

NAD

**SERVICE
MANUAL**

3240PE
INTEGRATED AMPLIFIER

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-3240PE-

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- REAR PANEL**
1. AC Line Cord
 2. AC Convenience Outlets
 3. Speakers A
 4. Speakers B
 5. Phono Ground
 6. Phono Input
 7. Tuner Input

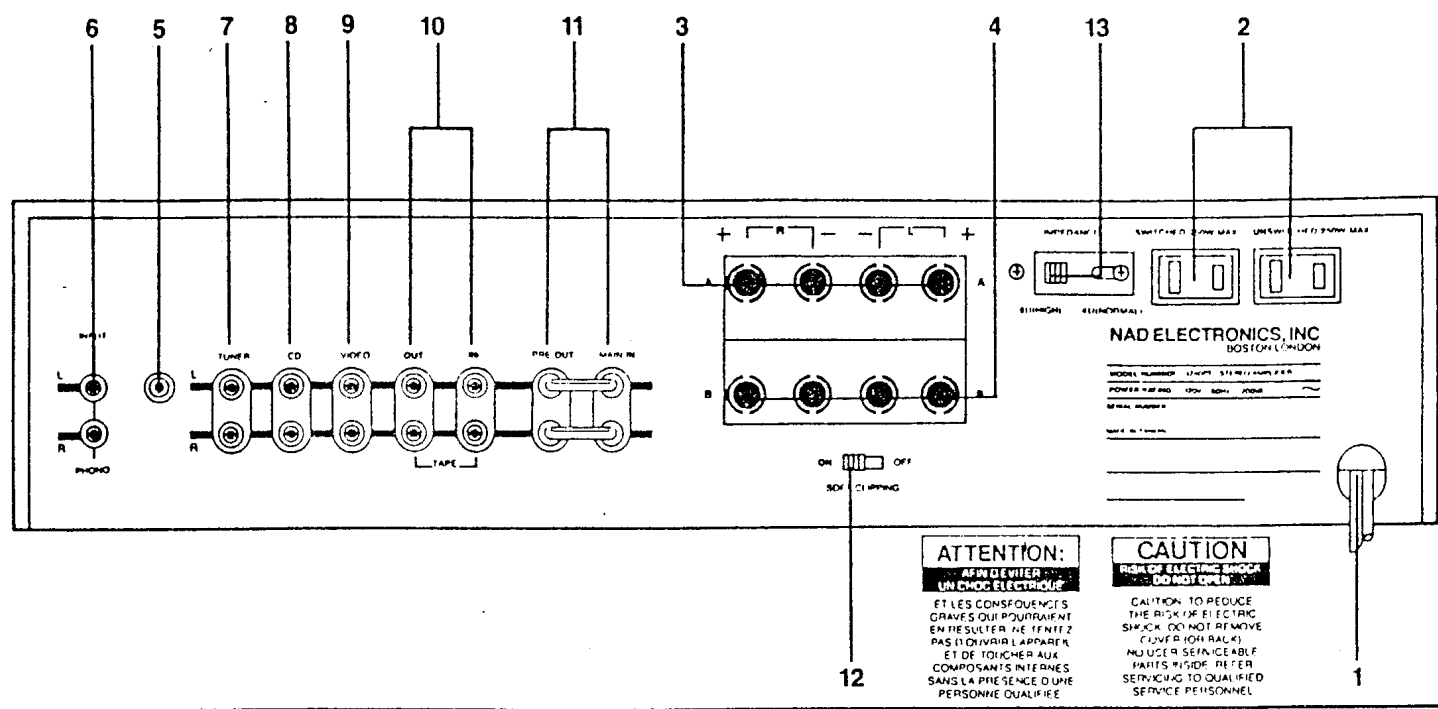
- LE PANNEAU ARRIERE**
8. CD Input
 9. Video Input
 10. Tape Input/Output
 11. Preamp Out. Main In
 12. Soft Clipping
 13. Speaker Impedance

- LE PANNEAU ARRIERE**
1. Cordon d'alimentation
 2. Prises CA
 3. Enceintes A
 4. Enceintes B
 5. Masse phonorecteur
 6. Entrée phono
 7. Entrée tuner

- LE PANNEAU ARRIERE**
8. Entrée lecteur de disque compact
 9. Entrée vidéo
 10. Entrée-Sortie magnétophone
 11. Sortie de préamplification
 12. Ecrêtage en douceur
 13. Impédance

- RUCKSEITE**
1. Netzkabel
 2. Sekundär-Steckdosen
 3. Anschlüsse für Lautsprechergruppe A
 4. Anschlüsse für Lautsprechergruppe B
 5. Masseanschluss für Plattenspieler
 6. Plattenspieler-Eingang
 7. Tuner-Eingang

- RUCKSEITE**
8. CD Eingang
 9. Video
 10. Tonanlage al Eingang Ausgang
 11. Unverstärker Ausgang Endverstärker Eingang
 12. Impedanzleistungs Schalter
 13. Lautsprecherimpedanz Schalter



ATTENTION:
AFRÉVIER
UN CHOC ÉLECTRIQUE
 ET LES CONSÉQUENCES GRAVES QUI POURRAIENT EN RÉSULTER NE FAITEZ PAS OUVRIE L'APPAREIL ET DE TOUCHER AUX COMPOSANTS INTERNES SANS LA PRÉSENCE D'UNE PERSONNE QUALIFIÉE

CAUTION
RISK OF ELECTRIC SHOCK
DO NOT OPEN
 CAUTION TO REDUCE THE RISK OF ELECTRIC SHOCK DO NOT REMOVE COVER (OR BACK) NO USER SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL

- FRONT PANEL**
1. Power
 2. Phones
 3. Speaker Selector
 4. Bass
 5. Treble
 6. Bass EQ
 7. Infrasonic Filter Off

