

BUCK ROGERS

PLANET OF ZOOM™

SEGA

Owner's Manual

Manual Part No. 420-0881





Owner's Manual

Manufactured By

SEGA®

TLX 910-335-1621

Buck Rogers™ Planet of Zoom™ Owner's Manual

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Introduction

BUCK ROGERS™ PLANET OF ZOOM™ is a micro-processor based coin-operated electronic game, that makes extensive use of digital integrated circuitry and television monitor concepts. This manual is intended for the use of the maintenance technicians who possess a general working knowledge of solid-state circuitry and video monitor theory. Any individual NOT knowledgeable in these areas SHOULD NOT attempt repair of the electronic portions of the game.

In addition to this manual and training in electronics, troubleshooting and repair will be facilitated by: access to general electronic type handtools, a multimeter, a 50 to 100 MHz oscilloscope and a logic probe would be helpful.

Technical assistance is available toll-free by calling:

1-800-854-1938 outside California

1-800-722-8576 inside California

Parts information assistance is available toll-free by calling:

1-800-854-1900 outside California

1-800-722-8575 inside California

Questions or comments concerning BUCK ROGERS™ PLANET OF ZOOM™ or any of our games are welcome and should be directed to:

Customer Service Manager

SEGA Electronics, Inc.

16250 Technology Drive

San Diego, California 92127-1985

Important Notes

The following note is included in compliance with FCC rules:

WARNING: This equipment generates and uses radio frequency energy and if not installed and used properly, i.e., in strict accordance with the instruction manual, may cause harmful interference to radio communications. It has been tested and found to comply with the limits for a Class A computing device pursuant to Subpart J of Part 15 of FCC rules, which are designed to provide reasonable protection against such interference when operated in a commercial environment. Operation of this equipment in a residential area is likely to cause interference in which case the user at his own expense will be required to take whatever measures may be required to correct the interference.

Other Notes

NEVER replace any components with anything other than exact replacement parts.

NEVER remove circuit board connections while power is on.

DO NOT replace fuses with anything other than the proper value. A blown fuse indicates an overload condition within the game. Replacing fuses with a higher value can cause severe damage to internal components if an overload occurs.

ALWAYS consult the manual before attempting repairs.

SPARE PARTS will be maintained at SEGA Electronics, Inc., for a period of five (5) years after the date of manufacture of the game concerned.

Game Concept

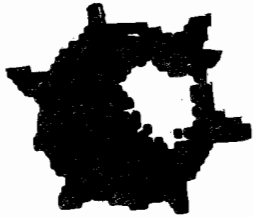
Flying skills and targeting accuracy must be honed to a fine edge, as you take command of Earth's last remaining hope of defense. Responsive 8-way joystick in hand, excitement is the name of the game as the Buck Rogers in all of us pilots a remote controlled spacecraft through the PLANET OF ZOOM™.

In the 25th century, Buck Rogers is confronted by a wicked warrior-world . . . the Planet of Zoom. It is a gargantuan out-of-orbit world that devastates everything in its path, and is ruled by an evil source ship. Buck Rogers mission: To destroy the source ship and liberate the Planet of Zoom before it reaches Earth.

Equipped with single-shot or rapid fire neutron cannon, and 2 level (upright) or 4 level (cockpit) speed control, you race your ship into and through heavily armed channels, through formidable smasher tunnels and around the towering spires of the cosmic city. You bank, dive and climb in pursuit of bizarre alien ships and ground forces to reach the climatic scene and primary target, the all powerful enemy source ship.

Fantastic game play graphics, great stereo sound effects, intense action and unique player controls makes this versatile one or two player video game as super as the Buck Rogers hero it is named for. With 3 to 6 extra ships (operator selectable) your score mounts and rounds proceed until the loss of the last player ship.

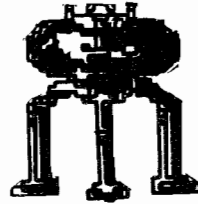
Scoring



100



200



300



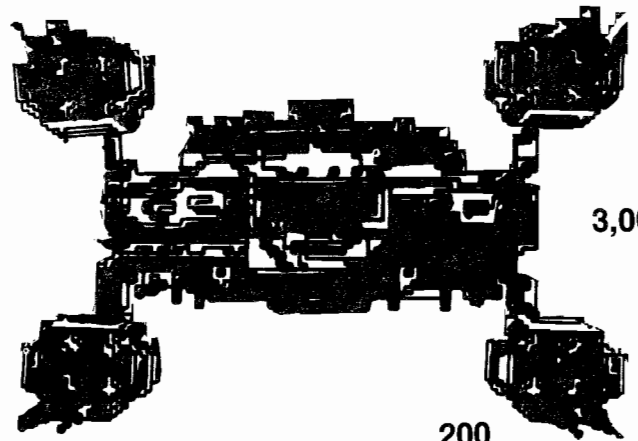
500



200



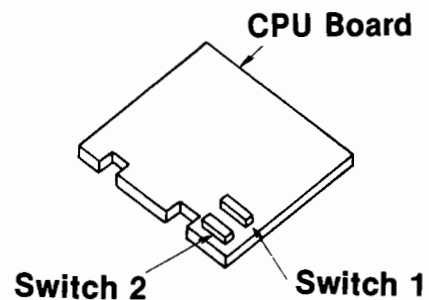
200



3,000

200

Option Selection



| <u>OPTION</u> | <u>SWITCH #1</u> | | | | | | | |
|-----------------|------------------|-----|-----|-----|-----|-----|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| 1 COIN/1 CREDIT | ON | ON | ON | ON | ON | ON | X | X |
| 1 COIN/2 CREDIT | OFF | ON | ON | OFF | ON | ON | X | X |
| 1 COIN/3 CREDIT | ON | OFF | ON | ON | OFF | ON | X | X |
| 1 COIN/6 CREDIT | OFF | OFF | ON | OFF | OFF | ON | X | X |
| 2 COIN/1 CREDIT | ON | ON | OFF | ON | ON | OFF | X | X |
| 3 COIN/1 CREDIT | OFF | ON | OFF | OFF | ON | OFF | X | X |
| 4 COIN/1 CREDIT | ON | OFF | OFF | ON | OFF | OFF | X | X |
| 5 COIN/1 CREDIT | OFF | OFF | OFF | OFF | OFF | OFF | X | X |

| <u>OPTION</u> | <u>SWITCH #2</u> | | | | | | | |
|-------------------|------------------|-----|-----|-----|-----|-----|-----|-----|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| COLLISIONS | ON | X | X | X | X | X | X | X |
| NO COLLISIONS | OFF | X | X | X | X | X | X | X |
| ACCEL. BY PEDAL | X | ON | X | X | X | X | X | X |
| ACCEL. BY BUTTON | X | OFF | X | X | X | X | X | X |
| BEST 5 SCORES ON | X | X | ON | X | X | X | X | X |
| BEST 5 SCORES OFF | X | X | OFF | X | X | X | X | X |
| SCORE DISPLAY ON | X | X | X | OFF | X | X | X | X |
| SCORE DISPLAY OFF | X | X | X | ON | X | X | X | X |
| DIFFICULT | X | X | X | X | ON | X | X | X |
| NORMAL | X | X | X | X | OFF | X | X | X |
| COCKPIT | X | X | X | X | X | X | X | ON |
| UPRIGHT | X | X | X | X | X | X | X | OFF |
| 3 EXTRA SHIPS | X | X | X | X | X | ON | ON | X |
| 4 EXTRA SHIPS | X | X | X | X | X | OFF | ON | X |
| 5 EXTRA SHIPS | X | X | X | X | X | ON | OFF | X |
| 6 EXTRA SHIPS | X | X | X | X | X | OFF | OFF | X |

ON = CLOSED

OFF = OPEN

X = NOT USED

Theory of Operation

BUCK ROGERSTM is a "state-of-the-art" electronic microprocessor based, video game. The result of hundreds of hours of work, design, research, experiment and more work. However, as with any electronic device, component failure or other problems can result in a game that doesn't function properly, or doesn't function at all. In either case, your game is "down", and so critically, are your profits.

Your objective is to fix it as quickly as possible, and logical troubleshooting goes a long way toward that repair. Although many troubleshooting methods may be familiar to you, procedural logic is common among them, and might be stated in this order: visual inspection, symptom recognition, symptom isolation, function isolation, component isolation and repair. Familiarity with the equipment in question will allow you to bypass one or more of these steps, as any particular problem may be obvious to you, or may have happened before. In general though, these 6 steps form a good premise upon which to approach your "down" game.

An extremely important item in our procedure is the first mentioned, giving the gear the "once over". A large percentage of failures found in electronics, show themselves visually and often a great deal of time can be saved by inspecting for burnt or blown components, loose or disconnected wiring or connectors, or PCB traces burnt or pulled up. Thorough visual inspections become increasingly important the closer you get to the faulty item, and should be repeated each time another portion of the game is eliminated. Symptom recognition (as with all electronic troubleshooting) in your BUCK ROGERS depends first, on knowing what a proper display is, and second, knowing how your display differs from a normal one. Symptom isolation follows naturally; (i.e., "I have no picture", "I have no sound", "I have no control over the ship", "the picture is scrambled"), ergo, a video, audio, input or logic problem. Function isolation, such as a sync problem with the video, requires that you consider those functions that go to make up video sync. Is it a monitor problem, or an "on-the-board" problem? A monitor input check to verify the signal will tell you. Does the board have the voltage (from the power supply) that it needs? Yes? We must have a board failure, as we've just isolated down to function. Taking our sync problem further, before we begin our search for an individual component, let's reapply that first item in

our "Logical Troubleshooting Procedure". Look at the board. Open resistors, diodes, and capacitors often give themselves away.

Noticing a trace literally burned open can save you serious "down-time". The board looks OK, so on we go. Specific component isolation relates to the specific nature of the failure, component commonality, proper inputting (both signal and power) and proper outputting (as in the case of an output held high, low, or floating by input port failure in the succeeding state). More general problems (such as a total loss of video sync) requires the more involved procedure of systematic elimination of possibilities. This operation can be expedited however, by dividing the circuit in half, establishing a "go-no/go" at that point, and again dividing the suspect circuit portion in half. The largest possible areas can be eliminated in this manner, dividing and subdividing until the individual component failure is found.

BUCK ROGERSTM is a microprocessor based, digital-integrated circuit computer video game. The heart of the computer is the CPU (IC13, Zone 8-D, Sht. 1, CPU Bd., 834-5120), a Z80A (P/N 315-0041). The Alpha type device MUST ALWAYS be used, as the Z80 is not fast enough to run the programs.

Master timing is crystal-driven at 20.00 MHz (X1, Zone 8-A, Sht. 1, CPU Bd., 834-5120) through IC34, 28, and 35. CPU timing is taken from IC34 p-7, applied to IC35 p-2 (Zone 8-B, Sht. 1, CPU Bd., 834-5120) clocked out of IC35 at p-13, inverted by IC28 (Zone 8-C, Sht. 1, CPU Bd., 834-5120) and finally applied to pin-6 of the CPU (IC13). Additionally, IC13 provides 5 MHz and 10 MHz for video timing and character generation, as well as processed interrupts and timing for the Select Address processor IC50 (Zone 8-D, Sht. 5, CPU Bd., 834-5120).

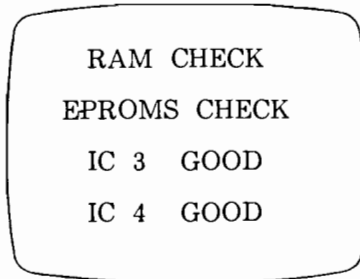
Manual system reset (Power-On) appears as a LO at IC16 p-4 (Zone 8-D, Sht. 1, CPU Bd., 834-5120) and is then felt at pin-26 of the CPU (IC13, Sht. 1, Zone 8-D, CPU Bd., 834-2150). Normal program interrupts (INT) are felt at pin-16 of the Z80A (an edge-triggered LO), and are the result of Input/Output activity timing with vertical blanking (an approx. 2 msec. instruction interrupt). The WAIT signal is used to synchronize that I/O activity during an interrupt to the CPU. IC1 and 2 (Zone 6-D, Sht. 1, CPU Bd., 834-5120) are address bus drivers. Two of the sixteen address lines pass through IC30 (Zone 6-D, Sht. 1, CPU Bd., 834-5120) and subsequently drive the Chip Enable inputs of EPROM IC's 3, 4, 15 and RAM IC 14 (Sht. 1, CPU Bd., 834-5120). IC's 113, 114, 121 and 122 (Sht. 4, CPU Bd., 834-5120) are input ports on the data bus. The 44-pin flat connector supplies player input information, service switch,

game start and coinage to the input ports. IC119 and 121 input Coin B, and IC120 and 121 input Coin A, together with Game Start, Self-Test, Up/Down and Acceleration to I/O processor IC106 (Zone 4-D, Sht. 4, CPU Bd., 834-5120). IC111, 112 and 114 accesses/buffers Player Left/Right data, IC111 and 113 interfaces Fire data, and Option Selection is shared by all 4 74LS244's. Located in the Volume Control Block is the Self-Test switch. When closed, it applies a LO to IC119 p-6 (Zone 7-C, Sht. 4, CPU Bd., 834-5120) initiating a systems/function verification outlined on the following page:

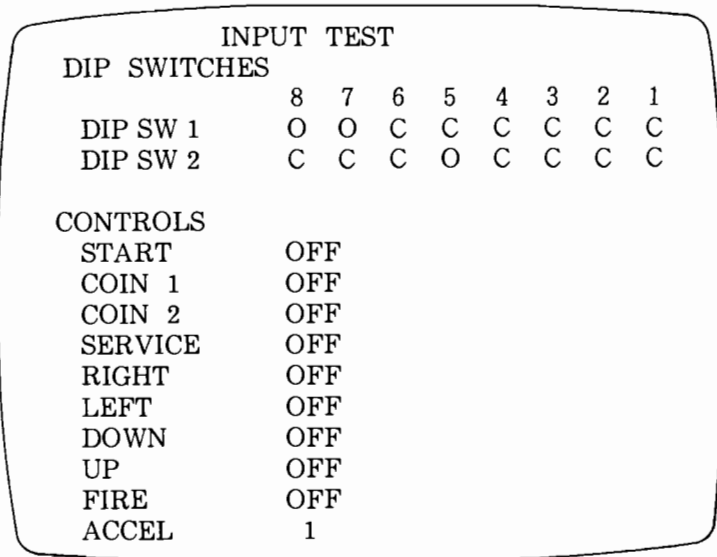
Self-Test

BUCK ROGERS™ is equipped with a diagnostics sequence that is initiated by pressing the Self-Test button located on the Volume Control Block Assembly. The test appears in the following order, with each major category ending with the press of the Self-Test button:

1.

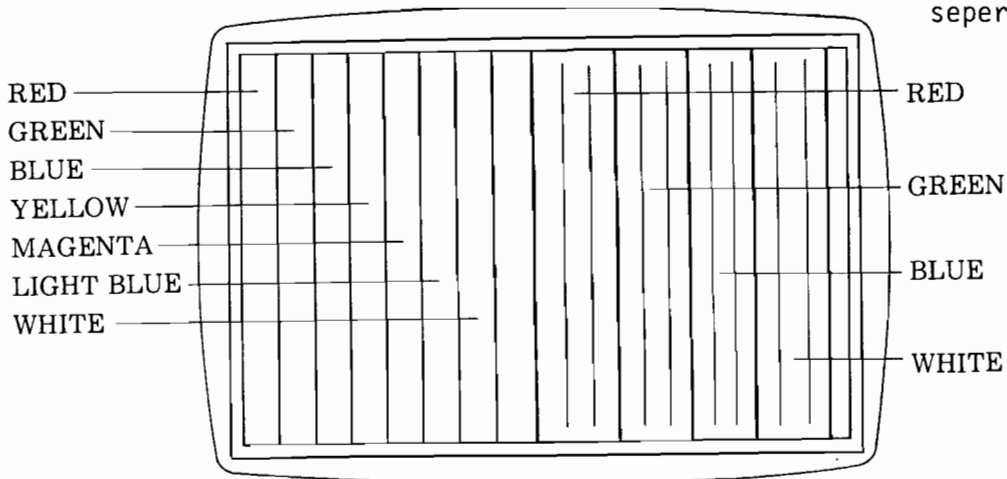


2.



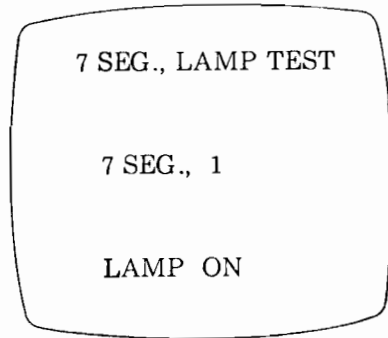
- Switch condition (ON or OFF) is verified by actuation.

3.



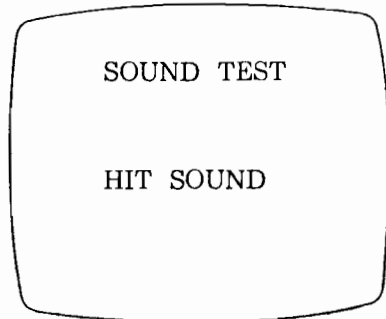
- Color tracking and separation

4.



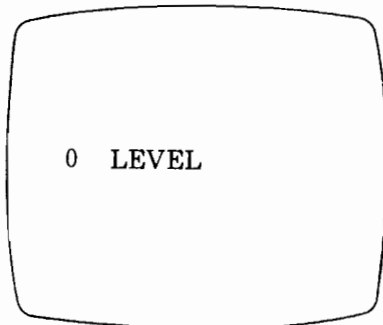
- START button sequences LED numerical read-out 0 - 9

5.



- FIRE button initiates each sound audibly.
- START button sequences each sound in turn.

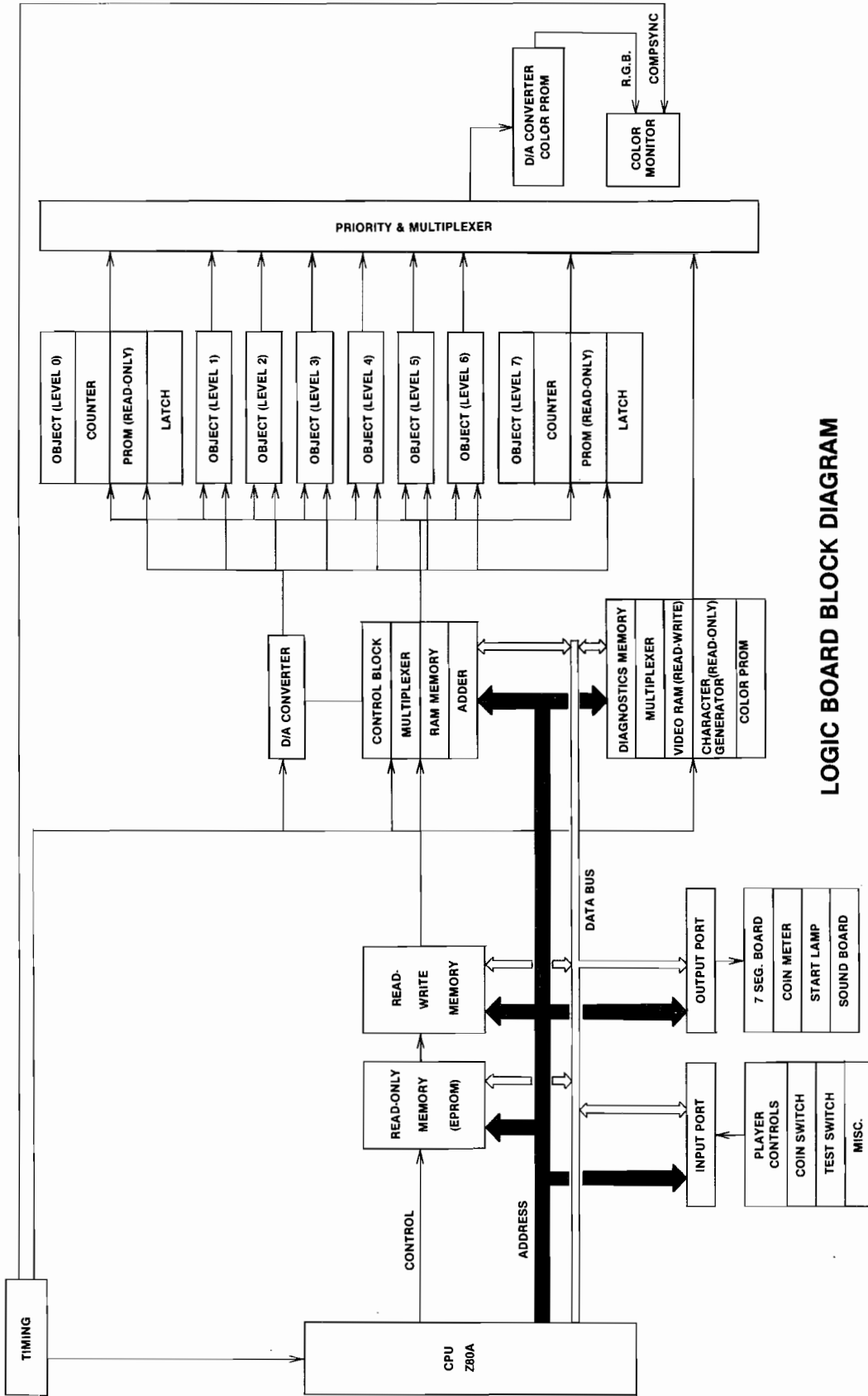
6. Character ROM Test



- Video display of character memory by Object Level.
- START button sequences Object Levels 0 through 7.

Due to the striking graphics employed in BUCK ROGERSTM, memory requirements for background generation are significant. On the EPROM Bd. (834-5121) there are sixteen (16) 27128-3 16K X 8 EPROMs that hold video character, positioning, color and timing information. Background generation accessible memory (RAM) is provided by TTL IC14 and IC84 (Zone 2-D and 4-B respectively, Sht. 1, on the CPU Bd., 834-5120), in addition to IC's 6-9 on Sht. 3 of the CPU (834-5120). Back on the EPROM Board, program storage is organized into eight (8) levels of multiplexed data for troubleshooting efficiency (Sheets 3 through 10, EPROM Bd., 823-5121), with final pre-CPU input "mux" occurring on Sht. 2, EPROM Bd., 834-5121. Armed with program data and input port data, the CPU can then integrate timing and sync (Sht. 2, CPU Bd., 834-5120) with color requirements (Sht. 6, CPU Bd., 834-5120) to produce complete color video at the Output Ports consisting of IC's 97, 98, 109 and 110 (Sht. 6. CPU Bd., 834-5120).

Just as the microprocessor Z80A is the heart of the game computer, so too is the 8255A-5 (IC113, Zone 2-D, Sht. 4, CPU Bd., 834-5120) the center of activity for Sound. Called a Sound Generator, IC113 interfaces data and address bus, as well as the noise generators on the Sound Bd. (834-5122), through the 20 pin flat cable, enabling specific sounds processing circuits. These circuits consist of individual sounds for Player ship flying sounds, rebound, explosion, laser and alarm. Those complete sounds not originating within the 8255A-5 are enabled by the Sound Generator through the noise generators on the Sound Bd. IC28 and VR1 (Volume Control, Sht. 1, Zone 6-A, Sound Bd.) set input biasing for the Audio Amplifier LA446 at an 8 ohm load.



LOGIC BOARD BLOCK DIAGRAM

Upright Assemblies

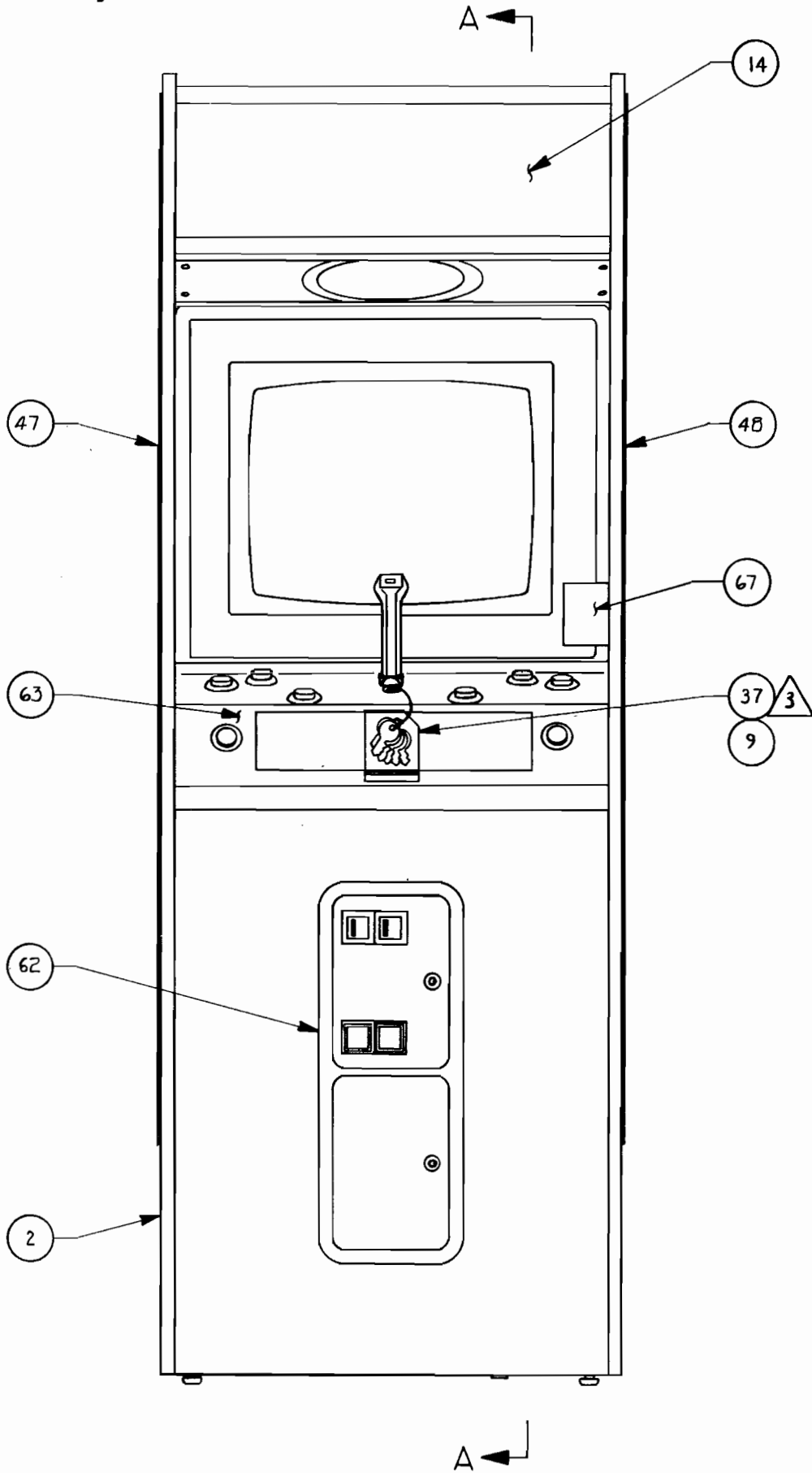
| <u>ITEM NO.</u> | <u>PART NO.</u> | <u>QTY</u> <u>REQD.</u> | <u>DESCRIPTION</u> |
|-----------------|-----------------|----------------------------|--|
| 1 | 140-0021-00 | 1 | Cover-J-Box |
| 2 | 140-0104-01 | 1 | Cabinet, Upright Model 103 |
| 3 | | | |
| 4 | 220-0178-00 | 2 | Draw Catch |
| 5 | 280-0495-00 | 1 | Spring, Compression |
| 6 | 250-0568-03 | 1 | Moulding Panel, 85 ⁰ |
| 7 | 250-0568-04 | 1 | Moulding Panel, 100 ⁰ |
| 8 | | | |
| 9 | 253-0238-00 | 1 | Plastic Bag 3.00 x 4.00 Vinyl Transparent Zip Lock |
| 10 | | | |
| 11 | 253-0281-00 | 1 | Envelope 12.0 x 15.0 H.D. Clear 10 MIL PVC |
| 12 | 253-0285-00 | 1 | Bezel, Plastic, CRT Horizontal |
| 13 | | | |
| 14 | 253-0300-00 | 1 | Panel Logo |
| 15 | 253-0302-00 | 1 | Monitor Panel |
| 16 | | | |
| 17 | 280-0005-00 | 40 | Cable Tie |
| 18 | 289-0002-04 | 1 | Cable Clamp Nylon |
| 19 | 280-0475-00 | 60 | Staple |
| 20 | 281-0045-28 | 2 | SCR, 10-12 x 1.75 PN HD Phil, Sht Mtl, Type AB |
| 21 | 281-0045-12 | 9 | SCR, 10-16 x .75 PN HD Phil, Sht Mtl, Type AB |
| 22 | 281-0134-12 | 8 | SCR, 8-18 x .75 PN HD Phil, Sht Mtl, Type AB, Black |
| 23 | 281-0185-24 | 4 | SCR, 10-16 x 1.50 FL HD Phil, 82 ⁰ Sht Mtl, Type AB, Black |
| 24 | | | |
| 25 | 282-0017-24 | 4 | Bolt, 1/4-20 x 1.50 Hex Head, Mach Thd |

| <u>ITEM NO.</u> | <u>PART NO.</u> | <u>QTY</u> <u>REQD.</u> | <u>DESCRIPTION</u> |
|-----------------|-----------------|----------------------------|---|
| 26 | 282-0019-32 | 1 | Bolt, 3/8-16 x 2.00 Hex HD, Mach THD |
| 27 | | | |
| 28 | 283-0060-25 | 5 | Washer, #10 Reg .203 I.D. x .562 O.D., Flt Stl |
| 29 | 283-0060-34 | 4 | Washer, 1/4 Lrg .281 I.D. x 1.25 O.D., Flt Stl |
| 30 | 283-0060-40 | 1 | Washer, 3/8 Reg .406 I.D. x 1.00 O.D., Flt Stl |
| 31 | 283-0061-06 | 9 | Washer, #10 Lock, Split, Steel |
| 32 | 283-0061-08 | 4 | Washer, 1/4 Lock, Split, Steel |
| 33 | 283-0061-10 | 1 | Washer, 3/8 Lock, Split, Steel |
| 34 | 283-0071-14 | 1 | Nut, Wing Steel 10-32 Mach THD |
| 35 | | | |
| 36 | 320-0020-00 | 4' | Sealant Foam |
| 37 | 320-0051-00 | 1' | Tie Ribbon, Wire, Plastic Coated |
| 38 | | | |
| 39 | 420-0030-00 | 1 | Decal, Caution 115V |
| 40 | | | |
| 41 | | | |
| 42 | 420-0713-00 | 1 | Advertising Pouch |
| 43 | | | |
| 44 | 420-0793-00 | 1 | Decal, Toll Free Number |
| 45 | 420-0880-00 | 1 | Decal, Box |
| 46 | 420-0881-00 | 1 | Manual |
| 47 | 420-0892-00 | 1 | Graphic-Left Side |
| 48 | 420-0893-00 | 1 | Graphic-Right Side |
| 49 | 420-0864-00 | 1 | Light Baffle |
| 50 | | | |
| 51 | | | |
| 52 | 540-0007-00 | 1 | Wrench for M5 Screw |
| 53 | | | |

| <u>ITEM NO.</u> | <u>PART NO.</u> | <u>QTY</u> <u>REQD.</u> | <u>DESCRIPTION</u> |
|-----------------|-----------------|----------------------------|------------------------------------|
| 54 | 800-0147-04 | 1 | Assy, Fluorescent Lamp 2 |
| 55 | 800-0362-02 | 1 | Assy, Monitor Color |
| 56 | 800-0408-03 | 1 | Assy, Gnd Strap Control Panel |
| 57 | 800-0408-04 | 1 | Assy, Gnd Strap Monitor |
| 58 | | | |
| 59 | | | |
| 60 | 800-0415-01 | 1 | Assy, Light, Speaker, Mod. 103 CAB |
| 61 | 800-3244-00 | 1 | Assy, Junction Box |
| 62 | 800-3294-01 | 1 | Assy, Coin System |
| 63 | 800-3314-00 | 1 | Assy, Control Panel |
| 64 | 800-3315-00 | 1 | Assy, Component Shelf |
| 65 | | | |
| 66 | 420-0912-00 | 1 | Decal, FCC Compliance Cabinet |
| 67 | 420-0913-02 | 1 | Decal, Original Game Seal |
| 68 | 420-0917-00 | 1 | Decal, FCC Compliance, Manual |
| 69 | | | |
| 70 | | | |
| 71 | | | |
| 72 | | | |
| 73 | | | |
| 74 | | | |
| | 420-0780-02 | REF | Shipping Kit |

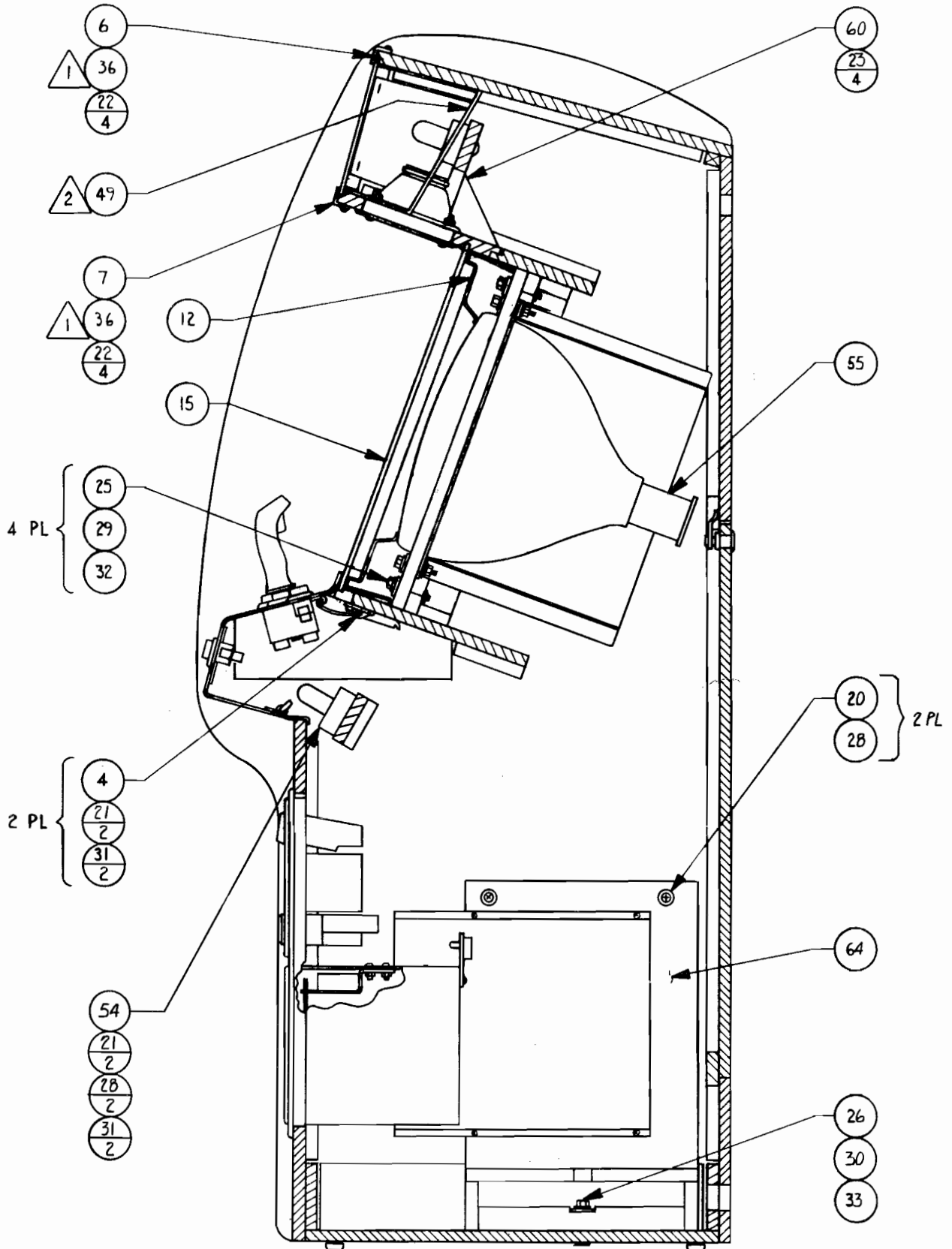
Top Assembly

700-0113

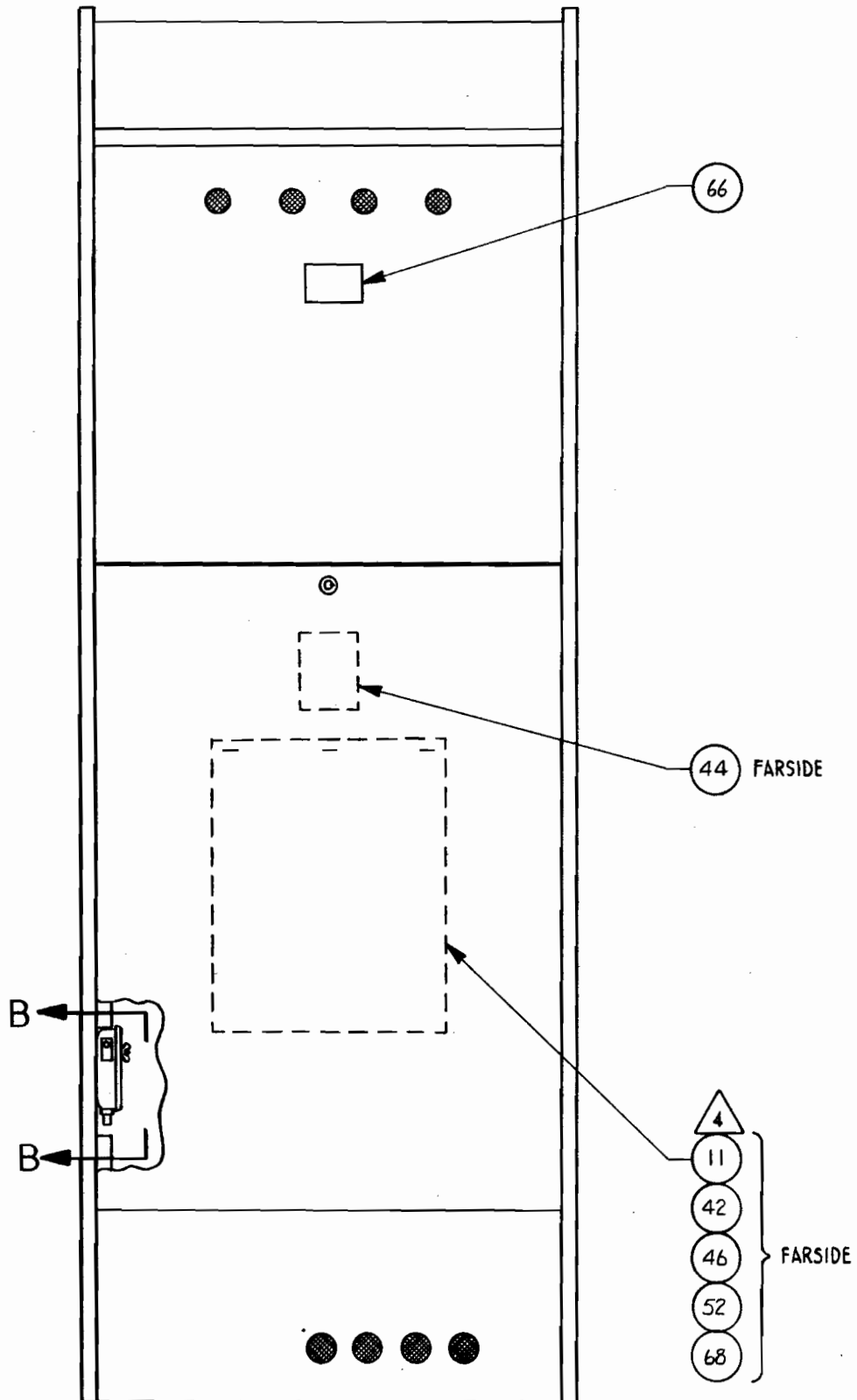


Top Assembly

700-0113



SECTION A-A

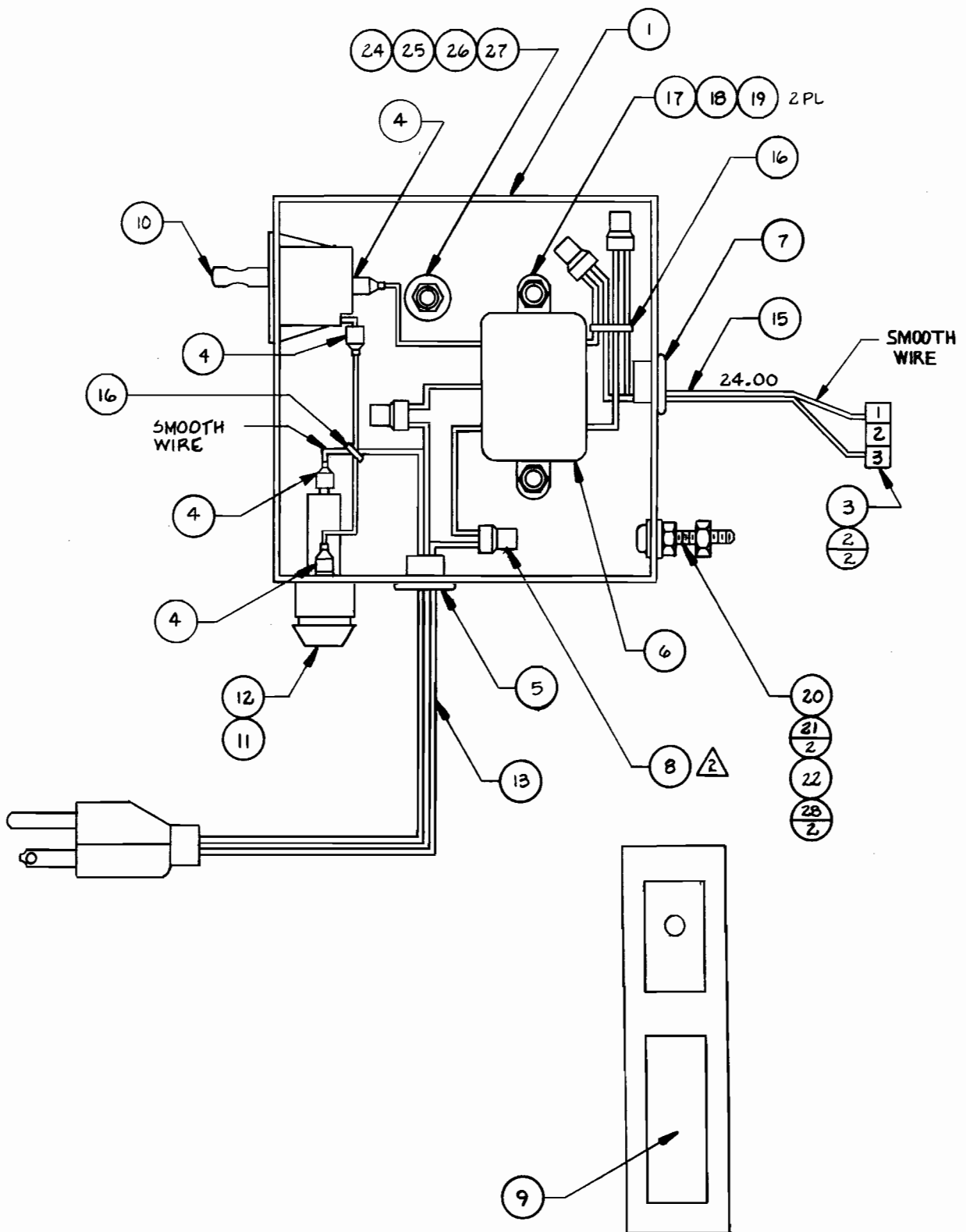


REAR VIEW
SCALE 1/5

AC JUNCTION BOX ASSEMBLY

DRAWING NUMBER 800-3244

| <u>ITEM NO.</u> | <u>PART NO.</u> | <u>QTY. REQ'D</u> | <u>DESCRIPTION</u> |
|-----------------|-----------------|-------------------|---------------------------------------|
| 1 | 140-0020 | 1 | Junction Box Metal |
| 2 | 211-0042 | 2 | Conn Socket AMP |
| 3 | 211-0060 | 1 | Conn Female Cap 3-pin AMP |
| 4 | 211-0164 | 4 | Conn Quick 3/16 Female insulated |
| 5 | 280-0361 | 1 | Bushing S/Rel AC Cord |
| 6 | 270-0001 | 1 | Filter EMI |
| 7 | 280-0007 | 1 | Bushing S/Rel 1/2 |
| 8 | 280-0362 | 4 | Electric Crimp Sleeve 24-18 AWG |
| 9 | 420-0598 | 1 | 2 Amp Fuse Decal |
| 10 | 510-0013 | 1 | Switch SPDT Cherry |
| 11 | 514-0001 | 1 | Fuse 2 Amp 250V S.B. |
| 12 | 514-0005 | 1 | Fuse Holder |
| 13 | 600-0001 | 1 | 3 Cond. Line Cord |
| 14 | | | |
| 15 | 600-0079 | 2ft. | Zip Cord Line |
| 16 | 280-0005 | 2 | Cable Tie |
| 17 | 281-0002-10 | 2 | Scr. Pn.Hd. Phl. #6-32 X 0.625 Mach |
| 18 | 283-0072-11 | 2 | Nut Hx.Hd. #6-32 Mach |
| 19 | 283-0062-04 | 2 | Washer Lock Int. Tooth #6 |
| 20 | 281-0004-12 | 1 | Scr. Pn.Hd. Phl. #8-32 X 0.750 Mach |
| 21 | 283-0072-13 | 2 | Nut Hx.Hd. #8-32 Mach |
| 22 | 283-0062-05 | 1 | Washer, Lock Int. Tooth #8 |
| 23 | | | |
| 24 | 283-0060-32 | 1 | Washer, Flat Std. O.D. 1/4 |
| 25 | 283-0072-15 | 1 | Nut, Hx.Hd. #10-24 Mach |
| 26 | 282-0005-28 | 1 | Bolt 10-24 X 1.75 Carr Hd. Mach Black |
| 27 | 310-0016-16 | 1 | Insul. Tubing 0.187 I.D. |
| 28 | 283-0060-22 | 2 | Washer #8 Flat Stl. |

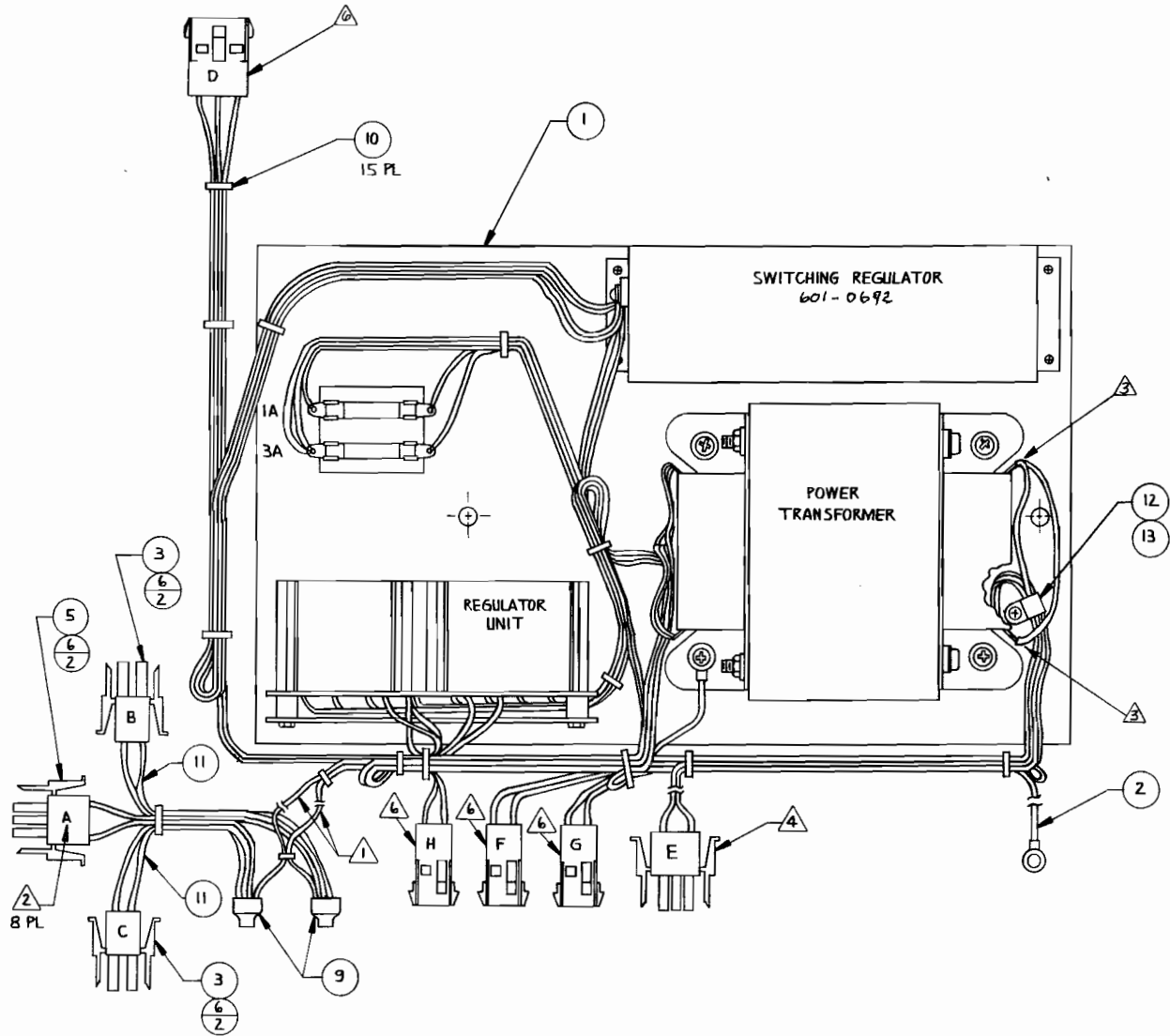


| <u>ITEM NO</u> | <u>PART NO.</u> | <u>QTY REQD.</u> | | | <u>DESCRIPTION</u> |
|----------------|-----------------|------------------|------------|------------|---|
| | | <u>-00</u> | <u>-01</u> | <u>-02</u> | |
| 1 | 834-0070-00 | 1 | 1 | 1 | Pwr Supply Assy (SEGA FR-4100) |
| 2 | 800-0370-00 | 1 | - | | Assy Gnd Strap |
| 3 | 211-0043-00 | 2 | 2 | 2 | Conn Plug Amp 2 Pin |
| 4 | 800-0408-02 | - | 1 | | Assy, Ground Strap |
| 5 | 211-0059-00 | 1 | 1 | 1 | Conn Plug Amp 3 Pin |
| 6 | 211-0042-00 | 6 | 6 | 10 | Conn Socket |
| 7 | 211-0047-00 | - | - | 1 | Conn Cap 12P Amp |
| 8 | 211-0186-00 | - | - | 2 | Conn Spring Spade Awg 22-16 |
| 9 | 280-0359-00 | 2 | 2 | 2 | Elec Crimp Sleeve |
| 10 | 280-0005-00 | 15 | 15 | 15 | Cable Tie |
| 11 | 600-0079-00 | 1.75' | 1.75' | 1.75' | 2 Cond Zip Cord |
| 12 | 280-0324-00 | 1 | 1 | 1 | Cable Clamp Nylon |
| 13 | 281-0044-08 | 1 | 1 | 1 | SCR 8-18 x 1/2" PN HD Type AB |
| 14 | | | | | |
| 15 | 600-0092-50 | - | - | 1.66' | Wire 22 Awg Blk Elec Hookup Stranded |
| 16 | 600-0092-41 | - | - | 3.33' | Wire 22 Awg Brn Elec Hookup Stranded |
| 17 | 600-0092-42 | - | - | 1.66' | Wire 22 Awg Red Elec Hookup Stranded |

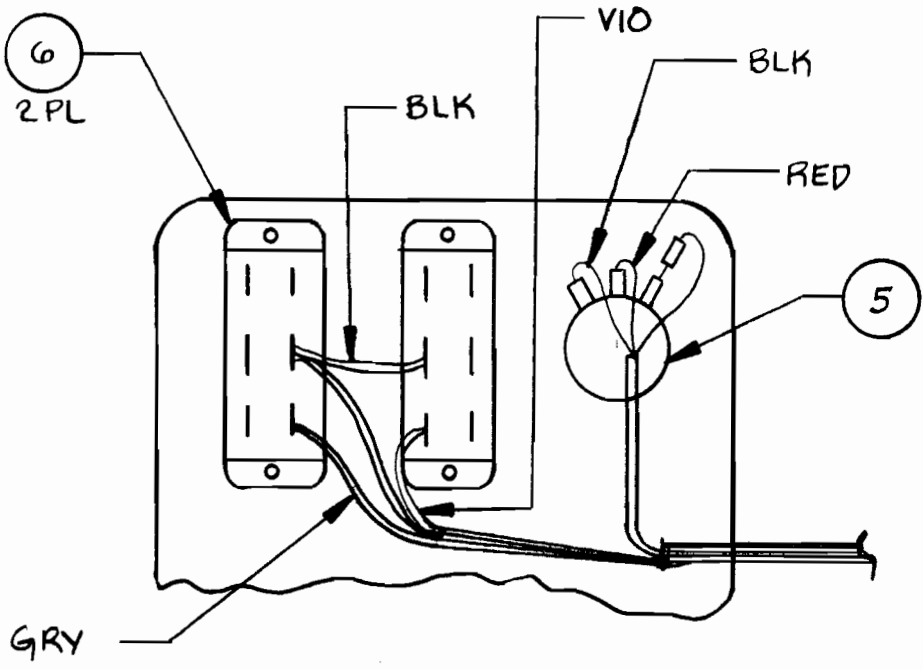
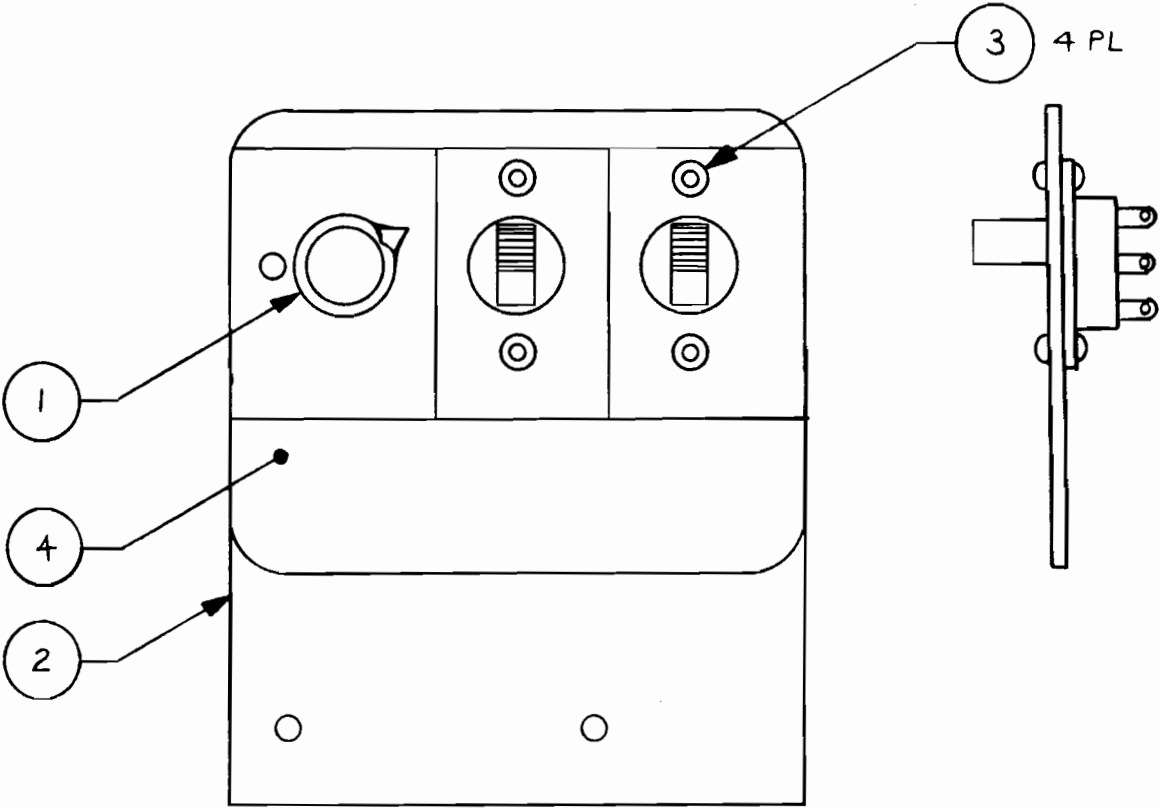
POWER SUPPLY ASSEMBLY (SEGA FR-4100)

DRAWING NUMBER 834-0070

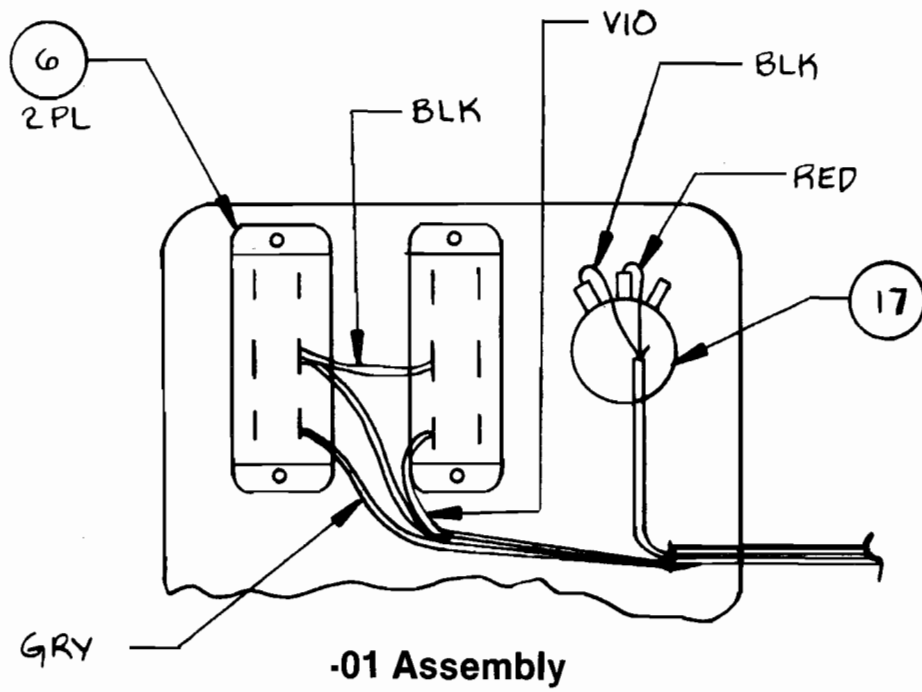
| <u>ITEM NO.</u> | <u>PART NO.</u> | <u>QTY.REQ'D.</u> | <u>DESCRIPTION</u> |
|-----------------|-----------------|-------------------|---------------------|
| 1 | 601-0612 | 1 | Regulator Unit |
| 2 | 560-0067 | 1 | Power Transformer |
| 3 | 421-5004 | 1 | Fuse Instructions |
| 4 | 420-0679 | 1 | 120V Warning Decal |
| 5 | 105-0248 | 2 | Bracket |
| 6 | 601-0158 | 1 | Switching Regulator |
| | 601-0692 | 1 | Switching Regulator |
| 7 | 514-0033 | 1 | Fuse, 1A |
| 8 | 514-0036 | 1 | Fuse, 3A |
| 9 | 280-0297 | 2 | One Touch Bushing |
| 10 | 280-0389 | 2 | One Touch Collar |



