

CARVER

THE CARVER RECEIVER 900 SERVICE MANUAL

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SPECIFICATIONS

PRE-AMPLIFIER & AMPLIFIER

| | |
|---|-------------------------------------|
| Minimum Audio Output Power at no more than 0.15% | : 90 watts per channel |
| Total Harmonic Distortion into 8 ohms, over the audio spectrum 20 - 20,000 Hz | : (RMS power, both channels driven) |
| Frequency Response (20 - 20,000 Hz) | : Flat |
| IM Distortion | : 0.05% |
| Gain: PHONO | : 35 dB |
| AMPLIFIER | : 26 dB |
| TUNER, VIDEO | : 17 dB |
| TAPE IN 1, 2 | : 17 dB |
| Tone Control Action BASS (100 Hz) | : ± 8 dB |
| TREBLE (10 kHz) | : ± 8 dB |
| Signal-to-Noise Ratio PHONO | : 82 dB |
| AUX and TAPE IN 1, 2 | : 90 dB |
| TAPE OUT 1, 2 Level | : 140mV |
| FM TUNER | |
| Sensitivity (IHF) | : 1.8 μ V |
| Sensitivity for 50 dB Quieting Mono, Stereo | : 3.1 μ V, 5.0 μ V |
| Limiting Sensitivity (- 3 dB) | : 1.5 μ V |
| Signal-to-Noise Ratio (1mV) | : 74 dB |
| Image Rejection | : 82 dB |
| IF Rejection | : 80 dB |
| Capture Ratio | : 1.0 dB |
| Harmonic Distortion Mono | : 0.15% |
| Stereo | : 0.2% |
| AM Suppression | : 80 dB |
| Stereo Separation (1 kHz) | : 40 dB |
| AM TUNER | |
| Sensitivity Terminal Radiated | : 20 μ V |
| Radiated | : 250 μ V/m for 20 dB S/N |
| Distortion (5mV/M) | : .9% |
| Selectivity | : 42 dB |
| Image Rejection | : 45 dB |
| IF Rejection | : 34 dB |
| AGC Figure of Merit | : 50 dB |

ANTENNAS

AM: Loop Antenna

FM: Dipole antenna

Plus terminals for external antennas.

POWER REQUIREMENTS

120V AC, 60 Hz (350 watts max.)

SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE

ALIGNMENT PROCEDURES

Amplifier

| Step | Set Condition | Output Indicator Connection (+/-) | Adjustment | Adjust for |
|---------------|--|---|--------------------------|------------|
| IDLING | | | | |
| 1 | Volume Control . . . MINIMUM Speaker Load . . . 8 ohm dummy Input . . . No signal Preheat . . . 2 minutes | DC digital volt meter Lch: TP1(J502)/TP2(R635) Rch: TP3(J512)/TP4(R636) | Lch: VR501 Rch: VR502 | 5.3 ± 1mV |

Tuner (AM)

Condition

1. Tuning method: LOCK LED, ON
2. Modulation: 400Hz, 30%
3. TAPE OUT load: A 100kΩ resistor shunted by a 1000pF capacitor
4. Generator output: IRE Loop antenna 24" (60cm) spacing or through IHF dummy.
5. CH. STEP switch (SW317): US position
6. NOISE + MULTIPATH switch: ON position
7. Preheat: More than 1 minute

| Step | Signal, Sweep Generator | | Reception Frequency | Output Indicator Connection | Adjustment | Adjust for |
|---------------------------|------------------------------------|-------------------------|---------------------------|---|--------------------|---------------------------------|
| | Connection | Frequency | | | | |
| TUNING VOLTAGE | | | | | | |
| 1 | No signal | | 520kHz | DC digital volt meter | T103 | 1.55 ± 0.1V |
| 2 | | | 1710kHz | TP001 | TC102 | 24.2 ± 0.1V |
| IF | | | | | | |
| 3 | TP5 TP101 | 450kHz | Point of non-interference | IF sweep generator TP102 (through a 1μF cap.) | T104 T105 | Maximum output (Double peak) |
| TRACKING | | | | | | |
| 4 | To ant. terminal through IHF dummy | 600kHz | 600kHz | VTVM | T100 T102 | Maximum output |
| 5 | | 1400kHz | 1400kHz | TAPE OUT jacks | TC101-1 TC101-2 | |
| 6 | Repeat steps (4) and (5). | | | | | |
| SIGNAL LEVEL METER | | | | | | |
| 6 | Same as step (4) | 1000kHz (Input 75dB) | 1000kHz | SIGNAL STRENGTH METER | SVR101 | Full light up |

Tuner (FM)

Condition

1. Tuning method: LOCK LED, ON
2. Generator: Mono Mod. 1kHz, 75kHz dev.
Stereo Mod. 1kHz, 67.5kHz+6.75kHz dev.
3. TAPE OUT load: A 100kΩ resistor shunted by a 1000pF capacitor
4. Input level: 60dB (1mV)
5. CH. STEP switch (SW317): US position
6. De-Emphasis switch (SW101): 75μs position
7. NOISE + MULTIPATH switch: ON position
8. Preheat: More than 1 minute

| Step | Signal, Sweep Generator | | Reception Frequency | Output Indicator Connection | Adjustment | Adjust for |
|--------------------------------|--|--|---------------------|--|-------------------------------------|---|
| | Connection | Frequency | | | | |
| TUNING VOLTAGE | | | | | | |
| 1 | No signal | | 87.50MHz | DC digital volt meter | OSC-L (Front-end) | 2.85 ± 0.1V |
| 2 | | | 108.00MHz | TP001 | Check | 21.0 ± 1.0V |
| IF | | | | | | |
| 3 | To 300 ohm antenna terminal through a matching dummy | 98.00MHz (INPUT 7 ~ 9dB) | 98.00MHz | VTVM TAPE OUT jacks | IFT (Front-end) | Maximum output or minimum THD |
| 4 | | 98.00MHz (INPUT 60dB) | 98.00MHz | DC digital volt meter TP001 ~ TP002 | T001 (PRI) | Less than 1mV |
| 5 | | | | Distortion Meter TAPE OUT jacks | T001 (SEC) | Less than 0.18% |
| TRACKING | | | | | | |
| 6 | Same as step (3) | 98.00MHz | 98.00MHz | Same as step (3) | ANT-L (Front-end) RF1-L RF2-L | Maximum output or Minimum THD |
| PLL REFERENCE FREQUENCY | | | | | | |
| 7 | Set the AUTO INDICATOR to the OFF position. | | | | | |
| 8 | Same as step (3) | 98.00MHz (Input 7 ~ 9dB) | 98.00MHz | Same as step (5) | TC301 | Minimum THD |
| MUTING LEVEL | | | | | | |
| 9 | Set the AUTO INDICATOR to the ON position. | | | | | |
| 10 | Same as step (3) | 98.00MHz (Input 29dB) | 98.00MHz | Same as step (3) | SVR002 | Until output is developed |
| SIGNAL LEVEL METER | | | | | | |
| 11 | Same as step (3) | 98.00MHz (Input 80dB) | 98.00MHz | SIGNAL STRENGTH METER | SVR001 | Full light up |
| 19kHz PILOT SIGNAL | | | | | | |
| 12 | Set the AUTO INDICATOR to the ON position. | | | | | |
| 13 | No signal | | 98.00MHz | Frequency counter TP051-TP052 | SVR052 | 19.00+0.01kHz |
| SEPARATION | | | | | | |
| 14 | Same as step (3) | 98.00MHz Mod: Rch only 98.00MHz Mod: Lch only | 98.00MHz | Same as step (3) | SVR051 | Minimum output, same separation in both channel |

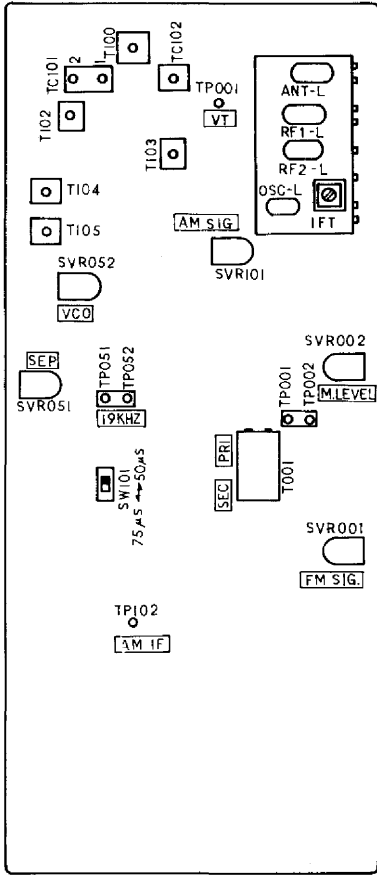
Noise Reduction

Unless otherwise stated the NR buttons are NOT engaged.

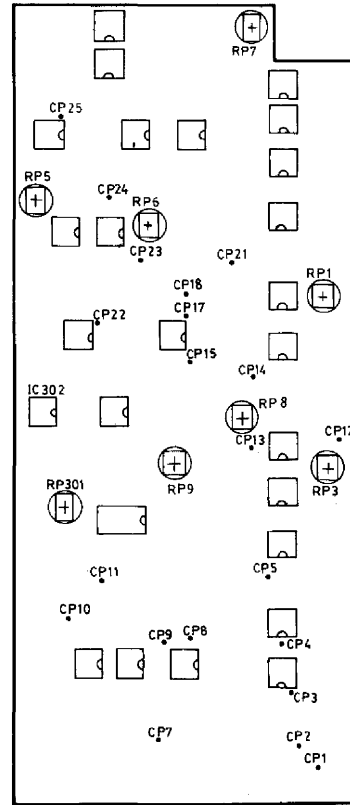
| STEP | INPUT SIGNAL | TEST POINT | REMARKS |
|---|---|--|---|
| ANTI ALIASING FILTER | | | |
| 1 | Both audio inputs driven | IC17 pin 1 (CP17) | Ground junction of C15/R29 (CP18). Measure test point for Fc of 8kHz \pm 1kHz. |
| LEADING EDGE DETECTOR | | | |
| 2 | 800Hz, 100% modulation left or right channel only. | IC16 pin 1 (CP22) | Check for $-10V_{dc} \pm 1.0V$ |
| 3 | 800Hz, 100% modulation left or right channel only. | IC18 pin 1 (CP24) | Adjust RP5 for minimum DC offset. |
| 4 | 800Hz, 110% modulation left or right channel as required. | IC1 pin 1 (right) (CP3) IC1 pin 7 (left) (CP4) | Adjust RP6 for best separation and left to right balance. |
| DELAY IC | | | |
| 5 | Both audio inputs driven 150% modulation at 400Hz. | Junction of R312/R313 or (CP11) | Increase audio input level and adjust RP301 for symmetrical clipping. Less than 1V. |
| 6 | Both audio inputs driven, 400Hz, 0.5V RMS. | A: IC17 pin 7 (CP15) B: Junction of R312/R313 or (CP11) | The output level at point A should be within 1.5 DB of test point B \pm 1 DB. |
| HIGH PASS FILTER | | | |
| 7 | Both audio inputs driven, 0.5V RMS | IC13 pin 1 (CP9) | Short junction of C15/R29 (CP18) to ground. Fc is 2.6 kHz referenced to 5 kHz. |
| LOW PASS FILTER | | | |
| 8 | Both audio inputs driven, 0.5V RMS. | IC14 pin 1 (CP8) | Short C15/R29 (CP18) to ground. Fc is 2.6 kHz referenced to 1 kHz |
| NOTE: HIGH PASS AND LOW PASS FILTERS MUST BE WITHIN 1 kHz AT Fc. TYPICAL MATCH SHOULD BE WITHIN 500 Hz. | | | |
| CLOCK FILTER | | | |
| 9 | Signal input to junction of R76/C48 (CP7) | IC12 pin 1 (CP10) | Fc should be 16 kHz |
| COMPRESSOR/EXPANDER | | | |
| 10 | Both audio inputs driven 800 Hz, 0.5V RMS | A: IC18 pin 7 (CP23) B: IC3 pin 7 (CP5) | Tracking between test point A and test point B adjust RP9 for \pm 1 DB. Tracking between test point A and test point B should be within 2.5 DB as the input signal is reduced 50 DB in 10 DB steps. Adjust RP9 to correct tracking error at -30 DB. |
| L-R/L+R LOG CIRCUIT | | | |
| 11 | Both CH Driven 400 Hz, 0.5V RMS | IC7 pin 7 (CP21) | Voltage Should be $-13V \pm 1$ |
| 12 | | | Reduce the Input Level of the Left or Right CH 5 DB and Adjust RP1 for -4 Volts \pm 100mV |
| 13 | Left or Right CH Only 400 Hz 0.5V | IC7 pin 7 (CP21) | Voltage Should be -1 to $-1.5V \pm 0.5V$ |
| L TO R LOG CIRCUIT | | | |
| 14 | Both Audio Inputs Driven 800Hz, 0.5V RMS | IC19 pin 1 (CP25) | Adjust RP7 for $0V \pm 10mV$ |
| 15 | | A: Left Audio Out (CP2) B: Right Audio Out (CP1) | Reduce the Input Level to the Left Channel. The Left Ch Mute FET, Should Switch On When the Left Input is Down 28 DB \pm 3 DB. Repeat for Right Ch and Trim RP7 to Obtain Proper Balance |
| 16 | Left or Right Ch Driven 800Hz, 0.5V RMS | IC5 pin 7 (CP13) | Check Test Point for Zero Audio Output When Only One Ch is Driven |
| AGC AMPLIFIER | | | |
| 17 | Both Inputs Driven 600 Hz | IC5 pin 7 (CP13) | 1. Note the Output Level at the Test Point. 2. Reduce the Left or Right Drive Signal 20 DB. 3. Compare the level to Step 1 and adjust RP8 for 14 ± 1 DB. |
| SPECTRAL SHAPE AMPLIFIER | | | |
| 18 | Signal Side of R162 (CP14) | IC5 pin 1 (CP12) | Check Response Against That Listed Below \pm 1.5dB: 20 Hz -4.6 DB 30 Hz -1.6 DB 40 Hz -0.2 DB 80 Hz $+1.6$ DB 100 Hz $+1.7$ DB 150 Hz $+1.4$ DB 200 Hz $+1.0$ DB 400 Hz 0 Reference 1 kHz -0.6 DB 1.5 kHz $+0.1$ DB 2.5 kHz $+2.2$ DB 4 kHz $+5$ DB 8 kHz $+9$ DB 10 kHz $+10.1$ DB |
| OUTPUT EQUALIZATION | | | |
| 19 | Left or Right Audio Input | A: Left Audio Output B: Right Audio Output | MR Button MUST Be Engaged, Check Output Eq for $+0.8$ DB at 10kHz; 0DB at 1kHz; $+0.9$ DB at 20Hz \pm 0.5DB. |
| CLOCK FREQUENCY | | | |
| 20 | None | IC302 Pins 2 and 4 | Clock Frequency is 20 kHz \pm 1 kHz. |
| CLOCK GATING | | | |
| 21 | None | IC302 Pin 2 or 4 | Check to See the Clock is Operating ONLY When Receiver is in the FM Mode. |
| NOISE MEASUREMENT | | | |
| 22 | None | Audio Outputs | Less than 500 μ V Excluding residual clock components. Less than 800 μ V noise and clock noise. |

