

# Service Manual

Model: 6502/04/06

20MHz/40MHz/60MHz 4Trace

Oscilloscope

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## 1. Features

This compact, light weight model 6500 series oscilloscope has a frequency range of DC-60MHz, [DC-40MHz] or (DC-20MHz), and offers the following features:

Wide frequency range : Frequencies up to DC-60MHz, [DC-40MHz] or (DC-20MHz).

High sensitivity : 1mV/div

Large size CRT : Waveforms are easy to read, on the large 6-inch CRT with an internal graticule scale.

Scale : Waveforms are parallax-free with the CRT's internal graticule scale.

Alt Mag : The normal( $\times 1$ ) and the  $\times 10(\times 5)$  magnified waveforms can be displayed simultaneously.

Alt Trig : Stabilized triggering is accomplished even with two unrelated signals.

TV synchronization : Stable TV signals are displayed using new circuitry.

Auto focus : Focus deviation is automatically corrected.

## 2. Configuration

The Standard accessories supplied are as follows:

(1) Oscilloscope .....	1
(2) Probe .....	2
(3) Power cord .....	1
(4) User's manual .....	1

### **3. Precautions to be taken to ensure long life**

#### **1. Storage and operation**

##### **1-1 Avoid extremes of heat or cold**

Do not place oscilloscope in direct sun light for long periods; Store in a closed, unventilated vehicle in hot summer weather, or near heating equipment, such as stoves.

##### **1-2 Do not use outdoors in cold weather. Optimum operating temperature range is 0°C to 40°C.**

##### **1-3 Movement from warm location to cold one, and vice versa**

Do not move oscilloscope abruptly from warm location to cold location, or vice versa. This could result in condensation forming inside the instrument.

##### **1-4 Avoid humidity, moisture and dust**

If oscilloscope is left in a humid or dusty location, this could result in instrument failure. Ideal operating relative humidity range is 35% to 85%. Never place containers of liquid such as cups of coffee on top of oscilloscope, as this could result in spilling in the instrument, inducing failure.

##### **1-5 Avoid areas subject to severe vibration**

Avoid places where severe vibration can occur, this may result in machine failure, this is a precision measuring instrument.

##### **1-6 Beware of places where magnets and magnetic fields are present**

An oscilloscope is an instrument which operates using electromagnetic properties. Never place magnets near your oscilloscope, or operate oscilloscope in the vicinity of equipment which produces strong magnetic fields.

#### **2. Handling**

##### **2-1 Do not place objects on top of oscilloscope, and take care not to block the ventilation holes.**

##### **2-2 Do not subject oscilloscope to severe impact**

##### **2-3 Do not insert wires or pins into the ventilation holes.**

##### **2-4 Do not pull equipment by the probes**

##### **2-5 Push both ends of carrying handle to release the locking device to deploy the handle.**

2-6 Never place a soldering iron on the oscilloscope frame, or on surface of the CRT tube.

2-7 Do not sit the oscilloscope upside down

3. Sitting the oscilloscope upside down may damage the handle or other parts.

Do not use oscilloscope with BNC cable connected to Ext input terminal on rear panel.

4. If the oscilloscope does not operate normally

Recheck operating procedures and, if the symptoms indicate equipment failure, contact your nearest dealer or store for service.

5. Repairs

5-1 To clean the case

- To clean stained casing, lightly rub the stained area with a soft cloth dipped in a neutral detergent.
- If the surface of the panel is dirty, use the same method to clean. If the panel is heavily stained, rub the affected area lightly with a soft cloth soaked in light neutral detergent or alcohol.
- Never use highly volatile material such as benzene or paint thinner.

6. Precautions prior to use

6-1 Verify the line voltage.

Refer to the following table for the correct operating voltage ranges for this oscilloscope. Check line voltage prior to connecting to the power source, and verify it is within a voltage range listed below.

Rating	Operating Voltage Range
AC 100V	AC 90V to 110V
AC 120V	AC 108V to 132V
AC 220V	AC 198V to 242V
AC 240V	AC 216V to 250V

This oscilloscope has been set to 120V AC prior to delivery.

If the oscilloscope is to be used at a voltage other than the 120V AC the operating voltage may be changed by the following procedure:

- ① Remove power cable from AC Input.
- ② Insert flat-blade screwdriver into the slot located on right side of the fuse holder cap, remove cap by pressing and then pulling up the screw driver.
- ③ Rotate cap on fuse holder to set voltage to the desired level.
- ④ Connect power cable to the AC Input.  
If voltage higher than AC 220V is required, power cable and fuse may need to be changed. In such case, contact your nearest dealer for appropriate service.

#### 6-2 In sure that the fuse used is an authorized product.

In order to prevent circuit damage resulting from overcurrent, use the correct fuse value for the primary circuit.

	20MHz, 40MHz, 60MHz
For AC 100V, AC 120V	2A
For AC 220V, AC 240V	1A

If the fuse blows, check for the cause. Replace the fuse with the correct one after repair has been made.

If other than the correct fuse is used, not only does this create conditions for failure, but is also dangerous. Therefore, always use the correct fuse value (In particular, never use any component which does not meet current ratings)

The fuse ratings are as follows:

	(Shape) (Diameter × length)mm	SPEC
2A	5.2 φ × 20	250V 2A UL
1A	5.2 φ × 20	250V 1A UL

#### 6-3. Do not turn the intensity too bright.

Do not excessively brighten the dot or trace, this not only tires the eyes but, if allowed for long periods of time, could burn the fluorescent side of the CRT.

#### 6-4. Exercise caution to prevent excessive voltage from being applied directly to the scope inputs or to the probe input. Do not apply voltages higher than these limits:

Vertical Inputs (Direct)	300V	(At DC + AC peak 1kHz)
When probes are used	400V	(At DC + AC peak 1kHz)
EXT TRIG INPUT	300V	(At DC + AC peak 1kHz)
Z-Axis Input	30V	(DC + AC peak)

#### 4. How to display a trace

Check input line voltage prior to turning on the power switch. If the voltage selector switch has been set to 120V AC, verify that input power voltage is within the range of 108V-132V. Refer to rear panel illustrations for selection of input line voltage. Insert the power cord into the rear panel AC receptacle, and set each control as follows:

Power	Off (■)
Intensity	Turn all the way counterclockwise.
Focus	Center
AC-GND-DC	GND
Vertical position	Center ( X5MAG is in the off (■) position)
Mode	CH1
Trig mode	Auto
Trig source	INT
Trig level	Center
Time/Div	0.5ms/div
Horizontal position	Center ( $\times 10MAG$ )( $\times 5 MAG$ ) are turned Off (■)

After the controls have been set as above, turn on the power switch. The trace will appear when the Inten Knob is turned clockwise, in approximately 15 seconds. Adjust focus knob until the traces are at their clearest. If the oscilloscope is not being used while the power is on, turn INTEN Knob counter clockwise to reduce brightness.

##### Caution

For normal operation, set the following variable controls to the "CAL" position.

V/DIV VAR.	The volts/div is calibrated to the indicated values on the V/Div switch when turned fully clockwise.
SWP VAR	The time/div is calibrated to the indicated values on the Time/DIV switch when turned fully clockwise.

Set the trace to the horizontal graticule scale on the center of the screen, by varying the CH1 position control.

If the trace is slanted with respect to the horizontal scale adjust the front panel trace rotation control until the trace is coincident with the horizontal scale.

- General Check -

**(1) Displaying 1 waveform on the CRT**

If using channel 1, set the switches as follows:

Vertical axis mode switch ..... CH1

Trig mode switch ..... Auto

Trig source switch ..... INT

When these settings have been completed, most repetitive signals of a frequency greater than approximately 25Hz will become synchronized by adjusting the trig level control and can be measured. Since the trigger mode is in Auto, the trace appears even when there is no signal, applied or when the AC-GND-DC switch is set to GND, a DC voltage can also be displayed if the AC-GND-DC switch is set to DC. If low-frequency signals less than 25Hz are applied to CH1, the following changes are required

Trig mode switch ..... Norm

Adjust the trigger level control to synchronize the trace.

If using CH2 input, set these switches:

Vertical axis mode switch to ..... CH2

Trig source switch to ..... CH2

All other settings and steps are the same as for displaying a waveform on CH1.

**(2) When 2 waveforms are to be observed**

Set the vertical axis mode switch to Dual, both waveforms now can be easily displayed; If the time/div range is changed, the scope will automatically select ALT or CHOP.

If a phase difference is being measured, the signal with a leading phase must be the trigger signal.

### **(3) Displaying an X-Y pattern**

When the X-Y switch is pressed, the oscilloscope will be an X-Y display with the signal applied to the CH1 input, as the X-Axis and the signal applied to CH2 as the Y-Axis. Set the vertical axis  $\times 10\text{MAG}$  ( $\times 5 \text{ MAG}$ ) switch to off (pulled-out state.)

### **(4) Use of ADD**

When the vertical mode switch is set to ADD, the algebraic sum of 2 waveforms can be displayed.

## 5. Specifications

### 1. Vertical Axis

	20MHz	40MHz	60MHz	Remarks
CH1 and CH2 sensitivity	5mV/div to 5V/div 1-2-5 step, 10 calibrated steps (1mV/div to 1V/div at $\times 5$ MAG)			
Accuracy	$\pm 3\%$ $\pm 5\%$ (at $\times 5$ MAG) } +10°C to +35°C			Vertical knob is set to CAL position
Variable vertical sensitivity	To less than 1/2.5 times indicated sensitivity value			
Frequency band width $\times 5$ MAG	DC: DC to 20MHz AC: 10Hz to 20MHz	DC: DC to 40MHz AC: 10Hz to 40MHz	DC: DC to 60MHz AC: 10Hz to 60MHz	
	DC: DC to 7MHz AC: 10Hz to 7MHz	DC: DC to 7MHz AC: 10Hz to 7MHz	DC: DC to 7MHz AC: 10Hz to 7MHz	
Rise time	Approximately 17.5ns	Approximately 8.7ns	Approximately 5.8ns	
Input impedance	$1M\Omega \pm 2\%$ , 25pF $\pm 3pF$			
Maximum input voltage	300V (DC+AC peak)			
Input coupling system	AC - GND - DC			
Operating systems	CH1: Only Channel 1 operates CH2: Only Channel 2 operates ADD: Algebraic sum of 2 signals (CH1 + CH2) Dual: Channels 1 and 2 simultaneously displayed			
Invert	Only CH2 signal is inverted			
Overshoot	maximum 8%			

## 2. CH1 Input Amplifier

	20MHz	40MHz	60MHz	Remarks
Output voltage	minimum 20mV/div			
Output impedance	Approximately 50Ω			
Band width	50Hz to 5MHz (-3dB)			

## 3. Time axis

	20MHz	40MHz	60MHz	Remarks
Sweep mode	A,XY,ALT.MAG, $\times 5$ MAG	A,XY,ALT.MAG $\times 10$ MAG		
Sweep time	0.1μs to 0.2s/div ± 3%, in 20calibrated steps (1-2-5 seq)			
Sweep expansion	20ns/div to 40ms/div (20ns/div,40ns/div : Uncal)	10ns/div to 20ms/div (10ns/div : Uncal)		
Alt. MAG TRACE	Maximum 4 traces			
Trace Sep. Var	minimum 1.5 div			

#### 4. Triggering

	20MHz	40MHz		60MHz						
Trigger mode	AUTO, NORM, TV-V, TV-H									
Trigger signal source	INT, CH2, LINE, EXT									
Polarity	+, --									
Coupling system	AC coupling									
sensitivity										
	Frequency	INT	EXT	Frequency	INT	EXT	Frequency	INT	EXT	
NORM	DC to 2MHz 2MHz to 20MHz	3div 3div	200mV 300mV	DC to 5MHz 5MHz to 40MHz	3div 3div	200mV 800mV	DC to 5MHz 5MHz to 40MHz 40MHz to 60MHz	3div 3div 3div	200mV 800mV 1 V	
AUTO	DC to 2MHz 2MHz to 20MHz	3div 3div	200mV 300mV	DC to 5MHz 5MHz to 40MHz	3div 3div	200mV 800mV	DC to 5MHz 5MHz to 40MHz 40MHz to 60MHz	3div 3div 3div	200mV 800mV 1 V	
TV synchronization	INT	minimum 1 div								
	EXT	minimum 1 Vp-p								

#### 5. XY operation

	20MHz	40MHz	60MHz	Remarks
Operating mode	CH1, X-axis and CH2, Y-axis; when in X-Y operation mode			
Sensitivity	As vertical axis			
Input impedance	1MΩ 2% approximately 25pF			
X-axis band width	X-axis band width			
Phase difference	maximum 3° (DC-50kHz)			

## 6. Z axis

	20MHz	40MHz	60MHz	Remarks
Input impedance	33kΩ			
Maximum input voltage	30V ( DC + AC peak), MAX AC 1kHz			
Band width	DC to 2MHz			
Input signal	±5V(NEGATIVE INCREASES INTENSITY)			

## 7. CAL

	20MHz	40MHz	60MHz	Remarks
Frequency	1kHz (20%)			
Output level	0.5V (±3%)			
Duty	minimum 48 : 52			

## 8. Power supply

	20MHz	40MHz	60MHz	Remarks
Voltage	AC 100V/120V/220V/240V ±10%			
Frequency	50Hz to 60Hz			
Power consumption	35W	35W	55W	

## 9. CRT

	20MHz	40MHz	60MHz	Remarks
Type	6inch square internal scale			
Acceleration voltage	-1.9kV	12K	12K	
Effective screen	8div(vertical direction)×10div(horizontal direction)			

10. Environmental conditions

	20MHz	40MHz	60MHz	Remarks
Operating temperature	0°C to 40°C			
Operating humidity	35% to 85%			
Guaranteed operating temperature	10°C to 35°C			
Guaranteed operating humidity	45% to 85%			
Guaranteed maintained temperature	-20°C to 70°C			
Guaranteed maintained humidity	35% to 85% (Less than 70% at temperatures exceeding 50°C).			

11. Mechanical specifications

	20MHz/40MHz/60MHz			Remarks
Physical dimensions	Height	Width	Length	
	140 (H)	335 (W)	375 (D)	mm
Weight	Approximately 7.3kg			

## **6. Maintenance, Repair and Storage**

- (1) This equipment is composed of many high-precision components and components which require high internal pressure, care is required when handling or storing this equipment.
- (2) Occasionally, clean the graticule scale with a clean, soft cloth.
- (3) Ideal ambient temperature range when storing this equipment is -10 to +60°C.

### **Calibration Period**

order to maintain this equipment in stable and efficient operating condition, calibrate the equipment after every 1,000 hours operating time, or every 6 month; whichever is shorter.

## 7. Test Equipment Required

Description	Minimum specification	Usage
1. Constant amplitude signal generator	50KHz reference frequency; maximum frequency 70KHz; variable amplitude	Check horizontal, vertical and trigger bandwidth.
2. Standard amplitude calibrator	Amplitude accuracy:0.25% variable amplitude; 5mV to 40V; frequency:1 KHz square wave	Check horizontal and vertical gain
3. Square-wave generator	Variable frequency: 10Hz to 1MHz; output amplitude; 10mV to 100V	Check probe and vertical compensation.
4. Digital voltmeter	0.1% accuracy	Check power supply
5. Time mark generator	0.1% accuracy	Check horizontal timing.
6. Cable	Impedance, 50 ohms; length, 42inches, connectors, BNC	External trigger operation check. Horizontal gain check and adjustment.
7. Termination	Impedance, 50ohm; connectors, BNC	Vertical amplifier compensation checks and adjustment.
8. Attenuator	Ratio, 1/10; connectors, BNC; impedance, 50ohms	Vertical amplifier bandwidth check
9. T-connector	Connectors, BNC	External trigger operation check.

## 8. Initial Starting Procedure

1. Rotate the INTENSITY control to the midrange and set the POWER switch to ON.
2. Wait a few seconds for the cathode ray tube (CRT) to warm up.  
A trace should appear on the CRT.
3. If trace disappears, increase (clockwise) the INTENSITY control setting until the trace is easily observed, or roughly check/adjust the DC balance to get a trace as same as NO.
4. Adjust the FOCUS control for the best focused display.
5. Readjust the POSITION control if necessary, to center the trace.

## 9. POWER SUPPLY SYSTEM

### NOTE

Before you start operation, see the adjustment location in pullout pages.

### Control settings

Preset the controls as given in the preliminary control setting.

①-1. Check low-voltage supply, if necessary.

- a. Connect the digital multimeter(DMM) between the V line ( P602-1) and ground.

:+209V to +231V (+220V) -->6502

:+114V to +126V (+120V) -->6504/06

- b. Connect the digital multimeter(DMM) between the V line ( P602-2) and ground.

:+114V to +126V (+120V) -->6502

:+71.25 to +78.75V(+75V) -->6504/06

- c. Connect the digital multimeter(DMM) between the V line ( P602-3) and ground.

:+7.6V to +8.4V (+8V)

- d. Connect the digital multimeter(DMM) between the V line ( P602-4) and ground.

:+4.75V to +5.25V(+5V)

- e. Connect the digital multimeter(DMM) between the V line ( P602-5) and ground.

:-7.6V to -8.4V (-8V)

①-2. Check high voltage supply.

- a. Connect the DMM to the H.V. test point P506-3 with a high-voltage probe(100:1)

b. Check for a reading of -1.85KV to -1.95KV (-1.90KV) -->6502

-1.60KV to -1.70KV (-1.65KV) -->6504/06

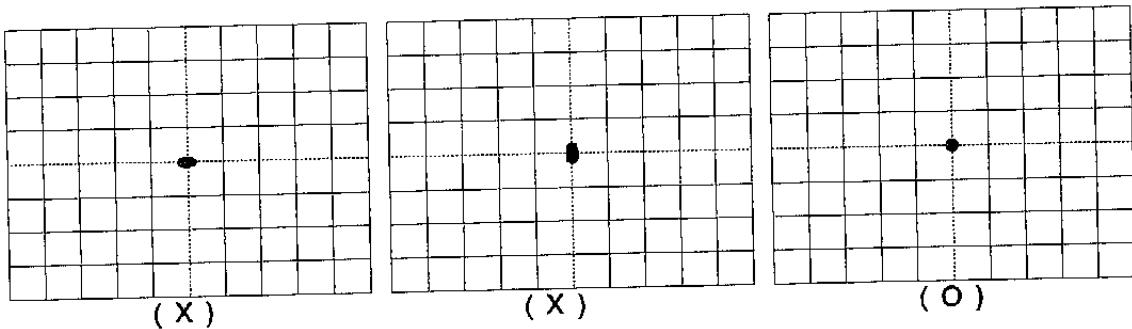
## 10. DISPLAY

### Control settings

Preset the controls as given in the preliminary control setting.

#### ②-1. Check / adjust ASTIG and FOCUS

- a. Put the focus control knob at center position and press the X-Y switch.
- b. Set the INTENSITY control for a small spot, as the following figure, using the position controls.
- c. Check that the spot is round.
- d. Adjust the FOCUS adjustment and ASTIG adjustment VR1035 for a round spot.



#### ②-2. Check / adjust INTENSITY.

- a. Put the INTENSITY control knob at the position of 10 o'clock and adjust semi-fixed resistor VR1021 in V-PCB assembly unite the trace line fades away.

#### ②-3. Check / adjust trace rotation.

- a. Position the trace to the center graticule line.
- b. Check that the trace is in parallel with the center horizontal line.
- c. Adjust TRACE ROTATION(screwdriver adjustment on front panel) for a trace that is in parallel with the horizontal graticule line.

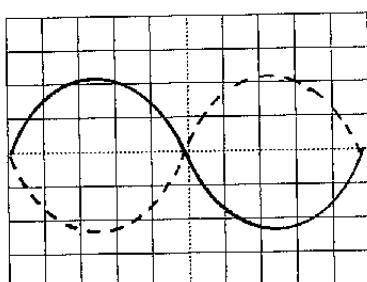
## 11. VERTICAL SYSTEM

### Control settings

- ③-1. Check / adjust Step attenuator balance
  - a. Set the VOLTS/DIV switch to 5mV position.
  - b. Position the trace to the horizontal center line.
  - c. Change the VOLTS/DIV switch to the 10mV position.
  - d. Adjust the CH1, CH2 STEP BAL adjustment, VR22 or VR122, for a trace at the horizontal center line.
  - e. Repeat the part a. through d. until less than  $\pm 2.5\%$  shift is noted when changing the VOLTS/DIV setting.
- ③-2. Check / adjust VARIABLE BALANCE.
  - a. Position the trace to the horizontal center line.
  - b. The knob is turned all the way in the opposite to the arrow.
  - c. Adjust the CH1, CH2 VAL /BAL adjustment, VR60 or VR160, for a trace at the horizontal center line.
  - d. Repeat the part a. through c. until less than  $\pm 2.5\%$  shift is noted when the knob is turned.
- ④. Check / adjust CH2-INVERT, CH-1.2 POSITION, CRT CENTER  
(CH2 only)
  - a. Set the CH1 and CH2 input coupling switches to GND.
  - b. Set to the V MODE switch to CH2, and repeat the CH2 INVERT switch of push or full.
  - c. This time, adjust the CH2 POSITION adjustment VR163 so that the trace aligns with stop moving.
  - d. Next, set the CH2 POSITION knob to the midposition, and adjust the CRT CENTER adjustment VR334 so that the trace aligns with the center horizontal graticule line.

(CH1 only)

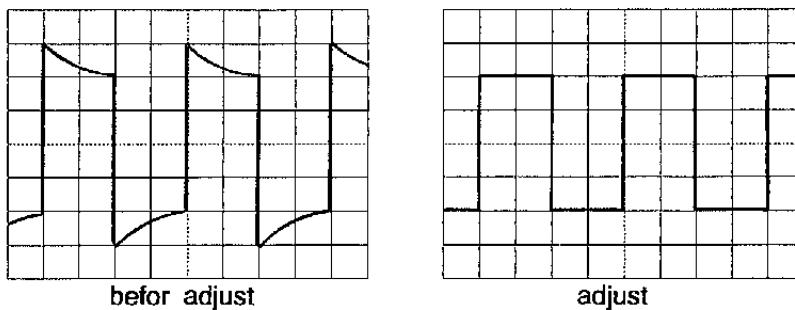
- e. Set the V MODE switch to CH1
  - f. Set the CH1 POSITION knob to the midposition, and adjust the CH1 POSITION adjustment VR63 so that the trace aligns with the center horizontal graticule line.
  - g. Next, adjust the vertical position controls CH1 and CH2 so that the trace aligns with the center horizontal graticule line
  - h. Set the V MODE switch to ADD.
  - i. Check that the trace aligns with the center horizontal graticule line within  $\pm 0.15$  division.
- ⑤. Check / adjust TRIG center.
- a. Set the TRIG SOURCE switch to the INT, V-MODE switch to the CH1, CH-COUPLING switch to the AC, TRIG-MODE switch to the AUTO.
  - b. Set the TRIG LEVEL VR to midposition.
  - c. Connect the sine-wave generator to the input connector for a 0.5 div (1KHz)
  - d. When the SLOPE switch push or pull, start position of trace line(SLOPE +, - ) is in accord with start point (+, - )
  - e. Next, adjust VR420 to the center start point



⑥-1. Check / adjust AC GAIN.

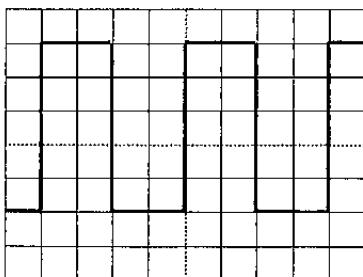
- a. Set the VOLTS/DIV switch to the 0.1V position.
- b. Connect the square-wave generator(using 1 KHz output range).
- c. Adjust the output amplitude of that generator for 5 division deflection of screen.

d. Check the AC GAIN VR33(CH1), VR133(CH2) adjustment for a flat level.



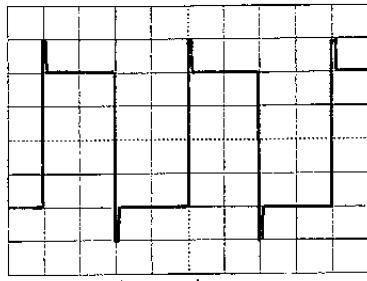
⑥-2. Check / adjust vertical GAIN.

- a. Set the VOLTS/DIV switch to the 10mV position and the CH-coupling switch to DC.
- b. Connect the square-wave generator(using 1 KHz output range).
- c. Set the standard amplitude calibrator for a 50mVp-p(5 division for display) signal.
- d. Check for a display of 5 division.
- e. Adjust the GAIN adjustment VR62(CH1), VR162(CH2) for a display of 5 divisions.
- f. Check all the VOLTS/DIV switch setting.

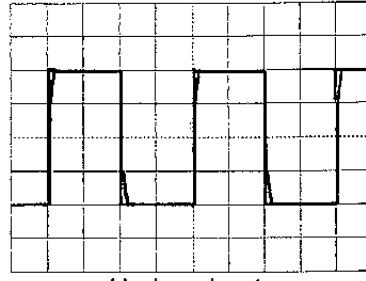


⑦-1. Check / adjust attenuation compensation. ( ATT: /100, /10 )

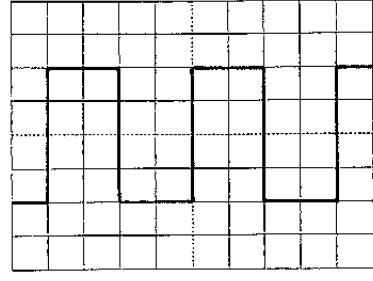
- a. Set the CH-coupling switch to DC
- b. Connect the square-wave generator to the CH1(CH2) input terminal check for a square-wave(1KHz) that is flat(flat top) under the following setting.



Over shoot



Under shoot



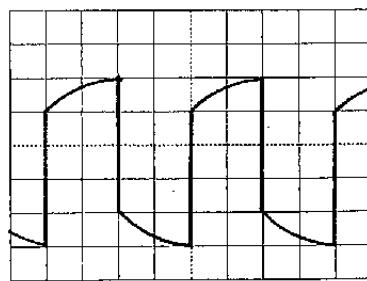
- c. Adjust the trimmer capacitors (refer to the circuit board illustration with adjustment location) for a square-wave(1KHz) that is flat(flat top) under the following setting.

ATT	VOLTS/DIV	Square-wave generator output	Adjust
/10	0.1V	0.5V	CH1 (CH2) CV7(CV107)
/100	1V	5V	CV4(CV104)

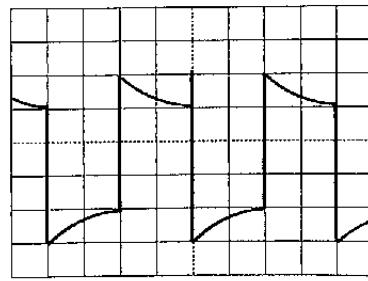
⑦-2. Check / adjust input capacity. (ATT: /10, /100 )

- a. Connect the 10:1 probe(OP20) to the input connector.
- b. Check the input capacity matching (Adjust probe trimmer to the input square-wave is flat).
- c. Adjust the trimmer capacitors (refer to the circuit board illustration with adjustment location) for a square-wave(1KHz) that is flat(flat top) under the following setting.

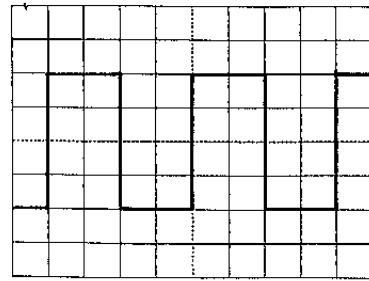
ATT	VOLTS/DIV	Adjust
/10	0.1V	CH1 (CH2) CV3 (CV103)
/100	1V	CV6 (CV106)



Capacitance excessive



Capacitance too low



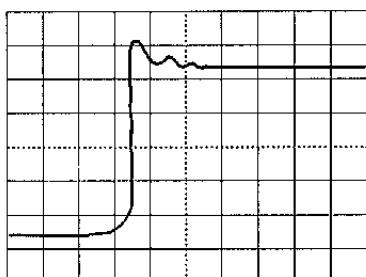
Optimal condition

⑧. Check / adjust vertical step response.

- a. Set the VOLTS/DIV switch to the 5mV position.
- b. Set the TIME/DIV switch to the 0.5mS position.
- c. Connect the fast-rise, positive output (50mV, 1MHz) of the square-wave generator to the input. Use a 50 ohm termination and cable.
- d. Adjust the square-wave generator output for a 5-divisions display.
- e. CH1 - Adjust CV366,CV337 so that a square wave is flat.

CH2 - Adjust CV161,CV366,CV337 so that a square wave is flat.

For over shoot of 8%(0.2DIV),under shoot of 8%(0.2DIV), sag of 3%,ringing of 3%.



⑨. Check / adjust INT TRIG.

- a. Set the Mode switch CH1, CH-COUPLING switch to the DC, TRIG-MODE switch to the AUTO
- b. Connect the digital multimeter(DMM) to the P200-1 and ground.
- c. Adjust the adjustment VR185 so that be equal to both INT position and CH2 position for the DC LEVEL.