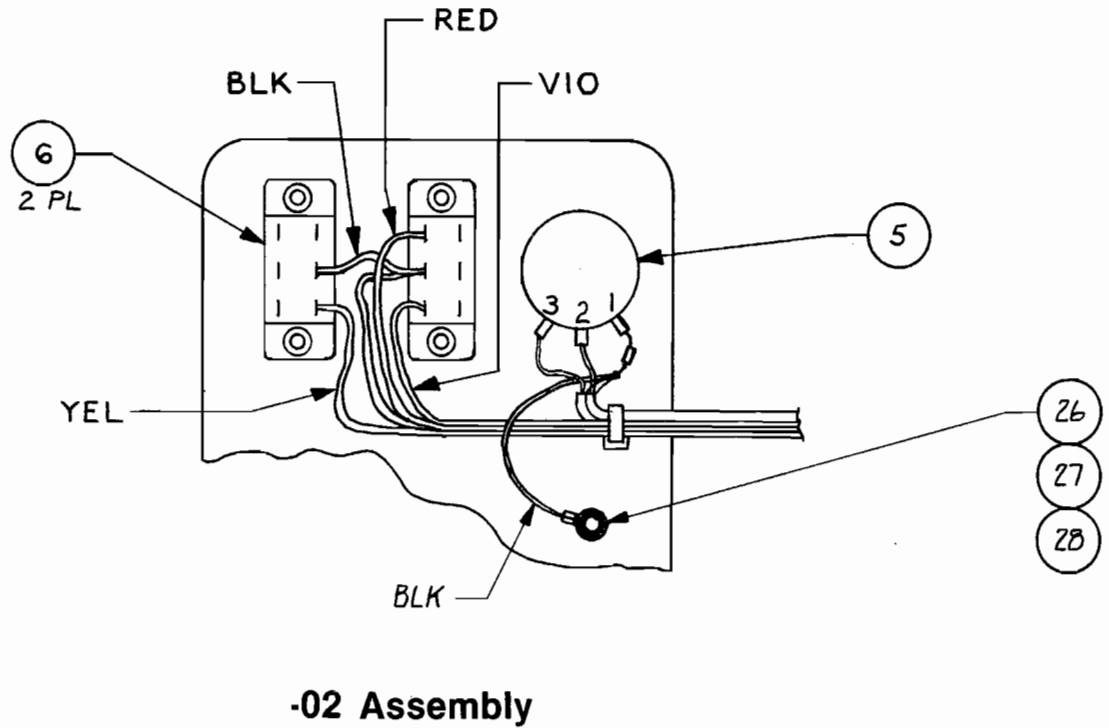
| ITEM NO | PART NO. | QTY REQD. | | | DESCRIPTION |
|---------|-------------|-----------|-------|-------|--|
| | | -00 | -01 | -02 | |
| 1 | 240-0001-00 | 1 | 1 | 1 | Knob Vol Cont |
| 2 | 250-0569-00 | 1 | 1 | - | Brkt Vol Cont Blk |
| 3 | 289-0003-14 | 4 | 4 | 4 | Eyelet Rolled Flg. Hd. |
| 4 | 420-0829-00 | 1 | 1 | 1 | Decal, E-Z Adjust Cont |
| 5 | 475-0007-00 | 1 | - | 2 | Pot 10K Car Pnlmt |
| 6 | 510-0051-00 | 2 | 2 | 1 | SW Pshbtn Slide |
| 7 | 420-0395-00 | - | - | 1 | Decal Serv SW/Vol Cont |
| 8 | 211-0041-00 | 5 | 5 | 6 | Conn Pin Amp |
| 9 | 211-0182-00 | 4 | 4 | 5 | Term .110 x .020 22-18 Awg QK Fem Fully Insul |
| 10 | 280-0005-00 | 4 | 4 | 3 | Cable Tie |
| 11 | 310-0041-02 | .08' | - | .08' | Tubing .125 ID Clear Polyolefin Shrinkable |
| 12 | 470-0101-00 | 1 | - | 1 | Res 100 Ohm 1/4W, 5% |
| 13 | 600-0029-00 | 1.38' | 1.38' | - | CA 2 Cndct Shld 22 Awg |
| 14 | 600-0092-47 | 1.46' | 1.46' | .75' | Wire 22 Awg Vio |
| 15 | 600-0092-48 | 1.54' | 1.54' | - | Wire 22 Awg Gry |
| 16 | 600-0092-50 | 1.62' | 1.62' | .116' | Wire 22 Awg Blk |
| 17 | 475-0034-00 | - | 1 | - | Pot 200 Car Pnlmt |
| 18 | 600-0013-00 | - | - | 3.1' | CA/Con Shld |
| 19 | 600-0092-42 | - | - | .75' | Wire 22 Awg Red |
| 20 | 600-0092-44 | - | - | .83' | Wire 22 Awg Yel |
| 21 | 211-0005-00 | - | - | 2 | Conn Crimp Lock, P24 |
| 22 | 212-0046-00 | - | - | 1 | Conn Cap Amp 6 Pin |
| 23 | 212-0005-00 | - | - | 1 | Conn Fem Blk 4 Pin |
| 24 | 250-0569-01 | - | - | 1 | Brkt. Vol Cont Blk |
| 25 | 211-0166-00 | - | - | 1 | Conn Ring Lug #10 |
| 26 | 283-0063-04 | - | - | 1 | Washer, #10 Lock, Ext Tooth, Star |
| 27 | 283-0070-03 | - | - | 1 | Nut. Nylon, Self Locking #10 |
| 28 | 281-0005-06 | - | - | 1 | Scr. #10 x .375 Pn Hd Phil Mach |



-00 Assembly



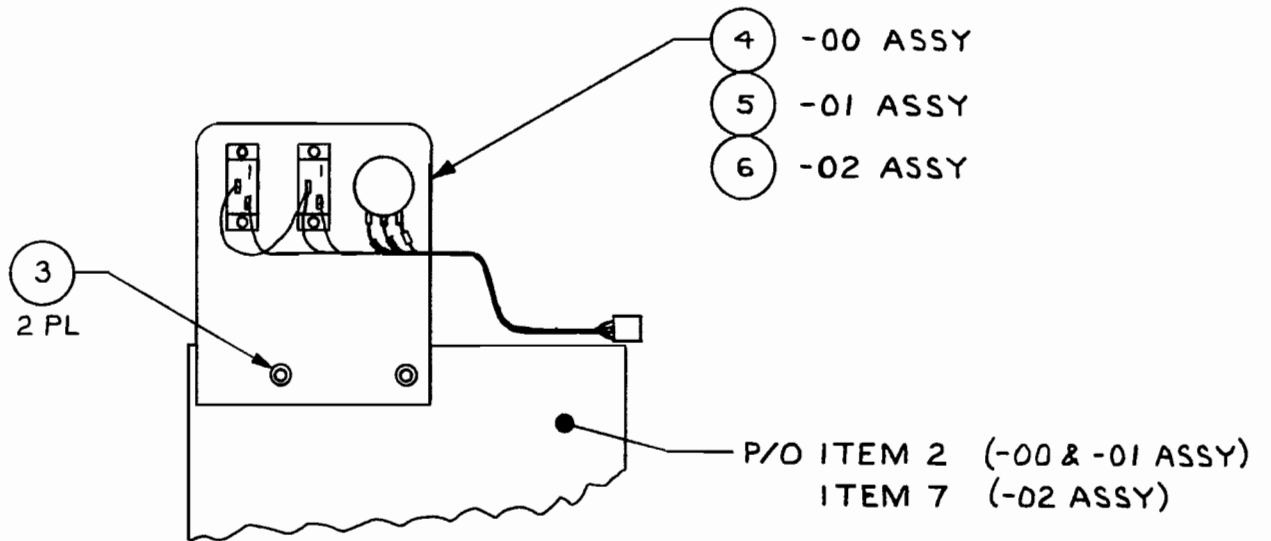
REAR VIEW



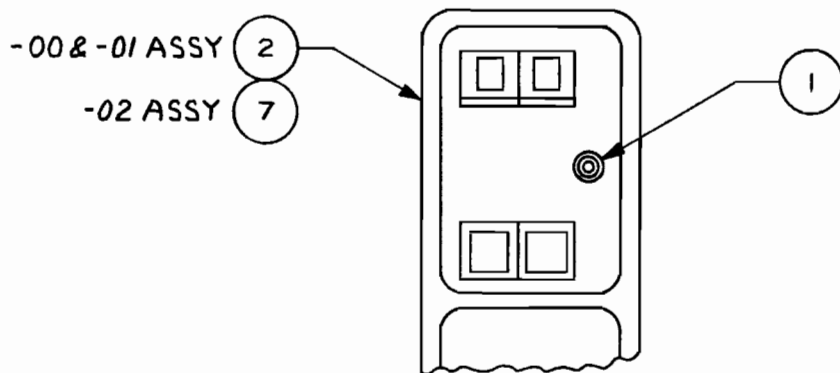
ASSY COIN SYSTEM

DRAWING NUMBER 800-3294

| <u>ITEM NO</u> | <u>PART NO.</u> | <u>QTY REQD.</u> | | | <u>DESCRIPTION</u> |
|----------------|-----------------|------------------|------------|------------|--|
| | | <u>-00</u> | <u>-01</u> | <u>-02</u> | |
| 1 | 220-0212-00 | 1 | 1 | 1 | Lock Panel 4-Way |
| 2 | 220-0265-00 | 1 | 1 | - | Coin Mech-Db1 Frame, Mini Door |
| 3 | 285-0001-04 | 2 | 2 | 2 | Rvt .125 dia x .250 lg, MDRL Pull, AL |
| 4 | 800-3282-00 | 1 | - | - | Vol Cont Blk Assy |
| 5 | 800-3282-01 | - | 1 | - | Vol Cont Blk Assy |
| 6 | 800-3282-02 | - | - | 1 | Vol Cont Blk Assy |
| 7 | 220-0265-01 | - | - | 1 | Coin Mech-Db1 Frame, Mini Door |

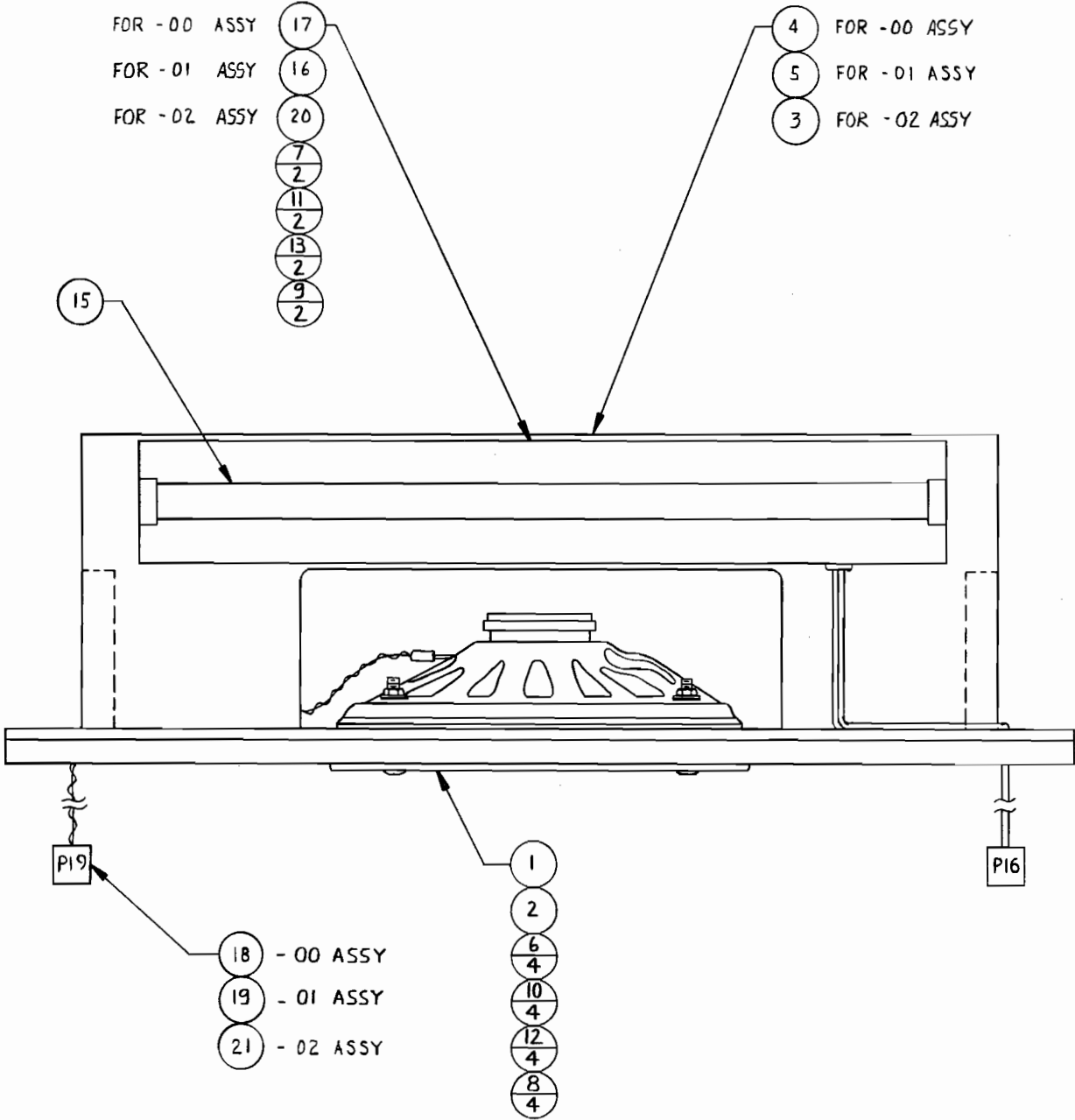


REAR VIEW OF
COIN ENCLOSURE

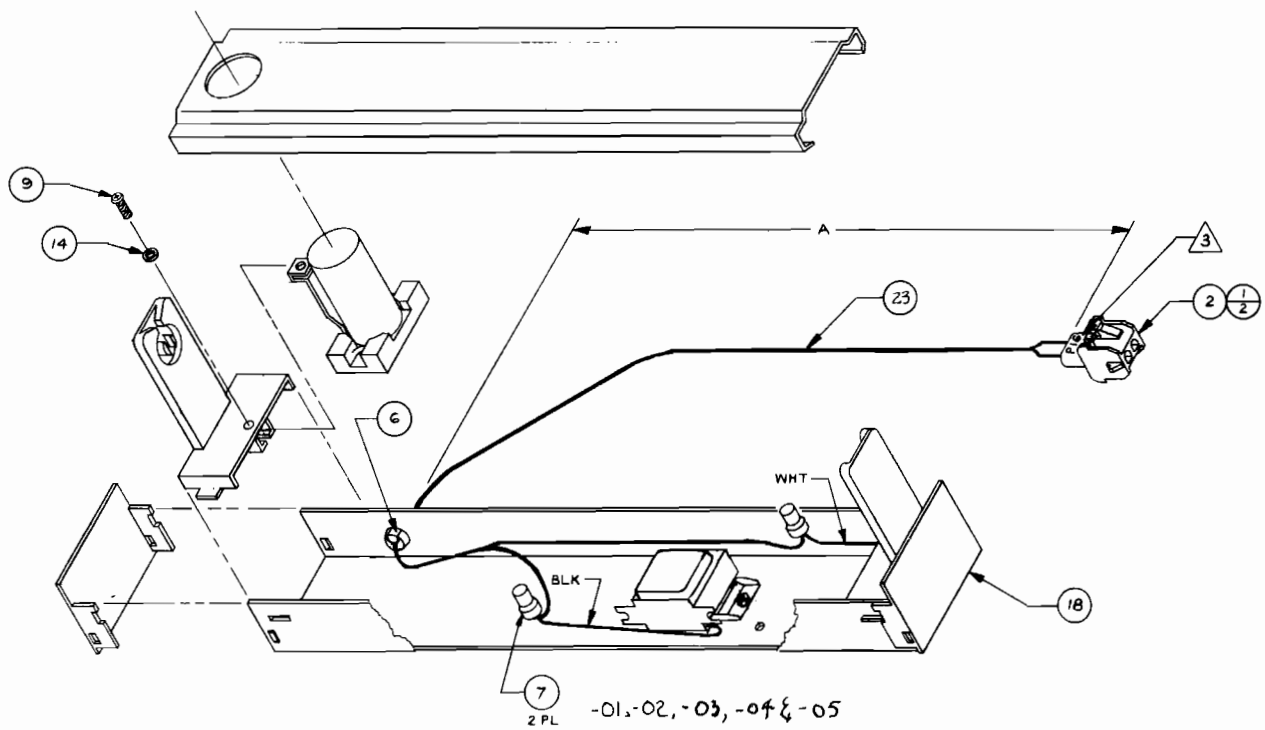


FRONT VIEW

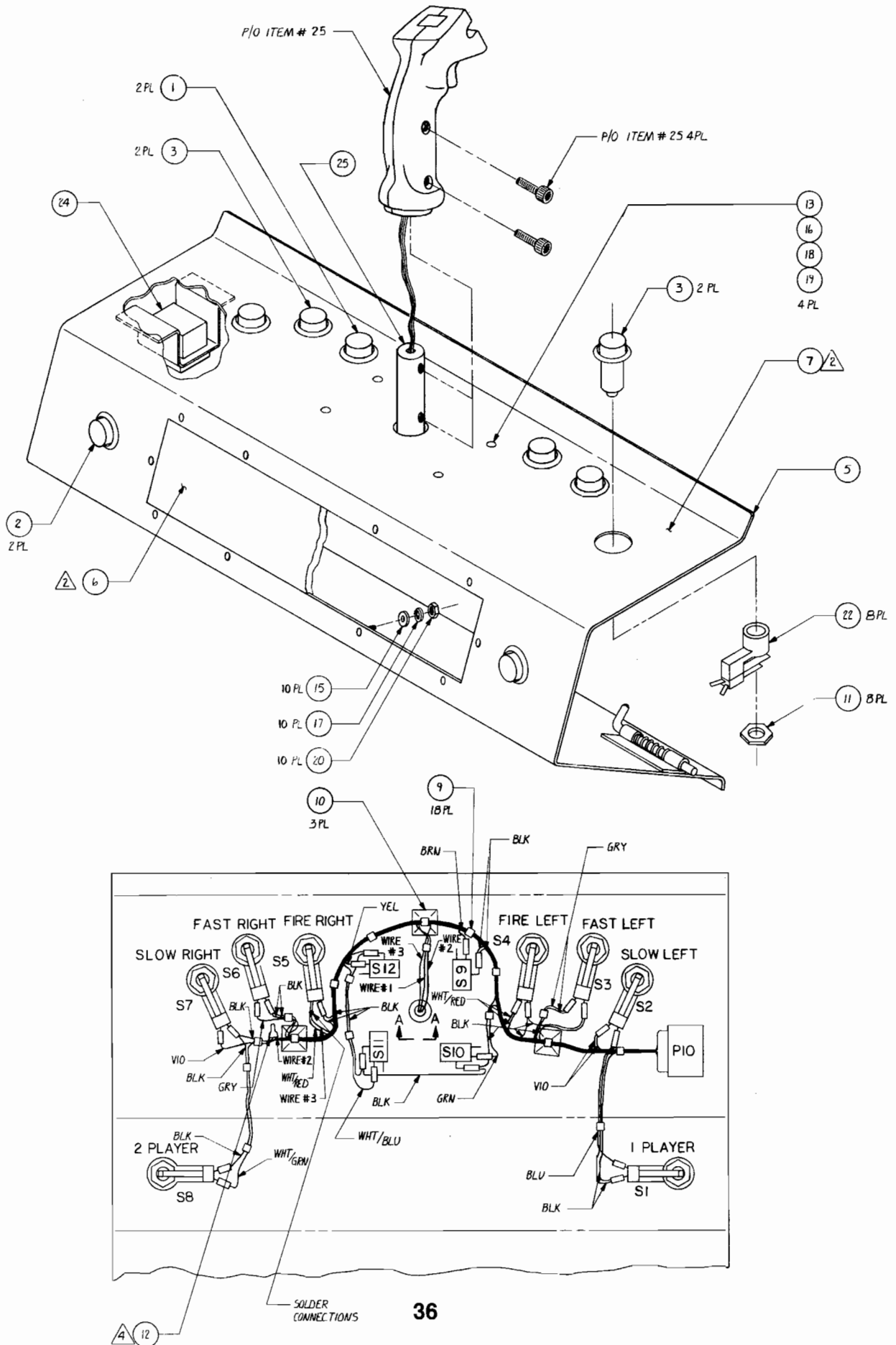
| <u>ITEM NO</u> | <u>PART NO.</u> | <u>QTY REQD.</u> | | | <u>DESCRIPTION</u> |
|----------------|-----------------|------------------|------------|------------|--|
| | | <u>-00</u> | <u>-01</u> | <u>-02</u> | |
| 1 | 130-0002-00 | 1 | 1 | 1 | Speaker, Cover |
| 2 | 130-0020-00 | 1 | 1 | 1 | Speaker, 6 x 9, 10W |
| 3 | 252-0213-01 | - | - | 1 | Panel, Speaker & Light |
| 4 | 252-0213-00 | 1 | - | - | Panel, Speaker & Light |
| 5 | 252-0242-00 | - | 1 | - | Panel, Speaker & Light |
| 6 | 281-0014-28 | 4 | 4 | 4 | SCR 8-32 x 1.75 lg. Ovhd Phil Mach, THD Black |
| 7 | 282-0005-20 | 2 | 2 | 2 | BLT 10-24 x 1.25 lg Crg HD Mach, THD Black |
| 8 | 283-0072-13 | 4 | 4 | 4 | Nut 8-32 Hex, Mach THD |
| 9 | 283-0072-15 | 2 | 2 | 2 | Nut 10-24 Hex, Mach THD |
| 10 | 283-0060-21 | 4 | 4 | 4 | Wshr #8 Fl, Stl |
| 11 | 283-0060-24 | 2 | 2 | 2 | Wshr #10 Fl, Stl |
| 12 | 283-0061-05 | 4 | 4 | 4 | Wshr #8 Lock, Split, Stl |
| 13 | 283-0061-06 | 2 | 2 | 2 | Wshr #10 Lock, Split, Stl |
| 14 | | | | | |
| 15 | 390-0019-00 | 1 | 1 | 1 | Lamp Fluor |
| 16 | 800-0147-02 | - | 1 | - | Fluor Lamp Assy |
| 17 | 800-0147-03 | 1 | - | - | Fluor Lamp Assy |
| 18 | 800-0371-00 | 1 | - | - | Speaker Harness Assy |
| 19 | 800-0412-00 | - | 1 | - | Speaker Harn Assy |
| 20 | 800-0147-05 | 1 | - | 1 | Fluor Lamp Assy |
| 21 | 800-0403-01 | - | - | 1 | Speaker Harness Assy |



| <u>ITEM NO</u> | <u>PART NO.</u> | <u>QTY REQD.</u> | | | | | <u>DESCRIPTION</u> |
|----------------|-----------------|------------------|------------|------------|------------|------------|--|
| | | <u>-00</u> | <u>-01</u> | <u>-02</u> | <u>-03</u> | <u>-04</u> | |
| 1 | 211-0041-00 | 2 | 2 | 2 | 2 | 2 | Conn Pin Amp |
| 2 | 211-0044-00 | 1 | 1 | 1 | 1 | 1 | Conn Cap Amp 2 Pin |
| 3 | | | | | | | |
| 4 | 211-0166-00 | 1 | - | - | - | - | Conn Crimp Ring #10 |
| 5 | | | | | | | |
| 6 | 280-0361-00 | - | 1 | 1 | 1 | 1 | Bshg Str Rlf AC Cord |
| 7 | 280-0362-00 | - | 2 | 2 | 2 | 2 | Elec Crp SL 24-18 Awg |
| 8 | | | | | | | |
| 9 | 281-0002-06 | 1 | 1 | 1 | 1 | 1 | Scr #6-32 x .375 Pan HD, Phil, Mach THD |
| 10 | | | | | | | |
| 11 | | | | | | | |
| 12 | | | | | | | |
| 13 | | | | | | | |
| 14 | 283-0060-19 | - | 1 | 1 | 1 | 1 | Washer #6 Flat, Steel |
| 15 | | | | | | | |
| 16 | | | | | | | |
| 17 | 390-0083-00 | 1 | - | - | - | - | Fluor Lamp Fxt 18 In |
| 18 | 390-0117-00 | - | 1 | 1 | 1 | 1 | Fluor Lamp Fxt 18 In U.L. |
| 19 | | | | | | | |
| 20 | | | | | | | |
| 21 | | | | | | | |
| 22 | | | | | | | |
| 23 | 600-0079-00 | - | 5.9' | 7.6' | 4.0' | 4.4' | CA 2 Cond Zip Cord |



| <u>ITEM NO</u> | <u>PART NO.</u> | <u>QTY REQD.</u> | | <u>DESCRIPTION</u> | <u>REF DES.</u> |
|----------------|-----------------|------------------|------------|--|-----------------|
| | | | <u>-00</u> | | |
| 1 | 240-0006-00 | | 2 | Button Plunger, Red | S4, S5 |
| 2 | 240-0009-00 | | 2 | Button Plunger, Yel | S1, S8 |
| 3 | 240-0109-00 | | 4 | Button Plunger, Orn | S2, S3, S6, S7 |
| 4 | 211-0041-00 | | 1 | Conn Pin Amp | |
| 5 | 250-0596-00 | | 1 | Control Panel, Metal | |
| 6 | 252-0296-00 | | 1 | Logo Support, Control Panel | |
| 7 | 253-0301-00 | | 1 | Graphic, Control Panel | |
| 8 | | | | | |
| 9 | 280-0005-00 | | 18 | Cable Tie | |
| 10 | 280-0327-00 | | 3 | Base Tie Wrap | |
| 11 | 280-0329-00 | | 8 | Nut, Hex Pal 1/2-13 | |
| 12 | 280-0362-00 | | 1 | Elec, Crimp Sleeve 24-18 Awg | |
| 13 | 282-0005-12 | | 4 | Bolt 10-24 x .750 lg. Crg HD Mach THD, Blk | |
| 14 | | | | | |
| 15 | 283-0060-19 | | 10 | Washer-Flt, Stl Reg #6 .156 I.D. x .438 O.D. | |
| 16 | 283-0060-25 | | 4 | Washer-Flt, Stl Reg #10 .203 I.D. x .562 O.D. | |
| 17 | 283-0061-04 | | 10 | Washer-Lock, Split, Stl #6 | |
| 18 | 283-0061-06 | | 4 | Washer-Lock, Split, Stl #10 | |
| 19 | 283-0070-03 | | 4 | Nut-Hex, Self Locking, Mach THD #10-24 | |
| 20 | 283-0072-11 | | 10 | Nut-Hex, Mach THD #6-32 | |
| 21 | | | | | |
| 22 | 510-0064-00 | | 8 | Switch-Pushbutton, Metal Panel | |
| 23 | | | | | |
| 24 | 800-3318-00 | | 1 | Assy, Harness Control Panel | |
| 25 | 834-0462-00 | | 1 | Assy, Joystick 8-Way-Silver | |

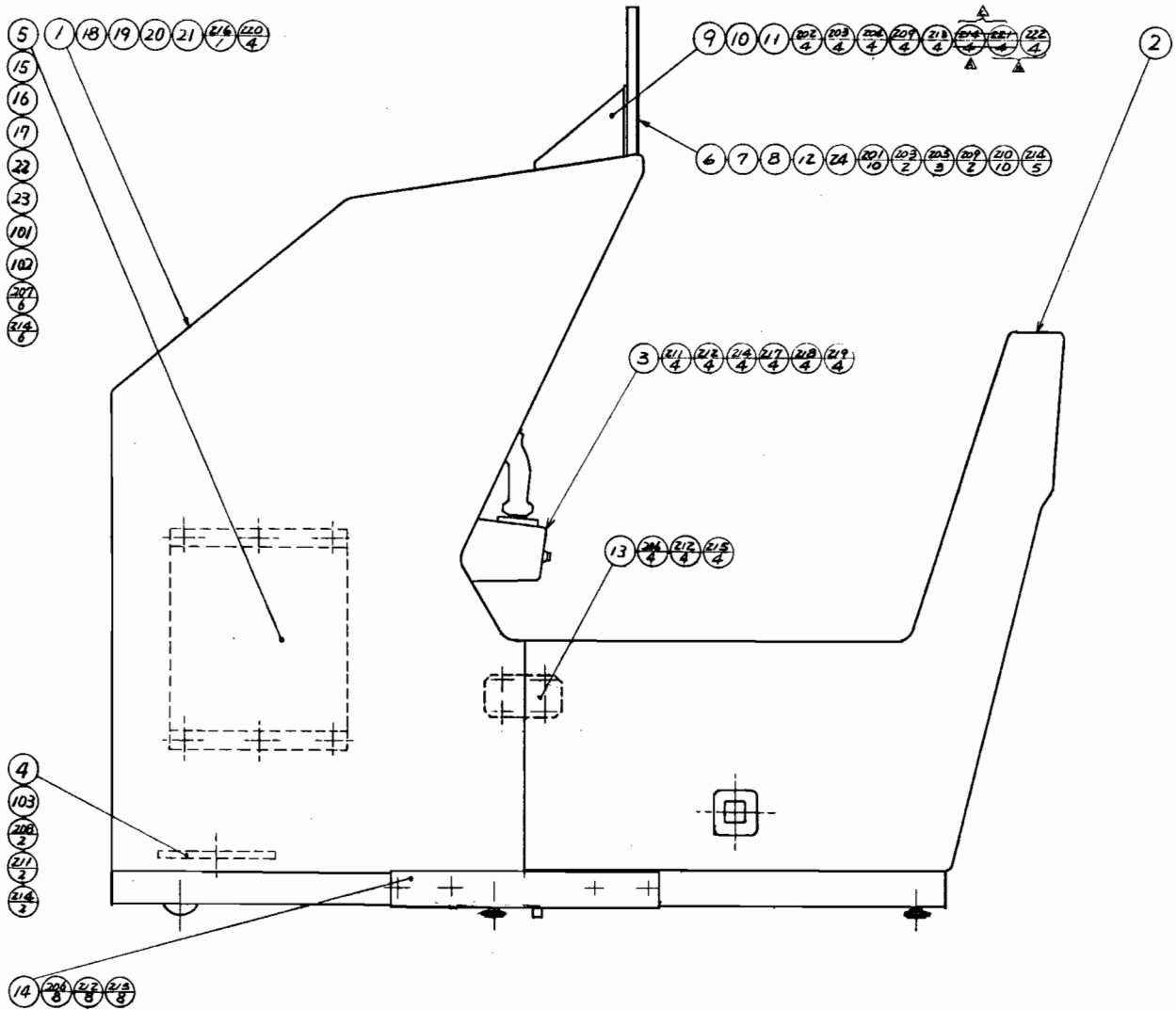


Cockpit Assemblies

| <u>ITEM NO.</u> | <u>PART NO.</u> | <u>QTY.</u> <u>REQD.</u> | <u>DESCRIPTION</u> |
|-----------------|-----------------|-----------------------------|---|
| 1 | 834-0471 | 1 | Assy Cabinet, front |
| 2 | 834-0472 | 1 | Assy Cabinet, rear |
| 3 | 834-0473 | 1 | Assy Control Lever |
| 4 | 834-0474 | 1 | Assy Power Supply |
| 5 | 834-0475 | 1 | Assy IC Board Case |
| 6 | 601-0876 | 1 | Billboard |
| 7 | 601-0877 | 1 | Ornament Frame |
| 8 | 105-0343 | 1 | L Bracket 639 |
| 9 | 109-0064 | 1 | Holder, left |
| 10 | 109-0065 | 1 | Holder, right |
| 11 | 280-0504 | 2 | Hinge 133 |
| 12 | 280-0505 | 1 | Hinge 285 |
| 13 | 117-0229 | 1 | Connecting Plate |
| 14 | 105-0298 | 2 | Connecting Bracket |
| 20 | 421-5137 | 1 | Adjustment Instructions Sheet, Boom 909 |
| 22 | 600-5016 | 1 | Assy FEM & Flat Cable, 40P (L=900) |
| 23 | 834-5119 | 1 | Assy IC Board, Zoom-909 W/C |
| 24 | 117-0230 | 1 | Display Plate, Zoom-909 |
| 101 | 420-5028 | 1 | Display Manual, 20" 200-0039 (NANA0 MC-2000-5) |
| 102 | 421-5005 | 1 | Adjustment Instructions Sheet |
| 103 | 211-0167 | 5 | Terminal Lug, round ID5 |
| 104 | 834-0476 | 1 | Assy Harness, phone, wire harn jack |
| 105 | 834-0477 | 1 | Assy Harness, power score board, wire harn |
| 106 | 834-0478 | 1 | Assy Harness, coin meter |
| 107 | 834-0479 | 1 | Assy Harness, coin switch |
| 108 | 834-0480 | 1 | Assy Harness, volume control |
| 109 | 834-0481 | 1 | Assy Harness, control lever |
| 110 | 834-0482 | 1 | Assy Harness, power IC board |

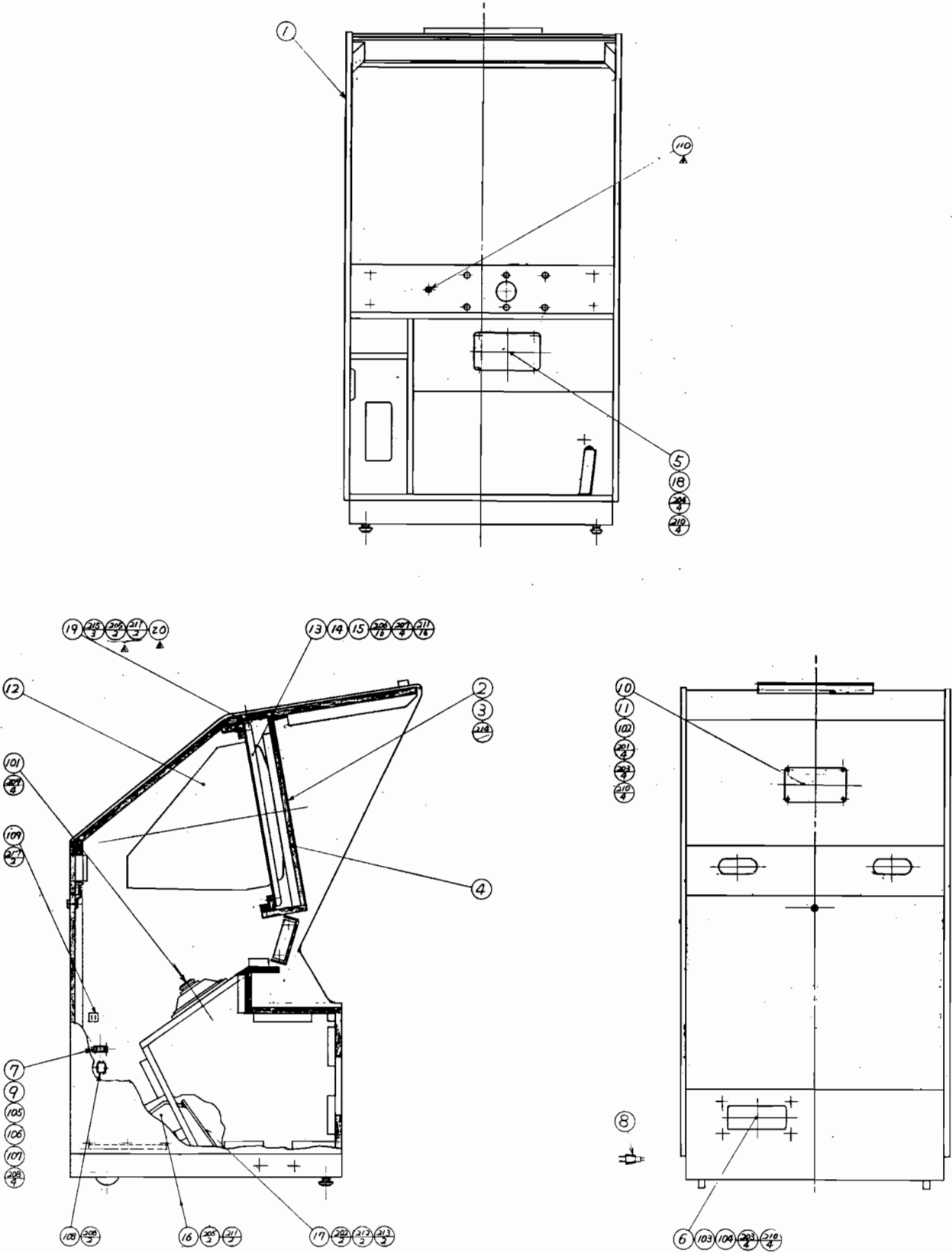
| <u>ITEM NO.</u> | <u>PART NO.</u> | <u>QTY.</u> <u>REQD.</u> | <u>DESCRIPTION</u> |
|-----------------|-----------------|-----------------------------|---|
| 111 | 834-0483 | 1 | Assy Harness, power sound board |
| 112 | 834-0484 | 1 | Assy Harness, power score board |
| 113 | 834-0485 | 1 | Assy Harness, speaker |
| 114 | 834-0486 | 1 | Assy Harness, fluorescent lamp |
| 115 | 834-0487 | 1 | Assy Harness, fan motor |
| 116 | 834-0488 | 1 | Assy Harness, noise filter |
| 117 | 834-0489 | 1 | Assy Harness, AC power |
| 118 | 834-0490 | 1 | Assy Harness, ground |
| 201 | | 10 | Carriage Bolt, unichrome special ISO, M4 x 14 |
| 202 | | 4 | Tamper Proof Screw, TH ZMC3 black ISO, M4 x 8 |
| 203 | | 6 | Tamper Proof Screw, TH ZMC3 black ISO, M5 x 12 |
| 204 | | 4 | Tamper Proof Screw, TH ZMC3 black ISO, M5 x 76 |
| 205 | | 3 | Tamper Proof Screw, TH ZMC3 black ISO, M5 x 20 |
| 206 | | 12 | Tamper Proof Screw, FH ZMC3 black, M8 x 30 |
| 207 | 285-0005-25 | 6 | M Screw, P H Phill ISO, M5 x 25 |
| 208 | 285-0005-30 | 2 | M Screw, P H Phill ISO, M5 x 30 |
| 209 | 280-0294-00 | 6 | T-Nut, ISO, M5 |
| 210 | | 10 | Flange Nut, 130 serrated type, M4 (O.D.=10) |
| 211 | 280-0289-00 | 6 | Flat Washer, special, 5.6-19.1 x 1.2 |
| 212 | | 16 | Flat Washer, special ZMC3 black, 8.5-22 x 1.6 |
| 213 | | 4 | Spring Washer, ZMC3 black, M4(#2) |
| 214 | | 17 | Spring Washer, ZMC3 black, M5(#2) |
| 215 | | 12 | Spring Washer, ZMC3 black, M8(#2) |

| <u>ITEM NO.</u> | <u>PART NO.</u> | <u>QTY.</u> <u>REQD.</u> | <u>DESCRIPTION</u> |
|-----------------|-----------------|-----------------------------|---|
| 216 | 285-0004-35 | 1 | M Screw, P H Phi11 ISO, M4 x 35 |
| 217 | | 4 | Carriage Bolt, ZMC3 black special ISO, M5 x 25 |
| 218 | | 4 | Tamper Proof Screw, TH ZMC3 black ISO, M8 x 12 |
| 219 | 287-0072-05 | 4 | Hex Nut, ISO, M5 |
| 220 | | 4 | Screw Nail, T H stainless, 1.5 x 16 |
| 222 | | 4 | F Washer, ZMC3 black, M5 |



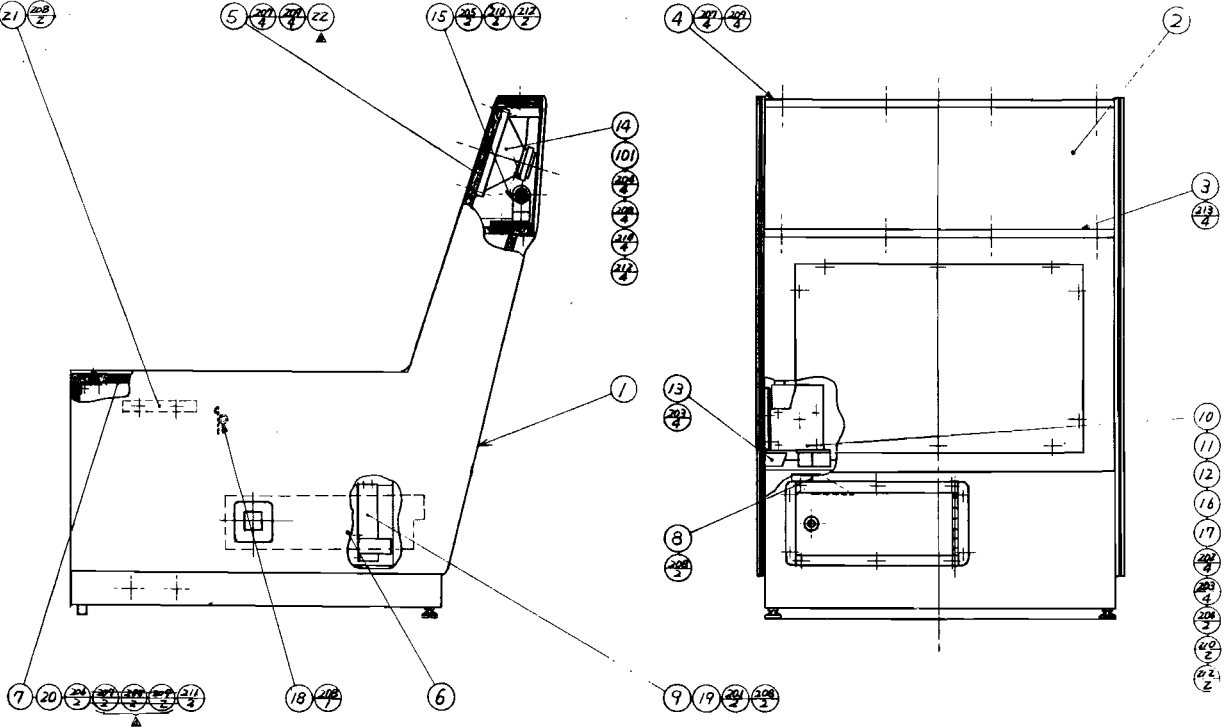
| <u>ITEM NO.</u> | <u>PART NO.</u> | <u>QTY.</u> <u>REQD.</u> | <u>DESCRIPTION</u> |
|-----------------|-----------------|-----------------------------|---|
| 1 | 834-0495 | 1 | Assy Sub Cabinet, front |
| 2 | 601-0880 | 1 | Window Panel |
| 3 | 420-0944 | 1 | Play Instruction, decal |
| 4 | 834-0494 | 1 | Assy Score Board |
| 5 | 117-0232 | 1 | Speaker Guard Plate |
| 6 | 140-0062 | 1 | Cover |
| 7 | 105-0064 | 1 | Main Switch, bracket |
| 8 | 600-0078 | 1 | Cable & Plug Assy |
| 10 | 105-0333 | 2 | Fan, bracket |
| 11 | 117-0123 | 1 | Guard Plate |
| 12 | 200-0039 | 1 | Color Display Assy, 20 type 100V (NANA0 MC - 2000-5) |
| 13 | 105-0246 | 2 | Mounting Bracket |
| 14 | 105-0255 | 2 | Bracket A |
| 15 | 105-0256 | 2 | Bracket B |
| 16 | 834-0106 | 1 | Accelerator, mechanism assy |
| 17 | 601-0556 | 1 | Accelerator, pedal assy |
| 18 | 601-0801 | 1 | Speaker Board |
| 19 | 105-0348 | 1 | L Brk 340 |
| 20 | 601-0881 | 2 | Sleeve |
| 101 | 130-0018 | 1 | Speaker, 16 cm 82 |
| 102 | 260-0011 | 1 | Axial Flow Fan, AC100V 50-60 Hz |
| 103 | 280-0417 | 1 | Terminal Binding Post, black |
| 104 | 280-0418 | 1 | Bushing Strain Relief, 8.0 |
| 105 | 509-0059 | 1 | Switch, push button type |
| 106 | 509-0049 | 1 | Switch, stopper 12 |
| 107 | 601-0444 | 1 | C&R Combination Element, 0.1 F & 120B |
| 108 | 601-0429 | 1 | Noise Filter, AC 250V 4A |
| 109 | 601-0484 | 1 | Outlet, AC type |
| 110 | 210-5001 | 1 | Phone Jack |
| 111 | 116-0068 | 1 | Plate, terminal IL3PA |

| <u>ITEM NO.</u> | <u>PART NO.</u> | <u>QTY.</u> <u>REQD.</u> | <u>DESCRIPTION</u> |
|-----------------|-----------------|-----------------------------|--|
| 112 | 463-0029 | 1 | Res, 120 ohm 5W cer |
| 201 | | 4 | M Screw, P H Phill W/F & S washer, M3 x 10 |
| 202 | | 2 | Tamper Proof Screw, P H ZMC3 black ISO, M5 x 20 |
| 203 | 280-0277-00 | 8 | Carriage Bolt, ZMC3 black special ISO, M4 x 25 |
| 204 | | 4 | Carriage Bolt, ZMC3 black special ISO, M4 x 30 |
| 205 | | 4 | Carriage Bolt, ZMC3 black special ISO, M5 x 25 |
| 206 | | 16 | Hex Bolt, ISO W/F & S washer, M5 x 14 |
| 207 | | 4 | Hex Bolt, ISO W/F & S washer, M5 x 25 |
| 208 | | 7 | Wood Screw, R H Phill, 3.1 x 13 |
| 209 | | 4 | Wood Screw, R H Phill W/F washer, 3.5 x 16 |
| 210 | | 12 | Flange Nut, ISO serrated type, M4 (O.D.=10) |
| 211 | | 20 | Flange Nut, ISO serrated type, M5 (O.D.=11) |
| 212 | | 2 | Flat Washer, ZMC3 black, M5 |
| 213 | 280-0288-00 | 2 | Spring, washer, M5 (#2) |
| 215 | 280-0258-00 | 3 | M Screw, P H Phill ISO W/F & S washer, M4 x 8 |
| 217 | | 2 | Wood Screw, F H Phill, 3.5 x 16 |



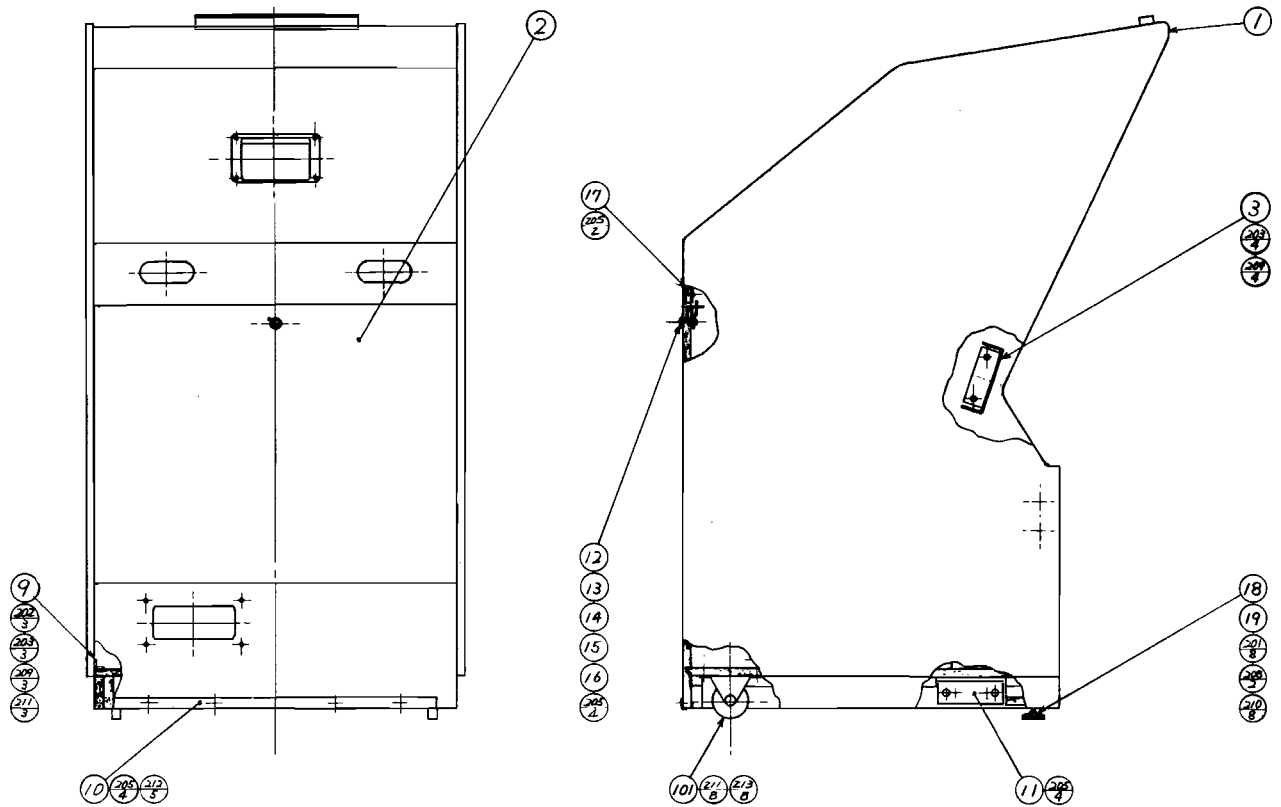
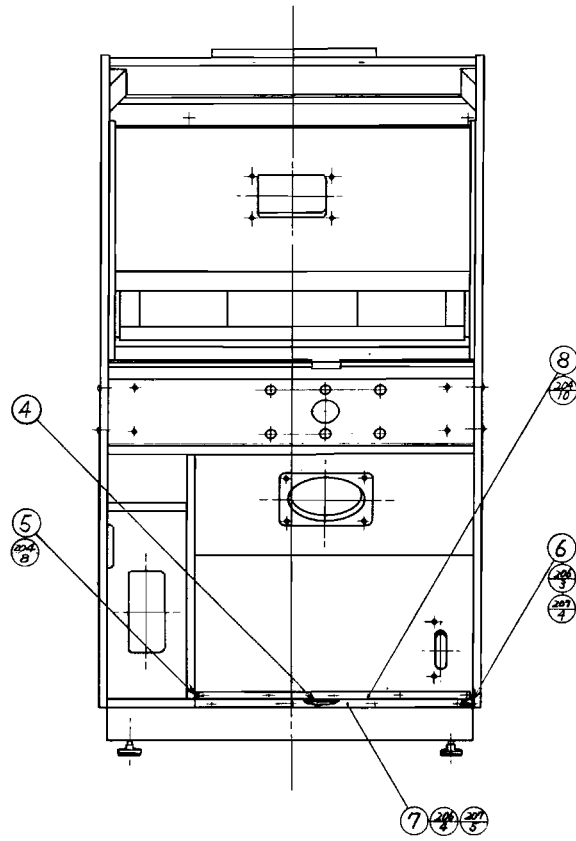
| <u>ITEM NO.</u> | <u>PART NO.</u> | <u>QTY.</u> <u>REQD.</u> | <u>DESCRIPTION</u> |
|-----------------|-----------------|-----------------------------|--|
| 1 | 834-0496 | 1 | Assy Sub Cabinet, rear |
| 2 | 117-0230 | 1 | Display Plate |
| 3 | 105-0349 | 1 | L Bracket, 668 |
| 4 | 115-0021 | 1 | Ornament |
| 5 | 117-0233 | 1 | Guard Plate |
| 6 | 220-0283 | 1 | Cash Box |
| 7 | 834-0497 | 1 | Assy Coin Entry |
| 8 | 220-0285 | 1 | Lower Coin Chute |
| 9 | 105-0350 | 1 | Coin Meter Bracket |
| 10 | 102-0061 | 1 | Coin Chute Base |
| 11 | 105-0351 | 1 | Coin Chute Bracket |
| 12 | 220-0286 | 1 | Coin Acceptor |
| 13 | 220-0287 | 1 | Reject Chute |
| 14 | 601-0801 | 1 | Speaker Board |
| 15 | 834-0492 | 1 | Fluorescent Light Assy, 15W |
| 16 | 105-0007 | 1 | Coin Chute, bracket assy |
| 17 | 220-0136 | 1 | Coin Chute, rejector type |
| 18 | 109-0045 | 1 | Key Holder |
| 21 | 834-0493 | 1 | Control Unit Assy |
| 101 | 130-0018 | 1 | Speaker, 16 cm 8Ω |
| 102 | 220-0240 | 1 | Mag Cntr, 6 digits dc 5V |
| 201 | 280-0265-00 | 2 | M Screw, P H Phill ISO W/F washer, M3 x 6 |
| 202 | 280-0267-00 | 4 | M Screw, P H Phill ISO W/S washer, M4 x 8 |
| 203 | 280-0258-00 | 8 | M Screw, P H Phill ISO W/F & S washer, M4 x 8 |
| 204 | 285-0005-25 | 6 | M Screw, P H Phill ISO, M5 x 25 |
| 205 | 285-0005-30 | 2 | M Screw, P H Phill ISO, M5 x 30 |
| 206 | | 2 | Tamper Proof Screw, T H ZMC3 black ISO, M5 x 35 |

| <u>ITEM NO.</u> | <u>PART NO.</u> | <u>QTY.</u> <u>REQD.</u> | <u>DESCRIPTION</u> |
|-----------------|-----------------|-----------------------------|--|
| 207 | | 8 | Carriage Bolt, ZMC3 black special ISO, M5 x 25 |
| 208 | | 11 | Wood Screw, R H Phill W/F washer, 3.5 x 16 |
| 209 | | 8 | Flange Nut, ISO serrated type, M5 (O.D. #11) |
| 210 | 287-0060-05 | 8 | Flat Washer, M5 |
| 211 | | 2 | Flat Washer, ZMC3 black, M5 |
| 212 | 280-0288-00 | 8 | Spring Washer, M5 (#2) |
| 213 | | 4 | Tamper Proof Screw, T H ZMC3 black ISO, M5 x 16 |



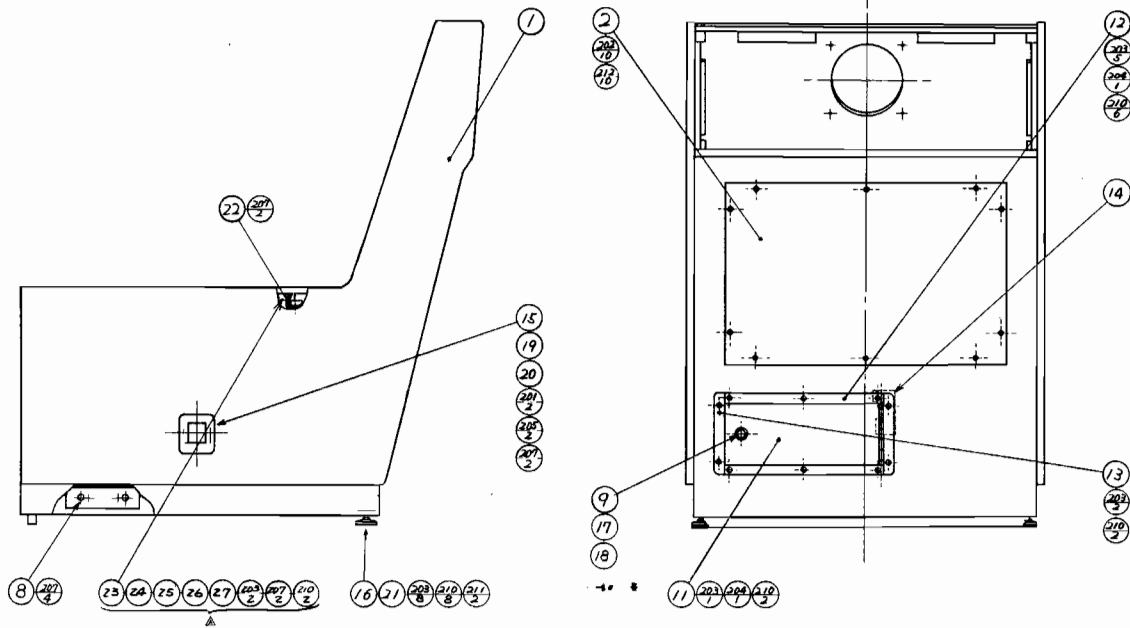
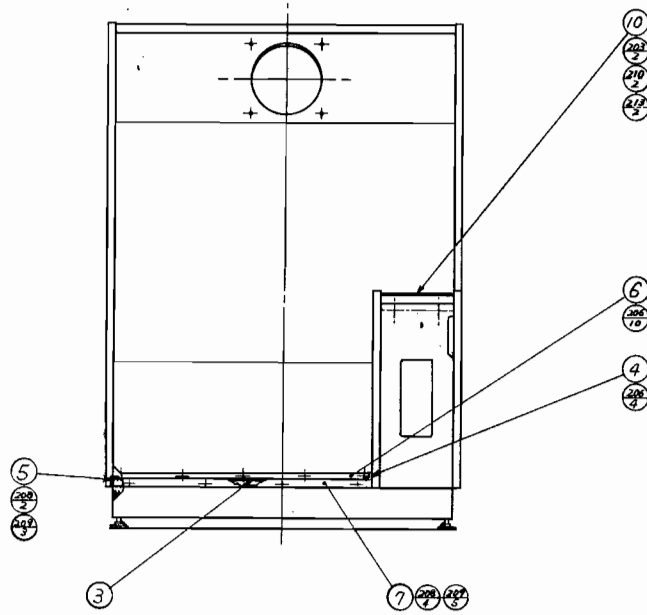
| <u>ITEM NO.</u> | <u>PART NO.</u> | <u>QTY.</u> <u>REQD.</u> | <u>DESCRIPTION</u> |
|-----------------|-----------------|-----------------------------|---|
| 1 | 140-0114 | 1 | Wooden Cabinet, front |
| 2 | 140-0115 | 1 | Service Door |
| 3 | 601-0885 | 1 | Protector |
| 4 | 601-0886 | 1 | Floor Mat, front |
| 5 | 105-0357 | 1 | L Bracket, 330 |
| 6 | 105-0358 | 1 | L Bracket, 346 |
| 7 | 105-0359 | 1 | L Bracket, 494 |
| 8 | 105-0360 | 1 | L Bracket, 508 |
| 9 | 105-0361 | 1 | L 25 x 25 Angle, 250 |
| 10 | 601-0841 | 1 | Protector A |
| 11 | 117-0183 | 2 | Nut Plate |
| 12 | 105-0269 | 1 | Bracket |
| 13 | 220-0224 | 1 | Ace Cylinder Lock, LS type master W/O key |
| 14 | 220-0225 | 1 | Key, master |
| 15 | 280-0401 | 1 | Tongue, locking |
| 16 | 117-0062 | 1 | Plate Lock, retainer |
| 17 | 117-0063 | 1 | Tongue, retainer plate |
| 18 | 601-0753 | 2 | Leg Adjuster |
| 19 | 105-0268 | 2 | Leg Adjuster, bracket |
| 101 | 601-0091 | 2 | Caster |
| 201 | 285-0005-20 | 8 | M Screw, P H Phill ISO, M5 x 20 |
| 202 | | 3 | Hex Bolt, M8 x 20 |
| 203 | | 7 | Tamper Proof Screw, TH ZMC3 black, M8 x 25 |
| 204 | | 18 | Wood Screw, R H Phill ZMC3 black, 3.1 x 16 |
| 205 | | 14 | Wood Screw, R H Phill W/F washer, 3.5 x 16 |
| 206 | | 7 | Wood Screw, O H Phill chromed, 3.1 x 13 |

| <u>ITEM NO.</u> | <u>PART NO.</u> | <u>QTY.</u> <u>REQD.</u> | <u>DESCRIPTION</u> |
|-----------------|-----------------|-----------------------------|--|
| 207 | | 9 | Wood Screw, 0 H Phill chromed, 3.1 x 20 |
| 208 | 283-0072-23 | 2 | Hex Nut, 3/8 - 16 |
| 209 | | 7 | Flat Washer, special ZMC3 black, 8.5-22 x 1.6 |
| 210 | 280-0288-00 | 8 | Spring Washer, M5 (#2) |
| 211 | | 11 | Spring Washer, M8 (#2) |
| 212 | | 5 | Screw Nail, thin H stainless, 1.5 x 16 |
| 213 | | 8 | Hex Bolt, M8 x 25 |



| <u>ITEM NO.</u> | <u>PART NO.</u> | <u>QTY.</u> <u>REQD.</u> | <u>DESCRIPTION</u> |
|-----------------|-----------------|-----------------------------|--|
| 1 | 140-0112 | 1 | Wooden Cabinet, rear |
| 2 | 140-0113 | 1 | Service Door |
| 3 | 601-0882 | 1 | Floor Mat, rear |
| 4 | 105-0353 | 1 | L Bracket, 198 |
| 5 | 105-0352 | 1 | L Bracket, 222 |
| 6 | 105-0354 | 1 | L Bracket, 494 |
| 7 | 105-0355 | 1 | L Bracket, 494 |
| 8 | 117-0183 | 2 | Nut Plate |
| 9 | 601-0789 | 1 | Locking Tongue |
| 10 | 280-0506 | 1 | Hinge, 144 |
| 11 | 220-0290 | 1 | Cash Box Door |
| 12 | 601-0883 | 2 | Door Protector, A |
| 13 | 601-0884 | 1 | Door Protector, B |
| 14 | 105-0356 | 1 | Lock Bracket |
| 15 | 220-0288 | 1 | Reject Chute |
| 16 | 105-0166 | 2 | Leg Adjuster Bracket |
| 17 | 220-0097 | 1 | Ace Cyl Lk, w/keys |
| 18 | 280-0406 | 1 | Spacer Ring, turbo |
| 19 | 601-0416 | 1 | Reject Cup & Flap Door Assy |
| 20 | 117-0009 | 2 | Retainer Plate |
| 21 | 601-0753 | 2 | Leg Adjuster |
| 22 | 117-0063 | 1 | Tongue Retainer Plate |
| 23 | 220-0289 | 1 | Coin Chute Door |
| 24 | 220-0224 | 1 | Ace Cylinder Lock, LS type master W/O key |
| 25 | 220-0225 | 1 | Key Master |
| 26 | 117-0062 | 1 | Plate Lock Retainer |
| 27 | 280-0401 | 1 | Tongue, locking |
| 201 | | 2 | M Screw, P H Phill ISO W/F & S washer, M3 x 14 |
| 202 | | 10 | Tamper Proof Screw, P H ZMC3 black ISO, M5 x 20 |

