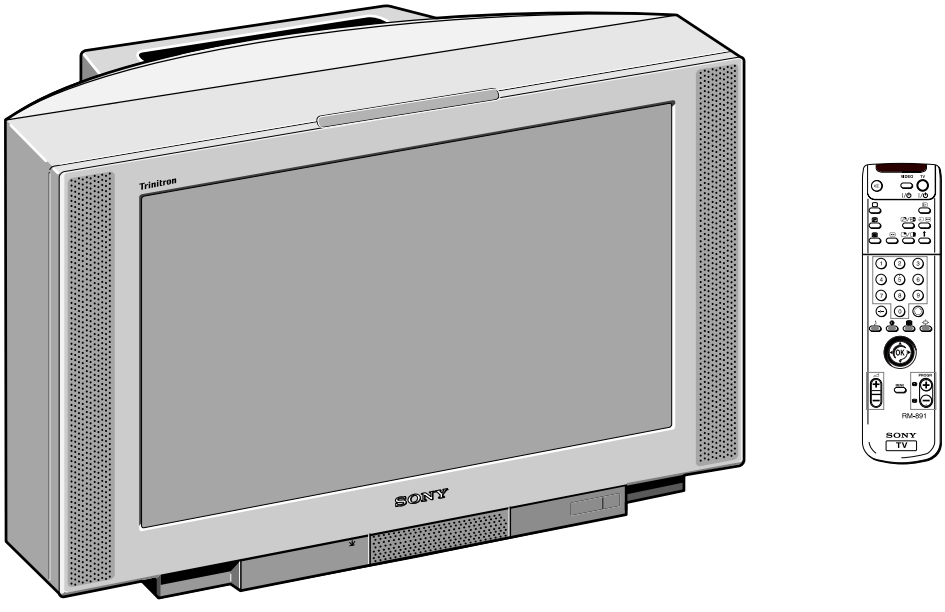
Self Diagnosis Supported model

SERVICE MANUAL

AE-5 CHASSIS

MODEL	COMMANDER	DEST	CHASSIS NO.	MODEL	COMMANDER	DEST	CHASSIS NO.
KV-29FS60A	RM-891	Italian	SCC-Q12E-A	KV-32FS60A	RM-891	Italian	SCC-Q12F-A
KV-29FS60B	RM-891	French	SCC-Q13E-A	KV-32FS60B	RM-891	French	SCC-Q13F-A
KV-29FS60D	RM-891	AEP	SCC-Q11E-A	KV-32FS60D	RM-891	AEP	SCC-Q11F-A
KV-29FS60E	RM-891	Spanish	SCC-Q14E-A	KV-32FS60E	RM-891	Spanish	SCC-Q14F-A
KV-29FS60K	RM-891	OIRT	SCC-Q16G-A				
KV-29FS60R	RM-891	OIRT	SCC-Q16H-A				
KV-29FS60U	RM-891	UK	SCC-Q15D-A				



TRINITRON ® COLOR TV

SONY ®

MICROFILM

ITEM MODEL	Television System	Stereo System	Channel Coverage	Color System
Italian	B/G/H,D/K	GERMAN Stereo	ITALIA VHF : A-H2 (C) UHF : 21-69 PAL B/G/H VHF : E2-E12 UHF : E21-E69 CABLE TV (1) : S1-S41 CABLE TV (2) : S01-S05,M1-M10,U1-U10 DK VHF : R01-R12 UHF : R21-R69	PAL, SECAM NTSC4.43, NTSC3.58 (VIDEO IN)
French	B/G/H, D/K,L,I	GERMAN/NICAM Stereo	L VHF : F02-F10 UHF : F21-F60 CABLE : B-Q B/G/H VHF : E2-E12 UHF : E21-E69 CABLE TV (1) : S1-S41 CABLE TV (2) : S01-S05, M1-M10, U1-U10 ITALIA VHF : A-H2 (C) UHF : 21-69 I UHF : B21-B69	PAL, SECAM NTSC4.43, NTSC3.58 (VIDEO IN)
AEP	B/G/H, D/K	GERMAN Stereo	PAL B/G/H/ VHF : E2-E12 : E21-E69 CABLE TV (1) : S1-S41 CABLE TV (2) : S01-S05, M1-M10, U1-U10 ITALIA VHF : A-H2 (C) UHF : 21-69 D/K VHF : R01-R12 UHF : R21-R69	PAL, SECAM NTSC4.43, NTSC3.58 (VIDEO IN)
Spanish	B/G/H, D/K	GERMAN/NICAM Stereo	PAL B/G/H/ VHF : E2-E12 : E21-E69 CABLE TV (1) : S1-S41 CABLE TV (2) : S01-S05, M1-M10, U1-U10 ITALIA VHF : A-H2 (C) UHF : 21-69	PAL, SECAM NTSC4.43, NTSC3.58 (VIDEO IN)
OIRT	B/G/H, D/K	KV-29FS60K GERMAN/NICAM Stereo KV-29FS60R GERMAN Stereo	B/G/H/ VHF : E2-E12 UHF : E21-E69 CABLE TV (1) : S1-S41 D/K VHF : R01-R12 UHF : R21-R69	PAL, SECAM NTSC4.43, NTSC3.58 (VIDEO IN)
UK	I	NICAM Stereo	UHF : B21-B69	PAL NTSC4.43, NTSC3.58 (VIDEO IN)

MODEL	29FS60A	29FS60B	29FS60D	29FS60E	29FS60K	29FS60R	29FS60U	32FS60A	32FS60B	32FS60D	32FS60E
Power Consumption	149Wh	148Wh	148Wh	148Wh	148W	148W	148Wh	144Wh	149Wh	149Wh	149Wh

[PICTURE TUBE]

KV-29FS60 FD Trinitron
Approx. 72 cm (29 inches)
(Approx. 68 cm picture measured diagonally)
102 degree deflection

KV-32FS60 FD Trinitron
Approx. 82 cm (32 inches)
(Approx. 76 cm picture measured diagonally)
102 degree deflection

Input/Output Terminals

[REAR]

1 / 21-pin Euro connector (CENELEC standard).
- Inputs for Audio and Video signals.
- Inputs for RGB.
- Outputs of TV Video and Audio signals.

2/S 21-pin Euro connector
- Inputs for Audio and Video signals.
- Inputs for S video.
- Outputs forVideo and Audio signals (selectable).

3/S 21-pin Euro connector
- Inputs for Audio and Video signals.
- Inputs for S video.

External speaker terminals : 2-pin DIN (5)

[FRONT]

3 Video output - phono jack
3 Audio inputs - phono jacks
3 S Video input - 4 pin DIN
Headphone jack : stereo minijack

Sound output	2x25W (Music Power)
Power requirements	220 - 240V
Dimensions	
KV-29FS60	Approx 738 x 588 x 507 mm (w/h/d)
KV-32FS60	Approx 867 x 564 x 558 mm (w/h/d)
Weight	
KV-29FS60	Approx 55kg
KV-32FS60	Approx 68kg
Supplied accessories	RM-891 Remote Commander (1) IEC designated R6 battery (2)
Other features	NICAM*, FASTEXT, TOPTEXT * (KV-29FS60B/29FS60E/29FS60K/ 29FS60U/32FS60B/32FS60E only)

[RM-891]

Remote control system	Infrared control
Power requirements	3V dc 2 batteries IEC designation R6 (size AA)
Dimensions	Approx 210x56x24mm (w/h/d)
Weight	Approx 110g (Not including battery)

Design and specifications are subject to change without notice.

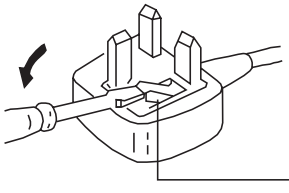
Model Name / Item	KV-29FS60A KV-32FS60A	KV-29FS60B KV-32FS60B	KV-29FS60D KV-32FS60D	KV-29FS60E KV-32FS60E	KV-29FS60K	KV-29FS60R	KV-29FS60U
Pal Comb	ON	ON	ON	ON	ON	ON	ON
PIP	OFF	OFF	OFF	OFF	OFF	OFF	OFF
RGB Priority	ON	ON	ON	ON	ON	ON	ON
Woofer Box	OFF	OFF	OFF	OFF	OFF	OFF	OFF
Scart 1	ON	ON	ON	ON	ON	ON	ON
Scart 2	ON	ON	ON	ON	ON	ON	ON
Front in (3)	ON	ON	ON	ON	ON	ON	ON
Scart 4	ON	ON	ON	ON	ON	ON	ON
Projector	OFF	OFF	OFF	OFF	OFF	OFF	OFF
AKB in 16:9 mode	ON	ON	ON	ON	ON	ON	ON
Norm B/G	ON	ON	ON	ON	ON	ON	OFF
Norm I	OFF	ON	OFF	OFF	OFF	OFF	ON
Norm D/K	ON	ON	ON	ON	ON	ON	OFF
Norm AUS	OFF	OFF	OFF	OFF	OFF	OFF	OFF
Norm L	OFF	ON	OFF	OFF	OFF	OFF	OFF
Norm SAT	OFF	OFF	OFF	OFF	OFF	OFF	OFF
Norm M	OFF	OFF	OFF	OFF	OFF	OFF	OFF
Teletext	ON	ON	ON	ON	ON	ON	ON
Nicam Stereo	OFF	ON	OFF	ON	ON	OFF	ON
Language Preset	Italian	French	German	Spanish	OIRT	OIRT	English

WARNING (KV-29FS60U only)

The flexible mains lead is supplied connected to a **B.S. 1363** fused plug having a fuse of **5 AMP** capacity. Should the fuse need to be replaced, use a **5 AMP FUSE** approved by **ASTA** to **BS 1362**, ie one that carries the ASTA mark.

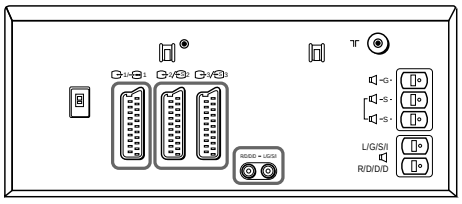
IF THE PLUG SUPPLIED WITH THIS APPLIANCE IS NOT SUITABLE FOR THE OUTLET SOCKETS IN YOUR HOME, IT SHOULD BE CUT OFF AND AN APPROPRIATE PLUG FITTED. THE PLUG SEVERED FROM THE MAINS LEAD MUST BE DESTROYED AS A PLUG WITH BARED WIRES IS DANGEROUS IF ENGAGED IN A LIVE OUTLET SOCKET.

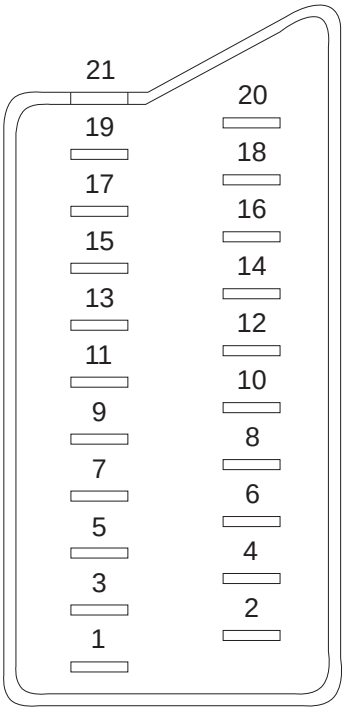
When an alternative type of plug is used it should be fitted with a **5 AMP FUSE**, otherwise the circuit should be protected by a **5 AMP FUSE** at the distribution board.



How to replace the fuse.
Open the fuse compartment with a screwdriver blade and replace the fuse.

21 pin connector

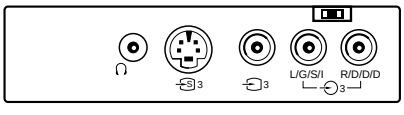




Pin No	1	2	4	Signal	Signal level
1	○	○	○	Audio output B (right)	Standard level : 0.5V rms Output impedence : Less than 1kohm*
2	○	○	○	Audio output B (right)	Standard level : 0.5V rms Output impedence : More than 10kohm*
3	○	○	○	Audio output A (left)	Standard level : 0.5V rms Output impedence : Less than 1kohm*
4	○	○	○	Ground (audio)	
5	○	○	○	Ground (blue)	
6	○	○	○	Audio input A (left)	Standard level : 0.5V rms Output impedence : More than 10kohm*
7	○	●	●	Blue input	0.7 +/- 3dB, 75 ohms positive
8	○	○	○	Function select (AV control)	High state (9.5-12V) : Part mode Low state (0-2V) : TV mode Input impedence : More than 10K ohms Input capacitance : Less than 2nF
9	○	○	○	Ground (green)	
10	○	○	○	Open	
11	○	●	●	Green	Green signal : 0.7 +/- 3dB, 75 ohms, positive
12	○	○	○	Open	
13	○	○	○	Ground (red)	
14	○	○	○	Ground (blanking)	
15	○	–	–	Red input	0.7 +/- 3dB, 75 ohms, positive
	–	○	○	(S signal Chroma input)	0.3 +/- 3dB, 75 ohms, positive
16	○	●	●	Blanking input (Ys signal)	High state (1-3V) Low state (0-0.4V) Input impedence : 75 ohms
17	○	○	○	Ground (video output)	
18	○	○	○	Ground (video input)	
19	○	○	○	Video output	1V +/- 3dB, 75ohms, positive sync 0.3V (-3+10dB)
20	○	–	–	Video input	1V +/- 3dB, 75ohms, positive sync 0.3V (-3+10dB)
	–	○	○	Video input Y (S signal)	1V +/- 3dB, 75ohms, positive sync 0.3V (-3+10dB)
21	○	○	○	Common ground (plug, shield)	

○ Connected ● Not Connected (open) * at 20Hz - 20kHz

Pin No.	Signal	Signal Level
1	Ground	
2	Ground	
3	Y (S signal) input	1V ± 3dB 75 ohm, positive Sync. 0.3V -3 + 10dB
4	C (S signal) input	0.3V ± 3dB 75 ohm, positive Sync.



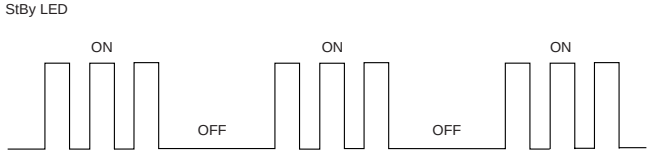
AE-5 SELF DIAGNOSTIC SOFTWARE

The identification of errors within the AE-5 chassis is triggered in one of two ways :- 1: Busy or 2: Device failure to respond to IIC. In the event of one of these situations arising the software will first try to release the bus if busy (Failure to do so will report with continuous flashing LED) and then communicate with each device in turn to establish if a device is faulty. If a device is found to be faulty the relevant device number will be displayed through the LED (Series of flashes which must be counted) See table 1., non fatal errors are reported using this method.

Diagnostic Item Description	No of times Standby LED Flashes	Probable cause Location	Detected Symptoms
Power does not turn on	Does not light	Power cord is not plugged in Fuse is burned out	Power does not come on No power is supplied to the TV AC power supply is faulty
+B Overcurrent (OCP)	2 times	H.OUT (Q6803/6804) is shorted. (D Board) Linearity FET (Q6806) is shorted. (D Board) IC6604 Power IC is shorted. (D Board)	Power does not come on Load on power line has shorted
Vertical Deflection stopped	4 times	+15V is not supplied R6835 open (D Board) -15V is not supplied R6834 open (D Board) IC6700 is shorted (D Board)	Vertical deflection pulse has stopped Power line has shorted

ERROR	LED ERROR COUNT
No error	00
Not allowed (may be confused with Sircs response flash!)	01
Over Current Protection	02
Over Voltage Protection	03
Vertical Protection	04
AKB	05
H - Protection	06
Speaker Protection	07
General IIC Line 0 error	08
MEGATEXT	09
NVM	10
Main colour decoder	11
Feature Box	12
D/A converter	13
Backend	14
Multi sound processor	15
Auto Wide	16
External RAM	17

Flash Timing Example : e.g. error number 3



ERROR DETECTION MONITOR

Device acknowledge is used to check IIC errors. Device acknowledge is checked by sending an IIC start sequence during CRT power on. Each device is checked three times, if there is no acknowledge after every attempt, it will be regarded as an error.
There are three steps to check errors

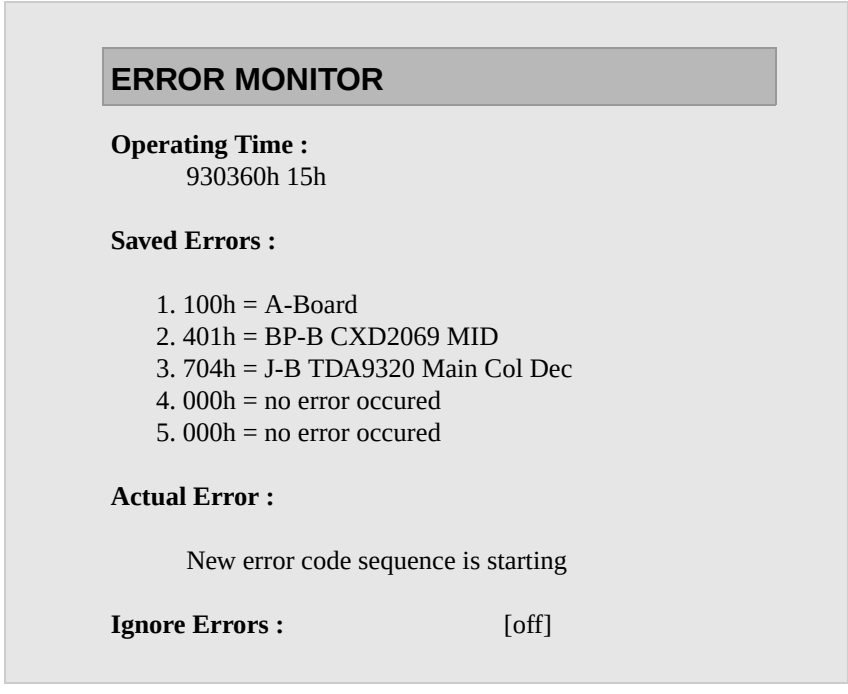
1. IIC line 0
   If all devices except the NVM have errors, IIC line 0 error is displayed
2. Board check
   If all devices mounted on one board have errors, board error is displayed
3. Each device check
   If IIC line error and board error are not detected then the device with an error is displayed

The detected errors can be displayed as follows:

1. Error Monitor Menu
2. Error Reader

1. ERROR MONITOR MENU

The error monitor menu is displayed by selecting TT33. The following menu will be displayed:



2. ERROR READER DISPLAY

The error reader display is connected to the service connector to read actual error codes. The part number for the error reader display is S-188-900-10. Once an error has been detected it will then be displayed on the two digit error reader. The errors displayed refer to the following table :

	Send Data to Error Reader			
Error Code	Data high	Data Low	Error type	Function
00 00h	-	f0h	no device	
Gen.IIC Error				
00 01h	f0h	01h	IIC 0 line	
00 02h	f0h	02h	IIC 1 line	not used
Board Error				
01 00h	f1h	00h	A Board	
02 00h	f2h	00h	B1 Board	
03 00h	f3h	00h	B2 Board	
04 00h	f4h	00h	BP Board	
05 00h	f5h	00h	D1 Board	
06 00h	f6h	00h	E Board	
07 00h	f7h	00h	J Board	
Device Error				
A Board				
01 01h	f1h	01h	CXA1875	Port Expander
01 02h	f1h	02h	TU1326	Main Tuner
01 03h	f1h	03h	TU1350	Sub Tuner
B1 Board				
02 01h	f2h	01h	P83C654	Feature Box
02 02h	f2h	02h	SDA9280	D/A Converter
B2 Board				
03 01h	f3h	01h	SAA4977	Basic
03 02h	f3h	02h	SAA4950	Memory
BP Board				
04 01h	f4h	01h	CXD2069	MID
D1 Board				
05 01h	f5h	01h	CXA8070	Dynamic Conv.
05 02h	f5h	02h	CXA1875	Port Expander
E Board				
06 01h	f6h	01h	CXD2100	Backend
J Board				
07 01h	f7h	01h	CXD2057	Auto Wide
07 02h	f7h	02h	SDA9288	PIP
07 03h	f7h	03h	TDA9320	Sub Colour
07 04h	f7h	04h	TDA9320	Main Colour
07 05h	f7h	05h	CXA1875	Sub Sound
07 06h	f7h	06h	TDA7309	HP Amp
07 07h	f7h	07h	TEA6422DT	Audio SW
07 08h	f7h	08h	MSP3410D	Sound Proc
07 09h	f7h	09h	TC9337F	Sound DSP

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CAUTION

SHORT CIRCUIT THE ANODE OF THE PICTURE TUBE AND THE ANODE CAP TO THE METAL CHASSIS, CRT SHIELD, OR THE CARBON PAINTED ON THE CRT, AFTER REMOVAL OF THE ANODE CAP

WARNING !!

AN ISOLATING TRANSFORMER SHOULD BE USED DURING ANY SERVICE WORK TO AVOID POSSIBLE SHOCK HAZARD DUE TO LIVE CHASSIS. THE CHASSIS OF THIS RECEIVER IS DIRECTLY CONNECTED TO THE POWER LINE.

SAFETY-RELATED COMPONENT WARNING !!

COMPONENTS IDENTIFIED BY SHADING AND MARKED ⚠ ON THE SCHEMATIC DIAGRAMS, EXPLODED VIEWS AND IN THE PARTS LIST ARE CRITICAL FOR SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

ATTENTION

APRES AVOIR DECONNECTE LE CAP DE'LANODE, COURT-CIRCUITER L'ANODE DU TUBE CATHODIQUE ET CELUI DE L'ANODE DU CAP AU CHASSIS METALLIQUE DE L'APPAREIL, OU AU COUCHE DE CARBONE PEINTE SUR LE TUBE CATHODIQUE OU AU BLINDAGE DU TUBE CATHODIQUE.

ATTENTION !!

AFIN D'EVITER TOUT RISQUE D'ELECTROCUTION PROVENANT D'UN CHÁSSIS SOUS TENTION, UN TRANSFORMATEUR D'ISOLEMENT DOIT ETRE UTILISÈ LORS DE TOUT DÈPANNAGE. LE CHÁSSIS DE CE RÈCEPTEUR EST DIRECTMENT RACCORDÈ Á L'ALIMENTATION SECTEUR.

ATTENTION AUX COMPOSANTS RELATIFS Á LA SÈCURITÈ !!

LES COMPOSANTS IDENTIFIÈS PAR UNE TRAME ET PAR UNE MARQUE ⚠ SUR LES SCHÈMAS DE PRINCIPE, LES VUES EXPLOSÈES ET LES LISTES DE PIECES SONT D'UNE IMPORTANCE CRITIQUE POUR LA SÈCURITÈ DU FONCTIONNEMENT, NE LES REMPLACER QUE PAR DES COMPSANTS SONY DONT LE NUMÈRO DE PIÈCE EST INDIQUÈ DANS LE PRÈSENT MANUEL OU DANS DES SUPPLÈMENTS PUBLIÈS PAR SONY.

Overview

This section briefly describes the buttons and controls on the TV set and the Remote Control. Open the flaps at the front and back of his Instruction Manual for detailed illustrations. For more information refer to the page numbers given in the overview.

Remote Control

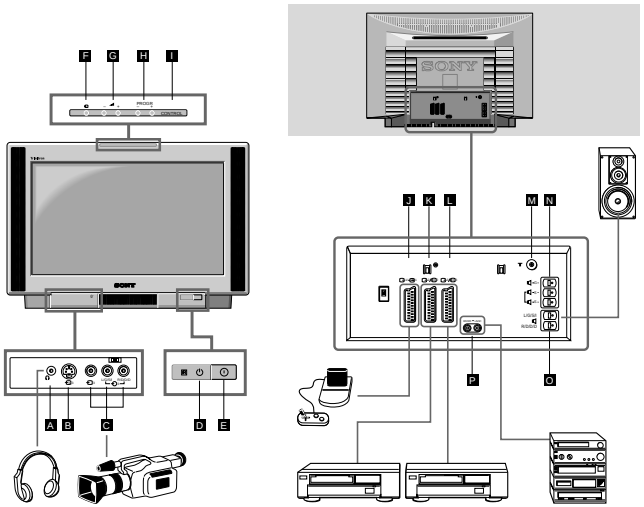
Symbol	Description	See page
❶ TV I/⏻	TV: standby mode on/off	32
❷	TV: on-screen display	32
	Teletext: index page	42
❸	Selecting of input source	44
	Teletext: Freezing a subpage	42
❹	PIP: Swapping the screens	41
❺	PIP: Selecting the source	41
❻	PIP: Switching on and off	41
❼ 1, 2, ... 9, 0	Number buttons	32
❽	Back to the channel last selected	32
❾	Selecting of screen format	32
❿	No function on this set	
⓫	Joystick for menu selection	31
	Press OK to confirm	
⓬ MENU	Switching on and off of Menu system	31
⓭ PROGR +/–	TV: Channel selection up- and downwards	32
	Teletext: Page selection up-and downwards	42
⓮ +/–	Volume control	32
⓯	Picture mode	32
⓰	Equaliser mode	32
⓱ -/--	Selection of double digit channel numbers	32
⓲	Freezing of TV picture	32
⓳	No function on this set	
⓴	Teletext: Switching on	42
㉑	TV: Selecting of TV mode	32
	Teletext: Switching off	42
㉒	Muting of sound on/off	32
㉓ VIDEO I/⏻	VCR: Standby mode	45
Buttons under cover		
㉔	Displaying of the time	32
㉕ CH +/–	VCR operation	45
VTR 1 2 3 4 MDP	Video equipment selector	
◀◀ ▶ ▶▶ ■ ❚❚ ●	Buttons for VCR operation	
㉖	Resetting of picture setting	32

SECTION 1 GENERAL

The operating instructions mentioned here are partial abstracts from the Operating Instruction Manual. The page numbers of the Operating Instruction Manual remain as in the manual.

TV-set – front and top

Symbol	Description	See page
A	Headphone jack	54
B	3	S-video input jack	52
C	3, 3	Phono video/audio inputs	52
D	⏻	Indicator for Standby mode	37
E		Power switch	37
F		Selecting input source	52
G	+/–	Volume control	37
H	PROGR +/–	Channel selection up- and downwards	37
I	CONTROL	Control panel: Switching on/off	37



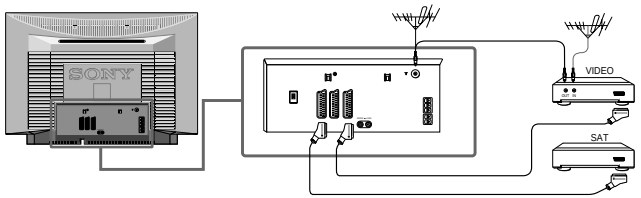
TV-set – rear

Symbol	Description	See page
J	1/1	21-pin Euro connector (Scart)	52
K	2/2	21-pin Euro connector (Scart)	52
L	3/3	21-pin Euro connector (Scart)	52
M		Aerial socket	35
N	R/D/D/D, L/G/S/I, , S, C	External speaker terminals (Centre, Surround)	34
O	L/G/S/I R/D/D/D	Left and right speaker terminals	34
P	L/G/S/I R/D/D/D	Audio phono jacks	54

B Connecting the TV Set

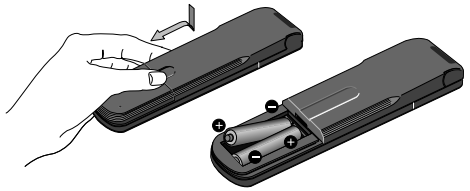
1 Connect the TV set to the mains socket (220-240 V. AC, 50 Hz).
2a Connect a conventional aerial cable to the socket marked ⊤ M on the rear of the TV set
or
2b Connect your Satellite Receiver to one of the Scart connectors J K L of the TV set.

When connecting a VCR to your TV set:
We recommend that you use the preset function Manual Programme Preset (page 38) to tune in the VCR signal to programme position 0.



C Inserting the Batteries into the Remote Control

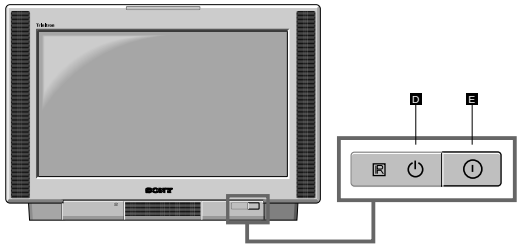
Make sure to insert the batteries using the correct polarities.
Dispose of exhausted batteries according to your local regulations.



D Switching on the TV Set

- Press the switch ⏻ E at the front of the TV set.

If the standby mode indicator ⏻ D on the TV is lit, press TV I/⏻ ❶ on the Remote Control to switch on the TV set.

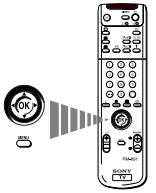


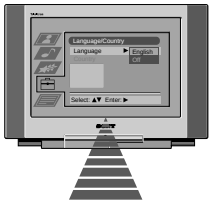
Step 2 Basic Presetting

A The Menu System

Your TV uses an on-screen menu system to guide you through the operations. Use the following buttons on the Remote Control to operate the menu system:

- Press MENU ⓬ to switch the menu on and off.
- Use ◄, ►, ▲, ▼ of the joystick ⓫ to select within the menu system.
- Press OK to store.
- When menu is switched off:
  Press ◄ to return to the last menu screen.

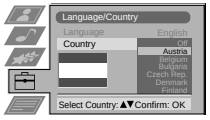




B Selecting Language and Country

1 Press the MENU ⓬ button.
The menu Language/Country appears on the screen.
2 Push the joystick ⓫ to ►. Push the joystick ⓫ to ▼ to select the language. Press OK ⓫.
The menus appear in the selected language.
3 Push the joystick ⓫ to ▼ to select Country. Push the joystick ⓫ to ►.
4 Select the country in which you will operate the TV set using ▼ or ▲.
Select Off if you wish an automatic tuning **without** ACI (fast presetting with a given channel sequence).
- Confirm by pressing OK ⓫.

The menu Auto Tuning appears.

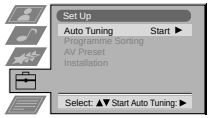


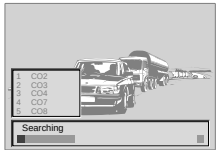
C Automatic Tuning In of Channels

- Push the joystick ⓫ to ► for more than 2 sec..

After all available channels are stored, the TV goes back to the programme position with which you started the automatic tuning. Your TV is now ready for use.

- To stop the automatic tuning: Press OK ⓫.
- If you wish to change the sequence of the stored channels, go to Sorting Programme Positions in Advanced Presetting.
- If you need to change or repeat the tuning afterwards (e.g. when you move house) : select the menu Auto Tuning in the Set Up menu.

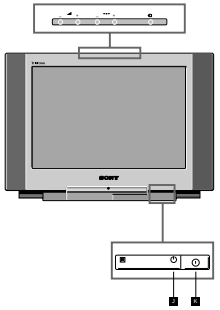


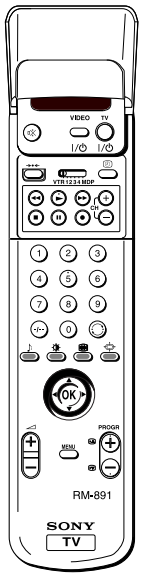


Step 3 Basic TV operation

This section explains the most important functions for the daily use of your TV set. When using the control panel on the top of the TV set, first press CONTROL I, then F, G or H.

Function	Operation
Switching on/off	• Press ⏻ E on the TV set. ⚠ To save energy, we recommend to switch off the TV completely when set is not in use.
Switching off temporarily (Standby mode)	• Press TV I/⏻ ❶. TV is now in standby mode. Indicator ⏻ D lights up. After 15 min. without any TV signal and no pressing of a button, the TV automatically goes into standby mode.
Switch on from standby mode	• Press TV I/⏻ ❶, PROGR +/– ⓲ H or any number button ❼.
Selecting channels	• Press PROGR +/- ⓲ H or the number buttons ❼. For a double digit number first press -/-- ⓱, then the two number buttons.
Using the Channel overview	• Press OK ⓫. Push to ▼ or ▲ to select a channel, push to ▶ to confirm.
Going to the channel last selected	• Press ❽.
Adjusting the volume	• Press + or – ⓰ G.
Muting the sound	• Press ✕ ㉒ to switch sound off or on.
Selecting Equaliser mode (See also page 39)	• Press ♪ repeatedly ⓯ to select one of the following modes: Personal, Vocal, Jazz, Rock, Pop or Flat
Selecting Picture mode (see also page 38)	• Press ☀ repeatedly ⓯ to select one of the following modes: Personal, Movie or Live.
Freezing the picture	• Press ⏯ ⓲ if you wish to make a note of an information, e.g., a telephone number. Press again to return to the normal TV screen.
Changing the screen format	• Press ❾ repeatedly to select 4:3 or 16:9 (imitation of wide screen format).
Resetting picture/sound settings to factory levels	• Open the cover of the Remote Control. Press ㉖.
Displaying on-screen indications	• Press i ❷ to switch indications on or off.
Displaying the time (only when teletext is broadcast)	• Open the cover of the Remote Control. Press ㉔ to switch time on or off.
Using Teletext (see also page 42)	• Press ☰ ⓴ to switch on. Press ▢ ㉑ to switch off. Select a page using the number buttons ❼. E.g. for page 125 press 1,2 and 5. Select the index page by pressing i ❷.
Viewing the input signal of a connected device (see also page 44)	• Press ⇥ ❸ repeatedly to select the desired input source. Press ▢ ㉑ to return to the TV picture.

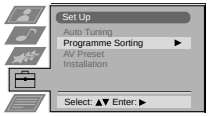




Advanced Operation

Advanced Presetting

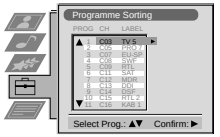
Sorting of Programme Positions



After having used Automatic Tuning of channels you may wish to rearrange the order of the channels.

1 Press MENU. Select the symbol using ▼. Push to ▶.

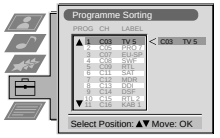
2 Select Programme Sorting using ▼. Push to ▶ to enter.



3 Select the programme position of the channel you wish to sort using ▲ or ▼. Push to ▶ to enter.

4 Move the channel to the new programme position using ▲ or ▼. Store by pressing OK.

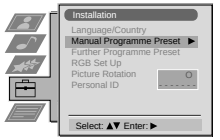
The channel is now at the new position. The other programme positions move accordingly.



5 To sort other programme positions repeat steps 3 to 4.

6 Press MENU to return to the normal TV screen.

Manual Tuning In of Channels

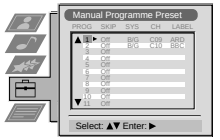


Use this function to preset channels or a video input source one by one to programme positions of your choice.

1 Press MENU. Select the symbol using ▼. Push to ▶.

2 Select Installation using ▼. Push to ▶ to enter.
Select Manual Programme Preset using ▼. Push to ▶ to enter.

3 Select the programme position by pushing to ▲ or ▼. Push twice to ▶.
The column SYS is highlighted.



4 Select the TV system using ▲ or ▼. Push to ▶ to enter.
Available TV systems are B/G for western European countries, D/K for eastern European countries, EXT for a video input source (please go to step 5c after selecting EXT)
The column CH is highlighted.

5 Select your method for the channel tuning using ▲ or ▼. Push to ▶ to enter.
You have the choice between **C** for a terrestrial channel, **S** for a cable channel, **F** for direct frequency input.

a Direct Channel Input - S, C or F

For channel numbers input a two digit number, for the channel frequency a three digit number.

- Select the two or three digits by using the number buttons 0 to 9.
- To start the search and to store the channel, press OK.
- To preset other channels repeat steps 3 to 5a.

b Channel search (SEARCH)

Use Search if you do not know the channel number or frequency

- Start the search for the next available channel by pushing to ▼.
- Store the channel by pressing OK or continue the search by pushing again to ▼.
- To search for other channels repeat steps 3 to 5b.

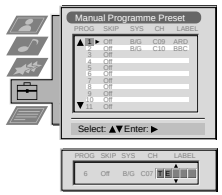
c For video input sources (EXT)

- Select the Video Input source using ▲ or ▼.
- Store your selection by pressing OK.
- To allocate other sources repeat steps 3 to 5c.

6 Press MENU to return to the normal TV screen.

Captioning a Station Name

During presetting the channels are usually labelled automatically.
You can, however, individually name a channel or a video input source.



1 Press MENU. Select the symbol using ▼. Push to ▶.

2 Select Installation using ▼. Push to ▶ to enter.
Select Manual Programme Preset using ▼. Push to ▶ to enter.

3 Select the programme position of the channel or the video source you wish to label by pushing to ▼ or ▲. Push repeatedly to ▶ until the first element of the position LABEL is highlighted.

4 Select a number, a letter, + or a blank using ▲ or ▼. Push to ▶ to confirm.
Select the other four characters in the same way.

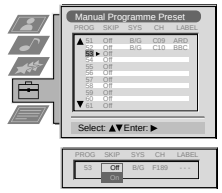
5 Store your selection by pressing OK.

6 To label other channels or video sources repeat steps 3 to 5.

7 Press MENU to return to the normal TV screen.

Skipping of Programme Positions

In case of 100 programme positions there may be unused positions, which you can skip in the menu Manual Programme Preset. When changing channels with the PROGR +/– buttons they do then not appear.
You can, however, still select them using the number buttons.



1 Press MENU. Select the symbol using ▼. Push to ▶.

2 Select Installation using ▼. Push to ▶ to enter.
Select Manual Programme Preset using ▼. Push to ▶ to enter.

3 Select the programme position you wish to skip by pushing to ▲ or ▼.
Push to ▶ to enter.
The column SKIP is highlighted.

4 Select ON using ▼.

5 Store by pressing OK.

6 To skip other programme positions repeat steps 3 to 5.

7 Press MENU to return to the normal TV screen.

Selecting your NexTView Provider*

***depending on availability of service**

NexTView is an on-screen electronic programme guide, providing you with programme information on many broadcasters. Your TV set automatically selects a NexTView provider. This provider will be available about 30 minutes after the channel tuning. You can however, also select a provider of your choice. See Using NexTView on page 48 for information on the operation of NexTView.

When using a satellite receiver make sure to connect the receiver to the aerial socket of your TV set.

1 Press MENU. Select the symbol using ▼. Push ▶ to enter.

2 Select Select NexTView using ▼. Push ▶ to enter.
A list is displayed containing all available NexTView providers and the supported broadcasters.

3 Select the desired NexTView provider by using ▲ or ▼. Store by pressing OK.

4 Press MENU to return to the normal TV screen.

Using of Further Programme Preset

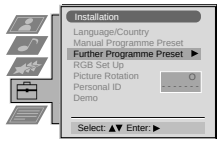
Using the menu Further Programme Preset you can

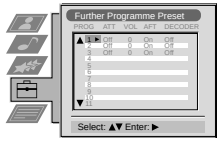
a) individually attenuate the strength of a channel signal in case of a strong local aerial signal (striped picture).

b) individually adjust the volume level of each channel.

c) improve the quality of a weak channel (picture or sound distortions) with manual fine tuning.

d) preset the AV output for programme positions of those channels with scrambled signals (e.g. from a Pay TV decoder). In this way a connected Smartlink VCR records the unscrambled signal.





1 Press MENU. Select the symbol using ▼. Push ▶ to enter.

2 Select Installation using ▼. Push ▶ to enter. Select Further Programme Preset using ▼. Push ▶ to enter.

3 Select the programme position of the desired channel by pushing ▲ or ▼.
Push ▶ repeatedly to select:
ATT (RF attenuator), VOL (Volume Offset), AFT (Automatic Fine Tuning) or DECODER.
The selected item changes colour.

4a ATT
Push ▼ to select ON. Store by pressing OK.
Repeat steps 3 and 4a if you wish to attenuate other channels.

b VOL
Push ▲ or ▼ to adjust the volume level (range -7 to +7) of the channel.
Store by pressing OK.
Repeat steps 3 and 4b if you wish to adjust the volume level of other channels.

c AFT
Push ▲ or ▼ to fine tune the channel (range -15 to +15). Store by pressing OK.
Repeat steps 3 and 4c if you wish to fine tune other channels.

d DECODER
Push to ▲ or ▼ to select AV1 (Euro AV socket 1) or AV2 (Euro AV socket 2) as output for the video source on this programme position. Store by pressing OK.
Repeat steps 3 and 4d if you wish to preset the AV output of other video sources.

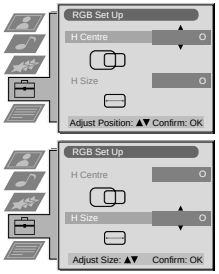
Should you use Auto Tuning afterwards, this setting will be cancelled.

5 Press MENU to return to the normal TV screen.

Adjusting the Picture Geometry for an RGB Source

When connecting an RGB source such as a Sony playstation you may need to readjust the picture geometry.

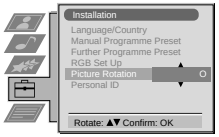
1 Select the connected RGB source by pressing repeatedly.
2 Press MENU. Select the symbol using ▼. Push to ►.
3 Select Installation using ▼. Push to ► to enter. Select RGB Set Up using ▼. Push to ► to enter.
4 Select H Centre by pushing to ►. Adjust the centre of the picture (range from -10 to +10) using ▲ or ▼. Store by pressing OK.
5 Select H Size using ▼. Push to ► to enter. Adjust the horizontal coordinates (range from -10 to +10) using ▲ or ▼. Store by pressing OK.
6 Press MENU to return to the normal TV screen.



Adjusting the Picture Rotation

Because of the earth magnetism the picture might slant. In this case you can readjust the picture.

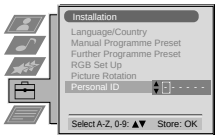
1 Press MENU. Select the symbol using ▼. Push to ►.
2 Select Installation using ▼. Push to ► to enter. Select Picture Rotation using ▼. Push to ► to enter.
3 Adjust the Picture Rotation (adjusting range -5 to +5) by pushing to ▲ or ▼. Store by pressing OK.
4 Press MENU to return to the normal TV picture.



Inputting Your Personal ID

You can programme your TV with a safety code, so that you can be traced if your TV is stolen and recovered. This code can only be input once!
Make sure to write it down in this Instruction Manual.

1 Press MENU. Select the symbol using ▼. Push to ►.
2 Select Installation using ▼. Push to ► to enter. Select Personal ID using ▼. Push to ► to enter.
3 a Select the first of a total of 11 characters (letter, number, + or a blank) by using ▲ or ▼.
b Push to ► to go to the next character.
c Repeat a and b for all characters.
4 Store by pressing OK.
5 Press MENU to return to the normal TV screen.



Presetting and Labelling of Input Sources

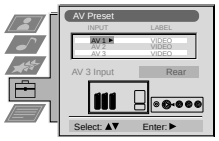
1 Press MENU. Select the symbol using ▼. Push to ►.
2 Select AV Preset using ▼. Push to ► to enter.
3 Select the desired AV input (AV 1, 2 or 3) using ▲ or ▼. Push to ► enter.

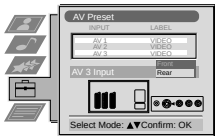
After each step you have the choice between memorizing (press OK) or going to the next item (push to ►).

4 **To label the source:**
a Push to ► to select Label.
b Select the first character using ▲ or ▼. Push to ► to confirm.
c Repeat step b to select the other 4 characters.
d Store by pressing OK.
5 Repeat steps 3 to 4 for the other AV inputs.
6 **Selecting the AV3 Input Source:**

In case of AV3 you have the choice between the front AV3 sockets B C or the rear Scart 3 L connector.

a Push to ▼ to select AV3 Input. Push to ► to enter.
b Select Front or Rear using ▲ or ▼.
c Store by pressing OK.
7 Press MENU to return to the normal TV screen.





Advanced TV operation

Adjusting Picture and Sound

Picture and sound are adjusted at the factory. You can however, adjust them individually.

1 Press MENU.
Select the symbol for Picture or for Sound using ▲ or ▼.
Push to ► to enter.

The menu Picture or Sound Control is displayed.

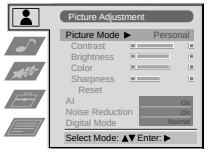
2 Select the desired item using ▲ or ▼. Push to ► to enter.

