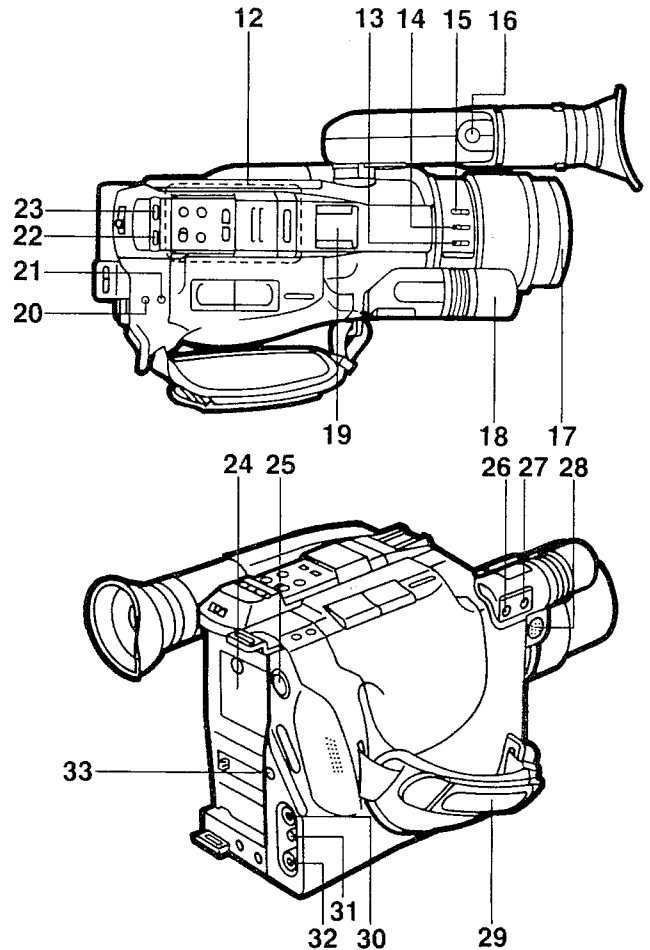
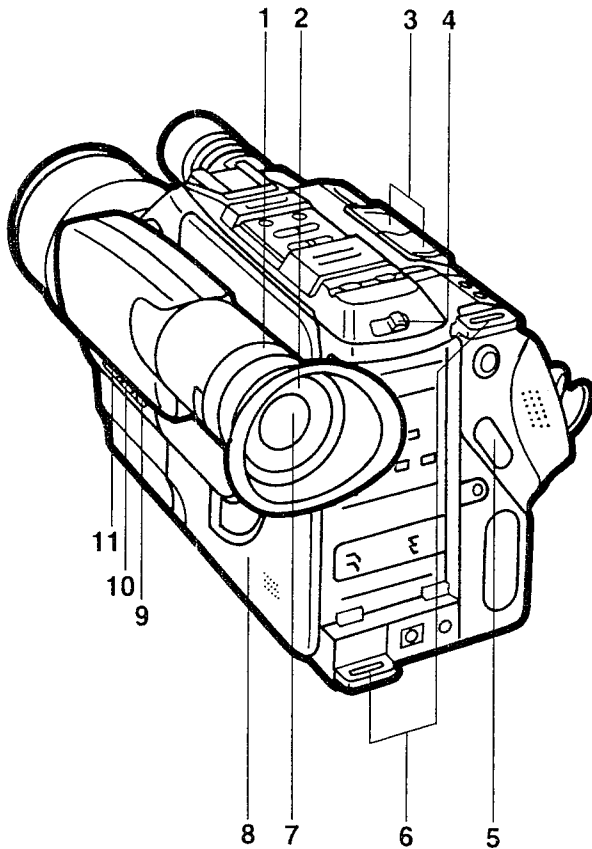


