

SERV. 35872

SERVICE MANUAL

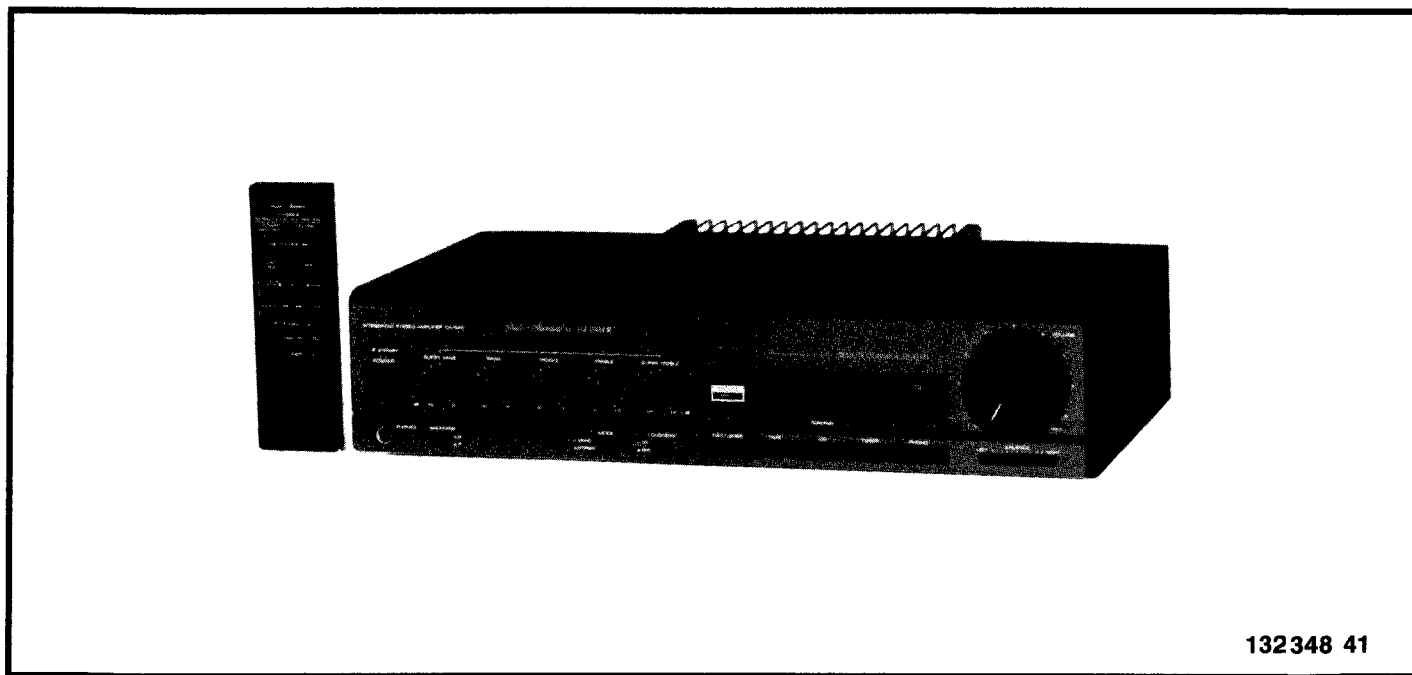


FISHER

INTEGRATED STEREO AMPLIFIER

CA-540

(EUROPE/SPAIN)



132348 41

SPECIFICATIONS

Remote Control (REM-540) 15-function,
wireless remote control

POWER AMPLIFIER SECTION

Minimum RMS sine wave power per channel
within stated bandwidth at no more than stated
distortion and with 8-ohm load 55W (DIN)
Power Bandwidth 20 Hz - 20 kHz
Total Harmonic Distortion 0.5 %
I.M. Distortion 0.5 %
Speaker Damping > 20

PREAMPLIFIER SECTION

Frequency Response
Phono (RIAA) ± 1 dB
Aux (20 Hz - 20 kHz) ± 1 dB
Input Sensitivity and Impedance
Phono 2.5 mV/50 k Ω
TAPE/DAT-VIDEO 150 mV/50 k Ω
Tuner/CD 150 mV/50k Ω

Phono Max. Input Capability 120 mV
MULTI-Tone Controls
SUPER BASS ± 10 dB
BASS ± 10 dB
MIDDLE ± 10 dB
TREBLE ± 10 dB
SUPER TREBLE ± 10 dB
Loudness Contour (100 Hz/10 kHz) + 1 dB/ + 4 dB
Hum & Noise (DIN)
Phono 65 dB
TAPE/DAT-VIDEO 85 dB
Tuner/CD 85 dB

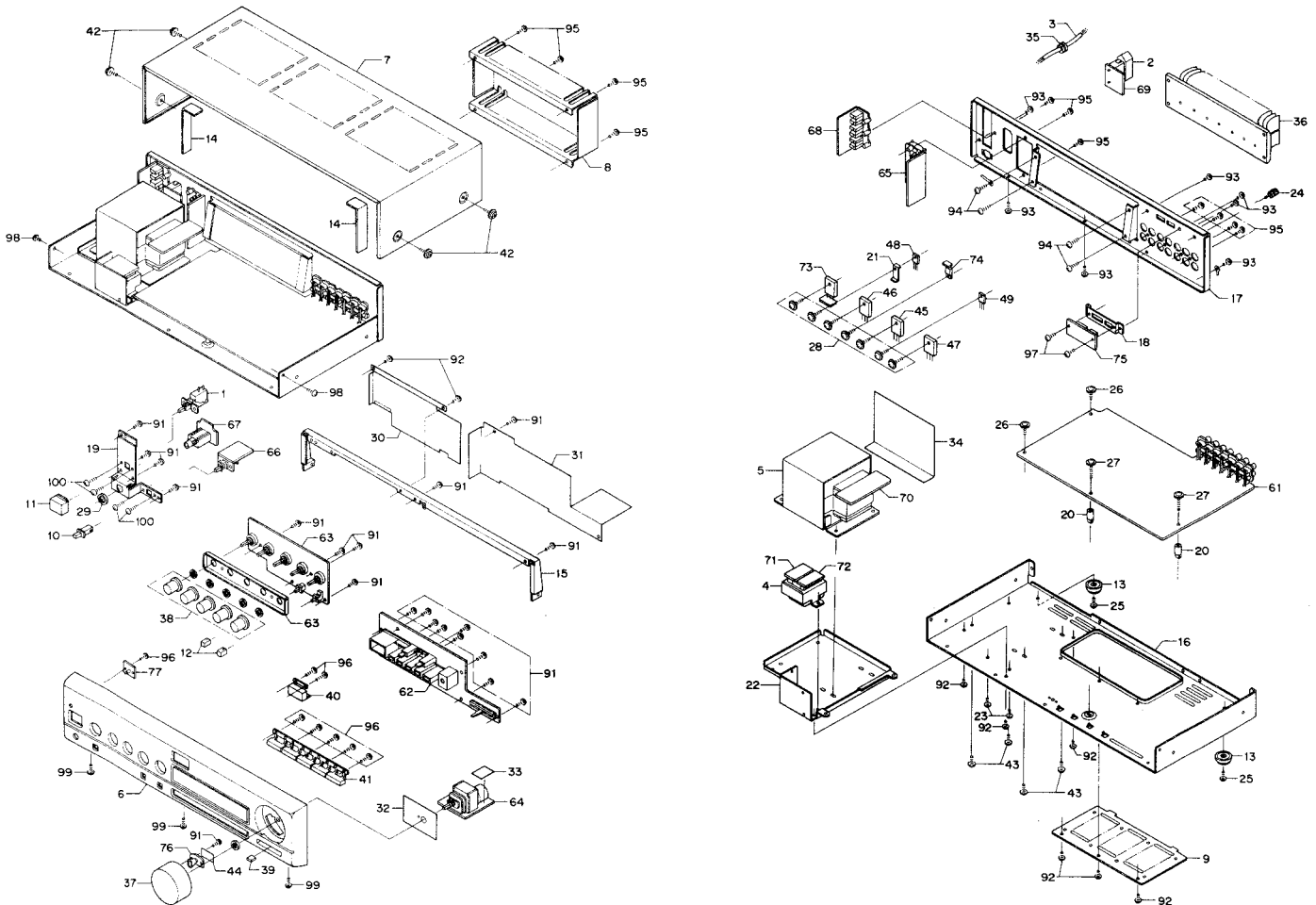
GENERAL

Power Requirements (50Hz) 220V
Power Consumption 260W
AC Outlets 1
Dimensions (W x H x D) 400 x 915 x 247 mm
Weight (approx.) 5.2 kg

— Specifications and design are subject to change without notice. —

REFERENCE No. VM-22785

CABINET & CHASSIS EXPLODED VIEW



POWER AMPLIFIER ADJUSTMENT

BEFORE ADJUSTMENT

Unplug the AC power cord and set the front panel controls as follows:

- Power Switch to OFF position.
- Set the SPEAKERS Switch to the OFF position.
- Turn the MASTER VOLUME Control to minimum.
- Connect the AC power cord and Power Switch to the ON position.

IDLING CURRENT ADJUSTMENT

This adjustment is very sensitive to changes in ambient temperature. Allow set to operate for 2 minutes before attempting this alignment.

LEFT CHANNEL AMPLIFIER

1. Connect the DC Voltmeter between pins TP1 and TP2 on the Main P.C.Board.
2. If the DC Voltmeter indicates less than 3mV, Cut the lead wire of the resistor R303 (560Ω) in the Main P.C.Board.
3. After cutting the R303, and if less than 3mV, the IC201 (μPC1298V) has anything wrong so repairment is required.
4. After cutting the R303, and if more than 20mV, the Power Transistor (Q201,Q203) has anything wrong so repairment is required.
5. If less than 20mV, the Main Amplifier Circuit is a normal operation.

RIGHT CHANNEL AMPLIFIER

1. Connect the DC Voltmeter between pins TP3 and TP4 on the Main P.C.Board.
2. If the DC Voltmeter indicates less than 3mV, Cut the lead wire of the resistor R304 (560Ω) in the Main P.C.Board.
3. After cutting the R304, and if less than 3mV, the IC202 (μPC1298V) has anything wrong so repairment is required.
4. After cutting the R304, and if more than 20mV, the Power Transistor (Q202,Q204) has anything wrong so repairment is required.
5. If less than 20mV, the Main Amplifier Circuit is a normal operation.

