JVC

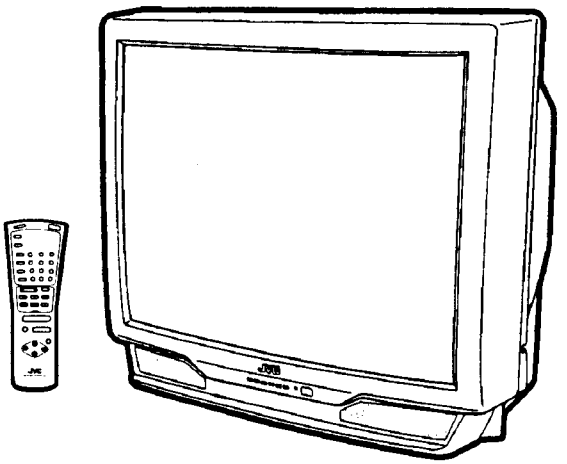
SERVICE MANUAL

COLOR TELEVISION

BASIC CHASSIS
FK

AV-32920 (US&CA)

AV-32920 (A US&CA)



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No. 51371
Mar. 1998

SPECIFICATIONS

Item	Contents
Dimensions (W × H × D)	30-1/4" × 26-1/4" × 21-1/2" / 76.8cm × 66.7cm × 54.7cm
Mass	112.5 lbs / 51 kg
TV System and Color System	
TV RF System	CCIR (M)
Color System	NTSC
Sound System	BTSC (Multi Channel Sound)
TV Receiving Channels and Frequency	
VL Band	(02 ~ 06) 54MHz ~ 88MHz
VH Band	(07 ~ 13) 174MHz ~ 216MHz
UHF Band	(14 ~ 69) 470MHz ~ 806MHz
CATV Receiving Channels and Frequency	
Low Band	(02 ~ 06, A-8) by (02 ~ 06&01)
High Band	(07 ~ 13) by (07 ~ 13)
Mid Band	(A ~ I) by (14 ~ 22)
Super Band	(J ~ W) by (23 ~ 36) (54MHz ~ 804MHz)
Hyper Band	(W + 1 ~ W + 28) by (37 ~ 64)
Ultra Band	(W + 29 ~ W + 84) by (65 ~ 125)
Sub Mid Band	(A8, A1 ~ A4) by (01, 96 ~ 99)
TV / CATV Total Channel	180 Channels
Intermediate Frequency	
Video IF Carrier	45.75MHz
Sound IF Carrier	41.25MHz (4.5MHz)
Color Sub Carrier	3.58MHz
Power Input	120V AC, 60Hz
Power Consumption	135W (US) ⁄ 1.8A (CA)
Picture Tube	
Screen Size	32inch / 80cm , Measured Diagonally, Full aquare
High Voltage	31kV ±1.3kV (at zero beam current)
Speakers	2" × 4-3/4" / 5cm × 12cm oblong Type × 2
Audio Power Output	3W + 3W
External Input (1, 2)	
Video Input	1Vp-p, 75Ω
Audio Input	500mVrms (-4dBs), High impedance
S-Video Input	Y : 1Vp-p positive, 75Ω (Negative sync provided)
	C : 0.286Vp-p (burst signal), 75Ω
Audio Output	Variable : More than 0 to 1550mVrms (+6dBs) / Fix : 500mVrms (-4dBs)
(Vari / Fix : Selectable)	Low impedance (400 Hz when modulated 100%)
AV Compu Link Ex	3.5mm mini jack
Antenna terminal	75Ω (VHF/UHF) Terminal, F-Type Connector
Remote Control Unit	RM-C754-1C (AA / R6 / UM-3 battery × 2)

Design & specification are subject to change without notice.

OPERATING INSTRUCTIONS [AV-32920 (US&CA) AV-32920 (A US&CA)]

JVC®

COLOR TELEVISION AV-32920 USER'S GUIDE

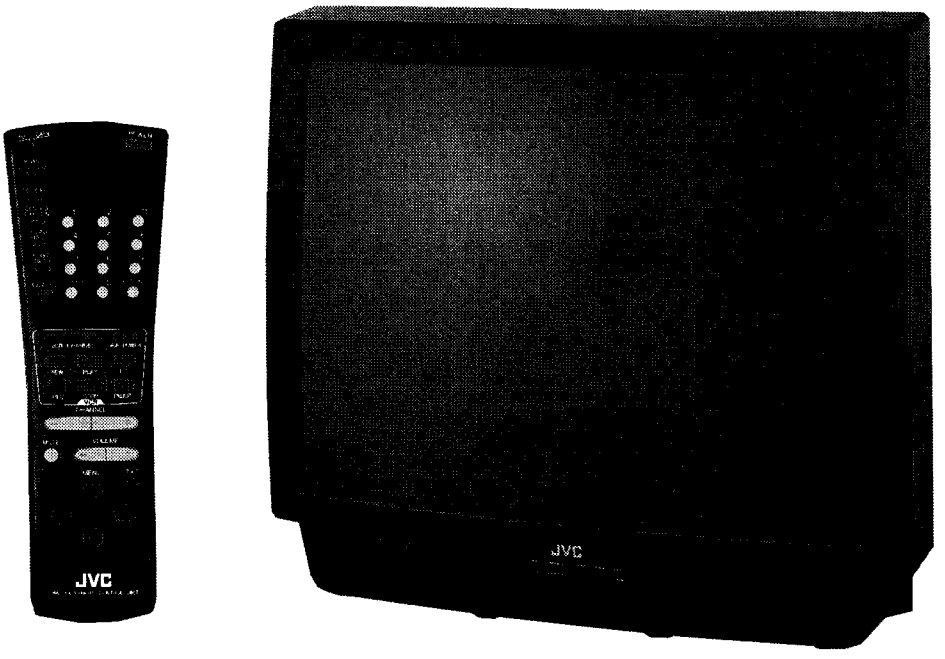


Illustration of AV-32920 and RM-C754

IMPORTANT NOTE TO THE CUSTOMER:

In the space below, enter the serial number for your television.
(The serial number is located on the rear of the television cabinet).
Staple your sales receipt or invoice to the inside cover of this guide.
Keep this user's guide in a convenient place for future reference.
Keep the carton and original packaging for future use.

IMPORTANT SAFETY PRECAUTIONS

CAUTION
RISK OF ELECTRIC SHOCK DO NOT OPEN

CAUTION: To reduce the risk of electric shock. do not remove cover (or back). No user serviceable parts inside. Refer servicing to qualified service personnel.

The lightning flash with arrowhead symbol, within an equilateral triangle is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

WARNING: TO PREVENT FIRE OR SHOCK HAZARDS, DO NOT EXPOSE THIS TV SET TO RAIN OR MOISTURE.

CAUTION: TO INSURE PERSONAL SAFETY, OBSERVE THE FOLLOWING RULES REGARDING THE USE OF THIS UNIT.

1. Operate only from the power source specified on the unit.
2. Avoid damaging the AC plug and power cord.
3. Avoid Improper installation and never position the unit where good ventilation is unattainable.
4. Do not allow objects or liquid into the cabinet openings.
5. In the event of trouble, unplug the unit and call a service technician. Do not attempt to repair it yourself or remove the rear cover.

Changes or modifications not approved by JVC could void the warranty.

* When you don't use this TV set for a long period of time, be sure to disconnect both the power plug from the AC outlet and antenna for your safety.

* To prevent electric shock do not use this polarized plug with an extension cord, receptacle or other outlet unless the blades can be fully inserted to prevent blade exposure.

IMPORTANT SAFEGUARDS

CAUTION:

Please read and retain for your safety.
Electrical energy can perform many useful functions. This TV set has been engineered and manufactured to assure your personal safety. But *improper use can result in potential electrical shock or fire hazards.* In order not to defeat the safeguards incorporated in this TV set, observe the following basic rules for its installation, use and servicing.
And also follow all warnings and instructions marked on your TV set.

INSTALLATION

1 Your TV set is equipped with a polarized AC line plug (one blade of the plug is wider than the other).

(POLARIZED-TYPE)

This safety feature allows the plug to fit into the power outlet only one way. Should you be unable to insert the plug fully into the outlet, try reversing the plug.
Should it still fail to fit, contact your electrician.

2 Operate the TV set only from a power source as indicated on the TV set or refer to the operating instructions for this information. If you are not sure of the type of power supply to your home, consult your TV set dealer or local power company. For battery operation, refer to the operating instructions.

3 Overloaded AC outlets and extension cords are dangerous, and so are frayed power cords and broken plugs. They may result in a shock or fire hazard. Call your service technician for replacement.

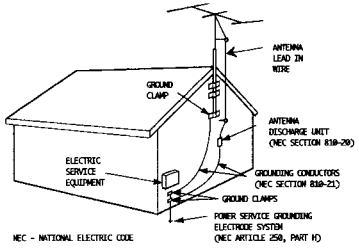
4 Do not allow anything to rest on or roll over the power cord, and do not place the TV set where power cord is subject to traffic or abuse. This may result in a shock or fire hazard.

5 Do not use this TV set near water — for example, near a bathtub, washbowl, kitchen sink, or laundry tub, in a wet basement, or near swimming pool, etc.

6 If an outside antenna is connected to the TV set, be sure the antenna system is grounded so as to provide some protection against voltage surges and built-up static charges. Section 810 of the National Electrical Code provides information with respect to proper grounding of the mast and supporting structure, grounding of the lead-in wire to an antenna discharge unit, size of grounding conductors, location of antenna discharge unit, connection requirements for the grounding electrode.

7 An outside antenna system should not be located in the vicinity of overhead power lines or other electric light or power circuits, or where it can fall into such power lines or circuits. When installing an outside antenna system, extreme care should be taken to keep from touching such power lines or circuits as contact with them might be fatal.

EXAMPLE OF ANTENNA GROUNDING AS PER NATIONAL ELECTRICAL CODE



8 TV sets are provided with ventilation openings in the cabinet to allow heat generated during operation to be released. Therefore:
- — Never block the bottom ventilation slots of a portable TV set by placing it on a bed, sofa, rug, etc.
- — Never place a TV set in a "built-in" enclosure unless proper ventilation is provided.
- — Never cover the openings with a cloth or other material.
- — Never place the TV set near or over a radiator or heat register.

9 To avoid personal injury:
- — Do not place a TV set on a sloping shelf unless properly secured.
- — Use only a cart or stand recommended by the TV set manufacturer.
- — Do not try to roll a cart with small casters across thresholds or deep pile carpets.
- — Wall or shelf mounting should follow the manufacturer's instructions, and should use a mounting kit approved by the manufacturer.

USE

10 Caution children about dropping or pushing objects into the TV set through cabinet openings. Some internal parts carry hazardous voltages and contact can result in a fire or electrical shock.

11 Unplug the TV set from the wall outlet before cleaning. Do not use liquid or an aerosol cleaner.

12 Never add accessories to a TV set that has not been designed for this purpose. Such additions may result in a hazard.

13 For added protection of the TV set during a lightning storm or when the TV set is to be left unattended for an extended period of time, unplug it from the wall outlet and disconnect the antenna. This will prevent damage to product due to lightning storms or power line surges.

14 A TV set and cart combination should be moved with care. Quick stops, excessive force, and uneven surfaces may cause the TV set and cart combination to overturn.

SERVICE

15 Unplug this TV set from the wall outlet and refer servicing to qualified service personnel under the following conditions:
- A. When the power cord or plug is damaged or frayed.
- B. If liquid has been spilled into the TV set.
- C. If the TV set has been exposed to rain or water.
- D. If the TV set does not operate normally by following the operating instructions. Adjust only those controls that are covered in the operating instructions as improper adjustment of other controls may result in damage and will often require extensive work by a qualified technician to restore the TV set to normal operation.
- E. If the TV set has been dropped or damaged in any way.
- F. When the TV set exhibits a distinct change in performance — this indicates a need for service.

16 Do not attempt to service this TV set yourself as opening or removing covers may expose you to dangerous voltage or other hazards. Refer all servicing to qualified service personnel.

17 When replacement parts are required, have the service technician verify in writing that the replacement parts he uses have the same safety characteristics as the original parts. Use of manufacturer's specified replacement parts can prevent fire, shock, or other hazards.

18 Upon completion of any service or repairs to this TV set, please ask the service technician to perform the safety check described in the manufacturer's service literature.

19 When a TV set reaches the end of its useful life, improper disposal could result in a picture tube implosion. Ask a qualified service technician to dispose of the TV set.

20 Note to CATV system installer.
This reminder is provided to call the CATV system installer's attention to Article 820-40 of the NEC that provides guidelines for proper grounding and, in particular, specifies that the cable ground shall be connected to the grounding system of the building, as close to the point of cable entry as practical.

WELCOME!

Congratulations on your new television purchase! We thank you for choosing JVC.

We know you are anxious to start watching your new television, but before you operate it, please read this guide and then keep it handy for future reference. After all, you just bought a great TV with a lot of terrific features, you should know what each feature is and how to use it properly!

Please note that the illustrations, diagrams, and menu pictures are not exact replicas of the actual television features. They are for reference only.

Again, congratulations and thank you for choosing JVC! Enjoy!

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CONNECTIONS CHECKLIST — READ ME FIRST!

The Connections Checklist — Read Me First! section of this guide is a list of ideas to keep in mind when you set out to perform your connections. It is designed to help us not-so-technically-advanced individuals. If you read this section, and can't identify the plugs, connectors, and components you have, do not be afraid to seek help.

1) **Always refer to the connection instructions** in the user's guide for your components first! The manufacturer will provide the most detailed information about their products.

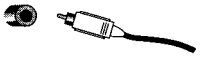
2) **Know your jacks and plugs** — most are color coded:
   - Yellow plugs are Video connections
   - Red plugs are Right Audio connections
   - White or black plugs are Left Audio (Mono) connections (if your VCR is mono, it will have a white or black plug, no red)

3) **Perform one hookup at a time.** If you have many accessories to connect, make sure each connection is correct by checking to see that it works properly before attempting the next connection.

4) **Unplug the power cord** between each connection.

5) **In and Out Concept.** Remember In and Out. The Output jack from one piece will go to the Input jack of the other — read the jack panels, they are all labeled.

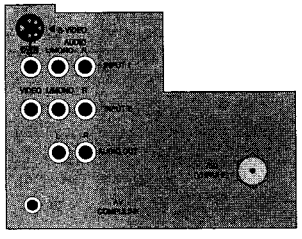
A/V input plug



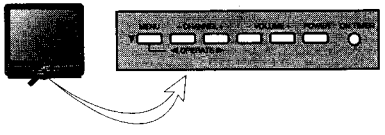
RF Connectors

S-Video Plug

FRONT & REAR PANEL DIAGRAMS



REAR PANEL DIAGRAM



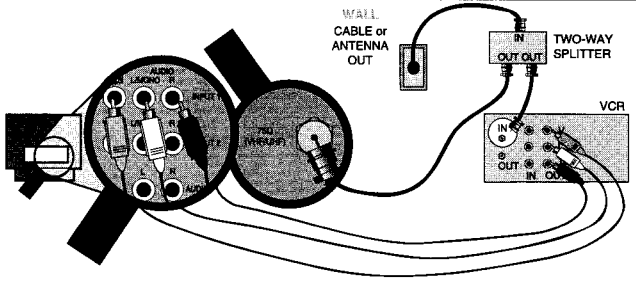
FRONT PANEL DIAGRAM

CABLE & VCR CONNECTIONS

There are two basic types of antenna or cable hookups. If you have an antenna, or have a cable TV system that does not require you to use a cable box to tune channels, use **Diagram #1.** If you have a cable system that requires you to use a cable box to access all channels, use **Diagram #2.** If you have a cable system that requires you to use a cable box to access certain premium channels, but not regular basic channels, use **Diagram # 3.**

NOTE: *To get stereo sound from a hi-fi stereo VCR, you must connect it to the TV with Audio/Video cables. Also, to get the best picture quality from any VCR use Audio/Video cables. (Use them! You'll be glad you did.)*

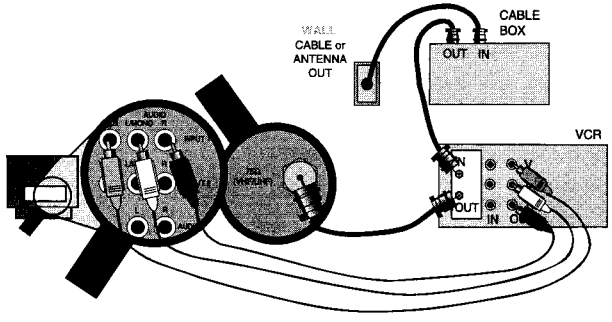
#1



1) Connect cable or antenna RF wire *out* from the wall, *in* to the splitter RF input.
2) Connect RF wire *Out* from the splitter RF output, *in* to the VCR RF input.
3) Connect RF wire *Out* from the splitter RF output, *in* to the TV VHF/UHF input.
4) Connect yellow video cable *out* from the VCR Video output, *in* to the TV Video input jack.
5) Connect white audio cable *out* from the VCR Left Audio output, *in* to the TV Left Audio input jack.
6) Connect red audio cable *out* from the VCR Right Audio output, *in* to the TV Right Audio input jack.

❒ *If your VCR is mono it has only one audio out jack, connect it to TV L/Mono input.*

#2

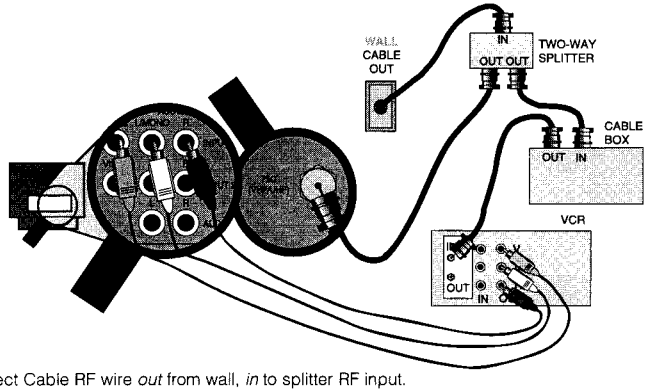


1) Connect the cable RF wire *out* from the wall, *in* to the cable box input.
2) Connect RF wire *Out* from the cable box RF output, *in* to the VCR RF input.
3) Connect RF wire *Out* from the VCR RF output, *in* to the TV VHF/UHF input.
4) Connect yellow video cable *out* from the VCR Video output, *in* to the TV Video input jack.
5) Connect white audio cable *out* from the VCR Left audio output, *in* to the TV Left Audio input jack.
6) Connect red audio cable *out* from the VCR Right Audio output, *in* to the TV Right Audio input jack.

❒ *If your VCR is mono it has only one audio out jack, connect it to TV L/Mono input.*

CABLE & VCR CONNECTIONS CONTINUED

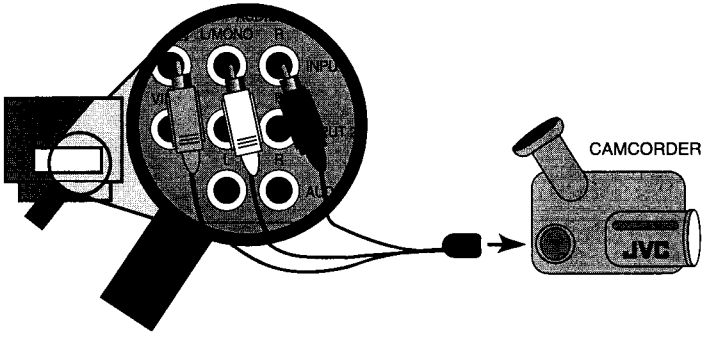
#3



1) Connect Cable RF wire *out* from wall, *in* to splitter RF input.
2) Connect RF *Out* from splitter RF output, *in* to cable box RF input.
3) Connect RF wire *Out* from cable box RF output, *in* to VCR RF input.
4) Connect RF wire *Out* from splitter RF output, *in* to TV VHF/UHF input.
5) Connect yellow video cable *out* from VCR Video output, *in* to TV Video input jack.
6) Connect white audio cable *out* from VCR Left audio output, *in* to TV Left Audio input jack.
7) Connect red audio cable *out* from VCR Right Audio output, *in* to TV Right Audio input jack.

❒ *If your VCR is mono it has only one audio out jack, connect it to TV L/Mono input.*

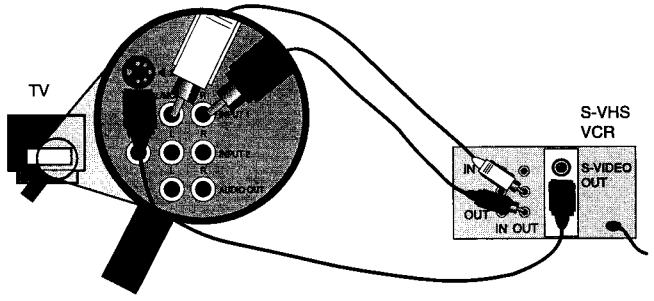
CONNECTING TO A CAMCORDER



Connect a camcorder to your TV.
1) Connect white audio cable *out* from the camcorder plug, *in* to the TV Left Audio input jack.
2) Connect yellow video cable *out* from the camcorder plug, *in* to the TV Video input jack.
3) If you have a stereo model camcorder, connect red audio cable *out* from the camcorder, *in* to the TV Right Audio input jack.

❒ *Refer to the camcorder's instruction book for any special instructions.*

CONNECTING S-VHS ACCESSORIES (VCR or Camcorder)

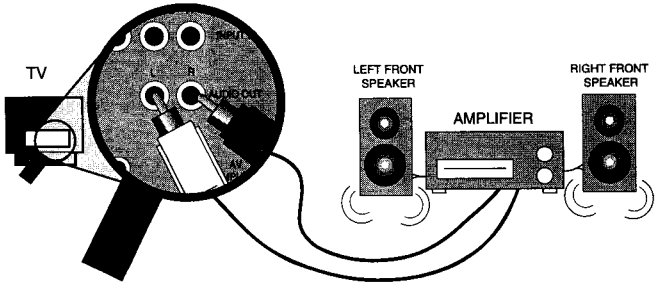


Keeping the audio connections the same as for a non-S-VHS VCR or camcorder (page 7), use the special S-VHS cable that came with the VCR or Camcorder. Illustration is of S-VHS VCR hookup.

1) Connect the S-VHS Plug *out* from VCR S-Video output, *in* to the TV's S-Video input.

❒ *Refer to your VCR or camcorder instructions.*

CONNECTING TO AN EXTERNAL AMPLIFIER



Set the TV Speaker to OFF (page 20), switch the audio output to VARI (page 20), and adjust the sound with the TV remote's VOLUME -/+ button (page 11.)

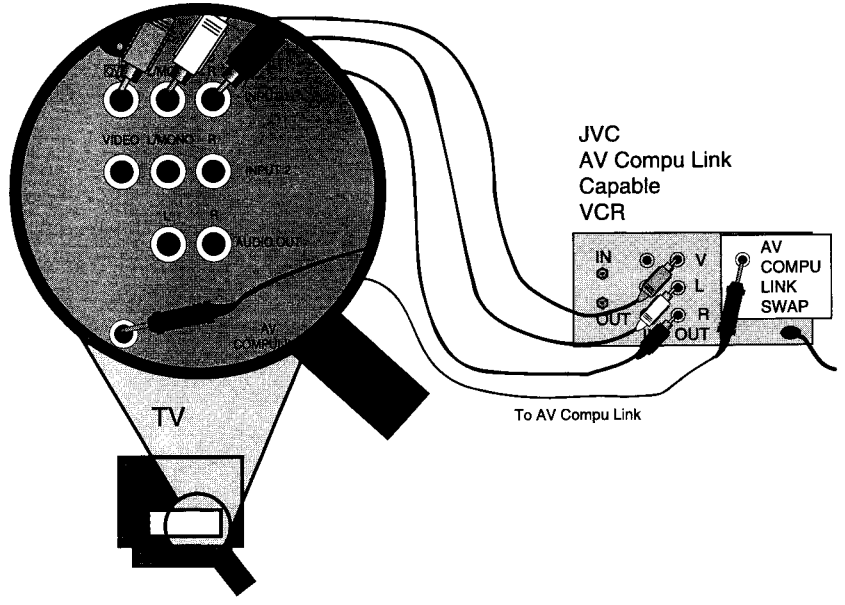
1) Connect white audio cable *out* from the TV Left Audio output jack *in* to the Amplifier [Left] input.

2) Connect red audio cable *out* from the TV Right Audio output jack *in* to the Amplifier [Right] input.

❒ *Refer to the amplifier's instructions.*

CONNECTING TO JVC AV COMPULINK CAPABLE COMPONENTS

AV Compu Link makes playing video tapes totally automatic. Simply insert a pre-recorded tape* into the VCR, and the VCR automatically turns on and starts playing. At the same time, the VCR sends an AV Compu Link signal to the television telling it to turn on and switch to the correct video input.



NOTES:

1) The AV Compu Link cable has a Male 3.5 mm (mono) mini plug on each end.

2) If your JVC brand VCR has A Code/B Code Remote Control Switching (see VCR instructions), using VCR A Code will switch the TV to Video Input 1. Using B Code will switch the TV to Video Input 2.

3) To connect a JVC HiFi receiver or amplifier for a completely automated home theater, see the HiFi receiver's instructions for detailed hookup diagrams.

** In order for AV Compu Link to work, the recording tabs must be removed from the VHS tape.*

***AV COMPU LINK EX is compatible with the following 1998 receivers: RX-664, RX-774, RX-884, and RX-1024 and later receiver models.*

REMOTE CONTROL

RM-C754

RM-C754
AV-32920

CHANGING THE REMOTE CONTROL'S BATTERIES

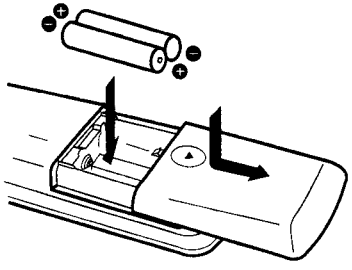
Use only size AA batteries.

1. Push down on the remote's back cover and slide towards the bottom to remove it.
2. Insert the two supplied AA batteries, carefully noting the "+" and "–" markings on the batteries and remote control.
3. To avoid a short circuit, insert "–" end first. Slide the cover back into place (until it clicks into position).

❒ *If it takes more than three minutes to change the batteries, you may have to reprogram the CATV and/or VCR codes (see page 12-13.)*

❒ *If the remote control acts erratically, replace the batteries. Battery life is usually six months to one year.*

❒ *We recommend the use of alkaline batteries for longer battery life.*



POWER

❒ Make sure that the TV/CATV switch is set to TV. Switch to CATV only if you plan to operate a cable box.

❒ Press the POWER button on the remote control or the TV front panel. The On Timer lamp will glow red.

❒ The first time you turn on the TV, the "Plug In Menu" will appear. You should turn to page 15 now to learn more about this menu.

❒ To turn the power off, press the POWER button again. The On Timer lamp will go out.

❒ The On Timer lamp remains on while the On/Off Timer function is active.

ADJUSTING VOLUME

1. Press the VOLUME button on the front panel or remote control. The volume slidebar will appear.

2. Press the MUTING button to instantly turn the volume off. To restore the volume to the previous level, press the MUTING button again.

CHANGING CHANNELS

1 10 key direct access.

Press the numbers on the remote's 10 key pad. For single-digit channel numbers press 0 then the number. For channels above 100, press the 100+ button plus the 2-digit number.

2 CHANNEL -/+ button.

Press the CHANNEL -/+ button, it will scan the channels in order.

❒ *NOTE: After you operate the Auto Tuner Setup (page 15), all of the blank, or empty, channels will be removed from scanning so that there is no noise or channel snow when you scan, only active channels.*

3 Return.

Press and release the RETURN+ button to return to the previous channel. First, select a channel (game #1). Then, select another channel (game #2) with the 10 key pad and push the RETURN+ button to flip directly back and forth.

4 Return+ .

Press and hold down the RETURN+ button for three seconds. The message, "RETURN CHANNEL PROGRAMMED !" will appear and you can scan as you wish. Press RETURN+ again and you will go back to the Return+ channel.

To cancel a Return+ channel, press and hold down the RETURN+ button for another three seconds and the message, "RETURN CHANNEL CANCELLED !" appears.

❒ Pressing a number key or turning the set off will also cancel a Return+ channel.

SETTING THE CATV & VCR CODES

Many CATV & VCR brands have more than one code. If the first code in the list does not work, try the other codes listed. If your CATV box or your VCR do not respond to any of the codes listed for the manufacturer, use the remote control for that accessory to operate it.

CABLE BOX OR SATELLITE SETUP

1) Determine the correct code from the "CATV & Satellite Codes" chart below.
2) Slide the 2-Way Mode Selector Switch to CATV.
3) Press and hold down the DISPLAY button.
4) Enter the 2-digit code with the 10 key pad while continuing to hold down the DISPLAY button.
5) Release the DISPLAY button.
6) Confirm the operation of the cable box.

CATV & Satellite Codes

CABLE BOXES	CODES
ABC	35 01 11 02 33 91 55
Antronix	44
Archer	29 01 44 88 91 63 42 30 52 76
Belcor	82
Cablestar	82
Cabletenna	29 01 44 88 91 76
Cableview	63 44 42 30 52 88
Century	63 44 42 30 52 88
Citizen	63 44 42 30 52 88
Colour Voice	23
Comtronice	42 21
Contec	10
Curtis	08 09 56 61 87 90
Diamond	29 01 44 88 91 76
Drake	37 67 71
Eagle	13 22 58 62 20 40 26 21
Eastern	28 99
Focus	59
GC Electronics	63 44 42 30 52 88 82
Gemini	04 85 32 30
General Electric	57
General Instruments	01 02 03 04 34 55 83 85 91 93 95
Gerrard	63 44 42 30 52 88
Hamlin	14 15 28 41 99
Hitachi	31 79 02 80
Hytex	11
Jerrold	01 02 03 04 34 55 83 85 91 93 95
Macom	31 79 80
Magnavox	25 26 13
Matsushita	16 17

CABLE BOXES	CODES
Memorex	07
Movietime	32 39 29 42 44 88 40 38 60
NSC	38 40 32
Oak	11 46 10 12 47
Panasonic	16 17
Paragon	07
Philips	13 20 23 24 96 30 84
Pioneer	05 06 78
Popular Mechanics	59
Pulsar	63 44 42 30 52 88 07
Quest	01 02 03 04 34 55 83 85 91 93 95
RCA	16 17
Realistic	51 44 88 53
Recoton	59 63 44 42 30 52 88
Regal	14 41
Regency	28 99
Rembrandt	32 39 29 42 44 88 02 60
Runco	07
Salora	68 72
Samsung	16 17 06 32 40 42 78 94
Scientific Atlanta	08 09 56 61 87 90
Sheritech	27
Signal	13 22 58 62 20 40 26 04 42 32 42 78 94 21
Signature	02
SL Marx	32 40 42 78 94 63 44 30 52 88
Sprucer	16 17
Standard Components	32 39 29 42 44 88 18 60
Starcom	01 04 55
Stargate	32 40 42 78 94 04 63 44 30 52 88

CABLE BOXES	CODES
Starquest	04
Sylvania	19 35
Tandy	62
Teknika	74 54
Telecaption	92 77
Teleview	32 40 42 78 94
Texscan	18 19 35
Tocom	33 34 48 49 01 42 91 73
Toshiba	36 07 66 70
Tusa	04
TV86	40
Uniden Satellite	65 69
Unika	29 01 44 88 91 63 42 30 52 76
United Artists	11
United Cable	01
Universal	42 43 44 52 63 88 82
Videoway	07 50 23 45
Vid Tech	64
Vidter	64
Viewstar	13 22 58 62 20 40 26 21
Zenith	07 50 23 75
Zentek	59

DIGITAL SATELLITE SYSTEMS	CODES
RCA	97
Sony	98

VCR SETUP

The remote is pre-programmed with the VCR codes for power on and power off, play, stop, record, pause, fast-forward, rewind, and channel up and down.

1) Determine the correct code from the "VCR Codes" chart (page 13).
2) Slide the 2-Way Mode Selector Switch to TV.
3) Press and hold down the DISPLAY button.
4) Enter the 2-digit code with the 10 key pad while continuing to hold down the DISPLAY button.
5) Release the DISPLAY button.
6) Confirm the operation of the VCR.

❒ When you record a channel, press the PLAY button while continuing to hold down the REC button.

