ORDER NO. VRD8607217
D1

# Service Manual

Video Cassette Recorder

***Operating Instructions***
***Electrical Adjustment Procedures***
***Mechanical Adjustment Procedures***
***Block Diagrams***
***Schematic Diagrams***
***Circuit Board Diagrams***
***Exploded Views***
***Replacement Parts Lists***

**Panasonic** VHS Hi-Fi
Professional/Industrial Video

# AG-1950



## SPECIFICATIONS

| ITEM | SPECIFICATION | ITEM | SPECIFICATION |
|---|---|---|---|
| Power | Source: 120 V AC 50~60 Hz | RF Out | VHF Channel 3 or 4, 75Ω unbalanced |
| | Consumption: Approx 40 watts | Television System | EIA Standard (525 lines, 60 fields) NTSC Color Signal<br>TV Tuners: VHF Input: VHF CH 2~CH 13 75Ω unbalanced<br>UHF Input: UHF CH 14~CH 93 300Ω balanced |
| Video | Head: 4 rotary heads, helical scanning system | | |
| | Luminance: FM azimuth recording | | |
| | Color signal: Converted subcarrier phase shift recording | Tape Speed | SP: 33.3 mm/sec, EP: 11.1 mm/sec<br>Record/Playback Time: 480 min. with NV-T160 used in EP mode.<br>FF/REW Time: Approx 4 min. with NV-T120 |
| | Input Level: VIDEO IN (BNC) 1.0 Vp-p 75Ω unbalanced<br>Output Level: VIDEO OUT (BNC) 1.0 Vp-p 75Ω unbalanced<br>Signal-to-Noise Ratio: VIDEO; more than 42 dB<br>Horizontal Resolution: Color: more than 240 lines | Tape Format | Tape width 1/2" (12.7 mm) high density tape |
| | | Operating Condition | 41°F (5°C)~104°F (40°C) (Temperature)<br>35%~85% (Humidity) |
| Audio | Head: Normal Audio/Control: 1 stationary head<br>HD Audio: 2 rotary heads<br>Erase: 1 full track erase<br>1 flying (rotary) erase head | Dimention | 16-15/16"(430 mm)(W)×5-9/16"(140 mm)(H)×15-5/8"(395.4 mm)(D) |
| | | Weight | 23.1 lbs. (10.5 kg) |
| | Track: 1 track (Normal-mono only), 2 channels (HD sound-stereo) | Accessories Supplied | Wireless Remote Control 1 pc.<br>Twin-Lead Cable 1 pc.<br>Coaxial Cable 1 pc.<br>300 ohm~75 ohm Transformer 1 pc.<br>Channel Indication Card for the Remote Control 1 pc. |
| | Input Level: AUDIO IN (phono): −10 dBV more than 47 kΩ unbalanced<br>MIC IN (M3×2): −70 dBV 600Ω unbalanced | | |
| | Output Level: AUDIO OUT (phono): −8 dBV more than 2 kΩ unbalanced<br>HEADPHONES: −60 dBV 8Ω | | |
| | Frequency Response: 20 Hz~20 kHz (HD audio track) | | |
| | Dynamic Range: 90 dBV (HD audio track) | | |

Specifications are subject to change without notice.
Weight and dimensions shown are approximate.

**Panasonic**®

**Panasonic Industrial Company**
**Division of Matsushita Electric Corporation of America**
One Panasonic Way Secaucus, New Jersey 07094

**Panasonic Hawaii Inc.**
91-238 Kauhi St. Ewa Beach
P.O. Box 774
Honolulu, Hawaii 96808-0774

**Matsushita Electric of Canada Limited**
5770 Ambler Drive, Mississauga, Ontario, L4W 2T3

**Panasonic Sales Company, Division of Matsushita Electric of Puerto Rico, Inc.**
Ave. 65 De Infanteria, KM 9.7
Victoria Industrial Park
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# INTRODUCTION

*This Service Manual contains all the technical information which allows service personnels to understand and service the Panasonic VHS Video cassette recorder model AG-1950.*
*The AG-1950 has many special features as described later.*
*Added to the basic VHS format, these features make the AG-1950 an ideal unit for business, eduction, entertament, sales and training applications.*

*Just slightly ahead of our time...Panasonic*

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This symbol warns the user that uninsulated voltage within the unit may have sufficient magnitude to cause electric shock. Therefore, it is dangerous to make any kind of contact with any inside part of this unit.



This symbol alerts the user that important literature concerning the operation and maintenance of this unit has been included. Therefore, it should be read carefully in order to avoid any problems.

**WARNING:**
**TO PREVENT FIRE OR SHOCK HAZARD, DO NOT EXPOSE THIS EQUIPMENT TO RAIN OR MOISTURE.**

**For use in the United States:**
**WARNING TO PURCHASERS:** The unauthorized recording of copyrighted broadcast and prerecorded programs for commercial purposes is copyright infringement.

**For use in other countries:**
**WARNING:** Unauthorized recording of copyrighted television programs, films, video tapes and other materials may infringe on the rights of copyright owners and be contrary to copyright laws.

# FEATURES

Excellent Picture Quality

Special Playback Functions with Superb Picture Quality ... GX4 Video Head System

Super-Smooth Distortion-Free Joints between Recordings ... Flying Erase Heads

For Prevention of Signal Deterioration in Editing ... Edit Switch

Hi-Fi Sound Quality

Excellent Hi-Fi Sound Characteristics ... Rotary Audio Head System

Recording a TV Program Simultaneously with Sound from a Stereo System ... Simulcast Recording

Versatile Special Functions

Variable Speed Search Function for quickly locating a desired scene in Forward or Reverse direction ... Shuttle Search

Ease of locating precisely the desired frame...Jog Search

For quick access to a desired tape segment...Automatic Tape Program Search to any of 9 programs

For More Creative Video Enjoyment (Making Animated Movies, etc.) ... Frame-by Frame Recording Function

Creating Dramatic Effects by Reducing Time-Consuming Actions into Seconds ... Interval Recording Function

Convenient Editing Functions

Adding New Pictures and Sound on Recorded Tapes ... Insert Editing & Audio Dubbing Functions

Connectiong Another VTR to the Camera Remote Control Sockets Enables Automatic Editing ... Automatic Assemble Editing Function

Easy operation

Selection of the Recording Duration with a Single Key ... One-Touch Timer Recording

All VTR Operations Can Be Checked at a Glance ... Nult-Function Display

Control of Most VTR Functions from a Distance ... Wireless Remote Control

Automatic Functions for Added Operating Ease

The VTR Turns On Automatically When a Cassette Is Inserted. If the Cassette Tab is Missing, Playback Starts Immediately ... Auto Power On & Auto Play

The Cassette Can Be Ejected even with the TVR off ... Power Off Eject

Rcording on a Cassette without Tab is Prevented and Tape is Ejected (Except OTR Recording) ... Auto Eject

Time Shift Recording

Timer-Recording a Desired Program and Watching It Later ... 14-Day, 8-Program Timer

Other Functions

Continuous Recording of up to 8 Hours on a Single Cassette is Possible ... SP/EP Mode Selection

Adjusting the Crispness of the Playback Picture Contours to Your Preference ... Picture Sharpness Control

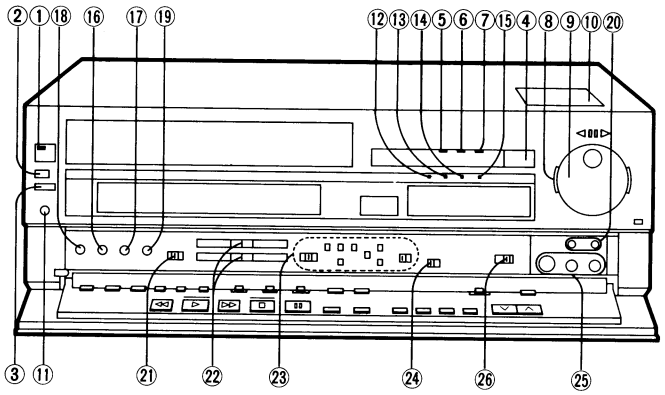
Protection of Timer Programming for up to 1 Hour in Case of Power Failure ... Power Back-up System

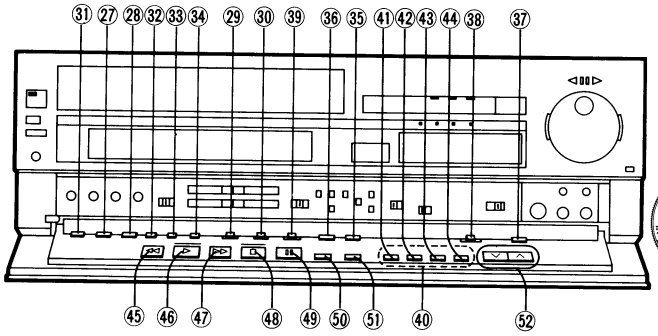
Increased Tape Winding Speed Saves Time ... High Speed FF & REW Functions

Tape Counter Shows Elapsed Recording/Playback Time ... Real Time Counter

Confirmation at a Glance How Much Time Is Left on the Tape ... Remaining Tape Time Indication

# CONTROLS AND COMPONENTS




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(1) Power On/Off Switch with Indicator

(2) Cassette-In Indecator

(3) Eject Button

(4) Search Button

(5) Interval Recording Indecator

(6) Jog Indicator

(7) Shuttle Indecator

(8) Shuttle Ring

(9) Jog Dial

(10) Tuner-Set-up Controls

(11) Headphones Socket

(12) Edit Indicator
When the Edit Switch is set to "ON", this Indicator lights up.

(13) Line-In 1 Indecator

(14) Line-In 2 Indicator

(15) Simulcast Indicator

(16) Tracking Control

(17) Slow Tracking Control

(18) Headphone Volume Control

(19) Picture Sharpness Control

(20) Microphone Jacks (Left, Right)

(21) Level Meter Mode Selector
For selecting the Level Meter function.
Hi-Fi TRACKING: For controlling the tracking of the hi-fi sound.
AUDIO LEVEL: For checking the audio level.
OFF: When Level Meter indication is not desired.

(22) Audio Recording Level Controls (Left, Right)

(23) Timer Controls

(24) MPX Filter Switch

(25) Line In 2 Connectors
Used to connect the VTR with another VTR, etc.

(26) Input Signal Selector
Set this switch according to the input signals.
TUNER: When recording a TV program. When selecting the channel on the VTR to watch a TV program on the TV set.
LINE IN: (1, 2) When recording signals via the Video and Audio Input Jacks. When making audio-only recordings.
SIMUL: When making Simulcast recordings.

(27) Audio Playback Mode Selector

(28) Hi-Fi/Normal Mix Button

(29) Remaining Tape Timer Selector

(30) Audio Rec Level Control Selector

(31) VTR/TV Selector
VTR: When watching a TV program selected with the Channel Selection Up/Down Buttons on the VTR.
The "VTR" Indication appears in the Multi-Function Display.
*When playback is started, this switch automatically changes over to "VTR".
TV: When watching a TV program or when recording a TV program while watching another program. The "VTR" Indication in the Multi-Function Display disappears.
*When the VTR is turned off, this switch automatically changes over to "TV".

(32) Memory/Serch Button

(33) Reset/Index Button

(34) Tape Counter/Remaining Tape Time Selector

(35) Insert Editing Botton

(36) Audio Dubbing Button

(37) OTR Button

(38) Edit switch
ON: To minimize deterioration of the picture quality when using this VTR as playback VTR for editing or dubbing. Also use this position if the picture is grainy due to weak reception.
OFF: For ordinary use of the VTR.

(39) Tape Speed Selector
SP: The maximum recording time is the time indicated on the tape.
EP: The maximum recording time is three times as long as the time indicated on the tape. in the EP mode, the picture and sound quality are not as good as in the SP mode.

(40) Use these buttons when performing automatic assemble editing.

(41) In Button

(42) Set Button

(43) Out Button

(44) Edit Start Button

(45) Rewind◀◀/Reverse◀◀ Button

(46) Play Button

(47) Fast Forward▶▶/Forward▶▶ Button

(48) Stop Button (■)

(49) Pause/Still Button (❚❚)

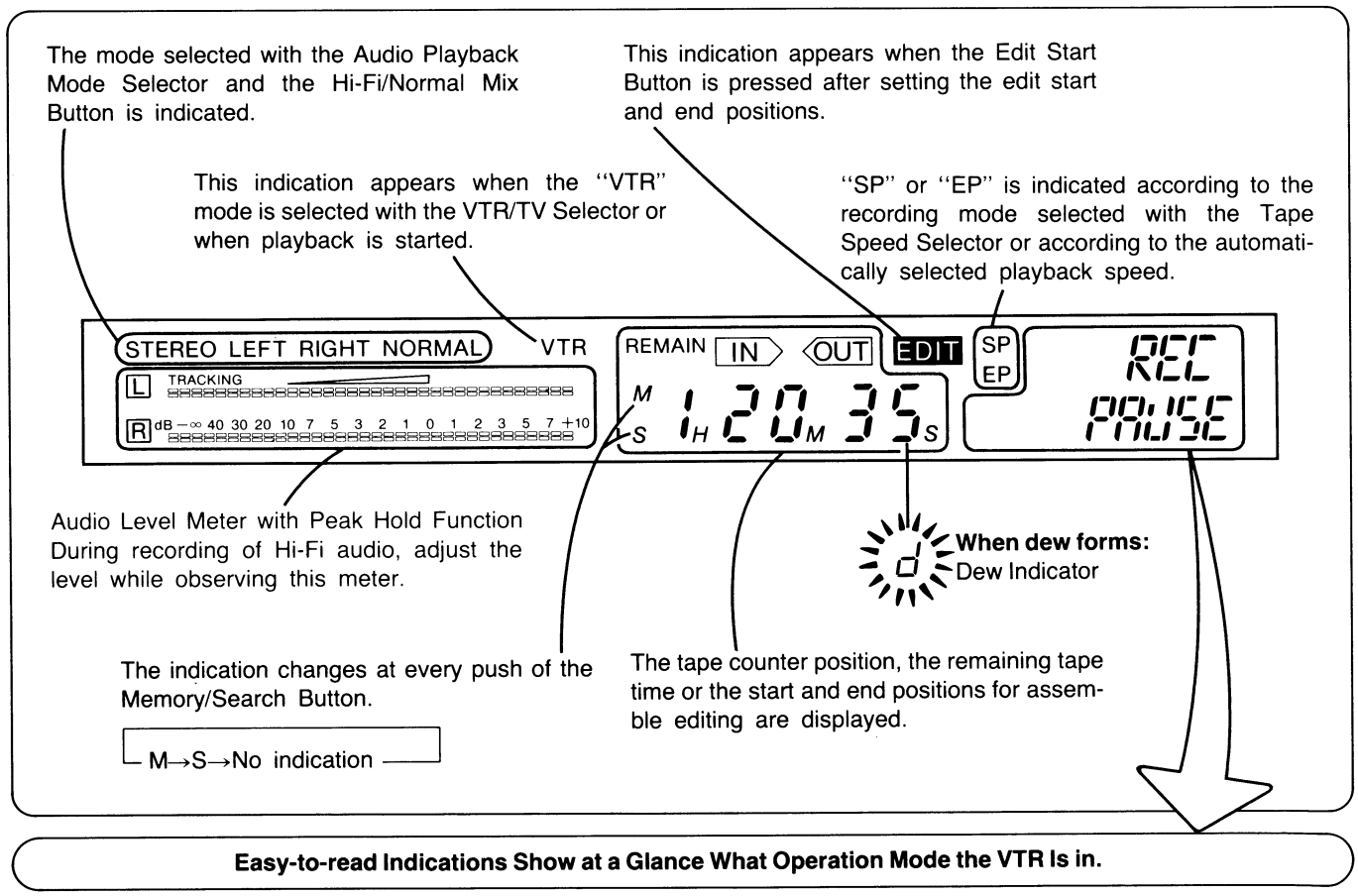
(50) Auto Audio Mute Button

(51) Record Button (●)

(52) Channel Selection Up and Down Buttons

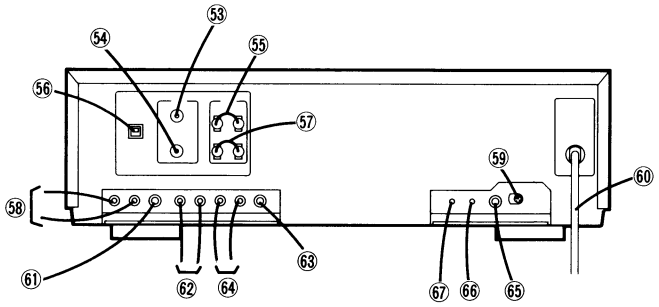
## Multi-Function Display

Whenever an operation button is pressed, the activated function is immediately indicated in this display.




**Easy-to-read Indications Show at a Glance What Operation Mode the VTR Is in.**

## Rear Panel




(53) VHF OUT Terminal

(54) VHF IN Terminal

(55) UHF OUT Terminals

(56) RF Channel Selector Switch

(57) UHF IN Terminals

(58) AUDIO IN Jack 1

(59) Remote Jack

(60) Power Cord

(61) VIDEO IN Connector 1

(62) AUDIO OUT Jack

(63) VIDEO OUT Connector

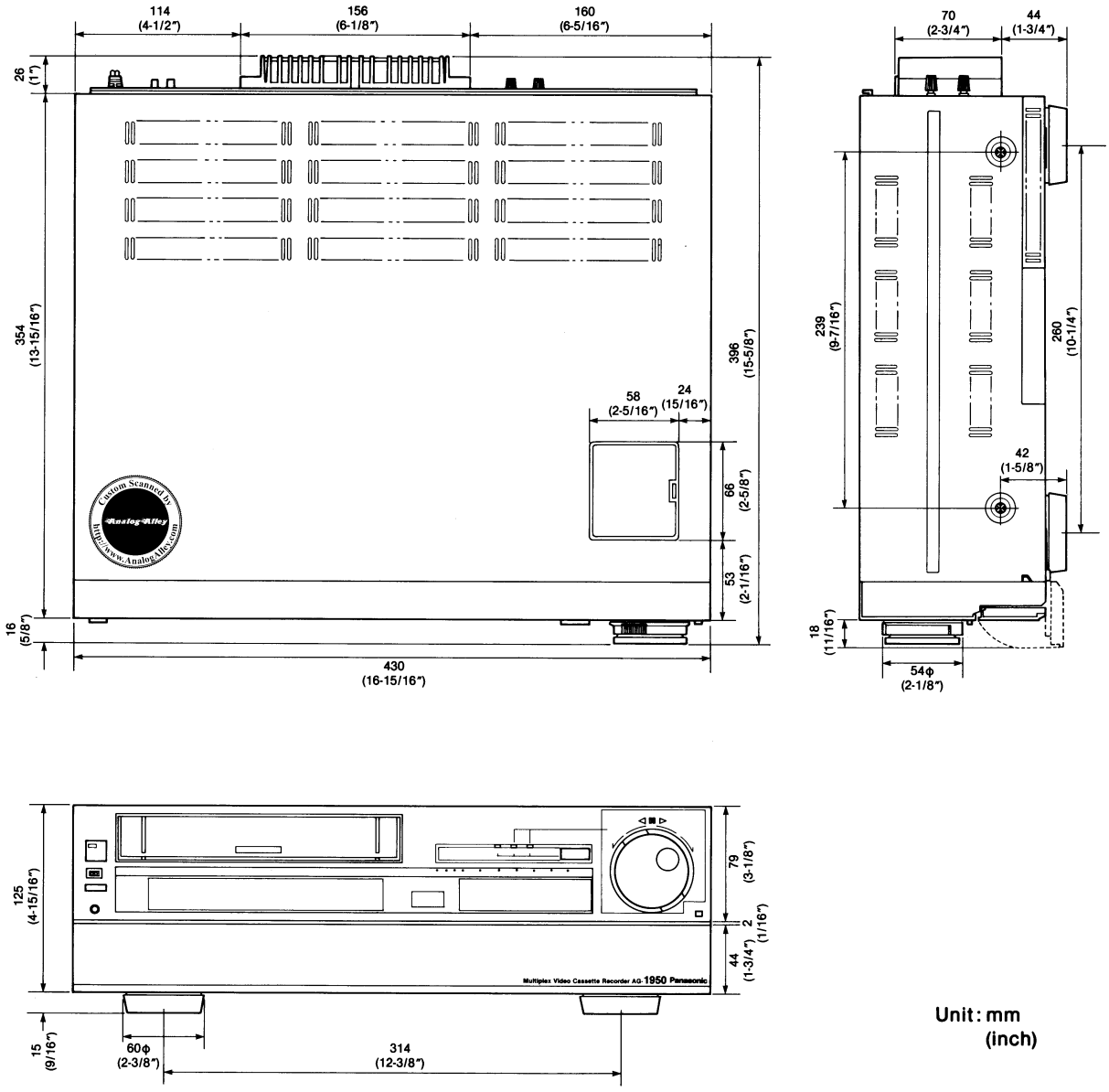
(64) AUDIO OUT Jack

(65) VIDEO OUT Jack
(used for editing, e.g., dubbing, etc.)

(66) Editing Control Jack

(67) Camera Remote Control Jack

# DIMENSIONS




Unit: mm
(inch)

# SAFETY PRECAUTIONS

## GENERAL GUIDELINES

1. When servicing, observe the original lead dress. If a short circuit is found, replace all parts which have been overheated or damaged by the short circuit.
2. After servicing, see to it that all the protective devices such as insulation barriers, insulation papers shields are properly installed.
3. After servicing, make the following leakage current checks to prevent the customer from being exposed to shock hazards.

## LEAKAGE CURRENT COLD CHECK

1. Unplug the AC cord and connect a jumper between the two prongs on the plug.
2. Measure the resistance value, with an ohmmeter, between the jumpered AC plug and each exposed metallic cabinet part on the equipment such as screwheads, connectors, control shafts, etc. When the exposed metallic part has a return path to the chassis, the reading should be between 1MΩ and 5.2MΩ.
   When the exposed metal does not have a return path to the chassis, the reading must be ∞.

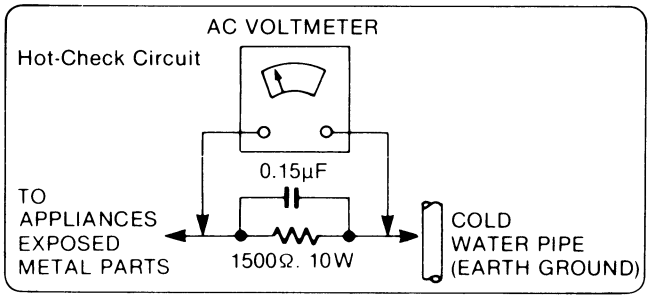



**Figure 1**

## LEAKAGE CURRENT HOT CHECK (See Figure 1)

1. Plug the AC cord directly into the AC outlet. Do not use an isolation transformer for this check.
2. Connect a 1.5kΩ, 10 watts resistor, in parallel with a 0.15μF capacitor, between each exposed metallic part on the set and a good earth ground such as a water pipe, as shown in Figure 1.
3. Use an AC voltmeter, with 1000 ohms/volt or more sensitivity, to measure the potential across the resistor.
4. Check each exposed metallic part, and measure the voltage at each point.
5. Reverse the AC plug in the AC outlet repeat each of the above measurements.
6. The potential at any point should not exceed 0.75 volts RMS. A leakage current tester (Simpson Model 229 equivalent) may be used to make the hot checks, leakage current must not exceed 1/2 milliamp. In case a measurement is outside of the limits specified, there is a possibility of a shock hazard, and the equipment should be repaired and rechecked before it is returned to the customer.

# ELECTROSTATICALLY SENSITIVE (ES) DEVICES

Some semiconductor (solid state) devices can be damaged easily by static electricity. Such components commonly are called Electrostatically Sensitive (ES) Devices. Examples of typical ES devices are integrated circuits and some field-effect transistors and semiconductor "chip" components. The following techniques should be used to help reduce the incidence of component damage caused by static electricity.

1. Immediately before handling any semiconductor component or semiconductor-equipped assembly, drain off any electrostatic charge on your body by touching a known earth ground. Alternatively, obtain and wear a commercially available discharging wrist strap device, which should be removed for potential shock reasons prior to applying power to the unit under test.
2. After removing an electrical assembly equipped with ES devices, place the assembly on a conductive surface such as aluminum foil, to prevent electrostatic charge buildup or exposure of the assembly.
3. Use only a grounded-tip soldering iron to solder or unsolder ES devices.
4. Use only an anti-static solder removal device. Some solder removal devices not classified as "anti-static" can generate electrical charges sufficient to damage ES devices.
5. Do not use freon-propelled chemicals. These can generate electrical charges sufficient to damage ES devices.
6. Do not remove a replacement ES device from its protective package until immediately before you are ready to install it. (Most replacement ES devices are packaged with leads electrically shorted together by conductive foam, aluminum foil or comparable conductive material).
7. Immediately before removing the protective material from the leads of a replacement ES device, touch the protective material to the chassis or circuit assembly into which the device will be installed.
   CAUTION: Be sure no power is applied to the chassis or circuit, and observe all other safety precautions.
8. Minimize bodily motions when handling unpackaged replacement ES devices. (Otherwise harmless motion such as the brushing together of your clothes fabric or the lifting of your foot from a carpeted floor can generate static electricity sufficient to damage an ES device).

# REGULAR MAINTENANCE

The purpose of periodic maintenance is to preserve the functioning of this machine throughout it's useful life. The user or service dealer should perform these maintenance regularly to ensure that maximum utility is obtained from the machine.

## REGULAR MAINTENANCE IS NECESSARY

The VCR is a complicated piece of equipment. It contains many belts, rollers, heads etc., which become worn, and deteriorate as time goes by, causing trouble. Dust and dirt will also impede the proper functioning of the machine. In light of this, it is very important that overall maintenance be done according to the maintenance chart to maintain the functions of the VCR, and to avoid accidental problems. This maintenance should also be performed after any repairs are done on the equipment.

## REGULAR MAINTENANCE IS RECOMMENDED

The VCR used for business applications requires particular attention for several reasons. The installation conditions and applications are not always the best. Long use times, or poor environmental conditions may adversely affect the lifespan and performance of the machine. Regular maintenance assures that the purchaser obtains the maximum value for his expenditure. Accordingly, the necessity of regular maintenance should be fully explained at the time of sale, as well as during after-sale repairs.

## MAINTENANCE PARTS LOCATION

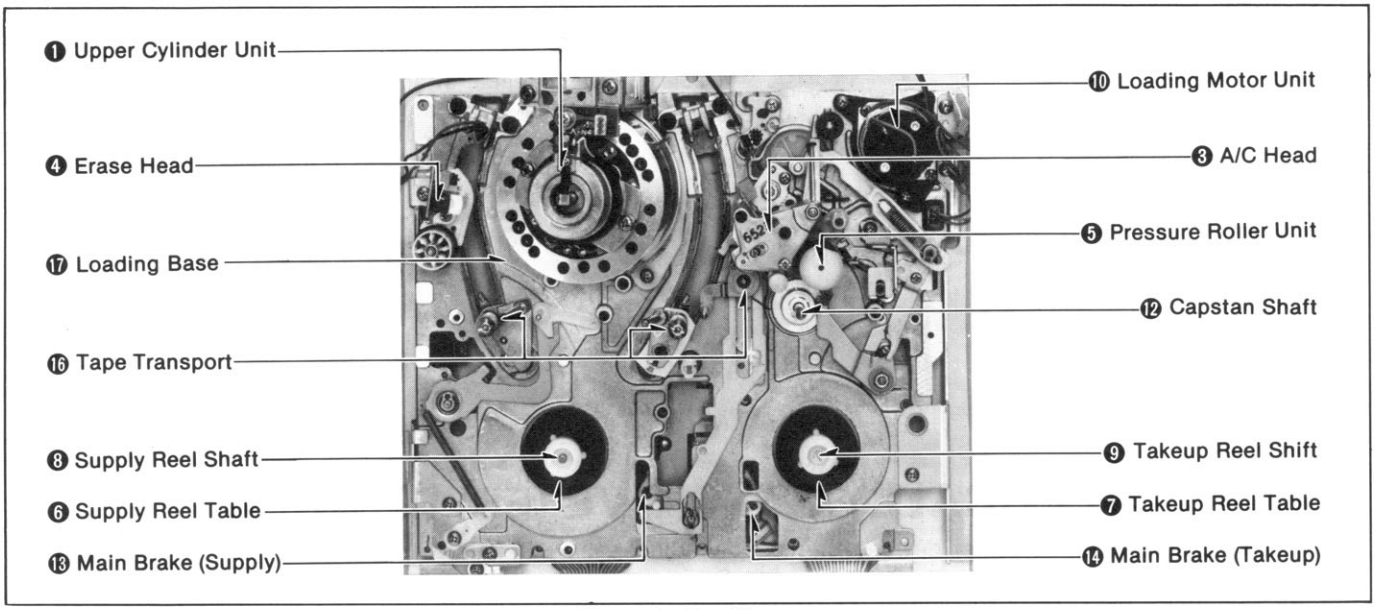
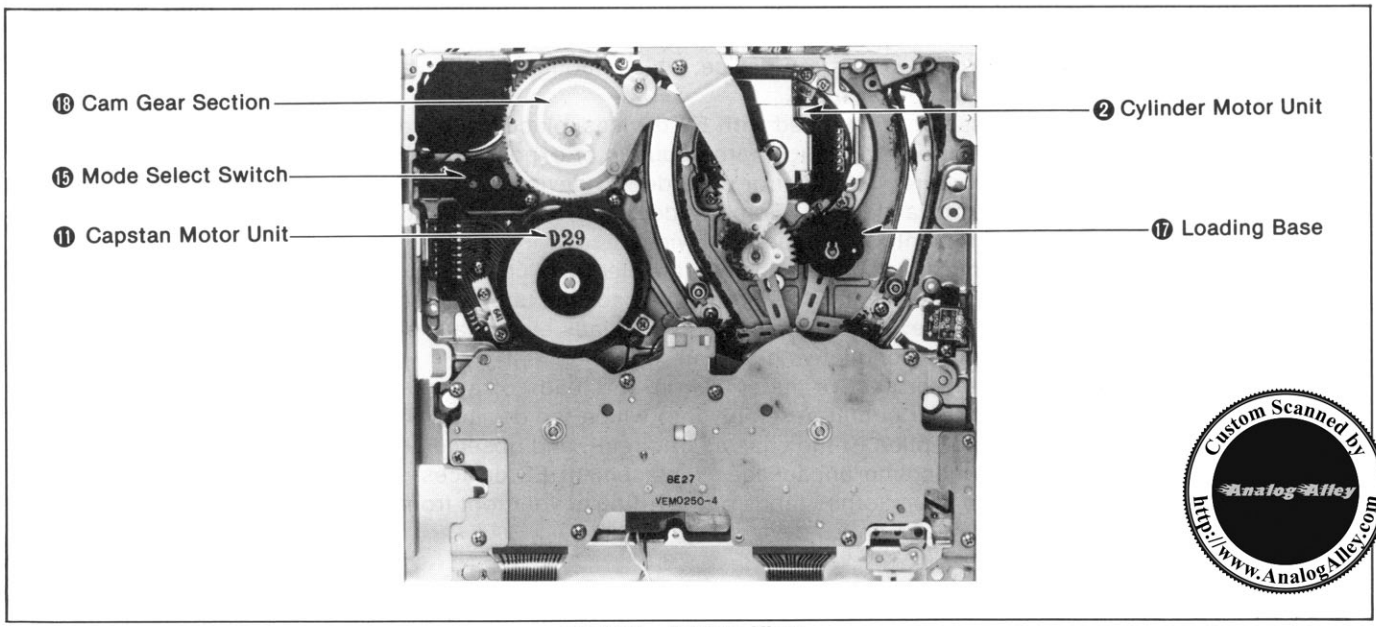



**Figure 1 Top View**




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**Figure 2 Bottom View**

# MAINTENANCE CHART

The following periodic maintenance is required to prolong the life of the machine.
Since the parts are keyed to the Inner Parts Location Diagram, when you replace the following parts, refer to the diagram.

| | Parts Name | Unit or Part No. | Hour | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 500 | 1000 | 1500 | 2000 | 2500 | 3000 | 3500 | 4000 | 4500 | 5000 | Page |
| ❶ | Upper Cylinder Unit | VEH0313 | ● | ◎ | ● | ◎ | ● | ◎ | ● | ◎ | ● | ◎ | 2-11, 2-12 |
| ❷ | Cylinder Motor Unit | VEG0419 | ● | ● | ● | ● | ● | ● | ● | ● | ● | ◎ | 2-11, 2-12 |
| ❸ | A/C Head | VBR0096 | ● | ● | ● | ● | ● | ● | ● | ◎ | ● | ● | 2-15~2-18 |
| ❹ | Erase Head | VBS0031 | ● | ● | ● | ● | ● | ● | ● | ◎ | ● | ● | |
| ❺ | Pressure Roller Unit | VXL1389 | ● | ● | ◎ | ● | ● | ◎ | ● | ● | ◎ | ● | ——— |
| ❻ | Supply Reel Table | VXR0122 | ● | ● | ● | ● | ● | ● | ● | ◎ | ● | ● | 2-19, 2-20 |
| ❼ | Takeup Reel Table | VXR0139 | ● | ● | ● | ● | ● | ● | ● | ◎ | ● | ● | 2-19, 2-20 |
| ❽ | Supply Reel Shaft | ——— | | | | ▲ | | | | ▲ | | | 2-19, 2-20 |
| ❾ | Takeup Reel Shift | ——— | | | | ▲ | | | | ▲ | | | 2-19, 2-20 |
| ❿ | Loading Motor Unit | VEM0207 | | | | ◎ | | | | ◎ | | | 2-22 |
| ⓫ | Capstan Motor Unit | VEM0206 | | | | | | | | | | ◎ | 2-20 |
| ⓬ | Capstan Shaft | ——— | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ——— |
| ⓭ | Main Brake (Supply) | VXZ0173 | | | | ◎ | | | | ◎ | | | 2-18, 2-19 |
| ⓮ | Main Brake (Takeup) | VXZ0212 | | | | ◎ | | | | ◎ | | | 2-18, 2-19 |
| ⓯ | Mode Select Switch | VSS0099 | | | | | | | | ◎ | | | 2-22 |
| ⓰ | Tape Transport | ——— | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | 2-14, 2-15 |
| ⓱ | Loading Base | ——— | | | | ■ | | | | ■ | | | ——— |
| ⓲ | Cam Gear Section | ——— | | | | ■ | | | | ■ | | | 2-21, 2-22, 2-23 |

*** NOTE:**

| Symbol | Maintenance | Requirement | Remark |
|---|---|---|---|
| ● | Cleaning | Freon TF, Ethyl-alcohol or Cleaning Liquid (Purchase locally) | Wipe dirt from the parts using soft cloth impregnated with Freon TF or Ethyl-Alcohol.<br>Note: When cleaning rubber parts, avoid using excessive alcohol since it may accelerate deterioration of these parts. After cleaning with alcohol, wipe the alcohol quickly and thoroughly. |
| ◎ | Replacement | ——— | ——— |
| ▲ | Lubrication | High Quality Spindle Oil (Purchase locally) | Supply one or two drops of oil. |
| ■ | Greasing | Molytone Grease (MOR265) | Wipe the old Grease and apply new grease. |

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# DISASSEMBLY PROCEDURES

## 1. DISASSEMBLY FLOWCHART (Figure D1)

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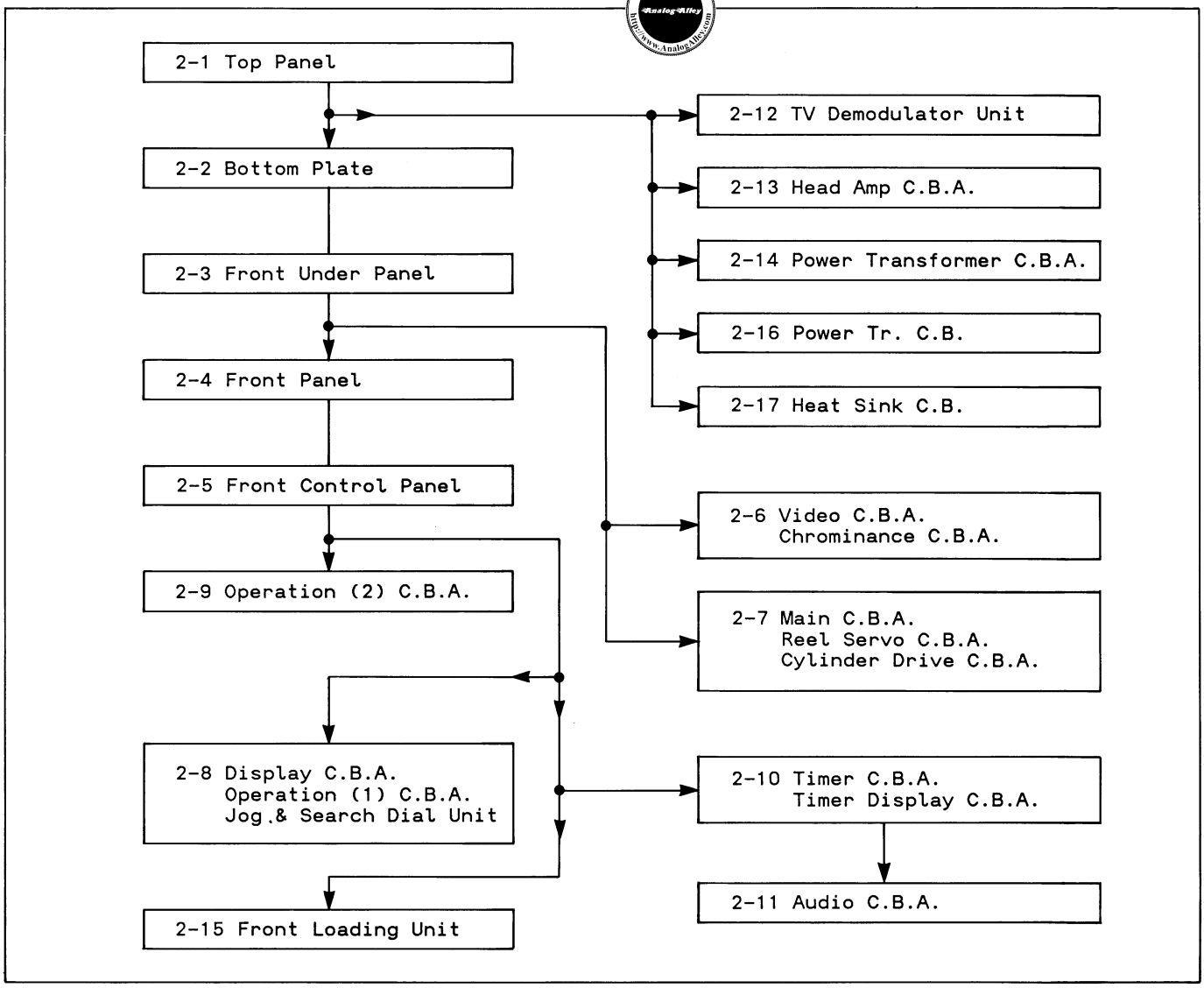



**Figure D1**

## 2. DETAILED DISASSEMBLY METHOD

2-1. REMOVAL OF THE TOP PANEL

1. Unscrew the 4 screws (A) on the Top Panel. (Figure D2)
2. Carefully lift the rear of case to remove.

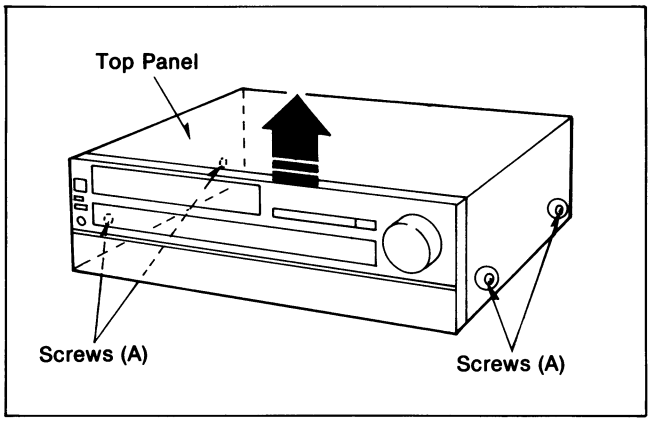



**Figure D2**

2-2. REMOVAL OF THE BOTTOM PLATE
1. Unscrew the 8 screws (B). (Figure D3)
Note:
Do not remove the 4 rubber feet.

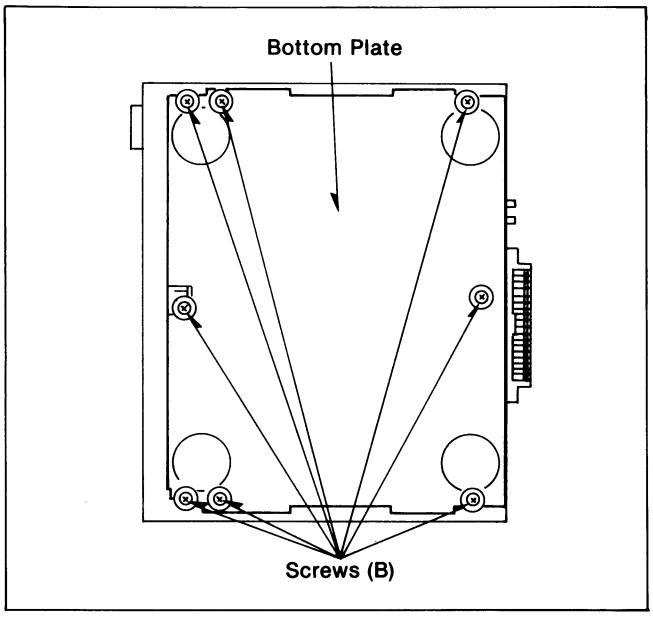



**Figure D3**

2-3. REMOVAL OF FRONT UNDER PANEL

1. Unlock the 2 locking portions (C). (Figur D4)

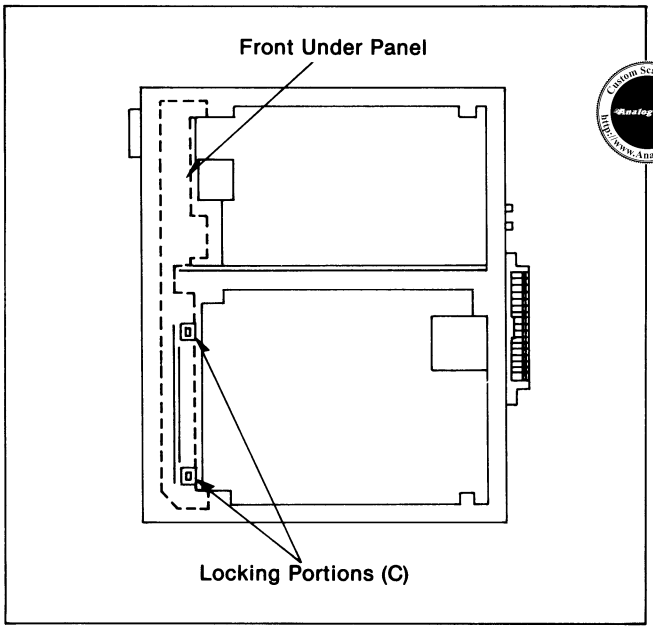



**Figure D4**

2-4. REMOVAL OF THE FRONT PANEL

1. Remove the Jog Dial and Search Ling.
2. Unscrew the 3 screws (D) and unlock the 5 locking portions (E).
3. Turn the Front Panel toward the front of the deck to remove. (Figure D5)

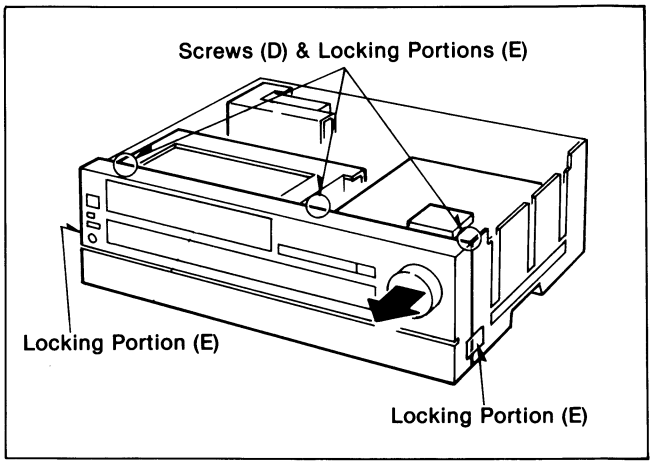



**Figure D5**

2-5. REMOVAL OF THE FRONT CONTROL PANEL.

1. Disconnect the flexible jumper from the connector PS6210 on the Front Connection C.B.
2. Unscrew the 4 screws (E). (Figure D6)

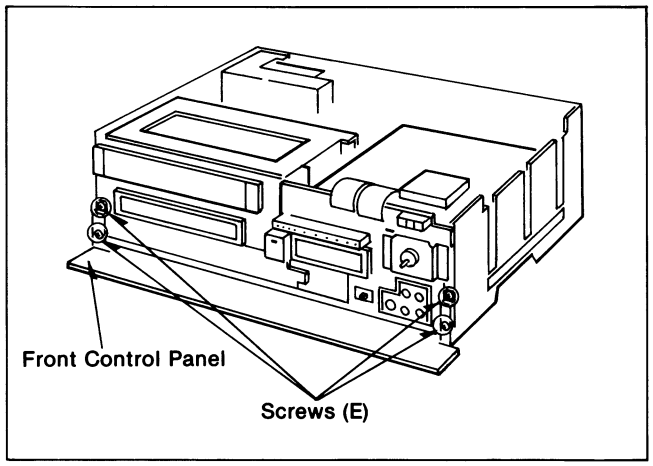



**Figure D6**

2-6. OPENING OF THE VIDEO C.B.A. AND CHROMINACE C.B.A.

1. Unscrew a screw (F) on the input terminal on front side. (Figure D7)
2. Unscrew the 4 screws (G) and unlock the 2 locking portions (H). (Figure D8)
3. Open up the Video C.B.A. with Chrominance C.B.A. (Figure D9)
4. Unlock the 2 lock pins (I).
5. Open up the Chrominace C.B.A. (Figure D9)

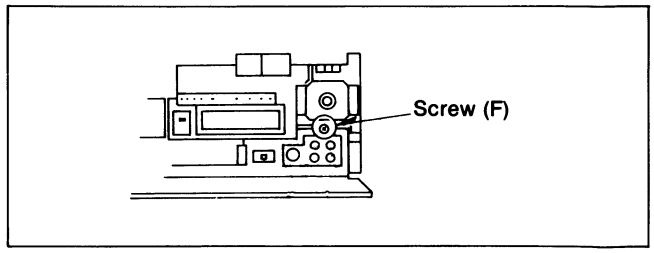



**Figure D7**

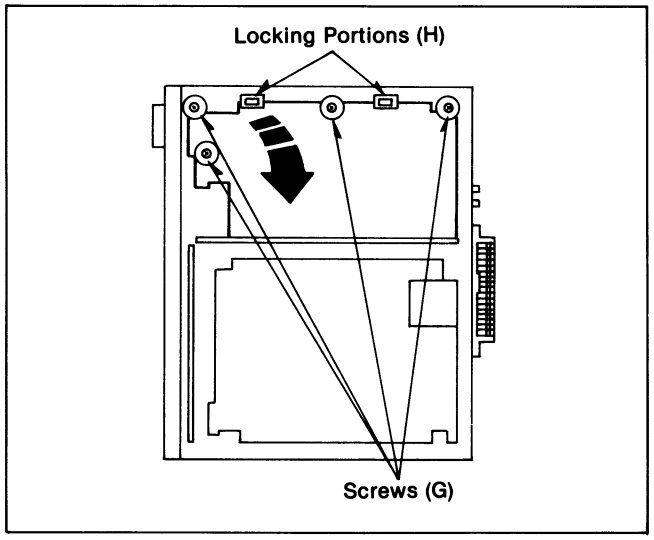



Figure D8

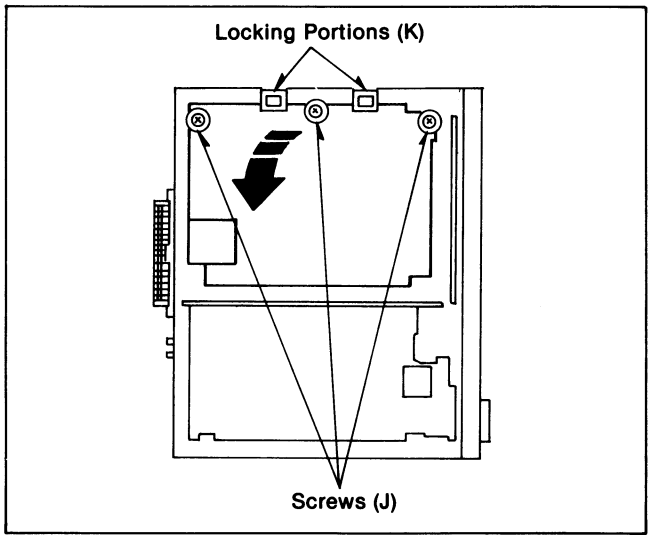



Figure D10

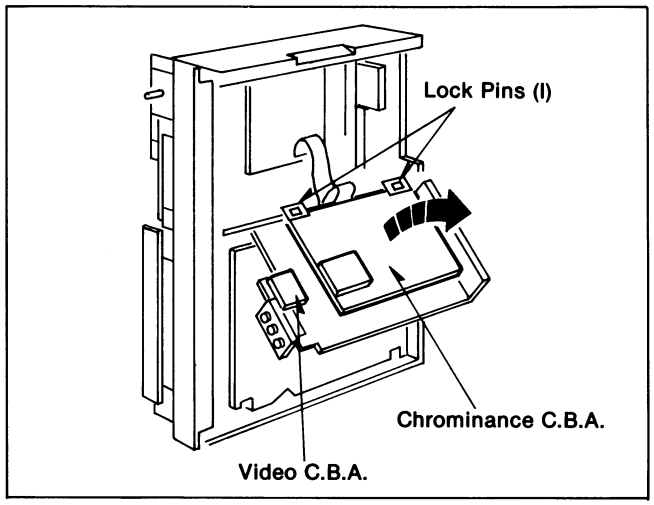



Figure D9

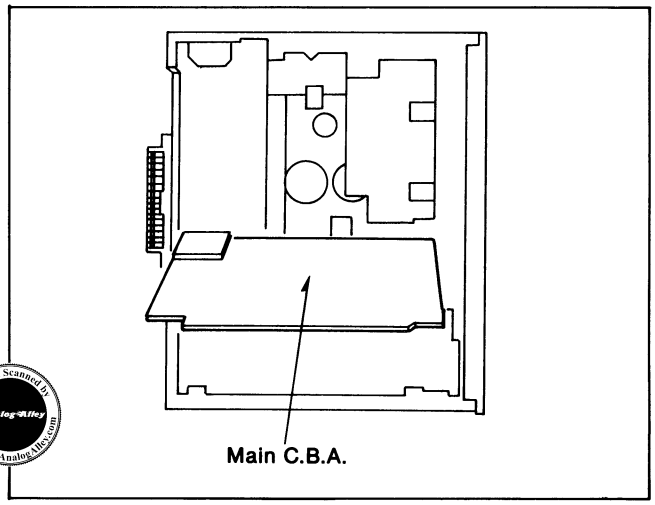



Figure D11

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2-7. OPENING OF MAIN C.B.A., REEL SERVO C.B.A. AND CYLINDER DRIVE C.B.A.

1. Unscrew the 3 screws (J) and unlock the 2 locking portions (K) on the Main C.B.A. (Figure D10)
2. Open up the Main C.B.A. (Figure D11)
3. Unscrew the 2 screws (L) on the Reel Servo C.B.A. and remove it. (Figure D12)
4. Unscrew the 2 screws (M) on the Cylinder Drive C.B.A. and remove it. (Figure D12)

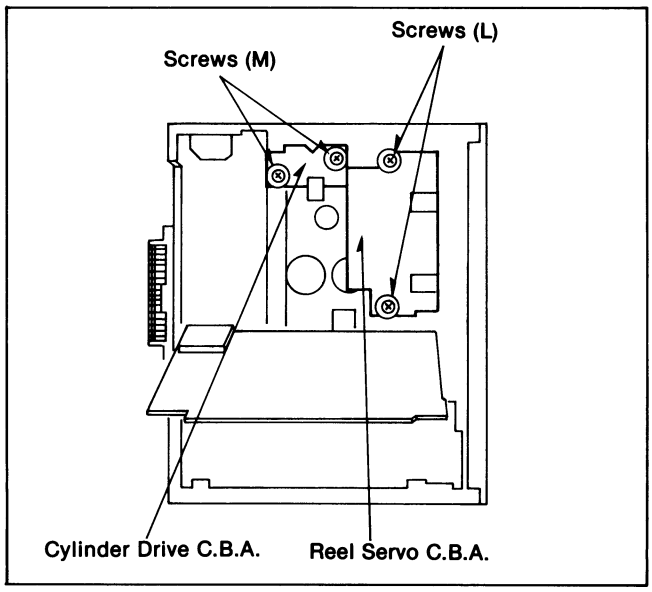



Figure D12

2-8. OPEINIG OF THE DISPLAY C.B.A., OPERATION (1) C.B.A. AND JOG & SEARCH DIAL UNIT

1. Unscrew the 2 screws (M) and remove the Display C.B.A. (Figure D13)
2. Unscrew the 3 screws (N) and remove the Operation (1) C.B.A. (Figure D13)
3. Unscrew the 4 screws (O) and remove the Jog & Search Dial Unit (Figure D13).

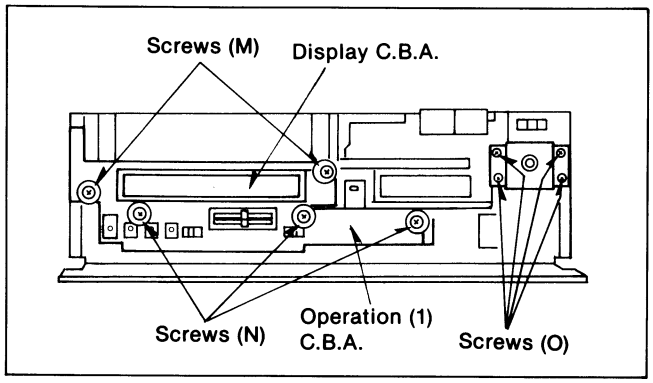



**Figure D13**

2-9. OPENING OF THE OPERATION (2) C.B.A.

1. Removal of the Front Control Panel. (Refer to 1-2-6)
2. Unscrew the 3 screws (P) and opening of Front Control Panel. (Figure D14)
3. Unscrew the 4 screws (Q) and remove the Operation (2) C.B.A. (Figure D15)

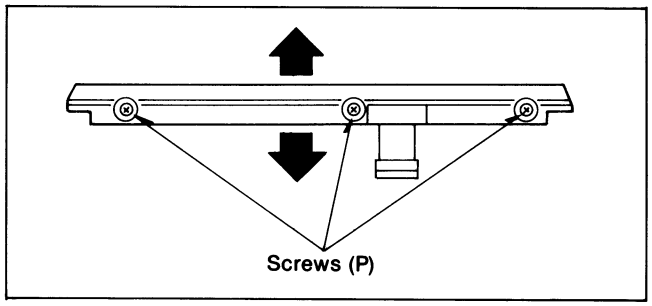



**Figure D14**

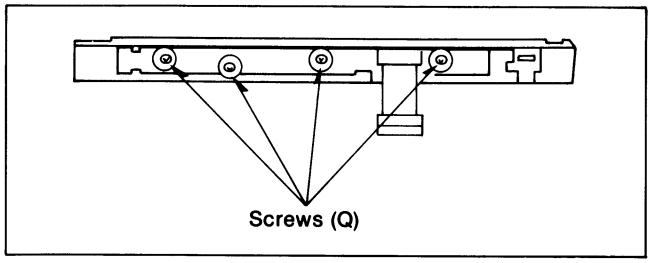



**Figure D15**

2-10. OPENING OF THE TIMER C.B.A. AND TIMER DISPLAY C.B.A.

1. Unscrew the 2 screws (R) and unlock a locking portion (S), and then remove the Timer Display C.B.A. (Figure D16)
2. Disconnect the connector P7504 on the Timer C.B.A. (Figure D17)
3. Unlock the 2 locking portions (T) and opening of the Timer C.B.A. (Figure D17)

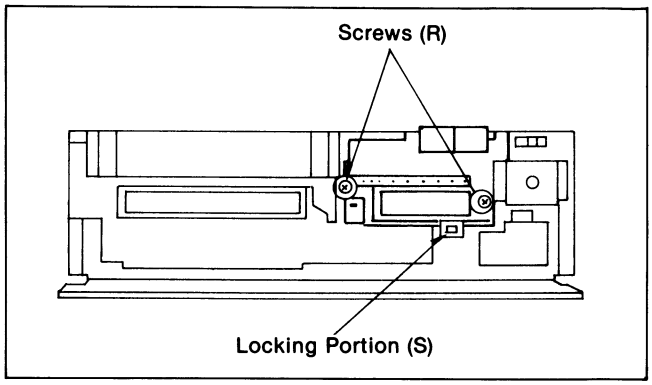



**Figure D16**

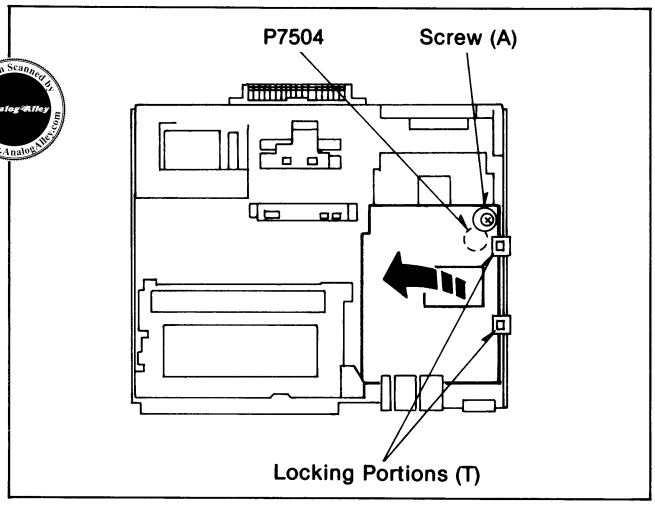



**Figure D17**

2-11. OPENING OF THE AUDIO C.B.A.

Operating of the Timer C.B.A. and Timer Display C.B.A. (Refer to 2-10)
2. Unscrew the 2 screws (U) and open up the Audio C.B.A. (Figure D18)

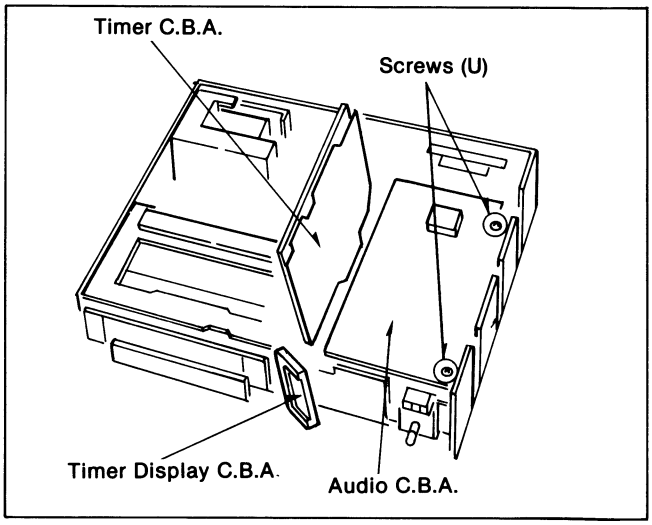



**Figure D18**

2-12. OPENING OF THE TV DEMODULATOR UNIT

1. Unscrew a screw (V) and TV Demodulator Unit from the deck. (Figure D19)
2. Unslder the point "A" on the Tuner C.B.A. (Figure D20)
3. Opening of the TV Demodulator Unit (Figure D21)

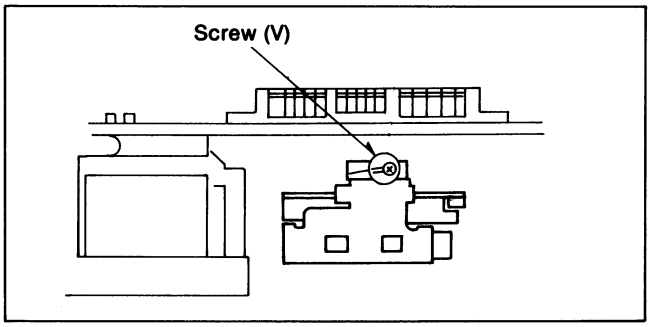



**Figure D19**

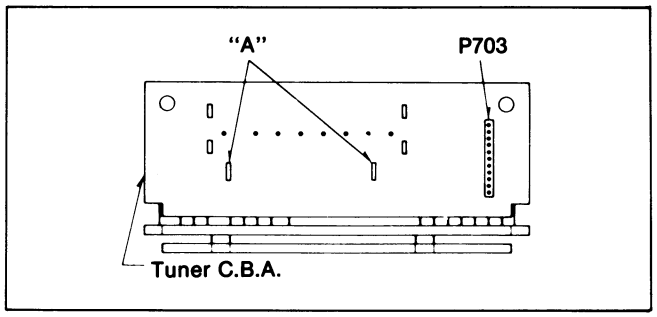



**Figure D20**

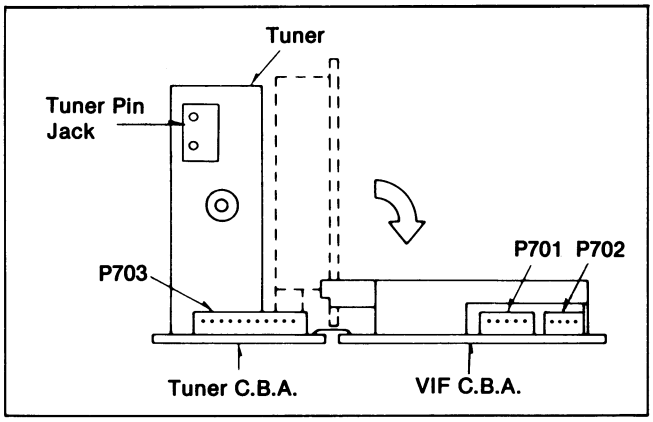



**Figure D21**

2-13.OPENING OF THE HEAD AMP C.B.A.

1. Unscrew the 2 screws (W) and remove the shield case. (Figure D22)

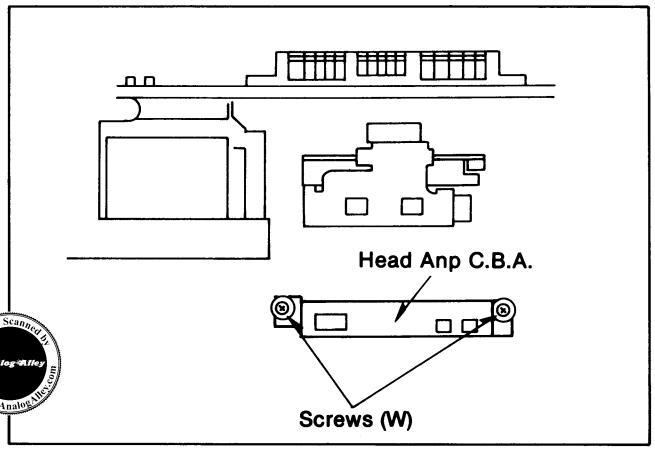



**Figure D22**

2-14.OPENING OF THE POWERTRANSFORMER C.B.A.

1. Unscrew a screw (X) and remove the C.B.A Cover.
2. Unscrew the 3 screws (Y) on the Power Transformer and lift up the Power Transformer togather with Power Transformer C.B.A. (Figure D23)

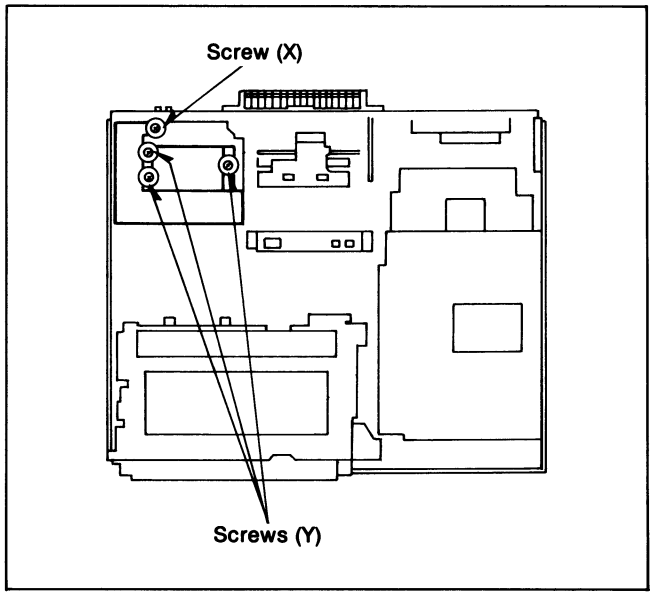



**Figure D23**

2-15.REMOVAL OF THE FRONT LOADING UNIT

1. Unscrew the 4 screws (Z) on the Front Loading Unit. (Figure D24)
2. Carefully lift the Front Loading Unit out.

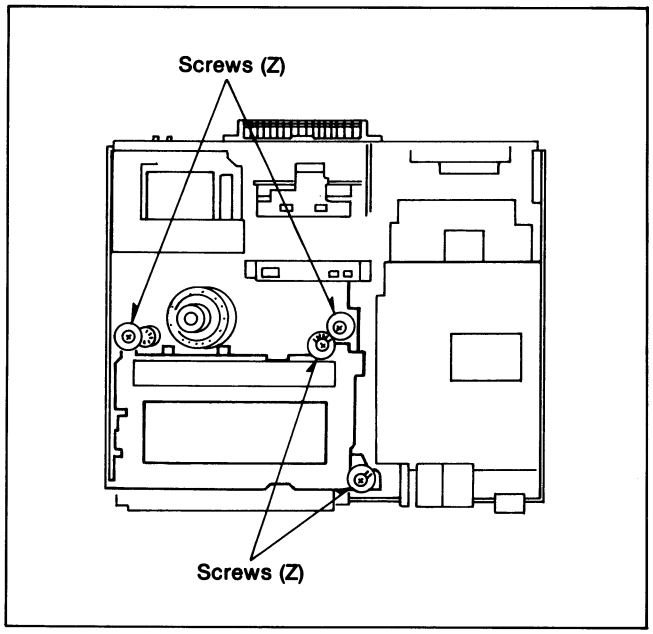



**Figure D24**

2-16.REMOVING OF THE POWER TR. C.B.

1. Unscrew the 2 screws (F) on the Power Tr. C.B. (Figure D25) and carefully pull out the C.B. from the deck.

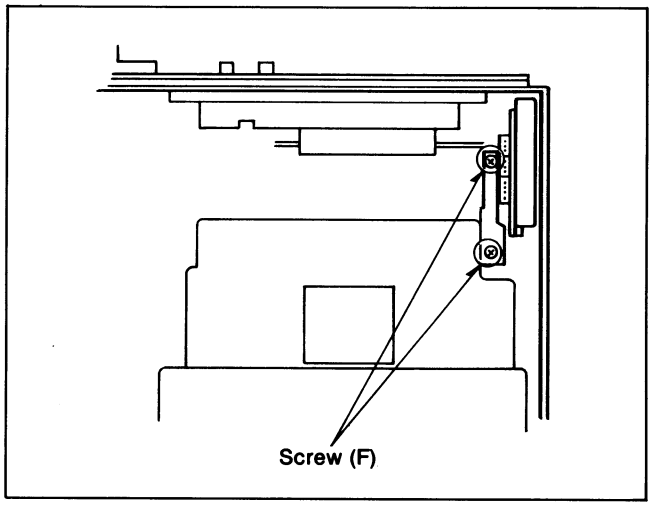



**Figure D25**

2-17.REMOVING OF THE HEAT SINK C.B.

1. Unscrew the 2 screws (A) and remove the heat sink cover. (Figure D26)
2. Unscrew the 2 screws (B) and opeing of the heat sink. (Figure D27)
3. Unscrew the 2 screws (c) and remove the Heat Sink C.B. (Figure D28)

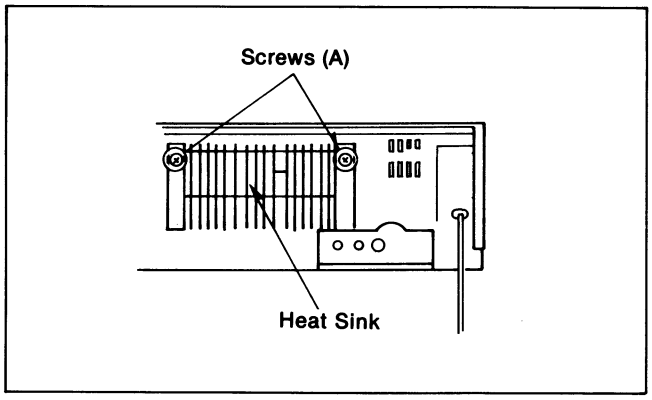



**Figure D26**

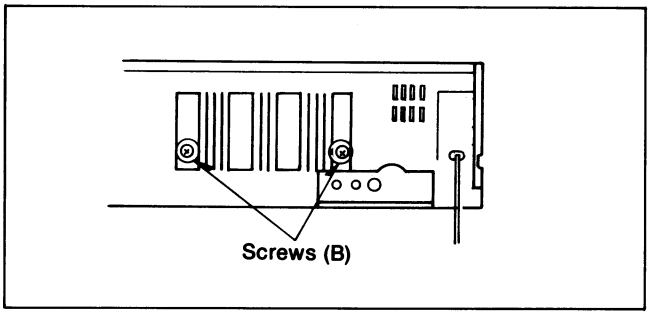



**Figure D27**

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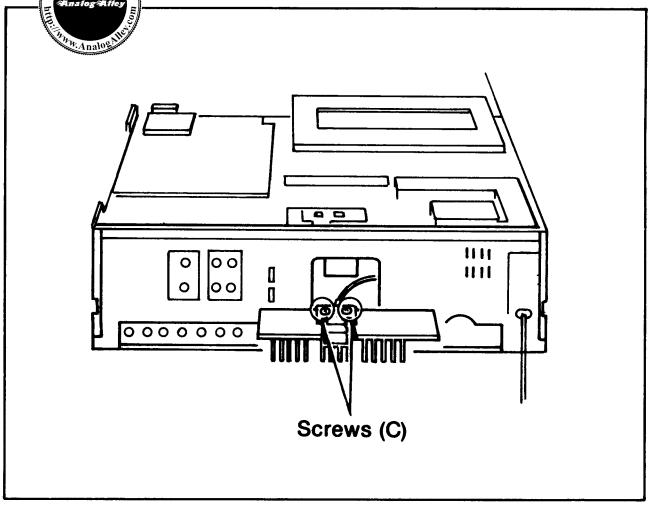



**Figure D28**

# MECHANICAL ADJUSTMENT PROCEDURES

This section provides complete mechnical adjustment procedues which may be required for mechanical section.

