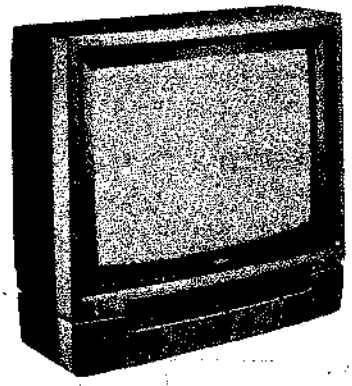
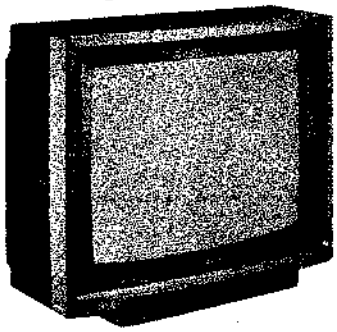
KV-2720/22/24EC2

ADJUSTMENT MANUAL

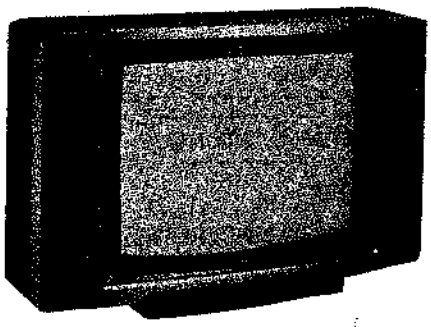
AEP Model

Chassis No. SCC-522A-A





KV-2720EC2



March, 1984

PE-3 CHASSIS

Please use the Adjustment Manual in conjunction with the Service Manual.

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MICROFILM

TRINITRON® COLOR TV

SONY®

CTV

SECTION 1
SETUP ADJUSTMENTS

The following adjustments should be made when a complete realignment is required or a new picture tube is installed.

These adjustments should be performed with rated power supply voltage unless otherwise noted.

Controls and switch should be set as follows unless otherwise noted:

◑ (picture) control . . . . . maximum (Press ◑ + button)

☼ BRIGHTNESS control . . . . maximum (fully clockwise)

AFT switch . . . . . ON

Perform the adjustments in order as follows:

1. Beam Landing
2. Convergence
3. White Balance

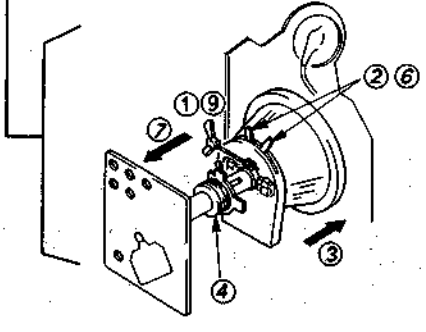
Note: Test Equipment Required.
1. Color-bar/Pattern Generator
2. Degausser

1-1. BEAM LANDING

Preparation:

- Feed in the white pattern.
- Before starting, degauss the entire screen.

1. Loosen deflection yoke screw.
2. Adjust purity control as shown in Fig. 1-1.
3. Slide deflection yoke as far forward as it will go.
4. Position neck ass'y as shown in Fig. 1-2.
5. Disconnect leads Ⓖ and Ⓑ on the C board.
6. Adjust purity control to center vertical red band as shown in Fig. 1-3.
7. Slide deflection yoke back for a uniform red screen.
8. Check green and blue rasters for uniformity by performing the same way as steps 5, 6 and 7.
   To get a uniform green screen, connect lead Ⓖ on the C board and disconnect leads Ⓡ and Ⓑ.
   To get a uniform blue screen, connect lead Ⓑ on the C board and disconnect leads Ⓡ and Ⓖ.
   After these checks, connect the leads Ⓡ, Ⓖ and Ⓑ.
9. Tighten the deflection yoke screw.
10. Check if mislanding appears at corners a – d as shown in Fig. 1-4. If mislanding is observed, correct it as shown in Fig. 1-4.
11. Confirm that beam landing is correct when the receiver is faced in all directions.



Note: The circled numbers (①–⑨) show above steps.

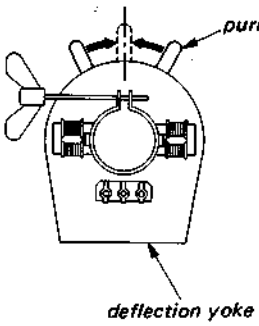


Fig. 1-1.

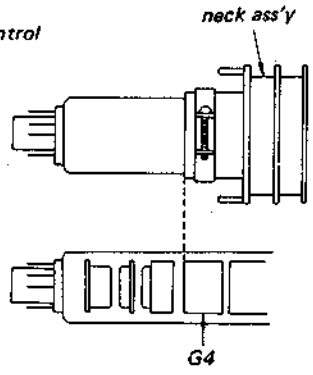


Fig. 1-2.

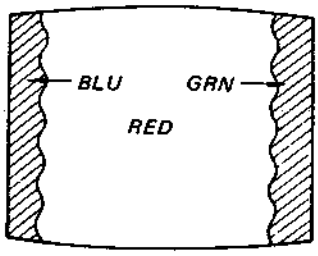


Fig. 1-3.

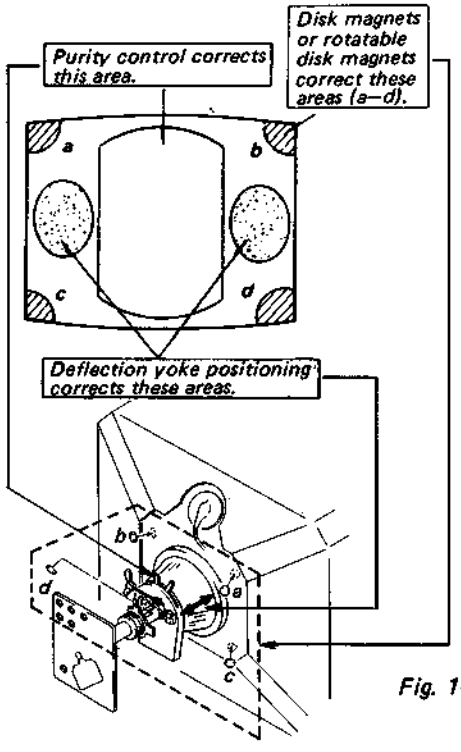


Fig. 1-4.

1-2. CONVERGENCE

Preparation:

- Before starting this adjustment, perform FOCUS, H. SIZE and V. SIZE adjustments.
- Turn BRIGHTNESS control fully counterclockwise.
- Feed in a dot pattern.

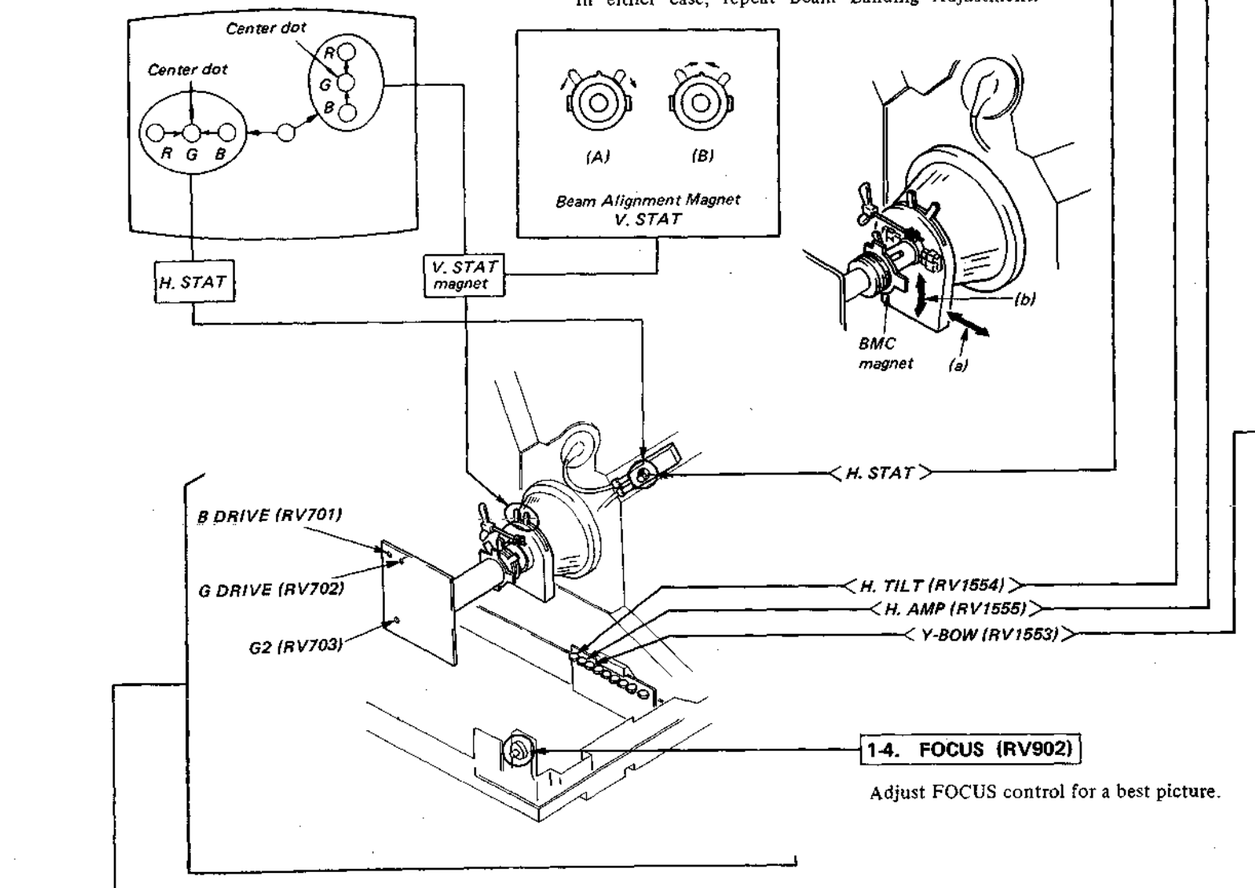
(1) Horizontal and Vertical Static Convergence

If blue dot does not coincide with red and green dots, perform following steps.

Move BMC magnet (a) to correct insufficient H. static convergence.

Rotate BMC magnet (b) to correct insufficient V. static convergence.

In either case, repeat Beam Landing Adjustment.



1-3. WHITE BALANCE

1. Tune in an off air signal.
2. Set the ☼ (BRT) control at mechanical center and ◑ (PIC) control at initial center.
3. Set the ◔ (COL) control at minimum.
4. Adjust White Balance with RV701 and RV702.
5. Confirm that White Balance does not change to turn the ☼ (BRT) control minimum through maximum.

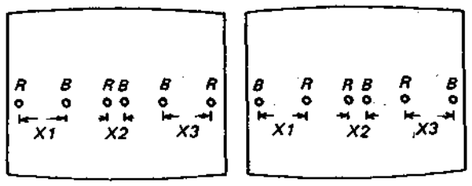
1-4. FOCUS (RV902)

Adjust FOCUS control for a best picture.

(2) Dynamic Convergence

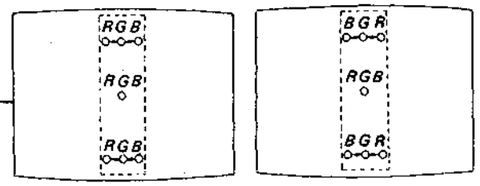
[Misconvergence at Both Sides of Screen.]

1. Set RV1555 and RV1554 to mechanical center.
2. Adjust H. STAT control so that green and blue dots coincide at center of screen.
3. Adjust RV1544 so that X1 is equal to X3.
4. Adjust RV1555 so that X2 is equal to X3.
5. Repeat above Steps 1 through 4 two or three times.

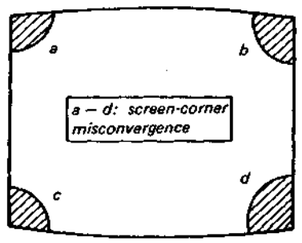


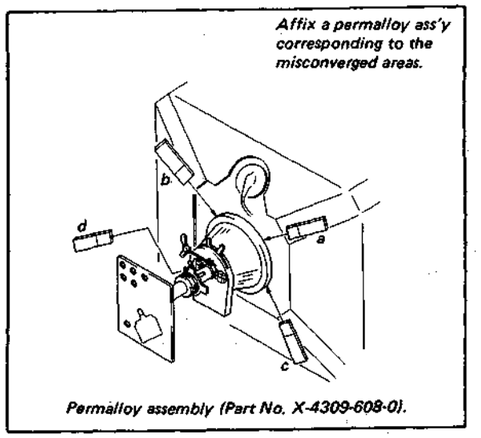
[Top and Bottom Misconvergence]

(A)



(3) Screen-corner Convergence





SECTION 2
CIRCUIT ADJUSTMENTS

Note: (1) TEST EQUIPMENT REQUIRED

1. Oscilloscope
2. Digital multimeter
3. Color-bar/pattern generator

(2) INPUT SIGNAL

When making these adjustments, supply a color-bar or an off-air signal.

(3) CONTROL SETTINGS

Controls and switches should be set as follows when, making checks and adjustments unless otherwise noted.

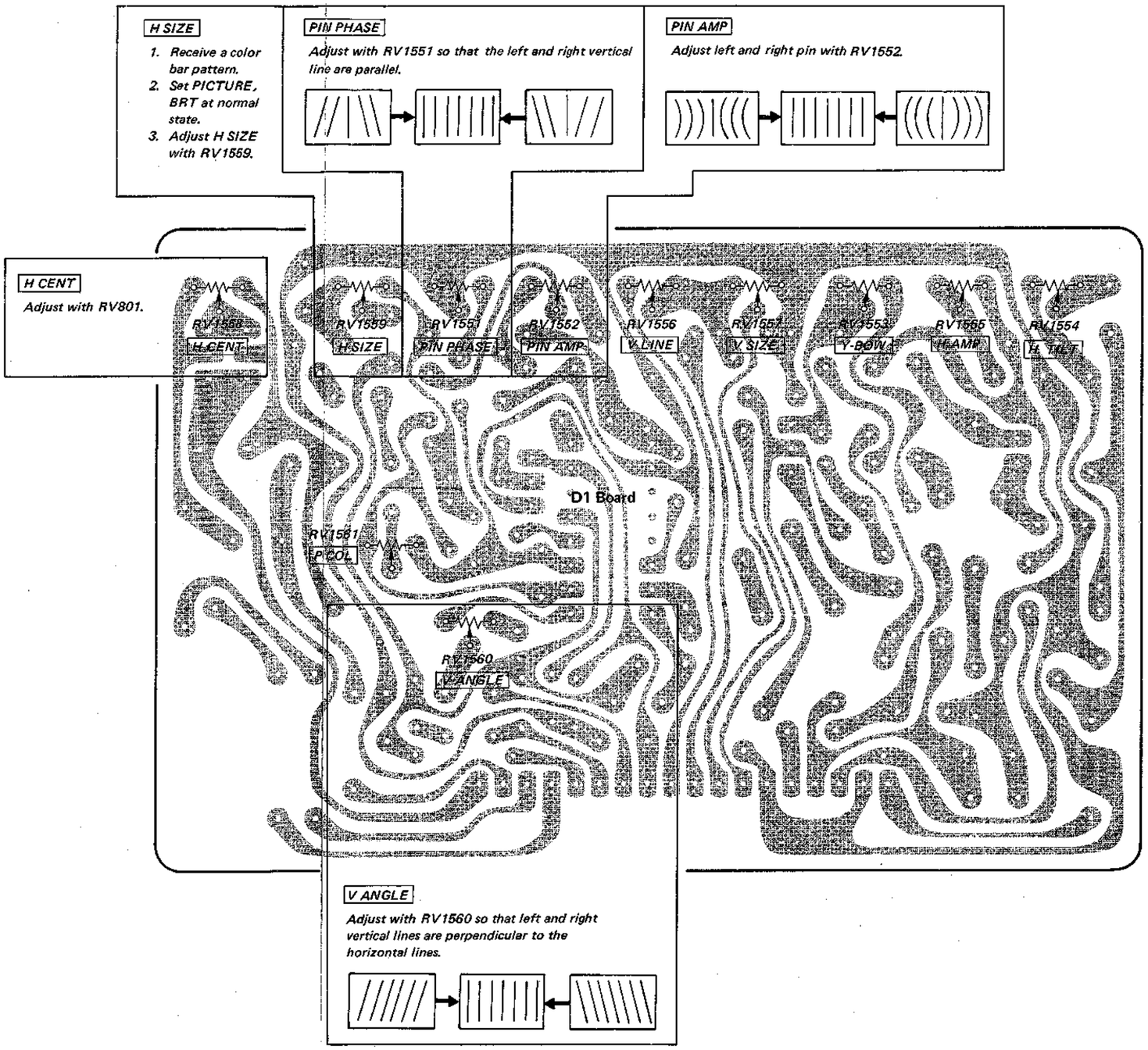
- PICTURE control ..... initial setting
- BRIGHTNESS control, COLOR control } mechanical center

(4) These adjustment should be performed with the rated power supply voltage unless otherwise noted.

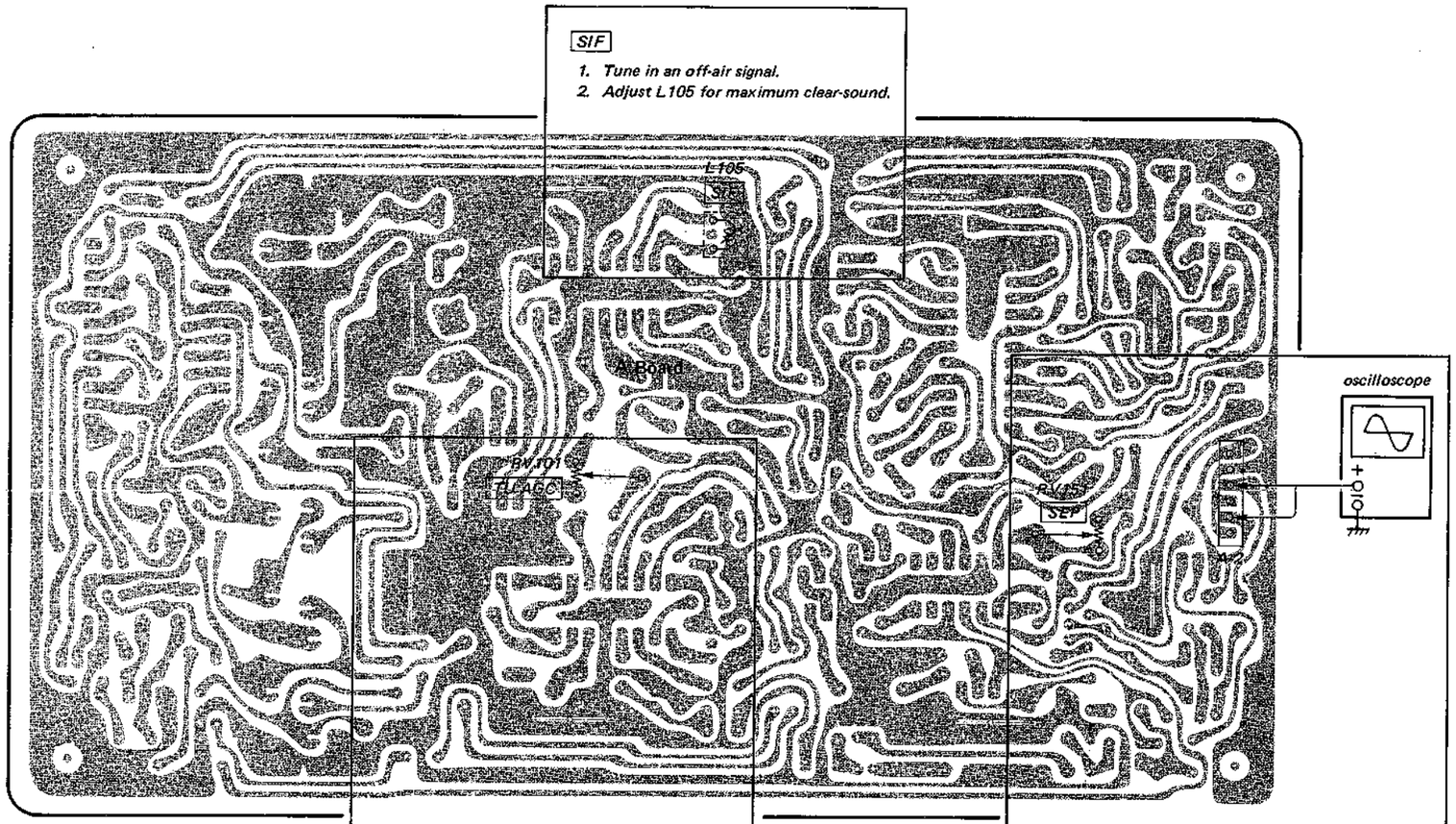
(5) CIRCUIT ADJUSTMENT

Adjustment	Circuit Board	Page
H SIZE PIN PHASE PIN AMP H CENT V ANGLE	D1	5, 6
SIF TU AGC SEPARATION	A	7, 8
DISCRI	SCM	8
1H DALAY 4.43MHz TRAP SUB-BALANCE SUB-BRIGHT APC SUB COLOR +135V ADJ HORIZONTAL SYNC	D	9, 10

2-1. D1 BOARD ADJUSTMENT



2-2. A BOARD ADJUSTMENTS



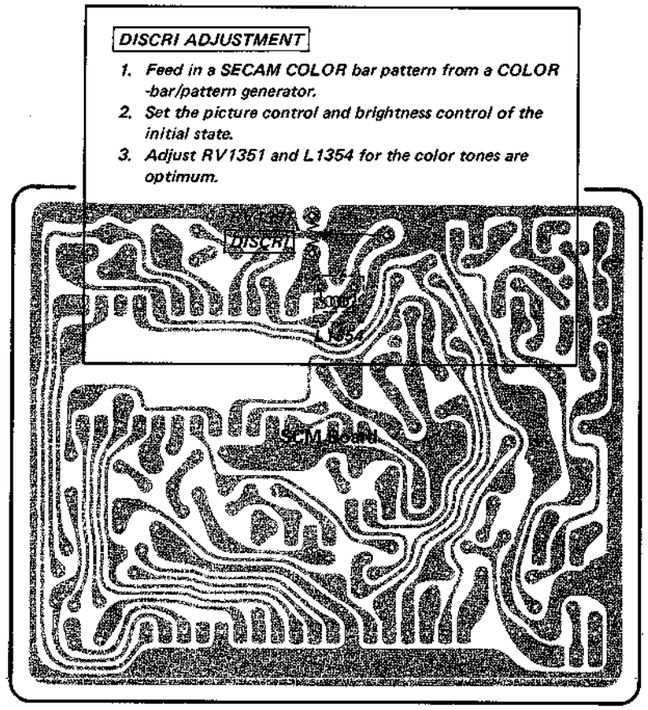
TU AGC

1. *Tune in an off-air signal.*
2. *Adjust RV101 so that snow noise and cross-modulation disappear from the picture.*

SEPARATION ADJ

1. *Receive a stereo signal (L-CH 1kHz, R-CH 400Hz) from a television multiplex modulator.*
2. *Adjust RV151 for minimum crosstalk from R-CH to L-CH.*

2-3. SCM BOARD (OPTIONAL) ADJUSTMENT



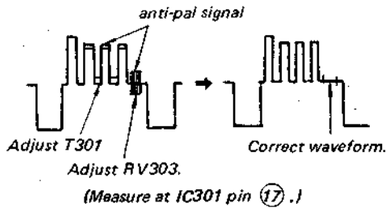
2-4. D BOARD ADJUSTMENTS

SUB BALANCE

1. S/S switch at OFF and BALANCE, BASS, TREBLE control at mechanical center.
2. Adjust with RV251 (SUB BALANCE) so that left and right levels are the same at D-15, D-16.
3. Turn BALANCE control to the right and confirm that the left side cannot be heard, that turn to the left and confirm that the right side cannot be heard.

1H DL ADJUSTMENT

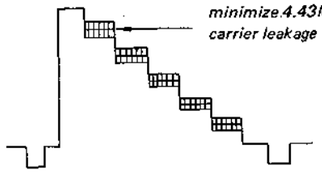
1. Receive a color bar signal.
2. Observe blue output of IC301, (17) pin.
3. Set the PICTURE, COLOR and BRT control to mechanical center.
4. Get tracking with both T301 and RV301 as shown



(Measure at IC301 pin (17).)

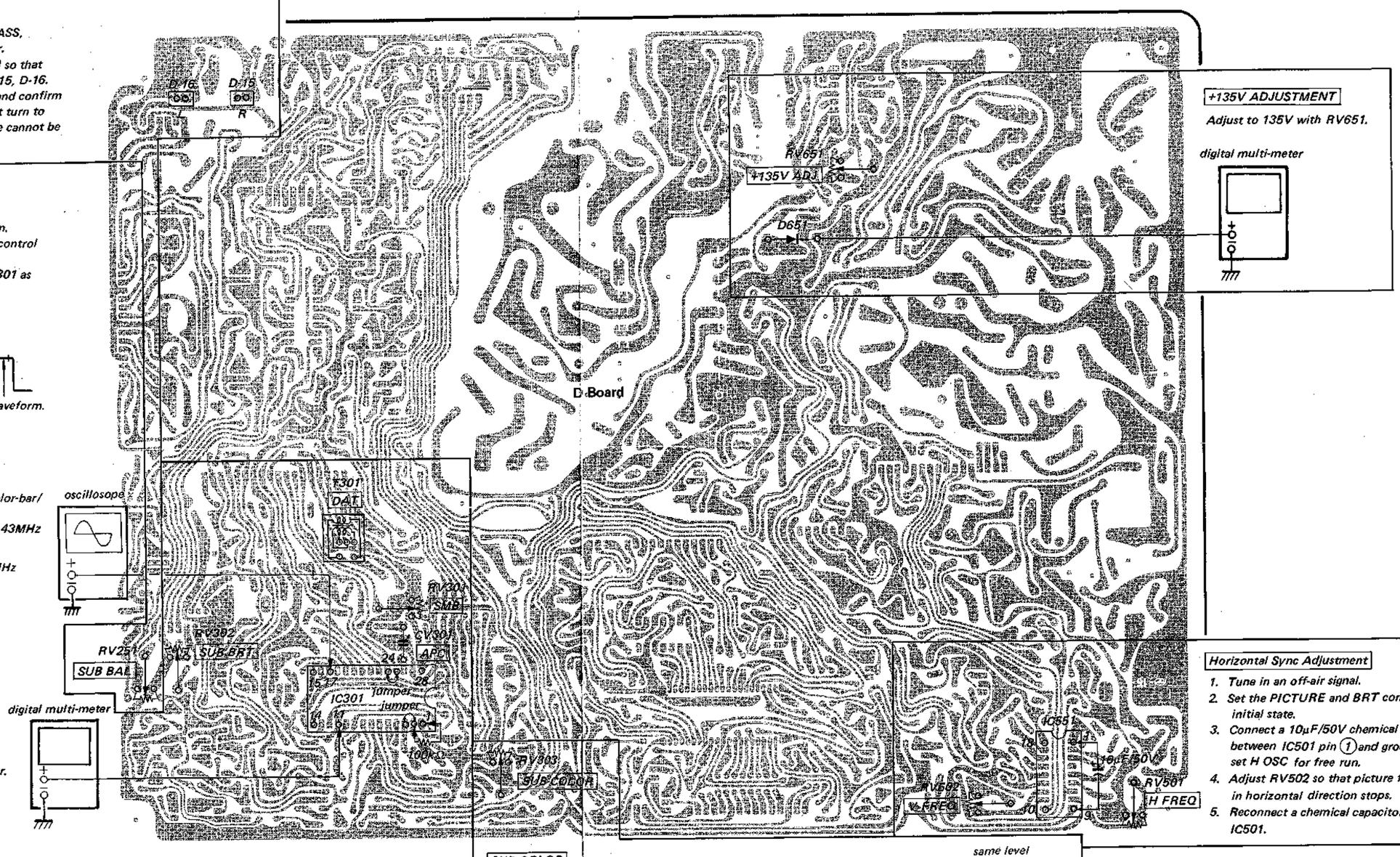
4.43MHz TRAP

1. Feed in a color-bar signal from the color-bar/ pattern generator.
2. Adjust 4.43MHz trap for minimum 4.43MHz component.



APC ADJUSTMENT

1. Receive a color bar signal.
2. Set the PICTURE, COLOR and BRT control to mechanical center.
3. Connect Resistor (100kΩ) between pin (1) and pin (2) of IC301.
4. Short-circuit between the pin (2) and pin (3), pin (24) and pin (25) of IC301 with a jumper.
5. Adjust CV301 to obtain the stable color picture
6. Disconnect the 100kΩ resistors and the jumper.



+135V ADJUSTMENT

Adjust to 135V with RV651.

digital multi-meter

Horizontal Sync Adjustment

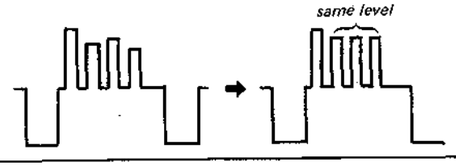
1. Tune in an off-air signal.
2. Set the PICTURE and BRT control to initial state.
3. Connect a 10μF/50V chemical capacitor between IC501 pin (1) and ground, and set H OSC for free run.
4. Adjust RV502 so that picture flowing in horizontal direction stops.
5. Reconnect a chemical capacitor from IC501.

SUB BRIGHT

1. Receive a dot signal.
2. Set BRT control at mechanical center.
3. Adjust to 2.0 ± 0.2V with RV302. (Measure at IC301 pin (11))

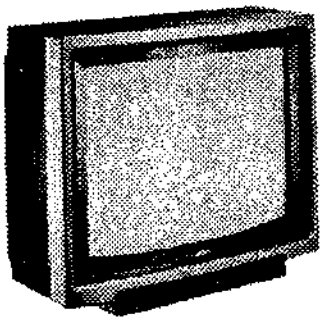
SUB COLOR

1. Receive a color bar signal.
2. Set the each VRs at 50%.
3. Adjust RV303 for same level from IC301 pin (17) as shown.



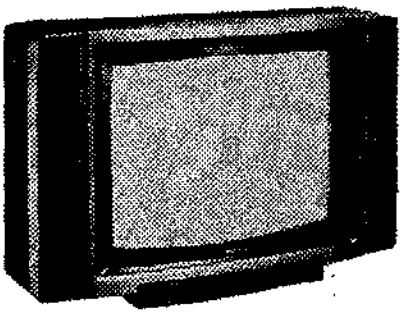
KV-2720

SERVICE MANUAL



AEP Model

Chassis No.SCC-522A-A



PE-3 CHASSIS

November, 1983

SPECIFICATIONS

Television system: CCIR TV standards (system B, G and H)
Color system: PAL
STEREO system: Two-carrier system
Channel coverage: VHF channels E2-U20
UHF channels E21-E68
Programing system: 30 programs
Automatic programing digital tuning
Picture tube: approx. 68 cm (27 inches),
approx. 64 cm screen measured diagonally
114-degree deflection Trinitron system
Antenna: 75-ohm standard antenna socket
(DIN 45325/IEC 169-2)
Audio output: 20 W + 20 W (music power)
Input: 21-pin connector in accordance with the requirements of CENELEC standard
Outputs: Audio output connector (5-pin DIN)
Recording output: 1 mVrms/kilohm
Line output: variable, 0–2 Vrms (max.)
impedance less than 1 kilohm
External speaker terminals (2-pin DIN)
For 8-ohm speakers
Headphones socket for 32-ohm impedance headphones
Power requirements: 220–240 V ac, 50 Hz
Power consumption: series: 132 W

Accessories supplied: Remote Commander RM-634 (1)
Only for the bolt (4), wrench (1)
Speakers supplied with the System: 2-way speaker system
Units: Woofer: 8.5 cm, cone type
Tweeter: 5 cm, cone type
Nominal impedance: 8 ohms
Power handling capacity: 15 W (max.)

Design and specifications subject to change without notice.

MICROFILM

TRINITRON® COLOR TV

SONY®

CTV

WARNING !!

AN ISOLATION TRANSFORMER SHOULD BE USED DURING ANY SERVICE TO AVOID POSSIBLE SHOCK HAZARD, BECAUSE OF LIVE CHASSIS.
THE CHASSIS OF THIS RECEIVER IS DIRECTLY CONNECTED TO THE AC POWER LINE.

SAFETY-RELATED COMPONENT WARNING !!

COMPONENTS IDENTIFIED BY SHADING AND MARK ⚠ ON THE SCHEMATIC DIAGRAMS, EXPLODED VIEWS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY. CIRCUIT ADJUSTMENTS THAT ARE CRITICAL TO SAFE OPERATION ARE IDENTIFIED IN THIS MANUAL. FOLLOW THESE PROCEDURES WHENEVER CRITICAL COMPONENTS ARE REPLACED OR IMPROPER OPERATION IS SUSPECTED.

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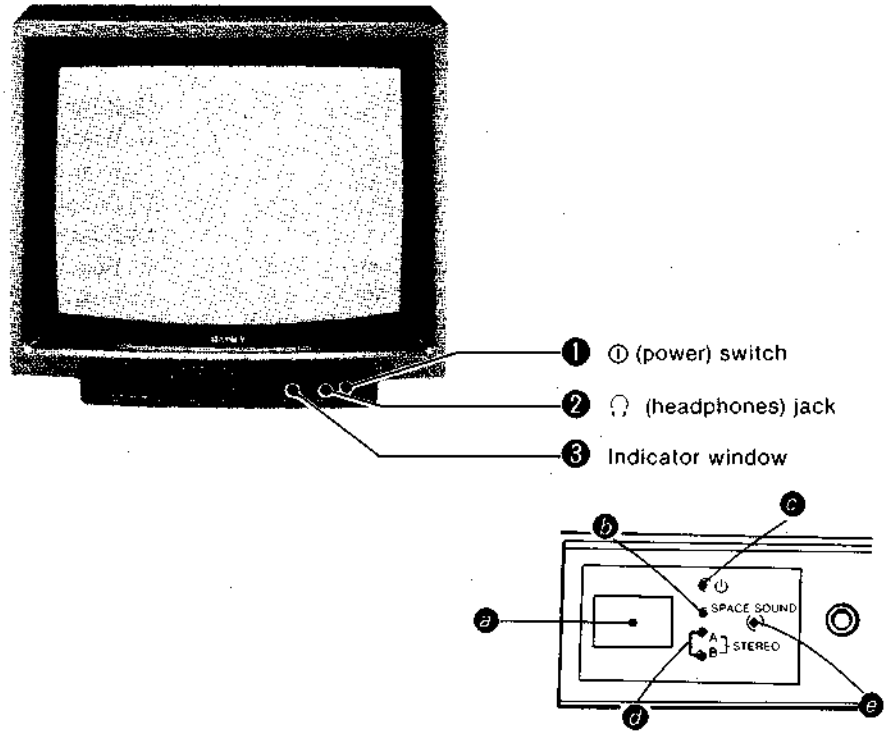
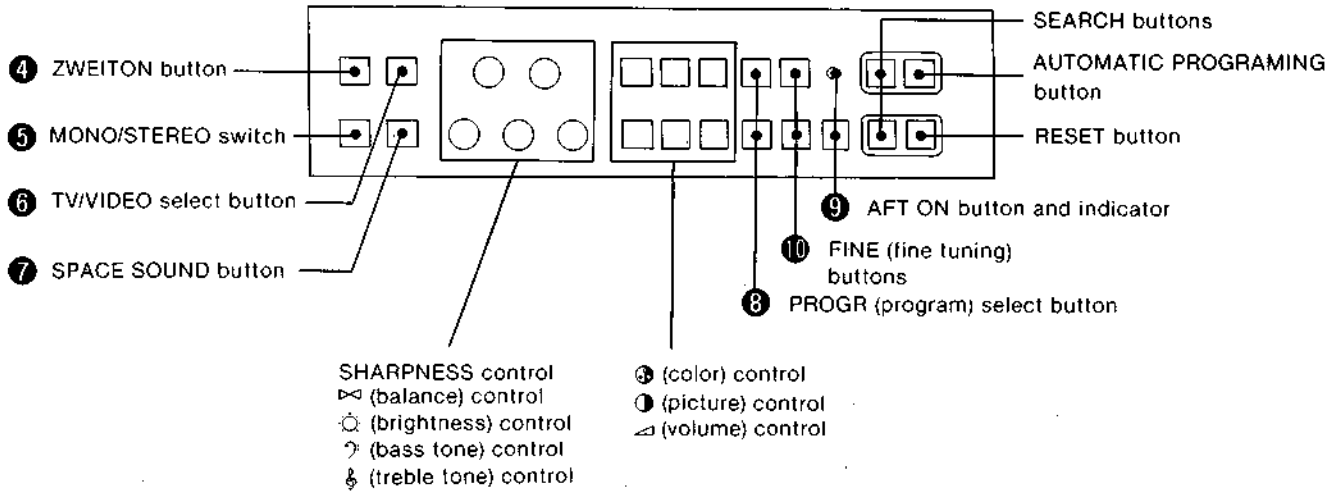
SECTION 1
GENERAL

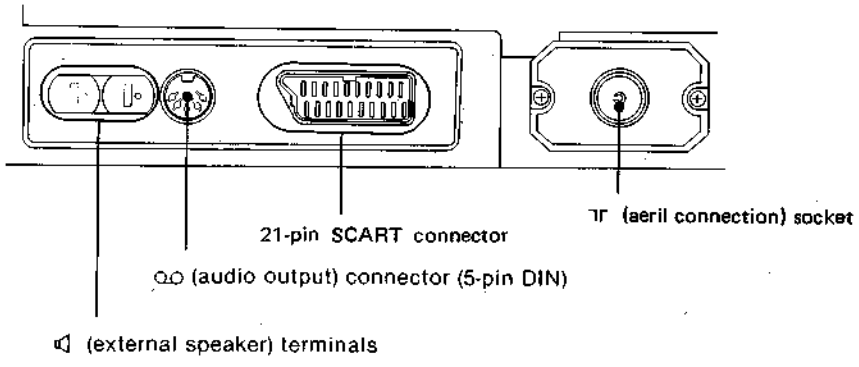
1-1. LOCATION AND FUNCTION OF CONTROLS

On the front panel





On the rear panel



❶ ⏻ (power) switch
Press to turn the TV on. Press again to turn the power off.