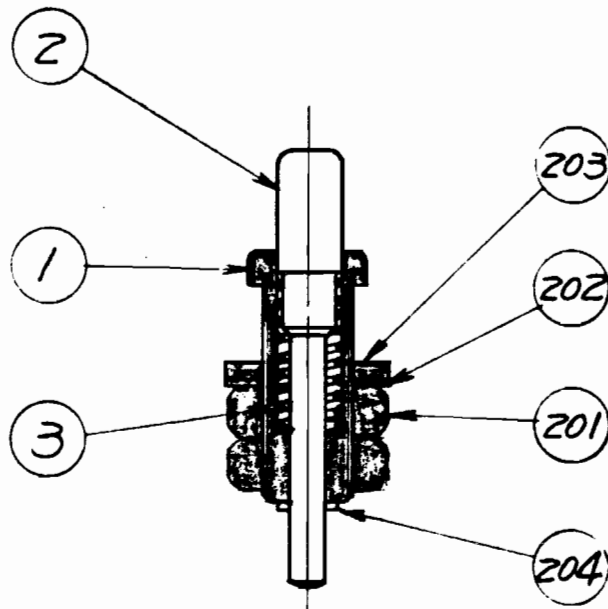
| <u>ITEM NO.</u> | <u>PART NO.</u> | <u>QTY.</u> <u>REQD.</u> | <u>DESCRIPTION</u> |
|-----------------|-----------------|-----------------------------|---|
| 203 | | 20 | Carriage Bolt, ZMC3 black special ISO, M5 x 25 |
| 204 | | 2 | Carriage Bolt, ZMC3 black special ISO, M5 x 30 |
| 205 | | 2 | Wood Screw, R H Phill W/F washer, 3.1 x 13 |
| 206 | | 14 | Wood Screw, R H Phill ZMC3 black, 3.1 x 16 |
| 207 | | 10 | Wood Screw, R H Phill W/F washer, 3.5 x 16 |
| 208 | | 6 | Wood Screw, O H Phill chromed, 3.1 x 13 |
| 209 | | 8 | Wood Screw, O H Phill chromed, 3.1 x 20 |
| 210 | | 22 | Flange Nut, ISO serrated type, M5 (O.D. #11) |
| 211 | 283-0072-23 | 2 | Hex Nut, 3/8 - 16 |
| 212 | | 10 | Flat Washer, ZMC3 black, M5 |
| 213 | 280-0299-00 | 2 | M Screw, P H Phill ISO W/F & S washer, M5 x 16 |



ASSY REJECT BUTTON

DRAWING NUMBER 601-0417

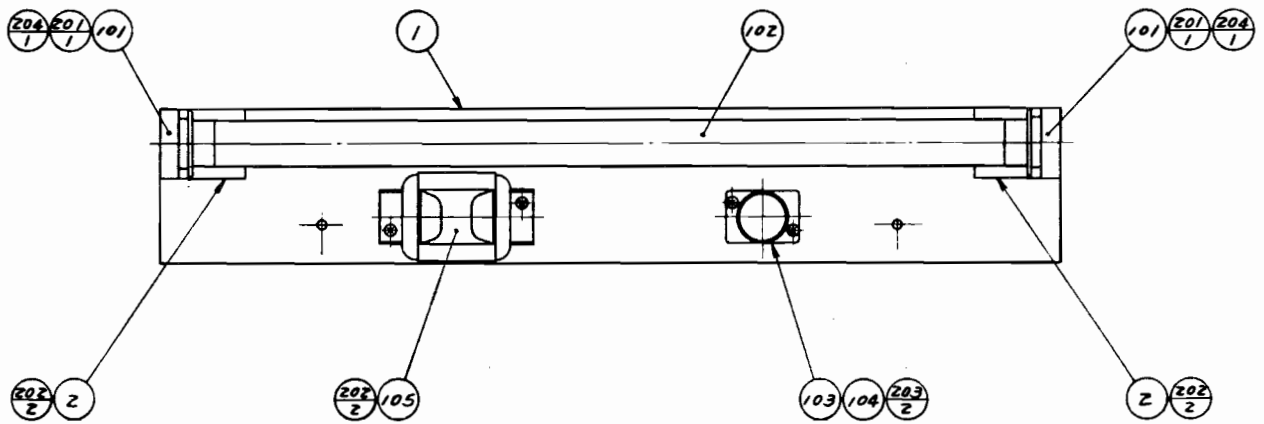
| <u>ITEM NO.</u> | <u>PART NO.</u> | <u>QTY.</u> <u>REQD.</u> | <u>DESCRIPTION</u> |
|-----------------|-----------------|-----------------------------|--------------------------------------|
| 1 | 240-0101 | 1 | Button, housing |
| 2 | 240-0102 | 2 | Push Button |
| 3 | 125-0032 | 1 | Compression Spring, rejection button |
| 201 | | 2 | Hexagon Nut, M12 (#2) P=1 |
| 202 | | 1 | Lock Washer, external, M12 |
| 203 | | 1 | Flat Washer, M12 |
| 204 | | 1 | Spring Pin, UNBRAKO, 1.5 x 8 |



ASSY FLUORESCENT LIGHT 15W

DRAWING NUMBER 834-0492

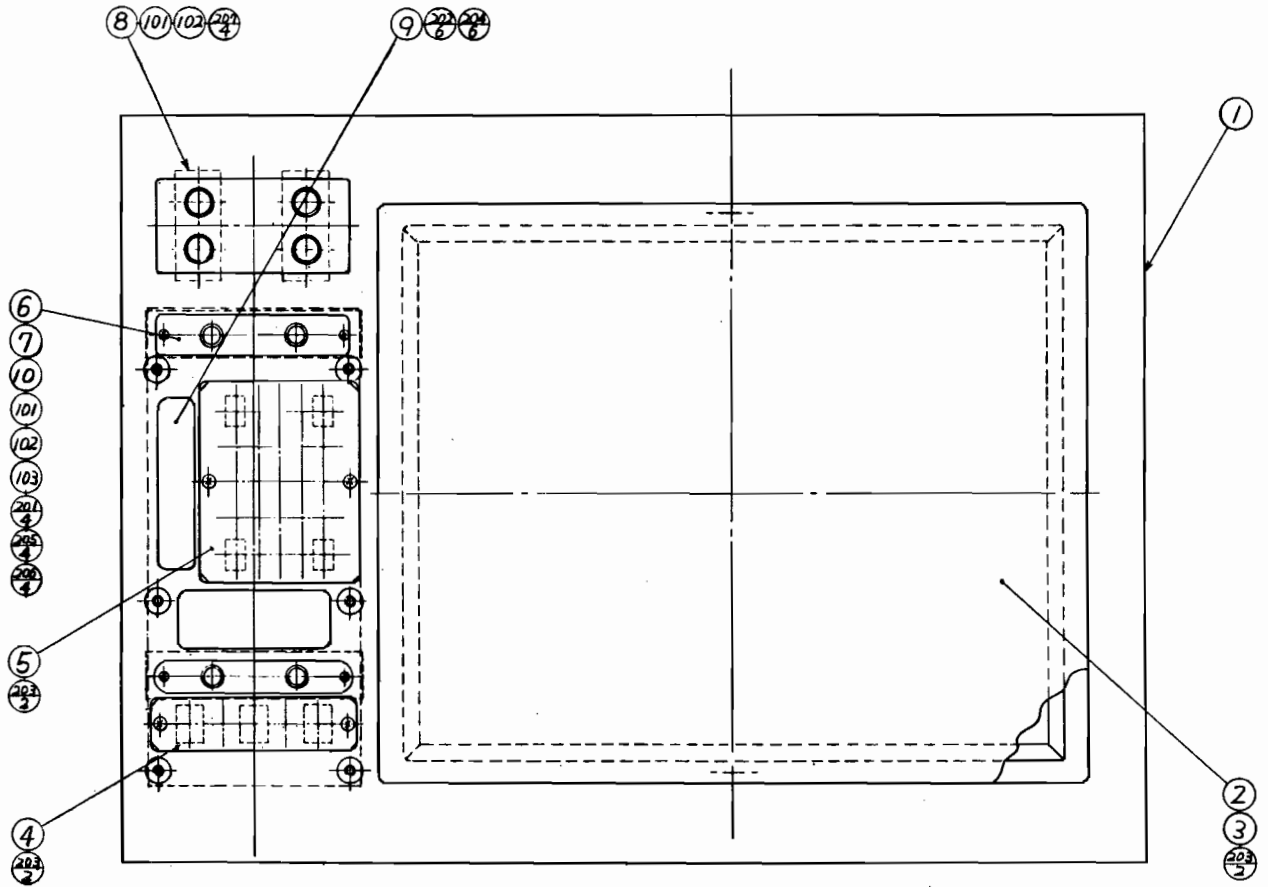
| <u>ITEM NO.</u> | <u>PART NO.</u> | <u>QTY.</u> <u>REQD.</u> | <u>DESCRIPTION</u> |
|-----------------|-----------------|-----------------------------|--|
| 1 | 102-0059 | 1 | Wooden Base |
| 2 | 250-0537 | 2 | Fluorescent Lamp, socket bracket |
| 101 | 214-0009 | 2 | Socket, fluorescent light |
| 102 | 390-0031 | 1 | Fluorescent Light, 15W |
| 103 | 214-0010 | 1 | Socket, fluorescent, starter |
| 104 | 390-0033 | 1 | Starter, fluorescent |
| 105 | 182-0006 | 1 | Ballast Coil, 100V, 15W, 50 Hz |
| 201 | 285-0024-16 | 2 | M. Screw, F.H. Phill, ISO, M4 x 16 |
| 202 | | 6 | Wood Screw, R.H. Phill., W/F washer, 3.1 x 13 |
| 203 | 280-0301-00 | 2 | Wood Screw, R.H. Phill., 3.1 x 16 |
| 204 | | 2 | Square Nut, ISO, M4(H=1.6 B=8) |



ASSY SCORE BOARD

DRAWING NUMBER 834-0494

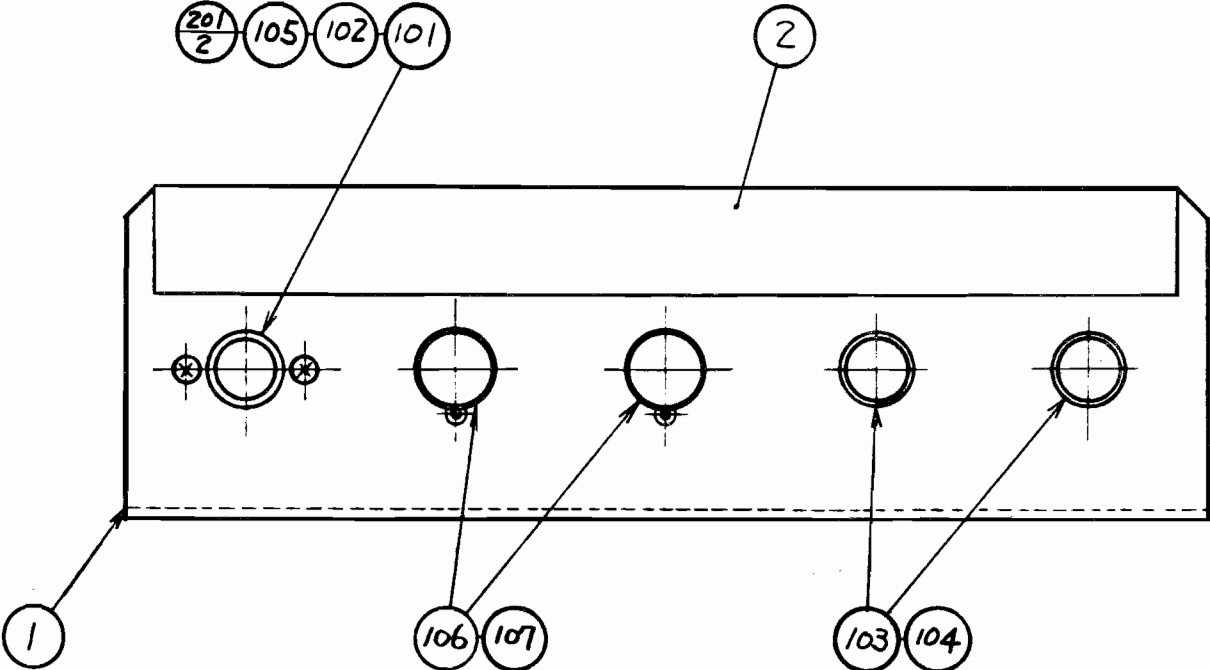
| <u>ITEM NO.</u> | <u>PART NO.</u> | <u>QTY.</u> <u>REQD.</u> | <u>DESCRIPTION</u> |
|-----------------|-----------------|-----------------------------|--|
| 1 | 601-0879 | 1 | Score Board |
| 2 | 601-0677 | 1 | TV Mask, graysmoke 20 |
| 3 | 601-0678 | 2 | TV Mask, 20 |
| 4 | 601-0674 | 1 | Mask, score |
| 5 | 601-0675 | 1 | Mask, best five |
| 6 | 601-0676 | 2 | Lamp Holder Board |
| 7 | 140-0064 | 2 | Lamp Cover |
| 8 | 601-0758 | 2 | Lamp Holder Board |
| 9 | 834-5129 | 1 | Ass'y LED 7 seg board |
| 10 | 280-0390 | 4 | Spacer Tube, 10 |
| 101 | 390-0116 | 8 | Lamp Wedge Base, type 14V 0.24A |
| 102 | 214-0081 | 8 | Wedge Base, socket assy |
| 103 | 310-0014 | 2 | Insulator Tubing, silicon rubber glass |
| 201 | 285-0002-18 | 4 | M Screw, PH Phill ISO, M3 x 18 |
| 202 | | 6 | M Screw, Ph Phill ISO W/F & S Washer, M4 x 16 |
| 203 | | 6 | Wood Screw, FH Phill, 3.1 x 13 |
| 204 | 280-0293-00 | 6 | T-Nut ISO, M4 |
| 205 | 287-0072-02 | 4 | Hex Nut, ISO, M3 |
| 206 | 287-0060-02 | 4 | F Washer, M3 |
| 207 | | 4 | Wood Screw, RH Phill W/F washer, 3.5 x 13 |



ASSY CONTROL UNIT

DRAWING NUMBER 834-0493

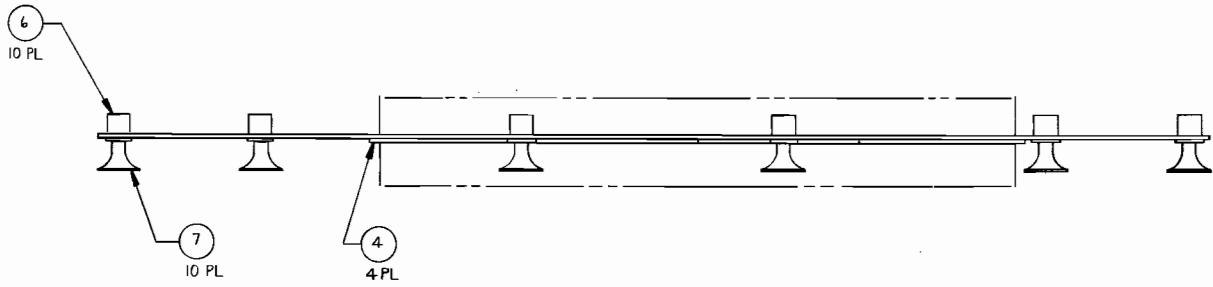
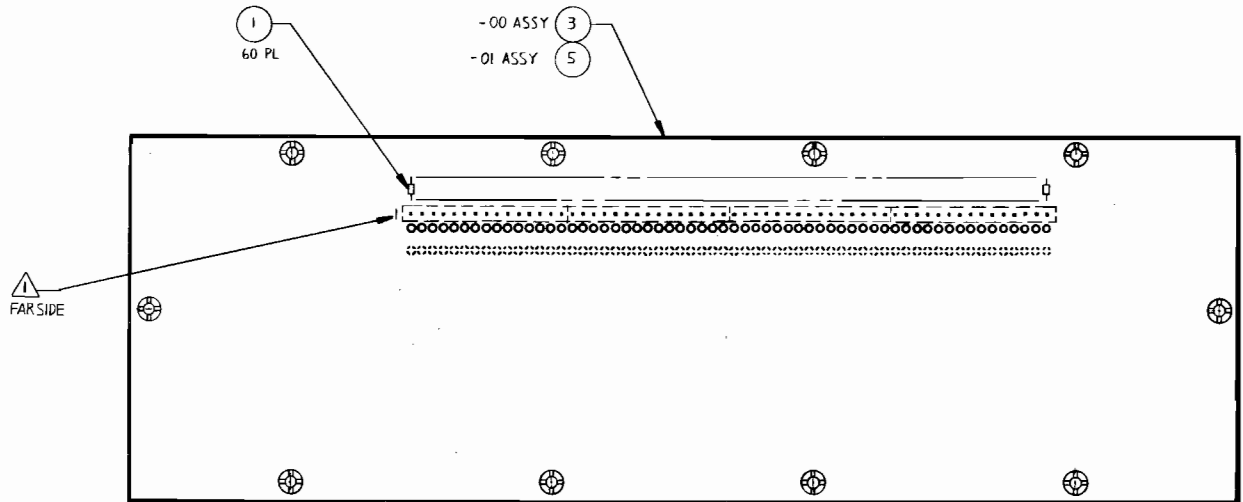
| <u>ITEM NO.</u> | <u>PART NO.</u> | <u>QTY.</u> <u>REQD.</u> | <u>DESCRIPTION</u> |
|-----------------|-----------------|-----------------------------|--|
| 1 | 105-0347 | 1 | Control Bracket |
| 2 | 421-5146 | 1 | Sticker, control instructions |
| 101 | 240-0105 | 1 | Push Button Switch, IM W/O button |
| 102 | 240-0106 | 1 | Push Button Ivory, 8 ϕ |
| 103 | 509-0113 | 2 | Push Button Switch, 2T |
| 104 | 509-0049 | 2 | Switch Stopper, 12 ϕ |
| 105 | 601-0444 | 1 | C & R Combination Element, 0.1 MF & 12.0 Ω |
| 106 | 475-0049 | 2 | Rheostat, 100 Ω 10W |
| 107 | 240-0125 | 2 | Knob, metal |
| 201 | 280-0308-00 | 2 | M. Screw, P.H. Phill., 130, W/S washer, M3 x 6 |



ASSY INTERFACE BOARD

DRAWING NUMBER 834-0422

| <u>ITEM NO.</u> | <u>PART NO.</u> | <u>QTY REQD.</u> | | <u>DESCRIPTION</u> |
|-----------------|-----------------|------------------|------------|--------------------------------|
| | | <u>-00</u> | <u>-01</u> | |
| 1 | 151-0061-00 | 60 | 60 | Cap 220 pf 16V Axial |
| 2 | | | | |
| 3 | 170-0274-00 | 1 | - | PCB-Interface |
| 4 | 211-0187-00 | 4 | 4 | Chassis Mount-15 Pin Feed Thru |
| 5 | 170-0274-01 | - | 1 | PCB-Interface |
| 6 | 289-0005-05 | 10 | 10 | Latch Grommet |
| 7 | 289-0005-06 | 10 | 10 | Latch Plunger |



ASSY ACCELERATOR MECHANISM

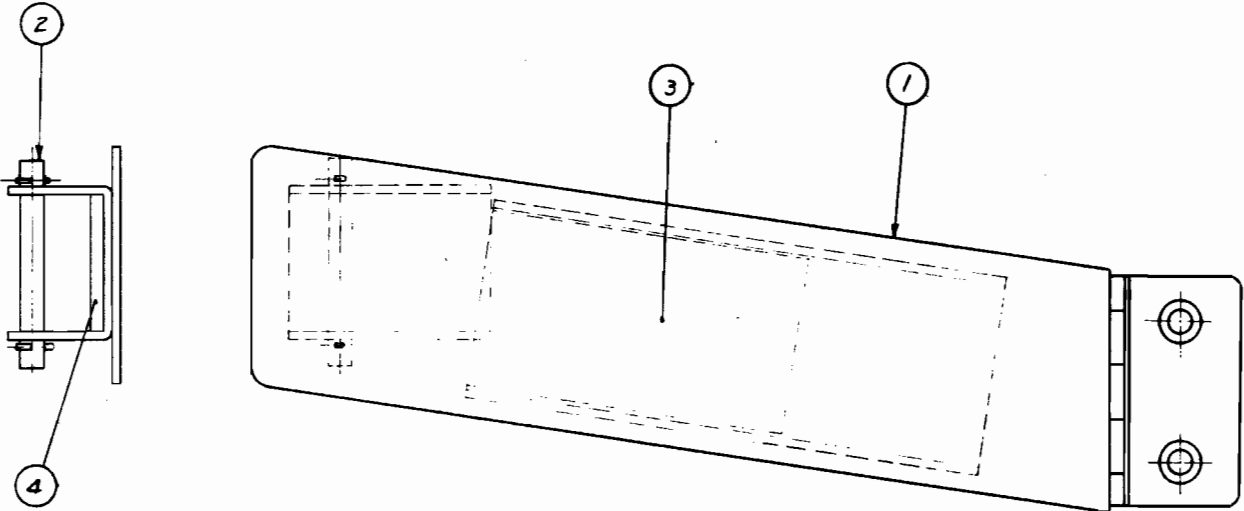
DRAWING NUMBER 834-0106

| <u>ITEM NO.</u> | <u>PART NO.</u> | <u>QTY.</u> <u>REQD.</u> | <u>DESCRIPTION</u> |
|-----------------|-----------------|-----------------------------|---|
| 1 | 105-0252 | 1 | Accelerator Bracket |
| 2 | 123-0067 | 1 | Accelerator Pedal, shaft |
| 3 | 105-0251 | 1 | Sensor Bracket |
| 4 | 105-0250 | 1 | Bracket |
| 5 | 601-0695 | 1 | Sensor Disc |
| 6 | 280-0158 | 1 | Shoulder Screw |
| 7 | 125-0021 | 1 | Extension Spring |
| 8 | 601-0694 | 2 | Coupler Unit |
| 9 | 834-0104 | 1 | Ass'y IC Board, buffer |
| 10 | 280-0396 | 2 | Spacer Tube |
| 11 | | 2 | Fiber Washer, 4.1 - 9 x 1.5 |
| 12 | 834-0247 | 1 | Assy Harness, accelerator |
| 201 | 280-0308-00 | 4 | M. Screw, P.H. Phil1. ISO, W/S, washer, M3 x 6 |
| 202 | 280-0258-00 | 5 | M. Screw, P.H. Phil1. ISO, W/F & S washer, M4 x 8 |
| 203 | | 2 | M. Screw, P.H. Phil1. ISO, W/F & S washer, M4 x 16 |
| 204 | 280-0261-00 | 1 | Hex Nut, M10 (#3) |
| 205 | 287-0060-02 | 4 | Flat Washer, M3 |
| 206 | 280-0262-00 | 1 | Spring Washer, M10 (#2) |
| 207 | | 2 | M. Screw, P.H. Phil1. ISO, W/S washer, M4 x 6 |
| 208 | | 1 | Flat Washer, special, 13.5-22.2 x 0.23 |

Accelerator Pedal Assembly

601-0556

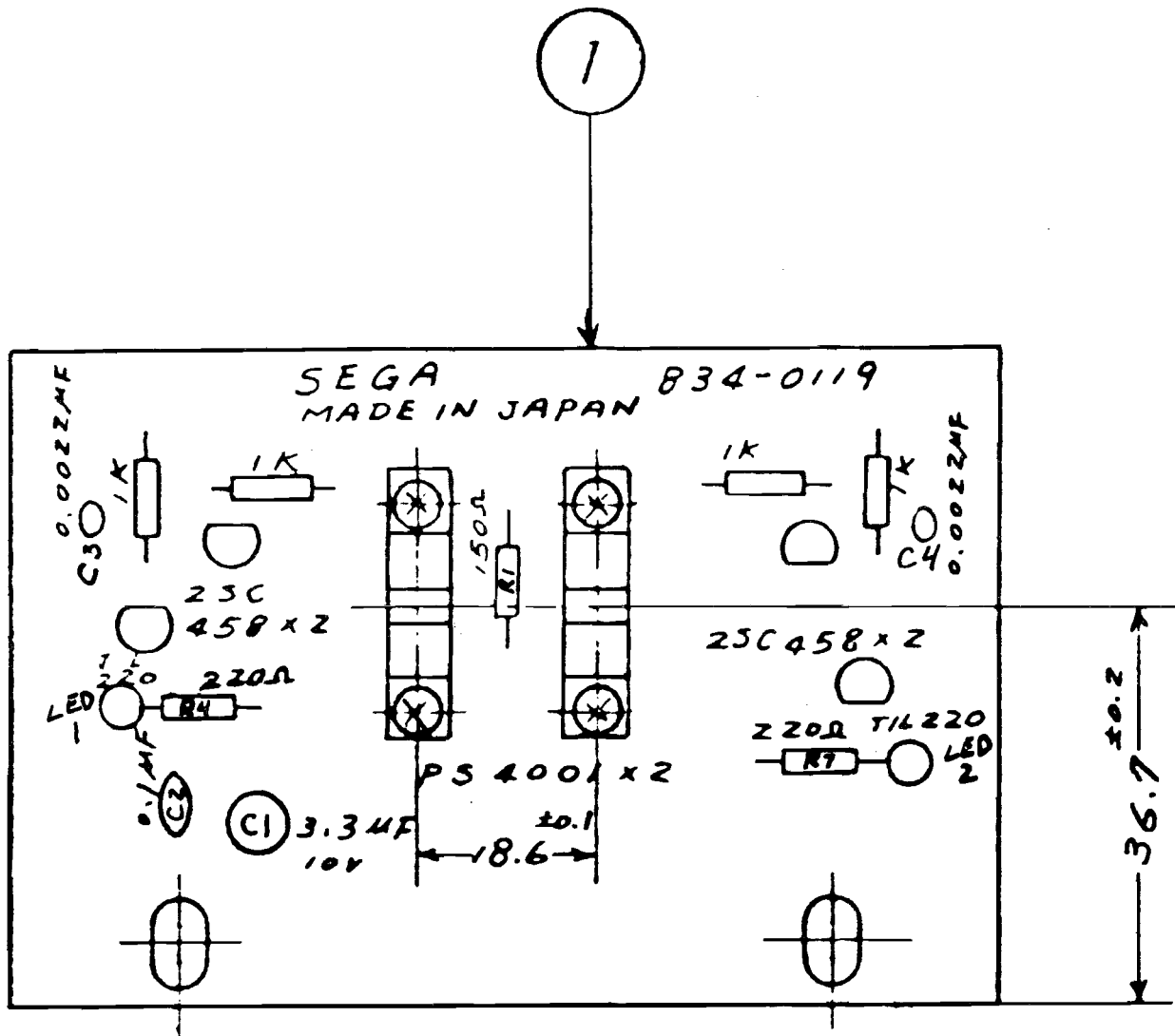
| <u>ITEM NO.</u> | <u>PART NO.</u> | <u>QTY REQD.</u> | <u>DESCRIPTION</u> |
|-----------------|-----------------|------------------|--------------------|
| 1 | 601-0726 | 1 | Accelerator Pedal |
| 2 | 280-0409 | 1 | Plastic Pin |
| 3 | 280-0410 | 1 | Rubber Spacer |
| 4 | 280-0411 | 1 | Plastic Spacer |



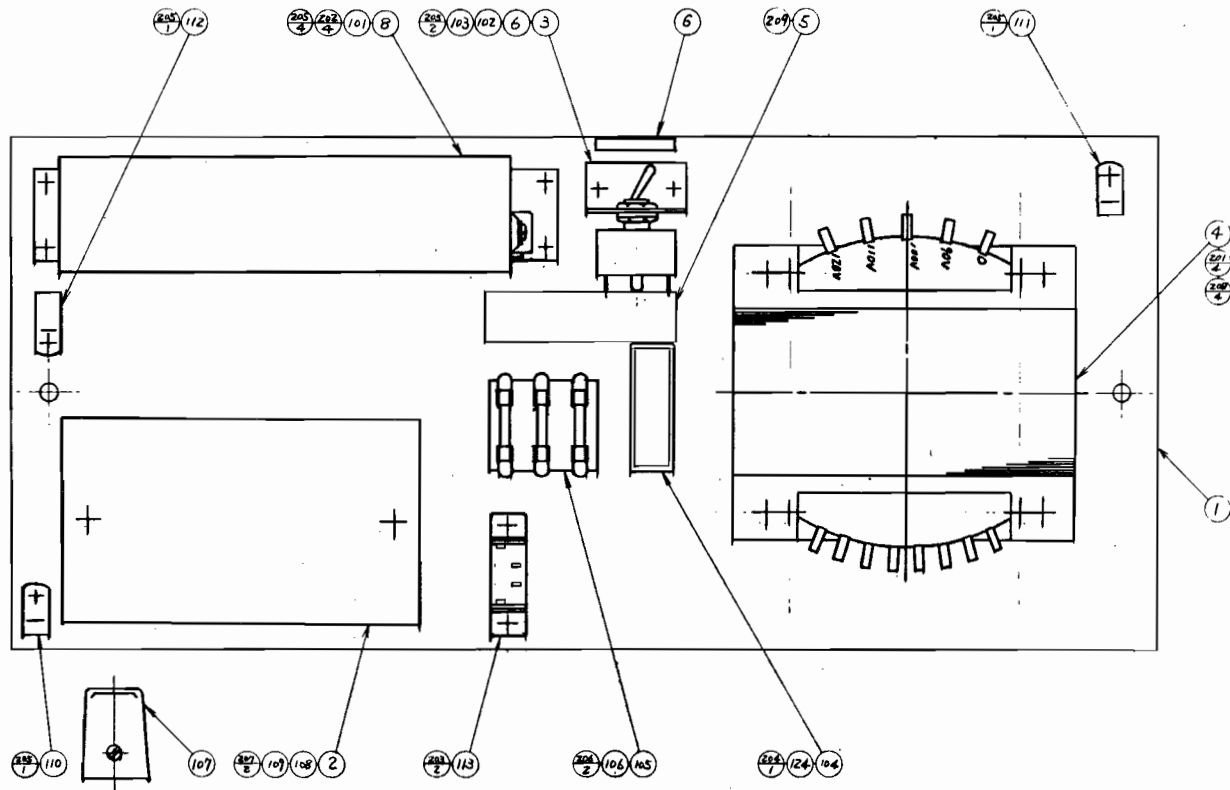
ASSY SENSOR BOARD

DRAWING NUMBER 834-0119

| <u>ITEM NO.</u> | <u>PART NO.</u> | <u>QTY. REQ'D</u> | <u>DESCRIPTION</u> |
|-----------------|-----------------|-------------------|---------------------------------|
| 1 | 171-0065 | 1 | Printed Board |
| 101 | 601-0693 | 2 | Photo Micro Sensor (NEC PS4001) |
| 102 | 390-0100 | 2 | LED TIL220 Red (Texas) |
| 103 | 482-0043 | 4 | Transistor 2SC458,C (Hitachi) |
| 104 | 151-0041 | 1 | CAP CER 0.1MF 25V |
| 105 | 150-0071 | 1 | CAP E 3.3MF 10V U-TYP |
| 106 | 151-0074 | 1 | CAP CER 0.0022MF 25V |
| 107 | 470-0151 | 1 | Res 150 OHM $\frac{1}{4}$ W 5% |
| 108 | 470-0221 | 2 | Res 220 OHM $\frac{1}{4}$ W 5% |
| 109 | 470-0102 | 4 | Res 1K OHM $\frac{1}{4}$ W 5% |



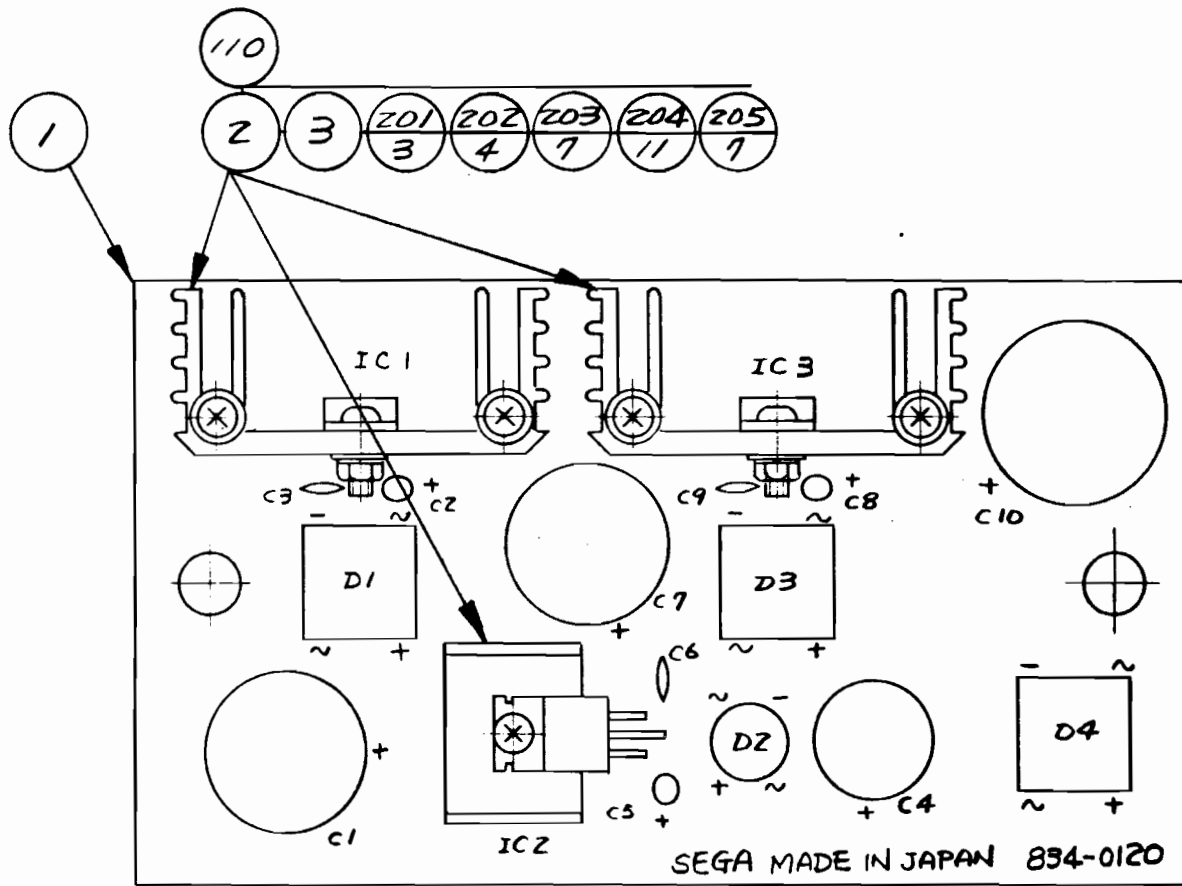
| <u>ITEM NO.</u> | <u>PART NO.</u> | <u>QTY.</u> <u>REQD.</u> | <u>DESCRIPTION</u> |
|-----------------|-----------------|-----------------------------|---|
| 1 | 102-0062 | 1 | Base |
| 2 | 834-0120 | 1 | Assy Regulator Board |
| 4 | 560-0071 | 1 | Power Transformer, 90-240V |
| 5 | 421-5135 | 1 | Fuse Instr |
| 7 | 834-0498 | 1 | Assy Harness, power supply |
| 8 | 105-0248 | 2 | Bracket |
| 101 | 601-0692 | 1 | Switching Regulator, AC 100V, 5V, 10A |
| 102 | 509-0115 | 1 | Switch, toggle, SP-DT 15A |
| 103 | 509-0049 | 1 | Switch Stopper, 12 |
| 104 | 514-0045 | 1 | Fuse Holder, w/cover 250V-10A |
| 105 | 514-0050 | 1 | Fuse Holder, 3P 125V 10A |
| 106 | 514-0040 | 3 | Fuse 4A |
| 107 | 600-0097 | 1 | AC Cord Connector Body, flat type |
| 108 | 280-0297 | 2 | One Touch Bush |
| 109 | 601-0485 | 2 | One Touch Collar |
| 113 | 481-0064 | 1 | Diode Bridge, 4B10Y |
| 124 | 514-0034 | 1 | Fuse 5A |
| 201 | | 4 | M Screw, P H Phill ISO W/F & spring washer, M5 x 14 |
| 202 | 280-0267-00 | 4 | M Screw, P H Phill ISO W/S washer, M4 x 8 |
| 203 | 280-0301-00 | 2 | Wood Screw, R H Phill, 3.1 x 16 |
| 204 | | 1 | Wood Screw, R H Phill, 3.1 x 20 |
| 205 | 280-0304-00 | 9 | Wood Screw, R H Phill W/F washer, 3.5 x 13 |
| 206 | | 2 | Wood Screw, R H Phill W/F washer, 3.1 x 13 |
| 207 | | 2 | Wood Screw, R H Phill, 3.5 x 25 |
| 208 | 280-0294-00 | 4 | T-Nut, ISO, M5 |



ASSY REGULATOR BOARD

DRAWING NUMBER 834-0120

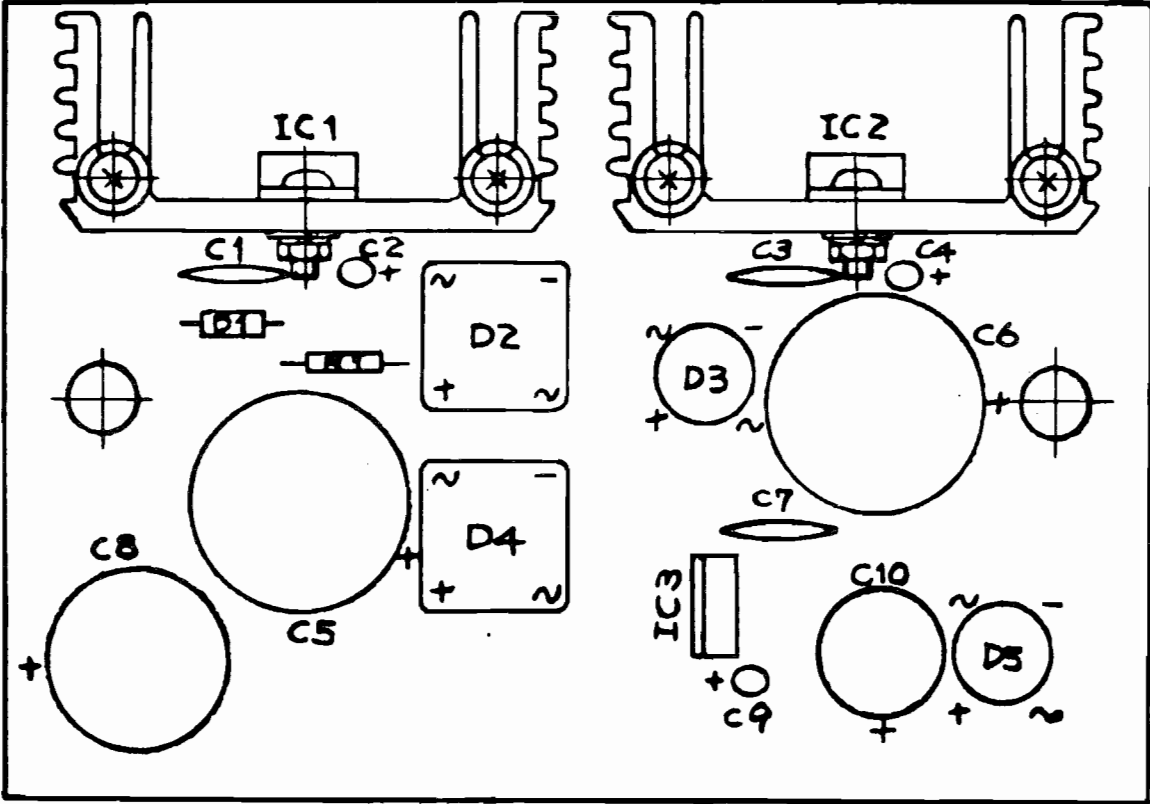
| <u>ITEM NO.</u> | <u>PART NO.</u> | <u>QTY. REQ'D</u> | <u>DESCRIPTION</u> |
|-----------------|-----------------|-------------------|-------------------------------|
| 1 | 171-0063 | 1 | Printed Board |
| 2 | 530-0021 | 2 | Heat Sink |
| 3 | 530-0024 | 1 | Heat Sink |
| 101 | 313-0091 | 1 | IC UA78M12 UC |
| 102 | 313-0058 | 2 | IC UA7812 UC |
| 103 | 481-0042 | 1 | Diode Bridge W06 |
| 104 | 481-0065 | 3 | Diode Bridge SZVB10 |
| 105 | 150-0008 | 1 | CAP E 2200MF 25V |
| 106 | 150-0189 | 2 | CAP E 3300 MF 25V |
| 107 | 150-0216 | 1 | CAP E 4700 MF 35V |
| 108 | 153-0002 | 3 | CAP Tant 1MF 25V |
| 109 | 151-0041 | 3 | CAP Cer 0.1MF 25V |
| 201 | | 3 | M. Screw PH Phill ISO M3 X 10 |
| 202 | | 4 | M. Screw PH Phill ISO M3 X 50 |
| 203 | | 7 | Hex. Nut, ISO M3 |
| 204 | | 11 | Flat Washer, Small Type M3 |
| 205 | | 7 | Spring Washer M3(#2) |



REGULATOR UNIT

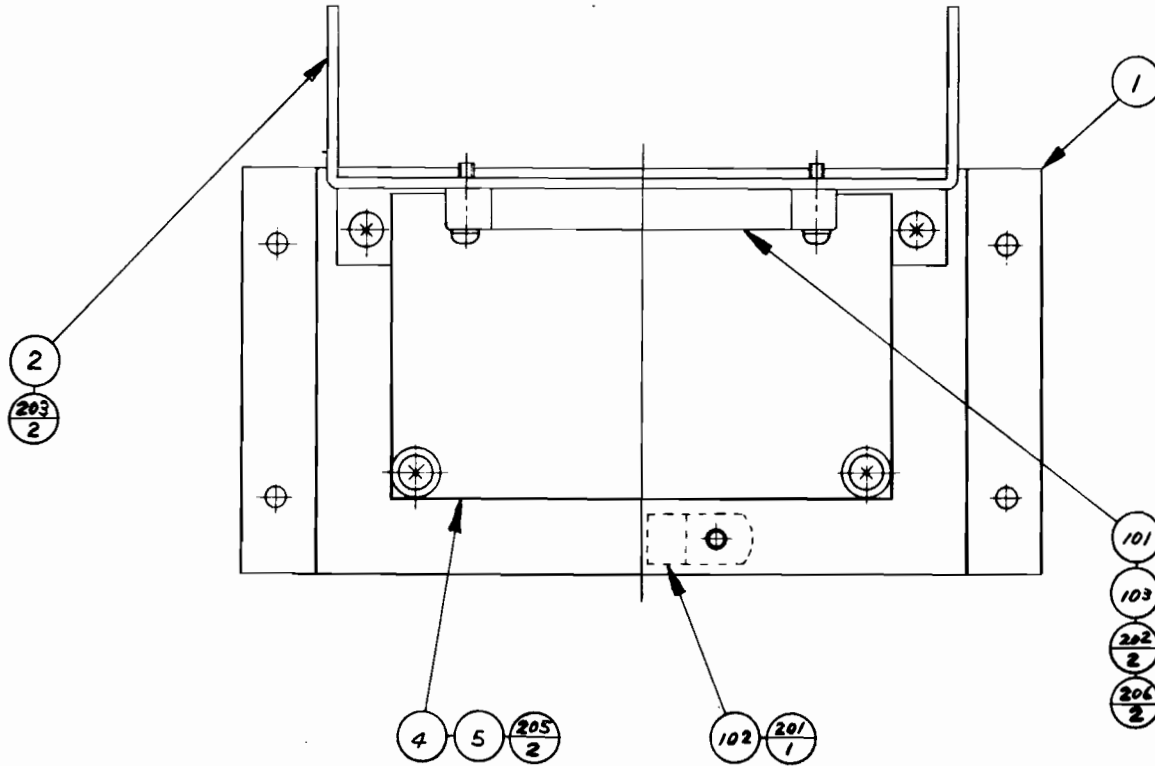
DRAWING NUMBER 601-0612

| <u>ITEM NO.</u> | <u>PART NO.</u> | <u>QTY. REQD.</u> | <u>DESCRIPTION</u> |
|-----------------|-----------------|-------------------|-----------------------------|
| 1 | 312-0070 | 1 | IC, uA 78M12UC |
| 2 | 313-0014 | 1 | IC, uA 7812UC |
| 3 | 312-0042 | 1 | IC, uA 7805UC |
| 4 | 481-0042 | 2 | Rectifier, Silicon Diode |
| 5 | 481-0065 | 2 | Rectifier, Silicon Diode |
| 6 | 481-0049 | 1 | Zener Diode |
| 7 | 150-0008 | 1 | Cap., 2200uf, 25V |
| 8 | 150-0182 | 2 | Cap., 3300uf, 25V |
| 9 | 150-0206 | 1 | Cap., 3300uf, 16V |
| 10 | 153-0002 | 3 | Cap., 1.0uf, 25V |
| 11 | 151-0041 | 3 | Cap., 0.1uf, 25V |
| 12 | 470-0332 | 1 | Res., 3.3K, $\frac{1}{4}$ W |
| 13 | 150-0154 | 1 | Cap., 470uf, 25W |



Power Amp, 32 VDC, 16W

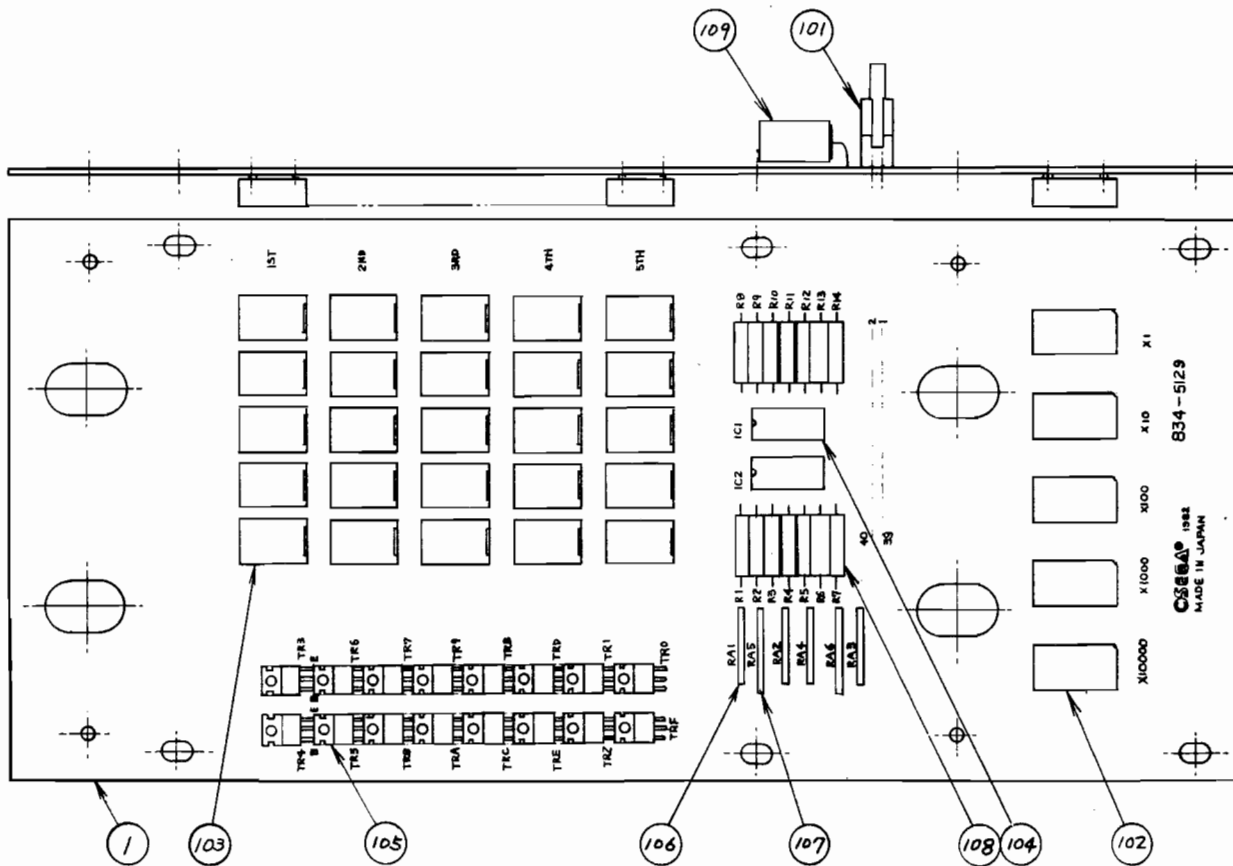
110-0019



POWER AMPLIFIER, DC3ZV, 16W

DRAWING NUMBER 110-0019

| <u>ITEM NO.</u> | <u>PART NO.</u> | <u>QTY. REQ'D</u> | <u>DESCRIPTION</u> |
|-----------------|-----------------|-------------------|---|
| 1 | 140-0066 | 1 | Chassis |
| 2 | 530-0034 | 1 | Heat Sink |
| 3 | | | |
| 4 | 834-0121 | 1 | Assy Power Amplifier |
| 5 | 280-0391 | 2 | Spacer Tube |
| 101 | 315-0129 | 1 | IC STK-439 |
| 201 | | 1 | M. Screw, PH Phill, ISO W/F Washer M3 X 8 |
| 202 | | 2 | M. Screw PH Phill, ISO M3 X 14 |
| 203 | | 2 | M. Screw PH Phill, ISO W/S Washer M4 X 8 |
| 204 | | | |
| 205 | | 2 | M. Screw PH Phill, ISO W/F Washer M4 X 14 |
| 206 | | 2 | Spring Washer M3 (#2) |



| <u>ITEM NO.</u> | <u>PART NO.</u> | <u>QTY.</u> <u>REQD.</u> | <u>DESCRIPTION</u> |
|-----------------|-----------------|-----------------------------|------------------------------------|
| 1 | 171-5016 | 1 | PC Board |
| | 150-0151 | 1 | Cap E, 220MF 16V T-typ |
| | 462-0091 | 14 | Res 33, ohm 2W metal oxide film 5% |
| | 477-0025 | 2 | Res Pack, 8 x 2.2K ohm 1/8W |
| | 477-0046 | 4 | Res Pack, 4 x 560 ohm 1/4W |
| | 482-0113 | 16 | Transistor, 25A473 |
| | 313-0086 | 2 | IC TD62003 |
| | 390-0109 | 25 | LED TLR 353 7 seg red |
| | 390-0108 | 5 | LED TLR 306 7 seg red |
| | 212-5001 | 1 | Conn M 40 pin |

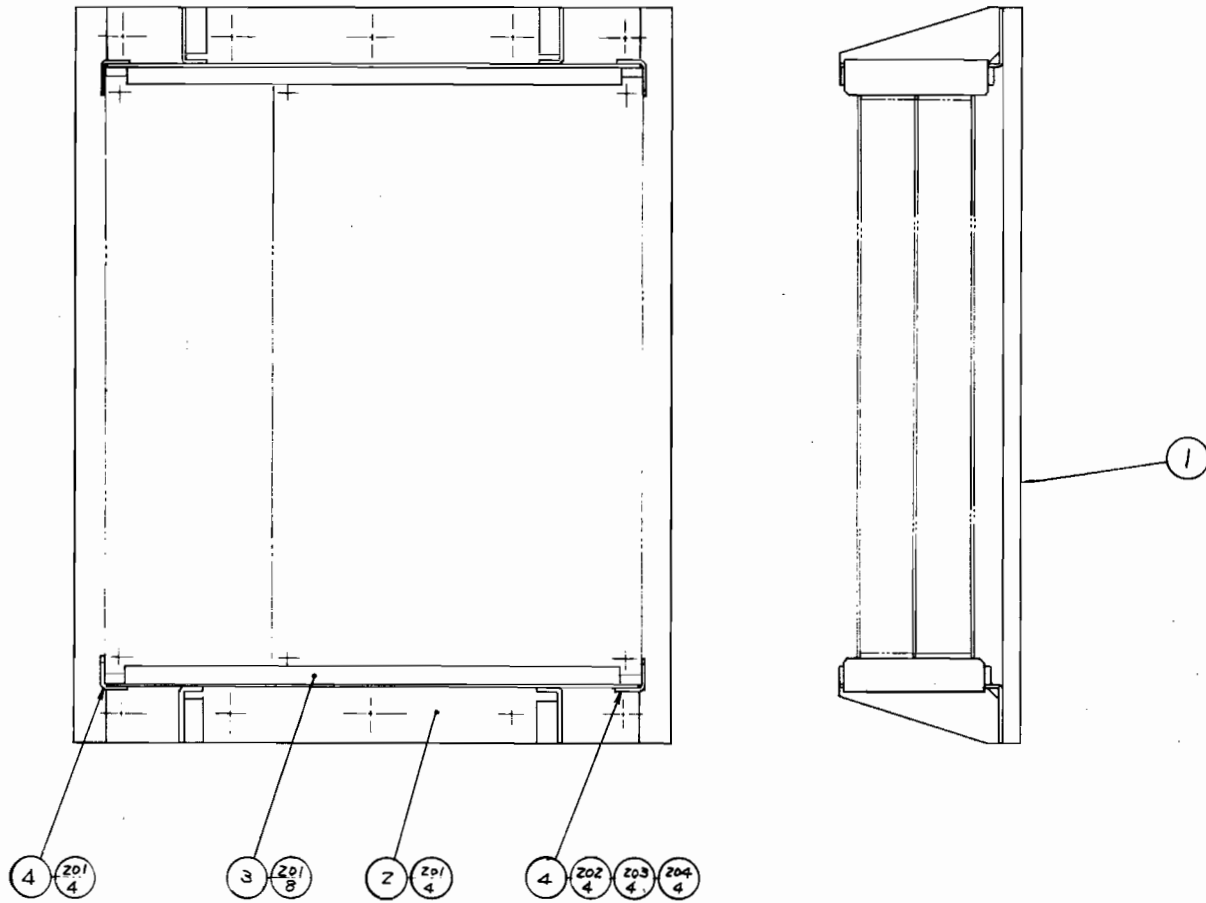
| <u>ITEM NO.</u> | <u>PART NO.</u> | <u>QTY.</u> <u>REQD.</u> | <u>DESCRIPTION</u> |
|-----------------|-----------------|-----------------------------|--|
| 1 | 105-0344 | 1 | Bracket A |
| 2 | 105-0345 | 1 | Bracket B |
| 3 | 123-0078 | 1 | Shaft, main |
| 4 | 601-0775 | 1 | Supporter Shaft |
| 5 | 601-0776 | 1 | Ring Shaft |
| 6 | 125-0101 | 1 | Compression Spring |
| 7 | 109-0067 | 1 | Holder Spring |
| 8 | 105-0346 | 2 | Bracket |
| 9 | 601-0878 | 2 | Internal Block |
| 10 | 109-0066 | 1 | Guide Plate Holder |
| 11 | 117-0231 | 1 | Guide Plate, 8 way |
| 12 | 310-0012 | 4 | Paper Insulator |
| 13 | 834-0468 | 1 | Assy Handle Grip |
| 14 | 509-0144 | 4 | Switch, micro type |
| 15 | 834-0491 | 1 | Assy Harness, Joystick |
| 16 | | 6 | M Screw, P H Phill ISO W/S washer, M5 x 10 |
| 17 | 285-0002-14 | 8 | M Screw, P H Phill ISO, M3 x 14 |
| 18 | 285-0125-20 | 4 | Set Screw, hex socket head cap screw ISO UNBRAKO, M5 x 20 |
| 19 | | 4 | M Screw P H Phill ISO W/S washer, M4 x 14 |
| 20 | | 4 | U-Nut, ISO, M4 |
| 21 | | 8 | U-Nut, ISO, M5 |
| 22 | | 10 | Flat Washer, special, 8.3-14.3 x 0.23 |
| 23 | | 1 | E Washer, 9mm |
| 24 | 280-0288-00 | 12 | Spring Washer, M5 (#2) |
| 25 | 280-0468-00 | 8 | Hex Bolt, ISO, M5 x 14 |
| 26 | | 4 | Tamper Proof Screw, P H ZMC3 black ISO, M5 x 10 |

ASSY HANDLE GRIP

DRAWING NUMBER 834-0468

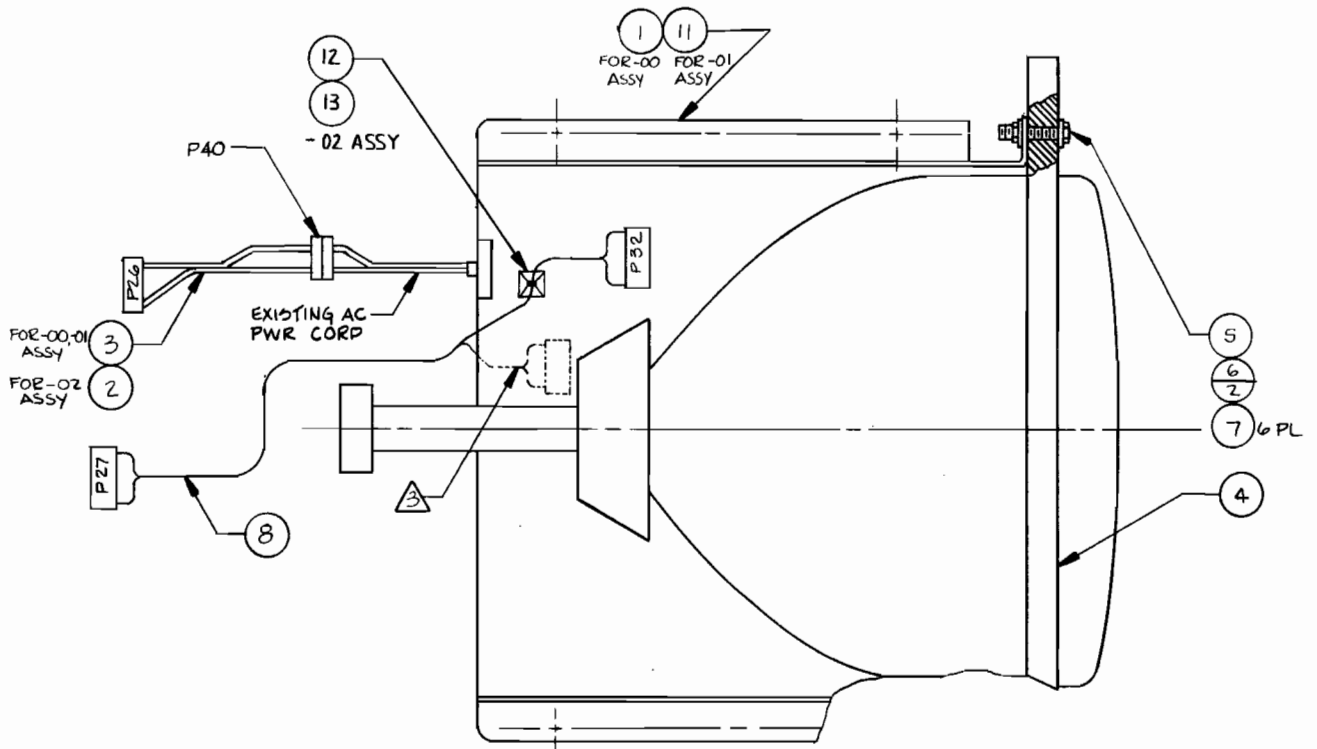
| <u>ITEM NO.</u> | <u>PART NO.</u> | <u>QTY REQD.</u> | <u>DESCRIPTION</u> |
|-----------------|-----------------|------------------|---|
| 1 | 109-0062-00 | 1 | Handle Grip Right |
| 2 | 109-0063-00 | 1 | Handle Grip Left |
| 3 | 601-0888-00 | 1 | Trigger |
| 4 | 123-0079-00 | 1 | Trigger Shaft |
| 5 | 834-0276-00 | 1 | Assy LED Board |
| 6 | 125-0011-00 | 1 | Compression Spring |
| 7 | 509-0058-00 | 1 | Switch Micro Type |
| 8 | | 5 | Tamper Proof Screw PH ZMC3 ISO M5 x 10 |
| 9 | 285-0000-10 | 2 | Machine Screw, PH Phillips M2 x 10 |

| <u>ITEM NO.</u> | <u>PART NO.</u> | <u>QTY.</u> <u>REQD.</u> | <u>DESCRIPTION</u> |
|-----------------|-----------------|-----------------------------|--|
| 1 | 102-0063 | 1 | Base |
| 2 | 105-0362 | 2 | Bracket |
| 3 | 601-0887 | 2 | Wooden Guide |
| 4 | 602-0818 | 4 | Stopper |
| 201 | 280-0268-00 | 16 | M Screw, PH Phill ISO W/F & S washer, M4 x 10 |
| 202 | | 4 | Wing Bolt, ISO, M4 x 10 |
| 203 | 287-0060-14 | 4 | Flat Washer, M4 |
| 204 | 280-0287-00 | 4 | Spring Washer, M4 (#2) |



