

# SERVICE MANUAL

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# CV-2562 Color Monitor

**NOTE:** This product is part of the 'A'-Line Color Television Receivers of Zenith Electronics Corporation. The material contained herein is reprinted from the Zenith Service Manual.

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The purpose of this page is to make sure that all service bulletins are entered in this manual. When a service bulletin is received, mark the manual and list the information in the record below.

## Record of Field Service Bulletins

SERVICE BULLETIN NUMBER	DATE OF ISSUE	CHANGED PAGE(S)	PURPOSE OF SERVICE BULLETIN	INITIALS

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# Introduction

The CV2562 is a medium-resolution 25-inch (diagonally measured) color monitor that can be used to display the output of a video cassette recorder/player, video disc player, or personal computer. Up to 450 lines of resolution can be displayed using either RGB or composite video signals. A green-only switch allows the monitor to be used in applications requiring 80 characters of text per line, blanking the red and blue picture elements for enhanced readability.

Table 1 describes the modules used in the CV2562.

**Table 1: CV2562 Modules**

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MODULE/PART NUMBER	DESCRIPTION
9-155-23	CRT socket module
9-227-02	Main module
9-230-03	RGB interface
9-365	High voltage and horizontal sweep module
14-11582-01	Cabinet rear
20-3918-25	Degausser coil
24-2971-01	Control cover
49-1334-01	Speaker
57-9002-01	CRT escutcheon
63-10914	On/off volume control assembly
85-1559 and 95-3406-02	Deflection yoke
206-948	Operator's manual
A-8846	On/off volume control knob
A-9731-03	AC line cord
A-10177-02	Light sensor
A-12302-05	Secondary control assembly
A-12696-01	Cabinet front
A-12802	High voltage power supply assembly
A63AAX01X	CRT

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The following pages are reprints from the Zenith Electronics Corporation service manual on this product.

## PRODUCT SAFETY SERVICING GUIDELINES FOR COLOR TELEVISION RECEIVERS

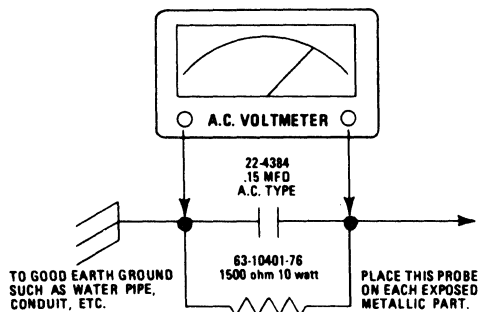
**CAUTION:** No modification of any circuit should be attempted. Service work should be performed only after you are thoroughly familiar with all of the following safety checks and servicing guidelines. To do otherwise increases the risk of potential hazards and injury to the user.

### SAFETY CHECKS

After the original service problem has been corrected, a check should be made of the following:

#### SUBJECT: FIRE & SHOCK HAZARD

1. Be sure that all components are positioned in such a way as to avoid possibility of adjacent component shorts. This is especially important on those chassis which are transported to and from the repair shop.
2. Never release a repair unless all protective devices such as insulators, barriers, covers, shields, strain reliefs, and other hardware have been reinstalled per original design.
3. Soldering must be inspected to discover possible cold solder joints, frayed leads, damaged insulation (including AC cord), solder splashes or sharp solder points. Be certain to remove all loose foreign particles.
4. Check the "across-the-line" capacitor and other components for physical evidence of damage or deterioration and replace if necessary. Follow original layout, lead length and dress.
5. No lead or component should touch a receiving tube or a resistor rated at 1 watt or more. Lead tension around protruding metal surfaces must be avoided.
6. All critical components (shaded on the schematic diagram and parts lists) such as fuses, flameproof resistors, capacitors, etc. must be replaced with exact Zenith types. Do not use replacement components other than those specified or make unrecommended circuit modifications.
7. After re-assembly of the set always perform an AC leakage test on all exposed metallic parts of the cabinet, (the channel selector knobs, antenna terminals, handle and screws) to be sure the set is safe to operate without danger of electrical shock. **DO NOT USE A LINE ISOLATION TRANSFORMER DURING THIS TEST.** Use an AC voltmeter, having 5000 ohms per volt or more sensitivity, in the following manner; Connect a 1500 ohm 10 watt resistor (63-10401-76), paralleled by a .15 mfd. 150V AC type capacitor (22-4384) between a known good earth ground (water pipe, conduit, etc.) and the exposed metallic parts, one at a time. Measure the AC voltage across the combination 1500 ohm resistor and .15 mfd. capacitor. Reverse the AC plug and repeat AC voltage measurements for each exposed metallic part. Voltage measured must not exceed .75 volts RMS. This corresponds to 0.5 milliamp AC. Any value exceeding this limit constitutes a potential shock hazard and must be corrected immediately.



#### SUBJECT: IMPLOSION

1. All Zenith picture tubes are equipped with an integral implosion protection system, but care should be taken to avoid damage during installation. Avoid scratching the tube.
2. Use only recommended Zenith replacement tubes.

#### SUBJECT: X-RADIATION

1. Be sure procedures and instructions to all service personnel cover the subject of X-radiation. The only potential source of X-rays in current TV receivers is the picture tube. However, this tube does not emit X-rays when the H.V. is at the factory specified level. It is only when the H.V. is excessive that X-radiation may be generated. Refer

to the X-ray Precaution Label which is located inside each television receiver for the correct high voltage. The proper value is also given in the applicable service manual. Operation at higher voltages may cause a failure of the picture tube or high voltage supply and, under certain circumstances, may produce radiation in excess of desirable levels.

