

Cybernet

System 700

CA-700

Service Manual

Contents

Specifications	2
Instruction Information	
Features	3
Installation	3
Amplifier Connections	3
Control Functions	4
Amplifier Operation	6
Trouble Shooting Guide	6
Circuit Description	
Function Controls	7
Power Transistor Overload Protection Circuit	7
Speaker Protection Circuit	7
Service Information	
Measurement Condition	8
Test Equipment	8
Operation and Standard Setting	8
Preadjustment	9
Alignment	9
Block Diagram	10
PC Board Layout	11
Exploded View	13
Replacement Parts List	14
Schematic Diagram	29

Specifications

Power output.	70W/channel, rated minimum sine wave RMS into 8 Ohm load over 20 to 20,000 Hz, both channels driven.	Bass ±10 dB at 100 Hz. Midrange ±6 dB at 1 kHz. Treble ±10 dB at 10 kHz.
Total harmonic distortion.	0.02%.	Filterage.
Dynamic head room.	1.4 dB.	Low 30 Hz (-12 dB/oct.).
SMPTE intermodulation distortion.	0.02%.	High 7 kHz (-12 dB/oct.).
Damping factor.	50 at 1 kHz into 8 Ohm.	Loudness contour.
Load impedance.		Tape recording output level. 150 mV.
A or B	4 to 16 Ohm.	Power consumption. 530 Watt.
A + B	8 to 16 Ohm.	Power supply. 220V 50 Hz AC.
Frequency response.	20 to 20,000 Hz at +0, -0.5 dB.	Dimensions.
Phono RIAA tolerance.	±0.5 dB.	Width 420 mm.
Input sensitivity.		Depth 430 mm.
Phono MM	0.3 mV (2.5 mV IHF '66).	Height 100 mm.
Phono MC	12 microvolt (100 microvolt IHF '66).	
Others	18 mV (150 mV IHF '66).	
Microphone	0.12 mV (1 mV IHF '66) 10 kOhm.	
S/N.		
Phono MM	77 dB (88 dB IHF '66) 47 kOhm.	
Phono MC	77 dB (68 dB IHF '66) 47 Ohm.	
Others	80 dB (100 dB IHF '66) 47 kOhm.	
Phono overload.		
Phono MM	220 mV (250 mV 1 kHz).	
Phono MC	8.4 mV (10 mV 1 kHz).	
Tone control range.		

Instruction Information

Features

The Cybernet model CA-700 is a high fidelity integrated stereo amplifier designed to be incorporated with other System 700-series components — the stereo digital tuner model CT-700S and the stereo cassette deck model CCD-700 — into a complete stereo system. It features the following:

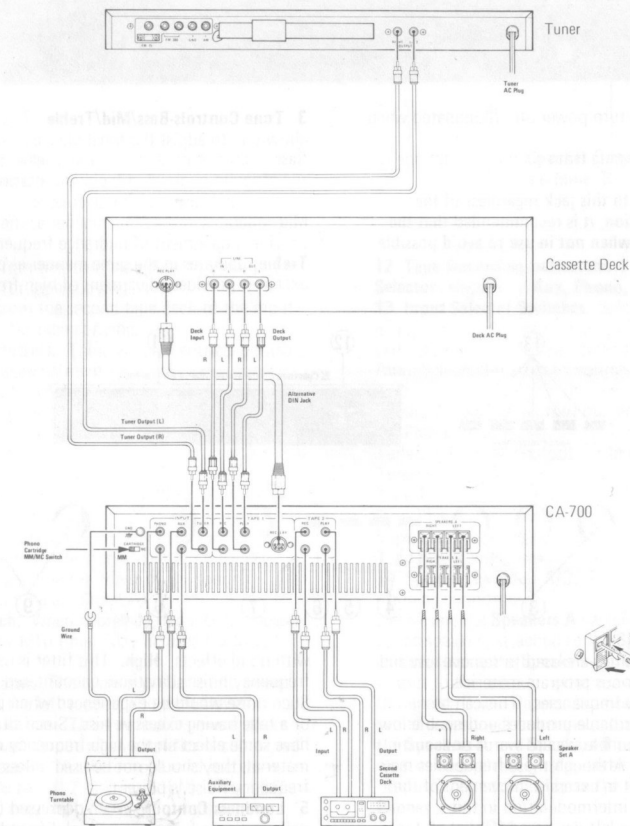
Direct coupled OCL power amplifier with 2 x 70W (1HF) power output/Built-in speaker protection circuit/Wide dynamic range MC/MM phono equalizer with high voltage plus and minus split power supply/Fluorescent power output level indicator with switchable range/Triple tone controls/High and low filters/Tape recording selector permitting recording of any program source while enjoying listening to other program sources/Microphone mixing possible with variable loudness/Illuminated pushbuttons.

Installation

Installation of your amplifier is not complicated. However, the following guidelines must be followed for satisfactory performance and to assure ease of operation.

Do not attempt to remove cover — there are no user serviceable parts inside the unit/Make sure the power switch is off before making any installation and connections/The amplifier and associated equipment must be located on a firm stable base/The equipment must not be exposed to excessive dust, moisture, or direct sources of heat or sunlight/If mounted where ventilation may be restricted, care must be taken to provide a minimum opening of approximately 50 square inches for free air movement, in and out of the cabinet to the room/To clean the cabinet, wipe with a cloth soaked in a neutral cleaner or a polishing cloth. Do not use benzine or thinner which will damage the cabinet finish.

Amplifier Connections



Refer to pictorial connection diagram.

Loudspeakers. Connect left and right channel speakers to amplifier terminals **Speaker-A**. Use suitable gauge wire. For wire lengths of less than 20 feet [6m], 18 gauge wire is recommended. For longer distances, 16 gauge wire should be used. This is necessary to avoid power loss and to maintain good control or damping of the loudspeakers. Use care not to short circuit speaker cables. Phase properly. That is, connect the positive or plus terminal on each speaker to the corresponding plus terminal on the amplifier. The minus terminals are likewise connected together. This insures that the speakers are working together and not against each other, providing optimum imaging and best bass response. Take care to connect left and right speakers to the proper channel. In the same manner, a second pair of speakers may be connected to the terminals **Speakers-B**.

Phono Turntables. Use cables provided with turntable or obtain insulated and shielded one terminated with standard pin (cinch) plug. The turntable should be connected to the **Phono** input jacks. If your turntable is equipped with a MM [moving magnet] phono cartridge, place the **Phono-MM/MC** switch in

Control Functions

- 1 Power Switch.** Depress to turn power on. Illuminated when power is on.
 - 2 Headphone Jack.** Accepts plug from a stereo headphone for private listening.
- Since the signal is always fed to this jack regardless of the **Speaker Mode** switches selection, it is recommended that the headphones be disconnected when not in use to avoid possible overload.

the **MM** position, but if equipped with a **MC** [moving coil] phono cartridge, place the switch in the **MC** position. Connect separate ground lead to amplifier ground terminal **[GND]**.

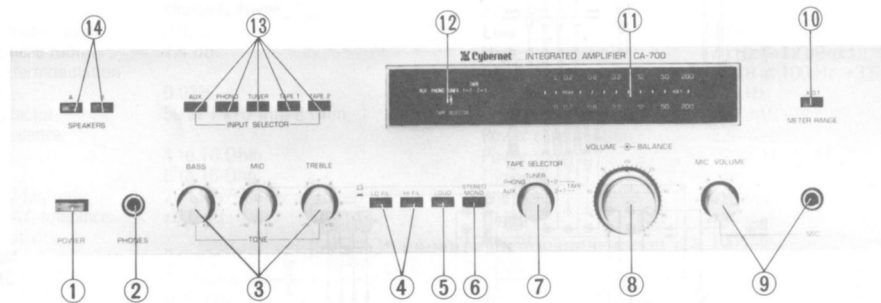
Auxiliary Equipment. Use insulated and shielded audio cables terminated with standard pin (cinch) plug. Connect to **AUX** input jacks on the amplifier. Make proper channel connection. Connect power plug of the auxiliary equipment to wall outlet.

Tuner. Use insulated and shielded audio cables terminated with standard pin (cinch) plug, connect to **Tuner** input jacks. Observe proper channel connection. Connect power plug to wall outlet. Provide suitable antenna.

Tape Decks. Connect output of main tape deck to **Tape Play 1** jacks, and connect tape deck's input to **Tape Rec 1** jacks. Use insulated and shielded audio cable terminated with cinch pin plug. A second tape deck may be likewise connected to the amplifier except that connections will be made to **Tape Play 2** jacks and **Tape Rec 2** jacks.

Amplifier Power Supply. Plug the cord set into the wall outlet supplying 220V 50 Hz AC.

- 3 Tone Controls-Bass/Mid/Treble.** These three tone controls allow you to adjust the tonal balance of the sound output. **Bass** increases or decreases the level of the low frequencies in the program material. Clockwise rotation increases and counterclockwise rotation decreases. **Mid** operates in the same manner as the **Bass** control except it provides adjustment of midrange frequency levels. **Treble** operates in the same manner as other tone controls except it provides adjustment of high frequency levels.



4 Filters-High/Low. These filters are used to remove low and high frequency noise from various program materials. **Low.** Filters out the very low frequencies. This can be particularly useful when a turntable produces undesirable low frequency signals caused by rumble, record warps or acoustic feedback from loudspeakers. Although these frequencies may not be audible, they can result in excessive movement of the woofer speaker cone, causing intermodulation in the loudspeaker. This filter can be left depressed (On) at all times

with no ill effects. **High.** This filter is used to remove high frequency noise sometimes encountered in program materials. Such noise would be experienced when playing a worn record or a tape having excessive hiss. Since all high frequency filters have some effect on the high frequency response of the program material, they should not be used unless disturbing high frequency noise is present.

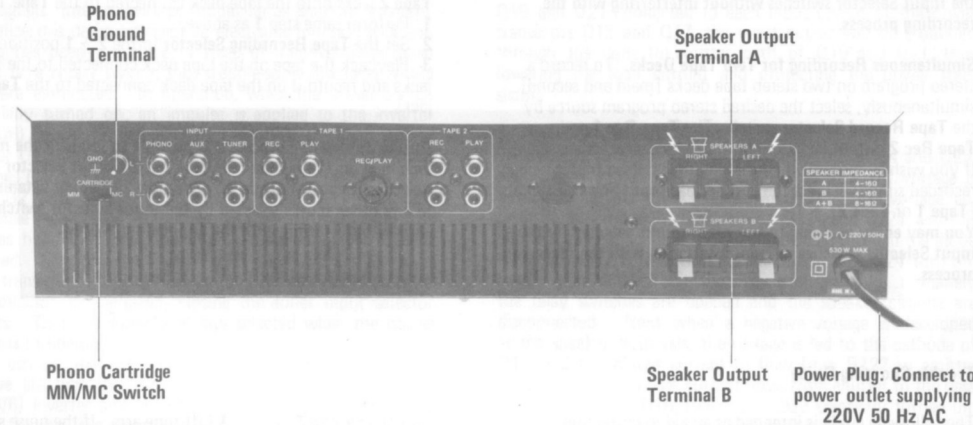
5 Loudness Contour. When depressed (On), compensates for deficiencies in human hearing ability at low listening levels

Circuit Description

based on the Fletcher-Munson curves. That is, the audio levels of high and low frequencies are boosted.

- 6 Stereo/Mono Switch.** Determines the manner in which program material will be reproduced through the left and right channels.
- Stereo (released).** Provides stereophonic reproduction of any stereo program source.
- Mono (depressed).** A program source connected to the left and right channel input jacks is mixed and reproduced through both channels.
- 7 Tape Recording Selector.** This switch selects the program

source to be recorded onto tape decks connected to the **Tape Rec 1** and **Tape Rec 2** output jacks. It provides complete independence from the **Input Selector** switches. Recording of any source is possible regardless of the reproduction of other program material through the amplifier. **Aux.** Feeds any stereo program source connected to the **AUX** input jacks to tape deck(s). **Phono.** Phono turntable recording signals are fed to the tape recording output jacks (**Tape Rec 1** and **Tape Rec 2**). **Tuner.** Provides tuner output signal to the tape deck(s).



