designation	& Stock No.	Description #	Note
ļ			
^2 /	05110-6103	BOARD ASSY:20 MC FILTER	
/ [05110-2041	BLANK BOARCIZOMC FILTER	
A2C1 /	0160-2055	C1FXD CER 0.01 UF +80-20% 100VDCW	
A2C2	0160-2055	CIFXD CER C.O. UF +80-20% 100VDC%	ł
1203	0160-2055	CIFXU CER 0.01 UF +80-20% 100V0CW	
1204	0160-2055	CIFXD CER 0.01 UF +80-20% 100VDCW	
12C5 THRU 12C10		NOT A SELECTED	· ·
12010		NOT ASSIGNED	
12011	0160-2055	C:FXD CER 0.01 UF +80-20% 100VDC#	
A2C12	0160-0359	CIFXO CER 103 PF 5% 500VOC%	
12013	0160-2055	C IFXD CER 0.01 UF +80-20% 100VDCW	
A2C14 A2C15	0160-0360 0160-2055	CIFXD CER 120 PF 5% 500VDC% CIFXD CER 0.01 UF 480-20% 100VDC%	
.2013	0100-5000	C15 YO CEK 0:01 05 +80-20# 10000C#	
2016	0160-0360	CIFXO CER 120 PF 5% 5008D # 16P	
12017	0160-2055	C+FXD CER 0.01 UF +80-20% 100VDCW	
12018	0160-0360	CIFXO CER 120 PF 5% 500VDCW	
12C19	0160-2055 0160-0360	CIFXU CER 0.01 UF +80-20% 100VDC% CIFXU CER 120 PF 5% 500VDC%	
	3100-0300	CHINA CENTRA FE DR DUCYUCH	
2021	0160-2055	CIFXO CER 0.01 UF +80-20% 100VOC%	
2022	0160-0360	CIFXD CER 120 PF 5% 500VDCW	
2023	0160-2055	C 1 F XD CER 0.01 UF +80-20% 100VDC%	
12024 12025 THRU	0160-0360	CIFXD CER 120 PF 5% 500VDCW	
2030		NOT ASSIGNED	
2031	0140-0202	CIFXO MICA 15 PF 5%	
2032	0150-0022	CIFXO TI 3-3 PF ION SOUVOCH	.
2034	0150-0022 0150-0022	C+FXO TI 3-3 PF 10% 500VDCW C+FXD TI 3-3 PF 10% 500VDCW	1
2035	0150-0022	CIFXO TI 3.3 PF 10% 500VDCW	
2036	0150-003#		
20,70	0150-0034	FACTORY SELECTED PARTITYPICAL VALUE GIVEN	
2037 THRU		The state of the s	
2038	4	NOT ASSIGNED	
2039	0160-2055	C1FXD CER 0.01 UF +80-20% 100VDC%	
2C40 2C41	0160-2055 0160-2055	CIFXD CER G.01 UP +80-20% 100VDCW CIFXD CER G.01 UP +80-20% 100VDCW	
2042	0160-2055	CIFXD CER 0+01 UF +80-20% 100VDCW	
2043	0160-2055	CIFAD CER 0.01 UF +80-20% 100VDCW	
2C44 2C45	0160-0179 0160-0179	CIFXD MICA 33 PF 5M 300VDCM CIFXD MICA 33 PF 5M 300VDCM	
2046	0160-2055	CIFXD CER G.O1 UF +80-20% 100VDCW	
			١,,
2047	0160-0179	CIFXO MICA 33 PF 5% 300VDCW	· /
2C48 2C49	0160 - 0179 0160-0179	CIFXD MICA 33 PF 5% 300VDCW	
2050	0160-0179	CIFXO MICA 33 PF 58 300VDCB CIFXO MICA 33 PF 58 300VDCB	
_			
2L I	9140-0179	COIL-FAD R.F. 22 UH 10N 275 MA	
2L2	9140-0179	COIL-FAD R.F. 22 UH 10% 275 MA	
2L3 2L4	9140-0179	COIL-FXD R.F. 22 UH 108 275 MA NOT ASSIGNED	1
2L5	05102-6114	COILIVAR +4050 UH	,
	9170-0105	CORE LADJUSTABLE TUNING	
	.114-0143	CAUCANDOS INDEE I CHILING	
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Table 6-11. A15 20/24 MHz Filter Module (05110-6101) (Cont'd) (prefix all parts A15)

Reference Designation	Stock No.	Description #	Note
1			
A2L6	05102-6114	C#CLIVAR +46-+50 UH	
	9170-0105	CORE ADJUSTABLE TUNING	1
A2L7	05102-6114	COIL1VAR .4050 UH	
A2L6	9170-0105 05102-6114	CORETADJUSTABLE TUNING	
· 	03102-0114	COILIVAR 4050 UH	!
	9170-0105	CORETADJUSTABLE TUNING	
A2L9	05102-6114	COILIVAR .4050 UH	
	9170-0105	CORETADJUSTABLE TUNING	
A2LIO	05102-6114	COILIVAR .4050 UH	
	9170-0105	CORE ADJUSTABLE TUNING	
A2L11	05102-6114	COILEVAR	-
,	9170-0105	CORE ADJUSTABLE TUNING	
A2L12	05110-6086	COIL: VAR 3.6-5.8 UH	İ
A3 T. T. (04.)	9170-0106	CORE ADJUSTABLE TUNING POWDERED IRON	ĺ
\2L13 THRU \2L20		NAT AREIGNED	
1220		NOT ASSIGNED	ŀ
2L21	9140-0179	COIL-FXD R.F. 22 UH 108 275 MA	
12L22	9140-0179	COIL-FXD R.F. 22 UH 108 275 MA	
A2L23	9140-0179	COIL-FXD R.F. 22 UH 10% 275 MA	
201	1053 0034	TRANSPORTED AND ADDRESS OF THE PARTY OF THE	ł
1201 1202	1853-0036	TRANSISTORISTLICON-PNP 2N3906	
1203	1853-0036 1853-0036	TRANSISTORISILICON PNP 2N3906 TRANSISTORISILICON PNP 2N3906	
1204	I853-0036	TRANSISTORISILICON PNP 2N3906	
1205	1853-0036	TRANSISTORISTLICON PNP 2N3906	1
			1
296 297	1853-0036	TRANSISTORISILICON PNP 2N3906	
247	1853-0036	TRANSISTORISILICON PNP 2N3906	1
2R1	0683-3925	RIFXD COMP 3900 DWM 5% 1/4%	\ \ \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\
2R2	0683-3925	RIFXD COMP 3900 OHM 5% 1/4%	
2R3	0683-3925	RIFXD COMP 3900 OHM 5% 1/4%	-
2R4	0683-3925	RIFXD COMP 3900 OHN 5% 1/4%	i
2R5	0683-3925	RIFXD COMP 3900 OHM 5% 1/4%	1 /
286	0683-3925	RIFXD COMP 3900 OHM 5% 1/4%	
2R7	0683-1825	RIFXD COMP 3900 OHM 5% 1/4# RIFXD ₁₀ COMP 1800 OHM 5% 1/4#	
2R\$	0683-1825	RIFXD COMP 1800 OHM 5% 1/4%	į
2R\$ THRU			
2R10		NOT ASSIGNED	
2R11	/0758-0009	RIFXDEMET FLM 6800 OHM 5% 1/2W	
2R12	0758-6009	BISYD BEY SIM 4000 OWN TO 1000	
2RI3	0758-0009	RIFXD BET FLM 6800 OHM 5% 1/2% RIFXD MET FLM 6800 OHM 5% 1/2%	
2R14	0758-0009	RIFXD/MET FLM 6800 OHM 5% 1/2#	1
2R15	0758-0009	RIFXD MET FLM 6800 OHM 5% 1/28	
2R16	0758-0009	RIFXD MET FLM 6800 OHM 5% 1/2W	}
			1
2R17 2R18	0758~0045 0758~0004	RIFXD MET FLM 3900 OHM 5% 1/2W	1
ZR19 THRU	0730-0004	RIFXD MET CX 2700 OHM 5% 1/2#	1
2R20		NOT ASSIGNED	
2R22	0757-0291	RIFXD MET FLM 24.9 OHM 1% 1/8#	
2R21	0757-0291	RIFXD MET FLM 24.9 OHM 18 1/88	1
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1	1250-0118	CONNECTORIBAC	
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}			
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Table 6-11. A15 20/24 MHz Filter Module (05110-6101) (Cont'd) (prefix all parts A15)

Reference		(prefix all parts A15)	
Reference Designation	Stock No.	Description #	Note
ļ		, , , , , , , , , , , , , , , , , , , ,	
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2 THRU		NOT ARRICHED	ľ
15	1250-0118	NOT ASSIGNED CONNECTORIBNC	
IP1	05110-0005	FILTER HOUSING	
IP2	05110-0006	FILTER COVER	
IP3 IP4	05110-0026 05110-2002	BRACKET: DIVIDER CAP: FRONT	
IP5	05110-2002	CAPI REAR	
1	125120216	CONNECTORIMALE 9-CONTACT TYPE U	
•	1251-0216	<i>f</i>	
		MISCELLANEOUS	
	0510-6207	NUTICAPTIVE 4-40 3/16 SST	ii
	05110-2001	SPACERI FILTER SHIELD	
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Table 6-12. A16 Power Supply Rectifier Assy (05110-6027) (prefix all parts A16)

Reference Designation	Stock No.	Description #	Note
\		Note: A16 not separately replaceable, order 05110-6116 Power Supply Assembly which includes A16, A17, T1, S2.	
A1	05110-6028 05110-2022	BOARO ASSY : RECTIFIER BLANK BOARDIRECTIFIER	
AICI	0180-0205	CIFXO ALUM. 12 UF -10 +79% 150VDCW	
A1C2	0180-0205	CIFXD ALUM- 12 UF -10 +75% 150VOCW	
A1CR1	1901-0049	SEMICON DEVICE DIODE STLICON	
A1CR2 A1CR3	1901-0049	SEMICON DEVICE DIODE SILICON SEMICON DEVICE DIODE SILICON	
A1CR4	1901-0049	SEMICON DEVICE DIDOE SILICON	
A1CR5	1901-0026	SEMICON DEVICE IDIONE SILICON 200PIV	
AICR6	1901-0026	SEMICON DEVICE DIODE SILICON 200PIV	
AICR7	1901-0026	SEMICON DEVICE LOIGOE SILICON 200PIV	
AICRB AICR9	1901-0026	SEMICON DEVICE IDIODE SILICON 200PIV	
AICRIO	1901-0049	SEMICON DEVICE:DIODE SILICON SEMICON DEVICE:DIODE SILICON	
AICR L	1901-6049	SEMICON DEVICE: DIODE SILICON	
AICRIZ	1901-0049	SEMICON DEVICE (DIODE . SIL 1 CON	
AICRIJ AICRI4	1902-0060	SEMICON DEVICE IDIODE SILICON	
AICR15	1902-0061 1902-0058	SEMICON DEVICE DIODE SILICON SEMICON DEVICE DIODE SILICON	
AICRI6	1901-0025	SEMICON DEVICE IDIODE JUNCTION	
AICR17	1902-0059	SEMICON DEVICE DIODE SILICON	
AICR18	1901-0025	SEMICON DEVICEIDIODE JUNCTION	
A1CŘ19 A1CŘ20	1901-0025 1901-0025	SEMICON DEVICE DIODE JUNCTION SEMICON DEVICE DIODE JUNCTION	•
A1CR21	1902-0080	SEMICON DEVICE DIODE SILICON	
AICR22	1902-0079	SEMICON DEVICE DIONE SILICON	
AICR23	1901-0025	SEMICON DEVICE:DIODE JUNCTION	
A1CR24	1901-0025	SEMICON DEVICE DIODE JUNCTION	
Alfi Alf2	2110-0001 2110-0001	FUSEILO AMP 250V	
	•	FUSE 11.0 AMP 250V	;
A101	1850-0064	TRANSISTOR GERMANIUM, 201183 PNP	
Alri Airi	0757-0290	RIFXO MET FLM 6.19K OHM 18 1/AW	•
AIRS	0757-0290 ° 0757-0289	RIFXD MET FLM 6.19K OHM IN 1/8# RIFXO MET FLM 13.3K OHM IP 1/8#	
AIR4	0757-0289	RIFXD MET FLM 13-3K OHM 18 1/8#	
A1R5	0757-0290	RIFXD MET FLM 6+19K OHM 18 1/8%	
LIR6	0757-0290	RIFXD MET FLM 6-19K OHM 18 1/88	
12	05110-6013	BOARD ASSY. ILIMITER	
	05110-2019	BLANK BOARC IN MITER	
12C1	0170-0055	C:FXU MY 0.1UF 20% 200VDCW	
1	0170-0055	C1FXU MY 0+1UF 20% 200VDCW -	,
1201	1851-0017 1850-0062	TRANSISTORIZANI304	-
		TRANSISTOR GERMANIUM ALLOY JUNCTION	
12RI 12R2	0683-4715 0812-0017	RIFXD COMP 470 OHM 5% 1/4%	
2R3	0683-3935	RIFXU MW 0.25 OHM 5%,3W RIFXD COMP 39K OHM 1/4%	
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Table 6-12. A16 Power Supply Rectifier Assy (05110-6027) (Cont'd) (prefix all parts A16)

		(prefix all parts A16)	
Reference Designation	Stock No.	T Description #	Note
A2R4	0683-3935	RIFXD COMP 39K OHM 1/4W	
A2R5	0683-4715	RIFXU COMP 470 OHM 5% 1/4%	
A2R6	0812-0017	RIFXU ## 0+25 OHM 5% 3W	
	·	•	
Cı	£180-0128	C1FXU ELECT 3000UF -10+30% 30VDC%	*
63	30,80-0204	CIFXO ALLUM 2800 UF 40 VDCW +100 -10% BEAD: FERRITE	
64 64 64	3178-8818	BEAD: FERRITE	İ
01	1854-0020	TRANSISTORINAN SILICON	
	1200-0076	INSULATORITANISTOR CLAMPITRANSISTOR	
	1200-0092	BUSHING: TRANSISTOR	-1
02	1854-0003	TRANSISTOR APN SILICON	
•	1200-0080	WASHERIFLAT INSULATING ANODIZED AL 0.53100	ļ
	1205-0025	NUTTHEAT DISSIPATOR	·
Q3	1205-0026	HEAT DISSIPATORIBODY	
u 5	1200-0080	TRANSISTOR PNP STLICON BOV 900MW WASHER FELAT INSULATING ANODIZED AL 0.5310D	
	1205-0025	NUTTHEAT DISSIPATOR	
	1205-0026	HEAT DISSIPATOR BODY .	j
04	1850-0098	TRANSISTOR GERMANIUM PNP SELECTED	ì
	1200-0043 1200-0081	INSULATOR: TRANSISTOR ANODIZED ALUMINUM BUSHING: INSULATOR NYLON	
T1	9100-0175	TRANSFORMER : POWER	
	1 5	MISCELLANEOUS	
	0380-0059	SPACERISLEEVE BRS CP 0.2500XU.152IDX0.25	
	0510-0207	NUTICAPTIVE 4-40 3/16 SST '	
	1251-0194	CONNECTORIPRINTED CIRCUIT 15-CONTACT	
	1400-0010 0403-0150	CLIPIELECTRICAL PH BRZ NP 13/32X3/8X1/2 SUPPOPTIPLASTIC	
	05100-2046	MOUNTING : CAPACITOR	
	05110-0004	BRACKET: TRANSISTOR	
	05110-0013 05110-6027	BRACKETI TRANSFORMER RECTIFIER ASSY. I POWER SUPPLY	İ
4300			
W. P. C.			
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Table 6-13. A17 Power Supply Regulator Assy (05110-6018) (prefix all parts A17)

Reference Designation	⊕ Btock No.	Description #	Note
		Note: A16 not separately replaceable, order 05110-6116 Power Supply Assembly which includes A16, A17, T1, S2.	
A1	05102-6036	BOARDI ASSY. REGULATOR	
	05102-2008	BLANK BOARD IREGULATOR	
AICI	0180-0049	CIFXD ELECT 20UF SOVOCH	
V1CS	0180-0049	CIFXD ELECT 20UF SOVDCW	
Alcái Alcáz	1902-0506 1902-0506	DIODE:BREAKDOWN 4.7V DIODE:BREAKDOWN 4.7V	1
Algi	1851-0017	TRANSISTOR I 2N1 304	,
A102	1854-0003	TRANSISTORINAN SILICON	
4103	1853-0001	TRANSISTORIPHP SILICON BOY GOOHE	
A104 A105	1850-0062 05100-6188	TRANSISTORIGERMANIUM ALLOY JUNCTION TRANSISTOR ASSYI 6.39	
A106	05100-6187	TRANSISTOR ASSY: 12.6V	
AlR1	0757-0288	RIFXD HET FLM 9.09K OHM IN 1/8#	
A IRZ	0757-0288	RIFXD MET FLM 9.09K OHM IN 1/8W	
AIR3 Air4	0758-0003 0758-0003	RIFXO MET FLM 1000 OHM 5% 1/2#	
AIRS	0757-0086	RIFXO MET FLM 1000 OHM 5% 1/2W RIFXO MET FLM 51 OHM 2% 1/2W	
AIR6	0757-0086	RIFXD MET FLM 51 OHM 28 1/29	
AIRT	0698-3122	RIFXD MET FLM 412 OHM 18 1/88	
Alro Alro	2100-0325	RIVAR BW 100 OHM 10% LIN 1/4W	
AIR10	0757-0287 2100-0325	RIFXO MET FLM 499 OHM IN 1/2W RIVAR WW 100 OHM ION LIN 1/4W	
AIRLI	0698-3443	RIFXO MET FLM 287 OHN 19 1/89	
AIR12	0758-0066	RIFXD MET FLM 620 OHM 5% 1/2W	
11R13 11R[4	0758-0066	RIFXO MET FLM 620 OHM 59 1/29	
AIR15	0758-0004 0758-0066	RIFXD MET FLM 2700 OHM 58 1/28 RIFXD MET FLM 620 OHM 58 1/28	
IR16	0758-0066	RIFXD MET FLM 620 OHM 5% 1/2W	
VIR 17	0758-0004	RIFXD MET FLM 2700 OHN 5% 1/2%	
LIRÎB LIRÎO	0698-3150	R#FXD MET FLM 2370 OHM 1% 1/8W	
IR20	0757-0317 0683-3025	RIFXD MET FLM 1.33K OHM 11 1/8W RIFXD COMP 3000 DHM 5% 1/4%	
1R21	0757-0401	R:FXD MET FLM 100 OHM 11 1/8W	
12	05100-6059	CAPACITOR & COIL ASSYLINGLUDES CL & L1	
د،	A	FILTER ASSEMBLY	
.5	051006059	CAPACITOR & COIL ASSYTINCLUDES C1 & L1 FILTER ASSEMBLY	
,	0160-0127	CIFXD CER 1UF 20% 25VDCW	
á	0160-0127	CIFXD CER 1UF 208 25VDC#	
PI	05110-0010	HOUSING: POWER SUPPLY	
P2 P3	05110-0011	BRACKET: POWER SUPPLY	
	05110-0012	COVERT POWER SUPPLY	
5	1854-0020	TRANSISTORINAN SILICON	
	1200-0076	INSULATOR ! TRANISTOR	
	1200-0087 1200-0092	CLAMP : TRANSISTOR	
	1804.0074	BUSHING: TRANSISTOR	
		j	

Table 6-15. A17 Power Supply Regulator Assy (05110-6018) (Cont'd) (prefix all parts A17)

Reference Designation	Stock No.	Description ∉		Note
	•		Wy w	
96	TRANSISTORIGERMANIUM PNP SELECTED 1200-0043 1850-0043 1			
		MISCELLANEOUS		
	0510-0124 0510-0208 1251-0382	NUTICAPTIVE 6-32 ST CP NUTICAPTIVE 8-32 CONNECTORIIZ-TERMINAL		
 		•		
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Table 6-14. A18 Selector Switch Assy (05110-6017) (prefix all parts A18)

61	3100-0706 0340-0038 0340-0039 05110-6036 05110-6037 05110-6038	SVITCH: ROT 2POS, FREQ STD TERMINAL: STUD INSULATOR: BUSHING CABLE ASSY: EXT FREQ INPUT CABLE ASSY: OSCILLATOR CABLE ASSY: CRYSTAL CAP: BELECTOR SVITCH HOUSING: SELECTOR SVITCH	
	0)110-0027	nousing: Salacion Switch	
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See list of abbreviations in introduction to this section

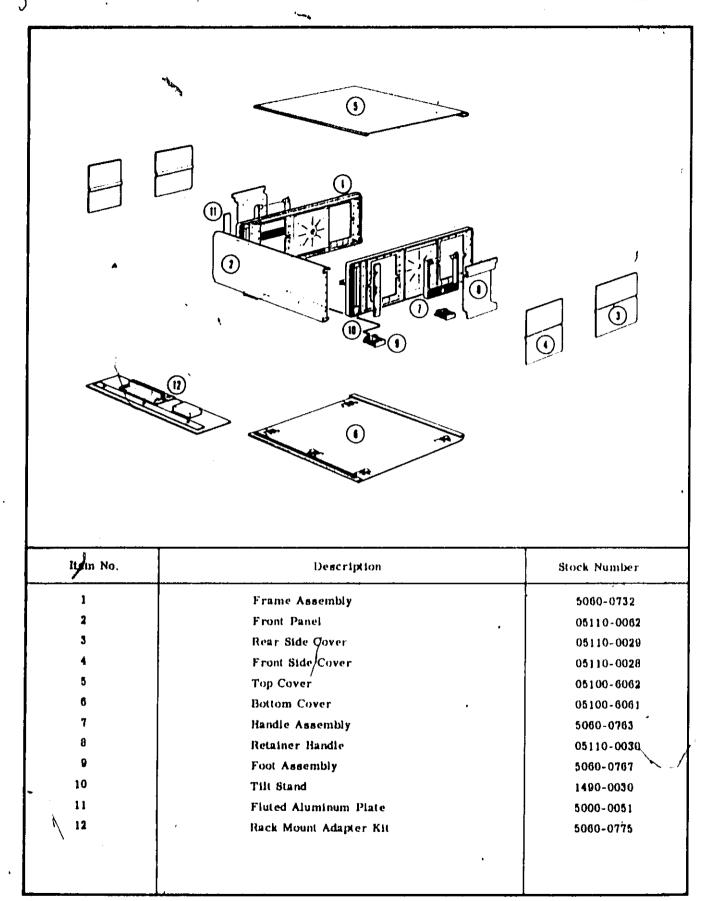


Figure 6-1. Modular Cabinet Parts

Table 6-15. Replaceable Parts

∯ Stock No.	Description #	Mir.	Mir. Part No.	то
0121-0013	CIVAR AIR 6-100-5PF	80486	080	1
0122-0005	CIVAR VOLTAGE 39 PF AT -4V	28480	V39	1
0130-0003	CIVAR CER 1-5-7PF 500VUCH	-72982	503-000C0P0-10R	1
0130-0017	CIVAR CER 8-50 PF	28480	0130-0017	1
0140-0101	CIFXD HICA 15PF 5% 500 VDCW	00853	RCM15C150J	10
0140-0145	CIFXO HICA 22 PF 58 500 VOCH		DH15C220J	6
0140-0149	CIFAD HICA 470 PF 5% 300 VDCW		OM15F471J	2
0140-0152	CIFXD MICA 1000 PF 5% 300 VDC% CIFXD MICA 4700 PF 10% 300 VDC%	,	DM16F102U DM20F472K	1 2
0140-0162 0140-0176	CIFAD HICA 100 PF 28 300 VDCB		DH15F1016 300V	[]
0140-0178	C1FXD H]CA 560 PF 28 300 VDCW	04062	DM15F561G 300V	14
0140-0160	CIFXO MICA 2000 PF 28 300 VOCE		DM19F202G (300V)	1
0140-0182	CIFNO HICA 5000 PF 28 300 VDCW		DM20F502G 300V	i
0140-0164	CIFXD MICA 8200 PF 18 100 VDC9		DM20F822F 100V	4
0140-0189	CIFXO MICA 5825 PF 28 300VDCW	04062	UM20F58259	1
0140-0190	CIEND HICA 39 PF 58 300 VOCE		DM15E390J 300V	9
0140-0191	CIFAD HICA 56 PF 5% 300 VDCW		DM15E560J 300V	2
0140-0192	CIFXD HICA 68PF 3N 300VDCW		DM15E680J	2
0140-0202 0140-0204	CIFXO NICA 15 PF 5% CIFXO NICA 47PF 5% NPO 500VQC#		0140-0202 0H15E470J	11
0140-0205	CIFXD HICA 62PF 5% 300VDCW	04062	DM15E620J 300V	,
0140-0206	CIFXO HICA 270PF 5% 500VUCW		DM15F271J 500V	1
0140-0207	CIFAD HICA 330PF 5% 500VDCM		UM15F331J 500V	i
0140-0215	CIFAD MICH BOPF 28 300VDCW		DH15E8005 300V	2
0140-0230	CIFXD MICA 420PF 18 300VDCR	04062	DH15F4212 300V	2
0150-0011	CIFXD TI 1.5PF 201 500VDCW		TYPE GA	4
0150-0015	CIFAD TI 2.2 PF 5% 500VDC#		TYPE GA	12
0150-0022	CIFXO T1 3.3 PF LON 500VUCH	78488	I .	22
0156-0029	CIFXD 11 IPF 10% 500VDCW		TYPE GA 2PF 5%	110
0150-0031	CIFXD TI 2PF 5% 500VDCW	/0400		112
0150-0034	CIEND 11 3.9 PF 10* 500 VDC*		TYPE GA	5
0150-0041	CIFXD TI 247 PF. 5% 500VDCW		TYPE GA	24
0150-0042 0150-0044	- CIFXO 11 4.7 PF 5% 500 VOC% - CIFXO 11 5.6 PF 5% 500 VOC%		TYPE GA	7
0150-0047	CIFXO TI 6.8 PF 10% 500 VDC%		TYPE GA	4
0150-0093	CIFXD CER 0+01 UF" +80-20% 100VLC#	91418	TA	2
0150-0098	CIFXD CER-0.01 UF 1000 VDCW	91418	1	5
0150-0110	CIFXD CER 470PF 58 300VDCW		CB 1864 471J P3K	ı
0150-0117	CLEND CER 100PF 10% 500VUC#		CC20 TCN 100	139
0150-0121	CIFAD CER O-JUF 50 VDC=	56289	5C50A	139
0160-0127	CIFRO CER LUF 208 25VDCW	56289	1	3
0166-0161	CIFXD O.OLUF 10%	_	0160-0161	8
0160-0162	CIFXO NY 0.022UF 10%	_	0160 0162	1
0160-0168 0160-0178	CIFXD 0-1UF 10R CIFXD HICA 27PF 5% 300VDC%		DM15E270J	7 2
0160-0179	CIFED MICA 33 PF 5% 300VUC#	04062	DH15E330J 300V	88
0160-0162	CIFAD HICA 47PF 54 300VDC#		CD15E470J 300V	ξ,
160-0217	CIFXO HICA 230C PF 18 300VDC8		0160-0217	li
160-0336	CIFXD HICA 267 PF IN 300VDCW	1	0160-0338	l i
160-0345	CIFXO CER 1000PF +80%-20% 500VUCW FEEDTH	RU 01121	F828-102E	3
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Table 6-15. Replaceable Parts (Cont'd)

♦ Stock No.	Description ∉	Mír.	Mir. Part No.	TO
0169-0357	CIFAD CER DISK 65PF 58		TB62850JS1G	22
0160-0356	I CIPAU CER DISK 94PP S#	71590	TB82940JS1G	ĺΖO
0166-0359	CIFAD CER DISK 103PF 58	71590	DA162-0697	12 1
0160-0360 0160-0361	CIFXD CER DISK 120PF 58 SOOVDCB		DA163-022J DA-163-023J	20
0160-0362	C-FXD NICA 510 PF 58	18460	0160-0362	
0160-0363	CIFAD MICA 620 PF 5R			2
0160-2055	CIFXD CER 0+01UF +80-208 100 VDCW	91418	0160-0363	757
0160-2595	CIFXD CER 68 PF 28 600VDCW		TCL-68	257
0176-0055	CIFXO MY 0.1UF 20% 200VOCW		192010402	1 2
0170-0084	CIFXD MY 0.068UF 20% SOVDCW CIFXD ELECT 20UF SOVOC% CIFXD ELECT TA 4.7UF 10% 35VDE% CIFXD ELECT 3000UF -10+30% 30VDCW CIFXD ALUM 2800 UF 40 VDCW +100 -10%	84411	SOIPE STYLE 3	2
0180-0049	CIEXO ELECT 20UF SOVOCE	56289	30D198A1	2
0180-0100	CATAD ELECT TA 4.7UF 108 35VOEN	56269	1500475x903582	6
0180-0128	CIPKU ELECT 3000UF -10+30% 30VDEW	00853	505 1010 02	1
0189-0204				1
0180-0205	C4FXD ALUM- 12 OF -10 +75% 150VOCW	05571	300126G1500H4	2
0340-0034	TERMINAL ISTUD	28480	0340-0039	46
0340-0039	INSULATOR BUSHING TERMINAL LUG 3-TERMINAL		HP-3000TD1	38
0360-0351	TERMINAL SLUG 3-TERMINAL		332-14-05-201	2
0370-0112			0370-0112	2
0380-0059	SPACER: SLEEVE BRS CP 0.2500X0.15210X0.25	00866	OBD#	2
0510-0123	FASTENER I PUSH-ON TYPE	78553	C12008-014-4	3
0510-0124	FASTEMERIPUSH-ON TYPE MUTICAPTIVE 6-32 ST CP MUTICAPTIVE 4-40 3/16 SST NUTICAPTIVE 8-32	83324	RPN 6-32 SC	51
0510-0207	NUTICAPTIVE 4-40 3/16 SST	42498	NCN-4-3-2-4	87
0510-0206			JIFFY CE103-82	8
0683-1025	RIFXD COMP 1000 0HM 58 1/48 RIFXD COMP 10K OHM 58 1/48	01121	CB 1025	64
0683~1035 0683~1235	RIFKO COMP 10K ONN 5% 1/48	01121	CB 1035	12
0683-1335	RIFXD COMP 12K OHM 58 1/4W RIFXD COMP 13K OHM 58 1/4W		CB 1235	2
0483-1515	RIFXD COMP 150 OHN 58 1/4W		CB 1335 CB 1515	1
0683-1525	RIFXD COMP 150 OHM 58 1/48	01121	CB 1525	10
0683-1825	R1FXD COMP 1800 OHK 5% 1/4%	01121	CB 1825	36
0683-2025	RIFXD COMP 2000 OHM 5N 1/4W	01121	CB 2025	1
0643-2035	RIFXU COMP 20K OHM 5% 1/4#	01121	CB 2035	i
0683-2205	RIFED COMP 22 OHN 58 1/4#	01151	CB 2205	1
0683-2215	RIFXD COMP 220 OHM 58 1/48		CB 2215	1
0683-2725	RIFXD COMP 2700 OHM 58 1/4#	01121	CB 2725	2
0683-2735	RIFXD COMP 27K OHM 58 1/4W		CB 2735	1
0683-3025 0683-3915	RIFXD COMP 300C OHM 5% 1/4% RIFXD COMP 390 OHM 5% 1/4%		CB 3025 CB 3915	12
0683-3925	RIFXD COMP 3900 OHH 58 1/4#	01121		- 1
0683-3935	RIFXD COMP 39K OHM 1/4#		CB 3925 CB 3935	63
0683-4325	RIFXD COMP 4300 OMM 58 1/4#		CB 4325	2 2
0683-4715	RIFKD COMP 479 OHM 5% 1/48		CB 4715	6
0683-4725	RIFXD COMP 4700 OHM 58 1/48		CB 4725	Ĭ
0683-4735	RIFKD COMP 47K OHN SR 1/48	01121	CB 4735	2
0683-5605	RIFXD COMP 56 OHM 58 1/48		CB 5605	10
0683-5625	RIFXD COMP 560 OHM SR 1/48		CB 5625	io
0683-7515	A I FXD COMP 750 OHH 58 1/4W	01121	CB 7515	10
0683-4215	RIFXD COMP 82Q OHM 5% 1/4#	01121	CB 8215	1
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[#] See list of abbreviations in introduction to this section

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Table 6-15. Replaceable Parts (Cont'd)

♦ Stock No.	Description ∉	Mír.	Mir. Part No.	тс	n
0689-0565	R FXD COMP 5.6 OHM 51 1W				
0698-3177	R. F.XD MET FLM 412 OHM 14 1/8W	01171	GB 5665	!	
0698-3150	RIFXO MET FLM 2370 0HM 14 1/8W		0698 - 3177	3	
0698-3443	RIFXD NET FLM 287 OHM 14 1/8W		0698-3150	1	
0727-0187	RIFXD DEPC 37.4K OHH 1% 1/2W		0698-3443 DC 1/2CR5	1	
0727-0215	RIFAD DEPC 123K OHM 1/28 1/28		DC 1/2A 15	1 !	!
0727-0221	RIFAD DEPC 200K OHM IN 1/2W		0727-0221	;	1
0727-0405	R:FXD DEPC 57.46K OHN 1/2% 1/8%	19701	DC 1/2 AR5	1	,
0757-0086	RIFXD HET FLH 51 OHH 28 1/28	07115		2	1
0757-0270	RIFXD MET FLM 249K OHM IN 1/6W		0757-0270	1	1
0757-0287	RIFXD MET FLM 499 OHM IN 1/28		MF7C-T2	1	1
0757-0288	RIFXD MET FLM 9.09K OHM 18 1/86	i -	MF6C-TO	2	1
0757-0289 0757-0290	R FXD MET FLM 13.3K OHM 14 1/8W		0757-0289	2	1
0757-0291	RIFXD MET FLM 6.19K OHM 14 1/8W	78480	0757-0790	4	1
0757-0316	RIFXO MET FLM 24.9 OHM 11 1/8W	28480	0757-0291	44	1 9
0757-0312	RIFXD MET FLM 42.2 OHM 11 1/8W	28480	0757-0316	- 3	1 1
0757-0349	RIFXO MET FLM 1,33% OHM 1% 1/8W RIFXO MET FLM 22.6% OHM 1% 1/8W	26460	0757-0317		1 1
0757+0401			0757-0349	1	1
075 -0899	RIFAD MET FLM 100 OHM 1% 1/8W RIFAD MET FLM 91 OHM 2% 1/8W	78480	0757-0401	1	1
0757-0908	RIFXD MET FLM 220 OHM 28 1/88	20460	0757-0699	1	
0757-0917	RIFXD MET FLM 510 OHM 28 1/88		0757-0908	1	1
0757-0922	RIFXD MET FLM 820 OHM 28 1/88		0757-0917 0757-0922	1	1
0757-0924	RIFXD MET FLM 1000 OHM 28 1/68		0757-0924	1 2	1
0757-0934	RIFXD MET FLM 2700 OHM 28 1/88	28480	0757-0934	1	1
0757-0936	RIFXD HET FLM 3300 OHM 24 1/89	28480	0757-0936	li	ì
0757-0937	RIFXO MET FLM 3600 OHM 28 1/89	28480	0757-0937	- I I	ī
0757-0940	RIFXD HET FLN 4700 OHH 28 1/88	28480	0757-0940	1	1
0757-0949	RIFXD MET FLM 11K OHM 2% 1/6%	28460	U757-0949	1	1
0756-0002	RIFXD MET FLM 560 OHM 5% 1/2#	07115	C 20	2	1
0758-0003	RIFXD MET FLM 1000 OHM 54 1/29		C 20/1K-5%-1/2W	5	1
0758-0004	RIFXD MET OX 2700 OHM 58 1/28		0758-0004	25	5
0758-0005 0758-0006	RIFXD MET OX 4700 OHM 58 1/2W RIFXD MET FLM 10K OHM 58 1/2W	28480	0758-0005 C 20	2	1
0758-0006	RIFXD MET FLM 390 OHM 58 1/28	07115	C 20		
0758-0009	RIFXD MET FLM 6800 OHM 58 1/28	07115		1	1
0758-0010	RIFXD HET OX FLM 3300 OHM 58 1/28		0758-0010	18	4
0758-0012	RIFXD MET FLM 12K OHM 58 1/28	07115			1
0756-0013	RIFXD MET FLM 120 OHM 5% 1/2%	07115		2	1
0758-0015	RIFXD MET FLM 220 OHM 5% 1/2%	07115	C 20	١	1
0758-0017	RIFAD MET FLM 1500 OHM 5% 1/2%	07115		1 1	1
0758-0020	RIFXD MET FLM 22K OHM 5% 1/2%	07115	C 20/22K-5%	1	1
0758-0024	RIFXD MET FLM 100 OHM 58 1/28	07115	C 20	1	1
0756-0029	RIFXD MET FLM 470 OHM 5% 1/2%	07115	C 20	3	1
0758-0035	RIFXD MET FLM 3000 OHM 58 1/28	07115	· 30		_
0758-0044	RIFXD HET FLH 2200 OHN 58 1/28	07115		12	3
0758-0045	AIFXD MET FLM 3900 OHM 54 1/28		C 20 0758-0045		1
0758-0046	RIFXD HET FLN 6200 OHM 58 1/28	07115	- -	40	1
0758-0048	AIFXD HET FLM 8200 OHM 58 1/28	07115	20		1
0758-0054	RIFXD HET FLM 330 OHM 58 1/28	07115		2	ī
0758-0057	RIFXD HET FLM 5600 OHN 58 1/28	07115		28	6
0758-0066	A I FXD HET FLM 620 OHM 58 1/20	07115		5	1
0758-0096	RIFXD MET FLM 110 OHM 59 1/29	07115	:-20	4	1

Table 6-15, Replaceable Parts (Cont'd)

Stock No.	Description ∉	Mír.	Mír.	Part No.	T	QR
0612-0017	RIFAD BW 0.25 CHM 58 38	35034	VTA 3			
0839-0012	THERMISTOR : SOK OHM 108	83186				١
0839-0026	THERMISTORS TOK OHM TON 250	83136			1.3	
0900-0034	GASKETIBILICONE RUBBER 1-7/1610	02286				1
1120-0152	MICROAMMETER 100 MICROAMPERES		1120-0152		;	
1200-0043	INSULATOR I TRANSISTOR ANODIZED ALUMINUM	76530	294457		2	
1200-0076	INSULATORITRANSISTOR	02735	DF 14A		3	1 :
1200-0060 1200-0081	MASHERIFLAT INSULATING ANDDIZED AL 0.53100		294834		i a	
1200-0087	BUSHINGIINSULATOR NYLON CLAMPITRANSISTOR		9745PECTAL		4	1
1200-0092		1			3	: ا
1205-0025	BUSHINGITRANDISTOR	02735	495334-1	A -	ه	10
1205-0026	NUT HEAT DISSIPATOR		1101A-1	Çí	2	1:
1250-0083			1205-0026		2	
1250-0102	CONNECTORIBNO	91737 01737	UG-1094/U 1250-0102		4	1
1250-0118	CONNECTORIBNO	ł	ł		1	
1250-0149		91737			24	9
1250-0781	CONNECTORIRE COAXIAL BNC RT-ANGLE RECEPT CONNECTORIRE BNC T 2-FEMALE 1-MALE		UG-1179/H		3	1
1251-0131	CONNECTOR I SOCKET FEMALE 1-PIN		3424-3		1	
1251-0194 4	CONNECTOR IPRINTED CIRCUIT 15-CONTACT	95354	69026-1164 50-61575	(RED)	1	
1251-0214	CONNECTORISUBMINAT TYPE O 9-CONTACT FEMALE					
1251-0216	CONSTITUTE A AANTALE A				1 1	3
1251-0362		71468	1251-0362		111	3
1400-0010	CLIPIELECTRICAL PH BRZ NP 13/32x3/8x1/2	71400			1	
1400-0084		75915			1	1
1450-0701	LIGHT: INDICATOR GREEN 10V 13 MA	26480	1450-0701		1	١,
1450-0094	LIGHT FINDICATOR WHITE LOV 13MA		1450-0094		- 1	1 -
1490-0030	STANDITILT	28480	1490 0030		1 1	۱ ا
1850-0020	TRANSISTORIGERMANIUM 2N1143 PMP	01295	2N1143		li	1
1850-0054	TRANSISTORIGERMANIUM 2N652A PNF	04713	2N652A		2	2
1850-0062	TRANSISTORIGERMANIUM ALLOY JUNCTION	28480	1650-0062		3	,
1650-0064	TRANSISTOR GERHANIUM 2N1183 Phr	02735	2N1183		1	1
1850-0090	TRANSISTORIGERMANIUM ZNILAJB PAP		2N11838		⊢l i	li
1850-0091	TRANSISTOP GERMANIUM 2N2048 PAP	87216	2N2048		24	15
1630-0048	1	28460	1620-0099		2	2
1850-0118	TRANSISTOR-PNP GERMANIUM EIA EN2360	82767	2N2360		20	12
1850-0138 1851-0017	TRANSISTORISPLENESSO PHP GERMANIUM MADT	28480	1650-0138		2 1	13
1853-0001	TRANSISTORIZNI304	01295	2N1304		2	
1853-0009	TRANSISTORIPHP SILICON 30V 900Hb TRANSISTORISILICON PNP	28480	1853 0001 1853-0009		5 7	5
1853-0016	TRANSISTORISILICON PNP				'	′
1853-0036	TRANSISTORISILICON PNP 2N3906		1853-0016		1	1
1854-0003	TRANSISTOR NPN SILICON	04713			- 1	20
1854-0020	TRANSISTORINPH SILICON	28480	1854-0003 1854-0020		4	4
1901-0025	SEMICON DEVICE IDIODE JUNCTION	28480	1901 0025		10	10
1901-0026	SEMICON DEVICE IDIODE SILICON MODPLY		1901-0026			
1901-0040	SEMIGON DEVICE IDIODE SILICON		901-0040		5	5
1901-0049	SEMICON DEVICE IDIODE SILICON	28480	1901 0049		1 1	15
1901-0050	SEMICON DEVICE IDIODE SILICON		901 0050		8 3	8
1902-0058	SEMICON DEVICE IDIODE SILICON		902-0059		1	1
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Table 6-15. Replaceable Parts (Cont'd)