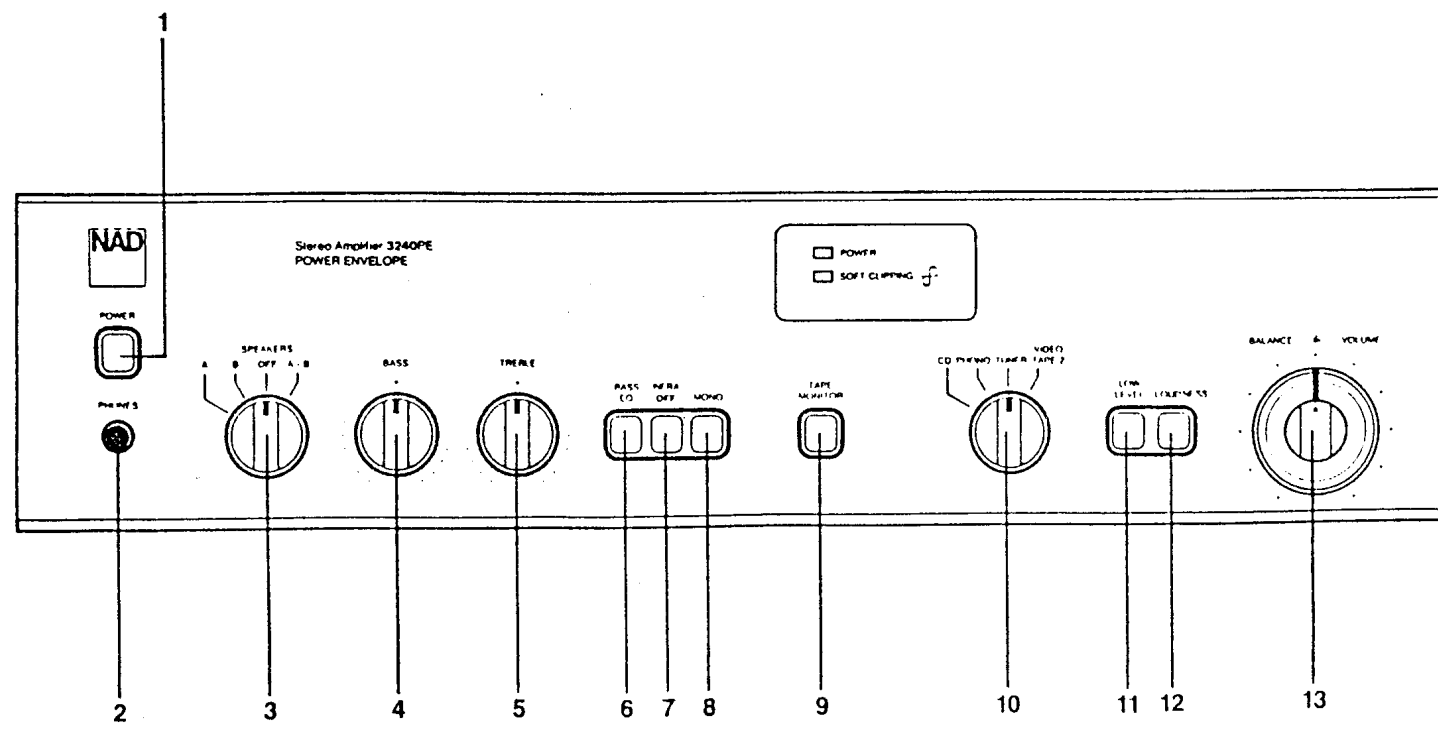
- LE PANNEAU AVANT**
8. Mono
 9. Tape Monitor
 10. Input Selector
 11. Low Level
 12. Loudness
 13. Volume/Balance

- LE PANNEAU AVANT**
1. Alimentation
 2. Casque d'écoute
 3. Sélecteur d'enceintes
 4. Graves
 5. Aigus
 6. Bass Eq
 7. Filtre infrasonique

- LE PANNEAU AVANT**
8. Mono
 9. Commutateur de surveillance de bande
 10. Sélecteur d'entrée
 11. -Low level-
 12. Commutateur de contour sonore
 13. Volume/Équilibrage

- FRONTSEITE**
1. Netzschafter
 2. Kopfhörer-Anschluß
 3. Lautsprecher Wählschalter
 4. Basssteller
 5. Höhensteller
 6. Bass/Equalizer Schalter
 7. Schalter für Infrasschall Filter

- FRONTSEITE**
8. Mono-Steuerung Schalter
 9. Nur Über Band Schalter
 10. Eingangswählschalter
 11. Schalter für Lautstärkeabsenkung
 12. Geeignichte Lautstärke Einstellung
 13. Lautstärke Balance-Steller



Specifications

NAD 3240PE Stereo Amplifier

Measured in accordance with EIA Standard RS-490 (formerly IHF A-202). Measurements referred to 8 ohms taken with Speaker Impedance selector set to "8Ω (High)." Measurements for 4 and 2 ohms taken with Impedance selector at "4Ω (Normal)."

Power Amplifier Section

CONTINUOUS AVERAGE POWER

OUTPUT AT 8 OHMS (minimum RMS power per channel, both channels driven, with no more than the rated distortion) 40 W (16 dBW)

Rated distortion (THD), 20 Hz - 20 kHz 0.03%

Clipping power, 1 kHz (maximum continuous power per channel) 50 W

Dynamic Headroom at 8 ohms +6 dB

Dynamic power (maximum short-term power per channel)

8 ohms	160 W
4 ohms	200 W
2 ohms	250 W

Damping factor > 50

Slew factor > 50

Slew rate 15V/μsec

T.H.D. and SMPTE I.M. distortion from 250 mW to rated output < 0.03%

IHF I.M. (CCIF IM) and T.I.M. distortion at rated output < 0.03%

Input impedance 22 kΩ

Input sensitivity for 1 W/ 40 W out 160 mV / 1.0 V

Power amp gain 25 dB (18X)