- 1 + 2.** Feeds output from the main tape deck to the input of the second tape deck, for tape copying.
- 2 + 1.** Feeds output from the second tape deck to the input of the main tape deck, for tape copying.
- 8 Volume/Balance Controls.** These are concentric controls which permit individual adjustment.
- Volume (outer).** Permits adjustment of the volume for left and right channels simultaneously.
- Balance (inner).** Provides left to right channel balance of the program material. Normally this control should be set to its center [20] position.
- 9 Microphone Volume Control and Jack.** The **Microphone Level** control adjusts the microphone input level for both left and right channels simultaneously. The **Microphone Jack** is the stereo input for 3-conductor stereo microphone. The microphone mixing is possible regardless of the program source being selected on the amplifier.
- 10 Meter Range Switch.** When depressed, reduces the power level indicator range by 1/10 time. May be used for low listening condition.
- 11 Power Level Indicator.** The main amplifier audio power output can be read on the left (upper) and right (lower) channel LED level indicators. These indicators give a direct readout of output power output when amplifier is connected to a pair of 8-Ohm speakers. As the output level increases, the indication advances like; 0.2, 0.8 . . . 50[W]. The LED indicators can react to very short high level pulses which conventional pointer-meters cannot follow.

- 12 Tape Recording Indicators.** Indicate the **Tape Recording Selector** selection — **Aux, Phono, Tuner, 1 + 2, 2 + 1**.
- 13 Input Selector Switches.** Selects the program source to be reproduced through the amplifier. Depressing a switch will automatically releases another switch that is depressed.
- Aux.** Selects the program source connected to the **Aux** input jacks.
- Phono.** Selects the output of stereo turntable connected to the **Phono** input jacks.
- Tuner.** Selects the output of stereo tuner connected to the **Tuner** input jacks.
- Tape 1.** Selects the output of the tape deck connected to the **Tape Play 1** input jacks.
- Tape 2.** Selects the output of the tape deck connected to the **Tape Play 2** input jacks.
- 14 Speaker Switches-A/B.** Permit you to select the speaker listening conditions. Depressing the **Speakers-A** switch will connect the sound output to the speakers attached to the **Speakers-A** output terminals, and depressing the **Speakers-B** switch will connect the sound output to the speakers attached to the **Speakers-B** output terminals. If you depress both switches at the same time, the sound output will be connected to the speakers attached to the **Speakers-A** and **Speakers-B** output terminals. When both switches are released, all speakers are silenced and the sound output is connected only to the headphones plugged into the **Phones** jack.

Amplifier Operation

Using a Tape Deck. To listen to a prerecorded tape, simply play the tape on the main or second tape deck. Select the appropriate **Input Selector** switches [**Tape 1** or **Tape 2**]. To record a stereo program, select the desired program source by the **Tape Recording Selector** switch. This will produce a recording signal at the **Tape Rec 1** and **Tape Rec 2** output jacks. If you wish to monitor the program information that is being recorded, depress the appropriate switch of the **Input Selector** switches [**Tape 1** or **Tape 2**].

You may also enjoy listening to any other source selected by the Input Selector switches without interfering with the recording process.

Simultaneous Recording for Two Tape Decks. To record a stereo program on two stereo tape decks (main and second) simultaneously, select the desired stereo program source by the **Tape Record Selector** switch. The **Tape Rec 1** and **Tape Rec 2** output jacks will both produce a recording signal. If you wish to monitor the program information that is being recorded simply depress the appropriate **Input Selector** switch [**Tape 1** or **Tape 2**].

You may enjoy listening to any other source selected by the Input Selector switches without interfering with the recording process.

Trouble-Shooting-Guide

The following guide is intended as an aid in correcting problems encountered when setting up the stereo system. Although suggested remedy might seem quite elementary, it may be sufficient to make corrections without returning the unit to your dealer.

Problem	Suggested Remedy
Amplifier inoperative when power switched on.	Check blown fuses inside. Refer checking to qualified personnel. Be sure power cord is properly connected to powered outlet having 220V 50 Hz AC.
Indicators lit up but no output any mode of operation.	1 Check speaker cables for loose or shorted connection. 2 Check speaker selector switches for proper speaker selection.
No output one channel.	1 Refer to above. 2 Exchange speaker cables to determine if problem is in speaker or cables. If phono only, check phono cable leads and cartridge connections. 3 Interchange phono cables to input jacks to check whether the same channel remains inoperative.

Using the Dubbing System. In order to duplicate a tape from the tape deck connected to **Tape 1** jacks onto the tape deck connected to **Tape 2** jacks, perform the following:

- 1 Make sure the inputs and outputs of both tape decks are connected to **Tape 1** and **Tape 2** jacks correctly.
- 2 Set the **Tape Recording Selector** to 1 → 2 position.
- 3 Playback the tape on the tape deck connected to the **Tape 1** jacks and record it on the tape deck connected to the **Tape 2** jacks.

In order to duplicate a tape from tape deck connected to **Tape 2** jacks onto the tape deck connected to the **Tape 1** jacks:

- 1 Perform same step 1 as above.
- 2 Set the **Tape Recording Selector** to the 2 → 1 position.
- 3 Playback the tape on the tape deck connected to the **Tape 2** jacks and record it on the tape deck connected to the **Tape 1** jacks.

During duplicating process it is possible to monitor the main tape deck or the second tape deck by the Input Selector switches (Tape 1 or Tape 2). You may also enjoy listening to any other source selected by the Input Selector switches without interfering with the duplicating process.

Scratchy or noisy phono sound.	1 Lift tone arm. If the noise stops, the problem probably originates in the cartridge or associated wiring. Repair or replace. 2 Connect ground lead between turntable mechanism and the amplifier ground terminal, when supplied with the turntable.
Hum, phono only.	1 Be sure phono cable plugs are fully inserted in the amplifier input jacks. 2 Move phono cables around (while listening) to reveal an intermittent or broken shielded lead. Repair or replace. 3 Connect ground lead as noted above. 4 Check proper MM/MC switch setting.
Hum, other inputs.	1 Check cables and connections. 2 Reverse amplifier power plug and associated equipment power plug.

Circuit Description

The circuitry of Cybernet model CA-700 consists of 10 major circuits; a MC phono amplifiers, MM phono amplifiers, flat amplifiers, tone amplifiers power amplifiers, mixing microphone amplifier, power transistor and speaker protection circuits, and a power supply circuit. Most of them shown above may be familiar to servicing engineers, so the circuit description will be given to special circuits used in this model.

1. Function Controls

As you know, low level signal handling is the most important and delicate works in assembling a good amplifier and this may determine the major performance of the amplifier. To avoid or to reduce undesirable interference against the low level signals, internal wirings should be as short as possible. To realize this design concept an electronic function selection system has been introduced in stead of a conventional push switch or a rotary switch, thus trouble-some low level wiring leads are eliminated. In operation, when the power switch is initially turned on, an impulse is applied to the inverter U1 (5/6) input through a capacitor of C50. Then second inverter U2 (5/6) through D16 and D8. Then U2 (5/6) output becomes low and the second inverter U2 (6/6) becomes high. Since U2 (6/6) output is connected to the U2 (5/6) input, a positive feedback is established, and the U2 (6/6) output is kept as high level even the impulse applied to the C50 is removed.

Now, transistor Q21 is turned on, and the relay connected to the collector is energized, closing the tuner input selector circuits. Thus the tuner is always selected when the power switch is turned on.

Next, assume the PHONO switch S is depressed, and the positive DC high level signal is applied to the input gate of U1 (3/6) inverter and U1 (4/6) output becomes high in the similar reason just described above, and the Q20 becomes conductive and the phono relay is energized, thus selecting the PHONO inputs. On the other hand, depressing the PHONO switch also makes the transistor Q24 conductive,

so the high level signal kept at U2 (5/6) input circuit is shorted out to the ground through D13 and Q24, thus the tuner selector circuit (Q21 & relay) are turned off.

For the remaining selector circuits the same operation theory will be applied.

2. Power Transistor Overload Protection Circuit

This circuit comprised of transistors Q19 and Q21, each base of which is connected to corresponding power transistor emitter. When power transistors Q1 and/or Q3 are subjected to overload condition for any reasons their emitter voltage will be increased due to increased emitter current, the Q19 and Q21 become conductive. Since each collector of the Q19 and Q21 connected to each input circuit of the driver transistors Q15 and Q17, the input circuit will be grounded through the collector-emitter path of Q19 and Q21, thus lowering the load current and protecting the power transistors.

3. Speaker Protection Circuit

This circuit consists of three transistors, Q23, Q24 and Q25, and a relay circuit. Now assume a positive DC voltage is developed at the speaker terminals. Then the voltage appears at the emitter of Q23 through R119 and R121, and this allows a current to flow to the base of Q23 through the diode D14. Then Q23 is turned on and this makes Q24 turn on, resulting in short-circuit the relay exciting coil . . . namely the relay switches are opened and the speaker circuits are disconnected. Next when a negative voltage is developed at the speaker terminals, the voltage is led to the cathode of D13, and this allows current to flow from R122 to emitter of Q13. Then the base current flows from emitter to the base and to the diode D16, resulting in Q23 transistor turned on. Then the Q24 is also turned on, and the relay contacts open in the same way as in the positive voltage developed, thus disconnecting the speaker circuits and protecting the speaker systems.

Service Information

Alignment Procedure

1. Measurement Conditions

- 1) Reference Temperature: 25°C
- 2) Reference Humidity: 65%

NOTE: Unless otherwise specified, alignment may be performed under the room temperature of 5 – 35°C and humidity of 45 – 80%.

- 3) Power Supply
Voltage: AC 220V ± 1%
Frequency: 50 Hz ± 2%
THD: less than 2%

2. Test Equipment

- 1) DC Voltmeter: High input impedance type
- 2) Signal Generator: 20 – 20 kHz

Any test equipment to be used in this alignment should have its known accuracy and capability to operate within a range of specified tolerance.

3. Operation and Standard Setting

3.1 Operation of Controls and Switches

a) **INPUT SELECTOR:** This selects one of five input signals, TUNER, AUX, PHONO, TAPE 1, TAPE 2.

b) **VOLUME/BALANCE:** These are concentric controls which permit individual adjustment of each function. The inner knob adjusts the left and right channel volume simultaneously, while balance is adjusted by the outer knob.

Rotating clockwise the inner knob, volume level is increased, while decreased by rotating counterclockwise. When the outer knob (balance level controller) is in 12 o'clock position where the center detent is provided, both left and right levels are maximum. Rotating clockwise the balance level controller, left channel is decreased, while counterclockwise, right channel is decreased.

c) **TONE Controls (BASS, MID and TREBLE):** Each tone controllers with 11 clicks adjusts tonal quality for both left and right channels simultaneously. The BASS control varies audio level by ±10 dB at 100 Hz, the MID control ±6 dB at 1 kHz, and the TREBLE control ±10 dB at 10 kHz.

d) **METER RANGE:** x 0.1 reduces indicator range by 1/10 (0.02 – 20W).

e) **HI FIL:** This is provided to reduce high frequency noises and reduce the noises by approx. -3 dB at 7 kHz with HI FIL switch on (attenuation -12 dB/oct).

f) **LO FIL:** This is provided to reduce low frequency noises especially noises from phono and reduce the low frequency noises by approx. -3 dB at 30 Hz with LO FIL switch on (attenuation -12 dB/oct).

g) **LOUDNESS:** This compensates for deficiency in human hearing ability at low and high listening level. With the volume control set about -30 dB or more than half, and the LOUDNESS switched on, low and high frequency signal levels are increased by +7 dB at 100 Hz and +3.5 dB at 10 kHz, respectively.

h) **REC SELECTOR:** Irrespective of the position of the input selector, the program source indicated by this selector comes out at the REC out. For TAPE 1 input, only TAPE 2 comes out at the REC out while for TAPE 2 input, TAPE 1 for REC out. For AUX, PHONO,

and TUNER positions, the input comes out at REC out of both TAPE 1 and TAPE 2.

i) **SPEAKERS Mode Switches/PHONO Jack:** Depress either A or B and both each position connects the audio output to the speakers attached to the speaker A terminal, or to the speaker B terminal on the rear panel respectively.

