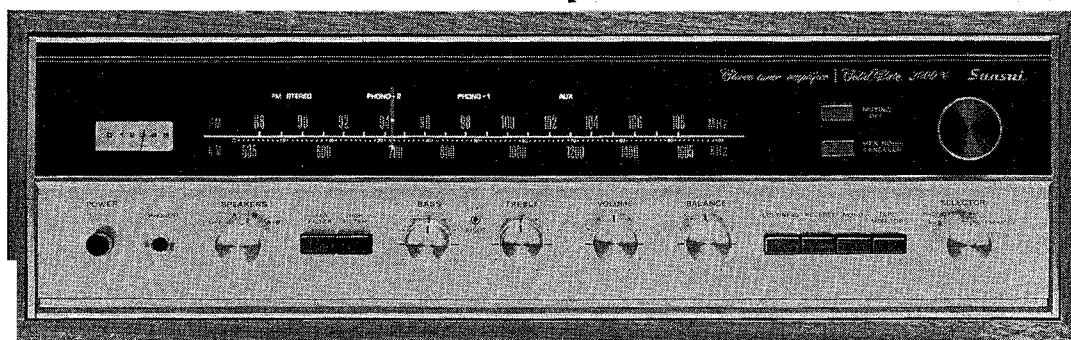


SERVICE MANUAL

SOLID-STATE AM/FM STEREO TUNER AMPLIFIER

SANSUI 2000 X



Sansui

SANSUI ELECTRIC COMPANY LIMITED

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GENERAL TROUBLESHOOTING CHART

If the amplifier is otherwise operating satisfactorily, the more common causes of trouble may generally be attributed to the following:

1. Incorrect connections or loose terminal contacts. Check the speakers, record player, tape recorder, antenna and line cord.
2. Improper operation. Before operating any audio com-

- ponent, be sure to read the manufacturer's instructions.
3. Improper location of audio components. The proper positioning of components, such as speakers and turntable, is vital to stereo.
 4. Defective audio components.
- The following are some other common causes of malfunction and what to do about them:

| PROGRAM | SYMPTOM | PROBABLE CAUSE | WHAT TO DO |
|-------------------------|--|---|--|
| AM, FM or MPX reception | A. Constant or intermittent noise heard at times or in a certain area | <ul style="list-style-type: none"> * Discharge or oscillation caused by electrical appliances, such as fluorescent lamp, TV set, D.C. motor, rectifier or oscillator * Natural phenomena, such as atmospherics, statics or thunderbolts * Insufficient antenna input due to ferroconcrete wall or long distance from the station * Wave interference from other electrical appliances | <ul style="list-style-type: none"> * Attach a noise limiter to the electrical appliance causing the noise, or attach it to the amplifier's power source * Install an outdoor antenna and ground the amplifier to raise the signal-to-noise ratio * Reverse the power cord plug-receptacle connections * If the noise occurs at a certain frequency, attach a wave trap to the ANT. input * Keep the set at a proper distance from other electrical appliances |
| | B. The needle of the tuning meter does not move sharply | <ul style="list-style-type: none"> * Receiver is located in a weak signal area | <ul style="list-style-type: none"> * Place the set to receive maximum signal strength |
| | C. The zero point of the meter diverges much | <ul style="list-style-type: none"> * Regional difference in field intensity. | <ul style="list-style-type: none"> * The unit is not at fault |
| AM reception | A. Noise heard at a particular time of a day, in a certain area or over part of dial | <ul style="list-style-type: none"> * Due to the nature of AM broadcasts | <ul style="list-style-type: none"> * Install the antenna for maximum antenna efficiency. See "ANTENNA" in the operating instructions * In some cases, the noise can be eliminated by grounding the amplifier or reversing the power cord plug-receptacle connections |
| | B. High-frequency noise | <ul style="list-style-type: none"> * Adjacent-channel interference or beat interference * TV set too close to audio system | <ul style="list-style-type: none"> * Although such noise cannot be eliminated by the amplifier, it is advisable to adjust the TREBLE control from midpoint to left and switch on the HIGH FILTER * Keep the TV set at a proper distance from the audio system |
| FM reception | A. Noisy | <ul style="list-style-type: none"> * Poor noise limiter effect or too low SN ratio due to insufficient antenna input | <ul style="list-style-type: none"> * Install the antenna (supplied) for maximum signal strength * If this does not prove effective, use an outdoor antenna designed exclusively for FM. When you use a TV antenna for both TV and FM with a splitter, make sure TV reception is not affected * An excessively long antenna may cause noise |
| | | <p>Note: FM reception is affected considerably by transmission conditions of stations: power and antenna efficiency. As a result, you may receive one station quite well while receiving another station poorly</p> | |

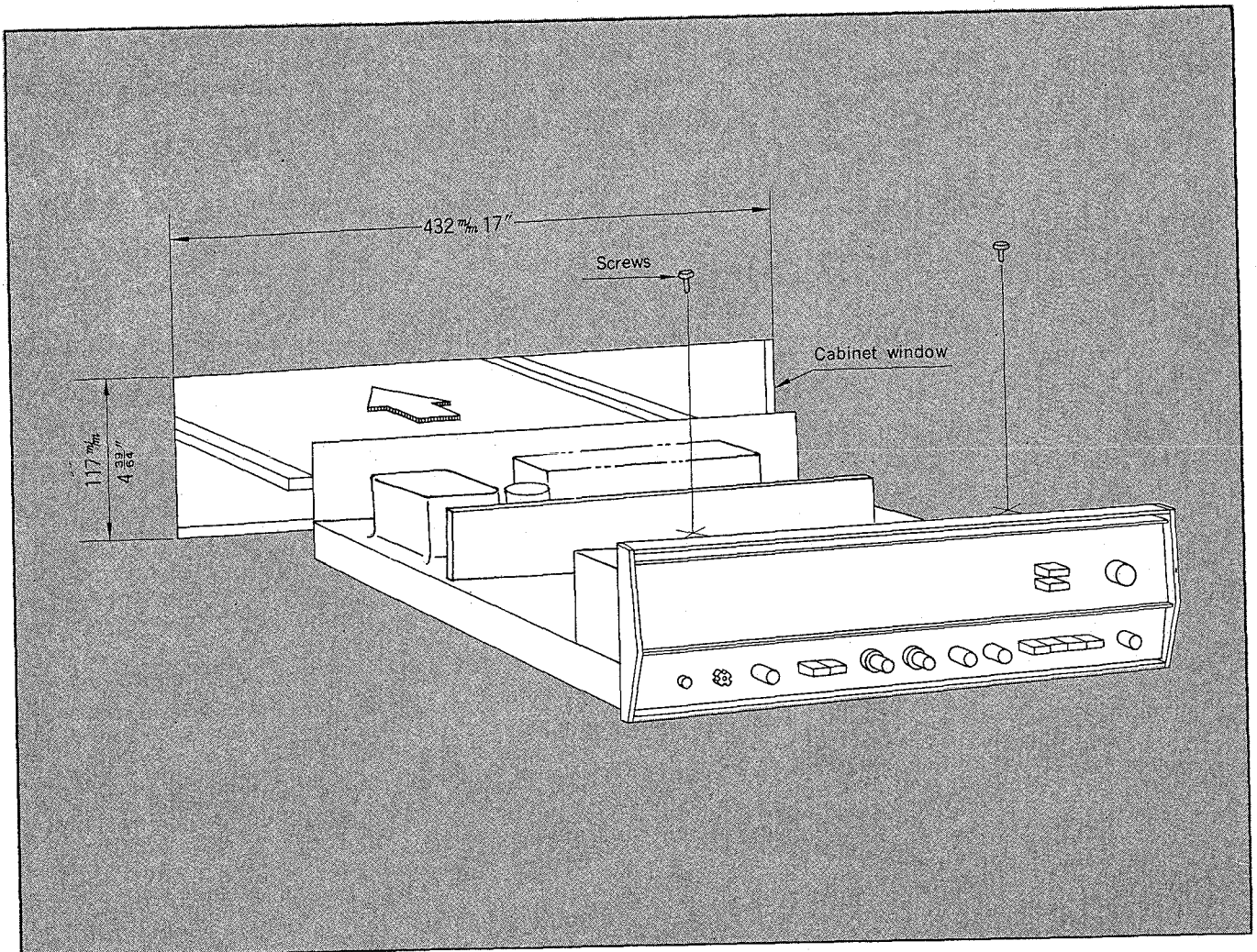
| PROGRAM | SYMPTOM | PROBABLE CAUSE | WHAT TO DO |
|---------------------------------|--|--|---|
| FM reception (cont'd) | B. A series of pops is heard | * Ignition noise caused by an automobile engine | * Install the antenna and its lead-in wire in proper distance from the road or raise the antenna input as described above |
| | C. Tuning noise between stations | * This results from the nature of the FM reception. As the station signal becomes weak, the noise limiter effect is decreased, and the amplification of the limiter, in turn, is enlarged, generating a noise | * Turn the muting on. |
| FM-MPX reception | A. Noise heard during FM-MPX reception while not heard during FM mono reception | * Weaker signal because the service area of the FM-MPX broadcast is only half that of the FM mono broadcast | * Install the antenna for maximum antenna input * Switch on the HIGH FILTER and/or turn the TREBLE control from midpoint, left |
| | B. Clearness of channel separation is decreased during reception | * Excess heat | * Circulation of air is important to the amplifier. Be sure that air is flowing under the amplifier |
| | C. The stereo indicator blinks on and off | * Interference | * The indicator is not at fault. Adjust VR ₄₀₁ |
| | D. The stereo indicator blinks on and off even though stereo station is not received | * Interference | * The indicator is not at fault. Adjust VR ₄₀₁ |
| Record playing or tape playback | A. Hum or howling | * Record player placed directly on speaker * Wire other than shielded wire used * Loose terminal contact * Shielded wire too close to line cord, fluorescent lamp or other electrical appliances * Nearby amateur radio station or TV transmission antenna | * Place a cushion between the player and the speaker box or place them away from each other * The connecting shielded wire should be as short as possible * Switch on the LOW FILTER and turn the BASS control from midpoint to left * Consult the nearest Radio Regulatory Bureau |
| | B. Surface noise | * Worn or old record * Worn stylus * Stylus dusty * Improper stylus pressure * Worn playback head | * Switch on the HIGH FILTER and turn the TREBLE control from midpoint to left * Clean or replace the stylus * Replace the playback head. |
| All stereo programs | BALANCE control is not at midpoint when equal sound comes from left and right channels | * It is important to adjust for equal sound from both channels. It should not always be set to the midpoint | * Set the MONO switch to MONO and then set the BALANCE control to a position where equal sound comes from both channels |