1902-0060 1902-0061 1902-0061 1902-0079 1902-0080 1902-0506 1910-0016 1910-0022 2100-0094 2100-0151 2100-0277 2100-0325 2100-0325 R 2100-0326 R 2100-0737 R 2110-0012 F 3100-0707 3101-1234 3101-0038 R 4324-0007 R 4324-0008	EMICON DEVICE:DIODE SILICON EMICON DEVICE:DIODE SILICON EMICON DEVICE:DIODE SILICON EMICON DEVICE:DIODE SILICON EMICON DEVICE:DIODE SILICON IODE:BREAKDOWN 4.7V EMICON DEVICE:DIODE GERMANIUM EMICON DEVICE:DIODE GE 100MA 6PIV 3.5NS IVAR COMP 50K OHM 30R LIN 1/5% IVAR COMP 50K OHM 30R LIN 1/5% IVAR COMP 500 OHM 20R LIN 1/6% IVAR COMP 100 OHM 20R LIN 1/4% IVAR WW 100 OHM 10R LIN 1/4% IVAR WW 50	26480 26480 26480 26480 26480 26480 26480 26480 26480 26480 75915	1902-0059 1902-0060 1902-0061 1902-0079 1902-0080 1902-0506 02361 1910-0022 2100-0094 2100-0151 2100-0277 2100 0325 2100-0326 2100-0737 2110-0001	(30	2
1902-0060 1902-0061 1902-0079 1902-0080 1902-0080 1902-0080 1902-0080 1902-0080 1902-0080 1902-0080 1902-0080 1902-0016 5 1910-0022 5 2100-0094 R 2100-0277 R 2100-0325 R 2100-0328 R 2100-0328 R 2100-0737 R 2110-001 2110-0012 5100-0707 3101-1234 5101-0038 R 4324-0007 R 4324-0008 R	EMICON DEVICE:DIODE SILICON EMICON DEVICE:DIODE SILICON EMICON DEVICE:DIODE SILICON EMICON DEVICE:DIODE SILICON IODE:BREAKDOWN 4.7V EMICON DEVICE:DIODE GERMANIUM EMICON DEVICE:DIODE GE 100MA 6PIV 3.5NS :VAR COMP 50K 0HM 30R LIN 1/5% :VAR COMP 50K 0HM 30R LIN 1/5% :VAR COMP 50O 0HM 20R LIN 1/6W :VAR COMP 100 0HM 20R LIN 0.3% :VAR WW 100 0HM 10R LIN 1/4W :VAR WW 100 0HM 10R LIN 1/4W :VAR WW 500 0HM 10R LIN 18 :VAR WW 500 0HM TYPE H CONFIGURATION USE:CARTRIDGE 1/2AMP 25UV BITCH-ROT 4 POS WITCH:SLIDE 0PDT BITCH:TOGGLE UPDT 3 AMP 125V	26480 26480 26480 26480 26480 26480 26480 26480 26480 26480 75915	1902-0060 1902-0061 1902-0079 1902-0080 1902-0506 02361 1910-0022 2100-0094 2100-0151 2100-0277 2100 0325 2100-0737 2110-0001	(36	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
1902-0061	EMICON DEVICE:DIODE SILICON EMICON DEVICE:DIODE SILICON EMICON DEVICE:DIODE SILICON IODE:BREAKDOWN 4.7V EMICON DEVICE:DIODE GERMANIUM EMICON DEVICE:DIODE GE 100MA 6PIV 3.5NS :VAR COMP 50K OHM 30R LIN 1/5% :VAR COMP 50O OHM 2R LIN 1/6% IVAR COMP 50O OHM 20R LIN 0.3% IVAR COMP 100 OHM 20R LIN 0.3% IVAR WW 100 OHM 10R LIN 1/4% IVAR WW 50O OHM 10R LIN 1/4% IVAR WW 50O OHM TYPE H CONFIGURATION USE:CARTRIDGE 1/2AMP 25UV BITCH-ROT 4 POS WITCHISLIDE OPDT BITCH:TOGGLE UPOT 3 AMP 125V	26480 26480 26480 26480 26480 26480 26480 26480 26480 26480 75915	1902-0060 1902-0061 1902-0079 1902-0080 1902-0506 02361 1910-0022 2100-0094 2100-0151 2100-0277 2100 0325 2100-0737 2110-0001	(36	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
1902-0061 1902-0079 1902-0080 S 1902-0506 1910-0016 1910-0022 2100-0094 2100-0151 R 2100-0325 2100-0328 2100-0328 2100-0737 2110-001 2110-001 2110-001 2110-001 3101-1234 3101-0038 4324-0007 R	EMICON DEVICE:DIODE SILICON EMICON DEVICE:DIODE SILICON EMICON DEVICE:DIODE SILICON IODE:BREAKDOWN 4.7V EMICON DEVICE:DIODE GERMANIUM EMICON DEVICE:DIODE GE 100MA 6PIV 3.5NS :VAR COMP 50K OHM 30R LIN 1/5% :VAR COMP 50O OHM 2R LIN 1/6% IVAR COMP 50O OHM 20R LIN 0.3% IVAR COMP 100 OHM 20R LIN 0.3% IVAR WW 100 OHM 10R LIN 1/4% IVAR WW 50O OHM 10R LIN 1/4% IVAR WW 50O OHM TYPE H CONFIGURATION USE:CARTRIDGE 1/2AMP 25UV BITCH-ROT 4 POS WITCHISLIDE OPDT BITCH:TOGGLE UPOT 3 AMP 125V	28480 28480 28480 28480 28480 28480 28480 28480 28480 28480 28480	1902-0061 1902-0079 1902-0080 1902-0506 02361 1910-0022 2100-0094 2100-0151 2100-0277 2100-0325 2100-0737 2110-0001	(30	1 1 1 2 2 3 3 1 1 1 2 2 2 3 3 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4
1902-0079 1902-0080 1902-0080 1902-0506 1910-0016 1910-0022 2100-0094 2100-0151 2100-0277 2100-0325 2100-0328 R 2100-0328 R 2100-0737 2110-0001 2110-0012 3100-0707 3101-1234 3101-0038 4324-0007 R R	EMICON DEVICE:DIODE SILICON EMICON DEVICE:DIODE SILICON IODE:BREAKDOWN 4.7V EMICON DEVICE:DIODE GERMANIUM EMICON DEVICE:DIODE GE 100MA 6PIV 3.5NS :VAR COMP 50K OHM 30R LIN 1/5% :VAR COMP 500 OHM 2R LIN 1/5% :VAR COMP 500 OHM 2R LIN 1/6W :VAR COMP 100 OHM 20R LIN 0.3% :VAR WW 100 OHM 10R LIN 1/4W :VAR WW 500 OHM 10R LIN 1/4W :VAR WW 500 OHM TYPE H CONFIGURATION USE:CARTRIDGE 1/2AMP 25UV BITCH-ROT 4 POS WITCH:SLIDE OPDT BITCH:TOGGLE UPOT 3 AMP 125V	26480 28480 93332 28480 28480 28480 28480 28480 28480 28480	1902-0079 1902-0080 1902-0506 02361 1910-0022 2100-0094 2100-0151 2100-0277 2100 0325 2100 0326 2100-0737 2110-0001	(30	1 2 2 3 3 1 1 1 2 2 2 2
1902-0080 S 1902-0506 U 1910-0016 S 1910-0022 S 2100-0094 R 2100-0151 R 2100-0325 R 2100-0328 R 2100-0737 R 2110-0012 F(3100-0737 R 3110-0012 F(3100-0737 R 3101-1234 S(3101-0038 R) 4324-0007 R(EMICON DEVICE:DIODE SILICON IODE:BREAKDOWN 4.7V EMICON DEVICE:DIODE GERMANIUM EMICON DEVICE:DIODE GE 100MA 6PIV 3.5NS :VAR COMP 50K OHM 30R LIN 1/5% !VAR COMP 50O OHM 2R LIN 1/6% !VAR COMP 100 OHM 20R LIN 0.3% !VAR COMP 100 OHM 20R LIN 1/4% !VAR WW 100 OHM 10R LIN 1/4% !VAR WW 50O OHM 10R LIN 1% !VAR WW 50O OHM TYPE H CONFIGURATION USE:CARTRIDGE 1/2AMP 25UV BITCH-ROT 4 POS WITCH:SLIDE OPDT BITCH:TOGGLE UPOT 3 AMP 125V	28480 93332 28480 28480 28480 28480 28480 28480 28480 75915	1902-0080 1902-0506 02361 1910-0022 2100-0094 2100-0151 2100-0277 2100-0325 2100-0737 2110-0001	(30	2 3 1 1 2 2 2
1910-0016 1910-0022 2100-0094 2100-0151 R 2100-0277 R 2100-0325 R 2100-0328 R 2100-0328 R 2100-0737 R 2110-0001 F 2110-0012 3100-0707 3101-1234 3101-0038 R 4324-0008 R	EMICON DEVICEIDIODE GERMANIUM EMICON DEVICEIDIODE GE 100MA 6PIV 3.5NS IVAR COMP 50K OHM 30R LIN 1/58 IVAR COMP 500 OHM 20R LIN 1/88 IVAR COMP 100 OHM 20R LIN 0.38 IVAR 88 100 OHM 10R LIN 1/48 IVAR 88 500 OHM 10R LIN 18 IVAR 88 500 OHM TYPE H CONFIGURATION USEII.0 AMP 250V USEICARTRIDGE 1/2AMP 25UV BITCH-ROT 4 POS WITCHISLIDE OPDT BITCHITOGGLE UPOT 3 AMP 125V	28480 28480 28480 28480 28480 28480 28480 28480	02361 1910-0022 2100-0094 2100-0151 2100-0277 2100 0325 2100-0737 2110-0001	(30	3 1 1 2 2 2
1910-0022 2100-0094 2100-0151 R 2100-0277 R100-0325 R100-0328 R110-001 2110-001 2110-001 2110-0012 3100-0707 3101-1234 3101-0038 4324-0007 R1	EMICON DEVICE IDIODE GE 100MA 6PIV 3.5NS IVAR COMP 50K OHM 30R LIN 1/58 IVAR COMP 500 OHM 28 LIN 1/88 IVAR COMP 100 OHM 208 LIN 0.38 IVAR 88 100 OHM 108 LIN 1/48 IVAR 88 500 OHM 108 LIN 18 IVAR 88 200 OHM TYPE H CONFIGURATION USEIL.O AMP 250V BITCH-ROT 4 POS BITCHISLIDE OPDT BITCHITOGGLE UPOT 3 AMP 125V	28480 28480 28480 28480 28480 28480 28480 75915	1910-0022 2100-0094 2100-0151 2100-0277 2100-0325 2100-0326 2100-0737 2110-0001	(2
2100-0094 2100-0151 R 2100-0277 R100-0325 R100-0328 R100-0737 R110-0001 F1 2110-0012 3100-0707 3101-1234 3101-0038 4324-0007 R1	IVAR COMP 50K OHM 30R LIN 1/5% IVAR COMP 500 OHM 2N LIN 1/8N IVAR COMP 100 OHM 20N LIN 0.3% IVAR NN 100 OHM 10N LIN 1/4N IVAR NN 500 OHM 10N LIN 1N IVAR NN 200 OHM TYPE H CONFIGURATION USE(1.0 AMP 250V USE(CARTRIDGE 1/2AMP 25UV BITCH-ROT 4 POS WITCHISLIDE OPDT BITCHITOGGLE UPOT 3 AMP 125V	28480 28480 28480 28480 28480 28480 28480 75915	1910-0022 2100-0094 2100-0151 2100-0277 2100-0325 2100-0326 2100-0737 2110-0001	(2
2100-0151 R 2100-0277 R 2100-0325 R 2100-0328 R 2100-0737 R 2110-0001 F 2110-0012 F 3100-0707 S1 3101-1234 S1 3101-0038 S1 4324-0007 R 4324-0008 R	IVAR COMP 500 OHM 28 LIN 1/88 IVAR COMP 100 OHM 208 LIN 0.38 IVAR 88 100 OHM 108 LIN 1/48 IVAR 88 500 OHM 108 LIN 18 IVAR 88 200 OHM TYPE H CONFIGURATION USE:CARTRIDGE 1/2AMP 25UV BITCH-ROT 4 POS WITCHISLIDE OPDT BITCHITOGGLE UPOT 3 AMP 125V	28480 28480 28480 28480 28480 28480 28480	2100-0094 2100-0151 2100-0277 2100 0325 2100 0326 2100-0737 2110-0001	1		2 2
2100-0277 R 2100-0325 R 2100-0328 R 2100-0737 R 2110-0001 F 2110-0012 F 3100-0707 SI 3101-1234 SI 3101-0038 SI 4324-0007 R 4324-0008 R	IVAR COMP 100 OHM 20% LIN 0.3% IVAR WW 100 OHM 10% LIN 1/4% IVAR WW 500 OHM 10% LIN 1% IVAR WW 200 OHM TYPE H CONFIGURATION USE:CARTRIDGE 1/2AMP 25UV WITCH-ROT 4 POS WITCHISLIDE OPDT WITCHITOGGLE UPOT 3 AMP 125V	28480 28480 28480 28480 28480	2100-0277 2100 0325 2100 0326 2100-0737 2110-0001			2
2100-0325 R 2100-0328 R 2100-0737 R 2110-0001 Fi 2110-0012 Fi 3100-0707 St 3101-1234 St 3101-0038 St 4324-0007 Rt	IVAR NW 100 OHM 10% LIN 1/4% IVAR NW 500 OHM 10% LIN 1% IVAR NW 200 OHM TYPE H CONFIGURATION USEIL-O AMP 250V USE-CARTRIDGE I/2AMP 250V BITCH-ROT 4 POS WITCHISLIDE OPDT BITCH-ITOGGLE UPOT 3 AMP 125V	28480 28480 28480 28480 75915	2100 0325 2100 0326 2100-0737 2110-0001			2
2100-0328 R 2100-0737 R 2110-0001 F1 2110-0012 F1 3100-0707 S1 3101-1234 S1 3101-0038 S1 4324-0007 R1	IVAR WW 500 OHN 10% LIN 1% IVAR WW 200 OHN TYPE H CONFIGURATION USEIL-0 AMP 250V USEICARTRIDGE I/2AMP 250V BITCH-ROT 4 POS WITCHISLIDE OPDT BITCHITOGGLE UPDT 3 AMP 125V	28480 28480 28480 75915	2100 0328 2100-0737 2110-0001		1	- 1
2100-0737 R 2110-0001 F1 2110-0012 F1 3100-0707 S1 3101-1234 S1 3101-0038 S1 4324-0007 R1	IVAR NW 200 OHM TYPE H CONFIGURATION USEFLA AMP 250V USEFCARTRIDGE I/2AMP 250V BITCH-ROT 4 POS WITCHISLIDE OPDT BITCHITOGGLE UPOT 3 AMP 125V	28480 28480 75915	2100-0737 2110-0001			1
2110-001 F1 2110-0012 F1 3100-0707 S1 3101-1234 S1 3101-0038 S1 4324-0007 R1	USEF1.0 AMP 250V USEFCARTRIDGE 1/2AMP 250V BITCH-ROT 4 POS WITCHISLIDE OPDT BITCHITOGGLE UPOT 3 AMP 125V	28480 75915	2110-0001		1	٠ ا
2110-0012 F1 3100-0707 S1 3101-1234 S1 3101-0038 S1 4324-0007 R1	USE+CARTRIDGE 1/2AMP 25UV BITCH-ROT 4 POS WITCH+SLIDE OPDT BITCH+TOGGLE UPOT 3 AMP 125V	75915				
3100-0707 SI 3101-1234 SI 3101-0036 SI 4324-0007 RI	DITCH-ROT 4 POS WITCHISLIDE OPDT BITCHITOGGLE UPOT 3 AMP 125V				2	2
3101-1234 5: 3101-0036 5: 4324-0007 RI	WITCHISCIDE OPDT BITCHITOGGLE UPOT 3 AMP 125V	74044	312500		1	ı
3101-0038 SI 4324-0007 RI 4324-0008 RI	MITCHITOGGLE UPOT 3 AMP 125V		080#		1	
4324-0007 RI 4324-0008 RI			1.0./		1	- 4
	OLGER SININGONKEME INTOXOLIO	28480 02286	3101-0038 080#		1 2	
	UPBER STRIPINEOPRENE 1X13X3/8	02286	0804		-	ı
3000-0051 TI	AIM STRIPIALUM #ZADHESIVE BACK		- · - · ·		2	
	UPPORT : PLASTIC		5000-0051		2	
	RAMEISIDE 5 1/4 IN		5060-0732		4	- 1
	ANCLE ASSY-SIDE : 2 REQ 10		5060-0763		2	
5060-0767 FC	DOT ASSY-SNAP ON	28480	5060-0767		5	
	ITERACK MOUNTING		5060-0775		1	
	ABLE POWER 7.5FT.	10400	3000 0115		li	
9100-0175 TF	RANSFORMER LPOMER	28480	9100-0175		i	- 4
)100-1790 IN	NOUCTORIRE 0.36 UH 5%	95265			2	
	ELTERIAC LINE (INCLUDES JI)	28480	9110-3112		1	
9[40-0077 CC	DILÍFXO PFI 2.2UH		9140-007		10	- 1
0140-0111 CO	ILIFXD RF 3.3 UH 10%	28480	9140-0111		i	1
	TELFXO PF 220 UHY	28480	9140-0129		46	
0140-0137 CO	DILIFXD PF 100 JHY	28480	9140-0137		6	l
	IL-FXD P.F. 22 UH 10% 275 MA	99800	1537-44		96	2
140-0181 (0	ILIFAD RE 22UH 59		12201H		1	
	OLIFXO PF 62UH 59		1537-72		1	
	DRE FERRITE BEAD DRE FADJUSTABLE TUNING		56-590-654		116	ء اد
170-0106 CO	RE ADJUSTABLE TUNING POWDEREL IRON	05544	A1. 268			ł
The state of the s	OUNTING (CAPACITOR		A1-268		50	l,
	PACITOR & COIL ASSYTINCLUDES CL & LI		05100-2046 05100-6059		1	
	EVER ASSIVE BOTTON		05100-6061		2	
= (VER ASS'Y+1 TOP		05100-6062		1	
5100-6166 CC	IL4 VARIABLE	28480	05100-6166		10	
i i	ANSFORMER I		05100-6167		10	
5100-6170 CO	ILI VARIABLE 3-2-5-6UH		05100-6170		10	
5100-6186 CO	IL! 0-17-0-2004		05100-6166		70	
5100-6187 TR	ANSISTOR ASSY: 12.6V		05100-6187		ĭ	1 -
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[#] See list of abbreviations in introduction to this section

Table 6-15. Replaceable Parts (Cont'd)

Stock No.	Description #	Mfr.	Mfr. Part No.	TQ
			,	
05100-6188	TRANSISTOR ASSY1 6.3V	26480	05100-6188	
05102-6114	COILIVAR .4050 UH	26480	05102-6114	7
02110-0001	BRACKET FILTER	26480	05110-0001	2
02110-0005	GUARDIAC INPUT		05110-0002	1
05110-0003	BRACKET FREQ. STO. HTG	28480	05110-0003	1
05110-0004	BRACKET TRANSISTOR	,	U5110-0004	1
5110-0005	FILTER HOUSING		05110-0005	11
05110-0006	FILTER COVER		05110-0006	[11]
05110-0007	BRACKET DIVIDER		05110-0007	10
05110-0006	COVERI COMB GENERATOR	28480	05110-0006	1 1
05110-0009	HOUSING COMB GENERATOR		05110-0009	1
02110-0010	HOUSING POWER SUPPLY		05110-0010	1
05110-0011	BRACKETE POWER SUPPLY		05110-0011	1
05110-0012	COVERT POWER SUPPLY	"	05110-0012	1 1
05110-0013	BRACKET I TRANSFORMER	28480	05110-0013	1
05110-0014	HOUSING: FREQ. STO.		05110-0014	1
05110-0015	COVER FREQ. STD.		05110-0015	1
05110-0017	INPUT CKT. HOUSING	1 20400	05110-0017	1 1
05110-0018	COVERI INPUT CKT.	28480	05110-0018	1
05110-0019	BRACKETI DIVIDER	, 26480	05110-0019	1
05110-0020	STRAP : POWER SUPPLY		05110-0020	1
05110-0021	BRACKET BOTTOM	28480	05110-0021	2
05110-0022	BRACKET TOP LEFT	28480	05110-0022	1
05110-0023	1 = 1 - 1 = 1 = 1 = 1 = 1 = 1 = 1 = 1 =		05110-0023	1
05110-0024	BRACKETI SIDE	28480	05110-0024	i
5110-0025	PANEL IFRONT		05110-0025	1
5110-0026	BRACKETI DIVIDER		05110-0026	
05110-0028	COVER FRONT SIDE	•	05110-0026	2
05110-0029 05110-0030	COVERI REAR SIDE RETAINERI HANDLE		05110-0029 05110-0030	2 2
		,		
95110-003I	BRACKET: MOUNTING		02110-0031	1 1
05110-0057	SHIELD: SPRING		05110-0057	2
05110-0058	SPRING: GROUNDING.FILTER		05110-0058	5
05110-0060 05110-2001	SPACERICOMB GEN MODULE SPACERI FILTER SHIELD		05110-0060	2
05110-2001 05110-0082	BRACKET: POWER SUPPLY		05110-2001 05110-0082	24
5110-0002 5110-2002	CAPI FRONT		05110-0082	
)5110-2018	BLANK BOARDIDIVIDER	1		11
)5110-2019	BLANK BOARDILINITER		05110-2018 05110-2019	10
05110-2020	BOARDI COMB. GEN.		05110-2019	
5110-2021	BLANK BOARD COMB	,	05110-2021	1
5110-2022	BLANK BOARD RECTIFIER	26460	05110-2022	1
5110-2024	BLANK BOARDTOSCILLATOR	28460	05110-2024	1
5110-2025	BOARD! OVEN CONTROL BLANK		05110-2025	i
5110-2027	CAPI FRONT		05110-2027	1
5110-2026	CAPI REAR	28480	05110-2026	1
5110-2030	GUIDEIM AND F FREQ ADJ		05110-2030	2
5110-2035	CAPI REAR		05110-2035	11
5110-2036	BOARD-INPUT AMP.		05110-2038	1
05110-2034	BOARD-BUFFER AMP.	28480	05110-2039	1
		l	i	1 1

Table 6-15. Replaceable Parts (Cont'd)

OS110-2041 BLANK BOARD120MC FILTER 28480 OS110-2041 OS110-2042 BOARD18LANK PC 28480 OS110-2042 OS110-2043 OS110-6011 ASSYFILTER BOARD 30 & 31 MC 28480 OS110-6011 OS110-6013 BOARD ASSY-ILIMITER 28480 OS110-6013 OS110-	1	Ī
05110-2041 BLANK BOARDIZONC FILTER 28480 05110-2041 05110-2042 BOARDIBLANK PC 28480 05110-2042 05110-2043 05110-6011 ASSYIFILTER BOARD 30 & 31 MC 28480 05110-6011	1	1
05110-2042 BOARDIBLANK PC 28480 05110-2042 05110-2043 05110-6011 ASSYIFILTER BOARD 30 & 31 MC . 28480 05110-6011	_ j + ,	
05110-2043 BLANK BOARDIFILTER 28480 05110-2043 05110-6011 ASSYIFILTER BOARD 30 & 31 MC . 28480 05110-6011		1
05110-6011 ASSYFFILTER BOARD 30 & 31 MC . 28480 05110-6011	1	1
1	11	
	1	١
05110-6014 FREQUENCY STD. ASS'Y. 28480 08110-6014	1	ł
05110-6015 INPUT AMP/BUFFER AMP. ASS'Y. 28480 05110-6015	1 1	1
05110-6017 SWITCH ASSY+1 SELECTOR 28480 05110-6017	1	
05110-6016 REGULATOR ASSY.: POWER SUPPLY 28480 05110-6018	1 4	
09110-6023 COILI VARIABLE 21-34UH 28480 05110-6023	1	1
05110-6024 COIL! VARIABLE 28-45UH 28480 05110-6024	12	
05110-6025 BOARD ASSY. 1 COMB GEN. 28480 05110-6025	1 1	
05110-6027 RECTIFIER ASSY. POWER SUPPLY 28480 QF110-6027	2	۱
05110-6028 BOARD ASSY. I RECTIFIER 28480 05110-6028	1	
05110-6030 OSCILLATOR BOARD ASS'Y. 28480 05110-6030	1	
05110-6031 OVEN CONTROL BOARD ASSY. 28480 05110-6031	i	
05110-6034 CABLE ASSY. (POWER SUPPLY 28480 05110-6034	i	
9110-6035 CABLE ASSY. I AC 28480 05110-6035	1	ļ
5110-6039 CABLE ASSYI DC FREQ. CONTROL 28480 05110-6039	1	
5110-6041 CABLE ASSY.	1	
5110-6042 CABLE ASSY. I (COMB INPUT) 28480 05110-6042	1	
3110-6043 OVEN ASSEMBLY-CRYSTAL 28480 05110-6043	1	
5110-6044 TRAMSFORMER: 28480 05110-6044	20	
15110-6047 COTCI VARIABLE 1.8-3.5UH 28480 05110-6047	10	
5110-6048 COILI VARIABLE 2.6-4.7UH	1	
05110-6049 D100E QVEN ASSY. INCLUDES CR6+ R7+ RY1 28480 05110-6049 3 10-6055 B0ARD ASSY. I DIVIDER 28480 05110-6055	1 2	
05110-6056 GOARD ASSY.I DIVIOER 28480 05110-6056	2	
BOARD ASSY. I DIVIDER 28480 05110-6057	2	
05110-6058 BOARD ASSY. DIVIDER 28480 05110-6058	2	1
5110-6059 BOARD ASSY. DIVIDER 28480 05110-6059	2	
5110-6060 COIL: VARIABLE 13.5-19.0UH 28480 05110-6060	1.1	Į
05110-6061 COILI VARIABLE 3.5-6.0UH 28480 05110-6061 05110-6063 COILI VARIABLE 35-50UH 28480 05110-6063	10	
5110-6064 TRANSFORMER: VARIABLE 28480 05110-6064	2	l
15110-6071 COIL-VARIABLE 4.5-7UH 28480 05110-6071	3	
5110-6072 COIL I FIXED 1850H 28480 05110-6072	1	
5110-6073 COIL-VARIABLE 50-100UH 28480 05110-6073	2	
5110-6085 COILIVARIABLE 434-47 UH 28480 05110-6085	7	1
5110-6081 FILTER: CRYSTAL 28480 05110-6081	1	1
3110-6086 CCIL VARIABLE 3.6-5.8 UH 28480 05110-6086	2	
5110-6088 BOARD ASS'YINPUT AMP. 28480 05110-6086	1 1	1
5110-6089 BOARD ASS'YBUFFER AMP- 28480 05110-6089	1 1	
5110-6092 FILTER/DIVIDER ASS'Y1 31/3-1 MC 28480 05110-6092	i	
5110-6093 FILTER/DIVIDER ASSY1 32/2.2 MC 28480 05110-6093	1	
5110-6094 FILTER/DIVIDER ASSY: 33/3.3 MC 28480 05110-6094	1	l
5110-6095 FILTER/DIVIDER ASSY: 34/3.4 MC 28480 05110-6095	1	
5110-6096 FILTER/DIVIDER ASSY1 35/3.5 MC 28480 05110-6096	1	
5110-6097 FILTER/DIVIDER ASSY: 36/3.6 MC 28480 05110~6097	1	
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Table 6-15. Replaceable Parts (Cont'd)

Stock No.	Description#	Mfr.	Mír. Part No.	ТС	R
			7		
(05110-6098	FILTER/DIVIDER ASSYL 37/3.7 MC	28480	05110-6098	1	1
05110-6099	FILTER/DIVIDER ASSYI 38/3.8 HC	28480	05110-6099	i	
05110-6100 05110-6101	FILTER/DIVIDER ASSY: 39/3.9 MC		05110-6100	1	
05110-6102	COME GENERATOR ASS'Y.		05110-6101 05110-6102	1	i
05110-6103	BOARD ASSY. 120 MC FILTER	28480	05110-6103	1	
05110-6105	BOARDIFILTER	28480	05110-6105	ı	
05110-6106 05110-6108	ASSYTOVEN-INCL HR1+RT1+Y1 TRANSFORMER		05110-6106 05110-6108	i	1
05110~6109 05110~6110	BOARD ASSY. 1 24 MC FILTER BOARD ASSY. 1 COMB GEN.	28480	05110-6109 05110-6110	1	
05110-6112	ASSYIFILTER BOARD 32 & 33 MC	28480	05110-6112	1 2	
05110-6113 05110-6114	ASSYIFILTER BOARD 34 & 35 MC		05110-6113 05110-6114	2 2	i
05110-6115 05107-2008	ASSYIFILTER BOARD 38 AND 39 MC		05110-6115 05102-2008	2	
05102-6036	BOARD: ASSY REGULATOR		05102-6036	1	
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Table 6-16. Code List of Manufacturers

The following rode numbers are from the Federal Supply Citle for Manufacturers Cataloging Handbooks H4-1 (Name to Code) and H4-2 (Code to Name) and their latest supplements. The date of revision and the date of the supplements used appear at the bistom of each page. Alpha₃ betical codes have been arbitrarily assigned to suppliers not appearing in the H4 Handbooks.

Code			Cude					
No	Manufacturer	Addresa	No	Manufacturer	Address	Cisd e No	Manufai turer	Addres
00000 00136		optier of U.S. Springe Pa	05347 05397	· · · · · · · · · · · · · · · · · · ·	San Mateo, Cal		CTS of Berne, Inc Chicago Telephone of	Berne, Inc
00213	Sage Electronics Corp Risc	heater N Y		Div	New York N Y		California Inc	lo Pandona Cal
00241		mielson Conn	05574		Canuga Park Cal	11242	Bay State Electronics Corp.	Waltham Mas
00334 00344		Colton, Calif	05593 05616		Sunnyvale, Cat	11312	Teledyne Inc Micrimave	
00373		Stram, N.Y. ry Hill N.J.	03010	Cosmo Plantic (r. o Electri Spec Co 3	Cleveland, Ohio	11334	Div	Palo Alto, Cal
00656		edford Mass	05624		Rockford Iti	11453	National Seal Preciation Connector Curp	Downey, Cal Jamaica, N. Y
00779		cristning Pa	05T28			11534		Custa Mesa, Cal
00781 00809		keenten N J		Hostyn Heigh		11711		
00815	Crowen List Whitby Or Northern Engineering	starjo Canada	05729 05783		Westbury,N. Y		Semiconductor Division Pr	
000,7		rimeton Wis	05820	Stewart Engineering Co. Wakefield Engineering Inc.	Senta Cruz Cal Wakefield Masa	11711	Group Impertal Electronic Inc	Newark, N J
90453	Sangamo Electric to		06004	Banaich Co Dis of Stewa	TI WARFIIFE MASS	11670		Buena Park, Cal Pale Alto, Cal
		Pickens S.I.		Warner Corp	Bridgepurt Conn	12134	Philadelphia Handle Co	Camden, N J
00866		ndustry ('a)	04090	Raychem Corp	Redword City Cal		Grove Mig Co Inc	Shady Grove Pa.
00929	·	Angeles (a) ingiston N.J.	06175	Hausch and Lomb Optical Co.	Rischester N Y	12574	Gulton buf Inc. Data System	
01002	General Electric Co	ring micros 14 3	06402		manester in t	12697	Div Clarostat Mfg. Co	Albuquerque H M Duver H H
	Capacitor Dept Hudson	Falls N Y		Amersica	Chicago III	12728		W Haven Conn
01009		orkion Mass	06540	Amatom Ejectronic Hardwa	re	12459	Nippin Electric Co. Ltd.	Tokyo, Japan
01121		iwaukee Wia	0444	Co Inc.	New Roichelle N - Y	12481	Metex Electronics Corp	Clark, N. J.
01233		ls Hille Ca) iwndale Cal	06555	Beede Electrical Instrumen - Lo., Inc		12930		Newport Boach, Cal
01295	Texas Instruments Inc		06666	General Devices Co., Inc.	Penacinik N. H. Indianapolia Ind	13019		Scottadale, Arizona Witchita, Kanna
4.0	Translator Products Div [Milas Texas	06751	Componenta Inc. Aris Div.	Phoenia Arteona	13061		Detroit Mich
01349		Bance Ohio	06412	Torrington Mfg. Co., Weat D		13103	Thermoliny	Dulias Temas
0153A 01589		Angeles Cal in Nuva - Cal	06980 07088	Varian Asset Elmai Div	Sun Carton Cal	13327		Таррая, М. Ү
01670		n Nuya (A) A York N)	07126	Kelvia Electric Co Digitas Co	Van Nuya Cal Pasadena Cal	13396		Hanuver , Germany
01930		toolidard III	07137	Transister Electronics	randoma (1)	13023	Pacific Industries Inc	Kansas City Sansas
01960		Clara Cal		Lorp	Minneapolis Minn	14099	Sem Tech	Neubury Park, Cal.
07114	Ferroscube Corp. of		07138				Calif Resistor Corp	Santa Montes Cal
02116		erties N.Y. Iranch N.J.	07149	Corp. Electronic Tube Dis Filmohm Corp			American Componenta Jac	Conshohochen Pa
02286		nvvaie (a)	07233		New York N Y	14433	ITT Semiconductor a Div. c. Int. Telephone and Telegrap	
02660	Amphenol Borg Electronics		0725h	Silicon Translator orp	Carle Place N Y			m rei Palen Beach Fig.
		nadview Nj	07261	Asnet Corp	Culver City Cal	14493	Hewlett Parkard Company	Loveland Colo
02735	Hadtu Corp. of America Semi conductor and Materiala		07263	Fairchild Camera & oast Co		14435	Cornell Dublier Electric Cor	
		erville 8 J	07322	Semiconductor Div. Minnesota Rubber Co.	Mountain View (Ca) Monneapolis Minn	14674	Corning Glass Works Electro Cube Inc	Corning N. Y
02771	Viscaline Co. of America		07317	Birtcher Corp. The	Monterey Park (a)	14960	Williams Mfg. Co	San Gabriel Cal San Jone Cal
		rook Cons	07397	Sylvania Elect. Prod. Im-		15106	The Sphere Co Inc	Little Fails N J
02 177		naudo Cal		ML View Operations	Mountain Fiew Cal-	15203	Webster Electronics Co	New York N Y
02 H 75 032 V r		ewark % I nglield % J	0.7700	Technical Wine Products Inc.		15207	Scionics Corp	Northridge Cal
0350#	G.E. Semiconductor Prod	ngilesa 🤏 J	07829	Indibat First Co	Chicago III	15291	Adjustable Bushing Co.	N Hollywood, Cal
	_	Acuse N Y	07910	Continental Desire Corp.	Hamiltone (4)		Micron Electronics Carden (Amprobe Inst. Corp.	Lymbrook N Y
01 705		Dayton Ohjo	07933	Raytheon Mig. Co., Semi.		15631	Cabietronics	Costa Mesa, Cal
01797 03ala		pton Calif	070.00	conductor Dis	Mountain Sies Cal	15772	Twentieth Century Coll	
03877		ngeles ('a) Nekt Mass	07940	Hewlett Packard () New Jersey Division	Horkanay N J	15801	Spring Co Femal Elect Inc	Insta Clara Cal Framingham Mass
03868	Pyrofilm Resistor Co.	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	OR145	1. S. Engineering (o	Lun Angeles Cal			Mountain View Cal
		nolls 5 J	08289	Blins Delbert Co.	Pomona Cal	16037	Spruce Pine Mics Co	Spruce Pine, N. C.
03954	Singer Co. Duebl Div		0835#	Burgean Battery Co.			Omni Spectra Inc 🥂	Detroit Di
04.009	Finderne Plant Sumer Arrow Hart and Hegeman	rville N I	08524		ila Ontario Canada		Computer Diode Corp	Lods N 3
(MICA)		ford Com		Deutach Fastener Corp. Bristol Co.: The	Los Angeles Cal Waterbury Conn		Electroid Co Boote Aircraft Not Corp	Union, N.J. Pasadern Cal
04013		trille N I		Sloan Company	waterbury Conn Sun Valley Cal		ideal Pres Meter Co. Inc.	
	Ario Electronic Inc. Great	Neck N.Y.	08718	ITT Cannon Electric Inc.			De Jur Meter Dis	Brooklyn N Y
		geles (a)	08727	Phoenis Dis			Delro Rudio Div. of G.M. Cor	
		Seach 5 (heeling III		National Radio Labiliu CBS Electronica Semiconduct	Paramus 5 J		Thermonetics Inc Transa Company	Canoga Park Cal Mountain View Cal
	Palo Alto Division of Hewlett	MALINE III	V4 132	Operations Divid CBS Inc	ion Lowell Mass		Hamin Metal Products Corp.	Akron Otso
		Anno Car	08806	General Electric Co		17745	Angstrohm Prec inc	No Hollywood Cal
04651	Sylvania Electric Printucta			Miniature Lamp Dept	Cleveland Ohto	17656	Siliconia Inc	Sumyvale Cal
04673		ties (a)		Mei Rain	Indianapolia Ind	17870	McGraw Ediana Cu	Manchester N H
	Dakota Engr. Inc	CHS CAL		Babrock Helava Inv	Conta Mena Cal		Power Design Pacific Inc	Palo Alto, Cal
		O Arizona		Electrosic Enclosures Inc. Tesas Capacitor Co.	Lus Angeles Calif Houston Texas		Clevite Corp. Semiconductor I Signetics Corp.	Dis Palo Atto Cal Sunnyvale Cal
04 73Z	Fiftros Co. Inc. Western			Tech Ind Inc Atohm	INMERIOR PERSON	18476	Tv-Car Mig Co Inc	Holiston Mase
// · • • -		City Call		Elect	Hurbank Cal	16486	TRW Elect Comp Div	Des Plaines III
				Electro Assemblies Inc	Chicago III		Chomerus	Plainville Mass
		lCite Cali ′ Honte Cali		C.4. B. Components Inc. Mallory Patters Co. of	Newton Mass		Curtis Instrument Inc Vishay Instruments Inc	Mt. Kinco, H. Y. Malvern, Pa
		henter III			to Ontario Canada		E I Du Pont and Co. Inc	Waltern Pa
	Component Mig. Service		Q9 795	Pennsylvania Florocartion Cl.	ifton Heighta, Penn	10911	Durant Mig Co	Milwauker, Wis
	Co W Bridgewa	iter Mass	09922	Burndy Corp	Norwalk Com	19315	The Bendix Corp. Navigation	4
05006	Twentieth Century Plantica	-1	10214	General Translator Western		, atom	Control Div	Teterboro, N _e j
05277 1	The Los Ang Westinghouse Electric Corp	reles Cal	10411	Corp Et-Tal Inc	Los Angeles (Ca)	17300	Thomas A. Edison Industries Div of McGraw Edison	West Orange, N. J.
				F1 144 199	Berkeley Cal			
	Semiconductor Dept Young	(wind Pa	10645	Carborundum (++	Sagara Falls N Y	19589	CONCOR	Baldwin Park, Cal

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Table 6-16. Code List of Manufacturers (Cont'd)