Depress both A and B, this connects the audio output simultaneously to the speaker A and speaker B terminals.

The PHONE jack on the front panel is always connected to the output circuits.

j) **STEREO/MONO Mode Switch:** This switch selects either STEREO or MONO mode of operation.

3.2 Standard Setting of Controls and Switches

a) **INPUT SELECTOR:** See appropriate adjustment.

b) **VOLUME/BALANCE:**

BALANCE: At 12 o'clock position (center click).

VOLUME: Main amplifier adjustment – Maximum,
Otherwise – Minimum.

c) **TONE CONTROL:**

BASS/MID/TREBLE: At 12 o'clock position.

d) **METER RANGE:** Release the METER RANGE button (x 1).

e) **HI FIL:** Release the HI FIL button. (Off)

f) **LO FIL:** Release the LO FIL button. (Off)

g) **LOUDNESS:** Release the LOUDNESS button. (Off)

h) **STEREO/MONO Mode:** Release the STEREO/MONO mode button. (STEREO)

i) **SPEAKERS Mode:** Select speaker A, unless otherwise specified.

4. Preadjustment

Before turning the power on to start the adjustment, be sure to complete the following.

4.1 Potentiometers Position

Place the potentiometers in positions as stated below, except in a case where the PC board assembly units have been adjusted and inspected.

RV-1, RV-2 (located in PSTA005): Rotate fully counterclockwise,

RV-1, RV-2 (located in PSDS009): At 12 o'clock position.

4.2 Wirings and Conduction Check

Carefully check for correct wirings and parts mounting in the power supply and power amplifier circuits, using a multimeter and visual inspection methods. Especially pay attention to find bridge-soldering on power transistor circuits, plus and minus B lines. Also pay attention to wirings of the regulated voltage circuit and polarity of block type electrolytic capacitors.

5. Alignment

The alignment should be performed in sequence as stated below.

5.1 Main Amplifier Adjustment

The main amplifier adjustment should be conducted first. No power voltage should be supplied for a long period of time to the amplifier before being adjusted.

1) Connect DC voltmeter between **TP-1** and **TP-2** (located on PSZQ013). Adjust **RV-1** for **12 mV ± 2 mV**.

2) Connect DC voltmeter between **TP-3** and **TP-4** (located on PSZQ014). Adjust **RV-2** for **12 mV ± 2 mV**.

5.2 Meter Adjustment

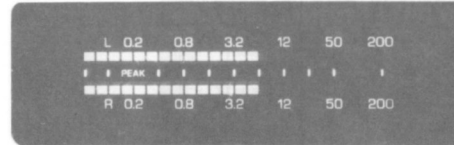
1) Rotate Volume fully counterclockwise.

2) Apply signal generator 43.5 dB (150 mV) to AUX input.

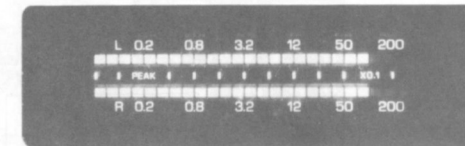
3) Connect voltmeter (and 8 Ohm dummy load) across speaker output terminals.

4) Rotate Volume clockwise until voltmeter will read 6.93V.

5) Rotate **RV-1** (left channel, located on PSDS009) so that fluorescent dots light up as shown.

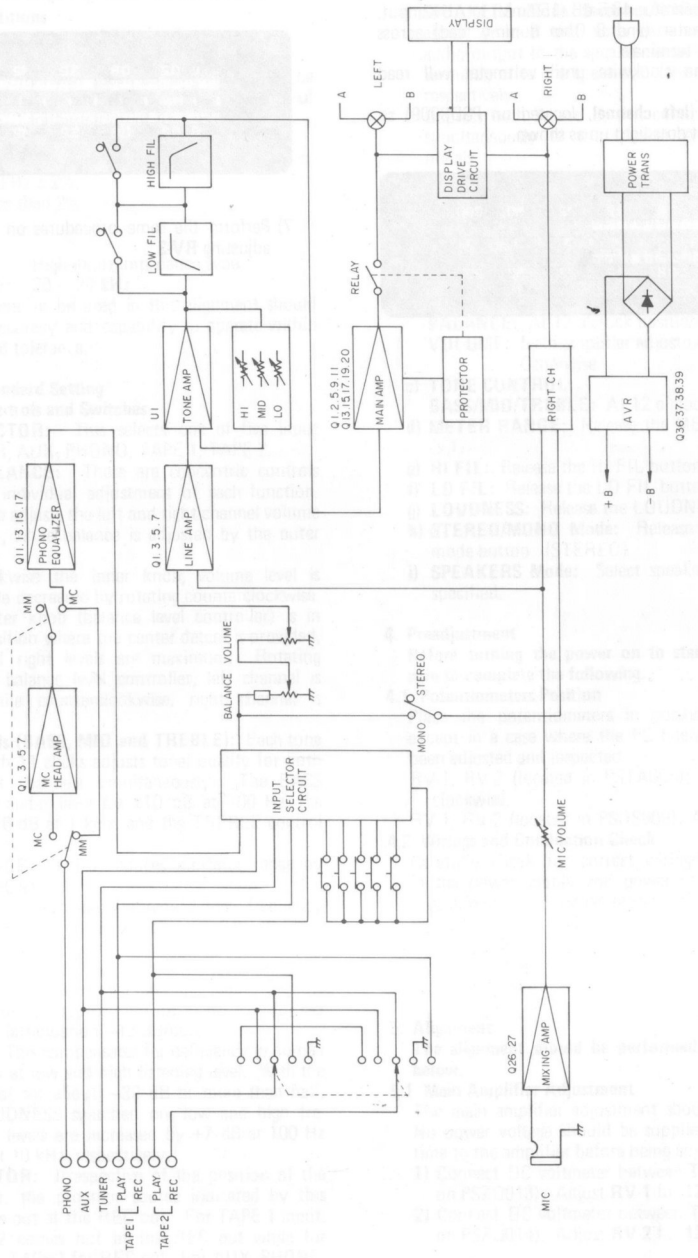


6) Depress METER RANGE button (x0.1 lights up), check that fluorescent dots light up as shown.

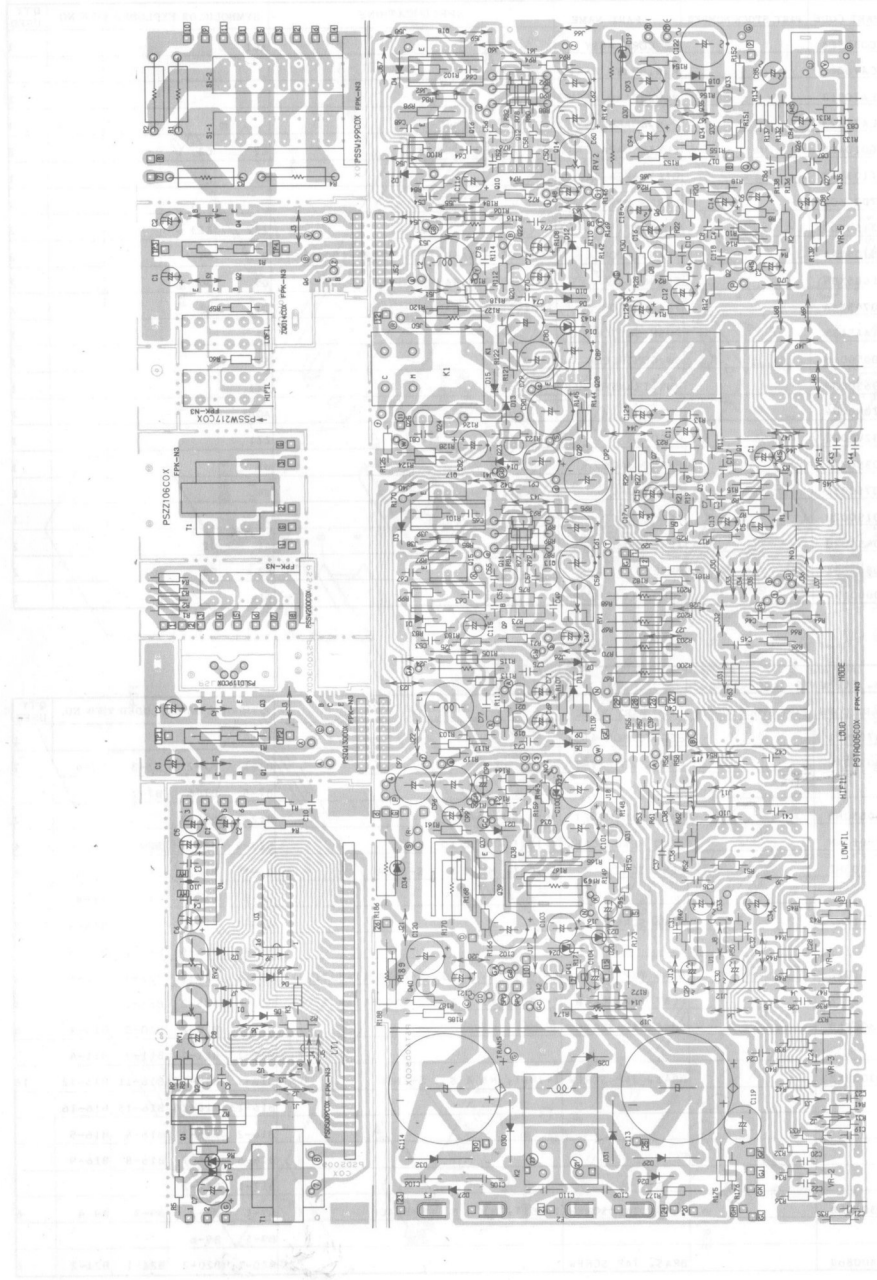


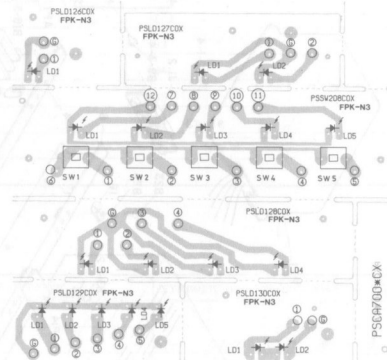
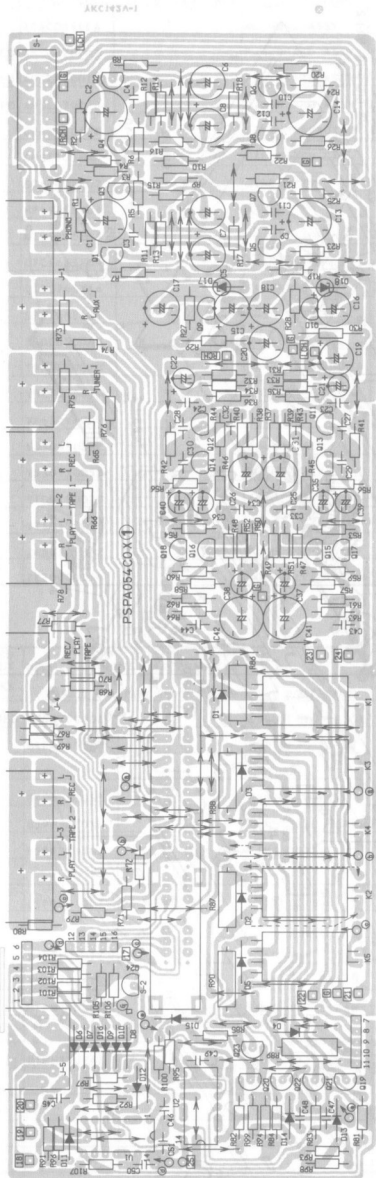
7) Perform the same procedures on **right channel** except adjusting **RV-2**.