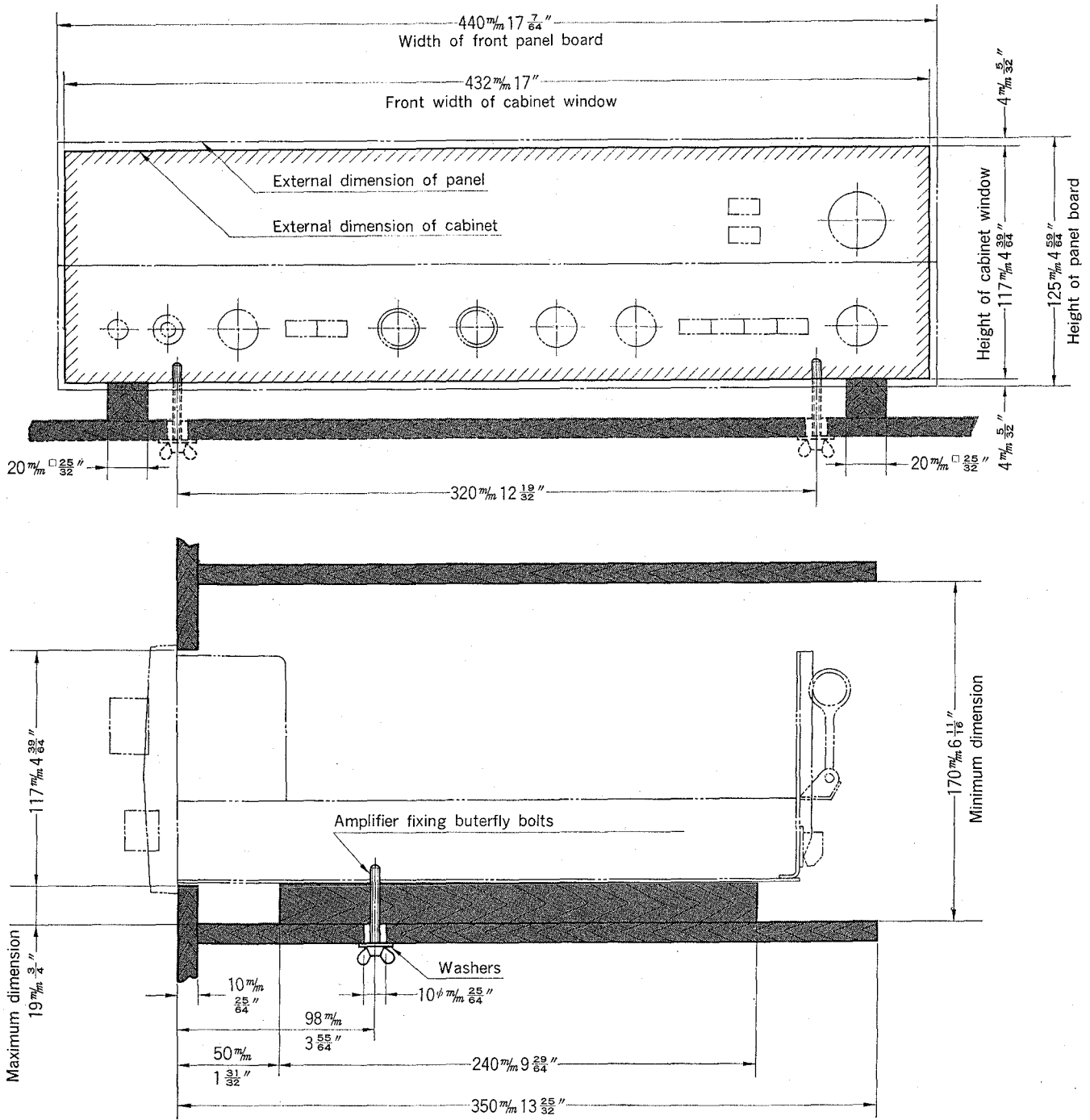
CUSTOM MOUNTING

How to install the amplifier in a wooden cabinet

1. Make a cabinet cutout of 432mm or 17" in width and 117mm or $4\frac{39}{64}$ " in height.
2. Place two square pieces of wood ($20 \times 20 \times 240$ mm or $\frac{25}{32}'' \times \frac{25}{32}'' \times 9\frac{29}{64}''$) for supporting the amplifier in the bottom board of the cabinet.
3. Cut two holes for attachment bolts in the bottom board of the cabinet.
4. Remove the amplifier from the wood case (Refer to the section entitled "DISASSEMBLY PROCEDURE").
5. Place the amplifier in position through the cabinet cutout.
6. Make sure the amplifier is in position, then put the washers in butterfly bolts (4×40 mm) and fix the amplifier to the cabinet with the butterfly bolts.

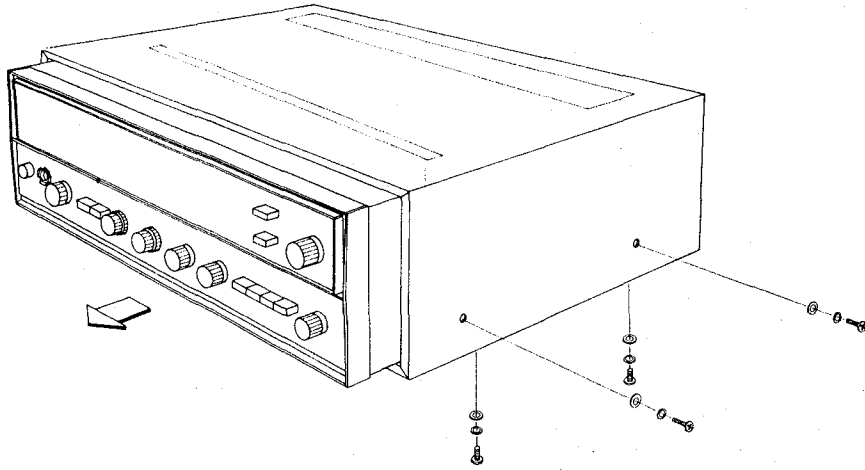
Note: When the amplifier is built into the custom cabinet, the wood case assembly including screws and washers is not used. Retain it for future use.



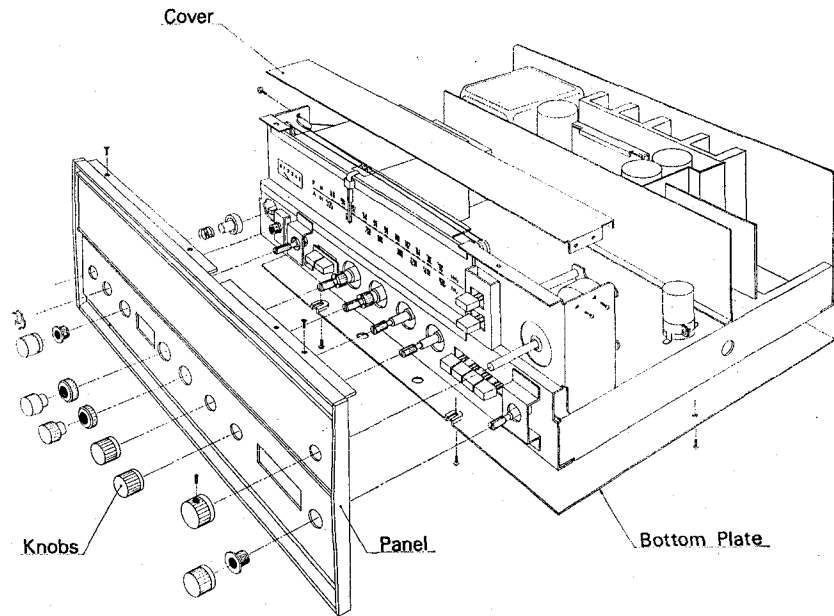


DISASSEMBLY PROCEDURE

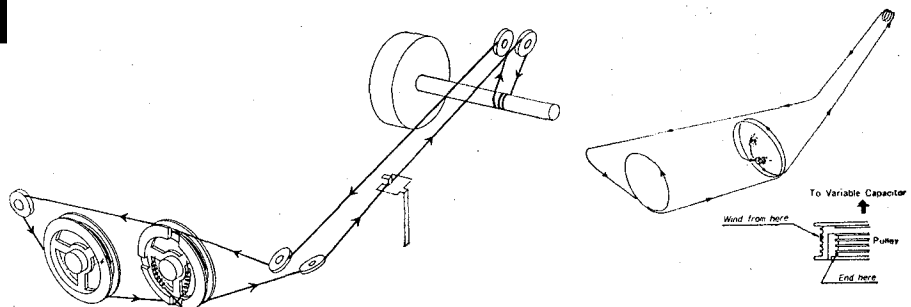
REMOVING THE WOOD CASE



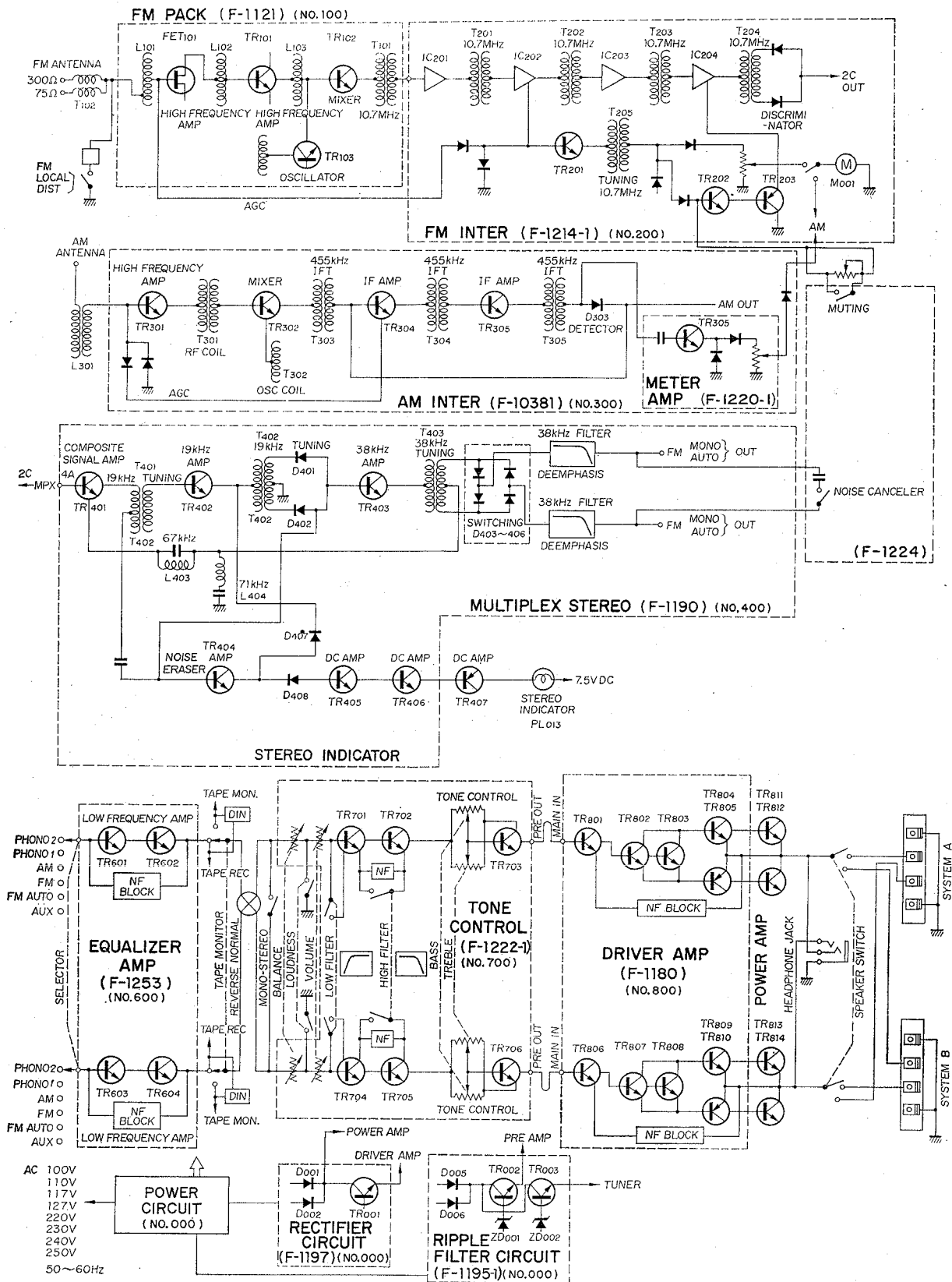
REMOVING THE FRONT PANEL AND BOTTOM PLATE