VCR Codes

VCRs	CODES
Admiral	84 40 07 31 06 65
Aiko	46
Aiwa	31 35 94 27 03 87 34 28 26 29
Akai	32 33 20 26 28 64 21
American High	01 05
Asha	03
Astra	03 94 52 15 27 89 32 90 91 83
Audio Dynamics	26 27 88 97 64
Audiovox	15
Aventura	31 35 94 27 03 87 34 28 26 29
Beaumark	98 03 02 05 06 56 57 72 34 04 99 75
Belcor	34 35 46 47
Bell & Howell	16 08 76
Broksonic	10 12 35 87 77 78
Calix	15
Candle	03 94 52 15 27 89 32 90 91 83
Canon	65 01 02 05 06 41 42 71 04 18 03 56 92 22
Capehart	34 35 46 47
Carrera	03 94 52 15 27 89 32 90 91 83
Carver	18 24
CCE	35 46
Citizen	89 15 31 36 46 47 79 94
Classic	89 15 31 36 46 47 79 94
Colortyne	27 21 01
Colt	35
Craig	03 08 15 43 31 26 28
Crosley	31 35 94 27 03 87 34 28 26 29
Curtis	34 35 46 47 03 94 52 15 27 89 32 90 91 83
Curtis Mathes	65 01 02 05 06 41 42 71 04 18 03 56 92
Cyberex	03 94 52 15 27 89 32 90 91 83
Daewoo	34 35 46 47 25
Daytron	34 35 46 47
DBX	26 27 88 97 64
Denon	98 03 02 05 06 56 57 72 34 04 99 75
Dumont	03 94 52 15 27 89 32 90 91 83
Dynatech	31 35 94 27 03 87 34 28 26 29
Dynatone	89 15 31 36 46 47 79 94
Electrohome	19 92 20 21 67 80 95 15 45
Electron	98 03 02 05 06 56 57 72 34 04 99 75
Electrophonic	28 15 26 29 53 55 59
Emerex	38
Emerson	10 87 11 12 13 14 08 15 86 37 62 19 25 65 58 78 77 31 45 20 21 60 66
Encore	65 01 02 05 06 41 42 71 04 18 03 56 92
Everex	39 02 25 89 94 70
Fisher	08 09 51 16
Fuji	01 05 23
Funai	31 35 94 27 03 87 34 28 26 29
Garrard	31
GE	65 03 04 05 06 56 01 57
Goldstar	89 15 31 36 46 47 79 94 27
Go Video	90 91
Gradiente	31
Granada	65 01 02 05 06 41 42 71 04 18 03 56 92
Grundig	01
Harley Davidson	31 35 94 27 03 87 34 28 26 29
Harmon/Kardon	21 19 27 20
Harvard	35 43
Harwood	35

VCRs	CODES
Headquarter	16
HI-Q	08
Hitachi	39 02 25 89 94 28 64 70 81
Homeline	89 15 31 36 46 47 79 94
Images	90 91
ITT	28 15 26 29 53 55 59
J.C. Penney	65 02 15 27 03 05 94
Jensen	26 29 28 64
JVC	00 85 28 15 26 29 64 53 55 59
Kenwood	26 28 29 27 64 16
KLH	35 43
Kodak	01 05 15
Lloyd	31 35 94 27 03 87 34 28 26 29
Lloyd's	11
Logik	31 35 94 27 03 87 34 28 26 29
LXI	15
Magnasonic	34 35 46 47 03 94 52 15 27 89 32 90 91 83
Magnavox	65 18 05 25 31 01 24 06 56 35 94 27 03 87 34 28 26 29
Magnin	03 94 52 15 27 89 32 90 91 83
Marantz	27 21 01 05 18 24
Marta	89 15 31 36 46 47 79 94
Matsui	03 94 52 15 27 89 32 90 91 26 31 16 29 83
Matsushita	01 05
Megasonic	02 15 16 09 08 61 34 19 65 31 67
MEI	01 05
Memorex	65 15 08 31 07 16 01 05 18 84 03 24
MGA	19 92 20 21 67 80 95 45
MGN	03 94 52 15 27 89 32 90 91 83
MGN Technology	03
Midland	98 03 02 05 06 56 57 72 34 04 99 75
Minolta	39 02 25 89 94 70
Mitsubishi	19 92 20 21 67 80 95 29 45
Mont. Ward	65 01 02 05 06 41 42 71 04 18 03 56 92 84 40 07 31 06
Motorola	01 05 07 84
MTC	31 35 94 27 03 87 34 28 26 29 52 15 89 32 90 91 83
Multitech	31 35 94 27 03 87 34 28 26 29
NAD	54
National	98 03 02 05 06 56 57 72 34 04 99 75
NEC	26 27 88 97 28 64 29
Nikko	89 15 31 36 46 47 79 94
Noblex	03
Olympus	65 01 02 05 06 41 42 71 04 18 03 56 92
Optimus	54 15 07 84
Optonica	84 40 07 31 06 65
Panasonic	65 01 02 05 06 41 42 71 04 18 03 56 92 72 82
Paxsonic	03 94 52 15 27 89 32 90 91 83
Penney	01 05 15 27 02 39 51 03
Pentax	65 02 39 70
Philco	65 01 02 05 06 41 42 71 04 18 03 56 92 34 35 46 47
Philips	65 96 18 05 31 25 01 40
Pilot	89 15 31 36 46 47 79 94
Pioneer	39 02 25 89 94 54 44 29 70
Portland	34 35 46 47
Proscan	98 03 02 05 06 56 57 72 34 04 99 75
Protec	35

VCRs	CODES
Pulsar	34 35 46 47 18 24 03 94 52 15 27 89 32 90 91 83
Quarter	16
Quartz	16
Quasar	65 01 02 05 06 41 42 71 04 18 03 56 92 72
Radix	15
Radio Shack	31 15
Randex	89 15 31 36 46 47 79 94
RCA	98 03 02 05 06 56 57 72 34 04 99 70 75
Realistic	65 07 15 16 08 31 32 01 05 84 40 09 03
Ricoh	30
Runco	24
Sanky	18 24 07 84
Sansui	43 31 26 28 64 29 03
Samsung	03 94 52 15 27 89 32 90 91 25 83
Sanyo	16 08 76 03
Scott	10 11 19 74 87 25 12 14
Sears	02 15 16 09 08 61 34 19 65 31 67 01 05 39 51 73 70 00 85
Semitsu	34 35 46 47
Sharp	84 40 07 31 06 65
Shintom	35 43
Shogun	03 94 52 15 27 89 32 90 91 83
Signature	65 01 02 05 06 41 42 71 04 18 03 56 92 84 40 07 31 06
Singer	35 43
Sony	23 30 38 50 49 16 17 01 05 48
Soundesign	31 35 94 27 03 87 34 28 26 29
STS	02 39
Sylvania	65 96 18 05 31 25 01 19 45
Symphonic	31 35 94 27 03 87 34 28 26 29
Syqmax	34 35 46 47
Tatung	26 29 28 64
Teac	31 35 94 27 03 87 34 28 26 29 64
Technics	65 01 02 05 06 41 42 71 04 18 03 56 92
Technivox	89 15 31 36 46 47 79 94
Teknika	31 36 65 01 15 05
Telefunken	11 31
Thomas	31 35 94 27 03 87 34 28 26 29
TMK	11 31 03
Toshiba	02 25 73 19 45 09
Totevision	03 94 52 15 27 89 32 90 91 83
Unitech	03 94 52 15 27 89 32 90 91 83
Vector	25
Vector Research	27 21 01
Video Concepts	27 21 01 25 20
Videosonic	26 27 31 16 29 03
Wards	31 01 05 02 08 07 84 40 35 06 56 25 03
XR-1000	31 35 94 27 03 87 34 28 26 29 01 05
Yamaha	26 27 31 16 29 28 64
Zenith	93 23 24 30 18

USING THE MENU

USING THIS GUIDE:

Throughout this guide there are certain symbols we use as shorthand to show you what to do. When you see them, keep these factors in mind:

▲▼ Up and down arrows indicate you should press the MENU UP or MENU DOWN button. This function allows you to:
- Move vertically in the main menu
- Move through a submenu, or
- Move to the next letter, number, or other choice in a submenu
- Back up to correct an error

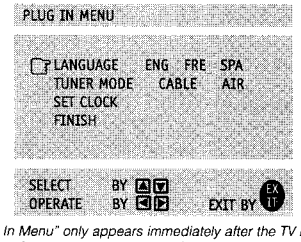
◀▶ Left and right arrows indicate you should press the MENU LEFT or MENU RIGHT button to:
- Select the highlighted item, or
- Select the options in a submenu

The "Press Button" icon means you should press that button on the remote control.

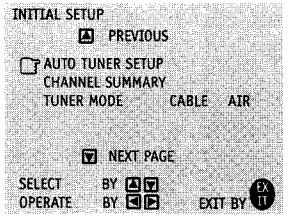
The "Helping Hand" icon points to the highlighted or selected item in a menu.

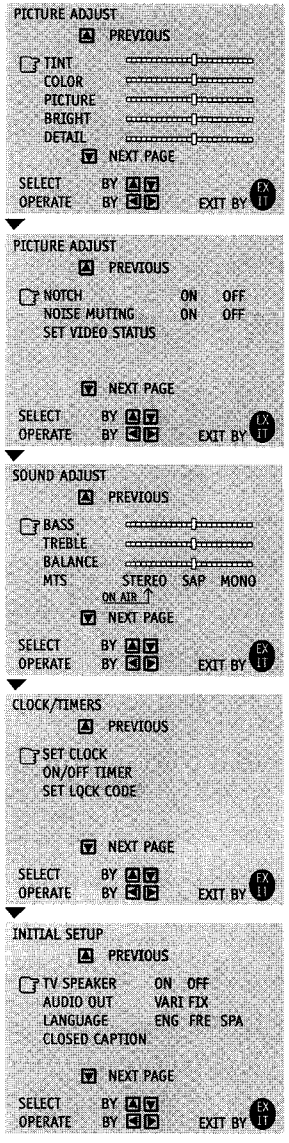
To use the Menu, press any of the remote's 4-way cursor control (MENU) buttons and JVC's transparent scrolling menu will appear on screen. The item that appears yellow is the selected item.

NOTE: The menu screens depicted in this book are representations of the menu screens on your set. They are not exact replications.



The "Plug In Menu" only appears immediately after the TV is plugged in, or after a power interruption of more than 90 seconds.





PLUG IN MENU

PLUG IN MENU

The Plug In Menu comes up automatically when you first turn on the TV after plugging it in. The Plug In Menu sets the default preferences for you for:

- The Language in which you want the onscreen displays to appear.
- The Auto Tuner Setup of channels to be included in scan.
- The Tuner Mode the TV is set to — Air or Cable.
- The time of the TV's Clock.

Once you have set your preferences in the Plug In Menu section, it will not appear again unless there is a power interruption.

LANGUAGE

Your JVC television allows you to choose from English, French, or Spanish on-screen menus and displays.

▲▼ To LANGUAGE

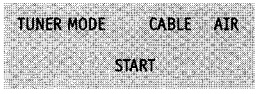
◀▶ To choose the language

AUTO TUNER SETUP

During Auto Tuner Setup, the TV will automatically scan through all available channels and memorize the active ones so that when you scan, you do not pick up weak or noisy channels.

▲▼ To AUTO TUNER SETUP

◀▶ To operate



◀▶ To choose CABLE or AIR

▲▼ To move to START

◀▶ To start Auto Tuner Setup

The Programming takes approximately 1 to 2 minutes

Note: You should perform the Auto Tuner Setup for both Cable and Air, if you have cable or a satellite system.

Note: Noise Muting will not work while Auto Tuner Setup is working.

NOTES:

You can exit the Plug In Menu at any time by pressing the Exit button on the remote control. You can enter the Plug In Menu any time by simultaneously pressing the MENU button and VOLUME "–" button on the TV's front panel.

16 PLUG IN MENU

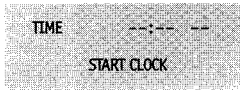
NOTES:

Remember, the Plug In Menu will only appear after you turn on the TV for the first time, or after a power interruption.

SET CLOCK

The Clock is the heart of all timer functions. You must set the clock before the On/Off Timer will work.

▲▼ To SET CLOCK
◀▶ To operate



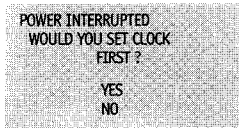
◀▶ To set the hour (AM/PM)
▼ To move to minutes
◀▶ To set the minutes
▼ To move to START CLOCK when done with settings
◀▶ To start the clock

If you want to synchronize the TV clock with another clock or time signal, press LEFT or RIGHT MENU arrow at the appropriate time, and the clock will start.

Note: If the TV is unplugged or you experience a power outage, you must reset the clock for any timer functions to work.

CLOCK SET MESSAGES:

If you do not set the clock but attempt to use the On/Off Timer anyway, you will get the following message:



▼ To YES/NO
◀▶ Choose YES

Continued above...

Continued from below...

If you choose NO, you will receive the following message:

Note: If you attempt to "Start Clock" without setting the time you will receive this message:

FINISH

Once you have set up the items in the Plug In Menu you must select Finish. Finish tells the TV that you have selected your personal default options for the menu and clock, and unless there is a power interruption, the Plug In Menu will not show up again.

▲▼ To FINISH
◀▶ To exit and save settings

Note: You can reset the options available in Plug In Menu via the regular JVC menu system:

- ❒ Language is found in the Initial Setup Menu.
- ❒ Auto Tuner Setup is found in the Initial Setup Menu.
- ❒ Tuner Mode is found in the Initial Setup Menu.
- ❒ Set Clock is found in the Clock/Timers Menu.

PICTURE ADJUST 17

NOTES:

To exit the Picture Adjust menu at any time press the EXIT button.

TINT

Adjust the levels of red and green.

▲▼ To TINT
▶ To accentuate green
◀ To accentuate red
▲▼ To move to the next

COLOR

Adjust both the vividness and subtlety of the color.

▲▼ To COLOR
▶ To make colors more vivid
◀ To subdue colors
▲▼ To move to the next

PICTURE

Picture allows you to adjust the picture's range of black and white.

▲▼ To PICTURE
▶ To increase contrast
◀ To decrease contrast
▲▼ To move to the next

BRIGHT

Adjust the degree of light and dark.

▲▼ To BRIGHT
▶ To lighten the picture
◀ To darken the picture
▲▼ To move to the next

DETAIL

Adjust the level of detail in the picture.

▲▼ To DETAIL
▶ To make the picture sharper
◀ To make the picture smoother
▲▼ To move to the next

NOTCH

The Notch Filter sharpens the edges of graphics and text, especially in computer generated graphics common in news and sports programs.

▲▼ To NOTCH
◀▶ To turn ON/OFF

NOISE MUTING

Inserts a blue screen and eliminates noise from channels that are not broadcasting or are too weak.

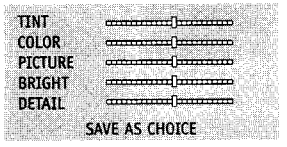
▲▼ To NOISE MUTING
◀▶ To turn ON/OFF

Note: Noise Muting will not work when you operate the Auto Tuner Setup or Channel Summary.

SET VIDEO STATUS

Save Picture Settings as "Choice".

▲▼ To SET VIDEO STATUS
◀▶ To operate
◀▶ To operate the TINT option



▲▼ To move to the next feature

Repeat the above steps to adjust each feature — color, picture, bright, detail.

▲▼ To SAVE AS CHOICE
◀▶ To save settings and exit

Note: Access your "Choice" settings by pressing the VIDEO STATUS button on the remote control.

NOTE:

MTS has no effect on normal sound broadcasts.

BASS

The Bass level adjustment feature allows you to raise or lower the level of lower frequencies in the TV's sound.

▲▼ To BASS
▶ To emphasize bass
◀ To reduce bass
▲▼ To move to next

TREBLE

The Treble level adjustment feature allows you to raise or lower the level of higher frequencies in the TV's sound.

▲▼ To TREBLE
▶ To increase treble
◀ To decrease treble
▲▼ To move to next

BALANCE

The Balance adjustment feature allows you to center the TV's sound to your needs.

▲▼ To BALANCE
▶ To shift the speaker balance to the right
◀ To shift the speaker balance to the left
▲▼ To move to next

MTS (Multi-Channel Television Sound)

MTS technology gives you a choice among stereo, mono, and Second Audio Programs (SAP).

▲▼ To MTS

◀▶ Select the mode

(The ON AIR arrow tells you if the current signal contains Stereo or SAP)

Note: Keep the TV in STEREO mode to get the fullest sound quality.

Note: SAP will allow you to hear an alternative soundtrack, if available.

Note: Choose MONO to reduce excess noise in a program or channel.

Some Sound Advice

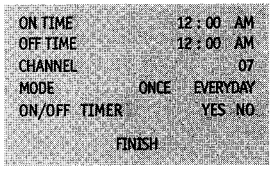
You can tell if a program is broadcast in stereo by the position of the ON AIR arrow in the MTS menu. Unfortunately, it is common for some cable companies to squash the transmission of stereo programs to mono because they only have mono equipment. If your TV is connected to a cable system, the sound is at the mercy of that cable company — if they broadcast in mono, you receive mono sound regardless of the original stereo programming.

Fortunately, most programs that are broadcast in stereo are aired on the major television networks. If you connect your TV to an antenna instead of cable, and set the Tuner Mode (page 15) to "Air" instead of "Cable," you will be able to pick up stereo broadcasts in stereo.

ON/OFF TIMER

YOU tell the TV to turn on and off. Use it as an alarm to wake up, as a program reminder, or as a decoy when you're out of the house.

▲▼ To ON/OFF TIMER
◀▶ To operate



◀▶ To set the hour (AM/PM) you want the TV to turn on
▼ To move to minutes
◀▶ To set the minutes
▼ To accept ON TIME and to move to OFF TIME (set time again)
▼ To move to CHANNEL
◀▶ To select channel
▼ To move to MODE
◀▶ Choose ONCE or EVERYDAY
▼ To YES NO
◀▶ Choose YES for on, NO for off
▼ To FINISH
◀▶ To save settings

Note: In order for ON/OFF Timer to work, the clock must be set. After a power interruption it will be cancelled.

Note: ON/OFF Timer cannot be set to locked or guarded channels.

SET LOCK CODE

The Lock Code locks and unlocks Channel Guard. Write this three digit number down and keep it where would-be viewers will not look for it!

▲▼ To SET LOCK CODE
◀▶ To operate

The padlock icon appears

Zero (*the access code is zero*)

◀▶ To choose the first number
▼ To move to the second place
◀▶ To choose the second number
▼ To move to the third place
◀▶ To choose the third number
▼ To FINISH
◀▶ To save settings and exit

Note: If you forget the Lock Code you can set another one this same way.

Note: After a power interruption you must reset the lock code.

NOTE:

Clock/Timers function:

• Set Clock

is described in full detail on page 16.

NOTE:

Initial Setup Menu item:

• Language

is described in full detail in the Plug In Menu section on page 15.

TV SPEAKER

You can listen to the TV speakers, or if your set is connected to a stereo, turn them off to listen to the stereo's speakers.

▲▼ To TV SPEAKER

◀▶ To turn the speaker ON or OFF

EXIT when finished

Note: TV Speaker will be cancelled after a power interruption.

Note: Before you set TV Speaker from Off to On, **make certain that the volume level is low!** If the volume is high, the sound will be extremely loud.

AUDIO OUT

Select fixed level or variable level audio output signals.

▲▼ To AUDIO OUT

◀▶ To VARI or FIX

VARI: Adjust the volume of the external speaker by using the TV's VOLUME +/– button or it's remote control.

FIX: Adjust the volume of the external speaker with the audio device controls.

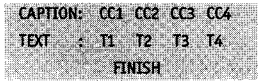
Note: When using external amplifiers and speakers, shut off the TV Speakers (above).

CLOSED CAPTION

If they are included in a program, you can view closed captions or text information.

▲▼ To CLOSED CAPTION

◀▶ To operate and select a caption or text channel



▲▼ To FINISH

◀▶ To save settings

EXIT when finished

Note: Captions are usually found on CC1 and text on T1. The other caption and text channels are workable but are for future purposes.

Note: To activate the Closed Caption settings that you set here:

CLOSED CAPTION

(See page 22 for complete details on how to access captioning with the CLOSED CAPTION button.)

CHANNEL SUMMARY

You can add or delete channels from channel scanning. You can also lock out any "unauthorized" viewers from one or up to all 181 channels.

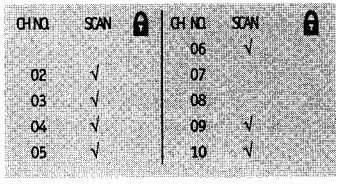
▲▼ To CHANNEL SUMMARY

◀▶ To operate

Note: Noise Muting will not work while you are in the Channel Summary menu.

SCAN

You can manually set channels to scan that were too weak to be picked up during Auto Tuner Setup. Conversely, if a channel was too weak to receive a good picture but was picked up anyway, delete it by removing the √. (If you have not performed the Auto Tuner Setup described on page 15, do so now.)



CHANNEL -/+ to select the channel

▲▼ To the SCAN column

◀▶ To include or delete from scan

EXIT when finished

Note: Channels set to scan will be marked with a √.

Note: Some cable systems experience interference from radio frequencies on Cable Channel 95. If you like, you can delete this channel from scanning by removing the √.

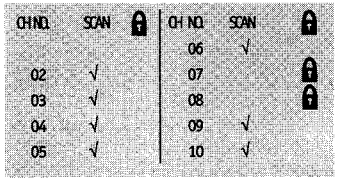
Continued above...

Continued from below...

CHANNEL GUARD - LOCK

▲▼ To CHANNEL SUMMARY

◀▶ To operate



▲▼ To the Lock column

The access code zero (0) to lock or unlock that channel

Use the CHANNEL-/+ button to go to any other channel you want to lock

EXIT when finished

CHANNEL GUARD MESSAGE:

This message appears when a viewer attempts to watch a guarded channel:

To watch a channel you have locked, enter the lock code using the 10 key pad.

If the wrong lock code is entered, this message will appear:

NOTES:

Initial Setup Menu items

- *Auto Tuner Setup, and*
- *Tuner Mode are described in detail on page 15 in the Plug In Menu section.*

In the Channel Summary:

To move up and down a column (e.g. from channel to channel) use the CHANNEL-/+ button.

To move from item to item (e.g. from channel number to add to lock) use the arrow up/down keys.

BUTTON FUNCTIONS

NOTES:

Please note that if the TV Clock, SleepTimer, or On/Off Timer are not set, the initial Display screen will state "Clock Not Set," "Sleep Timer Off," and "On/Off Timer Off," respectively.

DISPLAY

The Display screen shows the current status of timers and inputs.

DISPLAY

```
07
NOW                    12:20 PM
SLEEP TIMER              OFF
ON/OFF TIMER           EVERYDAY
  ON TIME               7:00 PM
  OFF TIME             10:00 PM
```

- ❑ The channel or AV input (Channel 07)
- ❑ Current time (12:20 PM)
- ❑ Sleep Timer status minutes remaining (Off)
- ❑ On/Off Timer status (Everyday, on at 7:00 PM, off at 10:00 PM)
- ❒ Each press of the DISPLAY button changes the display mode:

DISPLAY → TIME → CHANNEL → OFF

CLOSED CAPTION

View the closed captions or text when included in a program.

CLOSED CAPTION

CC → TEXT → OFF

Note: To change caption or text channels see page 20.

Note: To access a captioning option or to turn one off, allow the display to remain on screen until it disappears. In a few seconds the captions will start.

Note: CC2, CC3, CC4, T2, T3, and T4 are functional, however, they are for future purposes.

Note: If a large black box covers 80% of your screen, the Text Mode is probably set. Press CLOSED CAPTION to turn it off.

VIDEO STATUS

The Video Status button lets you select the "Choice" settings of the Set Video Status menu, or reset to factory settings.

"Standard" resets the picture settings to factory standard levels.

"Choice" consists of the settings that you saved in the Set Video Status menu, page 17.

"Theater" for a film-like look to video.

VIDEO STATUS

CHOICE → THEATER → STANDARD

SLEEP TIMER

Sleep Timer turns off the TV for you in case you fall asleep. Program it to work in intervals of 15 minutes up to 180 minutes.

SLEEP TIMER

0 15 30 45 60 75 90 105 120 135 150 165 180

SLEEP TIMER MESSAGE:

20 seconds prior to the automatic shut-off, this message will appear:

```
GOOD NIGHT ! !
PUSH SLEEP TIMER BUTTON
TO EXTEND.
```

You then have 20 seconds to press the Sleep Timer button to delay turn off for another 15 minutes.

HYPER SURROUND

Creates a deep, 3-dimensional sound effect by channeling the sound through the TV's front firing speakers.

TV / VIDEO

TV/Video selects the input mode.

TV/VIDEO

TV → VIDEO

100 +

The 100+ button accesses all channels above Channel 99.

To move to Channel 124:

100+

2 (two)

4 (four)

VCR BUTTONS

This remote will control your VCR. It is preset to control a JVC VCR. For any other brand, you must set the manufacturer's code (page 13).

MENU BUTTONS

The MENU buttons allow you to control the options located in the menu screens. See page 14 for a complete discussion on these buttons.

MUTING

The MUTING button turns the sound off completely when you press it. Press it again to restore the volume to the previous level.

RETURN+

There are two kinds of Return...

Return+ *— Set a "Return Channel" to return to after scanning with CHANNEL -/+.*

RETURN+ and hold for 3 seconds

```
RETURN CHANNEL
PROGRAMMED !
```

Scan with CHANNEL -/+

RETURN+

Note: To cancel a Return channel, press and hold Return+ for another 3 seconds until "Return Channel Cancelled!" appears.

Return *— Return to the last channel viewed after moving to another channel via the 10 key pad.*

RETURN+

Move to another channel with the 10 key pad.

RETURN+

NUMBER BUTTONS 10 KEY PAD

Change channels with the 10 key pad.

For example, to move to Channel 7:

0 (zero)

7 (seven)

NOTES :

You can find another discussion of Return and Return+ on page 11.

TROUBLESHOOTING

PROBLEMS	CHECK
No power	• See if the power cord became unplugged. • Perhaps you have experienced a blown circuit breaker or fuse or a power outage.
No picture or sound	• The antenna could be disconnected. • The input mode (TV or Video) could not be set properly, refer to page 23. • The tuner mode (in the menu selection) could be set improperly, refer to page 15. • The station may be having difficulties, check to see if other channels are operating normally.
Remote control is not operating	• Check that the batteries are still working and properly installed. • Make sure there are no objects blocking a clear path from the remote to the TV. • Check that the TV/CATV switch is in the proper position — set to TV to view television.
You cannot select a certain channel	• Maybe you are too far from the TV, you must be within 23 feet (or 7 meters). • Make sure the channels are programmed. See Channel Summary, page 21. • Perhaps the channel is locked, select it with the 10 key pad and follow instructions.
Power turns off	• Perhaps the On/Off Timer is set, press the power button, check page 19. • The power was interrupted or the power cord unplugged. Reset the clock, check page 16. • The Sleep Timer may be set.
The clock is wrong	• The power was interrupted and the clock not reset. Reset the clock, check page 16.
PICTURE	**CHECK**
Poor color quality	• Tint and color may be improperly adjusted. Check page 17. • Video Status mode may be set to an inappropriate setting. Check page 17.
Lines or streaks across the screen	• There could be interference from another energy consuming appliance, such as a computer, another TV or VCR. Move any other such appliances farther away from the TV.
Spotted picture	• There could be interference from a running high wattage appliance such as a hair-dryer, vacuum cleaner, or neon sign. You will have to move the antenna away from the source of the interference or change it to a coaxial cable which is less prone to interference.
Double picture (Ghosts)	• A building or airplane can reflect the original signal producing a second, delayed one. Adjust the antenna position.
Snowy picture/ Image noise	• The antenna may be damaged, disconnected or turned. Check the antenna connection, pages 6 to 7. If it is damaged, you will have to replace it.
Screen is 80% black	• Closed Caption Text Mode is on. Press the CLOSED CAPTION button until you select Off.
SOUND	**CHECK**
Bilingual or stereo programs can't be heard	• Make sure the MTS mode is properly set. Refer to page 18 for details on setting MTS Modes.
No sound from TV speakers at all	• TV Speakers may be turned off in the menu, see page 20.
NOT A PROBLEM	**DON'T WORRY ABOUT THIS, IT'S NORMAL**
Static electricity	• It is normal to feel a surge of static electricity if you brush over or touch the screen.
Occasional crackling sounds	• It is normal for the TV to emit crackling sounds when turned on or off. Unless the sound or picture become abnormal, this is fine.

JVC LIMITED WARRANTY

For Canadian model televisions, see separate sheets for Warranty/Garantie and JVC Authorized Service Centers in Canada.

JVC COMPANY OF AMERICA warrants this product and all parts thereof, except as set forth below TO THE ORIGINAL PURCHASER AT RETAIL to be FREE FROM DEFECTIVE MATERIALS AND WORKMANSHIP from the date of original purchase for the period as shown below (the "Warranty Period"). The picture tube is covered for two years.

Model No.	Serial No.	Parts	Labor
		1 YEAR	1 YEAR

This limited warranty is valid only in the fifty (50) United States, The District of Columbia and the Commonwealth of Puerto Rico.

JVC WILL:

If this product is found to be defective, repair or replace defective parts at no charge to the original owner. Such repairs will be made during regular business hours only at JVC authorized service centers. All parts repaired or replaced are warrantied for the remainder of this Warranty Period only. All products and parts should be brought to an authorized service center on a carry-in basis except for those models with a screen size larger than 25 inches which are covered on an in-home basis.

YOU MUST:

• Return your products to a JVC authorized service center with a copy of your bill of sale. For the authorized JVC service center nearest you, call toll free (800) 252-5722.

• If service is not locally available, box the product carefully, preferably in its original container, and ship it, insured, to the nearest authorized service center with a copy of the bill of sale and a letter of explanation as to the problem. Call the toll free number above for the address.

WHAT IS NOT COVERED:

1) Products which have been subject to abuse, accident, alteration, modification, tampering, negligence, misuse, faulty installation, lack of reasonable care, or if repaired or serviced by anyone other than a service facility authorized by JVC to render such service, or if connected to any attachment not provided with the products, or if the model or serial number has been altered, tampered with, or removed;
2) Initial installation, removal for repair, and reinstallation after repair is not covered;
3) Operational adjustments covered in the Owner's manual, normal maintenance, video and audio head cleaning;
4) Damage that occurs during shipment, due to an act of God, or of consequence to cosmetic changes;
5) Signal reception problems and failures due to line power surges;
6) Video Pick-up Tubes/CCD Image Sensor, Cartridge, Stylus (Needle) are covered for 90 days from the date of purchase;
7) Accessories, and;
8) Batteries (except for rechargeable batteries which are covered for 90 days from date of purchase.)

There are no express warranties except as listed above.

THE DURATION OF ANY IMPLIED WARRANTIES, INCLUDING THE IMPLIED WARRANTY OF MERCHANTABILTY, IS LIMITED TO THE DURATION OF THE EXPRESS WARRANTY HEREIN.

JVC SHALL NOT BE LIABLE FOR THE LOSS OF USE OF THIS PRODUCT, INCONVENIENCE, LOSS OR ANY OTHER DAMAGES, WHETHER DIRECT, INCIDENTAL OR CONSEQUENTIAL (INCLUDING, WITHOUT LIMITATION, DAMAGE TO TAPES, RECORDS OR DISCS) RESULTING FROM THE USE OF THIS PRODUCT, OR ARISING OUT OF ANY BREACH OF THIS WARRANTY, ALL EXPRESS AND IMPLIED WARRANTIES, INCLUDING THE WARRANTY OF MERCHANTABILITY AND FITNESS FOR PARTICULAR PURPOSE, ARE LIMITED TO THE WARRANTY PERIOD SET FORTH ABOVE.

Some states do not allow the exclusion of incidental or consequential damages or limitations on how long the warranty lasts, so these may not apply to you. This warranty gives you specific legal rights and you may also have other rights which vary state to state.

If you have questions concerning your JVC product, please contact our Customer Relations Department:

JVC COMPANY OF AMERICA
DIVISION OF US JVC CORP.
41 Slater Drive
Elmwood Park, New Jersey 07407

Refurbished products carry a separate warranty. This warranty does not apply for details of refurbished product warranty. Please refer to the refurbished product warranty information packaged with each refurbished product.

AUTHORIZED SERVICE CENTERS

For Canadian model televisions, see separate sheets for Warranty/Garantie and JVC Authorized Service Centers in Canada.

CALL TOLL FREE (800) 252-5722

1) **To locate the JVC Authorized Service Center nearest you.**
2) **To purchase parts or accessories.**
3) **For customer relations or hook-up assistance.**
4) **To locate the JVC authorized dealer nearest you.**

JVC SERVICE & ENGINEERING COMPANY OF AMERICA

DIVISION OF U.S. JVC CORP.

FACTORY SERVICE CENTER LOCATIONS

Dear customer;

In order to receive the most satisfaction from your purchase, read this guide before operating the unit, and before calling for service make sure you check the Troubleshooting pages at the end of this book. In the event that repair is necessary, or for the address nearest you, please refer to the factory service center list below, or within the continental United States, call the toll free number above for an authorized service center. Remember to retain your bill of sale for warranty service.

107 Little Falls Road
Fairfield, NJ 07004-2105
(201) 808-9279

1500 Lakes Parkway
Lawrenceville, GA 30243-5357
(404) 339-2522

705 Enterprise Street
Aurora, IL 60504-8149
(708) 851-7855

5665 Corporate Avenue
Cypress, CA 90630-0024
(714) 229-8011

10700 Hammerly Suite 110
Houston, TX 77043
(713) 935-9331

2969 Mapunapuna Place
Honolulu, HA 96819-2040
(808) 833-5828

230 Eliot Street
Ashland, MA 01721-2377
(508) 881-5923

8192 State Road 84
Davie, FL 33324
(954) 472-1960

890 Dubuque Avenue
South San Francisco, CA 94080-1804
(415) 871-2666

Sophisticated electronic products may require occasional service. Just as quality is a keyword in the engineering and production of the wide array of JVC products, service is key to maintaining the high level of performance for which JVC is world famous. The JVC service and engineering organization stands behind our products.

National Headquarters
JVC Service & Engineering Company of America
Division of U.S. JVC Corp.
107 Little Falls Road
Fairfield, NJ 07004-2105

THERE ARE NO USER SERVICEABLE PARTS INSIDE THIS TV! TO PREVENT ELECTRIC SHOCK, DO NOT OPEN CABINET AND DO NOT ATTEMPT TO SERVICE THIS TV YOURSELF.

SHIPPING INSTRUCTIONS

- Pack the TV in the original carton or one of equivalent size and strength. Use the original foam cushions or equivalent padding.
- Enclose a letter of explanation stating the problem that exists and a copy of the bill of sale.
- Print your home address on both the outside and inside of the shipping carton.
- Send to address nearest you in the list above.

SPECIFICATIONS

MODEL	AV-32920
Reception format	NTSC, BTSC System (Multi Channel Sound)
Reception range	VHF 2 to 13. UHF 14 to 69 Sub Mid, Super, Hyper and Ultra bands (181 channel frequency synthesizer system)
Power consumption	Max. 135W / 1.8A
Screen size	32 inch / 80 cm measured diagonally full square
Audio output	3W + 3W
Speakers	2" x 4 3/4" / 5 x 12 cm oval type x 2
Antenna terminal	75 ohms (VHF/UHF) (F-Type Connector)
External input jacks	Video: 1 Vp-p, 75 ohms Audio: 500mVrms (-4dBs) high impedance
S-Video input jack	Y: 1 Vp-p positive, 75 ohms (negative sync provided) C: 0.286 Vp-p (burst signal), 75 ohms
Variable audio output jacks	More than 0 to 1550mVrms (+6dBs) Low impedance (400 Hz when modulated 100%)
AV Compu Link jacks	3.5 mm ø mini jack x 1
Dimensions (inches) WxHxD (cm)	30 1/4 x 26 1/4 x 21 1/2 76.8 x 66.7 x 54.7
Weight (lbs. / kg.)	112.5 / 51.0
Accessories	Remote control unit x 1 / AA batteries x 2

Specifications subject to change without notice.