CABINET & CHASSIS PARTS LIST

| Ref. No. | Part No. | Description | Q'ty | Ref. No. | Part No. | Description | Q'ty |
|--------------------|----------------|--------------------------------------|------|--------------------------------------------------------------------------|--------------|------------------------------|------|
| PACKAGE | | | | 68 | 620 190 5861 | Power Supply P.C.B. Assy | 1 |
| | 620 000 0024 | Bag Polyethylene | 1 | 69 | 620 190 5878 | Outlet P.C.B. Assy | 1 |
| | 620 189 9924 | Pad Right | 1 | 70 | 620 190 5885 | Main Trans P.C.B. Assy | 1 |
| | 620 189 9931 | Pad Left | 1 | 71 | 620 190 5892 | Sub Trans-1 P.C.B. Assy | 1 |
| | 620 059 6596 | Patching Sheet | 1 | 72 | 620 190 5908 | Sub Trans-2 P.C.B. Assy | 1 |
| | 620 062 0543 | Serial No. Sheet | 2 | 73 | 620 190 5915 | Power Transistor P.C.B. Assy | 1 |
| | 620 190 4567 | Box Corrugate-Exp. | 1 | 74 | 620 191 2289 | Regulator P.C.B. Assy | 1 |
| | 620 148 8029 | Sheet Polyethylene | 1 | 75 | 620 190 5922 | Remocon Terminal P.C.B. Assy | 1 |
| | | | | 76 | 620 190 5939 | Volume IND. P.C.B. Assy | 1 |
| | | | | 77 | 620 190 5946 | Power IND. P.C.B. Assy | 1 |
| ACCESSORIES | | | | 91 | 411 020 5706 | SCR S-TPG BRZ 2.6X8 | 21 |
| | 620 190 3133 | REM-540EUR (Remote Control) | 1 | 92 | 411 020 7700 | SCR S-TPG BRZ 3X6 | 8 |
| | 620 017 4459 | Connector 4P Assy | 1 | 93 | 411 099 9704 | SCR S-TPG BRZ 3X6 | 7 |
| | 620 057 8783 | Bag Fan | 1 | 94 | 411 020 8004 | SCR S-TPG BRZ 3X8 | 4 |
| | 620 062 0543 | Serial No. Sheet | 1 | 95 | 411 099 9803 | SCR S-TPG BRZ 3X8 | 11 |
| | 620 152 2624 | Certificate Card | 1 | 96 | 411 021 0809 | SCR S-TPG BIN 2X6 | 8 |
| | 620 190 7735 | Explanatory Booklet | 1 | 97 | 411 021 2704 | SCR S-TPG BIN 2.6X6 | 2 |
| | | | | 98 | 411 021 5705 | SCR S-TPG BIN 3X6 | 2 |
| | | | | 99 | 411 021 6603 | SCR S-TPG BIN 3X8 | 3 |
| | | | | 100 | 411 045 6702 | SCR PAN + SW 3X8 | 4 |
| CABINET | | | | NOTES: | | | |
| | 620 062 0543 | Serial No. Sheet | 1 | 1. Parts order must contain Model Number, Part Number and Description. | | | |
| 1 | △ 620 015 2341 | Switch Push Power | 1 | 2. Ordering quantity of screws and resistors must be multiple of 10 pcs. | | | |
| 2 | △ 620 017 1212 | AC Socket | 1 | | | | |
| 3 | △ 620 023 7550 | Power Cord | 1 | | | | |
| 4 | △ 620 182 9778 | Power Trans (Sub) | 1 | | | | |
| 5 | △ 620 190 4840 | Power Trans (Main) | 1 | | | | |
| 6 | 620 190 4321 | Cabinet Front Assy | 1 | | | | |
| 7 | 620 045 5787 | Cover | 1 | | | | |
| 8 | 620 190 4352 | Cover Heat Sink | 1 | | | | |
| 9 | 620 189 9658 | Cover Bottom | 1 | | | | |
| 10 | 620 046 2716 | Knob (SPEAKER SELECTOR) | 1 | | | | |
| 11 | 620 046 5366 | Knob (POWER) | 1 | | | | |
| 12 | 620 046 6417 | Knob Push (MODE/LOUDNESS) | 2 | | | | |
| 13 | 620 047 3842 | Leg | 2 | | | | |
| 14 | 620 048 4541 | Metal Reinforce (Cover) | 2 | | | | |
| 15 | 620 189 9719 | Metal Reinforce (Front) | 2 | | | | |
| 16 | 620 189 9733 | Chassis | 1 | | | | |
| 17 | 620 189 9795 | Panel Rear | 1 | | | | |
| 18 | 620 050 2733 | Metal Mount Switch | 1 | | | | |
| 19 | 620 189 9818 | Metal Mount Switch | 1 | | | | |
| 20 | 620 050 4225 | Mount P.C.B. | 2 | | | | |
| 21 | 620 186 9354 | Mount P.C.B. | 1 | | | | |
| 22 | 620 189 9832 | Metal Mount Trans | 1 | | | | |
| 23 | 620 051 1735 | Screw, Braz. Hd. Tapp.-C, + M3.0X8 | 2 | | | | |
| 24 | 620 051 2152 | Screw Ground | 1 | | | | |
| 25 | 620 051 3692 | Screw, Braz. Hd. Taap.-B, + M3.0X6 | 2 | | | | |
| 26 | 620 051 3708 | Screw, Braz. Hd. Tapp.-B, + M3.0X8 | 2 | | | | |
| 27 | 620 051 3715 | Screw, Braz. Hd. Tapp.-B, + M3.0X14 | 2 | | | | |
| 28 | 620 051 3746 | Screw | 7 | | | | |
| 29 | 620 051 4903 | Nut | 1 | | | | |
| 30 | 620 191 0797 | Plate Shield | 1 | | | | |
| 31 | 620 191 7123 | Cover Shield | 1 | | | | |
| 32 | 620 191 9271 | Plate Shield VR | 1 | | | | |
| 33 | 620 191 9509 | Plate Shield | 1 | | | | |
| 34 | 620 189 9849 | Plate Sever | 1 | | | | |
| 35 | 620 053 2136 | Bushing (AC CORD) | 1 | | | | |
| 36 | 620 183 1184 | Heat Sink | 1 | | | | |
| 37 | 620 186 6711 | Knob Volume Assy (Master) | 1 | | | | |
| 38 | 620 191 1442 | Knob (TONE VOLUME) | 5 | | | | |
| 39 | 620 109 6460 | Knob Slide VR (BALANCE) | 1 | | | | |
| 40 | 620 188 1448 | Knob Touch (SOURCE DIRECT) | 1 | | | | |
| 41 | 620 188 1455 | Knob (FUNCTION) | 1 | | | | |
| 42 | 620 122 9738 | Screw, Bind Hd. Tapping-B, + M3.0X8 | 4 | | | | |
| 43 | 620 123 0833 | Screw, Bind Hd. Tapping-C, + M4.0X10 | 4 | | | | |
| 44 | 620 123 7658 | Sheet | 1 | | | | |
| 45 | 405 022 1606 | TR 2SD1289-Q [Q202] | 1 | | | | |
| or | 405 080 7800 | TR 2SC3181N-O | 1 | | | | |
| 46 | 405 009 6600 | TR 2SB966-Q [Q203] | 1 | | | | |
| or | 405 080 7602 | TR 2SA1264N-O | 1 | | | | |
| 47 | 405 009 6600 | TR 2SB966-Q [Q204] | 1 | | | | |
| or | 405 080 6209 | TR 2SB966-R | 1 | | | | |
| 48 | 405 026 0803 | TR 2SD947 [Q209] | 1 | | | | |
| 49 | 405 026 0803 | TR 2SD947 [Q210] | 1 | | | | |
| 61 | 620 190 5793 | Main P.C.B. Assy | 1 | | | | |
| 62 | 620 190 5809 | Function Switch P.C.B. Assy | 1 | | | | |
| 63 | 620 190 5816 | Graphic Equalizer P.C.B. Assy | 1 | | | | |
| 64 | 620 190 5823 | Motor Volume P.C.B. Assy | 1 | | | | |
| 65 | 620 190 5830 | Speaker Terminal P.C.B. Assy | 1 | | | | |
| 66 | 620 190 5847 | Speaker Switch P.C.B. Assy | 1 | | | | |
| 67 | 620 190 5854 | Phones Jack P.C.B. Assy | 1 | | | | |

PRODUCT SAFETY NOTICE

Each precaution in this manual should be followed during servicing. Components identified with the IEC symbol △ in the parts list and the schematic diagram designate components in which safety can be of special significance. When replacing a component identified with △, use only the replacement parts designated, or parts with the same ratings of resistance, wattage or voltage that are designated in the parts list in this manual. Leakage-current or resistance measurements must be made to determine that exposed parts are acceptably insulated from the supply circuit before returning the product to the customer.