# SECTION 1

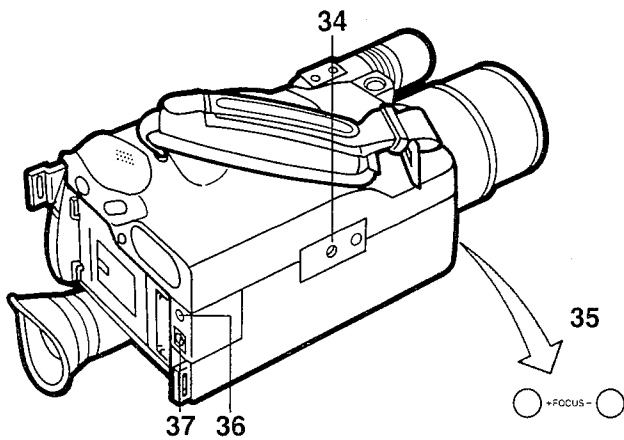
## GENERAL DESCRIPTIONS

### 1-1. CONTROLS AND COMPONENTS

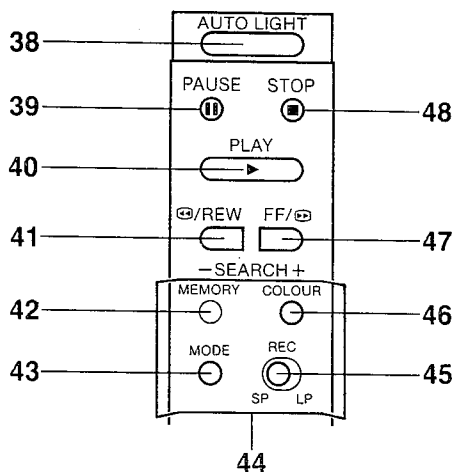


- 1 Eyepiece Corrector Control
- 2 Eyecup
- 3 Power Zoom Control Buttons
- 4 Operation Switch
- 5 Recording Start/Stop Buttons
- 6 Shoulder Strap Holder
- 7 Electronic Viewfinder
- 8 Cassette Compartment
- 9 Title Button (NV-G2E/B/A, G200EN)
- 10 Fade Button
- 11 Date/Time Selector

- 12 General Operation Controls
- 13 White Balance Button
- 14 High Speed Shutter
- 15 Focus Button
- 16 Eject Button
- 17 White Cap
- 18 Microphone
- 19 Light Shoe
- 20 Tracking/Date/Time Shift Button
- 21 Tracking/Time Set Button
- 22 Reset Button
- 23 Memory Display Button
- 24 Button Battery Compartment
- 25 Edit Socket (NV-G2E/B/A, G200EN)
- 26 Earphone Socket
- 27 External Microphone Socket
- 28 Character Generator Socket (NV-G2E/B/A, G200EN)
- 29 Grip Belt
- 30 Video Output Socket
- 31 RF DC Output Socket
- 32 Audio Output Socket
- 33 Battery Eject Button