Code	Manager 1 - 1	Address	Code	N	Address	Crede	Address
Xo	Manufacturer	8	No	Manutaciurer		Nu	Manufacturer
19644- 19701		Horseheads, N. Y. Independence , Kansas		C P Clare & Co Centralab Day of	Chicago III	78452 78471	
301 L3	General Atronics Corp	Philadelphia, Pa		Globe Union Inc	Milwauker, Wie	784 85	Stackpole Carbon Co. St. Marya Pa
21226 21255		ng Island City, N.Y. New British, Conn.		Commercial Plastics Co Curush Wire Co. The	Chicago III New York N Y	, 18493 78553	
21520	Faint Bearing Co., The Fanteel Metalbirgical Corp.			Coto Cott Co. Inc	Providence R I	18790	Timerman Products Inc. Cleveland Ohio Transformer Engineers San Gabriel, Cal
23020 23042	Graeral Reed Co Textean Corp	Metuchen, N.J. Indiamapotis, Ind.		Chicago Miniature Lamp Will Clock Mig. Co.	irks Chicago, (1)	78947 79136	
23783	British Radio Electronice Li	d Washington D.C.	*11,63	Howard B. Jones Div. *	- Chirago III	79142	
24455 24455	G.E. Lamp Division . Nels 1		71964	Dus Corning Corp Section Motive Mig. Co. 10	Midland Mich		Wenco Mig. Co. Chicago, III
24681	General Radio Co Memor lac Comp Div	West Concord Mass Huntington Ind	12130	Principal minimum and Co. 10	Willimantic Coon	19121	Continental-Wirt Electronics Corp Philadelphia Pa
26365	Gries Reproducer Corp.	New Ruchelle N Y		DialigM Corp	Brooklyn N Y		Zierich Mig Corp New Rochelle N. Y
24462 24851	Grobert File Co of America Compac Hollister Co	Hollister Cal	12430	Indiana General Corp Ejectronics Dis	Reasby N J	80011	Mepco Division of Sessions Clock Co. s
26993 29490	Hamittun Watch Co Hendett-Packard Co	Laucaster, Pa	T2699	General Instrument Corp . Cap Division	Newark N J *		Prentale Corp Toledu Ohio
18320	Heyman Mig Co	Palo Alto, Cal Kenilworth N J	72765		farwood Heights [1]		Schnitzer Alloy Products Co., Elizabeth N.J. Electronic Industries Association
30017	Instrument Specialises Co	durate Malda Ar A	72825 72928	Hugh H. Eby Inc. Gudeman Co.	Philadelphia Pa Chicago III		Standard tube or semi-conductor device
מונג	G E Receiving Tube Dept	Little Falls, N.J. Ovensburo Ky		Elastic Stop Nut Corp	Enson N.J.	80207	ans manufacturer Unimas Switch Dis. Maton Electronica
35434	Lectroliss for	Chicago III	72964 72982	Rokert M. Hadley Cu	Lus Angeles Cal		Corp Wallinglord Conn
36196	Rawyck Cot) Producta Ltd Hawkests	ry Ontarso Canada	73061	Erie Technological Producta Hansen Mig. Co. Inc.	inc Erie Pa. Princeton Ind	80223	United Transformer Corp New York N Y Oxford Electric Corp Chicago III
34287	Cunningham, W. H. & Hill,		13076	H M Harper Co Helipot Div at Beckman Inc.	Chicago III	80294	Bourns Inc. Risgrate Cal
37943	Lid Toros P R Mallury & Co. loc	nto Oltario Canada Indianapoliji ind	13134	Helipot Div. gr. neckman ina:	i unc Fullerton Cal	80411	Areo Div. of Robertshaw Controls Co. Columbus Obso.
19543	Mechanical Industries Prod I	Co Maron Ohio	73293	Hughes Products Division of Hughes Airceaft Co. 7	Newport Beach - Cal		All Star Products Inc. Deliance Ohio
49829 49831	Ministure Precision Bearings Honeywell Inc	s Jac – Keegé . N. H - Minneapolia, Minn	73445		chaville L.I. N.Y.	80509 80583	Avery Label Co
42190	Mater Co.	Chicago III	73504	Bradley Semiconductor Corp		80640	Stevens Arnold Co Inc. Boston Mass
43 99 0 44 6 55	C A Morgres Co Ohmite Mile Co	Englewood, Coto Skokte, III	73559	Carling Electric Inc	New Haven Conn Hartford Conn	90010 90912	Dinico Gray Co a Dayton Ohio International Inst. Inc. Orange Conn.
44384	Penn Eng &Mig Corp	Duylestown På		Circle F Mig. Co	Trenton, N.J.	81073	Gravhill Co. LaGrange III
47904 48620	Polaroid Corp Precision Thermometer &	Cambridge Mass	11087	George K. Carrett Co. Div. MSL Industries Inc.	Philadelphia Pa	81095 81312	Triad Transformer Corp Vergoe Cal Windhester Elec Div. Litton Ind. Inc. *
	Inst Co	Southampton, Pa		Fujeral Screw Products Inc			Qaliville Conn
19054 52000	Microsave & Power Tube Div Rhwas Controller Co	Waltham Mass Westminster Md		Fischer Special Mig. Co. General Industries Co. The	Cincinnati Offic Elyrus Ohio	81349 61483	Military Specification Biternational Rectifier Corp. El Segundo. Cal.
52963	HP Co., Med. Elec. Div.	Walthard, Mass		Coshen Stamping & Tool Co.	Guehen Ind	01541	Airpax Electronics Inc. Cambridge Maryland
54294 . 53026	Shalleross Mfg Co Simpson Electric Co	Selma N C Chicago III		JFD Electronies Corp. Jennings Radio Mfg. Corp.	Brooklyn N Y San Jone Cal	\$1.860	Barry Controls Div Barry Wright Corp. Watertown Mass.
55033	Sonotone Corp	Elmstord N		Groove-Pin Corp Signalite Inc	Ridgefield N I Neptune N J		Carter Precision Electric Co. Skokie. III
15638	Raytheon Co Commercial App & System Div	So Norwalk Cond		J.H. Winns, and Sons	Winchester Mass	H2104 1	Sperts Faraday Inc. Copper Hewitt Efectric Dix - Hoboken N. J.
\$4137	Spaulding Fiber Co. Inc.	Tonswanda N		Industrial Condenser Corp. R. F. Products Division of	Chicago III		Electric Regulator Corp Norwalk Conn
56289 58474	Spragur Electric Co 1 Superior Elect Co	North Adams, Mada Bristol, Colo	14804	Amphenul Borg Electronic	Corp	82 (42	Jeffers Electronics Division of Speer Carbin Co Du Bois Pa
59446 59730	Teles Corp	Tuisa Olla	74870	E F Johnson Co	Danbury Conn Waseca Minn	#2170	Fairchild Camera & Inst. Curp
60741	Thomas & Betts Co Triplett Electrical Inst. Co	Bluffton Chu	75042	International Resistance Co.	Phyladelphia Pa	12209	Space & Defense Systems Div. Paramus. N. J. Maguzie Industries. Inc
61775	Union Bustch and Signal Div. Westinghouse Air Brake Cu.			Keystone Carbon Co - Inc CTS Knights Inc	St Marys Pa Sandwich III	W2219	Sylvania Efectric Prof. Inc. Efectronic Tube Division Emporium Pa
42) 19	Universal Electric Con-	Owosso Mich	75382	Kulka Electric Corp	Mt Vernon N Y	92376 ₄	Astron Corp East Newart Harrison N. J.
63743 64855	Ward-Leonard Electry: Co Western Electric Co . Inc	M1 Vernon, N Y New York N Y	75015	Lenz Electric Mfg Co Littlefuse Inc	Chicago III Des Piames III		Switchcraft Inc. Chicago III Metala 4 Controla Inc.
65082	Weston Inst. Inc. Weston-New	eark Newark N J *	760	Lord Mig. Co	Егне Ра	9204	Spencer Products Attleboro Mass
66295 66346	Wattek Mig. Co. Mangrauta Maning & Mig. Co.			C W Marwedel Corp.	San Francisco Cat	82 764 92 866	Phillips Advance Control to Johnt III Research Products Corp Madison Wis
	Revere Mincum Dia	31 Paul Minn		Micamold Division	Newark N.J	82877	Rolton Mig. Co. Inc Woodstock 51 Y
702 74 70308	Alles Mig. Co Allied Control			James Millen Mfg. Co. Inc. J. W. Miller Co.	Malden Mass Los Ancelas Cal	\$2 193 83054	Yector Electronic Co Glendale Cal Carr Fastener Co Cambridge Mass
70314	Allmetal Screw Product Co .	Inc	16530-	Çinch-Monadnock Div of U			New Hampshire Ball
70417	Amples Div of Chrysler Cor	Gazden City, N. Y. rp. Detzoit Mich.	76545	Fastener Corp Mueller Electric Co	San Leandro, Cal Cieveland, Ohio	83125	Bearing Inc. Peterborough, N. H. General Instrument Corp.
19485	Atlantic India Rubber Works,	Inc. Chicago, III	16703	National Union	, Newark N J		Capacitor Div Darlington S.C.
70543 70674	Amperite Co Inc ADC Products Inc			Oak Manufacturing*Co The Begdis Corp	Crystal Lake III		TTT Wire and Cable Div Los Angelen, Cal. Victory Eng. Corp. Springfield. N.J.
70903	Beldes Mig Co				N Hollyworked Cal	83298	Bendix Corp. Red Bank Div. Red Bank N.J.
79898 71003	Bird Electric Corp Birnbirk Radio Co			Parific Metals Co	San Francisco Cal		Hubbeti Corp Mundelets III Rosas Inc Newport Beach Cal
71034	Bittey Electric Co. inc	Erw. Pa		Electronic Cu	So Panadena Cal	83330	Smith Herman H. Inc Brooklyn N.Y.
T104 (Bostos Gear Works Div. of Murray Co. of Texas	Quincey Mass	11232	Miladelphia Steel and Wice Corp	Philadelphia Pa		Tech Laba Phasades Park, N J Central Scree to Chicago Ili
T1218	Bed Radio, Inc	Willoughby, Ohio	77348	American Machine & Foundry Potter & Brumfiéld Div	y Co	83501	Gavill Wire and Cable Co. Div. of
71279 71286	Cambridge Thermionics Corp. Camior Fastener Corp.		77630	TRW Electronic Components	Princeton Ind Div Camden, N.J.		Amerace Cofp Brookfield Mass Birroughs Corp. Electronic
71313	Cardwell Condens			General Instrument Corp		-	Tube Div Plainfield, N.J.
71400	Bestmann Mig Dive	enhurst L.I.N.Y	77764	Rectifier Division Restetance Products Co	Brooklyn, N. Y. Harrisburg, Pa	13740	Union Carbide Corp Consumer Prod Div New York, N.Y
	McGraw - Edison Co	St Louis Mo	77969	Rubbergraft Corp. of Calif	Torrance, Cal		Model Eng and Mfg Inc Huntington, Ind S
71436 71447	Clarago Condensor Curp Calif Spring Co., Inc.	Chicago III Pico-Rivera Cai	44147	Shakepeuof Division of Illinuis Tool Works	Eigin Ill		Loyd Scruggs Co Festus, Mo Aeronautical Inst. & Radio Co Lodi, N. J.
T1450	CTS Corp	Elkhart, Ind	182 77	Sigma So	Braintres Mass	84171	Areo Electronics Inc. Great Neck, N. Y.
714 68 71471	ITT Cannon Electric Inc Cinema, Div. Aerovos Corp			Signal Indicator Corp Struthers-Duna Inc	New York, N. Y. Pitman, N. J.		A J Glesener Co. Inc. San Francisco, Cal. TRW Capacitor Div. Ogaliala, Neb.
				.S.	·		,
00015-4	1			, -			From Handhook Supplements
Revised							H4-1 Dated January 1970
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Table 6-16. Code List of Manufacturers (Cont'd)

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Con	40		Code	. ^		Cude		
, N		Address	No	Manufacturer	Address	Nu	Manufactures	Address
948	70 Sarken Tarzian, Inc	, Discomington lad	91926	Honeywell Inc Micro Switc	h Distaine		Ht Q Div. of Aeroros Corp.	Olesa N Y
854 854		Boomlon, N.J. San Francisco, Cal	91941	Nahm-Bros Spring Co	Freeport, III Oakland, Cal		Thordareon-Mesesner Inc. Solar Mig. Co.	Mi Carmel, III Los Angeles Cal.
854		San Francisco, Cal Hamden, Cunn		Tru-Connector Corp Elgeri Optical Co - Inc	Peabody Mass Suchester, N Y	HIM	Microswitch, Div. of MinnHoneywell	Freeport, ili
859	Il Seamless Rubber Co	Chicago, III		Tensulate Insulated Wire Co			Caritus Screw Co. Microwave Associates Inc.	Chicago, Ili Burlington, Mane
141 6411		'o ler			rethury L.I.N.Y	86501	Excel Transformer Co Xcelite Inc	Oakland, Cal Orchard Park, N.Y
\$45				Hudaum Lamp Co Bylvania Electric Prud Inc	Kearney N J	04133	San Fernando Elec Mig Co	San Fernando, Cal
8661	H Radio Corp of America Ele & Devices Division	ectronic Comp Harrison, N.J.	93349	Semiconductor Div Robbins & Myers Inc. Ps	Woburn, Maas Ilisades Park, N.J.	81464	Thomson Ind. Inc. Industrial Retaining Ring Co.	Long Island, R Y
8697 8703		Glendale Cal Ansheim, Cai	83410	Stemco Controls, Div. of Es. Wire Corp	Manafield Ohio		Automatic & Preciator Mig. Reun Resistor Corp.	Englewood, H J Yoskers, H Y
872		r Division) Lanadale Pa	61076	Waters Mig. Co G.V. Controls	Culver City Cal Livingsion N J	81963	Littim System Inc., Adler V Commun. Div	Yestres New Rochelle, N.Y
8741	73 - Western Fibrous Glass Prod		94137	General Cable Corp.	Bayoner H J		R Trontes, Inc Rubber Teck, Inc	Jamaica, N. Y. Gardena, Cal
6764		San Francisco Cal		Ind Comp Operations	Quincy Mass		Hewlett Packard Co	
8793 8414	10 Cutier Hammer Inc	Providence R I Lincoln III Paul Minn		Scientific Electronics Products Inc	lanetand Colu		Medical Elős Dis Microdol Jac	Pasadens, Cal By Pasadens, Cal
8822		Paul Minn Bullaiu N.S	94154	Wagner Elect Corp Tung Sol Div	Newark N J	98374	Sealectro Corp Zero Mtg. Co	Manutrometh, N. Y. Burlank, Cal
8923 8943	II Graybar Electric Co	Oakland Cal Schenectady N Y	9418T	Curtisa Wright Corp	ant Patterson N J		Etc. Inc. General Mills Inc. Electron	
8947	9 Security Co	Deroit Mich Chicago III		South Chester Corp Wire Cloth Products Inc	Chester Pa Bellwood III		Paeca Division of Hewlett 1	Minneapolts Minn
9003	10 United Shoe Machinery Corp.	Neverty Mass	94375	Automatic Metal Products Co	Branklyn N Y		North Hills Electronics Inc	Palo Alto Cal Glen Core, N. Y
9011	Plantics Prod. Div.	Pannate N.J.		Worcester Pressed Aluminus	Worcester Mass		International Electronic Res	earch Corp
9036	55 Believille Speciality Tool Mig	g Inc Belleville lli		Magnerraft Electric Co. George A. Philbrick Researc			Uniumbia Technical Corp	Burbank, Cal New York, N. Y
9076		Chicago Ili San Francisco Cal	95148	Alco Elect Mig Co	Boston Mass Laurence Mass		Varian Annociates Affee Corp	Palo Alto, Cal Winchester Mass
9114		m Div Sajem Mass	95236	Allies Products Unip Continental Connector Corp	Diante Fla Windaide N Y		Marshall Ind Capacitor Di	
9126		San Francisco Cal	95263	Feer raft Mig. Co. Inc.	Long Island, N.Y.		of America Delevan Electronics Corp	El Segundo, Cal Essi Aurors, N. Y
9134 9141	3 Radio Materials Co	El Monte (al Chicago (III	95275	National Coil Co Vitramon Inc	Sheridan Wyo Bridgeport Conn	99844	Wilco Corporation	Indianapolis . Ind
9150 9163		Altieboro Milas Columbus Nebi	95354		Bloomfield N J Illing Meadon's []]	99934	Branes Corp Rembradt Inc	Whippeny, N.J. Boston, Mass
9165	7 Elco Corp	William Gentre Pa		Arnold Engineering Co Dage Electric Co - Inc	Marengo III Franklin Ind	99943	Hoffman Electronics Corp Semiconductor Division	El Monte, Chi
91 T3 91 82	R GremarMig Co Inc.	Wakefield Mass Hedwood City Cal	85984	Stemon Mig. Co. Weikenser Co.	Wayne 111 Chicago 111	99957	Technology Instrument Corp. of California	
9188		Chicago III		Marineave Assis West Inc	Sunnyvale Cal			,
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The	lidlineing HP kendors have no min	nher as aigned in the lat	eal autho	iement to the Federal Supply (inde on Manufacturer	e Handl	n se bib	
0000	F Malco Tool and Die	Los Angeles Caid	000L5	Hewlett Packard Co., Color	adi:	01000	Confittue	Onkland Cal
0000	Z. Willow Leather Products Cor	p Newark V.J.	DOOMM		Springa Colorado		Lalifornia Kastern Lab	Burington Cal
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BACK DATING MANUAL CHANGES

SECTION VII MANUAL CHANGES AND OPTIONS

7-1. INTRODUCTION.

7-2. This section outlines the changes made to standard 5110B instruments for driving more than one HP Frequency Synthesizer. BNC connectors and output load resistors are installed in Filter Modules A5 thru-A15 for driving two (Option 02), three (Option 03), or four (Option 04) Evaquency Synthesizers. Any unused outputs should be terminated in 50 ohms (HP 10510A 50-ohm BNC load available) to maintain specified spurious performance. Twenty two (22) loads are required for each set of outputs not used. For example, if the 5110B has Option 04 installed and only two Frequency Synthesizers are being driven, 44 outputs should be terminated. The diagrams in Figures 7-1 through 7-6 and parts lists in Tables 7-1 through 04.

7-3. MANUAL CHANGES.

7-4. CURRENT INSTRUMENTS. This manual applies directly to Model 5110B Synthesizer Drivers with serial prefix 1048A. Refer to Paragraph 1-7 fer serial numbering system.

7-5. NEWER INSTRUMENTS. As changes are made in the Model 5110B, newer instruments may have serial number prefixes not listed in this manual. The manuals for these instruments will be supplied with an additional "Manual Changes" sheet containing the required information. Contact your nearest Hewlett-Packard Sales and Service Office for information if this sheet is missing.

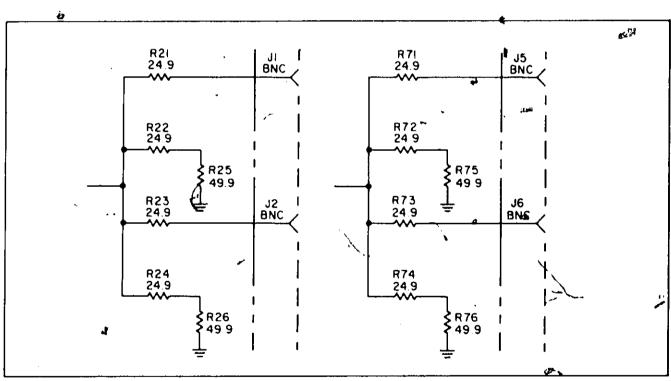


Figure 7-1. Option 02, A5-A14 Circuits

Table 7-1	A5-A14	Parts :	added :	for Option	. 02

		Platie 1-1. AU-Ala	raits added for Option of
	A1R23	0757-0291	R: fxd met_f\m 24. 9 ohm, 1\%, 1/8\W
1	A1R24	0757-0291	R: fxd met flm 24. 9 ohm, 1%, 1/8W
	A1R25	0757-0277	R: fxd met flm 49. 9 ohm, 1%, 1/8W
	A1R26	0757-0277	R: fxd met flm 49, 9 ohm, 1%, 1/8W
•	A2R73 ►	0757-0291	R: fxd met flm 24. 9 ohm, 1%, 1/8W
]	A2R74	0757-0291	R: fxd met flm 24. 9 ohm, 1%, 1/8W
ł	A2R75	0757-0277	R: fxd met flm 49. 9 ohm, 1%, 1/8W
	A2R76	0757-0277	R: fxd met flm 49, 9 ohm, 1%, 1/8W
	J2	1250-0118	Connector: BNC
	`J6	1250-0118	Connector: BNC

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7-6. OLDER INSTRUMENTS. This manual with changes listed below also applies to Model 5110B Synthesizer Drivers having serial prefix numbers 976 and below.

Serial Prefix	Make Manual Changes
976	1
630	1, 2
708	1, 2, 3

CHANGE 1: (976)

Page 5-6, Table 5-3:
Change A3, Crystal Filter to 051/10-6104

Page 6-2, Table 6-1:
Change A3 to 05110-6104.

Page 6-11, Table 6-4:
Replace with Table 7-7.

Page 6-53, Table 6-15:
Delete 05110-6081, Crystal Filter

Page 6-54, Table 6-15:
Add 05110-6104, Crystal Filter

Page 9-5, Figure 9-3:
Replace Component Locators with Figure 7-7

Replace A3 Schematic with Figure 7-8

CHANGE 2: (820)

Page 1-0, Power Cord Photo: Replace with Figure 7-9.

Page 1-1, Table 1-1:

· Change AC Power Cord part number to 8120-0078

Page 3-3/3-4, Figure 3-2: Replace with Figure 7-10.

Page 6-2, Table 6-1:

Change: DS2 to 1450-0093, Light: Indicator Red

FL1 to 9110-0086 S1 to 3101-0033 W1 to 8120-1348

Delete 05110-0082, Bracket: Power Supply

CHANGE 2 (Cont'd):

Page 6-50, Table 6-15:

Change 1450-0701 to 1450-0093, Light: Indicator

Page 6-51, Table 6-15:

Change 3101 -1254 to 3101 -0033

Change 8120-1348 to 8120-0078

Change 9110 -3112 to 9110 -0086

Page 6-52, Tuble 6-15:

Delete 05110-0082, Bracket: Power Supply

CHANGE 3: (708)

Page 6-44, Table 6-13:

Change A1 to 05102-6030, Board Assy: Regulator. Delete 05110-2023

Change A1CR1, CR2 to 1902-0506, Diode: Break-down, 4.7V.

Change A1R11 to 0698-3445, R:Fxd Mct Fim 287 ohm, 1%, 1/8W.

Change A1R18 to 0698-3150, R:Fxd Met Flm 2370 ohm, 1%, 1/8W

Change A1R19 to 0757-0317, R:Fxd Met Fim 1330 ohm, 1%, 1/8W

Add A2R21, 0757-0401, R:Fxd Met Flm, 100 ohm, 1%, 1/8W

Make appropriate changes to Table 6-15

Page 9-23, A17A1 Power Supply Regulator Board is changed as follows:

A1R11 to 287 ohms
A1R18 to 2370 ohms
A1R19 to 1330 ohms
A1CR1 to 4.7V
A1CR2 to 4.7V

Add A1R21, 100 ohm between R8 and ground lead. Change A17A1 HP Part No. to 05102-6036

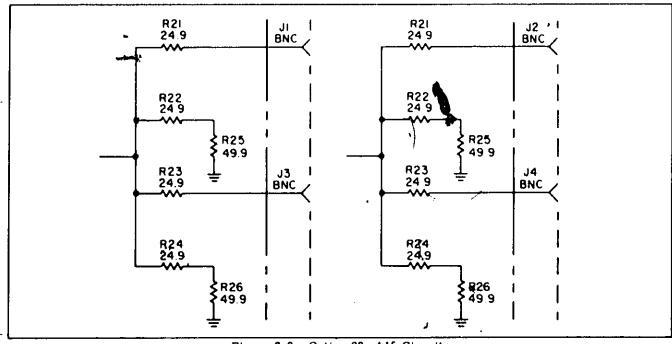


Figure 7-2. Option 02, A15 Circuits

Table 7-2. A15 Parts Added for Option 02

A1R23	0757-0201	R fud met flm 24. 9 ohm, 14h, 1/8W
A1R24	0757-0291	R fad met flm 24.0 ohm, 1%, 1/8W
A1R25	0757-0277	R. fxd met flm 49. 9 ohm, 13, 1/8W
A1R26	0757-0277	R: fud met fim 40. 9 ohm, 196, 1/8W
A2R24	0757-0291	R fad met flm 24.9 ohm, 1%, 1/8W
A2R24	0757-0291	R fxd met flm 24, 9 ohm, 1%, 1/8W
A2R25	0757-0277	R fud met flm 49, 9 ohm, 13b, 1/8W
A 2R26	0757-0277	R fad met flm 40.0 ohm, 13, 1/6W
J3	1250-0118	Connector: BNC
J4	1250-0118	Connector BNC

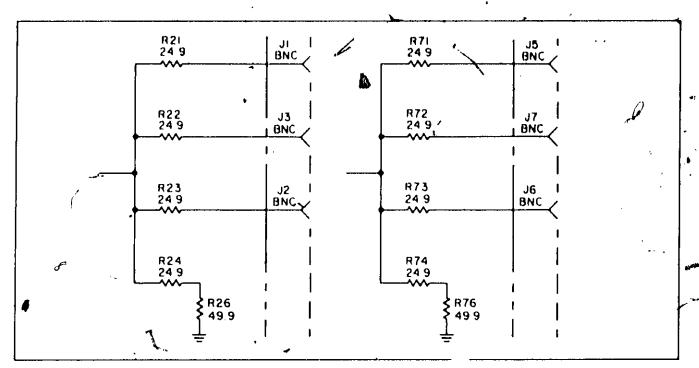


Figure 7-3. Option 03, A5-A14 Circuits

Table 7-3. A5-A14 Parts added for Option 03

A1R23	0757-0291	R: fxd met flm 24.9 ohm, 1%, 1/8W
A1R24	0757-0291	R: fxd met f1m 24, 9 ohm, 1%, 1/8W
A1R25	0757-0277	R: fxd met flm 49.9 ohm, 1%, 1/8W
A1R26	0757-0277	R: fxd met flm 49.9 ohm, 1%, 1/8W
A2R73	0757-0291	R: fxd met flm 24.9 ohm, 1%, 1/8W
A2R74	0757-0291	R: fxd met flm 24.9 ohm, 1%, 1/8W
A2R75	0757-0277	R: fxd met flm 49, 9 ohm, 1%, 1/8W
A2R76	, 0757-0277	R: fxd met flm 49.9 ohm, 1%, 1/8W
J2	1250-0118	Connector: BNC
J3	1250-0118	Connector: BNC
J6	1250-0118	Connector: BNC
J7	1250-0118	Connector: BNC

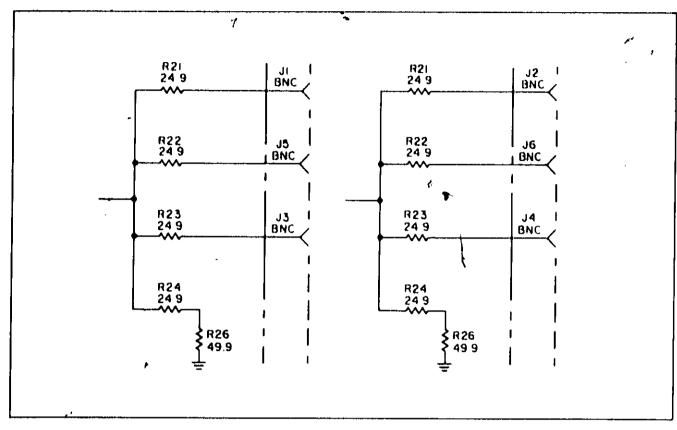


Figure 7-4. Option 03, A15 Circuits

Table 7-4. A15 Parts added for Option 03

A1R23 A1R24 A1R26	0757-0291 0757-0291 0757-0277	R: fxd met flm 24.9 ohm, 1%, 1/8W R: fxd met flm 24.9 ohm, 1%, 1/8W R: fxd met flm 49.9 ohm, 1%, 1/8W	
A2R23 A2R24 A2R26	0757-0291 0757-0291 0757-0 2 77	R: fxd met flm 24.9 ohm, 1%, 1/8W R: fxd met flm 24.9 ohm, 1%, 1/8W R: fxd met flm 24.9 ohm, 1%, 1/8W	i.
J3 J4 J5 J6	1250-0118 1250-0118 1250-0118 1250-0118	Connector: BNC Connector: BNC Connector: BNC Connector: BNC	•

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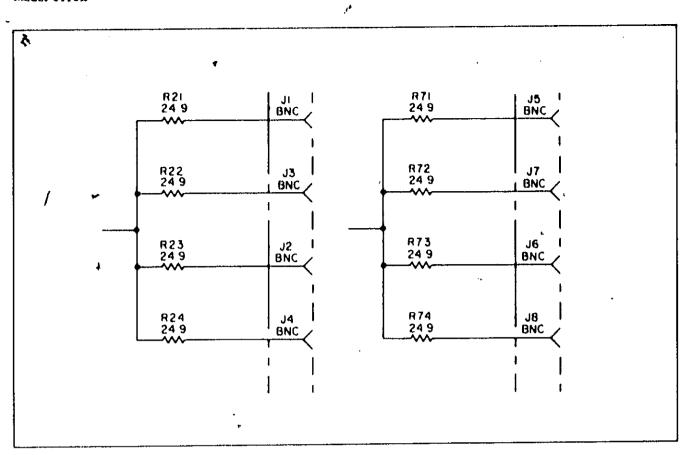
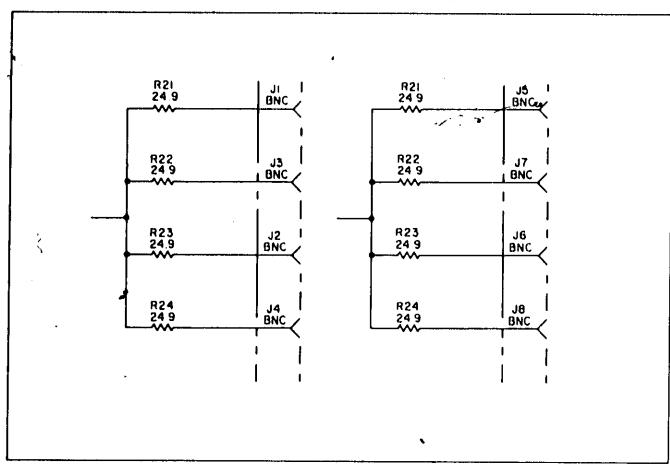


Figure 7-5. Option 04, A5-A14 Circuits

Table 7-5. A5-A14 Parts added for Option 04

	T	
A1R23	0757-0291	R: fxd met flm 24. 9 ohm, 1%, 1/8W
A1R24	0757-0291	R: fxd met f1m 24. 9 ohm, 1%, 1/8W
A2R73	0757-0291	R: fxd met flm 24.9 ohm, 1%, 1/8W
A2R74	0757-0291	R: fxd met flm 24.9 ohm, 1%, 1/8W
J2	1250-0118	Connector: BNC
J3	1250-0118	Connector: BNC
J4	1250-0118	Connector: BNC
J6	1250-0118	Connector: BNC
J7	1250-0118	Connector: BNC
J8	1250-0118	Connector: BNC



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Figure 7-6. Option 04, A15 Circuits

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Table 7-6. A15 Parts added for Option 04

A1R23	0757-0291	R: fxd met flm 24, 9 ohm, 1%, 1/8W
A1R24 ~	0757-0291	R: fxd met f1m 24.9 ohm, 1%, 1/8W
A2R23	0757-0291	R: fxd met flm 24.9 ohm, 1%, 1/8W
A2R24	0757-0291	R: fxd met flm 24.9 ohm, 1%, 1/8W
J3	1250-0118	Connector: BNC
J4	1250-0118	Connector: BNC
J5	1250-0118	Connector: BNC
J6	1250-0118	Connector: BNC
J7	1250-0118	Connector: BNC
J8	1250-0118	Connector: BNC

/Table 7-7. Crystal Filter Assembly (05110-6104) (prefix all parts A3)

Reference Designation	% Stock No.	Description #		Note	-
	05110-6104	CRYSTAL FILTER ASSY			
Ai	05110-6105 05110-2042 05110-6106	BOARDIFILTER BOARDIBLANK PC PASSYIOVEN-INCL HAIRTILYI NOT RECOMMENDED FOR FIELD REPLACEMENT	ŀ		
A1C1 A1C2 A1C3 A1C4	0160-0179 0160-2599 0160-0336 0130-0017	CIFXO MICA 33 PF 5% 300VDC% CIFXO CER 66 PF 2% 600VDC% CIFXO MICA 267 PF 1% 300VDC% CIVAR CER 8-50 PF		:	
AIHRI		NOT RECOMMENDED FOR FIELD REPLACEMENT			
AILI	9140-0238	COILIFXD RF 82UH 58		Ē	
A1Q1 A1Q2	1854-0003 1854-0003	TRANSISTOR NON SILICON TRANSISTOR NON SILICON			
AIR1 AIR2	0757-0934 0683-1025	RIFXD MET FLM 2700 OHM 2m 1/8m RIFXD COMP 1000 OHM 5m 1/4m			
LIBIA		NOT RECOMMENDED FOR FIELD REPLACEMENT			
AITI	05110-6108	TRANSFORMER			
A1Y1		NOT RECOMMENDED FOR FIELD REPLACEMENT			
J1 J2	1250-0149 1250-0083	CONNECTORIRE COAXIAL BNC RT-ANGLE RECEPT CONNECTORIBNC			
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See list of abbreviations in introduction to this section

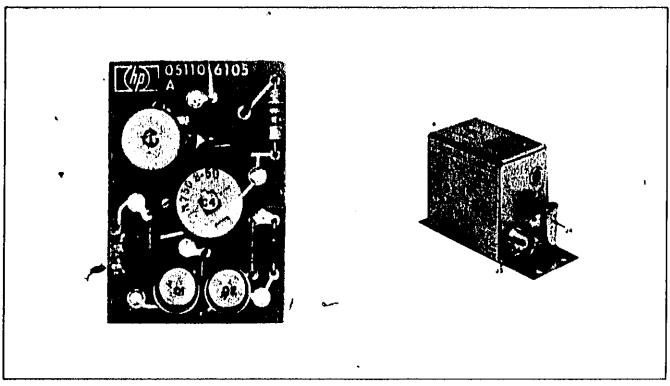


Figure 7-7. A3A1 Component Locator

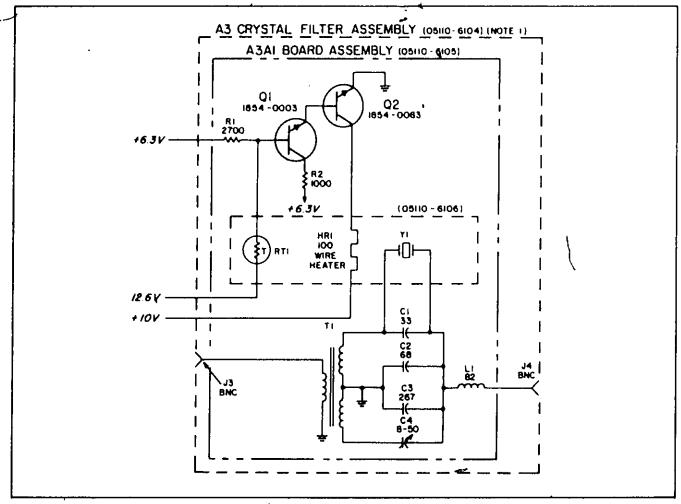


Figure 7-8. A3A1 Crystal Filter Schematic

MANUAL CHANGES 5110A

SECTION VIII MANUAL CHANGES FOR 5110A

8-1. INTRODUCTION.

- 8-2. The Model 5110A is similar to the Model 5110B Synthesizer Driver. Both units supply 22 fixed output frequencies to drive HP Frequency Synthesizers, but the 5110A supplies a 3 MHz signal in place of the 20 MHz signal from the 5110B. The standard 5110A drives only the Model 5100A Frequency Synthesizer. The 5110A is the same size and has the same number of modules as the 5110B. Manual changes required to make this manual apply to 5110A instruments with serial prefix number 624- are listed below. For older 5110A instruments, see Paragraph 8-3.
- 1. Crystal Filter Assembly A3 (HP Part No. 05110-6081) was installed. See schematic diagram, Figure 8-1 and parts list, Table 8-1.
- 2. Coil A1L5 in Comb Generator Module A4 was 22 microhenries (HP Part No. 9140+0179). Comb Generator Module was HP Part No. 05110-6012.

- 3. Different Filter/Divider Modules A5 through A14 were installed. These modules performed the same electrical function. See schematic diagrams, Figures 8-5 through 8-10 and parts lists, Tables 8-3 through 8-8.
- 4. In Filter Module A15 (HP Part No. 05110-6001), 20 MHz Filter Board Assembly is replaced by 3 MHz Filter Board Assembly with HP Part No. 05110-6021. This provided the 3 MHz output at the rearpanel. See schematic diagram, Figure 8-10 and parts list, Table 8-8.

8-3, OLDER 5110A INSTRUMENTS

8-4. With the changes listed in Table 8-8, this manual will apply to older 5110A Synthesizer Drivers with serial number prefix 552, 524, 442, 433, 427, 420, 408, 406, or 351. To use this manual with these older instruments, make changes as listed in Table 8-2 for your instrument's serial number prefix.

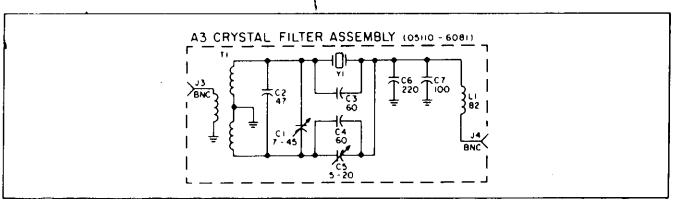


Figure 8-1. Crystal Filter A3

Table 8-1. Crystal Filter Assembly A3 (05110-6081) (Prefix all parts in this table A3)

Reference Designation	HP Stock No.	Description
C1	0130-0001	C: VAR CER 7-45 PF 500 VDCW
C2	0150-0116	C: FXD CER 47 PF 10% 500 VDCW
C3	0160-0950	C: FXD MICA 60 PF 5%
C4	0160-0950	C: FXD MICA 60 PF 5%
C5	0130-0006	C: VAR CER 5-20 PF 500 VDCW
C6	0160-0952	C: FXD MICA 220 PF 1%
C7	0150-0117	C: FXD CER 100 PF 10% 500 VDCW
J3	1250-0149	CONNECTOR: RF COAX BNC RT-ANGLE RECEPT
J4	1250-0083	CONNECTOR: BNC
Ll	9140-0238	COIL: FXD RF 82 μ H 5%
T1	05110-6082	TRANSFORMER ASSEMBLY
Y1	05110-6074 .	CRYSTAL ASSEMBLY
· · · · · · · · · · · · · · · · · · ·	05110-0061	HOUSING: CRYSTAL FILTER
	0340-0110	INSULATOR: STANDOFF MELAMINE 2-56 0.4 INCH

Table 8-2. Manual Changes

Γ	
Serial Prefix	Make Change:
552- 524- 442- 433- 427- and 420- 408 406- 351-	1 1, 2 1, 2, 3 1 thru 4 1 thru 5 1 thru 6 1 thru 7 1 thru 8

CHANGE 1: (552-)

Fuses A16A1F1, F2 on Rectifier Board Assembly A16A1 were 0.75 ampere, but 1.0 ampere is the preferred value.

The trigger circuit at the oscillator output on Frequency Standard Module A2 was as shown in Figure 8-2.

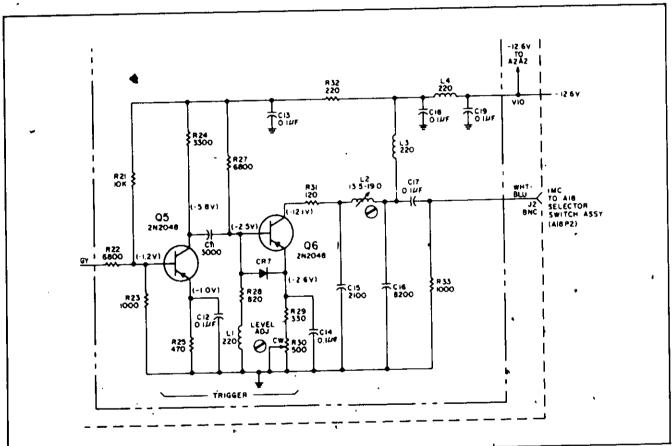


Figure 8-2. Trigger Circuif Changes

CHANGE 2: (524-)

Filter/Divider Modules A5 through A14 and Filter Module A15 were as shown in Figures 8-3 through 8-8. Note that terminating resistors were installed at the outputs for driving more than one Synthesizer and only BNC jacks needed to be added and connected to obtain multiple output signals.

Capacitor A17C5 on Power Supply Regulator Module A17 was not in these older instruments, but should be installed for optimum operation.

Transistors A1A1Q1 through Q4 and A1A2Q1, Q2 were HP Part No. 1853-0008, but 1853-0009 is the preferred part.

CHANGE 3: (442-)

Diodes CR54, CR55, and CR56 in Divider Boards A5A2 through A14A2 were not in these older instruments, but should be installed for optimum operation.

Resistor R12 on Oven Control Board A2A3 in Frequency Standard Module A2 was 214K ohms, but 200K ohms is the preferred value.

Resistor A1A1R9 in Input Amplifier Module A1 was 51.1 ohms, but 42.2 ohms is the preferred value.

Transistor A2Q53 in Filter/Divider Modules A5 through A14 was HP Part No. 1850-0118 (2N2360), but 1850-0138 is the preferred part.

CHANGE 4: (433-)

Resistors A17A1R7, R11 on Power Supply Regulator Module A17 were 499 ohms, but 412 ohms is the preferred value.

Breakdown diodes A17A1CR1, CR2 were 6.2 vdc, but 5.5 vdc is the preferred value.

Resistor A2A2R33 in Frequency Standard Module A2 was 68 ohms, but 120 ohms is the preferred value.

Resistor A2A2R26 in Frequency Standard Module A2 was 13 ohms, but 120 ohms is the preferred value.

Input Amplifier/Buffer Amplifier Module A1 was as shown in Figure 8-4.

CHANGE-6: (427- & 420-) In 20 MHz Filter Board A15A1 of 3/24 MHz Filter Module A15, parts were as follows: C

C12, C14, C16, C18, C20, C22, C24 were 85 pf, but 120 pf is the preferred value.

C31 and C32 were 2.0 pf, but 3.3 pf is the preferred value.

C33 through C36 were 2.0 pf, but 2.7 pf is the preferred value.

L5 through L11 were . 40-. 50 μ h, but . 34-. 47 is the preferred value.

L12 was 1.8-3.5 µh, but 3.6-5.8 is the preferred value.

CHANGE 6. (408-)

On Divider Boards A13A2 and A14A2 in Filter Divider Modules A13 and A14, parts were as follows:

C74 was 27 pf, and C78 was 18 pf, but values shown are preferred.

CHANGE 7 (406-)

Crystal Filter Assembly A3 was as shown in Figure 8-3.

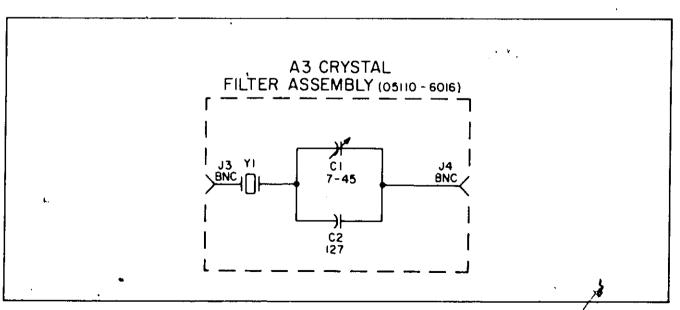


Figure 8-3. Crystal Filter A3 Changes

CHANGE 8: (351-)

On Regulator Board Assembly A17A1 in Power Supply Regulator Module A17, CR2 was HP Part No. 1902-0033, but 1902-0081 is the preferred part.

On Comb Generator Board Assembly A4A1, parts were:

C42 was 6.8 pf (5.6 pf preferred).

C37 through C41 were not installed.

CR8 through CR12 were installed in place of C37 through C41.

On Comb Generator Board Assembly A4A2, parts were:

C31 and C32 were 5. 6 pf (6.8 pf preferred).

C34 through C39 were not installed.

CR1 through CR6 were installed in place of C34 through C39.