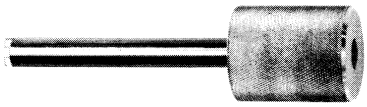
## 1. SERVICING FIXTURES & TOOLS

**VFM8080HMFP** **VHS Alignment Tape**

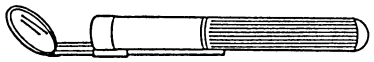


**Refer to Technical information order No. VRD-T-84-9001 VFM**

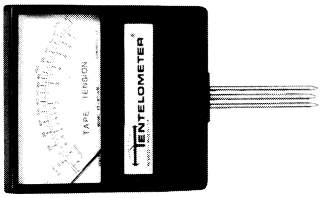
**VFK0137** **Post Adjustment Screwdriver**



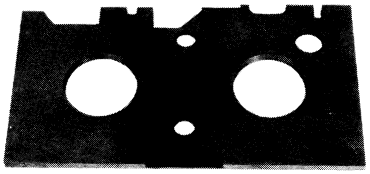
**VFK0343** **Check Light**



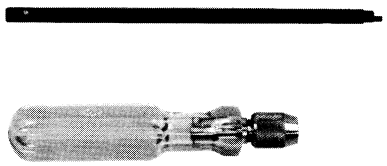
**VFK0132** **Back Tension Meter**
**(P2-T-H7-UM)** **(Tentelometer, Made in U.S.A.)**



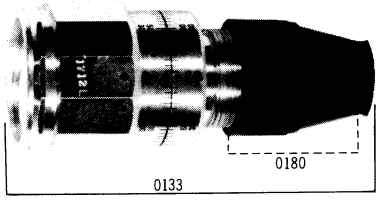

**VFKS0010** **Post Adjustment plate**



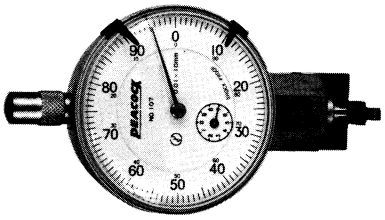
**VFK0192** **Eccentric Screwdriver**



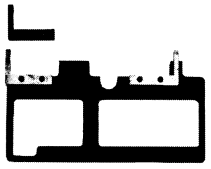
**VFK0133** **(Dial Torque Gauge)**
**VFK0180** **(Plastic Clamper Only)**



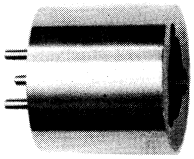

**VFKS0009** **Reel Table Height Gauge**



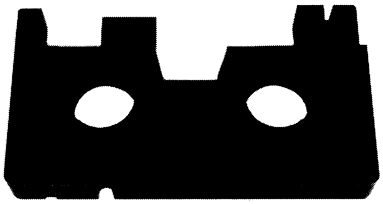

**VFK0236** **Tension Post Adj. Plate**
**VFK0264** **FWD Sensor Adj. Jig**
**VFK0265** **REV Sensor Adj. Jig**



**VFK0134** **Adaptor for VFK0133**



**VFKS0004** **Cassette Holder Fixture**



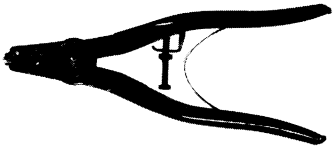
**VFKS0003** **H-Position Adj. Fixture**



**VFK0135** **Eccentric Screwdriver**



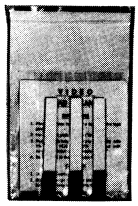
**VFK0144** **Retaining Ring Remover (3mmϕ)**
**VFK0145** **Retaining Ring Remover (4mmϕ)**



**MOR265**
**Morlytone Grease**



**VFK27**
**Head Cleaning Stick**



**VFK0136** **Fine Adjustment Screwdriver (3mmϕ)**



**VFK0146** **Hex. Wrench (0.9mm)**
**VFK76** **Hex. Wrench (1.5mm)**



**High Quality Machine Oil**
**<Purchase Loeally>**
**(Reel Shaft. Capstan Saft etc.)**

**Cleaning Liquid**
**(Freon TF., Alcohol)**
**<Purchase Locally>**
**(Tape Transport Rubber Parts etc.)**

# 2. CYLINDER MAINTENANCE PROCEDURES

## 2-1. REPLACEMENT OF THE UPPER CYLINDER UNIT

1. Remove the Top Panel and Front Loading Unit. (Refer to Disassembly Method)
2. Unscrew the screw (A) and remove the Earth Angle.
3. Unscrew the 2 screws (B) and remove the Stater Angle.
4. Unscrew the 2 screws (C) and remove the RT Rotor Base.
5. Unsolder the 12 Cylinder leads from the Head Relay Board, then unscrew the 2 screws (D) and remvoe the Upper cylinder Unit.
6. Place the new upper cylinder unit on the lower cylinder unit so that the screw holes match.
7. Tighten the 2 screws (D).
8. Solder the 12 Cylinder leads to the Head Relay Board.
   Be sure the wire colors and direction mark as shown in Figure M1 and M2 are matched up properly.
9. Reinstall the RT Rotor Base on the Upper Cylinder Unit and tighten the 2 screws (C).
10. Reinstall the Stator Angle on the RT Rotir Base and tighten the 2 screw (B).
11. Set the Earth Angle and tighten the screw (A).

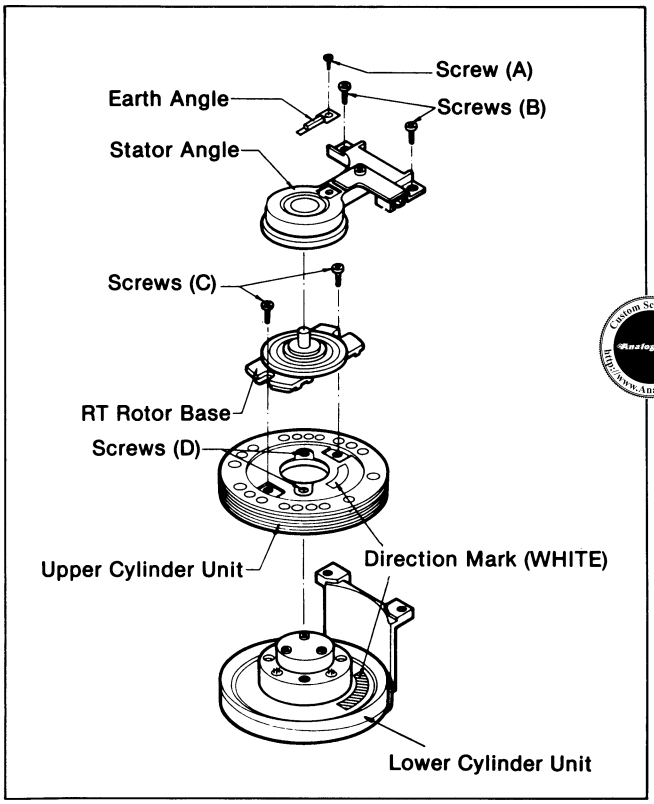
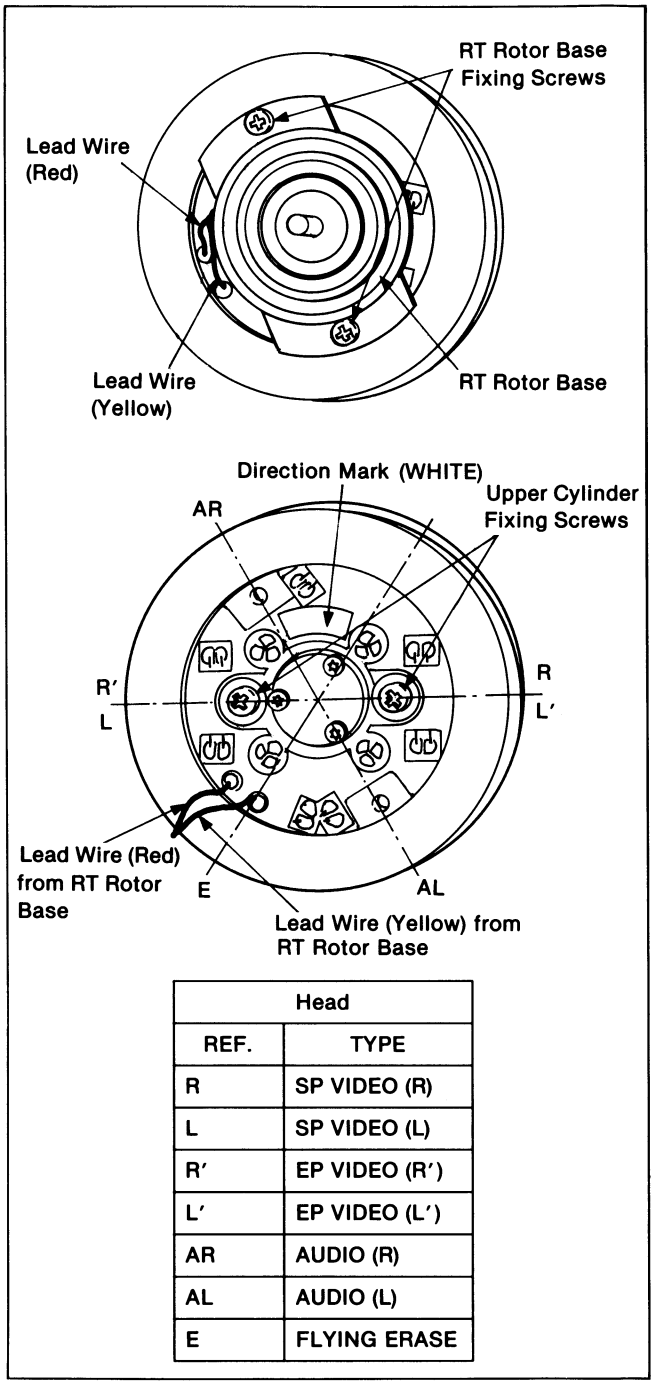



**Figure. M1 Cylinder Exploded View**




| Head | |
|---|---|
| REF. | TYPE |
| R | SP VIDEO (R) |
| L | SP VIDEO (L) |
| R' | EP VIDEO (R') |
| L' | EP VIDEO (L') |
| AR | AUDIO (R) |
| AL | AUDIO (L) |
| E | FLYING ERASE |

**Figure. M2 Upper Cylinder and Lead Wires**

## 2-2. REPLACEMENT OF THE DD CYLINDER UNIT

Work with extreme care when removing or replacing the DD cylinder unit. Do not touch video heads during servicing.

1. Remove the Top Case, Cassette Compartment, Bottom Case and open up the Bottom Circuit Boards.
   Refer to "DISASSEMBLY METHOD" section.
2. Disconnect the DD Cylinder Connector and unscrew the 3 screws (A). Since there is very little clearance between DD cylinder and chassis, remove the cylinder gently and carefully. (Figure M3)

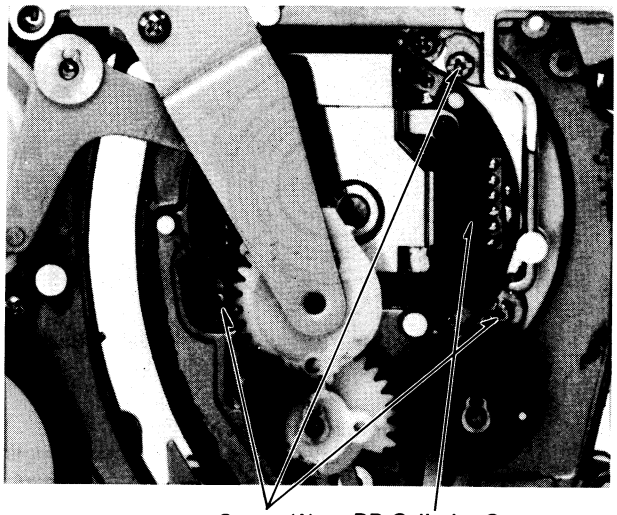



**Figure. M3 Replacement of the DD Cylinder Unit**

3. Reinstall the new DD cylinder unit to the chassis and reconnect the DD Cylinder Connection.

* Note:
Upon completion of replacement, confirm the performance. And if any further maintenance is required, refer to the "TAPE INTERCHANGEABILITY ADJUSTMENT ADJUSTMENT" section and perform the necessary items.

## 2-3. PROCEDURE FOR CLEANING OF CYLINDER UNIT

1. Position the video head to permit access for cleaning and hold the upper cylinder to keep it from turning while cleaning.
2. Gently rub the video head in direciton of tape travel with Head Cleaning Stick moistened with Freon TF.
3. Repeat for the other heads. (Figure M4)

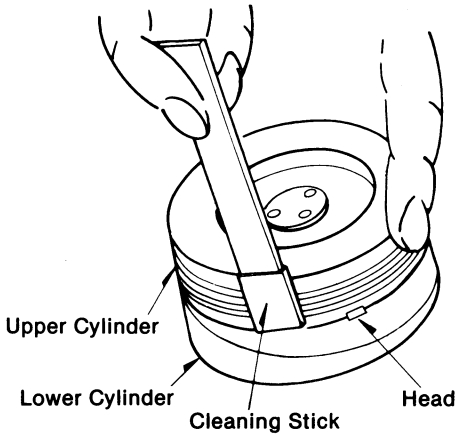



**Figure. M4 Head Cleaning**

* Notes:
1. Do not rub vertically.
2. Do not apply any pressure to head. If contaminant is not easily removed, continued gentle wiping will usually remove the substance.
3. Do not rotate the Upper Cylinder Unit clockwise when cleaning it.

# 3. TAPE INTERCHANGEABILITY ADJUSTMENT PROCEDURES

## 3-1. ADJUSTMENT FLOW CHART

This flow chart describes the order of steps for adjusting the tape guide posts and A/C head in order to gain access to the items needing servicing. (Figures M10(A),(B) and M11).

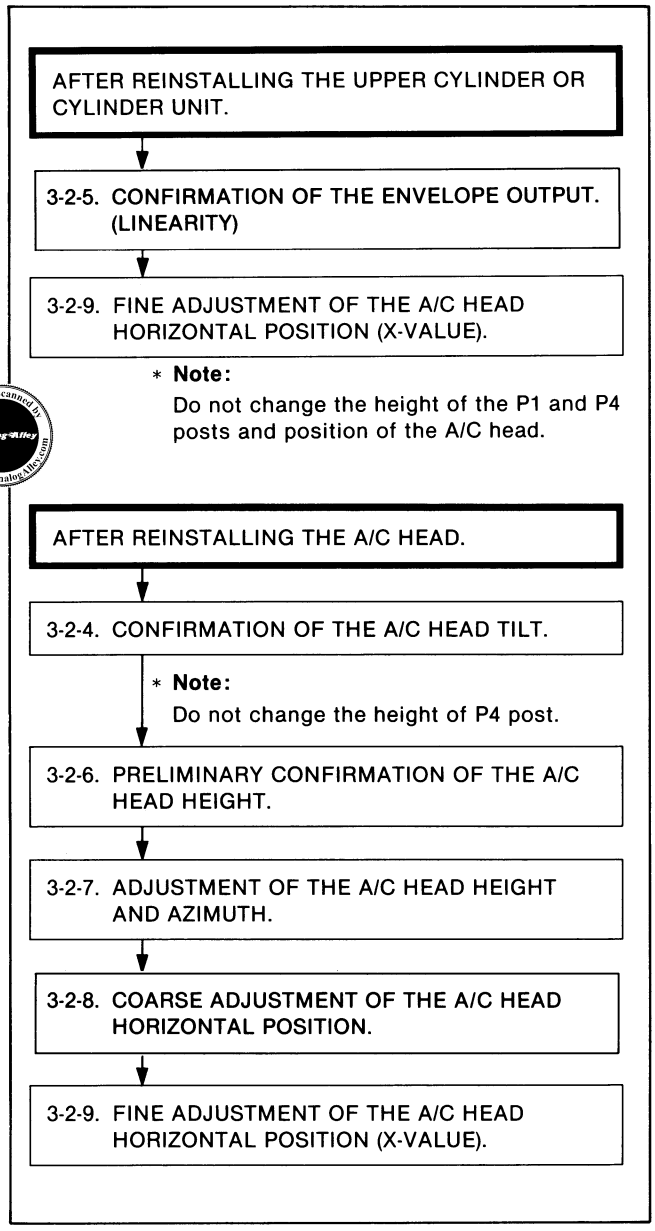



**Figure M10 (A)**

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AFTER REINSTALLING THE P1 POST, OR IF THE P1 POST HAS BEEN TURNED EXCESSIVELY.

↓

3-2-1. COARSE ADJUSTMENT OF THE TAPE GUIDE POST HEIGHTS.

↓

* **Note:**
Adjust the tape guide post P1 only.

↓

3-2-2. CONFIRMATION OF THE TAPE TRANSPORT.

↓

3-2-5. CONFIRMATION OF THE ENVELOPE OUTPUT. (LINEARITY)

AFTER REINSTALLING ALL POSTS OR IF ALL POSTS HAVE BEEN TURNED EXTREMELY.

↓

3-2-1. COARSE ADJUSTMENT OF THE TAPE GUIDE POST HEIGHTS.

↓

3-2-2. CONFIRMATION OF THE TAPE TRANSPORT.

↓

3-2-3. ADJUSTMENT OF THE PULL-OUT POST HEIGHT (P5 POST).

↓

3-2-4. CONFIRMATION OF THE A/C HEAD TILT.

↓

3-2-5. CONFIRMATION OF THE ENVELOPE OUTPUT. (LINEARITY)

AFTER REINSTALLING THE P4 POST, OR IF THE P4 POST HAS BEEN TURNED EXCESSIVELY.

↓

3-2-1. COARSE ADJUSTMENT OF THE TAPE GUIDE POST HEIGHTS.

↓

* **Note:**
Adjust the P4 post only.

↓

3-2-2. CONFIRMATION OF THE TAPE TRANSPORT.

↓

* **Note:**
Adjust the P4 post only.

↓

3-2-4. CONFIRMATION OF THE A/C HEAD TILT.

↓

3-2-5. CONFIRMATION OF THE ENVELOPE OUTPUT. (LINEARITY)

AFTER REINSTALLING THE PULL-OUT POST (P5 POST).

↓

**3-2-3.** ADJUSTMENT OF THE PULL-OUT POST (P5 POST).

* **Note:**
Do not readjust any other post.

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**Figure M10 (B)**

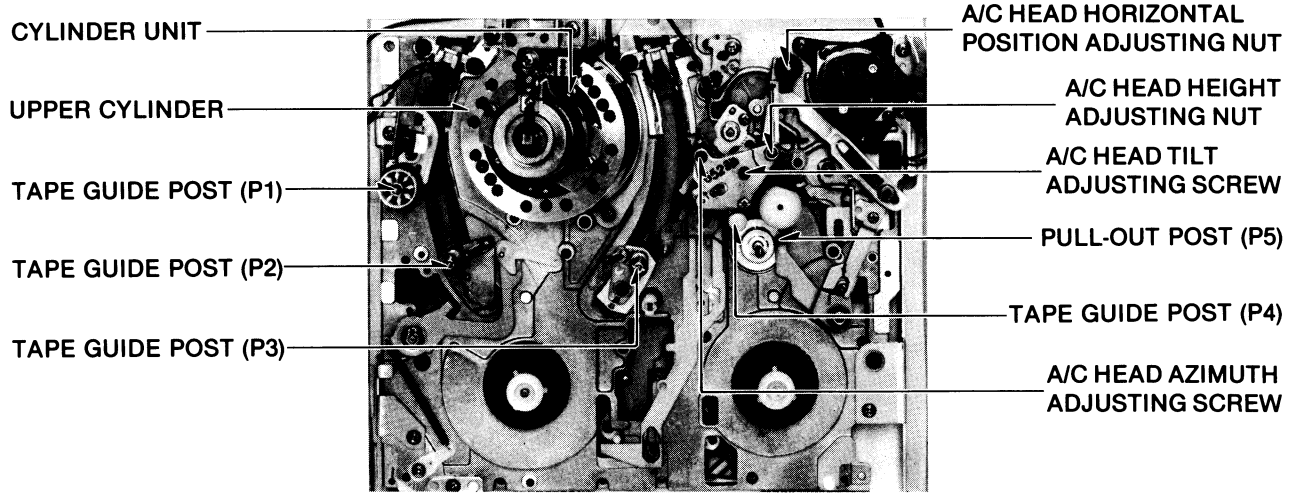



**Figure. M11**

## 3-2. ADJUSTMENT PROCEDURES

3-2-1. Coarse Adjustment of the Tape Guide Post Heights (P1, P2, P3 AND P4)

* Notes:
  The tape guide post P1, P2 and pullout post have been precisely adjusted at the factory. Therefore, normally do not change the height. The following adjustment is required only when replacing the posts.

* Equipment Required:
  Post Adjustment Plate.....VFKS0010
  Reel Table Height Gauge.....VFKS0009
  Nut Driver (Purchase locally)
  Post Adjustment Screwdriver.....VFK0137

1. Remove the Top Panel and the Front Loading Unit.
2. Place the Post Adjustment Plate over the reel tables. (Figure M12). Confirm that the Post Adjustment Plate is firmly seated.

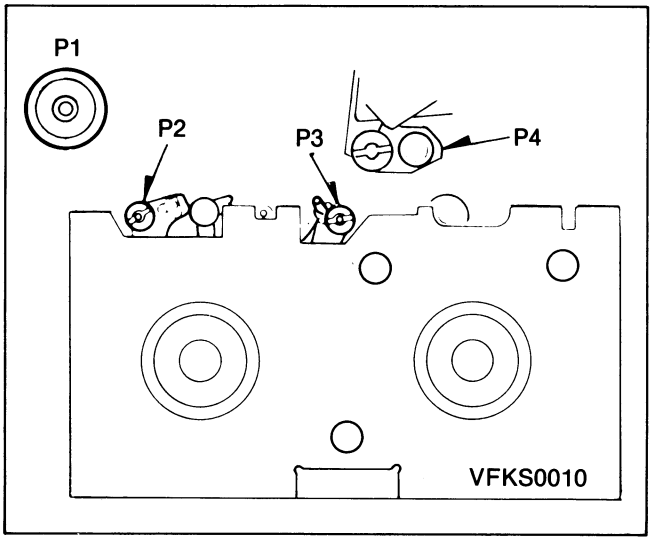



**Figure. M12**

3. Lower the tape guide posts so that the lower tape guide on each post is below the top surface of the adjustment plate.
   Use the Post Adjustment screwdriver to lower posts P2 and P3, and the Nut Driver to lower posts P1 and P4.
4. Place the Reel Table Height Gauge on the Post Adjustment Plate and lower the scraper so that it touches the plate. (Figure M13).

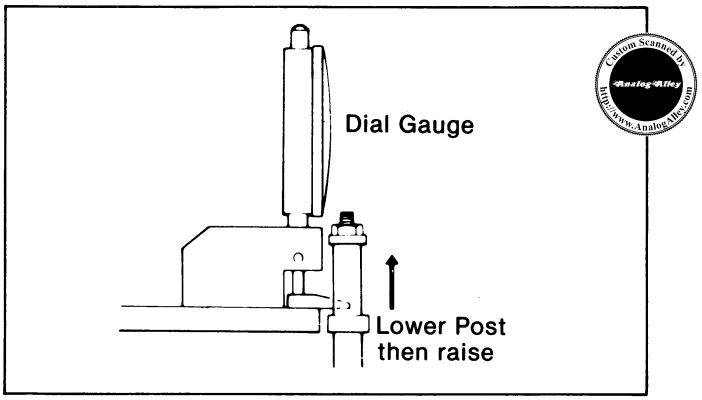



**Figure. M13**

5. Place the side of the scraper aginst the each post as shown in Figure M14, set the gauge to zero, then slowly raise the post until the lower tape guide just touches the bottom of the scraper. Use the gauge to determine the exact point at which the lower tape guide touches the scraper. (Figure M14)

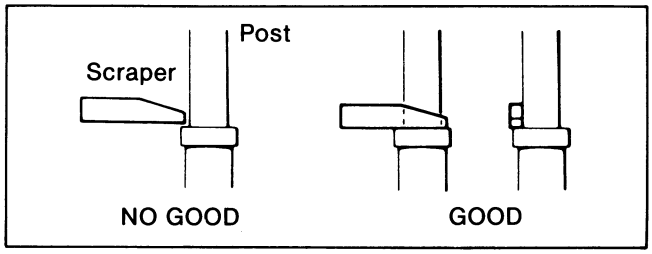



**Figure. M14**

3-2-2. Confirmation of the Tape Transport (Tape Guide Posts)

* Notes:
  1. The tape guide posts have been precisely adjusted at the factory. Therefore, normally do not change the height of P1 and P4 posts. The following adjustment is required only when replacing the posts.
  2. If curling is apparent proceed to the P4 post, wipe dirt from the pressure rolloer and capstan shaft using a soft cloth impregnated with Freon TF or cleaning liquid.
  3. The adjustment of the post height is required only the one which has been replaced.

* Equipment Required:
  Post Adjustment Screwdriver.....VFK0137
  Nut Driver (Purchase locally)
  Check Light.....VFK0343

1. To prevent the alignment tape from being damaged, use a normal cassette tape for this procedure.
   Play back the normal cassette tape and confirm that the tape travels without any curling at the edges of all the posts by using the check light.
   (Figures M15, M16 and M17)

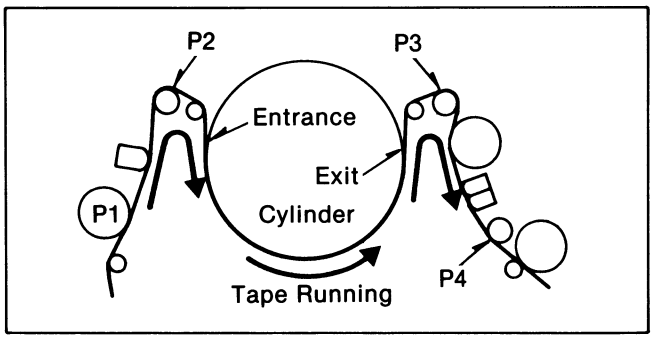



**Figure. M15 Tape Transport Posts**

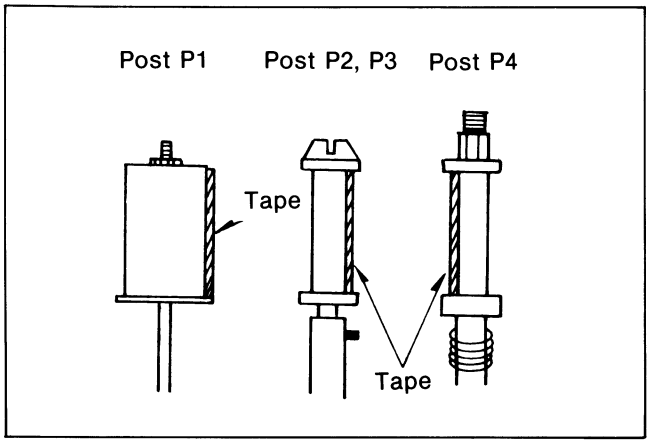



**Figure. M16 P1, P2, P3, P4 Posts**

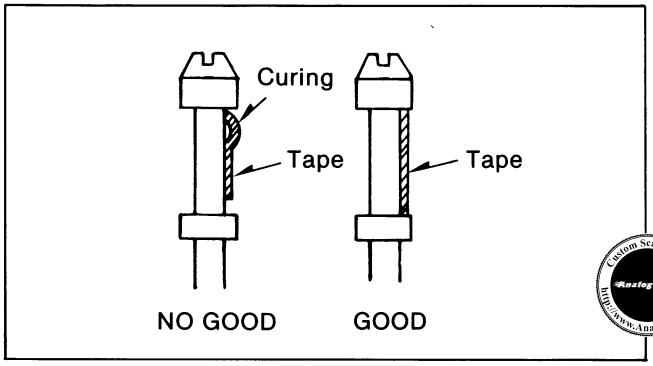



**Figure. M17 P1, P2 Posts**

2. If curling is apparent, adjust the height of posts by turning the top of post with the post adjustment screwdriver (Posts P2 and P3) or the nut driver (Posts P1 and P4). (Figures M16 and M17)
3. After adjusting the P4 post, adjustment of the pull-out post (P5) is required. (Refer to "ADJUSTMENT OF THE PULL-OUT POST HEIGHT".)
4. If the tape curling cannot be acomplished by adjusting the tape guide posts, then adjustment of the A/C head tilt may be neede.

3-2-3. Adjustment of the Pull-out Post (P5 Post) Height

* Note:
  1. This adjustment should be performed only after adjusting tape guide post P4 as the height of the pull-out post is based on the height of post P4.
  2. This adjustment should be performed with the unit in the loading-completion mode.
  3. When replacing or adjusting the pull-out post, unplug the unit from the power source.

* Tools and Equipment Required:
  Post Adjustment Plate.....VFKS0010
  Reel Tabel Height Gauge.....VFKS0009
  Check Light.....VFK0343
  Nut Driver (Purchase locally)

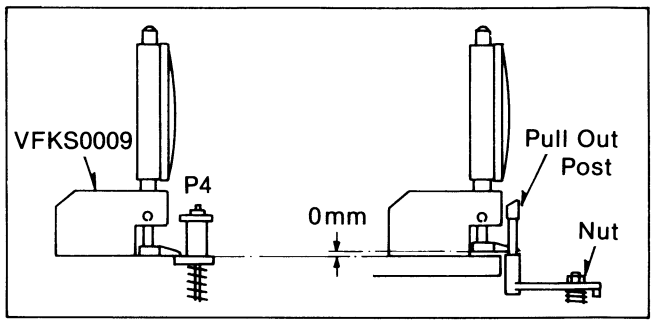



**Figure. M18 P5 Post**

1. Remove the Top Panel and the Front Loading Unit.
2. Turn the power switch on.
3. Insert a cassette tape to the cassette Compartment, then press the play button. This simulates the loading completion mode.
4. Unplug the unit from the power source.
5. Place the Post Adjustment plate over the reel tables.
6. Place the Reel Tabel Height Gauge on the tape guide post P4, lower the scraper so that it touches the lower edges of P4, then set the gauge to zero ("0"). (Figure M16)
7. Slightly lower the pull-out post by turning the nut on the post clockwise with the nut driver, and set the side of the scraper against the post as shown in Figure M19.
8. Slowly turn the nut on the post counterclockwise until the gauge reads 00mm. Figure M18)
9. Confirm there is no tape curling at P4 post during x 10 reverse mode by using the check light.
   If tape curling occurs, back to step 8.

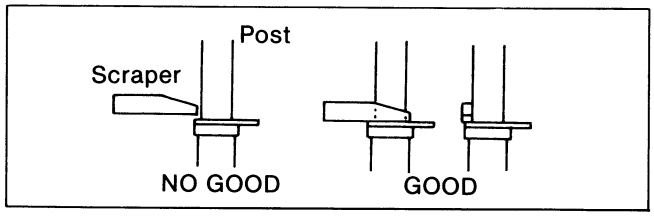



**Figure. M19 Post Adjustment**

3-2-4. Confirmation of the A/C Head Tilt

* Note:
  This procedure should be performed after replacing the A/C head and pressure roller, and adjusting the height of the tape guide post (P4).

  (Refer to "COARSE ADJUSTMENT OF THE TAPE GUID POST HEIGHTS".)

* Tools and Equipment Required:
  Nut Driver (purchase locally)
  Check Light.....VFK0343

1. Play back the begnning portion of NV-T160 cassette tape and confirm that the tape runs between lower and upper limiters of the P4 post by using the check light.

If there is waving or frilling in the lower edge or top edge of the tape, correct the tilt of the A/C head by turning the screw (C) located behind the A/C head. (Figure M20)

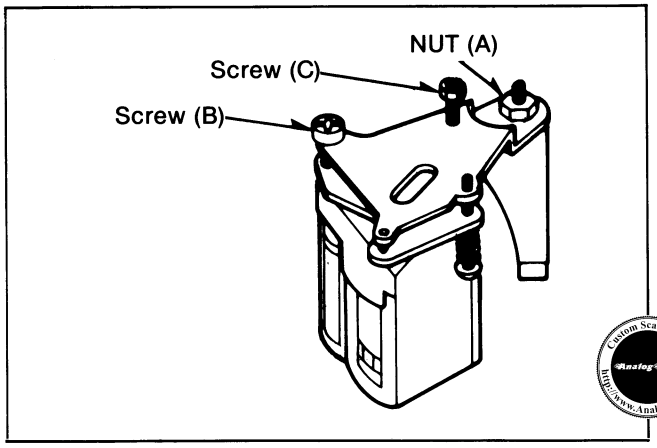



**Figure. M20 A/C Head Tilt**

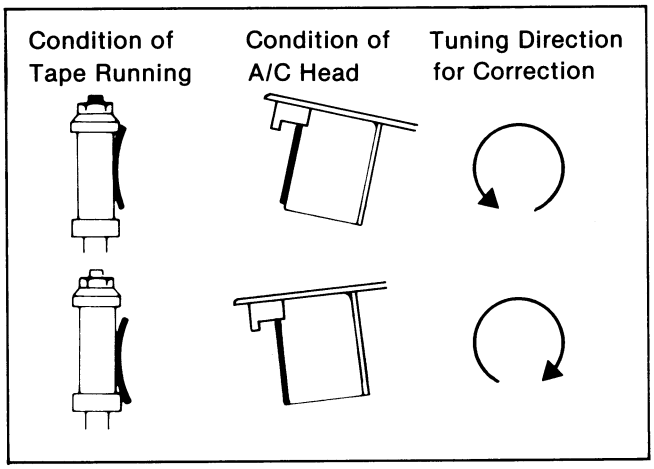



**Figure. M21 Confirmation of Tilt of A/C Head**

2. If correction of the tape curling cannot be acomplished by adjusting the A/C head tilt, then readjustment of the height of the tape guide post (P4) may be neede.

* Notes:
  1. The tape guide post (P4) has been precisely adjusted at the factory. Therefore, normally the tape guide post (P4) readjustment is not required to eliminate the tape curling.
  2. After adjusting the A/C head tilt, the A/C head height adjustment is required.

3-2-5. Confirmation of the Envelope Output (Linearity)

* Note:
  Before playback back the alignment tape , play back a normal casstte and confirm correct transprt (Refer "CONFIRMATION OF THE TAPE TRANSPORT").

* Tools and Equipment Required:
  Hex Wrench (0.9mm).....VFK0146
  Post Adjustment Screwdriver.....VFK0137
  Alignment Tape.....VFM8080HMFP

1. Connect the scope to TP4502 on the HD Audio C.B.A and IC4508-18 on the same C.B.A. to Ext-Trigger the scope.
2. Play back the 1st portion (HD AUDIO) of the alignment tape VFM8080HMFP.
3. Turn the Tracking Control VR and adjust for maximum HD Audio FM envelope.
4. If the HD Audio FM envelope appears like example "A" or "B" in Figure M22, then adjustment of the tape guide post (P2:Entrance) is necessary.
5. Adjust the tape guide post (P2) with the post adjustment screwdriver so that the HD Audio FM envelope waveform at the entrance portion becomes flat as shown "C" in Figure M22.

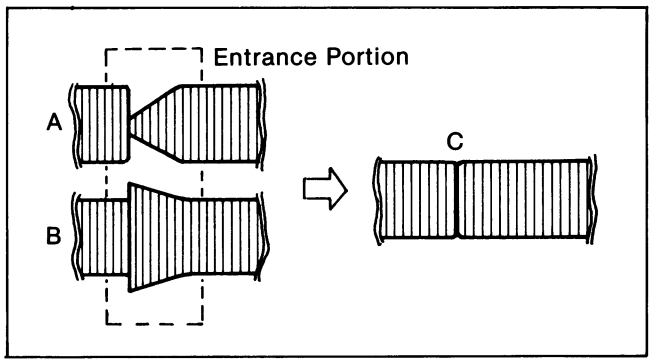



**Figure. M22 FM Envelope (1)**

6. If the HD Audio FM envelope appears like example "D" or "E" in Figure M23, then adjustment of the tape guide post (P3:Exit) is necessary.
7. Adjust the tape guide post (P3) in the same manner as the P2 post so that the exit portion becomes flat as shown in "F" in Figure M23.

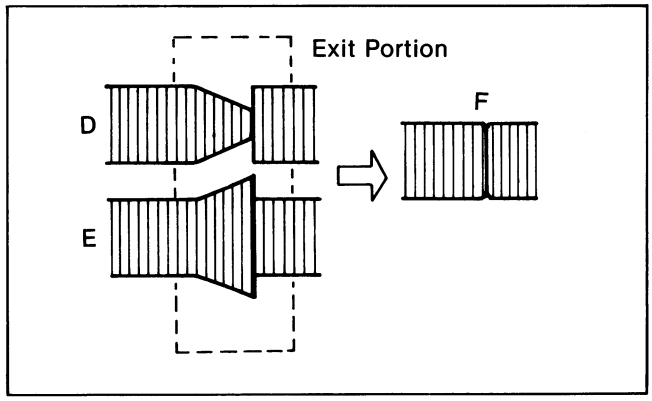



**Figure. M23 FM Envelope (2)**

8. Turn the Tracking VR from end to end.
   The variation of HD Audio FM envelope should be nealy parallel as shown in Figure M24.
9. Turn the Tracking VR and adjust for maximum HD Audio FM envelope.
   If the HD Audio FM envelope does not meet these specs,
   V1/V = more than 0.7
   V2/V = more than 0.8
   then repeat stsps 1-8 again. (Figure M26)

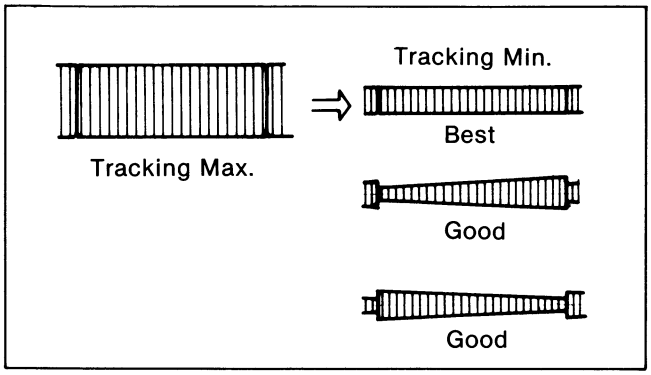



**Figure. M24 FM Envelope (3)**

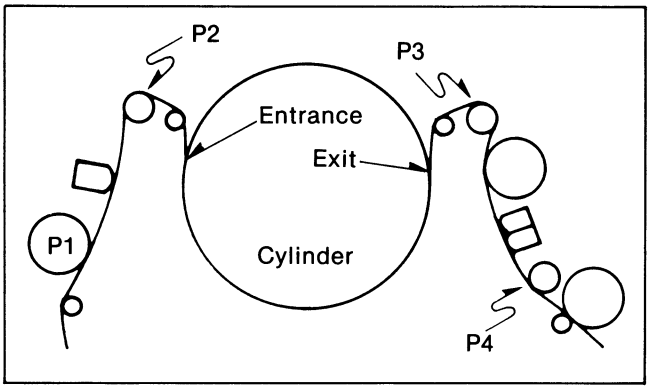



**Figure. M25 Loading of Posts**

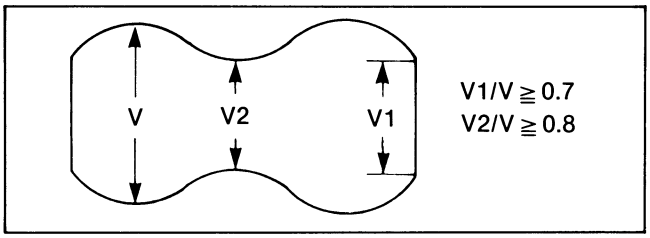



**Figure. M26 Spec. of Envelope**

10. Turn the Tracking VR from end to end again and then back to the detent (Fix) position.
    At the detent position, the HD Audio FM envelope waveform should be at maximum. If it is not at maximum then "ADJUSTMENT OF THE A/C HEAD HORIZONTAL POSITION" is necessary.
    (Refer to "FINE ADJUSTMENT OF THE A/C HEAD HORIZONTAL POSITION".)

3-2-6. Preliminary Confirmation of the A/C Head Height

* Note:
  This procedure should be performed only when the A/C Head is replaced.

* Tools and Equipment Required:
  Nut Driver (Purchase locally)
  Check Light.....VFK0343

With the tape running, look at the lower edge of the control head by using the check light and check if the lower edge of tape runs along the lower edge of the control head.
If it doesn't, slightly turn the nut (A) behind the A/C Head (Figure M20) to either lower or raise the A/C head so that the tape runs along the lower edge of the control Head. Turn the unt (A) clockwise to lower the head, and counterclockwise to raise it. (Figure M27).

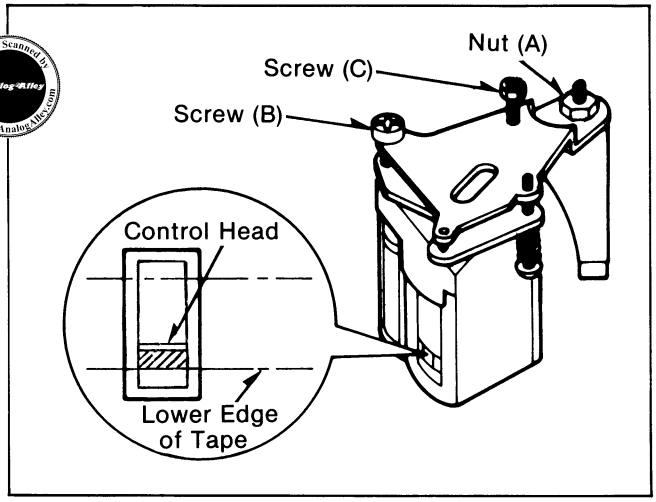



**Figure. M27 Confirmation of A/C Head Height**

3-2-7. Adjustment of the A/C hEAD HEIGHT And Azimuth

* Note:
  This procedure should be performed only when the A/C Head is replaced and posts heights are readjusted.

* Tools and Equipment Required:
  Nut Driver (Purchase locally)
  Alignment Tape.....VFM8080HMFP

1. Connect the scope CH1 to the Audio Output CH1 and scope CH2 to the Audio Output CH2 on the vear panel.
2. Play back the 2nd portion (Normal Audio 6KHz) of the alignment tape, VFM8080HMFP.
3. Adjust the screw (B) so that the CH2 output level becomes maximum. (Figure M28)

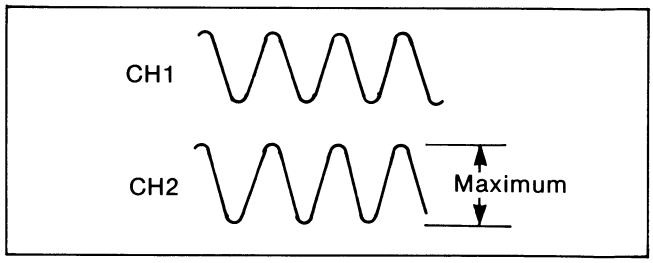



**Figure. M28 Normal Audio Signals**

4. Then adjust the nut (A) so that the CH2 envelope becomes maximu.
5. Readjust the screw (B) so that the phases of the both channel are matched as shown below. (Figure M29)

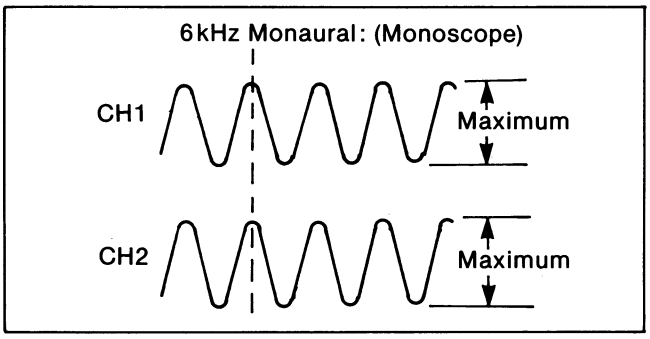



**Figure. M29 Adjustment of A/C Head Height and Azimuth (3)**

3-2-8. Coarse Adjustment of the A/C Head Horizontal Position

* Note:
This procedure should be performed only when the A/C head is replaced, and after performing the tape interchangeability adjustment.

* Tools and Equipment Required:
Alignment Tape.....VFM8080HMFP
H. Position Adj Driver.....VFKS0003

1. Set the Tracking Control VR to the center detent (fixed) position.
2. Connect the scope to TP3001 on the video section and scope CH2 to the Audio Output CH2 on the rear panel.
3. Play back 4th position (Monoscope and Normal Audio 3KHz) of the Alignment tape VFM8080HMFP.
4. Adjust A/C head horizontal position nut so that "T" width becomes 10msec as shown in Figures M30 and M31.

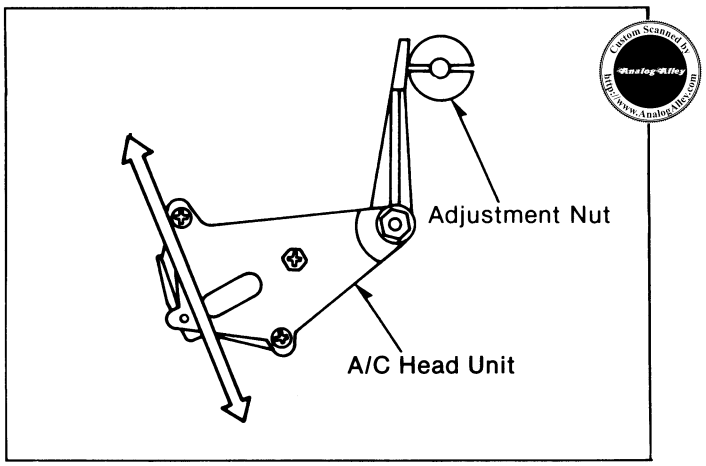



**Figure. M30 Coarse Adjustment of A/C Head**

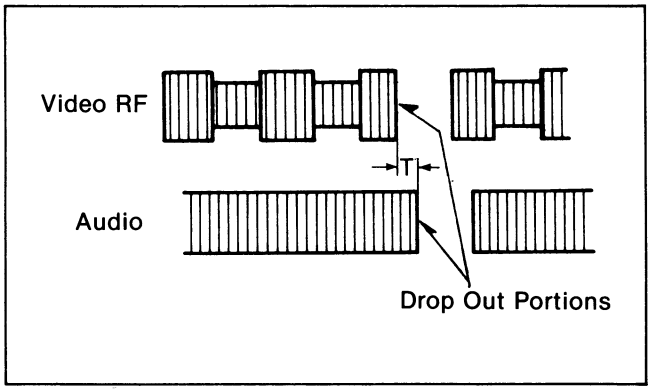



**Figure. M31 Horizontal Position Adjustment of A/C Head**

* Note:
After completion the fine adjustment of the A/C head horizontal position, the phase of Audio drop out and RF drop out may be change slightly.

3-2-9. Fine Adjustment of the A/C Head Horizontal Position (X-value)

* Note:
When the A/C head is replaced, the coarse adjustment of the A/C head horizontal position is required before performing this fine adjustment.

* Tools and Equipment Required:
H.Position Adj. Driver.....VFKS0003
Alignment Tape.....VFM8080HMFP

1. Set the Tracking Control VR to the center detent (fixed) position.
2. Connect the scope CH1 to TP3001 on the Video Section and TP2001 on the servo section.
3. Play back 2nd position (Monoscope) of the Alignment tape, VFM8080HMFP.
4. Adjust the adjust nut so that the RF envelope output level becomes maximum at the detent position. (Figure M28)
5. Turn the Tracking VR from end to end and then back to the detent position.
Confirm that the FM envelope output level is maximized at the detent position.

# 4. OTHER MECHANICAL ADJUSTMENT PROCEDURES

## 4-1. CONFIRMATION OF BRAKE TORQUE

* Equipment required:
Dial Torque Gauge.....VFK0133
Adaptor for Gauge.....VFK0134

1. Remove the Top Cover and Front loading Unit.
2. Attach the adaptor to the torque gauge and place the deck in STOP mode.
3. The weight of gauge should not rest on the reel tabel. (figure M32)
4. Turn torque gauge in either direction indicated in the Figure M33 and read the gauge when the brake begins slipping.

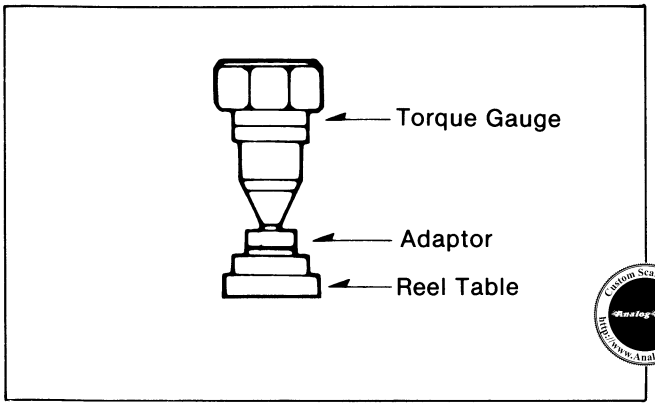
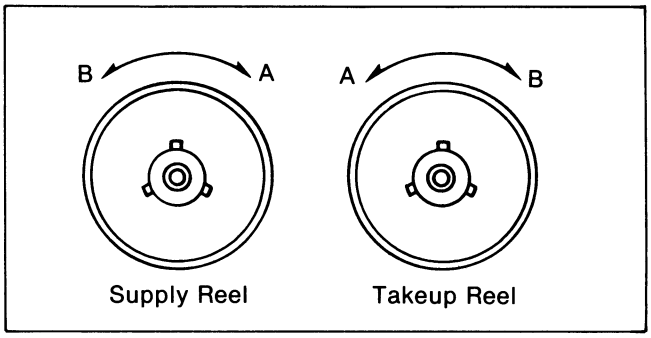



**Figure. M32 Confirmation of Brake Torque (1)**

* Notes:
  1. If proper brake torque can not be obtained, clean the rotating surface of reel table with a soft cloth and recheck torque before replacing brake pad.




| Reel | A | B |
|---|---|---|
| Takeup | more than 150g-cm | more than 40g-cm |
| Supply | more than 550g-cm | more than 40g-cm |

**Figure. M33 Confirmation of Brake Torque (2)**

  2. If proper brake torque can not be obtained after cleaning the rotating surface of reel table, replace the main brake units or reel tables.

## 4-2. CONFIRMATION OF BACK TENSION

* Equipment Required:
  Back Tension Meter
  VHS Cassette Tape (120 Minutes Tape)

* Specification:25~30g

1. Remove the Top Cover and Front Loading Unit. Pull the erase head in the direction.
2. Indicated by the arrow and hold it by adhesive tape.
3. Play back the cassette tape from its beginning and wait until tape running has stabilized. (for approx. 10 to 20 seconds)
4. Insert tension meter in tape path and confirm reading. (Figure M34)

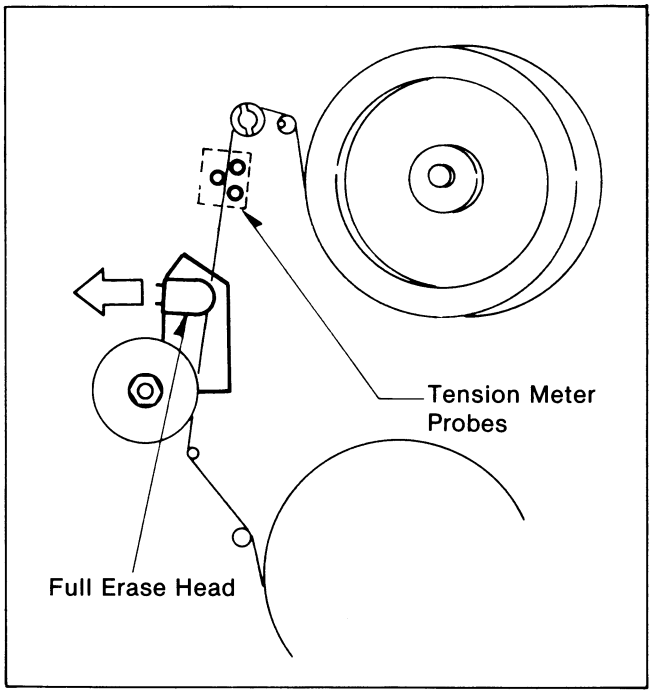



**Figure. M34 Confirmation of Back Tension**

* Notes:
  1. Make sure that the three probes of the meter are all in good contact with tape, but out put of contact with any parts while measuring.
  2. It is recommended to be measured three times as the tension meter is very sensitive.

## 4-3. HEIGHT ADJUSTMENT OF REEL TABLES

* Note:
  Cut-out on Post Adjustment Plate is reference of reel table height and their height is measured based on this reference.

* Equipment Required:
  Post Adjustment Plate.....VFKS0010
  Reel Table Height Gauge.....VFKS0009

* Specification: 0.10 +- 0.05mm

1. Place the post adjustment plate over the reels, and put the gauge on the plate. Set the gauge to zero "0" with the foot scraper of the gauge touching the cut-out portion of the plate. (Figure M35)

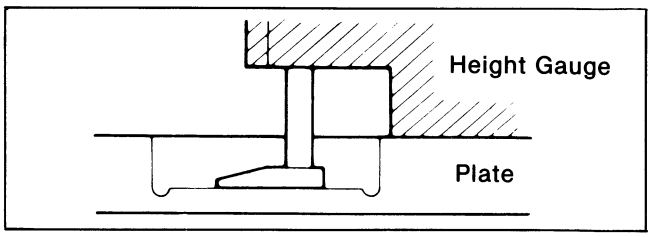



**Figure. M35 Height Adjustment of Reel Tables (1)**

2. Then measure the top portion of reel tabel and confirm the difference just performed in former step. Do same for the other reel table. (Figure M36)

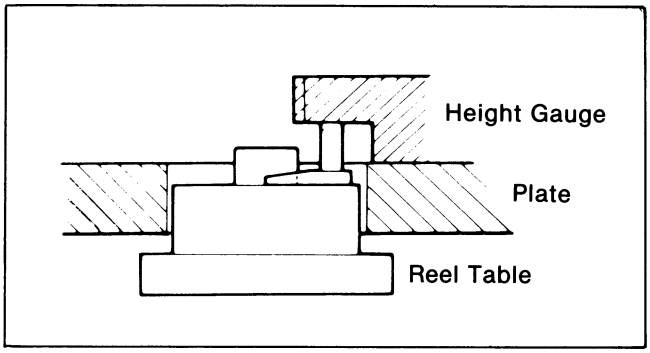



**Figure. M36 Height Adjustment of Reel Tables (2)**

3. If a height difference in readings between the cut-out portion of plate and reel tables is not 0.10 +- 0.05mm (higher or lower), adjust the height of the reel to obtain specified height.
4. For adjustment of Supply Reel, add or remove a washer located under the reel tabel. (Figure M37)

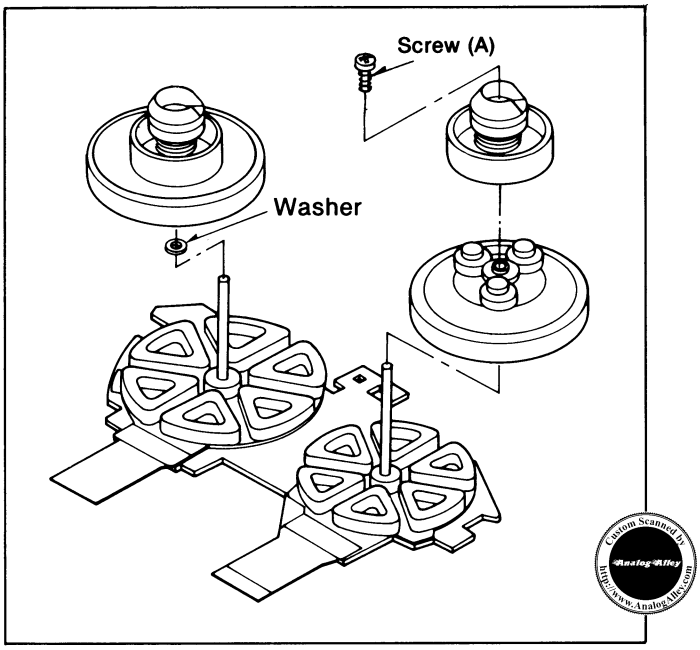



**Figure. M37 Height Adjustment of Reel Tables (3)**

5. For adjustment of Take-up Reel, adjustment screw (A) on Take-up Reel Table.

* Notes:
When adjusting the height of the Supply Reel tables, the DD Reel Unit needs to be removed from the chassis.
(Removal of the DD Reel Unit.)
Remove 8 screws and carefully lift it out.
(Figure M38)

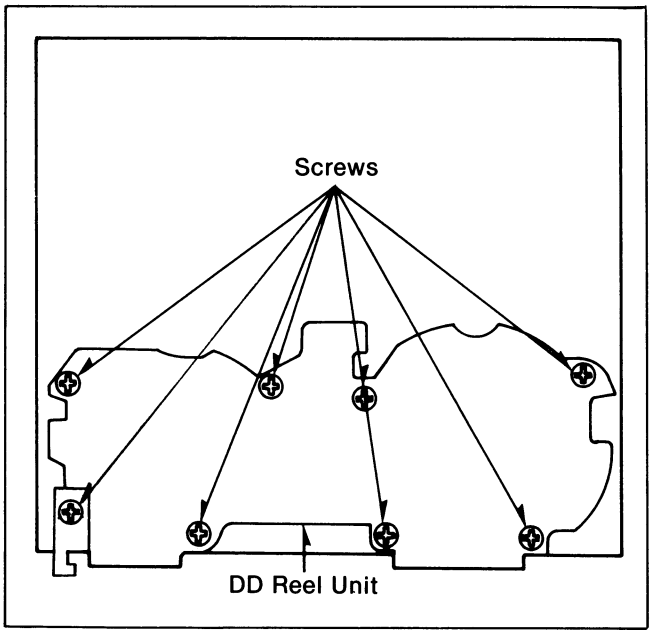



**Figure. M38 Bottom View of DD Reel Unit**

## 4-4. ADJUSTMENT OF F.G HEAD GAP

* Specification:0.18(+-0.02)mm

1. Slightly loosen the 2 screws.
2. Hold the F.G Head Unit with your fingers, and adjust the gap as specified.
3. After adjustment, tighten 2 screws. (Figure M39)

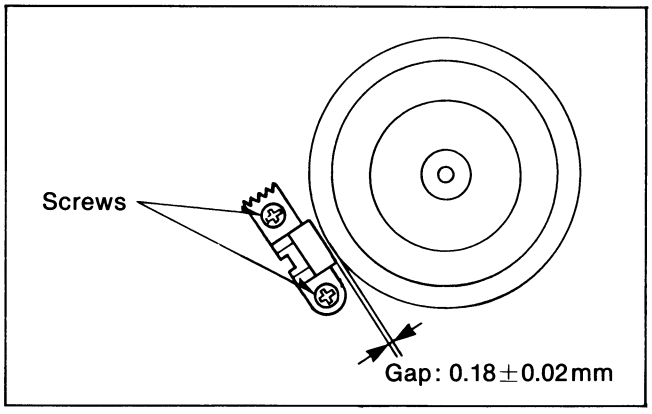



**Figure. M39 Adjustment of FG. Head Gap**

* Note:
Do not scratch the F.G. Head or outside surface of the rotor.

## 4-5. ASSEMBLY AND ADJUSTMENT OF GEARS AND ROD

GENERAL CONDITION

The mechanism of this model is mostly engaged to the System Control Circuit, through the mode select switch.
Therefore the relation between the mode select switch and the cam gear decides all further mechanical movement of the mechanical parts such as levers, gears, rollers and so on.
If the adjustment of this item is performed improperly, the deck will be unloaded or compulsorily stopped.
And it may result in damage to mechanicl or electrical parts.

4-5-1. Adjustment of Loading Arm

1. Install the supply and takeup loading arm units so that the projection (A) on the takeup loading gear aligns with the projiction (B) on the supply loading gear. Then install the 2 retaining rings on the supply loading gear and on the takeup loading gear.
   Ensure that the loading arm units are still in the fully unloaded condition. (Figure M40)

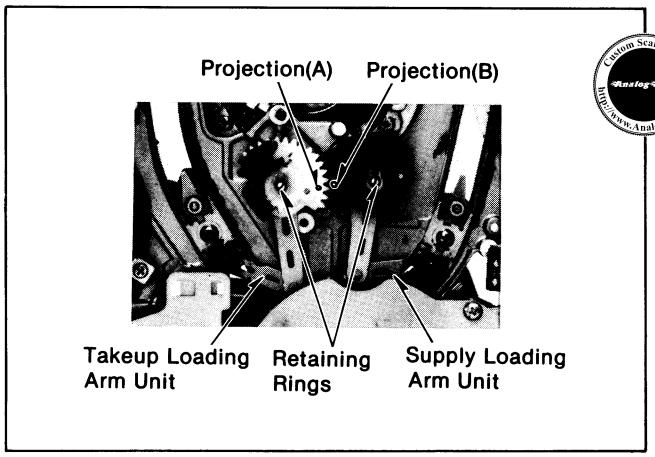



**Figure. M40 Assembly and Adjustment of Gears and Rod (1)**

* Note:
  Play attention that the washers are still under the loading gears.

4-5-2. Adjustment of Cam Gear

1. Make sure the position of Loading Arm is as Figure M40 before proceeding with this adjustment.
2. Install the cam gear so that the hole on the cam gear meets the hole on the chassis. Then install the retaining ring.(Figure M41)

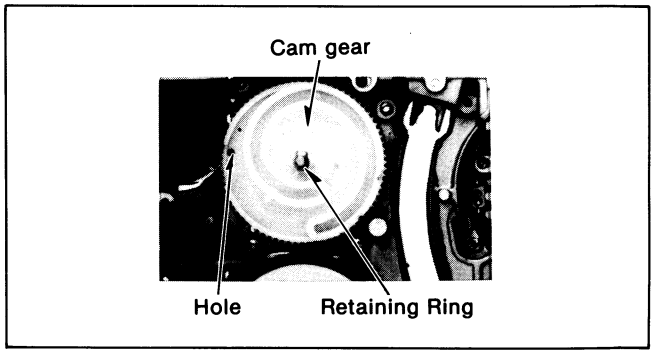



**Figure. M41 Assembly and Adjustment of Gears and Rod (2)**

3. Install the lock arm as shown in Figure. M42. Then install the retaining ring and the washer.

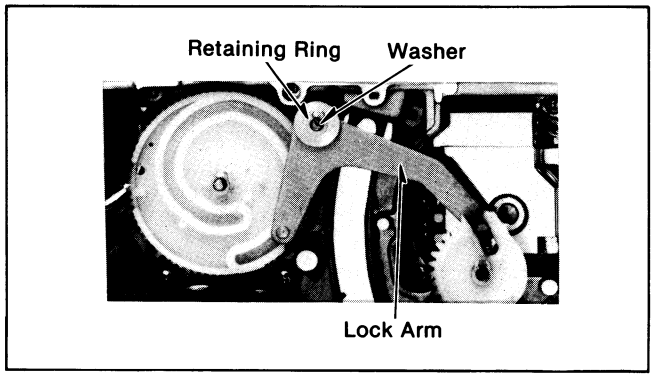



**Figure. M42 Assembly and Adjustment of Gears and Rod (3)**

* Note:
  Pay attention that the washer is still under the lock arm.

4-5-3. Adjustment of lock Gear

1. Perform the adjustment after making sure the mechanism position is as described in previous item 4-5-1 and 4-5-2.
2. Install the lock gear so that the projection (C) on the lock gear alings with the projection (D) on the takeup loading gear.

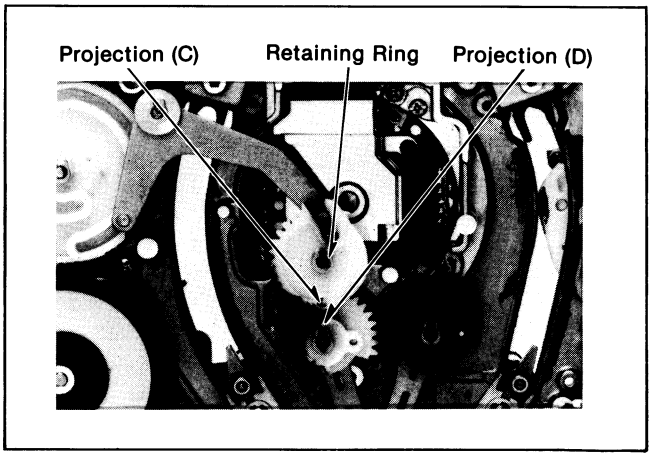



**Figure. M43 Assembly and Adjustment of Gears and Rod (4)**

3. Install the support plate with the screw.

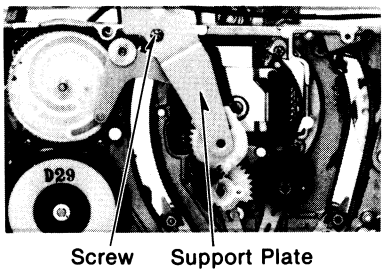



**Figure. M44 Assembly and Adjustment of Gears and Rod (5)**

4-5-4. Adjustment of Mode Select Switch

1. Perform this adjusment after making sure the mechanism position is as described in previous item 4-5-1, 4-5-2 and 4-5-3.
2. Rotate the gear on the mode select switch so that it is in click (detent) position. Then install the mode select switch so that the delta hole (E) on the rotary switch gear aligns with the projection (F) on the cam gear, and install the 2 screws. (Figure M45)

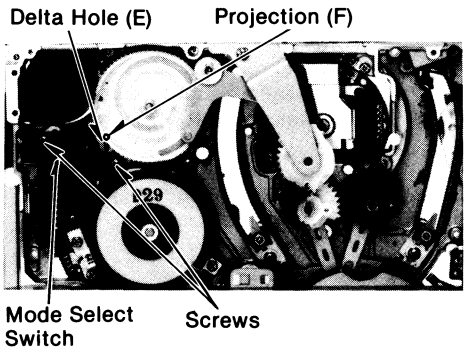



**Figure. M45 Assembly and Adjustment of Gears and Rod (6)**

* Note:
There is one click point per 4 rotations.

3. Install the loading motor with 2 screws. (Figure M46)

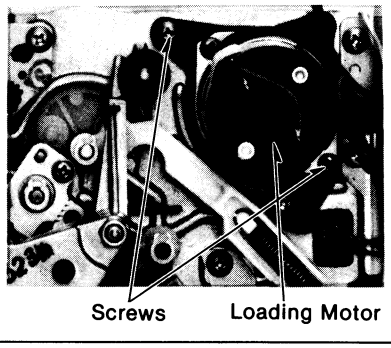



**Figure. M46 Assembly and Adjustment of Gears and Rod (7)**

4. Confirm that the cam gear is in the EJECT condition.

4-5-5. Assembly Procedure of Main Rod, Brake arm and Brake Cam Gear

1. Perform the assembly after making sure the mechanism position is as described in previous item 4-5-1,4-5-2,4-5-3 and 4-5-4.
2. Install the main rod so that the hole on the main rod meets the hole on the chassis. Then instal the brake arm, the washer and the 3 retaining rings. (Figure M47)

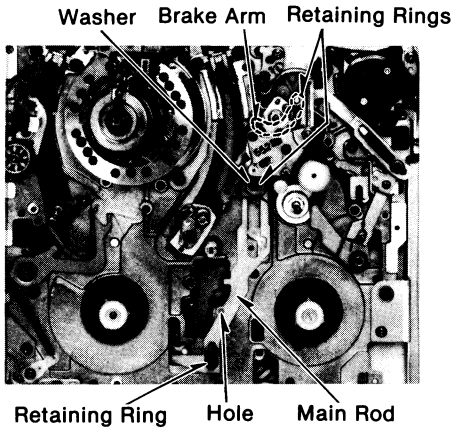



**Figure. M47 Assembly and Adjustment of Gears and Rod (8)**

## 5. GREASING PROCEDURES

### 5-1. LOADING BASE UNIT, MAIN LEVER UNIT AND CASSETTE LOADING UNIT GREASING

Greasing Method

1. Wipe dust and dirt off from the Loading Base Unit, Main Lever Unit and Cassette Lock Unit with a soft cloth clamped with a alcohol.
2. Supply grease (MOR265) to the Loading Base Unit, Main Lever Unit and Cassette Lock Unit(Figure M48).

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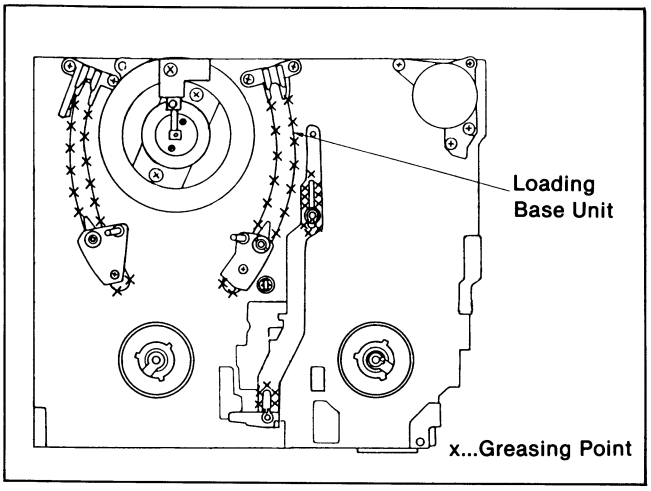
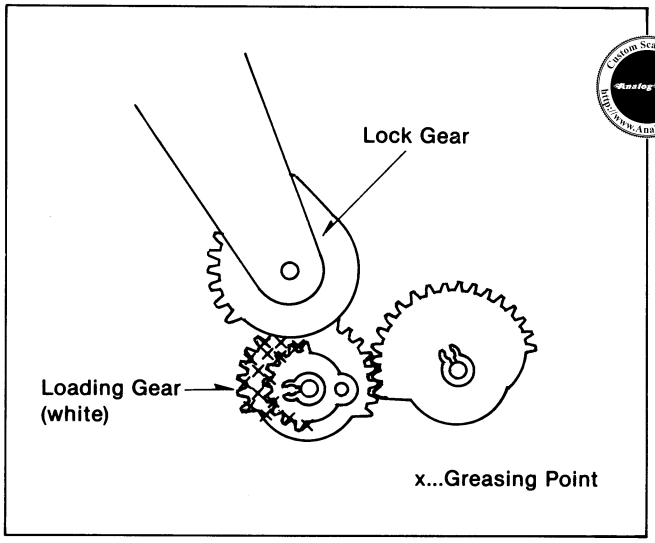



**Figure M48**

## 5-2. LOCK AND LOADING GEARS SECTION GREASING

Greasing Method

1. Supply grease (MOR265) to the Loading Gear (white) (Figure M49).




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**Figure M49**

# ELECTRICAL ADJUSTMENT PROCEDURES

This section provides complete electrical ajustment procedures which may be required for electronic circuits of VHS Video Cassette recorders AG-1950.