P.C.BOARD PARTS LIST

| Ref. No. | Part No. | Description | Q'ty | Ref. No. | Part No. | Description | Q'ty |
|-------------------------|--------------|---------------------|------|----------|--------------|------------------------|------|
| MAIN P.C.B. ASSY | | | | D210 | 407 008 0405 | DIODE GMB01-BT | 1 |
| 61 | 620 190 5793 | Main P.C.B. Assy | 1 | D211 | 407 049 7005 | ZENER DIODE GZA15Y-BT | 1 |
| | 620 017 0406 | Relay | 1 | D212 | 407 049 7005 | ZENER DIODE GZA15Y-BT | 1 |
| | 620 017 2448 | Pin Jack 4P | 2 | D213 | 407 050 5502 | ZENER DIODE GZA5.6Y-BT | 1 |
| | 620 017 2561 | Pin Jack 6P | 1 | D214 | 407 008 0405 | DIODE GMB01-BT | 1 |
| | 620 031 4763 | Wire Wrap Terminal | 6 | D216 | 407 050 5502 | ZENER DIODE GZA5.6Y-BT | 1 |
| | 620 183 0910 | Metal Mount (IC) | 2 | D217 | 407 088 6502 | DIODE MPG06D | 1 |
| | 620 053 6899 | Cover Safety | 1 | D218 | 407 088 6502 | DIODE MPG06D | 1 |
| | 620 189 9887 | Plate Heat Sink | 1 | D219 | 407 092 4105 | DIODE DSA20TC-KD3 | 1 |
| | 411 021 3107 | SCR S-TPG BIN 2.6X8 | 2 | D220 | 407 092 4105 | DIODE DSA20TC-KD3 | 1 |
| | 411 045 6702 | SCR PAN + SW 3X8 | 2 | D221 | 407 092 4105 | DIODE DSA20TC-KD3 | 1 |
| | 620 020 5887 | Connector 1P Assy | 1 | D222 | 407 092 4105 | DIODE DSA20TC-KD3 | 1 |
| | 620 020 5887 | Connector 1P Assy | 1 | D223 | 407 005 1603 | DIODE DS135D | 1 |
| | 620 055 5128 | Jumper | 1 | D224 | 407 005 3805 | DIODE DS442-BT | 1 |
| CF101 | 620 007 3349 | Ceramic.OSC CSA4.00 | 1 | C101 | 403 018 8509 | CERAMIC 220P K 50V | 1 |
| L201 | 620 027 1240 | AF Coil | 1 | C102 | 403 018 8509 | CERAMIC 220P K 50V | 1 |
| L202 | 620 027 1240 | AF Coil | 1 | C103 | 403 023 5807 | CERAMIC 330P K 50V | 1 |
| IC101 | 409 057 4403 | IC UPC4570C | 1 | C104 | 403 023 5807 | CERAMIC 330P K 50V | 1 |
| IC102 | 409 109 5105 | IC LC7821 | 1 | C105 | 403 047 1502 | ELECT 4.7U M 25V | 1 |
| IC103 | 409 166 5308 | IC TC9215P | 1 | C106 | 403 047 1502 | ELECT 4.7U M 25V | 1 |
| IC104 | 409 057 4403 | IC UPC4570C | 1 | C107 | 403 038 2303 | ELECT 100U M 6.3V | 1 |
| or | 409 018 4503 | IC LA6458DS | 1 | C108 | 403 038 2303 | ELECT 100U M 6.3V | 1 |
| IC105 | 409 162 2301 | IC LC6522H-3794 | 1 | C109 | 403 018 8509 | CERAMIC 220P K 50V | 1 |
| IC201 | 409 149 9101 | IC UPC1298V | 1 | C110 | 403 018 8509 | CERAMIC 220P K 50V | 1 |
| IC202 | 409 149 9101 | IC UPC1298V | 1 | C111 | 403 059 0401 | POLYESTER 0.018U K 50V | 1 |
| Q101 | 405 030 8000 | TR 2SC1740SLN-R | 1 | C112 | 403 059 0401 | POLYESTER 0.018U K 50V | 1 |
| or | 405 030 8109 | TR 2SC1740SLN-S | 1 | C113 | 403 061 8709 | POLYESTER 4700P K 50V | 1 |
| Q102 | 405 030 8000 | TR 2SC1740SLN-R | 1 | C114 | 403 061 8709 | POLYESTER 4700P K 50V | 1 |
| or | 405 030 8109 | TR 2SC1740SLN-S | 1 | C115 | 403 047 1502 | ELECT 4.7U M 25V | 1 |
| Q103 | 405 019 3804 | TR 2SC536-G-NP | 1 | C116 | 403 047 1502 | ELECT 4.7U M 25V | 1 |
| or | 405 019 2708 | TR 2SC536-F-NP | 1 | C119 | 403 018 8509 | CERAMIC 220P K 50V | 1 |
| Q104 | 405 019 2708 | TR 2SC536-F-NP | 1 | C120 | 403 018 8509 | CERAMIC 220P K 50V | 1 |
| or | 405 019 3804 | TR 2SC536-G-NP | 1 | C123 | 403 018 8509 | CERAMIC 220P K 50V | 1 |
| Q105 | 405 004 4502 | TR 2SA608-F-NP | 1 | C124 | 403 018 8509 | CERAMIC 220P K 50V | 1 |
| or | 405 004 5004 | TR 2SA608-G-NP | 1 | C127 | 403 018 8509 | CERAMIC 220P K 50V | 1 |
| Q106 | 405 019 2708 | TR 2SC536-F-NP | 1 | C128 | 403 018 8509 | CERAMIC 220P K 50V | 1 |
| or | 405 019 3804 | TR 2SC536-G-NP | 1 | C131 | 403 018 8509 | CERAMIC 220P K 50V | 1 |
| Q205 | 405 019 2708 | TR 2SC536-F-NP | 1 | C132 | 403 018 8509 | CERAMIC 220P K 50V | 1 |
| or | 405 019 3804 | TR 2SC536-G-NP | 1 | C135 | 403 018 8509 | CERAMIC 220P K 50V | 1 |
| Q206 | 405 019 2708 | TR 2SC536-F-NP | 1 | C136 | 403 018 8509 | CERAMIC 220P K 50V | 1 |
| or | 405 019 3804 | TR 2SC536-G-NP | 1 | C139 | 403 018 8509 | CERAMIC 220P K 50V | 1 |
| Q207 | 405 004 4502 | TR 2SA608-F-NP | 1 | C140 | 403 018 8509 | CERAMIC 220P K 50V | 1 |
| or | 405 004 5004 | TR 2SA608-G-NP | 1 | C143 | 403 042 0302 | ELECT 10U M 16V | 1 |
| Q208 | 405 004 4502 | TR 2SA608-F-NP | 1 | C144 | 403 042 0302 | ELECT 10U M 16V | 1 |
| or | 405 004 5004 | TR 2SA608-G-NP | 1 | C145 | 403 009 8105 | CERAMIC 100P K 50V | 1 |
| Q211 | 405 039 5802 | TR 2SC3792 | 1 | C146 | 403 009 8105 | CERAMIC 100P K 50V | 1 |
| Q212 | 405 039 5802 | TR 2SC3792 | 1 | C147 | 403 042 0302 | ELECT 10U M 16V | 1 |
| Q213 | 405 019 2708 | TR 2SC536-F-NP | 1 | C148 | 403 042 0302 | ELECT 10U M 16V | 1 |
| or | 405 019 3804 | TR 2SC536-G-NP | 1 | C149 | 403 044 0201 | ELECT 47U M 16V | 1 |
| Q214 | 405 019 2708 | TR 2SC536-F-NP | 1 | C150 | 403 044 0201 | ELECT 47U M 16V | 1 |
| or | 405 019 3804 | TR 2SC536-G-NP | 1 | C151 | 403 074 2701 | CERAMIC 0.047U Z 50V | 1 |
| Q215 | 405 034 6804 | TR DTA114-ES | 1 | C152 | 403 074 2701 | CERAMIC 0.047U Z 50V | 1 |
| Q216 | 405 019 2708 | TR 2SC536-F-NP | 1 | C153 | 403 044 0201 | ELECT 47U M 16V | 1 |
| or | 405 019 3804 | TR 2SC536-G-NP | 1 | C154 | 403 044 0201 | ELECT 47U M 16V | 1 |
| Q217 | 405 019 2708 | TR 2SC536-F-NP | 1 | C155 | 403 044 0201 | ELECT 47U M 16V | 1 |
| or | 405 019 3804 | TR 2SC536-G-NP | 1 | C156 | 403 044 0201 | ELECT 47U M 16V | 1 |
| Q218 | 405 004 4502 | TR 2SA608-F-NP | 1 | C157 | 403 018 8509 | CERAMIC 220P K 50V | 1 |
| or | 405 004 5004 | TR 2SA608-G-NP | 1 | C158 | 403 018 8509 | CERAMIC 220P K 50V | 1 |
| Q220 | 405 007 5100 | TR 2SB560-E-MP | 1 | C159 | 403 050 1209 | ELECT 2.2U M 50V | 1 |
| or | 405 007 5308 | TR 2SB560-F-MP | 1 | C160 | 403 050 1209 | ELECT 2.2U M 50V | 1 |
| Q221 | 405 023 8307 | TR 2SD438-E-MP | 1 | C161 | 403 044 0201 | ELECT 47U M 16V | 1 |
| or | 405 023 8505 | TR 2SD438-F-MP | 1 | C162 | 403 044 0201 | ELECT 47U M 16V | 1 |
| Q222 | 405 019 2708 | TR 2SC536-F-NP | 1 | C163 | 403 009 8105 | CERAMIC 100P K 50V | 1 |
| or | 405 019 3804 | TR 2SC536-G-NP | 1 | C164 | 403 009 8105 | CERAMIC 100P K 50V | 1 |
| Q223 | 405 019 6607 | TR 2SC536K-E-NP | 1 | C165 | 403 008 5204 | CERAMIC 10P D 50V | 1 |
| or | 405 019 6706 | TR 2SC536K-F-NP | 1 | C166 | 403 008 5204 | CERAMIC 10P D 50V | 1 |
| Q224 | 405 006 6504 | TR 2SA984-E | 1 | C167 | 403 042 0302 | ELECT 10U M 16V | 1 |
| or | 405 006 6702 | TR 2SA984-F | 1 | C168 | 403 042 0302 | ELECT 10U M 16V | 1 |
| D101 | 407 008 0405 | DIODE GMB01-BT | 1 | C169 | 403 050 1209 | ELECT 2.2U M 50V | 1 |
| D102 | 407 008 0405 | DIODE GMB01-BT | 1 | C170 | 403 050 1209 | ELECT 2.2U M 50V | 1 |
| D103 | 407 005 3805 | DIODE DS442-BT | 1 | C171 | 403 049 1609 | ELECT 1U M 50V | 1 |
| D104 | 407 008 0405 | DIODE GMB01-BT | 1 | C172 | 403 022 5907 | CERAMIC 33P J 50V | 1 |
| D203 | 407 008 0405 | DIODE GMB01-BT | 1 | C173 | 403 022 5907 | CERAMIC 33P J 50V | 1 |
| D204 | 407 008 0405 | DIODE GMB01-BT | 1 | C174 | 403 047 9607 | ELECT 0.1U M 50V | 1 |
| D205 | 407 008 0405 | DIODE GMB01-BT | 1 | C175 | 403 049 1609 | ELECT 1U M 50V | 1 |
| D206 | 407 008 0405 | DIODE GMB01-BT | 1 | C176 | 403 049 1609 | ELECT 1U M 50V | 1 |
| D207 | 407 008 0405 | DIODE GMB01-BT | 1 | C177 | 403 042 0302 | ELECT 10U M 16V | 1 |
| D208 | 407 008 0405 | DIODE GMB01-BT | 1 | C178 | 403 042 3501 | ELECT 100U M 16V | 1 |
| D209 | 407 008 0405 | DIODE GMB01-BT | 1 | C179 | 403 069 8404 | CERAMIC 0.01U Z 50V | 1 |