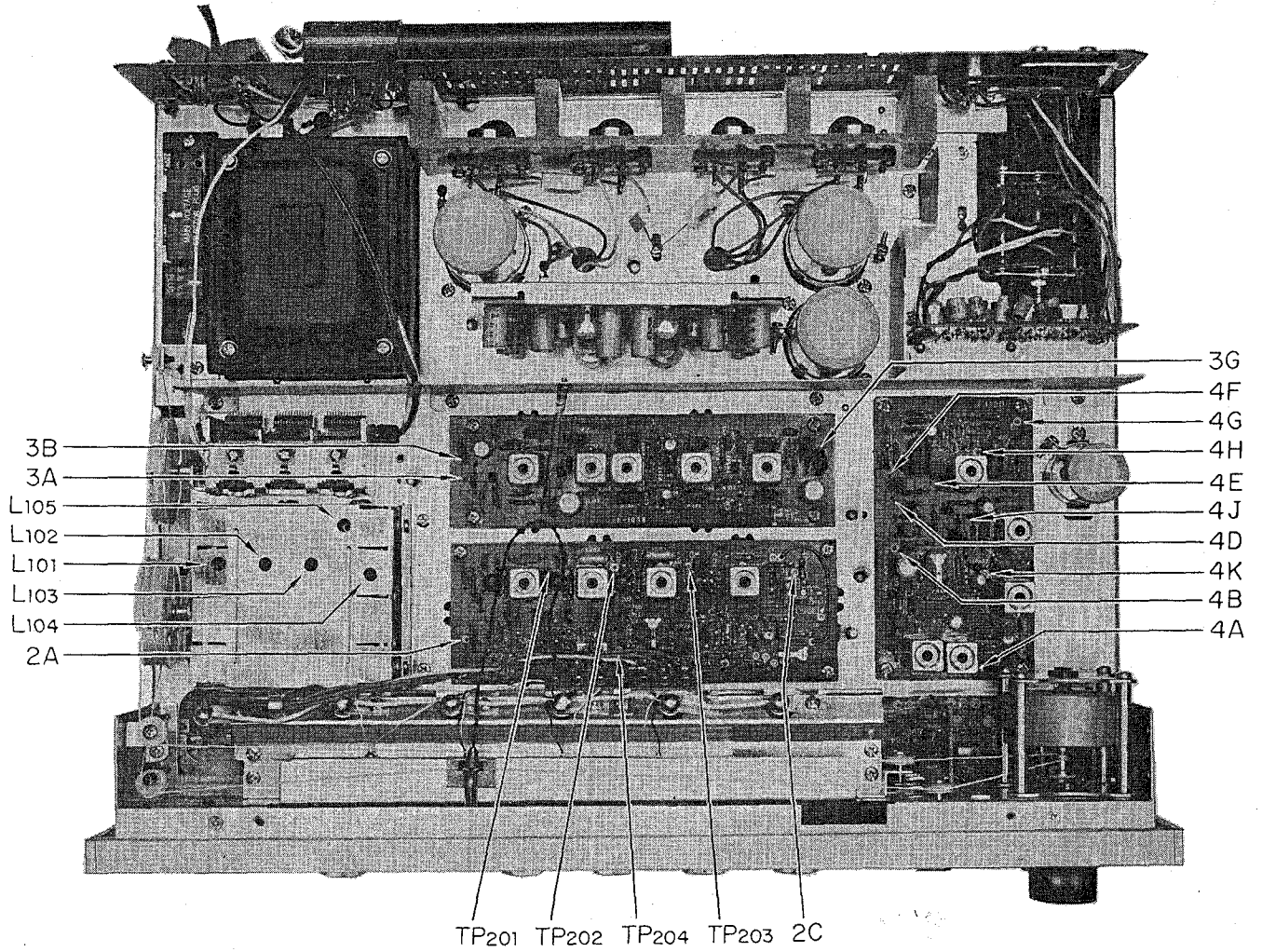
DIAL MECHANISM

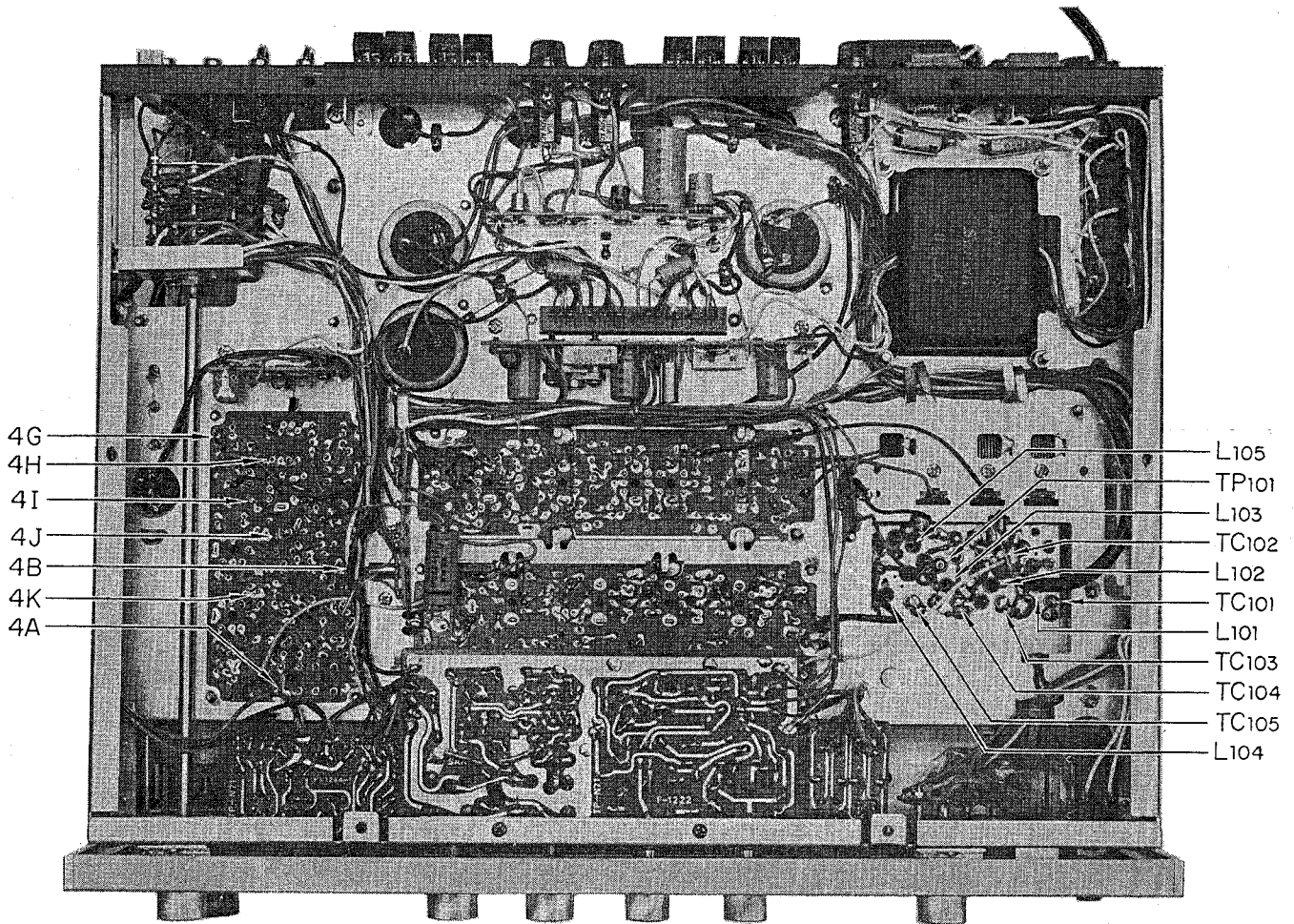


BLOCK DIAGRAM



TEST POINTS





- 4G
- 4H
- 4I
- 4J
- 4B
- 4K
- 4A
- L105
- TP101
- L103
- TC102
- L102
- TC101
- L101
- TC103
- TC104
- TC105
- L104

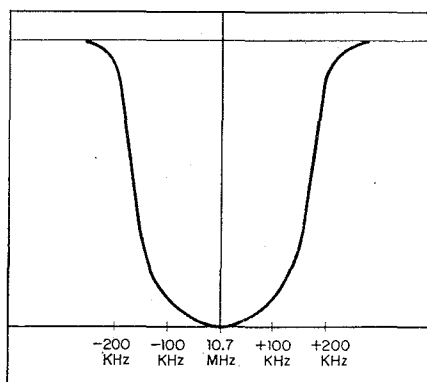
ALIGNMENT

FM ALIGNMENT PROCEDURE

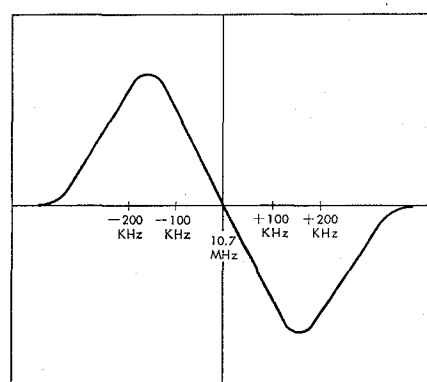
NOTE: To align, set the signal generator level to minimum.
Turn tuning gang fully.
Center carrier wave.
Set pointer at reference mark.

| STEP | ALIGN. | GENERATOR | FEED SIGNAL | CONNECT | DIAL SETTING | ADJUST | ADJUST FOR |
|------|-----------------------------|-----------------------------------|--|---|--------------|---|---------------------|
| 1. | IF Transformer | 10.7 MHz ±200 kHz | Sweep signal to TP ₁₀₁ via the 10pF ceramic capacitor | Oscilloscope to TP _{201, 202} and ₂₀₃ via the 10pF ceramic capacitor with probe | | Top and bottom sides of T _{201, 202, 203} | Best I.F. wave form |
| 2. | Discriminator | 10.7 MHz ±200 kHz | Sweep signal to TP ₁₀₁ via the 10pF ceramic capacitor | Oscilloscope to 2C | | FM. Discriminator transformer T ₂₀₄ top and bottom sides | S curve |
| 3. | O.S.C | 90 MHz 400 Hz 100% Modulation | To antenna terminals | Oscilloscope and V.T.V.M. to output load | 90 MHz | O.S.C. coil L ₁₀₄ | Maximum |
| 4. | O.S.C | 106 MHz 400 Hz 100% Modulation | To antenna terminals | Oscilloscope and V.T.V.M. to output load | 106 MHz | O.S.C. trimmer TC ₁₀₅ | Maximum |
| 5. | Reiterate 3 and 4. | | | | | | |
| 6. | High-frequency Amp. Circuit | 90 MHz 400 Hz 100% Modulation | To antenna terminals | Oscilloscope and V.T.V.M. to output load | 90 MHz | Antenna coil L _{101, L102} and L ₁₀₃ | Maximum |
| 7. | High-frequency Amp. Circuit | 106 MHz 400 Hz 100% Modulation | To antenna terminals | Oscilloscope and V.T.V.M. to output load | 106 MHz | Trimmer TC _{101, TC103} and TC ₁₀₄ | Maximum |
| 8. | Reiterate 6 and 7. | | | | | | |

FM IF WAVE FORM



FM DISCRIMINATOR WAVE FORM



FM MULTIPLEX ALIGNMENT PROCEDURE

1. Do not attempt to align the Multiplex Circuit unless the following equipments are available:

a. Multiplex Stereo Generator b. Oscilloscope c. AC. V.T.V.M. d. Audio Oscillator e. FM Signal Generator

| STEP | ALIGN. | GENERATOR | FEED SIGNAL TO | TEST EQUIPMENT (S) | ADJUST | ADJUST FOR |
|------|--------------------------------------|--|-------------------------------------|---|--|----------------------|
| 1. | 67 kHz Trap | 67 kHz Audio Signal | TP _{4A} or 2C | V.T.V.M. at 4I | L ₄₀₃ | Minimum |
| 2. | 71 kHz Trap | 71 kHz Audio Signal | TP _{4A} or 2C | V.T.V.M. at 4I | L ₄₀₄ | Minimum |
| 3. | 19 kHz Transformer | FM Signal Gen. Modulated 30% by STEREO Gen. sub-channel | Antenna terminals Tune to signal | V.T.V.M. and Oscilloscope at 4K | T ₄₀₁ | Maximum |
| 4. | 19 kHz Transformer | FM Signal Gen. Modulated 30% by STEREO Gen. sub-channel | Antenna terminals Tune to signal | V.T.V.M. and Oscilloscope at 4J | T ₄₀₂ | Maximum |
| 5. | 38 kHz Transformer | FM Signal Gen. Modulated 30% by STEREO Gen. sub-channel | Antenna terminals Tune to signal | V.T.V.M. and Oscilloscope at 4H | T ₄₀₃ | Maximum |
| 6. | 38 kHz Transformer and Separation VR | FM Signal Gen. Modulated 30% by STEREO Signal Gen, channel-L | Antenna terminals Tune to signal | V.T.V.M. and Oscilloscope at output load, (channel-R) | T ₄₀₂ or T ₄₀₃ within ¼ turn and Separation VR(VR ₆₀₁) | Minimum, (Channel-R) |

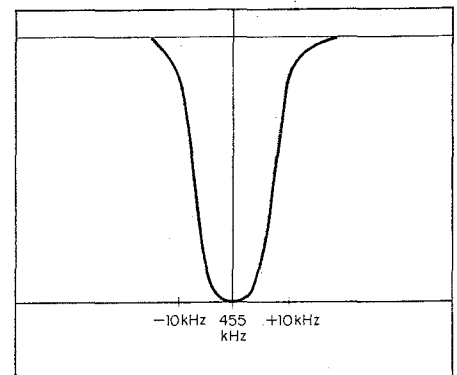
ALIGNMENT

AM ALIGNMENT PROCEDURE

NOTE: To align, set the signal generator level to minimum.

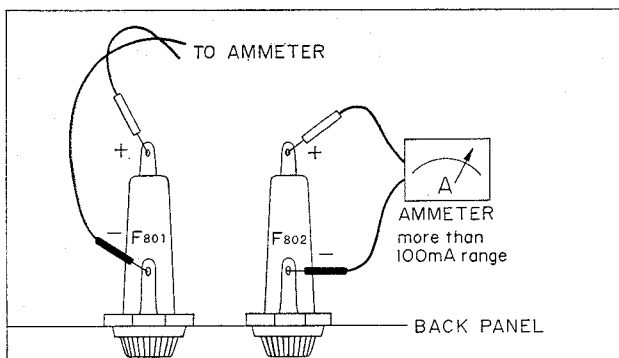
| STEP | ALIGN. | GENERATOR | FEED SIGNAL TO | TEST EQUIPMENTS | DIAL SETTING | ADJUST | ADJUST FOR |
|------|-----------------------|---|-------------------|--|--------------|--|---------------------|
| 1. | I.F. Transformer | 455 kHz ± 30 kHz Sweep-generator | Antenna terminals | Oscilloscope and V.T.V.M. at 3G | | Top and bottom sides from the 1st I.F.T. (T ₃₀₃) to the 3rd I.F.T. (T ₃₀₅) | Best I.F. wave form |
| 2. | O.S.C. | AM-generator 535 kHz 400 Hz 30% Modulation | Antenna terminals | Oscilloscope and V.T.V.M. at output load | 535 kHz | O.S.C. Coil T ₃₀₂ | Maximum |
| 3. | O.S.C. | AM-generator 1600 kHz 400 Hz 30% Modulation | Antenna terminals | Oscilloscope and V.T.V.M. at output load | 1600 kHz | O.S.C. Trimmer TC ₃₀₃ | Maximum |
| 4. | Reiterate 2 and 3 | | | | | | |
| 5. | RF amp. | AM-generator 600 kHz 400 Hz 30% Modulation | Antenna terminals | Oscilloscope and V.T.V.M. at output load | 600 kHz | RF transformer T ₃₀₁ | Maximum |
| 6. | Antenna circuit | AM-generator 600 kHz 400 Hz 30% Modulation | Antenna terminals | Oscilloscope and V.T.V.M. at output load | 600 kHz | Ferrite bar Antenna T ₃₀₆ | Maximum |
| 7. | RF amp. | AM-generator 1400 kHz 400 Hz 30% Modulation | Antenna terminals | Oscilloscope and V.T.V.M. at output load | 1400 kHz | RF Trimmer TC ₃₀₂ | Maximum |
| 8. | Antenna circuit | AM-generator 1400 kHz 400 Hz 30% Modulation | Antenna terminals | Oscilloscope and V.T.V.M. at output load | 1400 kHz | Antenna circuit Trimmer TC ₃₀₁ | Maximum |
| 9. | Reiterate 5. 6. 7. 8. | | | | | | |