Preamplifier Section

Phono Input

Input Impedance R = 47kΩ , C = 100 pF

Input Sensitivity (1 kHz) 0.55 mV for 1 W out
3.5 mV for 40 W out

Signal-to-Noise Ratio with cartridge connected, A-weighted 76 dB re 5 mV

Input Overload at 20 Hz/1kHz/20kHz 20/180/1500 mV

RIAA Accuracy ±0.5 dB

High-Level Inputs (Tuner, CD, Video, Tape)

Input Impedance R = 15 kΩ , C = 100 pF

Input Sensitivity 26 mV for 1W out
160 mV for 40W out

Signal-to-Noise ratio, A-weighted 86 dB re 1 W out
102 dB re 40W out

Input Overload >10 V

Frequency Response 20Hz - 20kHz ±0.5 dB

Outputs

Preamp output impedance 600 Ω

Tape output impedance Source Z + 1000 Ω

Controls

Treble ±7 dB at 10kHz

Bass ±10 dB at 50 Hz

Bass Equalization +3 dB at 70 Hz

+6 dB at 40 Hz

Infrasonic Filter -3 dB at 12 Hz

12 dB/octave

Low Level (audio muting) -20 dB

Physical Specifications

Width x Height x Depth 42 x 10.8 x 38 cm.
16.5 x 4.25 x 15 in.

Net Weight 6.7 kg (14 lbs 14 oz)

Shipping Weight 8 kg (17 lb 12 oz)

Power Consumption 50/60 Hz at 110, 120, 220, or 240 VAC
200 W

Specifications are those in effect at the time of printing. NAD reserves the right to change specifications or designs at any time without notice.

ALIGNMENT METHOD

AUDIO SECTION 3240PE

IMPORTANT

Speaker Impedance switch should be in 8 ohm position while adjusting center voltage and idling current.

INITIAL ADJUSTMENT (No load connected)

A. CENTER VOLTAGE

1. Connect DC millivoltmeter to L channel output terminals.
2. Turn on and adjust to 0 V +/- 30mV with VR401 (10KB). Connect DC millivoltmeter to R channel output terminals and adjust VR402 to 0 V +/- 30mV.

B. IDLING CURRENT

1. Remove solder short across R471 and R472.
2. Connect DC millivoltmeter across R471 (1 ohm) (output transistor's collector resistor) and adjust VR403 (1KB) for 26-30mV reading on meter.
Repeat adjust with VR404 (1KB), connecting meter across R472(1 ohm)
3. leave power on for minimum 5 minutes.