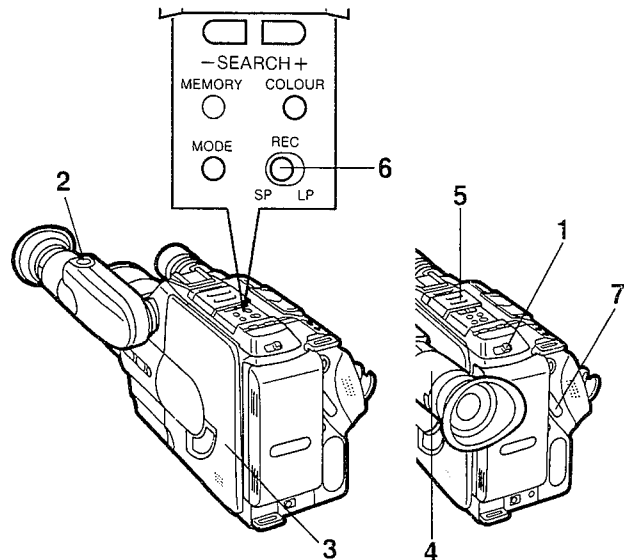
## 12 General Operation Controls



- 34 Tripod Receptacle
- 35 Focus +/- Buttons
- 36 Remote Control Socket
- 37 DC Input Socket
- 38 Auto Light Button (NV-G2E/B/A, G200EN)
- 39 Pause Button
- 40 Play Button
- 41 Rewind/Review Button
- 42 Memory Button (NV-G2E/B/A, G200EN)
- 43 Titling Mode Selector Button (NV-G2E/B/A, G200EN)
- 44 Camera/VTR Selector Cover
- 45 Recording Speed Selector Switch (NV-G2E/B/A, G200EN)
- 46 Title Colour Selector Button (NV-G2E/B/A, G200EN)
- 47 Fast Forward/Cue Button
- 48 Stop Button
- 44 **Function of the Camera/VTR Selector Cover**  
CAMERA position ..... For camera recording.  
VTR position (as illustrated) ..... For other operations  
than camera recording.

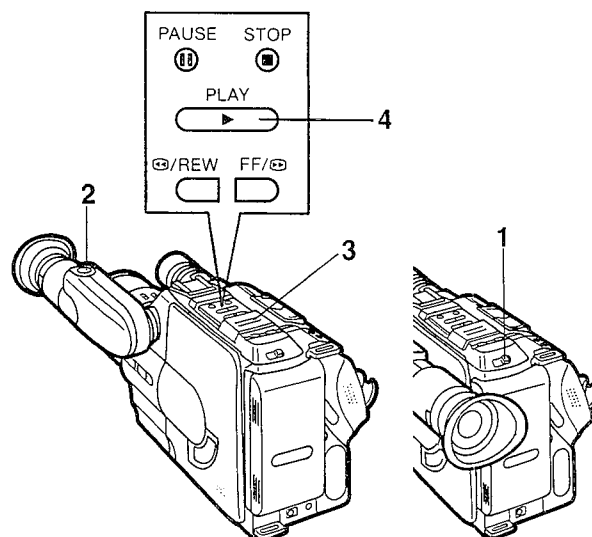
## 1-2 EASY OPERATIONS

### Camera Recording



- 1 Turn the Movie Camera on.
- 2 Turn the EVF by 180° towards the Lens, and press the Eject Button.
- 3 Insert a Video Cassette.
- 4 Pull out the EVF to its fully extended position.
- 5 Set the CAMERA/VTR Selector Cover to "CAMERA" (slide the CAMERA/VTR Selector Cover towards the Lens) until it stops.
- 6 Set the Recording Speed Selector to "SP" or "LP".  
(NV-G2E/B/A, G200EN)
- 7 Press the Start/Stop Button.
  - Recording starts.
  - Press this button again to stop recording.

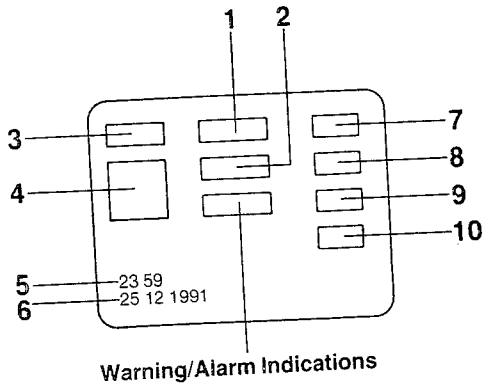
### Playback









- 1 Turn the Movie Camera on.
- 2 Turn the EVF by 180° towards the Lens, and press the Eject Button, then insert the recorded cassette.
- 3 Set the CAMERA/VTR Selector Cover to "VTR" (slide the CAMERA/VTR Selector Cover towards the Battery Pack) until it stops.
- 4 Press the Play Button.
  - Playback starts.
  - Press the Stop Button to stop playback.

## 1-3 INDICATIONS IN THE ELECTRONIC VIEWFINDER (E.V.F.)

The following indications are displayed in the Electronic Viewfinder (EVF) to inform you of the conditions of the Movie Camera.



