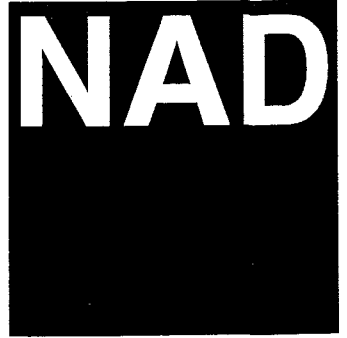


SERVICE MANUAL



NAD - 00104

SERVICE SAFETY PRECAUTIONS (UL)

1. Use exact replacement parts for critical locations marked "⚠"
2. Return lead dress to original position and re-install protective covers.
3. Before returning to customer, test for shock hazard; use either method A or B:
 - A. Leakage test "cold":
 1. Unplug the AC cord; turn power switch ON.
 2. Connect one lead of High Voltage Insulation Tester to both prongs of the AC plug.
 3. Touch other lead to all exposed metal parts.
 4. Impedance measurement must be 0.3-5.0 Megohms.
 - B. Leakage test, "live" :
 1. Plug unit directly into the AC outlet: do not use isolation transformer.
 2. Connect one lead of the Leakage Current Tester to earth ground.
 3. Touch other lead to all exposed metal parts.
 4. Leakage measurement must be less than 0.5 milliamps.

**214/216
STEREO POWER
AMPLIFIER**

**214/216
STEREO POWER
AMPLIFIER**

104

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NOTE: The "A", given after an item number, refers to the part number for the model 216 only.

SPECIFICATIONS

Specifications are measured in accordance with EIA Standard RS-490 (IHF T-202) for amplifiers.

| STEREO MODE | 214 | 216 |
|---|-------------------------|-------------------------|
| Continuous Power Output 8 ohms (20Hz/1kHz/20kHz at rated THD) 4 ohms | 80W 120W | 125W 200W |
| Clipping Power at 0.1%THD 8 ohms (1kHz) 4 ohms | 95W 150W | 150W 250W |
| Rated THD (with 80kHz LPF) 20Hz/1kHz/20kHz at rated power | 0.03% | 0.03% |
| Soft Clipping THD, 1kHz Output Reduction | 10% 1dB | 10% 1dB |
| Signal/Noise Ratio, 1kHz ref. 1W (A-weighted, 220 ohm load) ref. 8 ohms rated power | 96.5dB 115.5dB | 96.5dB 117.5dB |
| Frequency Response 20Hz 20kHz | 0~-0.3dB -0.2~-0.8dB | 0~-0.3dB -0.2~-0.8dB |
| Input Sensitivity, 1kHz (Rated output into 8 ohms) | 895±30mV | 1120±40mV |
| Channel Separation 1kHz 10kHz | 75dB 58dB | 75dB 58dB |
| Damping Factor (at 50Hz/8 ohms) | 200 | 200 |
| Dynamic Power 8 ohms 4 ohms 2 ohms | 110W 180W 250W | 170W 280W 400W |

BRIDGE MODE

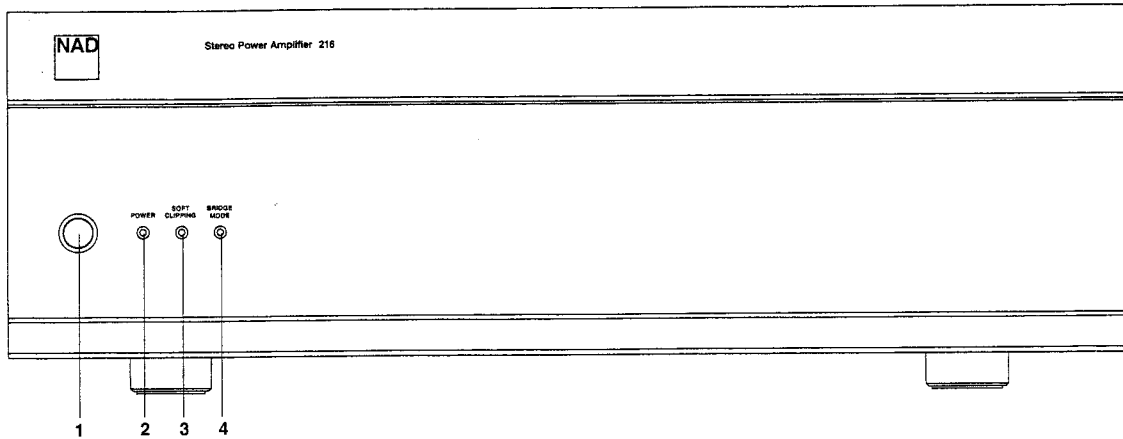
| | | |
|---|----------|-----------|
| Continuous Power Output 8 ohms (20Hz/1kHz/20kHz at rated THD with 80kHz LPF) | 240W | 400W |
| Input Sensitivity (Rated output into 8 ohms) | 775±40mV | 1000±50mV |

PHYSICAL

| | | |
|---|-------------------|-------------------|
| Dimensions (Width x Height x Depth) | 435 x 128 x 370mm | 435 x 146 x 370mm |
| Gross weight | 12.5kg (27.5lbs) | 15.5kg (34.1lbs) |
| Power consumption at 120, 220 or 240VAC, 50/60Hz | 384VA | 540VA |

WARNING: TO PREVENT FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.

FRONT PANEL



1. POWER Switch
2. POWER Indicator
3. SOFT CLIPPING Indicator
4. BRIDGE MODE Indicator

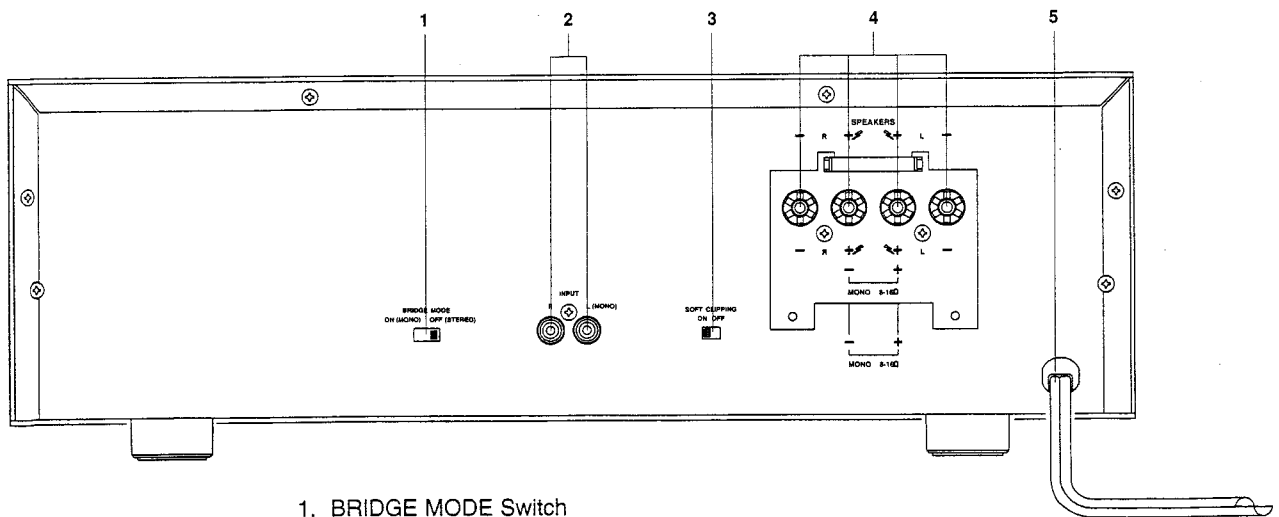


The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure, that may be of sufficient magnitude to constitute a risk of electric shock to persons.