2. Only Zenith specified CRT anode connectors must be used. The degaussing shield also serves as an X-ray shield in color sets, do not defeat its purpose.
3. It is essential that the serviceman has available an accurate and reliable high voltage meter. The calibration of the meter should be checked periodically against a reference standard, such as the one available at your distributor.
4. When the high voltage circuitry is operating properly there is no possibility of an X-radiation problem. Every time a color chassis is serviced, the brightness should be run up and down while monitoring the high voltage with a meter to be certain that the high voltage does not exceed the specified value and that it is regulating correctly. We suggest that you and your service organization review test procedures so that voltage regulation is always checked as a standard servicing procedure, and that the high voltage reading be recorded on each customer's invoice.
5. When trouble shooting and making test measurements in a receiver with a problem of excessive high voltage, avoid being unnecessarily close to the picture tube and the high voltage compartment. Do not operate the chassis longer than is necessary to locate the cause of excessive voltage.
6. Color transistor sets manufactured after June, 1973 ("E" Line and later), use new type picture tubes specifically designed to withstand higher operating voltages without causing excessive X-radiation. It is strongly recommended that the C.R.T. shop fixture be equipped with the new type tube. Addition of a permanently connected H.V. meter to the H.V. anode of the shop C.R.T. fixture is advisable. The C.R.T.'s in these sets should never be replaced with any other tube types as that may result in excessive X-radiation and possible violation of the law.
7. Starting with late production "E" line color sets, a special four lead damper capacitor was used. Its feature, the interlocking four leads, should not be defeated. However, each time one of these sets is serviced, for whatever reason, the part number of the capacitor should be examined. If it is the 22-7233 type (used in "E" and "F" model lines only), that capacitor must be replaced with an improved recommended type (22-7504-01). Please refer to Zenith Tech Topics (Issue No. 87) for the details. Your distributor will answer any questions, or you may write to Zenith for further details.

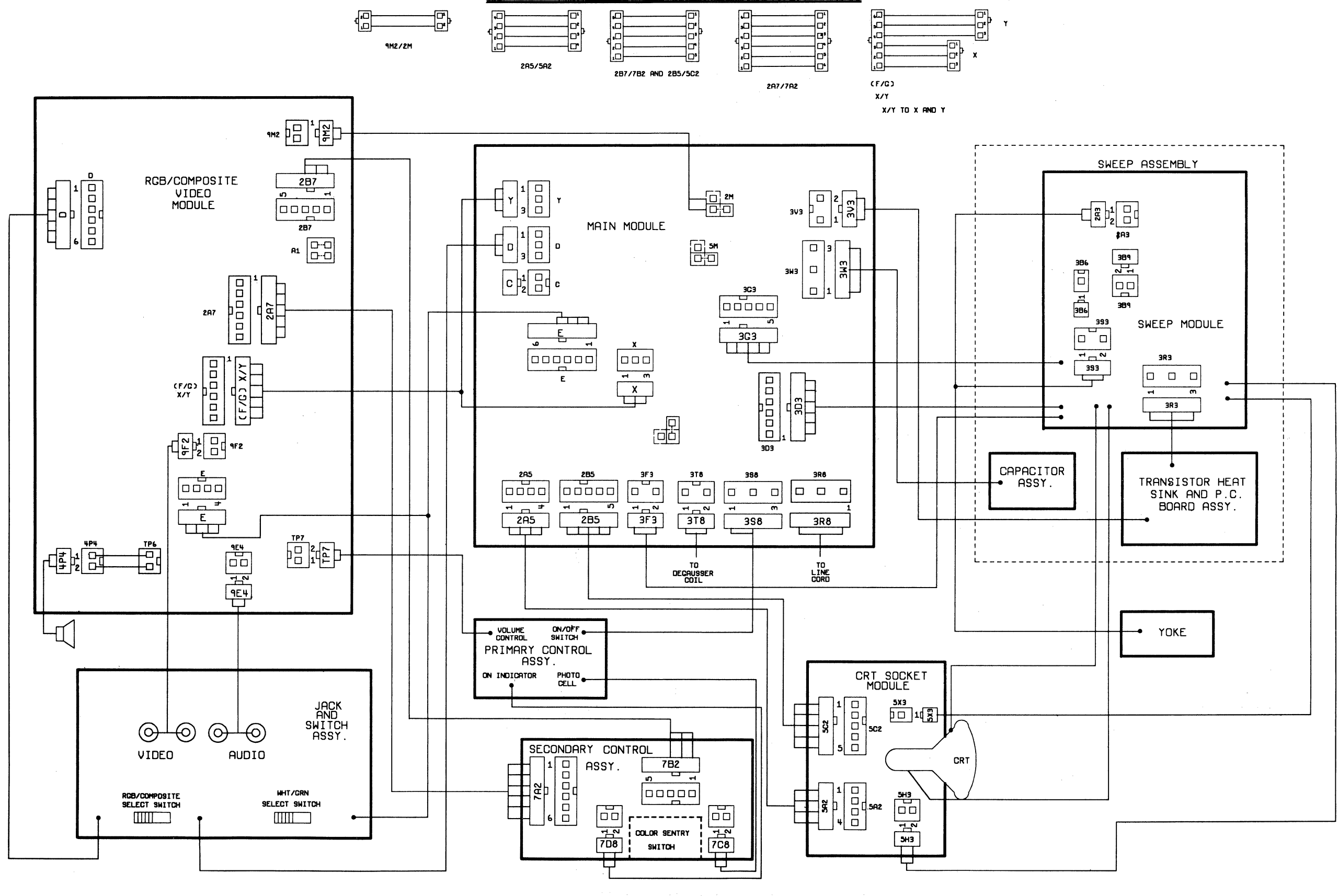
#### SUBJECT: TIPS ON PROPER INSTALLATION

1. Never install any receiver in a closed-in recess, cubbyhole or closely fitting shelf space.
2. Never install a receiver over, or close to a heat duct, or in the path of heated air flow.
3. Avoid conditions of high humidity such as; outdoor patio installations where dew is a factor, near steam radiators where steam leakage is a factor, etc.
4. Avoid placement where draperies may obstruct rear venting. The customer should also avoid the use of decorative scarves or other coverings which might obstruct ventilation.
5. Wall and shelf mounted installations using a commercial mounting kit, must follow the factory approved mounting instructions.
6. A receiver mounted to a shelf or platform must retain its original feet (or the equivalent thickness in spacers) to provide adequate air flow across the bottom. Bolts or screws used for fasteners must not touch any parts or wiring. Perform leakage tests on customized installations.
7. Caution customers against the mounting of a receiver on a sloping shelf or in a tilted position, unless the receiver is properly secured.
8. A receiver in a roll-about cart should be stable in its mounting to the cart. Caution the customer on the hazards of trying to roll a cart with small casters across thresholds or deep pile carpets.
9. Caution customers against the use of a cart or stand which has not been listed by Underwriters Laboratories, Inc. for use with their specific model of television receiver.