### Warning/Alarm Indications

-  There is little battery power left. Movie Camera will be turned off in a few minutes. Replace the battery pack by a fully recharged one.
-  There is no cassette tape inserted, or the tab of the inserted cassette is broken out. The indication flashes to warn that recording is not possible.
-  During recording, the tape has almost reached its end. Replace the tape with a new one. The indication will remain lit when the tape has reached its end.
-  When condensation has formed inside the Movie Camera, the "DEW" indication will flash and a few seconds later, the unit itself off.
-  Video Head Clogging (see page 20.)
-  When the button type Battery for the Title Memory and Auto Date functions is not inserted or when it is exhausted, the indication will flash for 10 seconds after the Movie Camera is turned on.

### 1 Remaining Battery Power Indication

- E--F** The "—" indications begin to disappear from right to left as the power of the Battery Pack weakens.
- When attaching the Battery Pack to the Movie Camera, the indication "E--F" will initially be displayed for approx. one minute and then the actual remaining battery power will then be displayed.

### 2 Counter Indication

**M 0:00.00** Tape Counter with Memory Indication

### 3 Auto Light Mode Indications (NV-G2E/B/A, G200EN)

**▷D AUTO** Auto Mode  
**▷D ON** Video Light On

### 4 Digital Memory Indication (NV-G2E/B/A, G200EN)

**WHT** Colour Indication  
**WIPE ↑** Mode Indication (No indication in normal mode.)

### 5 Time Indication

### 6 Date Indication

### 7 Tape Running Indications

**REC** Recording mode  
**PAUSE** Recording Pause mode, Rec Review  
**▷** Play mode, Camera Search (In forward direction)  
**||** Still mode  
**▷▷** Fast Forward/Cue mode  
**◁◁** Rewind/Review mode, Camera Search (In reverse direction)

### 8 Recording Mode Indications (NV-G2E/B/A, G200EN)

**SP** SP mode  
**LP** LP mode

### 9 Manual White Balance Indication

**—WHITE—** Manual Mode, Not adjusted  
**W.SET** Manual Mode, Hold Mode

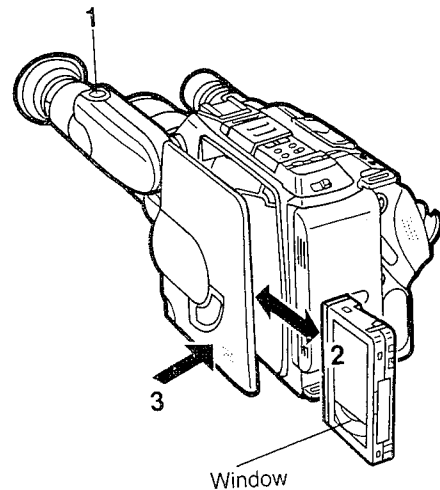
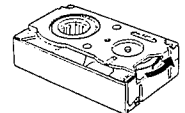
### 10 High Speed Shutter Mode Indications

<b>1/120</b>	1/120 sec.
<b>1/250</b>	1/250 sec.
<b>1/500</b>	1/500 sec.
<b>1/1000</b>	1/1000 sec.
<b>1/2000</b>	1/2000 sec.
<b>1/4000</b>	1/4000 sec.

**Focus Mode Indication**  
**MF** MF Mode

• Some of the above indications may light up alternately at the same place in the EVF to indicate the corresponding operating condition or warnings.

## 1-4. VIDEO CASSETTE



### Inserting the Video Cassette

#### Before Inserting the Cassette

Make sure that the tape is not loose. If it is loose, pull it in by turning the cog wheel on the side of the cassette in the direction of the arrow.

- 1** Turn the EVF by 180° towards the Lens, and press the Eject Button.
- 2** Insert the video cassette into the cassette compartment with its window facing outside.
- 3** Push the cassette compartment cover inward until it locks with a click and then turn the EVF back to its original position.