The exclamation point within an equilateral triangle is intended to alert the user of the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

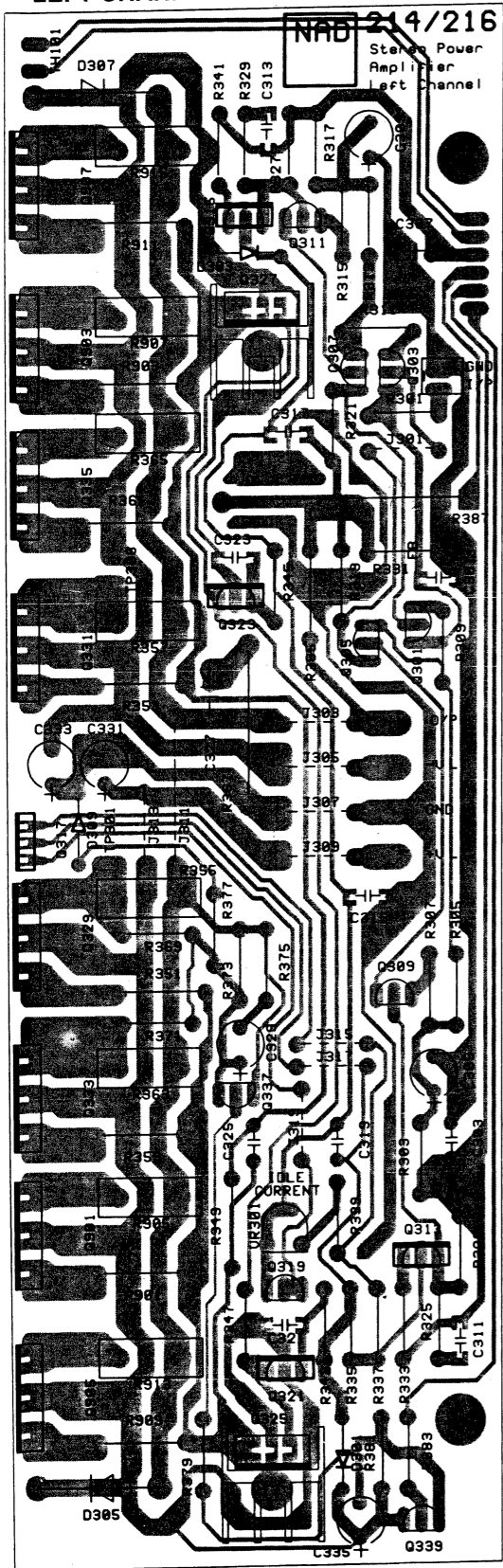
REAR PANEL



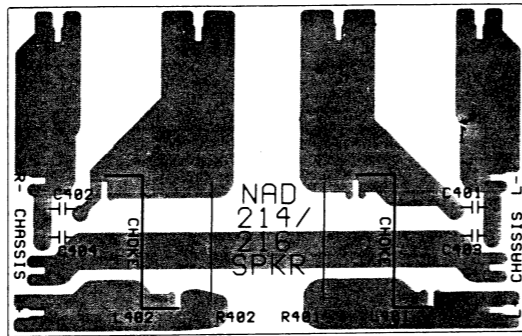
1. BRIDGE MODE Switch
2. INPUT Jacks
3. SOFT CLIPPING Switch
4. SPEAKER OUTPUT Terminals
5. AC POWER CORD