ALIGNMENT POINTS

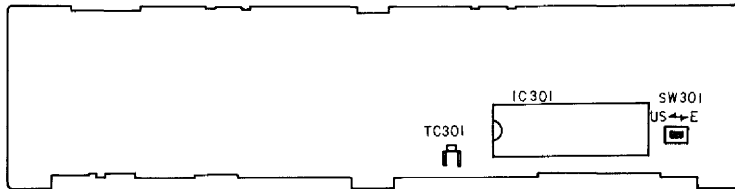
Tuner P.C. Board TIM-609



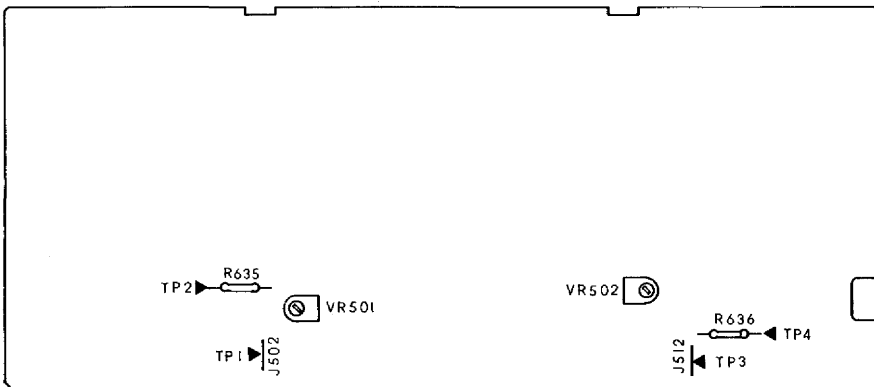
Noise Reduction P.C. Board CNR-572D

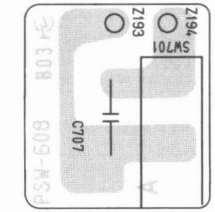
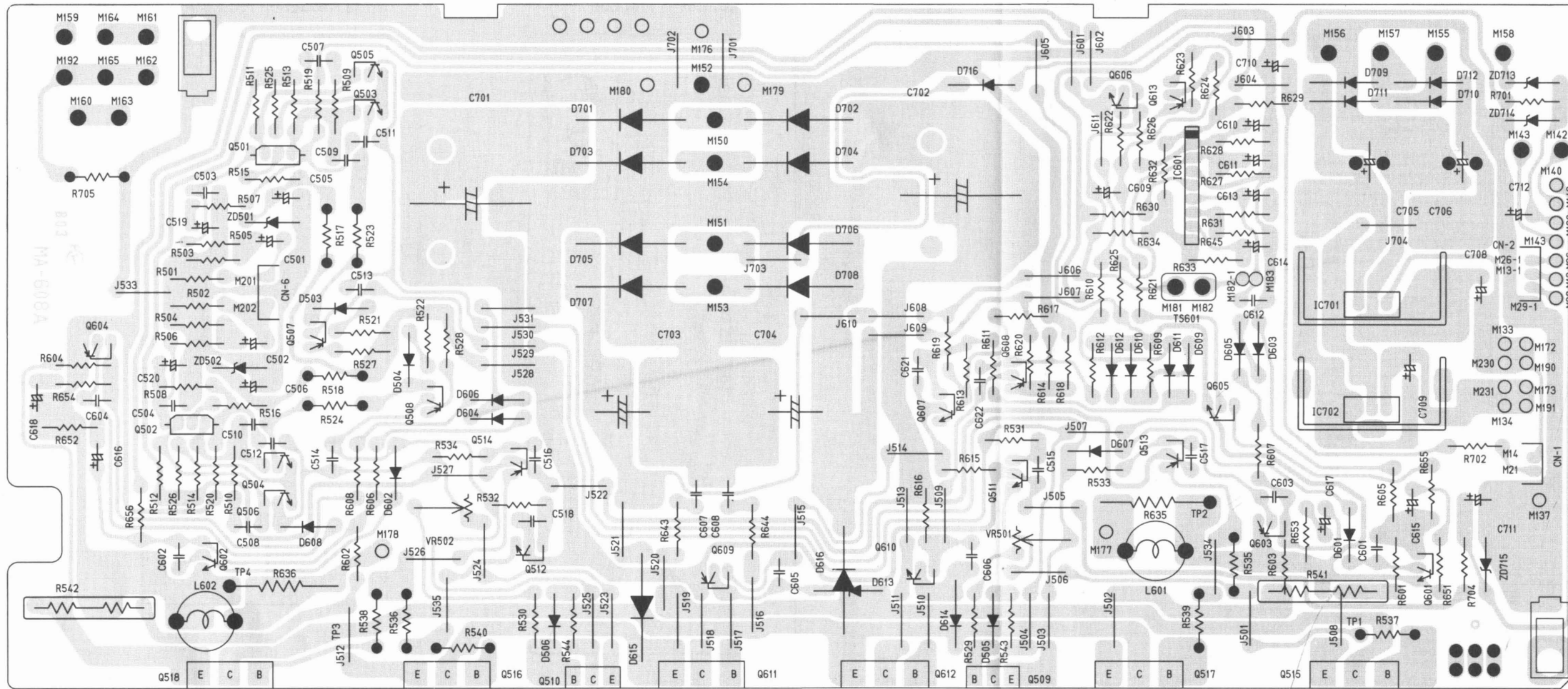


PLL P.C. Board PLL-552



Main Amp P.C. Board MA-608B

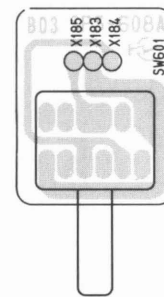
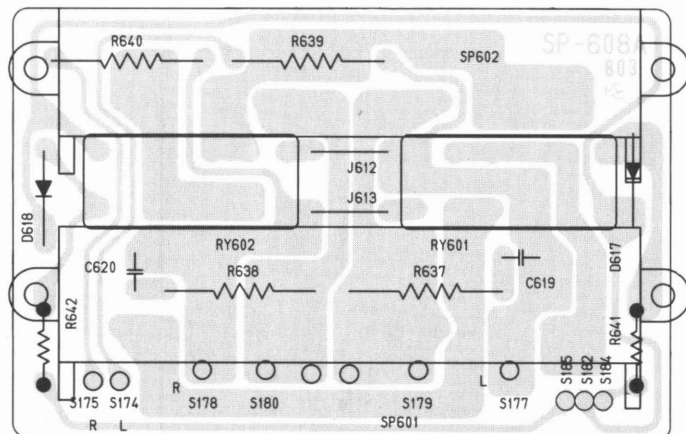




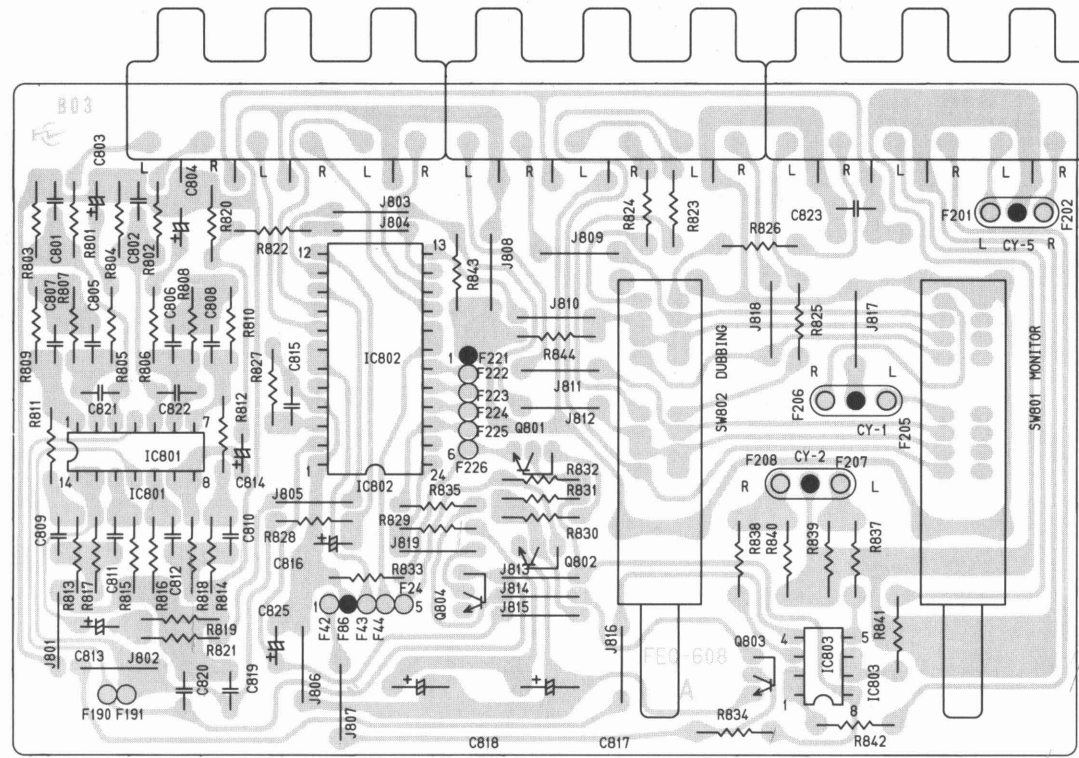
SP-608B Speaker Terminal P.C. Board

SPS-608B Speaker Selector P.C. Board

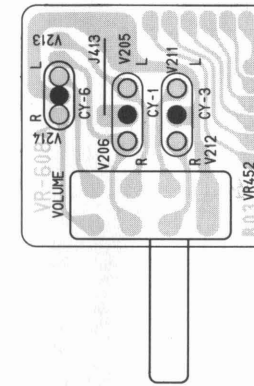
HP-608B Headphone Jack P.C. Board



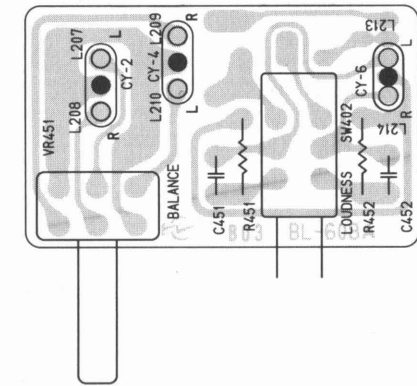
FEQ-608B Function and EQ P.C. Board



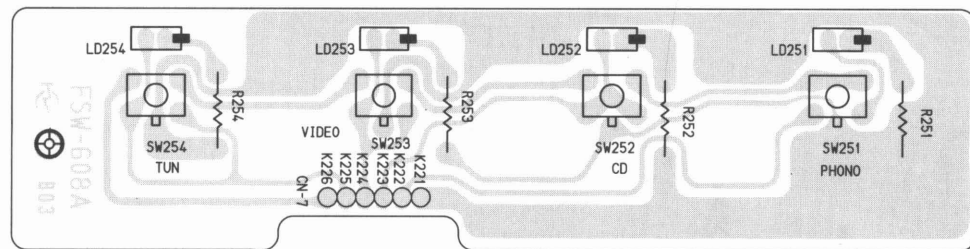
VR-608B Volume Control P.C. Board



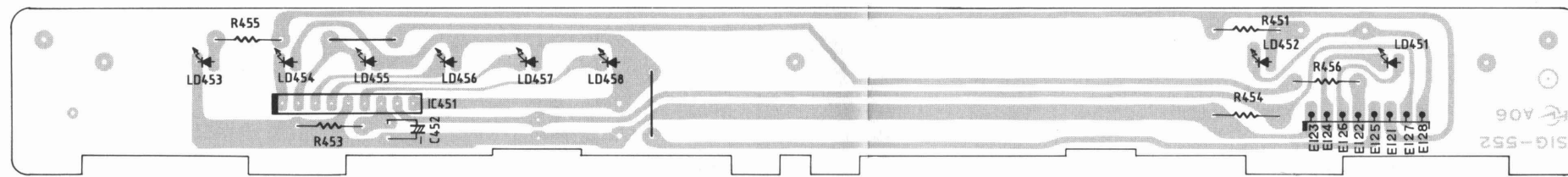
BL-608B Balance Control and Loudness Switch P.C. Board



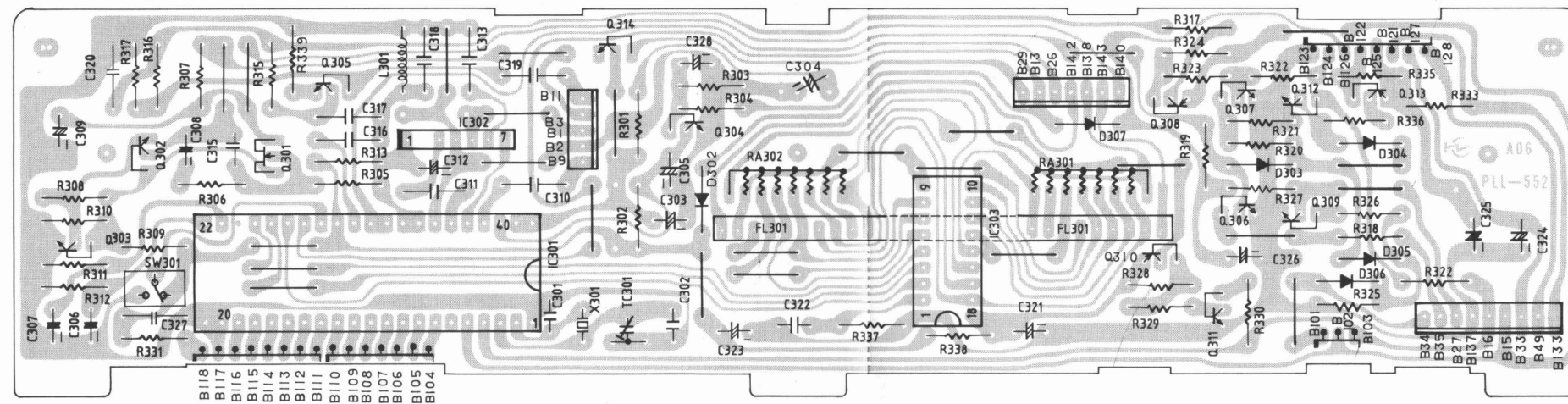
FSW-608B Source Selector P.C. Board



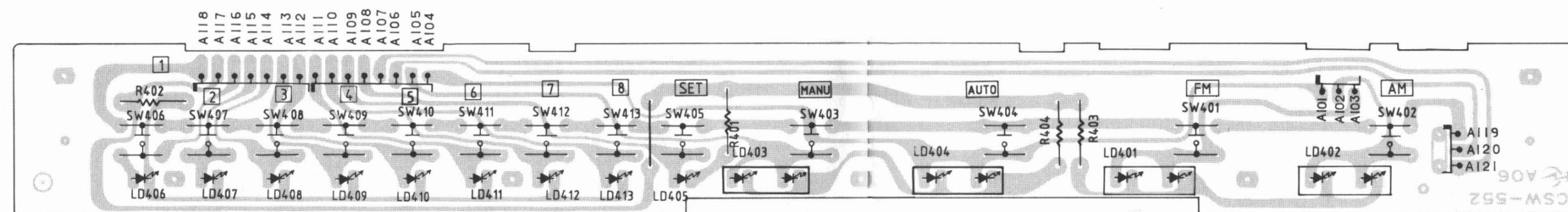
SIG-552 Signal Strength Meter P.C. Board



PLL-552 PLL P.C. Board



CSW-552 Tuner Function Switch P.C. Board



PARTS LISTS

1. BL-608B P.C. Board Assembly

| Ref. No | Q'ty | Carver Part No. | Supplier Part No. | Description |
|-------------------|------|-----------------|-------------------|---------------------------|
| Capacitors | | | | |
| C451,452 | 2 | | ECQV1H104JZ | Metallized Film Capacitor |
| Resistors | | | | |
| R451,452 | 2 | | KA25ST153J | Carbon Resistor |
| VR451 | 1 | | EWJ-KTA337BC5 | Variable Resistor |
| Switches | | | | |
| SW403 | 1 | | SW-1100159 | Push Switch |

2. CNR-527D P.C. Board Assembly

| Ref. No | Q'ty | Carver Part No. | Supplier Part No. | Description |
|-----------------------|------|-----------------|-------------------|-----------------------------|
| Semiconductors | | | | |
| ND001~026 | 26 | | 1S1588 | Diode |
| ND030 | 1 | | 1S1588 | Diode |
| ND032~043 | 12 | | 1S1588 | Diode |
| ND055,056 | 2 | | 1S1588 | Diode |
| ND057 | 1 | | 1N4004 | Diode |
| ND060 | 1 | | 1S1588 | Diode |
| ND070~072 | 3 | | 1S1588 | Diode |
| ND073~076 | 4 | | ZD50-062 | Zener Diode, 1/2W, 6.2V |
| NQ001~003 | 3 | | 2SC1815-Y,GR | Transistor |
| NQ004 | 1 | | 2SA1015-Y,GR | Transistor |
| NQ005~007 | 3 | | 2SK381-D | Transistor |
| NQ301~303 | 3 | | 2SC1815-Y,GR | Transistor |
| NIC001~023 | 23 | | M5218P | IC |
| | | | or NJM4560D | IC |
| NIC024 | 1 | | LM3080N | IC |
| NIC301 | 1 | | MN3010 | IC |
| NIC302 | 1 | | MN3101 | IC |
| Capacitors | | | | |
| NC003 | 1 | | MY-50VU823K | Mylar Capacitor |
| NC004 | 1 | | MY-50VU102K | Mylar Capacitor |
| NC005,006 | 2 | | LL-16TW4R7M | Low Leak. Electrolytic Cap. |
| NC007,008 | 2 | | HE50SJSJL101K | Ceramic Capacitor |
| NC009 | 1 | | MY-50VU823K | Mylar Capacitor |
| NC010 | 1 | | MY-50VU102K | Mylar Capacitor |
| NC011,012 | 2 | | LL-16TW4R7M | Low Leak. Electrolytic Cap. |
| NC015 | 1 | | MY-50VU222K | Mylar Capacitor |
| NC016 | 1 | | MY-50VU103K | Mylar Capacitor |
| NC017 | 1 | | HE95SJSJL561K | Ceramic Capacitor |
| NC018 | 1 | | MY-50VU392K | Mylar Capacitor |
| NC019 | 1 | | LL-16TW100M | Low Leak. Electrolytic Cap. |
| NC030 | 1 | | HE50SJSJL101K | Ceramic Capacitor |
| NC031 | 1 | | LL-16TW4R7M | Low Leak. Electrolytic Cap. |
| NC032 | 1 | | MY-50VU683K | Mylar Capacitor |
| NC040 | 1 | | LL-16TW4R7M | Low Leak. Electrolytic Cap. |
| NC041 | 1 | | MY-50VU123K | Mylar Capacitor |
| NC042 | 1 | | MY-50VU333K | Mylar Capacitor |
| NC043 | 1 | | MY-50VU223K | Mylar Capacitor |
| NC044 | 1 | | MY-50VU822K | Mylar Capacitor |
| NC045~047 | 3 | | MY-50VU332K | Mylar Capacitor |
| NC048 | 1 | | MY-50VU272K | Mylar Capacitor |
| NC049 | 1 | | MY-50VU182K | Mylar Capacitor |
| NC050 | 1 | | MY-50VU472K | Mylar Capacitor |
| NC051 | 1 | | HE11SJSJL681K | Ceramic Capacitor |
| NC052 | 1 | | MY-50VU472K | Mylar Capacitor |
| NC053 | 1 | | HE11SJSJL681K | Ceramic Capacitor |
| NC054 | 1 | | MY-50VU122K | Mylar Capacitor |
| NC055 | 1 | | MY-50VU222K | Mylar Capacitor |
| NC056 | 1 | | MY-50VU683K | Mylar Capacitor |
| NC057 | 1 | | LL-16TW100M | Low Leak. Electrolytic Cap. |
| NC058 | 1 | | LL-16TW4R7M | Low Leak. Electrolytic Cap. |
| NC061 | 1 | | MY-50VU223K | Mylar Capacitor |
| NC062 | 1 | | ECQV05224JZ | Metallized Film Capacitor |
| NC063,064 | 2 | | MY-50VU104K | Mylar Capacitor |
| NC065 | 1 | | LL-16TW4R7M | Low Leak. Electrolytic Cap. |
| NC066 | 1 | | HE50SJSJL121K | Ceramic Capacitor |