JVC®

JVC COMPANY OF AMERICA
A Division of U.S. JVC CORP.
41 Slater Drive
Elmwood Park, New Jersey 07407

JVC CANADA, INC.
21 Finchdene Square
Scarborough, Ontario
Canada M1X 1A7

LCT0157-001A-A
0198-TN-JII-JIM

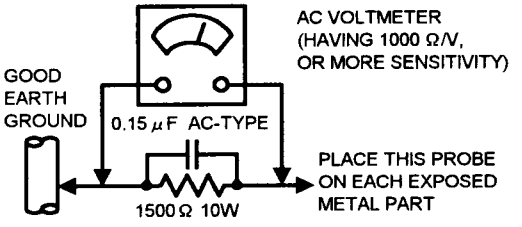
SAFETY PRECAUTIONS

1. The design of this product contains special hardware, many circuits and components specially for safety purposes. For continued protection, no changes should be made to the original design unless authorized in writing by the manufacturer. Replacement parts must be identical to those used in the original circuits. Service should be performed by qualified personnel only.
2. Alterations of the design or circuitry of the products should not be made. Any design alterations or additions will void the manufacturer's warranty and will further relieve the manufacturer of responsibility for personal injury or property damage resulting therefrom.
3. Many electrical and mechanical parts in the products have special safety-related characteristics. These characteristics are often not evident from visual inspection nor can the protection afforded by them necessarily be obtained by using replacement components rated for higher voltage, wattage, etc. Replacement parts which have these special safety characteristics are identified in the parts list of Service manual. **Electrical components having such features are identified by shading on the schematics and by (⚠) on the parts list in Service manual.** The use of a substitute replacement which does not have the same safety characteristics as the recommended replacement part shown in the parts list of Service manual may cause shock, fire, or other hazards.
4. **Use isolation transformer when hot chassis.**
   The chassis and any sub-chassis contained in some products are connected to one side of the AC power line. An isolation transformer of adequate capacity should be inserted between the product and the AC power supply point while performing any service on some products when the HOT chassis is exposed.
5. **Don't short between the LIVE side ground and ISOLATED (NEUTRAL) side ground or EARTH side ground when repairing.**
   Some model's power circuit is partly different in the GND. The difference of the GND is shown by the LIVE : (⊥) side GND, the ISOLATED(NEUTRAL) : (⏚) side GND and EARTH : (⏚) side GND. Don't short between the LIVE side GND and ISOLATED(NEUTRAL) side GND or EARTH side GND and never measure with a measuring apparatus (oscilloscope etc.) the LIVE side GND and ISOLATED(NEUTRAL) side GND or EARTH side GND at the same time.
   If above note will not be kept, a fuse or any parts will be broken.
6. If any repair has been made to the chassis, it is recommended that the B1 setting should be checked or adjusted (See ADJUSTMENT OF B1 POWER SUPPLY).
7. The high voltage applied to the picture tube must conform with that specified in Service manual. Excessive high voltage can cause an increase in X-Ray emission, arcing and possible component damage, therefore operation under excessive high voltage conditions should be kept to a minimum, or should be prevented. If severe arcing occurs, remove the AC power immediately and determine the cause by visual inspection (incorrect installation, cracked or melted high voltage harness, poor soldering, etc.). To maintain the proper minimum level of soft X-Ray emission, components in the high voltage circuitry including the picture tube must be the exact replacements or alternatives approved by the manufacturer of the complete product.
8. Do not check high voltage by drawing an arc. Use a high voltage meter or a high voltage probe with a VTVM. Discharge the picture tube before attempting meter connection, by connecting a clip lead to the ground frame and connecting the other end of the lead through a 10kΩ 2W resistor to the anode button.
9. When service is required, observe the original lead dress. Extra precaution should be given to assure correct lead dress in the high voltage circuit area. Where a short circuit has occurred, those components that indicate evidence of overheating should be replaced. Always use the manufacturer's replacement components.
10. **Isolation Check**
    (Safety for Electrical Shock Hazard)
    After re-assembling the product, always perform an isolation check on the exposed metal parts of the cabinet (antenna terminals, video/audio input and output terminals, Control knobs, metal cabinet, screwheads, earphone jack, control shafts, etc.) to be sure the product is safe to operate without danger of electrical shock.

    (1) **Dielectric Strength Test**
    The isolation between the AC primary circuit and all metal parts exposed to the user, particularly any exposed metal part having a return path to the chassis should withstand a voltage of 1100V AC (r.m.s.) for a period of one second.
    (. . . . Withstand a voltage of 1100V AC (r.m.s.) to an appliance rated up to 120V, and 3000V AC (r.m.s.) to an appliance rated 200V or more, for a period of one second.)
    This method of test requires a test equipment not generally found in the service trade.

    (2) **Leakage Current Check**
    Plug the AC line cord directly into the AC outlet (do not use a line isolation transformer during this check.). Using a "Leakage Current Tester", measure the leakage current from each exposed metal part of the cabinet, particularly any exposed metal part having a return path to the chassis, to a known good earth ground (water pipe, etc.). Any leakage current must not exceed 0.5mA AC (r.m.s.).
    However, in tropical area, this must not exceed 0.2mA AC (r.m.s.).

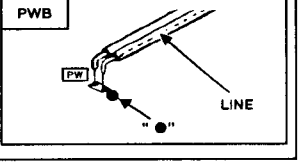
    ● **Alternate Check Method**
    Plug the AC line cord directly into the AC outlet (do not use a line isolation transformer during this check.). Use an AC voltmeter having 1000 ohms per volt or more sensitivity in the following manner. Connect a 1500Ω 10W resistor paralleled by a 0.15μF AC-type capacitor between an exposed metal part and a known good earth ground (water pipe, etc.). Measure the AC voltage across the resistor with the AC voltmeter. Move the resistor connection to each exposed metal part, particularly any exposed metal part having a return path to the chassis, and measure the AC voltage across the resistor. Now, reverse the plug in the AC outlet and repeat each measurement. Any voltage measured must not exceed 0.75V AC (r.m.s.). This corresponds to 0.5mA AC (r.m.s.).
    However, in tropical area, this must not exceed 0.3V AC (r.m.s.). This corresponds to 0.2mA AC (r.m.s.).



11. **High voltage hold down circuit check.**
    After repair of the high voltage hold down circuit, this circuit shall be checked to operate correctly.
    See item **"How to check the high voltage hold down circuit"**.

This mark shows a fast operating fuse, the letters indicated below show the rating.

POWER CORD
REPLACEMENT WARNING.
Connecting the line side of power cord to " ● " mark side.

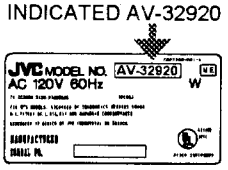
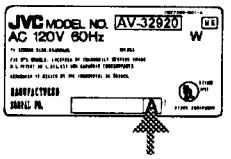
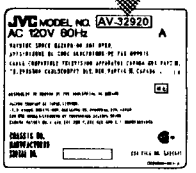
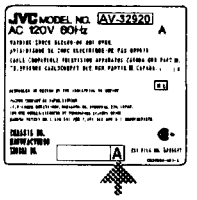


FEATURES

- New chassis design enables use of single board with simplified circuitry.
- Comb filter improved picture quality.
- Full-square CRT reproduces fine textured picture in every detail.
- PLL synthesizer system for channel tuning.
- With AV COMPU LINK EX terminal.
- TELETEXT broadcast can be viewed.
- With AUDIO, VIDEO input terminal.
- By the sound multiplex broadcast with MTS system, you can enjoy music programs and sporting events with live realism.
- S-VIDEO input terminal for taking best advantage of Super VHS.
- Variable audio output terminal.
- I^2C bus control utilities single chip ICs.
- By selecting the THEATER STATUS picture, you can enjoy pictures with powerful effects.
- The HYPER-SURROUND system makes a reproduction of the acoustic effects in a theater with strong appeal.

HOW TO IDENTIFY MODELS

- **For AV-32920 (A US&CA), an "A" is indicated after the serial No. on the rating label.**
  (The difference between AV-32920 (A US&CA) and AV-32920 (US&CA) is in the PICTURE TUBE. As the result of the difference in picture tube, the MAIN PWB also differ.)

⚠	MODEL / Parts name	AV-32920(US)	AV-32920(A US)	AV-32920(CA)	AV-32920(A CA)
⚠	RATING LABEL	CM23034-001-A	CM23034-001-A	CM22999-001-A	CM22999-001-A
		INDICATED AV-32920 	 INDICATED "A"	INDICATED AV-32920 	 INDICATED "A"

MAIN DIFFERENCE LIST

⚠	MODEL / Parts name	AV-32920(US)	AV-32920(A US)	AV-32920(CA)	AV-32920(A CA)
	MAIN PWB	SFK-1021A-M2	SFK-1022A-M2	SFK-1021A-M2	SFK-1022A-M2
⚠	ITC TUBE(C)	A80LJF30X08(W)	M80JUA061X06	A80LJF30X08(W)	M80JUA061X06
⚠	RATING LABEL	CM23034-001-A	←	CM22999-001-A	←
	REGI. CARD	BT-51006-1Q	←	×	×
	WARRANTY CARD	×	×	BT-52002-1Q	←
	SVC CENTER LIST	×	×	BT-20071B-Q	←
⚠	INST BOOK (FRENCH)	×	×	LCT0158-001A-A	←

SPECIFIC SERVICE INSTRUCTIONS

DISASSEMBLY PROCEDURE

REMOVING THE REAR COVER

1. Unplug the power supply cord.
2. Remove the 11 screws marked Ⓐ as shown in Fig.2.
3. Remove the rear cover toward you.

- When reinstalling the rear cover, carefully push it inward after inserting the chassis into the rear cover groove.

REMOVING THE CHASSIS

After removing the rear cover.

1. Slightly raise the both sides of the chassis by hand and remove the 2 claws under the both sides of the chassis from the front cabinet.
2. Draw the chassis backward along the rail in the arrow direction marked Ⓑ as shown in the Fig.2.
   (If necessary, take off the wire clamp, connectors etc.)

- When conducting a check with power supplied, be sure to confirm that the CRT earth wire is connected to the CRT SOCKET PWB and the MAIN PWB.

REMOVING THE FRONT CONTROL PW BOARD

• After removing the rear cover and chassis.

1. Remove the 2 screws marked Ⓓ as shown in Fig.2.
2. Remove the FRONT CONTROL PW BOARD toward you.

REMOVING THE AV TERMINAL BOARD

• After removing the rear cover.

1. Remove the 2 screws marked Ⓔ as shown in Fig.2.
2. After removing the claw marked Ⓕ in the direction of arrow mark as shown in Fig.1.
3. When you pull out the AV TERMINAL BOARD in the direction of arrow marked Ⓖ as shown in Fig.1, it can be removed.

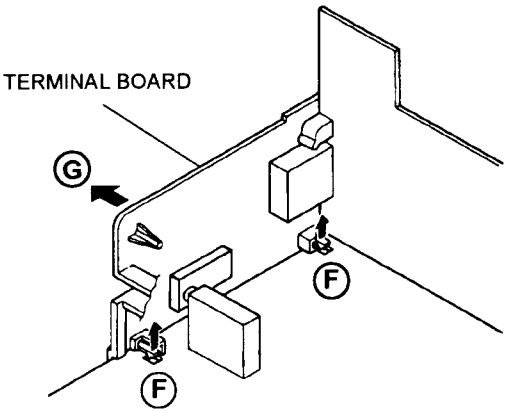


Fig. 1

CHECKING THE MAIN PW BOARD

1. To check the back side of the MAIN PW Board.
   1) Pull out the chassis. (Refer to REMOVING THE CHASSIS).
   2) Erect the chassis vertically so that you can easily check the back side of the MAIN PW Board.

[CAUTION]

- When erecting the chassis, be careful so that there will be no contacting with other PWB.
- Before turning on power, make sure that the CRT earth wire and other connectors are properly connected.

WIRE CLAMPING AND CABLE TYING

1. Be sure to clamp the wire.
2. Never remove the cable tie used for tying the wires together. Should it be inadvertently removed, be sure to tie the wires with a new cable tie.

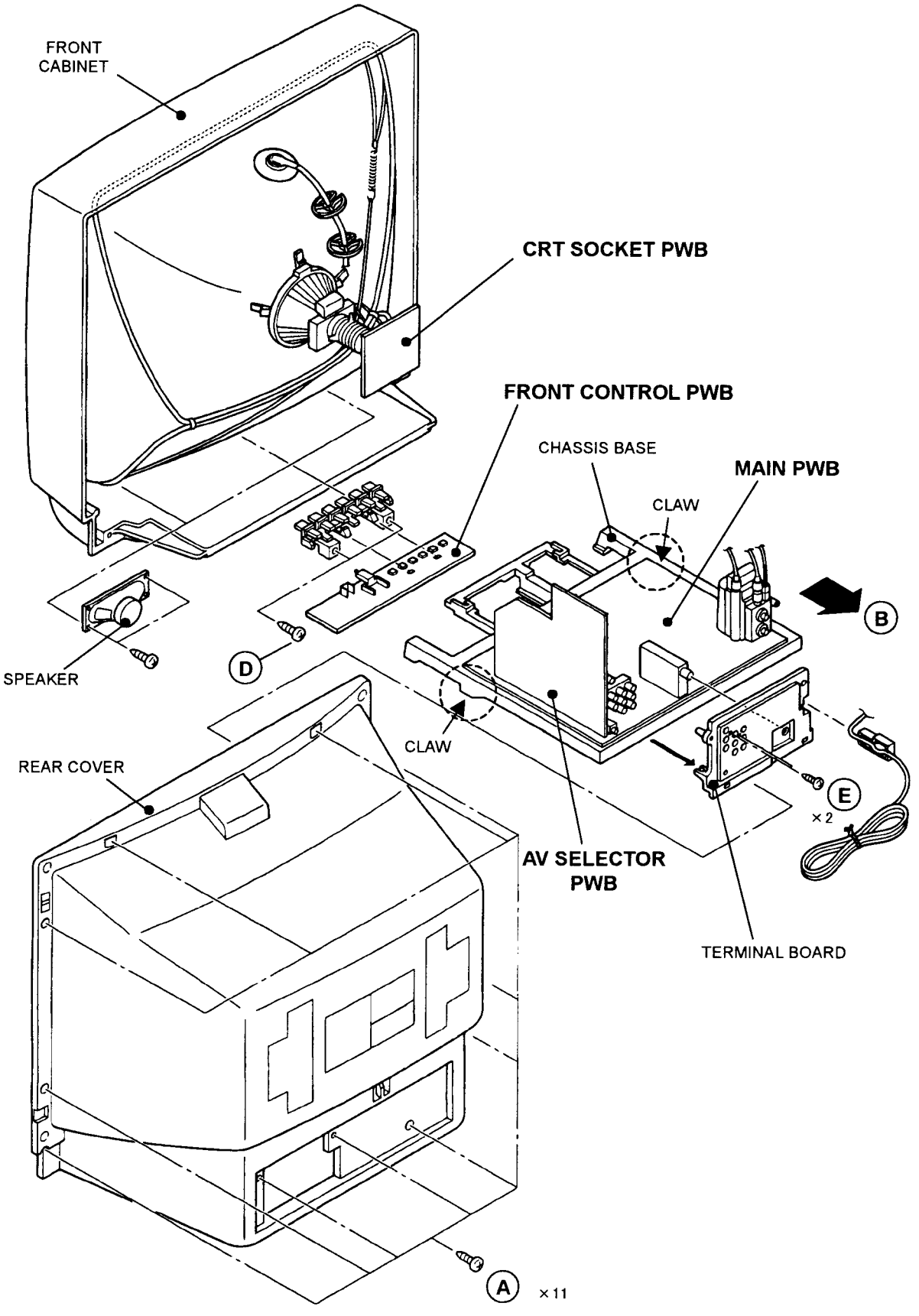

FRONT CABINET
CRT SOCKET PWB
FRONT CONTROL PWB
CHASSIS BASE
MAIN PWB
CLAW
B
SPEAKER
D
CLAW
REAR COVER
E
×2
AV SELECTOR PWB
TERMINAL BOARD
A
×11

Fig. 2

REMOVING THE CRT

* Replacement of the CRT should be performed by 2 or more persons.
- After removing the rear cover, chassis etc..,

1. Putting the CRT change table on soft cloth, the CRT change table should also be covered with such soft cloth (shown in Fig.3).
2. While keeping the surface of CRT down, mount the TV set on the CRT change table balanced will as shown in Fig.4.
3. Remove 4 screws marked by arrows with a box type screw driver as shown in Fig.4.

- Since the cabinet will drop when screws have been removed, be sure to support the cabinet with hands.

4. After 4 screws have been removed, put the cabinet slowly on cloth (At this time, be carefully so as not to damage the front surface of the cabinet) shown in Fig.5.

- The CRT should be assembled according to the opposite sequence of its dismounting steps.

* The CRT change table should preferably be smaller that the CRT surface, and its height be about 35cm.

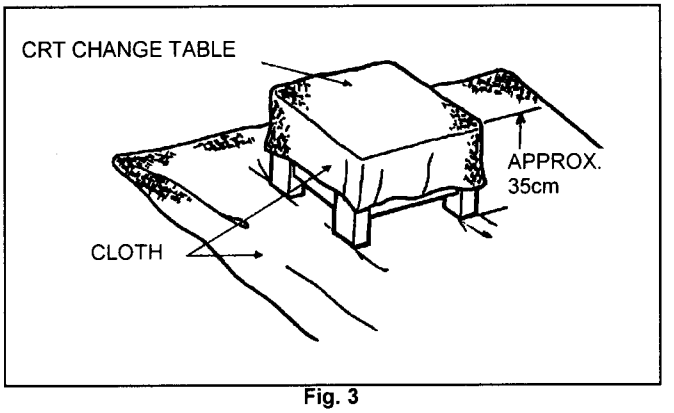


Fig. 3

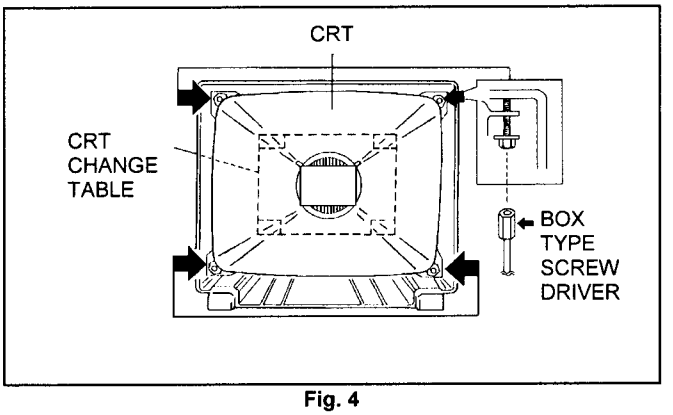


Fig. 4

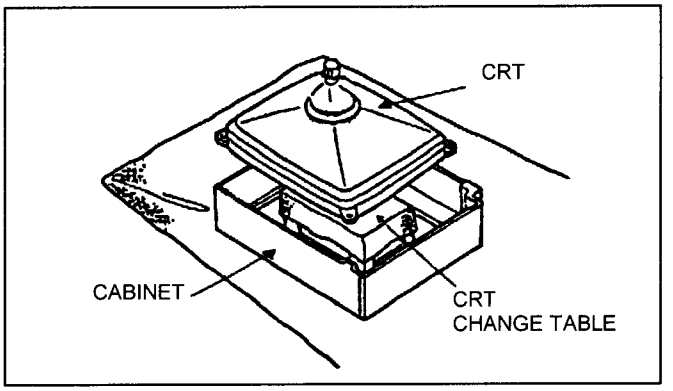


Fig. 5

COATING OF SILICON GREASE FOR ELECTRICAL INSULATION ON THE CRT ANODE CAP SECTION.

- Subsequent to replacement of the CRT and HV transformer or repair of the anode cap, etc. by dismounting them, be sure to coat silicon grease for electrical insulation as shown in Fig.6.
  Wipe around the anode button with clean and dry cloth. (Fig.6)
  Coat silicon grease on the section around the anode button. At this time, take care so that any silicon greases dose not stick to the anode button. (Fig.7)

★ **Silicon grease product No. KS - 650N**

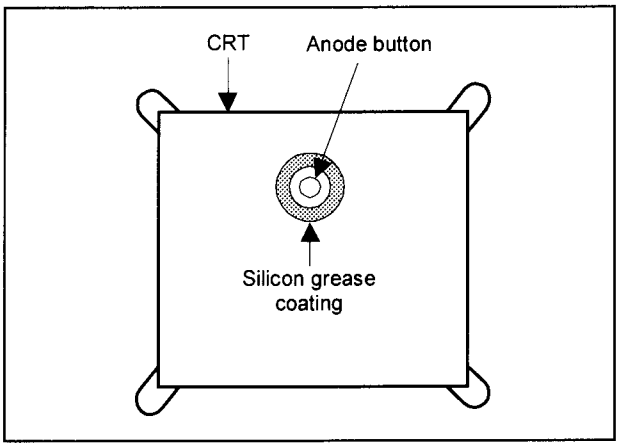


Fig. 6

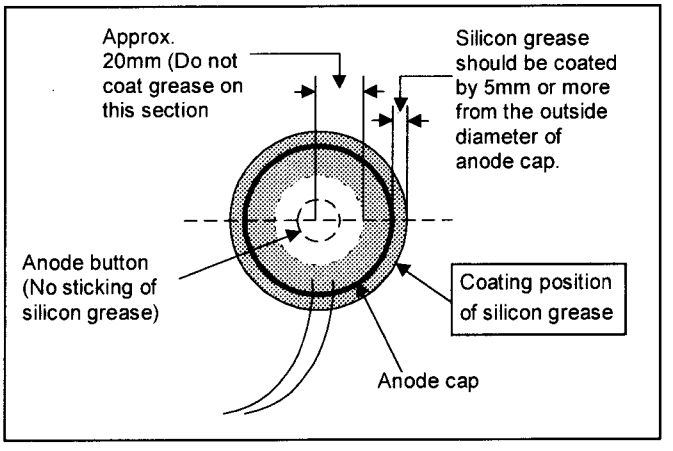


Fig. 7

MEMORY IC REPLACEMENT

1. Memory IC

This model use a memory IC.
The memory IC stores data for proper operation of video and deflection circuits.
When replacing, be sure to use an IC containing this (initial value) data.

2. Memory IC replacement procedure

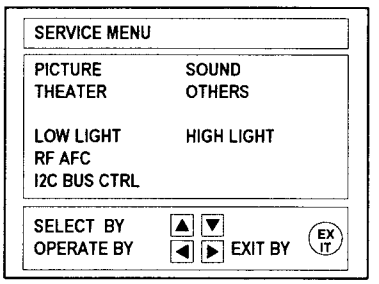
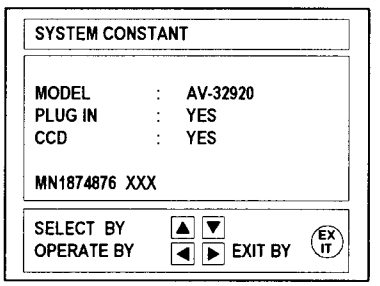
PROCEDURE	SCREEN DISPLAY
(1) **Power off** Switch off the power and disconnect the power cord from the outlet.	
(2) **Replace the memory IC.** Be sure to use memory ICs written with the initial data values.	
(3) **Power on** Connect the power cord to the outlet and switch on the power.	
(4) **System constant check and setting** 1) Simultaneously press the DISPLAY key and VIDEO STATUS key of the remote control unit. 2) The SERVICE MENU screen of Fig.1 is displayed. 3) While the SERVICE MENU is displayed, again simultaneously press the DISPLAY and VIDEO STATUS keys to display the Fig.2 SYSTEM CONSTANT screen. 4) Refer to the SYSTEM CONSTANT table and check the setting items. Where these differ, select the setting item with the MENU UP / DOWN key and adjust the setting with the MENU LEFT / RIGHT keys. (The letters of the selected item are displayed in yellow.) 5) After adjusting, release the MENU LEFT / RIGHT key to store the setting value. 6) Press the EXIT key twice to return the normal screen.	 Fig.1  Fig.2
(5) **Receive channel setting** Refer to the OPERATING INSTRUCTIONS (USER' S GUIDE) and set the receive channels (Channels Preset) as described.	
(6) **User settings** Check the user setting items according to Table 2. Where these do not agree, refer to the OPERATING INSTRUCTIONS (USER' S GUIDE) and set the items as described.	
(7) **SERVICE MENU setting** Verify what to set in the SERVICE MENU, and set whatever is necessary. (Fig.1) refer to the SERVISE ADJUSTMENT for setting.	

TABLE 1 (System Constant setting)

Setting item	Setting constant	Setting value
MODEL	AV-32920	AV-32920
PLUG IN	YES → NO	YES
CCD	YES → NO	YES

TABLE 2 (User setting)

Setting item	Setting value	Setting item	Setting value
1. Use remote controller keys			
POWER	OFF	DISPLAY	OFF
CHANNEL	CH-02	VIDEO STATUS	STANDARD
VOLUME	Proper sound volume	SLEEP TIMER	00
TV/VIDEO	TV		
CLOSED CAPTION	OFF(CC1/T1)		
HYPER SURROUND	OFF		
2. Settings of MENU			
TINT	CENTER	TV SPEAKER	ON
COLOR	CENTER	AUDIO OUT	FIX
PICTURE	CENTER	LANGUAGE	ENG
BRIGHT	CENTER	CLOSED CAPTION	CAPTION : CC1
DETAIL	CENTER		TEXT : T1
NOTCH	OFF	AUTO TUNER SET UP	Unnecessary to set
NOISE MUTE	ON		
SET VIDEO STATUS	ALL CENTER	CHANNEL SUMMARY	Set optionally
BASS	CENTER	TUNER MODE	AIR
TREBLE	CENTER		
BALANCE	CENTER		
MTS	STEREO		
SET CLOCK	MANUAL MODE		
ON/OFF TIMER	NO		
SET LOCK CODE	Unnecessary to set		

SERVICE ADJUSTMENTS

ADJUSTMENT PREPARATION:

1. **You can make the necessary adjustments for this unit with either the remote control unit or with the adjustment equipment and parts as given below.**
2. **Adjustment with the remote control unit is made on the basis of the initial setting values, however, the new setting values which set the screen to its optimum condition may differ from the initial settings.**
3. Turn on the power for the set and test equipment before use, and start the adjustment procedures after waiting at least 30 minutes.
4. Make sure that AC power is turned on correctly.
5. Unless otherwise specified, prepare the most suitable reception or input signal for adjustment.
6. Never touch any adjustment parts which are not specified in the list for this adjustment-variable resistors, transformers, condensers, etc.
7. Presetting before adjustment.
   Unless otherwise specified in the adjustment instructions, preset the following functions with the remote control unit.

VIDEO STATUS	STANDARD
NOTCH	OFF
HYPER SURROUND	OFF
BASS, TREBLE, BALANCE	CENTER

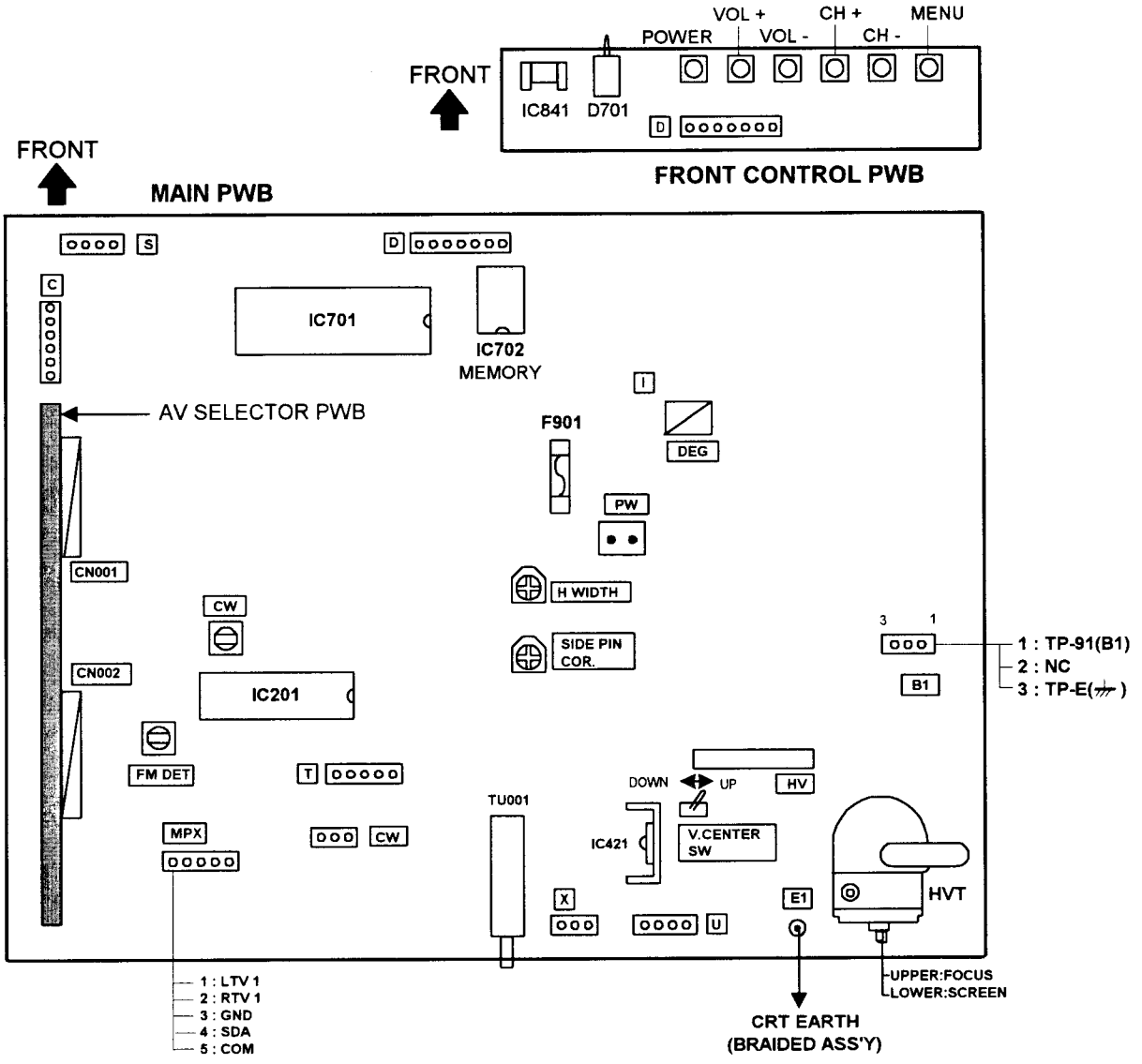
ADJUSTMENT EQUIPMENT

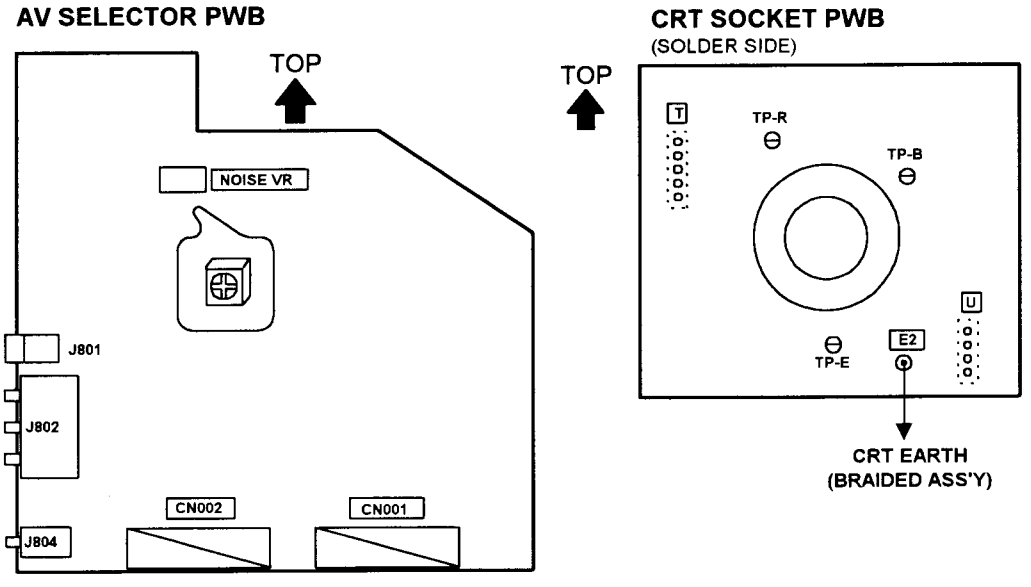
1. DC voltmeter(or digital voltmeter)
2. Oscilloscope
3. Signal generator (Pattern generator) [NTSC]
4. Remote control unit
5. TV audio multiplex signal generator
6. Frequency counter

ADJUSTMENT ITEMS

- ●B1 Voltage check
- ●IF VCO adjustment
- ●RF AGC adjustment
- ●FOCUS adjustment
- ●DEFLECTION adjustment
  - V. CENTER, V. SIZE, V. POSITION adjustment
  - H. WIDTH, SIDEPIN CORRECT, H. POSITION adjustment
- ●VIDEO / CHROMA adjustment
  - WHITE BALANCE (Low light) adjustment
  - WHITE BALANCE (High light) adjustment
  - SUB BRIGHT adjustment
  - SUB CONTRAST adjustment
  - SUB COLOR adjustment
  - SUB TINT adjustment
- ●PIP circuit adjustment
  - RF AGC (Noise) adjustment
  - DISPLAY POSITION adjustment
  - SUB BRIGHT adjustment
  - SUB CONTRAST adjustment
  - SUB COLOR adjustment
  - SUB TINT adjustment
- ●MTS circuit adjustment
  - INPUT LEVEL adjustment
  - STEREO VCO adjustment
  - SAP VCO adjustment
  - FILTER check
  - SEPARATION adjustment
- ●PURITY, CONVERGENCE adjustment

ADJUSTMENT LOCATONS





BASIC OPERATION OF SERVICE MENU

1. **Operate the SERVICE MENU with the REMOTE CONTROL UNIT.**

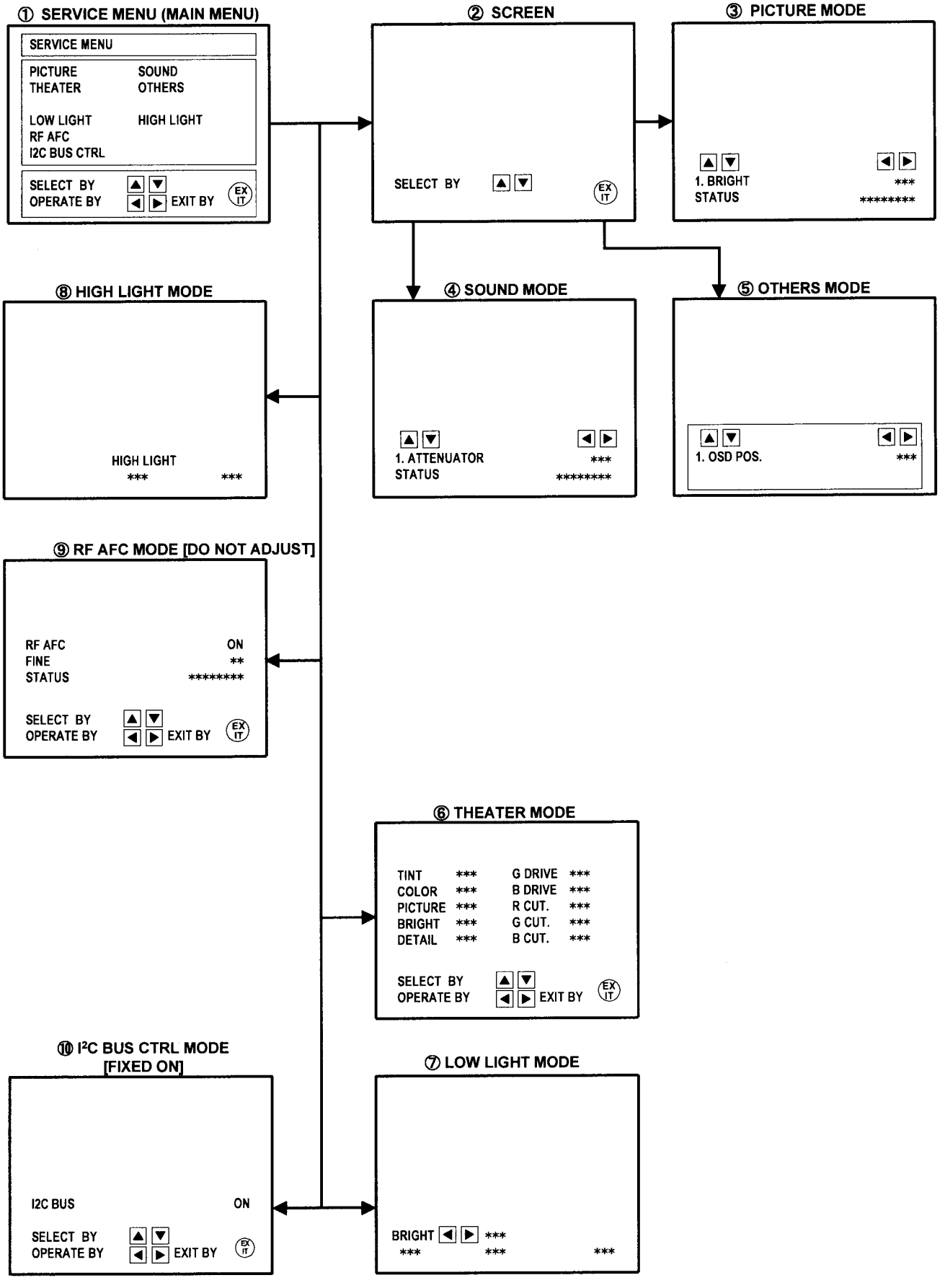
2. **In general, 8 basic setting(adjustments) items or verifications are performed in the SERVICE MENU.**
   (1) PICTURE ····· This sets the setting values (adjustment values) of the VIDEO/CHROMA and DEFLECTION circuits.
   (2) SOUND ····· This sets the setting values (adjustment values) of the AUDIO circuit.
   (3) THEATER ····· This is used when the THEATER MODE is adjusted.
   (4) OTHERS ····· This is used when the OTHER MODE is adjusted..
   (5) LOW LIGHT ····· This sets the setting values (adjustment values) of the WHITE BALANCE circuit.
   (6) HIGH LIGHT ····· This sets the setting values (adjustment values) of the WHITE BALANCE circuit.
   (7) RF AFC ····· This is used when the IF VCO is adjusted **[Do not adjust]**.
   (8) I2C BUS CTRL ····· This is used when ON/OFF of the I2C BUS CTRL is set **[Fixed ON]**.