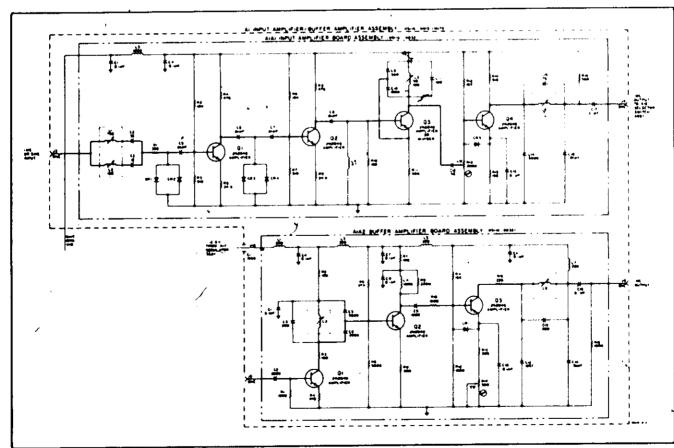


Figure 8-4. Input Amplifier A1 Changes

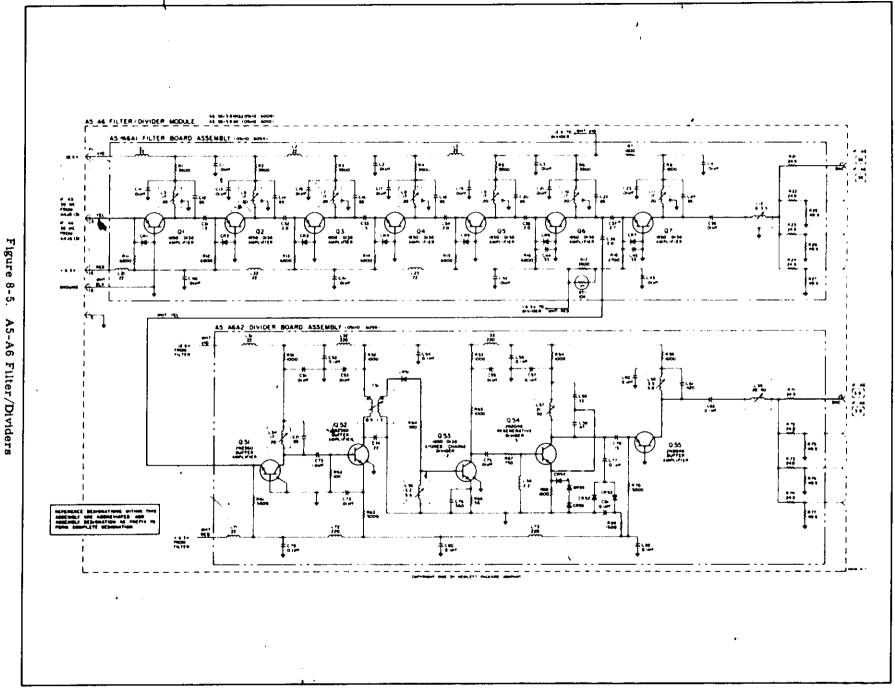


Table 8-3. FILTER/DIVIDER MODULE A5 (05110-6010) FILTER/DIVIDER MODULE A6 (05110-6009)

Reference	Ι Δ α	(Prefix all parts in this table A5 or A6)	Note
Designation	♦ Stock No.	Description	1100
			} ·
			1
Al	05110-6054	BOARD ASSY+ FILTER BLANK BOARD FILTER	ì
	05110-2014	BEAR SUARSIFICIEN	
A1C1	0160-2055	CIFXD CER O.OLUF +80-20% 100 VDCW	
A1C2	0160-2055	CIFXD CER 0.01UF +80-20% 100 VOCW	
A1C3	0160-2055	C:FXD CER 0.01UF +80-20% 100 VUC# C:FXD CER 0.01UF +80-20% 100 VDC#	İ
A1C4 A1C5 THRU	0160-2055	CIPAD CER GIGIOF VBG-208 100 VDC-	i
AIC10/		NOT ASSIGNED	
AICII	0160-2055	CIFXD CER 0.01UF +80-20% 100 VOCW	
A1C12 A1C13	0160-055	C:FXD CER 0.01UF +80-20% 100 VDC%	
A1C14	0160-0357	CIFXD CER DISK 85PF 5%	
A1C15	0160-2055	CIFXD CER 0.01UF +80-20% 100 VUCW	
A1C1A	0160-0357	CIFXO CER DISK 8SPF 5%	
A1C16 A1C17	0160-055	C1FXD CER U.01UF +80-20% 100 VOCW	
A1C18	0160-0357	CIFXO CER DISK 85PF 5N	1
A1C19	0160-2055	CIFXD CER 0.01UF +80-20% 100 VUCW	
A1C20	0160-0357	CIFXO CER DISK 85PF 5N	
A1C21	0160-2055	C:FXD CER 0.01UF +80-20% 100 VDC#	1
A1C22	0160-0357	CIFXO CER UISK 85PF 5N	
A1C23	0160-2055	CIFXU CER 0.01UF +80-20% 100 VUCW	
A1C24	0160-0357	CIFXO CER UISK 85PF 5N	
A1C25 THRU A1C30		NOT ASSIGNED	
~1030			
A1C31	0150-0011	C1FXD TI 1-5PF 20% 500VDCW	
A1C32	0150-0031	CIFXD TI 2PF 5% 500VDCW	
A1C33 A1C34	0150-0011 0150-0031	CIFXD TI 2PF 5% 500VDCM	
A1C35	0150-0031	CIFXD TI 2PF 5% 500VDCW	
	0150 0031	CLEVE TE DEE EN ERRUDEN	
A1C36 A1C37	0150-0031	CIFXD TI 2PF 5% 500VDC# CIFXD TI 2-7PF 5% 500VDC#	
	0.30-004.	FACTORY SELECTED COMPITYPICAL VALUE GIVEN	ĺ
A1C38		NOT ASSIGNED	
A1C39	0160-2055	CIFXO CER 0.01UF +80-20% 100 VOC#	
A1C40	0160-2055	CIFXO CER 0.01UF +80-20% 100 VOCW	
A1C41	0160-2055	CIFXD CER U-01UF +80-20% 100 VOCM	1
A1C42	0160-2055	C:FXD CER 0.01UF +80-20% 100 VDC#	
A1C43	0160-2055	C:FXD CER 0.01UF +80-20% 100 VUCW	Í
V1C44	0160-0179	CIFXU MICA 33PF 5% 300VDCW CIFXD MICA 33PF 5% 300VDCW	1
11045	0160-0179	CIPAU DICH JOPP DR DUUTUCE	}
AICRI	1910-0016	SEMICON DEVICE DIODE GERMANIUM	
AICR2	1910-0016	SEMICON DEVICE DIODE GERMANIUM	1
AICR3	1910-0016	SEMICON DEVICE:DIODE GERMANIUM	
NICR4 NICR5	1910- 0 016 1910-0016	SEMICON DEVICEIDIODE GERMANIUM SEMICON DEVICEIDIODE GERMANIUM	
ALCR6	1910-0016	SEMICON DEVICE FOLDUE GERMANIUM	
AICR7	1910-0016	SEMICON DEVICE DIOUE GERMANIUM	
Alli	9140-0179	COIL-FAD R-F- 22 UH 10% 275 MA	
A1L2	9140-0179	COIL-FXO R.F. 42 UH 108 275 HA	
AILS	9140-0179	COIL-FAD R.F. 22 UH 10% 275 MA	
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Table 8-3. FILTER/DIVIDER MODULE A5 (05110-6010)
FILTER/DIVIDER MODULE A6 (05110-6009)

(Prefix all parts in this table A5 or A6)

Reference Designation	Stock No.	Description	Note
			1
A1L4		NOT ASSIGNED	İ
A1L5	05100-6186	COIL1 0.17-0.20UH	
	9170-0105	CORETADJUSTABLE TUNING	4
AIL6	05100-6186	COIL: 0.17-0.20UH	ľ
	9170-0105	CORE I ADJUSTABLE TUNING	
AILT	05100-6186	COILF 0.17-0.20UH	
	9170-0105	CORE! ADJUSTABLE TUNING	
AILB	05100-6186	COIL! 0.17-0.20UH	ĺ
	9170-0105	CORE ADJUSTABLE TUNING	i
A1L9	05100-6186	COIL+ 0.17-0.20UH	
	9170-0105	CORETADJUSTABLE TUNING	
AIL10	05100-6186	COIL+ 0+17-0+20UH	
) مر ا	9170-0105	CORE FADJUSTABLE TUNING	
AILII/	05100-6166	COIL! 0.17-0.20UH	1
N	9170-0105	CORETADJUSTABLE TUNING	
AIL12	05110-6047	COIL: VARIABLE 1.8-3.50H	
	9170-0106	CORE ADJUSTABLE TUNING POWDERED IRON	
AILI3 THRU		NOT PRICES	
A1L20	9140-0179	NOT ASSIGNED COIL-FXD R+F+ 22 UH 10% 275 MA	
A1[2]	9140-0179	COIL-FAD R.F. 22 UH 10% 275 MA	
-1022	7140-0177		
A1L23	9140-0179	COIL-FXD R+F+ 22 UH 10% 275 MA	
A101	1850-0138	TRANSISTORISPLANASO PNP GERMANIUM MADT	
410S	1850-0138	TRANSISTORISPLENESSO PNP GERMANIUM MADT	
A193	1850-0138	TRANSISTORISPLENEZACO PNP GERMANIUM MADT	
A194 A195	1850-0138 1850-0138	TRANSISTORISPLANASO PNP GERMANIUM MADT TRANSISTORISPLANASO PNP GERMANIUM MADT	
~143	1030-0130		
A 106	1850-0138	TRANSISTOR/SPL2N2360 PNP GERMANIUM MADT	Ì
A197	1850-0138	TRANSISTOR SPL2N2360 PNP GERMANIUM MADT	
AIRI	0683-3925	RIFXD COMP 3900 OHM 5% 1/4%	
1R2	0683-3925	RIFXU COMP 3900 OHM 5% 1/4%	
AIR3	0683-3925	RIFAD COMP 3900 OHM 5% 1/4#	
AIR4	0683-3925	RIFXD COMP 3900 OHM 5% 1/4%	
A1R5	0683-3925	RIFXU COMP 3900 OHM 5% 1/4%	
A IR6	0683-3925	RIFXD COMP 3900 OHM 5% 1/4#	
AIR7	0683-1825	RIFXD COMP 1800 OHM 5% 1/4%	Ì
AIRB	0683-1825	RIFXD COMP 1800 OHM 5% 1/4%	
ALRO THRU			
A1R10	0750 0000	NOT ASSIGNED	
LIRII	0758-0009	RIFKO MET FLM 6800 DHM 5% 1/2W	[
1812	0758-0009	RIFXO MET FLM 6800 OHM 5% 1/28	
AIR13	0758-0009	RIFXO MET FLM 6800 OHM 5% 1/28]
A1R14	0758-0009	RIFXO MET FLM 6800 OHM 5% 1/28	1
AIR15	0758-0009	RIFXD MET FLM 6800 OHM 5% 1/28	
VIRIO >	0758-0009	RIFXD MET FLM 6800 OHM 5% 1/2W	
IR17	0758-0045	RIFAU MET FLM 3900 OHM 5% 1/28	j
IRIB	0758-0004	RIFXD MET FLM 2700 OHM 5% 1/2#	1
LIRIS THRU	1		ļ
1R20		NOT ASSIGNED	
11R21	0757-0291	RIFXO MET FLM 24.9 OHM IN 1/88	,
			1
	<u> </u>	The state of the s	

Table 8-3. FILTER/DIVIDER MODULE A5 (05110-6010)
FILTER/DIVIDER MODULE A6 (05110-6009)

(Prefix all parts in this table A5 or A6)

Designation	∌ Stock No.	Description	Note
		· ·	
1R22	0757-0291	RIFXU MET FLM 24.9 OHM 1% 1/8W	
\1R23	0757-0291	RIFXD MET FLM 24.9 OHM 15 1/88	l.
1R24	0757-0291	RIFXD MET FLM 24.9 OHM 18 1/88	
1R25	0757-0277	RIFXD MET FLM 49.9 OHM 18 1/88	İ
1R26	0757-0277	RIFAD MET FLM 49.9 OHN IN 1/8#	
1R27	0757-0277	RIFXO MET FLM 49.9 OHM 18 1/88	
NIRT1	0839-0026	THERMISTOR: 18K OHH 10% 25C	
12	05110-6059	BOARD ASSY. I DIVIDER	
	05110-2018	BLANK BOARDIDIVIDER	
2051	0160-2055	C1FXD CER 0.01UF +80-20% 100 VOCW	
2052 .	0150-0121	CIFXD CER 0.1UF 50 VOCW	İ
2053	0160-2055	CIFXU CER 0.01UF +80-20% 100 VUC#	i
2054	0150-0121	CIFAD CER U-LUF 50 VDCW	
2055	0160-2055	CIFXD CER 0.01UF +80-20% 100 VDC#	
2056	0150-0121	CIFXD CER 0-1UF 50 YOCH	
2057	0150-0121	CIFXO CER OLIUF 50 VDCW	
2058	0160-0179	CIFXD MICA 33PF 5N 300VDCW	
2059	0160-0182	CIFAD MICA 47PF 5% 300VDCW	
2060	0150-0121	CIFXD CER U-1UF 50 VDCH	
2061	0140-0230	CIFXD MICA 420PF IN 300VDCm	
2062	0150-0121	CIFAD CER U.1UF 50 VDCW	
2C63 THRU	0130-0121	CILVO CEM OLION 20 APCH	
2070		NOT ASSIGNED	
2071	0160-0357	NOT ASSIGNED	
2072	0150-0029	CIFXO CER DISK 85PF 5%	•
2073	0160-2055		
2074	0140-0145	C1FXD CER 0.01UF +80-20% 100 VDC% C1FXD MICA 22 PF 5% 500 VDC%	
2075	0160-2055	TOTAL MICH 22 PF 38 300 VOCE	
2C76		C:FXD CER U.01UF +80-20% 100 VDC#	;
2077	0140-0178 0150-0121	CIFXD MICA 560 PF 28 300 VDCR	
	0130-0121	CIFXD CER U.LUF 50 VDCW	
2C76	0140-0101	CIFXO MICA 15PF 5% 500 NOCH	
2079	0150-0121	CIFXO CER ULLUF 50 VDCM	1
2080	0150-0121	CIFXO CER U-1UF 50 VDC#	i
SC 8 T	0150-0121	CIFXO CER 0-1UF 50 VOCH	
IC82	0150-0121	CIFXO CER 0-1UF 50 VDCB	
CR51	1910-0016	SEMICON DEVICE DIODE GERMANIUM	
CR52	1910-0016	SEMICON DEVICE DIODE GERMANIUM	1
CR53	1910-0016	SEMICON DEVICE DIODE GERMANIUM	
CR54	1901-0040	DIODEFSILICON 30 MARAT IV 30 PIV	
CR55	1901-0040	DIODEISILICON 30 MA AT 1V 30 PIV	
CR56	1901-0040	DIODEISILICON-30 MA AT 1V 30 PIV	•
L51	9140-0179	COIL-FXD R+F+ 22 UH 10% 275 HA	
L52		COILIFXO RF 220 UH	
L53	9140-0129	COILIFXD RF 220 UH	
L54	05100-6166	COILI VARIABLE	
	9170-0105	CORETADJUSTABLE TUNING	
L55	05100-6170	COIL: VARIABLE 3.2-5.6UH	
	9170-0106	CORE ADJUSTABLE TUNING POWDERED IRON	
		A	
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Table 8-3. FILTER/DIVIDER MODULE A5 (05110-6010) cont'd FILTER/DIVIDER MODULE A6 (05110-6009) (Prefix all parts in this table A5 or A6)

Palaranaa	T***	(Prefix all parts in this table A5 or A6)	
Reference Designation	Stock No.	Description	Note
			ļ
12L56	9140-0077	COILIFXO RFI 2.2UH	
2157	05110-6023	COILI VARIABLE 21-34UH	
	9170-0106	CORE ADJUSTABLE TUNING POWDERED IRON	
2L58	05110-6061	COIL: VARIABLE 3.5-6.0UH	
	9170-0106	CORE ADJUSTABLE TUNING POWDERED IRON	
2L59	05110-6024	COIL: VARIABLE 28-450H	
	9170-0106	CORE ADJUSTABLE TUNING POWDERED IRON	
2L60 THRU			
2L70		NOT ASSIGNED	
2471	9140-0179	COIL-FXD R.F. 42 UH 10% 275 MA	
2L72	9140-0129	COILEFXO RF 220 UH	
2L73	9140-0129	COILIFXD RF 220 UH	
2051	1850-0116	TRANSISTOR-PNP GERMANIUM EIA 2N2360	
.2051 .2052	1850-0118	TRANSISTOR-PNP GERMANIUM EIA 2N2360	Ì
	1850-0118	TRANSISTOR-PAP GERMANION EIN ZNZOOO TRANSISTORISPLZNZ360 PNP GERMANIUM MADT	
2053	1	TRANSISTORIGERMANIUM 2N2U48 PNP	
2954 2955	1850-0091 1850+0091	TRANSISTORIGERMANIUM 2N2048 PNP	
E#JJ	103040047	Trining of the capturing the Property of the	
2851	0683-1025	RIFXU COMP 1000 OHM 5% 1/4%	1
2R52	0683-1025	RIFXO COMP 1000 OHM 5% 1/4%	
2853	0683-1025	RIFXD COMP 1000 OHM 5% 1/48	1
2R54 .	0683-1025	RIFAU COMP 1000 UHM 5% 1/4%	1
2R55	0683-1025	RIFXD COMP 1000 OHM 5% 1/4%	
2R56 THRU	1	J	
:-::	İ	NOT ASSIGNED	
2R60	0403-6436	RIFAU COMP 560 OHM 5% 1/4%	
2R61	0683-5625		
2R62	0683-1035	RIFED COMP TOK OHM 5% 1/4 %	
2R63	0683-3025	RIFAU COMP 3000 OHM 5% 1/4%	
2R64	0683-3915	RIFXD COMP 390 OHM 5% 1/4W	
2R65	0683-1025	RIFXO COMP 1000 OHM 5% 1/4%	
2R66	0683-5605	RIFXU COMP 56 OHM 5% 1/4#	
2R67	0683-7515	R:FXO COMP 750 OHM 5% 1/4%	''
2R68	0683-1825	RIFXU COMP 1800 OHM 5% 1/4%	
2R69	0683-1525	RIFXD COMP 150 OHM 5% 1/4%	
2R70	0758-0035	RIFXU MET FLM 3000 OHM 5% 1/4#	
2R71	0757-0291	RIFXD MET FLM 44.9 OHM 18 1/68	
	0757-0291	RIFAD MET FLM 24.9 OHM 1% 1/6W	
2R72 2R73		RIFXU MET FLM 24.9 OHM IN 1/8W	
2R73 2R74	0757-0291	RIFXU MET FLM 24.9 OHM 18 1/88	
	_		
2R75	0757-0277	RIFXU MET FLM 49.9 OHM 18 1/88	
2R76	0757-0277	RIFXD MET FLM 49.9 OHM 1% 1/8% RIFXD MET FLM 49.9 OHM 1% 1/8%	
2R77	0757-0277		
2T51	05100-6167	TRANSFORMERI	
1 2 THRU	1250-0118	CONNECTORIBAC	
4		NOT ASSIGNED	j
5	1250-0118	CONNECTORIBAC	
0 1	05110-0005	FILTER HOUSING	
P1			
P2	05110-0006	FILTER COVER	
P3	05110-0007	BRACKET: DIVIDER	[
P4	05110-2002	CAP :FRONT	J
P5	05110-2035	CAP :REAR	1
1	1251-0216	CONNECTOR MALE 9-CONTACT TYPE D	1
	0340-0039	INSULATOR (BUSHING	
	0510-0207	NUT:CAPTIVE 4-40 X 3/16 SST	j
	05110-2001	SPACER IF ILTER	1
	0340-0038	TERMINAL ISTUD	1

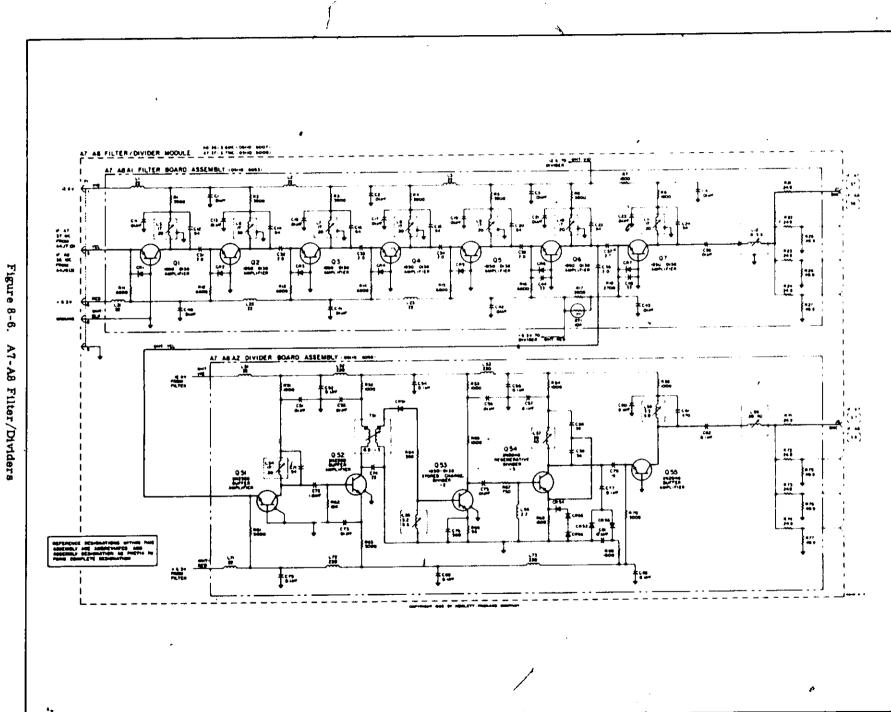


Figure 8-6.

Table 8-4. FILTER/DIVIDER MODULE A7 (05110-6008) FILTER/DIVIDER MODULE A8 (05110-6007)

Reference Designation	Stock No.	Description	Note
11	05110-6053 05110-2014	BOARD ASSY+1 FILTER BLANK BOARD:FILTER	
101'	0160-2055	CIFXD CER 0.01UF +80-20% 100 VUC#	
102	0160-2055	CIFXD CER 0.01UF +80-20% 100 VDCW	
103	0160-2055	CIFXD CER 0.01UF +80-20% 100 VDC# CIFXD CER 0.01UF +80-20% 100 VDC#	
1164 1165 THRU	0160-2055	CIEXD CER O-OFOR +80-50# 100 April	
1105 THRU 11010		NOT ASSIGNED	
1011	0160-2055	C1FXD CER 0.01UF +80-20% 100 VOC#	
1012	10160-0358	CIFXD CER DISK 94PF 5%	
(1013	0160-2055	C1FXD CER 0.01UF +80-20% 100 VDC#	
1014	0160-0358	CIFXD CER DISK 94PF 5% CIFXD CER 0.01UF +80-20% 100 VDC#	
11015	0160-2055		ļ
1C16	0160-0358	CIFXO CER DISK 94PF 5N	
1017	0160-2055	CIFXD CER 0.01UF +80-20% 100 VDC# CIFXD CER DISK 94PF 5%	
11018	0160-0358 0160-2055	C1FXU CER 0.01UF +80-20% 100 VUC#	
110 2 0	0160-0358	CIFXD CER UISK 94PF_5M	
	0.00		
1021	0160-2055	CIFXO CER 0.01UF +80-20% 100 VOC4	
V1C22	0160-0358	CIFXD CER DISK 94PF 5% 100 VDC#	
11023	0160-2055 0160-0358	CIFXO CER DISK 94PF \$%	
11024 11025 THRU	0100-0550		
1630		NOT ASSIGNED	
11031	0150-0031	CIFAD TI 2PF SN 500VDCR	
1032	0150-0031	CIPAD II 2PP 3W DOUGHCW	
11033	0150-0031	CIFXO TI 2PF 5% SOOVOCW	ľ
1C34	0150-0031	CIFXO TI 2PF 3% 500VDC#	
11035	0150-0031	CIFXU TI 2PF 5% 500VUCW	
1036	0150-0031	CIFXD.TI 2PF \$% 500VDC#	
11037	0150-0041	CIFXO TI 2.7PF 5% 500VDC#	
		FACTORY SELECTED COMPI TYPICAL VALUE GIVEN NOT ASSIGNED	
11038	0160-2055	CIFXD CER 0.01UF +80-20% 100 VDC#	
1103 9 11040	0160-2055	CIFAD CER 0.01UF +80-20% 100 VDC#	
1641	0160-2055	CIFXO CER 0.01UF +80-20% 100 VOC#	
1042	0160-2055	CIFXO CER 0.01UF +80-20% 100 VOC#	
11043	0160-2055	CIFXD CER 0.01UF +60-20% 100 VDC%* CIFXD MICA 33PF 5% 300VDCW	
1044	0160-0179 0160-0179	CIFXD HICA 33PF 5% 300VDCW	
ICR1	1910-0016	SEMICON DEVICE IDIODE GERMANIUM SEMICON DEVICE IDIODE GERMANIUM	
NICR2	1910-0016	SEMICON DEVICE : DIODE GERMANIUM	
LICR3 LICR4	1910-0016	SEMICON DEVICE DIOUE GERMANIUM	
ICR5	1910-0016	SEMICON DEVICE IDIOGE GERMANIUM	
LICR6 m	1910-0016	SEMICON DEVICE IDIODE GERMANIUM	
ICR7 D	1910-0016	SEMICON DEVICE IDIODE GERMANIUM	
ALI	9140-0179	COIL-FXD R.F. 22 UH 10% 275 MA	
A1L2	9140-0179	COIL-FXO R.F. 22 UH 10% 275 MA	
A1L3	9140-0179	COIL-FAD R.F. 42 UH 10% 275 MA	

Table 874. FILTER/DIVIDER MODULE A7 (05110-6008) cont'd FILTER/DIVIDER MODULE A8 (05110-6007)

Reference Designation	₱ Stock No.	Description	Note
A1L4 A1L5 A1L6 A1L7 A1L8	05100-6186 9170-0105 05100-6186 9170-0105' 05100-6166 9170-0105 05100-6186 9170-0105	NOT ASSIGNED COIL: VARIABLE 0.17-0.20UH CORE: ADJUSTABLE TUNING COIL: VARIABLE 0.17-0.20UH CORE: ADJUSTABLE TUNING COIL: VARIABLE 0.17-0.20UH CORE: ADJUSTABLE TUNING COIL: VARIABLE 0.17-0.20UH CORE: ADJUSTABLE TUNING COIL: VARIABLE 0.17-0.20UH CORE: ADJUSTABLE TUNING	
AILIO AILII	9170-0105 9170-0105 9170-0105 9170-0105 05100-6186 9170-0105	COIL! VARIABLE 0.17-0.20UH CORE: ADJUSTABLE TUNING COIL! VARIABLE 0.17-0.20UH CORE: ADJUSTABLE TUNING COIL! VARIABLE 0.17-0.20UH CORE: ADJUSTABLE TUNING	
AILIZ AILI3 THRU AIL20 AIL21 AIL22	05110-6047 9170-0106 19140-0179 9140-0179	COIL! VARIABLE 1.8-3.5UH CORE ADJUSTABLE TUNING POWDERED IRON NOT ASSIGNED COIL-FXD R.F. 22 UH 10% 275 MA COIL-FXD R.F. 22 UH 10% 275 MA COIL-FXD R.F. 22 UH 10% 275 MA	
1101 1102 1103 1104 1105	1850-0136 1850-0138 1850-0136 1850-0136 1850-0138	TRANSISTOR:SPL2N2360 PNP GERMANIUM MADT TRANSISTOR:SPL2N2360 RNP GERMANIUM MADT TRANSISTOR:SPL2N2360 PNP GERMANIUM MADT TRANSISTOR:SPL2N2360 PNP GERMANIUM MADT TRANSISTOR:SPL2N2360 PNP GERMANIUM MADT	
107 1R1 1R2 1R3 1R4 1R5	1850-0138 0683-3925 0683-3925 0683-3925 0683-3925 0683-3925	TRANSISTOR I SPL 202360 PNP GERMANIUM MADT RIFXD COMP 3900 OHM 5% 1/4% RIFXD COMP 3900 OHM 5% 1/4% RIFXD COMP 3900 OHM 5% 1/4% RIFXD COMP 3900 OHM 5% 1/4% RIFXD COMP 3900 OHM 5% 1/4%	
ilR6 ilR7 ilR8 ilR9 THRU ilR10 ilR11	0683-3925 0683-1825 0683-1825 0758-0009	RIFXD COMP 3900 OHM 5% 1/4% RIFXD COMP 1800 OHM 5% 1/4% RIFXD COMP 1800 OHM 5% 1/4% NOT ASSIGNED RIFXD MET FLM 6800 OHM 5% 1/2%	
1R12 1R13 1R14 1R15 1R16	0758-0009 0758-0009 0758-0009 0758-0009 0758-0009	RIFXO MET FLM 6800 OHM 5% 1/28 RIFXO MET FLM 6800 OHM 5% 1/28 RIFXO MET FLM 6800 OHM 5% 1/28 RIFXO MET FLM 6800 OHM 5% 1/28 RIFXO MET FLM 6800 OHM 5% 1/28	
1R17 1R18 1R19 THRU 1R20 1R21	0758-0045 0758-0004 0757-0291	RIFXU MET FLM 3900 OHM 58 1/28 RIFXD MET FLM 2760 OHM 58 1/28 NOT ASSIGNED RIFXO MET FLM 24.9 OHM 18 1/88	
:			

Table 8-4. FILTER/DIVIDER MODULE A7 (05110-6008)
FILTER/DIVIDER MODULE A8 (05110-6007)
(Prefix all parts in this table A7 or A8)

Reference Designation	⊕ Stock No.	Description		Note
	,			
1822	0757-0291	RIFXD MET FLM 24.9 OHM 1% 1/8W	1	-
1R23	0757-0291	RIFXD MET FLM 24.9 OHM IN 1/8W		
1824	0757-0291	RIFXD MET FLM 24.9 OHM IN 1/88		1
LR25	0757-0277	RIFAD MET FLM 49.9 OHM 1% 1/8W		
1R26	0757-0277	RIFXD MET FLM 49.9 OHM 1% 1/8#		
1R27 .	0757-0277	RIFXO MET FLM 49.9 OHM 1% 1/8#		
LAT1	0839-0024	THERMISTOR: 10K OHM 10% 25C		
2	05110-6058 05110-2018	BOARO ASSY. DIVIDER BLANK BOARD-DIVIDER		
2051	0160-2055	CIFXD CER 0-01UF +80-20% 100 VOCE		
2052	0150-0121	CIFXD CER 0.1UF 50 VUCT		
2C53		CIFXD CER 0.01UF +80-20% 100 VOC#		
2054	0150-0121	CIFXD CER 0-1UF 50 VDCW		
2055	0160-2055	CIFXD CER 0.01UF +80-20% 100 VDC#		
2056	0150-0121	CIFXD CER U-1UF 50 VOCH		
2Ç57	0150-0121	CIFAD CER 0-1UF 50 VDCW		
2058	0140-0190	CIFXD MICA 39 PF 5% 300 VDCW		}
2059	0140-0191	CIFXO MICA 56 PF 5% 300 VDC#		i
2060	0150-0121	CIFNO CER GILLE 50 VDCW]
2061	0140-0149	CIFXD MICA 470 PF 58 300 VDCW		
2062	0150-0121	CIFXU CER 0.1UF 50 VDCW		
2063 THRU		A1887 A # # 1 / A16 #		
2070	1	NOT ASSIGNED		
2071	0160-0358	CIFKO CER UISK 94PF 5%		
2072	0150-0029	CIFAD TI 1PF 10% SOOVDCW		
2073	0160-2055	C:FXD CER 0:01UF +80-20% 100 VUCW		
2074	0140-0145	CIFAD MICA 22 PF 5% 500 VDC#	* / /	
2075	0160-2055	CIFXD CER 0.010F +80-20% 100 VDC#	- 1	
2076	0140-0178	CIFXD MICA 560 PF 2% 300 VDC#	1	
2077	0150-0121	CIFXD CER 0-1UF 50 VDCW	\	
2078	0140-0101	CIFAD MICA 15PF 58 500 VDCB	1	
2079	0150-0121	CIFXO CER OLIUF 50 VOC#	l	
2080	0150-0121	CIFAD CER OLIUF 50 VOC#	1	
12081	0150-0121	CIFAD CER GILUF 50 VDC#		
12CB2 :	0150-0121	CIFAD CER 0.1UF 50 VDC#		1
2CR51	1910-0016	SEMICON DEVICE DIODE GERMANIUM		
2CR52	1910-0016	SEMICON DEVICE DIODE GERMANIUM		
2CR53	1910-0016	SEMICON DEVICE DIODE GERMANIUM		
2CR54	1901-0040	DIODEISILICON 30 MA AT IV 30 PIV		
2CR55	1901-0040	DIODEISILICON 30 MA AT IV 30 PIV		1
12CR56	1901-0040	DIODEISILICON 30 MA AT 1V 30 PIV		
2L51	9140-0179	COIL-FXD R.F. 22 UH 10% 275 MA		
21.52	9140-0129	COILIFAD RF 220 UH		
12L53	9140-0129	COILIFAD RF 220 UH		
12L54	05100-6166	COILI VARIABLE 0.17-0.20UH		
	9170-0105	CORE LADJUSTABLE TUNING		
2155	05100-6170	COIL FURTABLE 3.2-5.60H		
	9170-0106	CORE AUJUSTABLE TUNING POWDERED IRON		

Table 8-4. FILTER/DIVIDER MODULE A7 (05110-6008) FILTER/DIVIDER MODULE A8 (05110-6009)

Reference	6 00	(Prefix all parts in this table A7 or A8)	, , , ,
Designation	Stock No.	Description	Note
:			
A2L56	9140-0077	COILIFXO RF1 2.28H	Ì
12L57	05110-6024	COIL: VARIABLE 28-45UH	
	9170-0106	CORE ADJUSTABLE TUNING POWDERED IRON	
12L58	05110-6061	COIL: VARIABLE 3.5-6.0UH	
	9170-0106	CORE ADJUSTABLE TUNING POWDERED IRON	
12159	08110-602#	COIL: VARIABLE 28-45UH	
2657	05110-6024 9170-0106	CORE ADJUSTABLE TUNING POWDERED IRON	
2L60 THRU	7.70-0.00	b	
2L70	,	NOT ASSIGNED	
2L71	9140-0179	COIL-FXD R.F. 22 UH 10% 275 MA	
2L72	9140-0129	COILIFAD RF 220 UH	
			•
2L73	9140-0129	COILIFAD AF 220 UH	
2951	1850-0118	TRANSISTOR-PNP GERMANIUM EIA 2N2360	
2052	1850-0118	TRANSISTOR-PNP GERMANIUM EIA 2N2360	
2053	1850-0138	TRANSISTORISPLENESSO PNP GERMANIUM HADT	
2054	1850-0091	TRANSISTORIGERMANIUM 2N2048 PNP	-
2055	1850-0091	TRANSISTOR GERMANIUM 2N2048 PNP	-
2851	0683-1025	RIFXO COMP 1000 OHM 5% 1/4m	
2R52	0683-1025	RIFXD COMP 1000 OHM 5% 1/4%	ŧ
2R53	0683-1025	RIFXO COMP 1000 OHM 5% 1/4%	
2R54	0683-1025	RIFXD COMP 4000 OHM 5% 1/4%	
2R55	0683-1025	RIFXD COMP 1000 OHM 5% 1/4%	1
2RS6 THRU		10.	
2860		NOT ASSIGNED	
2R61	0683-5625	RIFXO COMP 560 OHM 5% 1/48	
2R62	0683-1035	RIFAD COMP TOK OHM 5% 1/4W	
2863	0683-3025	RIFXD COMP 3000 OHM 5% 1/4%	
2R64	0683-3915	RIFAU COMP 390 OHM 58 1/48	
2845	0443-1034	BIETO COMP 1040 ON SE 1415	
2865 3866	0683-1025	RIFXD COMP 1000 OHM 5% 1/4%	
2R66 2R67	0683-5605 0683-7515	RIFXD COMP 56 OHM 5% 1/4% RIFXD COMP 750 OHM 5% 1/4%	
2R68	0683-1825	RIFXD COMP 1800 OHM 5% 1/4%	
2869	0683-1525	RIFXD COMP 150 OHM 5% 1/4W	
	•	1	
2R70	0758-0035	RIFAD MET FLM 3000 OHM 58 1/28	
2871	0757-0291	RIFKO MET FLM 24.9 OHM 1% 1/6W	
2R72	0757-0291	RIFXO MET FLM 24.9 OHM 18 1/88	
2R73	0757~0291	RIFAD MET FLM 24.9 OHM 18 1/88	
ery4 _{fi} .	0757-0291	RIFXD MET FLM 24.9 OHM 18 1/8W	
2 475	0757-0277	RIFXO MET FLM 49.9 OHM 1% 1/8#	
1976	0757-0277	RIFXO MET FLM 49.9 OHM 1% 1/8#	1
UA77	0757-0277	RIFXO MET FLM 49.9 OHM 1% 1/8%	
IT\$1	05100-6167	TRANSFORMER	
	1250-0118	CONNECTORIUM	
Z THRU	· ·		
	1260-0116	NOT ASSIGNED	j
•	1250-0118	CONNECTORIBAC	
P1	05110-0005	FILTER HOUSING	
·	05110-0006	FILTER COVER	
73	05110-0007	BRACKETI DIVIDER	1
P4	05110-2002	CAP IFRONT	
P5	05110-2035	CAP IREAK	
1	1251-0216	CONNECTOR MALE 9-CONTACT TYPE D	
	0340-0039	INSULATOR (BUSHING	
	0510-0207	NUT:CAPTIVE 4-40 X 3/16 SST	
	05110-2001	SPACER:FILTER SHIELD	į.