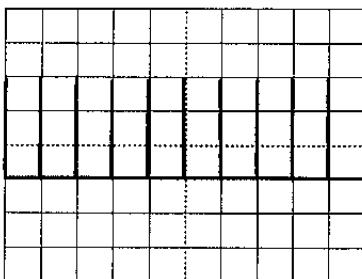
## 12. HORIZONTAL SYSTEM

### Control settings

Preset the controls as given in the preliminary control settings.

⑩-1. Check / adjust horizontal gain(adjust TIME 1mS).

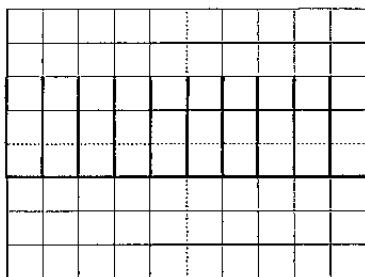
- a. Set the CH-COUPLING switch to the DC, TIME/DIV switch to the 1mS position, TRIG.MODE switch to the AUTO, SOURCE switch to the INT.
- b. Connect the cable to the output of the time mark generator.
- c. Set the time mark generator for 1mS time marks. Use a 50 ohm termination and cable.
- d. Check that the time marks align with the graticule lines over the middle ten divisions, within 3%.
- e. Adjust the horizontal gain(TIME 1mS) adjustment VR824 so that the time marks coincide with the middle ten graticule lines.



⑩-2. Check / adjust low speed sweep accuracy(adjust TIME 10mS).

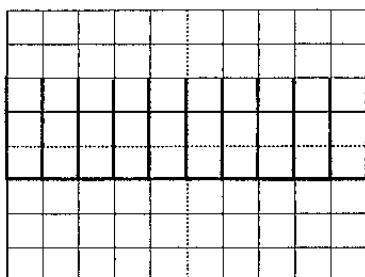
- a. Set the CH-COUPLING switch to the DC, TIME/DIV switch to the 10mS position, TRIG.MODE switch to the AUTO, SOURCE switch to the INT.
- b. Connect the cable to the output of the time mark generator.
- c. Set the time mark generator for 10mS time marks. Use a 50 ohm termination and cable.
- d. Check that the time marks align with the graticule lines over the center ten divisions, within 3%.

- e. Adjust the TIME 10mS adjustment VR542 so that the time marks coincide with the middle ten graticule lines.



⑪-1. Check / adjust TIME  $1 \mu\text{S}$ .

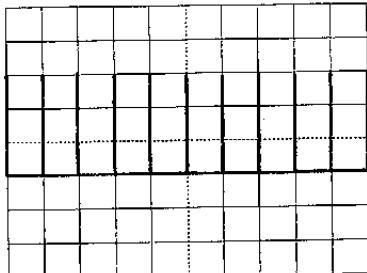
- a. Set the CH-COUPING switch to the DC, TIME/DIV switch to the  $1 \mu\text{S}$  position, TRIG.MODE switch to the AUTO, SOURCE switch to the INT.
- b. Connecr the cable to the output of the time mark generator.
- c. Set the time mark generator for  $1 \mu\text{S}$  time marks. Use a 50 ohm termination and cable.
- d. Check that the time marks align with the graticule line over the middle ten-divisions, within 3%.
- e. Adjust the TIME  $1 \mu\text{S}$  adjustment VC520 so that the time marks coincide with the middle ten graticule lines.



⑪-2. Check / adjust TIME  $0.1 \mu\text{S}$ .

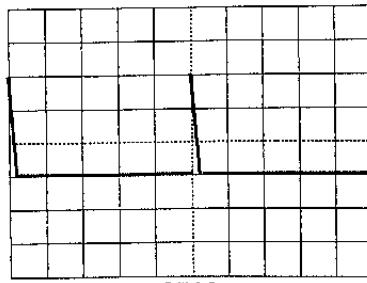
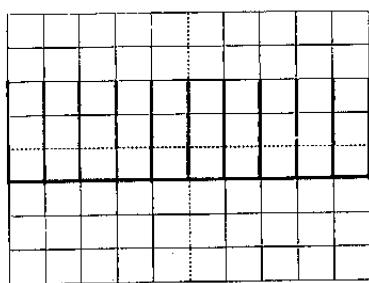
- a. Set the CH-COUPING switch to the DC, TIME/DIV switch to the  $0.1 \mu\text{S}$  position, TRIG.MODE switch to the AUTO, SOURCE switch to the INT.
- b. Connecr the cable to the output of the time mark generator.
- c. Set the time mark generator for  $0.1 \mu\text{S}$  time marks. Use a 50 ohm termination and cable.

- d. Check that the time marks align with the graticule line over the middle ten divisions, within 3%.
- e. Adjust the TIME  $0.1 \mu\text{S}$  adjustment VR580 so that the time marks coincide with the middle ten graticule lines.

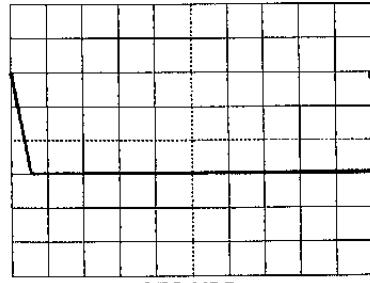


**⑫-1. Check / adjust Horizontal  $\times 5$  ( $\times 10$ ) MAG.--->(6504/6)**

- a. Set the TIME/DIV switch to 1ms.
- b. Connect the cable to the output of the time mark generator.
- c. Push in the  $\times 5$  ( $\times 10$ ) MAG.
- d. Set the time mark generator for 1mS time marks. Use a 50 ohm termination and cable.
- e. Check that the one-cycle time marks align with the five(ten)-divisions graticule lines, within 5%.
- f. adjust the MAG GAIN adjustment VR831 so that one-cycle time marks coincide with the five(ten)-divisions graticule lines.
- g. Push in the MAG switch after adjustment and check.



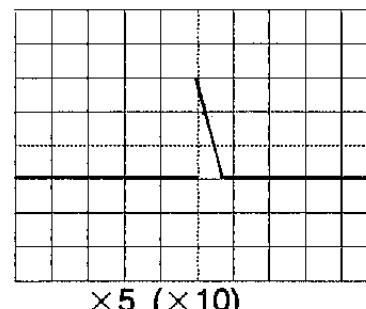
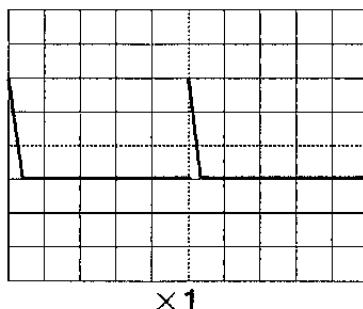
6502



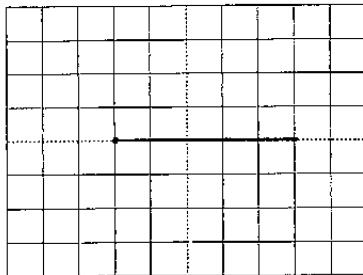
6504/06

⑫-2. Check / adjust CRT CENTER, MAG CENTER.

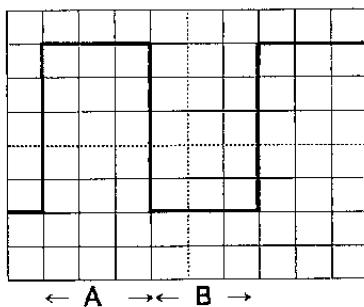
- a. Set the V-MODE switch to the CH1, VOLTS/DIV switch to the 1V position, TIME/DIV switch to the 0.2mS.
- b. Adjust the TIME POSITION so that the trace aligns left end of vertical graticule line.
- c. Connect the cable to the output of the time mark generator.
- d. Set the time mark generator for 1mS time marks. Use a 50 ohm termination and cable.
- e. Adjust the adjustment VR802 so that the first time mark to the trace aligns left end of vertical graticule line.
- f. This time, push in the MAG  $\times 5$  ( $\times 10$ ) switch.
- g. Adjust the adjustment VR802 so that the extension time mark to coincide of the screen trace center.
- h. Again, push full MAG  $\times 5$  ( $\times 10$ ) switch and adjust the adjustment VR821 so that the first time mark to the coincide left end of the screen trace.
- i. Repeat the park a. through h.



- ⑬. Check / adjust X gain.
- Set the VOLTS/DIV switch to the 0.1V, SWEEP MODE switch to the X-Y, position TRIG MODE switch to the AUTO.
  - Connect the standard amplitude calibrator to the CH1 input connector.
  - Set the standard amplitude calibrator for 0.5V.
  - Check for a display of five divisions.
  - Adjust the X gain adjustment VR550 for a display of five divisions.



- ⑭. Check / adjust CAL terminal(0.5Vp-p 1KHz)
- Set the VOLTS/DIV switch to the 0.1V position, TIME/DIV switch to the 0.1mS position..
  - Connect the CAL terminal to the CH1 input terminal.
  - Check for a display of five divisions
  - Adjust the CAL adjustment VR1201 for the CAL output of five divisions.(3%)



$$A:B = 48:52 \text{ or } 52:48$$

## 16. Parts list

### 1.CRT ASSY

REF-NO	PART-CODE	DESCRIPTION	6502	6504	6506	REF-NO	PART-CODE	DESCRIPTION	6502	6504	6506
	2-C32-041	ROTATION COIL 6502,6504	1	1	1	2-C18-019	CRT D14.363GY(1/23		1	1	1
	2-C09-009	CRT BYB31(40.60MHz)		1	1	2-C42-011	CRT SOCKET		1	1	1
	2-C25-547	CONNECTOR LEAD WIRE 6500-14	1	1	1				1	1	1

### 2.CRT SOCKET PCB ASSY

REF-NO	PART-CODE	DESCRIPTION	6502	6504	6506	REF-NO	PART-CODE	DESCRIPTION	6502	6504	6506
D395	2-C03-196	INDUCTOR 0.33UH M	1	1	1	R1411	2-C16-089	CONNECTOR LEAD WIRE 6500-15B	1	1	1
D396	2-C03-196	CRT PCB OS620(FR1)	1	1	1	VR805	2-C39-245	LEAD WIRE 6500-20-1	1	1	1
D397	2-C03-196	DIODE 1SS133 D0-34 T-77	1	1	1	VR1301	2-C39-245	LEAD WIRE 6500-20-2	1	1	1
D398	2-C03-196	DIODE 1SS133 D0-34 T-77	1	1	1	VR1311	2-C39-245	LEAD WIRE 6500-21-1	1	1	1
D224	2-C03-196	DIODE 1SS133 D0-34 T-77	1	1	1	VR1350	2-C39-245	LEAD WIRE 6500-21	1	1	1
D225	2-C03-196	DIODE 1SS133 D0-34 T-77	1	1	1	VR1351	2-C39-245	LEAD WIRE 6504-1	1	1	1
S1101	2-C03-295	LED SIR-54MG3	1	1	1	VR1401	2-C39-249	VARIABLE RESISTOR 2MOHM B	1	1	1
	2-C46-482	PANEL PCB.	1	1	1	VR1348	2-C29-092	VARIABLE RESISTOR 10MOHM B	1	1	1
R393	2-C20-090	C/F RESISTOR 3300OHM 1/8W J	1	1	1	VR393	2-C29-093	SEMI FIXED RESISTOR 5000OHM B	1	1	1
R395	2-C20-083	C/F RESISTOR 3.3KOHM 1/8W J	1	1	1	2-C21-103	JUMP WIRE 10MM		4	4	4
R396	2-C20-107	C/F RESISTOR 2.2KOHM 1/8W J	1	1	1	2-C21-101	JUMP WIRE 5MM		6	6	6
R1311	2-C20-096	C/F RESISTOR 1500OHM 1/8W J	1	1	1	2-T01-032	CAL TERMINAL		1	1	1
	2-C25-534	CONNECTOR LEAD WIRE 6500-01	1	1	1	2-C25-538	CONNECTOR LEAD WIRE 6500-05		1	1	1
	2-C25-535	CONNECTOR LEAD WIRE 6500-02	1	1	1	2-C25-544	CONNECTOR LEAD WIRE 6500-11		1	1	1
	2-C25-536	CONNECTOR LEAD WIRE 6500-03	1	1	1	2-C25-545	CONNECTOR LEAD WIRE 6500-12		1	1	1
	2-C25-537	CONNECTOR LEAD WIRE 6500-04	2	2	2	2-C25-546	CONNECTOR LEAD WIRE 6500-13		1	1	1

### 4.SCALE LAMP PCB ASSY

REF-NO	PART-CODE	DESCRIPTION	6502	6504	6506	REF-NO	PART-CODE	DESCRIPTION	6502	6504	6506
	2-C42-176	SCALE LAMP 14V 80MA T-5	2	2	2	2-C25-550	CONNECTOR LEAD WIRE 6500-17		1	1	1
	2-C43-377	SCALE LAMP PCB	1	1	1						

## 5.TIME PCB ASSY

REF-NO	PART-CODE	DESCRIPTION	6502	6504	6506	REF-NO	PART-CODE	DESCRIPTION	6502	6504	6506
C426	2-C33-243	ELECTROLYTIC CAPACITOR 47 $\mu$ F 10V M	1	1	1	C579	2-C28-388	CERAMIC CAPACITOR 0.1 $\mu$ F 25V Z		1	1
C460	2-C33-243	ELECTROLYTIC CAPACITOR 47 $\mu$ F 10V M	1	1	1	C595	2-C28-388	CERAMIC CAPACITOR 0.1 $\mu$ F 25V Z		1	1
C501	2-C33-369	CERAMIC CAPACITOR 0.01 $\mu$ F 50V Z	1	1	1	C596	2-C28-388	CERAMIC CAPACITOR 0.1 $\mu$ F 25V Z		1	1
C505	2-C28-342	CERAMIC CAPACITOR 1 $\mu$ F 50V C	1	1	1	C597	2-C28-310	CERAMIC CAPACITOR 220 $\text{pF}$ 50V J		1	1
C508	2-C33-243	ELECTROLYTIC CAPACITOR 47 $\mu$ F 10V M	1	1	1	C598	2-C28-388	CERAMIC CAPACITOR 0.1 $\mu$ F 25V Z		1	1
C510	2-C33-269	CERAMIC CAPACITOR 0.01 $\mu$ F 50V Z	1	1	1	C599	2-C28-310	CERAMIC CAPACITOR 220 $\text{pF}$ 50V J		1	1
C511	2-C33-238	ELECTROLYTIC CAPACITOR 22 $\mu$ F 16V M	1	1	1	C701	2-C28-388	CERAMIC CAPACITOR 0.1 $\mu$ F 25V Z		1	1
C515	2-C33-243	ELECTROLYTIC CAPACITOR 47 $\mu$ F 10V M	1	1	1	C702	2-C28-331	CERAMIC CAPACITOR 1000 $\text{pF}$ 50V J		1	
C519	2-C33-243	ELECTROLYTIC CAPACITOR 47 $\mu$ F 10V M	1	1	1	C703	2-C28-346	CERAMIC CAPACITOR 220 $\text{pF}$ 50V J		1	
C520	2-C28-351	CERAMIC CAPACITOR 82 $\text{pF}$ 50V J	1	1	1	C703	2-C28-354	CERAMIC CAPACITOR 270 $\text{pF}$ 50V J		1	
C524	2-C28-203	CERAMIC CAPACITOR 56 $\text{pF}$ 50V J	1			C704	2-C28-067	CERAMIC CAPACITOR 47000 $\text{pF}$ 50V K		1	
C524	2-C28-338	CERAMIC CAPACITOR 8 $\text{pF}$ 50V J	1			C704	2-C33-269	CERAMIC CAPACITOR 0.01 $\mu$ F 50V Z		1	
C525	2-C33-388	M/F CAPACITOR 1 $\mu$ F 50V J	1	1	1	C801	2-C33-243	ELECTROLYTIC CAPACITOR 47 $\mu$ F 10V M		1	1
C526	2-C11-135	P/F CAPACITOR 0.01 $\mu$ F 50V J	1	1	1	C805	2-C33-269	CERAMIC CAPACITOR 0.01 $\mu$ F 50V Z		1	1
C527	2-C33-269	CERAMIC CAPACITOR 0.01 $\mu$ F 50V Z	1	1	1	C806	2-C33-243	ELECTROLYTIC CAPACITOR 47 $\mu$ F 10V M		1	1
C528	2-C33-243	ELECTROLYTIC CAPACITOR 47 $\mu$ F 10V M	1	1	1	C807	2-C28-388	CERAMIC CAPACITOR 0.1 $\mu$ F 25V Z		1	
C530	2-C28-341	CERAMIC CAPACITOR 100 $\text{pF}$ 50V J	1	1	1	C808	2-C33-243	ELECTROLYTIC CAPACITOR 47 $\mu$ F 10V M		1	1
C538	2-C28-350	CERAMIC CAPACITOR 47 $\text{pF}$ 50V J	1			C811	2-C28-344	CERAMIC CAPACITOR 10 $\text{pF}$ 50V J		1	
C538	2-C28-249	CERAMIC CAPACITOR 33 $\text{pF}$ 50V J	1			C811	2-C28-233	CERAMIC CAPACITOR 18 $\text{pF}$ 50V J		1	
C544	2-C30-126	P/F CAPACITOR 0.022 $\mu$ F 50V K	1	1	1	C812	2-C28-344	CERAMIC CAPACITOR 10 $\text{pF}$ 50V J		1	
C545	2-C33-387	ELECTROLYTIC CAPACITOR 1 $\mu$ F 50V BP	1	1	1	C812	2-C28-233	CERAMIC CAPACITOR 18 $\text{pF}$ 50V J		1	
C550	2-C28-350	CERAMIC CAPACITOR 47 $\mu$ F 50V J	1	1	1	C823	2-C28-345	CERAMIC CAPACITOR 15 $\text{pF}$ 50V J		1	
C551	2-C33-269	CERAMIC CAPACITOR 0.01 $\mu$ F 50V Z	1	1	1	C832	2-C28-311	CERAMIC CAPACITOR 22 $\text{pF}$ 50V J		1	
C552	2-C33-269	CERAMIC CAPACITOR 0.01 $\mu$ F 50V Z	1	1	1	C840	2-C28-360	CERAMIC CAPACITOR 68 $\text{pF}$ 50V J		1	
C553	2-C33-243	ELECTROLYTIC CAPACITOR 47 $\mu$ F 10V M	1	1	1	C840	2-C28-344	CERAMIC CAPACITOR 10 $\text{pF}$ 50V J		1	
C554	2-C33-243	ELECTROLYTIC CAPACITOR 47 $\mu$ F 10V M	1	1	1	C842	2-C28-311	CERAMIC CAPACITOR 22 $\text{pF}$ 50V J		1	
C570	2-C28-368	CERAMIC CAPACITOR 0.1 $\mu$ F 25V Z	1	1	1	C846	2-C28-422	CERAMIC CAPACITOR 5 $\text{pF}$ 500V C		1	
C571	2-C33-269	CERAMIC CAPACITOR 0.01 $\mu$ F 50V Z	1	1	1	C846	2-C28-039	CERAMIC CAPACITOR 1 $\text{pF}$ 500V C		1	
C572	2-C28-350	CERAMIC CAPACITOR 47 $\mu$ F 50V J	1	1	1	C847	2-C28-282	CERAMIC CAPACITOR 39 $\text{pF}$ 50V J		1	
C573	2-C28-331	CERAMIC CAPACITOR 1000 $\text{pF}$ 50V J	1			C847	2-C28-311	CERAMIC CAPACITOR 22 $\text{pF}$ 50V J		1	
C573	2-C28-310	CERAMIC CAPACITOR 220 $\text{pF}$ 50V J	1	1	1	C848	2-C28-311	CERAMIC CAPACITOR 22 $\text{pF}$ 50V J		1	
C575	2-C28-331	CERAMIC CAPACITOR 1000 $\text{pF}$ 50V J	1			C857	2-C28-334	CERAMIC CAPACITOR 4700 $\text{pF}$ 500V Z		1	
C575	2-C28-310	CERAMIC CAPACITOR 220 $\text{pF}$ 50V J	1	1	1	C861	2-C33-269	CERAMIC CAPACITOR 0.01 $\mu$ F 50V Z		1	
C576A	2-C33-243	ELECTROLYTIC CAPACITOR 47 $\mu$ F 10V M	1	1	1	C873	2-C28-341	CERAMIC CAPACITOR 100 $\text{pF}$ 50V J		1	
C576	2-C28-388	CERAMIC CAPACITOR 0.1 $\mu$ F 25V Z	1	1	1	C874	2-C28-341	CERAMIC CAPACITOR 100 $\text{pF}$ 50V J		1	
C577	2-C28-388	CERAMIC CAPACITOR 0.1 $\mu$ F 25V Z	1	1	1	C880	2-C33-269	CERAMIC CAPACITOR 0.01 $\mu$ F 50V Z		1	
C578	2-C28-388	CERAMIC CAPACITOR 0.1 $\mu$ F 25V Z	1	1	1	C883	2-C28-346	CERAMIC CAPACITOR 220 $\text{pF}$ 50V J		1	

REF-NR	PART-CODE	DESCRIPTION	6502	6504	6506	REF-NO	PART-CODE	DESCRIPTION	6502	6504	6506
C1101	2-C33-384	ELECTROLYTIC CAPACITOR 47 $\mu$ F 160V M	1	1	1	C801	2-C45-020	IC SN74LS74N	1	1	1
C1102	2-C33-054	ELECTROLYTIC CAPACITOR 47 $\mu$ F 250V M	1	1	1	L571	2-C32-204	INDUCTOR 33 $\mu$ H K	1	1	1
C1111	2-C33-035	ELECTROLYTIC CAPACITOR 2200 $\mu$ F 25V M	1	1	1	L537	2-C32-207	INDUCTOR 680 $\mu$ H K	1		
C1121	2-C33-035	ELECTROLYTIC CAPACITOR 2200 $\mu$ F 25V M	1	1	1	L537	2-C32-207	INDUCTOR 330 $\mu$ H	1	1	1
CV520	2-C31-056	TRIMMER CAPACITOR 50 $\text{pF}$	1	1	1	L432	2-C32-206	INDUCTOR 6.8 $\mu$ H	1	1	1
CV840	2-C31-056	TRIMMER CAPACITOR 50 $\text{pF}$	1	1	1	L852	2-C32-207	INDUCTOR 680 $\mu$ H K	1	1	1
D501	2-C03-196	DIODE 1S133 DO-34 T-77	1	1	1	R426	2-C20-082	C/F RESISTOR 100HM 1/8 J	1	1	1
D520	2-C03-200	DIODE MA 161	1	1	1	R430	2-C20-094	C/F RESISTOR 1000HM 1/8 J	1	1	1
D521	2-C03-200	DIODE MA 161	1	1	1	R431	2-C20-135	C/F RESISTOR 2.7KOHM 1/8 J	1		
D522	2-C03-200	DIODE MA 161	1	1	1	R431	2-C20-135	C/F RESISTOR 2.7KOHM 1/8 J	1		
D530	2-C03-196	DIODE 1S133 DO-34 T-77	1	1	1	R432	2-C20-073	C/F RESISTOR 6800HM 1/8 J	1		
D535	2-C03-200	DIODE MA 161	1	1	1	R432	2-C20-132	C/F RESISTOR 3900HM 1/8 J	1	1	1
D536	2-C03-196	DIODE 1S133 DO-34 T77	1	1	1	R433	2-C20-093	C/F RESISTOR 1KOHM 1/8 J	1		
D541	2-C03-196	DIODE 1S133 DO-34 T77	1	1	1	R433	2-C20-097	C/F RESISTOR 8200HM 1/8 J	1	1	1
D571	2-C03-196	DIODE 1S133 DO-34 T77	1	1	1	R434	2-C20-106	C/F RESISTOR 470HM 1/8 J	1	1	1
D572	2-C03-196	DIODE 1S133 DO-34 T77	1	1	1	R435	2-C20-135	C/F RESISTOR 2.7KOHM 1/8 J	1	1	1
D573	2-C03-196	DIODE 1S133 DO-34 T77	1	1	1	R436	2-C20-083	C/F RESISTOR 3.3KOHM 1/8 J	1	1	1
D574	2-C03-196	DIODE 1S133 DO-34 T77	1	1	1	R437	2-C20-083	C/F RESISTOR 3.3KOHM 1/8 J	1	1	1
D580	2-C03-196	DIODE 1S133 DO-34 T77	1	1	1	R438	2-C20-101	C/F RESISTOR 47KOHM 1/8 J	1	1	1
D581	2-C03-196	DIODE 1S133 DO-34 T77	1	1	1	R439	2-C20-101	C/F RESISTOR 47KOHM 1/8 J	1	1	1
D851	2-C03-196	DIODE 1S133 DO-34 T77	1	1	1	R460	2-C20-082	C/F RESISTOR 100HM 1/8 J	1	1	1
D852	2-C03-196	DIODE 1S133 DO-34 T77	1	1	1	R460	2-C20-122	C/F RESISTOR 220HM 1/8 J	1	1	1
D853	2-C03-196	DIODE 1S133 DO-34 T77	1	1	1	R500	2-C20-087	C/F RESISTOR 10KOHM 1/8 J	1	1	1
D854	2-C03-196	DIODE 1S133 DO-34 T77	1	1	1	R501	2-C20-082	C/F RESISTOR 100HM 1/8 J	1	1	1
D867	2-C03-196	DIODE 1S133 DO-34 T77	1	1	1	R502	2-C20-093	C/F RESISTOR 1KOHM 1/8 J	1	1	1
D1101	2-C03-197	DIODE S5566J	1	1	1	R503	2-C20-084	C/F RESISTOR 4.7KOHM 1/8 J	1	1	1
D1106	2-C03-197	DIODE S5566J	1	1	1	R504	2-C20-101	C/F RESISTOR 47KOHM 1/8 J	1	1	1
DW1	2-C03-006	DIODE W02	-	1	1	R505	2-C20-083	C/F RESISTOR 3.3KOHM 1/8 J	1	1	1
DW2	2-C03-006	DIODE W02	-	1	1	R506	2-C20-101	C/F RESISTOR 47KOHM 1/8 J	1	1	1
IC401	2-C21-134	IC SN74L00N	1			R507	2-C20-087	C/F RESISTOR 10KOHM 1/8 J	1	1	1
IC401	2-C05-037	IC SN74S00N	1			R509	2-C20-107	C/F RESISTOR 2.2KOHM 1/8 J	1	1	1
IC401	2-C05-063	IC MC74F00N	1			R510	2-C20-106	C/F RESISTOR 470HM 1/8 J	1	1	1
IC501	2-C45-020	IC SN74LS74N	1			R513	2-C20-137	C/F RESISTOR 8.2KOHM 1/8 J	1	1	1
IC501	2-C21-521	IC 74S74N	1			R514	2-C20-133	C/F RESISTOR 1.5KOHM 1/8 J	1	1	1
IC501	2-C21-522	IC 74F74N	1			R515	2-C20-108	C/F RESISTOR 15KOHM 1/8 J	1	1	1
IC502	2-C05-019	IC SN74L03N	1	1	1	R519	2-C20-107	C/F RESISTOR 2.2KOHM 1/8 J	1	1	1
IC550	2-C05-031	IC TC4053BP	1	1	1	R520	2-C20-107	C/F RESISTOR 2.2KOHM 1/8 J	1	1	1
IC571	2-C21-518	IC SN74L02N	1	1	1	R521	2-C20-101	C/F RESISTOR 47KOHM 1/8 J	1	1	1