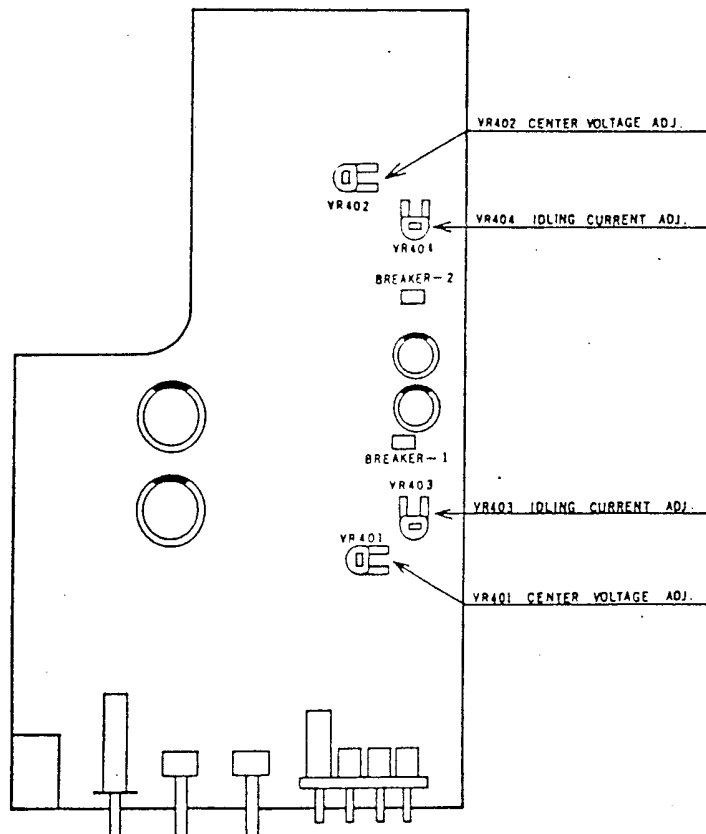
FINAL ADJUSTMENT

C. CENTER VOLTAGE

1. Repeat step A above.

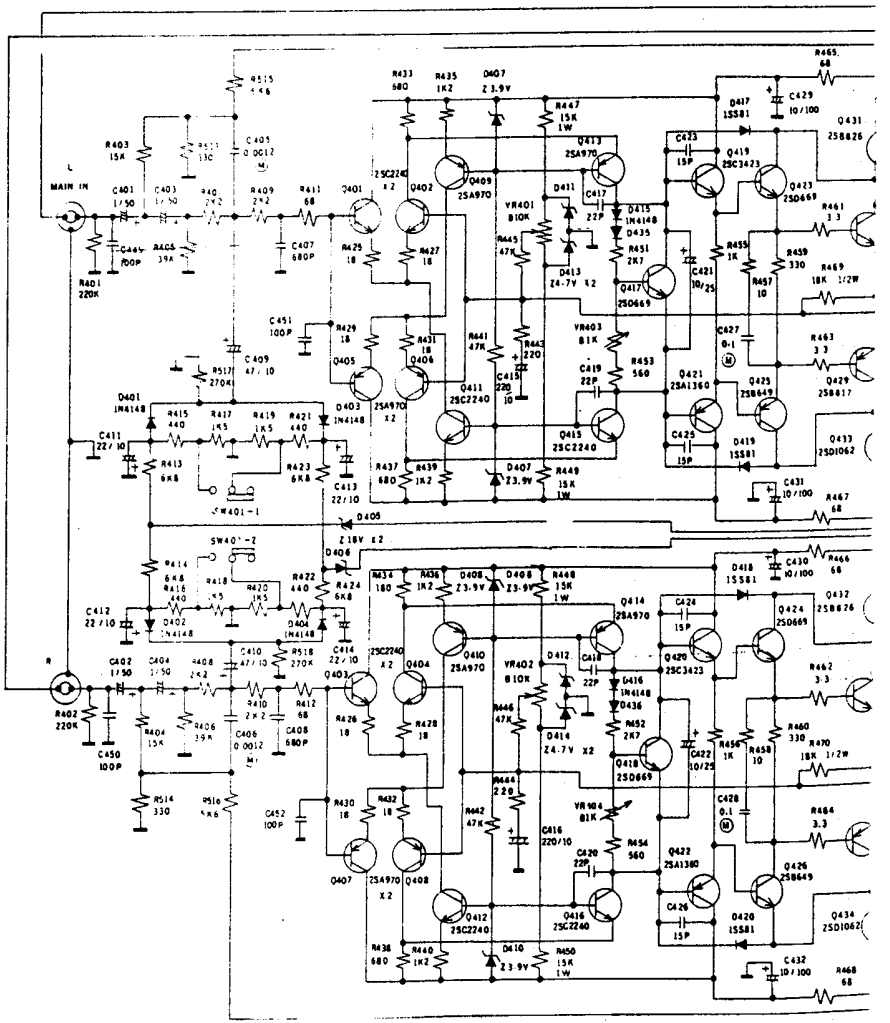
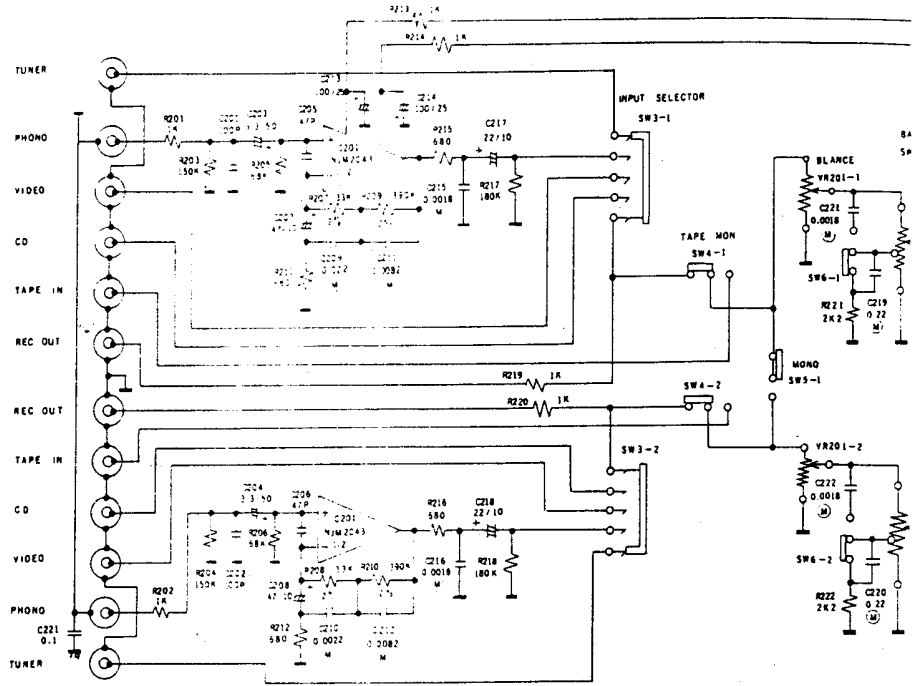
D. IDLING CURRENT

1. Repeat step B and adjust with VR403, VR404 for 30mV reading on meter.
2. After the alignment is finished, 1 ohm resistor R471,R472 is shorted by solder short.