2. CNR-527D P.C. Board Assembly (cont'd)

| Ref. No | Q'ty | Carver Part No. | Supplier Part No. | Description |
|------------------|------|-----------------|-------------------|-----------------------------|
| NC067~069 | 3 | | LL-16TW4R7M | Low Leak. Electrolytic Cap. |
| NC070 | 1 | | HE50SJSJL121K | Ceramic Capacitor |
| NC071 | 1 | | HE50SJSJL101K | Ceramic Capacitor |
| NC072,073 | 2 | | LL-16TW4R7M | Low Leak. Electrolytic Cap. |
| NC074 | 1 | | LL-16TW100M | Low Leak. Electrolytic Cap. |
| NC075 | 1 | | MY-50VU124K | Mylar Capacitor |
| NC078 | 1 | | MY-50VU473K | Mylar Capacitor |
| NC079 | 1 | | MY-50VU123K | Mylar Capacitor |
| NC080 | 1 | | MY-50VU682K | Mylar Capacitor |
| NC084 | 1 | | HE95SJSJL561K | Ceramic Capacitor |
| NC085 | 1 | | MY-50VU393K | Mylar Capacitor |
| NC086 | 1 | | LL-16TW220M | Low Leak. Electrolytic Cap. |
| NC087 | 1 | | MY-50VU102K | Mylar Capacitor |
| NC088 | 1 | | HE11SJSJL751K | Ceramic Capacitor |
| NC089 | 1 | | MY-50VU393K | Mylar Capacitor |
| NC090 | 1 | | LL-16TW220M | Low Leak. Electrolytic Cap. |
| NC091 | 1 | | MY-50VU102K | Mylar Capacitor |
| NC104 | 1 | | MY-50VU182K | Mylar Capacitor |
| NC107 | 1 | | LL-16TW100M | Low Leak. Electrolytic Cap. |
| NC111,112 | 2 | | NS-16TW331M | Electrolytic Capacitor |
| NC113~120 | 8 | | NS-50TW2R2M | Electrolytic Capacitor |
| NC150,151 | 2 | | MY-50VU104K | Mylar Capacitor |
| NC302 | 1 | | NS-25TW470M | Electrolytic Capacitor |
| NC303 | 1 | | HE70SJYF103Z | Ceramic Capacitor |
| NC304 | 1 | | LL-50TW3R3M | Low Leak. Electrolytic Cap. |
| NC305 | 1 | | NS-50TW100M | Electrolytic Capacitor |
| NC306 | 1 | | HE11SJSJL681K | Ceramic Capacitor |
| NC307 | 1 | | LL-50TW3R3M | Low Leak. Electrolytic Cap. |
| NC308 | 1 | | MY-50VU122K | Mylar Capacitor |
| NC309 | 1 | | NS-50TW2R2M | Electrolytic Capacitor |
| NC310 | 1 | | HE70SJYF103Z | Ceramic Capacitor |
| NC311 | 1 | | NS-50TW100M | Electrolytic Capacitor |
| NC312 | 1 | | NS-25TW470M | Electrolytic Capacitor |
| NC313 | 1 | | HE12SJCH241J | Ceramic Capacitor |
| NC314 | 1 | | HE70SJYF103Z | Ceramic Capacitor |
| Resistors | | | | |
| NR001 | 1 | | KA25ST513J | Carbon Resistor |
| NR002 | 1 | | KA25ST222J | Carbon Resistor |
| NR003,004 | 2 | | KA25ST103J | Carbon Resistor |
| NR005 | 1 | | KA25ST513J | Carbon Resistor |
| NR006 | 1 | | KA25ST222J | Carbon Resistor |
| NR007 | 1 | | KA25ST472J | Carbon Resistor |
| NR008,009 | 2 | | KA25ST103J | Carbon Resistor |
| NR010 | 1 | | KA25ST472J | Carbon Resistor |
| NR011 | 1 | | KA25ST223J | Carbon Resistor |
| NR012 | 1 | | KA25ST224J | Carbon Resistor |
| NR013,014 | 2 | | KA25ST222J | Carbon Resistor |
| NR015 | 1 | | KA25ST223J | Carbon Resistor |
| NR016 | 1 | | KA25ST104J | Carbon Resistor |
| NR017,018 | 2 | | KA25ST472J | Carbon Resistor |
| NR019,020 | 2 | | KA25ST223J | Carbon Resistor |
| NR021 | 1 | | KA25ST224J | Carbon Resistor |
| NR022,023 | 2 | | KA25ST222J | Carbon Resistor |
| NR024 | 1 | | KA25ST223J | Carbon Resistor |
| NR025 | 1 | | KA25ST104J | Carbon Resistor |
| NR026,027 | 2 | | KA25ST472J | Carbon Resistor |
| NR028 | 1 | | KA25ST203J | Carbon Resistor |
| NR029 | 1 | | KA25ST562J | Carbon Resistor |
| NR030 | 1 | | KA25ST203J | Carbon Resistor |
| NR031 | 1 | | KA25ST822J | Carbon Resistor |
| NR032~034 | 3 | | KA25ST113J | Carbon Resistor |
| NR035 | 1 | | KA25ST333J | Carbon Resistor |
| NR036 | 1 | | KA25ST153J | Carbon Resistor |
| NR037 | 1 | | KA25ST821J | Carbon Resistor |
| NR038 | 1 | | KA25ST302J | Carbon Resistor |
| NR039 | 1 | | KA25ST104J | Carbon Resistor |
| NR040 | 1 | | KA20ST103J | Carbon Resistor |
| NR041 | 1 | | KA25ST181J | Carbon Resistor |
| NR042 | 1 | | KA25ST224J | Carbon Resistor |
| NR043,044 | 2 | | KA25ST562J | Carbon Resistor |
| NR045 | 1 | | KA25ST224J | Carbon Resistor |
| NR046 | 1 | | KA25ST243J | Carbon Resistor |
| NR047 | 1 | | KA25ST565J | Carbon Resistor |
| NR066~068 | 3 | | KA25ST752J | Carbon Resistor |

2. CNR-527D P.C. Board Assembly (cont'd)

| Ref. No | Q'ty | Carver Part No. | Supplier Part No. | Description |
|-----------|------|-----------------|-------------------|----------------------|
| NR069 | 1 | | KA25ST202J | Carbon Resistor |
| NR070 | 1 | | KA25ST183J | Carbon Resistor |
| NR071,072 | 2 | | KA25ST202J | Carbon Resistor |
| NR073 | 1 | | KA25ST103J | Carbon Resistor |
| NR074 | 1 | | KA25ST683J | Carbon Resistor |
| NR075 | 1 | | KA25ST392J | Carbon Resistor |
| NR076 | 1 | | KA25ST202J | Carbon Resistor |
| NR077 | 1 | | KA25ST163J | Carbon Resistor |
| NR078 | 1 | | KA25ST203J | Carbon Resistor |
| NR079 | 1 | | KA25ST303J | Carbon Resistor |
| NR080 | 1 | | KA25ST392J | Carbon Resistor |
| NR081,82 | 2 | | KA25ST752J | Carbon Resistor |
| NR083 | 1 | | KA25ST272J | Carbon Resistor |
| NR084,85 | 2 | | KA25ST302J | Carbon Resistor |
| NR086 | 1 | | KA25ST183J | Carbon Resistor |
| NR087 | 1 | | KA25ST562J | Carbon Resistor |
| NR088 | 1 | | KA25ST203J | Carbon Resistor |
| NR089 | 1 | | KA25ST104J | Carbon Resistor |
| NR090 | 1 | | KA25ST302J | Carbon Resistor |
| NR091 | 1 | | KA25ST243J | Carbon Resistor |
| NR092 | 1 | | KA25ST335J | Carbon Resistor |
| NR093 | 1 | | KA25ST224J | Carbon Resistor |
| NR094 | 1 | | KA25ST333J | Carbon Resistor |
| NR095,96 | 2 | | KA25ST562J | Carbon Resistor |
| NR097 | 1 | | KA25ST153J | Carbon Resistor |
| NR098 | 1 | | KA25ST181J | Carbon Resistor |
| NR099 | 1 | | KA25ST821J | Carbon Resistor |
| NR100 | 1 | | KA25ST434J | Carbon Resistor |
| NR101 | 1 | | KA25ST224J | Carbon Resistor |
| NR102 | 1 | | KA25ST242J | Carbon Resistor |
| NR104 | 1 | | KA25ST183J | Carbon Resistor |
| NR105 | 1 | | KA25ST203J | Carbon Resistor |
| NR107,108 | 2 | | KA25ST912J | Carbon Resistor |
| NR109 | 1 | | KA25ST101J | Carbon Resistor |
| NR110 | 1 | | KA25ST752J | Carbon Resistor |
| NR111,112 | 2 | | KA25ST470J | Carbon Resistor |
| NR112 | 1 | | SA-1WT270J-LP | Metal Oxide Resistor |
| NR113 | 1 | | KA25ST104J | Carbon Resistor |
| NR114 | 1 | | KA25ST103J | Carbon Resistor |
| NR114 | 1 | | KA50ST390J-LP | Carbon Resistor |
| NR115 | 1 | | KA25ST202J | Carbon Resistor |
| NR116 | 1 | | KA25ST124J | Carbon Resistor |
| NR117 | 1 | | KA25ST102J | Carbon Resistor |
| NR118 | 1 | | KA25ST113J | Carbon Resistor |
| NR119 | 1 | | KA25ST134J | Carbon Resistor |
| NR120 | 1 | | KA25ST515J | Carbon Resistor |
| NR121 | 1 | | KA25ST102J | Carbon Resistor |
| NR122 | 1 | | KA25ST433J | Carbon Resistor |
| NR123 | 1 | | KA25ST102J | Carbon Resistor |
| NR124 | 1 | | KA25ST563J | Carbon Resistor |
| NR125,126 | 2 | | KA25ST242J | Carbon Resistor |
| NR127 | 1 | | KA25ST912J | Carbon Resistor |
| NR128 | 1 | | KA25ST106J | Carbon Resistor |
| NR129 | 1 | | KA25ST223J | Carbon Resistor |
| NR130 | 1 | | KA25ST912J | Carbon Resistor |
| NR131 | 1 | | KA25ST123J | Carbon Resistor |
| NR132 | 1 | | KA25ST104J | Carbon Resistor |
| NR133 | 1 | | KA25ST562J | Carbon Resistor |
| NR134 | 1 | | KA25ST563J | Carbon Resistor |
| NR135 | 1 | | KA25ST433J | Carbon Resistor |
| NR136 | 1 | | KA25ST242J | Carbon Resistor |
| NR137 | 1 | | KA25ST912J | Carbon Resistor |
| NR138 | 1 | | KA25ST242J | Carbon Resistor |
| NR139 | 1 | | KA25ST106J | Carbon Resistor |
| NR140 | 1 | | KA25ST912J | Carbon Resistor |
| NR141 | 1 | | KA25ST223J | Carbon Resistor |
| NR142,143 | 2 | | KA25ST123J | Carbon Resistor |
| NR144,145 | 2 | | KA25ST393J | Carbon Resistor |
| NR146,147 | 2 | | KA25ST203J | Carbon Resistor |
| NR148 | 1 | | KA25ST104J | Carbon Resistor |
| NR149,150 | 2 | | KA25ST203J | Carbon Resistor |
| NR151 | 1 | | KA25ST104J | Carbon Resistor |
| NR152 | 1 | | KA25ST225J | Carbon Resistor |
| NR157 | 1 | | KA25ST124J | Carbon Resistor |
| NR158 | 1 | | KA25ST561J | Carbon Resistor |
| NR159 | 1 | | KA25ST104J | Carbon Resistor |

2. CNR-527D P.C. Board Assembly (cont'd)

| Ref. No | Q'ty | Carver Part No. | Supplier Part No. | Description |
|----------------------|------|-----------------|-------------------|-----------------------------------|
| NR160,161 | 2 | | KA25ST223J | Carbon Resistor |
| NR162 | 1 | | KA25ST103J | Carbon Resistor |
| NR163,164 | 2 | | KA25ST133J | Carbon Resistor |
| NR165,166 | 2 | | KA25ST392J | Carbon Resistor |
| NR168 | 1 | | KA20ST682J | Carbon Resistor |
| NR169 | 1 | | KA20ST103J | Carbon Resistor |
| NR170 | 1 | | KA25ST123J | Carbon Resistor |
| NR171 | 1 | | KA25ST223J | Carbon Resistor |
| NR172,173 | 2 | | KA25ST183J | Carbon Resistor |
| NR174 | 1 | | KA25ST222J | Carbon Resistor |
| NR175 | 1 | | KA25ST113J | Carbon Resistor |
| NR184 | 1 | | KA25ST512J | Carbon Resistor |
| NR185 | 1 | | KA25ST103J | Carbon Resistor |
| NR186 | 1 | | KA25ST512J | Carbon Resistor |
| NR187 | 1 | | KA25ST243J | Carbon Resistor |
| NR188 | 1 | | KA25ST753J | Carbon Resistor |
| NR189 | 1 | | KA25ST243J | Carbon Resistor |
| NR190 | 1 | | KA25ST203J | Carbon Resistor |
| NR191 | 1 | | KA25ST104J | Carbon Resistor |
| NR192 | 1 | | KA25ST121J | Carbon Resistor |
| NR193 | 1 | | KA25ST222J | Carbon Resistor |
| NR194 | 1 | | KA25ST183J | Carbon Resistor |
| NR195 | 1 | | KA25ST472J | Carbon Resistor |
| NR197 | 1 | | KA25ST621J | Carbon Resistor |
| NR201 | 1 | | KA25ST512J | Carbon Resistor |
| NR202 | 1 | | KA25ST303J | Carbon Resistor |
| NR203 | 1 | | KA25ST103J | Carbon Resistor |
| NR204 | 1 | | KA25ST512J | Carbon Resistor |
| NR205 | 1 | | KA25ST243J | Carbon Resistor |
| NR206 | 1 | | KA25ST473J | Carbon Resistor |
| NR207 | 1 | | KA25ST243J | Carbon Resistor |
| NR208 | 1 | | KA25ST203J | Carbon Resistor |
| NR209 | 1 | | KA25ST222J | Carbon Resistor |
| NR210 | 1 | | KA25ST121J | Carbon Resistor |
| NR211 | 1 | | KA25ST183J | Carbon Resistor |
| NR212 | 1 | | KA25ST621J | Carbon Resistor |
| NR213 | 1 | | KA25ST104J | Carbon Resistor |
| NR214 | 1 | | KA25ST472J | Carbon Resistor |
| NR230 | 1 | | KA25ST303J | Carbon Resistor |
| NR244 | 1 | | KA25ST152J | Carbon Resistor |
| NR246 | 1 | | KA20ST242J | Carbon Resistor |
| NR251 | 1 | | KA25ST184J | Carbon Resistor |
| NR301 | 1 | | KA25ST510J-LP | Carbon Resistor |
| NR302,303 | 2 | | KA25ST242J | Carbon Resistor |
| NR304 | 1 | | KA25ST104J | Carbon Resistor |
| NR305 | 1 | | KA25ST102J | Carbon Resistor |
| NR306,307 | 2 | | KA25ST104J | Carbon Resistor |
| NR308,309 | 2 | | KA25ST562J | Carbon Resistor |
| NR310 | 1 | | KA25ST104J | Carbon Resistor |
| NR311 | 1 | | KA25ST513J | Carbon Resistor |
| NR312,312 | 2 | | KA25ST512J | Carbon Resistor |
| NR314 | 1 | | KA25ST513J | Carbon Resistor |
| NR315 | 1 | | KA25ST911J | Carbon Resistor |
| NR316 | 1 | | KA25ST202J | Carbon Resistor |
| NR317 | 1 | | KA25ST510J-LP | Carbon Resistor |
| NR318 | 1 | | KA25ST223J | Carbon Resistor |
| NR319,320 | 2 | | KA25ST513J | Carbon Resistor |
| NRP001 | 1 | | SVR-10T3B104CK | Semi-Variable Resistor |
| NRP003 | 1 | | SVR-10T3B225CK | Semi-Variable Resistor |
| NRP005 | 1 | | SVR-10T3B224CK | Semi-Variable Resistor |
| NRP006 | 1 | | SVR-10T3B104CK | Semi-Variable Resistor |
| NRP007 | 1 | | SVR-10T3B203CK | Semi-Variable Resistor |
| NRP008 | 1 | | SVR-06T3B204CK | Semi-Variable Resistor |
| NRP009 | 1 | | SVR-06T3B105CK | Semi-Variable Resistor |
| NRP301 | 1 | | SVR-10T3B472CK | Semi-Variable Resistor |
| Miscellaneous | | | | |
| P16-1 | 2 | | IPS-1041-4 | Jump Wire |
| | 1 | | 007S240R16-J-J | Solder-Plated Wire |
| | 1 | | 171826-2 | Micro Plug (P133,134) |
| | 1 | | 171826-6 | Micro Plug (P16-1,87,89,90,92,93) |
| | 74 | | 5E-T05 | Jump Wire |