❷ 🎧 (headphones) jack
Connect stereo headphones here. Speaker sound will be disconnected. If your stereo headphones have a stereo miniplug, use an optional plug adaptor. To hear the sound from the speakers, disconnect the headphones.

❸ Indicator window

ⓐ Program indicator

ⓑ SPACE SOUND indicator

ⓒ ⏻ (standby) indicator
Lights up when the TV is turned off with the Remote Commander. When any of the buttons on the Remote Commander is pressed, this lamp blinks.

ⓓ Zweiton/STEREO indicators
When a dual-sound program is received, A or B lights up.
When a stereo program is received, both indicators light up.

ⓔ Remote control detector
Point the infrared transmitter of the supplied Remote Commander here.

❹ ZWEITON button
When a dual-sound program is received, select the language.

❺ MONO/STEREO
Normally set this switch to the depressed STEREO position.
Stereo programs can be received. If a stereo program has too much noise, press and release this switch (MONO position). The noise will be reduced, although the stereo feature will be lost.

❻ TV/VIDEO select button
When playing back a video tape recorder without a 6-pin DIN connector, press this button so that "AV" lights in the program indicator. (When playing back a recorder with a 6-pin DIN connector, the video mode is automatically selected.)

❼ SPACE SOUND button
Press to get special acoustic effects (for example, more presence). The SPACE SOUND indicator will illuminate. To disengage, press it again.

❽ PROGR (program) select buttons
Press either + or – to select a preset program (from positions 1 through 30). Press + for higher numbered programs, and – for lower numbered programs. Programs will be changed continuously in sequence. The selected program number will appear on the program indicator.

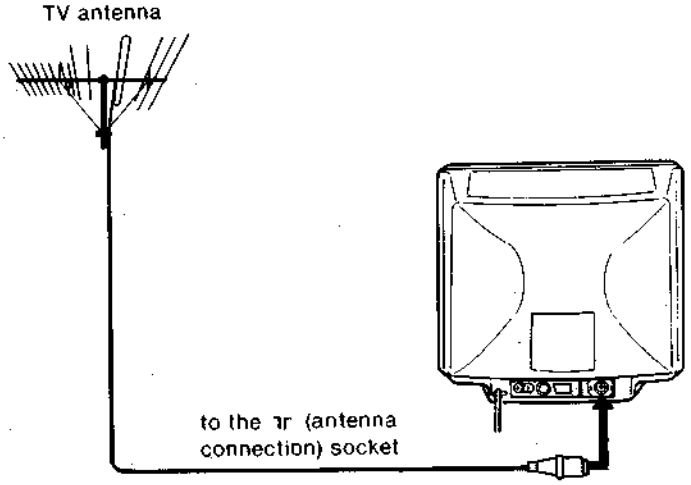
❾ AFT (automatic fine tuning) ON button and indicator
When the AFT circuit activates, the indicator illuminates.
Press the AFT ON button to restore the AFT on the channel which has been fine-tuned manually with the FINE buttons. After the automatic programing is finished, or after a station is tuned and memorized in the manual programing system, the AFT circuit will automatically reactivate.

❿ FINE (fine tuning) buttons
Keep either + or – depressed to get a clear picture for each unsatisfactory channel. The AFT circuit will be automatically deactivated.

1-2. CONNECTIONS

ANTENNA CONNECTION

Good picture and sound are obtained when a proper antenna is used. Your TV receiver is equipped with a standard antenna connection socket, which is effective for both VHF and UHF reception. Use a coaxial antenna connection cable equipped with a single plug, and insert the plug into the ꟾ (antenna connection) socket of your TV.

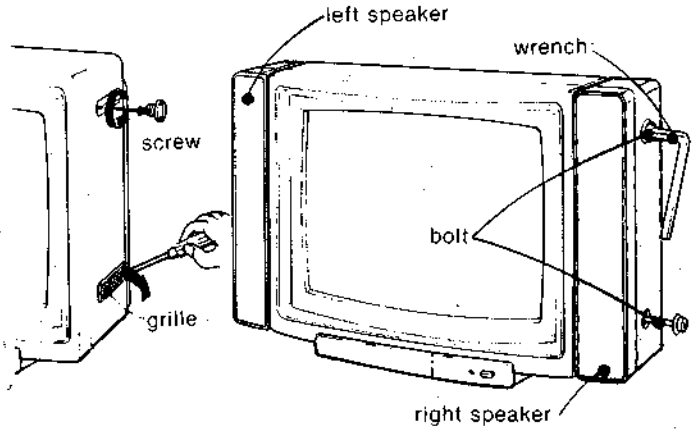


When a video tape recorder is to be connected to the ꟾ socket of the TV, connect an antenna to the recorder, as explained on page **11**.

KV-2722EC

Remove the screws and grilles on both sides of the TV using a screwdriver or similar and attach the supplied left and right speakers by tightening the supplied bolts with the supplied hexagonal wrench.

- The left and right speakers can be distinguished by the label at the rear of each speaker.



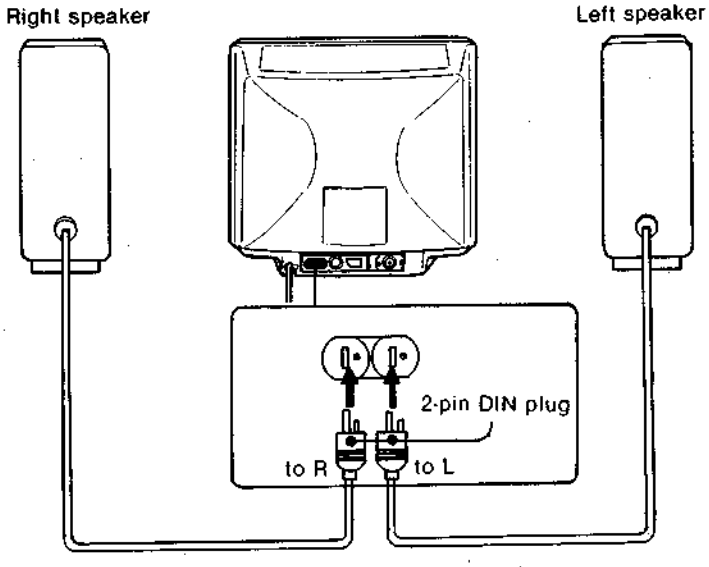
You can connect an external speaker system or an amplifier in the same way as the above example of KV-2720EC. If you connect an external speaker system, the attached speaker system is disconnected.

SPEAKER CONNECTION

KV-2720EC

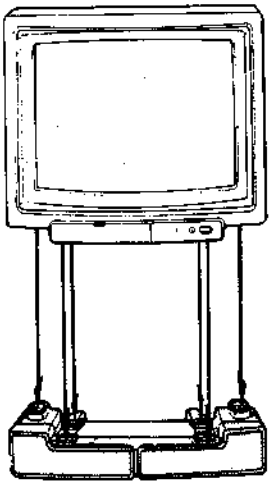
The KV-2720EC is not equipped with speakers.
Attach an optional SS-2722 (the same as the speakers supplied with the KV-2722EC) or SS-2724 (the same as the speakers supplied with the KV-2724EC) speaker system, or connect external 8-ohm speakers to the 🔊 terminals at the rear.

ex. External speaker connection



KV-2724EC

Place the TV on the supplied speaker system.



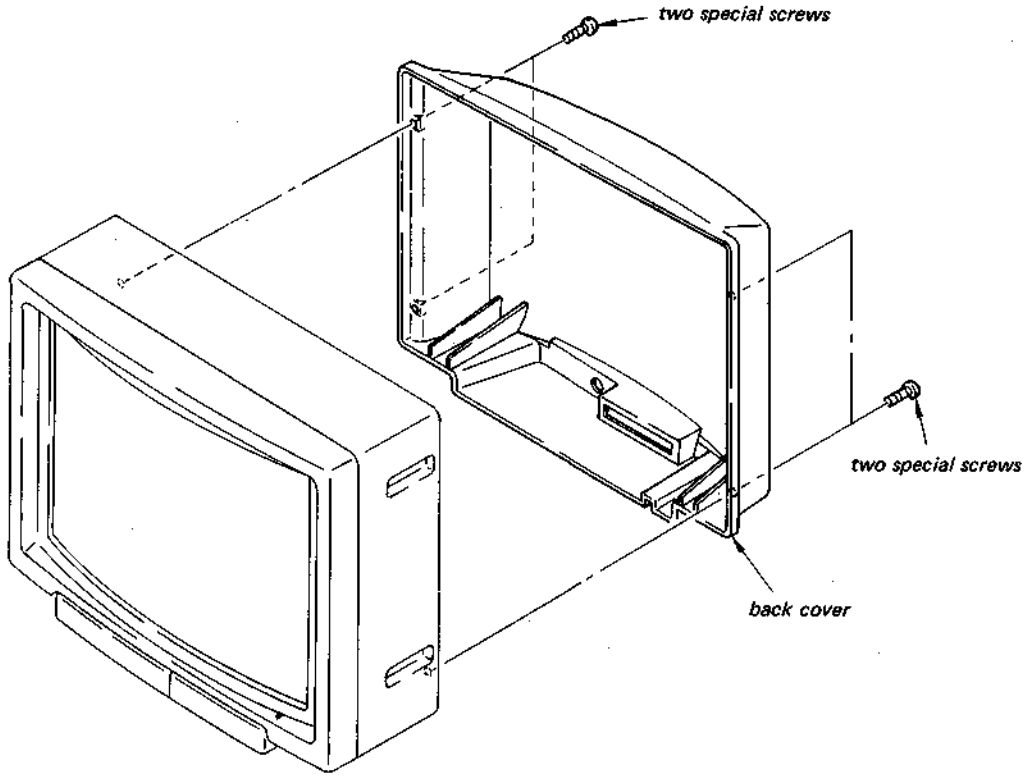
You can connect an external speaker system or an amplifier in the same way as the one for KV-2720EC. If you connect an external speaker system, the attached speaker system will be disconnected.

POWER CONNECTION

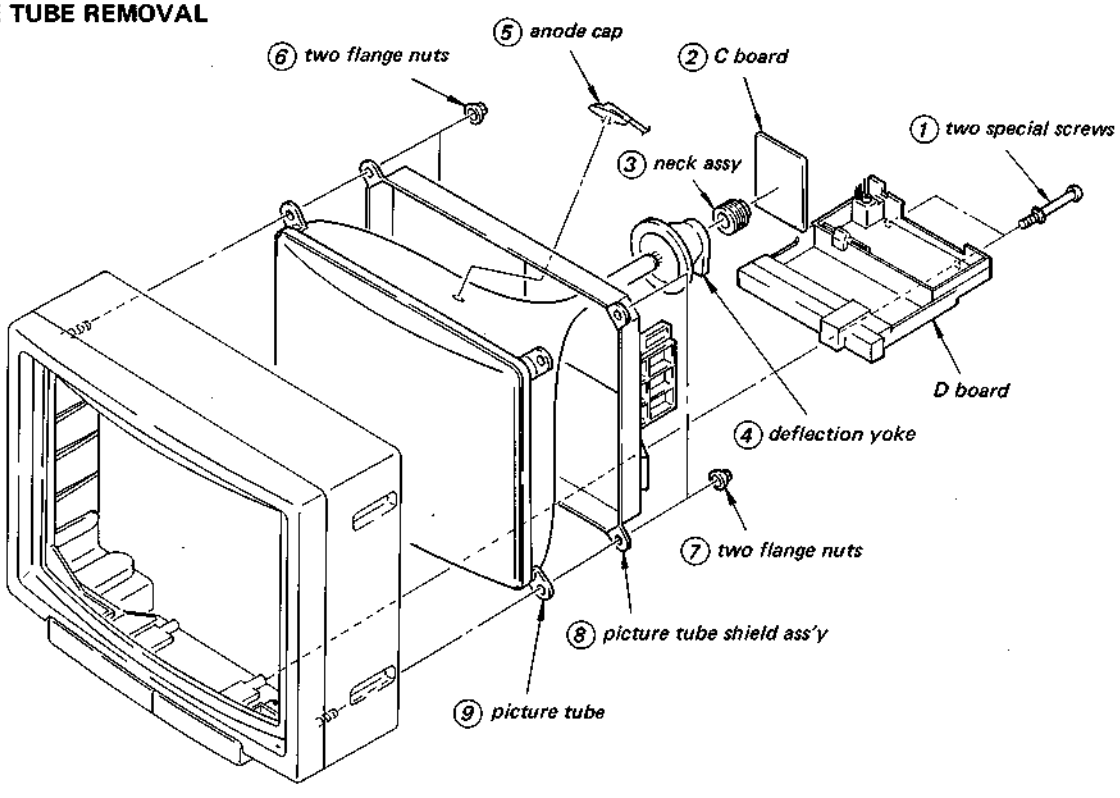
This TV operates only on 220–240 V ac. Plug the ac power cord into a 220–240 V ac wall outlet.

SECTION 2
DISASSEMBLY

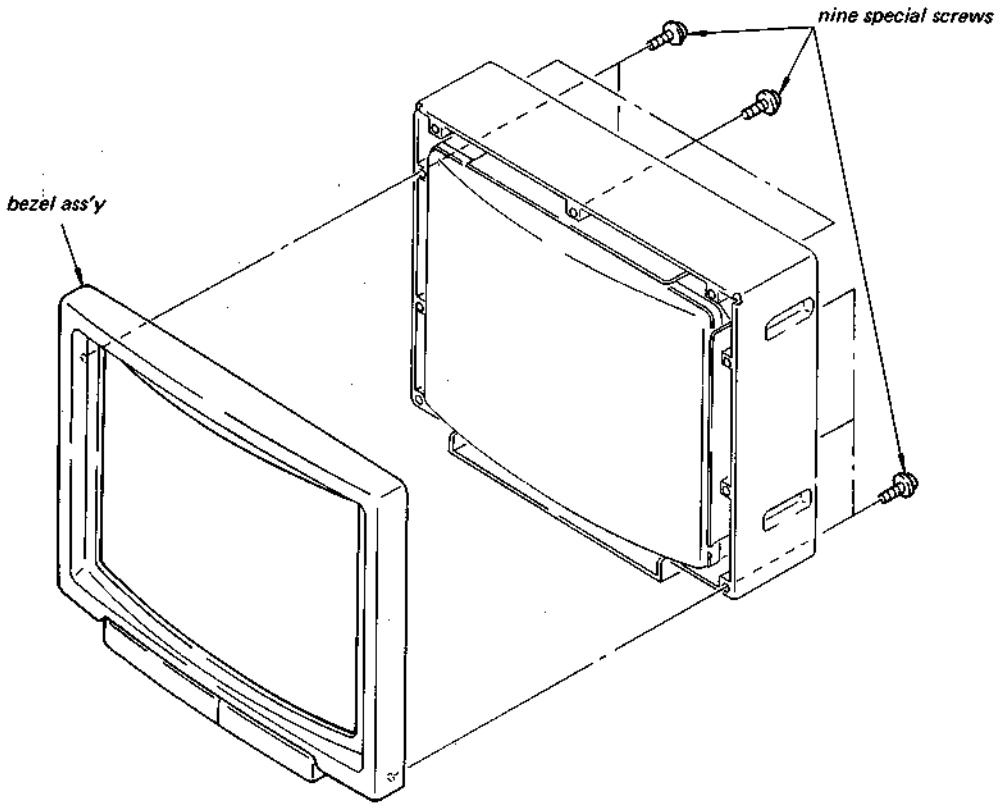
2-1. BACK COVER REMOVAL



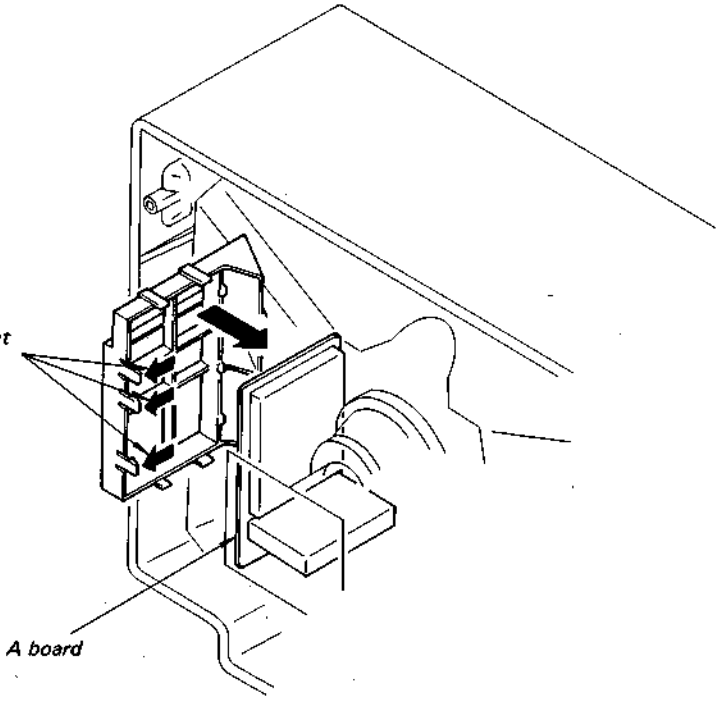
2-2. PICTURE TUBE REMOVAL



2-3. BEZEL ASS'Y REMOVAL



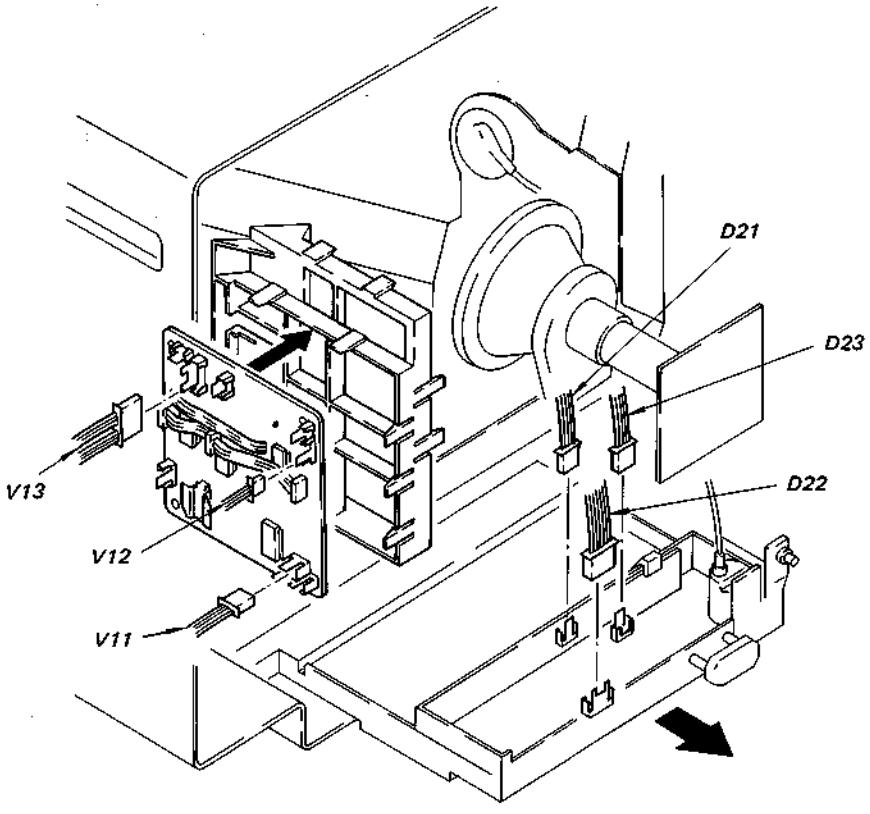
2-4. A BOARD REMOVAL



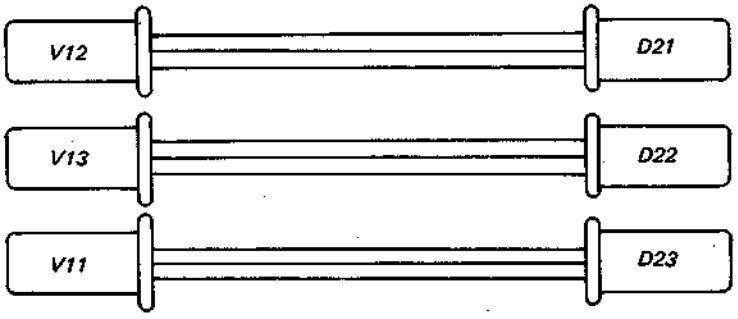
2-5. OPK-203 BOARD ATTACHING

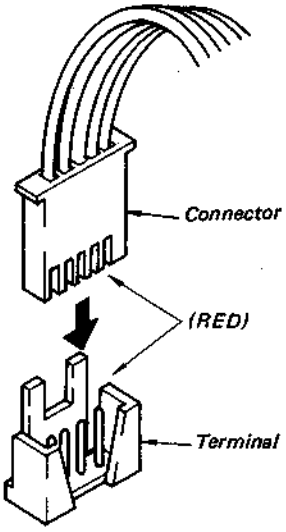
- **Before installing the OPK-203 unplug the set forom the wall outlet.**
- **After the installation is completed, check that the TV operates properly.**
- **Cut out the JW81 of the OPK-203.**

1. Remove the back cover.
2. Attach the OPK-203 to the A board bracket and pull out the main chassis ass'y.

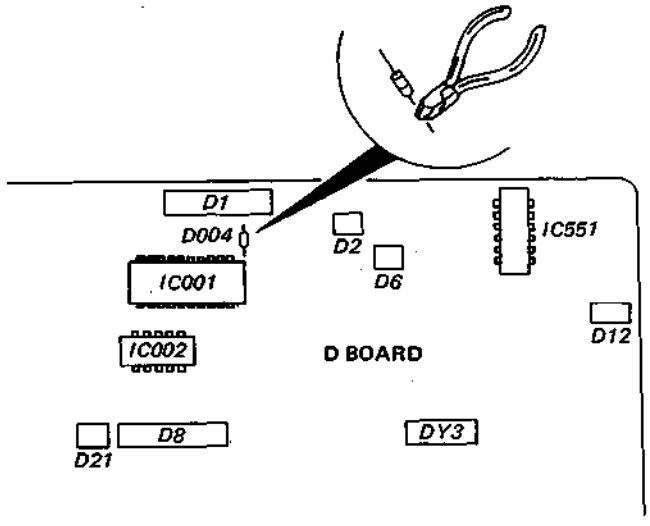


3. Connecter to the same numberterminal as the connector.
   Connected terminals are coloured red.

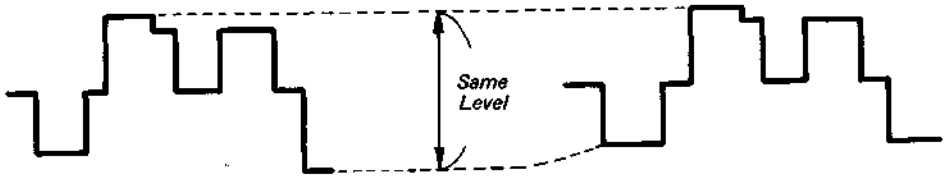




4. Cut out the D004 of the D board.



5. ADJUSTMENT
   (1) Set the ◑(picture) control of the minimum and ☼(breghtness) control of the mechanical center.
   (2) Receve the COLOR BAR signal.
   (3) Connect the Oscilloscope to the Red input of C board.
   (4) Receve the COLOR BAR signal including the TEXT signal.
   (5) Press the TEXT button on the remote commander.
   (6) Adjust RV-3 for a same level of Red input as shown below.



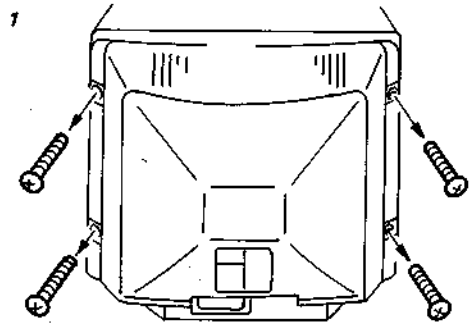
COLOR BAR SIGNAL

COLOR BAR SIGNAL
Including The TEXT signal

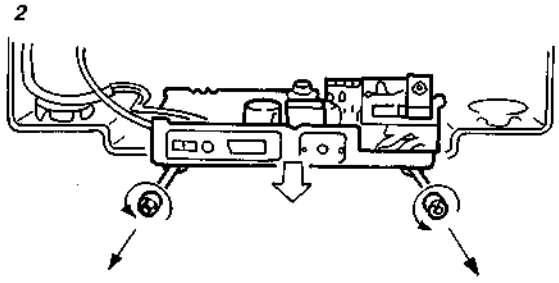
6. Attach the rear panel.

2-6. BEFORE INSTALLING THE OPK-202 UNPLUG THE SET FROM THE WALL OUTLET

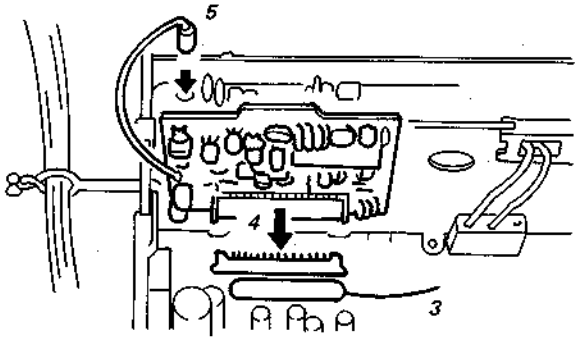
1. Unscrew and remove the rear panel.



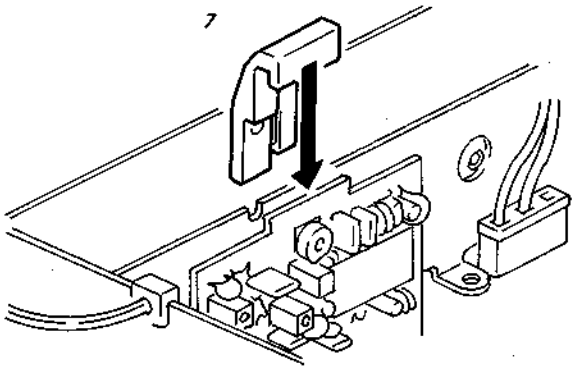
2. Unfasten the screws and pull out the main D-board. When cords are clamped, unfasten the plastic retainers. So that the main D-board can be withdrawn easily.



3. Cut off the five soldered connections marked SCM; JW208, 209, 210, 211, 213 on the D-board.
4. Insert the adaptor into the D-20 board as shown.
5. Insert the connector to the D-24 on the board.
6. Connect the power plug and check that the SECAM program is displayed in color.

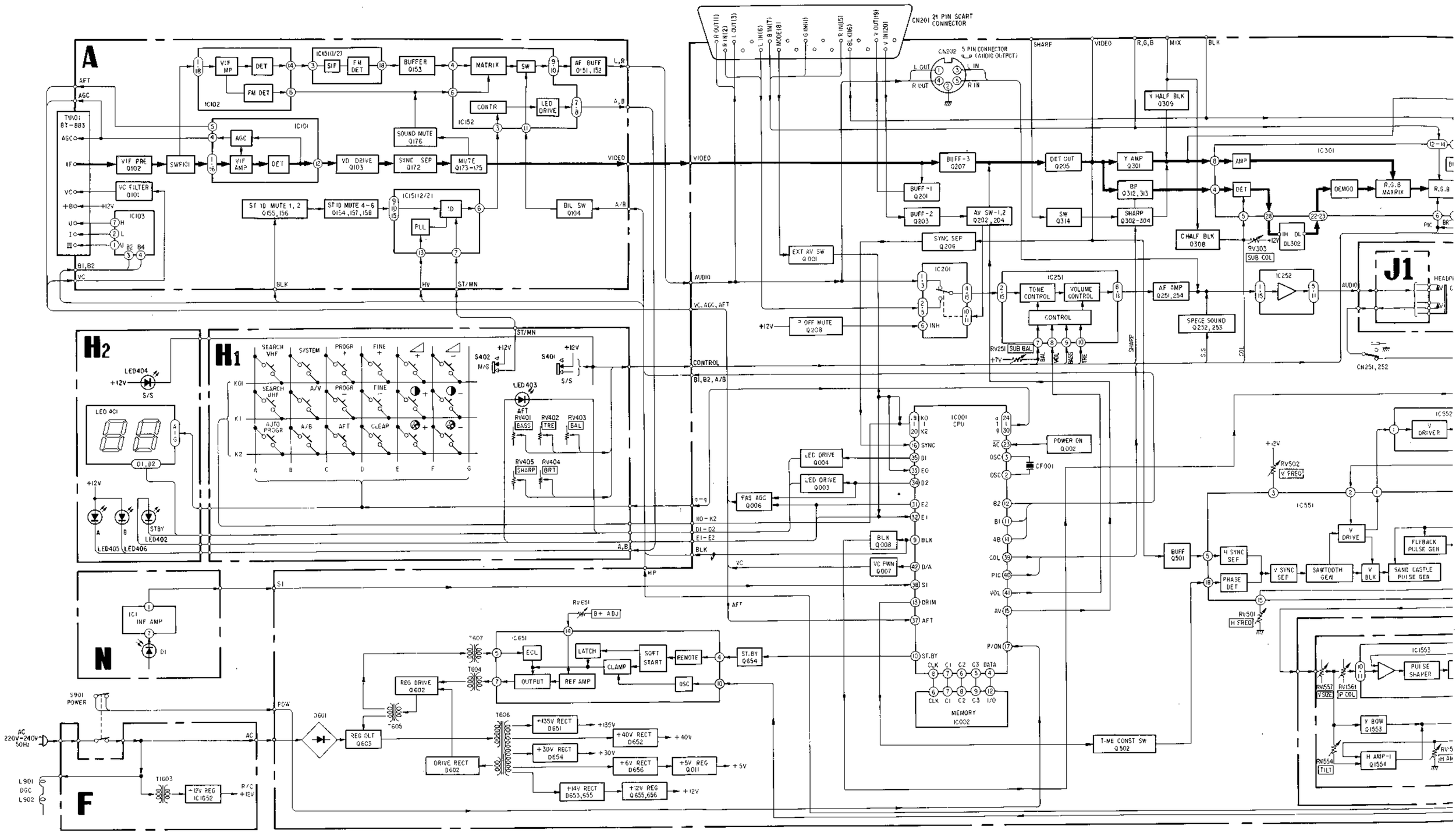


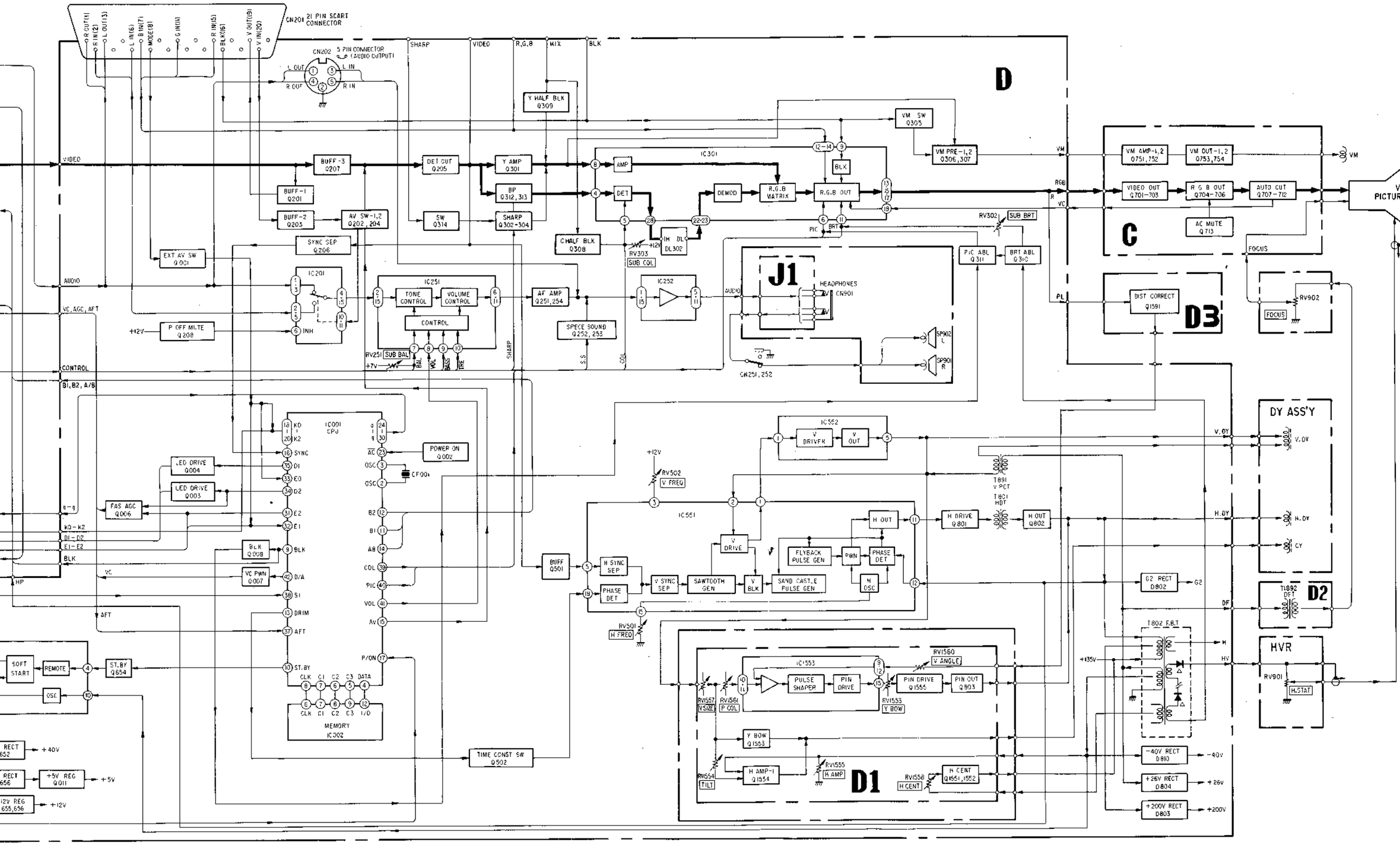
7. Secure the adaptor with the supplied adaptor holder.
8. Disconnect the plug again and reinstall the main D-board and cords as they were and tighten the screws on the board and rear panel.