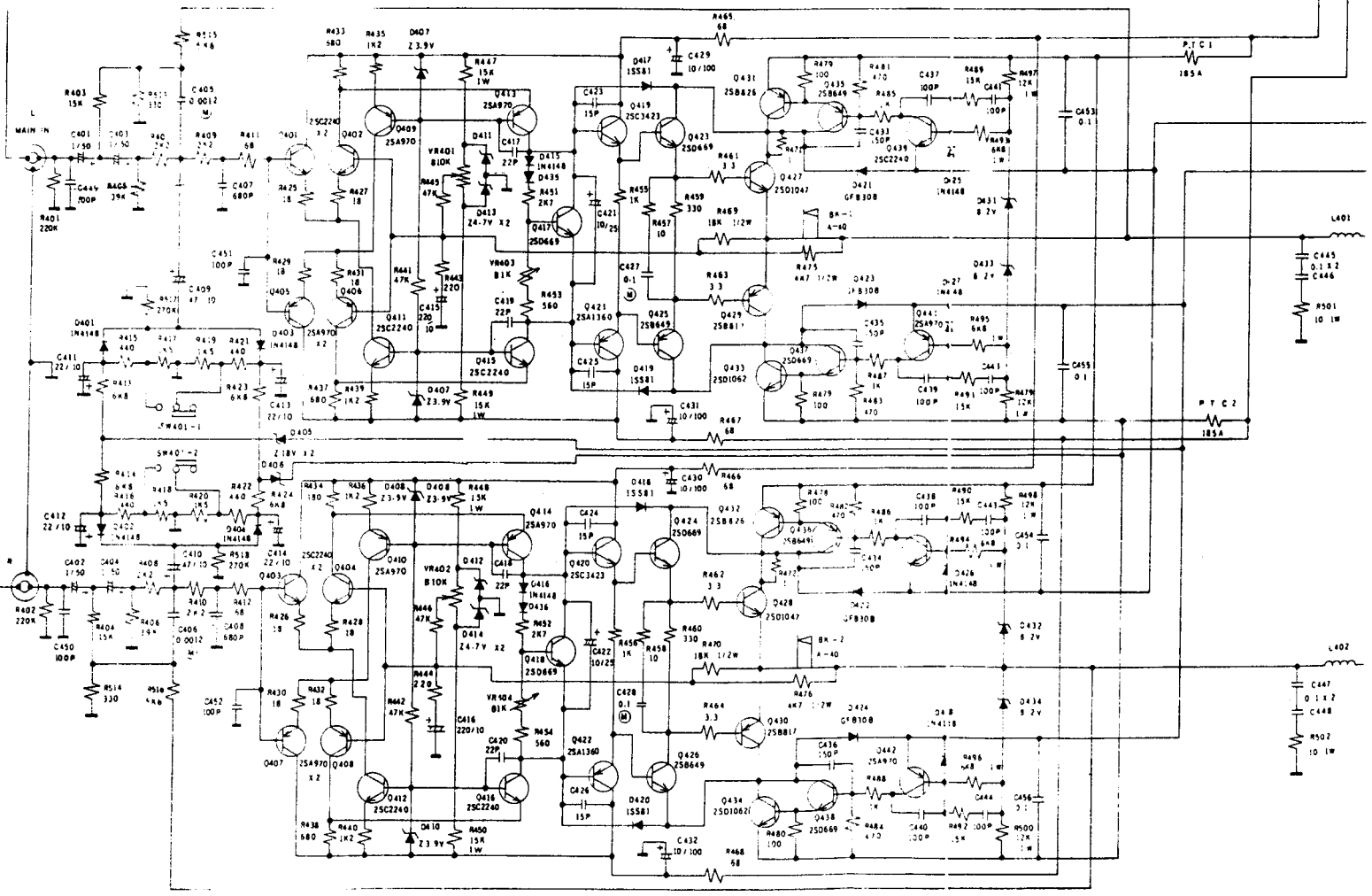
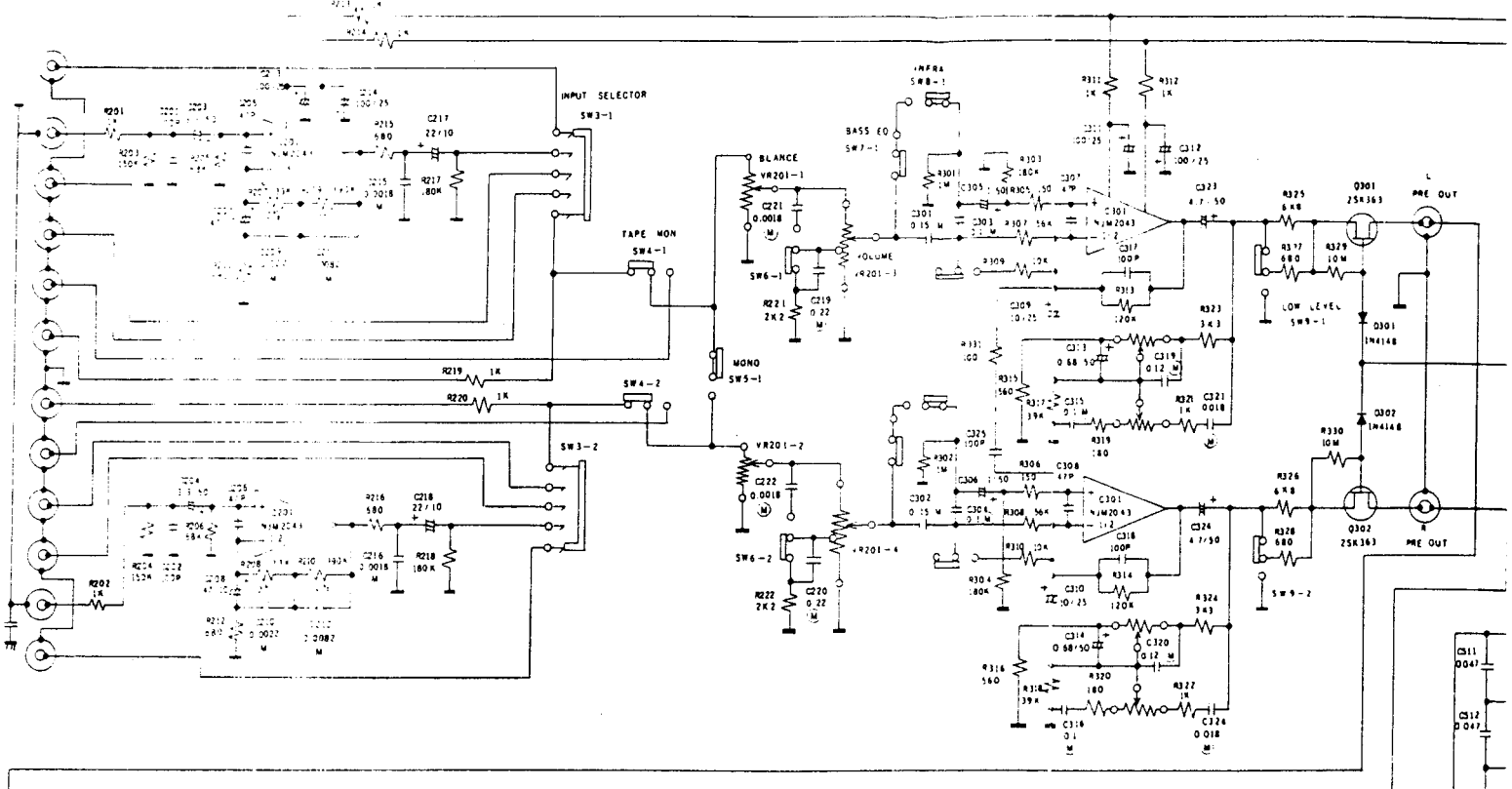
AMPLIFIER ADJUSTMENT POINTS