3. **Basic Operations of the SERVICE MENU**
   (1) How to enter the SERVICE MENU.
   Press the DISPLAY key and VIDEO STATUS key of the remote control unit at the same time to enter the SERVICE MENU screen ①shown in figure page later.

   (2) SERVICE MENU screen selection
   Press the UP / DOWN key of the MENU to select any of the following items.
   (The letters of the selected items are displayed in yellow.)
   - PICTURE
   - SOUND
   - THEATER
   - OTHERS
   - LOW LIGHT
   - HIGH LIGHT
   - RF AFC
   - I2C BUS CTRL

   (3) Enter the any setting (adjustment) mode
   - **PICTURE, SOUND and OTHERS mode**
     1) If select any of PICTURE, SOUND or OTHERS items, and the LEFT / RIGHT key is pressed from SERVICE MENU (MAIN MENU), the screen ②will be displayed as shown in figure page later.
     2) Then the UP / DOWN key is pressed, the PICTURE mode screen ③ or the SOUND mode screen ④ or the OTHERS mode screen ⑤is displayed, and the PICTURE, SOUND or OTHERS setting can be performed.

   - **THEATER, LOW LIGHT, HIGH LIGHT, RF AFC and I^2C BUS CTRL mode**
     1) If select any of THEATER / LOW LIGHT / HIGH LIGHT / RF AFC / I2C BUS CTRL items, and the LEFT / RIGHT key is pressed from SERVICE MENU (MAIN MENU), the screens ⑥⑦⑧⑨⑩ will be displayed as shown in figure page later.
     2) Then the settings or verifications can be performed.

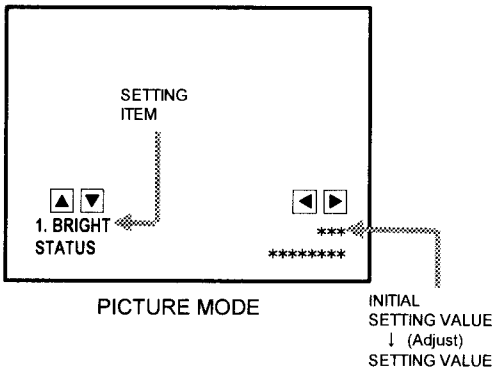

① SERVICE MENU (MAIN MENU)
SERVICE MENU
PICTURE
SOUND
THEATER
OTHERS
LOW LIGHT
HIGH LIGHT
RF AFC
I2C BUS CTRL
SELECT BY
OPERATE BY
EXIT BY
② SCREEN
SELECT BY
③ PICTURE MODE
1. BRIGHT
STATUS
④ SOUND MODE
1. ATTENUATOR
STATUS
⑤ OTHERS MODE
1. OSD POS.
⑥ THEATER MODE
TINT
COLOR
PICTURE
BRIGHT
DETAIL
G DRIVE
B DRIVE
R CUT.
G CUT.
B CUT.
⑦ LOW LIGHT MODE
BRIGHT
⑧ HIGH LIGHT MODE
HIGH LIGHT
⑨ RF AFC MODE [DO NOT ADJUST]
RF AFC
ON
FINE
STATUS
⑩ I²C BUS CTRL MODE [FIXED ON]
I2C BUS
ON

(3) Setting method

1) UP / DOWN key of the MENU
Select the SETTING ITEM.

2) LEFT / RIGHT key of the MENU
Setting(adjust) the SETTING VALUE of the SETTING ITEM.
When the key is released the SETTING VALUE will be stored (memorized).

3) EXIT key
Returns to the previous screen.

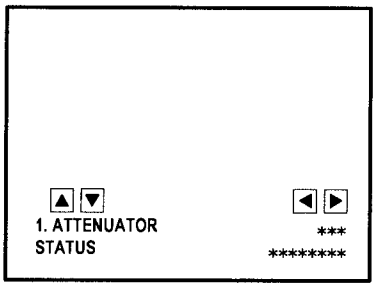


PICTURE MODE

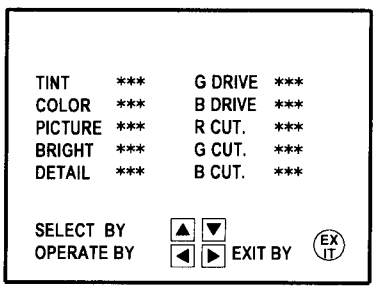
(4) Releasing SERVICE MENU

1) After returning to the SERVICE MENU upon completion of the setting (adjustment) work, press the EXIT key again.

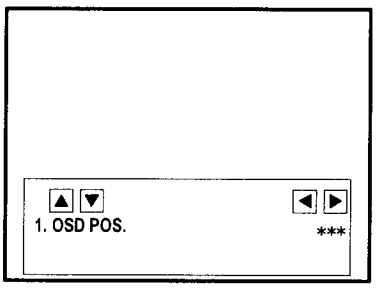
★ **The settings for LOW LIGHT and HIGH LIGHT are described in the WHITE BALANCE page of ADJUSTMENT.**



SOUND MODE



THEATER MODE



OTHERS MODE

INITIAL SETTING VALUE OF SERVICE MENU

1. **Adjustment of the SERVICE MENU is made on the basis of the initial setting values ; however, the new setting values which set the screen in its optimum condition may differ from the initial setting.**
2. **Do not change the initial Setting Values of the Setting (Adjustment) items not listed In "ADJUSTMENT".**

● PICTURE MODE

✧ The four setting items in the video mode No.8 EXT BRI., No.9 EXT PIC., No.12 EXT TINT and No.13 EXT COL. are linked to the items in the TV MODE No.1 BRIGHT, No.2 PICTURE, No.6 TINT and No.7 COLOR, respectively. When the setting items in the TV mode are adjusted, the values in the setting items in the video mode are revised automatically to the same values in the TV mode.(The initial setting values given in ( ) are off-set values.)

✧ When the four items (No.8, 9, 12 and 13) are adjusted in the video mode, the setting values in each item are revised independently.

No.	Setting (Adjustment) item	Variable range	Initial setting value
1.	BRIGHT	0~127	64
2.	PICTURE	0~127	75
3.	WPS (WHITE PEAK SUPPRESSOR)	0 / 1	1
4.	TV DETAIL	0~63	40
5.	TV BPF (TV B.P.FILTER)	0 / 1	1
6.	TINT	0~127	64
7.	COLOR	0~127	52
8.	EXT BRIGHT	±25	(-1)
9.	EXT PICT.	±25	(0)
10.	EXT DETAIL	0~63	38
11.	EXT BPF (EXT B.P.FILTER)	0 / 1	1
12.	EXT TINT	±25	(+8)
13.	EXT COLOR	±25	(+3)
14.	V SIZE	0~63	30
15.	V CENTER	0~7	0
16.	H POSITION	0~31	22
17.	H AFC	0 / 1	0
18.	BLANKING	0 / 1	0
19.	RF AGC	0~63	35
20.	PIF VCO	0~127	64

● SOUND MODE

No.	Setting (Adjustment) item	Variable range	Initial setting value
1.	ATTENUATOR	0~63	50
2.	BALANCE	0~63	32
3.	NOISE DET.	0 / 1	1
4.	IN LEVEL (INPUT LEVEL)	0~63	25
5.	FH MONITOR	0 / 1	0
6.	STEREO VCO	0~63	23
7.	PILOT CAN. (PILOT CANCELER)	0 / 1	0
8.	FILTER	0~63	30
9.	LOW SEP. (LOW SEPARATION)	0~63	35
10.	HI SEP. (HI SEPARATION)	0~63	17
11.	5FH MON. (5FH MONITOR)	0 / 1	0
12.	SAP VCO	0~63	28
13.	IN GAIN (INPUT GAIN)	0 / 1	0
14.	FIL.OFFSET	0~10	0

● THEATER MODE

Setting (Adjustment) item	Variable range	Initial setting value
TINT	±20	±00
COLOR	±20	-2
PICTURE	±20	-15
BRIGHT	±20	±00
DETAIL	±15	-3
G DRIVE	-80~+50	-25
B DRIVE	-80~+50	-72
R CUT. (R CUTOFF)	±10	±00
G CUT (G CUTOFF)	±10	±00
B CUT (B CUTOFF)	±10	±00

● OTHERS MODE

No.	Setting (Adjustment) item	Variable range	Initial setting value
1.	OSD POS.	0 ~ 7	0
2.	CCD POS. (CLOSED CAPTION DECODER POS.)	0 ~ 15	5
3.	EOSEL	0 / 1	1
4.	F1-FIELD	0 / 1	1
5.	F1-LINE21	0 ~ 15	8
6.	F2-LINE21	0 ~ 15	8
7.	OSD STABI	0 / 1	0
8.	LOCK DET.	0 / 1	0
9.	COL. NOISE	0 / 1	0
10.	MENU COLOR	-30 ~ 0	-10
11.	MENU PICT	-30 ~ 0	-12
12.	MENU BRI	-30 ~ 0	-12

● LOW LIGHT MODE

Setting (Adjustment) item	Variable range	Initial setting value
R CUTOFF	0 ~ 255	20
G CUTOFF	0 ~ 255	20
B CUTOFF	0 ~ 255	20

● HIGH LIGHT MODE

Setting (Adjustment) item	Variable range	Initial setting value
G DRIVE	0 ~ 255	128
B DRIVE	0 ~ 255	128

● RF AFC MODE

Setting (Adjustment) item	Variable range	Initial setting value
RF AFC	ON / OFF	ON
FINE	-77 ~ +77	±×× **Do not adjust**

● I^2C BUS CTRL MODE

Setting (Adjustment) item	Variable range	Initial setting value
I^2C BUS	ON/OFF	**[Fixed on]**

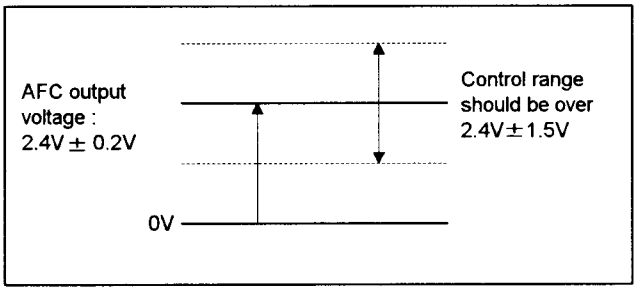
■ ADJUSTMENTS

B1 POWER SUPPLY

Item	Measuring instrument	Test point	Adjustment item	Description
Check of B1 POWER SUPPLY	DC Voltmeter	B1 (B1 Connector 1 pin) (TP-91) TP-E(⏚) (B1 Connector 3 pin)		1. Input a black and white signal (color off). 2. Connect the DC voltmeter to B1 connector 1 pin (TP-91) and TP-E(⏚) (B1 connector 3 pin). 3. Confirm that the voltage is DC134V±2V.

ADJUSTMENT OF IF VCO

Item	Measuring instrument	Test point	Adjustment item	Description
IF VCO adjustment	Oscilloscope Signal generator	CW Connector 3 pin	CW TRANSF. [RF AFC] mode	1. Input the color bar signal. 2. Connect the oscilloscope to pin 3 of the CW connector. 3. Select the [RF AFC] mode of the SERVICE MENU, and set the RF AFC to OFF and FINE to ±00. 4. Turn CW TRANSF., verify that the AFC output voltage changes quickly between 2.4V ±1.5V and then adjust the voltage to 2.4V±0.2V. 5. Return the RF AFC to ON. 6. Cancel the SERVICE MENU and check that no irregularities are displayed on the screen. If there any irregularities, select [RF AFC] mode on the SERVICE MENU and verify that FINE is 00 when the AFC is ON. Repeat steps 3 to 5 if necessary.



ADJUSTMENT OF RF AGC

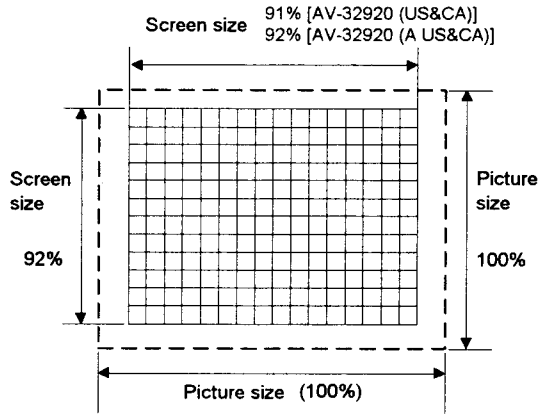
RF AGC adjustment			No.19 RF AGC	1. Receive a broadcast. 2. Select "No.19 RF AGC" of the PICTURE mode in SERVICE MENU. 3. Press the MUTE key and turn off color. 4. With the MENU LEFT key, get noise in the screen picture. (0 side of setting value) 5. Press the MENU RIGHT key and stop when noise disappears from the screen. 6. Change to other channels and make sure that there is no irregularity. 7. Press the MUTE key and get color out.

ADJUSTMENT OF FOCUS

FOCUS adjustment	Signal generator		FOCUS VR [In HVT]	1. Input a crosshatch signal. 2. While looking at the screen, adjust FOCUS VR so that the vertical and horizontal lines will be clear and in fine detail. 3. Make sure that the picture is in focus even when the screen gets darkened.

ADJUSTMENT OF DEFLECTION CIRCUIT

Item	Measuring instrument	Test point	Adjustment item	Description
V.CENTER V.SIZE and V.POSITION adjustment	**Signal generator**		**No.14 V SIZE** **No.15 V CENTER** **V.CENTER SW**	1. Input a crosshatch signal. 2. Confirm the "No.15 V CENTER" of the PICTURE mode is 0. 3. Adjust the vertical SCREEN size to 92% with the "No.14 V SIZE" and V.CENTER SW.
H.WIDTH, SIDEPIN CORRECT and H.POSITION adjustment	**Signal generator**		**No.16 H POSITION** **SIDEPIN CORRECT VR** **H.WIDTH VR**	1. Input a crosshatch signal. 2. Adjust the SIDEPIN CORRECT VR so that the vertical lines at both side of the crosshatch are straight. 3. Select the "No.16 H POSITION" of the PICTURE mode in SERVICE MENU. 4. Adjust the "No.16 H POSITION" until the screen will be horizontally centered. 5. Adjust the horizontal SCREEN size to the following percentages with the H.WIDTH VR. 91% [AV-32920 (US&CA)] 92% [AV-32920 (A US&CA)] 6. As required above steps 2 and 5.

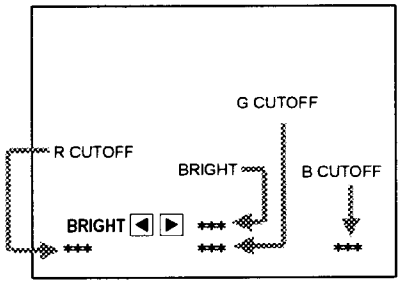


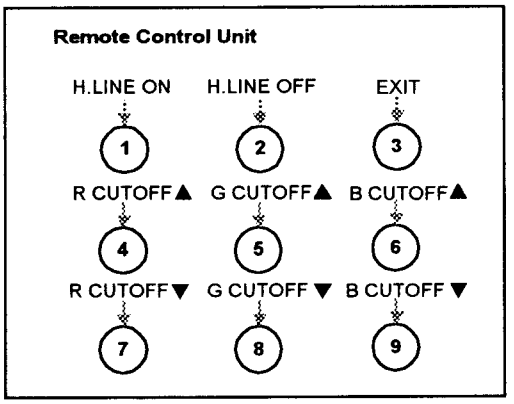
ADJUSTMENT OF VIDEO / CHROMA CIRCUIT

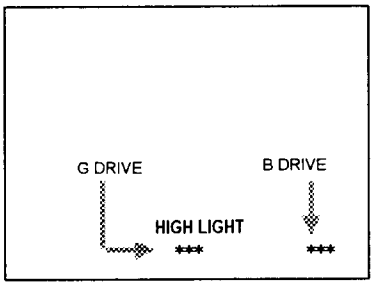
<table>
<tr><th>Item</th><th>Measuring instrument</th><th>Test point</th><th>Adjustment item</th><th>Description</th></tr>
<tr><td>WHITE BALANCE (Low Light) adjustment</td><td>Signal generator

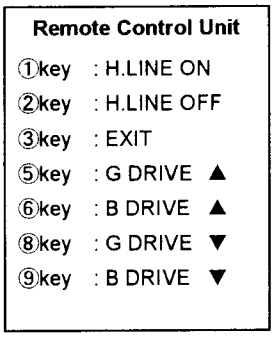
Remote control unit</td><td></td><td>BRIGHT

R CUTOFF
G CUTOFF
B CUTOFF

SCREEN VR</td><td>1. Input a black and white signal (color off).
2. Select the LOW LIGHT mode from the SERVICE MENU.
3. Confirm the Initial setting value of "BRIGHT", "R CUTOFF", "G CUTOFF" and "B CUTOFF".
4. Display one horizontal line by pressing the ① key of the remote control unit.
5. Turn the screen VR all the way to the left.
6. Turn the screen VR gradually to the right from the left until either one of the red, blue or green colors appears slightly.
7. Adjust the two colors which did not appear until the one horizontal line that is displayed becomes white using the ④ to ⑨ keys of the remote control unit.
8. Turn the screen VR until the first horizontal line is displayed slightly.
9. Press the ② key to return to the regular screen.</td></tr>
<tr><td colspan="4">[LOW LIGHT] MODE
 


</td></tr>
<tr><td>WHITE BALANCE (High Light) adjustment</td><td>Signal generator

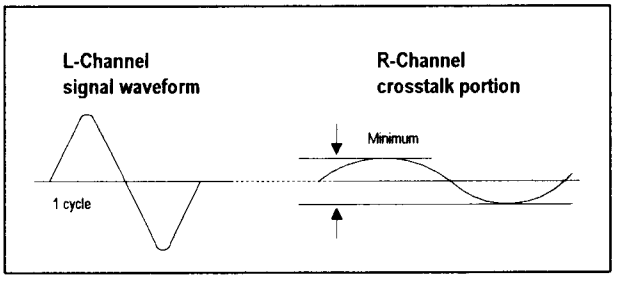
Remote control unit</td><td></td><td>G DRIVE
B DRIVE</td><td>1. Input a black and white signal (color off).
2. Select the HIGH LIGHT mode in the SERVICE MENU.
3. Confirm the initial setting value of "G DRIVE" and "B DRIVE".
4. Adjust the screen color to white with the ⑤,⑥,⑧ and ⑨ keys of the remote control unit.</td></tr>
<tr><td colspan="4">[HIGH LIGHT] MODE
 


</td></tr>
</table>

Item	Measuring instrument	Test point	Adjustment item	Description
SUB BRIGHT adjustment	**Remote control unit**		**No.1 BRIGHT**	1. Receive a broadcast. 2. Select "No.1 BRIGHT" of the PICTURE mode in SERVICE MENU. 3. Confirm the initial setting value of the "No.1 BRIGHT" . 4. If the brightness is not the best with the initial setting value, make fine adjustment of the "No.1 BRIGHT" until you get the optimum brightness.
SUB CONTRAST adjustment	**Remote control unit**		**No.2 PICTURE**	1. Receive a broadcast. 2. Select "No.2 PICTURE" of the PICTURE mode in SERVICE MENU. 3. Confirm the initial setting value of the "No.2 PICTURE". 4. If the contrast is not the best with the initial setting value, make fine adjustment of the "No.2 PICTURE" until you get the optimum contrast.
SUB COLOR adjustment	**Remote control unit**		**No.7 COLOR**	1. Receive a broadcast. 2. Select "No.7 COLOR" of the PICTURE mode in SERVICE MENU. 3. Confirm the initial setting value of the "No.7 COLOR". 4. If the color is not the best with the initial setting value, make fine adjustment until you get the best color.
SUB TINT adjustment	**Remote control unit**		**No. 6 TINT**	1. Receive a broadcast. 2. Select "No. 6 TINT" of the PICTURE mode in SERVICE MENU. 3. Confirm the initial setting value of the "No. 6 TINT". 4. If the tint is not the best with the initial setting value, make fine adjustment until you get the best tint.

ADJUSTMENT OF MTS CIRCUIT

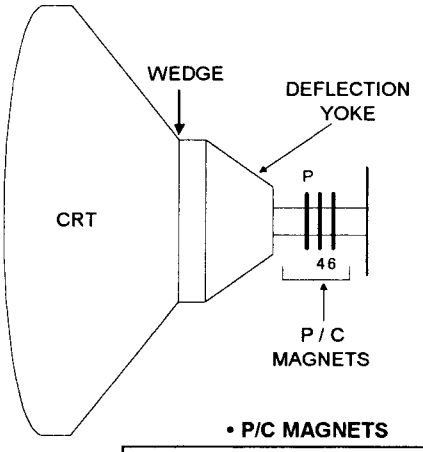
Item	Measuring instrument	Test point	Adjustment part	Description
MTS INPUT LEVEL check			**No.4 IN LEVEL**	1. Select the "No.4 IN LEVEL" of the SOUND mode in SERVICE MENU. 2. Verify that the "No.4 IN LEVEL" is set at its initial setting value.
MTS STEREO adjustment	**Signal generator** **Frequency counter**	**MPX Connector 2 pin RTV1 [MAIN PWB]**	**No.5 FH MONITER** **No.6 STEREO VCO**	1. Receive a RF signal (non modulated sound signal) from the antenna terminal. 2. Select the "No.5 FH MONITER" of SOUND mode in SERVICE MENU, change the setting value from 0 to 1. 3. Connect the frequency connector to pin 2 of MPX connector. 4. Select the "No.6 STEREO VCO". 5. Confirm the initial setting value of the "No.6 STEREO VCO". 6. Adjust the "No.6 STEREO VCO" so that the frequency counter will display 15.73kHz±0.1kHz. 7. Select the "No.5 FH MONITER" of the SOUND mode, and reset the setting value from 1 to 0.
MTS SAP VCO adjustment	**Signal generator** **Frequency counter**	**MPX Connector 4 pin SDA 3 pin GND 2 pin RTV1 [MAIN PWB]**	**No.11 5FH MON.** **No.12 SAP VCO.**	1. Receive a RF signal (non modulated sound signal) from the antenna terminal. 2. Connect between pin 4 of MPX connector and GND (pin 3 of MPX connector) through 1MΩ resistor. 3. Select the "No.11 5FH MON." of the SOUND mode in SERVICE MENU, and reset the setting value from 0 to 1. 4. Connect the frequency connector to pin 2 (R.OUT) of MPX connector. 5. Select the "No.12 SAP VCO". 6. Confirm the initial setting value of "No.12 SAP VCO". 7. Adjust the "No.12 SAP VCO" so that the frequency connector will display 78.67kHz±0.5kHz. 8. Select the "No.11 5FH MON." of the SOUND mode, and reset the setting value from 1 to 0.
MTS FILTER check			**No.8 FILTER**	1. Select the "No.8 FLTER" of the SOUND mode in SERVICE MENU. 2. Verify that the "No.8 FLTER" is set at its initial setting value.
MTS SEPARATION adjustment	**TV audio multiplex signal generator** **Oscilloscope**	**MPX Connector 1 pin LTV1 2 pin RTV1 [MAIN PWB]**	**No.9 LOW SEP.** **No.10 HI SEP.**	1. Input a stereo L signal (300Hz) from the TV Audio multiplex signal generator to the antenna terminal. 2. Connect an oscilloscope to pin 1 (L.OUT) of MPX connector, and display one cycle portion of the 300Hz signal. 3. Change the connection of the oscilloscope to pin 2 (R.OUT) of MPX connector, and enlarge the voltage axis. 4. Select the "No.9 LOW SEP." of the SOUND mode in SERVICE MENU. 5. Confirm the initial setting value of the "No.9 LOW SEP.". 6. Adjust the "No.9 LOW SEP." so that the stroke element of the 300Hz signal will become minimum. 7. Change the signal to 3kHz, and similarly adjust the "No.10 HI SEP.".



PURITY, CONVERGENCE

PURITY ADJUSTMENT

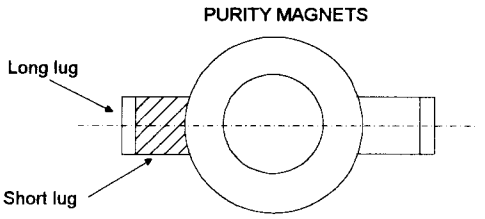
1. Demagnetize CRT with the demagnetizer.
2. Loosen the retainer screw of the deflection yoke.
3. Remove the wedges.
4. Input a green raster signal from the signal generator, and turn the screen to green raster.
5. Move the deflection yoke backward.
6. Bring the long lug of the purity magnets on the short lug and position them horizontally. (Fig.2)
7. Adjust the gap between two lugs so that the GREEN RASTER will come into the center of the screen. (Fig.3)
8. Move the deflection yoke forward, and fix the position of the deflection yoke so that the whole screen will become green.
9. Insert the wedge to the top side of the deflection yoke so that it will not move.
10. Input a crosshatch signal.
11. Verify that the screen is horizontal.
12. Input red and blue raster signals, and make sure that purity is properly adjusted.



• P/C MAGNETS

P : PURITY MAGNET
4 : 4 POLES (convergence magnets)
6 : 6 POLES (convergence magnets)

Fig.1



Bring the long lug over the short lug and position them horizontally.

Fig.2

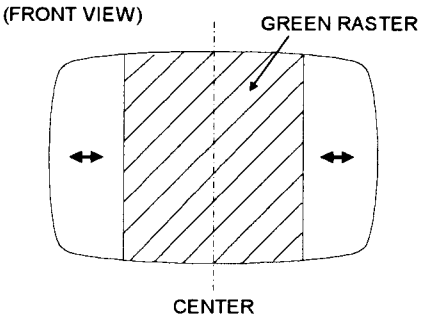


Fig.3

STATIC CONVERGENCE ADJUSTMENT

1. Input a crosshatch signal.
2. Using 4-pole convergence magnets, overlap the red and blue lines in the center of the screen (Fig.1) and turn them to magenta (red/blue).
3. Using 6-pole convergence magnets, overlap the magenta (red/blue) and green lines in the center of the screen and turn them to white.
4. Repeat 2 and 3 above, and make best convergence.

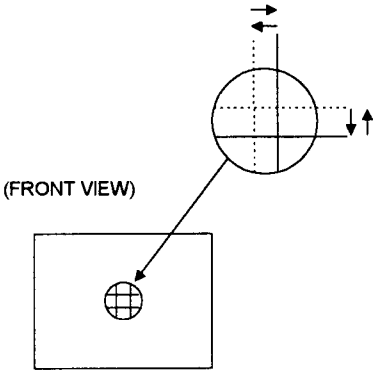


Fig.1

DYNAMIC CONVERGENCE ADJUSTMENT

1. Move the deflection yoke up and down and overlap the lines in the periphery. (Fig. 2)
2. Move the deflection yoke left to right and overlap the lines in the periphery. (Fig. 3)
3. Repeat 1 and 2 above, and make best convergence.

(FRONT VIEW)

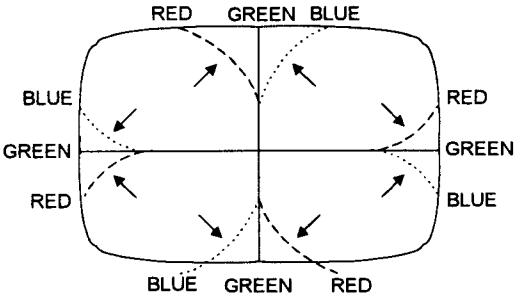


Fig.2

- After adjustment, fix the wedge at the original position.
  Fasten the retainer screw of the deflection yoke.
  Fix the 6 magnets with glue.

(FRONT VIEW)

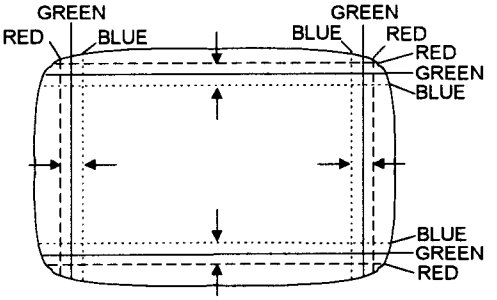


Fig.3

HOW TO CHECK THE HIGH VOLTAGE HOLD DOWN CIRCUIT

1. HIGH VOLTAGE HOLD DOWN CIRCUIT

After repairing the high voltage hold down circuit shown in Fig. 1.
This circuit shall be checked to operate correctly.

2. CHECKING OF THE HIGH VOLTAGE HOLD DOWN CIRCUIT

(1) Turn the POWER SW ON.
(2) As shown in Fig.2, set the resistor (between [X] connector [1] & [3]).
(3) Make sure that the screen picture disappears.
(4) Temporarily unplug the power cord.
(5) Remove the resistor (between [X] connector [1] & [3]).
(6) Again plug the power cord, make sure that the normal picture is displayed on the screen.

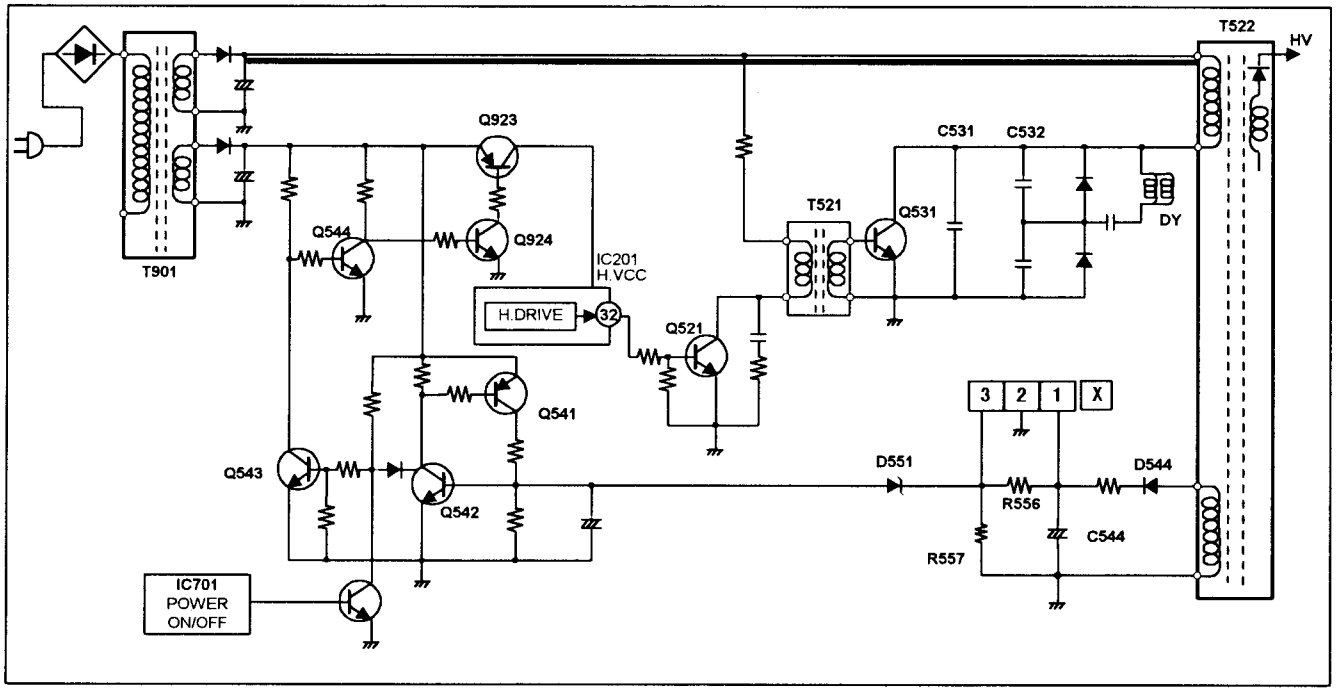


Fig. 1

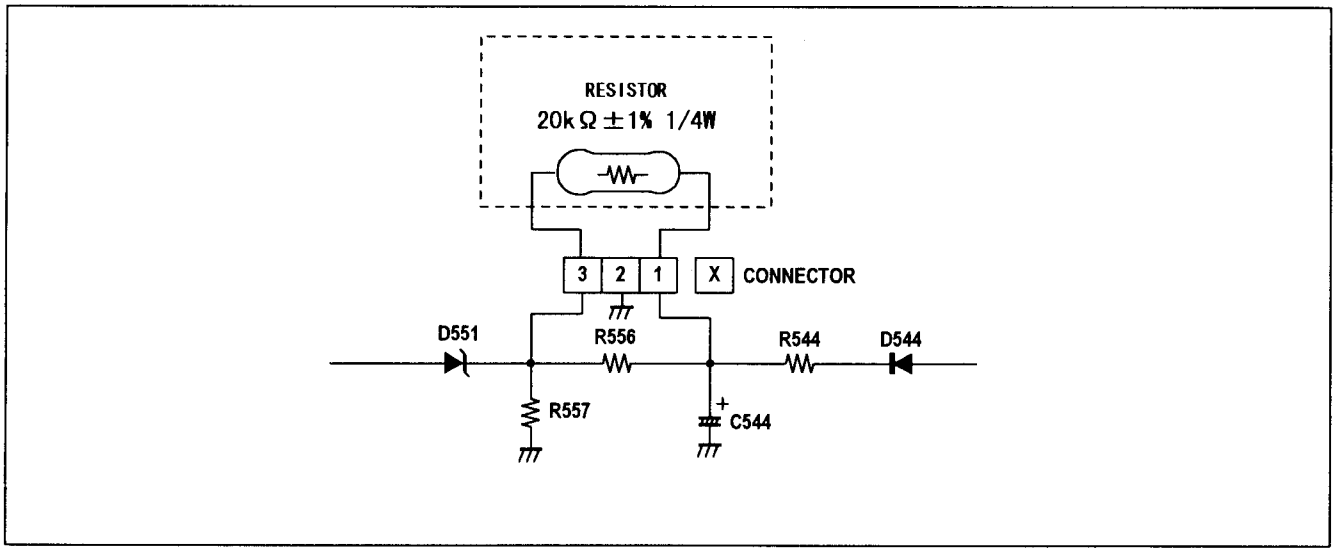


Fig.2

REPLACEMENT OF CHIP COMPONENT

■ CAUTIONS

1. Avoid heating for more than 3 seconds.
2. Do not rub the electrodes and the resist parts of the pattern.
3. When removing a chip part, melt the solder adequately.
4. Do not reuse a chip part after removing it.