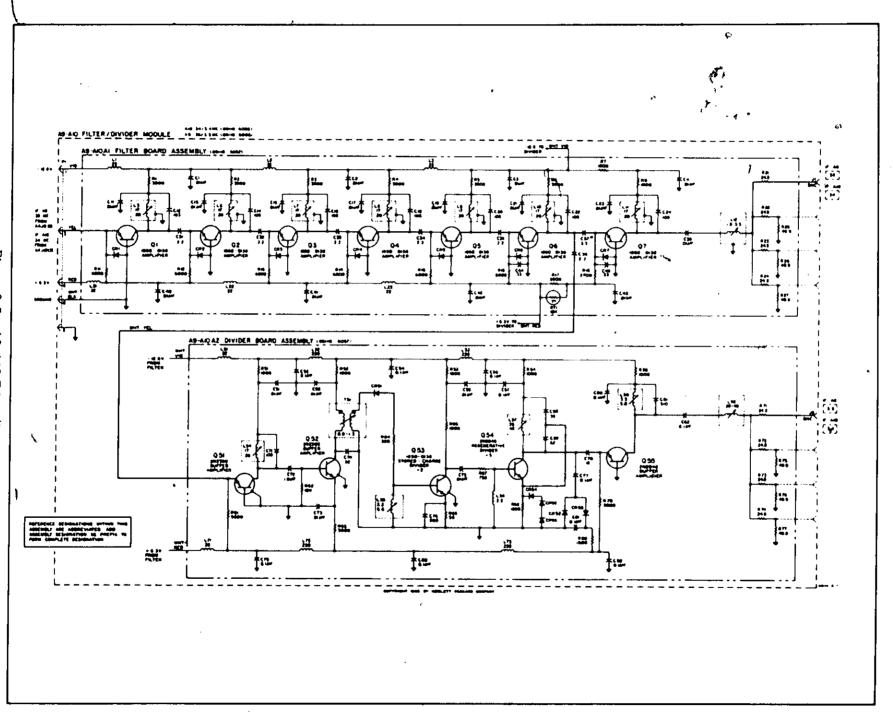


Figure 8-7. A9-A10 Filter/Dividers

Table 8-5. FILTER/DIVIDER MODULE A9 (05110-6006) FILTER/DIVIDER MODULE A10 (05110-6005)

Reference	Stock No.	Description	Note
Designation	4 otors no.	Description	1100
			İ
A1	05110-6052	BOARD ASSY . I FILTER	
	05110-2014	BLANK BOARD IFILTER	
101	0160-2055	CIFXO CER 0-01UF +80-20N 100 VDCN	
N1C2 N1C3	0160-2055 0160-2055	C:FXD CER 0.01UF +80-20% 100 VDCW C:FXD CER 0.01UF +80-20% 100 VDCW	İ
1104	0160-2055	CIFAD CER 0-01UF +80-20% 100 VDCW	ŀ
11C5 THRU 1	()	NOT ASSIGNED	
1012	0160-2055	CIFXD CER 0.01UF +80-20% 100 VDC%	
VIÇTŞ	0160-2055	CIFXO CER 0.01UF +80-20% 100 VDCW	
\1C14 \1C15	0160-0359	CIFXO CER DISK 103PF 5% CIFXO CER 0.01UF +80-20% 100 VUC#	
·	ĺ		
1016	0160-0359° 0160-2055	C:FXD CER DISK 103PF 5% C:FXD CER 0.01UF +80-20% 100 VDCW	
1018	0160-0359	CIFXO CER DISK 103PF 5%	
1019	0160-2055 0160-0359	CIFXO CER U-01UF +80-20% 100 VUCW CIFXO CER UISK 103PF 5%	
	1		
1021	0160-2055 0160-0359	C1FXU CER 0.01UF +80-20% 100 VUCW C1FXU CER UISK 103PF 5%	
1023	0160-2055	CIFXU CER 0.01UF +80-20% 100 VUCW	
1024 \ 1025 THRU	0160-0359	CIFXO CER UISK 103PF 5%	
1030		NOT ASSIGNED	
1031	0150-0015	CIFXU TI 2.2PF 10% 500VDCW	
1032	0150-0015 0150-0015	C:FXD TI 2.2PF 10% 500VDCW C:FXD TI 2.2PF 10% 500VDCW	
1034	0150-0015	CIFXU TI 2.2PF 10% 500V0CW	į
1035	0150-0015	C1FXD T1 2+2PF 10% 500VDCW	
1036	0150-0015	CIFXO TI 2.2PF 10% 500VDCW	
1037	0150-0022	CIFXU TI 3.3PF 10% 500VDCW FACTORY SELECTED COMPI TYPICAL VALUE GIVEN	į
1C36		NOT ASSIGNED	
1039 1040	0160-2055 0160-2055	C1FXD CER U.01UF +80-20% 100 VDC% C1FXD CER U.01UF +80-20% 100 VDC%	
	}	<u>'</u>	Ì
1C41 1C42	0160-2 95 5 0160-2055	CIFXU CER 0.01UF +80-20% 100 VUC# CIFXU CER 0.01UF +80-20% 100 VUC#	
1043	0160-3055	CIFXD CER 0.01UF +80-20% 100 VDC#	
1C44 1C45	0160-0179 .0160-0179	CIFXD MICA 33PF 5% 300VDCW	
		•	
ICRI ICR2	1910-0016	SEMICON DEVICE:DIODE GERMANIUM SEMICON DEVICE:DIODE GERMANIUM	
ICR3	1910-0016	SEMICON DEVICE DIODE GERMANIUM	·
ICR4 ICR5	1910-0016	SEMICON DEVICE (DIODE GERMANIUM SEMICON DEVICE (DIODE GERMANIUM	
LCR6	1910-0016	SEMICON DEVICE:DIODE GERMANIUM	
ICR7	1910-0016	SEMICON DEVICE DIODE GERHANTUM	
161	9140-0179	COIL-FXD R+F+ 22 UH 10% 275 MA	
11.2	9140-0179 9140-0179	. COIL-FXD R+F+ 22 UH 10% 275 MA - COIL-FXD R+F+ 22 UH 10% 275 MA	
	7.40-01/7		
,		:	
}	_		
ı		i e e e e e e e e e e e e e e e e e e e	

Table 8-5. FILTER/DIVIDER MODULE A9 (05110-6006) cont'd FILTER/DIVIDER MODULE A10 (05110-6005)

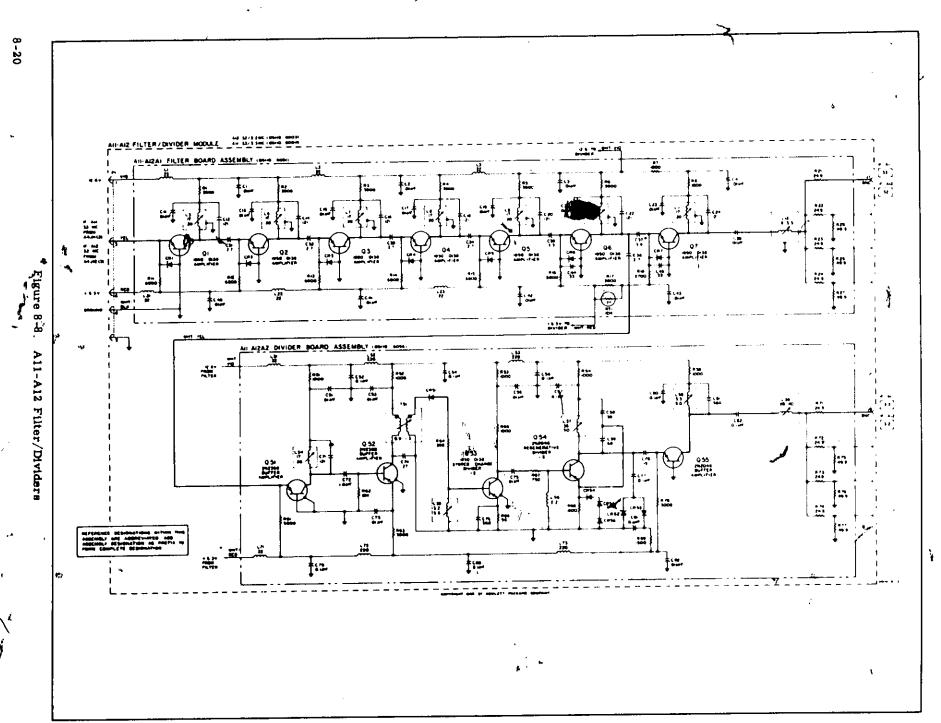
		(Prefix all parts in this table A9 or A10)	
Reference Designation	Stock No.	Description	Note
DC DI GIACTORI	 		
		NOT ACCUALC	
A1L4 A1L5	05100-6186	NOT ASSIGNED COIL: VARIABLE 0.17-0.20UH	ı
~1.0	9170-0105	COREIADJUSTABLE TUNING	
A1L6	05100-6186	COIL: VARIABLE 0.17-0.20UH	
	9170-0105	CORE ADJUSTABLE TUNING	
		!	
A1L7	05100-6186	COIL: VARIABLE 0.17-0.20UH	
	9170-0105	COREIADJUSTABLE TUNING	
ALLS	05100-6186	COLLI VARIABLE 0.17~0.20UH	
AIUP	9170-0105 05100-6186	: CORE:ADJUSTABLE TUNING COIL: VARIABLE 0:17-0:20UH	
1.7.4	03100-0100	COICE ANGINEE OF LANGE CONT.	
{	9170-0105	CORE: ADJUSTABLE TUNING	1
ALLTO	05100-6186	COIL: VARIABLE 0.17-0.20UH	
	9170-0105	CORETADJUSTABLE TUNING	
AlL11	05100-6186	COILI VARIABLE 0.17-0.20UH	
	9170-0105	COREIADJUSTABLE TUNING	
411.12	05110-6047	COILI VARIABLE 1.8-3.5UH	1
A1L12	9170-0106	CORE ADJUSTABLE TUNING POWDERED IRON	
AILI3 THRU	, , , , , , , , , , , , , , , , , , , ,	Anim imparings imitting i Angring strail	
AIL20		NOT ASSIGNED	
A1L21	9140-0179	COIL-FXD R.F. 22 UH 10% 275 MA	- {
A1L22	9140-0179	COIL-FXD R.F. 22 UH 10% 275 MA	4 5
4.0.27	0100 0176	COT: EVO & E 22 IN ION 175 MA	
A1L23	9140-0179	COIL-FXD R+F+ 22 UH 10% 275 MA	
AIPL	1251-0216	CONNECTORINALE 9-CUNTACT TYPE D	
	1		·
A101	1850-0138	TRANSISTORISPLAN2360 PNP GERMANIUM MADT	
AIQZ	1850-0138	TRANSISTORISPLANAGE PNP GERMANIUM MADT	
A103	1850-0138	TRANSISTORISPLENESSO PNP GERMANIUM MADT	1
A104	: 1850-0138 : 1850-0138	TRANSISTORISPLENESSO PNP GERMANIUM MADT	İ
A105	1850-0138	TRANSISTOR SPL2N2360 PNP GERMANIUM MADT	
A196	1850-0138	TRANSISTORISPLANAGO PNP GERMANIUM MADT	
A107	1850-0138	TRANSISTORISPLENESSO PNP GERMANIUM MADT	
-			
AIR1	0683-3925	RIFXU COMP 3990 OHM 5% 1/4%	
A1R2	0683-3925	RIFXD COMP 3900 OHM 5% 1/4%	
A1R3	0683-3925	RIFXD COMP 3900 OHM 5% 1/4%	
A1R4 A1R5	0683-3925 0683-3925	RIFXD COMP 3900 OHM 5% 1/4# RIFXD COMP 3900 OHM 5% 1/4#	
4172 ,	JUGJ-JYE3	TYPON GODE NOON NOT NOT AND AND AND AND AND AND AND AND AND AND	
AIR6	0683-3925	RIFXU COMP 3900 OHM 5% 1/4%	ļ
A1R7	0683-1825	RIFXU COMP 1800 OHM 5% 1/4W	
AIRS	0683-1825	RIFXD COMP 1800 OHM 5% 1/4#	
AIR9 THRU		NAME ARTECOPY	
AIRIO	0748 0000	NOT ASSIGNED	
AIRII	0758-0009	RIFAD MET FLM 6800 OHM 5% 1/2#	1
AIR12	0758-0009	RIFXU MET FLM 6800 OHM 5% 1/2#	
AIRI3	0758-0009	RIFXO MET FLM 6800 OHM 5% 1/48	1
AIRI4	0758-0009	RIFXD MET FLM 6800 OHM 58 1/28	
AIR15	0758-0009	RIFAD MET FLM 6800 OHM Sh 1/2	1
AIR16	0758-0009	RIFXO MET FLM 6800 OHM 5% 1/28	
TISIA	0758-0045	RIFXD MET FLM 3900 0MM 5% 1/2W	,
AIRIB	0758-0004	RIFXU MET FLM 2700 OHM 5% 1/28	
AIRI9 THRU			
AIR20		NOT ASSIGNED	
		İ	
		<u>}</u>	
		į	
		•	
			ļ

Table 8-5.: FILTER/DIVIDER MODULE A9 (05110-6006)
FILTER/DIVIDER MODULE A10 (05110-6005)
(Prefix all parts in this table A9 or A10)

(Prefix all parts in this table A9 or A10)			
Reference Designation	Stock No.	Description .	Note
A1R21 A1R22 A1R23 A1R24 A1R25	0757-0291 0757-0291 0757-0291 0757-0291 0757-0277	RIFXO MET FLM 28.9 OHM 1% 1/8W RIFXD MET FLM 24.9 OHM 1% 1/8W RIFXD MET FLM 24.9 OHM 1% 1/8W RIFXD MET FLM 24.9 OHM 1% 1/8W RIFXD MET FLM 24.9 OHM 1% 1/8W	,
AIR26 AIR27	0757-0277 0757-0277	RIFXD MET FLM 49.9 ONN 18 1/88 RIFXD MET FLM 49.9 ONN 18 1/88	
AIRTI	0839-0026	THERMISTOR: 10K OHM 10% 25C	
,A2 .	05110-6057 05110-2018	BOARD ASSY. I DIVIDER BLANK HOARDIDIVIDER	
A2C51 A2C52 A2C53 A2C53 A2C54 A2C55	0160-2055 0150-0121 0160-2055 0150-0121 0160-2055	C:FXD CER 0.01UF +80-20% 100 VUCW C:FXD\CER 0.1UF 50 VDCW C:FXD CER 0.01UF +80-20% 100 VDC# C:FXD CER 0.1UF 50 VDCW C:FXD, CER 0.01UF +80-20% 100 VDCW	1
A2C56 A2C57 A2C58 A2C59 A2C60	0150-0121 0150-0121 0140-0190 0140-0205 0150-0121	CIFXU CER 0.1UF 50 VDC# CIFXU CER 0.1UF 50 VDCW CIFXU MICA 39 PF 5% 300 VDCW CIFXU MICA 62PF 5% 300VDCW CIFXU CER 0.1UF 50 VDCW	
A2C61 A2C62 A2C63 THRU A2C70 A2C71 A2C72	0160-0364 0150 0121 0160-0359 0150-0029	C-FXD MICA 510 PF 5% C1FXD CER 0.1UF 50 VDCW NOT ASSIGNEC C1FXD CER DISK 103PF 5% C1FXD TI 1PF 10% 500VDCW	
A2C73 A2C74 A2C75 A2C76 A2C77	0160 ^{1/2} 055 0140-0145 0160-2055 0140-0178 0150-0121	C:FXD CER 0.01UF +80-20% 100 VDC# C:FXD MICA 22 PF 5% 500 VDCW C:FXU CER 0.01UF +80-20% 100 VDC% C:FXU MICA 360 PF 2% 300 VDCW C:FXD CER 0.1UF 50 VDCW	
A2C78 A2C79 A2C80 A2C81 A2C82	0140-0101 0150-0121 0150-0121 0150-0121	CIFXO MICA 15PF 5% 500 VDC% CIFXE CER U-1UF 50 VDC% CIFXD CER U-1UF 50 VDC% CIFXD CER U-1UF 50 VDC% CIFXD CER U-1UF 50 VDC%	-
AZCR51 AZCR52 AZCR53 AZCR54 AZCR55	1910-0016 1910-0016 1910-0040 1901-0040	SEMICON DEVICE:DIQUE GERMANIUM SEMICON DEVICE:DIQUE GERMANIUM SEMICON DEVICE:DIQUE GERMANIUM DIQUE:SILICON 30 MA AT 1V 30 PIV DIQUE:SILICON 30 MA AT 1V 30 PIV	
A2CR56	1901-0040	DIODEISILICAN 30 MA AT 1V 30 PIV	
A2L51 A2L52 A2L53 A2L54 A2L54	0-0129	COIL+FXD R+F. 22 UM 10% 275 MA COIL+FXD RF 220, UM COIL+FXD RF 220 UM COIL+ VARIABLE CORE+ADJUSTABLE TUNING	
A2L55	05100-6170	COILI VARIABLE 3.2-5.6UH	

Table 8-5. FILTER/DIVIDER MODULE A9 (05110-6006) FILTER/DIVIDER MODULE A10 (05110-6005)

Reference	& Charle Ma	(Prefix all parts in this table A9 or A10)	
Designation	Stock No.	Description #	Note
		√ ()	
	9170-0106	CORE ADJUSTABLE TUNING PORDERED IRON	٠
A2L56	9140-0077	COILIFXD RF1 2.2UH	
A2L57	05110-6024	COIL: VARIABLE	
	9170-0106	CORE ADJUSTABLE TUNING POWDERED IRON	
A2L58	05110-6061	COIL: VARIABLE 3.5-6.0UH	
		1	
	9170-0106	CORE ADJUSTABLE TUNING POWDERED IRON	
A2L59	05110-6024	COILI VARIABLE	ľ
	9170-0106	CORE ADJUSTABLE TUNING POWDERED IRON	
AZL60 THRU			
A2L70		NOT ASSIGNED	
A2L71 .	9140-0179	COIL-FXD R+F+ 22 UH 10% 275 MA	
42L72	9140-0139	COILIFAD RF 220 UH	
12L73	9140-0129	COILIFXD RF 220 UH	
2051	1850-0118	TRANSISTOR-PNP GERMANIUM EIA 2N2360	
2052	1850-0118	TRANSISTOR-PNP GERMANIUM EIA 2N2360	ĺ
2953	1650-0136	TRANSISTORISPLAN2360 PNP GERMANIUM MADT	
2054	1850-0091	TRANSISTORIGERMANIUM 2N2048 PNP	
2055	1850-0091	TRANSISTORIGERMANIUM 2N2048 PNP	
		· ·	
2R51	0683-1025	R+FXD COMP 1000 OHM 5% 1/4%	1
2R52	0683-1025	RIFXU COMP 1000 OHM 5% 1/4%	
2R53	0683-1025	R4FXJ COMP 1000 OHM 5% 1/4m	
2R54	0683-1025	RIFAD COMP 1000 OHM 5% 1/4%	
2R55	0683-1025	RIFAD COMP 1000 OHM 5% 1/4#	
1064 Tubi			
2856 THRU		NOT ASSTURE!	}
2R60	0403-8435	NOT ASSIGNED	
2861	0683-5625	RIFXO COMP 560 OHM 58 1/4%	
2R62	0683-1035	RIFXD COMP 10K OHM 5% 1/4 W	
2R63	0683-3025	RIFXD COMP 3000 OHM 5% 1/4W	
2R64	0683-3915	RIFXO COMP 390 OHM 5% 1/4W	
2R65	0683-1025	PAEXI) COMP 1000 OLM SE 120 =	1
2R66	0683-1025	RIFXD COMP 1000 OHM 5% 1/4#	
2R67	0683-7515	RIFXD COMP 56 OHM 5% 1/4% RIFXD COMP 750 OHM 5% 1/4%	
2R68	0683-1825	RIFXD COMP 1800 OHM 5% 1/4%	}
2R69	0683-1525	RIFXD COMP 150 OHM 5% 1/4%	ĺ
	0005-1525	KITAD CONF 150 ONA 58 1748	
2R70	0758-0035	RIFXD MET FLM 3000 OHM 5% 1/28	
2871	0757-0291	RIFXD MET FLM 24.9 OHM 18 1/8W	
2R72 4	0757-0291	RIFAD MET FLM 24.9 OHM 18 1/88	1
2R73	0757-0291	RIFXU MET FLM 24.9 OHM 18 1/88	i
2R74 -	0757-0291	RIFXD MET FLM 24.9 OHM IN 178W	
		ा पर प्राप्त का प्राप्त का का का का का का का का का किंद्र का किंद्र का का का का का का का का का का का का का	
2R75	0757-0277	RIFXU MET FLM 49.9 OHM 1% 1/88	
2R76	0757-0277	RIFXD MET FLM 49.9 OHM 18 1/6W	ļ
2R77	0757-0277	RIFAD MET FLM 49.9 OHM 18 1/88	
2151	05100-6167	TRANSFORMERI	
	- ·		
1	1250-0118	CONNECTOR I BNC/	
2 THRU		i	
	,	NOT ASSIGNED	
5	1250-0118.	CONNECTORIBAC	1
	·		
Pi	05110-0005	SHIELDI FILTER HOUSING	
P2	05110-0006	SHIELD: FILTER COVER	1
P3.	05110-0007	BRACKET DIVIDER	1
4	05110-2002	CAP FRONT	
ך '	05110-2035	CAP IREAR	}
-	0340-0038	TERMINAL :STUD	1
	. 0340-0039	INSULATOR :BUSHING	i
/**	0910-0207	NUTICAPTIVE 4-40 X 3/16 SST	
	05110-2001	SPACER IFILTER SHIELD	ı



Model 5110B

Table 8-6. FILTER/DIVIDER MODULE A11 (05110-6004)
FILTER/DIVIDER MODULE A12 (05110-6004)
(Prefix all parts in this table A11 or A12)

Reference Designation	& shock No.	Description	Not
-4 m 6 m 4 m		•	
A1	05119-6051 05110-2014	BOARD ASSY-1' FILTER 32 & 33 MC BLANK BOARD:FILTER	
A1C1	0160-2055	CIFXO CER 0.01UF +80-20% 100 VOCW	
A1C2	0160-2055	1 C1FXD CER 0+01UF +80-20% 100 VDCW	
A1C3	0160-2055	C + FXD/ CER U.01UF +80-20% 100 VDC#	
A1C4	0160-2055	C : FXQ CER 0.01UF +80-20% 100 VUCW	
AIC5 THRU AIC10		NOT ASSIGNED	
A1C11	0160-2055	C:FXD CER 0:01UF +80-20% 100 VDC#	
A1C12	0160-0360	CIFKO CER DISK 140PF 5%	
A1C13	0160+2055	CIFXD CER G.01UF +80-20% 100 VDC#	j
A1C14	0160-0360	CIFXD CER DISK 120PF 5%	
A1C15	0160-2055	C:FXD CER 0.01UF +80-20% 100 VDC#	
A1C16	0160-0360	CIFXD CER DISK 120PF 5%	
A1C17	0160-2055	C:FXD CER 0.01UF +80-20% 100 VOC#	
A1C18	0160-0360	CIFXO CER DISK 120PF 5%	
AIC19	0160-2055	C*FXD CER G.01UF +60-20% 100 VOCW	
A1C20	0160-0360	CIFXO CER DISK 120PF 5%	
A1C21	0160-2055	CIFXD CER 0-01UF +80-20% 100 VDC#	
11022	0160-0360	CIFAD CER DISK 120PF 5%	
N1C23	0160-2055	C+FXD CER U+01UF +80-20% 100 VDC#	
11024	0160-0360	CIFXU CER UISK 120PF 5%	
VIC25 THRU			
11030	•	NOT ASSIGNED	
11031	0150-0041	C1FXD TI 2.7PF 5% 500VDC%	
1036	0150-0041	C1FXU T1 2.7PF 5% 500VDCW	
11033	0150-0041	CIFXD T1 2.7PF 5% 500VDCs	
1034	0150-0041 0150-0022	CIFXU TI 2-7PF 5% 500VDC% CIFXU TI 3-3PF 10% 500VDC%	
11036	0150-0041	CIFXD T1 2.7PF 5% 500VOC%	
11037	0150-0034	CIFXO TI 3.9 PF 10% 500 VDC#]
		FACTORY SELECTED COMPITYPICAL VALUE GIVEN	1
1C38	1	NOT ASSIGNEL	1
11039	0160-2055	CIFXD CER 0.01UF +80-20% 100 VOCM	
11040	0160-2055	CIFXU CER U-01UF +80-20% 100 VOC%	
1041	0160-2055	C#FXD CER 0.01UF +80-20% 100 VDC#	
1042	0160-2055	CIFXU CER U.01UF +80-20% 100 VOCW	
1043	0160-2055	CIFXU CER U.019F +80-20% 100 VOC#	
1044	0160-0179	CIFXU MICA 33PF 5% 300VDCM	
1045	0160-0179	CIFXD MICA 33PF 5% 300VDCW	
ICRI	1910-0016	SEMICON DEVICE: DIOUE GERMANIUM	ł
ICR2	1910-0016	SEMICON DEVICE IDIONE GERMANIUM	
ICR3	1910-0016	SEMICON DEVICE TO LOVE GERMANIUM	
1CR4	1910-0016	SEMICON DEVICE DIODE GERMANIUM	1
ICR5	1910-0016	SEMICON DEVICEIDIODE GERMANIUM	
ICR6 ICR7	1910-0016	SEMICON DEVICE:DIODE GERMANIUM SEMICON DEVICE:DIOUE GERMANIUM	
ILI	9140-0179	COIL-FXD R.F. 22 UH 10% 275 MA	1
1L2 1L3	9140-0179	COIL-FAD R.F. 22 UH 10% 275 MA COIL-FAD R.F. 22 UH 10% 275 MA	- 1
127	9140-0179	COSESTAN MOTO 24 MM SUS MA	
		i	1
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Table 8-6. FILTER/DIVIDER MODULE A11 (05110-6004)
FILTER/DIVIDER MODULE A12 (05110-6004) cont'd
(Prefix all parts in this table A11 or A12)

Reference			7
Designation	Stock No.	Description	Note
	ĺ.	, , ,	
e* us.			ı
AIL4/		NOT ASSIGNED	
A1L5	05100-6186	COILI VARIABLE 0-17-0-20UH	
}	9170-0105	· CORELADJUSTABLE TUNING	•
AIL6 /	05100+6186	COIL! VARIABLE 0.17-0.20UH	•
	9170-0105	CORETADJUSTABLE TUNING	
A1L7	05100-6186	COIL: VARIABLE 0.17-0.20UH	
<u>-</u>	9170-0105	CORETADJUSTABLE TUNING	\sim
AILS	05100-6186	COILI VARIABLE 0.17-0.20UH	
	9170-0105	CORE ADJUSTABLE TUNING	
A1L9	05100-6186	COIL: VARIABLE 0.17-0.20UH	
	9170-0105	CORETADJUSTABLE TUNING	
A1L10	05100-6186	COILI VARIABLE 0.17-0.20UH	
	9170-0105	COREIADJUSTABLE TUNING	
AILII	05100-6186	COILI VARIABLE 0.17-0.20UH	ĺ
	9170-0105	CORE: ADJUSTABLE TUNING	
A1L12	05110-6047	COIL! VARIABLE 1.8-3.5UH	
~ * * * *	9170-0106	CORE ADJUSTABLE TUNING POWDERED IRON	
AILI3 THRU	7110-0100	COUR WOODS TOTAL TOTAL TOTAL TROP	
AIL20		NOT ASSIGNED	1
AILZI	9140-0179	COIL-FAD R.F. 22 UH 10% 275 HA	
AIL22	9140-0179	COIL-FXD R.F. 22 UH 10N 275 MA	
A1L23	9140-0179	COIL-FAD R+F+ 22 UH 10% 275 MA	
A191	1850-0138	TRANSISTORISPL2N2360 PNP GERMANIUM MADT	
A102	1850-0138	TRANSISTORISPLENESSO PHP GERMANIUM MADT	
A103	1850-0138	TRANSISTORISPLENESSO PNP GERMANIUM MADT	
A 194	1850-0138	TRANSISTORISPLANASOO PNP GERMANIUM MADT	
A195	1850-0138	TRANSISTORISPLENESSO PNP GERMANIUM MADT	
A196 A197	1850-0138	TRANSISTORISPLENESSO PNP GERMANIUM MADT	
VIAL	1850-0138	TRANSISTOR SPL2N2360 PNP GERMANIUM MADT	
AIRI	0683-3925	RIFXD COMP 3900 ONE 5% 1/4#	
A1R2	0683-3925	RIFXU COMP 3900 OHM 5% 1/4%	i
AIRJ	0683-3925	RIFXD COMP 3900 OHM 5% 1/4%	
A1R4	0683-3925	RIFXO COMP 3900 OHM 5% 1/4%	
A1R5	0683-3925	RIFXD COMP 3900 OHM 5% 1/4#	1
A1R6	0683-3925	RIFXD COMP 3900 OHM 5% 1/4%	ĺ
AIR7	0683-1825	RIFAD COMP 1800 OHM 5% 1/4%	
AIRB	0683-1825	RIFXD COMP 1800 OHM 5% 1/4%	
AIR9 THRU		· · · · · · · · · · · · · · · · · · ·	
11R10		*NOT ASSIGNED	
AIRII	0758-0009	RIFAD HET FLH 6800 OHM 58 1/48	
LIRL2	0758-0009	RIFKO MET FLM 6800 OHM 5% 1/28	
1813	0758-0009	RIFXU MET FLM 6800 OHM 5% 1/2W	
1814	0758-0009	RIFXD MET FLM 6800 OHM 5% 1/2W	
IRIS	0758-0009	RIFXU MET FLM 6800 OHM 5% 1/2#	1
iRI6	0758-0009	RIFXD MET FLM 6800 OHM 5% 1/2W	l
1817	0758-0045	RIFXO MET FLM 3900 OHM 5% 1/28	
IRIO	0758-0004	RIFXD MET FLM 2700 OHM 5% 1/2#	
IR19 THRU		CONTRACT THE BING WIND DR STAR	1
1R20		NOT ASSIGNED	1
INEL	0757-0291	RIFXO MET FLM 24.9 OHM IS 1/8W	İ
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Table 8-6. FILTER/DIVIDER MODULE A11 (05110-6004) cont'd FILTER/DIVIDER MODULE A12 (05110-6004)

(Prefix all parts in this table A11 or A12) Reference Note Description Stock No. Designation RIFKD MET FLM 24.9 OHM 18 1/8W RIFKD\MET FLM 24.9 OHM 18 1/8W 0757-0291 AIR22 0757-0291 A1R23 AIR24 0757-0291 RIFXD WET FLM 24.9 OHM IN 1/8W RIFXD HET FLM 49.9 OHH 18 1/89 AIR25 0757-0277 0757-0277 RIFXO MET FLM 49.9 OHM IN 1/8W AIR26 RIFXD HET FLM 49.9 OHM 1% 1/8% ALR27 0757-0277 THERMISTOR | 18K OHM 10% 25C A1RT1 0839-0026 05110-6056 BOARD ASSY . I DIVIDER A2 BLANK BOARDIDIVIDER 05110-2018 CIFXU CER 0.01UF +80-20% 100 VDC% CIFXD CER 0.1UF 50 VDC% A2C51 0160-2055 A2C52 0150-0121 0160-2055 CIFXD CER 0.01UF +80-20% 100 VDC# A2C53 CIFXD CER U-1UF 50 VDCW 0150-0121 A2C54 CIFXD CER 0+01UF +80-20% 100 VOC# 0160-2055 A2C55 A2C56 0150-0121 CIFXO CER OLLUF 50 VOCE A2C57 0150-0121 CIFXD CER U-1UF 50 VOCW CIFXD MICA 39 PF 5% 300 VDCW A2C58 0140-0190 CIFXD MICA 68PF 5% 300VDCW 0140-0192 A2C59 CIFXD CER U-1UF 50 VDC# A2C60 0150-0121 A2C61 0140-0178 CIFXD MICA 560 PF 28 300 VDC# CIFXD CER 0.1UF 50 VOCE 0150-0121 A2C62 A2C63 THRU NOT ASSIGNED A2C70 CIFXD CER DISK 120PF 5% A2C71 0160-0360 CIFXD TI 1PF 10% 500VDCW 0150-0029 A2C72 CIFXD CER 0.01UF +80-20% 100 VDC# A2C73 0160-2055 CIFXD HICA 27PF 5% 300VDCW A2C74 0160-0178 CIFXD CER U.01UF +80-20%-100 VUC# CIFXD MICA 560 PF 2% 300 VUC# 0160-2055 A2C75 0140-0178 A2C76 CIFXD CER 0-1UF 50 VDC# AZC77 0150-0121 A2C78 0140-0101 CIFXO MICA 15PF 5% 500 VOC# CIFXU CER GILUF 50 VOC# CIFXU CER GILUF 50 VOC# 0150-0121 A2C79 0150-0121 A2C80 CIFXD CER U-1UF 50 VDC# A2CB1 0150-0121 CIFXD CER U.1UF 50 VDC# A2C82 0150-0121 1910-0016 SEMICON DEVICE IDIODE GERMANIUM A2CR51 A2CR52 1910-0016 SEMICON DEVICE 10100E GERMANIUM 1910-0016 SEMICON DEVICE DIODE GERMANIUM A2CR53 DIODEISILICON 30 MA AT 1V 30 PIV A2CR54 1901-0040 1901-0040 DIODEISILICON 30 MA AT IV 30 PIV A2CR55 1901-0040 DIODETSILICON 30 MA AT 1V 30 PLV A2CR56 COIL-FAD R.F. 22 UH 10# 275 HA 9140-0179 A2L51 COILIFXO RF 220 UH COILIFXO RF 220 UH A2L52 9140-0129 A2L53 9140-0129 05100-6166 COIL: VARIABLE 0.16-0.23UH A2L54 9170-0105 CORELADJUSTABLE TUNING 05100-6170 COIL: VARIABLE 3.2-5.6UH A2L55 CORE ADJUSTABLE TUNING POWDERED IRON 9170-0106

न्द्रतान । तानक्ष्मण्यास्य स्टब्स्टर विश्वविक्षण्यास्य सम्बद्धाः ^{सम्बद्धाः} स्थानस्य स्थानस्य स्थानस्य स्थानस्य सम्बद्धाः स्थानस्य सम्बद्धाः स्थानस्य सम्बद्धाः स्थानस्य सम्बद्धाः स्थानस्य

Table 8-6. FILTER/DIVIDER MODULE A11 (05110-6004)
FILTER/DIVIDER MODULE A12 (05110-6004)
(Profix all parts in this table A11 or A12)

Reference	T	(Prefix all parts in this table A11 or A12)	Note
Designation	Stock No.	Description	Note
		å.	
A2L56	9140-0077	COILIFAD RFI 2.2UH	
	9170-0106	CORE ADJUSTABLE TUNING POWDERED IRON	
AZL57	05110-6063	COILI VARIABLE 35-50UH	
•	9170-0106	CORE ADJUSTABLE TUNING POWDERED IRON	
A2L58	05110-6061	COILI VARIABLE 3.5-6.0UH	
	9170-0106	CORE ADJUSTABLE TUNING POWDERED IRON	
A2L59	05110-6024	COIL! VARIABLE	Ţ
	9170-0106	CORE ADJUSTABLE TUNING POWDERED IRON	
A2L60 THRU			ŀ
A2LYO	1	NOT ASSIGNED	
A2L71	9140-0179	COIL-FXD R.F. 22 UH 10% 275 MA	į
A2L72	9140-0129	COILIFXD RF 220 UH	İ
A2L73	9140-0129	COILIFXD RF 220 UH	
A2951 /	1850-0118	TRANSISTOR-PNP GERMANIUM E1A 2N2360	
A2952	1850-0118	TRANSISTOR-PNP GERMANIUM EIA 2N2360 , TRANSISTOR-SPL2N2360 PNP GERMANIUM MADT	
A2953 A2954	1850-0138	TRANSISTOR I GERMANIUM 2N2048 PNP	
A2955	1850-0091	TRANSISTOR GERMANIUM 2N2048 PNP	
A2R51	0683-1025	RIFXD COMP 1000 OHM 5% 1/4%	
A2R52	0683-1025	RIFXD COMP 1000 OHM 5% 1/4%	
A2R53	0683-1025 0683-1025	RIFXU COMP 1000 OHM 5% 1/4% RIFXU COMP 1000 OHM 5% 1/4%	ŀ
A2R54 A2R55	0683-1025	R:FXD COMP 1000 OHM 5% 1/4%	
	0300		
AZRS6 THRÚ			İ
A2R60		NOT ASSIGNED	1
A2R61	0683-5625 0683-1035	RIFXD COMP 560 OHM 5% 1/4 W	
A2R62 A2R63	0683-1035	R:FXD COMP 3000 OHM 5% 1/4%	
A2R64	0683-3915	R:FXD COMP 398 OHM 5% 1/4W	ŀ
AZR65	0683-1025	RIFED COMP 1000 OHM 5% 1/4W	
A2R66 A2R67	0683-5605 0683-7515	RIFXO COMP 56 OHM 5% 1/4%	
A2R68	0683-1825	RIFXU COMP 1800 OHM 5% 1/4%	
A2R69	0683-1525	RIFAD COMP 150 OHM 5% 1/4W	
;			
A2RTO	0758-0035	RIFXU MET FLM 3000 OHM 5% 1/2# RIFXU MET FLM 24.9 OHM 1% 1/8#	
A2R71 A2R72	0757-0291	RIFAD MET FLM 24-9 OHM 1% 1/8%	
A2R72 A2R73	0757-0291	RIFAD MET FLM 24.9 OHM IS 1/89	
A2R74	0757-0291	RIFXO MET FLM 24.9 OHM 18 1/6W	/
	1]
A2R75	0757-0277	RIFXO MET FLM 49.9 OHM IN 1/88	.
A2R 7 6 A2R 7 7	0757-0277 0757-0277	RIFAD MET FLM 49-9 OHM 1% 1/8W RIFAD MET FLM 49-9 OHM 1% 1/8W	
MARTE	0131-0411	- 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1	
A2T51	05100-6167	TRANSFORMER	1
		- A.W. T. T. T. T. T. T. T. T. T. T. T. T. T.	
Ji	1250-0118	CONNECTOR I BNC]
J2 THRU J4		NOT ASSIGNED	1
J5	1250-0118	CONNECTORIBAC	
			İ
MP1	05110-0005	FILTER HOUSING	
₩ 2	05110-0006	FILTER COVER BRACKET:DIVIDER]
MP3 MP4	05110-0007	CAP :FRONT	1
MP5	05110-2002 05110-2035	CAP :REAR]
P1	1251-0216	CONNECTOR:MALE 9-CONTACT TYPE D	
	0340-0039	INSULATOR:BUSHING	1
	05110-2001	SPACER IF ILTER SHIELD	
	0340-0038	TERMINAL STUD	1

Model 5110B

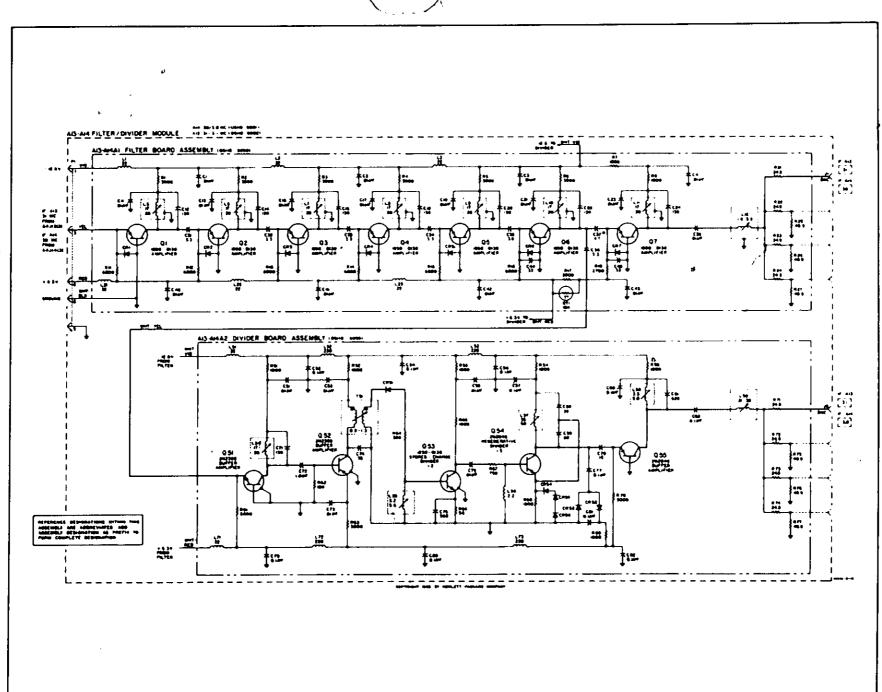


Figure 8-9. A13-A14 Filter/Dividers

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Table 8-7. FILTER/DIVIDER MODULE A13 (05110-6002)
FILTER/DIVIDER MODULE A14 (05110-6001)

Reference Designation	Stock No.	Description	Note
· /	 Ψ 3.00 1.01		
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		BAARD 446W 4 #11 Wee	
A1 C	05110-6050	BOARD ASSY-I FILTER BLANK BOARD:FILTER	
	0311074414	DENIM DONNOT TELEN	
A1C1	0160-2055	CIFXD CER 0-01UF +80-20% 100 VDCW	
A1C2	0160-2055	C+FXD CER 0+01UF +80+20W 100 VDCW	ļ
A1CS	0160-3055	CIFXD CER 0.01UF +80~20% 100 VDCW	
AICS THRU	0100-2033	C1PXD CEN 01010P 480-204 100 40C#	
AICLO		NOT ASSIGNED	
		4.540 CSB 0 0145 100 505 100 1005	
AICLI	0160-2055	C:FXD CER O:01UF +80-20% 100 VDC# C:FXD CER CISK 140PF 5% 500VDC#	
AICIZ AICIZ	0160-2055	C+FXD' CER 0.01UF +80-20% 100 VDCW	
AIC14	0160-0361	CIFXD CER DISK 140PF 5% 500VDC%	
A1C15	0160-2055	CIFXO CER 0.01UF +80-20% 100 VDCW].
AICI6 &	D160-0361	CIFXD CER DISK 140PF 5% 500VDC#	
AICIT	0160-2055	C:FXD CER 0.01UF +80-20% 100 VOC#	ļ
AICIB	0160-0361	CIFKO CER LISK 140PF 5% 500VDC#	
AICIS .	0160-2055	CIFXD CER 0.01UF +80-20% 100 VDCW	
A1C20	0160-0361	CIFXD CER UISK 140PF 5% 500VDCm	
A1C21	0160-2055	C:FXD CER U-01UF +80-20% 100 VDC%	
A1C22	0160-0361	CIFXD CER DISK 140PF 5% 500VUC#	
A1C23	0160-2055	CIFXO CER 0.01UF +80-20% 100 VDCW	ļ
A1C24	0160-0361	CIFXD CER DISK 140PF 5% 500VUC#	Ì
A1C25 THRU]	NOT ACCIONAL	
A1C30 "))	NOT ASSIGNEL	İ
A1C31	0150-0022	C4FXD TI 3+3PF 10% 500VDCW	
VIC35	0150-0022	C:FXD T1 3-3PF 10% 500VDCW	
A1C33	0150-0022	CIFXU TI 3-3PF 10% 500VDCW	
A1C34 A1C35	0150-0022 0150-0034	CIFXD TI 3-3PF 10% 500VDCW	
~1033	0130-0034	1	
A1C36	0150-0022	CIFXD TI 3.3PF 10% 500VDCW	
A1C37	0150-0042	CIFAD TI 4.7 PF 58 500 VDCs	
41630		FACTORY SELECTED COMPITYPICAL VALUE GIVEN NOT ASSIGNED	1
A1C38 A1C39	0160-2055	CIFAD CER U-01UF +80-20% 100 VUC#	
A1C40	0160-2055	CIFXD CER U.01UF +80-20% 100 VOC%	Ī
		Leven ero o over too ook too week	
A1C41	0160-2055	C:FXD CER 0.01UF +80-20% 100 VUC# C:FXD CER 0.01UF +80-20% 100 VDC#	
A1C42 A1C43	0160-2055 0160-2055	CIFAD CER 0.010F +80-20% 100 VDCW	
A1C44	0160-0179	CIFXD MICA 33PF 5% 300VDC%	
A1C45	0160-0179	CIFXO MICA DOPF SE BOOVOCH	
A1001	1910-0016	SEMICON DEVICEIDIQUE GERMANIUM	
AICRI AICR2	1910-0016	SEMICON DEVICE DIODE GERMANIUM	1
AICRJ	1910-0019	SEMICON DEVICE DIODE GERMANIUM	ĺ
AICR4	1910-0016	SEMICON DEVICE IDIODE GERMANIUM	1
A1CR5	1910-0016	SEMICON DEVICE IDIODE GERMANIUM	
A1CR6	1910-0016	SEMICON DEVICEIDIQUE GERMANIUM	
AICR7	1910-0016	SENICON DEVICE DIODE GERMANIUM	
		CALL FUR II F 100 100 100 100 100 100	F
AILI AIL2	9140-0179 9140-0179	COIL-FXD R+F+ 22 UH 10% 275 MA COIL-FXD R+F+ 22 UH 10% 275 MA	
A1L2 A1L3	9140-0179	COIL-FAD R.F. 22 UH 10% 275 HA	
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Table 8-7. FILTER/DIVIDER MODULE A13 (05110-6002)
FILTER/DIVIDER MODULE A14 (05110-6001)
(Profits all parts in this table A13 or A14)