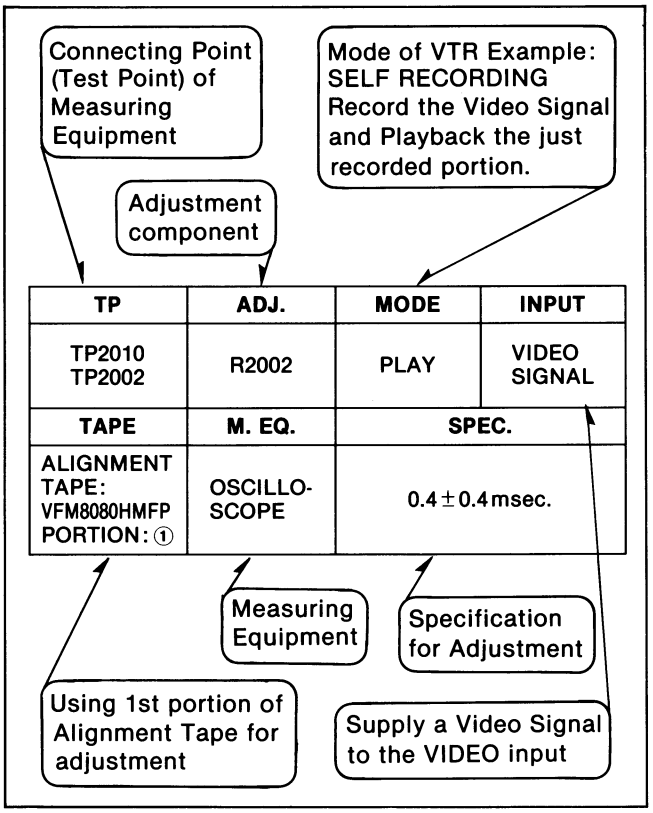
## TEST AND SERVICE EQUIPMENT

To perform the electrical adjustments completely, following equipments are required.

1. VTVM (Vacuum Tube Volt Meter) or DVM (Digital Volt Meter)
   Voltage Range: 0.001~50V
2. Video Test Signal Generator
3. Dual-Trace Oscilloscope
   Voltage Range: 0.005~50V/div.
   Frequency Range: DC~10MHz
   Probes: 10:1 or 1:1
4. Frequency Counter
   Frequency Range: 0~10MHz
5. Signal Generator (Sinewave)
   Frequency Range: 0~10MHz
6. Video Sweep Generator
   Frequency Range: 0~10MHz
7. Color Monitor TV
8. Plastic Tip Driver
9. VHS Alignment Tape (VFM8080HMFP)
10. VIF SWEEP GENERATOR with the Trap Adjustor .....45.75MHz
11. SIF SWEEP GENERATOR .....4.5MHz+-90kHz
12. CW OSCILLATOR .....45.75MHz+-100kHz
13. MONITOR SCOPE
14. TUNING AMP.....45.75MHz

## ADJUSTMENT PROCEDURES

### HOW TO READ THE ADJUSTMENT PROCEDURES




| TP | ADJ. | MODE | INPUT |
|---|---|---|---|
| TP2010 TP2002 | R2002 | PLAY | VIDEO SIGNAL |
| TAPE | M. EQ. | SPEC. | |
| ALIGNMENT TAPE: VFM8080HMFP PORTION: ① | OSCILLO-SCOPE | 0.4±0.4msec. | |

Figure E1

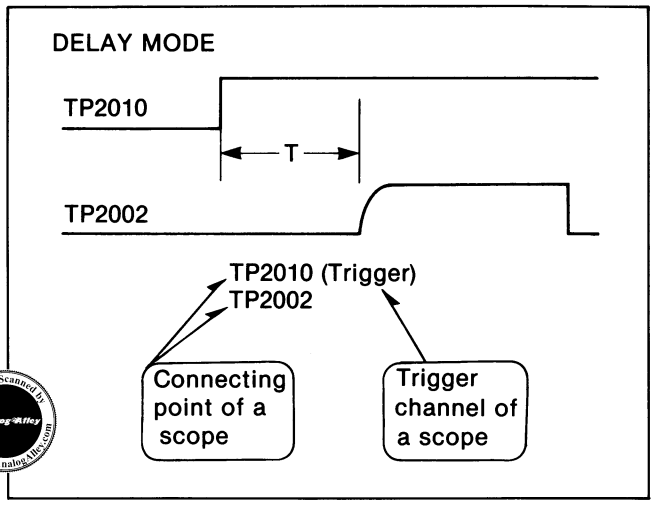



Figure E2

### 1. POWER SUPPLY SECTION

1-1. REG +5V ADJUSTMENT

| TP | ADJ. | MODE | INPUT |
|---|---|---|---|
| TP1003 | VR1001 | STOP | |
| TAPE | M. EQ. | SPEC. | |
| | D.V.M | 5.1±0.05V | |

1-2. REG +12V ADJUSTMENT

| TP | ADJ. | MODE | INPUT |
|---|---|---|---|
| TP1002 | VR1002 | STOP | |
| TAPE | M. EQ. | SPEC. | |
| | D.V.M | 12.7±0.05V | |

### 2. SERVO SECTION

2-1. PG SHIFTER ADJUSTMENT

| TP | ADJ. | MODE | INPUT |
|---|---|---|---|
| TP2001 TP3002 | VR2001 | PLAY | |
| TAPE | M. EQ. | SPEC. | |
| ALIGNMENT TAPE: VFM8080HMFP PORTION: ③ | OSCILLO-SCOPE | 6.5±0.5H | |

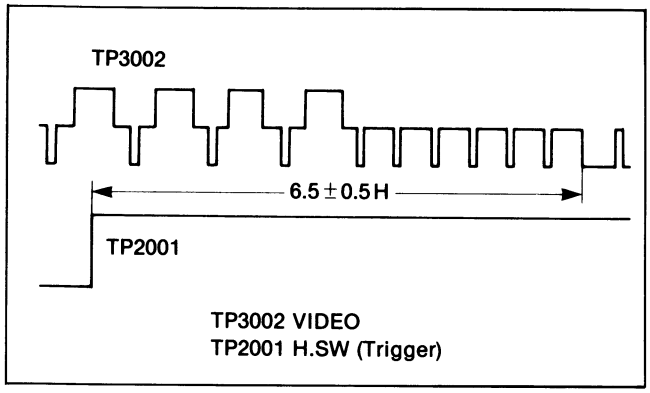



**Figure E3 PG Shifter Adjustment**

2-2. TRACKING FIX ADJUSTMENT

| TP | ADJ. | MODE | INPUT |
|---|---|---|---|
| TP2001<br>TP2002 | VR2002 | PLAY | |
| **TAPE** | **M. EQ.** | **SPEC.** | |
| ALIGNMENT TAPE: VFM8080HMFP PORTION: ③ | OSCILLO-SCOPE | T=7.3±0.4msec. | |

1. TRACKING VR on the front Panel is fix position.
2. Play back the 3rd portion of alignment tape.
3. Adjust VR2002 so that the period of "T" becomes 7.3+-0.4msec. as shown Figure. E4.

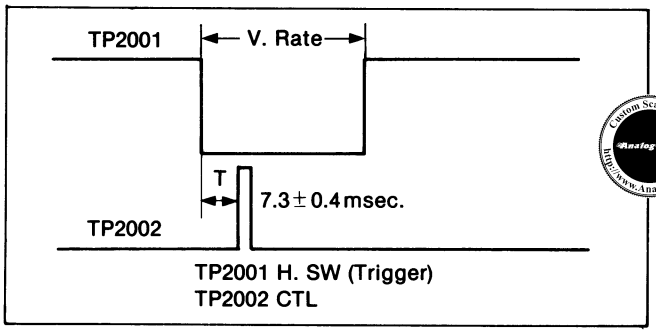



**Figure E4 Tracking Fix Adjustment**

2-3. ARTIFICIAL V-SYNC ADJUSTMENT

| TP | ADJ. | MODE | INPUT |
|---|---|---|---|
| TP2001<br>TP2009 | SP: VR2010<br>EP: VR2009 | STILL PLAY | COLOR BAR |
| **TAPE** | **M. EQ.** | **SPEC.** | |
| SP AND EP SELF-RECORDED TAPE | OSCILLO-SCOPE | SP: T1=110μsec.<br>EP: T2=110μsec. | |

Note:
Confirm no V dancing on the TV screen.

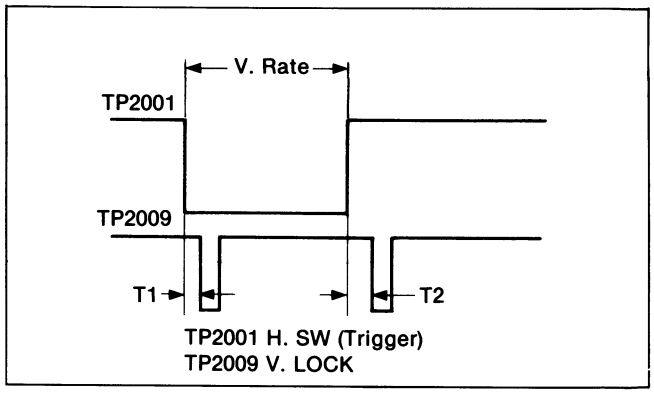



**Figure E5 Artificial V-sync Adjustment**

2-4. FINE SLOW TRACKING ADJUSTMENT

| TP | ADJ. | MODE | INPUT |
|---|---|---|---|
| | SP (FWD): VR2011<br>SP (REV): VR2021<br>EP (FWD): VR2006<br>EP (REV): VR2020 | FWD SLOW<br>REV SLOW | VIDEO SIGNAL |
| **TAPE** | **M. EQ.** | **SPEC.** | |
| SP AND EP SELF-RECORDED TAPE | MONITOR TV | | |

Note:
when this adjustment proceed, PG shifter, Tracking Fix, Fine Slow Free Run and Interchangeability Adjustments must be completed.

1. SLOW TRACKING VR on the front panel is center position.
2. Play back the portion just recorded .
3. Adjust VR 2011 (FWD SLOW) and VR 2021 (REV SLOW) so that the nois band disappears on the TV screen in the SP forward slow and reverse slow modes.
4. Adjust VR 2006 (FWD SLOW) and VR 2020 (REV SLOW) so that the noise band stays on the top or bottom of TV screen in the EP forward slow and reverse slow modes.

2-5. SLOW FREE RUN ADJUSTMENT

| TP | ADJ. | MODE | INPUT |
|---|---|---|---|
| TP2015 | VR2013 | PLAY | COLOR BAR |
| **TAPE** | **M. EQ.** | **SPEC.** | |
| SELF-RECORDED TAPE | FREQUENCY COUNTER | 864±10Hz | |

1. Connect a jamper wire between TP2018 and TP2020.

## 3. LUMINANCE SECTION

3-1. E-E LEVEL ADJUSTMENT

| TP | ADJ. | MODE | INPUT |
|---|---|---|---|
| TP3002 | VR3001 | STOP (E-E) | COLOR BAR |
| **TAPE** | **M. EQ.** | **SPEC.** | |
| | OSCILLO-SCOPE | 2.0±0.1Vp-p | |

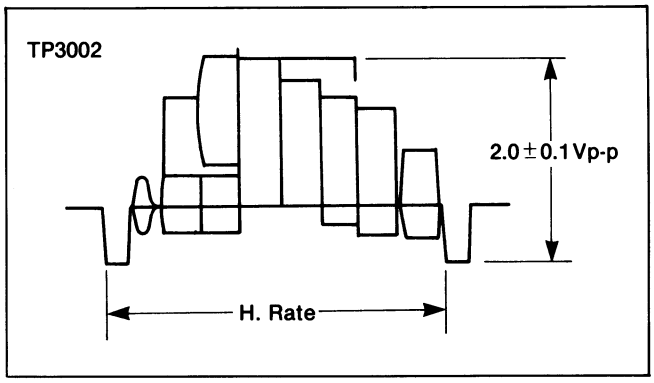



**Figure E6 E-E Level Adjustment**

3-2. REC CURRENT ADJUSTMENT

| TP | ADJ. | MODE | INPUT |
|---|---|---|---|
| TP503<br>TP504 (GND) | VR501 (Y)<br>VR502 (C) | EP<br>REC/PLAY | COLOR BAR |
| **TAPE** | **M. EQ.** | **SPEC.** | |
| BLANK | OSCILLO-SCOPE | 36±4mVp-p (CYAN)<br>110±6mVp-p (SYNC TIP) | |

1. Record the color bar signal in SLP mode.
2. Turn VR501 fully counterclockwise.
3. Adjust VR502 so that the cyan portion of chroma signal becomes 36+-4mVp-p.
4. Adjust VR501 so that the sync tip portion of FM signal becomes 110+-6mVp-p.

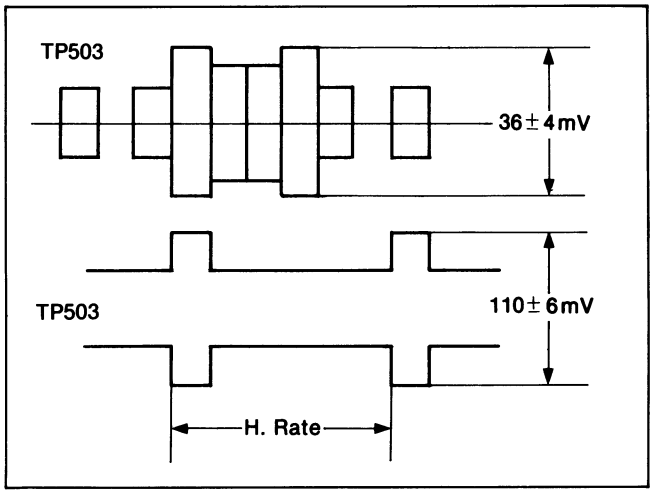



**Figure E7 Rec Current Adjustment**

3-3. RECURSIVE ADJUSTMENT

| TP | ADJ. | MODE | INPUT |
|---|---|---|---|
| TP3601 | VR3601<br>VR3602 | PLAY (SP) | CHROMA 100% VIDEO |
| **TAPE** | **M. EQ.** | **SPEC.** | |
| CHROMA 100% SELF-RECORDED TAPE (SP) | OSCILLO-SCOPE | V=MINIMUM | |

1. Supply the video signal as shown Figure E8 from the test signal generator to the video input and make a short recording the SP mode.
2. Play back the portion just recorded.
3. Adjust VR3601 and VR3602 so that "V" level becomes minimum.

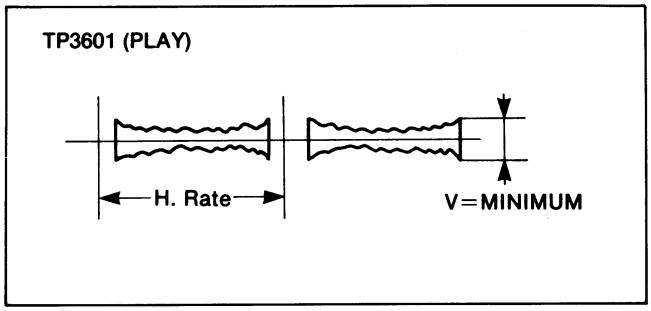
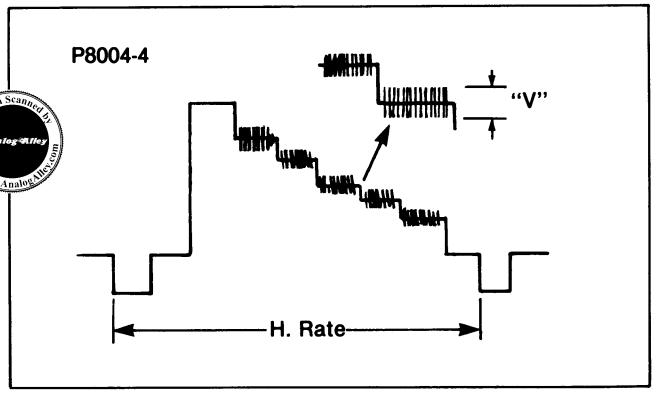



**Figure E8 Recursive Adjustment**

3-4. LUMINANCE SEPARATION ADJUSTMENT

| TP | ADJ. | MODE | INPUT |
|---|---|---|---|
| CONNECTOR P8004-4 | VR3603<br>VR3604 | STOP | COLOR BAR |
| **TAPE** | **M. EQ.** | **SPEC.** | |
| | OSCILLO-SCOPE | V=MINIMUM | |

1. Supply the color bar signal to the VIDEO INPUT 2.
2. Adjust VR3603 and VR3604 so that the leakage of the chrominance signal "V" becomes minimum.




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**Figure E9**

3-5. CCD INPUT LEVEL ADJUSTMENT

| TP | ADJ. | MODE | INPUT |
|---|---|---|---|
| TP3501 | VR3901 | PLAY | |
| **TAPE** | **M. EQ.** | **SPEC.** | |
| ALIGNMENT TAPE: VFM8080HMFP PORTION: ① | OSCILLO-SCOPE | V=MAXIMUM | |

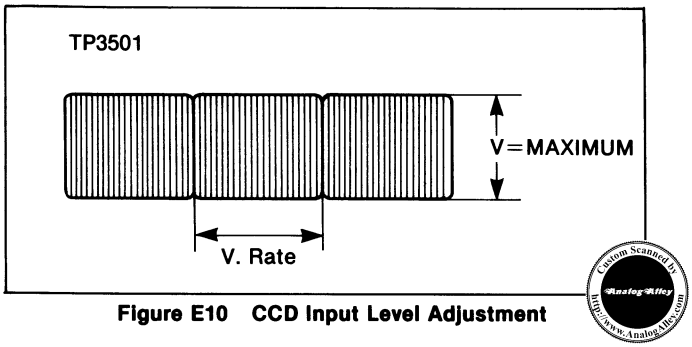



**Figure E10 CCD Input Level Adjustment**

3-6. CCD REFERENCE OSC ADJUSTMENT

| TP | ADJ. | MODE | INPUT |
|---|---|---|---|
| TP3902 | C3928 | STOP | |
| **TAPE** | **M. EQ.** | **SPEC.** | |
| | FREQUENCY COUNTER | 14.3MHz±0.3MHz | |

1. Make short-circuit between TP3928 and TP3902.
2. Adjust C3928 to obtain 14.3MHz +- 0.3MHz frequency at TP3902.

3-7. VCO REFERENCE OSC ADJUSTMENT

| TP | ADJ. | MODE | INPUT |
|---|---|---|---|
| TP3503 | VR3503 | REC · PLAY | |
| **TAPE** | **M. EQ.** | **SPEC.** | |
| BLANK | FREQUENCY COUNTER | 550kHz±5kHz | |

1. Make short-circuit between TP3507 and GND.
2. Adjust VR3503 to obtain 550kHz frequency at TP3503.

3-8. SKEW COMPENSATION ADJUSTMENT

| TP | ADJ. | MODE | INPUT |
|---|---|---|---|
| | VR3501 | CUE/REV (SP) | |
| **TAPE** | **M. EQ.** | **SPEC.** | |
| ALIGNMENT TAPE: VFM8080HMFP PORTION: ③ | | MINIMUM SKEW ON TV MONITOR SCREEN SEE FIG. E11 | |

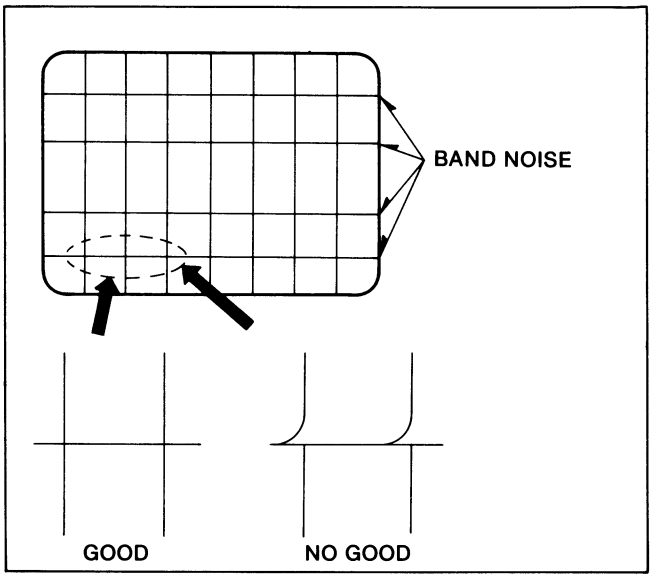



**Figure E11 Skew Comp. Adjustment**

3-9. CHROMA AMPLITUDE ADJUSTMENT

| TP | ADJ. | MODE | INPUT |
|---|---|---|---|
| TP3504 | VR3504 | REV · PLAY | FLAT FIELD 50%+ CHROMA 100% |
| **TAPE** | **M. EQ.** | **SPEC.** | |
| FLAT FIELD 50%+ CHROMA 100% RECORDED TAPE | OSCILLO-SCOPE TEST SIGNAL GENERATOR | SEE FIG. E13 | |

1. Supply the following video signal from the test signal genelator to the video input and make a short recording in the SP mode.
2. Connect the scope to TP3504.
3. Play back the portion just recorded.
4. Adjust VR3504 so that the playback chroma signal at switching portion becomes the waveform between figure (b) and (C).

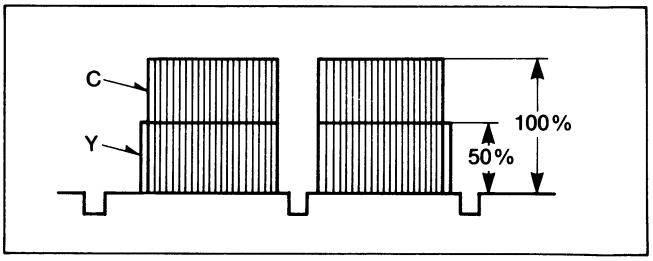



**Figure E12 Video Input Signal.**

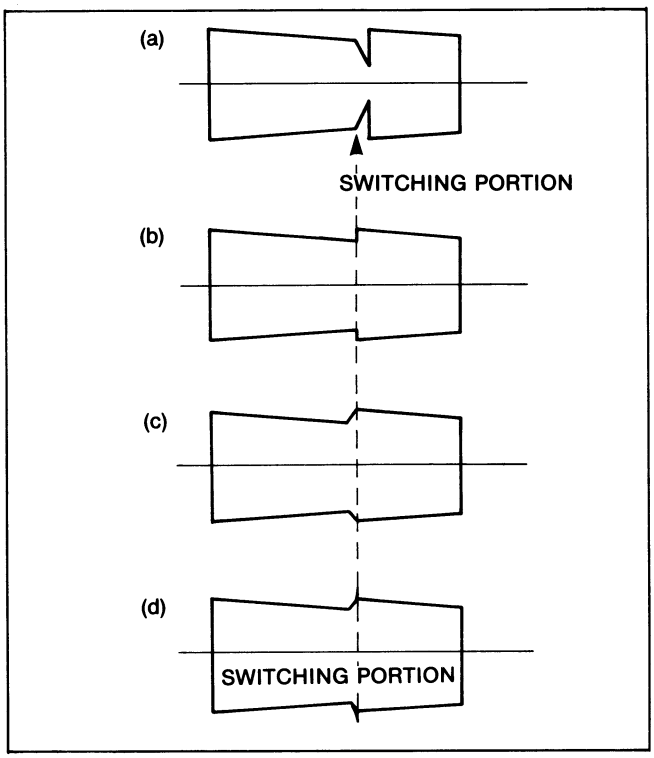



**Figure E13 Chroma Amplitude Adjustment**

3-10. CHROMA PHASE ADJUSTMENT

| TP | ADJ. | MODE | INPUT |
|---|---|---|---|
| | VR3505 | SEARCH | FLAT FIELD 50%+ CHROMA 100% |
| **TAPE** | **M. EQ.** | **SPEC.** | |
| FLAT FIELD 50%+ CHROMA 100% RECORDED TAPE | MONITOR TV | SEE FIG. E14 | |

1. Supply the video signal as shown in Figure E12 from the test signal generator to the video input and make a short recording in the SP mode.
2. Play back the portion just recorded in the search mode.
3. Adjust VR3505 so that the tone of the color (Chrominance Phase) at the band noise portions becomes the same as the main portions on the monitor TV screen as shown in Figure E14.

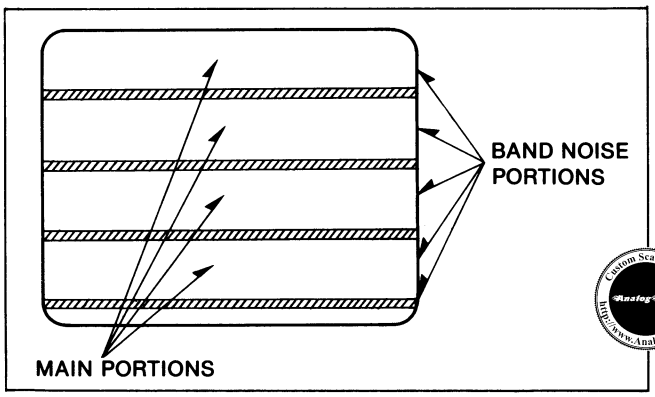



**Figure E14 Chroma Phase Adjustment**

## 4. NORMAL AUDIO SECTION

Note:
Audio Level
0dB(V)=1Vrms=2.828Vp-p
-8db(V)=0.398Vrms=1.126Vp-p
-10dB(V)=0.316Vrms=0.894Vp-p
-20dB(V)=0.1Vrms=0.283Vp-p

Unless otherwise specified, set the following switches to the following posifions.

| SWITCH | POSITION |
|---|---|
| TAPE SPEED SELECTOR | SP |
| INPUT SIGNAL SELECTOR | LINE IN 2 |
| AUDIO PLAYBACK SELECTOR | NORMAL |
| AUDIO REC LEVEL CONTROL SELECTOR | AGC |
| HI-FI, NORMAL, MIX BUTTON | NORMAL |

4-1. NORMAL AUDIO BIAS CURRENT ADJUSTMENT

| TP | ADJ. | MODE | INPUT |
|---|---|---|---|
| TP4002(+) TP4003(−) | VR4002 | SP REC · PLAY | |
| **TAPE** | **M. EQ.** | **SPEC.** | |
| BLANK TAPE | V.T.V.M. | 2.75±0.1mVrms | |

4-2. AUDIO PLAYBACK LEVEL ADJUSTMENT

| TP | ADJ. | MODE | INPUT |
|---|---|---|---|
| LINE OUT | VR4001 | PLAY | 1kHz, −20dB |
| **TAPE** | **M. EQ.** | **SPEC.** | |
| 1kHz, −20dB SELF-RECORDED TAPE | V.T.V.M | ±2dB OF E-E LEVEL | |

1. Supply the 1KHz sine wave signal at -20dB to the Audio Input 2 and make a short recording in the SP mode.
2. At the same time, measure the audio E-E level at the Audio Output.
3. Play back the portion just recorded.
4. Adjust VR4001 so that the audio level at the Audio Output becomes +- 2dB of the audio E-E output level.

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## 5. HD AUDIO SECTION

Note:
1. Unless other wise specified, set the following switches to the following positions.

| SWITCH | POSITION |
|---|---|
| TAPE SPEED SELECTOR | SP |
| INPUT SIGNAL SELECTOR | LINE IN 2 |
| AUDIO PLAYBACK SELECTOR | HI-FI |
| AUDIO REC LEVEL CONTROL SELECTOR | NORMAL |
| HI-FI, NORMAL, MIX BUTTON | NORMAL |

5-1. FM CARRIER FREQUENCY ADJUSTMENT

Notes:
Fix the Audio Recording Level Controls on the front panel at the minimum position.

| TP | ADJ. | MODE | INPUT |
|---|---|---|---|
| (CH1: L) BETWEEN R4590 & L4503 (CH2: R) BETWEEN R4595 & L4504 | VR4501 (CH1) VR4509 (CH2) | REC · PLAY | |
| **TAPE** | **M. EQ.** | **SPEC.** | |
| | FREQUENCY COUNTER | 1.3MHz±10kHz (CH1) 1.7MHz±10kHz (CH2) | |

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5-2. FM DEVIATION ADJUSTMENT

Note:
Fix the Audio Recording Level Controls on the front panel to the minimum position.

| TP | ADJ. | MODE | INPUT |
|---|---|---|---|
| (CH1: L) CATHODE OF D4510 (CH2: R) CATHODE OF D4517 | VR4502 (CH1) VR4507 (CH2) | REC · PLAY | |
| **TAPE** | **M. EQ.** | **SPEC.** | |
| | OSCILLO-SCOPE | CH1 (L)=320mVp-p CH2 (R)=320mVp-p | |

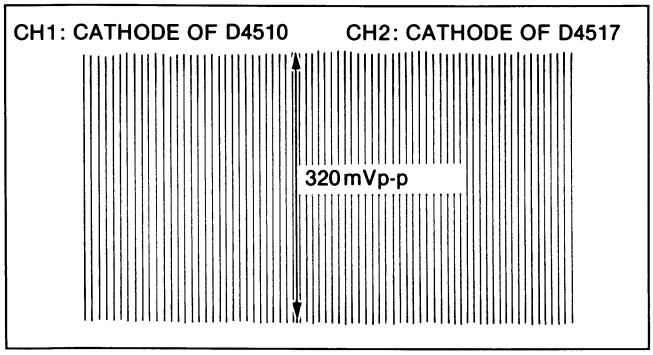



**Figure E15 FM Deviation Adjustment**

5-3. Hi-Fi AUDIO RECORDING CURRENT ADJUSTMENT

Note:
Fix the Audio Recording Level Controls on the front panel to the minimum position.

| TP | ADJ. | MODE | INPUT |
|---|---|---|---|
| TP4507 TP4508 (GND) | VR4503 | REC · PLAY | |
| **TAPE** | **M. EQ.** | **SPEC.** | |
| BLANK | OSCILLO-SCOPE | 240mVp-p±10mV | |

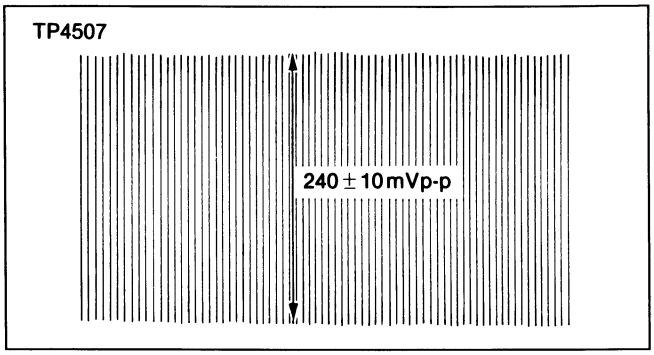



**Figure E16 HD Audio Rec Current Adjustment**

5-4. Hi-Fi AUDIO HEAD SW SHIFTER ADJUSTMENT

| TP | ADJ. | MODE | INPUT |
|---|---|---|---|
| TP4502 | VR4510 | PLAY | |
| **TAPE** | **M. EQ.** | **SPEC.** | |
| VFM8080HMFP PORTION: ③ | OSCILLO-SCOPE | NO SW GAP | |

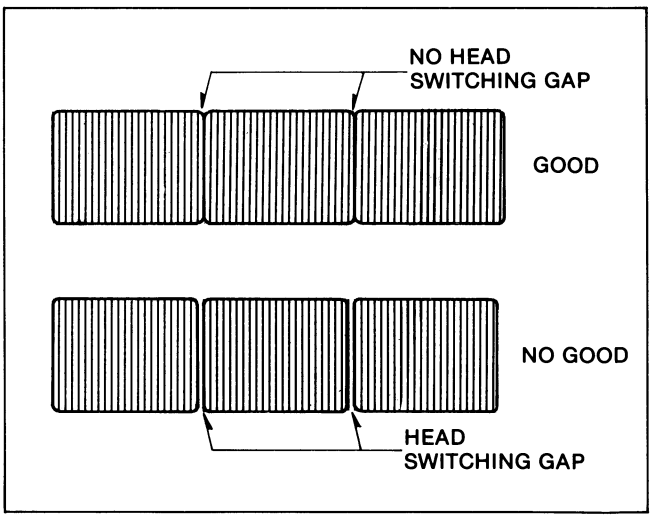



**Figure E17 HD Audio Head Sw Adjustment**

5-5. Hi-Fi AUDIO PLAYBACK LEVEL ADJUSTMENT

| TP | ADJ. | MODE | INPUT |
|---|---|---|---|
| LINE OUT (L) (R) | VR4504 (L) VR4508 (R) | PLAY | 1kHz, −10dB SINE WAVE |
| **TAPE** | **M. EQ.** | **SPEC.** | |
| SELF RECORDED TAPE | V.T.V.M. | −8±1dB | |

1. Set the Audio Rec Level control selector to the Normal position.
2. Supply the 1KHz Sine wave signal at -10dB to the Audio Inputs 2 and adjust the Audio Rec Level controls so that the Audio Line outputs become -8dB.
3. Make a short recording and Play back the portion just recorded.
4. Adjust VR 4504 (CHL) and VR 4508 (CHR) so that the level at the Audio Outputs become -8+-1dB.

5-6. HD AUDIO MUTING LEVEL ADJUSTMENT

| TP | ADJ. | MODE | INPUT |
|---|---|---|---|
| PIN 5 OF IC4508 | VR4505 | PLAY | |
| **TAPE** | **M. EQ.** | **SPEC.** | |
| VFM8080HMFP PORTION: ① | D.V.M. | 3.5V | |

1. Play back the 1st portion of the alignment tape.
2. Connect the D.V.M. to pin 5 of IC4508.
3. Adjust VR4505 so that the voltage become.3.5V.

5-7. LEVEL METER ADJUSTMENT

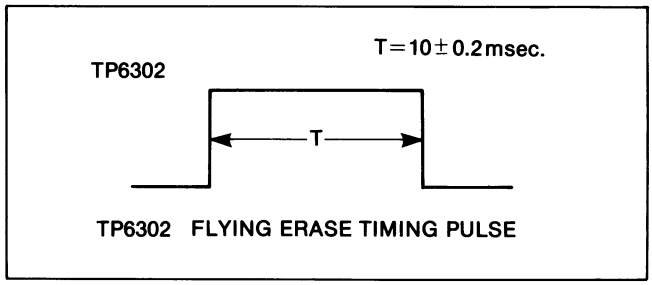
| TP | ADJ. | MODE | INPUT |
|---|---|---|---|
| | VR6501 (L-ch) VR6502 (R-ch) | STOP (E-E) | 1kHz, −10dB AUDIO SIGNAL |
| **TAPE** | **M. EQ.** | **SPEC.** | |
| SELF RECORDED TAPE | SIGNAL GENERATOR/ V.T.V.M. | 0dB INDICATION | |

1. Set the Audio Rec Level Control selector to the Normal position.
2. Supply the 1KHz sine wave at -10dB to the Audio inputs 2 and adjust the Audio Rec level controls to obtain -8dB Audio outputs.
3. Adjust VR6501 (CH L) and VR6502 (CH R) so that the Audio Level meters indicate 0dB.

## 6. SYSTEM CONTROL SECTION

6-1. FLYING ERASE TIMING ADJUSTMENT

| TP | ADJ. | MODE | INPUT |
|---|---|---|---|
| TP6302 | VR6302 | INSERT-REC·PLAY | COLOR BAR |
| **TAPE** | **M. EQ.** | **SPEC.** | |
| SELF RECORDED TAPE | OSCILLO-SCOPE | T=10±0.2msec. | |

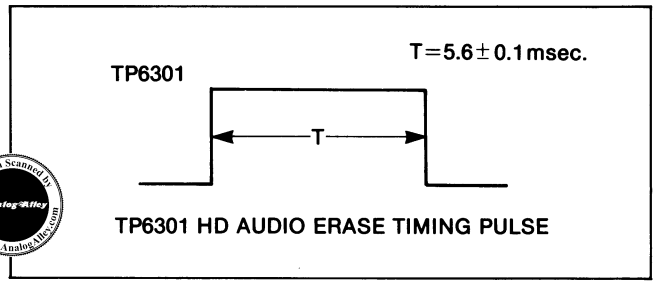


TP6302 FLYING ERASE TIMING PULSE

**Eigure E18 F. ERASE Timing Adjustment**

6-2. Hi-Fi AUDIO ERASE TIMING ADJUSTMENT

| TP | ADJ. | MODE | INPUT |
|---|---|---|---|
| TP6301 | VR6301 | INSERT-REC·PLAY | COLOR BAR |
| **TAPE** | **M. EQ.** | **SPEC.** | |
| SELF RECORDED TAPE | OSCILLO-SCOPE | T=5.6±0.1msec. | |



TP6301 HD AUDIO ERASE TIMING PULSE

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**Figure E19 HD Audio Erase Timing Adjustment**

## 7. TIMER SECTION

CAUTION:
When repair or parts replacement is required, disconnect P7504 (backup +B line) to pevent electric shock.

7-1. TIMER RESET ADJUSTMENT

| TP | ADJ. | MODE | INPUT |
|---|---|---|---|
| TP7501 | VR7501 | | |
| **TAPE** | **M. EQ.** | **SPEC.** | |
| | DC POWER SUPPLY/ FREQUENCY COUNTER | 128Hz | |

Note:
Do not connect the AC Power plug.
1. Disconnect P7504.
2. Connect the jumper wire between TP7504 and TP7505.
3. Set the voltage of the DC POWER SUPPLY to 4.4+-0.05V and supply to TP7505 (+) and TP7507 (GND).
4. Adjust R7501 so that the frequency changes from 128Hz to 16Hz.
5. Set the voltage of the DC Power Supply to 4.6+-0.05V.
6. Confirm that the frequency of TP7501 is 128Hz.

7-2. TIMER CLOCK ADJUSTMENT

| TP | ADJ. | MODE | INPUT |
|---|---|---|---|
| TP7501 | C7502 | | |
| **TAPE** | **M. EQ.** | **SPEC.** | |
| | FREQUENCY COUNTER/ DC POWER SUPPLY | 7812.5±0.017μsec. | |

Note:
Do not connect the AC Power plug.
1. Disconnect P7504.
2. Connect the jumper wire between TP7504 and TP7505.
3. Set the voltage of the DC POWER SUPPLY to 5.1+-0.05V and supply to TP7505 (+) and TP7507 (GND).
4. Adjust C7502 so that the indication of FREQUENCY COUNTER becomes 7812.5+-0.017usec.

## 8. TV DEMODULATOR SECTION

Note:
To adjust the TV Demodulator Section, TV Demodulator Unit must be removed from the Deck.

1. Remove the TV DEMODULATOR Unit from the deck, and unsolder the "A" point as shown below.

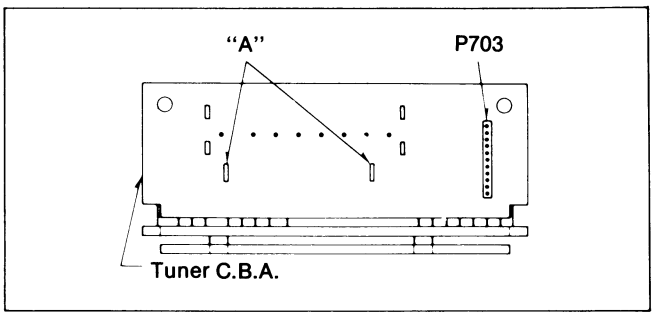



**Figure E20 Removal of TV Demodulator**

2. Open the P.C.B. connect the P703, P702, P701 and Tuner pin jack as shown below.

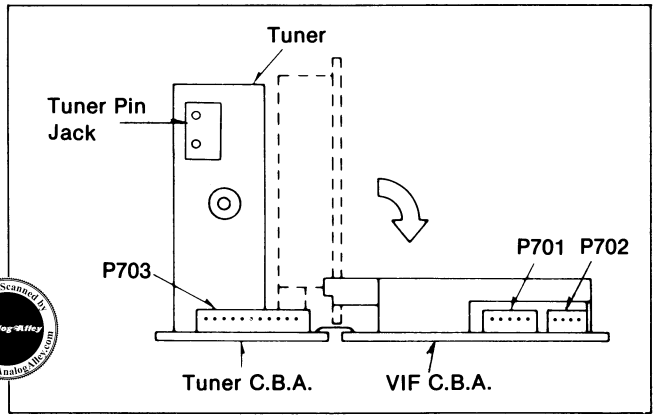



**Figure E21 Opening of TV Demodulator**

8-1. VIF OVERALL SWEEP ADJUSTMENT

| TP | ADJ. | MODE | INPUT |
|---|---|---|---|
| TP707 | T701, T703 TUNER CONVERTER COIL | | VIF SWEEP |
| **TAPE** | **M. EQ.** | **SPEC.** | |
| | VIF SWEEP/ MONITOR SCOPE | | |

1. Set the Band SW to the VHF high position and receive the TV station where the voltage at BT terminal of the tuner becomes 20V+-1V.
2. Disconnect P702.
3. Connect a jumper wire between the AGC terminal of the Tuner Unit and GND.
4. Connect the VIF SWEEP tothe TUNER TEST POINT and connect the MONITOR SCOPE to TP707 as shown below.

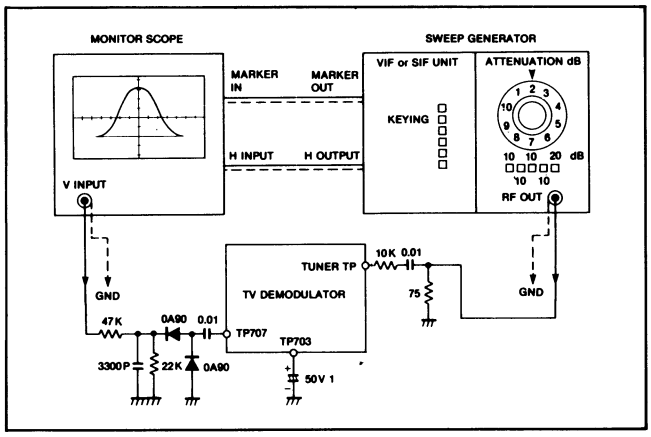



**Figure E22 Measuring Equipment Connection**

5. Adjust the output of the VIF SWEEP GENERATOR so that the sweep wave becomes 0.3Vp-p on the MONITOR SCOPE.
6. Release the attenuator of the VIF SWEEP GENERATOR for 20dB connect the following Adjustment Jig. to both points TP709 and REG 12V (P703-11).

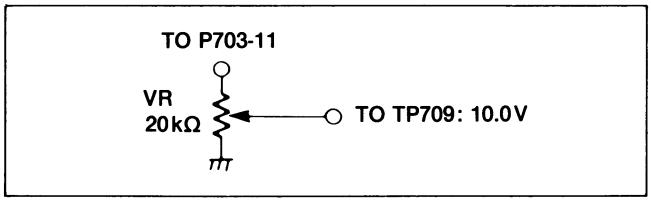



**Figure E23 Adjustment Jig. 1**

7. Adjust the VR of the Adjustment Jig.1 so that the sweep wave becomes 0.3Vp-p on the MONITOR SCOPE.
8. Adjust T701 so that the marker position at 44.00MHz becomes maximum.
9. Adjust T703 so that the waveform is shown below.

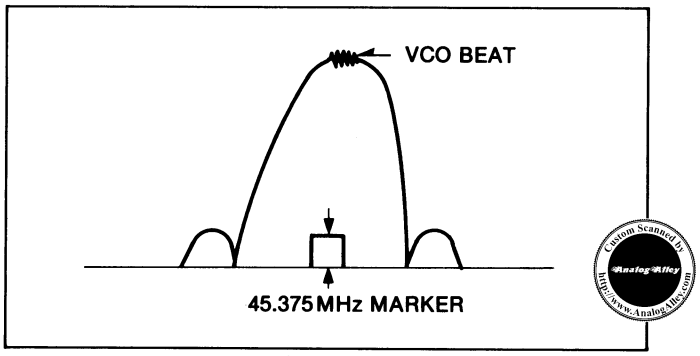



**Figure E24**

10. Adjust the VR of the Adjustment Jig.1 so that the sweep wave becomes 0.3Vp-p on the MONITOR SCOPE.
11. Adjust the T703 so that the waveform is shown in Figure E17.
12. Adjust the T701 & Tuner Converter Coil so that the sweep output waveform is shown in Figure E25.

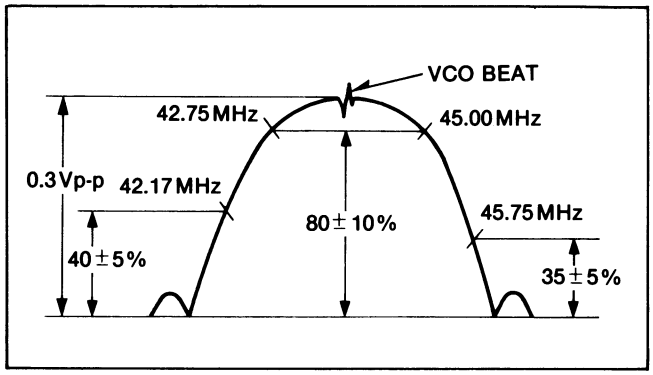



**Figure E25**

8-2. SIF SWEEP ADJUSTMENT

| TP | ADJ. | MODE | INPUT |
|---|---|---|---|
| VR751, HOT | T751<br>T752 | | SIF SWEEP |
| **TAPE** | **M. EQ.** | **SPEC.** | |
| | SIF SWEEP/<br>MONITOR<br>SCOPE | | |

1. Set the Band SW to the VHF high position and receive the TV station where the voltage at BT terminal of the tuner becomes 20V+-1V.
2. Disconnect P702.
3. Connect a jumper wire between the AGC terminal of the Tuner Unit and GND.
4. Connect the SIF SWEEP GENERATOR to TP706 and connect the MONITOR SCOPE to VR751 (HOT) as shown below.

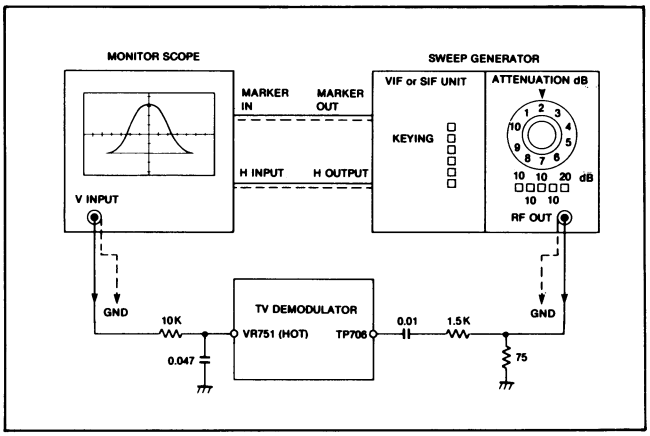



**Figure E26 Measuring Equipment Connection**

5. Connect the Adjustment JIG.1 to both points TP709 and REG 12V (P703-11) and then adjust VR so that the DC level becomes 4V.
6. Set the output of the SIF SWEEP GENERATOR to 6mVrms at no load.
7. Adjust T752 so that the marker position at 4.5MHz becomes minimum as shown in Figure E20.
8. Adjust T751 so that 4.5MHz+-90kHz markers are symmetrical to the 4.5MHz marker.

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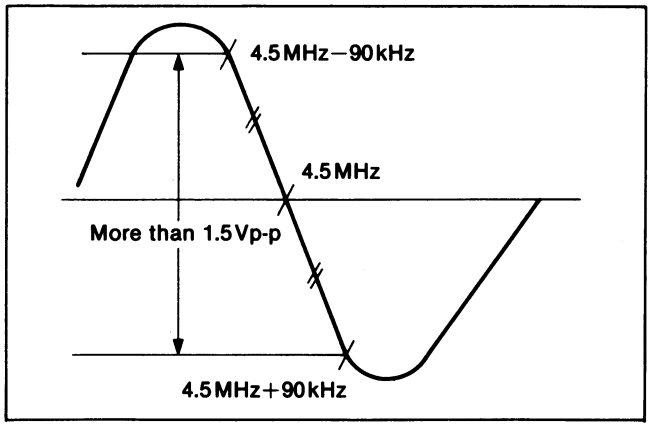



**Figure E27 SIF WAVEFORM**

8-3. VCO ADJUSTMENT

| TP | ADJ. | MODE | INPUT |
|---|---|---|---|
| TP704 | T703 | | |
| **TAPE** | **M. EQ.** | **SPEC.** | |
| | FREQUENCY COUNTER/ TUNING AMP | 45750±10kHz | |

1. Set the Band SW to the VHF high position and receive the TV station where the voltage at BT terminal of the tuner becomes 15V+-1V.
2. Disconnect P702.
3. Connect a jumper wire between the AGC terminal of the Tuner Unit and GND.
4. Connect the Frequency Counter through a Tuning Amp to TP704 as shown below.

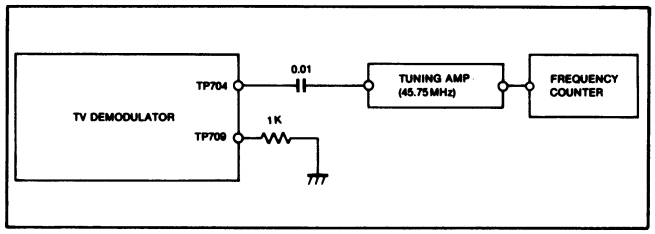



**Figure E28**

8-4. AFC ADJUSTMENT

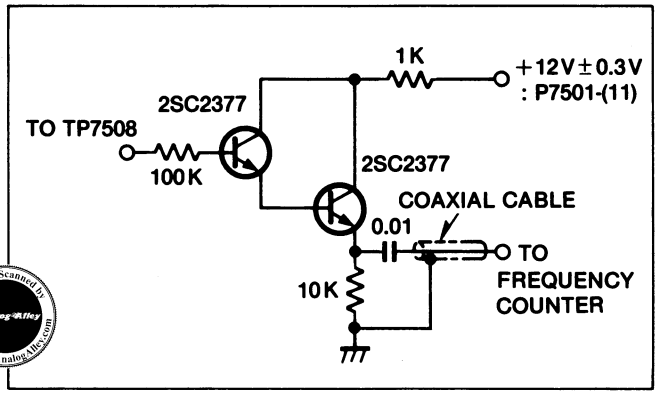
| TP | ADJ. | MODE | INPUT |
|---|---|---|---|
| AFC TERMINAL OF THE TUNER | T704 | | CW SIGNAL (45.75MHz) |
| **TAPE** | **M. EQ.** | **SPEC.** | |
| | CW OSCILLATOR/ D.V.M. | 6.5±0.3V | |

1. Set the Band SW to the VHF high position and receive the TV station where the voltage at BT terminal of the tuner becomes 15V+-1V.
2. Disconnect P702 and connect a jumper wire between P702(1) and P702(2).
3. Adjust the CW OSCILLATOR output to 1.0Vp-p and connect the TUNER TEST POINT through a 10Kohm resistor.
4. Connect the D.V.M. to the AFC TERMINAL of the tuner.
5. Adjust T704 so that the reading of the D.V.M. is 6.5+-0.3V.

8-5. TV SIGNAL DETECT FREQUENCY ADJUSTMENT

| TP | ADJ. | MODE | INPUT |
|---|---|---|---|
| TP7508 | VR7502 | | |
| **TAPE** | **M. EQ.** | **SPEC.** | |
| | FREQUENCY COUNTER | 15.735±0.05kHz | |

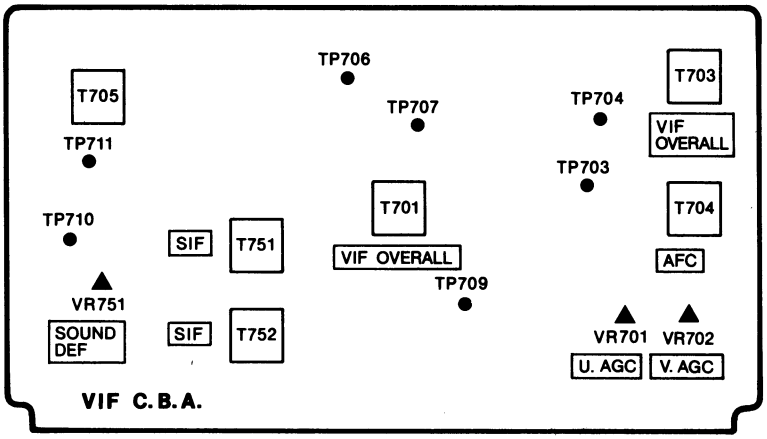
Note:
To make this adjustment, prepare the following circuit.



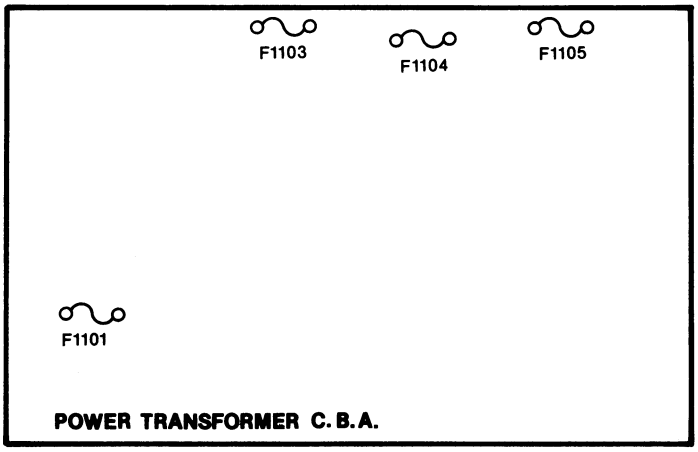

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**Figure E29 Adjustment Circuit**

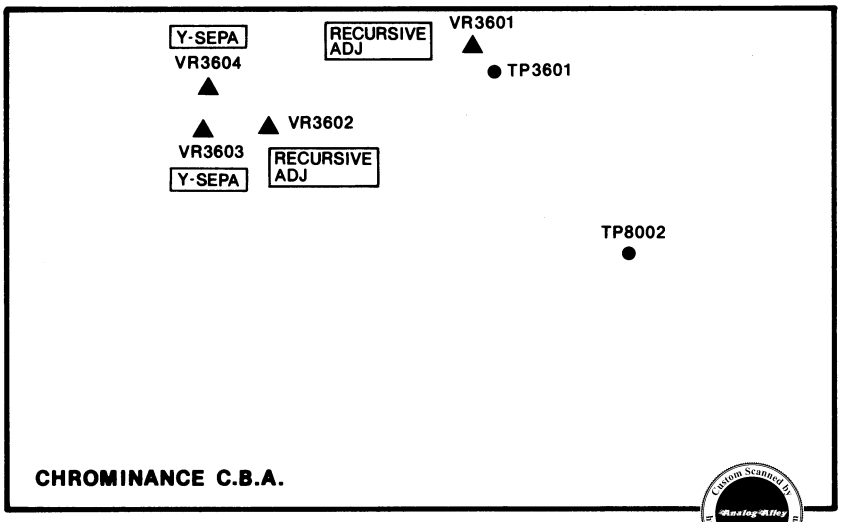
## VIF C.B.A. (VEP07289D)



## POWER TRANSFORMER C.B.A. (VEP01254A)

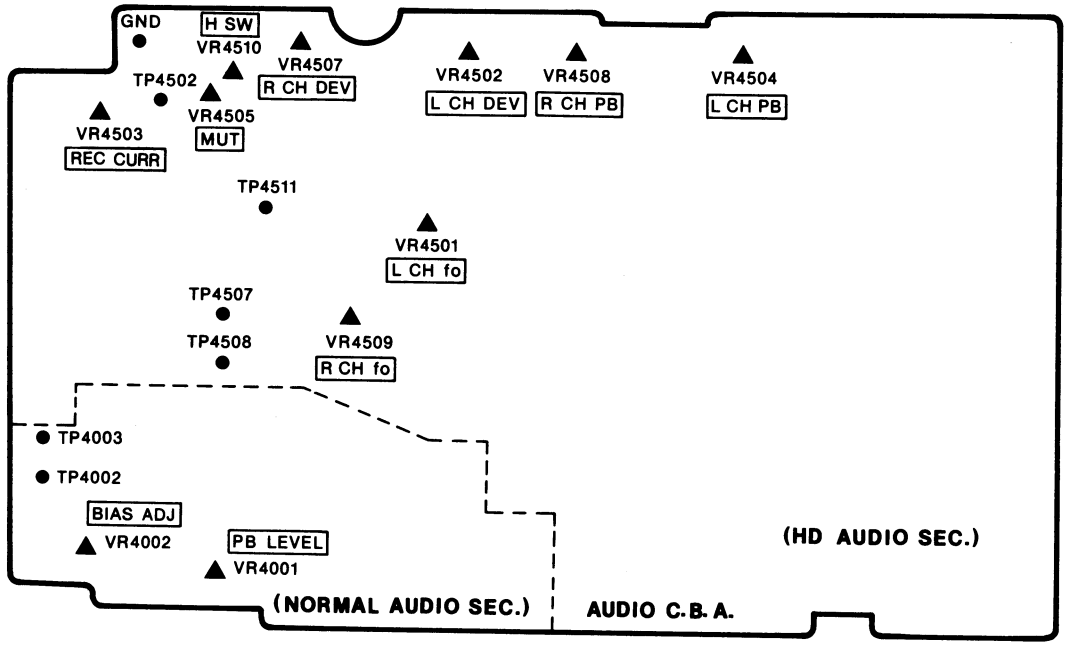



## CHROMINANCE C.B.A. (VEP08112A)



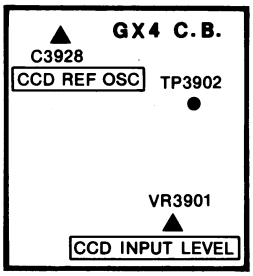

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## AUDIO C.B.A. (VEP04169A)

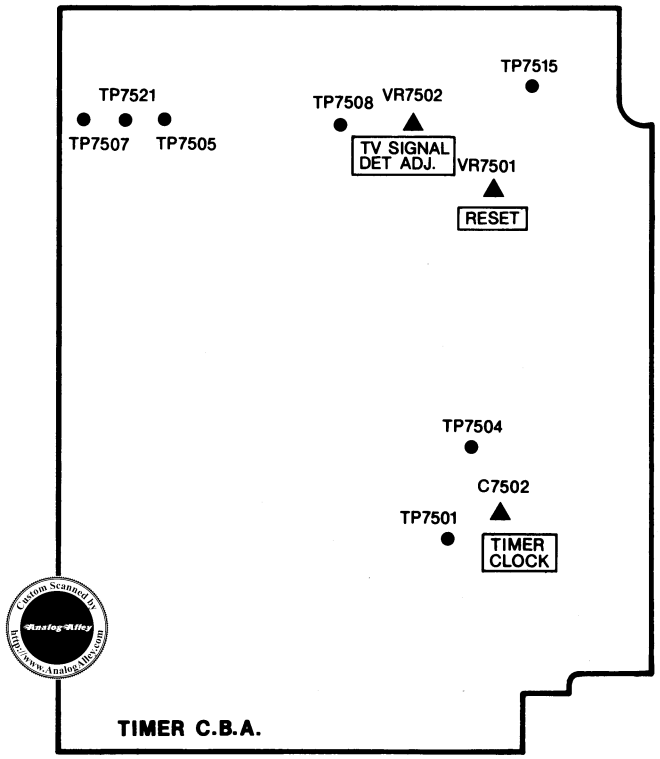


# LOCATION OF TEST POINTS & CONTROLS

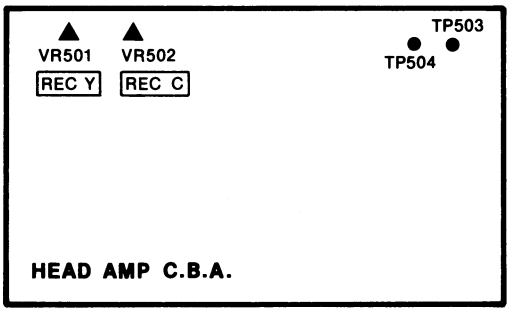
## GX4 C.B. (VJB03375)



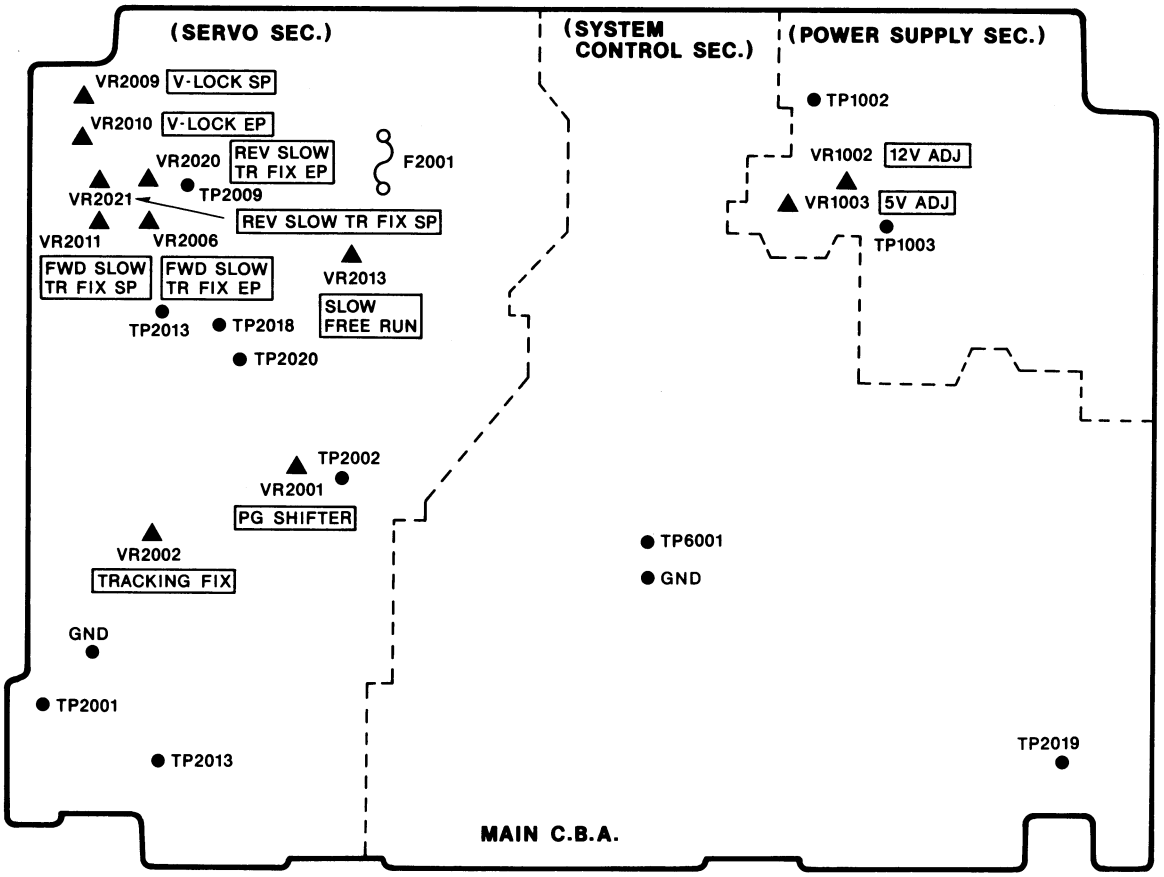

## TIMER C.B.A. (VEP07346A)



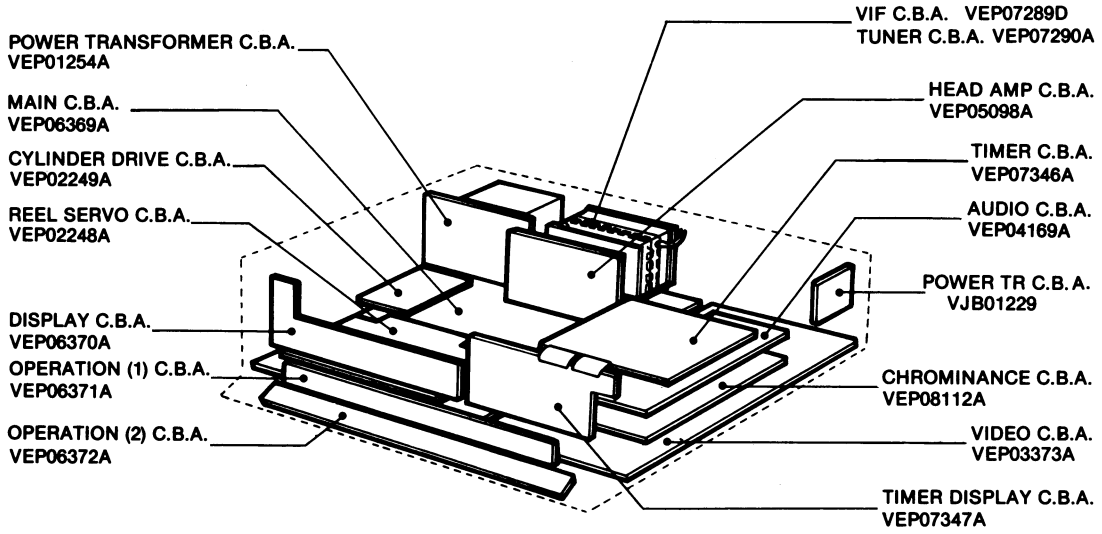

## HEAD AMP C.B.A. (VEP05098A)



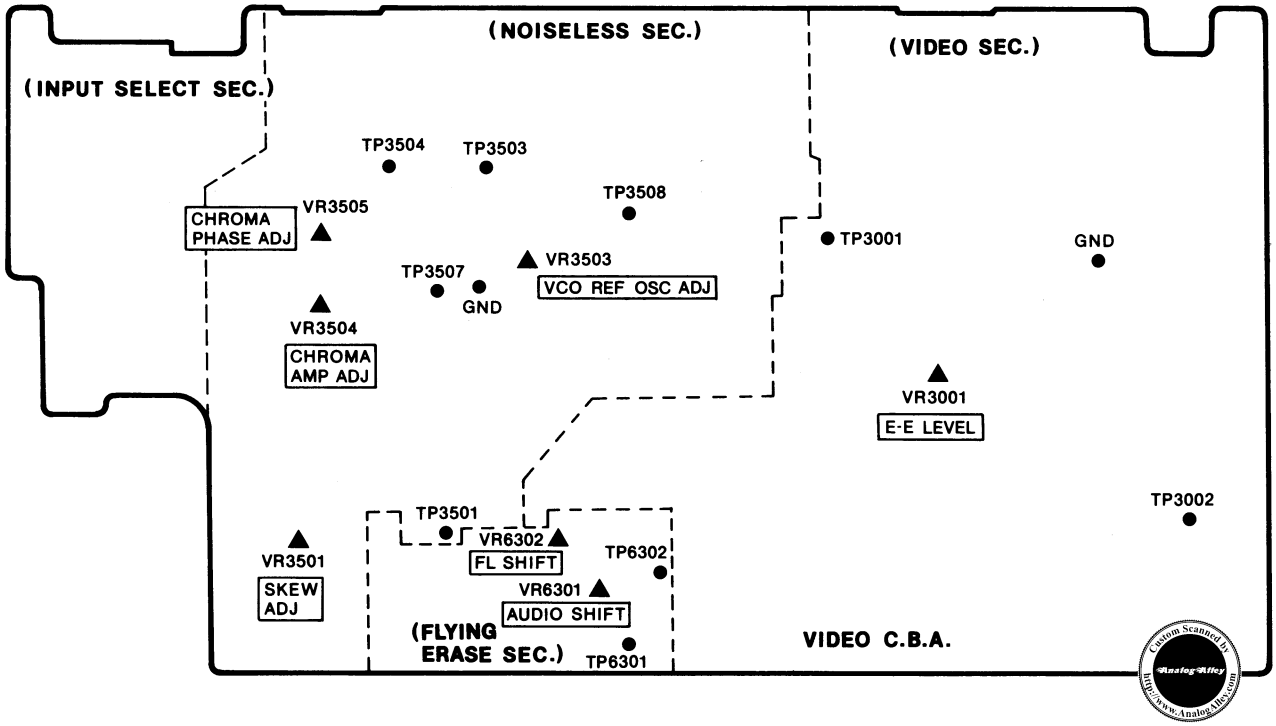

## MAIN C.B.A. (VEP06369A)



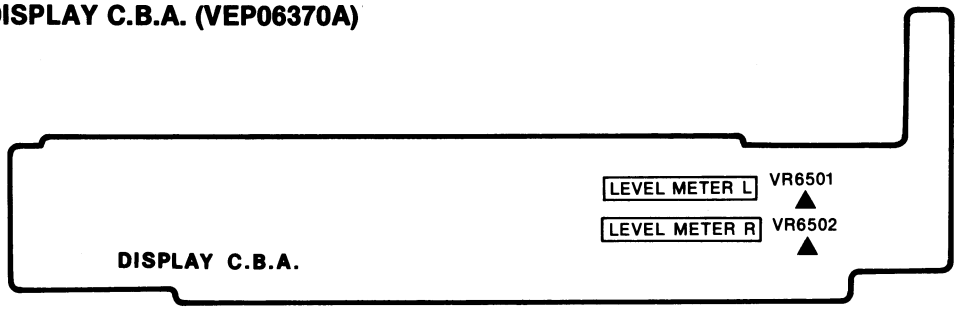

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## VIDEO C.B.A. (VEP03373A)