Common Assemblies

| <u>ITEM NO</u> | <u>PART NO.</u> | <u>QTY REQD.</u> | | | <u>DESCRIPTION</u> | <u>REF DES.</u> |
|----------------|-----------------|------------------|------------|------------|----------------------------------|-----------------|
| | | <u>-00</u> | <u>-01</u> | <u>-02</u> | | |
| 1 | SEE BELOW | | | | | |
| 2 | 800-0369-01 | - | - | 1 | Assy Harness AC "Z" | |
| 3 | 800-0369-00 | 1 | 1 | - | Assy Harness AC "Z" | |
| 4 | 252-0175-00 | 1 | 1 | 1 | Monitor Mounting Board | |
| 5 | 282-0017-24 | 6 | 6 | 6 | Hex HD Bolt 1/4-20 x 1.500 lg | |
| 6 | 283-0060-34 | 12 | 12 | 12 | Washer, 1/4 Flat | |
| 7 | 283-0070-05 | 6 | 6 | 6 | Nut-1/4-20 Hex Self-Locking | |
| 8 | 800-0361-00 | 1 | 1 | 1 | Assy Harn Video Intf | |
| 9 | 470-0221-00 | 3 | 3 | 3 | Res 220 Ohm 1/4W | See Sh 2 |
| 10 | 470-0302-00 | 3 | 3 | 3 | Res 3K 1/4W | See Sh 2 |
| 11 | 200-0019-00 | - | 1 | - | Crt C1 19 In Vt Mt | |
| | 200-0022-00 | | | | W/G Clr 19 In Vt Mt | |
| 1 | 200-0019-00 | 1 | - | 1 | Crt C1 19 In Vt Mt | |
| | 200-0091-00 | | | | Mon 19 In Vert Mt W/G | |
| 12 | 280-0005-00 | - | - | 1 | Cable Tie | |
| 13 | 280-0327-00 | - | - | 1 | Base Tie Wrap | |



OUTSIDE OF THE PCB ASSY

| <u>Part No.</u> | <u>Description</u> | <u>Ref. Des.</u> |
|--------------------|---------------------------------|------------------|
| 200-0067 | Picture tube 19" | |
| 200-0068 | Deflection yoke | |
| 113-0009 | PC magnet | |
| 560-0096 | Flyback trans. HVR | |
| | UNF resistor 220 Ohm, 25W K | R05 |
| | C capacitor 150 pf, AC1.5KV | C04 |
| 482-0198 | Si. transistor, 2SD870 | X01 |
| 482-0143 | Si. transistor, 2SC1106A | X02 |
| | Screw #8 3/8 | |
| | Screw 1/4 x 3/4 pix tub mtg (4) | |
| | Pyramidal lock washer (4) | |
| | Nut retainer, pix tube mtg (4) | |
| | Clip - PCB support | |
| | Standoff | |
| | Wire terminal (gnd strap) | |
| | Terminal lug (gnd) | |
| | Groundstrap assy | |
| | Grounding spring | |
| | Wire hook (gnd strap) | |
| | Purity shield holddown clamp | |
| | Support brkt RH | |
| | Support brkt LH | |
| | Chassis base | |
| | Yoke wedge (3) | |
| PURITY SHIELD ASSY | | |
| 180-0022 | Degaussing coil | D911, D912 |
| 481-0225 | Rectifier 1 amp 600 V (2) | |
| | Pin Terminal (2) | |

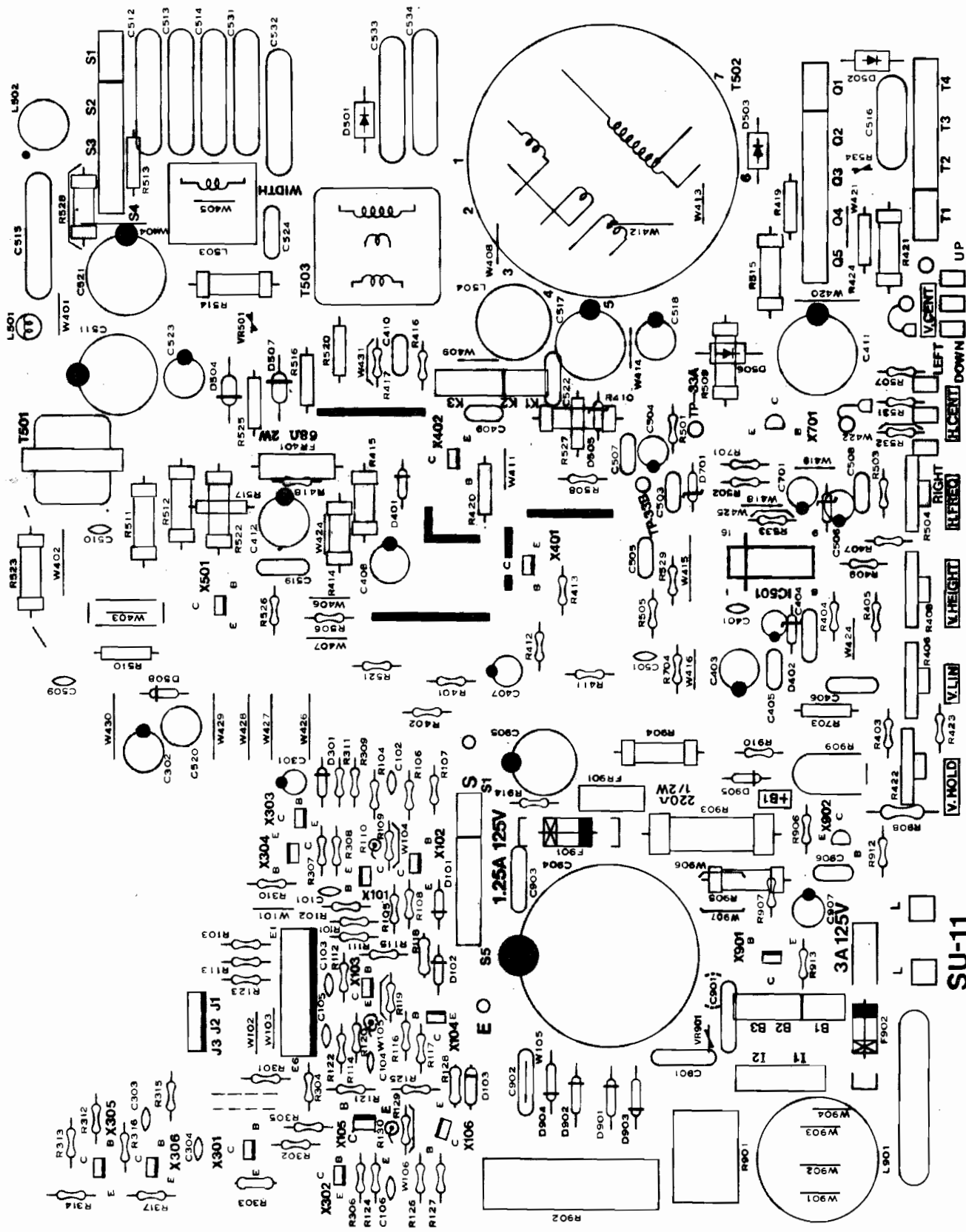
| <u>Part No.</u> | <u>Description</u> | <u>Ref. Des.</u> |
|---------------------|---------------------------------|------------------|
| | Pin terminal housing | |
| | Purity shield (2 pcs) | |
| | Purity shield (2 pcs) | |
| | Capacitor 100 nf 10% 400V | C911 |
| | Resistor, wirewound 33 Ohm, 4W | R921 |
| | Fire retardant term strip 4 lug | |
| CRT SOCKET PCB ASSY | | |
| | V R 200 | R105 |
| | V R 200 | R106 |
| | V R 5K | R113 |
| | V R 5K | R114 |
| | V R 5K | R115 |
| | OM R 10K Ohm 2W J | R116 |
| | OM R 10K Ohm 2W J | R117 |
| | OM R 10K Ohm 2W J | R118 |
| | Comp R 3.3K Ohm 1/2 K | R119 |
| | Comp R 3.3K Ohm 1/2 K | R120 |
| | Comp R 3.3K Ohm 1/2 K | R121 |
| Capacitors | E Cap 10 uf 250V A | C107 |
| | C Cap 1000 pf DC1400V P | C108 |
| Coils | | |
| 180-0023 | Peaking coil | L101 |
| Semiconductors | | |
| 482-0290 | Si transistor, 2SC1514VC | X101 |
| 482-0290 | Si transistor, 2SC1514VC | X102 |
| 482-0290 | Si transistor, 2SC1514VC | X103 |
| Miscellaneous | | |
| 213-0022 | CRT socket | |

| <u>Part No.</u> | <u>Description</u> | <u>Ref. Des</u> |
|-----------------|---------------------------|-----------------|
| MAIN PCB ASSY | | |
| Resistors | | |
| | V R 200 Ohm | R406 |
| | V R 200 Ohm | R408 |
| | CMF R 6.8 Ohm 1W J | R410 |
| | OM R 3.3K Ohm 1W J | R414 |
| | OM R 2.7K Ohm 1W J | R415 |
| | OM R 12K Ohm 2W J | R421 |
| | V R 10K Ohm | R422 |
| | F R 68 Ohm 2W K | FR401 |
| | CMF R 11.8K Ohm 1/4W + 1% | R503 |
| | V R 5K Ohm | R504 |
| | OM R 10K Ohm 2W J | R509 |
| | OM R 8.2K Ohm 2W J | R512 |
| | OM R 820 Ohm 2W J | R514 |
| | CMF R 8.2 Ohm 1W J | R515 |
| | CMF R 4.7 Ohm 1W J | R522 |
| | OM R 68 Ohm 2W J | R523 |
| | OM R 390 Ohm 1W J | R528 |
| | ZN R 470 Ohm | R534 |
| | ZN R | VR501 |
| | CMF R 39 Ohm 1/2W + 1% | R703 |
| | CMF R 7.68K Ohm 1/4 + 1% | R704 |
| | Posistor | R901 |
| | UNF R 2 Ohm 7W K | R902 |
| | CMF R 4.7 Ohm 3W J | R903 |
| | OM R 10K Ohm 2W J | R904 |
| | OM R 18K Ohm 1W J | R905 |
| | CMF R 47 Ohm 1/2W + 1% | Q908 |
| | V R 2K Ohm | R909 |
| | CMF R 2.74K Ohm 1/4 + 1% | R910 |
| | F R 220 Ohm 1/2W K | FR901 |

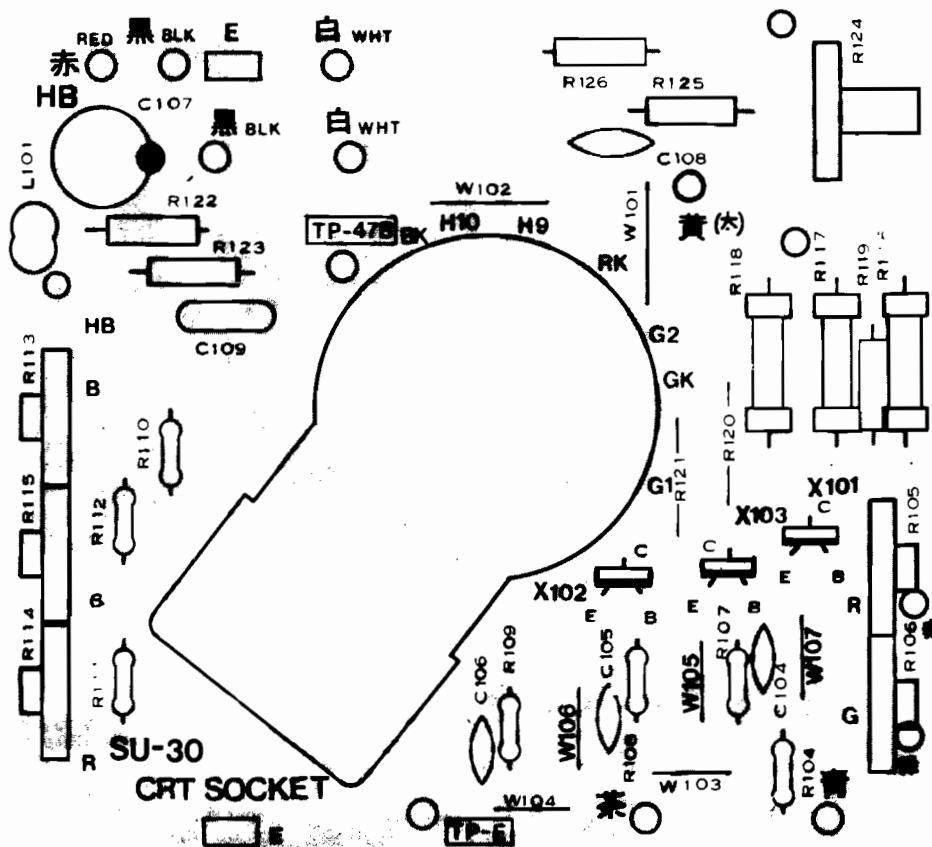
| <u>Part No.</u> | <u>Description</u> | <u>Ref. Des</u> |
|-----------------|---------------------------|-----------------|
| Capacitors | | |
| | BPE Cap 3.3 uf 50V A | C301 |
| | Tan cap 2.2 uf 16V K | C402 |
| | E cap 4.7 uf 6.3V A | C407 |
| | E cap 100 uf 160V A | C411 |
| | E cap 3.3 uf 160V A | C412 |
| | PP cap 5600 uf 50V J | C508 |
| | PP cap 2000 pf DC1500V J | C512 |
| | PP cap 2000 pf DC1500V J | C513 |
| | PP cap 2000 pf DC1500V J | C514 |
| | PP cap 0.53 uf DC1200V J | C515 |
| | BPE cap 3.3 uf 50V A | C520 |
| | E cap 1 uf 160V A | C523 |
| | M cap 0.1 uf 200V K | C524 |
| | PP cap 2000 pf DC1500V J | C531 |
| | PP cap 1500 pf DC1500V J | C532 |
| | E cap | C904 |
| | E cap 10 uf 250V A | C905 |
| Coils | | |
| 180-0024 | Linarity coil | L502 |
| 181-0031 | Width coil | L503 |
| 180-0025 | Heater choke | L504 |
| Transformers | | |
| 560-0061 | Hor drive transf | T501 |
| 560-0097 | Side pin transf | T503 |
| Semiconductors | | |
| 316-0807 | IC HA11244 | IC501 |
| 482-0177 | Si transistor, 2SC1685(R) | X101 |
| 482-0111 | Si transistor, 2SA673(C) | X102 |
| 482-0177 | Si transistor, 2SC1685(R) | X103 |
| 482-0111 | Si transistor, 2SA673(C) | X104 |
| 482-0177 | Si transistor, 2SC1685(R) | X105 |

| <u>Part No.</u> | <u>Description</u> | <u>Ref. Des</u> |
|-----------------|------------------------------|-----------------|
| 482-0111 | Si transistor, 2SCA673(C) | X106 |
| 482-0177 | Si transistor, 2SC1685(R) | X301 |
| 482-0177 | Si transistor, 2SC1685(R) | X302 |
| 482-0111 | Si transistor, 2SA673(C) | X303 |
| 482-0177 | Si transistor, 2SC1685(R) | X304 |
| 482-0177 | Si transistor, 2SC1685(R) | X305 |
| 482-0196 | Si transistor, 2SD478 | X401 |
| 482-0196 | Si transistor, 2SD478 | X402 |
| 482-0291 | Si transistor, 2SC2610BK | X501 |
| 482-0257 | Si transistor, 2SC2688 (KLM) | X901 |
| 482-0258 | Si transistor, 2SC1890A (EF) | X902 |
| 481-0226 | Si diode, W06A | D101 |
| 481-0226 | Si diode, W06A | D102 |
| 481-0226 | Si diode, W06A | D103 |
| 481-0149 | Si diode, 1SZ473H | D301 |
| 481-0149 | Si diode, 1SZ473H | D401 |
| 481-0227 | Zener diode, RD10F (C) | D402 |
| 481-0171 | Si diode, HF-1 | D503 |
| 481-0228 | Si diode, V09E | D504 |
| 481-0229 | Zener diode, RD11E(B) | D505 |
| 581-0226 | Si diode, W06A | D506 |
| 481-0230 | Si diode, 1SS81 | D507 |
| 481-0149 | Si diode, 1SZ473H | D508 |
| 481-0231 | Zener diode, RD20EV2 | D701 |
| 481-0160 | Si diode, 1S1887A | D901 |
| 481-0160 | Si diode, 1S1887A | D902 |
| 481-0160 | Si diode, 1S1887A | D903 |
| 481-0160 | Si diode, 1S1887A | D904 |
| 481-0198 | Zener diode, RD6.8EV3 | D905 |
| Miscellaneous | | |
| | Fuse 1.25A | F901 |
| | US fuse 3A | F902 |

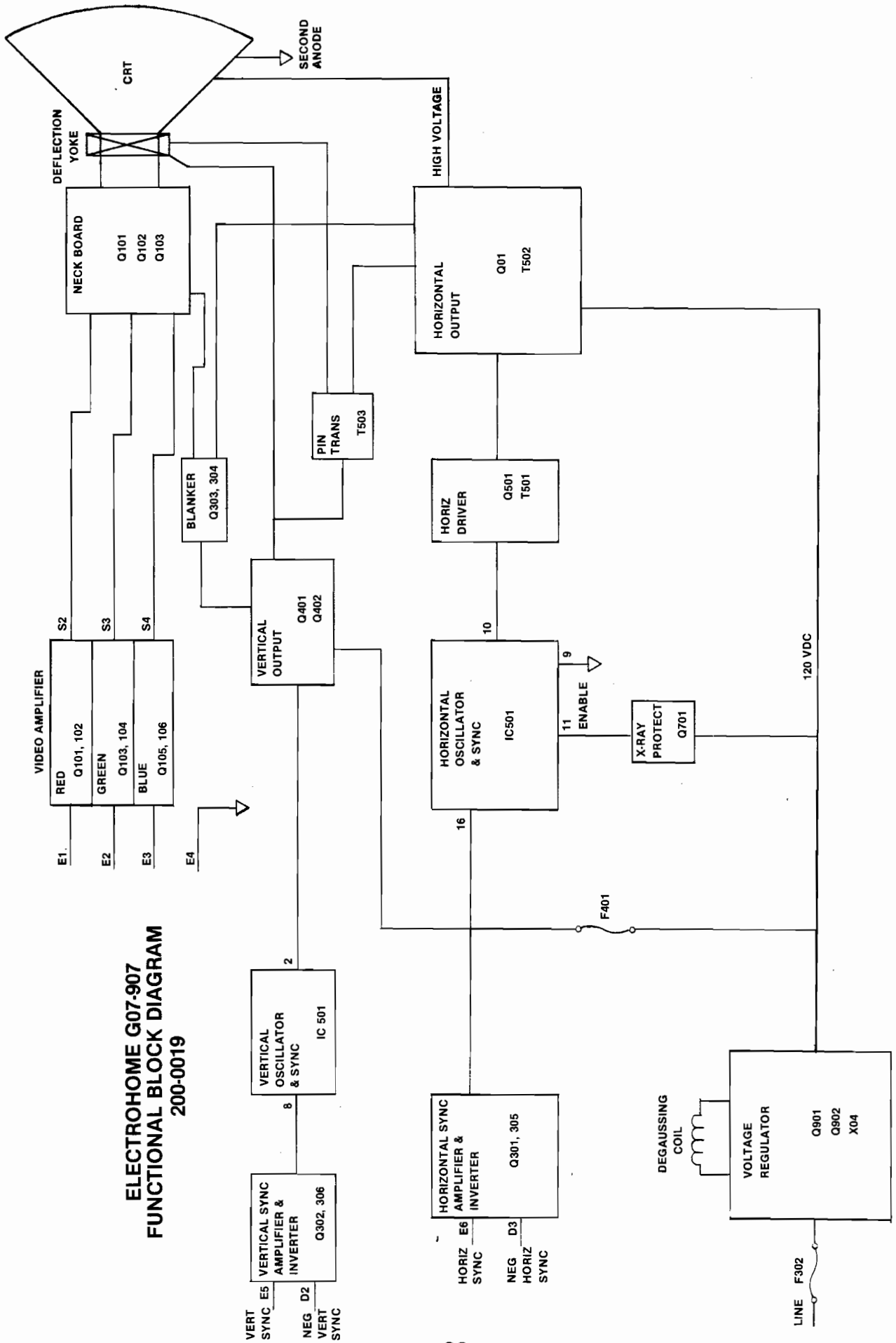
MAIN P.C.B. COMPONENT LAYOUT



C.R.T. P.C.B. COMPONENT LAYOUT



ELECTROHOME G07-907 FUNCTIONAL BLOCK DIAGRAM 200-0019



| <u>Part No.</u> | <u>Description</u> | <u>Ref. Des</u> |
|-----------------|-------------------------------------|-----------------|
| Resistors | 33k Ohm, <u>+10%</u> , 1/2W carbon | R603 |
| | 470 Ohm, <u>+10%</u> , 5W WW | R606 |
| | 2.7k Ohm, <u>+10%</u> , 5W WW | R607 |
| | 1.2k Ohm, <u>+10%</u> , 1W MO | R608 |
| | 22 Ohm, <u>+5%</u> , 1/8W carbon | R610 |
| | 1k Ohm, <u>+5%</u> , 1/2W carbon | R611 |
| | 470 Ohm, <u>+10%</u> , 1/2W carbon | R612 |
| | 1.2k Ohm, <u>+5%</u> , 1W MO | R613 |
| | 680k Ohm, <u>+5%</u> , 1/2W comp | R614 |
| | 270k Ohm, <u>+5%</u> , 1/2W comp | R615 |
| | 2.7 Ohm, <u>+5%</u> , 1/8W carbon | R616 |
| | 68k Ohm, <u>+5%</u> , 1/8W carbon | R617 |
| | 1k Ohm, <u>+5%</u> , 1/2W carbon | R624 |
| | 2.2 Ohm, <u>+10%</u> , 5W MO | R631 |
| | 120 Ohm, <u>+5%</u> , 5W carbon | R632 |
| | 2.2 Ohm, <u>+5%</u> , 1/8W carbon | R634 |
| | 6.8 Ohm, <u>+5%</u> , 1/2W carbon | R635 |
| | 33k Ohm, <u>+5%</u> , 1/8W carbon | R641 |
| | 15k Ohm, <u>+5%</u> , 1/8W carbon | R642 |
| | 15 Ohm, <u>+10%</u> , 2W carbon | R647 |
| | 1.8k Ohm, <u>+10%</u> , 1/2W carbon | R649 |
| | 270k Ohm, <u>+10%</u> , 1/2W carbon | R650 |
| | 240 Ohm, <u>+10%</u> , 2W carbon | R651 |
| | 6/8k Ohm, <u>+10%</u> , 1/2W carbon | |
| Semiconductors | | |
| 482-0262 | Transistor, 2SC1893 | TR601 |
| 481-0214 | Rectifier, (SI) RM-2AV 600V | X601 |
| 481-0214 | Rectifier, (SI) RM-2AV 600V | X602 |
| 481-0214 | Rectifier, (SI) RM-2AV 600V | X603 |
| 481-0214 | Rectifier, (SI) RM-2AV 600V | X604 |
| 481-0215 | Diode (HS) SB-2CGL 1200V min | X605 |
| 481-0149 | Diode (SI) IS2473-772 | X606 |

| <u>Part No.</u> | <u>Description</u> | <u>Ref. Des</u> |
|---------------------------------|------------------------------------|-----------------|
| 481-0216 | Diode (HS) RC-2V 0.8 US | X607 |
| 481-0217 | Diode (HS) RU-2V | X608 |
| 481-0217 | Diode (HS) RU-2V | X609 |
| 481-0218 | Rectifier, power (SI) 500V PIV | X610 |
| 481-0218 | Rectifier, power (SI) 500V PIV | X611 |
| 481-0218 | Rectifier, power (SI) 500V PIV | X612 |
| Transformers & Coils | | |
| 180-0020 | Coil, line filter R-3 | L601 |
| 180-0014 | Coil, filter, 10uh | L602 |
| 560-0094 | Transformer, hor drive | T602 |
| 560-0095 | Transformer, side PC | T603 |
| 180-0015 | Width coil | L702 |
| Capacitors | | |
| | 0.1 uf, 125V, <u>+20%</u> MM | C601 |
| | 2200 pf, Z5F, <u>+10%</u> ceramic | C602 |
| | 2200 pf, 125V ceramic | C603 |
| | 2200 pf, Z5F, <u>+10%</u> ceramic | C604 |
| | 330 uf, 200V electrolytic | C605 |
| | 47 uf, 160V electrolytic | C608 |
| | .0033 uf, 500V <u>+10%</u> ceramic | C609 |
| | .01 uf, 500V, <u>+10%</u> ceramic | C610 |
| | 100 pf, 3 KV, <u>+10%</u> ceramic | C611 |
| | .022 uf, 200v, <u>+10%</u> PP | C612 |
| | 220 uf, 25V electrolytic | C613 |
| | 33 uf, 25V electrolytic | C614 |
| | 0.39 uf, 200V, <u>+10%</u> PP | C615 |
| | 47 pf, 500V ceramic | C616 |
| | 1 uf, 50v electrolytic | C617 |
| | 1 uf, 50V electrolytic | C619 |
| | 0.1 uf, 100V, <u>+10%</u> mylar | C620 |
| | 0.1 uf, 1.5 KV, <u>+20%</u> paper | C621 |
| | 1000 uf, 35V electrolytic | C622 |

| <u>Part No.</u> | <u>Description</u> | <u>Ref. Des</u> |
|-------------------|-----------------------------|-----------------|
| Capacitors (cont) | 470 uf, 25V electrolytic | C623 |
| | 100 uf, 25V electrolytic | C624 |
| | 10 uf, 160V electrolytic | C625 |
| | 100 pf, 500V, +10% ceramic | C626 |
| | 39 pf, 500V, +10% ceramic | C627 |
| | 2200 pf, 500V, +10% ceramic | C628 |
| | 6900 pf, 1.5 KV, +5% PP | C629 |
| | 2.2 uf, 50V electrolyte | C633 |
| | 3 pf, 2 kV, +0.5 pf ceramic | C637 |
| | .056 uf, 10% mylar | C638 |
| Miscellaneous | | |
| | Fuse (UL/CSA) 3A-125 | F601 |
| | Socket, 6 pin | J607 |
| | Plug, 3 pin (GT) | P602 |
| | Plug, 4 pin (NM) | P604 |
| | Plug, 6 pin (GT) | P607 |
| | Plug, 3 pin (NM) | P608 |
| | Plug, 2 pin (NM) | P611 |
| | Thermistor | TH601 |
| | Plug, 6 pin | P201 |
| | Plug, 6 pin | P202 |

VERT/HOR BOARD

| <u>Part No.</u> | <u>Description</u> | <u>Ref. Des</u> |
|-----------------|----------------------------|-----------------|
| Resistors | | |
| | 820 Ohm, +5%, 1/8W carbon | R301 |
| | 12k Ohm, +5%, 1/8W carbon | R302 |
| | 15k Ohm, +5%, 1/8W carbon | R303 |
| | 10k Ohm, +5%, 1/8W carbon | R304 |
| | 330k Ohm, +5%, 1/8W carbon | R305 |
| | 1k Ohm, +5%, 1/8W carbon | R306 |
| | 1.5k Ohm, +5%, 1/8W carbon | R307 |
| | 2.2k Ohm, +5%, 1/8 carbon | R309 |

| <u>Part No.</u> | <u>Description</u> | <u>Ref. Des</u> |
|------------------|------------------------------------|-----------------|
| Resistors (cont) | 470k Ohm, <u>+5%</u> , 1/8W | R310 |
| | 56k Ohm, <u>+5%</u> , 1/8W carbon | R311 |
| | 100k Ohm, <u>+5%</u> , 1/8W carbon | R312 |
| | 10k Ohm, <u>+5%</u> , 1/8W carbon | R313 |
| | 47k Ohm, <u>+5%</u> , 1/8W carbon | R314 |
| | 820 Ohm, <u>+5%</u> , 1/8W carbon | R315 |
| | 120 Ohm, <u>+5%</u> , 1/2W carbon | R316 |
| | 2.2 Ohm, <u>+5%</u> , 1/2W carbon | R317 |
| | 33k Ohm, <u>+5%</u> , 1/4W carbon | R318 |
| | 10 Ohm, <u>+5%</u> , 1/8W carbon | R319 |
| | 15k Ohm, <u>+5%</u> , 1/8W carbon | R320 |
| | 560 Ohm, <u>+5%</u> , 1/2W carbon | R321 |
| | 22 Ohm, <u>+5%</u> , 2W MO | R322 |
| | 1.5 Ohm, <u>+5%</u> , 1/8W carbon | R323 |
| | 27k Ohm, <u>+5%</u> , 1/8W carbon | R234 |
| | 47 Ohm, <u>+5%</u> , 1/8W carbon | R325 |
| | 820 Ohm, <u>+5%</u> , 1/8W carbon | R328 |
| | 10k Ohm, <u>+5%</u> , 1/8W carbon | R330 |
| | 220k Ohm, <u>+5%</u> , 1/8W carbon | R331 |
| | 2.2k Ohm, <u>+5%</u> , 1/8W carbon | R351 |
| | 15k Ohm, <u>+5%</u> , 1/8W carbon | R352 |
| | 18k Ohm, <u>+5%</u> , 1/8W carbon | R353 |
| | 3.9k Ohm, <u>+5%</u> , 1/8W carbon | R354 |
| | 12k Ohm, <u>+5%</u> , 1/8W carbon | R355 |
| | 470 Ohm, <u>+5%</u> , 1/8W carbon | R356 |
| | 2.2k Ohm, <u>+5%</u> , 1/8W carbon | R357 |
| | 1.2k Ohm, <u>+5%</u> , 1/8W carbon | R358 |
| | 68k Ohm, <u>+5%</u> , 1/8W carbon | R359 |
| | 27 Ohm, <u>+5%</u> , 1/4W carbon | R360 |
| | 1.2k Ohm, <u>+5%</u> , 1/8W carbon | R361 |
| | 1.2k Ohm, <u>+5%</u> , 1/8W carbon | R363 |
| | 47k Ohm, <u>+5%</u> , 1W MO | R364 |

| <u>Part No.</u> | <u>Description</u> | <u>Ref. Des</u> |
|------------------|-------------------------------------|-----------------|
| Resistors (cont) | | |
| | 56k Ohm, <u>+5%</u> , 1/2W carbon | R365 |
| | 3.3k Ohm, <u>+5%</u> , 1/8W carbon | R366 |
| | 2.2k Ohm, <u>+5%</u> , 1/2W carbon | R367 |
| | 3.9k Ohm, <u>+5%</u> , 1/8W carbon | R368 |
| | 3.3k Ohm, <u>+5%</u> , 1/4W carbon | R369 |
| | 1k Ohm, <u>+5%</u> , 1/4W carbon | R370 |
| | 2.7k Ohm, <u>+5%</u> 1/4W carbon | R371 |
| | 2.2k Ohm, <u>+5%</u> , 1/4W carbon | R383 |
| | 8.2k Ohm, <u>+5%</u> , 1/4W carbon | R384 |
| | Varistor, 250k Ohm, vert hold | VR301 |
| | Varistor, 20k Ohm, vert size | VR302 |
| | Varistor, 50k Ohm, hor hold | VR351 |
| Capacitors | | |
| | 0.15 uf, 50V <u>+10%</u> mylar | C301 |
| | 0.222 uf, 50V, <u>+10%</u> mylar | C302 |
| | 0.1 uf, 50V, <u>+10%</u> mylar | C304 |
| | 2.2 uf, 50V electrolytic | C306 |
| | 0.15 uf, 50V, <u>+10%</u> mylar | C307 |
| | 0.1 uf, 50V, <u>+10%</u> myar | C309 |
| | 22 uf, 16V electrolytic | C310 |
| | 1000 uf, 35V electrolytic | C311 |
| | 0.0082 uf, 50V, <u>+10%</u> ceramic | C312 |
| | 47 uf, 50V electrolytic | C313 |
| | 10 uf, 25V electrolytic | C315 |
| | 3300 uf, 50V, <u>+10%</u> mylar | C316 |
| | 100 pf 50V, <u>+10%</u> ceramic | C317 |
| | 1500 pf, 50V, <u>+10%</u> ceramic | C351 |
| | 1000 pf, 50V, <u>+10%</u> ceramic | C352 |
| | 0.022 uf, 50V, <u>+10%</u> mylar | C353 |
| | 0.1 uf, 50V, <u>+10%</u> mylar | C355 |
| | 4.7 uf, 25V electroytic | C356 |

| <u>Part No.</u> | <u>Description</u> | <u>Ref. Des</u> |
|-------------------|-----------------------------------|-----------------|
| Capacitors (cont) | 0.015 uf, 200V, <u>+10%</u> PP | C357 |
| | 0.018 uf, 200V, <u>+10%</u> PP | C358 |
| | 4.7 uf, 160V electrolytic | C359 |
| | 0.01 uf, 50V, <u>+10%</u> ceramic | C360 |
| | 0.015 uf, 50V, <u>+10%</u> mylar | C361 |
| | 10 uf, 50V electrolytic | C362 |
| | 0.01 uf, 640V, <u>+10%</u> PP | C363 |
| | 0.01 uf, 50V, <u>+10%</u> ceramic | C364 |
| Semiconductors | | |
| 482-0282 | Transistor, 2SA826Q | TR301 |
| 482-0261 | Transistor, 2SC1740Q | TR302 |
| 482-0283 | Transistor, 2SA1740Q | TR303 |
| 482-0261 | Transistor, 2SC1740Q | TR304 |
| 452-0284 | Transistor, 2SA490YLBGLI | TR305 |
| 482-0285 | Transistor, 2SC1625YLBGLI | TR306 |
| 482-0261 | Transistor, 2SC1740R | TR307 |
| 482-0261 | Transistor, 2SC1740Q | TR308 |
| 482-0117 | Transistor, 2SA854Q | TR351 |
| 482-0286 | Transistor, 2SC1722BKS | TR352 |
| 482-0261 | Transistor, 2SC1740Q | TR353 |
| 482-0282 | Transistor, 2SA826Q | TR354 |
| 481-0149 | Diode (SI) IS2473-T72 | X301 |
| 481-0149 | Diode (SI) IS2473-T72 | X302 |
| 481-0099 | Diode (GE) IN60TVGL | X303 |
| 481-0219 | Diode (SI) ISS81 | X304 |
| 481-0219 | Diode (SI) ISS81 | X305 |
| 481-0219 | Diode (SI) ISS81 | X306 |
| 481-0220 | Diode (SI) MA26W | X307 |
| 481-0149 | Diode (SI) IS2473 | X308 |
| 481-0149 | Diode (SI) IS2473-T72 | X351 |
| 481-0149 | Diode (SI) IS2473-T72 | X352 |
| 481-0149 | Diode (SI) IS2473-T72 | X53 |

| <u>Part No.</u> | <u>Description</u> | <u>Ref. Des</u> |
|----------------------|------------------------------------|-----------------|
| 481-0149 | Diode (SI) IS2473-T72 | X54 |
| 481-0221 | Diode (Zener) RD10EBI | X355 |
| 481-0222 | Diode (HS) RU-1 0.3 US | X366 |
| Miscellaneous | | |
| 204X9300-958 | Socket, 6 pin | J301 |
| 204X9300-958 | Socket, 6 pin | J302 |
| 204X9601-195 | Plug, 6 pin | P301 |
| 204X9601-195 | Plug, 6 pin | P302 |
| 201X0000-534 | Thermistor | TH301 |
| Transformers & Coils | | |
| 101-0030 | Coil, horiz osc | L351 |
| POWER BOARD | | |
| Resistors | | |
| | 180 Ohm, <u>+10%</u> m 15W WW | R501 |
| | 100 Ohm, <u>+5%</u> , 1/8W carbon | R502 |
| | 1k Ohm, <u>+5%</u> , 1/8W carbon | R503 |
| | 560 Ohm, <u>+5%</u> , 1/8W carbon | R504 |
| | 39k Ohm, <u>+5%</u> , 1W MO | R505 |
| | 6.8k Ohm, <u>+5%</u> , 1/8W carbon | R506 |
| | Varistor volt adj | VR501 |
| Capacitors | | |
| | 10 uf, 160V electrolytic | C501 |
| | 1500 pf, 50V, <u>+10%</u> ceramic | C502 |
| | 22 uf, 16V electrolytic | |
| Semiconductors | | |
| 482-0261 | Transistor, 2SC1740Q | TR501 |
| 482-0288 | Transistor, 2SC1454 | TR502 |
| 481-0135 | Diode (SI) zener EQB01-06V | X501 |
| 481-0149 | Diode (SI) IS2473-T72 | X502 |
| Miscellaneous | | |
| | Socket, 6 pin | J501 |

| <u>Part No.</u> | <u>Description</u> | <u>Ref. Des</u> |
|-----------------|--|-----------------|
| | Plug, 6 pin | P501 |
| | Thermister | TH501 |
| NECK BOARD | | |
| Resistors | | |
| | 1.8k Ohm, <u>+5%</u> , 1/8W carbon | R401 |
| | 1.8k Ohm, <u>+5%</u> , 1/8W carbon | R402 |
| | 1.8k Ohm, <u>+5%</u> , 1/8W carbon | R403 |
| | 150 Ohm, <u>+5%</u> , 1/8W carbon | R404 |
| | 220 Ohm, <u>+5%</u> , 1/8W carbon | R405 |
| | 150 Ohm, <u>+5%</u> , 1/8W carbon | R406 |
| | 390 Ohm, <u>+5%</u> , 1/4W carbon | R407 |
| | 390 Ohm, <u>+5%</u> , 1/4W carbon | R408 |
| | 4.7k Ohm, <u>+5%</u> , 1/8W carbon | R409 |
| | 4.7k Ohm, <u>+5%</u> , 1/8W carbon | R410 |
| | 4.7k Ohm, <u>+5%</u> , 1/8W carbon | R411 |
| | 12k Ohm, <u>+5%</u> , 2.0W metal oxide | R412 |
| | 12k Ohm, <u>+5%</u> , 2.0W metal oxide | R413 |
| | 12k Ohm, <u>+5%</u> , 2.0W metal oxide | R414 |
| | 2.7k Ohm, <u>+10%</u> , 1/2W comp | R415 |
| | 2.7k Ohm, <u>+10%</u> , 1/2W comp | R416 |
| | 2.7k Ohm, <u>+10%</u> , 1/2W comp | R417 |
| | 470k Ohm, <u>+10%</u> , 1/2W comp | R418 |
| | 330k Ohm, <u>+10%</u> , 1/2W comp | R419 |
| | 1.0 Ohm, <u>+10%</u> , 2W metal oxide | R422 |
| | 270 Ohm, <u>+5%</u> , 1/4W carbon | R423 |
| | 500 Ohm varistor R drive | VR401 |
| | 500 Ohm varistor B drive | VR402 |
| | 5k Ohm varistor R cutoff | VR403 |
| | 5k Ohm varistor G cutoff | VR404 |
| | 5k Ohm varistor B cutoff | VR405 |
| | 1M Ohm varistor screen | VR406 |

| <u>Part No.</u> | <u>Description</u> | <u>Ref. Des</u> |
|---|--------------------------------------|-----------------|
| Capacitors | | |
| | 1000 pf, 50V, 10% ceramic | C401 |
| | 1000 pf, 50V, 10% ceramic | C402 |
| | 1000 pf, 50V, 10% ceramic | C403 |
| | 1500 pf, 2 kV <u>+10%</u> ceramic | C404 |
| | 100 pf, 12 kV, <u>+10%</u> ceramic | C405 |
| | .01 uf, 500V, <u>+10%</u> ceramic | C406 |
| | 1500 pf, 2 kV, <u>+10%</u> ceramic | C407 |
| | 68 pf, 50V, <u>+10%</u> ceramic | C408 |
| | 68 pf, 50V, <u>+10%</u> ceramic | C409 |
| | 68 pf, 50V, <u>+10%</u> ceramic | C410 |
| Semiconductors | | |
| 482-0155 | Transistor, 2SC1514 (R output) | TR401 |
| 482-0155 | Transistor, 2SC1514 (G output) | TR402 |
| 482-0155 | Transistor, 2SC1514 (B output) | TR403 |
| 481-0223 | Diode, IS2367 (B output) | X404 |
| 481-0223 | Diode, IS2367 (protector) | X405 |
| 481-0223 | Diode, IS2367 (protector) | X406 |
| Miscellaneous | | |
| | Socket, 5 pin | J401 |
| | Socket, 3 pin | J402 |
| | Plug, 5 pin | P401 |
| | Plug, 3 pin | P402 |
| 800-3253 High Voltage Assembly (T7010) | | |
| | 6.8 Ohm, <u>+10%</u> 15W WW resistor | R701 |
| 220-0223 | Focus control | VR702 |
| | Diode (SI HV)) | X701 |
| | Diode (SI HV)) Part of T701 | X702 |
| | Diode (SI HV)) | X703 |

| <u>Part No.</u> | <u>Description</u> | <u>Ref. Des.</u> |
|----------------------|---------------------------------------|------------------|
| Final Assembly Parts | | |
| 200-0020 | 19VJTP22 pix tube | |
| 800-3254 | Assy purity shld/degaussing | |
| 800-3255 | Lateral/purity assembly | |
| 200-0066 | Yoke, deflection | |
| 213-0021 | CRT socket | |
| 800-3253 | HV unit (T701) | |
| | Plug, line cord (K4625, K4675, K4677) | |
| | Plug, line cord (K4626, K4676) | |
| 180-0021 | Degaussing coil (L701) | |
| | INTERFACE FACE BOARD (P317) | |
| Resistors | | |
| | 91 Ohm <u>+5%</u> , 1/2W carbon | R201 |
| | 22k Ohm, <u>+10%</u> , 1/4W carbon | R202 |
| | 1k Ohm, <u>+5%</u> , 1/2W carbon | R203 |
| | 100 Ohm, <u>+5%</u> , 1/4W carbon | R204 |
| | 100k Ohm, <u>+5%</u> , 1/4W carbon | R205 |
| | 330 Ohm, <u>+10%</u> , 1/2W carbon | R206 |
| | 2.2k Ohm, <u>+5%</u> , 1/4W carbon | R207 |
| | 2.2k Ohm, <u>+5%</u> , 1/4W carbon | R208 |
| | 100k Ohm, <u>+5%</u> , 1/4W carbon | R209 |
| | 100 Ohm, <u>+5%</u> , 1/4W carbon | R210 |
| | 220 Ohm, <u>+5%</u> , 1/4W carbon | R211 |
| | 220 Ohm, <u>+5%</u> , 1/4W carbon | R212 |
| | 220 Ohm <u>+5%</u> , 1/4W carbon | R213 |
| | 150 Ohm, <u>+5%</u> , 1/4W carbon | R214 |
| | 150 Ohm, <u>+5%</u> , 1/4W carbon | R215 |
| | 150 Ohm, <u>+5%</u> , 1/4W carbon | R216 |
| | 100 Ohm, <u>+5%</u> , 1/4W carbon | R217 |
| | 1k Ohm, <u>+5%</u> , 1/2W carbon | R218 |
| | 1k Ohm, <u>+5%</u> , 1/2W carbon | R219 |
| | 680 Ohm, <u>+5%</u> , 1/2W carbon | R220 |

| <u>Part No.</u> | <u>Description</u> | <u>Ref. Des.</u> |
|------------------|-------------------------------------|------------------|
| Resistors (cont) | | |
| | 270 Ohm, <u>+5%</u> , 1/2W carbon | R221 |
| | 270 Ohm, <u>+5%</u> , 1/2W carbon | R222 |
| | 100k Ohm, <u>+5%</u> , 1/4W carbon | R223 |
| | 1k Ohm, <u>+5%</u> , 1/2W carbon | R224 |
| | 8.2k Ohm, <u>+5%</u> , 1/4W carbon | R225 |
| | 8.2k Ohm, <u>+5%</u> , 1/4W carbon | R226 |
| | 8.2k Ohm, <u>+5%</u> , 1/4W carbon | R227 |
| | 390 Ohm, <u>+5%</u> , 1/2W carbon | R228 |
| | 1.5k Ohm black level control | VR201 |
| | 10k Ohm horizontal centering | VR202 |
| Capacitors | | |
| | 1000 uf, 16V electrolytic | C201 |
| | 470 uf, 16V lytic | C202 |
| | .022 uf, 10% 100V | C203 |
| | 680 pf, 10%, Z5F | C204 |
| | .01 uf, 10%, 100V | C205 |
| Semiconductors | | |
| 482-0030 | Transistor (NPN) 2N3904 | TR201 |
| 482-0030 | Transistor (NPN) 2N3904 | TR202 |
| 482-0030 | Transistor (NPN) 2N3904 | TR203 |
| 482-0289 | Transistor (PNP) MPS-A70 | TR204 |
| 482-0289 | Transistor (PNP) MPS-A70 | TR205 |
| 482-0289 | Transistor (PNP) MPS-A70 | TR206 |
| 482-0030 | Transistor (NPN) 2N3904 | TR207 |
| 482-0030 | Transistor (NPN) 2N3904 | TR208 |
| 482-0030 | Transistor (NPN) 2N3904 | TR209 |
| 482-0030 | Transistor (NPN) 2N3904 | TR210 |
| 481-0224 | Diode silicon FDH-444 | X201 |
| 481-0224 | Diode silicon FDH-444 | X202 |
| 481-0224 | Diode silicon FDH-444 | X203 |
| 481-0224 | Diode silicon FDH-444 | X204 |
| 481-0014 | Diode, zener 3.9V, 5%, 0.5W IN5228B | ZD201 |

| <u>Part No.</u> | <u>Description</u> | <u>Ref. Des.</u> |
|----------------------|------------------------------------|------------------|
| Miscellaneous | | |
| | Socket, 6 pin | J201 |
| | Socket, 6 pin | J202 |
| | Plug, 4 pin | P203 |
| | Plug, 3 pin | P204 |
| | Plug, 6 pin | P205 |
| Resistors | | |
| | 91 Ohm <u>+5%</u> , 1/2W carbon | R201 |
| | 22k Ohm, <u>+10%</u> , 1/4W carbon | R202 |
| | 1k Ohm, <u>+5%</u> , 1/2W carbon | R203 |
| | 100 Ohm, <u>+5%</u> , 1/4W carbon | R204 |
| | 100k Ohm, <u>+5%</u> , 1/4W carbon | R205 |
| | 330 Ohm, <u>+10%</u> , 1/2W carbon | R206 |
| | 2.2k Ohm, <u>+5%</u> , 1/4W carbon | R207 |
| | 2.2k Ohm, <u>+5%</u> , 1/4W carbon | R208 |
| | 100k Ohm, <u>+5%</u> , 1/4W carbon | R209 |
| | 100 Ohm, <u>+5%</u> , 1/4W carbon | R210 |
| | 200 Ohm, <u>+5%</u> , 1/4W carbon | R211 |
| | 200 Ohm, <u>+5%</u> , 1/4W carbon | R212 |
| | 200 Ohm <u>+5%</u> , 1/4W carbon | R213 |
| | 200 Ohm, <u>+5%</u> , 1/4W carbon | R214 |
| | 200 Ohm, <u>+5%</u> , 1/4W carbon | R215 |
| | 200 Ohm, <u>+5%</u> , 1/4W carbon | R216 |
| | 100 Ohm, <u>+5%</u> , 1/4W carbon | R217 |
| | 1k Ohm, <u>+5%</u> , 1/2W carbon | R218 |
| | 1k Ohm, <u>+5%</u> , 1/2W carbon | R219 |
| | 1k Ohm, 5%, 1/2W carbon | R220 |
| | 200 Ohm, 5%, 1/2W carbon | R221 |
| | 200 Ohm, 5%, 1/2W carbon | R222 |
| | 100k Ohm, 5%, 1/4W carbon | R223 |
| | 680k Ohm, 5%, 1/2W carbon | R224 |
| | 8.2k Ohm, 5%, 1/4W carbon | R225 |

| <u>Part No.</u> | <u>Description</u> | <u>Ref. Des.</u> |
|------------------|-------------------------------------|------------------|
| Resistors (cont) | 8.2k Ohm, 5%, 1/4W carbon | R226 |
| | 8.2k Ohm, 5%, 1/4W carbon | R227 |
| | 390 Ohm, 5%, 1/2W carbon | R228 |
| | 1.5k Ohm black level control | VR201 |
| | 10k Ohm horizontal centering | VR202 |
| Capacitors | | |
| | 1000 uf, 16V electrolytic | C201 |
| | 470 uf, 16V lytic | C202 |
| | .022 uf, 10% 100V | C203 |
| | 680 pf, 10%, Z5F | C204 |
| | .01 uf, 10%, 100V | C205 |
| Semiconductors | | |
| 482-0030 | Transistor (NPN) 2N3904 | TR201 |
| 482-0030 | Transistor (NPN) 2N3904 | TR202 |
| 482-0030 | Transistor (NPN) 2N3904 | TR203 |
| 482-0289 | Transistor (PNP) MPS-A70 | TR204 |
| 482-0289 | Transistor (PNP) MPS-A70 | TR205 |
| 482-0289 | Transistor (PNP) MPS-A70 | TR206 |
| 482-0030 | Transistor (NPN) 2N3904 | TR207 |
| 482-0030 | Transistor (NPN) 2N3904 | TR208 |
| 482-0030 | Transistor (NPN) 2N3904 | TR209 |
| 482-0030 | Transistor (NPN) 2N3904 | TR210 |
| 481-0224 | Diode silicon FDH-444 | X201 |
| 481-0224 | Diode silicon FDH-444 | X202 |
| 481-0224 | Diode silicon FDH-444 | X203 |
| 481-0224 | Diode silicon FDH-444 | X204 |
| 481-0014 | Diode, zener 3.9V, 5%, 0.5W IN5228B | ZD201 |
| Miscellaneous | | |
| | Socket, 6 pin | J201 |
| | Socket, 6 pin | J202 |
| | Plug, 4 pin | P203 |
| | Plug, 3 pin | P204 |
| | Plug, 6 pin | P205 |

P.C. BOARD LAYOUT

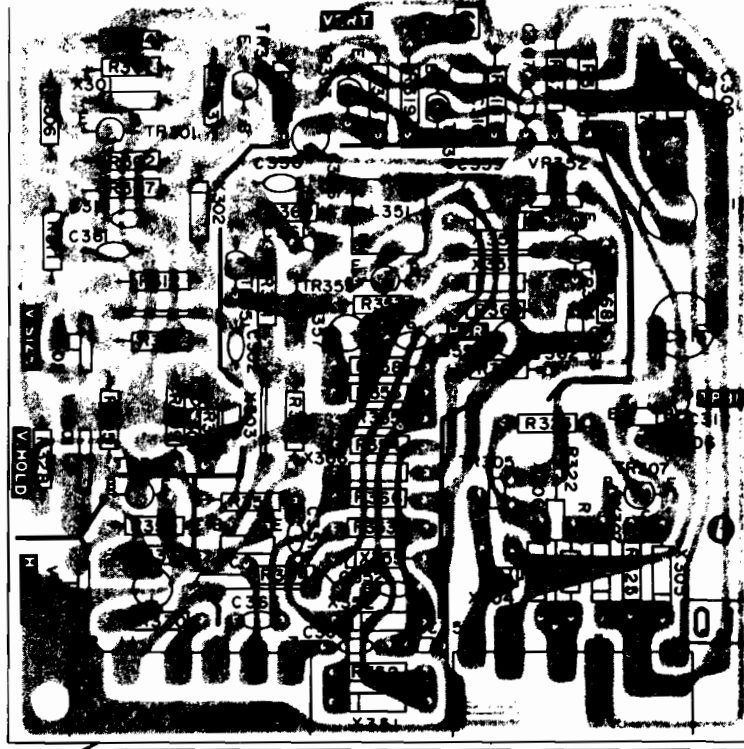
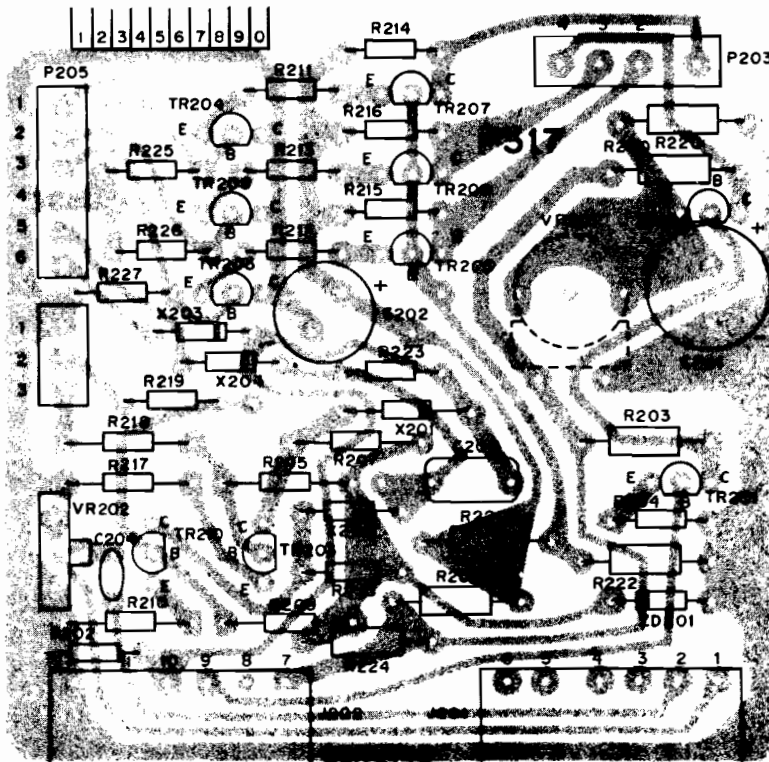
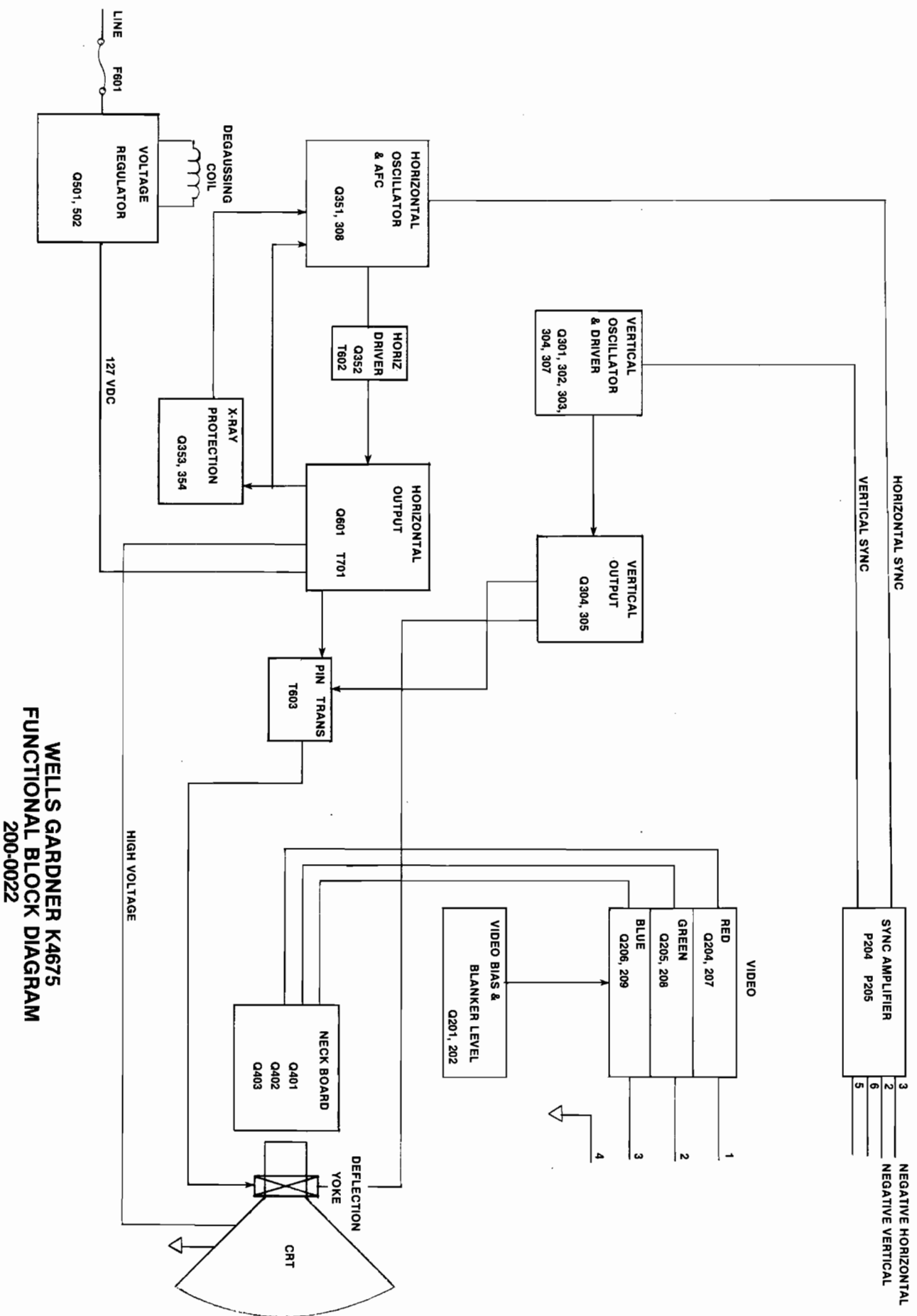