3 Adjust the selected item using ▲, ▼, ► and ◄. Press OK to store.

Refer to the tables on this and the following page for more information.

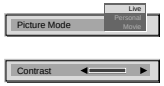
4 Repeat steps 2 and 3 to adjust other items.

5 Press MENU to return to the normal TV screen.



Picture Control

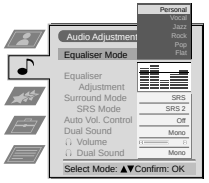
Item	Effect/Operation
Picture Mode	▼ Live (for live broadcasts) Personal (for individual settings) ▲ Movie (for movie broadcasts)
Contrast	Less ◄ ► More
Brightness*	Darker ◄ ► Brighter
Colour*	Less ◄ ► More
Hue**	Reddish ◄ ► Greenish
Sharpness*	Softer ◄ ► Sharper
Reset	Resets picture to the factory preset levels
AI (Artificial Intelligence)	▲ Off: normal ▼ On: Automatic optimization of contrast level according to the TV signal
Noise Reduction	▲ Off: Normal ▼ On: Reduces picture noise in case of a weak broadcasting signal
Digital Mode	▼ Normal: 100 Hz Digital+: 100 Hz plus line flicker reduction ▲ Advanced: Digital+ plus smoothing of motions



* Only if Personal is selected in Picture Mode
** Only available for NTSC colour signal (e.g. US video tapes)

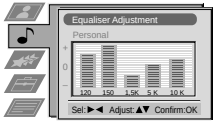
Sound Control

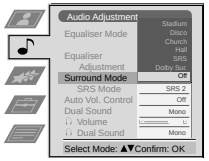
Item	Effect/Operation
Equaliser mode	Select between the following sound settings ▼ Personal Vocal Jazz Rock Pop ▲ Flat (fixed setting, cannot be adjusted)



Sound Control (continued)

Item	Effect/Operation
Equaliser adjustment	You can adjust the mode selected in Equaliser mode by cutting and boosting of 5 selected frequency bands. Only the changes made in Personal can be stored, the others return to factory setting. ● Select the desired bar using ► or ◄, adjust using ▲ and ▼. Press OK to store.
Surround mode	▲ Off: Normal Dolby Sur. (Pro Logic or Tru Surround **) Select when receiving a Dolby broadcast. After the broadcast return to off, otherwise the TV automatically selects Dolby for any stereo broadcast and the sound will be distorted. SRS Hall Church Disco ▼ Stadium
SRS-Mode* *only when SRS is selected in Surround mode	▲ SRS 1 SRS 2 ▼ SRS 3
Auto Volume Control	▲ On: volume level of the channels will stay the same independent of the broadcast signal (e.g. in case of advertisements) ▼ Off: volume level changes according to the broadcast signal
Dual Sound	For a bilingual broadcast: ▼ A for channel 1 ▲ B for channel 2 For a stereo broadcast: ▼ Mono ▲ Stereo
Headphones Volume Dual Sound	Less ◄ ► More For a bilingual broadcast: ▼ A for channel 1 ▲ B for channel 2 PAP When PAP is switched on, you can additionally select the PAP sound for the headphones





** TruSurround is a trademark of SRS Labs, Inc. SRS and the SRS symbol are registered trademarks of SRS Labs, Inc. in the Unites States and selected foreign countries. SRS and TruSurround are incorporated under license from SRS Labs, Inc. and is protected under United States Patent Nos. 4,748,669 and 4,841,572 with numerous additional issued and pending foreign patents. Purchase of this product does not convey the right to sell recordings made with the TruSurround technology.

Using the Features Menu

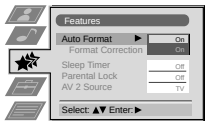
1 Press MENU. Select the symbol using ▼. Push ► to enter.

2 Select the desired menu item using ▼. Push ► to enter.

3 Select the desired setting using ▲ or ▼.

4 Store by pressing OK.

5 Press MENU to return to the normal TV screen.



Features

Item	Effect/Operation
Auto Format* *only for aerial signal	▲ On: Automatic selection of the screen format ▼ Off: Normal mode
Format Correction* *only if Auto Format is on	▲ On: Smart mode is selected automatically for 4:3/14:9 broadcasts ▼ Off: 4:3/14:9 is selected
Sleep Timer	You can select a time period after which the TV switches itself into standby mode ▲ Off 10 min. 20 min. ⋮ ▼ 90 min.
Parental Lock	▼ Off: Normal mode ▲ On: TV can only be switched on out of standby-mode using the Remote Commander, the buttons on the TV do not work.
AV2 Source	You can select the source to be output from the Scart connector 2/2. In this way you can record from this socket while watching another source. ▲ TV audio/video signal from the aerial AV1 audio/video signal from Scart 1 AV2 audio/video signal from Scart 2 ▼ AV3 audio/video signal from front or rear connectors

Using Multi PIP

Multi PIP (picture in picture) mode displays a succession of 12 still pictures and a 13th that is live. You can manually select which channel you wish to watch, either full-screen or in the PIP mode.

1 Press .
Now 13 programme positions appear on the screen, with the current channel in the centre.

2 Press PROGR +/- repeatedly to get the next or the preceding 12 programme positions .

3 Use ▲, ▼, ◄ and ► to move within the 13 displayed channels.
Press OK to select the framed channel.
The selected channel moves to the centre.

4 When the centre channel is framed, press OK to get the channel full screen or press to return to the normal TV mode.

Using Screen Mode

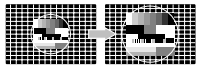
When Auto Format in the Features menu is preset to »On« and a format signal is being transmitted, the TV set automatically selects the detected screen format. Screen mode, however, lets you select the screen format of your choice.

- Press 9 repeatedly to get one of the following formats:

Smart	imitation of wide screen effect for 4:3 broadcasts, parts of the top and bottom of the picture are cut off
4:3	conventional 4:3 aspect ratio, full picture information
14:9	compromise between 4:3 and 16:9 aspect ratios
Zoom	imitation of wide screen effect for letterboxed movies
Wide	for 16:9 broadcasts

In Zoom and 14:9 modes parts of the top and the bottom of the screen are cut off. Using ▲ and ▼ you can adjust the position of the image onscreen to e.g. read subtitles. Press OK to confirm.

Smart


Zoom

Wide

Operating PAP (Picture and Picture)

PAP divides the screen into two for watching two channels simultaneously (with a video source on one if you want).
The sound of the left screen is on the TV loudspeakers, the sound of the right screen is selectable via headphones.

Switching PAP on and off

- Press 6 once to display the screens in format 4:3 and twice to switch PAP off.

Selecting a PAP source

1 Press 5.
The symbol appears in the right screen.

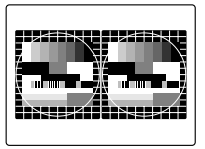
2 Select the desired source using the number buttons (for a TV channel) 7 or 3 (for a video source).

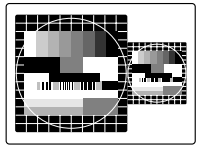
Swapping screens

- Press 4 to swap the two screens.

Zooming the screens

- Using the joystick buttons ◄ and ► you can change the size of the two screens. When you press ► repeatedly the right screen gets bigger, while the left screen gets smaller.





Teletext

Most TV channels broadcast information via teletext. The index page of the teletext service (usually page 100) gives you information on how to use the service.

⚠ Make sure to use a TV channel with a strong signal, otherwise there may be Teletext errors.

Direct Access Functions

Switching Teletext on and off

1 Select the TV channel which carries the teletext service you want to view.

2 a Press ☰ ⓴ once for Picture and Teletext (P&T).
↳ The screen is divided in two, with the TV channel in the right corner and the Teletext display on the left.

ⓘ P&T mode: Press ⦿/◔ ❹. Press PROGR +/- ⓲ to change the channel of the TV screen. Push ◄ or ► to change the size of the TV screen.
Press ⦿/◔ ❹ again to resume normal teletext reception.

b Press ☰ twice to get Teletext only.

c Press ☰ three times for Mix mode.
↳ The TV broadcast and the Teletext display are overlapped.

3 Press ▢ ㉑ or press ☰ a fourth time to switch teletext off.

Selecting a Teletext Page

Direct Page Selection

- Input the three digits of the page number using the number buttons ❼.

ⓘ If you have made a mistake:
Type in any three digits, then re-enter the correct page number.

Page Catching

1 Select a teletext page which has several page numbers on it (e.g., the index page).

2 Press OK ⓫.
↳ Page Catching is displayed.

3 Select the desired page number using ▲ or ▼ ⓫ and press OK.
↳ The requested page is displayed after some seconds.

Selecting the next or the preceding page

- Press ▲ ⓲ (Page +) or ▼ (Page -).

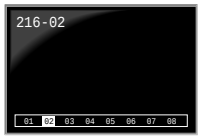
Selecting the index page

- Press ⓘ ❷.

Selecting a subpage

ⓘ A teletext page may consist of several subpages. In this case an information line is displayed, showing the number of subpages.

- Select the mode by pushing ▲. Select the subpage by using ▲ or ▼.



Freezing a Teletext subpage

1 Press ⏭ ⓲ or ⦵ ❸
↳ The symbol ⦵ is displayed and the subpage is not updated.

2 Press ☰ ⓴ to resume normal teletext reception.

Using Fastext*

*depending on availability of service

ⓘ Fastext lets you access pages with one button stroke. When Fastext is broadcast, a colour-coded menu appears at the bottom of the screen. The colours of this menu correspond to the red, green, yellow and blue buttons ❾, ❿, ⓯, ⓰ on the Remote Control.

- Press the coloured button which corresponds to the colour in the colour-coded menu.

Using the Teletext Menu

ⓘ This TV set has a menu-guided teletext system. When teletext is switched on you can use the joystick buttons to operate the teletext menu.

Select the menu functions as follows:

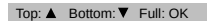
1 Press MENU ⓬.
↳ The Teletext menu is superimposed onto the teletext display.

2 Select the teletext function using ▲ or ▼ ⓫. Push ► to enter.

Top/Bottom/Full

ⓘ For convenient reading of a Teletext page you can enlarge it.
↳ After having selected the function, a sub menu Top ▲ Bottom ▼ Full OK is displayed.

- Push ▲ to enlarge the upper half of the screen, push ▼ to enlarge the lower half. Press OK to resume the normal size.
Press ☰ to resume the normal Teletext operation.



Text Clear

ⓘ After having selected the function, you can watch a TV channel while waiting for a requested Teletext page. As soon as the page is available, the symbol ☰ changes colour.

- Press ☰ to view the page.

Reveal

ⓘ Some teletext pages contain hidden information (e.g., for a quiz), which you can reveal.
↳ After having selected the function, the hidden information appears.

- Press ☰ to resume the normal Teletext operation.

Time Page*

*depending on availability of service

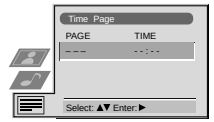
ⓘ You can call up a time-coded page - such as an alarm page - at a time specified by you.
↳ After having selected the function a sub menu is displayed.

1 Select On using ▲ or ▼. Push ► to enter.

2 Enter the three digits of the desired page using the number buttons ❼.

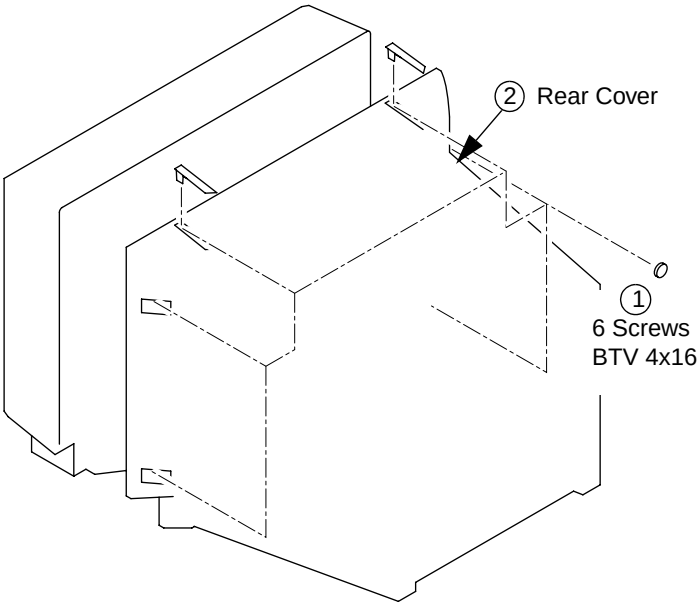
3 Enter the four digits of the desired time using the number buttons ❼.

4 Press OK to store.
↳ The time is displayed in the top left-handed corner of the screen.
At the requested time the page is displayed.



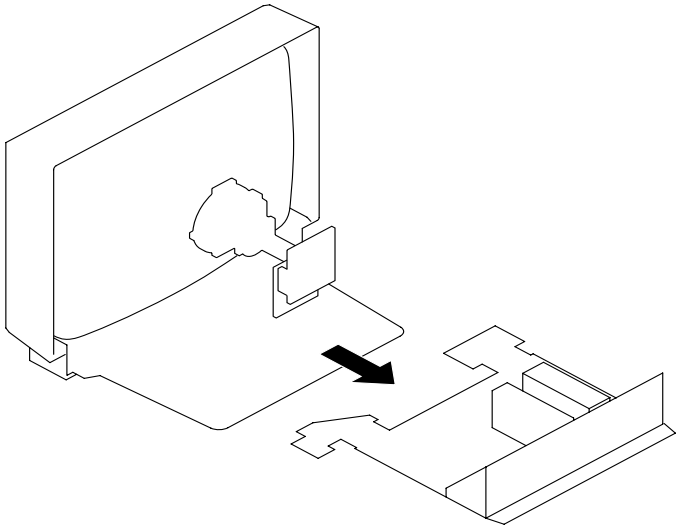
SECTION 2
DISASSEMBLY

2-1. REAR COVER REMOVAL

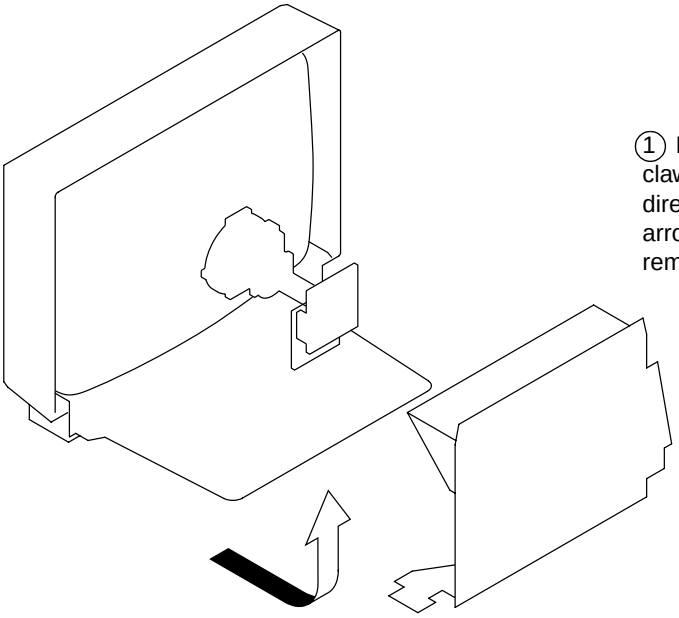


CAUTION:
Take care not to damage the C Board when removing or refitting the rear cover.

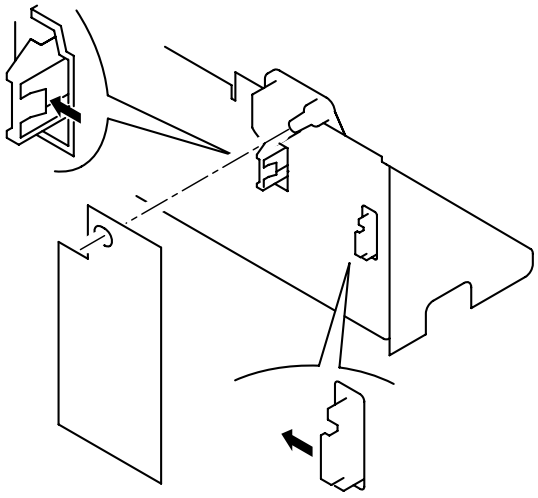
2-2. CHASSIS ASSY REMOVAL



2-3. SERVICE POSITION



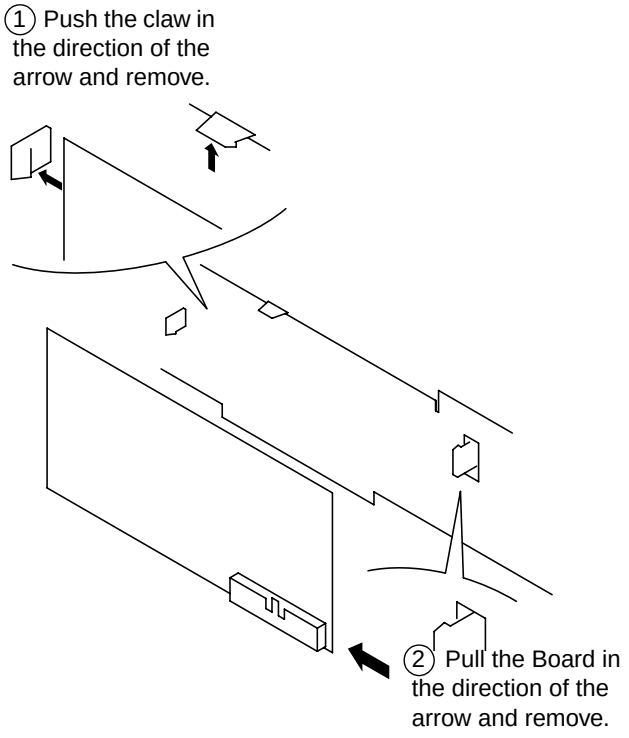
2-4. U BOARD REMOVAL



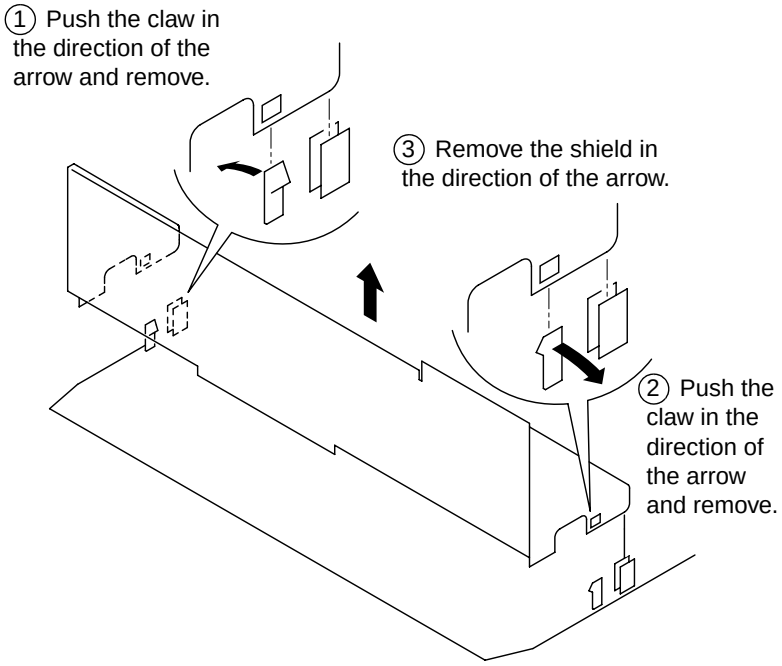
① Push the claw in the direction of the arrow and remove.

② Pull the Board in the direction of the arrow and remove.

2-5. J BOARD REMOVAL



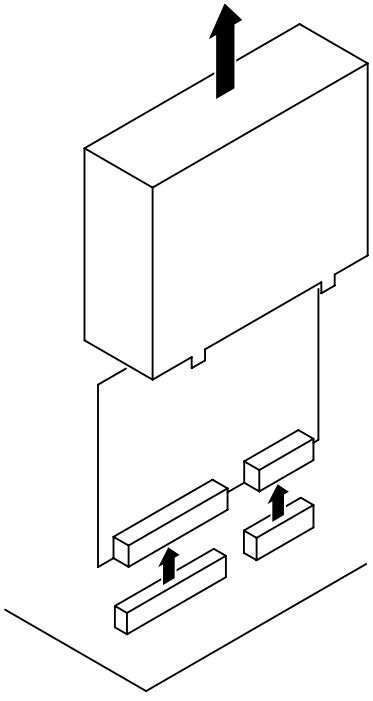
2-6. J SHIELD REMOVAL



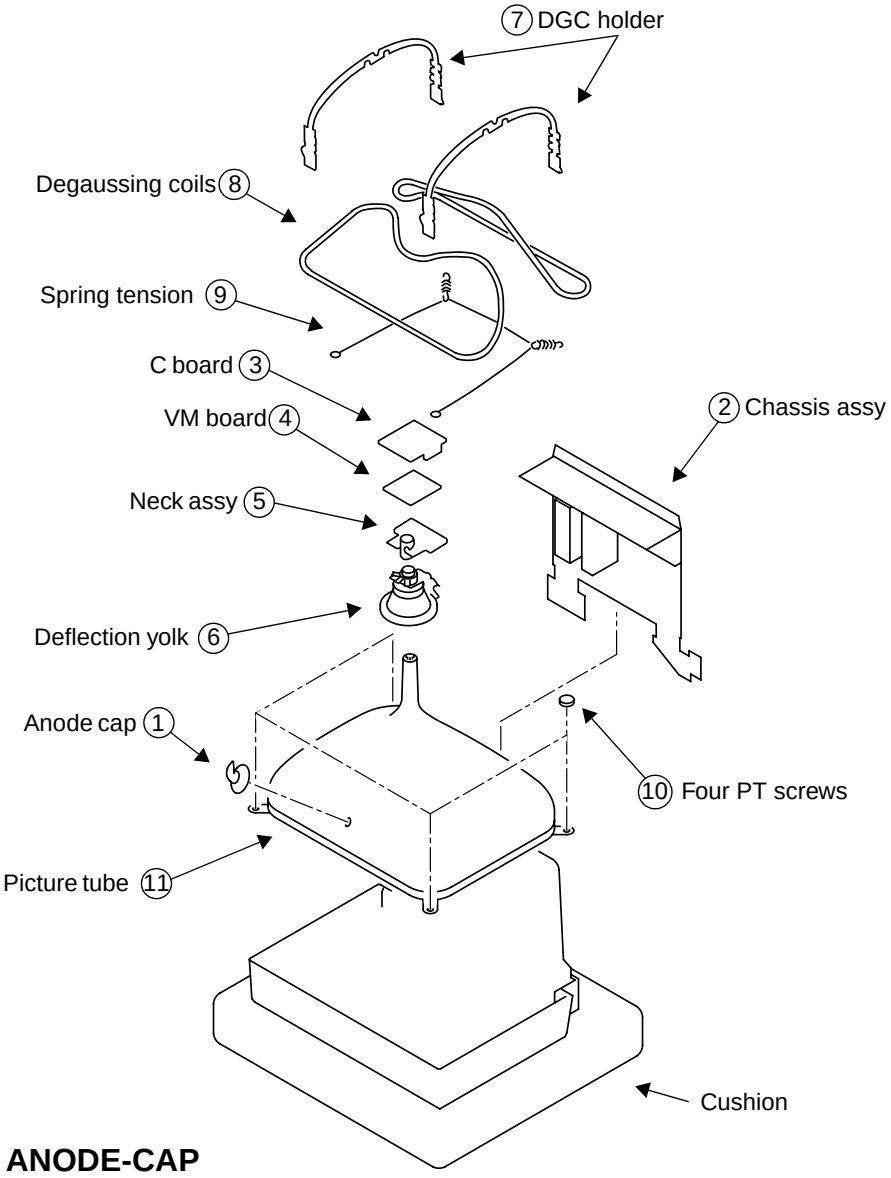
2-7. B1 BOARD REMOVAL

NOTE

All other boards are removed in a similar manner to those shown



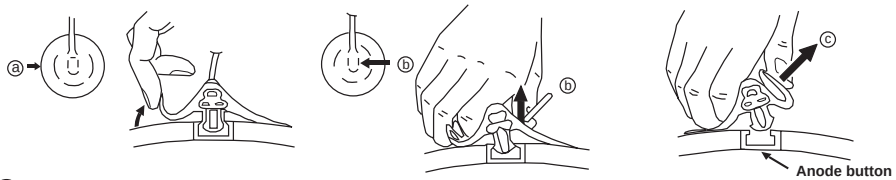
2-8. PICTURE TUBE REMOVAL



• REMOVAL OF ANODE-CAP

Note : Short circuit the anode of the picture tube and the anode cap to the metal chassis, CRT shield or carbon paint on the CRT, after removing the anode.

*** REMOVING PROCEDURES.**



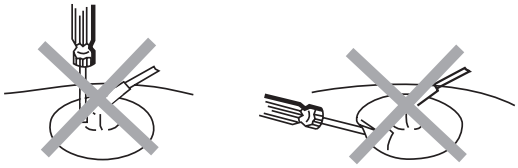
① Turn up one side of the rubber cap in the direction indicated by the arrow ⓐ

② Using a thumb pull up the rubber cap firmly in the direction indicated by the arrow ⓑ

③ When one side of the rubber cap is separated from the anode button, the anode-cap can be removed by turning up the rubber cap and pulling it up in the direction of the arrow ⓒ

• HOW TO HANDLE THE ANODE-CAP

① To prevent damaging the surface of the anode-cap do not use sharp materials.
② Do not apply too great a pressure on the rubber, as this may cause damage to the anode connector.
③ A metal fitting called a shatter hook terminal is fitted inside the rubber cap. Do not turn the rubber foot over excessively this may cause damage if the shatter hook sticks out.



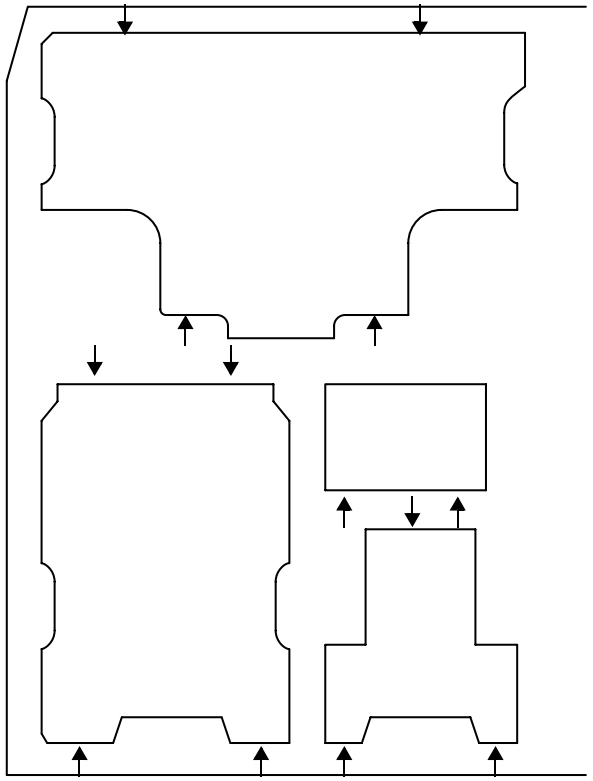
REMOVAL AND REPLACEMENT OF THE MAIN-BRACKET BOTTOM PLATES.

⚠ For safety reasons, on no account should the plates be removed and not refitted after servicing.

(1) REMOVING THE PLATES

In the event of servicing being required to the solder side of the D Board printed wiring board, the bottom plates fitted to the main chassis bracket require to be removed.
This is performed by cutting the gates with a sharp wire cutter at the locations indicated by arrows.

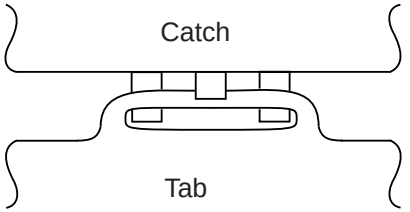
Note : There are 4 plates fitted to the main bracket and secured by 4 gates.
Only remove the necessary plate to gain access to the printed wiring board.



(2) REFITTING THE PLATES

Because the plates differ in size it is important that the correct plates are refitted in their original location.

Please note that the plates need to be rotated 180 degrees from the cut position to allow the tabs to be fitted in the catch positions.



SECTION 3
SET-UP ADJUSTMENTS

- When complete readjustment is necessary or a new picture tube is installed, carry out the following adjustments.
- Unless there are specific instructions to the contrary, carry out these adjustments with the rated power supply.
- Unless there are specific instructions to the contrary, set the controls and switches to the following settings:

Contrast ..... normal

Brightness ..... normal

Carry out the following adjustments in this order:

3-1. Beam Landing
3-2. Convergence
3-3. Focus
3-4. White balance

Note: Test equipment required
1. Color bar/pattern generator.
2. Degausser.
3. Digital multimeter.
4. Oscilloscope.

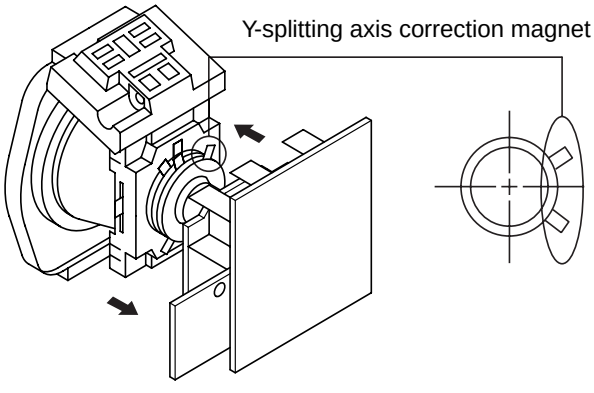
3-1. BEAM LANDING

Preparation:

1. In order to reduce the influence of geomagnetism on the set's picture tube, face it in an easterly or westerly direction.
2. Switch on the set's power and degauss with the degausser.

(1) Adjustment of Correction Magnet for Y-Splitting Axis

1. Input a crosshatch signal from the pattern generator.
2. Set the Picture control to minimum and confirm that the Brightness control is set to normal.
3. Position the neck assembly as indicated in Fig.3-2.
4. Move the deflection yolk as far forward as is possible.
5. Adjust the upper and lower pin symmetrically by opening or closing the Y-splitting axis correction magnets located on the neck assembly.
6. Return the deflection yolk to its original position.



Caution :

High voltages are present on the Deflection yolk terminals - take care when handling the Deflection yolk whilst carrying out adjustments.

(2) Landing

Note : Before carrying out the following adjustments adjust the magnets as indicated below [See Fig.3-3].

1. Input an all-white signal from the pattern generator. Maximize the picture setting and adjust the Brightness setting.
2. Rough-adjust the focus and horizontal convergence.
3. Loosen the deflection yolk screws and align the purity adjustment knob to its central position. [See Fig.3-1].
4. Switch from the all-white pattern to an all-green pattern.
5. Move the deflection yolk backwards and adjust with the purity magnet so that the green is at the centre and it aligns symmetrically. [See Fig.3-4].
6. Move the deflection yolk forward and adjust so that the entire screen becomes green.
7. Switch the raster signal to red, then to blue and verify the landing condition.
8. When the position of the deflection yolk has been determined, fasten the deflection yolk with the screw.
9. If the beam does not land correctly in all the corners of the screen, use magnets to correct it. [See Fig.3-5].

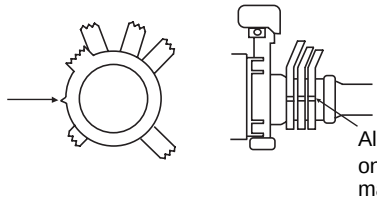


Fig.3-3

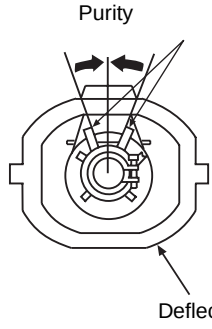


Fig.3-1

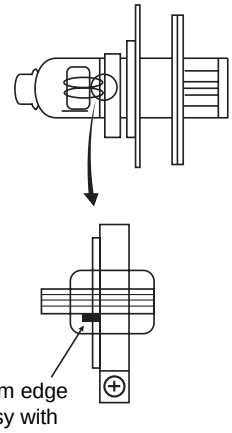


Fig.3-2

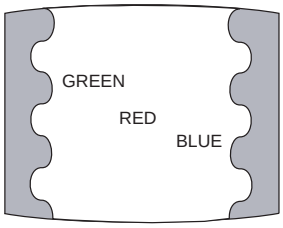


Fig.3-4

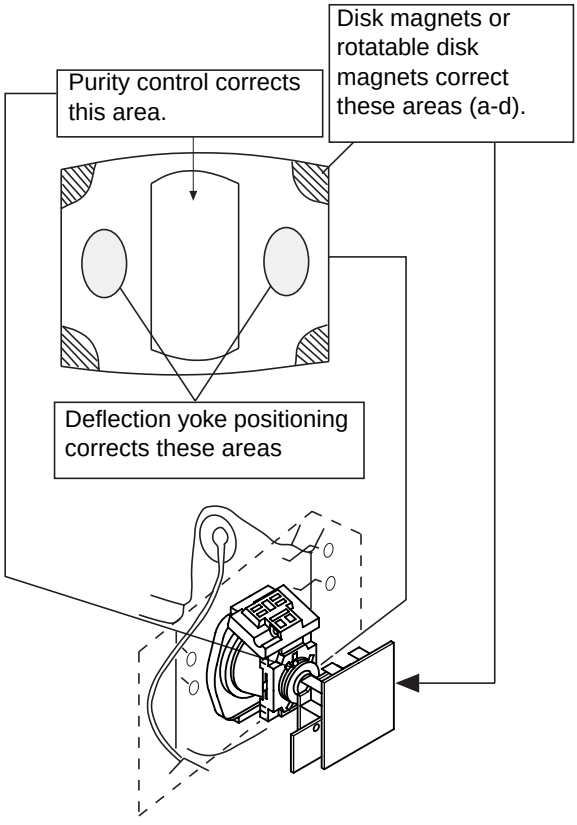
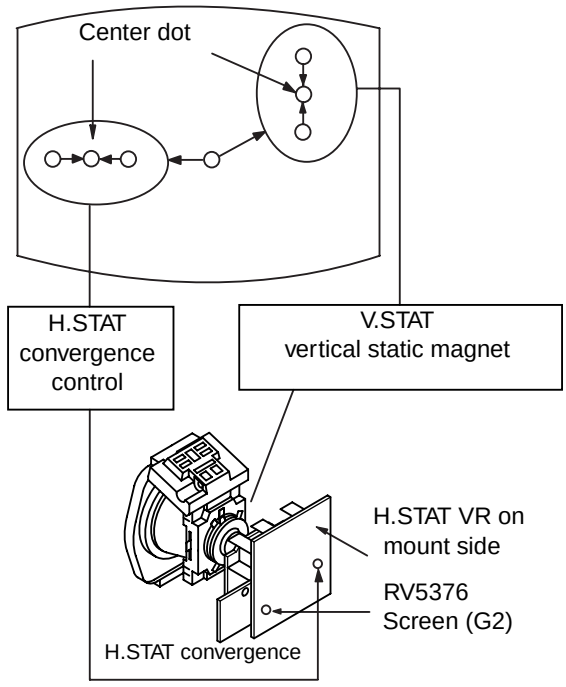


Fig. 3-5

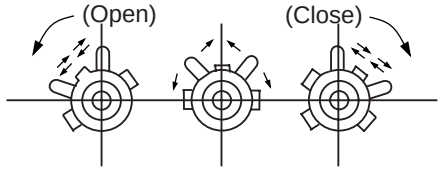
3-2. CONVERGENCE

(1) Screen centre convergence [Static convergence]

1. Input a dot signal from the pattern generator. Normalize the picture setting.
2. [Moving horizontally], adjust the H.STAT control so that the horizontal red, green and blue dots coincide at the centre of the screen.
3. [Moving vertically], adjust the V.STAT magnet so that the vertical red, green and blue dots coincide at the centre of the screen.

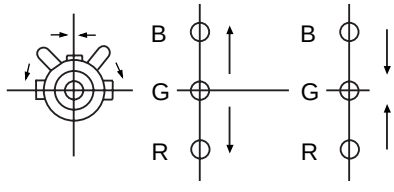


- If the horizontal dots are unable to coincide with the variable range of the H.STAT convergence, adjust together with the V.STAT convergence while tracking.
  [Adjust the convergence by tilting the V.STAT convergence or by opening and closing the V.STAT convergence.]

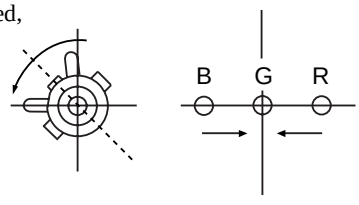


4. Movement of the red, green and blue dots by tilting the V.STAT magnet and by opening or closing the V.STAT magnet.

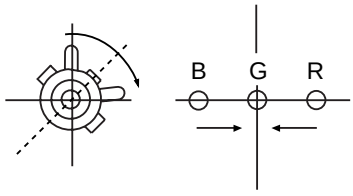
a). By opening or closing the V.STAT magnet, the red, green and blue dots move as indicated below.



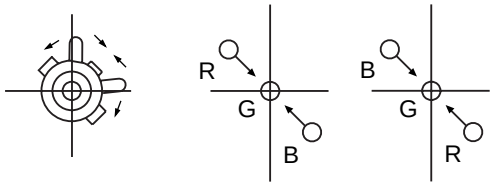
b). By rotating the V.STAT magnet counter clockwise, the red, green and blue dots move as indicated below.



c). By rotating the V.STAT magnet clockwise, the red, green and blue dots move in the direction indicated below.



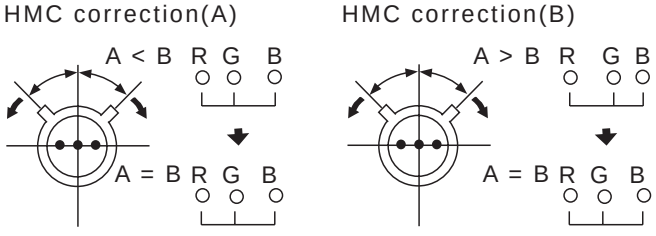
d). By opening or closing the V.STAT magnet, the red, green and blue dots move in the direction indicated below.



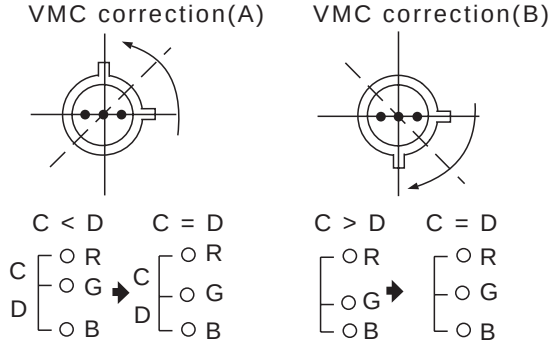
Note : If the blue dot does not coincide with the red and green points correct the points by using the BMC [Hexapole] magnet.

5. Correction for HMC [horizontal mis-convergence] and VMC [vertical mis-convergence] by using the BMC [Hexapole] magnet.

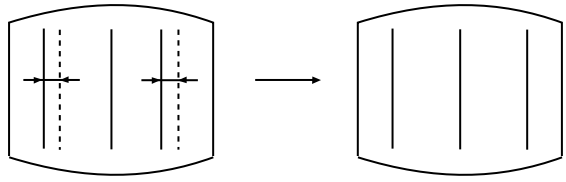
a). HMC correction by BMC [Hexapole] magnet and movement of the electron beam.



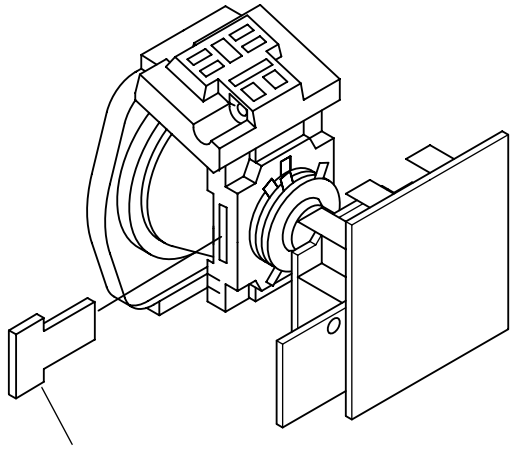
b). VMC correction by BMC [Hexapole] magnet and movement of the electron beam.



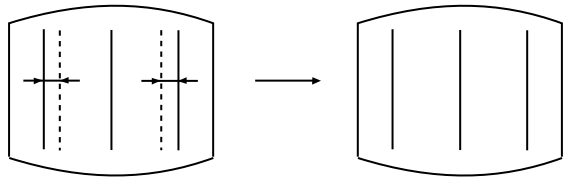
HAMP



7. HTIL correction can be performed by adding a THL correction ASSY to the DY.



HTIL



Layout of each control

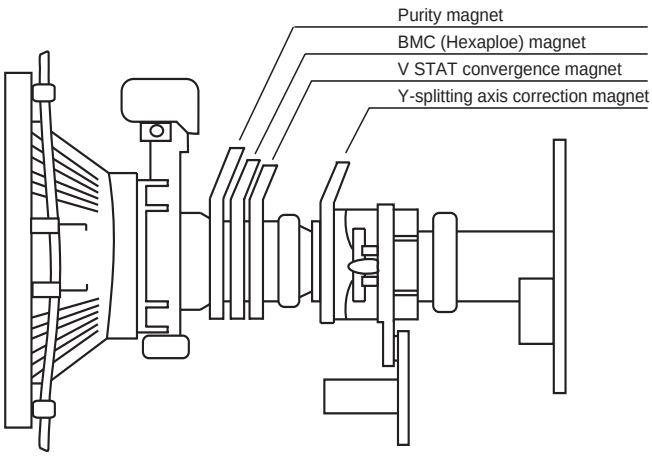
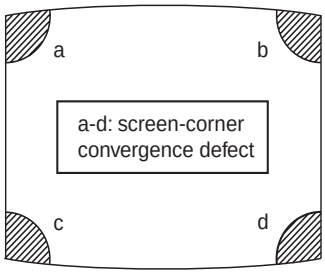
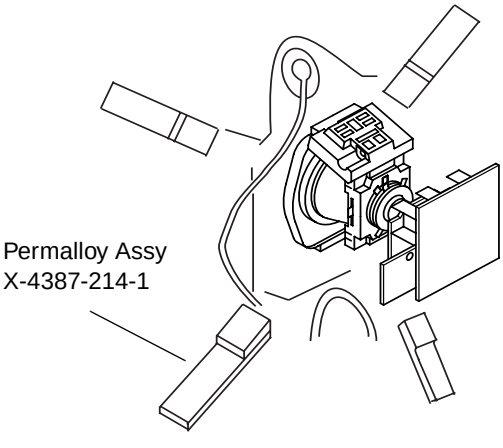


Fig 3-5

Note : If you are unable to adjust the corner convergence properly, this can be corrected with the use of permalloys.

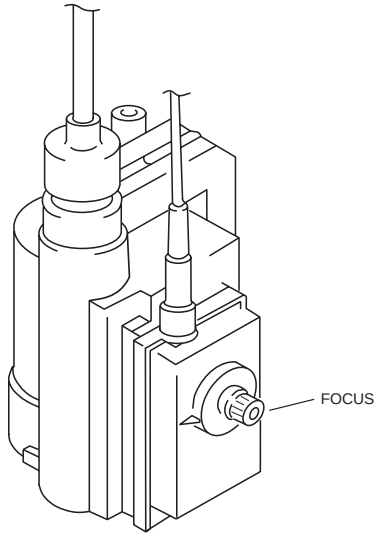




Convergence adjustment with permalloy

3-3. FOCUS

1. Receive a television broadcast signal.
2. Normalize the picture setting.
3. Adjust the focus control located on the flyback transformer to obtain the best focus at the centre of the screen.
   Bring only the centre area of the screen into focus, the magenta-ring appears on the screen. In this case, adjust the focus to optimize the screen uniformly.



3-4. SCREEN (G2), WHITE BALANCE

[Adjustment in the service mode using the remote commander]

G2 adjustment (RV5376)

1. Input a dot signal from the pattern generator.
2. Set the Picture, Brightness and Colour to minimum.
3. Apply 175V DC from an external power supply to the R, G and B cathodes of the CRT.
4. Whilst watching the picture, adjust the G2 control RV5376 [SCREEN] located on the C Board to the point just before the flyback return lines disappear.