Block Diagram



PC Board Layout

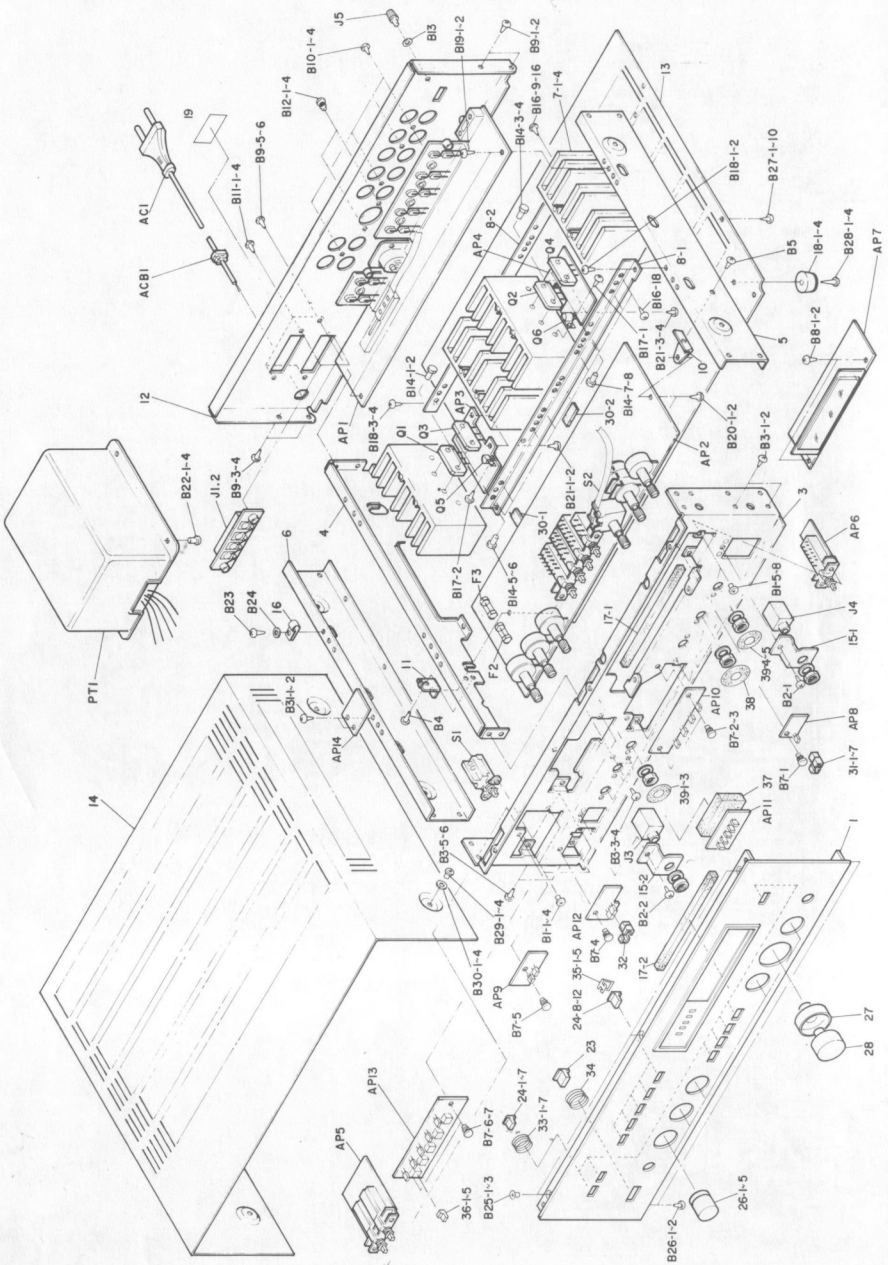




EXPLODED ASSEMBLY	PART NAME		PART CODE	REMARKS	SPECIFICATIONS	SYMBOLIC OR EXPLODED VIEW NO.				QTY USED
	MECH. ELEMENTS	AAC29ASMCL2				PART CODE	PART STOCK NUMBER	PART NAME		
1						B21-3	B21-4			
2			BTPW3008BZ	BRAS. TAP SCREW	(+)BIT, M3 X 8 S-ZNCR	B18-1	B18-2	B18-3	B18-4	33
3						B19-1	B19-2	B2-1	B2-2	
4						B23	B26-1	B26-2	B27-1	
5						B27-10	B27-2	B27-3	B27-4	
6						B27-5	B27-6	B27-7	B27-8	
7						B27-9	B3-1	B3-2	B3-3	
8						B3-4	B3-5	B3-6	B31-1	
9						B31-2	B4	B5	B8-1	
10						B8-2				
11			BTPW3010BZ	BRAS. TAP SCREW	(+)BIT, M3 X 10 S-ZNCR	B28-1	B28-2	B28-3	B28-4	4
12			BWM30A08SN	FLAT L. WASHER	FLAT LARGE, 3 M/M S-NI	B13	B24			2
13			BWM50C08SN	FLAT L. WASHER	FLAT LARGE, 5 M/M S-NI	B30-1	B30-2	B30-3	B30-4	4
14			MB851SX003	SIDE BRACKET L		4				1
15			MB962SK009	REAR PANEL		12				1
16			MB962SX005	FRONT PANEL		3				1
17			MH746AD001	HEAT SINK		7-1	7-2	7-3	7-4	4
18			ML122SX002	BP BRACKET		11				1
19			ML221LD003	SPRING F		35-1	35-2	35-3	35-4	5
20						35-5				
21			ML332SZ011	BRACKET PWB F		10				1

EXPLODED ASSEMBLY	PART NAME		PART CODE	REMARKS	SPECIFICATIONS	SYMBOLIC OR EXPLODED VIEW NO.				QTY USED
	MECH. ELEMENTS	AAC29ASMCL2				PART CODE	PART STOCK NUMBER	PART NAME		
1			ML821SX002	HEAT BRACKET		8-1	8-2			2
2			MN276XA038	KNOB		26-1	26-2	26-3	26-4	5
3						26-5				
4			MN286XA064	KNOB W R		27				1
5			MN286XA065	KNOB W L		28				1
6			MS986SL011	BOTTOM PLATE		13				1
7			MU851SX001	SIDE BRACKET R		5				1
8			MU851SX002	SIDE BRACKET		6				1
9			MU896SM006	COVER		14				1
10			MW271LY004	SPRING A		33-1	33-2	33-3	33-4	7
11						33-5	33-6	33-7		
12			MW271LY005	SPRING C		34				1
13			MZ232SX001	JACK BRACKET		15-1	15-2			2
14			VK111SB002	ADAPTER SW		36-1	36-2	36-3	36-4	5
15						36-5				
16			VM283SB001	FOOT		18-1	18-2	18-3	18-4	4
17			VN220AX001	BUTTON A		24-1	24-10	24-11	24-12	12
18						24-2	24-3	24-4	24-5	
19						24-6	24-7	24-8	24-9	
20			VN220AX003	BUTTON C		23				1
21			VQ422MB001	SPONGE		37				1

Exploded View



Replacement Parts List

EXPLODED ASSEMBLY	PART NAME		PART CODE	REMARKS	PART CODE	PART STOCK NUMBER	PART NAME	SPECIFICATIONS	SYMBOLIC OR EXPLODED VIEW NO.		QTY USED
	ELEC. ELEMENTS	AAC29ASMCL1							C2	C3	
1		ACAC035EEA					AC CORD ASSY			AC1	1
2	EXPLODED	APSCA70001					P.W.B. BOARD ASSY				1
3	EXPLODED	APSLA70012					P.W.B. BOARD ASSY				1
4	EXPLODED	APSLA70023					P.W.B. BOARD ASSY				1
5		CEAG010ALX					ELYT. CAPACITOR	1MF0 50V		C2 C3	2
6		CNST103MAN					OIL PAPER CAP.			C1	1
7		GCA700A02					WIRES KIT				1
8		MP1215D003					HOLDER			ZZ2 ZZ3	2
9		QTB0705XAA					TRANSISTOR	2SB7055,R-RANKWITHS-27(MP-100SHEET)		Q3 Q4	2
10		QTC1685XDN					TRANSISTOR	25C1685 R+S-RANK		Q5 Q6	2
11		QTD0745XAA					TRANSISTOR	25D745 R+S-RANK		Q1 Q2	2
12		SPO1AAS13N					PUSH SWITCH			S1	1
13		SR0005006N					SW CONTROLLER			S1	1
14		TPH965002N					PWR. TRANSFORMER			PT1	1
15		VM270NB004					BUSHING			ACB1	1
16		VX432VL002					C-COVER			ZZ1	1
17		YJS035023Z					PHONE JACK			J3	1
18		YJS075005Z					PHONE JACK			J4	1
19		YTD015002U					TERMINAL			J5	1
20		YTS045007U					TERMINAL			J1 J2	2
21		ZFB080203Z					FUSE			F2 F3	2
22		ZZZ0000154					SOLDERLESS CONN			ZZ4	1

EXPLODED ASSEMBLY	PART NAME		PART CODE	REMARKS	PART CODE	PART STOCK NUMBER	PART NAME	SPECIFICATIONS	SYMBOLIC OR EXPLODED VIEW NO.				QTY USED
	MECH. ELEMENTS	AAC29ASMCL2							B7-1	B7-2	B7-3	B7-4	
1	EXPLODED	AMCA700001					ESCUTCHEON ASSY			1			1
2		BRP30450NB					PAN HEAD RIVET			B7-1 B7-2 B7-3 B7-4			7
3		BRP30550NB					PAN HEAD RIVET	3MX5.5		B7-5 B7-6 B7-7			2
4		BRP30550NB					PAN HEAD RIVET	3MX5.5		B12-1 B12-2			2
5		BSPB5010NN					BIND HEAD SCREW	(+)BIT, M5 X 10 S-NI		B29-1 B29-2 B29-3 B29-4			4
6		BSPC3005NZ					CEMS SCREW	(+)BIT, M3 X 5 S-ZNCR		B1-1 B1-2 B1-3 B1-4			8
7		BSPB5010NN					BIND HEAD SCREW	(+)BIT, M5 X 10 S-NI		B1-5 B1-6 B1-7 B1-8			8
8		BSPR3010NZ					HEXA SCREW			B14-1 B14-2 B14-3 B14-4			8
9		BSPB5010NN					BIND HEAD SCREW	(+)BIT, M5 X 10 S-NI		B14-5 B14-6 B14-7 B14-8			8
10		BTPB4010TZ					BIND TAP SCREW	(+)BIT, M4 X 10 S-ZNCR (TAP TITE)		B22-1 B22-2 B22-3 B22-4			4
11		BTPS3008TZ					FLAT TAP SCREW	(+)BIT, M3 X 8 S-ZNCR (TAP TITE)		B25-1 B25-2 B25-3			3
12		BTPW3008AB					BRAS TAP SCREW			B10-1 B10-2 B10-3 B10-4			8
13		BTPW3008AB					BRAS TAP SCREW			B11-1 B11-2 B11-3 B11-4			8
14		BTPW3008AZ					BRAS. TAP SCREW	(+)BIT, M3 X 8 S-ZNCR		B16-1 B16-10 B16-11 B16-12			18
15		BTPW3008AZ					BRAS. TAP SCREW	(+)BIT, M3 X 8 S-ZNCR		B16-13 B16-14 B16-15 B16-16			18
16		BTPW3008AZ					BRAS. TAP SCREW	(+)BIT, M3 X 8 S-ZNCR		B16-2 B16-3 B16-4 B16-5			18
17		BTPW3008AZ					BRAS. TAP SCREW	(+)BIT, M3 X 8 S-ZNCR		B16-6 B16-7 B16-8 B16-9			18
18		BTPW3008AZ					BRAS. TAP SCREW	(+)BIT, M3 X 8 S-ZNCR		B17-1 B17-2			18
19		BTPW3008BB					BRAS. TAP SCREW	(+)BIT, M3 X 8 S-BLACK		B9-1 B9-2 B9-3 B9-4			6
20		BTPW3008BB					BRAS. TAP SCREW	(+)BIT, M3 X 8 S-BLACK		B9-5 B9-6			6
21		BTPW3008BJ					BRAS. TAP SCREW	(+)BIT, M3 X 8 S-BLACK		B20-1 B20-2 B21-1 B21-2			6