PCB LAYOUT

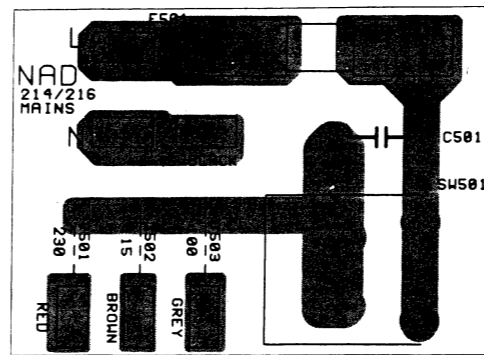
LEFT CHANNEL



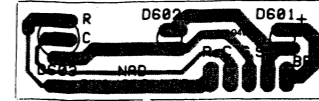
SPEAKER



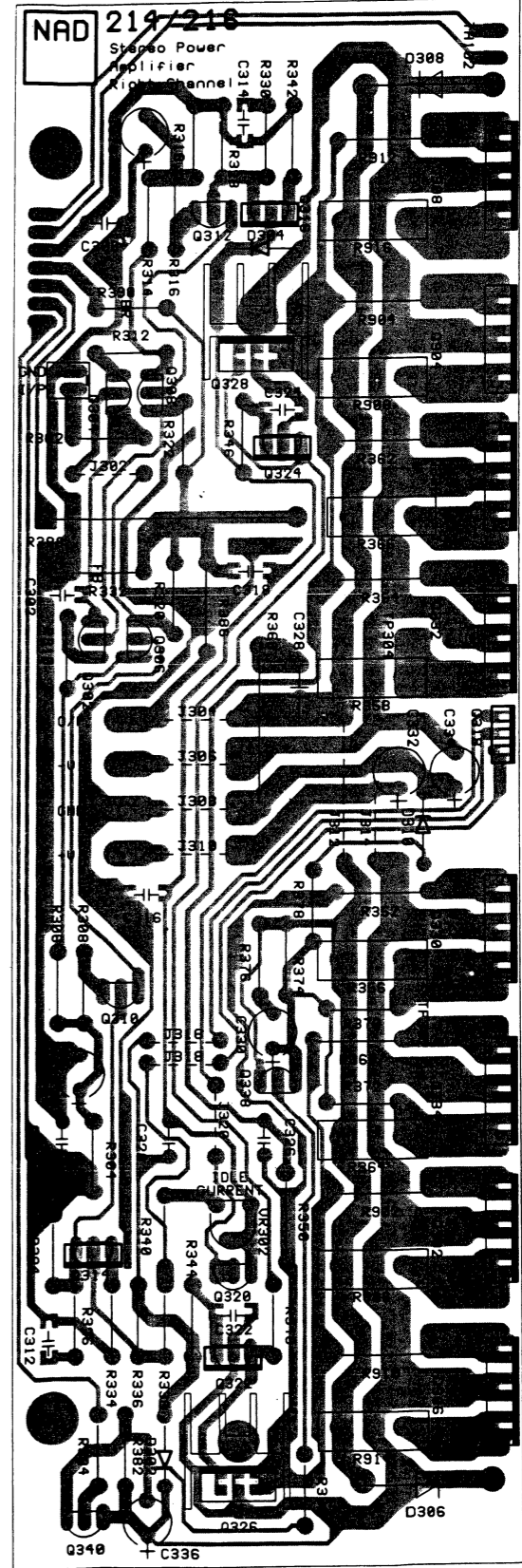
MAINS



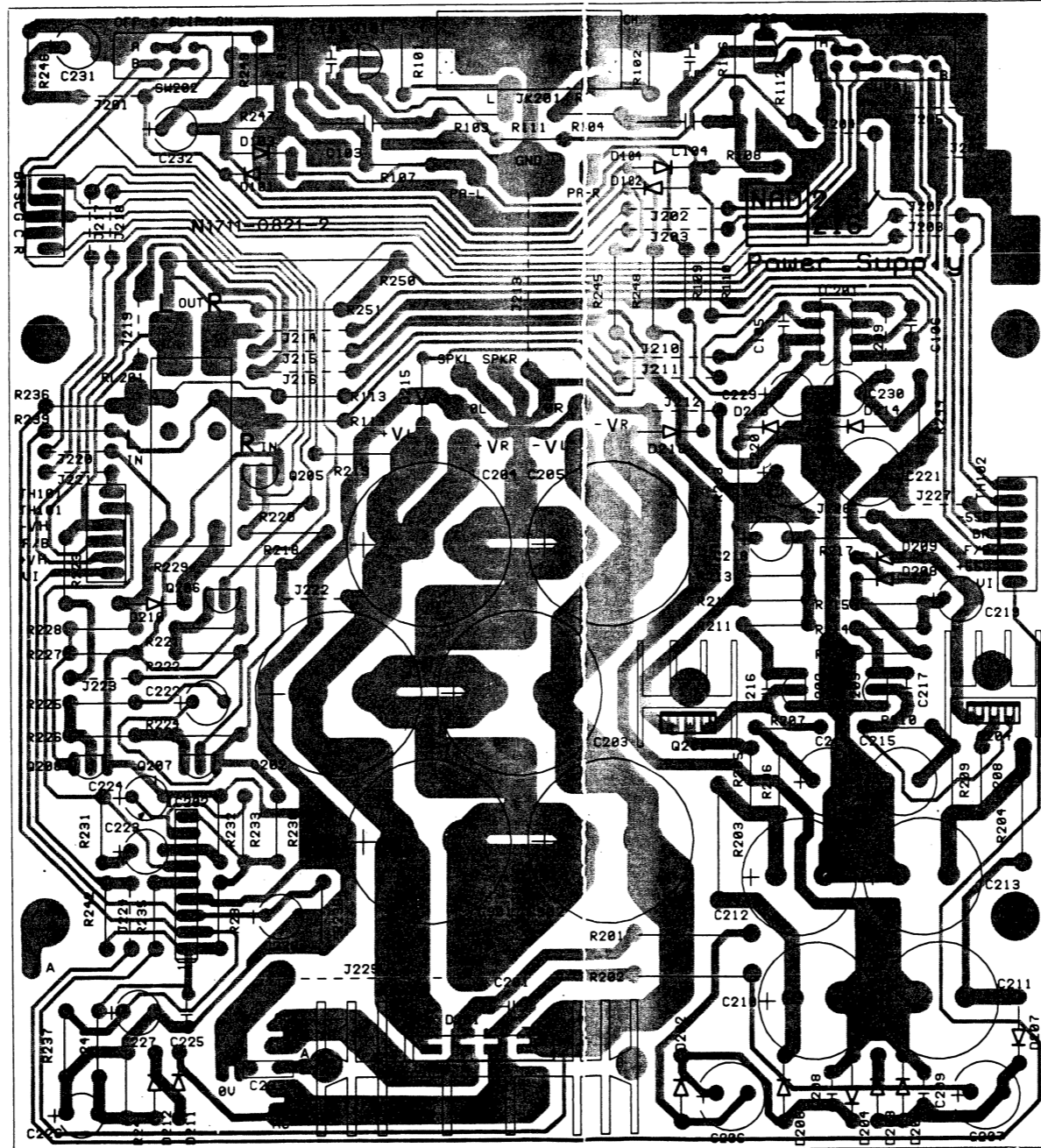
LED



RIGHT CHANNEL



POWER SUPPLY

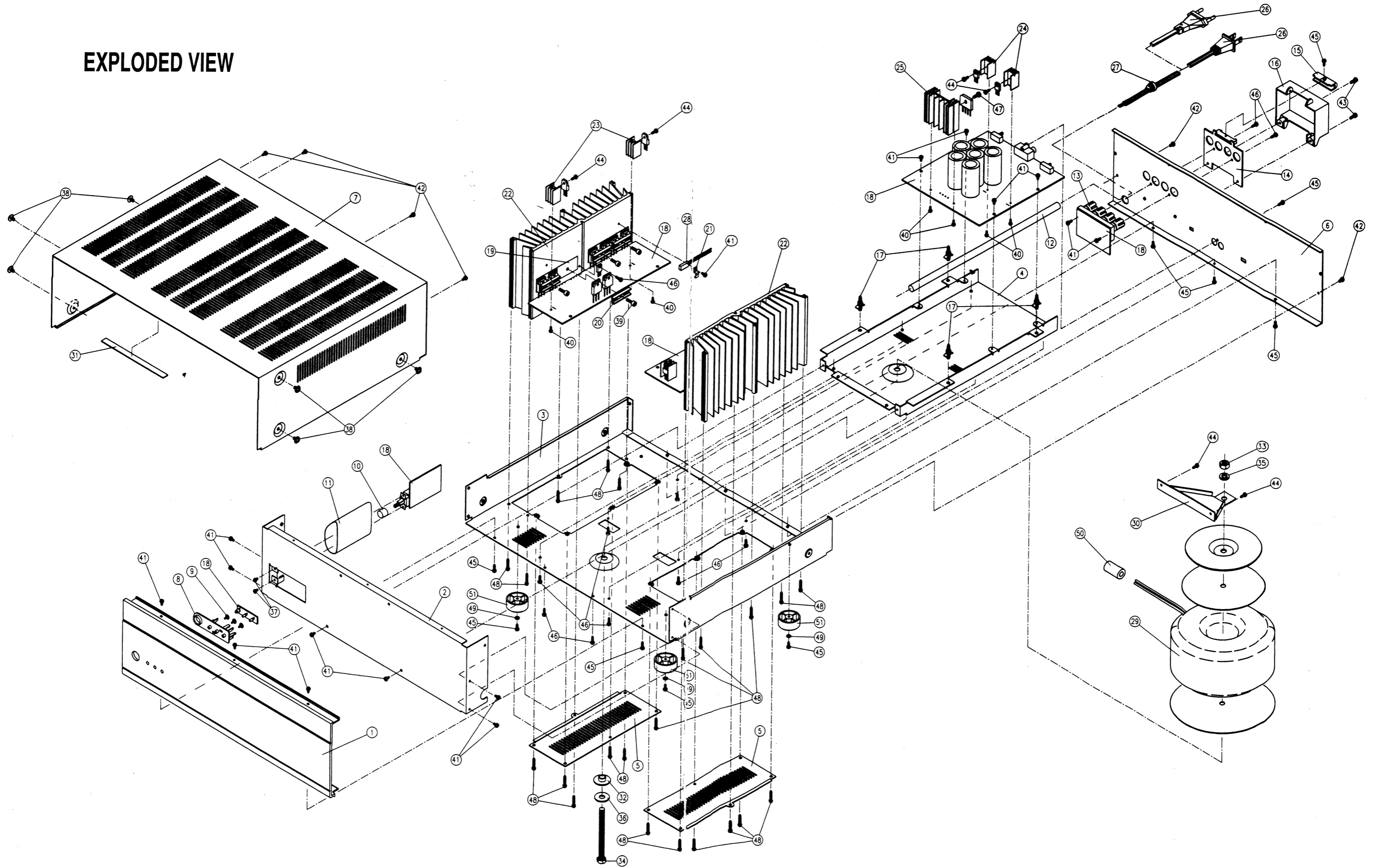


EXPLODED VIEW PARTS LIST

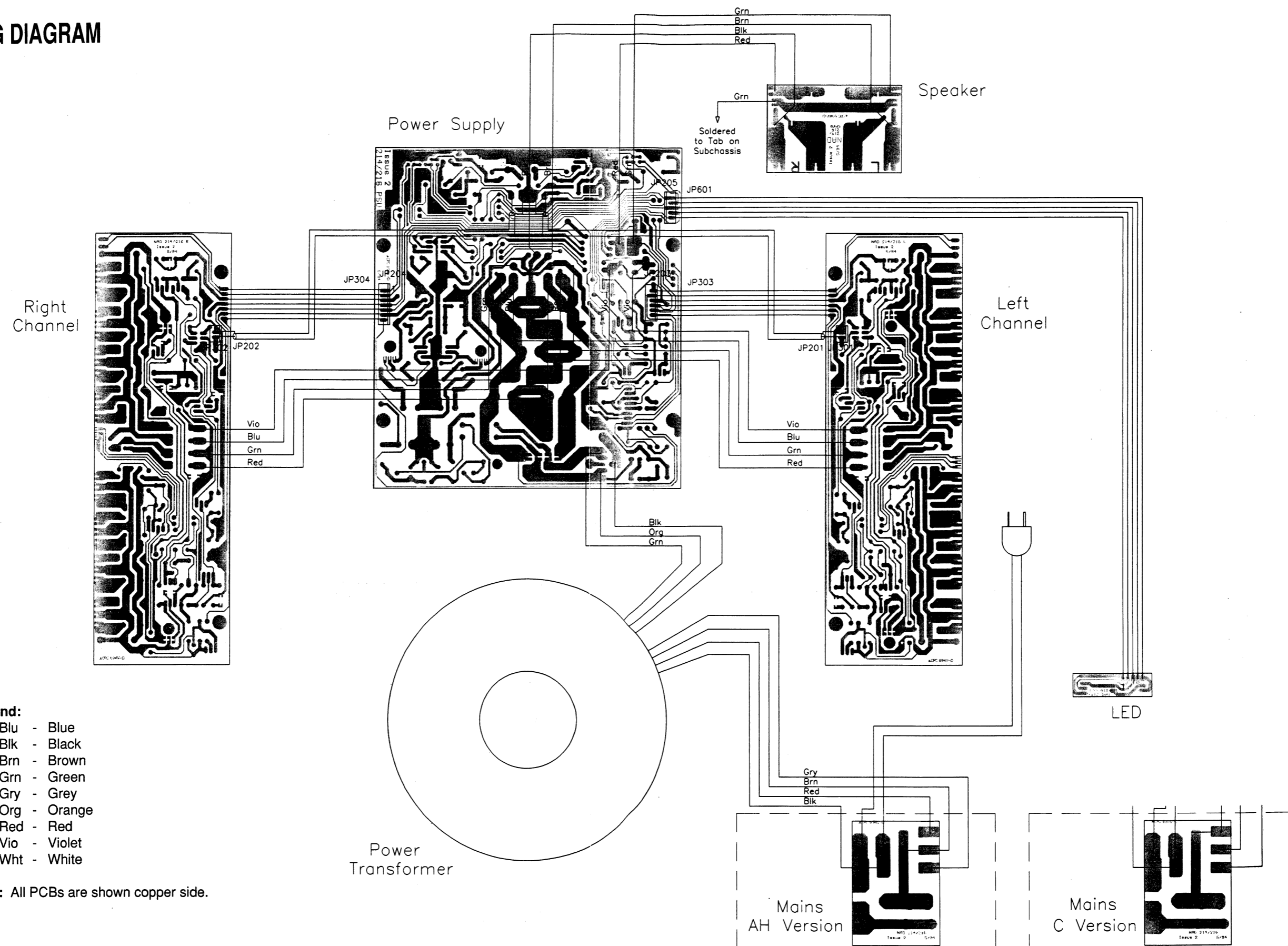
| ITEM NO. | PART NUMBER | DESCRIPTION | QTY. |
|----------|---------------|--|------|
| 1 | N14619601-1 | Fascia 214 | 1 |
| 1 A | N14620601-1 | Fascia 216 | 1 |
| 2 | N14023250-1 | Subfascia 214 | 1 |
| 2 A | N14023350-1 | Subfascia 216 | 1 |
| 3 | N14023270-1 | Base Plate | 1 |
| 4 | N14023290-1 | Subchassis | 1 |
| 5 | N14023300-0 | Access Cover | 2 |
| 6 *AH | N14023260-1 | Rear Panel 214 AH | 1 |
| 6 *C | N14023320-1 | Rear Panel 214 C | 1 |
| 6 A*AH | N14023360-0 | Rear Panel 216 AH | 1 |
| 6 A*C | N14023370-1 | Rear Panel 216 C | 1 |
| 7 | N14023280-0 | Top Cover 214 | 1 |
| 7 A | N14023380-0 | Top Cover 216 | 1 |
| 8 | N41519991-0 | Bezel | 1 |
| 9 | N41520011-0 | Clear LED Lens | 3 |
| 10 | N2437640B-0 | Power Button | 1 |
| 11 | N16600600-0 | Shrinkage Tube ID=38.1mm 0.07m | 1 |
| 12 | N16600710-0 | Sleeve Tube ID=10mm 0.3m | 1 |
| 13 *C | N21038004-0 | Speaker Terminal with Plug C | 1 |
| 13 *AH | N21038104-0 | Speaker Terminal without Plug AH | 1 |
| 14 A*AH | N41520022-0 | UL Box Backplate Pantone 420 Grey AH | 1 |
| 15 A*AH | N41520031-0 | UL Box Saddle AH | 1 |
| 16 A*AH | N41519981-0 | UL Box Cover AH | 1 |
| 17 | N41519951-0 | PCB Support (LCBS) | 4 |
| 18 | N17110821-2 | 214/216 Amp PCB without components | 1 |
| 19 | N31003191-0 | Silicon Sheet | 8 |
| 20 | N41321671-0 | Transistor Clamp | 8 |
| 21 | N41321661-0 | Thermal Mounting Clip | 2 |
| 22 | N54000841-0 | Main Heatsink 214 | 2 |
| 22 A | N54000871-0 | Main Heatsink 216 | 2 |
| 23 | N54000831-0 | Heatsink Power Amplifier | 4 |
| 24 | N54000851-0 | Heatsink Regulator | 2 |