White balance adjustment for TV mode

1. Input an all-white signal.
2. Enter into the Service Mode by pressing ‘TEST’, ‘TEST’ and ‘MENU’ ‘MENU’on the Service Commander.
3. Select ‘Backend’ from the on screen menu display and press ‘OK’.
4. The ‘Backend’ menu will appear on the screen.
5. Set the contrast to MAX.
6. Set the ‘R DRIVE’ to 41.
7. Adjust the ‘G DRIVE’ and ‘B DRIVE’ so that the white balance becomes optimum.
8. Press the ‘OK’ button to write the data for each item.
9. Set the contrast to MIN.
10. Set the ‘R CUT-OFF’ to 31.
11. Adjust the ‘G CUT-OFF’, and ‘B CUT-OFF’ with the left and right buttons on the remote commander so that the white balance becomes optimum.
12. Press the ‘OK’ button to write the data for each item.

Backend

No	Descr.	Def	Min	Max	Data
1	R-on	ON	OFF	ON	ON
2	G-on	ON	OFF	ON	ON
3	B-on	ON	OFF	ON	ON
4	D-col	OFF	OFF	ON	ON
5	Color-axis	2	0	3	2
6	Contrast	63	0	63	63
7	Limit-Luv	3	0	3	3
8	Hue	31	0	63	31
9	Colour	31	0	63	28
10	CTI -Level	2	0	3	2
11	Brightness	31	0	63	31
12	Gamma	2	0	3	2
13	Sharpness	31	0	63	44
14	LTI-Level	0	0	3	0
15	R-Drive	41	0	63	40
16	BLK-Bottom	0	0	3	0
17	G-Drive	41	0	63	38
18	ABL-TH	0	0	3	0
19	B-Drive	41	0	63	21
20	ABL-Mode	2	0	3	2
21	Sub Bright	31	0	63	32
22	VM-Level	2	0	3	2
23	R-Cutoff	31	0	63	41
24	Preover	2	0	3	2
25	G-Cutoff	31	0	63	45
26	DPIC-Level	2	0	3	2
27	B-Cutoff	31	0	63	48
28	DC-Tran	1	0	3	1
29	Sub-Cont	7	0	15	7
30	LRGB2-Lvl	12	0	15	12
31	P-Abl	15	0	15	15
32	DL-Pass	OFF	OFF	ON	OFF
33	Sharp.Fo	ON	OFF	ON	ON
34	Aging-W	OFF	OFF	ON	OFF
35	Aging-B	OFF	OFF	ON	OFF
36	CB-offset1	7	0	15	7
37	CR-offset1	7	0	15	7
38	CB-offset2	7	0	15	7
39	CR-offset2	7	0	15	7
40	Sub Colour	0	-8	8	-1

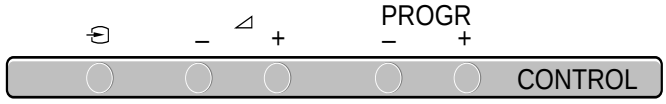
SECTION 4
CIRCUIT ADJUSTMENTS

4-1. ELECTRICAL ADJUSTMENTS

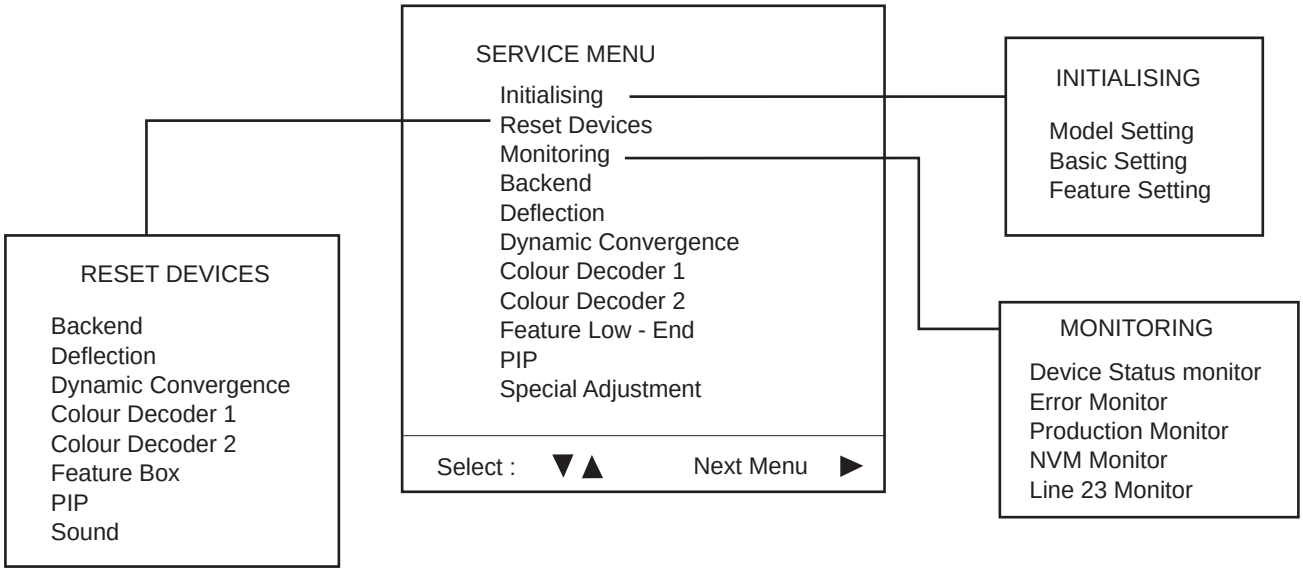
Service adjustments to this model can be performed using the supplied Remote Commander RM-891.

HOW TO ENTER INTO SERVICE MODE

1. Turn on the main power switch of the set while pressing PROG + (plus) and PROG - (minus) buttons on the top panel.



2. "TT" will appear in the upper right corner of the screen.
3. Press the ‘MENU’ button twice on the remote commander to obtain the service menu on the screen.



4. Push the joystick up or down on the remote commander to select the adjustment item.
5. Push the right button to proceed to the next menu.
6. If the required adjustment item is ‘Deflection’, push the down button to move to ‘Deflection’.
7. Push the joystick to the right to enter into ‘Deflection’.
8. Change the data in order to comply with each standard.

NOTE:
- Before performing any adjustments assure that the correct model has been selected in the Model Setting menu.
- After carrying out the service adjustments, to prevent the customer accessing the Service Menu switch the TV set OFF and then ON.

Model Setting

1	KV-29FX60A/D/E
2	KV-29FX60B
3	KV-29FX60U
4	KV-29FC60A/D/E
5	KV-29FC60B
6	KV-29FC60K
7	KV-29FC60R
8	KV-29FS60A/D/E
9	KV-29FS60B
10	KV-29FS60K
11	KV-29FS60R
12	KV-28/32FX60A/D/E
13	KV-28/32FX60B
14	KV-28/32FX60K
15	KV-28/32FX60R
16	KV-28/32FX60U
17	KV-29FS60A/D/E
18	KV-29FS60B

Fig.4-1

Basic setting

No	Descr.	Min	Max	Data
1	Sys.B/G	OFF	ON	ON
2	Sys.D/K	OFF	ON	ON
3	Sys.L	OFF	ON	ON
4	Sys I (UK)	OFF	ON	OFF
5	Sys I (IRL)	OFF	ON	OFF
6	Russian sound	OFF	ON	OFF
7	TXT Nod.option	1	4	3
8	simple PAT	OFF	ON	OFF
9	16:9 CRT	OFF	ON	OFF
10	Sub-woofer	OFF	ON	ON
11	Auto stand-by	OFF	ON	ON
12	comb-filter	OFF	ON	OFF
13	Auto YC det	OFF	ON	ON
14	Auto comb det	OFF	ON	OFF
15	AV2 Available	OFF	ON	ON
16	AV3 Available	OFF	ON	ON
17	AV4 Available	OFF	ON	OFF
18	AV3 Front & rear	OFF	ON	ON
19	SECAM Tape	OFF	ON	OFF

Fig.4-2

NOTE:
The above table is dependant on model, destination & size.

Backend

No	Descr.	Def	Min	Max	Data
1	R-on	ON	OFF	ON	ON
2	G-on	ON	OFF	ON	ON
3	B-on	ON	OFF	ON	ON
4	D-col	OFF	OFF	ON	ON
5	Color-axis	2	0	3	2
6	Contrast	63	0	63	63
7	Limit-Luv	3	0	3	3
8	Hue	31	0	63	31
9	Colour	31	0	63	28
10	CTI -Level	2	0	3	2
11	Brightness	31	0	63	31
12	Gamma	2	0	3	2
13	Sharpness	31	0	63	44
14	LTI-Level	0	0	3	0
15	R-Drive	41	0	63	40
16	BLK-Bottom	0	0	3	0
17	G-Drive	41	0	63	38
18	ABL-TH	0	0	3	0
19	B-Drive	41	0	63	21
20	ABL-Mode	2	0	3	2
21	Sub Bright	31	0	63	32
22	VM-Level	2	0	3	2
23	R-Cutoff	31	0	63	41
24	Preover	2	0	3	2
25	G-Cutoff	31	0	63	45
26	DPIC-Level	2	0	3	2
27	B-Cutoff	31	0	63	48
28	DC-Tran	1	0	3	1
29	Sub-Cont	7	0	15	7
30	LRGB2-Lvl	12	0	15	12
31	P-Abl	15	0	15	15
32	DL-Pass	OFF	OFF	ON	OFF
33	Sharp.Fo	ON	OFF	ON	ON
34	Aging-W	OFF	OFF	ON	OFF
35	Aging-B	OFF	OFF	ON	OFF
36	CB-offset1	7	0	15	7
37	CR-offset1	7	0	15	7
38	CB-offset2	7	0	15	7
39	CR-offset2	7	0	15	7
40	Sub Colour	0	-8	8	-1

Fig.4-3

Feature setting

No	Descr.	Min	Max	Data
1	PIP	OFF	ON	ON

Fig.4-4

Colour Decoder 1

No	Descr.	Def	Min	Max	Data
1	DelayLinMd	OFF	OFF	ON	OFF
2	Gain set	1	0	3	1
3	Y-Delay	7	0	15	7
4	Phase Time	0	0	3	0
5	Vid Ident Md	OFF	OFF	ON	OFF
6	Sync Mode	OFF	OFF	ON	OFF
7	Vid Ident Sw	ON	OFF	ON	ON
8	H-Output	OFF	OFF	ON	OFF
9	Enagating	OFF	OFF	ON	OFF
10	IF Circuit	ON	OFF	ON	ON
11	GP Delay	OFF	OFF	ON	OFF

Fig.4-5

Colour Decoder 2

No	Descr.	Def	Min	Max	Data
1	DelayLinMd	OFF	OFF	ON	OFF
2	Gain set	1	0	3	1
3	Y-Delay	7	0	15	7
4	Phase Time	0	0	3	0
5	Vid Ident Md	OFF	OFF	ON	OFF
6	Sync Mode	OFF	OFF	ON	OFF
7	Vid Ident Sw	ON	OFF	ON	ON
8	H-Output	OFF	OFF	ON	OFF
9	Enagating	OFF	OFF	ON	OFF
10	IF Circuit	ON	OFF	ON	ON
11	GP Delay	OFF	OFF	ON	OFF

Fig.4-6

Deflection

No	Descr.	Def	Min	Max	Data
1	V-Size	31	0	63	34
2	V-Position	31	0	63	21
3	V-Comp	1	0	3	1
4	V-Linear	7	0	15	7
5	S-Corr	7	0	15	8
6	H-Size	31	0	63	29
7	EW-DC	OFF	OFF	ON	OFF
8	Pin-Amp	31	0	63	36
9	Up-Cpin	31	0	63	35
10	M-Pin	2	0	3	2
11	Lo-Cpin	31	0	63	37
12	Trapezium	7	0	15	7
13	H-Position	31	0	63	25
14	AFC-Bow	7	0	15	7
15	AFC-Angle	7	0	15	9
16	Up-Vlin	0	0	15	0
17	Lo-Vlin	0	0	15	0

Fig.4-7

Dynamic Convergence

No	Descr.	Def	Min	Max	Data
1	Range	63	0	63	32
2	H Stat	33	0	63	33
3	H amp L	37	0	63	37
4	H amp R	36	0	63	36
5	Up Y	31	0	63	31
6	Low Y	33	0	63	33
7	Y Up L	30	0	63	30
8	Y Up R	30	0	63	30
9	Y Low L	31	0	63	31
10	Y Low R	30	0	63	30
11	Mbow Up L	31	0	63	31
12	Mbow Up R	32	0	63	32
13	Mbow Low L	32	0	63	32
14	Mbow Low R	32	0	63	32
15	V Stat	32	0	63	32
16	Linearity	128	0	255	104
17	H Centre	32	0	63	32
18	H Trap	32	0	63	32
19	Rotation	0	0	255	0
20	Focus Phase	128	0	255	128

Fig.4-8

Feature Low-End

No	Descr.	Def	Min	Max	Data
1	F.S.F.M	OFF	OFF	ON	OFF
2	G-Mode	OFF	OFF	ON	OFF
3	Picture Pos	0	0	3	0
4	Comp Mode	OFF	OFF	ON	OFF
5	CompSW	OFF	OFF	ON	OFF
6	Acqu.freq	OFF	OFF	ON	OFF
7	Still Pic	OFF	OFF	ON	OFF
8	Init	OFF	OFF	ON	OFF
9	Dis Feature	ON	OFF	ON	ON
10	Dis Vlimit	ON	OFF	ON	ON
11	Scr Fade	0	0	3	0
12	Hwe Delay	20	0	255	20
13	Auto Vshift	OFF	OFF	ON	OFF
14	Vwe Delay	0	0	127	0
15	SFR sw	OFF	OFF	ON	OFF
16	IPQ	0	0	3	0
17	D.Col Dec	OFF	OFF	ON	OFF
18	Blankfield	0	0	15	0
19	P1.5	OFF	OFF	ON	OFF
20	P1.4	OFF	OFF	ON	OFF
21	P1.3	OFF	OFF	ON	OFF
22	P1.2	OFF	OFF	ON	OFF
23	P1.1	OFF	OFF	ON	OFF
24	Set Vdba	OFF	OFF	ON	OFF
25	Set Sidep	ON	OFF	ON	ON
26	Set Hwe	OFF	OFF	ON	OFF
27	Set Clv	OFF	OFF	ON	OFF
28	Set Hddel	OFF	OFF	ON	OFFF
29	Set Hblnd	OFF	OFF	ON	OFF
30	Set Hre	ON	OFF	ON	ON
31	Set Hbda	ON	OFF	ON	ON
32	Set Hdav	ON	OFF	ON	ON
33	Vbdasta	0	0	255	0
34	Vsdasto	0	0	255	0
35	Msbhwesto	OFF	OFF	ON	OFF
36	Msbhwesta	OFF	OFF	ON	OFF
37	Msbvbdasto	OFF	OFF	ON	OFF
38	Msbvbdasta	OFF	OFF	ON	OFF
39	Hdavsta	40	0	255	40
40	Hdavsto	255	0	255	255

Feature Low-End(Cont.)

No	Descr.	Def	Min	Max	Data
41	Hbdasta	223	0	255	223
42	Hbdasto	222	0	255	222
43	Hresta	38	0	255	38
44	Hresto	202	0	255	202
45	Hblndsta	31	0	255	31
46	Hblndsto	30	0	255	30
47	MsbHblndsta	OFF	OFF	ON	OFF
48	MsbHblndsto	OFF	OFF	ON	OFF
49	Msb Hresto	ON	OFF	ON	ON
50	Msb Hresta	OFF	OFF	ON	OFF
51	Msbhbdasta	ON	OFF	ON	ON
52	Msbhbdasto	ON	OFF	ON	ON
53	Msbhdavsto	ON	OFF	ON	ON
54	Msbhdavsta	OFF	OFF	ON	OFF
55	Hddel	0	0	15	0
56	Clvsta	0	0	255	0
57	Clvsto	9	0	255	9
58	Hwesta	44	0	255	44
59	Hwesto	208	0	255	208
60	Ex-Thres	OFF	OFF	ON	OFF
61	Wes	ON	OFF	ON	OFF
62	Demo mode	ON	OFF	ON	OFF
63	Limerick NR	0	0	4	0
64	Nthr	0	0	255	2
65	Wval	200	0	255	200
66	Agc Ych	203	0	255	203
67	Agc Uvch	209	0	255	209
68	Aal-Bypass	OFF	OFF	ON	OFF
69	Stby Fr	OFF	OFF	ON	OFF
70	Lsb Agc-Uv	OFF	OFF	ON	OFF
71	Lsb Agc-Y	OFF	OFF	ON	OFF
72	Vcl cor	0	0	3	0
73	Ucl cor	0	0	3	0
74	Uv cor mode	0	0	3	0
75	Uvcl tau	3	0	3	3
76	Uvcol Lvl	0	0	3	0
77	Fil Mem	OFF	OFF	ON	OFF
78	Overl Thr	1	0	3	1
79	Y delay f	4	0	7	4
80	Dcti pdxsel	ON	OFF	ON	ON

Fig.4-9

Feature Low-End (Cont.)

No	Descr.	Def	Min	Max	Data
81	Dcti Thres	0	0	15	0
82	Dcti Gain	0	0	7	0
83	Dcti Super	ON	OFF	ON	ON
84	Dcti Fil	ON	OFF	ON	ON
85	Dcti Prot	ON	OFF	ON	ON
86	Dcti Sep	ON	OFF	ON	ON
87	Dcti Limit	2	0	3	2
88	Peak Beta	0	0	7	0
89	Peak Alpha	2	0	7	2
90	Peak Neg g	0	0	3	0
91	Peak Delta	0	0	3	0
92	Peak Tau	0	0	7	0
93	Peak Corth	0	0	15	0
94	Overlay V	0	0	15	0
95	Overlay U	0	0	15	0
96	Overlay Y	10	0	255	10
97	Sidep sta	240	0	255	240
98	Sidep sto	36	0	255	36
99	Y delay B	7	0	7	7
100	Invert UV	ON	OFF	ON	ON
101	Output Range	ON	OFF	ON	ON
102	Sidep Fdel	0	0	3	0

PIP

No	Descr.	Def	Min	Max	Data
1	Freeze	OFF	OFF	ON	OFF
2	Frame	ON	OFF	ON	ON
3	Pipon	ON	OFF	ON	OFF
4	Seldel	1	0	15	1
5	Mixdis	ON	OFF	ON	ON
6	H-Poshi	0	0	3	0
7	H-Pos	137	0	255	137
8	V-Pos	59	0	255	59
9	Y-Delay	0	0	7	0
10	V-Dec	OFF	OFF	ON	OFF
11	H-Dec	OFF	OFF	ON	OFF
12	Insvh	ON	OFF	ON	ON
13	Chrins	ON	OFF	ON	ON
14	Pmod	0	0	3	0
15	Imod	0	0	3	0
16	Clisw	ON	OFF	ON	ON
17	H side	4	0	15	4
18	Vsiisq	OFF	OFF	ON	OFF
19	Vsidel	0	0	31	0
20	Parasynd	ON	OFF	ON	ON
21	Vspisq	OFF	OFF	ON	OFF
22	Vspdel	10	0	31	10
23	Con	1	0	15	1
24	Fry	8	0	15	8
25	Frv	3	0	15	3
26	Fru	4	0	15	4
27	Sel Down	OFF	OFF	ON	OFF
28	Frwidv	1	0	3	1
29	Frwidh	2	0	7	2
30	Mat	4	0	7	4
31	Daconst	OFF	OFF	ON	OFF
32	Plltc	1	0	3	1
33	Dacontle	OFF	OFF	ON	OFF
34	Left	83	0	255	83
35	RightHi	1	0	3	1
36	Right	192	0	255	192
37	Up	46	0	255	46
38	Down	189	0	255	189

Fig.4-10

Sound

No	Descr.	Def	Min	Max	Data
1	Ref.Level	40	0	20	40
2	Auto-gain	ON	OFF	ON	ON
3	Ana-in	0	0	1	0
4	Corr-mute	ON	OFF	ON	ON
5	Clock out	ON	OFF	ON	ON
6	AM-gain	ON	OFF	ON	ON
7	Clip mode	0	0	2	0
8	SCART1 Vol	79	0	127	79
9	SCART2 Vol	79	0	127	79
10	SCART Pr	27	0	127	27
11	Izs1-pr	16	0	127	16
12	Izs2-pr	16	0	127	16
13	FM pr	27	0	127	27
14	BG Nic-pr	53	0	127	53
15	L Nic-pr	59	0	127	59
16	DK Nic-pr	53	0	127	53
17	I Nic-pr	97	0	127	97
18	Irl Nic-pr	97	0	127	97
19	AVC-Decay	2	0	8	2
20	Subw-vol	0	0	-127	0
21	Subw-freq	20	5	40	20
22	Subw-Hpuss	OFF	OFF	ON	OFF
23	Spat-stre	127	0	-1	127
24	Spat-Coeff	0	0	8	0
25	Bass offs	0	-3	3	0
26	Treble offs	0	-3	3	0
27	Loudn offs	0	0	9	0
28	Hp-voloffs	-2	-5	5	-2
29	M-S Limit	30	-128	127	30
30	M-B Limit	-30	-128	127	-30
31	S-M Limit	12	-128	127	12
32	S-B Limit	-20	-128	127	-20
33	B-M Limit	-12	-128	127	-12
34	B-S Limit	20	-128	127	20
35	Err.Max	40	0	255	40
36	Err.Min	14	0	255	18

Fig.4-11

Special Adjustment

No	Descr.	Min	Max	Data
1	RGB Level	0	7	0
2	RGB Gain	0	31	9
3	RGB PatLevel	0	7	7
4	RGB Patgain	0	31	31
5	RGB H-position	-10	10	-1
6	Extra Fw	0	255	255
7	EPG Chks Check	OFF	ON	ON
8	Slicer High	OFF	ON	ON
9	FCW Wide	OFF	ON	ON
10	High Pll	OFF	ON	OFF
11	Panic offset	0	2	0
12	Wide Mute	OFF	ON	ON

Fig.4-12

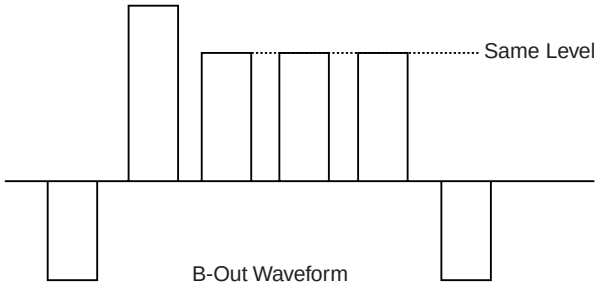
DEFLECTION SYSTEM ADJUSTMENT

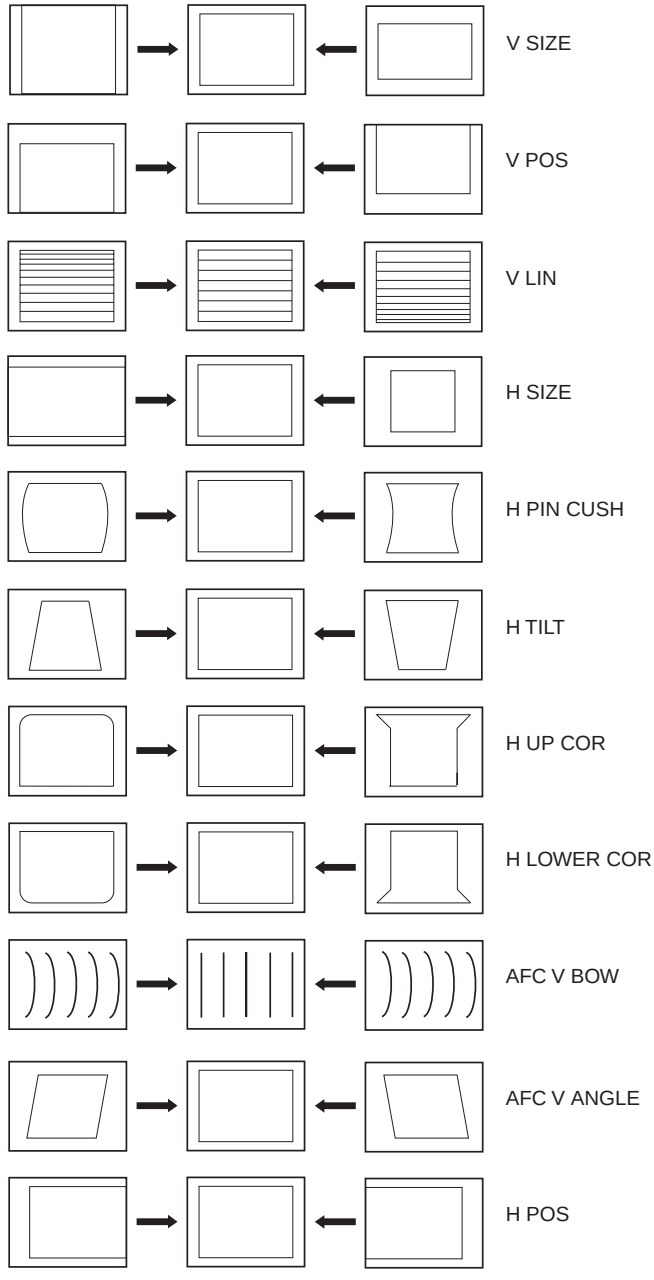
1. Enter into the service mode and select ‘Deflection ’. The ‘Deflect ’ adjustment menu will be displayed.
2. Select and adjust each item to obtain the optimum image.

4-2.VOLUME ELECTRICAL ADJUSTMENTS

Sub Colour Adjustment

1. Input a PAL colour bar signal.
2. Connect an oscilloscope to CN5400 pin 5 on the C board.
3. Enter into the ‘SERVICE MODE’.
4. Choose ‘Backend’.
5. Adjust Sub Colour data so that the right sides of the waveforms are of equal height.





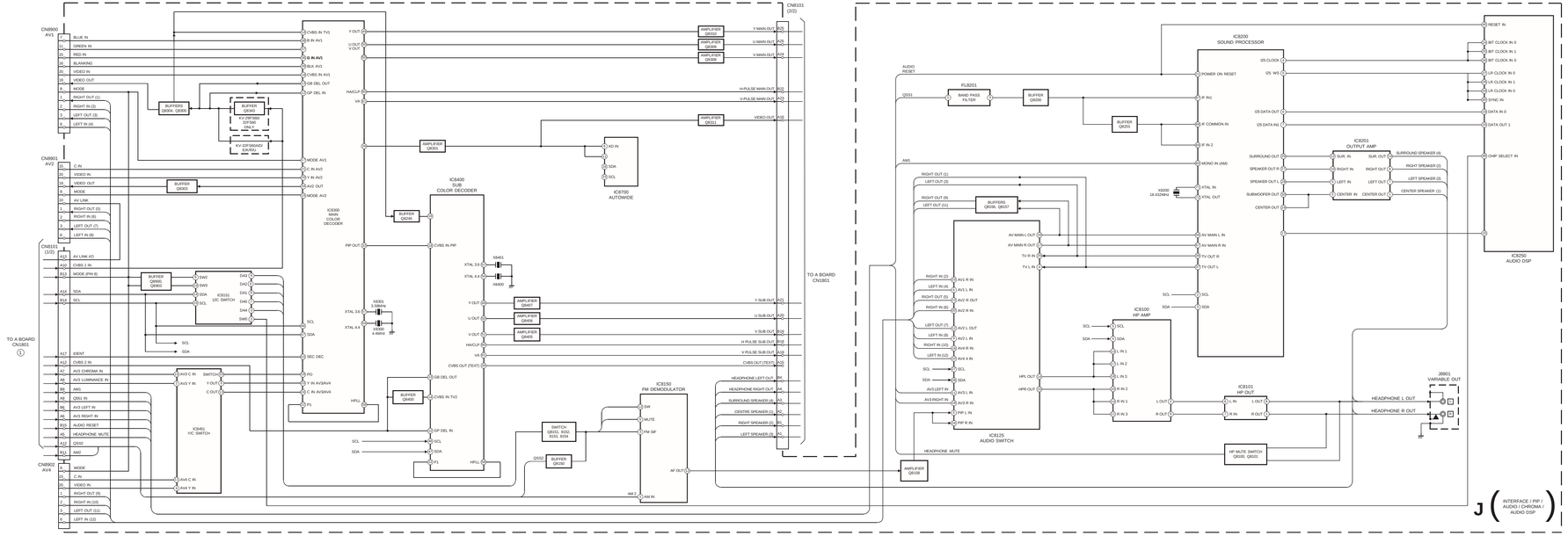
4-3. TEST MODE 2:

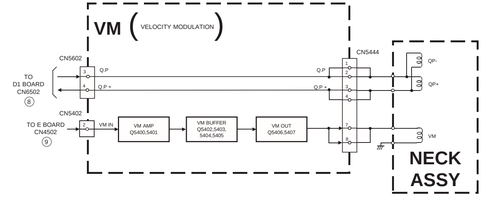
Is available by pressing ‘TEST’ button twice, OSD ‘TT’ appears. The functions described below are available by pressing the two numbers. To release the Test mode 2, press 0, 10, 20 ... twice or switch the TV set into Stand-by Mode. Pressing the two Local Control buttons (+ and -) during Power ON will also switch into ‘TT’ mode.
In ‘TT’ mode, it is possible to remove the Menu from the screen by pressing the Speaker Off button once. Pressing the Speaker OFF button a second time will cause the menu to reappear. The Function is kept even when the menu is not displayed !!.

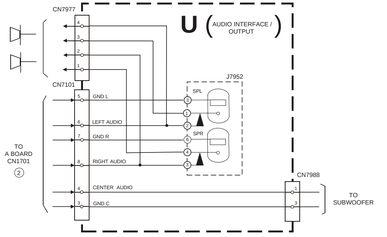
00	Switch back to normal mode - ‘TT’ mode off
01	Set picture maximum
02	Set picture minimum
03	Set speaker/headphone Volume to 30%
04	Set speaker/headphone Volume to 50%
05	Set speaker/headphone Volume to 65%
06	Set speaker/headphone Volume to 80%
07	Ageing Mode
08	Shipping Condition
09	Language Reset
10	No function
11	Sub picture adjustment
12	Sub colour adjustment
13	Display software version and TV set configuration
14	Production Info Display
15	Picture Rotation
16	Picture level 50%
17	Audio mute on
18	No function
19	Sub brightness adjustment
20	See ‘TT10’
21	Destination A includes text settings, display TV status
22	Destination L includes text settings, display TV status
23	Destination E includes text settings, display TV status
24	Destination U includes text settings, display TV status
25	Destination D includes text settings, display TV status
26	Destination B includes text settings, display TV status
27	Destination K includes text settings, display TV status
28	Destination R includes text settings, display TV status
30	See ‘TT10’
31	Geometry Adjustment 1
32	Geometry Adjustment 2
33	Error monitor
34	No function
35	CRT 4:3 < > 16:9 ; Display TV status
36	Line 23 detection switch
37	Velocity Modulation (VM) test
38	No function
39	No function
40	See ‘TT10’

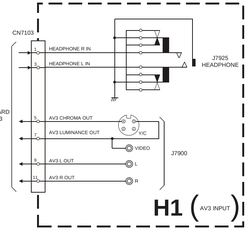
41	Screen mode check
42	Re initialise geometry
43	No function
44	No function
45	No function
46	Reserved for dealer commander
47	Re initialise NVM
48	Set NVM as non virgin
49	Set NVM as virgin
50	See ‘TT10’
51	Set Dolby volume to 90%
52	Dolby on left speaker only
53	Dolby on right speaker only
54	Dolby on left centre only
55	Dolby on surround speaker only
56 - 59	No function
60	See ‘TT10’
61	Service mode
62	Production mode
65	Reset error codes
68	Ignore errors on
69	Ignore errors off
70	See ‘TT10’
71 - 72	No function
73	Clear programs
74 - 79	No function
80	See ‘TT10’
81	PAP H adjustment left image
82	PAP H adjustment right image
83 - 86	No function
87	Personal ID reset
88	Parental Lock off
89	No function
90	See ‘TT10’

5-1 BLOCK DIAGRAMS (1)

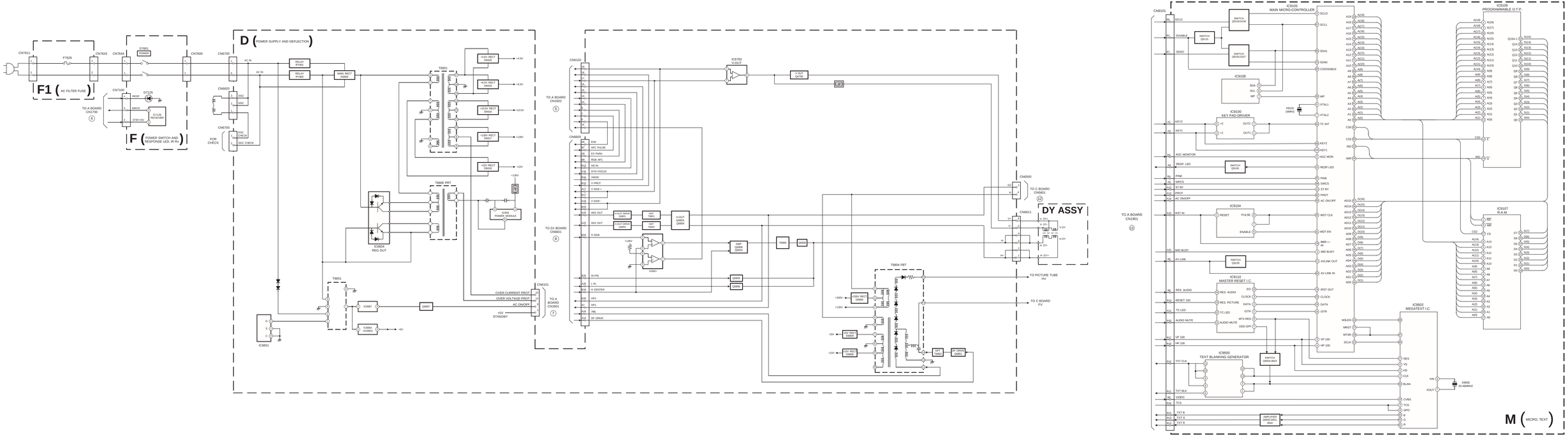




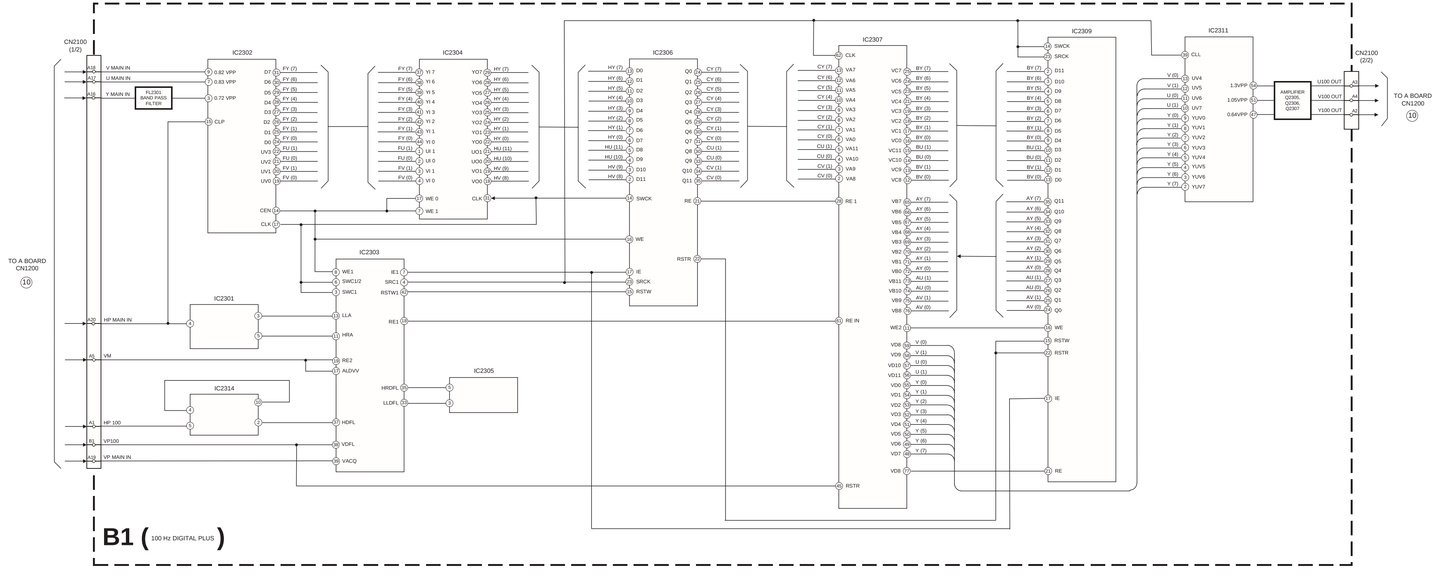


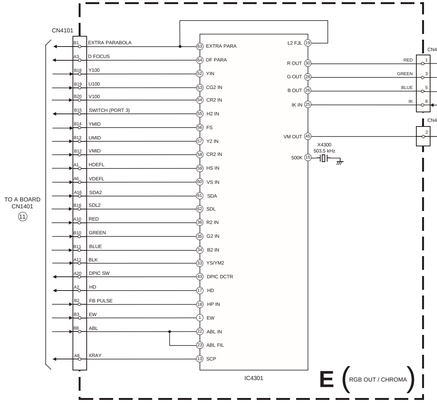


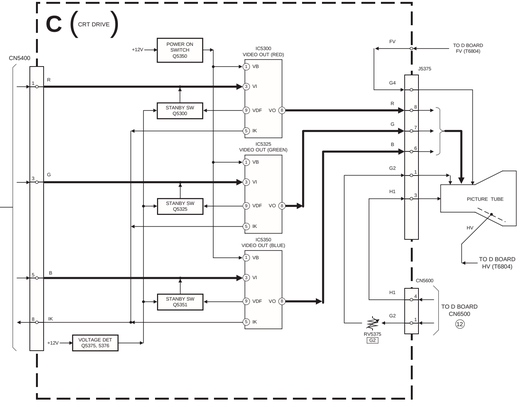
BLOCK DIAGRAMS (2)



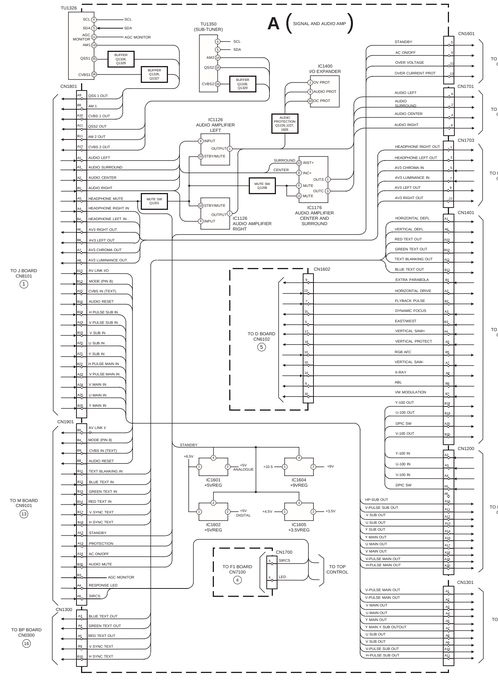
BLOCK DIAGRAMS (3)

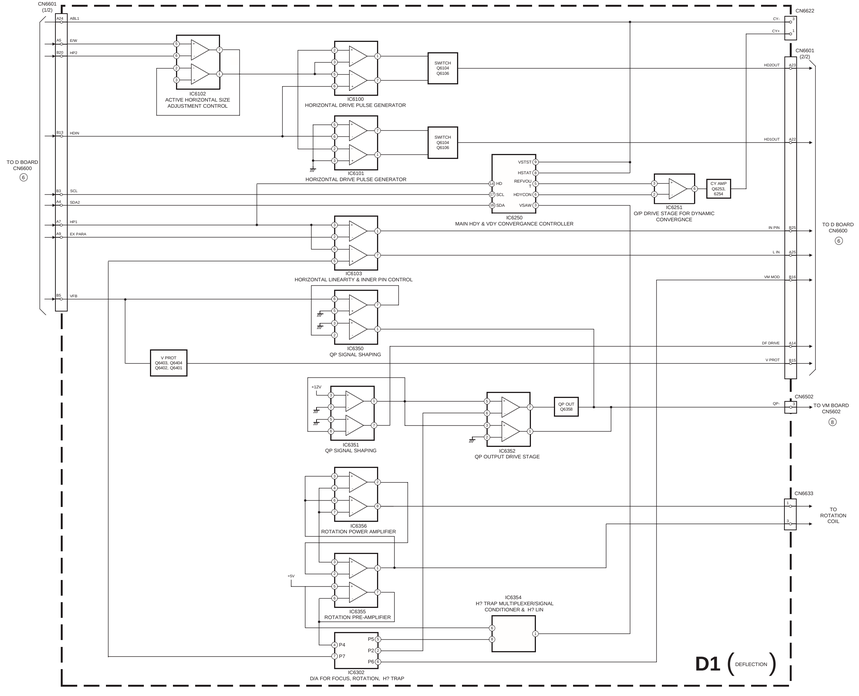


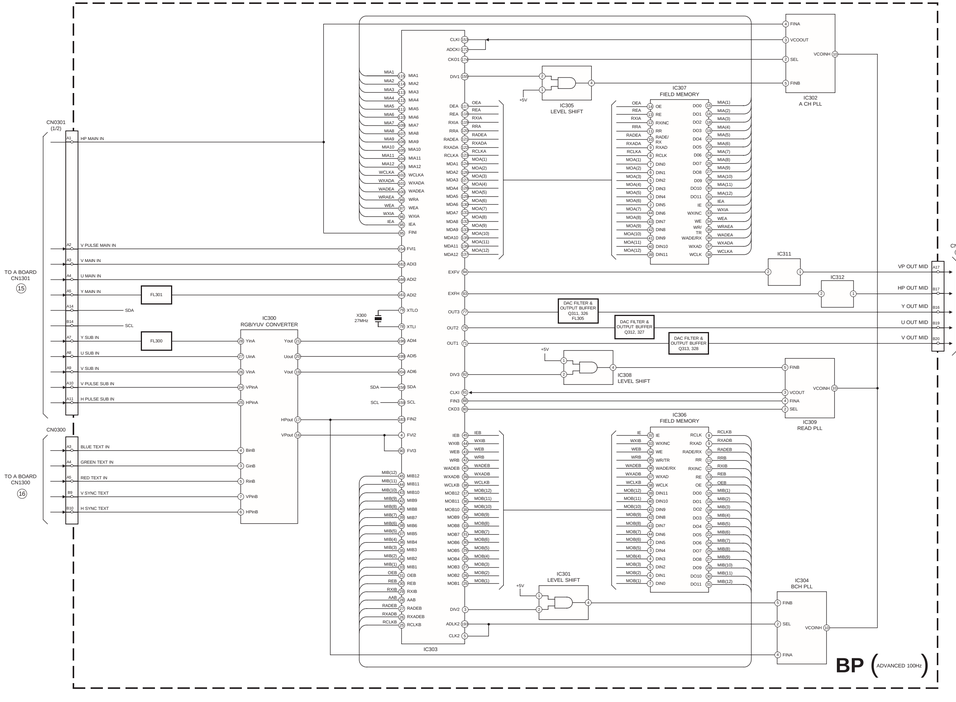




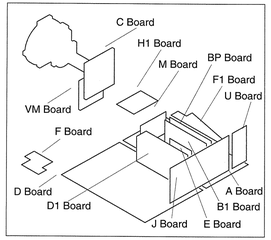
BLOCK DIAGRAMS (4)







5-2. CIRCUIT BOARD LOCATION



5-3. SCHEMATIC DIAGRAMS AND PRINTED WIRING BOARDS

Note :

- All capacitors are in µF unless otherwise noted.
- pF : µµF 50WV or less are not indicated except for electrolytic types.
- Indication of resistance, which does not have one for rating electrical power, is as follows.