**CV2562 COLOR TV MONITOR**

PART NO	REF CODE	DESCRIPTION	PART NO	REF CODE	DESCRIPTION
<b>PRINCIPAL COMPONENTS</b>					
A-9731-03		LINE CORD & CONNECTOR HOUSING ASSEMBLY (3R8)	86-798-03		TERMINAL PIN (15 REQ)
A-10177-02		LIGHT SENSOR & PCB ASSEMBLY (SEE BREAKDOWN WITHIN THIS LIST)	86-799		TERMINAL PIN (15 REQ)
A-12302-05		SECONDARY CONTROLS & PCB ASSEMBLY (SEE BREAKDOWN WITHIN THIS LIST)	<b>POWER SUPPLY &amp; HORIZONTAL SWEEP ASSEMBLY</b>		
A-12696-01		MAIN CABINET & SPEAKER ASSEMBLY (SEE A-12696-01 BREAKDOWN WITHIN THIS LIST)	A-12802		HORIZ OUTPUT TRANSISTOR, HEAT SINK & REGULATOR TRANSFORMER ASSEMBLY (SEE A-12802 BREAKDOWN WITHIN THIS LIST)
A-12802		HORIZ OUTPUT TRANSISTOR, HEAT SINK & REGULATOR TRANSFORMER PCB ASSEMBLY (SEE BREAKDOWN WITHIN THIS LIST)	9-365		HIVOLTAGE & HORIZ SWEEP MODULE (SEE 9-365 PARTS LIST FOR COMPONENTS)
9-155-23		CRT SOCKET MODULE (SEE 9-155-23 PARTS LIST FOR COMPONENTS)	19-733-01		CABLE TIE STRAP (2 REQ)
9-227-02		RGB MAIN MODULE (SEE 9-227-02 PARTS LIST FOR COMPONENTS)	114-802		8-18X5/16X1/4AF HEX WASHER HD THD FORM SCREW, TP B, STAT BRONZE (2 REQ)
9-230-03		RGB/COMPOSITE VIDEO INTERFACE MODULE (SEE 9-230-03 PARTS LIST FOR COMPONENTS)	157-44		SINGLE PIECE PUSH-IN FASTENER
9-365		HIVOLTAGE & HORIZ SWEEP MODULE (SEE 9-365 PARTS LIST FOR COMPONENTS)	194-1029-01		INSULATING STRIP
14-11582-01		CABINET REAR	<b>A-12802 HORIZ OUTPUT TRANSISTOR, HEAT SINK &amp; REGULATOR TRANSFORMER PCB ASSEMBLY</b>		
20-3918-25		DEGAUSSER COIL (SEE 20-3918-25 BREAKDOWN WITHIN THIS LIST)	A-9943-07		CABLE & HOUSING ASSEMBLY (3W3)
46-10335		ON/OFF PUSH-BUTTON KNOB	A-12891		REGULATOR TRANSFORMER & PCB ASSEMBLY (SEE A-12891 BREAKDOWN WITHIN THIS LIST)
49-1334-01		SPEAKER, OVAL 3" X 6 1/2" (PART OF A-12696-01)	12-8276-03		HEAT SINK & MTG BRACKET (MTS 9-365 SWEEP MODULE)
57-9002-01		CRT ESCUTCHEON	19-733-01		CABLE TIE STRAP
63-10914		VOLUME CONTROL	19-981		CLAMP
95-3406-02		DEFLECTION YOKE (SEE 95-3406-02 BREAKDOWN WITHIN THIS LIST)	22-6466		530PF ±10% 3000V CERAMIC DISC CAP
136-113-23		FUSE, 4 AMP 250V	22-7735-01		300/180V 1700/180V ELECTROLYTIC CAP
192-726		SUN SCREEN	78-3080-01		SOCKET TRANSISTOR
<b>CRT (A63AAX01X)</b>					
<b>CONTROL PANEL COMPONENTS</b>					
A-8846		ON/OFF VOLUME CONTROL & BRACKET ASSEMBLY (SEE ON/OFF VOLUME CONTROL ASSEMBLY BREAKDOWN WITHIN THIS LIST)	112-2367		M3-1/2 HEX WASHER HD METRIC THD SCREW (2 REQ)
A-10177-02		VOLUME CONTROL KNOB ASSEMBLY (SEE A-10177-02 BREAKDOWN WITHIN THIS LIST)	114-802-01		8-18X3/8X1/4AF HEX WASHER HD THD FORM SCREW, TP B, STAT BRONZE (2 REQ)
A-12302-05		SECONDARY CONTROL ASSEMBLY (SEE A-12302-05 BREAKDOWN WITHIN THIS LIST)	114-1115-02		6-20X3/8X1/4AF HEX WASHER HD THD FORM SCREW, TP B, STAT BRONZE
19-733-04		CABLE RETAINING TIE	114-1425-01		8-18X3/8X1/4AF HEX HD W/WASHER THD FORM SCREW, TP B, STAT BRONZE
24-2971-01		CONTROL COVER	121-1033		HORIZ OUTPUT TRANSISTOR, NPN
43-1938-02		HOUSING, CONTROL PANEL	194-678		INSULATING STRIP, TRANSISTOR
73-205-02		8-32X0.531 SPECIAL SET SCREW SLOTTED (3 MT CONTROL DOOR)	<b>A-12891 REGULATOR TRANSFORMER &amp; PCB ASSEMBLY</b>		
93-2115-01		WASHER, NM FLAT	A-9941-25		CABLE & HOUSING ASSEMBLY (3W3)
114-1393		8-10X1/2X1/4AF HEX WASHER HD HI RISE THD CUT SCREW (5 REQ, 3 MT A-12302-05 SEC CONT TO 43-1938-02 HSG & 2 MT VOLUME CONT BRKT TO 43-1938-02 HSG)	A-9943-12		CABLE & HOUSING ASSEMBLY (3R3)
156-149-01		CATCH WITH KEEPER (MTS FRAME)	19-733-01		CABLE TIE STRAP