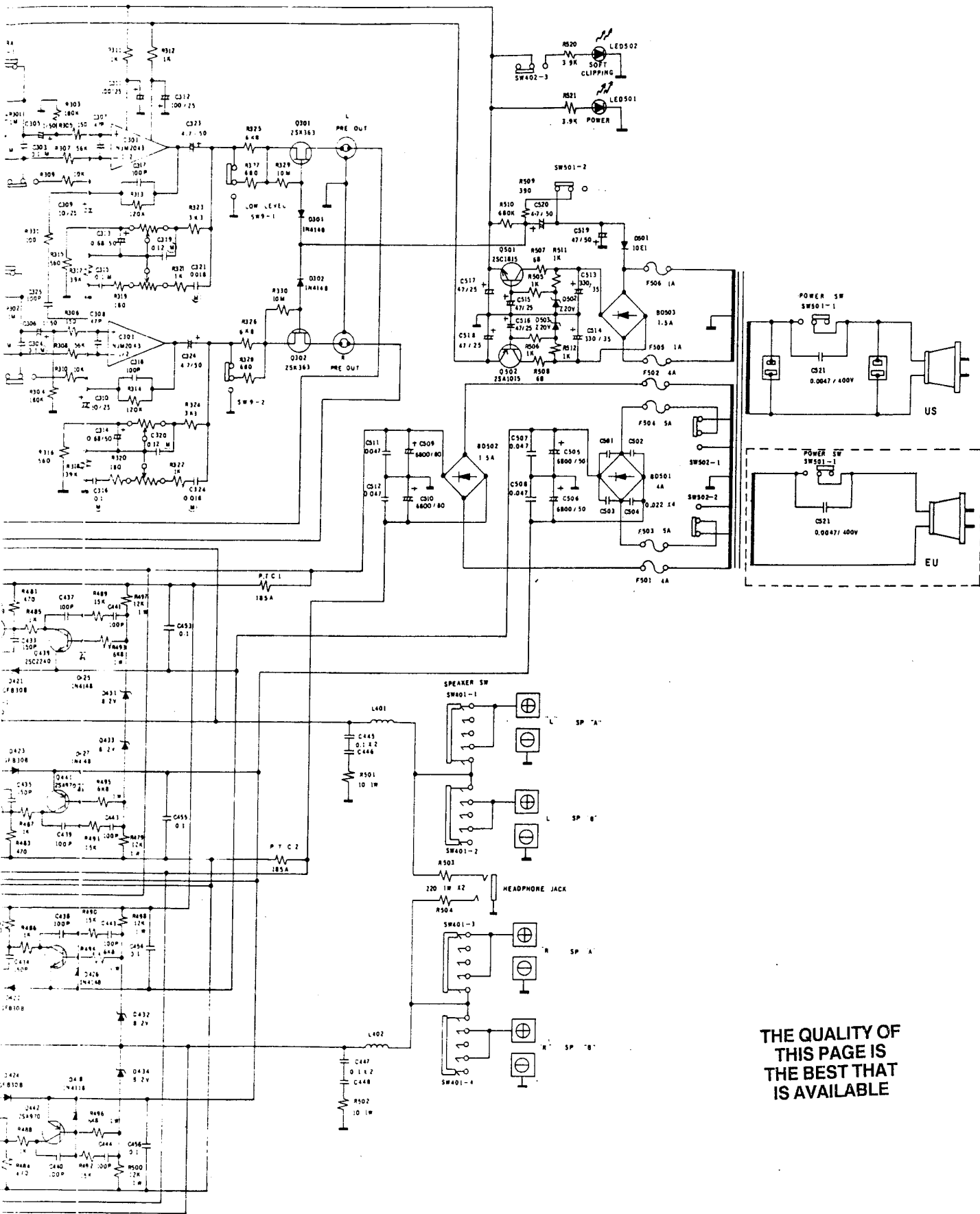
SCHEMATIC DIAGRAM NAD 3240PE AMPLIFIER



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IS AVAILABLE**

SCHEMATIC DIAGRAM NAD 3240PE AMPLIFIER





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ITEM	PARTS NO.	NAME	Q'TY	ITEM	PARTS NO.	NAME	Q'TY
01	L580A002H01	COVER BOTTOM	1	29	L704C013H02	HAND-POST (RED)	C3 4
02	L561A010H01	CABINET	1	29	L704C013H02	HAND-POST (RED)	C2 4
03	L582A001H01	CHASSIS, FRONT SUB	1	30	L531D018H01	BINDING POST GROUND	1
04	L702A017H02	PANEL, FRONT	1	31	U683D011H01	WASHER PLANE	1
05	L582A002H13	PANEL, REAR	A1 1	32	L703D027H01	PLATE SWITCH LOCK	1
05	L572A002H13	PANEL, REAR	A2 1	33	L449Y002H02	AC SOCKET	A1 2
05	L582A002H13	PANEL, REAR	A 1	33	L449Y002H02	AC SOCKET	A2 2
05	L582A002H15	PANEL, REAR	B 1	33	L449Y002H02	AC SOCKET	A 2