| 25 | N54000821-1 | Heatsink Power Supply 214 | 1 |
| 25 A | N54000901-0 | Heatsink Power Supply 216 | 1 |
| 26 *AH | N70093100-1 | AC Cord 18AWGx2 UL/CSA SPT-2 AH | 1 |
| 26 *B | N70095100-0 | AC Cord ASTA BS1363 with 5A Fuse B | 1 |
| 26 *B1 | N70091190-1 | AC Cord SAA AS3112 B1 | 1 |
| 26 *C | N70093110-0 | AC Cord SEMKO C | 1 |
| 27 | N41519461-0 | Strain Relief Bushing | 1 |
| 28 | N89100055-0 | Thermal Breaker UP 7290C | 2 |
| 29 | N18062102-0 | Transformer TI-61233with Accessory 214 | 1 |
| 29 A | N18062105-0 | Transformer TI-61242with Accessory 216 | 1 |
| 30 | N41322151-0 | Transformer Bracket | 1 |
| 31 | N41519411-0 | Cushion 130x10x1.0mm | 1 |
| 32 | N41520331-0 | Transformer Bushing | 1 |
| 33 | 28368075-0 | Nut M8x0.75mm 214 | 1 |
| 34 | 29078070-2000 | Bolt Hexagon Head M8x0.75mm - 70mm 214 | 1 |
| 34 A | N41321891-0 | Bolt + Nut Hexagon Head BSW 18TPI - 3.5" 216 | 1 |
| 35 | 28428015-0 | Spring Washer M8 | 1 |

| ITEM NO. | PART NUMBER | DESCRIPTION | QTY. |
|----------|---------------|--------------------------------------|------|
| 36 | 41321971-0 | Flat Washer M8x22x1.5mm | 1 |
| 37 | 28153042-0 | Screw M3x4mm | 2 |
| 38 | 29004006-3010 | Screw M4x0.5x6mm with Flat Washer | 6 |
| 39 | 29084012-3400 | Screw Hexagon Socket Head 4x12mm Blk | 8 |
| 40 | 29542606-0000 | Screw BT 2.6x6mm | 8 |
| 41 | 29543006-0000 | Screw B-Tite 3x6mm Yel.Zn | 17 |
| 42 | 29543006-3000 | Screw B-Tite 3x6mm Blk.Zn | 6 |
| 43 | 29443008-3000 | Screw S-Tite 3x8mm Blk | 2 |
| 44 | 29503008-3000 | Screw Tapping 3x8mm | 8 |
| 45 | 29543008-3000 | Screw B-Tite 3x8mm Blk.Zn | 11 |
| 46 | 29543010-3000 | Screw B-Tite 3x10mm Blk.Zn | 12 |
| 47 | 29543510-0000 | Screw B-Tite 3.5x10mm Yel.Zn | 1 |
| 48 | 29503516-3100 | Screw B-Tite 3.5x16mm | 22 |
| 49 | 28423367-0 | Metal Washer ID=3.3mm OD=6.7mm | 4 |
| 50 A | N18080110-0 | Ferrite Core 33RH15.5x28.5x7.3 216 | 1 |
| 51 | N41519371-1 | Rubber Foot | 4 |