EXPLODED ASSEMBLY	PART NAME		PART CODE		REMARKS	PART CODE	PART, STOCK NUMBER	PART NAME	SPECIFICATIONS	SYMBOLIC OR EXPLODED VIEW NO.	QTY USED
	MECH.	ELEMENTS	AAC29AS	MCL2							
1						VQ611R8002		FLE. SHEET		17-1 17-2	2
2						VS117F8001		SW BUSH		40	1
3						VS416R8001		BOTTOM SHEET		30-1 30-2	2
4						VS417N003		CLAMPER.		16	1
5						VS805Y8004		SHEET A		38	1
6						VS805Y8005		SHEET B		39-1 39-2 39-3 39-4	5
7										39-5	1
8						VVSCA700E1		SER.NO. PLATE		19	1
9						VX222SW001		ADAPTER BUTT A		31-1 31-2 31-3 31-4	7
10										31-5 31-6 31-7	1
11						VX222SW002		ADAPTER BUTT C		32	1
12											
13											
14						KPCA700E01		INNER CARTON [PACKING MATTER]			1
15											
16						ACSP001CEA		ST. AUDIO CABLE [ACCESSORIES]			1
17											
18											
19											
20											
21											

EXPLODED ASSEMBLY	PART NAME		PART CODE		REMARKS	PART CODE	PART, STOCK NUMBER	PART NAME	SPECIFICATIONS	SYMBOLIC OR EXPLODED VIEW NO.	QTY USED
	P.W.	BOARD ASSY	APSD5009AD								
1						BTPW3008AZ		BRAS. TAP SCREW	1+1BIT, M3 X 8 5-ZNCR	B1	1
2						CEVE101ALX		ELYT. CAPACITOR		C7	1
3						CEVE470ALX		ELYT. CAPACITOR		C6	1
4						CEVG010ALX		ELYT. CAPACITOR		C1 C2 C5	3
5						CKFB473ZFT		CERAMIC CAP.	0.047MFD 50V -20, +80% F	C10 C9	2
6						CQMB682KTH		NYLAR CAPACITOR	6800PF 50V -10, +10%	C3 C4	2
7						MU242AD004		HEAT SINK		H51	1
8						MW2018S001		TERMINAL			6
9						MW401CX002		SHORT JUMPER			1
10						MW401CX004		SHORT JUMPER	JW-5		1
11						MW401CX006		SHOT JAMPER	10MM		6
12						PSDS009COX		PRINTED W.B.O.A.R.D			1
13						QDSMA150XN		SILICON DIODE	MA150 VF=1.2V,VR=35V NO-RANK 24MIN	D1 D2 D5 D6	4
14						QDZ180EB3A		ZENER DIODE	RD18E83 VZ=17.42-18.33V	D4	1
15						QQM07318AT		I.C.	TAT318P-2	U1	1
16						QQM12010AB		IC	HA12010	U2 U3	2
17						QTC1826XBD		TRANSISTOR	ZSC1826 O, Y-RANK NG ACCESSORIES	Q1	1
18						RD25PJ104X		CARBON FILM R.	0.25W 100K OHM 5%	R1 R3	2
19						RD25TJ104X		CARBON FILM R.	0.25W 100K OHM 5%	R2	1
20						RGHARJ181B		M-OXIDE FILM R.		R4	1
21						RGHARJ222B		M-OXIDE FILM R.		R6	1

EXPLODED ASSEMBLY	PART NAME		PART CODE		REMARKS	PART CODE	PART, STOCK NUMBER	PART NAME	SPECIFICATIONS	SYMBOLIC OR EXPLODED VIEW NO.	QTY USED
	ESCUTCHEON ASSY	AMCA700#01									
1						ME96EAA030		ESCUTCHEON		1-A	1
2						VF174SX003		FRAME		1-B	1
3						VK172SB001		BUTTON GUIDE F		1-E	1
4						VK222SB003		BUTTON GUIDE C		1-D	1
5						VK272SB002		BUTTON GUIDE A		1-F	1
6						VS747AS002		PLATE		1-C	1
7											
8											
9											

EXPLODED ASSEMBLY	PART NAME		PART CODE		REMARKS	PART CODE	PART, STOCK NUMBER	PART NAME	SPECIFICATIONS	SYMBOLIC OR EXPLODED VIEW NO.	QTY USED
	P.W.	BOARD ASSY	APSLA7001Z								
1						RGLARJ221B		M-OXIDE FILM R.		R5	1
2						RPJNB22201		SEMI FIXED VR.		RV1 RV2	2
3						ZL24EW17XA		DISPLAY TUBE	FIP24EW17YS	LT1	1

EXPLODED ASSEMBLY	PART NAME		PART CODE		REMARKS	PART CODE	PART, STOCK NUMBER	PART NAME	SPECIFICATIONS	SYMBOLIC OR EXPLODED VIEW NO.	QTY USED
	P.W.	BOARD ASSY	APSLA7002Z								
1	EXPLODED					APSPA054BD		P.W. BOARD ASSY			1
2											

EXPLODED ASSEMBLY	PART NAME		PART CODE		REMARKS	PART CODE	PART, STOCK NUMBER	PART NAME	SPECIFICATIONS	SYMBOLIC OR EXPLODED VIEW NO.	QTY USED
	P.W.	BOARD ASSY	APSLA7002Z								
1	EXPLODED					APSLD126AA		P.W. BOARD ASSY			1
2	EXPLODED					APSLD127AA		P.W. BOARD ASSY			1
3	EXPLODED					APSLD128AA		P.W. BOARD ASSY			1
4	EXPLODED					APSLD129AA		P.W. BOARD ASSY			1
5	EXPLODED					APSLD130AA		P.W. BOARD ASSY			1
6	EXPLODED					APSSW208AA		P.W. BOARD ASSY			1
7											
8											
9											

EXPLODED ASSEMBLY	PART NAME		PART CODE		REMARKS	PART CODE	PART, STOCK NUMBER	PART NAME	SPECIFICATIONS	SYMBOLIC OR EXPLODED VIEW NO.	QTY USED
	P.W.	BOARD ASSY	APSLA7002Z								
1	EXPLODED					APSD5009AD		P.W. BOARD ASSY			1
2	EXPLODED					APSSW199BA		P.W. BOARD ASSY			1
3	EXPLODED					APSSW200AA		P.W. BOARD ASSY			1
4	EXPLODED					APSSW217AA		P.W. BOARD ASSY			1
5	EXPLODED					APSTA005CD		P.W. BOARD ASSY			1
6	EXPLODED					APSZQ013AD		P.W. BOARD ASSY			1
7	EXPLODED					APSZQ014AD		P.W. BOARD ASSY			1
8	EXPLODED					APSZ2106AA		P.W. BOARD ASSY			1
9											
10											

EXPLODED ASSEMBLY		PART NAME		PART CODE			
		P.W. BOARD	ASSY	APSLD126AA			
REMARKS	PART CODE	PART STOCK NUMBER	PART NAME	SPECIFICATIONS	SYMBOLIC OR EXPLODED VIEW NO.	QTY USED	
1	PSLD126COX		P.W. BOARD				1
2	QLBLN317GN		L.E.D.	LN317GP GREEN	LD1		1
3	WUG051EKXX		HI-WRAP WIRE		NO2		1
4	WUG715EKXX		HI-WRAP WIRE		NO1		1

EXPLODED ASSEMBLY		PART NAME		PART CODE			
		P.W. BOARD	ASSY	APSLD127AA			
REMARKS	PART CODE	PART STOCK NUMBER	PART NAME	SPECIFICATIONS	SYMBOLIC OR EXPLODED VIEW NO.	QTY USED	
1	PSLD127COX		P.W. BOARD				1
2	QLBLN317GN		L.E.D.	LN317GP GREEN	LD1 LD2		2
3	WUGD16EKXX		HI-WRAP WIRE		NO1		1
4	WUGY16EKXX		HI-WRAP WIRE		NO2		1
5	WUGO19EKXX		HI-WRAP WIRE		NO3		1

EXPLODED ASSEMBLY		PART NAME		PART CODE			
		P.W. BOARD	ASSY	APSLD128AA			
REMARKS	PART CODE	PART STOCK NUMBER	PART NAME	SPECIFICATIONS	SYMBOLIC OR EXPLODED VIEW NO.	QTY USED	
1	PSLD128COX		P.W. BOARD				1
2	QLBLN317GN		L.E.D.	LN317GP GREEN	LD1 LD2 LD3 LD4		4
3	WUG017EKXX		HI-WRAP WIRE		NO5		1
4	WUG117EKXX		HI-WRAP WIRE		NO1		1
5	WUG217EKXX		HI-WRAP WIRE		NO2		1
6	WUG317EKXX		HI-WRAP WIRE		NO3		1
7	WUG417EKXX		HI-WRAP WIRE		NO4		1

EXPLODED ASSEMBLY		PART NAME		PART CODE			
		P.W. BOARD	ASSY	APSLD129AA			
REMARKS	PART CODE	PART STOCK NUMBER	PART NAME	SPECIFICATIONS	SYMBOLIC OR EXPLODED VIEW NO.	QTY USED	
1	ACCN459GEA		CONN CORD ASSY.		AC1		1
2	PSLD129COX		P.W. BOARD				1
3	QLBLN324GN		L.E.D.	LN324GP GREEN	LD1 LD2 LD3 LD4		5
4					LD5		
5	WUG040EKXX		HI-WRAP WIRE		NO1		1
6							
7							
8							
9							

EXPLODED ASSEMBLY		PART NAME		PART CODE		STOCK NO.	
		P.W. BOARD	ASSY	APSLD130AA			
REMARKS	PART CODE	PART STOCK NUMBER	PART NAME	SPECIFICATIONS	SYMBOLIC OR EXPLODED VIEW NO.	QTY USED	
1	PSLD130COX		P.W. BOARD				1
2	QLBLN417YN		L.E.D. DIODE	LN417YP ORANGE	LD1 LD2		2
3	WUG018EKXX		HI-WRAP WIRE		NO2		1
4	WUG318EKXX		HI-WRAP WIRE		NO1		1
5							
6							
7							
8							
9							