3. CSW-552 P.C. Board Assembly

| Ref. No | Q'ty | Carver Part No. | Supplier Part No. | Description |
|-----------------------|------|-----------------|-------------------|-----------------|
| Semiconductors | | | | |
| LD401~404 | 4 | | SLP171D | LED (Red) |
| LD405 | 1 | | SLP255B | LED (Green) |
| LD406~413 | 8 | | SLP155B | LED (Red) |
| Resistors | | | | |
| R401 | 1 | | KA25ST331J | Carbon Resistor |
| R402 | 1 | | KA25ST751J | Carbon Resistor |
| R403,404 | 2 | | KA25ST241J | Carbon Resistor |
| Switches | | | | |
| SW401~413 | 13 | | KHH10910 | Tact Switch |
| Miscellaneous | | | | |
| | 1 | | 5E-T05 | Jump Wire |

4. FEQ-608B P.C. Board Assembly

| Ref. No | Q'ty | Carver Part No. | Supplier Part No. | Description |
|-----------------------|------|-----------------|-------------------|-----------------------------|
| Semiconductors | | | | |
| Q801~804 | 4 | | 2SC1815-Y,GR | Transistor |
| IC801 | 1 | | NJM2060D | IC |
| IC802 | 1 | | TC9152P | IC |
| IC803 | 1 | | M5218PR | IC |
| Capacitors | | | | |
| C801,802 | 2 | | HE50SJSL101K | Ceramic Capacitor |
| C803,804 | 2 | | NS-10TW221M | Electrolytic Capacitor |
| C805,806 | 2 | | MY-50VU562J | Mylar Capacitor |
| C807,808 | 2 | | MY-50VU182J | Mylar Capacitor |
| C809~812 | 4 | | MY-50VU473J | Mylar Capacitor |
| C813,814 | 2 | | LL-16TW220M | Low Leak. Electrolytic Cap. |
| C815 | 1 | | MY-50VU683J | Mylar Capacitor |
| C816 | 1 | | NS-16TW101M | Electrolytic Capacitor |
| C817,818 | 2 | | NS-16TW222M | Electrolytic Capacitor |
| C819,820 | 2 | | ECQV1H104JZ | Metallized Film Capacitor |
| C821,822 | 2 | | HE40SJYB471K | Ceramic Capacitor |
| C823 | 1 | | HC10SJZF473Z | Ceramic Capacitor |
| Resistors | | | | |
| R801,802 | 2 | | KA25ST100J | Carbon Resistor |
| R803,804 | 2 | | KA25ST473J | Carbon Resistor |
| R805,806 | 2 | | KA25ST103J | Carbon Resistor |
| R807,808 | 2 | | KA25ST514J | Carbon Resistor |
| R809,810 | 2 | | KA25ST393J | Carbon Resistor |
| R811,812 | 2 | | KA25ST391J | Carbon Resistor |
| R813,814 | 2 | | KA25ST513J | Carbon Resistor |
| R815,816 | 2 | | KA25ST334J | Carbon Resistor |
| R817,818 | 2 | | KA25ST104J | Carbon Resistor |
| R819,820 | 2 | | KA25ST223J | Carbon Resistor |
| R821,822 | 2 | | KA25ST271J | Carbon Resistor |
| R823~826 | 4 | | KA25ST222J | Carbon Resistor |
| R827 | 1 | | KA25ST104J | Carbon Resistor |
| R828 | 1 | | KA25ST101J | Carbon Resistor |
| R829 | 1 | | KA25ST471J | Carbon Resistor |
| R830 | 1 | | KA25ST473J | Carbon Resistor |
| R831 | 1 | | KA25ST222J | Carbon Resistor |
| R832,833 | 2 | | KA25ST104J | Carbon Resistor |
| R834,835 | 2 | | KA25ST103J | Carbon Resistor |
| R837,838 | 2 | | KA25ST102J | Carbon Resistor |
| R839,840 | 2 | | KA25ST513J | Carbon Resistor |
| R841,842 | 2 | | KA25ST621J | Carbon Resistor |
| R843,844 | 2 | | KA25ST104J | Carbon Resistor |
| Switches | | | | |
| SW801,802 | 2 | | SW-2434086 | Rotary Slide Switch |

| Ref. No | Q'ty | Carver Part No. | Supplier Part No. | Description |
|----------------------|------|-----------------|-------------------|--------------------------------------|
| Miscellaneous | | | | |
| J801~819 | 19 | | 5E-T05 | Jump Wire |
| CY005 | 1 | | MC03-424 | Micro Socket Ass'y |
| | 1 | | MC05-426 | Micro Socket Ass'y (F42,86,43,44,25) |
| RCA801 | 1 | | T6001-ABAA | RCA Jack 6P |
| RCA801,802 | 2 | | T5916-ABAA | RCA Jack 6P |

5. FSW-608B P.C. Board Assembly

| Ref. No | Q'ty | Carver Part No. | Supplier Part No. | Description |
|-----------------------|------|-----------------|-------------------|-------------------------------|
| Semiconductors | | | | |
| LD251~254 | 4 | | SLP155B | LED (Red) |
| Resistors | | | | |
| R251~254 | 4 | | KA25ST472J | Carbon Resistor |
| Switches | | | | |
| SW251~254 | 4 | | KHH10910 | Tact Switch |
| Miscellaneous | | | | |
| CN007 | 1 | | MC06-428 | Micro Socket Ass'y (K221~226) |

6. HP-608B P.C. Board Assembly

| Ref. No | Q'ty | Carver Part No. | Supplier Part No. | Description |
|---------|------|-----------------|-------------------|-------------|
| HJ601 | 1 | | YKB11-5010-S | H.P. Jack |

7. MA-608B P.C. Board Assembly

| Ref. No | Q'ty | Carver Part No. | Supplier Part No. | Description |
|-----------------------|------|-----------------|-------------------|--------------------------|
| Semiconductors | | | | |
| D503~506 | 4 | | 1S1588 | Diode |
| D601~612 | 12 | | 1S1588 | Diode |
| D613,614 | 2 | | 1N4002 | Diode |
| D615,616 | 2 | | 30DF2FC | Diode |
| D701~708 | 8 | | 1N5402-F | Diode |
| D709~712 | 4 | | 1N4002 | Diode |
| D716 | 1 | | 1N4002 | Diode |
| Q501,502 | 2 | | 2SA979-F,G | Transistor |
| Q503~506 | 4 | | 2SC2229-O,Y | Transistor |
| Q507,508 | 2 | | 2SA970-GR,BL | Transistor |
| Q509,510 | 2 | | 2SC1846-Q,R | Transistor |
| Q511,512 | 2 | | 2SC3298-O,Y | Transistor |
| Q513,514 | 2 | | 2SA1306-O,Y | Transistor |
| Q515,516 | 2 | | 2SC3181-O,R | Transistor |
| Q517,518 | 2 | | 2SA1264-O,R | Transistor |
| Q601,602 | 2 | | 2SC1815-GR | Transistor |
| Q603,604 | 2 | | 2SA1015-GR | Transistor |
| Q605,606 | 2 | | 2SC2240-GR,BL | Transistor |
| Q607 | 1 | | 2SC1815-GR | Transistor |
| Q608 | 1 | | 2SA1015-GR | Transistor |
| Q609 | 1 | | 2SA1306-O,Y | Transistor |
| Q610 | 1 | | 2SC3298-O,Y | Transistor |
| Q611 | 1 | | 2SC3181-O,R | Transistor |
| Q612 | 1 | | 2SA1264-O,R | Transistor |
| Q613 | 1 | | 2SA970-GR,BL | Transistor |
| IC601 | 1 | | TA7317P | IC |
| IC701 | 1 | | AN78M15 | IC |
| IC702 | 1 | | AN79M15 | IC |
| ZD501,502 | 2 | | ZD50-295 | Zener Diode, 1/2W, 29.5V |
| ZD713 | 1 | | ZD50-035 | Zener Diode, 1/2W, 3.5V |
| ZD714 | 1 | | ZD50-200 | Zener Diode, 1/2W, 20.0V |
| ZD715 | 1 | | ZD50-295 | Zener Diode, 1/2W, 29.5V |

| Ref. No | Q'ty | Carver Part No. | Supplier Part No. | Description |
|-------------------|------|-----------------|-------------------|-----------------------------|
| Capacitors | | | | |
| C501,502 | 2 | | LL-16TW220M | Low Leak. Electrolytic Cap. |
| C503,504 | 2 | | HE90SJSL471K | Ceramic Capacitor |
| C505,506 | 2 | | NS-35TW470M | Electrolytic Capacitor |
| C507,508 | 2 | | MY-50VU152J | Mylar Capacitor |
| C509,510 | 2 | | HE40SJSL330K | Ceramic Capacitor |
| C511,512 | 2 | | HE40SJSL120K | Ceramic Capacitor |
| C513,514 | 2 | | ECQV1H104JZ | Metallized Film Capacitor |
| C515~518 | 4 | | HM74SJSL151K | Ceramic Capacitor |
| C519,520 | 2 | | NS-10TW101M | Electrolytic Capacitor |
| C601~604 | 4 | | HE70SJYF103Z | Ceramic Capacitor |
| C605,606 | 2 | | MY-50VU222M | Mylar Capacitor |
| C607,608 | 2 | | MY100VS473K | Mylar Capacitor |
| C609 | 1 | | NS-50TW1R0M | Electrolytic Capacitor |
| C610,611 | 2 | | NS-25TW470M | Electrolytic Capacitor |
| C612 | 1 | | MY-50VU473M | Mylar Capacitor |
| C613 | 1 | | NS-50TWR47M | Electrolytic Capacitor |
| C614 | 1 | | NS-25TW220M | Electrolytic Capacitor |
| C615~618 | 4 | | NS-50TW4R7M | Electrolytic Capacitor |
| C621,622 | 2 | | HE80SJSL331K | Ceramic Capacitor |
| C701,702 | 2 | | BC71822MA60CC3 | Electrolytic Capacitor |
| C703,704 | 2 | | BC50682MA50CC3 | Electrolytic Capacitor |
| C705,706 | 2 | | NS-35TW102M | Electrolytic Capacitor |
| C708,709 | 2 | | NS-16TW101M | Electrolytic Capacitor |
| C710 | 1 | | NS-50TW1R0M | Electrolytic Capacitor |
| C711,712 | 2 | | NS-35TW470M | Electrolytic Capacitor |
| Resistors | | | | |
| R501,502 | 2 | | KA25ST104J | Carbon Resistor |
| R503,504 | 2 | | KA25ST273J | Carbon Resistor |
| R505,506 | 2 | | KA25ST102J | Carbon Resistor |
| R507,508 | 2 | | KA25ST122J | Carbon Resistor |
| R509,510 | 2 | | KA25ST470J | Carbon Resistor |
| R511~514 | 4 | | KA25ST152J | Carbon Resistor |
| R515,516 | 2 | | KA25ST822J | Carbon Resistor |
| R517,518 | 2 | | KA50XT472J | Carbon Resistor |
| R519,520 | 2 | | MF25ST273J | Carbon Resistor |
| R521,522 | 2 | | KA25ST271J | Carbon Resistor |
| R523,524 | 2 | | KA50XT123J | Carbon Resistor |
| R525~528 | 4 | | KA25ST271J | Carbon Resistor |
| R529,530 | 2 | | KA25ST331J | Carbon Resistor |
| R531~534 | 4 | | KA25ST560J | Carbon Resistor |
| R535,536 | 2 | | KS50XT331J | Carbon Resistor |
| R537~540 | 4 | | KA50XT100J | Carbon Resistor |
| R541,542 | 2 | | MPC722R22KX2LF | Cement Resistor |
| R543,544 | 2 | | KA25ST222J | Carbon Resistor |
| R601~604 | 4 | | KA25ST431J | Carbon Resistor |
| R605~608 | 4 | | KA25ST392J | Carbon Resistor |
| R609,610 | 2 | | KA25ST101J | Carbon Resistor |
| R611~614 | 4 | | KA25ST103J | Carbon Resistor |
| R615,616 | 2 | | KA25ST331J | Carbon Resistor |
| R617,618 | 2 | | KA25ST242J | Carbon Resistor |
| R619,620 | 2 | | KA25ST222J | Carbon Resistor |
| R621,622 | 2 | | KA25ST103J | Carbon Resistor |
| R623 | 1 | | KA25ST332J | Carbon Resistor |
| R624 | 1 | | KA25ST473J | Carbon Resistor |
| R625~628 | 4 | | KA25ST563J | Carbon Resistor |
| R629 | 1 | | KA25ST104J | Carbon Resistor |
| R630 | 1 | | KA25ST183J | Carbon Resistor |
| R631 | 1 | | KA25ST563J | Carbon Resistor |
| R632 | 1 | | KA25ST473J | Carbon Resistor |
| R633 | 1 | | KA25ST224J | Carbon Resistor |
| R634 | 1 | | KA25ST223J | Carbon Resistor |
| R635,636 | 2 | | SA-2WT100J-LP | Metal Oxide Resistor |
| R643,644 | 2 | | KA25ST100J | Carbon Resistor |
| R645 | 1 | | KA25ST333J | Carbon Resistor |
| R651~654 | 4 | | KA25ST431J | Carbon Resistor |
| R655,656 | 2 | | KA25ST331J | Carbon Resistor |
| R701 | 1 | | KA25ST152J | Carbon Resistor |
| R702 | 1 | | KA25ST682J | Carbon Resistor |
| R704 | 1 | | KA25ST332J | Carbon Resistor |
| R705 | 1 | | KA50XT335J | Carbon Resistor |
| SVR501,502 | 2 | | SVR-08T3B202 | Semi-Variable Resistor |

| Ref. No | Q'ty | Carver Part No. | Supplier Part No. | Description |
|----------------------|------|-----------------|-------------------|--|
| Coils | | | | |
| L601,602 | 2 | | 104001 | Air-Core Coil |
| Miscellaneous | | | | |
| | 1 | | MC02-420 | Micro Socket Ass'y (M133,134) |
| | 1 | | MC07-429 | Micro Socket Ass'y (M140,142,138,143,26,13,29) |
| | 18 | | RP-006 | Terminal Pin (M142,143,150~158,160~165,192) |
| | 49 | | 5E-T05 | Jump Wire |
| J508,512 | 2 | | IPS-1065 | Jump Wire |
| CN001 | 1 | | 171825-2 | Micro Plug |
| CN002,006 | 2 | | 171825-3 | Micro Plug |
| TS601 | 1 | | UI2-10005-200A | Thermal Relay |