SECTION 3
DIAGRAMS

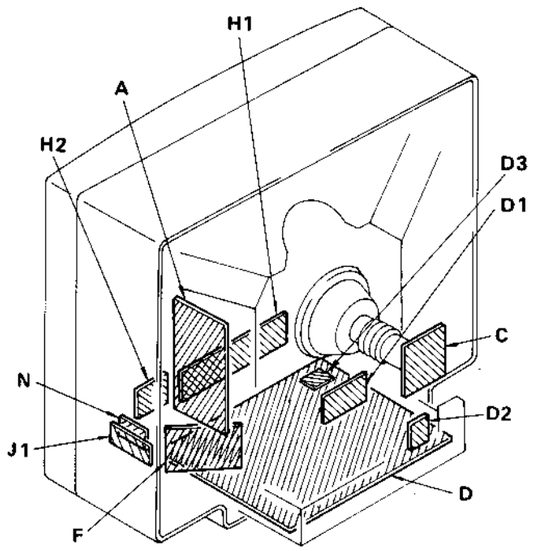
3-1. BLOCK DIAGRAM




CN201 21 PIN SCART CONNECTOR
R OUT(1)
R IN(2)
L OUT(3)
L IN(6)
B IN(7)
MODE(8)
G IN(11)
R IN(15)
BLK(16)
V OUT(19)
V IN(20)
CN202 5 PIN CONNECTOR (AUDIO OUTPUT)
L OUT
L IN
R OUT
R IN
SHARP
VIDEO
R,G,B
MIX
BLK
D
Y HALF BLK Q309
VM SW Q305
VM PRE-1,2 Q306,307
VIDEO
BUFF-3 Q207
DET OUT Q295
Y AMP Q301
IC301
AMP
DET
DEMOD
R.G.B MATRIX
R.G.B OUT
BLK
BUFF-1 Q201
BUFF-2 Q203
AV SW-1,2 Q202, 204
SW Q314
BP Q312,313
SHARP Q302-304
SYNC SEP Q206
C HALF BLK Q308
1H DL DL302
RV303 SUB COL
RV302 SUB BRT
PIC ABL Q311
BRT ABL Q310
EXT AV SW Q001
AUDIO
IC201
IC251
TONE CONTROL
VOLUME CONTROL
CONTROL
AF AMP Q251,254
SPECE SOUND Q252,253
IC252
J1
HEADPHONES CN901
SP902 L
SP901 R
CN251,252
RV251 SUB BAL
+7V
BAL
VOL
BASS
TRE
SHARP
S.S
COL
VC, AGC, AFT
+12V
P OFF MUTE Q208
CONTROL
B1, B2, A/B
IC001 CPU
POWER ON Q002
LED DRIVE Q004
LED DRIVE Q003
FAS AGC Q006
BLK Q008
VC PWN Q007
K0-K2
D1-D2
E1-E2
BLK
HP
VC
AFT
SOFT START
REMOTE
ST.BY Q654
OSC
MEMORY IC002
TIME CONST SW Q502
BUFF Q501
H SYNC SEP
PHASE DET
V SYNC SEP
SAWTOOTH GEN
V BLK
SAND CASTLE PULSE GEN
V DRIVE
FLYBACK PULSE GEN
PWN
PHASE DET
H OSC
H OUT
IC551
IC552
V DRIVER
V OUT
RV502 V FREQ
RV501 H FREQ
T891 V OUT
T801 HOT
H DRIVE Q801
H OUT Q802
G2 RECT D802
T802 F.B.T
-40V RECT D810
+26V RECT D804
+200V RECT D803
+135V
D1
IC1553
PULSE SHAPER
PIN DRIVE
PIN DRIVE Q1555
PIN OUT Q803
RV1560 V ANGLE
RV1557 V SIZE
RV1561 P COL
RV1553 Y BOW
Y BOW Q1553
H AMP-1 Q1554
RV1555 H AMP
RV1554 TILT
RV1558 H CENT
H CENT Q1551,1552
C
VM AMP-1,2 Q751,752
VM OUT-1,2 Q753,754
VIDEO OUT Q701-703
R G B OUT Q704-706
AUTO CUT Q707-712
AC MUTE Q713
V901 PICTURE TUBE
FOCUS
RV902
D3
DIST CORRECT Q1591
DY ASS'Y
V.DY
H.DY
CY
D2
T892 DFT
HVR
RV901 H.STAT
+40V REG Q652
+5V REG Q011
+12V REG Q655,656

3-2. CIRCUIT BOARDS LOCATION

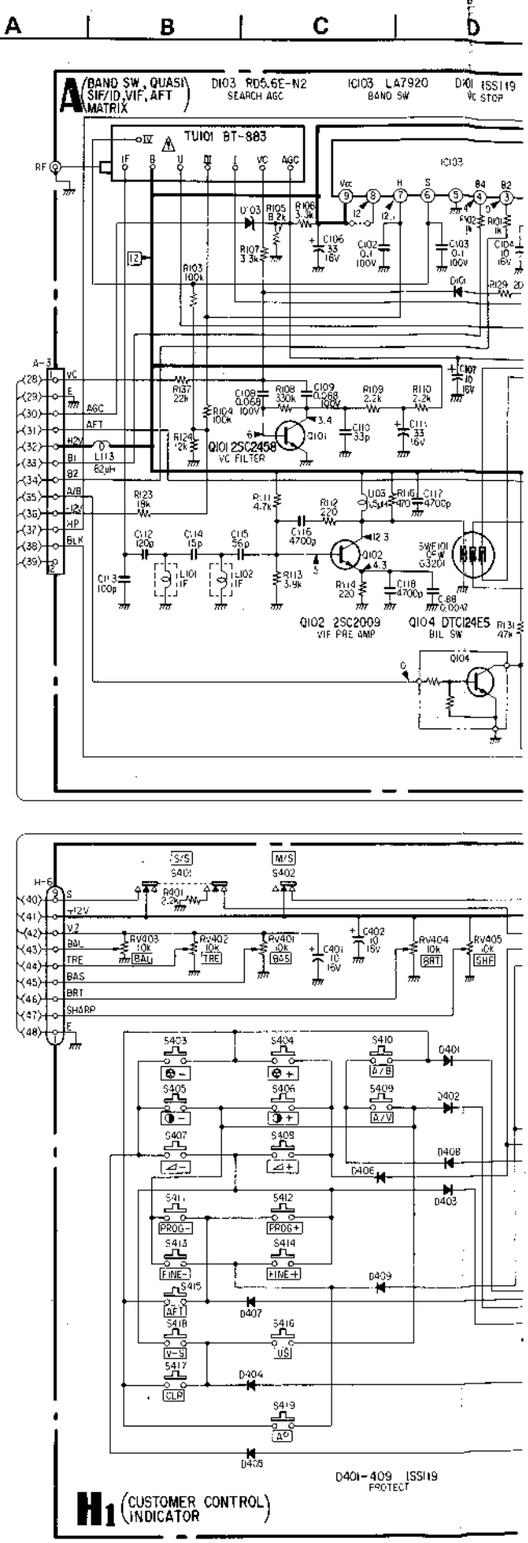
POSIZIONE DEI CIRCUITI STAMPATI



3-3. SCHEMATIC DIAGRAM

Note:

- All capacitors are in μF unless otherwise noted. pF : μμF 50WV or less are not indicated except for electrolytics
- C board and D board resistors are in ohms, 1/4 W unless otherwise noted, and other boards are in ohms, 1/6 W unless otherwise noted. k : 1000 Ω; M : 1000 kΩ
- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.
- : nonflammable resistor.
- : fusible resistor.
- △ : internal component.
- ▭ : panel designation.
- ▭ : adjustment for repair.
- All voltage are in V.
- ——: B+ bus.
- – – –: B– bus.
- Voltages are dc with respect to ground unless otherwise noted.
- Readings are taken with a 10 MΩ digital multimeter.
- Readings are taken with a color-bar signal input.
- Voltages on A and H_1 boards are taken under conditions below.
  - The channel 2 is selected.
  - VOLUME control is set to no sound position.
  - PICTURE control is set to the first stage. (The first stage is the condition when the POWER switch sets to ON.)
- Waveform on A board is taken with controls set to the first stage.
- Voltage variations may be noted due to normal production tolerances.



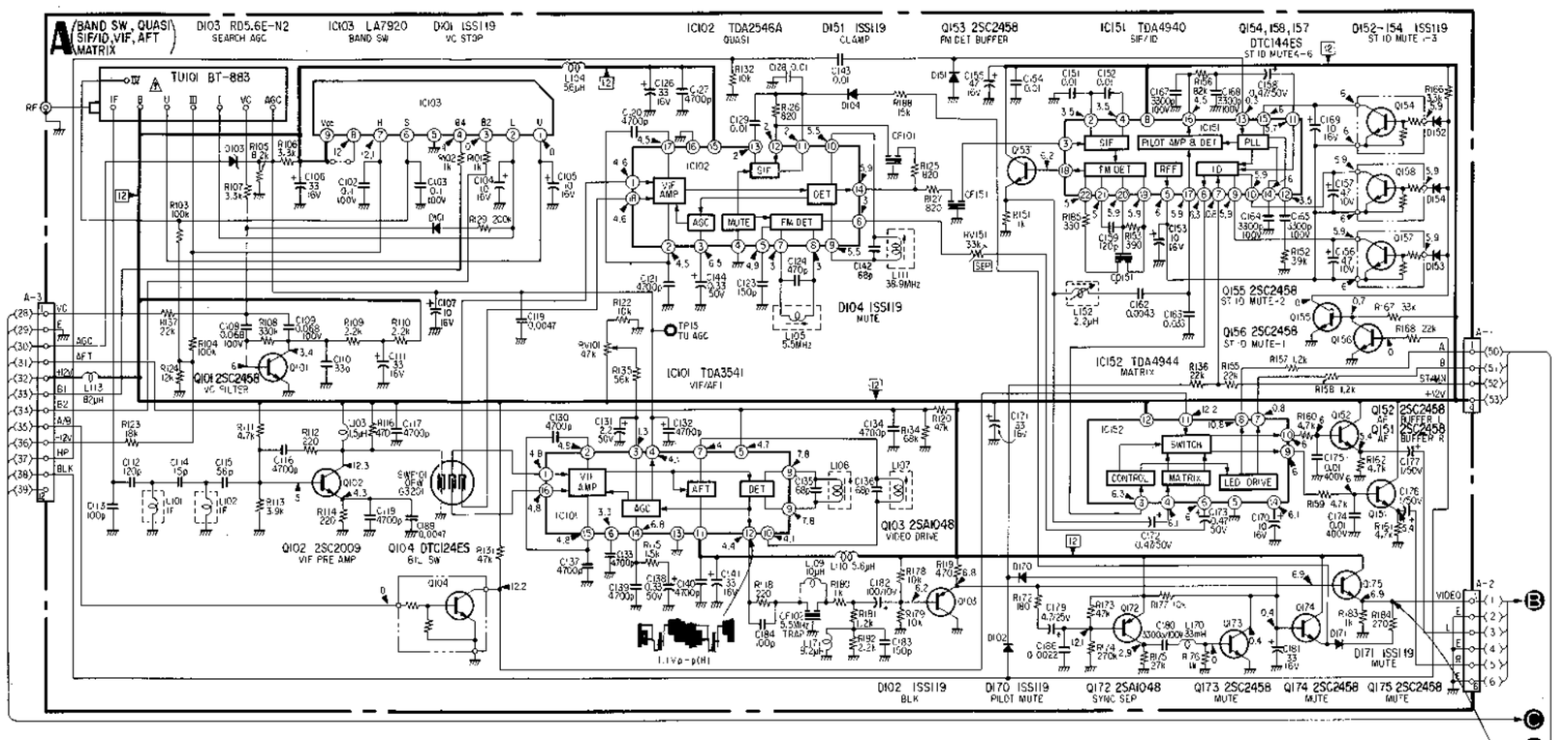
HEMATIC DIAGRAM

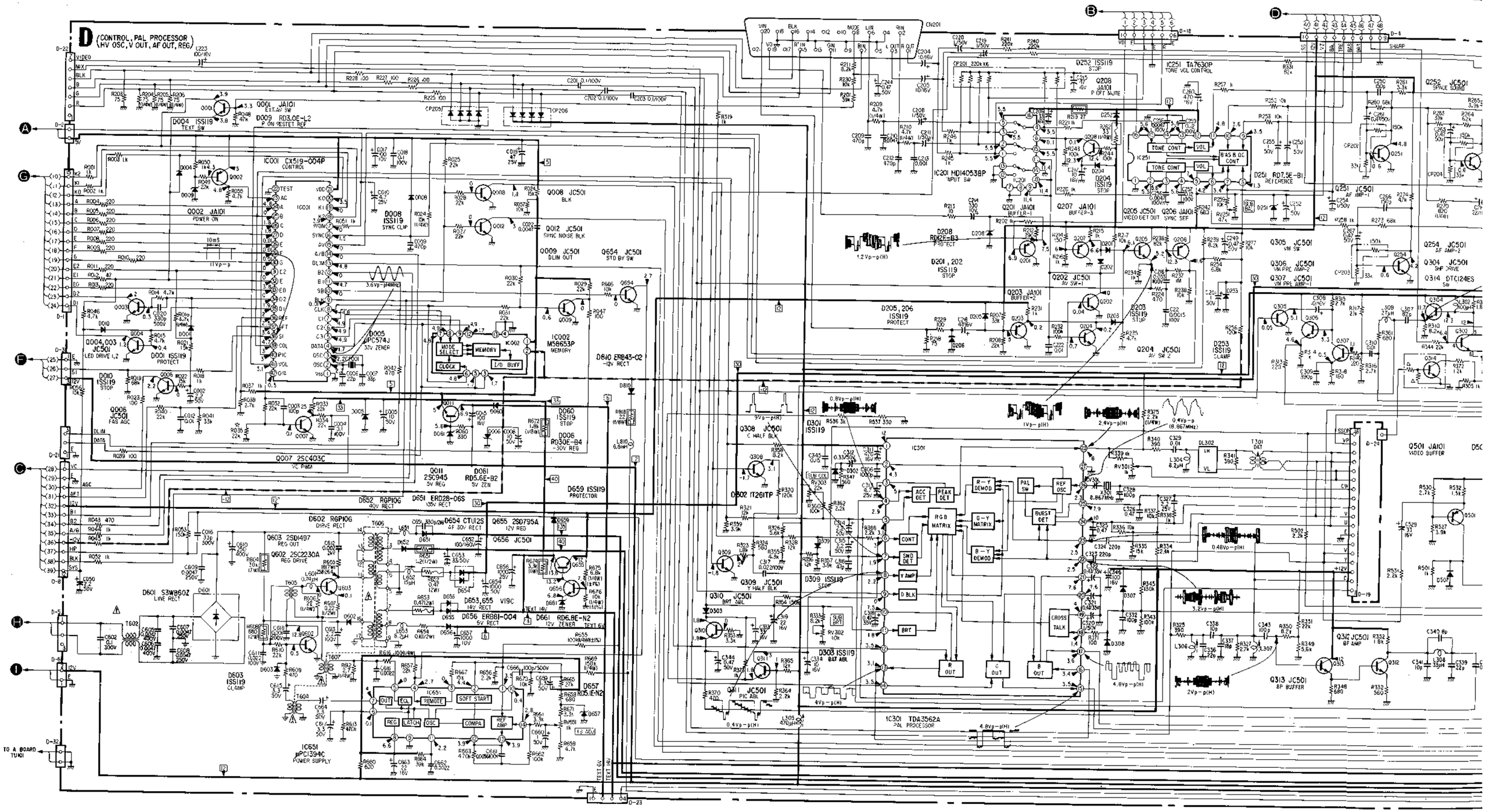
pacitors are in μF unless otherwise noted. pF : μμF
or less are not indicated except for electrolytics
rd and D board resistors are in ohms, 1/4 W unless
ise noted, and other boards are in ohms, 1/6 W
otherwise noted. k : 1000 Ω; M : 1000 kΩ
riable and adjustable resistors have characteristic
3, unless otherwise noted.
: nonflammable resistor.
: fusible resistor.
: internal component.
: panel designation.
: adjustment for repair.
rage are in V.
: B+ bus.
: B- bus.
es are dc with respect to ground unless otherwise

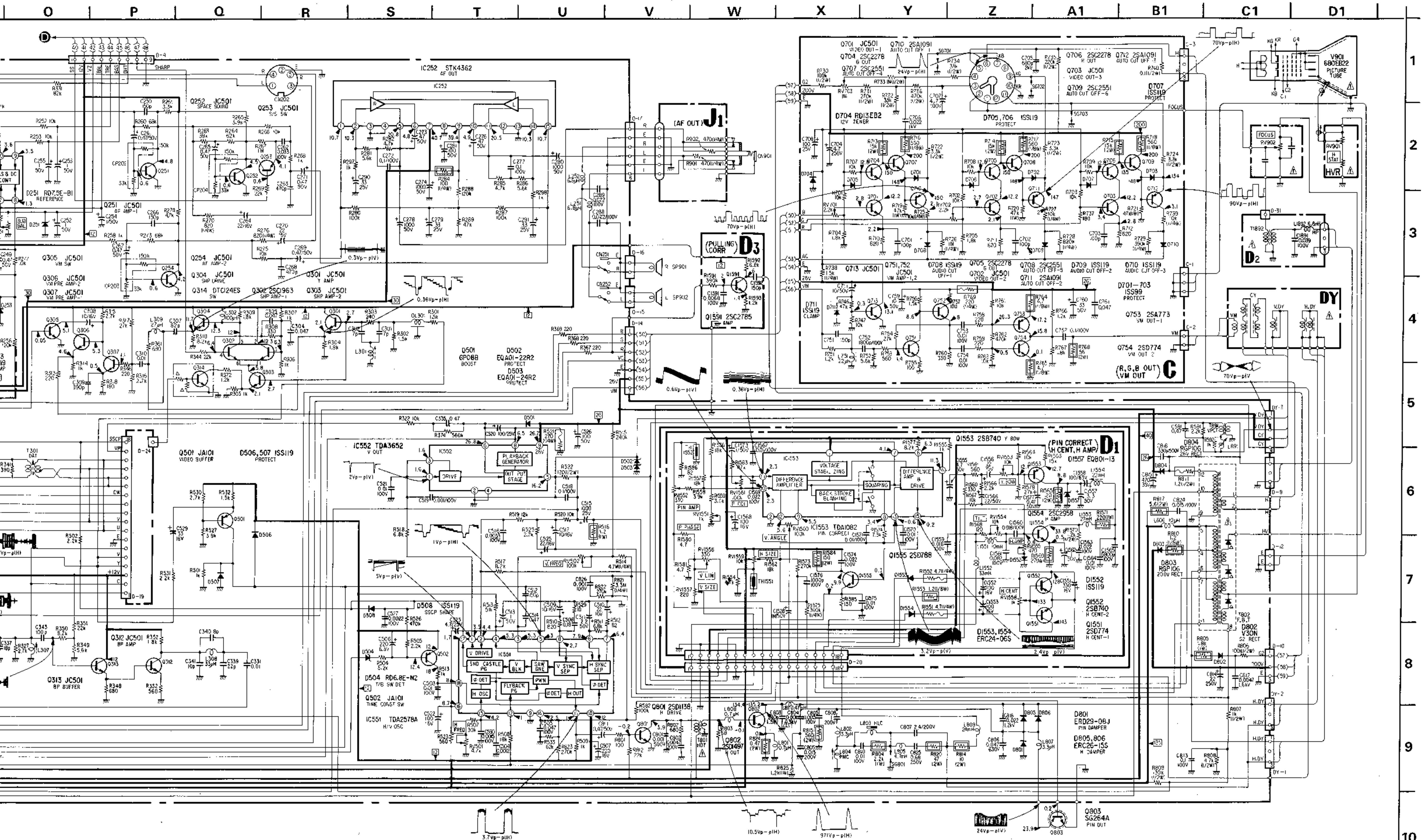
gs are taken with a 10 MΩ digital multimeter.
gs are taken with a color-bar signal input.
s on A and H_1 boards are taken under conditions

channel 2 is selected.
LUME control is set to no sound position.
TURE control is set to the first stage.
e first stage is the condition when the POWER
ch sets to ON.)

rm on A board is taken with controls set to the
ge.
e variations may be noted due to normal produc-
lerances.



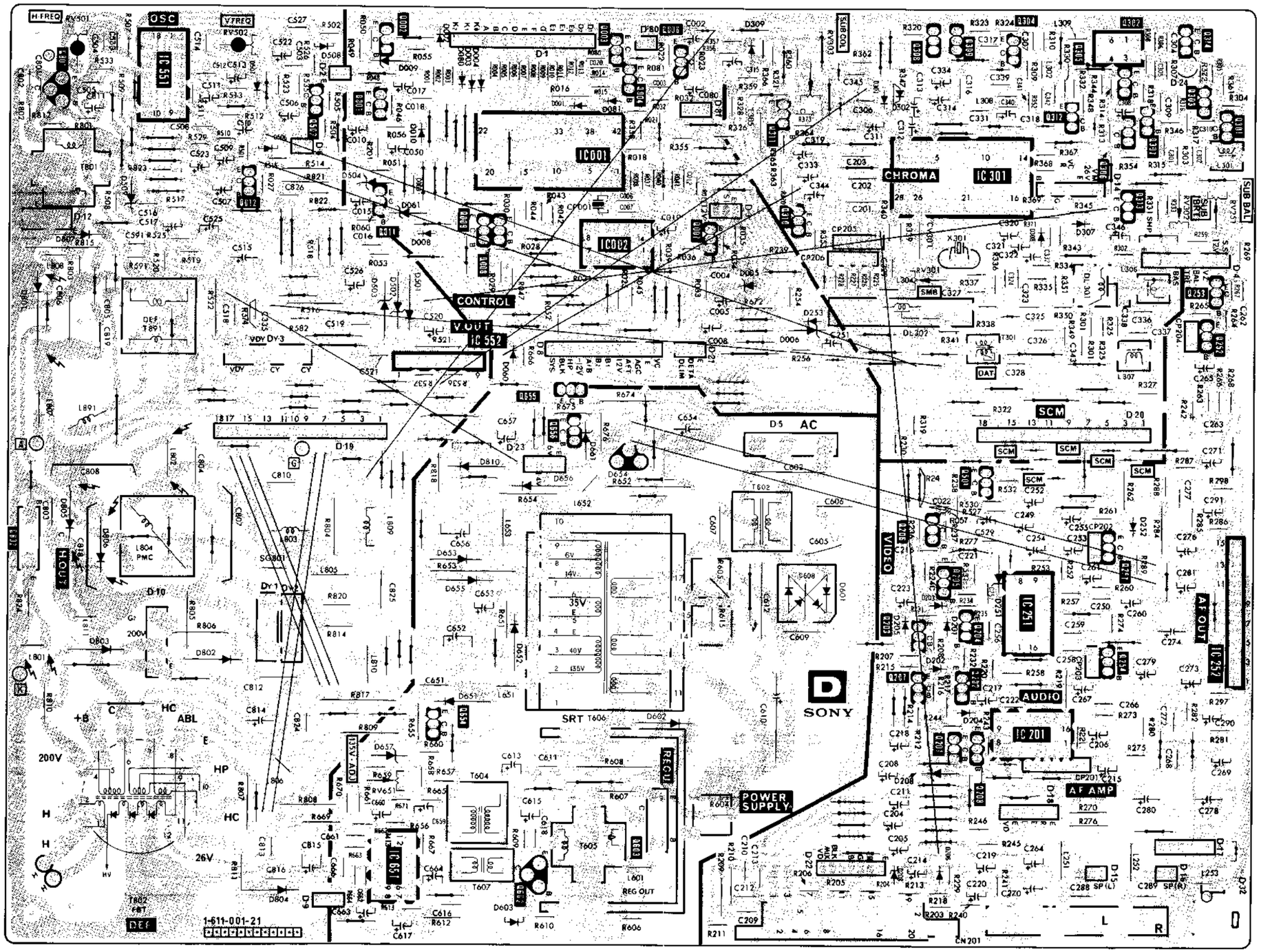

D (CONTROL, PAL PROCESSOR) (HV OSC, V OUT, AF OUT, REG)
IC001 CX519-004P CONTROL
Q001 JA101 EXT AV SW
D004 ISS119 TEXT SW
D009 RD3.0E-L2 P ON RESET REF
Q002 JA101 POWER ON
D008 ISS119 SYNC CLIP
Q008 JC501 BLK
Q012 JC501 SYNC NOISE BLK
D009 JC501 DLIM OUT
Q654 JC501 STD BY SW
IC002 M58653P MEMORY
D005 MPC574J 33V ZENER
D004,003 JC501 LED DRIVE 1,2
D001 ISS119 PROTECT
D010 ISS119 STOP
Q006 JC501 FAS AGC
Q007 2SC403C I²C PWM
Q011 2SC945 5V REG
D061 RD5.6E-B2 5V ZEN
D060 ISS119 STOP
D006 RD30E-B4 -30V REG
D810 ERB43-02 -12V RECT
D659 ISS119 PROTECTOR
D652 RGP10G 40V RECT
D651 ERD28-06S 135V RECT
D654 CTU12S OF 30V RECT
Q655 2SD795A 12V REG
Q656 JC501
Q602 2SC2230A REG DRIVE
Q603 2SD1497 REG OUT
D602 RGP10G DRIVE RECT
D601 S3WB60Z LINE RECT
D603 ISS119 CL AMP
IC651 μPC1394C POWER SUPPLY
D657 RD5.1EN2
D656 ERB81-004 5V RECT
D653,655 V19C 14V RECT
D661 RD6.8E-N2 12V ZENER
CN201
D252 ISS119 STOP
IC251 TA7630P TONE VOL CONTROL
Q208 JA101 P OFT MUTE
IC201 HD14053BP INPUT SW
D251 RD7.5E-B1 REFERENCE
Q251 JC501 AF AMP-1
Q252 JC501 SPACE SOUND
Q254 JC501 AF AMP-2
Q304 JC501 SHP DRIVE
Q314 DTC124ES SW
Q201 JA101 BUFFER-1
Q207 JA101 BUFFER-3
Q205 JC501 VIDEO DET OUT
Q206 JA101 SYNC SEP
D208 RD12E-B3 PROTECT
D201,202 ISS119 STOP
Q202 JC501 AV SW-1
Q203 JA101 BUFFER-2
Q204 JC501 AV SW-2
D205,206 ISS119 PROTECT
D203 ISS119 STOP
D253 ISS119 CLAMP
Q305 JC501 VM SW
Q306 JC501 VM PRE AMP-2
Q307 JC501 VM PRE AMP-1
Q308 JC501 C HALF BLK
Q309 JC501 Y HALF BLK
Q310 JC501 BRT ABL
Q311 JC501 PIC ABL
D301 ISS119
D303 ISS119 BAT ABL
D309 ISS119 STOP
IC301 TDA3562A PAL PROCESSOR
Q501 JA101 VIDEO BUFFER
Q313 JC501 BF BUFFER
Q312 BF AMP
ACC DET
PEAK DET
R-Y DEMOD
G-Y MATRIX
B-Y DEMOD
RGB MATRIX
PAL SW
REF OSC
BURST DET
CONT
SND DET
Y AMP
D BLK
BRT
CROSS TALK
R OUT
G OUT
B OUT
TONE CONT
VOL
BASS DC CONT
TO A BOARD TU101


O P Q R S T U V W X Y Z A1 B1 C1 D1
1 2 3 4 5 6 7 8 9 10
IC252 STK4362 AF OUT
Q252 JC501 SPACE SOUND
Q253 JC501 S/S SW
Q251 JC501 AF AMP-1
D251 RD7.5E-B1 REFERENCE
Q254 JC501 AF AMP-2
Q304 JC501 SHP DRIVE
Q314 DTC124ES SW
Q302 2SC1963 SHP AMP-1
Q303 JC501 SHP AMP-2
Q301 JC501 Y AMP
Q305 JC501 VM SW
Q306 JC501 VM PRE AMP-2
Q307 JC501 VM PRE AMP-1
D501 GP08B BOOST
D502 EQA01-22R2 PROTECT
D503 EQA01-24R2 PROTECT
(AF OUT) J1
(PULLING CORR) D3
Q1591 2SC2785 AMP
SP901 SP902
Q501 JA101 VIDEO BUFFER
D506,507 1SS119 PROTECT
IC552 TDA3652 V OUT
PLAYBACK GENERATOR
OUT PUT STAGE
DRIVE
D508 1SS119 SSCP SHAPE
D504 RD6.8E-N2 T/B SW DET
Q502 JA101 TIME CONST SW
IC551 TDA2578A H/V OSC
V DRIVE
SND CASTLE PG
V BLK
SAW GNE
V SYNC SEP
H SYNC SEP
FLYBACK PG
H OSC
H OUT
Q312 JC501 BP AMP
Q313 JC501 BP BUFFER
Q801 2SD1138 H DRIVE
Q802 2SD1497 H OUT
T801 HDT
Q1553 2SB740 Y 80W
(PIN CORRECT H CENT, H AMP) D1
D1557 EQB01-13
IC1553 TDA1082 PIN CORRECT
DIFFERENCE AMPLIFIER
VOLTAGE STABILIZING
SQUARING
BACK STROKE BLANKING
DIFFERENCE AMP & DRIVE
Q1555 2SD788
Q1554 2SC2958 H AMP
D1552 1SS119
Q1552 2SB740 H CENT-2
Q1551 2SD774 H CENT-1
D1553,1554 ERC24-06S
V.ANGLE H SIZE V LIN V SIZE V FREQ H FREQ PIN AMP P PHASE H CENT H AMP
Q701 JC501 VIDEO OUT-1
Q710 2SA1091 AUTO CUT OFF-1
Q704 2SC2278 B OUT
Q707 2SC2551 AUTO CUT OFF-4
Q706 2SC2278 R OUT
Q712 2SA1091 AUTO CUT OFF-3
Q703 JC501 VIDEO OUT-3
Q709 2SC2551 AUTO CUT OFF-6
D707 1SS119 PROTECT
D704 RD13EB2 12V ZENER
D705,706 1SS119 PROTECT
D708 1SS119 AUDIO CUT OFF-1
Q705 2SC2278 G OUT
Q702 JC501 VIDEO OUT-2
Q708 2SC2551 AUTO CUT OFF-5
Q711 2SA1091 AUTO CUT OFF-2
D709 1SS119 AUDIO CUT OFF-2
D710 1SS119 AUDIO CUT OFF-3
D701-703 1SS99 PROTECT
Q713 JC501
Q751,752 JC501 VM AMP-1,2
D711 1SS119 CLAMP
Q753 2SA773 VM OUT-1
Q754 2SD774 VM OUT-2
(R,G,B OUT VM OUT) C
V901 680EB22 PICTURE TUBE
FOCUS RV902
RV901 H STAT HVR
T1892 D2
DY CY V.DY H.DY
D804 RGP10G 26V RECT
D803 RGP10G 200V RECT
T802 F.B.T
D802 V30N S2 RECT
D801 ERD29-08J PIN DAMPER
D805,806 ERC26-15S H DAMPER
Q803 SG264A PIN OUT
70Vp-p(H) 90Vp-p(H) 70Vp-p(V) 0.3Vp-p(V) 0.36Vp-p(H) 0.6Vp-p(V) 2Vp-p(V) 1Vp-p(H) 5Vp-p(V) 3.7Vp-p(H) 10.5Vp-p(H) 971Vp-p(H) 24Vp-p(V) 3.2Vp-p(V) 2.4Vp-p(V) 24Vp-p(H)

[CONTROL, PAL PROCESSOR
HV OSC, V OUT, AF OUT, REG] D

D

– D Board –



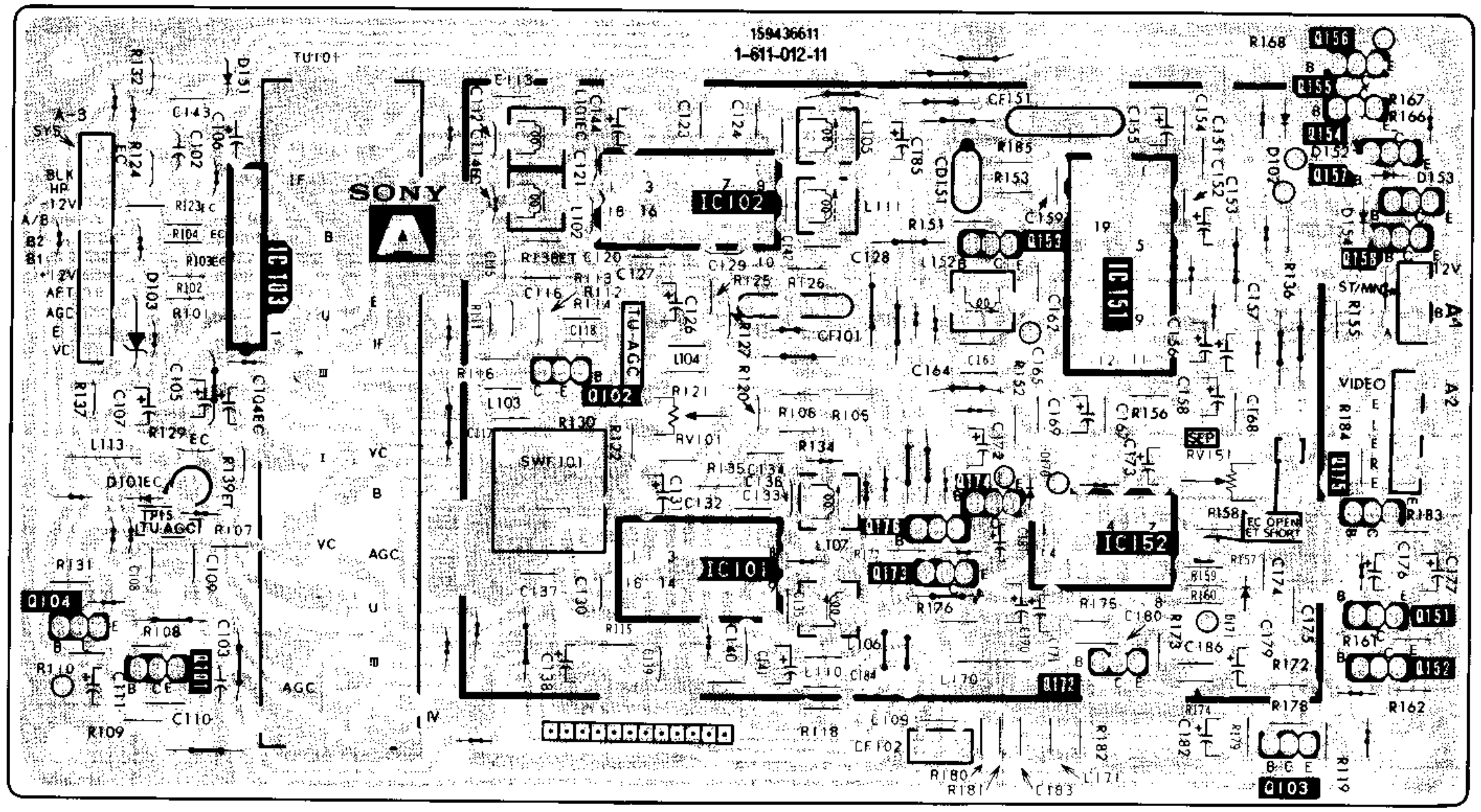
Q , IC	D	ADJ
308,309,314 002,003, 304 006 ,302 IC551, 004,305 801 502,001 303 311, 312 306,307,301 IC001 IC301 012 011 313 310 009,008 007 IC002 253 252 IC552 655 656 501 206 802 251 205 IC251, IC252 204 203 254 207,202 654 IC201 201,208 603 IC651 602	508,002 009, 309 507,080 302 003,004 081,301 001 010 506 504 509 061 307 008,308 807 005 801 503,502,501 253 006 060 661 654 810 656 805 252 806 653 655 251 601 203 205,201 652 803 802 202 651 204 602 657 208 208,206 804 603	RV501 RV502 RV303 RV251 RV302 RV301 RV651