REF-NO	PART-CODE	DESCRIPTION		REF-NO	PART-CODE	DESCRIPTION		REF-NO	PART-CODE	DESCRIPTION	
		6502	6504			6506	6508			6302	6504
R522	2-C20-089	C/F RESISTOR 2700HM 1/8W J	1	1	1	C/F RESISTOR 10KOHM 1/8W J	1	1	1	1	6306
R523	2-C20-084	C/F RESISTOR 4.7KOHM 1/8W J	1	1	1	C/F RESISTOR 8.2KOHM 1/8W J	1	1	1	1	
R524	2-C20-077	C/F RESISTOR 100KOHM 1/8W J	1	1	1	C/F RESISTOR 5600HM 1/8W J	1	1	1	1	
R524	2-C20-101	C/F RESISTOR 47KOHM 1/8W J	1	1	1	C/F RESISTOR 143MOHM 1/8W F	1	1	1	1	
R525	2-C20-106	C/F RESISTOR 470HM 1/8W J	1	1	1	M/F RESISTOR 1.43MOHM 1/8W F	1	1	1	1	
R526	2-C20-591	C/F RESISTOR 6.8KOHM 1/8W J	1	1	1	M/F RESISTOR 715KOHM 1/8W F	1	1	1	1	
R527	2-C11-37	C/F RESISTOR 10MOHM 1/4W J	1	1	1	M/F RESISTOR 286KOHM 1/8W F	1	1	1	1	
R529	2-C20-094	C/F RESISTOR 1000HM 1/8W J	1	1	1	M/F RESISTOR 143KOHM 1/8W F	1	1	1	1	
R530	2-C20-092	C/F RESISTOR 4700HM 1/8W J	1	1	1	M/F RESISTOR 72KOHM 1/8W F	1	1	1	1	
R531	2-C20-177	M/F RESISTOR 2KOHM 1/8W F	1	1	1	R589	2-C13-114	M/F RESISTOR 28.6KOHM 1/8W F	1	1	
R532	2-C20-264	M/F RESISTOR 3KOHM 1/8W F	1	1	1	R701	2-C20-090	C/F RESISTOR 3300HM 1/8W J	1	1	
R533	2-C20-083	C/F RESISTOR 3.3KOHM 1/8W J	1	1	1	R701	2-C11-140	C/F RESISTOR 33KOHM 1/8W J	1	1	
R534	2-C20-104	C/F RESISTOR 22KOHM 1/8W J	1	1	1	R801	2-C20-136	C/F RESISTOR 5.6KOHM 1/8W J	1	1	
R535	2-C20-107	C/F RESISTOR 2.2KOHM 1/8W J	1	1	1	R804	2-C20-087	C/F RESISTOR 10KOHM 1/8W J	1	1	
R536	2-C20-135	C/F RESISTOR 2.7KOHM 1/8W J	1	1	1	R805	2-C20-092	C/F RESISTOR 4700HM 1/8W J	1	1	
R536	2-C20-107	C/F RESISTOR 2.2KOHM 1/8W J	1	1	1	R806	2-C20-106	C/F RESISTOR 470HM 1/8W J	1	1	
R537	2-C20-107	C/F RESISTOR 2.2KOHM 1/8W J	1	1	1	R808	2-C20-815	M/F RESISTOR 1.2KOHM 1/8W F	1	1	
R538	2-C20-108	C/F RESISTOR 15KOHM 1/8W J	1	1	1	R811	2-C20-584	M/F RESISTOR 2.21KOHM 1/8W F	1	1	
R540	2-C20-102	C/F RESISTOR 5600HM 1/8W J	1	1	1	R812	2-C20-584	M/F RESISTOR 2.21KOHM 1/8W F	1	1	
R541	2-C20-132	C/F RESISTOR 3900HM 1/8W J	1	1	1	R813	2-C20-815	M/F RESISTOR 1.2KOHM 1/8W F	1	1	
R542	2-C20-089	C/F RESISTOR 1.2KOHM 1/8W J	1	1	1	R814	2-C20-815	M/F RESISTOR 1.2KOHM 1/8W J	1	1	
R544	2-C20-092	C/F RESISTOR 4700HM 1/8W J	1	1	1	R821	2-C20-107	C/F RESISTOR 2.2KOHM 1/8W J	1	1	
R545	2-C20-137	C/F RESISTOR 8.2KOHM 1/8W J	1	1	1	R821	2-C20-093	C/F RESISTOR 1KOHM 1/8W J	1	1	
R546	2-C20-107	C/F RESISTOR 2.2KOHM 1/8W J	1	1	1	R822	2-C20-107	C/F RESISTOR 2.2KOHM 1/8W J	1	1	
R549	2-C20-087	C/F RESISTOR 10KOHM 1/8W J	1	1	1	R822	2-C20-093	C/F RESISTOR 1KOHM 1/8W J	1	1	
R550	2-C20-136	C/F RESISTOR 5.6KOHM 1/8W J	1	1	1	R823	2-C20-082	C/F RESISTOR 100HM 1/8W J	1	1	
R551	2-C20-084	C/F RESISTOR 4.7KOHM 1/8W J	1	1	1	R824	2-C20-107	C/F RESISTOR 2.2KOHM 1/8W J	1	1	
R552	2-C20-083	C/F RESISTOR 3.3KOHM 1/8W J	1	1	1	R824	2-C20-135	C/F RESISTOR 2.7KOHM 1/8W J	1	1	
R553	2-C20-087	C/F RESISTOR 10KOHM 1/8W J	1	1	1	R831	2-C20-090	C/F RESISTOR 3300HM 1/8W J	1	1	
R555	2-C20-092	C/F RESISTOR 4700HM 1/8W J	1	1	1	R831	2-C20-094	C/F RESISTOR 1000HM 1/8W J	1	1	
R556	2-C20-073	C/F RESISTOR 6800HM 1/8W J	1	1	1	R832	2-C20-089	M/F RESISTOR 1.21KOHM 1/8W F	1	1	
R570	2-C20-063	C/F RESISTOR 10KOHM 1/8W J	1	1	1	R832	2-C20-122	C/F RESISTOR 220HM 1/8W J	1	1	
R571	2-C20-093	C/F RESISTOR 1KOHM 1/8W J	1	1	1	R833	2-C20-332	M/F RESISTOR 2.2KOHM 1/8W F	1	1	
R572	2-C20-103	C/F RESISTOR 3.9KOHM 1/8W J	1	1	1	R833	2-C20-583	M/F RESISTOR 1.21KOHM 1/8W F	1	1	
R573	2-C20-092	C/F RESISTOR 4700HM 1/8W J	1	1	1	R834	2-C20-332	M/F RESISTOR 2.2KOHM 1/8W F	1	1	
R574	2-C20-108	C/F RESISTOR 15KOHM 1/8W J	1	1	1	R834	2-C20-583	M/F RESISTOR 1.21KOHM 1/8W F	1	1	
R576	2-C20-082	C/F RESISTOR 100HM 1/8W J	1	1	1	R840	2-C20-134	C/F RESISTOR 1.8KOHM 1/8W J	1	1	
R578	2-C20-103	C/F RESISTOR 3.9KOHM 1/8W J	1	1	1	R840	2-C20-526	C/F RESISTOR 2200HM 1/8W J	1	1	

REF-NO.	PART-CODE	DESCRIPTION	6502	6504	6506	REF-NO	PART-CODE	DESCRIPTION	6502	6504	6506
R841	2-C20-344	M/F RESISTOR 2.7KOHM 1/8W F	1	1	1	R1141	2-C20-078	C/F RESISTOR 470KOHM 1/8W J	1	1	1
R841	2-C20-157	M/F RESISTOR 1.5KOHM 1/8W F		1	1	R1142	2-C11-140	C/F RESISTOR 33KOHM 1/8W J	1	1	1
R842	2-C20-344	M/F RESISTOR 2.7KOHM 1/8W F	1			S501	2-C36-108	ROTARY SWITCH	1	1	1
R842	2-C20-157	M/F RESISTOR 1.5KOHM 1/8W F		1	1	TR396	2-C06-102	TR 2SC458(C)TO-92TZ	1	1	1
R843	2-C20-083	C/F RESISTOR 3.3KOHM 1/8W J		1		TR431	2-C06-104	TR 2SC535(C)TO-92TZ	1	1	1
R843	2-C20-107	C/F RESISTOR 2.2KOHM 1/8W J		1	1	TR432	2-C06-104	TR 2SC535(C)TO-92TZ	1	1	1
R844	2-C20-083	C/F RESISTOR 3.3KOHM 1/8W J		1		TR433	2-C06-104	TR 2SC535(C)TO-92TZ	1	1	1
R844	2-C20-107	C/F RESISTOR 2.2KOHM 1/8W J		1	1	TR503	2-C06-110	TR 2SA1029(D)TO-92TZ	1	1	1
R845	2-C16-164	M/O RESISTOR 68KOHM 1W Q	1			TR514	2-C06-102	TR 2SC458(C)TO-92TZ	1	1	1
R845	2-C16-031	M/O RESISTOR 22KOHM 1W Q		1	1	TR520	2-C08-098	FET 2SK304(E)	1	1	1
R846	2-C16-164	M/O RESISTOR 68KOHM 1W Q		1		TR521	2-C06-102	TR 2SC458(C)TO-92TZ	1	1	1
R846	2-C16-031	M/O RESISTOR 22KOHM 1W Q		1	1	TR522	2-C06-102	TR 2SC458(C)TO-92TZ	1	1	1
R847	2-C20-126	C/F RESISTOR 680OHM 1/8W J		1	1	TR532	2-C06-102	TR 2SC458(C)TO-92TZ	1	1	1
R851	2-C16-159	M/O RESISTOR 68KOHM 2W J		1		TR545	2-C06-102	TR 2SC458(C)TO-92TZ	1	1	1
R851	2-C16-158	M/O RESISTOR 16KOHM 2W J		1	1	TR570	2-C06-110	TR 2SA1029(D)TO-92TZ	1	1	1
R852	2-C16-163	M/O RESISTOR 30KOHM 2W Q		1		TR811	2-C06-102	TR 2SC458(C)TO-92TZ	1	1	1
R852	2-C16-158	M/O RESISTOR 16KOHM 2W J		1	1	TR812	2-C06-102	TR 2SC458(C)TO-92TZ	1	1	1
R857	2-C20-090	C/F RESISTOR 3300HM 1/8W J		1	1	TR821	2-C06-110	TR 2SA1029(D)TO-92TZ	1	1	1
R858	2-C20-090	C/F RESISTOR 3300HM 1/8W J		1	1	TR822	2-C06-110	TR 2SA1029(D)TO-92TZ	1	1	1
R859	2-C16-018	C/F RESISTOR 2200HM 1/4W J		1	1	TR831	2-C06-110	TR 2SA1029(D)TO-92TZ	1	1	1
R860	2-C15-073	M/F RESISTOR 43KOHM 1/2W F		1		TR832	2-C06-110	TR 2SA1029(D)TO-92TZ	1	1	1
R860	2-C20-619	C/F RESISTOR 18KOHM 1/2W J		1		TR843	2-C06-110	TR 2SA1029(D)TO-92TZ	1	1	1
R861	2-C20-084	C/F RESISTOR 4.7KOHM 1/8W J		1	1	TR844	2-C06-110	TR 2SA1029(D)TO-92TZ	1	1	1
R862	2-C20-084	C/F RESISTOR 4.7KOHM 1/8W J		1	1	TR851	2-C06-118	TR 2SC2610TO-92TZ	1	1	1
R863	2-C20-084	C/F RESISTOR 4.7KOHM 1/8W J		1	1	TR851	2-C06-108	TR 2SC2909-S	1	1	1
R864	2-C20-092	C/F RESISTOR 4700HM 1/8W J		1	1	TR852	2-C06-118	TR 2SC2610TO-92TZ	1	1	1
R865	2-C20-092	C/F RESISTOR 4700HM 1/8W J		1	1	TR852	2-C06-108	TR 2SC2909-S	1	1	1
R867	2-C20-084	C/F RESISTOR 4.7KOHM 1/8W J		1	1	TR853	2-C06-118	TR 2SC2610TO-92TZ	1	1	1
R869	2-C20-082	C/F RESISTOR 100HM 1/8W J		1	1	TR853	2-C06-108	TR 2SC2909-S	1	1	1
R871	2-C20-094	C/F RESISTOR 1000HM 1/8W J		1	1	TR854	2-C06-118	TR 2SC2610TO-92TZ	1	1	1
R872	2-C20-094	C/F RESISTOR 1000HM 1/8W J		1	1	TR854	2-C06-108	TR 2SC2909-S	1	1	1
R873	2-C20-526	C/F RESISTOR 2200HM 1/8W J		1	1	TR860	2-C06-110	TR 2SA1029(D)TO-92TZ	1	1	1
R874	2-C20-526	C/F RESISTOR 2200HM 1/8W J		1	1	TR861	2-C06-110	TR 2SA1029(D)TO-92TZ	1	1	1
R880	2-C20-526	C/F RESISTOR 2200HM 1/8W J		1	1	TR862	2-C06-110	TR 2SA1029(D)TO-92TZ	1	1	1
R881	2-C20-526	C/F RESISTOR 2200HM 1/8W J		1	1	VR540	2-C99-256	VARIABLE RESISTOR 2KOHM B	1	1	1
R883	2-C19-136	C/F RESISTOR 13KOHM 1/8W J		1		VR542	2-C99-032	VARIABLE RESISTOR 2KOHM B	1	1	1
R883	2-C20-586	C/F RESISTOR 12KOHM 1/8W J		1	1	VR550	2-C99-039	VARIABLE RESISTOR 1KOHM B	1	1	1
R914	2-C18-032	C/F RESISTOR 1.2KOHM 1/4W J		1	1	VR580	2-C99-041	VARIABLE RESISTOR 10KOHM B	1	1	1

REF-NO	PART-CODE	DESCRIPTION	6502	6504	6506	REF-NO	PART-CODE	DESCRIPTION	6502	6504	6506
VR802	2-C29-104	VARIABLE RESISTOR 5KOHM B	1	1	1	P702	2-C21-479	CONNECTOR WAFER YW025-04	1	1	1
VR821	2-C29-032	VARIABLE RESISTOR 2KOHM B	1			P703	2-C21-478	CONNECTOR WAFER YW025-03	1	1	1
VR821	2-C29-038	VARIABLE RESISTOR 4700HM B	1	1	1	P801	2-C21-482	CONNECTOR WAFER YW025-07	1	1	1
VR824	2-C29-041	VARIABLE RESISTOR 10KOHM B	1	1	1	P802	2-C21-479	CONNECTOR WAFER YW025-04	1	1	1
VR831	2-C29-038	VARIABLE RESISTOR 4700HM B	1			P803	2-C21-4481	CONNECTOR WAFER YW025-06	1	1	1
VR831	2-C29-037	VARIABLE RESISTOR 2200HM B	1	1	1		2-C46-481	TIME PCB	1	1	1
VR841	2-C29-006	VARIABLE RESISTOR 5KOHM B	1				2-C25-559	CONNECTOR LEAD WIRE	1	1	1
P101	2-C21-499	CONNECTOR WAFER YW025-10	1	1	1		2-C21-103	JUMP WIRE	57	57	57
P401	2-C21-478	CONNECTOR WAFER YW025-03	1	1	1		2-C21-101	JUMP WIRE	49	49	49
P403	2-C21-479	CONNECTOR WAFER YW025-04	1	1	1		2-C25-578	LEAD WIRE	1	1	1
P700	2-C21-478	CONNECTOR WAFER YW025-03	1	1	1						

#### 6.VERTICAL PCB ASS'Y

REF-NO	PART-CODE	DESCRIPTION	6502	6504	6506	REF-NO	PART-CODE	DESCRIPTION	6502	6504	6506
C1	2-C31-018	M/F CAPACITOR 0.022 $\mu$ F 630V K	1	1	1	C50	2-C28-358	CERAMIC CAPACITOR 6 $\mu$ F 50V C	1	1	1
C2	2-C28-311	CERAMIC CAPACITOR 22 $\mu$ F 50V J	1	1	1	C51	2-C28-388	CERAMIC CAPACITOR 0.1 $\mu$ F 25V Z			1
C5	2-C28-350	CERAMIC CAPACITOR 47 $\mu$ F 50V J	1	1	1	C52	2-C28-388	CERAMIC CAPACITOR 0.1 $\mu$ F 25V Z			1
C9	2-C28-346	CERAMIC CAPACITOR 220 $\mu$ F 50V J	1	1	1	C67	2-C33-269	CERAMIC CAPACITOR 0.01 $\mu$ F 50V Z	1	1	1
C10	2-C28-033	CERAMIC CAPACITOR 270 $\mu$ F 50V J	1			C69	2-C28-359	CERAMIC CAPACITOR 680 $\mu$ F 50V J	1	1	1
C10	2-C28-341	CERAMIC CAPACITOR 100 $\mu$ F 50V J	1	1	1	C71	2-C28-359	CERAMIC CAPACITOR 680 $\mu$ F 50V J	1	1	1
C11	2-C28-338	CERAMIC CAPACITOR 8 $\mu$ F 50V J	1			C72	2-C33-269	CERAMIC CAPACITOR 0.01 $\mu$ F 50V Z	1	1	1
C11	2-C28-344	CERAMIC CAPACITOR 10 $\mu$ F 50V J	1			C83	2-C33-243	ELECTROLYTIC CAPACITOR 47 $\mu$ F 10V M	1		
C12	2-C28-342	CERAMIC CAPACITOR 1 $\mu$ F 50V J	1			C86	2-C28-359	CERAMIC CAPACITOR 680 $\mu$ F 50V J	1		
C13	2-C28-343	CERAMIC CAPACITOR 2 $\mu$ F 50V C	1			C86	2-C28-360	CERAMIC CAPACITOR 68 $\mu$ F 50V J	1	1	1
C14	2-C28-338	CERAMIC CAPACITOR 10 $\mu$ F 50V J	1			C90	2-C28-359	CERAMIC CAPACITOR 680 $\mu$ F 50V J	1	1	1
C16	2-C28-333	CERAMIC CAPACITOR 1000 $\mu$ F 500V Z	1	1	1	C91	2-C28-359	CERAMIC CAPACITOR 680 $\mu$ F 50V J	1	1	1
C18	2-C28-343	CERAMIC CAPACITOR 2 $\mu$ F 50V C	1	1	1	C94	2-C33-243	ELECTROLYTIC CAPACITOR 47 $\mu$ F 10V M	1	1	1
C20	2-C28-350	CERAMIC CAPACITOR 47 $\mu$ F 50V J	1	1	1	C96	2-C33-269	CERAMIC CAPACITOR 0.01 $\mu$ F 50V Z	1	1	1
C23	2-C28-331	CERAMIC CAPACITOR 1000 $\mu$ F 50V J	1	1	1	C97	2-C28-311	CERAMIC CAPACITOR 22 $\mu$ F 50V 330V K	1	1	1
C25	2-C28-350	CERAMIC CAPACITOR 47 $\mu$ F 50V J	1	1	1	C101	2-C31-018	M/F CAPACITOR 0.022 $\mu$ F 630V K	1	1	1
C26	2-C33-243	ELECTROLYTIC CAPACITOR 47 $\mu$ F 10V M	1	1	1	C102	2-C28-311	CERAMIC CAPACITOR 22 $\mu$ F 50V J	1	1	1
C30	2-C33-243	ELECTROLYTIC CAPACITOR 47 $\mu$ F 10V M	1	1	1	C105	2-C28-350	CERAMIC CAPACITOR 47 $\mu$ F 50V J	1	1	1
C32	2-C28-282	CERAMIC CAPACITOR 39 $\mu$ F 50V J	1	1	1	C109	2-C28-346	CERAMIC CAPACITOR 220 $\mu$ F 50V J	1	1	1
C36	2-C28-358	CERAMIC CAPACITOR 5 $\mu$ F 50V C	1	1	1	C110	2-C28-033	CERAMIC CAPACITOR 270 $\mu$ F 50V J	1		
C40	2-C33-243	ELECTROLYTIC CAPACITOR 47 $\mu$ F 10V M	1	1	1	C110	2-C28-341	CERAMIC CAPACITOR 100 $\mu$ F 50V J	1	1	1
C41	2-C28-388	CERAMIC CAPACITOR 0.1 $\mu$ F 25V Z	1	1	1	C111	2-C28-338	CERAMIC CAPACITOR 8 $\mu$ F 50V J	1		
C42	2-C28-311	CERAMIC CAPACITOR 22 $\mu$ F 50V J	1	1	1	C111	2-C28-344	CERAMIC CAPACITOR 10 $\mu$ F 50V J	1		
C44	2-C33-243	ELECTROLYTIC CAPACITOR 47 $\mu$ F 10V M	1	1	1	C14	2-C28-338	CERAMIC CAPACITOR 8 $\mu$ F 50V J	1		

REF-NO	PART-CODE	DESCRIPTION	6502	6504	6506	REF-NO	PART-CODE	DESCRIPTION	6502	6504	6506
C111	2-C28-338	CERAMIC CAPACITOR 8 $\mu$ F 50V J	1	1	C221	2-C28-355	CERAMIC CAPACITOR 330 $\text{pF}$ 50V J	1	1	1	1
C112	2-C28-342	CERAMIC CAPACITOR 1 $\mu$ F 50V J	1	1	C223	2-C28-355	CERAMIC CAPACITOR 330 $\text{pF}$ 50V J	1	1	1	1
C113	2-C28-343	CERAMIC CAPACITOR 2 $\mu$ F 50V J	1	1	C224	2-C28-243	ELECTROLYTIC CAPACITOR 47 $\mu$ F 10V M	1	1	1	1
C114	2-C28-344	CERAMIC CAPACITOR 10 $\text{pF}$ 50V J	1	1	C241	2-C28-269	CERAMIC CAPACITOR 0.01 $\mu$ F 50V Z	1	1	1	1
C116	2-C28-333	CERAMIC CAPACITOR 1000 $\text{pF}$ 500V Z	1	1	C242	2-C28-243	ELECTROLYTIC CAPACITOR 47 $\mu$ F 10V M	1	1	1	1
C118	2-C28-343	CERAMIC CAPACITOR 2 $\mu$ F 50V J	1	1	C243	2-C28-269	CERAMIC CAPACITOR 0.01 $\mu$ F 50V Z	1	1	1	1
C120	2-C28-350	CERAMIC CAPACITOR 47 $\mu$ F 50V J	1	1	C244	2-C28-269	CERAMIC CAPACITOR 0.01 $\mu$ F 50V Z	1	1	1	1
C123	2-C28-331	CERAMIC CAPACITOR 1000 $\text{pF}$ 50V J	1	1	C245	2-C28-243	ELECTROLYTIC CAPACITOR 47 $\mu$ F 10V M	1	1	1	1
C125	2-C28-350	CERAMIC CAPACITOR 27 $\text{pF}$ 50V J	1	1	C248	2-C28-341	CERAMIC CAPACITOR 100 $\text{pF}$ 50V J	1	1	1	1
C126	2-C33-243	ELECTROLYTIC CAPACITOR 47 $\mu$ F 10V M	1	1	C249	2-C28-359	CERAMIC CAPACITOR 5 $\text{pF}$ 50V J	1	1	1	1
C130	2-C33-243	ELECTROLYTIC CAPACITOR 47 $\mu$ F 10V M	1	1	C270	2-C28-243	ELECTROLYTIC CAPACITOR 47 $\mu$ F 10V M	1	1	1	1
C132	2-C28-282	CERAMIC CAPACITOR 39 $\text{pF}$ 50V J	1	1	C271	2-C28-243	ELECTROLYTIC CAPACITOR 47 $\mu$ F 10V M	1	1	1	1
C133	2-C28-388	CERAMIC CAPACITOR 0.1 $\mu$ F 50V J	1	1	C301	2-C28-505	ELECTROLYTIC CAPACITOR 1 $\mu$ F 160V M	1	1	1	1
C134	2-C28-338	CERAMIC CAPACITOR 8 $\text{pF}$ 50V J	1	1	C302	2-C28-243	ELECTROLYTIC CAPACITOR 47 $\mu$ F 10V M	1	1	1	1
C136	2-C28-358	CERAMIC CAPACITOR 5 $\text{pF}$ 50V J	1	1	C303	2-C28-243	ELECTROLYTIC CAPACITOR 47 $\mu$ F 10V M	1	1	1	1
C140	2-C33-243	ELECTROLYTIC CAPACITOR 47 $\mu$ F 10V M	1	1	C304	2-C28-243	ELECTROLYTIC CAPACITOR 47 $\mu$ F 10V M	1	1	1	1
C141			1	1	C305	2-C28-243	ELECTROLYTIC CAPACITOR 47 $\mu$ F 10V M	1	1	1	1
C142	2-C28-311	CERAMIC CAPACITOR 22 $\text{pF}$ 50V J	1	1	C331	2-C28-358	CERAMIC CAPACITOR 5 $\text{pF}$ 50V J	1	1	1	1
C142	2-C28-282	CERAMIC CAPACITOR 39 $\text{pF}$ 50V J	1	1	C332	2-C28-358	CERAMIC CAPACITOR 5 $\text{pF}$ 50V J	1	1	1	1
C144	2-C33-243	ELECTROLYTIC CAPACITOR 47 $\mu$ F 10V M	1	1	C336	2-C28-358	CERAMIC CAPACITOR 5 $\text{pF}$ 50V J	1	1	1	1
C150	2-C28-358	CERAMIC CAPACITOR 5 $\text{pF}$ 50V J	1	1	C337	2-C28-295	CERAMIC CAPACITOR 120 $\text{pF}$ 50V J	1	1	1	1
C151	2-C28-358	CERAMIC CAPACITOR 5 $\text{pF}$ 50V J	1	1	C337	2-C28-350	CERAMIC CAPACITOR 47 $\text{pF}$ 50V J	1	1	1	1
C167	2-C33-269	CERAMIC CAPACITOR 0.01 $\mu$ F 50V J	1	1	C338	2-C28-349	CERAMIC CAPACITOR 33 $\text{pF}$ 50V J	1	1	1	1
C169	2-C28-359	CERAMIC CAPACITOR 680 $\text{pF}$ 50V J	1	1	C345	2-C28-331	CERAMIC CAPACITOR 1000 $\text{pF}$ 50V J	1	1	1	1
C171	2-C28-359	CERAMIC CAPACITOR 680 $\text{pF}$ 50V J	1	1	C346	2-C28-331	CERAMIC CAPACITOR 1000 $\text{pF}$ 50V J	1	1	1	1
C172	2-C33-269	CERAMIC CAPACITOR 0.01 $\mu$ F 50V J	1	1	C355	2-C28-341	CERAMIC CAPACITOR 100 $\text{pF}$ 50V J	1	1	1	1
C179	2-C33-269	CERAMIC CAPACITOR 0.01 $\mu$ F 50V Z	1	1	C357	2-C28-358	CERAMIC CAPACITOR 5 $\text{pF}$ 50V J	1	1	1	1
C180	2-C28-388	CERAMIC CAPACITOR 0.1 $\mu$ F 25V Z	1	1	C357	2-C28-282	CERAMIC CAPACITOR 39 $\text{pF}$ 50V J	1	1	1	1
C184	2-C28-341	CERAMIC CAPACITOR 1000 $\text{pF}$ 50V J	1	1	C363	2-C28-269	CERAMIC CAPACITOR 0.01 $\mu$ F 50V Z	1	1	1	1
C186	2-C28-388	CERAMIC CAPACITOR 0.1 $\mu$ F 25V Z	1	1	C364	2-C28-243	ELECTROLYTIC CAPACITOR 47 $\mu$ F 10V M	1	1	1	1
C186	2-C28-359	CERAMIC CAPACITOR 680 $\text{pF}$ 50V J	1	1	C365	2-C28-360	CERAMIC CAPACITOR 68 $\text{pF}$ 50V J	1	1	1	1
C186	2-C28-360	CERAMIC CAPACITOR 68 $\text{pF}$ 50V J	1	1	C365	2-C28-344	CERAMIC CAPACITOR 10 $\text{pF}$ 50V J	1	1	1	1
C190	2-C28-369	CERAMIC CAPACITOR 680 $\text{pF}$ 50V J	1	1	C365	2-C28-345	CERAMIC CAPACITOR 15 $\text{pF}$ 50V J	1	1	1	1
C201	2-C28-369	CERAMIC CAPACITOR 0.01 $\mu$ F 50V Z	1	1	C366	2-C28-350	CERAMIC CAPACITOR 47 $\text{pF}$ 50V J	1	1	1	1
C207	2-C28-341	CERAMIC CAPACITOR 100 $\text{pF}$ 50V J	1	1	C367	2-C28-040	CERAMIC CAPACITOR 2 $\text{pF}$ 500V J	1	1	1	1
C210	2-C28-385	ELECTROLYTIC CAPACITOR 10 $\mu$ F 16V BP	1	1	C367	2-C28-039	CERAMIC CAPACITOR 1 $\text{pF}$ 500V J	1	1	1	1
C210	2-C28-226	CERAMIC CAPACITOR 18 $\text{pF}$ 50V J	1	1	C111	2-C28-344	CERAMIC CAPACITOR 10 $\text{pF}$ 50V J	1	1	1	1
C217	2-C28-344	CERAMIC CAPACITOR 10 $\text{pF}$ 50V J	1	1	C355	2-C28-350	CERAMIC CAPACITOR 47 $\text{pF}$ 50V J	1	1	1	1