FIGURE 15. HORIZ/VERT P.C. BOARD





WELLS GARDNER K4675
FUNCTIONAL BLOCK DIAGRAM
200-0022

PCB ASSEMBLY

| <u>Part No.</u> | <u>Description</u> | <u>Ref Des.</u> |
|-----------------|--------------------------|-----------------|
| Resistors | R carbon 1/4 sb 680 Ohm | R101 |
| | R carbon 1/4 sb 680 Ohm | R102 |
| | R carbon 1/4 sb 2.2k Ohm | R103 |
| | R carbon 1/4 sb 390 Ohm | R104 |
| | R carbon 1/4 sb 2.2k Ohm | R105 |
| | R carbon 1/4 sb 390 Ohm | R106 |
| | R carbon 1/4 sb 1K Ohm | R107 |
| | R carbon 1/4 sb 680 Ohm | R111 |
| | R carbon 1/4 sb 780 Ohm | R112 |
| | R carbon 1/4 sb 15K Ohm | R113 |
| | R carbon 1/4 sb 390 Ohm | R114 |
| | R carbon 1/4 sb 2.2K Ohm | R115 |
| | R carbon 1/4 sb 390 Ohm | R116 |
| | R carbon 1/4 sb 1K Ohm | R117 |
| | R carbon 1/4 sb 680 Ohm | R121 |
| | R carbon 1/4 sb 680 Ohm | R122 |
| | R carbon 1/4 sb 390 Ohm | R124 |
| | R carbon 1/4 sb 2.2K Ohm | R125 |
| | R carbon 1/4 sb 390 Ohm | R126 |
| | R carbon 1/4 sb 1K Ohm | R127 |
| | R carbon 1/4 sb 10K Ohm | R401 |
| | R carbon 1/4 sb 8.2K Ohm | R402 |
| | R carbon 1/4 sb 3.3K Ohm | R403 |
| | R carbon 1/4 sb 8.2K Ohm | R404 |
| | R carbon 1/2 sb 270 Ohm | R405 |
| | R carbon 1/4 sb 10K Ohm | R406 |
| | R carbon 1/4 sb 680 Ohm | R407 |
| | R carbon 1/4 sb 2.2K Ohm | R408 |
| | R carbon 1/4 sb 12K Ohm | R409 |
| | R carbon 1/4 sb 10K Ohm | R410 |

| <u>Part No.</u> | <u>Description</u> | <u>Ref Des.</u> |
|------------------|----------------------------|-----------------|
| Resistors (cont) | R fuseable FMR1/4W 100 Ohm | R413 |
| | R carbon 1/4 sb 2.2K Ohm | R414 |
| | R metal 10K Ohm | R415 |
| | R fuseable FMR1/4C 22 Ohm | R416 |
| | R cement RGBIOH(V) 220 Ohm | R417 |
| | R metal 4.7K Ohm | R418 |
| | R carbon 1/2 sb 2.2K Ohm | R419 |
| | R carbon 1/4 sb 68K Ohm | R421 |
| | R carbon 1/4 sb 6.8 Ohm | R422 |
| | R carbon 1/4 sb 470 Ohm | R423 |
| | R fuseable FMR1/4W | R424 |
| | R carbon 1/2 sb 390 Ohm | R425 |
| | R carbon 1/4 sb 6.8K Ohm | R426 |
| | R fuseable FMR1/2W 1.2 Ohm | R427 |
| | R fuseable FMR2W 1.2 Ohm | R428 |
| | R carbon 1/4 sb 330 Ohm | R501 |
| | R carbon 1/4 sb 10K Ohm | R502 |
| | R carbon 1/4 sb 10K Ohm | R504 |
| | R carbon 1/4 sb 27k Ohm | R505 |
| | R carbon 1/4 sb 390K Ohm | R506 |
| | R carbon 1/4 sb 18K Ohm | R507 |
| | R carbon 1/4 sb 68K Ohm | R508 |
| | R carbon 1/4 sb 6.8K Ohm | R509 |
| | R carbon 1/4 sb 10K Ohm | R510 |
| | R carbon 1/4 sb 1.2K Ohm | R511 |
| | R carbon 1/4 sb 470 Ohm | R512 |
| | R metal RNL1/4 3.3K Ohm | R513 |
| | R metal RNL1/4 560K Ohm | R514 |
| | R metal 6.8K Ohm | R515 |
| | R carbon 1/2 sb 8.2K Ohm | R516 |
| | R metal 3.3K Ohm | R517 |
| | R carbon 1/4 sb 8.2K Ohm | R518 |

| <u>Part No.</u> | <u>Description</u> | <u>Ref Des.</u> |
|------------------|-------------------------------|-----------------|
| Resistors (cont) | R carbon 1/2 sb 4.7K Ohm | R519 |
| | R carbon 1/2 sb 33 Ohm | R520 |
| | R carbon 1/4 sb 10K Ohm | R521 |
| | R fuseable FMR1/4W 330 Ohm | R522 |
| | R fuseable FMR1/4W 330 Ohm | R523 |
| | R fuseable FMR1/4W 330 Ohm | R524 |
| | R fuseable FMR1/2W 4.7 Ohm | R525 |
| | R carbon 1/4 sb 22K Ohm | R527 |
| | R carbon 1/4 sb 22K Ohm | R528 |
| | R carbon 1/4 sb 680 Ohm | R529 |
| | R carbon 1/4 sb 4.7K Ohm | R530 |
| | R carbon 1/4 sb 470 Ohm | R531 |
| | R carbon 1/4 sb 680 Ohm | R532 |
| | R carbon 1/4 sb 47 Ohm | R533 |
| | R fuseable FMR1/4W 330 Ohm | R901 |
| | R carbon 1/4 sb 47K Ohm | R902 |
| | R fuseable FMR1/4W 68 Ohm | R903 |
| | R metal 15K Ohm | R904 |
| | R carbon 1/4 sb 1M Ohm | R905 |
| | R carbon 1/4 sb 15K Ohm | R906 |
| | R carbon 1/4 sb 68K Ohm | R907 |
| | R carbon 1/4 sb 68K Ohm | R908 |
| | R carbon 1/4 sb 4.7K Ohm | R909 |
| | R variable V8K4-1 5K Ohm | RV101 |
| | R variable V8K4-1 5K Ohm | RV102 |
| | R variable V8K4-1 5K Ohm | RV103 |
| | R variable V8K4-1 5K Ohm | RV104 |
| | R variable RVA0911H320-7-502M | RV404 |
| | R variable RVG0911H320-7-303M | RV402 |
| | R variable RVA0911H320-7-501M | RV403 |
| | R variable RVA0911H320-7-302M | RV501 |
| | R variable RVG0911H320-7-303M | RV502 |

| <u>Part No.</u> | <u>Description</u> | <u>Ref Des.</u> |
|------------------|----------------------------|-----------------|
| Resistors (cont) | R semifixed V8K4-1 3K Ohm | R910 |
| Capacitors | | |
| | C electro CE04 16V100(M) | C101 |
| | C electro CE04 50V 1(M) | C401 |
| | C polyester DEP50V 333K | C402 |
| | C polyester DEP50V 333K | C403 |
| | C tantal D 16V 2.2 uf K | C404 |
| | C ceramic DD104-63B561K50V | C405 |
| | C electro CE04 16V 470 (M) | C406 |
| | C electro CE04 25V 10 (M) | C407 |
| | C tantal D 25 10 uf K | C408 |
| | C electro CE04 100V 10 (M) | C409 |
| | C electro CE04 50V 1 (M) | C410 |
| | C electro CE04 35V 220 (M) | C411 |
| | C electro CE04 63V 470 (M) | C412 |
| | C electro CE04 16V 470 (M) | C413 |
| | C electro CE04 25V 10 (M) | C414 |
| | C ceramic DD09]63B222K500V | C415 |
| | C electro CE04 100V 10 (M) | C416 |
| | C electro CE04 35V 220 (M) | C417 |
| | C electro CE04 160V 22 (M) | C418 |
| | C ceramic DD09-63B222K500V | C419 |
| | C electro CE04 25V 10 (M) | C501 |
| | C electro CE04 25V 10 (M) | C502 |
| | C electro CE04 50V 1 (M) | C503 |
| | C ceramic DD105-63E222P50V | C504 |
| | C electro CE04 50V 1 (M) | C505 |
| | C polyester DEP 50V 473K | C506 |
| | C polyester DEP 50V 473K | C507 |
| | C polypro DTW100V 562-G | C508 |
| | C electro CE04 50V 1 (M) | C510 |
| | C electro CE04 16V 220 (M) | C511 |

| <u>Part No.</u> | <u>Description</u> | <u>Ref Des.</u> |
|-------------------|----------------------------------|-----------------|
| Capacitors (Cont) | C ceramic DD05-63B561K500V | C512 |
| | C ceramic DD10 63E472P500V | C513 |
| | C ceramic DE1510R 222K | C514 |
| | C ceramic DE1510R 222K | C515 |
| | C ceramic DE1410R 182K | C516 |
| | C ceramic DE1110R 821K | C517 |
| | C ceramic DD104-63B821K 50V | C518 |
| | C polypro DTW200VDC 0.47 uf M | C520 |
| | C electro CE04 50V 47 (M) | C523 |
| | C electro CE04 160V 47 (M) | C524 |
| | C ceramic DD09-63B222K500V | C525 |
| | C electro CE04 160V 1 (M) | C526 |
| | C electro CE04 160V 10 (M) | C527 |
| | C polypro DTW630VDC 0.01 uf - M | C528 |
| | C electro CE04 25V 10 (M) | C529 |
| | C polypro UL LHX125VAC 0.1 uf | C901 |
| | C ceramic MVDE0807E222ZAC250V | C902 |
| | C ceramic MVDE0807E222ZAC250V | C903 |
| | C ceramic DD09-63B 22K 500V | C904 |
| | C electro RPE 180V (30o) 680 (M) | C905 |
| | C electro CE04 160V 22 (M) | C906 |
| | C ceramic DD05-63B 221K 500V | C907 |
| Coils | | |
| 180-0033 | L choke | L401 |
| 181-0034 | L choke | L501 |
| 180-0032 | L choke | L502 |
| 181-0033 | L linear | L503 |
| 181-0032 | L size | L504 |
| 180-0031 | L choke | L505 |
| 180-0030 | L choke | L506 |
| 180-0029 | L choke | L507 |
| 180-0028 | L choke | L901 |

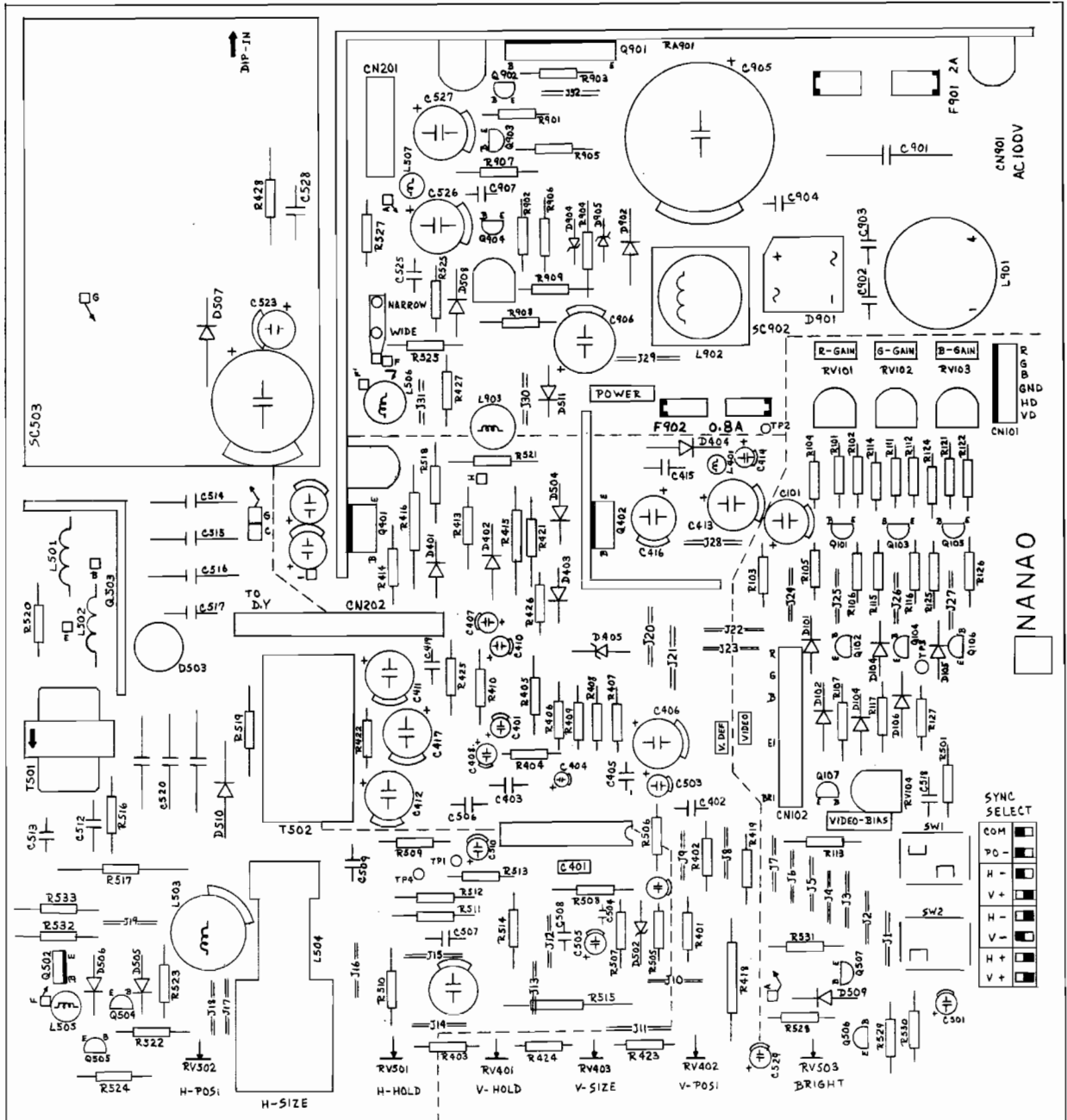
| <u>Part No.</u> | <u>Description</u> | <u>Ref Des.</u> |
|-----------------|--------------------|-----------------|
| 180-0027 | L choke | L902 |
| 180-0026 | L choke | L903 |
| Transformers | | |
| 560-0102 | T H drive | T501 |
| 560-0101 | T pin corr | T502 |
| 560-0100 | T FBT MSH1FAC02 | T503 |
| Diodes | | |
| 481-0164 | Diode 1S1588 | D101 |
| 481-0164 | Diode 1S1588 | D102 |
| 481-0164 | Diode 1S1588 | D103 |
| 481-0164 | Diode 1S1588 | D104 |
| 481-0164 | Diode 1S1588 | D105 |
| 481-0164 | Diode 1S1588 | D106 |
| 481-0164 | Diode 1S1588 | D401 |
| 481-0234 | Diode 1S1886 | D402 |
| 481-0175 | Diode 1S2076A | D403 |
| 481-0119 | Diode RU2 | D404 |
| 481-0233 | Diode EQA01-24 | D405 |
| 481-0164 | Diode 1S1588 | D501 |
| 481-0137 | D zener EQA01-07S | D502 |
| 481-0164 | Diode 1S1588 | D504 |
| 481-0175 | Diode 1S2076A | D505 |
| 481-0175 | Diode 1S2067A | D506 |
| 481-0119 | Diode RU2 | D507 |
| 481-0232 | Diode S5295G | D508 |
| 481-0164 | Diode 1S1588 | D509 |
| 481-0232 | Diode S5295G | D510 |
| 481-0164 | Diode 1S1588 | D511 |
| 481-0137 | Diode EQA01-07S | D512 |
| 481-0235 | D bridge 3D4B41 | D901 |
| 481-0119 | Diode RU2 | D902 |
| 481-0137 | D zener EQA01-07S | D904 |

| <u>Part No.</u> | <u>Description</u> | <u>Ref Des.</u> |
|-----------------|--------------------|-----------------|
| 481-0137 | D zener EQA01-07S | D905 |
| Transistors | | |
| 482-0261 | Transistor 2SC1740 | Q101 |
| 482-0261 | Transistor 2SC1740 | Q102 |
| 482-0261 | Transistor 2SC1740 | Q103 |
| 482-0261 | Transistor 2SC1740 | Q104 |
| 482-0261 | Transistor 2SC1740 | Q105 |
| 482-0261 | Transistor 2SC1740 | Q106 |
| 482-0111 | Transistor 2SA673 | Q107 |
| Miscellaneous | | |
| | Connector | CN201 |
| | Connector | CN202 |
| | Connector | CN203 |
| | Assy accord | CD901 |
| | Connector | CN901 |
| 510-0068 | Switch SSA042 | SW1 |
| 510-0068 | Switch SSA042 | SW2 |
| | Pin terminal | TP1 |
| | Pin terminal | TP2 |
| | Pin terminal | TP3 |
| | Pin terminal | TP4 |
| Transistors | | |
| 482-0276 | Transistor 2SD1138 | Q401 |
| 482-0276 | Transistor 2SD1138 | Q402 |
| 482-0261 | Transistor 2SC1740 | Q501 |
| 482-0257 | Transistor 2SC2688 | Q502 |
| 482-0198 | Transistor 2SD870 | Q503 |
| 482-0201 | Transistor 2SD763 | Q504 |
| 482-0201 | Transistor 2SD763 | Q505 |
| 482-0111 | Transistor 2SA673 | Q506 |
| 482-0111 | Transistor 2SA673 | Q507 |
| | Transistor 2SC2555 | Q901 |

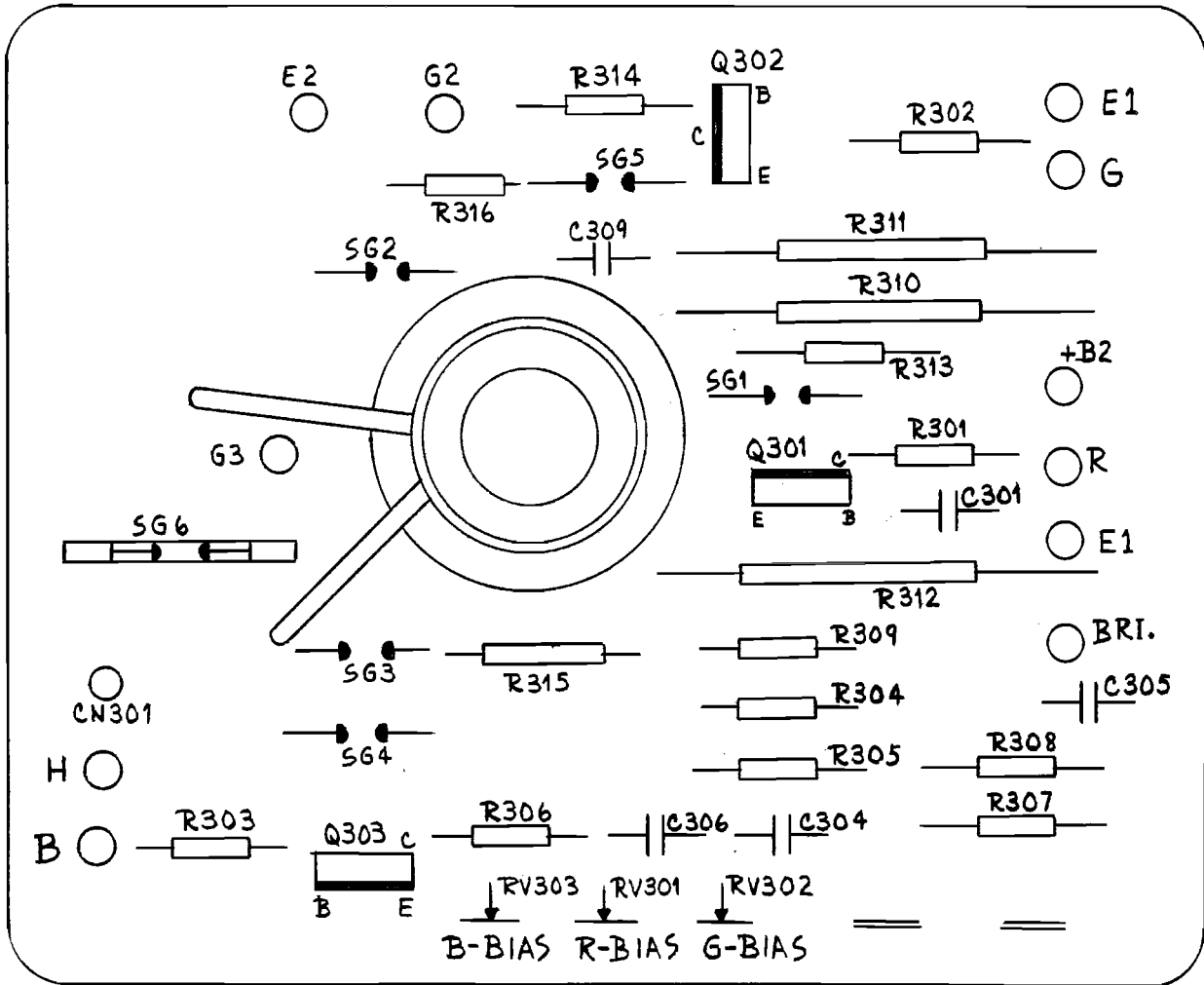
| <u>Part No.</u> | <u>Description</u> | <u>Ref. Des.</u> |
|-----------------|--------------------------|------------------|
| 482-0273 | Transistor 2SA1091 | Q902 |
| 482-0167 | Transistor 2SC2482 | Q903 |
| 482-0167 | Transistor 2SC2482 | Q904 |
| Miscellaneous | | |
| 313-0051 | I C HA11235 | IC401 |
| | Connector | CN101 |
| | Connector | CN102 |
| | Fuse | F901 |
| | Fuse clip | CF901 |
| | Fuse | |
| | Fuse clip | |
| | Shield case | |
| 560-0098 | Assy tr (v-out) | |
| 560-0099 | Assy tr (h-out) | |
| 200-0081 | Assy radiator A | |
| NECK BOARD PCB | | |
| Resistors | | |
| | R carbon 1/4 sb 220 Ohm | R301 |
| | R carbon 1/4 sb 220 Ohm | R302 |
| | R carbon 1/4 sb 220 Ohm | R303 |
| | R carbon 1/4 sb 1.2K Ohm | R304 |
| | R carbon 1/4 sb 1.2K Ohm | R305 |
| | R carbon 1/4 sb 1.2K Ohm | R306 |
| | R carbon 1/4 sb 330 Ohm | R307 |
| | R carbon 1/4 sb 330 Ohm | R308 |
| | R carbon 1/4 sb 330 Ohm | R309 |
| | R metal 8.2K Ohm | R310 |
| | R metal 8.2K Ohm | R311 |
| | R metal 8.2K Ohm | R312 |
| | R solid 1/2 2.2K Ohm | R313 |
| | R solid 1/2 2.2K Ohm | R314 |
| | R solid 1/2 2.2K Ohm | R315 |

| <u>Part No.</u> | <u>Description</u> | <u>Ref. Des.</u> |
|------------------|-----------------------------------|------------------|
| Resistors (cont) | R solid 1/2 1M Ohm | R316 |
| | R variable RVA0911H-306-1 5K Ohm | RV301 |
| | R variable RVA0911H-306-2 5K Ohm | RV302 |
| | R variable RVA0911H-306-3 5K Ohm | RV303 |
| | R variable RVA0911H-306-7 220 Ohm | RV304 |
| | R variable RVA0911H-306-7 220 Ohm | RV305 |
| Capacitors | | |
| | C ceramic DD104-63B 271K 50V | C304 |
| | C ceramic DD104-63B 271K 50V | C305 |
| | C ceramic DD104-63B 271K 50V | C306 |
| | C ceramic DE0705-B 102K 1KV | C309 |
| Transistors | | |
| 482-0257 | Transistor 2SC2688 | Q301 |
| 482-0257 | Transistor 2SC2688 | Q302 |
| 482-0257 | Transistor 2SC2688 | Q303 |

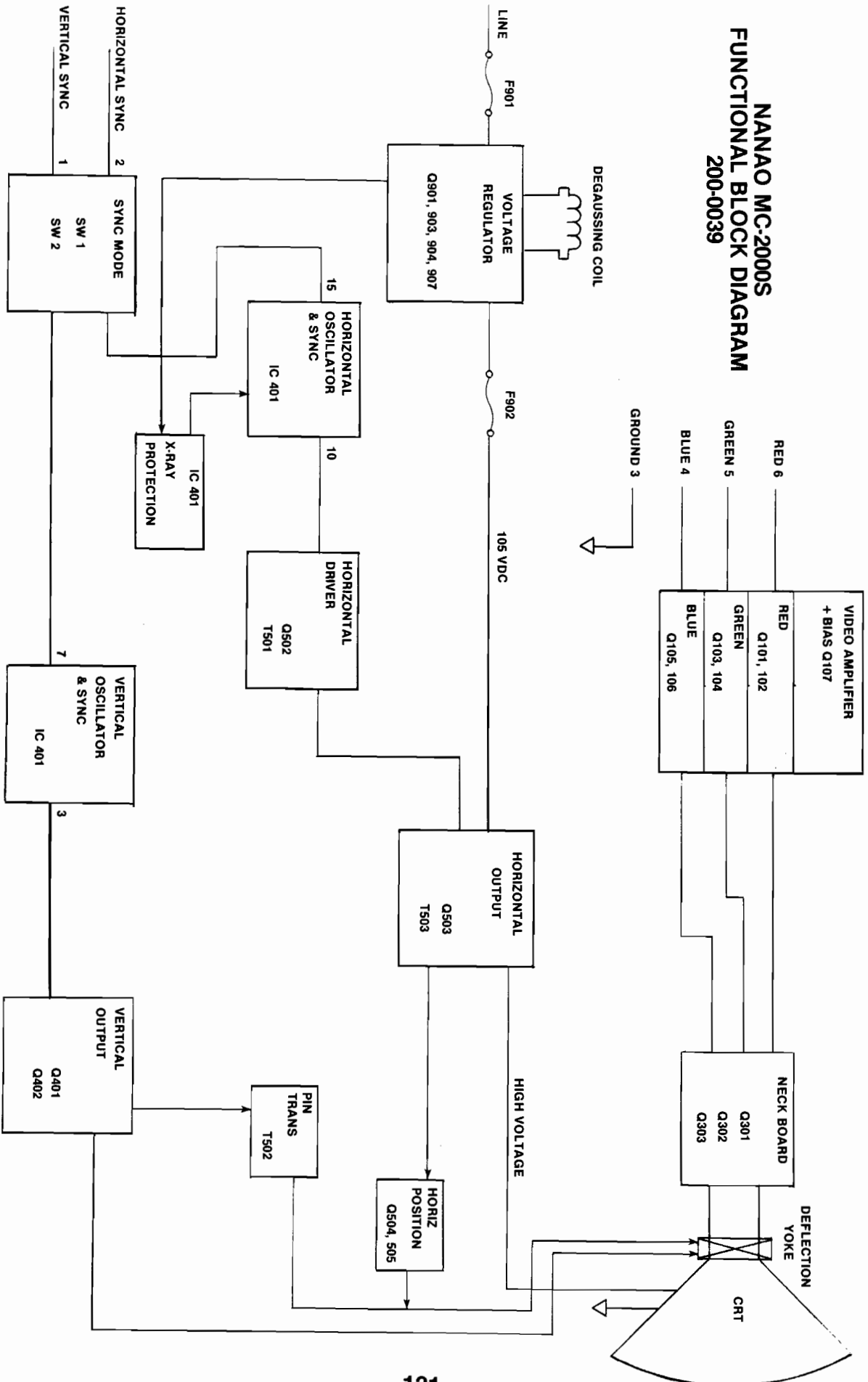
ASSY MAIN PC BOARD, NANA0-200 0039



ASSY, NECKBOARD
NANA0 200 0039



NANA0 MC-2000S FUNCTIONAL BLOCK DIAGRAM 200-0039



MAIN BOARD

| <u>ITEM NO.</u> | <u>PART NO.</u> | <u>DESCRIPTION</u> | <u>REF. DESG.</u> |
|-----------------|-----------------|----------------------------|-------------------|
| CAPACITORS | | | |
| 1 | | 1000 uF, 16V, Electrolytic | C201 |
| 2 | | 330 pF, 500V, Ceramic | C202 |
| 3 | | 220 pF, 500V, Ceramic | C203 |
| 4 | | 220 pF, 500V, Ceramic | C204 |
| 5 | | 470 uF, 16V, Electrolytic | C205 |
| 6 | | 0.1 uF, 125V Mylar | C206 |
| 7 | | .022 uF, 100V Mylar | C207 |
| 8 | | 330 uF, 50V Electrolytic | C301 |
| 9 | | 0.033 uF, 50V Mylar | C302 |
| 10 | | 3.3 uF, 50V Electrolytic | C303 |
| 11 | | 0.068 pF, 50V Mylar | C304 |
| 12 | | 2.2 uF, 16V Tantal | C306 |
| 13 | | 0.033 uF, 50V Mylar | C307 |
| 14 | | 3.3 uF, 50V Electrolytic | C308 |
| 15 | | 0.068 uF, 100V PP | C309 |
| 16 | | 10 uF, 100V Electrolytic | C310 |
| 17 | | 10 uF, 160V Electrolytic | C311 |
| 18 | | 1000 pF, 500V Ceramic | C312 |
| 19 | | 47 uF, 160V Electrolytic | C313 |
| 20 | | 0.033 uF, 200V PP | C314 |
| 21 | | 1 uF, 50V Electrolytic | C315 |
| 22 | | 1 uF, 50V Electrolytic | C351 |
| 23 | | 47 uF, 25V Electrolytic | C352 |
| 24 | | 0.0082 pF, 50V Mylar-PP | C353 |
| 25 | | 47 uF, 25V Electrolytic | C354 |
| 26 | | 0.0068 pF, 50V Mylar | C355 |
| 27 | | 0.01 uF, 500V Ceramic | C356 |
| 28 | | 100 pF, 500V Ceramic | C359 |
| 29 | | 0.0033 pF, 500V Ceramic | C360 |

MAIN BOARD

| <u>ITEM NO.</u> | <u>PART NO.</u> | <u>DESCRIPTION</u> | <u>REF. DESG.</u> |
|-----------------|-----------------|---------------------------|-------------------|
| CAPACITORS | | | |
| 30 | | 0.01 uF, 500V Ceramic | C361 |
| 31 | | 0.01 uF, 50V Ceramic | C362 |
| 32 | | 8700 pF, 1.5 KV PP | C363 |
| 33 | | 0.33 uF, 200V PP | C365 |
| 34 | 150-0074 | 22 uF, 25V Electrolytic | C366 |
| 35 | | 6 uF, 500V Ceramic | C367 |
| 36 | | 0.01 uF, 50V Ceramic | C368 |
| 37 | | 0.1 uF, 100V PP | C372 |
| 38 | | 470 uF, 500V Ceramic | C380 |
| 39 | | 0.1 uF, 125V Mylar | C501 |
| 40 | | 1500 pF, 500V Ceramic | C502 |
| 41 | | 2200 pF, 125V Ceramic | C503 |
| 42 | | 2200 pF, 125V Ceramic | C504 |
| 43 | | 560 uF, 200V Electrolytic | C505 |
| 44 | | 22 uF, 160V Electrolytic | C506 |
| 45 | | 47 uF, 160V Electrolytic | C507 |
| 46 | | 1000 uF, 25V Electrolytic | C701 |
| 47 | | 10 uF, 100V Electrolytic | C702 |
| 48 | | 1000 pF, 500V Ceramic | C703 |

MAIN BOARD

| <u>ITEM NO.</u> | <u>PART NO.</u> | <u>DESCRIPTION</u> | <u>REF. DESG.</u> |
|-----------------|-----------------|---------------------------|-------------------|
| RESISTORS | | | |
| 1 | | 1K Ohm, 5%, 1/4W Carbon | R201 |
| 2 | | 30 Ohm, 5%, 1/4W Carbon | R202 |
| 3 | | 100 Ohm, 5%, 1/4W Carbon | R203 |
| 4 | | 100 Ohm, 5%, 1/2W Carbon | R204 |
| 5 | | 270 Ohm, 5%, 1/2W Carbon | R205 |
| 6 | | 390 Ohm, 5%, 1/4W Carbon | R206 |
| 7 | | 200 Ohm, 5%, 1/4W Carbon | R207 |
| 8 | | 390 Ohm, 5%, 1/4W Carbon | R208 |
| 9 | | 200 Ohm, 5%, 1/4W Carbon | R209 |
| 10 | | 390 Ohm, 5%, 1/4W Carbon | R210 |
| 11 | | 200 Ohm, 5%, 1/4W Carbon | R211 |
| 12 | | 1K Ohm, 5%, 1/4W Carbon | R214 |
| 13 | | 100K Ohm, 5%, 1/4W Carbon | R215 |
| 14 | | 1K Ohm, 5%, 1/4W Carbon | R216 |
| 15 | | 100 Ohm, 5%, 1/4W Carbon | R217 |
| 16 | | 1K Ohm, 5%, 1/4W Carbon | R218 |
| 17 | | 100K Ohm, 5%, 1/4W Carbon | R219 |
| 18 | | 1K Ohm, 5%, 1/4W Carbon | R220 |
| 19 | | 100 Ohm, 5%, 1/4W Carbon | R221 |
| 20 | | 3.3 Ohm, 5%, 1/4W Carbon | R222 |
| 21 | | 10 Ohm, 5%, 1/4W Carbon | R224 |
| 22 | | 10 Ohm, 5%, 1/4W Carbon | R225 |
| 23 | | 10 Ohm, 5%, 1/4W Carbon | R226 |
| 24 | | 47K Ohm, 5%, 1/4W Carbon | R227 |
| 25 | | 1K Ohm, 5%, 1/4W Carbon | R228 |
| 26 | | 270 Ohm, 5%, 1/2W Carbon | R229 |
| 27 | | 8.2K Ohm, 5%, 1/2W Comp. | R230 |
| 28 | | 8.2K Ohm, 5%, 1/2W Comp. | R231 |
| 29 | | 8.2K Ohm, 5%, 1/2W Comp. | R232 |

MAIN BOARD

| <u>ITEM NO.</u> | <u>PART NO.</u> | <u>DESCRIPTION</u> | <u>REF. DESG.</u> |
|-----------------|-----------------|---------------------------|-------------------|
| RESISTORS | | | |
| 30 | | 180 Ohm, 5%, 1/4W Carbon | R233 |
| 31 | | 82 Ohm, 5%, 1/4W Carbon | R234 |
| 32 | | 82 Ohm, 5%, 1/4W Carbon | R235 |
| 33 | | 82 Ohm, 5%, 1/4W Carbon | R236 |
| 34 | | 270 Ohm, 5%, 1/4W Carbon | R301 |
| 35 | | 8.2K Ohm, 5%, 1/4W Carbon | R302 |
| 36 | | 8.2K Ohm, 5%, 1/4W Carbon | R303 |
| 37 | | 2.2K Ohm, 5%, 1/4W Carbon | R304 |
| 38 | | 6.8K Ohm, 5%, 1/4W Carbon | R305 |
| 39 | | 7.5K Ohm, 2%, 1/4W Carbon | R306 |
| 40 | | 5.6K Ohm, 5%, 1/4W Carbon | R307 |
| 41 | | 22K Ohm, 5%, 1/4W Carbon | R309 |
| 42 | | 39K Ohm, 5%, 1/4W Carbon | R310 |
| 43 | | 3.3K Ohm, 5%, 1/4W Carbon | R311 |
| 44 | | 4.7K Ohm, 5%, 1/4W Carbon | R312 |
| 45 | | 1K Ohm, 5%, 5W Carbon | R313 |
| 46 | | 220 Ohm, 5%, 1/4W Carbon | R314 |
| 47 | | 10 Ohm, 5%, 1/4W Carbon | R315 |
| 48 | | 3.3K Ohm, 5%, 1/4W Carbon | R316 |
| 49 | | 12 Ohm, 5%, 1/2W Carbon | R317 |
| 50 | | 390 Ohm, 5%, 1/4W Carbon | R318 |
| 51 | | 1K Ohm, 5%, 1/4W Carbon | R319 |
| 52 | | 33K Ohm, 5%, 1/4W Carbon | R320 |
| 53 | | 270K Ohm, 5%, 1/2W Carbon | R321 |
| 54 | | 10K Ohm, 5%, 1/4W Carbon | R322 |
| 55 | | 10K Ohm, 5%, 1/4W Carbon | R351 |
| 56 | | 3.9K Ohm, 5%, 1/4W Carbon | R352 |
| 57 | | 68K Ohm, 5%, 1/4W Carbon | R353 |
| 58 | | 3.3K Ohm, 5%, 1/4W Carbon | R354 |

MAIN BOARD

| <u>ITEM NO.</u> | <u>PART NO.</u> | <u>DESCRIPTION</u> | <u>REF. DESG.</u> |
|-----------------|-----------------|------------------------------|-------------------|
| RESISTORS | | | |
| 59 | | 6.8K Ohm, 5%, 3W Metal Oxide | R355 |
| 60 | | 56K Ohm, 5%, 1/2W Carbon | R358 |
| 61 | | 470 Ohm, 5%, 1/4W Carbon | R360 |
| 62 | | 10K Ohm, 5%, 1/4W Carbon | R361 |
| 63 | | 1.8K Ohm, 5%, 1W Metal Oxide | R362 |
| 64 | | 3.9K Ohm, 5%, 7W Metal Oxide | R363 |
| 65 | | 22 Ohm, 5%, 1/4W Carbon | R364 |
| 66 | | 33K Ohm, 5%, 1/4W Carbon | R365 |
| 67 | | 10K Ohm, 5%, 1/4W Carbon | R367 |
| 68 | | 330K Ohm, 5%, 1/2W Comp. | R368 |
| 79 | | 680K Ohm, 5%, 1/2W Comp. | R369 |
| 70 | | 33K Ohm, 5%, 1/4W Carbon | R370 |
| 71 | | 1K Ohm, 5%, 1W Metal Oxide | R371 |
| 72 | | 12K Ohm, 5%, 1W Metal Oxide | R372 |
| 73 | | 6.8K Ohm, 5%, 1/2W Carbon | R375 |
| 74 | | 270 Ohm, 5%, 2W Metal Oxide | R376 |
| 75 | | 150 Ohm, 5%, 1/4W Carbon | R377 |
| 76 | | 10K Ohm, 5%, 1/4W Carbon | R378 |
| 77 | | 10K Ohm, 5%, 1/4W Carbon | R379 |
| 78 | | 8.2K Ohm, 5%, 1/4W Carbon | R380 |
| 79 | | 2.2K Ohm, 5%, 1W Metal Oxide | R381 |
| 80 | | 150 Ohm, 5%, 1W Metal Oxide | R383 |
| 81 | | 10K Ohm, 5%, 1/4W Carbon | R502 |
| 82 | | 150 Ohm, 5%, 15W Metal Oxide | R503 |
| 83 | | 47 Ohm, 5%, 1W Metal Oxide | R504 |
| 84 | | 2.2K Ohm, 5%, 1/4W Carbon | R505 |
| 85 | | 15 Ohm, 5%, 2W Metal Oxide | R506 |
| 86 | | 330K Ohm, 5%, 1/2W Comp. | R507 |
| 87 | | 3.3 Ohm, 5%, 10W WW | R601 |

MAIN BOARD

| <u>ITEM NO.</u> | <u>PART NO.</u> | <u>DESCRIPTION</u> | <u>REF. DESG.</u> |
|-----------------|-----------------|-----------------------------|-------------------|
| RESISTORS | | | |
| 88 | | 2.2 Ohm, 5%, 2W Metal Oxide | R701 |
| 89 | | 2.2 Ohm, 5%, 1/2W Carbon | R702 |
| 90 | | 2K Ohm-B Semi-Fixed | VR201 |
| 91 | | 5K Ohm-B Semi-Fixed | VR301 |
| 92 | | 500 Ohm-B Semi-Fixed | VR303 |
| 93 | | 2K Ohm-B Semi-Fixed | VR351 |
| 94 | | 2K Ohm-B Semi-Fixed | VR352 |

MAIN BOARD

| <u>ITEM NO.</u> | <u>PART NO.</u> | <u>DESCRIPTION</u> | <u>REF. DESG.</u> |
|-----------------|-----------------|------------------------------|-------------------|
| SEMI CONDUCTORS | | | |
| 1 | 481-0175 | Diode, IS2076-27 | D203 |
| 2 | 481-0175 | Diode, IS2076-27 | D204 |
| 3 | 481-0175 | Diode, IS2076-27 | D205 |
| 4 | 481-0175 | Diode, IS2076-27 | D206 |
| 5 | 481-0175 | Diode, IS2076-27 | D207 |
| 6 | 481-0175 | Diode, IS2076-27 | D208 |
| 7 | 481-0175 | Diode, IS2076-27 | D209 |
| 8 | 481-0219 | Diode, ISS81 | D301 |
| 9 | 481-0175 | Diode, IS2076-27 | D302 |
| 10 | 481-0175 | Diode, IS2076-27 | D303 |
| 11 | 481-0244 | Diode, RH-IV | D304 |
| 12 | 481-0244 | Diode, RH-IV | D305 |
| 13 | 481-0175 | Diode, IS2076-27 | D306 |
| 14 | 481-0245 | Diode, RM-1AV | D501 |
| 15 | 481-0245 | Diode, RM-1AV | D502 |
| 16 | 481-0245 | Diode, RM-1AV | D503 |
| 17 | 481-0245 | Diode, RM-1AV | D504 |
| 18 | 481-0245 | Diode, RM-1AV | D505 |
| 19 | 481-0245 | Diode, RM-1AV | D506 |
| 20 | 481-0217 | Diode, RU-2V | D701 |
| 21 | 481-0244 | Diode, RH-IV | D702 |
| 22 | 482-0160 | Transistor (NPN) 2SC1815GR | Q201 |
| 23 | 482-0160 | Transistor (NPN) 2SC1815GR | Q202 |
| 24 | 482-0301 | Transistor (PNP) 2SA562-Y-TM | Q203 |
| 25 | 482-0301 | Transistor (PNP) 2SA562-Y-TM | Q204 |
| 26 | 482-0301 | Transistor (PNP) 2SA562-Y-TM | Q205 |
| 27 | 482-0160 | Transistor (NPN) 2SC1815GR | Q206 |
| 28 | 482-0160 | Transistor (NPN) 2SC1815GR | Q207 |
| 29 | 482-0160 | Transistor (NPN) 2SC1815GR | Q208 |

MAIN BOARD

| <u>ITEM NO.</u> | <u>PART NO.</u> | <u>DESCRIPTION</u> | <u>REF. DESG.</u> |
|-----------------|-----------------|-------------------------------|-------------------|
| SEMICONDUCTORS | | | |
| 30 | 482-0302 | Transistor (NPN) 2SC1851GR | Q209 |
| 31 | 482-0302 | Transistor (NPN) 2SC1851GR | Q210 |
| 32 | 482-0302 | Transistor (NPN) 2SC1851GR | Q301 |
| 33 | 482-0161 | Transistor (NPN) 2SC2073LBGL2 | Q302 |
| 34 | 482-0161 | Transistor (NPN) 2SC2073LBGL2 | Q303 |
| 35 | 482-0303 | Transistor (NPN) 2SC2482BK | Q351 |
| 36 | 482-0202 | Transistor (NPN) 2SD898B | Q352 |
| 37 | 313-0132 | IC HA11423 | IC301 |
| 38 | 313-0129 | IC STR381 | IC501 |

MAIN BOARD

| <u>ITEM NO.</u> | <u>PART NO.</u> | <u>DESCRIPTION</u> | <u>REF. DESG.</u> |
|-----------------|-----------------|-------------------------|-------------------|
| | | TRANSFORMERS & COILS | |
| 1 | 181-0035 | Coil, (RF Choke) | L351 |
| 2 | 181-0036 | Coil, Horiz., Size | L352 |
| 3 | 181-0037 | Coil, Adg. | L701 |
| 4 | 560-0121 | Transformer, Hor. Drive | T351 |
| 5 | 560-0122 | HV-Unit M-11 | T352 |

MAIN BOARD

| <u>ITEM NO.</u> | <u>PART NO.</u> | <u>DESCRIPTION</u> | <u>REF. DESG.</u> |
|-----------------|-----------------|----------------------|-------------------|
| MISCELLANEOUS | | | |
| 1 | | Fuse, 4 Amp. 125V | F501 |
| 2 | | Recap W Wire 3P-M-BG | J402 |
| 3 | | Plug, PWB 3P-J | P201 |
| 4 | | Plug, PWB 6P-Q | P202 |
| 5 | | Plug, PWB 4P-B | P401 |
| 6 | | Plug, PWB 2P-B | P501 |
| 7 | | Plug, PWB 4P-C | P601 |
| 8 | 478-0012 | Thermistor | TH501 |

MAIN BOARD

| <u>ITEM NO.</u> | <u>PART NO.</u> | <u>DESCRIPTION</u> | <u>REF. DESG.</u> |
|-----------------|-----------------|--------------------|-------------------|
|-----------------|-----------------|--------------------|-------------------|

FINAL ASSEMBLY

| | | | |
|---|----------|--------------------------------|--|
| 1 | 200-0093 | 19VLT22 Pix Tube | |
| 2 | 834-5030 | Lateral/Purity Assembly | |
| 3 | 200-0092 | Yoke Deflection | |
| 4 | 834-5031 | CRT Socket | |
| 5 | 181-0038 | Automatic Degaussing Coil Unit | |

NECK BOARD

| <u>ITEM NO.</u> | <u>PART NO.</u> | <u>DESCRIPTION</u> | <u>REF. DESG.</u> |
|-----------------|-----------------|------------------------------|-------------------|
| RESISTORS | | | |
| 1 | | 220 Ohm, 5%, 1/4W Carbon | R401 |
| 2 | | 390 Ohm, 5%, 1/4W Carbon | R402 |
| 3 | | 820 Ohm, 5%, 1/4W Carbon | R403 |
| 4 | | 220 Ohm, 5%, 1/4W Carbon | R404 |
| 5 | | 390 Ohm, 5%, 1/4W Carbon | R405 |
| 6 | | 820 Ohm, 5%, 1/4W Carbon | R406 |
| 7 | | 470 Ohm, 5%, 1/4W Carbon | R407 |
| 8 | | 270 Ohm, 5%, 1/4W Carbon | R408 |
| 9 | | 820 Ohm, 5%, 1/4W Carbon | R409 |
| 10 | | 15K Ohm, 5%, 2W M.O. Forming | R410 |
| 11 | | 15K Ohm, 5%, 2W M.O. Forming | R411 |
| 12 | | 15K Ohm, 5%, 2W M.O. Forming | R412 |
| 13 | | 2.7K Ohm, 5%, 1/2W Comp. | R413 |
| 14 | | 2.7K Ohm, 5%, 1/2W Comp. | R414 |
| 15 | | 2.7K Ohm, 5%, 1/2W Comp. | R415 |
| 16 | | 2.2 Ohm, 5%, 2W Metal Oxide | R416 |
| 17 | | 2.7K Ohm, 5%, 1/4W Carbon | R419 |
| 18 | | 2.7K Ohm, 5%, 1/4W Carbon | R420 |
| 19 | | 2.7K Ohm, 5%, 1/4W Carbon | R421 |
| 20 | | 500 Ohm, -B Semi-Fixed | VR401 |
| 21 | | 500 Ohm, -B Semi-Fixed | VR402 |
| 22 | | 5K Ohm, -B Semi-Fixed | VR403 |
| 23 | | 5K Ohm, -B Semi-Fixed | VR404 |
| 24 | | 5K Ohm, -B Semi-Fixed | VR405 |

NECK BOARD

| <u>ITEM NO.</u> | <u>PART NO.</u> | <u>DESCRIPTION</u> | <u>REF. DESG.</u> |
|-----------------|-----------------|-------------------------|-------------------|
| CAPACITORS | | | |
| 1 | | 1200 pF, 500V Ceramic | C401 |
| 2 | | 1000 pF, 500V Ceramic | C402 |
| 3 | | 1000 pF, 500V Ceramic | C403 |
| 4 | | 1500 pF, 1.5 KV Ceramic | C404 |
| 5 | | 0.01 uF, 500V Ceramic | C405 |

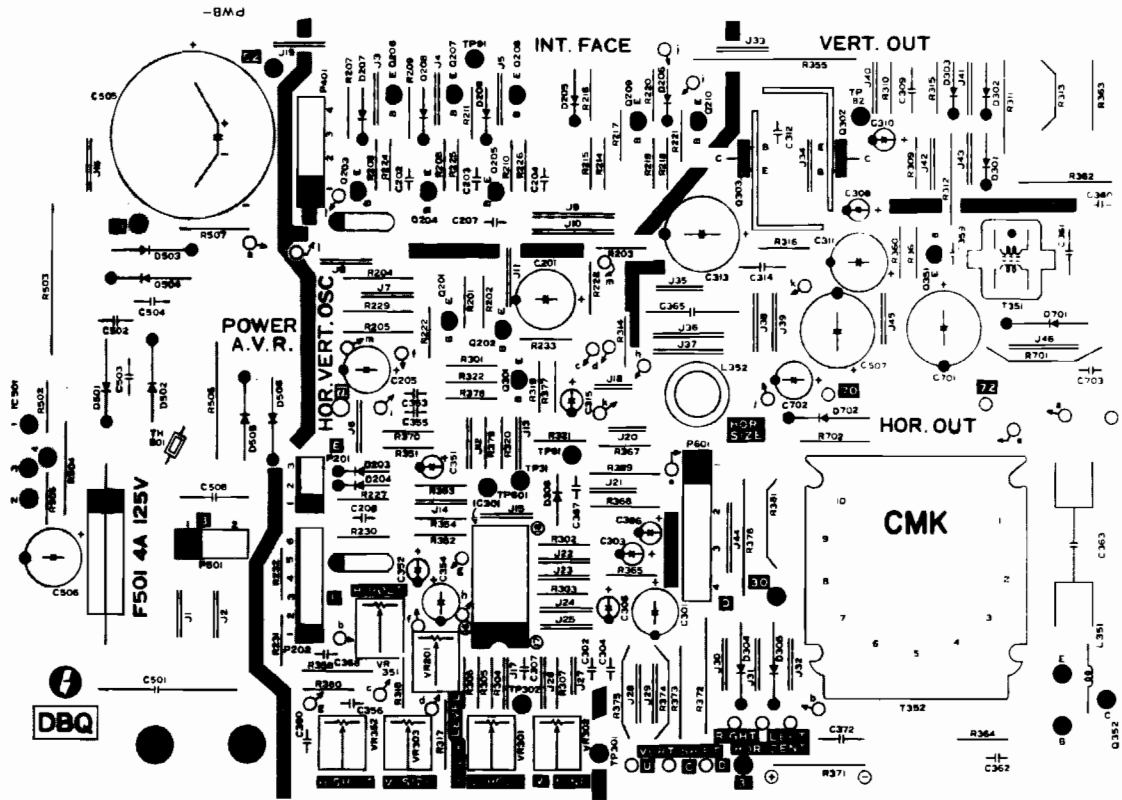
NECK BOARD

| <u>ITEM NO.</u> | <u>PART NO.</u> | <u>DESCRIPTION</u> | <u>REF. DESG.</u> |
|-----------------|-----------------|----------------------------|-------------------|
| SEMI CONDUCTORS | | | |
| 1 | 482-0304 | Transistor (NPN) 2SC2068LB | Q401 |
| 2 | 482-0304 | Transistor (NPN) 2SC2068LB | Q402 |
| 3 | 482-0304 | Transistor (NPN) 2SC2068LB | Q403 |

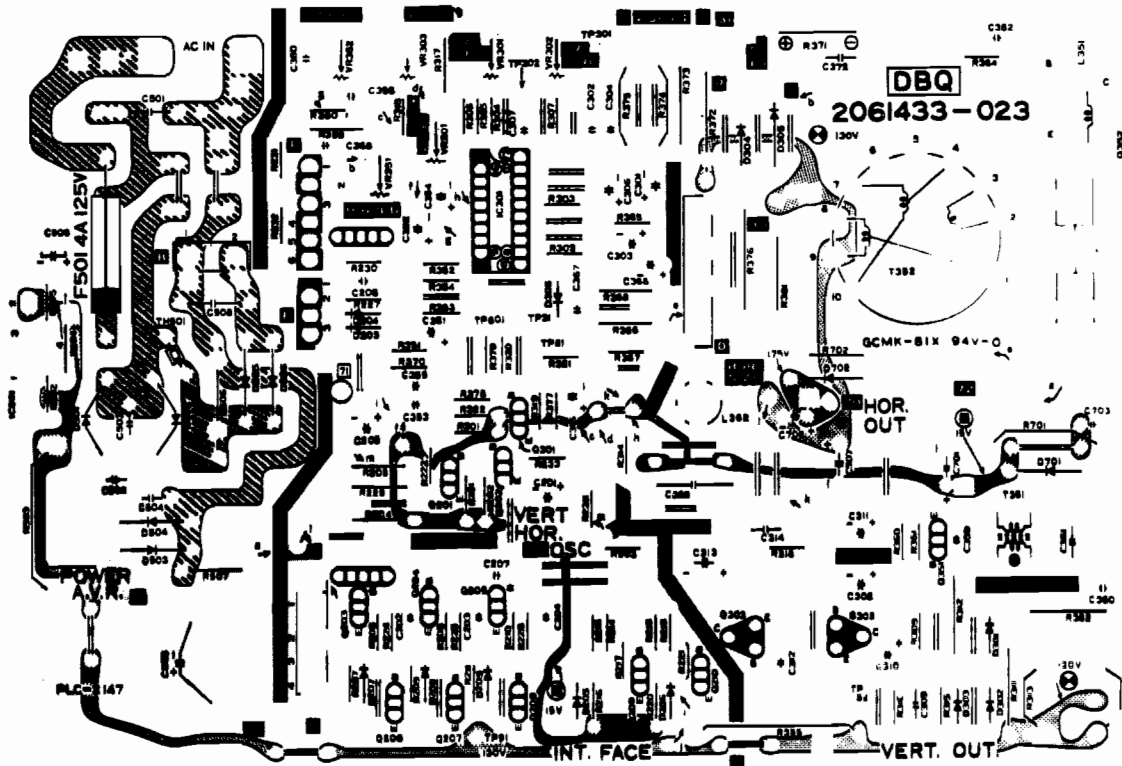
NECK BOARD

| <u>ITEM NO.</u> | <u>PART NO.</u> | <u>DESCRIPTION</u> | <u>REF. DESG.</u> |
|-----------------|-----------------|--------------------|-------------------|
| | | MISCELLANEOUS | |
| 1 | | RECEP W Wire 4P-E | J401 |
| 2 | | Plug, PWB 3P-A | P402 |
| 3 | | Plug, Pin 1P-D | P403 |
| 4 | | Plug, PWB 4P-E | P701 |

P.C. BOARD LAYOUT

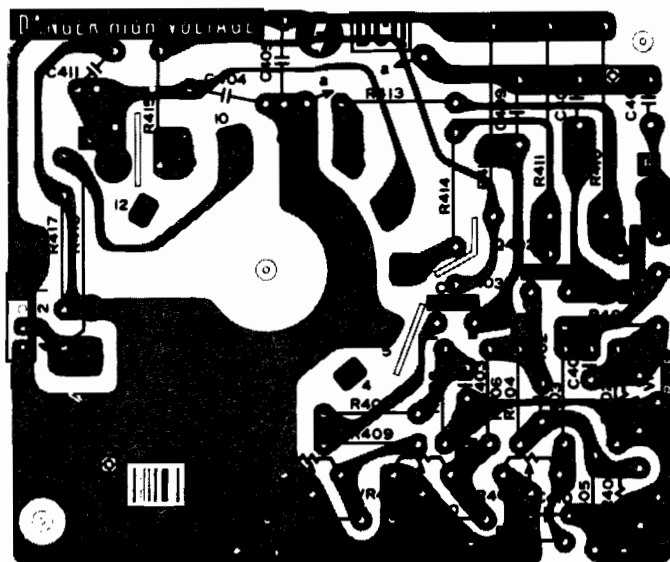


TOP VIEW

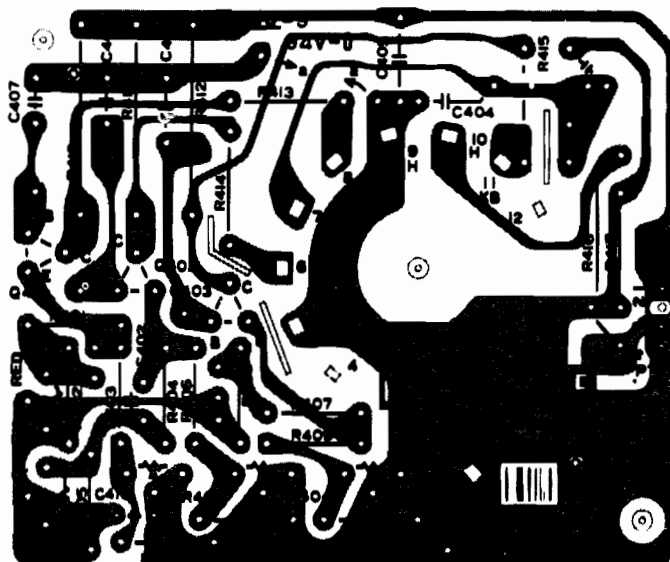


BOTTOM VIEW

P.C. BOARD LAYOUT

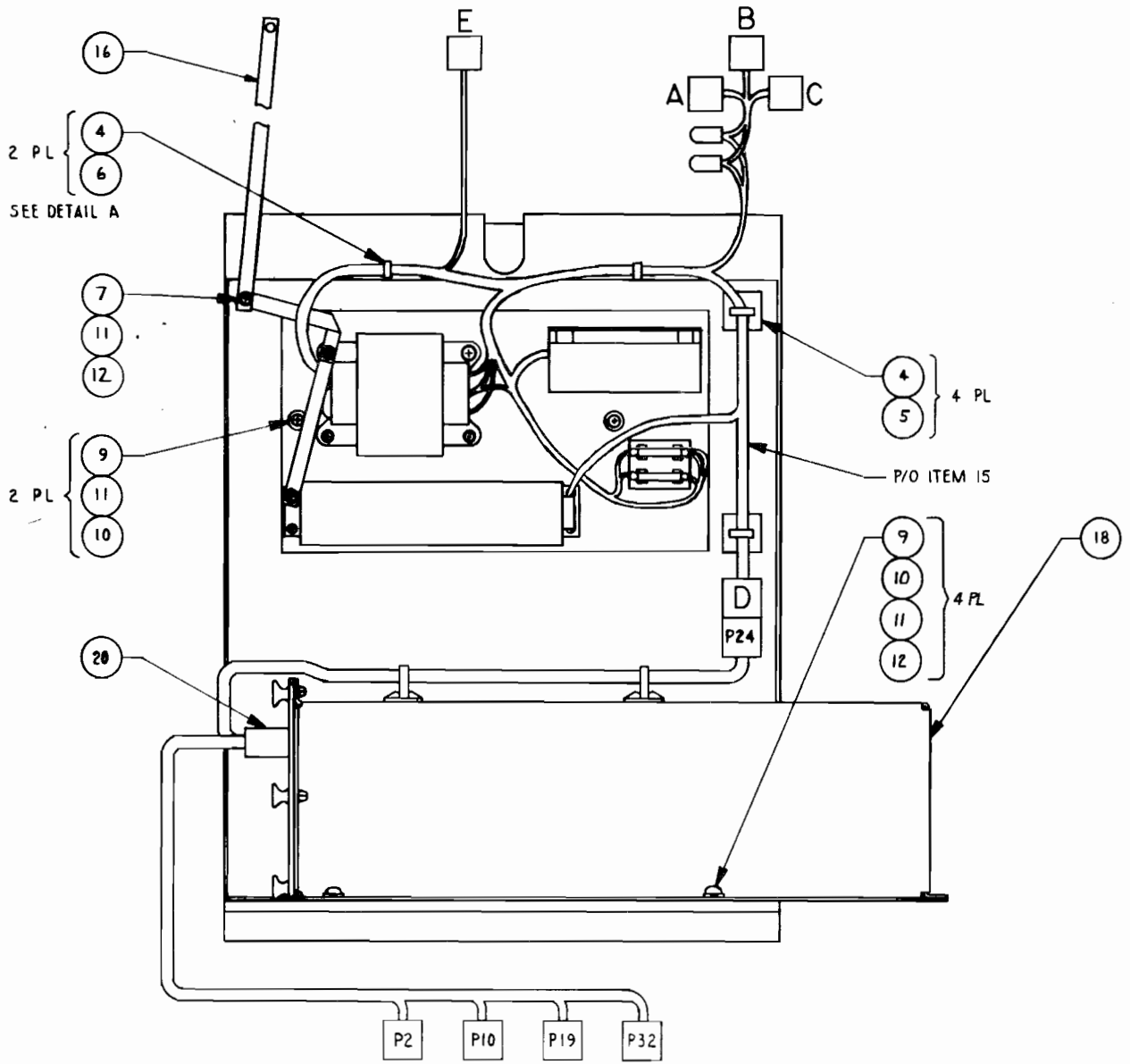


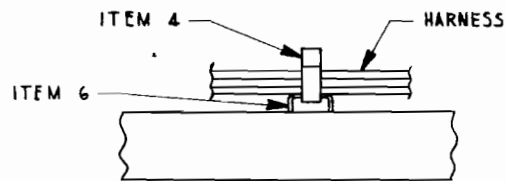
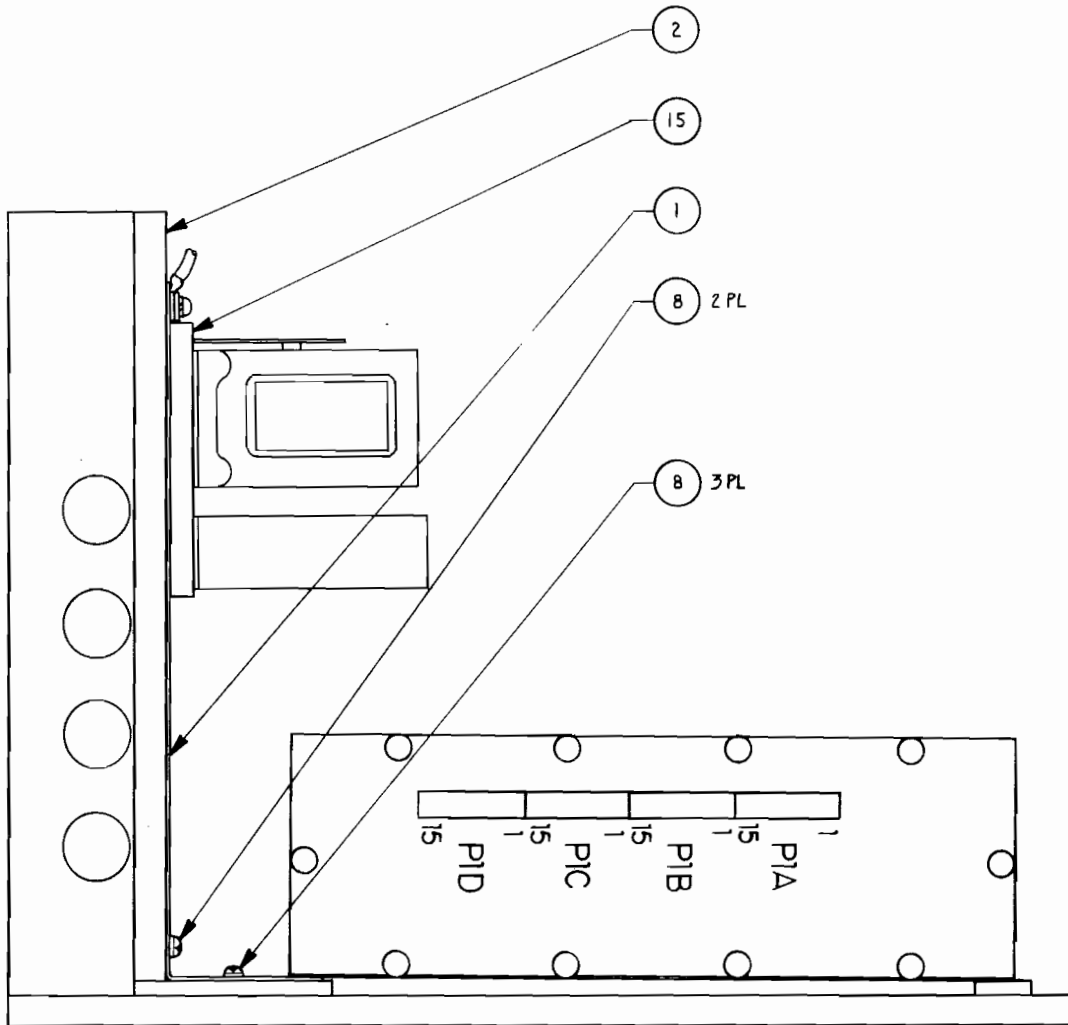
TOP VIEW