Reference Designation	Stock No.	Description	Note
Designation	1		
114	00100 1104	NOT ASSIGNED COIL: VARIABLE 0-17-0-20UH	
11L5	05100-6186	COREIADJUSTABLE TUNING	
	9170-0105	COILI VARIABLE 0.17-0.20UH	
\1L6	05100-6186 9170-0105	CORETADJUSTABLE TUNING	
	41/0-0103	CONF. MODEL TOUTHO	
A1L7	05100-6186	COIL! VARIABLE 0-17-0-20UH	1
	9170-0105	CORETADJUSTABLE TUNING	
AILS	05100-6186	COILI VARIABLE 0-17-0-20UH	i
•	9170-0105	CORELADJUSTABLE TUNING	
AIL9	05100-6186	COIL: VARIABLE 0-17-0-20UH	
	9170-0105	CORE ADJUSTABLE TUNING	
AILIO	05100-6186 9170-0105	COIL: VARIABLE 0.17-0.20UH CORE:ADJUSTABLE TUNING	İ
A 14 1 1	05100-6186	COIL: VARIABLE 0-17-0-20UH	
AILII	9170-0105	CORE LADJUSTABLE TUNING	
	741W:V4V#	ernermeter mener i entrice	
A1L12	05110-6047	COIL: VARIABLE 1.8-3.5UH	
	9170-0106	CORE ADJUSTABLE TUNING POWDERED IRON	
A1L13 THRU			
A'1L20		NOT ASSIGNED	Ì
AILŽI	9140-0179	COIL-FXD R-F- 22 UH 10% 275 MA	
A1L22	9140-0179	COIL-FXD R.F. 22 UH 10% 275 MA	
A 11 28	0140-0170	COIL-FAD R.F. 22 UH 10% 275 MA	
A1L23	9140-0179	CATF-LUC DALE TE ALL TAM TIN DM	,
A 101	1850-0138	TRANSISTONISPLENESSO PNP GERMANIUM MADT	1
A102	1850-0136	TRANSISTORISPLENESSO PNP GERMANIUM MADT	1
A103	1850-0136	TRANSISTOR: SPL2N2360 PNP GERMANIUM MADT	٠.
A194	1850-0138	TRANSISTORISPL2N2360 PNP GERMANIUM MADT	"
A105	1850-0136	TRANSISTORISPLZN2360 PNP GERMANIUM MADT	
	_		
A196	1850-0138	TRANSISTORISPLANZAGO PNP GERMANIUM MADT	
A107	1850-0136	TRANSISTOR: SPL2N2360 PNP GERMANIUM MADT	1
4 1 0 1	0403-3035	RIFXD COMP 3900 OHM 5% 1/4%	
Alri Alri	0683-3925 0683-3925	RIFXD COMP 3900 OHM 5% 1/4%	ł
AIR3	0683-3925	RIFXD COMP 3900 OHM 5% 1/4%	
AIR4	^0683-3925	RIFXD COMP 3900 OHM 5% 1/4%	
A1R5	0683-3925	RIFED COMP 3900 OHM 5% 1/4%	
		(
A1R6	0683-3925	RIFXD COMP 3900 OHM 5% 1/4#	ľ
A1R7	0683-1825	R:FXD COMP 1800 OHM 5% 1/48	
AIRB	0683-1825	RIFXD COMP 1800 OHM 5% 1/4%	
AIR9 THRU		NOT ASSIGNED	
AIRIO	0758-0009	RIFXD MET FLM 6800 OHM 5% 1/2W	İ
AIRII	U / 20-0007	Dillon Late Lang Andre Aller No 91 pt.	
AIR12	0758-0009	RIFXD HET FLM 6800 OHM 5% 1/28	
AIRIJ	0758-0009	RIFXD MET FLM 6800 OHM 58 1/28	
AIRI4	0758-0009	RIFXD MET FLM 6890 OHM 5% 1/4W	
AIR15	0758-0009	RIFXD MET FLM 6800 OHM 5% 1/2#	
AIRI6	0758-0009	RIFNU MET FLM 6800 OHM 5% 1/28	
·			
AIR17	0758-0045	RIFXU MET FLM 3900 OHM 5% 1/2W	
AIRIB	0758-0004	RIFXD MET FLM 2780 OHM 5% 1/2%	
AIRI9 THRU		NOT ASSIGNED	
A1R20	0757-0291	RIFXD MET FLM 24.9 OHM 18 1/8#	
A1R21	0131-0271	MILION WELLING WALA AND THE TLAM	
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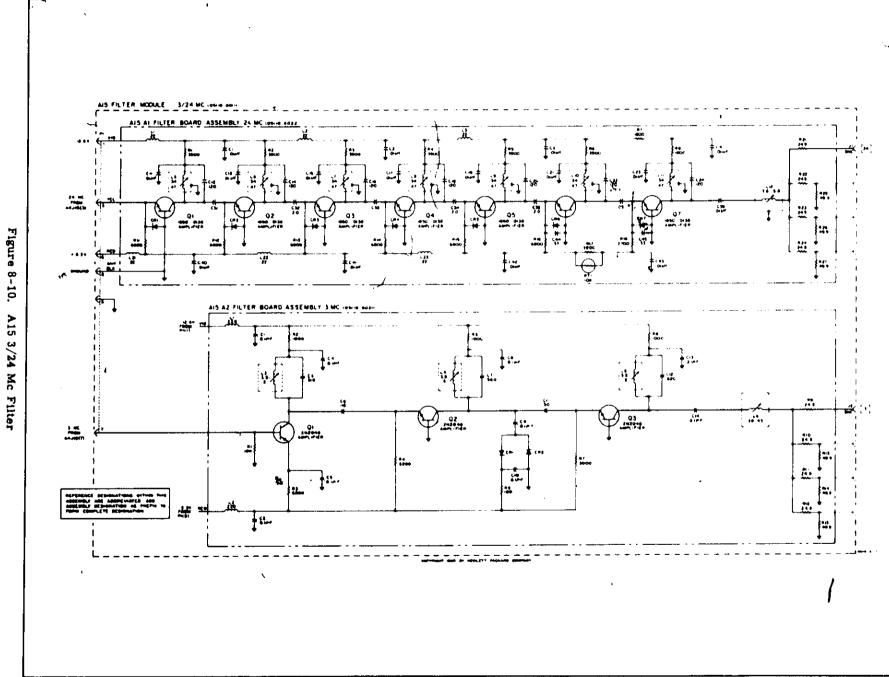
Table 8-7. FILTER/DIVIDER MODULE A13 (05110-6002) FILTER/DIVIDER MODULE A14 (05110-6001) cont'd) (Prefix all parts in this table A13 or A14)

Reference	Stock No.	Description	31-4
Designation	Ψ	Description	Note
		•	
A1R22	0757-0291	RIFXO MET FLM 24.9 OHM IN 1/88	
AIR23	0757-0291	RIFKU MET FLM 24.9 OHN 18 1/88	
AIR24	0757-0291	RIFXD MET FLM 24.9 OHM IN 1/88	1
AIR25	0757-0277	RIFXO MET FLM 49.9 OHM 18 1/88	
AIR26	0757-0277	RIFXD MET FLM 49.9 OHN IN 1/8#	1
	1	THE PART OF THE PART OF THE STATE OF THE STA	ı
A1R27	0757-0277	RIFXO MET FLM 49-9 OHM 15 1/8#	
AIRT1	0839-0026	THERMISTOR: 10K OHM 10% 25C	ł
	 ••···		
42	05110-6055	BOARD ASSY. I DIVIDER	
	05110-2018	BLANK BOARDIDIVIDER	
A2C51	0140-3055	CIEVO CER O ALLE LAB BOR LAB LOCA	Ţ
A2C52	0160-2055	CIFXD CER 0.01UF +80-20% 100 VDC#	
A2C53	0150-0121	CIFXD CER 0-1UF 50 VDCH	1
12C54	0160-2055	C1FXD CER 0.01UF +80-20% 100 VOC#	ĺ
2055	0160-2055	CIFXD CER 0-1UF 50 VDCW CIFXD CER 0-01UF +80-20% 100 VDCW	
	2100-2033	CHENO CEN MANTOL ADD-SOM TOO ADCE	1
A2C56	0150-0121	CIFXD CER G.1UF 50 VDC#	
A2C57	0150-0121	CIFXD CER 0.1UF 50 VDC#	
12C58	0140-0190	CIFAD MICA 39 PF 58 300 VDCB	Í
2059	0140-0215	CIFXO MICA BOPF 28 300VDCW	
2060	0150-0121	CIFXO CER OLIUF 50 VOCE	ļ
	*****	50 VOCE	
ZC61	0160-0363	CIFKO MICA 620 PF 58	
2062	0150-0121	CIFXD CER OLLUF 50 VDC	
2C63 THRU		30 750	
2070	İ	NOT ASSIGNED	
2071	0160-0361	CIFXD CER UISK 140PF 5% 500VUC#	
2072	0150-0029	CIFXO TI IPF ION SOOVOCH	1
2073	0160-2055	C1FXD CER U.01UF +80-20% 100 VDC#	1
2074	0160-0179	CIFXD MICA 33PF 5% 300VDCM	
2075	0160-2055	CIFXD CER U.01UF +80-20% 100 VOC#	
2076	0140-0178	CIFXD MICA 560 PF 28 300 VDC#	ļ
2077	0150-0121	CIFXD CER U.1UF 50 VDC#	
2078	0140-0101	CIFXD MICA 15PF 5% 500 VDC%	
2079	0150-0121	CIFXO CER U-1UF 50 VDCH	
2080	0150-0121	CIFXD CER 0.1UF 50 VOCH	
2C81	0150-0121	CIFXO CER U.1UF 50 VOCA	
2082	0150-0121	CIFXO CER 0.1UF 50 VDC#	
20051	1010 0011	2544504 05-44-5	1
2CR51	1910-0016	SEMICON DEVICE IDIODE GERMANIUM	
2CR52	1910-0016	SEMICON DEVICE ID100E GERMANIUM	ļ
2CR53	1910-0016	SEMICON DEVICE IDIODE GERMANIUM	
2CR54	1901-0040	DIODEISILICON 30 MA AT 1V 30 PLV	
2CR55	1901-0040	DIODEISILICON 30 MA AT 14 30 PIV	
2CR56	1001 0040	DIADUATE ICON DA ALLA DE LA COLLA DELA COLLA DELA COLLA DE LA COLLA DE LA COLLA DE	1
ZCROO	1901-0040	DIODETSILICON 30 MA AT 1V 30 PIV	
21.51	9140-0179	COLLEGED B & 32 MI ION 125 MI	J
21.52	9140-0129	COIL-FXD R.F. 22 UH 10% 275 MA	-
21.53	9140-0129	COLLIFAD RF 220 UH	
21.54	05100-6166	COILIFXO RF 220 UH COILI VARIABLE	
	9170-0105	CORE ADJUSTABLE TUNING	1
		AAUF-WAAALWOFF IMIIMA	
2155	05100-6170	COILT VARIABLE 3.2-5.6UH	
	9170-0106	CORE ADJUSTABLE TUNING POWDERED IRON	
		ATT	
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Table 8-7. FILTER/DIVIDER MODULE A13 (05110-6002)
FILTER/DIVIDER MODULE A14 (05110-6001)
(Prefix all parts in this table A13 or A14)

Reference	Stock No.	(Prefix all parts in this table A13 or A14) Description	Note
Designation	DIOCE NO.	Description .	Noce
	0.00		
A2L56	9140-0077	COLLIFAD RFI 2.2UH	
A2L57	9170-0106	CORE ADJUSTABLE TUNING POWDERED IRON	
AZLJI	9170-6063	COIL! VARIABLE 35-50UH CORE AUJUSTABLE TUNING POWDEREU IRON	ł
A2L58	05110-6061	COILI VARIABLE 3.5-6.0UH	
~2574	03110-0001	COIL! VARIABLE 3:3-0:00H	
	9170-0106	CORE ADJUSTABLE TUNING POWDERED IRON	
AZL59	05110-6023	COIL! VARIABLE	!
_ _ _ ·	9170-0106	CORE ADJUSTABLE TUNING POWDERED IRON	1
AZLOG THRU			
A2L70		NOT ASSIGNED	i
A2L71	9140-0179	COIL-FAD R.F. 22 UH 10% 275 MA	
			ĺ
A2L72	9140-0129	COILIFAD RF 220 UH	
A2L73	9140-0129	COILIFAD RF 220 UH	i
42051	1850 0110	TO AND TOTAL CARMANTIM PTA DATE A	ı
A2051 A2052	1850-0118	TRANSISTUR-PNP GERMANIUM EIA 2N2360	1
A2452 A2453	1850-0118 1850-0138	TRANSISTOR-PNP GERMANIUM EIA 2N2360 TRANSISTOR:SPL2N2360 PNP GERMANIUM MADT	
A2Q54	1850-0091	TRANSISTORIGERMANIUM 2N2048 PNP	
A2055	1850-0091	TRANSISTORIGERMANIUM 2N2048 PNP	1
		The state of the second of the state of the	
A2R51	0683-1025	RIFXU COMP 1000 OHM 5% 1/4#	
A2R52	0683-1025	RIFXO COMP 1000 OHM 5% 1/4%	
A2R53	0683-1025	RIFXU COMP 1000 OHM 5% 1/4%	
A2R54	0683-1025	RIFXD COMP 1000 OHM 5% 1/4%	i
A2R55	0683-1025	RIFXU COMP 1000 OHM 59 1/48	
A2R56 THRU	ļ	NAT ARCHENIA	1
A2R60	0403 8436	NOT ASSIGNED	, L
A2R61	0683-5625	RIFXU COMP 560 OHM 5% 1/4#	* -
A2R62 A2R63	0683-1035 0683-3025	RIFXU COMP 10K OHM 5% 1/4 W RIFXU COMP 3000 OHM 5% 1/4W	
A2R64	0683-3915	RIFXD COMP 390 OHM 5% 1/4W	
72004	0003-3413	NIT NO COME STO OTHER STATE	l
A2R65	0683-1025	RIFAD COMP 1000 OHM 5% 1/4#	
A2R66	0683-5605	RIFXU COMP 56 OHM 58 1/48	
A2R67	0683-7515	RIFXU COMP 750 OHM 5% 1/4#	
AZR68	0683-1825	RIFXD COMP 1800 OHM 5% 1/4%	ł
A2R69	0683-1525	RIFAD COMP 150 OHM 5% 1/4W	1
A2R70	0758-0035	RIFXU MET FLM 3000 OHM 5% 1/2#	
A2R71	0757-0291	RIFXO MET FLM 24.9 OHM 1% 1/8W	
A2R72	0757-0291	RIFAD MET FLM 24.9 OMM 1% 1/8#	1
A2R73 A2R74	0757-0291	RIFXO MET FLM 24.9 OHM 15 1/88	
A2R74	0757-0291	RIFXU MET FLM 24.9 OHM 1% 1/8#	1
A2R75	0757-0277	RIFXD MET FLM 49.9 OHM 18 1/8W	
A2R76	0757-0277	RIFXU MET FLM 49.9 OHM 18 1/88	
A2R77	0757-0277	RIFXD MET FLM 49.9 OHM 18 1/88	
			İ
A2T51	05100-6167	TRANSFORMER	i
			ĺ
J1	1250-0116	CONNECTORIBAC	
J2 THRU		NAT ARRIGNAL	
J4	1250-0110	NOT ASSIGNED	i
J 5	1250-0118	CONNECTORIBAC	
HP1	05110-0005	FILTER HOUSING	5 3/
1P2	05110-0006	FILTER COVER	15 *
MP3	05110-0007	BRACKETIDIVIDER	ľ
VP4	05110-2002	CAP :FRONT	
WP5	05110-2035	CAP :REAR	
21	1251-0216	CONNECTOR MALE 9-CONTACT TYPE D	
	0340-0039	INSULATOR :BUSHING	j
	0340-0038	TERMINAL ISTUD	i
	05110-2001	SPACER IF ILTER SHIELD	



Model 5110B

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Table 8-8.. 3/24 MC FILTER MODULE A15 (05110-6011)

Reference Designation	Stock No.	Description	Note
A I	05110-6022 05110-2014	BOARD ASSY .: 24 MC FILTER BLANK BOARD :FILTER	
A1C1	0160-2055	CIFXD CER 0.01UF +80-20% 100 VOCW	
A1C2	0160-2055	C1FXD CER 0.01UF +80-20% 100 VOC#	
A1C3 A1C4	Ø160-2055 0160-2055	CIFXD CER 0.01UF +80-20% 100 VDC# CIFXD CER 0.01UF +80-20% 100 VDC#	
AICS THRU	0100-2033	CIPAD CER 0:010F 480-20% 100 40C%	ĺ
AICIO	·	NOT ASSIGNED	
AIC11	0160-2055	C:FXD CER 0.01UF +80-20% 100 VUC#	
1012	0160-0360	CIFAD CER 120 PF 5% SOOVDCW	İ
A10134	0160-2055	CIFXD CER 0.01UF +80-20% 100 VDC#	
A1C15	0160-2055	CIFXD CER 120 PF 5% VDCW CIFXD CER U-DIUF +80-20% 100 VDCW	
41016	0160-0360	CIFXD CER 120 PF 5% VOCW	
A1C17	0160-2055	C : FXU CER G.01UF +80=20% 100 VDC#	ļ
A1C16	0160-0360	CIFAD CER 120 PF 5% VOCW	
N1C19	0160-2055	CIFXD CER 0.01UF +80-20% 100 VDC%	
A1C20	0160-0360	CIFXD CER 120 PF 5% VOCW	
V1CS1	0160-2055	CIFXU CER 0.01UF +80-20% 100 VUCM	
V1C22	0160-0360	CIFXU CER 120 PF 5% VDCW	İ
1023	0160-2056	CIFXO CER 0.01UF +80-20% 100 VUC#	
11024 11025 THRU	0160-0360	CIFXO CER 120 PF 5% VOCW	
1023		NOT ASSIGNED	
1031	0150-0022	CIFXO TI 3+3 PF 104 500VDC#	
1032	0150-0022	C1FXD TI 3-3 PF 10% 500VDCW	
1033	0150-0041	CIFXO TI 2.7 PF 5% 500VDCW	i
1C34 ·	0150-0041	CIFAD TI 2.7 PF 5% 500VOCM	ŀ
1035	0150-0041	CIFAD TI 2.7 PF 5% 500VDCW	
1036	0150-0041	CIFXD TI 2.7 PF 5% 500VDCW +	
1037 THRU		PACTORY SELECTED COMPITYPICAL VALUE GIVEN	
1038	[NOT ASSIGNEL	
1040	0160-2055	CIFXD CER 0-01UF +80-20% 100 VUC#	ļ
	0160-2055	CIFXO CER 0.01UF +80-20% 100 VDG%	
1041"****	0160-2055	CIFXD CER 0.01UF +80-20% 100 VDC#	
1042	0160-2095	CIFXD CER 0.01UF +80-20% 100 VUCM	
1043	0160-2055	C:FXU CER 0.01UF +80-20% 100 VDC#	,
1044 1045	0160-0179 / 0160-0179	CIFXD MICA 33PF 5% 300VDCW CIFXD MICA 33PF 5% 300VDC%	
1045	0180-0179		
ICRI	1910-0016	SEMICON DEVICE + DIODE GERMANIUM	
ICR2 ICR3	1910-0016	SEMICON DEVICE DIODE GERMANIUM SEMICON DEVICE:DIODE GERMANIUM	
ICR4	1910-0016	SEMICON DEVICE DIODE GERMANIUM	
ICR5	1910-0016	SEMICON DEVICE DIODE GERMANIUM	
1CR6	1910-0016	SEMICON DEVICE DIODE GERMANIUM	
ICR7	1910-0016	SEMICON DEVICE DIODE GERMANIUM	1
16.1	9140-0179	COIL-FXD R.F. 22 UH 10% 275 MA	
1LŽ	9140-0179	COIL-FXD R.F. 22 UH 108 275 MA	
11.3	9140-0179	COIL-FAD R.F. 22 UH 108 275 MA	
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Table 8-8. 3/24 MC FILTER MODULE A15 (05110-6011)

Reference	Stock No.	Description \	Note
Designation	& Stock No.	Description 1	
	,	NOT ASSIGNED	į.
\1L4	08110.4005	COILIVARIABLE .3447 UH	1
1172	05110-6085	CORE LADJUSTABLE TUNING	
. 11 &	9170-0105 05110-6065	COLL:VARIABLE .3447 UH	
11.6	9170-0105	CORE LADJUSTABLE TUNING	
	7.10-0.05		1
A1L7	05110-6085	COILIVARIABLE .3447 UH	7
- 46 /	9170-0105	CORE: ADJUSTABLE TUNING	
11L8	05110-6085	COILIVARIABLE .3447 UH	
	9170-0105	CORE: ADJUSTABLE TUNING	
IL9	05110-6085	COILIVARIABLE .3447 UH	
,			
	9170-0105	CORETADJUSTABLE TUNING	
1L10	05110-6085	COILIVARIABLE .3447 UH	
	9170-0105	CORE ADJUSTABLE TUNING Y	ļ
AILXI	05110-6085	COILIVARIABLE .3447 UH	
	9170-0105	CORELADJUSTABLE TUNING	{
_	l	ARTICLEM SALES & A. F. B. 41	1
11L12	05110-6086	COILIVARIABLE 3.6-5.8 UH	1
	9170-0106	CORE ADJUSTABLE TUNING POWDERED IRON	
LILIS THRU		NOT ASSIGNAT	
11L20	0100 0170	NOT ASSIGNEL COIL-FXD R∙F∙ 22 UH 10% 475 MA	1
A1L21	9140-0179	COIL-FAD R.F. 22 UH 108 275 MA	1
11L22	9140-0179	- PATP-LINE LIBIT BE MIT TON RIG JIM	
A1L:23	9140-0179	COIL-FXD R.F. 22 UH 10# 275 MA ;	
11023	7140-0117	COTE-LYO MALA TE OU TON TIES HE	Ĭ
101	1850-0138	TRANSISTORISPLAN2360 PNP GERMANIUM MADT	
102	1850-0138	TRANSISTURISPLANASO PNP GERMANIUM MADT	
103	1850-0138	TRANSISTORISPLZN2360 PNP GERMANIUM MADT	
104	1850-0138	TRANSISTORISPLANASGO PNP GERMANIUM MADT	
1105	1850-0138	TRANSISTOR I SPL 2N2 360 PNP GERMANIUM MADT	
196	1850-0138	TRANSISTORISPLENESSO PHP GERMANIUM MADT	
107	1850-0138	TRANSISTOR SPL2N4360 PNP GERMANIUM MADT	
•		•	
LIRI	0683-3925	RIFXD COMP 3900 OHM 5% 1/4%	
IIR2	0683-3925	RIFXD COMP 3900 OHM 5% 1/4%	
LIR3	0683-3925	RIFXD COMP 3900 OHM 5% 1/48	
\1R4	0683-3925	RIFXD COMP 3900 OHM 5% 1/48	
1R5	0683-3925	RIFXD COMP 3900 OHM 5% 1/4%	
_		CARRO COMO 3000 ALM EN LAND	
AIR6	0683-3925	RIFKO COMP 3900 OHM 5% 1/4%	
1R7	0683-1825	RIFXO COMP 1800 OHM 5% 1/4#	
AIRB	0683-1825	RIFXD COMP 1800 OHM 5% 1/4%	
ALRO THRU	•	NOT ASSIGNED	
AIRIO	0755-0000	RIFXD MET FLM 6800 OHM 5% 1/2#	ļ
MIRII	0758-0009	I MILLY UP I LEW ARAN ALIII NA TLEM	l
	0758-0009	RIFXD MET FLM 6800 OHM 5% 1/2#	ļ
11R12	0758-0009	RIFXD MET FLM 6800 OHM 5% 1/2W	ļ
N1R13 N1R14	0758-0009	RIFKO MET FLM 6800 OHM 5% 1/2#	
11117 11115	0758-0009	RIFXD MET FLM 6800 OHM 5% 1/2#]
1R15 1R16	0758-0009	RIFXD MET FLM 6800 OHM 5% 1/28	1
	J , 30=000		
1A17	0758-0045	RIFKO MET FLM 3900 OHM 5% 1/2W	[
1R18	0758-0004	RIFAD MET FLM 2700 OHM 5% 1/2%	
LIRLS THRU	- ,	afi.	ŀ
1820		NOT ASSIGNED	
1R21	0757-0291	RIFXU MET FLM 44.9 OHM IN 1/88	[
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Table 8-8. 3/24 MC FILTER MODULE A15 (05110-6011)

		(Prefix all parts in this table A15)	٤
Reference Designation	⊕ Stock No.	Description	Note
A1R22	0757-0291	R1FXD MET FLM 24.9 OHM 1% 1/8#	
AIR23	0757-0291	RIFXO MET FLM 24.9 OHM 1% 1/8W	
1R24	0757-0291	RIFXD MET FLM 24.9 OHM 19 1/8W	
A1R25	0757-0277	RIFXD MET FLM 49.9 OHM 1% 1/8#	
1R26	0757-0277	RIFXO MET FLM 49.9 OHM 1% 1/68	
A1R27	0757-0277	RIFXU MET FLM 49.9 OHM 18 1/68	
L LTRIA	0839-0026	THERMISTOR! 19K OHM 10% 25C	
A2 -	05110-6021	BOARD ASSY. 1 3 MC FILTER	
	05110-2016	BLANK BOARDES HE FILTER	-
A2C1	0150-0121	CIFXD CER U-1UF 50 VDCW	
A2C2	0150-0121	CIFXO CER U.IUF 50 VDC#	
A2C3	0160-0362	CIFXD MICA SIOPF 58	
A2C4	0150-0121	CIFXU CER OLLUF 50 VDCW	
	0150-0121	CIFAD CER OLIUF 50 VDCB	
A2C5	0120-0151		
A2C6	0140-0194	CIFAD HICA 110 PF 5% 300 VDC#	
A2C7	0140-0178	C1FXD H1CA 560 PF 28 300 VDC4	
A2C8	0150-0121	CIFXO CER O.LUF 50 VDCW	
A2C9	0150-0121	CIFXD CER O-1UF 50 VDC#	
A2C10	0150-0121	CIFAD CER U-1UF 50 VDCW	
A2C11	0140-0203	CIFAD MICA SOPE 5% SOOVDCM	
A2C12	0160-0363	CIFXU MICA 620PF 5%	
A2C13	0150-0121	CIFXD CER U-1UF 50 VUCW	
A2C14	0150-0121	CIFXO CER U-LUF 50 VDC#	
A2CR1	1910-0016	SEMICON DEVICEIDIODE GERMANIUM	
AZCR2	1910-0016	SEMICON DEVICE DIODE GERMANIUM	
A 24 1	9140-0129	COILIFAD RF 220 UH	
A2L1		COLLIFAD RF 220 UH	
AZLZ	9140-0129	COILI VARIABLE 3.5-6.0UH	
A2L3	05110-6061	CORE ADJUSTABLE TUNING POWDERED IRON	
A2L4	9170-0106	COIL: VARIABLE 3.5-6.0UH	
	45,14		
	9170-0106	CORE ADJUSTABLE TUNING POWDERED TRON	
A2L5	05110-6061	COILI VARIABLE 3.5-6.0UH	
	9170-0106	CORE ADJUSTABLE TUNING POWDERED IRON	
A2L6	05110-6024	COILI VARIABLE 28-45UH	
	9170-0106	CORE ADJUSTABLE TUNING POWDERED IRON	
A201	1850-0091	TRANSISTORIGERHANIUM 2N2048 PNP	1
A202	1850-0091	TRANSISTOR GERMANIUM 2N2048 PNP	
A20J	1850-0091	TRANSISTORIGERMANIUM 2N2048 PNP	
A2R1	0683-1035	RIFAD COMP 10K OHM 5% 1/4 %	
A2R2	0683-1025	RIFXU COMP 1000 OHM 5% 1/4#	ĺ
A2R3	0756-0046	RIFXO MET FLM 6200 OHM 5% 1/2W	
A2R4	0758-0046	RIFXO MET FLM 6200 OMM 5% 1/2W	
A2R5	0683-1025	RIFXU COMP 1000 OHM 5% 1/4#	
A2R6	0683-1015	RIFXU COMP 100 OHM 5% 1/4%	1
A2R7	0758-0035	RIFXO MET FLM 3000 OMM 5% 1/4W	
A2R8	0683-1025	RIFXD COMP 1000 OHM 5% 1/4%	
A2R9	0757-0291	RIFXO MET FLM 24.9 OHM IN 1/6#	
AZRIO	0757-0291	RIFXO MET FLM 24.9 OHM IN 1/8#	
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			L

Table 8-8. 3/24 MC FILTER MODULE A15 (05110-6011) **eqnt'd

Reference Designation	Stock No.	Description	Not
4 mm Dr. 11244 Aust		:	
.2811 .2812 .2813 .2814 .2815	0757-0291 0757-0291 0757-0277 0757-0277 0757-0277	RIFXU MET FLM 24.9 OHM 18 1/6W RIFXD MET FLM 24.9 OHM 18 1/6W RIFXD MET FLM 49.9 OHM 18 1/6W RIFXD MET FLM 49.9 OHM 18 1/6W RIFXO MET FLM 49.9 OHM 18 1/6W	
) <u>1</u> 2	1250-0118 1250-0118	CONNECTOR SUCCESSION CONNECTOR	
IP1 IP2 IP3 IP4 IP5	05110-0005 05110-0006 05110-0026 05110-2002 05110-2035	FILTER HOUSING FILTER COVEH BRACKET! DIVIDER CAP! FRONT CAP! REAR	,
'1	1251-0216	CONNECTORIMALE 9-CONTACT TYPE U	
	0511016011 0510-0207 05110-2001	FILTER ASSY13/24 MC NUTICAPTIVE 4-40 3/16 55T SPACERI FILTER SMIELD	
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			d F
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SCHEMATIC DIAGRAMS

SECTION IX CIRCUIT DIAGRAMS

9-1. INTRODUCTION.

- 9-2. This section includes the following:
 - a. Schematic Diagram Notes, Figure 9-1.
 - b. Block Diagram, Figure 9-2.
- c. Schematic diagrams and component location illustrations in order of their designation (A1 through A17, Figures 9-3 through 9-12).
- 9-3. The block diagram or any schematic diagram can be unfolded and used with any other part of this manual.

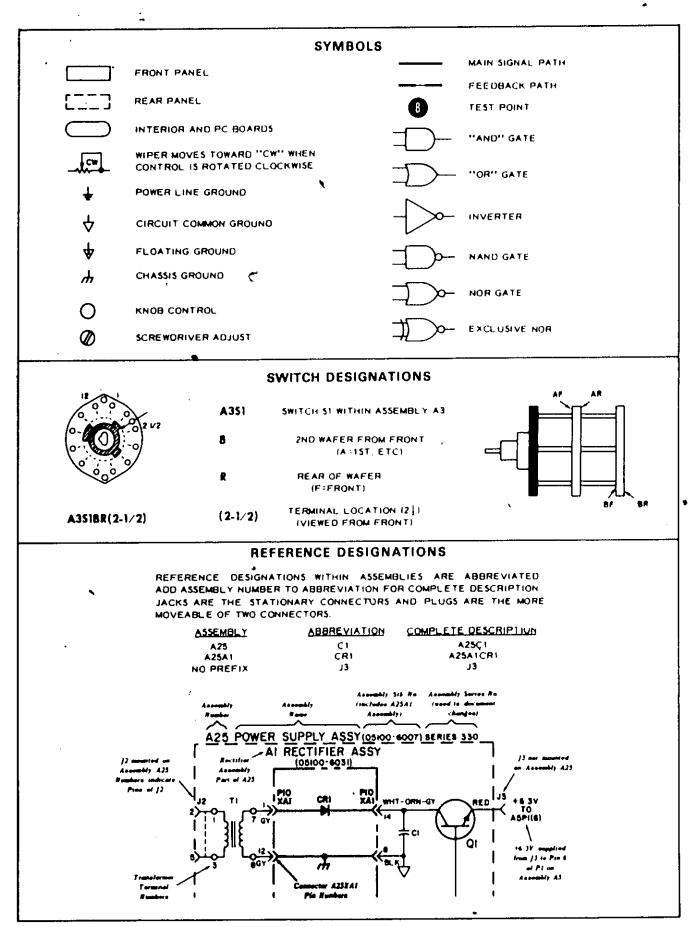


Figure 9-1. Schematic Diagram Notes

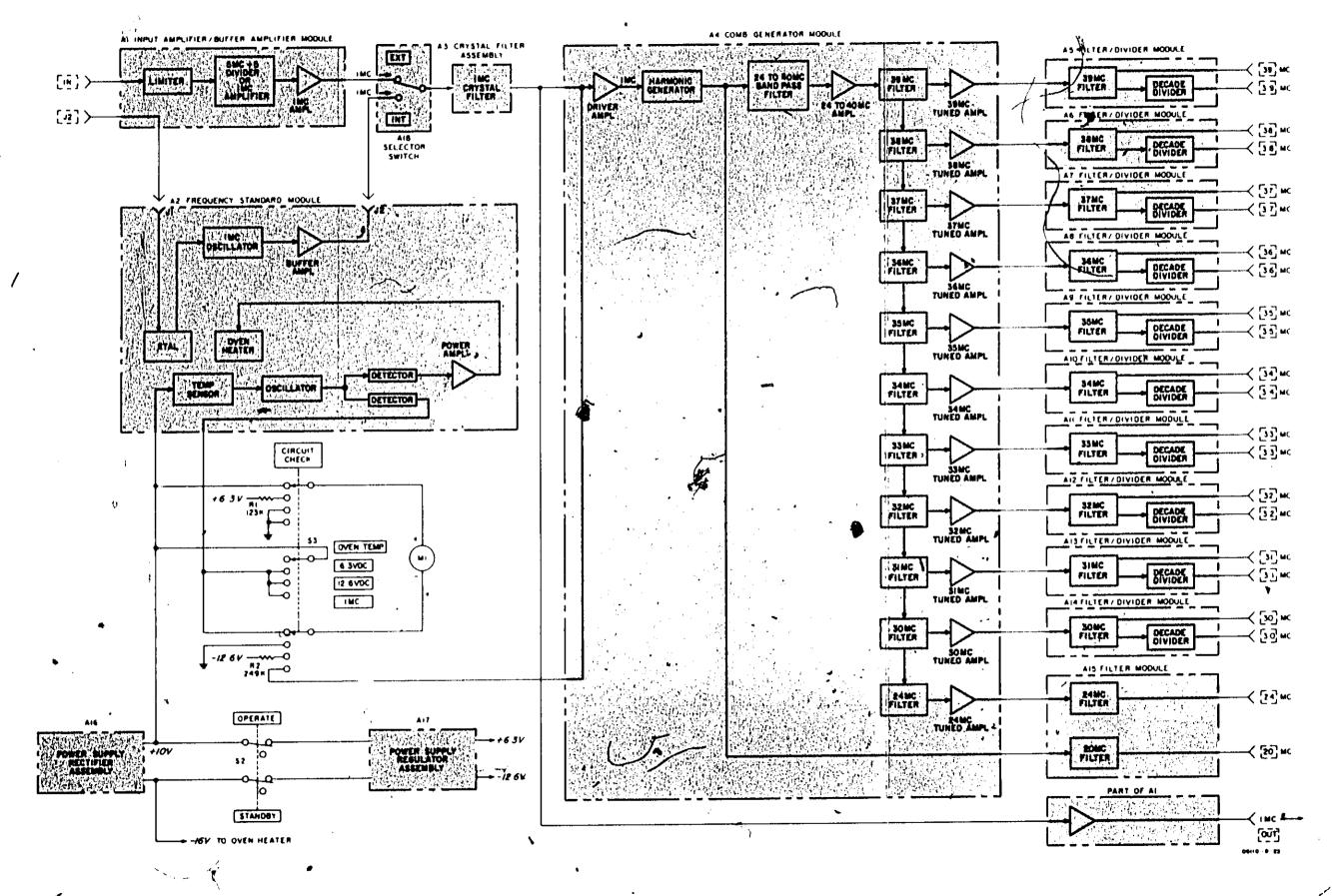
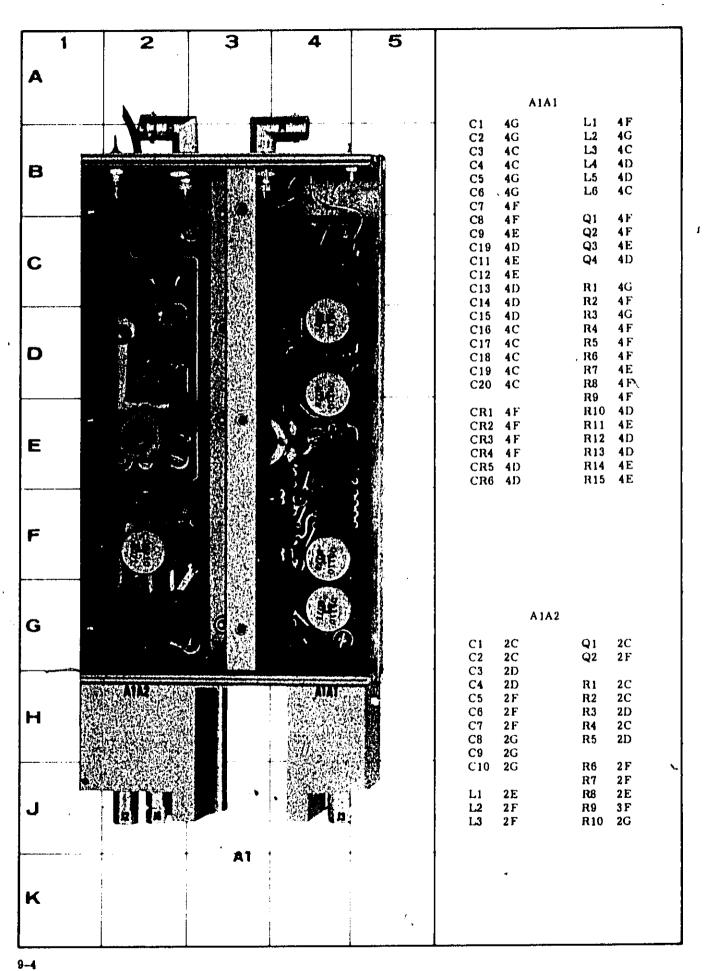
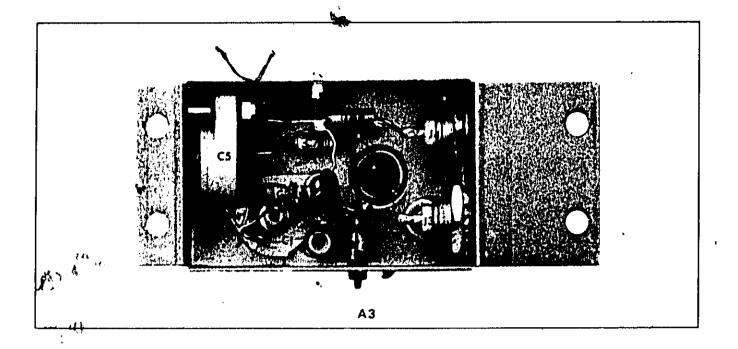


Figure 9-2. Verall Block Diagram





NOTES

REFERENCE DESIGNATIONS WITHIN THIS ASSEMBLY ARE ABBREVIATED ADD ASSEMBLY DESIGNATION AS PREFIX TO FORM COMPLETE DESIGNATION

2 UNLESS OTHERWISE INDICATED RESISTANCE IN OHMS, CAPACITANCE IN PICOFARADS INDUCTANCE IN MICROHENRIES

REFERENCE DESIGNATIONS

NO PREFIX	A +	AIAI	AIA2	A3	A18
	C i	C+ 20	Clin	C1 - 7	
	\ . ·	CR 1 6	"	1 (1)	ļ
	12 6	••• •		J 3,4	ſ
		t i = 6	1.1 - 3		1
	Pι		Ī		P2 - 4
:		0+-4	Q1, Z		1
		R+-15	R1 - IQ		1
		1			51
	i			1 11	
				* 1	1

04110 0

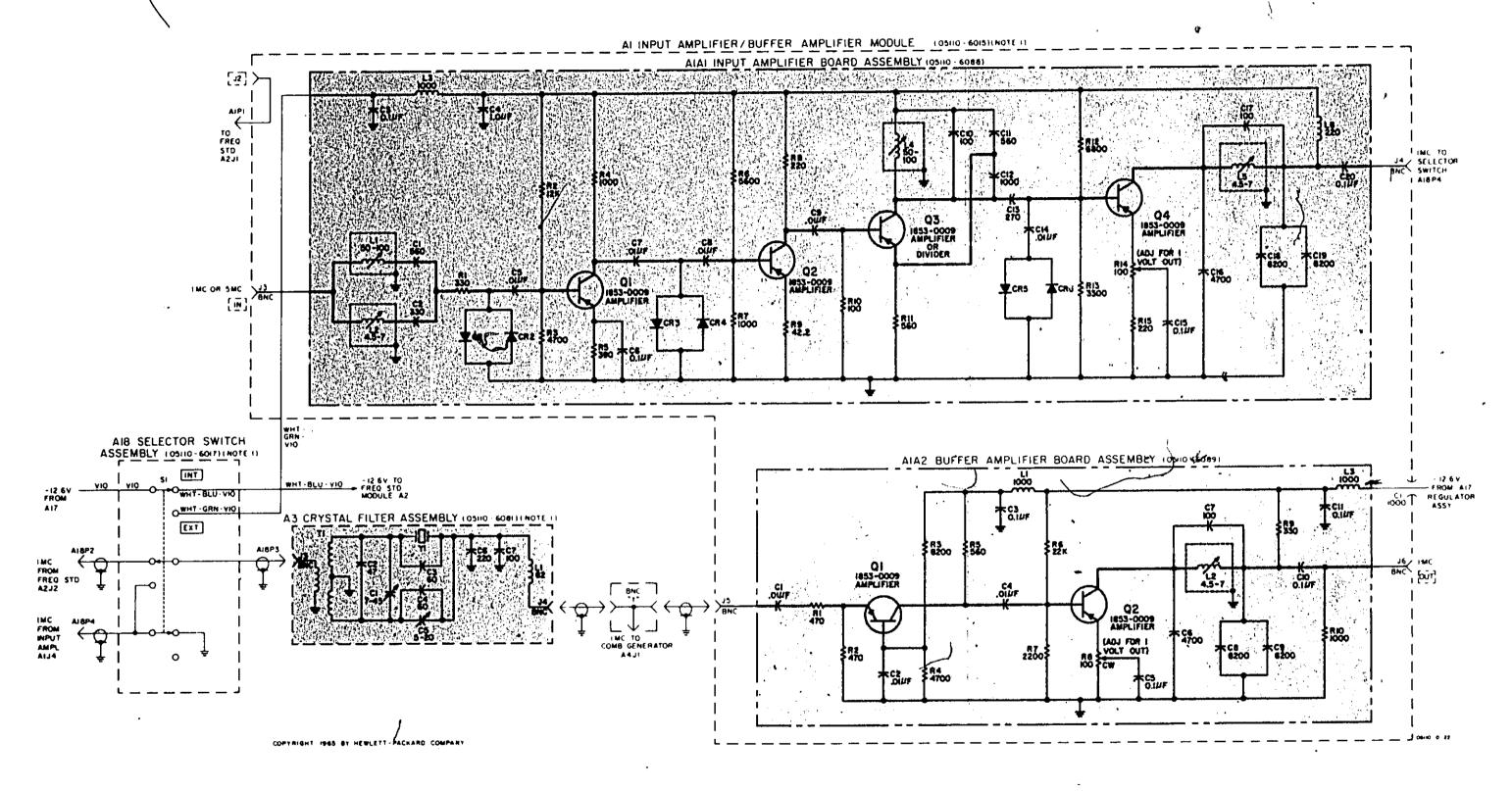
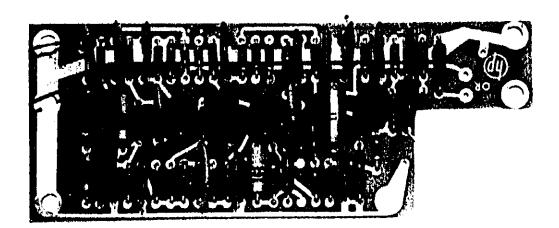
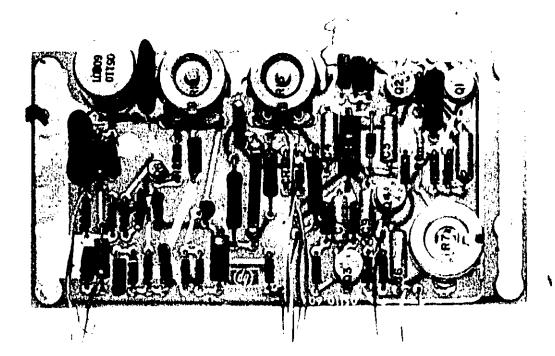