[BAND SW, QUASI SIF/ID, VIF, AFT, MATRIX] **A**

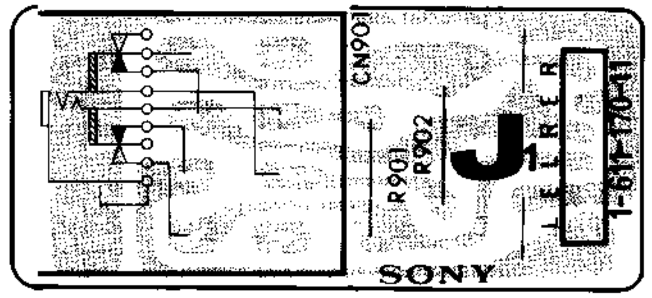
A **J1** [AF OUT] **N** [REMOCON RECEIVE]

– A Board –

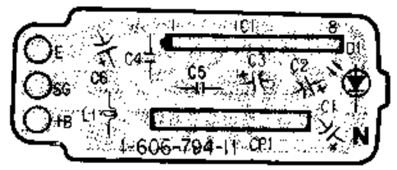
	A	B	C	D	E	F	G	H	I	J	
Q, IC		104, 101	IC103		102	IC102, IC101	176, 173	153, 174, IC152, 172	IC151	103, 156, 155, 154, 157, 158, 175, 151, 152	Q, IC
D		103, 101	151						171		D
ADJ									RV151		ADJ
TP		15									TP



– J1 Board –



– N Board –

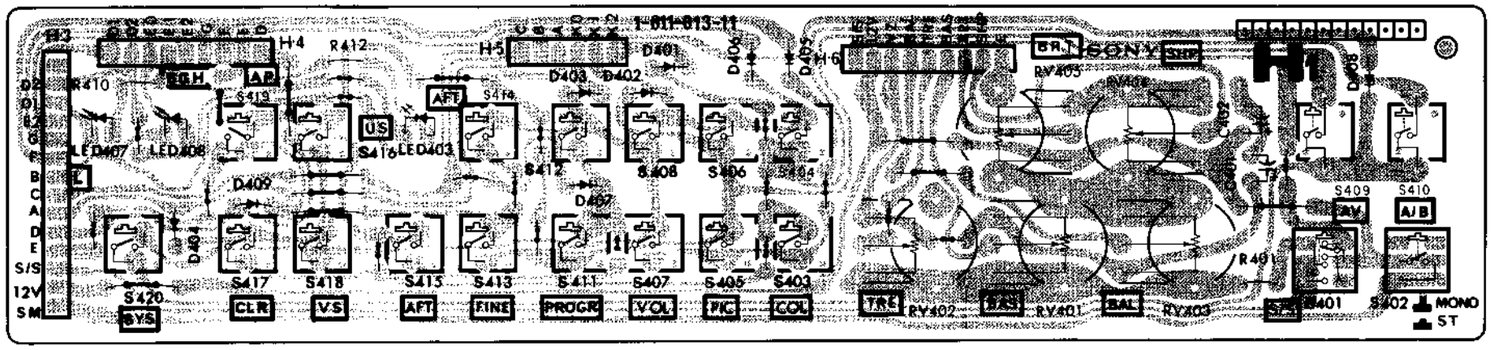


[CUSTMER CONTROL] [INDICATOR] **H1** [PIN CORRECT] [H CENT, H AMP] **D1** **H1** **H2** [INDICATORE] **D2** [HP OUT] **D3** [PULLING CORR]

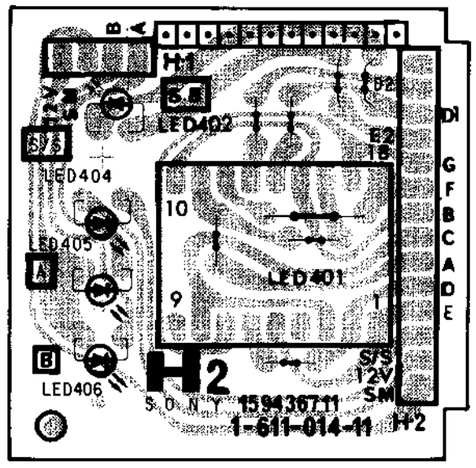
A B C D E F G H I J K L M N O

1 2 3 4 5 6 7 8

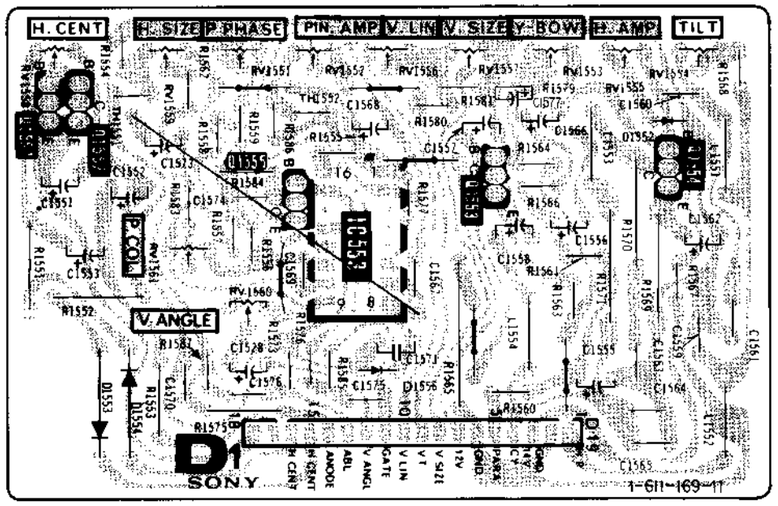
– H1 Board –



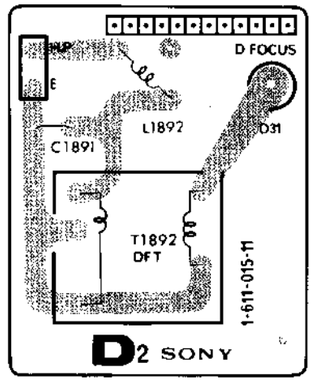
– H2 Board –



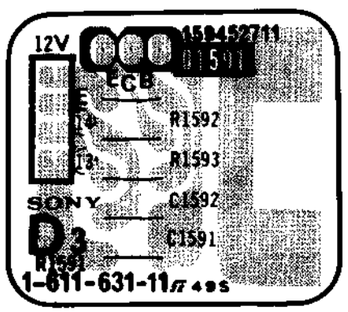
– D1 Board –



– D2 Boad –

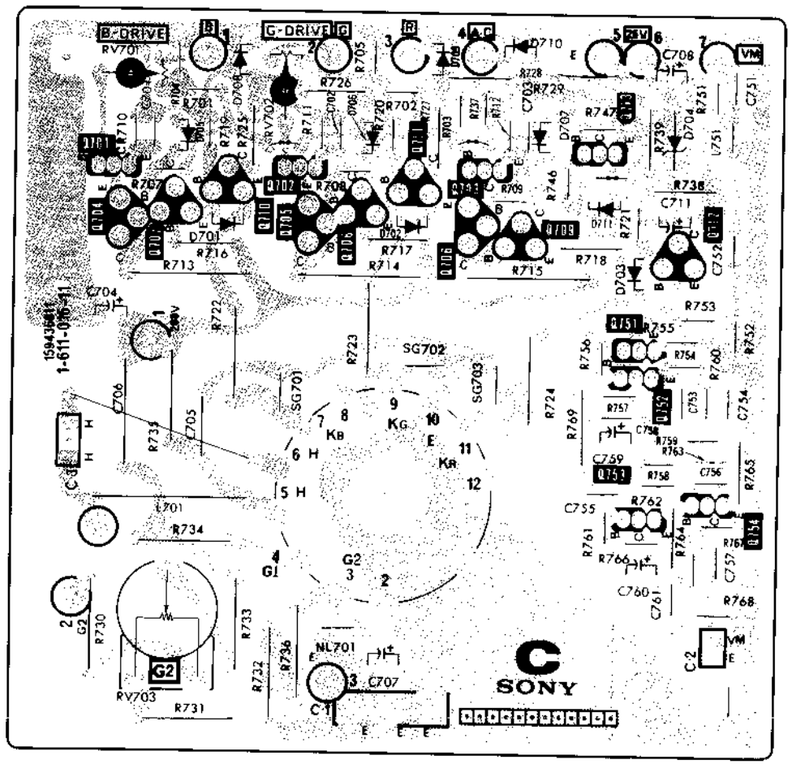


– D3 Board –

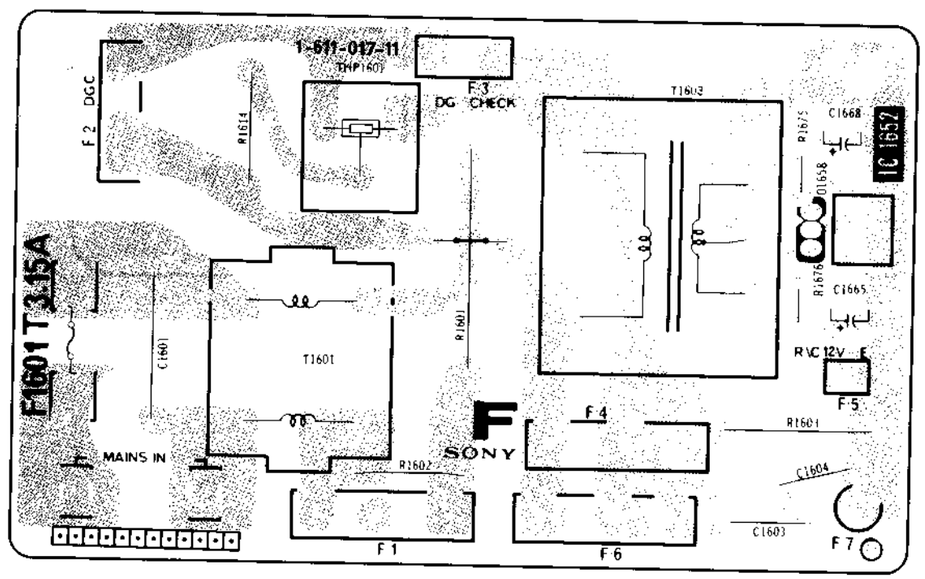


[R, G, B OUT] [VM OUT] **C** [REG OUT] **F**

– C Board –

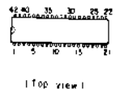


– F Board –



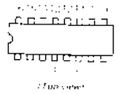
3-5. SEMICONDUCTORS

CX519-004P

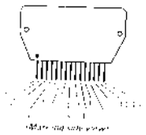


LA7920

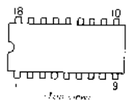
HD14053BP
M58653P
TA7630P
TDA1082A
TDA3541
μPD4053BC



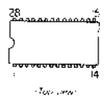
STK4362



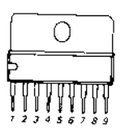
TDA2546A
TDA2578A



TDA3562A



TDA3652



μPC1373H

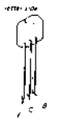
μPC1394C

μPC78L12

UPC574J

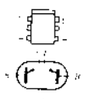
2SA1091
2SC2551
2SC945
JA101
JC501

2SA1175
2SC2785



2SB740
2SC2230
JC501

2SC1963



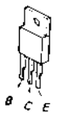
2SC2009

2SC2958
2SD774

2SC4703C

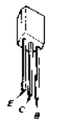
2SC2278

2SD1138-02C
2SD795A

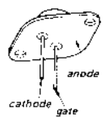


2SD1497
2SD1497-06

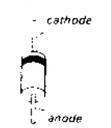
DTC124ES



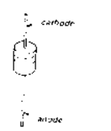
SG264A



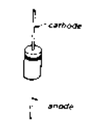
IS1555
1SS133
1SS99
ERB43-02
ERD28-06
RD13E-B2
RD3.0E-B4
RD3.0E-L2
RD5.1E-N2
RD5.6E-B2
RD5.6E-N2
RD6.8E-N2
RD7.5E-B1



ISS119
1SS148

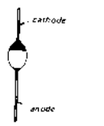


EQA01-22R2
EQA01-24R2
RGP10G

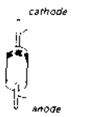


ERB81-004
ERC24-06S

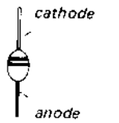
ERC26-15S



ERD29-04
ERD29-08J

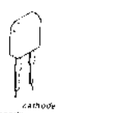


GP08B

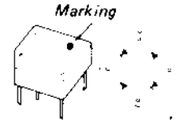


MC921

PH302B

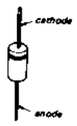


S3WB60Z
Marking



SLP161B

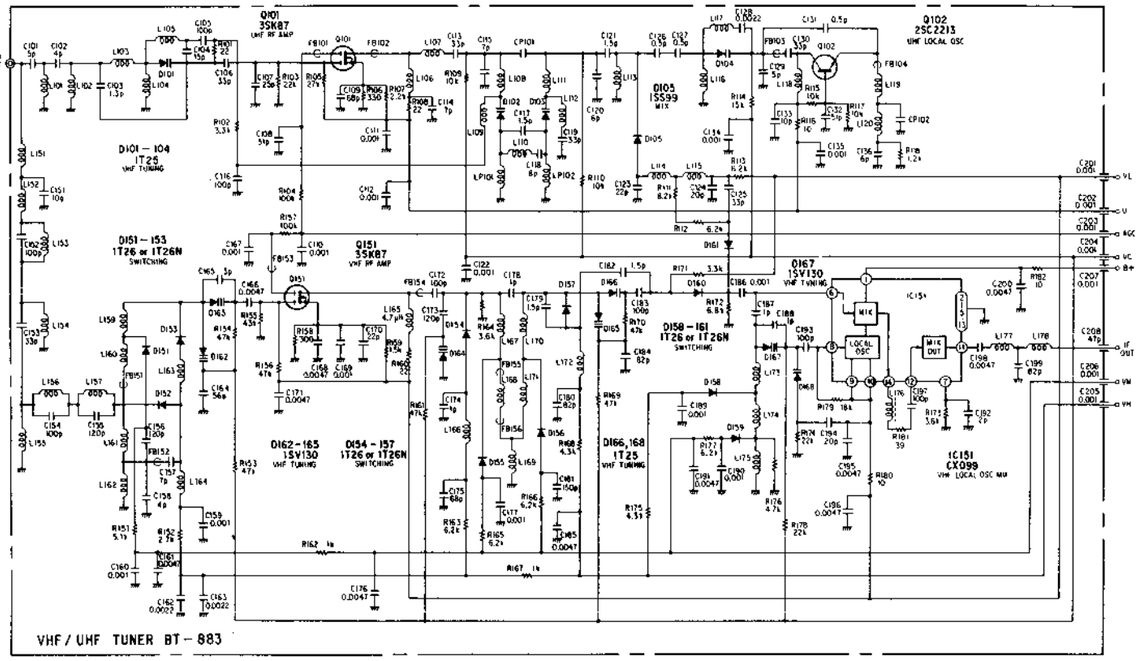
TLR147



V19C
V30V

3-6. VHF/UHF SCHEMATIC DIAGRAM

–BT-883–



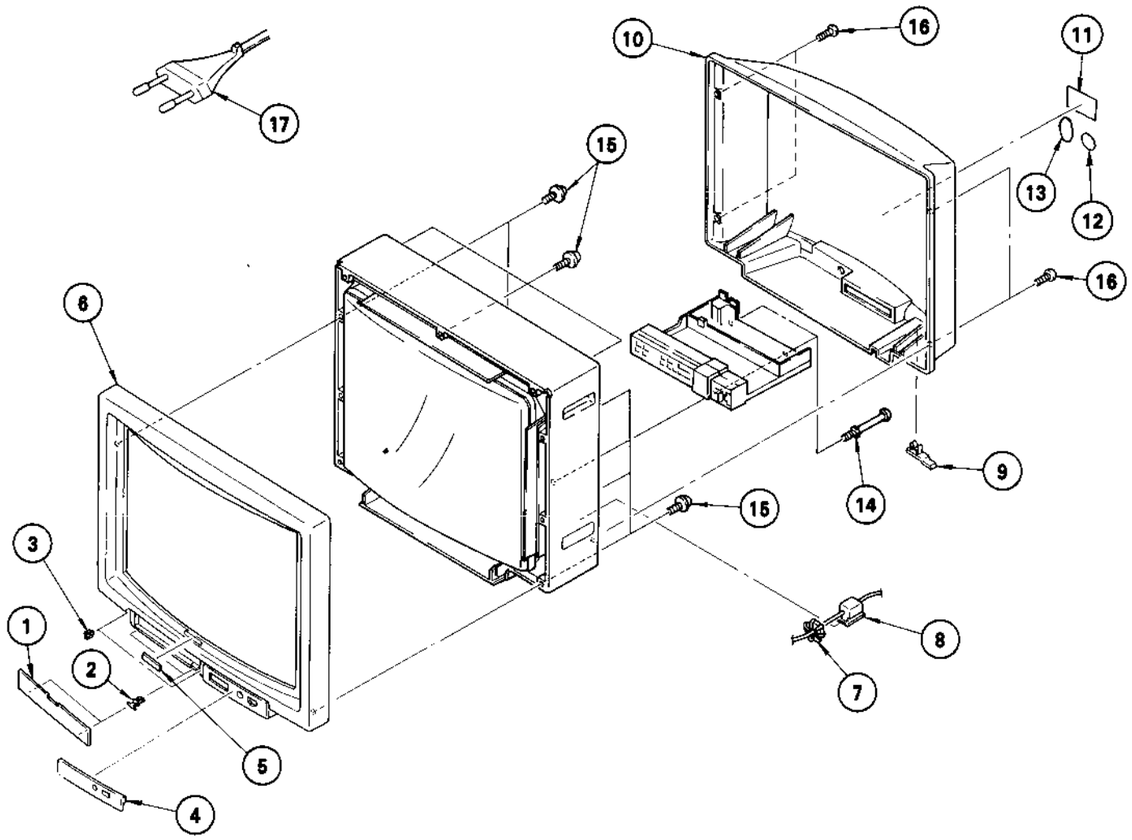
Note: Tuner reference numbers are not included in the Electrical Parts List.

SECTION 4
EXPLODED VIEWS

NOTE:
- Items with no part number and no description are not stocked because they are seldom required for routine service.
- The construction parts of an assembled part are indicated with a collation number in the remark column.
- As to the part numbered with E-, refer to the electrical parts list.
- Items marked " ★ " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

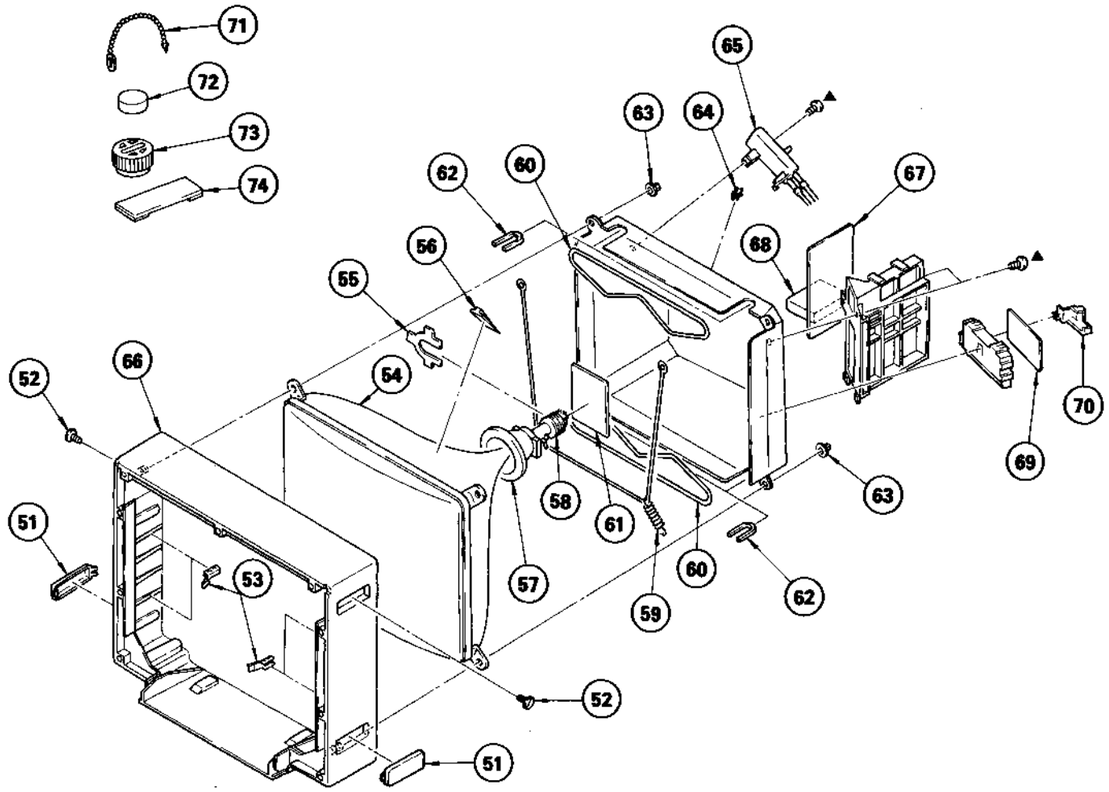
4-1 BEZEL



No.	Part No.	Description	Remark
1	X-4361-925-0	DOOR ASSY	
2	★:4-361-905-00	SHAFT, DOOR	
3	4-342-511-00	RETAINER, DOOR	
4	4-361-911-00	WINDOW, ORNAMENTAL, BEZEL	
5	3-701-912-00	EMBLEM, SONY, (LARGE)	
6	X-4361-926-0	BEZEL ASSY	3,5
7	1-543-179-00	CORE, RING	
8	⚠:4-022-115-00	HOLDER, AC CORD	
9	4-329-127-00	CLAMP, CORD	
10	4-361-927-00	COVER, BACK	
11	★:4-369-704-00	LABEL, MODEL NUMBER	
12	4-310-380-00	LABEL, DEMKO	
13	3-703-269-00	LABEL, SEV	
14	4-363-671-00	SCREW (DIA.4), SPECIAL	
15	4-309-749-00	SCREW, TAPPING, +PW4X20	
16	4-365-513-00	SCREW (4X16), TAPPING, SPECIAL	
17	⚠:1-551-427-11	CORD, POWER	

4-2 CABINET

▲: TA, BV 4 x 12 7-685-661-14

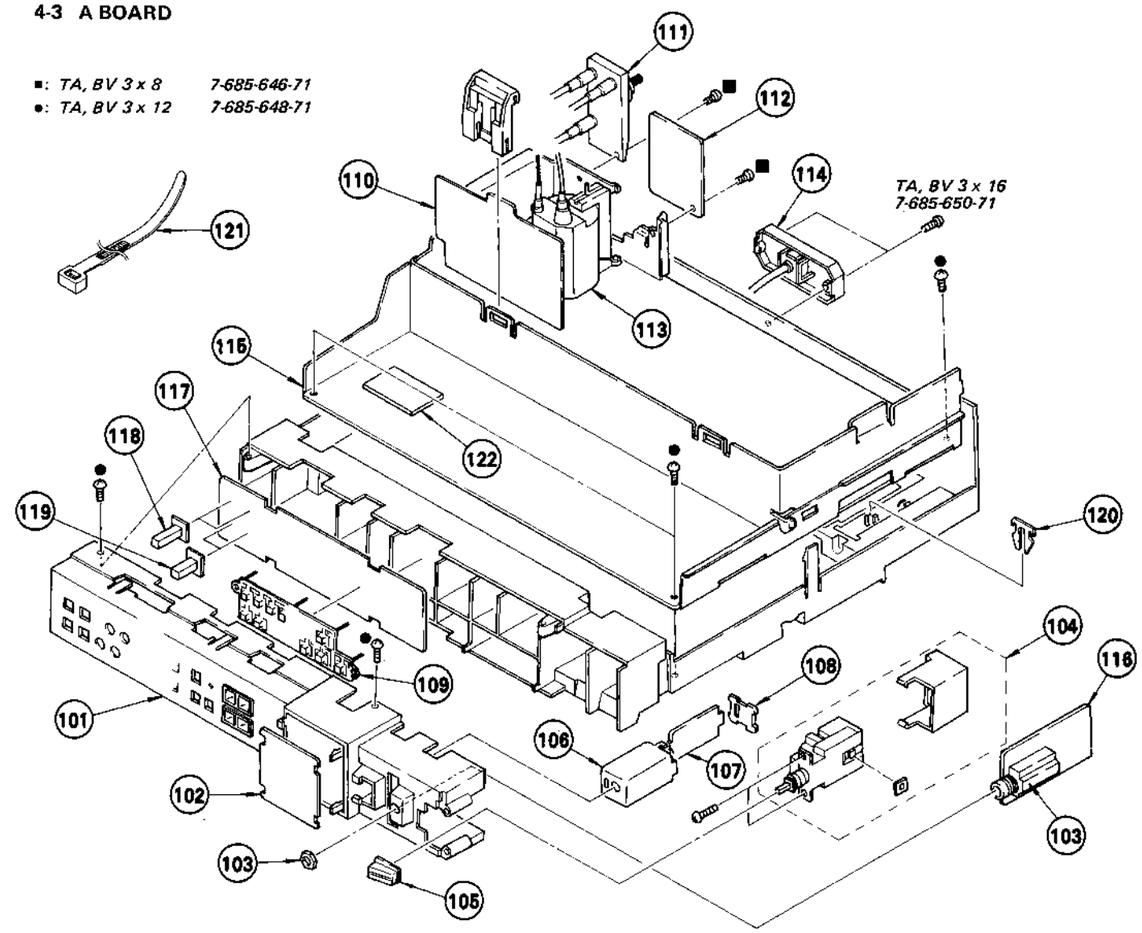


No.	Part No.	Description	Remark
51	4-361-907-00	PLATE, ORNAMENTAL, CABINET	
52	4-363-611-00	SCREW, ORNAMENTAL	
53	♦:4-363-646-00	HOLDER, CORD	
54	⚠▲8-738-405-05	CRT 680EB22	
55	1-452-146-00	MAGNET, BMC	
56	3-703-003-00	SPACER, DY	
57	⚠:1-451-226-00	DEFLECTION YOKE (SY105A)	
58	⚠:1-452-315-00	CRT NECK ASSY (NA303)	
59	4-303-774-XX	SPRING	
60	⚠:1-426-041-00	COIL, DEGAUSSING	
61	♦:A-1330-470-A	C BOARD, COMPLETE	
62	♦:4-330-306-00	BUSHING, CRT INSULATING	
63	4-330-305-00	NUT, SPECIAL	
64	♦:4-322-922-00	HOLDER, COIL, DEGAUSSER	
65	⚠:1-228-544-00	RESISTOR ASSY, HIGH-VOLTAGE	
66	X-4361-927-2	CABINET ASSY	
67	♦:A-1295-788-A	A BOARD, SUB, COMPLETE	
68	⚠:1-463-421-21	TUNER, ET (BT-883)	
69	♦:1-611-017-00	F BOARD	
70	♦:4-362-247-00	COVER, AC TERMINAL	
71	4-308-870-00	CLIP, LEAD WIRE	
72	1-452-032-00	MAGNET, DISK; 10MM ϕ	
73	1-452-094-00	MAGNET, ROTATABLE DISK; 15MM ϕ	
74	X-4308-815-0	PERMALLOY ASSY, CONVERGENCE	

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

4-3 A BOARD

■: TA, BV 3 x 8 7-685-646-71
●: TA, BV 3 x 12 7-685-648-71



No.	Part No.	Description	Remark
101	4-363-677-00	PANEL, CONTROL	
102	♦:1-611-014-00	H2 BOARD	
103	♦:1-507-657-00	JACK	
104	⚠:1-553-225-00	SWITCH, PUSH	
105	4-364-805-00	BUTTON, POWER	
106	♦:4-342-117-00	CASE, SHIELD (MAIN), R	
107	♦:1-606-794-00	N BOARD	
108	♦:4-342-118-00	LID, SHIELD CASE, R	
109	4-363-675-00	BUTTON, MULTI	
110	♦:A-1340-571-A	D1 BOARD, COMPLETE	
111	⚠:1-215-066-21	RES ASSY, HIGH-VOLTAGE	
112	♦:1-611-015-00	D2 BOARD	
113	⚠:1-439-332-00	TRANSFORMER ASSY, FLYBACK	
114	⚠:1-536-817-00	TERMINAL BOARD ASSY, ANTENNA	
115	♦:A-1345-439-A	D BOARD, SUB, COMPLETE	
116	♦:1-611-170-00	J1 BOARD	
117	♦:1-611-013-00	H1 BOARD	
118	4-361-939-00	PUSH BUTTON (B)	
119	4-361-938-00	PUSH BUTTON (A)	
120	♦:4-369-712-01	STOPPER	
121	3-701-748-00	CLAMP	
122	♦:1-611-631-11	D3 BOARD	

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

SECTION 5
ELECTRICAL PARTS LIST

F A

NOTE:

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

- Items marked " ♦ " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.

CAPACITORS
- MF : μF, PF : μμF

RESISTORS
- All resistors are in ohms
- F : nonflammable

COILS
- MMH : mH, UH : μH

When indicating parts by reference number, please include the board name.

Ref.No.	Part No.	Description				Remark
	♦:1-611-017-00	F BOARD				
		*******				
		CAPACITOR				
C1601	⚠1-130-238-00	MYLAR	0.22MF	20%	300V	
C1603	⚠1-161-738-00	CERAMIC	0.0047MF	20%	400V	
C1604	⚠1-161-738-00	CERAMIC	0.0047MF	20%	400V	
C1655	1-123-332-00	ELECT	47MF	20%	16V	
C1668	1-123-346-00	ELECT	220MF	20%	35V	
		DIODE				
D1658	8-719-000-06	DIODE MC921				
		CONNECTOR				
F1	♦:1-506-348-XX	3P PLUG (L)				
F2	♦:1-508-765-00	3P PLUG (M)				
F3	♦:1-508-786-00	2P PLUG (M)				
F4	♦:1-506-348-XX	3P PLUG (L)				
F5	♦:1-560-290-00	PLUG, CONNECTOR (2.5MM PITCH)				
F6	♦:1-506-348-XX	3P PLUG (L)				
F7	♦:1-508-784-00	1P PLUG				
		FUSE				
F1601	⚠1-532-237-00	FUSE, TIME-LAG 3.15A				
	1-533-087-00	HOLDER, FUSE, F1601				
		IC				
IC1652	8-759-178-12	IC UPC78L12				
		THERMISTOR				
⚠PTH1601	1-806-387-00	THERMISTOR (POSITIVE)				
		RESISTOR				
R1601	⚠1-217-328-00	WIREWOUND	2.7	10%	7W	F
R1602	⚠1-202-719-00	SOLID	1M	10%	1/2W	
R1603	⚠1-247-289-00	CARBON	8.2M	5%	1W	
R1614	⚠1-205-653-00	CEMENTED	100	5%	5W	
R1675	⚠1-247-083-00	SOLID	10		1/4W	F
R1676	⚠1-247-083-00	SOLID	10		1/4W	F
		TRANSFORMER				
T1601	⚠1-421-352-00	TRANSFORMER, FERRITE				
T1603	⚠1-447-703-00	TRANSFORMER, POWER				
	♦:A-1295-788-A	A BOARD, SUB, COMPLETE				
		**********				
	♦:4-363-672-00	CASE (MAIN), SHIELD, VIF				
	♦:4-363-673-00	CASE (BOTTOM LID), SHIELD, VIF				
	♦:4-363-674-00	CASE (UPPER LID), SHIELD, VIF				

Ref.No.	Part No.	Description				Remark
		CONNECTOR				
A1	♦:1-560-124-00	PLUG, CONNECTOR (2.5MM) 4P				
A2	♦:1-560-126-00	PLUG, CONNECTOR (2.5MM) 6P				
A3	♦:1-560-156-00	PLUG, CONNECTOR (2.5MM PITCH)				
		CAPACITOR				
C102	1-108-389-00	MYLAR	0.1MF	10%	100V	
C103	1-108-389-00	MYLAR	0.1MF	10%	100V	
C104	1-123-356-00	ELECT	10MF	20%	16V	
C105	1-123-356-00	ELECT	10MF	20%	16V	
C106	1-123-318-00	ELECT	33MF	20%	16V	
C107	1-123-356-00	ELECT	10MF	20%	16V	
C108	1-108-387-00	MYLAR	0.068MF	10%	100V	
C109	1-108-387-00	MYLAR	0.068MF	10%	100V	
C110	1-102-963-00	CERAMIC	33PF	5%	50V	
C111	1-123-318-00	ELECT	33MF	20%	16V	
C112	1-102-530-00	CERAMIC	120PF	5%	50V	
C113	1-102-529-00	CERAMIC	100PF	5%	50V	
C114	1-102-851-00	CERAMIC	15PF	5%	50V	
C115	1-102-523-00	CERAMIC	56PF	5%	50V	
C116	1-102-125-00	CERAMIC	0.0047MF	10%	50V	
C117	1-102-125-00	CERAMIC	0.0047MF	10%	50V	
C118	1-102-125-00	CERAMIC	0.0047MF	10%	50V	
C120	1-102-125-00	CERAMIC	0.0047MF	10%	50V	
C121	1-102-125-00	CERAMIC	0.0047MF	10%	50V	
C123	1-102-108-00	CERAMIC	150PF	10%	50V	
C124	1-130-014-00	FILM	470PF	5%	50V	
C126	1-123-318-00	ELECT	33MF	20%	16V	
C127	1-102-125-00	CERAMIC	0.0047MF	10%	50V	
C128	1-101-004-00	CERAMIC	0.01MF		50V	
C129	1-101-004-00	CERAMIC	0.01MF		50V	
C130	1-102-125-00	CERAMIC	0.0047MF	10%	50V	
C131	1-123-353-00	ELECT	2.2MF	20%	50V	
C132	1-102-125-00	CERAMIC	0.0047MF	10%	50V	
C133	1-102-125-00	CERAMIC	0.0047MF	10%	50V	
C134	1-102-125-00	CERAMIC	0.0047MF	10%	50V	
C135	1-102-525-00	CERAMIC	68PF	5%	50V	
C136	1-102-525-00	CERAMIC	68PF	5%	50V	
C137	1-102-125-00	CERAMIC	0.0047MF	10%	50V	
C138	1-123-286-00	ELECT	0.33MF	20%	50V	
C139	1-102-125-00	CERAMIC	0.0047MF	10%	50V	
C140	1-102-125-00	CERAMIC	0.0047MF	10%	50V	
C141	1-123-318-00	ELECT	33MF	20%	16V	
C142	1-102-525-00	CERAMIC	68PF	5%	50V	
C143	1-101-004-00	CERAMIC	0.01MF		50V	
C144	1-123-286-00	ELECT	0.33MF	20%	50V	
C151	1-101-004-00	CERAMIC	0.01MF		50V	
C152	1-101-004-00	CERAMIC	0.01MF		50V	
C153	1-123-356-00	ELECT	10MF	20%	16V	
C154	1-101-004-00	CERAMIC	0.01MF		50V	
C155	1-123-332-00	ELECT	47MF	20%	16V	
C156	1-123-306-00	ELECT	47MF	20%	10V	