Pitch : 5mm
Electrical power rating : 1/4W

- Chip resistors are 1/10W
- All resistors are in ohms.
  k = 1000 ohms, M = 1000,000 ohms
- : nonflammable resistor.
- : fusible resistor.
- : internal component.
- : panel designation or adjustment for repair.
- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.
- All voltages are in Volts.
- Readings are taken with a 10Mohm digital mutimeter.
- Readings are taken with a color bar input signal.
- Voltage variations may be noted due to normal production tolerences.
- : B + bus.
- : B - bus.
- : RF signal path.
- : earth - ground.
- : earth - chassis.

Reference Information

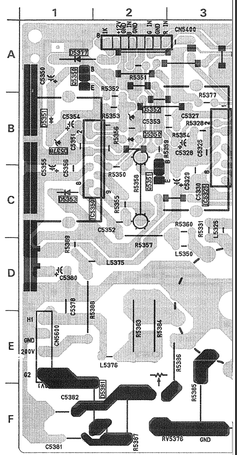
RESISTOR	**RN**	: METAL FILM
	RC	: SOLID
	FPRD	: NON FLAMMABLE CARBON
	FUSE	: NON FLAMMABLE FUSIBLE
	RS	: NON FLAMMABLE METAL OXIDE
	RB	: NON FLAMMABLE CEMENT
	RW	: NON FLAMMABLE WIREWOUND
	※	: ADJUSTMENT RESISTOR
COIL	**LF-8L**	: MICRO INDUCTOR
CAPACITOR	**TA**	: TANTALUM
	PS	: STYROL
	PP	: POLYPROPYLENE
	PT	: MYLAR
	MPS	: METALIZED POLYESTER
	MPP	: METALIZED POLYPROPYLENE
	ALB	: BIPOLAR
	ALT	: HIGH TEMPERATURE
	ALR	: HIGH RIPPLE

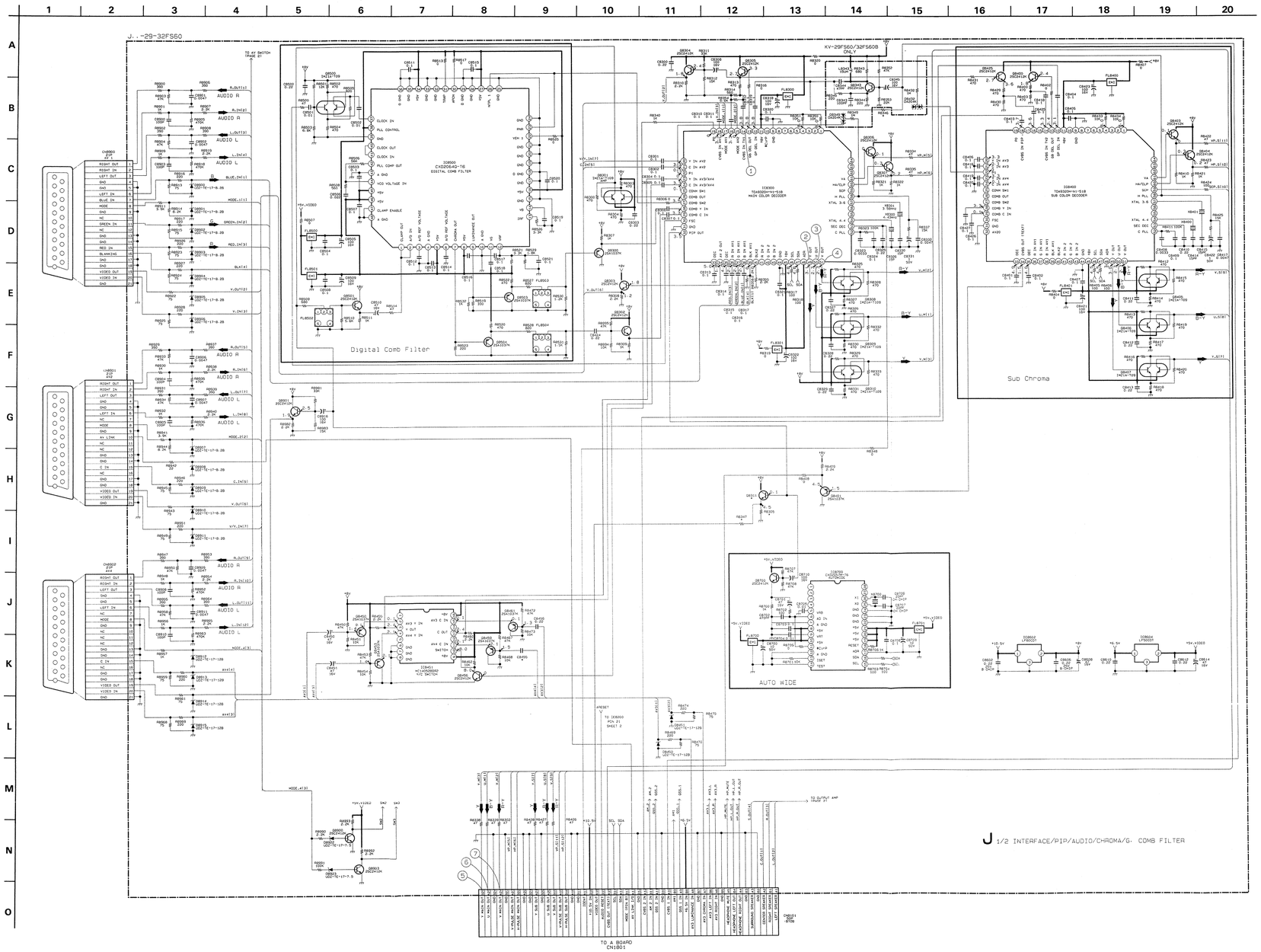
Note : The components identified by shading and marked ⚠ are critical for safety. Replace only with the part numbers specified in the parts list.

Note : Les composants identifiés par une trame et par une marque ⚠ sont d'une importance critique pour la sécurité. Ne les remplacer que par des pièces de numéro spécifié. specified.

C [RGB OUT]

C Board

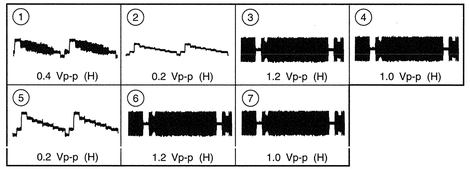


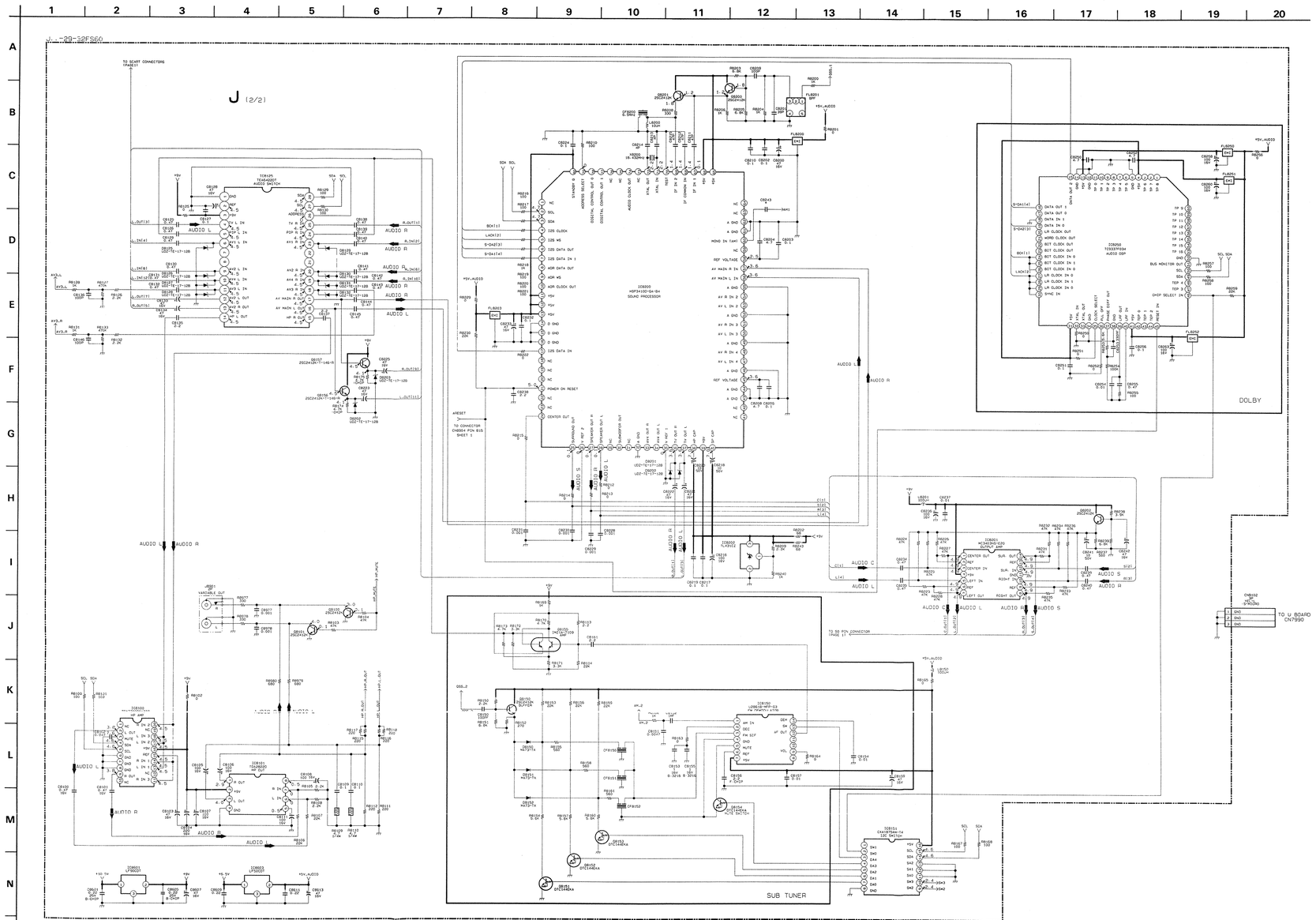


J BOARD * MARK

Ref	29FS60A	29FS60B	29FS60D	29FS60E	29FS60K	29FS60R	29FS60U	32FS60A	32FS60B	32FS60D	32FS60E
C8243	-	0.33MF	-	-	-	-	-	-	0.33MF	-	-
C8455	0.22MF	0.22MF	0.22MF	0.22MF	0.22MF	0.22MF	0.22MF	0.22MF	-	0.22MF	0.22MF
D8349	-	DA204K-T-146	-	-	-	-	-	-	DA204-T-146	-	-
Q8311	-	2SC2412K-T-146-R	-	-	-	-	-	-	2SC2412K-T-146-R	-	-
R8305		1K	-	-	-	-	-	-	1K	-	-
R8346	SHORT 0	-	SHORT 0	SHORT 0	SHORT 0	SHORT 0	SHORT 0	SHORT 0	-	SHORT 0	SHORT 0
R8347	-	100	-	-	-	-	-	-	100	-	-
R8348	-	SHORT 0	-	-	-	-	-	-	SHORT 0	-	-
R8349	-	1M	-	-	-	-	-	-	1M	-	-

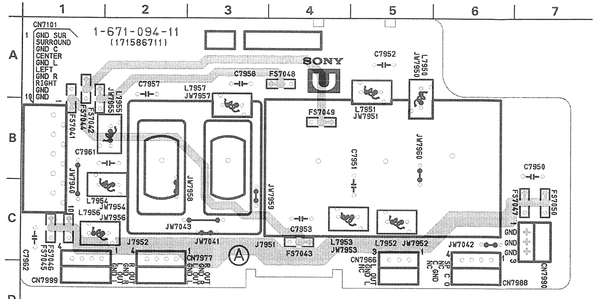
Waveforms J1(1/2) Board



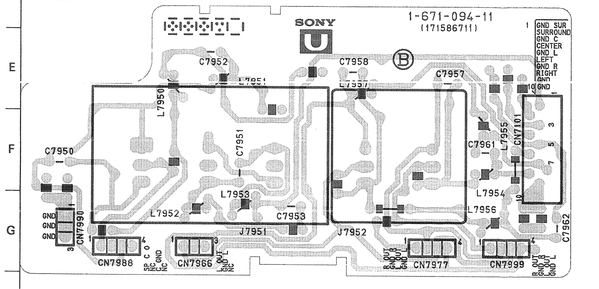

J (2/2)
TO SCART CONNECTORS
SHEET 17
AUDIO L
AUDIO R
DOLBY
SUB TUNER
TO U BOARD
CN7990
TO SUB PCN CONNECTOR
SHEET 11

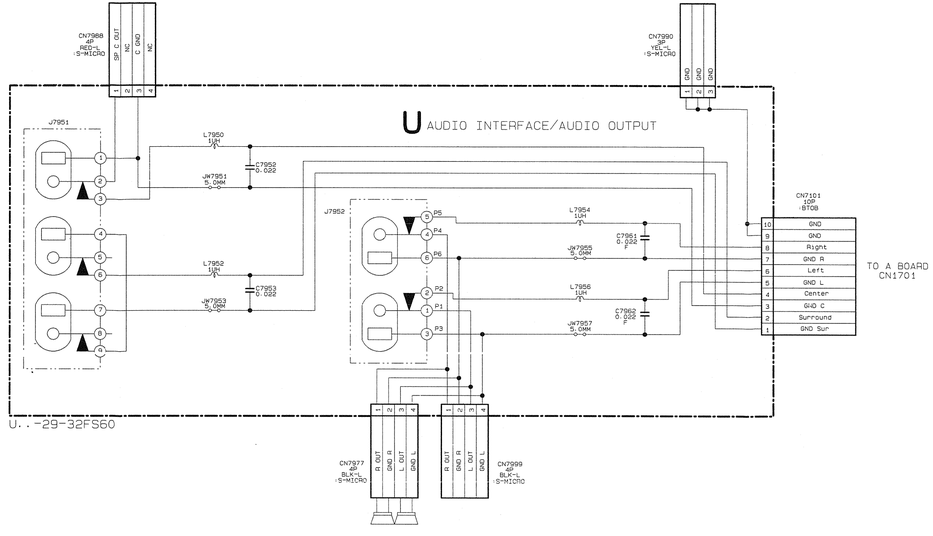
U [AUDIO INTERFACE / OUTPUT]

U Board <Component Side>



U Board <Conductor Side>



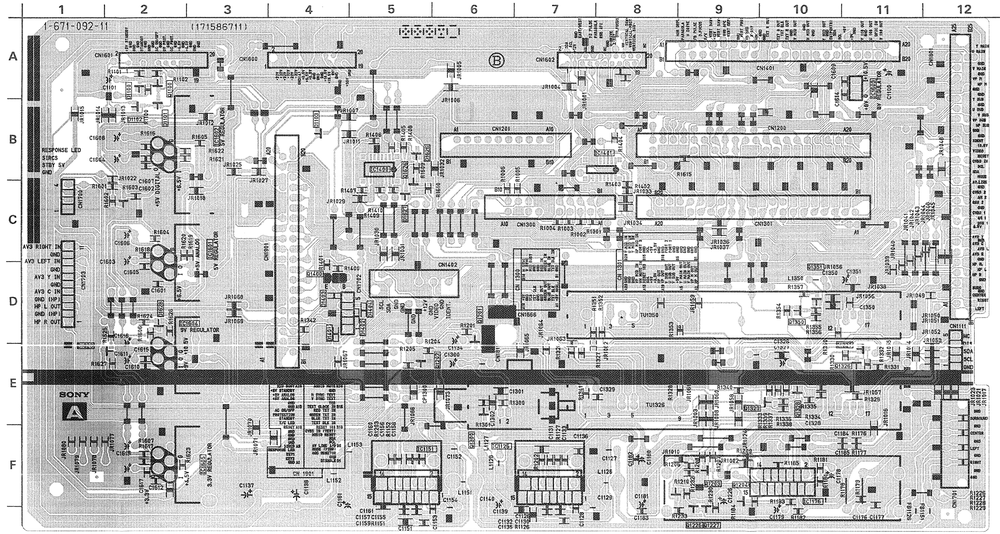


A BOARD

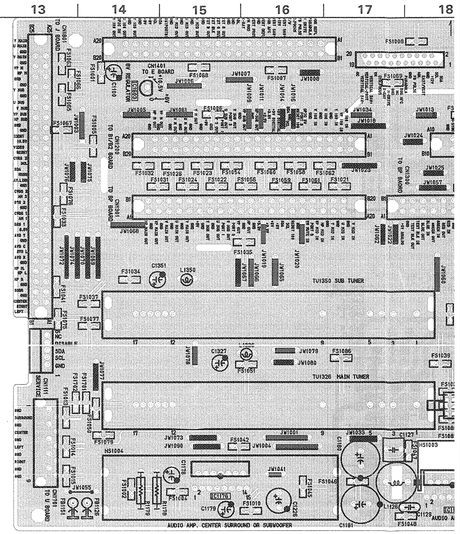
IC		DIODE	
IC1126	F - 6	D1100	A - 2
IC1151	F - 5	D1101	B - 2
IC1176	G - 15	D1102	B - 2
IC1400	B - 5	D1103	B - 4
IC1601	C - 3	D1401	E - 4
IC1602	B - 3	D1402	D - 5
IC1603	A - 11	D1403	D - 4
IC1604	D - 3	D1404	D - 5
IC1605	F - 3	D1626	B - 6
TRANSISTOR		D1627	C - 5
Q1100	A - 2	D1629	E - 1
Q1201	D - 6		
Q1202	E - 6		
Q1203	F - 9		
Q1204	F - 9		
Q1226	G - 9		
Q1227	G - 9		
Q1326	E - 11		
Q1327	E - 11		
Q1328	E - 10		
Q1329	E - 10		
Q1400	D - 4		
Q1626	B - 5		

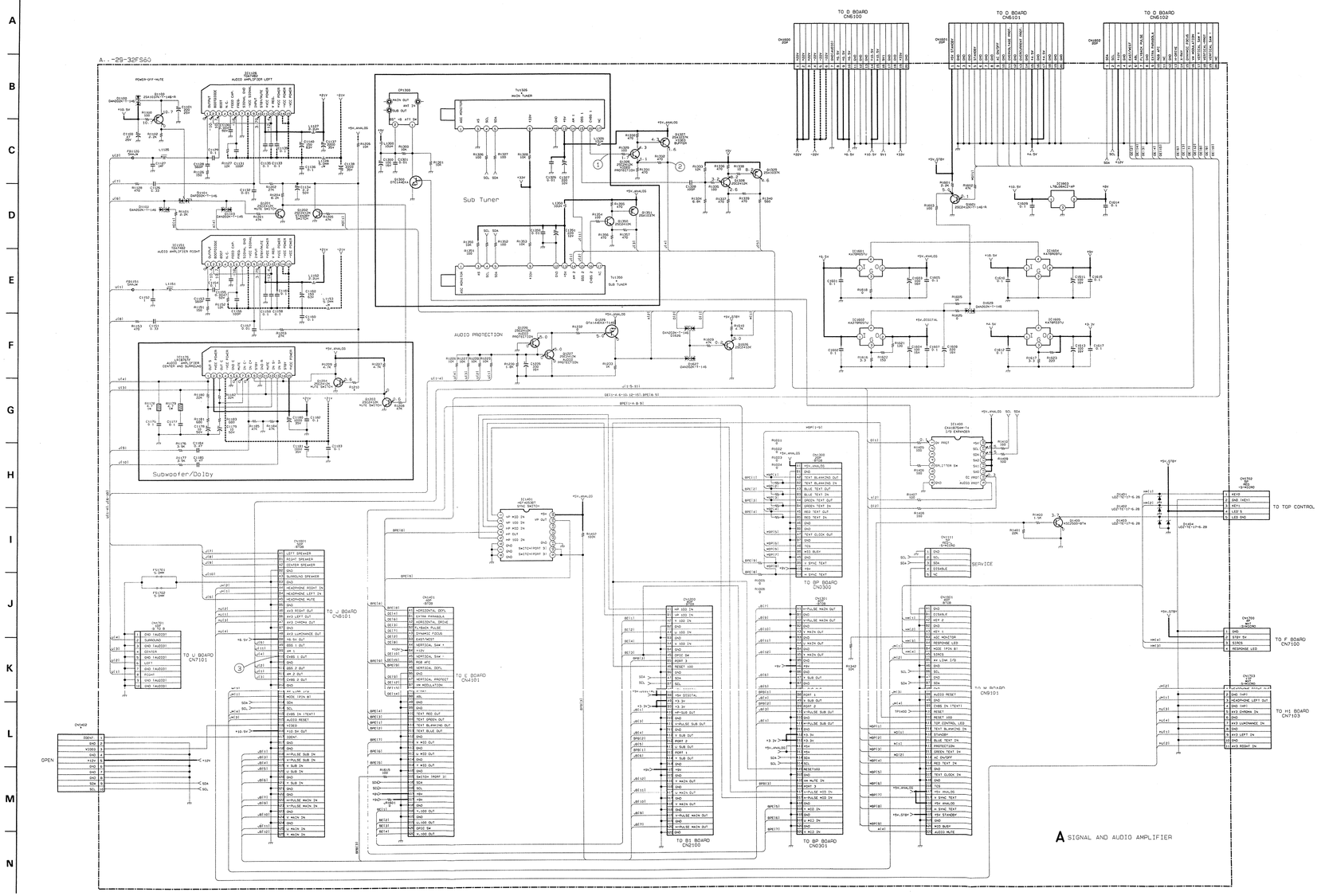
A [SIGNAL AND AUDIO AMP]

A Board <Conductor Side>



A Board <Component Side>

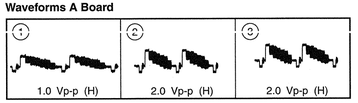


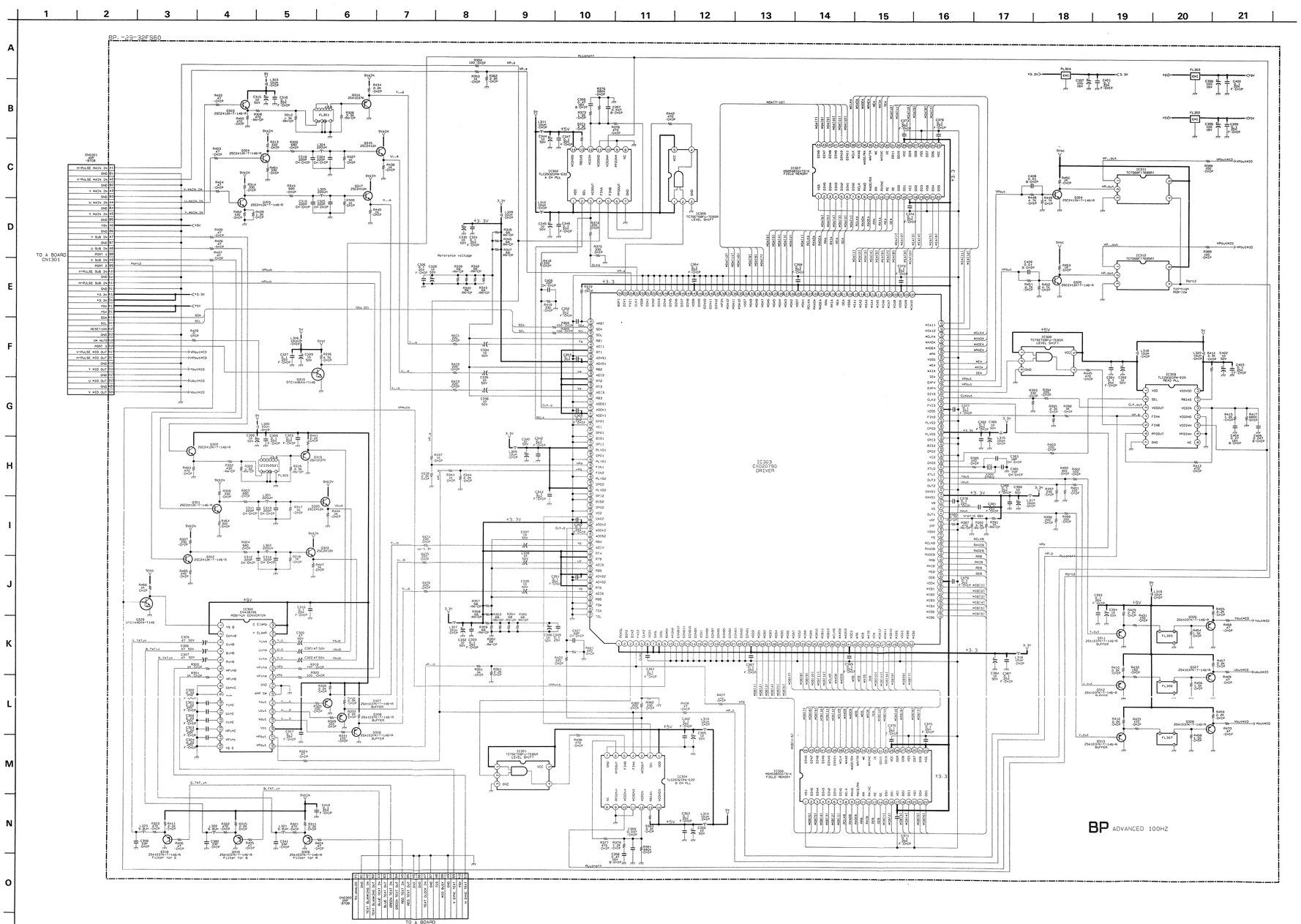


A BOARD * MARK

Ref	29FS60A	29FS60B	29FS60D	29FS60E	29FS60K	29FS60R	29FS60U	32FS60A	32FS60B	32FS60D	32FS60E
CN1402	-	10PIN	-	-	-	-	-	-	10PIN	-	-
R1210	47K 5%	47K 0.5%	47K 5%	47K 5%	47K 5%	47K 5%	47K 0.5%	47K 5%	47K 0.5%	47K 5%	47K 5%
TU1326	TUNER/VIF (AEP)	TUNER/VIF (FR)	TUNER/VIF (AEP)	TUNER/VIF (AEP)	TUNER/VIF (AEP)	TUNER/VIF (AEP)	TUNER/VIF (UK)	TUNER/VIF (AEP)	TUNER/VIF (FR)	TUNER/VIF (AEP)	TUNER/VIF (AEP)
TU1350	TUNER/VIF (AEP)	TUNER/VIF (FR)	TUNER/VIF (AEP)	TUNER/VIF (AEP)	TUNER/VIF (AEP)	TUNER/VIF (AEP)	TUNER/VIF (AEP)	TUNER/VIF (AEP)	TUNER/VIF (FR)	TUNER/VIF (AEP)	TUNER/VIF (AEP)

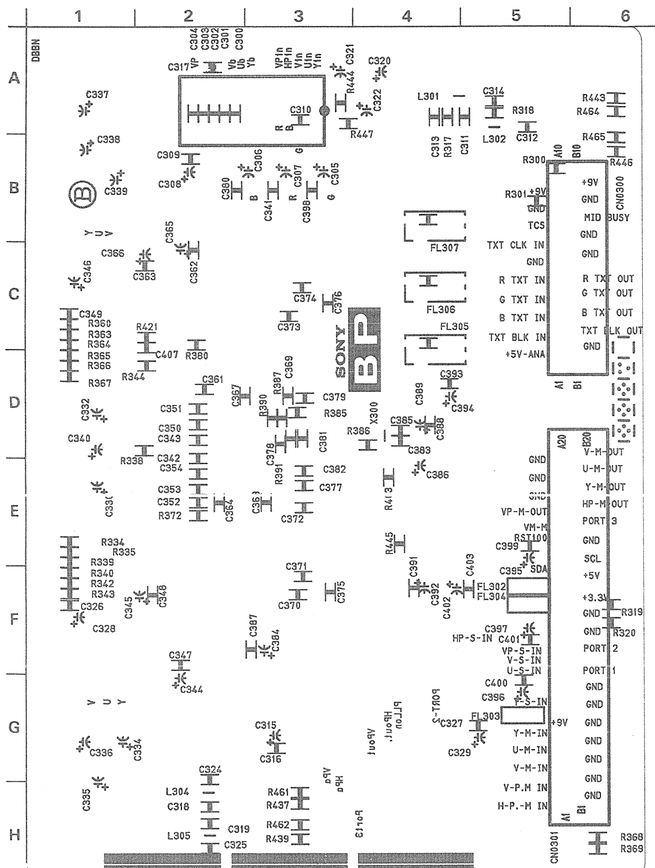
Waveforms A Board



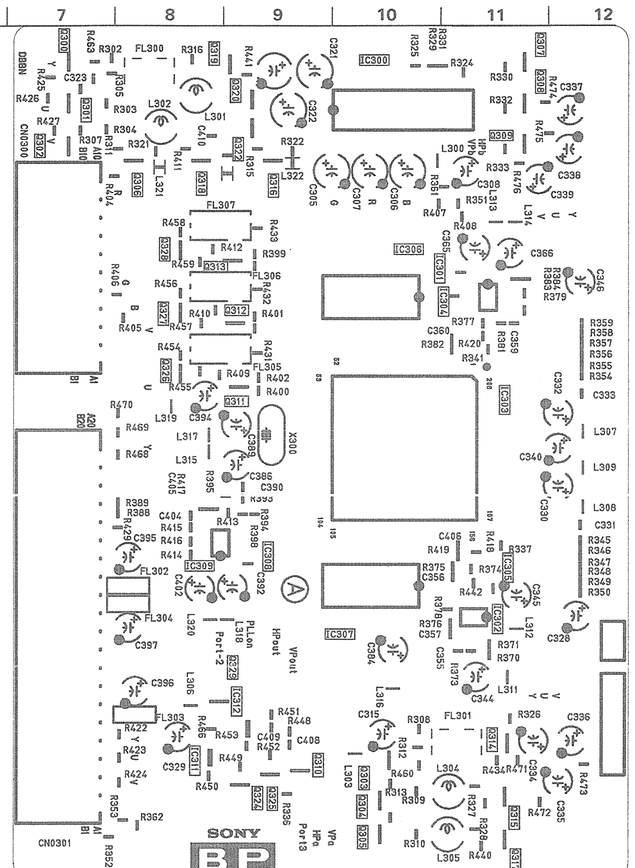

BP-28-32FS60
TO A BOARD CN1301
TO A BOARD CN1300
IC3303 CXA2075Q DRIVER
IC3306 CXA1870S RGB/YUV CONVERTER
IC3307 M52347-101SP FIELD MEMORY
IC3308 TLC5540IDW-E20 VIDEO PLL
IC3309 TLC5540IDW-E20 PLL
IC3310 TC7S66F(TE85R) LEVEL SHIFT
IC3311 TC7S66F(TE85R) LEVEL SHIFT
IC3312 TC7S66F(TE85R) LEVEL SHIFT
IC3313 TC7S66F(TE85R) LEVEL SHIFT
IC3201 TC7SET08F(TE85R) LEVEL SHIFT
IC3202 TLC5540IDW-E20 H SYNC PLL
IC3203 M52347-101SP FIELD MEMORY
Reference voltage
BP ADVANCED 100HZ

BP [ADVANCED 100Hz]

BP Board <Conductor Side>

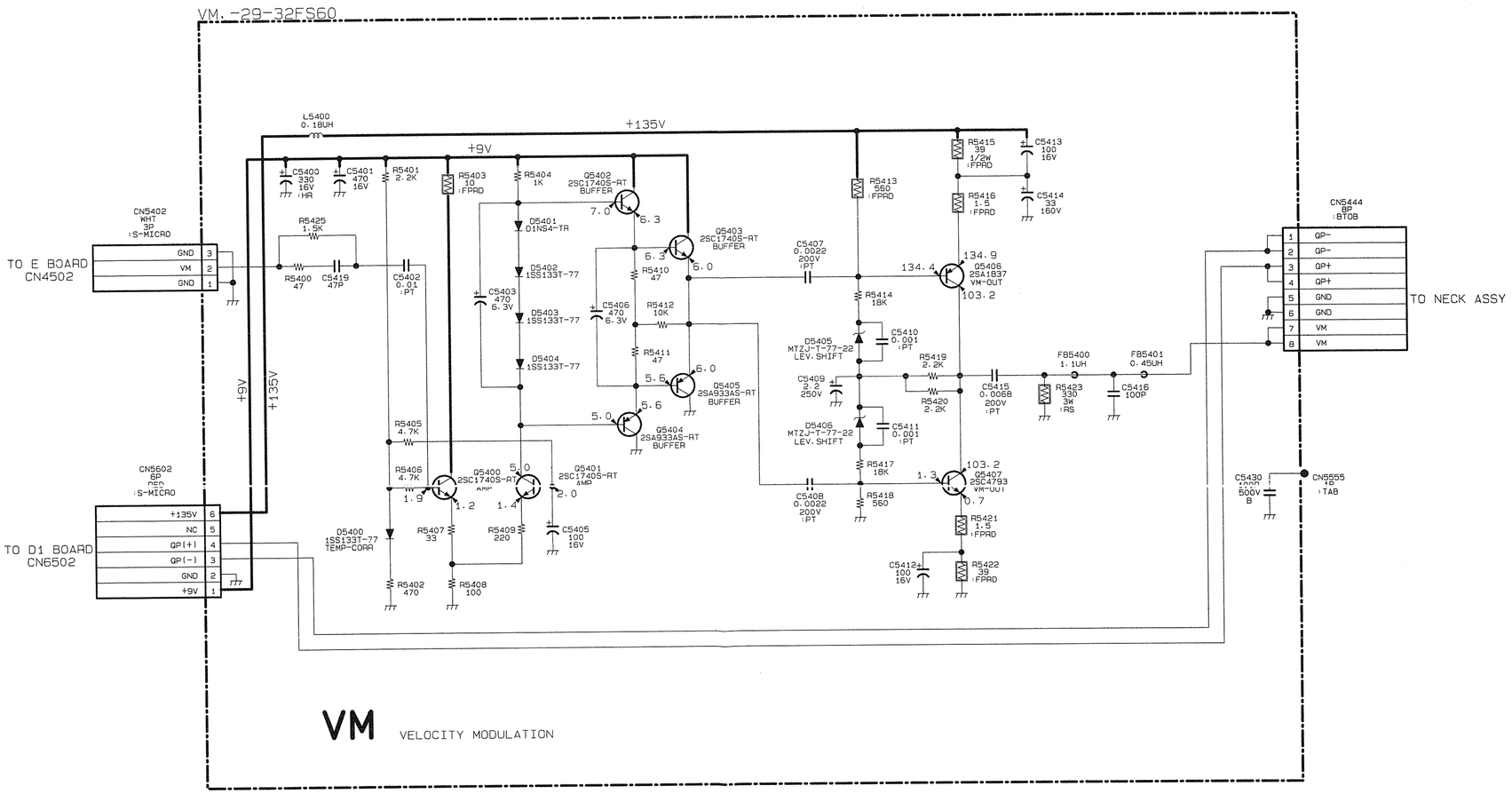


BP Board <Component Side>



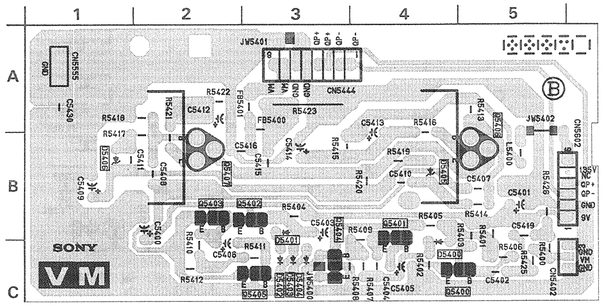
BP BOARD

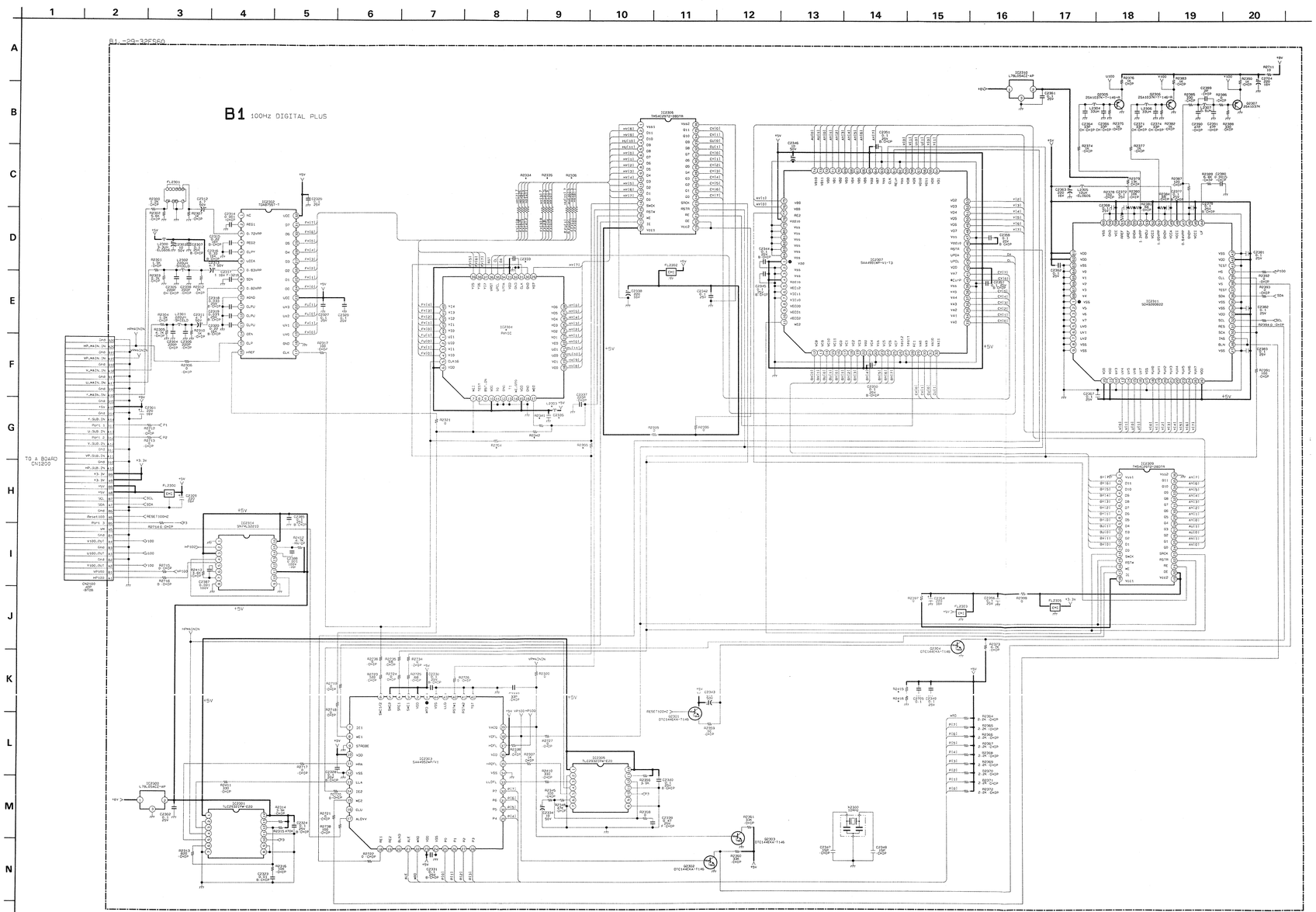
IC		Q307	A - 11
IC300	A - 10	Q308	A - 11
IC301	C - 10	Q309	B - 11
IC302	F - 11	Q310	G - 10
IC303	D - 11	Q311	D - 10
IC304	C - 10	Q312	D - 9
IC305	E - 8	Q313	C - 8
IC306	C - 10	Q314	G - 11
IC307	F - 10	Q315	H - 11
IC308	F - 10	Q316	B - 9
IC309	E - 9	Q317	H - 11
IC311	G - 8	Q318	B - 8
IC312	G - 9	Q319	A - 8
TRANSISTOR		Q320	A - 9
Q300	A - 7	Q322	B - 9
Q301	A - 7	Q324	G - 9
Q302	B - 7	Q325	G - 9
Q303	G - 9	Q326	D - 8
Q304	H - 9	Q327	C - 8
Q305	H - 9	Q328	C - 8
Q306	B - 8	Q329	F - 8



VM [VELOCITY MODULATION]

VM Board





B1 [100Hz DIGITAL PLUS]

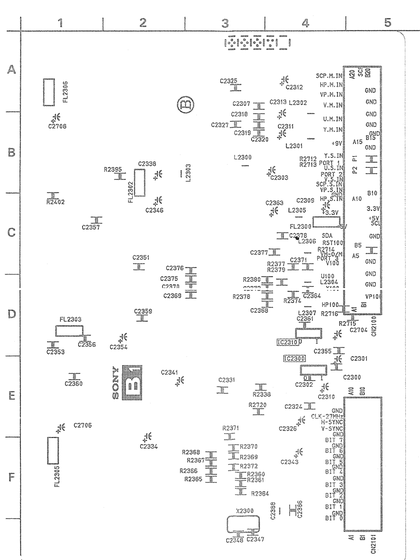
B1 BOARD * MARK

Ref	29FS60A	29FS60B	29FS60D	29FS60E	29FS60K	29FS60R	29FS60U	32FS60A	32FS60B	32FS60D	32FS60E
C2333	-	-	-	-	-	-	-	0.1MF	0.1MF	0.1MF	0.1MF
C2335	-	-	-	-	-	-	-	0.1MF	0.1MF	0.1MF	0.1MF
IC2304	-	-	-	-	-	-	-	SAA4995WP-V1-T3	SAA4995WP-V1-T3	SAA4995WP-V1-T3	SAA4995WP-V1-T3
L2303	-	-	-	-	-	-	-	3.3UH	3.3UH	3.3UH	3.3UH
R2334	RES,CHIP NETWORK 10	RES,CHIP NETWORK 10	RES,CHIP NETWORK 10	RES,CHIP NETWORK 10	RES,CHIP NETWORK 10	RES,CHIP NETWORK 10	RES,CHIP NETWORK 10	-	-	-	-
R2335	RES,CHIP NETWORK 10	RES,CHIP NETWORK 10	RES,CHIP NETWORK 10	RES,CHIP NETWORK 10	RES,CHIP NETWORK 10	RES,CHIP NETWORK 10	RES,CHIP NETWORK 10	-	-	-	-
R2336	RES,CHIP NETWORK 10	RES,CHIP NETWORK 10	RES,CHIP NETWORK 10	RES,CHIP NETWORK 10	RES,CHIP NETWORK 10	RES,CHIP NETWORK 10	RES,CHIP NETWORK 10	-	-	-	-
R2341	-	-	-	-	-	-	-	SHORT 0	SHORT 0	SHORT 0	SHORT 0
R2342	SHORT 0	SHORT 0	SHORT 0	SHORT 0	SHORT 0	SHORT 0	SHORT 0	-	-	-	-
R2354	SHORT 0	SHORT 0	SHORT 0	SHORT 0	SHORT 0	SHORT 0	SHORT 0	-	-	-	-
R2355	-	-	-	-	-	-	-	SHORT 0	SHORT 0	SHORT 0	SHORT 0
R2415	-	-	-	-	-	-	-	SHORT 0	SHORT 0	SHORT 0	SHORT 0
R2416	SHORT 0	SHORT 0	SHORT 0	SHORT 0	SHORT 0	SHORT 0	SHORT 0	-	-	-	-