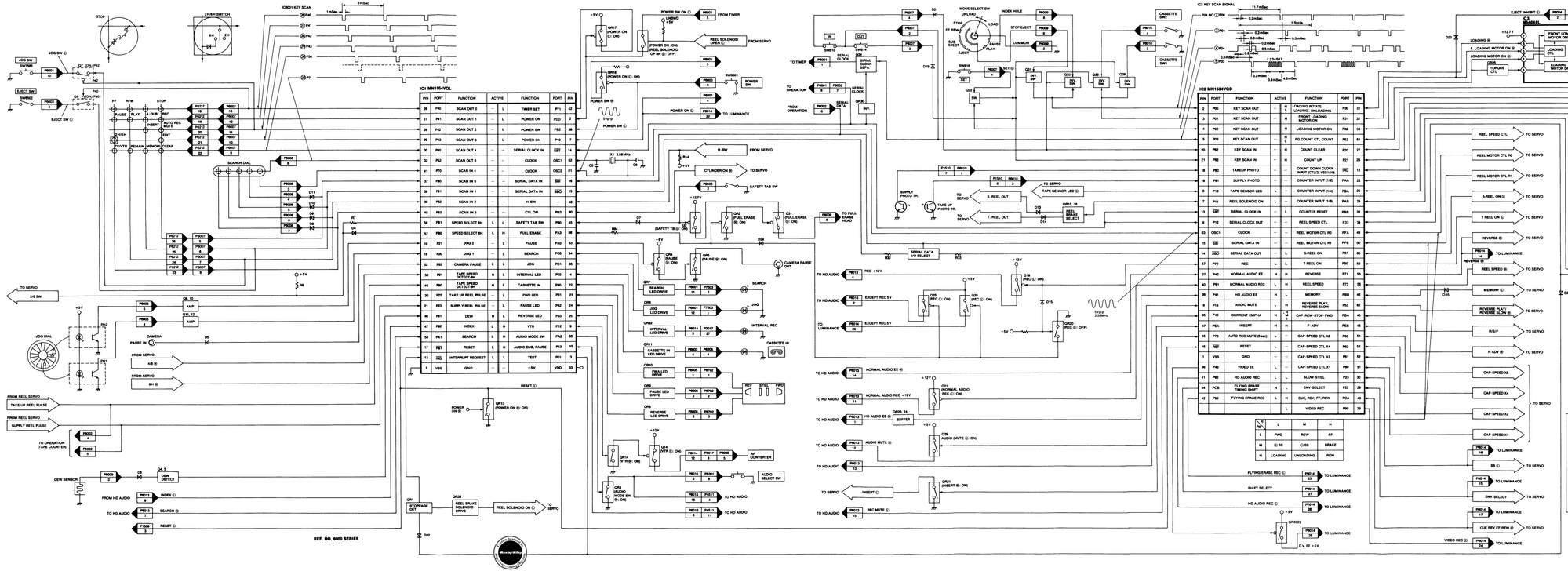



## DISPLAY C.B.A. (VEP06370A)

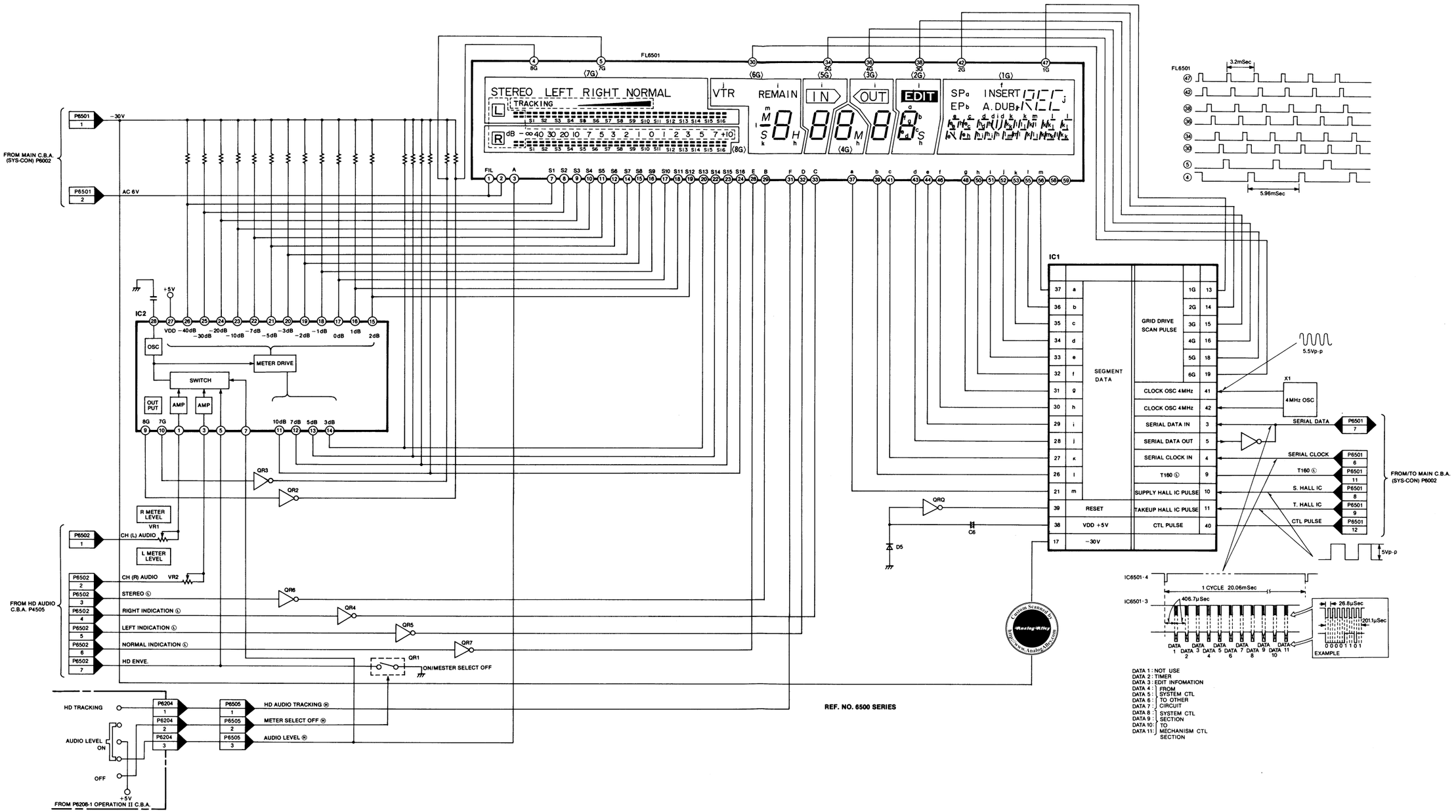


SYSTEM CONTROL BLOCK SYSTEM CONTROL BLOCK

# SYSTEM CONTROL BLOCK DIAGRAM

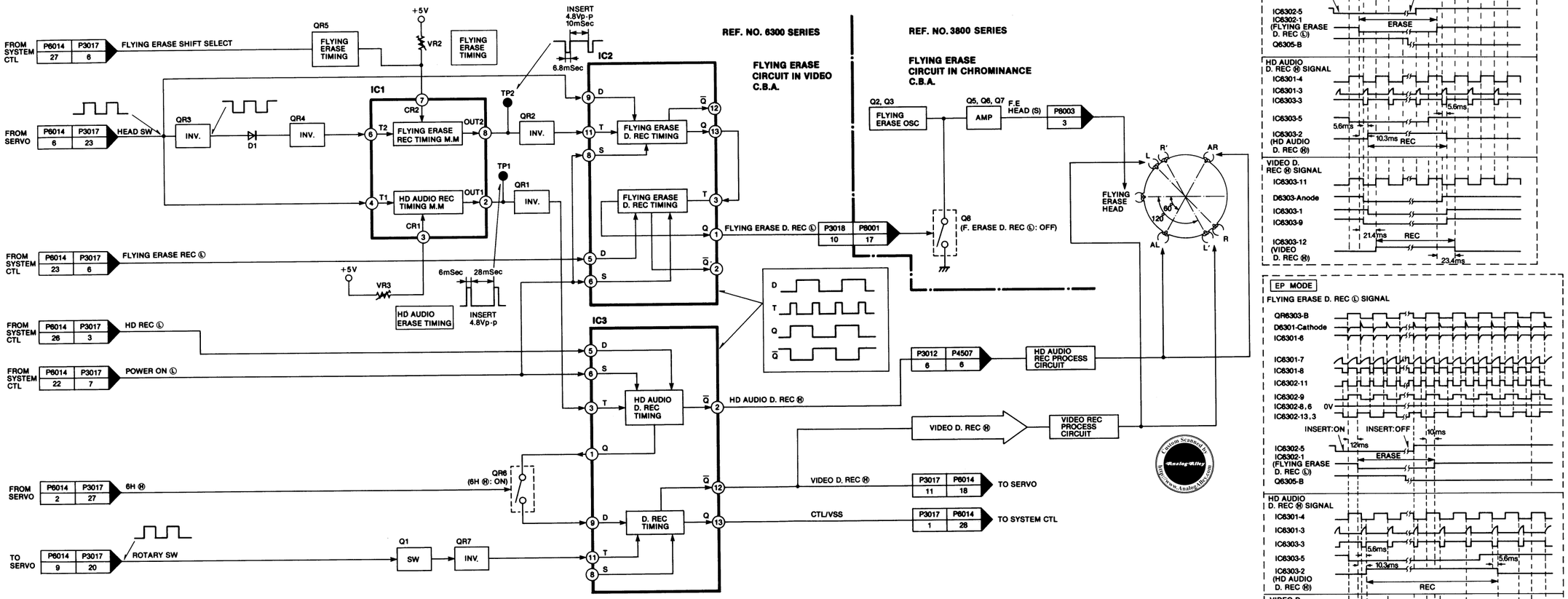


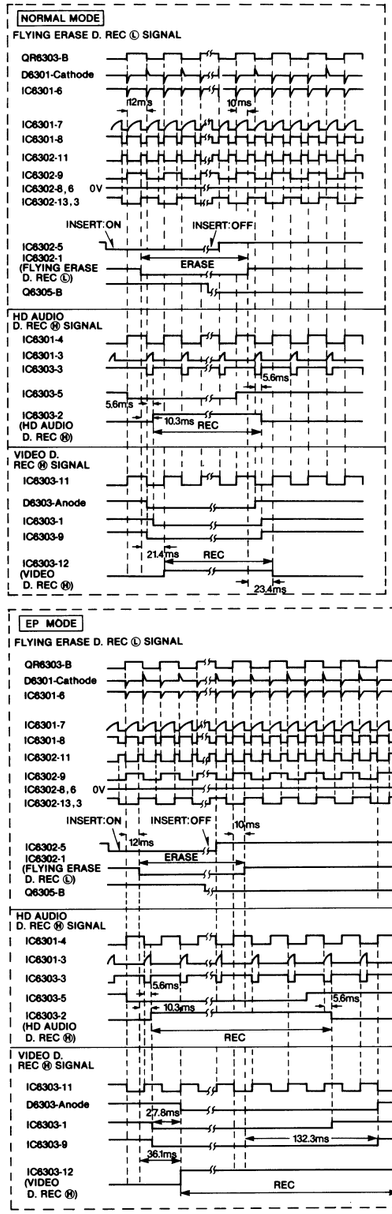
# OPERATION BLOCK DIAGRAM




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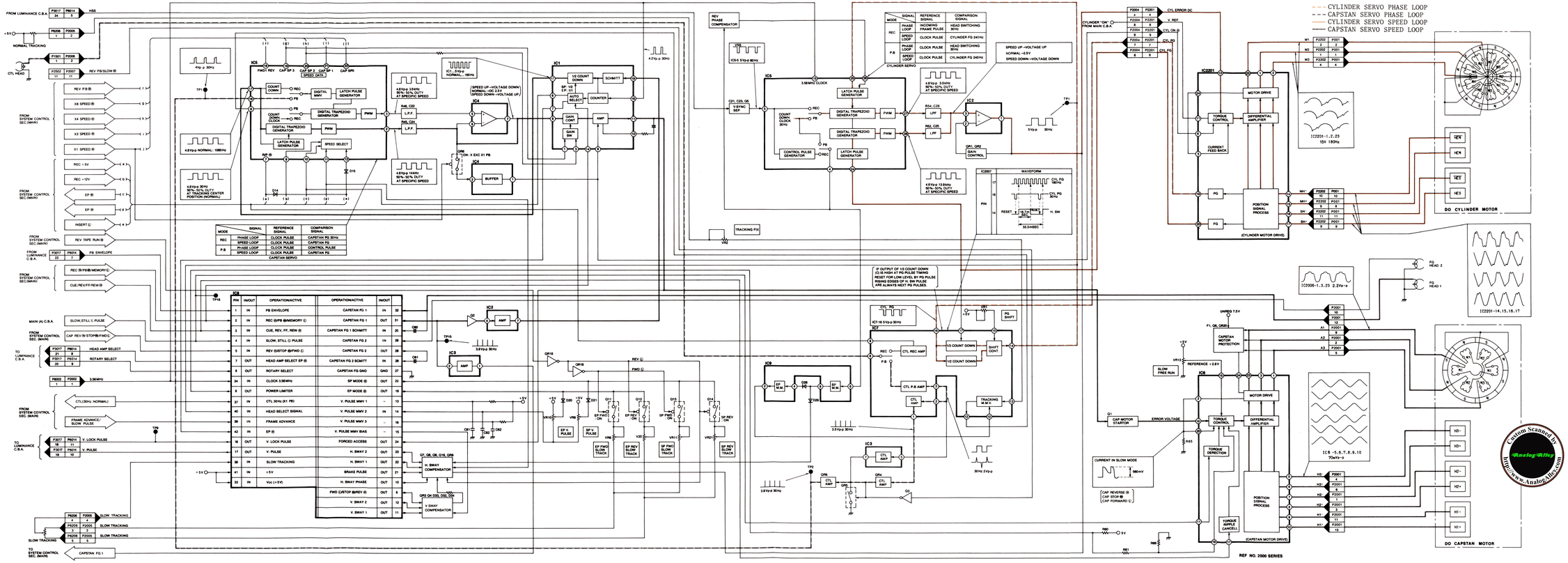
# FLYING ERASE BLOCK DIAGRAM



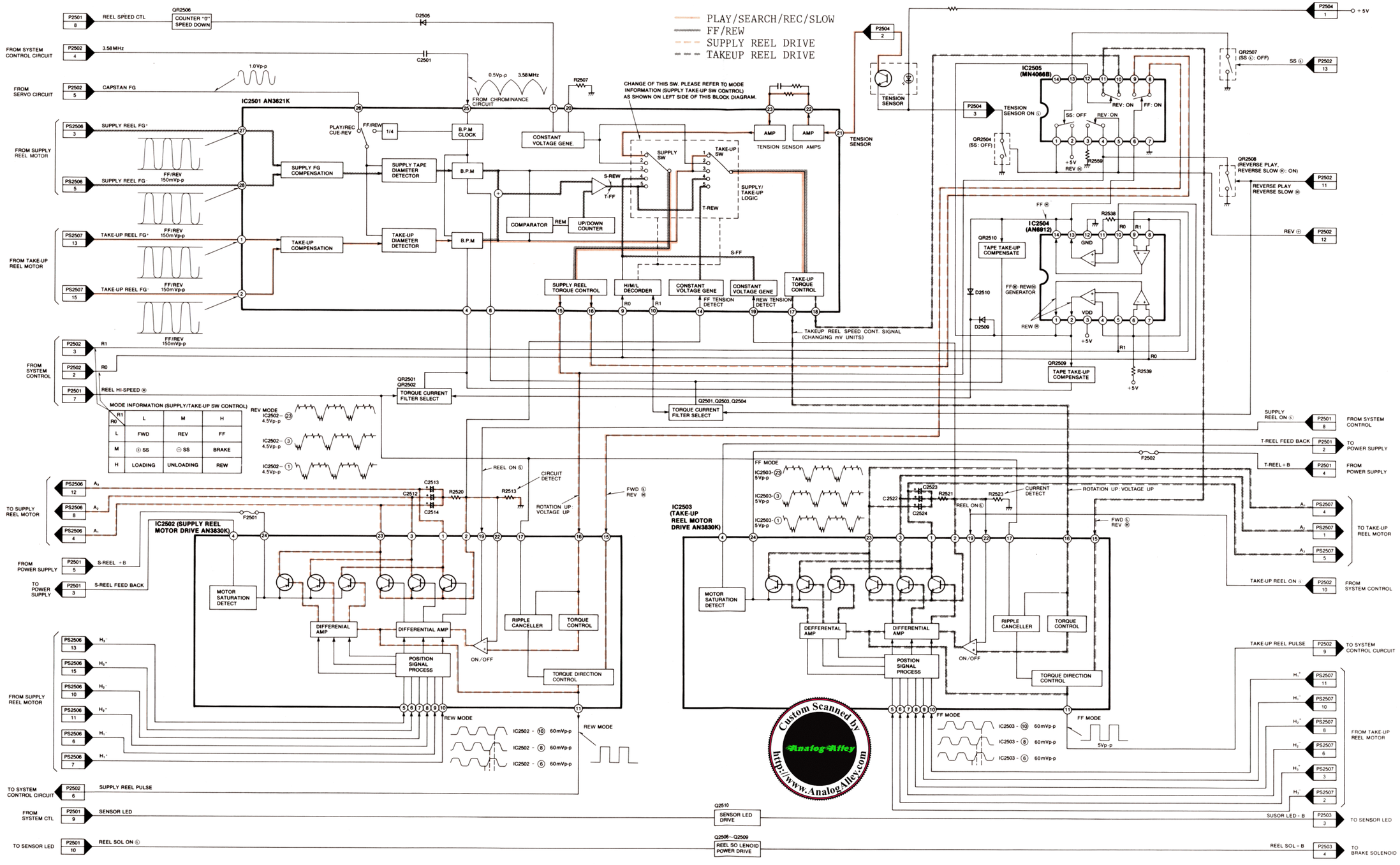



OPERATION
FLYING ERASE
SERVO BLOCK
SERVO BLOCK
SERVO BLOCK

## SERVO BLOCK DIAGRAM

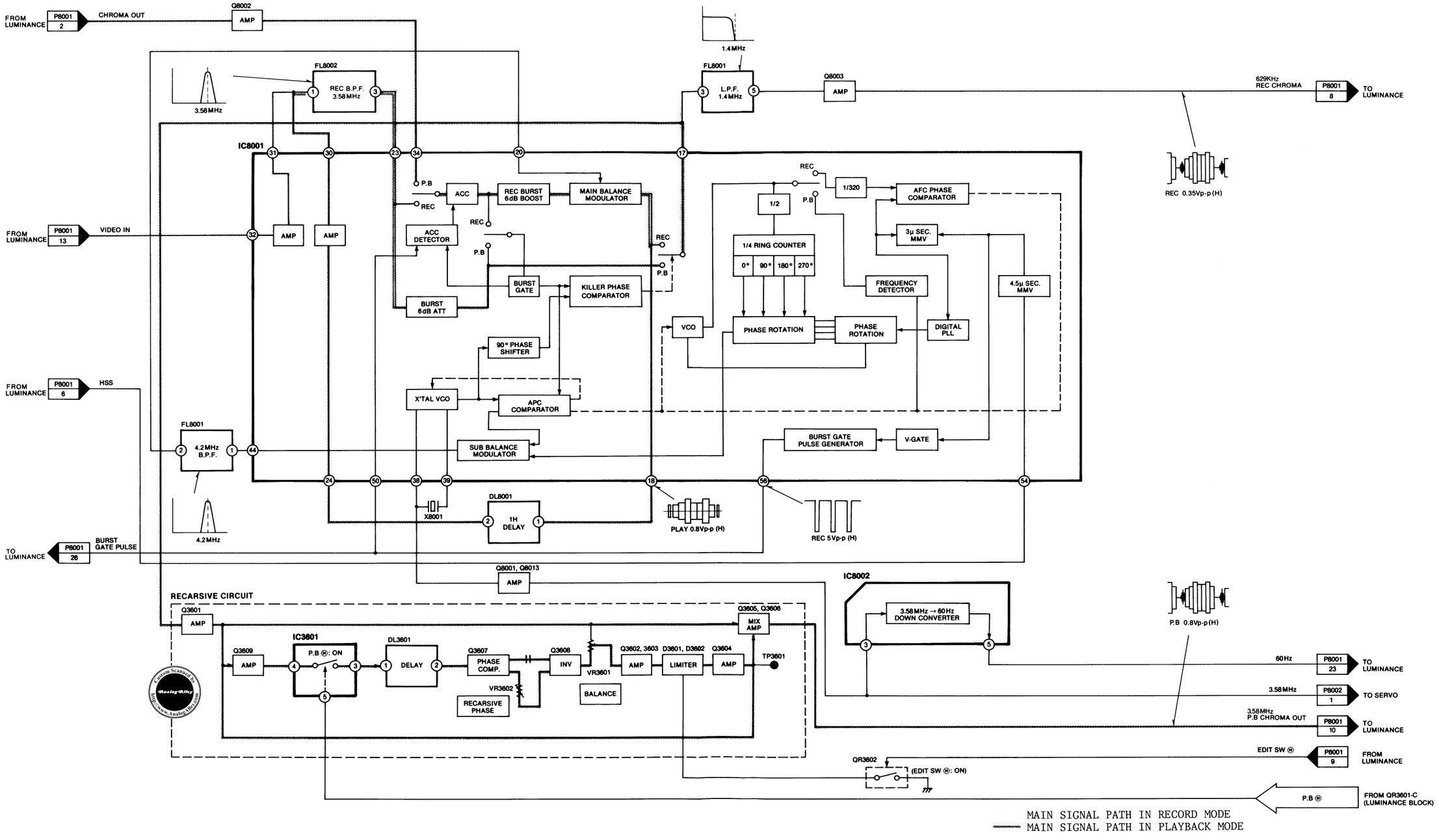


# REEL SERVO BLOCK DIAGRAM



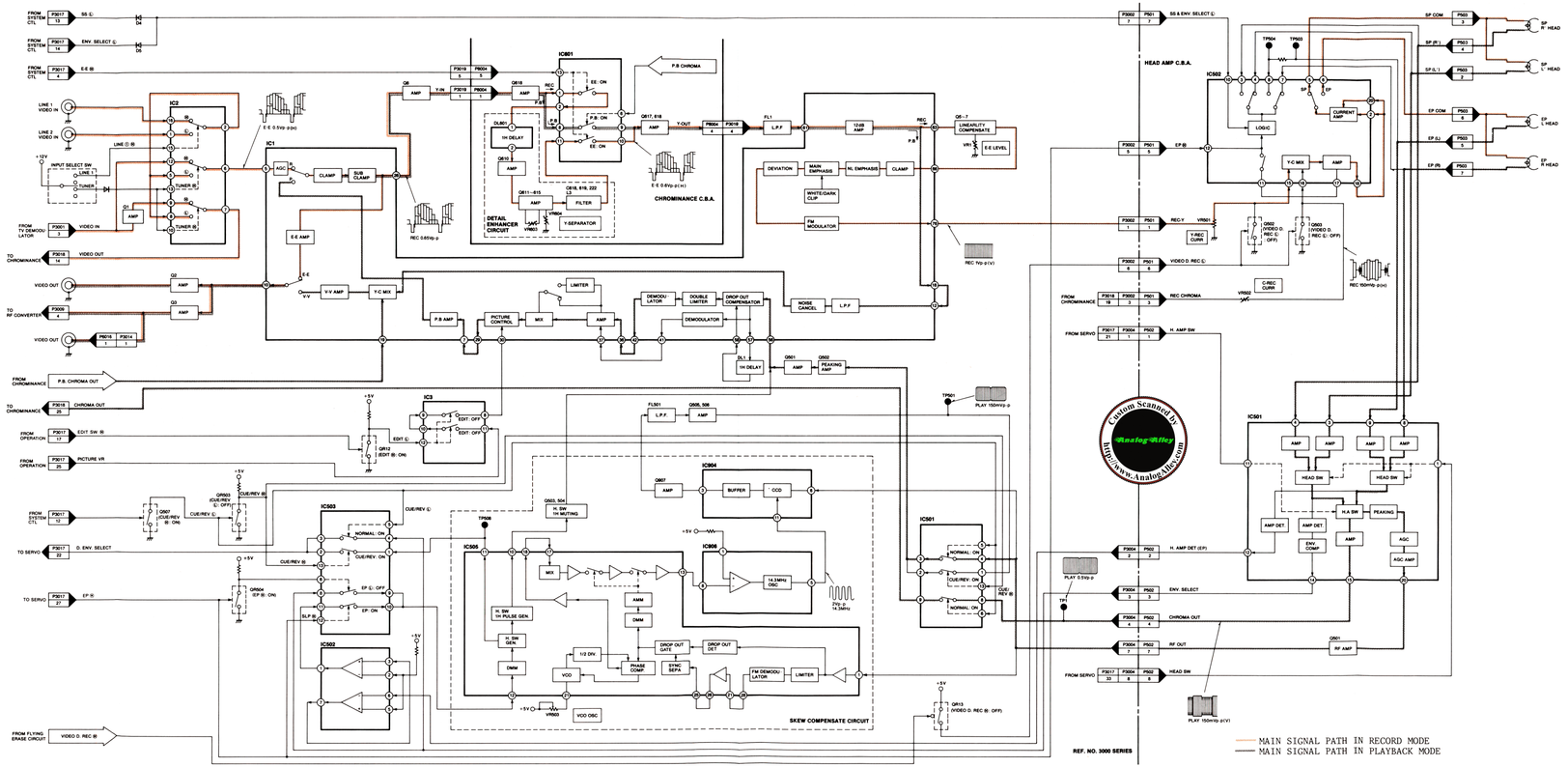
REEL SERVO
CHROMINANCE BLOCK

# CHROMINANCE BLOCK DIAGRAM



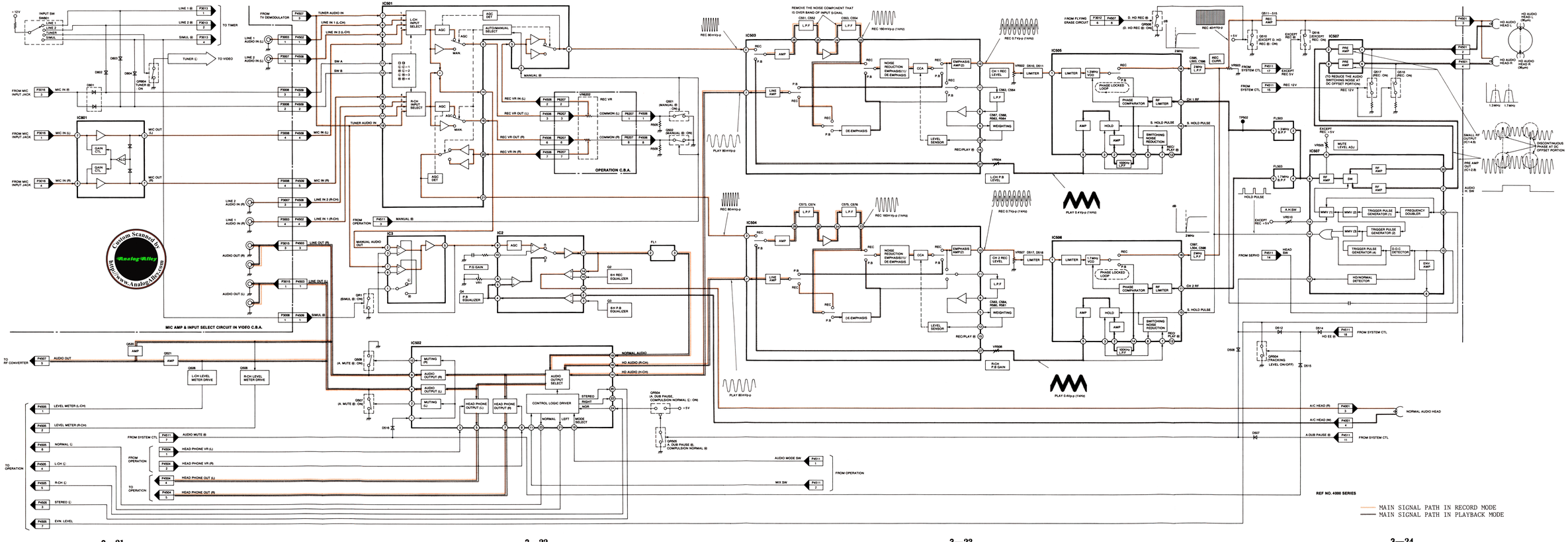

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# VIDEO BLOCK DIAGRAM

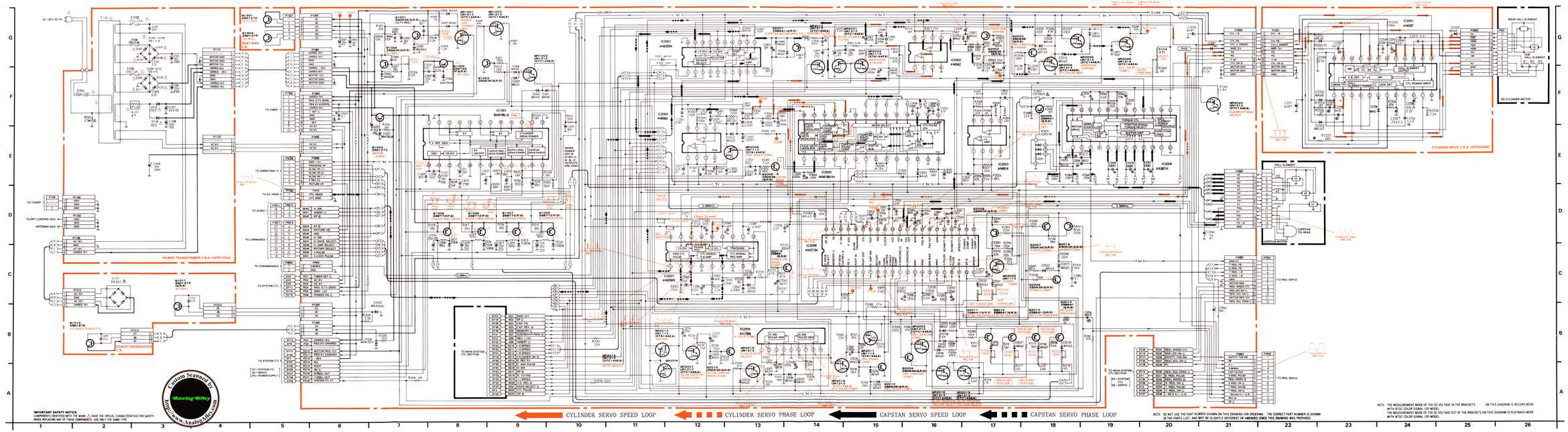


VIDEO
AUDIO BLOCK
AUDIO BLOCK
AUDIO BLOCK

# AUDIO BLOCK DIAGRAM



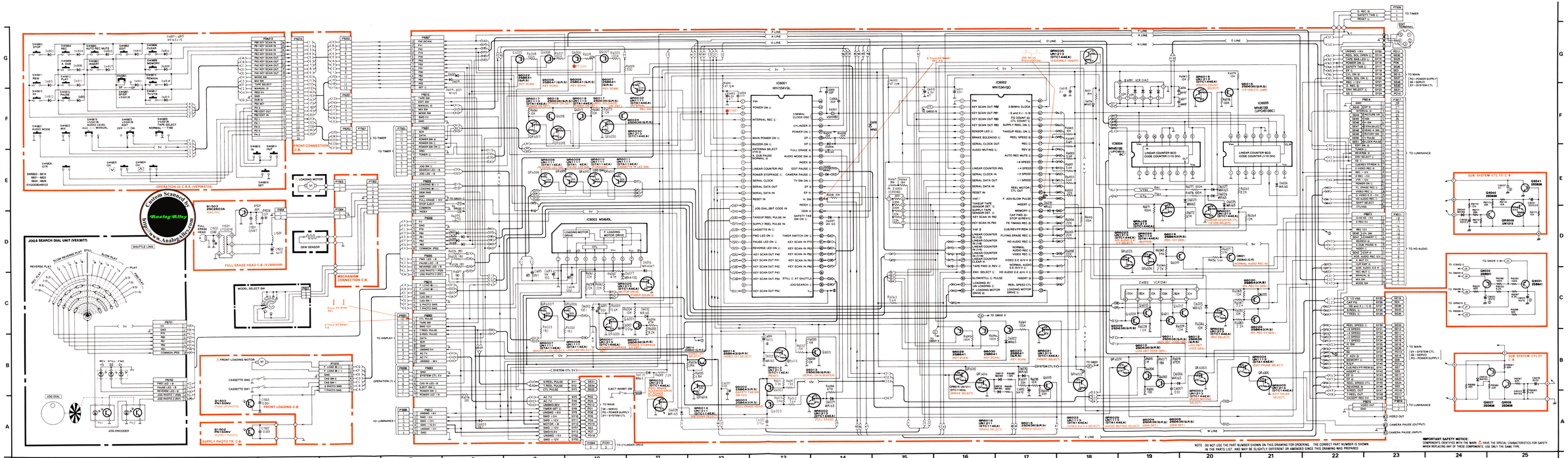
# POWER TRANSFORMER, POWER SUPPLY, SERVO & CYLINDER DRIVE SCHEMATIC DIAGRAM




NOTE: DO NOT USE THE PART NUMBER SHOWN ON THIS DRAWING FOR ORDERING. THE CORRECT PART NUMBER IS SHOWN IN THE PARTS LIST, AND MAY BE SLIGHTLY DIFFERENT OR AMENDED SINCE THIS DRAWING WAS PREPARED.

NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE IN THE BRACKETS : : ON THIS DIAGRAM IS RECORD MODE WITH NTSC COLOR SIGNAL (SP MODE).
THE MEASUREMENT MODE OF THE DC VOLTAGE OUT OF THE BRACKETS ON THIS DIAGRAM IS PLAYBACK MODE WITH NTSC COLOR SIGNAL (SP MODE).

# SYSTEM CONTROL & OPERATION (2) SCHEMATIC DIAGRAM




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Analog-Hifi.jp

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# SYSTEM CONTROL ICs DC VOLTAGE CHART (SP Mode)

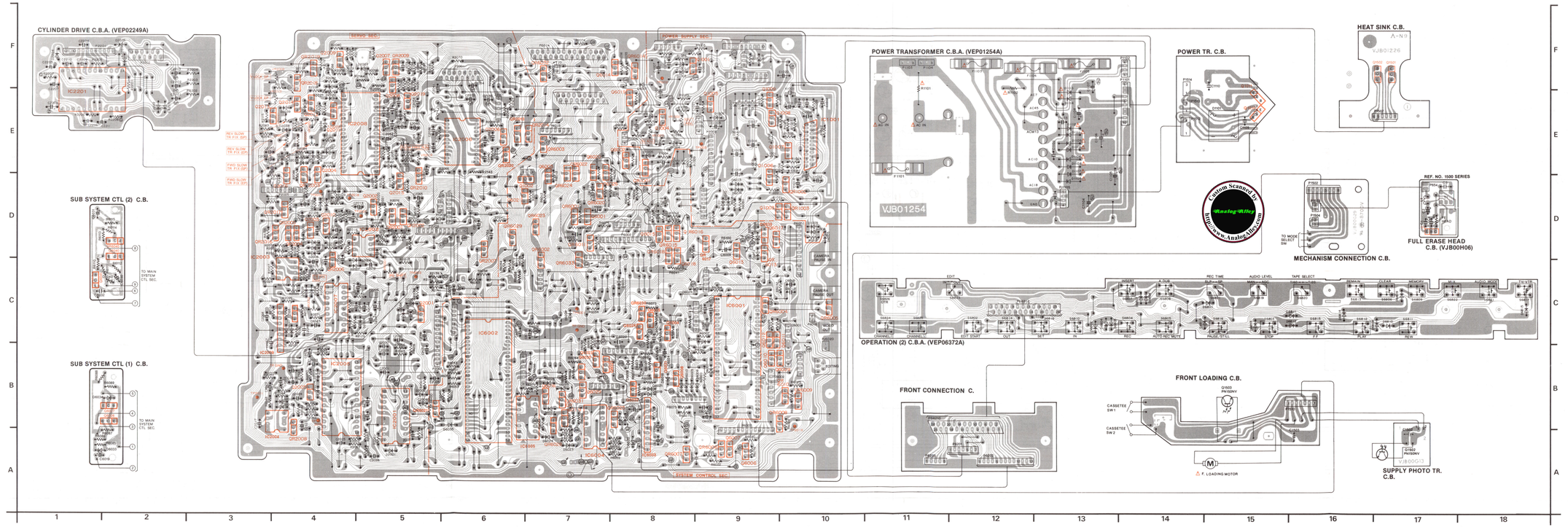
| REF. NO. | IC6001 | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MODE | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| STOP | 0 | 0.3 | 5.2 | 5.2 | 5.2 | 0 | 0 | 5.2 | 0 | 0 | 4.6 | 5.2 | 5.4 | 4.9 | 0.1 | 5.1 | 5.2 | 5.1 | 0.8 | 0.1 |
| PLAY | 0 | 0.3 | 5.2 | 5.2 | 5.2 | 0 | 0 | 5.2 | 2.1 | 0 | 4.6 | 5.2 | 5.4 | 4.9 | 0.1 | 5.1 | 5.2 | 5.1 | 0.8 | — |
| REC | 0 | 0.3 | 5.2 | 5.2 | 5.2 | 0 | 0 | 5.2 | 0 | 0 | 4.6 | 5.2 | 5.4 | 4.9 | 0 | 5.1 | 5.2 | 5.1 | 0.8 | — |
| F.F | 0 | 0.3 | 5.2 | 5.2 | 5.2 | 0 | 0 | 5.2 | 2.1 | 0 | 4.6 | 5.2 | 5.4 | 4.9 | 0 | 5.1 | 5.2 | 5.1 | 0.8 | 2.6 |
| REW | 0 | 0.3 | 5.2 | 5.2 | 5.2 | 0 | 0 | 5.2 | 2.1 | 0 | 4.6 | 5.2 | 5.4 | 4.9 | 0.1 | 5.1 | 5.2 | 5.1 | 0.8 | 2.6 |
| REF. NO. | IC6001 | | | | | | | | | | | | | | | | | | | |
| MODE | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 |
| STOP | 5.2 | 0 | 5.2 | 5.2 | 5.2 | 4.6 | 4.6 | 4.6 | 4.6 | 4.6 | 4.6 | 4.6 | 5.2 | 5.2 | 5.2 | 4.6 | 5.2 | 5.1 | 5.1 | 5.1 |
| PLAY | — | 0 | 5.2 | 5.2 | 5.2 | 4.6 | 4.6 | 4.6 | 4.6 | 4.6 | 4.6 | 4.6 | 5.2 | 5.2 | 5.2 | 4.6 | 5.2 | 5.1 | 5.1 | 5.1 |
| REC | — | 0 | 5.2 | 5.2 | 5.2 | 4.6 | 4.6 | 4.6 | 4.6 | 4.6 | 4.6 | 4.6 | 5.2 | 5.2 | 5.2 | 4.6 | 5.2 | 5.1 | 5.1 | 5.1 |
| F.F | 2.6 | 0 | 5.2 | 5.2 | 5.2 | 4.6 | 4.6 | 4.6 | 4.6 | 4.6 | 4.6 | 4.6 | 5.2 | 5.2 | 5.2 | 4.6 | 5.2 | 5.1 | 5.1 | 5.1 |
| REW | 2.6 | 0 | 5.2 | 5.2 | 5.2 | 4.6 | 4.6 | 4.6 | 4.6 | 4.6 | 4.6 | 4.6 | 5.2 | 5.2 | 5.2 | 4.6 | 5.2 | 5.1 | 5.1 | 5.1 |
| REF. NO. | IC6001 | | | | | | | | | | | | | | | | | | | |
| MODE | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 |
| STOP | 5.2 | 5.2 | 5.2 | 5.2 | 0.5 | 0.6 | 5.2 | 0.2 | 0 | 0.1 | 5.2 | 5.2 | 0 | 0 | 0 | 0 | 5.2 | 5.1 | 5.2 | 0 |
| PLAY | 5.2 | 5.2 | 5.2 | 5.2 | 0.5 | 0.6 | 5.2 | 2.6 | 0 | 0.1 | 5.2 | 5.2 | 0 | 0 | 0 | 0 | 5.2 | 5.1 | 5.2 | 4.8 |
| REC | 5.2 | 5.2 | 5.2 | 5.2 | 0.5 | 0.6 | 5.2 | 2.6 | 0 | 0.1 | 5.2 | 5.2 | 0 | 0 | 0 | 4.3 | 5.2 | 5.1 | 5.2 | 4.8 |
| F.F | 5.2 | 5.2 | 5.2 | 5.2 | 0.5 | 0.6 | 5.2 | 0.2 | 0 | 0.1 | 5.2 | 5.2 | 0 | 0 | 0 | 0 | 5.2 | 5.1 | 5.2 | 0 |
| REW | 5.2 | 5.2 | 5.2 | 5.2 | 0.5 | 0.6 | 5.2 | 0.2 | 0 | 0.1 | 5.2 | 5.2 | 0 | 0 | 0 | 0 | 5.2 | 5.1 | 5.2 | 0 |
| REF. NO. | IC6001 | | | | | | | | | | | | | | | | | | | |
| MODE | 61 | 62 | 63 | 64 | | | | | | | | | | | | | | | | |
| STOP | 2.3 | 2.3 | 2.1 | 2.3 | | | | | | | | | | | | | | | | |
| PLAY | 2.3 | 2.3 | 2.1 | 2.3 | | | | | | | | | | | | | | | | |
| REC | 2.3 | 2.3 | 2.1 | 2.3 | | | | | | | | | | | | | | | | |
| F.F | 2.3 | 2.3 | 2.1 | 2.3 | | | | | | | | | | | | | | | | |
| REW | 2.3 | 2.3 | 2.1 | 2.3 | | | | | | | | | | | | | | | | |
| REF. NO. | IC6002 | | | | | | | | | | | | | | | | | | | |
| MODE | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| STOP | 0 | 5.1 | 5.1 | 0.9 | 4.6 | 4.2 | 5.2 | 4.9 | 5.2 | 4.2 | 5.2 | 0 | 4.9 | 0.2 | 5.1 | 5.2 | 3.1 | 5.1 | 5.2 | 1.5 |
| PLAY | 0 | 5.1 | 5.1 | 0.9 | 4.6 | 4.2 | 5.2 | 4.9 | 5.2 | 4.2 | 5.2 | — | 4.9 | 0.2 | 5.1 | 5.2 | 3.1 | 5.1 | 5.2 | 2.9 |
| REC | 0 | 5.1 | 5.1 | 0.9 | 4.6 | 4.2 | 5.2 | 4.9 | 5.2 | 4.2 | 5.2 | — | 4.9 | 0.2 | 5.1 | 5.2 | 3.1 | 5.1 | 5.2 | 2.9 |
| F.F | 0 | 5.1 | 5.1 | 0.9 | 4.6 | 4.2 | 5.2 | 4.9 | 5.2 | 4.2 | 5.2 | 0.5 | 4.9 | 0.2 | 5.1 | 5.2 | 3.1 | 5.1 | 5.2 | 1.5 |
| REW | 0 | 5.1 | 5.1 | 0.9 | 4.6 | 4.2 | 5.2 | 4.9 | 5.2 | 4.2 | 5.2 | 0.5 | 4.9 | 0.2 | 5.1 | 5.2 | 3.1 | 5.1 | 5.2 | 1.5 |
| REF. NO. | IC6002 | | | | | | | | | | | | | | | | | | | |
| MODE | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 |
| STOP | 4.4 | 2.1 | 0 | 0 | 5.3 | 2.2 | 0 | 5.2 | 5.2 | 5.2 | 0 | 0 | 0 | 0 | 0 | 5.2 | 5.2 | 0 | 5.3 | 12.7 |
| PLAY | 4.6 | 2.1 | 2.7 | — | — | — | 0 | 5.2 | 5.2 | 5.2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5.3 | 5.3 | 12.7 |
| REC | 4.6 | 2.1 | 2.7 | — | — | — | 0 | 5.2 | 5.2 | 5.2 | 0 | 0 | 0 | 0 | 0 | 5.2 | 5.2 | 0 | 0.1 | 0.2 |
| F.F | 4.4 | 2.1 | 2.7 | 2.1 | 2.1 | 2.8 | 0 | 5.2 | 5.2 | 5.2 | 0 | 0 | 0 | 0 | 0 | 5.2 | 5.2 | 0 | 5.3 | 12.7 |
| REW | 4.4 | 2.1 | 2.7 | 2.1 | 2.1 | 2.8 | 0 | 0 | 5.2 | 5.2 | 0 | 0 | 0 | 0 | 0 | 5.2 | 5.2 | 0 | 5.3 | 12.7 |
| REF. NO. | IC6002 | | | | | | | | | | | | | | | | | | | |
| MODE | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 |
| STOP | 5.3 | 5.3 | 0 | 0 | 2.1 | 5.2 | 0 | 0 | 2.1 | 5.1 | 0.1 | 0 | 0.1 | 0.1 | 5.0 | 0.1 | 12.7 | 0 | 5.2 | 5.2 |
| PLAY | 5.3 | 5.3 | 0 | 0 | 0 | 5.2 | 0 | 0 | 0 | 0 | 5.2 | 0 | 0.1 | 0.1 | 5.0 | 0.1 | 12.7 | 0 | 0 | 0 |
| REC | 0.1 | 0.1 | 0 | 0 | 0 | 5.2 | 0 | 0 | 0 | 0.1 | 5.2 | 0 | 0.1 | 0.1 | 5.0 | 0.1 | 0.2 | 0 | 0 | 0 |
| F.F | 5.3 | 5.3 | 5.1 | 0 | 2.1 | 5.2 | 0 | 0 | 0 | 5.2 | 0.1 | 0 | 0.1 | 0.1 | 5.0 | 0.1 | 12.7 | 5.3 | 0 | 0 |
| REW | 5.3 | 5.3 | 5.1 | 0 | 2.1 | 5.2 | 0 | 0 | 5.2 | 5.2 | 0.1 | 0 | 0.1 | 0.1 | 5.0 | 0.1 | 12.7 | 5.3 | 0 | 0 |
| REF. NO. | IC6002 | | | | | | | | | | IC6003 | | | | | | | | | |
| MODE | 61 | 62 | 63 | 64 | | | | | | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| STOP | 5.1 | 0 | 2.3 | 5.2 | | | | | | | 0 | 0.2 | 0.2 | 0 | 0 | 0 | 12.7 | 9.8 | 12.3 | 0.2 |
| PLAY | 0 | 0 | 2.3 | 5.2 | | | | | | | 0 | 0.2 | 0.2 | 0 | 0 | 0 | 12.7 | 9.8 | 12.3 | 0.2 |
| REC | 0 | 0 | 2.3 | 5.2 | | | | | | | 0 | 0.2 | 0.2 | 0 | 0 | 0 | 12.7 | 9.8 | 12.3 | 0.2 |
| F.F | 0 | 0 | 2.3 | 5.2 | | | | | | | 0 | 0.2 | 0.2 | 0 | 0 | 0 | 12.7 | 9.8 | 12.3 | 0.2 |
| REW | 0 | 0 | 2.3 | 5.2 | | | | | | | 0 | 0.2 | 0.2 | 0 | 0 | 0 | 12.7 | 9.8 | 12.3 | 0.2 |
| REF. NO. | IC6004 | | | | | | | | | | | | | | | | | | | |
| MODE | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | | | | |
| STOP | 0 | 0 | 0 | 0 | 0 | 0 | 5.3 | 0 | 0 | 5.3 | 0 | 0 | 0 | 0 | 0 | 5.3 | | | | |
| PLAY | 0 | 0 | 0 | 0 | 5.3 | 0 | 5.3 | 0 | 5.3 | 5.3 | 0 | 0 | 0 | 0 | 2.2 | 5.3 | | | | |
| REC | 0 | 0 | 0 | 0 | 5.3 | 0 | 5.3 | 0 | 5.3 | 5.3 | 0 | 0 | 0 | 0 | 2.2 | 5.3 | | | | |
| F.F | 0 | 0 | 0 | 0 | 5.3 | 0 | 5.3 | 0 | 5.3 | 5.3 | 0 | 0 | 0 | 0 | 0 | 5.3 | | | | |
| REW | 0 | 0 | 0 | 0 | 5.3 | 0 | 5.3 | 0 | 5.3 | 0 | 0 | 0 | 0 | 0 | 0 | 5.3 | | | | |
| REF. NO. | IC6005 | | | | | | | | | | | | | | | | | | | |
| MODE | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | | | | |
| STOP | 0 | 0.1 | 0 | 0 | 5.2 | 0 | 5.3 | 0 | 0 | 5.2 | 5.3 | 0 | 0 | 0 | 5.3 | 5.3 | | | | |
| PLAY | 0 | — | 0 | 0 | 0 | 2.7 | — | 0 | 0 | 5.3 | — | 0 | 0 | — | 5.3 | 5.3 | | | | |
| REC | 0 | — | 0 | 0 | 0 | 2.7 | — | 0 | 0 | 5.3 | — | 0 | 0 | — | 2.2 | 5.3 | | | | |
| F.F | 0 | 1.1 | 0 | 0 | 0 | 2.7 | 4.8 | 0 | 0 | 5.2 | 2.1 | 0 | 0 | 2.1 | 4.0 | 5.3 | | | | |
| REW | 0 | 1.1 | 0 | 0 | 0 | 2.7 | 4.8 | 0 | 0 | 0 | 2.1 | 0 | 0 | 2.1 | 4.4 | 5.3 | | | | |

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# SYSTEM CONTROL TRANSISTORs DC VOLTAGE CHART (SP Mode)

| REF. NO. | Q6001 | | | Q6002 | | | Q6003 | | | Q6004 | | | Q6005 | | | Q6006 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MODE | E | C | B | E | C | B | E | C | B | E | C | B | E | C | B | E | C | B |
| STOP | 0 | 0 | 0.6 | 12.7 | 12.7 | 11.9 | 12.7 | 0.3 | 12.7 | 0.5 | 0.6 | 1.2 | 0.5 | 1.2 | 0.4 | 5.1 | 1.2 | 5.0 |
| PLAY | 0 | 0 | 0.6 | 12.7 | 12.7 | 11.9 | 12.7 | 0.3 | 12.7 | 0.5 | 0.6 | 1.2 | 0.5 | 1.2 | 0.4 | 5.1 | 1.2 | 5.0 |
| REC | 0 | 0 | 0.6 | 12.7 | 12.4 | 11.9 | 12.4 | 12.3 | 11.6 | 0.5 | 0.6 | 1.2 | 0.5 | 1.2 | 0.4 | 5.1 | 1.2 | 5.0 |
| F.F | 0 | 0 | 0.6 | 12.7 | 12.7 | 11.9 | 12.7 | 0.3 | 12.7 | 0.5 | 0.6 | 1.2 | 0.5 | 1.2 | 0.4 | 5.1 | 1.2 | 5.0 |
| REW | 0 | 0 | 0.6 | 12.7 | 12.7 | 11.9 | 12.7 | 0.3 | 12.7 | 0.5 | 0.6 | 1.2 | 0.5 | 1.2 | 0.4 | 5.1 | 1.2 | 5.0 |
| REF. NO. | Q6007 | | | Q6008 | | | Q6009 | | | Q6010 | | | Q6011 | | | Q6012 | | |
| MODE | E | C | B | E | C | B | E | C | B | E | C | B | E | C | B | E | C | B |
| STOP | 5.1 | 1.6 | 5.0 | 5.1 | 1.6 | 5.0 | 0.7 | 1.4 | 0.3 | 0.7 | 0.8 | 1.4 | 0.1 | 0.1 | 0.7 | 0.1 | 5.1 | 0.1 |
| PLAY | 5.1 | 1.6 | 5.0 | 5.1 | 1.5 | 5.0 | 0.7 | 1.4 | 0.3 | 0.7 | 0.8 | 1.4 | 0.1 | 0.1 | 0.7 | 0.1 | 5.1 | 0.1 |
| REC | 5.1 | 1.6 | 5.0 | 5.1 | 1.5 | 5.0 | 0.7 | 1.4 | 0.3 | 0.7 | 0.8 | 1.4 | 0.1 | 0.1 | 0.7 | 0.1 | 5.1 | 0.1 |
| F.F | 5.1 | 1.6 | 5.0 | 5.1 | 1.5 | 5.0 | 0.7 | 1.4 | 0.3 | 0.7 | 0.8 | 1.4 | 0.1 | 0.1 | 0.7 | 0.1 | 5.1 | 0.1 |
| REW | 5.1 | 1.6 | 5.0 | 5.1 | 1.6 | 5.0 | 0.7 | 1.4 | 0.3 | 0.7 | 0.8 | 1.4 | 0.1 | 0.1 | 0.7 | 0.1 | 5.1 | 0.1 |
| REF. NO. | Q6013 | | | Q6014 | | | Q6015 | | | Q6016 | | | Q6017 | | | Q6018 | | |
| MODE | E | C | B | E | C | B | E | C | B | E | C | B | E | C | B | E | C | B |
| STOP | 0 | 5.0 | 0 | 11.9 | 11.8 | 11.2 | 5.2 | 5.2 | 2.3 | 0 | 5.3 | 0 | 0.3 | 0.3 | 1.0 | 5.1 | 5.3 | 5.2 |
| PLAY | 0 | 5.1 | 0 | 11.9 | 11.8 | 11.2 | 5.3 | 5.2 | 2.3 | 0 | 5.3 | 0 | 0.3 | 0.3 | 1.0 | 5.2 | 5.3 | 5.2 |
| REC | 0 | 5.1 | 0 | 11.9 | 11.8 | 11.2 | 5.3 | 5.2 | 2.3 | 0 | 2.2 | 0.4 | 0.3 | 0.3 | 1.0 | 5.2 | 5.3 | 5.2 |
| F.F | 0 | 5.1 | 0 | 11.9 | 11.8 | 11.2 | 5.2 | 5.2 | 2.3 | 0 | 4.3 | 0.1 | 0.3 | 0.3 | 1.0 | 5.2 | 5.3 | 5.2 |
| REW | 0 | 5.1 | 0 | 11.9 | 11.8 | 11.2 | 5.2 | 5.2 | 2.3 | 0 | 4.3 | 0.1 | 0.3 | 0.3 | 1.0 | 5.2 | 5.3 | 5.2 |
| REF. NO. | Q6019 | | | Q6020 | | | Q6021 | | | Q6022 | | | Q6023 | | | Q6024 | | |
| MODE | E | C | B | E | C | B | E | C | B | E | C | B | E | C | B | E | C | B |
| STOP | 12.7 | 0 | 12.7 | 5.1 | 4.9 | 4.3 | 12.7 | 0 | 12.7 | 4.4 | 4.2 | 4.0 | 1.5 | 0.6 | 1.1 | 4.6 | 5.1 | 0.1 |
| PLAY | 12.7 | 0 | 12.7 | 5.1 | 4.9 | 4.3 | 12.7 | 0 | 12.7 | 4.6 | 4.3 | 4.1 | 3.0 | 2.4 | 2.6 | 4.7 | 5.1 | 0.1 |
| REC | 12.4 | 12.0 | 11.6 | 5.1 | 0.1 | 5.1 | 12.5 | 12.3 | 11.6 | 4.6 | 4.3 | 4.1 | 3.0 | 2.4 | 2.6 | 4.7 | 5.1 | 0.1 |
| F.F | 12.7 | 0 | 12.7 | 5.1 | 4.9 | 4.3 | 12.7 | 0 | 12.7 | 4.5 | 4.2 | 4.0 | 4.4 | 4.2 | 4.0 | 4.7 | 5.1 | 0.1 |
| REW | 12.7 | 0 | 12.7 | 5.1 | 4.9 | 4.3 | 12.7 | 0 | 12.7 | 4.4 | 4.2 | 4.0 | 2.9 | 2.4 | — | 4.7 | 5.1 | 0.1 |
| REF. NO. | Q6025 | | | Q6028 | | | Q6029 | | | Q6030 | | | Q6031 | | | Q6032 | | |
| MODE | E | C | B | E | C | B | E | C | B | E | C | B | E | C | B | E | C | B |
| STOP | 5.1 | 5.0 | 4.3 | 0 | 0 | 3.0 | 4.4 | 0.8 | 5.1 | 1.5 | 0 | 5.1 | 4.4 | 0.5 | 5.1 | 1.5 | 0.5 | 5.1 |
| PLAY | 5.1 | 5.0 | 4.3 | 0 | 4.9 | 0 | 4.6 | 0.8 | 5.2 | 2.9 | 0 | 5.1 | 4.6 | 5.3 | 5.2 | 2.9 | 0.5 | 5.1 |
| REC | 5.1 | 0 | 5.1 | 0 | 4.9 | 0 | 4.6 | 0.8 | 5.2 | 2.9 | 0 | 5.1 | 4.6 | 5.3 | 5.2 | 2.9 | 0.5 | 5.1 |
| F.F | 5.1 | 5.0 | 4.3 | 0 | 4.9 | 0 | 4.4 | 0 | 5.2 | 4.4 | 0 | 5.1 | 4.4 | 0.5 | 5.1 | 4.4 | 0.5 | 5.1 |
| REW | 5.1 | 5.0 | 4.3 | 0 | 4.9 | 0 | 4.4 | 0.9 | 5.1 | 1.5 | 0 | 5.1 | 4.4 | 0.5 | 5.1 | 4.4 | 0.5 | 5.1 |
| REF. NO. | QR6001 | | | QR6002 | | | QR6003 | | | QR6004 | | | QR6005 | | | QR6006 | | |
| MODE | E | C | B | E | C | B | E | C | B | E | C | B | E | C | B | E | C | B |
| STOP | 0 | 5.4 | 0 | 0 | 12.7 | 0 | 0 | 10.9 | 0 | 5.3 | 5.3 | 0 | 0 | 0 | 5.3 | 5.0 | 0.1 | 5.1 |
| PLAY | 0 | 5.4 | 0 | 0 | 12.7 | 0 | 12.7 | 0.3 | 12.7 | 5.3 | 5.3 | 0 | 0 | 0 | 5.3 | 5.0 | 0.1 | 5.2 |
| REC | 0 | 5.4 | 0 | 0 | 0 | 4.0 | 0 | 10.9 | 0 | 5.3 | 5.3 | 0 | 0 | 0 | 5.3 | 5.0 | 0.1 | 5.2 |
| F.F | 0 | 5.4 | 0 | 0 | 12.7 | 0 | 0 | 10.9 | 0 | 5.3 | 5.3 | 0 | 0 | 0 | 5.3 | 5.0 | 0.1 | 5.2 |
| REW | 0 | 5.4 | 0 | 0 | 12.7 | 0 | 0 | 10.9 | 0 | 5.3 | 5.3 | 0 | 0 | 0 | 5.3 | 5.0 | 0.1 | 5.2 |
| REF. NO. | QR6007 | | | QR6008 | | | QR6009 | | | QR6010 | | | QR6011 | | | QR6013 | | |
| MODE | E | C | B | E | C | B | E | C | B | E | C | B | E | C | B | E | C | B |
| STOP | 5.0 | 0.1 | 5.1 | 5.0 | 0 | 5.1 | 5.0 | 0 | 5.1 | 5.0 | 0 | 5.1 | 5.1 | 5.0 | 0.1 | 0 | 5.2 | 0 |
| PLAY | 5.0 | 0 | 5.2 | 5.0 | 0 | 5.2 | 5.0 | 0 | 5.2 | 5.0 | 0 | 5.2 | 5.1 | 5.0 | 0 | 0 | 5.2 | 0 |
| REC | 5.0 | 0 | 5.1 | 5.0 | 0 | 5.2 | 5.0 | 0 | 5.2 | 5.0 | 0 | 5.2 | 5.1 | 4.9 | 0 | 0 | 5.2 | 0 |
| F.F | 5.0 | 0 | 5.2 | 5.0 | 0 | 5.2 | 5.0 | 0 | 5.2 | 5.0 | 0 | 5.2 | 5.1 | 4.9 | 0 | 0 | 5.2 | 0 |
| REW | 5.0 | 0.1 | 5.2 | 5.0 | 0 | 5.1 | 5.0 | 0 | 5.2 | 5.0 | 0 | 5.2 | 5.1 | 4.9 | 0 | 0 | 5.2 | 0 |
| REF. NO. | QR6014 | | | QR6015 | | | QR6016 | | | QR6017 | | | QR6018 | | | QR6019 | | |
| MODE | E | C | B | E | C | B | E | C | B | E | C | B | E | C | B | E | C | B |
| STOP | 0 | 0 | 2.1 | 5.3 | 0 | 5.2 | 0 | 14.1 | 0 | 5.2 | 5.2 | 0.3 | 5.1 | 0 | 5.2 | 0 | 0 | 5.2 |
| PLAY | 0 | 0 | 2.1 | 5.3 | 0 | 5.3 | 0 | 13.1 | 0 | 5.2 | 5.2 | 0.3 | 5.2 | 0 | 5.2 | 0 | 5.3 | 0 |
| REC | 0 | 0 | 2.1 | 5.3 | 0 | 5.3 | 0 | 13.0 | 0 | 5.2 | 5.2 | 0.3 | 5.2 | 0 | 5.2 | 0 | 5.3 | 0 |
| F.F | 0 | 0 | 2.1 | 5.3 | 0 | 5.2 | 0 | 13.1 | 0 | 5.2 | 5.2 | 0.3 | 5.2 | 0 | 5.2 | 0 | 5.3 | 0 |
| REW | 11.9 | 11.8 | 11.2 | 5.3 | 0 | 5.2 | 0 | 13.5 | 0 | 5.2 | 5.2 | 0.3 | 5.2 | 0 | 5.2 | 0 | 5.3 | 0 |
| REF. NO. | QR6020 | | | QR6021 | | | QR6022 | | | QR6023 | | | QR6024 | | | QR6025 | | |
| MODE | E | C | B | E | C | B | E | C | B | E | C | B | E | C | B | E | C | B |
| STOP | 0 | 0.1 | 4.5 | 0 | 4.8 | 0 | 5.1 | 5.0 | 0 | 0 | 0 | 5.2 | 5.1 | 5.0 | 0 | 0 | 7.9 | 0 |
| PLAY | 0 | 0.1 | 4.5 | 0 | 4.8 | 0 | 5.1 | 0 | 5.3 | 0 | 5.0 | 0 | 5.1 | 0 | 5.0 | 0 | 7.9 | 0 |
| REC | 0 | 5.1 | 0.8 | 0 | 4.8 | 0 | 5.1 | 5.0 | 0 | 0 | 0 | 5.2 | 5.1 | — | 0 | 0 | 7.9 | 0 |
| F.F | 0 | 0.1 | 4.5 | 0 | 4.8 | 0 | 5.1 | 5.0 | 0 | 0 | 0 | 5.2 | 5.1 | — | 0 | 0 | 7.9 | 0 |
| REW | 0 | 0.1 | 4.5 | 0 | 4.8 | 0 | 5.1 | 4.9 | 0 | 0 | 0 | 5.2 | 5.1 | 5.0 | 0 | 0 | 7.9 | 0 |
| REF. NO. | QR6028 | | | QR6029 | | | QR6030 | | | QR6031 | | | QR6032 | | | QR6033 | | |
| MODE | E | C | B | E | C | B | E | C | B | E | C | B | E | C | B | E | C | B |
| STOP | 0 | 0 | 3.1 | 5.3 | 0.1 | 5.2 | 0 | 0.1 | 4.9 | 0 | 0 | 5.3 | 5.1 | 0 | 5.2 | 0 | 5.2 | 0 |
| PLAY | 0 | — | — | 5.3 | 0.1 | 5.3 | 0 | 0 | 4.9 | 0 | 0 | 5.3 | 5.1 | 0 | 5.2 | 0 | 5.2 | 0 |
| REC | 0 | — | — | 5.3 | 0.1 | 5.3 | 0 | 0.1 | 4.9 | 0 | 0.6 | 0 | 5.1 | 0 | 5.2 | 0 | 5.2 | 0 |
| F.F | 0 | 0.5 | 2.8 | 5.3 | 0.1 | 5.2 | 0 | 0.1 | 4.9 | 0 | 0 | 5.3 | 5.1 | 0 | 5.2 | 0 | 5.2 | 0 |
| REW | 0 | 0.5 | 2.8 | 5.3 | 0.1 | 5.2 | 0 | 0.1 | 4.9 | 0 | 0 | 5.3 | 5.1 | 0 | 5.2 | 0 | 5.2 | 0 |

# MAIN, OPERATION (2), POWER TRANSFORMER & CYLINDER DRIVE C.B.A. (VEP06369A, VEP06372A, VEP01254A, VEP02249A)






**MAIN, OPERATION (2), POWER TRANSFORMER & CYLINDER DRIVE C.B.A.**

**Translator**

| | |
|---|---|
| Q1001 | E-6 |
| Q1002 | D-6 |
| Q1003 | D-9 |
| Q1004 | E-8 |
| Q1005 | E-9 |
| Q1006 | E-9 |
| Q1007 | E-9 |
| Q1008 | E-9 |
| Q1009 | E-9 |
| Q1010 | F-15 |
| Q1011 | F-15 |
| Q1501 | F-17 |
| Q1502 | A-17 |
| Q1502 | F-17 |
| Q1503 | B-15 |
| Q1503 | D-17 |
| Q2001 | C-5 |
| Q2002 | D-5 |
| Q2003 | D-4 |
| Q2004 | D-4 |
| Q2005 | B-4 |
| Q2006 | E-6 |
| Q2007 | F-5 |
| Q2008 | G-5 |
| Q2009 | F-4 |
| Q2010 | D-4 |
| Q2011 | E-4 |
| Q2012 | E-4 |
| Q2013 | E-3 |
| Q2014 | E-4 |
| Q2015 | D-5 |
| Q2016 | D-4 |
| Q2019 | E-5 |
| Q6001 | D-7 |
| Q6002 | E-8 |
| Q6003 | E-7 |
| Q6004 | C-8 |
| Q6005 | C-8 |
| Q6006 | A-9 |
| Q6007 | A-9 |
| Q6008 | B-8 |
| Q6009 | B-9 |
| Q6010 | B-9 |
| Q6011 | C-9 |
| Q6012 | C-9 |
| Q6013 | C-9 |
| Q6014 | F-7 |
| Q6015 | D-8 |
| Q6016 | B-7 |
| Q6017 | D-9 |
| Q6018 | E-8 |
| Q6019 | E-8 |
| Q6020 | E-7 |
| Q6021 | D-6 |
| Q6022 | B-7 |
| Q6023 | B-7 |
| Q6024 | C-8 |
| Q6025 | D-7 |
| Q6026 | B-2 |
| Q6027 | B-2 |
| Q6029 | B-7 |
| Q6030 | B-7 |
| Q6031 | B-8 |
| Q6032 | B-8 |
| Q6040 | D-2 |
| Q6041 | C-1 |

**Translator & Resistor**

| | |
|---|---|
| QR1001 | D-8 |
| QR1002 | D-10 |
| QR1003 | D-10 |
| QR2001 | D-5 |
| QR2002 | D-5 |
| QR2003 | D-4 |
| QR2004 | D-4 |
| QR2005 | D-4 |
| QR2006 | C-4 |
| QR2007 | C-6 |
| QR2008 | A-4 |
| QR2009 | F-5 |
| QR2010 | D-5 |
| QR2013 | E-6 |
| QR2014 | E-7 |
| QR2015 | C-4 |
| QR2016 | D-3 |
| QR2017 | D-4 |
| QR2018 | F-4 |
| QR2019 | F-4 |
| QR2020 | E-6 |
| QR6001 | D-7 |
| QR6002 | D-7 |
| QR6003 | E-7 |
| QR6004 | C-9 |
| QR6005 | C-10 |
| QR6006 | A-9 |
| QR6007 | A-8 |
| QR6008 | B-9 |
| QR6009 | B-10 |
| QR6010 | B-10 |
| QR6011 | D-7 |
| QR6013 | D-9 |
| QR6014 | F-8 |
| QR6015 | D-8 |
| QR6016 | D-9 |
| QR6017 | C-9 |
| QR6018 | D-8 |
| QR6019 | B-7 |
| QR6020 | D-7 |
| QR6021 | B-5 |
| QR6022 | E-7 |
| QR6023 | D-7 |
| QR6024 | D-7 |
| QR6025 | B-8 |
| QR6028 | A-7 |
| QR6029 | D-6 |
| QR6030 | C-8 |
| QR6031 | B-7 |
| QR6032 | F-7 |
| QR6033 | C-7 |
| QR6035 | D-9 |
| QR6040 | D-2 |

**Integrated Circuit**

| | |
|---|---|
| IC1001 | E-10 |
| IC2001 | B-5 |
| IC2002 | D-5 |
| IC2003 | C-3 |
| IC2004 | A-4 |
| IC2005 | B-4 |
| IC2006 | E-6 |
| IC2007 | C-4 |
| IC2008 | E-5 |
| IC2009 | C-3 |
| IC2201 | E-1 |
| IC6001 | C-9 |
| IC6002 | C-6 |
| IC6003 | A-8 |
| IC6004 | A-7 |
| IC6005 | A-7 |

**Test Point**

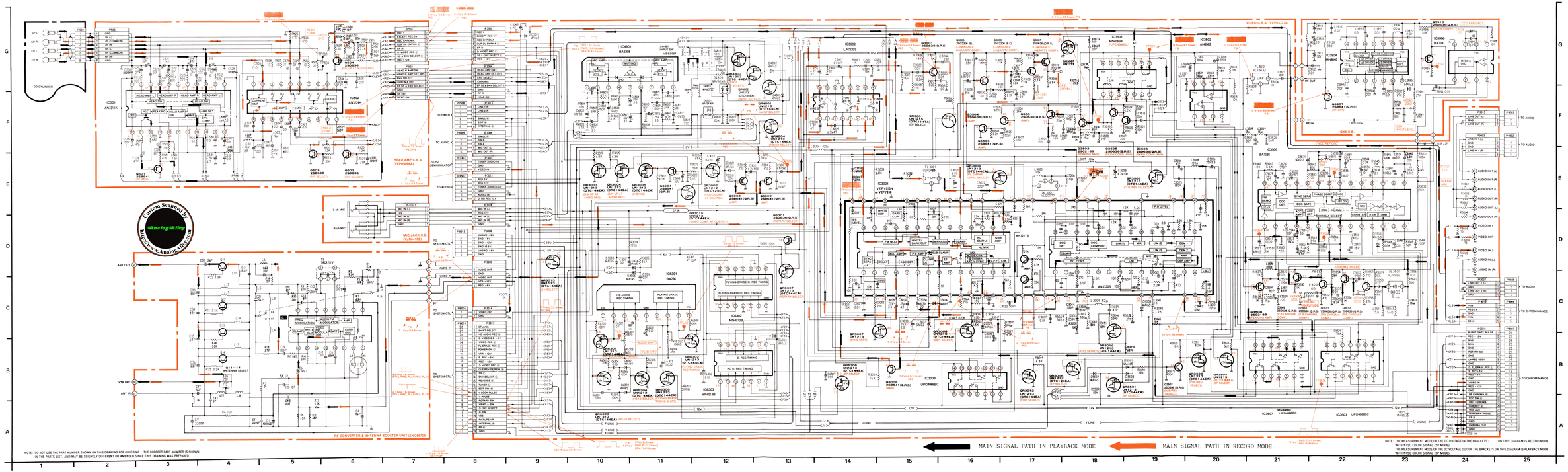
| | |
|---|---|
| TP1003 | E-8 |
| TP2001 | B-3 |
| TP2002 | C-5 |
| TP2009 | E-4 |
| TP2013 | B-4 |
| TP2015 | D-4 |
| TP2018 | D-4 |
| TP2019 | B-10 |
| TP2020 | D-5 |
| TP6001 | C-7 |
| TP GND | B-4 |
| TP GND | C-7 |

**Adjustment**

| | |
|---|---|
| VR1002 | E-8 |
| VR1003 | E-8 |
| VR2001 | C-5 |
| VR2002 | C-4 |
| VR2006 | E-4 |
| VR2009 | F-4 |
| VR2010 | E-4 |
| VR2011 | E-4 |
| VR2013 | E-5 |
| VR2020 | E-4 |
| VR2021 | E-4 |

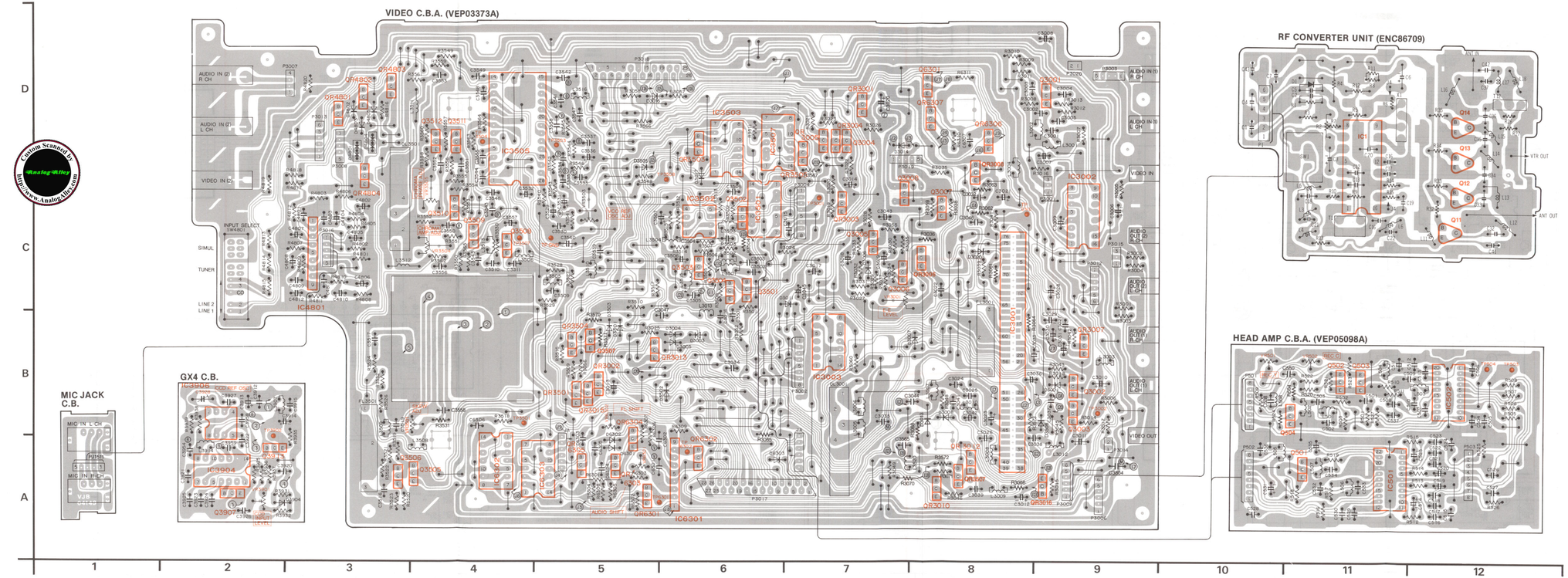
ADDRESS INFORMATION

# VIDEO, HEAD AMP & RF CONVERTER SCHEMATIC DIAGRAM




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# VIDEO, HEAD AMP & RF CONVERTER C.B.A. (VEP03373A, VEP05098A, ENC86709)




Custom Scanned By
Analog-Alley
http://www.AnalogAlley.com

| VIDEO, HEAD AMP & RF CONVERTER C.B.A. | | | |
|---|---|---|---|
| **Transistor** | | QR6301 | A-5 |
| Q11 | C-12 | QR6302 | A-6 |
| Q12 | D-12 | QR6303 | A-5 |
| Q13 | D-12 | QR6304 | B-5 |
| Q14 | D-12 | QR6305 | A-5 |
| Q501 | A-11 | QR6306 | D-8 |
| Q502 | B-11 | QR6307 | D-8 |
| Q503 | B-11 | **Integrated Circuit** | |
| Q504 | B-11 | IC1 | D-11 |
| Q3001 | D-9 | IC501 | A-11 |
| Q3002 | B-9 | IC502 | B-12 |
| Q3003 | B-9 | IC3001 | B-8 |
| Q3004 | D-7 | IC3002 | C-9 |
| Q3005 | C-7 | IC3003 | B-7 |
| Q3006 | C-7 | IC3501 | C-6 |
| Q3007 | C-8 | IC3502 | C-6 |
| Q3008 | D-8 | IC3503 | D-6 |
| Q3501 | C-6 | IC3505 | D-4 |
| Q3502 | C-6 | IC3507 | D-6 |
| Q3503 | C-6 | IC3904 | A-2 |
| Q3504 | C-6 | IC3906 | B-2 |
| Q3505 | A-4 | IC4801 | D-3 |
| Q3506 | A-3 | IC6301 | A-6 |
| Q3507 | B-5 | IC6302 | A-4 |
| Q3508 | C-4 | IC6303 | A-5 |
| Q3509 | C-4 | **Test Point** | |
| Q3510 | C-4 | TP503 | B-12 |
| Q3511 | D-4 | TP504 | B-12 |
| Q3512 | D-4 | TP3001 | C-7 |
| Q3907 | A-2 | TP3002 | B-9 |
| Q3913 | A-2 | TP3501 | B-4 |
| Q6301 | D-8 | TP3503 | D-5 |
| **Transistor & Resistor** | | TP3504 | D-4 |
| QR3001 | D-7 | TP3507 | C-4 |
| QR3002 | B-5 | TP3508 | D-6 |
| QR3003 | C-7 | TP3902 | B-2 |
| QR3004 | D-7 | TP6301 | A-6 |
| QR3005 | D-7 | TP6302 | A-6 |
| QR3006 | C-8 | TP GND | C-5 |
| QR3007 | B-9 | TP GND | C-8 |
| QR3008 | D-8 | **Adjustment** | |
| QR3010 | A-8 | VR501 | B-10 |
| QR3012 | A-8 | VR502 | B-11 |
| QR3013 | B-5 | VR3001 | C-7 |
| QR3015 | B-5 | VR3501 | B-4 |
| QR3016 | A-8 | VR3503 | C-5 |
| QR3501 | B-5 | VR3504 | C-4 |
| QR3503 | D-6 | VR3505 | D-4 |
| QR3504 | B-5 | VR3901 | A-2 |
| QR3505 | D-7 | VR6301 | A-5 |
| QR3507 | A-8 | VR6302 | B-5 |
| QR4801 | D-3 | C3928 | C-2 |
| QR4802 | D-3 | | |
| QR4803 | D-3 | | |
| QR4804 | D-3 | | |

ADDRESS INFORMATION

# CHROMINANCE & REEL SERVO SCHEMATIC DIAGRAM

MAIN RECORD SIGNAL IN CHROMINANCE C.B.A.