REF-NO	PART-CODE	DESCRIPTION	6502	6504	6506	REF-NO	PART-CODE	DESCRIPTION	6502	6504	6506
C368	2-C28-040	CERAMIC CAPACITOR 2 $\mu$ F 500V C	1	1	1	C1014	2-C28-367	CERAMIC CAPACITOR 4700 $\text{pF}$ 2kV K	1	1	1
C368	2-C28-039	CERAMIC CAPACITOR 1 $\mu$ F 500V C	1	1	1	C1016	2-C28-150	CERAMIC CAPACITOR 100 $\text{pF}$ 2kV K	1	1	1
C379	2-C28-333	CERAMIC CAPACITOR 1000 $\text{pF}$ 500V Z	1	1	1	C1020	2-C28-333	CERAMIC CAPACITOR 1000 $\text{pF}$ 500V Z	1	1	1
C380	2-C28-333	CERAMIC CAPACITOR 1000 $\text{pF}$ 500V Z	1	1	1	C1021	2-C23-505	ELECTROLYTIC CAPACITOR 1 $\mu$ F 160V M	1	1	1
C385	2-C28-044	CERAMIC CAPACITOR 0.01 $\mu$ F 500V P	1	1	1	C1023	2-C28-337	CERAMIC CAPACITOR 1000 $\text{pF}$ 2kV K	1	1	1
C385	2-C28-335	CERAMIC CAPACITOR 0.01 $\mu$ F 500V Z	1	1	1	C1025	2-C28-367	CERAMIC CAPACITOR 4700 $\text{pF}$ 2kV K	1	1	1
C386	2-C28-044	CERAMIC CAPACITOR 0.01 $\mu$ F 500V P	1	1	1	C1026	2-C28-337	CERAMIC CAPACITOR 1000 $\text{pF}$ 2kV K	1	1	1
C386	2-C28-335	CERAMIC CAPACITOR 0.01 $\mu$ F 500V Z	1	1	1	C1030	2-C28-360	CERAMIC CAPACITOR 68 $\text{pF}$ 50V J	1	1	1
C389	2-C28-334	CERAMIC CAPACITOR 4700 $\text{pF}$ 500V Z	1	1	1	C1034	2-C28-334	CERAMIC CAPACITOR 4700 $\text{pF}$ 500V Z	1	1	1
C402	2-C28-336	CERAMIC CAPACITOR 22 $\mu$ F 500V J	1	1	1	C1035	2-C28-334	CERAMIC CAPACITOR 4700 $\text{pF}$ 500V Z	1	1	1
C403	2-C28-018	P/F CAPACITOR 0.022 $\mu$ F 630V K	1	1	1	C1104	2-C33-384	ELECTROLYTIC CAPACITOR 47 $\mu$ F 160V M	1	1	1
C404	2-C28-331	CERAMIC CAPACITOR 1000 $\text{pF}$ 50V J	1	1	1	C1110	2-C28-332	CERAMIC CAPACITOR 1500 $\text{pF}$ 50V J	1	1	1
C405	2-C28-127	P/F CAPACITOR 0.0475 $\mu$ F 50V C	1	1	1	C1112	2-C33-243	ELECTROLYTIC CAPACITOR 47 $\mu$ F 10V M	1	1	1
C405	2-C28-058	P/F CAPACITOR 0.0475 $\mu$ F 50V C	1	1	1	C1122	2-C33-243	ELECTROLYTIC CAPACITOR 47 $\mu$ F 10V M	1	1	1
C407	2-C28-358	CERAMIC CAPACITOR 5 $\mu$ F 50V C	1	1	1	C1124	2-C30-127	P/F CAPACITOR 0.047 $\mu$ F 50V K	1	1	1
C408	2-C28-408	ELECTROLYTIC CAPACITOR 47 $\mu$ F 10V M	1	1	1	C1124	2-C30-058	P/F CAPACITOR 0.047 $\mu$ F 100V K	1	1	1
C417	2-C33-385	ELECTROLYTIC CAPACITOR 16V BP	1	1	1	C1131	2-C33-072	ELECTROLYTIC CAPACITOR 22 $\mu$ F 25V M	1	1	1
C418	2-C33-269	CERAMIC CAPACITOR 0.01 $\mu$ F 50V Z	1	1	1	C1138	2-C33-243	ELECTROLYTIC CAPACITOR 47 $\mu$ F 10V M	1	1	1
C425	2-C33-243	ELECTROLYTIC CAPACITOR 47 $\mu$ F 10V M	1	1	1	C1201	2-C28-344	CERAMIC CAPACITOR 10 $\text{pF}$ 50V J	1	1	1
C442	2-C33-387	ELECTROLYTIC CAPACITOR 1 $\mu$ F 5V BP	1	1	1	C1202	2-C28-331	CERAMIC CAPACITOR 1000 $\text{pF}$ 50V J	1	1	1
C444	2-C33-243	ELECTROLYTIC CAPACITOR 47 $\mu$ F 10V M	1	1	1	C1208	2-C30-126	P/F CAPACITOR 0.022 $\mu$ F 50V K	1	1	1
C452	2-C33-269	CERAMIC CAPACITOR 0.01 $\mu$ F 50V Z	1	1	1	C1210	2-C33-243	ELECTROLYTIC CAPACITOR 47 $\mu$ F 10V M	1	1	1
C901	2-C33-243	ELECTROLYTIC CAPACITOR 47 $\mu$ F 10V M	1	1	1	CV3	2-C34-129	TRIMMER CAPACITOR 10 $\text{pF}$	1	1	1
C904	2-C28-039	CERAMIC CAPACITOR 1 $\mu$ F 500V C	1	1	1	CV4	2-C34-068	TRIMMER CAPACITOR 5 $\text{pF}$	1	1	1
C904	2-C28-040	CERAMIC CAPACITOR 2 $\mu$ F 500V C	1	1	1	CV6	2-C34-129	TRIMMER CAPACITOR 10 $\text{pF}$	1	1	1
C908	2-C28-334	CERAMIC CAPACITOR 4700 $\text{pF}$ 50V Z	1	1	1	CV7	2-C34-068	TRIMMER CAPACITOR 5 $\text{pF}$	1	1	1
C912	2-C33-505	ELECTROLYTIC CAPACITOR 1 $\mu$ F 160V M	1	1	1	CV61	2-C31-056	TRIMMER CAPACITOR 50 $\text{pF}$	1	1	1
C913	2-C28-388	CERAMIC CAPACITOR 0.1 $\mu$ F 25V Z	1	1	1	CV77	2-C28-282	CERAMIC CAPACITOR 39 $\text{pF}$ 50V J	1	1	1
C920	2-C28-296	CERAMIC CAPACITOR 470 $\text{pF}$ 50V J	1	1	1	CV77	2-C31-056	TRIMMER CAPACITOR 50 $\text{pF}$	1	1	1
C920	2-C28-341	CERAMIC CAPACITOR 100 $\text{pF}$ 50V J	1	1	1	CV103	2-C34-129	TRIMMER CAPACITOR 10 $\text{pF}$	1	1	1
C920	2-C28-350	CERAMIC CAPACITOR 47 $\text{pF}$ 50V J	1	1	1	CV104	2-C34-068	TRIMMER CAPACITOR 5 $\text{pF}$	1	1	1
C1001	2-C33-126	P/F CAPACITOR 0.022 $\mu$ F 50V K	1	1	1	CV106	2-C34-129	TRIMMER CAPACITOR 10 $\text{pF}$	1	1	1
C1002	2-C33-506	ELECTROLYTIC CAPACITOR 47 $\mu$ F 50V M	1	1	1	CV107	2-C34-068	TRIMMER CAPACITOR 5 $\text{pF}$	1	1	1
C1004	2-C30-127	P/F CAPACITOR 0.047 $\mu$ F 50V K	1	1	1	CV161	2-C31-056	TRIMMER CAPACITOR 50 $\text{pF}$	1	1	1
C1005	2-C33-116	P/F CAPACITOR 0.1 $\mu$ F 100V K	1	1	1	CV337	2-C31-056	TRIMMER CAPACITOR 50 $\text{pF}$	1	1	1
C1012	2-C28-367	CERAMIC CAPACITOR 4700 $\text{pF}$ 2kV K	1	1	1	CV338	2-C28-282	CERAMIC CAPACITOR 39 $\text{pF}$ 50V J	1	1	1
C1013	2-C28-367	CERAMIC CAPACITOR 4700 $\text{pF}$ 2kV K	1	1	1	CV355	2-C31-056	TRIMMER CAPACITOR 50 $\text{pF}$	1	1	1

REF-NO	PART-CODE	DESCRIPTION	6502	6504	6506	REF-NO	PART-CODE	DESCRIPTION	6502	6504	6506
			6502	6504	6506	D1024	2-C03-012	DIODE 1SS83	1	1	1
CV366	2-C31-066	TRIMMER CAPACITOR 50 pF	1	1		F1001	2-C40-083-	FUSE 51NM05000L	1	1	1
CV366	2-C34-130	TRIMMER CAPACITOR 20 pF	1	1		F1001	2-C27-158	FUSE HOLDER GF-205B	1	1	1
CV366	2-C34-068	TRIMMER CAPACITOR 5 pF	1	1		TR349	2-C40-015	BEED CORE	1	1	1
TR40	2-C34-129	TRIMMER CAPACITOR 10 pF	1	1		TR350	2-C40-015	BEED CORE	1	1	1
TR40	2-C34-129	TRIMMER CAPACITOR 10 pF	1	1		TR360	2-C40-015	BEED CORE	1	1	1
D16	2-C03-196	DIODE 1SS133 DO-34 T-77	1	1		TR365	2-C40-015	BEED CORE	1	1	1
D21	2-C03-198	DIODE 1SS110	1	1		IC16	2-C05-046	IC LF356CN	1	1	1
D97	2-C46-539	DIODE HZ 3B-2	1	1		IC116	2-C05-046	IC LF356CN	1	1	1
D116	2-C03-196	DIODE 1SS133 DO-34 T-77	1	1		IC226	2-C45-020	IC SN74LS74N	1	1	1
D121	2-C03-198	DIODE 1SS110	1	1		IC111	2-C05-084	IC MC7808CT	1	1	1
D201	2-C03-196	DIODE 1SS133 DO-34 T-77	1	1		IC1121	2-C08-012	IC MC7908CT	1	1	1
D202	2-C03-196	DIODE 1SS133 DO-34 T-77	1	1		IC1131	2-C05-085	IC KA7805CT	1	1	1
D203	2-C03-196	DIODE 1SS133 DO-34 T-77	1	1		L34	2-C32-034	INDUCTOR 0.47 $\mu$ H	1		
D204	2-C03-196	DIODE 1SS133 DO-34 T-77	1	1		L34	2-C32-202	INDUCTOR 0.22 $\mu$ H	1		
D205	2-C03-196	DIODE 1SS133 DO-34 T-77	1	1		L98	2-C32-256	INDUCTOR 100 $\mu$ H	1		
D206	2-C03-196	DIODE 1SS133 DO-34 T-77	1	1		L134	2-C32-034	INDUCTOR 0.47 $\mu$ H	1		
D207	2-C03-196	DIODE 1SS133 DO-34 T-77	1	1		L134	2-C32-202	INDUCTOR 0.22 $\mu$ H	1		
D208	2-C03-196	DIODE 1SS133 DO-34 T-77	1	1		L135	2-C32-204	INDUCTOR 33 $\mu$ H K	1		
D221	2-C03-196	DIODE 1SS133 DO-34 T-77	1	1		L385	2-C32-085	INDUCTOR 2.2 $\mu$ H K	1		
D226	2-C03-196	DIODE 1SS133 DO-34 T-77	1	1		L385	2-C32-202	INDUCTOR 0.22 $\mu$ H	1		
D227	2-C03-196	DIODE 1SS133 DO-34 T-77	1	1		L386	2-C32-085	INDUCTOR 2.2 $\mu$ H K	1		
D230	2-C03-196	DIODE 1SS133 DO-34 T-77	1	1		L386	2-C32-202	INDUCTOR 0.22 $\mu$ H	1		
D231	2-C03-196	DIODE 1SS133 DO-34 T-77	1	1		N1024	2-C42-015	NEON LAMP NE-2	1		
D243	2-C03-196	DIODE 1SS133 DO-34 T-77	1	1		N1025	2-C42-015	NEON LAMP NE-2	1		
D244	2-C03-196	DIODE 1SS133 DO-34 T-77	1	1		M1001	2-C42-236	H.V.P. DMP606	1		
D245	2-C46-479	DIODE HZ 5B1	1	1		R2	2-C20-106	C/F RESISTOR 470OHM 1/8W J	1		
D374	2-C46-479	DIODE HZ 5B1	1	1		R4	2-C17-024	M/F RESISTOR 900KOHM 1/4W D	1		
D375	2-C46-479	DIODE HZ 5B1	1	1		R5	2-C12-194	M/F RESISTOR 111KOHM 1/8W D	1		
D377	2-C46-479	DIODE HZ 5B1	1	1		R6	2-C20-192	C/F RESISTOR 510OHM 1/8W J	1		
D401	2-C03-196	DIODE 1SS133 DO-34 T-77	1	1		R6	2-C10-148	C/F RESISTOR 390OHM 1/8W J	1		
D444	2-C03-196	DIODE 1SS133 DO-34 T-77	1	1		R6	2-C20-123	C/F RESISTOR 270HM 1/8W J	1		
D901	2-C03-196	DIODE 1SS133 DO-34 T-77	1	1		R8	2-C12-195	M/F RESISTOR 10.1KOHM 1/8W D	1		
D902	2-C03-196	DIODE 1SS133 DO-34 T-77	1	1		R7	2-C17-025	M/F RESISTOR 990KOHM 1/4W D	1		
D910	2-C03-196	DIODE 1SS133 DO-34 T-77	1	1		R9	2-C20-082	C/F RESISTOR 100HM 1/8W J	1		
D1012	2-C46-297	DIODE DHM3FJ60	1	1		R10	2-C20-094	C/F RESISTOR 1000HM 1/8W J	1		
D1021	2-C03-012	DIODE 1SS83	1	1		R11	2-C20-587	C/F RESISTOR 150HM 1/8W J	1		
D1022	2-C03-012	DIODE 1SS83	1	1		R11	2-C20-082	C/F RESISTOR 100HM 1/8W J	1		
D1023	2-C03-012	DIODE 1SS83	1	1							

REF-NO	PART-CODE	DESCRIPTION	6502	6504	6506	REF-NO	PART-CODE	DESCRIPTION	6502	6504	6506
R12	2-C20-122	C/F RESISTOR 220HM 1/8W J	1	1	1	R63	2-C20-107	C/F RESISTOR 2.2KOHM 1/8W J	1	1	1
R12						R64	2-C20-083	C/F RESISTOR 3.3KOHM 1/8W J	1		
R13	2-C18-007	C/F RESISTOR 470HM 1/4W J	1	1	1	R64	2-C20-107	C/F RESISTOR 2.2KOHM 1/8W J	1	1	1
R16	2-C12-189	C/F RESISTOR 500KOHM 1/8W D	1	1	1	R65	2-C20-087	C/F RESISTOR 10KOHM 1/8W J	1	1	1
R17	2-C12-189	C/F RESISTOR 500KOHM 1/8W D	1	1	1	R66	2-C20-104	C/F RESISTOR 22KOHM 1/8W J	1	1	1
R18	2-C20-094	C/F RESISTOR 1000HM 1/8W J	1	1	1	R67	2-C20-129	C/F RESISTOR 1200HM 1/8W J	1	1	1
R19	2-C20-077	C/F RESISTOR 100KOHM 1/8W J	1	1	1	R68	2-C20-122	C/F RESISTOR 220HM 1/8W J	1	1	1
R20	2-C20-077	C/F RESISTOR 100KOHM 1/8W J	1	1	1	R69	2-C20-098	C/F RESISTOR 1.2KOHM 1/8W J	1		
R21	2-C11-137	C/F RESISTOR 10MOMH 1/4W J	1	1	1	R69	2-C20-073	C/F RESISTOR 6800HM 1/8W J	1	1	1
R22	2-C20-141	C/F RESISTOR 68KOHM 1/8W J	1	1	1	R70	2-C20-098	C/F RESISTOR 1.2KOHM 1/8W J	1		
R23	2-C20-084	C/F RESISTOR 4.7KOHM 1/8W J	1	1	1	R70	2-C20-073	C/F RESISTOR 6800HM 1/8W J	1	1	1
R25	2-C20-094	C/F RESISTOR 1000HM 1/8W J	1			R71	2-C20-122	C/F RESISTOR 220HM 1/8W J	1	1	1
R25	2-C20-126	C/F RESISTOR 680HM 1/8W J	1	1	1	R72	2-C20-106	C/F RESISTOR 470HM 1/8W J	1	1	1
R26	2-C13-123	M/F RESISTOR 5.62KOHM 1/8W F	1			R73	2-C13-147	M/F RESISTOR 6810HM 1/8W F	1		
R26	2-C13-113	M/F RESISTOR 3.92KOHM 1/8W F	1	1	1	R73	2-C12-034	M/F RESISTOR 4320HM 1/8W F	1	1	1
R30	2-C20-083	C/F RESISTOR 3.3KOHM 1/8W J	1			R74	2-C13-147	M/F RESISTOR 6810HM 1/8W F	1		
R30	2-C20-107	C/F RESISTOR 2.2KOHM 1/8W J	1			R74	2-C12-034	M/F RESISTOR 4320HM 1/8W F	1	1	1
R30	2-C20-093	C/F RESISTOR 1KOHM 1/8W J		1	1	R75	2-C20-083	C/F RESISTOR 3.3KOHM 1/8W J	1	1	1
R32	2-C20-533	C/F RESISTOR 620HM 1/8W J		1	1	R76	2-C20-092	C/F RESISTOR 4700HM 1/8W J	1		
R33	2-C20-270	C/F RESISTOR 2700HM 1/8W J	1	1	1	R76	2-C20-094	C/F RESISTOR 1000HM 1/8W J	1	1	1
R36	2-C12-190	M/F RESISTOR 6000HM 1/8W D	1	1	1	R77	2-C20-106	C/F RESISTOR 470HM 1/8W J	1	1	1
R40	2-C20-082	C/F RESISTOR 100HM 1/8W J	1	1	1	R81	2-C20-094	C/F RESISTOR 1000HM 1/8W J	1	1	1
R41	2-C20-082	C/F RESISTOR 100HM 1/8W J	1	1	1	R82	2-C13-128	M/F RESISTOR 86.60HM 1/8W F	1	1	1
R43	2-C20-073	C/F RESISTOR 6800HM 1/8W J	1	1	1	R83	2-C20-094	C/F RESISTOR 1000HM 1/8W J	1	1	1
R44	2-C20-073	C/F RESISTOR 6800HM 1/8W J	1			R84	2-C20-096	C/F RESISTOR 1500HM 1/8W J	1	1	1
R44	2-C20-102	C/F RESISTOR 5600HM 1/8W J		1	1	R85	2-C20-108	C/F RESISTOR 15KOHM 1/8W J	1	1	1
R45	2-C20-082	C/F RESISTOR 100HM 1/8W J	1	1	1	R86	2-C20-133	C/F RESISTOR 1.5KOHM 1/8W J	1		
R46	2-C12-191	M/F RESISTOR 16KOHM 1/8W D	1	1	1	R86	2-C20-094	C/F RESISTOR 1000HM 1/8W J	1		
R47	2-C12-192	M/F RESISTOR 80KOHM 1/8W D	1	1	1	R87	2-C20-126	C/F RESISTOR 680HM 1/8W J	1		
R48	2-C12-193	M/F RESISTOR 4KOHM 1/8W D	1	1	1	R87	2-C20-590	C/F RESISTOR 330HM 1/8W J	1	1	1
R59	2-C20-526	C/F RESISTOR 2200HM 1/8W J	1			R88	2-C20-084	C/F RESISTOR 4.7KOHM 1/8W J	1		
R59	2-C20-096	C/F RESISTOR 1500HM 1/8W J		1	1	R88	2-C20-107	C/F RESISTOR 2.2KOHM 1/8W J	1	1	1
R60	2-C20-101	C/F RESISTOR 47KOHM 1/8W J	1	1	1	R89	2-C20-084	C/F RESISTOR 4.7KOHM 1/8W J	1		
R61	2-C20-082	C/F RESISTOR 100HM 1/8W J	1			R89	2-C20-107	C/F RESISTOR 2.2KOHM 1/8W J	1	1	1
R61	2-C10-148	C/F RESISTOR 390HM 1/8W J		1	1	R90	2-C20-090	C/F RESISTOR 3300HM 1/8W J	1		
R62	2-C20-126	C/F RESISTOR 680HM 1/8W J	1			R90	2-C20-082	C/F RESISTOR 100HM 1/8W J	1	1	1
R62	2-C20-106	C/F RESISTOR 470HM 1/8W J	1	1	1	R91	2-C20-090	C/F RESISTOR 3300HM 1/8W J	1		
R63	2-C20-083	C/F RESISTOR 3.3KOHM 1/8W J	1			R91	2-C20-526	C/F RESISTOR 2200HM 1/8W J	1	1	1

REF-NO	PART-CODE	DESCRIPTION	6502	6504	6506	REF-NO	PART-CODE	6502	6504	6506
			1	1	1	R133	C/F RESISTOR 2700HM 1/8W J	1	1	1
R93	2-C20-084	C/F RESISTOR 4.7KOHM 1/8W J	1	1	1	R136	C/F RESISTOR 2-C20-089	2-C20-089	C/F RESISTOR 2-C20-190	C/F RESISTOR 6000HM 1/8W J
R93	2-C20-107	C/F RESISTOR 2.2KOHM 1/8W J	1	1	1	R140	2-C20-082	2-C20-082	C/F RESISTOR 100HM 1/8W J	C/F RESISTOR 100HM 1/8W J
R94	2-C20-157	M/F RESISTOR 1.5KOHM 1/BW F	1	1	1	R141	2-C20-082	2-C20-082	C/F RESISTOR 100HM 1/8W J	C/F RESISTOR 6800HM 1/8W J
R94	2-C13-126	M/F RESISTOR 6800HM 1/8W F	1	1	1	R143	2-C20-073	2-C20-073	C/F RESISTOR 6800HM 1/8W J	C/F RESISTOR 6800HM 1/8W J
R95	2-C20-106	C/F RESISTOR 470HM 1/8W J	1	1	1	R144	2-C20-073	2-C20-073	C/F RESISTOR 6800HM 1/8W J	C/F RESISTOR 6800HM 1/8W J
R96	2-C20-106	C/F RESISTOR 470HM 1/8W J	1	1	1	R144	2-C20-102	2-C20-102	C/F RESISTOR 5600HM 1/8W J	C/F RESISTOR 5600HM 1/8W J
R97	2-C20-087	C/F RESISTOR 10KOHM 1/8W J	1	1	1	R145	2-C20-082	2-C20-082	C/F RESISTOR 100HM 1/8W J	C/F RESISTOR 100HM 1/8W J
R98	2-C20-073	C/F RESISTOR 6800HM 1/8W J	1	1	1	R146	2-C12-191	2-C12-191	M/F RESISTOR 16KOHM 1/8W D	M/F RESISTOR 16KOHM 1/8W D
R99	2-C20-073	C/F RESISTOR 6800HM 1/8W J	1	1	1	R147	2-C12-192	2-C12-192	M/F RESISTOR 80KOHM 1/8W D	M/F RESISTOR 80KOHM 1/8W D
R102	2-C20-106	C/F RESISTOR 470HM 1/8W J	1	1	1	R148	2-C12-193	2-C12-193	M/F RESISTOR 4KOHM 1/8W D	M/F RESISTOR 4KOHM 1/8W D
R104	2-C20-024	M/F RESISTOR 900KOHM 1/8W D	1	1	1	R159	2-C20-526	2-C20-526	C/F RESISTOR 2200HM 1/8W J	C/F RESISTOR 2200HM 1/8W J
R105	2-C12-194	M/F RESISTOR 111KOHM 1/8W D	1	1	1	R159	2-C20-096	2-C20-096	C/F RESISTOR 1500HM 1/8W J	C/F RESISTOR 1500HM 1/8W J
R106	2-C20-192	C/F RESISTOR 510HM 1/8W J	1	1	1	R160	2-C20-101	2-C20-101	C/F RESISTOR 47KOHM 1/8W J	C/F RESISTOR 47KOHM 1/8W J
R106	2-C10-048	C/F RESISTOR 390HM 1/8W J	1	1	1	R161	2-C20-082	2-C20-082	C/F RESISTOR 100HM 1/8W J	C/F RESISTOR 100HM 1/8W J
R106	2-C20-123	C/F RESISTOR 270HM 1/8W J	1	1	1	R161	2-C10-048	2-C10-048	C/F RESISTOR 390HM 1/8W J	C/F RESISTOR 390HM 1/8W J
R107	2-C17-025	M/F RESISTOR 990KOHM 1/4W D	1	1	1	R162	2-C20-126	2-C20-126	C/F RESISTOR 680HM 1/8W J	C/F RESISTOR 680HM 1/8W J
R108	2-C12-195	M/F RESISTOR 10.1KOHM 1/8W D	1	1	1	R162	2-C20-106	2-C20-106	C/F RESISTOR 470HM 1/8W J	C/F RESISTOR 470HM 1/8W J
R109	2-C20-082	C/F RESISTOR 100HM 1/8W J	1	1	1	R163	2-C20-083	2-C20-083	C/F RESISTOR 3.3KOHM 1/8W J	C/F RESISTOR 3.3KOHM 1/8W J
R110	2-C20-094	C/F RESISTOR 1000HM 1/8W J	1	1	1	R163	2-C20-107	2-C20-107	C/F RESISTOR 2.2KOHM 1/8W J	C/F RESISTOR 2.2KOHM 1/8W J
R111	2-C20-587	C/F RESISTOR 150HM 1/8W J	1	1	1	R164	2-C20-083	2-C20-083	C/F RESISTOR 3.3KOHM 1/8W J	C/F RESISTOR 3.3KOHM 1/8W J
R111	2-C20-082	C/F RESISTOR 100HM 1/8W J	1	1	1	R164	2-C20-107	2-C20-107	C/F RESISTOR 2.2KOHM 1/8W J	C/F RESISTOR 2.2KOHM 1/8W J
R112	2-C20-122	C/F RESISTOR 220HM 1/8W J	1	1	1	R165	2-C20-087	2-C20-087	C/F RESISTOR 10KOHM 1/8W J	C/F RESISTOR 10KOHM 1/8W J
R113	2-C18-007	C/F RESISTOR 470HM 1/4W J	1	1	1	R166	2-C20-104	2-C20-104	C/F RESISTOR 22KOHM 1/8W J	C/F RESISTOR 22KOHM 1/8W J
R116	2-C12-189	M/F RESISTOR 500KOHM 1/8W D	1	1	1	R167	2-C20-129	2-C20-129	C/F RESISTOR 1200HM 1/8W J	C/F RESISTOR 1200HM 1/8W J
R118	2-C20-084	C/F RESISTOR 1000HM 1/8W J	1	1	1	R168	2-C20-122	2-C20-122	C/F RESISTOR 220HM 1/8W J	C/F RESISTOR 220HM 1/8W J
R119	2-C20-077	C/F RESISTOR 100KOHM 1/8W J	1	1	1	R169	2-C20-098	2-C20-098	C/F RESISTOR 1.2KOHM 1/8W J	C/F RESISTOR 1.2KOHM 1/8W J
R120	2-C20-077	C/F RESISTOR 100KOHM 1/8W J	1	1	1	R169	2-C20-073	2-C20-073	C/F RESISTOR 6800HM 1/8W J	C/F RESISTOR 6800HM 1/8W J
R121	2-C11-137	C/F RESISTOR 10M0HM 1/4W J	1	1	1	R170	2-C20-073	2-C20-073	C/F RESISTOR 6800HM 1/8W J	C/F RESISTOR 6800HM 1/8W J
R122	2-C20-141	C/F RESISTOR 68KOHM 1/8W J	1	1	1	R171	2-C20-122	2-C20-122	C/F RESISTOR 220HM 1/8W J	C/F RESISTOR 220HM 1/8W J
R123	2-C20-123	C/F RESISTOR 4.7KOHM 1/8W J	1	1	1	R172	2-C20-106	2-C20-106	C/F RESISTOR 470HM 1/8W J	C/F RESISTOR 470HM 1/8W J
R125	2-C20-126	C/F RESISTOR 6800HM 1/8W J	1	1	1	R173	2-C13-143	2-C13-143	M/F RESISTOR 6810HM 1/8W F	M/F RESISTOR 6810HM 1/8W F
R126	2-C13-123	M/F RESISTOR 5.62KOHM 1/8W F	1	1	1	R173	2-C12-034	2-C12-034	M/F RESISTOR 6810HM 1/8W F	M/F RESISTOR 6810HM 1/8W F
R126	2-C13-113	M/F RESISTOR 3.92KOHM 1/8W F	1	1	1	R174	2-C13-143	2-C13-143	M/F RESISTOR 4320HM 1/8W F	M/F RESISTOR 4320HM 1/8W F
R130	2-C20-083	C/F RESISTOR 3.3KOHM 1/8W J	1	1	1	R174	2-C12-034	2-C12-034	M/F RESISTOR 4320HM 1/8W F	M/F RESISTOR 4320HM 1/8W F
R130	2-C20-107	C/F RESISTOR 2.2KOHM 1/8W J	1	1	1	R175	2-C20-083	2-C20-083	C/F RESISTOR 3.3KOHM 1/8W J	C/F RESISTOR 3.3KOHM 1/8W J
R130	2-C20-093	C/F RESISTOR 1KOHM 1/8W J	1	1	1	R176	2-C20-092	2-C20-092	C/F RESISTOR 4700HM 1/8W J	C/F RESISTOR 4700HM 1/8W J
R132	2-C20-533	C/F RESISTOR 620HM 1/8W J	1	1	1	R176	2-C20-094	2-C20-094	C/F RESISTOR 1000HM 1/8W J	C/F RESISTOR 1000HM 1/8W J