## Removing a Video Cassette

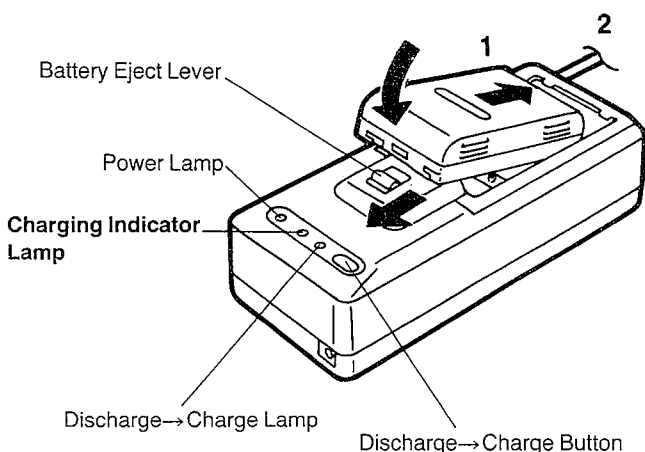
- 1 Turn the EVF by 180° towards the Lens, and press the Eject Button.
- 2 Pull out the video cassette.
- 3 Push the cassette compartment cover inward until it locks with a click and then turn the EVF back to its original position.

### Note:

- Use VHS-C video cassettes only.

## 1-5. BATTERY PACK

### Charging



- 1 Attach the Battery Pack.
- 2 Connect the AC Adaptor to the Mains.

### •Charging Indicator Lamp

Lights while charging is taking place and goes out when charging is finished.

### Note:

- The charging takes about 60 minutes.
- The Movie Camera can be used continuously for approx. 45 minutes with a fully charged Battery Pack.
- With the VW-VBS2E Battery Pack (optional), the charging as well as possible recording time is twice as long as for the standard supplied Battery Pack.

- When the charging is completed, slide the Battery Eject Lever in the direction of the arrow and remove the Battery Pack.

### ■ Discharge→Charge Function

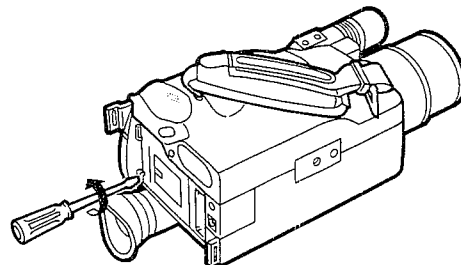
The Battery Pack can be recharged for repeated use. However, if it is recharged repeatedly while there is still some charge left, its charging capacity will be gradually reduced. Therefore, if you often need to recharge semi-discharged Battery Packs, attach the Battery Pack to the AC Adaptor, connect the AC Adaptor Mains, and press the Discharge→Charge Button to completely discharge the Battery Pack. (The Discharge→Charge Lamp will light up, and when the discharging is finished, the Charging Indicator Lamp will light up instead.) This will increase the charging capacity and extend the operating life of the Battery Pack. Therefore, if the operating life of the Battery Pack becomes noticeably shorter, refresh it. (It is recommended to refresh the Battery Pack approx. once every five rechargings.)

## 1-6. SETTING THE CLOCK

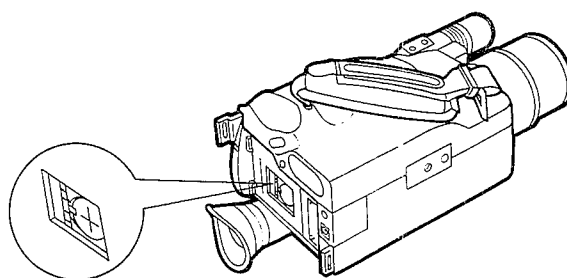
### How to Insert the Battery for the Clock Operation

The "CR2032" size battery is necessary for the date & time and title to be memorized by the Movie Camera.

1



2



- 1 Remove the lid.
- 2 Insert the "CR2032" size battery on the Battery Holder with (+) mark facing upward.