MAIN PLAYBACK SIGNAL IN CHROMINANCE C.B.A.

PLAY/SEARCH/REC/SLOW SIGNAL IN REEL SERVO C.B.A.

SUPPLY REEL DRIVE SIGNAL IN REEL SERVO C.B.A.

FF/REW SIGNAL IN REEL SERVO C.B.A.

TAKEUP REEL DRIVE SIGNAL IN REEL SERVO C.B.A.

**IMPORTANT SAFETY NOTICE:**
COMPONENTS IDENTIFIED WITH THE MARK ⚠ HAVE THE SPECIAL CHARACTERISTICS FOR SAFETY. WHEN REPLACING ANY OF THESE COMPONENTS, USE ONLY THE SAME TYPE.

NOTE : THE MEASUREMENT MODE OF THE DC VOLTAGE IN THE BRACKETS : : ON THIS DIAGRAM IS RECORD MODE WITH NTSC COLOR SIGNAL (SP MODE).
THE MEASUREMENT MODE OF THE DC VOLTAGE OUT OF THE BRACKETS ON THIS DIAGRAM IS PLAYBACK MODE WITH NTSC COLOR SIGNAL (SP MODE)

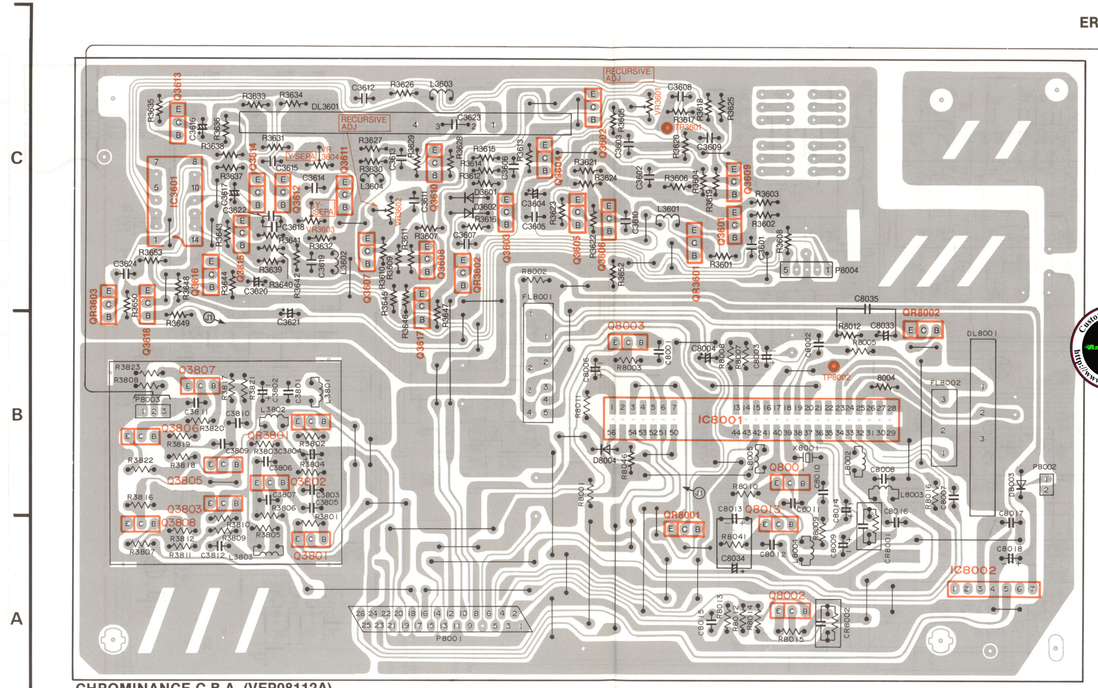
CHROMINANCE C.B.A. (VEP60112A)

REEL SERVO C.B.A. (VEP22448A)

NOTE : DO NOT USE THE PART NUMBER SHOWN ON THIS DRAWING FOR ORDERING. THE CORRECT PART NUMBER IS SHOWN IN THE PARTS LIST, AND MAY BE SLIGHTLY DIFFERENT OR AMENDED SINCE THIS DRAWING WAS PREPARED.

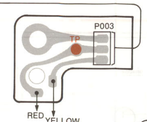
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## CHROMINANCE & REEL SERVO C.B.A. (VEP08112A, VEP02248A)




CHROMINANCE C.B.A. (VEP08112A)

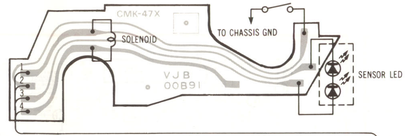
### ERASE CONNECTION C.B.

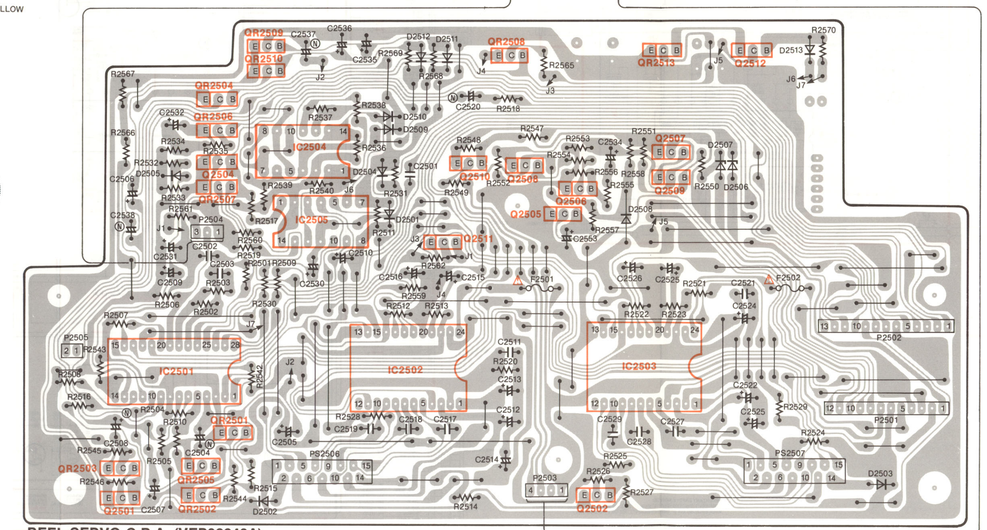



### TENSION SENSOR C.B.




### SOLENOID C.B.



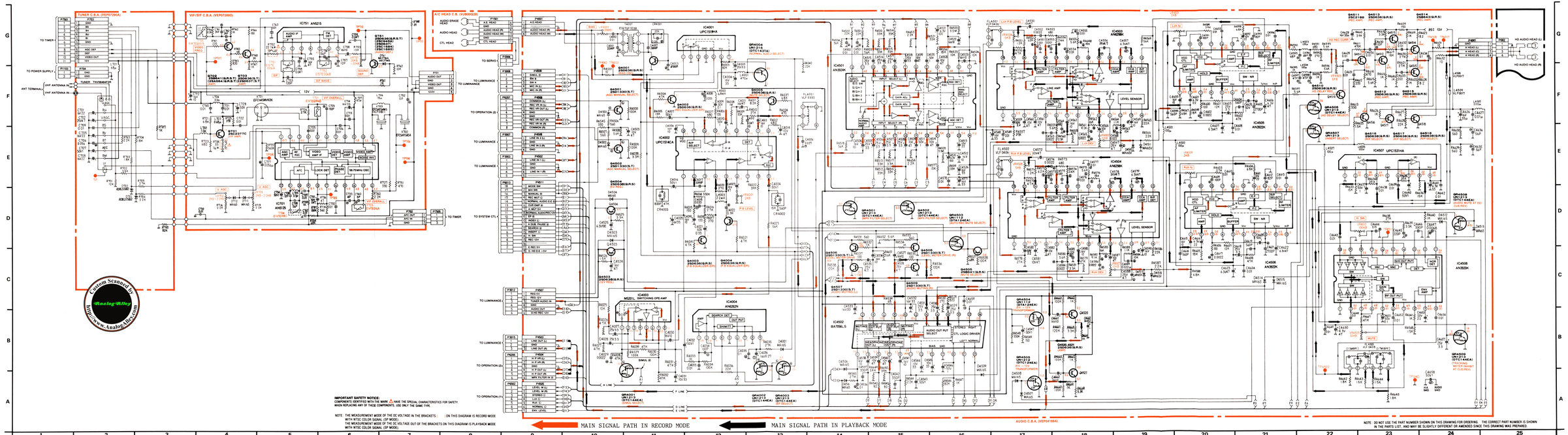

REEL SERVO C.B.A. (VEP02248A)

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| REEL SERVO & CHROMINANCE C.B.A. | |
|---|---|
| **Transistor** | |
| Q1504 | C-8 |
| Q2501 | A-7 |
| Q2502 | A-8 |
| Q2504 | B-7 |
| Q2505 | B-9 |
| Q2506 | B-9 |
| Q2507 | C-9 |
| Q2508 | B-9 |
| Q2509 | B-9 |
| Q2510 | B-8 |
| Q2511 | B-8 |
| Q2512 | C-10 |
| Q3601 | C-4 |
| Q3602 | C-3 |
| Q3603 | C-3 |
| Q3604 | C-3 |
| Q3605 | C-3 |
| Q3606 | C-3 |
| Q3607 | C-2 |
| Q3608 | C-3 |
| Q3609 | C-4 |
| Q3610 | C-3 |
| Q3611 | C-2 |
| Q3612 | C-2 |
| Q3613 | C-1 |
| Q3614 | C-2 |
| Q3615 | C-2 |
| Q3616 | C-1 |
| Q3617 | B-2 |
| Q3618 | B-1 |
| Q3801 | A-2 |
| Q3802 | B-2 |
| Q3803 | B-2 |
| Q3805 | B-1 |
| Q3806 | B-1 |
| Q3808 | A-1 |
| Q3817 | B-1 |
| Q8001 | B-4 |
| Q8002 | A-4 |
| Q8003 | B-3 |
| Q8013 | A-4 |
| **Transistor & Resistor** | |
| QR2501 | A-7 |
| QR2502 | A-7 |
| QR2503 | A-7 |
| QR2504 | C-7 |
| QR2505 | A-7 |
| QR2506 | C-7 |
| QR2507 | B-7 |
| QR2508 | C-9 |
| QR2509 | C-7 |
| QR2510 | C-7 |
| QR2513 | C-9 |
| QR3601 | C-4 |
| QR3602 | C-3 |
| QR3603 | C-1 |
| QR3801 | B-2 |
| QR8001 | A-4 |
| QR8002 | B-5 |
| **Integrated Circuit** | |
| IC2501 | A-7 |
| IC2502 | A-8 |
| IC2503 | A-9 |
| IC2504 | C-8 |
| IC2505 | B-8 |
| IC3601 | C-1 |
| IC8001 | B-4 |
| IC8002 | A-5 |
| **Test Point** | |
| TP3601 | C-4 |
| TP8002 | B-4 |
| **Adjustment** | |
| VR3601 | C-4 |
| VR3602 | C-2 |
| VR3603 | C-2 |
| VR3604 | C-2 |

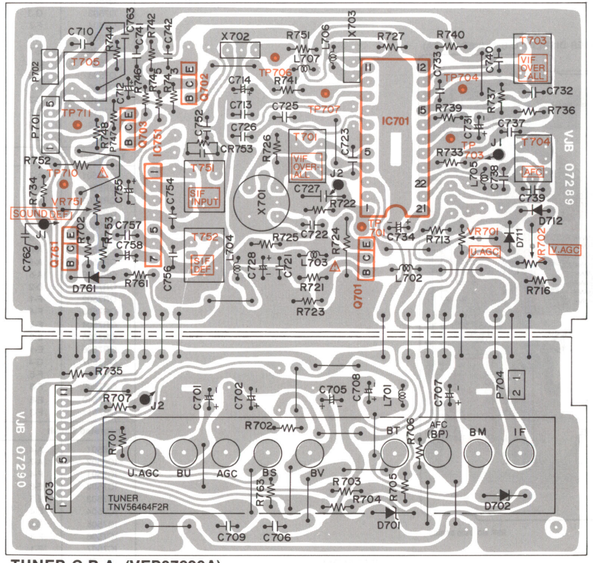
ADDRESS INFORMATION

# VIF, TUNER & AUDIO SCHEMATIC DIAGRAM



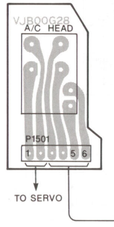
# VIF, TUNER & AUDIO C.B.A. (VEP07289D, VEP07290A, VEP04169A)

VIF C.B.A. (VEP07289D)

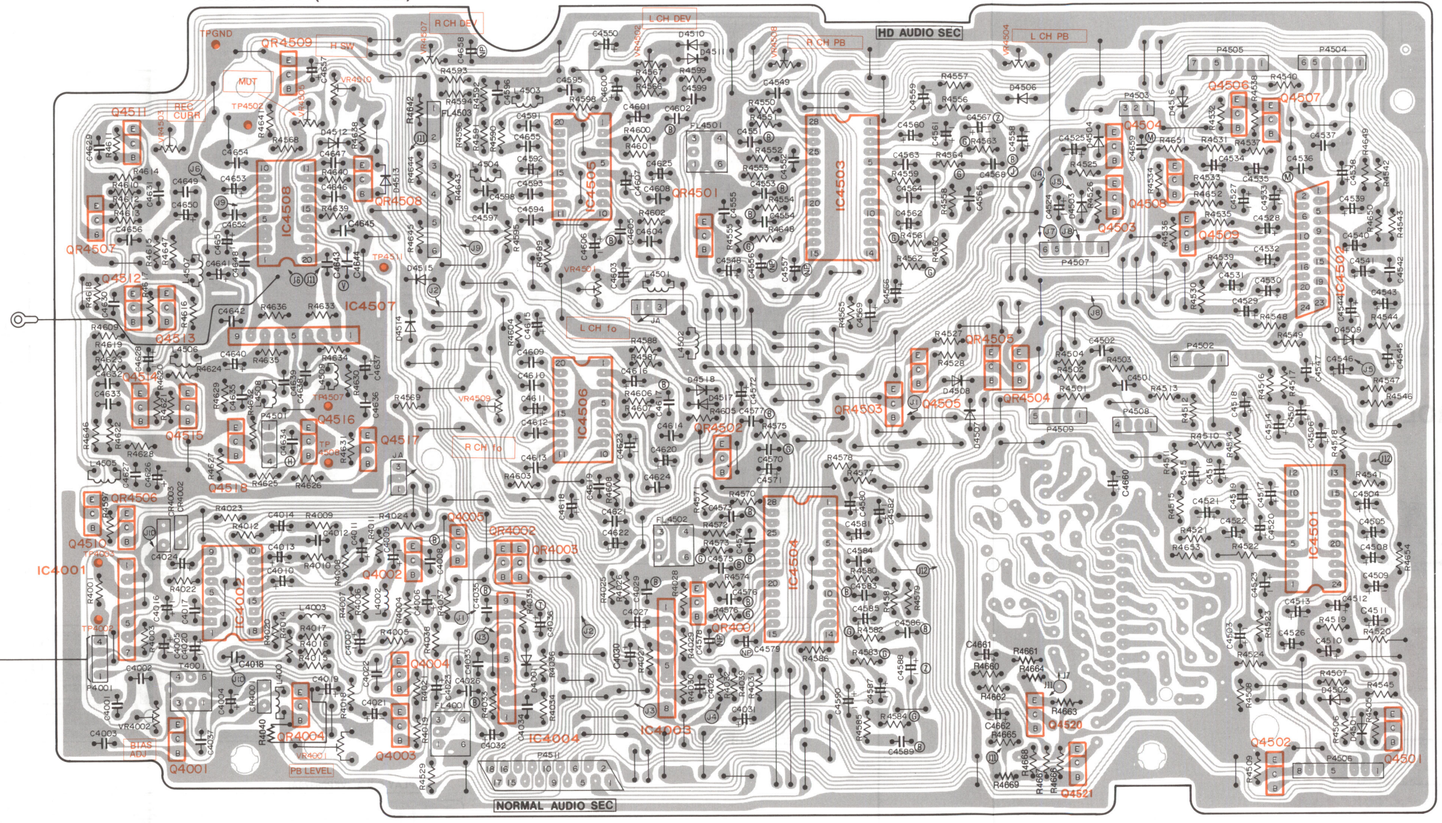


TUNER C.B.A. (VEP07290A)

A/C HEAD C.B. (VJB00G28)




AUDIO C.B.A. (VEP04169A)

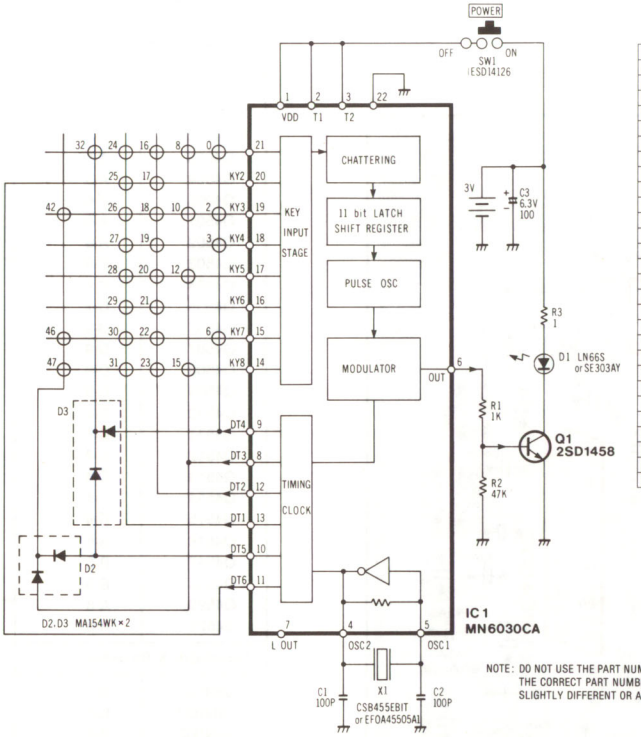



| VIF, TUNER & AUDIO C.B.A. | | | |
|---|---|---|---|
| **Transistor** | | IC4002 | B-5 |
| Q701 | C-2 | IC4003 | A-6 |
| Q702 | D-1 | IC4004 | A-6 |
| Q703 | D-1 | IC4501 | B-9 |
| Q761 | C-1 | IC4502 | C-9 |
| Q4001 | A-4 | IC4503 | C-7 |
| Q4002 | B-5 | IC4504 | B-7 |
| Q4003 | A-5 | IC4505 | D-6 |
| Q4004 | A-5 | IC4506 | C-6 |
| Q4005 | B-6 | IC4507 | C-5 |
| Q4501 | A-9 | IC4508 | D-5 |
| Q4502 | A-9 | **Test Point** | |
| Q4503 | D-9 | TP701 | C-2 |
| Q4504 | D-9 | TP703 | D-3 |
| Q4505 | C-7 | TP704 | D-3 |
| Q4506 | D-9 | TP706 | D-2 |
| Q4507 | D-9 | TP707 | D-2 |
| Q4508 | D-9 | TP710 | D-1 |
| Q4509 | C-9 | TP711 | D-1 |
| Q4510 | B-4 | TP4002 | B-4 |
| Q4511 | D-4 | TP4003 | B-4 |
| Q4512 | C-4 | TP4502 | D-5 |
| Q4513 | C-4 | TP4507 | C-5 |
| Q4514 | C-4 | TP4508 | B-5 |
| Q4515 | C-4 | TP4511 | C-5 |
| Q4516 | B-5 | TP GND | D-5 |
| Q4517 | B-5 | **Adjustment** | |
| Q4518 | B-5 | VR701 | C-3 |
| Q4520 | A-8 | VR702 | C-3 |
| Q4521 | A-8 | VR751 | D-1 |
| **Transistor & Resistor** | | VR4001 | A-5 |
| QR4001 | B-7 | VR4002 | A-4 |
| QR4002 | B-6 | VR4501 | C-6 |
| QR4003 | B-6 | VR4502 | D-6 |
| QR4004 | A-5 | VR4503 | D-4 |
| QR4501 | C-7 | VR4504 | D-8 |
| QR4502 | B-7 | VR4505 | D-5 |
| QR4503 | C-7 | VR4507 | D-5 |
| QR4504 | C-8 | VR4508 | D-7 |
| QR4505 | C-8 | VR4509 | B-6 |
| QR4506 | B-4 | VR4510 | D-5 |
| QR4507 | D-4 | T701 | D-2 |
| QR4508 | D-5 | T703 | D-3 |
| QR4509 | D-5 | T704 | D-3 |
| **Integrated Circuit** | | T751 | D-2 |
| IC701 | D-2 | T752 | C-2 |
| IC751 | D-1 | | |
| IC4001 | B-4 | | |

ADDRESS INFORMATION

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# IR REMOTE CONTROL SCHEMATIC DIAGRAM

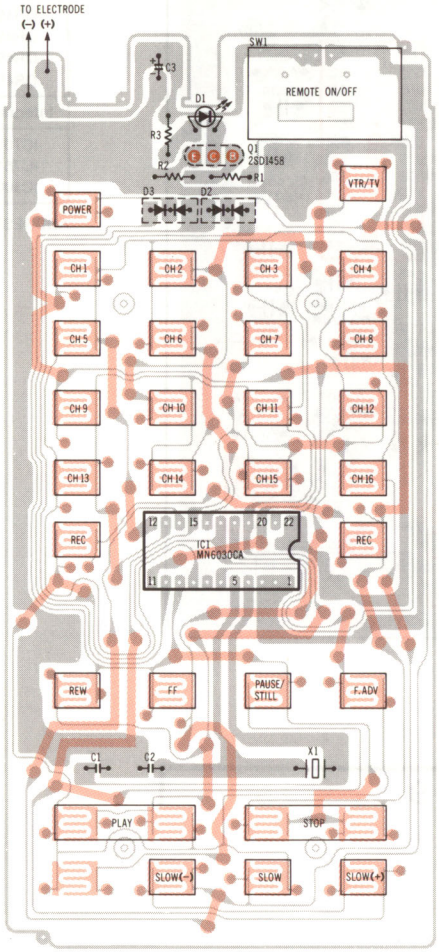



| KEY NO. | FUNCTION |
|---|---|
| 0 | STOP |
| 2 | REW |
| 3 | FF |
| 6 | PAUSE/STILL |
| 8 | REC |
| 10 | PLAY |
| 12 | F. ADV |
| 15 | SLOW |
| 16 | CH1 |
| 17 | CH2 |
| 18 | CH3 |
| 19 | CH4 |
| 20 | CH5 |
| 21 | CH6 |
| 22 | CH7 |
| 23 | CH8 |
| 24 | CH9 |
| 25 | CH10 |
| 26 | CH11 |
| 27 | CH12 |
| 28 | CH13 |
| 29 | CH14 |
| 30 | CH15 |
| 31 | CH16 |
| 32 | POWER |
| 42 | VTR/TV |
| 46 | SLOW (+) |
| 47 | SLOW (−) |

NOTE: DO NOT USE THE PART NUMBER SHOWN ON THIS DRAWING FOR ORDERING. THE CORRECT PART NUMBER IS SHOWN IN THE PARTS LIST, AND MAY BE SLIGHTLY DIFFERENT OR AMENDED SINCE THIS DRAWING WAS PREPARED.

# IR REMOTE CONTROL C.B.A.

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TIMER, DISPLAY

# TIMER, TIMER DISPLAY, DISPLAY & OPERATION (1) C.B.A. (VEP07346A, VEP07347A, VEP06370A, VEP06371A)

TIMER C.B.A. (VEP07346A)

REF. NO. 7500 SERIES

IR RECEIVER C.B.

TIMER DISPLAY C.B.A. (VEP07347A)

REF. NO. 7500 SERIES

HEAD PHONE JACK C.B.

OPERATION (1) C.B.A. (VEP06371A)

DISPLAY C.B.A. (VEP06370A)

POWER

POWER SW

CASSETTE IN

EJECT

G F E D C B A

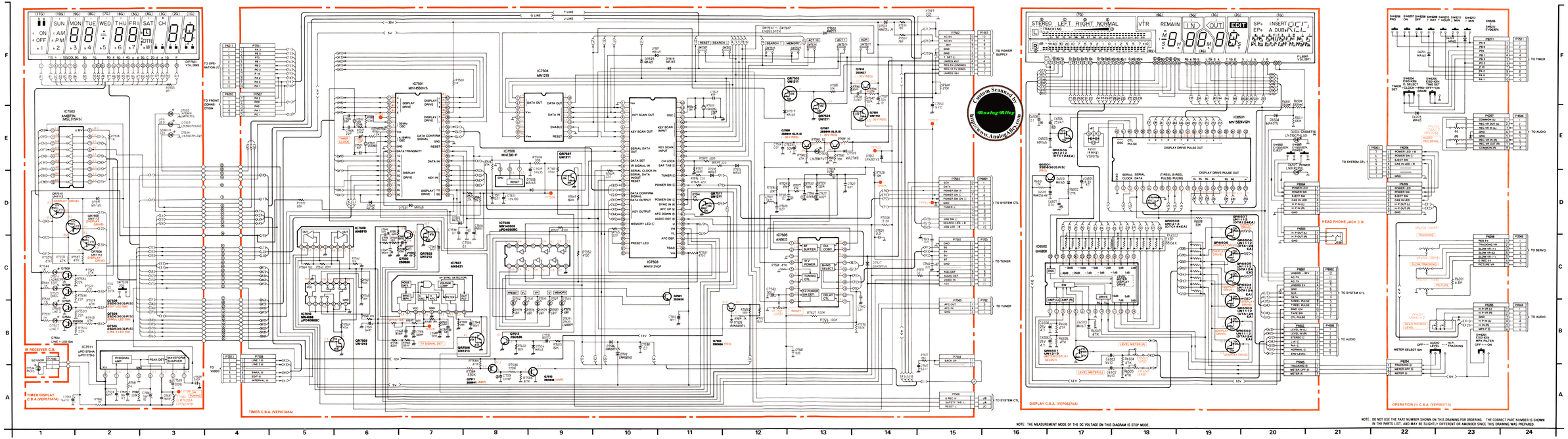
1 2 3 4 5 6 7 8 9

| TIMER, TIMER DISPLAY, DISPLAY & OPERATION (1) C.B.A. | |
|---|---|
| **Transistor** | |
| Q6501 | A-5 |
| Q7501 | E-2 |
| Q7502 | F-1 |
| Q7503 | G-3 |
| Q7504 | F-7 |
| Q7505 | E-7 |
| Q7506 | E-7 |
| Q7507 | G-3 |
| Q7508 | G-3 |
| Q7509 | F-7 |
| Q7510 | D-2 |
| Q7511 | G-5 |
| Q7512 | G-5 |
| Q7513 | D-1 |
| **Transistor & Resistor** | |
| QR6501 | A-7 |
| QR6502 | A-6 |
| QR6503 | A-6 |
| QR6504 | A-6 |
| QR6505 | A-6 |
| QR6506 | A-6 |
| QR6507 | A-6 |
| QR6508 | A-5 |
| QR6509 | A-5 |
| QR7501 | D-2 |
| QR7502 | F-1 |
| QR7503 | F-4 |
| QR7504 | F-4 |
| QR7505 | E-2 |
| QR7506 | E-1 |
| QR7507 | G-4 |
| QR7508 | F-8 |
| QR7509 | F-8 |
| QR7510 | E-8 |
| QR7511 | F-3 |
| **Integrated Circuit** | |
| IC6501 | A-4 |
| IC6502 | A-7 |
| IC7501 | F-4 |
| IC7502 | E-8 |
| IC7503 | E-3 |
| IC7504 | E-4 |
| IC7505 | G-2 |
| IC7506 | F-3 |
| IC7507 | E-1 |
| IC7508 | D-4 |
| IC7509 | E-2 |
| IC7510 | D-1 |
| IC7511 | G-8 |
| **Test Point** | |
| TP7501 | F-4 |
| TP7504 | F-4 |
| TP7505 | D-1 |
| TP7507 | C-1 |
| TP7508 | E-2 |
| TP7515 | F-1 |
| TP7521 | D-1 |
| TP7581 | F-6 |
| **Adjustment** | |
| C7502 | F-4 |
| T7580 | F-6 |
| VR6201 | B-8 |
| VR6202 | C-5 |
| VR6203 | B-7 |
| VR6204 | B-7 |
| VR6205 | B-6 |
| VR6501 | A-8 |
| VR6502 | A-8 |
| VR7501 | F-2 |
| VR7502 | F-1 |

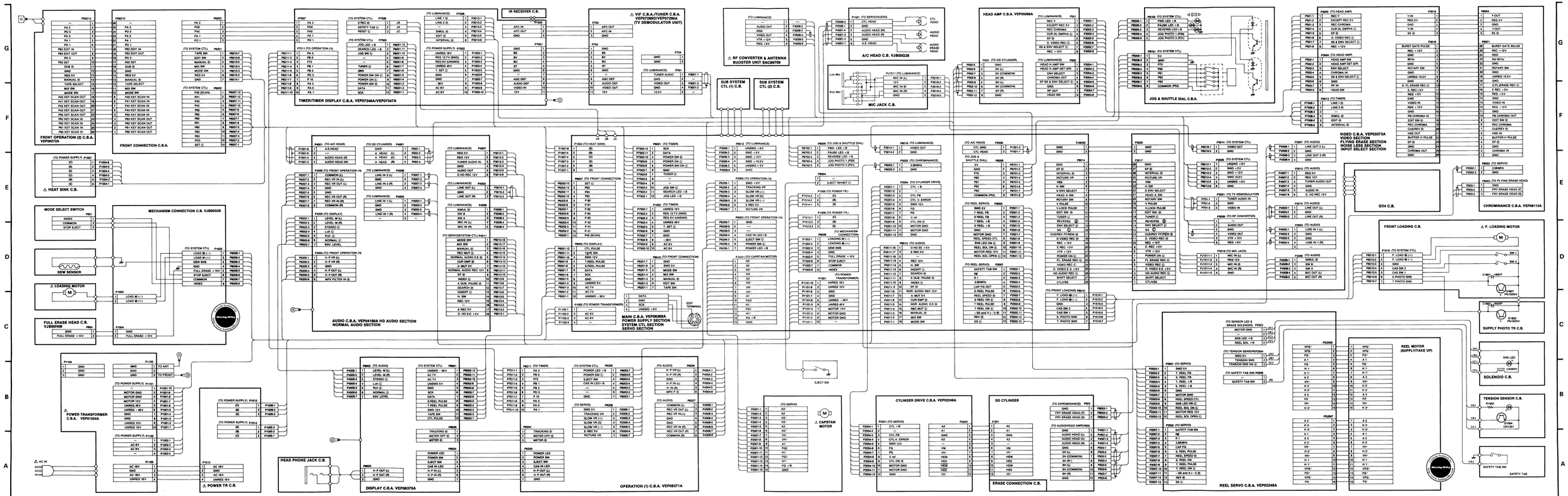
ADDRESS INFORMATION

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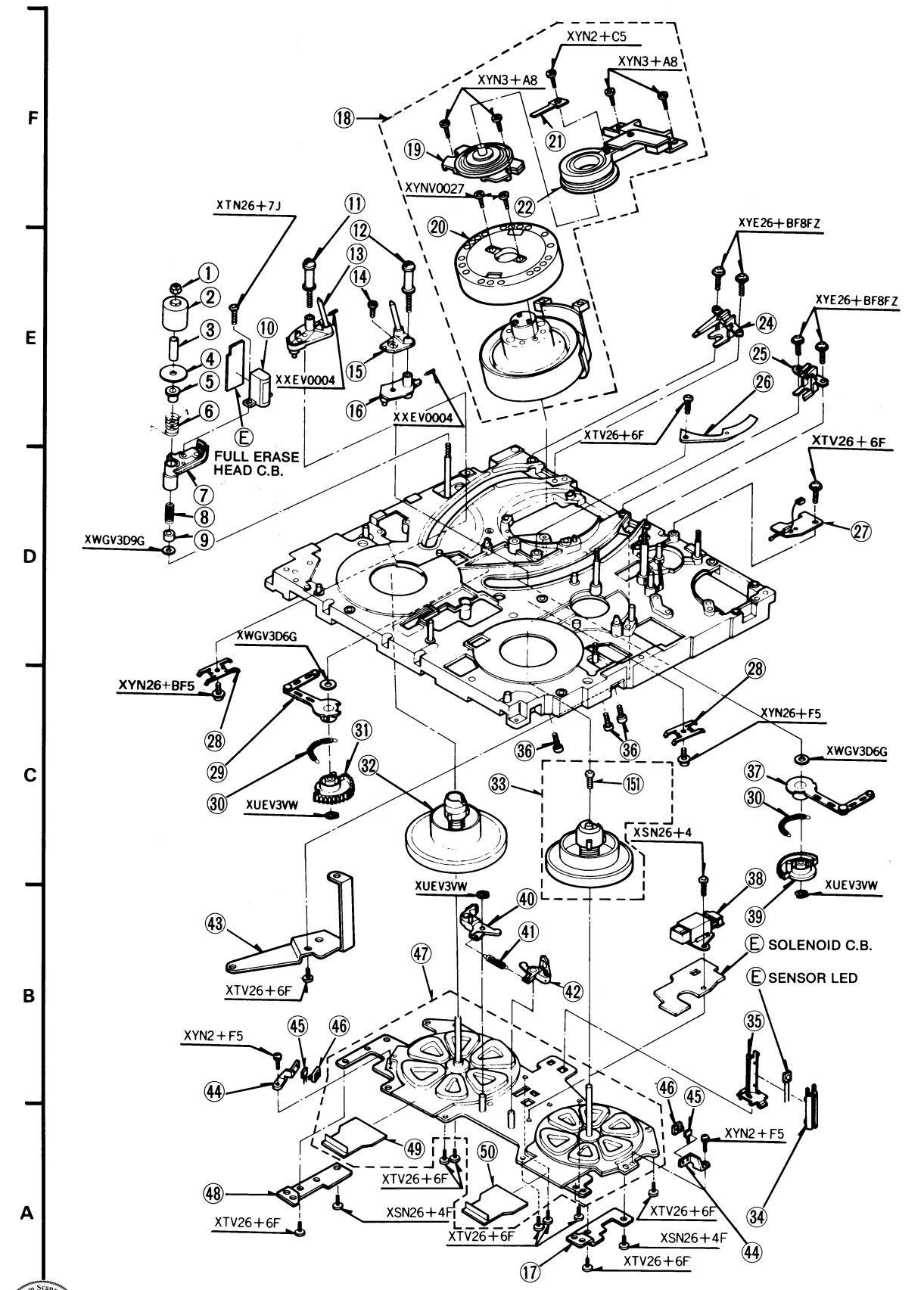
# TIMER, TIMER DISPLAY, DISPLAY & OPERATION (1) SCHEMATIC DIAGRAM



# INTERCONNECTION SCHEMATIC DIAGRAM

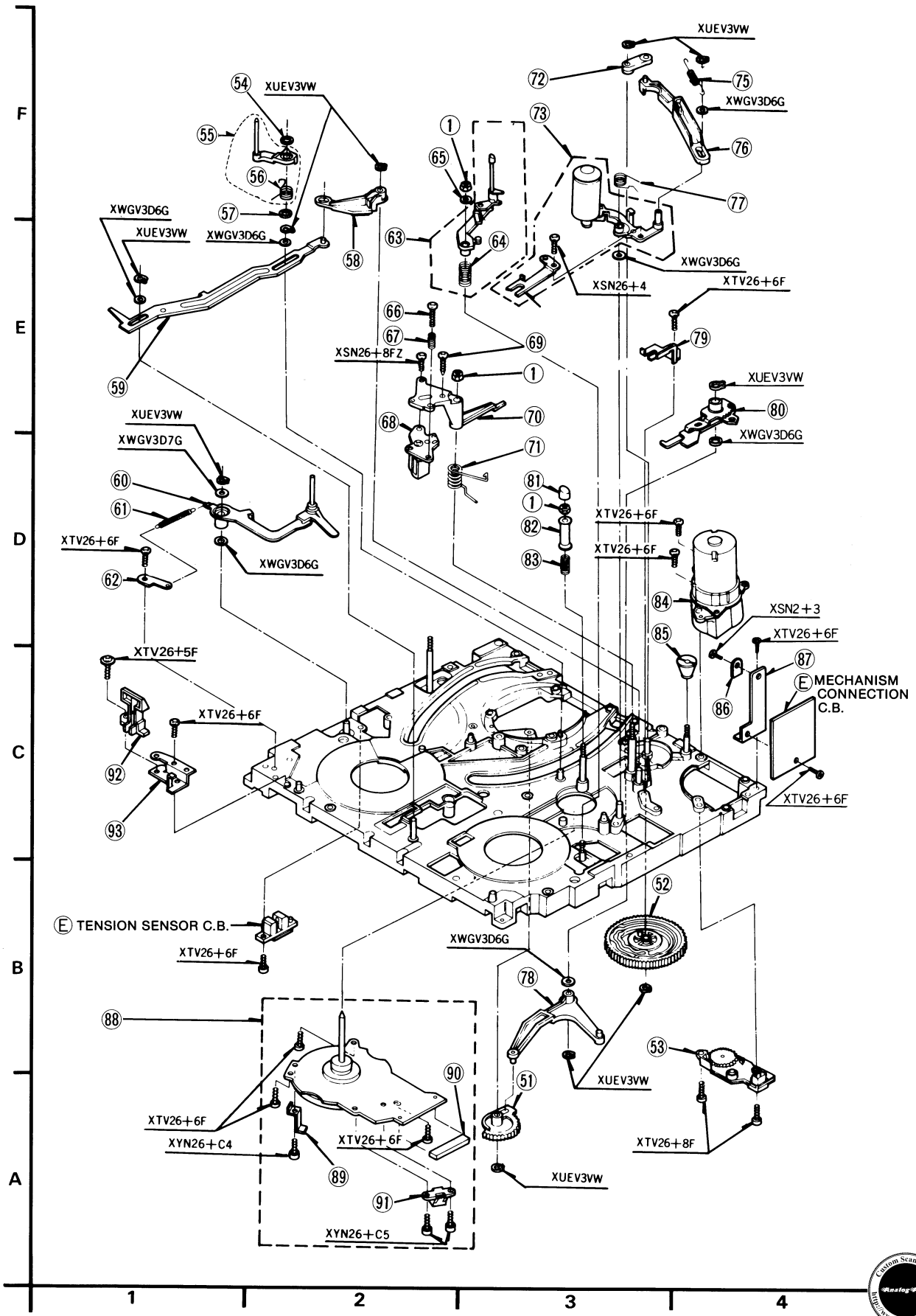


# EXPLODED VIEWS ❶ *Transport Section*



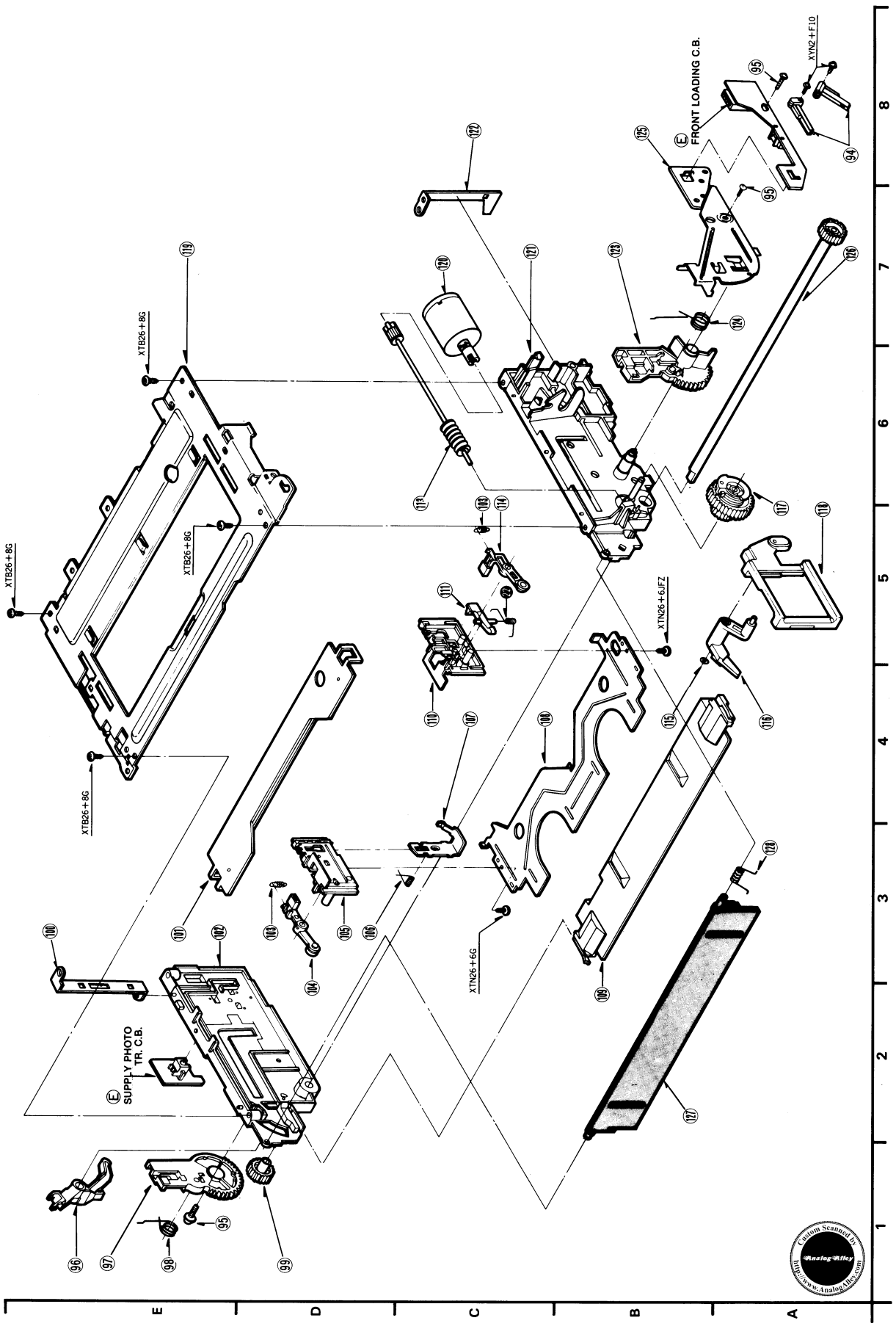

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# ❷ Moving Mechanism Section



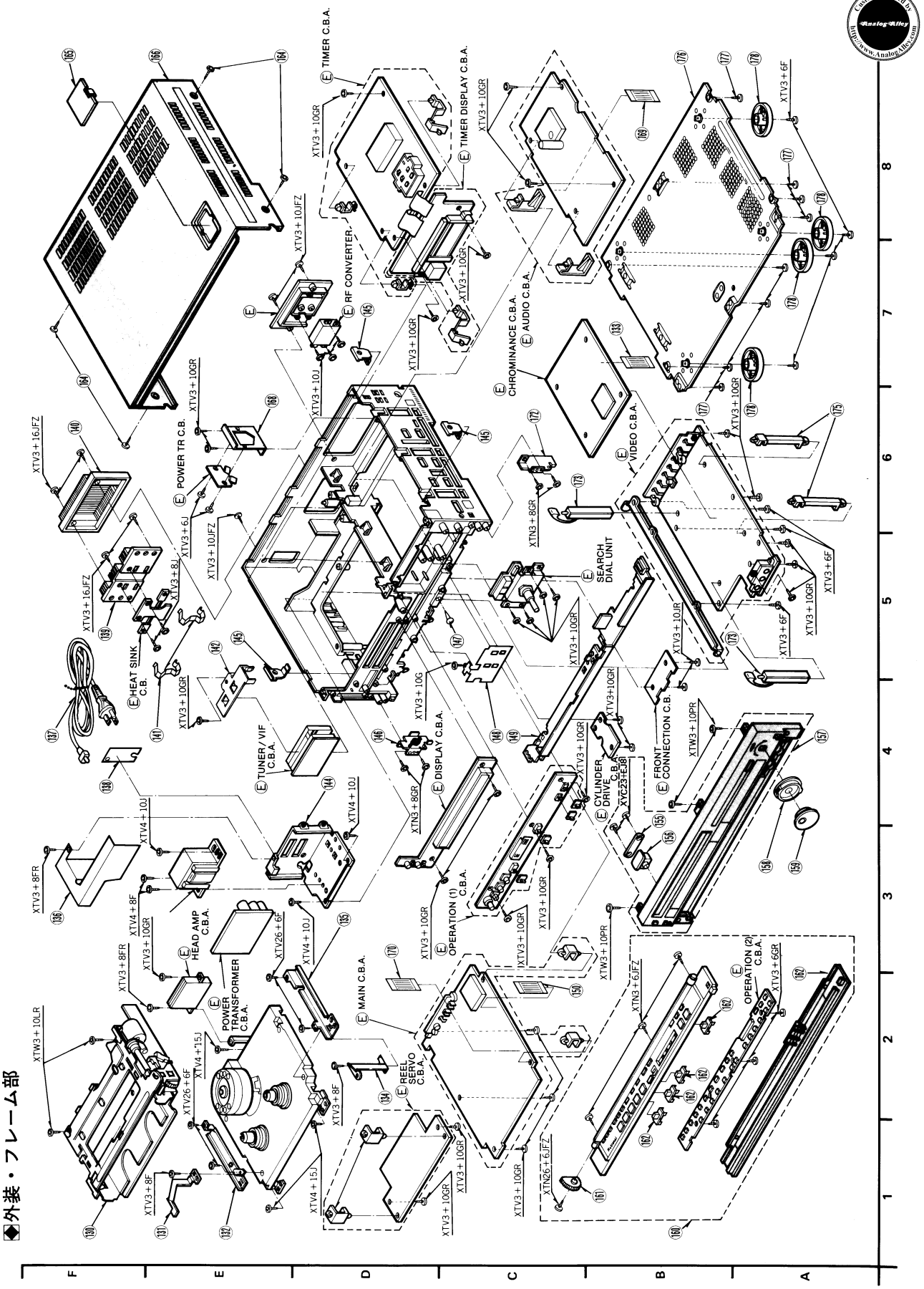

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## ❸ *Front Loading Mechanism Section*

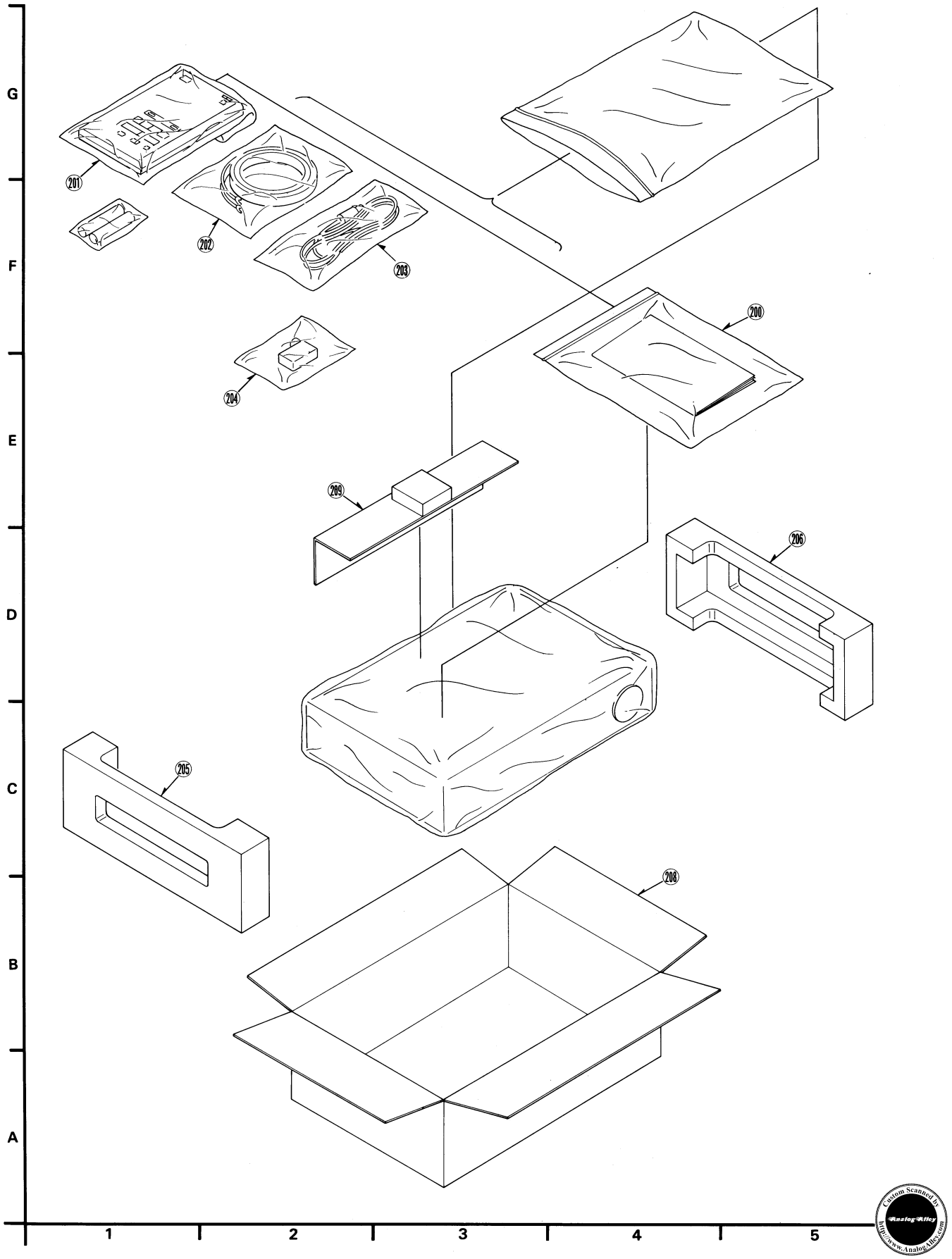



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# ❹ Casing Parts Section

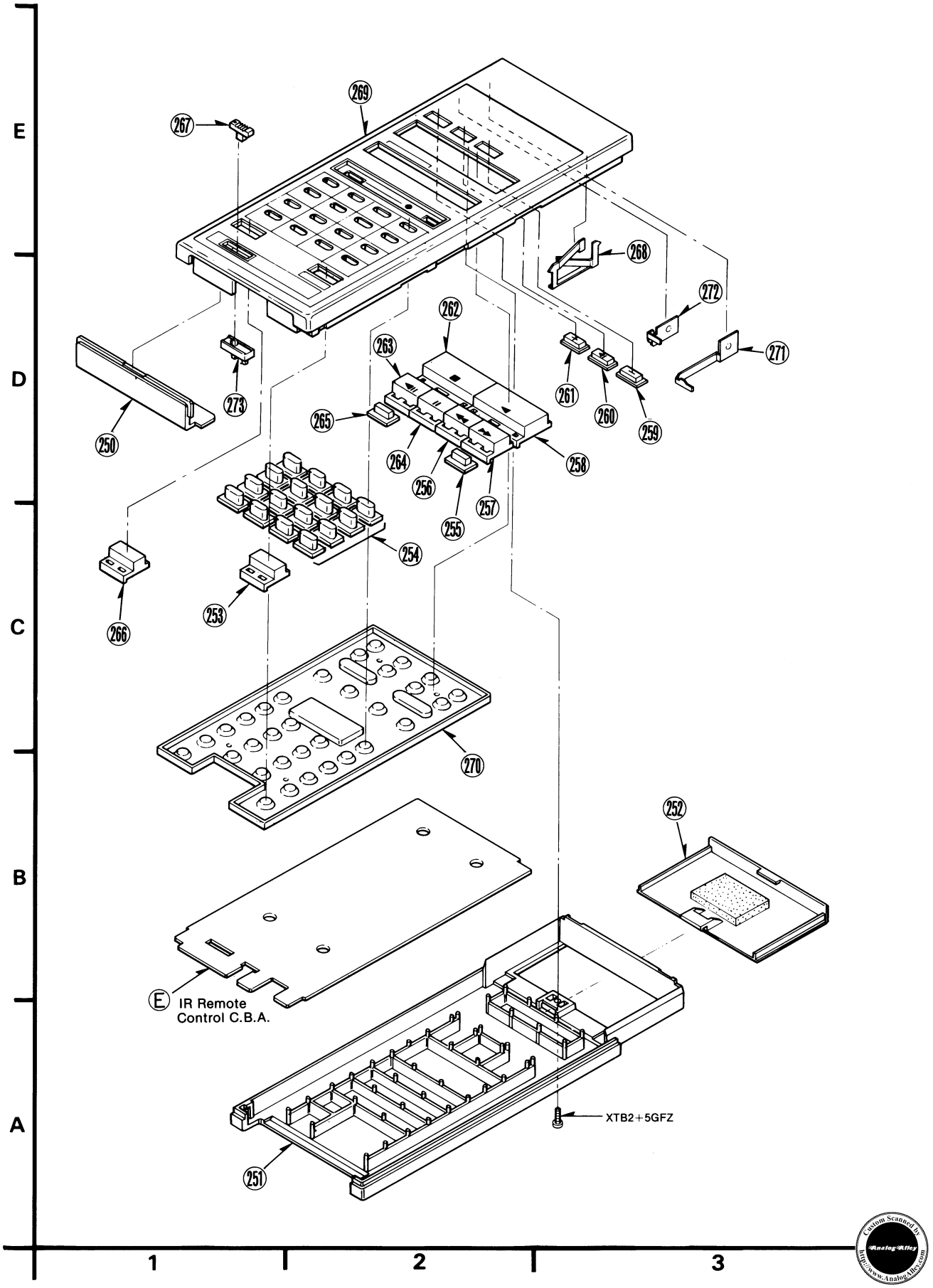


# ❺ *Packing Parts Section*




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## ❻ *IR Remote Control Unit*




Custom Scanned by Analog-Rifles http://www.Analog-Rifles.com

Panasonic®

MATSUSHITA ELECTRIC

Printed in Japan

ORDER NO. VRD8607217
D1
(Date of issue: Aug., 1986)

Video Cassette Recorder

# *Replacement Parts List*

Panasonic VHS Hi-Fi
Professional/Industrial Video

# AG-1950

**Notes:**

1. • Be sure to make your orders of replacement parts according to this list.
   • "〈R〉" in Remark column indicates recommended for stocking.
   • "〈M〉" in Remark column indicates needed parts in the periodical maintenance.
2. IMPORTANT SAFETY NOTICE
   Components identified by "⚠" have special characteristics important for safety.
   When replacing any of these components, use only the original ones.
   Meaning of simbol ⚠ on this parts list is exactly same as simbol ⚠ on Schematic and Circuit Board Diagrams.
3. Unless otherwise specified;
   All resistors are in OHMS (Ω), K=1,000Ω, M=1,000 KΩ.
4. C.B.A. or C.B. marked with "■" show below the main assembled parts.
5. When ordering parts, use part No. only from Part No. column.

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## 1. SERVICING FIXTURES & TOOLS LIST

| Ref.No. | | Part No. | Part Name & Description | Pcs | Remarks |
|---|---|---|---|---|---|
| | | VFM8080HMFP | VHS Alignment Tape | 1 | |
| | | VFK0137 | Post Adj. Screwdriver | 1 | |
| | | VFK0343 | Check Light | 1 | |
| | | VFK0132 | Back Tension Meter | 1 | |
| | | | (Tentelometer, | | (T2-H7-UM) |
| | | | Made in U.S.A.) | | |
| | | VFKS0010 | Post Adj. Plate | 1 | |
| | | VFK0133 | Dial Torque Gauge | 1 | |
| | | VFK0180 | Plastic Clamper | 1 | |
| | | VFK0134 | Adaptor for VFK0133 | 1 | |
| | | VFKS0009 | Reel Table Height Fixture | 1 | |
| | | VFK0136 | Fine Adjustment Screwdriver | 1 | |
| | | | (3mm Phi) | | |
| | | VFKS0004 | Cassette Holder Fixture | 1 | |

| Ref.No. | | Part No. | Part Name & Description | Pcs | Remarks |
|---|---|---|---|---|---|
| | | VFKS0003 | H-Position Adj. Fixture | 1 | |
| | | VFK0192 | Eccentric Screwdriver | 1 | |
| | | VFK0144 | Retaining Ring Remover | 1 | |
| | | | (3mm Phi) | | |
| | | VFK0145 | Retaining Ring Remover | 1 | |
| | | | (4mm Phi) | | |
| | | VFK0146 | Hex.Wrench (0.9mm) | 1 | |
| | | VFK76 | Hex.Wrench (1.5mm) | 1 | |
| | | MOR265 | Morlytone Grease | 1 | |
| | | VFK27 | Head Cleaning Stick | 1 | |
| | | VFK0236 | Tention Post Adj. Plate | 1 | |
| | | VFK0264 | FWD Sensor Adj. Jig | 1 | |
| | | VFK0265 | REV Sensor Adj. Jig | 1 | |
| | | VFK0135 | Eccentric Screwdriver | 1 | |

# 2. MECHANICAL REPLACEMENT PARTS LIST

| Ref.No. | | Part No. | Part Name & Description | Pcs | Remarks |
|---|---|---|---|---|---|
| 1(1) | | VHN0023 | Nylon Nut | 4 | |
| 2(1) | | VMX0541 | Collar (B) | 1 | |
| 3(1) | | VDR0970 | Limiter Roller | 1 | |
| 4(1) | | VMX0679 | Lower Limiter | 1 | |
| 5(1) | | VMX0957 | Limiter Stand | 1 | |
| 6(1) | | VMB1231 | FE Head Lever Spring | 1 | |
| 7(1) | | VML1569 | FE Head Lever | 1 | |
| 8(1) | | VMB1239 | Limiter Spring | 1 | |
| 9(1) | | VMX0958 | Collar (A) | 1 | |
| 10(1) | | VBS0031 | FE Head | 1 | <R> <M> |
| 11(1) | | VXP0302A | Roller Post Unit (S) | 1 | |
| 12(1) | | VXP0718 | Roller Post Unit (T) | 1 | |
| 13(1) | | VXA2039 | Shaft Holder (S) Unit | 1 | |
| 14(1) | | VHD0162 | Screw, Shaft Holder (T) | 1 | |
| 15(1) | | VXA2483 | Shaft Holder (T) Unit | 1 | |
| 16(1) | | VXA2042 | Inclind Base (T) Unit | 1 | |
| 17(1) | | VMA6784 | Reel Motor Angle (L) | 1 | |
| 18(1) | | VEG0419 | DD Cylinder Unit | 1 | <R> <!> <M> |
| 19(1) | | VXA2477 | RT Rotor Base | 1 | |
| 20(1) | | VEH0313 | Upper Cylinder Unit | 1 | <R> <M> |
| 21(1) | | VXS0070 | Earth Angle | 1 | |
| 22(1) | | VXA2480 | Stator Angle | 1 | |
| 23(1) | | XYNV0027 | Screw | 2 | |
| 24(1) | | VMD0613 | Post Stopper (S) | 1 | |
| 25(1) | | VMD0614 | Post Stopper (T) | 1 | |
| 26(1) | | VMD0609 | Inclind Support | 1 | |
| 27(1) | | VXA2567 | Eject Inhibit Switch | 1 | |
| 28(1) | | VMA6422 | Shaft Holder Plate | 2 | |
| 29(1) | | VXL1193 | Loading Arm (S) Unit | 1 | |
| 30(1) | | VMB1232 | Loading Spring | 2 | |
| 31(1) | | VXP0561 | Loading Gear (S) Unit | 1 | |
| 32(1) | | VXR0122 | Supply Reel Table Unit | 1 | <R> <M> |
| 33(1) | | VXR0139 | Takeup Reel Table Unit | 1 | <R> <M> |
| 34(1) | | VMX0683 | LED Holder (L) | 1 | |
| 35(1) | | VMX0682 | LED Holder (R) | 1 | |
| 36(1) | | VHD0081 | Screw | 3 | |
| 37(1) | | VXL1191 | Loading Arm (T) Unit | 1 | |
| 38(1) | | VSJ0066 | Brake Solenoid | 1 | |
| 39(1) | | VXP0560 | Loading Gear (T) Unit | 1 | |
| 40(1) | | VXZ0173 | Main Brake (S) Unit | 1 | <R> <M> |
| 41(1) | | VMB1241 | Brake Spring | 1 | |
| 42(1) | | VXZ0212 | Main Brake (T) Unit | 1 | <R> <M> |
| 43(1) | | VMA6786 | Head Amp Mount Angle | 1 | |
| 44(1) | | VMD0611 | FG Support (1) | 2 | |
| 45(1) | | HW300B | Hall IC | 2 | |
| 46(1) | | VMD0621 | FG Support (2) | 2 | |
| 47(1) | | VXA2485 | Stator Base Unit | 1 | <R> <!> |
| 48(1) | | VMA6785 | Reel Motor Angle (R) | 1 | |
| 49(1) | | VWJ0232 | Supply Reel Motor FPC | 1 | <R> |
| 50(1) | | VWJ0231 | Takeup Reel Motor FPC | 1 | <R> |
| | | | | | |
| 51(2) | | VDG0161 | Lock Gear | 1 | |
| 52(2) | | VDG0286 | Cam Gear Unit | 1 | <R> <M> |
| 53(2) | | VSS0099 | Mode Select SW | 1 | <R> <M> |
| 54(2) | | VMX0653 | Sub Arm Cut Washer | 1 | |
| 55(2) | | VXL1390 | Sub Arm | 1 | |
| 56(2) | | VMB1469 | Sub Arm Spring | 1 | |
| 57(2) | | VMX0960 | Sub Arm Washer | 1 | |
| 58(2) | | VXL1386 | Brake Arm Unit | 1 | |
| 59(2) | | VXL1385 | Main Rod Unit | 1 | |
| 60(2) | | VXL1394 | Tension Arm Unit | 1 | |
| 61(2) | | VMB1230 | Tension Arm Spring | 1 | |
| 62(2) | | VMD0604 | Tension Arm Spring Tie (C) | 1 | |
| 63(2) | | VXL1387 | P5 Arm Unit | 1 | |
| 64(2) | | VMB1468 | P5 Spring | 1 | |
| 65(2) | | VMX0988 | P5 Washer | 1 | |
| 66(2) | | VHD0077 | Height Adj.Screw | 1 | |
| 67(2) | | VMB0935 | Height Adj.Spring | 1 | |
| 68(2) | | VBR0096 | A/C Head | 1 | <R> <M> |
| 69(2) | | VHD0144 | Screw (Azimuth Adj.) | 1 | |
| 70(2) | | VML1567 | A/C Head Arm | 1 | |
| 71(2) | | VMB1240 | A/C Head Height Spring | 1 | |
| 72(2) | | VML1563 | Guide Lever | 1 | |
| 73(2) | | VXL1389 | Pressure Roller Unit | 1 | <R> <M> |
| 74(2) | | VML1772 | P5 Kick Lever | 1 | |
| | | | | | |
| | | | | | |

| Ref.No. | | Part No. | Part Name & Description | Pcs | Remarks |
|---|---|---|---|---|---|
| 75(2) | | VMB1228 | Pressure Spring | 1 | |
| 76(2) | | VMM0130 | Pressure Lever | 1 | |
| 77(2) | | VMB1238 | Pressure Arm Spring | 1 | |
| 78(2) | | VXL1384 | Lock Arm Unit | 1 | |
| 79(2) | | VMA6589 | Pressure Roller Angle | 1 | |
| 80(2) | | VXL1391 | Sub Arm Adjustment Lever | 1 | |
| 81(2) | | VMD0752 | P4 Post Cap | 1 | |
| 82(2) | | VMX0959 | Post Sleeve | 1 | |
| 83(2) | | VMB1239 | Limitter Spring | 1 | |
| 84(2) | | VEM0207 | Loading Motor Unit | 1 | <R> <!> <M> |
| 85(2) | | VHN0039 | Adjust Nut | 1 | |
| 86(2) | | VEK2604 | Dew Sensor Unit | 1 | <R> |
| 87(2) | | VMA6781 | Dew Sensor Angle | 1 | |
| 88(2) | | VEM0206 | DD Capstan Unit | 1 | <R> <!> <M> |
| 89(2) | | VMA6714 | Stopper | 1 | |
| 90(2) | | VJS1403 | Capstan Stator Connector | 1 | |
| 91(2) | | VBK0041 | MR. FG Sensor | 1 | |
| 92(2) | | VSH0025 | Safety Tab Switch | 1 | <R> |
| 93(2) | | VMA6587 | Safety Tab Switch Base | 1 | |
| | | | | | |
| 94(3) | | VSH0028 | Detection Switch | 2 | <R> |
| 95(3) | | VHD0296 | Screw | 3 | |
| 96(3) | | VML1625 | Front Opener Lever | 1 | |
| 97(3) | | VML1620 | Wiper Arm (L) | 1 | |
| 98(3) | | VMB1301 | Wiper Spring (L) | 1 | |
| 99(3) | | VDG0274 | Shaft Gear | 1 | |
| 100(3) | | VSC1601 | Shield Angle (L) | 1 | |
| 101(3) | | VXA2577 | Holder Angle Unit | 1 | |
| 102(3) | | VMD0817 | Side Plate (L) | 1 | |
| 103(3) | | VMB1257 | Pressing Lever Spring | 2 | |
| 104(3) | | VXL1246 | Pressing Lever (L) Unit | 1 | |
| 105(3) | | VMD0799 | Holder Guide (L) | 1 | |
| 106(3) | | VMB1456 | Safety Lever Spring | 1 | |
| 107(3) | | VMM0152 | Safety Lever (L) | 1 | |
| 108(3) | | VMA6761 | Cassette Holder | 1 | |
| 109(3) | | VMA6767 | Cassette Guide | 1 | |
| 110(3) | | VXA2452 | Holder Guide (R) Unit | 1 | |
| 111(3) | | VML1585 | Release Lever | 1 | |
| 112(3) | | VMB1259 | Release Lever Spring | 1 | |
| 113(3) | | VXP0693 | Worm Shaft Unit | 1 | |
| 114(3) | | VXL1247 | Pressing Lever (R) Unit | 1 | |
| 115(3) | | VMX0653 | Cut Washer | 1 | |
| 116(3) | | VXL1366 | Cassette Opener Unit | 1 | |
| 117(3) | | VXP0691 | Worm Wheel Unit | 1 | |
| 118(3) | | VXA2433 | Slider (R) Unit | 1 | |
| 119(3) | | VMA6766 | Top Plate | 1 | |
| 120(3) | | VEM0243 | Front Loading Motor | 1 | <R> <!> |
| 121(3) | | VXA2490 | Side Plate (R) Unit | 1 | |
| 122(3) | | VSC1602 | Shield Angle (R) | 1 | |
| 123(3) | | VML1756 | Wiper Arm (R) | 1 | |
| 124(3) | | VMB1300 | Wiper Spring (R) | 1 | |
| 125(3) | | VMA6760 | Switch Bracket | 1 | |
| 126(3) | | VXP0692 | Main Shaft Unit | 1 | |
| 127(3) | | VKF0588 | Blinder Panel | 1 | <R> |
| 128(3) | | VMB1258 | Blinder Spring | 1 | |
| | | | | | |
| 130(4) | | VXA2488 | Front Loading Unit | 1 | |
| 131(4) | | VSC1599 | Shield Angle (L) | 1 | |
| 132(4) | | VMA6782 | F. Loading Mount Angle (L) | 1 | |
| 133(4) | | VWJ26BW060MM | Flexible Jumper | 1 | P8001 - P3018 <R> |
| 134(4) | | VSC1600 | Shield Angle (R) | 1 | |
| 135(4) | | VMA6783 | F. Loading Mount Angle (R) | 1 | |
| 136(4) | | VMZ0841 | Power Barrier | 1 | |
| 137(4) | | VJA0113 | AC Cord | 1 | <!> <R> |
| 138(4) | | VGH1032 | Brinder Panel | 1 | |
| 139(4) | | VEK2688 | Heat Sink | 1 | |
| 140(4) | | VKF0670 | Heat Sink Cover | 1 | |
| 141(4) | | VMB0758 | Transistor Mount Angle | 2 | |
| 142(4) | | VMP0492 | P.C.Board Mount Angle | 1 | |
| 144(4) | | VMP1012 | Power Transformer Angle | 1 | |
| 145(4) | | VMP0442 | Top Panel Angle | 3 | |
| 146(4) | | VXA2495 | Panel Mount Angle (L) | 1 | |
| 147(4) | | VJF0209 | P.C.Board Clip | 1 | |
| 148(4) | | VXA2500 | Timer Barrier | 1 | |
| 149(4) | | VGP1347 | Lower Front Panel | 1 | |
| | | | | | |
| | | | | | |

| Ref.No. | | Part No. | Part Name & Description | Pcs | Remarks |
|---|---|---|---|---|---|
| 150(4) | | VWJ28AW135MM | Flexible Jumper | 1 | P3517 - P6014 <R> |
| 151(4) | | VXD0078 | Screw | 1 | |
| 155(4) | | VMA6673 | Headphone Angle | 1 | |
| 156(4) | | VJJ0096 | Headphone Jack | 1 | |
| 157(4) | | VYP1715 | Front Panel Unit | 1 | <R> |
| 158(4) | | VXU0569 | Shuttle Ring Unit | 1 | <R> |
| 159(4) | | VXU0621 | Jog Dial Unit | 1 | <R> |
| 160(4) | | VYF0886 | Operation Panel Unit | 1 | <R> |
| 161(4) | | VDG0287 | Dumper Gear | 1 | |
| 162(4) | | VGU2742 | Select Knob | 4 | <R> |
| 163(4) | | VYC0136 | Aluminum Door Unit | 1 | <R> |
| 164(4) | | VHD0165 | Top Cover Screw | 4 | |
| 165(4) | | VYF0674 | Tuning Door Unit | 1 | <R> |
| 166(4) | | VGM0142 | Top Cover Unit | 1 | <R> |
| 168(4) | | VMP0879 | P.C.Board Angle | 1 | |
| 169(4) | | VWJ18AW180MM | Flexible Jumper | 1 | P4511 - P6013 <R> |
| 170(4) | | VWJ15AW090MM | Flexible Jumper | 1 | P2001 - Capstan <R> |
| 171(4) | | VTP0209 | Power Transformer | 1 | <R> <!> |
| 172(4) | | VXA2496 | Panel Mount Angle(R) | 1 | |
| 173(4) | | VJF0244 | P.C.Board Support | 2 | |
| 175(4) | | VKC0141 | Hinge | 2 | |
| 176(4) | | VKU0244 | Bottom Plate | 1 | <R> |
| 177(4) | | VHD0059 | Screw Bottom Plate | 8 | |
| 178(4) | | VYQ0019 | Felt Foot | 4 | |
| | | | | | |
| 200(5) | | VQF1805 | Fan Bag Kit | 1 | For U.S.A. Model |
| | | | | | <R> <!> |
| 200(5) | | VQF1806 | Fan Bag Kit | 1 | For Canadian Model<R> |
| | | | | | <R> <!> |
| 201(5) | | VEQ0473 | Remote Control Unit | 1 | |
| 202(5) | | VJA0322 | VHF Cable | 1 | |
| 203(5) | | VJA0102 | UHF Cable | 1 | |
| 204(5) | | VSQ0057 | Antenna Plug | 1 | |
| 205(5) | | VPN1588 | Cushion (L) | 1 | |
| 206(5) | | VPN1587 | Cushion (R) | 1 | |
| 207(5) | | VPN1399 | Top Pad | 1 | |
| 208(5) | | VPG2855 | Packing Case | 1 | For U.S.A. Model <R> |
| 208(5) | | VPG2856 | Packing Case | 1 | For Canadian Model<R> |
| | | | | | |
| 250(6) | | VKW0393 | Smoke Board | 1 | <R> |
| 251(6) | | VYK1354 | Botton Case | 1 | <R> |
| 252(6) | | VYF0464 | Battery Cover Unit | 1 | <R> |
| 253(6) | | VGU1956 | Power Botton | 1 | |
| 254(6) | | VGU1958 | CH Select Botton | 16 | |
| 255(6) | | VGU1212 | Rec Botton | 1 | |
| 256(6) | | VGU1955 | FF Botton | 1 | |
| 257(6) | | VGU1954 | REW Botton | 1 | |
| 258(6) | | VGU1951 | PLAY Botton | 1 | |
| 259(6) | | VGU1960 | SEARCH (-) Botton | 1 | |
| 260(6) | | VGU3324 | SEARCH Botton | 1 | |
| 261(6) | | VGU1962 | SEARCH (+) Botton | 1 | |
| 262(6) | | VGU1950 | STOP Botton | 1 | |
| 263(6) | | VGU1953 | F.ADV. Botton | 1 | |
| 264(6) | | VGU1952 | PAUSE Botton | 1 | |
| 265(6) | | VGU1959 | REC Sub Botton | 1 | |
| 266(6) | | VGU1957 | VIDEO/TV Botton | 1 | |
| 267(6) | | VGQ0601 | Power Switch Knob | 1 | <R> |
| 268(6) | | VJR0054 | Electrode (Common) | 1 | |
| 269(6) | | VYK1353 | Top Case | 1 | <R> |
| 270(6) | | VSP0150 | Rubber Contact | 1 | |
| 271(6) | | VJR0055 | Electrode (+) | 1 | |
| 272(6) | | VJR0056 | Electrode (-) | 1 | |
| 273(6) | | VGQ0601 | Bottom Holder | 1 | |

| Ref.No. | | Part No. | Part Name & Description | Pcs | Remarks |
|---|---|---|---|---|---|