8. NRS-608B P.C. Board Assembly

| Ref. No | Q'ty | Carver Part No. | Supplier Part No. | Description |
|-----------------------|------|-----------------|-------------------|---|
| Semiconductors | | | | |
| D271~274 | 4 | | 1S1588 | Diode |
| IC271 | 1 | | MN4001B | IC |
| Capacitors | | | | |
| C271,272 | 2 | | ECQV1H224JZ | Metallized Film Capacitor |
| C273 | 1 | | MY-50VU223J | Mylar Capacitor |
| Resistors | | | | |
| R271,272 | 2 | | KA25ST103J | Carbon Resistor |
| R273,274 | 2 | | KA25ST225J | Carbon Resistor |
| R275,276 | 2 | | KA25ST103J | Carbon Resistor |
| Switches | | | | |
| SW271 | 1 | | SW-1200167 | Push Switch |
| Miscellaneous | | | | |
| | 1 | | MC06-419 | Micro Socket Ass'y (N16,93,89,87,90,92) |
| | 1 | | W-D0606 | Connector (N119~121,DW,UP,CO) |
| J271~273 | 3 | | 5E-T05 | Jump Wire |
| X301 | 1 | | EYX-TE725S17T | Quartz Oscillator Unit |
| CN003 | 1 | | 171825-3 | Micro Plug |
| CN004 | 1 | | 171825-4 | Micro Plug |

9. PLL-552 P.C. Board Assembly

| Ref. No | Q'ty | Carver Part No. | Supplier Part No. | Description |
|-----------------------|------|-----------------|-------------------|-------------|
| Semiconductors | | | | |
| D302~307 | 6 | | 1S1588 | Diode |
| Q301 | 1 | | 2SK222-E | Transistor |
| Q302~307 | 6 | | 2SC1740-R,S | Transistor |
| | | | or 2SC1815-Y,GR | Transistor |
| Q308 | 1 | | 2SA1015-Y,GR | Transistor |
| | | | or 2SA933-R,S | Transistor |
| Q309 | 1 | | 2SC1740-R,S | Transistor |
| | | | or 2SC1815-Y,GR | Transistor |
| Q310 | 1 | | 2SA1015-Y,GR | Transistor |
| | | | or 2SA933-R,S | Transistor |
| Q311,312 | 2 | | 2SC1740-R,S | Transistor |
| | | | or 2SC1815-Y,GR | Transistor |
| Q313 | 1 | | 2SA1015-Y,GR | Transistor |
| | | | or 2SA933-R,S | Transistor |
| Q314 | 1 | | 2SC2021-R,S | Transistor |
| IC301 | 1 | | TC9147BP | IC |
| IC302 | 1 | | TD6104P | IC |
| IC303 | 1 | | TC9158P | IC |

| Ref. No | Q'ty | Carver Part No. | Supplier Part No. | Description |
|----------------------|------|-----------------|-------------------|---|
| Capacitors | | | | |
| C301 | 1 | | HE40SJCH180K | Ceramic Capacitor |
| C302 | 1 | | HE40SJSLO30D | Ceramic Capacitor |
| C303 | 1 | | NS-10TW101M | Electrolytic Capacitor |
| C304 | 1 | | LL-6R3TW222M | Low Leak. Electrolytic Cap. |
| C305~307 | 3 | | NS-50TW1R0M | Electrolytic Capacitor |
| C308 | 1 | | LL-25TWR47M | Low Leak. Electrolytic Cap. |
| C309 | 1 | | NS-25TW470M | Electrolytic Capacitor |
| C310,311 | 2 | | TP125X103N | Ceramic Capacitor |
| C312 | 1 | | NS-10TW470M | Electrolytic Capacitor |
| C313 | 1 | | TP125X103N | Ceramic Capacitor |
| C315 | 1 | | ECQV1H104JZ | Metallized Film Capacitor |
| C316,317 | 2 | | EP125Y223N | Ceramic Capacitor |
| C318 | 1 | | UP125SL121J | Ceramic Capacitor |
| C319 | 1 | | UP125B102K | Ceramic Capacitor |
| C320 | 1 | | TP125X103N | Ceramic Capacitor |
| C321 | 1 | | NS-10TW221M | Electrolytic Capacitor |
| C322 | 1 | | MY-50VU332J | Mylar Capacitor |
| C323 | 1 | | NS-10TW470M | Electrolytic Capacitor |
| C324 | 1 | | NS-50TW1R0M | Electrolytic Capacitor |
| C325 | 1 | | NS-16TW101M | Electrolytic Capacitor |
| C326 | 1 | | NS-10TW470M | Electrolytic Capacitor |
| C327 | 1 | | EP125Y223N | Ceramic Capacitor |
| C328 | 1 | | NS-50TW1R0M | Electrolytic Capacitor |
| TC301 | 1 | | CTZ53F113 | Trimmer Capacitor |
| Resistors | | | | |
| R301 | 1 | | KA25ST471J | Carbon Resistor |
| R302 | 1 | | KA25ST562J | Carbon Resistor |
| R303,304 | 2 | | KA25ST473J | Carbon Resistor |
| R305~307 | 3 | | KA25ST103J | Carbon Resistor |
| R308 | 1 | | KA25ST471J | Carbon Resistor |
| R309,310 | 2 | | KA25ST222J | Carbon Resistor |
| R311 | 1 | | KA25ST473J | Carbon Resistor |
| R312 | 1 | | KA25ST753J | Carbon Resistor |
| R313 | 1 | | KA25ST470J | Carbon Resistor |
| R315 | 1 | | KA25ST223J | Carbon Resistor |
| R316 | 1 | | KA25ST474J | Carbon Resistor |
| R317 | 1 | | KA25ST104J | Carbon Resistor |
| R317 | 1 | | KA25ST221J | Carbon Resistor |
| R318 | 1 | | KA25ST473J | Carbon Resistor |
| R319 | 1 | | KA25ST102J | Carbon Resistor |
| R320,321 | 2 | | KA25ST104J | Carbon Resistor |
| R322 | 1 | | KA25ST751J | Carbon Resistor |
| R323,324 | 2 | | KA25ST104J | Carbon Resistor |
| R325,326 | 2 | | KA25ST473J | Carbon Resistor |
| R327 | 1 | | KA25ST562J | Carbon Resistor |
| R328 | 1 | | KA25ST104J | Carbon Resistor |
| R329,330 | 2 | | KA25ST103J | Carbon Resistor |
| R331 | 1 | | KA25ST101J | Carbon Resistor |
| R332 | 1 | | KA25ST103J | Carbon Resistor |
| R333 | 1 | | KA25ST101J | Carbon Resistor |
| R335 | 1 | | KA25ST104J | Carbon Resistor |
| R336 | 1 | | KA25ST103J | Carbon Resistor |
| R337 | 1 | | KA25ST223J | Carbon Resistor |
| R338,339 | 2 | | KA25ST470J | Carbon Resistor |
| R456 | 1 | | KA25ST473J | Carbon Resistor |
| RA301,302 | 2 | | RA-IP-07104K | Networks Resistor |
| Coils | | | | |
| L301 | 1 | | LAL03102K | Inductor |
| Switches | | | | |
| SW301 | 1 | | SSS212A | Slide Switch |
| Miscellaneous | | | | |
| FL301 | 1 | | 171825-5 | Micro Plug (B1~3,9,11) |
| | 1 | | 171825-7 | Micro Plug (B13,26,29,138,140,142,143) |
| | 1 | | 171825-9 | Micro Plug (B15,16,27,33~35,49,133,137) |
| | 25 | | 5E-T05 | Jump Wire |
| | 1 | | FG710E1 | Fluorescence Lamp |

10. PSW-608B P.C. Board Assembly

| Ref. No | Q'ty | Carver Part No. | Supplier Part No. | Description |
|-------------------|------|-----------------|-------------------|---------------------------|
| Capacitors | | | | |
| C707 | 1 | | ECQU1A103MH | Metallized Film Capacitor |
| Switches | | | | |
| SW701 | 1 | | SW-1101147 | Power Switch |

11. SIG-552 P.C. Board Assembly

| Ref. No | Q'ty | Carver Part No. | Supplier Part No. | Description |
|-----------------------|------|-----------------|-------------------|------------------------|
| Semiconductors | | | | |
| IC451 | 1 | | LB1423 | IC |
| LD451,452 | 2 | | TLR147 | LED (Red) |
| LD453~458 | 6 | | TLY147 | LED (Yellow) |
| Capacitors | | | | |
| C452 | 1 | | NS-25TW4R7M | Electrolytic Capacitor |
| Resistors | | | | |
| R451 | 1 | | KA25ST182J | Carbon Resistor |
| R453 | 1 | | KA25ST103J | Carbon Resistor |
| R454 | 1 | | KA25ST223J | Carbon Resistor |
| R455 | 1 | | KA25ST152J | Carbon Resistor |
| Miscellaneous | | | | |
| | 2 | | 5E-T05 | Jump Wire |

12. SP-608B P.C. Board Assembly

| Ref. No | Q'ty | Carver Part No. | Supplier Part No. | Description |
|-----------------------|------|-----------------|-------------------|----------------------|
| Semiconductors | | | | |
| D617,618 | 2 | | 1N4002 | Diode |
| Capacitors | | | | |
| C619,620 | 2 | | MY-50VU473M | Mylar Capacitor |
| Resistors | | | | |
| R637,638 | 2 | | SA-2WT100J-LP | Metal Oxide Resistor |
| R639,640 | 2 | | SA-2WT102J-LP | Metal Oxide Resistor |
| R641,642 | 2 | | SA-1WT471J-LP | Metal Oxide Resistor |
| Miscellaneous | | | | |
| RY601,602 | 2 | | AJR39040 | Relay |
| SP601,602 | 2 | | YKD31-0214 | Socket 4P (S.P.) |

13. SPS-608B P.C. Board Assembly

| Ref. No | Q'ty | Carver Part No. | Supplier Part No. | Description |
|-----------------|------|-----------------|-------------------|---------------|
| Switches | | | | |
| SW601 | 1 | | SW-2246137 | Rotary Switch |

14. TIM-609 P.C. Board Assembly

| Ref. No | Q'ty | Carver Part No. | Supplier Part No. | Description |
|-----------------------|------|-----------------|--------------------|----------------|
| Semiconductors | | | | |
| D001 | 1 | | 1S1588 or DS442 | Diode Diode |
| D002 | 1 | | 20A99A | Diode |
| D051,101 | 2 | | 1S1588 or DS442 | Diode Diode |

| Ref. No | Q'ty | Carver Part No. | Supplier Part No. | Description |
|-------------------|------|-----------------|-------------------|-----------------------------|
| D151~154 | 4 | | 1S1588 | Diode |
| D201 | 1 | | or DS442 | Diode |
| D202 | 1 | | 1S1588 | Diode |
| D204~207 | 4 | | or DS442 | Diode |
| D209,210 | 2 | | 20A99A | Diode |
| Q001 | 1 | | 1S1588 | Diode |
| Q002 | 1 | | or DS442 | Diode |
| Q003 | 1 | | 1S1588 | Diode |
| Q004 | 1 | | or DS442 | Diode |
| Q005,051 | 2 | | 2SC2668-O,Y | Transistor |
| Q101 | 1 | | 2SK381-D | Transistor |
| Q201 | 1 | | 2SC1815-GR,BL | Transistor |
| Q202 | 1 | | 2SC2878-A,B | Transistor |
| Q203 | 1 | | 2SC1815-GR,BL | Transistor |
| Q204 | 1 | | 2SK161-GR | Transistor |
| Q205 | 1 | | 2SC3242A-E,F | Transistor |
| Q210 | 1 | | 2SA1282A-E,F | Transistor |
| Q211,212 | 2 | | 2SC1815-GR,BL | Transistor |
| Q231 | 1 | | 2SA1282A-E,F | Transistor |
| IC001 | 1 | | 2SC1815-GR,BL | Transistor |
| IC051 | 1 | | 2SA1015-Y,GR | Transistor |
| IC101 | 1 | | 2SC2878-A,B | Transistor |
| IC151 | 1 | | 2SC3242A-E,F | Transistor |
| IC201 | 1 | | LA1235 | IC |
| VD101~103 | 3 | | LA3350SS | IC |
| ZD001 | 1 | | LA1247 | IC |
| ZD201 | 1 | | LA6458D | IC |
| ZD204 | 1 | | BA6251 | IC |
| | | | SVC333-A | Diode |
| | | | ZD50-117 | Zener Diode, 1/2W, 11.7V |
| | | | ZD50-062 | Zener Diode, 1/2W, 6.2V |
| | | | ZD50-117 | Zener Diode, 1/2W, 11.7V |
| Capacitors | | | | |
| C001 | 1 | | HC75SJZF223Z | Ceramic Capacitor |
| C002~004 | 3 | | HC10SJZF473Z | Ceramic Capacitor |
| C005 | 1 | | NS-50TW4R7M | Electrolytic Capacitor |
| C006~009 | 4 | | HC10SJZF473Z | Ceramic Capacitor |
| C010 | 1 | | NS-50TW1R0M | Electrolytic Capacitor |
| C011 | 1 | | HC10SJZF473Z | Ceramic Capacitor |
| C012 | 1 | | NS-50TWR47M | Electrolytic Capacitor |
| C013 | 1 | | HC10SJZF473Z | Ceramic Capacitor |
| C014 | 1 | | NS-50TW1R0M | Electrolytic Capacitor |
| C015 | 1 | | HE40SJSL560K | Ceramic Capacitor |
| C016 | 1 | | NS-16TW221M | Electrolytic Capacitor |
| C017 | 1 | | HC10SJZF473Z | Ceramic Capacitor |
| C018 | 1 | | NS-50TW1R0M | Electrolytic Capacitor |
| C019 | 1 | | NS-50TWR47M | Electrolytic Capacitor |
| C020 | 1 | | NS-10TW101M | Electrolytic Capacitor |
| C021 | 1 | | LL-16TW100M | Low Leak. Electrolytic Cap. |
| C051 | 1 | | NS-16TW221M | Electrolytic Capacitor |
| C052 | 1 | | ST-50VS152J | Styrol Capacitor |
| C053 | 1 | | MS-50TWR22M | Electrolytic Capacitor |
| C054 | 1 | | NS-50TWR47M | Electrolytic Capacitor |
| C055 | 1 | | NS-50TW4R7M | Electrolytic Capacitor |
| C056,057 | 2 | | LL-25TW4R7M | Low Leak. Electrolytic Cap. |
| C058,059 | 2 | | MY-50VU332J | Mylar Capacitor |
| C060 | 1 | | MY-50VU393J | Mylar Capacitor |
| C061 | 1 | | MY-50VU223J | Mylar Capacitor |
| C064 | 1 | | MY-50VU473J | Mylar Capacitor |
| C070 | 1 | | MY-50VU393J | Mylar Capacitor |
| C071 | 1 | | MY-50VU223J | Mylar Capacitor |
| C080 | 1 | | HC75SJZF223Z | Ceramic Capacitor |
| C081 | 1 | | NS-16TW101M | Electrolytic Capacitor |
| C101 | 1 | | HC75SJZF223Z | Ceramic Capacitor |
| C102 | 1 | | HC10SJZF473Z | Ceramic Capacitor |
| C103 | 1 | | HC75SJZF223Z | Ceramic Capacitor |
| C104,105 | 2 | | HE40SJSL100K | Ceramic Capacitor |
| C106,107 | 2 | | HC75SJZF223Z | Ceramic Capacitor |
| C108 | 1 | | HE40SJSL180K | Ceramic Capacitor |
| C109 | 1 | | ST-50VS481J | Styrol Capacitor |
| C110 | 1 | | HC10SJZF473Z | Ceramic Capacitor |
| C111 | 1 | | HE50SJYB102K | Ceramic Capacitor |
| C112 | 1 | | HC10SJZF473Z | Ceramic Capacitor |
| C113 | 1 | | HC75SJZF223Z | Ceramic Capacitor |