EXPLODED ASSEMBLY		PART NAME		PART CODE			
		P.W. BOARD	ASSY	APSPA054BD			
REMARKS	PART CODE	PART STOCK NUMBER	PART NAME	SPECIFICATIONS	SYMBOLIC OR EXPLODED VIEW NO.	QTY USED	
1	CCFB151KOT		CERAMIC CAP.	150PF 50V -10, +10% SL	C23 C24		2
2	CCFB221KOT		CERAMIC CAP.	220PF 50V -10, +10% SL	C10 C11 C12 C9		4
3	CCGB101KOT		CERAMIC CAP.	100PF 50V -10, +10% SL	C29 C30		2
4	CCGB390KOT		CERAMIC CAP.	39PF 50V -10, +10% SL	C27 C28		2
5	CEAC221ALX		ELYT. CAPACITOR	220MFD 10V	C15 C16 C17 C18		10
6					C25 C26 C5 C6		
7					C7 C8		
8	CEAC470ALX		ELYT. CAPACITOR	47MFD 10V	C35 C36		2
9	CEAD100ALX		ELYT. CAPACITOR	10MFD 16V	C39 C40 C51 C52		7
10					C53 C54 C55		
11	CEAD101NAN		ELYT. CAPACITOR		C13 C14		2
12	CEAD470NAN		ELYT. CAPACITOR		C1 C2		2
13	CEAE101ALX		ELYT. CAPACITOR	100MFD 25V	C19 C20		2
14	CEAE4R7ALX		ELYT. CAPACITOR	4.7MFD 25V	C37 C38		2
15	CEAE4R7NAN		ELYT. CAPACITOR		C41 C42		2
16	CEAE4R7ZMN		ELYT. CAPACITOR	4.7MFD 25V MS	C21 C22		2
17	CKFB103ZFT		CERAMIC CAP.	0.01MFD 50V -20, +80% F	C45 C46 C47 C48		5
18					C49		
19	CKFB473ZFT		CERAMIC CAP.	0.047MFD 50V -20, +80% F	C50		1
20	CQMB103KTH		MYLAR CAPACITOR	0.01MFD 50V -10, +10%	C3 C4		2
21	CQMB152KTH		MYLAR CAPACITOR		C43 C44		2

EXPLODED ASSEMBLY		PART NAME		PART CODE			
		P.W. BOARD	ASSY	APSPA054BD			
REMARKS	PART CODE	PART STOCK NUMBER	PART NAME	SPECIFICATIONS	SYMBOLIC OR EXPLODED VIEW NO.	QTY USED	
1	CQVB183JCN		MYLAR FILM CAP		C33 C34		2
2	CQVB683JCN		MYLAR FILM CAP.		C31 C32		2
3	MW2018S001		TERMINAL				6
4	MW401CX001		SHORT JUMPER	JW-10			11
5	MW401CX005		SHORT JUMPER	JW-15			20
6	MW401CX006		SHORT JUMPER	10MM			52
7	PSLA7001CX		PRINTED W. BOARD				1
8	PSPA054COX		PRINTED W. BOARD				1
9	QDSMA150XN		SILICON DIODE	MA150 VF=1.2V, VR=35V NO-RANK 24MIN	D1 D10 D11 D12		16
10					D13 D14 D15 D16		
11					D2 D3 D4 D5		
12					D6 D7 D8 D9		
13	QDZ8R2EB2A		ZENER DIODE	R08.2EB2 VZ=7.78-8.19V	D17 D18		2
14	QQ004069AA		I.C.	UPD4069C HEX INVERTER	U1 U2		2
15	QTA0564AEN		TRANSISTOR	2SA564A R+S-RANK 50V	Q10 Q17 Q18		3
16	QTA0722XAN		TRANSISTOR	2SA722	Q5 Q6		2
17	QTA0991XAA		TRANSISTOR	2SA991 E,F-RANK	Q11 Q12		2
18	QTA1092XAN		TRANSISTOR	2SA1092 S,T-RANK	Q3 Q4		2
19	QTC1328XBN		TRANSISTOR	2SC1328 R+S-RANK	Q13 Q14 Q7 Q8		4
20	QTC1685XDN		TRANSISTOR	2SC1685 R+S-RANK	Q15 Q16 Q19 Q20		5
21					Q21 Q22 Q23 Q24		

EXPLODED ASSEMBLY		PART NAME		PART CODE							
P+W BOARD ASSY		AP5PA054BD									
1/4	REMARKS	PART CODE	PART STOCK NUMBER	PART NAME	SPECIFICATIONS	SYMBOLIC OR EXPLODED VIEW NO.				QTY USED	
1						Q9					
2		QTC2557XAN		TRANSISTOR	25C2557 S+T-RANK	Q1	Q2				2
3		RD25PJ103X		CARBON FILM R.	0.25W 10K OHM 5%	R106	R41	R42	R49		5
4						R50					
5		RD25PJ104X		CARBON FILM R.	0.25W 100K OHM 5%	R101	R102	R103	R104		11
6						R105	R31	R32	R33		
7						R34	R69	R70			
8		RD25PJ105X		CARBON FILM R.	0.25W 1M OHM 5%	R73	R74	R75	R76		8
9						R77	R78	R79	R80		
10		RD25PJ123X		CARBON FILM R.	0.25W 12K OHM 5%	R51	R52	R81	R82		7
11						R83	R84	R85			
12		RD25PJ152X		CARBON FILM R.	0.25W 1.5K OHM 5%	R25	R26				2
13		RD25PJ155X		CARBON FILM R.	0.25W 1.5M OHM 5%	R107					1
14		RD25PJ222X		CARBON FILM R.	0.25W 2.2K OHM 5%	R55	R56	R65	R66		6
15						R71	R72				
16		RD25PJ224X		CARBON FILM R.	0.25W 220K OHM 5%	R61	R62				2
17		RD25PJ271X		CARBON FILM R.	0.25W 270 OHM 5%	R23	R24				2
18		RD25PJ272X		CARBON FILM R.	0.25W 2.7K OHM 5%	R53	R54				2
19		RD25PJ332X		CARBON FILM R.	0.25W 3.3K OHM 5%	R4					1
20		RD25PJ362X		CARBON FILM R.	0.25W 3.6K OHM 5%	R11	R12	R13	R14		8
21						R15	R16	R17	R18		

EXPLODED ASSEMBLY		PART NAME		PART CODE							
P+W BOARD ASSY		AP5PA054BD									
1/4	REMARKS	PART CODE	PART STOCK NUMBER	PART NAME	SPECIFICATIONS	SYMBOLIC OR EXPLODED VIEW NO.				QTY USED	
1		SH060609UN		SLIDE ROTARY SW		S2					1
2		SS040204ZA		SLIDE SWITCH		S1					1
3		WUGV41EKXX		HI-WRAP WIRE		NO28					1
4		WUG047EKXX		HI-WRAP WIRE		NO11					1
5		WUG112EEXX		HI-WRAP WIRE		NO3					1
6		WUG212EEXX		HI-WRAP WIRE		NO4					1
7		WUG313EEXX		HI-WRAP WIRE		NO5					1
8		WUG411EEXX		HI-WRAP WIRE		NO6					1
9		WUG511EEXX		HI-WRAP WIRE		NO7					1
10		WUG535EKXX		HI-WRAP WIRE		NO10					1
11		WUG609EEXX		HI-WRAP WIRE		NO8					1
12		WUG709EEXX		HI-WRAP WIRE		NO9					1
13		WVF517JJJJ		SHIELDED WIRE		NO1					1
14		YJD055011Z		5P DIN JACK		J4					1
15		YJF055004Z		JUNCTION JACK	B5P-SHF-1AA	J7	J8				2
16		YJF065003Z		JUNCTION JACK	B6P-SHF-1AA	J6					1
17		YJP045020U		4P PIN JACK		J2	J3				2
18		YJP065010U		6P PIN JACK		J1					1
19		ZR2232001Z		REED RELAY		K1	K2	K3	K4		5
20						K5					
21											

EXPLODED ASSEMBLY		PART NAME		PART CODE							
P+W BOARD ASSY		AP5PA054BD									
1/4	REMARKS	PART CODE	PART STOCK NUMBER	PART NAME	SPECIFICATIONS	SYMBOLIC OR EXPLODED VIEW NO.				QTY USED	
1		RD25PJ392X		CARBON FILM R.	0.25W 3.9K OHM 5%	R45	R46				2
2		RD25PJ394X		CARBON FILM R.	0.25W 390K OHM 5%	R67	R68	R91	R92		7
3						R93	R94	R95			
4		RD25PJ470X		CARBON FILM R.	0.25W 47 OHM 5%	R1	R2	R35	R36		6
5						R47	R48				
6		RD25PJ473X		CARBON FILM R.	0.25W 47K OHM 5%	R43	R44				2
7		RD25PJ561X		CARBON FILM R.	0.25W 560 OHM 5%	R63	R64				2
8		RD25PJ680X		CARBON FILM R.	0.25W 68 OHM 5%	R19	R20	R21	R22		6
9						R57	R58	R59	R60		
10		RD25PJ681X		CARBON FILM R.	0.25W 680 OHM 5%	R10	R27	R28	R7		6
11						R8	R9				
12		RD25PJ693X		CARBON FILM R.	0.25W 68K OHM 5%	R100	R96	R97	R98		5
13						R99					
14		RD25PJ8R2X		CARBON FILM R.	0.25W 8.2 OHM 5%	R5	R6				2
15		RD25PJ820X		CARBON FILM R.	0.25W 82 OHM 5%	R39	R40				2
16		RD25PJ823X		CARBON FILM R.	0.25W 82K OHM 5%	R37	R38				2
17		RD25TJ332X		CARBON FILM R.	0.25W 3.3K OHM 5%	R3					1
18		RGHARJ122B		M-OXIDE FILM R.		R86	R87	R88	R89		5
19						R90					
20		RGHARJ221B		M-OXIDE FILM R.		R29	R30				2
21		SH060609UN		SLIDE SWITCH							1

EXPLODED ASSEMBLY		PART NAME		PART CODE							
P+W BOARD ASSY		AP5SW199BA									
1/4	REMARKS	PART CODE	PART STOCK NUMBER	PART NAME	SPECIFICATIONS	SYMBOLIC OR EXPLODED VIEW NO.				QTY USED	
1		MW201B5001		TERMINAL							11
2		P55W199C0X		PRINTED W.B.OARD							1
3		RG2ARJ271B		M-OXIDE FILM R.		R3	R4				2
4		RG2ARJ272B		M-OXIDE FILM R.		R1	R2				2
5		SP02CA09A		PUSH SWITCH		S1					1
6											
7											
8											
9											

EXPLODED ASSEMBLY		PART NAME		PART CODE							
P+W BOARD ASSY		AP5SW200AA									
1/4	REMARKS	PART CODE	PART STOCK NUMBER	PART NAME	SPECIFICATIONS	SYMBOLIC OR EXPLODED VIEW NO.				QTY USED	
1		MW201B5001		TERMINAL							8
2		P55W200C0X		PRINTED W.B.OARD							1
3		RD25PJ123X		CARBON FILM R.	0.25W 12K OHM 5%	R1	R2				2
4		RD25PJ303X		CARBON FILM R.	0.25W 30K OHM 5%	R3	R4				2
5		SP01AAX51A		PUSH SWITCH		S1					1
6											
7											
8											
9											

EXPLODED ASSEMBLY		PART NAME	PART CODE						
		P.W. BOARD ASSY	AP55W208AA						
REMARKS	PART CODE	PART STOCK NUMBER	PART NAME	SPECIFICATIONS	SYMBOLIC OR EXPLODED VIEW NO.				QTY USED
1	ACCN459GEA		CONN CORD ASSY.		AC2				1
2	ACCN460GEA		CONN CORD ASSY.		AC1				1
3	PSCA7009CX		PRINTED W. BOARD						1
4	P55W208COX		P.W. BOARD						1
5	QLBLN317GN		L.E.D.	LN317GP GREEN	LD1	LD2	LD3	LD4	5
6					LD5				
7	SP01ABX44A		PUSH SWITCH		S1	S2	S3	S4	5
8					S5				
9	WUG631EKXX		HI-WRAP WIRE		NO1				1
10									