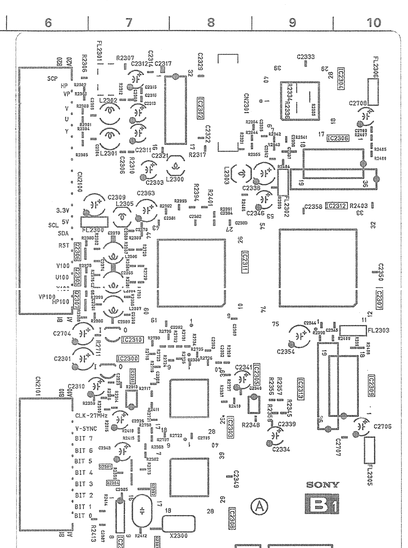
B1 BOARD

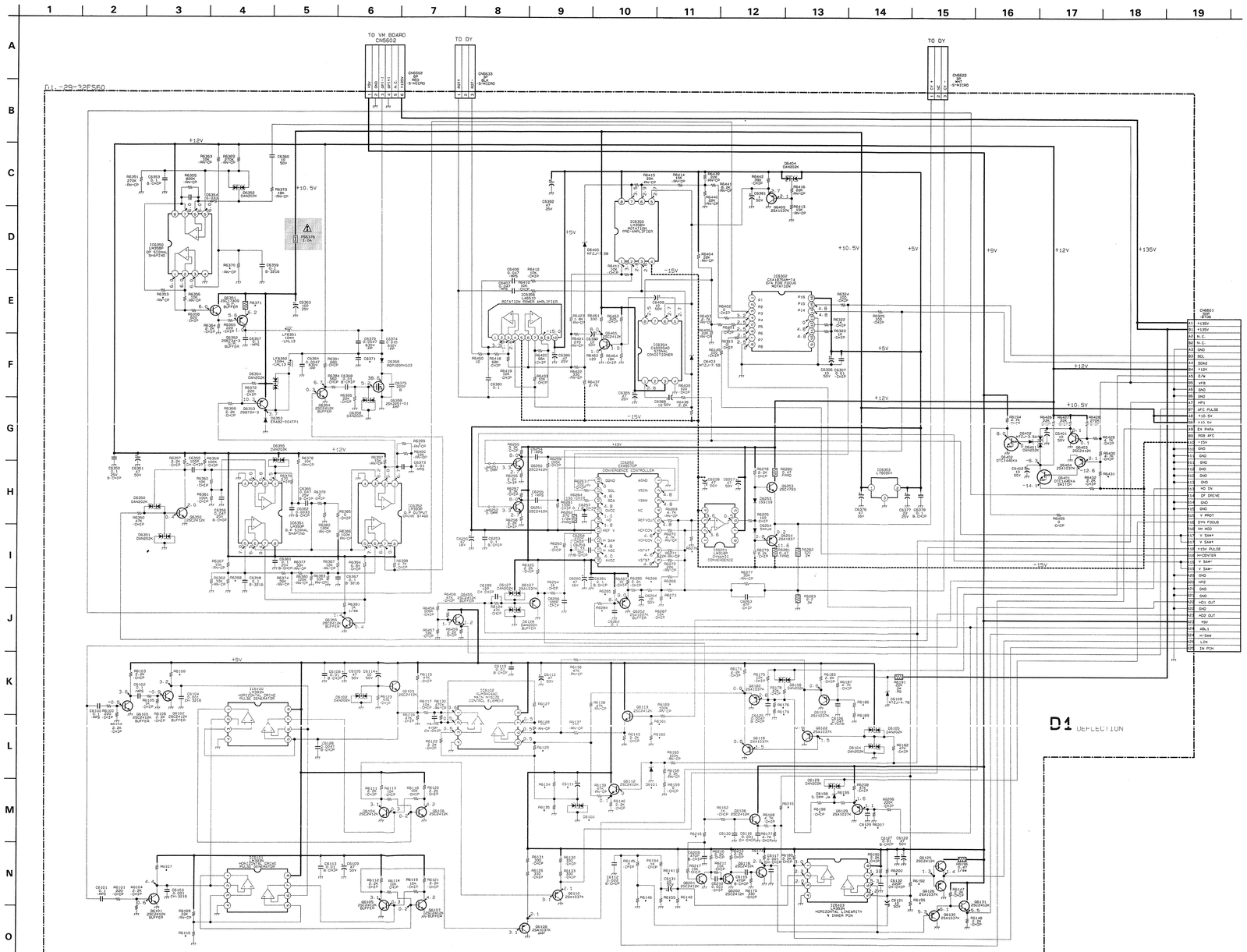
IC	
IC2300	E - 4
IC2301	A - 11
IC2302	B - 9
IC2305	E - 8
IC2306	B - 9
IC2307	D - 10
IC2309	E - 10
IC2310	D - 7

B1 Board <Conductor Side>



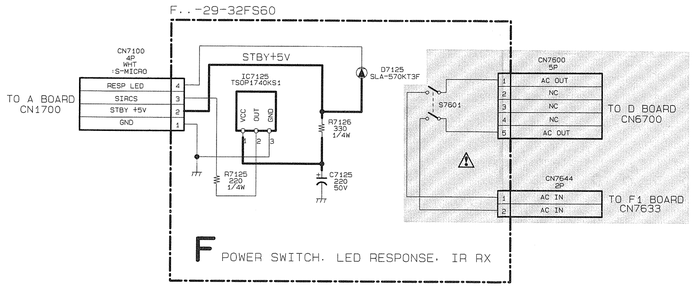
B1 Board <Component Side>

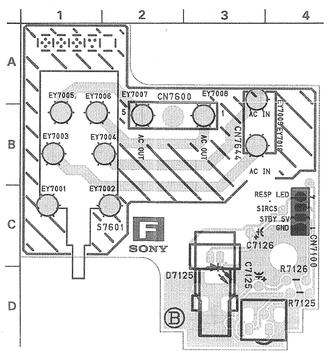


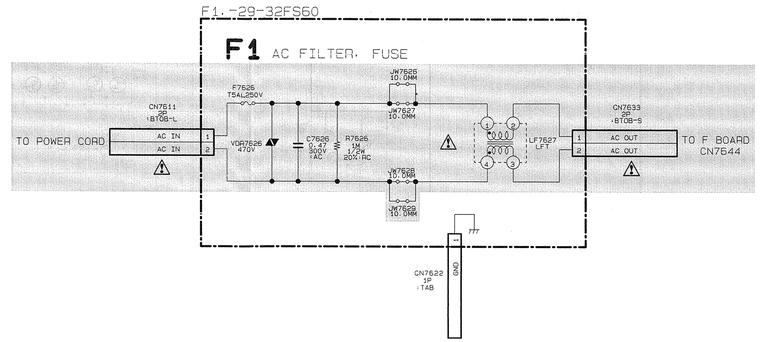


D1 BOARD * MARK

Ref	29FS60A	29FS60B	29FS60D	29FS60E	29FS60K	29FS60R	29FS60U	32FS60A	32FS60B	32FS60D	32FS60E
C6111	-	-	-	-	-	-	-	47MF	47MF	47MF	47MF
C6129	0.1MF	0.1MF	0.1MF	0.1MF	0.1MF	0.1MF	0.1MF	0.33MF	0.33MF	0.33MF	0.33MF
C6130	220PF	220PF	220PF	220PF	220PF	220PF	220PF	-	-	-	-
C6371	-	-	-	-	-	-	-	0.0047MF	0.0047MF	0.0047MF	0.0047MF
D6100	-	-	-	-	-	-	-	DAN202K-T-146	DAN202K-T-146	DAN202K-T-146	DAN202K-T-146
D6101	-	-	-	-	-	-	-	MTZJ-T-77-4.7B	MTZJ-T-77-4.7B	MTZJ-T-77-4.7B	MTZJ-T-77-4.7B
R6107	2.2K	2.2K	2.2K	2.2K	2.2K	2.2K	2.2K	1.8K	1.8K	1.8K	1.8K
R6108	2.2K	2.2K	2.2K	2.2K	2.2K	2.2K	2.2K	1.8K	1.8K	1.8K	1.8K
R6110	15K	15K	15K	15K	15K	15K	15K	22K	22K	22K	22K
R6127	15K	15K	15K	15K	15K	15K	15K	22K	22K	22K	22K
R6129	-	-	-	-	-	-	-	47K	47K	47K	47K
R6134	-	-	-	-	-	-	-	2.2K	2.2K	2.2K	2.2K
R6135	0.01MF	0.01MF	0.01MF	0.01MF	0.01MF	0.01MF	0.01MF	2.2K	2.2K	2.2K	2.2K
R6141	22K	22K	22K	22K	22K	22K	22K	6.8K	6.8K	6.8K	6.8K
R6142	7.5K	7.5K	7.5K	7.5K	7.5K	7.5K	7.5K	2.2K	2.2K	2.2K	2.2K
R6146	4.7K 0.50%	4.7K 0.50%	4.7K 0.50%	4.7K 0.50%	4.7K 0.50%	4.7K 0.50%	4.7K 0.50%	4.7K 5%	4.7K 5%	4.7K 5%	4.7K 5%
R6155	4.7K	4.7K	4.7K	4.7K	4.7K	4.7K	4.7K	100K	100K	100K	100K
R6160	SHORT 0	SHORT 0	SHORT 0	SHORT 0	SHORT 0	SHORT 0	SHORT 0	1K	1K	1K	1K
R6161	8.2K	8.2K	8.2K	8.2K	8.2K	8.2K	8.2K	5.6K	5.6K	5.6K	5.6K
R6174	15K	15K	15K	15K	15K	15K	15K	22K	22K	22K	22K
R6176	22K	22K	22K	22K	22K	22K	22K	SHORT 0	SHORT 0	SHORT 0	SHORT 0
R6179	1.5K	1.5K	1.5K	1.5K	1.5K	1.5K	1.5K	3.3K	3.3K	3.3K	3.3K
R6186	3.3K	3.3K	3.3K	3.3K	3.3K	3.3K	3.3K	1K	1K	1K	1K
R6189	SHORT 0	SHORT 0	SHORT 0	SHORT 0	SHORT 0	SHORT 0	SHORT 0	1K	1K	1K	1K
R6192	3.9K	3.9K	3.9K	3.9K	3.9K	3.9K	3.9K	22K	22K	22K	22K
R6195	22K	22K	22K	22K	22K	22K	22K	68K	68K	68K	68K
R6198	22K	22K	22K	22K	22K	22K	22K	47K	47K	47K	47K
R6199	22K	22K	22K	22K	22K	22K	22K	47K	47K	47K	47K
R6200	-	-	-	-	-	-	-	270K	270K	270K	270K
R6207	150K	150K	150K	150K	150K	150K	150K	330K	330K	330K	330K
R6215	22K	22K	22K	22K	22K	22K	22K	47K	47K	47K	47K
R6216	47K	47K	47K	47K	47K	47K	47K	4.7K	4.7K	4.7K	4.7K
R6265	1K	1K	1K	1K	1K	1K	1K	180K	180K	180K	180K
R6268	-	-	-	-	-	-	-	33K	33K	33K	33K
R6273	22K	22K	22K	22K	22K	22K	22K	-	-	-	-
R6276	39K	39K	39K	39K	39K	39K	39K	30K	30K	30K	30K
R6284	470K	470K	470K	470K	470K	470K	470K	330K	330K	330K	330K
R6286	10K	10K	10K	10K	10K	10K	10K	6.8K	6.8K	6.8K	6.8K
R6353	5.1K	5.1K	5.1K	5.1K	5.1K	5.1K	5.1K	6.8K	6.8K	6.8K	6.8K
R6368	180K	180K	180K	180K	180K	180K	180K	220K	220K	220K	220K
R6370	10K	10K	10K	10K	10K	10K	10K	12K	12K	12K	12K
R6371	56	56	56	56	56	56	56	82	82	82	82
R6399	180K	180K	180K	180K	180K	180K	180K	150K	150K	150K	150K
R6431	-	-	-	-	-	-	-	470K	470K	470K	470K

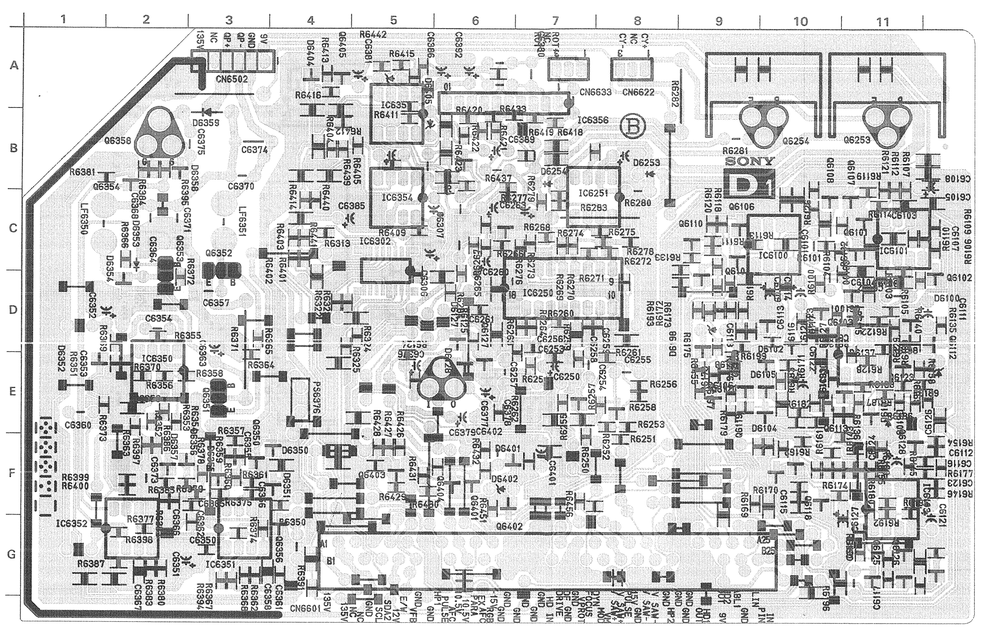






D1 [DEFLECTION]

D1 Board

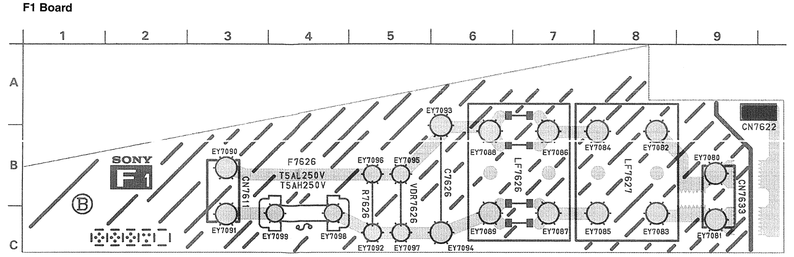


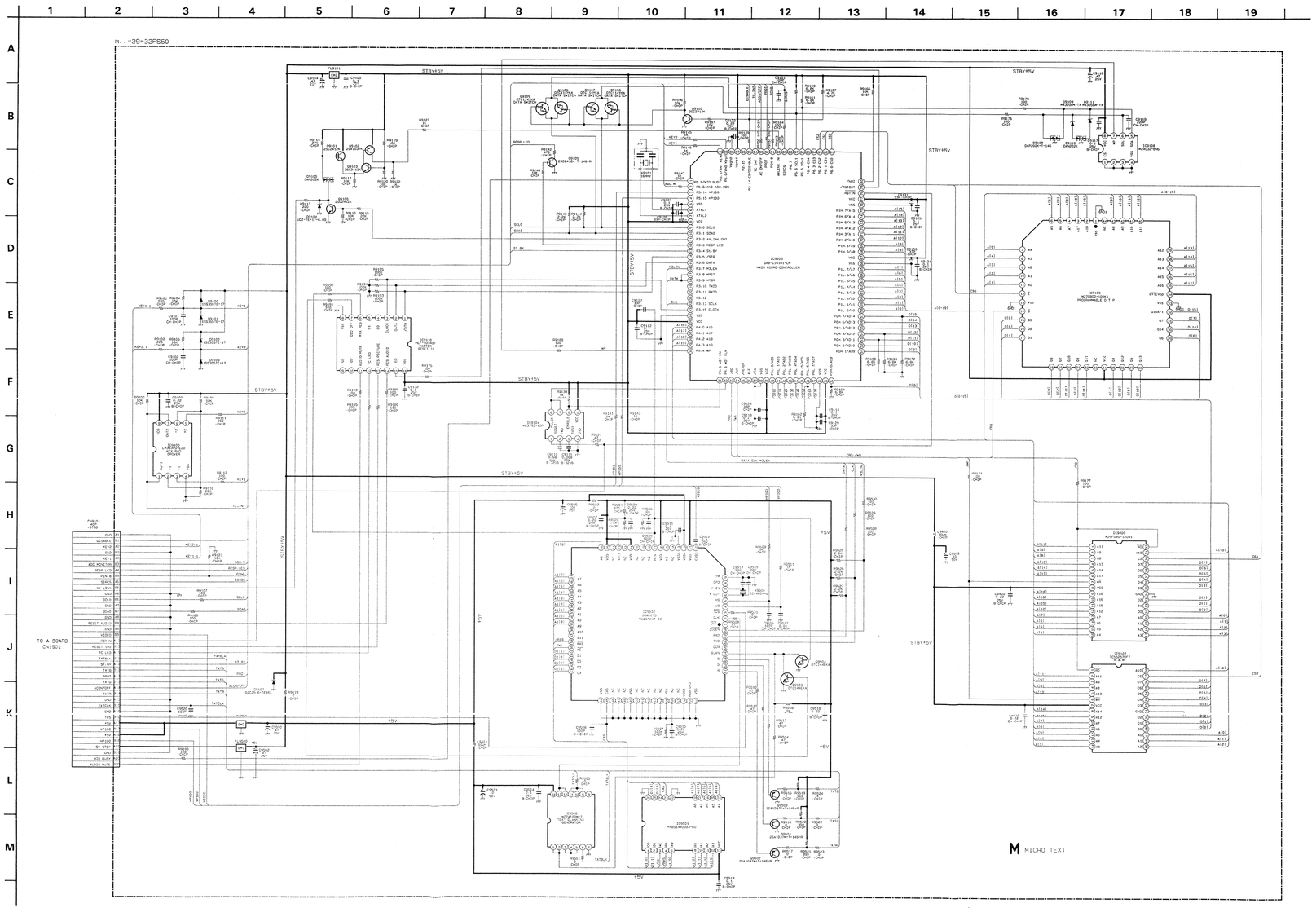
D1 BOARD

IC		TRANSISTOR		Q6350	E - 8
IC6100	C - 9	Q6100	D - 11	Q6351	E - 3
IC6101	C - 12	Q6101	C - 11	Q6352	D - 3
IC6102	D - 11	Q6102	C - 12	Q6353	C - 2
IC6103	G - 12	Q6104	C - 9	Q6354	C - 2
IC6250	D - 8	Q6105	B - 11	Q6356	G - 4
IC6251	C - 8	Q6106	C - 9	Q6358	B - 2
IC6302	D - 5	Q6107	E - 11	Q6401	F - 7
IC6350	D - 3	Q6108	B - 10	Q6402	G - 6
IC6351	G - 3	Q6110	C - 8	Q6403	F - 5
IC6352	G - 1	Q6118	G - 10	Q6404	G - 6
IC6353	E - 5	Q6119	E - 8	Q6455	C - 8
IC6354	C - 5	Q6120	E - 9	Q6465	B - 5
IC6355	A - 5	Q6122	E - 9	DIODE	
IC6356	A - 6	Q6123	E - 12	D6100	D - 12
		Q6125	H - 11	D6101	E - 12
		Q6126	H - 11	D6102	D - 10
		Q6127	E - 6	D6104	E - 9
		Q6128	F - 12	D6105	E - 9
		Q6130	H - 11	D6106	E - 8
		Q6131	G - 12	D6108	F - 11
		Q6201	F - 10	D6127	D - 6
		Q6202	F - 10	D6128	E - 6
		Q6250	E - 8	D6129	D - 8
		Q6251	E - 8	D6198	D - 8
		Q6252	B - 10	D6253	B - 8
		Q6253	B - 11	D6254	B - 7
		Q6254	C - 2	D6350	F - 4
				D6351	F - 4
				D6352	E - 1
				D6353	C - 2
				D6354	D - 2
				D6355	E - 3
				D6358	B - 2
				D6359	B - 3
				D6401	F - 7
				D6402	F - 6
				D6403	A - 5
				D6404	A - 4
				D6405	A - 5

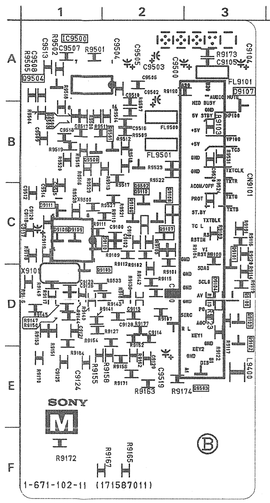
F1 [AC FILTER FUSE]

F1 Board

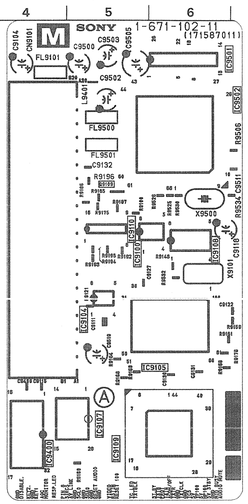




M Board <Conductor Side>

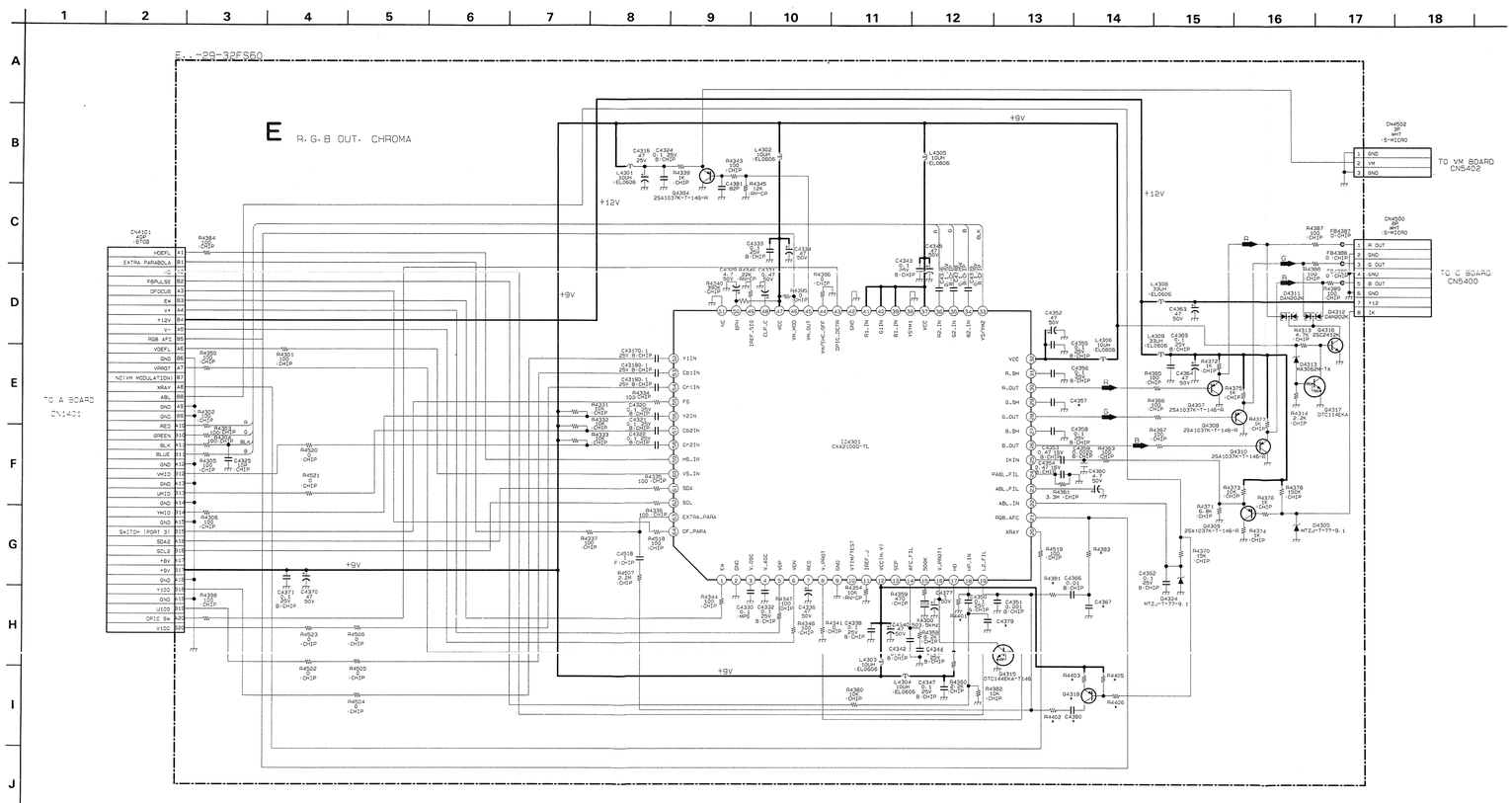


M Board <Component Side>



M BOARD

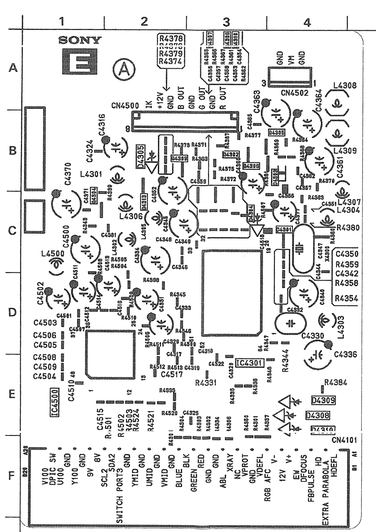
IC	
IC9100	C - 5
IC9104	D - 5
IC9105	E - 6
IC9107	E - 5
IC9108	C - 6
IC9109	F - 5
IC9110	C - 5
IC9500	A - 1
IC9502	B - 6
TRANSISTOR	
Q9100	D - 3
Q9101	C - 3
Q9102	D - 3
Q9103	D - 3
Q9105	D - 1
Q9106	C - 2
Q9107	C - 2
Q9108	C - 2
Q9109	B - 5
Q9110	C - 2
Q9500	B - 1
Q9501	B - 2
Q9502	C - 2
Q9503	E - 3
Q9504	A - 1
DIODE	
D9104	D - 3
D9107	A - 3
D9108	C - 1
D9109	C - 1
D9110	C - 2
D9111	C - 1



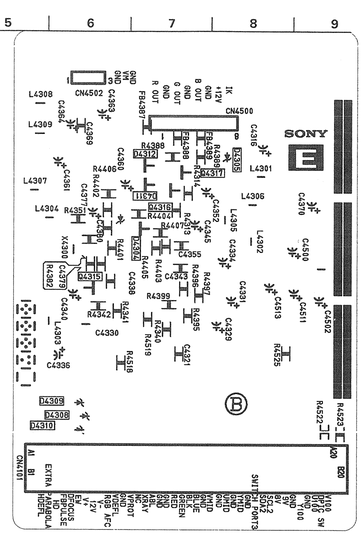
E BOARD * MARK

Ref	29FS60A	29FS60B	29FS60D	29FS60E	29FS60K	29FS60R	29FS60U	32FS60A	32FS60B	32FS60D	32FS60E
C4357	-	-	-	-	-	-	-	0.1MF	0.1MF	0.1MF	0.1MF
C4367	0.047MF 25V	0.047MF 25V	0.047MF 25V	0.047MF 25V	0.047MF 25V	0.047MF 25V	0.047MF 25V	0.047MF 50V	0.047MF 50V	0.047MF 50V	0.047MF 50V
C4379	-	-	-	-	-	-	-	47PF	47PF	47PF	47PF
C4380	-	-	-	-	-	-	-	470PF	470PF	470PF	470PF
Q4318	-	-	-	-	-	-	-	2SA1037K-T-146-R	2SA1037K-T-146-R	2SA1037K-T-146-R	2SA1037K-T-146-R
R4381	1.5M	1.5M	1.5M	1.5M	1.5M	1.5M	1.5M	1.8M	1.8M	1.8M	1.8M
R4383	47K	47K	47K	47K	47K	47K	47K	18K	18K	18K	18K
R4401	270K	270K	270K	270K	270K	270K	270K	120K	120K	120K	120K
R4402	-	-	-	-	-	-	-	56K	56K	56K	56K
R4403	-	-	-	-	-	-	-	10K	10K	10K	10K
R4404	-	-	-	-	-	-	-	10K	10K	10K	10K
R4405	-	-	-	-	-	-	-	39K	39K	39K	39K
R4406	-	-	-	-	-	-	-	220K	220K	220K	220K
R4407	-	-	-	-	-	-	-	56K	56K	56K	56K

E Board <Component Side>



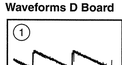
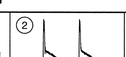
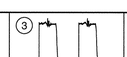
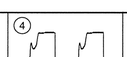
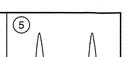
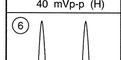
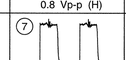
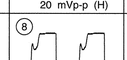
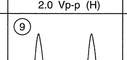
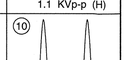
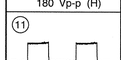
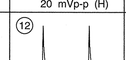
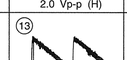
E Board <Conductor Side>

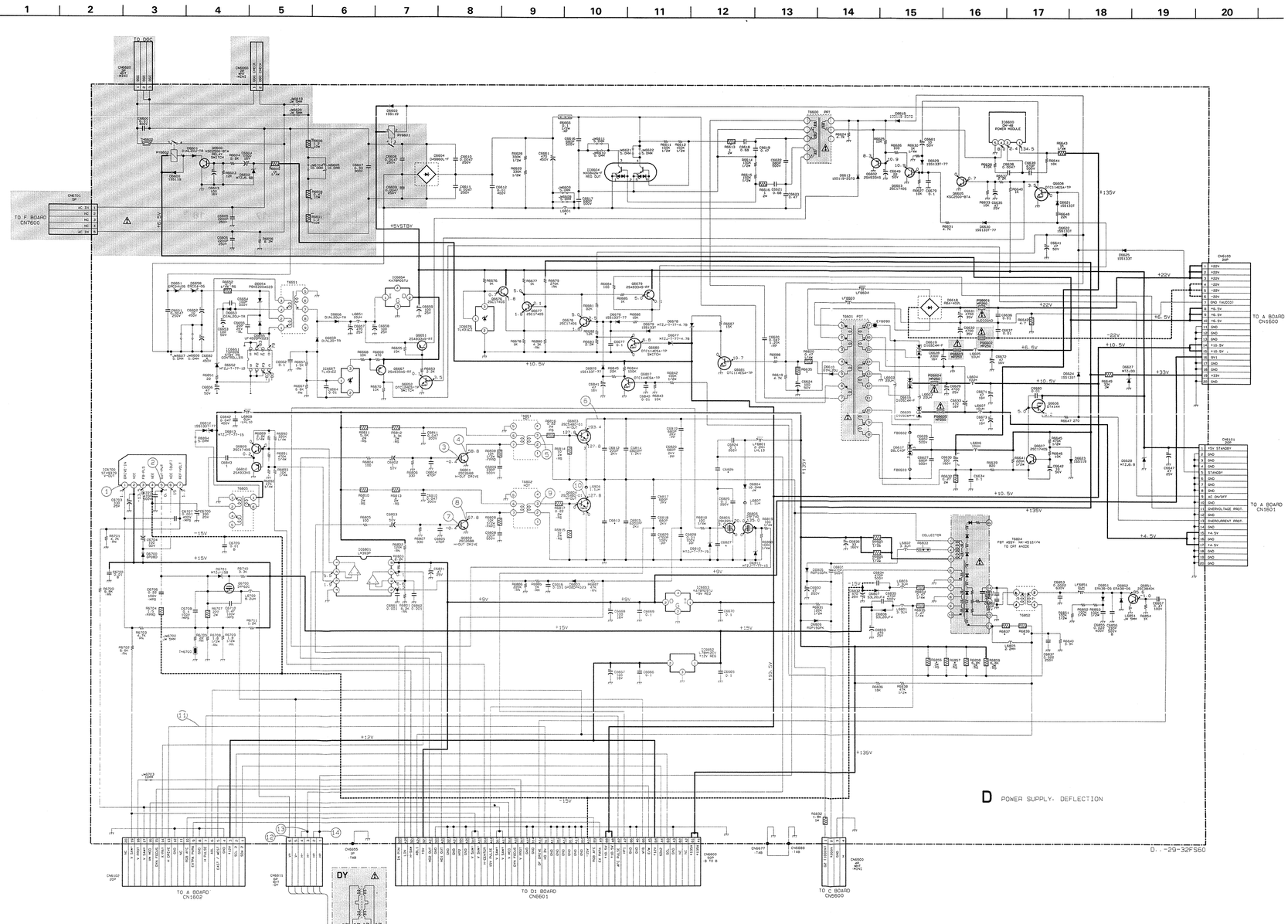


D BOARD * MARK

Ref	29FS60A	29FS60B	29FS60D	29FS60E	29FS60K	29FS60R	29FS60U	32FS60A	32FS60B	32FS60D	32FS60E
C6682	22MF	22MF	22MF	22MF	22MF	22MF	22MF	-	-	-	-
C6813	100PF	100PF	100PF	100PF	100PF	100PF	100PF	470PF	470PF	470PF	470PF
C6826	0.47MF	0.47MF	0.47MF	0.47MF	0.47MF	0.47MF	0.47MF	0.56MF	0.56MF	0.56MF	0.56MF
C6827	0.12MF	0.12MF	0.12MF	0.12MF	0.12MF	0.12MF	0.12MF	0.1MF	0.1MF	0.1MF	0.1MF
L6601	2.2MMH	2.2MMH	2.2MMH	2.2MMH	2.2MMH	2.2MMH	2.2MMH	JW (5.0MM)	JW (5.0MM)	JW (5.0MM)	JW (5.0MM)
R6635	0.47	0.47	0.47	0.47	0.47	0.47	0.47	JW (5.0MM)	JW (5.0MM)	JW (5.0MM)	JW (5.0MM)
R6810	3.3K	3.3K	3.3K	3.3K	3.3K	3.3K	3.3K	3.9K	3.9K	3.9K	3.9K
R6813	3.3K 3W	3.3K 3W	3.3K 3W	3.3K 3W	3.3K 3W	3.3K 3W	3.3K 3W	3.3K 2W	3.3K 2W	3.3K 2W	3.3K 2W
R6837	2.2K 3W	2.2K 3W	2.2K 3W	2.2K 3W	2.2K 3W	2.2K 3W	2.2K 3W	2.2K 2W	2.2K 2W	2.2K 2W	2.2K 2W
R6839	2.2K 3W	2.2K 3W	2.2K 3W	2.2K 3W	2.2K 3W	2.2K 3W	2.2K 3W	2.2K 2W	2.2K 2W	2.2K 2W	2.2K 2W
R6856	5.6K	5.6K	5.6K	5.6K	5.6K	5.6K	5.6K	6.8K	6.8K	6.8K	6.8K
R6857	5.6K	5.6K	5.6K	5.6K	5.6K	5.6K	5.6K	6.8K	6.8K	6.8K	6.8K

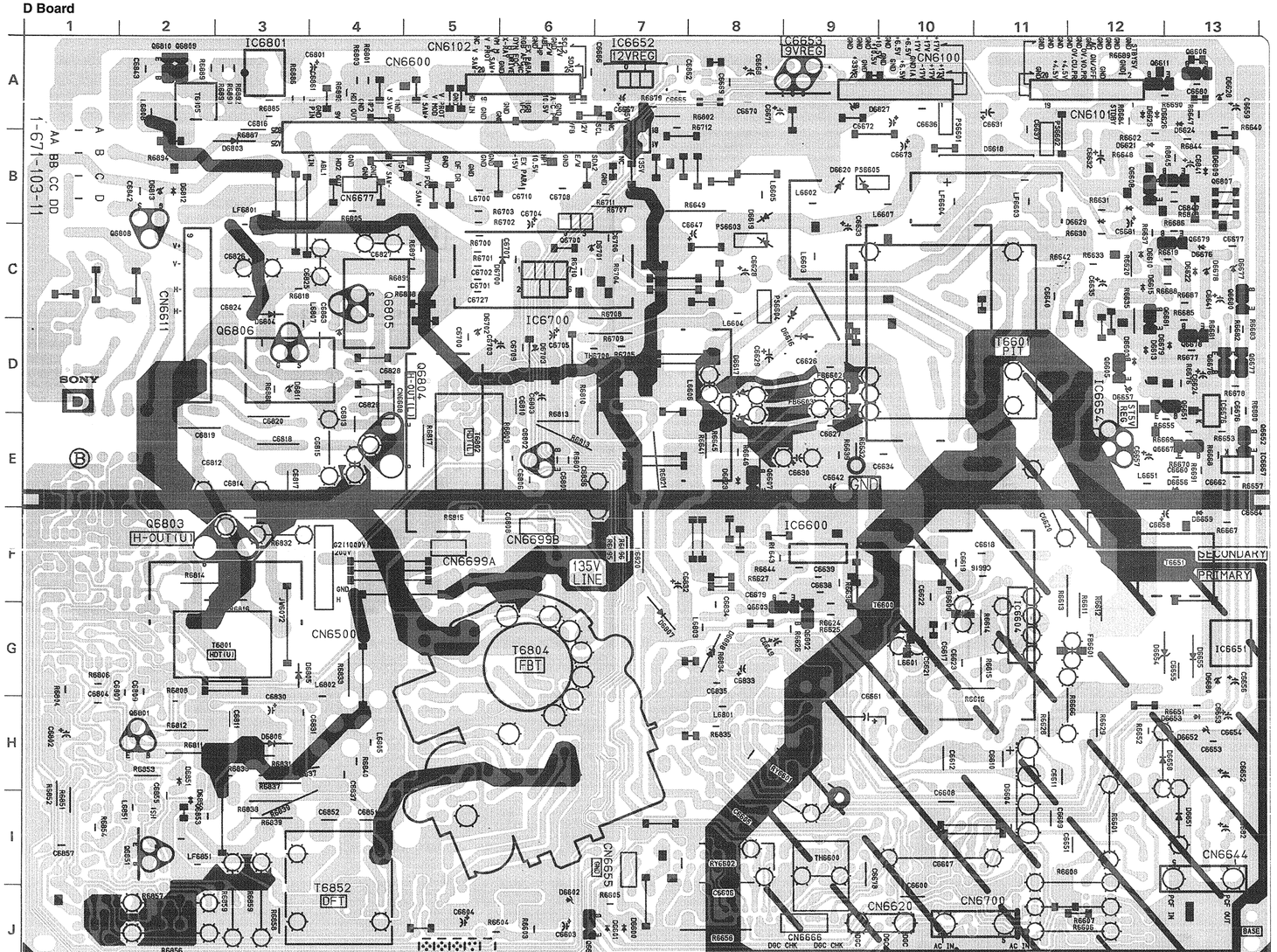
Waveforms D Board

1  40 mVp-p (H)	2  0.8 Vp-p (H)	3  20 mVp-p (H)	4  2.0 Vp-p (H)	5  1.1 KVp-p (H)
6  180 Vp-p (H)	7  20 mVp-p (H)	8  2.0 Vp-p (H)	9  1.1 KVp-p (H)	10  180 Vp-p (H)
11  0.1 Vp-p (H)	12  2.0 Vp-p (V)	13  0.3 Vp-p (H)	14 20 Vp-p (H)	



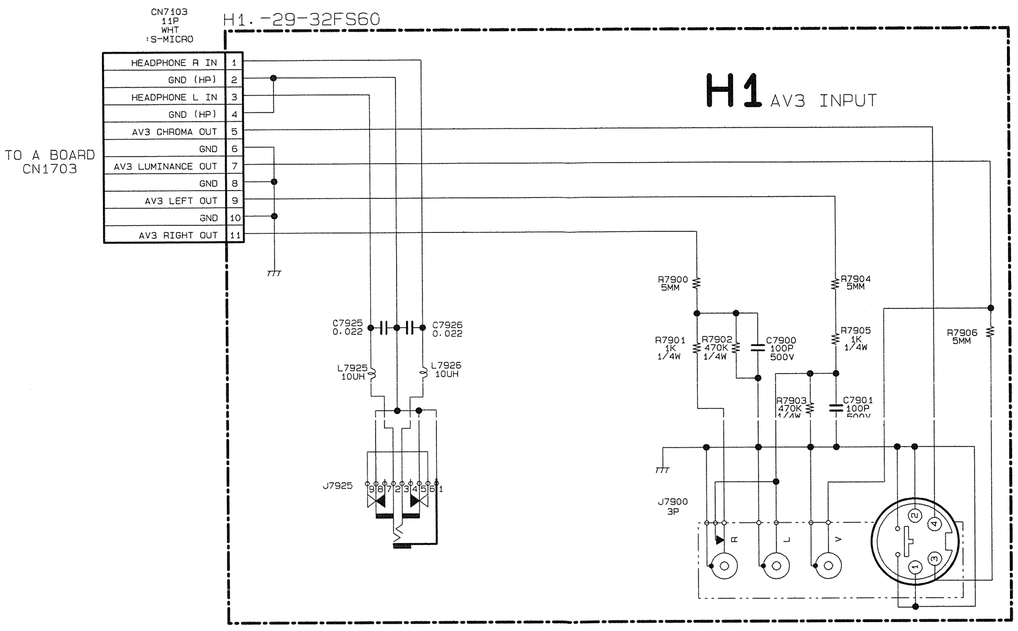
D [POWER SUPPLY AND DEFLECTION]

D Board



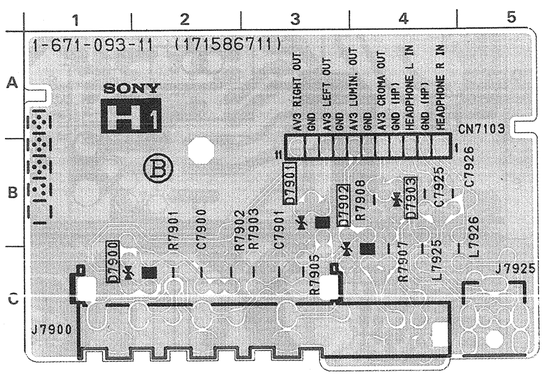
D BOARD

IC		D6613	D - 12
IC6600	F - 9	D6615	C - 12
IC6604	H - 11	D6616	D - 9
IC6651	G - 13	D6617	D - 8
IC6652	A - 7	D6618	B - 11
IC6653	A - 9	D6619	B - 8
IC6654	D - 12	D6620	B - 9
IC6667	E - 14	D6621	B - 12
IC6700	D - 6	D6623	E - 8
IC6801	A - 3	D6624	B - 13
TRANSISTOR		D6625	A - 12
Q6600	J - 6	D6627	A - 10
Q6602	G - 9	D6628	A - 13
Q6603	G - 8	D6629	B - 12
Q6605	D - 12	D6651	I - 13
Q6606	A - 13	D6652	H - 13
Q6607	E - 8	D6653	H - 13
Q6651	E - 13	D6654	G - 12
Q6652	E - 14	D6655	G - 13
Q6667	E - 13	D6656	E - 13
Q6676	D - 13	D6658	H - 13
Q6677	D - 14	D6659	F - 13
Q6678	D - 13	D6676	C - 13
Q6679	C - 13	D6677	C - 13
Q6680	C - 13	D6678	C - 13
Q6681	D - 13	D6679	D - 13
Q6700	C - 6	D6681	E - 13
Q6801	H - 2	D6700	C - 5
Q6802	E - 6	D6701	H - 2
Q6803	F - 2	D6803	B - 3
Q6804	D - 5	D6804	C - 3
Q6805	E - 13	D6805	G - 3
Q6806	D - 3	D6806	H - 3
Q6807	B - 13	D6807	G - 7
Q6809	A - 2	D6808	G - 8
Q6810	A - 2	D6809	B - 13
Q6851	I - 2	D6811	D - 3
DIODE		D6812	B - 2
D6600	J - 7	D6813	B - 2
D6601	J - 7	D6851	H - 2
D6602	J - 6	D6852	1 - 2
D6603	D - 12		
D6604	I - 11		
D6610	C - 12		

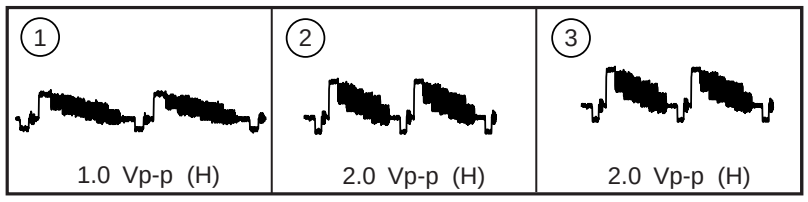


H1 [AV3 INPUT]