AM IF WAVE FORM



1. CURRENT ADJUSTMENT

| STEP | SETTING OF AMMETER (TESTER) | WHAT TO DO | NOTE |
|------|-----------------------------|---|--|
| 1. | | Remove F ₈₀₁ and F ₈₀₂ | Use an ammeter having 100 or 50mA range. |
| 2. | | Set VR ₈₀₂ and VR ₈₀₄ to minimum. | |
| 3. | | Set VR ₇₀₂ and VR ₇₀₆ (VOLUME) to minimum. | |
| 4. | | Push the POWER switch ON. | Be sure to switch on 1st and then connect the ammeter. |
| 5. | 100mA range. | Connect the ammeter to F ₈₀₁ as illustrated in Fig. 1. | |
| 6. | | Turn VR ₈₀₄ clockwise and adjust current to 15 to 10mA at room temperature of 25°C or less or to 20 to 15mA at 25°C or more. | |
| 7. | 100mA range. | Push the POWER switch OFF and attach F ₈₀₁ in place. | |
| 8. | | Push the POWER switch ON and connect the ammeter to F ₈₀₂ as illustrated in Fig. 1. | |
| 9. | | Turn VR ₈₀₂ clockwise and adjust current to 15 to 10mA at 25°C or less or to 20 to 15mA at 25°C or more. | |
| 10. | | Attach F ₈₀₂ in place. | |



(Fig. 1) QUICK-ACTING FUSE HOLDER

2. OUTPUT ADJUSTMENT

| STEP | WHAT TO DO | NOTE |
|------|--|--|
| 1. | Adjust the volume control to minimum. | The oscillator used should have the oscillation frequency of 20 to 20,000Hz and the output voltage of more than 200mV. |
| 2. | Set an oscillator to 1,000Hz and connect it to the LEFT AUX input. | |
| 3. | Set the SELECTOR switch to AUX. | |
| 4. | Connect a 8- or 16-ohm load resistor having capacitor of more than 50 watts to the LEFT SPEAKER output. | |
| 5. | Connect an oscilloscope to the SPEAKER terminal. | |
| 6. | Push the POWER switch on and advance the volume little by little. Check the output at the terminal by means of the oscilloscope. | |
| 7. | Adjust VR ₈₀₁ so that the fronts of sine wave are clipped simultaneously | |
| 8. | Adjust the right channel as above. In Step 7, adjust VR ₈₀₃ . | |

PRINTED CIRCUIT BOARDS AND PARTS LIST

W: Parts No. X: Parts Name Y: Stock No. Z: Position of Parts

F-1222-1 <TONE CONTROL BLOCK>

| W | X | Y | Z |
|------|----------|---------|--------|
| R701 | 1kΩ | 0101102 | 2C |
| R702 | 47kΩ | 0101473 | 1D |
| R703 | 68kΩ | 0101683 | 1D |
| R704 | 100kΩ | 0101104 | 1D |
| R705 | 1kΩ | 0101102 | 1C, D |
| R706 | 270kΩ | 0101274 | 1C, D |
| R707 | 3.9kΩ | 0101392 | 1C, D |
| R708 | 8.2kΩ | 0101822 | 1C |
| R709 | 2.7kΩ | 0101272 | 1C |
| R710 | 6.8kΩ | 0101682 | 2B |
| R711 | 6.8kΩ | 0101682 | 2B |
| R712 | 10kΩ | 0101103 | 1, 2 B |
| R713 | 10kΩ | 0101103 | 1A |
| R714 | 22kΩ | 0101223 | 1A |
| R715 | 150kΩ | 0101154 | 2A |
| R716 | 150kΩ | 0101154 | 1B |
| R717 | 390kΩ | 0101394 | 1B |
| R718 | 560Ω | 0101561 | 1A |
| R719 | 5.6kΩ | 0101562 | 1A |
| R720 | 100kΩ | 0101104 | 1A |
| R721 | 1kΩ | 0101102 | 2D |
| R722 | 47kΩ | 0101473 | 1D |
| R723 | 68kΩ | 0101683 | 2C, D |
| R724 | 100kΩ | 0101104 | 1D |
| R725 | 1kΩ | 0101102 | 1C |
| R726 | 270kΩ | 0101274 | 2C |
| R727 | 3.9kΩ | 0101392 | 1C, D |
| R728 | 8.2kΩ | 0101822 | 1C |
| R729 | 2.7kΩ | 0101272 | 1C |
| R730 | 6.8kΩ | 0101682 | 2B |
| R731 | 6.8kΩ | 0101682 | 2B |
| R732 | 10kΩ | 0101103 | 2A, B |
| R733 | 10kΩ | 0101103 | 2A |
| R734 | 22kΩ | 0101223 | 1A |
| R735 | 150kΩ | 0101154 | 2A |
| R736 | 150kΩ | 0101154 | 2B, C |
| R737 | 390kΩ | 0101394 | 1B |
| R738 | 560Ω | 0101561 | 1B |
| R739 | 5.6kΩ | 0101562 | 1B |
| R740 | 100kΩ | 0101104 | 1A |
| C701 | 0.01μF | 0601107 | 2C |
| C702 | 0.22μF | 0601228 | 1, 2 D |
| C703 | 220μF | 0513221 | 1, 2 D |
| C704 | 33μF | 0510330 | 1C |
| C705 | 120pF | 0660121 | 1C |
| C706 | 33μF | 0512330 | 1C |
| C707 | 1μF | 0515109 | 1C |
| C708 | 0.015μF | 0601157 | 1C |
| C709 | 0.0015μF | 0601156 | 2B |
| C710 | 0.04μF | 0601407 | 2A |
| C711 | 0.04μF | 0601407 | 2A |
| C712 | 10μF | 0515100 | 1B |
| C713 | 100pF | 0660101 | 1B |
| C714 | 47μF | 0510470 | 1A |
| C715 | 1μF | 0515109 | 1A |
| C716 | 0.01μF | 0601107 | 2D |

| W | X | Y | Z |
|-------|------------------------------|---------|--------|
| C717 | 0.22μF ±10% 50 V MC. | 0601228 | 2D |
| C718 | 33μF 6.3 V EC. | 0510330 | 1, 2 C |
| C719 | 120pF ±10% 50 V CC. | 0660121 | 1C |
| C720 | 33μF 16 V EC. | 0512330 | 1C |
| C721 | 1μF 50 V EC. | 0515109 | 1, 2 C |
| C722 | 0.015μF | 0601157 | 1C |
| C723 | 0.0015μF | 0601156 | 2B |
| C724 | 0.04μF | 0601408 | 2A |
| C725 | 0.04μF | 0601408 | 2A |
| C726 | 10μF 50 V EC. | 0515100 | 1, 2 B |
| C727 | 100pF ±10% 50 V CC. | 0660101 | 1B |
| C728 | 47μF 6.3 V EC. | 0510470 | 1, 2 B |
| C729 | 1μF 50 V EC. | 0515109 | 1A |
| VR701 | } 250kΩ M, N Balance Control | 1010400 | 2D |
| VR705 | | 1010400 | 2D |
| VR702 | } 250kΩ B Volume Control | 1010200 | 2C |
| VR706 | | 1010200 | 2C |
| VR703 | } 100kΩ B Treble Control | 1020040 | 2B |
| VR707 | | 1020040 | 2B |
| VR704 | } 100kΩ B Bass Control | 1010040 | 2A |
| VR708 | | 1010040 | 2A |
| TR701 | 2SC458 LG(C) | 0305311 | 1D |
| TR702 | 2SC458 LG(B) | 0305310 | 1C |
| TR703 | } 2SC458 LG(C) | 0305311 | 1A |
| TR704 | | 0305311 | 1D |
| TR705 | 2SC458 LG(B) | 0305310 | 1C |
| TR706 | 2SC458 LG(C) | 0305311 | 1B |

Abbreviations

- CR:** Carbon Resistor
- SR:** Solid Resistor
- CeR:** Cement Resistor
- MC:** Mylar Capacitor
- EC:** Electrolytic Capacitor
- AEC:** Aluminium Electrolytic Capacitor
- MiC:** Mica Capacitor
- OC:** Oil Capacitor
- SC:** Styrol Capacitor
- CC:** Ceramic Capacitor
- TC:** Tantalum Capacitor