# 3. ELECTRICAL REPLACEMENT PARTS LIST

| Ref.No. | | Part No. | Part Name & Description | Pcs | Remarks |
|---|---|---|---|---|---|
| | | VEP01254A | POWER TRANSFORMER C.B.A. | 1 | <!> <R> |
| | | VEP02248A | REEL SERVO C.B.A. | 1 | <R> |
| | | VEP02249A | CYLINDER DRIVE C.B.A. | 1 | <R> |
| | | VEP03373A | VIDEO C.B.A. | 1 | <R> |
| | | VEP08112A | CHROMINANCE C.B.A. | 1 | <R> |
| | | VEP04169A | AUDIO C.B.A. | 1 | <R> |
| | | VEP05098A | HEAD AMP C.B.A. | 1 | <R> |
| | | VEP06369A | MAIN C.B.A. | 1 | <R> |
| | | VEP06370A | DISPLAY C.B.A. | 1 | <R> |
| | | VEP06371A | OPERATION (1) C.B.A. | 1 | <R> |
| | | VEP06372A | OPERATION (2) C.B.A. | 1 | <R> |
| | | VEP07289D | VIF C.B.A. | 1 | |
| | | VEP07290A | TUNER C.B.A. | 1 | |
| | | ENC86709 | RF CONVERTER & ANTENNA | 1 | <!><R> |
| | | | BOOSTER UNIT | | |
| | | VEP07346A | TIMER C.B.A. | 1 | <R> |
| | | VEP07347A | TIMER DISPLAY C.B.A. | 1 | <R> |
| | | VJB00G30 | ERASE CONNECTION C.B. | 1 | |
| | | VJB00H06 | FULL ERASE HEAD C.B. | 1 | |
| | | VEK3077 | SEARCH DIAL UNIAT | 1 | <R> |
| | | | FUSE | | |
| F1101 | | XBA1C16NU100 | 1.6A/125V | 1 | <!> <R> |
| F1103 | | XBA1C25NU100 | 2.5A/125V | 1 | <!> <R> |
| F1104 | | XBA1C20NU100 | 2.0A/125V | 1 | <!> <R> |
| F1105 | | XBA1C16NU100 | 1.6A/125V | 1 | <!> <R> |
| | | VM20429 | FUSE COVER | 1 | <!> <R> For F1101 |
| | | LN59NV | SENSOR LED | 1 | <R> |
| | ■ | VEP01254A | POWER TRANSFORMER C.B.A. | | |

| Ref.No. | | Part No. | Part Name & Description | Pcs | Remarks |
|---|---|---|---|---|---|
| | | | CAPACITORS | | |
| C1101-1103 | | ECKF1H103ZF | CERAMIC 50V 0.01U | 3 | |
| C1104 | | ECEA1EU332 | ELECTROLYTIC 25V 3300U | 1 | |
| C1105 | | ECEA1CU332 | ELECTROLYTIC 16V 3300U | 1 | |
| C1106 | | ECEA1EU472 | ELECTROLYTIC 25V 4700U | 1 | |
| C1107,1108 | | ECEA1JU101 | ELECTROLYTIC 63V 100U | 2 | |
| | | | DIODES | | |
| D1105-1112 | | 10E1 | DIODE | 8 | <!> <R> |
| D1113,1114 | | 10E2 | DIODE | 2 | <!> <R> |
| | | | CONNECTORS | | |
| P1101 | | VJP1237T | 10P | 1 | |
| P1102 | | VJP1231T | 4P | 1 | |
| P1103,1104 | | VJP1142 | | 2 | |
| | | | RESISTORS | | |
| R1101 | | ERC122GK275 | SOLID 1/2W 2.7M | 1 | <!> <R> |
| R1102 | | ERD2FCJ4R7 | CARBON 2W 4.7 | 1 | <!> <R> |
| | | | MISCELLANEOUS | | |
| | | VJS0039 | FUSE HOLDER | 8 | <!><R> |
| | ■ | VEP02248A | REEL SERVO C.B.A. | | |
| | | | CAPACITORS | | |
| C2501 | | ECKF1H101KB | CERAMIC 50V 100P | 1 | |
| C2502 | | ECKF1H472ZF | CERAMIC 50V 4700P | 1 | |
| C2503 | | ECQV1H473JZ | MYLAR 50V 0.047 | 1 | |
| C2504 | | ECEA1EKN4R7 | ELECTROLYTIC 25V 4.7U | 1 | |
| C2505 | | ECEA1HKR47 | ELECTROLYTIC 50V 0.47U | 1 | |
| C2506 | | ECEA1HK010 | ELECTROLYTIC 50V 1U | 1 | |
| C2507 | | ECEA1HKR47 | ELECTROLYTIC 50V 0.47U | 1 | |
| C2508 | | ECEA1EKN4R7 | ELECTROLYTIC 25V 4.7U | 1 | |
| C2509 | | ECEA0JK220 | ELECTROLYTIC 6.3V 22U | 1 | |
| C2510 | | ECEA1HK2R2 | ELECTROLYTIC 50V 2.2U | 1 | |
| C2511 | | ECQB1H123KH | MYLAR 50V 0.012U | 1 | |
| C2512,2514 | | ECEA1EK4R7 | ELECTROLYTIC 25V 4.7U | 2 | |
| C2515,2516 | | ECEA1HK010 | ELECTROLYTIC 50V 1U | 2 | |
| C2517-2519 | | ECKF1H472ZF | CERAMIC 50V 4700P | 3 | |
| C2520 | | ECEA1EKN2R2 | ELECTROLYTIC 25V 2.2U | 1 | |
| C2521 | | ECQB1H123KH | MYLAR 50V 0.012 | 1 | |
| C2522,2523 | | ECEA1EK4R7 | ELECTROLYTIC 25V 4.7U | 3 | |
| C2525,2526 | | ECEA1HK010 | ELECTROLYTIC 50V 1U | 2 | |
| C2527-2529 | | ECKF1H472ZF | CERAMIC 50V 4700P | 3 | |
| C2530 | | ECEA1HK2R2 | ELECTROLYTIC 50V 2.2U | 1 | |
| C2531-2533 | | ECEA0JK470 | ELECTROLYTIC 6.3V 47U | 3 | |
| C2534 | | ECEA1HK010 | ELECTROLYTIC 50V 1U | 1 | |
| C2535,2536 | | ECEA0JK220 | ELECTROLYTIC 6.3V 22U | 2 | |
| C2537,2538 | | ECEA1EKN2R2 | ELECTROLYTIC 25V 2.2U | 2 | |
| | | | DIDES | | |
| D2501-2505 | | MA165 | DIODE | 5 | <R> |
| D2506,2507 | | MA4075HML | DIODE | 2 | <R> |
| D2508-2513 | | MA165 | DIODE | 6 | <R> |
| | | | FUSES | | |
| F2501 | | VSF0043 | | 1 | <!> <R> |
| F2502 | | VSF0043 | | 1 | <!> <R> |
| | | | INTEGRATED CIRCUITS | | |
| IC2501 | | AN3621K | IC | 1 | <R> |
| IC2502 | | AN3830KA | IC | 1 | <R> |

| Ref.No. | | Part No. | Part Name & Description | Pcs | Remarks |
|---|---|---|---|---|---|
| IC2503 | | AN3830K | IC | 1 | <R> |
| IC2504 | | AN6912 | IC | 1 | <R> |
| IC2505 | | UPD4066BC | IC | 1 | <R> |
| | | | | | |
| | | | | | |
| | | | CONNECTORS | | |
| P2501 | | VJP1239T | 12P | 1 | |
| P2502 | | VJP1393T | 13P | 1 | |
| P2503 | | VJP1231T | 4P | 1 | |
| P2504 | | VJP1230T | 3P | 1 | |
| P2505 | | VJP1229T | 2P | 1 | |
| PS2506 | | VJS1663 | 15P | 1 | |
| PS2507 | | VJS1663 | 15P | 1 | |
| | | | | | |
| | | | | | |
| | | | TRANSISTORS | | |
| Q2501 | | 2SB641 | TRANSISTOR | 1 | (Q,R,S) <R> |
| Q2502-2506 | | 2SD636 | TRANSISTOR | 4 | (Q,R,S) <R> |
| Q2507,2508 | | 2SB819 | TRANSISTOR | 2 | (Q,R,S) <R> |
| Q2509 | | 2SB641 | TRANSISTOR | 1 | (Q,R,S) <R> |
| Q2510 | | 2SB977 | TRANSISTOR | 1 | (P,Q,R) <R> |
| Q2511,2512 | | 2SD636 | TRANSISTOR | 2 | (Q,R,S) <R> |
| | | | | | |
| | | | | | |
| | | | COMBINATION PARTS | | |
| QR2501 | | DTC114TA | COMBINATION PARTS | 1 | <R> |
| QR2502 | | DTA114EA | COMBINATION PARTS | 1 | <R> |
| QR2503 | | DTC114TA | COMBINATION PARTS | 1 | <R> |
| QR2504 | | DTC144EA | COMBINATION PARTS | 5 | <R> |
| -2508 | | | | | |
| QR2509 | | DTC114TA | COMBINATION PARTS | 1 | <R> |
| QR2510 | | DTC114TA | COMBINATION PARTS | 1 | <R> |
| QR2513 | | DTC144EA | COMBINATION PARTS | 1 | <R> |
| | | | | | |
| | | | | | |
| | | | RESISTORS | | |
| R2501 | | ERDS2TJ563 | CARBON 1/4W 56K | 1 | |
| R2502 | | ERDS2TJ334 | CARBON 1/4W 330K | 1 | |
| R2503 | | ERDS2TJ682 | CARBON 1/4W 6.8K | 1 | |
| R2504 | | ERDS2TJ223 | CARBON 1/4W 22K | 1 | |
| R2505 | | ERDS2TJ123 | CARBON 1/4W 12K | 1 | |
| R2506 | | ERDS2TJ823 | CARBON 1/4W 82K | 1 | |
| R2507 | | ERDS2TJ223 | CARBON 1/4W 22K | 1 | |
| R2508 | | ERDS2TJ221 | CARBON 1/4W 220 | 1 | |
| R2509 | | ERDS2TJ101 | CARBON 1/4W 100 | 1 | |
| R2510 | | ERDS2TJ153 | CARBON 1/4W 15K | 1 | |
| R2511 | | ERDS2TJ224 | CARBON 1/4W 220K | 1 | |
| R2512 | | ERDS2TJ182 | CARBON 1/4W 1.8K | 1 | |
| R2513 | | ERDS2TJ1R0 | CARBON 1/4W 1.0 | 1 | |
| R2514 | | ERDS2TJ221 | CARBON 1/4W 220 | 1 | |
| R2515 | | ERDS2TJ563 | CARBON 1/4W 56K | 1 | |
| R2516 | | ERDS2TJ683 | CARBON 1/4W 68K | 1 | |
| R2517 | | ERDS2TJ273 | CARBON 1/4W 27K | 1 | |
| R2518 | | ERDS2TJ102 | CARBON 1/4W 1K | 1 | |
| R2519 | | ERDS2TJ563 | CARBON 1/4W 56K | 1 | |
| R2520,2521 | | ERDS2TJ120 | CARBON 1/4W 12 | 2 | |
| R2522 | | ERDS2TJ102 | CARBON 1/4W 1K | 1 | |
| R2523 | | ERDS2TJR56 | CARBON 1/4W 0.56 | 1 | |
| R2524 | | ERDS2TJ221 | CARBON 1/4W 220 | 1 | |
| R2525 | | ERDS2TJ101 | CARBON 1/4W 100 | 1 | |
| R2526 | | ERDS2TJ272 | CARBON 1/4W 2.7K | 1 | |
| R2527 | | ERDS2TJ392 | CARBON 1/4W 3.9K | 1 | |
| R2528,2529 | | ERDS2TJ221 | CARBON 1/4W 220 | 2 | |
| R2530 | | ERDS2TJ101 | CARBON 1/4W 100 | 1 | |
| R2531 | | ERDS2TJ224 | CARBON 1/4W 220K | 1 | |
| R2532 | | ERDS2TJ682 | CARBON 1/4W 6.8K | 1 | |
| R2533 | | ERDS2TJ392 | CARBON 1/4W 3.9K | 1 | |
| R2534 | | ERDS2TJ272 | CARBON 1/4W 2.7K | 1 | |
| R2535 | | ERDS2TJ183 | CARBON 1/4W 18K | 1 | |
| R2536 | | ERDS2TJ103 | CARBON 1/4W 10K | 1 | |
| R2537 | | ERDS2TJ153 | CARBON 1/4W 15K | 1 | |
| R2538 | | ERDS2TJ183 | CARBON 1/4W 18K | 1 | |
| R2539 | | ERDS2TJ223 | CARBON 1/4W 22K | 1 | |
| R2540 | | ERDS2TJ103 | CARBON 1/4W 10K | 1 | |
| R2542,2543 | | ERDS2TJ103 | CARBON 1/4W 10K | 2 | |
| | | | | | |
| | | | | | |

| Ref.No. | | Part No. | Part Name & Description | Pcs | Remarks |
|---|---|---|---|---|---|
| R2544,2545 | | ERDS2TJ564 | CARBON 1/4W 560K | 2 | |
| R2546 | | ERDS2TJ683 | CARBON 1/4W 68K | 1 | |
| R2547 | | ERDS2TJ272 | CARBON 1/4W 2.7K | 1 | |
| R2548 | | ERDS2TJ182 | CARBON 1/4W 1.8K | 1 | |
| R2549 | | ERDS2TJ101 | CARBON 1/4W 100 | 1 | |
| R2550 | | ERDS2TJ272 | CARBON 1/4W 2.7K | 1 | |
| R2551,2552 | | ERDS2TJ183 | CARBON 1/4W 18K | 2 | |
| R2553 | | ERDS2TJ103 | CARBON 1/4W 10K | 1 | |
| R2554 | | ERDS2TJ471 | CARBON 1/4W 470 | 1 | |
| R2555 | | ERDS2TJ103 | CARBON 1/4W 10K | 1 | |
| R2556 | | ERDS2TJ272 | CARBON 1/4W 2.7K | 1 | |
| R2557 | | ERDS2TJ473 | CARBON 1/4W 47K | 1 | |
| R2558 | | ERDS2TJ104 | CARBON 1/4W 100K | 1 | |
| R2559 | | ERDS2TJ392 | CARBON 1/4W 3.9K | 1 | |
| R2560 | | ERDS2TJ273 | CARBON 1/4W 27K | 1 | |
| R2561 | | ERDS2TJ104 | CARBON 1/4W 100K | 1 | |
| R2562 | | ERDS2TJ821 | CARBON 1/4W 820 | 1 | |
| R2565 | | ERDS2TJ332 | CARBON 1/4W 3.3K | 1 | |
| R2566,2567 | | ERDS2TJ821 | CARBON 1/4W 820 | 2 | |
| R2568,2569 | | ERDS2TJ104 | CARBON 1/4W 100K | 2 | |
| R2570 | | ERDS2TJ124 | CARBON 1/4W 120K | 1 | |
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| | | | | | |
| | | | MISCELLANEOUS | | |
| | | VSC1215 | HEAT SINK | 2 | |
| | | VMC0075 | HEAT SINK ANGLE | 2 | |
| | | VMC0105 | FUSE ANGLE | 2 | |
| | | VMX1008 | P.C.BOARD SPACER | 1 | |
| | | VKC0271 | HINGE | 2 | |
| | | VMX1007 | P.C.BOARD SUPPORT ANGLE | 1 | |
| | | | | | |
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| | ■ | VEP02249A | CYLINDER DRIVE C.B.A. | | |
| | | | | | |
| | | | CAPACITORS | | |
| C2201-2203 | | ECEA1CKN100 | ELECTROLYTIC 16V 10U | 3 | |
| C2204 | | ECKF1H472ZF | CERAMIC 50V 4700P | 1 | |
| C2205 | | ECQB1H682KH | MYLAR 50V 6800P | 1 | |
| C2206 | | ECQB1H123KH | MYLAR 50V 0.012 | 1 | |
| C2207 | | ECEA1EK3R3 | ELECTROLYTIC 25V 3.3U | 1 | |
| C2208 | | ECEA50ZR22 | ELECTROLYTIC 50V 0.22U | 1 | |
| C2209,2210 | | ECKF1H103ZF | CERAMIC 50V 0.01U | 2 | |
| C2211 | | ECEA1CK470 | ELECTROLYTIC 16V 47U | 1 | |
| | | | | | |
| | | | | | |
| | | | DIODE | | |
| D2201-2205 | | MA165 | DIODE | 5 | <R> |
| | | | | | |
| | | | | | |
| | | | INTEGRATED CIRCUIT | | |
| IC2201 | | AN6387 | IC | 1 | <R> |
| | | | | | |
| | | | | | |
| | | | CONNECTORS | | |
| P2201 | | VJP1239T | 12P | 1 | |
| P2202 | | VJS1474 | 12P | 1 | |
| | | | | | |
| | | | | | |
| | | | RESISTORS | | |
| R2201 | | ERDS2TJR56 | CARBON 1/4W 0.56 | 1 | |
| R2202-2204 | | ERDS2TJ4R7 | CARBON 1/4W 4.7 | 3 | |
| R2205,2206 | | ERDS2TJ124 | CARBON 1/4W 120K | 2 | |
| R2207 | | EROS2CKG680O | METAL OXIDE 1/4W 680 | 1 | |
| R2208 | | EROS2CKG2201 | METAL OXIDE 1/4W 2.2K | 1 | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | MISCELLANEOUS | | |
| | | VWJ12AW070MM | FLEXIBLE JUMPER | 1 | P2202-CYL |
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| Ref.No. | | Part No. | Part Name & Description | Pcs | Remarks |
|---|---|---|---|---|---|
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| | ■ | VEP03373A | VIDEO C.B.A. | | |
| | | | | | |
| | | | CAPACITORS | | |
| C3001 | | ECKF1H121KB | CERAMIC 50V 120P | 1 | |
| C3002 | | ECCF1H220JC | CERAMIC 50V 22P | 1 | |
| C3003-3005 | | ECKF1H103ZF | CERAMIC 50V 0.01U | 3 | |
| C3006-3009 | | ECEA0JK470 | ELECTROLYTIC 6.3V 47U | 4 | |
| C3010,3011 | | ECEA0JU102 | ELECTROLYTIC 6.3V 1000U | 2 | |
| C3012 | | ECEA1CK470 | ELECTROLYTIC 16V 47U | 1 | |
| C3013 | | ECEA1CK100 | ELECTROLYTIC 16V 10U | 1 | |
| C3014 | | ECEA1HK010 | ELECTROLYTIC 50V 1U | 1 | |
| C3015,3016 | | ECKF1H103ZF | CERAMIC 50V 0.01U | 2 | |
| C3017-3019 | | ECEA0JK220 | ELECTROLYTIC 6.3V 22U | 3 | |
| C3020 | | ECEA50ZR68 | ELECTROLYTIC 50V 0.68U | 1 | |
| C3021 | | ECEA0JK101 | ELECTROLYTIC 6.3V 100U | 1 | |
| C3022 | | ECKF1H221KB | CERAMIC 50V 220P | 1 | |
| C3023 | | ECEA0JK101 | ELECTROLYTIC 6.3V 100U | 1 | |
| C3024 | | ECCF1H470JC | CERAMIC 50V 47P | 1 | |
| C3025 | | ECKF1H151KB | CERAMIC 50V 150P | 1 | |
| C3026 | | ECEA1EK3R3 | ELECTROLYTIC 25V 3.3U | 1 | |
| C3027 | | ECKF1H103ZF | CERAMIC 50V 0.01U | 1 | |
| C3028 | | ECEA1EK3R3 | ELECTROLYTIC 25V 3.3U | 1 | |
| C3029 | | ECEA1EK4R7 | ELECTROLYTIC 25V 4.7U | 1 | |
| C3030 | | ECEA1EK3R3 | ELECTROLYTIC 25V 3.3U | 1 | |
| C3031 | | ECEA1HK2R2 | ELECTROLYTIC 50V 2.2U | 1 | |
| C3032 | | ECCF1H680JC | CERAMIC 50V 68P | 1 | |
| C3033 | | ECEA1HK010 | ELECTROLYTIC 50V 1U | 1 | |
| C3034 | | ECKF1H331KB | CERAMIC 50V 330P | 1 | |
| C3035 | | VCYD1C333MR1 | SEMICONDUCTOR 16V 0.033U | 1 | |
| C3036 | | ECEA0JK220 | ELECTROLYTIC 6.3V 22U | 1 | |
| C3037 | | ECKF1H103ZF | CERAMIC 50V 0.01U | 1 | |
| C3038 | | ECKF1H181KB | CERAMIC 50V 180P | 1 | |
| C3039 | | ECCF1H470JC | CERAMIC 50V 47P | 1 | |
| C3041 | | ECKF1H103ZF | CERAMIC 50V 0.01U | 1 | |
| C3042 | | ECEA1HK010 | ELECTROLYTIC 50V 1U | 1 | |
| C3043 | | ECEA1CK100 | ELECTROLYTIC 16V 10U | 1 | |
| C3044 | | ECKF1H151KB | CERAMIC 50V 150P | 1 | |
| C3045 | | ECEA0JK220 | ELECTROLYTIC 6.3V 22U | 1 | |
| C3046 | | ECCF1H390JC | CERAMIC 50V 39P | 1 | |
| C3047 | | ECCF1H470J | CERAMIC 50V 47P | 1 | |
| C3048 | | ECQV1H104JZ | MYLAR 50V 0.1U | 1 | |
| C3501 | | ECKF1H103ZF | CERAMIC 50V 0.01U | 1 | |
| C3502 | | ECCF1H100DC | CERAMIC 50V 10P | 1 | |
| C3503 | | VCKD1H391JA | CERAMIC 50V 390P | 1 | |
| C3504 | | ECCF1H820JC | CERAMIC 50V 82P | 1 | |
| C3505 | | ECQB1H682JH | MYLAR 50V 6800P | 1 | |
| C3506 | | ECEA0JK470 | ELECTROLYTIC 6.3V 47U | 1 | |
| C3507 | | ECEA1CK100 | ELECTROLYTIC 16V 10U | 1 | |
| C3508 | | ECQB1H183JH | MYLAR 50V 0.018 | 1 | |
| C3509 | | ECCF1H820JC | CERAMIC 50V 82P | 1 | |
| C3510 | | ECKF1H103ZF | CERAMIC 50V 0.01U | 1 | |
| C3511 | | VCKD1H431JA | CERAMIC 50V 430P | 1 | |
| C3516,3517 | | ECKF1H103ZF | CERAMIC 50V 0.01U | 2 | |
| C3519 | | ECCF1H820JC | CERAMIC 50V 82P | 1 | |
| C3529 | | ECEA1EKN4R7 | ELECTROLYTIC 25V 4.7U | 1 | |
| C3530 | | ECKF1H391KB | CERAMIC 50V 390P | 1 | |
| C3531 | | ECEA1HK2R2 | ELECTROLYTIC 50V 2.2U | 1 | |
| C3532 | | ECEA1EK4R7 | ELECTROLYTIC 25V 4.7U | 1 | |
| C3533 | | ECQB1H183JH | MYLAR 50V 0.018 | 1 | |
| C3534 | | ECQB1H222JH | MYLAR 50V 2200P | 1 | |
| C3535 | | ECQB1H152JH | MYLAR 50V 1500P | 1 | |
| C3536 | | ECEA1CK100 | ELECTROLYTIC 16V 10U | 1 | |
| C3537 | | ECQB1H183JH | MYLAR 50V 0.018 | 1 | |
| C3538 | | ECQV1H104JZ | MYLAR 50V 0.1U | 1 | |
| C3539 | | ECKF1H103ZF | CERAMIC 50V 0.01U | 1 | |
| C3540 | | ECEA0JU221 | ELECTROLYTIC 6.3V 220U | 1 | |
| C3541 | | ECQB1H562JH | MYLAR 50V 5600P | 1 | |
| C3542 | | ECQB1H333JH | MYLAR 50V 0.033 | 1 | |
| C3543 | | ECQB1H223JH | MYLAR 50V 0.022 | 1 | |
| C3544 | | ECCF1H820J | CERAMIC 50V 82P | 1 | |
| C3545 | | ECKF1H471KB | CERAMIC 50V 470P | 1 | |
| C3546 | | ECKF1H103ZF | CERAMIC 50V 0.01U | 1 | |
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| Ref.No. | | Part No. | Part Name & Description | Pcs | Remarks |
|---|---|---|---|---|---|
| C3547 | | ECCF1H180JC | CERAMIC 50V 18P | 1 | |
| C3548 | | ECKF1H102KB | CERAMIC 50V 1000P | 1 | |
| C3549 | | ECKF1H221KB | CERAMIC 50V 220P | 1 | |
| C3550 | | ECQB1H103JH | MYLAR 50V 0.01U | 1 | |
| C3551 | | ECKF1H103ZF | CERAMIC 50V 0.01U | 1 | |
| C3552 | | ECCF1H271JC | CERAMIC 50V 270P | 1 | |
| C3553 | | ECKF1H103ZF | CERAMIC 50V 0.01U | 1 | |
| C3555,3556 | | ECKF1H103ZF | CERAMIC 50V 0.01U | 2 | |
| C3557 | | ECEA0JK220 | ELECTROLYTIC 6.3V 22U | 1 | |
| C3558 | | ECCF1H220JC | CERAMIC 50V 22P | 1 | |
| C3565 | | ECCF1H270JC | CERAMIC 50V 27P | 1 | |
| C3912 | | ECKF1H103ZF | CERAMIC 50V 0.01U | 1 | |
| C3913,3914 | | ECEA1HK010 | ELECTROLYTIC 50V 1U | 2 | |
| C3915 | | ECKF1H103ZF | CERAMIC 50V 0.01U | 1 | |
| C3920-3926 | | ECKF1H103ZF | CERAMIC 50V 0.01U | 7 | |
| C3927 | | ECCF1H120JC | CERAMIC 50V 12P | 1 | |
| C3928 | | ECV1ZW10X64T | TRIMMER 10P | 1 | |
| C3954 | | ECQB1H103JH | MYLAR 50V 0.01U | 1 | |
| C3958,3959 | | ECQB1H103JH | MYLAR 50V 0.01U | 2 | |
| C4801 | | ECKF1H102KB | CERAMIC 50V 1000P | 1 | |
| C4802 | | ECEA1AK330 | ELECTROLYTIC 10V 33U | 1 | |
| C4803 | | ECKF1H151KB | CERAMIC 50V 150P | 1 | |
| C4804 | | ECEA1CK100 | ELECTROLYTIC 16V 10U | 1 | |
| C4805,4806 | | ECEA1EK3R3 | ELECTROLYTIC 25V 3.3U | 2 | |
| C4807 | | ECEA1CK330 | ELECTROLYTIC 16V 33U | 1 | |
| C4808 | | ECEA1EK3R3 | ELECTROLYTIC 25V 3.3U | 1 | |
| C4809 | | ECKF1H151KB | CERAMIC 50V 150P | 1 | |
| C4810 | | ECEA1CK100 | ELECTROLYTIC 16V 10U | 1 | |
| C4811 | | ECKF1H102KB | CERAMIC 50V 1000P | 1 | |
| C4812 | | ECEA1AK330 | ELECTROLYTIC 10V 33U | 1 | |
| C6301 | | ECQV1H104JZ | MYLAR 50V 0.1U | 1 | |
| C6302 | | ECQV1H224JZ | MYLAR 50V 0.22U | 1 | |
| C6303 | | ECQB1H223JH | MYLAR 50V 0.022 | 1 | |
| C6304,6305 | | ECKF1H102KB | CERAMIC 50V 1000P | 2 | |
| C6306 | | ECQB1H103JH | MYLAR 50V 0.01U | 1 | |
| C6307 | | ECKF1H103ZF | CERAMIC 50V 0.01U | 1 | |
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| | | | DIODES | | |
| | | | | | |
| D02 | | MA221 | DIODE | 1 | <R> |
| D3001 | | MA165 | DIODE | 1 | <R> |
| D3003-3008 | | MA165 | DIODE | 6 | <R> |
| D3011 | | MA165 | DIODE | 1 | <R> |
| D3013 | | 1SS99 | DIODE | 1 | <R> |
| D3014 | | MA165 | DIODE | 1 | <R> |
| D3016,3017 | | MA165 | DIODE | 2 | <R> |
| D3020-3022 | | MA165 | DIODE | 3 | <R> |
| D3501-3503 | | MA165 | DIODE | 3 | <R> |
| D3505,3506 | | MA165 | DIODE | 2 | <R> |
| D3904 | | MA165 | DIODE | 1 | <R> |
| D4801 | | MA154WA | DIODE | 1 | <R> |
| D4802,4803 | | MA165 | DIODE | 2 | <R> |
| D4804 | | MA154WA | DIODE | 1 | <R> |
| D4805 | | MA165 | DIODE | 1 | <R> |
| D6301-6303 | | MA165 | DIODE | 3 | <R> |
| | | | | | |
| | | | | | |
| | | | DELAY LINES | | |
| DL3001 | | VLD0077 | | 1 | |
| DL3501 | | VLD0084 | | 1 | |
| | | | | | |
| | | | | | |
| | | | FILTERS | | |
| FL3001 | | VLF0485 | | 1 | |
| FL3501 | | VLF0433 | | 1 | |
| | | | | | |
| | | | | | |
| | | | INTEGRATED CIRCUITS | | |
| IC3001 | | VEFY010N | IC | 1 | <R> |
| IC3002 | | LA7220S | IC | 1 | <R> |
| IC3003 | | UPD4066BC | IC | 1 | <R> |
| IC3501 | | UPD4066BC | IC | 1 | <R> |
| IC3502 | | AN6562 | IC | 1 | <R> |
| IC3503 | | UPD4066BC | IC | 1 | <R> |
| IC3505 | | BA7038 | IC | 1 | <R> |
| | | | | | |
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| Ref.No. | | Part No. | Part Name & Description | Pcs | Remarks |
|---|---|---|---|---|---|
| IC3507 | | UPD4066BC | IC | 1 | <R> |
| IC3904 | | MN8040 | IC | 1 | <R> |
| IC3906 | | BA7041 | IC | 1 | <R> |
| IC4801 | | BA3308 | IC | 1 | <R> |
| IC6301 | | BA236B | IC | 1 | <R> |
| IC6302 | | UPD4013BC | IC | 1 | <R> |
| IC6303 | | UPD4013BC | IC | 1 | <R> |
| | | | | | |
| | | | COILS | | |
| | | | | | |
| L3001 | | VLQEL05F150K | COIL 15UH | 1 | |
| L3002 | | VLQEL05F180K | COIL 18UH | 1 | |
| L3003,3004 | | VLQEL05F101K | COIL 100UH | 2 | |
| L3005,3006 | | VLQEL05F100K | COIL 10UH | 2 | |
| L3007 | | VLQEL05F101K | COIL 100UH | 1 | |
| L3008 | | VLQEL05F121K | COIL 120UH | 1 | |
| L3009 | | VLQEL05F820K | COIL 82UH | 1 | |
| L3010 | | VLQEL05F121K | COIL 120UH | 1 | |
| L3012,3013 | | VLQEL05F101K | COIL 100UH | 2 | |
| L3501 | | VLQEL05F330K | COIL 33UH | 1 | |
| L3502 | | VLQEL05F181K | COIL 180UH | 1 | |
| L3503 | | VLQEL05F150J | COIL 15UH | 1 | |
| L3504 | | VLQEL05F101K | COIL 100UH | 1 | |
| L3505 | | VLQEL05F150J | COIL 15UH | 1 | |
| L3506 | | VLQEL05F151K | COIL 150UH | 1 | |
| L3508,3509 | | VLQEL05F150J | COIL 15UH | 2 | |
| L3510 | | VLQEL05F101K | COIL 100UH | 1 | |
| L3511,3512 | | VLQ0171K150H | COIL 15UH | 2 | |
| L3513 | | VLQEL05F181K | COIL 180UH | 1 | |
| L3515 | | VLQEL05F101K | COIL 100UH | 1 | |
| L3516 | | VLQEL05F470J | COIL 47UH | 1 | |
| L3520 | | VLQEL05F330K | COIL 33UH | 1 | |
| L3907 | | VLQEL05F470K | COIL 47UH | 1 | |
| L3914 | | VLQEL05F101K | COIL 100UH | 1 | |
| | | | | | |
| | | | CONNECTORS | | |
| | | | | | |
| P3001 | | VJP1230R | 3P | 1 | |
| P3002 | | VJP1235T | 8P | 1 | |
| P3003 | | VJP1232T | 5P | 1 | |
| P3004 | | VJP1235R | 8P | 1 | |
| P3006 | | VJP1233T | 6P | 1 | |
| P3007 | | VJP1231T | 4P | 1 | |
| P3008 | | VJP1232T | 5P | 1 | |
| P3009 | | VJP1233R | 6P | 1 | |
| P3012 | | VJP1233R | 6P | 1 | |
| P3013 | | VJP1233T | 6P | 1 | |
| P3014 | | VJP1229T | 2P | 1 | |
| P3015 | | VJP1230T | 3P | 1 | |
| P3016 | | VJP1232T | 5P | 1 | |
| P3017 | | VJS1446 | 28P | 1 | |
| P3018 | | VJS1445 | 26P | 1 | |
| P3019 | | VJP1232T | 5P | 1 | |
| P3020 | | VJP1229T | 2P | 1 | |
| | | | | | |
| | | | TRANSISTORS | | |
| | | | | | |
| Q3001 | | 2SD636 | TRANSISTOR | 1 | (Q,R,S) <R> |
| Q3002-3004 | | 2SB641 | TRANSISTOR | 3 | (Q,R,S) <R> |
| Q3005 | | 2SC2206 | TRANSISTOR | 1 | (B) <R> |
| Q3006 | | 2SC2206 | TRANSISTOR | 1 | (B,C) <R> |
| Q3007 | | 2SD636 | TRANSISTOR | 1 | (Q,R,S) <R> |
| Q3008 | | 2SB641 | TRANSISTOR | 1 | (Q,R,S) <R> |
| Q3501 | | 2SD636 | TRANSISTOR | 1 | (Q,R,S) <R> |
| Q3502 | | 2SC2188 | TRANSISTOR | 1 | <R> |
| Q3503 | | 2SB641 | TRANSISTOR | 1 | (Q,R,S) <R> |
| Q3504-3507 | | 2SD636 | TRANSISTOR | 4 | (Q,R,S) <R> |
| Q3508 | | 2SC2188 | TRANSISTOR | 1 | <R> |
| Q3509-3512 | | 2SD636 | TRANSISTOR | 4 | (Q,R,S) <R> |
| Q3907 | | 2SB641 | TRANSISTOR | 1 | (Q,R,S) <R> |
| Q3913 | | 2SD636 | TRANSISTOR | 1 | (Q,R,S) <R> |
| Q6301 | | 2SD636 | TRANSISTOR | 1 | (Q,R,S) <R> |
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| | | | COMBINATION PARTS | | |
| | | | | | |

| Ref.No. | | Part No. | Part Name & Description | Pcs | Remarks |
|---|---|---|---|---|---|
| QR3001 | | DTC114TA | COMBINATION PARTS | 1 | <R> |
| QR3002 | | DTC124EA | COMBINATION PARTS | 1 | <R> |
| QR3003 | | DTC144EA | COMBINATION PARTS | 6 | <R> |
| -3008 | | | | | |
| QR3010 | | DTC144EA | COMBINATION PARTS | 1 | <R> |
| QR3012 | | DTC144EA | COMBINATION PARTS | 1 | <R> |
| QR3013 | | DTA144EA | COMBINATION PARTS | 1 | <R> |
| QR3015 | | DTC144EA | COMBINATION PARTS | 1 | <R> |
| QR3016 | | DTC124EA | COMBINATION PARTS | 1 | <R> |
| QR3501 | | DTC144EA | COMBINATION PARTS | 1 | <R> |
| QR3503 | | DTC144EA | COMBINATION PARTS | 3 | <R> |
| -3505 | | | | | |
| QR3507 | | DTC144EA | COMBINATION PARTS | 1 | <R> |
| QR4801 | | DTC144EA | COMBINATION PARTS | 4 | <R> |
| -4804 | | | | | |
| QR6301 | | DTC144EA | COMBINATION PARTS | 7 | <R> |
| -6307 | | | | | |
| | | | | | |
| | | | RESISTORS | | |
| | | | | | |
| R3001-3004 | | ERDS2TJ102 | CARBON 1/4W 1K | 4 | |
| R3005,3006 | | ERDS2TJ750 | CARBON 1/4W 75 | 2 | |
| R3007 | | ERDS2TJ102 | CARBON 1/4W 1K | 1 | |
| R3008 | | ERDS2TJ122 | CARBON 1/4W 1.2K | 1 | |
| R3009 | | ERDS2TJ183 | CARBON 1/4W 18K | 1 | |
| R3010 | | ERDS2TJ822 | CARBON 1/4W 8.2K | 1 | |
| R3011 | | ERDS2TJ102 | CARBON 1/4W 1K | 1 | |
| R3012 | | ERDS2TJ821 | CARBON 1/4W 820 | 1 | |
| R3013 | | ERDS2TJ121 | CARBON 1/4W 120 | 1 | |
| R3014,3015 | | ERDS2TJ471 | CARBON 1/4W 470 | 2 | |
| R3016 | | ERDS2TJ820 | CARBON 1/4W 82 | 1 | |
| R3017 | | ERDS2TJ750 | CARBON 1/4W 75 | 1 | |
| R3018 | | ERDS2TJ223 | CARBON 1/4W 22K | 1 | |
| R3019,3020 | | ERDS2TJ682 | CARBON 1/4W 6.8K | 2 | |
| R3021 | | ERDS2TJ473 | CARBON 1/4W 47K | 1 | |
| R3022,3023 | | ERDS2TJ563 | CARBON 1/4W 56K | 2 | |
| R3024 | | ERDS2TJ124 | CARBON 1/4W 120K | 1 | |
| R3025 | | ERDS2TJ563 | CARBON 1/4W 56K | 1 | |
| R3026 | | ERDS2TJ682 | CARBON 1/4W 6.8K | 1 | |
| R3027 | | EROS2CKG3302 | METAL OXIDE 1/4W 33K | 1 | |
| R3028 | | EROS2CKG3902 | METAL OXIDE 1/4W 39K | 1 | |
| R3029,3030 | | ERDS2TJ152 | CARBON 1/4W 1.5K | 2 | |
| R3031 | | ERDS2TJ472 | CARBON 1/4W 4.7K | 1 | |
| R3032 | | ERDS2TJ103 | CARBON 1/4W 10K | 1 | |
| R3033 | | ERDS2TJ222 | CARBON 1/4W 2.2K | 1 | |
| R3034 | | ERDS2TJ333 | CARBON 1/4W 33K | 1 | |
| R3035 | | ERDS2TJ123 | CARBON 1/4W 12K | 1 | |
| R3036 | | EROS2CKG3001 | METAL OXIDE 1/4W 3K | 1 | |
| R3037 | | ERDS2TJ122 | CARBON 1/4W 1.2K | 1 | |
| R3038 | | ERDS2TJ682 | CARBON 1/4W 6.8K | 1 | |
| R3039 | | ERDS2TJ683 | CARBON 1/4W 68K | 1 | |
| R3041 | | ERDS2TJ103 | CARBON 1/4W 10K | 1 | |
| R3042 | | ERDS2TJ393 | CARBON 1/4W 39K | 1 | |
| R3043 | | ERDS2TJ824 | CARBON 1/4W 820K | 1 | |
| R3045 | | ERDS2TJ182 | CARBON 1/4W 1.8K | 1 | |
| R3046 | | ERDS2TJ222 | CARBON 1/4W 2.2K | 1 | |
| R3048 | | ERDS2TJ122 | CARBON 1/4W 1.2K | 1 | |
| R3049 | | ERDS2TJ682 | CARBON 1/4W 6.8K | 1 | |
| R3050 | | ERDS2TJ102 | CARBON 1/4W 1K | 1 | |
| R3052 | | ERDS2TJ331 | CARBON 1/4W 330 | 1 | |
| R3055 | | ERDS2TJ152 | CARBON 1/4W 1.5K | 1 | |
| R3056 | | ERDS2TJ682 | CARBON 1/4W 6.8K | 1 | |
| R3057 | | ERDS2TJ472 | CARBON 1/4W 4.7K | 1 | |
| R3058,3059 | | ERDS2TJ102 | CARBON 1/4W 1K | 2 | |
| R3062 | | ERDS2TJ681 | CARBON 1/4W 680 | 1 | |
| R3063 | | ERDS2TJ182 | CARBON 1/4W 1.8K | 1 | |
| R3064 | | ERDS2TJ471 | CARBON 1/4W 470 | 1 | |
| R3065 | | ERDS2TJ183 | CARBON 1/4W 18K | 1 | |
| R3066 | | ERDS2TJ273 | CARBON 1/4W 27K | 1 | |
| R3067 | | ERDS2TJ274 | CARBON 1/4W 270K | 1 | |
| R3068 | | ERDS2TJ103 | CARBON 1/4W 10K | 1 | |
| R3069 | | ERDS2TJ104 | CARBON 1/4W 100K | 1 | |
| R3070,3071 | | ERDS2TJ682 | CARBON 1/4W 6.8K | 2 | |
| R3501 | | ERDS2TJ152 | CARBON 1/4W 1.5K | 1 | |
| R3502 | | ERDS2TJ102 | CARBON 1/4W 1K | 1 | |
| | | | | | |
| | | | | | |

| Ref.No. | | Part No. | Part Name & Description | Pcs | Remarks |
|---|---|---|---|---|---|
| R3503 | | ERDS2TJ221 | CARBON 1/4W 220 | 1 | |
| R3504 | | ERDS2TJ102 | CARBON 1/4W 1K | 1 | |
| R3505 | | ERDS2TJ472 | CARBON 1/4W 4.7K | 1 | |
| R3506 | | ERDS2TJ393 | CARBON 1/4W 39K | 1 | |
| R3507 | | ERDS2TJ103 | CARBON 1/4W 10K | 1 | |
| R3508 | | ERDS2TJ222 | CARBON 1/4W 2.2K | 1 | |
| R3509 | | ERDS2TJ153 | CARBON 1/4W 15K | 1 | |
| R3510 | | ERDS2TJ103 | CARBON 1/4W 10K | 1 | |
| R3511 | | ERDS2TJ822 | CARBON 1/4W 8.2K | 1 | |
| R3512 | | ERDS2TJ684 | CARBON 1/4W 680K | 1 | |
| R3513 | | ERDS2TJ683 | CARBON 1/4W 68K | 1 | |
| R3514,3515 | | ERDS2TJ103 | CARBON 1/4W 10K | 2 | |
| R3516,3517 | | ERDS2TJ563 | CARBON 1/4W 56K | 2 | |
| R3518 | | ERDS2TJ102 | CARBON 1/4W 1K | 1 | |
| R3519 | | ERDS2TJ122 | CARBON 1/4W 1.2K | 1 | |
| R3520 | | ERDS2TJ471 | CARBON 1/4W 470 | 1 | |
| R3521 | | ERDS2TJ183 | CARBON 1/4W 18K | 1 | |
| R3522 | | ERDS2TJ103 | CARBON 1/4W 10K | 1 | |
| R3523,3524 | | ERDS2TJ102 | CARBON 1/4W 1K | 2 | |
| R3526 | | ERDS2TJ561 | CARBON 1/4W 560 | 1 | |
| R3527,3528 | | ERDS2TJ102 | CARBON 1/4W 1K | 2 | |
| R3529 | | ERDS2TJ221 | CARBON 1/4W 220 | 1 | |
| R3530 | | ERDS2TJ102 | CARBON 1/4W 1K | 1 | |
| R3531 | | ERDS2TJ682 | CARBON 1/4W 6.8K | 1 | |
| R3532 | | ERDS2TJ103 | CARBON 1/4W 10K | 1 | |
| R3540 | | ERDS2TJ182 | CARBON 1/4W 1.8K | 1 | |
| R3541 | | ERDS2TJ562 | CARBON 1/4W 5.6K | 1 | |
| R3542 | | ERDS2TJ823 | CARBON 1/4W 82K | 1 | |
| R3543 | | ERDS2TJ221 | CARBON 1/4W 220 | 1 | |
| R3544 | | ERDS2TJ222 | CARBON 1/4W 2.2K | 1 | |
| R3545 | | ERDS2TJ103 | CARBON 1/4W 10K | 1 | |
| R3546 | | ERDS2TJ684 | CARBON 1/4W 680K | 1 | |
| R3548 | | ERDS2TJ104 | CARBON 1/4W 100K | 1 | |
| R3549 | | ERDS2TJ563 | CARBON 1/4W 56K | 1 | |
| R3550 | | ERDS2TJ102 | CARBON 1/4W 1K | 1 | |
| R3551 | | ERDS2TJ560 | CARBON 1/4W 56 | 1 | |
| R3552 | | ERDS2TJ471 | CARBON 1/4W 470 | 1 | |
| R3553 | | ERDS2TJ102 | CARBON 1/4W 1K | 1 | |
| R3554 | | ERDS2TJ183 | CARBON 1/4W 18K | 1 | |
| R3555 | | ERDS2TJ822 | CARBON 1/4W 8.2K | 1 | |
| R3556 | | ERDS2TJ102 | CARBON 1/4W 1K | 1 | |
| R3557,3558 | | ERDS2TJ471 | CARBON 1/4W 470 | 2 | |
| R3559,3560 | | ERDS2TJ183 | CARBON 1/4W 18K | 2 | |
| R3561,3562 | | ERDS2TJ561 | CARBON 1/4W 560 | 2 | |
| R3563 | | ERDS2TJ392 | CARBON 1/4W 3.9K | 1 | |
| R3564 | | ERDS2TJ562 | CARBON 1/4W 5.6K | 1 | |
| R3565 | | ERDS2TJ122 | CARBON 1/4W 1.2K | 1 | |
| R3566 | | ERDS2TJ102 | CARBON 1/4W 1K | 1 | |
| R3567 | | ERDS2TJ221 | CARBON 1/4W 220 | 1 | |
| R3570 | | ERDS2TJ393 | CARBON 1/4W 39K | 1 | |
| R3571 | | ERDS2TJ104 | CARBON 1/4W 100K | 1 | |
| R3572 | | ERDS2TJ181 | CARBON 1/4W 180 | 1 | |
| R3573 | | ERDS2TJ393 | CARBON 1/4W 39K | 1 | |
| R3925 | | ERDS2TJ331 | CARBON 1/4W 330 | 1 | |
| R3931,3932 | | ERDS2TJ273 | CARBON 1/4W 27K | 2 | |
| R3935 | | ERDS2TJ102 | CARBON 1/4W 1K | 1 | |
| R3936 | | ERDS2TJ223 | CARBON 1/4W 22K | 1 | |
| R3937 | | ERDS2TJ273 | CARBON 1/4W 27K | 1 | |
| R3938,3939 | | ERDS2TJ103 | CARBON 1/4W 10K | 2 | |
| R4801,4802 | | ERDS2TJ472 | CARBON 1/4W 4.7K | 2 | |
| R4803 | | ERDS2TJ473 | CARBON 1/4W 47K | 1 | |
| R4804 | | ERDS2TJ121 | CARBON 1/4W 120 | 1 | |
| R4805 | | ERDS2TJ392 | CARBON 1/4W 3.9K | 1 | |
| R4806 | | ERDS2TJ473 | CARBON 1/4W 47K | 1 | |
| R4807 | | ERDS2TJ564 | CARBON 1/4W 560K | 1 | |
| R4808,4809 | | ERDS2TJ473 | CARBON 1/4W 47K | 2 | |
| R4810 | | ERDS2TJ392 | CARBON 1/4W 3.9K | 1 | |
| R4811 | | ERDS2TJ121 | CARBON 1/4W 120 | 1 | |
| R4812 | | ERDS2TJ221 | CARBON 1/4W 220 | 1 | |
| R4813-4815 | | ERDS2TJ103 | CARBON 1/4W 10K | 3 | |
| R4816-4818 | | ERDS2TJ104 | CARBON 1/4W 100K | 3 | |
| R4819 | | ERDS2TJ102 | CARBON 1/4W 1K | 1 | |
| R4820 | | ERDS2TJ750 | CARBON 1/4W 75 | 1 | |
| R6301 | | ERDS1TJ470 | CARBON 1/2W 47 | 1 | |
| R6302 | | ERDS2TJ104 | CARBON 1/4W 100K | 1 | |

| Ref.No. | | Part No. | Part Name & Description | Pcs | Remarks |
|---|---|---|---|---|---|
| R6303 | | ERDS2TJ473 | CARBON 1/4W 47K | 1 | |
| R6304 | | ERDS2TJ473 | CARBON 1/4W 47K | 1 | |
| R6305 | | ERDS2TJ103 | CARBON 1/4W 10K | 1 | |
| R6306,6307 | | ERDS2TJ104 | CARBON 1/4W 100K | 2 | |
| R6308 | | ERDS2TJ103 | CARBON 1/4W 10K | 1 | |
| R6309-6311 | | ERDS2TJ104 | CARBON 1/4W 100K | 3 | |
| | | | SWITCHES | | |
| SW4801 | | VSS0147 | | 1 | <R> |
| | | | VARIABLE RESISTORS | | |
| VR3001 | | EVN61AA00B52 | VARIABLE 500 | 1 | |
| VR3501 | | EVN38CA00B53 | VARIABLE 5K | 1 | |
| VR3503 | | EVN61AA00B22 | VARIABLE 200 | 1 | |
| VR3504 | | EVN61AA00B52 | VARIABLE 500 | 1 | |
| VR3505 | | EVN61AA00B52 | VARIABLE 500 | 1 | |
| VR3901 | | EVN38CA00B24 | VARIABLE 20K | 1 | |
| VR6301 | | EVN38CA00B15 | VARIABLE 100K | 1 | |
| VR6302 | | EVN38CA00B15 | VARIABLE 100K | 1 | |
| | | | MISCELLANEOUS | | |
| | | VJB03375 | GX4 C.B. | 1 | |
| | | VSC1641 | SHIELD CASE (UPPER) | 1 | For GX 4 C.B. |
| | | VEK2740 | SHIELD CASE (MIDDLE) | 1 | For GX 4 C.B. |
| | | VSC1634 | SHIELD CASE (UPPER) | 1 | For MIC Amp. Circuit. |
| | | VSC1635 | SHIELD CASE (MIDDLE) | 1 | For MIC Amp. Circuit. |
| | | VSC1636 | SHIELD CASE (LOWER) | 1 | For MIC Amp. Circuit. |
| | | VMP0432 | P.C.BOARD ANGLE | 1 | |
| | | VYQ0030 | REAR JACK FRAME | 1 | |
| | | VEJ0515 | REAR JACK UNIT | 1 | |
| | | VJF0004 | WIRE SADDLE | 2 | |
| | | VJB04149 | MIC JACK C.B. | 1 | |
| | | VEJ0521 | MIC JACK UNIT | 1 | |
| | | VSC1675 | SHIELD CASE | 1 | For MIC Jack C.B. |
| | ■ | VEP08112A | CHROMINANCE C.B.A. | | |
| | | | CAPACITORS | | |
| C3601 | | ECKF1H103ZF | CERAMIC 50V 0.01U | 1 | |
| C3602 | | ECCF1H120JC | CERAMIC 50V 12P | 1 | |
| C3603 | | ECKF1H103ZF | CERAMIC 50V 0.01U | 1 | |
| C3604 | | ECEA0JK101 | ELECTROLYTIC 6.3V 100U | 1 | |
| C3605 | | ECKF1H103ZF | CERAMIC 50V 0.01U | 1 | |
| C3606 | | VCYD1C104MR1 | SEMICONDUCTOR 16V 0.1U | 1 | |
| C3607-3610 | | ECKF1H103ZF | CERAMIC 50V 0.01U | 4 | |
| C3611 | | ECCF1H271JC | CERAMIC 50V 270P | 1 | |
| C3612,3613 | | ECKF1H103ZF | CERAMIC 50V 0.01U | 2 | |
| C3614 | | ECCF1H271JC | CERAMIC 50V 270P | 1 | |
| C3615 | | VCYD1C104MR1 | SEMICONDUCTOR 16V 0.1U | 1 | |
| C3616 | | ECEA0JK101 | ELECTROLYTIC 6.3V 100U | 1 | |
| C3617 | | ECEA0JK470 | ELECTROLYTIC 6.3V 47U | 1 | |
| C3618 | | ECKF1H181KB | CERAMIC 50V 180P | 1 | |
| C3619 | | ECKF1H471KB | CERAMIC 50V 470P | 1 | |
| C3620,3621 | | ECEA0JK470 | ELECTROLYTIC 6.3V 47U | 2 | |
| C3622 | | ECCF1H180JC | CERAMIC 50V 18P | 1 | |
| C3623 | | ECCF1H680JC | CERAMIC 50V 68P | 1 | |
| C3624 | | ECCF1H470JC | CERAMIC 50V 47P | 1 | |
| C3801 | | ECKF1H103ZF | CERAMIC 50V 0.01U | 1 | |
| C3802 | | ECEA1EK330 | ELECTROLYTIC 25V 33U | 1 | |
| C3803 | | ECKF1H103ZF | CERAMIC 50V 0.01U | 1 | |
| C3804 | | ECEA1CK330 | ELECTROLYTIC 16V 33U | 1 | |
| C3805 | | ECKF1H103ZF | CERAMIC 50V 0.01U | 1 | |
| C3806 | | ECKF1H102KB | CERAMIC 50V 1000P | 1 | |
| C3807 | | ECCF1H470JC | CERAMIC 50V 47P | 1 | |
| C3809,3810 | | ECCF1H101JC | CERAMIC 50V 100P | 2 | |
| C3811 | | ECKF1H103ZF | CERAMIC 50V 0.01U | 1 | |
| C3812 | | ECCF1H101JC | CERAMIC 50V 100P | 1 | |

| Ref.No. | | Part No. | Part Name & Description | Pcs | Remarks |
|---|---|---|---|---|---|
| C8001 | | ECKF1H471KB | CERAMIC 50V 470P | 1 | |
| C8002 | | ECKF1H222KB | CERAMIC 50V 2200P | 1 | |
| C8003 | | ECEA1EK3R3 | ELECTROLYTIC 25V 3.3U | 1 | |
| C8004 | | ECEA1HK010 | ELECTROLYTIC 50V 1U | 1 | |
| C8006 | | ECEA0JK470 | ELECTROLYTIC 6.3V 47U | 1 | |
| C8007 | | ECKF1H103ZF | CERAMIC 50V 0.01U | 1 | |
| C8008 | | ECKF1H271KB | CERAMIC 50V 270P | 1 | |
| C8009 | | ECEA0JK470 | ELECTROLYTIC 6.3V 47U | 1 | |
| C8010 | | ECKF1H102KB | CERAMIC 50V 1000P | 1 | |
| C8011 | | ECCF1H080DC | CERAMIC 50V 8P | 1 | |
| C8012 | | ECKF1H103ZF | CERAMIC 50V 0.01U | 1 | |
| C8013 | | ECEA10Z47 | ELECTROLYTIC 10V 47U | 1 | |
| C8014 | | ECEA1HK010 | ELECTROLYTIC 50V 1U | 1 | |
| C8015-8017 | | ECKF1H103ZF | CERAMIC 50V 0.01U | 3 | |
| C8018 | | ECEA1CK470 | ELECTROLYTIC 16V 47U | 1 | |
| C8033 | | ECEA1CK100 | ELECTROLYTIC 16V 10U | 1 | |
| C8034 | | ECEA10Z33 | ELECTROLYTIC 10V 33U | 1 | |
| C8035 | | ECQB1H153KH | MYLAR 50V 0.015 | 1 | |
| | | | | | |
| | | | COMBINATION PARTS | | |
| | | | | | |
| CR8001 | | EXED271K122C | C & R 270P 1.2K | 1 | |
| CR8002 | | EXED103Z821C | C & R 0.01U 820 | 1 | |
| | | | | | |
| | | | | | |
| | | | DIODES | | |
| D3601,3602 | | 1SS99 | DIODE | 2 | <R> |
| D8003,8004 | | MA165 | DIODE | 2 | <R> |
| | | | | | |
| | | | | | |
| | | | DELAY LINES | | |
| DL3601 | | VLD0090 | | 1 | |
| DL8001 | | VLD0072 | | 1 | |
| | | | | | |
| | | | FILTERS | | |
| | | | | | |
| FL8001 | | VLF0344 | | 1 | |
| FL8002 | | VLF0295 | | 1 | |
| | | | | | |
| | | | INTEGRATED CIRCUITS | | |
| | | | | | |
| IC3601 | | UPD4066BC | IC | 1 | <R> |
| IC8001 | | VEFC012 | IC | 1 | <R> |
| IC8002 | | AN6342N | IC | 1 | <R> |
| | | | | | |
| | | | COILS | | |
| | | | | | |
| L3601 | | VLQEL05F101K | COIL 100UH | 1 | |
| L3602 | | VLQEL05F6R8K | COIL 6.8UH | 1 | |
| L3603,3604 | | VLQEL05F150K | COIL 15UH | 2 | |
| L3801,3802 | | VLQEL05F221K | COIL 220UH | 2 | |
| L3803 | | VLQEL05F8R2K | COIL 8.2UH | 1 | |
| L8002 | | VLQEL05F331K | COIL 330UH | 1 | |
| L8003 | | VLQEL05F221K | COIL 220UH | 1 | |
| L8004,8005 | | VLQEL05F101K | COIL 100UH | 2 | |
| | | | | | |
| | | | CONNECTORS | | |
| | | | | | |
| P8001 | | VJS1445 | 26P | 1 | |
| P8002 | | VJP1242R | 2P | 1 | |
| P8003 | | VJP1230T | 3P | 1 | |
| | | | | | |
| | | | TRANSISTORS | | |
| | | | | | |
| Q3601,3602 | | 2SC2206 | TRANSISTOR | 2 | (B,C) <R> |
| Q3603 | | 2SC2206 | TRANSISTOR | 1 | (B) <R> |
| Q3604,3605 | | 2SC2206 | TRANSISTOR | 2 | (B,C) <R> |
| Q3606 | | 2SD636 | TRANSISTOR | 1 | (Q,R,S) <R> |
| Q3607 | | 2SC2206 | TRANSISTOR | 1 | (B,C) <R> |
| Q3608 | | 2SB641 | TRANSISTOR | 1 | (Q,R,S) <R> |
| Q3609,3612 | | 2SC2206 | TRANSISTOR | 4 | (B,C) <R> |
| Q3613 | | 2SD636 | TRANSISTOR | 1 | (Q,R,S) <R> |
| Q3614 | | 2SC2206 | TRANSISTOR | 1 | (B,C) <R> |
| Q3615 | | 2SC2206 | TRANSISTOR | 1 | (B) <R> |
| Q3616 | | 2SD636 | TRANSISTOR | 1 | (Q,R,S) <R> |
| | | | | | |
| | | | | | |