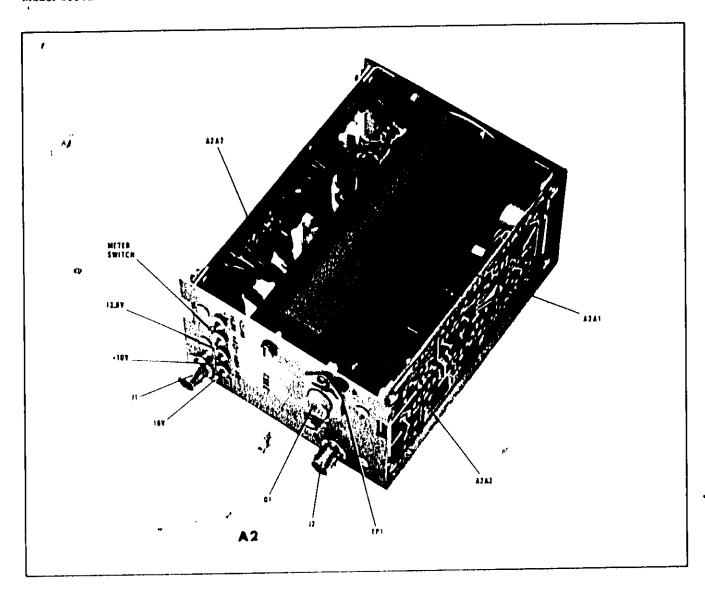
Figure 9-3. A1 Input Amplifier/Buffer Amplifier A3 Crystal Filter A18 Selector Switch



A2A2



A2A3



HEFERENCE DESIGNATIONS

A 2	A2 A1	A7,A7	AZAS
7	0.7	C) 6	(, 1 9
	1441	(34 d)	OH €
11.2		1 . 4	1:4
3+	Rt 4	Q1 4 R1 6	QI 6 RI 25
_	R1:	25 33	RTI
Pi	71		

NOTES

DRESS OTHERWISE INDICATED

RESISTANCE IN OHMS,
CAPACITANCE IN PICOFARADS
INDICTANCE IN MICROHENRIES

2 ASTERISK (#) INDICATES SELECTED COMPONENT AVERAGE VALUES SHOWN

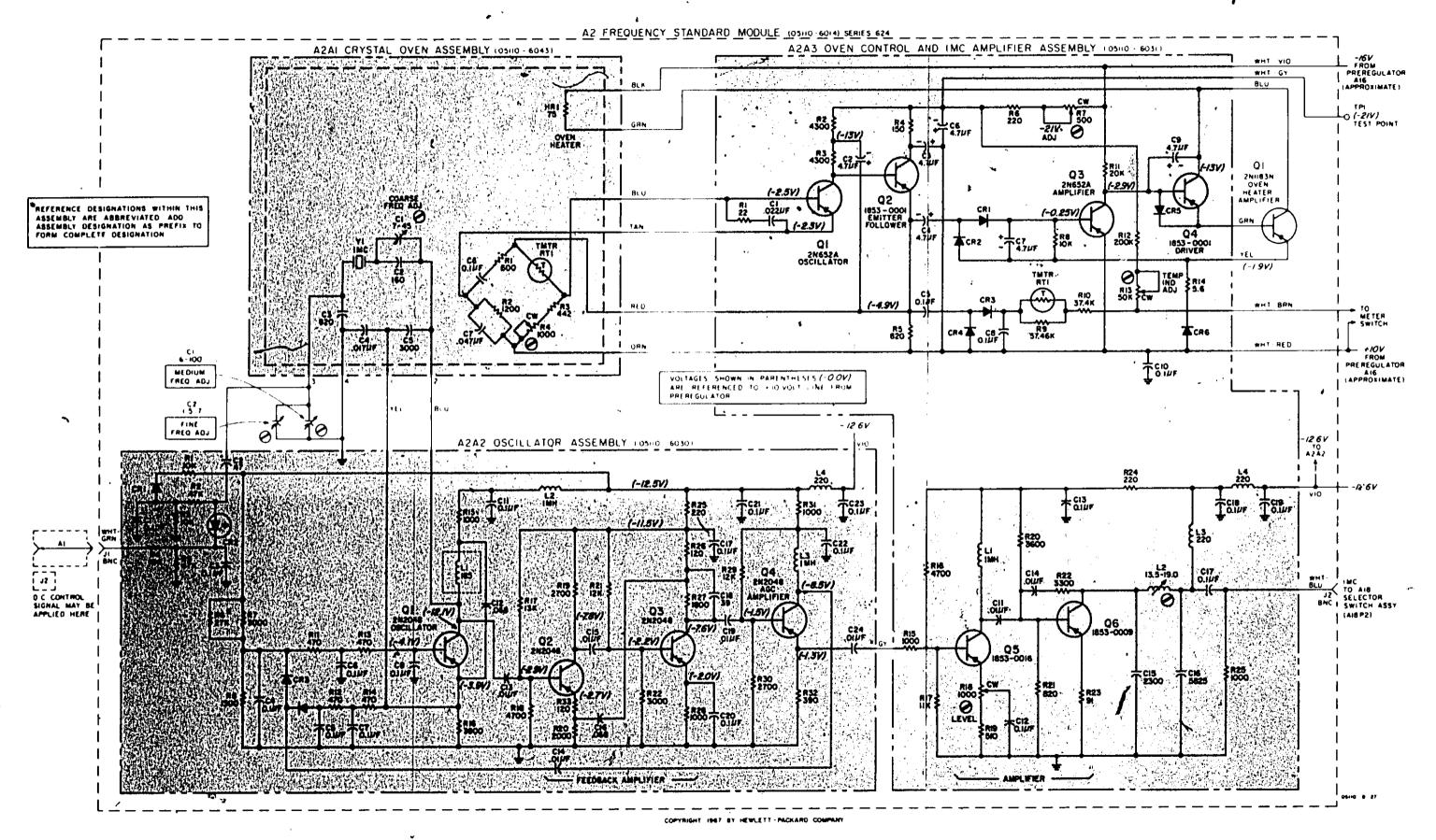


Figure 9-4. A2 Frequency Standard

_	<u>-</u> i		
		A4A1	
	C1 5J	C36, 5F	R1 5J
	C2 5J [,] C3 5J	С3 7 6Н С38 бН	R2 5K R3 6J
6 34 1 3 16 19	C4 5J	C39 6Ç	. R4 6K
	C5 6J C6 6K	C40 6F C41 6F	, R2 61
	C7 5J		R6 7J
	C8 5H C9 6J	CR1 5 \vec{J} CR2 5 j	R7 7.J R8 7H
	C10 7J	CR3 5J	R9 7J
G C	C11 6J C12 7J	CR4 5J CR5 6J	*R10 7H
	C13 7H	CR6 7J	R11 6H
	C14 7G C15 7G	CR7 7J	R12 6H R13 6G
	C16 7F	E1 7J	R14 6F
0	C17 6H C18 6H	→ L1 6J	R15 5H R16 6H
	C19 6G	L2 6J	R17 6G
	C20 6G C21 6F	L3 6.J L4 7H	R18 6F R19 6F
	C22 6J	L5 7H	
	C23 6H C24 6G	L6 7J L7 7H	RT1 7J
	C25 6F	L8 , 6J	T1 7J
	C26 6F C27 6J	L9 7H	T2 7H T3 7G
	C28 611	Q1 5J	T4 7G
	C29 6G C30 6F	Q2 6.J . Q3 6.J	T5 7F
0 20	C31 6F	Q4 6.J	T12 6J
	C32 5H C33 5H	Q5 6H Q6 6G	Т13 6Н Т14 6G
	C34 5G	Q7 6G	T r 5 6Gʻ
	C35 5F	Q8 6F	T16 6G
		4440	
		A4A2	
	C1 6B	C26 6B C27 6B	R1 6E R2 6E
	C2 5E C3 6E	C28 5E	R2 6E R3 6D
	C4 7E C5 7D	C29 5D C30 5C	R4 6C R5 6C
0 9	C6 7D	C31 5C '	R6 6B
	C7 7C C8 7B	C32 5B C33 5B	R7 6E R8 6D
	C9 7B	C34 6E	R9 6C
	C10 6E C11 6E	C35 6D	R10 6C R11 6B
	C12 BD	C36 6C	R11 6B
1 0	C13 6C C14 6C	C37 6C C38 6B	T6 7E
io o comparis	C15 6B	C39 6B	T7 7 D
	C16 6E C17 6D	L1 6E	T8 7D T9 7C
	C18 6D	L1 6E	T10 7B
	C19 6C C20 6B	•	T11 -7B T17 6E
THE PROPERTY OF THE PROPERTY O	C21 6B	Q2 6D	T18 6D
6 y	C22 6E	Q3 6D	T19 6D
A4	C23 6D C24 6D	Q4 6C Q5 6B	T21 6B
	C25 6C	Q6 6B	T22 6B

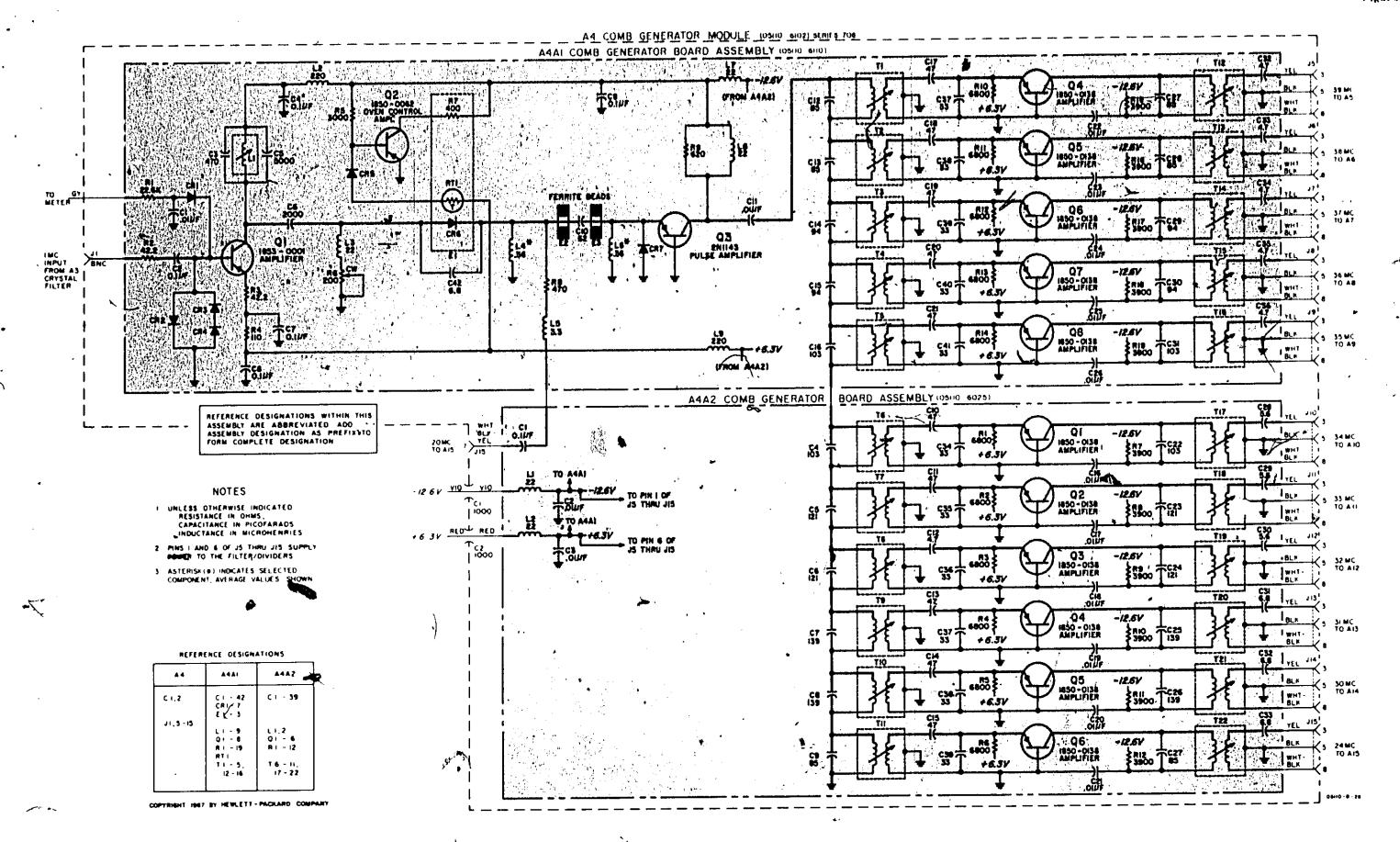


Figure 9-5. A4 Comb Generator

	Section IX							Model 5
	1	2	3	4	5	1		
	A					C1 4B C2 4E	A5A1, A6A1 C40 4C C41 4D	Q2 Q3
	В	Ó				C3 4F C4 7G C11 4C C12 4B C13 4C C14 4C C15 4D	C42 4F C44 4F C45 4G C46 4C C47 4D C48 5E C49 4E	Q4 Q5 Q6 Q7 R1 R2 R3
	С		, O1			C16 4D C17 4E C18 4E C19 4E C20 4F C21 4G C22 4G	L1 4C 1.2 4D 1.3 4F 1.5 4C 1.6 4C	R4 R5 R6 R7 R8
	D	1				C22 40 C23 4H C24 4H C31 4C C32 4C C33 4D C34 4E	L7 4D L8 4E L9 4F 1.10 4G L11 4G L12 4H 1.21 3C	R11 R12 R13 R14 R15 R16 R17 R18
	E					C35 4F C36 4G C37 4G C39 4H	1.22 3C 1.23 4E Q1 4B	R21 R22 RT1
	F					C51 2B C52 2C C53 2D C54 2E C55 2E	A5A2, A6A2 C81 2F C82 2F CR51 2D	Q51 Q52 Q53 Q54
	G					C56 3G C57 3F C58 2F C59 2E C60 2G	CR52 2F CR53 2F CR54 2F CR55 3F CR56 3F	Q55 R51 R52 R53 R54 R55
	Н -					C61 2G C62 2G C71 2C C72 2C C73 2C C74 2D C75 2D	L52 3D L53 3E L54 2C L55 2E L56 3E L57 2F	R61 R62 R63 R64 R65 R66 R67
na a nagrada de la calenda de la calenda de la calenda de la calenda de la calenda de la calenda de la calenda	J					C76 2D C77 2E C78 2F C79 2B C80 2E	L58 2G L59 2H L71 2C L72 2D L73 2F	R68 R69 R70 R71 R72 T51
ACTION AND THE PERSON	K	4	N5-A6					
	9-10			1				\

NOTES

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- UNLESS OTHERWISE (NOICATED RESISTANCE IN OMMS, CAPACITANCE IN PICOLARADS INDUCTANCE-IN MICROHENRIES

2 ASTENISH ONE INDICATES SELECTED LOMPONENT AVERAGE VALUES SHOWN

REFERENCE DESIGNATIONS

A5 A6	A5 A6A1	A5 A6A?
		£ 50 62.
	31 37	71 62
	39 49	
21 4]	CR 51 - 56
•	1 (1 3 5 12)	(5) 59.
	21 23	71 73
P	0, 7	0.51 - 55
	R 6	R 51 55
	0.16	61 - 72
	21,22 B11	
	1 "''	1.5(

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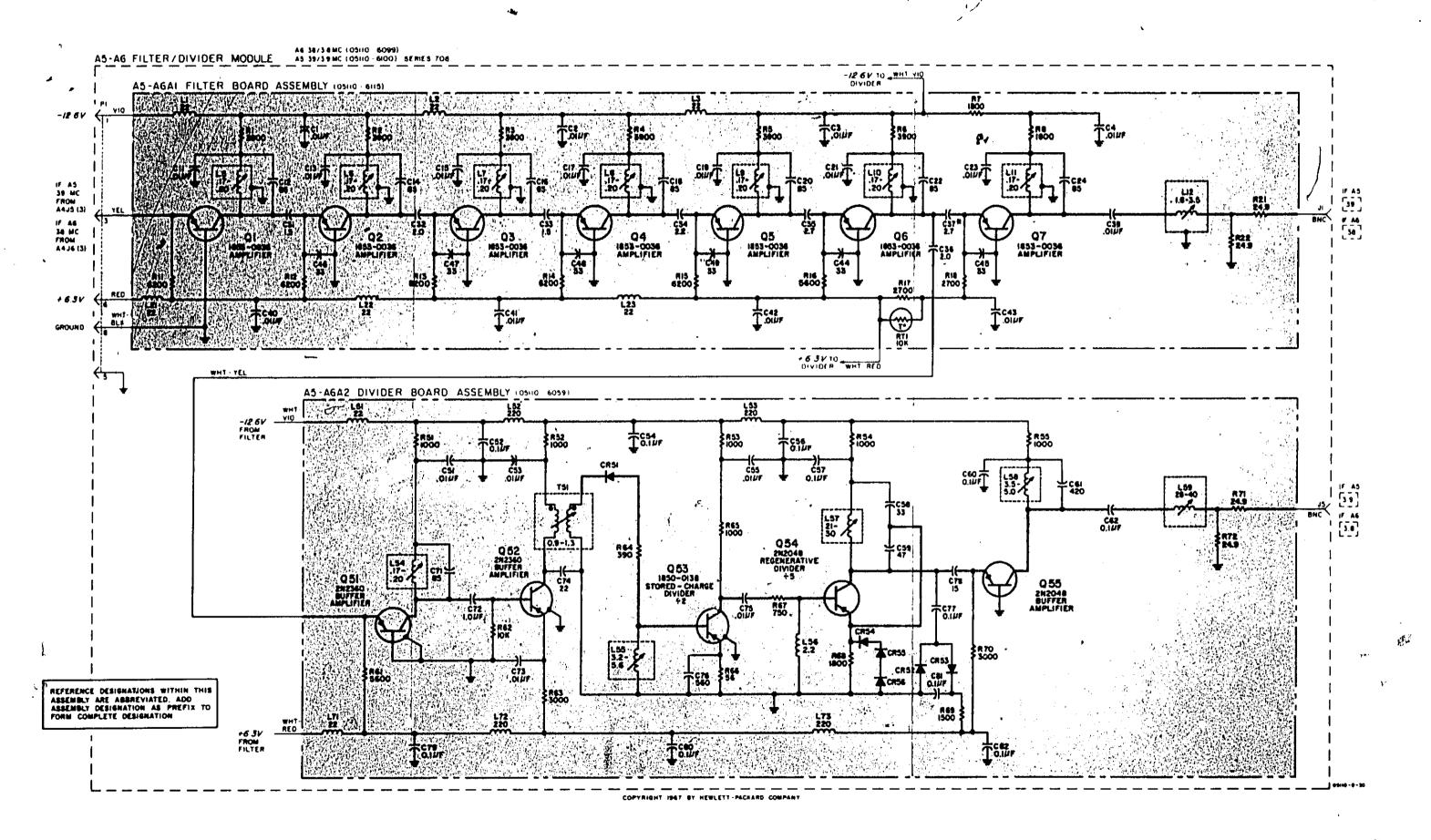


Figure 9-6. A5-A6 Filter/Divider 9-11

A A7A1, A8A1 C1 4B C40 4C Q2 4E C41 4D Q3 4D Q4 4E C41 4D Q3 4D Q4 4E C41 4D Q3 4D Q4 4E C41 4D Q3 4D Q4 4E C41 4D Q3 4D Q4 4E C41 4D Q3 4D Q4 4E C41 4D Q3 4D Q4 4E C41 4D Q3 4D Q4 4E C41 4D Q4 4E C4	1	2	3	4	5	Ι					
C	,	-	,	·				A7A1,	A8A1		
C3 4F C42 4F Q4 4F Q5 4F Q6 4F	A			1.		C1					4C
B C4 4G C44 4F Q5 66 4 C11 4C C45 4G Q6 4 C11 4C C46 5E R2 46 C13 4C C47 4D R1 4 C14 4C C48 5E R2 44 C15 4D C49 4E R3 44 C16 4D R4 L2 4D R6 44 C17 4E, L1 4C R5 41 C18 4E L2 4D R6 44 C19 4E L2 4D R6 44 C19 4E L2 4D R6 44 C19 4E L2 4D R6 44 C19 4E L3 4F R7 55 C21 4G L5 4C C22 4G L6 4C R11 4B R13 31 C24 4H L8 4E R13 31 C24 4H L8 4E R13 31 C24 4H L8 4E R13 31 C24 4H L8 4E R13 31 C33 4D L12 4H R17 4D R12 44 C33 4C L11 4G R16 41 C33 4D L12 4H R17 4D R12 44 C33 4D L12 4H R17 4D R12 41 C33 4D L12 4H R17 4D R12 41 C33 4C L11 4G R16 41 C33 4D L12 4H R17 4D R12 41 C33 4D L12 4H R17 4D R12 41 C33 4D L12 4H R17 4D R12 41 C34 4E L21 3C R21 55 C36 4G L23 4E R22 4D R3 48 C37 4G	•					C2 C3					4D 4E
C11 4C C12 4B C46 4C C13 4C C47 4D R1 4C C14 4C C48 5E R2 44 C15 4D C49 4E R3 4C C16 4D R4 4E R3 4C C17 4E L1 4C R8 4 C18 4E L2 4D R8 4C C18 4E L3 4F R7 56 C20 4F C21 4G L5 4C C22 4G L6 4C R11 C23 4H L7 4D R12 4C C24 4H L8 4E R13 31 C21 L9 4F R14 31 C24 4H L8 4E R13 31 C23 4C L11 4G R16 41 C33 4D L12 4H R17 4C C33 4D L12 4H R17 4C C33 4D L12 4H R17 4C C33 4D L12 4H R17 4C C34 4E L21 3C R16 4C C35 4F L22 3C R21 51 C36 4G L23 4E R22 41 C37 4G C39 4H Q1 4B R71 4C C37 4G C39 4H Q1 4B R71 4C C44 4B C45 C75 2B C75		1			3	C4		C44	4 F	Q5	4 E
C12 4B C46 4C C13 4C C47 4D R1 44 C14 4C C48 5E R2 44 C16 4D C49 4E R3 44 C16 4D C49 4E R3 44 C16 4D C49 4E R3 44 C16 4D C49 4E R3 44 C17 4E L1 4C R5 4 C18 4E L2 4D R6 46 C19 4E L3 4F R7 55 C20 4F R8 55 C21 4G L6 4C R11 46 C23 4H L7 4D R12 46 C23 4H L7 4D R12 46 C23 4H L8 4E R13 31 C31 4C L10 4G R15 41 C32 4C L11 4G R16 41 C32 4C L11 4G R16 41 C32 4C L11 4G R16 41 C33 4D L12 4H R7 46 C34 4E L2] 3C R16 41 C37 4G C39 4H Q1 4B R71 46 C37 4G C39 4H Q1 4B R71 46 C49 4E R2 3C R2 47 C55 2E C82 2F Q55 22 C53 2D C73 2F C56 3G CR54 2F R51 22 C57 3F C85 3F R52 27 C56 3G CR54 3F R52 27 C57 3F C85 3F R53 21 C58 2E C85 2E C85 2F R54 22 C59 2E C85 2E C85 2F R55 2E C66 3G CR54 2F R51 2D C67 2B C87 2F R55 3F R52 27 C58 2E C87 2B C87 2B R55 2C C68 2F C85 3F R53 21 C59 2E C85 2E C85 2F R54 2C C77 2E C59 2E C85 2E R64 2E C77 2E C59 2E R65 2B R66 2E C77 2E C59 2B L59 2H R69 2 C77 2E L59 2H R69 2 C77 2E L59 2H R69 2 C77 2E L59 2H R69 2 C77 2E L59 2H R69 2 C77 2E C77 2E L59 2H R69 2 C77 2E C77 2E L59 2H R69 2 C77 2E C79 2B L72 2D R72 2		E IL VISION		11111		C11	4C	C45	40	ЦO	41
C14 4C C48 5E R2 44 C15 4D C49 4E R3 44 C16 4D C49 4E R3 44 C16 4D C49 4E R3 44 C16 4D C49 4E R3 44 C17 4E L1 4C R5 4 C18 4E L2 4D R6 46 C19 4E L3 4F R7 56 C20 4F R8 5] C20 4F R8 5] C21 4G L5 4C C22 4G L6 4C R11 4 C23 4H L7 4D R12 46 C23 4H L6 4E R13 31 C31 4C L10 4G R15 41 C32 4C L11 4G R16 41 C32 4C L11 4G R16 41 C32 4C L11 4G R16 41 C32 4C L11 4G R16 41 C33 4D L12 4H R17 4C C34 4E L2] 3C R21 51 C35 4F L22 3C R21 51 C36 4G L23 4E R22 41 C37 4G C39 4H Q1 4B RT1 4C C37 4G C39 4H Q1 4B RT1 4C C44 4E L21 3C R16 4C C55 2E CR52 2F Q55 22 C53 2D C73 2D C73 21 C57 3F C75 3F R5 22 C56 3G C75 4F L22 3C R5 3E R6 22 C75 2E C75 2E C75 3F R5 22 C76 2C C77 2E C77 2E R6 22 C77 2E C77 2E C77 2E R6 2D R72 2D R72 2D C77 2E C77 2E C79 2H R6 22 C77 2E C77 2E C79 2H R6 22 C77 2E C79 2H R6 2D C79 2H L72 2D R72 2D C79 2H L72 2D C79 2H L72 2D C79 2H L72 2D C79 2H L72 2D C79 2H L72 2D C79 2H L72 2D C79 2H L72 2D C79 2H L72 2D C79 2H L72 2D C79 2H L72 2D C79 2H L	В			The state of the s		C12				D t	140
C16 4D R4 L1 4C R5 44 C18 4E L12 4D R6 44 C18 4E L12 4D R6 4C R19 4E L3 4F R7 56 C20 4F R8 51 C21 4G L5 4C R11 4G C22 4G L5 4C R11 4G C23 4H L7 4D R12 4G C24 4H L8 4E R13 31 C31 4C L10 4G R15 44 C35 4F L22 3C R18 4G C32 4C L11 4G R16 44 C35 4F L22 3C R18 4G C34 4E L21 3C R18 4G C37 4G L22 3C R21 55 C36 4G L23 4E R22 41 C37 4G C37						C14		C48		R2	4C
C				40	1 ,————			C49	4 E		4C
C		A STATE OF THE PARTY OF THE PAR	٠ الألفال		8	C17	4 E.	L1		R5	4 F
C20 4F R8 51 C21 4G L5 4C C22 4G L6 4C R11 46 C24 4H L8 4E R13 31 L9 4F R14 41 C31 4C L10 4G R15 41 C32 4C L11 4G R16 41 C33 4D L12 4H R17 46 C34 4E L21 3C R18 40 C35 4F L22 3C R21 51 C36 4G L23 4E R22 4F C37 4G C39 4H Q1 4B RT1 40 C34 4E L22 3C R21 51 C35 2F C85 2F Q52 2C C53 2D C53 2D Q53 2D C54 2E C85 2F Q52 2C C53 3D R6 2D C85 3F R53 2F C56 3F C85 3F R53 2F C56 3F C85 3F R53 2F C57 3F C85 3F R53 2F C58 2F C85 3F R53 2F C58 2F C85 3F R53 2F C59 2E R54 2F R51 2D C59 2E R54 2F R51 2D C59 2E R54 2F R51 2D C59 2E R54 2F R51 2D C59 2E R54 2F R55 2D C59 2E R54 2F R51 2D C59 2E R54 2F R51 2D C59 2E R54 2F R51 2D C59 2E R54 2F R55 3F R53 2F C58 2F C85 3F R53 2F C58 2F C85 3F R53 2F C59 2E L53 3E R65 2F C60 2G L53 3E R66 2D C71 2C L54 2C R63 2E C71 2C L54 2C R63 2E C72 2C L55 2E R64 2D C73 2C L55 2E R65 2F C75 2D L57 2F R67 2D C76 2D L59 2H R69 2D C76 2D L59 2H R69 2D C76 2D L59 2H R69 2D C76 2D L59 2H R69 2D C76 2D L59 2H R69 2D C76 2D L59 2H R69 2D C76 2D L59 2H R69 2D C76 2D L59 2H R69 2D C76 2D L59 2H R69 2D C76 2D L59 2H R69 2D C76 2D L59 2H R69 2D C76 2D L59 2H R69 2D C77 2E C77 2E C77 2D R72 2D C77 2E C79 2B L72 2D R72 2D C77 2E C79 2B L72 2D R72 2D C77 2E C79 2B L72 2D R72 2D C79 2B L72 2D R72 2D C79 2B L72 2D R72 2D	C										4G 5G
C22 4 H L7 4D R12 44 C24 4H L7 4D R12 44 C24 4H L7 4D R12 44 C31 4C L10 4G R15 41 C32 4C L11 4G R16 41 C33 4D L12 4H R17 46 C34 4E L21 3C R16 46 C35 4F L22 3C R21 51 C36 4G L23 4E R22 41 C37 4G C39 4H Q1 4B RT1 46 C39 4H Q1 4B RT1 46 C30 4G C39 4H Q1 4B RT1 46 C31 4C C39 4G C		1007				C20	4 F				5H
C23 4H L7 4D R12 44 C24 4H L8 4E R13 31 C31 4C L10 4G R15 41 C32 4C L11 4G R16 41 C33 4D L12 4H R17 4C C33 4D L12 4H R17 4C C33 4F L22 3C R2 51 C36 4G L23 3E R22 41 C37 4G C39 4H Q1 4B RT1 4C C39 4H Q1 4B RT1 4C C39 4H Q1 4B RT1 4C C30 C39 C39 C39 C39 C39 C39 C39 C39 C39 C39				Li C	·	C21				R11	4C
C31 4C L10 4G R15 41 C32 4C L11 4G R16 41 C33 4D L12 4H R17 4C C34 4E L21 3C R16 4C C35 4F 122 3C R21 51 C36 4G L23 4E R22 41 C37 4G C39 4H Q1 4B RT1 4C C39 4H Q1 4B				~		C23	4H	L7	4D	R12	4C
C31 4C L10 4G R15 41 C32 4C L11 4G R16 41 C33 4D L12 4H R17 46 C34 4E L21 3C R18 46 C35 4F L22 3C R21 51 C36 4G L23 4E R22 41 C37 4G C39 4H Q1 4B RT1 46 C39 4H Q1 4B RT1 46 C39 4H Q1 4B RT1 46 C39 4H Q1 4B RT1 46 C39 C39 C89 C89 C89 C89 C89 C89 C89 C89 C89 C8		1/2		70/	C	C24	4 H				3D 4 E
C33 4D L12 4H R17 44 C34 4E L21 3C R18 4C C35 4F L22 3C R21 51 C36 4G L23 4E R22 4F C37 4G C39 4H Q1 4B RT1 4C C51 2B C81 2F Q51 2F C52 2C C82 2F Q52 2C C53 2D Q53 2F C53 2D C83 2F C55 2E CR52 2F Q55 2C C54 2E CR51 2D Q54 2F C55 2E CR52 2F Q55 2C C57 3F CR53 2F C56 3G CR54 2F R51 2C C57 3F CR53 3F R52 2F C58 2F CR56 3F R52 2F C58 2F CR56 3F R52 2F C58 2F CR56 3F R52 2F C59 2E R54 2F R51 2C C57 3F CR55 3F R52 2F C58 2F CR56 3F R52 2F C58 2F CR56 3F R52 2F C59 2E R54 2F C60 2G L51 3C R55 3F C60 2G L51 3C R55 3F C61 2G L52 3D R61 2F C62 2G L53 3E R62 2F C63 2C L54 2C R63 2C C64 2C L55 2E R64 2F C65 2C L55 2E R64 2F C66 2C L55 3F R52 2F C67 2C L55 2F R64 2F C67 2C L55 2F R64 2F C77 2C L55 2F R67 2F C78 2F L71 2C R70 2F C78 2F L71 2C R70 2F C79 2B L72 2D R72 2F C79 2B L72 2D R72 2F C79 2B L72 2D R72 2F C79 2B L72 2D R72 2F C79 2B L72 2D R72 2F C79 2B L72 2D R72 2F C79 2B L72 2D R72 2F C79 2B L72 2D R72 2F C79 2B L72 2D R72 2F C79 2B L72 2D R72 2F C79 2B L72 2D R72 2F C79 2B L72 2D R72 2F C79 2B L72 2D R72 2F C79 2B L72 2D R72 2F C79 2B L72 2D R72 2F C79 2B L72 2D R72 2F C79 2B L72 2D R72 2F C79 2B L72 2D R72 2F	D	V. V.			•	C31		L10	4 G	R15	4 F
C34 4E L21 3C R18 4C C35 4F L22 3C R21 5C C36 4G L23 4E R22 4I C37 4G C39 4H Q1 4B RT1 4C C51 2B C81 2F Q51 21 C52 2C C82 2F Q52 2C C53 2D C95 2E C82 2F Q52 2F C55 2E CR51 2D Q54 2E C55 2E CR52 2F R51 2C C57 3F CR55 3F C86 3G C854 2F R51 2C C57 3F CR55 3F R52 2C C58 2F CR66 3F R53 2I C58 2F CR66 3F R53 2I C58 2F CR66 3F R53 2I C58 2F CR66 3F R53 2I C58 2F CR66 3F R53 2I C58 2F C86 3F R53 2I C59 2E R54 2Z C58 2F CR68 3F R65 2I C58 2F CR68 3F R65 2I C59 2E R54 2Z C73 2C C81 2G L53 3E R62 2C C74 2D L56 3E R66 2I C74 2D L56 3E R66 2I C74 2D L56 3E R66 2I C75 2D L57 2F R67 2I C78 2F L71 2C R71 2I C78 2F L71 2C R71 2F R69 2I C77 2E R70 2F L71 2C R71 2F C78 2F L71 2C R71 2F C79 2B L72 2D R72 2F C79 2B L72 2D R72 2F C79 2B L72 2D R72 2F C79 2B L72 2D R72 2F C79 2B L72 2D R72 2F C79 2B L72 2D R72 2F C79 2B L72 2D R72 2F C79 2B L72 2D R72 2F C79 2B L72 2D R72 2F C79 2B L72 2D R72 2F C79 2B L72 2D R72 2F C79 2B L72 2D R72 2F C79 2B L72 2D R72 2F C79 2B L72 2D R72 2F C79 2B L72 2D R72 2F C79 2B L72 2D R72 2F C79 2B L72 2D R72 2F C79 2B L72 2D R72 2F	į	100			ò						4 F
C36 4G L23 4E R22 4I C37 4G C39 4H Q1 4B RT1 4C C51 2B C81 2F Q51 2I C52 2C C82 2F Q52 2C C53 2D Q53 2I C54 2E CR51 2D Q54 2I C55 2E CR52 2F Q55 2C C53 2F C66 3G CR54 2F R51 2D C57 3F CR53 3F R52 2I C58 2F CR56 3F R53 2I C58 2F CR56 3F R53 2I C58 2F CR56 3F R53 2I C58 2F CR56 3F R53 2I C58 2F CR56 3F R53 2I C58 2F C85 3F R52 2I C58 2F C85 3F R54 2I C58 2F C85 3F R54 2I C58 2F C85 3F R54 2I C58 2F C85 3F R54 2I C58 2F C85 3F R54 2I C58 2F C85 3F R54 2I C58 2F C85 3F R54 2I C58 2F C85 3F R54 2I C61 2G L52 3D R61 2I C62 2G L53 3E R62 2I C71 2C L54 2C R63 2I C71 2C L55 2E R64 2I C72 2C L55 2E R64 2I C73 2C C74 2D L56 3E R66 2I C75 2D L57 2F R67 2I L58 2G R68 2I C76 2D L59 2H R69 2I C77 2E R70 2I C78 2F L71 2C R71 2I C79 2B L72 2D R72 2I C79 2B L72 2D R72 2I					—————————————————————————————————————	C34	4 E	L21	3C	R18	4G
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NOTES

- L UNLESS OTHERWISE INDICATED RESISTANCE IN OHMS, CAPACITANCE IN PICOFARADS INDUCTANCE IN MICROHENRIES
- 2 ASTERISH (N) INDICATES SELECTED COMPONENT AVERAGE VALUES SHOWN

REFERENCE DESIGNATIONS

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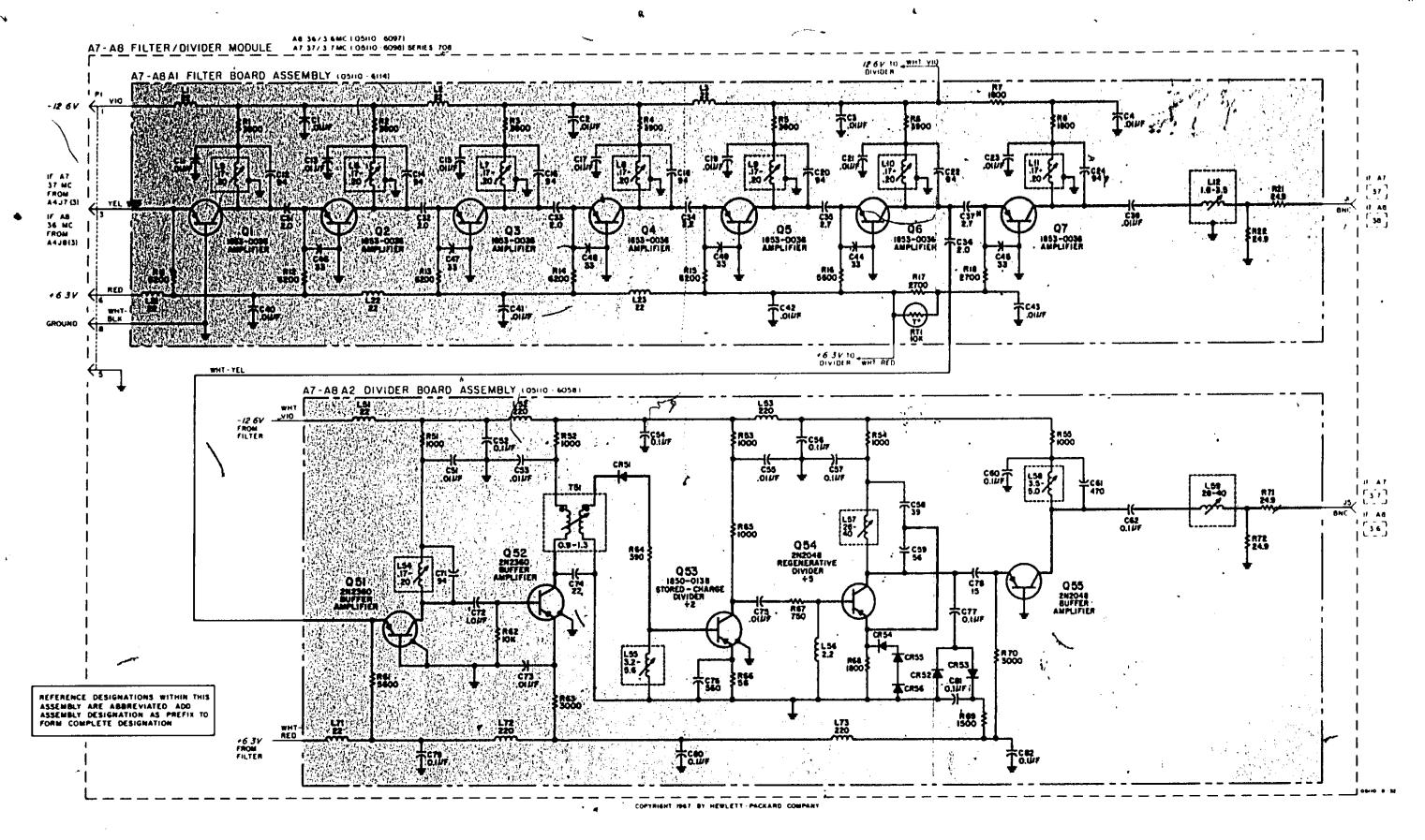