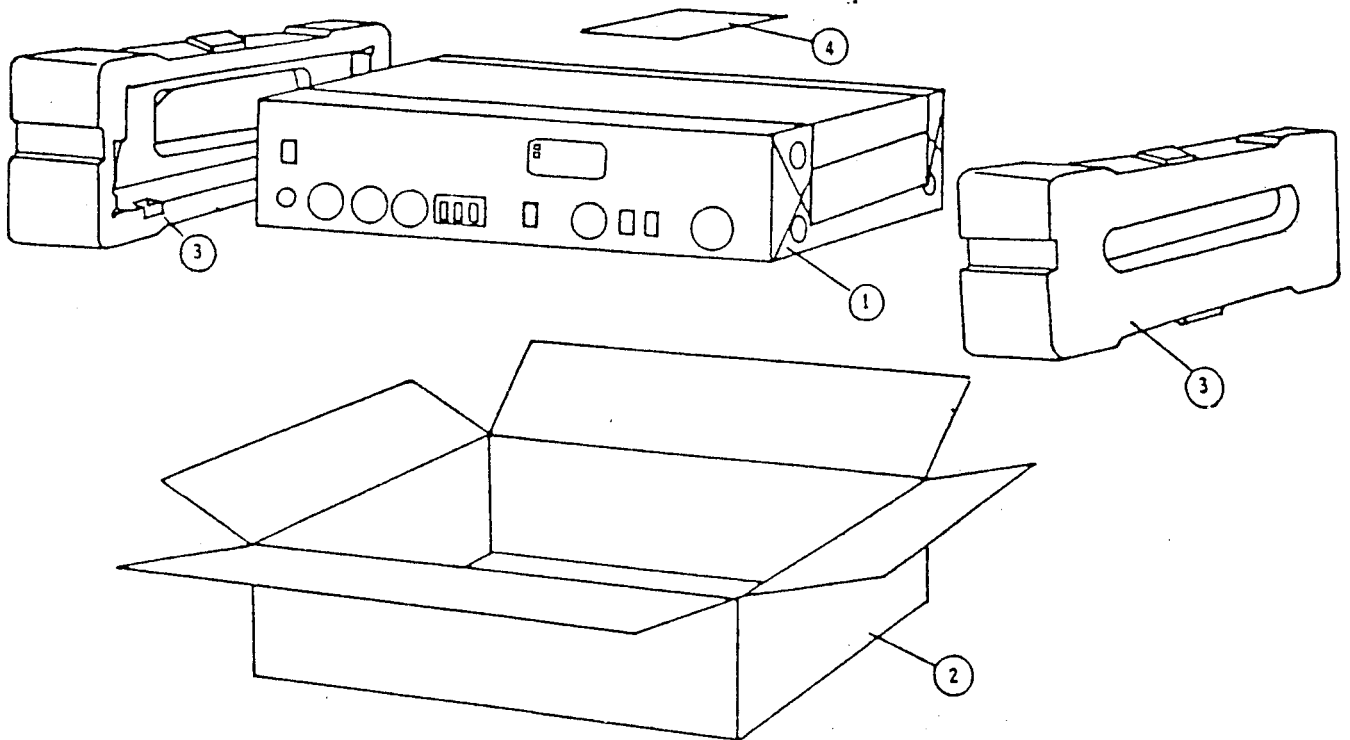
3240PE PARTS LIST

SYMBOL NO.	PART NO.	DESCRIPTION	REF
R201, 202, 213, 214, 219, 220	L103Y214H19	Res, Carb, 1K +-5%	1/4W
R203, 204	L103Y214H45	Res, Carb, .150K +-5%	1/4W
R205, 206	L103Y214H41	Res, Carb, 68K +-5%	1/4W
R207, 208	L103Y216H61	Res, Carb, 33K +-2%	1/4W
R209, 210	L103Y216H87	Res, Carb, 390K +-2%	1/4W
R211, 212, 215, 216	L103Y214H17	Res, Carb, 680 +-5%	1/4W
R217, 218	L103Y214H46	Res, Carb, 180K +-5%	1/4W
R221, 222	L103Y214H23	Res, Carb, 2.2K +-5%	1/4W
R301, 302	L103Y214H55	Res, Carb, 1M +-5%	1/4W
R303, 304	L103Y214H46	Res, Carb, 180K +-5%	1/4W
R305, 306	L103Y214H09	Res, Carb, 150 +-5%	1/4W
R307, 308	L103Y214H40	Res, Carb, 56K +-5%	1/4W
R309, 310	L103Y214H31	Res, Carb, 10K +-5%	1/4W
R311, 312, 321, 322	L103Y214H19	Res, Carb, 1K +-5%	1/4W
R313, 314	L103Y214H44	Res, Carb, 120K +-5%	1/4W
R315, 316	L103Y214H16	Res, Carb, 560 +-5%	1/4W
R317, 318	L103Y214H38	Res, Carb, 39K +-5%	1/4W
R319, 320	L103Y214H10	Res, Carb, 180 +-5%	1/4W
R323, 324	L103Y214H25	Res, Carb, 3.3K +-5%	1/4W
R325, 326	L103Y214H29	Res, Carb, 6.8K +-5%	1/4W
R327, 328	L103Y214H17	Res, Carb, 680 +-5%	1/4W
R329, 330	L103Y214H59	Res, Carb, 10M +-5%	1/4W
R331	L103Y214H07	Res, Carb, 100 +-5%	1/4W
R401, 402	L103Y214H47	Res, Carb, 220K +-5%	1/4W
R403, 404, 489, 490, 491, 492	L103Y214H33	Res, Carb, 15K +-5%	1/4W
R405, 406	L103Y214H38	Res, Carb, 39K +-5%	1/4W
R407, 408, 409, 410	L103Y214H23	Res, Carb, 2.2K +-5%	1/4W
R411, 412	L103Y214H06	Res, Carb, 68 +-5%	1/4W
R413, 414, 423, 424	L103Y214H29	Res, Carb, 6.8K +-5%	1/4W
R415, 416, 421, 422	L103Y022H80	Res, Carb, 440 +-5%	1/4W
R417, 418, 419, 420	L103Y214H21	Res, Carb, 1.5K +-5%	1/4W
R425, 426, 427, 428, 429, 430, 431	L103Y214H66	Res, Carb, 18 +-5%	1/4W
R432	L103Y214H17	Res, Carb, 680 +-5%	1/4W
R471, 472	L103Y214H20	Res, Carb, 1.2K +-5%	1/4W
R475, 476	L103Y214H39	Res, Carb, 47K +-5%	1/4W
R477, 478, 479, 480	L103Y214H11	Res, Carb, 220 +-5%	1/4W
R481, 482, 483, 484	U105S007H39	Res, Metal, 15K +-5%	1W
R485, 486, 487, 488	U103S017H24	Res, Carb, 2.7K +-5%	1/4W
	L103Y214H24	Res, Carb, 2.7K +-5%	1/4W
	L103Y214H16	Res, Carb, 560 +-5%	1/4W
	L103Y214H19	Res, Carb, 1K +-5%	1/4W
	L103Y214H01	Res, Carb, 10 +-5%	1/4W
	L103Y214H13	Res, Carb, 330 +-5%	1/4W
	U103S140H60	Res, Carb, 3.3 +-5%	1/3W
	U103S140H06	Res, Carb, 68 +-5%	1/3W
	U103S024H34	Res, Carb, 18K +-5%	1/2W
	L103Y214H62	Res, Carb, 1 +-5%	1/4W
	U103S024H27	Res, Carb, 4.7K +-5%	1/2W
	L103Y214H07	Res, Carb, 100 +-5%	1/4W
	L103Y214H15	Res, Carb, 470 +-5%	1/4W
	U103S140H19	Res, Carb, 1K +-5%	1/3W