192-723-04		CRYSTAL WINDOW	22-6466		1000PF ±10% 500V CERAMIC DISC CAP
194-663-03		INSULATOR ROUND	22-7523-01		530PF ±10% 3000V CERAMIC DISC CAP (3 REQ)
<b>ON-OFF, VOLUME CONTROL &amp; BRACKET COMPONENTS</b>					
A-10150-01		CABLE & HOUSING ASSEMBLY (3S8)	22-7523-01		0.01µF ±20% 2000V CERAMIC DISC CAP
12-8653		METAL BRACKET, CONTROL MTG	63-10444-06		0.18Ω 10% 5W WIREWOUND RES
19-733-04		CABLE RETAINING TIE	63-10852-02		0.33Ω 10% 3W WIREWOUND RES
50-209-64		CABLE & HOUSING ASSEMBLY (TP7)	64-519-01		EYELET, ROLLED FLANGE
63-10914		VOLUME CONTROL	64-1032		GRIPLET, BRASS-SOLDER COATED
85-1559-02		ON/OFF SWITCH, PUSH-BUTTON	86-735-01		TERMINAL CLOSED END
114-584		4-24X1/4X3/16AF HEX HD SLOTTED THD FORM SCREW, TP B, CADMIUM (3 REQ, 2 MT 85-1559-02 SWITCH TO 12-8653 BRKT, 1 MTS A-10177-02 PC BOARD TO 12-8653 BRKT)	89-3427-02		REGULATING TRANSFORMER
<b>A-10177-02 LIGHT SENSOR &amp; PCB ASSEMBLY</b>					
A-8865-03		RED EMITTING DIODE, PREFORMED LEADS	103-312		DIODE, LOW VOLT
22-7859-08		47µF 20% 16V ELECTROLYTIC CAP	103-339-04		DIODE, LOW VOLT
50-209-65		CABLE & HOUSING ASSEMBLY (7C8)	149-454		CORE, FERRITE BEAD
50-209-66		CABLE & HOUSING ASSEMBLY (7D8)	<b>95-3406-02 DEFLECTION YOKE COMPONENTS</b>		
162-10		PHOTOVARISTOR	19-821-02		CRT NECK CLAMP
199-642		SLEEVE	24-2680-02		YOKE COVER
<b>A-12302-05 SECONDARY CONTROL ASSEMBLY</b>					
63-10235-72		1KΩ 5% 1/4W FILM RES	78-3021-02		2 POSITION F SLOT CONNECTOR HSG (3T8)
63-10235-73		1100Ω 5% 1/4W FILM RES	93-2105		FLAT METAL WASHER
63-10235-77		1800Ω 5% 1/4W FILM RES	95-3406-02		DEFLECTION YOKE
63-10235-86		3900Ω 5% 1/4W FILM RES	114-1410		8-32X13/16 SPECIAL STAINLESS STEEL HEX WASHER HD MACHINE SCREW
63-10762		BLACK LEVEL CONTROL	152-326-01		YOKE ADJ WEDGE (3 REQ) (NOT FURNISHED AS PART OF 95-3458-01 YOKE)
63-10763		PICTURE CONTROL	940-21		GLASS SILICON TAPE (APPROX 24" ROLL 2 1/2" RETAINS EACH 152-326-01 WEDGE)
63-10763-01		SHARPNESS CONTROL	<b>20-3918-25 DEGAUSSER COIL COMPONENTS</b>		
63-10764		COLOR & TINT CONTROL (2 REQ)	A-9941-07		CABLE & HOUSING ASSEMBLY (3T8)
63-10857-11		CONTROL, SERVICE ADJUST (3 REQ)	20-3918-25		COIL DEGAUSSER
64-1211-01		COLOR LEVEL, TINT & BRIGHTNESS RANGE EYELET, TUBULAR (24 REQ)	23-40		SPRICE CAP, CRIMP TYPE (2 REQ)
85-1594		COLOR SENTRY LEVER SWITCH (3 POSITION)	78-3021-02		2 POSITION F SLOT CONNECTOR HSG (3T8)
<b>JACK &amp; CONNECTOR COMPONENTS</b>					
A-9919-62		CABLE & HOUSING ASSEMBLY (D)	79-317-03		HEAT SHRINKABLE SLEEVE (2 REQ)
A-11217-03		CABLE & HOUSING ASSEMBLY (9E4)	125-230		STRAIN RELIEF
A-11218-06		CABLE & HOUSING ASSEMBLY (9F2)	<b>JACK &amp; CONNECTOR COMPONENTS</b>		
A-11861-01		JACK & BRACKET ASSEMBLY (STAKING)	A-9919-62		CABLE & HOUSING ASSEMBLY (D)
A-11862		CABLE & HOUSING ASSEMBLY (E)	A-11217-03		CABLE & HOUSING ASSEMBLY (9E4)
A-11866		CABLE & HOUSING ASSEMBLY (D)	A-11218-06		CABLE & HOUSING ASSEMBLY (9F2)
30-1076		OVERLAY, AUDIO/VIDEO	A-11861-01		JACK & BRACKET ASSEMBLY (STAKING)
30-1076-01		OVERLAY, SWITCH RGB/COMP	A-11862		CABLE & HOUSING ASSEMBLY (E)
63-10243-45		75Ω 5% 1/2W FILM RES	A-11866		CABLE & HOUSING ASSEMBLY (D)
78-2219-02		JACK, SINGLE (2 REQ)	30-1076		OVERLAY, AUDIO/VIDEO
78-2219-06		JACK, PHONO SINGLE (YELLOW)	30-1076-01		OVERLAY, SWITCH RGB/COMP
79-91		SLEEVE (2 REQ)	63-10243-45		75Ω 5% 1/2W FILM RES
85-1614		SLIDE SWITCH, AUTO/MANUAL	78-2219-02		JACK, SINGLE (2 REQ)
85-1640-01		SLIDE SWITCH (RGB/COMP)	78-2219-06		JACK, PHONO SINGLE (YELLOW)
86-623		TERMINAL SPRING	79-91		SLEEVE (2 REQ)