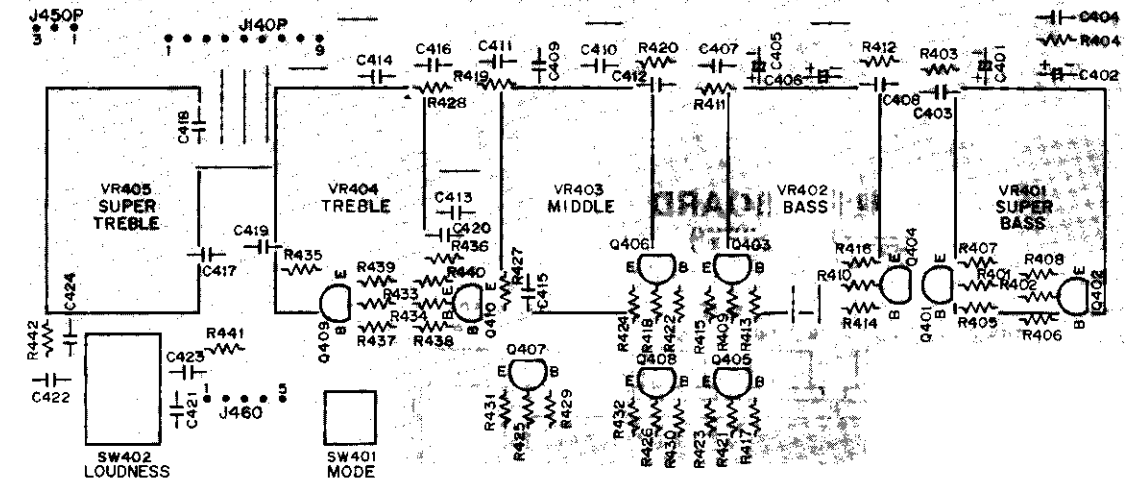
P.C.BOARD PARTS LIST (Continued)

| Ref. No. | Part No. | Description | Q'ty | Ref. No. | Part No. | Description | Q'ty | |
|----------|--------------|-------------|--------------|----------|----------|--------------|------------------------|---|
| C180 | 403 043 3104 | ELECT | 2200U M 16V | 1 | R141 | 401 024 7707 | CARBON 100K JA 1/6W | 1 |
| C201 | 403 050 1209 | ELECT | 2.2U M 50V | 1 | R142 | 401 024 7707 | CARBON 100K JA 1/6W | 1 |
| C202 | 403 050 1209 | ELECT | 2.2U M 50V | 1 | R143 | 401 024 7707 | CARBON 100K JA 1/6W | 1 |
| C205 | 403 018 8509 | CERAMIC | 220P K 50V | 1 | R144 | 401 024 7707 | CARBON 100K JA 1/6W | 1 |
| C206 | 403 018 8509 | CERAMIC | 220P K 50V | 1 | R147 | 401 026 1000 | CARBON 2.7K JA 1/6W | 1 |
| C215 | 403 018 8509 | CERAMIC | 220P K 50V | 1 | R148 | 401 026 1000 | CARBON 2.7K JA 1/6W | 1 |
| C216 | 403 018 8509 | CERAMIC | 220P K 50V | 1 | R149 | 401 025 7805 | CARBON 2.2K JA 1/6W | 1 |
| C217 | 403 039 2906 | ELECT | 47U M 6.3V | 1 | R150 | 401 025 7805 | CARBON 2.2K JA 1/6W | 1 |
| C218 | 403 039 2906 | ELECT | 47U M 6.3V | 1 | R151 | 401 026 9907 | CARBON 4.7K JA 1/6W | 1 |
| C219 | 403 012 9809 | CERAMIC | 15P K 50V | 1 | R152 | 401 026 9907 | CARBON 4.7K JA 1/6W | 1 |
| C220 | 403 012 9809 | CERAMIC | 15P K 50V | 1 | R153 | 401 016 2604 | CARBON 220 JA 1/4W | 1 |
| C221 | 403 121 0704 | ELECT | 100U M 63V | 1 | R154 | 401 016 2604 | CARBON 220 JA 1/4W | 1 |
| C222 | 403 121 0704 | ELECT | 100U M 63V | 1 | R155 | 401 016 2604 | CARBON 220 JA 1/4W | 1 |
| C223 | 403 062 0900 | POLYESTER | 0.047U K 50V | 1 | R156 | 401 016 2604 | CARBON 220 JA 1/4W | 1 |
| C224 | 403 062 0900 | POLYESTER | 0.047U K 50V | 1 | R157 | 401 016 2604 | CARBON 220 JA 1/4W | 1 |
| C225 | 403 072 2703 | CERAMIC | 0.022U Z 50V | 1 | R158 | 401 016 2604 | CARBON 220 JA 1/4W | 1 |
| C226 | 403 072 2703 | CERAMIC | 0.022U Z 50V | 1 | R159 | 401 016 2604 | CARBON 220 JA 1/4W | 1 |
| C227 | 403 072 2703 | CERAMIC | 0.022U Z 50V | 1 | R160 | 401 016 2604 | CARBON 220 JA 1/4W | 1 |
| C228 | 403 072 2703 | CERAMIC | 0.022U Z 50V | 1 | R161 | 401 024 7400 | CARBON 10K JA 1/6W | 1 |
| C229 | 403 074 2701 | CERAMIC | 0.047U Z 50V | 1 | R163 | 401 024 7004 | CARBON 1K JA 1/6W | 1 |
| C230 | 403 074 2701 | CERAMIC | 0.047U Z 50V | 1 | R164 | 401 024 7004 | CARBON 1K JA 1/6W | 1 |
| C231 | 403 039 2906 | ELECT | 47U M 6.3V | 1 | R165 | 401 012 5708 | CARBON 1K JA 1/4W | 1 |
| C234 | 403 039 4504 | ELECT | 470U M 6.3V | 1 | R166 | 401 012 5708 | CARBON 1K JA 1/4W | 1 |
| C235 | 403 054 5807 | ELECT | 10U M 100V | 1 | R167 | 401 012 5708 | CARBON 1K JA 1/4W | 1 |
| C236 | 403 044 0201 | ELECT | 47U M 16V | 1 | R168 | 401 024 7004 | CARBON 1K JA 1/6W | 1 |
| C237 | 403 044 0201 | ELECT | 47U M 16V | 1 | R169 | 401 024 7400 | CARBON 10K JA 1/6W | 1 |
| C238 | 403 042 3600 | ELECT | 100U M 16V | 1 | R170 | 401 012 7009 | CARBON 10K JA 1/4W | 1 |
| C239 | 403 047 1502 | ELECT | 4.7U M 25V | 1 | R171 | 401 012 7009 | CARBON 10K JA 1/4W | 1 |
| C240 | 403 047 4206 | ELECT | 47U M 25V | 1 | R172 | 401 024 7400 | CARBON 10K JA 1/6W | 1 |
| C241 | 403 047 4206 | ELECT | 47U M 25V | 1 | R173 | 401 012 3407 | CARBON 10 JA 1/4W | 1 |
| C242 | 403 047 1502 | ELECT | 4.7U M 25V | 1 | R174 | 401 024 7004 | CARBON 1K JA 1/6W | 1 |
| C244 | 403 039 4504 | ELECT | 470U M 6.3V | 1 | R175 | 401 024 6700 | CARBON 100 JA 1/6W | 1 |
| C245 | 403 042 6205 | ELECT | 1000U M 16V | 1 | R176 | 401 021 4105 | CARBON 56K JA 1/4W | 1 |
| C247 | 620 006 6877 | Capacitor | 4700MF 55V | 1 | R177 | 401 025 4606 | CARBON 18K JA 1/6W | 1 |
| C248 | 620 006 6877 | Capacitor | 4700MF 55V | 1 | R178 | 401 024 7400 | CARBON 10K JA 1/6W | 1 |
| C249 | 404 012 7000 | CERAMIC | 0.01U P 500V | 1 | R179 | 401 027 0507 | CARBON 470K JA 1/6W | 1 |
| C253 | 620 006 6679 | Capacitor | 0.01MF400V | 1 | R180 | 401 024 7400 | CARBON 10K JA 1/6W | 1 |
| C254 | 403 074 2701 | CERAMIC | 0.047U Z 50V | 1 | R181 | 401 027 9005 | CARBON 82K JA 1/6W | 1 |
| C302 | 403 038 2303 | ELECT | 100U M 6.3V | 1 | R182 | 401 026 7408 | CARBON 39K JA 1/6W | 1 |
| R101 | 401 025 7805 | CARBON | 2.2K JA 1/6W | 1 | R201 | 401 024 7004 | CARBON 1K JA 1/6W | 1 |
| R102 | 401 025 7805 | CARBON | 2.2K JA 1/6W | 1 | R202 | 401 024 7004 | CARBON 1K JA 1/6W | 1 |
| R103 | 401 024 7707 | CARBON | 100K JA 1/6W | 1 | R205 | 401 021 3009 | CARBON 5.6K JA 1/4W | 1 |
| R104 | 401 024 7707 | CARBON | 100K JA 1/6W | 1 | R206 | 401 027 2600 | CARBON 5.6K JA 1/6W | 1 |
| R105 | 401 024 7707 | CARBON | 100K JA 1/6W | 1 | R215 | 401 025 1902 | CARBON 15K JA 1/6W | 1 |
| R106 | 401 024 7707 | CARBON | 100K JA 1/6W | 1 | R216 | 401 025 1902 | CARBON 15K JA 1/6W | 1 |
| R107 | 401 026 0607 | CARBON | 270 JA 1/6W | 1 | R217 | 401 027 5908 | CARBON 68K JA 1/6W | 1 |
| R108 | 401 026 0607 | CARBON | 270 JA 1/6W | 1 | R218 | 401 027 5908 | CARBON 68K JA 1/6W | 1 |
| R109 | 401 025 8703 | CARBON | 220K JA 1/6W | 1 | R219 | 401 026 6609 | CARBON 390 JA 1/6W | 1 |
| R110 | 401 025 8703 | CARBON | 220K JA 1/6W | 1 | R220 | 401 026 6609 | CARBON 390 JA 1/6W | 1 |
| R111 | 401 025 1902 | CARBON | 15K JA 1/6W | 1 | R221 | 401 027 5908 | CARBON 68K JA 1/6W | 1 |
| R112 | 401 025 1902 | CARBON | 15K JA 1/6W | 1 | R222 | 401 027 5908 | CARBON 68K JA 1/6W | 1 |
| R113 | 401 024 7707 | CARBON | 100K JA 1/6W | 1 | R223 | 401 015 6504 | CARBON 2.2 JA 1/4W | 1 |
| R114 | 401 024 7707 | CARBON | 100K JA 1/6W | 1 | R224 | 401 015 6504 | CARBON 2.2 JA 1/4W | 1 |
| R115 | 401 012 5708 | CARBON | 1K JA 1/4W | 1 | R225 | 401 015 6504 | CARBON 2.2 JA 1/4W | 1 |
| R116 | 401 012 5708 | CARBON | 1K JA 1/4W | 1 | R226 | 401 015 6504 | CARBON 2.2 JA 1/4W | 1 |
| R117 | 401 024 7004 | CARBON | 1K JA 1/6W | 1 | R227 | 620 004 4967 | Cement 0.47X2 J | 1 |
| R118 | 401 024 7004 | CARBON | 1K JA 1/6W | 1 | R228 | 620 004 4967 | Cement 0.47X2 J | 1 |
| R119 | 401 024 7004 | CARBON | 1K JA 1/6W | 1 | R231 | 401 018 2800 | CARBON 330 JA 1/4W | 1 |
| R120 | 401 024 7004 | CARBON | 1K JA 1/6W | 1 | R232 | 401 018 2800 | CARBON 330 JA 1/4W | 1 |
| R121 | 401 024 7004 | CARBON | 1K JA 1/6W | 1 | R233 | 401 018 2800 | CARBON 330 JA 1/4W | 1 |
| R122 | 401 024 7004 | CARBON | 1K JA 1/6W | 1 | R234 | 401 018 2800 | CARBON 330 JA 1/4W | 1 |
| R123 | 401 024 7004 | CARBON | 1K JA 1/6W | 1 | R235 | 401 024 7004 | CARBON 1K JA 1/6W | 1 |
| R124 | 401 024 7004 | CARBON | 1K JA 1/6W | 1 | R236 | 401 024 7004 | CARBON 1K JA 1/6W | 1 |
| R125 | 401 024 7004 | CARBON | 1K JA 1/6W | 1 | R237 | 401 024 7004 | CARBON 1K JA 1/6W | 1 |
| R126 | 401 024 7004 | CARBON | 1K JA 1/6W | 1 | R238 | 401 024 7004 | CARBON 1K JA 1/6W | 1 |
| R127 | 401 024 7004 | CARBON | 1K JA 1/6W | 1 | R239 | 401 020 2003 | CARBON 4.7K JA 1/4W | 1 |
| R128 | 401 024 7004 | CARBON | 1K JA 1/6W | 1 | R240 | 401 020 2003 | CARBON 4.7K JA 1/4W | 1 |
| R129 | 401 024 7707 | CARBON | 100K JA 1/6W | 1 | R241 | 401 020 8401 | CARBON 5.1K JA 1/4W | 1 |
| R130 | 401 024 7707 | CARBON | 100K JA 1/6W | 1 | R242 | 401 020 8401 | CARBON 5.1K JA 1/4W | 1 |
| R131 | 401 024 7707 | CARBON | 100K JA 1/6W | 1 | R247 | 401 019 3004 | CARBON 39K JA 1/4W | 1 |
| R132 | 401 024 7707 | CARBON | 100K JA 1/6W | 1 | R248 | 401 019 3004 | CARBON 39K JA 1/4W | 1 |
| R133 | 401 026 9907 | CARBON | 4.7K JA 1/6W | 1 | R249 | 401 019 6203 | CARBON 4.7 JA 1/4W | 1 |
| R134 | 401 026 9907 | CARBON | 4.7K JA 1/6W | 1 | R250 | 401 019 6203 | CARBON 4.7 JA 1/4W | 1 |
| R135 | 401 024 7707 | CARBON | 100K JA 1/6W | 1 | R251 | 401 054 7500 | OXIDE-MT 10 JB 1/2W | 1 |
| R136 | 401 024 7707 | CARBON | 100K JA 1/6W | 1 | R252 | 401 054 7500 | OXIDE-MT 10 JB 1/2W | 1 |
| R137 | 401 024 7004 | CARBON | 1K JA 1/6W | 1 | R253 | 401 027 3003 | CARBON 56K JA 1/6W | 1 |
| R138 | 401 024 7004 | CARBON | 1K JA 1/6W | 1 | R254 | 401 027 3003 | CARBON 56K JA 1/6W | 1 |
| R139 | 401 024 7004 | CARBON | 1K JA 1/6W | 1 | R256 | 401 024 9701 | CARBON 12K JA 1/6W | 1 |
| R140 | 401 024 7004 | CARBON | 1K JA 1/6W | 1 | R257 | 402 039 3203 | FUSIBLE RES 33 JA 1/4W | 1 |