EXPLODED VIEW



WIRING DIAGRAM

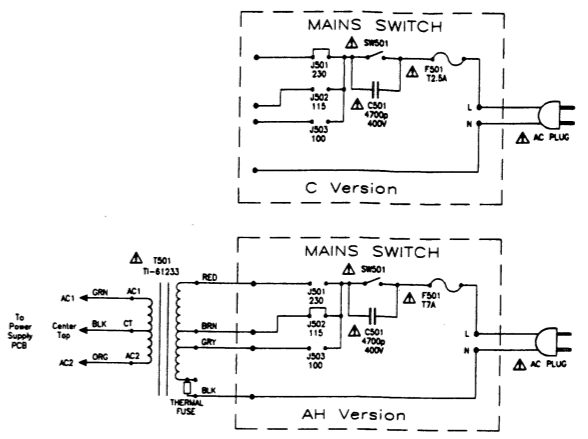
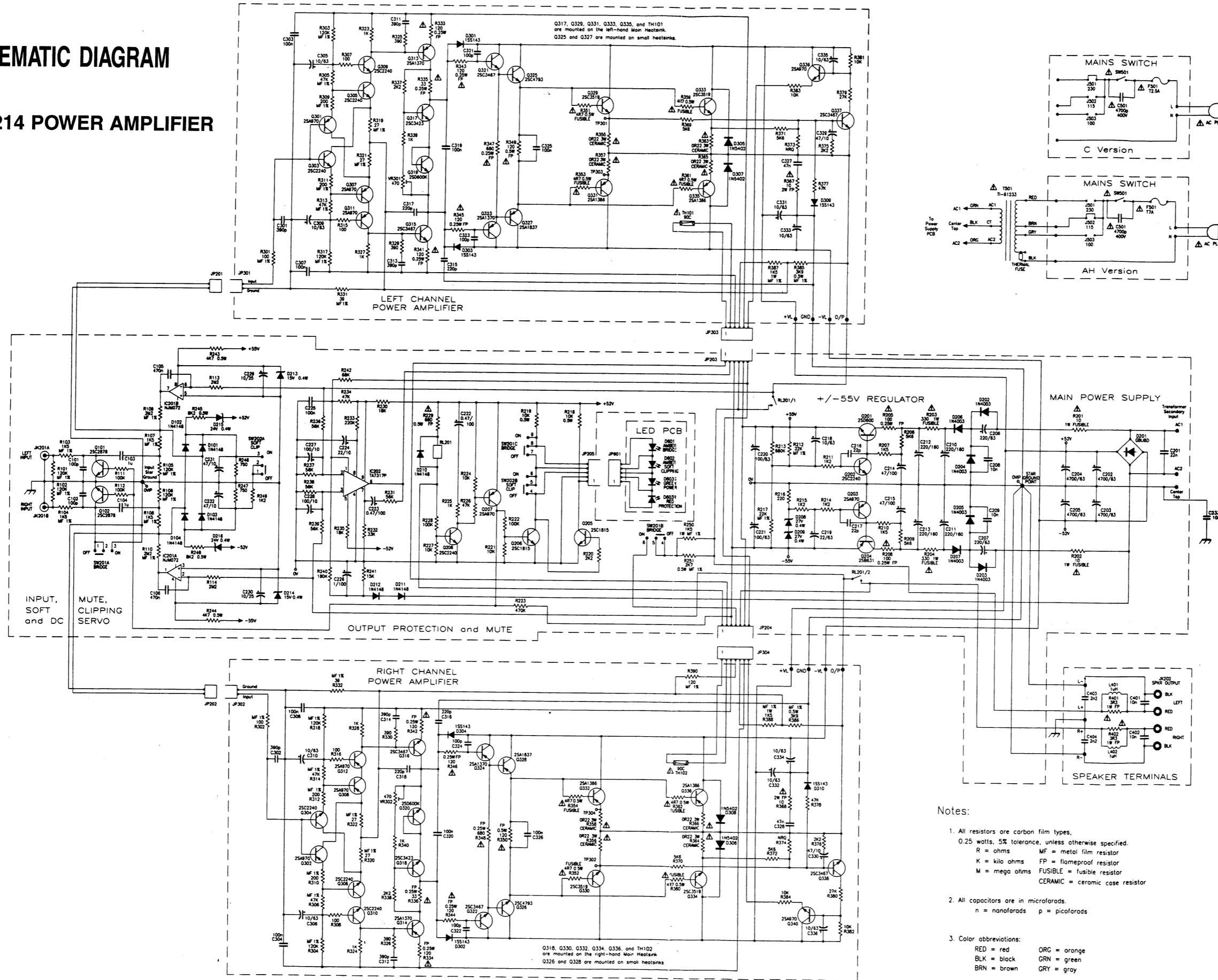


- Legend:**
- Blu - Blue
 - Blk - Black
 - Brn - Brown
 - Grn - Green
 - Gry - Grey
 - Org - Orange
 - Red - Red
 - Vio - Violet
 - Wht - White

Note: All PCBs are shown copper side.

SCHEMATIC DIAGRAM

214 POWER AMPLIFIER



AD712
NJW072

TA7317P

25A1386
25C3519

25A1837
25C4793

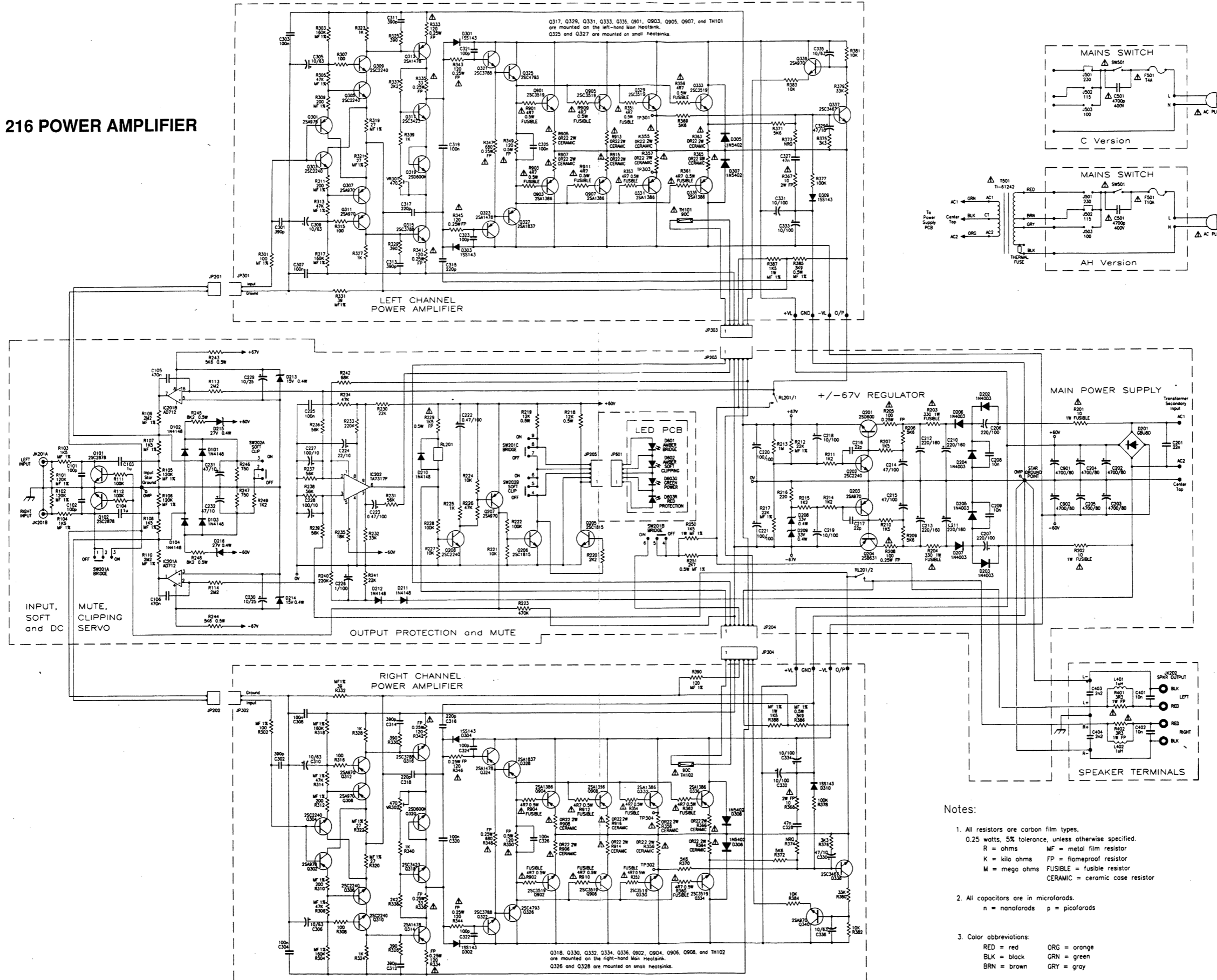
25A1478
25B631
25C3423
25C3788
25D600K

25A970
25C1815
25C2240
25C2878

25A1370
25C3467

- Notes:
- All resistors are carbon film types, 0.25 watts, 5% tolerance, unless otherwise specified.
R = ohms MF = metal film resistor
K = kilo ohms FP = flameproof resistor
M = mega ohms FUSIBLE = fusible resistor
CERAMIC = ceramic case resistor
 - All capacitors are in microfarads.
n = nanofarads p = picofarads
 - Color abbreviations:
RED = red ORG = orange
BLK = black GRN = green
BRN = brown GRY = gray