**INTERCONNECT CABLES**



**INTERCONNECT DIAGRAM, MODULAR MONITOR CV2562**





9-227-02 MAIN MODULE

PART NO	REF CODE	DESCRIPTION	PART NO	REF CODE	DESCRIPTION
		<b>COILS</b>			
20-3831		RCF COIL (2 REQ L2501, L3401)	63-10235-76		1500Ω 1/4W 5% FILM (2 REQ R3112, R3429)
20-3887-01		RCF COIL (3 REQ L2502, L2503 & L2504)	63-10235-79		2000Ω 1/4W 5% FILM (R3432)
20-4026		RCF TUNABLE (L3402)	63-10235-80		2200Ω 1/4W 5% FILM (5 REQ R2117, R3218, R3431, R3443, R3445)
		<b>CAPACITORS</b>	63-10235-82		2700Ω 1/4W 5% FILM (3 REQ R2508, R2519, R2530, R3428)
22-3512		0.01μF +40% -10% 1000V CERAMIC DISC (C3205)	63-10235-83		3000Ω 1/4W 5% FILM (R3213)
22-5854		0.1μF 20% 125V (CX3258)	63-10235-84		3300Ω 1/4W 5% FILM (R3419)
22-7390-02		0.47μF 20% 50V ELECTROLYTIC (C2105)	63-10235-86		3900Ω 1/4W 5% FILM (7 REQ R3403, R3404, R3440, R3442, R3466, R3472, R3473)
22-7395		22μF 20% 16V ELECTROLYTIC (4 REQ C3209, C3234, C3242 & C3257)	63-10235-88		4700Ω 1/4W 5% FILM (5 REQ R2103, R2115, R2118, R3425, R3451)
22-7404-06		22μF 20% 16V ELECTROLYTIC (C3410)	63-10235-90		5600Ω 1/4W 5% FILM (3 REQ R2502, R2513, R2524)
22-7406		0.47μF ±20% 35V ELECTROLYTIC (C3429)	63-10235-92		6800Ω 1/4W 5% FILM (R3452)
22-7406-01		1μF 20% 35V ELECTROLYTIC (C3402)	63-10235-93		7500Ω 1/4W 5% FILM (R3471)
22-7431-06		0.0047μF ±20% CERAMIC DISC (2 REQ C3249, CX3250)	63-10235-94		8200Ω 1/4W 5% FILM (R3467)
22-7562-32		0.47μF 5% 100V POLYESTER (C3413)	63-10235-96		10KΩ 1/4W 5% FILM (2 REQ R2570, R3414)
22-7603-01		10μF +100%-10% 315V LYTIC (C3206)	63-10235-98		12KΩ 1/4W 5% FILM (R3461)
22-7613-08		470pF 10% 50V CERAMIC DISC (C3423)	63-10236-02		15KΩ 1/4W 5% FILM (R3415)
22-7613-24		0.20μF 10% 50V CERAMIC DISC (3 REQ C2104, C3422, C3430)	63-10236-03		18KΩ 1/4W 5% FILM (R3415)
22-7619-41		200pF 5% 50V CERAMIC DISC (C3450)	63-10236-04		20KΩ 1/4W 5% FILM (R3411)
22-7647-35		150pF 5% 50V CERAMIC DISC (C3427)	63-10236-07		22KΩ 1/4W 5% FILM (R3408)
22-7678		100μF +100% -10% 180V LYTIC (C3246)	63-10236-08		30KΩ 1/4W 5% FILM (R3213)
22-7708-09		100μF +50-10% 25V LYTIC (C3411)	63-10236-09		33KΩ 1/4W 5% FILM (R3405)
22-7709-09		100μF +50-10% 35V ELECTROLYTIC (C3409)	63-10236-13		51KΩ 1/4W 5% FILM (2 REQ R3420, R3468)
22-7710-01		1μF +50-10% 50V ELECTROLYTIC (4 REQ C3407, C3412, C3420, C3461)	63-10236-16		68KΩ 1/4W 5% FILM (R3470)
22-7710-07		33μF +50-10% 50V ELECTROLYTIC (C2106)	63-10236-18		82KΩ 1/4W 5% FILM (2 REQ R3401, R3407)
22-7742-05		390pF 10% 50V CERAMIC TUBULAR (C3424)	63-10236-20		100KΩ 1/4W 5% FILM (R3433)
22-7742-06		470pF 10% 50V CERAMIC TUBULAR (C3434)	63-10236-22		120KΩ 1/4W 5% FILM (R3465)
22-7742-10		100pF 10% 50V CERAMIC TUBULAR (3 REQ R2501, R2512, R2523)	63-10236-31		300KΩ 1/4W 5% FILM (R3410)
22-7751-39		180pF 5% 50V CERAMIC TUBULAR (4 REQ C2110, C3207, C3425, C3426)	63-10243-11		3Ω 1/2W 5% FILM (2 REQ RX2104, RX2105)
22-7773-17		0.027μF 5% 100V POLYESTER (C3404)	63-10243-56		220Ω 1/2W 5% FILM (R2102)
22-7773-18		0.033μF 5% 100V POLYESTER (2 REQ C3403, C3421)	63-10243-60		330Ω 1/2W 5% FILM (3 REQ R2113, R3417, R3423)
22-7774-09		0.0056μF 10% 100V POLYESTER (C3462)	63-10243-63		430Ω 1/2W 5% FILM (R2126)
22-7774-12		0.01μF 10% 100V POLYESTER (2 REQ C3428, C3436)	63-10243-64		470Ω 1/2W 5% FILM (2 REQ R3422)
22-7774-14		0.015μF 10% 100V POLYESTER (2 REQ C2101, C2107)	63-10243-66		2000Ω 1/2W 5% FILM (R3439)
22-7774-16		0.022μF 10% 100V POLYESTER (3 REQ C2102, C3414, C3431)	63-10243-96		10KΩ 1/2W 5% FILM (R3260)