REF-NO	PART-CODE	DESCRIPTION	6502	6504	6506	REF-NO	PART-CODE	DESCRIPTION	6502	6504	6506
			1	1	1	R210	2-C20-101	CIF RESISTOR 47KOHM 1/8W J	1	1	1
R177	2-C20-092	C/F RESISTOR 4700HM 1/8W J	1	1	1	R210	2-C20-137	CIF RESISTOR 82KOHM 1/8W J	1	1	1
R177	2-C20-092	C/F RESISTOR 1000HM 1/8W J	1	1	1	R211	2-C20-102	CIF RESISTOR 5600HM 1/8W J	1	1	1
R178	2-C20-083	C/F RESISTOR 3.3KOHM 1/8W J	1	1	1	R211	2-C20-097	CIF RESISTOR 8200HM 1/8W J	1	1	1
R179	2-C20-106	C/F RESISTOR 470HM 1/8W J	1	1	1	R212	2-C20-102	CIF RESISTOR 5600HM 1/8W J	1	1	1
R181	2-C20-094	C/F RESISTOR 1000HM 1/8W J	1	1	1	R212	2-C20-097	CIF RESISTOR 8200HM 1/8W J	1	1	1
R184	2-C20-096	C/F RESISTOR 1500HM 1/8W J	1	1	1	R212	2-C20-327	CIF RESISTOR 8200HM 1/8W J	1	1	1
R185	2-C20-108	C/F RESISTOR 15KOHM 1/8W J	1	1	1	R213	2-C13-128	MIF RESISTOR 470HM 1/8W F	1	1	1
R186	2-C20-133	C/F RESISTOR 1.5KOHM 1/8W J	1	1	1	R213	2-C13-128	MIF RESISTOR 86.60HM 1/8W F	1	1	1
R186	2-C20-094	C/F RESISTOR 1000HM 1/8W J	1	1	1	R214	2-C20-327	MIF RESISTOR 470HM 1/8W F	1	1	1
R187	2-C20-126	C/F RESISTOR 680HM 1/8W J	1	1	1	R214	2-C13-128	MIF RESISTOR 86.60HM 1/8W F	1	1	1
R187	2-C20-590	C/F RESISTOR 330HM 1/8W J	1	1	1	R215	2-C20-107	CIF RESISTOR 2.2KOHM 1/8W J	1	1	1
R188	2-C20-084	C/F RESISTOR 4.7KOHM 1/8W J	1	1	1	R215	2-C20-134	CIF RESISTOR 1.8KOHM 1/8W J	1	1	1
R188	2-C20-107	C/F RESISTOR 2.2KOHM 1/8W J	1	1	1	R216	2-C20-107	CIF RESISTOR 2.2KOHM 1/8W J	1	1	1
R189	2-C20-084	C/F RESISTOR 4.7KOHM 1/8W J	1	1	1	R216	2-C20-134	CIF RESISTOR 1.8KOHM 1/8W J	1	1	1
R189	2-C20-107	C/F RESISTOR 2.2KOHM 1/8W J	1	1	1	R217	2-C20-526	CIF RESISTOR 2200HM 1/8W J	1	1	1
R190	2-C20-090	C/F RESISTOR 3300HM 1/8W J	1	1	1	R221	2-C20-589	CIF RESISTOR 270HM 1/8W J	1	1	1
R190	2-C20-082	C/F RESISTOR 100HM 1/8W J	1	1	1	R221	2-C20-582	CIF RESISTOR 180HM 1/8W J	1	1	1
R191	2-C20-103	C/F RESISTOR 3.9KOHM 1/8W J	1	1	1	R222	2-C20-526	CIF RESISTOR 2200HM 1/8W J	1	1	1
R191	2-C20-083	C/F RESISTOR 3.3KOHM 1/8W J	1	1	1	R222	2-C20-129	CIF RESISTOR 1200HM 1/8W J	1	1	1
R192	2-C20-107	C/F RESISTOR 2.2KOHM 1/8W J	1	1	1	R223	2-C20-589	CIF RESISTOR 270HM 1/8W J	1	1	1
R192	2-C20-098	C/F RESISTOR 1.2KOHM 1/8W J	1	1	1	R223	2-C20-582	CIF RESISTOR 180HM 1/8W J	1	1	1
R201	2-C20-182	C/F RESISTOR 9100HM 1/8W J	1	1	1	R224	2-C20-526	CIF RESISTOR 2200HM 1/8W J	1	1	1
R201	2-C20-098	C/F RESISTOR 1.2KOHM 1/8W J	1	1	1	R224	2-C20-129	CIF RESISTOR 1200HM 1/8W J	1	1	1
R202	2-C20-182	C/F RESISTOR 9100HM 1/8W J	1	1	1	R225	2-C20-101	CIF RESISTOR 47KOHM 1/8W J	1	1	1
R202	2-C20-098	C/F RESISTOR 1.2KOHM 1/8W J	1	1	1	R226	2-C20-122	CIF RESISTOR 220HM 1/8W J	1	1	1
R203	2-C13-142	MIF RESISTOR 3320HM 1/8W F	1	1	1	R228	2-C20-101	CIF RESISTOR 47KOHM 1/8W J	1	1	1
R203	2-C12-214	MIF RESISTOR -1820HM 1/8W F	1	1	1	R228	2-C20-107	CIF RESISTOR 2.2KOHM 1/8W J	1	1	1
R204	2-C13-142	MIF RESISTOR 3320HM 1/8W F	1	1	1	R239	2-C20-107	CIF RESISTOR 2.2KOHM 1/8W J	1	1	1
R204	2-C12-214	MIF RESISTOR 1820HM 1/8W F	1	1	1	R240	2-C20-141	CIF RESISTOR 68KOHM 1/8W J	1	1	1
R205	2-C20-093	C/F RESISTOR 1KOHM 1/8W J	1	1	1	R241	2-C20-084	CIF RESISTOR 4.7KOHM 1/8W J	1	1	1
R205	2-C20-102	C/F RESISTOR 5600HM 1/8W F	1	1	1	R242	2-C20-084	CIF RESISTOR 4.7KOHM 1/8W J	1	1	1
R206	2-C20-093	C/F RESISTOR 1KOHM 1/8W J	1	1	1	R243	2-C20-092	CIF RESISTOR 4700HM 1/8W J	1	1	1
R206	2-C13-142	MIF RESISTOR 3320HM 1/8W F	1	1	1	R244	2-C20-092	CIF RESISTOR 4700HM 1/8W J	1	1	1
R207	2-C20-927	MIF RESISTOR 4.3KOHM 1/8W F	1	1	1	R245	2-C20-098	CIF RESISTOR 1.2KOHM 1/8W J	1	1	1
R207	2-C20-084	C/F RESISTOR 4.7KOHM 1/8W J	1	1	1	R245	2-C20-102	CIF RESISTOR 5060HM 1/8W J	1	1	1
R208	2-C13-142	MIF RESISTOR 3320HM 1/8W F	1	1	1	R246	2-C20-098	CIF RESISTOR 1.2KOHM 1/8W J	1	1	1
R208	2-C13-154	MIF RESISTOR 2210HM 1/8W F	1	1	1	R246	2-C20-102	CIF RESISTOR 5060HM 1/8W J	1	1	1
R209	2-C13-142	MIF RESISTOR 3320HM 1/8W F	1	1	1						

REF-NO	PART-CODE	DESCRIPTION	6502	6504	6506	REF-NO	PART-CODE	DESCRIPTION	6502	6504	6506
R247	2-C20-097	C/F RESISTOR 8200HM 1/8W J	1	1	1	R364	2-C13-142	M/F RESISTOR 3320HM 1/8W F	1	1	1
R247	2-C20-092	C/F RESISTOR 4700HM 1/8W J	1	1	1	R365	2-C20-092	C/F RESISTOR 4700HM 1/8W J	1	1	1
R248	2-C20-106	C/F RESISTOR 470HM 1/8W J	1	1	1	R365	2-C20-093	C/F RESISTOR 1KOHM 1/8W J	1	1	1
R249	2-C20-094	C/F RESISTOR 1000HM 1/8W J	1	1	1	R366	2-C20-092	C/F RESISTOR 4700HM 1/8W J	1	1	1
R331	2-C13-124	M/F RESISTOR 1500HM 1/8W F	1	1	1	R366	2-C20-093	C/F RESISTOR 1KOHM 1/8W J	1	1	1
R331	2-C15-005	M/F RESISTOR 1000HM 1/8W F	1	1	1	R367	2-C16-155	M/O RESISTOR 10KOHM 1W G	1	1	1
R332	2-C13-124	M/F RESISTOR 1500HM 1/8W F	1	1	1	R367	2-C16-154	M/O RESISTOR 6.8KOHM 1W G	1	1	1
R332	2-C15-005	M/F RESISTOR 1000HM 1/8W F	1	1	1	R368	2-C16-155	M/O RESISTOR 10KOHM 1W G	1	1	1
R333	2-C20-084	C/F RESISTOR 4.7KOHM 1/8W J	1	1	1	R368	2-C16-154	M/O RESISTOR 6.8KOHM 1W G	1	1	1
R336	2-C20-125	C/F RESISTOR 5600HM 1/8W J	1	1	1	R369	2-C20-122	C/F RESISTOR 220HM 1/8W J	1	1	1
R336	2-C20-129	C/F RESISTOR 1200HM 1/8W J	1	1	1	R371	2-C20-590	C/F RESISTOR 330HM 1/8W J	1	1	1
R337	2-C20-106	C/F RESISTOR 470HM 1/8W J	1	1	1	R372	2-C20-590	C/F RESISTOR 330HM 1/8W J	1	1	1
R337	2-C20-082	C/F RESISTOR 100HM 1/8W J	1	1	1	R373	2-C20-122	C/F RESISTOR 220HM 1/8W J	1	1	1
R338	2-C20-096	C/F RESISTOR 1500HM 1/8W J	1	1	1	R374	2-C20-122	C/F RESISTOR 220HM 1/8W J	1	1	1
R338	2-C20-083	C/F RESISTOR 3.3KOHM 1/8W J	1	1	1	R375	2-C20-590	C/F RESISTOR 330HM 1/8W J	1	1	1
R339	2-C20-102	C/F RESISTOR 5600HM 1/8W J	1	1	1	R376	2-C20-590	C/F RESISTOR 330HM 1/8W J	1	1	1
R339	2-C20-092	C/F RESISTOR 4700HM 1/8W J	1	1	1	R376	2-C20-590	C/F RESISTOR 330HM 1/8W J	1	1	1
R340	2-C20-102	C/F RESISTOR 5600HM 1/8W J	1	1	1	R377	2-C20-093	C/F RESISTOR 1KOHM 1/8W J	1	1	1
R340	2-C20-092	C/F RESISTOR 4700HM 1/8W J	1	1	1	R378	2-C20-093	C/F RESISTOR 1KOHM 1/8W J	1	1	1
R341	2-C20-082	C/F RESISTOR 100HM 1/8W J	1	1	1	R381	2-C16-156	M/O RESISTOR 13KOHM 1W G	1	1	1
R342	2-C20-091	C/F RESISTOR 220KOHM 1/8W J	1	1	1	R381	2-C16-154	M/O RESISTOR 6.8KOHM 1W G	1	1	1
R343	2-C20-091	C/F RESISTOR 220KOHM 1/8W J	1	1	1	R382	2-C16-156	M/O RESISTOR 13KOHM 1W G	1	1	1
R344	2-C20-126	C/F RESISTOR 6800HM 1/8W J	1	1	1	R382	2-C16-154	M/O RESISTOR 6.8KOHM 1W G	1	1	1
R345	2-C20-106	C/F RESISTOR 470HM 1/8W J	1	1	1	R383	2-C20-122	C/F RESISTOR 220HM 1/8W J	1	1	1
R346	2-C20-106	C/F RESISTOR 470HM 1/8W J	1	1	1	R384	2-C20-122	C/F RESISTOR 220HM 1/8W J	1	1	1
R347	2-C20-096	C/F RESISTOR 1500HM 1/8W J	1	1	1	R385	2-C20-526	C/F RESISTOR 2200HM 1/8W J	1	1	1
R348	2-C20-096	C/F RESISTOR 1500HM 1/8W J	1	1	1	R385	2-C20-131	C/F RESISTOR 1800HM 1/8W J	1	1	1
R349	2-C20-096	C/F RESISTOR 1500HM 1/8W J	1	1	1	R386	2-C20-526	C/F RESISTOR 2200HM 1/8W J	1	1	1
R350	2-C20-096	C/F RESISTOR 1500HM 1/8W J	1	1	1	R386	2-C20-131	C/F RESISTOR 1800HM 1/8W J	1	1	1
R355	2-C20-593	C/F RESISTOR 820HM 1/8W J	1	1	1	R389	2-C12-197	M/F RESISTOR 33KOHM 1/2W F	1	1	1
R355	2-C20-096	C/F RESISTOR 1500HM 1/8W J	1	1	1	R389	2-C12-202	C/F RESISTOR 22KOHM 1/2W J	1	1	1
R356	2-C20-094	C/F RESISTOR 1000HM 1/8W J	1	1	1	R390	2-C20-087	C/F RESISTOR 10KOHM 1/8W J	1	1	1
R357	2-C20-082	C/F RESISTOR 100HM 1/8W J	1	1	1	R391	2-C20-195	C/F RESISTOR 1300HM 1/8W J	1	1	1
R357	2-C20-083	C/F RESISTOR 3.3KOHM 1/8W J	1	1	1	R391	2-C20-131	C/F RESISTOR 1800HM 1/8W J	1	1	1
R360	2-C20-102	C/F RESISTOR 5600HM 1/8W J	1	1	1	R398	2-C10-025	C/F RESISTOR 1200HM 1/4W J	1	1	1
R361	2-C20-102	C/F RESISTOR 5600HM 1/8W J	1	1	1						
R363	2-C13-142	M/F RESISTOR 3320HM 1/8W F	1	1	1						

REF-NO	PART-CODE	DESCRIPTION	6502	6504	6506	REF-NO	PART-CODE	DESCRIPTION	6502	6504	6506
R399	2-C10-025	C/F RESISTOR 120OHM 1/4W J	1	1	1	R910	2-C20-108	C/F RESISTOR 15KOHM 1/8W J	1	1	1
R401	2-C20-078	C/F RESISTOR 470KOHM 1/8W J		1	1	R911	2-C20-087	C/F RESISTOR 10KOHM 1/8W J	1		
R402	2-C20-126	C/F RESISTOR 680HM 1/8W J	1	1	1	R911	2-C20-093	C/F RESISTOR 1KOHM 1/8W J	1	1	1
R1201	2-C20-177	M/F RESISTOR 2KOHM 1/8W F	1	1	1	R912	2-C20-082	C/F RESISTOR 100HM 1/8W J	1	1	1
R404	2-C20-132	C/F RESISTOR 390OHM 1/8W J	1	1	1	R915	2-C20-526	C/F RESISTOR 220OHM 1/8W J	1	1	1
R406	2-C20-078	C/F RESISTOR 470KOHM 1/8W J	1	1	1	R920	2-C20-131	C/F RESISTOR 180OHM 1/8W J	1	1	1
R407	2-C20-526	C/F RESISTOR 220OHM 1/8W J	1	1	1	R930	2-C20-103	C/F RESISTOR 3.9KOHM 1/8W J	1	1	1
R408	2-C20-904	C/F RESISTOR 100OHM 1/8W J	1	1	1	R931	2-C11-140	C/F RESISTOR 33KOHM 1/8W J	1	1	1
R409	2-C20-084	C/F RESISTOR 4.7KOHM 1/8W J	1			R932	2-C16-185	C/F RESISTOR 1.5MOHM 1/2W J	1		
R409	2-C20-591	C/F RESISTOR 6.8KOHM 1/8W J	1	1	1	R932	2-C16-195	M/F RESISTOR 3.9MOHM 1/2W F	1	1	1
R410	2-C20-134	C/F RESISTOR 1.8KOHM 1/8W J	1	1	1	R933	2-C16-186	C/F RESISTOR 1.5MOHM 1/2W J	1		
R411	2-C20-106	C/F RESISTOR 47OHM 1/8W J	1			R933	2-C16-195	M/F RESISTOR 3.9MOHM 1/2W F	1	1	1
R411	2-C20-122	C/F RESISTOR 220HM 1/8W J	1			R1001	2-C17-072	M/F RESISTOR 1.48MOHM 1/4W D			1
R417	2-C20-093	C/F RESISTOR 1KOHM 1/8W J	1	1	1	R1001	2-C17-027	M/F RESISTOR 1MOHM 1/4W D	1	1	1
R418	2-C20-591	C/F RESISTOR 6.8KOHM 1/8W J	1	1	1	R1002	2-C20-101	C/F RESISTOR 47KOHM 1/8W J	1	1	1
R420	2-C20-087	C/F RESISTOR 10KOHM 1/8W J	1	1	1	R1003	2-C20-091	C/F RESISTOR 220KOHM 1/8W J	1	1	1
R425	2-C20-082	C/F RESISTOR 100HM 1/8W J	1	1	1	R1004	2-C20-093	C/F RESISTOR 1KOHM 1/8W J	1	1	1
R441	2-C20-093	C/F RESISTOR 1KOHM 1/8W J	1	1	1	R1005	2-C20-135	C/F RESISTOR 2.7KOHM 1/8W J	1		
R443	2-C20-101	C/F RESISTOR 47KOHM 1/8W J	1	1	1	R1005	2-C20-133	C/F RESISTOR 1.5KOHM 1/8W J	1	1	1
R444	2-C20-133	C/F RESISTOR 1.5KOHM 1/8W J	1	1	1	R1006	2-C20-094	C/F RESISTOR 100OHM 1/8W J	1		
R445	2-C20-084	C/F RESISTOR 4.7KOHM 1/8W J	1	1	1	R1006	2-C20-593	C/F RESISTOR 820HM 1/8W J	1	1	1
R450	2-C20-084	C/F RESISTOR 4.7KOHM 1/8W J	1	1	1	R1012	2-C20-175	M/F RESISTOR 22KOHM 1/4W F	1	1	1
R452	2-C20-104	C/F RESISTOR 22KOHM 1/8W J	1	1	1	R1014	2-C12-196	M/F RESISTOR 6.8KOHM 1/2W F	1	1	1
R901	2-C20-101	C/F RESISTOR 47KOHM 1/8W J	1			R1017	2-C16-157	M/O RESISTOR 22MOHM 1W F	1	1	1
R901	2-C11-140	C/F RESISTOR 33KOHM 1/8W J	1	1	1	R1020	2-C11-139	C/F RESISTOR 330KOHM 1/8W J	1	1	1
R902	2-C20-103	C/F RESISTOR 3.9KOHM 1/8W J	1	1	1	R1021	2-C20-101	C/F RESISTOR 47KOHM 1/8W J	1		
R903	2-C20-591	C/F RESISTOR 6.8KOHM 1/8W J	1			R1021	2-C20-107	C/F RESISTOR 2.2KOHM 1/8W J	1	1	1
R903	2-C20-139	C/F RESISTOR 18KOHM 1/8W J	1	1	1	R1023	2-C20-084	C/F RESISTOR 4.7OHM 1/8W J	1	1	1
R904	2-C14-148	C/F RESISTOR 47KOHM 1/2W J	1			R1024	2-C20-580	SOLID RESISTOR 10MOHM 1/4W J	1	1	1
R904	2-C12-197	M/F RESISTOR 33KOHM 1/2W F	1	1	1	R1030	2-C20-202	C/F RESISTOR 20KOHM 1/8W J	1		
R905	2-C20-110	C/F RESISTOR 150KOHM 1/8W J	1	1	1	R1030	2-C20-586	C/F RESISTOR 12KOHM 1/8W J	1	1	1
R906	2-C20-077	C/F RESISTOR 100KOHM 1/8W J	1	1	1	R1031	2-C18-208	C/F RESISTOR 16KOHM 1/8W J	1		
R907	2-C20-094	C/F RESISTOR 100OHM 1/8W J	1	1	1	R1031	2-C20-140	C/F RESISTOR 27KOHM 1/8W J	1	1	1
R908	2-C20-107	C/F RESISTOR 2.2KOHM 1/8W J	1			R1032	2-C15-022	M/F RESISTOR 1MOHM 1/2W F	1		
R908	2-C20-133	C/F RESISTOR 1.5KOHM 1/8W J	1	1	1	R1032	2-C16-165	M/F RESISTOR 2.4MOHM 1/2W F	1	1	1
R909	2-C11-139	C/F RESISTOR 330KOHM 1/8W J	1			R1033	2-C20-084	C/F RESISTOR 4.7KOHM 1/8W J	1		
R909	2-C20-091	C/F RESISTOR 220KOHM 1/8W J	1	1	1	R1033	2-C20-143	C/F RESISTOR 56KOHM 1/8W J	1	1	1
R910	2-C20-077	C/F RESISTOR 100KOHM 1/8W J	1			R1034	2-C11-141	C/F RESISTOR 200KOHM 1/8W J	1		

REF-NO	PART-CODE	DESCRIPTION	6502	6504	6506	REF-NO	PART-CODE	DESCRIPTION	6502	6504	6506
R1034	2-C20-592	C/F RESISTOR 75KOHM 1/8W J	1	1	1	S403	2-C36-110	LEVER SWITCH SILLY34N-1	1	1	1
R1101	2-C12-103	C/F RESISTOR 100KOHM 1/2W J	1	1	1	AT1	2-C39-243	ROTARY SWITCH ADR2SSS-18R10PY09	1	1	1
R1102	2-C15-043	C/F RESISTOR 1KOHM 1/2W J	1	1	1	AT101	2-C39-243	ROTARY SWITCH ADR2SSS-18R10PY09	1	1	1
R1103	2-C20-083	C/F RESISTOR 3.3KOHM 1/8W J	1			TR24	2-C08-097	FET 2SK404E	1	1	1
R1103	2-C20-135	C/F RESISTOR 2.7KOHM 1/8W J	1			TR30	2-C06-102	TR 2SC458(C)TO-92TZ	1		
R1104	2-C20-336	M/F RESISTOR 100KOHM 1/8W FJ	1			TR30	2-C06-103	TR 2SC1674-K	1	1	1
R1104	2-C13-129	M/F RESISTOR 38.2KOHM 1/8W F	1	1	1	TR40	2-C06-110	TR 2SA1029(D)	1		
R1105	2-C20-084	C/F RESISTOR 4.7KOHM 1/8W J	1			TR40	2-C06-038	TR 2SA781-K	1	1	1
R1105	2-C20-083	C/F RESISTOR 3.3KOHM 1/8W J	1	1	1	TR61	2-C06-104	TR 2SC535(C)TO-92TZ	1	1	1
R1106	2-C13-130	M/F RESISTOR 15KOHM 1/8W F	1			TR61	2-C06-004	TR 2SC1907	1		
R1106	2-C20-160	M/F RESISTOR 10KOHM 1/8W F	1	1	1	TR62	2-C06-104	TR 2SC535(C)TO-92TZ	1	1	1
R1107	2-C20-104	C/F RESISTOR 22KOHM 1/8W J	1	1	1	TR62	2-C06-004	TR 2SC1907	1	1	1
R1110	2-C20-526	C/F RESISTOR 220OHM 1/8W J	1	1	1	TR63	2-C06-110	TR 2SA1029(D)	1	1	1
R1111	2-C20-526	C/F RESISTOR 220OHM 1/8W J	1	1	1	TR64	2-C06-110	TR 2SA1029(D)	1	1	1
R1121	2-C20-526	C/F RESISTOR 220OHM 1/8W J	1	1	1	TR85	2-C06-104	TR 2SC535(C)TO-92TZ	1		
R1124	2-C20-108	C/F RESISTOR 15KOHM 1/8W J	1	1	1	TR85	2-C06-004	TR 2SC1907	1		
R1125	2-C20-106	C/F RESISTOR 47OHM 1/8W J	1	1	1	TR86	2-C06-104	TR 2SC535(C)TO-92TZ	1	1	1
R1131	2-C20-588	C/F RESISTOR 220HM 1/8W J	1	1	1	TR86	2-C06-004	TR 2SC1907	1	1	1
R1143	2-C20-093	C/F RESISTOR 1KOHM 1/8W J	1	1	1	TR87	2-C06-102	TR 2SC458(C)TO-92TZ	1	1	1
R1144	2-C20-084	C/F RESISTOR 4.7KOHM 1/8W J	1	1	1	TR124	2-C08-097	FET 2SK404E	1	1	1
R1202	2-C20-150	M/F RESISTOR 270OHM 1/8W F	1	1	1	TR130	2-C06-102	TR 2SC458(C)TO-92TZ	1		
R1203	2-C20-108	C/F RESISTOR 15KOHM 1/8W J	1	1	1	TR130	2-C06-103	TR 2SC1674-K	1		
R1204	2-C20-087	C/F RESISTOR 10KOHM 1/8W J	1	1	1	TR140	2-C06-110	TR 2SA1029(D)	1		
R1205	2-C20-108	C/F RESISTOR 15KOHM 1/8W J	1	1	1	TR140	2-C06-038	TR 2SA781-K	1	1	1
R1207	2-C20-087	C/F RESISTOR 10KOHM 1/8W J	1	1	1	TR161	2-C06-104	TR 2SC535(C)TO-92TZ	1	1	1
R1208	2-C11-140	C/F RESISTOR 33KOHM 1/8W J	1	1	1	TR162	2-C06-104	TR 2SC535(C)TO-92TZ	1	1	1
R1209	2-C20-087	C/F RESISTOR 10KOHM 1/8W J	1	1	1	TR162	2-C06-004	TR 2SC1907	1		
R1210	2-C20-082	C/F RESISTOR 100HM 1/8W J	1	1	1	TR163	2-C06-110	TR 2SA1029(D)	1	1	1
R1301	2-C20-083	C/F RESISTOR 3.3KOHM 1/8W J	1			TR163	2-C06-004	TR 2SC1907	1	1	1
R1301	2-C20-107	C/F RESISTOR 2.2KOHM 1/8W J	1	1	1	TR164	2-C06-110	TR 2SA1029(D)	1	1	1
R1302	2-C18-003	C/F RESISTOR 4.7OHM 1/8W J	1	1	1	TR165	2-C06-110	TR 2SA1029(D)	1	1	1
R1349	2-C20-093	C/F RESISTOR 1KOHM 1/8W J	1	1	1	TR166	2-C06-110	TR 2SA1029(D)	1	1	1
R1350	2-C20-122	C/F RESISTOR 220HM 1/8W J	1	1	1	TR185	2-C06-104	TR 2SC535(C)TO-92TZ	1	1	1
RM43	2-C46-477	NETWORK RESISTOR AX-1026	1	1	1	TR186	2-C06-104	TR 2SC535(C)TO-92TZ	1	1	1
RM143	2-C46-477	NETWORK RESISTOR AX-1026	1	1	1	TR186	2-C06-104	TR 2SC535(C)TO-92TZ	1	1	1
S1	2-C36-109	LEVER SWITCH SILLY0323N-1	1	1	1	TR186	2-C06-004	TR 2SC1907	1	1	1
S101	2-C36-109	LEVER SWITCH SILLY0323N-1	1	1	1	TR201	2-C06-004	TR 2SC1907	1	1	1
S401	2-C36-110	LEVER SWITCH SILLY0344N-1	1	1	1	TR202	2-C06-004	TR 2SC1907	1	1	1