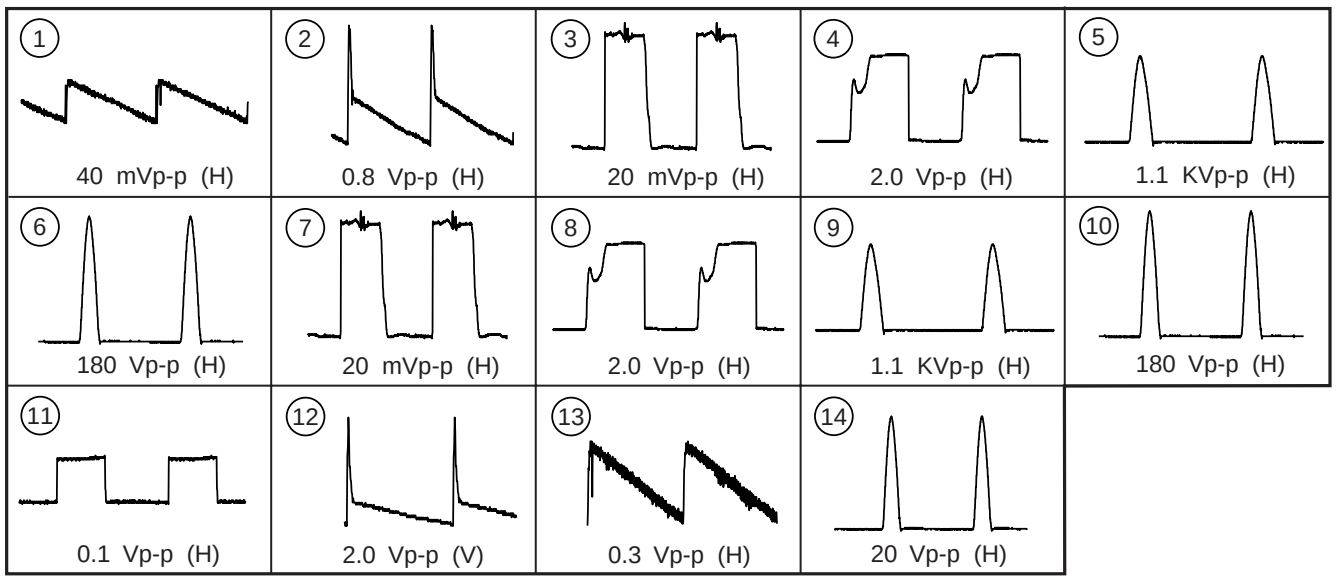
H1 Board



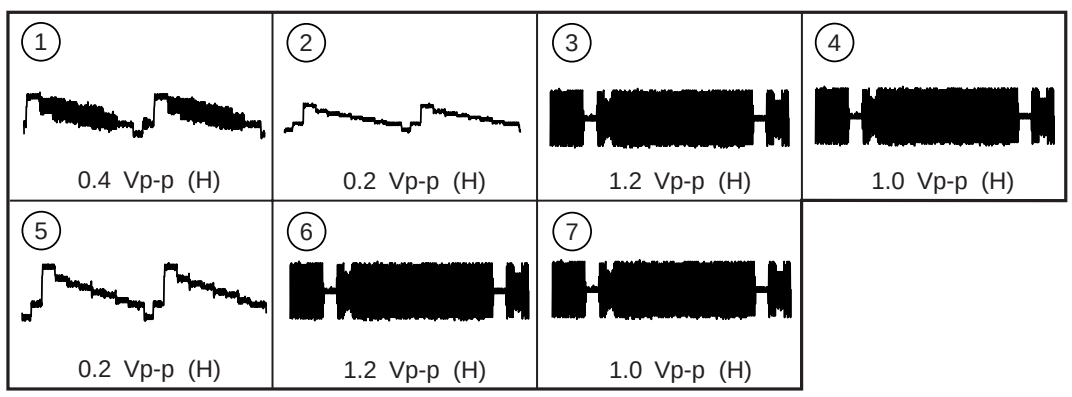
Waveforms A Board



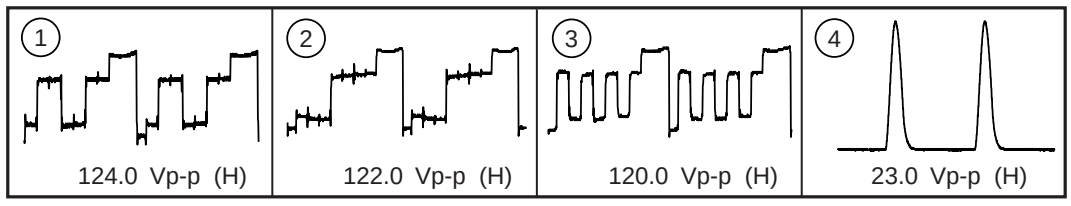
Waveforms D Board



Waveforms J1(1/2) Board

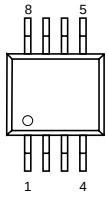


Waveforms C Board



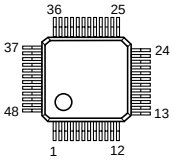
5-4 SEMICONDUCTORS

BA7046F
BA7046F-T1
LM393PS-E20
MB3793-42NF
MB3793-42NF-ER
NJM2240M
NJM2240M(TE2)
NJM3404AD



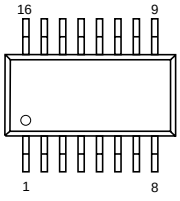
(TOP VIEW)

CXA1855Q-T6



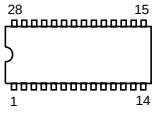
(TOP VIEW)

CXA1875AM-T4
HE4094BT
MC14052BDR2
MC74F157ADR2
SN74LS221D
74HCT4046AD/S470



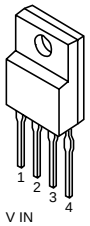
(TOP VIEW)

CXD2053S
TDA4780/V3



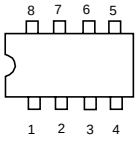
(TOP VIEW)

KA78R05TU
KA78R09TU
KA78R33TU



1 : V IN
2 : V OUT
3 : GND
4 : ON/OFF CONTROL

LM393D
M5216P
M24C32-BN6
ST24C16FB6
TDA2822M
UPC393C



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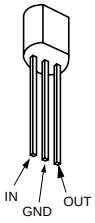
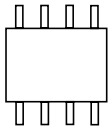
LM78L12ACZ
L78L05ACZ-AP
L78L12ACZ-AP



MB3793-42PNF-ER



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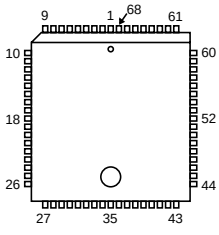
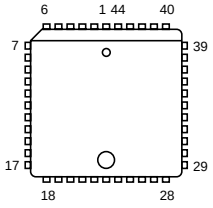
SAA7185WP
SDA5273P-C134-GEG
SDA5275



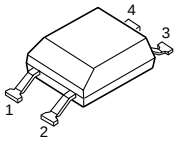
(TOP VIEW)

M27C800-100K1

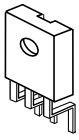


(TOP VIEW)

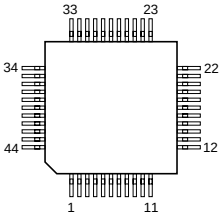
PC123F2
PC123FY2



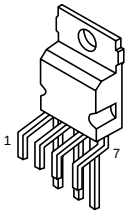
SBX1981-51



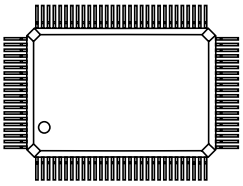
SDA9361



STV9379

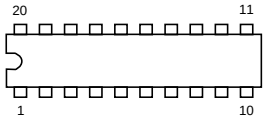


SAB-C161R1-LM



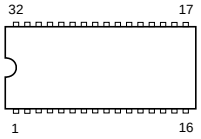
TC55257DFTL-70V-EL

TDA7309D013TR



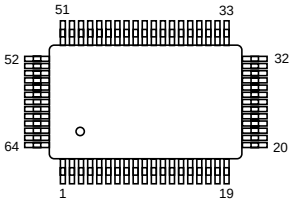
(TOP VIEW)

SDA9288X-B121
TDA9143/N2
TDA9144/N2
TDA9170T



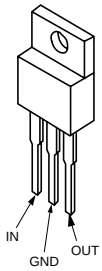
(TOP VIEW)

TDA9320H-N1-518

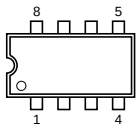


(TOP VIEW)

TEA6422DT
LM393N

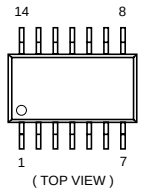


TOP209P

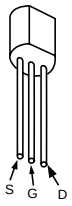


(TOP VIEW)

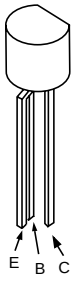
U2860B-BFPG3
74LVC08D



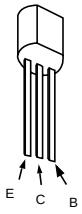
BC546B
BC556B



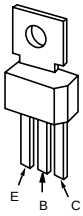
BF199
BF199-AMMO



BF421-AMMO



BF87-127



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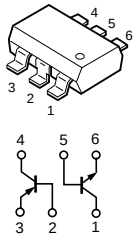
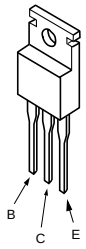


IRF614
IRF620



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DTC114EK
DTC114YKA-T146
DTC123EK
DTC123EK-T146
DTC124EKA-T146

DTC144EK
DTC144EK-T146
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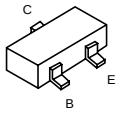
2SA1162-G
2SC2412K-QR
2SC2412K-T-146-R



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DTC114ESA-TP
DTC144ESA-TP
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2SA733-K

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2SA933AS-QRT
2SA933S-RT
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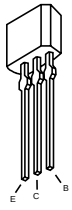
2SC2785-HFE



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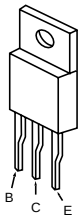

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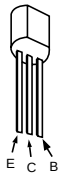

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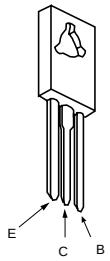

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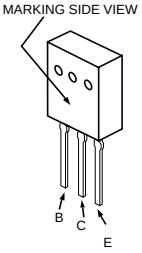

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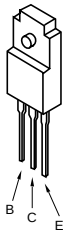

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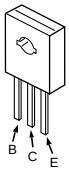

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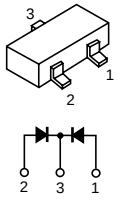

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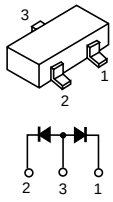

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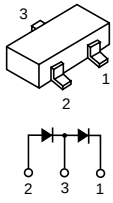
DA204K-T-146



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D1N54-TR
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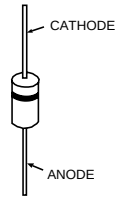
EL1Z
GP08D
GP08DPKG23
R2K-V1

RGP02-20EG23
RGP10GPKG23
RGP15GPKG23
S2LA20F
1SS133T-77
1SS83
1SS83TD



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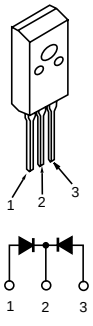
D10SC6M



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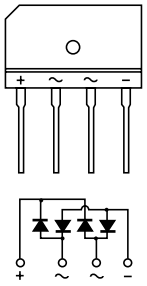
D4SB60L-F
RBA-402L



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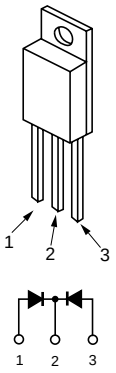
ESAC39M-06CF38



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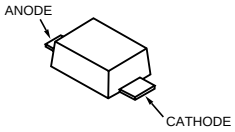

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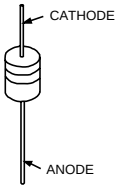
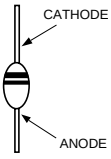
ERA82-004TP1
GP08DPKG23
MTZJ-T-77-12
MTZJ-T-77-15
MTZJ-T-77-2.2B
MTZJ-T-77-22
MTZJ-T-77-33C
MTZJ-T-77-3.6B
MTZJ-T-77-4.7B
MTZJ-T-77-5.6B
MTZJ-T-77-6.8
MTZJ-T-77-7.5B
MTZJ-T-77-9.1
MTZJ-33C
RD5.6ESB2
RD9.1ESB2
PGKE200AG23
1SS119-25
1SS119-25TD



ERC04-06SE



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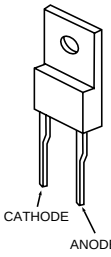
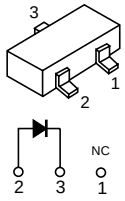


MA3033-L
MA3033L-TX
MA3056M-TX
MA3062M-TX
MA3030-H-(TX)



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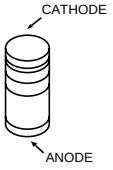
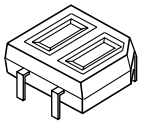


MA73-TX



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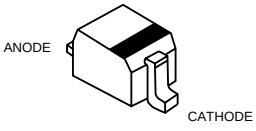
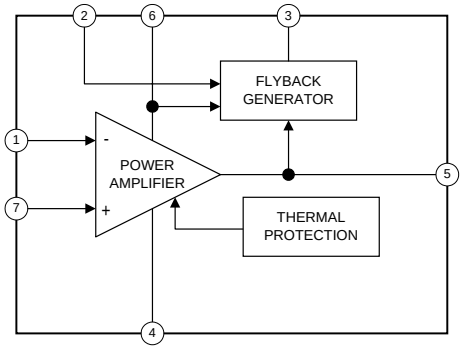
UDZ-TE-17-6.8B
UDZ-TE-12B

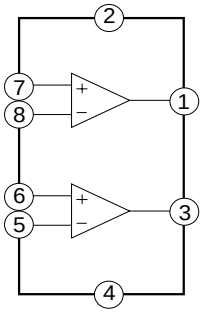


5-5. IC BLOCK DIAGRAMS

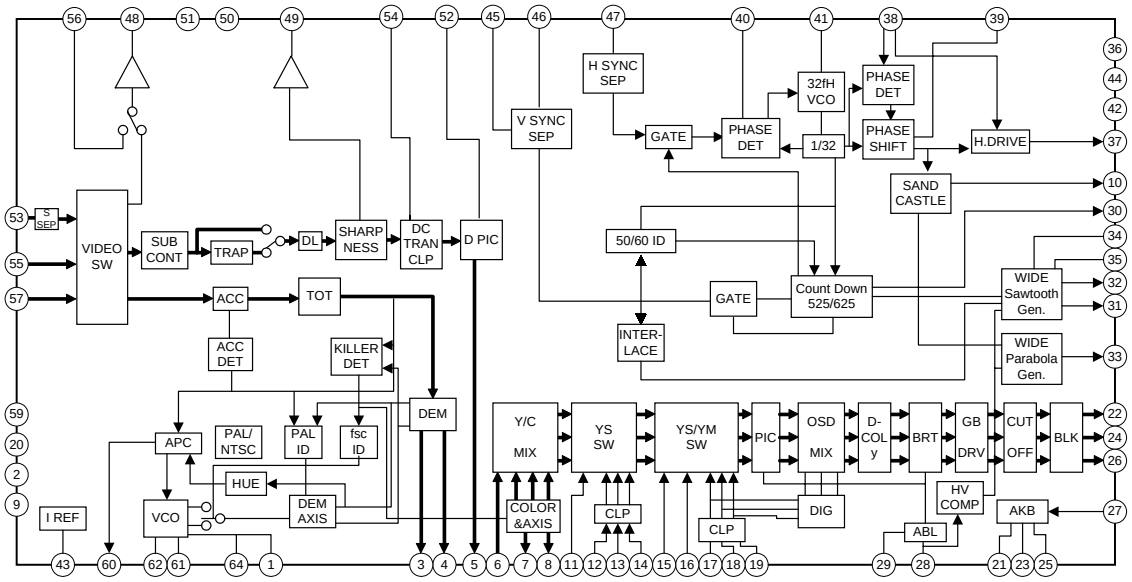
D BOARD IC6700 STV 9379



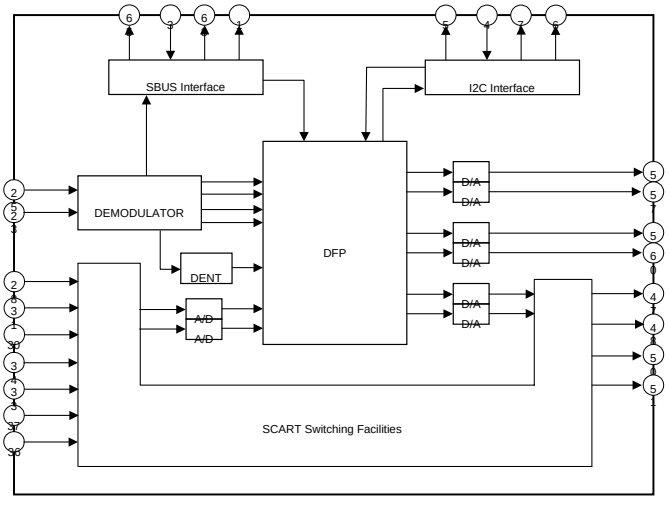
J BOARD IC8101 TDA2822D



E BOARD IC4301 CXA2100Q-TL



J BOARD IC8200 MSP3410D-QA-B4



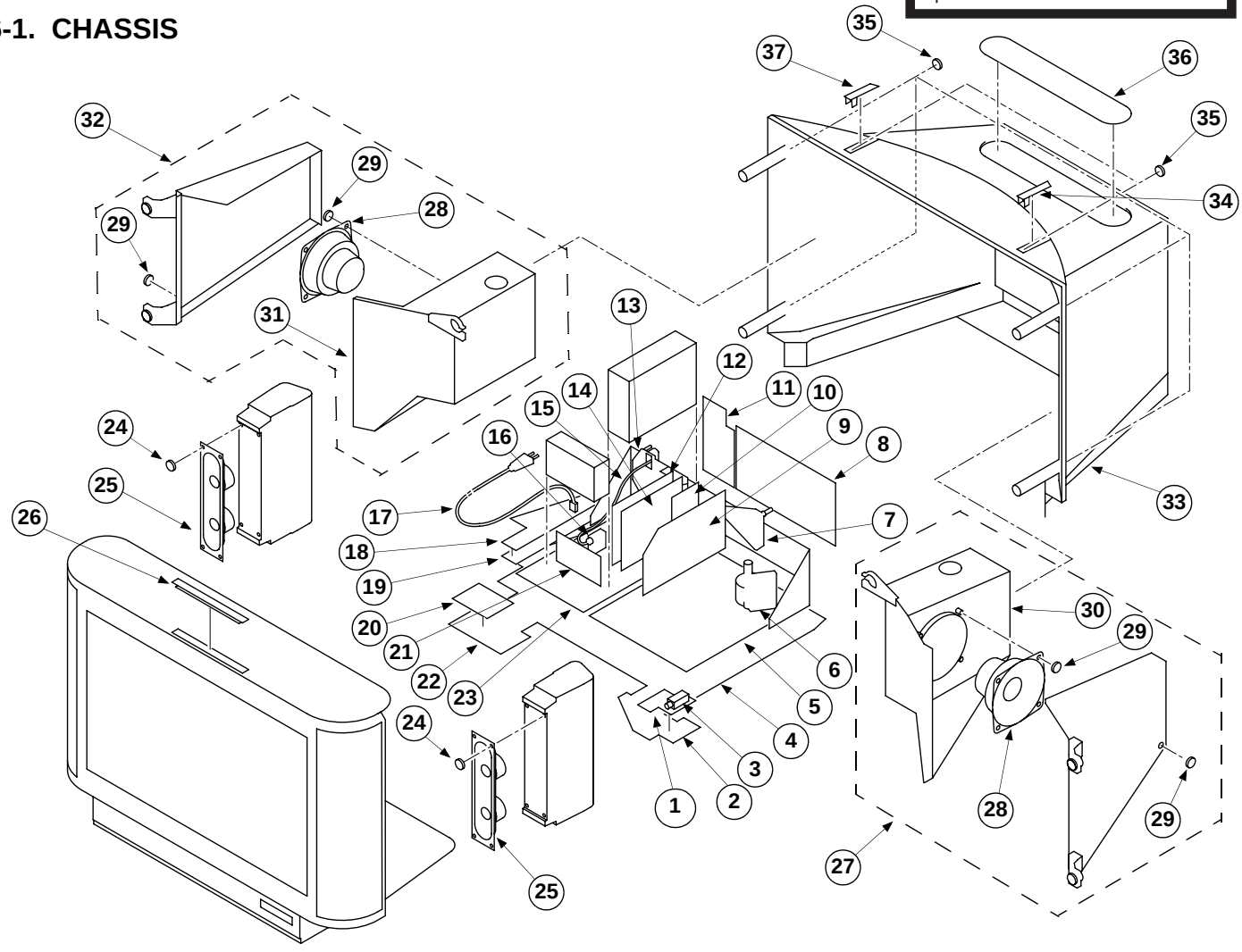
SECTION 6
EXPLODED VIEWS

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 remarks 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 marked ⚠ are critical for safety
Replace only with the part number specified.

6-1. CHASSIS



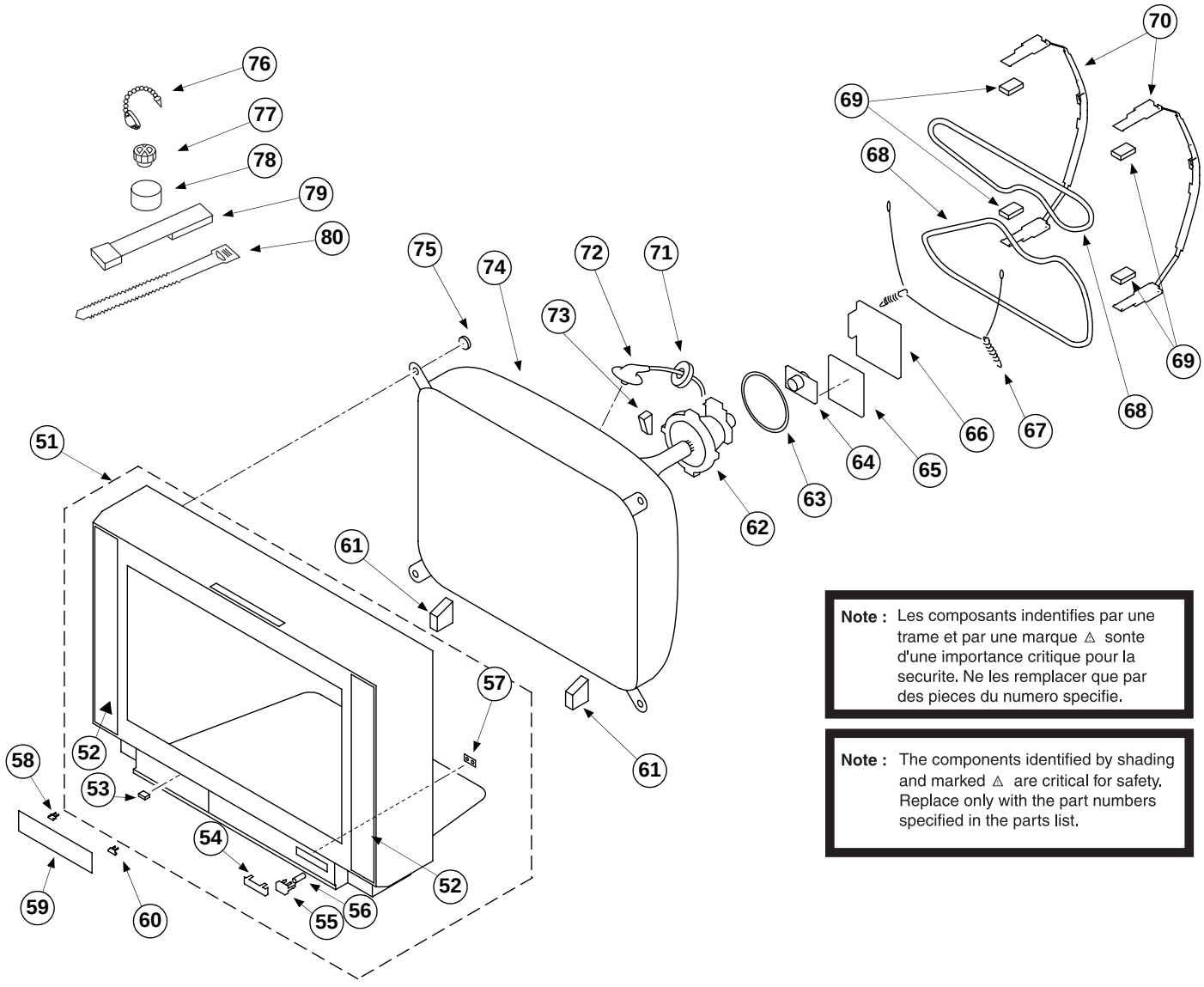
REF. NO.		PART.NO	DESCRIPTION	REMARK
1		*A-1624-073-A	F BOARD, COMPLETE (KV-29FS60)	
		*A-1624-075-A	F BOARD, COMPLETE (KV-32FS60)	
2		*4-204-551-01	BRACKET, F (KV-29FS60)	
		*4-204-551-11	BRACKET, F (KV-32FS60)	
3	⚠	1-571-433-21	SWITCH, PUSH (AC POWER)	
4		*1-204-549-01	BRACKET, MAIN	
5		*A-1640-342-A	D BOARD (29"), COMPLETE (KV-29FS60)	
		*A-1640-326-A	D BOARD (32"), COMPLETE (KV-32FS60)	
6	⚠	1-453-272-11	TRANSFORMER ASSY, FLYBACK (NX-4512/U2B4)	
7		4-204-476-01	BRACKET, J1	
8		*A-1651-102-A	J BOARD, COMPLETE (KV-29FS60A/29FS60D/ 29FS60E/29FS60K/ 29FS60R/29FS60U)	
		*A-1651-106-A	J BOARD, COMPLETE (KV-29FS60B)	
		*A-1651-101-A	J BOARD, COMPLETE (KV-32FS60A/32FS60D/ 32FS60E)	
		*A-1651-107-A	J BOARD, COMPLETE (KV-32FS60B)	

REF. NO.	PART.NO	DESCRIPTION	REMARK
9	*A-1640-320-A	D1 BOARD, COMPLETE (KV-29FS60)	
	*A-1640-325-A	D1 BOARD, COMPLETE (KV-32FS60)	
10	*A-1640-319-A	E BOARD, COMPLETE (KV-29FS60)	
	*A-1640-324-A	E BOARD, COMPLETE (KV-32FS60)	
11	*A-1648-018-A	U BOARD, COMPLETE (KV-29FS60)	
	*A-1648-017-A	U BOARD, COMPLETE (KV-32FS60)	
12	*A-1620-117-A	BP BOARD, COMPLETE (KV-29FS60)	
	*A-1620-115-A	BP BOARD, COMPLETE (KV-32FS60)	
13	4-204-477-01	BRACKET, J2	
14	*A-1620-116-A	B1 BOARD, COMPLETE (KV-29FS60)	
	*A-1620-114-A	B1 BOARD, COMPLETE (KV-32FS60)	
15	1-790-082-11	CABLE, RF	
16	1-693-338-11	TUNER/VIF (AEP) (KV-29FS60A/29FS60D/29FS60E/29FS60K 29FS60R/32FS60A/32FS60D/32FS60E)	
	1-693-340-11	TUNER/VIF (FR) (KV-29FS60B/32FS60B)	
	1-693-339-11	TUNER/VIF (UK) (KV-29FS60U)	

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

REF. NO.		PART.NO	DESCRIPTION	REMARK
17	⚠	1-574-062-61	CORD, POWER (WITH CONNECTOR) (KV-29FS60A/29FS60B/29FS60D/29FS60E/29FS60K/ 29FS60R/32FS60A/32FS60B/32FS60D/32FS60E)	
	⚠	1-590-762-21	CORD, POWER (WITH UK PLUG) (KV-29FS60U)	
18		*A-1624-074-A	F1 BOARD, COMPLETE (KV-29FS60)	
		*A-1624-076-A	F1 BOARD, COMPLETE (KV-32FS60)	
19		*4-204-552-01	BRACKET, F1	
20		*A-1646-170-A	H1 BOARD, COMPLETE (KV-29FS60)	
		*A-1646-174-A	H1 BOARD, COMPLETE (KV-32FS60)	
21		*A-1634-049-A	M BOARD, COMPLETE (KV-29FS60)	
		*A-1634-048-A	M BOARD, COMPLETE (KV-32FS60)	
22		4-204-550-01	BRACKET, H (KV-29FS60)	
		4-204-550-11	BRACKET, H (KV-32FS60)	
23		*A-1630-980-A	A BOARD, COMPLETE (KV-29FS60A/29FS60D/29FS60E/ 29FS60K/29FS60R)	
		*A-1630-993-A	A BOARD, COMPLETE (KV-29FS60B)	
		*A-1630-994-A	A BOARD, COMPLETE (KV-29FS60U)	
		*A-1630-979-A	A BOARD, COMPLETE (KV-32FS60A/32FS60D/ 32FS60E)	
		*A-1630-995-A	A BOARD, COMPLETE (KV-32FS60B)	
24		4-039-358-01	SCREW (4X16), (+) BV TAPPING	
25		1-529-153-11	SPEAKER (4.8X20CM)	
26		1-771-599-11	SWITCH, ARRAY	
27		A-1678-188-A	WOOFER (R) ASSY	28-30
28		1-529-144-11	SPEAKER (13CM)	
29		4-039-355-01	SCREW (4X12), (+) BV TAPPING	
30		*A-1678-158-A	WOOFER (R) ASSY, SP FX	
31		*A-1678-157-A	WOOFER (L) ASSY, SP FX	
32		A-1678-150-A	WOOFER (L) ASSY	28,29,31
33		4-204-508-01	COVER, REAR (KV-29FS60)	
		4-204-367-11	COVER, REAR (KV-32FS60)	
34		4-204-460-01	COVER, SCREW (LEFT) (KV-29FS60)	
		4-204-369-01	COVER, SCREW (LEFT) (KV-32FS60)	
35		4-302-404-03	SCREW (WASHER HEAD) (+P 4X16)	
36		4-204-458-01	COVER, PORT	
37		4-039-461-01	COVER, SCREW (RIGHT) (KV-29FS60)	
		4-204-370-01	COVER, SCREW (RIGHT) (KV-32FS60)	

6-2. PICTURE TUBE



Note : Les composants indentifies par une trame et par une marque ⚠ sonte d'une importance critique pour la securite. Ne les remplacer que par des pieces du numero specifie.

Note : The components identified by shading and marked ⚠ are critical for safety. Replace only with the part numbers specified in the parts list.

REF. NO.		PART.NO	DESCRIPTION	REMARK
51		X-4200-423-1	BEZNET ASSY (KV-29FS60)	
		A-1605-585-A	BEZNET ASSY (KV-32FS60)	
52		4-204-473-01	GRILLE, SPEAKER (KV-29FS60)	
		4-204-368-01	GRILLE, SPEAKER (KV-32FS60)	
53		4-042-192-11	CATCHER, PUSH (KV-29FS60)	
		4-042-192-01	CATCHER, PUSH (KV-32FS60)	
54		4-204-492-01	WINDOW, ORNAMENTAL	
55		4-204-438-01	BUTTON, POWER	
56		4-202-964-11	SPRING	
57		4-204-439-01	GUIDE, LIGHT	
58		4-202-555-01	SHAFT, DOOR	
59		4-204-435-21	DOOR	
60		4-045-250-01	DAMPER	

REF. NO.		PART.NO	DESCRIPTION	REMARK
61		4-203-098-01	SUPPORTER, CRT (KV-32FS60A/32FS60B/ 32FS60D/32FS60E)	
62	⚠	8-451-504-11	DEFLECTION YOKE Y29RSC-M (KV-29FS60)	
	⚠	1-451-480-11	DEFLECTION YOKE Y32RVC2 (KV-32FS60)	
63		1-452-896-11	COIL, NA ROTATION (RT200)	
64	⚠	8-453-011-11	NECK ASSY, NA299-M	
65		*A-1644-094-A	VM BOARD, COMPLETE (KV-29FS60)	
		*A-1644-095-A	VM BOARD, COMPLETE (KV-32FS60)	
66		*A-1638-123-A	C BOARD, COMPLETE (KV-29FS60)	
		*A-1638-122-A	C BOARD, COMPLETE (KV-32FS60)	
67		4-200-433-01	SPRING, EXTENSION (KV-29FS60)	
		4-369-318-51	SPRING, TENSION (KV-32FS60)	

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

REF. NO.		PART.NO	DESCRIPTION	REMARK
68	⚠	1-416-654-11	COIL, DEMAGNETIC (KV-29FS60)	
	⚠	1-416-769-11	COIL, DEMAGNETIC (KV-32FS60)	
69		*4-202-988-01	CUSHION, BOX	
70		*4-060-802-01	HOLDER, DGC (KV-29FS60)	
		*4-059-569-01	HOLDER, DGC (KV-32FS60)	
71		3-704-372-01	HOLDER, HV CABLE	
72	⚠	1-251-317-31	CAP ASSY, HIGH-VOLTAGE	
73		3-704-495-01	SPACER, DY	
74	⚠	8-735-053-05	PICTURE TUBE (M68LNH060X) (KV-29FS60)	
	⚠	8-735-054-05	PICTURE TUBE (W76LLZ060X) (SD-302) (KV-32FS60)	
75		4-036-188-01	SCREW, SELF TAPPING (KV-29FS60)	
		4-203-043-01	SCREW (PT) (KV-32FS60)	
76		4-308-870-00	CLIP, LEAD WIRE	
77		1-452-094-00	MAGNET, ROTATABLE DISK; 15MM	
78		1-425-032-00	MAGNET, DISK; 10MM	
79		X-4387-214-1	PERMALLOY ASSY, CORRECTION	
80		3-701-007-00	BAND, BINDING	

SECTION 7
ELECTRICAL PARTS LIST

Note : Les composants indentifies par une trame et par une marque ⚠ sonte d'une importance critique pour la securite. Ne les remplacer que par des pieces du numero specifie.

Note : The components identified by shading and marked ⚠ are critical for safety. Replace only with the part numbers specified in the parts list.

- 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.
- RESISTORS
- All resistors are in ohms.
- F : nonflammable.

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

CAPACITORS MF : mF, PF : mmF

COILS MMH : mH , uH

B1

REF. NO.	PART.NO	DESCRIPTION	REMARK
	*A-1620-116-A	B1 BOARD, COMPLETE (KV-29FS60)	
		**********	
	*A-1620-114-A	B1 BOARD, COMPLETE (KV-32FS60)	
		**********	
		< CAPACITOR >	
C2301	1-126-934-11	ELECT 220MF 20%	16V
C2302	1-164-004-11	CERAMIC CHIP 0.1MF 10%	25V
C2303	1-126-964-11	ELECT 10MF 20%	50V
C2304	1-163-125-00	CERAMIC CHIP 220PF 5%	50V
C2305	1-163-259-91	CERAMIC CHIP 220PF 5%	50V
C2306	1-163-125-00	CERAMIC CHIP 220PF 5%	50V
C2307	1-164-004-11	CERAMIC CHIP 0.1MF 10%	25V
C2308	1-163-125-00	CERAMIC CHIP 220PF 5%	50V
C2309	1-126-934-11	ELECT 220MF 20%	16V
C2311	1-126-963-11	ELECT 4.7MF 20%	50V
C2312	1-126-963-11	ELECT 4.7MF 20%	50V
C2313	1-126-963-11	ELECT 4.7MF 20%	50V
C2314	1-163-141-00	CERAMIC CHIP 0.001MF 5%	50V
C2315	1-164-489-11	CERAMIC CHIP 0.22MF 10%	16V
C2316	1-110-501-11	CERAMIC CHIP 0.33MF 10%	16V
C2317	1-162-638-11	CERAMIC CHIP 1MF	16V
C2318	1-163-989-11	CERAMIC CHIP 0.033MF 10%	25V
C2319	1-163-989-11	CERAMIC CHIP 0.033MF 10%	25V
C2320	1-164-489-11	CERAMIC CHIP 0.22MF 10%	16V
C2323	1-163-021-91	CERAMIC CHIP 0.01MF 10%	50V
C2324	1-164-004-11	CERAMIC CHIP 0.1MF 10%	25V
C2325	1-164-004-11	CERAMIC CHIP 0.1MF 10%	25V
C2327	1-164-004-11	CERAMIC CHIP 0.1MF 10%	25V
C2328	1-164-004-11	CERAMIC CHIP 0.1MF 10%	25V
C2329	1-164-004-11	CERAMIC CHIP 0.1MF 10%	25V
C2330	1-164-004-11	CERAMIC CHIP 0.1MF 10%	25V
C2331	1-164-004-11	CERAMIC CHIP 0.1MF 10%	25V
C2332	1-163-105-00	CERAMIC CHIP 33PF 5%	50V
C2333	1-164-004-11	CERAMIC CHIP 0.1MF 10%	25V
		(KV-32FS60A/32FS60B/32FS60D/32FS60E)	
C2334	1-126-964-11	ELECT 10MF 20%	50V
C2335	1-164-004-11	CERAMIC CHIP 0.1MF 10%	25V
		(KV-32FS60A/32FS60B/32FS60D/32FS60E)	
C2337	1-163-125-00	CERAMIC CHIP 220PF 5%	50V
C2338	1-126-934-11	ELECT 220MF 20%	16V
C2339	1-164-005-11	CERAMIC CHIP 0.47MF	25V
C2340	1-164-004-11	CERAMIC CHIP 0.1MF 10%	25V
C2342	1-164-004-11	CERAMIC CHIP 0.1MF 10%	25V
C2343	1-126-961-11	ELECT 2.2MF 20%	50V
C2344	1-164-004-11	CERAMIC CHIP 0.1MF 10%	25V
C2345	1-164-004-11	CERAMIC CHIP 0.1MF 10%	25V
C2346	1-126-964-11	ELECT 10MF 20%	50V
C2347	1-163-097-00	CERAMIC CHIP 15PF 5%	50V
C2348	1-163-097-00	CERAMIC CHIP 15PF 5%	50V
C2349	1-164-004-11	CERAMIC CHIP 0.1MF 10%	25V
C2350	1-164-004-11	CERAMIC CHIP 0.1MF 10%	25V
C2351	1-164-004-11	CERAMIC CHIP 0.1MF 10%	25V
C2354	1-126-934-11	ELECT 220MF 20%	16V
C2356	1-164-004-11	CERAMIC CHIP 0.1MF 10%	25V
C2357	1-164-004-11	CERAMIC CHIP 0.1MF 10%	25V
C2358	1-164-004-11	CERAMIC CHIP 0.1MF 10%	25V
C2361	1-164-004-11	CERAMIC CHIP 0.1MF 10%	25V
C2362	1-164-004-11	CERAMIC CHIP 0.1MF 10%	25V
C2363	1-126-934-11	ELECT 220MF 20%	16V
C2364	1-163-239-11	CERAMIC CHIP 33PF 5%	50V
C2366	1-163-239-11	CERAMIC CHIP 33PF 5%	50V
C2367	1-164-004-11	CERAMIC CHIP 0.1MF 10%	25V
C2368	1-164-004-11	CERAMIC CHIP 0.1MF 10%	25V
C2371	1-163-239-11	CERAMIC CHIP 33PF 5%	50V
C2372	1-164-004-11	CERAMIC CHIP 0.1MF 10%	25V
C2374	1-163-239-11	CERAMIC CHIP 33PF 5%	50V
C2377	1-164-004-11	CERAMIC CHIP 0.1MF 10%	25V
C2378	1-164-004-11	CERAMIC CHIP 0.1MF 10%	25V
C2380	1-163-145-00	CERAMIC CHIP 0.0015MF 5%	50V
C2381	1-164-004-11	CERAMIC CHIP 0.1MF 10%	25V
C2382	1-164-004-11	CERAMIC CHIP 0.1MF 10%	25V
C2383	1-164-004-11	CERAMIC CHIP 0.1MF 10%	25V
C2385	1-164-004-11	CERAMIC CHIP 0.1MF 10%	25V
C2387	1-136-250-11	FILM 0.001MF 2%	100V

B1

REF. NO.	PART.NO	DESCRIPTION	REMARK
C2388	1-136-479-11	FILM 0.001MF 1% 100V	
C2389	1-163-085-00	CERAMIC CHIP 2PF 0.25PF 50V	
C2390	1-163-243-11	CERAMIC CHIP 47PF 5% 50V	
C2391	1-163-243-11	CERAMIC CHIP 47PF 5% 50V	
C2704	1-126-934-11	ELECT 220MF 20% 16V	
C2705	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
		< CONNECTOR >	
CN2100	1-695-301-11	CONNECTOR, BOARD TO BOARD 40P	
		< FILTER >	
FL2300	1-236-071-11	ENCAPSULATED COMPONENT	
FL2301	1-233-767-21	FILTER	
FL2302	1-236-071-11	ENCAPSULATED COMPONENT	
FL2303	1-236-071-11	ENCAPSULATED COMPONENT	
FL2305	1-236-071-11	ENCAPSULATED COMPONENT	
		< IC >	
IC2300	8-759-991-41	IC LM78L05ACZ	
IC2301	8-759-295-09	IC TLC2932IPW	
IC2302	8-759-257-59	IC TDA8755T-T	
IC2303	8-759-438-64	IC SAA4952WP/V1	
IC2304	8-759-546-02	IC SAA4995WP-V1-T3	(KV-32FS60A/32FS60B/32FS60D/32FS60E)
IC2305	8-759-295-09	IC TLC2932IPW	
IC2306	8-759-439-27	IC TMS4C2972-26DTR	
IC2307	8-759-546-04	IC SAA4991WP-V1-T3	
IC2309	8-759-439-27	IC TMS4C2972-28DTR	
IC2310	8-759-991-41	IC LM78L05ACZ	
IC2311	8-759-467-19	IC SDA9280B22	
IC2314	8-759-439-26	IC SN74LS221D	
		< COIL >	
L2300	1-408-597-31	INDUCTOR 3.3UH	
L2301	1-410-435-21	INDUCTOR 220UH	
L2302	1-410-435-21	INDUCTOR 220UH	
L2303	1-408-597-31	INDUCTOR 3.3UH	(KV-32FS60A/32FS60B/32FS60D/32FS60E)
L2304	1-414-186-31	INDUCTOR 33UH	
L2305	1-408-603-31	INDUCTOR 10UH	
L2306	1-414-186-31	INDUCTOR 33UH	
L2307	1-414-384-11	INDUCTOR 5.6UH	
		< TRANSISTOR >	
Q2301	1-801-806-11	TRANSISTOR DTC144EKA-T146	
Q2302	1-801-806-11	TRANSISTOR DTC144EKA-T146	
Q2303	1-801-806-11	TRANSISTOR DTC144EKA-T146	
Q2304	1-801-806-11	TRANSISTOR DTC144EKA-T146	
Q2305	8-729-216-22	TRANSISTOR 2SA1162-G	
Q2306	8-729-216-22	TRANSISTOR 2SA1162-G	
Q2307	8-729-216-22	TRANSISTOR 2SA1162-G	