216 POWER AMPLIFIER



ELECTRICAL PARTS LIST

| SYMBOL NO. | PART NUMBER | DESCRIPTION | REMARKS |
|--------------|----------------|--|---------|
| C101, C102 | N158R101J-5-IQ | Capacitor, Polystyrene 250V 100pF ±5% | |
| C103, C104 | 153I105K-9-NL | Capacitor, Mylar 63V 1uF ±10% | |
| C105, C106 | 153I474K-9-NL | Capacitor, Mylar 63V 0.47uF ±10% | |
| C201 | 153R223M-9-NL | Capacitor, Mylar 250V 0.022uF ±20% | |
| C202, C203 | N89100057-0 | Capacitor, Electrolytic 63V 4700uF ±20% | 214 |
| C202, C203 A | 89100062-0 | Capacitor, Electrolytic 80V 4700uF ±20% | 216 |
| C204, C205 | N89100057-0 | Capacitor, Electrolytic 63V 4700uF ±20% | 214 |
| C204, C205 A | 89100062-0 | Capacitor, Electrolytic 80V 4700uF ±20% | 216 |
| C206, C207 A | 157H227M-5-5& | Capacitor, Electrolytic 100V 220uF ±20% | 216 |
| C206, C207 | N157I227M-5-S9 | Capacitor, Electrolytic 63V 220uF ±20% | 214 |
| C208, C209 | 153R103M-9-NL | Capacitor, Mylar 250V 0.01uF ±20% | |
| C210, C211 | N89100056-0 | Capacitor, Electrolytic 160V 220uF ±20% | |
| C212, C213 | N89100056-0 | Capacitor, Electrolytic 160V 220uF ±20% | |
| C214, C215 | 157H476M-5-S5 | Capacitor, Electrolytic 100V 47uF ±20% | |
| C216, C217 | 15CG220J-7-IJ | CTC 0/30 22pF ±5% | |
| C218, C219 A | 157H106M-5-LU | Capacitor, Electrolytic 100V 10uF ±20% | 216 |
| C218 | N157I106M-5-IU | Capacitor, Electrolytic 63V 10uF ±20% | 214 |
| C219 | N157I226M-5-IU | Capacitor, Electrolytic 63V 22uF ±20% | 214 |
| C220, C221 A | 157H107M-5-X9 | Capacitor, Electrolytic 100V 100uF ±20% | 216 |
| C220, C221 | N157I107M-5-SX | Capacitor, Electrolytic 63V 100uF ±20% | 214 |
| C222, C223 | N157H474M-5-IU | Capacitor, Electrolytic 100V 0.47uF ±20% | |
| C224 | 157C226M-5-IU | Capacitor, Electrolytic 10V 22uF ±20% | |
| C225 | 153H104M-9-NL | Capacitor, Mylar 100V 0.1uF ±20% | |
| C226 | N157H105M-5-IU | Capacitor, Electrolytic 100V 1uF ±20% | |
| C227, C228 | 157C107M-5-IU | Capacitor, Electrolytic 10V 100uF ±20% | |
| C229, C230 | 157E106M-5-IU | Capacitor, Electrolytic 25V 10uF ±20% | |
| C231, C232 | 157C476M-5-IU | Capacitor, Electrolytic 10V 47uF ±20% | |
| C233 | N150F103K-5-UU | Capacitor, Ceramic 50V 0.01uF ±10% | 214 |
| C301, C302 | N158F391J-5-IQ | Capacitor, Polystyrene 50V 390pF ±5% | |
| C303, C304 | 153H104M-9-NL | Capacitor, Mylar 100V 0.1uF ±20% | |
| C305, C306 | 157I106M-5-IU | Capacitor, Electrolytic 63V 10uF ±20% | |
| C307, C308 | 153H104M-9-NL | Capacitor, Mylar 100V 0.1uF ±20% | |
| C309, C310 | 157I106M-5-IU | Capacitor, Electrolytic 63V 10uF ±20% | |
| C311, C312 | N158F391J-5-IQ | Capacitor, Polystyrene 50V 390pF ±5% | |
| C313, C314 | N158F391J-5-IQ | Capacitor, Polystyrene 50V 390pF ±5% | |
| C315, C316 | N158K221J-5-IQ | Capacitor, Polystyrene 150V 220pF ±5% | |
| C317, C318 | N158K221J-5-IQ | Capacitor, Polystyrene 150V 220pF ±5% | |
| C319, C320 | 153H104M-9-NL | Capacitor, Mylar 100V 0.1uF ±20% | |
| C321, C322 | N158R101J-5-IQ | Capacitor, Polystyrene 250V 100pF ±5% | |
| C323, C324 | N158R101J-5-IQ | Capacitor, Polystyrene 250V 100pF ±5% | |
| C325, C326 | 153H104M-9-NL | Capacitor, Mylar 100V 0.1uF ±20% | |
| C327, C328 | 153H473K-9-SW | Capacitor, Mylar 100V 0.047uF ±10% | |
| C329, C330 | 157C476M-5-IU | Capacitor, Electrolytic 10V 47uF ±20% | |
| C331, C332 A | 157H106M-5-LU | Capacitor, Electrolytic 100V 10uF ±20% | 216 |
| C331, C332 | N157I106M-5-IU | Capacitor, Electrolytic 63V 10uF ±20% | 214 |
| C333, C334 A | 157H106M-5-LU | Capacitor, Electrolytic 100V 10uF ±20% | 216 |
| C333, C334 | N157I106M-5-IU | Capacitor, Electrolytic 63V 10uF ±20% | 214 |
| C335, C336 | 157I106M-5-IU | Capacitor, Electrolytic 63V 10uF ±20% | |
| C401, C402 | 153R103M-9-NL | Capacitor, Mylar 250V 0.01uF ±20% | |
| C403, C404 | 15CG222J-7-IJ | CTC 0/30 2200pF ±5% | |
| C501 | N89100049-0 | CAP 400V 4700pF DE7150F472MVA1KC | ⚠ |
| C901, C902 A | 89100062-0 | Capacitor, Electrolytic 80V 4700uF ±20% | 216 |