A

Ref.No.	Part No.	Description			Remark
C157	1-123-306-00	ELECT	47MF	20%	10V
C158	1-123-379-00	ELECT	0.47MF	20%	50V
C159	1-102-816-00	CERAMIC	120PF	5%	50V
C162	1-108-570-00	MYLAR	0.0043MF	5%	50V
C163	1-130-626-00	FILM	0.033MF	5%	50V
C164	1-108-371-00	MYLAR	0.0033MF	10%	100V
C165	1-108-371-00	MYLAR	0.0033MF	10%	100V
C167	1-108-371-00	MYLAR	0.0033MF	10%	100V
C168	1-108-371-00	MYLAR	0.0033MF	10%	100V
C169	1-123-356-00	ELECT	10MF	20%	16V
C170	1-123-356-00	ELECT	10MF	20%	16V
C171	1-123-318-00	ELECT	33MF	20%	16V
C172	1-123-379-00	ELECT	0.47MF	20%	50V
C173	1-123-379-00	ELECT	0.47MF	20%	50V
C174	1-106-367-00	MYLAR	0.01MF	10%	400V
C175	1-106-367-00	MYLAR	0.01MF	10%	400V
C176	1-123-380-00	ELECT	1MF	20%	50V
C177	1-123-380-00	ELECT	1MF	20%	50V
C179	1-123-328-00	ELECT	4.7MF	20%	25V
C180	1-108-371-00	MYLAR	0.0033MF	10%	100V
C181	1-123-318-00	ELECT	33MF	20%	16V
C182	1-123-307-00	ELECT	100MF	20%	10V
C183	1-102-108-00	CERAMIC	150PF	10%	50V
C184	1-102-973-00	CERAMIC	100PF	5%	50V
C186	1-102-121-00	CERAMIC	0.0022MF	10%	50V
C188	1-102-125-00	CERAMIC	0.0047MF	10%	50V

DISCRIMINATOR

CD151	1-404-501-00	DISCRIMINATOR, CERAMIC

FILTER

CF101	1-527-840-00	FILTER, CERAMIC
CF102	1-404-134-00	TRAP, CERAMIC (5.5MHZ)
CF151	1-527-839-00	FILTER, CERAMIC

DIODE

D101	8-719-911-19	DIODE 1SS119
D102	8-719-911-19	DIODE 1SS119
D103	8-719-102-71	DIODE RD5.6E-N2
D104	8-719-911-19	DIODE 1SS119
D151	8-719-911-19	DIODE 1SS119
D152	8-719-911-19	DIODE 1SS119
D153	8-719-911-19	DIODE 1SS119
D154	8-719-911-19	DIODE 1SS119
D170	8-719-911-19	DIODE 1SS119
D171	8-719-911-19	DIODE 1SS119

IC

IC102	8-759-909-54	IC TDA2546A
IC103	8-759-800-12	IC LA7920
IC151	8-759-007-54	IC TDA4940
IC152	8-759-007-55	IC TDA4944

Ref.No.	Part No.	Description	Remark

COIL

L101	1-404-476-00	COIL, IF
L102	1-404-476-00	COIL, IF
L103	1-408-593-00	MICRO INDUCTOR 1.5UH
L104	1-408-406-00	MICRO INDUCTOR 5.6UH
L105	1-404-477-00	COIL, IF 5.5MHz
L106	1-404-493-00	COIL
L107	1-404-493-00	COIL
L109	1-408-409-00	MICRO INDUCTOR 10UH
L110	1-408-406-00	MICRO INDUCTOR 5.6UH
L111	1-404-493-00	COIL 38.9MHz
L113	1-408-226-00	MICRO INDUCTOR 82UH
L152	1-404-506-00	COIL, VARIABLE 2.2UH
L170	1-408-247-00	MICRO INDUCTOR 33MMH
L171	1-408-408-00	MICRO INDUCTOR 8.2UH

TRANSISTOR

Q101	8-729-245-83	TRANSISTOR 2SC2458
Q102	8-765-300-00	TRANSISTOR 2SC2009
Q103	8-729-204-83	TRANSISTOR 2SA1048-GR
Q104	8-729-900-36	TRANSISTOR DTC124ES
Q151	8-729-245-83	TRANSISTOR 2SC2458
Q152	8-729-245-83	TRANSISTOR 2SC2458
Q153	8-729-245-83	TRANSISTOR 2SC2458
Q154	8-729-900-89	TRANSISTOR DTC144ES
Q155	8-729-245-83	TRANSISTOR 2SC2458
Q156	8-729-245-83	TRANSISTOR 2SC2458
Q157	8-729-900-89	TRANSISTOR DTC144ES
Q158	8-729-900-89	TRANSISTOR DTC144ES
Q172	8-729-204-83	TRANSISTOR 2SA1048-GR
Q173	8-729-245-83	TRANSISTOR 2SC2458
Q174	8-729-245-83	TRANSISTOR 2SC2458
Q175	8-729-245-83	TRANSISTOR 2SC2458

RESISTOR

R101	1-247-831-00	METAL	1K	5%	1/6W
R102	1-247-831-00	METAL	1K	5%	1/6W
R103	1-247-879-00	METAL	100K	5%	1/6W
R104	1-247-879-00	METAL	100K	5%	1/6W
R105	1-247-853-00	METAL	8.2K	5%	1/6W
R106	1-247-843-00	METAL	3.3K	5%	1/6W
R107	1-247-843-00	METAL	3.3K	5%	1/6W
R108	1-247-891-00	METAL	330K	5%	1/6W
R109	1-247-839-00	METAL	2.2K	5%	1/6W
R110	1-247-839-00	METAL	2.2K	5%	1/6W
R111	1-247-847-00	METAL	4.7K	5%	1/6W
R112	1-247-815-00	METAL	220	5%	1/6W
R113	1-247-845-00	METAL	3.9K	5%	1/6W
R114	1-247-815-00	METAL	220	5%	1/6W
R115	1-247-835-00	METAL	1.5K	5%	1/6W
R116	1-247-823-00	METAL	470	5%	1/6W
R118	1-247-815-00	METAL	220	5%	1/6W

Ref.No.	Part No.	Description	Remark
D405	8-719-911-19	DIODE 1SS119	
D406	8-719-911-19	DIODE 1SS119	
D407	8-719-911-19	DIODE 1SS119	
D408	8-719-911-19	DIODE 1SS119	
D409	8-719-911-19	DIODE 1SS119	
LED403	8-719-812-41	DIODE TLR124	
	▲:4-357-710-00	HOLDER, LED, LED403	

RESISTOR

R401	1-247-839-00	CARBON	2.2K	5%	1/6W
R412	1-247-813-00	CARBON	180	5%	1/6W

VARIABLE RESISTOR

RV401	1-228-578-00	RES, VAR, CARBON 10K
RV402	1-228-578-00	RES, VAR, CARBON 10K
RV403	1-228-578-00	RES, VAR, CARBON 10K
RV404	1-228-578-00	RES, VAR, CARBON 10K
RV405	1-228-578-00	RES, VAR, CARBON 10K

SWITCH

SW401	1-554-118-00	SWITCH, PUSH
SW402	1-554-118-00	SWITCH, PUSH
SW403	1-553-329-00	SWITCH, PUSH (MONO KEY)
SW404	1-553-329-00	SWITCH, PUSH (MONO KEY)
SW405	1-553-329-00	SWITCH, PUSH (MONO KEY)
SW406	1-553-329-00	SWITCH, PUSH (MONO KEY)
SW407	1-553-329-00	SWITCH, PUSH (MONO KEY)
SW408	1-553-329-00	SWITCH, PUSH (MONO KEY)
SW409	1-552-774-00	SWITCH, PUSH
SW410	1-552-774-00	SWITCH, PUSH
SW411	1-553-329-00	SWITCH, PUSH (MONO KEY)
SW412	1-553-329-00	SWITCH, PUSH (MONO KEY)
SW413	1-553-329-00	SWITCH, PUSH (MONO KEY)
SW414	1-553-329-00	SWITCH, PUSH (MONO KEY)
SW415	1-553-329-00	SWITCH, PUSH (MONO KEY)
SW416	1-553-329-00	SWITCH, PUSH (MONO KEY)
SW417	1-553-329-00	SWITCH, PUSH (MONO KEY)
SW418	1-553-329-00	SWITCH, PUSH (MONO KEY)
SW419	1-553-329-00	SWITCH, PUSH (MONO KEY)

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▲:1-611-014-00 H2 BOARD
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▲:4-361-909-00 HOLDER, LED

DIODE

LED401	8-719-908-08	DIODE SL1274
LED402	8-719-801-07	DIODE TLR107
LED404	8-719-812-41	DIODE TLR124
LED405	8-719-812-41	DIODE TLR124
LED406	8-719-812-41	DIODE TLR124

Ref.No.	Part No.	Description	Remark
	▲:A-1340-571-A	D1 BOARD, COMPLETE	
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CAPACITOR

C1528	1-124-038-00	ELECT	1MF	20%	50V
C1551	1-124-036-00	ELECT	330MF	20%	16V
C1552	1-123-973-00	ELECT	100MF	20%	16V
C1553	1-123-973-00	ELECT	100MF	20%	16V
C1555	1-123-369-00	ELECT	4.7MF	20%	50V
C1556	1-124-125-00	ELECT	22MF	20%	25V
C1557	1-123-382-00	ELECT	3.3MF	20%	50V
C1558	1-124-130-00	ELECT	100MF	20%	63V
C1559	1-108-380-00	MYLAR	0.018MF	10%	100V
C1560	1-108-380-00	MYLAR	0.018MF	10%	100V
C1561	1-108-637-00	MYLAR	0.082MF	10%	100V
C1562	1-124-038-00	ELECT	1MF	20%	50V
C1563	1-108-381-00	MYLAR	0.022MF	10%	100V
C1564	1-129-701-00	FILM	0.01MF	5%	100V
C1565	1-108-375-00	MYLAR	0.0068MF	10%	100V
C1567	1-108-377-00	MYLAR	0.01MF	10%	100V
C1568	1-123-973-00	ELECT	100MF	20%	16V
C1569	1-108-381-00	MYLAR	0.022MF	10%	100V
C1570	1-108-377-00	MYLAR	0.01MF	10%	100V
C1573	1-124-038-00	ELECT	1MF	20%	50V
C1574	1-108-381-00	MYLAR	0.022MF	10%	100V
C1575	1-108-377-00	MYLAR	0.01MF	10%	100V
C1576	1-108-365-00	MYLAR	0.001MF	10%	100V

CONNECTOR

D19	▲:1-562-370-00	CONNECTOR, BOARD TO BOARD 18P

DIODE

D1552	8-719-911-19	DIODE 1SS119
D1553	8-719-924-06	DIODE ERC24-06S
D1554	8-719-924-06	DIODE ERC24-06S
D1557	8-719-931-13	DIODE EQB01-13

IC

IC1553	6-066-717-10	IC TDA1082

COIL

L1551	1-408-242-00	MICRO INDUCTOR 10MMH
L1552	1-408-247-00	MICRO INDUCTOR 33MMH
L1553	1-407-509-00	MICRO INDUCTOR 27MMH
L1554	1-408-245-00	MICRO INDUCTOR 22MMH

TRANSISTOR

Q1551	8-729-177-43	TRANSISTOR 2SD774-4
Q1552	8-729-103-43	TRANSISTOR 2SB734-4
Q1553	8-729-103-43	TRANSISTOR 2SB734-4
Q1554	8-729-195-82	TRANSISTOR 2SC2958
Q1555	8-729-378-84	TRANSISTOR 2SD788

Ref.No.	Part No.	Description				Remark
		RESISTOR				
R1551	1-212-849-00	FUSIBLE	4.7	5%	1/4W	F
R1552	1-212-849-00	FUSIBLE	4.7	5%	1/4W	F
R1553	1-210-859-00	CARBON	1.2	5%	1/8W	F
R1554	1-247-847-00	CARBON	4.7K	5%	1/6W	
R1555	1-247-831-00	CARBON	1K	5%	1/6W	
R1556	1-247-861-00	CARBON	18K	5%	1/6W	
R1557	1-247-861-00	CARBON	18K	5%	1/6W	
R1558	1-247-845-00	CARBON	3.9K	5%	1/6W	
R1559	1-247-844-00	CARBON	3.6K	5%	1/6W	
R1560	1-247-819-00	CARBON	330	5%	1/6W	
R1561	1-247-825-00	CARBON	560	5%	1/6W	
R1562	1-247-861-00	CARBON	18K	5%	1/6W	
R1563	1-247-787-00	CARBON	15	5%	1/6W	
R1564	1-247-855-00	CARBON	10K	5%	1/6W	
R1565	1-206-642-00	METAL OXIDE	120	5%	2W	F
R1567	1-247-855-00	CARBON	10K	5%	1/6W	
R1568	1-247-809-00	CARBON	120	5%	1/6W	
R1569	1-213-124-00	METAL OXIDE	27	5%	1W	F
R1570	1-244-875-00	CARBON	1.2K	5%	1/2W	
R1571	1-213-135-00	METAL OXIDE	220	5%	1W	F
R1573	1-247-889-00	CARBON	270K	5%	1/6W	
R1574	1-247-855-00	CARBON	10K	5%	1/6W	
R1575	1-246-519-00	CARBON	82K	5%	1/4W	
R1577	1-247-853-00	CARBON	8.2K	5%	1/6W	
R1579	1-247-865-00	CARBON	27K	5%	1/6W	
R1580	1-247-775-00	CARBON	4.7	5%	1/6W	
R1581	1-247-775-00	CARBON	4.7	5%	1/6W	
R1583	1-247-871-00	CARBON	47K	5%	1/6W	
R1584	1-217-226-00	WIREWOUND	150	10%	2W	F
R1585	1-247-811-00	CARBON	150	5%	1/6W	
R1586	1-247-805-00	CARBON	82	5%	1/6W	
R1587	1-247-889-00	CARBON	270K	5%	1/6W	
R1588	1-247-831-00	CARBON	1K	5%	1/6W	
		VARIABLE RESISTOR				
RV1551	1-230-230-00	RES, ADJ, CERAMIC CARBON 1K				
RV1552	1-230-228-00	RES, ADJ, CERAMIC CARBON 330				
RV1553	1-228-824-00	RES, ADJ, CERAMIC CARBON 10K				
RV1554	1-228-824-00	RES, ADJ, CERAMIC CARBON 10K				
RV1555	1-230-229-00	RES, ADJ, CERAMIC CARBON 470				
RV1556	1-230-228-00	RES, ADJ, CERAMIC CARBON 330				
RV1557	1-230-227-00	RES, ADJ, CERAMIC CARBON 220				
RV1558	1-230-230-00	RES, ADJ, CERAMIC CARBON 1K				
RV1559	1-228-824-00	RES, ADJ, CERAMIC CARBON 10K				
RV1560	1-230-237-00	RES, ADJ, CERAMIC CARBON 100K				
RV1561	1-230-237-00	RES, ADJ, CERAMIC CARBON 100K				
		THERMISTOR				
TH1551	1-800-625-00	THERMISTOR				
TH1552	1-806-110-00	THERMISTOR				

Ref.No.	Part No.	Description				Remark
	★:1-611-015-00	D2 BOARD ********				
		CAPACITOR				
C1891	⚠ 1-108-384-00	MYLAR	0.039MF	10%	100V	
		COIL				
L1892	⚠ 1-459-074-00	COIL, DUST CORE 6.8MMH(HCC)				
		TRANSFORMER				
T1892	⚠ 1-407-849-00	TRANSFORMER, D.F				
	★:1-611-631-11	D3 BOARD ********				
		CAPACITOR				
C1591	1-108-375-00	MYLAR	0.0068MF	10%	100V	
C1592	1-102-980-00	CERAMIC	270PF	5%	50V	
		TRANSISTOR				
Q1591	8-729-245-83	TRANSISTOR 2SC2458				
		RESISTOR				
R1591	1-247-893-00	CARBON	390K	5%	1/6W	
R1592	1-247-851-00	CARBON	6.8K	5%	1/6W	
R1593	1-247-833-00	CARBON	1.2K	5%	1/6W	
	★:A-1345-439-A	D BOARD, SUB, COMPLETE **********				
	1-536-813-00	TERMINAL BOARD, INPUT OUTPUT				
	★:3-646-071-00	HOLDER, WIRE				
	3-701-748-00	CLAMP				
	4-343-134-00	RETAINER, AC CORD				
	★:4-363-404-00	HOLDER, IC				
	4-363-414-00	SPACER, MICA				
	★:4-368-658-01	INSULATOR (H)				
	★:4-368-659-01	INSULATOR (R)				
		CAPACITOR				
C002	1-123-381-00	ELECT	2.2MF	20%	50V	
C003	1-102-973-00	CERAMIC	100PF	5%	50V	
C004	1-108-389-00	MYLAR	0.1MF	10%	100V	
C005	1-123-356-00	ELECT	10MF	20%	50V	
C006	1-102-959-00	CERAMIC	22PF	5%	50V	
C007	1-102-963-00	CERAMIC	33PF	5%	50V	
C008	1-123-356-00	ELECT	10MF	20%	50V	
C009	1-102-114-00	CERAMIC	470PF	10%	50V	
C010	1-123-328-00	ELECT	4.7MF	20%	25V	
C012	1-101-004-00	CERAMIC	0.01MF		50V	

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

D

Ref.No.	Part No.	Description				Remark
C015	1-123-333-00	ELECT	100MF	20%	16V	
C016	1-101-810-00	CERAMIC	100PF	5%	500V	
C018	1-108-389-00	MYLAR	0.1MF	10%	100V	
C019	1-123-332-00	ELECT	47MF	20%	25V	
C020	1-102-030-00	CERAMIC	330PF	10%	500V	
C021A	1-123-307-00	ELECT	100MF	20%	10V	
C022	1-102-125-00	CERAMIC	0.0047MF	10%	50V	
C050	1-123-381-00	ELECT	2.2MF	20%	50V	
C201	1-108-389-00	MYLAR	0.1MF	10%	100V	
C202	1-108-389-00	MYLAR	0.1MF	10%	100V	
C203	1-108-389-00	MYLAR	0.1MF	10%	100V	
C204	1-123-356-00	ELECT	10MF	20%	16V	
C205	1-123-356-00	ELECT	10MF	20%	16V	
C206	1-123-318-00	ELECT	33MF	20%	16V	
C208	1-123-380-00	ELECT	1MF	20%	50V	
C209	1-102-114-00	CERAMIC	470PF	10%	50V	
C210	1-102-074-00	CERAMIC	0.001MF	10%	50V	
C211	1-123-380-00	ELECT	1MF	20%	50V	
C212	1-102-114-00	CERAMIC	470PF	10%	50V	
C213	1-102-074-00	CERAMIC	0.001MF	10%	50V	
C214	1-123-309-00	ELECT	330MF	20%	10V	
C215	1-123-332-00	ELECT	47MF	20%	16V	
C216	1-108-383-00	MYLAR	0.033MF	10%	100V	
C217	1-123-356-00	ELECT	10MF	20%	16V	
C218	1-123-332-00	ELECT	47MF	20%	16V	
C219	1-123-380-00	ELECT	1MF	20%	50V	
C220	1-123-380-00	ELECT	1MF	20%	50V	
C221	1-108-367-00	MYLAR	0.0015MF	10%	100V	
C222	1-101-004-00	CERAMIC	0.01MF		50V	
C223	1-123-333-00	ELECT	100MF	20%	16V	
C249	1-123-379-00	ELECT	0.47MF	20%	50V	
C250	1-102-108-00	CERAMIC	150PF	10%	50V	
C251	1-123-380-00	ELECT	1MF	20%	50V	
C252	1-123-380-00	ELECT	1MF	20%	50V	
C253	1-123-380-00	ELECT	1MF	20%	50V	
C254	1-123-380-00	ELECT	1MF	20%	50V	
C255	1-123-380-00	ELECT	1MF	20%	50V	
C256	1-108-373-00	MYLAR	0.0047MF	10%	100V	
C257	1-108-390-00	MYLAR	0.12MF	10%	100V	
C258	1-108-373-00	MYLAR	0.0047MF	10%	100V	
C259	1-108-390-00	MYLAR	0.12MF	10%	100V	
C260	1-123-323-00	ELECT	470MF	20%	16V	
C261	1-123-379-00	ELECT	0.47MF	20%	50V	
C262	1-108-383-00	MYLAR	0.033MF	10%	100V	
C263	1-102-114-00	CERAMIC	470PF	10%	50V	
C264	1-123-330-00	ELECT	22MF	20%	16V	
C265	1-123-379-00	ELECT	0.47MF	20%	50V	
C266	1-102-108-00	CERAMIC	150PF	10%	50V	
C267	1-123-379-00	ELECT	0.47MF	20%	50V	
C268	1-102-114-00	CERAMIC	470PF	10%	50V	
C269	1-123-379-00	ELECT	0.47MF	20%	50V	
C270	1-123-330-00	ELECT	22MF	20%	16V	
C271	1-123-379-00	ELECT	0.47MF	20%	50V	

Ref.No.	Part No.	Description				Remark
C272	1-108-389-00	MYLAR	0.1MF	10%	100V	
C273	1-123-359-00	ELECT	47MF	20%	50V	
C274	1-123-364-00	ELECT	1000MF	20%	50V	
C276	1-123-359-00	ELECT	47MF	20%	50V	
C277	1-108-389-00	MYLAR	0.1MF	10%	100V	
C278	1-123-364-00	ELECT	1000MF	20%	50V	
C279	1-123-331-00	ELECT	33MF	20%	25V	
C280	1-123-364-00	ELECT	1000MF	20%	50V	
C281	1-123-360-00	ELECT	100MF	20%	50V	
C288	1-108-381-00	MYLAR	0.022MF	10%	100V	
C289	1-108-381-00	MYLAR	0.022MF	10%	100V	
C290	1-123-331-00	ELECT	33MF	20%	25V	
C291	1-123-331-00	ELECT	33MF	20%	25V	
C301	1-102-809-00	CERAMIC	7PF	1PF	50V	
C302	1-102-809-00	CERAMIC	7PF	1PF	50V	
C304	1-101-006-00	CERAMIC	0.047MF		50V	
C305	1-101-006-00	CERAMIC	0.047MF		50V	
C307	1-102-971-00	CERAMIC	82PF	5%	50V	
C308	1-123-356-00	ELECT	10MF	20%	16V	
C309	1-102-113-00	CERAMIC	390PF	10%	50V	
C310	1-101-004-00	CERAMIC	0.01MF		50V	
C311	1-123-323-00	ELECT	470MF	20%	16V	
C312	1-123-286-00	ELECT	0.33MF	20%	50V	
C313	1-123-328-00	ELECT	4.7MF	20%	25V	
C314	1-123-381-00	ELECT	2.2MF	20%	50V	
C315	1-123-381-00	ELECT	2.2MF	20%	50V	
C316	1-101-880-00	CERAMIC	47PF	5%	50V	
C317	1-108-381-00	MYLAR	0.022MF	10%	100V	
C318	1-131-345-00	TANTALUM	0.47MF	20%	35V	
C319	1-123-330-00	ELECT	22MF	20%	16V	
C320	1-123-380-00	ELECT	1MF	20%	50V	
C321	1-131-345-00	TANTALUM	0.47MF	20%	35V	
C322	1-131-345-00	TANTALUM	0.47MF	20%	35V	
C323	1-102-110-00	CERAMIC	220PF	10%	50V	
C324	1-102-110-00	CERAMIC	220PF	10%	50V	
C325	1-130-640-00	FILM	0.47MF	5%	50V	
C326	1-130-640-00	FILM	0.47MF	5%	50V	
C327	1-121-705-00	ELECT	2.2MF	30%	25V	
C328	1-102-973-00	CERAMIC	100PF	5%	50V	
C329	1-101-004-00	CERAMIC	0.01MF		50V	
C331	1-102-129-00	CERAMIC	0.01MF	10%	50V	
C332	1-102-973-00	CERAMIC	100PF	5%	50V	
C333	1-123-318-00	ELECT	33MF	20%	16V	
C334	1-123-356-00	ELECT	10MF	20%	16V	
C335	1-130-640-00	FILM	0.47MF	5%	50V	
C336	1-102-858-00	CERAMIC	10PF	0.5PF	50V	
C337	1-102-888-00	CERAMIC	150PF	5%	50V	
C337A	1-102-676-00	CERAMIC	68PF	5%	50V	
C338	1-102-884-00	CERAMIC	33PF	5%	50V	
C339	1-102-959-00	CERAMIC	22PF	5%	50V	
C340	1-102-945-00	CERAMIC	8PF	1PF	50V	
C341	1-102-947-00	CERAMIC	10PF	5%	50V	
C343	1-102-973-00	CERAMIC	100PF	5%	50V	

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Ref.No.	Part No.	Description			Remark
C344	1-123-379-00	ELECT	0.47MF	20%	50V
C345	1-130-634-00	FILM	0.15MF	5%	50V
C346	1-123-333-00	ELECT	100MF	20%	16V
C503	1-108-377-00	MYLAR	0.01MF	10%	100V
C504	1-130-019-00	FILM	0.0012MF	5%	50V
C505	1-108-385-00	MYLAR	0.047MF	10%	100V
C506	1-123-296-00	ELECT	220MF	20%	6.3V
C507	1-123-321-00	ELECT	220MF	20%	16V
C508	1-130-635-00	FILM	0.18MF	5%	50V
C509	1-123-356-00	ELECT	10MF	20%	16V
C510	1-123-330-00	ELECT	22MF	20%	16V
C511	1-123-381-00	ELECT	2.2MF	20%	50V
C512	1-102-108-00	CERAMIC	150PF	10%	50V
C513	1-123-380-00	ELECT	1MF	20%	50V
C514	1-130-640-00	FILM	0.47MF	5%	50V
C515	1-123-337-00	ELECT	1000MF	20%	25V
C516	1-108-371-00	MYLAR	0.0033MF	10%	100V
C517	1-131-371-00	TANTALUM	10MF	10%	16V
C518	1-108-389-00	MYLAR	0.1MF	10%	100V
C519	1-108-365-00	MYLAR	0.001MF	10%	100V
C520	1-123-333-00	ELECT	100MF	20%	25V
C521	1-108-377-00	MYLAR	0.01MF	10%	100V
C522	1-123-333-00	ELECT	100MF	20%	16V
C525	1-123-330-00	ELECT	22MF	20%	16V
C526	1-123-360-00	ELECT	100MF	20%	50V
C527	1-108-373-00	MYLAR	0.0047MF	10%	100V
C529	1-123-318-00	ELECT	33MF	20%	16V
C530	1-108-367-00	MYLAR	0.0015MF	10%	100V
C531	1-123-356-00	ELECT	10MF	20%	16V
C532	1-123-319-00	ELECT	47MF	20%	16V
C533	1-123-379-00	ELECT	0.47MF	20%	50V
C591	1-130-640-00	FILM	0.47MF	5%	50V
C602 ⚠	1-108-747-00	MYLAR	0.1MF	20%	300V
C605 ⚠	1-161-738-00	CERAMIC	0.0047MF	20%	400V
C606 ⚠	1-161-738-00	CERAMIC	0.0047MF	20%	400V
C607 ⚠	1-161-964-00	CERAMIC	0.0047MF		250V
C608 ⚠	1-161-964-00	CERAMIC	0.0047MF		250V
C609	1-161-964-00	CERAMIC	0.0047MF		250V
C610	1-125-167-00	ELECT(BLOCK)	250MF		400V
C611	1-108-381-00	MYLAR	0.022MF	10%	100V
C612	1-136-064-00	FILM	0.002MF	3%	2KV
C613	1-123-381-00	ELECT	2.2MF	20%	100V
C615	1-123-354-00	ELECT	3.3MF	20%	50V
C616	1-102-121-00	CERAMIC	0.0022MF	10%	50V
C617	1-123-354-00	ELECT	3.3MF	20%	50V
C618	1-108-409-00	MYLAR	0.001MF	10%	200V
C651	1-102-155-00	CERAMIC	330PF	20%	2KV
C652	1-124-347-00	ELECT	100MF	20%	160V
C653	1-123-372-00	ELECT	33MF	20%	50V
C654	1-123-364-00	ELECT	1000MF	20%	50V
C656	1-123-606-00	ELECT	1000MF	20%	25V
C657	1-123-311-00	ELECT	1000MF	20%	10V
C659	1-123-354-00	ELECT	3.3MF	20%	50V

Ref.No.	Part No.	Description			Remark
C660	1-123-380-00	ELECT	1MF	20%	50V
C661	1-108-374-00	MYLAR	0.0056MF	10%	100V
C662	1-130-022-00	FILM	0.0022MF	5%	50V
C663	1-123-330-00	ELECT	22MF	20%	16V
C664	1-123-354-00	ELECT	3.3MF	20%	50V
C666	1-101-810-00	CERAMIC	100PF	5%	500V
C801	1-102-038-00	CERAMIC	0.001MF		500V
C802	1-108-417-00	MYLAR	0.0047MF	10%	200V
C803	1-102-327-00	CERAMIC	330PF	15%	1.5KV
C804	1-161-754-00	CERAMIC	0.001MF	10%	3KV
C805	1-108-423-00	MYLAR	0.015MF	10%	200V
C806	1-129-722-00	FILM	0.047MF	10%	630V
C807	1-136-186-00	FILM	2.4MF	5%	200V
C808	1-136-116-00	FILM	1MF	5%	200V
C810	1-108-377-00	MYLAR	0.01MF	10%	100V
C811	1-123-379-00	ELECT	0.47MF	20%	50V
C812	1-102-223-00	CERAMIC	0.0047MF	10%	2KV
C813	1-108-389-00	MYLAR	0.1MF	10%	100V
C814	1-123-005-00	ELECT	22MF		250V
C815	1-123-348-00	ELECT	470MF	20%	35V
C816	1-102-030-00	CERAMIC	330PF	10%	500V
C818	1-130-894-00	FILM	0.022MF	3%	1.2KV
C819	1-129-704-00	FILM	0.0015MF	10%	630V
C824	1-108-381-00	MYLAR	0.022MF	10%	100V
C825	1-136-184-00	MYLAR	0.68MF	10%	250V
C826	1-108-365-00	MYLAR	0.001MF	10%	100V

FILTER

CF001	1-527-790-00	OSCILLATOR, CERAMIC

CONNECTOR

CN201	1-561-534-00	SOCKET, PIN 21P

TRIMMER

CV301	1-141-181-11	CAP, TRIMMER

CONNECTOR

D1	:1-560-288-00	PLUG, CONNECTOR (2.5MM PITCH)
D2	:1-560-290-00	PLUG, CONNECTOR (2.5MM PITCH)
D3	:1-560-123-00	PLUG, CONNECTOR (2.5MM) 3P
D4	:1-560-129-00	PLUG, CONNECTOR (2.5MM) 9P
D5	:1-506-348-XX	3P PLUG (L)
D6	:1-560-290-00	PLUG, CONNECTOR (2.5MM PITCH)
D8	:1-560-156-00	PLUG, CONNECTOR (2.5MM PITCH)
D9	:1-560-123-00	PLUG, CONNECTOR (2.5MM) 3P
D10	:1-508-765-00	3P PLUG (M)
D12	:1-508-786-00	2P PLUG (M)
D14	:1-560-127-00	PLUG, CONNECTOR (2.5MM) 7P
D15	:1-560-290-00	PLUG, CONNECTOR (2.5MM PITCH)
D16	:1-560-290-00	PLUG, CONNECTOR (2.5MM PITCH)
D17	:1-560-126-00	PLUG, CONNECTOR (2.5MM) 6P
D18	:1-560-126-00	PLUG, CONNECTOR (2.5MM) 6P

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

Ref.No.	Part No.	Description				Remark
R119	1-247-823-00	METAL	470	5%	1/6W	
R120	1-247-871-00	METAL	47K	5%	1/6W	
R122	1-247-855-00	METAL	10K	5%	1/6W	
R123	1-247-861-00	METAL	18K	5%	1/6W	
R124	1-247-857-00	METAL	12K	5%	1/6W	
R125	1-247-829-00	METAL	820	5%	1/6W	
R126	1-247-829-00	METAL	820	5%	1/6W	
R127	1-247-829-00	METAL	820	5%	1/6W	
R129	1-247-886-00	METAL	200K	5%	1/6W	
R131	1-247-871-00	METAL	47K	5%	1/6W	
R132	1-247-855-00	METAL	10K	5%	1/6W	
R134	1-247-875-00	METAL	68K	5%	1/6W	
R135	1-247-873-00	METAL	56K	5%	1/6W	
R136	1-247-863-00	METAL	22K	5%	1/6W	
R137	1-247-863-00	METAL	22K	5%	1/6W	
R151	1-247-831-00	METAL	1K	5%	1/6W	
R152	1-247-869-00	METAL	39K	5%	1/6W	
R153	1-247-821-00	METAL	390	5%	1/6W	
R155	1-247-863-00	METAL	22K	5%	1/6W	
R156	1-247-877-00	METAL	82K	5%	1/6W	
R157	1-247-833-00	METAL	1.2K	5%	1/6W	
R158	1-247-833-00	METAL	1.2K	5%	1/6W	
R159	1-247-847-00	METAL	4.7K	5%	1/6W	
R160	1-247-847-00	METAL	4.7K	5%	1/6W	
R161	1-247-847-00	METAL	4.7K	5%	1/6W	
R162	1-247-847-00	METAL	4.7K	5%	1/6W	
R166	1-247-843-00	METAL	3.3K	5%	1/6W	
R167	1-247-867-00	METAL	33K	5%	1/6W	
R168	1-247-863-00	METAL	22K	5%	1/6W	
R172	1-247-813-00	METAL	180	5%	1/6W	
R173	1-247-871-00	METAL	47K	5%	1/6W	
R174	1-247-889-00	METAL	270K	5%	1/6W	
R175	1-247-865-00	METAL	27K	5%	1/6W	
R176	1-247-831-00	METAL	1K	5%	1/6W	
R177	1-247-855-00	METAL	10K	5%	1/6W	
R178	1-247-855-00	METAL	10K	5%	1/6W	
R179	1-247-855-00	METAL	10K	5%	1/6W	
R180	1-247-831-00	METAL	1K	5%	1/6W	
R181	1-247-833-00	METAL	1.2K	5%	1/6W	
R182	1-247-839-00	METAL	2.2K	5%	1/6W	
R183	1-247-831-00	METAL	1K	5%	1/6W	
R184	1-247-817-00	METAL	270	5%	1/6W	
R185	1-247-819-00	METAL	330	5%	1/6W	
R186	1-247-861-00	METAL	18K	5%	1/6W	
R188	1-247-159-00	METAL	15K	5%	1/4W	

VARIABLE RESISTOR

RV101	1-228-727-00	RES, ADJ, CERAMIC CARBON 47K
RV151	1-228-726-00	RES, ADJ, CERAMIC CARBON 33K

FILTER

SWF101	1-404-438-00	FILTER, SAW

Ref.No.	Part No.	Description	Remark

TUNER

TU101⚠	1-463-421-21	TUNER, ET (BT-883)

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♣:A-1330-470-A	C BOARD, COMPLETE	
	**********	
1-526-644-41	SOCKET, CRT	

CONNECTOR

C1	♣:1-508-765-00	3P PLUG (M)
C2	♣:1-560-290-00	PLUG, CONNECTOR (2.5MM PITCH)
C3	♣:1-560-123-00	PLUG, CONNECTOR (2.5MM) 3P

CAPACITOR

C701	1-102-973-00	CERAMIC	100PF	5%	50V
C702	1-102-973-00	CERAMIC	100PF	5%	50V
C703	1-102-973-00	CERAMIC	100PF	5%	50V
C704	1-121-759-00	ELECT	4.7MF		250V
C705	1-102-249-00	CERAMIC	680PF	20%	2KV
C706	1-129-779-00	FILM	0.022MF	20%	1KV
C707	1-123-383-00	ELECT	4.7MF	20%	100V
C708	1-123-333-00	ELECT	100MF	20%	25V
C711	1-123-356-00	ELECT	10MF	20%	50V
C751	1-101-361-00	CERAMIC	150PF	5%	50V
C752	1-106-178-00	MYLAR	0.0018MF	10%	100V
C753	1-108-377-00	MYLAR	0.01MF	10%	100V
C754	1-108-377-00	MYLAR	0.01MF	10%	100V
C757	1-108-389-00	MYLAR	0.1MF	10%	100V
C759	1-123-356-00	ELECT	10MF	20%	50V
C760	1-123-358-00	ELECT	33MF	20%	50V
C761	1-101-006-00	CERAMIC	0.047MF		50V

DIODE

D701	8-719-104-10	DIODE 1SS99
D702	8-719-104-10	DIODE 1SS99
D703	8-719-104-10	DIODE 1SS99
D704	8-719-100-68	DIODE RD13E-B2
D705	8-719-911-19	DIODE 1SS119
D706	8-719-911-19	DIODE 1SS119
D707	8-719-911-19	DIODE 1SS119
D708	8-719-911-19	DIODE 1SS119
D709	8-719-911-19	DIODE 1SS119
D710	8-719-911-19	DIODE 1SS119
D711	8-719-911-19	DIODE 1SS119