■ SOLDERING IRON

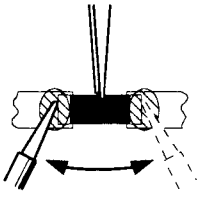
1. Use a high insulation soldering iron with a thin pointed end of it.
2. A 30w soldering iron is recommended for easily removing parts.

■ REPLACEMENT STEPS

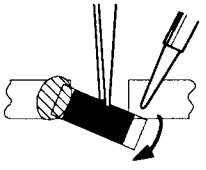
1. How to remove Chip parts

◆ **Resistors, capacitors, etc**

(1) As shown in the figure, push the part with tweezers and alternately melt the solder at each end.



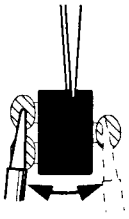
(2) Shift with tweezers and remove the chip part.



◆ **Transistors, diodes, variable resistors, etc**

(1) Apply extra solder to each lead.

(2) As shown in the figure, push the part with tweezers and alternately melt the solder at each lead. Shift and remove the chip part.

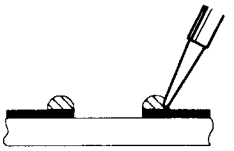


Note : After removing the part, remove remaining solder from the pattern.

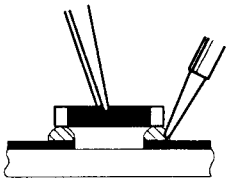
2. How to install Chip parts

◆ **Resistors, capacitors, etc**

(1) Apply solder to the pattern as indicated in the figure.



(2) Grasp the chip part with tweezers and place it on the solder. Then heat and melt the solder at both ends of the chip part.

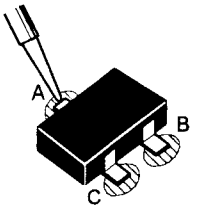


◆ **Transistors, diodes, variable resistors, etc**

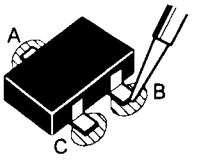
(1) Apply solder to the pattern as indicated in the figure.

(2) Grasp the chip part with tweezers and place it on the solder.

(3) First solder lead **A** as indicated in the figure.



(4) Then solder leads **B** and **C**.



AV-32920(US&CA) AV-32920(A US&CA) STANDARD CIRCUIT DIAGRAM

■ NOTE ON USING CIRCUIT DIAGRAMS

1.SAFETY

The components identified by the⚠ symbol and shading are critical for safety. For continued safety replace safety critical components only with manufactures recommended parts.

2.SPECIFIED VOLTAGE AND WAVEFORM VALUES

The voltage and waveform values have been measured under the following conditions.

(1)Input signal : Color bar signal
(2)Setting positions of each knob/button and variable resistor :Original setting position when shipped
(3)Internal resistance of tester :DC 20kΩ/V
(4)Oscilloscope sweeping time :H ⇒ 20μS/div
:V ⇒ 5mS/div
:Others ⇒ Sweeping time is specified
(5)Voltage values :All DC voltage values

＊Since the voltage values of signal circuit vary to some extent according to adjustments, use them as reference values.

3.INDICATION OF PARTS SYMBOL [EXAMPLE]

●In the PW board :R1209→R209

4.INDICATIONS ON THE CIRCUIT DIAGRAM

(1)Resistors

●Resistance value
No unit :[Ω]
K :[KΩ]
M :[MΩ]
●Rated allowable power
No indication :1/10 [W]
Others :As specified
●Type
No indication :Carbon resistor
OMR :Oxide metal film resistor
MFR :Metal film resistor
MPR :Metal plate resistor
UNFR :Uninflammable resistor
FR :Fusible resistor

*Composition resistor 1/2 [W] is specified as 1/2S or Comp.

(2)Capacitors

●Capacitance value
1 or higher :[pF]
less than 1 :[μF]
●Withstand voltage
No indication :DC50[V]
Others :DC withstand voltage [V]
AC indicated :AC withstand voltage [V]
*Electrolytic Capacitors
47/50[Example]:Capacitance value [μF]/withstand voltage[V]

●Type
No indication :Ceramic capacitor
MY :Mylar capacitor
MM :Metalized mylar capacitor
PP :Polypropylene capacitor
MPP :Metalized polypropylene capacitor
MF :Metalized film capacitor
TF :Thin film capacitor
BP :Bipolar electrolytic capacitor
TAN :Tantalum capacitor

(3)Coils

No unit :[μH]
Others :As specified

(4)Power Supply

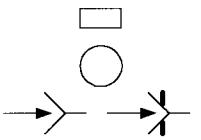

:B1(134V)
:B2(12V)
:9V
:5V

*Respective voltage values are indicated

(5)Test point


:Test point
:Only test point display

(6)Connecting method


:Connector
:Wrapping or soldering
:Receptacle

(7)Ground symbol

⊥ :LIVE side ground
⏚ :ISOLATED(NEUTRAL) side ground
⏚ :EARTH ground
▽ :DIGITAL ground

5.NOTE FOR REPAIRING SERVICE

This model's power circuit is partly different in the GND. The difference of the GND is shown by the LIVE : (⊥) side GND and the ISOLATED(NEUTRAL) : (⏚) side GND. Therefore, care must be taken for the following points.

(1)Do not touch the LIVE side GND or the LIVE side GND and the ISOLATED(NEUTRAL) side GND simultaneously. If the above caution is not respected, an electric shock may be caused. Therefore, make sure that the power cord is surely removed from the receptacle when, for example, the chassis is pulled out.
(2)Do not short between the LIVE side GND and ISOLATED(NEUTRAL) side GND or never measure with a measuring apparatus (oscilloscope, etc.) the LIVE side GND and ISOLATED(NEUTRAL) side GND at the same time. If the above precaution is not respected , a fuse or any parts will be broken.

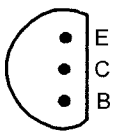
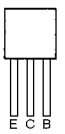
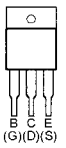
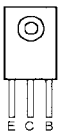
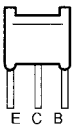
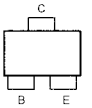
◇**Since the circuit diagram is a standard one, the circuit and circuit constants may be subject to change for improvement without any notice.**

Mar. 1998 No.51371

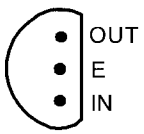
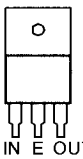
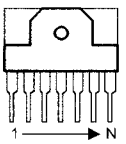
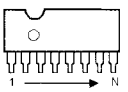
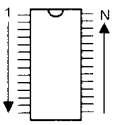
CONTENTS

SEMICONDUCTOR SHAPES

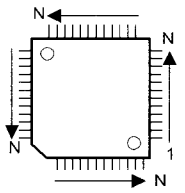
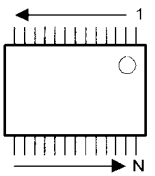
TRANSISTOR

BOTTOM VIEW	FRONT VIEW				TOP VIEW
					CHIP TR 

IC

BOTTOM VIEW	FRONT VIEW			TOP VIEW
				

CHIP IC

TOP VIEW		
		

■CHANNEL CHART (US)

MODE		BAND	CHANNEL		TUNER BAND
TV	CATV		REAL	DISP	
○	○	VL	02		I
			03		
			04		
			05		
			06		
		VH	07		II
			08		
			09		
			10		
			11		
			12		
			13		
×	○	MID	A	14	I
			B	15	
			C	16	II
			D	17	
			E	18	
			F	19	
			G	20	
			H	21	
			I	22	
		SUPER	J	23	
			K	24	
			L	25	
			M	26	
			N	27	
			O	28	
			P	29	
			Q	30	
			R	31	
			S	32	
			T	33	
			U	34	
			V	35	
			W	36	
		HYPER	W+1	37	
			W+2	38	
			W+3	39	
			W+4	40	
			W+5	41	
			W+6	42	
			W+7	43	
			W+8	44	
			W+9	45	
			W+10	46	
			W+11	47	
			W+12	48	IV
			W+13	49	
			W+14	50	
			W+15	51	
			W+16	52	
			W+17	53	
			W+18	54	
			W+19	55	
			W+20	56	
			W+21	57	
			W+22	58	
			W+23	59	
			W+24	60	
			W+25	61	
			W+26	62	
			W+27	63	
			W+28	64	
		ULTRA	W+29	65	
			W+30	66	
			W+31	67	
			W+32	68	
			W+33	69	
			W+34	70	

MODE		BAND	CHANNEL		TUNER BAND
TV	CATV		REAL	DISP	
×	○	ULTRA	W+35	71	IV
			W+36	72	
			W+37	73	
			W+38	74	
			W+39	75	
			W+40	76	
			W+41	77	
			W+42	78	
			W+43	79	
			W+44	80	
			W+45	81	
			W+46	82	
			W+47	83	
			W+48	84	
			W+49	85	
			W+50	86	
			W+51	87	
			W+52	88	
			W+53	89	
			W+54	90	
			W+55	91	
			W+56	92	
			W+57	93	
			W+58	94	
			W+59	100	
			W+60	101	
			W+61	102	
			W+62	103	
			W+63	104	
			W+64	105	
			W+65	106	
			W+66	107	
			W+67	108	
			W+68	109	
			W+69	110	
			W+70	111	
			W+71	112	
			W+72	113	
			W+73	114	
			W+74	115	
			W+75	116	
			W+76	117	
			W+77	118	
			W+78	119	
			W+79	120	
			W+80	121	
			W+81	122	
			W+82	123	
			W+83	124	
			W+84	125	
		SUB MID	A-8	01	I
			A-4	96	
			A-3	97	
			A-2	98	
			A-1	99	
○	×	UHF	14 ~ 69		IV

TOTAL 180CH
{ VHF 124CH
{ UHF 56CH

NOTE:
TO RECEIVE THE SUBSCRIPTION OR PREMIUM PROGRAMMING FROM CERTAIN CABLE COMPANIES.
SPECIAL ADAPTERS MAY BE REQUIRED.

■CHANNEL CHART (CA)

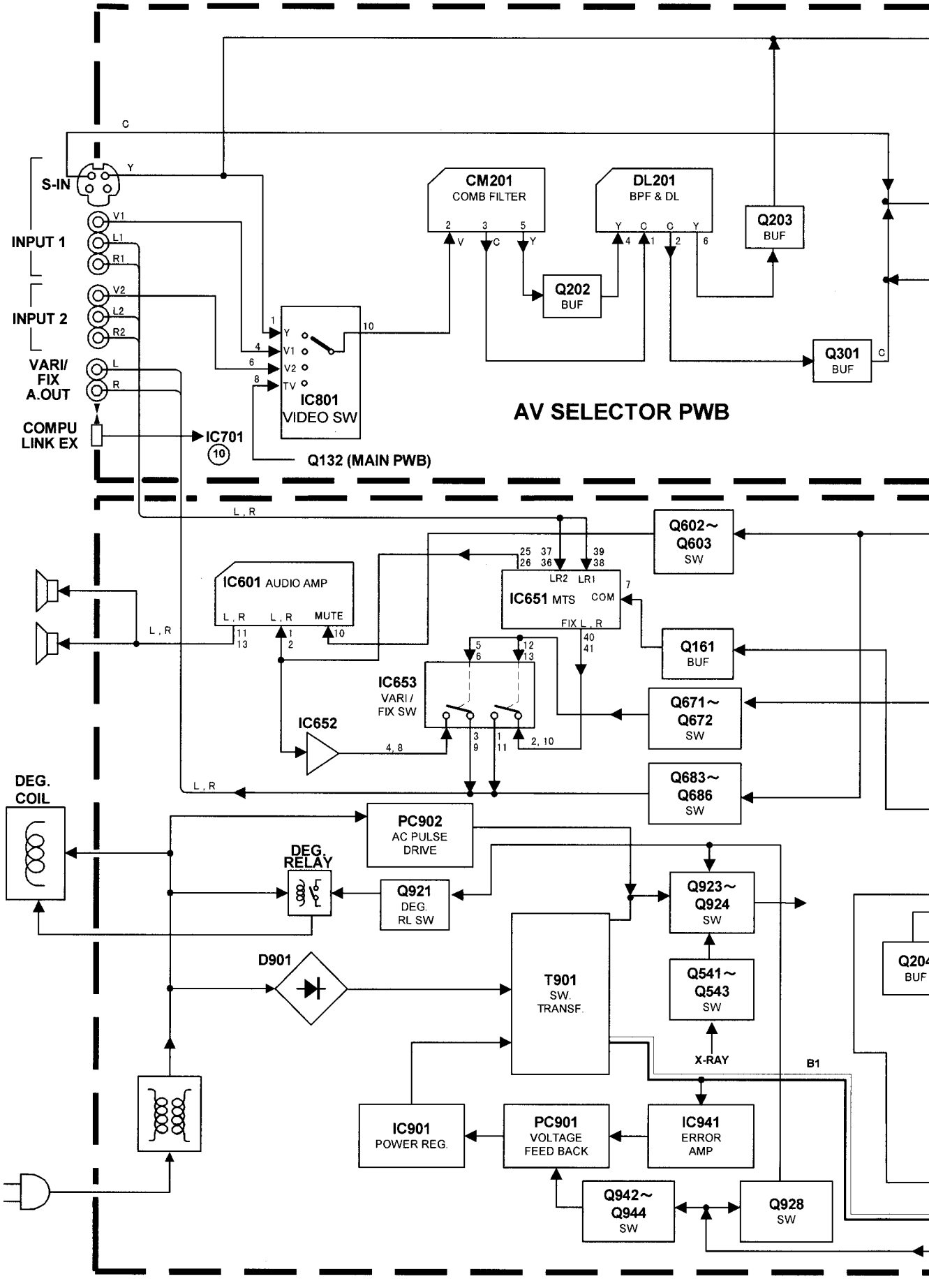
MODE		BAND	CHANNEL		TUNER BAND
TV	CATV		REAL	DISP	
○	○	VL	02		I
			03		
			04		
			05		
			06		
		VH	07		II
			08		
			09		
			10		
			11		
			12		
			13		
×	○	MID	A	14	
			B	15	
			C	16	
			D	17	
			E	18	
			F	19	
			G	20	
			H	21	
			I	22	
		SUPER	J	23	
			K	24	
			L	25	
			M	26	
			N	27	
			O	28	
			P	29	III
			Q	30	
			R	31	
			S	32	
			T	33	
			U	34	
			V	35	
			W	36	
		HYPER	W+1	37	
			W+2	38	
			W+3	39	
			W+4	40	
			W+5	41	
			W+6	42	
			W+7	43	
			W+8	44	
			W+9	45	
			W+10	46	
			W+11	47	
			W+12	48	
			W+13	49	
			W+14	50	
			W+15	51	
			W+16	52	
			W+17	53	
			W+18	54	
			W+19	55	
			W+20	56	
			W+21	57	
			W+22	58	
			W+23	59	
			W+24	60	
			W+25	61	
			W+26	62	
			W+27	63	
			W+28	64	
		ULTRA	W+29	65	
			W+30	66	IV
			W+31	67	
			W+32	68	
			W+33	69	
			W+34	70	

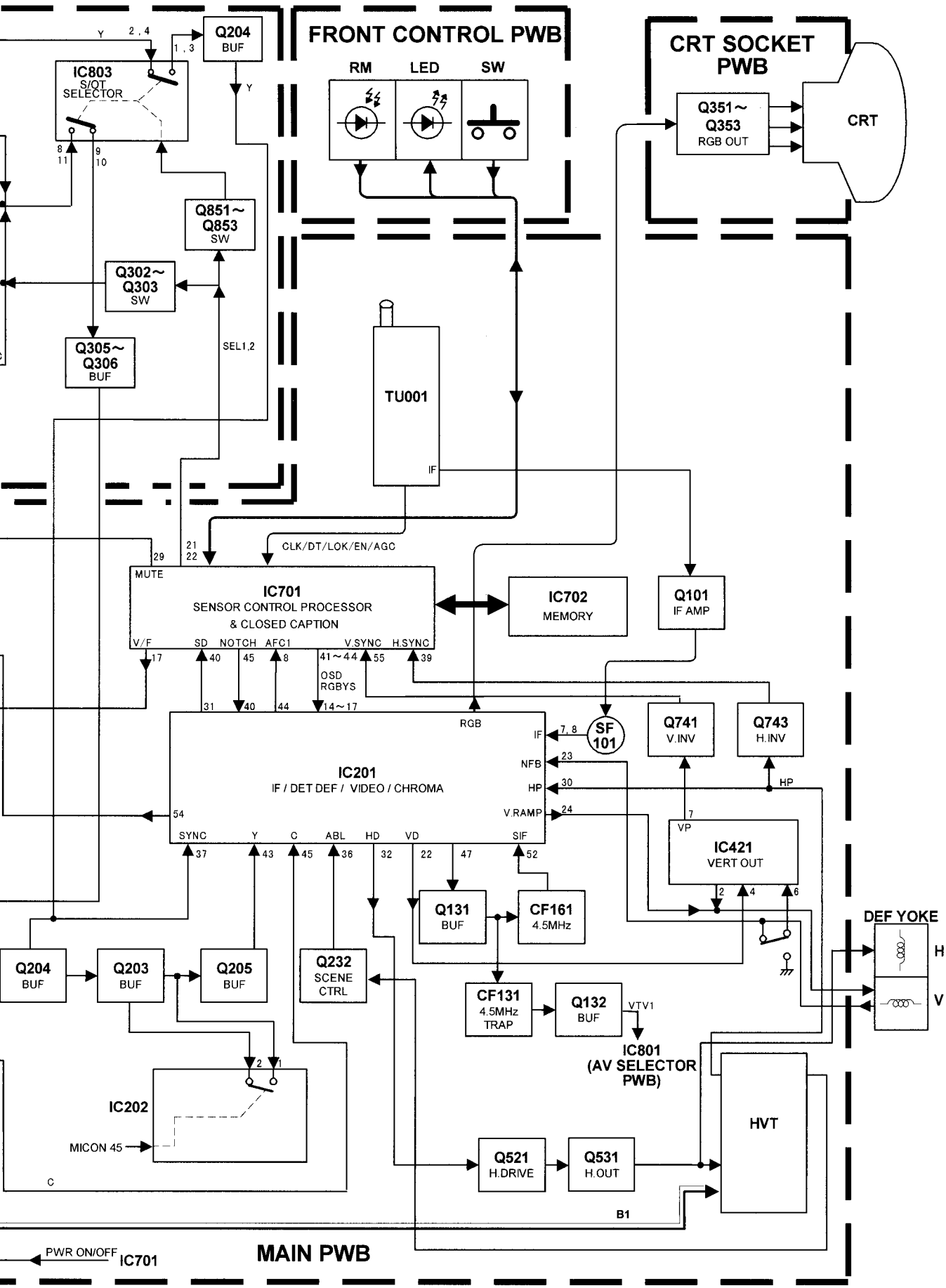
MODE		BAND	CHANNEL		TUNER BAND
TV	CATV		REAL	DISP	
×	○	ULTRA	W+35	71	IV
			W+36	72	
			W+37	73	
			W+38	74	
			W+39	75	
			W+40	76	
			W+41	77	
			W+42	78	
			W+43	79	
			W+44	80	
			W+45	81	
			W+46	82	
			W+47	83	
			W+48	84	
			W+49	85	
			W+50	86	
			W+51	87	
			W+52	88	
			W+53	89	
			W+54	90	
			W+55	91	
			W+56	92	
			W+57	93	
			W+58	94	
			W+59	100	
			W+60	101	
			W+61	102	
			W+62	103	
			W+63	104	
			W+64	105	
			W+65	106	
			W+66	107	
			W+67	108	
			W+68	109	
			W+69	110	
			W+70	111	
			W+71	112	
			W+72	113	
			W+73	114	
			W+74	115	
			W+75	116	
			W+76	117	
			W+77	118	
			W+78	119	
			W+79	120	
			W+80	121	
			W+81	122	
			W+82	123	
			W+83	124	
			W+84	125	
		SUB MID	A-8	01	I
			A-4	96	
			A-3	97	II
			A-2	98	
			A-1	99	
○	×	UHF	14 ~ 69		IV

TOTAL 180CH
{ VHF 124CH
{ UHF 56CH

NOTE:
TO RECEIVE THE SUBSCRIPTION OR PREMIUM PROGRAMMING FROM CERTAIN CABLE COMPANIES.
SPECIAL ADAPTERS MAY BE REQUIRED.

BLOCK DIAGRAM



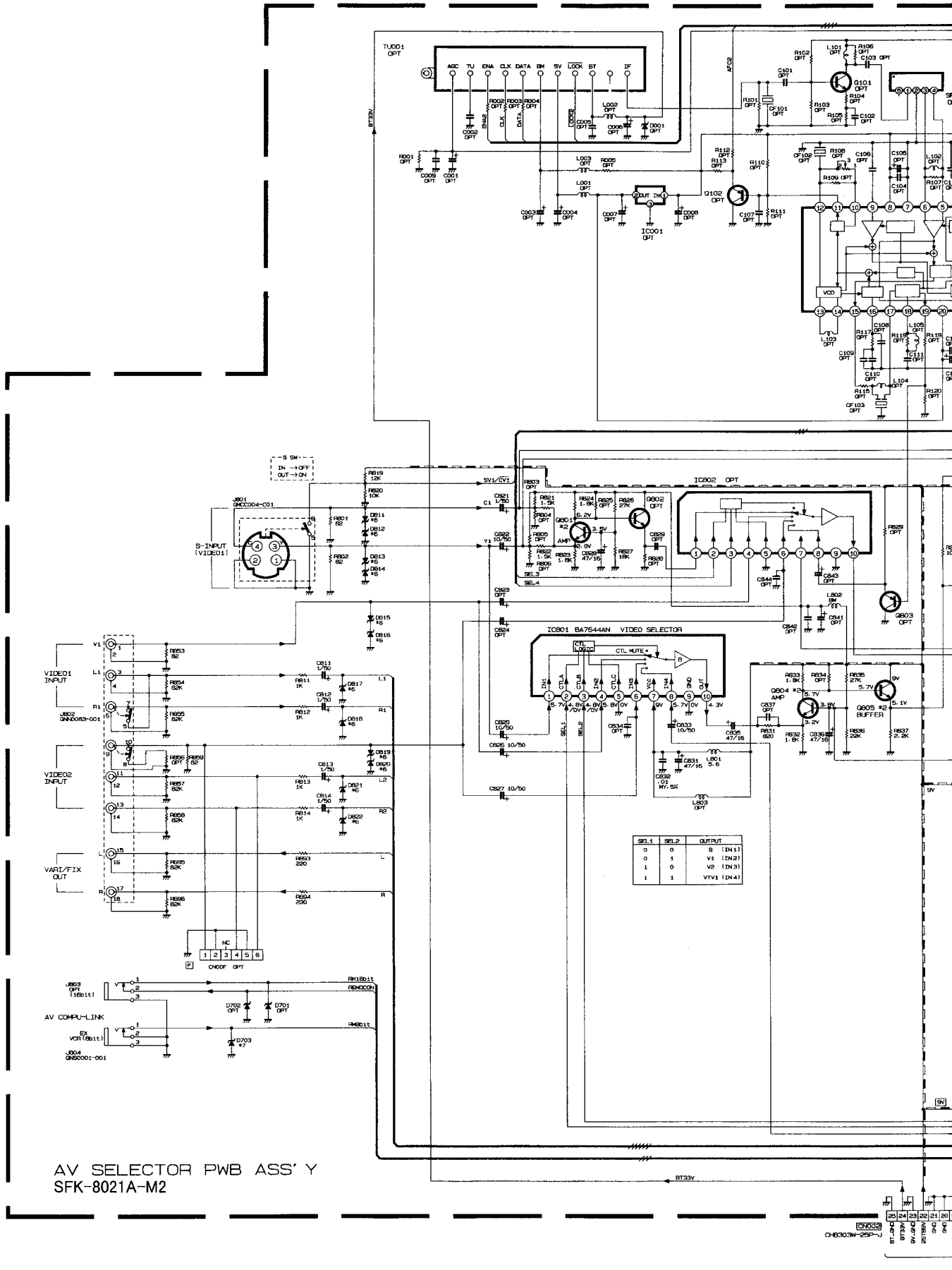

FRONT CONTROL PWB
RM
LED
SW
CRT SOCKET PWB
Q351~ Q353 RGB OUT
CRT
IC803 S/OT SELECTOR
Q204 BUF
Q851~ Q853 SW
Q302~ Q303 SW
Q305~ Q306 BUF
SEL1,2
TU001
IF
CLK/DT/LOK/EN/AGC
MUTE
IC701
SENSOR CONTROL PROCESSOR & CLOSED CAPTION
V/F
SD
NOTCH
AFC1
V.SYNC
H.SYNC
OSD RGBYS
RGB
IC702 MEMORY
Q101 IF AMP
SF 101
Q741 V.INV
Q743 H.INV
IC201
IF / DET DEF / VIDEO / CHROMA
NFB
HP
V.RAMP
SYNC
Y
C
ABL
HD
VD
SIF
VP
IC421 VERT OUT
DEF YOKE
H
V
Q131 BUF
CF161 4.5MHz
Q204 BUF
Q203 BUF
Q205 BUF
Q232 SCENE CTRL
CF131 4.5MHz TRAP
Q132 BUF
VTV1
IC801 (AV SELECTOR PWB)
IC202
MICON 45
HVT
Q521 H.DRIVE
Q531 H.OUT
B1
PWR ON/OFF
IC701
MAIN PWB

CIRCUIT DIAGRAMS

AV SELECTOR PWB CIRCUIT DIAGRAM

NOTE

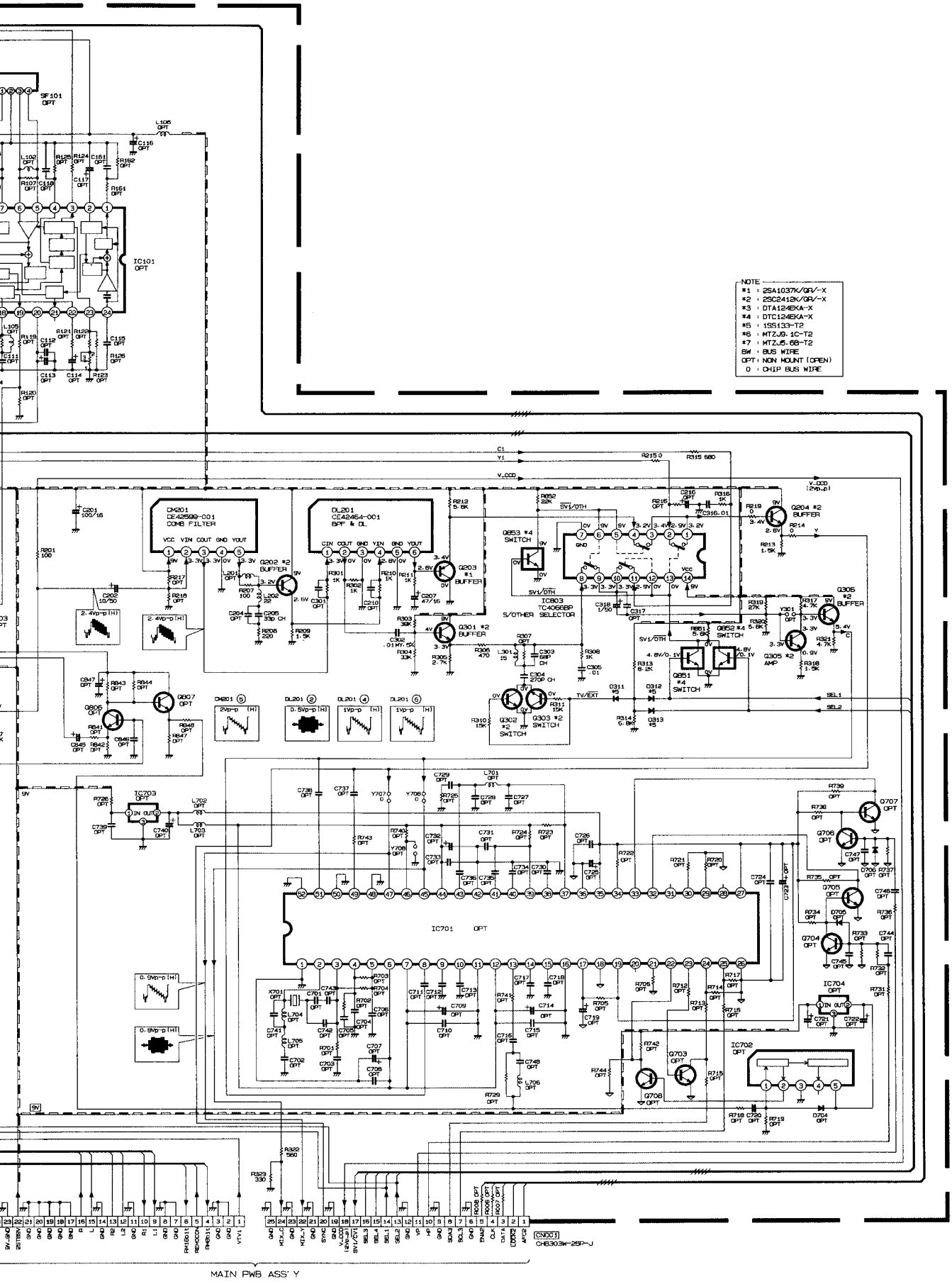
Due to part number standardization, some part numbers shown in th
diagram may not agree with those indicated in the parts list.
When ordering parts, please use the numbers that appear in the Part



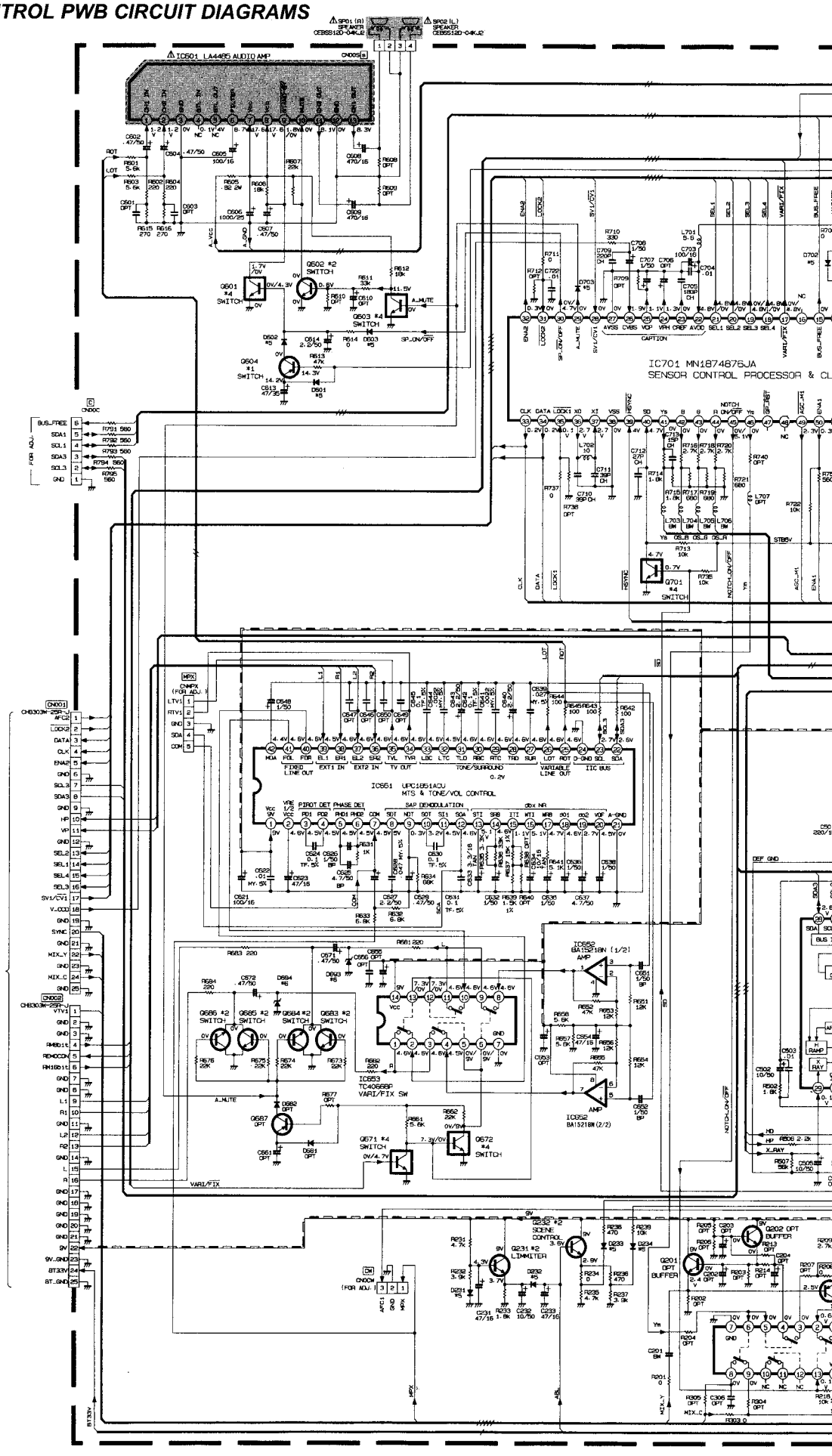
n in the circuit

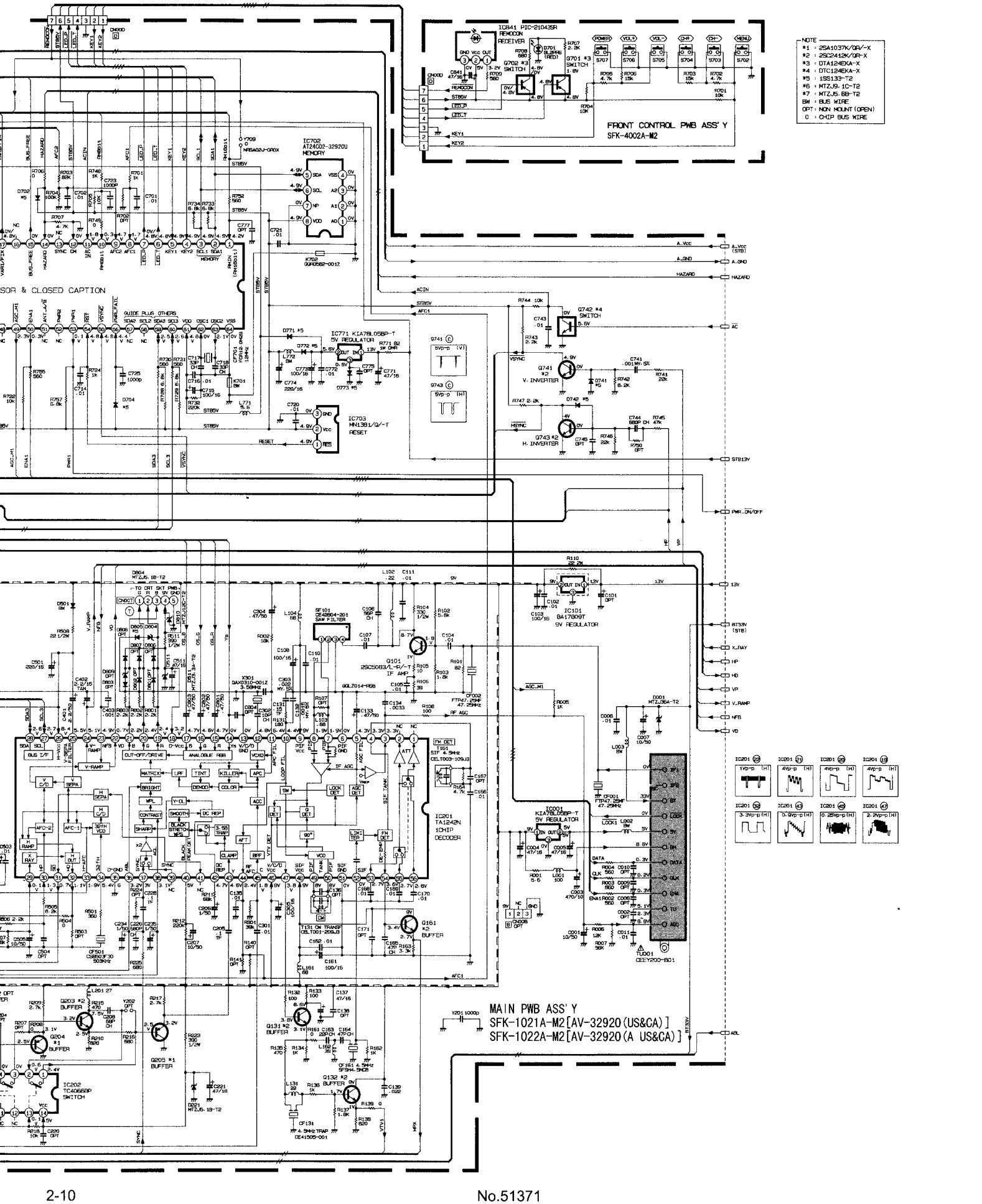
e Parts List.