REF-NO	PART-CODE	DESCRIPTION	6502	6504	6506	REF-NO	PART-CODE	DESCRIPTION	6502	6504	6506
TR240						TR1104	2-C06-102	TR 2SC458(C)TO-92TZ	1	1	1
TR241	2-C06-102	TR 2SC458(C)TO-92TZ	1	1	1	TR1105	2-C06-112	TR 2SA966	1	1	1
TR242	2-C06-102	TR 2SC458(C)TO-92TZ	1	1	1	TR1106	2-C06-112	TR 2SA966	1	1	1
TR246	2-C06-012	TR 2SA1206-L	1	1	1	TR1201	2-C06-110	TR 2SA1029(D)	1	1	1
TR331	2-C06-061	TR 2SC2901(K)	1	1	1	TR1208	2-C06-102	TR 2SC458(C)TO-92TZ	1	1	1
TR332	2-C06-061	TR 2SC2901(K)	1	1	1	TR1209	2-C06-102	TR 2SC458(C)TO-92TZ	1	1	1
TR349	2-C06-061	TR 2SC2901(K)	1	1	1	TR1348	2-C06-102	TR 2SC458(C)TO-92TZ	1	1	1
TR349	2-C06-105	TR 2SC3779-D	1	1	1	TR1349	2-C06-110	TR 2SA1029(D)	1	1	1
TR350	2-C06-061	TR 2SC2901(K)	1	1	1	VR22	2-C29-033	SEMI FIXED RESISTOR 50KOHM B	1	1	1
TR350	2-C06-105	TR 2SC3779-D	1	1	1	VR33	2-C29-094	SEMI FIXED RESISTOR 200OHM B	1	1	1
TR365	2-C06-061	TR 2SC2901(K)	1	1	1	VR34	2-C29-011	SEMI FIXED RESISTOR 100OHM B	1	1	1
TR365	2-C06-105	TR 2SC3779-D	1	1	1	VR35	2-C29-011	SEMI FIXED RESISTOR 100OHM B	1	1	1
TR366	2-C06-061	TR 2SC2901(K)	1	1	1	VR60	2-C29-045	SEMI FIXED RESISTOR 470KOHM B	1	1	1
TR366	2-C06-105	TR 2SC3779-D	1	1	1	VR62	2-C29-094	SEMI FIXED RESISTOR 200OHM B	1	1	1
TR371	2-C06-106	TR 2SC2912-S	1	1	1	VR63	2-C29-033	SEMI FIXED RESISTOR 50KOHM B	1	1	1
TR371	2-C06-053	TR 2SC3600-E	1	1	1	VR85	2-C29-041	SEMI FIXED RESISTOR 10KOHM B	1	1	1
TR372	2-C06-106	TR 2SC2912-S	1	1	1	VR122	2-C29-033	SEMI FIXED RESISTOR 50KHM B	1	1	1
TR372	2-C06-053	TR 2SC3600-E	1	1	1	VR133	2-C29-094	SEMI FIXED RESISTOR 200CHM B	1	1	1
TR375	2-C06-113	TR 2SA1210-S	1	1	1	VR135	2-C29-011	SEMI FIXED RESISTOR 100CHM B	1	1	1
TR375	2-C06-045	TR 2SA1406	1	1	1	VR160	2-C29-045	SEMI FIXED RESISTOR 470KOHM B	1	1	1
TR376	2-C06-113	TR 2SA1210-S	1	1	1	VR162	2-C29-094	SEMI FIXED RESISTOR 200CHM B	1	1	1
TR376	2-C06-045	TR 2SA1406	1	1	1	VR163	2-C29-033	SEMI FIXED RESISTOR 50KOHM B	1	1	1
TR377	2-C06-038	TR 2SA781-K	1	1	1	VR185	2-C29-041	SEMI FIXED RESISTOR 10KOHM B	1	1	1
TR378	2-C06-038	TR 2SA781-K	1	1	1	VR334	2-C29-038	SEMI FIXED RESISTOR 470KHM B	1	1	1
TR390	2-C06-102	TR 2SC458(C)TO-92TZ	1	1	1	VR334	2-C29-094	SEMI FIXED RESISTOR 200CHM B	1	1	1
TR401	2-C08-097	FET 2SK404E -	1	1	1	VR408	2-C29-003	SEMI FIXED RESISTOR 10KOHM B	1	1	1
TR402	2-C06-102	TR 2SC458(C)TO-92TZ	1	1	1	VR418	2-C29-003	SEMI FIXED RESISTOR 10KOHM B	1	1	1
TR441	2-C06-110	TR 2SA1029(D)	1	1	1	VR420	2-C29-041	SEMI FIXED RESISTOR 10KOHM B	1	1	1
TR901	2-C06-107	TR 2SC641(K)TO-92TZ	1	1	1	VR1021	2-C29-044	SEMI FIXED RESISTOR 100KOHM B	1	1	1
TR906	2-C06-102	TR 2SC458(C)TO-92TZ	1	1	1	VR1035	2-C29-044	SEMI FIXED RESISTOR 100KOHM B	1	1	1
TR912	2-C06-108	TR 2SC2909-S	1	1	1	VR1201	2-C29-039	SEMI FIXED RESISTOR 1KOHM B	1	1	1
TR910	2-C06-114	TR 2SA1207-S	1	1	1	P101	2-C21-479	CONNECTOR WAFER YAW025-04	1	1	1
TR1001	2-C08-098	FET 2SK304E	1	1	1	P102	2-C21-479	CONNECTOR WAFER YAW025-04	1	1	1
TR1002	2-C06-110	TR 2SA1029(D)	1	1	1	P200	2-C21-478	CONNECTOR WAFER YAW025-03	1	1	1
T1001	2-C38-200	TRANS 06-009-15	1	1	1	P201	2-C21-478	CONNECTOR WAFER YAW025-03	1	1	1
TR1101	2-C06-111	TR 2SA778(K)TO-92TZ	1	1	1	P202	2-C21-478	CONNECTOR WAFER YAW025-03	1	1	1
TR1102	2-C06-109	TR 2SC1505-C	1	1	1	P203	2-C21-479	CONNECTOR WAFER YAW025-04	1	1	1
TR1103	2-C06-110	TR 2SA1029(D)	1	1	1	P204	2-C21-481	CONNECTOR WAFER YAW025-06	1	1	1

REF-NO	PART-CODE	DESCRIPTION	6502	6504	6506	REF-NO	PART-CODE	DESCRIPTION	6502	6504	6506
P205	2-C21-478	CONNECTOR WAFER YAW025-03	1	1	1		2-C25-562	CONNECTOR LEAD WIRE 6500-26	1	1	1
P206	2-C21-478	CONNECTOR WAFER YAW025-03	1	1	1		2-C25-571	CONNECTOR LEAD WIRE 6500-31	1	1	1
P207	2-C21-479	CONNECTOR WAFER YAW025-04	1	1	1		2-C25-576	CONNECTOR LEAD WIRE 6500-32	1	1	1
P301	2-C21-478	CONNECTOR WAFER YAW025-03	1	1	1		2-C25-577	CONNECTOR LEAD WIRE 6500-33	1	1	1
P400	2-C21-478	CONNECTOR WAFER YAW025-03	1	1	1		2-C21-103	JUMP WIRE 10MM	109	109	109
P402	2-C21-478	CONNECTOR WAFER YAW025-03	1	1	1		2-C21-101	JUMP WIRE 5MM	79	79	79
P501	2-C21-479	CONNECTOR WAFER YAW025-04	1	1	1		2-C25-569	LEAD WIRE 6500-29	2	2	2
P502	2-C21-478	CONNECTOR WAFER YAW025-03	1	1	1		2-C25-570	LEAD WIRE 6500-30	2	2	2
P504	2-C21-495	CONNECTOR WAFER YAW025-06	1	1	1		2-T10-326	SHIELD CASE 6500	1	1	1
P506	2-C21-478	CONNECTOR WAFER YAW025-03	1	1	1		2-C37-154	HEAT SINK(1) 6500	1	1	1
P507	2-C21-478	CONNECTOR WAFER YAW025-03	1	1	1		2-C37-155	HEAT SINK(2) 6500	1	1	1
P508	2-C21-478	CONNECTOR WAFER YAW025-03	1	1	1		2-C37-156	HEAT SINK(3) 6500	1	1	1
P601	2-C21-482	CONNECTOR WAFER YAW025-07	1	1	1		2-C42-137	SILICON BUBBER(2) ARH 231	2	2	2
P602	2-C21-481	CONNECTOR WAFER YAW025-06	1	1	1		2-C42-136	SILICON BUBBER ARH 230	2	2	2
P603	2-C21-478	CONNECTOR WAFER YAW025-03	1	1	1		2-T10-143	MACHINE SCREW BH(+) M3.0×6.0N/PL	5	5	5
P604	2-C21-480	CONNECTOR WAFER YAW025-05	1	1	1		2-T22-413	SHIELD PLATE(1) 6500	2	2	2
PT1006	2-C21-478	CONNECTOR WAFER YAW025-03	1	1	1		2-T18-053	SCREW SUPPORT DACN-12N	1	1	1
	2-C46-476	VERTICAL PCB	1	1	1		2-C25-563	CONNECTOR LEAD WIRE 6500-27	2	2	2
	2-C25-561	CONNECTOR LEAD WIRE 6500-25	1	1	1						

#### 7.FRONT PANEL ASS'Y

REF-NO	PART-CODE	DESCRIPTION	6502	6504	6506	REF-NO	PART-CODE	DESCRIPTION	6502	6504	6506
	2-T10-001	BNC CONNECTOR UG-625U	3	3	3		2-T21-093	FRONT PANEL 6500	1	1	1
	2-C22-036	LEAD WIRE 55053	1	1	1		2-T12-294	TOP PLATE	1	1	1
	2-C25-560	LEDA WIRE 6500-24	3	3	3		2-T53-105	MACHINE SCREW FH(+)M2×6N/PL	2	2	2
	2-T27-055	SCALE ILLUM BRACKET 5000	1	1	1		2-T54-214	MACHINE SCREW PH(+)M2×6N/PL	2	2	2
	2-T07-442	FRONT COVER 6500	1	1	1		2-T54-201	WASHER WITH MACHINE SCREW PH(+)M3×6	4	4	4
	2-T53-293	CRT CORNER SUPPORT(1) 6500	4	4	4		2-T05-099	LEVER BLIND 6500	4	4	4
	2-T22-480	FILTER 6500	1	1	1		2-T20-297	FILTER SPRING 6500	1	1	1
	2-T17-079	INDICATE GROBLE 6500	1	1	1		2-T01-035	GROUND TERMINAL 6500	1	1	1
	2-T21-017	SCALE INSERT C310113-2,C2600P-1/H	2	2	2		2-T11-018	TOOTHED LOCK WASHER 6PI ZN/PL	1	1	1
	2-T11-029	HEXAGON NUT M6 N/PL	1	1	1						

#### 8.REAR PANEL ASS'Y

REF-NO	PART-CODE	DESCRIPTION	6502	6504	6506	REF-NO	PART-CODE	DESCRIPTION	6502	6504	6506
	2-T01-001	BNC CONNECTOR UG-625U	2	2	2		2-C06-115	TR 2SD880	1	1	1
	2-C42-213	ACINLET BACH-03	1	1	1		2-C38-125	POWER TRANSFORMER PT-6500	1	1	1

REF-NO	PART-CODE	DESCRIPTION	6502	6504	6506	REF-NO	PART-CODE	DESCRIPTION	6502	6504	6506
	2-T25-009	HEAT SINK TUBE 4.5PI 20MM	3	3	3		2-T23-338	SUB HEAT SINK 6500	1	1	1
	2-C22-165	CONNECTOR LEAD WIRE 56029-2A	1	1	1		2-T11-026	HEXAGON NUT M3 NI/PL	2	2	2
	2-C25-539	CONNECTOR LEAD WIRE 650-0-06	1	1	1		2-T08-126	REAR PANEL 6500	1	1	1
	2-C25-540	CONNECTOR LEAD WIRE 650-0-07	1	1	1		2-C42-136	SILICON RUBBER ARH230	5	5	5
	2-C25-576	CONNECTOR LEAD WIRE 650-0-32	1	1	1		2-T10-017	MACHINE SCREW BH(+)/M3 X 12NI/PL	1	1	1
	2-C25-577	CONNECTOR LEAD WIRE 650-0-33	1	1	1		2-T10-143	MACHINE SCREW BH(+)/M3 X 6NI/PL	8	8	8
	2-T26-016	GROUND LEAD WIRE 55042	1	1	1		2-T10-021	MACHINE SCREW BH(+)/M4 X 10NI/PL	8	8	8
	2-C25-552	LEAD WIRE 6500-19-1	1	1	1		2-T53-106	MACHINE SCREW BH(+)/M3 X 8NI/PL	2	2	2
	2-C25-553	LEAD WIRE 6500-19-2	1	1	1		2-T11-009	SPRING WASHER 3PI NI/PL	1	1	1
	2-C42-012	INSULATION BUSHING B24	3	3	3		2-T11-010	SPRING WASHER 4PI NI/PL	4	4	4
	2-C58-085	REAR FOOT 6500	4	4	4		2-T11-017	TOOTHED LOCK WASHER 3PI NI/PL	2	2	2
	2-C37-113	HEAT SINK(1) 7802	1	1	1						

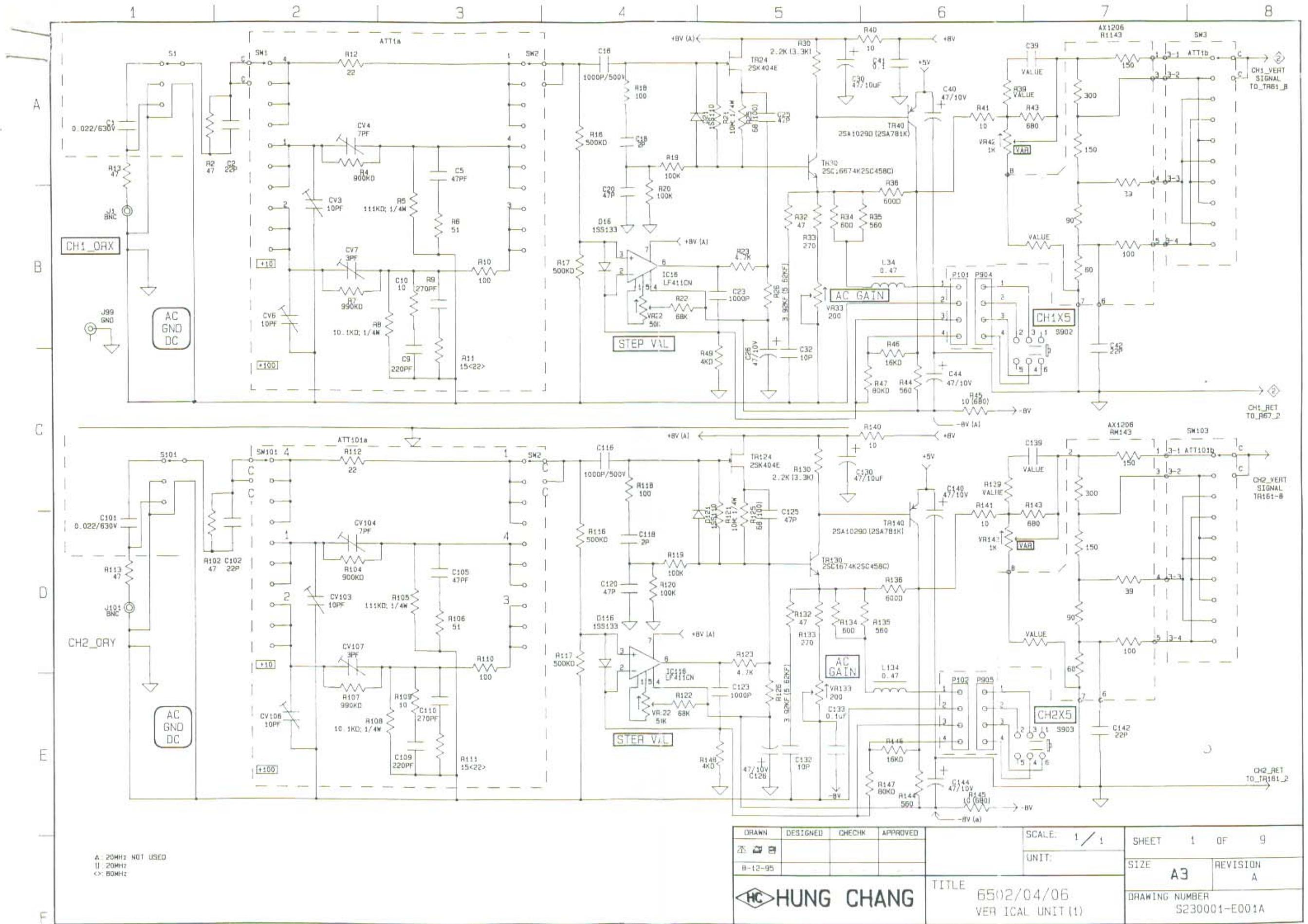
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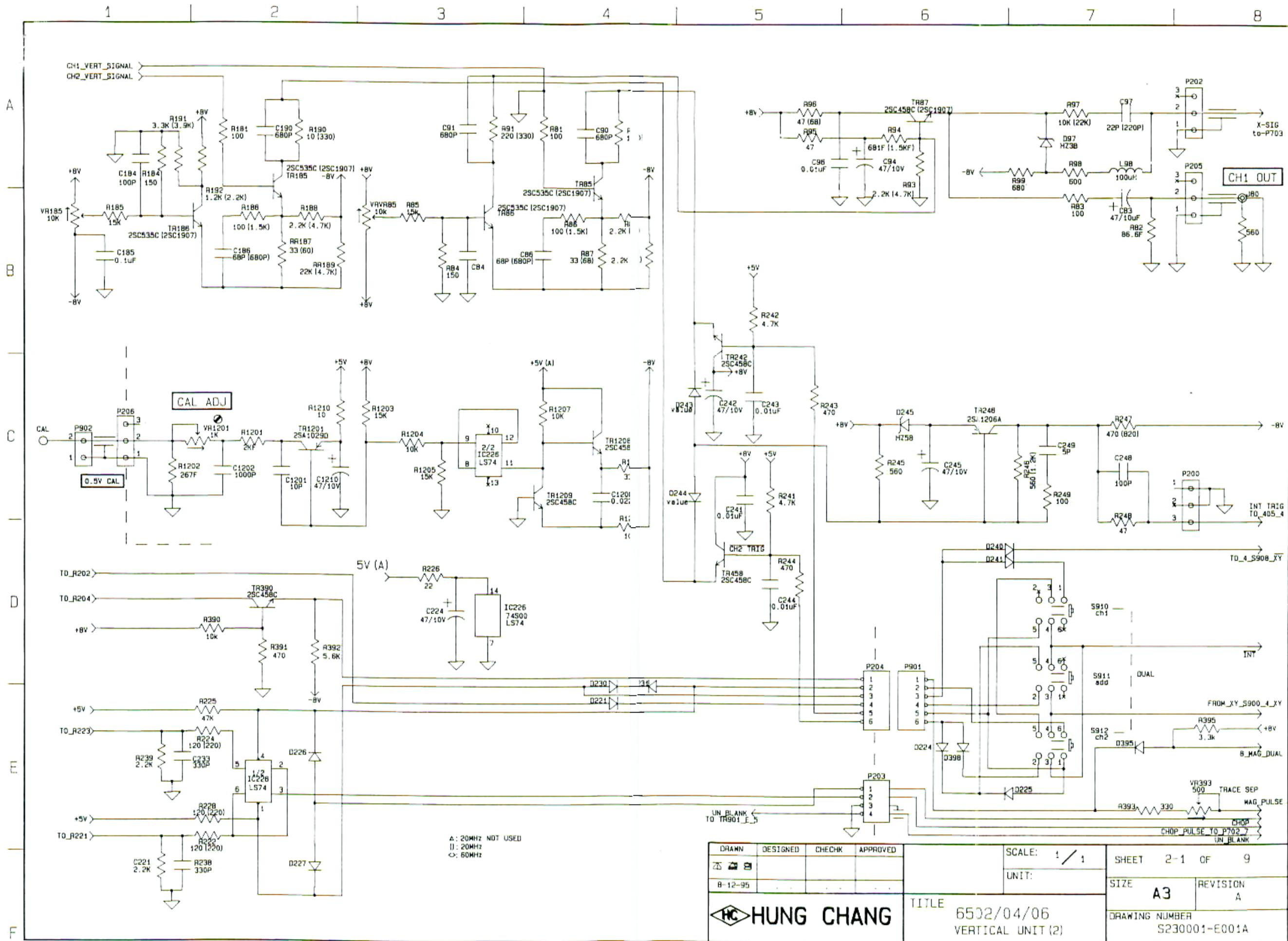
REF-NO	PART-CODE	DESCRIPTION	6502	6504	6506	REF-NO	PART-CODE	DESCRIPTION	6502	6504	6506
	2-C40-085	FUSE 51MM 020H	1	1	1			HANDLE	1	1	1
	2-C40-018	1KEY PUSH-PUSH SWITCH SPL208K-TD	1	1	1		2-T21-130	KNOB P10.8 6500	2	2	2
	2-C25-541	CONNECTOR LEAD WIRE 6500-08	1	1	1		2-T21-131	KNOB P14 6500	7	7	7
	2-C25-542	CONNECTOR LEAD WIRE 6500-09	1	1	1		2-T21-132	KNOB P17 6500	2	2	2
	2-C25-543	CONNECTOR LEAD WIRE 6500-10	1	1	1		2-T21-133	KNOB P123.2 6500	1	1	1
	2-C25-549	CONNECTOR LEAD WIRE 6500-16	1	1	1		2-T21-134	KNOB (13)	1	1	1
	2-C25-551	CONNECTOR LEAD WIRE 6500-18	1	1	1		2-T21-135	KNOB (14)	1	1	1
	2-C25-558	CONNECTOR LEAD WIRE 6500-22	1	1	1		2-T21-136	LEVER SWITCH KNOB 6500	4	4	4
	2-T05-096	CRT BAND(3) 5504	1	1	1		2-T21-137	PUSH BUTTON	10	10	10
	2-T05-097	CRT BAND(4) 5504	1	1	1		2-T01-023	HANDEL METAL OS620	1	1	1
	2-T21-129	SWITCH BAR	1	1	1		2-T11-027	HEXAGON NUT M4 NI/PL	2	2	2
	2-T19-193	CRT BAND BARACKET 6500	1	1	1		2-T07-023	BLIND RIVET	1	1	1
	2-T23-364	BOTTOM CASE(1) 6502	1	1	1		2-T25-044	SNAP RIVET	2	2	2
	2-T03-167	TOP CASE(1) 6502	1	1	1		2-T10-143	MACHINE SCREW BH(+)/M3 X 6 NI/PL	10	10	10
	2-T10-452	SHIELD COVER 6500	1	1	1		2-T10-021	MACHINE SCREW BH(+)/M4 X 10 NI/PL	2	2	2
	2-T10-327	SHIELD COVER 6500	1	1	1		2-T53-106	MACHINE SCREW BH(+)/M3 X 8 NI/PL	15	15	15
	2-T22-407	BAND CUSHION(2) 5504	2	2	2		2-T11-005	MACHINE SCREW BH(+)/M4 X 12 NI/PL	2	2	2
	2-T01-006	MOULD LEG OS620	2	2	2		2-T25-040	SET SCREW 3X6	4	4	4
	2-C42-128	PLASTIC FOOT TM-127	6	4	4		2-T10-049	TAPPING SCREW FH(+)/P13 X 8ZN/PL	15	15	15
	2-T21-094	FRAME(1) 6500	1	1	1		2-T54-201	WASHER WITH MACHINE SCREW PH(+)/M3X6	9	9	9
	2-T21-095	FRAME(2) 6500	1	1	1		2-T22-434	INSULATION SHEET(1) 6500	1	1	1
	2-T21-096	FRAME(3) 6500	1	1	1		2-T22-442	INSULATION SHEET(2) 6500	1	1	1
	2-T21-097	FRAME(4) 6500	1	1	1		2-T22-475	INSULATION SHEET(3) 6500	1	1	1

REF-NO	PART-CODE	DESCRIPTION	6502	6504	6506	REF-NO	PART-CODE	DESCRIPTION	6502	6504	6506	
	2-T22-413	SHIELD PLATE(1) 6500		2	2		2-T07-228	CONTACT SPRING 3502		1	1	1
	2-T22-414	SHIELD PLATE(1) 6500		1	1		2-T01-018	STAND		1		
	2-T22-476	SHIELD PLATE(1) 6500		2	2							

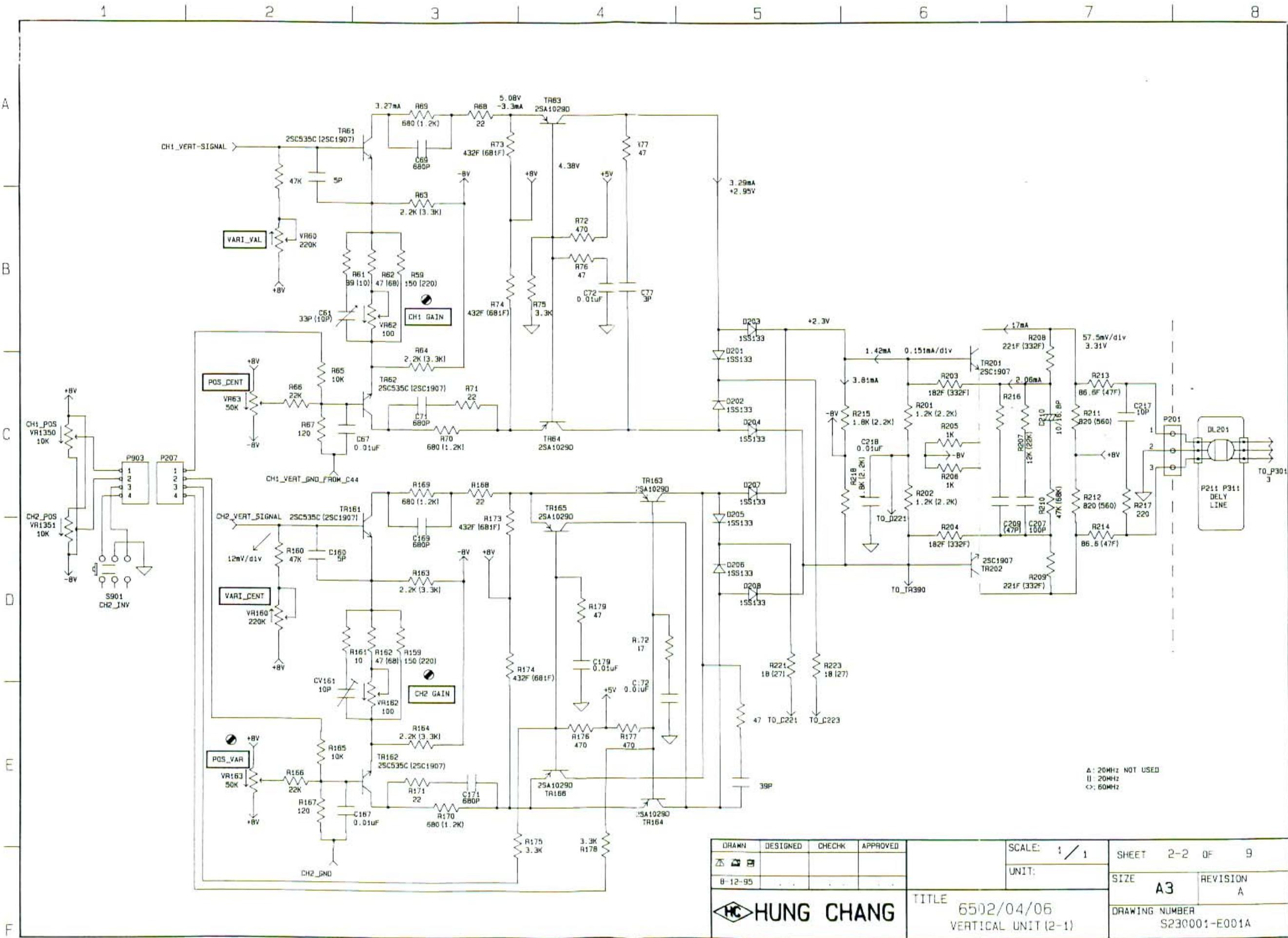
10 PACKING ASSY

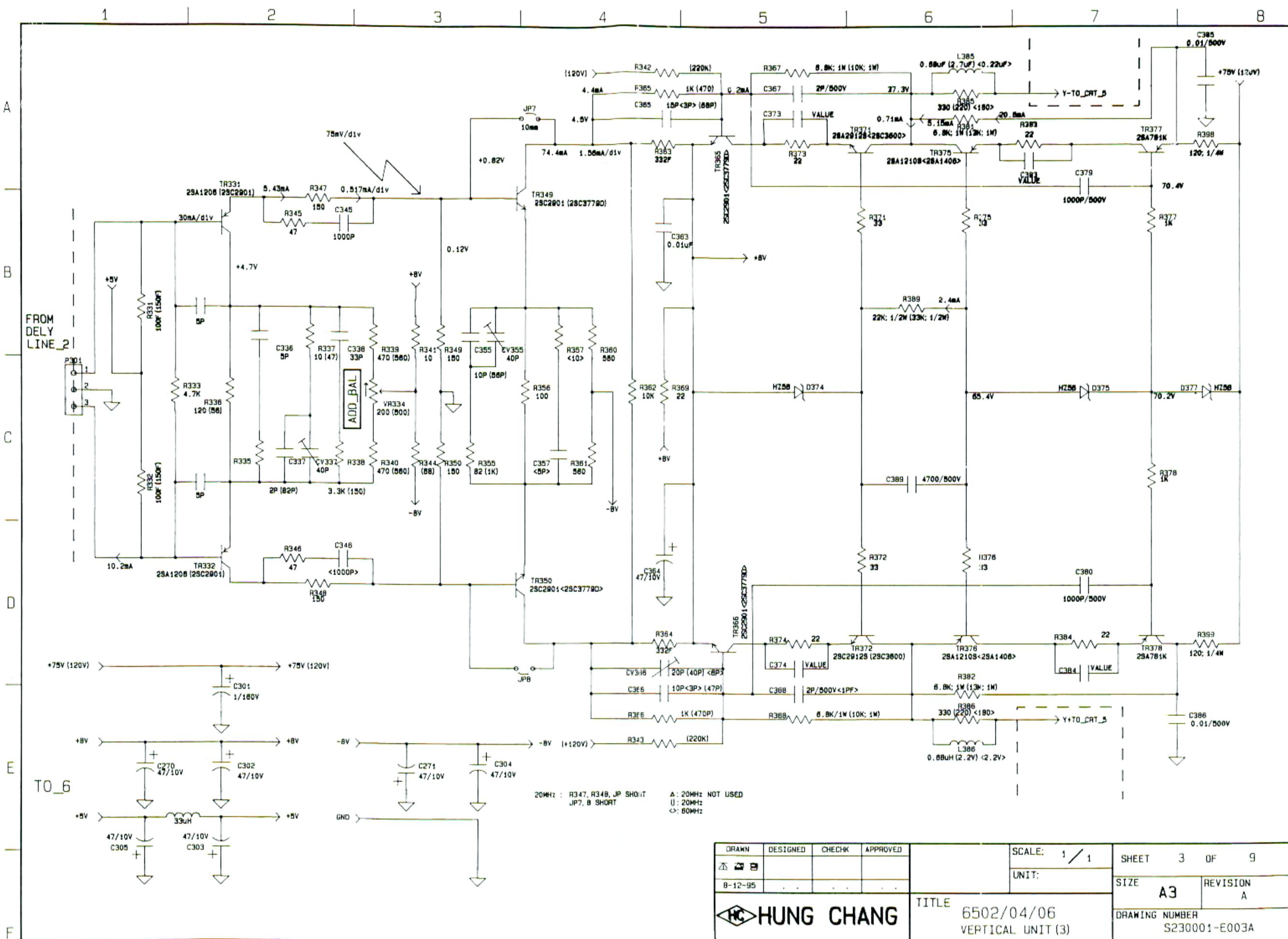
REF-NO	PART-CODE	DESCRIPTION	6502	6504	6506	REF-NO	PART-CODE	DESCRIPTION	6502	6504	6506
	2-T27-004	AC POWER CORD M-117V	1	1	1		2-T25-211	MANUAL 6500	1	1	1
	2-C40-085	FUSE 51NM020H	1	1	1		2-T54-348	PE PAD 6510	1	1	1
	2-T22-415	NAME PLATE 6502	1	1	1		2-T14-010	POLY BAG 48×32×47	1	1	1
	2-T14-084	INNER BOX	1	1	1		2-T14-013	POLY BAG 5.5×8(IPPER)	1	1	1
	2-T14-055	OUT BOX	1	1	1		2-T52-003	SILICA GEL	1	1	1
	2-T25-163	BOX HOLDER DABH-100	2	2	2						