Figure 9-7. A7-A8 Filter/Divider

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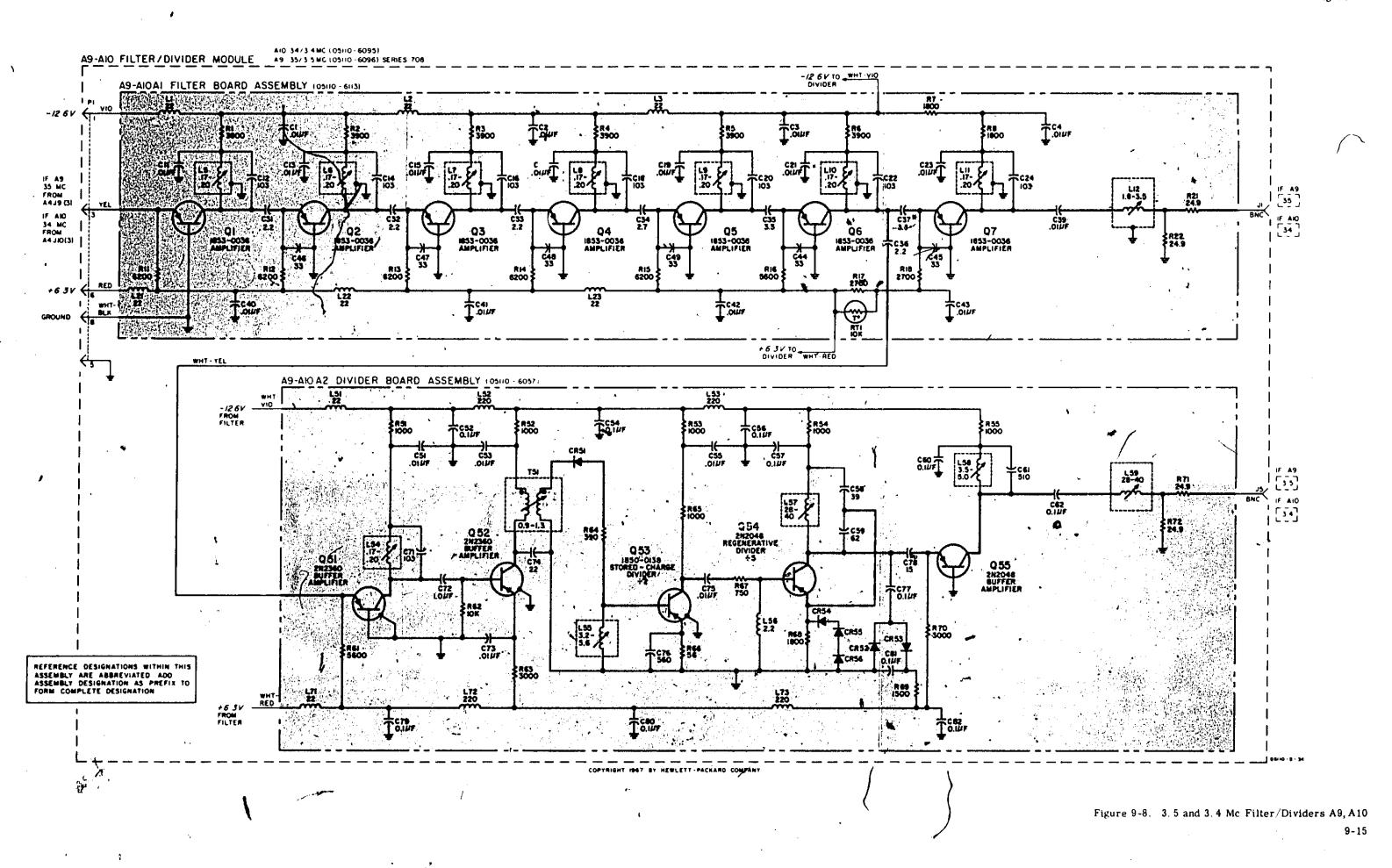
NOTES

- I UNLESS OTHERWISE INDICATED RESISTANCE IN OMMS, CAPACITANCE IN PICOFARADS INDUCTANCE IN MICROHENRIES
- 2 ASTERISH (N) INDICATES SELECTED COMPONENT, AVERAGE VALUES SHOWN

REFERENCE DESIGNATIONS

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l		465	10 支票	· \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \		C57 C58	3 F 2 F	CR55 CR56	3 F 3 F	R52 R53	2D 2E
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						C60	2G	L51	3C	R55	2Ç/
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İ						C72	2C	L55	2 E	R64	2D
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					!	C80	2E	L73	2 F	T51	2 D
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K		į	A11-A12				•				
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- 2 ASTERISH (H) INDICATES SELECTED COMPONENT AVERAGE VALUES SHOWN

REFERENCE DESIGNATIONS

A): A(2	44 A12A1	AII A12A2
	(i 4, ii - 24, 3i - 37, 39 - 48	C51 62 71 82
J1 5		CR51-56
_	L I - 3 , 5 - 12 , 21 - 23	151 59, 71 73
P1 /	Q: 7 R: 8	05) 55 85) 55,
	() (8, 2(,22	61 - 72
	RT I	T 51

05:10 0 35

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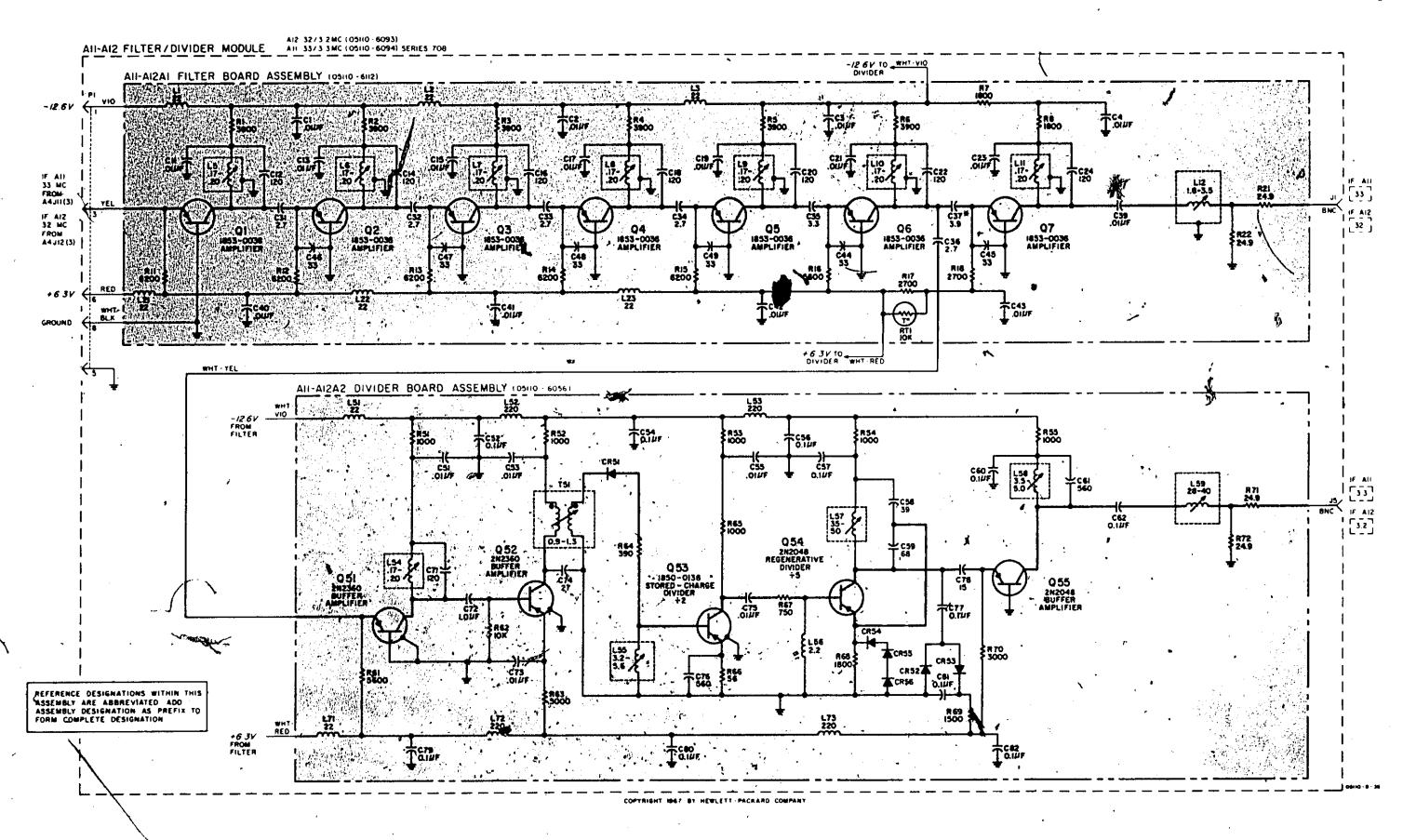


Figure 9-9. 3.3 and 3.2 Mc Filter/Dividers All, Al2

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1	2	3	4	5			<i>j</i>			
A	1									
~			14.	r			A13A1, A1	14A1		
	1 13				Cı	4B	C40	4C	Q2	4C
	<u> </u>				C2	4E	C41	4D	Q3	4D
		- 15 to	any iyakyah nyakarakya da Judakan kanya abda u mu		C3	4 F	C42	4 F	Q5	4 E
	375.74				CII	4C	C45	4G	Q6	4 F
В			int.	5	C12	4B	C46	4C		
		IN 25		,	C13	4C	C47	4D	R1	4C
				T	C14 C15	4C 4D	C48 C49	5E 4E	R2 R3	4C 4C
	813149			a l	C16	4D	C49	46	R4	4E
	1.1				C17	4E	L1	4C	R5	4 F
C	3	的数据	2 (u)		C18	4E	L2	4D	R6	4G
	12/: 8		-	,	C19 C20	4 E 4 F	L3	4 F	R7 R8	5G 5H
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					C22	4G	L6	4C	R11	4C
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	ALEA .		9	· · · · · · · · · · · · · · · · · · ·	C33 C34	4D 4E	L12 L21	4 H 3 C	R17 R18	4G 4G
	633 4~				C35	4 F	1.22	3C	R21	5H
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	1, 4, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1,				C51	2B	C81	2 F	Q51	2B
					C52	2C	C82	2F	Q52	2C
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	0			ł	C54 C55	2E 2E	CR51 CR52	2D 2 F	Q54 Q55	2E 2G
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	100]]	C58 C59	2 F 2 E	CR56	3 F	R53 R54	2 E 2 F
			L		C60	2G	L51	3C	R55	2G
				J	C61	2 G	L52	3D	R61	2B
H				0	C62	2G	L53	3 E	R62	2C
•	3	, Q			C71 C72	2C 2C	L54 L55	2C 2E	R63 R64	2C 2D
	A cho cho		0-0-0-19	Ն	C73	2C	*****		R65	2E
•			3. E.	W.	C74	2D	L56	3 E	R66	2D
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J			ARMENIAL PROPERTY.	7 0	C76	2D	L56 L59	2H	R69	2 E 2 F
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	-		} •••		C78	2F	L71	C 2D	R71	2H
					C79 C80	2B 2E	L72 L73	2D 2F	R72 T51	2 H 2 D
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2 ASTERISK LAFT INDICATES SELECTED LUMPUNENT AVERAGE VALUES SHOWN

REFERENCE DESIGNATIONS

4 1 44	A15 614A1	A13 A14A2
	4 24 3 37 19 49	C 5) 62 7) 82
41.5	", ",	CR 5+ 56
	5 i2 2 23	(5) 59 7) 73
	31.7	Q51 - 55
*	R 8 -1 -8 -2-,22 RT	P 54 - 55, 64 - 72
		7 5 1

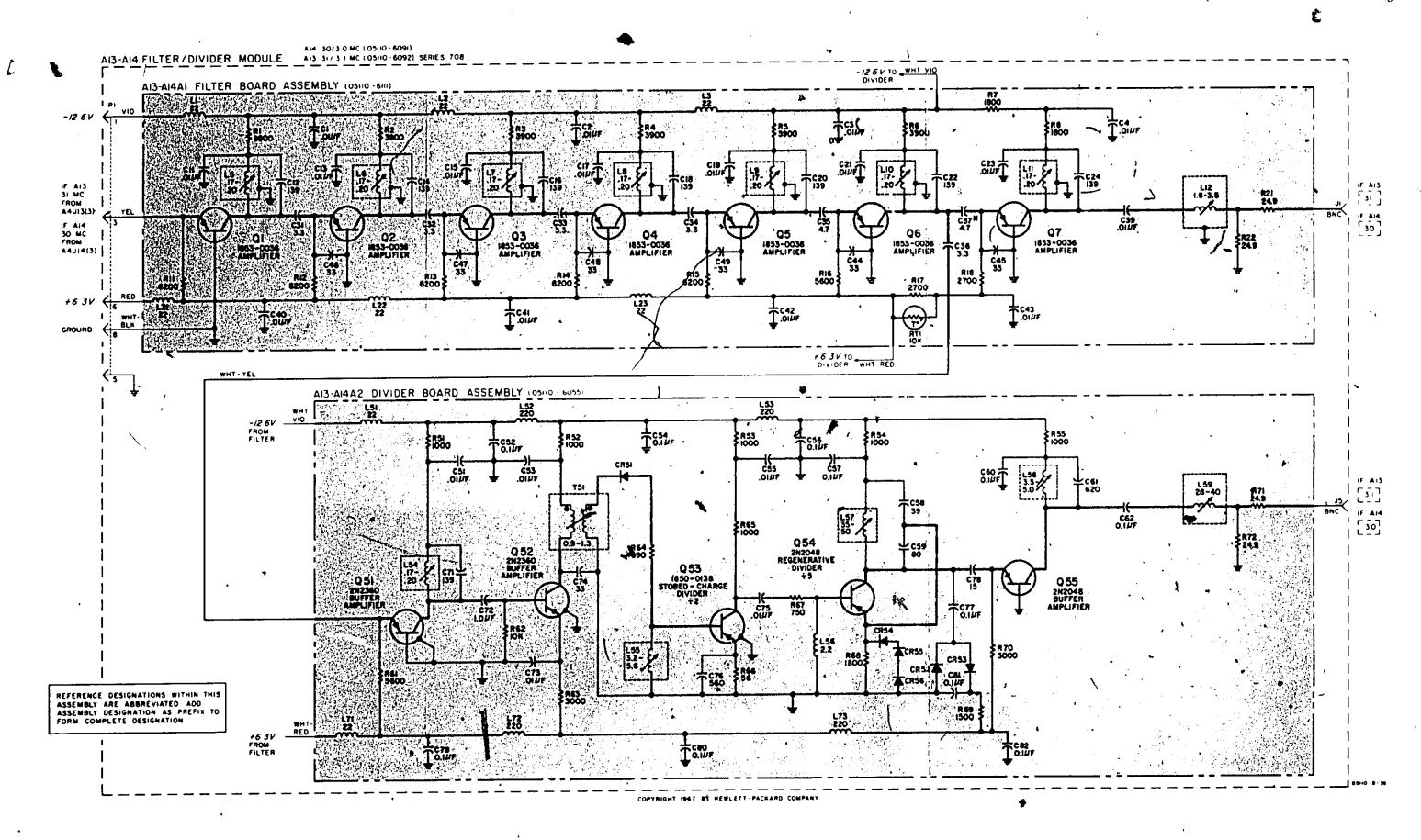


Figure 9-10. 3.1 and 3.0 Mc Filter/Dividers A13-A14

9-19

SCHEMATIC DIAGRAMS

C1 4B C41 4D Q3 44 C24 4F Q4			-	4		<u> </u>	A1541 ,	,
C13 4C C47 4D R1 48 C14 4C C48 4D R2 55 C15 4D C49 4E R3 5E C15 4D C49 4E R3 5E C16 4D C49 4E R3 5E C17 4E L1 5B R8 55 C17 4E L1 5B R8 55 C18 4E L2 5D R6 44 C19 4E L3 5E R7 5C C20 4E L5 4B R8 55 C20 4E L5 4B R8 55 C21 4F L6 4C C22 4F L7 4D R11 4E R2 4C C22 4F L7 4D R11 4E R12 4C C23 4H L8 4E R12 4C C24 4G L9 4F R13 3E C23 4C L11 4G R15 4B C23 4C L11 4G R15 4B C23 4C L11 4G R15 4B C23 4D L12 4H R16 4F C23 4D L12 4H R16 4F C23 4D L12 4H R16 4F C23 4D L12 4H R16 4F C23 4D L12 4H R16 4F C23 4D L12 4H R16 4F C33			3	4 [E û	5	C2 4D C3 4F C4 5G C11 4C	C41 4D C42 4F C43 4H C44 4F C45 4G	Q4 £ D Q5 4E Q6 4F
C20 4E L5 4B R8 55 C21 4F L6 4C C22 4F L7 4D C23 4H L8 4E R12 44 C24 4G L9 4F R13 31 C31 46 L10 4F R14 4E C32 4C L11 4G R15 4E C33 4D L12 4H R16 4F C34 4E L21 3B R17 4G C35 4F L22 3C R18 4G C36 4F L22 3B R17 4G C37 4F R22 4F C39 4G Q1 4B C40 4B Q2 4C RT1 4G C40 4B Q2 4C RT1 4G C40 4B Q2 6C C41 2P C40 2G C44 2F C40 2G C44 2	В	The second secon	==			C13 4C C14 4C C15 4D C16 4D C17 4E C18 4E	C47 4D C48 4D C49 4E L1 5B L2 5D	R2 5C R3 5D R4 5E R5 5F R6 4F
C32 4C L11 4G R15 4E C33 4D L12 4H R16 4F C34 4E L21 3B R17 4G C35 4F L22 3C R18 4G C34 4E L21 3B R17 4G C35 4F L22 3C R18 4G C36 4F L22 3C R18 4G C37 4F R22 4F C39 4G Q1 4B Q2 4C RT1 4G C40 4B Q2 4C AC RT1 4G C40 4B Q2 4C AC AC AC AC AC AC AC AC AC AC AC AC AC	C				,	C20 4E C21 4F C22 4F C23 4H C24 4G	L5 4B L6 4C L7 4D L8 4E L9 4F	R8 5H R11 4B R12 4C R13 3D
C40 4B Q2. 4C RT1 4C A15A2 C1 2D C41 2D Q1 2E C2 2E C42 2F Q2 2C C3 2G C43 2G Q3 2E C4 2G C44 2F Q4 2E C11 2B C45 2G Q5 2E C12 2B C46 2B Q6 2F C13 2D C47 2C Q7 2C C14 2C C48 2D C15 2D C49 2D R1 2E C16 2D C50 2E R2 3G C17 2E R3 3E C19 2F L2 3D R5 3E C19 2F L2 3D R5 3E C20 2E L3 3F R6 3F R7 3G C21 2G L5 2B R8 3G C22 2F L6 2C R11 2E C33 2C L10 2F R15 2E C33 2C L10 2F R15 2E C33 2C L10 2F R15 2E C33 2C L10 2F R15 2E C33 2D L11 2G R16 2F C34 2E L12 2H R17 2G C35 2F R18 2G	D					C32 4C C33 4D C34 4E C35 4F C36 4F C37 4F	L11 4G L12 4H L21 3B L22 3C L23 3E	R15 4E R16 4F R17 4G R18 4G R21 5H
A15A2 C1 2D C41 2D Q1 2E C2 2E C42 2F Q2 2C C3 2G C43 2G Q3 2D C4 2G C44 2F Q4 2D C11 2B C45 2G Q5 2E C12 2B C46 2B Q6 2F C13 2D C47 2C Q7 2C C14 2C C48 2D C15 2D C49 2D R1 2E C16 2D C50 2E R2 3C C17 2E R3 3D C17 2E R3 3D C17 2E R3 3D C19 2F L2 3D R5 3E C18 2E L1 3B R4 3C C19 2F L2 3D R5 3E C20 2E L3 3F R6 3F C20 2E L3 3F R6 3F C21 2G L5 2B R8 3C C22 2F L6 2C R11 2E C23 2G L7 2D R12 2C C24 2G L8 2E R13 2D C31 2C L9 2F R14 2E C33 2D L11 2G R16 2F C34 2E L12 2H R17 2C C35 2F R18 2C C35 2F R18 2C C36 2F L21 2B R21 3H	E		• •					RT1 4G
C4 2G C44 2F Q4 2E C11 2B C45 2G Q5 2E C12 2B C46 2B Q6 2F C13 2D C47 2C Q7 2C C14 2C C48 2D C15 2D C49 2D R1 2E C16 2D C50 2E R2 3C C17 2E R3 3E C18 2E L1 3B R4 3C C19 2F L2 3D R5 3E C20 2E L3 3F R6 3F C20 2E L3 3F R6 3F C21 2G L5 2B R8 3C C22 2F L6 2C R11 2E C23 2G L7 2D R12 2E C24 2G L8 2E R13 2D C31 2C L9 2F R14 2E C32 2C L10 2F R15 2E C33 2D L11 2G R16 2F C33 2D L11 2G R16 2F C34 2E L12 2H R17 2C C35 2F R18 2C C36 2F L21 2B R21 3H	F					C2 2E	C41 2D C42 2F	Q1 2B Q2 2C
C16 2D C50 2E R2 3C C17 2E R3 3E C18 2E L1 3B R4 3C C19 2F L2 3D R5 3E C20 2E L3 3F R6 3F R7 3C C20 2E L3 3F R6 3F R7 3C C22 2F L6 2C R11 2E C23 2G L7 2D R12 2C C24 2G L8 2E R13 2D C24 2G L8 2E R13 2D C24 2G L8 2E R13 2D C31 2C L9 2F R14 2E C32 2C L10 2F R15 2E C33 2D L11 2G R16 2F C34 2E L12 2H R17 2G C35 2F R18 2G C35 2F R18 2G C35 2F R18 2G C36 2F L21 2B R21 3H	G				X	C4 2G C11 2B C12 2B C13 2D C14 2C	C44 2F C45 2G C46 2B C47 2C C48 2D .	Q4 2D Q5 2E Q6 2F Q7 2G
C22 2F L6 2C R11 2E C23 2G L7 2D R12 2C C24 2G L8 2E R13 2D C31 2C L9 2F R14 2E C32 2C L10 2F R15 2E C33 2D L11 2G R16 2F C34 2E L12 2H R17 2G C35 2F R18 2G C36 2F L21 2B R21 3H	н .	K.	. (O) 5:		0	C16 2D C17 2E C18 2E C19 2F C20 2E	C50 2E L1 3B L2 3D L3 3F	R2 3C R3 3D R4 3G R5 3E R6 3F R7 3G
C34 2E L12 2H R17 2G C35 2F R18 2G C36 2F L21 2B R21 3H	J					C22 2F C23 2G C24 2G C31 2C C32 2C C33 2D	L6 2C L7 2D L8 2E L9 2F L10 2F	R11 2B R12 2C, R13 2D R14 2E R15 2E
C40 2C L23 2E RT1 2G	K		A15			C34 2E C35 2F C36 2F C39 2G	L12 2H L21 2B L22 2C	R17 2G R18 2G R21 3H R22 3H

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2 ASTERISK (H) INDICATES SELECTED COMPONENT, AVERAGE VALUES SHOWN

REFERENCE DESIGNATIONS

A15 - A14	AIS MAAI	A15 A14A2
	 	,
	L 1 • 4	C 51 - 62
	10 - 24	71 - 82
	31-37	
	39 49	
	57 77	604 44
_		CR 5+ - 56
J1,5		
	1 4 1	C51 - 59
	5 - 12	71 - 73
	20.25	
P i	1	
	01-7	95(-55
	R) - 8.	R 51 - 55.
	11 18.	61 - 72
		a) - 72
	24,22	
	RT:	
		T 51

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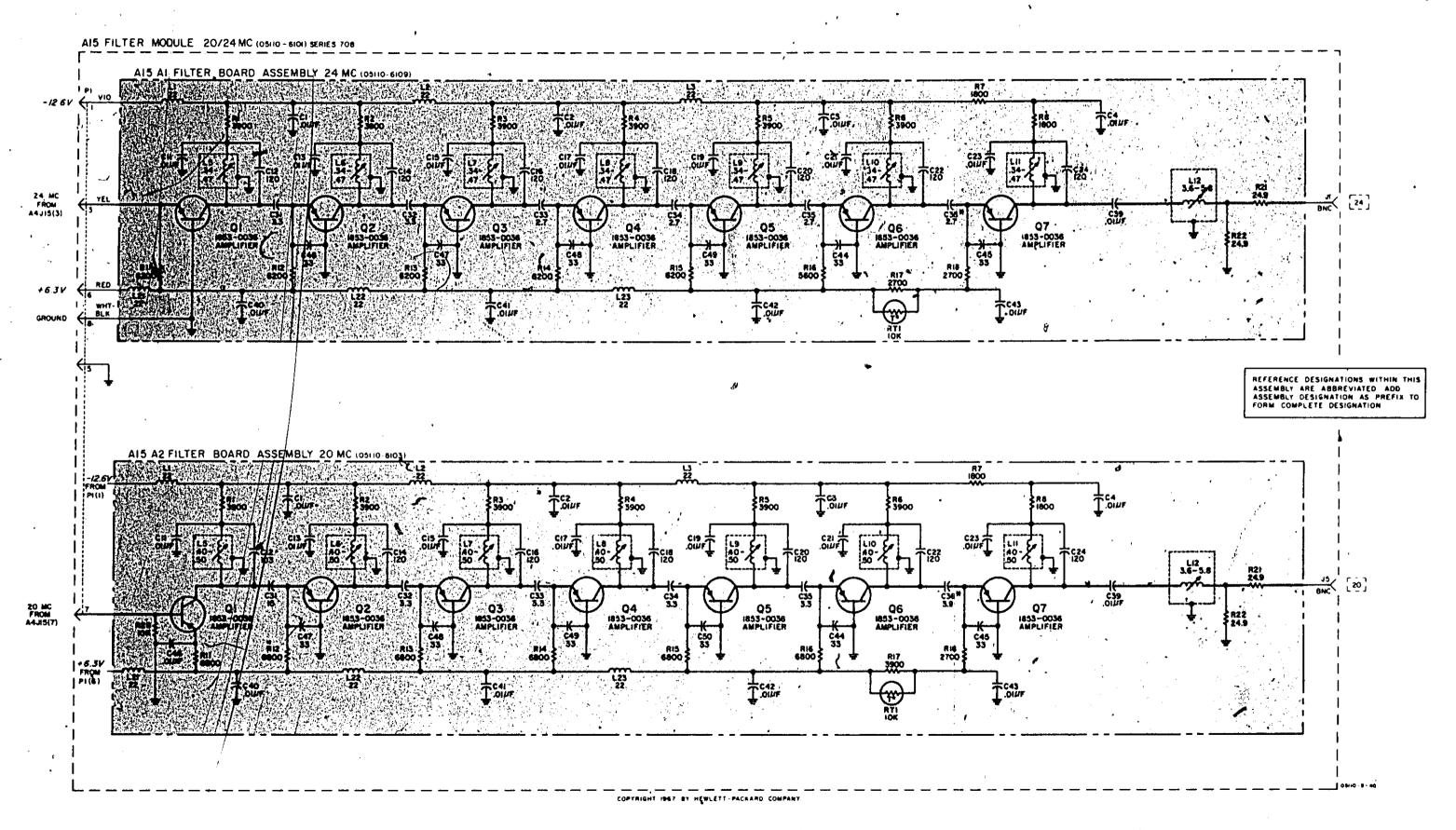
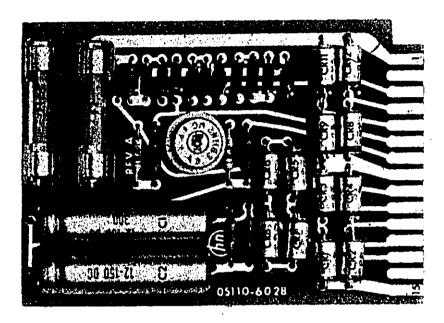
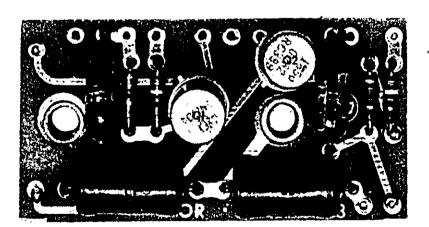


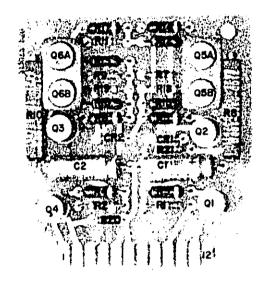
Figure 9-11. A15 20/24 MHz Filter

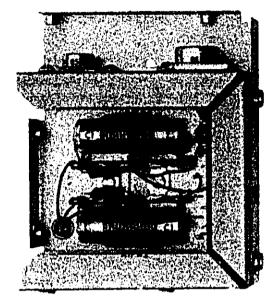


A16A1



A16A2





A17A1

A17A2/A3

NOTES

I UNLESS OTHERWISE INDICATED RESISTANCE IN OHMS. CAPACITANCE IN PICOFARADS



REFERENCE DESIGNATIONS

NO PREFIX	A16	AI6AI	AI6A2	A(7	AI 7AI	AI7A2	AI7A3
	C1,2	C1,2 CR1-24	C1,2	C3,4	C1,2 CR1,2	Ci	Ci
DSI,2 Fi Ji	E1,2 /	F+,2				<u> </u>	
	Q1,4 R1	Q1 A1-6	Q1,2 R1 - 6	05,6	Q1-6 R1-21		
\$1,2	T1		1		Ţ		
WI	T1				1		

Q941G D 41

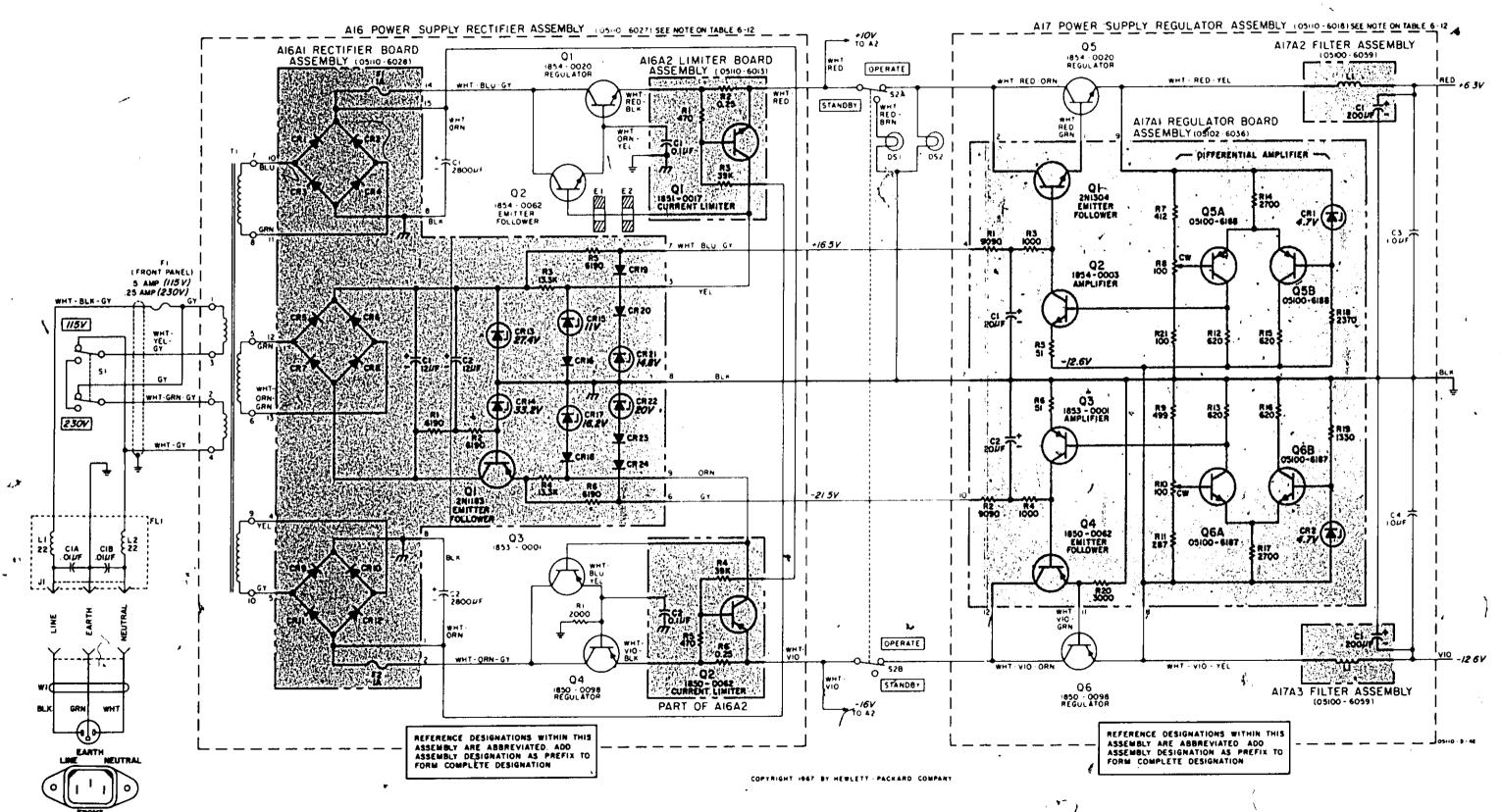


Figure 9-12. A16 Power Supply Rectifier
A17 Power Supply Regulator

MANUAL CHANGES



MANUAL DESCRIPTION

INSTRUMENT: 6110B Synthesizer Driver

SERIAL PREFIX:

1048A

DATE PRINTED:

DEC 1970

HP PART NO:

05110-9032

CHANGE DATE: January 31, 1974

(This change supersedes all earlier dated changes)

Make all changes listed as ERRATA.

Check the following table for your instrument's serial prefix or serial number and make listed change(s) to manual.

IF YOUR INSTRUMENT HAS SERIAL PREFIX OR SERIAL NUMBER	MAKE THE FOLLOWING CHANGES TO YOUR MANUAL		IF YOUR INSTRUMENT HAS SERIAL PREFIX OR SERIAL NUMBER		MAKE THE FOLLOWING CHANGES TO YOUR MANUAL	
1124A	1 '			• /		
1212A	1,2			_/		
1228A	1,2,3			<u> </u>		
	7	J.				

► NEW OR REVISED ITEM

ERRATA

Page 1-1, Table 1-1:

Change, 8120-1348 to 8120-1378.

Change 5060-0775 to 5060-8740.

Page 3-2, Figure 3-1:

Change call-outs B and 9 (at top) to 6 and 5 respectively. Change 1st word item 4 from "Red" to "Green".

Page 5-2, Table 5-2, SIGNAL-TO-PHASE NOISE RATIO:

Change first line from "68 dB" to "65 dB"

Change second line from "78 d8" to "65 d8".

Change step 8, from "78 dB" to "65 dB".

Page 6-2, Table 6-1:

Change DS2 to 1450-0701.

Change FL1 to 9100-3112.

Abd F1 2110-0201 FUSE 1/4 AMP 250 V.

Change W1 from 8120-1348 to 8120-1378.

►Change F1 from 2110-0012 to 2110-0202; add "Slo-Blow" to description.

Page 8-4, Table 6-2:

Change A1C3 to 0160-3060.

Page 6-5, Table 6-2:

Change A1C3,4 to 0160-3060.

Page 6-7, Table 6-3:

Change A1C1, 3-8, 11, 17, 20-23 to 0160-3060.

Page 6-8, Table 6-3:

Change A3CR6 from 1901-0026 to 1901-0028 400 PIV.

Change A1C5, 8, 10, 12, 13, 17-19 to 0160-3060.

ERRATA (Cont'd)

Page 6-9, Table 6-3:

Change A2A3R8 from 0683-1035 to 0683-5625 5800 OHM; add to description "FACTORY SELECT COMPONENT."

Page 6-12, Table 6-5:

Change A1C4, 8, 9 to 0160-3060 25V. Change A1C37-41 to 0160-2150.

Page 6-14, Table 6-5:

Change ABC1 to 0160-3060.

Change A2C34-39 to 0160-2150.

Page 6-17, Table 6-6:

Change A1C44-49 to 0160-2150.

Page 6-19, Table 6-6:

Change A2C58 to 0160-2150.

Change A2C52, 54, 56, 57, 60, 62, 77, 79-82 to 0160-3060 25V.

Page 6-21, Table 6-7:

Change A1C44-49 to 0160-2150.

Page 6-23, Table 6-7:

Change A2C52, 54, 56, 57, 60, 62, 77, 79-82 to 0160-3060 25V.

Page 6-25, Table 6-8:

Change A1C44-49 to 0160-2150.

Páge 6-27, Table 6-8:

Change A2C52, 54, 56, 57, 60, 62, 77, 79-82 to 0160-3060 25V.

Page 6-29, Table 6-9:

Change A1C44-49 to 0160-2150.

Page 6-31, Table 6-9:

Change A2C52, 54, 56, 57, 60, 62, 77, 79-82 to 0160-3060 25V.

Page 6-33, Table 6-10:

Change A1C44-49 to 0160-2150.

Page 6-35, Table 6-10:

Change A2C74 to 0160-2150.

A2C52, 54, 56, 57, 60, 62, 77, 79-82 to 0160-3060 25V.

Page 6-37, Table 6-11:

Change A1C48 to 0160-2150.

Change A1C35, 36 to 0150-0011 1.5 PF.

A1C44, 45, 47-49 to 0140-0194 110 PF.

Change A15A1C35, 36 from 0150-0011 to 0150-0041 2.7 PF (original value) Change A15A1R16 from 0758-0057 to 0758-0047 7500 OHM,

Page 6-39, Table 6-11:

Change A2C44, 45, 47-50 to 0160-2150.

MANUAL CHANGES MODEL 5110B Page 3

ERRATA (Cont'd)

Page 6-42, Table 6-12:

Change A16A1CR1-12 to 1901-0028 400 PIV.

▶Page 6-45, Table 6-13:

Change 5040-0601 to 0403-0150.

Page 6-51, Table 6-15: "

Change 9110-3112 to 9100-3112 in HP Stock No. and Mfr., Part No. columns.

► Change 5040-0601 to 0403-0150.

Page 7-2, Paragraph 7-6, Serial Prefix/Manual Changes table:

Change Serial Prefix 830 to "820".

Page 1811, Figure 7-7, Right-hand photo:

Change Ja to J4.

Change J4 to J3.

Page 9-6, A2A2 Component Locator (Photo):

Replace with Figure (A2A2).



Page 9-7, Figure 9-4, A2A2 schematic:

Add reference designator (CR4) to diode connected between CR3 anode and junction of R12 and C5.

Page 9-7, Figure 9-4, A2A3 schematic:

Change A2A3R8 to 5600 OHM; add asterisk (*) to reference designator.

Page 9-21, Figure 9-11, A15A1 schematic:

Change A15A1C35, 36 to 2.7 PF (original value).

Change A15A1R16 to 7500 OHM.

Change C35, 36 to 1.5 PF.

C44, 45, 47-49 to 110 PF.

Page 9-23, A7A1 COMPONENT LOCATOR (Photo):

Change pin #1 to 12; #12 to 1.

CHANGE 1 (1124A)

NOTE

This change provides for the new standard and optional instrument colors. Option A85, designates use of light gray panel with olive gray cabinet. Option X95 designates use of light gray panel and blue textured cabinet. Standard colors are mint gray panel and olive gray cabinet.

Page 6-46, Figure 6-1:
Replace table of Modular Cabinet Parts with Table 1.

item]	December	HP Part No.			
No.	Description	Standard	Option A85	Option X95	
1	Frame Assembly	5060-0732	5060-0732	5060-0732	
2	Front Panel	05110-0090	05110-0062	05110-0062	
3	Rear Side Cover	05110-0086	05110-0086	05110-0029	
4	Front Side Cover	05110-0084	05110-0084	05110-0028	
5	Top Cover	05100-6222	05100-6222	05100-6062	
6	Bottom Cover	05100-6220	05100-6220	05100-6061	
7	Handle Assembly	5060-0222	5060-0222	5060-0222	
8	Retainer Handle	05110-0088	05110-0088	05110-0030	
9	Foot Assembly	5060-0767	5060-0767	5060-0767	
10	Tilt Stand	1490-0030	1490-0030	1490-0030	
11	Fluted Aluminum Plate	5000-0051	5000-0051	5000-0051	
12	Rack Mount Adapter Kit	5060-8740	5060-0775	5060-0775	

CHANGE 2 (1212A)

Page 6-42, Table 6-12: Change Al6AlQl to 1853-0012 2N2904A

CHÂNGE 3 (1228A)

Page 6-10, Table 6-3:

Change A2Q1 from 1850-0090 to 1853-0052

Page 6-10, Table 6-3:

Change 1200-0076 to 0340-0162 and Delete 1200-0087

Page 9-7, Figure 9-4:

Change A2Q1 from 2N1183N to 2N3740

SERVICE NOTES

SERVICE NOTE

SUPERSEDES

Installation of Option 02 thru 04 in HP Model 5110A & 5110B Frequency Synthesizer

When modifying the HP Model 5110A or 5110B Synthesizer Driver from Option 01 to Option 02,03, or 04, new end plates may be required for assemblies A5 thru A15. Before attempting this modification check the end plates of these modules, at the rear of the instrument, to be sure there are enough holes to accommodate the additial output connector.

If new end plates are required for the modification they may be ordered from your nearest HP Sales and Service Office. The HP part numbers are given in Table 1.

The new end plates are provided with connector holes for Option 04. When installing Option 02 or 03 not all of the holes will be needed. The unused holes should be plugged using 3/8 inch plug buttons, HP part number 6960-0045.

Table 1. Module End Plate Stock Numbers for Options 02 thru 04

ASSEMBLY	END PLATE PART NO. FOR 02-04
A5	05110-2012
A6	05110-2011
A7	05110-2010
A8	05110-2009
A9	05110-2008
A10	05110-2007
A11	05110-2006
A12	05110-2005
A13	05110-2004
A14	05110-2033
A15	05110-2013

Instructions for installing this modification are given in Section VII of the Model 5110B Operating & Service Manual. Instruments shipped from the factory with Option 02 or 03 do not require new end plates.

Customer Service - 333 Logue Avenue, Mountain View, Catifornia 94040 Tel. (415) 968-9200 Europe: 54 Route Des Acachas, Geneva, Switzerland, Cable: "HEWPACKSA" Tel. (022) 42-81-50

CL/sg/wn

HEWLETT PACKARD

April 15, 1966

Model 5110A Synthesizer Driver Serials Prefixed 552 and below

Fuse Replacement

When a change is made of either F1 or F2 on A16Q1 Rectifier Board Assembly (05110-6028) it is recommended that these fuses be replaced with 1 ampere fast blow fuses. **P Part No. 2110-0001.

The 1 ampere fuses will provide adequate protection at the lower temperatures and will eliminate occasional fuse failure at high ambient temperatures.

The present markings on the printer circuit board should be corrected to reflect the new value.

Before replacing the fuse take a pair of longnose pliers and squeeze the fuse clip terminals together to provide a snug fit when fuse is snapped in.

Customer Service + 395 Page Mill Road Palo Alto, California 94306 Tel (415) 326 3950

Europe 54 Route Des Acacias, Geneva, Switzerland Cable "HEWPACKSA" Tel (022) 42 81 50