This schematic diagram is applicable to both (US) and (CA) models.
As for the parts (marked by *) in the diagram, refer to the difference list (also marked by * for the parts).

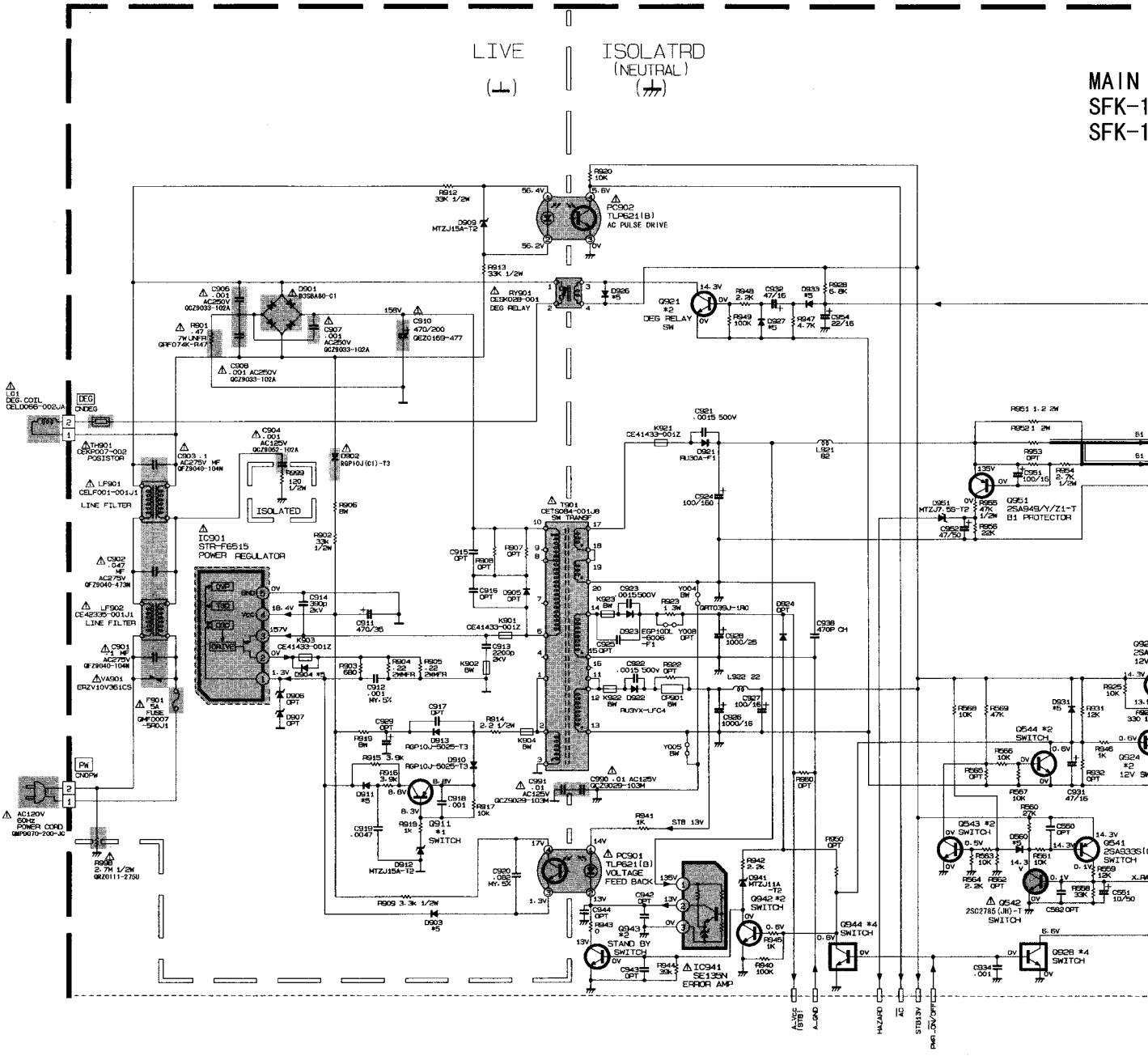


MAIN PWB and FRONT CONTROL PWB CIRCUIT DIAGRAMS



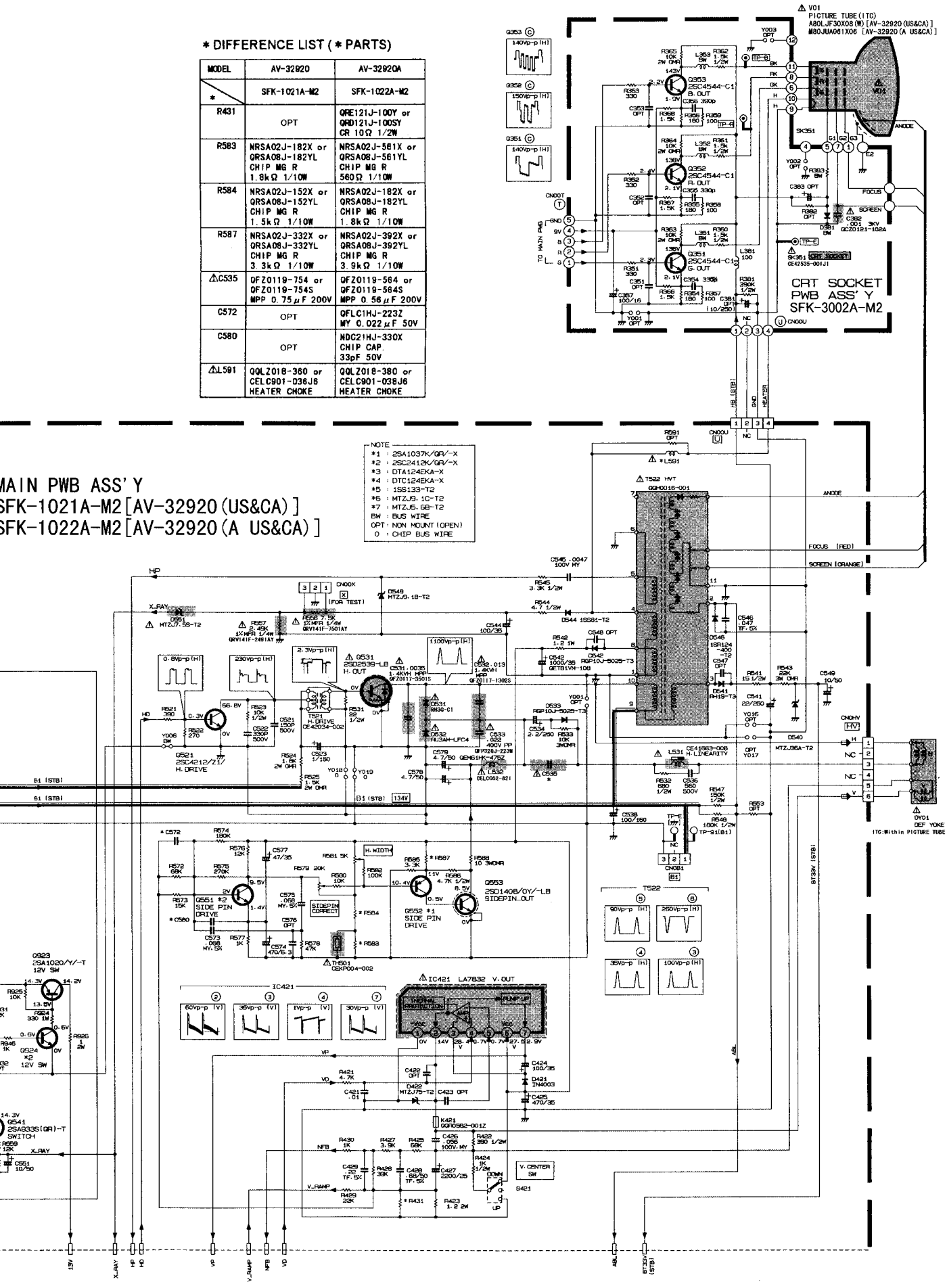

FRONT CONTROL PWB ASS'Y
SFK-4002A-M2
MAIN PWB ASS'Y
SFK-1021A-M2[AV-32920(US&CA)]
SFK-1022A-M2[AV-32920(A US&CA)]
IC702 AT24C02-32920U MEMORY
IC703 MN1381/Q/-T RESET
IC771 KIA78L05BP-T 5V REGULATOR
IC101 BA17809T 9V REGULATOR
IC201 TA1242N 1CHIP DECODER
IC001 KIA78L08BP-T 5V REGULATOR
IC202 TC4066BP SWITCH
IC841 PIC-21043R REMOCON RECEIVER
Q101 2SC5083/L-R/-T IF AMP
Q131 BUFFER
Q132 BUFFER
Q161 BUFFER
Q203 BUFFER
Q204 BUFFER
Q205 BUFFER
Q701 SWITCH
Q741 V. INVERTER
Q742 SWITCH
Q743 H. INVERTER
SAW FILTER
SOR & CLOSED CAPTION
GUIDE PLUS OTHERS
NOTE
#1 : 2SA1037K/QR/-X
#2 : 2SC2412K/QR-X
#3 : DTA124EKA-X
#4 : DTC124EKA-X
#5 : 1SS133-T2
#6 : MTZJ9.1C-T2
#7 : MTZJ5.6B-T2
BW : BUS WIRE
OPT : NON MOUNT(OPEN)
C : CHIP BUS WIRE

MAIN PWB and CRT SOCKET PWB CIRCUIT DIAGRAMS



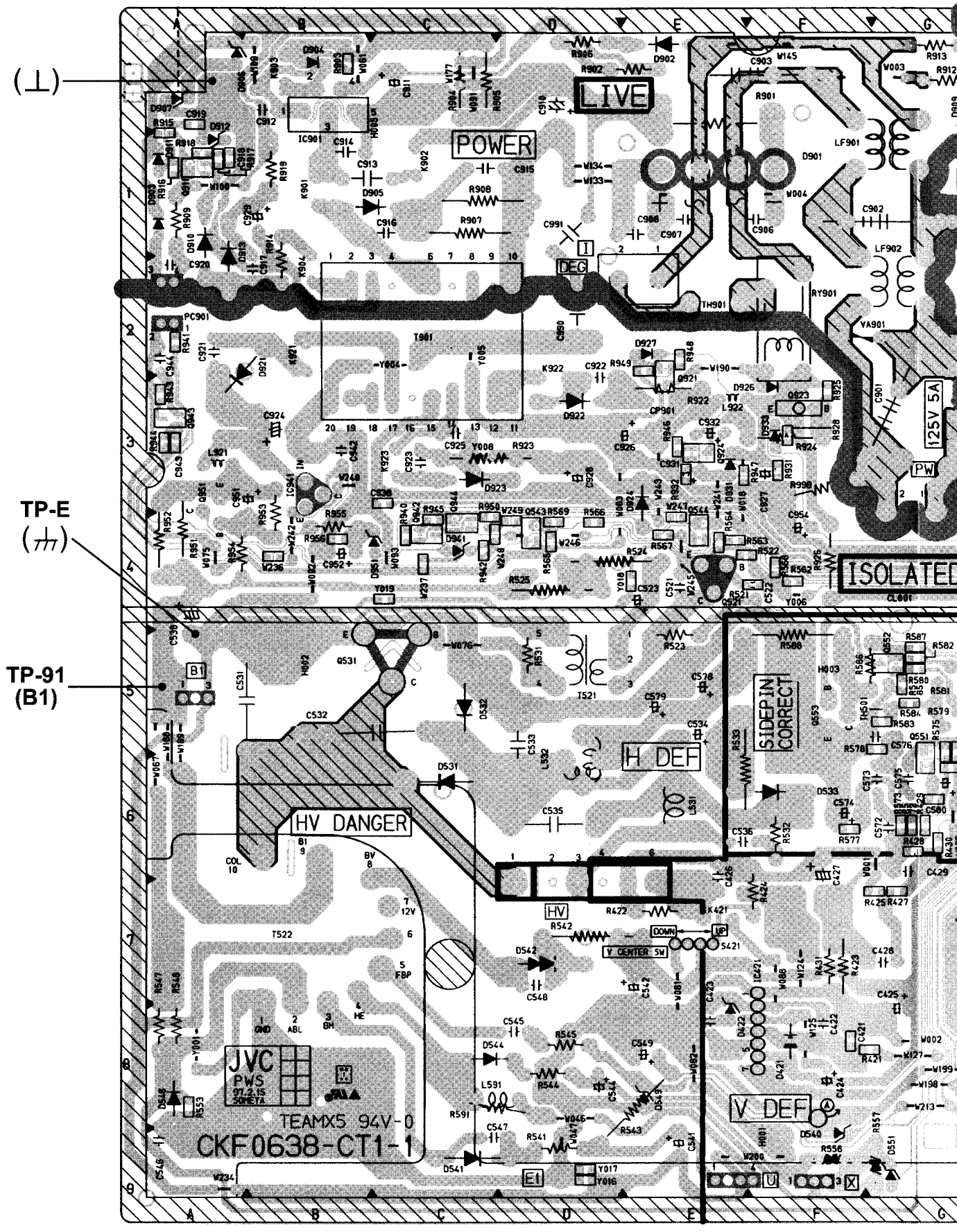
* DIFFERENCE LIST (* PARTS)

MODEL	AV-32920	AV-3292QA
*	SFK-1021A-M2	SFK-1022A-M2
R431	OPT	QRE121J-100Y or QRD121J-100SY CR 10Ω 1/2W
R583	NRSA02J-182X or QRSA08J-182YL CHIP MG R 1.8kΩ 1/10W	NRSA02J-561X or QRSA08J-561YL CHIP MG R 560Ω 1/10W
R584	NRSA02J-152X or QRSA08J-152YL CHIP MG R 1.5kΩ 1/10W	NRSA02J-182X or QRSA08J-182YL CHIP MG R 1.8kΩ 1/10W
R587	NRSA02J-332X or QRSA08J-332YL CHIP MG R 3.3kΩ 1/10W	NRSA02J-392X or QRSA08J-392YL CHIP MG R 3.9kΩ 1/10W
⚠C535	QFZ0119-754 or QFZ0119-754S MPP 0.75μF 200V	QFZ0119-564 or QFZ0119-564S MPP 0.56μF 200V
C572	OPT	QFLC1HJ-223Z MY 0.022μF 50V
C580	OPT	NDC21HJ-330X CHIP CAP. 33pF 50V
⚠L591	QQLZ018-360 or CELC901-036J6 HEATER CHOKE	QQLZ018-380 or CELC901-038J6 HEATER CHOKE

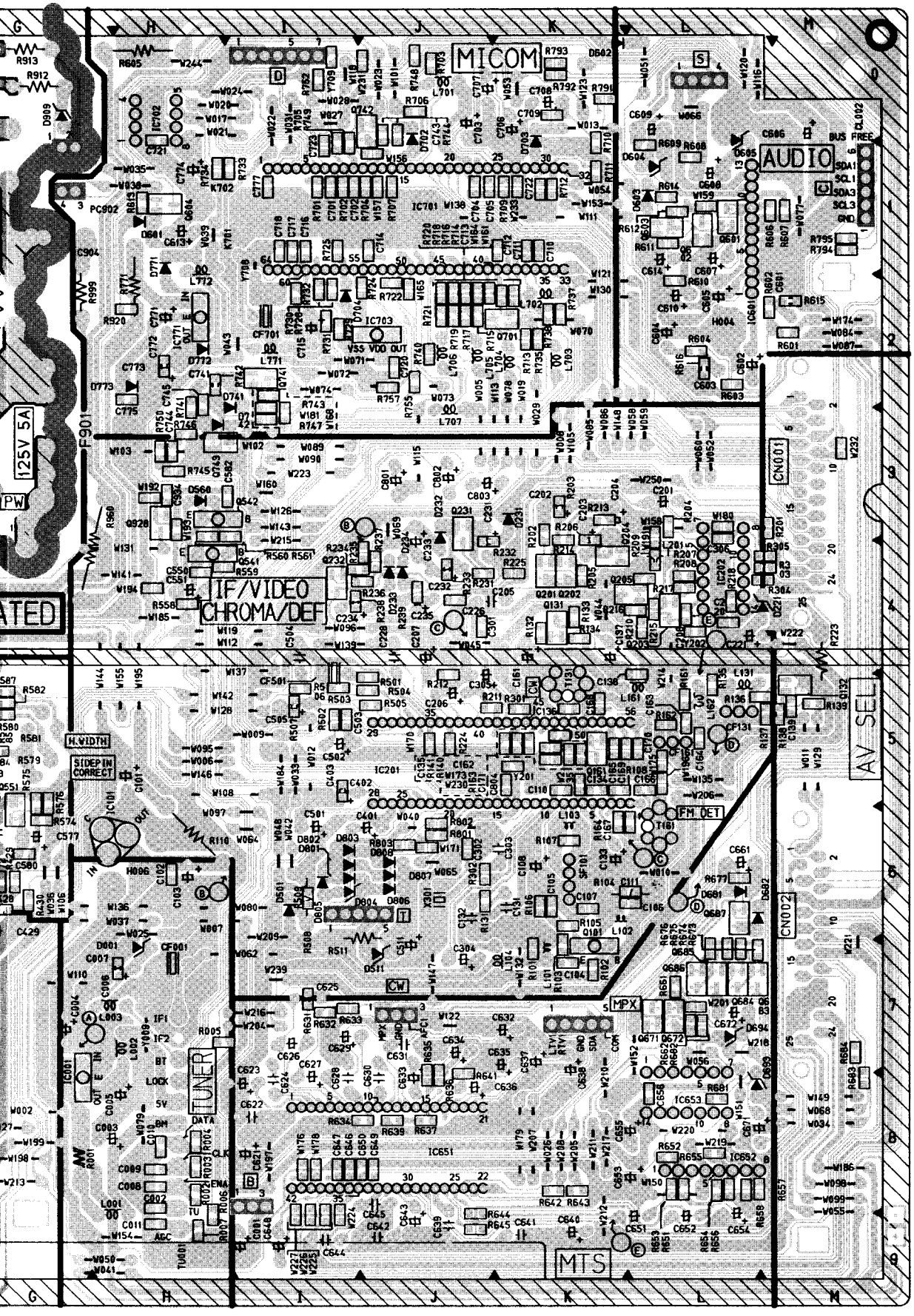


PATTERN DIAGRAMS

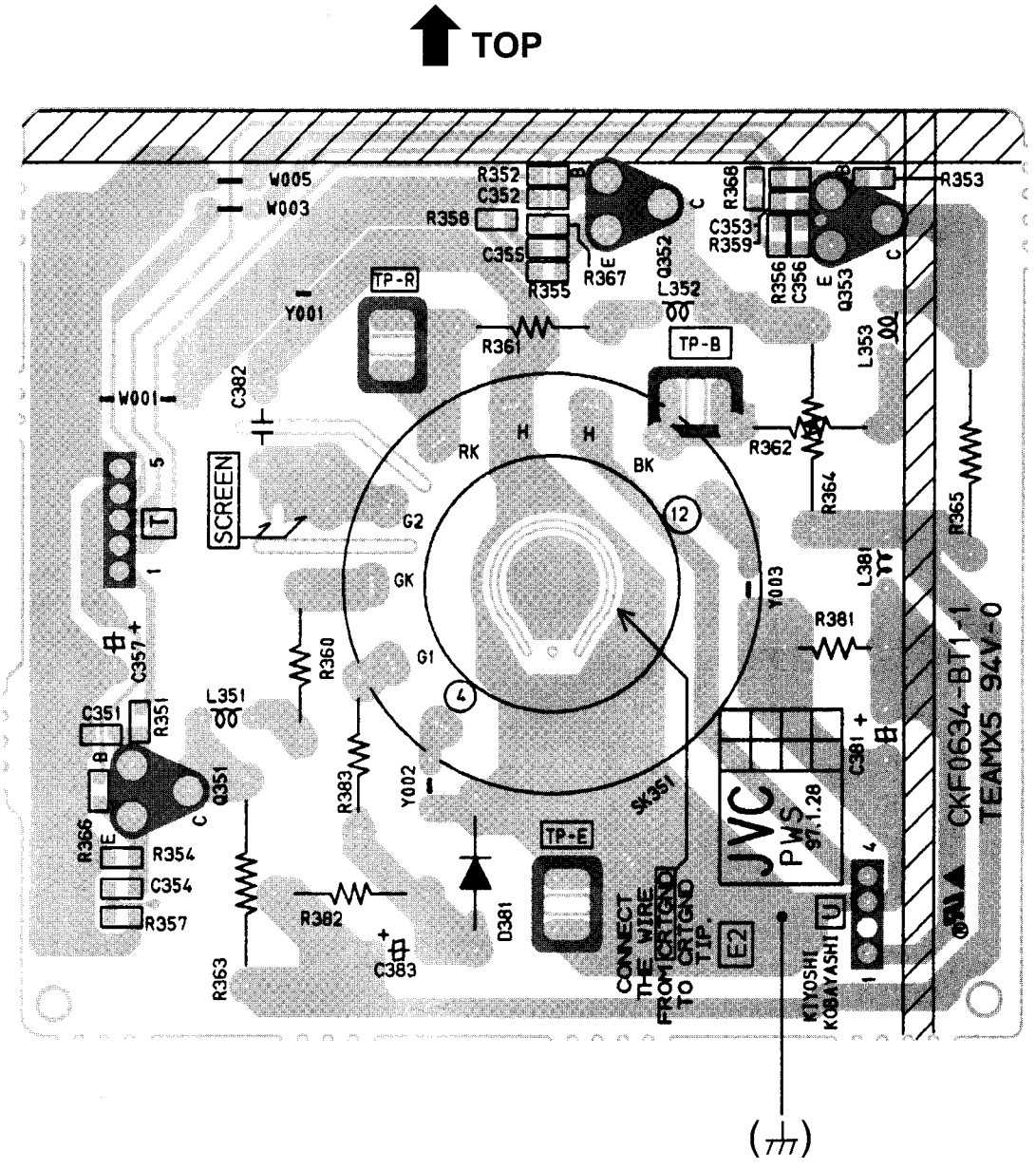
MAIN PWB PATTERN



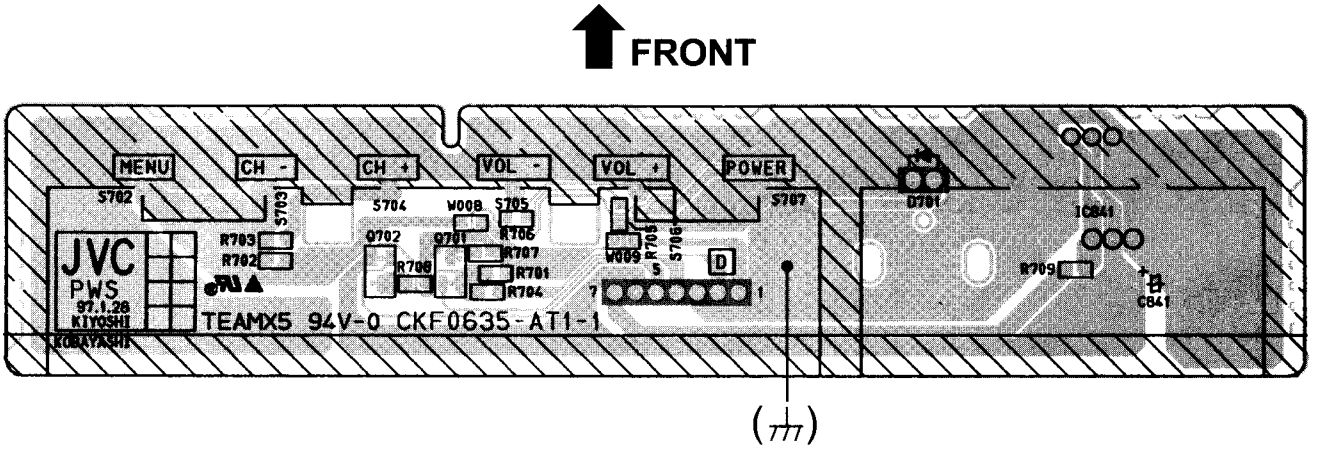
FRONT


MICOM
AUDIO
IF/VIDEO
CHROMA/DEF
TUNER
MTS
AV SEL
FM DET
MPX
H.WIDTH
SIDEPIN
CORRECT
125V 5A
CN0001
CN0002

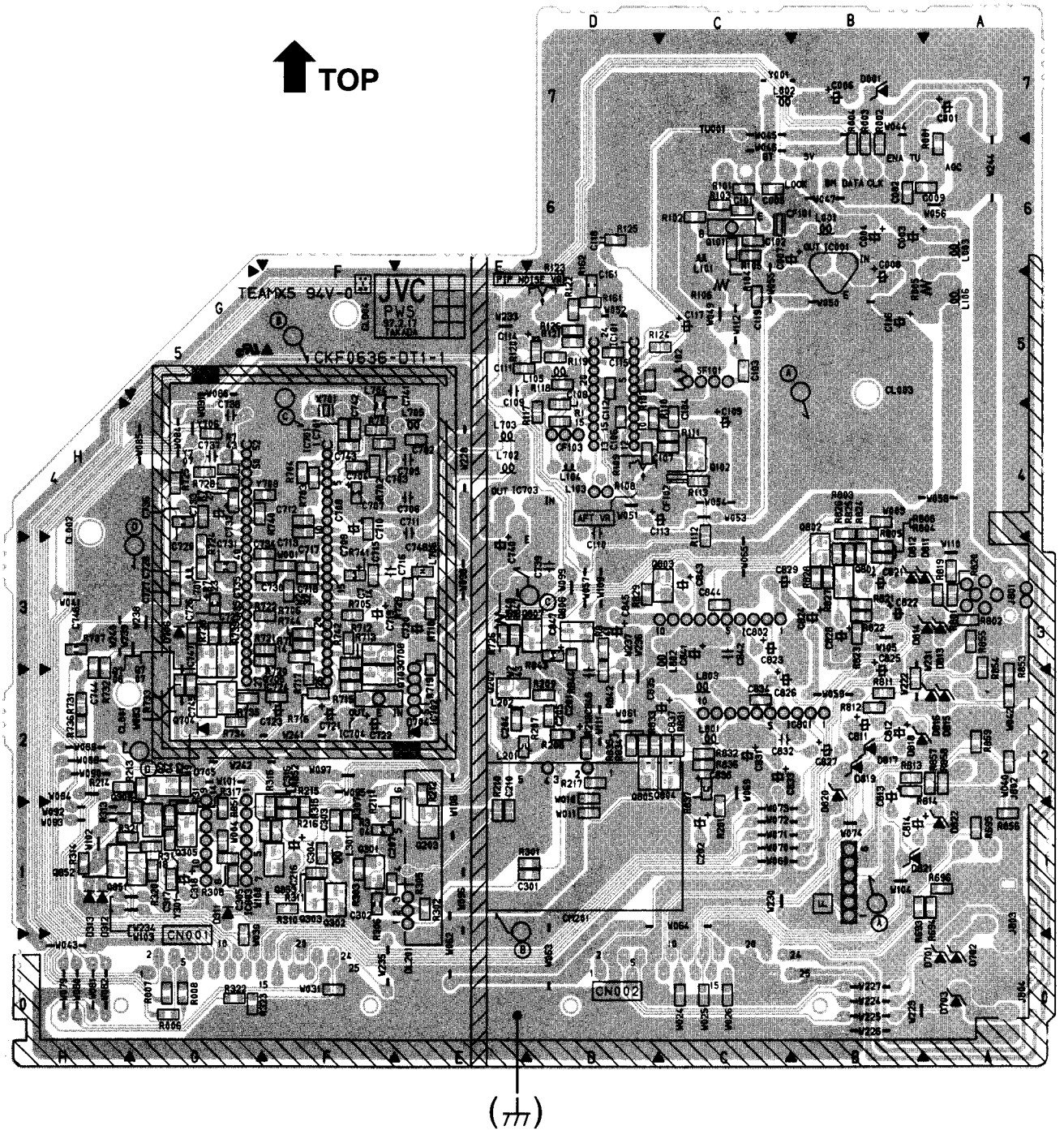
CRT SOCKET PWB PATTERN



FRONT CONTROL PWB PATTERN



AV SELECTOR PWB PATTERN



PARTS LIST

CAUTION

- The parts identified by the ⚠ symbol are important for the safety. Whenever replacing these parts, be sure to use specified ones to secure the safety .
- The parts not indicated in this Parts List and those which are filled with lines —— in the Parts No. columns will not be supplied.
- P. W. Board Ass'y will not be supplied, but those which are filled with the Parts No. in the Parts No. columns will be supplied.