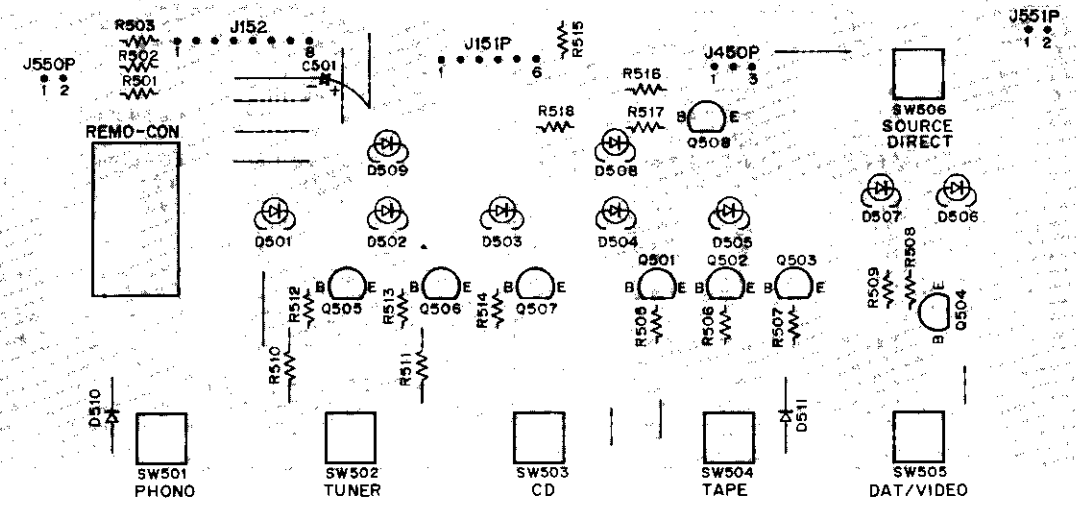
P.C.BOARD PARTS LIST (Continued)

GRAPHIC EQUALIZER P.C.BOARD
(BOTTOM VIEW)