22-7774-17		0.027μF 10% 100V POLYESTER (C2111)	63-10244-20		600KΩ 1/2W 5% FILM (R3219)
22-7775-08		0.0047μF 20% 100V POLYESTER (C3405)	63-10244-24		150KΩ 1/2W 5% FILM (R3261)
22-7802-07		0.01μF 20% 50V CERAMIC TUBULAR (C3416)	63-10244-25		160KΩ 1/2W 5% FILM (R3216)
22-7811		1000μF 10% 1000V CERAMIC DISC (3 REQ C3251, C3252, C3253)	63-10244-33		360KΩ 1/2W 5% FILM (R3217)
22-7859-10		220μF 20% 16V ELECTROLYTIC (C3204)	63-10244-38		560KΩ 1/2W 5% FILM (R3219)
22-7860-09		100μF 20% 25V ELECTROLYTIC (C3247)	63-10244-40		680KΩ 1/2W 5% FILM (R3219)
22-7861-09		680μF 20% 35V ELECTROLYTIC (C2103)	63-10420-01		21Ω 2W 5% WIREWOUND (R3210)
22-7861-13		1000μF 20% 35V ELECTROLYTIC (C2176)	63-10422-24		1Ω 2W 10% WIREWOUND (RX3231)
22-7861-14		2200μF 20% 35V ELECTROLYTIC (2 REQ C3236, C3256)	63-10430-64		47Ω 3W 10% WIREWOUND (R3244)
22-7900-01		22μF 20% 100V ELECTROLYTIC (C3254)	63-10460-50		12Ω 10W 10% WIREWOUND (R3206)
		<b>FUSES</b>	63-10565-08		1Ω 1/2W 5% FILM (R2109, R2110, R2111, R2112)
136-113-23		4AMP 250V FUSE (FX3201) (FUSE NOT FURNISHED (AS PART OF 9-227-02 MODULE))	63-10565-14		2Ω 1/2W 5% FILM (R2120)
		<b>RESISTORS &amp; CONTROLS</b>	63-10565-18		3.9Ω 1/2W 5% FILM (2 REQ R3233, R3234)
63-8246		820Ω 1/2W 5% CARBON (R3205)	63-10565-32		22Ω 1/2W 5% FILM (RX2101)
63-9023-02		4Ω 10W 10% WIREWOUND (R3241)	63-10565-52		150Ω 1/2W 5% FILM (2 REQ RX2121, RX2122)
63-10235-32		VERTICAL CENTERING CONTROL (R2125)	63-10657-03		1.2 MEGOHM 1/2W 20% CARBON (RX3246)
63-10235-54		22Ω 1/4W 5% FILM (3 REQ R2550, R2552, R2554)	63-10710		THERMISTOR (R3245)
63-10235-58		100Ω 1/4W 5% FILM (8 REQ R2510, R2521, R2532, R2538, R2539, R2540, R3222)	63-10832-56		220Ω 1W 5% FILM (R2129)
63-10235-59		120Ω 1/4W 5% FILM (R3202)	63-10832-65		510Ω 1W 5% FILM (2 REQ R2127, R2128)
63-10235-63		150Ω 1/4W 5% FILM (R2534)	63-10857-02		HORIZ CENTERING CONTROL (R3441)
63-10235-65		180Ω 1/4W 5% FILM (2 REQ R2542, R2546)	63-10857-08		VERTICAL HEIGHT CONTROL (R3418)
63-10235-66		180Ω 1/4W 5% FILM (5 REQ R2119, R2541, R2543, R2544, R2545)	63-10857-17		ADJUSTMENT CONTROL (R3409)
63-10235-67		270Ω 1/4W 5% FILM (3 REQ R2503, R2514, R2555)	63-10857-25		GRN DRIVE & GRN CUT-OFF CONTROL (2 REQ R2517, R2516)
63-10235-68		300Ω 1/4W 5% FILM (2 REQ R3201, R3203)	63-10857-26		BLUE DRIVE & BLUE CUT-OFF CONTROL (2 REQ R2527, R2528)
63-10235-69		330Ω 1/4W 5% FILM (2 REQ R2116, R3444)	63-10857-27		RED DRIVE & RED CUT-OFF CONTROL (2 REQ R2505, R2506)
63-10235-69		430Ω 1/4W 5% FILM (R3435)			<b>TRANSFORMERS</b>
63-10235-66		560Ω 1/4W 5% FILM (2 REQ R2107, R2108)			LINE FILTER (TX3202)
63-10235-67		620Ω 1/4W 5% FILM (4 REQ R2511, R2548, R2549, R3406)			FILTER CHOKE (LX3202)
63-10235-68		680Ω 1/4W 5% FILM (R3262)			POWER TRANSFORMER (T3201)
63-10235-69		750Ω 1/4W 5% FILM (2 REQ R2504, R2526)			<b>DIODES</b>
63-10235-71		910Ω 1/4W 5% FILM (R2515)			LOW VOLTAGE (9 REQ CR2104, CR2108, CR2501, CR2502, CR2503, CR3401, CR3404, CR3405, CR3406)
63-10235-72		1000Ω 1/4W 5% FILM (9 REQ R2106, R2114, R3436, R3446, R3463, R3465, R3469, R3474, R3475)			LOW VOLTAGE (4 REQ CR2105, CR2106, CR2107, CR3206, CR3210, CR3211)
63-10235-73		1100Ω 1/4W 5% FILM (R3424)			ZENER DIODE 6.8V 0.5W (2 REQ CR2108, CR3408)
63-10235-74		1300Ω 1/4W 5% FILM (2 REQ R3214, R3421)			ZENER DIODE 10V 0.5W (CR3409)
63-10235-75		1300Ω 1/4W 5% FILM (3 REQ R2507, R2518, R2529, R3453)			LOW VOLTAGE (CR3235)