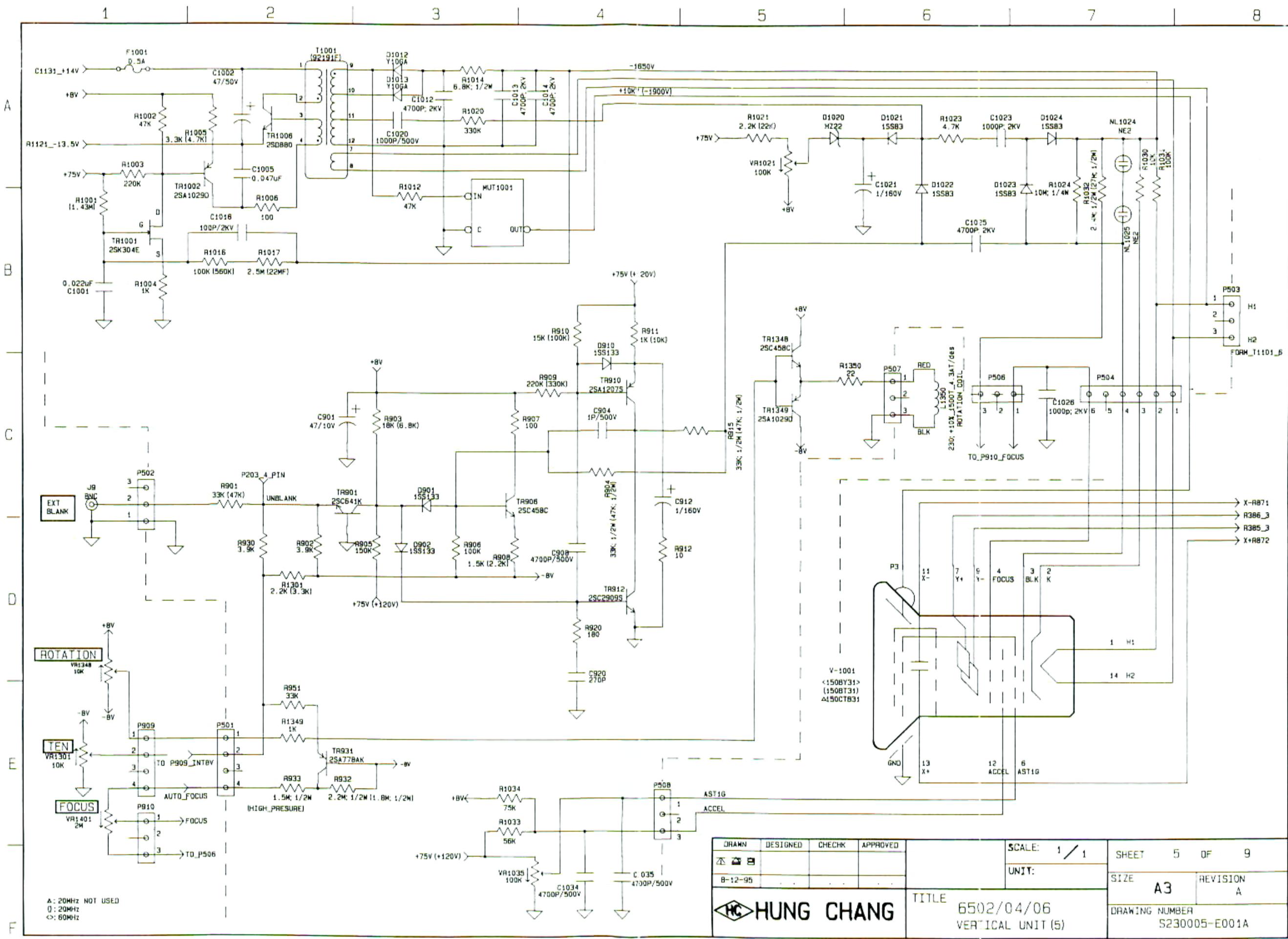




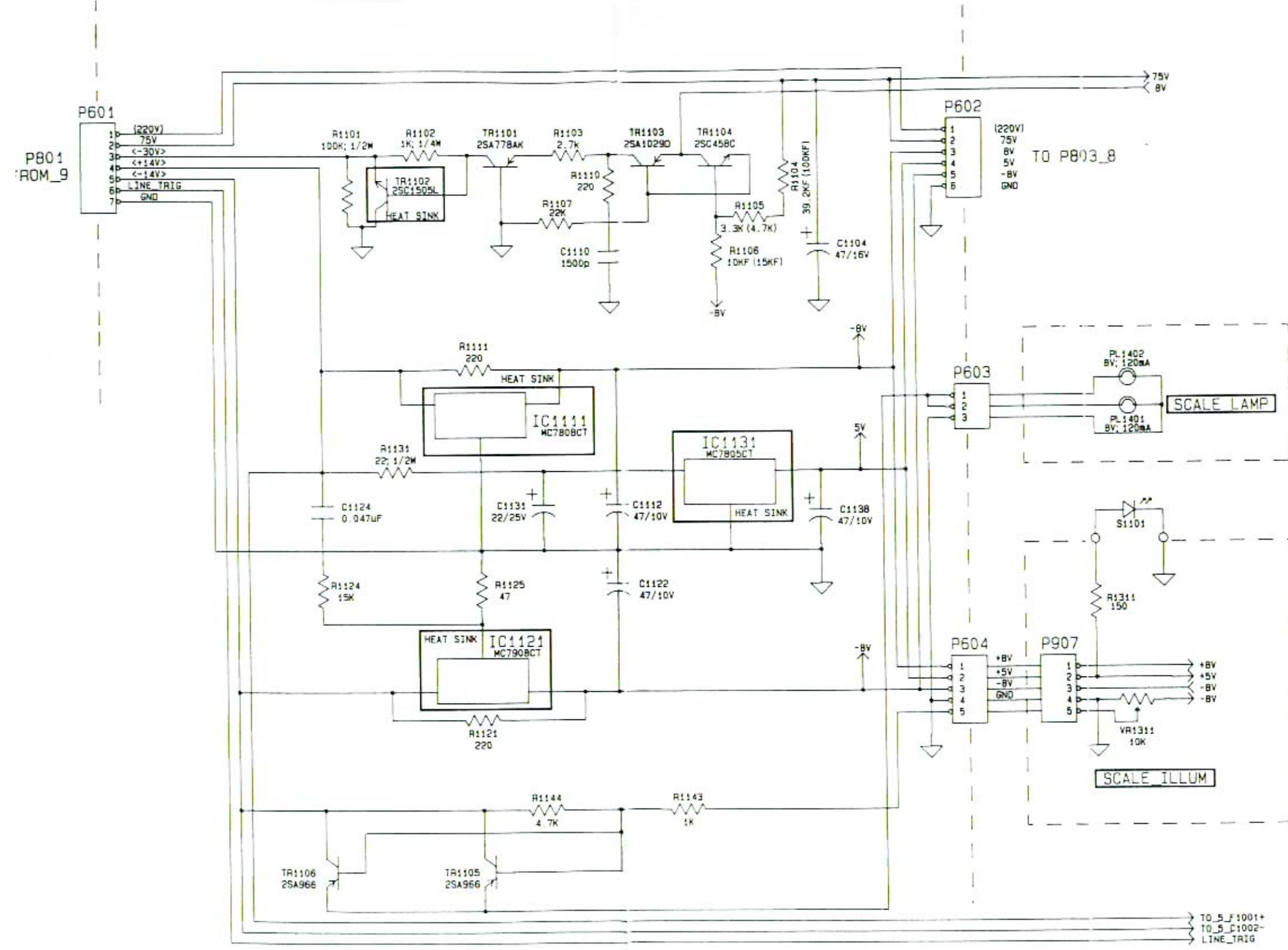
A3 (594x420)



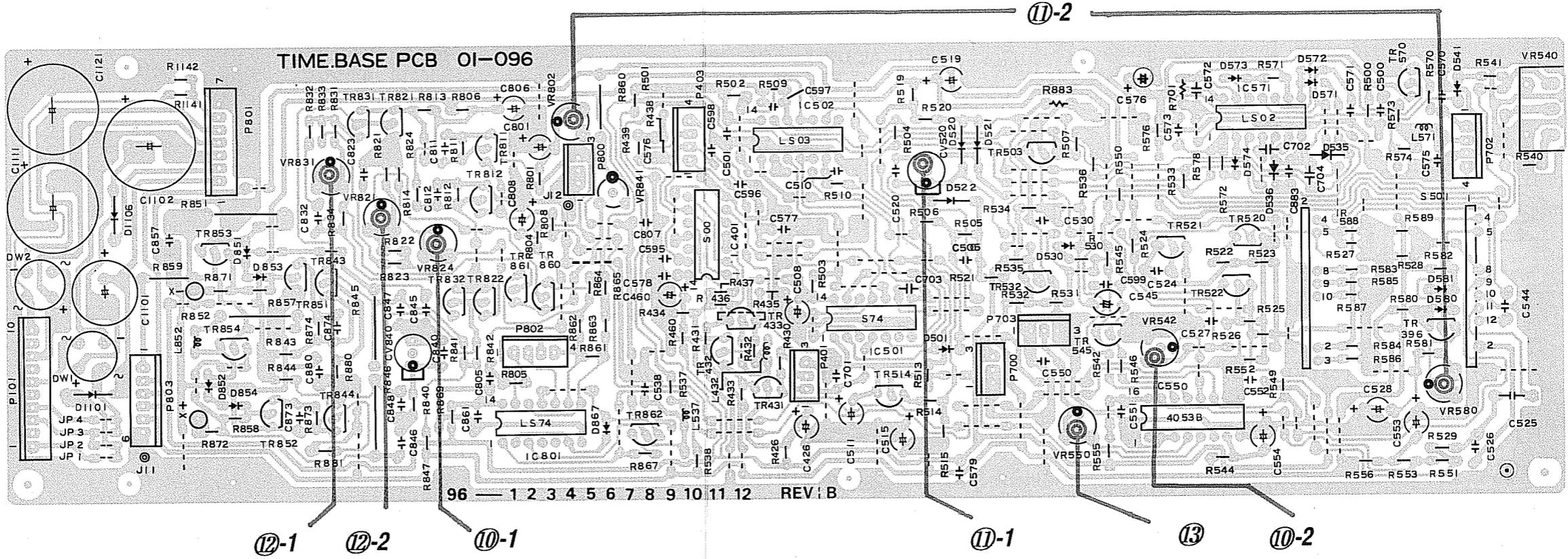




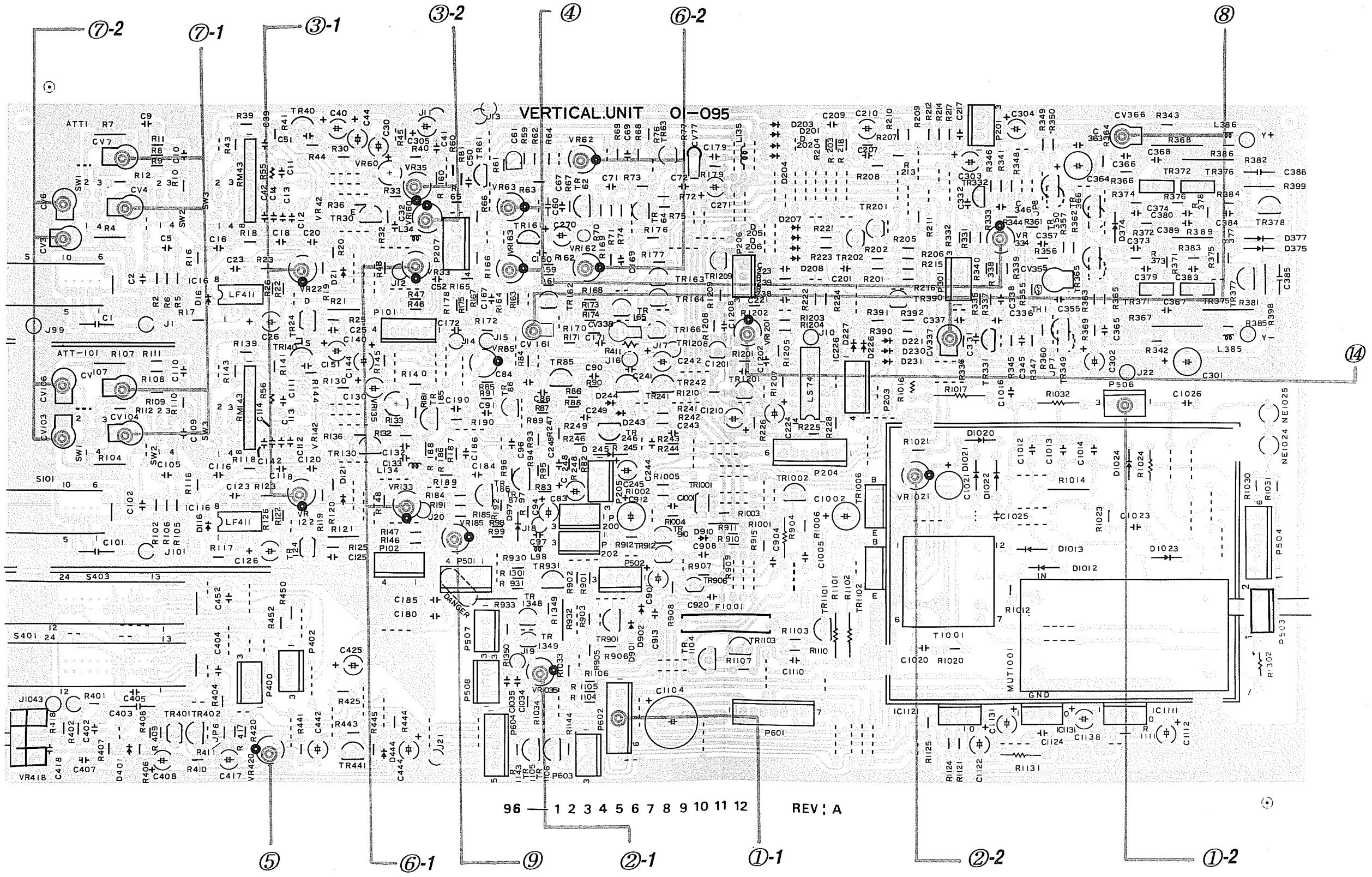
A3 (594\*420)



## 14 Block diagram



### **13. Electrical parts arrangement**



1 | 2 | 3 | 4 | 5 | 6 | 7 | 8

A

CH1  
or X

CH1  
ATTENUATOR

CH1  
PRE AMP

CH1  
OUT

POS  
OFFSET

VERTICAL  
SWITCHING

(40.60MHz)  
DELAY  
LINE

VERTICAL  
OUTPUT AMP

CH2  
or X

CH2  
ATTENUATOR

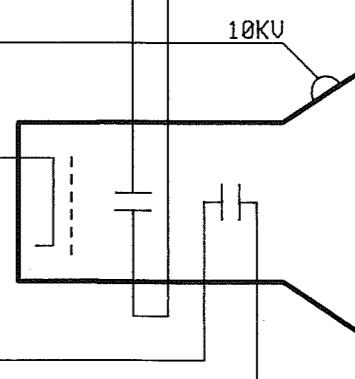
CH2  
PRE AMP

VERT MODE  
CH1.CH2.DUAL.ADD

HIGH VOLTAGE  
MULTIPLIER  
(40.60MHz)

20MHz = -1.9KU  
40/60MHz = -1.65KU

Z AXIS



EXT  
IN

TRIGGER  
AMP

TRIGGER  
GATE

SWEEP  
GATE

SWEEP  
GENERATOR

HORIZONTAL  
OUTPUT AMP

HORIZONTAL  
POS

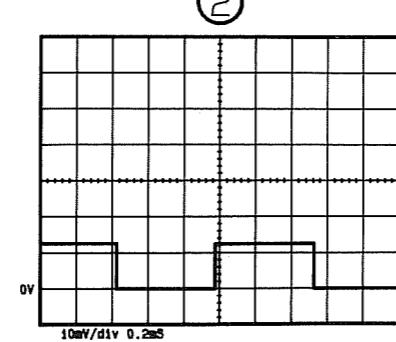
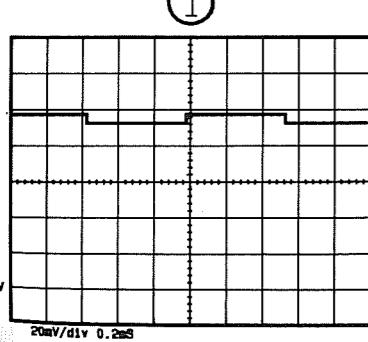
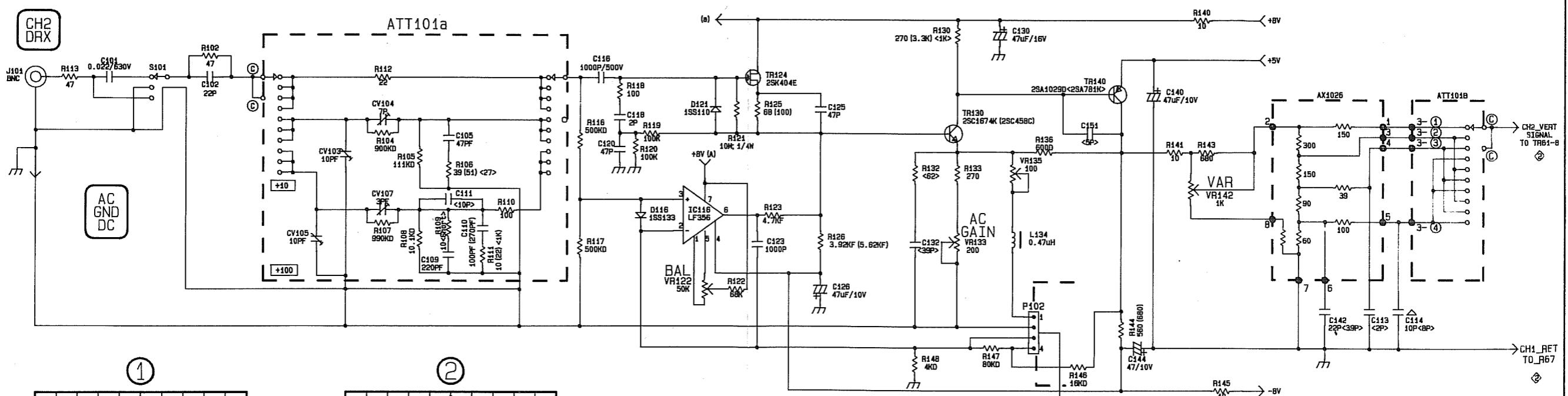
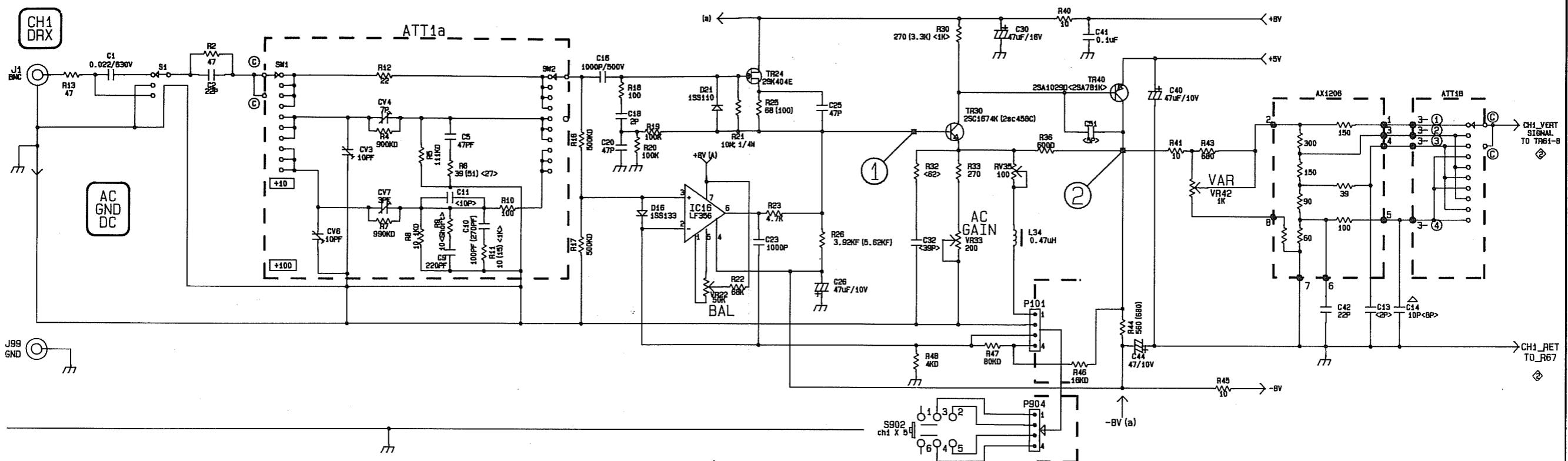
CAL  
OUT

SQUARE WAVE  
CAL = 1KHz

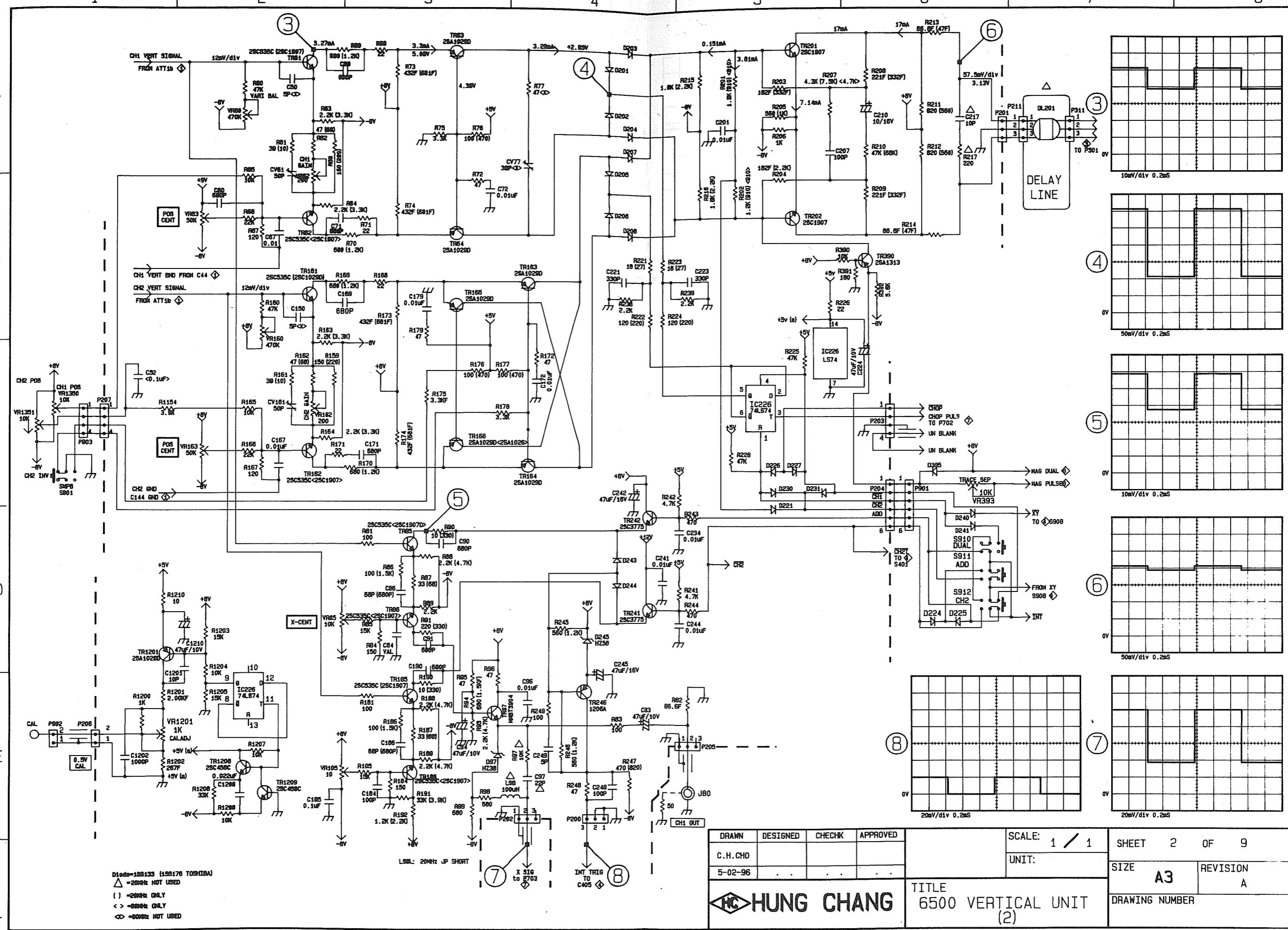
POWER  
SUPPLY

DRAWN	DESIGNED	CHECHD	APPROVED		SCALE:	UNIT:	SHEET OF			
...	...	...	...				SIZE	A3		
<b>HUNG CHANG</b>							TITLE	REVISION		
							DRAWING NUMBER			

## 15 Schematic diagrams



DRAWN	DESIGNED	CHECHK	APPROVED		SCALE: 1 / 1	SHEET 1 OF 9
C.H.CHO					UNIT:	
5-02-96	.	.	.			SIZE A3 REVISION A
 HUNG CHANG				TITLE 6500 VERTICAL UNIT (1)		DRAWING NUMBER



D1ode=128133 [193176 TOSHIBA]  
△ =200Hz NOT USED  
(-) -200Hz ONLY  
<> -500Hz ONLY  
<> -500Hz NOT USED

Digitized by srujanika@gmail.com

LSL: 20MHz JP SHORT

www.aeaweb.org

Journal of Health Politics, Policy and Law, Vol. 32, No. 4, December 2007  
DOI 10.1215/03616878-32-4 © 2007 by The University of Chicago

— 1 —

DRAWN	DESIGNED	CHECHK	APPROVE
C.H.CHG			
5-02-96	.	.	.