| Ref.No. | | Part No. | Part Name & Description | Pcs | Remarks |
|---|---|---|---|---|---|
| Q3617 | | 2SB641 | TRANSISTOR | 1 | (Q,R,S) <R> |
| Q3618 | | 2SD636 | TRANSISTOR | 1 | (Q,R,S) <R> |
| Q3801 | | 2SB641 | TRANSISTOR | 1 | (Q,R,S) <R> |
| Q3802 | | 2SC2188 | TRANSISTOR | 1 | <R> |
| Q3803 | | 2SD636 | TRANSISTOR | 1 | (Q,R,S) <R> |
| Q3805 | | 2SD636 | TRANSISTOR | 1 | (Q,R,S) <R> |
| Q3806 | | 2SB643 | TRANSISTOR | 1 | (Q,R,S) <R> |
| Q3807 | | 2SD638 | TRANSISTOR | 1 | (Q,R,S) <R> |
| Q3808 | | 2SD1330 | TRANSISTOR | 1 | (S,T) <R> |
| Q8001 | | 2SD636 | TRANSISTOR | 1 | (Q,R,S) <R> |
| Q8002 | | 2SC2206 | TRANSISTOR | 1 | (B,C) <R> |
| Q8003 | | 2SB641 | TRANSISTOR | 1 | (Q,R,S) <R> |
| Q8013 | | 2SD636 | TRANSISTOR | 1 | (Q,R,S) <R> |
| | | | | | |
| | | | COMBINATION PARTS | | |
| | | | | | |
| QR3601 | | DTA124EA | COMBINATION PARTS | 1 | <R> |
| QR3602 | | DTC124EA | COMBINATION PARTS | 1 | <R> |
| QR3603 | | DTC144EA | COMBINATION PARTS | 1 | <R> |
| QR3801 | | DTC144EA | COMBINATION PARTS | 1 | <R> |
| QR8001 | | DTC144EA | COMBINATION PARTS | 1 | <R> |
| QR8002 | | DTC144EA | COMBINATION PARTS | 1 | <R> |
| | | | | | |
| | | | RESISTORS | | |
| | | | | | |
| R3601 | | ERDS2TJ123 | CARBON 1/4W 12K | 1 | |
| R3602 | | ERDS2TJ103 | CARBON 1/4W 10K | 1 | |
| R3603 | | ERDS2TJ471 | CARBON 1/4W 470 | 1 | |
| R3604 | | ERDS2TJ332 | CARBON 1/4W 3.3K | 1 | |
| R3605 | | ERDS2TJ271 | CARBON 1/4W 270 | 1 | |
| R3606 | | ERDS2TJ221 | CARBON 1/4W 220 | 1 | |
| R3607 | | ERDS2TJ271 | CARBON 1/4W 270 | 1 | |
| R3608 | | ERDS2TJ102 | CARBON 1/4W 1K | 1 | |
| R3609,3610 | | ERDS2TJ471 | CARBON 1/4W 470 | 2 | |
| R3611 | | ERDS2TJ102 | CARBON 1/4W 1K | 1 | |
| R3612 | | ERDS2TJ561 | CARBON 1/4W 560 | 1 | |
| R3613 | | ERDS2TJ122 | CARBON 1/4W 1.2K | 1 | |
| R3614 | | ERDS2TJ471 | CARBON 1/4W 470 | 1 | |
| R3615 | | ERDS2TJ220 | CARBON 1/4W 22 | 1 | |
| R3616 | | ERDS2TJ821 | CARBON 1/4W 820 | 1 | |
| R3617 | | ERDS2TJ151 | CARBON 1/4W 150 | 1 | |
| R3618 | | ERDS2TJ391 | CARBON 1/4W 390 | 1 | |
| R3619 | | ERDS2TJ102 | CARBON 1/4W 1K | 1 | |
| R3620 | | ERDS2TJ681 | CARBON 1/4W 680 | 1 | |
| R3621 | | ERDS2TJ471 | CARBON 1/4W 470 | 1 | |
| R3622 | | ERDS2TJ122 | CARBON 1/4W 1.2K | 1 | |
| R3623 | | ERDS2TJ561 | CARBON 1/4W 560 | 1 | |
| R3624 | | ERDS2TJ122 | CARBON 1/4W 1.2K | 1 | |
| R3625-3627 | | ERDS2TJ561 | CARBON 1/4W 560 | 3 | |
| R3628 | | ERDS2TJ822 | CARBON 1/4W 8.2K | 1 | |
| R3629 | | ERDS2TJ123 | CARBON 1/4W 12K | 1 | |
| R3630 | | ERDS2TJ102 | CARBON 1/4W 1K | 1 | |
| R3631,3632 | | ERDS2TJ471 | CARBON 1/4W 470 | 2 | |
| R3633 | | ERDS2TJ122 | CARBON 1/4W 1.2K | 1 | |
| R3634 | | ERDS2TJ331 | CARBON 1/4W 330 | 1 | |
| R3635 | | ERDS2TJ102 | CARBON 1/4W 1K | 1 | |
| R3636 | | ERDS2TJ222 | CARBON 1/4W 2.2K | 1 | |
| R3637 | | ERDS2TJ471 | CARBON 1/4W 470 | 1 | |
| R3638 | | ERDS2TJ122 | CARBON 1/4W 1.2K | 1 | |
| R3639 | | ERDS2TJ822 | CARBON 1/4W 8.2K | 1 | |
| R3640 | | ERDS2TJ392 | CARBON 1/4W 3.9K | 1 | |
| R3641 | | ERDS2TJ561 | CARBON 1/4W 560 | 1 | |
| R3642 | | ERDS2TJ391 | CARBON 1/4W 390 | 1 | |
| R3643 | | ERDS2TJ122 | CARBON 1/4W 1.2K | 1 | |
| R3644 | | ERDS2TJ102 | CARBON 1/4W 1K | 1 | |
| R3645 | | ERDS2TJ393 | CARBON 1/4W 39K | 1 | |
| R3646 | | ERDS2TJ122 | CARBON 1/4W 1.2K | 1 | |
| R3647 | | ERDS2TJ822 | CARBON 1/4W 8.2K | 1 | |
| R3648 | | ERDS2TJ103 | CARBON 1/4W 10K | 1 | |
| R3649 | | ERDS2TJ153 | CARBON 1/4W 15K | 1 | |
| R3650 | | ERDS2TJ102 | CARBON 1/4W 1K | 1 | |
| R3652 | | ERDS2TJ102 | CARBON 1/4W 1K | 1 | |
| R3653 | | ERDS2TJ331 | CARBON 1/4W 330 | 1 | |
| R3801 | | ERDS2TJ682 | CARBON 1/4W 6.8K | 1 | |
| R3802 | | ERDS2TJ332 | CARBON 1/4W 3.3K | 1 | |
| | | | | | |
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| Ref.No. | | Part No. | Part Name & Description | Pcs | Remarks |
|---|---|---|---|---|---|
| R3803 | | ERDS2TJ153 | CARBON 1/4W 15K | 1 | |
| R3804 | | ERDS2TJ822 | CARBON 1/4W 8.2K | 1 | |
| R3805 | | ERDS2TJ682 | CARBON 1/4W 6.8K | 1 | |
| R3806 | | ERDS2TJ272 | CARBON 1/4W 2.7K | 1 | |
| R3807 | | ERDS2TJ103 | CARBON 1/4W 10K | 1 | |
| R3808 | | ERDS2TJ100 | CARBON 1/4W 10 | 1 | |
| R3809 | | ERDS2TJ104 | CARBON 1/4W 100K | 1 | |
| R3810,3811 | | ERDS2TJ473 | CARBON 1/4W 47K | 2 | |
| R3812 | | ERDS2TJ561 | CARBON 1/4W 560 | 1 | |
| R3816 | | ERDS2TJ561 | CARBON 1/4W 560 | 1 | |
| R3817 | | ERDS2TJ471 | CARBON 1/4W 470 | 1 | |
| R3818 | | ERDS2TJ102 | CARBON 1/4W 1K | 1 | |
| R3819,3820 | | ERDS2TJ472 | CARBON 1/4W 4.7K | 2 | |
| R3821 | | ERDS2TJ102 | CARBON 1/4W 1K | 1 | |
| R3822,3823 | | ERDS2TJ220 | CARBON 1/4W 22 | 2 | |
| R8001 | | ERDS2TJ562 | CARBON 1/4W 5.6K | 1 | |
| R8002 | | ERDS2TJ102 | CARBON 1/4W 1K | 1 | |
| R8003 | | ERDS2TJ471 | CARBON 1/4W 470 | 1 | |
| R8004 | | ERDS2TJ122 | CARBON 1/4W 1.2K | 1 | |
| R8005 | | ERDS2TJ271 | CARBON 1/4W 270 | 1 | |
| R8007 | | ERDS2TJ273 | CARBON 1/4W 27K | 1 | |
| R8008 | | ERDS2TJ821 | CARBON 1/4W 820 | 1 | |
| R8009 | | ERDS2TJ222 | CARBON 1/4W 2.2K | 1 | |
| R8010 | | ERDS2TJ332 | CARBON 1/4W 3.3K | 1 | |
| R8011 | | ERDS2TJ470 | CARBON 1/4W 47 | 1 | |
| R8012 | | ERDS2TJ273 | CARBON 1/4W 27K | 1 | |
| R8013 | | ERDS2TJ103 | CARBON 1/4W 10K | 1 | |
| R8014 | | ERDS2TJ102 | CARBON 1/4W 1K | 1 | |
| R8015 | | ERDS2TJ181 | CARBON 1/4W 180 | 1 | |
| R8016 | | ERDS2TJ123 | CARBON 1/4W 12K | 1 | |
| R8041 | | ERDS2TJ102 | CARBON 1/4W 1K | 1 | |
| R8042 | | ERDS2TJ182 | CARBON 1/4W 1.8K | 1 | |
| R8046 | | ERDS2TJ562 | CARBON 1/4W 5.6K | 1 | |
| | | | | | |
| | | | VARIABLE RESISTORS | | |
| | | | | | |
| VR3601 | | EVN38CA00B52 | VARIABLE 500 | 1 | |
| VR3602 | | EVN38CA00B52 | VARIABLE 500 | 1 | |
| VR3603 | | EVN38CA00B52 | VARIABLE 500 | 1 | |
| VR3604 | | EVN38CA00B12 | VARIABLE 100 | 1 | |
| | | | | | |
| | | | CRYSTAL OSCILLATOR | | |
| | | | | | |
| X8001 | | VSX0160 | | 1 | |
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| | | | | | |
| | | | MISCELLANEOUS | | |
| | | VSC1641 | SHIELD CASE (UPPER) | 1 | |
| | | VSC1639 | SHIELD CASE (MIDDLE) | 1 | |
| | | VSC1643 | SHIELD CASE (LOWER) | 1 | |
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| | ■ | VEP04169 | AUDIO C.B.A. | | |
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| | | | CAPACITORS | | |
| C4001 | | ECQP1222JZ | MYLAR 100V 2200P | 1 | |
| C4002 | | ECKF1H103ZF | CERAMIC 50V 0.01U | 1 | |
| C4003 | | ECQB1H472KH | MYLAR 50V 4700P | 1 | |
| C4004 | | ECEA1CK330 | ELECTROLYTIC 16V 33U | 1 | |
| C4005 | | ECEA1EK3R3 | ELECTROLYTIC 25V 3.3U | 1 | |
| C4006 | | ECEA1CK100 | ELECTROLYTIC 16V 10U | 1 | |
| C4007 | | ECEA1HK010 | ELECTROLYTIC 50V 1U | 1 | |
| C4008 | | ECQB1H333JH | MYLAR 50V 0.033 | 1 | |
| C4009 | | ECEA1HK0R1 | ELECTROLYTIC 50V 0.1U | 1 | |
| C4010 | | ECEA1HK010 | ELECTROLYTIC 50V 1U | 1 | |
| C4011 | | ECEA1CK470 | ELECTROLYTIC 16V 47U | 1 | |
| C4012 | | VCYD1C473MR1 | SEMICONDUCTOR 16V 0.047U | 1 | |
| C4013 | | ECEA1CK100 | ELECTROLYTIC 16V 10U | 1 | |
| C4014 | | ECEA1AK470 | ELECTROLYTIC 10V 47U | 1 | |
| C4016 | | ECEA1HKL010 | ELECTROLYTIC 50V 1U | 1 | |
| C4017 | | ECKF1H102KB | CERAMIC 50V 1000P | 1 | |
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| Ref.No. | | Part No. | Part Name & Description | Pcs | Remarks |
|---|---|---|---|---|---|
| C4018 | | ECQB1H333JH | MYLAR 50V 0.033 | 1 | |
| C4019 | | ECEA1CKL100 | ELECTROLYTIC 16V 10U | 1 | |
| C4020 | | ECEA1CK330 | ELECTROLYTIC 16V 33U | 1 | |
| C4021 | | ECEA1HKR33 | ELECTROLYTIC 50V 0.33U | 1 | |
| C4022 | | ECQV1H394JZ | MYLAR 50V 0.39U | 1 | |
| C4023 | | ECEA1AK470 | ELECTROLYTIC 10V 47U | 1 | |
| C4024 | | ECEA1HK010 | ELECTROLYTIC 50V 1U | 1 | |
| C4026 | | ECQB1H273JH | MYLAR 50V 0.027 | 1 | |
| C4027,4028 | | ECEA1EK3R3 | ELECTROLYTIC 25V 3.3U | 2 | |
| C4029 | | ECQB1H222KH | MYLAR 50V 2200P | 1 | |
| C4030 | | ECEA1CK100 | ELECTROLYTIC 16V 10U | 1 | |
| C4031 | | ECEA1AK330 | ELECTROLYTIC 10V 33U | 1 | |
| C4032 | | ECEA1HK010 | ELECTROLYTIC 50V 1U | 1 | |
| C4033 | | ECKF1H103ZF | CERAMIC 50V 0.01U | 1 | |
| C4034 | | ECCF1H101J | CERAMIC 50V 100P | 1 | |
| C4035 | | ECQV1H104JZ | MYLAR 50V 0.1U | 1 | |
| C4036 | | ECSF1CE274 | | 1 | |
| C4037 | | ECKF1H102KB | CERAMIC 50V 1000P | 1 | |
| C4501,4502 | | ECQB1H103KH | MYLAR 50V 0.01U | 2 | |
| C4503 | | ECEA1AK470 | ELECTROLYTIC 10V 47U | 1 | |
| C4504 | | ECEA1CK100 | ELECTROLYTIC 16V 10U | 1 | |
| C4505,4508 | | ECEA1EK3R3 | ELECTROLYTIC 25V 3.3U | 4 | |
| C4509 | | ECEA1AK470 | ELECTROLYTIC 10V 47U | 1 | |
| C4510 | | ECEA0JK101 | ELECTROLYTIC 6.3V 100U | 1 | |
| C4511 | | ECEA1HK010 | ELECTROLYTIC 50V 1U | 1 | |
| C4512 | | ECEA1CK100 | ELECTROLYTIC 16V 10U | 1 | |
| C4513 | | ECEA1AK220 | ELECTROLYTIC 10V 22U | 1 | |
| C4514 | | ECEA1AK470 | ELECTROLYTIC 10V 47U | 1 | |
| C4515-4518 | | ECEA1EK3R3 | ELECTROLYTIC 25V 3.3U | 4 | |
| C4519 | | ECEA1AK470 | ELECTROLYTIC 10V 47U | 1 | |
| C4520 | | ECEA1HK010 | ELECTROLYTIC 50V 1U | 1 | |
| C4521 | | ECEA0JK101 | ELECTROLYTIC 6.3V 100U | 1 | |
| C4522,4523 | | ECEA1CK100 | ELECTROLYTIC 16V 10U | 2 | |
| C4524 | | ECEA1CK470 | ELECTROLYTIC 16V 47U | 1 | |
| C4525 | | ECEA0JK101 | ELECTROLYTIC 6.3V 100U | 1 | |
| C4526 | | ECEA1CK330 | ELECTROLYTIC 16V 33U | 1 | |
| C4527 | | ECEA1CK100 | ELECTROLYTIC 16V 10U | 1 | |
| C4528 | | ECEA1EK4R7 | ELECTROLYTIC 25V 4.7U | 1 | |
| C4529-4531 | | ECEA1EK3R3 | ELECTROLYTIC 25V 3.3U | 3 | |
| C4532,4533 | | ECEA1CK330 | ELECTROLYTIC 16V 33U | 2 | |
| C4534 | | ECEA1CK100 | ELECTROLYTIC 16V 10U | 1 | |
| C4535 | | ECEA1EK4R7 | ELECTROLYTIC 25V 4.7U | 1 | |
| C4536 | | ECQV1H104JZ | MYLAR 50V 0.1U | 1 | |
| C4537 | | ECKF1H331KB | CERAMIC 50V 330P | 1 | |
| C4538 | | ECEA1CK100 | ELECTROLYTIC 16V 10U | 1 | |
| C4539,4540 | | ECEA1AK470 | ELECTROLYTIC 10V 47U | 2 | |
| C4541 | | ECEA1CK100 | ELECTROLYTIC 16V 10U | 1 | |
| C4542 | | ECKF1H331KB | CERAMIC 50V 330P | 1 | |
| C4543 | | ECEA1HK010 | ELECTROLYTIC 50V 1U | 1 | |
| C4544,4545 | | ECEA1AK330 | ELECTROLYTIC 10V 33U | 2 | |
| C4546,4547 | | ECEA1HK010 | ELECTROLYTIC 50V 1U | 2 | |
| C4548 | | ECEA1CK330 | ELECTROLYTIC 16V 33U | 1 | |
| C4549 | | ECKF1H103ZF | CERAMIC 50V 0.01U | 1 | |
| C4550 | | ECEA1AK470 | ELECTROLYTIC 10V 47U | 1 | |
| C4551 | | ECQB1H102KH | MYLAR 50V 1000P | 1 | |
| C4552 | | ECQB1H222KH | MYLAR 50V 2200P | 1 | |
| C4553 | | ECQB1H102KH | MYLAR 50V 1000P | 1 | |
| C4554,4555 | | ECQB1H103KH | MYLAR 50V 0.01U | 2 | |
| C4556 | | ECEA1EKN4R7 | ELECTROLYTIC 25V 4.7U | 1 | |
| C4557 | | ECEA0JKN470 | ELECTROLYTIC 6.3V 47U | 1 | |
| C4558 | | ECEA1AK470 | ELECTROLYTIC 10V 47U | 1 | |
| C4559 | | ECEA1HK2R2 | ELECTROLYTIC 50V 2.2U | 1 | |
| C4560,4561 | | ECEA1AK470 | ELECTROLYTIC 10V 47U | 2 | |
| C4562 | | ECEA1CK100 | ELECTROLYTIC 16V 10U | 1 | |
| C4563 | | ECQB1H222KH | MYLAR 50V 2200P | 1 | |
| C4564 | | ECQB1H102KH | MYLAR 50V 1000P | 1 | |
| C4565 | | ECQB1H222JH | MYLAR 50V 2200P | 1 | |
| C4566 | | ECEA1AK470 | ELECTROLYTIC 10V 47U | 1 | |
| C4567 | | ECEA25Z4R7 | ELECTROLYTIC 25V 4.7U | 1 | |
| C4568 | | ECQB1H223JH | MYLAR 50V 0.022 | 1 | |
| C4569 | | ECEA16Z10 | ELECTROLYTIC 16V 10U | 1 | |
| C4570 | | ECKF1H103ZF | CERAMIC 50V 0.01U | 1 | |
| C4571 | | ECEA1CK330 | ELECTROLYTIC 16V 33U | 1 | |
| C4572 | | ECEA1AK470 | ELECTROLYTIC 10V 47U | 1 | |
| C4573 | | ECQB1H102KH | MYLAR 50V 1000P | 1 | |
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| Ref.No. | | Part No. | Part Name & Description | Pcs | Remarks |
|---|---|---|---|---|---|
| C4574 | | ECQB1H222KH | MYLAR 50V 2200P | 1 | |
| C4575 | | ECQB1H102KH | MYLAR 50V 1000P | 1 | |
| C4576,4577 | | ECQB1H103KH | MYLAR 50V 0.01U | 2 | |
| C4578 | | ECEA1EKN4R7 | ELECTROLYTIC 25V 4.7U | 1 | |
| C4579 | | ECEA0JKN470 | ELECTROLYTIC 6.3V 47U | 1 | |
| C4580 | | ECEA1HK2R2 | ELECTROLYTIC 50V 2.2U | 1 | |
| C4581,4582 | | ECEA1AK470 | ELECTROLYTIC 10V 47U | 2 | |
| C4583 | | ECQB1H102KH | MYLAR 50V 1000P | 1 | |
| C4584 | | ECQB1H222KH | MYLAR 50V 2200P | 1 | |
| C4585 | | ECEA1CK100 | ELECTROLYTIC 16V 10U | 1 | |
| C4586 | | ECQB1H222JH | MYLAR 50V 2200P | 1 | |
| C4587 | | ECEA1AK470 | ELECTROLYTIC 10V 47U | 1 | |
| C4588 | | ECEA2524R7 | ELECTROLYTIC 25V 4.7U | 1 | |
| C4589 | | ECQB1H223JH | MYLAR 50V 0.022 | 1 | |
| C4590 | | ECEA16Z10 | ELECTROLYTIC 16V 10U | 1 | |
| C4591 | | ECCF1H101JC | CERAMIC 50V 100P | 1 | |
| C4592 | | ECEA1AK220 | ELECTROLYTIC 10V 22U | 1 | |
| C4593 | | ECCF1H820JC | CERAMIC 50V 82P | 1 | |
| C4594 | | ECKF1H103ZF | CERAMIC 50V 0.01U | 1 | |
| C4595,4596 | | ECCF1H680JC | CERAMIC 50V 68P | 2 | |
| C4597,4598 | | ECCF1H470JC | CERAMIC 50V 47P | 2 | |
| C4599 | | ECKF1H561KB | CERAMIC 50V 560P | 1 | |
| C4600 | | ECEA1CK100 | ELECTROLYTIC 16V 10U | 1 | |
| C4601 | | ECEA0JK220 | ELECTROLYTIC 6.3V 22U | 1 | |
| C4602 | | ECQB1H222KH | MYLAR 50V 2200P | 1 | |
| C4603 | | ECEA1EK3R3 | ELECTROLYTIC 25V 3.3U | 1 | |
| C4604 | | ECKF1H561KB | CERAMIC 50V 560P | 1 | |
| C4605 | | ECQB1H272KH | MYLAR 50V 2700P | 1 | |
| C4606,4607 | | ECEA0JK470 | ELECTROLYTIC 6.3V 47U | 2 | |
| C4608 | | ECKF1H103ZF | CERAMIC 50V 0.01U | 1 | |
| C4609 | | ECCF1H101JC | CERAMIC 50V 100P | 1 | |
| C4610 | | ECKF1H103ZF | CERAMIC 50V 0.01U | 1 | |
| C4611 | | ECEA1AK220 | ELECTROLYTIC 10V 22U | 1 | |
| C4612 | | ECCF1H820JC | CERAMIC 50V 82P | 1 | |
| C4613 | | ECKF1H103ZF | CERAMIC 50V 0.01U | 1 | |
| C4614 | | ECKF1H561KB | CERAMIC 50V 560P | 1 | |
| C4615 | | ECEA1CK100 | ELECTROLYTIC 16V 10U | 1 | |
| C4616 | | ECEA0JK220 | ELECTROLYTIC 6.3V 22U | 1 | |
| C4617 | | ECQB1H222KH | MYLAR 50V 2200P | 1 | |
| C4618 | | ECEA1EK3R3 | ELECTROLYTIC 25V 3.3U | 1 | |
| C4619 | | ECKF1H561KB | CERAMIC 50V 560P | 1 | |
| C4620 | | ECEA1HK010 | ELECTROLYTIC 50V 1U | 1 | |
| C4621 | | ECQB1H272KH | MYLAR 50V 2700P | 1 | |
| C4622,4623 | | ECEA0JK470 | ELECTROLYTIC 6.3V 47U | 2 | |
| C4624 | | ECKF1H103ZF | CERAMIC 50V 0.01U | 1 | |
| C4625 | | ECEA1HK010 | ELECTROLYTIC 50V 1U | 1 | |
| C4626 | | ECEA1CK330 | ELECTROLYTIC 16V 33U | 1 | |
| C4627 | | ECKF1H103ZF | CERAMIC 50V 0.01U | 1 | |
| C4628 | | ECEA1CK330 | ELECTROLYTIC 16V 33U | 1 | |
| C4629 | | ECKF1H103ZF | CERAMIC 50V 0.01U | 1 | |
| C4630 | | ECCF1H100DC | CERAMIC 50V 10P | 1 | |
| C4631-4633 | | ECKF1H103ZF | CERAMIC 50V 0.01U | 3 | |
| C4634 | | VCYD1C104MR1 | SEMICONDUCTOR 16V 0.1U | 1 | |
| C4635 | | ECCF1H560JC | CERAMIC 50V 56P | 1 | |
| C4636 | | ECCF1H560JC | CERAMIC 50V 56P | 1 | |
| C4637 | | ECEA1HK010 | ELECTROLYTIC 50V 1U | 1 | |
| C4638,4639 | | ECKF1H103ZF | CERAMIC 50V 0.01U | 2 | |
| C4640 | | ECEA1HK010 | ELECTROLYTIC 50V 1U | 1 | |
| C4641 | | ECEA0JK330 | ELECTROLYTIC 6.3V 33U | 1 | |
| C4642,4643 | | ECKF1H103ZF | CERAMIC 50V 0.01U | 2 | |
| C4644 | | ECQV1H154JZ | MYLAR 50V 0.15U | 1 | |
| C4645 | | ECCF1H221JC | CERAMIC 50V 220P | 1 | |
| C4646 | | ECKF1H331KB | CERAMIC 50V 330P | 1 | |
| C4647 | | ECQB1H682KH | MYLAR 50V 6800P | 1 | |
| C4648,4649 | | ECKF1H103ZF | CERAMIC 50V 0.01U | 2 | |
| C4650 | | ECEA0JK470 | ELECTROLYTIC 6.3V 47U | 1 | |
| C4651 | | ECEA1HK0R1 | ELECTROLYTIC 50V 0.1U | 1 | |
| C4652 | | ECKF1H103ZF | CERAMIC 50V 0.01U | 1 | |
| C4653 | | ECEA1HK2R2 | ELECTROLYTIC 50V 2.2U | 1 | |
| C4654-4656 | | ECKF1H103ZF | CERAMIC 50V 0.01U | 3 | |
| C4657 | | ECEA1EK3R3 | ELECTROLYTIC 25V 3.3U | 1 | |
| C4658 | | ECEA1HKN010 | ELECTROLYTIC 50V 1U | 1 | |
| C4659 | | ECQB1H103KH | MYLAR 50V 0.01U | 1 | |
| C4660 | | ECEA1CK220 | ELECTROLYTIC 16V 22U | 1 | |
| C4661 | | ECEA1CK100 | ELECTROLYTIC 16V 10U | 1 | |
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| Ref.No. | | Part No. | Part Name & Description | Pcs | Remarks |
|---|---|---|---|---|---|
| C4662 | | ECEA1CK100 | ELECTROLYTIC 16V 10U | 1 | |
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| | | | COMBINATION PARTS | | |
| | | | | | |
| CR4001 | | EXED153M223C | C & R 0.015U 22K | 1 | |
| CR4002 | | EXED561K153C | C & R 560P 15K | 1 | |
| CR4003 | | EXED821K473C | C & R 820P 47K | 1 | |
| | | | | | |
| | | | DIODES | | |
| | | | | | |
| D4001 | | MA165 | DIODE | 1 | <R> |
| D4501-4504 | | MA165 | DIODE | 4 | <R> |
| D4506-4518 | | MA165 | DIODE | 13 | <R> |
| | | | | | |
| | | | FILTERS | | |
| | | | | | |
| FL4001 | | VLF0332 | | 1 | |
| FL4501 | | VLF0406 | | 1 | |
| FL4502 | | VLF0406 | | 1 | |
| FL4503 | | VLF0408 | | 1 | |
| | | | | | |
| | | | INTEGRATED CIRCUITS | | |
| | | | | | |
| IC4001 | | UPC1519HA | IC | 1 | <R> |
| IC4002 | | UPC1514CA | IC | 1 | <R> |
| IC4003 | | M5201L | IC | 1 | <R> |
| IC4004 | | AN6262N | IC | 1 | <R> |
| IC4501 | | AN3924K | IC | 1 | <R> |
| IC4502 | | BA7056LS | IC | 1 | <R> |
| IC4503 | | AN6298NK | IC | 1 | <R> |
| IC4504 | | AN6298NK | IC | 1 | <R> |
| IC4505 | | AN3922NK | IC | 1 | <R> |
| IC4506 | | AN3922NK | IC | 1 | <R> |
| IC4507 | | UPC1531HA | IC | 1 | <R> |
| IC4508 | | AN3920K | IC | 1 | <R> |
| | | | | | |
| | | | COILS | | |
| | | | | | |
| L4001 | | VLQEL05F471K | COIL 470UH | 1 | |
| L4002 | | VLQEL07F682J | COIL 6800UH | 1 | |
| L4003 | | VLQEL07F222J | COIL 2200UH | 1 | |
| L4501 | | VLQEL05F101K | COIL 100UH | 1 | |
| L4502 | | VLQEL05F101K | COIL 100UH | 1 | |
| L4503 | | VLQEL05F121K | COIL 120UH | 1 | |
| L4504 | | VLQEL05F101K | COIL 100UH | 1 | |
| L4505 | | VLQEL05F221K | COIL 220UH | 1 | |
| L4506 | | VLQEL05F101K | COIL 100UH | 1 | |
| L4507 | | VLQEL05F101K | COIL 100UH | 1 | |
| L4508,4509 | | VLP0017 | | 2 | |
| | | | | | |
| | | | CONNECTORS | | |
| | | | | | |
| P4001 | | VJP1231T | 4P | 1 | |
| P4501 | | VJP1231R | 4P | 1 | |
| P4502 | | VJP1232R | 5P | 1 | |
| P4503 | | VJP1230T | 3P | 1 | |
| P4504 | | VJP1233T | 6P | 1 | |
| P4505 | | VJP1234T | 7P | 1 | |
| P4506 | | VJP1235T | 8P | 1 | |
| P4507 | | VJP1233R | 6P | 1 | |
| P4508 | | VJP1231T | 4P | 1 | |
| P4509 | | VJP1232T | 5P | 1 | |
| P4510 | | VJP1230R | 3P | 1 | |
| P4511 | | VJS1455 | 18P | 1 | |
| | | | | | |
| | | | TRANSISTORS | | |
| | | | | | |
| Q4001-4005 | | 2SD636 | TRANSISTOR | 5 | (Q,R,S) <R> |
| Q4501,4502 | | 2SD1330 | TRANSISTOR | 2 | (S,T) <R> |
| Q4503,4504 | | 2SD636 | TRANSISTOR | 2 | (Q,R,S) <R> |
| Q4505 | | 2SB641 | TRANSISTOR | 1 | (Q,R,S) <R> |
| Q4506-4509 | | 2SD1330 | TRANSISTOR | 4 | (S,T) <R> |
| Q4510 | | 2SD638 | TRANSISTOR | 1 | (Q,R,S) <R> |
| Q4511 | | 2SC2188 | TRANSISTOR | 1 | <R> |
| Q4512,4513 | | 2SD636 | TRANSISTOR | 2 | (Q,R,S) <R> |
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| Ref.No. | | Part No. | Part Name & Description | Pcs | Remarks |
|---|---|---|---|---|---|
| Q4514 | | 2SB643 | TRANSISTOR | 1 | (Q,R,S) <R> |
| Q4515 | | 2SD638 | TRANSISTOR | 1 | (Q,R,S) <R> |
| Q4516 | | 2SD636 | TRANSISTOR | 1 | (Q,R,S) <R> |
| Q4517,4518 | | 2SD638 | TRANSISTOR | 2 | (Q,R,S) <R> |
| Q4520,4521 | | 2SD636 | TRANSISTOR | 2 | (Q,R,S) <R> |
| | | | | | |
| | | | COMBINATION PARTS | | |
| | | | | | |
| QR4001 | | DTC144EA | COMBINATION PARTS | 3 | <R> |
| -4003 | | | | | |
| QR4004 | | DTC143TA | COMBINATION PARTS | 1 | <R> |
| QR4501 | | DTC144EA | COMBINATION PARTS | 1 | <R> |
| QR4502 | | DTC144EA | COMBINATION PARTS | 1 | <R> |
| QR4503 | | DTA124EA | COMBINATION PARTS | 1 | <R> |
| QR4504 | | DTA124EA | COMBINATION PARTS | 1 | <R> |
| QR4505 | | DTC124EA | COMBINATION PARTS | 1 | <R> |
| QR4506 | | DTC144EA | COMBINATION PARTS | 4 | <R> |
| -4509 | | | | | |
| | | | | | |
| | | | RESISTORS | | |
| | | | | | |
| R4001 | | ERDS2TJ100 | CARBON 1/4W 10 | 1 | |
| R4003 | | ERDS2TJ823 | CARBON 1/4W 82K | 1 | |
| R4004 | | ERDS2TJ472 | CARBON 1/4W 4.7K | 1 | |
| R4005 | | EROS2CKG1302 | METAL OXIDE 1/4W 13K | 1 | |
| R4006 | | ERDS2TJ121 | CARBON 1/4W 120 | 1 | |
| R4007 | | ERDS2TJ681 | CARBON 1/4W 680 | 1 | |
| R4008 | | ERDS2TJ105 | CARBON 1/4W 1000K | 1 | |
| R4009 | | ERDS2TJ333 | CARBON 1/4W 33K | 1 | |
| R4010 | | ERDS2TJ273 | CARBON 1/4W 27K | 1 | |
| R4011 | | ERDS2TJ822 | CARBON 1/4W 8.2K | 1 | |
| R4012 | | ERDS2TJ681 | CARBON 1/4W 680 | 1 | |
| R4014 | | ERDS2TJ334 | CARBON 1/4W 330K | 1 | |
| R4015 | | ERDS2TJ151 | CARBON 1/4W 150 | 1 | |
| R4016 | | ERDS2TJ272 | CARBON 1/4W 2.7K | 1 | |
| R4017 | | ERDS2TJ271 | CARBON 1/4W 270 | 1 | |
| R4018 | | ERDS2TJ121 | CARBON 1/4W 120 | 1 | |
| R4019 | | ERDS2TJ472 | CARBON 1/4W 4.7K | 1 | |
| R4020 | | ERDS2TJ271 | CARBON 1/4W 270 | 1 | |
| R4021 | | ERDS2TJ472 | CARBON 1/4W 4.7K | 1 | |
| R4022 | | ERDS2TJ392 | CARBON 1/4W 3.9K | 1 | |
| R4023 | | ERDS2TJ563 | CARBON 1/4W 56K | 1 | |
| R4024 | | ERDS2TJ471 | CARBON 1/4W 470 | 1 | |
| R4025 | | ERDS2TJ103 | CARBON 1/4W 10K | 1 | |
| R4026 | | ERDS2TJ472 | CARBON 1/4W 4.7K | 1 | |
| R4027,4028 | | ERDS2TJ473 | CARBON 1/4W 47K | 2 | |
| R4029,4030 | | ERDS2TJ104 | CARBON 1/4W 100K | 2 | |
| R4031,4032 | | ERDS2TJ473 | CARBON 1/4W 47K | 2 | |
| R4033 | | ERDS2TJ102 | CARBON 1/4W 1K | 1 | |
| R4034 | | ERDS2TJ104 | CARBON 1/4W 100K | 1 | |
| R4035 | | ERDS2TJ272 | CARBON 1/4W 2.7K | 1 | |
| R4036 | | ERDS2TJ223 | CARBON 1/4W 22K | 1 | |
| R4037 | | ERDS2TJ682 | CARBON 1/4W 6.8K | 1 | |
| R4038 | | ERDS2TJ332 | CARBON 1/4W 3.3K | 1 | |
| R4039 | | ERDS2TJ473 | CARBON 1/4W 47K | 1 | |
| R4040 | | ERDS2TJ223 | CARBON 1/4W 22K | 1 | |
| R4501,4502 | | ERDS2TJ223 | CARBON 1/4W 22K | 2 | |
| R4503,4504 | | ERDS2TJ563 | CARBON 1/4W 56K | 2 | |
| R4505 | | ERDS2TJ104 | CARBON 1/4W 100K | 1 | |
| R4506,4507 | | ERDS2TJ561 | CARBON 1/4W 560 | 2 | |
| R4508 | | ERDS2TJ562 | CARBON 1/4W 5.6K | 1 | |
| R4509 | | ERDS2TJ104 | CARBON 1/4W 100K | 1 | |
| R4510-4517 | | ERDS2TJ333 | CARBON 1/4W 33K | 8 | |
| R4518 | | ERDS2TJ563 | CARBON 1/4W 56K | 1 | |
| R4519 | | ERDS2TJ333 | CARBON 1/4W 33K | 1 | |
| R4520 | | ERD25TJ335 | CARBON 1/4W 3.3M | 1 | |
| R4521 | | ERDS2TJ333 | CARBON 1/4W 33K | 1 | |
| R4522 | | ERD25TJ335 | CARBON 1/4W 3.3M | 1 | |
| R4523,4524 | | ERDS2TJ103 | CARBON 1/4W 10K | 2 | |
| R4525 | | ERDS2TJ332 | CARBON 1/4W 3.3K | 1 | |
| R4526 | | ERDS2TJ152 | CARBON 1/4W 1.5K | 1 | |
| R4527 | | ERDS2TJ683 | CARBON 1/4W 68K | 1 | |
| R4528 | | ERDS2TJ104 | CARBON 1/4W 100K | 1 | |
| R4529 | | ERDS2TJ821 | CARBON 1/4W 820 | 1 | |
| R4530 | | ERDS2TJ271 | CARBON 1/4W 270 | 1 | |
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| Ref.No. | | Part No. | Part Name & Description | Pcs | Remarks |
|---|---|---|---|---|---|
| R4531 | | ERDS2TJ561 | CARBON 1/4W 560 | 1 | |
| R4532 | | ERDS2TJ102 | CARBON 1/4W 1K | 1 | |
| R4533 | | ERDS2TJ561 | CARBON 1/4W 560 | 1 | |
| R4534 | | ERDS2TJ102 | CARBON 1/4W 1K | 1 | |
| R4535 | | ERDS2TJ101 | CARBON 1/4W 100 | 1 | |
| R4536 | | ERDS2TJ124 | CARBON 1/4W 120K | 1 | |
| R4537 | | ERDS2TJ101 | CARBON 1/4W 100 | 1 | |
| R4538 | | ERDS2TJ124 | CARBON 1/4W 120K | 1 | |
| R4539 | | ERDS2TJ680 | CARBON 1/4W 68 | 1 | |
| R4540 | | ERDS2TJ272 | CARBON 1/4W 2.7K | 1 | |
| R4541 | | ERDS2TJ683 | CARBON 1/4W 68K | 1 | |
| R4542,4543 | | ERDS2TJ820 | CARBON 1/4W 82 | 2 | |
| R4544 | | ERDS2TJ222 | CARBON 1/4W 2.2K | 1 | |
| R4545 | | ERDS2TJ331 | CARBON 1/4W 330 | 1 | |
| R4546 | | ERDS2TJ823 | CARBON 1/4W 82K | 1 | |
| R4547 | | ERDS2TJ102 | CARBON 1/4W 1K | 1 | |
| R4548 | | ERDS2TJ334 | CARBON 1/4W 330K | 1 | |
| R4549 | | ERDS2TJ151 | CARBON 1/4W 150 | 1 | |
| R4550 | | ERDS2TJ472 | CARBON 1/4W 4.7K | 1 | |
| R4551 | | ERDS2TJ122 | CARBON 1/4W 1.2K | 1 | |
| R4552 | | EROS2CKG6201 | METAL OXIDE 1/4W 6.2K | 1 | |
| R4553 | | ERDS2TJ681 | CARBON 1/4W 680 | 1 | |
| R4554 | | EROS2CKG2401 | METAL OXIDE 1/4W 2.4K | 1 | |
| R4555 | | EROS2CKG5601 | METAL OXIDE 1/4W 5.6K | 1 | |
| R4556 | | ERDS2TJ153 | CARBON 1/4W 15K | 1 | |
| R4557 | | ERDS2TJ273 | CARBON 1/4W 27K | 1 | |
| R4558 | | ERDS2TJ473 | CARBON 1/4W 47K | 1 | |
| R4559 | | ERDS2TJ562 | CARBON 1/4W 5.6K | 1 | |
| R4560 | | ERDS2TJ332 | CARBON 1/4W 3.3K | 1 | |
| R4561 | | EROS2CKG9101 | METAL OXIDE 1/4W 9.1K | 1 | |
| R4562 | | EROS2CKG1602 | METAL OXIDE 1/4W 16K | 1 | |
| R4563 | | EROS2CKG1002 | METAL OXIDE 1/4W 10K | 1 | |
| R4564 | | EROS2CKG1101 | METAL OXIDE 1/4W 1.1K | 1 | |
| R4565 | | ERDS2TJ223 | CARBON 1/4W 22K | 1 | |
| R4566 | | ERDS2TJ222 | CARBON 1/4W 2.2K | 1 | |
| R4567 | | ERDS2TJ682 | CARBON 1/4W 6.8K | 1 | |
| R4568 | | ERDS2TJ152 | CARBON 1/4W 1.5K | 1 | |
| R4569 | | ERDS2TJ563 | CARBON 1/4W 56K | 1 | |
| R4570 | | ERDS2TJ472 | CARBON 1/4W 4.7K | 1 | |
| R4571 | | ERDS2TJ122 | CARBON 1/4W 1.2K | 1 | |
| R4572 | | EROS2CKG6201 | METAL OXIDE 1/4W 6.2K | 1 | |
| R4573 | | ERDS2TJ681 | CARBON 1/4W 680 | 1 | |
| R4574 | | EROS2CKG2401 | METAL OXIDE 1/4W 2.4K | 1 | |
| R4575 | | EROS2CKG5601 | METAL OXIDE 1/4W 5.6K | 1 | |
| R4576 | | EROS2CKG1802 | METAL OXIDE 1/4W 18K | 1 | |
| R4577 | | ERDS2TJ153 | CARBON 1/4W 15K | 1 | |
| R4578 | | ERDS2TJ273 | CARBON 1/4W 27K | 1 | |
| R4579 | | ERDS2TJ473 | CARBON 1/4W 47K | 1 | |
| R4580 | | ERDS2TJ562 | CARBON 1/4W 5.6K | 1 | |
| R4581 | | ERDS2TJ332 | CARBON 1/4W 3.3K | 1 | |
| R4582 | | EROS2CKG9101 | METAL OXIDE 1/4W 9.1K | 1 | |
| R4583 | | EROS2CKG1602 | METAL OXIDE 1/4W 16K | 1 | |
| R4584 | | EROS2CKG1002 | METAL OXIDE 1/4W 10K | 1 | |
| R4585 | | EROS2CKG1101 | METAL OXIDE 1/4W 1.1K | 1 | |
| R4586 | | ERDS2TJ223 | CARBON 1/4W 22K | 1 | |
| R4587 | | ERDS2TJ222 | CARBON 1/4W 2.2K | 1 | |
| R4588 | | ERDS2TJ682 | CARBON 1/4W 6.8K | 1 | |
| R4589 | | ERDS2TJ392 | CARBON 1/4W 3.9K | 1 | |
| R4590 | | ERDS2TJ102 | CARBON 1/4W 1K | 1 | |
| R4591 | | ERDS2TJ681 | CARBON 1/4W 680 | 1 | |
| R4592 | | ERDS2TJ271 | CARBON 1/4W 270 | 1 | |
| R4593,4594 | | ERDS2TJ562 | CARBON 1/4W 5.6K | 2 | |
| R4595,4596 | | ERDS2TJ102 | CARBON 1/4W 1K | 2 | |
| R4597 | | ERDS2TJ562 | CARBON 1/4W 5.6K | 1 | |
| R4598 | | ERDS2TJ682 | CARBON 1/4W 6.8K | 1 | |
| R4599 | | ERDS2TJ183 | CARBON 1/4W 18K | 1 | |
| R4600 | | ERDS2TJ101 | CARBON 1/4W 100 | 1 | |
| R4601 | | ERDS2TJ123 | CARBON 1/4W 12K | 1 | |
| R4602 | | ERDS2TJ473 | CARBON 1/4W 47K | 1 | |
| R4603 | | ERDS2TJ272 | CARBON 1/4W 2.7K | 1 | |
| R4604 | | ERDS2TJ682 | CARBON 1/4W 6.8K | 1 | |
| R4605 | | ERDS2TJ183 | CARBON 1/4W 18K | 1 | |
| R4606 | | ERDS2TJ101 | CARBON 1/4W 100 | 1 | |
| R4607 | | ERDS2TJ123 | CARBON 1/4W 12K | 1 | |
| R4608 | | ERDS2TJ473 | CARBON 1/4W 47K | 1 | |
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| Ref.No. | | Part No. | Part Name & Description | Pcs | Remarks |
|---|---|---|---|---|---|
| R4609 | | ERDS2TJ151 | CARBON 1/4W 150 | 1 | |
| R4610 | | ERDS2TJ392 | CARBON 1/4W 3.9K | 1 | |
| R4611 | | ERDS2TJ474 | CARBON 1/4W 470K | 1 | |
| R4612 | | ERDS2TJ221 | CARBON 1/4W 220 | 1 | |
| R4613 | | ERDS2TJ331 | CARBON 1/4W 330 | 1 | |
| R4614 | | ERDS2TJ471 | CARBON 1/4W 470 | 1 | |
| R4615 | | ERDS2TJ562 | CARBON 1/4W 5.6K | 1 | |
| R4616 | | ERDS2TJ102 | CARBON 1/4W 1K | 1 | |
| R4617 | | ERDS2TJ183 | CARBON 1/4W 18K | 1 | |
| R4618 | | ERDS2TJ332 | CARBON 1/4W 3.3K | 1 | |
| R4619 | | ERDS2TJ102 | CARBON 1/4W 1K | 1 | |
| R4620,4621 | | ERDS2TJ272 | CARBON 1/4W 2.7K | 2 | |
| R4622 | | ERDS2TJ102 | CARBON 1/4W 1K | 1 | |
| R4623,4624 | | ERDS2TJ8R2 | CARBON 1/4W 8.2 | 2 | |
| R4625 | | ERDS2TJ152 | CARBON 1/4W 1.5K | 1 | |
| R4626,4627 | | ERDS2TJ102 | CARBON 1/4W 1K | 2 | |
| R4628 | | ERDS2TJ223 | CARBON 1/4W 22K | 1 | |
| R4629,4630 | | ERDS2TJ561 | CARBON 1/4W 560 | 2 | |
| R4631,4632 | | ERDS2TJ100 | CARBON 1/4W 10 | 2 | |
| R4633 | | ERDS2TJ153 | CARBON 1/4W 15K | 1 | |
| R4634,4635 | | ERDS2TJ393 | CARBON 1/4W 39K | 2 | |
| R4636 | | ERDS2TJ153 | CARBON 1/4W 15K | 1 | |
| R4638 | | ERDS2TJ273 | CARBON 1/4W 27K | 1 | |
| R4639 | | ERDS2TJ332 | CARBON 1/4W 3.3K | 1 | |
| R4640,4641 | | ERDS2TJ102 | CARBON 1/4W 1K | 2 | |
| R4642 | | ERDS2TJ182 | CARBON 1/4W 1.8K | 1 | |
| R4643,4644 | | ERDS2TJ152 | CARBON 1/4W 1.5K | 2 | |
| R4645 | | ERDS2TJ182 | CARBON 1/4W 1.8K | 1 | |
| R4646 | | ERDS2TJ102 | CARBON 1/4W 1K | 1 | |
| R4647 | | ERDS2TJ473 | CARBON 1/4W 47K | 1 | |
| R4648 | | ERDS2CKG1802 | METAL OXIDE 1/4W 18K | 1 | |
| R4649,4650 | | ERDS2TJ392 | CARBON 1/4W 3.9K | 2 | |
| R4651,4652 | | ERDS2TJ562 | CARBON 1/4W 5.6K | 2 | |
| R4653,4654 | | ERDS2TJ222 | CARBON 1/4W 2.2K | 2 | |
| R4660 | | ERDS2TJ104 | CARBON 1/4W 100K | 1 | |
| R4661 | | ERDS2TJ124 | CARBON 1/4W 120K | 1 | |
| R4662 | | ERDS2TJ102 | CARBON 1/4W 1K | 1 | |
| R4663 | | ERDS2TJ332 | CARBON 1/4W 3.3K | 1 | |
| R4664 | | ERDS2TJ102 | CARBON 1/4W 1K | 1 | |
| R4665 | | ERDS2TJ104 | CARBON 1/4W 100K | 1 | |
| R4666 | | ERDS2TJ124 | CARBON 1/4W 120K | 1 | |
| R4667 | | ERDS2TJ102 | CARBON 1/4W 1K | 1 | |
| R4668 | | ERDS2TJ332 | CARBON 1/4W 3.3K | 1 | |
| R4669 | | ERDS2TJ102 | CARBON 1/4W 1K | 1 | |
| | | | | | |
| | | | TRANSFORMER | | |
| | | | | | |
| T4001 | | EIQ7QF003B | IF TRANSFORMER | 1 | |
| | | | | | |
| | | | VARIABLE RESISTORS | | |
| | | | | | |
| VR4001 | | EVN61AA00B23 | VARIABLE 2K | 1 | |
| VR4002 | | EVN38CA00B25 | VARIABLE 200K | 1 | |
| VR4501 | | EVN38CA00B23 | VARIABLE 2K | 1 | |
| VR4502 | | EVN32CA00B14 | VARIABLE 10K | 1 | |
| VR4503 | | EVN38CA00B53 | VARIABLE 5K | 1 | |
| VR4504 | | EVN32CA00B53 | VARIABLE 5K | 1 | |
| VR4505 | | EVN38CA00B54 | VARIABLE 50K | 1 | |
| VR4507 | | EVN32CA00B14 | VARIABLE 10K | 1 | |
| VR4508 | | EVN32CA00B53 | VARIABLE 5K | 1 | |
| VR4509 | | EVN38CA00B23 | VARIABLE 2K | 1 | |
| VR4510 | | EVN38CA00B15 | VARIABLE 100K | 1 | |
| VR7201 | | EVN38CA00B54 | VARIABLE 50K | 1 | |
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| | | | | | |
| | | | | | |
| | | | MISCELLANEOUS | | |
| | | VSC1635 | SHIELD CASE (MIDDLE) | 1 | |
| | | VSC1637 | SHIELD CASE (LOWER) | 1 | |
| | | VKC0129 | HINGE | 2 | |
| | | VMX0361 | P.C.BOARD SPACER | 1 | |
| | | VJF0004 | WIRE SADDLE | 1 | |
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| Ref.No. | | Part No. | Part Name & Description | Pcs | Remarks |
|---|---|---|---|---|---|
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| | ■ | VEP05098A | HEAD AMP C.B.A. | | |
| | | | | | |
| | | | CAPACITORS | | |
| C501 | | ECCF1H560J | CERAMIC 50V 56P | 1 | |
| C502 | | ECKF1H331KB | CERAMIC 50V 330P | 1 | |
| C503 | | ECCF1H560JC | CERAMIC 50V 56P | 1 | |
| C504 | | ECEA0JK220 | ELECTROLYTIC 6.3V 22U | 1 | |
| C505-509 | | ECKF1H103ZF | CERAMIC 50V 0.01U | 5 | |
| C510 | | ECCF1H390K | CERAMIC 50V 39P | 1 | |
| C511 | | ECEA1CK330 | ELECTROLYTIC 16V 33U | 1 | |
| C512,513 | | ECKF1H103ZF | CERAMIC 50V 0.01U | 2 | |
| C514 | | ECEA1CK100 | ELECTROLYTIC 16V 10U | 1 | |
| C515 | | ECCF1H470JC | CERAMIC 50V 47P | 1 | |
| C516,517 | | ECKF1H103ZF | CERAMIC 50V 0.01U | 2 | |
| C518 | | ECCF1H470JC | CERAMIC 50V 47P | 1 | |
| C519,520 | | ECEA1CK100 | ELECTROLYTIC 16V 10U | 2 | |
| C521 | | ECCF1H150JC | CERAMIC 50V 15P | 1 | |
| C522,523 | | ECKF1H103ZF | CERAMIC 50V 0.01U | 2 | |
| C524 | | ECCF1H150JC | CERAMIC 50V 15P | 1 | |
| C525 | | ECEA1CK100 | ELECTROLYTIC 16V 10U | 1 | |
| C526,527 | | VCYD1C104MR1 | SEMICONDUCTOR 16V 0.1U | 2 | |
| C528 | | ECKF1H102KB | CERAMIC 50V 1000P | 1 | |
| C529,530 | | VCYD1C103MR1 | SEMICONDUCTOR 16V 0.01U | 2 | |
| C531 | | ECEA0JK470 | ELECTROLYTIC 6.3V 47U | 1 | |
| C532 | | ECKF1H103ZF | CERAMIC 50V 0.01U | 1 | |
| C533 | | ECCF1H220J | CERAMIC 50V 22P | 1 | |
| C534 | | ECCF1H470JC | CERAMIC 50V 47P | 1 | |
| C535 | | ECEA1HK010 | ELECTROLYTIC 50V 1U | 1 | |
| C536 | | ECKF1H102KB | CERAMIC 50V 1000P | 1 | |
| C537 | | ECKF1H121KB | CERAMIC 50V 120P | 1 | |
| C538 | | ECCF1H100DC | CERAMIC 50V 10P | 1 | |
| C550 | | ECKF1H102KB | CERAMIC 50V 1000P | 1 | |
| | | | | | |
| | | | INTEGRATED CIRCUITS | | |
| | | | | | |
| IC501 | | AN3311K | IC | 1 | <R> |
| IC502 | | AN3224K | IC | 1 | <R> |
| | | | | | |
| | | | COIL | | |
| | | | | | |
| L501 | | VLQEL05F181K | COIL 180UH | 1 | |
| L502 | | VLQEL05F121K | COIL 120UH | 1 | |
| L503 | | VLQEL05F120K | COIL 12UH | 1 | |
| L504,505 | | VLQEL05F101K | COIL 100UH | 2 | |
| L506 | | VLQEL05F330K | COIL 33UH | 1 | |
| L507 | | VLQEL05F470K | COIL 47UH | 1 | |
| L508 | | VLQEL05F270K | COIL 27UH | 1 | |
| | | | | | |
| | | | CONNECTORS | | |
| | | | | | |
| P501 | | VJP1248T | 8P | 1 | |
| P502 | | VJP1248R | 8P | 1 | |
| P503 | | VJP1235T | 8P | 1 | |
| | | | | | |
| | | | TRANSISTORS | | |
| | | | | | |
| Q501 | | 2SB641 | TRANSISTOR | 1 | (Q,R,S) <R> |
| Q502-504 | | 2SD636 | TRANSISTOR | 3 | (Q,R,S) <R> |
| | | | | | |
| | | | RESISTORS | | |
| | | | | | |
| R501 | | ERDS2TJ271 | CARBON 1/4W 270 | 1 | |
| R502,503 | | ERDS2TJ222 | CARBON 1/4W 2.2K | 2 | |
| R504 | | ERDS2TJ102 | CARBON 1/4W 1K | 1 | . |
| R505-508 | | ERDS2TJ100 | CARBON 1/4W 10 | 4 | |
| R509 | | ERDS2TJ152 | CARBON 1/4W 1.5K | 1 | |
| R510 | | ERDS2TJ471 | CARBON 1/4W 470 | 1 | |
| R511 | | ERDS2TJ271 | CARBON 1/4W 270 | 1 | |
| R512-515 | | ERDS2TJ821 | CARBON 1/4W 820 | 4 | |
| R516 | | ERDS2TJ152 | CARBON 1/4W 1.5K | 1 | |
| R517 | | ERDS2TJ122 | CARBON 1/4W 1.2K | 1 | |
| R518 | | ERDS2TJ471 | CARBON 1/4W 470 | 1 | |
| R519 | | ERDS2TJ681 | CARBON 1/4W 680 | 1 | |
| | | | | | |
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| Ref.No. | | Part No. | Part Name & Description | Pcs | Remarks |
|---|---|---|---|---|---|
| R520 | | ERDS2TJ122 | CARBON 1/4W 1.2K | 1 | |
| R521 | | ERDS2TJ333 | CARBON 1/4W 33K | 1 | |
| R522 | | ERDS2TJ122 | CARBON 1/4W 1.2K | 1 | |
| R523 | | ERDS2TJ333 | CARBON 1/4W 33K | 1 | |
| R524 | | ERDS2TJ222 | CARBON 1/4W 2.2K | 1 | |
| R525,526 | | ERDS2TJ471 | CARBON 1/4W 470 | 2 | |
| R527 | | ERDS2TJ681 | CARBON 1/4W 680 | 1 | |
| | | | | | |
| | | | VARIABLE RESISTORS | | |
| | | | | | |
| VR501 | | EVNKOAAOOB23 | VARIABLE 2K | 1 | |
| VR502 | | EVNKOAAOOB24 | VARIABLE 20K | 1 | |
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| | | | | | |
| | | | MISCELLANEOUS | | |
| | | VYK1168 | SHIELD CASE (MIDDLE) | 1 | |
| | | VSC1612 | SHIELD CASE (COVER) | 1 | |
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| | ■ | VEP06369A | MAIN C.B.A. | | |
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| | | | CAPACITORS | | |
| C1001 | | ECKF1H102KB | CERAMIC 50V 1000P | 1 | |
| C1002 | | ECEA1VU470 | ELECTROLYTIC 35V 47U | 1 | |
| C1003,1004 | | ECKF1H103ZF | CERAMIC 50V 0.01U | 2 | |
| C1005 | | ECEA1HU220 | ELECTROLYTIC 50V 22U | 1 | |
| C1006 | | ECEA1CU101 | ELECTROLYTIC 16V 100U | 1 | |
| C1007 | | ECEA1EU101 | ELECTROLYTIC 25V 100U | 1 | |
| C1008 | | ECKF1H561KB | CERAMIC 50V 560P | 1 | |
| C1009 | | ECCF1H82OJC | CERAMIC 50V 82P | 1 | |
| C1010 | | ECKF1H271KB | CERAMIC 50V 270P | 1 | |
| C1011-1015 | | ECEA1HK010 | ELECTROLYTIC 50V 1U | 5 | |
| C1016-1019 | | ECEA1EU221 | ELECTROLYTIC 25V 220U | 4 | |
| C1020 | | ECEA1EU331 | ELECTROLYTIC 25V 330U | 1 | |
| C1021 | | ECKF1H103ZF | CERAMIC 50V 0.01U | 1 | |
| C1022 | | ECQV1H104JZ | MYLAR 50V 0.1U | 1 | |
| C2001 | | ECKF1H102KB | CERAMIC 50V 1000P | 1 | |
| C2002 | | ECQV1H563JZ | MYLAR 50V 0.056 | 1 | |
| C2003 | | ECEA1HKN010 | ELECTROLYTIC 50V 1U | 1 | |
| C2004 | | ECEA1HK010 | ELECTROLYTIC 50V 1U | 1 | |
| C2005 | | ECKF1H103ZF | CERAMIC 50V 0.01U | 1 | |
| C2006 | | ECQB1H123KH | MYLAR 50V 0.012 | 1 | |
| C2007,2008 | | ECEA1HKR47 | ELECTROLYTIC 50V 0.47U | 2 | |
| C2009 | | ECEA1HK010 | ELECTROLYTIC 50V 1U | 1 | |
| C2010 | | ECQB1H562JH | MYLAR 50V 5600P | 1 | |
| C2011 | | ECEA1CK100 | ELECTROLYTIC 16V 10U | 1 | |
| C2012 | | ECQV1H224JZ | MYLAR 50V 0.22U | 1 | |
| C2013 | | ECKF1H152KB | CERAMIC 50V 1500P | 1 | |
| C2014 | | ECEA1HKOR1 | ELECTROLYTIC 50V 0.1U | 1 | |
| C2015 | | ECEA1CK100 | ELECTROLYTIC 16V 10U | 1 | |
| C2016 | | ECEA1HK010 | ELECTROLYTIC 50V 1U | 1 | |
| C2017-2020 | | ECEAOJK470 | ELECTROLYTIC 6.3V 47U | 4 | |
| C2021 | | ECEA1HK010 | ELECTROLYTIC 50V 1U | 1 | |
| C2022 | | ECEA1HKOR1 | ELECTROLYTIC 50V 0.1U | 1 | |
| C2023 | | ECKF1H472ZF | CERAMIC 50V 4700P | 1 | |
| C2024,2025 | | ECQB1H562JH | MYLAR 50V 5600P | 2 | |
| C2026 | | ECEA1HKOR1 | ELECTROLYTIC 50V 0.1U | 1 | |
| C2027,2028 | | ECEAOJK470 | ELECTROLYTIC 6.3V 47U | 2 | |
| C2029 | | ECKF1H472ZF | CERAMIC 50V 4700P | 1 | |
| C2030 | | ECQB1H182KH | MYLAR 50V 1800P | 1 | |
| C2031 | | ECKF1H103ZF | CERAMIC 50V 0.01U | 1 | |
| C2032 | | ECEAOJK470 | ELECTROLYTIC 6.3V 47U | 1 | |
| C2033-2035 | | ECEA1VKN2R2 | ELECTROLYTIC 35V 2.2U | 3 | |
| C2036 | | ECQV1H104JZ | MYLAR 50V 0.1U | 1 | |
| C2037 | | ECEA1HK010 | ELECTROLYTIC 50V 1U | 1 | |
| C2038-2040 | | ECQB1H822KH | MYLAR 50V 8200P | 3 | |
| C2041 | | ECEA1CK470 | ELECTROLYTIC 16V 47U | 1 | |
| C2042 | | ECEA1HK010 | ELECTROLYTIC 50V 1U | 1 | |
| C2043 | | ECQB1H223KH | MYLAR 50V 0.022 | 1 | |
| C2044 | | ECEA1CK100 | ELECTROLYTIC 16V 10U | 1 | |
| C2045 | | ECEAOJK470 | ELECTROLYTIC 6.3V 47U | 1 | |
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| Ref.No. | | Part No. | Part Name & Description | Pcs | Remarks |
|---|---|---|---|---|---|
| C2046 | | ECQB1H223KH | MYLAR 50V 0.022 | 1 | |
| C2047 | | ECEAOJK101 | ELECTROLYTIC 6.3V 100U | 1 | |
| C2048 | | ECQV1H274JZ | MYLAR 50V 0.27U | 1 | |
| C2049 | | ECEAOJK470 | ELECTROLYTIC 6.3V 47U | 1 | |
| C2050 | | ECQV1H274JZ | MYLAR 50V 0.27U | 1 | |
| C2051 | | ECKF1H103ZF | CERAMIC 50V 0.01U | 1 | |
| C2052 | | ECEAOJK470 | ELECTROLYTIC 6.3V 47U | 1 | |
| C2053 | | ECEA1HK010 | ELECTROLYTIC 50V 1U | 1 | |
| C2054 | | ECQB1H333KH | MYLAR 50V 0.033 | 1 | |
| C2055 | | ECEAOJK470 | ELECTROLYTIC 6.3V 47U | 1 | |
| C2056 | | ECEA1HK010 | ELECTROLYTIC 50V 1U | 1 | |
| C2057 | | ECQB1H332JH | MYLAR 50V 3300P | 1 | |
| C2058 | | ECQB1H562JH | MYLAR 50V 5600P | 1 | |
| C2059 | | ECQB1H333KH | MYLAR 50V 0.033 | 1 | |
| C2060,2061 | | ECEA1HK010 | ELECTROLYTIC 50V 1U | 2 | |
| C2062 | | ECQB1H682JH | MYLAR 50V 6800P | 1 | |
| C2063,2064 | | ECQV1H104JZ | MYLAR 50V 0.1U | 2 | |
| C2065 | | ECEA1CKN100 | ELECTROLYTIC 16V 10U | 1 | |
| C2066 | | ECEA1HK010 | ELECTROLYTIC 50V 1U | 1 | |
| C2067 | | ECQV1H334JZ | MYLAR 50V 0.33U | 1 | |
| C2068 | | ECQV1H563JZ | MYLAR 50V 0.056 | 1 | |
| C2069 | | ECQB1H562JH | MYLAR 50V 5600P | 1 | |
| C2070 | | ECKF1H102KB | CERAMIC 50V 1000P | 1 | |
| C2071 | | ECKF1H101KB | CERAMIC 50V 100P | 1 | |
| C2072 | | ECEA1HKN010 | ELECTROLYTIC 50V 1U | 1 | |
| C2073 | | ECQB1H273KH | MYLAR 50V 0.027 | 1 | |
| C2074 | | ECQV1H563JZ | MYLAR 50V 0.056 | 1 | |
| C2075 | | ECEA1CK470 | ELECTROLYTIC 16V 47U | 1 | |
| C2076 | | ECEA1EKN2R2 | ELECTROLYTIC 25V 2.2U | 1 | |
| C2077 | | ECEA1HKR22 | ELECTROLYTIC 50V 0.22U | 1 | |
| C2080 | | ECQV1H104JZ | MYLAR 50V 0.1U | 1 | |
| C6001,6002 | | ECQB1H103KH | MYLAR 50V 0.01U | 2 | |
| C6003 | | ECEAOJK470 | ELECTROLYTIC 6.3V 47U | 1 | |
| C6004 | | ECKF1H103ZF | CERAMIC 50V 0.01U | 1 | |
| C6005,6006 | | ECCF1H330J | CERAMIC 50V 33P | 2 | |
| C6007 | | ECQB1H103KH | MYLAR 50V 0.01U | 1 | |
| C6009 | | ECEA16Z10 | ELECTROLYTIC 16V 10U | 1 | |
| C6010 | | ECEAOJK470 | ELECTROLYTIC 6.3V 47U | 1 | |
| C6011 | | ECKF1H103ZF | CERAMIC 50V 0.01U | 1 | |
| C6012 | | ECEA1CK100 | ELECTROLYTIC 16V 10U | 1 | |
| C6013 | | ECEA1CU101 | ELECTROLYTIC 16V 100U | 1 | |
| C6014,6015 | | ECEA1HKN010 | ELECTROLYTIC 50V 1U | 2 | |
| C6016,6017 | | ECKF1H102KB | CERAMIC 50V 1000P | 2 | |
| C6018 | | ECQV1H104JZ | MYLAR 50V 0.1U | 1 | |
| C6019 | | ECEAOJK220 | ELECTROLYTIC 6.3V 22U | 1 | |
| C6020 | | ECQV1H334JZ | MYLAR 50V 0.33U | 1 | |
| C6022 | | ECKF1H103ZF | CERAMIC 50V 0.01U | 1 | |
| C6023,6024 | | ECEA16Z10 | ELECTROLYTIC 16V 10U | 2 | |
| C6030 | | ECEA1HK2R2 | ELECTROLYTIC 50V 2.2U | 1 | |
| C6031 | | ECEA1HKR22 | ELECTROLYTIC 50V 0.22U | 1 | |
| C6032 | | ECQV1H104JZ | MYLAR 50V 0.1U | 1 | |
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| | | | DIODES | | |
| | | | | | |
| D1001 | | MA4062ML | DIODE | 1 | <R> |
| D1002 | | MA4039ML | DIODE | 1 | <R> |
| D1003,1004 | | MA165 | DIODE | 2 | <R> |
| D1005 | | MA4068L | DIODE | 1 | <R> |
| D1006 | | MA4300M | DIODE | 1 | <R> |
| D1007 | | MA4130ML | DIODE | 1 | <R> |
| D1008-1011 | | MA165 | DIODE | 4 | <R> |
| D1014-1017 | | 11DQ04 | DIODE | 4 | <R> |
| D1018 | | MA4130H | DIODE | 1 | <R> |
| D2001-2016 | | MA165 | DIODE | 16 | <R> |
| D2020-2034 | | MA165 | DIODE | 15 | <R> |
| D2036-2040 | | MA165 | DIODE | 5 | <R> |
| D2041 | | 10E1 | DIODE | 1 | <R> |
| D6001-6003 | | 10E1 | DIODE | 3 | <R> |
| D6004-6015 | | MA165 | DIODE | 12 | <R> |
| D6016 | | MA4047 | DIODE | 1 | <R> |
| D6017 | | MA4100 | DIODE | 1 | <R> |
| D6018-6030 | | MA165 | DIODE | 13 | <R> |
| D6032-6036 | | MA165 | DIODE | 5 | <R> |
| D6040 | | MA165 | DIODE | 1 | <R> |
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| Ref.No. | Part No. | Part Name & Description | Pcs | Remarks |
|---|---|---|---|---|
| | | | | |
| | | FUSE | | |
| F2001 | VSF0043 | | 1 | <R><!> |
| | | | | |
| | | INTEGRATED CIRCUITS | | |
| | | | | |
| IC1001 | BA6149LS | IC | 1 | <R> |
| IC2001 | AN6359N | IC | 1 | <R> |
| IC2002 | AN6562 | IC | 1 | <R> |
| IC2003 | AN6914 | IC | 1 | <R> |
| IC2004 | AN6562 | IC | 1 | <R> |
| IC2005 | MN6168VIH | IC | 1 | <R> |
| IC2006 | AN3821K | IC | 1 | <R> |
| IC2007 | AN6356N | IC | 1 | <R> |
| IC2008 | AN3712K | IC | 1 | <R> |
| IC2009 | BA236B | IC | 1 | <R> |
| IC6001 | MN1554VQL | IC | 1 | <R> |
| IC6002 | MN1534VQD | | 1 | <R> |
| IC6003 | M54649L | IC | 1 | <R> |
| IC6004 | UPD4510BC | IC | 1 | <R> |
| IC6005 | UPD4510BC | IC | 1 | <R> |
| | | | | |
| | | COIL | | |
| | | | | |
| L1001-1004 | ELC08D021 | | 4 | |
| | | | | |
| | | CONNECTORS | | |
| | | | | |
| P1001 | VJP1237R | 10P | 1 | |
| P1002 | VJP1231T | 4P | 1 | |
| P1003 | VJP1237T | 10P | 1 | |
| P1004 | VJP1233T | 6P | 1 | |
| P1005,1006 | VJP1230T | 3P | 2 | |
| P2001 | VJS1663 | 15P | 1 | |
| P2002 | VJP1229 | 2P | 1 | |
| P2003,2004 | VJP1239T | 12P | 2 | |
| P2005 | VJP1234T | 7P | 1 | |
| P2006 | VJP1229T | 2P | 1 | |
| | | | | |
| P2007 | VJP1393T | 13P | 1 | |
| | | | | |
| P6001,6002 | VJP1239T | 12P | 2 | |
| P6003 | VJP1234T | 7P | 1 | |
| P6005 | VJP1232T | 5P | 1 | |
| | | | | |
| P6007 | VJP1393T | 13P | 1 | |
| P6008,6009 | VJP1235T | 8P | 2 | |
| P6010 | VJP1234T | 7P | 1 | |
| P6012 | VJP1233T | 6P | 1 | |
| P6013 | VJS1455 | 18P | 1 | |
| P6014 | VJS1446 | 28P | 1 | |
| P6015 | VJP1234R | 7P | 1 | |
| P6016 | VJP1229T | 2P | 1 | |
| | | | | |
| | | | | |
| | | TRANSISTORS | | |
| | | | | |
| Q1001 | 2SD636 | TRANSISTOR | 1 | (Q,R,S) <R> |
| Q1002 | 2SD1273 | TRANSISTOR | 1 | <R> |
| Q1003,1004 | 2SD636 | TRANSISTOR | 2 | (Q,R,S) <R> |
| Q1005 | 2SA794 | TRANSISTOR | 1 | (P,Q,R,S) <R> |
| Q1006-1009 | 2SB772 | TRANSISTOR | 4 | (P,Q) <!><R> |
| Q2001 | 2SB641 | TRANSISTOR | 1 | (Q,R,S) <R> |
| Q2002-2005 | 2SD636 | TRANSISTOR | 4 | (Q,R,S) <R> |
| Q2006 | 2SB641 | TRANSISTOR | 1 | (Q,R,S)<R> |
| Q2007-2010 | 2SD636 | TRANSISTOR | 4 | (Q,R,S)<R> |
| Q2011-2015 | 2SB641 | TRANSISTOR | 5 | (Q,R,S)<R> |
| Q2016 | 2SD636 | TRANSISTOR | 1 | (Q,R,S)<R> |
| Q2019 | 2SD636 | TRANSISTOR | 1 | (Q,R,S)<R> |
| Q6001 | 2SD636 | TRANSISTOR | 1 | (Q,R,S)<R> |
| Q6002,6003 | 2SB643 | TRANSISTOR | 2 | (R,S) <R> |
| Q6004,6005 | 2SD636 | TRANSISTOR | 2 | (Q,R,S) <R> |
| Q6006-6008 | 2SB641 | TRANSISTOR | 3 | (Q,R,S) <R> |
| Q6009-6013 | 2SD636 | TRANSISTOR | 5 | (Q,R,S) <R> |
| Q6014 | 2SB643 | TRANSISTOR | 1 | (Q,R,S) <R> |
| | | | | |
| | | | | |