| Ref. No | Q'ty | Carver Part No. | Supplier Part No. | Description |
|------------------|------|-----------------|-------------------|-----------------------------|
| C114 | 1 | | NS-50TW100M | Electrolytic Capacitor |
| C115,116 | 2 | | HC75SJZF223Z | Ceramic Capacitor |
| C117 | 1 | | HE50SJYB102K | Ceramic Capacitor |
| C118 | 1 | | NS-50TWR47M | Electrolytic Capacitor |
| C119 | 1 | | HC10SJZF473Z | Ceramic Capacitor |
| C120 | 1 | | NS-50TW100M | Electrolytic Capacitor |
| C121 | 1 | | NS-50TW4R7M | Electrolytic Capacitor |
| C122 | 1 | | HE70SJYF103Z | Ceramic Capacitor |
| C123 | 1 | | MY-50VU222J | Mylar Capacitor |
| C124 | 1 | | MY-50VU102J | Mylar Capacitor |
| C125 | 1 | | NS-16TW101M | Electrolytic Capacitor |
| C126 | 1 | | ECQV05334JZ | Metallized Film Capacitor |
| C127 | 1 | | HC75SJZF223Z | Ceramic Capacitor |
| C128 | 1 | | HE50SJYB102K | Ceramic Capacitor |
| C151,152 | 2 | | LL-25TW4R7M | Low Leak. Electrolytic Cap. |
| C153,154 | 2 | | LL-50TWR47M | Low Leak. Electrolytic Cap. |
| C155,156 | 2 | | NS-50TW100M | Electrolytic Capacitor |
| C157,158 | 2 | | HE40SJSL470K | Ceramic Capacitor |
| C159,160 | 2 | | LL-25TW4R7M | Low Leak. Electrolytic Cap. |
| C161 | 1 | | NS-16TW101M | Electrolytic Capacitor |
| C162 | 1 | | NS-10TW101M | Electrolytic Capacitor |
| C201 | 1 | | NS-16TW221M | Electrolytic Capacitor |
| C202 | 1 | | NS-25TW470M | Electrolytic Capacitor |
| C203 | 1 | | NS-10TW221M | Electrolytic Capacitor |
| C204,205 | 2 | | NS-25TW470M | Electrolytic Capacitor |
| C206 | 1 | | NS-50TW100M | Electrolytic Capacitor |
| C207,214 | 2 | | NS-25TW470M | Electrolytic Capacitor |
| TC101-1 | 1 | | CTC-6U-010 | Trimmer Capacitor |
| TC101-2 | 1 | | CTC-6U-030 | Trimmer Capacitor |
| TC102 | 1 | | CTC-6U-010 | Trimmer Capacitor |
| Resistors | | | | |
| R001 | 1 | | KA25ST390J | Carbon Resistor |
| R002 | 1 | | KA25ST101J | Carbon Resistor |
| R003 | 1 | | KA25ST221J-LP | Carbon Resistor |
| R004 | 1 | | KA25ST471J | Carbon Resistor |
| R005 | 1 | | KA25ST182J | Carbon Resistor |
| R006 | 1 | | KA25ST103J | Carbon Resistor |
| R007 | 1 | | KA25ST331J | Carbon Resistor |
| R008 | 1 | | KA25ST182J | Carbon Resistor |
| R009 | 1 | | KA25ST151J | Carbon Resistor |
| R010 | 1 | | KA25ST331J | Carbon Resistor |
| R011 | 1 | | KA25ST470J-LP | Carbon Resistor |
| R012 | 1 | | KA25ST563J | Carbon Resistor |
| R013 | 1 | | KA25ST273J | Carbon Resistor |
| R014 | 1 | | KA25ST333J | Carbon Resistor |
| R015 | 1 | | KA25ST472J | Carbon Resistor |
| R016 | 1 | | KA25ST822J | Carbon Resistor |
| R017 | 1 | | KA25ST123J | Carbon Resistor |
| R018 | 1 | | KA25ST391J | Carbon Resistor |
| R019 | 1 | | KA25ST222J | Carbon Resistor |
| R020 | 1 | | KA25ST225J | Carbon Resistor |
| R021 | 1 | | KA25ST103J | Carbon Resistor |
| R022~024 | 3 | | KA25ST104J | Carbon Resistor |
| R025 | 1 | | KA25ST683J | Carbon Resistor |
| R026,027 | 2 | | KA25ST103J | Carbon Resistor |
| R031 | 1 | | KA25ST473J | Carbon Resistor |
| R032 | 1 | | KA25ST333J | Carbon Resistor |
| R051 | 1 | | KA25ST470J-LP | Carbon Resistor |
| R052,053 | 2 | | KA25ST332J | Carbon Resistor |
| R054 | 1 | | KA25ST822J | Carbon Resistor |
| R055 | 1 | | KA25ST102J | Carbon Resistor |
| R057 | 1 | | KA25ST103J | Carbon Resistor |
| R058 | 1 | | KA25ST472J | Carbon Resistor |
| R059,060 | 2 | | KA25ST473J | Carbon Resistor |
| R061,062 | 2 | | KA25ST332J | Carbon Resistor |
| R063,064 | 2 | | KA25ST272J | Carbon Resistor |
| R080 | 1 | | KA25ST390J | Carbon Resistor |
| R101,102 | 2 | | KA25ST104J | Carbon Resistor |
| R103 | 1 | | KA25ST103J | Carbon Resistor |
| R104 | 1 | | KA25ST221J | Carbon Resistor |
| R105 | 1 | | KA25ST105J | Carbon Resistor |
| R106 | 1 | | KA25ST101J | Carbon Resistor |
| R108 | 1 | | KA25ST152J | Carbon Resistor |
| R109 | 1 | | KA25ST471J | Carbon Resistor |

| Ref. No | Q'ty | Carver Part No. | Supplier Part No. | Description |
|----------------------|------|-----------------|-------------------|--------------------------------|
| R110 | 1 | | KA25ST101J-LP | Carbon Resistor |
| R111,112 | 2 | | KA25ST103J | Carbon Resistor |
| R113 | 1 | | KA25ST101J | Carbon Resistor |
| R114 | 1 | | KA25ST820J | Carbon Resistor |
| R115 | 1 | | KA25ST102J | Carbon Resistor |
| R116 | 1 | | KA25ST332J | Carbon Resistor |
| R117 | 1 | | KA25ST183J | Carbon Resistor |
| R118 | 1 | | KA25ST220J-LP | Carbon Resistor |
| R119 | 1 | | KA25ST472J | Carbon Resistor |
| R120 | 1 | | KA25ST154J | Carbon Resistor |
| R123 | 1 | | KA25ST132J | Carbon Resistor |
| R151,152 | 2 | | KA25ST822J | Carbon Resistor |
| R153,154 | 2 | | KA25ST473J | Carbon Resistor |
| R155,156 | 2 | | KA25ST822J | Carbon Resistor |
| R157,158 | 2 | | KA25ST912J | Carbon Resistor |
| R159,160 | 2 | | KA25ST104J | Carbon Resistor |
| R161,162 | 2 | | KA25ST182J | Carbon Resistor |
| R163,164 | 2 | | KA25ST103J | Carbon Resistor |
| R165~168 | 4 | | KA25ST104J | Carbon Resistor |
| R169 | 1 | | KA25ST101J-LP | Carbon Resistor |
| R170 | 1 | | KA25ST473J | Carbon Resistor |
| R201 | 1 | | KA25ST150J-LP | Carbon Resistor |
| R202 | 1 | | KA50ST680J-LP | Carbon Resistor |
| R203 | 1 | | KA25ST821J | Carbon Resistor |
| R204 | 1 | | KA25ST104J | Carbon Resistor |
| R205 | 1 | | KA25ST103J | Carbon Resistor |
| R206 | 1 | | KA25ST104J | Carbon Resistor |
| R207 | 1 | | KA25ST103J | Carbon Resistor |
| R208 | 1 | | KA25ST104J | Carbon Resistor |
| R209 | 1 | | KA25ST103J | Carbon Resistor |
| R210 | 1 | | KA25ST104J | Carbon Resistor |
| R211 | 1 | | KA25ST103J | Carbon Resistor |
| R212 | 1 | | KA25ST273J | Carbon Resistor |
| R213 | 1 | | KA25ST220J | Carbon Resistor |
| R214 | 1 | | KA25ST333J | Carbon Resistor |
| R215,216 | 2 | | KA25ST472J | Carbon Resistor |
| R217 | 1 | | KA25ST333J | Carbon Resistor |
| R218 | 1 | | KA25ST220J | Carbon Resistor |
| R219 | 1 | | KA25ST102J | Carbon Resistor |
| R220 | 1 | | KA25ST472J | Carbon Resistor |
| R221,237 | 2 | | KA25ST103J | Carbon Resistor |
| R238~240 | 3 | | KA25ST472J | Carbon Resistor |
| R241 | 1 | | KA25ST271J | Carbon Resistor |
| SVR001 | 1 | | SVR-08T3B503 | Semi-Variable Resistor |
| SVR002 | 1 | | SVR-08T3B203 | Semi-Variable Resistor |
| SVR051 | 1 | | SVR-08T3B501CM | Semi-Variable Resistor |
| SVR052 | 1 | | SVR-08T3B502CM | Semi-Variable Resistor |
| SVR101 | 1 | | SVR-08T3B103 | Semi-Variable Resistor |
| Coils | | | | |
| F051,052 | 2 | | 184016 | Filter Block |
| L001,002 | 2 | | LAL03100K | Inductor |
| L002 | 1 | | 100025 | Inductor |
| L101 | 1 | | LAL03100K | Inductor |
| L102 | 1 | | LAL03102K | Inductor |
| T001 | 1 | | 141026 | FM Det Coil |
| T100 | 1 | | 126042 | MW Ant Coil |
| T102 | 1 | | 126041 | MW RF Coil |
| T103 | 1 | | 135020 | MW OSC Coil |
| T104 | 1 | | 140048 | AM IFT |
| T105 | 1 | | 140049 | AM IFT |
| Switches | | | | |
| SW101 | 1 | | SW-5220157 | Slide Switch |
| Miscellaneous | | | | |
| | 1 | | HE-064-10 | Braided Wire |
| | 1 | | IPS-1041-10 | Jump Wire |
| | 1 | | IPS-1041-4 | Jump Wire |
| | 1 | | MC02-417 | Micro Socket Ass'y (T14,21) |
| | 1 | | MC03-421 | Micro Socket Ass'y (T19,20,28) |
| | 1 | | MC03-425 | Micro Socket Ass'y (T13,26,29) |

14. TIM-609 P.C. Board Assembly (cont'd)

| Ref. No | Q'ty | Carver Part No. | Supplier Part No. | Description |
|---------------|------|-----------------|-------------------|---|
| | 1 | | MC04-418 | Micro Socket Ass'y (T45~48) |
| | 1 | | MC05-427 | Micro Socket Ass'y (T1,3,4,9~12) |
| | 1 | | MC09-430 | Micro Socket Ass'y (T15,16,27,33~35,49,133) |
| | 1 | | 09-#02B37 | UL Type Tube |
| | 6 | | U9-#18B01 | UL Type Tube (for C109,052,R123) |
| | 1 | | 171825-5 | Micro Plug (T24,42~44,86) |
| | 40 | | 5E-T05 | Jump Wire |
| F001,002 | 2 | | SFE10.7MS2GHYA | Ceramic Filter |
| F101 | 1 | | BFU450K | Ceramic Filter |
| F102 | 1 | | SFU450B3 | Ceramic Filter |
| AT001 | 1 | | YKD31-0201 | ANT. Terminal |
| FM001 | 1 | | FE407-A12 | FM Front End |
| TP001,002 | 1 | | WE-2 | Terminal Pin |
| TP051,052 | 1 | | WE-2 | Terminal Pin |
| TP001,101,102 | 3 | | RP-001 | Terminal Pin |

15. TON-608B P.C. Board Assembly

| Ref. No | Q'ty | Carver Part No. | Supplier Part No. | Description |
|-----------------------|------|-----------------|-------------------|-----------------------------|
| Semiconductors | | | | |
| IC401 | 1 | | M5218PR | IC |
| Capacitors | | | | |
| C401,402 | 2 | | LL-25TW4R7M | Low Leak. Electrolytic Cap. |
| C403,404 | 2 | | HE70SJS221K | Ceramic Capacitor |
| C405,406 | 2 | | HE40SJS270K | Ceramic Capacitor |
| C407,408 | 2 | | LL-25TW4R7M | Low Leak. Electrolytic Cap. |
| C411,412 | 2 | | LL-25TW4R7M | Low Leak. Electrolytic Cap. |
| C413,414 | 2 | | MY-50VU153J | Mylar Capacitor |
| C415,416 | 2 | | MY-50VU823J | Mylar Capacitor |
| C417,418 | 2 | | MY-50VU392J | Mylar Capacitor |
| C419,420 | 2 | | MY-50VU223J | Mylar Capacitor |
| C421,422 | 2 | | MY-50VU102J | Mylar Capacitor |
| C423,424 | 2 | | LL-25TW4R7M | Low Leak. Electrolytic Cap. |
| Resistors | | | | |
| R401,402 | 2 | | KA25ST101J | Carbon Resistor |
| R403,404 | 2 | | KA25ST104J | Carbon Resistor |
| R405,406 | 2 | | KA25ST433J | Carbon Resistor |
| R409,410 | 2 | | KA25ST473J | Carbon Resistor |
| R411,412 | 2 | | KA25ST103J | Carbon Resistor |
| R415,416 | 2 | | KA25ST153J | Carbon Resistor |
| R417~420 | 4 | | KA25ST272J | Carbon Resistor |
| R421,422 | 2 | | KA25ST821J | Carbon Resistor |
| R423,424 | 2 | | KA25ST102J | Carbon Resistor |
| R425,426 | 2 | | KA25ST473J | Carbon Resistor |
| VR401,402 | 2 | | EWG-G0A337C15 | Potentiometer |
| Switches | | | | |
| SW401 | 1 | | SW-1200172 | Push Switch |
| Miscellaneous | | | | |
| J401~412 | 12 | | 5E-T05 | Jump Wire |
| CN007 | 1 | | 171826-6 | Micro Plug |

16. UD-608B P.C. Board Assembly

| Ref. No | Q'ty | Carver Part No. | Supplier Part No. | Description |
|-----------|------|-----------------|-------------------|-------------|
| SW261,262 | 2 | | KHH10910 | Tact Switch |

17. VR-608B P.C. Board Assembly

| Ref. No | Q'ty | Carver Part No. | Supplier Part No. | Description |
|------------------|------|-----------------|-------------------|---------------|
| Resistors | | | | |
| VR452 | 1 | | EWG-G0A337751 | Potentiometer |

18. Inner Construction Parts

| Ref. No | Q'ty | Carver Part No. | Supplier Part No. | Description |
|---------------------------|------|-----------------|-------------------|------------------------------|
| Capacitors | | | | |
| C713 | 1 | | ECQU1A103MH | Metallized Film Capacitor |
| Coils | | | | |
| PT701 | 1 | | NPT-2004S | Power Transformer |
| Switches | | | | |
| 27E7 | 1 | | SW-1101147 | Power Switch |
| P.C.Board Assembly | | | | |
| 6E18 | 1 | | 26R1P02C | P.C.Board Ass'y (TIM-609) |
| 8E10 | 1 | | 26R1P04C | P.C.Board Ass'y (PLL-552) |
| 8E11 | 1 | | 26R1P04C-1 | P.C.Board Ass'y (SIG-552) |
| 8E12 | 1 | | 26R1P04C-2 | P.C.Board Ass'y (CSW-552) |
| 16E29 | 1 | | 26R1P05C | P.C.Board Ass'y (CNR-527D) |
| 19E29 | 1 | | 26R1P01C-1 | P.C.Board Ass'y (FEQ-608B) |
| 20E27 | 1 | | 26R1P01C-2 | P.C.Board Ass'y (TON-608B) |
| 21E4 | 1 | | 26R1P01C-3 | P.C.Board Ass'y (FSW-608B) |
| 21E13 | 1 | | 26R1P01C-4 | P.C.Board Ass'y (BL-608B) |
| 21E14 | 1 | | 26R1P01C-5 | P.C.Board Ass'y (VR-608B) |
| 21E29 | 1 | | 26R1P01C-6 | P.C.Board Ass'y (NSR-608B) |
| 21E30 | 1 | | 26R1P01C-7 | P.C.Board Ass'y (UD-608B) |
| 23E22 | 1 | | 26R1P01C | P.C.Board Ass'y (MA-608B) |
| 25E28 | 1 | | 26R1P01C-8 | P.C.Board Ass'y (SPS-608B) |
| 25E29 | 1 | | 26R1P01C-9 | P.C.Board Ass'y (SP-608B) |
| 25E30 | 1 | | 26R1P01C-10 | P.C.Board Ass'y (HP-608B) |
| 27E9 | 1 | | 26R1P01C-11 | P.C.Board Ass'y (PSW-608B) |
| Miscellaneous | | | | |
| 19E24 | 2 | | SK-501202 | Short Pin |
| 22E10 | 4 | | AC238 | Mica for Q515~518 |
| 24E9 | 2 | | AC238 | Mica for Q611, 612 |
| 27E1 | 1 | | AC-T05LB15 | AC Outlet |
| 27E2 | 1 | | FU-616024T | Fuse |
| 27E3 | 1 | | FH-032C | Fuse Holder |
| 3M1 | 1 | | N21280B | Front Chassis |
| 3M3 | 2 | | N21305 | Side Chassis |
| 3M4 | 1 | | N30837 | Center Chassis A |
| 3M5 | 1 | | N30838A | Center Chassis B |
| 3M6 | 1 | | N30811C | Support Chassis (P.T.) |
| 3M7 | 2 | | N44442 | Spacer |
| 3M8 | 1 | | N44311 | Fittings L (HEAT SINK) |
| 3M9 | 1 | | N44310 | Fittings R (HEAT SINK) |
| 3M10 | 1 | | N30729B | Angle L (P.C.B.) |
| 3M11 | 1 | | N30734B | Angle R (P.C.B.) |
| 3M12 | 1 | | N30776 | Fittings (P.C.B.) |
| 3M13 | 1 | | N42222-1 | Fittings (THERMAL RELAY) |
| 3M14 | 2 | | N44374 | Support Metal |
| 3M15 | 1 | | N44405 | Fittings (PCB) |
| 3M16 | 1 | | N21112A | Heat Sink |
| 3M17 | 2 | | SH-1230 | Heat Sink (for IC701,702) |
| 3M19 | 1 | | N43838A | Insulation Cover (Power) |
| 3M20 | 1 | | N41960 | Cabinet Mat |
| 3M21 | 2 | | N42584-1 | Shaft Supporter |
| 3M22 | 2 | | N42585 | Connector |
| 3M23 | 2 | | N44312 | Switch Shaft |
| 3M24 | 2 | | N44445 | RT Cushion |
| 3M25 | 4 | | N43879 | Stud 34 |
| 3M26 | 2 | | N44446A | Spacer |
| 3M27 | 1 | | N44096 | FL Spacer |
| 3M28 | 1 | | N44152 | Spacer (TUN knob guide) |
| 3M29 | 2 | | N44148 | Spacer (Up, Down) |
| 3M30 | 2 | | N41960 | Cabinet Mat |
| 5M3~11,13 | 25 | | TSB+30X06-Y | Tap Screw S, Bind Head, Y |
| 5M15,16 | 4 | | TSB+30X08-Y | Tap Screw S, Bind Head, Y |
| 5M17,19,20 | 7 | | TBB+30X08-Y | Tap Screw B, Bind Head, Y |
| 5M22~24 | 8 | | TBB+30X12-Y | Tap Screw B, Bind Head, Y |
| 5M26~29 | 10 | | TSB+30X06-B | Tap Screw S, Bind Head, B |
| 6M1 | 2 | | TSB+30X08-B | Tap Screw S, Bind Head, B |
| 6M6~14 | 21 | | TSC+30X06-Y | Tap Screw S, Washer Faced, Y |
| 6M16~18 | 10 | | ZS+STR26X08-1Y | Tap Screw, Flat Head, Y |