REF. NO.	PART.NO	DESCRIPTION	REMARK
		< RESISTOR >	
R2300	1-216-051-00	RES,CHIP 1.2K 5% 1/10W	
R2301	1-216-053-00	RES,CHIP 1.5K 5% 1/10W	
R2302	1-216-067-00	RES,CHIP 5.6K 5% 1/10W	
R2303	1-216-059-00	RES,CHIP 2.7K 5% 1/10W	
R2304	1-216-051-00	RES,CHIP 1.2K 5% 1/10W	
R2305	1-216-065-91	RES,CHIP 4.7K 5% 1/10W	
R2306	1-216-295-91	SHORT 0	
R2307	1-216-049-91	RES,CHIP 1K 5% 1/10W	
R2310	1-216-049-91	RES,CHIP 1K 5% 1/10W	
R2312	1-216-049-91	RES,CHIP 1K 5% 1/10W	
R2313	1-216-047-91	RES,CHIP 820 5% 1/10W	
R2314	1-216-063-91	RES,CHIP 3.9K 5% 1/10W	
R2315	1-216-113-00	RES,CHIP 470K 5% 1/10W	
R2316	1-216-073-00	RES,CHIP 10K 5% 1/10W	
R2317	1-216-025-91	RES,CHIP 100 5% 1/10W	
R2320	1-216-295-91	SHORT 0	
R2321	1-216-295-91	SHORT 0	
R2334	1-233-574-11	RES, CHIP NETWORK 10	(KV-29FS60A/29FS60B/29FS60D/29FS60E/29FS60K/29FS60R/29FS60U)
R2335	1-233-574-11	RES, CHIP NETWORK 10	(KV-29FS60A/29FS60B/29FS60D/29FS60E/29FS60K/29FS60R/29FS60U)
R2336	1-233-574-11	RES, CHIP NETWORK 10	(KV-29FS60A/29FS60B/29FS60D/29FS60E/29FS60K/29FS60R/29FS60U)
R2337	1-216-049-91	RES,CHIP 1K 5% 1/10W	
R2338	1-216-295-91	SHORT 0	
R2341	1-216-295-91	SHORT 0	(KV-32FS60A/32FS60B/32FS60D/32FS60E)
R2342	1-216-295-91	SHORT 0	(KV-29FS60A/29FS60B/29FS60D/29FS60E/29FS60K/29FS60R/29FS60U)
R2345	1-216-025-91	RES,CHIP 100 5% 1/10W	
R2348	1-216-089-91	RES,CHIP 47K 5% 1/10W	
R2354	1-216-295-91	SHORT 0	(KV-29FS60A/29FS60B/29FS60D/29FS60E/29FS60K/29FS60R/29FS60U)
R2355	1-216-295-91	SHORT 0	(KV-32FS60A/32FS60B/32FS60D/32FS60E)
R2356	1-216-063-91	RES,CHIP 3.9K 5% 1/10W	
R2358	1-216-295-91	SHORT 0	
R2359	1-216-001-00	RES,CHIP 10 5% 1/10W	
R2360	1-216-085-00	RES,CHIP 33K 5% 1/10W	
R2361	1-216-085-00	RES,CHIP 33K 5% 1/10W	
R2364	1-216-057-00	RES,CHIP 2.2K 5% 1/10W	
R2365	1-216-057-00	RES,CHIP 2.2K 5% 1/10W	
R2366	1-216-057-00	RES,CHIP 2.2K 5% 1/10W	
R2367	1-216-057-00	RES,CHIP 2.2K 5% 1/10W	
R2368	1-216-057-00	RES,CHIP 2.2K 5% 1/10W	

REF. NO.	PART.NO	DESCRIPTION			REMARK
R2369	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R2370	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R2371	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R2372	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R2373	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R2374	1-216-049-91	RES,CHIP	1K	5%	1/10W
R2375	1-216-049-91	RES,CHIP	1K	5%	1/10W
R2376	1-216-049-91	RES,CHIP	1K	5%	1/10W
R2377	1-216-049-91	RES,CHIP	1K	5%	1/10W
R2378	1-216-029-00	RES,CHIP	150	5%	1/10W
R2379	1-216-076-00	RES,CHIP	13K	5%	1/10W
R2380	1-216-073-00	RES,CHIP	10K	5%	1/10W
R2381	1-216-021-00	RES,CHIP	68	5%	1/10W
R2382	1-216-049-91	RES,CHIP	1K	5%	1/10W
R2383	1-216-049-91	RES,CHIP	1K	5%	1/10W
R2384	1-216-021-00	RES,CHIP	68	5%	1/10W
R2385	1-216-037-00	RES,CHIP	330	5%	1/10W
R2386	1-216-295-91	SHORT	0		
R2387	1-216-027-00	RES,CHIP	120	5%	1/10W
R2388	1-216-037-00	RES,CHIP	330	5%	1/10W
R2389	1-216-069-00	RES,CHIP	6.8K	5%	1/10W
R2390	1-216-049-91	RES,CHIP	1K	5%	1/10W
R2391	1-216-025-91	RES,CHIP	100	5%	1/10W
R2392	1-216-295-91	SHORT	0		
R2393	1-216-295-91	SHORT	0		
R2394	1-216-295-91	SHORT	0		
R2395	1-216-295-91	SHORT	0		
R2396	1-216-295-91	SHORT	0		
R2397	1-216-295-91	SHORT	0		
R2398	1-216-295-91	SHORT	0		
R2410	1-216-037-00	RES,CHIP	330	5%	1/10W
R2411	1-216-037-00	RES,CHIP	330	5%	1/10W
R2412	1-216-667-11	METAL CHIP	4.7K	0.50%	1/10W
R2413	1-216-664-11	METAL CHIP	3.6K	0.50%	1/10W
R2415	1-216-295-91	SHORT	0		(KV-32FS60A/32FS60B/32FS60D/32FS60E)
R2416	1-216-295-91	SHORT	0		(KV-29FS60A/29FS60B/29FS60D/29FS60E/ 29FS60K/29FS60R/29FS60U)
R2711	1-216-001-00	RES,CHIP	10	5%	1/10W
R2712	1-216-295-91	SHORT	0		
R2713	1-216-295-91	SHORT	0		
R2714	1-216-295-91	SHORT	0		
R2715	1-216-295-91	SHORT	0		
R2716	1-216-295-91	SHORT	0		
R2717	1-216-295-91	SHORT	0		
R2718	1-216-295-91	SHORT	0		
R2719	1-216-295-91	SHORT	0		
R2720	1-216-295-91	SHORT	0		
R2721	1-216-295-91	SHORT	0		
R2722	1-216-295-91	SHORT	0		
R2723	1-216-027-00	RES,CHIP	120	5%	1/10W
R2724	1-216-295-91	SHORT	0		
R2725	1-216-021-00	RES,CHIP	68	5%	1/10W
R2726	1-216-295-91	SHORT	0		
R2727	1-216-295-91	SHORT	0		
R2734	1-216-295-91	SHORT	0		
R2735	1-216-021-00	RES,CHIP	68	5%	1/10W
R2736	1-216-295-91	SHORT	0		
R2738	1-216-025-91	RES,CHIP	100	5%	1/10W
		< CRYSTAL >			
X2300	1-579-175-11	VIBRATOR, CERAMIC			
**********					
	*A-1620-117-A	BP BOARD, COMPLETE (KV-29FS60)			
		**********			
	*A-1620-115-A	BP BOARD, COMPLETE (KV-32FS60)			
		**********			
		< CAPACITOR >			
C300	1-164-222-11	CERAMIC CHIP	0.22MF		25V
C301	1-164-222-11	CERAMIC CHIP	0.22MF		25V
C302	1-164-222-11	CERAMIC CHIP	0.22MF		25V
C303	1-164-222-11	CERAMIC CHIP	0.22MF		25V
C304	1-164-222-11	CERAMIC CHIP	0.22MF		25V
C305	1-126-967-11	ELECT	47MF	20%	50V
C306	1-126-967-11	ELECT	47MF	20%	50V
C307	1-126-967-11	ELECT	47MF	20%	50V
C308	1-126-964-11	ELECT	10MF	20%	50V
C309	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C310	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C311	1-163-259-91	CERAMIC CHIP	220PF	5%	50V
C312	1-163-259-91	CERAMIC CHIP	220PF	5%	50V
C313	1-163-259-91	CERAMIC CHIP	220PF	5%	50V
C314	1-163-259-91	CERAMIC CHIP	220PF	5%	50V
C315	1-126-964-11	ELECT	10MF	20%	50V
C316	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C317	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C318	1-163-259-91	CERAMIC CHIP	220PF	5%	50V
C319	1-163-259-91	CERAMIC CHIP	220PF	5%	50V
C320	1-126-967-11	ELECT	47MF	20%	50V
C321	1-126-967-11	ELECT	47MF	20%	50V
C322	1-126-967-11	ELECT	47MF	20%	50V
C323	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C324	1-163-259-91	CERAMIC CHIP	220PF	5%	50V
C325	1-163-259-91	CERAMIC CHIP	220PF	5%	50V
C326	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C327	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C328	1-126-964-11	ELECT	10MF	20%	50V
C329	1-126-964-11	ELECT	10MF	20%	50V
C330	1-126-964-11	ELECT	10MF	20%	50V

BP

REF. NO.	PART.NO	DESCRIPTION		REMARK
C331	1-163-038-91	CERAMIC CHIP 0.1MF		25V
C332	1-126-964-11	ELECT 10MF	20%	50V
C333	1-163-038-91	CERAMIC CHIP 0.1MF		25V
C334	1-126-964-11	ELECT 10MF	20%	50V
C335	1-126-964-11	ELECT 10MF	20%	50V
C336	1-126-964-11	ELECT 10MF	20%	50V
C337	1-126-964-11	ELECT 10MF	20%	50V
C338	1-126-964-11	ELECT 10MF	20%	50V
C339	1-126-964-11	ELECT 10MF	20%	50V
C340	1-126-964-11	ELECT 10MF	20%	50V
C341	1-163-239-11	CERAMIC CHIP 33PF	5%	50V
C342	1-163-038-91	CERAMIC CHIP 0.1MF		25V
C343	1-163-038-91	CERAMIC CHIP 0.1MF		25V
C344	1-126-964-11	ELECT 10MF	20%	50V
C345	1-126-964-11	ELECT 10MF	20%	50V
C346	1-126-964-11	ELECT 10MF	20%	50V
C347	1-163-038-91	CERAMIC CHIP 0.1MF		25V
C348	1-163-038-91	CERAMIC CHIP 0.1MF		25V
C349	1-163-038-91	CERAMIC CHIP 0.1MF		25V
C350	1-163-038-91	CERAMIC CHIP 0.1MF		25V
C351	1-163-038-91	CERAMIC CHIP 0.1MF		25V
C352	1-163-038-91	CERAMIC CHIP 0.1MF		25V
C353	1-163-038-91	CERAMIC CHIP 0.1MF		25V
C354	1-163-038-91	CERAMIC CHIP 0.1MF		25V
C355	1-107-823-11	CERAMIC CHIP 0.47MF	10%	16V
C357	1-104-760-11	CERAMIC CHIP 0.047MF	10%	50V
C358	1-107-823-11	CERAMIC CHIP 0.47MF	10%	16V
C359	1-104-760-11	CERAMIC CHIP 0.047MF	10%	50V
C361	1-163-038-91	CERAMIC CHIP 0.1MF		25V
C362	1-163-038-91	CERAMIC CHIP 0.1MF		25V
C363	1-163-038-91	CERAMIC CHIP 0.1MF		25V
C364	1-163-038-91	CERAMIC CHIP 0.1MF		25V
C365	1-126-964-11	ELECT 10MF	20%	50V
C366	1-126-964-11	ELECT 10MF	20%	50V
C367	1-163-038-91	CERAMIC CHIP 0.1MF		25V
C368	1-163-038-91	CERAMIC CHIP 0.1MF		25V
C369	1-163-038-91	CERAMIC CHIP 0.1MF		25V
C370	1-163-038-91	CERAMIC CHIP 0.1MF		25V
C371	1-163-038-91	CERAMIC CHIP 0.1MF		25V
C372	1-163-038-91	CERAMIC CHIP 0.1MF		25V
C373	1-163-038-91	CERAMIC CHIP 0.1MF		25V
C374	1-163-038-91	CERAMIC CHIP 0.1MF		25V
C375	1-163-038-91	CERAMIC CHIP 0.1MF		25V
C376	1-163-038-91	CERAMIC CHIP 0.1MF		25V
C377	1-163-038-91	CERAMIC CHIP 0.1MF		25V
C378	1-163-038-91	CERAMIC CHIP 0.1MF		25V
C379	1-163-038-91	CERAMIC CHIP 0.1MF		25V
C380	1-163-239-11	CERAMIC CHIP 33PF	5%	50V
C381	1-163-038-91	CERAMIC CHIP 0.1MF		25V
C382	1-163-038-91	CERAMIC CHIP 0.1MF		25V
C383	1-163-099-00	CERAMIC CHIP 18PF	5%	50V
C384	1-126-964-11	ELECT 10MF	20%	50V
C385	1-163-231-11	CERAMIC CHIP 15PF	5%	50V
C386	1-126-964-11	ELECT 10MF	20%	50V
C387	1-163-038-91	CERAMIC CHIP 0.1MF		25V
C388	1-163-038-91	CERAMIC CHIP 0.1MF		25V
C389	1-126-964-11	ELECT 10MF	20%	50V
C391	1-163-038-91	CERAMIC CHIP 0.1MF		25V
C392	1-126-964-11	ELECT 10MF	20%	50V
C393	1-163-038-91	CERAMIC CHIP 0.1MF		25V
C394	1-126-964-11	ELECT 10MF	20%	50V
C395	1-126-933-11	ELECT 100MF	20%	16V
C396	1-126-933-11	ELECT 100MF	20%	16V
C397	1-126-933-11	ELECT 100MF	20%	16V
C398	1-163-239-11	CERAMIC CHIP 33PF	5%	50V
C399	1-163-038-91	CERAMIC CHIP 0.1MF		25V
C400	1-163-038-91	CERAMIC CHIP 0.1MF		25V
C401	1-163-038-91	CERAMIC CHIP 0.1MF		25V
C402	1-126-964-11	ELECT 10MF	20%	50V
C403	1-163-038-91	CERAMIC CHIP 0.1MF		25V
C404	1-107-823-11	CERAMIC CHIP 0.47MF	10%	16V
C405	1-104-760-11	CERAMIC CHIP 0.047MF	10%	50V
C406	1-163-235-11	CERAMIC CHIP 22PF	5%	50V
C407	1-163-235-11	CERAMIC CHIP 22PF	5%	50V
C408	1-163-021-91	CERAMIC CHIP 0.01MF	10%	50V
C409	1-163-021-91	CERAMIC CHIP 0.01MF	10%	50V
C410	1-163-038-91	CERAMIC CHIP 0.1MF		25V
		< CONNECTOR >		
CN300	1-695-300-11	CONNECTOR, BOARD TO BOARD 20P		
CN301	1-695-301-11	CONNECTOR, BOARD TO BOARD 40P		
		< FILTER >		
FL300	1-233-505-21	FILTER, LOW PASS		
FL301	1-233-505-21	FILTER, LOW PASS		
FL302	1-236-071-11	ENCAPSULATED COMPONENT		
FL303	1-236-071-11	ENCAPSULATED COMPONENT		
FL304	1-236-071-11	ENCAPSULATED COMPONENT		
FL305	1-233-446-11	FILTER, LOW PASS		
FL306	1-233-446-11	FILTER, LOW PASS		
FL307	1-233-446-11	FILTER, LOW PASS		
		< IC >		
IC300	8-752-067-36	IC CXA1815S		
IC301	8-759-485-79	IC TC7SET08FU(TE85L)		
IC302	8-759-295-09	IC TLC2932IPW		
IC303	8-752-392-55	IC CXD2079Q		
IC304	8-759-295-09	IC TLC2932IPW		
IC305	8-759-485-79	IC TC7SET08FU(TE85L)		
IC306	8-759-467-22	IC MSM548331TS-K		
IC307	8-759-467-22	IC MSM548331TS-K		
IC308	8-759-485-79	IC TC7SET08FU(TE85L)		

REF. NO.	PART.NO	DESCRIPTION	REMARK
IC309	8-759-295-09	IC TLC2932IPW	
IC311	8-759-062-66	IC TC7S66F	
IC312	8-759-062-66	IC TC7S66F	
		< COIL >	
L300	1-412-029-11	INDUCTOR CHIP 10UH	
L301	1-410-435-21	INDUCTOR 220UH	
L302	1-410-435-21	INDUCTOR 220UH	
L303	1-412-029-11	INDUCTOR CHIP 10UH	
L304	1-410-435-21	INDUCTOR 220UH	
L305	1-410-435-21	INDUCTOR 220UH	
L306	1-412-029-11	INDUCTOR CHIP 10UH	
L307	1-412-029-11	INDUCTOR CHIP 10UH	
L308	1-412-029-11	INDUCTOR CHIP 10UH	
L309	1-412-029-11	INDUCTOR CHIP 10UH	
L311	1-412-029-11	INDUCTOR CHIP 10UH	
L312	1-412-029-11	INDUCTOR CHIP 10UH	
L313	1-412-029-11	INDUCTOR CHIP 10UH	
L314	1-412-029-11	INDUCTOR CHIP 10UH	
L315	1-412-029-11	INDUCTOR CHIP 10UH	
L316	1-412-029-11	INDUCTOR CHIP 10UH	
L317	1-412-029-11	INDUCTOR CHIP 10UH	
L318	1-412-029-11	INDUCTOR CHIP 10UH	
L319	1-412-029-11	INDUCTOR CHIP 10UH	
L320	1-412-029-11	INDUCTOR CHIP 10UH	
L321	1-412-004-31	INDUCTOR CHIP 6.8UH	
L322	1-412-004-31	INDUCTOR CHIP 6.8UH	
L323	1-412-004-31	INDUCTOR CHIP 6.8UH	
		< TRANSISTOR >	
Q300	8-729-620-06	TRANSISTOR 2SC3052-EF	
Q301	8-729-620-06	TRANSISTOR 2SC3052-EF	
Q302	8-729-620-06	TRANSISTOR 2SC3052-EF	
Q303	8-729-620-06	TRANSISTOR 2SC3052-EF	
Q304	8-729-620-06	TRANSISTOR 2SC3052-EF	
Q305	8-729-620-06	TRANSISTOR 2SC3052-EF	
Q306	8-729-216-22	TRANSISTOR 2SA1162-G	
Q307	8-729-216-22	TRANSISTOR 2SA1162-G	
Q308	8-729-216-22	TRANSISTOR 2SA1162-G	
Q309	8-729-216-22	TRANSISTOR 2SA1162-G	
Q310	1-801-806-11	TRANSISTOR DTC144EKA-T146	
Q311	8-729-216-22	TRANSISTOR 2SA1162-G	
Q312	8-729-216-22	TRANSISTOR 2SA1162-G	
Q313	8-729-216-22	TRANSISTOR 2SA1162-G	
Q314	8-729-216-22	TRANSISTOR 2SA1162-G	
Q315	8-729-620-06	TRANSISTOR 2SC3052-EF	
Q316	8-729-216-22	TRANSISTOR 2SA1162-G	
Q317	8-729-620-06	TRANSISTOR 2SC3052-EF	
Q318	8-729-216-22	TRANSISTOR 2SA1162-G	
Q319	8-729-216-22	TRANSISTOR 2SA1162-G	
Q320	8-729-620-06	TRANSISTOR 2SC3052-EF	
Q322	8-729-620-06	TRANSISTOR 2SC3052-EF	
Q324	8-729-620-06	TRANSISTOR 2SC3052-EF	
Q325	8-729-620-06	TRANSISTOR 2SC3052-EF	
Q326	8-729-216-22	TRANSISTOR 2SA1162-G	
Q327	8-729-216-22	TRANSISTOR 2SA1162-G	
Q328	8-729-216-22	TRANSISTOR 2SA1162-G	
Q329	1-801-806-11	TRANSISTOR DTC144EKA-T146	
		< RESISTOR >	
R300	1-216-049-91	RES,CHIP 1K 5% 1/10W	
R301	1-216-049-91	RES,CHIP 1K 5% 1/10W	
R302	1-216-642-11	METAL CHIP 430 0.50% 1/10W	
R303	1-216-045-00	RES,CHIP 680 5% 1/10W	
R304	1-216-045-00	RES,CHIP 680 5% 1/10W	
R305	1-216-656-11	METAL CHIP 1.6K 0.50% 1/10W	
R306	1-216-037-00	RES,CHIP 330 5% 1/10W	
R307	1-216-037-00	RES,CHIP 330 5% 1/10W	
R308	1-216-643-11	METAL CHIP 470 0.50% 1/10W	
R309	1-216-045-00	RES,CHIP 680 5% 1/10W	
R310	1-216-045-00	RES,CHIP 680 5% 1/10W	
R311	1-216-057-00	RES,CHIP 2.2K 5% 1/10W	
R312	1-216-654-11	METAL CHIP 1.3K 0.50% 1/10W	
R313	1-216-037-00	RES,CHIP 330 5% 1/10W	
R314	1-216-037-00	RES,CHIP 330 5% 1/10W	
R315	1-216-057-00	RES,CHIP 2.2K 5% 1/10W	
R316	1-216-663-11	METAL CHIP 3.3K 0.50% 1/10W	
R317	1-216-049-91	RES,CHIP 1K 5% 1/10W	
R318	1-216-049-91	RES,CHIP 1K 5% 1/10W	
R319	1-216-025-91	RES,CHIP 100 5% 1/10W	
R320	1-216-025-91	RES,CHIP 100 5% 1/10W	
R321	1-216-041-00	RES,CHIP 470 5% 1/10W	
R322	1-216-041-00	RES,CHIP 470 5% 1/10W	
R323	1-216-041-00	RES,CHIP 470 5% 1/10W	
R324	1-216-017-91	RES,CHIP 47 5% 1/10W	
R325	1-216-025-91	RES,CHIP 100 5% 1/10W	
R326	1-216-663-11	METAL CHIP 3.3K 0.50% 1/10W	
R327	1-216-049-91	RES,CHIP 1K 5% 1/10W	
R328	1-216-049-91	RES,CHIP 1K 5% 1/10W	
R329	1-216-025-91	RES,CHIP 100 5% 1/10W	
R330	1-216-057-00	RES,CHIP 2.2K 5% 1/10W	
R331	1-216-025-91	RES,CHIP 100 5% 1/10W	
R332	1-216-057-00	RES,CHIP 2.2K 5% 1/10W	
R333	1-216-057-00	RES,CHIP 2.2K 5% 1/10W	
R336	1-216-065-91	RES,CHIP 4.7K 5% 1/10W	
R337	1-216-049-91	RES,CHIP 1K 5% 1/10W	
R338	1-216-057-00	RES,CHIP 2.2K 5% 1/10W	
R339	1-216-623-11	METAL CHIP 68 0.50% 1/10W	
R340	1-216-623-11	METAL CHIP 68 0.50% 1/10W	
R341	1-216-049-91	RES,CHIP 1K 5% 1/10W	
R342	1-216-623-11	METAL CHIP 68 0.50% 1/10W	
R343	1-216-623-11	METAL CHIP 68 0.50% 1/10W	

BP

REF. NO.	PART.NO	DESCRIPTION			REMARK
R344	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R345	1-216-623-11	METAL CHIP	68	0.50%	1/10W
R346	1-216-623-11	METAL CHIP	68	0.50%	1/10W
R347	1-216-623-11	METAL CHIP	68	0.50%	1/10W
R351	1-216-049-91	RES,CHIP	1K	5%	1/10W
R352	1-216-025-91	RES,CHIP	100	5%	1/10W
R353	1-216-049-91	RES,CHIP	1K	5%	1/10W
R357	1-216-623-11	METAL CHIP	68	0.50%	1/10W
R358	1-216-623-11	METAL CHIP	68	0.50%	1/10W
R359	1-216-623-11	METAL CHIP	68	0.50%	1/10W
R360	1-216-623-11	METAL CHIP	68	0.50%	1/10W
R361	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R362	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R363	1-216-623-11	METAL CHIP	68	0.50%	1/10W
R364	1-216-623-11	METAL CHIP	68	0.50%	1/10W
R365	1-216-623-11	METAL CHIP	68	0.50%	1/10W
R368	1-216-025-91	RES,CHIP	100	5%	1/10W
R369	1-216-025-91	RES,CHIP	100	5%	1/10W
R371	1-216-061-00	RES,CHIP	3.3K	5%	1/10W
R372	1-216-049-91	RES,CHIP	1K	5%	1/10W
R373	1-216-051-00	RES,CHIP	1.2K	5%	1/10W
R374	1-216-033-00	RES,CHIP	220	5%	1/10W
R375	1-216-037-00	RES,CHIP	330	5%	1/10W
R376	1-216-117-00	RES,CHIP	680K	5%	1/10W
R377	1-216-041-00	RES,CHIP	470	5%	1/10W
R378	1-216-041-00	RES,CHIP	470	5%	1/10W
R379	1-216-051-00	RES,CHIP	1.2K	5%	1/10W
R380	1-216-033-00	RES,CHIP	220	5%	1/10W
R381	1-216-117-00	RES,CHIP	680K	5%	1/10W
R382	1-216-037-00	RES,CHIP	330	5%	1/10W
R383	1-216-061-00	RES,CHIP	3.3K	5%	1/10W
R385	1-216-667-11	METAL CHIP	4.7K	0.50%	1/10W
R386	1-216-025-91	RES,CHIP	100	5%	1/10W
R387	1-216-643-11	METAL CHIP	470	0.50%	1/10W
R388	1-216-025-91	RES,CHIP	100	5%	1/10W
R389	1-216-025-91	RES,CHIP	100	5%	1/10W
R390	1-216-663-11	METAL CHIP	3.3K	0.50%	1/10W
R391	1-216-651-11	METAL CHIP	1K	0.50%	1/10W
R393	1-216-037-00	RES,CHIP	330	5%	1/10W
R394	1-216-033-00	RES,CHIP	220	5%	1/10W
R395	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R396	1-216-636-11	METAL CHIP	240	0.50%	1/10W
R397	1-216-636-11	METAL CHIP	240	0.50%	1/10W
R398	1-216-049-91	RES,CHIP	1K	5%	1/10W
R399	1-216-025-91	RES,CHIP	100	5%	1/10W
R400	1-216-638-11	METAL CHIP	300	0.50%	1/10W
R401	1-216-025-91	RES,CHIP	100	5%	1/10W
R402	1-216-025-91	RES,CHIP	100	5%	1/10W
R403	1-216-025-91	RES,CHIP	100	5%	1/10W
R404	1-216-017-91	RES,CHIP	47	5%	1/10W
R405	1-216-017-91	RES,CHIP	47	5%	1/10W

REF. NO.	PART.NO	DESCRIPTION			REMARK
R406	1-216-017-91	RES,CHIP	47	5%	1/10W
R407	1-216-025-91	RES,CHIP	100	5%	1/10W
R408	1-216-017-91	RES,CHIP	47	5%	1/10W
R409	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R410	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R411	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R412	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R413	1-216-041-00	RES,CHIP	470	5%	1/10W
R414	1-216-061-00	RES,CHIP	3.3K	5%	1/10W
R415	1-216-051-00	RES,CHIP	1.2K	5%	1/10W
R417	1-216-117-00	RES,CHIP	680K	5%	1/10W
R418	1-216-033-00	RES,CHIP	220	5%	1/10W
R419	1-216-037-00	RES,CHIP	330	5%	1/10W
R420	1-216-033-00	RES,CHIP	220	5%	1/10W
R421	1-216-037-00	RES,CHIP	330	5%	1/10W
R422	1-216-017-91	RES,CHIP	47	5%	1/10W
R423	1-216-017-91	RES,CHIP	47	5%	1/10W
R424	1-216-017-91	RES,CHIP	47	5%	1/10W
R425	1-216-017-91	RES,CHIP	47	5%	1/10W
R426	1-216-017-91	RES,CHIP	47	5%	1/10W
R427	1-216-017-91	RES,CHIP	47	5%	1/10W
R429	1-216-295-91	SHORT	0		
R431	1-216-029-00	RES,CHIP	150	5%	1/10W
R432	1-216-029-00	RES,CHIP	150	5%	1/10W
R433	1-216-029-00	RES,CHIP	150	5%	1/10W
R434	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R436	1-216-049-91	RES,CHIP	1K	5%	1/10W
R438	1-216-041-00	RES,CHIP	470	5%	1/10W
R439	1-216-653-11	METAL CHIP	1.2K	0.50%	1/10W
R440	1-216-049-91	RES,CHIP	1K	5%	1/10W
R441	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R442	1-216-041-00	RES,CHIP	470	5%	1/10W
R444	1-216-049-91	RES,CHIP	1K	5%	1/10W
R445	1-216-041-00	RES,CHIP	470	5%	1/10W
R447	1-216-049-91	RES,CHIP	1K	5%	1/10W
R448	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R449	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R450	1-216-049-91	RES,CHIP	1K	5%	1/10W
R451	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R452	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R453	1-216-049-91	RES,CHIP	1K	5%	1/10W
R454	1-216-053-00	RES,CHIP	1.5K	5%	1/10W
R455	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R456	1-216-053-00	RES,CHIP	1.5K	5%	1/10W
R457	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R458	1-216-053-00	RES,CHIP	1.5K	5%	1/10W
R459	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R460	1-216-041-00	RES,CHIP	470	5%	1/10W
R461	1-216-037-00	RES,CHIP	330	5%	1/10W
R462	1-216-037-00	RES,CHIP	330	5%	1/10W
R463	1-216-041-00	RES,CHIP	470	5%	1/10W

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

REF. NO.		PART.NO	DESCRIPTION	REMARK
R464		1-216-638-11	METAL CHIP 330 0.50% 1/10W	
R465		1-216-636-11	METAL CHIP 240 0.50% 1/10W	
R466		1-216-049-91	RES,CHIP 1K 5% 1/10W	
R468		1-216-017-91	RES,CHIP 47 5% 1/10W	
R469		1-216-017-91	RES,CHIP 47 5% 1/10W	
R470		1-216-017-91	RES,CHIP 47 5% 1/10W	
R471		1-216-033-00	RES,CHIP 220 5% 1/10W	
R472		1-216-033-00	RES,CHIP 220 5% 1/10W	
R473		1-216-033-00	RES,CHIP 220 5% 1/10W	
R474		1-216-033-00	RES,CHIP 220 5% 1/10W	
R475		1-216-033-00	RES,CHIP 220 5% 1/10W	
R476		1-216-033-00	RES,CHIP 220 5% 1/10W	
			< CRYSTAL >	
X300		1-767-262-31	VIBRATOR, CRYSTAL	
**********				
		*A-1624-073-A	F BOARD, COMPLETE (KV-29FS60)	
			**********	
		*A-1624-075-A	F BOARD, COMPLETE (KV-32FS60)	
			**********	
		*4-203-258-11	HOLDER, LED	
			< CAPACITOR >	
C7125		1-126-969-11	ELECT 220MF 20% 50V	
			< CONNECTOR >	
CN7100		*1-568-879-11	PIN, CONNECTOR 4P	
CN7600	⚠	*1-691-291-11	PIN, CONNECTOR (PC BOARD) 5P	
CN7644	⚠	*1-580-844-11	PIN, CONNECTOR (POWER)	
			< DIODE >	
D7125		8-719-030-11	DIODE SLA-570KT3F	
			< IC >	
IC7125		8-749-014-59	IC TSOP1740KS1	
			< RESISTOR >	
R7125		1-247-815-91	CARBON 220 5% 1/4W	
R7126		1-249-411-11	CARBON 330 5% 1/4W	
			< SWITCH >	
S7601	⚠	1-571-433-21	SWITCH, PUSH (AC POWER)	

REF. NO.		PART.NO	DESCRIPTION	REMARK
		*A-1624-074-A	F1 BOARD, COMPLETE (KV-29FS60)	
			**********	
		*A-1624-076-A	F1 BOARD, COMPLETE (KV-32FS60)	
			**********	
			< CAPACITOR >	
C7626	⚠	1-136-527-12	FILM 0.47MF 20% 300V	
			< CONNECTOR >	
CN7611	⚠	*1-580-844-11	PIN, CONNECTOR (POWER)	
CN7622		1-695-915-11	TAB (CONTACT)	
CN7633	⚠	*1-580-843-11	PIN, CONNECTOR (POWER)	
			< FUSE >	
F7626	⚠	1-532-299-11	FUSE 5A/250V	
	⚠	*1-533-725-11	HOLDER, FUSE (F7626)	
			< FILTER >	
LF7627	⚠	1-433-488-11	TRANSFORMER, LINE FILTER	
			< RESISTOR >	
R7626	⚠	1-202-719-00	SOLID 1M 20% 1/2W	
			< VARISTOR >	
VDR762	⚠	1-801-073-31	VARISTOR ERZV14D471	
**********				
		*A-1630-980-A	A BOARD, COMPLETE (KV-29FS60A/29FS60D/	
			********** 29FS60E/29FS60K/	
			29FS60R)	
		*A-1630-993-A	A BOARD, COMPLETE (KV-29FS60B)	
			**********	
		*A-1630-994-A	A BOARD, COMPLETE (KV-29FS60U)	
			**********	
		*A-1630-979-A	A BOARD, COMPLETE (KV-32FS60A/32FS60D/	
			********** 32FS60E)	
		*A-1630-995-A	A BOARD, COMPLETE (KV-32FS60B)	
			**********	
		4-204-625-01	HEAT SINK, AUDIO	
		4-382-854-11	SCREW (M3X10), P, SW (+)	
		*4-931-401-01	HEAT SINK, V.OUT	
			< CAPACITOR >	
C1100		1-104-664-11	ELECT 47MF 20% 25V	
C1101		1-104-666-11	ELECT 220MF 20% 25V	
C1126		1-162-568-11	CERAMIC CHIP 0.33MF 10% 16V	
C1127		1-136-177-00	FILM 1MF 5% 50V	
C1128		1-163-135-00	CERAMIC CHIP 560PF 5% 50V	
C1129		1-130-777-00	FILM 0.1MF 5% 63V	
C1130		1-163-017-00	CERAMIC CHIP 0.0047MF 10% 50V	
C1131		1-163-251-11	CERAMIC CHIP 100PF 5% 50V	

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REF. NO.	PART.NO	DESCRIPTION	REMARK
C1132	1-163-021-91	CERAMIC CHIP 0.01MF	10% 50V
C1133	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C1134	1-126-961-11	ELECT 2.2MF	20% 50V
C1135	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C1136	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C1137	1-126-953-11	ELECT 2200MF	20% 35V
C1138	1-126-953-11	ELECT 2200MF	20% 35V
C1139	1-104-329-11	CERAMIC CHIP 0.1MF	10% 50V
C1140	1-111-216-91	ELECT 150MF	20% 63V
C1151	1-162-568-11	CERAMIC CHIP 0.33MF	10% 16V
C1152	1-136-177-00	FILM 1MF	5% 50V
C1153	1-163-135-00	CERAMIC CHIP 560PF	5% 50V
C1154	1-130-777-00	FILM 0.1MF	5% 63V
C1155	1-163-017-00	CERAMIC CHIP 0.0047MF	10% 50V
C1156	1-163-251-11	CERAMIC CHIP 100PF	5% 50V
C1157	1-163-021-91	CERAMIC CHIP 0.01MF	10% 50V
C1158	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C1159	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C1160	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C1161	1-104-329-11	CERAMIC CHIP 0.1MF	10% 50V
C1162	1-111-216-91	ELECT 150MF	20% 63V
C1176	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C1177	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C1178	1-126-964-11	ELECT 10MF	20% 50V
C1179	1-126-964-11	ELECT 10MF	20% 50V
C1180	1-126-952-11	ELECT 1000MF	20% 35V
C1181	1-126-952-11	ELECT 1000MF	20% 35V
C1182	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C1183	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C1184	1-107-823-11	CERAMIC CHIP 0.47MF	10% 16V
C1185	1-107-823-11	CERAMIC CHIP 0.47MF	10% 16V
C1226	1-104-661-91	ELECT 330MF	20% 16V
C1300	1-126-933-11	ELECT 100MF	20% 16V
C1301	1-163-059-91	CERAMIC CHIP 0.01MF	10% 50V
C1326	1-163-059-91	CERAMIC CHIP 0.01MF	10% 50V
C1327	1-126-934-11	ELECT 220MF	20% 10V
C1328	1-163-117-00	CERAMIC CHIP 100PF	5% 50V
C1350	1-163-059-91	CERAMIC CHIP 0.01MF	10% 50V
C1351	1-126-934-11	ELECT 220MF	20% 10V
C1601	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C1602	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C1603	1-126-933-11	ELECT 100MF	20% 16V
C1604	1-126-933-11	ELECT 100MF	20% 16V
C1605	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C1607	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C1608	1-126-934-11	ELECT 220MF	20% 16V
C1609	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C1610	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C1611	1-126-933-11	ELECT 100MF	20% 16V
C1612	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C1613	1-126-933-11	ELECT 100MF	20% 16V
C1614	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C1615	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C1617	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
		< CONNECTOR >	
CN1111	*1-564-520-11	PLUG, CONNECTOR 5P	
CN1200	1-695-298-11	CONNECTOR, BOARD TO BOARD 40P	
CN1300	1-695-297-11	CONNECTOR, BOARD TO BOARD 20P	
CN1301	1-695-298-11	CONNECTOR, BOARD TO BOARD 40P	
CN1401	1-695-298-11	CONNECTOR, BOARD TO BOARD 40P	
CN1402	1-573-296-11	CONNECTOR, BOARD TO BOARD 10P	(KV-29FS60B/32FS60B)
CN1600	1-900-903-64	CONNECTOR ASSY, 20P	
CN1601	1-900-903-64	CONNECTOR ASSY, 20P	
CN1602	1-900-903-64	CONNECTOR ASSY, 20P	
CN1700	*1-568-879-11	PIN, CONNECTOR 4P	
CN1701	1-573-296-11	CONNECTOR, BOARD TO BOARD 10P	
CN1702	*1-568-880-51	PIN, CONNECTOR 5P	
CN1703	*1-564-514-11	PLUG, CONNECTOR 11P	
CN1801	1-695-299-11	CONNECTOR, BOARD TO BOARD 50P	
CN1901	1-695-298-11	CONNECTOR, BOARD TO BOARD 40P	
		< COMPOSITION CIRCUIT BLOCK >	
CP1300	1-251-658-11	SPLITTER RF	
		< DIODE >	
D1100	8-719-914-43	DIODE DAN202K	
D1101	8-719-914-44	DIODE DAP202K	
D1102	8-719-914-43	DIODE DAN202K	
D1103	8-719-914-43	DIODE DAN202K	
D1401	8-719-105-99	DIODE RD6.2M-B1	
D1402	8-719-105-99	DIODE RD6.2M-B1	
D1403	8-719-105-99	DIODE RD6.2M-B1	
D1404	8-719-105-99	DIODE RD6.2M-B1	
D1626	8-719-914-43	DIODE DAN202K	
D1627	8-719-914-43	DIODE DAN202K	
D1629	8-719-914-43	DIODE DAN202K	
		< FERRITE BEAD >	
FB1126	1-535-143-61	LEAD, JUMPER (5.0MM)	
FB1151	1-535-143-61	LEAD, JUMPER (5.0MM)	
		< IC >	
IC1126	8-759-544-25	IC TDA7482	
IC1151	8-759-544-25	IC TDA7482	
IC1176	8-759-333-24	IC LM1876TF	
IC1400	8-752-072-94	IC CXA1875AM-T4	
IC1401	8-759-439-64	IC HEF4053BT	
IC1601	8-759-457-44	IC KA78R05TU	
IC1602	8-759-544-09	IC KA278R05TU	

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REF. NO.	PART.NO	DESCRIPTION	REMARK
IC1603	8-759-295-82	IC L78L08ACZ-AP	
IC1604	8-759-544-13	IC KA78R09TU	
IC1605	8-759-544-11	IC KA78R33TU	
		< COIL >	
L1126	1-416-966-11	CHOKE, COIL 30uH	
L1127	1-414-158-11	INDUCTOR 2.2UH	
L1128	1-535-143-61	LEAD, JUMPER (5.0MM)	
L1151	1-416-966-11	CHOKE, COIL 30uH	
L1152	1-414-158-11	INDUCTOR 2.2UH	
L1153	1-535-143-61	LEAD, JUMPER (5.0MM)	
L1300	1-414-183-41	INDUCTOR 10UH	
L1326	1-414-183-41	INDUCTOR 10UH	
L1350	1-414-183-41	INDUCTOR 10UH	
		< TRANSISTOR >	
Q1100	8-729-216-22	TRANSISTOR 2SA1162-G	
Q1201	8-729-620-06	TRANSISTOR 2SC3052-EF	
Q1202	8-729-620-06	TRANSISTOR 2SC3052-EF	
Q1203	8-729-620-06	TRANSISTOR 2SC3052-EF	
Q1204	8-729-620-06	TRANSISTOR 2SC3052-EF	
Q1226	8-729-620-06	TRANSISTOR 2SC3052-EF	
Q1227	8-729-620-06	TRANSISTOR 2SC3052-EF	
Q1229	8-729-027-38	TRANSISTOR DTA144EKA-T146	
Q1300	1-801-806-11	TRANSISTOR DTC144EKA-T146	
Q1326	8-729-620-06	TRANSISTOR 2SC3052-EF	
Q1327	8-729-216-22	TRANSISTOR 2SA1162-G	
Q1328	8-729-620-06	TRANSISTOR 2SC3052-EF	
Q1329	8-729-216-22	TRANSISTOR 2SA1162-G	
Q1350	8-729-620-06	TRANSISTOR 2SC3052-EF	
Q1351	8-729-216-22	TRANSISTOR 2SA1162-G	
Q1400	8-729-046-47	TRANSISTOR KSC2500-BTA	
Q1601	8-729-620-06	TRANSISTOR 2SC3052-EF	
Q1626	8-729-620-06	TRANSISTOR 2SC3052-EF	
		< RESISTOR >	
R1001	1-216-295-91	SHORT 0	
R1002	1-216-295-91	SHORT 0	
R1003	1-216-295-91	SHORT 0	
R1004	1-216-295-91	SHORT 0	
R1005	1-216-295-91	SHORT 0	
R1006	1-216-295-91	SHORT 0	
R1100	1-216-025-91	RES,CHIP 100 5% 1/10W	
R1101	1-216-057-00	RES,CHIP 2.2K 5% 1/10W	
R1102	1-216-057-00	RES,CHIP 2.2K 5% 1/10W	
R1126	1-216-631-11	METAL CHIP 150 0.50% 1/10W	
R1127	1-216-075-00	RES,CHIP 12K 5% 1/10W	
R1128	1-216-041-00	RES,CHIP 470 5% 1/10W	
R1151	1-216-631-11	METAL CHIP 150 0.50% 1/10W	
R1152	1-216-075-00	RES,CHIP 12K 5% 1/10W	
R1153	1-216-041-00	RES,CHIP 470 5% 1/10W	

REF. NO.	PART.NO	DESCRIPTION	REMARK
R1176	1-216-063-91	RES,CHIP 3.9K 5% 1/10W	
R1177	1-216-063-91	RES,CHIP 3.9K 5% 1/10W	
R1178	1-216-357-00	METAL OXIDE 4.7 5% 1W	F
R1179	1-216-357-00	METAL OXIDE 4.7 5% 1W	F
R1180	1-216-081-00	RES,CHIP 22K 5% 1/10W	
R1181	1-216-045-00	RES,CHIP 680 5% 1/10W	
R1182	1-216-081-00	RES,CHIP 22K 5% 1/10W	
R1183	1-216-045-00	RES,CHIP 680 5% 1/10W	
R1184	1-216-089-91	RES,CHIP 47K 5% 1/10W	
R1185	1-216-089-91	RES,CHIP 47K 5% 1/10W	
R1201	1-216-089-91	RES,CHIP 47K 5% 1/10W	
R1202	1-216-083-00	RES,CHIP 27K 5% 1/10W	
R1203	1-216-083-00	RES,CHIP 27K 5% 1/10W	
R1204	1-216-071-00	RES,CHIP 8.2K 5% 1/10W	
R1205	1-216-089-91	RES,CHIP 47K 5% 1/10W	
R1206	1-216-073-00	RES,CHIP 10K 5% 1/10W	
R1207	1-216-065-91	RES,CHIP 4.7K 5% 1/10W	
R1208	1-216-089-91	RES,CHIP 47K 5% 1/10W	
R1209	1-216-065-91	RES,CHIP 4.7K 5% 1/10W	
R1210	1-216-089-91	METAL CHIP 47K 5% 1/10W	(KV-29FS60A/29FS60D/29FS60E/29FS60K/29FS60R/32FS60A/32FS60D/32FS60E)
	1-216-691-11	METAL CHIP 47K 0.50% 1/10W	(KV-29FS60B/29FS60U/32FS60B)
R1226	1-216-073-00	RES,CHIP 10K 5% 1/10W	
R1227	1-216-073-00	RES,CHIP 10K 5% 1/10W	
R1228	1-216-073-00	RES,CHIP 10K 5% 1/10W	
R1229	1-216-073-00	RES,CHIP 10K 5% 1/10W	
R1230	1-216-055-00	RES,CHIP 1.8K 5% 1/10W	
R1232	1-216-295-91	SHORT 0	
R1233	1-216-049-91	RES,CHIP 1K 5% 1/10W	
R1300	1-216-073-00	RES,CHIP 10K 5% 1/10W	
R1301	1-216-073-00	RES,CHIP 10K 5% 1/10W	
R1326	1-216-025-91	RES,CHIP 100 5% 1/10W	
R1327	1-216-025-91	RES,CHIP 100 5% 1/10W	
R1328	1-216-073-00	RES,CHIP 10K 5% 1/10W	
R1329	1-216-025-91	RES,CHIP 100 5% 1/10W	
R1330	1-216-041-00	RES,CHIP 470 5% 1/10W	
R1331	1-216-041-00	RES,CHIP 470 5% 1/10W	
R1332	1-216-041-00	RES,CHIP 470 5% 1/10W	
R1333	1-216-075-00	RES,CHIP 12K 5% 1/10W	
R1334	1-216-069-00	RES,CHIP 6.8K 5% 1/10W	
R1335	1-216-025-91	RES,CHIP 100 5% 1/10W	
R1336	1-216-041-00	RES,CHIP 470 5% 1/10W	
R1337	1-216-041-00	RES,CHIP 470 5% 1/10W	
R1338	1-216-001-00	RES,CHIP 10 5% 1/10W	
R1339	1-216-041-00	RES,CHIP 470 5% 1/10W	
R1340	1-216-043-91	RES,CHIP 560 5% 1/10W	
R1342	1-216-073-00	RES,CHIP 10K 5% 1/10W	
R1350	1-216-073-00	RES,CHIP 10K 5% 1/10W	
R1351	1-216-025-91	RES,CHIP 100 5% 1/10W	
R1352	1-216-025-91	RES,CHIP 100 5% 1/10W	