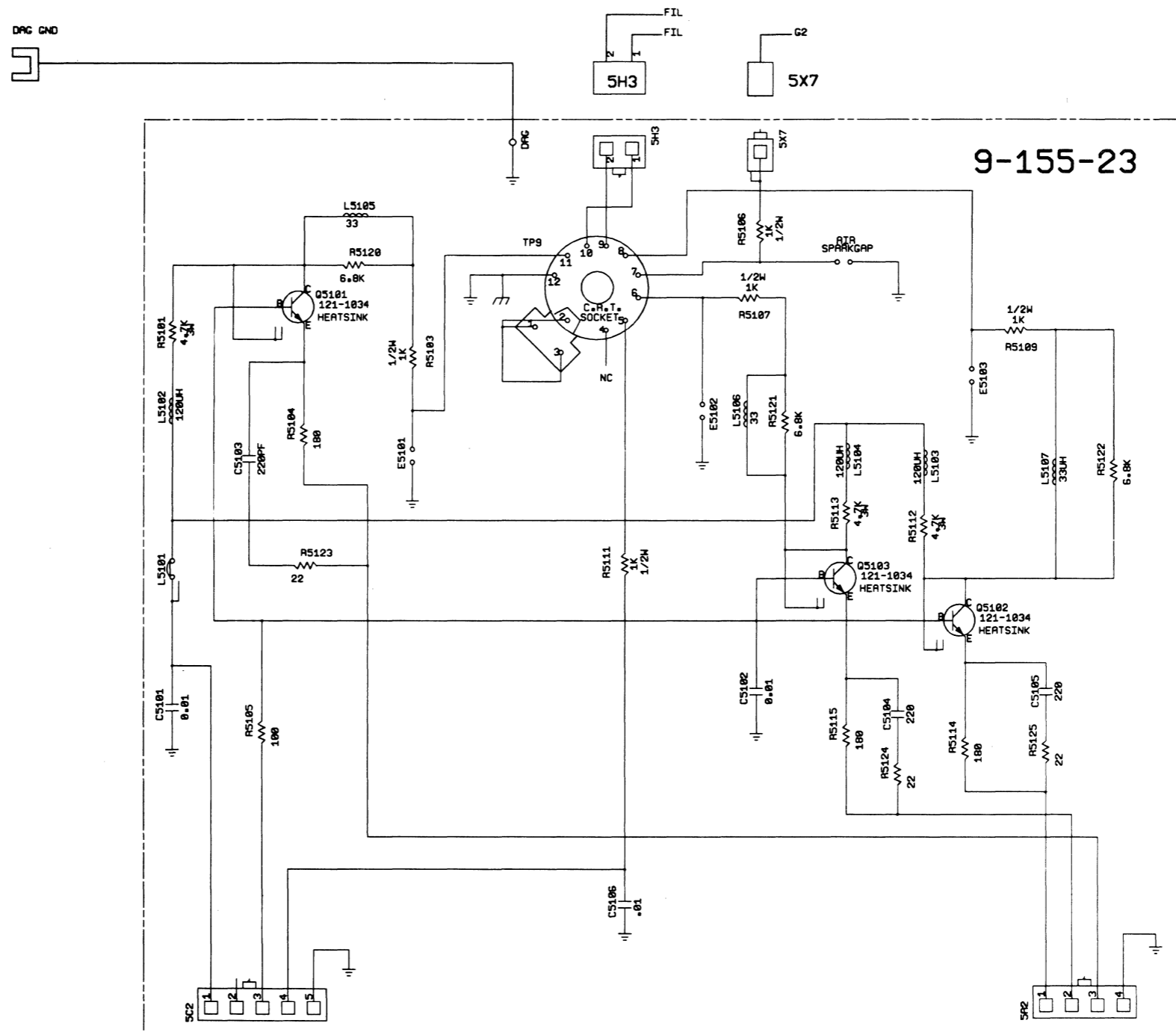
CIRCUIT REFERENCE DESIGNATOR	PART NUMBER	DESCRIPTION	9-227	9-227-01	9-227-02	9-227-03	9-227-04	CIRCUIT REFERENCE DESIGNATOR	PART NUMBER	DESCRIPTION	9-227	9-227-01	9-227-02	9-227-03	9-227-04
C2101	22-7778-10A	CAPACITOR, POLYESTER, .0068 MF, ±20%, 100V	X	X	X	X		C3430	22-7613-24D	CAPACITOR, DISC, .01 MF, ±10%, 50V	X	X	X	X	
C2102	22-7778-24A	CAPACITOR, POLYESTER, 0.1 MF, ±20%, 100V	X	X	X	X		C3431	22-7774-16A	CAPACITOR, POLYESTER, .022 MF, ±10%, 100V	X	X	X	X	
C2103	22-7778-16	CAPACITOR, POLYESTER, .022 MF, ±10%, 100V	X	X	X	X		C3432		PROVISION FOR 22-7509-04	X	X	X	X	
C2104	22-7613-24C	CAPACITOR, DISC, .01 MF, ±10%, 50V	X	X	X	X		C3433		PROVISION FOR 22-7709-06A	X	X	X	X	
C2105	22-7774-14	CAPACITOR, POLYESTER, .015 MF, ±10%, 100V	X	X	X	X		C3434	22-7742-06	CAPACITOR, AXIAL, 47U PF, ±10%, 50V	X	X	X	X	
C2106	22-7390-02	CAPACITOR, ELECTROLYTIC, .47 MF, ±20%, 50V	X	X	X	X		C3435	22-7613-24C	CAPACITOR, DISC, 0.1MF, ±10%, 100V	X	X	X	X	
C2107	22-7710-01C	CAPACITOR, ELECTROLYTIC, .33 MF, ±50-10%, 50V	X	X	X	X		C3436		PROVISION FOR 22-7709-06A	X	X	X	X	
C2108	22-7774-14	CAPACITOR, POLYESTER, .015 MF, ±10%, 100V	X	X	X	X		C3437	22-7742-10	CAPACITOR, AXIAL, .001 MF, ±10%, 50V	X	X	X	X	
C2109	22-7615-03D	CAPACITOR, DISC, .0033 MF, ±10%, 100V	X	X	X	X		C3438		PROVISION FOR 22-7709-06A	X	X	X	X	
C2110	22-7742-10	CAPACITOR, POLYESTER, .001 MF, ±10%, 50V	X	X	X	X		C3439	22-7739-29A	CAPACITOR, POLYESTER, .27 MF, ±10%, 100V	X	X	X	X	
C2111	22-7774-17A	CAPACITOR, POLYESTER, .027 MF, ±10%, 100V	X	X	X	X		C3440	22-7710-01A	CAPACITOR, ELECTROLYTIC, 1.0 MF, ±50-10%, 50V	X	X	X	X	
C2116	22-7861-13	CAPACITOR, ELECTROLYTIC, 1000 MF, ±20%, 35V	X	X	X	X		C3441	22-7619-41C	CAPACITOR, DISC, 200 PF, ±5%, 50V	X	X	X	X	
CR201	22-7621-42C	CAPACITOR, DISC, 220 PF, 15%, 50V	X					CR202	22-7710-01C	CAPACITOR, ELECTROLYTIC, 1.0 MF, ±50-10%, 50V	X	X	X	X	
CR202	22-7621-42C	CAPACITOR, DISC, 220 PF, 15%, 50V	X					CR203	103-142-01	DIODE, LOW VOLTAGE	X	X	X	X	
CR203	22-7621-42C	CAPACITOR, DISC, 220 PF, 15%, 50V	X					CR204	103-254-01	DIODE, LOW VOLTAGE	X	X	X	X	
CR204	22-7621-42C	CAPACITOR, DISC, 220 PF, 15%, 50V	X					CR205	103-254-01	DIODE, LOW VOLTAGE	X	X	X	X	
CR205	22-7621-42C	CAPACITOR, DISC, 220 PF, 15%, 50V	X					CR206	103-279-14A	DIODE, LOW VOLTAGE	X	X	X	X	
CR206	22-7621-42C	CAPACITOR, DISC, 220 PF, 15%, 50V	X					CR207	103-254-01	DIODE, LOW VOLTAGE	X	X	X	X	
CR207	22-7621-42C	CAPACITOR, DISC, 220 PF, 15%, 50V	X					CR208	103-142-01	DIODE, LOW VOLTAGE	X	X	X	X	
CR208	22-7621-42C	CAPACITOR, DISC, 220 PF, 15%, 50V	X					CR209	103-142-01	DIODE, LOW VOLTAGE	X	X	X	X	
CR209	22-7621-42C	CAPACITOR, DISC, 220 PF, 15%, 50V	X					CR210	103-142-01	DIODE, LOW VOLTAGE	X	X	X	X	
CR210	22-7621-42C	CAPACITOR, DISC, 220 PF, 15%, 50V	X					CR211	103-254-01	DIODE, LOW VOLTAGE	X	X	X	X	
CR211	22-7621-42C	CAPACITOR, DISC, 220 PF, 15%, 50V	X					CR212	103-254-01	DIODE, LOW VOLTAGE	X	X	X	X	
CR212	22-7621-42C	CAPACITOR, DISC, 220 PF, 15%, 50V	X					CR213	103-142-01	DIODE, LOW VOLTAGE	X	X	X	X	
CR213	22-7621-42C	CAPACITOR, DISC, 220 PF, 15%, 50V	X					CR214	103-309-01	DIODE, ZENER, 10V, 1W	X	X	X	X	
CR214	22-7621-42C	CAPACITOR, DISC, 220 PF, 15%, 50V	X					CR215	103-309-01	DIODE, ZENER, 10V, 1W	X	X	X	X	
CR215	22-7621-42C	CAPACITOR, DISC, 220 PF, 15%, 50V	X					CR216	103-309-01	DIODE, ZENER, 10V, 1W	X	X	X	X	