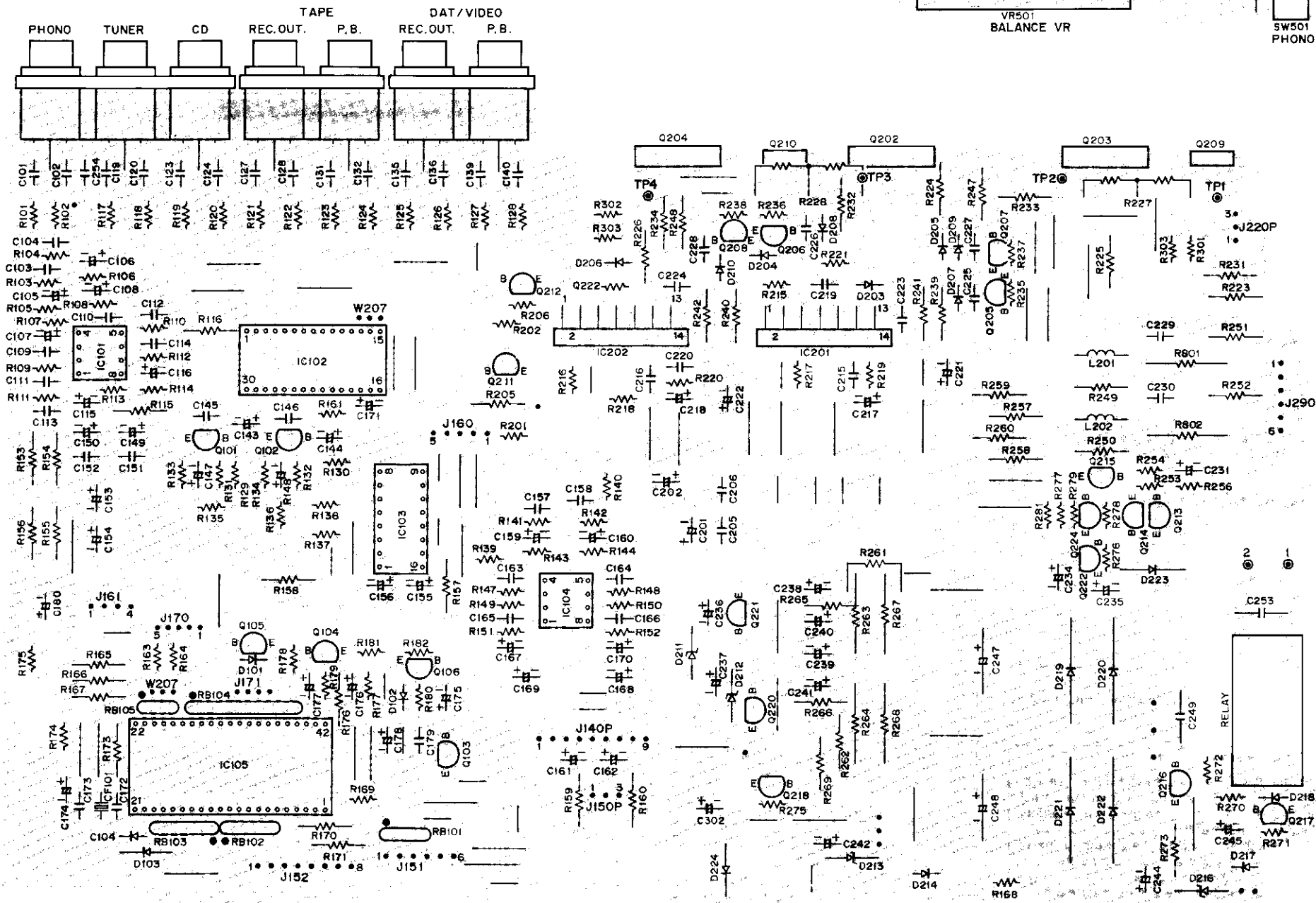
| Ref. No. | Part No. | Description | Q'ty | Ref. No. | Part No. | Description | Q'ty |
|-------------------------------------|--------------|------------------------------|------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------|------------------------------|------|
| R408 | 401 024 7400 | CARBON 10K JA 1/6W | 1 | 620 017 7177 | Socket 2P | 1 | |
| R409 | 401 026 6609 | CARBON 390 JA 1/6W | 1 | 423 005 0507 | FUSE 250V 1A | 2 | |
| R410 | 401 026 6609 | CARBON 390 JA 1/6W | 1 | OUTLET P.C.B. ASSY | | | |
| R411 | 401 028 0001 | CARBON 910 JA 1/6W | 1 | 69 | 620 190 5878 | Outlet P.C.B. Assy | 1 |
| R412 | 401 028 0001 | CARBON 910 JA 1/6W | 1 | 620 017 2721 | Fuse Clip | 2 | |
| R413 | 401 024 7707 | CARBON 100K JA 1/6W | 1 | 620 022 2587 | EC Terminal 1P | 2 | |
| R414 | 401 024 7707 | CARBON 100K JA 1/6W | 1 | 620 031 4763 | Wire Wrap Terminal | 2 | |
| R415 | 401 024 7400 | CARBON 10K JA 1/6W | 1 | 423 006 4702 | FUSE 250V 2.5A | 1 | |
| R416 | 401 024 7400 | CARBON 10K JA 1/6W | 1 | MAIN TRANS P.C.B. ASSY | | | |
| R417 | 401 026 6609 | CARBON 390 JA 1/6W | 1 | 70 | 620 190 5885 | Main Trans P.C.B. Assy | 1 |
| R418 | 401 026 6609 | CARBON 390 JA 1/6W | 1 | 620 017 2721 | Fuse Clip | 4 | |
| R419 | 401 024 9305 | CARBON 1.2K JA 1/6W | 1 | 620 031 4763 | Wire Wrap Terminal | 3 | |
| R420 | 401 024 9305 | CARBON 1.2K JA 1/6W | 1 | 423 007 2103 | FUSE 250V 4A | 2 | |
| R421 | 401 027 0309 | CARBON 47K JA 1/6W | 1 | SUB TRANS-1 P.C.B. ASSY | | | |
| R422 | 401 027 0309 | CARBON 47K JA 1/6W | 1 | 71 | 620 190 5892 | Sub Trans-1 P.C.B. Assy | 1 |
| R423 | 401 024 7400 | CARBON 10K JA 1/6W | 1 | 620 190 5175 | Sub Trans-1 P.C.B. | 1 | |
| R424 | 401 024 7400 | CARBON 10K JA 1/6W | 1 | SUB TRANS-2 P.C.B. ASSY | | | |
| R425 | 401 026 6609 | CARBON 390 JA 1/6W | 1 | 72 | 620 190 5908 | Sub Trans-2 P.C.B. Assy | 1 |
| R426 | 401 026 6609 | CARBON 390 JA 1/6W | 1 | 620 190 5182 | Sub Trans-2 P.C.B. | 1 | |
| R427 | 401 024 8407 | CARBON 1.1K JA 1/6W | 1 | POWER TRANSISTOR P.C.B. ASSY | | | |
| R428 | 401 024 8407 | CARBON 1.1K JA 1/6W | 1 | 73 | 620 190 5915 | Power Transistor P.C.B. Assy | 1 |
| R429 | 401 026 7408 | CARBON 39K JA 1/6W | 1 | J220 | 620 055 3803 | Jumper | 1 |
| R430 | 401 026 7408 | CARBON 39K JA 1/6W | 1 | Q201 | 405 022 1606 | TR 2SD1289-Q | 1 |
| R431 | 401 024 7400 | CARBON 10K JA 1/6W | 1 | or | 405 080 6100 | TR 2SD1289-R | 1 |
| R432 | 401 024 7400 | CARBON 10K JA 1/6W | 1 | or | 405 080 7800 | TR 2SC3181N-O | 1 |
| R433 | 401 026 6609 | CARBON 390 JA 1/6W | 1 | or | 405 080 7909 | TR 2SC3181N-R | 1 |
| R434 | 401 026 6609 | CARBON 390 JA 1/6W | 1 | REGURATOR P.C.B. ASSY | | | |
| R435 | 401 024 8407 | CARBON 1.1K JA 1/6W | 1 | 74 | 620 191 2289 | Regurator P.C.B. Assy | 1 |
| R436 | 401 024 8407 | CARBON 1.1K JA 1/6W | 1 | J221 | 620 055 3100 | Jumper | 1 |
| R437 | 401 026 1307 | CARBON 27K JA 1/6W | 1 | Q219 | 405 035 7206 | TR 2SD1913-S | 1 |
| R438 | 401 026 1307 | CARBON 27K JA 1/6W | 1 | or | 405 035 7107 | TR 2SD1913-R | 1 |
| R439 | 401 024 7400 | CARBON 10K JA 1/6W | 1 | REMOCON TERMINAL P.C.B. ASSY | | | |
| R440 | 401 024 7400 | CARBON 10K JA 1/6W | 1 | 75 | 620 190 5922 | Remocon Terminal P.C.B. Assy | 1 |
| R441 | 401 026 1000 | CARBON 2.7K JA 1/6W | 1 | CN701 | 620 021 5947 | Plug 5P | 1 |
| R442 | 401 026 1000 | CARBON 2.7K JA 1/6W | 1 | CN702 | 620 021 5930 | Plug 4P | 1 |
| MOTOR VOLUME P.C.B. ASSY | | | | J170 | 620 185 1267 | Jumper | 1 |
| 64 | 620 190 5823 | Motor Volume P.C.B. Assy | 1 | J171 | 620 185 1274 | Jumper | 1 |
| J160 | 620 055 2493 | Jumper | 1 | R701 | 401 024 7004 | CARBON 1K JA 1/6W | 1 |
| J161 | 620 055 2615 | Jumper | 1 | R702 | 401 024 7004 | CARBON 1K JA 1/6W | 1 |
| J460 | 620 055 2851 | Jumper | 1 | R703 | 401 024 7004 | CARBON 1K JA 1/6W | 1 |
| VR601 | 620 190 5007 | Motor VR 50K15AMX2 | 1 | R704 | 401 024 7004 | CARBON 1K JA 1/6W | 1 |
| IC601 | 409 114 4803 | IC LB1641 | 1 | VOLUME IND. P.C.B. ASSY | | | |
| D601 | 407 050 3706 | ZENER DIODE GZA4.7Y-BT | 1 | 76 | 620 190 5939 | Volume IND. P.C.B. Assy | 1 |
| C601 | 403 069 4000 | CERAMIC 1000P Z 50V | 1 | 620 185 2820 | Reflector | 1 | |
| C602 | 403 038 4505 | ELECT 1000U M 6.3V | 1 | D513 | 407 062 7204 | LED SEL2213C | 1 |
| C603 | 403 074 2701 | CERAMIC 0.047U Z 50V | 1 | POWER IND. P.C.B. ASSY | | | |
| R601 | 401 012 3407 | CARBON 10 JA 1/4W | 1 | 77 | 620 190 5946 | Power IND. P.C.B. Assy | 1 |
| SPEAKER TERMINAL P.C.B. ASSY | | | | J551 | 620 055 3247 | Jumper | 1 |
| 65 | 620 190 5830 | Speaker Terminal P.C.B. Assy | 1 | D512 | 407 108 6000 | LED SLP-644B-41 | 1 |
| | 620 022 4956 | 8P Push Terminal | 1 | NOTES: | | | |
| | 620 020 5894 | Connector 1P Assy | 1 | 1. | Parts order must contain Model Number, Part Number and Description. | | |
| C801 | 403 069 1504 | CERAMIC 1000P K 50V | 1 | 2. | Ordering quantity of screws and resistors must be multiple of 10 pcs. | | |
| C802 | 403 069 1504 | CERAMIC 1000P K 50V | 1 | PRODUCT SAFETY NOTICE | | | |
| C803 | 403 069 1504 | CERAMIC 1000P K 50V | 1 | Each precaution in this manual should be followed during servicing. Components identified with the IEC symbol Δ in the parts list and the schematic diagram designate components in which safety can be of special significance. When replacing a component identified with Δ , use only the replacement parts designated, or parts with the same ratings of resistance, wattage or voltage that are designated in the parts list in this manual. Leakage-current or resistance measurements must be made to determine that exposed parts are acceptably insulated from the supply circuit before returning the product to the customer. | | | |
| C804 | 403 069 1504 | CERAMIC 1000P K 50V | 1 | | | | |
| C805 | 403 069 4000 | CERAMIC 1000P Z 50V | 1 | | | | |
| C806 | 403 069 4000 | CERAMIC 1000P Z 50V | 1 | | | | |
| SPEAKER SWITCH P.C.B. ASSY | | | | | | | |
| 66 | 620 190 5847 | Speaker Switch P.C.B. Assy | 1 | | | | |
| J991 | 620 055 3124 | Jumper | 1 | | | | |
| S801 | 620 016 5815 | Switch Push 1 Key | 1 | | | | |
| PHONES JACK P.C.B. ASSY | | | | | | | |
| 67 | 620 190 5854 | Phones Jack P.C.B. Assy | 1 | | | | |
| | 620 190 5557 | Jack 7P | 1 | | | | |
| J290 | 620 055 3124 | Jumper | 1 | | | | |
| J990 | 620 055 2523 | Jumper | 1 | | | | |
| R803 | 401 055 0005 | OXIDE 120 JB 1/2W | 1 | | | | |
| R804 | 401 055 0005 | OXIDE 120 JB 1/2W | 1 | | | | |
| POWER SUPPLY P.C.B. ASSY | | | | | | | |
| 68 | 620 190 5861 | Power Supply P.C.B. Assy | 1 | | | | |
| | 620 017 2721 | Fuse Clip | 4 | | | | |
| | 620 017 7153 | Socket 2P | 1 | | | | |
| | 620 017 7160 | Socket 2P | 1 | | | | |



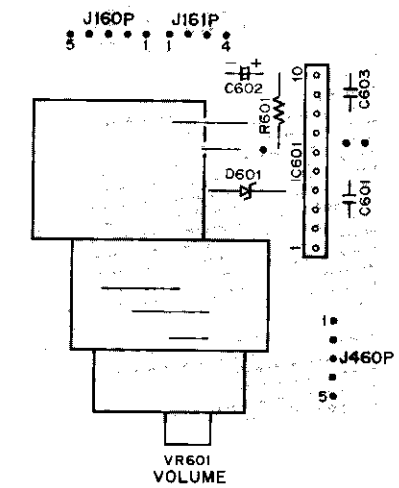
**FUNCTION SWITCH P.C. BOARD
(BOTTOM VIEW)**