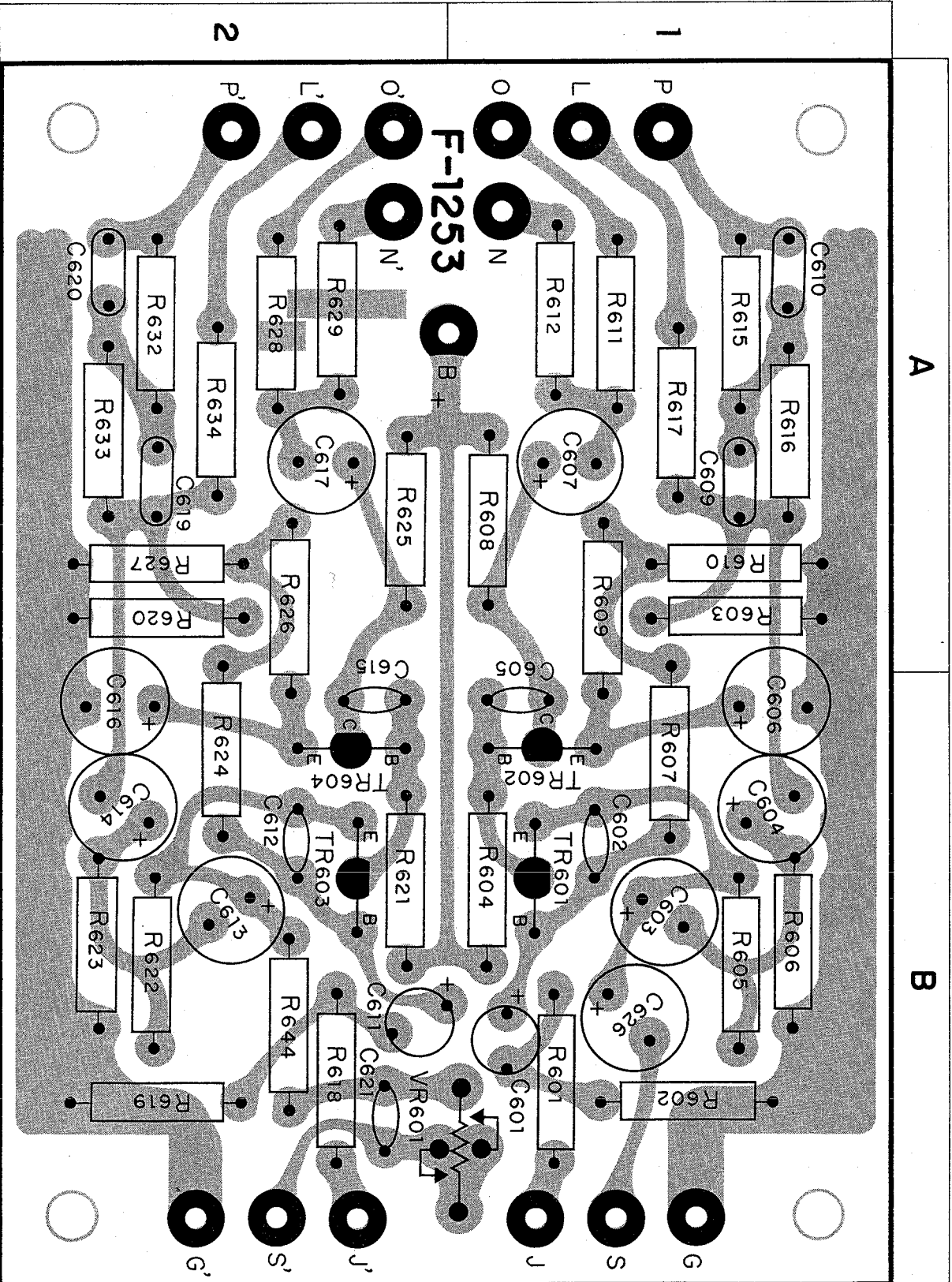
PRINTED CIRCUIT BOARDS AND PARTS LIST

W: Parts No. X: Parts Name Y: Stock No. Z: Position of Parts

F-1253 <EQUALIZER AMP. BLOCK>

| W | X | Y | Z |
|-----------------------------|---|---------|--------|
| R601 | 1k Ω | 0101102 | 1 B |
| R602 | 680k Ω | 0101684 | 1 B |
| R603 | 4.7k Ω | 0101472 | 1 A |
| R604 | 100k Ω | 0101104 | 1 B |
| R605 | 1.8k Ω | 0101182 | 1 B |
| R606 | 470 Ω | 0101471 | 1 B |
| R607 | 390k Ω | 0101394 | 1 B |
| R608 | 6.8k Ω | 0101682 | 1 A |
| R609 | 220 Ω | 0101221 | 1 A |
| R610 | 680 Ω | 0101681 | 1 A |
| R611 | 12k Ω | 0101123 | 1 A |
| R612 | 100 Ω | 0101101 | 1 A |
| R615 | 25k Ω | 0101253 | 1 A |
| R616 | 390k Ω | 0101394 | 1 A |
| R617 | 3.9k Ω | 0101392 | 1 A |
| R618 | 1k Ω | 0101102 | 2 B |
| R619 | 680k Ω | 0101684 | 2 B |
| R620 | 4.7k Ω | 0101472 | 2 A |
| R621 | 100k Ω | 0101104 | 2 B |
| R622 | 1.8k Ω | 0101182 | 2 B |
| R623 | 470 Ω | 0101471 | 2 B |
| R624 | 390k Ω | 0101394 | 2 B |
| R625 | 6.8k Ω | 0101682 | 2 A |
| R626 | 220 Ω | 0101221 | 2 A |
| R627 | 680 Ω | 0101681 | 2 A |
| R628 | 12k Ω | 0101123 | 2 A |
| R629 | 100 Ω | 0101101 | 2 A |
| R632 | 25k Ω | 0101253 | 2 A |
| R633 | 390k Ω | 0101394 | 2 A |
| R634 | 3.9k Ω | 0101392 | 2 A |
| R644 | 100 Ω | 0101101 | 2 B |
| $\pm 10\% \frac{1}{4}W$ CR. | | | |
| C601 | 1.5 μ F 16 V TC. | 0572159 | 1 B |
| C602 | 150 pF $\pm 10\%$ 50 V CC. | 0660151 | 1 B |
| C603 | 33 μ F } 6.3 V EC. | 0510330 | 1 B |
| C604 | 33 μ F } | 0510330 | 1 B |
| C605 | 150 pF $\pm 10\%$ 50 V CC. | 0660151 | 1 B |
| C606 | 47 μ F 6.3 V EC. | 0510470 | 1 B |
| C607 | 10 μ F 25 V EC. | 0513100 | 1 A |
| C609 | 0.01 μ F } $\pm 10\%$ 50 V MC. | 0601107 | 1 A |
| C610 | 0.003 μ F } | 0601306 | 1 A |
| C611 | 1.5 μ F 16 V TC. | 0572159 | 2 B |
| C612 | 150 pF $\pm 10\%$ 50 V CC. | 0660151 | 2 B |
| C613 | 33 μ F } 6.3 V EC. | 0510330 | 2 B |
| C614 | 33 μ F } | 0510330 | 2 B |
| C615 | 150 pF $\pm 10\%$ 50 V CC. | 0660151 | 2 B |
| C616 | 47 μ F 6.3 V EC. | 0510470 | 2 B |
| C617 | 10 μ F 25 V EC. | 0513100 | 2 B |
| C619 | 0.01 μ F } $\pm 10\%$ 50 V MC. | 0601107 | 2 A |
| C620 | 0.003 μ F } | 0601306 | 2 A |
| C621 | 0.002 μ F $\begin{matrix} +80\% \\ -20\% \end{matrix}$ 25 V CC. | 0659002 | 2 B |
| C626 | 100 μ F 6.3 V EC. | 0510101 | 1 B |
| VR601 | 3k Ω B Separation Adjustor | 1030660 | 1, 2 B |

| W | X | Y | Z |
|-------|-----------------|------------|-----|
| TR601 | } 2SC871 R(E,F) | 0305474, 5 | 1 B |
| TR602 | | 0305474, 5 | 1 B |
| TR603 | | 0305474, 5 | 2 B |
| TR604 | | 0305474, 5 | 2 B |

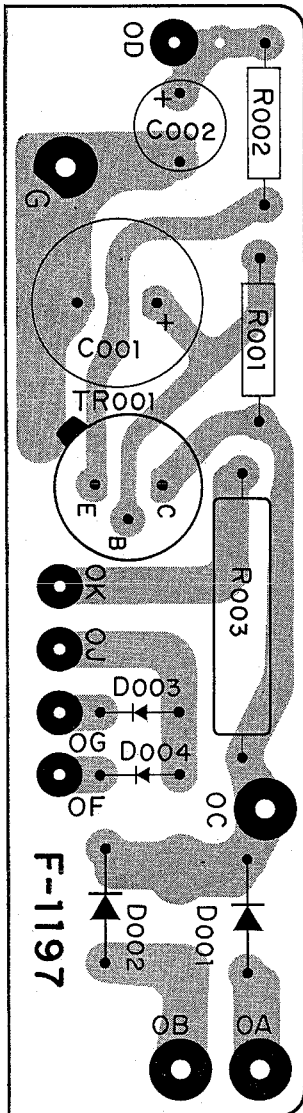


PRINTED CIRCUIT BOARDS AND PARTS LIST

W: Parts No. X: Parts Name Y: Stock No. Z: Position of Parts

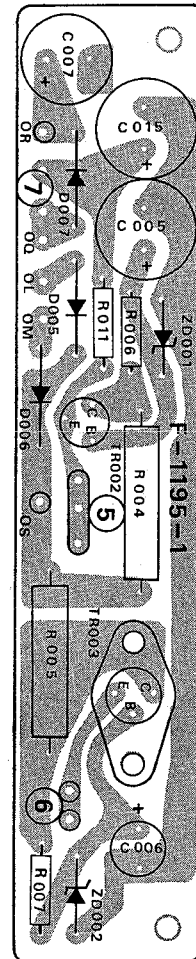
F-1197 <RECTIFIER BLOCK>

| W | X | Y | Z |
|-------|--------------------|---------------|---|
| R001 | 12kΩ } ±10% ½W SR. | 0111123 | |
| R002 | | | |
| C001 | 200μF } 75V EC. | 0519301 | |
| C002 | | | |
| D001 | } SA-2Z | 0310420 | |
| D002 | | 0310420 | |
| TR001 | 2SC627 (1, 2, 3) | 0305580, 1, 2 | |



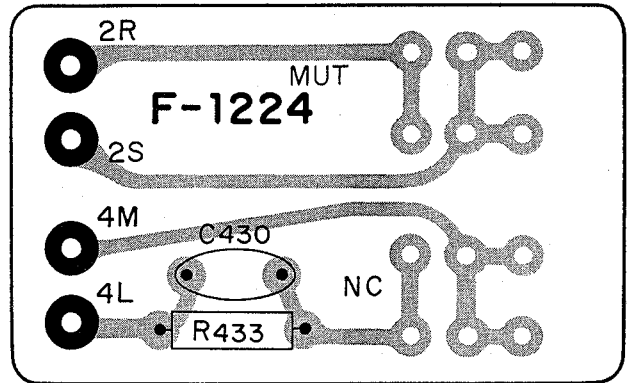
F-1195-1 <RIPPLE FILTER BLOCK>

| W | X | Y | Z |
|-------|---------------------|----------|---------|
| R004 | 68Ω } ±10% 3W CeR. | 0153680 | |
| R005 | | | |
| R006 | 3.9kΩ } ±10% ¼W CR. | 0101392 | |
| R007 | | | |
| R011 | 220Ω | 0101221 | |
| C005 | 220μF | 25 V EC. | 0513221 |
| C006 | 330μF | 16 V EC. | 0512331 |
| C007 | 330μF | 10 V EC. | 0511331 |
| C015 | 220μF | 25 V EC. | 0513221 |
| D005 | } 10D-2 | 0310350 | |
| D006 | | 0310350 | |
| D007 | | 0310340 | |
| ZD001 | ZB-1-25 Zener Diode | 0310710 | |
| ZD002 | ZB-1-14 Zener Diode | 0310691 | |
| TR002 | 2SC971 | 0305531 | |
| TR003 | 2SD205 | 0308130 | |



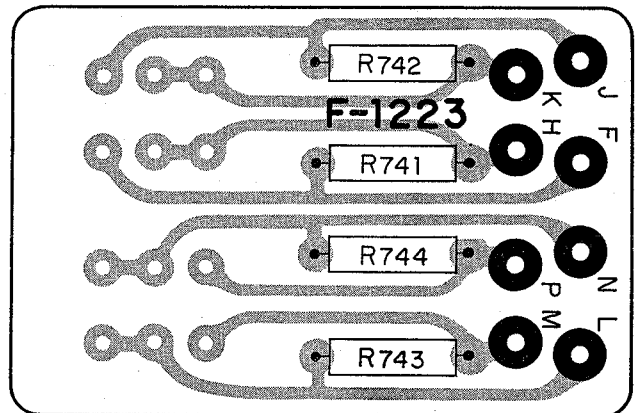
F-1224 <NOISE CANCELER AND MUTING BLOCK>

| W | X | Y | Z |
|--------|-----------------------------------|---------|---|
| R433 | 3.3M Ω \pm 10% 1/2 W SR. | 0111335 | |
| C430 | 330pF \pm 10% 50 V MiC. | 0641331 | |
| S6, S7 | | 1130131 | |



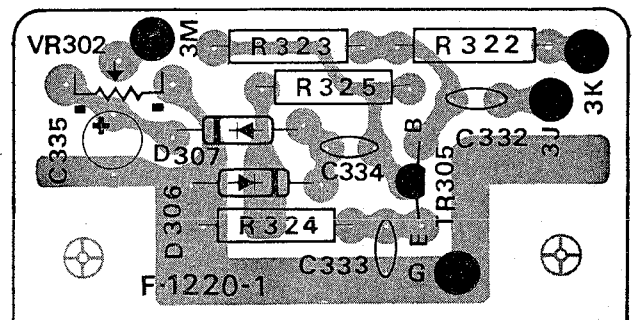
F-1223 <HIGH-LOW FILTER BLOCK>

| W | X | Y | Z |
|--------|-----------------------------------|---------|---|
| R741 | 1M Ω } \pm 10% 1/4 W CR. | 0101105 | |
| R742 | | 0101105 | |
| R743 | | 0101105 | |
| R744 | | 0101105 | |
| S8, S9 | | 1130070 | |



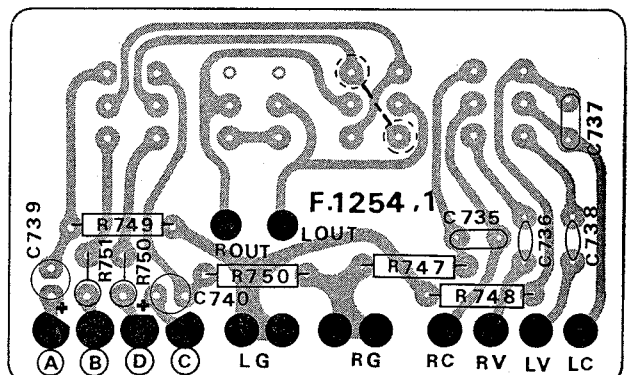
F-1220-1 <AM METER BLOCK>

| W | X | Y | Z |
|-------|--------------------------------------|----------------------|---------|
| R322 | 68k Ω } \pm 10% 1/4 W CR. | 0101683 | |
| R323 | | 560k Ω | 0101564 |
| R324 | | 2.2k Ω | 0101222 |
| R325 | | 12k Ω | 0101123 |
| C332 | 0.01 μ F } +80% -20% 25 V CC. | 0659004 | |
| C333 | | 0.001 μ F | 0659001 |
| C334 | | 0.01 μ F | 0659004 |
| C335 | | 4.7 μ F 25 V EC. | 0513479 |
| VR302 | 50k Ω B AM Meter Adjustor | 1030490 | |
| D306 | IN60 | 0310330 | |
| D307 | | 0310330 | |
| TR305 | 2SC460(C) | 0305350 | |



F-1254,1 <ACCESSORIES BLOCK>

| W | X | Y | Z |
|----------|------------------------------------|------------------------------------|---------|
| R747 | 27k Ω } \pm 10% 1/4 W CR. | 0101273 | |
| R748 | | 0101273 | |
| R749 | | 100k Ω | 0101104 |
| R750 | | 100k Ω | 0101104 |
| R751 | | 12k Ω | 0101123 |
| R752 | | 12k Ω | 0101123 |
| C735 | 0.02 μ F } \pm 10% 50 V MC. | 0601207 | |
| C736 | | 150 pF \pm 10% 50 V MiC. | 0641151 |
| C737 | | 0.02 μ F \pm 10% 50 V MC. | 0601207 |
| C738 | | 150 pF \pm 10% 50 V MiC. | 0641151 |
| C739 | | 0.47 μ F } \pm 20% 25 V AEC. | 0563478 |
| C740 | | 0.47 μ F | 0563478 |
| S2,3,4,5 | | 1130140 | |