| SYMBOL NO. | PARTNUMBER | DESCRIPTION | REMARKS |
|--------------|--------------|---------------------------------|---------|
| D101, D102 | 48041480-2 | Diode 1N4148 | |
| D103, D104 | 48041480-2 | Diode 1N4148 | |
| D201 | N48400610-0 | Diode, Bridge GBU8D | |
| D202, D203 | N48040030-2 | Diode 1N4003 | |
| D204, D205 | N48040030-2 | Diode 1N4003 | |
| D206, D207 | N48040030-2 | Diode 1N4003 | |
| D208, D209 | N483727V0-2 | Diode, Zener 0.5W 27V | 214 |
| D208, D209 A | 483733V0-2 | Diode, Zener 0.5W 33V | 216 |
| D210, D211 | 48041480-2 | Diode 1N4148 | |
| D212 | 48041480-2 | Diode 1N4148 | |
| D213, D214 | 48400510-0 | Diode, Zener 0.5W 15V | |
| D215, D216 | N48400620-0 | Diode, Zener 0.5W 24V | 214 |
| D215, D216 A | 483727V0-2 | Diode, Zener 0.5W 27V | 216 |
| D301, D302 | 48400590-0 | Diode 1SS143 | |
| D303, D304 | 48400590-0 | Diode 1SS143 | |
| D305, D306 | N48054020-L | Diode 1N5402 | |
| D307, D308 | N48054020-L | Diode 1N5402 | |
| D309, D310 | 48400590-0 | Diode 1SS143 | |
| D601, D602 | N37003513-Y | LED Yellow (L-424YDT) 3mm | |
| D603 | N37003517-RG | LED Red/Green (L-469HGW) | |
| F501 A*AH | N51001030-3A | Fuse T10A 125V/250V (UL/CSA) | △ 216AH |
| F501 *C | N51002530-1B | Fuse T2.5A 250V IEC (SEMKO/VDE) | △ 214C |
| F501 *AH | N51007030-1A | Fuse T7A 125V (UL/CSA) | △ 214AH |
| F501 A*C | 51200017-0 | Fuse T4A 250V SEMKO/VDE | △ 216C |
| IC201 | N31303560-0 | IC NJM072 (D) | 214 |
| IC201 A | N31303830-0 | IC AD712 (JN) Analog Devices | 216 |
| IC202 | N31303530-0 | IC TA7317P | |
| JK201 | N21037902-0 | Twin RCA Jack YKC21-3539 | |
| L401, L402 | N18040490-0 | Spring Coil 1uH 1/9/16.5 | |
| Q101, Q102 | N48600070-5 | Transistor 2SC2878 (A, B) | |
| Q201 | N48600740-5 | Transistor 2SD600K (E, F) | |
| Q202 | N485240GR-5 | Transistor 2SC2240 (G, R) | |
| Q203 | N48600650-5 | Transistor 2SA970 (G, R) | |
| Q204 | N48600870-5 | Transistor 2SB631K (E, F) | |
| Q205, Q206 | N4851815Y-5 | Transistor 2SC1815-Y | |
| Q207 | N48600650-5 | Transistor 2SA970 (G, R) | |
| Q208 | N485240GR-5 | Transistor 2SC2240 (G, R) | |
| Q301, Q302 | N48600650-5 | Transistor 2SA970 (G, R) | |
| Q303, Q304 | N485240GR-5 | Transistor 2SC2240 (G, R) | |
| Q305, Q306 | N485240GR-5 | Transistor 2SC2240 (G, R) | |
| Q307, Q308 | N48600650-5 | Transistor 2SA970 (G, R) | |
| Q309, Q310 | N485240GR-5 | Transistor 2SC2240 (G, R) | |
| Q311, Q312 | N48600650-5 | Transistor 2SA970 (G, R) | |
| Q313, Q314 | N48600680-5 | Transistor 2SA1370 (E) | 214 |
| Q313, Q314 A | N48600810-5 | Transistor 2SA1478 (E) | 216 |
| Q315, Q316 | N48600720-5 | Transistor 2SC3467 (E) | 214 |
| Q315, Q316 A | N48600820-5 | Transistor 2SC3788 (E) | 216 |
| Q317, Q318 | N48600790-5 | Transistor 2SC3423 (Y) | |
| Q319, Q320 | N48600740-5 | Transistor 2SD600K (E, F) | |
| Q321, Q322 | N48600720-5 | Transistor 2SC3467 (E) | 214 |
| Q321, Q322 A | N48600820-5 | Transistor 2SC3788 (E) | 216 |
| Q323, Q324 | N48600680-5 | Transistor 2SA1370 (E) | 214 |

| SYMBOL NO. | PART NUMBER | DESCRIPTION | REMARKS |
|--------------|----------------|---|---------|
| Q323, Q324 A | N48600810-5 | Transistor 2SA1478 (E) | 216 |
| Q325, Q326 | 48601060-5 | Transistor 2SC4793 | |
| Q327, Q328 | 48601050-5 | Transistor 2SA1837 | |
| Q329, Q330 | N48600730-5 | Transistor 2SC3519 (O, P, Y) | |
| Q331, Q332 | N48600690-5 | Transistor 2SA1386 (O, P, Y) | |
| Q333, Q334 | N48600730-5 | Transistor 2SC3519 (O, P, Y) | |
| Q335, Q336 | N48600690-5 | Transistor 2SA1386 (O, P, Y) | |
| Q337, Q338 | N48600720-5 | Transistor 2SC3467 (E) | |
| Q339, Q340 | N48600650-5 | Transistor 2SA970 (G, R) | |
| Q901, Q902 A | N48600730-5 | Transistor 2SC3519 (O, P, Y) | 216 |
| Q903, Q904 A | N48600690-5 | Transistor 2SA1386 (O, P, Y) | 216 |
| Q905, Q906 A | N48600730-5 | Transistor 2SC3519 (O, P, Y) | 216 |
| Q907, Q908 A | N48600690-5 | Transistor 2SA1386 (O, P, Y) | 216 |
| R201, R202 | N4718100J-2-F | Resistor Fusible 10 1W 5% | ⚠ |
| R203, R204 | N4718331J-2-F | Resistor Fusible 330 1W 5% | ⚠ |
| R205, R208 | N4715101J-2-P | Resistor Flame Proof 100 0.25W 5% | ⚠ |
| R229 | N4717681J-2-P | Resistor Flame Proof 680 0.5W 5% | ⚠ 214 |
| R229 A | N4717152J-2-P | Resistor Flame Proof 1K5 0.5W 5% | ⚠ 216 |
| R333, R334 | 4715121J-2-P | Resistor Flame Proof 120 0.25W 5% | ⚠ |
| R335, R336 | N4715330J-2-P | Resistor Flame Proof 33 0.25W 5% | ⚠ |
| R341, R342 | 4715121J-2-P | Resistor Flame Proof 120 0.25W 5% | ⚠ |
| R343, R344 | 4715121J-2-P | Resistor Flame Proof 120 0.25W 5% | ⚠ |
| R345, R346 | 4715121J-2-P | Resistor Flame Proof 120 0.25W 5% | ⚠ |
| R347, R348 | N4715681J-2-P | Resistor Flame Proof 680 0.25W 5% | ⚠ |
| R349, R350 | 4717121J-2-P | Resistor Flame Proof 120 0.5W 5% | ⚠ |
| R351, R352 | 47174R7J-2-F | Resistor Fusible 4R7 0.5W 5% | ⚠ |
| R353, R354 | 47174R7J-2-F | Resistor Fusible 4R7 0.5W 5% | ⚠ |
| R355, R356 | 471A022K-5-N | Resistor Ceramic Case 0R22 3W 10% | ⚠ 214 |
| R355, R356 A | 4719022K-5-N | Resistor Ceramic Case 0R22 2W 10% | ⚠ 216 |
| R357, R358 | 471A022K-5-N | Resistor Ceramic Case 0R22 3W 10% | ⚠ 214 |
| R357, R358 A | 4719022K-5-N | Resistor Ceramic Case 0R22 2W 10% | ⚠ 216 |
| R359, R360 | 47174R7J-2-F | Resistor Fusible 4R7 0.5W 5% | ⚠ |
| R361, R362 | 47174R7J-2-F | Resistor Fusible 4R7 0.5W 5% | ⚠ |
| R363, R364 | 471A022K-5-N | Resistor Ceramic Case 0R22 3W 10% | ⚠ 214 |
| R363, R364 A | 4719022K-5-N | Resistor Ceramic Case 0R22 2W 10% | ⚠ 216 |
| R365, R366 | 471A022K-5-N | Resistor Ceramic Case 0R22 3W 10% | ⚠ 214 |
| R365, R366 A | 4719022K-5-N | Resistor Ceramic Case 0R22 2W 10% | ⚠ 216 |
| R367, R368 | 4719100J-1-P | Resistor Flame Proof 10 2W 5% | ⚠ |
| R401, R402 | N47183R3J-2-P | Resistor Flame Proof 3R3 1W 5% | ⚠ |
| R901, R902 A | 47174R7J-2-F | Resistor Fusible 4R7 0.5W 5% | ⚠ 216 |
| R903, R904 A | 47174R7J-2-F | Resistor Fusible 4R7 0.5W 5% | ⚠ 216 |
| R905, R906 A | 4719022K-5-N | Resistor Ceramic Case 0R22 2W 10% | ⚠ 216 |
| R907, R908 A | 4719022K-5-N | Resistor Ceramic Case 0R22 2W 10% | ⚠ 216 |
| R909, R910 A | 47174R7J-2-F | Resistor Fusible 4R7 0.5W 5% | ⚠ 216 |
| R911, R912 A | 47174R7J-2-F | Resistor Fusible 4R7 0.5W 5% | ⚠ 216 |
| R913, R914 A | 4719022K-5-N | Resistor Ceramic Case 0R22 2W 10% | ⚠ 216 |
| R915, R916 A | 4719022K-5-N | Resistor Ceramic Case 0R22 2W 10% | ⚠ 216 |
| RL201 | N45000130-0 | Relay DEC DH48D2-0 (M) DH 2U | |
| SW201 | N52003161-0-01 | 4PDT Slide Switch SK-42F28-G6TS | |
| SW202 | N52003171-0-01 | DPDT Slide Switch SK-22F28-G9TS | |
| SW501 | N52003181-0-01 | DPST Push Switch SDDFA3066A | ⚠ |
| TH101, TH102 | N89100055-0 | Thermal Breaker UP 72 90C | ⚠ |
| VR301, VR302 | N47564716-3-06 | Resistor, Semi-fixed 470 H3 7X7.6 RH0615C | |

ALIGNMENT PROCEDURE

EQUIPMENT

Digital voltmeter (DVM) switched to 200mV DC range.