ABBREVIATIONS OF RESISTORS, CAPACITORS AND TOLERANCES

RESISTORS		CAPACITORS	
C R	Carbon Resistor	C CAP.	Ceramic Capacitor
F R	Fusible Resistor	E CAP.	Electrolytic Capacitor
P R	Plate Resistor	M CAP.	Mylar Capacitor
V R	Variable Resistor	HV CAP.	High Voltage Capacitor
HV R	High Voltage Resistor	MF CAP.	Metalized Film Capacitor
MF R	Metal Film Resistor	MM CAP.	Metalized Mylar Capacitor
MG R	Metal Glazed Resistor	MP CAP.	Metalized Polystyrol Capacitor
MP R	Metal Plate Resistor	PP CAP.	Polypropylene Capacitor
OM R	Metal Oxide Film Resistor	PS CAP.	Polystyrol Capacitor
CMF R	Coating Metal Film Resistor	TF CAP.	Thin Film Capacitor
UNF R	Non-Flammable Resistor	MPP CAP.	Metalized Polypropylene Capacitor
CH V R	Chip Variable Resistor	TAN. CAP.	Tantalum Capacitor
CH MG R	Chip Metal Glazed Resistor	CH C CAP.	Chip Ceramic Capacitor
COMP. R	Composition Resistor	BP E CAP.	Bi-Polar Electrolytic Capacitor
LPTC R	Linear Positive Temperature Coefficient Resistor	CH AL E CAP.	Chip Aluminum Electrolytic Capacitor
		CH AL BP CAP.	Chip Aluminum Bi-Polar Capacitor
		CH TAN. E CAP.	Chip Tantalum Electrolytic Capacitor
		CH AL BP E CAP.	Chip Tantalum Bi-Polar Electrolytic Capacitor

TOLERANCES									
F	G	J	K	M	N	R	H	Z	P
±1%	±2%	±5%	±10%	±20%	±30%	+30% -10%	+50% -10%	+80% -20%	+100% -0%

CONTENTS

USING P.W.BOARD & REMOTE CONTROL UNIT

Model / P.W.B ASS'Y	AV-32920 (US&CA)	AV-32920 (A US&CA)
MAIN P.W.B	SFK-1021A-M2	SFK-1022A-M2
CRT SOCKET P.W.B	SFK-3002A-M2	←
FRONT CONTROL P.W.B	SFK-4002A-M2	←
AV SELECTOR P.W.B	SFK-8021A-M2	←
REMOTE CONTROL UNIT	RM-C754-1C	←

EXPLODED VIEW PARTS LIST

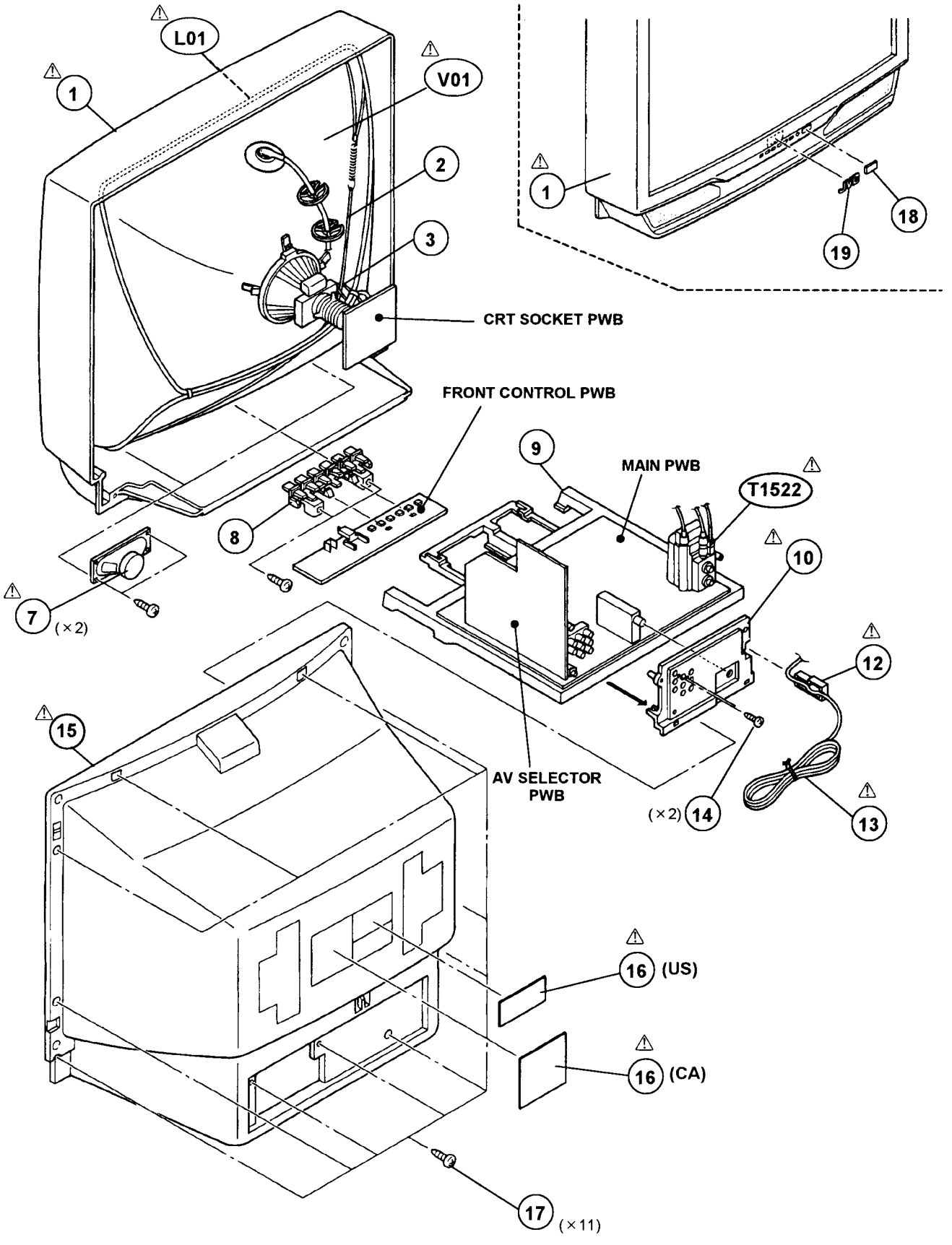
[AV-32920 (US&CA)]

⚠	Ref. No.	Part No.	Part Name	Description	Local
⚠	L01	CELD066-002JA	DEG COIL		*
⚠	V01	A80LJF30X08 (W)	ITC TUBE (C)	(Inc. DY, PC, WED)	*
⚠	T1522	QQH0016-001	H V TRANSF.	(Within MAIN PWB)	*
⚠	1	CM12914-C03-MA	FRONT CABINET		*
	2	CHGB0015-0E	BRAIDED WIRE		*
	3	CHGB0016-0D	BRAIDED WIRE		*
⚠	7	CEBSS12D-04KJ2	SPEAKER	(×2) SP01, SP02	*
	8	CM36568-B01-VA	PUSH KNOB		*
	9	CM12689-B01-VA	CHASSIS BASE		*
⚠	10	CM23125-003-VA	TERMINAL BOARD		*
⚠	12	CM48140-A03-A	CORD CLAMP		*
⚠	13	QMPD070-200-JC	POWER CORD		*
	14	SBSB3010Z	TAPPING SCREW	(×2)	*
⚠	15	CM12915-D01-MA	REAR COVER		*
⚠	**16**	**CM23034-001-A**	**RATING LABEL**	**(US)**	*
⚠	**16**	**CM22999-001-A**	**RATING LABEL**	**(CA)**	*
	17	GBSB4016Z	TAPPING SCREW	(×11)	*
	18	CM35983-001-H	REMOCON WINDOW		*
	19	CM48006-A03-H	JVC MARK		*

[AV-32920 (A US&CA)]

⚠	Ref. No.	Part No.	Part Name	Description	Local
⚠	L01	CELD066-002JA	DEG COIL		*
⚠	V01	M80JUA061X06	ITC TUBE (C)	(Inc. DY, PC, WED)	*
⚠	T1522	QQH0016-001	H V TRANSF.	(Within MAIN PWB)	*
⚠	1	CM12914-C03-MA	FRONT CABINET		*
	2	CHGB0015-0E	BRAIDED WIRE		*
	3	CHGB0016-0D	BRAIDED WIRE		*
⚠	7	CEBSS12D-04KJ2	SPEAKER	(×2) SP01, SP02	*
	8	CM36568-B01-VA	PUSH KNOB		*
	9	CM12689-B01-VA	CHASSIS BASE		*
⚠	10	CM23125-003-VA	TERMINAL BOARD		*
⚠	12	CM48140-A03-A	CORD CLAMP		*
⚠	13	QMPD070-200-JC	POWER CORD		*
	14	SBSB3010Z	TAPPING SCREW	(×2)	*
⚠	15	CM12915-D01-MA	REAR COVER		*
⚠	**16**	**CM23034-001-A**	**RATING LABEL**	**(US)**	*
⚠	**16**	**CM22999-001-A**	**RATING LABEL**	**(CA)**	*
	17	GBSB4016Z	TAPPING SCREW	(×11)	*
	18	CM35983-001-H	REMOCON WINDOW		*
	19	CM48006-A03-H	JVC MARK		*

EXPLODED VIEW



PRINTED WIRING BOARD PARTS LIST

MAIN P.W. BOARD ASS'Y (SFK-1021A-M2) [AV-32920 (US&CA)]

⚠ Symbol No.	Part No.	Part Name	Description	Local
VARIABLE RESISTOR				
R1579	QVPE611-203HZ	V R(SIDEPIN CORRECT)	20kΩ B	*
R1581	QVPE611-502HZ	V R(H.WIDTH)	5kΩ B	*
RESISTOR				
R1001	QRD14CJ-5R6SX	C R	5.6 Ω 1/4W J	*
R1002-04	QRSA08J-561YL	CHIP MG R	560 Ω 1/10W J	*
R1005	QRSA08J-102YL	CHIP MG R	1kΩ 1/10W J	*
R1006	QRSA08J-123YL	CHIP MG R	12kΩ 1/10W J	*
R1007	QRSA08J-563YL	CHIP MG R	56kΩ 1/10W J	*
R1101	QRSA08J-820YL	CHIP MG R	82 Ω 1/10W J	*
R1102	QRSA08J-562YL	CHIP MG R	5.6kΩ 1/10W J	*
R1103	QRSA08J-182YL	CHIP MG R	1.8kΩ 1/10W J	*
R1104	QRD121J-331SY	C R	330 Ω 1/2W J	*
R1105	QRSA08J-100YL	CHIP MG R	10 Ω 1/10W J	*
R1106	QRSA08J-390YL	CHIP MG R	39 Ω 1/10W J	*
R1108	QRSA08J-101YL	CHIP MG R	100 Ω 1/10W J	*
R1110	QRG029J-220A	OM R	22 Ω 2W J	*
R1131	QRSA08J-181YL	CHIP MG R	180 Ω 1/10W J	*
R1132-33	QRSA08J-101YL	CHIP MG R	100 Ω 1/10W J	*
R1134	QRSA08J-102YL	CHIP MG R	1kΩ 1/10W J	*
R1135	QRSA08J-471YL	CHIP MG R	470 Ω 1/10W J	*
R1136	QRSA08J-102YL	CHIP MG R	1kΩ 1/10W J	*
R1137	QRSA08J-182YL	CHIP MG R	1.8kΩ 1/10W J	*
R1138	QRSA08J-821YL	CHIP MG R	820 Ω 1/10W J	*
R1139	QRSA08J-0R0YL	CHIP MG R	0.0 Ω 1/10W J	*
R1161	QRSA08J-0R0YL	CHIP MG R	0.0 Ω 1/10W J	*
R1162	QRSA08J-102YL	CHIP MG R	1kΩ 1/10W J	*
R1163	QRSA08J-332YL	CHIP MG R	3.3kΩ 1/10W J	*
R1164	QRSA08J-472YL	CHIP MG R	4.7kΩ 1/10W J	*
R1201	QRSA08J-0R0YL	CHIP MG R	0.0 Ω 1/10W J	*
R1208	QRSA08J-0R0YL	CHIP MG R	0.0 Ω 1/10W J	*
R1209	QRSA08J-272YL	CHIP MG R	2.7kΩ 1/10W J	*
R1210	QRSA08J-821YL	CHIP MG R	820 Ω 1/10W J	*
R1211	QRSA08J-683YL	CHIP MG R	68kΩ 1/10W J	*
R1212	QRSA08J-224YL	CHIP MG R	220kΩ 1/10W J	*
R1215	QRSA08J-471YL	CHIP MG R	470 Ω 1/10W J	*
R1216	QRSA08J-681YL	CHIP MG R	680 Ω 1/10W J	*
R1217	QRSA08J-272YL	CHIP MG R	2.7kΩ 1/10W J	*
R1218	QRSA08J-103YL	CHIP MG R	10kΩ 1/10W J	*
R1223	QRD121J-391SY	C R	390 Ω 1/2W J	*
R1225	QRSA08J-681YL	CHIP MG R	680 Ω 1/10W J	*
R1231	QRSA08J-472YL	CHIP MG R	4.7kΩ 1/10W J	*
R1232	QRSA08J-392YL	CHIP MG R	3.9kΩ 1/10W J	*
R1233	QRSA08J-182YL	CHIP MG R	1.8kΩ 1/10W J	*
R1234	QRSA08J-0R0YL	CHIP MG R	0.0 Ω 1/10W J	*
R1235	QRSA08J-472YL	CHIP MG R	4.7kΩ 1/10W J	*
R1236	QRSA08J-471YL	CHIP MG R	470 Ω 1/10W J	*
R1237	QRSA08J-392YL	CHIP MG R	3.9kΩ 1/10W J	*
R1238	QRSA08J-471YL	CHIP MG R	470 Ω 1/10W J	*
R1239	QRSA08J-103YL	CHIP MG R	10kΩ 1/10W J	*
R1301	QRSA08J-393YL	CHIP MG R	39kΩ 1/10W J	*
R1302	QRSA08J-183YL	CHIP MG R	18kΩ 1/10W J	*
R1303	QRSA08J-0R0YL	CHIP MG R	0.0 Ω 1/10W J	*
R1421	QRSA08J-472YL	CHIP MG R	4.7kΩ 1/10W J	*
R1422	QRD121J-391SY	C R	390 Ω 1/2W J	*
R1423	QRX029J-1R2A	MF R	1.2 Ω 2W J	*
R1424	QRD121J-102SY	C R	1kΩ 1/2W J	*
R1425	QRSA08J-683YL	CHIP MG R	68kΩ 1/10W J	*
R1427	QRSA08J-392YL	CHIP MG R	3.9kΩ 1/10W J	*
R1428	QRSA08J-393YL	CHIP MG R	39kΩ 1/10W J	*
R1429	QRSA08J-223YL	CHIP MG R	22kΩ 1/10W J	*
R1430	QRSA08J-102YL	CHIP MG R	1kΩ 1/10W J	*
R1501	QRSA08J-361YL	CHIP MG R	360 Ω 1/10W J	*
R1502	QRSA08J-182YL	CHIP MG R	1.8kΩ 1/10W J	*
R1504	QRSA08J-0R0YL	CHIP MG R	0.0 Ω 1/10W J	*

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⚠ Symbol No.	Part No.	Part Name	Description	Local
RESISTOR				
R1505	QRSA08J-822YL	CHIP MG R	8.2kΩ 1/10W J	*
R1506	QRSA08J-222YL	CHIP MG R	2.2kΩ 1/10W J	*
R1507	QRSA08J-563YL	CHIP MG R	56kΩ 1/10W J	*
R1508	QRD121J-220SY	C R	22 Ω 1/2W J	*
R1511	QRD121J-391SY	C R	390 Ω 1/2W J	*
R1521	QRSA08J-391YL	CHIP MG R	390 Ω 1/10W J	*
R1522	QRSA08J-271YL	CHIP MG R	270 Ω 1/10W J	*
R1523	QRD121J-103SY	C R	10kΩ 1/2W J	*
R1524	QRG029J-182A	OM R	1.8kΩ 2W J	*
R1525	QRG029J-152A	OM R	1.5kΩ 2W J	*
R1531	QRD121J-220SY	C R	22 Ω 1/2W J	*
R1532	QRD121J-681SY	C R	680 Ω 1/2W J	*
R1533	QRG039J-103A	OM R	10kΩ 3W J	*
R1541	QRD129J-150S	C R	15 Ω 1/2W J	*
R1542	QRX019J-1R2S	MF R	1.2 Ω 1W J	*
R1543	QRG039J-223A	OM R	22kΩ 3W J	*
R1544	QRD129J-4R7S	C R	4.7 Ω 1/2W J	*
R1545	QRD121J-332SY	C R	3.3kΩ 1/2W J	*
R1547	QRD121J-154SY	C R	150kΩ 1/2W J	*
R1548	QRD121J-184SY	C R	180kΩ 1/2W J	*
⚠ R1556	QRV141F-7501AY	MF R	7.5kΩ 1/4W F	*
⚠ R1557	QRV141F-2491AY	MF R	2.49kΩ 1/4W F	*
R1558	QRSA08J-333YL	CHIP MG R	33kΩ 1/10W J	*
R1559	QRSA08J-123YL	CHIP MG R	12kΩ 1/10W J	*
R1560	QRSA08J-273YL	CHIP MG R	27kΩ 1/10W J	*
R1561	QRSA08J-103YL	CHIP MG R	10kΩ 1/10W J	*
R1563	QRSA08J-103YL	CHIP MG R	10kΩ 1/10W J	*
R1564	QRSA08J-222YL	CHIP MG R	2.2kΩ 1/10W J	*
R1566-68	QRSA08J-103YL	CHIP MG R	10kΩ 1/10W J	*
R1569	QRSA08J-473YL	CHIP MG R	47kΩ 1/10W J	
R1572	QRSA08J-683YL	CHIP MG R	68kΩ 1/10W J	*
R1573	QRSA08J-153YL	CHIP MG R	15kΩ 1/10W J	*
R1574	QRSA08J-184YL	CHIP MG R	180kΩ 1/10W J	*
R1575	QRSA08J-274YL	CHIP MG R	270kΩ 1/10W J	*
R1576	QRSA08J-123YL	CHIP MG R	12kΩ 1/10W J	*
R1577	QRSA08J-102YL	CHIP MG R	1kΩ 1/10W J	*
R1578	QRSA08J-473YL	CHIP MG R	47kΩ 1/10W J	*
R1580	QRSA08J-103YL	CHIP MG R	10kΩ 1/10W J	*
R1582	QRSA08J-104YL	CHIP MG R	100kΩ 1/10W J	*
R1583	QRSA08J-182YL	CHIP MG R	1.8kΩ 1/10W J	*
R1584	QRSA08J-152YL	CHIP MG R	1.5kΩ 1/10W J	*
R1585	QRSA08J-332YL	CHIP MG R	3.3kΩ 1/10W J	*
R1586	QRD121J-472SY	C R	4.7kΩ 1/2W J	*
R1587	QRSA08J-332YL	CHIP MG R	3.3kΩ 1/10W J	*
R1588	QRG039J-100A	OM R	10 Ω 3W J	*
R1601	QRSA08J-562YL	CHIP MG R	5.6kΩ 1/10W J	*
R1602	QRSA08J-221YL	CHIP MG R	220 Ω 1/10W J	*
R1603	QRSA08J-562YL	CHIP MG R	5.6kΩ 1/10W J	*
R1604	QRSA08J-221YL	CHIP MG R	220 Ω 1/10W J	*
R1605	QRX029J-R82A	MF R	0.82 Ω 2W J	*
R1606	QRSA08J-183YL	CHIP MG R	18kΩ 1/10W J	*
R1607	QRSA08J-223YL	CHIP MG R	22kΩ 1/10W J	*
R1611	QRSA08J-333YL	CHIP MG R	33kΩ 1/10W J	*
R1612	QRSA08J-183YL	CHIP MG R	18kΩ 1/10W J	*
R1613	QRSA08J-473YL	CHIP MG R	47kΩ 1/10W J	*
R1614	QRSA08J-0R0YL	CHIP MG R	0.0 Ω 1/10W J	*
R1615-16	QRSA08J-271YL	CHIP MG R	270 Ω 1/10W J	*
R1631	QRSA08J-102YL	CHIP MG R	1kΩ 1/10W J	*
R1632-33	QRSA08J-682YL	CHIP MG R	6.8kΩ 1/10W J	*
R1634	QRSA08J-683YL	CHIP MG R	68kΩ 1/10W J	*
R1635	QRSA08J-332YL	CHIP MG R	3.3kΩ 1/10W J	*
R1636	QRSA08J-333YL	CHIP MG R	33kΩ 1/10W J	*
R1637	NRVA02D-1502NY	MF R	15kΩ 1/10W±0.5%	*
R1639	NRVA02D-1501NY	MF R	1.5kΩ 1/10W±0.5%	*
R1641	QRSA08J-512YL	CHIP MG R	5.1kΩ 1/10W J	*
R1642-45	QRSA08J-101YL	CHIP MG R	100 Ω 1/10W J	*
R1651	QRSA08J-123YL	CHIP MG R	12kΩ 1/10W J	*

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⚠ Symbol No.	Part No.	Part Name	Description	Local
RESISTOR				
R1652	QRSA08J-473YL	CHIP MG R	47kΩ 1/10W J	*
R1653-54	QRSA08J-123YL	CHIP MG R	12kΩ 1/10W J	*
R1655	QRSA08J-473YL	CHIP MG R	47kΩ 1/10W J	*
R1656	QRSA08J-123YL	CHIP MG R	12kΩ 1/10W J	*
R1657-58	QRSA08J-562YL	CHIP MG R	5.6kΩ 1/10W J	*
R1661	QRSA08J-562YL	CHIP MG R	5.6kΩ 1/10W J	*
R1662	QRSA08J-223YL	CHIP MG R	22kΩ 1/10W J	*
R1673-76	QRSA08J-223YL	CHIP MG R	22kΩ 1/10W J	*
R1681-84	QRSA08J-221YL	CHIP MG R	220 Ω 1/10W J	*
R1701	QRSA08J-102YL	CHIP MG R	1kΩ 1/10W J	*
R1703	QRSA08J-823YL	CHIP MG R	82kΩ 1/10W J	*
R1704	QRSA08J-104YL	CHIP MG R	100kΩ 1/10W J	*
R1705	QRSA08J-103YL	CHIP MG R	10kΩ 1/10W J	*
R1706	QRSA08J-0R0YL	CHIP MG R	0.0 Ω 1/10W J	*
R1707	QRSA08J-472YL	CHIP MG R	4.7kΩ 1/10W J	*
R1710	QRSA08J-331YL	CHIP MG R	330 Ω 1/10W J	*
R1711	QRSA08J-0R0YL	CHIP MG R	0.0 Ω 1/10W J	*
R1713	QRSA08J-103YL	CHIP MG R	10kΩ 1/10W J	*
R1714-15	QRSA08J-182YL	CHIP MG R	1.8kΩ 1/10W J	*
R1716	QRSA08J-272YL	CHIP MG R	2.7kΩ 1/10W J	*
R1717	QRSA08J-681YL	CHIP MG R	680 Ω 1/10W J	*
R1718	QRSA08J-272YL	CHIP MG R	2.7kΩ 1/10W J	*
R1719	QRSA08J-681YL	CHIP MG R	680 Ω 1/10W J	*
R1720	QRSA08J-272YL	CHIP MG R	2.7kΩ 1/10W J	*
R1721	QRSA08J-681YL	CHIP MG R	680 Ω 1/10W J	*
R1722	QRSA08J-103YL	CHIP MG R	10kΩ 1/10W J	*
R1724	QRSA08J-102YL	CHIP MG R	1kΩ 1/10W J	*
R1728-29	QRSA08J-682YL	CHIP MG R	6.8kΩ 1/10W J	*
R1730-31	QRSA08J-561YL	CHIP MG R	560 Ω 1/10W J	*
R1732	QRSA08J-224YL	CHIP MG R	220kΩ 1/10W J	*
R1733-34	QRSA08J-682YL	CHIP MG R	6.8kΩ 1/10W J	*
R1735	QRSA08J-103YL	CHIP MG R	10kΩ 1/10W J	*
R1737	QRSA08J-0R0YL	CHIP MG R	0.0 Ω 1/10W J	*
R1741	QRSA08J-223YL	CHIP MG R	22kΩ 1/10W J	*
R1742	QRSA08J-822YL	CHIP MG R	8.2kΩ 1/10W J	*
R1743	QRSA08J-222YL	CHIP MG R	2.2kΩ 1/10W J	*
R1744	QRSA08J-103YL	CHIP MG R	10kΩ 1/10W J	*
R1745	QRSA08J-473YL	CHIP MG R	47kΩ 1/10W J	*
R1746	QRSA08J-223YL	CHIP MG R	22kΩ 1/10W J	*
R1747	QRSA08J-222YL	CHIP MG R	2.2kΩ 1/10W J	*
R1748	QRSA08J-102YL	CHIP MG R	1kΩ 1/10W J	*
R1749	QRSA08J-0R0YL	CHIP MG R	0.0 Ω 1/10W J	*
R1752	QRSA08J-561YL	CHIP MG R	560 Ω 1/10W J	*
R1755	QRSA08J-561YL	CHIP MG R	560 Ω 1/10W J	*
R1757	QRSA08J-682YL	CHIP MG R	6.8kΩ 1/10W J	*
R1771	QRG019J-820S	OM R	82 Ω 1W J	*
R1791-95	QRSA08J-561YL	CHIP MG R	560 Ω 1/10W J	*
R1801-02	QRSA08J-222YL	CHIP MG R	2.2kΩ 1/10W J	*
R1803	QRSA08J-222YL	CHIP MG R	2.2kΩ 1/10W J	*
⚠ R1901	QRF074K-R47	UNF R	0.47 Ω 7W K	*
R1902	QRD121J-333SY	C R	33kΩ 1/2W J	*
R1903	QRSA08J-681YL	CHIP MG R	680 Ω 1/10W J	*
R1904-05	QRX029J-R22A	MF R	0.22 Ω 2W J	*
R1909	QRD121J-332SY	C R	3.3kΩ 1/2W J	*
R1912-13	QRD121J-333SY	C R	33kΩ 1/2W J	*
R1914	QRD121J-2R2SY	C R	2.2 Ω 1/2W J	*
R1915-16	QRSA08J-392YL	CHIP MG R	3.9kΩ 1/10W J	*
R1917	QRSA08J-103YL	CHIP MG R	10kΩ 1/10W J	*
R1918	QRSA08J-102YL	CHIP MG R	1kΩ 1/10W J	*
R1920	QRSA08J-103YL	CHIP MG R	10kΩ 1/10W J	*
R1923	QRX039J-1R0A	MF R	1 Ω 3W J	*
R1924	QRG019J-331S	OM R	330 Ω 1W J	*
R1925	QRSA08J-103YL	CHIP MG R	10kΩ 1/10W J	*
R1926	QRX029J-1R0A	MF R	1 Ω 2W J	*
R1928	QRSA08J-682YL	CHIP MG R	6.8kΩ 1/10W J	*
R1931	QRSA08J-123YL	CHIP MG R	12kΩ 1/10W J	*
R1940	QRSA08J-104YL	CHIP MG R	100kΩ 1/10W J	*

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⚠ Symbol No.	Part No.	Part Name	Description			Local
RESISTOR						
R1941	QRSA08J-102YL	CHIP MG R	1kΩ	1/10W	J	*
R1942	QRSA08J-222YL	CHIP MG R	2.2kΩ	1/10W	J	*
R1943	QRSA08J-0R0YL	CHIP MG R	0.0 Ω	1/10W	J	*
R1944	QRSA08J-393YL	CHIP MG R	39kΩ	1/10W	J	*
R1945-46	QRSA08J-102YL	CHIP MG R	1kΩ	1/10W	J	*
R1947	QRSA08J-472YL	CHIP MG R	4.7kΩ	1/10W	J	*
R1948	QRSA08J-222YL	CHIP MG R	2.2kΩ	1/10W	J	*
R1949	QRSA08J-104YL	CHIP MG R	100kΩ	1/10W	J	*
R1951	QRX029J-1R2A	MF R	1.2 Ω	2W	J	*
R1952	QRX029J-1R0A	MF R	1 Ω	2W	J	*
R1954	QRD121J-272SY	C R	2.7kΩ	1/2W	J	*
R1955	QRD121J-473SY	C R	47kΩ	1/2W	J	*
R1956	QRSA08J-223YL	CHIP MG R	22kΩ	1/10W	J	*
⚠ R1998	QRZ0111-275U	C R	2.7MΩ	1/2W		*
R1999	QRD121J-121SY	C R	120 Ω	1/2W	J	*
CAPACITOR						
C1001	QETC1HM-106Z	E CAP.	10μF	50V	M	*
C1003	QETC1AM-477Z	E CAP.	470μF	10V	M	*
C1004-05	QETC1CM-476Z	E CAP.	47μF	16V	M	*
C1006	NCB21HK-103AY	CHIP CAP.	0.01μF	50V	K	*
C1007	QETC1HM-106Z	E CAP.	10μF	50V	M	*
C1011	NCB21HK-103AY	CHIP CAP.	0.01μF	50V	K	*
C1102	NCB21HK-103AY	CHIP CAP.	0.01μF	50V	K	*
C1103	QETC1CM-107Z	E CAP.	100μF	16V	M	*
C1104-05	NCB21HK-103AY	CHIP CAP.	0.01μF	50V	K	*
C1106	NCT03CH-560AY	CHIP CAP.	56pF	50V	J	*
C1107	NCB21HK-103AY	CHIP CAP.	0.01μF	50V	K	*
C1108	QETC1CM-107Z	E CAP.	100μF	16V	M	*
C1110-11	NCB21HK-103AY	CHIP CAP.	0.01μF	50V	K	*
C1131	QFV71HJ-154MZ	TF CAP.	0.15μF	50V	J	*
C1132	QFN31HJ-152ZJ1	M CAP.	1500pF	50V	J	*
C1133	QETC1HM-474Z	E CAP.	0.47μF	50V	M	*
C1134	NCB21HK-332AY	CHIP CAP.	3300pF	50V	K	*
C1135	NCB21HK-103AY	CHIP CAP.	0.01μF	50V	K	*
C1137	QETC1CM-476Z	E CAP.	47μF	16V	M	*
C1139	NCB21HK-223AY	CHIP CAP.	0.022μF	50V	K	*
C1161	QETC1CM-107Z	E CAP.	100μF	16V	M	*
C1162	NCB21HK-103AY	CHIP CAP.	0.01μF	50V	K	*
C1163	NCT03CH-220AY	CHIP CAP.	22pF	50V	J	*
C1164-65	NCT03CH-470AY	CHIP CAP.	47pF	50V	J	*
C1166	NCB21HK-103AY	CHIP CAP.	0.01μF	50V	K	*
C1168-70	NCB21HK-103AY	CHIP CAP.	0.01μF	50V	K	*
C1205	QFV71HJ-104MZ	TF CAP.	0.1μF	50V	J	*
C1206	QETC1HM-105Z	E CAP.	1μF	50V	M	*
C1207	QETC1HM-106Z	E CAP.	10μF	50V	M	*
C1208	NCT03CH-680AY	CHIP CAP.	68pF	50V	J	*
C1221	QETC1CM-476Z	E CAP.	47μF	16V	M	*
C1226	NCT03CH-681AY	CHIP CAP.	680pF	50V	J	*
C1228	QFV71HJ-104MZ	TF CAP.	0.1μF	50V	J	*
C1231	QETC1CM-476Z	E CAP.	47μF	16V	M	*
C1232	QETC1HM-106Z	E CAP.	10μF	50V	M	*
C1233	QETC1CM-476Z	E CAP.	47μF	16V	M	*
C1234-35	QETC1HM-105Z	E CAP.	1μF	50V	M	*
C1301	NCB21HK-103AY	CHIP CAP.	0.01μF	50V	K	*
C1302	NCT03CH-100AY	CHIP CAP.	10pF	50V	J	*
C1303	QFLC1HJ-223MZ	M CAP.	0.022μF	50V	J	*
C1304	QETC1HM-474Z	E CAP.	0.47μF	50V	M	*
C1305	QETC1CM-107Z	E CAP.	100μF	16V	M	*
C1401	QETC1HM-225Z	E CAP.	2.2μF	50V	M	*
C1402	QEE61CK-225BZ	TAN. CAP.	2.2μF	16V	K	*
C1403	NCB21HK-102AY	CHIP CAP.	1000pF	50V	K	*
C1421	NCB21HK-103AY	CHIP CAP.	0.01μF	50V	K	*
C1424	QETC1VM-107Z	E CAP.	100μF	35V	M	*
C1425	QETC1VM-477Z	E CAP.	470μF	35V	M	*
C1426	QFLC2AK-563MZ	M CAP.	0.056μF	100V	K	*
C1427	QETB1EM-228	E CAP.	2200μF	25V	M	*
C1428	QFV71HJ-684MZ	TF CAP.	0.68μF	50V	J	*

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⚠ Symbol No.	Part No.	Part Name	Description			Local
CAPACITOR						
C1429	QFV71HJ-224MZ	TF CAP.	0.22μF	50V	J	*
C1501	QETC1CM-227Z	E CAP.	220μF	16V	M	*
C1502	QETC1HM-106Z	E CAP.	10μF	50V	M	*
C1503	NCB21HK-103AY	CHIP CAP.	0.01μF	50V	K	*
C1505	QETC1HM-106Z	E CAP.	10μF	50V	M	*
C1511	QETC1CM-476Z	E CAP.	47μF	16V	M	*
C1521	QCY32HK-151RZ	CH C CAP.	150pF	500V	K	*
C1522	QCY32HK-331RZ	CH C CAP.	330pF	500V	K	*
C1523	QETC2CM-105Z	E CAP.	1μF	160V	M	*
⚠ C1531	QFZ0117-3501S	MPP CAP.	3500pF	1.4kVH	±2.5%	*
⚠ C1532	QFZ0117-1302S	MPP CAP.	0.013μF	1.4kVH	±2.5%	*
⚠ C1533	QFP32GJ-223M	PP CAP.	0.022μF	400V	J	*
C1534	QEHC2EM-225MZ	E CAP.	2.2μF	250V	M	*
⚠ C1535	QFZ0119-754S	MPP CAP.	0.75μF	200V	±3%	*
C1536	QCY32HK-561MZ	CH C CAP.	560pF	500V	K	*
C1538	QEZ0203-107R	E CAP.	100μF	160V		*
C1541	QETB2EM-226	E CAP.	22μF	250V	M	*
C1542	QETB1VM-108	E CAP.	1000μF	35V	M	*
C1544	QETC1VM-107Z	E CAP.	100μF	35V	M	*
C1545	QFN32AJ-472ZJ1	M CAP.	4700pF	100V	J	*
C1546	QFV71HJ-473MZ	TF CAP.	0.047μF	50V	J	*
C1549	QETC1HM-106Z	E CAP.	10μF	50V	M	*
C1551	QETC1HM-106Z	E CAP.	10μF	50V	M	*
C1573	QFLC1HJ-683MZ	M CAP.	0.068μF	50V	J	*
C1574	QETC0JM-477Z	E CAP.	470μF	6.3V	M	*
C1575	QFLC1HJ-683MZ	M CAP.	0.068μF	50V	J	*
C1577	QETC1VM-476Z	E CAP.	47μF	35V	M	*
C1578-79	QEM61HK-475MZ	E CAP.	4.7μF	50V	K	
C1602	QETC1HM-474Z	E CAP.	0.47μF	50V	M	*
C1604	QETC1HM-474Z	E CAP.	0.47μF	50V	M	*
C1605	QETC1CM-107Z	E CAP.	100μF	16V	M	*
C1606	QETB1EM-108	E CAP.	1000μF	25V	M	*
C1607	QETC1HM-474Z	E CAP.	0.47μF	50V	M	*
C1608-09	QETC1CM-477Z	E CAP.	470μF	16V	M	*
C1613	QETC1VM-476Z	E CAP.	47μF	35V	M	*
C1614	QETC1HM-225Z	E CAP.	2.2μF	50V	M	*
C1621	QETC1CM-107Z	E CAP.	100μF	16V	M	*
C1622	QFLC1HJ-103MZ	M CAP.	0.01μF	50V	J	*
C1623	QETC1CM-476Z	E CAP.	47μF	16V	M	*
C1624	QFV71HJ-104MZ	TF CAP.	0.1μF	50V	J	*
C1625	QEN61HM-475Z	BP E CAP.	4.7μF	50V	M	*
C1626	QEN61HM-105Z	BP E CAP.	1μF	50V	M	*
C1627	QETC1HM-225Z	E CAP.	2.2μF	50V	M	*
C1628	QFLC1HJ-473MZ	M CAP.	0.047μF	50V	J	*
C1629	QETC1HM-474Z	E CAP.	0.47μF	50V	M	*
C1630-31	QFV71HJ-104MZ	TF CAP.	0.1μF	50V	J	*
C1632	QETC1HM-105Z	E CAP.	1μF	50V	M	*
C1633	QEE61CK-335BZ	TAN. CAP.	3.3μF	16V	K	
C1634	QEE61CK-106BZ	TAN. CAP.	10μF	16V	K	
C1635-36	QETC1HM-105Z	E CAP.	1μF	50V	M	*
C1637	QETC1HM-475Z	E CAP.	4.7μF	50V	M	*
C1638	QETC1HM-105Z	E CAP.	1μF	50V	M	*
C1639	QFLC1HJ-273MZ	M CAP.	0.027μF	50V	J	*
C1640	QETC1HM-225Z	E CAP.	2.2μF	50V	M	*
C1641	QFN31HJ-222ZJ1	M CAP.	2200pF	50V	J	*
C1642	QFV71HJ-104MZ	TF CAP.	0.1μF	50V	J	*
C1643	QETC1HM-225Z	E CAP.	2.2μF	50V	M	*
C1644	QFN31HJ-222ZJ1	M CAP.	2200pF	50V	J	*
C1645	QFV71HJ-104MZ	TF CAP.	0.1μF	50V	J	*
C1648	QETC1HM-105Z	E CAP.	1μF	50V	M	*
C1651-52	QEN61HM-105Z	BP E CAP.	1μF	50V	M	*
C1654	QETC1CM-476Z	E CAP.	47μF	16V	M	*
C1671-72	QETC1HM-474Z	E CAP.	0.47μF	50V	M	*
C1701-02	NCB21HK-103AY	CHIP CAP.	0.01μF	50V	K	*
C1703	QETC1CM-107Z	E CAP.	100μF	16V	M	*
C1704	NCB21HK-103AY	CHIP CAP.	0.01μF	50V	K	*
C1705	NCT03CH-181AY	CHIP CAP.	180pF	50V	J	*