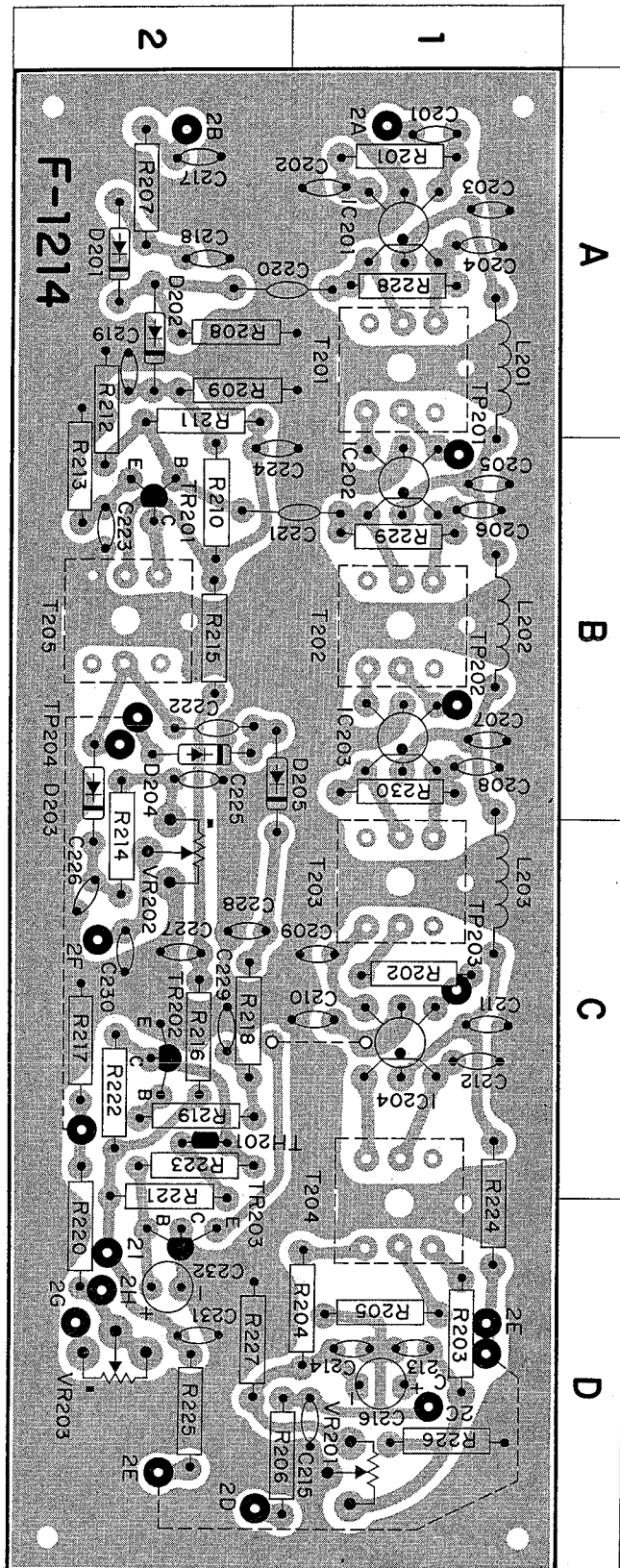
PRINTED CIRCUIT BOARDS AND PARTS LIST

W: Parts No. X: Parts Name Y: Stock No. Z: Position of Parts

F-1214-1 <FM IF BLOCK>

| W | X | Y | Z |
|------|---------------|---------|-----|
| R201 | 1.5k Ω | 0101152 | 1 A |
| R202 | 68 Ω | 0101680 | 1 C |
| R203 | 1k Ω | 0101102 | 1 D |
| R204 | 1k Ω | 0101102 | 1 D |
| R205 | 56 Ω | 0101560 | 1 D |
| R206 | 22k Ω | 0101223 | 2 D |
| R207 | 100k Ω | 0101104 | 2 A |
| R208 | 220k Ω | 0101224 | 2 A |
| R209 | 680 Ω | 0101681 | 2 A |
| R210 | 68k Ω | 0101683 | 2 B |
| R211 | 22k Ω | 0101223 | 2 A |
| R212 | 10k Ω | 0101103 | 2 A |
| R213 | 1k Ω | 0101102 | 2 B |
| R214 | 2.2k Ω | 0101222 | 2 C |
| R215 | 22 Ω | 0101220 | 2 B |
| R216 | 22 Ω | 0101220 | 2 C |
| R217 | 10k Ω | 0101103 | 2 C |
| R218 | 1k Ω | 0101102 | 2 C |
| R219 | 68k Ω | 0101683 | 2 C |
| R220 | 100k Ω | 0101104 | 2 D |
| R222 | 18k Ω | 0101183 | 2 D |
| R223 | 2.7k Ω | 0101272 | 2 C |
| R224 | 56 Ω | 0101560 | 2 C |
| R225 | 820 Ω | 0101821 | 2 D |
| R226 | 10k Ω | 0101103 | 1 D |
| R227 | 10k Ω | 0101103 | 2 D |
| R228 | 15k Ω | 0101153 | 1 A |
| R229 | 15k Ω | 0101153 | 1 B |
| R230 | 15k Ω | 0101153 | 2 B |
| C201 | 0.01 μ F | 0659004 | 1 A |
| C202 | 0.02 μ F | 0659005 | 1 A |
| C203 | 0.02 μ F | 0659005 | 1 A |
| C204 | 0.02 μ F | 0659005 | 1 A |
| C205 | 0.02 μ F | 0659005 | 1 B |
| C206 | 0.02 μ F | 0659005 | 1 B |
| C207 | 0.02 μ F | 0659005 | 1 B |
| C208 | 0.02 μ F | 0659005 | 1 B |
| C209 | 0.02 μ F | 0659005 | 1 C |
| C210 | 0.02 μ F | 0659005 | 1 C |
| C211 | 0.02 μ F | 0659005 | 1 C |
| C212 | 0.02 μ F | 0659005 | 1 C |
| C213 | 220 pF | 0660221 | 1 D |
| C214 | 220 pF | 0660221 | 1 D |
| C215 | 47 pF | 0660470 | 1 D |
| C216 | 10 μ F | 0511100 | 1 D |
| C217 | 0.05 μ F | 0659007 | 2 A |
| C218 | 0.02 μ F | 0659005 | 2 A |
| C219 | 0.02 μ F | 0659005 | 2 A |
| C220 | 3.3 pF | 0660339 | 2 A |
| C221 | 3.3 pF | 0660339 | 2 A |
| C222 | 3.3 pF | 0660339 | 2 B |
| C223 | 0.02 μ F | 0659005 | 2 B |

| W | X | Y | Z |
|-------|--------------------------------------|------------|-----|
| C224 | 0.02 μ F | 0659005 | 2 B |
| C225 | 0.02 μ F | 0659005 | 2 B |
| C226 | 0.02 μ F | 0659005 | 2 C |
| C227 | 0.02 μ F | 0659005 | 2 C |
| C228 | 330 pF | 0660331 | 2 C |
| C229 | 330 pF | 0660331 | 2 C |
| C230 | 0.05 μ F | 0659007 | 2 C |
| C231 | 0.02 μ F | 0659005 | 2 D |
| C232 | 1 μ F | 0515109 | 2 D |
| VR202 | 50k Ω B Tuning Meter Adjustor | 1030200 | 2 C |
| VR203 | 100k Ω B Muting Adjustor | 1030340 | 2 D |
| T201 | FM IFT 10.7MHz | 4235470 | 1 A |
| T202 | | 4235480 | 1 B |
| T203 | | 4235490 | 1 C |
| T204 | FM Detector 10.7MHz | 4235180 | 1 D |
| T205 | FM Meter Transformer | 4235290 | 2 B |
| L201 | 3.5 μ H Choke Coil | 4290011 | 1 A |
| L202 | | 4290011 | 1 B |
| L203 | | 4290011 | 1 C |
| IC201 | PA-7703E | 0360030 | 1 A |
| IC202 | | 0360030 | 1 B |
| IC203 | | 0360030 | 1 B |
| IC204 | | 0360030 | 1 C |
| TR201 | 25C 380 (O) or 25C460 (B,C) | 0305330 | 2 B |
| TR202 | 25C 828 (T) | 0305270 | 2 C |
| TR203 | 25A 564 (P,Q) | 0300090, 1 | 2 D |
| D201 | IN60 | 0310330 | 2 A |
| D202 | | 0310330 | 2 A |
| D203 | | 0310330 | 2 B |
| D204 | | 0310330 | 2 B |
| D205 | | 0310330 | 2 B |