R493, 494, 495, 496	R497, 498, 499, 500	R501, 502	R503, 504	R505, 506, 511, 512	R507, 508	R509	R510	R513, 514	R515, 516	R517, 518	R520	R521	C201, 202	C203, 204	C205, 206	C207, 208	C209, 210	C211, 212	C213, 214	C215, 216, 221, 222	C217, 218	C219, 220	C233	C301, 302	C303, 304	C305, 306	C307, 308	C309, 310	C311, 312	C313, 314	C315, 316	C317, 318	C319, 320	C321, 322	C323, 324	C325	C401, 402, 403, 404	C405, 406	C407, 408	C409, 410	C411, 412, 413, 414	C415, 416	C417, 418, 419, 420	C421, 422	C423, 424, 425, 426	C427, 428	C429, 430, 431, 432	C433, 434, 435, 436	C437, 438, 439, 440, 441, 442, 443	C444, 449, 450, 451, 452	C445, 446, 447, 448	C453, 454, 455, 456	C501, 502, 503, 504	C505, 506	C507, 508
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05S007H35	Res, Metal, 6.8K +-5%	1W
05S007H38	Res, Metal, 12K +-5%	1W
05S007H01	Res, Metal, 10 +-5%	1W
05S007H17	Res, Metal, 220 +-5%	1W
03Y214H19	Res, Carb, 1K +-5%	1/4W
03Y214H06	Res, Carb, 68 +-5%	1/4W
03Y214H14	Res, Carb, 390 +-5%	1/4W
03Y214H53	Res, Carb, 680K +-5%	1/4W
03S017H13	Res, Carb, 330 +-5%	1/4W
03Y214H28	Res, Carb, 5.6K +-5%	1/4W
03Y214H48	Res, Carb, 270K +-5%	1/4W
03Y214H26	Res, Carb, 3.9K +-5%	1/4W
03Y022H26	Res, Carb, 3.9K +-5%	1/4W
40Y203H35	Cap, Cer, 100pF +-5%	50WV
82Y322H62	Cap, El, 3.3uF +75-10%	50V
40Y203H27	Cap, Cer, 47pF +-5%	50WV
82Y322H13	Cap, El, 47uF +50-10%	10V
72Y306H05	Cap, Poly, 2200pF +-5%	50WV
72Y306H12	Cap, Poly, 8200pF +-5%	50WV
82Y322H38	Cap, El, 100uF +50-10%	25V
72Y306H04	Cap, Poly, 1800pF +-5%	50WV
82Y322H21	Cap, El, 22uF +50-10%	16V
72S002H15	Cap, Poly, 0.22uF +-5%	50V
40Y201H25	Cap, Cer, 0.1uF +-10%	25WV
72S002H14	Cap, Poly, 0.15uF +-5%	50WV
72Y306H25	Cap, Poly, 0.1uF +-5%	50WV
82S333H40	Cap, El, 1uF +75-10%	50V
40Y203H27	Cap, Cer, 47pF +-5%	50WV
82Y322H34	Cap, El, 10uF +50-10%	25V
82Y322H38	Cap, El, 100uF +50-10%	25V
82S322H38	Cap, El, 0.68uF +75-10%	50V
72S002H13	Cap, Poly, 0.1uF +-5%	50WV
40Y203H35	Cap, Cer, 100pF +-5%	50WV
72Y306H26	Cap, Poly, 0.12uF +-5%	50WV
72Y306H16	Cap, Poly, 0.018uF +-5%	50WV
82Y322H63	Cap, El, 4.7uF +75-10%	50V
40Y203H35	Cap, Cer, 100pF +-5%	50WV
82S333H40	Cap, El, 1uF +75-10%	50V
72Y306H02	Cap, Poly, 1200pF +-5%	50WV
10Y306H10	Cap, Cer, 680pF +-10%	50WV
82Y322H13	Cap, El, 47uF +50-10%	10V
82Y322H23	Cap, El, 22uF +50-10%	16V
82S022H15	Cap, El, 220uF +50-10%	10V
10Y203H19	Cap, Cer, 22pF +-5%	50WV
82Y322H34	Cap, El, 10uF +50-10%	25V
10Y203H15	Cap, Cer, 15pF +-5%	50WV
2Y306H25	Cap, Poly, 0.1uF +-5%	50WV
2S022H88	Cap, El, 10uF +50-10%	100V
0Y203H39	Cap, Cer, 150pF +-5%	50WV
0Y203H35	Cap, Cer, 100pF +-5%	50WV
0Y201H25	Cap, Cer, 0.1uF +-10%	25WV
0S021H71	Cap, Cer, 0.1uF +80-20%	50WV
0Y306H39	Cap, Cer, 0.022uF +80-20%	50WV
0S016H01	Cap, El, 6800uF +50-10%	50V
0Y306H45	Cap, Cer, 0.047uF +80-20%	50WV

PACKING DIAGRAM



ITEM	NUMBER	NAME	Q'TY
1	L831D002H01	Bag-Poly	1
2	L800D003H04	Carton Individual	1
3	L813A006H01	Styro Packing	2
4	L871B502H85	Instruction	1