18. Inner Construction Parts (cont'd)

| Ref. No | Q'ty | Carver Part No. | Supplier Part No. | Description |
|---------|------|-----------------|-------------------|----------------------------|
| 6M22~25 | 12 | | TPM+30X08-B | Tap Screw P, Round Head, B |
| 6M28 | 5 | | TSS+30X08-Y | Tap Screw S, Flat Head, Y |
| 7M1 | 4 | | TST+40X08-Y | Tap Screw S, Truss, Y |
| 7M3 | 4 | | TSB+40X12-Y | Tap Screw S, Bind Head, Y |
| 7M6 | 4 | | TSB+40X14-Y | Tap Screw S, Bind Head, Y |
| 7M9 | 4 | | TSB+40X08-B | Tap Screw S, Bind Head, B |
| 7M12~15 | 8 | | SSP+30X06-Y | Screw, Pan Head, Y |
| 7M17 | 2 | | SSS+30X06-Y | Screw, Flat Head, Y |
| 7M19,20 | 12 | | 2AWX0830-05-Y | Plain Washer, Y |
| 7M21 | 1 | | 2AWX0830-05-B | Plain Washer, B |
| 7M22 | 4 | | 2AWX1040-08-B | Plain Washer, B |
| 7M27~30 | 5 | | 59BS1692 | GND Lug |

19. Appearance Parts

| Ref. No | Q'ty | Carver Part No. | Supplier Part No. | Description |
|----------------------|------|-----------------|-------------------|---|
| Miscellaneous | | | | |
| 19E23 | 1 | | UB-0027 | Binding Post |
| 27E4 | 1 | | ACC-022D5-4EE1 | Line Cord |
| 27E5 | 1 | | SR-4N-4 | Cord Stopper |
| 1M1 | 1 | | N21278A-1B | Front Panel |
| 1M3 | 1 | | N30835C-1-1 | Rear Panel |
| 1M4 | 1 | | N30836A | Bottom Board |
| 1M5 | 4 | | NO.7105 | Foot |
| 1M8 | 1 | | N42656-T-BR2 | Push Button (Power) |
| 1M9 | 3 | | N43093-T-BR2 | Push Button |
| 1M10 | 1 | | N43715 | Push Button Guide (Power) |
| 1M11 | 3 | | N43714-1 | Push Button Guide, 1 |
| 1M12 | 1 | | N42848-8 | LED Chip 8-Gang |
| 1M16 | 2 | | N44308 | Side Cap |
| 1M17 | 1 | | N44309 | Push Button Base (PH, CD, Video, Tuner) |
| 1M19 | 3 | | N30733A | Knob 19 (SP, Monitor, Dubbing) |
| 1M20 | 3 | | N43720 | Knob 19 (Bass, Treble, Balance) |
| 1M21 | 1 | | N43719 | Knob 38 (Volume) |
| 1M23 | 1 | | N44002 | Push Button |
| 1M24 | 1 | | N44003 | Push Button |
| 1M25 | 1 | | N30778A | LED Guide |
| 1M26 | 1 | | N21279A-1 | Cabinet |
| 2M1 | 1 | | N43000-GY3 | Knob Cap (UP) |
| 2M2 | 1 | | N43001-GY3 | Knob Cap (DOWN) |
| 2M3 | 1 | | N44032 | Knob Cap (NOISE) |
| 2M4 | 1 | | N44033 | Knob Cap (ENGAGE) |
| 2M5 | 2 | | N42864 | Knob Base (Noise, Engage) |
| 2M6 | 2 | | N42865 | Knob Base (Up, Down) |
| 2M7 | 1 | | N42819A-BR2 | Tuning Knob Guide |
| 2M8 | 2 | | N44031 | Knob Spring |
| 2M11 | 4 | | N43000-1GY3 | Knob Cap (PH, CD, Video, Tuner) |
| 2M14 | 1 | | N44000 | Tinted Window |
| 2M16 | 1 | | N44030 | Filter |
| 2M21 | 2 | | N44093A-GY3 | Handle |
| 2M22 | 4 | | N44092-GY3 | Handle Spacer |

20. Packing Parts

| Ref. No | Q'ty | Carver Part No. | Supplier Part No. | Description |
|---------|------|-----------------|-------------------|---------------------------------|
| AT101 | 1 | | 171001 | Loop Antenna |
| 27E11 | 1 | | TANT-031 | FM Antenna (cord) |
| 27E12 | 1 | | N1-461 | Ant. Holder Kit |
| 4M1 | 1 | | N40612A | Polyethylene Bag (Unit) |
| 4M2 | 1 | | N40487 | Polyethylene Bag (Accessories) |
| 4M3 | 1 | | N44591 | Packing Pad (Bottom) |
| 4M6 | 2 | | N21300-11 | Packing Pad |
| 4M9 | 1 | | N44403A | Shipping Carton |
| 4M10 | 1 | | N44404A | Packing Pad (TOP) |
| 4M11 | 1 | | N44447B | Packing Pad (Front) |
| 4M13 | 2 | | N44043 | Label, SA1965 (Lightning Flash) |
| 4M14 | 1 | | N42235 | Sheet, Serial Number |
| 4M15 | 2 | | N41014 | Label, Serial Number |
| 4M20 | 1 | | OM-556C | Instruction Manual |
| 4M21 | 1 | | N44095A | Card, Warranty Registration |

Capacitors description

• Electrolytic Capacitor

| | | | | |
|----|-----|----|-----|---|
| NS | -16 | TW | 221 | M |
|----|-----|----|-----|---|

Tolerance (%); M = ±20
 Value (μF); R22=0.22, 100=10, 1R0=1.0, 221=220, 3R3=3.3, 102=1000
 Voltage (V); -16 = 16, 6R3 = 6.3

• Mylar Capacitor

| | | | | |
|----|------|---|-----|---|
| MY | -50V | S | 223 | M |
|----|------|---|-----|---|

Tolerance (%); J = 5, K = 10, M = 20
 Value (pF); 122 = 1200, 104 = 100000 = 0.1 (μF), 223 = 22000
 Voltage (V); -50 = 50

• Ceramic Capacitor

| | | | | | |
|----|----|----|----|-----|---|
| HE | 90 | SJ | YF | 223 | Z |
|----|----|----|----|-----|---|

Tolerance (%); D = ±0.5pF, J = ±5 (%), K = ±10 (%), Z = ±5₂₀ (%)
 Value (pF); 050 = 5, 102 = 1000, 560 = 56, 223 = 22000, 821 = 820
 Voltage (V); HC = 25, HE = 50, HK = 250, HM = 500, H = 100

Resistors description

• Fixed Resistors

| | | | | | |
|----|-----|---|-----|---|-----|
| KA | 25S | T | 473 | J | -LP |
|----|-----|---|-----|---|-----|

Tolerance (%); D = ±0.5, F = ±1, G = ±2, J = ±5
 Value (Ω); 2R2 = 2.2, 682 = 6.8k, 125 = 1.2M, 470 = 47, 473 = 47k,
 221 = 220, 394 = 390k
 Wattage (W); 25S = 1/4, 50S or 50X = 1/2, -2W = 2
 Type; KA = Carbon, FR = Flame Proof, SA = Metal Oxide,
 RF = Fusible, MF = Metal Film

VOLTAGE CONVERSION

220V/50Hz Version

Bill of Materials

| Q'ty | Part No. | Description |
|------|--------------|-----------------------------|
| 1 | 5217 | RCVR 900 FINISHED GOODS |
| 1 | 315-10511-00 | FUSE AGC3 |
| 1 | 530-10054-00 | LABEL, AGC3 |
| 1 | 530-10053-00 | LABEL, 240V AC 50HZ |
| 1 | 530-10050-00 | LABEL, VOLTAGE CONVERSION |
| 1 | 530-10012-00 | LABEL, MILITARY IMPORT DUTY |
| 1 | 530-10013-00 | LABEL, MILITARY CONVERSION |

Direction for Change

1. Locate power supply circuit board in center of unit.
 - A. Move yellow wire from M161 to M159.
 - B. Move blue wire from M163 to M161.
 - C. Move brown wire from M165 to M163.

Main Amp P.C. Board MA-608B

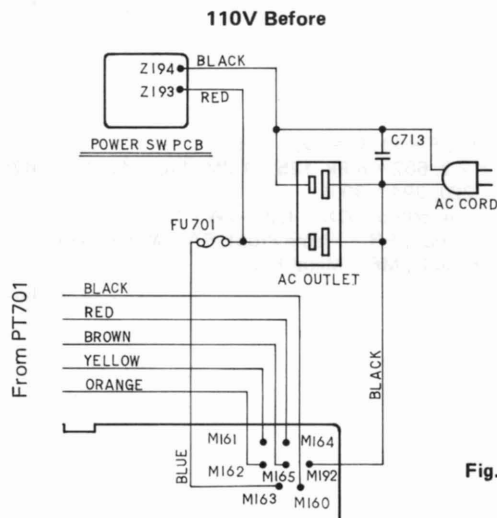


Fig. 1

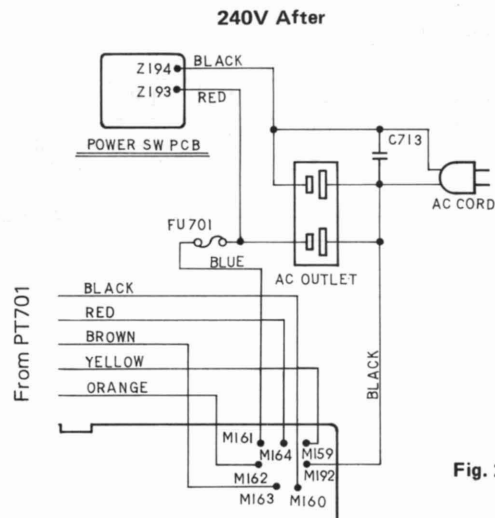


Fig. 2

2. Change fuse on back panel from AGC6 to AGC3.
3. Locate small slide switch SW301 on front controller P.C. board and switch it to "E" for 240V Europe frequency stepping. (See Fig. 3)
4. Locate small slide switch SW101 on AM/FM board switch to "50 μ s" for 240V Europe de-emphasis. (See Fig. 4)
5. Apply label 530-10054-00 (AGC3) in place of existing label "AGC6".
6. Apply label 530-10053-00 (240V AC 50HZ) in place of existing label "120V AC 60Hz".
7. Using spray adhesive, mount label 530-10050-00 (VOLTAGE CONVERSION) to inside top cover.
8. Apply label 530-10012-00 (MILITARY IMPORT DUTY) and label 530-10013-00 (MILITARY CONVERSION) to bottom of unit.

PLL P.C. Board PLL-552

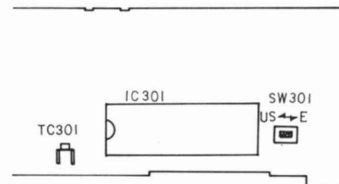


Fig. 3

Tuner P.C. Board TIM-609

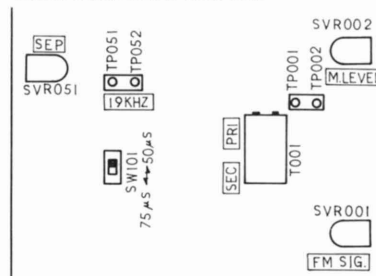
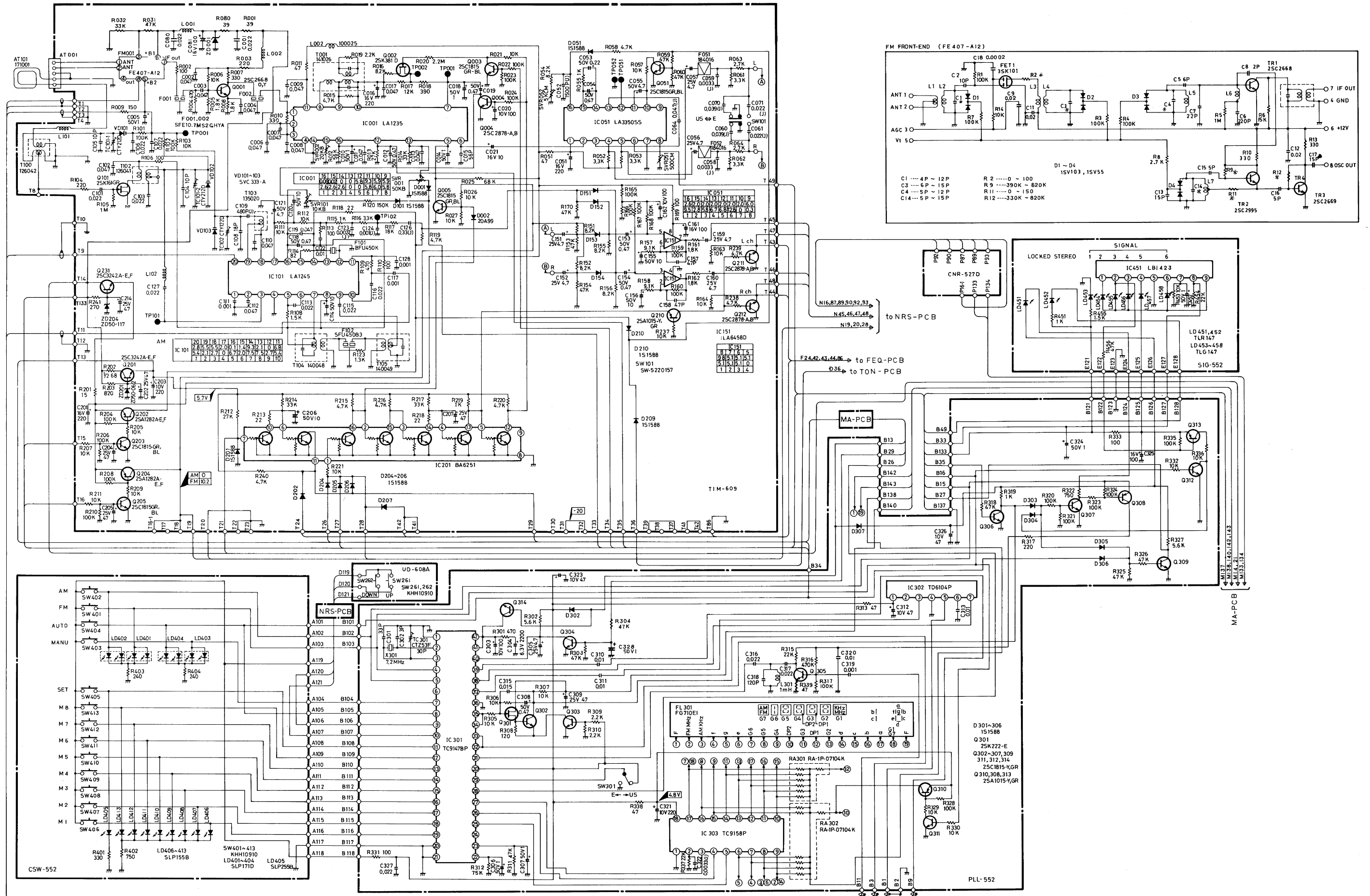