EXPLODED ASSEMBLY		PART NAME	PART CODE						
		P.W. BOARD ASSY	AP55W217AA						
REMARKS	PART CODE	PART STOCK NUMBER	PART NAME	SPECIFICATIONS	SYMBOLIC OR EXPLODED VIEW NO.				QTY USED
1	P55W217COX		PRINTED W. BOARD						1
2	RD25PJ622X		CARBON FILM R.	0.25W 6.2K OHM 5%	R59	R60			2
3									
4									
5									
6									
7									
8									

EXPLODED ASSEMBLY		PART NAME	PART CODE						
		P.W. BOARD ASSY	APSTA005CD						
REMARKS	PART CODE	PART STOCK NUMBER	PART NAME	SPECIFICATIONS	SYMBOLIC OR EXPLODED VIEW NO.				QTY USED
1	BTPW3008A2		BRAS. TAP SCREW	1-1/8BIT, M3 X 8 S-ZNCR	B1	B2	B3	B4	6
2					B5	B6			
3	CCFB151K0T		CERAMIC CAP.	150PF 50V -10, +10% SL	C51	C52			2
4	CCFB331K0T		CERAMIC CAP.	330PF 50V -10, +10% SL	C43	C44			2
5	CCGB020C0T		CERAMIC CAP.	SL 2PF 50V -0.25, +0.25PF	C53	C54			2
6	CCGB100D0T		CERAMIC CAP.	SL 10PF 50V -0.5, +0.5PF	C57	C58			2
7	CCGB101K0T		CERAMIC CAP.	100PF 50V -10, +10% SL	C83	C86			2
8	CCGB150K0T		CERAMIC CAP.	15PF 50V -10, +10% SL	C117	C118	C55	C56	4
9	CCGB220K0T		CERAMIC CAP.	22PF 50V -10, +10% SL	C10	C9			2
10	CCGB470K0T		CERAMIC CAP.	47PF 50V -10, +10% SL	C3	C31	C32	C4	4
11	CCGB680K0T		CERAMIC CAP.	68PF 50V -10, +10% SL	C49	C50	C63	C64	7
12					C65	C66	C87		
13	CCGB820K0T		CERAMIC CAP.	82PF 50V -10, +10% SL	C7	C8			2
14	CEAC470ALX		ELYT. CAPACITOR	47MFD 10V	C115	C116			2
15	CEAE100NAN		ELYT. CAPACITOR		C17	C18	C33	C34	4
16	CEAE4R7ALX		ELYT. CAPACITOR	4.7MFD 25V	C69	C70	C71	C72	4
17	CEAE4R7NAN		ELYT. CAPACITOR		C29	C30	C88		3
18	CEAF101ALX		ELYT. CAPACITOR	100MFD 35V	C101	C102	C89		3
19	CEAF221ALX		ELYT. CAPACITOR	220MFD 35V	C90				1
20	CEAG2R2ZMN		ELYT. CAPACITOR	2.2MFD 50V MS	C1	C2	C84		3
21	CEAH010ALX		ELYT. CAPACITOR	1MFD 63V	C121				1

EXPLODED ASSEMBLY		PART NAME	PART CODE						
		P.W. BOARD ASSY	APSTA005CD						
REMARKS	PART CODE	PART STOCK NUMBER	PART NAME	SPECIFICATIONS	SYMBOLIC OR EXPLODED VIEW NO.				QTY USED
1	CEAH101ALX		ELYT. CAPACITOR	100MFD 63V	C120	C91	C92		3
2	CEQLH10301		ELYT. CAPACITOR		C113	C114			2
3	CEVC101ALX		ELYT. CAPACITOR		C103	C79	C80		3
4	CEVC221ALX		ELYT. CAPACITOR		C100				1
5	CEVC470ALX		ELYT. CAPACITOR		C11	C12	C5	C6	5
6					C85				
7	CEVD100ALX		ELYT. CAPACITOR		C15	C16	C61	C62	4
8	CEVE101ALX		ELYT. CAPACITOR		C96	C97			2
9	CEVE4R7ALX		ELYT. CAPACITOR		C125	C126	C13	C14	4
10	CEVF470ALX		ELYT. CAPACITOR		C59	C60			2
11	CEVG010ALX		ELYT. CAPACITOR		C95				1
12	CEVG2R2ALX		ELYT. CAPACITOR		C47	C48	C98	C99	4
13	CEVH220ALX		ELYT. CAPACITOR		C82				1
14	CKDE103PEM		CERAMIC CAP.	0.01MFD 500V -0, +100% E	C105	C106			2
15	CQMB103KTH		MYLAR CAPACITOR	0.01MFD 50V -10, +10%	C25	C26	C39	C40	4
16	CQMB223KTH		MYLAR CAPACITOR	0.022MFD 50V -10, +10%	C73	C74	C75	C76	5
17					C81				
18	CQMB393KTH		MYLAR CAPACITOR	0.039MFD 50V -10, +10%	C19	C20	C21	C22	4
19	CQMB472KTH		MYLAR CAPACITOR	4700PF 50V -10, +10%	C27	C28	C41	C42	4
20	CQMB683KTH		MYLAR CAPACITOR	0.068MFD 50V -10, +10%	C67	C68			2
21	CQMB822KTH		MYLAR CAPACITOR	8200PF 50V -10, +10%	C23	C24			2

EXPLODED ASSEMBLY		PART NAME	PART CODE						
		P.W. BOARD ASSY	APSTA005CD						
REMARKS	PART CODE	PART STOCK NUMBER	PART NAME	SPECIFICATIONS	SYMBOLIC OR EXPLODED VIEW NO.				QTY USED
1	CQMC563KEH		MYLAR CAPACITOR		C77	C78			2
2	CQVB124JEN		MYLAR FILM CAP.		C45	C46			2
3	CQVB274JEN		MYLAR CAP.		C35	C36	C37	C38	4
4	LA3QH1323B		CHOKE COIL		L1	L2			2
5	MU242AD004		HEAT SINK		HS1	HS2	HS3	HS4	4
6	MU622AD002		HEAT SINK		HS5	HS6			2
7	MW201BS001		TERMINAL						29
8	MW401CX001		SHORT JUMPER	JW-10					5
9	MW401CX002		SHORT JUMPER						5
10	MW401CX005		SHORT JUMPER	JW-15					1
11	MW401CX006		SHORT JUMPER	10MM					46
12	MW401CX008		SHORT JUMPER						2
13	PSLA7002CX		PRINTED W. BOARD						1
14	PSTA005COX		PRINTED W. BOARD						1
15	QDSEM1ZXXD		SILICON DIODE	EMIZ <SANKEN>	D1	D15	D2	D20	6
16					D3	D4			
17	QDSMA150XN		SILICON DIODE	MA150 VF=1.2V, VR=35V NO-RANK 24MIN	D10	D11	D12	D13	11
18					D14	D21	D5	D6	
19					D7	D8	D9		
20	QDSR3AMB8E		SILICON DIODE	SR3AM-88VRRM400VR=320VRSMS00VFM=1.1	D29	D30	D31	D32	4
21	QDZ130EB3A		ZENER DIODE	RD13E3 VZ=12.99-13.66V	D34				1

EXPLODED ASSEMBLY	PART NAME		PART CODE		REMARKS	PART CODE	PART STOCK NUMBER	PART NAME	SPECIFICATIONS	SYMBOLIC OR EXPLODED VIEW NO.				QTY USED
	P-W-BOARD ASSY	APSTA005CD												
1						QDZ360EB2A		ZENER DIODE	RD36EB1 VZ=32.79-34.49V	D16				1
2						QDZ8R2EB2A		ZENER DIODE	RD8.2EB2 VZ=7.78-8.19V	D22	D23			2
3						QQM045596J		I.C.	NJM4559D-G NOISE-SELECT(3UV)	U1				1
4						QTA0564AEN		TRANSISTOR	2SA564A R+S-RANK 50V	Q23	Q31	Q37	Q7	5
5										Q8				
6						QTA0720AAN		TRANSISTOR	2SA720A Q+R-RANK 70V	Q21	Q22	Q29		3
7						QTA0768XBD		TRANSISTOR	2SA768 Q+Y-RANK	Q39				1
8						QTA0798XEE		TRANSISTOR	2SA798 F+G-RANK BREAK VOLTAGE=70V	Q10	Q9			2
9						QTA0991XAA		TRANSISTOR	2SA991 E+F-RANK	Q1	Q2	Q26		3
10						QTA1111XAN		TRANSISTOR	2SA1111 Q+R-RANK	Q17	Q18			2
11						QTC1318AAN		TRANSISTOR	2SC1318A Q+R-RANK 70V	Q19	Q20	Q25		3
12						QTC1318XDN		TRANSISTOR	2SC1318 Q+R-RANK	Q40				1
13						QTC1328XBN		TRANSISTOR	2SC1328 R+S-RANK	Q27				1
14						QTC1685XDN		TRANSISTOR	2SC1685 R+S-RANK	Q24	Q3	Q36	Q4	6
15										Q5	Q6			
16						QTC1826XBD		TRANSISTOR	2SC1826 Q+Y-RANK NO ACCESSORIES	Q28	Q38			2
17						QTC2591XAN		TRANSISTOR	2SC2591 Q+R-RANK	Q15	Q16			2
18						QTC2632XAN		TRANSISTOR	2SC2632 R+S-RANK	Q11	Q12	Q13	Q14	4
19						RD25PJ101X		CARBON FILM R.	0.25W 100 OHM 5%	R107	R108			2
20						RD25PJ102X		CARBON FILM R.	0.25W 1K OHM 5%	R141	R176	R189		3
21						RD25PJ103X		CARBON FILM R.	0.25W 10K OHM 5%	R11	R12	R150	R17	10

EXPLODED ASSEMBLY	PART NAME		PART CODE		REMARKS	PART CODE	PART STOCK NUMBER	PART NAME	SPECIFICATIONS	SYMBOLIC OR EXPLODED VIEW NO.				QTY USED
	P-W-BOARD ASSY	APSTA005CD												
1										R159	R161			1
2						RD25PJ224X		CARBON FILM R.	0.25W 220K OHM 5%	R137				1
3						RD25PJ272X		CARBON FILM R.	0.25W 2.7K OHM 5%	R143	R21	R22		3
4						RD25PJ302X		CARBON FILM R.	0.25W 3K OHM 5%	R111	R112			2
5						RD25PJ303X		CARBON FILM R.	0.25W 30K OHM 5%	R83	R84			2
6						RD25PJ332X		CARBON FILM R.	0.25W 3.3K OHM 5%	R109	R110	R121	R122	9
7										R164	R55	R56	R57	
8										R58				
9						RD25PJ333X		CARBON FILM R.	0.25W 33K OHM 5%	R77	R78			2
10						RD25PJ362X		CARBON FILM R.	0.25W 3.6K OHM 5%	R163				1
11						RD25PJ391X		CARBON FILM R.	0.25W 390 OHM 5%	R95	R96			2
12						RD25PJ392X		CARBON FILM R.	0.25W 3.9K OHM 5%	R138				1
13						RD25PJ394X		CARBON FILM R.	0.25W 390K OHM 5%	R125				1
14						RD25PJ433X		CARBON FILM R.	0.25W 43K OHM 5%	R53	R54			2
15						RD25PJ470X		CARBON FILM R.	0.25W 47 OHM 5%	R139				1
16						RD25PJ471X		CARBON FILM R.	0.25W 470 OHM 5%	R132	R200	R201	R202	9
17										R203	R3	R4	R73	
18										R74				
19						RD25PJ472X		CARBON FILM R.	0.25W 4.7K OHM 5%	R187	R37	R39	R40	6
20										R41	R42			
21						RD25PJ566X		CARBON FILM R.	0.25W 5.6 OHM 5%	R100	R101	R102	R99	4