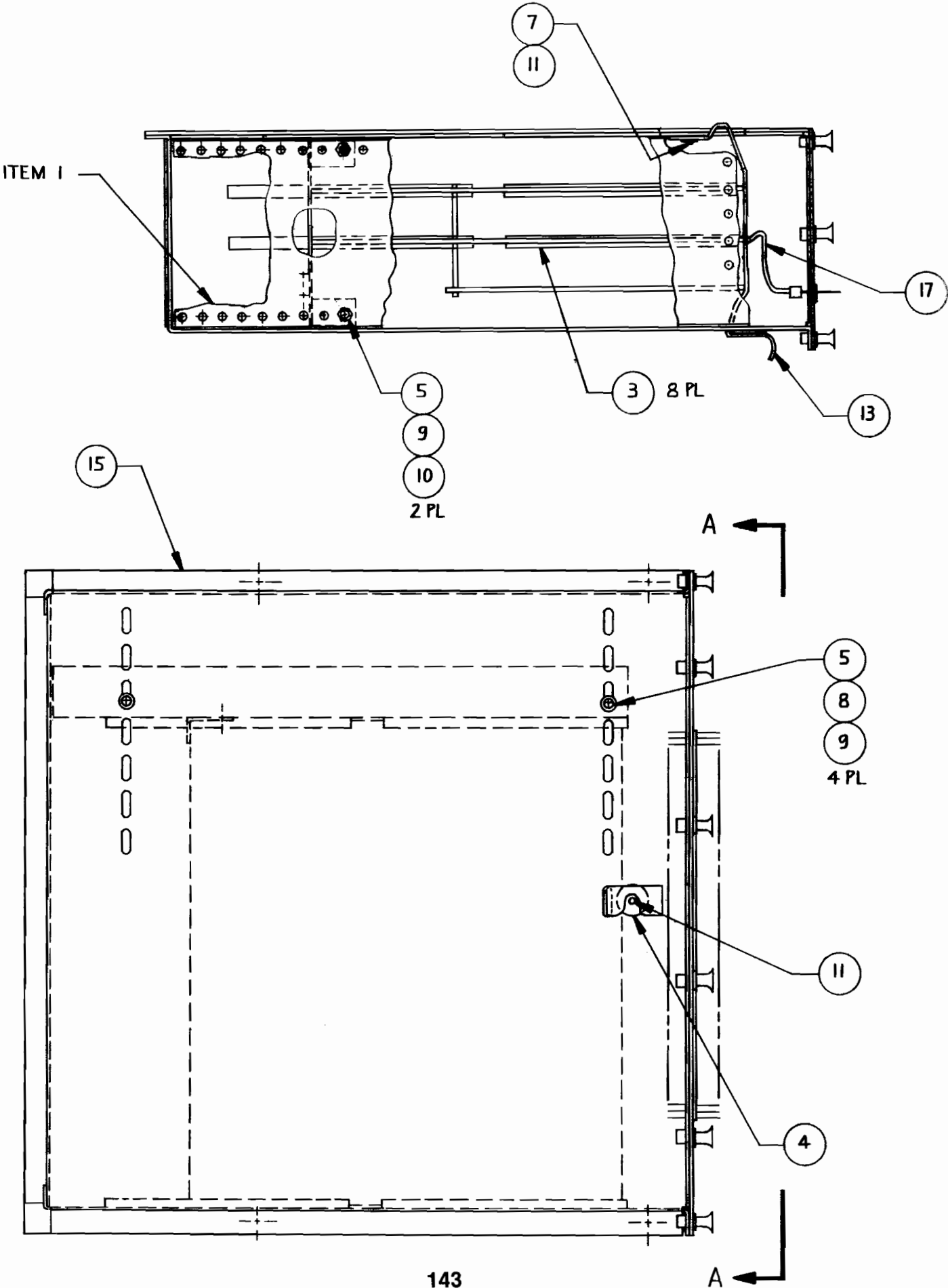
BOTTOM VIEW

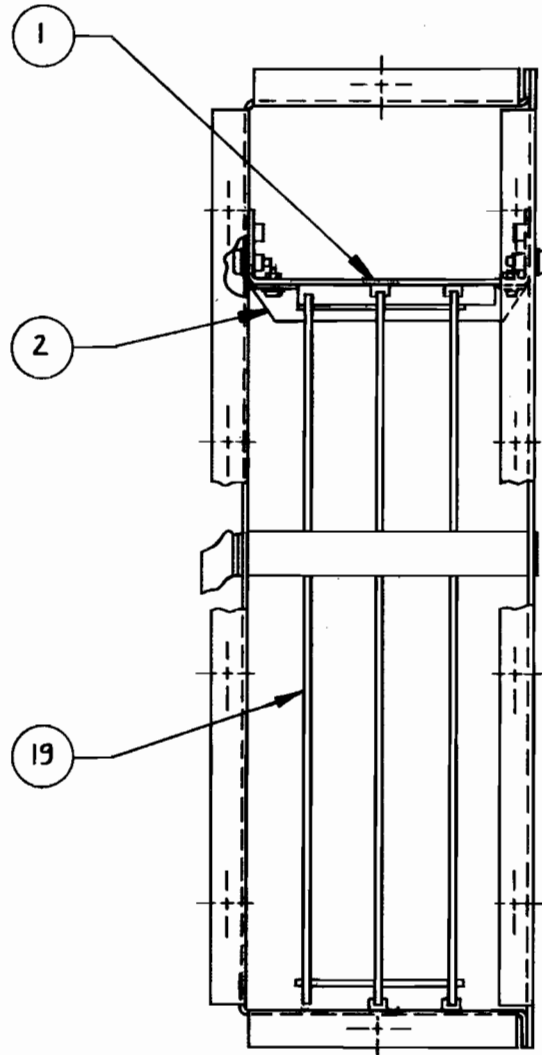
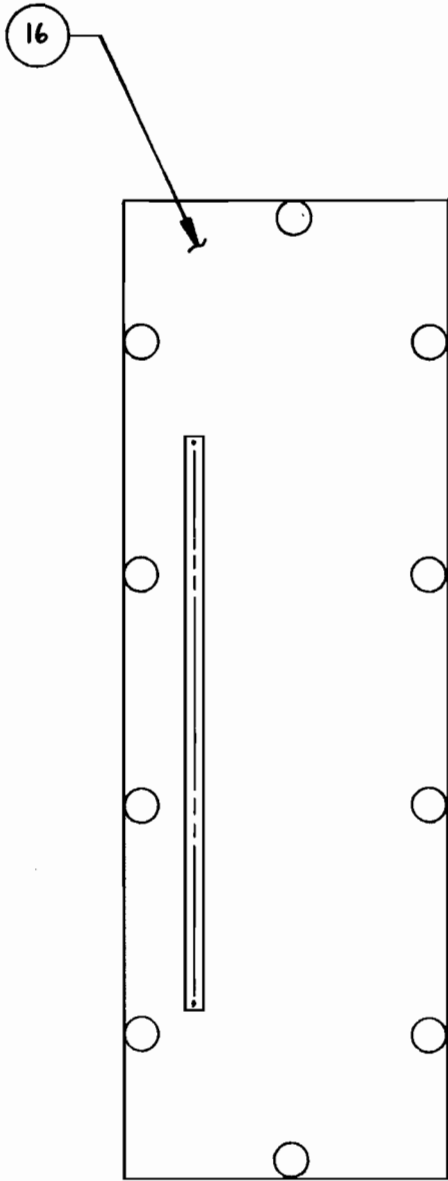
| <u>ITEM NO.</u> | <u>PART NO.</u> | <u>QTY</u> <u>REQD.</u> | <u>DESCRIPTION</u> |
|-----------------|-----------------|----------------------------|---|
| 1 | 250-0606-00 | 1 | Ground Plane |
| 2 | 252-0209-01 | 1 | Component Shelf |
| 3 | | | |
| 4 | 280-0005-00 | 6 | Cable Tie |
| 5 | 280-0327-00 | 4 | Base Tie Wrap |
| 6 | 280-0475-00 | 2 | Staple |
| 7 | 281-0045-16 | 1 | SCR #10-16 x 1.00 Pan HD Phil, Sht Mtl, Type AB |
| 8 | 281-0045-12 | 5 | SCR #10-16 x .750 Pan HD Phil, Sht Mtl, Type AB |
| 9 | 281-0045-20 | 6 | SCR #10-16 x 1.250 Pan HD Phil, Sht Mtl, Type AB |
| 10 | 283-0060-25 | 6 | Washer #10 Flat, Steel |
| 11 | 283-0061-06 | 7 | Washer #10 Lock, Split, Steel |
| 12 | 283-0060-26 | 5 | Washer #10 x .750, Flat, Steel |
| 13 | | | |
| 14 | | | |
| 15 | 800-0367-02 | 1 | Assy Power Supply |
| 16 | 800-0423-01 | 1 | Ground Strap |
| 17 | | | |
| 18 | 800-3328-00 | 1 | Assy Game Electronics |
| 19 | | | |
| 20 | 800-3316-00 | 1 | Assy Master Harness |





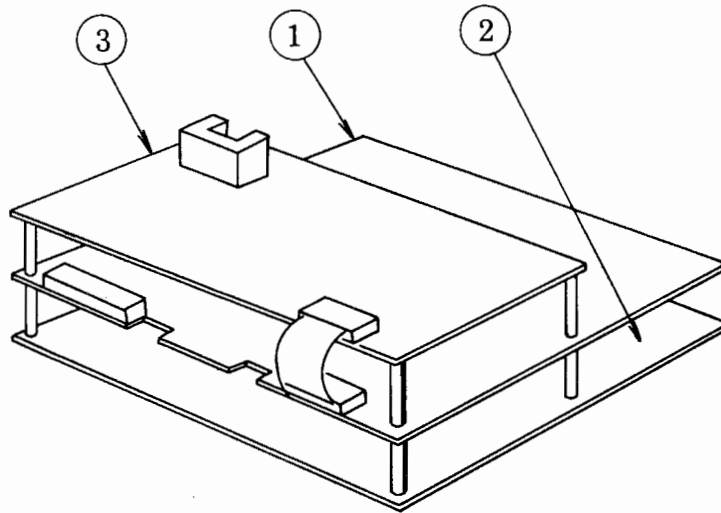
| <u>ITEM NO.</u> | <u>PART NO.</u> | <u>QTY</u> <u>REQD.</u> | <u>DESCRIPTION</u> |
|-----------------|-----------------|----------------------------|---------------------------------|
| 1 | 250-0602-00 | 1 | PCB Adjustable Channel |
| 2 | 250-0603-00 | 1 | PCB Stop Bracket |
| 3 | 253-0309-00 | 8 | Card Guide, Deep Channel |
| 4 | 280-0499-00 | 1 | Velcro Disc |
| 5 | 281-0004-05 | 6 | SCR 8-32 x .312 PN HD Phil Mach |
| 6 | | | |
| 7 | 283-0060-14 | 1 | Washer #4 Flat, Stl |
| 8 | 283-0060-22 | 4 | Washer #8 Flat, Stl |
| 9 | 283-0061-05 | 6 | Washer #8 Lock, Split, Stl |
| 10 | 283-0072-13 | 2 | Nut 8-32 Hex, Mach THD |
| 11 | 289-0003-16 | 2 | Eyelet .121 Dia x .187 Lg |
| 12 | | | |
| 13 | 320-0062-00 | .75' | Strap Velcro Loop |
| 14 | | | |
| 15 | 800-0421-00 | 1 | Welded Assy, Elec. Housing |
| 16 | 800-0422-00 | 1 | Interface Bd Assy |
| 17 | 800-3331-00 | 1 | Interface Harn Assy |
| 18 | | | |
| 19 | 834-5119-00 | 1 | IC Board Assy |





VIEW A - A
(VIEW SHOWN WITHOUT ITEM 16)

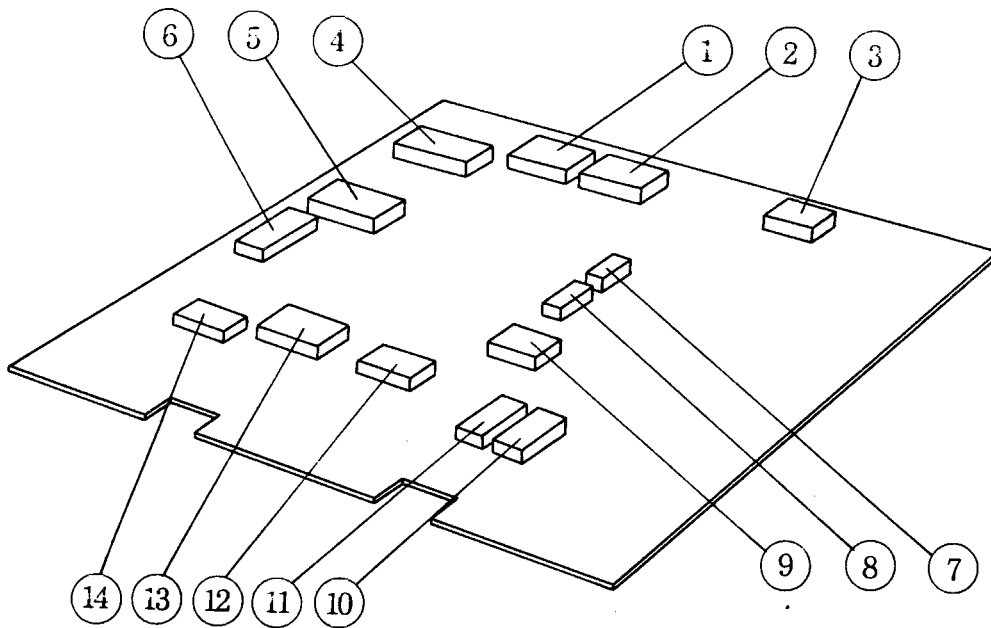
| <u>ITEM NO.</u> | <u>PART NO.</u> | QTY <u>REQD.</u> | <u>DESCRIPTION</u> |
|-----------------|-----------------|---------------------|--------------------|
| 1 | 834-5120 | 1 | Assy CPU Board |
| 2 | 834-5121 | 1 | Assy PROM Board |
| 3 | 834-5122 | 1 | Assy Sound Board |



CPU BOARD ASSEMBLY

DRAWING NUMBER 834-5120

| <u>ITEM NO.</u> | <u>PART NO.</u> | <u>QTY. REQD.</u> | <u>DESCRIPTION</u> | <u>REF. DES.</u> |
|-----------------|-----------------|-------------------|---------------------|------------------|
| 1 | 316-5204 | 1 | EPROM (Program 1) | IC3 |
| 2 | 316-5205 | 1 | EPROM (Program 2) | IC4 |
| 3 | 316-5196 | 1 | PROM (V-Rate) | IC10 |
| 4 | 315-0041 | 1 | Z80A | IC13 |
| 5 | 315-0183 | 1 | Z80B | IC50 |
| 6 | 316-5200 | 1 | EPROM (Star) | IC66 |
| 7 | 316-5194 | 1 | PROM | IC39 |
| 8 | 316-5195 | 1 | PROM | IC53 |
| 9 | 316-5197 | 1 | PROM (H-Rate) | IC78 |
| 10 | 316-5202 | 1 | EPROM (Character 2) | IC103 |
| 11 | 316-5201 | 1 | EPROM (Character 1) | IC102 |
| 12 | 316-5198 | 1 | PROM (Color) | IC93 |
| 13 | 316-5203 | 1 | EPROM (Back Screen) | IC91 |
| 14 | 316-5199 | 1 | PROM (Color) | IC95 |



| <u>ITEM NO.</u> | <u>PART NO.</u> | <u>QTY.</u> <u>REQD.</u> | <u>DESCRIPTION</u> |
|-----------------|-----------------|-----------------------------|--------------------|
| 1 | 171-5011 | 1 | Printed Board |
| 2 | 314-0064 | 4 | IC 74LS153 |
| 3 | 314-0018 | 3 | IC 74LS00 |
| 4 | 314-0019 | 4 | IC 74LS04 |
| 5 | 314-0046 | 1 | IC 74S04 |
| 6 | 314-0060 | 1 | IC 74LS20 |
| 7 | 314-0068 | 1 | IC 74LS32 |
| 8 | 314-0106 | 4 | IC 74LS51 |
| 9 | 314-0067 | 3 | IC 74LS74 |
| 10 | 314-0070 | 1 | IC 74LS86 |
| 11 | 314-0237 | 1 | IC 74LS109 |
| 12 | 314-0080 | 1 | IC 74LS123 |
| 13 | 314-0104 | 2 | IC 74LS138 |
| 14 | 314-0144 | 2 | IC 74LS145 |
| 15 | 314-0194 | 1 | IC 74LS148 |
| 16 | 314-0071 | 1 | IC 74LS151 |
| 17 | 314-0252 | 3 | IC 74LS155 |
| 18 | 314-0076 | 10 | IC 74LS157 |
| 19 | 314-0077 | 2 | IC 74LS166 |
| 20 | 314-0127 | 2 | IC 74LS164 |
| 21 | 314-0072 | 2 | IC 74LS174 |
| 22 | 314-0073 | 1 | IC 74LS175 |
| 23 | 314-0098 | 1 | IC 74LS194 |
| 24 | 314-0055 | 2 | IC 74LS244 |
| 25 | 314-0099 | 4 | IC 74LS245 |
| 26 | 314-0173 | 2 | IC 74LS48 |
| 27 | 314-0105 | 4 | IC 74LS253 |
| 28 | 314-0100 | 5 | IC 74LS273 |
| 29 | 314-0101 | 4 | IC 74LS283 |
| 30 | 314-0297 | 1 | IC 74LS321 |
| 31 | 314-0102 | 1 | IC 74LS367 |

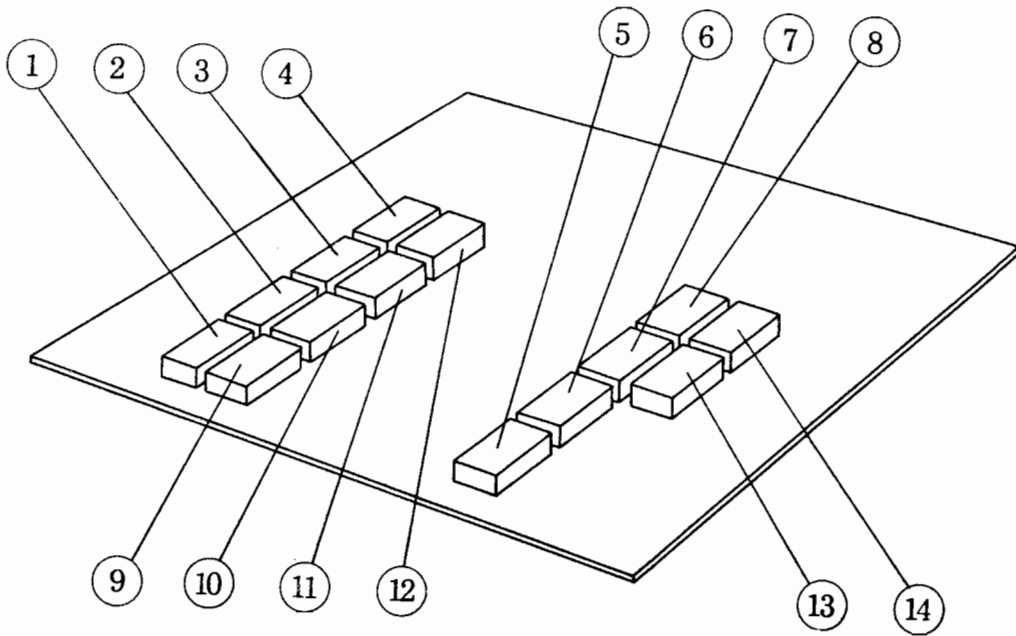
| <u>ITEM NO.</u> | <u>PART NO.</u> | <u>QTY.</u> <u>REQD.</u> | <u>DESCRIPTION</u> |
|-----------------|-----------------|-----------------------------|------------------------|
| 32 | 314-0017 | 1 | IC 74125 |
| 33 | 314-0048 | 5 | IC 74153 |
| 34 | 314-0233 | 4 | IC 74161 |
| 35 | 315-0041 | 1 | IC Z80A |
| 36 | 315-0183 | 1 | IC Z80B |
| 37 | 315-0101 | 1 | IC 8279C-5 |
| 38 | 315-0152 | 2 | IC 8255A-5 |
| 39 | 315-0194 | 3 | IC TMM2016 |
| 40 | 315-0126 | 4 | IC MB8148-55 |
| 41 | 315-0207 | 4 | IC MB8264-20 |
| 42 | 315-0127 | 4 | IC AM25LS2619 |
| 43 | 313-0086 | 1 | IC TD62003 |
| 44 | 316-5194 | 1 | IC TBP185030 PR-5194 |
| 45 | 316-5196 | 1 | IC 825141 PR-5196 |
| 46 | 316-5197 | 1 | IC 825141 PR-5197 |
| 47 | 316-5198 | 1 | IC 825141 PR-5198 |
| 48 | 316-5199 | 1 | IC 825181 PR-5199 |
| 49 | 316-5200 | 1 | IC 2732A EPR-5200 |
| 50 | 316-5201 | 1 | IC 2716 EPR-5201 |
| 51 | 316-5202 | 1 | IC 2716 EPR-5202 |
| 52 | 316-5203 | 1 | IC 2764 EPR-5203 |
| 53 | 316-5204 | 1 | IC 27128 EPR-5204 |
| 54 | 316-5205 | 1 | IC 27128 EPR-5205 |
| 55 | 316-5195 | 1 | IC TBP18S030 PR-5195 |
| 56 | 314-0097 | 1 | IC 74LS161 |
| 57 | 212-0115 | 3 | Conn M50 Pin |
| 58 | 212-0164 | 1 | Conn M40 Pin |
| 59 | 212-0129 | 1 | Conn M20 Pin |
| 60 | 213-0005 | 2 | Sket 40 Pin, dual inln |
| 61 | 213-0012 | 4 | Sket 28 Pin, dual inln |
| 62 | 213-0001 | 10 | Sket 24 Pin, dual inln |
| 63 | 213-0002 | 4 | Sket 18 Pin, dual inln |
| 64 | 213-0004 | 2 | Sket 16 Pin, dual inln |

| <u>ITEM NO.</u> | <u>PART NO.</u> | <u>QTY.</u> <u>REQD.</u> | <u>DESCRIPTION</u> |
|-----------------|-----------------|-----------------------------|--------------------------------------|
| 65 | 180-0040 | 1 | Peaking Coil, 56 MH |
| 66 | 601-0731 | 4 | Photo Coupler, TLP 521-4 |
| 67 | 230-0044 | 1 | Crystal, 20.000 MHZ |
| 68 | 390-0100 | 1 | LED TIL 220 red |
| 69 | 510-0049 | 2 | Switch, 8 pos, dip SPST |
| 70 | 477-0005 | 4 | Res Pack, 8 x 4.7K ohm 1/8W W/common |
| 71 | 477-0039 | 3 | Res Pack, 8 x 1K ohm 1/8W W/common |
| 72 | 477-0008 | 2 | Res Pack, 8 x 560 ohm 1/8W W/common |
| 73 | 470-0220 | 1 | Res, 22 ohm 1/4W 5% |
| 74 | 470-0222 | 5 | Res, 2.2K ohm 1/4W 5% |
| 75 | 477-0049 | 1 | Res Pack, 4 x 390 ohm 1/4W |
| 76 | 477-0050 | 1 | Res Pack, 4 x 47K ohm 1/4W |
| 77 | 470-0331 | 1 | Res, 330 ohm 1/4W 5% |
| 78 | 601-5001 | 8 | EMI Filter |
| 79 | 601-5002 | 3 | EMI Filter |
| 80 | 151-0041 | 60 | Cap CER 0.1 μ F 25V |
| 81 | 151-0005 | 1 | Cap CEB 680 PF 50V |
| 82 | 153-0066 | 6 | Cap Tant, 10 μ F 16V |
| 83 | 150-0185 | 1 | Cap E, 47 μ F 16V T-Typ |

EPROM BOARD ASSEMBLY

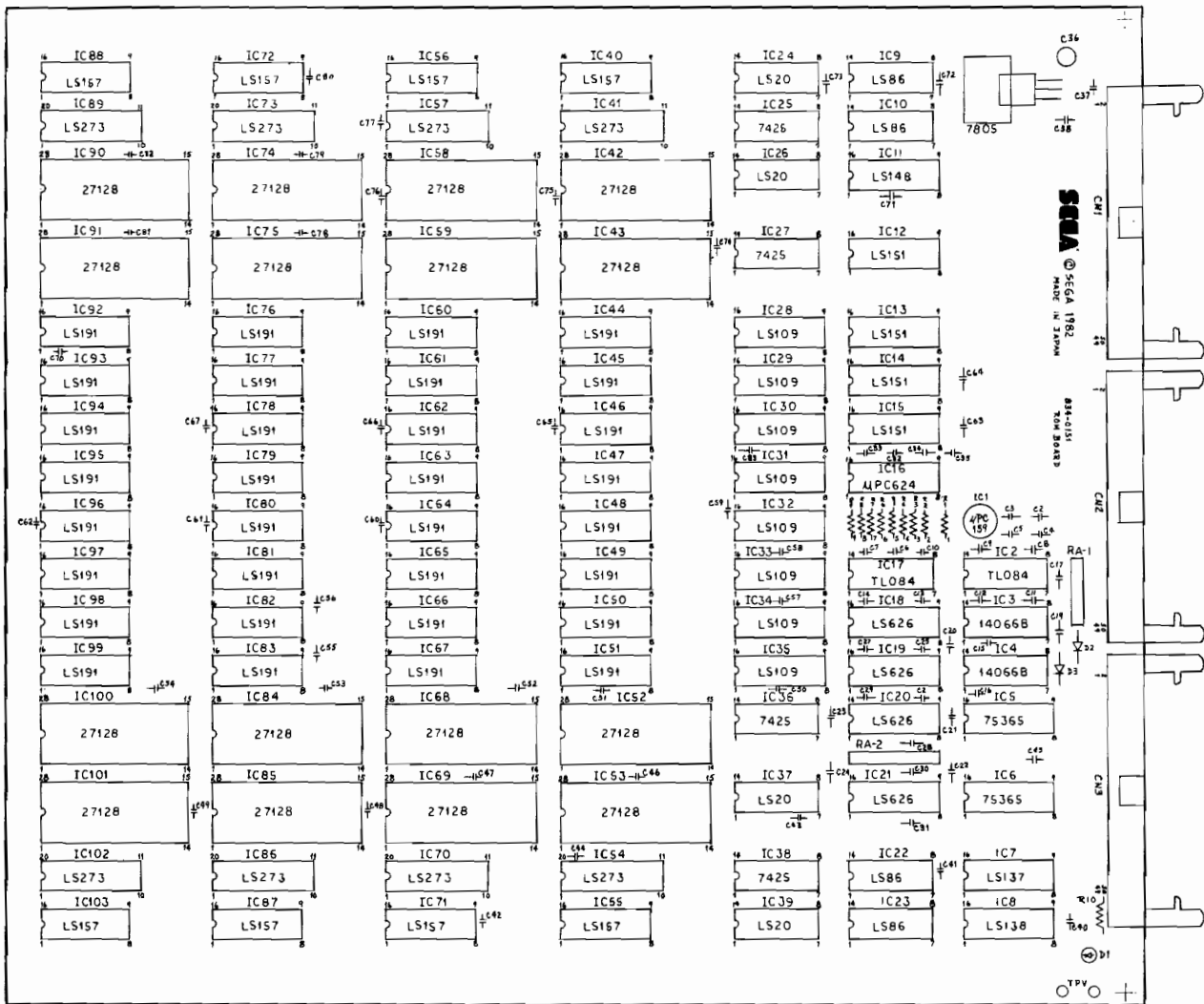
DRAWING NUMBER 834-5121

| <u>ITEM NO.</u> | <u>PART NO.</u> | <u>QTY. REQD.</u> | <u>DESCRIPTION</u> | <u>REF. DES.</u> |
|-----------------|-----------------|-------------------|--------------------|------------------|
| 1 | 316-5214 | 1 | EPROM (Character) | IC90 |
| 2 | 316-5211 | 1 | EPROM " | IC74 |
| 3 | 316-5208 | 1 | EPROM " | IC58 |
| 4 | | | | IC42 |
| 5 | 316-5216 | 1 | EPROM " | IC100 |
| 6 | 316-5213 | 1 | EPROM " | IC84 |
| 7 | 316-5210 | 1 | EPROM " | IC68 |
| 8 | 316-5207 | 1 | EPROM " | IC52 |
| 9 | 316-5215 | 1 | EPROM " | IC91 |
| 10 | 316-5212 | 1 | EPROM " | IC75 |
| 11 | 316-5209 | 1 | EPROM " | IC59 |
| 12 | 316-5206 | 1 | EPROM " | IC43 |
| 13 | | | | IC69 |
| 14 | | | | IC53 |



| <u>ITEM NO.</u> | <u>PART NO.</u> | <u>QTY.</u> <u>REQD.</u> | <u>DESCRIPTION</u> |
|-----------------|-----------------|-----------------------------|-----------------------|
| 1 | 171-5012 | 1 | Printed Board |
| 2 | 314-0060 | 4 | IC 74LS20 |
| 3 | 314-0070 | 4 | IC 74LS86 |
| 4 | 314-0237 | 8 | IC 74LS109 |
| 5 | 314-0277 | 1 | IC 74LS137 |
| 6 | 314-0104 | 1 | IC 74LS138 |
| 7 | 314-0194 | 1 | IC 74LS148 |
| 8 | 314-0071 | 4 | IC 74LS151 |
| 9 | 314-0076 | 8 | IC 74LS157 |
| 10 | 314-0074 | 32 | IC 74LS191 |
| 11 | 314-0100 | 8 | IC 74LS273 |
| 12 | 314-0257 | 4 | IC 74LS626 |
| 13 | 314-0234 | 4 | IC 7425 |
| 14 | 314-0132 | 2 | IC 75365 |
| 15 | 315-0045 | 2 | IC CD4066 |
| 16 | 315-0124 | 1 | IC μ PC624D |
| 17 | 313-0039 | 2 | IC TL084CN |
| 18 | 313-0090 | 1 | IC μ PC159A |
| 19 | 313-0092 | 1 | IC μ A7805UC |
| 20 | 316-5206 | 1 | IC 27128 EPR-5206 |
| 21 | 316-5207 | 1 | IC 27128 EPR-5207 |
| 22 | 316-5208 | 1 | IC 2764 EPR-5208 |
| 23 | 316-5209 | 1 | IC 27128 EPR-5209 |
| 24 | 316-5210 | 1 | IC 27128 EPR-5210 |
| 25 | 316-5211 | 1 | IC 2764 EPR-5211 |
| 26 | 316-5212 | 1 | IC 27128 EPR-5212 |
| 27 | 316-5213 | 1 | IC 2764 EPR-5213 |
| 28 | 316-5214 | 1 | IC 2764 EPR-5214 |
| 29 | 316-5215 | 1 | IC 27128 EPR-5215 |
| 30 | 316-5216 | 1 | IC 2764 EPR-5216 |
| 31 | 212-0115 | 3 | Conn M50 Pin |
| 32 | 213-0012 | 16 | Skt 28 Pin, dual inln |

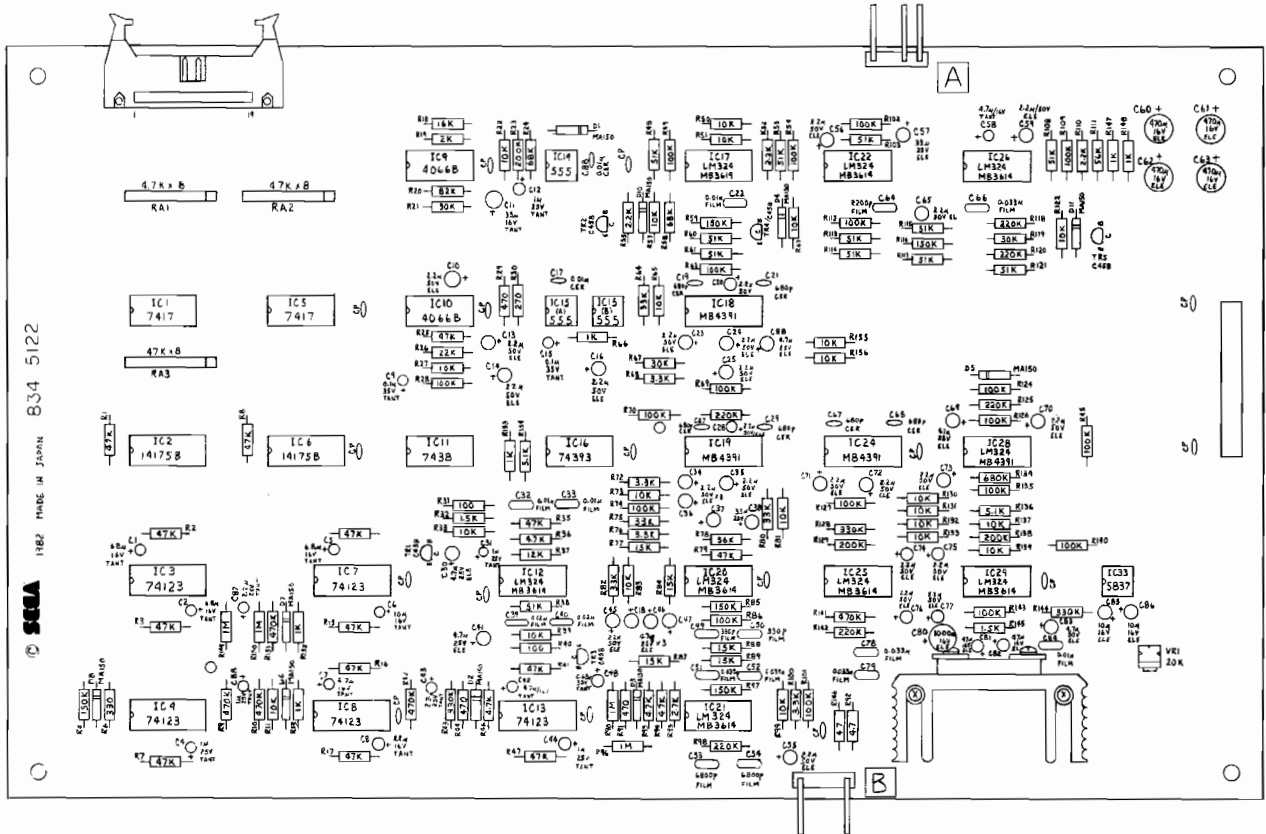
| <u>ITEM NO.</u> | <u>PART NO.</u> | <u>QTY.</u> <u>REQD.</u> | <u>DESCRIPTION</u> |
|-----------------|-----------------|-----------------------------|--------------------------------------|
| 33 | 213-0004 | 1 | Skt 16 Pin, dual inln |
| 34 | 481-0031 | 2 | Diode, MA150 |
| 35 | 477-0046 | 2 | Res Pack, 4 x 560 ohm 1/4W |
| 36 | 470-0102 | 2 | Res 1K Ohm 1/4W 5% |
| 37 | 470-0122 | 1 | Res 1.2K Ohm 1/4W 5% |
| 38 | 470-0392 | 1 | Res 3.9K Ohm 1/4W 5% |
| 39 | 470-0222 | 2 | Res 2.2K Ohm 1/4W 5% |
| 40 | 470-0221 | 1 | Res 220 Ohm 1/4W 5% |
| 41 | 470-0821 | 1 | Res 820 Ohm 1/4W 5% |
| 42 | 470-0152 | 1 | Res 1.5K Ohm 1/4W 5% |
| 43 | 150-0059 | 1 | Cap E 100 μ F 10V U-Typ |
| 44 | 153-0002 | 1 | Cap Tant 1 μ F 25V |
| 45 | 155-0011 | 8 | Cap Silvered Mica, 100 pf 500V 5% |
| 46 | 155-0012 | 8 | Cap Silvered Mica, 220 pf 500V 5% |
| 47 | 151-0005 | 8 | Cap Cer 680 pf 50V |
| 48 | 151-0008 | 1 | Cap Cer 0.001 μ F 50V |
| 49 | 151-0041 | 50 | Cap Cer 0.1 μ F 25V |
| 50 | 151-0002 | 1 | Cap Cer 100 pf 50V |
| 51 | 530-0024 | 1 | Heat Sink |
| 52 | | 1 | M. Screw, pan head Phill ISO M3 x 10 |
| 53 | | 1 | Hex Nut, M3 |
| 54 | | 1 | Spring Washer, M3 (#2) |



| <u>ITEM NO.</u> | <u>PART NO.</u> | <u>QTY.</u> <u>REQD.</u> | <u>DESCRIPTION</u> |
|-----------------|-----------------|-----------------------------|-------------------------------------|
| 1 | 171-5015 | 1 | Printed Board |
| 2 | 530-5002 | 1 | Heat Sink |
| 101 | 313-0097 | 1 | IC LA4460 |
| 102 | 313-0034 | 9 | IC LM324 |
| 103 | 313-0083 | 3 | IC MB4391M |
| 104 | 315-0035 | 1 | IC MM5837 |
| 105 | 314-0001 | 3 | IC NE555DIP |
| 106 | 314-0051 | 2 | IC 7417 |
| 107 | 314-0126 | 1 | IC 7438 |
| 108 | 314-0016 | 5 | IC 74123 |
| 109 | 314-0030 | 1 | IC 74393 |
| 110 | 315-0045 | 2 | IC CD4066 |
| 111 | 315-0161 | 2 | IC MC14175B |
| 112 | 482-0043 | 5 | Transistor 2SC458C |
| 113 | 481-0031 | 11 | Diode MA150 |
| 114 | 477-0005 | 2 | Res Pack, 8 x 47K Ohm 1/8W W/common |
| 115 | 477-0024 | 1 | Res Pack, 8 x 47K Ohm 1/8W W/common |
| 116 | 470-04R7 | 2 | Res 4.7 Ohm 1/4W 5% |
| 117 | 470-0101 | 2 | Res 100 Ohm 1/4W 5% |
| 118 | 470-0271 | 1 | Res 270 Ohm 1/4W 5% |
| 119 | 470-0331 | 1 | Res 330 Ohm 1/4W 5% |
| 120 | 470-0471 | 4 | Res 470 Ohm 1/4W 5% |
| 121 | 470-0102 | 6 | Res 1K Ohm 1/4W 5% |
| 122 | 470-0152 | 2 | Res 1.5K Ohm 1/4W 5% |
| 123 | 470-0202 | 1 | Res 2K Ohm 1/4W 5% |
| 124 | 470-0222 | 3 | Res 2.2K Ohm 1/4W 5% |
| 125 | 470-0272 | 1 | Res 2.7K Ohm 1/4W 5% |
| 126 | 470-0332 | 5 | Res 3.3K Ohm 1/4W 5% |
| 127 | 470-0472 | 4 | Res 4.7K Ohm 1/4W 5% |
| 128 | 470-0512 | 2 | Res 5.1K Ohm 1/4W 5% |
| 129 | 470-0682 | 1 | Res 6.8K Ohm 1/4W 5% |
| 130 | 470-0103 | 23 | Res 10K Ohm 1/4W 5% |

| <u>ITEM NO.</u> | <u>PART NO.</u> | <u>QTY.</u> <u>REQD.</u> | <u>DESCRIPTION</u> |
|-----------------|-----------------|-----------------------------|---------------------------|
| 131 | 470-0123 | 1 | Res 12K Ohm 1/4W 5% |
| 132 | 470-0153 | 5 | Res 15K Ohm 1/4W 5% |
| 133 | 470-0163 | 1 | Res 16K Ohm 1/4W 5% |
| 134 | 470-0223 | 1 | Res 22K Ohm 1/4W 5% |
| 135 | 470-0303 | 3 | Res 30K Ohm 1/4W 5% |
| 136 | 470-0333 | 4 | Res 33K Ohm 1/4W 5% |
| 137 | 470-0473 | 14 | Res 47K Ohm 1/4W 5% |
| 138 | 470-0513 | 12 | Res 51K Ohm 1/4W 5% |
| 139 | 470-0563 | 2 | Res 56K Ohm 1/4W 5% |
| 140 | 470-0683 | 1 | Res 68K Ohm 1/4W 5% |
| 141 | 470-0823 | 1 | Res 82K Ohm 1/4W 5% |
| 142 | 470-0104 | 20 | Res 100K Ohm 1/4W 5% |
| 143 | 470-0154 | 5 | Res 150K Ohm 1/4W 5% |
| 144 | 470-0204 | 3 | Res 200K Ohm 1/4W 5% |
| 145 | 470-0224 | 6 | Res 220K Ohm 1/4W 5% |
| 146 | 470-0334 | 3 | Res 330K Ohm 1/4W 5% |
| 147 | 470-0474 | 5 | Res 470K Ohm 1/4W 5% |
| 148 | 470-0684 | 1 | Res 680K Ohm 1/4W 5% |
| 149 | 470-0105 | 4 | Res 1M Ohm 1/4W 5% |
| 150 | 150-0014 | 27 | Cap E 2.2 MF 25V U-typ |
| 151 | 150-0007 | 8 | Cap E 4.7 MF 16V U-typ |
| 152 | 150-0017 | 2 | Cap E 33 MF 25V U-typ |
| 153 | 150-0065 | 2 | Cap E 47 MF 16V U-typ |
| 154 | 150-0160 | 7 | Cap E 470 MF 16V U-typ |
| 155 | 151-0005 | 6 | Cap Cer 680 PF 50V |
| 156 | 151-0011 | 1 | Cap Cer 0.01 MF 50V |
| 157 | 151-0041 | 5 | Cap Cer 0.1 MF 50V |
| 158 | 152-0004 | 1 | Cap Film 0.0022 MF 50V |
| 159 | 152-0009 | 2 | Cap Film 0.0033 MF 25V |
| 160 | 152-0078 | 2 | Cap Film 0.0068 MF 50V 5% |
| 161 | 152-0033 | 3 | Cap Film 0.01 MF 50V |
| 162 | 152-0079 | 2 | Cap Film 0.022 MF 50V 5% |

| <u>ITEM NO.</u> | <u>PART NO.</u> | <u>QTY.</u> <u>REQD.</u> | <u>DESCRIPTION</u> |
|-----------------|-----------------|-----------------------------|---|
| 163 | 152-0035 | 3 | Cap Film 0.033 MF 50V |
| 164 | 152-0072 | 2 | Cap E 0.039 MF 50V |
| 165 | 150-0023 | 2 | Cap E 10 MF 16V U-type |
| 166 | 153-0016 | 2 | Cap Tant 0.1 MF 35V |
| 167 | 153-0038 | 1 | Cap Tant 0.68 MF 16V |
| 168 | 153-0002 | 5 | Cap Tant 1 MF 25V |
| 169 | 153-0003 | 2 | Cap Tant 2.2 MF 25V |
| 170 | 153-0045 | 3 | Cap Tant 4.7 MF 16V |
| 171 | 153-0030 | 4 | Cap Tant 6.8 MF 16V |
| 172 | 153-0066 | 1 | Cap Tant 10 MF 16V |
| 173 | 153-0026 | 5 | Cap Tant 22 MF 16V |
| 174 | 153-0050 | 1 | Cap Tant 33 MF 16V |
| 175 | 212-0129 | 1 | Conn M 20 Pin |
| 176 | 212-0101 | 2 | Conn M 4 Pin RTA |
| 177 | 220-5012 | 1 | Vol Cont 20K Ohm 5M-F |
| 201 | | 2 | M Screw, P.H. Phil., ISO, W/F & spring washer, M3 x 10 |
| 202 | 285-0002-30 | 2 | M Screw, P.H. Phil., ISO, M3 x 30 |
| 203 | 287-0072-02 | 2 | Hex Nut, ISO, M3 |
| 204 | 287-0060-02 | 2 | F Washer, M3 |
| 205 | 280-0257-00 | 2 | Spring Washer, M3 (#2) |



SWITCHING REGULATOR

DRAWING NUMBER 601-0692

| <u>ITEM NO.</u> | <u>PART NO.</u> | <u>QTY.</u> <u>REQ'D</u> | <u>DESCRIPTION</u> | <u>REF DES</u> |
|-----------------|-----------------|-----------------------------|--|----------------|
| 1 | 150-0009 | 1 | Electrolytic Capacitor 1 μ f 50V | C24 |
| 2 | 150-0013 | 1 | Electrolytic Capacitor 100 μ f 25V | C18 |
| 3 | 150-0148 | 3 | Electrolytic Capacitor 1000 μ f 10V | C11, C12, C13 |
| 4 | 150-0218 | 1 | Electrolytic Capacitor 330 μ f 200V | C5 |
| 5 | 150-0223 | 1 | Electrolytic Capacitor | C19 |
| 6 | | | | |
| 7 | | | | |
| 8 | | | | |
| 9 | 151-0117 | 2 | Ceramic Capacitor 2200 pf AC 125V | C2, C3 |
| 10 | 151-0118 | 1 | Ceramic Capacitor 1000 pf AC 125V | C4 |
| 11 | | | | |
| 12 | | | | |
| 13 | 152-0001 | 1 | Polyester Capacitor 0.1 μ f 100V | C22 |
| 14 | 152-0039 | 2 | Polyester Capacitor 0.01 μ f 100V | C8, C21 |
| 15 | 152-0152 | 1 | Polyester Capacitor 0.01 μ f 630V | C1 |
| 16 | 152-0153 | 1 | Polyester Capacitor 3300 pf 630V | C6 |
| 17 | 152-0154 | 2 | Polyester Capacitor 0.01 μ f 630V | C16, C17 |
| 18 | 152-0155 | 2 | Polyester Capacitor 1000 pf 100V | C20, C23 |
| 19 | 152-0156 | 1 | Polyester Capacitor 0.047 μ f 100V | C26 |

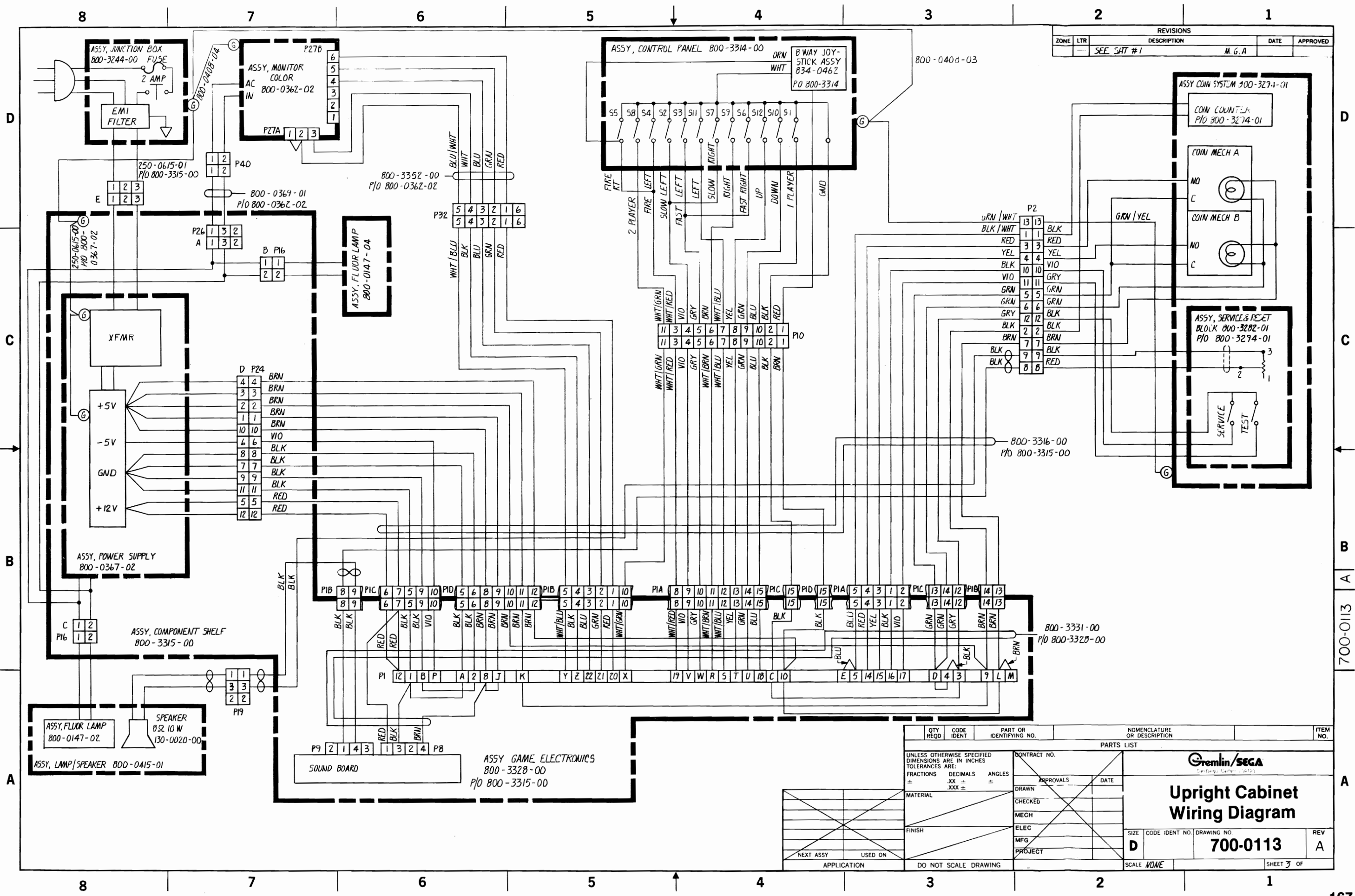
| <u>ITEM NO.</u> | <u>PART NO.</u> | <u>QTY.</u> <u>REQ'D</u> | <u>DESCRIPTION</u> | <u>REF DES</u> |
|-----------------|-----------------|-----------------------------|--|----------------|
| 20 | 152-0157 | 1 | Polyester Capacitor 2200 pf 630V | C7 |
| 21 | | | | |
| 22 | | | | |
| 23 | 180-0034 | 1 | Filter Choke TLP6506P | L1 |
| 24 | 180-0035 | 1 | Smoothing Choke ETB-35KH27 | L2 |
| 25 | | | | |
| 26 | 316-0124 | 1 | Intergrated Circuit M51848P | IC1 |
| 27 | 316-0125 | 1 | Intergrated Circuit T1431CP | IC2 |
| 28 | | | | |
| 29 | 370-0005 | 1 | Opto Isolator ON3110 | PC1 |
| 30 | | | | |
| 31 | 462-0024 | 1 | Metal Oxide Resistor 10 Ω 1W | R5 |
| 32 | | | | |
| 33 | 470-0101 | 3 | Carbon Film Resistor 100 Ω 1/4W | R12, R14, R27 |
| 34 | 470-0102 | 2 | Carbon Film Resistor 1K Ω 1/4W | R8, R30 |
| 35 | 470-0123 | 1 | Carbon Film Resistor 12K Ω 1/4W | R17 |
| 36 | 470-0150 | 1 | Carbon Film Resistor 15 Ω 1/4W | R22 |
| 37 | 470-0152 | 1 | Carbon Film Resistor 1.5K Ω 1/4W | R19 |
| 38 | 470-0181 | 1 | Carbon Film Resistor 100 Ω 1/4W | R25 |
| 39 | 470-0182 | 1 | Carbon Film Resistor 1.8K Ω 1/4W | R11 |
| 40 | 470-0221 | 1 | Carbon Film Resistor 220 Ω 1/4W | R23 |

| <u>ITEM NO.</u> | <u>PART NO.</u> | <u>QTY.</u> <u>REQ'D</u> | <u>DESCRIPTION</u> | <u>REF DES</u> |
|-----------------|-----------------|-----------------------------|--|----------------|
| 41 | 470-0222 | 1 | Carbon Film Resistor 2.2K Ω 1/4W | R10 |
| 42 | 470-0224 | 1 | Carbon Film Resistor 220K Ω 1/4W | R16 |
| 43 | 470-0471 | 1 | Carbon Film Resistor 470 Ω 1/4W | R21 |
| 44 | 470-0681 | 1 | Carbon Film Resistor 680 Ω 1/4W | R29 |
| 45 | 470-0683 | 1 | Carbon Film Resistor 68K Ω 1/4W | R18 |
| 46 | 470-0820 | 1 | Carbon Film Resistor 82 Ω 1/4W | R20 |
| 47 | 470-0821 | 1 | Carbon Film Resistor 820 Ω 1/4W | R15 |
| 48 | 470-0822 | 1 | Carbon Film Resistor 8.2K Ω 1/4W | R13 |
| 49 | 470-0151 | 1 | Carbon Film Resistor 150 Ω 1/4W | R24 |
| 50 | 470-0561 | 1 | Carbon Film Resistor 560 Ω 1/4W | R9 |
| 51 | 472-0330 | 1 | Metal Oxide Resistor 33 Ω 2W | R7 |
| 52 | 472-0393 | 1 | Metal Oxide Resistor 33K Ω 1W | R4 |
| 53 | 472-0682 | 2 | Metal Oxide Resistor 6.8K Ω 2W | R2, R3 |
| 54 | 472-0R47 | 1 | Metal Oxide Resistor 0.47 Ω 2W | R26 |
| 55 | | | | |
| 56 | 473-06RB | 1 | Wirewound Resistor 6.8 Ω 5W | R1 |
| 57 | | | | |

| <u>ITEM NO.</u> | <u>PART NO.</u> | <u>QTY.</u> <u>REQ'D</u> | <u>DESCRIPTION</u> | <u>REF DES</u> |
|-----------------|-----------------|-----------------------------|------------------------|----------------|
| 58 | 478-0008 | 1 | Thermistor | TH1 |
| 59 | 478-0009 | 1 | Thermistor | TH2 |
| 60 | | | | |
| 61 | 481-0236 | 1 | Diode S4VB40 | D1 |
| 62 | 481-0237 | 2 | Diode ERC2506E | D2, D5 |
| 63 | 481-0238 | 2 | Diode ERB43-06K | D3, D6 |
| 64 | 481-0239 | 1 | Diode ESAC83-004 | D4 |
| 65 | 481-0240 | 2 | Diode MA161LF5 | D7, D8 |
| 66 | 481-0241 | 1 | Zener Diode RD5.6E-B2 | ZD1 |
| 67 | | | | |
| 68 | 482-0057 | 1 | Transistor 2SC1384 | Q2 |
| 69 | 482-0076 | 1 | Transistor 2SA564A | Q6 |
| 70 | 482-0177 | 1 | Transistor 2SC1685 | Q4 |
| 71 | 482-0294 | 1 | Transistor 2SC2739HD | Q1 |
| 72 | 482-0295 | 1 | Transistor 2SA886 | Q3 |
| 73 | 482-0296 | 1 | Transistor 2SD889 | Q5 |
| 74 | 514-0001 | 1 | Fuse 2A Slow | F1 |
| 75 | 560-0103 | 1 | Transformer ETB-35KA38 | T1 |

Schematics

| REVISIONS | | | | |
|-----------|-----|-------------|--------|----------|
| ZONE | LTR | DESCRIPTION | DATE | APPROVED |
| | | SEE SHIT #1 | M.G.A. | |

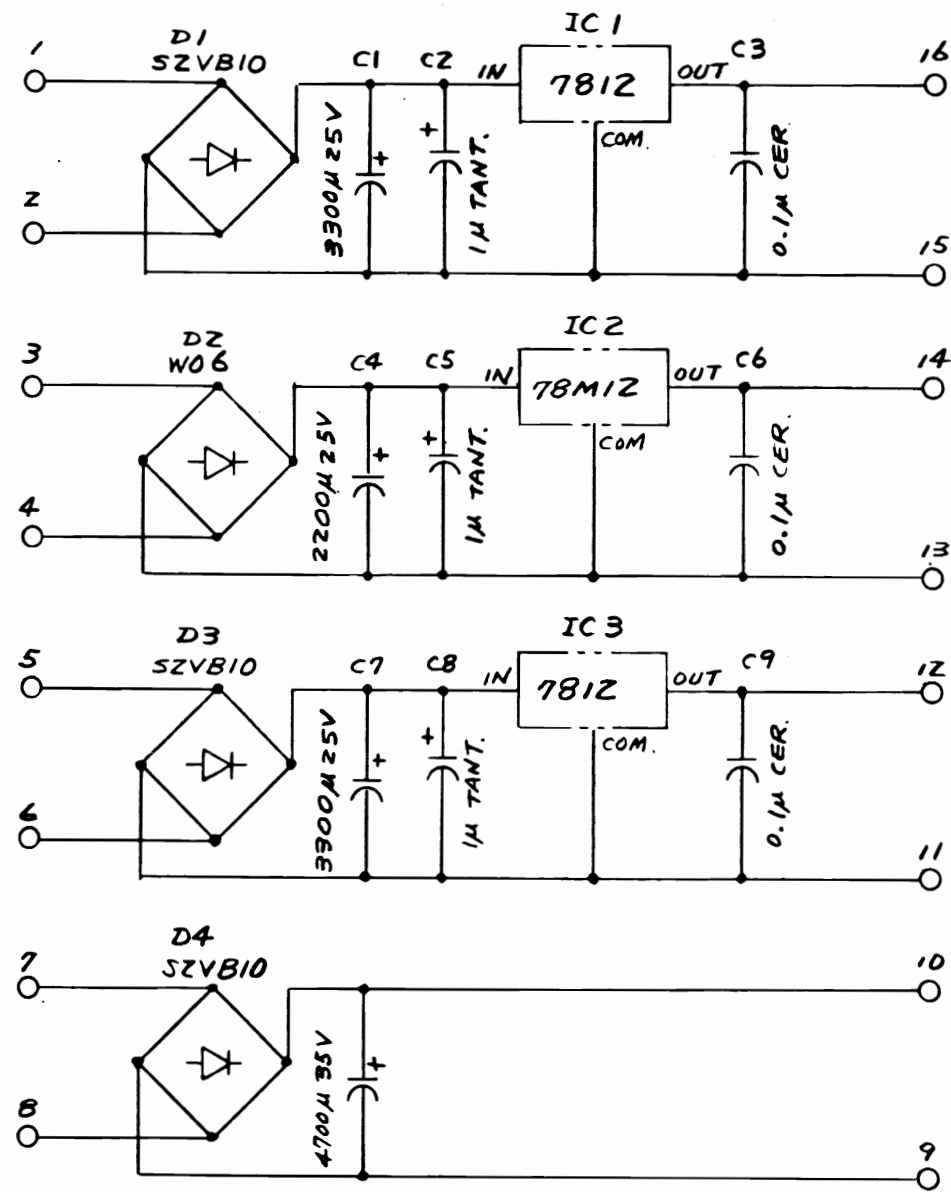


| QTY REQD | CODE IDENT | PART OR IDENTIFYING NO. | NOMENCLATURE OR DESCRIPTION | ITEM NO. |
|---|------------|-------------------------|-----------------------------|----------|
| PARTS LIST | | | | |
| UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: | | | | |
| FRACTIONS | DECIMALS | ANGLES | | |
| ± | XX ± | ± | | |
| MATERIAL | | | | |
| FINISH | | | | |
| NEXT ASSY USED ON APPLICATION | | | | |
| DO NOT SCALE DRAWING | | | | |

| | | | | |
|--------------|----------------|-------------|------------|------|
| CONTRACT NO. | | APPROVALS | | DATE |
| DRAWN | CHECKED | MECH | | ELEC |
| MFG | | PROJECT | | |
| SIZE | CODE IDENT NO. | DRAWING NO. | REV | |
| D | | 700-0113 | A | |
| SCALE NONE | | | SHEET 3 OF | |