| Ref.No. | Part No. | Part Name & Description | Pcs | Remarks |
|---|---|---|---|---|
| Q6015-6018 | 2SD636 | TRANSISTOR | 4 | (Q,R,S) <R> |
| Q6019-6021 | 2SB643 | TRANSISTOR | 3 | (R,S) <R> |
| Q6022,6023 | 2SB641 | TRANSISTOR | 2 | (Q,R,S) <R> |
| Q6024 | 2SD636 | TRANSISTOR | 1 | (Q,R,S) <R> |
| Q6025 | 2SB643 | TRANSISTOR | 1 | (R,S) <R> |
| Q6026,6027 | 2SD636 | TRANSISTOR | 2 | (Q,R,S) <R> |
| Q6029-6032 | 2SB641 | TRANSISTOR | 4 | (Q,R,S) <R> |
| Q6040,6041 | 2SD636 | TRANSISTOR | 2 | (Q,R,S) <R> |
| | | | | |
| | | COMBINATION PARTS | | |
| | | | | |
| QR1001 | DTC144EA | COMBINATION PARTS | 1 | <R> |
| QR1002 | DTC124EA | COMBINATION PARTS | 1 | <R> |
| QR1003 | DTC144EA | COMBINATION PARTS | 1 | <R> |
| QR2001 | DTC144EA | COMBINATION PARTS | 1 | <R> |
| QR2002 | DTA144EA | COMBINATION PARTS | 1 | <R> |
| QR2003 | DTC144EA | COMBINATION PARTS | 5 | <R> |
| -2007 | | | | |
| QR2008 | DTA144EA | COMBINATION PARTS | 1 | <R> |
| QR2009 | DTA144EA | COMBINATION PARTS | 1 | <R> |
| QR2010 | DTC144EA | COMBINATION PARTS | 1 | <R> |
| QR2013 | DTA144EA | COMBINATION PARTS | 1 | <R> |
| QR2014 | DTC144EA | COMBINATION PARTS | 3 | <R> |
| -2016 | | | | |
| QR2017 | DTA144EA | COMBINATION PARTS | 1 | <R> |
| QR2018 | DTC144EA | COMBINATION PARTS | 3 | <R> |
| -2020 | | | | |
| QR6001 | DTC144EA | COMBINATION PARTS | 3 | <R> |
| -6003 | | | | |
| QR6004 | DTA144EA | COMBINATION PARTS | 1 | <R> |
| QR6005 | DTC144EA | COMBINATION PARTS | 1 | <R> |
| QR6006 | DTA114EA | COMBINATION PARTS | 6 | <R> |
| -6011 | | | | |
| QR6013 | DTC114EA | COMBINATION PARTS | 1 | <R> |
| QR6014 | DTC114EA | COMBINATION PARTS | 1 | <R> |
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| QR6016 | DTC114EA | COMBINATION PARTS | 1 | <R> |
| QR6017 | DTA144EA | COMBINATION PARTS | 1 | <R> |
| QR6018 | DTA144EA | COMBINATION PARTS | 1 | <R> |
| QR6019 | DTC144EA | COMBINATION PARTS | 3 | <R> |
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| QR6022 | DTA144EA | COMBINATION PARTS | 1 | <R> |
| QR6023 | DTC144EA | COMBINATION PARTS | 1 | <R> |
| QR6024 | DTA144EA | COMBINATION PARTS | 1 | <R> |
| QR6025 | DTC144EA | COMBINATION PARTS | 1 | <R> |
| QR6028 | DTC144EA | COMBINATION PARTS | 1 | <R> |
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| QR6035 | DTC144EA | COMBINATION PARTS | 1 | <R> |
| QR6040 | DTC144EA | COMBINATION PARTS | 1 | <R> |
| | | | | |
| | | RESISTORS | | |
| | | | | |
| R1001-1003 | ERDS2TJ103 | CARBON 1/4W 10K | 3 | |
| R1004 | ERDS2TJ332 | CARBON 1/4W 3.3K | 1 | |
| R1005 | ERDS2TJ122 | CARBON 1/4W 1.2K | 1 | |
| R1006 | ERDS2TJ123 | CARBON 1/4W 12K | 1 | |
| R1007 | ERDS2TJ331 | CARBON 1/4W 330 | 1 | |
| R1008 | ERDS2TJ472 | CARBON 1/4W 4.7K | 1 | |
| R1009 | ERDS2TJ473 | CARBON 1/4W 47K | 1 | |
| R1010 | ERDS2TJ103 | CARBON 1/4W 10K | 1 | |
| R1011 | ERDS2TJ124 | CARBON 1/4W 120K | 1 | |
| R1012 | ERDS2TJ563 | CARBON 1/4W 56K | 1 | |
| R1013 | ERDS2TJ154 | CARBON 1/4W 150K | 1 | |
| R1014 | ERDS2TJ103 | CARBON 1/4W 10K | 1 | |
| R1015-1018 | ERDS2TJ391 | CARBON 1/4W 390 | 4 | |
| R1020-1022 | ERDS2TJ154 | CARBON 1/4W 150K | 3 | |
| R1023-1025 | ERDS2TJ182 | CARBON 1/4W 1.8K | 3 | |
| R1026 | ERDS2TJ821 | CARBON 1/4W 820 | 1 | |
| R1027 | ERDS2TJ182 | CARBON 1/4W 1.8K | 1 | |
| R1028 | ERDS2TJ563 | CARBON 1/4W 56K | 1 | |
| R1029 | ERDS2TJ182 | CARBON 1/4W 1.8K | 1 | |
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| Ref.No. | | Part No. | Part Name & Description | Pcs | Remarks |
|---|---|---|---|---|---|
| R1033 | | ERDS2TJ102 | CARBON 1/4W 1K | 1 | |
| R1034 | | ERDS2TJ222 | CARBON 1/4W 2.2K | 1 | |
| R1035 | | ERDS2TJ103 | CARBON 1/4W 10K | 1 | |
| R2001 | | ERDS2TJ104 | CARBON 1/4W 100K | 1 | |
| R2002 | | ERDS2TJ154 | CARBON 1/4W 150K | 1 | |
| R2003 | | ERDS2TJ104 | CARBON 1/4W 100K | 1 | |
| R2004 | | ERDS2TJ274 | CARBON 1/4W 270K | 1 | |
| R2006 | | ERDS2TJ183 | CARBON 1/4W 18K | 1 | |
| R2007 | | ERDS2TJ103 | CARBON 1/4W 10K | 1 | |
| R2008 | | ERDS2TJ224 | CARBON 1/4W 220K | 1 | |
| R2009 | | ERDS2TJ272 | CARBON 1/4W 2.7K | 1 | |
| R2010,2011 | | ERDS2TJ332 | CARBON 1/4W 3.3K | 2 | |
| R2012 | | ERDS2TJ823 | CARBON 1/4W 82K | 1 | |
| R2013 | | ERDS2TJ824 | CARBON 1/4W 820K | 1 | |
| R2014 | | ERDS2TJ823 | CARBON 1/4W 82K | 1 | |
| R2015 | | ERDS2TJ154 | CARBON 1/4W 150K | 1 | |
| R2016 | | ERDS2TJ183 | CARBON 1/4W 18K | 1 | |
| R2017 | | ERDS2TJ273 | CARBON 1/4W 27K | 1 | |
| R2018,2019 | | ERDS2TJ103 | CARBON 1/4W 10K | 2 | |
| R2020 | | ERDS2TJ822 | CARBON 1/4W 8.2K | 1 | |
| R2021 | | ERDS2TJ472 | CARBON 1/4W 4.7K | 1 | |
| R2022 | | ERDS2TJ333 | CARBON 1/4W 33K | 1 | |
| R2023,2024 | | ERDS2TJ103 | CARBON 1/4W 10K | 2 | |
| R2025 | | ERDS2TJ223 | CARBON 1/4W 22K | 1 | |
| R2026 | | ERDS2TJ391 | CARBON 1/4W 390 | 1 | |
| R2027 | | ERDS2TJ333 | CARBON 1/4W 33K | 1 | |
| R2028 | | ERDS2TJ223 | CARBON 1/4W 22K | 1 | |
| R2029 | | ERDS2TJ473 | CARBON 1/4W 47K | 1 | |
| R2030 | | ERDS2TJ105 | CARBON 1/4W 1M | 1 | |
| R2031 | | ERDS2TJ223 | CARBON 1/4W 22K | 1 | |
| R2032 | | ERDS2TJ183 | CARBON 1/4W 18K | 1 | |
| R2033 | | ERDS2TJ223 | CARBON 1/4W 22K | 1 | |
| R2034,2035 | | ERDS2TJ104 | CARBON 1/4W 100K | 2 | |
| R2036 | | ERDS2TJ473 | CARBON 1/4W 47K | 1 | |
| R2037 | | ERDS2TJ104 | CARBON 1/4W 100K | 1 | |
| R2038 | | ERDS2TJ223 | CARBON 1/4W 22K | 1 | |
| R2039 | | ERDS2TJ224 | CARBON 1/4W 220K | 1 | |
| R2040 | | ERDS2TJ473 | CARBON 1/4W 47K | 1 | |
| R2041 | | ERDS2TJ223 | CARBON 1/4W 22K | 1 | |
| R2042 | | ERDS2TJ334 | CARBON 1/4W 330K | 1 | |
| R2043 | | ERDS2TJ153 | CARBON 1/4W 15K | 1 | |
| R2044 | | ERDS2TJ224 | CARBON 1/4W 220K | 1 | |
| R2045 | | ERDS2TJ154 | CARBON 1/4W 150K | 1 | |
| R2046 | | ERDS2TJ563 | CARBON 1/4W 56K | 1 | |
| R2047 | | EROS2CKG1002 | METAL OXIDE 1/4W 10K | 1 | |
| R2048 | | EROS2CKG1502 | METAL OXIDE 1/4W 15K | 1 | |
| R2049 | | EROS2CKG5602 | METAL OXIDE 1/4W 56K | 1 | |
| R2050 | | ERDS2TJ104 | CARBON 1/4W 100K | 1 | |
| R2051 | | ERDS2TJ562 | CARBON 1/4W 5.6K | 1 | |
| R2052 | | ERDS2TJ154 | CARBON 1/4W 150K | 1 | |
| R2053 | | ERDS2TJ124 | CARBON 1/4W 120K | 1 | |
| R2054 | | ERDS2TJ333 | CARBON 1/4W 33K | 1 | |
| R2055 | | ERDS2TJ222 | CARBON 1/4W 2.2K | 1 | |
| R2056 | | ERDS2TJ153 | CARBON 1/4W 15K | 1 | |
| R2057 | | ERDS2TJ563 | CARBON 1/4W 56K | 1 | |
| R2058 | | ERDS2TJ223 | CARBON 1/4W 22K | 1 | |
| R2059 | | ERDS2TJ103 | CARBON 1/4W 10K | 1 | |
| R2061 | | ERDS2TJ223 | CARBON 1/4W 22K | 1 | |
| R2062-2064 | | ERDS2TJ224 | CARBON 1/4W 220K | 3 | |
| R2065 | | ERDS2TJR68 | CARBON 1/4W 0.68 | 1 | |
| R2066 | | ERDS2TJ392 | CARBON 1/4W 3.9K | 1 | |
| R2068 | | ERDS2TJ822 | CARBON 1/4W 8.2K | 1 | |
| R2069 | | ERDS2TJ103 | CARBON 1/4W 10K | 1 | |
| R2070 | | ERDS2TJ122 | CARBON 1/4W 1.2K | 1 | |
| R2071 | | ERDS2TJ102 | CARBON 1/4W 1K | 1 | |
| R2072 | | ERDS2TJ222 | CARBON 1/4W 2.2K | 1 | |
| R2073 | | ERDS2TJ181 | CARBON 1/4W 180 | 1 | |
| R2074,2075 | | ERDS2TJ104 | CARBON 1/4W 100K | 2 | |
| R2076,2077 | | ERDS2TJ223 | CARBON 1/4W 22K | 2 | |
| R2078 | | ERDS2TJ181 | CARBON 1/4W 180 | 1 | |
| R2079 | | ERDS2TJ562 | CARBON 1/4W 5.6K | 1 | |
| R2080 | | ERDS2TJ273 | CARBON 1/4W 27K | 1 | |
| R2081 | | ERDS2TJ124 | CARBON 1/4W 120K | 1 | |
| R2082 | | ERDS2TJ562 | CARBON 1/4W 5.6K | 1 | |
| R2083 | | ERDS2TJ823 | CARBON 1/4W 82K | 1 | |

| Ref.No. | | Part No. | Part Name & Description | Pcs | Remarks |
|---|---|---|---|---|---|
| R2084,2085 | | ERDS2TJ224 | CARBON 1/4W 220K | 2 | |
| R2086 | | ERDS2TJ474 | CARBON 1/4W 470K | 1 | |
| R2088 | | ERDS2TJ104 | CARBON 1/4W 100K | 1 | |
| R2089 | | ERDS2TJ224 | CARBON 1/4W 220K | 1 | |
| R2090 | | ERDS2TJ184 | CARBON 1/4W 180K | 1 | |
| R2091 | | ERDS2TJ334 | CARBON 1/4W 330K | 1 | |
| R2092 | | ERDS2TJ823 | CARBON 1/4W 82K | 1 | |
| R2093,2094 | | ERDS2TJ224 | CARBON 1/4W 220K | 2 | |
| R2095 | | ERDS2TJ154 | CARBON 1/4W 150K | 1 | |
| R2096 | | ERDS2TJ473 | CARBON 1/4W 47K | 1 | |
| R2097 | | ERDS2TJ104 | CARBON 1/4W 100K | 1 | |
| R2098 | | ERDS2TJ124 | CARBON 1/4W 120K | 1 | |
| R2099 | | ERDS2TJ473 | CARBON 1/4W 47K | 1 | |
| R2100 | | ERDS2TJ103 | CARBON 1/4W 10K | 1 | |
| R2101 | | ERDS2TJ124 | CARBON 1/4W 120K | 1 | |
| R2102 | | ERDS2TJ104 | CARBON 1/4W 100K | 1 | |
| R2103 | | ERDS2TJ103 | CARBON 1/4W 10K | 1 | |
| R2104 | | ERDS2TJ124 | CARBON 1/4W 120K | 1 | |
| R2105 | | ERDS2TJ223 | CARBON 1/4W 22K | 1 | |
| R2106 | | ERDS2TJ123 | CARBON 1/4W 12K | 1 | |
| R2107 | | ERDS2TJ393 | CARBON 1/4W 39K | 1 | |
| R2108,2109 | | ERDS2TJ104 | CARBON 1/4W 100K | 2 | |
| R2110 | | ERDS2TJ223 | CARBON 1/4W 22K | 1 | |
| R2111 | | ERDS2TJ563 | CARBON 1/4W 56K | 1 | |
| R2112 | | ERDS2TJ562 | CARBON 1/4W 5.6K | 1 | |
| R2113 | | ERDS2TJ563 | CARBON 1/4W 56K | 1 | |
| R2114 | | ERDS2TJ102 | CARBON 1/4W 1K | 1 | |
| R2115,2116 | | ERDS2TJ563 | CARBON 1/4W 56K | 2 | |
| R2117,2118 | | ERDS2TJ101 | CARBON 1/4W 100 | 2 | |
| R2119 | | ERDS2TJ682 | CARBON 1/4W 6.8K | 1 | |
| R2120 | | ERDS2TJ102 | CARBON 1/4W 1K | 1 | |
| R2121,2122 | | ERDS2TJ473 | CARBON 1/4W 47K | 2 | |
| R2123 | | ERDS2TJ824 | CARBON 1/4W 820K | 1 | |
| R2124,2125 | | ERDS2TJ104 | CARBON 1/4W 100K | 2 | |
| R2127 | | ERDS2TJ222 | CARBON 1/4W 2.2K | 1 | |
| R2128 | | ERDS2TJ103 | CARBON 1/4W 10K | 1 | |
| R2129 | | ERDS2TJ102 | CARBON 1/4W 1K | 1 | |
| R2134 | | ERDS2TJ393 | CARBON 1/4W 39K | 1 | |
| R2135 | | ERDS2TJ224 | CARBON 1/4W 220K | 1 | |
| R2136,2137 | | ERDS2TJ102 | CARBON 1/4W 1K | 2 | |
| R2138 | | ERDS2TJ473 | CARBON 1/4W 47K | 1 | |
| R2139 | | ERDS2TJ562 | CARBON 1/4W 5.6K | 1 | |
| R2140 | | ERDS2TJ473 | CARBON 1/4W 47K | 1 | |
| R2141 | | ERDS2TJ102 | CARBON 1/4W 1K | 1 | |
| R2142 | | ERDS2TJ124 | CARBON 1/4W 120K | 1 | |
| R2143 | | ERDS2TJ682 | CARBON 1/4W 6.8K | 1 | |
| R2144 | | ERDS2TJ154 | CARBON 1/4W 150K | 1 | |
| R6001,6002 | | ERDS1TJ470 | CARBON 1/2W 47 | 2 | |
| R6003 | | ERDS2TJ562 | CARBON 1/4W 5.6K | 1 | |
| R6004 | | ERDS2TJ103 | CARBON 1/4W 10K | 1 | |
| R6005 | | ERDS2TJ822 | CARBON 1/4W 8.2K | 1 | |
| R6006 | | ERDS2TJ473 | CARBON 1/4W 47K | 1 | |
| R6007,6008 | | ERDS2TJ103 | CARBON 1/4W 10K | 2 | |
| R6009 | | ERDS2TJ331 | CARBON 1/4W 330 | 1 | |
| R6010 | | ERDS2TJ152 | CARBON 1/4W 1.5K | 1 | |
| R6011 | | ERDS2TJ332 | CARBON 1/4W 3.3K | 1 | |
| R6012 | | ERDS2TJ562 | CARBON 1/4W 5.6K | 1 | |
| R6013 | | ERDS2TJ392 | CARBON 1/4W 3.9K | 1 | |
| R6014 | | ERDS2TJ103 | CARBON 1/4W 10K | 1 | |
| R6015 | | ERDS2TJ102 | CARBON 1/4W 1K | 1 | |
| R6016 | | ERDS2TJ101 | CARBON 1/4W 100 | 1 | |
| R6017 | | ERDS2TJ183 | CARBON 1/4W 18K | 1 | |
| R6018 | | ERDS2TJ474 | CARBON 1/4W 470K | 1 | |
| R6019-6021 | | ERDS2TJ104 | CARBON 1/4W 100K | 3 | |
| R6022-6027 | | ERDS2TJ181 | CARBON 1/4W 180 | 6 | |
| R6028,6029 | | ERDS2TJ122 | CARBON 1/4W 1.2K | 2 | |
| R6030 | | ERDS2TJ822 | CARBON 1/4W 8.2K | 1 | |
| R6031 | | ERDS2TJ821 | CARBON 1/4W 820 | 1 | |
| R6032,6033 | | ERDS2TJ153 | CARBON 1/4W 15K | 2 | |
| R6034 | | ERDS2TJ103 | CARBON 1/4W 10K | 1 | |
| R6035 | | ERDS2TJ682 | CARBON 1/4W 6.8K | 1 | |
| R6036 | | ERDS2TJ392 | CARBON 1/4W 3.9K | 1 | |
| R6037 | | ERDS2TJ333 | CARBON 1/4W 33K | 1 | |
| R6038 | | ERDS2TJ103 | CARBON 1/4W 10K | 1 | |
| R6039 | | ERDS2TJ333 | CARBON 1/4W 33K | 1 | |

| Ref.No. | | Part No. | Part Name & Description | Pcs | Remarks |
|---|---|---|---|---|---|
| R6040-6043 | | ERDS2TJ103 | CARBON 1/4W 10K | 4 | |
| R6044 | | ERDS2TJ272 | CARBON 1/4W 2.7K | 1 | |
| R6045 | | ERDS2TJ392 | CARBON 1/4W 3.9K | 1 | |
| R6046 | | ERDS2TJ103 | CARBON 1/4W 10K | 1 | |
| R6047 | | ERDS2TJ222 | CARBON 1/4W 2.2K | 1 | |
| R6048 | | ERDS2TJ103 | CARBON 1/4W 10K | 1 | |
| R6049-6051 | | ERDS2TJ562 | CARBON 1/4W 5.6K | 3 | |
| R6052 | | ERDS2TJ223 | CARBON 1/4W 22K | 1 | |
| R6053 | | ERDS2TJ562 | CARBON 1/4W 5.6K | 1 | |
| R6054,6055 | | ERDS2TJ223 | CARBON 1/4W 22K | 2 | |
| R6056 | | ERDS2TJ562 | CARBON 1/4W 5.6K | 1 | |
| R6057 | | ERDS2TJ392 | CARBON 1/4W 3.9K | 1 | |
| R6058,6059 | | ERDS2TJ223 | CARBON 1/4W 22K | 2 | |
| R6060 | | ERDS2TJ472 | CARBON 1/4W 4.7K | 1 | |
| R6061,6062 | | ERDS2TJ223 | CARBON 1/4W 22K | 2 | |
| R6063 | | ERDS2TJ562 | CARBON 1/4W 5.6K | 1 | |
| R6064 | | ERDS2TJ123 | CARBON 1/4W 12K | 1 | |
| R6065 | | ERDS2TJ822 | CARBON 1/4W 8.2K | 1 | |
| R6066 | | ERDS2TJ183 | CARBON 1/4W 18K | 1 | |
| R6067 | | ERDS2TJ393 | CARBON 1/4W 39K | 1 | |
| R6068,6069 | | ERDS2TJ104 | CARBON 1/4W 100K | 2 | |
| R6071 | | ERDS2TJ104 | CARBON 1/4W 100K | 1 | |
| R6072 | | ERDS2TJ473 | CARBON 1/4W 47K | 1 | |
| R6073 | | ERDS2TJ103 | CARBON 1/4W 10K | 1 | |
| R6074 | | ERDS2TJ331 | CARBON 1/4W 330 | 1 | |
| R6075 | | ERDS2TJ271 | CARBON 1/4W 270 | 1 | |
| R6076-6078 | | ERDS2TJ104 | CARBON 1/4W 100K | 3 | |
| R6079 | | ERDS2TJ103 | CARBON 1/4W 10K | 1 | |
| R6080,6081 | | ERDS2TJ182 | CARBON 1/4W 1.8K | 2 | |
| R6082 | | ERDS2TJ103 | CARBON 1/4W 10K | 1 | |
| R6083 | | ERDS2TJ222 | CARBON 1/4W 2.2K | 1 | |
| R6084 | | ERDS2TJ472 | CARBON 1/4W 4.7K | 1 | |
| R6085 | | ERDS2TJ473 | CARBON 1/4W 47K | 1 | |
| R6086 | | ERDS2TJ823 | CARBON 1/4W 82K | 1 | |
| R6087 | | ERDS2TJ683 | CARBON 1/4W 68K | 1 | |
| R6088 | | ERDS2TJ393 | CARBON 1/4W 39K | 1 | |
| R6089 | | ERDS2TJ333 | CARBON 1/4W 33K | 1 | |
| R6093-6096 | | ERDS2TJ104 | CARBON 1/4W 100K | 4 | |
| R6097 | | ERDS2TJ822 | CARBON 1/4W 8.2K | 1 | |
| R6098 | | ERDS2TJ821 | CARBON 1/4W 820 | 1 | |
| R6099 | | ERDS2TJ222 | CARBON 1/4W 2.2K | 1 | |
| R6100 | | ERDS2TJ104 | CARBON 1/4W 100K | 1 | |
| R6101 | | ERDS2TJ393 | CARBON 1/4W 39K | 1 | |
| R6110 | | ERDS2TJ123 | CARBON 1/4W 12K | 1 | |
| R6111 | | ERDS2TJ393 | CARBON 1/4W 39K | 1 | |
| R6112-6115 | | ERDS2TJ103 | CARBON 1/4W 10K | 4 | |
| | | | | | |
| | | | VARIABLE RESISTORS | | |
| | | | | | |
| VR1002 | | EVN38CA00B52 | VARIABLE 500 | 1 | |
| VR1003 | | EVN38CA00B53 | VARIABLE 5K | 1 | |
| VR2001 | | EVN38CA00B15 | VARIABLE 100K | 1 | |
| VR2002 | | EVN38CA00B15 | VARIABLE 100K | 1 | |
| VR2006 | | EVN38CA00B15 | VARIABLE 100K | 1 | |
| VR2009 | | EVTK8CA00B15 | VARIABLE 100K | 1 | |
| VR2010 | | EVTK8CA00B15 | VARIABLE 100K | 1 | |
| VR2011 | | EVN38CA00B15 | VARIABLE 100K | 1 | |
| VR2013 | | EVN38CA00B23 | VARIABLE 2K | 1 | |
| VR2020 | | EVN38CA00B15 | VARIABLE 100K | 1 | |
| VR2021 | | EVN38CA00B15 | VARIABLE 100K | 1 | |
| | | | | | |
| | | | CRYSTAL OSCILLATORS | | |
| | | | | | |
| X1001 | | VSX0136 | | 1 | |
| X6001 | | VSX0082 | | 1 | |
| | | | | | |
| | | | DIODE ARRAYS | | |
| | | | | | |
| Z2001 | | VCR0139 | | 1 | <R> |
| Z6001 | | VCR0142 | | 1 | <R> |
| Z6002 | | VCR0141 | | 1 | <R> |
| Z6003 | | VCR0140 | | 1 | <R> |
| | | | | | |
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| Ref.No. | | Part No. | Part Name & Description | Pcs | Remarks |
|---|---|---|---|---|---|
| | | | MISCELLANEOUS | | |
| | | VKC0068 | HINGE | 3 | |
| | | VMX0985 | P.C.BOARD SPACER | 4 | |
| | | VJH0371 | REAR JACK UNIT | 1 | |
| | | VEJ0522 | REAR JACK FRAME | 1 | |
| | | VJF0022 | WIRE SADDLE | 1 | |
| | | VSC1215 | HEAT SINK | 1 | |
| | | VMC0075 | HEAT SINK ANGLE | 1 | |
| | | VMC0105 | FUSE ANGLE | 1 | |
| | | VSC1644 | SHIELD CASE (UPPER) | 1 | |
| | | VSC1645 | SHIELD CASE (MIDDLE) | 1 | |
| | | VSC1646 | SHIELD CASE (LOWER) | 1 | |
| | | VJB00H74 | SUB SYSTEM CONTROL (1) C.B. | 1 | |
| | | VJB00H75 | SUB SYSTEM CONTROL (2) C.B. | 1 | |
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| | ■ | VEP06370A | DISPLAY C.B. | | |
| | | | | | |
| | | | CAPACITORS | | |
| C6501 | | ECEA0JKS470 | ELECTROLYTIC 6.3V 47U | 1 | |
| C6502,6503 | | ECEA1CKK100 | ELECTROLYTIC 16V 10U | 2 | |
| C6504-6506 | | ECEA1EKK4R7 | ELECTROLYTIC 25V 4.7U | 3 | |
| C6507 | | ECQB1H103JH | MYLAR 50V 0.01U | 1 | |
| C6508,6509 | | ECQV1H104JZ | MYLAR 50V 0.1U | 2 | |
| | | | | | |
| | | | DIODES | | |
| | | | | | |
| D6501 | | MA165 | DIODE | 1 | <R> |
| D6502 | | MA4056M | | 1 | <R> |
| D6503 | | MA167 | DIODE | 1 | <R> |
| D6504 | | MA4075M | | 1 | <R> |
| D6505 | | MA165 | DIODE | 1 | <R> |
| D6506 | | LN31GCPHL | LED | 1 | <R> |
| D6507 | | LN81RCPHL | LED | 1 | <R> |
| | | | | | |
| | | | FILTERS | | |
| | | | | | |
| FL6501 | | VSL0071 | | 1 | |
| | | | | | |
| | | | INTEGRATED CIRCUITS | | |
| | | | | | |
| IC6501 | | MN15824VQN | IC | 1 | <R> |
| IC6502 | | BA6800 | IC | 1 | <R> |
| | | | | | |
| | | | CONNECTORS | | |
| | | | | | |
| P6501 | | VJP1252T | 12P | 1 | |
| P6502 | | VJP1247T | 7P | 1 | |
| P6503 | | VJP1230T | 3P | 1 | |
| P6504 | | VJP1234T | 7P | 1 | |
| P6505 | | VJP1243T | 3P | 1 | |
| | | | | | |
| | | | TRANSISTOR | | |
| | | | | | |
| Q6501 | | 2SD636 | TRANSISTOR | 1 | (Q,R,S) <R> |
| | | | | | |
| | | | COMBINATION PARTS | | |
| | | | | | |
| QR6501 | | DTC144EA | COMBINATION PARTS | 1 | <R> |
| QR6502 | | DTA124EA | COMBINATION PARTS | 6 | <R> |
| -6507 | | | | | |
| QR6508 | | DTC144EA | COMBINATION PARTS | 1 | <R> |
| QR6509 | | DTC124EA | COMBINATION PARTS | 1 | <R> |
| | | | | | |
| | | | RESISTOR | | |
| | | | | | |
| R6501 | | ERDS2TJ122 | CARBON 1/4W 1.2K | 1 | |
| R6502 | | ERDS2TJ273 | CARBON 1/4W 27K | 1 | |
| R6503-6507 | | ERDS2TJ473 | CARBON 1/4W 47K | 5 | |
| R6508 | | ERDS2TJ333 | CARBON 1/4W 33K | 1 | |
| R6509,6510 | | ERDS1TJ330 | CARBON 1/2W 33 | 2 | |
| R6511 | | ERDS2TJ104 | CARBON 1/4W 100K | 1 | |
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| Ref.No. | | Part No. | Part Name & Description | Pcs | Remarks |
|---|---|---|---|---|---|
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| | | | RESISTOR ARRAYS | | |
| | | | | | |
| RX6501 | | EXBP88104K | RESISTOR&RESISTOR 100K | 1 | |
| RX6502 | | EXBP88104K | RESISTOR&RESISTOR 100K | 1 | |
| RX6503 | | EXBP88104K | RESISTOR&RESISTOR 100K | 1 | |
| | | | | | |
| | | | SWITCHES | | |
| | | | | | |
| SW6501 | | EVQQS307K | SWITCH | 1 | <R> |
| SW6502 | | EVQQS307K | SWITCH | 1 | <R> |
| | | | | | |
| | | | VARIABLE RESISTORS | | |
| | | | | | |
| VR6501 | | EVN38CA00B53 | VARIABLE 5K | 1 | |
| VR6502 | | EVN38CA00B53 | VARIABLE 5K | 1 | |
| | | | | | |
| | | | CRYSTAL OSCILLATOR | | |
| | | | | | |
| X6501 | | VSX0176 | | 1 | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | MISCELLANEOUS | | |
| | | VJF0328 | F.I.P. HOLDER (R) | 1 | |
| | | VJF0242 | F.I.P. HOLDER (L) | 1 | |
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| | ■ | VEP06371A | OPERATION (1) C.B.A. | | |
| | | | | | |
| | | | DIODE | | |
| D6201-6203 | | MA165 | DIODE | 3 | <R> |
| | | | | | |
| | | | CONNECATOR | | |
| | | | | | |
| P6204 | | VJP1243T | 3P | 1 | |
| P6205 | | VJP1246T | 6P | 1 | |
| P6206 | | VJP1247T | 7P | 1 | |
| P6207 | | VJP1248T | 8P | 1 | |
| P6208 | | VJP1247T | 7P | 1 | |
| P6211 | | VJP1250T | 10P | 1 | |
| | | | | | |
| | | | RESISTORS | | |
| | | | | | |
| R6201 | | ERDS2TJ682 | CARBON 1/4W 6.8K | 1 | |
| | | | | | |
| | | | SWITCHES | | |
| | | | | | |
| SW6201 | | ESD14314 | SWITCH | 1 | <R> |
| SW6202 | | ESD14316 | SWITCH | 1 | <R> |
| SW6204 | | ESD14316 | SWITCH | 1 | <R> |
| SW6205 | | ESD14314 | SWITCH | 1 | <R> |
| SW6206 | | EVQQS307K | SWITCH | 7 | <R> |
| -6212 | | | | | |
| | | | | | |
| | | | VARIABLE RESISTORS | | |
| | | | | | |
| VR6201 | | EVJVEAE05A24 | VARIABLE 20K | 1 | |
| VR6202 | | VRV0036 | | 1 | |
| VR6203 | | EVUFMAE03B15 | VARIABLE 100K | 1 | |
| VR6204 | | EVUFSAE03B15 | | 1 | |
| VR6205 | | EVUFRAE03B24 | | 1 | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | MISCELLANEOUS | | |
| | | VGF0161 | REC. LEVEL VR SHEET | 1 | |
| | | VKM0464 | REC. LEVEL VR AUGLE | 1 | |
| | | VGU2539 | REC. LEVEL VR KNOB | 2 | |
| | | VGU2745 | METER SELECT KNOB | 1 | |
| | | VGU2725 | TIMER REC KNOB | 1 | |
| | | VGU2707 | MPX / TIMER SELECT KNOB | 1 | |
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| Ref.No. | | Part No. | Part Name & Description | Pcs | Remarks |
|---|---|---|---|---|---|
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| | ■ | VEP06372A | OPERATION (2) C.B.A. | | |
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| | | | DIODES | | |
| D6801-6815 | | MA165 | DIODE | 15 | <R> |
| | | | | | |
| | | | | | |
| | | | CONNECTORS | | |
| PS6212 | | VJS1442 | 26P | 1 | |
| | | | | | |
| | | | SWITCHES | | |
| | | | | | |
| SW6801 | | VSS0126 | SWITCH | 1 | <R> |
| SW6802 | | EVQQSB04B | SWITCH | 17 | <R> |
| -6818 | | | | | |
| SW6819 | | VSS0126 | SWITCH | 1 | <R> |
| SW6820 | | VSS0126 | SWITCH | 1 | <R> |
| SW6821 | | EVQQSB04B | SWITCH | 1 | <R> |
| SW6822 | | EVQQSB04B | SWITCH | 1 | <R> |
| SW6823 | | VSS0126 | SWITCH | 1 | <R> |
| SW6824 | | EVQQSB04B | SWITCH | 3 | <R> |
| -6826 | | | | | |
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| | | | | | |
| | | | | | |
| | | | MISCELLANEOUS | | |
| | | VWJ0236 | FLEXIBLE JUMPER | 1 | P6210-P6212 |
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| | ■ | VEP07289D | V.I.F. C.B.A. | | |
| | | | | | |
| | | | CAPACITORS | | |
| C710 | | ECKF1H103ZF | CERAMIC 50V 0.01U | 1 | |
| C712 | | ECEA1CK100 | ELECTROLYTIC 16V 10U | 1 | |
| C713 | | ECKF1H103ZF | CERAMIC 50V 0.01U | 1 | |
| C714 | | ECEA1CK330 | ELECTROLYTIC 16V 33U | 1 | |
| C721,722 | | ECKF1H103ZF | CERAMIC 50V 0.01U | 2 | |
| C723 | | ECCF1H151JC | CERAMIC 50V 150P | 1 | |
| C725,726 | | ECKF1H103ZF | CERAMIC 50V 0.01U | 2 | |
| C727 | | ECQV1H563JZ | MYLAR 50V 0.056 | 1 | |
| C728 | | ECEA1HK010 | ELECTROLYTIC 50V 1U | 1 | |
| C731 | | ECEA1HKR47 | ELECTROLYTIC 50V 0.47U | 1 | |
| C732 | | ECKF1H103ZF | CERAMIC 50V 0.01U | 1 | |
| C733 | | ECCF1H040CC | CERAMIC 50V 4P | 1 | |
| C734 | | ECEA1HK010 | ELECTROLYTIC 50V 1U | 1 | |
| C737 | | ECKF1H103ZF | CERAMIC 50V 0.01U | 1 | |
| C738 | | ECCF1H120JC | CERAMIC 50V 12P | 1 | |
| C739 | | ECCF1H560JR | CERAMIC 50V 56P | 1 | |
| C740 | | ECCF1H050CU | CERAMIC 50V 5P | 1 | |
| C741 | | ECCF1H390JR | CERAMIC 50V 39P | 1 | |
| C742 | | ECCF1H390JC | CERAMIC 50V 39P | 1 | |
| C752 | | ECCF1H050CC | CERAMIC 50V 5P | 1 | |
| C753 | | ECCF1H121JP | CERAMIC 50V 120P | 1 | |
| C754 | | ECQV1H473JZ | MYLAR 50V 0.047 | 1 | |
| C755 | | ECEA1CK470 | ELECTROLYTIC 16V 47U | 1 | |
| C756 | | ECCF1H560JP | CERAMIC 50V 56P | 1 | |
| C757 | | ECCF1H120JC | CERAMIC 50V 12P | 1 | |
| C758 | | ECEA1CK100 | ELECTROLYTIC 16V 10U | 1 | |
| C759 | | ECQV1H473JZ | MYLAR 50V 0.047 | 1 | |
| C762,763 | | ECKF1H103ZF | CERAMIC 50V 0.01U | 2 | |
| | | | | | |
| | | | DIODES | | |
| | | | | | |
| D711,712 | | MA165 | DIODE | 2 | <R> |
| D761 | | MA27WA | DIODE | 1 | <R> |
| | | | | | |
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| | | | INTEGRATED CIRCUITS | | |
| | | | | | |

| Ref.No. | | Part No. | Part Name & Description | Pcs | Remarks |
|---|---|---|---|---|---|
| IC701 | | AN5125 | IC | 1 | <R> |
| IC751 | | AN5215 | IC | 1 | <R> |
| | | | | | |
| | | | COILS | | |
| | | | | | |
| L702 | | ELQS1R0KB | COIL | 1 | |
| L703 | | ELQSR68KB | COIL | 1 | |
| L704,705 | | VLQEL05F3R3K | COIL 3.3UH | 2 | |
| L706 | | VLQEL05F180K | COIL 18UH | 1 | |
| L707 | | VLQEL05F4R7K | COIL 4.7UH | 1 | |
| | | | | | |
| | | | CONNECTORS | | |
| | | | | | |
| P701 | | VJP1245T | 5P | 1 | |
| P702 | | VJP1243T | 3P | 1 | |
| | | | | | |
| | | | TRANSISTORS | | |
| | | | | | |
| Q701 | | 2SC1047 | TRANSISTOR | 1 | (C) <R> |
| Q702 | | 2SB641 | TRANSISTOR | 1 | (Q,R,S,T) <R> |
| Q703 | | 2SD636 | TRANSISTOR | 1 | (S,T) <R> |
| Q761 | | 2SD636 | TRANSISTOR | 1 | (Q,R,S,T) <R> |
| | | | | | |
| | | | RESISTORS | | |
| | | | | | |
| R713 | | ERDS2TJ222 | CARBON 1/4W 2.2K | 1 | |
| R716 | | ERDS2TJ222 | CARBON 1/4W 2.2K | 1 | |
| R721 | | ERDS2TJ682 | CARBON 1/4W 6.8K | 1 | |
| R722 | | ERDS2TJ564 | CARBON 1/4W 560K | 1 | |
| R723 | | ERDS2TJ681 | CARBON 1/4W 680 | 1 | |
| R724 | | ERD2FCG330 | CARBON 2W 33 | 1 | <!> <R> |
| R725 | | ERDS2TJ271 | CARBON 1/4W 270 | 1 | |
| R726 | | ERDS2TJ272 | CARBON 1/4W 2.7K | 1 | |
| R727 | | ERDS2TJ331 | CARBON 1/4W 330 | 1 | |
| R733 | | ERDS2TJ102 | CARBON 1/4W 1K | 1 | |
| R734 | | ERDS2TJ683 | CARBON 1/4W 68K | 1 | |
| R736 | | ERDS2TJ470 | CARBON 1/4W 47 | 1 | |
| R737 | | ERDS2TJ184 | CARBON 1/4W 180K | 1 | |
| R739 | | ERDS2TJ561 | CARBON 1/4W 560 | 1 | |
| R740 | | ERDS2TJ222 | CARBON 1/4W 2.2K | 1 | |
| R741 | | ERDS2TJ221 | CARBON 1/4W 220 | 1 | |
| R742 | | EROS2CKG1001 | METAL OXIDE 1/4W 1K | 1 | |
| R743 | | EROS2CKG8200 | METAL OXIDE 1/4W 820 | 1 | |
| R744 | | ERDS2TJ822 | CARBON 1/4W 8.2K | 1 | |
| R745 | | ERDS2TJ680 | CARBON 1/4W 68 | 1 | |
| R746 | | ERDS2TJ151 | CARBON 1/4W 150 | 1 | |
| R747 | | ERDS2TJ102 | CARBON 1/4W 1K | 1 | |
| R748 | | ERDS2TJ390 | CARBON 1/4W 39 | 1 | |
| R751 | | ERDS2TJ471 | CARBON 1/4W 470 | 1 | |
| R752 | | ERD2FCG220 | CARBON 2W 22 | 1 | <!> <R> |
| R753 | | ERDS2TJ152 | CARBON 1/4W 1.5K | 1 | |
| R761 | | ERDS2TJ102 | CARBON 1/4W 1K | 1 | |
| R762 | | ERDS2TJ103 | CARBON 1/4W 10K | 1 | |
| | | | | | |
| | | | TRANSFORMER | | |
| | | | | | |
| T701 | | EIV7EG006B | HIGH FREQUENCY COIL | 1 | |
| T703 | | EIV7E016A | HIGH FREQUENCY COIL | 1 | |
| T704 | | EIV7E018C | HIGH FREQUENCY COIL | 1 | |
| T705 | | EIK7EG001B | CHOKE COIL | 1 | |
| T751 | | EIS7E006A | IF TRANSFORMER | 1 | |
| T752 | | EIS7E006B | IF TRANSFORMER | 1 | |
| | | | | | |
| | | | VARIABLE RESISTORS | | |
| | | | | | |
| VR701,702 | | EVNE4AA00B23 | VARIABLE 2K | 2 | |
| VR751 | | EVNE4AA00B24 | VARIABLE 20K | 1 | |
| | | | | | |
| | | | CRISTAL OSCILLATORS | | |
| | | | | | |
| X701 | | EFCH45MVK2K | | 1 | |
| X702 | | EFCS4R5MS4 | CERAMIC FILTER 4.5MHZ | 1 | |
| X703 | | EFCS4R5MW3 | CERAMIC FILTER 4.5MHZ | 1 | |

| Ref.No. | | Part No. | Part Name & Description | Pcs | Remarks |
|---|---|---|---|---|---|
| | | | | | |
| | | | MISCELLANEOUS | | |
| | | VSC1282 | SHIELD CASE (UPPER) | 1 | |
| | | VSC1339 | SHIELD CASE (MIDDLE) | 1 | |
| | | VSC1283 | SHIELD CASE (LOWER) | 1 | |
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| | ■ | VEP07290A | TUNER C.B.A. | | |
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| | | | DIODES | | |
| D701,702 | | RD8.2JS3 | ZENER | 2 | OR RD8.2JS2 <R> |
| | | | | | |
| | | | RESISTORS | | |
| | | | | | |
| R701 | | ERDS2TJ123 | 12K | 1 | |
| R702 | | ERDS2TJ392 | 3.9K | 1 | |
| R703,704 | | ERDS2TJ182 | 1.8K | 2 | |
| R705,706 | | ERDS2TJ272 | 2.7K | 2 | |
| R707 | | ERDS2TJ102 | 1K | 1 | |
| R735 | | ERDS2TJ823 | 82K | 1 | |
| R763 | | ERDS2TJ222 | 2.2K | 1 | |
| | | | | | |
| | | | CAPACITORS | | |
| | | | | | |
| C701 | | ECEA1CKS220 | ELECTROLYTIC 16V 22U | 1 | |
| C702 | | ECEA1EKS4R7 | ELECTROLYTIC 25V 4.7U | 1 | |
| C705 | | ECEA1CKS220 | ELECTROLYTIC 16V 22U | 1 | |
| C706 | | ECQV1H563JZ | MYLAR 50V 0.056U | 1 | |
| C707 | | ECEA1HKS010 | ELECTROLYTIC 50V 1U | 1 | |
| C708 | | ECEA1CKS220 | ELECTROLYTIC 16V 22U | 1 | |
| C709 | | ECKF1H103ZF | CERAMIC 50V 0.01U | 1 | |
| | | | | | |
| | | | COIL | | |
| | | | | | |
| L701 | | VLQEL05F680K | 68UH | 1 | |
| | | | | | |
| | | | CONNECTOR | | |
| | | | | | |
| P703 | | VJP1251T | 11P | 1 | |
| P704 | | VJP1148 | 2P | 1 | |
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| | | | MISCELLANEOUS | | |
| | | TNV56464F2 | TUNER | 1 | <R><!> |
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| | | | | | |
| | ■ | ENC86709 | RF CONVERTER & ANTENNA | | <R><!> |
| | | | BOOSTER UNIT | | |
| | | | | | |
| | | | TRANSISTORS | | |
| | | | | | |
| Q11-14 | | 2SC3120 | | 4 | OR 2SC2735,2SC3130, |
| | | | | | 2SC3082,2SC2480 <R> |
| | | | | | |
| | | | DIODE | | |
| | | | | | |
| D1 | | MA1062 | ZENER | 1 | OR HZ6C1,HZ6C2, <R> |
| | | | | | |
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| | ■ | VEP07346A | TIMER C.B.A. | | |
| | | | | | |
| | | | CAPACITORS | | |
| C7501 | | ECCF1H080DC | CERAMIC 50V 8P | 1 | |
| C7502 | | ECRHA050G41 | 50P | 1 | |
| C7503 | | ECKF1H103ZF | CERAMIC 50V 0.01U | 1 | |

| Ref.No. | | Part No. | Part Name & Description | Pcs | Remarks |
|---|---|---|---|---|---|
| C7504 | | ECCF1H330JC | CERAMIC 50V 33P | 1 | |
| C7505 | | ECCF1H220JC | CERAMIC 50V 22P | 1 | |
| C7506 | | ECQV1H104JZ | MYLAR 50V 0.1U | 1 | |
| C7507 | | EECF5R5U105 | 5.5V 1F | 1 | |
| C7508 | | ECEA1HKR22 | ELECTROLYTIC 50V 0.22U | 1 | |
| C7509 | | ECEA1AK330 | ELECTROLYTIC 10V 33U | 1 | |
| C7510 | | ECEA1AK101 | ELECTROLYTIC 10V 100U | 1 | |
| C7511 | | ECKF1H103ZF | CERAMIC 50V 0.01U | 1 | |
| C7512 | | ECQP1562JZ | MYLAR 5600P | 1 | |
| C7513,7514 | | ECCF1H470JC | CERAMIC 50V 47P | 2 | |
| C7515 | | ECQV1H104JZ | MYLAR 50V 0.1U | 1 | |
| C7516 | | ECQV1H683JZ | MYLAR 50V 0.068U | 1 | |
| C7517 | | ECQB1H273JH | MYLAR 50V 0.027U | 1 | |
| C7518 | | ECQV1H823JZ | MYLAR 50V 0.082U | 1 | |
| C7519 | | ECQB1H103JZ | MYLAR 50V 0.01U | 1 | |
| C7520-7522 | | ECKF1H103ZF | CERAMIC 50V 0.01U | 3 | |
| C7523 | | ECEA1HK010 | ELECTROLYTIC 50V 1U | 1 | |
| C7524 | | ECKF1H103ZF | CERAMIC 50V 0.01U | 1 | |
| C7525 | | ECQB1H272JH | MYLAR 50V 2700P | 1 | |
| C7526 | | ECEA1CK470 | ELECTROLYTIC 16V 47U | 1 | |
| C7527 | | ECEA1HK100 | ELECTROLYTIC 50V 10U | 1 | |
| C7528 | | ECQV1H473JZ | MYLAR 50V 0.047U | 1 | |
| C7530 | | ECQV1H104JZ | MYLAR 50V 0.01U | 1 | |
| C7531 | | ECQB1H102JH | MYLAR 50V 1000P | 1 | |
| C7532 | | ECEA1HK010 | ELECTROLYTIC 50V 1U | 1 | |
| C7539 | | ECQV1H104JZ | MYLAR 50V 0.1U | 1 | |
| C7540 | | ECEA1HK010 | ELECTROLYTIC 50V 1U | 1 | |
| C7541,7542 | | ECKF1H103ZF | CERAMIC 50V 0.01U | 2 | |
| C7543 | | ECEA1HK010 | ELECTROLYTIC 50V 1U | 1 | |
| C7544 | | ECKF1H103ZF | CERAMIC 50V 0.01U | 1 | |
| C7545 | | ECEA1CKN330 | ELECTROLYTIC 16V 33U | 1 | |
| C7546 | | ECQB1H103JZ | MYLAR 50V 0.01U | 1 | |
| C7547 | | ECQB1H392JH | MYLAR 50V 3900P | 1 | |
| C7548 | | ECEA1HK010 | ELECTROLYTIC 50V 1U | 1 | |
| C7549 | | ECEA1HK010 | ELECTROLYTIC 50V 1U | 1 | |
| C7551 | | ECEA1HK2R2 | ELECTROLYTIC 50V 2.2U | 1 | |
| | | | | | |
| | | | DIDES | | |
| | | | | | |
| D7501,7502 | | MA165 | | 2 | <R> |
| D7503,7504 | | LN31GCPHL | | 2 | <R> |
| D7505 | | LN81RCPHL | | 1 | <R> |
| D7506 | | ERA1501 | | 1 | <R> |
| D7509 | | MA27WB | | 1 | <R> |
| D7510 | | LN28WPVT | | 1 | <R> |
| D7511 | | MA165 | | 1 | <R> |
| D7512 | | ERA1501 | | 1 | <R> |
| D7514,7515 | | MA165 | | 2 | <R> |
| D7518,7519 | | MA165 | | 2 | <R> |
| D7520 | | MA27TB | | 1 | <R> |
| D7521,7522 | | MA165 | | 2 | <R> |
| D7523 | | MA4075M | | 1 | <R> |
| D7523 | | MA4075L | | 1 | <R> |
| D7524 | | MA165 | | 1 | <R> |
| D7525 | | MA4130L | | 1 | <R> |
| D7526 | | MA165 | | 1 | <R> |
| D7527 | | ERA1501 | | 1 | <R> |
| D7528 | | MA165 | | 1 | <R> |
| D7529-7533 | | LN28RCPP | | 5 | <R> |
| D7535,7536 | | MA165 | | 2 | <R> |
| | | | | | |
| | | | INTEGRATED CIRCUITS | | |
| | | | | | |
| IC7501 | | MN1455BVLK | | 1 | <R> |
| IC7503 | | MN1512VQF | | 1 | <R> |
| IC7504 | | MN1219 | | 1 | <R> |
| IC7505 | | AN5033 | | 1 | <R> |
| IC7506 | | MN1280P | | 1 | <R> |
| IC7507 | | AN5421 | | 1 | <R> |
| IC7508 | | MN4050B | | 1 | OR MSM4050B <R> |
| IC7509 | | AN6913 | | 1 | <R> |
| IC7510 | | MN4066B | | 1 | <R> |
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| | | | COILS | | |
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| Ref.No. | | Part No. | Part Name & Description | Pcs | Remarks |
|---|---|---|---|---|---|
| L7501 | | VLQEL05F102K | 1mH | 1 | |
| | | | | | |
| | | | CONNECTORS | | |
| | | | | | |
| P7501 | | VJP1511T | 11P | 1 | |
| P7502 | | VJP1237T | 10P | 1 | |
| P7503 | | VJP1239T | 12P | 1 | |
| P7504 | | VJP1229T | 2P | 1 | |
| P7505 | | VJP1230T | 3P | 1 | |
| P7507 | | VJP1232T | 5P | 1 | |
| P7508 | | VJP1233T | 6P | 1 | |
| P7509 | | VJP1230T | 3P | 1 | |
| P7511 | | VJP1237T | 10P | 1 | |
| | | | | | |
| | | | TRANSISTORS | | |
| | | | | | |
| Q7501-7503 | | 2SD636 | | 3 | (Q,R,S) <R> |
| Q7507,7508 | | 2SB644 | | 2 | (Q,R) <R> |
| Q7510 | | 2SD637 | | 1 | (Q,R,S) <R> |
| Q7511 | | 2SB641 | | 1 | (Q,R,S) <R> |
| Q7512,7513 | | 2SD636 | | 2 | (Q,R,S) <R> |
| | | | | | |
| | | | COMBINATION PARTS | | |
| | | | | | |
| QR7501 | | UN1112 | | 1 | <R> |
| QR7502 | | UN1213 | | 1 | <R> |
| QR7503 | | UN1211 | | 2 | <R> |
| ,7504 | | | | | |
| QR7505 | | UN1213 | | 2 | <R> |
| ,7506 | | | | | |
| QR7507 | | UN1211 | | 1 | <R> |
| QR7511 | | UN1211 | | 1 | <R> |
| | | | | | |
| | | | RESISTORS | | |
| | | | | | |
| R7501 | | ERDS2TJ122 | 1200 | 1 | |
| R7502 | | ERC14GJ126 | 12M | 1 | |
| R7503 | | ERDS2TJ102 | 1000 | 1 | |
| R7505,7506 | | ERDS2TJ223 | 22K | 2 | |
| R7507 | | ERDS2TJ181 | 180 | 1 | |
| R7508 | | ERDS2TJ331 | 330 | 1 | |
| R7509 | | ERDS2TJ122 | 1200 | 1 | |
| R7510 | | ERDS2TJ472 | 4700 | 1 | |
| R7511 | | ERDS2TJ562 | 5600 | 1 | |
| R7512,7513 | | ERDS2TJ152 | 1500 | 2 | |
| R7514 | | ERDS2TJ102 | 1000 | 1 | |
| R7515 | | ERDS2TJ273 | 27K | 1 | |
| R7516 | | ERDS2TJ473 | 47K | 1 | |
| R7517 | | ERDS2TJ224 | 220K | 1 | |
| R7522 | | ERDS2TJ222 | 2200 | 1 | |
| R7523-7525 | | ERDS2TJ221 | 220 | 3 | |
| R7526,7527 | | ERDS2TJ104 | 100K | 2 | |
| R7528 | | ERDS2TJ103 | 10K | 1 | |
| R7529 | | ERDS2TJ473 | 47K | 1 | |
| R7530 | | ERDS2TJ104 | 100K | 1 | |
| R7531 | | ERDS2TJ124 | 120K | 1 | |
| R7535 | | ERDS2TJ181 | 180 | 1 | |
| R7539 | | ERDS2TJ390 | 39 | 1 | |
| R7540 | | ERDS2TJ820 | 82 | 1 | |
| R7541 | | ERDS2TJ333 | 33K | 1 | |
| R7542 | | ERDS2TJ473 | 47K | 1 | |
| R7545 | | ERDS2TJ103 | 10K | 1 | |
| R7546 | | ERDS2TJ273 | 27K | 1 | |
| R7547 | | ERDS2TJ104 | 100K | 1 | |
| R7548 | | ERDS2TJ332 | 3300 | 1 | |
| R7549 | | ERDS2TJ104 | 100K | 1 | |
| R7550 | | ERDS2TJ181 | 180 | 1 | |
| R7551,7552 | | ERDS2TJ472 | 4700 | 2 | |
| R7554 | | ERDS2TJ473 | 47K | 1 | |
| R7555 | | ERDS2TJ332 | 3300 | 1 | |
| R7556 | | ERDS2TJ105 | 1M | 1 | |
| R7560 | | ERDS2TJ222 | 2200 | 1 | |
| R7561 | | ERDS2TJ822 | 8200 | 1 | |
| R7562 | | ERDS2TJ103 | 10K | 1 | |
| R7563 | | ERDS2TJ472 | 4700 | 1 | |
| | | | | | |
| | | | | | |

| Ref.No. | | Part No. | Part Name & Description | Pcs | Remarks |
|---|---|---|---|---|---|
| R7564 | | ERDS2TJ103 | 10K | 1 | |
| R7565 | | ERDS2TJ333 | 33K | 1 | |
| R7566 | | ERDS2TJ102 | 1000 | 1 | |
| R7567 | | ERDS2TJ333 | 33K | 1 | |
| R7568,7569 | | ERDS2TJ473 | 47K | 2 | |
| R7570 | | ERDS2TJ332 | 3300 | 1 | |
| R7571 | | ERDS2TJ102 | 1000 | 1 | |
| R7572 | | ERDS2TJ223 | 22K | 1 | |
| R7573,7574 | | ERDS2TJ681 | 680 | 2 | |
| R7575 | | ERDS2TJ334 | 330K | 1 | |
| R7576 | | ERDS2TJ223 | 22K | 1 | |
| R7577 | | ERDS2TJ473 | 47K | 1 | |
| R7578,7579 | | ERDS2TJ681 | 680 | 2 | |
| R7583 | | ERDS2TJ473 | 47K | 1 | |
| R7584 | | ERDS2TJ334 | 330K | 1 | |
| R7585 | | ERDS2TJ124 | 120K | 1 | |
| R7586 | | ERDS2TJ473 | 47K | 1 | |
| R7587 | | ERDS2TJ681 | 680 | 1 | |
| R7588 | | ERDS2TJ472 | 4700 | 1 | |
| R7589 | | ERDS2TJ393 | 39K | 1 | |
| R7590 | | ERDS2TJ101 | 100 | 1 | |
| R7591 | | ERDS2TJ471 | 470 | 1 | |
| R7592 | | ERDS2TJ562 | 5600 | 1 | |
| R7593 | | ERDS2TJ151 | 150 | 1 | |
| R7594 | | ERDS2TJ472 | 4700 | 1 | |
| R7595 | | ERDS2TJ104 | 100K | 1 | |
| R7596 | | ERDS2TJ221 | 220 | 1 | |
| R7597 | | ERDS2TJ562 | 5600 | 1 | |
| R7598 | | ERDS2TJ393 | 39K | 1 | |
| R7599 | | ERDS2TJ221 | 220 | 1 | |
| R7600 | | ERDS2TJ472 | 4700 | 1 | |
| R7601 | | ERDS2TJ392 | 3900 | 1 | |
| R7602,7603 | | ERDS2TJ823 | 8.2K | 2 | |
| | | | | | |
| | | | SWITCHES | | |
| | | | | | |
| SW7501 | | EVQQS307K | | 7 | <R> |
| -7507 | | | | | |
| | | | VARIABLE RESISTORS | | |
| | | | | | |
| | | | | | |
| VR7501 | | EVN61AA00B14 | 10KB | 1 | |
| VR7502 | | EVMK3GA00B23 | 2KB | 1 | |
| | | | | | |
| | | | CRYSTAL OSCILLATORS | | |
| | | | | | |
| X7501 | | VSX0140 | 4.19MHz | 1 | |
| X7502 | | VSX0094 | 32KHz | 1 | |
| X7503 | | VSX0082 | 3.58MHz | 1 | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | VMZ0742 | SHIELD BARRIER (Al) | 1 | |
| | | VMZ0743 | SHIELD BARRIER | 1 | |
| | | VHN0041 | RIVET | 3 | |
| | | VKC0128 | HINGE | 2 | |
| | | VKC0068 | HINGE CRIP | 2 | |
| | | VJF0102 | WIRE CRIPPER | 1 | |
| | | VGH0708 | NAME PLATE | 1 | |
| | | VGQ0457 | LED SPACER | 5 | |
| | | VGQ0868 | VR CASE | 1 | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | ■ | VEP07347A | TIMER DISPLAY C.B.A. | | |
| | | | | | |
| | | | CAPACITORS | | |
| C7529 | | ECKF1H331KB | CERAMIC 50V 330P | 1 | |
| C7533 | | ECEA1CK100 | ELECTROLYTIC 16V 10U | 1 | |
| C7534 | | ECEA1CK470U | ELECTROLYTIC 16V 47U | 1 | |
| C7535 | | ECEA1EK4R7 | ELECTROLYTIC 25V 4.7U | 1 | |
| C7536 | | ECEA1CK100 | ELECTROLYTIC 16V 10U | 1 | |
| | | | | | |
| | | | | | |

| Ref.No. | | Part No. | Part Name & Description | Pcs | Remarks |
|---|---|---|---|---|---|
| C7537 | | ECQP1182JZ | MYLAR 1800P | 1 | |
| C7538 | | ECQB1H183JH | MYLAR 50V 0.018U | 1 | |
| C7550 | | ECEA1CK100 | ELECTROLYTIC 16V 10U | 1 | |
| | | | | | |
| | | | DIODES | | |
| | | | | | |
| D7507,7508 | | LN28RCPP | | 2 | <R> |
| D7513 | | LN28RCPP | | 1 | <R> |
| D7516 | | LN28RCPP | | 1 | <R> |
| D7517 | | MA165 | | 1 | <R> |
| D7534 | | PN313 | | 1 | <R> |
| | | | | | |
| | | | | | |
| | | | | | |
| DP7501 | | VSL0049 | | 1 | <R> |
| | | | | | |
| | | | INTEGRATED CIRCUITS | | |
| | | | | | |
| IC7502 | | AN6873N | | 1 | <R> |
| IC7511 | | UPC1373HA | | 1 | <R> |
| | | | | | |
| | | | TRANSISTORS | | |
| | | | | | |
| Q7504-7506 | | 2SD636 | | 3 | (Q,R,S) <R> |
| Q7509 | | 2SD636 | | 1 | (Q,R,S) <R> |
| | | | | | |
| | | | COMBINATION PARTS | | |
| | | | | | |
| QR7508 | | UN1112 | | 3 | <R> |
| -7510 | | | | | |
| | | | | | |
| | | | RESISTORS | | |
| | | | | | |
| R7504 | | ERDS2TJ102 | 1000 | 1 | |
| R7518-7521 | | ERDS2TJ473 | 47K | 4 | |
| R7532-7534 | | ERDS2TJ223 | 22K | 3 | |
| R7536 | | ERDS2TJ223 | 22K | 1 | |
| R7537,7538 | | ERDS2TJ102 | 1000 | 2 | |
| R7543,7544 | | ERDS2TJ102 | 1000 | 2 | |
| R7553 | | ERDS2TJ470 | 47 | 1 | |
| R7557-7559 | | ERDS2TJ473 | 47K | 3 | |
| R7580 | | ERDS2TJ224 | 220K | 1 | |
| R7581 | | ERDS2TJ560 | 56 | 1 | |
| R7582 | | ERDS2TJ102 | 1000 | 1 | |
| | | | | | |
| | | | | | |
| | | | SWITCHE | | |
| SW7508 | | EVQQS307K | | 1 | <R> |
| | | | | | |
| | | | TRANSFORMERS | | |
| | | | | | |
| T7580 | | ELM7Q206A | | 1 | OR EIR7QE007B |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | MISCELLANEOUS | | |
| | | VJB00H17 | IR RECEIVER C.B. | 1 | |
| | | VSL0049 | DISPLAY TUBE | 1 | |
| | | KL04 | LED SPACER | 3 | |
| | | VJF0252 | F.I.P. HOLDER (L) | 1 | |
| | | VJF0253 | F.I.P. HOLDER (R) | 1 | |
| | | VMX0469 | F.I.P. SPACER | 2 | |
| | | VMX0964 | LED SPACER (L) | 1 | |
| | | VSC1608 | IR SHIELD CASE (UPPER) | 1 | |
| | | VSC1506 | IR SHIELD CASE (MIDDLE) | 1 | |
| | | VSC1507 | IR SHIELD CASE (LOWER) | 1 | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | ■ | | HEAT SINK C.B. | | |
| | | | | | |
| | | | CONNECTORS | | |
| P1507 | | VJP1233T | 6P | 1 | |
| | | | | | |
| | | | | | |

| Ref.No. | | Part No. | Part Name & Description | Pcs | Remarks |
|---|---|---|---|---|---|
| | | | TRANSISTORS | | |
| Q1501,1502 | | 2SD1275 | TRANSISTOR | 2 | <R> |
| | ■ | | POWER TRANSISTOR C.B. | | |
| | | | CAPACITORS | | |
| C1109,1110 | | ECKF1H103ZF | CERAMIC 50V 0.01U | 2 | |
| | | | DIODE | | |
| D1101 | | RB402 | | 1 | <!><R> |
| | | | CONNECTORS | | |
| P1512 | | VJP1244T | 4P | 1 | |
| P1513,1514 | | VJP1243T | 3P | 2 | |
| | | | TRANSISTORS | | |
| Q1010 | | 2SD1275 | TRANSISTOR | 1 | <R> |
| Q1011 | | 2SD1273 | TRANSISTOR | 1 | <R> |
| | ■ | | FRONT CONNECTION C.B. | | |
| | | | CONNECTORS | | |
| P6201 | | VJP1234T | 7P | 1 | |
| P6202 | | VJP1393T | 13P | 1 | |
| P6203 | | VJP1232T | 5P | 1 | |
| PS6210 | | VJS1800 | 26P | 1 | |
| | ■ | | TENSION SENSOR C.B. | | |
| | | | TRANSISTOR | | |
| Q1504 | | ON1301 | PHOTO COUPLER | 1 | (Q):R1502 is ERDS2TJ102 <R> |
| | | | | | (R):R1502 is ERDS2TJ182 <R> |
| | | | RESISTORS | | |
| R1502 | | ERDS2TJ102 | 1K | 1 | IN Case Q1504 is ON 1301 (Q) |
| R1502 | | ERDS2TJ182 | 1.8K | 1 | IN Case Q1504 is ON 1301 (R) |
| | ■ | | SUPPLY PHOTO TR. C.B. | | |
| | | | TRANSISTOR | | |
| Q1502 | | PN150NV | | 1 | <R> |
| | | | CAPACITOR | | |
| C1502 | | ECKF1H102KB | CERAMIC 50V 1000P | 1 | |
| | | | MISCELLANEOUS | | |
| | | VMD0645 | PHOTO TR. HOLDER | 1 | |

| Ref.No. | | Part No. | Part Name & Description | Pcs | Remarks |
|---|---|---|---|---|---|
| | ■ | | FRONT LOADING C.B. | | |
| | | | CONNECTORS | | |
| P1510 | | VJP1247T | 7P | 1 | |
| | | | TRANSISTOR | | |
| Q1503 | | PN150NV | PHOTO TRANSISTOR | 1 | <R> |
| | | | MISCELLANEOUS | | |
| | | VMD0645 | TRANSISTOR HOLDER | 1 | |
| | ■ | | MECHANISM CONNECTION C.B. | | |
| | | | CONNECTORS | | |
| P1502 | | VJP1248T | 8P | 1 | |
| P1503,1504 | | VJP1242T | 2P | 2 | |
| | ■ | | ERASE CONNECTION C.B. | | |
| | | VJP1243T | 3P | 1 | |
| | ■ | | FULL ERASE HEAD C.B. | | |
| | | | COIL | | |
| L1501 | | VLQEL05F221K | COIL | 1 | |
| | | | CONNECTOR | | |
| P654 | | VJP1229T | 2P | 1 | |
| | | | TRANSISTOR | | |
| Q1503 | | 2SC2603A | TRANSISTOR | 1 | <R> |
| | | | TRANSFORMER | | |
| T1501 | | VTD0014 | TRANSFORMER | 1 | |
| | ■ | VEK3077 | SEARCH DIAL UNIT | | |
| | | | CONNECTORS | | |
| P6701 | | VJP1235T | 8P | 1 | |
| P6702 | | VJP1232T | 5P | 1 | |
| | | | MISCELLANEOUS | | |
| | | VLL0039 | INDICATOR UNIT | 1 | |
| | | VMP0846 | DIAL ANGLE | 1 | |
| | | VHN0056 | NUT | 1 | |

Order No. VRD8709S207
D1

# Service Manual

Supplement

Effective from: First Production

Video Product

Model No. AG-A95
AG-A95 Bulletin No. 1

## Subject: Correction of Parts List

Please use this manual together with the Service Manual for Order No. VRD8607218
Model No. AG-A95

Please correct the part number of the Grounding Code as follows:

*Interchangeability Code* See the I/C column on the following Part Number list.

| | Parts | Set Production | | | Parts | Set Production | | | Parts | Set Production | | | Parts | Set Production | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| A | Original | Early | B | | Original | Early | C | | Original | Early | D | | Original | Early | E | Addition |
| | New | Late | | | New | Late | | | New | Late | | | New | Late | F | Deletion |
| | | | | | | | | | | | | | | | G | Other |

*Part Number*

| Ref. No. | Original Part No. | New Part No. | Part Name & Descriptions | I/C | Remarks |
|---|---|---|---|---|---|
| 15 (1) | VEE3297 | VEE3387 | Grounding Code | G | |

Panasonic®

Panasonic Industrial Company
Division of Matsushita Electric
Corporation of America
Two Panasonic Way Secaucus,
New Jersey 07094

Panasonic Hawaii Inc.
91-238 Kauhi St. Ewa Beach
P.O. Box 774
Honolulu, Hawaii 96808-0774

Matsushita Electric
of Canada Limited
5770 Ambler Drive, Mississauga,
Ontario, L4W 2T3

Panasonic Sales Company,
Division of Matsushita Electric
of Puerto Rico, Inc.
Ave. 65 De Infanteria, KM 9.7
Victoria Industrial Park
Carolina, Puerto Rico 00630

Printed in Japan

Order No. VRD8709S203
D1

# Service Manual

Supplement

Effective from: Running Change

Video Product

Model No. AG-1950
AG-1950 Bulletin No. 2

## Subject: Change of Integrated Circuit

Please use this manual together with the Service Manual for Order No. VRD8607217
Model No. AG-1950

The following ICs have been changed for the standardization.

*Interchangeability Code* See the I/C column on the following Part Number list.

| | Parts | Set Production | | Parts | Set Production | | Parts | Set Production | | Parts | Set Production | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| A | Original | Early | B | Original | Early | C | Original | Early | D | Original | Early | E | Addition |
| | New | Late | | New | Late | | New | Late | | New | Late | F | Deletion |
| | | | | | | | | | | | | G | Other |

*Part Number*

| Ref. No. | Original Part No. | New Part No. | Part Name & Descriptions | I/C | Remarks |
|---|---|---|---|---|---|
| IC2002 | AN6562 | UPC358C | IC | A | |
| IC2003 | AN6914 | UPC393C | IC | A | |
| IC2004 | AN6562 | UPC358C | IC | A | |
| IC3502 | AN6562 | UPC358C | IC | A | |
| IC2504 | AN6912 | UPC339C | IC | A | |

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Panasonic Industrial Company
Division of Matsushita Electric
Corporation of America
Two Panasonic Way Secaucus,
New Jersey 07094

Panasonic Hawaii Inc.
91-238 Kauhi St. Ewa Beach
P.O. Box 774
Honolulu, Hawaii 96808-0774

Matsushita Electric
of Canada Limited
5770 Ambler Drive, Mississauga,
Ontario, L4W 2T3

Panasonic Sales Company,
Division of Matsushita Electric
of Puerto Rico, Inc.
Ave. 65 De Infanteria, KM 9.7
Victoria Industrial Park
Carolina, Puerto Rico 00630

Printed in Japan

Order No. VRDS860808
D1

# Service Manual

Supplement

Effective from: First Production

Video Product

Model No. AG-A95
AG-A95 Bulletin No. 1

## Subject: Correction of Part Number

Please use this manual together with the Service Manual for Order No. VRD8607218
Model No. AG-A95

Please correct the part number for the LCD Display Tube as follows:

*Interchangeability Code* See the I/C column on the following Part Number list.

| | Parts | Set Production | | Parts | Set Production | | Parts | Set Production | | Parts | Set Production | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| A | Original | Early | B | Original | Early | C | Original | Early | D | Original | Early | E | Addition |
| | New | Late | | New | Late | | New | Late | | New | Late | F | Deletion |
| | | | | | | | | | | | | G | Other |

*Part Number*

| Ref. No. | Original Part No. | New Part No. | Part Name & Descriptions | I/C | Remarks |
|---|---|---|---|---|---|
| LCD | VSL0092 | VSL0106 | LCD Display Tube | G | |


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**Panasonic Industrial Company**
**Division of Matsushita Electric**
**Corporation of America**
One Panasonic Way Secaucus,
New Jersey 07094

**Panasonic Hawaii Inc.**
91-238 Kauhi St. Ewa Beach
P.O. Box 774
Honolulu, Hawaii 96808-0774

**Matsushita Electric**
**of Canada Limited**
5770 Ambler Drive, Mississauga,
Ontario, L4W 2T3

**Panasonic Sales Company,**
**Division of Matsushita Electric**
**of Puerto Rico, Inc.**
Ave. 65 De Infanteria, KM 9.7
Victoria Industrial Park
Carolina, Puerto Rico 00630


Printed in Japan

Order No. VRDS860801
D1

# Service Manual

Supplement

Effective from: First Production

Video Product

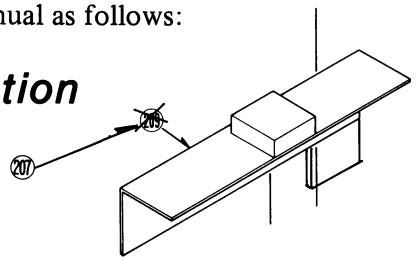
Model No. AG-1950
AG-1950 Bulletin No. 1

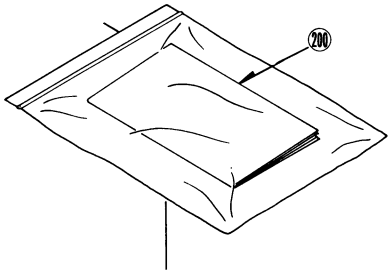
## Subject: Correction of Service Manual

Please use this manual together with the Service Manual for Order No. VRD8607217
Model No. AG-1950

Please correct your service manual as follows:

## ❺ Packing Parts Section




*Interchangeability Code* See the I/C column on the following Part Number list.

| | Parts | Set Production | | | Parts | Set Production | | | Parts | Set Production | | | Parts | Set Production | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| A | Original | Early | B | | Original | Early | C | | Original | Early | D | | Original | Early | E | Addition |
| | New | Late | | | New | Late | | | New | Late | | | New | Late | F | Deletion |
| | | | | | | | | | | | | | | | G | Other |

*Part Number*

| Ref. No. | Original Part No. | New Part No. | Part Name & Descriptions | I/C | Remarks |
|---|---|---|---|---|---|
| 3 (1) | VDR0970 | VDP0970 | Limiter Roller | G | |
| 200 (5) | VQF1805 | – | Fan Bag Kit | G | For U.S.A. Model <!> |
| 200 (5) | – | VQT1999 | Operating Instructions | G | |
| 200 (5) | VQF1806 | – | Fan Bag Kit | G | For Canadian Model <!> |
| 200 (5) | – | VQT2000 | Operating Instructions | G | |
| 207 (5) | VPN1399 | VPN1729 | Top Pad | G | |
| D2506 | MA4075HML | MA4075M | Diode | G | |
| D2507 | MA4075HML | MA4075M | Diode | G | |
| ■ | VEP04169 | VEP04169A | Audio C.B.A. | G | |
| VR6204 | EVUFSAE03B15 | EVUFMAE03B15 | Variable Resistor | G | |
| VR6205 | EVUFRAE03B24 | EVUFLAE03B24 | Variable Resistor | G | |
| Q11~Q14 | 2SC3120 | 2SC2480 | Transistor | G | |
| D7506 | ERA1501 | ERA15-01 | Diode | G | |
| D7512 | ERA1501 | ERA15-01 | Diode | G | |

Panasonic


**Panasonic Industrial Company**
**Division of Matsushita Electric Corporation of America**
One Panasonic Way Secaucus, New Jersey 07094

**Panasonic Hawaii Inc.**
91-238 Kauhi St. Ewa Beach
P.O. Box 774
Honolulu, Hawaii 96808-0774

**Matsushita Electric of Canada Limited**
5770 Ambler Drive, Mississauga, Ontario, L4W 2T3

**Panasonic Sales Company, Division of Matsushita Electric of Puerto Rico, Inc.**
Ave. 65 De Infanteria, KM 9.7
Victoria Industrial Park
Carolina, Puerto Rico 00630


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