### Note:

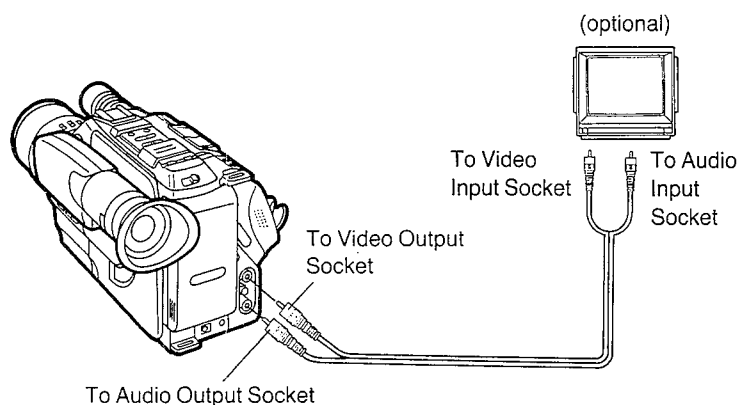
- If the battery is not inserted or if it is exhausted, the indication "BACKUP" in the EVF will flash for approximately 10 seconds when turning the Movie Camera on.
- Before replacing the battery, connect the AC Adaptor to the Movie Camera to maintain correct operation of the clock during battery replacement.

### CAUTION FOR BATTERY REPLACEMENT

- The life of the battery is about one year. Inspect and if necessary, replace the Battery once a year.
- Load the new battery with its polarities (+ and -) aligned correctly.
- Remove an exhausted battery immediately from the Movie Camera and dispose of it.
- Do not try to short-circuit, recharge or heat the battery and do not throw it into a fire.

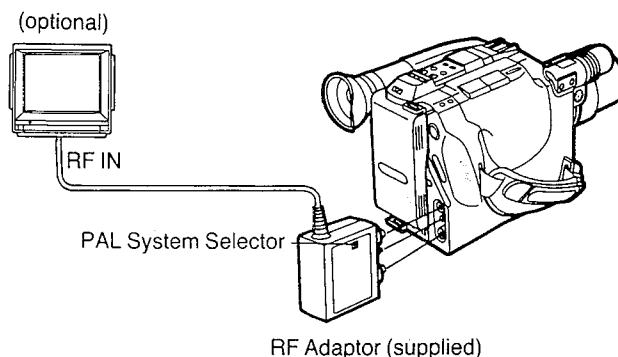
## 1-7 PLAYBACK VIA TV SET (CONNECTIONS)

### TV Set with AV Input



### TV Set without AV Socket

Before connecting the RF Adaptor, turn the Movie Camera off with the Operation Switch.



**Australia model only:**

#### FOR YOUR SAFETY:

Install any external aerial to AS 1417.1.

### Playback on a table Type VTR

Use the Cassette Adaptor.

#### TV

Tune to UHF channel 36.

#### PAL System Selector

For the Australia and New Zealand region, set the RF Converter Channel Selector at "G" position.

## 1-8. ACCESSORIES

### Standard Accessories

○: Supplied

×: Not Supplied

	NV-G2E	NV-G2B	NV-G2A	NV-G200EN	NV-G1E	NV-G1B	NV-G1A	NV-G100EN
AC Adaptor	○	○	○	○	○	○	○	○
Battery Pack	○	○	○	○	○	○	○	○
RF Adaptor	×	○	○	○	×	×	○	×
Cassette Adaptor	○	○	○	○	○	○	○	○
Shoulder Strap	○	○	○	○	○	○	○	○
AV Output Cable	○	○	○	○	○	○	○	○
DC Input Cable	○	○	○	○	○	○	○	○
Battery for Cassette Adaptor Operation	○	○	○	○	○	○	○	○
Battery for Clock Operation	○	○	○	○	○	○	○	○
Video Light	○	○	○	○	×	×	×	×
Soft Case	×	○	×	×	×	○	×	×
BNC/PHONO Adaptor Plug	×	○	×	×	×	○	×	×