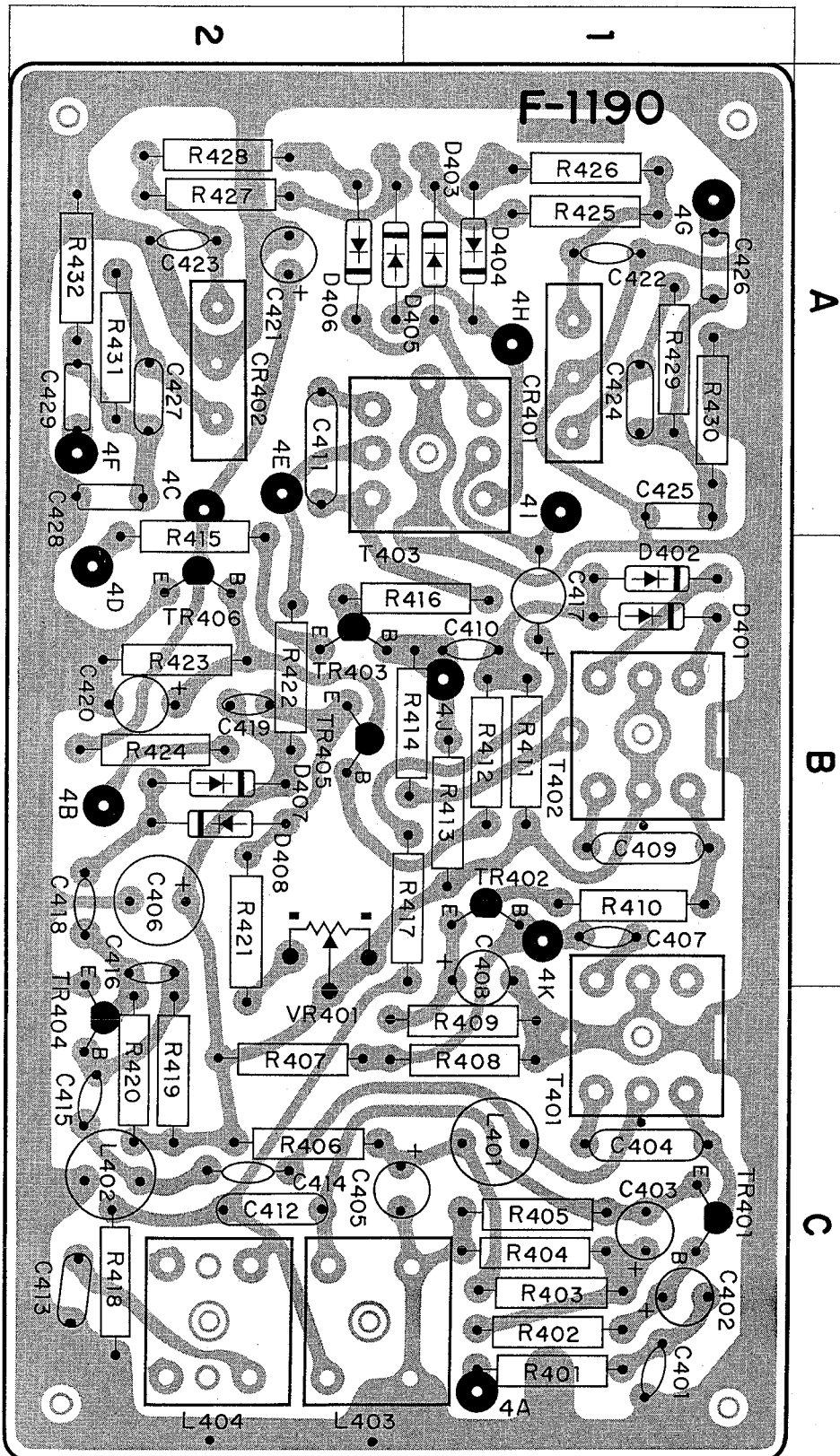
PRINTED CIRCUIT BOARDS AND PARTS LIST

W: Parts No. X: Parts Name Y: Stock No. Z: Position of Parts

F-1190 <MULTIPLEX BLOCK>

| W | X | Y | Z |
|------|----------------------------------|---------|-----|
| R401 | 1k Ω | 0101102 | 1 C |
| R402 | 100k Ω | 0101104 | 1 C |
| R403 | 100k Ω | 0101104 | 1 C |
| R404 | 22k Ω | 0101223 | 1 C |
| R405 | 680 Ω | 0101681 | 1 C |
| R406 | 100 Ω | 0101101 | 2 C |
| R407 | 47k Ω | 0101473 | 2 C |
| R408 | 22k Ω | 0101223 | 1 C |
| R409 | 2.2k Ω | 0101222 | 1 C |
| R410 | 1k Ω | 0101102 | 1 B |
| R411 | 10k Ω | 0101103 | 1 B |
| R412 | 10k Ω | 0101103 | 1 B |
| R413 | 100k Ω | 0101104 | 1 B |
| R414 | 18k Ω | 0101183 | 1 B |
| R415 | 5.6k Ω | 0101562 | 2 A |
| R416 | 470 Ω | 0101471 | 1 B |
| R417 | 2.2k Ω | 0101222 | 1 B |
| R418 | 10k Ω | 0101103 | 2 C |
| R419 | 1.2M Ω | 0110125 | 2 C |
| R420 | 4.7k Ω | 0101472 | 2 C |
| R421 | 3.3k Ω | 0101332 | 2 B |
| R422 | 47 Ω | 0101470 | 2 B |
| R423 | 1.8k Ω | 0101182 | 2 B |
| R424 | 6.8k Ω | 0101682 | 2 B |
| R425 | 22k Ω | 0101223 | 1 A |
| R426 | 22k Ω | 0101223 | 1 A |
| R427 | 22k Ω | 0101223 | 2 A |
| R428 | 22k Ω | 0101223 | 2 A |
| R429 | 100k Ω | 0101104 | 1 A |
| R430 | 220k Ω | 0101224 | 1 A |
| R431 | 100k Ω | 0101104 | 2 A |
| R432 | 220k Ω | 0101224 | 2 A |
| C401 | 100 pF $\pm 10\%$ 50 V CC. | 0660101 | 1 C |
| C402 | 1 μ F 50 V EC. | 0515109 | 1 C |
| C403 | 33 μ F 6.3 V EC. | 0510330 | 1 C |
| C404 | 5000 pF $\pm 5\%$ 50 V SC. | 0620502 | 1 C |
| C405 | 10 μ F } 25 V EC. | 0513100 | 1 C |
| C406 | 47 μ F } | 0513470 | 2 B |
| C407 | 0.02 μ F $\pm 10\%$ 50 V MC. | 0601207 | 1 B |
| C408 | 1 μ F 50 V EC. | 0515109 | 1 B |
| C409 | 6800 pF $\pm 5\%$ 50 V SC. | 0620682 | 1 B |
| C410 | 0.02 μ F $\pm 10\%$ 50 V MC. | 0601207 | 1 B |
| C411 | 1700 pF | 0620172 | 2 A |
| C412 | 1500 pF } $\pm 5\%$ 50 V SC. | 0620152 | 2 D |
| C413 | 220 pF } | 0620221 | 2 C |
| C414 | 330 pF | 0660331 | 2 C |
| C415 | 330 pF } $\pm 10\%$ 50 V CC. | 0660331 | 2 C |
| C416 | 47 pF } | 0660470 | 2 B |
| C417 | 10 μ F 25 V EC. | 0513100 | 1 B |
| C418 | 0.02 μ F } $+80\%$ 25 V CC. | 0659005 | 2 B |
| C419 | 0.02 μ F } -20% | 0659005 | 2 B |
| C420 | 3.3 μ F 25 V EC. | 0513339 | 2 B |
| C421 | 10 μ F 10 V EC. | 0511100 | 2 A |
| C422 | 220 pF } $\pm 10\%$ 50 V CC. | 0660221 | 1 A |
| C423 | 220 pF } | 0660221 | 2 A |
| C424 | 560 pF $\pm 5\%$ 50 V SC. | 0620561 | 1 A |

| W | X | Y | Z | |
|-------|---|---|------------|-----|
| C425 | 1000 pF $\pm 5\%$ 50 V SC. | 0620102 | 1 A | |
| C426 | 0.03 μ F $\pm 10\%$ 50 V MC. | 0601307 | 1 A | |
| C427 | 560 pF } $\pm 5\%$ 50 V SC. | 0620561 | 2 A | |
| C428 | 1000 pF } | 0620102 | 2 A | |
| C429 | 0.03 μ F $\pm 10\%$ 50 V MC. | 0601307 | 2 A | |
| CR401 | FP-38A | 0800080 | 1 A | |
| CR402 | | 0800080 | 2 A | |
| T401 | 19kHz | 4240280 | 1 C | |
| T402 | | 4240290 | 1 B | |
| T403 | | 4240290 | 1 A | |
| L401 | 4.7mH | 4900030 | 1 C | |
| L402 | | 4900030 | 2 C | |
| L403 | | 4240260 | 2 C | |
| L404 | | 4240270 | 2 C | |
| D401 | IN34A | 0310400 | 1 B | |
| D402 | | 0310400 | 1 B | |
| D403 | | 0310401 | 1 A | |
| D404 | | 0310401 | 1 A | |
| D405 | | 0310401 | 2 A | |
| D406 | IN34A \otimes | 0310401 | 2 A | |
| D407 | | 0310400 | 2 B | |
| D408 | | 0310400 | 2 B | |
| TR401 | 2SC458LG (B, C) | 0305310 | 1 C | |
| TR402 | 2SC536V ₁ (E ₁ , E ₂) | 0305244, 5 | 1 B | |
| TR403 | | 0305244, 5 | 2 B | |
| TR404 | | 0305244, 5 | 2 C | |
| TR405 | | 2SA564 (P, Q) | 0300090, 1 | 2 B |
| TR406 | | 2SC536V ₁ (E ₁ , E ₂) | 0305244, 5 | 2 B |



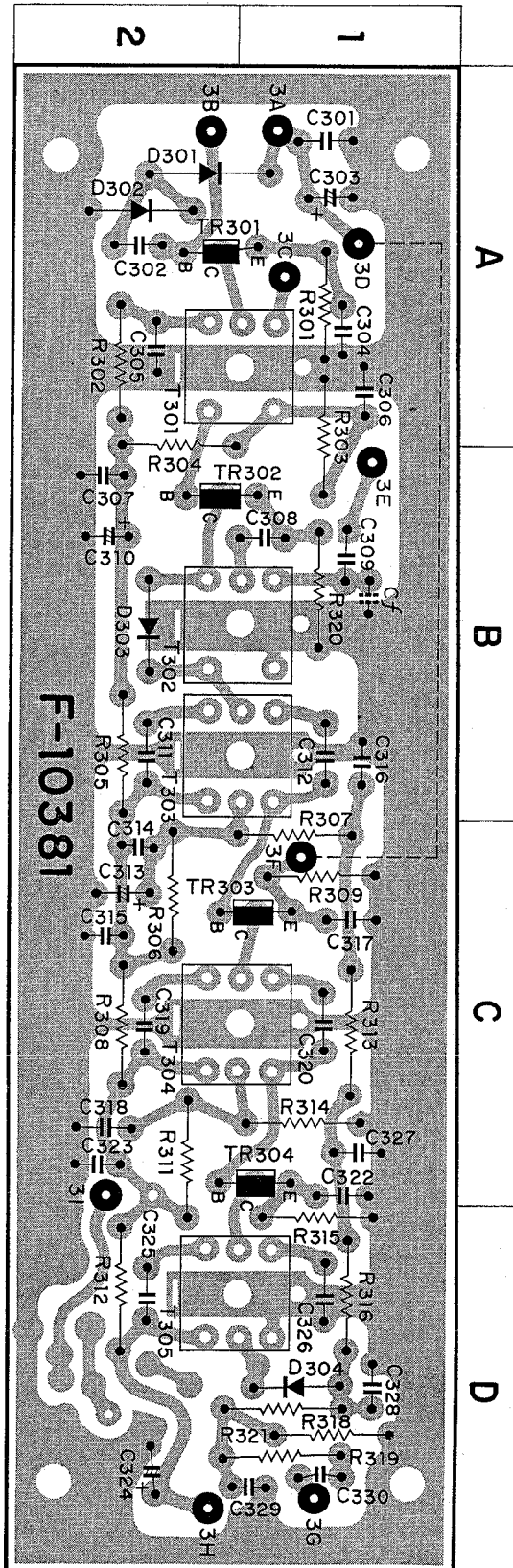
PRINTED CIRCUIT BOARDS AND PARTS LIST

W: Parts No. X: Parts Name Y: Stock No. Z: Position of Parts

F-10381 <AM IF BLOCK>

| W | X | Y | Z |
|------|----------------------------------|---------|--------|
| R301 | 1k Ω | 0101102 | 1 A |
| R302 | 100 Ω | 0101101 | 2 A |
| R303 | 3.9k Ω | 0101392 | 1 A |
| R304 | 33k Ω | 0101333 | 2 B |
| R305 | 100 Ω | 0101101 | 2 B |
| R306 | 56k Ω | 0101563 | 2 C |
| R307 | 22 Ω | 0101220 | 1 B |
| R308 | 22 Ω | 0101220 | 2 C |
| R309 | 1k Ω | 0101102 | 1 C |
| R311 | 10k Ω | 0101103 | 2 C |
| R312 | 22 Ω | 0101220 | 2 D |
| R313 | 100 Ω | 0101101 | 1 C |
| R314 | 6.8k Ω | 0101682 | 1 C |
| R315 | 470 Ω | 0101471 | 1 C |
| R316 | 8.2k Ω | 0101822 | 1 D |
| R318 | 1k Ω | 0101102 | 1 D |
| R319 | 120k Ω | 0101124 | 1 D |
| R320 | 1k Ω | 0101102 | 1 B |
| R321 | 4.7k Ω | 0101472 | 1 D |
| C301 | 0.04 μ F } +80% 25 V CC. | 0659006 | 1 A |
| C302 | 0.04 μ F } -20% | 0659006 | 2 A |
| C303 | 100 μ F 6.3 V EC. | 0510101 | 1 A |
| C304 | 0.02 μ F } +80% 25 V CC. | 0659005 | 1 A |
| C305 | 0.04 μ F } -20% | 0659006 | 2 A |
| C306 | 0.04 μ F } +80% 25 V CC. | 0659006 | 1 A |
| C307 | 0.02 μ F } -20% | 0659005 | 2 B |
| C308 | 0.01 μ F \pm 5% 50 V MC. | 0600107 | 1 B |
| C309 | 430 pF \pm 5% 50 V MiC. | 0640431 | 1 B |
| C310 | 100 μ F 16 V EC. | 0512101 | 2 B |
| C311 | 500 pF } \pm 5% 50 V MiC. | 0640501 | 2 B |
| C312 | 500 pF } \pm 5% | 0640501 | 2 A |
| C313 | 4.7 μ F 16 V EC. | 0512479 | 2 C |
| C314 | 0.02 μ F } +80% 25 V CC. | 0659005 | 2 B |
| C315 | 0.02 μ F } -20% | 0659005 | 2 C |
| C316 | 0.04 μ F } +80% 25 V CC. | 0659006 | 1 B |
| C317 | 47 μ F 6.3 V EC. | 0510470 | 1 C |
| C318 | 0.02 μ F } +80% 25 V CC. | 0659005 | 2 C |
| C319 | 500 pF } \pm 5% 50 V MiC. | 0640501 | 2 C |
| C320 | 500 pF } \pm 5% | 0640501 | 1 C |
| C322 | 0.04 μ F } +80% 25 V CC. | 0659006 | 1 C |
| C323 | 0.02 μ F } -20% | 0659005 | 2 C |
| C324 | 220 μ F 16 V EC. | 0512221 | 2 D |
| C325 | 500 pF } \pm 5% 50 V MiC. | 0640501 | 2 D |
| C326 | 500 pF } \pm 5% | 0640501 | 1 D |
| C327 | 0.02 μ F } +80% 25 V CC. | 0659005 | 1 C |
| C328 | 0.02 μ F } \pm 5% 50 V MC. | 0600207 | 1 D |
| C329 | 0.1 μ F } \pm 5% | 0600108 | 1 D |
| C330 | 0.04 μ F } +80% 25 V CC. | 0659006 | 1 D |
| T301 | AM RF | 4210050 | 1, 2 A |
| T302 | AM OSC | 4220070 | 1, 2 B |
| T303 | AM IFT 455kHz | 4230190 | 1, 2 B |
| T304 | AM IFT 455kHz | 4230190 | 1, 2 C |
| T305 | | 4230180 | 1, 2 D |

| W | X | Y | Z |
|-------|-----------|---------|--------|
| TR301 | 2SC460(C) | 0305351 | 2 A |
| TR302 | 2SC460(B) | 0305350 | 2 B |
| TR303 | | 0305350 | 1, 2 C |
| TR304 | | 0305351 | 1 D |
| D301 | IN60 | 0310330 | 2 A |
| D302 | | 0310330 | 2 A |
| D303 | | 0310330 | 2 B |
| D304 | | 0310330 | 1 D |