COIL

L751	1-408-413-00	MICRO INDUCTOR 22UH

NEON LAMP

NL701	1-519-108-XX	LAMP, NEON ASSY

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

C H1

Ref.No.	Part No.	Description				Remark
		TRANSISTOR				
Q701	8-729-245-83	TRANSISTOR 2SC2458				
Q702	8-729-245-83	TRANSISTOR 2SC2458				
Q703	8-729-245-83	TRANSISTOR 2SC2458				
Q704	8-729-322-78	TRANSISTOR 2SC2278				
Q705	8-729-322-78	TRANSISTOR 2SC2278				
Q706	8-729-322-78	TRANSISTOR 2SC2278				
Q707	8-729-255-12	TRANSISTOR 2SC2551				
Q708	8-729-255-12	TRANSISTOR 2SC2551				
Q709	8-729-255-12	TRANSISTOR 2SC2551				
Q710	8-729-200-17	TRANSISTOR 2SA1091				
Q711	8-729-200-17	TRANSISTOR 2SA1091				
Q712	8-729-200-17	TRANSISTOR 2SA1091				
Q713	8-729-245-83	TRANSISTOR 2SC2458				
Q751	8-729-245-83	TRANSISTOR 2SC2458				
Q752	8-729-245-83	TRANSISTOR 2SC2458				
Q753	8-729-103-43	TRANSISTOR 2SB734-4				
Q754	8-729-177-43	TRANSISTOR 2SD774-4				
		RESISTOR				
R701	1-247-855-00	CARBON	10K	5%	1/6W	
R702	1-247-855-00	CARBON	10K	5%	1/6W	
R703	1-247-855-00	CARBON	10K	5%	1/6W	
R704	1-247-837-00	CARBON	1.8K	5%	1/6W	
R705	1-247-837-00	CARBON	1.8K	5%	1/6W	
R706	1-247-837-00	CARBON	1.8K	5%	1/6W	
R707	1-247-855-00	CARBON	10K	5%	1/6W	
R708	1-247-855-00	CARBON	10K	5%	1/6W	
R709	1-247-855-00	CARBON	10K	5%	1/6W	
R710	1-247-826-00	CARBON	620	5%	1/6W	
R711	1-247-826-00	CARBON	620	5%	1/6W	
R712	1-247-826-00	CARBON	620	5%	1/6W	
R713	1-206-692-00	METAL OXIDE	15K	5%	2W	F
R714	1-206-692-00	METAL OXIDE	15K	5%	2W	F
R715	1-206-692-00	METAL OXIDE	15K	5%	2W	F
R716	1-247-038-00	CARBON	560	5%	1/8W	F
R717	1-247-038-00	CARBON	560	5%	1/8W	F
R718	1-247-038-00	CARBON	560	5%	1/8W	F
R719	1-213-163-00	METAL OXIDE	47K	5%	1W	F
R720	1-213-163-00	METAL OXIDE	47K	5%	1W	F
R721	1-213-163-00	METAL OXIDE	47K	5%	1W	F
R722	1-202-824-00	SOLID	3.3K		1/2W	
R723	1-202-824-00	SOLID	3.3K		1/2W	
R724	1-202-824-00	SOLID	3.3K		1/2W	
R725	1-246-497-00	CARBON	10K	5%	1/4W	
R726	1-214-964-00	METAL	1M	1%	1/4W	
R727	1-246-497-00	CARBON	10K	5%	1/4W	
R728	1-214-960-00	METAL	680K	1%	1/4W	
R729	1-214-788-00	METAL	300K	1%	1/4W	
R730	1-202-838-00	SOLID	100K		1/2W	
R731	1-202-631-00	SOLID	270K		1/2W	
R732	1-202-609-00	SOLID	33K		1/2W	
R733	1-202-719-00	SOLID	1M	10%	1/2W	
R734	1-202-609-00	SOLID	33K		1/2W	
R735	1-202-629-00	SOLID	220K		1/2W	
R736	1-202-846-00	SOLID	470K		1/2W	
R737	1-247-813-00	CARBON	180	5%	1/6W	
R738	1-246-477-00	CARBON	1.5K	5%	1/4W	
R739	1-246-497-00	CARBON	10K	5%	1/4W	
R740	1-207-451-00	WIREWOUND	0.1	10%	1/2W	
R746	1-247-871-00	CARBON	47K	5%	1/6W	
R747	1-247-855-00	CARBON	10K	5%	1/6W	
R751	1-247-833-00	CARBON	1.2K	5%	1/6W	
R752	1-247-849-00	CARBON	5.6K	5%	1/6W	
R753	1-247-825-00	CARBON	560	5%	1/6W	
R754	1-247-865-00	CARBON	27K	5%	1/6W	
R755	1-247-807-00	CARBON	100	5%	1/6W	
R756	1-247-835-00	CARBON	1.5K	5%	1/6W	
R757	1-247-807-00	CARBON	100	5%	1/6W	
R758	1-247-815-00	CARBON	220	5%	1/6W	
R759	1-247-815-00	CARBON	220	5%	1/6W	
R760	1-247-819-00	CARBON	330	5%	1/6W	
R761	1-247-855-00	CARBON	10K	5%	1/6W	
R762	1-247-895-00	CARBON	470K	5%	1/6W	
R763	1-247-855-00	CARBON	10K	5%	1/6W	
R764	1-246-981-00	CARBON	4.7	5%	1/8W	F
R765	1-246-981-00	CARBON	4.7	5%	1/8W	F
R766	1-247-833-00	CARBON	1.2K	5%	1/6W	
R767	1-247-837-00	CARBON	1.8K	5%	1/6W	
R768	1-247-801-00	CARBON	56	5%	1/6W	
R769	1-212-889-00	FUSIBLE	220	5%	1/4W	F
		VARIABLE RESISTOR				
RV701	1-228-721-00	RES, ADJ, CERAMIC CARBON 2.2K				
RV702	1-228-721-00	RES, ADJ, CERAMIC CARBON 2.2K				
RV703	1-226-157-00	RES, ADJ, METAL GLAZE 1M				
		SPARK GAP				
SG701	1-519-063-XX	DISCHARGING GAP				
SG702	1-519-063-XX	DISCHARGING GAP				
SG703	1-519-063-XX	DISCHARGING GAP				

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◆:	1-611-013-00	H1 BOARD
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		CAPACITOR
C401	1-123-617-00	ELECT 10MF 20% 16V
C402	1-123-617-00	ELECT 10MF 20% 16V
		DIODE
D401	8-719-911-19	DIODE 1SS119
D402	8-719-911-19	DIODE 1SS119
D403	8-719-911-19	DIODE 1SS119
D404	8-719-911-19	DIODE 1SS119

Ref.No.	Part No.	Description	Remark
D19	⚠:1-564-346-00	CONNECTOR, BOARD TO BOARD 18P	
D20	⚠:1-564-346-00	CONNECTOR, BOARD TO BOARD 18P	
D21	⚠:1-560-123-00	PLUG, CONNECTOR (2.5MM PITCH)	
D22	⚠:1-560-127-00	PLUG, CONNECTOR (2.5MM PITCH)	
D23	⚠:1-560-124-00	PLUG, CONNECTOR (2.5MM PITCH)	
D24	⚠:1-508-784-00	1P PLUG	
D32	⚠:1-560-290-00	PLUG, CONNECTOR (2.5MM PITCH)	
		DIODE	
D001	8-719-911-19	DIODE 1SS119	
D002	8-719-911-19	DIODE 1SS119	
D004	8-719-911-19	DIODE 1SS119	
D005	8-759-157-40	IC UPC574J	
D006	8-719-101-02	DIODE RD30E-B4	
D008	8-719-911-19	DIODE 1SS119	
D009	8-719-101-35	DIODE RD3.0E-L2	
D010	8-719-911-19	DIODE 1SS119	
D060	8-719-911-19	DIODE 1SS119	
D061	8-719-100-35	DIODE RD5.6E-B2	
D201	8-719-911-19	DIODE 1SS119	
D202	8-719-911-19	DIODE 1SS119	
D203	8-719-911-19	DIODE 1SS119	
D204	8-719-911-19	DIODE 1SS119	
D205	8-719-911-19	DIODE 1SS119	
D206	8-719-911-19	DIODE 1SS119	
D208	8-719-100-66	DIODE RD12E-B3	
D251	8-719-100-43	DIODE RD7.5E-B1	
D252	8-719-911-19	DIODE 1SS119	
D253	8-719-911-19	DIODE 1SS119	
D301	8-719-911-19	DIODE 1SS119	
D302	8-719-026-11	DIODE 1T261	
D303	8-719-911-19	DIODE 1SS119	
D307	8-719-911-19	DIODE 1SS119	
D308	8-719-911-19	DIODE 1SS119	
D309	8-719-911-19	DIODE 1SS119	
D501	8-719-911-55	DIODE U05G	
D502	8-719-906-98	DIODE EQA01-22R2	
D503	8-719-992-42	DIODE EQA01-24R2	
D504	8-719-102-78	DIODE RD6.8E-N2	
D506	8-719-911-19	DIODE 1SS119	
D507	8-719-911-19	DIODE 1SS119	
D508	8-719-911-19	DIODE 1SS119	
D601	8-719-503-06	DIODE S3WB60Z	
D602	8-719-924-06	DIODE ERC24-06S	
D603	8-719-911-19	DIODE 1SS119	
D651	8-719-928-08	DIODE ERD28-08	
D652	8-719-924-06	DIODE ERC24-06S	
D653	8-719-901-93	DIODE V19E	
D654	8-719-300-59	DIODE CTU12S	
D655	8-719-901-93	DIODE V19E	
D656	8-719-982-04	DIODE ERB81-004	
D657	8-719-102-68	DIODE RD5.1E-N2	
D659	8-719-911-19	DIODE 1SS119	

Ref.No.	Part No.	Description	Remark
D661	8-719-102-78	DIODE RD6.8E-N2	
D801	8-719-900-26	DIODE ERD29-08J	
D802	8-719-903-09	DIODE V30M	
D803	8-719-924-06	DIODE ERC24-06S	
D804	8-719-901-93	DIODE V19E	
D805	8-719-305-15	DIODE GH3F	
D806	8-719-305-15	DIODE GH3F	
D810	8-719-907-40	DIODE ERB43-02	
		DELAY LINE	
DL301	1-415-336-00	DELAY LINE, Y	
DL302	1-415-122-31	DELAY LINE	
		CONNECTOR	
DY1	⚠:1-508-765-00	3P PLUG (M)	
DY2	⚠:1-508-765-00	3P PLUG (M)	
DY3	⚠:1-508-766-00	4P PLUG (M)	
		IC	
IC001	8-759-600-63	IC CX519-004P	
IC002	8-759-600-66	IC M58653P	
IC201	8-759-340-53	IC HD14053BP	
IC251	8-759-276-30	IC TA7630P	
IC252	8-749-943-62	IC STK-4362	
IC301	6-066-720-60	IC TDA3562A	
IC551	8-759-907-56	IC TDA2578A	
IC552	8-759-907-57	IC TDA3652	
IC651	8-759-100-75	IC UPC1394C	
		COIL	
L251	1-408-300-00	MICRO INDUCTOR 6.8UH	
L252	1-408-300-00	MICRO INDUCTOR 6.8UH	
L301	1-404-495-00	COIL	
L302	1-408-421-00	MICRO INDUCTOR 100UH	
L304	1-408-408-00	MICRO INDUCTOR 8.2UH	
L305	1-408-227-00	MICRO INDUCTOR 470UH	
L306	1-404-494-00	COIL	
L307	1-404-498-00	COIL	
L308	1-408-415-00	MICRO INDUCTOR 33UH	
L309	1-408-414-00	MICRO INDUCTOR 27UH	
L601	1-407-365-00	COIL, CHOKE 0.7UH	
L651	1-425-613-00	COIL, AIR-CORE, QF TYPE	
L652	1-459-442-00	COIL (WITH CORE)	
L801	1-407-365-00	COIL, CHOKE 0.7UH	
L802	1-408-225-00	MICRO INDUCTOR 3.3UH	
L803	1-459-224-00	HLC	
L804	1-421-390-00	COIL, FERRITE (PMC)	
L805	1-408-239-00	MICRO INDUCTOR 4.7MMH	
L806	1-421-329-00	COIL, CHOKE	
L807	1-408-225-00	MICRO INDUCTOR 3.3UH	
L808	1-407-365-00	COIL, CHOKE 0.7UH	
L809	1-459-115-00	COIL, DCC-H	
L810	1-408-240-00	MICRO INDUCTOR 6.8MMH	

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Ref.No.	Part No.	Description	Remark
L811	1-407-365-00	COIL, CHOKE	
L891	1-459-443-00	COIL, FERRITE	
		TRANSISTOR	
Q001	8-729-204-83	TRANSISTOR 2SA1048-GR	
Q002	8-729-204-83	TRANSISTOR 2SA1048-GR	
Q003	8-729-245-83	TRANSISTOR 2SC2458	
Q004	8-729-245-83	TRANSISTOR 2SC2458	
Q006	8-729-245-83	TRANSISTOR 2SC2458	
Q007	8-724-375-01	TRANSISTOR 2SC403C	
Q008	8-729-245-83	TRANSISTOR 2SC2458	
Q009	8-729-245-83	TRANSISTOR 2SC2458	
Q011	8-729-245-83	TRANSISTOR 2SC2458	
Q012	8-729-245-83	TRANSISTOR 2SC2458	
Q201	8-729-204-83	TRANSISTOR 2SA1048-GR	
Q202	8-729-245-83	TRANSISTOR 2SC2458	
Q203	8-729-204-83	TRANSISTOR 2SA1048-GR	
Q204	8-729-245-83	TRANSISTOR 2SC2458	
Q205	8-729-245-83	TRANSISTOR 2SC2458	
Q206	8-729-204-83	TRANSISTOR 2SA1048-GR	
Q207	8-729-204-83	TRANSISTOR 2SA1048-GR	
Q208	8-729-204-83	TRANSISTOR 2SA1048-GR	
Q251	8-729-245-83	TRANSISTOR 2SC2458	
Q252	8-729-245-83	TRANSISTOR 2SC2458	
Q253	8-729-245-83	TRANSISTOR 2SC2458	
Q254	8-729-245-83	TRANSISTOR 2SC2458	
Q301	8-729-245-83	TRANSISTOR 2SC2458	
Q302	8-765-222-20	TRANSISTOR 2SC1963	
Q303	8-729-245-83	TRANSISTOR 2SC2458	
Q304	8-729-245-83	TRANSISTOR 2SC2458	
Q305	8-729-245-83	TRANSISTOR 2SC2458	
Q306	8-729-245-83	TRANSISTOR 2SC2458	
Q307	8-729-245-83	TRANSISTOR 2SC2458	
Q308	8-729-245-83	TRANSISTOR 2SC2458	
Q309	8-729-245-83	TRANSISTOR 2SC2458	
Q310	8-729-245-83	TRANSISTOR 2SC2458	
Q311	8-729-245-83	TRANSISTOR 2SC2458	
Q312	8-729-245-83	TRANSISTOR 2SC2458	
Q313	8-729-245-83	TRANSISTOR 2SC2458	
Q314	8-729-900-36	TRANSISTOR DTC124ES	
Q501	8-729-204-83	TRANSISTOR 2SA1048-GR	
Q502	8-729-204-83	TRANSISTOR 2SA1048-GR	
Q602	8-729-213-12	TRANSISTOR 2SC2230A	
Q603	8-729-301-00	TRANSISTOR 2SD1497-02	
Q654	8-729-245-83	TRANSISTOR 2SC2458	
Q655	8-729-109-53	TRANSISTOR 2SD795A	
Q656	8-729-245-83	TRANSISTOR 2SC2458	
Q801	8-729-323-82	TRANSISTOR 2SD1138-02-C	
Q802	8-729-300-90	TRANSISTOR 2SD1497-06	
Q803	8-726-400-02	THYRISTOR SG264A	
	2-825-006-00	SPACER, MICA, Q803	
	3-703-320-00	BUSHING (A), TRANSISTOR, Q803	
▲	4-309-762-00	RETAINER (MD-17), TRANSISTOR, Q803	

Ref.No.	Part No.	Description				Remark
		RESISTOR				
R001	1-247-831-00	CARBON	1K	5%	1/6W	
R002	1-247-831-00	CARBON	1K	5%	1/6W	
R003	1-247-831-00	CARBON	1K	5%	1/6W	
R004	1-247-815-00	CARBON	220	5%	1/6W	
R005	1-247-815-00	CARBON	220	5%	1/6W	
R006	1-247-815-00	CARBON	220	5%	1/6W	
R007	1-247-815-00	CARBON	220	5%	1/6W	
R008	1-247-815-00	CARBON	220	5%	1/6W	
R009	1-247-815-00	CARBON	220	5%	1/6W	
R010	1-247-815-00	CARBON	220	5%	1/6W	
R011	1-247-815-00	CARBON	220	5%	1/6W	
R012	1-247-799-00	CARBON	47	5%	1/6W	
R013	1-247-815-00	CARBON	220	5%	1/6W	
R014	1-247-847-00	CARBON	4.7K	5%	1/6W	
R015	1-247-847-00	CARBON	4.7K	5%	1/6W	
R016	1-246-489-00	CARBON	4.7K	5%	1/4W	
R018	1-247-831-00	CARBON	1K	5%	1/6W	
R019	1-247-875-00	CARBON	68K	5%	1/6W	
R021	1-247-859-00	CARBON	15K	5%	1/6W	
R022	1-247-859-00	CARBON	15K	5%	1/6W	
R023	1-247-807-00	CARBON	100	5%	1/6W	
R024	1-246-501-00	CARBON	15K	5%	1/4W	
R025	1-247-863-00	CARBON	22K	5%	1/6W	
R027	1-247-863-00	CARBON	22K	5%	1/6W	
R028	1-247-863-00	CARBON	22K	5%	1/6W	
R029	1-247-863-00	CARBON	22K	5%	1/6W	
R030	1-247-863-00	CARBON	22K	5%	1/6W	
R031	1-247-863-00	CARBON	22K	5%	1/6W	
R032	1-247-863-00	CARBON	22K	5%	1/6W	
R033	1-247-863-00	CARBON	22K	5%	1/6W	
R034	1-247-863-00	CARBON	22K	5%	1/6W	
R035	1-247-863-00	CARBON	22K	5%	1/6W	
R037	1-247-831-00	CARBON	1K	5%	1/6W	
R038	1-247-841-00	CARBON	2.7K	5%	1/6W	
R039	1-247-807-00	CARBON	100	5%	1/6W	
R040	1-247-863-00	CARBON	22K	5%	1/6W	
R041	1-247-867-00	CARBON	33K	5%	1/6W	
R042	1-247-823-00	CARBON	470	5%	1/6W	
R043	1-247-823-00	CARBON	470	5%	1/6W	
R044	1-247-831-00	CARBON	1K	5%	1/6W	
R045	1-247-831-00	CARBON	1K	5%	1/6W	
R046	1-247-847-00	CARBON	4.7K	5%	1/6W	
R047	1-247-807-00	CARBON	100	5%	1/6W	
R048	1-247-871-00	CARBON	47K	5%	1/6W	
R049	1-247-863-00	CARBON	22K	5%	1/6W	
R050	1-247-831-00	CARBON	1K	5%	1/6W	
R051	1-247-831-00	CARBON	1K	5%	1/6W	
R052	1-247-831-00	CARBON	1K	5%	1/6W	
R053	1-247-883-00	CARBON	150K	5%	1/6W	
R055	1-247-847-00	CARBON	4.7K	5%	1/6W	
R056	1-247-859-00	CARBON	15K	5%	1/6W	

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Ref.No.	Part No.	Description				Remark
R057	1-246-497-00	CARBON	10K	5%	1/4W	
R060	1-247-819-00	CARBON	330	5%	1/6W	
R201	1-247-869-00	CARBON	39K	5%	1/6W	
R202	1-247-831-00	CARBON	1K	5%	1/6W	
R203	1-247-804-00	CARBON	75	5%	1/6W	
R204A	1-246-446-00	CARBON	75	5%	1/4W	
R205A	1-246-446-00	CARBON	75	5%	1/4W	
R206A	1-246-446-00	CARBON	75	5%	1/4W	
R207	1-247-867-00	CARBON	33K	5%	1/6W	
R208	1-247-863-00	CARBON	22K	5%	1/6W	
R209	1-246-489-00	CARBON	4.7K	5%	1/4W	
R210	1-246-489-00	CARBON	4.7K	5%	1/4W	
R211	1-247-853-00	CARBON	8.2K	5%	1/6W	
R212	1-247-821-00	CARBON	390	5%	1/6W	
R213	1-247-783-00	CARBON	10	5%	1/6W	
R214	1-247-811-00	CARBON	150	5%	1/6W	
R215	1-247-831-00	CARBON	1K	5%	1/6W	
R216	1-247-831-00	CARBON	1K	5%	1/6W	
R217	1-247-855-00	CARBON	10K	5%	1/6W	
R218	1-247-804-00	CARBON	75	5%	1/6W	
R219	1-247-031-00	CARBON	27	5%	1/8W	F
R220	1-247-831-00	CARBON	1K	5%	1/6W	
R221	1-247-831-00	CARBON	1K	5%	1/6W	
R224	1-247-823-00	CARBON	470	5%	1/6W	
R225	1-247-807-00	CARBON	100	5%	1/6W	
R226	1-247-807-00	CARBON	100	5%	1/6W	
R227	1-247-807-00	CARBON	100	5%	1/6W	
R228	1-247-807-00	CARBON	100	5%	1/6W	
R229	1-247-807-00	CARBON	100	5%	1/6W	
R230	1-246-497-00	CARBON	10K	5%	1/4W	
R231	1-247-831-00	CARBON	1K	5%	1/6W	
R232	1-247-879-00	CARBON	100K	5%	1/6W	
R234	1-247-831-00	CARBON	1K	5%	1/6W	
R235	1-247-847-00	CARBON	4.7K	5%	1/6W	
R236	1-247-877-00	CARBON	82K	5%	1/6W	
R237	1-247-903-00	CARBON	1M	5%	1/6W	
R238	1-247-855-00	CARBON	10K	5%	1/6W	
R239	1-247-853-00	CARBON	8.2K	5%	1/6W	
R240	1-247-887-00	CARBON	220K	5%	1/6W	
R241	1-247-887-00	CARBON	220K	5%	1/6W	
R242	1-247-827-00	CARBON	680	5%	1/6W	
R243	1-247-879-00	CARBON	100K	5%	1/6W	
R244	1-247-879-00	CARBON	100K	5%	1/6W	
R245	1-247-831-00	CARBON	1K	5%	1/6W	
R246	1-247-831-00	CARBON	1K	5%	1/6W	
R252	1-247-855-00	CARBON	10K	5%	1/6W	
R253	1-247-855-00	CARBON	10K	5%	1/6W	
R254	1-247-851-00	CARBON	6.8K	5%	1/6W	
R256	1-247-881-00	CARBON	120K	5%	1/6W	
R257	1-247-831-00	CARBON	1K	5%	1/6W	
R258	1-247-831-00	CARBON	1K	5%	1/6W	
R259	1-247-855-00	CARBON	10K	5%	1/6W	
R260	1-247-875-00	CARBON	68K	5%	1/6W	

Ref.No.	Part No.	Description				Remark
R261	1-247-843-00	CARBON	3.3K	5%	1/6W	
R262	1-217-393-00	FUSIBLE	33	5%	1/4W	F
R263	1-247-869-00	CARBON	39K	5%	1/6W	
R264	1-247-874-00	CARBON	62K	5%	1/6W	
R265	1-247-845-00	CARBON	3.9K	5%	1/6W	
R266	1-247-855-00	CARBON	10K	5%	1/6W	
R267	1-247-903-00	CARBON	1M	5%	1/6W	
R268	1-247-831-00	CARBON	1K	5%	1/6W	
R269	1-247-863-00	CARBON	22K	5%	1/6W	
R270	1-246-471-00	CARBON	820	5%	1/4W	
R273	1-247-875-00	CARBON	68K	5%	1/6W	
R274	1-247-847-00	CARBON	4.7K	5%	1/6W	
R275	1-247-855-00	CARBON	10K	5%	1/6W	
R276	1-246-471-00	CARBON	820	5%	1/4W	
R277	1-247-855-00	CARBON	10K	5%	1/6W	
R280	1-247-879-00	CARBON	100K	5%	1/6W	
R281	1-247-849-00	CARBON	5.6K	5%	1/6W	
R282	1-247-847-00	CARBON	4.7K	5%	1/6W	
R284	1-247-005-00	CARBON	100	5%	1/4W	F
R285	1-247-847-00	CARBON	4.7K	5%	1/6W	
R286	1-247-849-00	CARBON	5.6K	5%	1/6W	
R287	1-247-879-00	CARBON	100K	5%	1/6W	
R288	1-247-881-00	CARBON	120K	5%	1/6W	
R289	1-247-871-00	CARBON	47K	5%	1/6W	
R297	1-247-831-00	CARBON	1K	5%	1/6W	
R298	1-247-831-00	CARBON	1K	5%	1/6W	
R301	1-247-835-00	CARBON	1.5K	5%	1/6W	
R302	1-247-835-00	CARBON	1.5K	5%	1/6W	
R303	1-247-816-00	CARBON	240	5%	1/6W	
R304	1-247-837-00	CARBON	1.8K	5%	1/6W	
R305	1-247-831-00	CARBON	1K	5%	1/6W	
R306	1-247-831-00	CARBON	1K	5%	1/6W	
R307	1-247-831-00	CARBON	1K	5%	1/6W	
R308	1-247-819-00	CARBON	330	5%	1/6W	
R309	1-247-837-00	CARBON	1.8K	5%	1/6W	
R310	1-247-853-00	CARBON	8.2K	5%	1/6W	
R313	1-247-815-00	CARBON	220	5%	1/6W	
R314	1-247-831-00	CARBON	1K	5%	1/6W	
R315	1-247-841-00	CARBON	2.7K	5%	1/6W	
R316	1-247-841-00	CARBON	2.7K	5%	1/6W	
R317	1-247-865-00	CARBON	27K	5%	1/6W	
R318	1-247-813-00	CARBON	180	5%	1/6W	
R319	1-247-831-00	CARBON	1K	5%	1/6W	
R320	1-247-881-00	CARBON	120K	5%	1/6W	
R321	1-247-857-00	CARBON	12K	5%	1/6W	
R322	1-247-855-00	CARBON	10K	5%	1/6W	
R323	1-247-837-00	CARBON	1.8K	5%	1/6W	
R324	1-247-825-00	CARBON	560	5%	1/6W	
R325	1-247-821-00	CARBON	390	5%	1/6W	
R326	1-247-849-00	CARBON	5.6K	5%	1/6W	
R327	1-247-831-00	CARBON	1K	5%	1/6W	
R328	1-247-857-00	CARBON	12K	5%	1/6W	
R331	1-247-877-00	CARBON	82K	5%	1/6W	

D

Ref.No.	Part No.	Description				Remark
R332	1-247-825-00	CARBON	560	5%	1/6W	
R333	1-247-853-00	CARBON	8.2K	5%	1/6W	
R334	1-247-840-00	CARBON	2.4K	5%	1/6W	
R335	1-247-859-00	CARBON	15K	5%	1/6W	
R336	1-247-855-00	CARBON	10K	5%	1/6W	
R337	1-247-855-00	CARBON	10K	5%	1/6W	
R338	1-247-831-00	CARBON	1K	5%	1/6W	
R339	1-247-831-00	CARBON	1K	5%	1/6W	
R340	1-247-821-00	CARBON	390	5%	1/6W	
R341	1-247-821-00	CARBON	390	5%	1/6W	
R343	1-247-879-00	CARBON	100K	5%	1/6W	
R344	1-247-863-00	CARBON	22K	5%	1/6W	
R345	1-247-882-00	CARBON	130K	5%	1/6W	
R346	1-247-815-00	CARBON	220	5%	1/6W	
R347	1-247-825-00	CARBON	560	5%	1/6W	
R348	1-247-827-00	CARBON	680	5%	1/6W	
R349	1-247-849-00	CARBON	5.6K	5%	1/6W	
R350	1-247-853-00	CARBON	8.2K	5%	1/6W	
R351	1-247-863-00	CARBON	22K	5%	1/6W	
R352	1-247-837-00	CARBON	1.8K	5%	1/6W	
R353	1-247-843-00	CARBON	3.3K	5%	1/6W	
R354	1-247-883-00	CARBON	150K	5%	1/6W	
R355	1-247-846-00	CARBON	4.3K	5%	1/6W	
R356	1-247-857-00	CARBON	12K	5%	1/6W	
R357	1-247-845-00	CARBON	3.9K	5%	1/6W	
R358	1-247-853-00	CARBON	8.2K	5%	1/6W	
R359	1-247-845-00	CARBON	3.9K	5%	1/6W	
R360	1-247-879-00	CARBON	100K	5%	1/6W	
R361	1-247-827-00	CARBON	680	5%	1/6W	
R362	1-247-839-00	CARBON	2.2K	5%	1/6W	
R364	1-247-839-00	CARBON	2.2K	5%	1/6W	
R365	1-247-857-00	CARBON	12K	5%	1/6W	
R366	1-247-839-00	CARBON	2.2K	5%	1/6W	
R367	1-247-815-00	CARBON	220	5%	1/6W	
R368	1-247-815-00	CARBON	220	5%	1/6W	
R369	1-247-815-00	CARBON	220	5%	1/6W	
R370	1-247-823-00	CARBON	470	5%	1/6W	
R371	1-247-807-00	CARBON	100	5%	1/6W	
R372	1-247-833-00	CARBON	1.2K	5%	1/6W	
R373	1-247-831-00	CARBON	1K	5%	1/6W	
R374	1-247-897-00	CARBON	560K	5%	1/6W	
R501	1-247-831-00	CARBON	1K	5%	1/6W	
R502	1-247-839-00	CARBON	2.2K	5%	1/6W	
R504	1-247-853-00	CARBON	8.2K	5%	1/6W	
R505	1-247-839-00	CARBON	2.2K	5%	1/6W	
R507	1-247-866-00	CARBON	30K	5%	1/6W	
R508	1-247-869-00	CARBON	39K	5%	1/6W	
R509	1-247-831-00	CARBON	1K	5%	1/6W	
R510	1-247-829-00	CARBON	820	5%	1/6W	
R511	1-247-851-00	CARBON	6.8K	5%	1/6W	
R512	1-247-805-00	CARBON	82	5%	1/6W	
R513	1-247-872-00	CARBON	51K	5%	1/6W	
R514	1-202-471-00	SOLID	4.7M	5%	1/4W	
R515	1-247-888-00	CARBON	240K	5%	1/6W	
R516	1-212-361-00	METAL OXIDE	1.2	5%	1W	F
R517	1-247-853-00	CARBON	8.2K	5%	1/6W	
R518	1-247-851-00	CARBON	6.8K	5%	1/6W	
R519	1-247-857-00	CARBON	12K	5%	1/6W	
R520	1-247-855-00	CARBON	10K	5%	1/6W	
R521	1-212-891-00	FUSIBLE	270	5%	1/4W	F
R522	1-247-218-00	CARBON	120	5%	1/2W	
R523	1-247-825-00	CARBON	560	5%	1/6W	
R525	1-247-841-00	CARBON	2.7K	5%	1/6W	
R526	1-247-895-00	CARBON	470K	5%	1/6W	
R527	1-247-845-00	CARBON	3.9K	5%	1/6W	
R529	1-247-783-00	CARBON	10	5%	1/6W	
R530	1-247-841-00	CARBON	2.7K	5%	1/6W	
R531	1-247-827-00	CARBON	680	5%	1/6W	
R532	1-247-835-00	CARBON	1.5K	5%	1/6W	
R533	1-247-877-00	CARBON	82K	5%	1/6W	
R535	1-247-831-00	CARBON	1K	5%	1/6W	
R536	1-247-842-00	CARBON	3K	5%	1/6W	
R537	1-247-819-00	CARBON	330	5%	1/6W	
R538	1-213-140-00	METAL OXIDE	560	5%	1W	F
R582	1-247-879-00	CARBON	100K	5%	1/6W	
R591	1-247-839-00	CARBON	2.2K	5%	1/6W	
R604	1-205-737-00	CEMENTED	30	10%	7W	
R605	1-205-728-00	CEMENTED	47	10%	7W	
R606	1-246-433-00	CARBON	22	5%	1/4W	
R607	1-207-455-00	WIREWOUND	0.22	10%	1/2W	
R608	1-206-660-00	METAL OXIDE	680	5%	2W	F
R609	1-247-823-00	CARBON	470	5%	1/6W	
R610	1-247-863-00	CARBON	22K	5%	1/6W	
R612	1-246-411-00	CARBON	2.7	5%	1/4W	
R613	1-247-895-00	CARBON	470K	5%	1/6W	
R616	1-246-449-00	CARBON	100	5%	1/4W	
R651	1-212-936-00	FUSIBLE	1.2	5%	1/2W	F
R652	1-217-653-00	FUSIBLE	0.47	10%	2W	
R653	1-217-653-00	FUSIBLE	0.47	10%	2W	
R654	1-217-418-00	FUSIBLE	0.47	10%	1/2W	F
R655	1-214-777-00	METAL	100K	1%	1/4W	
R656	1-247-839-00	CARBON	2.2K	5%	1/6W	
R657	1-247-863-00	CARBON	22K	5%	1/6W	
R658	1-247-827-00	CARBON	680	5%	1/6W	
R659	1-247-847-00	CARBON	4.7K	5%	1/6W	
R660	1-247-826-00	CARBON	620	5%	1/6W	
R661	1-247-843-00	CARBON	3.3K	5%	1/6W	
R662	1-247-879-00	CARBON	100K	5%	1/6W	
R663	1-247-895-00	CARBON	470K	5%	1/6W	
R664	1-247-869-00	CARBON	39K	5%	1/6W	
R665	1-247-865-00	CARBON	27K	5%	1/6W	
R666	1-247-855-00	CARBON	10K	5%	1/6W	
R667	1-247-859-00	CARBON	15K	5%	1/6W	
R669	1-246-525-00	CARBON	150K	5%	1/4W	
R670	1-247-855-00	CARBON	10K	5%	1/6W	
R671	1-247-843-00	CARBON	3.3K	5%	1/6W	

Ref.No.	Part No.	Description				Remark
R672	1-247-837-00	CARBON	1.8K	5%	1/8W	F
R674	1-213-149-00	METAL OXIDE	3.3	5%	1W	F
R675	1-214-749-00	METAL	6.8K	1%	1/4W	
R676	1-214-753-00	METAL	10K	1%	1/4W	
R801	1-247-807-00	CARBON	100	5%	1/6W	
R802	1-247-827-00	CARBON	680	5%	1/6W	
R803	1-247-803-00	CARBON	68	5%	1/6W	
R804	1-213-147-00	METAL OXIDE	2.2K	5%	1W	F
R805	1-213-146-00	METAL OXIDE	1.8K	5%	1W	F
R806	1-202-838-00	SOLID	100K		1/2W	
R807	1-202-818-00	SOLID	1K		1/2W	
R808	1-202-826-00	SOLID	4.7K		1/2W	
R809	1-244-924-00	CARBON	130K	5%	1/2W	
R810	1-210-859-00	CARBON	1.2	5%	1/8W	F
R811	1-212-936-00	FUSIBLE	1.2	5%	1/2W	F
R812	1-247-863-00	CARBON	22K	5%	1/6W	
R814	1-217-212-00	WIREWOUND	10	10%	2W	F
R815	1-206-658-00	METAL OXIDE	560	5%	2W	F
R817	1-206-459-00	METAL OXIDE	6.8	5%	2W	F
R818	1-247-791-00	CARBON	22	5%	1/8W	F
R820	1-217-220-00	WIREWOUND	47	10%	2W	F
R821	1-210-825-00	SOLID	3.3M	5%	1/4W	
R822	1-247-889-00	CARBON	270K	5%	1/6W	
R823	1-247-889-00	CARBON	270K	5%	1/6W	
R824	1-207-616-00	WIREWOUND	0.47	10%	2W	F
R825	1-213-144-00	METAL OXIDE	1.2K	5%	1W	F