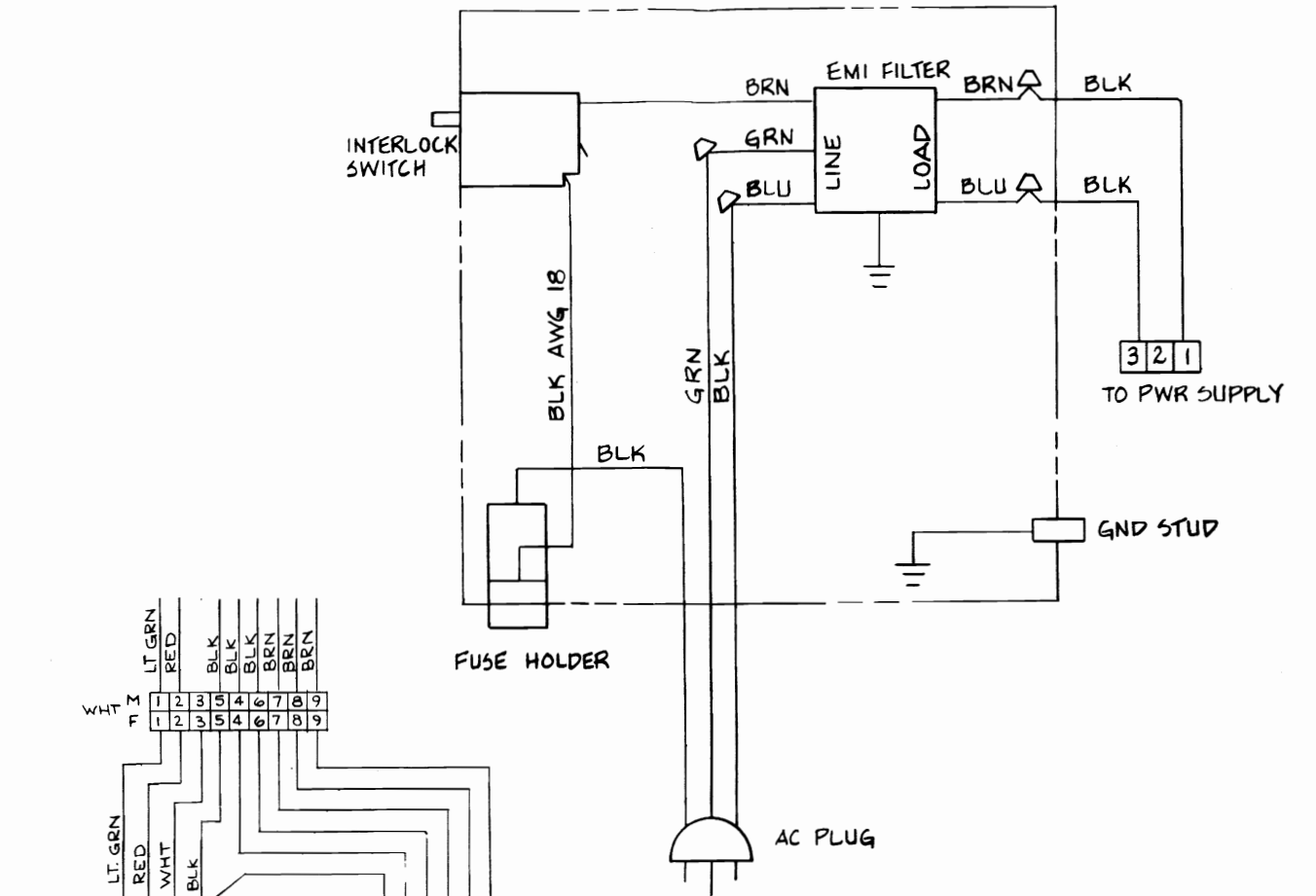
Regulator Board Assembly

834-0120

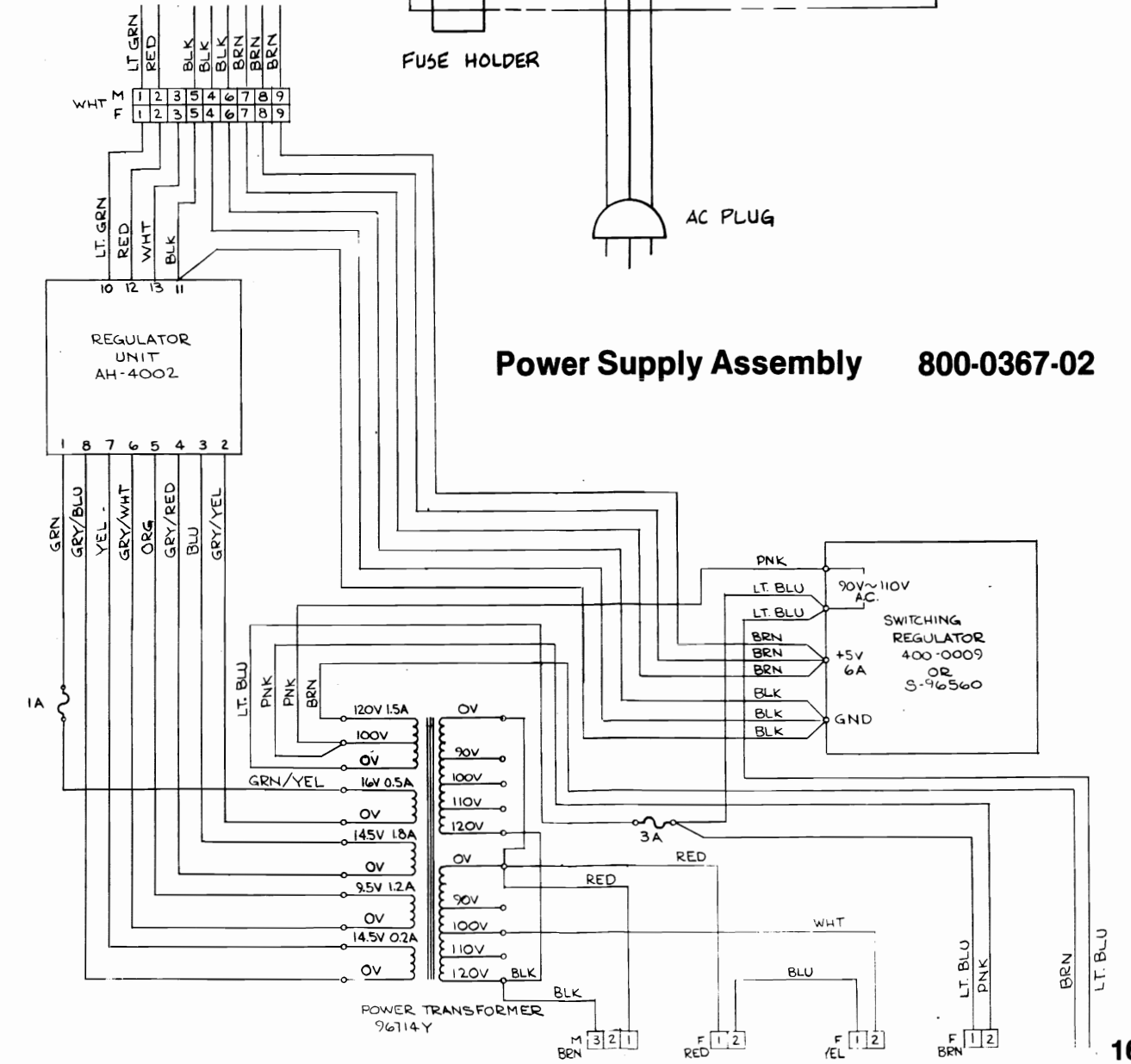


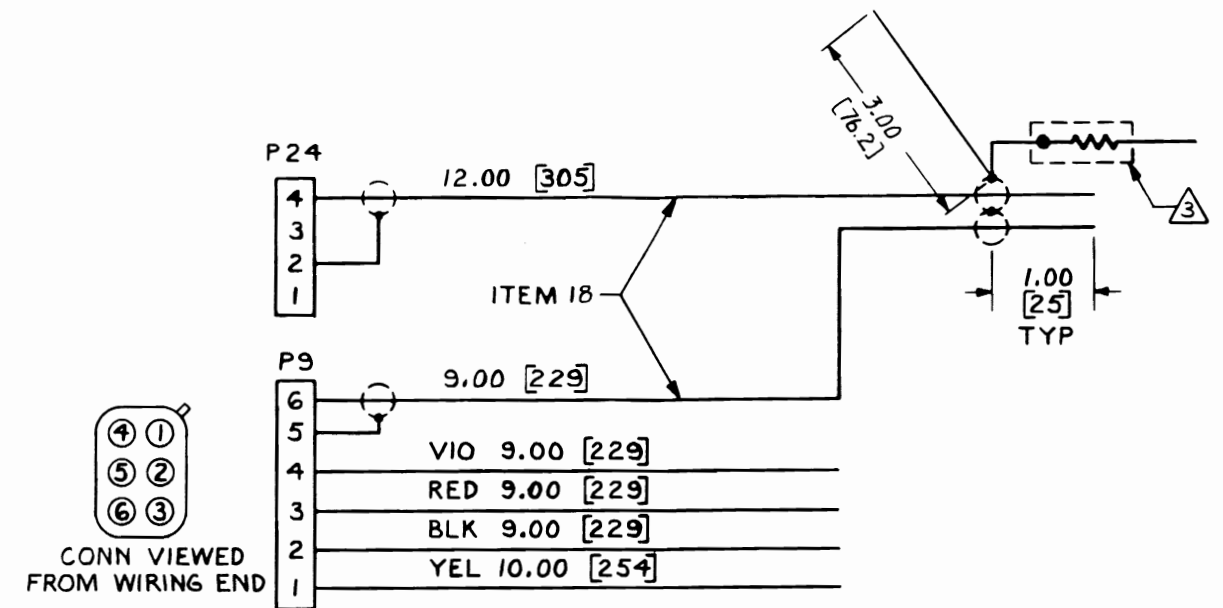
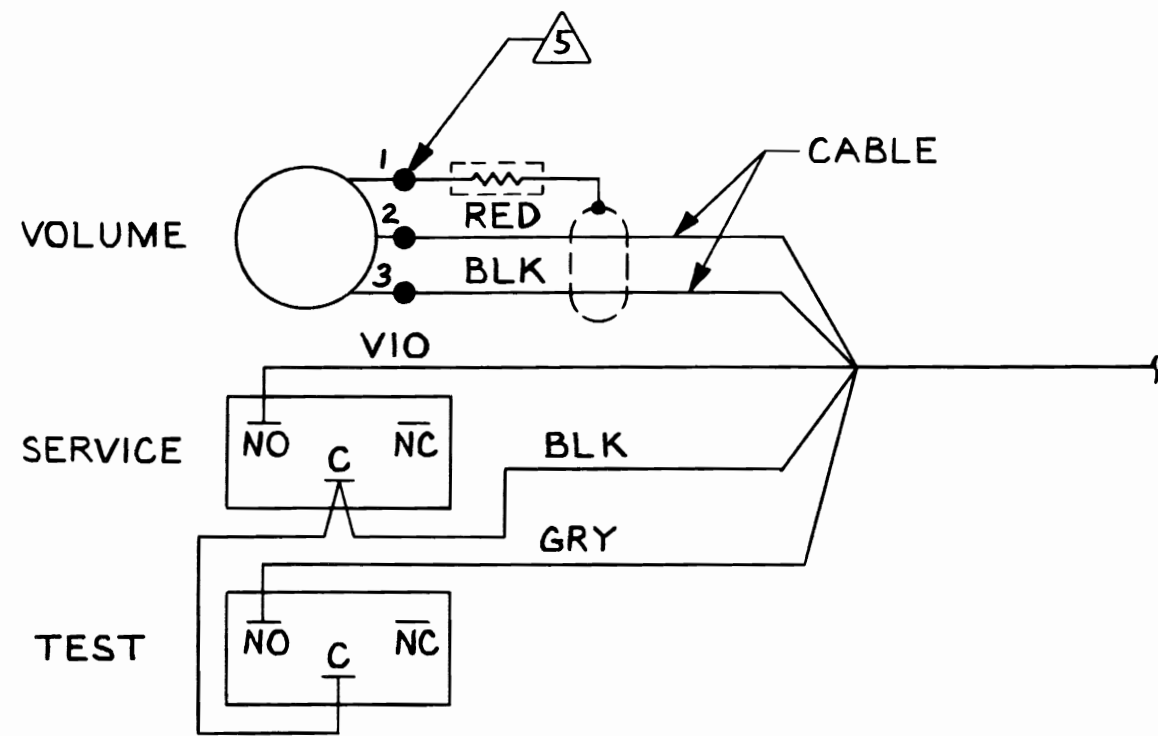
AC Junction Box Assembly

800-3244

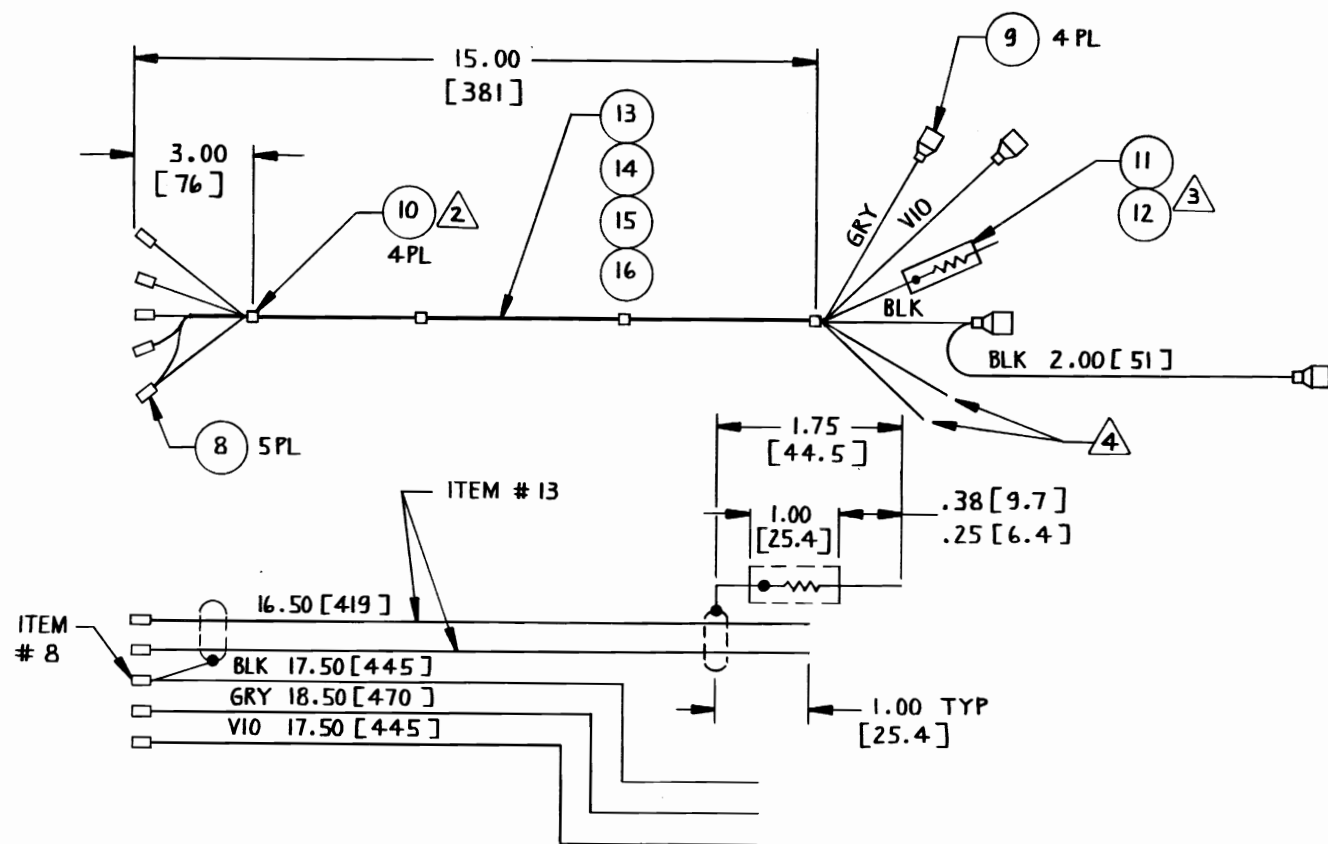


Power Supply Assembly 800-0367-02

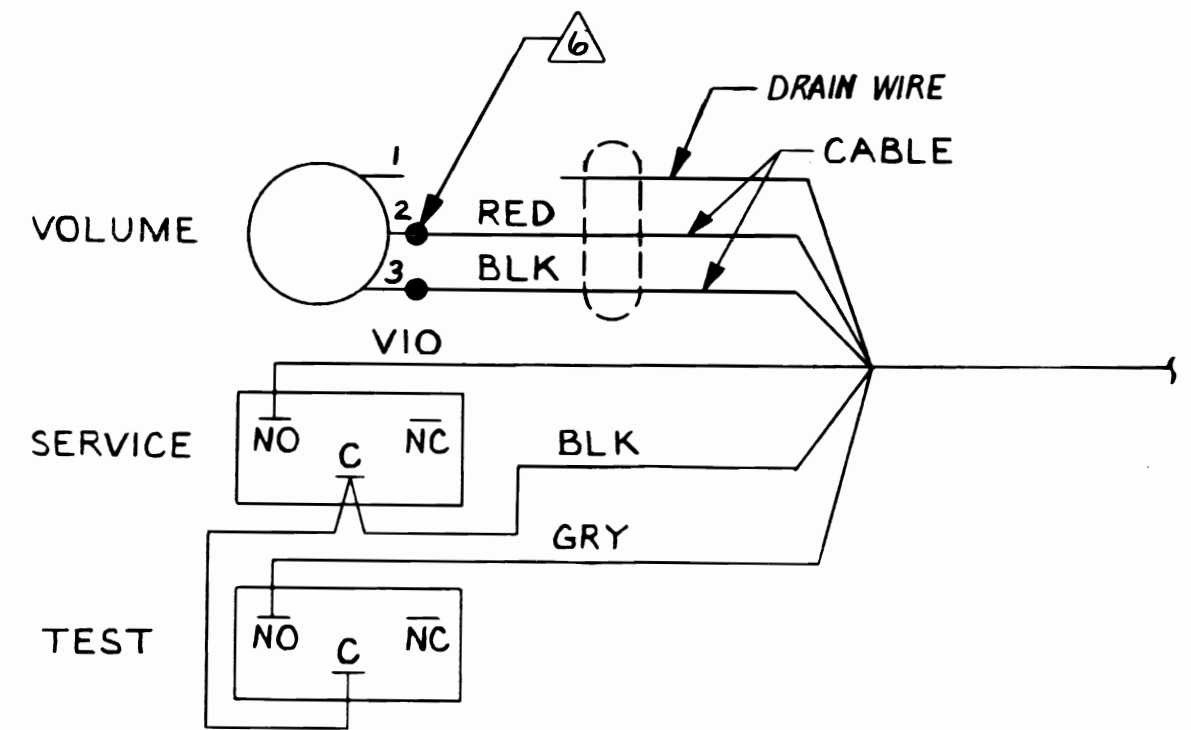




-00 Assembly



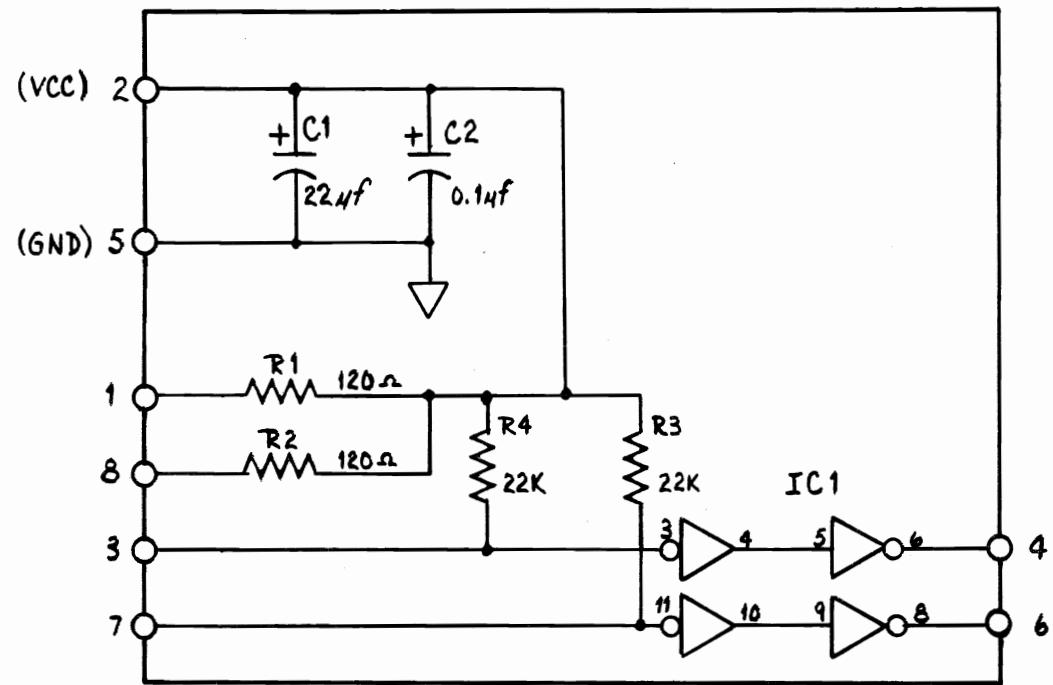
-00 Assembly



-01 Assembly

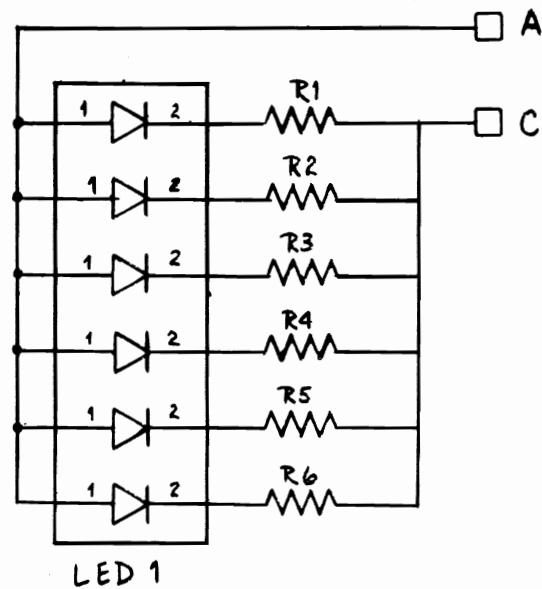
IC Buffer Board Assembly

834-0104



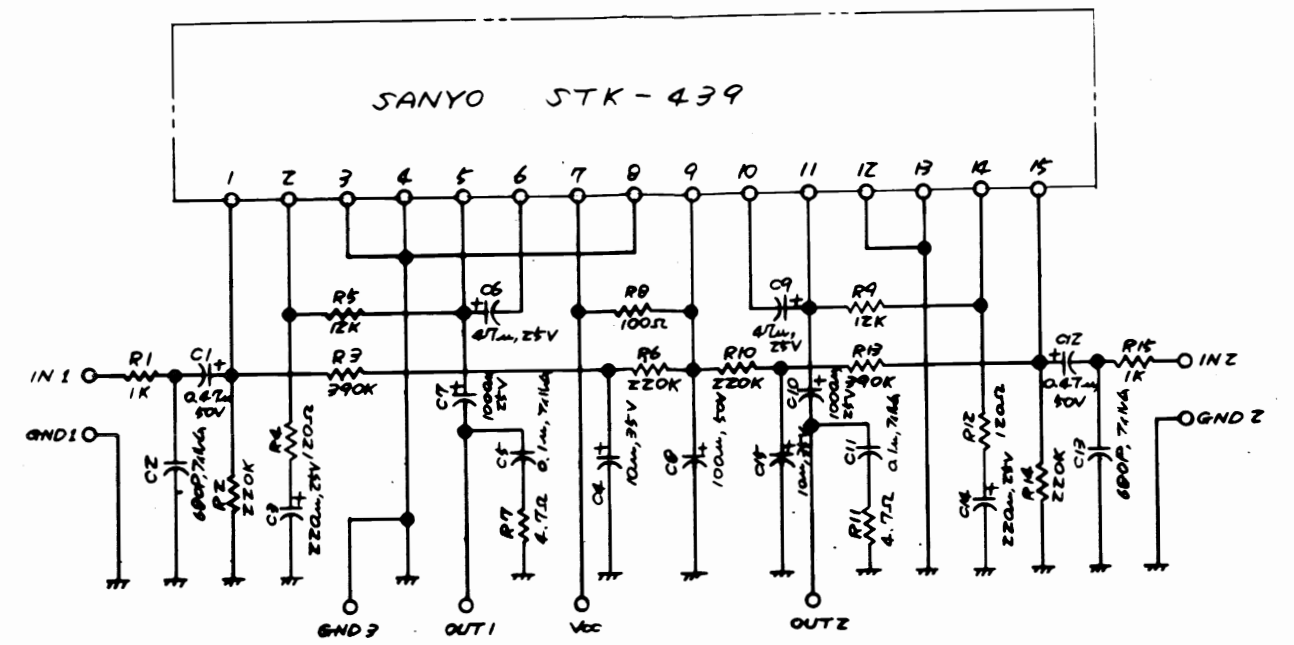
LED Board Assembly

834-0276



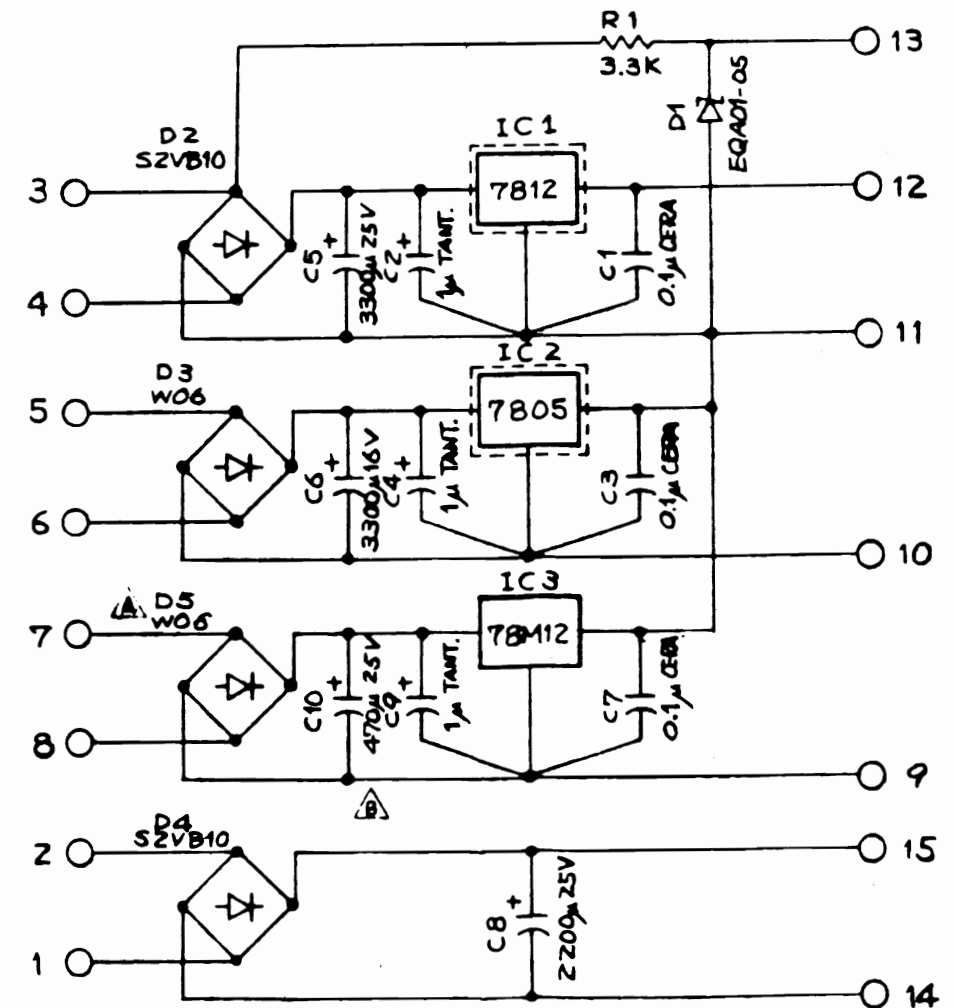
Power Amp Assembly

834-0121

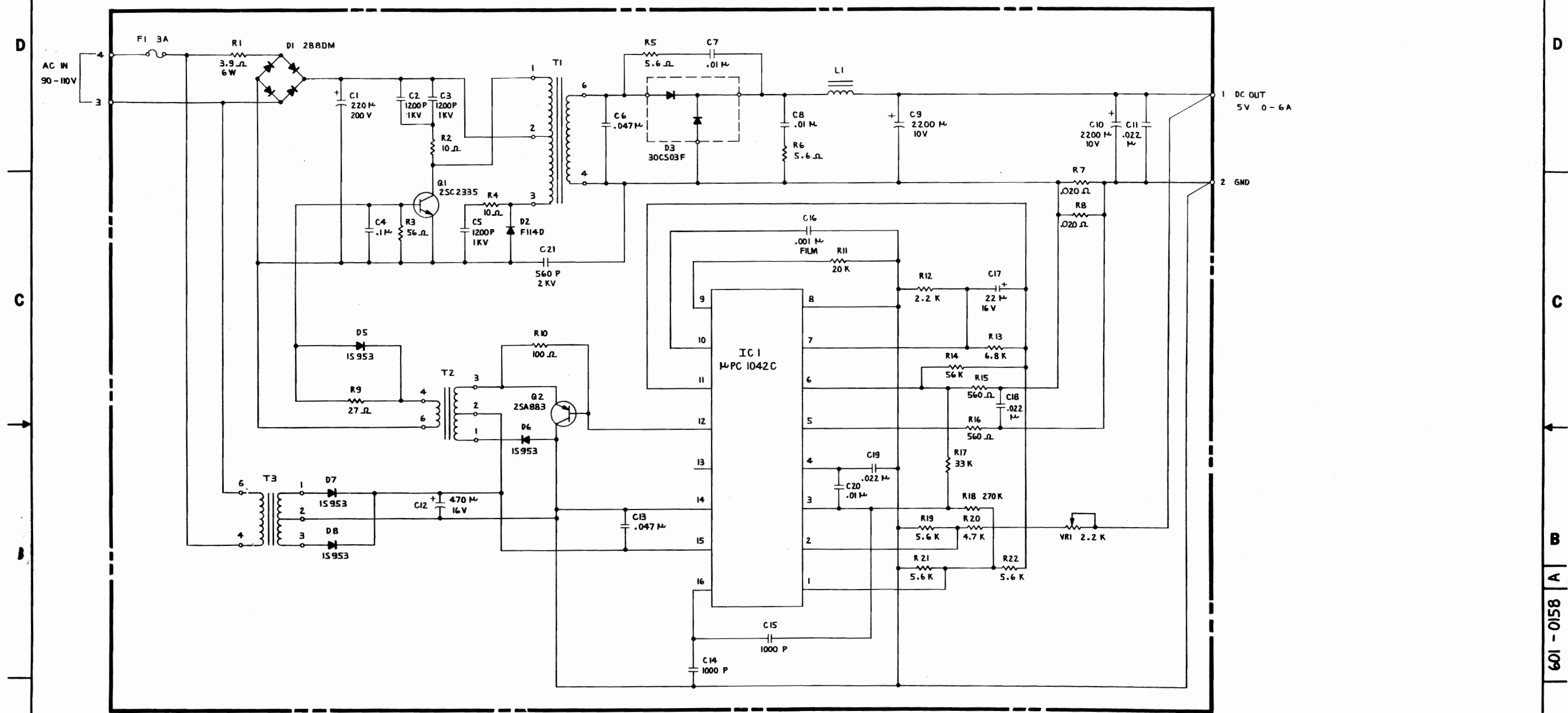


Regulator Unit

601-0612



| REVISIONS | | | | |
|-----------|----------|-------------|---------|---------------|
| ZONE | LTR | DESCRIPTION | DATE | APPROVED |
| A | RELEASED | SD | 8-14-81 | <i>Robert</i> |



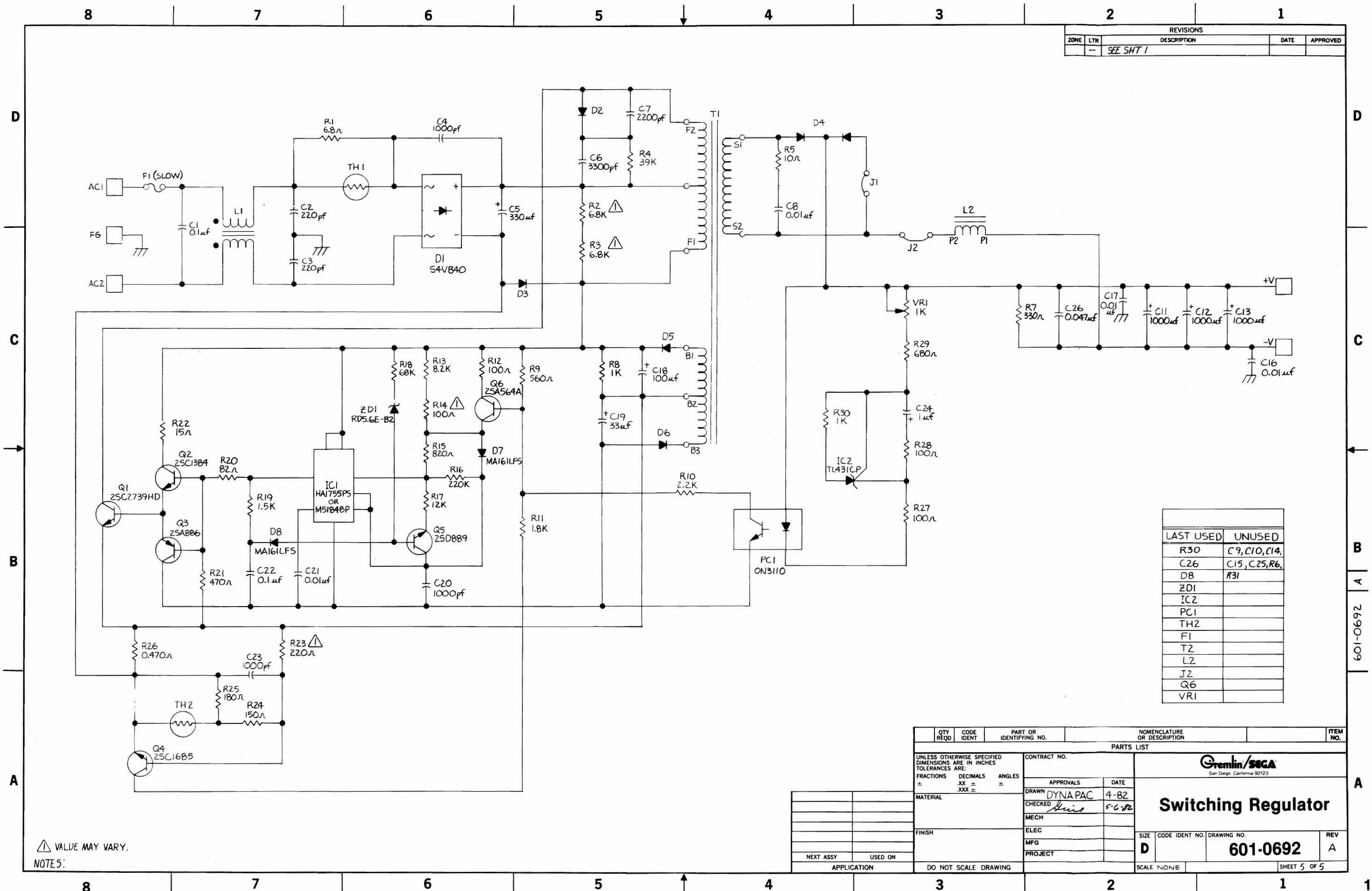
NOTES :
 1. R7, R8 AS REQUIRED OTHERWISE USE JUMPER WIRE.

| QTY REQD | CODE IDENT | PART OR IDENTIFYING NO. | NOMENCLATURE OR DESCRIPTION | ITEM NO. |
|---|----------------|-------------------------|--|--------------|
| PARTS LIST | | | | |
| UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: | | | | |
| FRACTIONS | DECIMALS | ANGLES | | |
| ± | .XX ± | ± | | |
| MATERIAL | | | | |
| FINISH | | | | |
| NEXT ASSY USED ON | | | | |
| APPLICATION | | | | |
| CONTRACT NO. | | | Grem/SECA San Diego, California 92123 | |
| APPROVALS | | DATE | | |
| DRAWN <i>SOM DUONG</i> | | 8-17-81 | | |
| CHECKED <i>G. GRICE</i> | | 8-17-81 | | |
| MECH | | | | |
| ELEC | | | | |
| MFG | | | | |
| PROJECT | | | | |
| SIZE | CODE IDENT NO. | DRAWING NO. | REV | |
| D | | 601-0158 | A | |
| SCALE | NONE | | | SHEET 1 OF 1 |

601-0158

A

| REVISIONS | | | | |
|-----------|-----|-------------|------|----------|
| ZONE | LTR | DESCRIPTION | DATE | APPROVED |
| - | - | SEE SHT 1 | | |

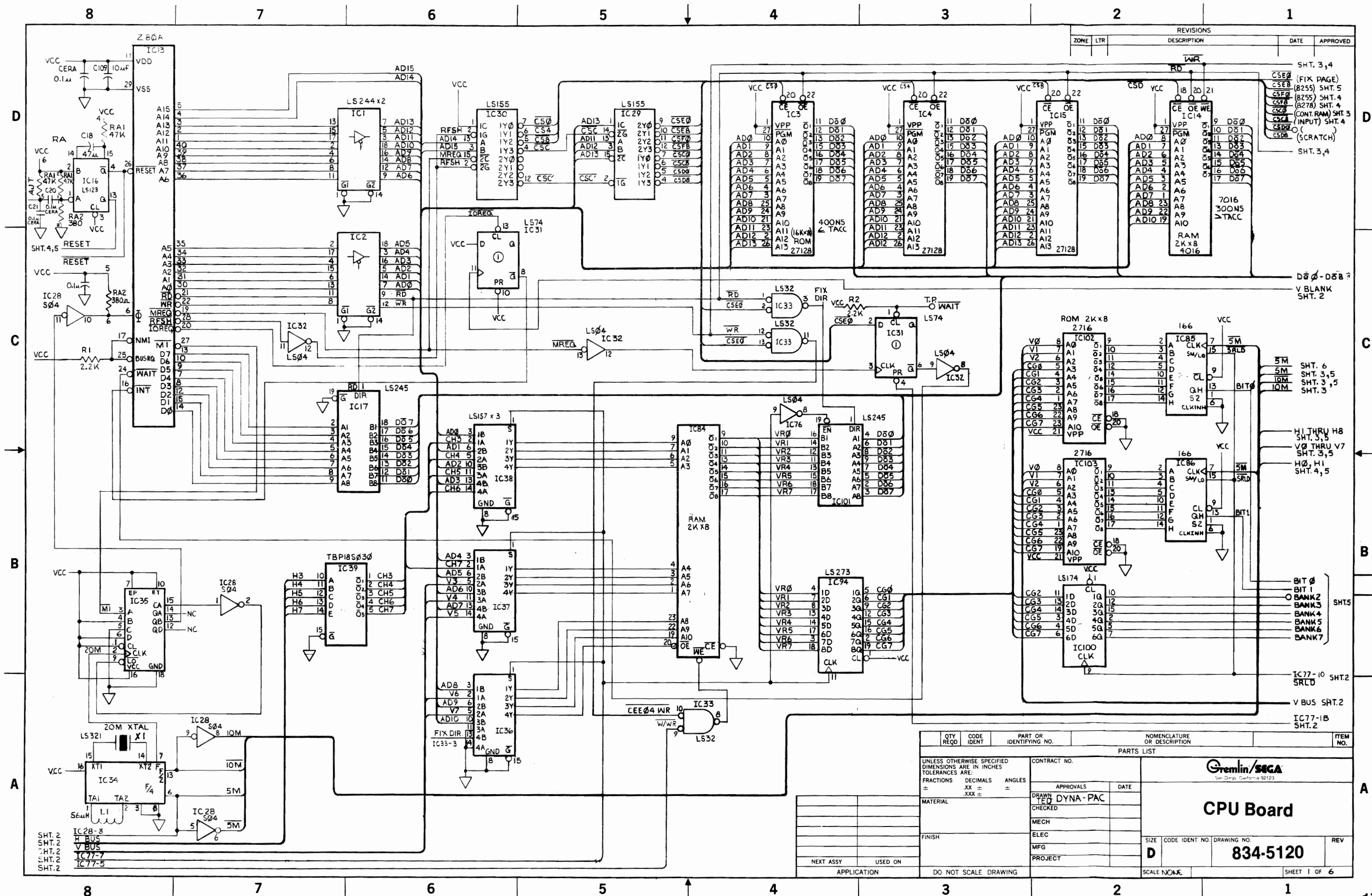


| LAST USED | UNUSED |
|-----------|---------------|
| R30 | C9, C10, C14, |
| C26 | C15, C25, R6, |
| D8 | R31 |
| ZD1 | |
| IC2 | |
| PC1 | |
| TH2 | |
| F1 | |
| T2 | |
| L2 | |
| J2 | |
| Q6 | |
| VR1 | |

△ VALUE MAY VARY.
NOTES:

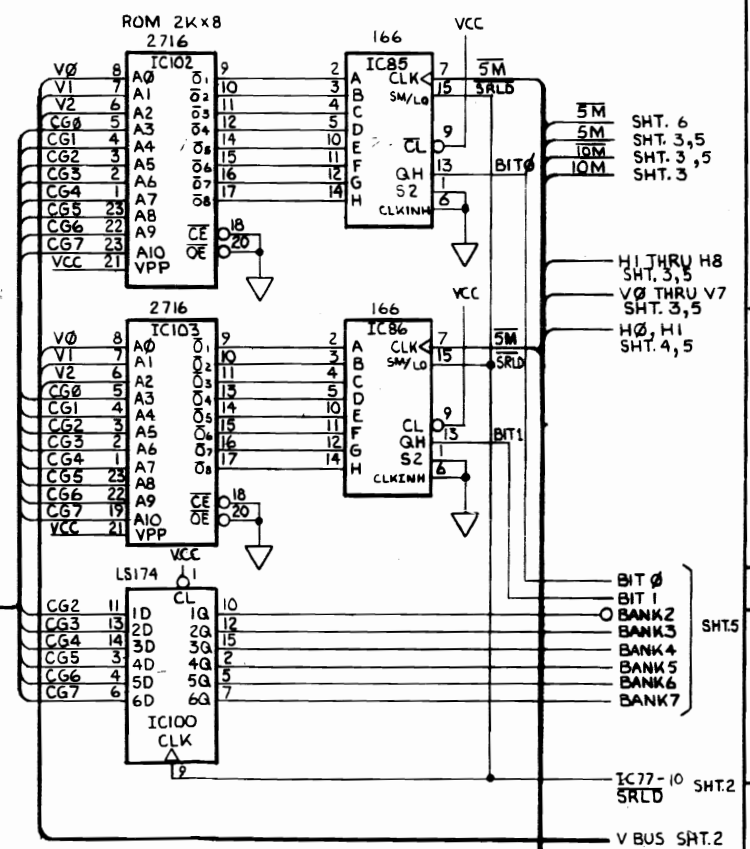
| QTY REQD | CODE IDENT | PART OR IDENTIFYING NO. | NOMENCLATURE OR DESCRIPTION | ITEM NO. |
|---|----------------------|-------------------------|-----------------------------|----------------|
| PARTS LIST | | | | |
| UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: | | CONTRACT NO. | | |
| FRACTIONS | DECIMALS | ANGLES | APPROVALS | DATE |
| ± | .XX ± | ± | | |
| | .XXX ± | | | |
| MATERIAL | | | DRAWN DYNAPAC | 4-82 |
| | | | CHECKED <i>Brice</i> | 5-6-82 |
| FINISH | | | MECH | |
| | | | ELEC | |
| | | | MFG | |
| | | | PROJECT | |
| NEXT ASSY | USED ON | | SIZE | CODE IDENT NO. |
| | | | D | 601-0692 |
| APPLICATION | DO NOT SCALE DRAWING | | DRAWING NO. | REV |
| | | | 801-0692 | A |
| | | | SCALE NONE | SHEET 5 OF 5 |

601-0692



| REVISIONS | | | | |
|-----------|-----|-------------|------|----------|
| ZONE | LTR | DESCRIPTION | DATE | APPROVED |
| | | | | |

SHT. 3,4
 (FIX PAGE)
 (8255) SHT. 5
 (8255) SHT. 4
 (8278) SHT. 4
 (CONT. RAM) SHT. 3
 (INPUT) SHT. 4
 (SCRATCH)
 SHT. 3,4



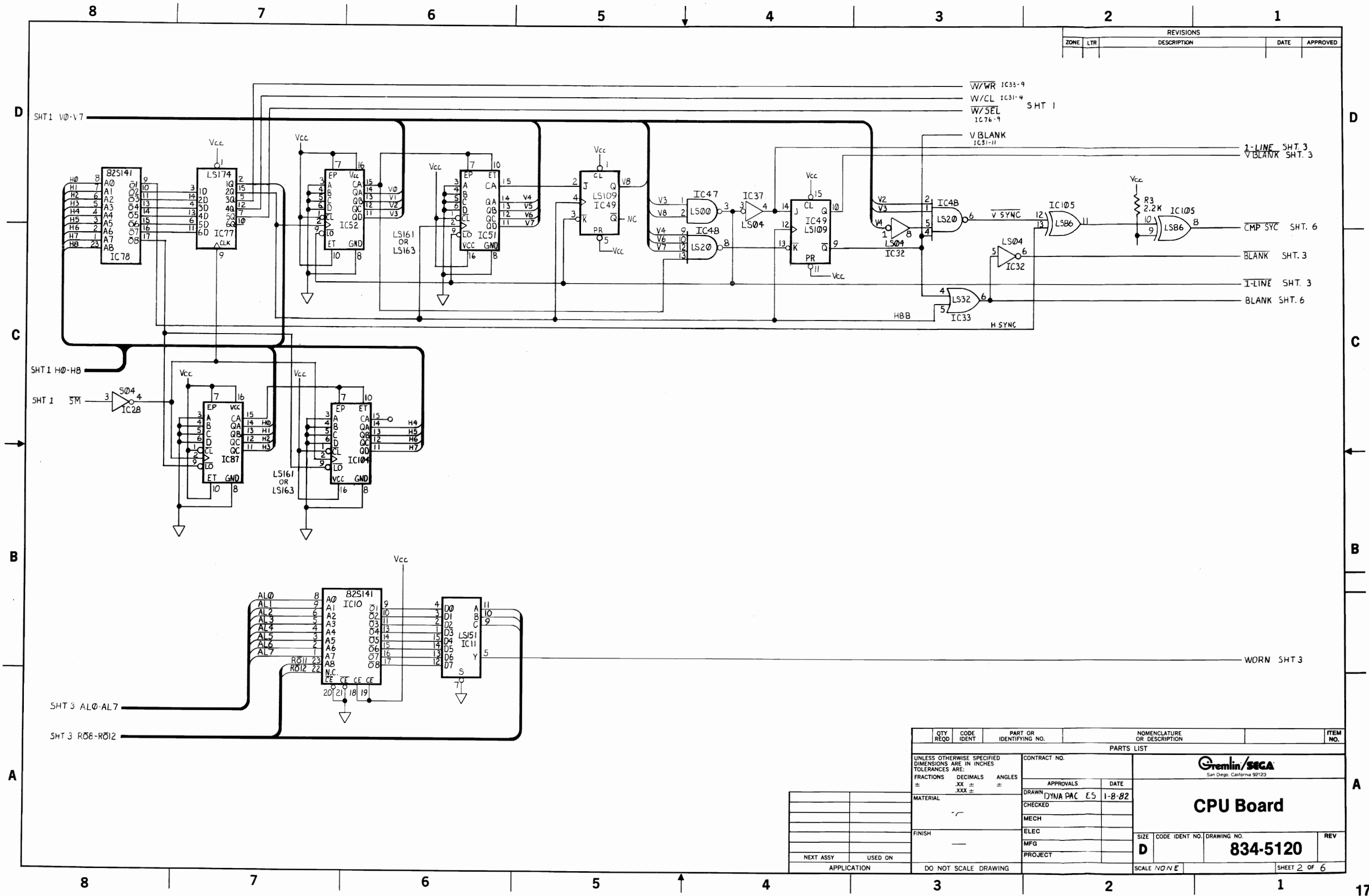
| QTY REQD | CODE IDENT | PART OR IDENTIFYING NO. | NOMENCLATURE OR DESCRIPTION | ITEM NO. |
|----------|------------|-------------------------|-----------------------------|----------|
| | | | | |

| PARTS LIST | |
|---|--|
| UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: FRACTIONS DECIMALS ANGLES ± .XX ± ± MATERIAL | CONTRACT NO. APPROVALS DATE DRAWN BY DYNA-PAC CHECKED MECH ELEC MFG PROJECT |

| | |
|---|-----------------|
| Gremlin/SEGA <small>San Diego, California 92123</small> | |
| CPU Board | |
| SIZE CODE IDENT NO. DRAWING NO. | REV |
| D | 834-5120 |

SHT. 2 IC28-3
 SHT. 2 H BUS
 SHT. 2 V BUS
 SHT. 2 IC77-7
 SHT. 2 IC77-5

| REVISIONS | | | | |
|-----------|-----|-------------|------|----------|
| ZONE | LTR | DESCRIPTION | DATE | APPROVED |
| | | | | |

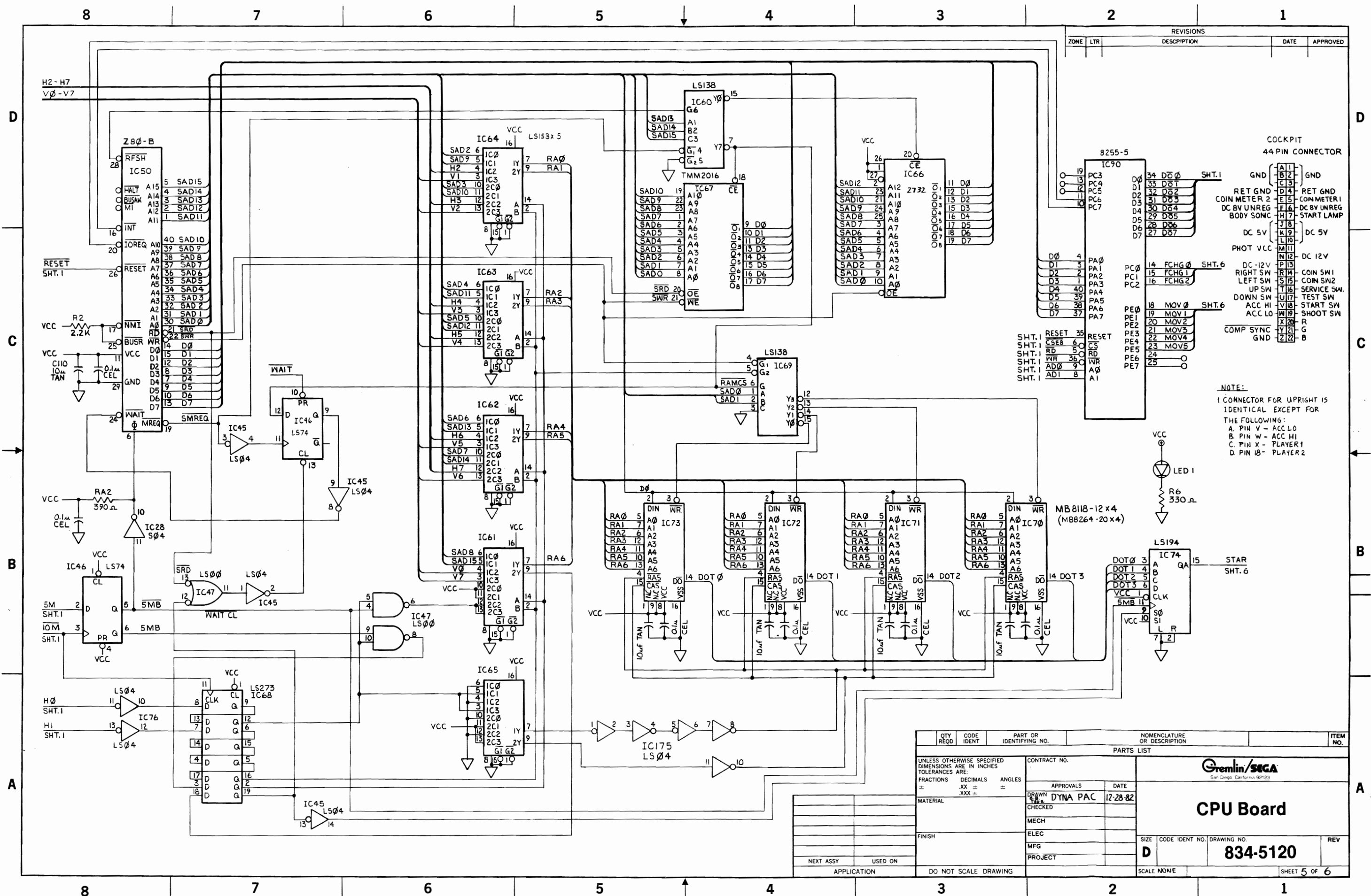


| QTY REQD | CODE IDENT | PART OR IDENTIFYING NO. | NOMENCLATURE OR DESCRIPTION | ITEM NO. |
|---|------------|-------------------------|-----------------------------|--------------|
| PARTS LIST | | | | |
| UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: | | CONTRACT NO. | | |
| FRACTIONS | DECIMALS | ANGLES | APPROVALS | DATE |
| ± | .XX ± | ± | DRAWN | 1-8-82 |
| | .XXX ± | | CHECKED | |
| MATERIAL | | | MECH | |
| FINISH | | | ELEC | |
| | | | MFG | |
| | | | PROJECT | |
| NEXT ASSY | USED ON | DO NOT SCALE DRAWING | SCALE NO/V/E | SHEET 2 OF 6 |

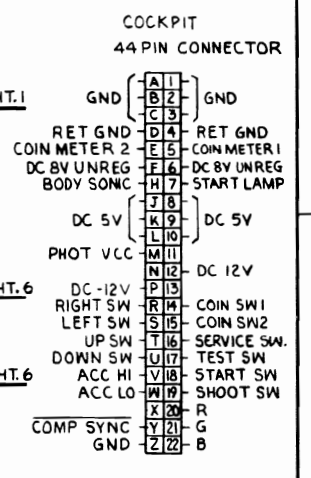
Gremlin/SEGA
San Diego, California 92123

CPU Board

SIZE CODE IDENT NO. DRAWING NO. REV
D **834-5120**



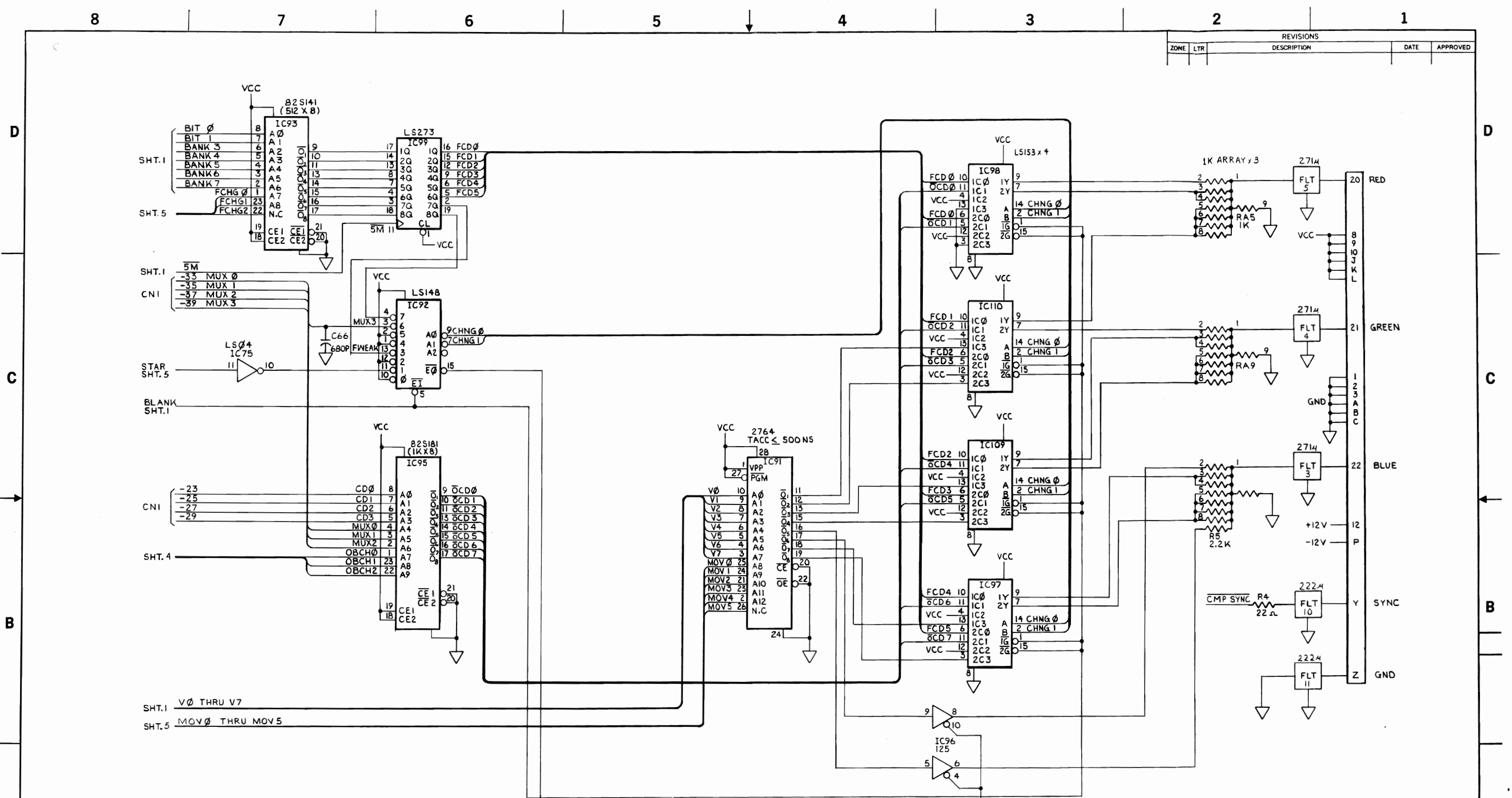
| REVISIONS | | | | |
|-----------|-----|-------------|------|----------|
| ZONE | LTR | DESCRIPTION | DATE | APPROVED |
| | | | | |



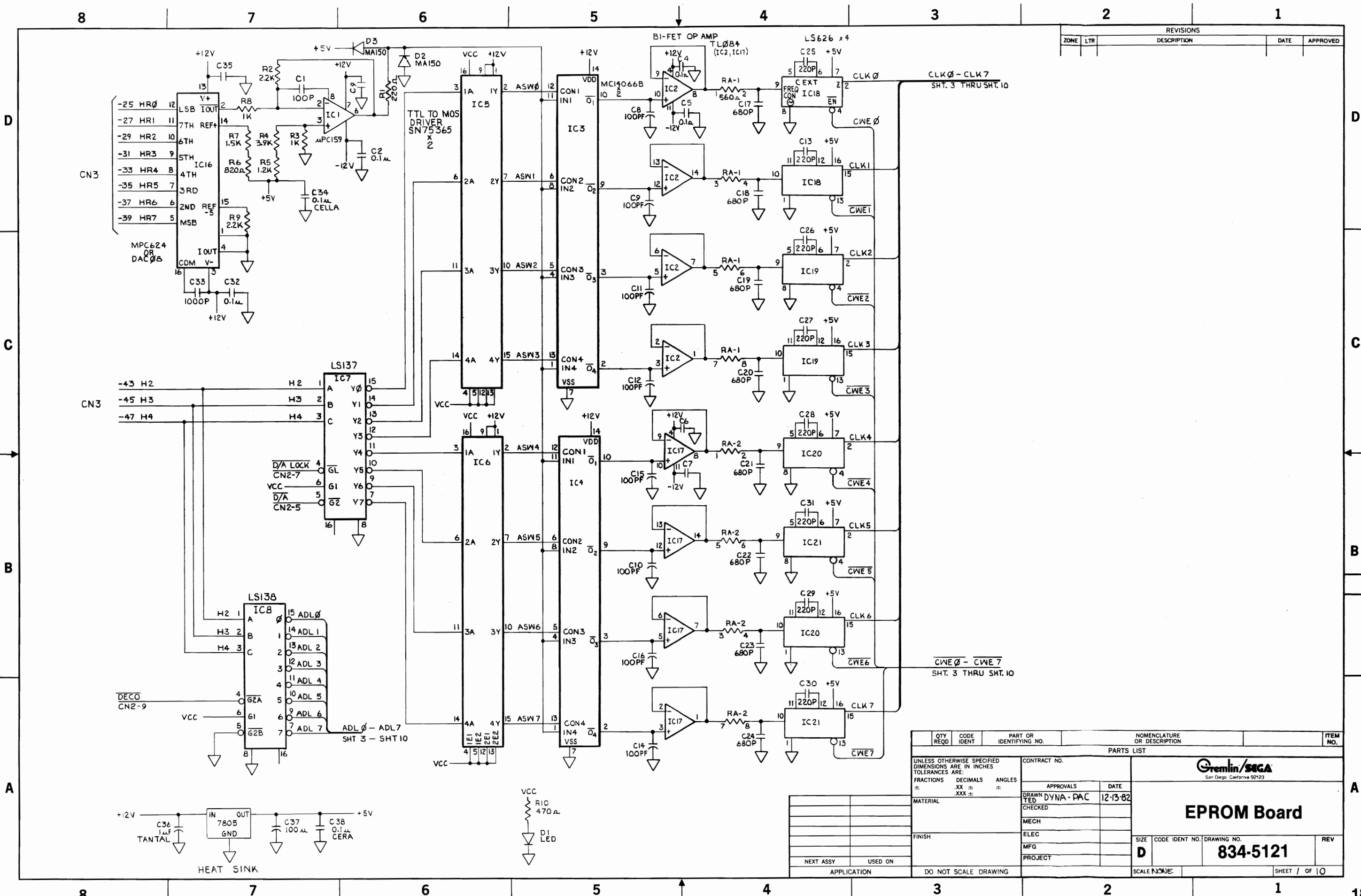
NOTE:
1 CONNECTOR FOR UPRIGHT IS IDENTICAL EXCEPT FOR THE FOLLOWING:
A. PIN V - ACC LO
B. PIN W - ACC HI
C. PIN X - PLAYER 1
D. PIN 18 - PLAYER 2

| QTY REQD | CODE IDENT | PART OR IDENTIFYING NO. | NOMENCLATURE OR DESCRIPTION | ITEM NO. |
|--|------------|---------------------------------|-----------------------------|----------|
| PARTS LIST | | | | |
| UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: FRACTIONS DECIMALS ANGLES ± .XX ± .XXX ± ° | | | | |
| MATERIAL | | CONTRACT NO. | | |
| FINISH | | APPROVALS DATE | | |
| NEXT ASSY USED ON | | DRAWN BY DYN PAC 12-28-82 | | |
| APPLICATION | | CHECKED | | |
| DO NOT SCALE DRAWING | | MECH | | |
| SCALE NONE | | ELEC | | |
| SHEET 5 OF 6 | | MFG | | |
| | | PROJECT | | |
| | | SIZE CODE IDENT NO. DRAWING NO. | | |
| | | D 834-5120 REV | | |

| REVISIONS | | | | |
|-----------|-----|-------------|------|----------|
| ZONE | LTR | DESCRIPTION | DATE | APPROVED |
| | | | | |



| QTY REQD | CODE IDENT | PART OR IDENTIFYING NO. | NOMENCLATURE OR DESCRIPTION | ITEM NO. |
|--|------------|-------------------------|-----------------------------|----------|
| PARTS LIST | | | | |
| UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES. TOLERANCES ARE: | | | | |
| FRACTIONS | DECIMALS | ANGLES | | |
| ± | .XX ± | ± | | |
| MATERIAL | | | | |
| FINISH | | | | |
| NEXT ASSY USED ON | | | | |
| APPLICATION | | | | |
| CONTRACT NO. | | APPROVALS | | |
| DRAWN BY DYNAPAC | | DATE 12-21-82 | | |
| CHECKED | | MECH | | |
| ELEC | | MFG | | |
| PROJECT | | SCALE NONE | | |
| | | CPU Board | | |
| | | | | |
| DO NOT SCALE DRAWING | | SHEET 6 OF 6 | | |



| REVISIONS | | | | |
|-----------|-----|-------------|------|----------|
| ZONE | LTR | DESCRIPTION | DATE | APPROVED |
| | | | | |

| QTY REQD | CODE IDENT | PART OR IDENTIFYING NO. | NOMENCLATURE OR DESCRIPTION | ITEM NO. |
|---|------------|-------------------------|-----------------------------|----------|
| PARTS LIST | | | | |
| UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: | | CONTRACT NO. | | |
| FRACTIONS | DECIMALS | ANGLES | APPROVALS | DATE |
| ± | .XX ± | ± | DRAWN TED | 12-13-82 |
| | .XXX ± | | CHECKED | |
| MATERIAL | | MECH | | |
| FINISH | | ELEC | | |
| NEXT ASSY | | MFG | | |
| USED ON | | PROJECT | | |
| APPLICATION | | DO NOT SCALE DRAWING | | |