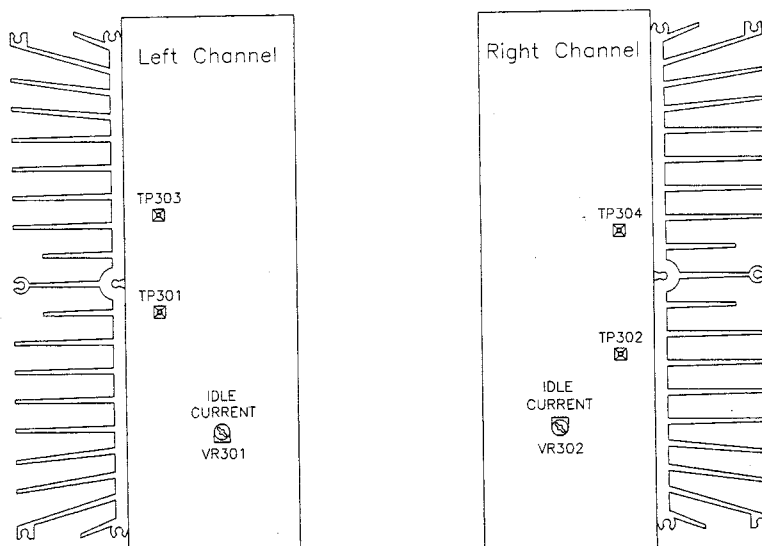
TEST CONDITIONS

Ensure VR301 and VR302 are set to minimum (fully counterclockwise) before first switching on.

| | |
|---------|--------------------------|
| Preheat | Minimum five (5) minutes |
| Load | No load |
| Input | No signal |

ALIGNMENT

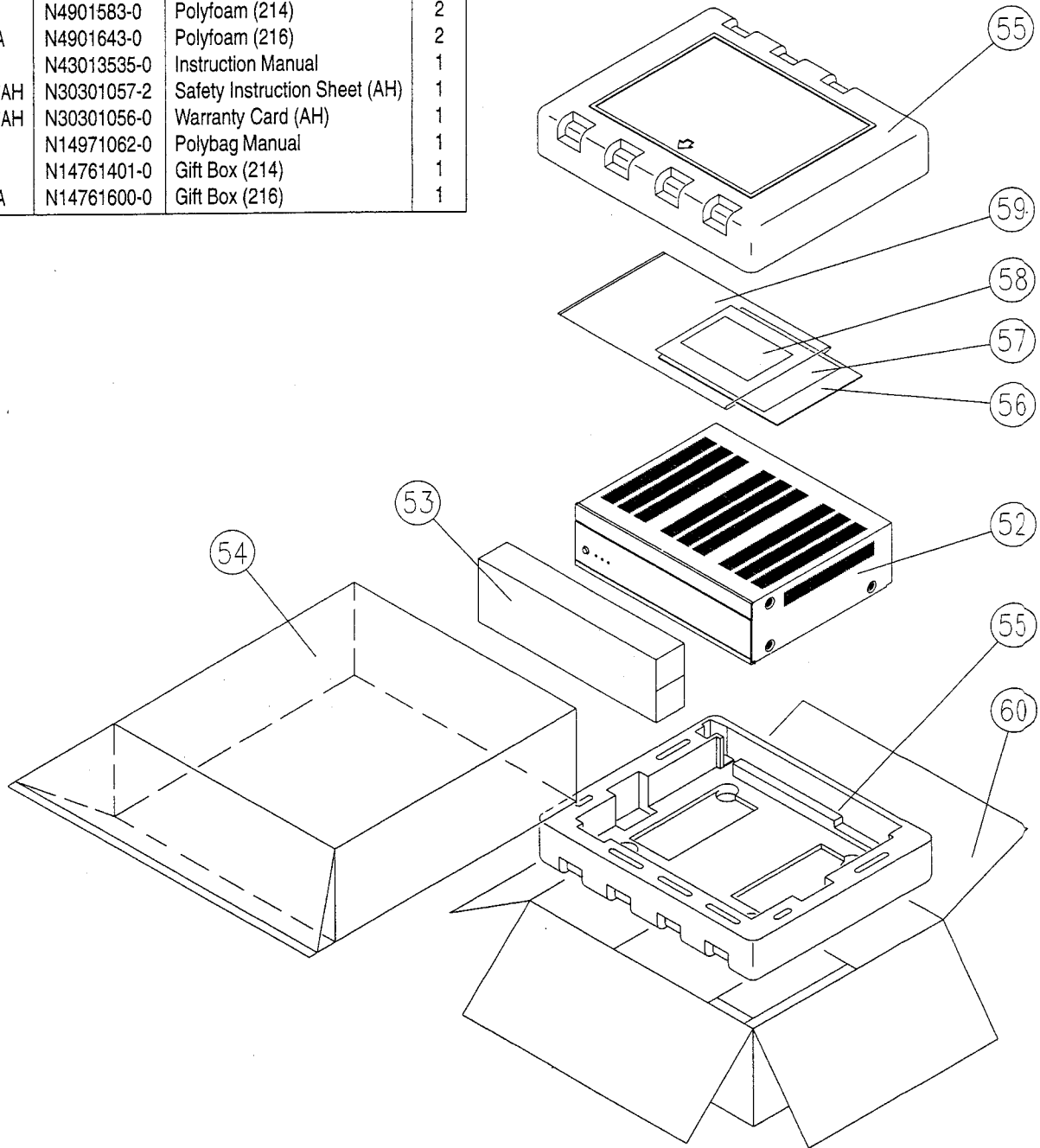
1. Connect DVM across TP301 and TP303, Left Channel.
2. Adjust VR301, Left channel, for a reading of:
 214 20mV \pm 1.5mV.
 216 18mV \pm 1.5mV.
3. Connect DVM across TP302 and TP304, Right channel.
4. Adjust VR302, Right channel, for a reading of:
 214 20 mV \pm 1.5mV.
 216 18mV \pm 1.5mV.
5. Leave power on for a further five (5) minutes (minimum).
6. Repeat steps 1 to 4.



AMPLIFIER ADJUSTMENT POINTS

PACKING DIAGRAM

| ITEM | PART NUMBER | NAME | QTY |
|--------|-------------|-------------------------------|-----|
| 52 | | Unit | 1 |
| 53 | N14971252-0 | EPE Bag (214) | 1 |
| 53 A | N14971162-0 | EPE Bag (216) | 1 |
| 54 | N14971072-3 | Polybag Unit | 1 |
| 55 | N4901583-0 | Polyfoam (214) | 2 |
| 55 A | N4901643-0 | Polyfoam (216) | 2 |
| 56 | N43013535-0 | Instruction Manual | 1 |
| 57 *AH | N30301057-2 | Safety Instruction Sheet (AH) | 1 |
| 58 *AH | N30301056-0 | Warranty Card (AH) | 1 |
| 59 | N14971062-0 | Polybag Manual | 1 |
| 60 | N14761401-0 | Gift Box (214) | 1 |
| 60 A | N14761600-0 | Gift Box (216) | 1 |



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