**MAIN P.C. BOARD
(BOTTOM VIEW)**

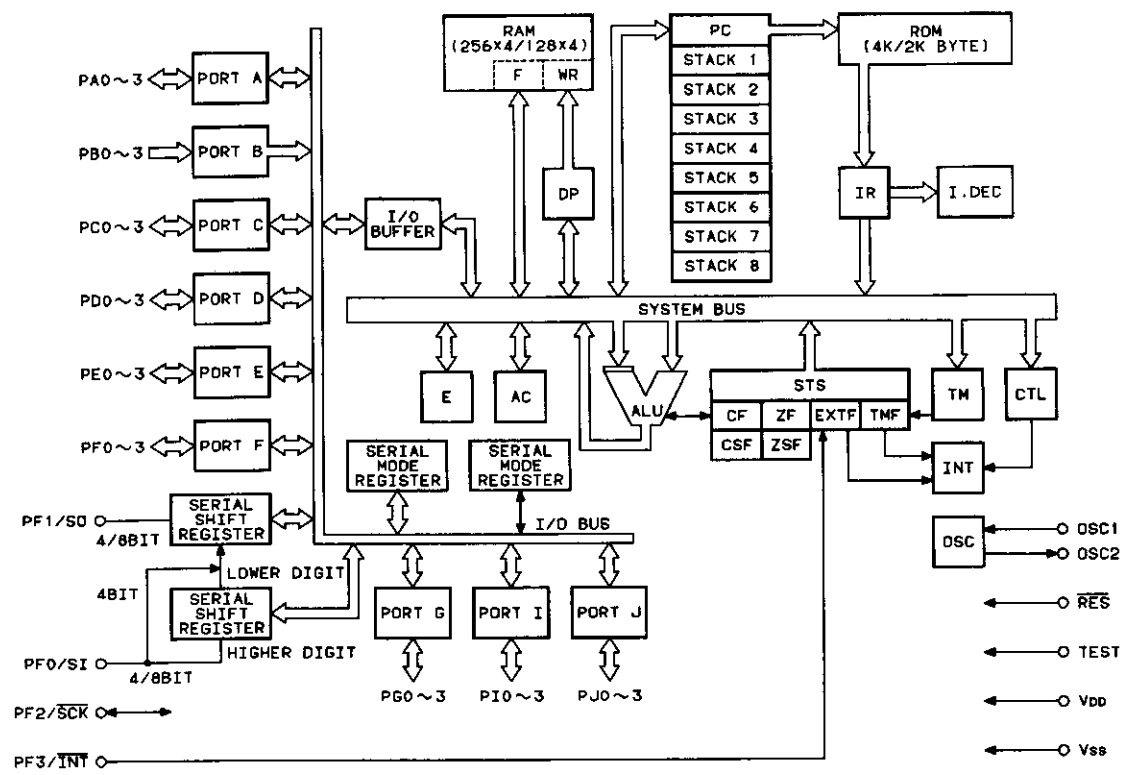


**MOTOR VOLUME P.C. BOARD
(BOTTOM VIEW)**

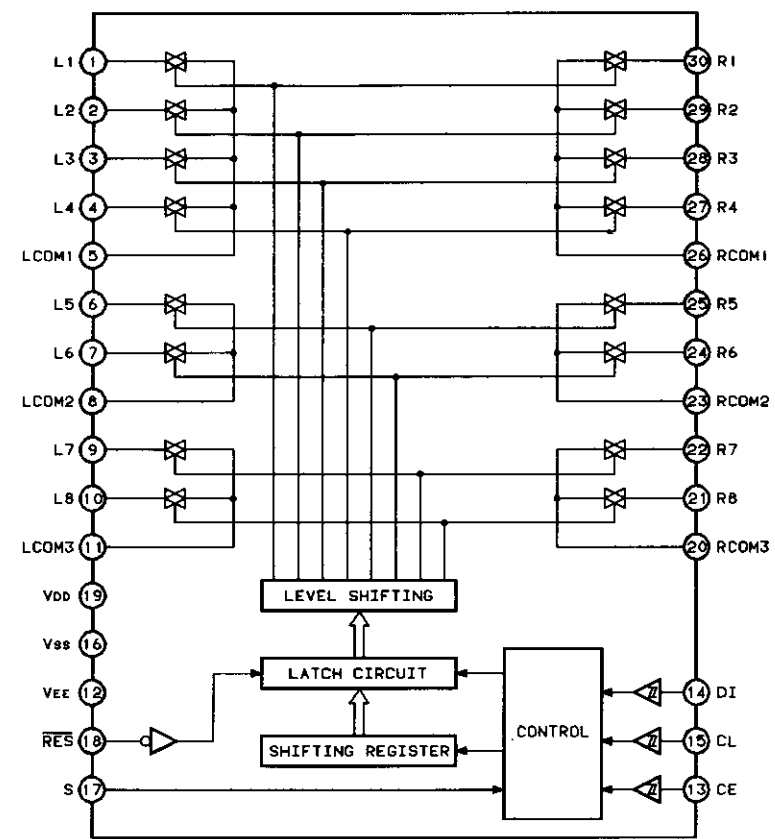


INTEGRATED CIRCUIT BLOCK DIAGRAM

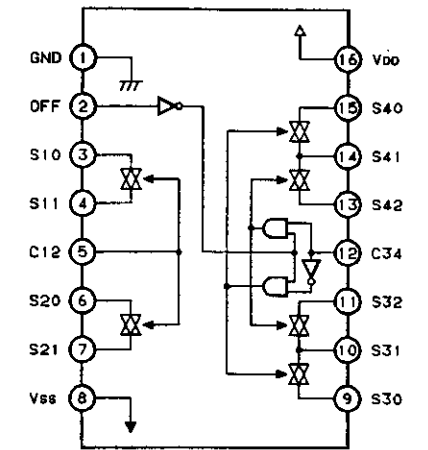
LC6522H BLOCK DIAGRAM



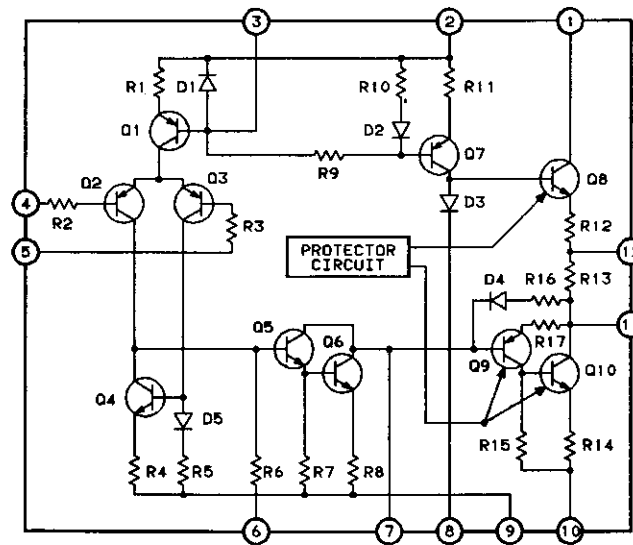
LC7821 BLOCK DIAGRAM



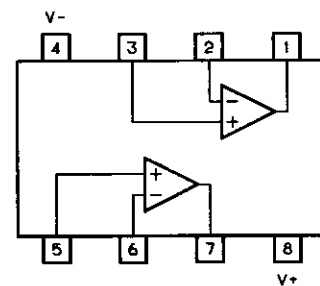
TC9215 BLOCK DIAGRAM



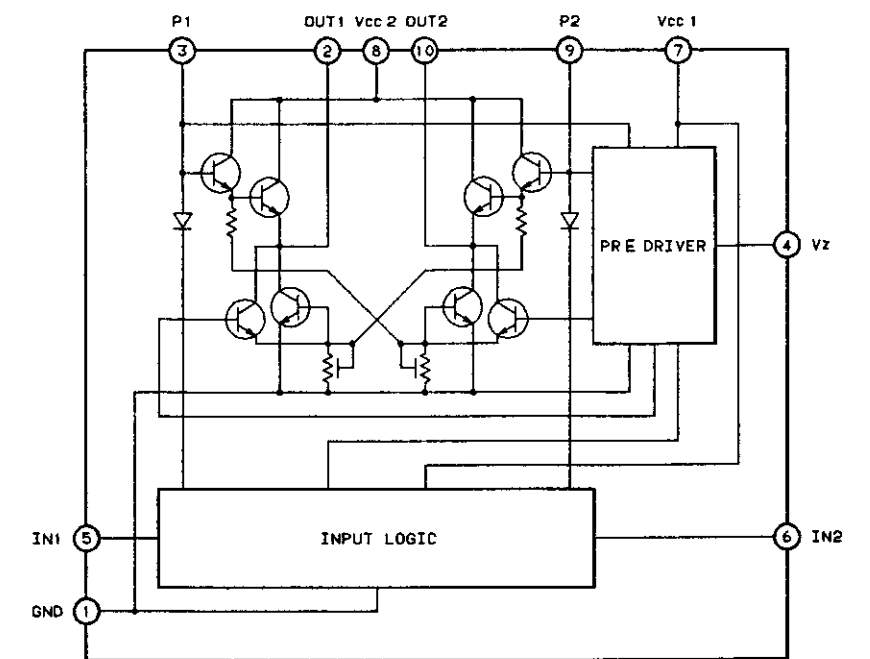
μPC1298V BLOCK DIAGRAM



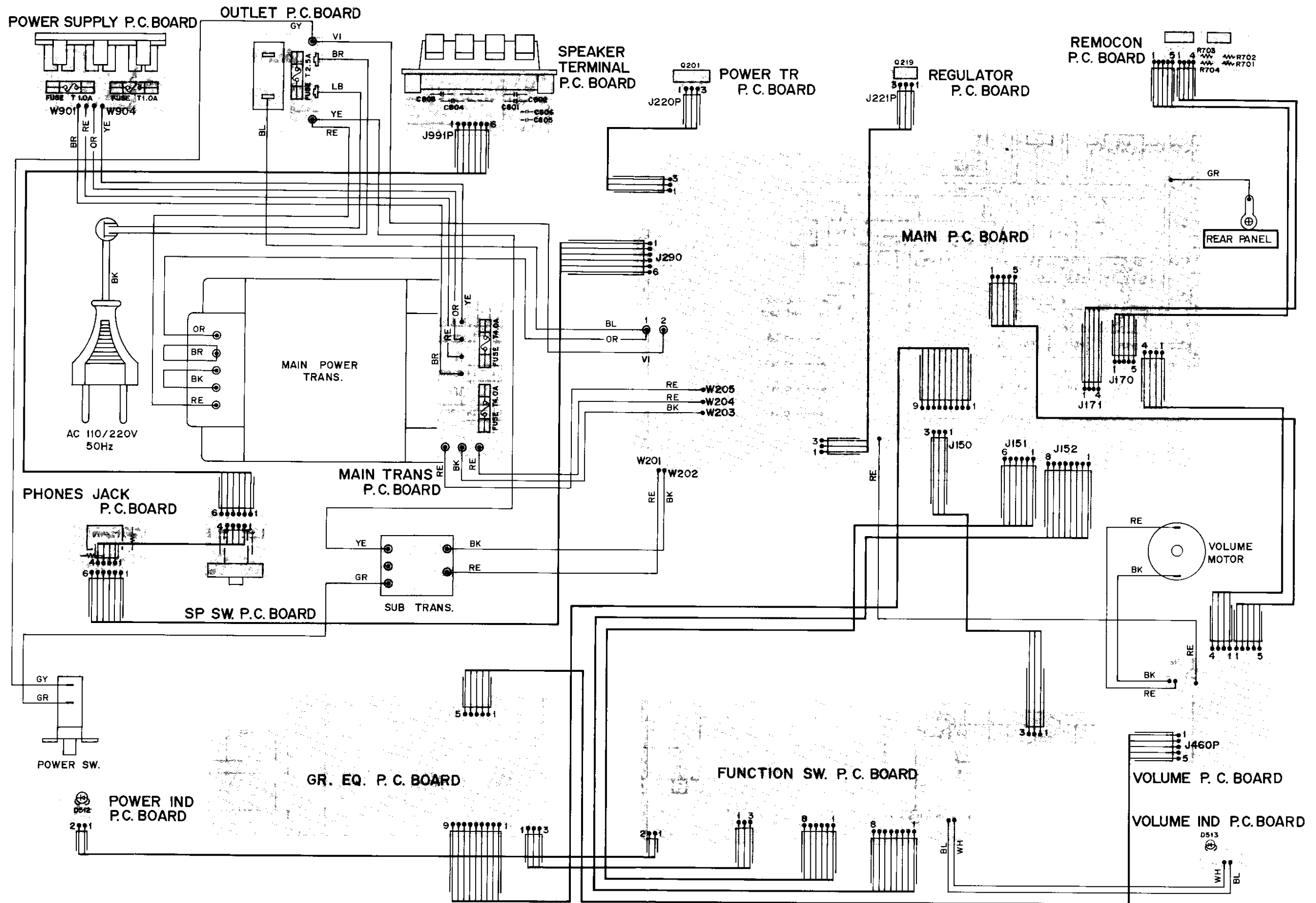
μPC4570C BLOCK DIAGRAM



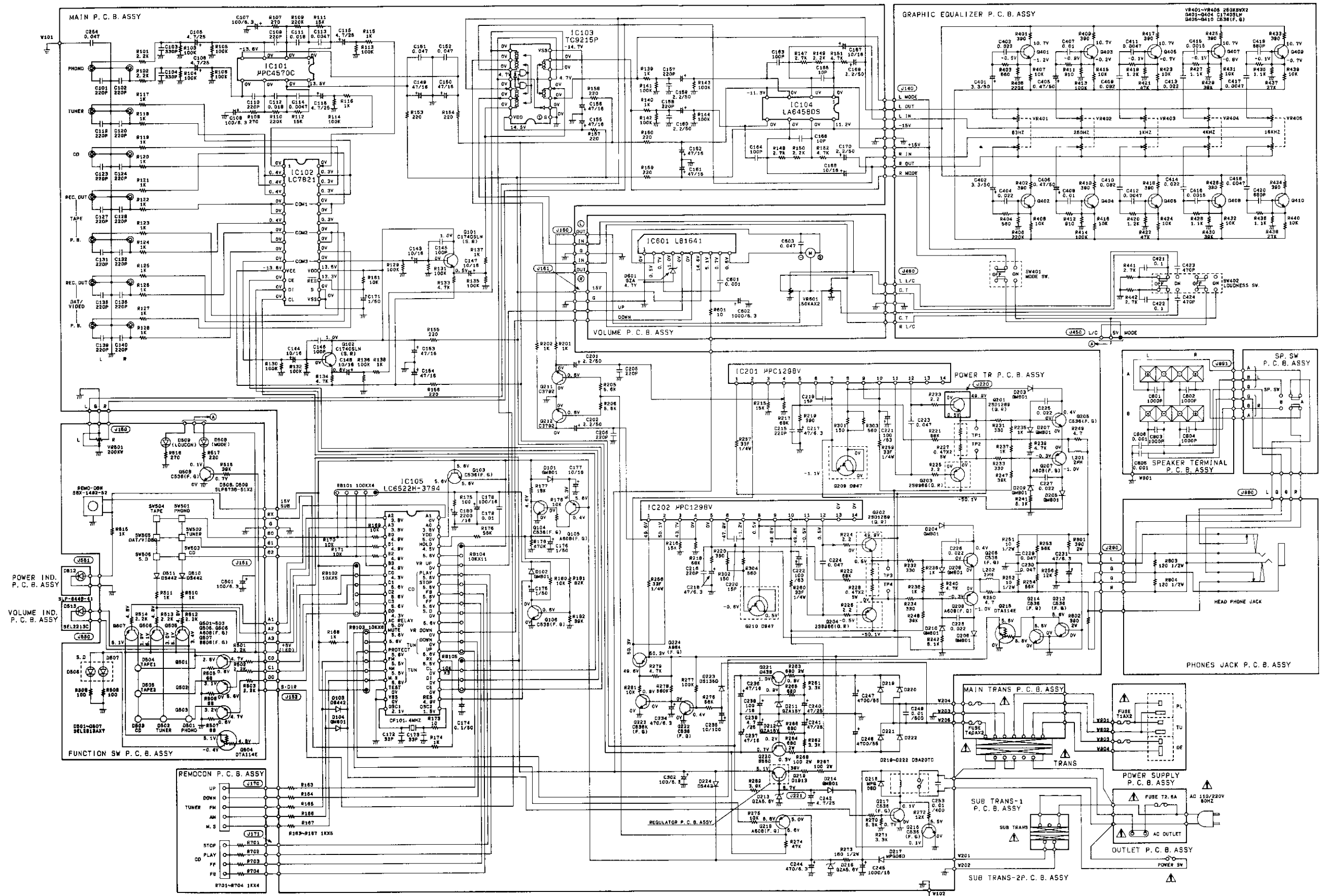
LB1641 BLOCK DIAGRAM



POINT TO POINT WIRING DIAGRAM



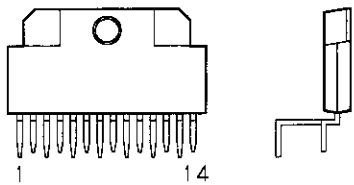
SCHEMATIC DIAGRAM



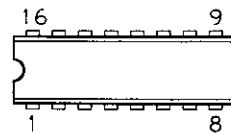
IC & TRANSISTOR LEAD IDENTIFICATION

| TRANSISTOR | FRONT VIEW | BOTTOM VIEW | TRANSISTOR | FRONT VIEW | BOTTOM VIEW |
|--------------------------------------------------|------------|-------------|--------------------|------------|-------------|
| 2SA608 2SA984 2SC1740 2SC3792 2SC536 | | | 2SB560 2SD438 | | |
| DTA114 2SA608 2SB808 2SC1740 2SC536 | | | 2SD947 | | |
| 2SD1913 | | | 2SA1264 2SC3181 | | |
| 2SB966 2SD1289 | | | | | |
| TERMINAL NAME | | | | | |
| B → BASE C → COLLECTOR E → EMITTER | | | | | |

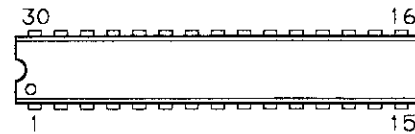
UPC1298V FRONT/SIDE VIEWS



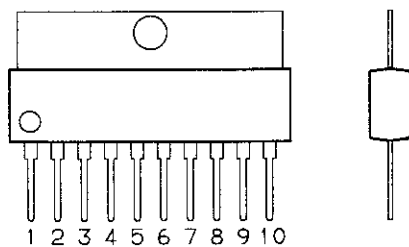
TC9215P TOP VIEW



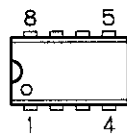
LC7821 TOP VIEW



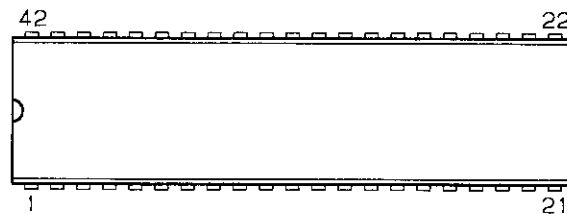
LB1641 FRONT/SIDE VIEWS



UPC4570C TOP VIEW



LC6522H-3794 TOP VIEW



Bezeichnung/Description
SERVICE MANUAL Menge/Quantity 1
 Teile-Nr./Parts No.
 WM22785 LS-Nr.
 Lagerort 31C01 617496 / 24
 FISHER-HiFi Europa Vertriebs-GmbH



FISHER Hi-Fi Europa Vertriebs GmbH

Stahlgruberring 4 Tel: 089/420 45-0