VARIABLE RESISTOR

RV251	1-228-727-00	RES, ADJ, CERAMIC CARBON	47K
RV301	1-228-720-00	RES, ADJ, CERAMIC CARBON	1K
RV302	1-228-724-00	RES, ADJ, CERAMIC CARBON	10K
RV303	1-228-725-00	RES, ADJ, CERAMIC CARBON	22K
RV501	1-228-723-00	RES, ADJ, CERAMIC CARBON	4.7K
RV502	1-228-728-00	RES, ADJ, CERAMIC CARBON	100K
RV651	1-228-720-00	RES, ADJ, CERAMIC CARBON	1K

SPARK GAP

SG801	1-519-063-XX	DISCHARGING GAP

TRANSFORMER

T301	1-426-121-00	DAT
T602 ⚠	1-421-412-00	COIL, FERRITE
T604 ⚠	1-437-147-00	TRANSFORMER, FERRITE
T605	1-437-079-00	TRANSFORMER, HPRIZONTAL DRIVE
T606 ⚠	1-421-632-00	TRANSFORMER, FERRITE (SRT)
T607 ⚠	1-421-624-00	TRANSFORMER, CURRENT
T801 ⚠	1-437-149-00	TRANSFORMER, HORIZONTAL DRIVE
T802 ⚠	1-439-332-00	TRANSFORMER ASSY, FLYBACK
T891	1-421-634-00	TRANSFORMER, FERRITE (V.PCT)

CRYSTAL

X301	1-527-789-00	VINRATOR, CRYSTAL

Ref.No.	Part No.	Description				Remark
⚠	1-611-170-00	J1 BOARD				
		********				

CONNECTOR

CN901	1-507-657-00	JACK				

RESISTOR

R901	1-246-465-00	CARBON	470	5%	1/4W	
R902	1-246-465-00	CARBON	470	5%	1/4W	

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⚠	1-606-794-00	N BOARD				
		*******				
⚠	4-342-117-00	CASE, SHIELD (MAIN), R				
⚠	4-342-118-00	LID, SHIELD CASE, R				

CAPACITOR

C1	1-123-617-00	ELECT	10MF	20%	16V
C2	1-123-617-00	ELECT	10MF	20%	16V
C3	1-123-617-00	ELECT	10MF	20%	16V
C4	1-161-019-00	CERAMIC	0.033MF	10%	25V
C5	1-108-567-00	MYLAR	0.0033MF	5%	50V
C6	1-123-821-00	ELECT	47MF	20%	16V

DIODE

D1	8-719-110-32	DIODE PH302B

IC

IC1	8-759-113-73	IC UPC1373H

COIL

L1	1-404-310-00	COIL 4.7MMH

****

MISCELLANEOUS
****

RV902 ⚠	1-215-066-21	RES ASSY, HIGH-VOLTAGE
⚠	1-536-817-00	TERMINAL BOARD ASSY, ANTENNA
RV901 ⚠	1-228-544-00	RESISTOR ASSY, HIGH-VOLTAGE
⚠	1-451-226-00	DEFLECTION YOKE (SY10GA)
	1-452-032-00	MAGNET, DISK; 10MM ϕ
	1-452-094-00	MAGNET, ROTATABLE DISK; 15MM ϕ
	1-452-146-00	MAGNET, BMC
⚠	1-452-315-00	CRT NECK ASSY (NA303)
	1-543-179-00	CORE, RING
⚠	1-551-427-11	CORD, POWER
L901 ⚠	1-426-041-00	COIL, DEGAUSSING
L902 ⚠	1-426-041-00	COIL, DEGAUSSING
S901 ⚠	1-553-225-00	SWITCH, PUSH
V901 ⚠	8-738-405-06	CRT 680EB22

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

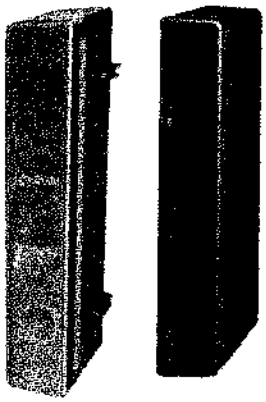
Ref.No.	Part No.	Description	Remark

ACCESSORIES AND PACKING MATERIALS
****

	A-1470-625-A	COMMANDER ASSY RM-653
	X-4361-913-0	BAND ASSY
	2-373-803-00	WRENCH, HEXAGON ROD (FOR KV-2722EC2)
	2-373-807-00	SCREW, CAP (FOR KV-2722EC2)
	4-363-009-00	CUSHION (SPEAKER) (ASSY) (FOR KV-2722EC2)
	4-363-613-00	CUSHION (UPPER) (ASSY)
	4-363-614-00	CUSHION (LOWER) (ASSY)
	4-363-615-00	CUSHION (SPEAKER) (ASSY) (FOR KV-2724EC2)
	4-363-617-00	TRAY
	4-363-667-00	INDIVIDUAL CARTON (FOR KV-2720EC2)
	4-363-668-00	INDIVIDUAL CARTON (FOR KV-2722EC2)
	4-363-669-00	INDIVIDUAL CARTON (FOR KV-2724EC2)
	4-491-718-01	SCHEMATIC DIAGRAM (B2)
	4-493-847-11	MANUAL, INSTRUCTION
	6-047-001-00	HANDLE

SS-2722/2724

SERVICE MANUAL



November, 1983

SPEAKER SYSTEM

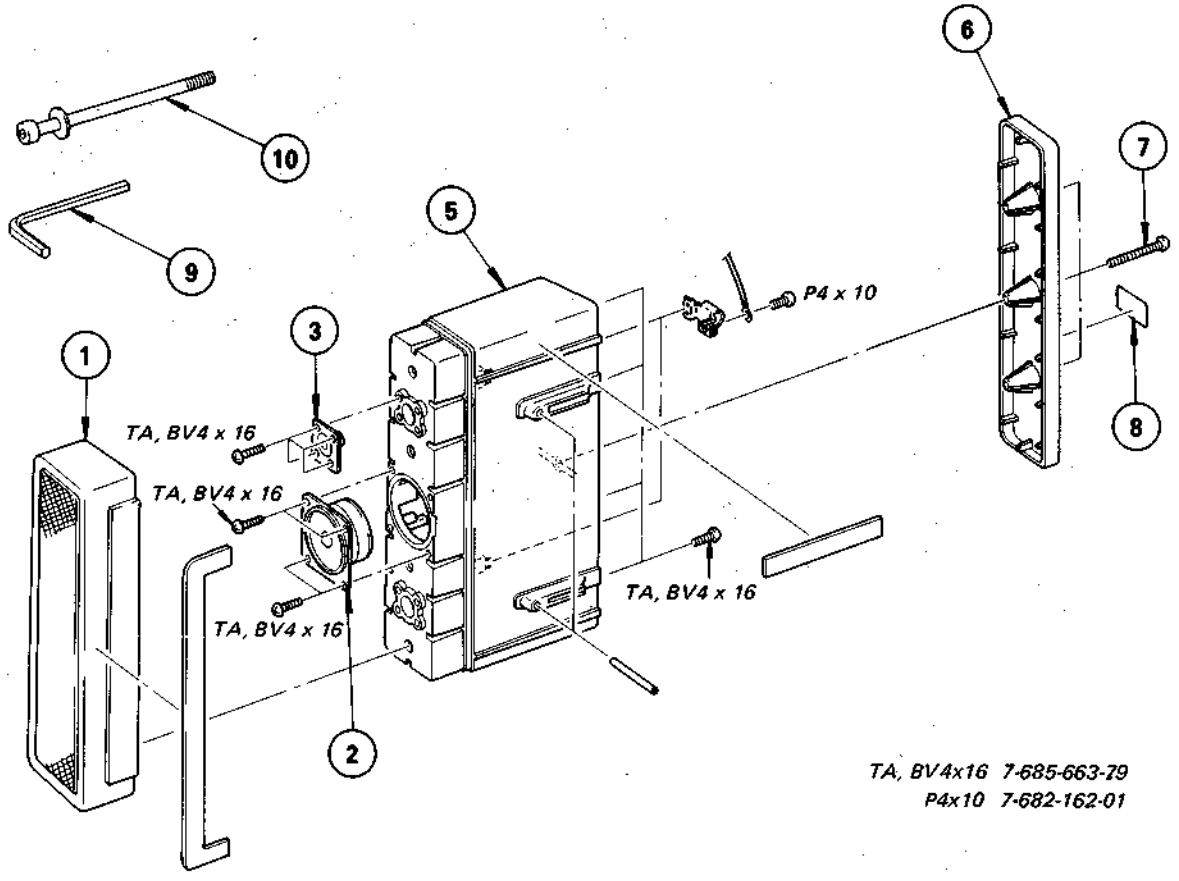
SONY®

EXPLODED VIEW

NOTE:
- Items with no part number and no description are not stocked because they are seldom required for routine service.
- The construction parts of an assembled part are indicated with a collation number in the remark column.
- Items marked " ♦ " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

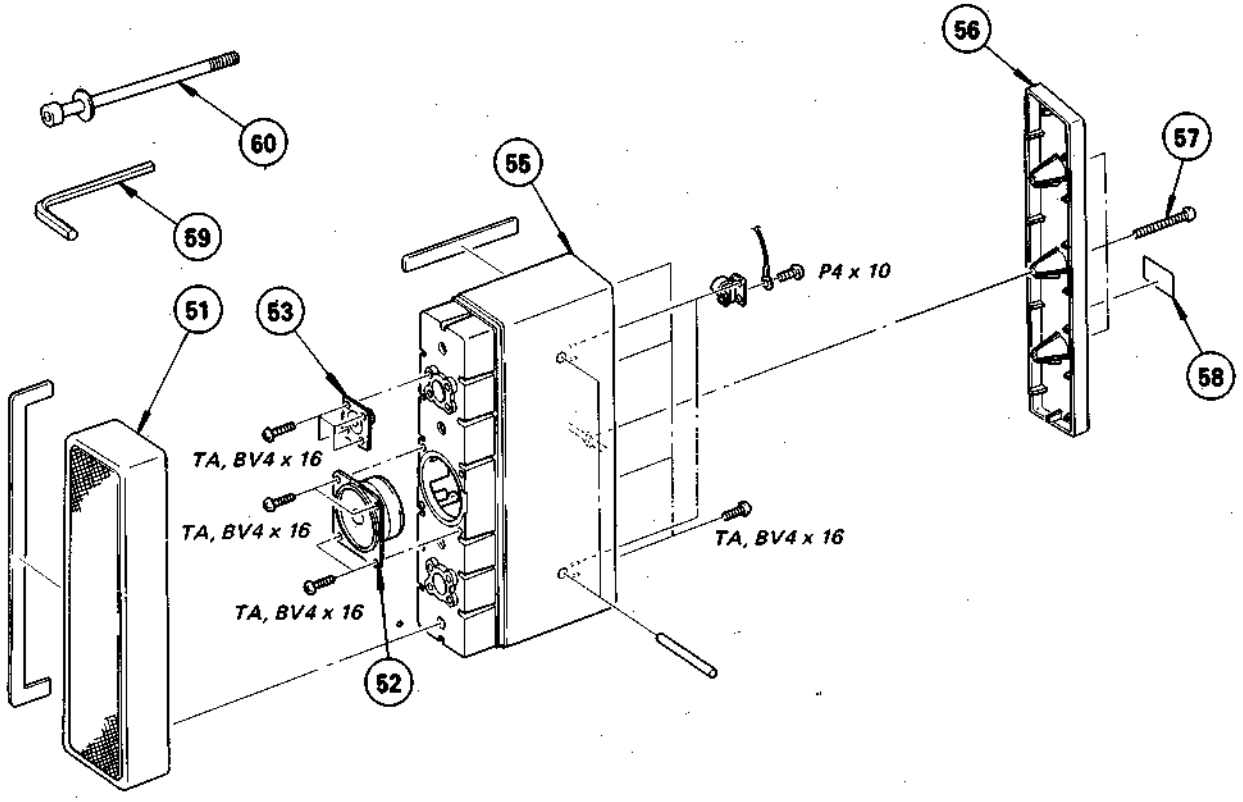
SS-2722 (LEFT)



TA, BV4x16 7-685-663-79
P4x10 7-682-162-01

No.	Part No.	Description	Remark
1	X-2373-802-0	PANEL (SPEAKER.SIDE) ASSY, FRONT	
2	1-503-188-00	SPEAKER	
3	1-503-189-00	SPEAKER	
5	2-373-810-00	BOX (SIDE), SPEAKER	
6	2-373-813-00	PANEL (SPEAKER.SIDE) REAR, LEFT	
7	4-355-242-11	SCREW, TAPPING, +P	
8	♦:2-373-818-00	LABEL, MODEL NUMBER (LEFT)	
9	2-373-803-00	WRENCH, HEXAGON ROD	
10	2-373-807-00	SCREW,CAP	

SS-2722 (RIGHT)



TA, BV4x16 7-685-663-79
P4x10 7-682-162-01

No.	Part No.	Description	Remark
51	X-2373-802-0	PANEL (SPEAKER.SIDE) ASSY, FRONT	
52	1-503-188-00	SPEAKER	
53	1-503-189-00	SPEAKER	
55	2-373-810-00	BOX (SIDE), SPEAKER	

No.	Part No.	Description	Remark
56	2-373-811-00	PANEL (SPEAKER.SIDE) REAR, RIGHT	
58	♣:2-373-817-00	LABEL, MODEL NUMBER (RIGHT)	
57	4-355-242-11	SCREW, TAPPING, +P	
59	2-373-803-00	WRENCH, HEXAGON ROD	
60	2-373-807-00	SCREW,CAP	

ELECTRICAL PARTS LIST

NOTE:

When indicating parts by reference number, please include the board name.

CAPACITORS
• MF : μF, PF : μμF

Ref.No.	Part No.	Description	Remark
		MISCELLANEOUS **********	
C901	1-119-195-00	CAP,ELEC 1MF	
C902	1-119-195-00	CAP,ELEC 1MF	
SP901	1-503-189-00	SPEAKER	
SP902	1-503-188-00	SPEAKER	
SP903	1-503-188-00	SPEAKER	
SP904	1-503-189-00	SPEAKER	

****

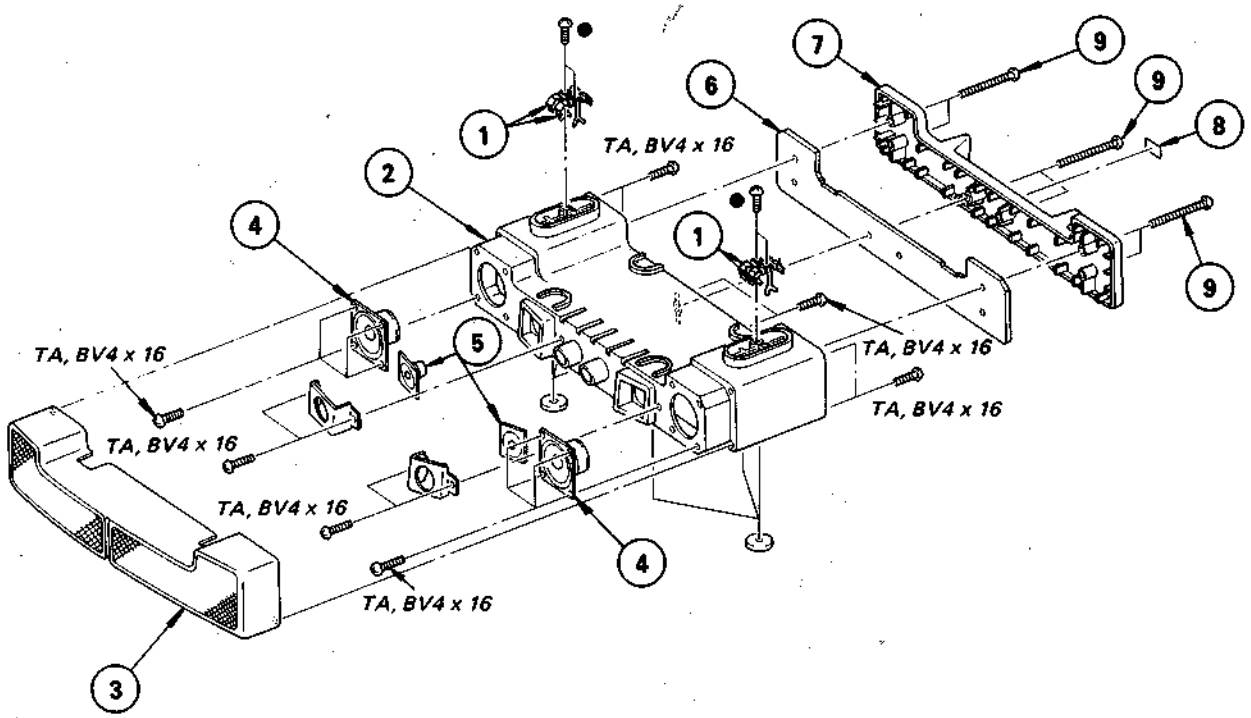
ACCESSORIES AND PACKING MATERIALS
****

Part No.	Description	Remark
2-373-803-01	WRENCH, HEXAGON ROD	
2-373-807-01	SCREW, CAP	
4-463-668-00	INDIVIDUAL CARTON	
4-363-009-00	CUSHION (SPEAKER ASSY)	
4-493-847-11	MANUAL, INSTRUCTION	

EXPLODED VIEW

SS-2724

●: TA, BV3x12 7-685-648-71
TA, BV4x16 7-685-663-79



No.	Part No.	Description	Remark
1	♦:2-373-701-00	TERMINAL, SPEAKER	
2	2-373-707-00	BOX, SPEAKER	
3	X-2373-701-0	PANEL ASSY, FRONT	
4	1-503-188-00	SPEAKER	
5	1-503-189-00	SPEAKER	
6	2-373-702-00	BOARD, REAR	
7	2-373-708-00	PANEL, REAR	
8	♦:2-373-711-00	LABEL, MODEL NUMBER	
9	4-355-242-11	SCREW, TAPPING, +P	

NOTE:
- Items with no part number and no description are not stocked because they are seldom required for routine service.
- The construction parts of an assembled part are indicated with a collation number in the remark column.
- Items marked " ♦ " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

ELECTRICAL PARTS LIST

NOTE:

When indicating parts by reference number, please include the board name.

CAPACITORS
• MF : μF, PF : μμF

Ref.No.	Part No.	Description	Remark
		MISCELLANEOUS **********	
C901	1-119-195-00	CAP,ELEC IMF	
C902	1-119-195-00	CAP,ELEC IMF	
SP901	1-503-189-00	SPEAKER	
SP902	1-503-188-00	SPEAKER	
SP903	1-503-188-00	SPEAKER	
SP904	1-503-189-00	SPEAKER	

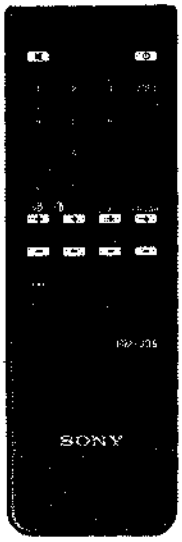
****

ACCESSORIES AND PACKING MATERIALS
****

Part No.	Description	Remark
4-363-615-00	CUSHION (SPEAKER) (ASSY)	
4-363-669-00	INDIVIDUAL CARTON	
4-493-847-11	MANUAL, INSTRUCTION	

RM-635

SERVICE MANUAL



November, 1983

SPECIFICATIONS

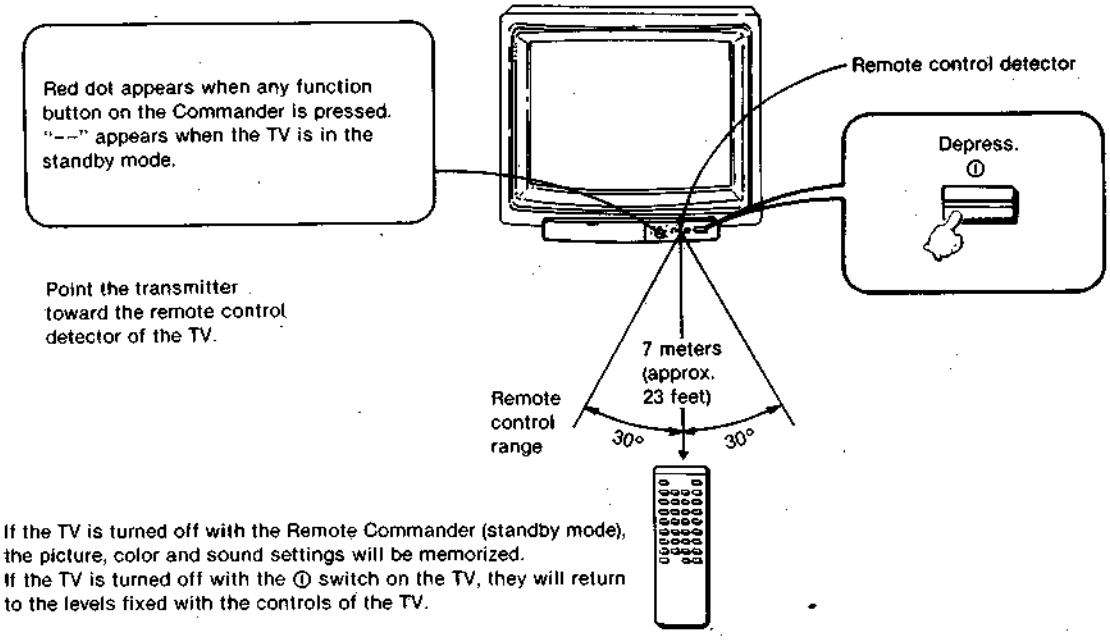
Remote control system	Infrared control
Power requirements	3 V dc 2 batteries IEC designation R03 (size AAA)
Dimensions	Approx. 54 × 16 × 165 mm (w/h/d)
Weight	Approx. 100 g incl. batteries
Accessories supplied	IEC designation R03 battery (2)

Design and specifications are subject to change without notice.

REMOTE COMMANDER

SONY®

1. REMOTE TV OPERATION



If the TV is turned off with the Remote Commander (standby mode), the picture, color and sound settings will be memorized.
If the TV is turned off with the ⏻ switch on the TV, they will return to the levels fixed with the controls of the TV.

FUNCTION OF THE BUTTONS ON THE REMOTE COMMANDER

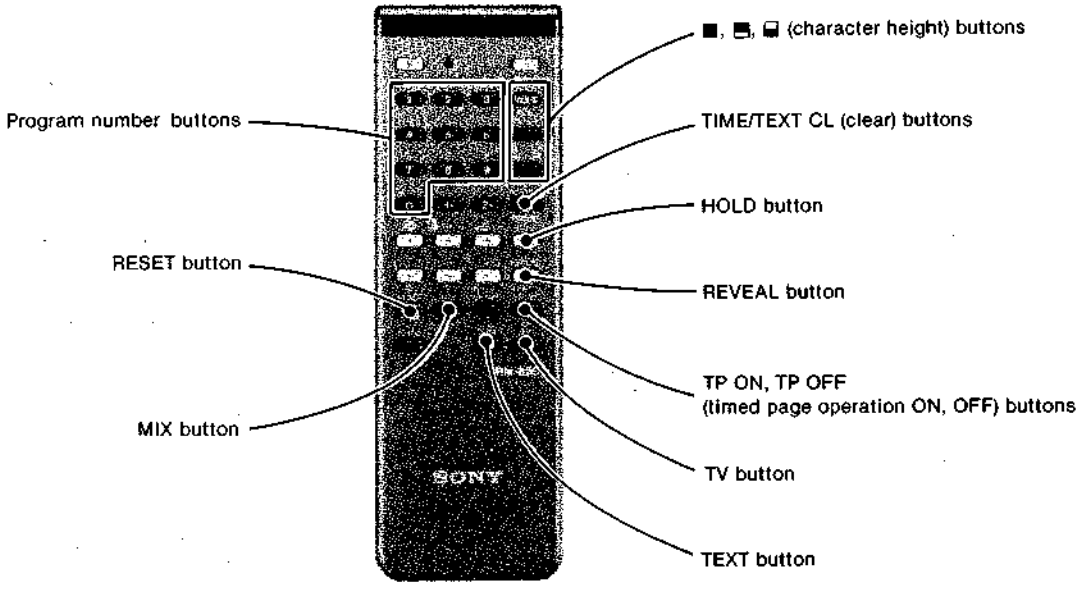
Each button has different functions for normal TV, teletext and VTR operations.
Functions for operating the TV are indicated **in white or black.**
Functions for operating the video tape recorder* are indicated **in brown.**

Functions for teletext operation using the optional OPK-203 teletext adaptor are indicated **in green.**

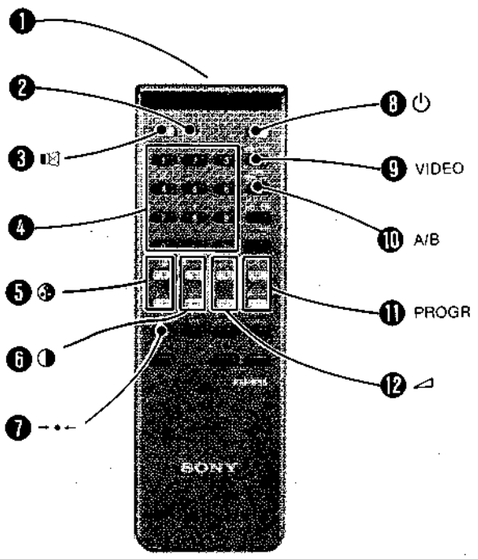
* This Remote Commander can control the Sony SL-F1E combined with the TT-F1 series tuner timer unit, and Sony SL-C9 series.

Buttons used for teletext operations

The following functions are for operating the TV as a teletext display by installing the optional Sony OPK-203 teletext adaptor. For details, please consult a dealer prepared to install a teletext adaptor.



Buttons used for normal TV operation



❶ Transmitter
Point towards the remote control detector.

❷ Pilot lamp
Lights when any button on the Remote Commander is pressed.
If the lamp does not light when the button is pressed, battery replacement is required.

❸ (sound mute) button
When you want to mute the sound (to answer the telephone, for instance), press this button. To restore the sound, press this button again.

❹ Program number buttons
Programs are displayed by pressing the corresponding numbers.
For programs 1 through 9, press the appropriate single-digit button.
For programs 10 through 19, press the 1– button (the tens-digit "/" will blink on the program indicator), then the button corresponding to the last digit of the program number (the tens-digit will now stop blinking). For example:
for program 10, press 1– and 0.
for program 11, press 1– and 1.

For programs 20 to 29, press the 2– button and then the single-digit button.
For program 30, press the 0 button.

Note: If you do not press a single-digit button within several seconds after pressing the 1– or 2– button, the previous program setting will be automatically recalled.

❺ (color) buttons
Adjust the color intensity. Press the + button to increase it, or the – button to decrease it.

❻ (picture) buttons
Press the + button to increase the picture contrast, or the – button to decrease it.

❼ (normal) button
Press this button once instantly returns the color and contrast settings made with the ◑ and ◑ buttons on the Commander to the factory preset levels.

❽ ⏻ (standby) switch
Turns the TV in standby mode. Program indicator will show "– –".
To turn on the TV from the standby mode, press a program number button or button on the Commander.

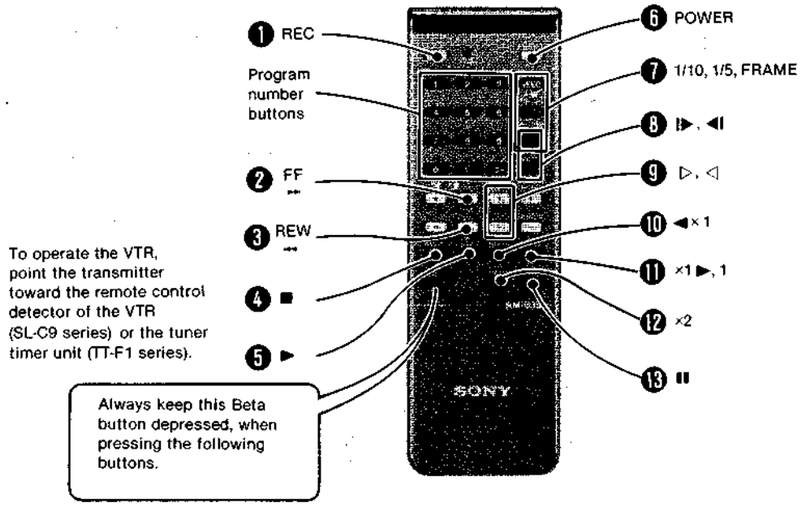
❾ VIDEO button
This button is not usable for this TV. When this button is pressed, "AU" will momentarily light in the program indicator, but will immediately disappear.

❿ A/B button
This button is not usable for this TV.

⓫ PROGR (program) buttons
Function the same as the PROGR buttons on the TV.

⓬ (volume) buttons
Press the + button to increase the volume, or the – button to decrease it.

Buttons used for VTR operations



Buttons which have the same functions for both SL-C9 series and SL-F1E

❶ REC (record) button
Press to start recording.

❷ FF (fast-forward) button
Press to advance the tape rapidly. This button is also used for the forward picture-search operation.

❸ REW (rewind) button
Press to rewind the tape. This button is also used for the reverse picture-search operation.

❹ ■ (stop) button
Press to stop the tape.

❺ ▶ (play) button
Press to play the tape back.

❻ POWER switch
Press to turn the video tape recorder (and the tuner timer unit) on or off.

⓬ x2 (double-speed) button
Functions the same as the x2 button on the video tape recorder. Press to obtain a double-speed playback picture.

⓭ ▮▮ (pause) button
Functions the same as the ▮▮ PAUSE button on the SL-C9 series and the PAUSE button on the SL-F1E. To release the pause mode, press this button again.

Buttons used for the SL-C9 series

❼ Speed control buttons (1/10, 1/5, FRAME)
Function the same as the 1/10, 1/5 and FRAME of the SPEED CONTROL buttons on the recorder.

❾ ▷ (forward) and ◁ (reverse) buttons
Select the direction of the speed control playback. Function the same as the ▷ and ◁ buttons of the SPEED CONTROL buttons on the recorder.

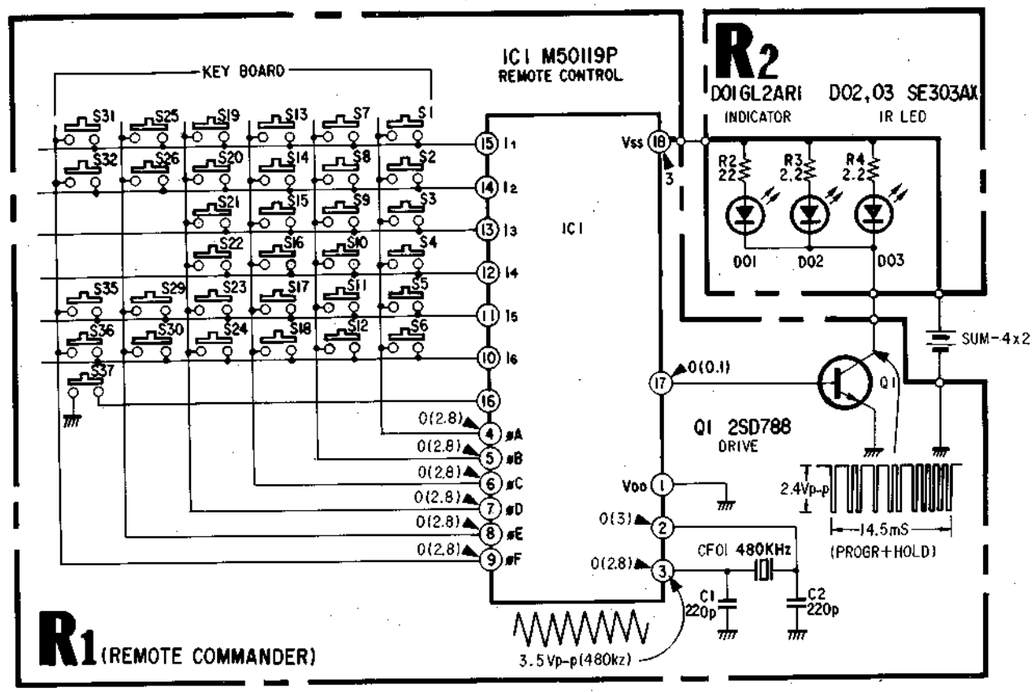
❿ 1 (normal speed) button
Functions the same as the 1 button of the SPEED CONTROL buttons on the recorder.

Buttons used for the SL-F1E

❽ ▮▶ (forward slow motion) and ◀▮ (reverse slow motion) buttons
Function the same as the ▮▶ and ◀▮ SWING SEARCH buttons on the SL-F1E.

❿ ◀ x1 (reverse) button and ⓫ x1 ▶ (forward) button
Function the same as the ◀ and ▶ SWING SEARCH buttons on the SL-F1E.

2. SCHEMATIC DIAGRAM



KEY MATRIX

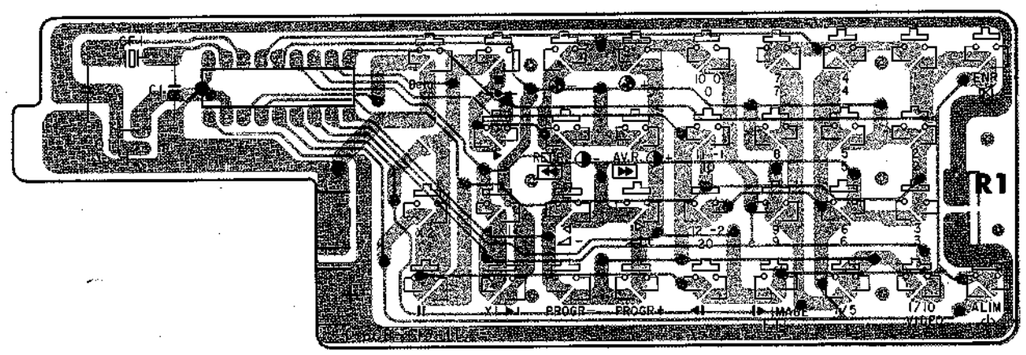
	øA	øB	øC	øD	øE	øF
I1	S1 1	S7 2	S13 3	S19 1−	S25 ▮▮	S31
I2	S2 4	S8 5	S14 6	S20 2−	S26 X2	S32 ⏻
I3	S3 7	S9 8	S15 9	S21 VIDEO I/IO	S27	S33
I4	S4 0	S10 X1 ▶ I	S16 ◀ X1	S22 A/B	S28	S34
I5	S5 +	S11 +	S17 +	S23 PROGR +	S29 ▮▶	S35 ▮▶ FRAME
I6	S6 −	S12 −	S18 −	S24 PROGR −	S30 →●←	S36 ▶
						S37 Beta

- Voltages and waveform are for when any push button is pressed.
- Voltages in ( ) are taken with button not pressed.
- All capacitors are in μF unless otherwise noted. pF: μμF 50 WV or less are not indicated except for electrolytics.
- All resistors are in ohms, ¼ W unless otherwise noted. k: 1000 Ω, M: 1000 kΩ
- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.