**HUNG CHANG**

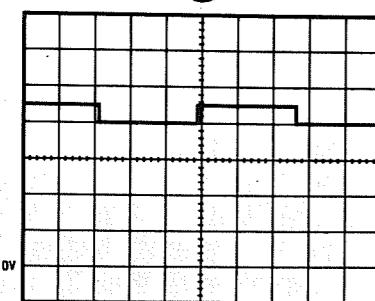
**HUNG CHANG**

TITLE  
6500 VERTICAL UNIT  
(2)

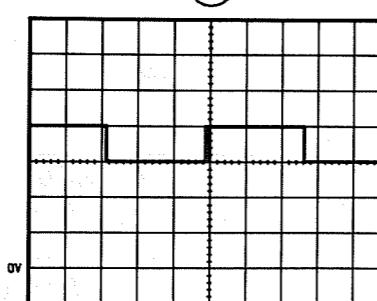
SHEET	2	OF	9
SIZE	A3	REVISION	A
DRAWING NUMBER			

1 2 3 4 5 6 7 8

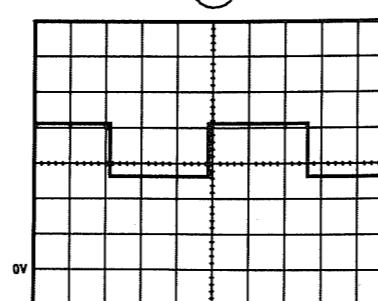
(9)



(10)



(11)



A

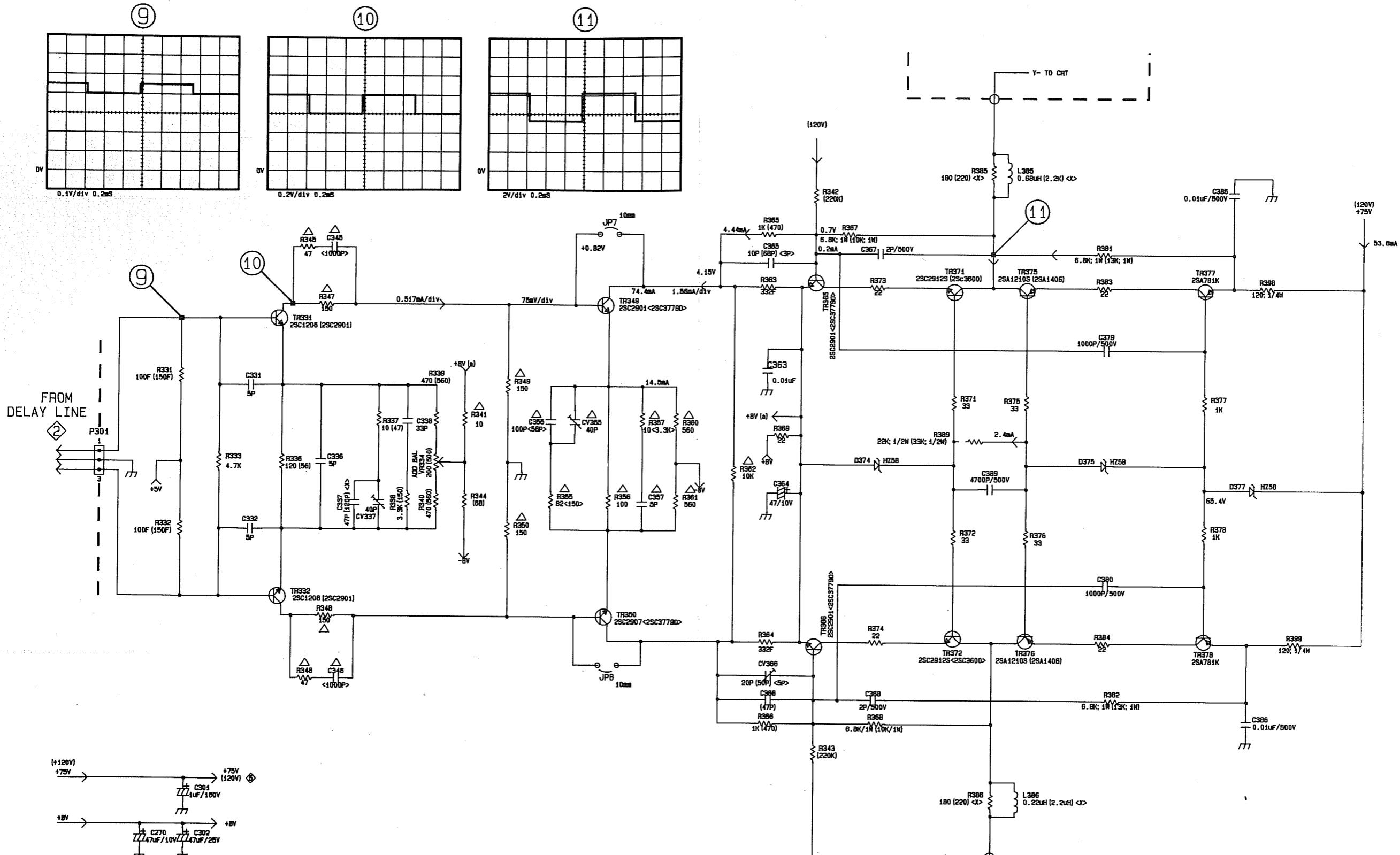
B

C

D

E

F

20MHz : R347, 340, JP SHORT  
JP7, B SHORT

△	20MHz Not Used
( )	20MHz Only
<>	80MHz Only
<>	80MHz Not Used

DRAWN	DESIGNED	CHECHK	APPROVED	SCALE:	1 / 4	SHEET	3 OF 9
C.H. CHO						SIZE	A3
5-02-96	.	.	.	UNIT:		REVISION	A
TITLE						DRAWING NUMBER	
HUNG CHANG							
6500 VERTICAL UNIT							
(3)							

1 2 3 4 5 6 7 8

A

B

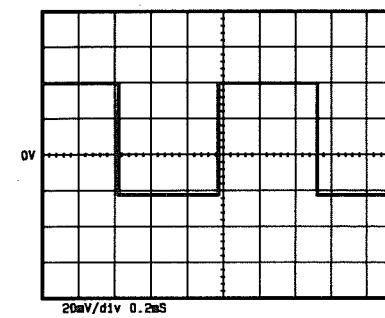
C

D

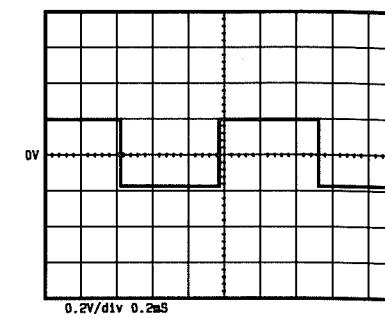
E

F

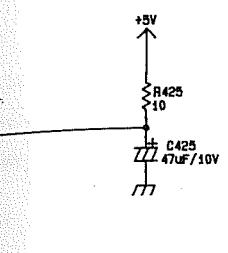
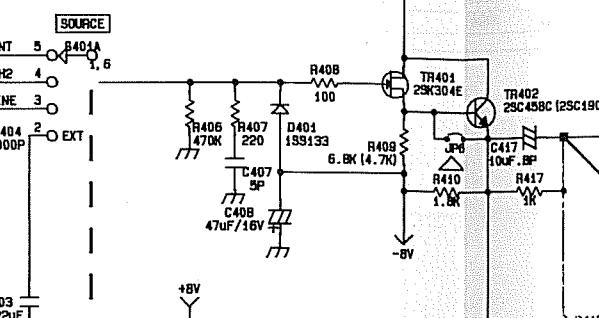
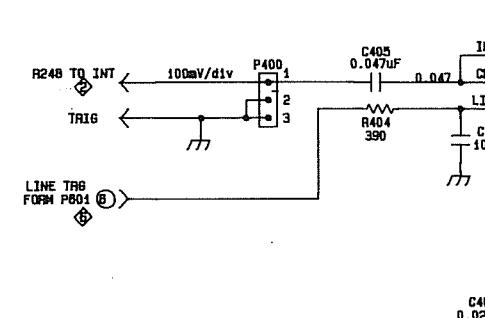
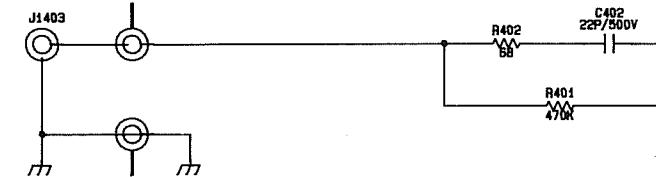
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(13)



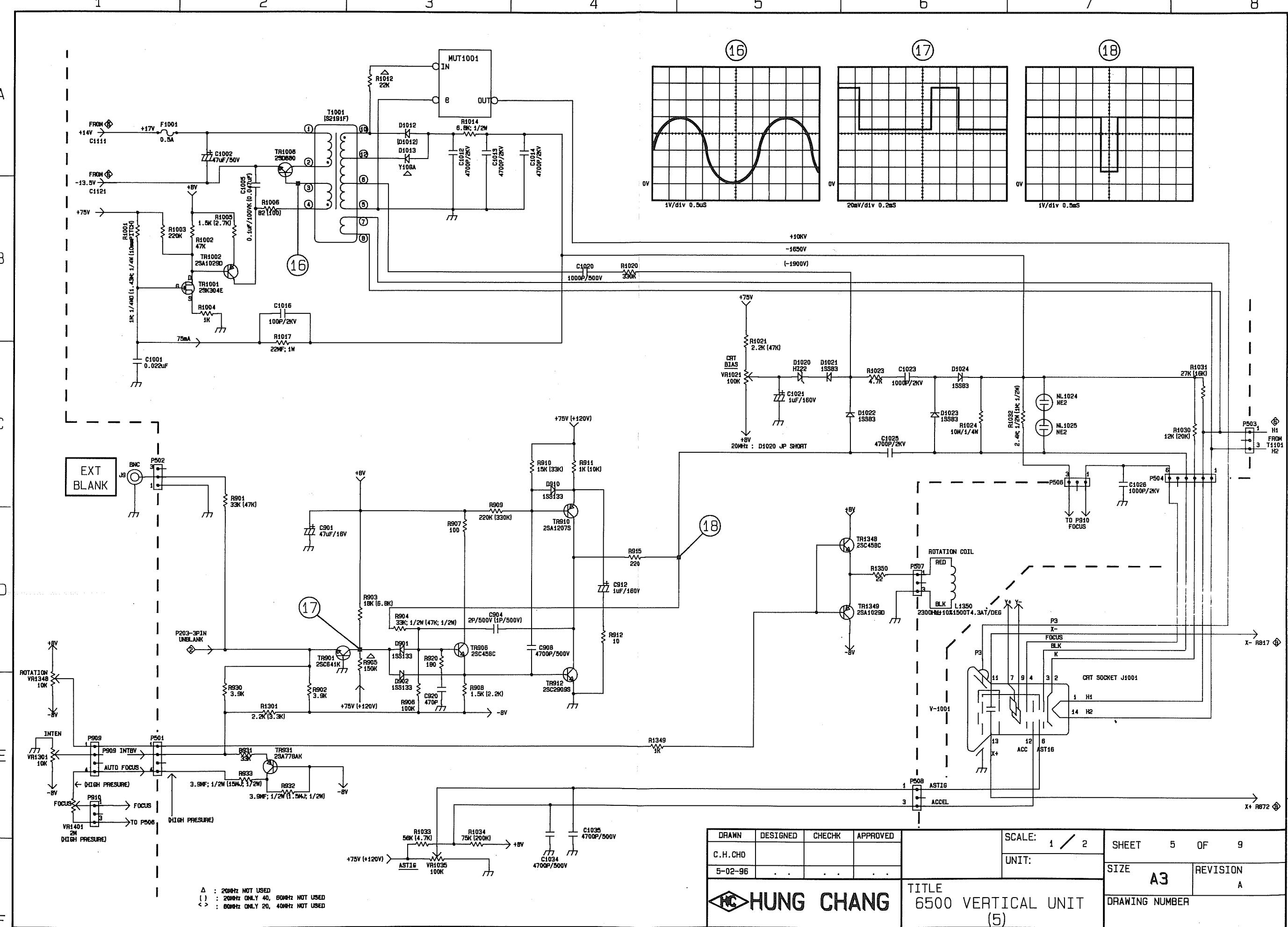
EXT TRG

TRIG LEVEL CENTER  
VR420  
10KR420  
10K

-8V

+8V

R425  
470F/10VC425  
470F/10VR425  
10C425  
470F/10VR426  
10L432  
6.8uHC426  
470F/10VR432  
680TR433  
2SC335CR434  
2.7KIC401/C  
74S00IC401/A  
74S00IC401/D  
74S00IC401/B  
74S00R435  
2.7KR436  
3.3KR437  
3.3KR438  
2.7KC576  
470F74S00  
IC401R460  
22(10)C450  
470F/16VC577  
0.1uFC578  
0.04uFC596  
<0.1uF>C598  
<0.1uF>C595  
<0.1uF>C579  
0.1uFC577  
0.1uFC578  
0.04uFC596  
<0.1uF>C598  
<0.1uF>C595  
<0.1uF>C577  
0.1uF



$\Delta$  : 20MHz NOT USED  
( ) : 20MHz ONLY 40, 80MHz NOT USED  
< > : 80MHz ONLY 20, 40MHz NOT USED

HUNG CHANG

TITLE  
6500 VERTICAL UNIT  
(5)

A3 (594\*420)

1 | 2 | 3 | 4 | 5 | 6 | 7 | 8

A

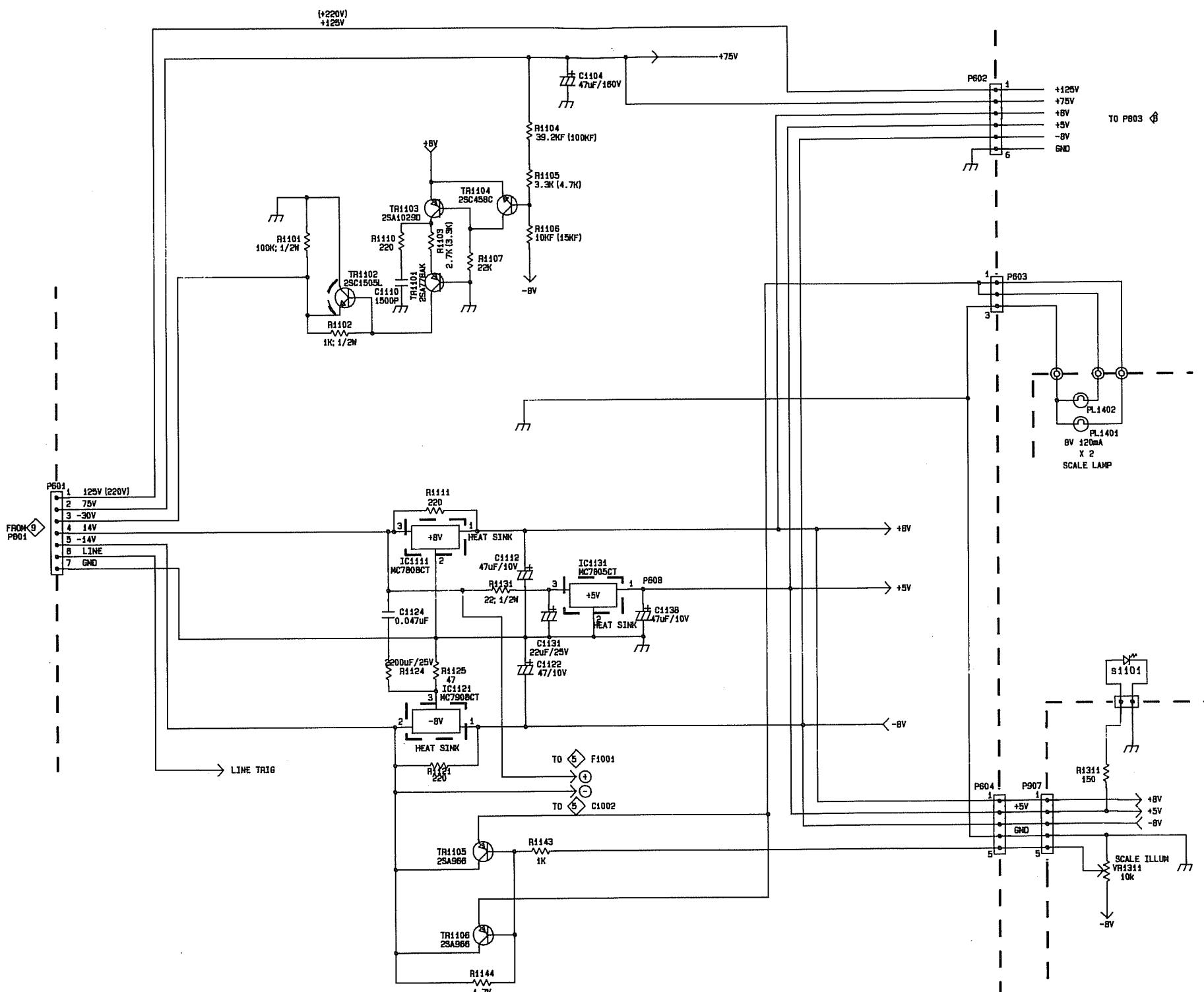
B

C

D

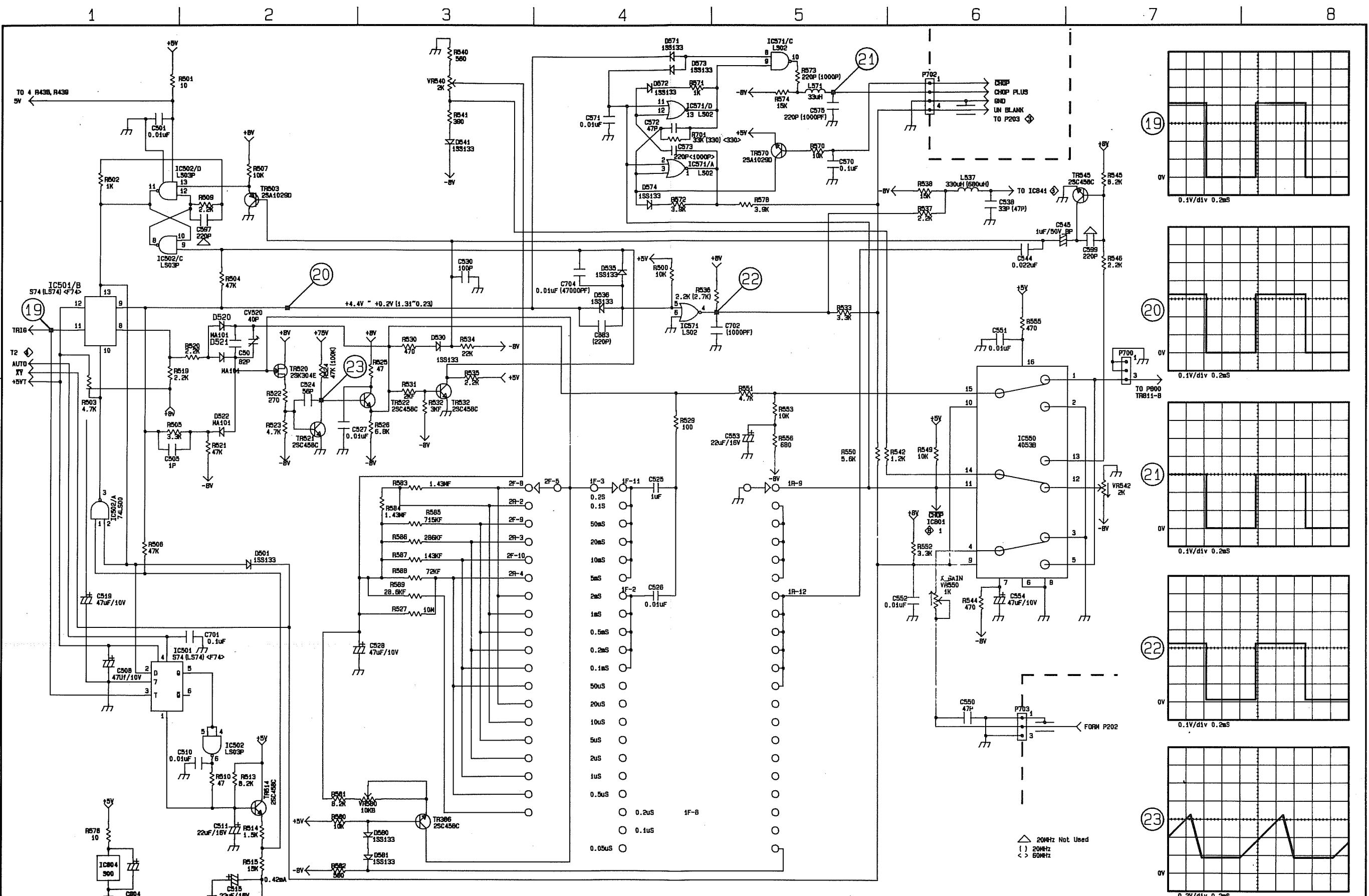
E

F

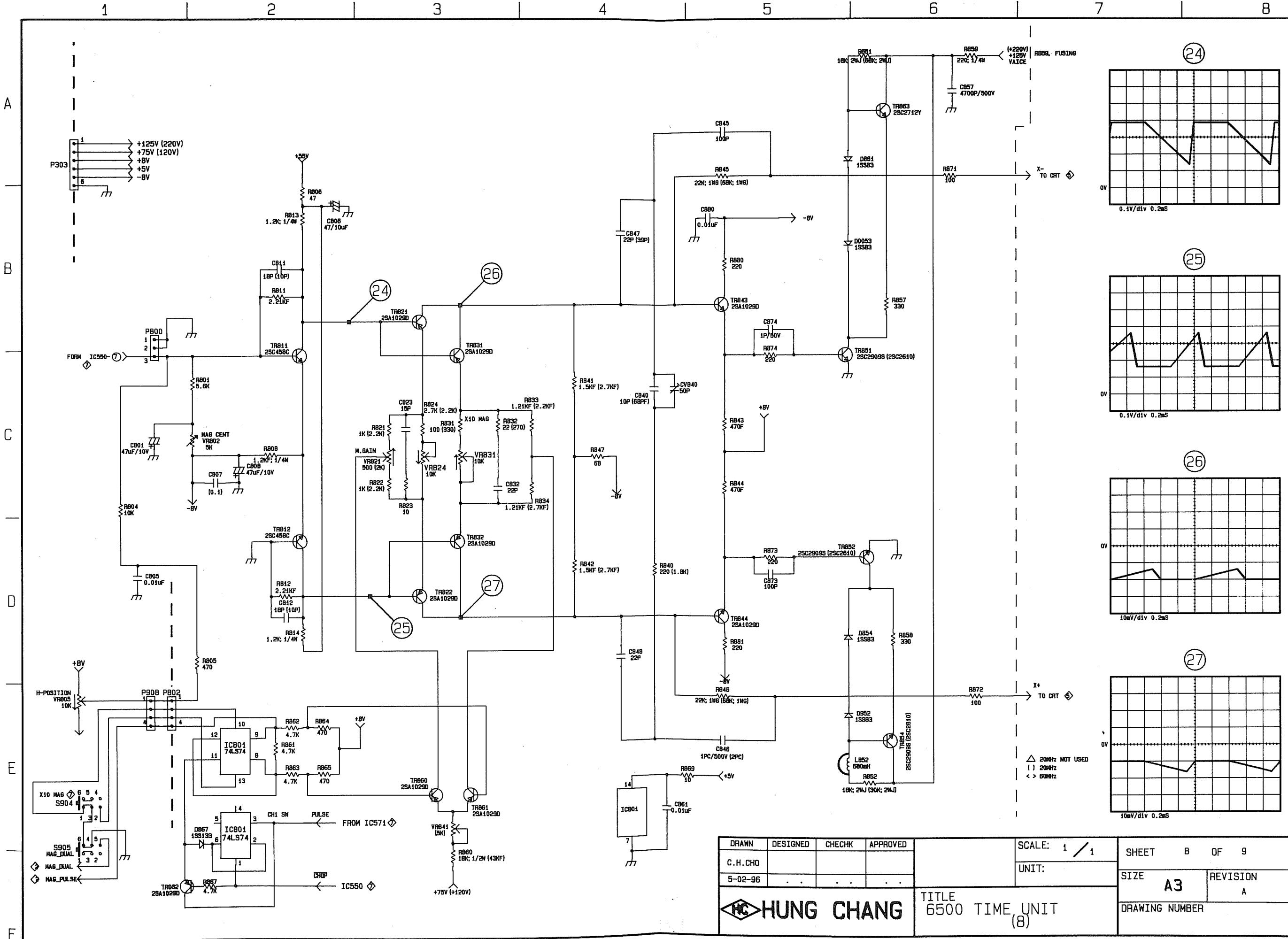


△ : 20MHz NOT USED  
( ) : 20MHz ONLY  
< > : 60MHz

DRAWN	DESIGNED	CHECHK	APPROVED	SCALE: 1 / 1	SHEET 6 OF 9
C.H.CHQ					UNIT:
5-02-96	.	.	.		
TITLE HUNG CHANG					TITLE HUNG CHANG
6500 VERTICAL UNIT (6)					DRAWING NUMBER
SIZE A3					REVISION A

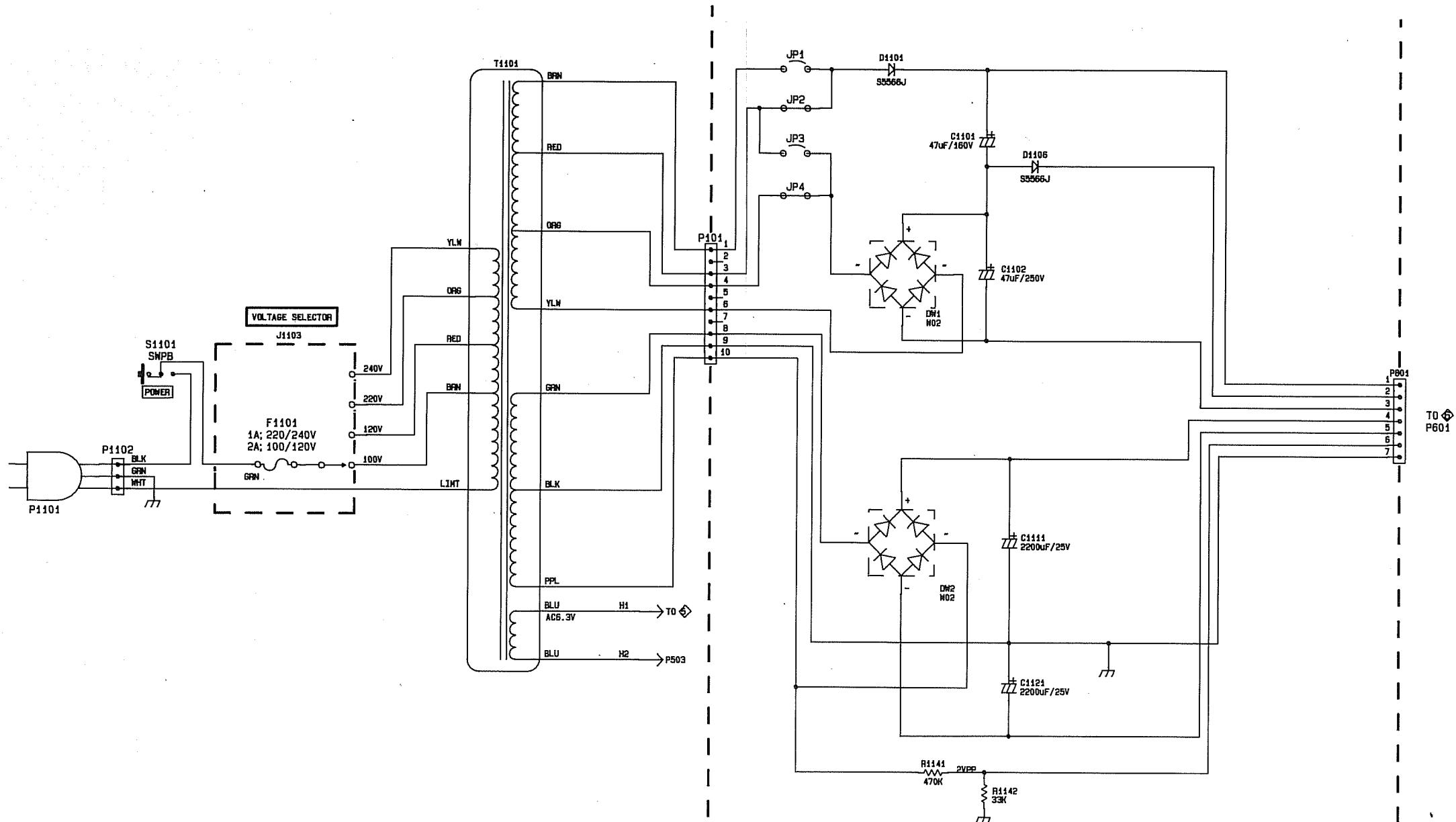


DRAWN	DESIGNED	CHECHK	APPROVED		SCALE: 1 / 1	SHEET 7 OF 9
C.H.CHO					UNIT:	
5-02-96	.	.	.			SIZE A3 REVISION A
 HUNG CHANG				TITLE 6500 TIME BASE UNIT (7)	DRAWING NUMBER	



A3 (594\*420)

1 | 2 | 3 | 4 | 5 | 6 | 7 | 8



DRAWN	DESIGNED	CHECHK	APPROVED	SCALE: 1 / 1 UNIT:	SHEET 9 OF 9
C.H.CHO					SIZE A3
4-08-96	.	.	.		REVISION A
<b>HUNG CHANG</b>					TITLE 6500 VERTICAL UNIT (9)
					DRAWING NUMBER