 8000 München 82 Tlx: 524033

Technisches Labor/ Durchwahl -120/121
 Qualitätskontrolle

Funkstörmeßlabor -127/128

Service-Zentrale
 Color TV -166
 Hi-Fi/Audio -168
 Video -172
 Autoradio -170
 Ersatzteillager -155/156
 Techn. Schulung -174

Weitere Service-Zentralen in BRD (keine Ersatzteilbestellungen)

| | | | | | |
|-------------------------|--------------------------------------------|---------------------------------------|-----------------------------------------|--------------------------------------------------------------|----------------------------------------|
| Offenbach/ Frankfurt | Frankfurter Straße 121 6050 Offenbach | Tel: 069/88 80 45/48 Tlx: 4 12 558 | Hamburg | Spaldingstraße 1 2000 Hamburg | Tel: 040/23 12 23/24 Tlx: 2 173 839 |
| Military | Frankfurter Straße 121 6050 Offenbach | Tel: 069/88 80 45/48 Tlx: 4 12 558 | Ditzingen | Max-Eyth-Straße 11 7257 Ditzingen | Tel: 07156/50 88 Tlx: 7 245 278 |
| Düsseldorf-Erkrath | Albert-Einstein-Straße 8 4006 Erkrath 1 | Tel: 0211/200 05-0 Tlx: 8 588 563 | Berlin (Fisher Vertragswerkstatt) | Drewitz & Kaulbach Eisenacher Straße 53 1000 Berlin 62 | Tel: 030/781 20 01 Tlx: 186 460 |

Unser FISHER-Team steht Ihnen jederzeit gerne zur Verfügung. Ersatzteilbestellungen wickeln Sie bitte ausschließlich mit unserer Service-Zentrale München ab.
 Senden Sie uns im Garantiefall die ausgefüllte Garantiekarte ein. Bei unverkauften Lagergeräten des Fachhandels gilt als Garantienachweis eine eidesstattliche Versicherung mit eingetragener Modellbezeichnung und Geräte-Nummer oder ein Liefernachweis. Die gleiche Regelung besteht auch für Reparaturaufträge.
 Bitte geben Sie unbedingt die Ersatzteil-Nummer und die Modellbezeichnung an.
 Sie sparen so wertvolle Zeit. Vielen Dank.