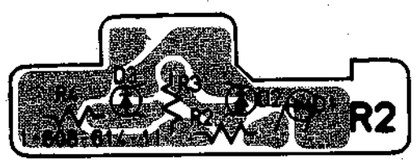
R1 R2

3. MOUNTING DIAGRAMS

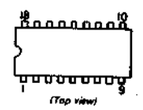
– R1 Board –



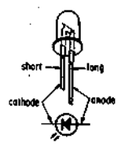
– R2 Boad –



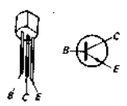
M50119P



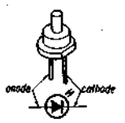
SE303AY



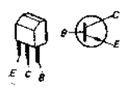
2SD789



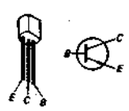
GL2ARI



2SD774

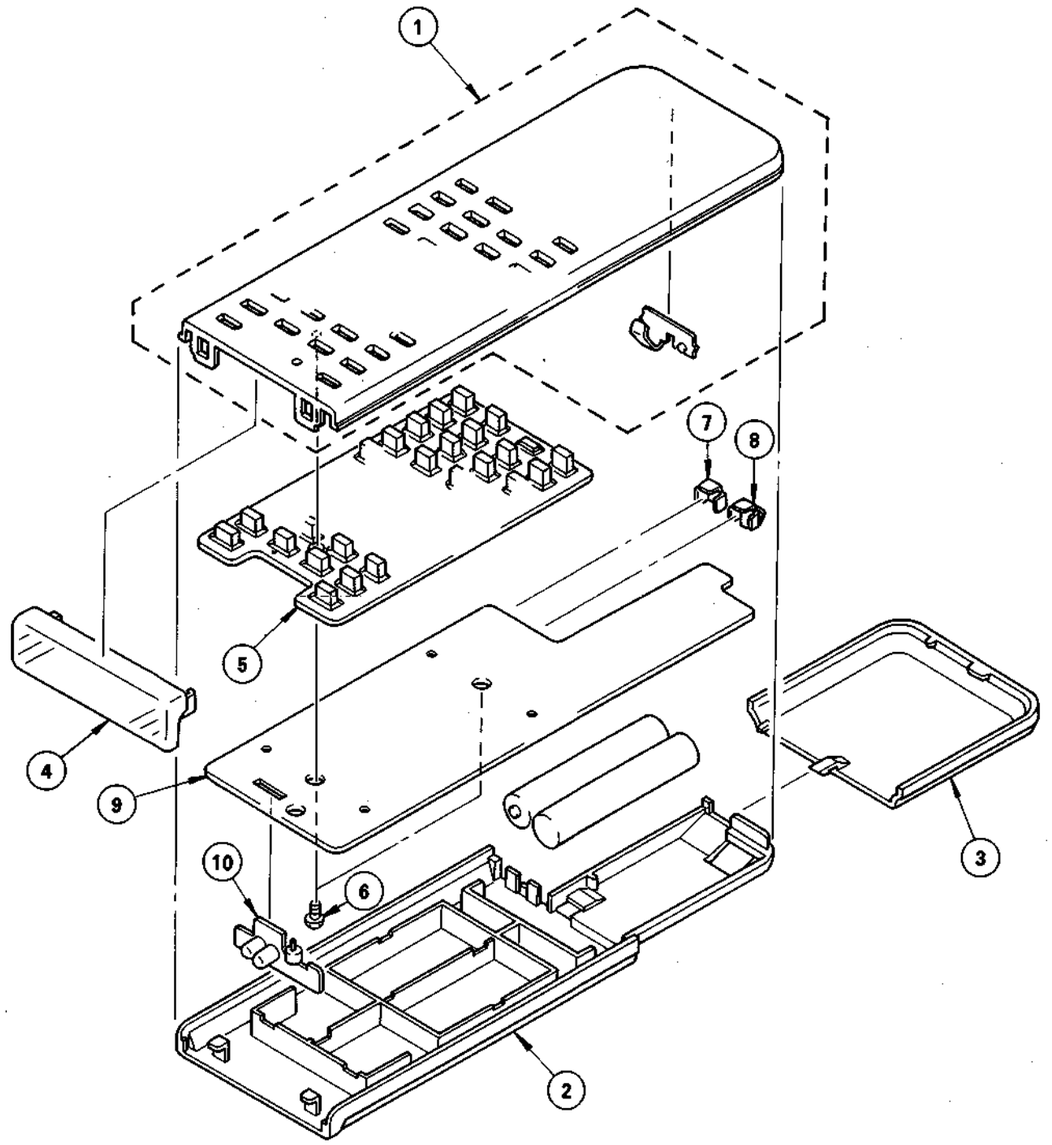


2SC1474
2SD788



4. EXPLODED VIEW

NOTE:
- Items with no part number and no description are not stocked because they are seldom required for routine service.
- The construction parts of an assembled part are indicated with a collation number in the remark column.
- Items marked " ♦ " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.



No.	Part No.	Description	Remark
1	X-4362-211-0	CASE (UPPER) ASSY, COMMANDER	
2	4-361-948-00	CASE (LOWER), COMMANDER	
3	4-361-945-00	COVER, BATTERY	
4	4-361-943-00	PANEL, FRONT, COMMANDER	
5	4-361-944-21	SHEET, RUBBER	
6	4-356-741-00	SCREW, TAPPING (BIND 2X5)	
7	4-348-542-00	TERMINAL (A), BATTERY	
8	4-348-543-00	TERMINAL (B), BATTERY	
9	♦:1-608-613-00	R1 BOARD	
10	♦:1-608-614-00	R2 BOARD	

R1 R2

5. ELECTRICAL PARTS LIST

- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.

CAPACITORS
- MF : μF, PF : μμF

- Items marked " ♦ " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

RESISTORS
- All resistors are in ohms

When indicating parts by reference number, please include the board name.

COMMANDER

Ref.No.	Part No.	Description			Remark
	♦:1-608-613-00	R1 BOARD ********			
	4-348-542-00	TERMINAL (A), BATTERY			
	4-348-543-00	TERMINAL (B), BATTERY			
		CAPACITOR			
C01	1-161-315-00	CERAMIC	220PF	10% 50V	
C02	1-161-315-00	CERAMIC	220PF	10% 50V	
		FILTER			
CF01	1-527-476-00	OSCILLATOR, CERAMIC			
		IC			
IC01	8-759-600-07	IC M50119P			
		TRANSISTOR			
Q01	8-729-378-84	TRANSISTOR 2SD788			

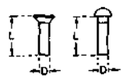
****

	♦:1-608-614-00	R2 BOARD ********			
		IC			
D01	8-719-900-23	DIODE GL-2AR1			
LED02	8-719-107-82	DIODE SE303AY			
LED03	8-719-107-82	DIODE SE303AY			
		RESISTOR			
R02	1-247-791-00	CARBON	22	5% 1/6W	
R03	1-247-767-00	CARBON	2.2	5% 1/6W	
R04	1-247-767-00	CARBON	2.2	5% 1/6W	

HARDWARE NOMENCLATURE

Screw:

P 3 x 10
- *L: Length in mm*
- *D: Diameter in mm*
- *Type of head*
- *Indicated slotted-head only. Unless otherwise indicated, it means cross-recessed head (Phillips type).*



Nut, Washer, Retaining ring:

N 3
- *Diameter of usable screw or shaft*
- *Reference designation*

Reference Designation	Shape	Description	Remarks
		SCREWS	
P		pan-head screw	binding-head (B) screw for replacement
PWH		pan-head screw with washer face	binding-head (B) screw and flat washer for replacement
PS PSP		pan-head screw with spring washer	binding-head (B) screw and spring washer for replacement
PSW PSPW		pan-head screw with spring and flat washers	binding-head (B) screw and *spring and flat washers for* replacement
R		round-head screw	binding-head (B) screw for replacement
K		flat-countersunk-head screw	
RK		oval-countersunk-head screw	
B		binding-head screw	
T		truss-head screw	binding-head (B) screw for replacement
F		flat-fillister-head screw	
RF		fillister-head screw	
BV		braizer-head screw	

Reference Designation	Shape	Description	Remarks
		SELF-TAPPING SCREWS	
TA		self-tapping screw	ex: TA, P 3 x 10
PTP		pan-head *self-tapping* screw	binding-head self-tapping (TA, B) screw for replacement
PTPWH		pan-head self-tapping screw with washer face	binding-head self tapping (TA, B) screw and flat washer for replacement
PTTWH		pan-head thread-rolling screw with washer face	binding-head (B) screw and flat washer for replacement
		SET SCREWS	
SC		set screw	
SC		hexagon-socket set screw	ex: SC 2.6 x 4, hexagon socket
		NUT	
N		nut	
		WASHERS	
W		flat washer	
SW		spring washer	
LW		internal-tooth lock washer	ex: LW3, internal
LW		external-tooth lock washer	ex: LW3, external
		RETAINING RINGS	
E		retaining ring	
G		grip-type retaining ring	

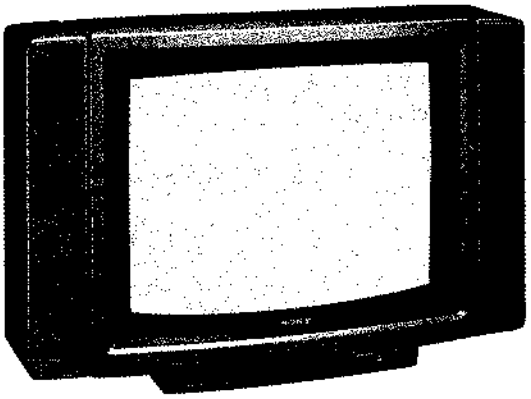
9-963-197-01

Sony Corporation

83L0263-1
Printed in Japan

QE-X CHASSIS

ADJUSTMENT MANUAL



April, 1983

KV-2722ET

TABLE OF CONTENTS

Note: The printed diagrams and illustrations used in this Adjustment Manual are of KV-2722ET.

MICROFILM

TRINITRON® COLOR TV

SONY®

CTV

SECTION 1
SETUP ADJUSTMENTS

The following adjustments should be made when a complete realignment is required or a new picture tube is installed.

These adjustments should be performed with rated power supply voltage unless otherwise noted.

Controls and switch should be set as follows unless otherwise noted:

◑ (picture) control ..... maximum
(Press ◑ + button)

☼ BRIGHTNESS control .... maximum
(fully clockwise)

AFT switch ..... ON

Perform the adjustments in order as follows:

1. Beam Landing
2. Convergence
3. White Balance

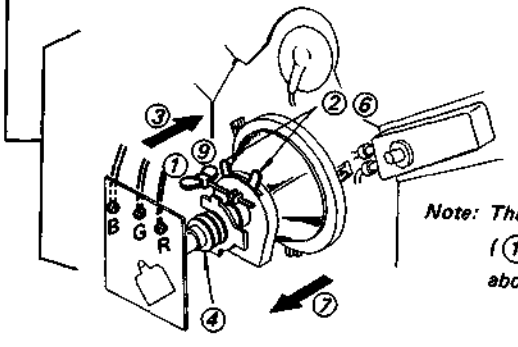
Note: Test Equipment Required.
1. Color-bar/Pattern Generator
2. Degausser

1-1. BEAM LANDING

Preparation:

- Feed in the white pattern.
- Before starting, degauss the entire screen.

1. Loosen deflection yoke screw.
2. Adjust purity control as shown in Fig. 1-1.
3. Slide deflection yoke as far forward as it will go.
4. Position neck ass'y as shown in Fig. 1-2.
5. Disconnect leads Ⓖ and Ⓑ on the C board.
6. Adjust purity control to center vertical red band as shown in Fig. 1-3.
7. Slide deflection yoke back for a uniform red screen.
8. Check green and blue rasters for uniformity by performing the same way as steps 5, 6 and 7.
   To get a uniform green screen,
   connect lead Ⓖ on the C board and
   disconnect leads Ⓡ and Ⓑ .
   To get a uniform blue screen,
   connect lead Ⓑ on the C board and
   disconnect leads Ⓡ and Ⓖ .
   After these checks, connect the leads Ⓡ , Ⓖ and Ⓑ .
9. Tighten the deflection yoke screw.
10. Check if mislanding appears at corners a – d as shown in Fig. 1-4. If mislanding is observed, correct it as shown in Fig. 1-4.
11. Confirm that beam landing is correct when the receiver is faced in all directions.



Note: The circled numbers (①–⑨) show above steps.

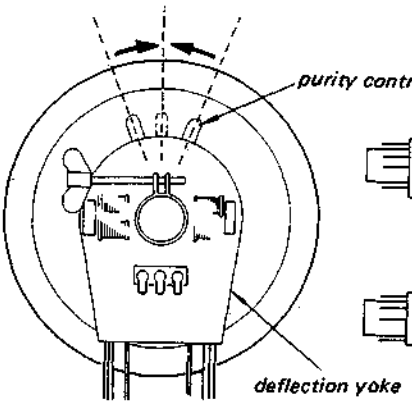


Fig. 1-1.

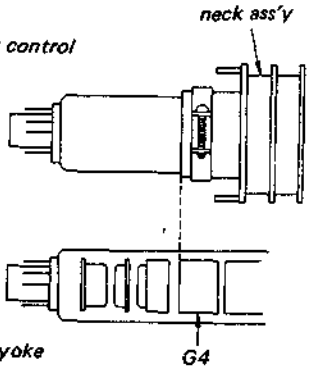


Fig. 1-2.

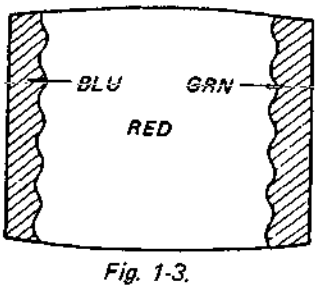


Fig. 1-3.

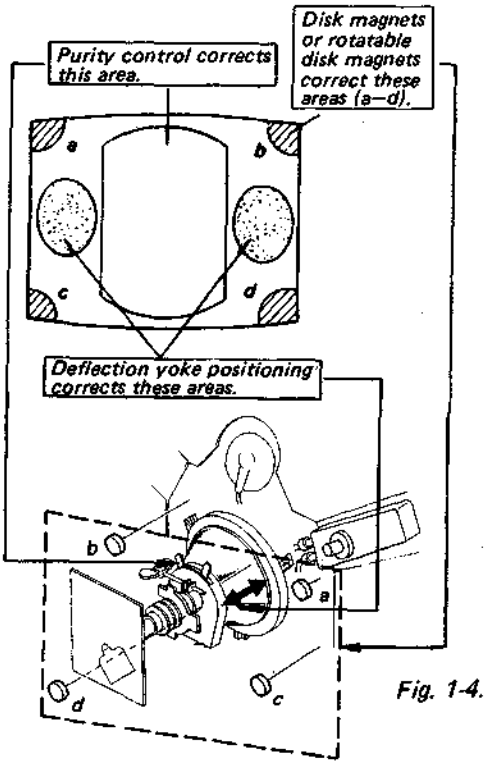


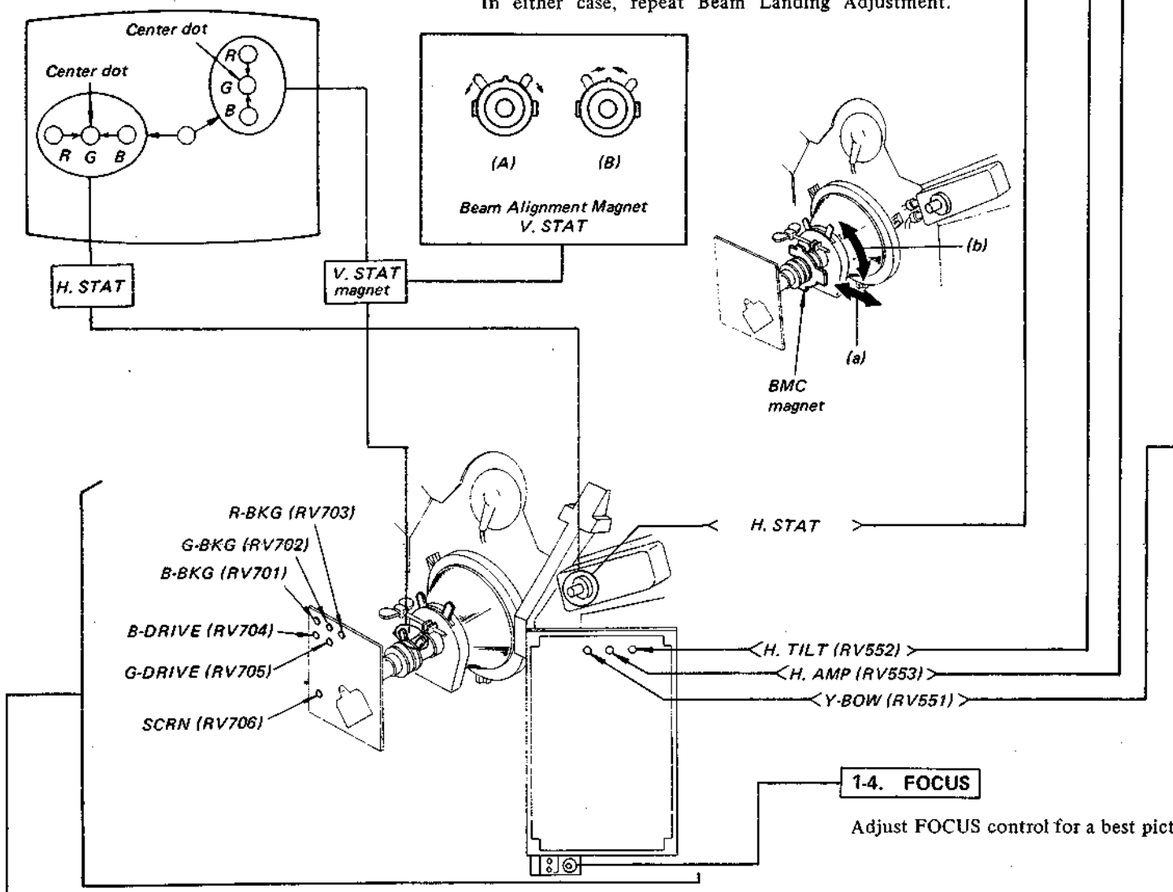
Fig. 1-4.

1-2. CONVERGENCE

Preparation:

- Before starting this adjustment, perform FOCUS, H. SIZE and V. SIZE adjustments.
- Turn BRIGHTNESS control fully counterclockwise.
- Feed in a dot pattern.

(1) Horizontal and Vertical Static Convergence



If blue dot does not coincide with red and green dots, perform following steps.

Move BMC magnet (a) to correct insufficient H. static convergence.

Rotate BMC magnet (b) to correct insufficient V. static convergence.

In either case, repeat Beam Landing Adjustment.

1-4. FOCUS

Adjust FOCUS control for a best picture.

1-3. WHITE BALANCE

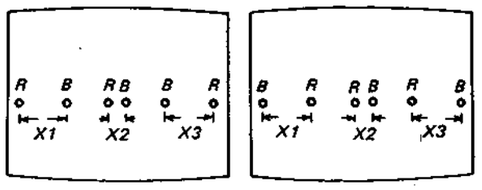
Feed in a cross-hatch pattern.

1. Turn BRIGHTNESS control fully counterclockwise and press ◑ – (picture) button to obtain a minimum picture position.
2. Turn RV704 (B.DRIVE) and RV705 (G.DRIVE) fully clockwise.
3. Set RV701 (B. BKG), RV702 (G. BKG) and RV703 (R. BKG) to mechanical center.
4. Turn RV706 (SCRN) slowly to obtain a faintly visible cross-hatch. Note the color which first becomes visible by turning RV706. Do not turn a BKG control for this color.
5. Adjust the other two BKG controls for best white balance (neutral gray) of faint cross-hatch.
6. Turn BRIGHTNESS control fully clockwise and press ◑ + (picture) button to obtain a maximum picture position. Observe the screen and adjust the DRIVE control for best white balance.
7. Repeat Steps 1 through 6 several times.

(2) Dynamic Convergence

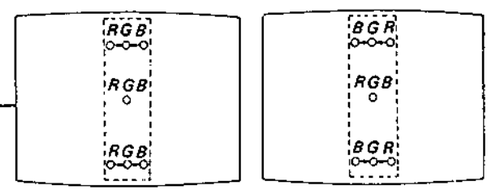
[Misconvergence at Both Sides of Screen.]

1. Set RV552 and RV553 to mechanical center.
2. Adjust H. STAT control so that green and blue dots coincide at center of screen.
3. Adjust RV552 so that X1 is equal to X3.
4. Adjust RV553 so that X2 is equal to X3.
5. Repeat above Steps 1 through 4 two or three times.

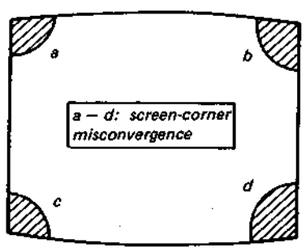


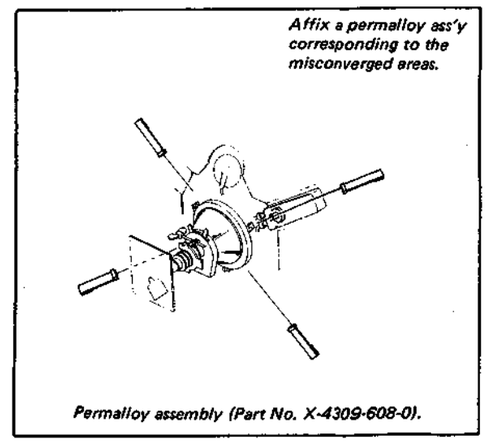
[Top and Bottom Misconvergence]

(A)



(3) Screen-corner Convergence





SECTION 2
CIRCUIT ADJUSTMENTS

Note: (1) TEST EQUIPMENT REQUIRED

1. Oscilloscope
2. Voltmeter (VOM)
3. Color-bar/pattern generator
4. Television multiplex modulator

(2) INPUT SIGNAL

When making these adjustments, supply a cross-hatch, a color-bar, or an off-air signal.

(3) CONTROL SETTINGS

Controls and switch should be set as follows when making checks and adjustments unless otherwise noted.

◑ (picture) control
SHARPNESS control
◕ (color) control
} Set for best picture.

☼ BRIGHTNESS control . . . mechanical center

AFT switch . . . . .ON

(4) These adjustment should be performed with rated power supply voltage, unless otherwise noted.

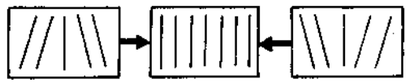
(5) CIRCUIT ADJUSTMENTS

Adjustment	Circuit Board	Page
PIN PHASE PIN AMP V PIN V ANGLE H SIZE H CENT Horizontal Sync ADJ	D	5, 6
TU AGC SUB COLOR SUB BRIGHT SUB BALANCE ADJ SEPARATION ADJ 1H DL ADJ CW PHASE 4.433MHz	A	7, 8
135V ADJ	F	9

2-1. D BOARD ADJUSTMENTS

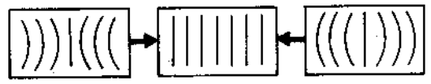
PIN PHASE

Adjust with RV556 so that the left and right vertical lines are parallel.



PIN AMP

Adjust left and right pin with RV555.



V PIN

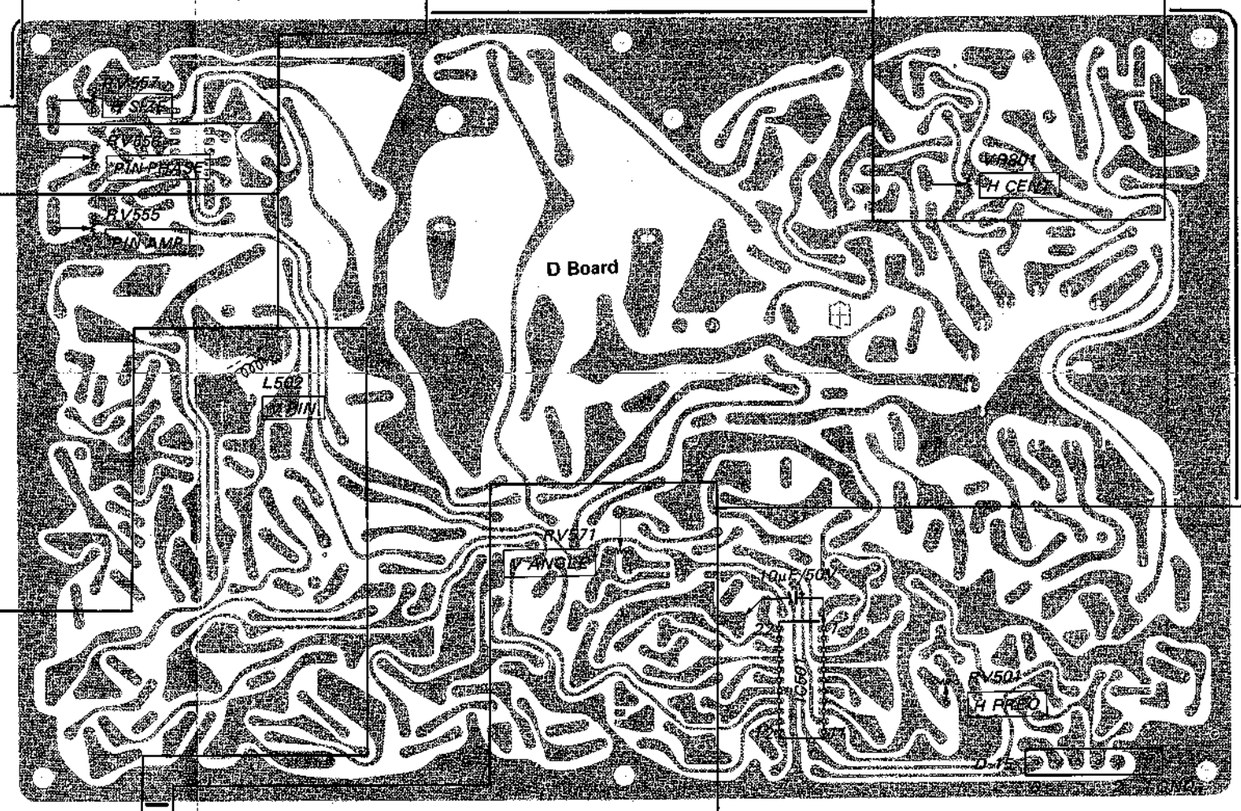
1. *Receive a special color pattern.*
2. *Set PICTURE, BRT at normal state.*
3. *Turn L502 (PAC) to adjust upper and lower pin distortion.*

H SIZE

1. *Receive a special color pattern.*
2. *Set PICTURE, BRT at normal state.*
3. *Adjust H SIZE with R557.*

H CENT

Adjust with VR 801.



V ANGLE

Adjust with RV571 so that the left and right vertical lines are perpendicular to the horizontal lines.

Horizontal Sync Adjustment

1. *Receive a broadcast.*
2. *Set PICTURE, BRT to standard state.*
3. *Connect a 10μ/50V chemical capacitor between IC501 pin (1) and ground, and set H OSC for free run.*
4. *Adjust RV501 so that picture flowing in horizontal direction stops.*
   - ** Connect chemical capacitor between IC501 pin (1) and D15 connector ground side.*

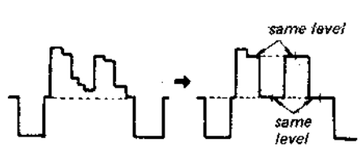
2-2. A BOARD ADJUSTMENTS

4.433MHz

1. Receive a color bar signal.
2. Release KILLER circuit.
   Mount 100kΩ between IC301 pin (13) and ground.
3. Cut burst signal by mounting a 10/16V chemical capacitor between IC301 pin (16) and ground.
4. Turn RV305 until color cycle stops. Color cycle stop range is wide with respect to the VR rotation, so stop at the point where color is lightest.

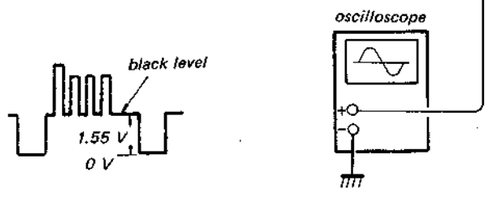
SUB COLOR

1. Receive a color bar or PHILPS color pattern.
2. Set each VR at normal state.
3. Turn RV302 until A-5 pin (4) red output is in normal state.



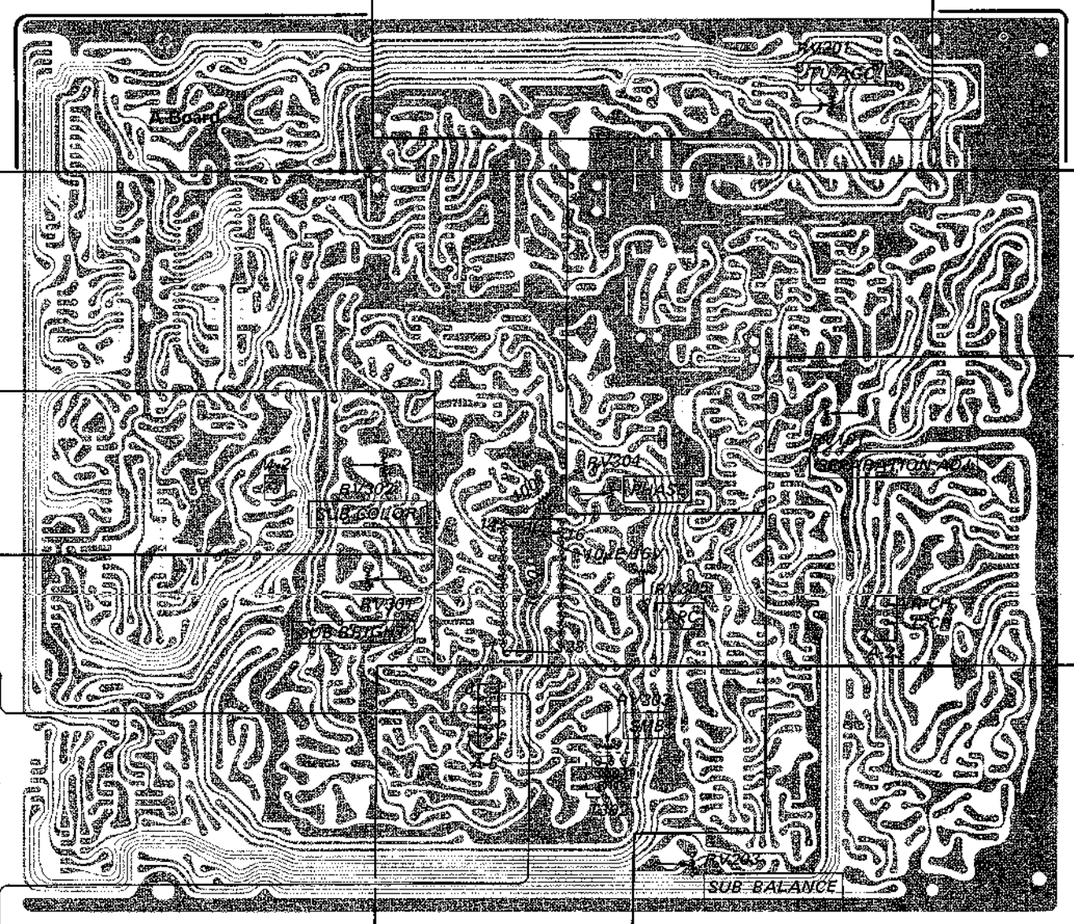
SUB BRIGHT

1. Receive a color bar signal.
2. Set PICTURE at MIN, and COLOR VR at MIN or 50%.
3. Set BRT VR at MIN.
4. Observe A-5 pin (6) blue output black level and make this black level potential 1.55V DC.



TU AGC

1. Receive a broadcast.
   Adjust with RV201 so that the snow noise on the picture disappears.
   * Receive each channel and confirm that there is no beat, snow noise, etc.



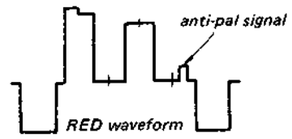
1H DL Adjustment

1. Receive a color bar signal.
2. Observe blue output of A-5, (6) pins.
3. Set PICTURE, COLOR, BRT VRs to normal state:
   PICTURE VR 50%, COLOR VR 50%, BRT VR 50%, Remote Control NORMAL.
4. Get tracking with both T302 and RV303 as shown in the diagram below.

   Note: PICTURE 80% is 27.7V DC on M-2 pin (2), MIN is 6.88V DC.

CW PHASE

1. Receive a color bar signal. (PHILPS)
2. Set each VR at normal state.
3. Turn RV304 until A-5 pin (4) red output ANTI-PAL signal becomes zero potential.



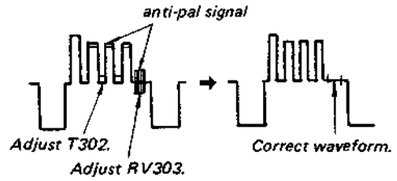
SEPARATION ADJ

1. Receive a stereo signal. (L. 400Hz, R: 1kHz)
2. Check that LED453(A), LED454(B) light up for SW403 on, and that L, R signals appear on A-23 pins (2) and (4).
3. Adjust with RV101 so that the R signal overlapping the L signal at A-23 pin (LCH) is minimum.
4. Check that LED453(A) and LED454(B) go out at SW403 off, and that L and R signals appear on A-23 pins (2) and (4).

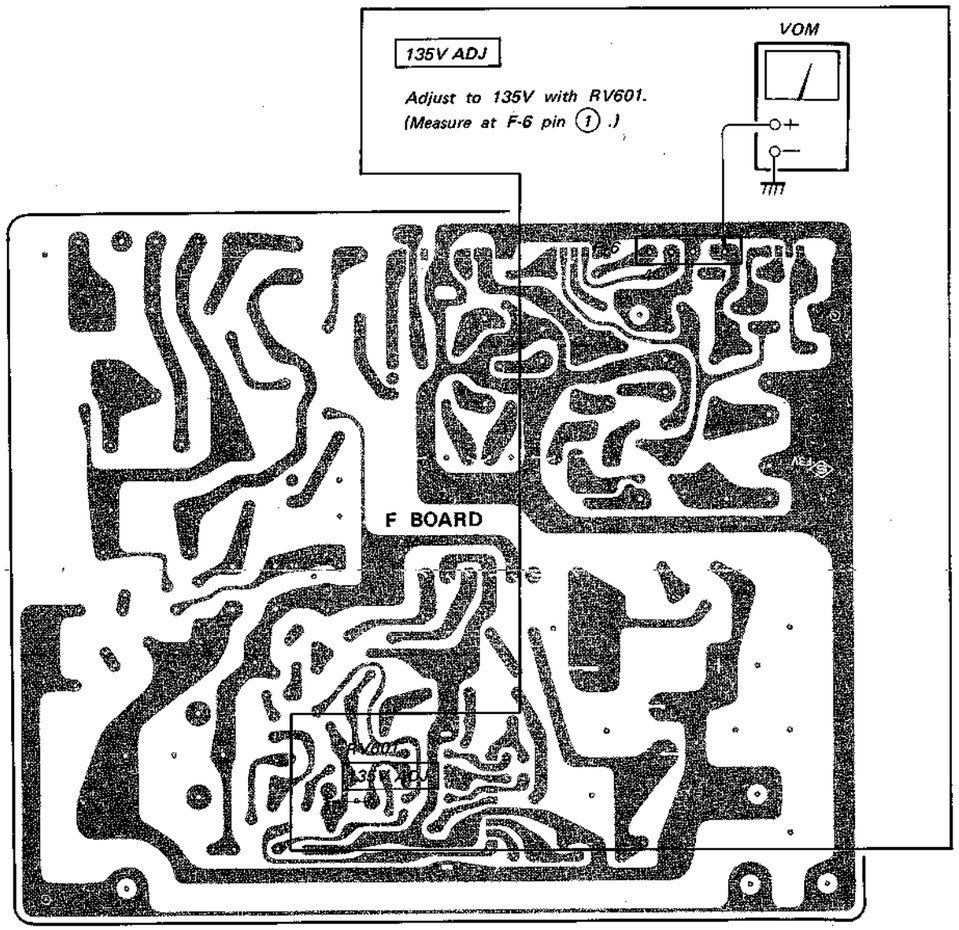
SUB BALANCE ADJ

1. SW403 (S/S) OFF. Set RV408 (BALANCE), RV402 (BASS), RV403 (TREBLE) to center.
2. Adjust with RV203 (SUB BALANCE) so that left and right levels are the same at A-23 connector pins (2), (4).
3. Turn RV408 to the right and confirm that the left side cannot be heard, then turn to the left and confirm that the right side cannot be heard.

* SUB COLOR VR (RV302) Coarse Adjustment
When color does not take well, adjust with RV302 until normal state is reached. (First do ANTI-PAL signal phase coarse adjustment.)



2-3. F BOARD ADJUSTMENT



MEMO