EXPLODED ASSEMBLY	PART NAME		PART CODE		REMARKS	PART CODE	PART STOCK NUMBER	PART NAME	SPECIFICATIONS	SYMBOLIC OR EXPLODED VIEW NO.				QTY USED
	P-W-BOARD ASSY	APSTA005CD												
1										R18	R31	R32	R34	
2										R35	R36			
3						RD25PJ104X		CARBON FILM R.	0.25W 100K OHM 5%	R123	R29	R30		3
4						RD25PJ105X		CARBON FILM R.	0.25W 1M OHM 5%	R49	R50	R51	R52	6
5										R63	R64			
6						RD25PJ122X		CARBON FILM R.	0.25W 1.2K OHM 5%	R75	R76			2
7						RD25PJ123X		CARBON FILM R.	0.25W 12K OHM 5%	R19	R20			2
8						RD25PJ124X		CARBON FILM R.	0.25W 120K OHM 5%	R124	R71	R72		3
9						RD25PJ131X		CARBON FILM R.	0.25W 130 OHM 5%	R113	R114			2
10						RD25PJ132X		CARBON FILM R.	0.25W 1.3K OHM 5%	R183	R184			2
11						RD25PJ133X		CARBON FILM R.	0.25W 13K OHM 5%	R15	R16			2
12						RD25PJ134X		CARBON FILM R.	0.25W 130K OHM 5%	R1				1
13						RD25PJ151X		CARBON FILM R.	0.25W 150 OHM 5%	R103	R104	R105	R106	4
14						RD25PJ152X		CARBON FILM R.	0.25W 1.5K OHM 5%	R167	R168	R93	R94	4
15						RD25PJ163X		CARBON FILM R.	0.25W 16K OHM 5%	R61	R62			2
16						RD25PJ182X		CARBON FILM R.	0.25W 1.8K OHM 5%	R45	R46			2
17						RD25PJ202X		CARBON FILM R.	0.25W 2K OHM 5%	R79	R80	R81	R82	4
18						RD25PJ222X		CARBON FILM R.	0.25W 2.2K OHM 5%	R10	R181	R182	R23	10
19										R24	R43	R44	R47	
20										R48	R9			
21						RD25PJ223X		CARBON FILM R.	0.25W 22K OHM 5%	R119	R120	R131	R133	6

EXPLODED ASSEMBLY	PART NAME		PART CODE		REMARKS	PART CODE	PART STOCK NUMBER	PART NAME	SPECIFICATIONS	SYMBOLIC OR EXPLODED VIEW NO.				QTY USED
	P-W-BOARD ASSY	APSTA005CD												
1						RD25PJ561X		CARBON FILM R.	0.25W 560 OHM 5%	R145				1
2						RD25PJ562X		CARBON FILM R.	0.25W 5.6K OHM 5%	R135	R162	R65	R66	4
3						RD25PJ680X		CARBON FILM R.	0.25W 68 OHM 5%	R25	R26	R27	R28	4
4						RD25PJ681X		CARBON FILM R.	0.25W 680 OHM 5%	R165	R166			2
5						RD25PJ683X		CARBON FILM R.	0.25W 68K OHM 5%	R149				1
6						RD25PJ820X		CARBON FILM R.	0.25W 82 OHM 5%	R134				1
7						RD25PJ822X		CARBON FILM R.	0.25W 8.2K OHM 5%	R13	R14			2
8						RD25PJ823X		CARBON FILM R.	0.25W 82K OHM 5%	R136	R7	R8		3
9						RD25TJ103X		CARBON FILM R.	0.25W 10K OHM 5%	R33				1
10						RD25TJ134X		CARBON FILM R.	0.25W 130K OHM 5%	R2				1
11						RD25TJ182X		CARBON FILM R.	0.25W 1.8K OHM 5%	R160				1
12						RD25TJ472X		CARBON FILM R.	0.25W 4.7K OHM 5%	R38				1
13						RGHARJ101B		M-OXIDE FILM R.		R128				1
14						RGHARJ271B		M-OXIDE FILM R.		R97	R98			2
15						RGHARJ332B		M-OXIDE FILM R.		R89	R90	R91	R92	4
16						RGHARJ470B		M-OXIDE FILM R.		R148	R87	R88		3
17						RGHARJ560B		M-OXIDE FILM R.		R142				1
18						RGHARJ682B		M-OXIDE FILM R.		R173				1
19						RGLARJ332B		M-OXIDE FILM R.		R126				1
20						RGLARJ392B		M-OXIDE FILM R.		R140				1
21						RGLARJ560B		M-OXIDE FILM R.		R177				1

EXPLODED ASSEMBLY	PART NAME		PART CODE		REMARKS	PART CODE	PART STOCK NUMBER	PART NAME	SPECIFICATIONS	SYMBOLIC OR EXPLODED VIEW NO.				QTY USED
	P-W-B-O-A-R-D	A-S-S-Y	A-P-S-T-A-O-O-5-C-D											
1						RG1ARJ562B		M-OXIDE FILM R.		R85	R86			2
2						RG2ARJ122B		M-OXIDE FILM R.		R186				1
3						RG2ARJ151B		M-OXIDE FILM R.		R169	R170			2
4						RG2ARJ222B		M-OXIDE FILM R.		R175	R67	R68	R69	5
5										R70				
6						RG2ARJ272B		M-OXIDE FILM R.		R188				1
7						RG2ARJ681B		M-OXIDE FILM R.		R127				1
8						RPJNB33102		SEMI-FIXED VR.		RV1	RV2			2
9						RVNA503A16		VR		VR5				1
10						RVQA503B14		VR		VR2	VR3	VR4		3
11						RVUA104B03		VR		VR1				1
12						RXHARJ100B		M-OXIDE FILM R.		R117	R118	R185		3
13						RXHARJ4R7B		M-OXIDE FILM R.		R144				1
14						RX2ARJ5R6B		M-OXIDE FILM R.		R115	R116			2
15						SP04CAX13D		PUSH-SW		S1				1
16						VVL211GE90		FUSE LABEL						2
17						WP08110DHT		PC-JOINT		JU1	JU2			2
18						WUGP14EEEX		HI-WRAP WIRE		NO13	NO15			2
19						WUGP20EEEX		HI-WRAP WIRE		NO14				1
20						WUG007EEEX		HI-WRAP WIRE		NO2				1
21						WUG008EEEX		HI-WRAP WIRE		NO1				1

EXPLODED ASSEMBLY	PART NAME		PART CODE		REMARKS	PART CODE	PART STOCK NUMBER	PART NAME	SPECIFICATIONS	SYMBOLIC OR EXPLODED VIEW NO.				QTY USED
	P-W-B-O-A-R-D	A-S-S-Y	A-P-S-T-A-O-O-5-C-D											
1						YHF0P0001Z		FUSE HOLDER		FH1	FH2	FH3	FH4	4
2						ZRA244102Z		RELAY		K1				1
3														
4														
5														
6														
7														
8														
9														
10														
11														
12														
13														
14														
15														
16														
17														
18														
19														
20														
21														

EXPLODED ASSEMBLY	PART NAME		PART CODE		REMARKS	PART CODE	PART STOCK NUMBER	PART NAME	SPECIFICATIONS	SYMBOLIC OR EXPLODED VIEW NO.				QTY USED
	P-W-B-O-A-R-D	A-S-S-Y	A-P-S-T-A-O-O-5-C-D											
1						WUG015EEEX		HI-WRAP WIRE		NO8				1
2						WUG016EEEX		HI-WRAP WIRE		NO5				1
3						WUG021EEEX		HI-WRAP WIRE		NO7				1
4						WUG024EEEX		HI-WRAP WIRE		NO3				1
5						WUG034EEEX		HI-WRAP WIRE		NO4				1
6						WUG036EEEX		HI-WRAP WIRE		NO6				1
7						WUG043EKXX		HI-WRAP WIRE		NO27				1
8						WUG121EEEX		HI-WRAP WIRE		NO9				1
9						WUG215EEEX		HI-WRAP WIRE		NO10				1
10						WUG220EEEX		HI-WRAP WIRE		NO21				1
11						WUG323EEEX		HI-WRAP WIRE		NO23				1
12						WUG341EKXX		HI-WRAP WIRE		NO25				1
13						WUG429EEEX		HI-WRAP WIRE		NO24				1
14						WUG446EKXX		HI-WRAP WIRE		NO26				1
15						WUG527EEEX		HI-WRAP WIRE		NO18				1
16						WUG629EEEX		HI-WRAP WIRE		NO19				1
17						WUG711EEEX		HI-WRAP WIRE		NO11				1
18						WUG716EEEX		HI-WRAP WIRE		NO20				1
19						WUG823EEEX		HI-WRAP WIRE		NO12				1
20						WUG919EEEX		HI-WRAP WIRE		NO22				1
21						WUG931EEEX		HI-WRAP WIRE		NO16	NO17			2

EXPLODED ASSEMBLY	PART NAME		PART CODE		REMARKS	PART CODE	PART STOCK NUMBER	PART NAME	SPECIFICATIONS	SYMBOLIC OR EXPLODED VIEW NO.				QTY USED
	P-W-B-O-A-R-D	A-S-S-Y	A-P-S-T-A-O-O-5-C-D											
1						CEVHD10ALX		ELYT. CAPACITOR		C1	C2			2
2						MW201BS001		TERMINAL						2
3						MW401CX001		SHORT JUMPER	JW-10					1
4						MW401CX006		SHOT JUMPER	10MM					2
5						PSZQ013COX		PRINTED W-B-O-A-R-D						1
6						RF03WKR22B		WIRE WOUND R.		R1				1
7						WUGP44EKXX		HI-WRAP WIRE		NO1				1
8						WUG116EEEX		HI-WRAP WIRE		NO3				1
9						WUG939EKXX		HI-WRAP WIRE		NO2				1
10														
11														
12														
13														
14														
15														
16														
17														
18														
19														
20														
21														

NOTE.

EXPLODED ASSEMBLY		PART NAME		PART CODE					
P.W. BOARD ASSY		APSZQ014AD							
1	REMARKS	PART CODE	PART STOCK NUMBER	PART NAME	SPECIFICATIONS	SYMBOLIC OR EXPLODED VIEW NO.		QTY USED	
1		CEVH010ALX		ELYT. CAPACITOR		C1	C2		2
2		MW201B5001		TERMINAL					2
3		MW401CX001		SHORT JUMPER	JW-10				1
4		MW401CX006		SHORT JUMPER	10MM				2
5		PSZQ014COX		PRINTED W. BOARD					1
6		RF03WKR22B		WIRE WOUND R.		R1			1
7		WUGP51EKXX		HI-WRAP WIRE		N01			1
8		WUG216EEXX		HI-WRAP WIRE		N03			1
9		WUG525EEXX		HI-WRAP WIRE		N04			1
10		WUG947EKXX		HI-WRAP WIRE		N02			1
11									
12									
13									
14									
15									
16									
17									
18									
19									
20									
21									

EXPLODED ASSEMBLY		PART NAME		PART CODE					
P.W. BOARD ASSY		APSZZ106AA							
1	REMARKS	PART CODE	PART STOCK NUMBER	PART NAME	SPECIFICATIONS	SYMBOLIC OR EXPLODED VIEW NO.		QTY USED	
1		MW201B5001		TERMINAL					2
2		PSZZ106COX		PRINTED W. BOARD					1
3		IHG24B001W		HEATER TRANS.					1
4									
5									
6									
7									
8									
9									
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19									
20									
21									

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