## Optional Accessories

○: Supplied  
×: Not Supplied

	NV-G2E	NV-G2B	NV-G2A	NV-G200EN	NV-G1E	NV-G1B	NV-G1A	NV-G100EN
Battery Pack (VW-VBS2E)	○	○	○	○	○	○	○	○
Battery Pack Holder (VW-VH1E)	○	○	○	○	○	○	○	○
Car Battery Cord (VW-ACC11E)	○	○	○	○	○	○	○	○
Battery Charger (VW-BCS1E/B/A)	○	○	○	○	○	○	○	○
Travel Kit (VW-TKS1E/B/A)	○	○	○	○	○	○	○	○
Carrying Bag (VW-CBG2E)	○	×	○	○	○	○	○	○
Video DC Light (VZ-LDS15E)	○	○	○	○	○	○	○	○
Replacement Bulb for DC Light (VZ-LL15E)	○	○	○	○	○	○	○	○
Filter Kit (VW-LF43E)	○	○	○	○	○	○	○	○
Tele Conversion Lens (VW-LT4320E)	○	○	○	○	○	○	○	○
Tele Conversion Lens (VW-LT4350E)	○	○	○	○	○	○	○	○
Wide Conversion Lens (VW-LW2E)	○	○	○	○	○	○	○	○
Step Up Ring (VW-SUR1E)	○	○	○	○	○	○	○	○
Hand Grip (VW-GPC1E)	○	○	○	○	○	○	○	○
Pause Remote Control (VW-RM1E)	○	○	○	○	○	○	○	○
L-Shaped Shoe Adaptor (VW-SK3E)	○	○	○	○	○	○	○	○
RF-Adaptor (VW-RF7E)	○	×	×	○	○	○	○	○
Standard Tripod (VZ-CT55E)	○	○	○	○	○	○	○	○
Deluxe Tripod (VZ-CT75E)	○	○	○	○	○	○	○	○
Table Tripod (VZ-CTT1E)	○	○	○	○	○	○	○	○
Character Generator (VW-CG2E) (VW-CG5E)	○	○	○	○	×	×	×	×
VITC Generator (VW-VG1E)	○	○	×	×	×	×	×	×
VITC Controller (VW-EC10E)	○	○	×	×	×	×	×	×
Editing Controller (VW-EC300E)	○	○	○	○	×	×	×	×
Editing Controller (VW-EC310E)	○	○	○	○	×	×	×	×
Cassette Adaptor (VW-TCA7E)	×	×	×	×	○	×	×	×

# 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 ohm meter, 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 1M ohm and 5.2M ohm. When the exposed metal does not have a return path to the chassis, the reading must be

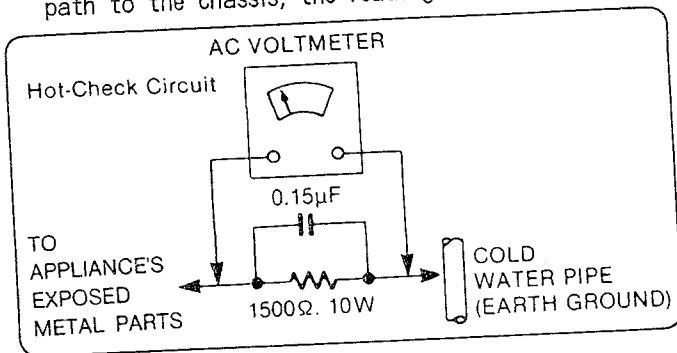


Figure 1

## 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 1.5k ohm, 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 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 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).

## X-RADIATION

### WARNING:

1. The potential source of X-Radiation in the display is the High Voltage section and the picture tube.
2. When using a picture tube test equipment for service, make sure the equipment is capable of handling 25.0kV without causing X-Radiation.

**NOTE:** It is important to use an accurate periodically calibrated high voltage meter.

1. Turn Bright and Contrast controls fully counterclockwise.
2. Set Service switch to SERVICE.
3. Measure the high voltage. The high voltage meter (electrostatic type) reading should indicate 23.0kV +/- 1.0kV. If the meter indication is out of tolerance, immediate service and correction is required to prevent the possibility of premature component failure.
4. To prevent an X-Radiation possibility, it is essential to use the specified picture tube.