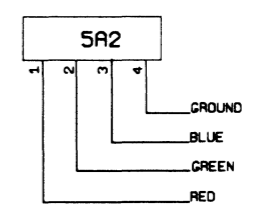
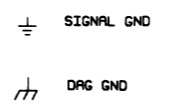
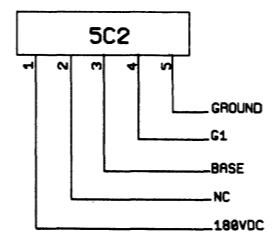




9-155-23

NOTES: (VALUE TAGS WITH SPECIAL MEANINGS)  
 A. P/L = SEE PARTS LIST FOR APPLICABLE USAGE.  
 B. JUMPER = JUMPER WIRE USED INSTEAD OF NORMAL PART  
 C. PROV = PROVISION FOR A PHYSICAL PART  
 IN THE LAYOUT ONLY.

- NOTES:  
 1. RESISTORS ARE 1/4 WATT, 5 PERCENT TOLERANCE  
 UNLESS OTHERWISE SPECIFIED.  
 2. CAPACITORS ARE IN MICROFARADS UNLESS  
 OTHERWISE SPECIFIED.



**SCHEMATIC, 9-155-23 MED. RESOLUTION VIDEO OUTPUT**