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⚠	Symbol No.	Part No.	Part Name	Description			Local
	CAPACITOR						
	C1707-08	QETC1HM-105Z	E CAP.	1μF	50V	M	*
	C1709	NCT03CH-221AY	CHIP CAP.	220pF	50V	J	*
	C1710-11	NCT03CH-390AY	CHIP CAP.	39pF	50V	J	*
	C1712	NCT03CH-270AY	CHIP CAP.	27pF	50V	J	*
	C1713	NCT03CH-150AY	CHIP CAP.	15pF	50V	J	*
	C1714	NCB21HK-103AY	CHIP CAP.	0.01μF	50V	K	*
	C1715	QETC1CM-107Z	E CAP.	100μF	16V	M	*
	C1716	NCB21HK-103AY	CHIP CAP.	0.01μF	50V	K	*
	C1717-18	NCT03CH-330AY	CHIP CAP.	33pF	50V	J	*
	C1720-22	NCB21HK-103AY	CHIP CAP.	0.01μF	50V	K	*
	C1723	NCB21HK-102AY	CHIP CAP.	1000pF	50V	K	*
	C1725	NCB21HK-102AY	CHIP CAP.	1000pF	50V	K	*
	C1741	QFN31HJ-102ZJ1	M CAP.	1000pF	50V	J	*
	C1743	NCB21HK-103AY	CHIP CAP.	0.01μF	50V	K	*
	C1744	NCT03CH-681AY	CHIP CAP.	680pF	50V	J	*
	C1771	QETC1CM-476Z	E CAP.	47μF	16V	M	*
	C1772	NCB21HK-103AY	CHIP CAP.	0.01μF	50V	K	*
	C1773	QETC1CM-107Z	E CAP.	100μF	16V	M	*
	C1774	QETC1CM-227Z	E CAP.	220μF	16V	M	*
	C1801	QETC1HM-474Z	E CAP.	0.47μF	50V	M	*
	C1802	QETC1HM-474Z	E CAP.	0.47μF	50V	M	
	C1803	QETC1HM-474Z	E CAP.	0.47μF	50V	M	*
⚠	C1901	QFZ9040-104N	MF CAP.	0.1μFAC275V		M	*
⚠	C1902	QFZ9040-473N	MF CAP.	0.047μFAC275V		M	*
⚠	C1903	QFZ9040-104N	MF CAP.	0.1μFAC275V		M	*
⚠	C1904	QCZ9052-102A	C CAP.	1000pFAC125V			*
⚠	C1906	QCZ9033-102A	C CAP.	1000pFAC250V		K	*
⚠	C1907	QCZ9033-102A	C CAP.	1000pFAC250V		K	*
⚠	C1908	QCZ9033-102A	C CAP.	1000pFAC250V		K	*
⚠	C1910	QEZ0169-477	E CAP.	470μF	200V	M	*
	C1911	QETC1VM-477Z	E CAP.	470μF	35V	M	*
	C1912	QFN31HJ-102ZJ1	M CAP.	100pF	50V	J	*
	C1913	QCZ0122-222U	C CAP.	2200pF	2000V	K	*
	C1914	QCZ0122-391A	C CAP.	390pF	2000V	K	*
	C1918	NCB21HK-102AY	CHIP CAP.	1000pF	50V	K	*
	C1919	NCB21HK-472AY	CHIP CAP.	4700pF	50V	K	*
	C1920	QFLC1HJ-823MZ	M CAP.	0.082μF	50V	J	*
	C1921-23	QCZ0132-152AZ	C CAP.	1500pF	500V	K	*
	C1924	QEZ0203-107R	E CAP.	100μF	160V		*
	C1926	QETC1CM-108Z	E CAP.	1000μF	16V	M	*
	C1927	QETC1CM-107Z	E CAP.	100μF	16V	M	*
	C1928	QETB1EM-108	E CAP.	1000μF	25V	M	*
	C1931-32	QETC1CM-476Z	E CAP.	47μF	16V	M	*
	C1934	NCB21HK-102AY	CHIP CAP.	1000pF	50V	K	*
	C1938	NCT03CH-471AY	CHIP CAP.	470pF	50V	J	*
	C1951	QETC1CM-107Z	E CAP.	100μF	16V	M	*
	C1952	QETC1HM-476Z	E CAP.	47μF	50V	M	*
	C1954	QETC1CM-226Z	E CAP.	22μF	16V	M	*
⚠	C1990-91	QCZ9029-103M	C CAP.	0.01μFAC125V		M	*
	TRANSFORMER						
	T1131	CELT001-209J3	C.WAVE TRANSF.				*
	T1161	CELT003-109J3	S.I.F.TRANSF.				*
	T1521	CE42034-002	H.DRIVE TRANSF.				*
⚠	T1522	QQH0016-001	H V TRANSF.				*
⚠	T1901	CETS084-001J8	S M T				*
	COIL						
	L1001	CELP059-101Z	PEAKING COIL	100μH			*
	L1102	CELP041-R22	PEAKING COIL	0.22μH			*
	L1103	CELP041-R68	PEAKING COIL	0.68μH			*
	L1104	CELP059-680Z	PEAKING COIL	68μH			*
	L1131	CELP059-220Z	PEAKING COIL	22μH			*
	L1161	CELP059-680Z	PEAKING COIL	68μH			*
	L1162	CELP059-390Z	PEAKING COIL	39μH			*
	L1201	CELP059-270Z	PEAKING COIL	27μH			*
⚠	L1531	CE41663-00B	LINEARITY COIL				*
⚠	L1532	CELC052-821	CHOKE COIL				*

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⚠	Symbol No.	Part No.	Part Name	Description	Local
	COIL				
⚠	L1591	CELC901-036J6	HEATER CHOKE		*
	L1701	CELP059-5R6Z	PEAKING COIL	5.6μH	*
	L1702	CELP058-100Z	PEAKING COIL	10μH	*
	L1771	CELP059-5R6Z	PEAKING COIL	5.6μH	*
	L1921	CELC058-820Z	CHOKE COIL		*
	L1922	CELC058-220Z	CHOKE COIL		*
	DIODE				
	D1001	MTZJ36(A)-T2	ZENER DIODE		*
	D1221	MTZJ5.1(B)-T2	ZENER DIODE		*
	D1231-34	1SS133-T2	SI.DIODE		*
	D1421	1N4003-T2	SI.DIODE		*
	D1422	MTZJ75-T2	ZENER DIODE		*
	D1511	MTZJ3.3(A)-T2	ZENER DIODE		*
⚠	D1531	RH3G-C1	SI.DIODE		*
⚠	D1532	RU3AM-LFC4	SI.DIODE		*
	D1533	RGP10J(C1)-T3	SI.DIODE		*
	D1540	MTZJ36(A)-T2	ZENER DIODE		*
	D1541	RH1S-T3	SI.DIODE		*
	D1542	RGP10J(C1)-T3	SI.DIODE		*
	D1544	1SS81-T2	SI.DIODE		*
	D1546	1SR124-400A-T2	SI.DIODE		*
	D1549	MTZJ9.1(B)-T2	ZENER DIODE		*
⚠	D1551	MTZJ7.5S-T2	ZENER DIODE		*
	D1560	1SS133-T2	SI.DIODE		*
	D1601-03	1SS133-T2	SI.DIODE		*
	D1693-94	MTZJ9.1(C)-T2	ZENER DIODE		*
	D1702-04	1SS133-T2	SI.DIODE		*
	D1741-42	1SS133-T2	SI.DIODE		*
	D1771-73	1SS133-T2	SI.DIODE		*
	D1804	MTZJ5.1(B)-T2	ZENER DIODE		*
	D1805	1SS133-T2	SI.DIODE		*
	D1810	MTZJ12(C)-T2	ZENER DIODE		*
⚠	D1901	D3SBA60-C1	BRIDGE DIODE		*
⚠	D1902	RGP10J(C1)-T3	SI.DIODE		*
	D1903-04	1SS133-T2	SI.DIODE		*
	D1909	MTZJ15(A)-T2	ZENER DIODE		*
	D1910	RGP10J(C1)-T3	SI.DIODE		*
	D1911	1SS133-T2	SI.DIODE		*
	D1912	MTZJ15(A)-T2	ZENER DIODE		*
	D1913	RGP10J(C1)-T3	SI.DIODE		*
	D1921	RU30A-C1	SI.DIODE		*
	D1922	RU3YX-LFC4	SI.DIODE		*
	D1923	EGP10D-C1	SI.DIODE		
	D1926-27	1SS133-T2	SI.DIODE		*
	D1931	1SS133-T2	SI.DIODE		*
	D1933	1SS133-T2	SI.DIODE		*
	D1941	MTZJ11(A)-T2	ZENER DIODE		*
	D1951	MTZJ7.5S-T2	ZENER DIODE		*
	TRANSISTOR				
	Q1101	2SC5083(L-P)-T	SI.TRANSISTOR		*
	Q1131-32	2SC2412K(QR)-X	SI.TRANSISTOR		*
	Q1161	2SC2412K(QR)-X	SI.TRANSISTOR		*
	Q1203	2SC2412K(QR)-X	SI.TRANSISTOR		*
	Q1204-05	2SA1037K(QR)-X	SI.TRANSISTOR		*
	Q1231-32	2SC2412K(QR)-X	SI.TRANSISTOR		*
	Q1521	2SC4212-C1	SI.TRANSISTOR		*
⚠	Q1531	2SD2539-LB	SI.TRANSISTOR	H.OUT	*
	Q1541	2SA933S(QR)-T	SI.TRANSISTOR		*
⚠	Q1542	2SC2785(JH)-T	SI.TRANSISTOR		*
	Q1543-44	2SC2412K(QR)-X	SI.TRANSISTOR		*
	Q1551	2SC2412K(QR)-X	SI.TRANSISTOR		*
	Q1552	2SA1037K(QR)-X	SI.TRANSISTOR		*
	Q1553	2SD1408(OY)-LB	SI.TRANSISTOR		*
	Q1601	DTC124EKA-X	DIGI.TRANSISTOR		*
	Q1602	2SC2412K(QR)-X	SI.TRANSISTOR		*
	Q1603	DTC124EKA-X	DIGI.TRANSISTOR		*

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⚠	Symbol No.	Part No.	Part Name	Description	Local
	TRANSISTOR				
	Q1604	2SA1037K(QR)-X	SI.TRANSISTOR		*
	Q1671-72	DTC124EKA-X	DIGI.TRANSISTOR		*
	Q1683-86	2SC2412K(QR)-X	SI.TRANSISTOR		*
	Q1701	DTC124EKA-X	DIGI.TRANSISTOR		*
	Q1741	2SC2412K(QR)-X	SI.TRANSISTOR		*
	Q1742	DTC124EKA-X	DIGI.TRANSISTOR		*
	Q1743	2SC2412K(QR)-X	SI.TRANSISTOR		*
	Q1911	2SA1037K(QR)-X	SI.TRANSISTOR		*
	Q1921	2SC2412K(QR)-X	SI.TRANSISTOR		*
	Q1923	2SA1020(Y)-T	SI.TRANSISTOR		*
	Q1924	2SC2412K(QR)-X	SI.TRANSISTOR		*
	Q1928	DTC124EKA-X	DIGI.TRANSISTOR		*
	Q1942-43	2SC2412K(QR)-X	SI.TRANSISTOR		*
	Q1944	DTC124EKA-X	DIGI.TRANSISTOR		*
	Q1951	2SA949(Y)C1-T	SI.TRANSISTOR		*
	IC				
	IC1001	KIA78L05BP-T	I.C.(MONO-ANA)		*
	IC1101	BA17809T	I.C.(MONO-ANA)		*
	IC1201	TA1242N	I.C.(MONO-ANA)		*
	IC1202	TC4066BP	I.C.(DIGI-MOS)		*
⚠	IC1421	LA7832	I C		*
⚠	IC1601	LA4485	I.C.(MONO-ANA)		*
	IC1651	UPC1851ACU	I C		
	IC1652	BA15218N	I.C.(MONO-ANA)		*
	IC1653	TC4066BP	I.C.(DIGI-MOS)		*
	IC1701	MN1874876JA	I C		*
	IC1702	AT24C02-32920U	I C	(SERVICE)	
	IC1703	MN1381/Q/-T	I.C.(MONO-ANA)		*
	IC1771	KIA78L05BP-T	I.C.(MONO-ANA)		*
⚠	IC1901	STR-F6515	I.C.(HYBRID)		*
⚠	IC1941	SE135N	I.C.(HYBRID)		*
	OTHERS				
	CF1001-02	FTP47.25MF	CERAMIC FILTER		*
	CF1131	CE41505-001	CERAMIC FILTER		*
	CF1161	SFSH4.5MCB	CERAMIC FILTER		*
	CF1501	CSB503F30-T2	CER.RESONATOR		*
	CF1701	FCR12.0M2S	CER.RESONATOR		*
⚠	F1901	QMF0007-5R0J1	FUSE	5.0A	*
	K1421	QQR0582-001Z	BEADS CORE		*
	K1702	QQR0582-001Z	BEADS CORE		*
	K1901	CE41433-001Z	BEADS CORE		*
	K1903	CE41433-001Z	BEADS CORE		*
	K1921	CE41433-001Z	BEADS CORE		*
⚠	LF1901	CELF001-001J1	LINE FILTER		*
⚠	LF1902	CE42335-001J1	LINE FILTER		*
⚠	PC1901	TLP621(B)	I.C.(PH.COUPLER)		*
⚠	PC1902	TLP621(B)	I.C.(PH.COUPLER)		*
⚠	RY1901	CESK028-001	RELAY		*
	S1421	QSL6A13-C01	LEVER SWITCH	V.CENTER SW	*
	SF1101	CE42604-201	SAW FILTER		
⚠	TH1501	CEKP004-002	P.THERMISTOR		*
⚠	TH1901	CEKP007-002	P.THERMISTOR		*
⚠	TU1001	CEEY200-B01	TUNER		*
⚠	VA1901	ERZV10V361CS	VARISTOR		*
	W1156-57	QRSA08J-0R0YL	CHIP MG R	0.0 Ω 1/10W J	*
	W1159	QRSA08J-0R0YL	CHIP MG R	0.0 Ω 1/10W J	*
	W1161	QRSA08J-0R0YL	CHIP MG R	0.0 Ω 1/10W J	*
	W1164-65	QRSA08J-0R0YL	CHIP MG R	0.0 Ω 1/10W J	*
	W1168	QRSA08J-0R0YL	CHIP MG R	0.0 Ω 1/10W J	*
	W1170-71	QRSA08J-0R0YL	CHIP MG R	0.0 Ω 1/10W J	*
	W1173	QRSA08J-0R0YL	CHIP MG R	0.0 Ω 1/10W J	*
	W1175-76	QRSA08J-0R0YL	CHIP MG R	0.0 Ω 1/10W J	*
	W1178	QRSA08J-0R0YL	CHIP MG R	0.0 Ω 1/10W J	*
	W1180-81	QRSA08J-0R0YL	CHIP MG R	0.0 Ω 1/10W J	*
	W1191-94	QRSA08J-0R0YL	CHIP MG R	0.0 Ω 1/10W J	*
	W1196	QRSA08J-0R0YL	CHIP MG R	0.0 Ω 1/10W J	*

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⚠ Symbol No.	Part No.	Part Name	Description	Local
OTHERS				
W1201	QRSA08J-0R0YL	CHIP MG R	0.0 Ω 1/10W J	*
W1224-27	QRSA08J-0R0YL	CHIP MG R	0.0 Ω 1/10W J	*
W1230-33	QRSA08J-0R0YL	CHIP MG R	0.0 Ω 1/10W J	*
W1235-37	QRSA08J-0R0YL	CHIP MG R	0.0 Ω 1/10W J	*
W1247-49	QRSA08J-0R0YL	CHIP MG R	0.0 Ω 1/10W J	*
X1301	QAX0310-001Z	X-TAL		*
Y1018-19	QRSA08J-0R0YL	CHIP MG R	0.0 Ω 1/10W J	*
Y1201	NCB21HK-102AY	CHIP CAP.	1000pF 50V K	*
Y1709	QRSA08J-0R0YL	CHIP MG R	0.0 Ω 1/10W J	*

MAIN P.W. BOARD ASS'Y (SFK-1022A-M2) [AV-32920 (A US&CA)]

Regarding the parts list for the main PW board ass'y **SFK-1022A-M2**, only the different parts from those of the **SFK-1021A-M2** are described. For further details regarding the other parts, refer to the parts list for the **SFK-1021A-M2** described on page 31 through page 39.

⚠	Symbol No.	Parts No.		Parts Name	Description
		AV-32920 (US&CA) SFK-1021A-M2	AV-32920 (A US&CA) SFK-1022A-M2		
	R1431	×	QRE121J-100Y (10Ω 1/2W J *) or QRD121J-100SY (10Ω 1/2W J *)	C R	
	R1583	NRSA02J-182X (1.8kΩ 1/10W J *) or QRSA08J-182YL (1.8kΩ 1/10W J *)	NRSA02J-561X (560Ω 1/10W J *) or QRSA08J-561YL (560Ω 1/10W J *)	CHIP MG R	
	R1584	NRSA02J-152X (1.5kΩ 1/10W J *) or QRSA08J-152YL (1.5kΩ 1/10W J *)	NRSA02J-182X (1.8kΩ 1/10W J *) or QRSA08J-182YL (1.8kΩ 1/10W J *)	CHIP MG R	
	R1587	NRSA02J-332X (3.3kΩ 1/10W J *) or QRSA08J-332YL (3.3kΩ 1/10W J *)	NRSA02J-392X (3.9kΩ 1/10W J *) or QRSA08J-392YL (3.9kΩ 1/10W J *)	CHIP MG R	
⚠	C1535	QFZ0119-754 (0.75μF 200V ±3% *) or QFZ0119-754S (0.75μF 200V±3% *)	QFZ0119-564 (0.56μF 200V ±3% *) or QFZ0119-564S (0.56μF 200V±3% *)	MPP CAP.	
	C1572	×	QFLC1HJ-223Z (0.022μF 50V J *)	M CAP.	
	C1580	×	NDC21HJ-330X (33pF 50V J *)	CHIP CAP.	
⚠	L1591	QQLZ018-360 or CELC901-036J6 *	QQLZ018-380 or CELC901-038J6 *	HEATER CHOKE	

CRT SOCKET P.W. BOARD ASS'Y (SFK-3002A-M2) [AV-32920 (US&CA) / AV-32920 (A US&CA)]

⚠ Symbol No.	Part No.	Part Name	Description	Local
RESISTOR				
R3351-53	QRSA08J-331YL	CHIP MG R	330 Ω 1/10W J	*
R3354-56	QRSA08J-181YL	CHIP MG R	180 Ω 1/10W J	*
R3357-59	QRSA08J-101YL	CHIP MG R	100 Ω 1/10W J	*
R3360-62	QRZ0111-152	C R	1.5kΩ 1/2W	*
R3363-65	QRG029J-103	OM R	10kΩ 2W J	*
R3366-68	QRSA08J-152YL	CHIP MG R	1.5kΩ 1/10W J	*
R3381	QRD121J-394SY	C R	390kΩ 1/2W J	*
CAPACITOR				
C3354-55	NCS21HJ-331AY	CER. CAP. -M	330pF 50V J	*
C3356	NCS21HJ-391AY	CER. CAP. -M	330pF 50V J	*
C3357	QETC1CM-107Z	E CAP.	100μF 16V M	*
⚠ C3382	QCZ0121-102A	C CAP.	1000pF 3kV Z	*
COIL				
L3381	CELP055-101Z	PEAKING COIL	100μH	*
TRANSISTOR				
Q3351-53	2SC4544-C1	SI. TRANSISTOR		*
OTHERS				
⚠ SK3351	CE42535-001J1	C.R.T. SOCKET		*

FRONT CONTROL P.W. BOARD ASS'Y (SFK-4002A-M2) [AV-32920 (US&CA) / AV-32920 (A US&CA)]

⚠ Symbol No.	Part No.	Part Name	Description	Local
RESISTOR				
R4701	QRSA08J-103YL	CHIP MG R	10kΩ 1/10W J	*
R4702	QRSA08J-472YL	CHIP MG R	4.7kΩ 1/10W J	*
R4703	QRSA08J-153YL	CHIP MG R	15kΩ 1/10W J	*
R4704	QRSA08J-103YL	CHIP MG R	10kΩ 1/10W J	*
R4705	QRSA08J-472YL	CHIP MG R	4.7kΩ 1/10W J	*
R4706	QRSA08J-153YL	CHIP MG R	15kΩ 1/10W J	*
R4707	QRSA08J-222YL	CHIP MG R	2.2kΩ 1/10W J	*
R4708	QRSA08J-681YL	CHIP MG R	680 Ω 1/10W J	*
R4709	QRSA08J-561YL	CHIP MG R	560 Ω 1/10W J	*
CAPACITOR				
C4841	QETC1CM-476Z	E CAP.	47μF 16V M	*
DIODE				
D4701	GL2PR6	L.E.D. (RED)		*
TRANSISTOR				
Q4701-02	DTA124EKA-X	DIGI. TRANSISTOR		*
IC				
IC4841	PIC-21043SR	IR DETECT UNIT		*
OTHERS				
	CM46978-A01-H	L.E.D. HOLDER		*
S4702	QSP1A11-C19Z	PUSH SWITCH	MENU	*
S4703	QSP1A11-C19Z	PUSH SWITCH	CH -	*
S4704	QSP1A11-C19Z	PUSH SWITCH	CH +	*
S4705	QSP1A11-C19Z	PUSH SWITCH	VOL -	*
S4706	QSP1A11-C19Z	PUSH SWITCH	VOL +	*
S4707	QSP1A11-C19Z	PUSH SWITCH	POWER	*
W4008-09	QRSA08J-0R0YL	CHIP MG R	0.0 Ω 1/10W J	*

AV SELECTOR P.W. BOARD ASS'Y (SFK-8021A-M2) [AV-32920 (US&CA) / AV-32920 (A US&CA)]

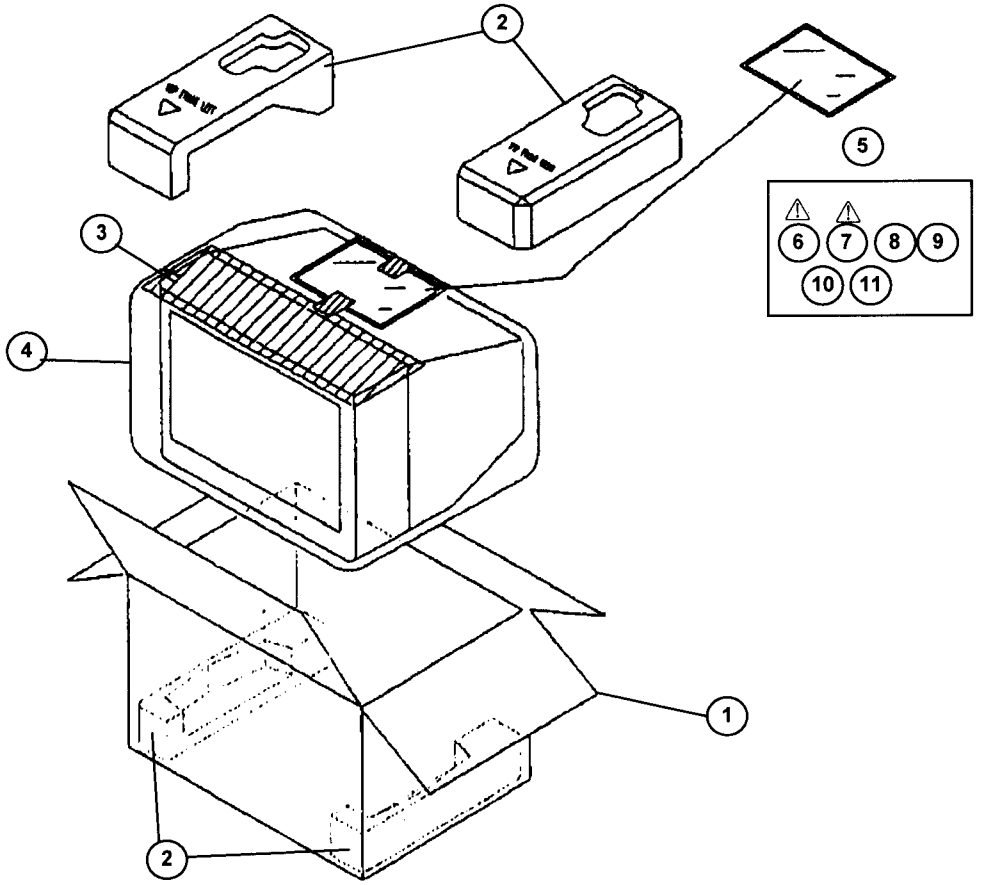
⚠ Symbol No.	Part No.	Part Name	Description	Local
RESISTOR				
R8201	QRSA08J-101YL	CHIP MG R	100 Ω 1/10W J	*
R8207	QRSA08J-101YL	CHIP MG R	100 Ω 1/10W J	*
R8208	QRSA08J-221YL	CHIP MG R	220 Ω 1/10W J	*
R8209	QRSA08J-152YL	CHIP MG R	1.5kΩ 1/10W J	*
R8210-11	QRSA08J-102YL	CHIP MG R	1kΩ 1/10W J	*
R8212	QRSA08J-562YL	CHIP MG R	5.6kΩ 1/10W J	*
R8213	QRSA08J-152YL	CHIP MG R	1.5kΩ 1/10W J	*
R8214-15	QRSA08J-0R0YL	CHIP MG R	0.0 Ω 1/10W J	*
R8219	QRSA08J-0R0YL	CHIP MG R	0.0 Ω 1/10W J	*
R8301-02	QRSA08J-102YL	CHIP MG R	1kΩ 1/10W J	*
R8303	QRSA08J-393YL	CHIP MG R	39kΩ 1/10W J	*
R8304	QRSA08J-333YL	CHIP MG R	33kΩ 1/10W J	*
R8305	QRSA08J-272YL	CHIP MG R	2.7kΩ 1/10W J	*
R8306	QRSA08J-471YL	CHIP MG R	470 Ω 1/10W J	*
R8308	QRSA08J-102YL	CHIP MG R	1kΩ 1/10W J	*
R8310-11	QRSA08J-153YL	CHIP MG R	15kΩ 1/10W J	*
R8313	QRSA08J-822YL	CHIP MG R	8.2kΩ 1/10W J	*
R8314	QRSA08J-682YL	CHIP MG R	6.8kΩ 1/10W J	*
R8315	QRSA08J-681YL	CHIP MG R	680 Ω 1/10W J	*
R8316	QRSA08J-102YL	CHIP MG R	1kΩ 1/10W J	*
R8317	QRSA08J-472YL	CHIP MG R	4.7kΩ 1/10W J	*
R8318	QRSA08J-152YL	CHIP MG R	1.5kΩ 1/10W J	*
R8319	QRSA08J-273YL	CHIP MG R	27kΩ 1/10W J	*
R8320	QRSA08J-562YL	CHIP MG R	5.6kΩ 1/10W J	*
R8321	QRSA08J-472YL	CHIP MG R	4.7kΩ 1/10W J	*
R8322	QRSA08J-561YL	CHIP MG R	560 Ω 1/10W J	*
R8323	QRSA08J-331YL	CHIP MG R	330 Ω 1/10W J	*
R8693-94	QRSA08J-221YL	CHIP MG R	220 Ω 1/10W J	*
R8695-96	QRSA08J-823YL	CHIP MG R	82kΩ 1/10W J	*
R8801-02	QRSA08J-820YL	CHIP MG R	82 Ω 1/10W J	*
R8811-14	QRSA08J-102YL	CHIP MG R	1kΩ 1/10W J	*
R8819	QRSA08J-123YL	CHIP MG R	12kΩ 1/10W J	*
R8820	QRSA08J-103YL	CHIP MG R	10kΩ 1/10W J	*
R8821-22	QRSA08J-152YL	CHIP MG R	1.5kΩ 1/10W J	*
R8823-24	QRSA08J-182YL	CHIP MG R	1.8kΩ 1/10W J	*
R8826	QRSA08J-273YL	CHIP MG R	27kΩ 1/10W J	*
R8827	QRSA08J-183YL	CHIP MG R	18kΩ 1/10W J	*
R8831	QRSA08J-821YL	CHIP MG R	820 Ω 1/10W J	*
R8832-33	QRSA08J-182YL	CHIP MG R	1.8kΩ 1/10W J	*
R8835	QRSA08J-273YL	CHIP MG R	27kΩ 1/10W J	*
R8836	QRSA08J-223YL	CHIP MG R	22kΩ 1/10W J	*
R8837	QRSA08J-222YL	CHIP MG R	2.2kΩ 1/10W J	*
R8851	QRSA08J-562YL	CHIP MG R	5.6kΩ 1/10W J	*
R8852	QRSA08J-223YL	CHIP MG R	22kΩ 1/10W J	*
R8853	QRSA08J-820YL	CHIP MG R	82 Ω 1/10W J	*
R8854-55	QRSA08J-823YL	CHIP MG R	82kΩ 1/10W J	*
R8857-58	QRSA08J-823YL	CHIP MG R	82kΩ 1/10W J	*
R8859	NRSA02J-820X	MG R	82Ω 1/10W J	*
CAPACITOR				
C8201	QETC1CM-107Z	E CAP.	100μF 16V M	*
C8202	QETC1HM-106Z	E CAP.	10μF 50V M	*
C8205	NCT03CH-330AY	CHIP CAP.	33pF 50V J	*
C8207	QETC1CM-476Z	E CAP.	47μF 16V M	*
C8302	QFLC1HJ-103MZ	M CAP.	0.01μF 50V J	*
C8303	NCT03CH-680AY	CHIP CAP.	68pF 50V J	*
C8304	NCT03CH-271AY	CHIP CAP.	270pF 50V J	*
C8305	NCB21HK-103AY	CHIP CAP.	0.01μF 50V K	*
C8316	NCB21HK-103AY	CHIP CAP.	0.01μF 50V K	*
C8318	QETC1HM-105Z	E CAP.	1μF 50V M	*
C8811-14	QETC1HM-105Z	E CAP.	1μF 50V M	*
C8821	QETC1HM-105Z	E CAP.	1μF 50V M	*
C8822	QETC1HM-106Z	E CAP.	10μF 50V M	*
C8825-27	QETC1HM-106Z	E CAP.	10μF 50V M	*
C8828	QETC1CM-476Z	E CAP.	47μF 16V M	*
C8831	QETC1CM-476Z	E CAP.	47μF 16V M	*
C8832	QFLC1HJ-103MZ	M CAP.	0.01μF 50V J	*
C8833	QETC1HM-106Z	E CAP.	10μF 50V M	*
C8835-36	QETC1CM-476Z	E CAP.	47μF 16V M	*

⚠ Symbol No.	Part No.	Part Name	Description	Local
COIL				
L8202	CELP059-220Z	PEAKING COIL	22μH	*
L8301	CELP059-150Z	PEAKING COIL	15μH	*
L8801	CELP059-5R6Z	PEAKING COIL	5.6μH	*
DIODE				
D8311-13	1SS133-T2	SI.DIODE		*
D8703	MTZJ5.6(B)-T2	ZENER DIODE		*
D8811-22	MTZJ9.1(C)-T2	ZENER DIODE		*
TRANSISTOR				
Q8202	2SC2412K(QR)-X	SI.TRANSISTOR		*
Q8203	2SA1037K(QR)-X	SI.TRANSISTOR		*
Q8204	2SC2412K(QR)-X	SI.TRANSISTOR		*
Q8301-03	2SC2412K(QR)-X	SI.TRANSISTOR		*
Q8305-06	2SC2412K(QR)-X	SI.TRANSISTOR		*
Q8801	2SC2412K(QR)-X	SI.TRANSISTOR		*
Q8804-05	2SC2412K(QR)-X	SI.TRANSISTOR		*
Q8851-53	DTC124EKA-X	DIGI.TRANSISTOR		*
IC				
IC8801	BA7644AN	OP AMP IC		*
IC8803	TC4066BP	I.C.(DIGI-MOS)		*
OTHERS				
CM8201	CE42599-001	COMB FILTER MOD		*
DL8201	CE42464-001	BPF&DL MODULE		*
J8801	QMCC004-C01	MINI DIN JACK		
J8802	QNN0083-001	PIN JACK		*
J8804	QMS3003-C01	JACK		*
W8003-04	QRSA08J-0R0YL	CHIP MG R	0.0 Ω 1/10W J	*
W8010-11	QRSA08J-0R0YL	CHIP MG R	0.0 Ω 1/10W J	*
W8024-26	QRSA08J-0R0YL	CHIP MG R	0.0 Ω 1/10W J	*
W8030-31	QRSA08J-0R0YL	CHIP MG R	0.0 Ω 1/10W J	*
W8040	QRSA08J-0R0YL	CHIP MG R	0.0 Ω 1/10W J	*
W8042	QRSA08J-0R0YL	CHIP MG R	0.0 Ω 1/10W J	*
W8222	QRSA08J-0R0YL	CHIP MG R	0.0 Ω 1/10W J	*
Y8706-07	QRSA08J-0R0YL	CHIP MG R	0.0 Ω 1/10W J	*

REMOTE CONTROL UNIT PARTS LIST (RM-C754-1C)

⚠ Symbol No.	Part No.	Part Name.	Description	Local
	2AA015250	BATTERY COVER		*

PACKING



PACKING PARTS LIST

⚠	Ref. No.	Part No.	Part Name	Description	Local
	[America model]				
	1	CP11499-A18-A	PACKING CASE		*
	2	LC10176-002A-A	CUSHION ASSY	4pcs in 1set	*
	3	CP30055-A02-A	TOP COVER		*
	4	CP30056-004-A	POLY BAG		*
	5	QPGA025-03505A	POLY BAG		*
⚠	6	LCT0157-001A-A	INST BOOK	(ENGLISH)	*
	8	RM-C754-1C	REMOCON UNIT		*
	9	BT-51006-1Q	REGISTER CARD		*

⚠	Ref. No.	Part No.	Part Name	Description	Local
	[Canada model]				
	1	CP11499-A18-A	PACKING CASE		*
	2	LC10176-002A-A	CUSHION ASSY	4pcs in 1set	*
	3	CP30055-A02-A	TOP COVER		*
	4	CP30056-004-A	POLY BAG		*
	5	QPGA025-03505A	POLY BAG		*
⚠	6	LCT0157-001A-A	INST BOOK	(ENGLISH)	*
⚠	7	LCT0158-001A-A	INST BOOK	(FRENCH)	*
	8	RM-C754-1C	REMOCON UNIT		*
	10	BT-52002-1Q	WARRANTY CARD		*
	11	BT-20071B-Q	SVC CENTER LIST		*

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JVC

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