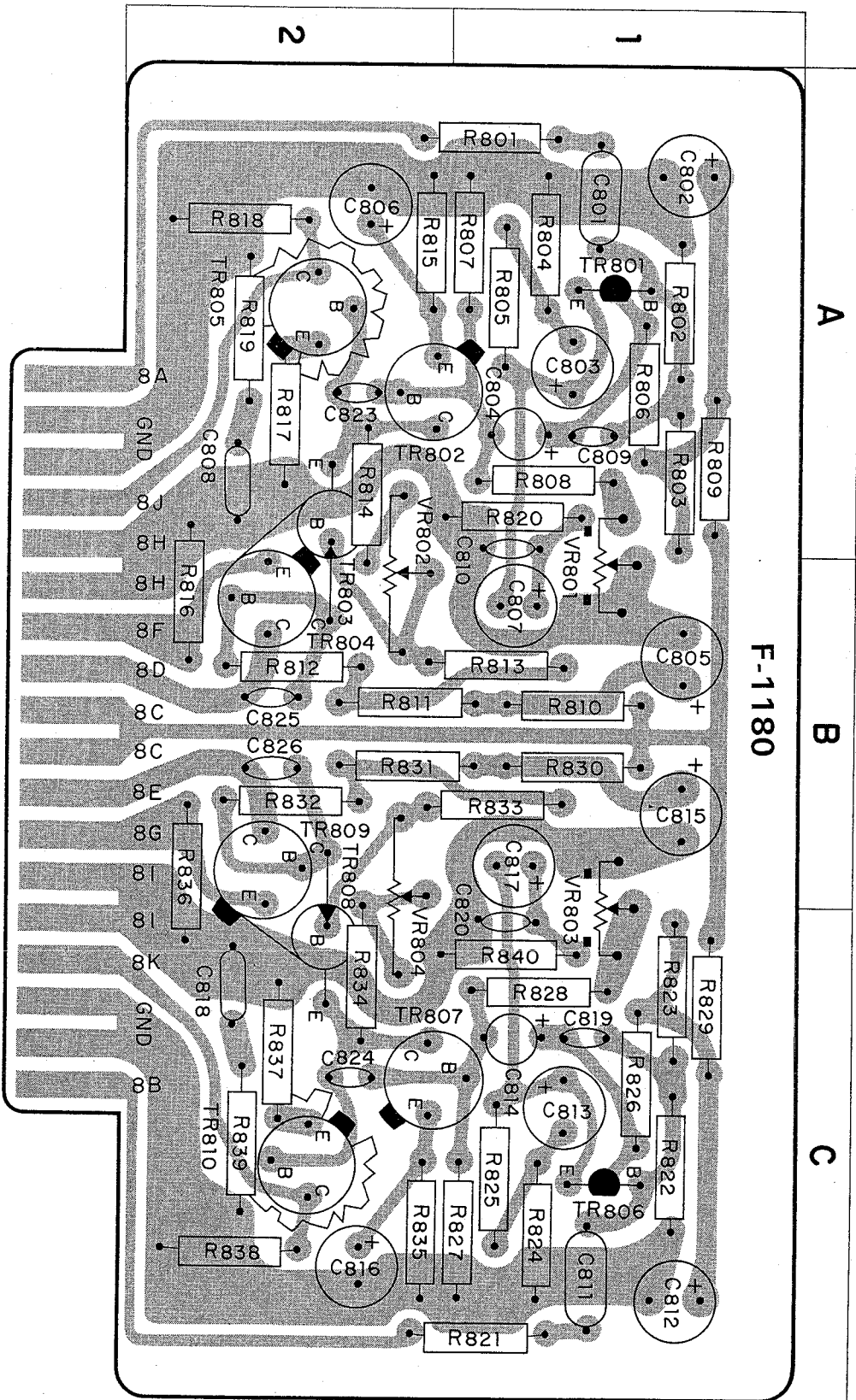
PRINTED CIRCUIT BOARDS AND PARTS LIST

W: Parts No. X: Parts Name Y: Stock No. Z: Position of Parts

F-1180 <DRIVER AMP. BROCK>

| W | X | Y | Z |
|------|-----------------------------------|---------|-----|
| R801 | 2.2k Ω | 0101222 | 1 A |
| R802 | 150k Ω | 0101154 | 1 A |
| R803 | 560k Ω | 0101564 | 1 A |
| R804 | 220 Ω | 0101221 | 1 A |
| R805 | 3.3k Ω | 0101332 | 1 A |
| R806 | 3.3k Ω | 0101332 | 1 A |
| R807 | 10k Ω | 0101103 | 1 A |
| R808 | 47k Ω | 0101473 | 1 A |
| R809 | 56k Ω | 0101563 | 1 A |
| R810 | 1.8k Ω | 0101182 | 1 B |
| R811 | 3.9k Ω | 0101392 | 2 B |
| R812 | 39 Ω | 0101390 | 2 B |
| R813 | 3.3k Ω | 0101332 | 1 B |
| R814 | 1.5k Ω | 0101152 | 2 A |
| R815 | 220 Ω | 0101221 | 2 A |
| R816 | 100 Ω | 0101101 | 2 B |
| R817 | 4.7 Ω | 0101479 | 2 A |
| R818 | 100 Ω | 0101101 | 2 A |
| R819 | 10 Ω | 0111100 | 2 A |
| R820 | 8.2k Ω | 0101822 | 1 A |
| R821 | 2.2k Ω | 0101222 | 1 C |
| R822 | 150k Ω | 0101154 | 1 C |
| R823 | 560k Ω | 0101564 | 1 C |
| R824 | 220 Ω | 0101221 | 1 C |
| R825 | 3.3k Ω | 0101332 | 1 C |
| R826 | 3.3k Ω | 0101332 | 1 C |
| R827 | 10k Ω | 0101103 | 1 C |
| R828 | 47k Ω | 0101473 | 1 C |
| R829 | 56k Ω | 0101563 | 1 C |
| R830 | 1.8k Ω | 0101182 | 1 B |
| R831 | 3.9k Ω | 0101392 | 2 B |
| R832 | 39 Ω | 0101390 | 2 B |
| R833 | 3.3k Ω | 0101332 | 1 B |
| R834 | 1.5k Ω | 0101152 | 2 C |
| R835 | 220 Ω | 0101221 | 2 C |
| R836 | 100 Ω | 0101101 | 2 B |
| R837 | 4.7 Ω | 0101479 | 2 C |
| R838 | 100 Ω | 0101101 | 2 C |
| R839 | 10 Ω | 0111100 | 2 C |
| R840 | 8.2k Ω | 0101822 | 1 C |
| | | | |
| C801 | 0.22 μ F $\pm 10\%$ 50 V MC. | 0601228 | 1 A |
| C802 | 100 μ F 25 V EC. | 0513101 | 1 A |
| C803 | 220 μ F 10 V EC. | 0511221 | 1 A |
| C804 | 1 μ F | 0515109 | 1 A |
| C805 | 33 μ F | 0515330 | 1 B |
| C806 | 100 μ F 10 V EC. | 0511101 | 2 A |
| C807 | 10 μ F 50 V EC. | 0515100 | 1 B |
| C808 | 0.047 μ F $\pm 10\%$ 50 V MC. | 0601477 | 2 A |
| C809 | 47 pF $\pm 10\%$ 50 V CC. | 0660470 | 1 A |
| C811 | 0.22 μ F $\pm 10\%$ 50 V MC. | 0601228 | 1 C |
| C812 | 100 μ F 25 V EC. | 0513101 | 1 C |
| C813 | 220 μ F 10 V EC. | 0511221 | 1 C |
| C814 | 1 μ F | 0515109 | 1 C |
| C815 | 33 μ F | 0515330 | 1 B |
| C816 | 100 μ F 10 V EC. | 0511101 | 2 C |

| W | X | Y | Z |
|-------|-------------------------------------|---------------|--------|
| C817 | 10 μ F 50 V EC. | 0515100 | 1 B |
| C818 | 0.047 μ F $\pm 10\%$ 50 V MC. | 0601477 | 2 C |
| C819 | 47 pF | 0660470 | 1 C |
| C823 | 47 pF | 0660470 | 2 A |
| C824 | 47 pF | 0660470 | 2 C |
| C825 | 330 pF | 0660331 | 2 B |
| C826 | 330 pF | 0660331 | 2 B |
| | | | |
| VR801 | 200k Ω B AC Balance Adjustor | 1030150 | 1 A, B |
| VR802 | 1k Ω B DC Bias Adjustor | 1030510 | 2 A, B |
| VR803 | 200k Ω B AC Balance Adjustor | 1030150 | 1 B, C |
| VR804 | 1k Ω B DC Bias Adjustor | 1030510 | 2 B, C |
| | | | |
| TR801 | 2SC458LG (C) | 0305311 | 1 A |
| TR802 | 2SC627 (1, 2) | 0305581, 2 | 2 A |
| TR803 | 2SC281 (B) | 0305121 | 2 A, B |
| TR804 | 2SC708 (A, B, C) | 0305480, 1, 2 | 2 B |
| TR805 | 2SA537 (A, B, C) | 0300120, 1, 2 | 2 A |
| TR806 | 2SC458LG (C) | 0305311 | 1 C |
| TR807 | 2SC627 (1, 2) | 0305581, 2 | 2 C |
| TR808 | 2SC281 (B) | 0305121 | 2 B, C |
| TR809 | 2SC708 (A, B, C) | 0305480, 1, 2 | 2 B |
| TR810 | 2SA537 (A, B, C) | 0300120, 1, 2 | 2 C |



OTHER PARTS AND THEIR POSITION ON CHASSIS

W: Parts No. X: Parts Name Y: Stock No.

| W | X | Y |
|-----------|---|------------|
| R008 | 1.2k Ω $\pm 10\%$ $\frac{1}{2}$ W SR. | 0111122 |
| R009 | 150 Ω | 0101151 |
| R010 | 10 Ω | 0101100 |
| R012 | 39 Ω | 0101390 |
| R017 | 220 Ω | 0101221 |
| R120 | 56 Ω | 0101560 |
| R121 | 680 Ω | 0101681 |
| R635 | 68k Ω | 0101683 |
| R636 | 180k Ω | 0101184 |
| R637 | 100k Ω | 0101104 |
| R638 | 22k Ω } $\pm 10\%$ $\frac{1}{4}$ W CR. | 0101223 |
| R639 | 15k Ω | 0101153 |
| R640 | 100k Ω | 0101104 |
| R641 | 220k Ω | 0101224 |
| R642 | 100k Ω | 0101104 |
| R643 | 220k Ω | 0101224 |
| R645 | 68k Ω | 0101683 |
| R646 | 180k Ω | 0101184 |
| R647 | 100k Ω | 0101104 |
| R648 | 15k Ω | 0101153 |
| R841 | 0.5 Ω } $\pm 10\%$ 2W CeR. | 0152508 |
| R842 | 0.5 Ω | 0152508 |
| R843 | 330 Ω $\pm 10\%$ $\frac{1}{2}$ W SR. | 0111331 |
| R844 | 0.5 Ω } $\pm 10\%$ 2W CeR. | 0152508 |
| R845 | 0.5 Ω | 0152508 |
| R846 | 330 Ω $\pm 10\%$ $\frac{1}{2}$ W SR. | 0111331 |
| R847 | 560 Ω } $\pm 10\%$ 1W CeR. | 0151561 |
| R848 | 560 Ω | 0151561 |
| C003 | 2200 μ F 80 V EC. | 0559821 |
| C004 | 1000 μ F 50 V EC. | 0515102 |
| C008 | 0.033 μ F } 600V OC. | 0591337 |
| C009 | 0.0047 μ F | 0591476 |
| C011 | 0.04 μ F } $\pm 80\%$ 25 V CC. | 0659006 |
| C012 | 0.04 μ F } -20% | 0659006 |
| C013 | 0.01 μ F } 400V OC. | 0590107 |
| C014 | 0.01 μ F | 0590107 |
| C017 | 220 μ F 25 V EC. | 0503221 |
| C345 | 1 μ F 50 V EC. | 0515109 |
| C439 | 0.02 μ F $\pm 100\%$ 50 V CC. | 0650203 |
| C622 | 100 pF } 6660101 | 0660101 |
| C623 | 100 pF } $\pm 10\%$ 50 V CC. | 0660101 |
| C624 | 100 pF | 0660101 |
| C625 | 100 pF | 0660101 |
| C821 | 2200 μ F } 75 V EC. | 0559703 |
| C822 | 2200 μ F | 0559703 |
| VR204 | 1M Ω B Muting Adjustor | 1005080 |
| S001 | UEH 12CD00 | 1130160 |
| S1(a~i) | Y-4-9-6 | 1104120 |
| S10 | Y-1-4-4 | 1101180 |
| S11 | SL-13-8-10H6-2-2 | 1110040 |
| J001 | Headphones Jack | 2430070 |
| J002 | DIN Connector | 2430040 |
| TR407 | 2SB324 | 0303110 |
| TR811~814 | 2SD202 or 2SC793 | 0308200, 1 |

| W | X | Y |
|-----------|--|--------------------|
| CO001,2 | AC Outlet | 2450010 |
| PU001 | Multi Connector | 2420020 |
| PU002 | Voltage Selector | 2410170 |
| M001 | 200 μ A Tuning Meter | 0900200 |
| T001 | 400-5338 Power Trans. | 4000510 |
| PL001 | 7V 0.2A PHONO 1, 2 AUX Indicator | 0400150 |
| PL002 | | 0400150 |
| PL008 | | 0400150 |
| PL003 | 6.3V 0.25A Dial Scale Lamp | 0400080 |
| PL004 | | 0400080 |
| PL005 | | 0400080 |
| PL006 | | 0400080 |
| PL007 | | 0400080 |
| PL011 | 0400080 | |
| PL010 | 6V 0.1A Stereo Indicator | 0400160 |
| PL012 | 5V 0.06A Dial Pointer | 0400101 |
| VC301~303 | AM 3-Gang Variable Capacitor | 1200040 |
| T306 | 9G-013 | 4200270 |
| T102 | 300 Ω -75 Ω High Frequency Transformer | 4290021 |
| F001 | Power Fuse 100V/127V 3A 220V/250V 2A | 0431261 0431241 |
| F801 | Quick Acting Fuse (2.5A) | 0430111 |
| F802 | Quick Acting Fuse (2.5A) | 0430111 |
| D317 | SV-02 | 0310490 |

* Manufacturer reserves right to change design and/or specifications without notice for purpose of improvement.