Gremlin/SEGA
San Diego, California 92123

EPROM Board

SIZE CODE IDENT NO. DRAWING NO. **834-5121** REV

SCALE NONE SHEET / OF 10

8

7

6

5

4

3

2

1

| REVISIONS | | | | |
|-----------|-----|-------------|------|----------|
| ZONE | LTR | DESCRIPTION | DATE | APPROVED |
| | | | | |

D

D

C

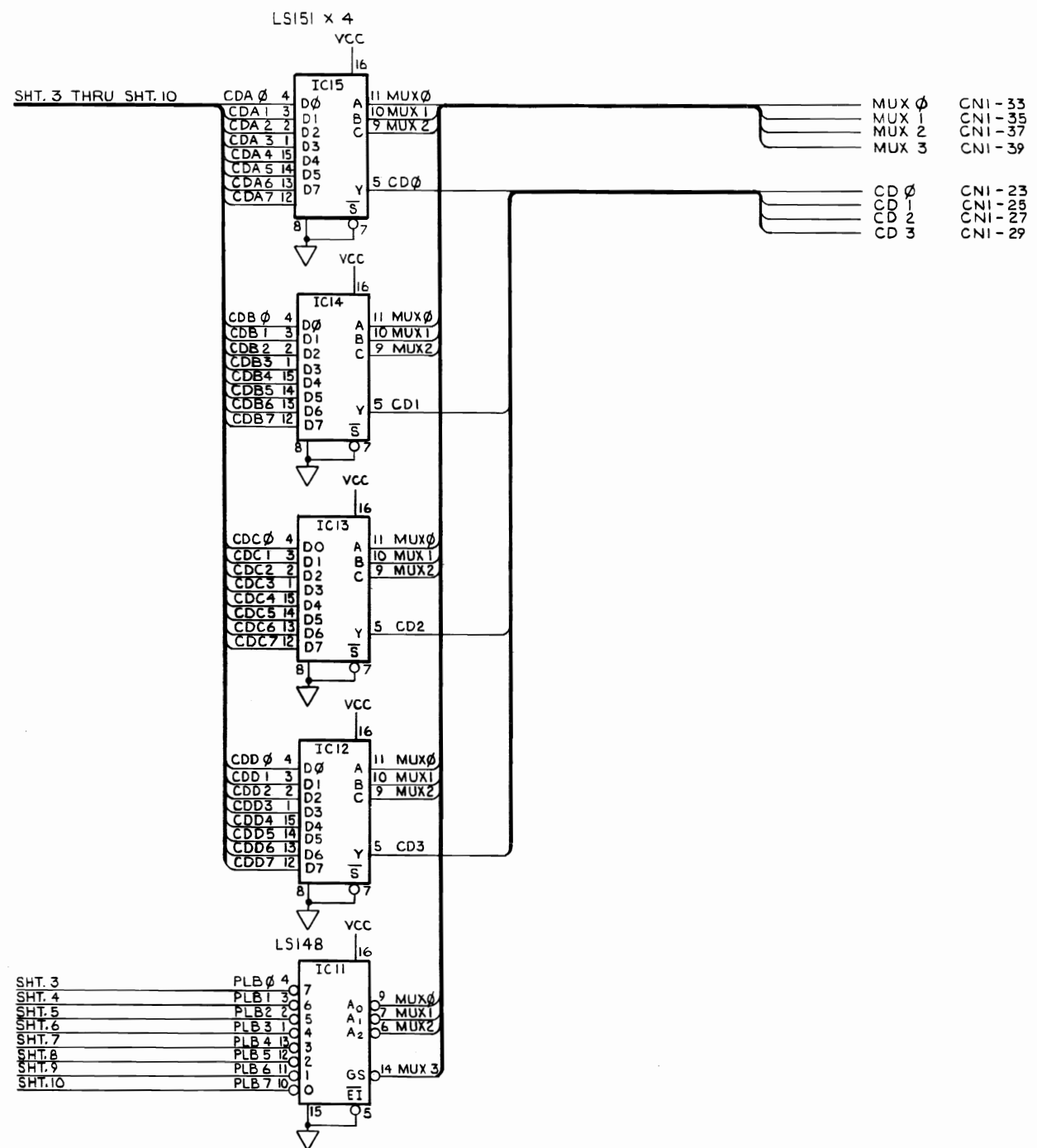
C

B

B

A

A



| QTY REQD | CODE IDENT | PART OR IDENTIFYING NO. | NOMENCLATURE OR DESCRIPTION | ITEM NO. |
|---|------------|-------------------------|-----------------------------|----------|
| PARTS LIST | | | | |
| UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: | | CONTRACT NO. | | |
| FRACTIONS | DECIMALS | ANGLES | APPROVALS | DATE |
| ± | .XX ± | ± | DRAWN DYNA PAC | 12-15-82 |
| ± | .XXX ± | ± | CHECKED | |
| MATERIAL | | MECH | | |
| FINISH | | ELEC | | |
| NEXT ASSY | | MFG | | |
| USED ON | | PROJECT | | |
| APPLICATION | | DO NOT SCALE DRAWING | | |
| SCALE NAME | | SHEET 2 OF 10 | | |

Gremlin/SEGA
San Diego, California 92123

EPROM Board

SIZE CODE IDENT NO. DRAWING NO. REV
D **834-5121**

8

7

6

5

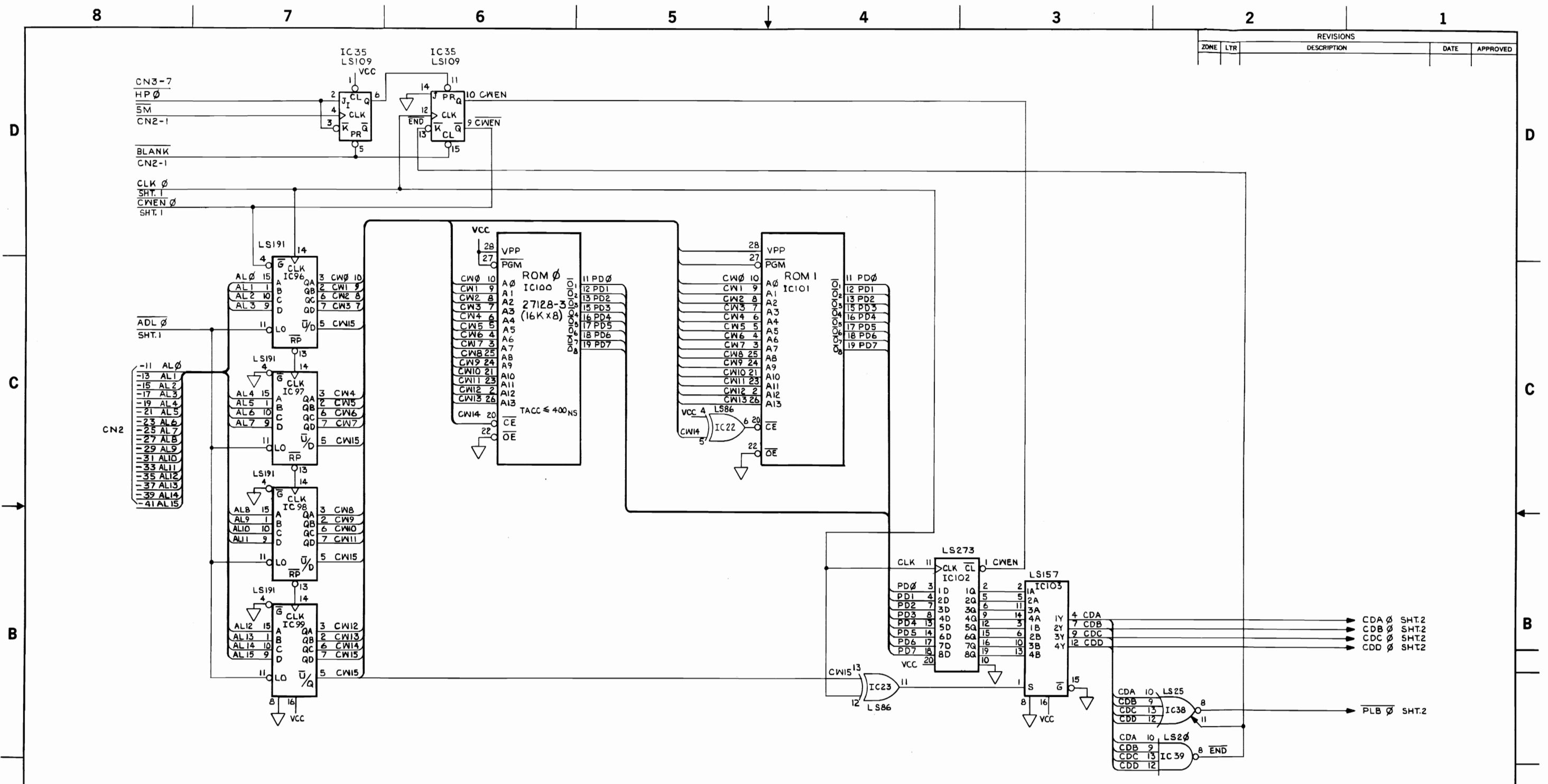
4

3

2

1

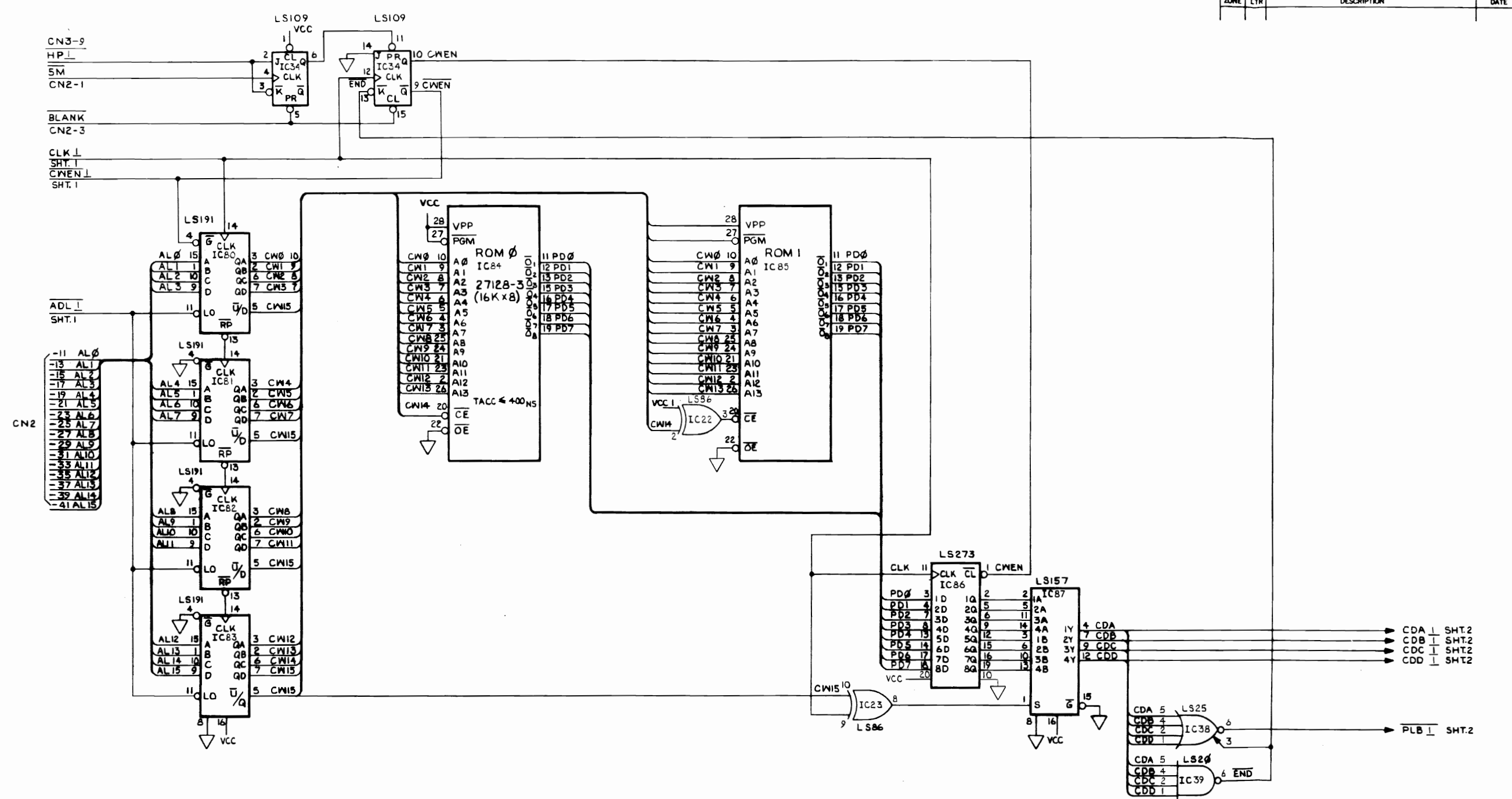
| REVISIONS | | | | |
|-----------|-----|-------------|------|----------|
| ZONE | LTR | DESCRIPTION | DATE | APPROVED |
| | | | | |



LEVEL 0

| QTY REQD | CODE IDENT | PART OR IDENTIFYING NO. | NOMENCLATURE OR DESCRIPTION | ITEM NO. |
|---|------------|-------------------------------------|-----------------------------|----------|
| PARTS LIST | | | | |
| UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: | | | | |
| FRACTIONS | DECIMALS | ANGLES | | |
| ± | .XX ± | ± | | |
| MATERIAL | | CONTRACT NO. | | |
| FINISH | | APPROVALS DATE | | |
| NEXT ASSY USED ON | | DRAWN DYNA-PAC 12-8-82 | | |
| APPLICATION | | CHECKED | | |
| DO NOT SCALE DRAWING | | MECH | | |
| SCALE | | ELEC | | |
| | | MFG | | |
| | | PROJECT | | |
| | | SIZE CODE IDENT NO. DRAWING NO. REV | | |
| | | D 834-5121 | | |
| | | SHEET 3 OF 10 | | |

| REVISIONS | | | | |
|-----------|-----|-------------|------|----------|
| ZONE | LTR | DESCRIPTION | DATE | APPROVED |
| | | | | |



LEVEL 1

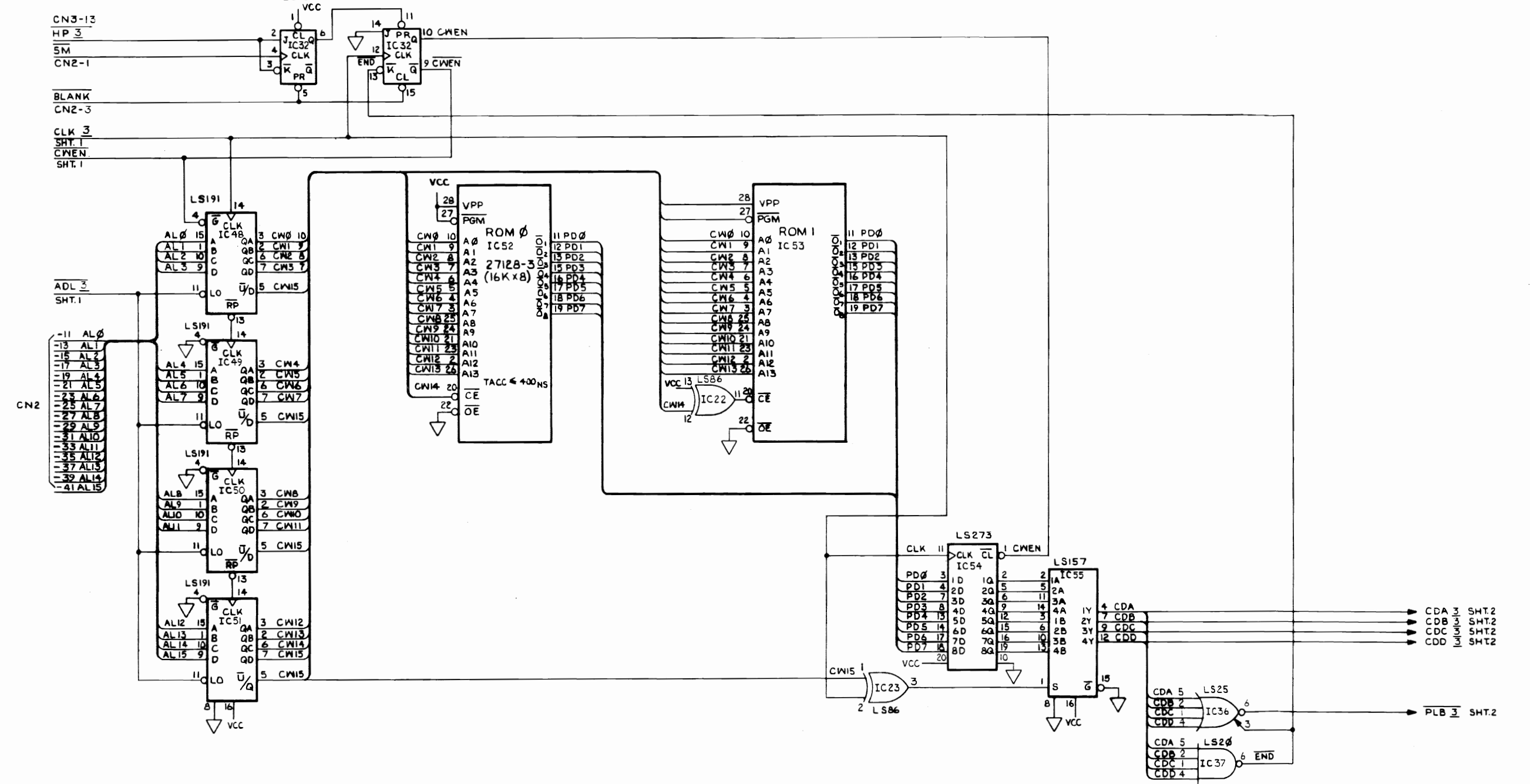
| QTY REQD | CODE IDENT | PART OR IDENTIFYING NO. | NOMENCLATURE OR DESCRIPTION | ITEM NO. |
|---|------------|-------------------------|-----------------------------|----------|
| PARTS LIST | | | | |
| UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: | | CONTRACT NO. | | |
| FRACTIONS | DECIMALS | ANGLES | APPROVALS | |
| = | .XX ± | ± | DATE | |
| | .XXX ± | | DRAWN BY DYNAPAC 12-8-82 | |
| MATERIAL | | | CHECKED | |
| | | | MECH | |
| FINISH | | | ELEC | |
| | | | MFG | |
| NEXT ASSY | USED ON | | PROJECT | |
| APPLICATION | | DO NOT SCALE DRAWING | | SCALE |



EPROM Board

834-5121

| ZONE | | LTR | | REVISIONS | | DATE | APPROVED |
|------|--|-----|--|-------------|--|------|----------|
| | | | | DESCRIPTION | | | |
| | | | | | | | |



LEVEL 3

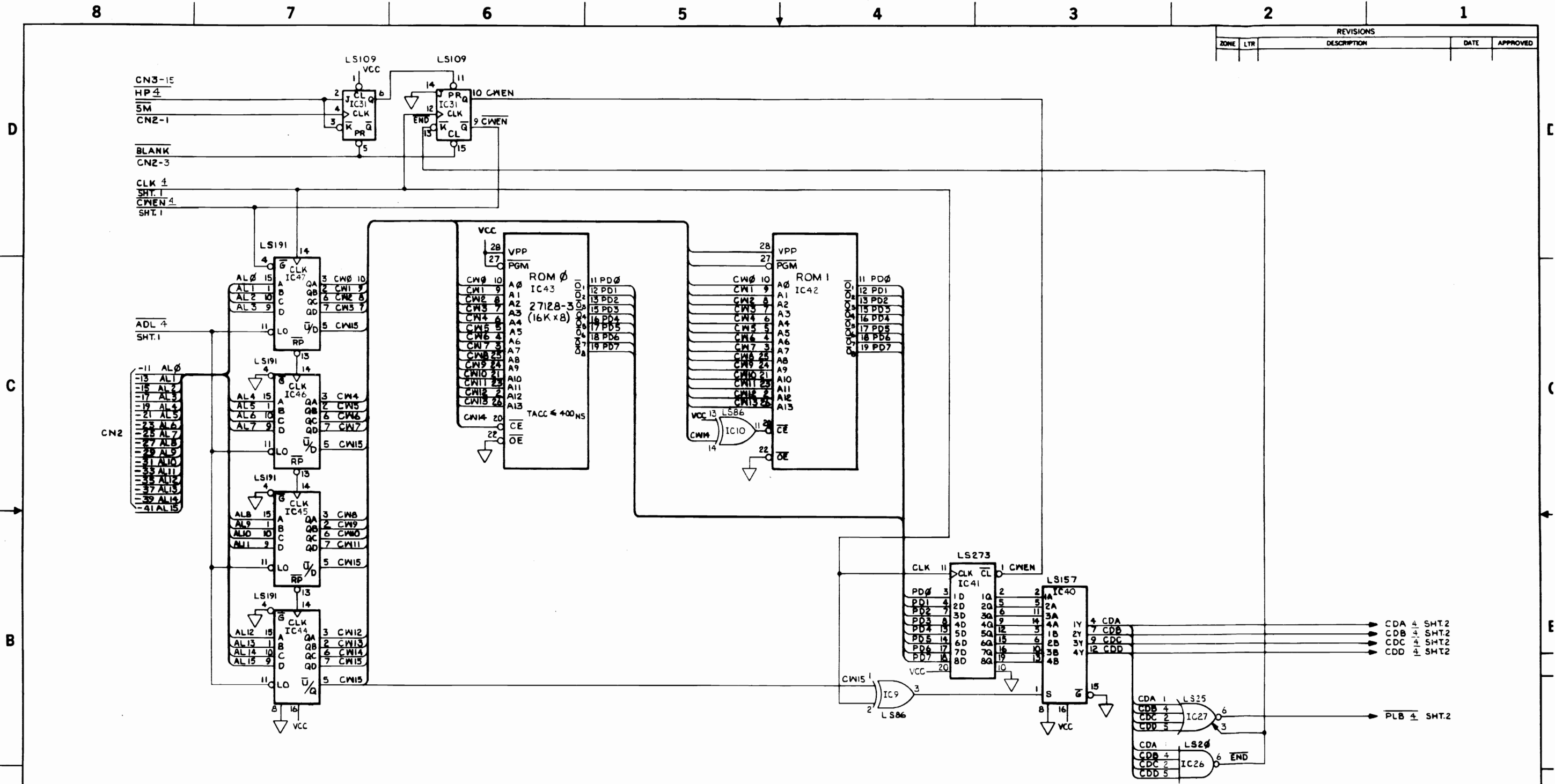
| QTY REQD | CODE IDENT | PART OR IDENTIFYING NO | NOMENCLATURE OR DESCRIPTION | ITEM NO. |
|--|----------------|------------------------|-----------------------------|---------------|
| PARTS LIST | | | | |
| UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE | | | CONTRACT NO | |
| FRACTIONS ± | DECIMALS .XX ± | ANGLES XXX ± | APPROVALS DATE | |
| MATERIAL | | | DRAWN BY DYNA-PAC 12-B-82 | |
| FINISH | | | CHECKED | |
| NEXT ASSY USED ON | | | MECH | |
| APPLICATION | | | ELEC | |
| DO NOT SCALE DRAWING | | | MFG | |
| | | | PROJECT | |
| SIZE | | CODE IDENT NO | DRAWING NO | REV |
| D | | | 834-5121 | |
| SCALE | | | | SHEET 6 of 10 |



EPROM Board

834-5121

| REVISIONS | | | | |
|-----------|-----|-------------|------|----------|
| ZONE | LTR | DESCRIPTION | DATE | APPROVED |
| | | | | |



LEVEL 4

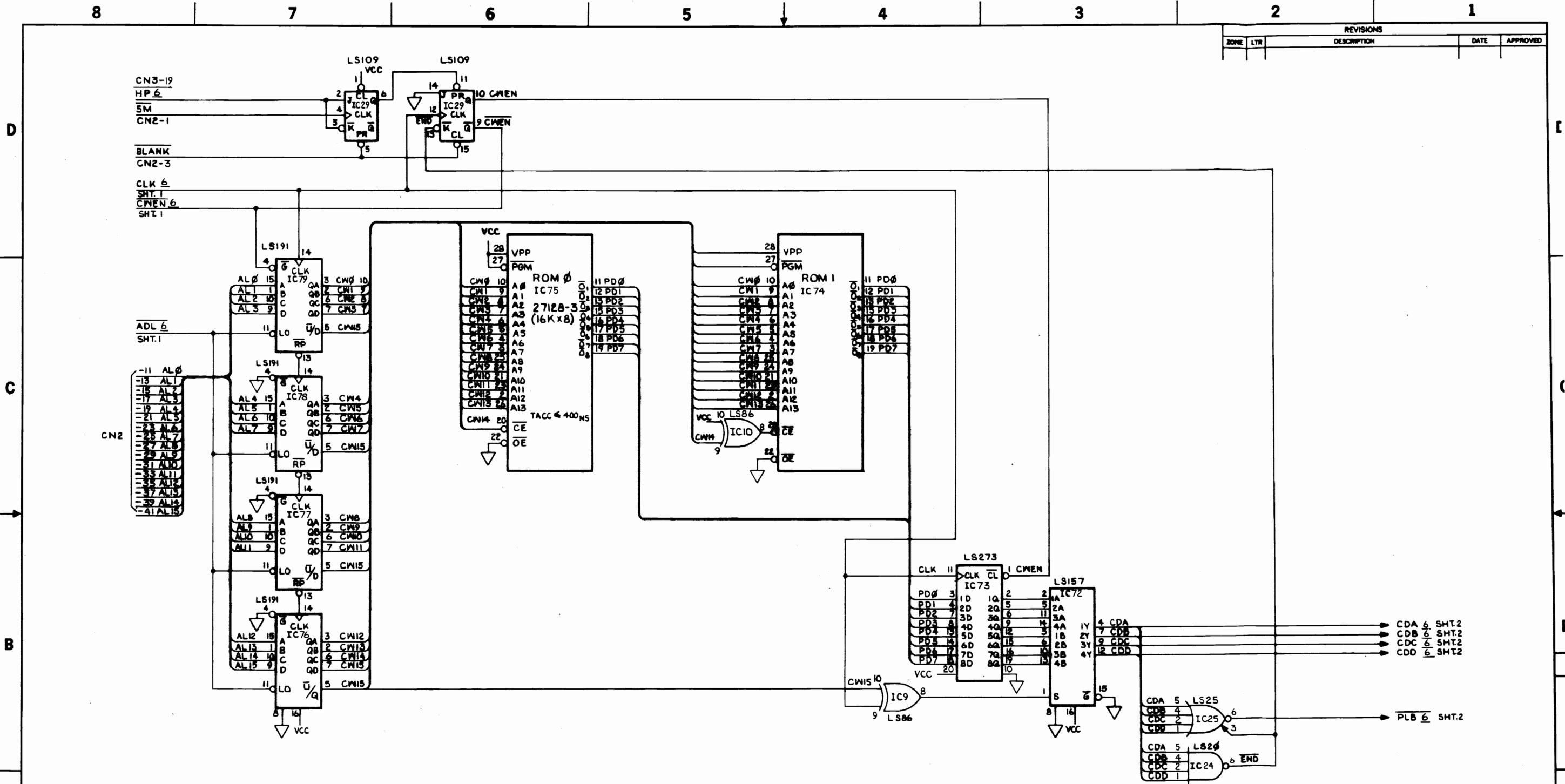
| QTY REQD | CODE IDENT | PART OR IDENTIFYING NO | NOMENCLATURE OR DESCRIPTION | ITEM NO. |
|--|----------------|-----------------------------------|-----------------------------|----------|
| PARTS LIST | | | | |
| UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE | | CONTRACT NO. | | |
| FRACTIONS ± | DECIMALS .XX ± | ANGLES XXX ± | APPROVALS | DATE |
| MATERIAL | | DRAWN BY DYNA-PAC 12-8-82 | | |
| FINISH | | CHECKED | | |
| NEXT ASSY | | USED ON | | |
| APPLICATION | | DO NOT SCALE DRAWING | | |
| SCALE | | SIZE CODE IDENT NO DRAWING NO REV | | |
| D | | 834-5121 | | |
| SHEET 7 OF 10 | | ELEC MFG PROJECT | | |

Gremlin/SECA

EPROM Board

834-5121

| REVISIONS | | | | |
|-----------|-----|-------------|------|----------|
| ZONE | LTR | DESCRIPTION | DATE | APPROVED |
| | | | | |



LEVEL 6

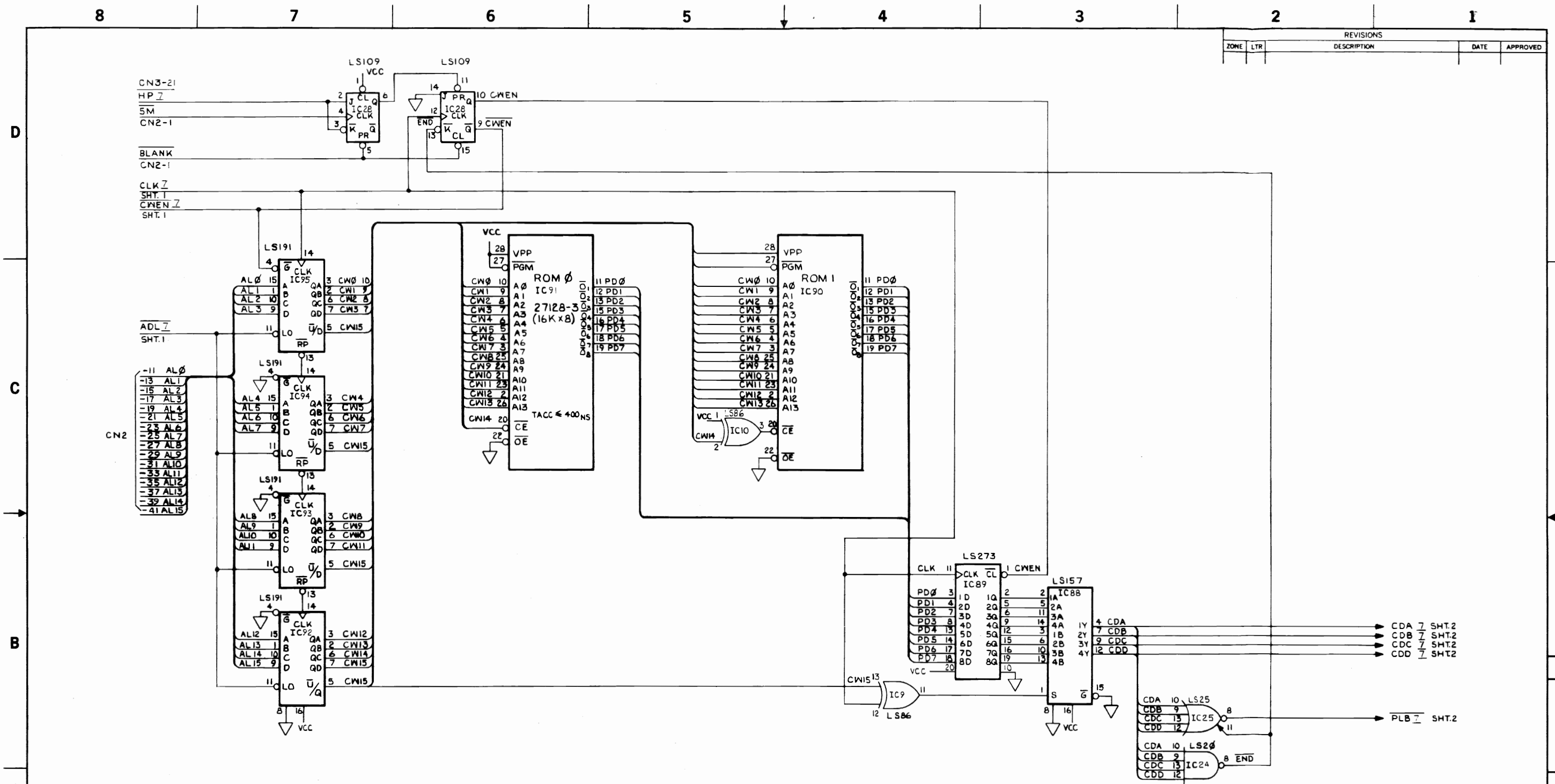
| QTY REQD | CODE IDENT | PART OR IDENTIFYING NO. | NOMENCLATURE OR DESCRIPTION | ITEM NO. |
|---|------------|-------------------------------------|-----------------------------|----------|
| PARTS LIST | | | | |
| UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: | | CONTRACT NO. | | |
| FRACTIONS | DECIMALS | ANGLES | APPROVALS | |
| ± | ± | ± | DATE | |
| MATERIAL | | DRAWN BY DYNAPAC 12-8-82 | | |
| FINISH | | CHECKED | | |
| NEXT ASSY | | MECH | | |
| USED ON | | ELEC | | |
| APPLICATION | | MFG | | |
| DO NOT SCALE DRAWING | | PROJECT | | |
| SCALE | | SIZE CODE IDENT NO. DRAWING NO. REV | | |
| | | D 834-5121 | | |
| | | SHEET 9 OF 10 | | |



EPROM Board

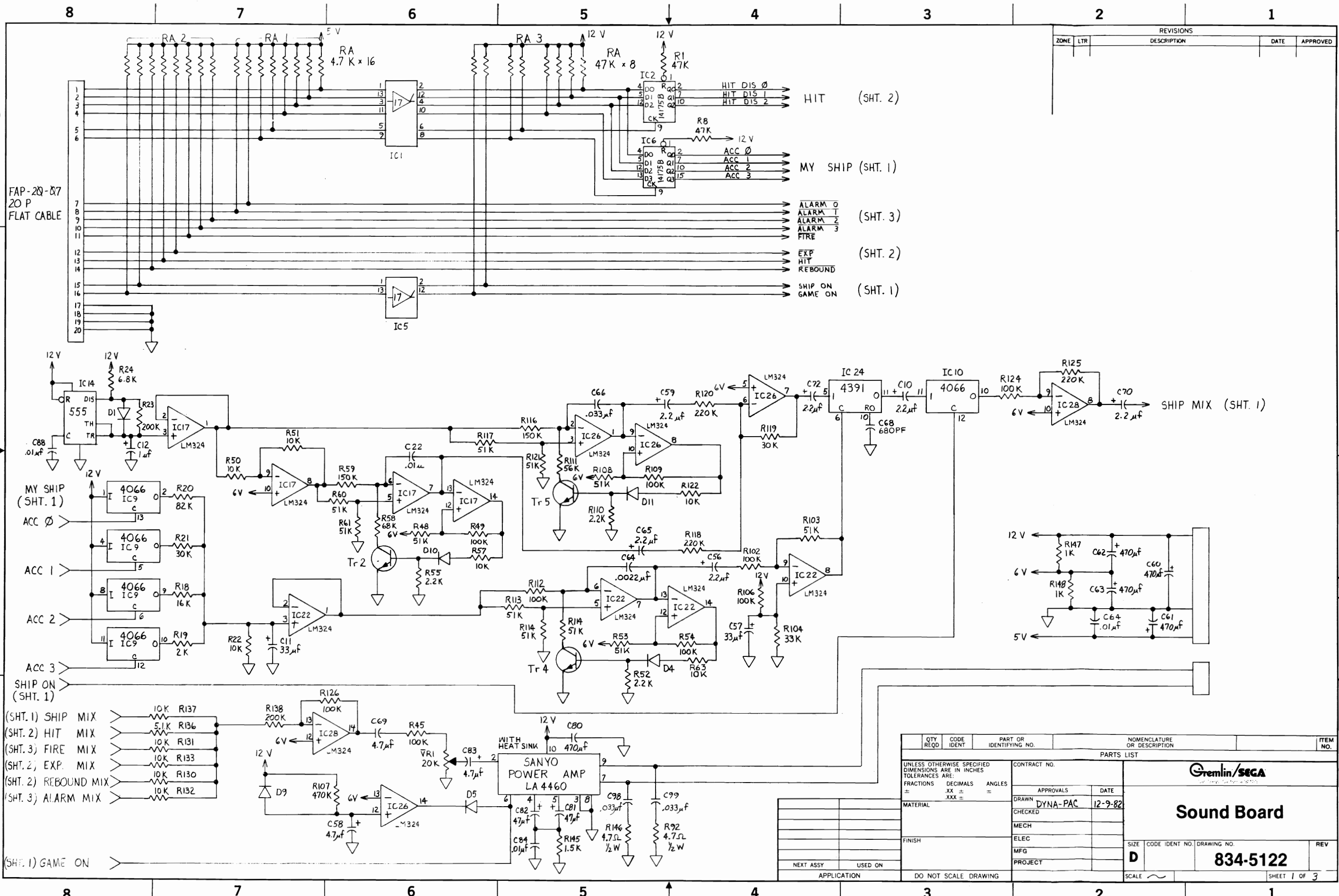
834-5121

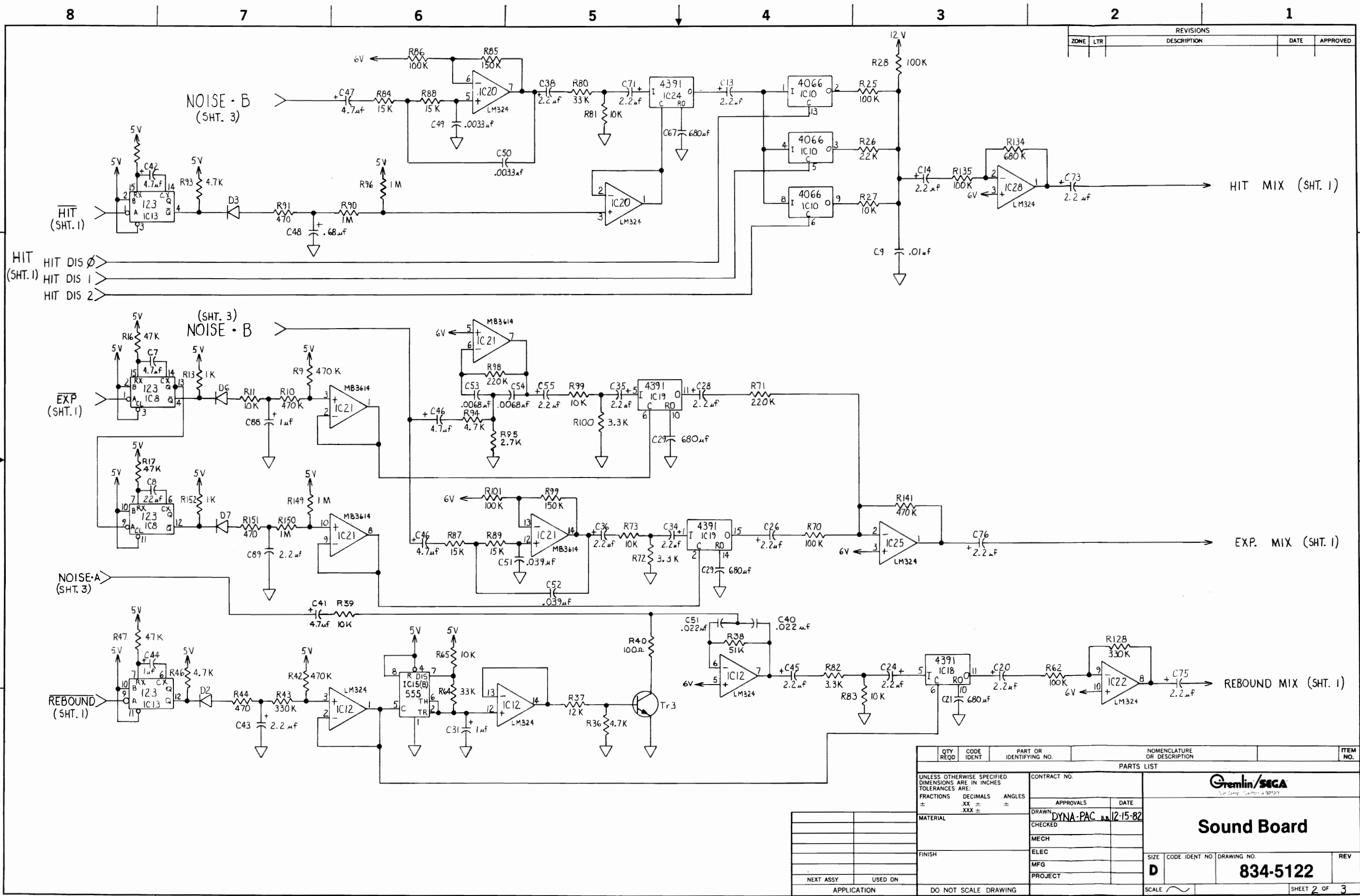
| ZONE | | LTR | | REVISIONS | | DATE | APPROVED |
|------|--|-----|--|-------------|--|------|----------|
| | | | | DESCRIPTION | | | |
| | | | | | | | |



LEVEL 7

| QTY REQD | CODE IDENT | PART OR IDENTIFYING NO. | NOMENCLATURE OR DESCRIPTION | ITEM NO. |
|---|----------------|----------------------------|-----------------------------|---------------|
| PARTS LIST | | | | |
| UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: | | CONTRACT NO. | | |
| FRACTIONS DECIMALS ANGLES | | APPROVALS DATE | | |
| = .XX .XXX | | DRAWN TED DYNA-PAC 12-8-82 | | |
| MATERIAL | | CHECKED | | |
| FINISH | | MECH | | |
| NEXT ASSY USED ON | | ELEC | | |
| APPLICATION | | MFG | | |
| DO NOT SCALE DRAWING | | PROJECT | | |
| | | | | |
| <h1>EPROM Board</h1> | | | | |
| SIZE | CODE IDENT NO. | DRAWING NO. | REV | |
| D | | 834-5121 | | |
| SCALE | | | | SHEET 1 OF 10 |





| REVISIONS | | | | |
|-----------|-----|-------------|------|----------|
| ZONE | LTR | DESCRIPTION | DATE | APPROVED |
| | | | | |

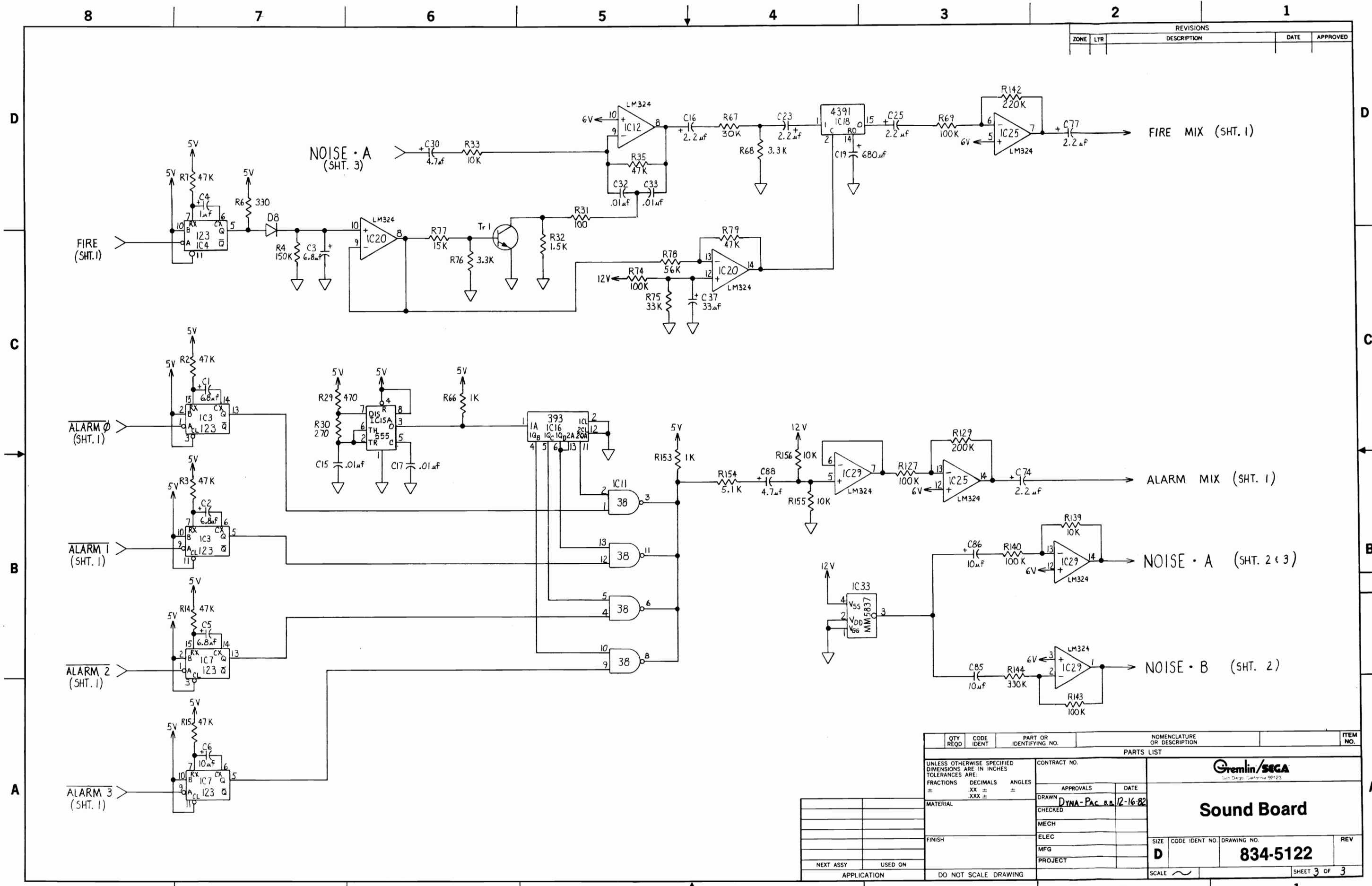
| QTY | CODE | PART OR IDENTIFYING NO. | NOMENCLATURE OR DESCRIPTION | ITEM NO. |
|---|----------|-------------------------|-----------------------------|----------|
| PARTS LIST | | | | |
| UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: | | CONTRACT NO. | | |
| FRACTIONS | DECIMALS | ANGLES | APPROVALS | |
| ± | .XX ± | ± | DATE | |
| ± | .XXX ± | ± | DRAWN: DYNAPAC | |
| MATERIAL | | CHECKED | | 12-15-82 |
| FINISH | | MECH | | |
| NEXT ASSY | | ELEC | | |
| USED ON | | MFG | | |
| APPLICATION | | PROJECT | | |
| DO NOT SCALE DRAWING | | SCALE | | |

Gremlin/SCGA

Sound Board

SIZE: **D** CODE IDENT NO: **834-5122** DRAWING NO: **834-5122** REV:

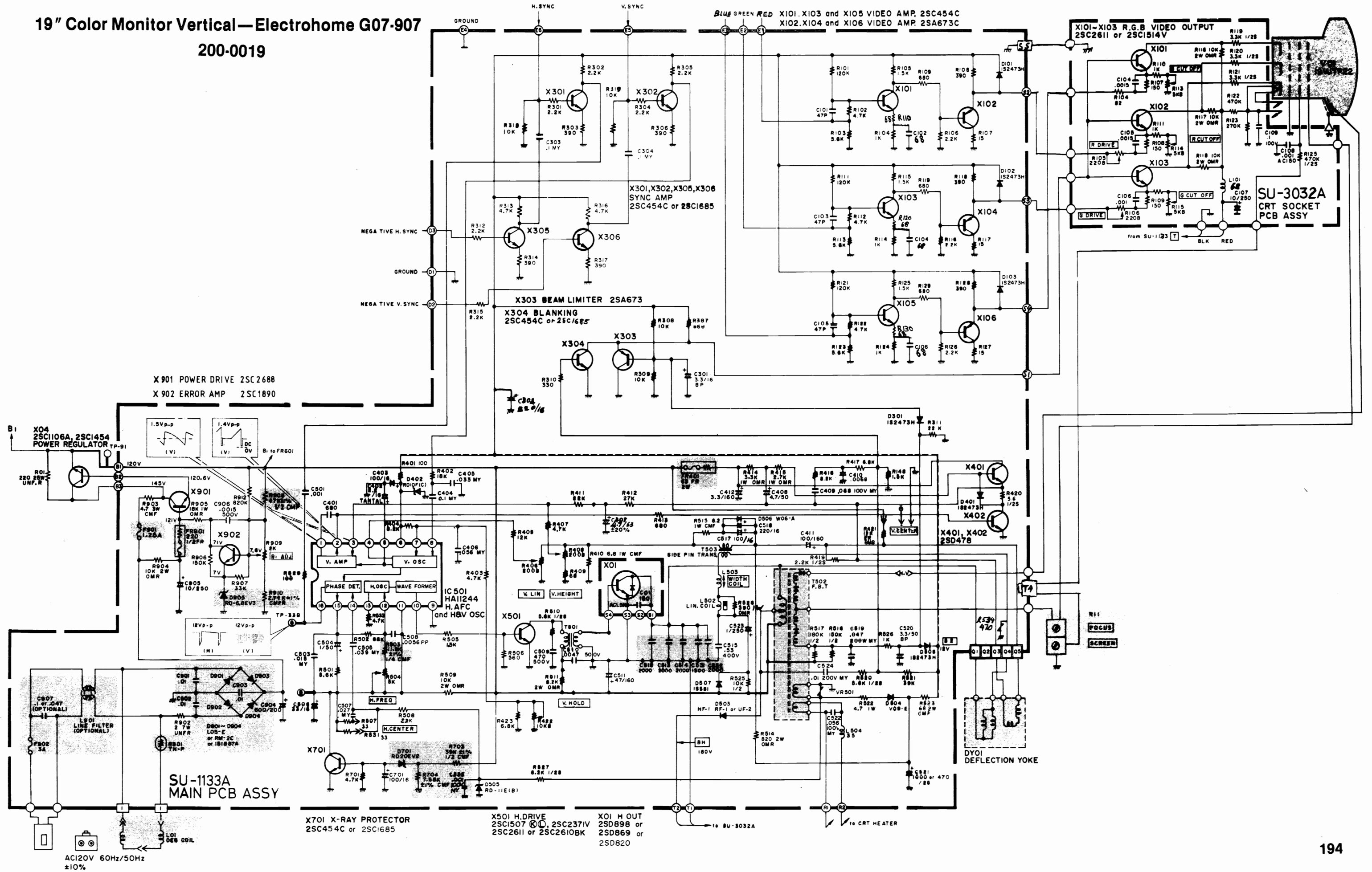
| REVISIONS | | | | |
|-----------|-----|-------------|------|----------|
| ZONE | LTR | DESCRIPTION | DATE | APPROVED |
| | | | | |

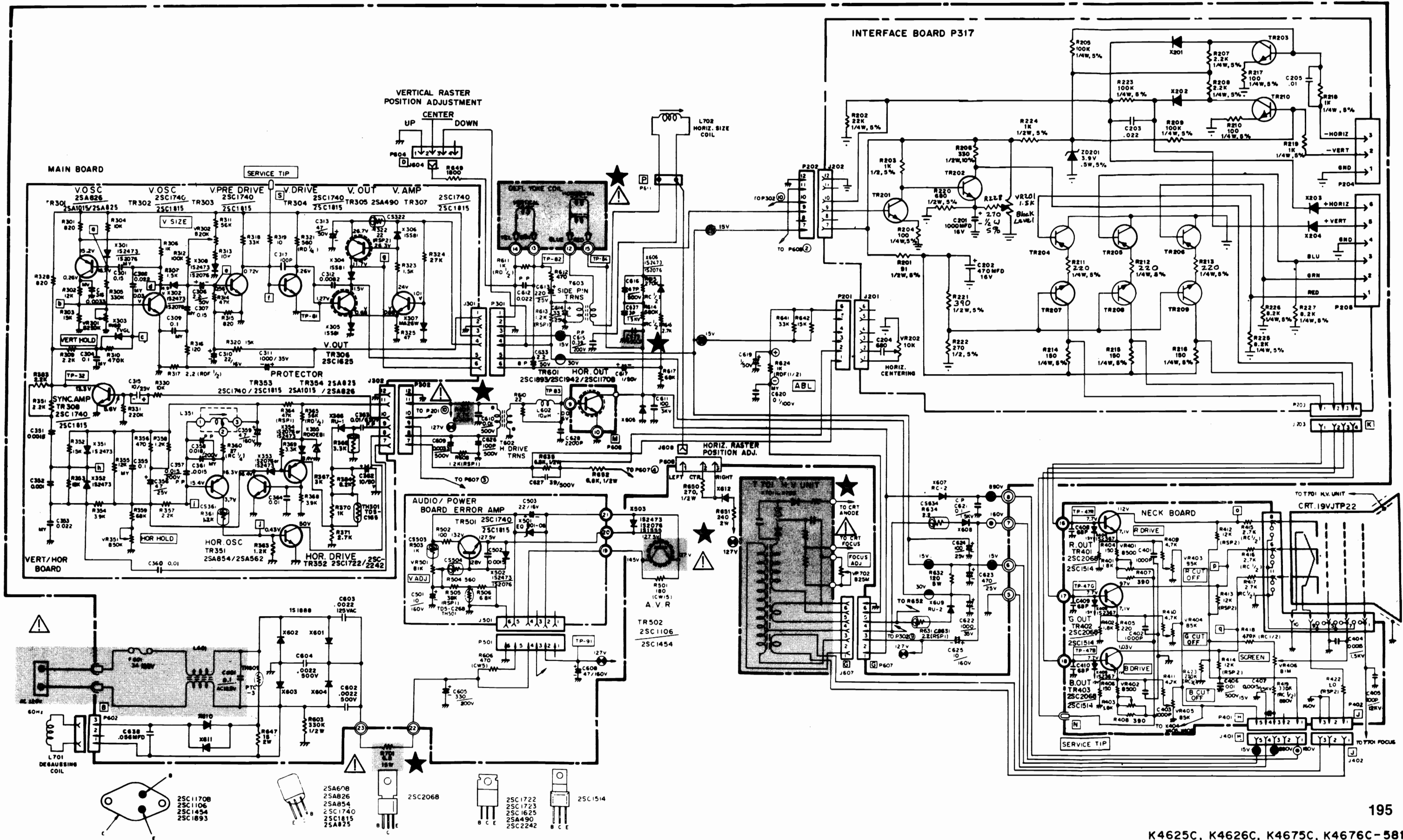


| QTY REQD | CODE IDENT | PART OR IDENTIFYING NO. | NOMENCLATURE OR DESCRIPTION | ITEM NO. |
|---|----------------|--------------------------------|---|----------|
| PARTS LIST | | | | |
| UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: | | CONTRACT NO. | | |
| FRACTIONS | DECIMALS | ANGLES | APPROVALS | DATE |
| ± | .XX ± | ± | | 12-16-82 |
| ± | .XXX ± | ± | Gremlin/SEGA <small>San Diego, California 92123</small> | |
| MATERIAL | | Sound Board | | |
| FINISH | | DRAWN DYNA-PAC 12-16-82 | | |
| NEXT ASSY | | CHECKED | | |
| USED ON | | MECH | | |
| APPLICATION | | ELEC | | |
| DO NOT SCALE DRAWING | | MFG | | |
| | | PROJECT | | |
| SIZE | CODE IDENT NO. | DRAWING NO. | REV | |
| D | | 834-5122 | | |
| SCALE | SHEET 3 of 3 | | | |

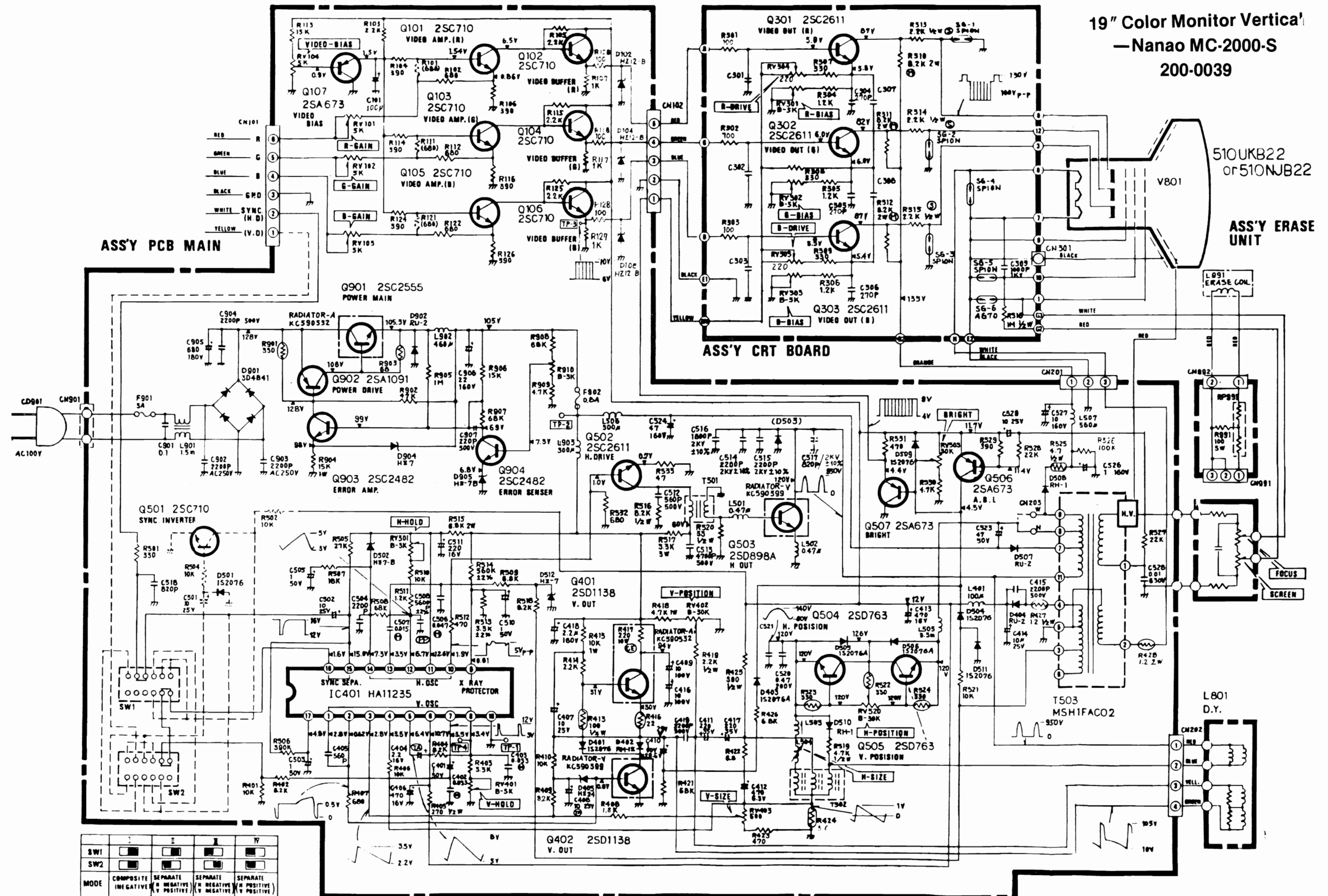
19" Color Monitor Vertical—Electrohome G07-907

200-0019





19" Color Monitor Vertical
 — Nanao MC-200-S
 200-0039



ASSY PCB MAIN

ASSY CRT BOARD

ASS'Y ERASE UNIT

| | | | | |
|------|--------------------------|--------------------------|--------------------------|--------------------------|
| SW1 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| SW2 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| MODE | COMPOSITE NEGATIVE | SEPARATE NEGATIVE | SEPARATE NEGATIVE | SEPARATE POSITIVE |