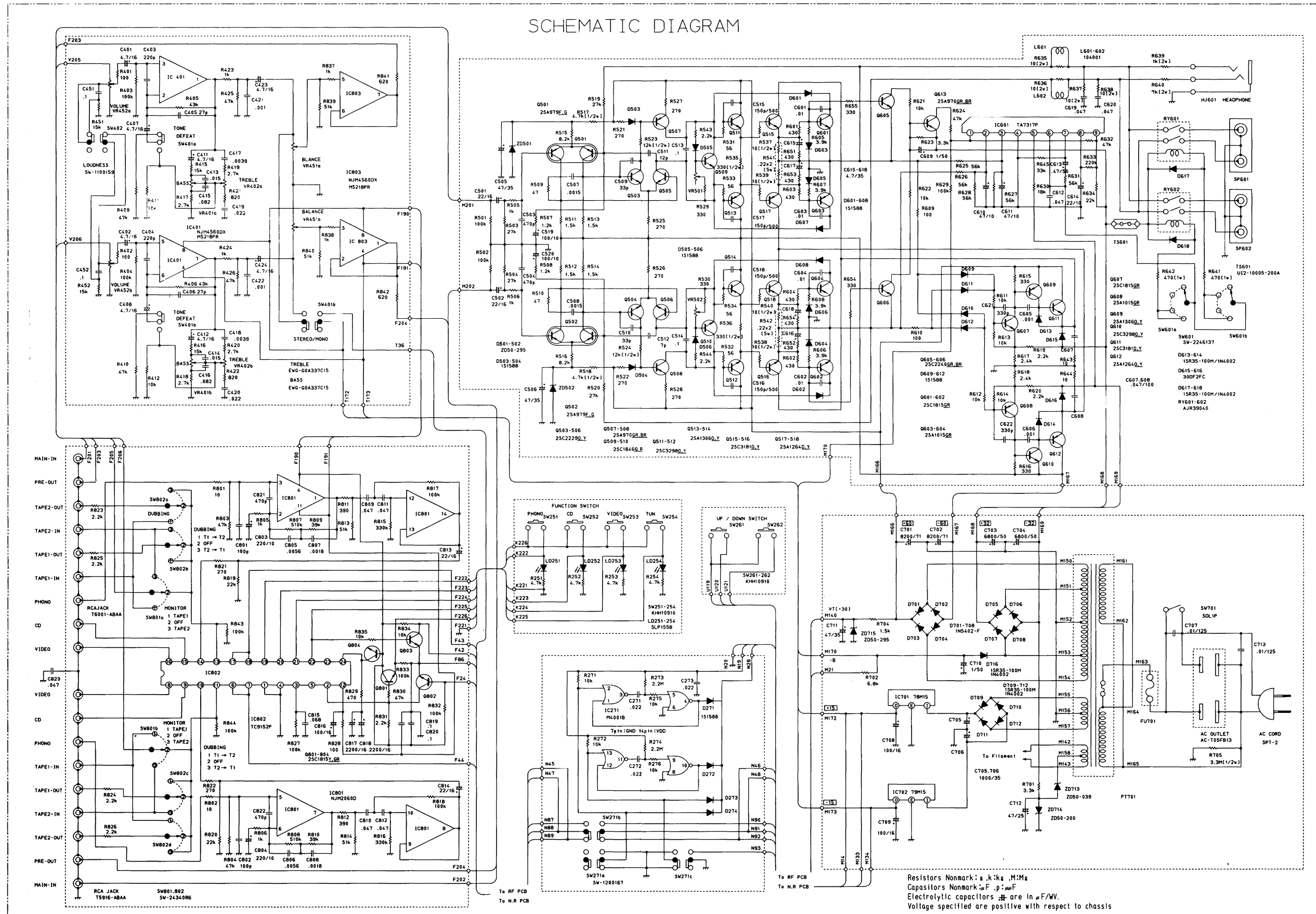
Fig. 4

SCHEMATICS DAIGRAM

Tuner

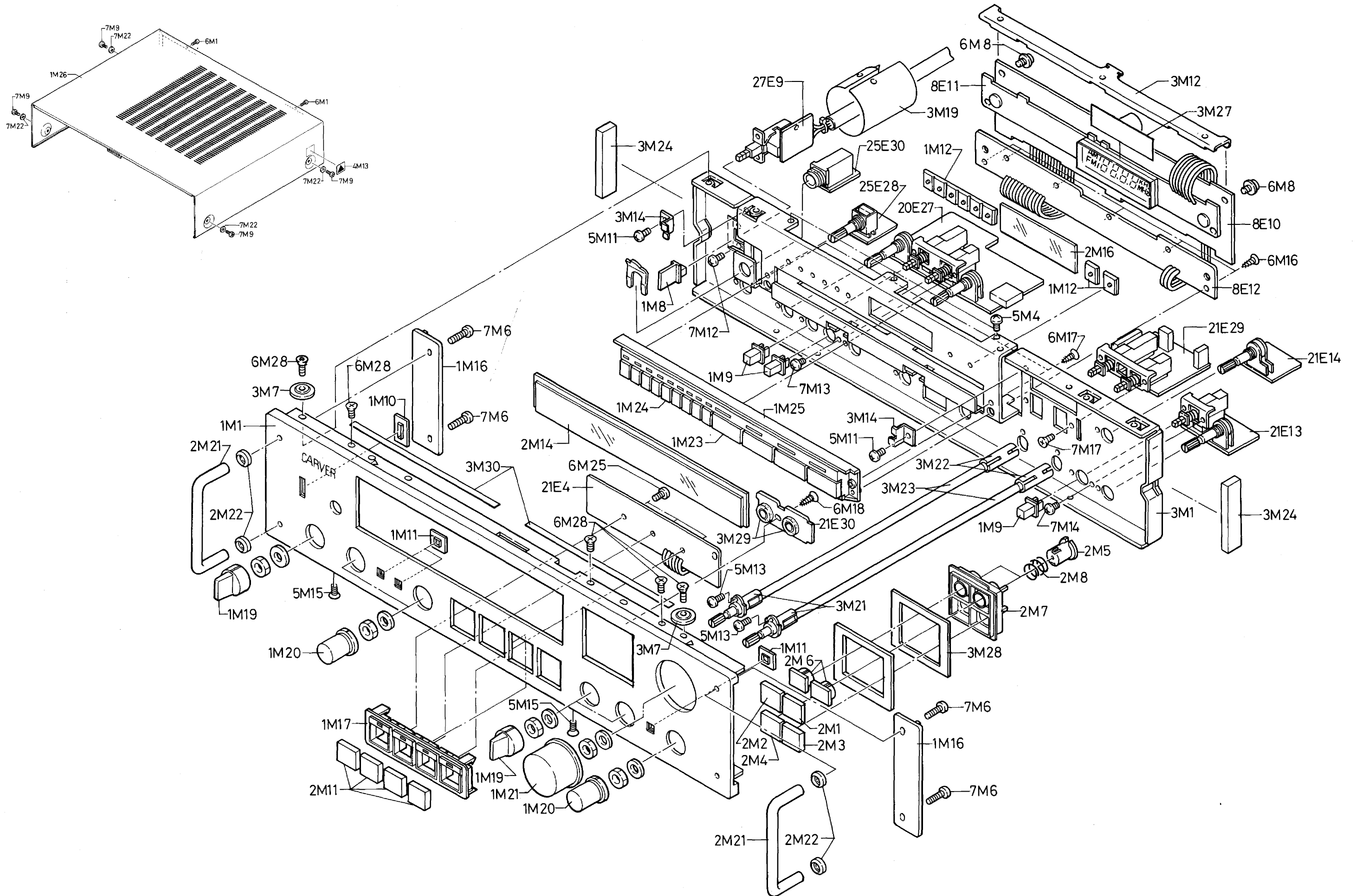


SCHMATIC DIAGRAM

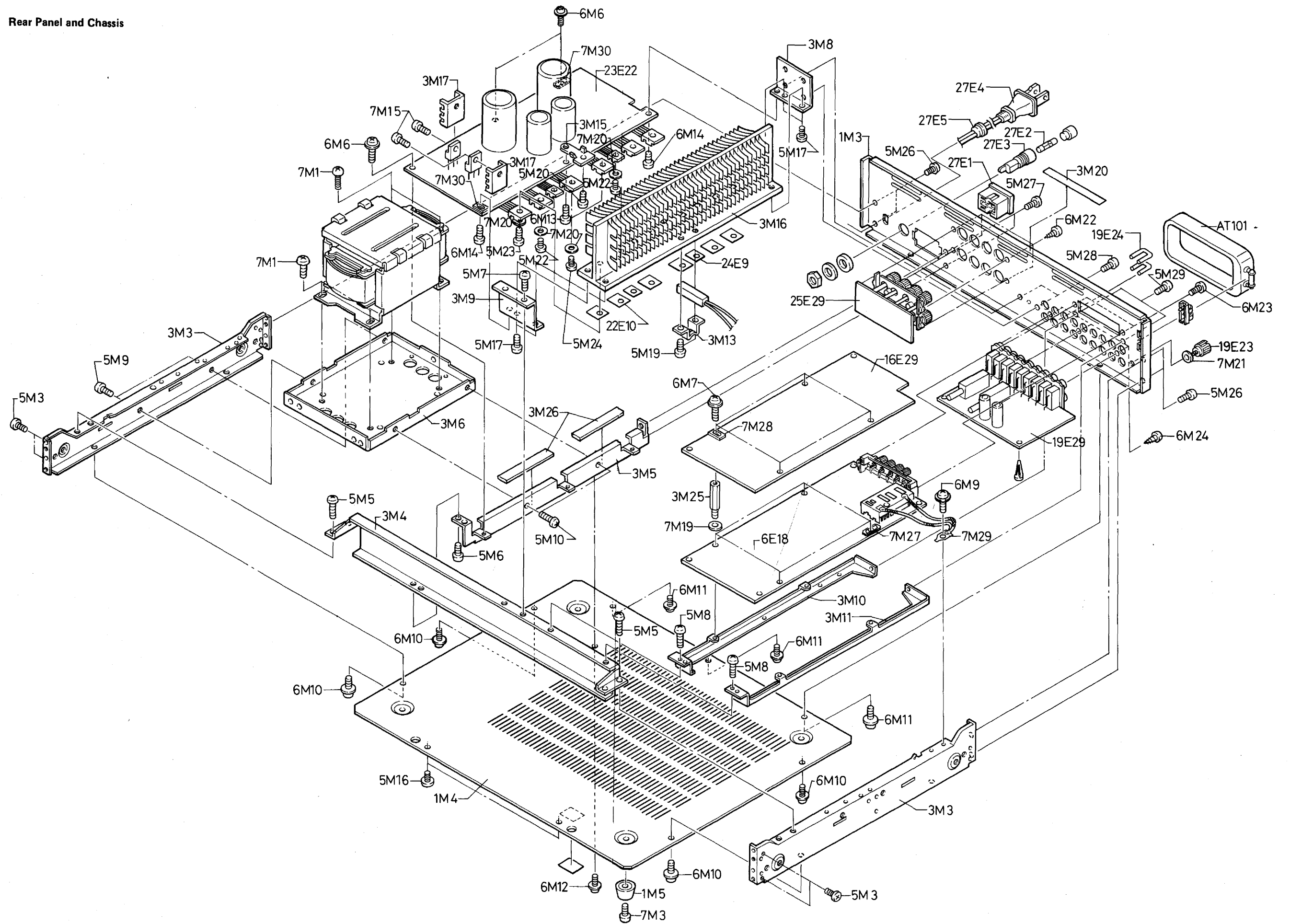


EXPLODED VIEW

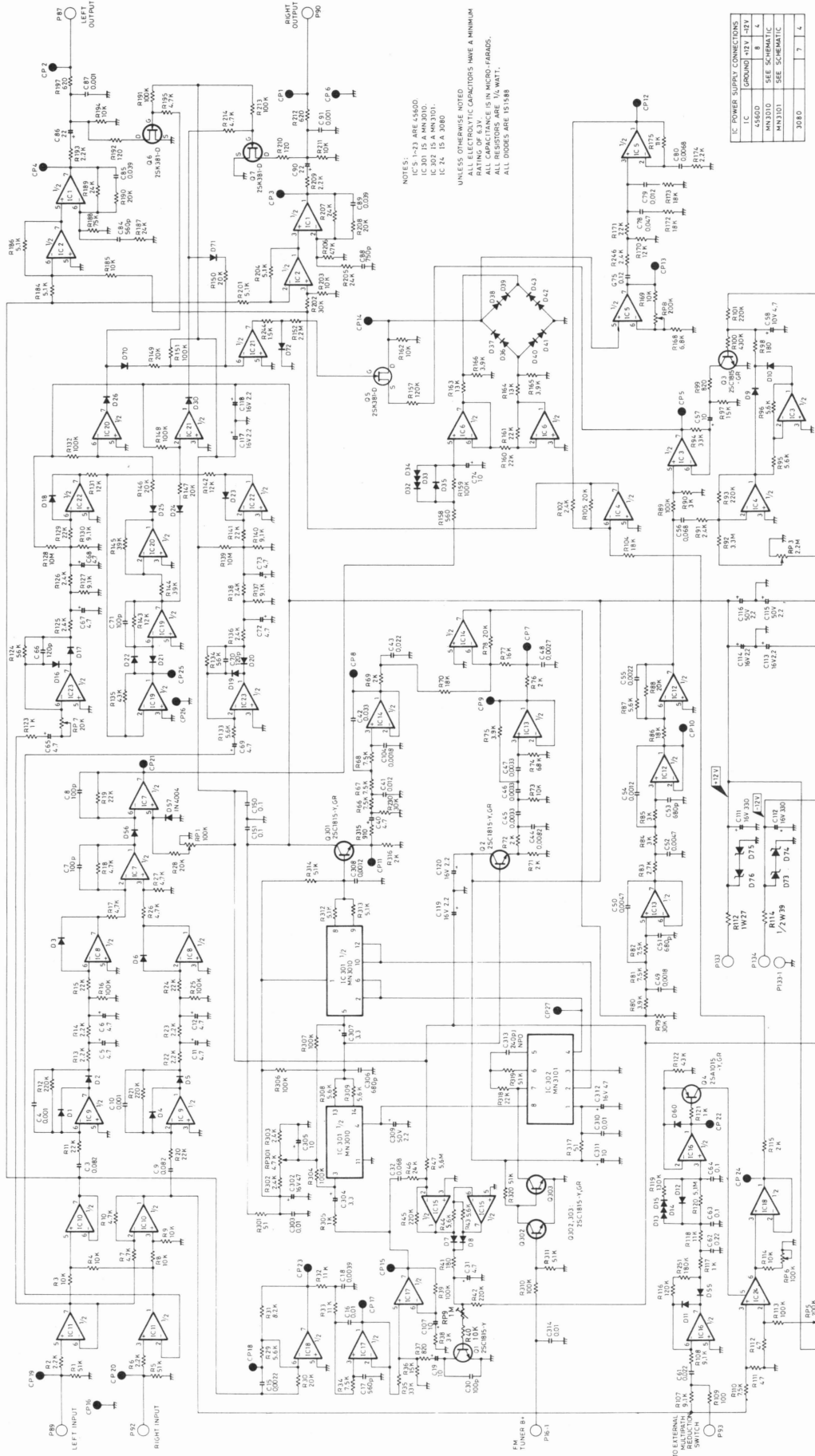
Front Panel and Remote Control



Rear Panel and Chassis



Noise reduction



NOTES:
 IC'S 1-23 ARE LS6000
 IC 24 IS A MN3001
 IC 25 IS A MN3001
 IC 26 IS A 741
 UNLESS OTHERWISE NOTED
 ALL RESISTORS ARE IN OHMS
 ALL CAPACITORS ARE IN MICRO-FARADS
 ALL DIMENSIONS ARE IN INCHES

| IC | POWER SUPPLY CONNECTIONS | 7 | 4 |
|--------|--------------------------|---|---|
| LS6000 | GROUND +12V -42V | 8 | 4 |
| MN3001 | SEE SCHEMATIC | | |
| MN3001 | SEE SCHEMATIC | | |
| 741 | | | |