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REF. NO.	PART.NO	DESCRIPTION	REMARK
R1353	1-216-073-00	RES,CHIP 10K 5% 1/10W	
R1354	1-216-025-91	RES,CHIP 100 5% 1/10W	
R1355	1-216-041-00	RES,CHIP 470 5% 1/10W	
R1356	1-216-041-00	RES,CHIP 470 5% 1/10W	
R1357	1-216-041-00	RES,CHIP 470 5% 1/10W	
R1400	1-216-053-00	RES,CHIP 1.5K 5% 1/10W	
R1401	1-216-081-00	RES,CHIP 22K 5% 1/10W	
R1402	1-216-097-91	RES,CHIP 100K 5% 1/10W	
R1405	1-216-025-91	RES,CHIP 100 5% 1/10W	
R1406	1-216-025-91	RES,CHIP 100 5% 1/10W	
R1407	1-216-025-91	RES,CHIP 100 5% 1/10W	
R1408	1-216-025-91	RES,CHIP 100 5% 1/10W	
R1409	1-216-025-91	RES,CHIP 100 5% 1/10W	
R1410	1-216-025-91	RES,CHIP 100 5% 1/10W	
R1601	1-216-057-00	RES,CHIP 2.2K 5% 1/10W	
R1602	1-216-691-11	METAL CHIP 47K 0.50% 1/10W	
R1603	1-216-025-91	RES,CHIP 100 5% 1/10W	
R1605	1-216-049-91	RES,CHIP 1K 5% 1/10W	
R1609	1-216-089-91	RES,CHIP 47K 5% 1/10W	
R1610	1-216-065-91	RES,CHIP 4.7K 5% 1/10W	
R1615	1-216-025-91	RES,CHIP 100 5% 1/10W	
R1616	1-216-304-11	RES,CHIP 3.3 5% 1/10W	
R1617	1-216-304-11	RES,CHIP 3.3 5% 1/10W	
R1618	1-216-295-91	SHORT 0	
R1621	1-216-027-00	RES,CHIP 120 5% 1/10W	
R1622	1-216-029-00	RES,CHIP 150 5% 1/10W	
R1623	1-216-033-00	RES,CHIP 220 5% 1/10W	
R1625	1-216-295-91	SHORT 0	
		< TUNER >	
TU1326	1-693-338-21	TUNER/VIF (AEP) (KV-29FS60A/29FS60D/29FS60E/29FS60K/ 29FS60R/32FS60A/32FS60D/32FS60E)	
	1-693-340-21	TUNER/VIF (FR) (KV-29FS60B/32FS60B)	
	1-693-339-21	TUNER/VIF (UK) (KV-29FS60U)	
TU1350	1-693-338-21	TUNER/VIF (AEP) (KV-29FS60A/29FS60D/29FS60E/29FS60K/ 29FS60R/32FS60A/32FS60D/32FS60E)	
	1-693-340-21	TUNER/VIF (FR) (KV-29FS60B/32FS60B)	
	1-693-339-21	TUNER/VIF (UK) (KV-29FS60U)	
**********			
	*A-1634-049-A	M BOARD, COMPLETE (KV-29FS60) **********	
	*A-1634-048-A	M BOARD, COMPLETE (KV-32FS60) **********	
		< CAPACITOR >	
C9100	1-115-340-11	CERAMIC CHIP 0.22MF 10% 25V	
C9101	1-163-251-11	CERAMIC CHIP 100PF 5% 50V	
C9102	1-163-251-11	CERAMIC CHIP 100PF 5% 50V	
C9104	1-104-664-11	ELECT 47MF 20% 25V	
C9105	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C9110	1-165-321-11	CERAMIC CHIP 0.68MF 10% 16V	
C9111	1-164-157-11	CERAMIC CHIP 0.068MF 10% 25V	
C9112	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C9113	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C9114	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C9115	1-115-340-11	CERAMIC CHIP 0.22MF 10% 25V	
C9117	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C9118	1-104-664-11	ELECT 47MF 20% 25V	
C9119	1-163-259-91	CERAMIC CHIP 220PF 5% 50V	
C9121	1-163-251-11	CERAMIC CHIP 100PF 5% 50V	
C9122	1-115-340-11	CERAMIC CHIP 0.22MF 10% 25V	
C9123	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C9124	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C9125	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C9126	1-163-105-00	CERAMIC CHIP 33PF 5% 50V	
C9127	1-163-105-00	CERAMIC CHIP 33PF 5% 50V	
C9128	1-163-105-00	CERAMIC CHIP 33PF 5% 50V	
C9129	1-163-105-00	CERAMIC CHIP 33PF 5% 50V	
C9130	1-163-105-00	CERAMIC CHIP 33PF 5% 50V	
C9131	1-163-105-00	CERAMIC CHIP 33PF 5% 50V	
C9132	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C9400	1-115-340-11	CERAMIC CHIP 0.22MF 10% 25V	
C9500	1-104-664-11	ELECT 47MF 20% 25V	
C9502	1-104-664-11	ELECT 47MF 20% 25V	
C9503	1-126-964-11	ELECT 10MF 20% 50V	
C9504	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C9505	1-104-665-11	ELECT 100MF 20% 25V	
C9506	1-163-251-11	CERAMIC CHIP 100PF 5% 50V	
C9507	1-115-340-11	CERAMIC CHIP 0.22MF 10% 25V	
C9508	1-115-340-11	CERAMIC CHIP 0.22MF 10% 25V	
C9509	1-163-251-11	CERAMIC CHIP 100PF 5% 50V	
C9510	1-115-340-11	CERAMIC CHIP 0.22MF 10% 25V	
C9511	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C9512	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C9513	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C9514	1-163-235-11	CERAMIC CHIP 22PF 5% 50V	
C9515	1-163-235-11	CERAMIC CHIP 22PF 5% 50V	
C9516	1-163-251-11	CERAMIC CHIP 100PF 5% 50V	
C9517	1-163-021-91	CERAMIC CHIP 0.01MF 10% 50V	
C9518	1-115-340-11	CERAMIC CHIP 0.22MF 10% 25V	
C9519	1-126-964-11	ELECT 10MF 20% 50V	
C9520	1-163-251-11	CERAMIC CHIP 100PF 5% 50V	
		< CONNECTOR >	
CN9101	1-695-301-11	CONNECTOR, BOARD TO BOARD 40P	
		< DIODE >	
D9100	8-719-988-62	DIODE 1SS355	
D9101	8-719-988-62	DIODE 1SS355	
D9102	8-719-988-62	DIODE 1SS355	

REF. NO.	PART.NO	DESCRIPTION	REMARK
D9103	8-719-988-62	DIODE 1SS355	
D9104	8-719-056-83	DIODE UDZ-TE-17-6.8B	
D9105	8-719-914-43	DIODE DAN202K	
D9107	8-719-025-31	DIODE 02CZ5.6-TE85L	
D9108	8-719-914-44	DIODE DAP202K	
D9109	8-719-105-91	DIODE RD5.6M-B2	
D9110	8-719-914-43	DIODE DAN202K	
D9111	8-719-105-91	DIODE RD5.6M-B2	
		< FILTER >	
FL9101	1-236-071-11	ENCAPSULATED COMPONENT	
FL9500	1-236-071-11	ENCAPSULATED COMPONENT	
FL9501	1-236-071-11	ENCAPSULATED COMPONENT	
		< IC >	
IC9100	8-759-988-13	IC LM393PS	
IC9104	8-759-259-18	IC MB3793-42PNF	
IC9105	8-759-544-30	IC SAB-C161R1-LM	
IC9107	8-759-395-27	IC TC55257DFTL-70V	
IC9108	8-759-531-64	IC M24C32-BN6	
IC9109	8-759-544-32	IC M27C800-100K1	
IC9110	8-759-559-96	IC HEF4094BT	
IC9400	8-759-481-78	IC M29F040-120N1	
IC9500	8-759-034-47	IC MC74F00M-T2	
IC9501	8-759-483-52	IC HYB514400BJ-60	
IC9502	8-759-438-62	IC SDA5275	
		< COIL >	
L9400	1-412-029-11	INDUCTOR CHIP 10UH	
L9401	1-412-029-11	INDUCTOR CHIP 10UH	
		< TRANSISTOR >	
Q9100	8-729-620-06	TRANSISTOR 2SC3052-EF	
Q9101	8-729-620-06	TRANSISTOR 2SC3052-EF	
Q9102	8-729-216-22	TRANSISTOR 2SA1162-G	
Q9103	8-729-620-06	TRANSISTOR 2SC3052-EF	
Q9105	8-729-620-06	TRANSISTOR 2SC3052-EF	
Q9106	8-729-027-46	TRANSISTOR DTC114YKA-T146	
Q9107	8-729-027-46	TRANSISTOR DTC114YKA-T146	
Q9108	8-729-027-46	TRANSISTOR DTC114YKA-T146	
Q9109	8-729-027-46	TRANSISTOR DTC114YKA-T146	
Q9110	8-729-620-06	TRANSISTOR 2SC3052-EF	
Q9500	8-729-216-22	TRANSISTOR 2SA1162-G	
Q9501	8-729-216-22	TRANSISTOR 2SA1162-G	
Q9502	8-729-216-22	TRANSISTOR 2SA1162-G	
Q9503	1-801-806-11	TRANSISTOR DTC144EKA-T146	
Q9504	1-801-806-11	TRANSISTOR DTC144EKA-T146	
		< RESISTOR >	
R9100	1-216-073-00	RES,CHIP 10K 5% 1/10W	
R9101	1-216-033-00	RES,CHIP 220 5% 1/10W	
R9102	1-216-033-00	RES,CHIP 220 5% 1/10W	
R9103	1-216-025-91	RES,CHIP 100 5% 1/10W	
R9104	1-216-073-00	RES,CHIP 10K 5% 1/10W	
R9105	1-216-073-00	RES,CHIP 10K 5% 1/10W	
R9107	1-216-025-91	RES,CHIP 100 5% 1/10W	
R9108	1-216-025-91	RES,CHIP 100 5% 1/10W	
R9109	1-216-073-00	RES,CHIP 10K 5% 1/10W	
R9110	1-216-081-00	RES,CHIP 22K 5% 1/10W	
R9111	1-216-025-91	RES,CHIP 100 5% 1/10W	
R9112	1-216-025-91	RES,CHIP 100 5% 1/10W	
R9113	1-216-033-00	RES,CHIP 220 5% 1/10W	
R9114	1-216-083-00	RES,CHIP 27K 5% 1/10W	
R9115	1-216-081-00	RES,CHIP 22K 5% 1/10W	
R9116	1-216-073-00	RES,CHIP 10K 5% 1/10W	
R9117	1-216-073-00	RES,CHIP 10K 5% 1/10W	
R9119	1-216-073-00	RES,CHIP 10K 5% 1/10W	
R9120	1-216-073-00	RES,CHIP 10K 5% 1/10W	
R9121	1-216-017-91	RES,CHIP 47 5% 1/10W	
R9122	1-216-049-91	RES,CHIP 1K 5% 1/10W	
R9123	1-216-073-00	RES,CHIP 10K 5% 1/10W	
R9127	1-216-049-91	RES,CHIP 1K 5% 1/10W	
R9138	1-216-049-91	RES,CHIP 1K 5% 1/10W	
R9140	1-216-057-00	RES,CHIP 2.2K 5% 1/10W	
R9141	1-216-049-91	RES,CHIP 1K 5% 1/10W	
R9142	1-216-041-00	RES,CHIP 470 5% 1/10W	
R9143	1-216-049-91	RES,CHIP 1K 5% 1/10W	
R9144	1-216-057-00	RES,CHIP 2.2K 5% 1/10W	
R9145	1-216-049-91	RES,CHIP 1K 5% 1/10W	
R9146	1-216-049-91	RES,CHIP 1K 5% 1/10W	
R9147	1-216-049-91	RES,CHIP 1K 5% 1/10W	
R9148	1-216-073-00	RES,CHIP 10K 5% 1/10W	
R9149	1-216-025-91	RES,CHIP 100 5% 1/10W	
R9150	1-216-025-91	RES,CHIP 100 5% 1/10W	
R9151	1-216-025-91	RES,CHIP 100 5% 1/10W	
R9153	1-216-025-91	RES,CHIP 100 5% 1/10W	
R9159	1-216-069-00	RES,CHIP 6.8K 5% 1/10W	
R9161	1-216-069-00	RES,CHIP 6.8K 5% 1/10W	
R9162	1-216-069-00	RES,CHIP 6.8K 5% 1/10W	
R9164	1-216-069-00	RES,CHIP 6.8K 5% 1/10W	
R9166	1-216-073-00	RES,CHIP 10K 5% 1/10W	
R9168	1-216-069-00	RES,CHIP 6.8K 5% 1/10W	
R9169	1-216-069-00	RES,CHIP 6.8K 5% 1/10W	
R9172	1-216-069-00	RES,CHIP 6.8K 5% 1/10W	
R9173	1-216-295-91	SHORT 0	
R9174	1-216-025-91	RES,CHIP 100 5% 1/10W	
R9175	1-216-025-91	RES,CHIP 100 5% 1/10W	
R9176	1-216-025-91	RES,CHIP 100 5% 1/10W	
R9177	1-216-025-91	RES,CHIP 100 5% 1/10W	
R9178	1-216-025-91	RES,CHIP 100 5% 1/10W	
R9184	1-216-025-91	RES,CHIP 100 5% 1/10W	
R9185	1-216-025-91	RES,CHIP 100 5% 1/10W	

M C

REF. NO.	PART.NO	DESCRIPTION			REMARK
R9186	1-216-025-91	RES,CHIP	100	5%	1/10W
R9187	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R9188	1-216-025-91	RES,CHIP	100	5%	1/10W
R9189	1-216-025-91	RES,CHIP	100	5%	1/10W
R9190	1-216-025-91	RES,CHIP	100	5%	1/10W
R9191	1-216-025-91	RES,CHIP	100	5%	1/10W
R9192	1-216-025-91	RES,CHIP	100	5%	1/10W
R9193	1-216-097-91	RES,CHIP	100K	5%	1/10W
R9194	1-216-097-91	RES,CHIP	100K	5%	1/10W
R9195	1-216-097-91	RES,CHIP	100K	5%	1/10W
R9196	1-216-073-00	RES,CHIP	10K	5%	1/10W
R9197	1-216-073-00	RES,CHIP	10K	5%	1/10W
R9500	1-216-295-91	SHORT	0		
R9501	1-216-295-91	SHORT	0		
R9502	1-216-295-91	SHORT	0		
R9504	1-216-041-00	RES,CHIP	470	5%	1/10W
R9505	1-216-051-00	RES,CHIP	1.2K	5%	1/10W
R9506	1-216-073-00	RES,CHIP	10K	5%	1/10W
R9507	1-216-097-91	RES,CHIP	100K	5%	1/10W
R9508	1-216-017-91	RES,CHIP	47	5%	1/10W
R9509	1-216-049-91	RES,CHIP	1K	5%	1/10W
R9510	1-216-017-91	RES,CHIP	47	5%	1/10W
R9511	1-216-049-91	RES,CHIP	1K	5%	1/10W
R9512	1-216-017-91	RES,CHIP	47	5%	1/10W
R9513	1-216-017-91	RES,CHIP	47	5%	1/10W
R9514	1-216-017-91	RES,CHIP	47	5%	1/10W
R9515	1-216-295-91	SHORT	0		
R9516	1-216-295-91	SHORT	0		
R9517	1-216-295-91	SHORT	0		
R9518	1-216-049-91	RES,CHIP	1K	5%	1/10W
R9519	1-216-039-00	RES,CHIP	390	5%	1/10W
R9520	1-216-039-00	RES,CHIP	390	5%	1/10W
R9521	1-216-039-00	RES,CHIP	390	5%	1/10W
R9522	1-216-295-91	SHORT	0		
R9523	1-216-295-91	SHORT	0		
R9524	1-216-295-91	SHORT	0		
R9525	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R9526	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R9527	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R9528	1-216-025-91	RES,CHIP	100	5%	1/10W
R9529	1-216-025-91	RES,CHIP	100	5%	1/10W
R9530	1-216-025-91	RES,CHIP	100	5%	1/10W
R9531	1-216-295-91	SHORT	0		

< CRYSTAL >

X9101	1-781-107-21	RESONATOR	
X9500	1-760-551-21	VIBRATOR, CERAMIC	

REF. NO.	PART.NO	DESCRIPTION			REMARK
	*A-1638-123-A	C BOARD, COMPLETE (KV-29FS60)			
		**********			
	*A-1638-122-A	C BOARD, COMPLETE (KV-32FS60)			
		**********			
	1-671-108-11	PWB, C IC			
	4-382-854-11	SCREW (M3X10), P, SW (+)			

< CAPACITOR >

C5301	1-102-129-00	CERAMIC	0.01MF	10%	50V
C5302	1-128-528-11	ELECT	470MF	20%	16V
C5304	1-107-666-11	ELECT	1MF	20%	350V
C5305	1-136-207-11	FILM	0.047MF	10%	400V
C5306	1-102-157-00	CERAMIC	560PF	10%	500V
C5325	1-102-959-00	CERAMIC	22PF	5%	50V
C5326	1-102-157-00	CERAMIC	560PF	10%	500V
C5327	1-102-129-00	CERAMIC	0.01MF	10%	50V
C5328	1-128-528-11	ELECT	470MF	20%	16V
C5329	1-107-666-11	ELECT	1MF	20%	350V
C5330	1-136-207-11	FILM	0.047MF	10%	400V
C5350	1-107-907-11	ELECT	22MF	20%	50V
C5352	1-102-157-00	CERAMIC	560PF	10%	500V
C5353	1-102-129-00	CERAMIC	0.01MF	10%	50V
C5354	1-128-528-11	ELECT	470MF	20%	16V
C5355	1-107-666-11	ELECT	1MF	20%	350V
C5356	1-136-207-11	FILM	0.047MF	10%	400V
C5375	1-107-902-11	ELECT	1MF	20%	50V
C5377	1-162-115-00	CERAMIC	330PF	10%	2KV
C5378	1-162-116-00	CERAMIC	680PF	10%	2KV
C5379	1-162-116-00	CERAMIC	680PF	10%	2KV
C5380	1-107-652-11	ELECT	10MF	20%	250V
C5381	1-162-116-00	CERAMIC	680PF	10%	2KV
C5382	1-162-114-00	CERAMIC	0.0047MF		2KV

< CONNECTOR >

CN5400	1-564-511-11	PLUG, CONNECTOR 8P
CN5511	1-695-915-11	TAB (CONTACT)
CN5522	1-695-915-11	TAB (CONTACT)
CN5600	1-508-766-00	PIN, CONNECTOR (5MM PITCH) 4P

< DIODE >

D5300	8-719-911-19	DIODE 1SS119-25
D5302	8-719-901-83	DIODE 1SS83
D5325	8-719-911-19	DIODE 1SS119-25
D5326	8-719-923-60	DIODE MTZJ-T-77-9.1A
D5327	8-719-901-83	DIODE 1SS83
D5350	8-719-911-19	DIODE 1SS119-25
D5351	8-719-991-33	DIODE 1SS133T-77
D5353	8-719-901-83	DIODE 1SS83
D5375	8-719-991-33	DIODE 1SS133T-77
D5376	8-719-991-33	DIODE 1SS133T-77
D5377	8-719-908-03	DIODE GP08D

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

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REF. NO.	PART.NO	DESCRIPTION	REMARK
D5378	8-719-921-88	DIODE MTZJ-13B	
D5379	8-719-982-96	DIODE MTZJ-T-77-2.2A	
D5380	8-719-982-96	DIODE MTZJ-T-77-2.2A	
D5381	8-719-031-34	DIODE RGP02-20EG23	
		< IC >	
IC5300	8-759-360-83	IC TDA6111Q/N4	
IC5325	8-759-360-83	IC TDA6111Q/N4	
IC5350	8-759-360-83	IC TDA6111Q/N4	
		< SOCKET >	
J5375	⚠ 1-540-071-22	SOCKET, CRT	
		< COIL >	
L5300	1-408-599-31	INDUCTOR 4.7UH	
L5325	1-408-599-31	INDUCTOR 4.7UH	
L5350	1-408-599-31	INDUCTOR 4.7UH	
L5375	1-410-671-31	INDUCTOR 47UH	
L5376	1-412-525-31	INDUCTOR 10UH	
L5377	1-414-183-41	INDUCTOR 10UH	
		< TRANSISTOR >	
Q5300	8-729-255-12	TRANSISTOR 2SC2551-O	
Q5325	8-729-255-12	TRANSISTOR 2SC2551-O	
Q5350	8-729-029-56	TRANSISTOR DTA144ESA	
Q5351	8-729-255-12	TRANSISTOR 2SC2551-O	
Q5375	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q5376	8-729-026-41	TRANSISTOR 2SA933AS-QRT	
		< RESISTOR >	
R5300	1-249-417-11	CARBON 1K 5% 1/4W	
R5301	1-249-415-11	CARBON 680 5% 1/4W	
R5302	1-249-408-11	CARBON 180 5% 1/4W	
R5303	1-249-417-11	CARBON 1K 5% 1/4W	
R5304	1-202-565-00	SOLID 470 20% 1/2W	
R5305	1-215-926-00	METAL OXIDE 33K 5% 3W	F
R5306	1-249-424-11	CARBON 3.9K 5% 1/4W	
R5307	1-247-863-91	CARBON 22K 5% 1/4W	
R5325	1-249-417-11	CARBON 1K 5% 1/4W	
R5326	1-249-415-11	CARBON 680 5% 1/4W	
R5327	1-249-408-11	CARBON 180 5% 1/4W	
R5328	1-249-417-11	CARBON 1K 5% 1/4W	
R5329	1-202-565-00	SOLID 470 20% 1/2W	
R5330	1-215-926-00	METAL OXIDE 33K 5% 3W	F
R5331	1-249-424-11	CARBON 3.9K 5% 1/4W	
R5332	1-247-863-91	CARBON 22K 5% 1/4W	
R5350	1-249-417-11	CARBON 1K 5% 1/4W	
R5351	1-249-415-11	CARBON 680 5% 1/4W	
R5352	1-249-416-11	CARBON 820 5% 1/4W	
R5353	1-249-421-11	CARBON 2.2K 5% 1/4W	
R5354	1-249-418-11	CARBON 1.2K 5% 1/4W	
R5355	1-249-408-11	CARBON 180 5% 1/4W	
R5356	1-249-417-11	CARBON 1K 5% 1/4W	
R5357	1-202-565-00	SOLID 470 20% 1/2W	
R5358	1-215-926-00	METAL OXIDE 33K 5% 3W	F
R5359	1-247-863-91	CARBON 22K 5% 1/4W	
R5360	1-249-424-11	CARBON 3.9K 5% 1/4W	
R5361	1-249-425-11	CARBON 4.7K 5% 1/4W	
R5375	1-249-435-11	CARBON 33K 5% 1/4W	
R5376	1-249-429-11	CARBON 10K 5% 1/4W	
R5377	1-249-430-11	CARBON 12K 5% 1/4W	
R5378	1-249-429-11	CARBON 10K 5% 1/4W	
R5379	1-249-438-11	CARBON 56K 5% 1/4W	
R5380	1-247-863-91	CARBON 22K 5% 1/4W	
R5381	1-249-420-11	CARBON 1.8K 5% 1/4W	
R5382	1-202-549-00	SOLID 100 20% 1/2W	
R5383	1-216-392-11	METAL OXIDE 6.8 5% 3W	F
R5384	1-216-392-11	METAL OXIDE 6.8 5% 3W	F
R5385	1-202-549-00	SOLID 100 20% 1/2W	
R5386	1-202-884-11	SOLID 820K 20% 1/2W	
R5387	1-202-884-11	SOLID 820K 20% 1/2W	
R5388	1-215-911-11	METAL OXIDE 100 5% 3W	F
R5389	1-249-417-11	CARBON 1K 5% 1/4W	F
		< VARIABLE RESISTOR >	
RV5375	1-241-656-21	RES, ADJ, METAL FILM 110M	
RV5376	1-230-641-11	RES, ADJ, METAL GLAZE 2.2M	
		**********	
	*A-1640-319-A	E BOARD, COMPLETE (KV-29FS60)	
		**********	
	*A-1640-324-A	E BOARD, COMPLETE (KV-32FS60)	
		**********	
		< CAPACITOR >	
C4316	1-104-664-11	ELECT 47MF 20% 25V	
C4317	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C4318	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C4319	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C4320	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C4321	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C4322	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C4324	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C4325	1-163-093-00	CERAMIC CHIP 10PF 5% 50V	
C4329	1-126-963-11	ELECT 4.7MF 20% 50V	
C4330	1-136-165-00	FILM 0.1MF 5% 50V	
C4331	1-126-959-11	ELECT 0.47MF 20% 50V	
C4332	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C4333	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C4334	1-126-967-11	ELECT 47MF 20% 50V	
C4336	1-126-967-11	ELECT 47MF 20% 50V	

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REF. NO.	PART.NO	DESCRIPTION	REMARK
C4338	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C4340	1-126-967-11	ELECT 47MF 20% 50V	
C4342	1-163-021-91	CERAMIC CHIP 0.01MF 10% 50V	
C4343	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C4344	1-163-809-11	CERAMIC CHIP 0.047MF 10% 25V	
C4345	1-126-967-11	ELECT 47MF 20% 50V	
C4346	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C4347	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C4348	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C4349	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C4350	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C4351	1-163-009-11	CERAMIC CHIP 0.001MF 10% 50V	
C4352	1-126-967-11	ELECT 47MF 20% 50V	
C4353	1-107-823-11	CERAMIC CHIP 0.47MF 10% 16V	
C4354	1-107-823-11	CERAMIC CHIP 0.47MF 10% 16V	
C4355	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C4356	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C4357	1-164-004-11	CERAMIC CHIP 0.1MF 10% 50V	(KV-32FS60A/32FS60B/32FS60D/32FS60E)
C4358	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C4359	1-164-161-11	CERAMIC CHIP 0.0022MF 10% 50V	
C4360	1-126-963-11	ELECT 4.7MF 20% 50V	
C4362	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C4363	1-126-967-11	ELECT 47MF 20% 50V	
C4364	1-126-967-11	ELECT 47MF 20% 50V	
C4366	1-163-021-91	CERAMIC CHIP 0.01MF 10% 50V	
C4367	1-163-809-11	CERAMIC CHIP 0.047MF 10% 25V	(KV-29FS60A/29FS60B/29FS60D/29FS60E/ 29FS60K/29FS60R/29FS60U)
	1-104-760-11	CERAMIC CHIP 0.047MF 10% 50V	(KV-32FS60A/32FS60B/32FS60D/32FS60E)
C4369	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C4370	1-126-967-11	ELECT 47MF 20% 50V	
C4371	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C4377	1-126-960-11	ELECT 1MF 20% 50V	
C4379	1-163-243-11	CERAMIC CHIP 47PF 5% 50V	(KV-32FS60A/32FS60B/32FS60D/32FS60E)
C4380	1-163-005-11	CERAMIC CHIP 470PF 10% 50V	(KV-32FS60A/32FS60B/32FS60D/32FS60E)
C4381	1-163-249-11	CERAMIC CHIP 82PF 5% 50V	
C4518	1-162-638-11	CERAMIC CHIP 1MF 16V	
		< CONNECTOR >	
CN4101	1-695-301-11	CONNECTOR, BOARD TO BOARD 40P	
CN4500	1-564-511-11	PLUG, CONNECTOR 8P	
CN4502*	1-568-878-51	PIN, CONNECTOR 3P	
		< DIODE >	
D4304	8-719-923-60	DIODE MTZJ-T-77-9.1A	
D4305	8-719-923-60	DIODE MTZJ-T-77-9.1A	
D4311	8-719-914-43	DIODE DAN202K	
D4312	8-719-914-43	DIODE DAN202K	
D4313	8-719-401-63	DIODE MA3062M-TX	
		< FERRITE BEAD >	
FB4387	1-216-295-91	SHORT 0	
FB4388	1-216-295-91	SHORT 0	
FB4389	1-216-295-91	SHORT 0	
		< IC >	
IC4301	8-752-086-23	IC CXA2100Q-TL	
		< COIL >	
L4301	1-414-183-41	INDUCTOR 10UH	
L4302	1-414-183-41	INDUCTOR 10UH	
L4303	1-414-183-41	INDUCTOR 10UH	
L4304	1-414-183-41	INDUCTOR 10UH	
L4305	1-414-183-41	INDUCTOR 10UH	
L4306	1-414-183-41	INDUCTOR 10UH	
L4308	1-408-609-41	INDUCTOR 33UH	
L4309	1-408-609-41	INDUCTOR 33UH	
		< TRANSISTOR >	
Q4304	8-729-216-22	TRANSISTOR 2SA1162-G	
Q4307	8-729-216-22	TRANSISTOR 2SA1162-G	
Q4308	8-729-216-22	TRANSISTOR 2SA1162-G	
Q4309	8-729-216-22	TRANSISTOR 2SA1162-G	
Q4310	8-729-216-22	TRANSISTOR 2SA1162-G	
Q4315	1-801-806-11	TRANSISTOR DTC144EKA-T146	
Q4316	8-729-620-06	TRANSISTOR 2SC3052-EF	
Q4317	8-729-900-53	TRANSISTOR DTC114EK	
Q4318	8-729-902-21	TRANSISTOR 2SA1037K-T-146-R	(KV-32FS60A/32FS60B/32FS60D/32FS60E)
		< RESISTOR >	
R4301	1-216-025-91	RES,CHIP 100 5% 1/10W	
R4302	1-216-025-91	RES,CHIP 100 5% 1/10W	
R4303	1-216-025-91	RES,CHIP 100 5% 1/10W	
R4304	1-216-025-91	RES,CHIP 100 5% 1/10W	
R4305	1-216-025-91	RES,CHIP 100 5% 1/10W	
R4306	1-216-025-91	RES,CHIP 100 5% 1/10W	
R4313	1-216-065-91	RES,CHIP 4.7K 5% 1/10W	
R4314	1-216-057-00	RES,CHIP 2.2K 5% 1/10W	
R4331	1-216-073-00	RES,CHIP 10K 5% 1/10W	
R4332	1-216-073-00	RES,CHIP 10K 5% 1/10W	
R4333	1-216-073-00	RES,CHIP 10K 5% 1/10W	
R4334	1-216-025-91	RES,CHIP 100 5% 1/10W	
R4335	1-216-025-91	RES,CHIP 100 5% 1/10W	
R4336	1-216-025-91	RES,CHIP 100 5% 1/10W	
R4337	1-216-025-91	RES,CHIP 100 5% 1/10W	
R4339	1-216-049-91	RES,CHIP 1K 5% 1/10W	
R4340	1-216-111-00	RES,CHIP 390K 5% 1/10W	
R4341	1-216-295-91	SHORT 0	

REF. NO.	PART.NO	DESCRIPTION	REMARK
R4343	1-216-025-91	RES,CHIP 100 5% 1/10W	
R4344	1-216-025-91	RES,CHIP 100 5% 1/10W	
R4345	1-216-677-11	METAL CHIP 12K 0.50% 1/10W	
R4346	1-216-683-11	METAL CHIP 22K 0.50% 1/10W	
R4347	1-216-025-91	RES,CHIP 100 5% 1/10W	
R4348	1-216-025-91	RES,CHIP 100 5% 1/10W	
R4350	1-216-025-91	RES,CHIP 100 5% 1/10W	
R4354	1-216-675-11	METAL CHIP 10K 0.50% 1/10W	
R4358	1-216-071-00	RES,CHIP 8.2K 5% 1/10W	
R4359	1-216-041-00	RES,CHIP 470 5% 1/10W	
R4360	1-216-057-00	RES,CHIP 2.2K 5% 1/10W	
R4361	1-216-133-00	RES,CHIP 3.3M 5% 1/10W	
R4363	1-216-025-91	RES,CHIP 100 5% 1/10W	
R4365	1-216-025-91	RES,CHIP 100 5% 1/10W	
R4366	1-216-025-91	RES,CHIP 100 5% 1/10W	
R4367	1-216-025-91	RES,CHIP 100 5% 1/10W	
R4370	1-216-077-00	RES,CHIP 15K 5% 1/10W	
R4371	1-216-069-00	RES,CHIP 6.8K 5% 1/10W	
R4372	1-216-049-91	RES,CHIP 1K 5% 1/10W	
R4373	1-216-073-00	RES,CHIP 10K 5% 1/10W	
R4374	1-216-049-91	RES,CHIP 1K 5% 1/10W	
R4375	1-216-049-91	RES,CHIP 1K 5% 1/10W	
R4376	1-216-049-91	RES,CHIP 1K 5% 1/10W	
R4377	1-216-049-91	RES,CHIP 1K 5% 1/10W	
R4378	1-216-101-00	RES,CHIP 150K 5% 1/10W	
R4380	1-216-073-00	RES,CHIP 10K 5% 1/10W	
R4381	1-216-125-00	RES,CHIP 1.5M 5% 1/10W	
		(KV-29FS60A/29FS60B/29FS60D/29FS60E/ 29FS60K/29FS60R/29FS60U)	
	1-216-127-11	RES,CHIP 1.8M 5% 1/10W	
		(KV-32FS60A/32FS60B/32FS60D/32FS60E)	
R4382	1-216-073-00	RES,CHIP 10K 5% 1/10W	
R4383	1-216-089-91	RES,CHIP 47K 5% 1/10W	
		(KV-29FS60A/29FS60B/29FS60D/29FS60E/ 29FS60K/29FS60R/29FS60U)	
	1-216-079-00	RES,CHIP 18K 5% 1/10W	
		(KV-32FS60A/32FS60B/32FS60D/32FS60E)	
R4384	1-216-025-91	RES,CHIP 100 5% 1/10W	
R4387	1-216-025-91	RES,CHIP 100 5% 1/10W	
R4388	1-216-025-91	RES,CHIP 100 5% 1/10W	
R4389	1-216-025-91	RES,CHIP 100 5% 1/10W	
R4395	1-216-295-91	SHORT 0	
R4396	1-216-295-91	SHORT 0	
R4398	1-216-025-91	RES,CHIP 100 5% 1/10W	
R4401	1-216-107-00	RES,CHIP 270K 5% 1/10W	
		(KV-29FS60A/29FS60B/29FS60D/29FS60E/ 29FS60K/29FS60R/29FS60U)	
	1-216-099-00	RES,CHIP 120K 5% 1/10W	
		(KV-32FS60A/32FS60B/32FS60D/32FS60E)	
R4402	1-216-133-91	RES,CHIP 56K 5% 1/10W	
		(KV-32FS60A/32FS60B/32FS60D/32FS60E)	
R4403	1-216-073-91	RES,CHIP 10K 5% 1/10W	
		(KV-32FS60A/32FS60B/32FS60D/32FS60E)	
R4404	1-216-073-91	RES,CHIP 10K 5% 1/10W	
		(KV-32FS60A/32FS60B/32FS60D/32FS60E)	
R4405	1-216-087-91	RES,CHIP 39K 5% 1/10W	
		(KV-32FS60A/32FS60B/32FS60D/32FS60E)	
R4406	1-216-105-91	RES,CHIP 220K 5% 1/10W	
		(KV-32FS60A/32FS60B/32FS60D/32FS60E)	
R4407	1-216-091-91	RES,CHIP 56K 5% 1/10W	
		(KV-32FS60A/32FS60B/32FS60D/32FS60E)	
R4504	1-216-295-91	SHORT 0	
R4505	1-216-295-91	SHORT 0	
R4506	1-216-295-91	SHORT 0	
R4507	1-216-129-00	RES,CHIP 2.2M 5% 1/10W	
R4518	1-216-025-91	RES,CHIP 100 5% 1/10W	
R4519	1-216-025-91	RES,CHIP 100 5% 1/10W	
R4520	1-216-295-91	SHORT 0	
R4521	1-216-295-91	SHORT 0	
R4522	1-216-295-91	SHORT 0	
R4523	1-216-295-91	SHORT 0	
		< CRYSTAL >	
X4300	1-767-127-11	VIBRATOR, CERAMIC	
**********			
	*A-1640-320-A	D1 BOARD, COMPLETE (KV-29FS60)	
		**********	
	*A-1640-325-A	D1 BOARD, COMPLETE (KV-32FS60)	
		**********	
	4-382-854-11	SCREW (M3X10), P, SW (+)	
		< CAPACITOR >	
C6100	1-136-165-00	FILM 0.1MF 5% 50V	
C6101	1-136-165-00	FILM 0.1MF 5% 50V	
C6102	1-136-165-00	FILM 0.1MF 5% 50V	
C6103	1-163-205-00	CERAMIC CHIP 0.001MF 5% 50V	
C6104	1-163-205-00	CERAMIC CHIP 0.001MF 5% 50V	
C6105	1-126-967-11	ELECT 47MF 20% 50V	
C6106	1-163-133-00	CERAMIC CHIP 470PF 5% 50V	
C6108	1-163-021-91	CERAMIC CHIP 0.01MF 10% 50V	
C6109	1-126-967-11	ELECT 47MF 20% 50V	
C6110	1-126-967-11	ELECT 47MF 20% 50V	
C6111	1-126-967-11	ELECT 47MF 20% 50V	
		(KV-32FS60A/32FS60B/32FS60D/32FS60E)	
C6112	1-163-037-11	CERAMIC CHIP 0.022MF 10% 50V	
C6113	1-163-021-91	CERAMIC CHIP 0.01MF 10% 50V	
C6114	1-126-964-11	ELECT 10MF 20% 50V	
C6115	1-163-005-11	CERAMIC CHIP 470PF 10% 50V	
C6116	1-163-275-11	CERAMIC CHIP 0.001MF 5% 50V	
C6117	1-163-275-11	CERAMIC CHIP 0.001MF 5% 50V	
C6119	1-163-021-91	CERAMIC CHIP 0.01MF 10% 50V	

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REF. NO.	PART.NO	DESCRIPTION	REMARK
C6121	1-126-964-11	ELECT 10MF 20% 50V	
C6122	1-126-967-11	ELECT 47MF 20% 50V	
C6125	1-163-017-00	CERAMIC CHIP 0.0047MF 10% 50V	
C6126	1-163-809-11	CERAMIC CHIP 0.047MF 10% 25V	
C6127	1-163-021-91	CERAMIC CHIP 0.01MF 10% 50V	
C6128	1-163-017-00	CERAMIC CHIP 0.0047MF 10% 50V	
C6129	1-115-339-11	CERAMIC CHIP 0.1MF 10% 50V	(KV-29FS60A/29FS60B/29FS60D/29FS60E/ 29FS60K/29FS60R/29FS60U)
	1-164-336-11	CERAMIC CHIP 0.33MF 10% 50V	(KV-32FS60A/32FS60B/32FS60D/32FS60E)
C6130	1-163-259-91	CERAMIC CHIP 220PF 5% 50V	(KV-29FS60A/29FS60B/29FS60D/29FS60E/ 29FS60K/29FS60R/29FS60U)
C6131	1-126-964-11	ELECT 10MF 20% 50V	
C6132	1-163-259-91	CERAMIC CHIP 220PF 5% 50V	
C6199	1-163-229-11	CERAMIC CHIP 12PF 5% 50V	
C6207	1-126-967-11	ELECT 47MF 20% 50V	
C6208	1-126-967-11	ELECT 47MF 20% 50V	
C6209	1-163-133-00	CERAMIC CHIP 470PF 5% 50V	
C6210	1-163-009-11	CERAMIC CHIP 0.001MF 10% 50V	
C6250	1-104-664-11	ELECT 47MF 20% 16V	
C6253	1-115-339-11	CERAMIC CHIP 0.1MF 10% 50V	
C6254	1-136-177-00	FILM 1MF 5% 50V	
C6255	1-136-177-00	FILM 1MF 5% 50V	
C6256	1-163-117-00	CERAMIC CHIP 100PF 5% 50V	
C6257	1-115-339-11	CERAMIC CHIP 0.1MF 10% 50V	
C6258	1-163-127-00	CERAMIC CHIP 270PF 5% 50V	
C6259	1-110-501-11	CERAMIC CHIP 0.33MF 10% 16V	
C6260	1-104-664-11	ELECT 47MF 20% 16V	
C6261	1-115-339-11	CERAMIC CHIP 0.1MF 10% 50V	
C6262	1-136-165-00	FILM 0.1MF 5% 50V	
C6263	1-163-109-00	CERAMIC CHIP 47PF 5% 50V	
C6264	1-126-964-11	ELECT 10MF 20% 50V	
C6306	1-126-964-11	ELECT 10MF 20% 50V	
C6307	1-163-021-91	CERAMIC CHIP 0.01MF 10% 50V	
C6350	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C6351	1-126-967-11	ELECT 47MF 20% 50V	
C6353	1-115-339-11	CERAMIC CHIP 0.1MF 10% 50V	
C6354	1-136-159-00	FILM 0.033MF 5% 50V	
C6355	1-163-251-11	CERAMIC CHIP 100PF 5% 50V	
C6356	1-163-809-11	CERAMIC CHIP 0.047MF 10% 25V	
C6357	1-136-165-00	FILM 0.1MF 5% 50V	
C6358	1-104-329-11	CERAMIC CHIP 0.1MF 10% 50V	
C6359	1-104-329-11	CERAMIC CHIP 0.1MF 10% 50V	
C6360	1-107-714-11	ELECT 10MF 20% 50V	
C6361	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C6362	1-164-182-11	CERAMIC CHIP 0.0033MF 10% 50V	
C6363	1-104-665-11	ELECT 100MF 20% 25V	
C6364	1-137-493-11	FILM 0.0047MF 5% 630V	
C6365	1-163-809-11	CERAMIC CHIP 0.047MF 10% 25V	
C6367	1-104-329-11	CERAMIC CHIP 0.1MF 10% 50V	
C6368	1-163-021-91	CERAMIC CHIP 0.01MF 10% 50V	
C6370	1-137-493-11	FILM 0.0047MF 5% 630V	
C6371	1-137-493-11	FILM 0.0047MF 5% 630V	(KV-32FS60A/32FS60B/32FS60D/32FS60E)
C6373	1-136-153-00	FILM 0.01MF 5% 50V	
C6374	1-137-499-11	FILM 0.015MF 5% 630V	
C6375	1-102-110-00	CERAMIC 220PF 10% 50V	
C6376	1-104-664-11	ELECT 47MF 20% 16V	
C6377	1-128-551-11	ELECT 22MF 20% 25V	
C6378	1-115-339-11	CERAMIC CHIP 0.1MF 10% 50V	
C6380	1-136-165-00	FILM 0.1MF 5% 50V	
C6381	1-126-960-11	ELECT 1MF 20% 50V	
C6385	1-104-664-11	ELECT 47MF 20% 25V	
C6386	1-104-664-11	ELECT 47MF 20% 25V	
C6388	1-126-964-11	ELECT 10MF 20% 50V	
C6389	1-126-964-11	ELECT 10MF 20% 50V	
C6392	1-104-664-11	ELECT 47MF 20% 25V	
C6401	1-126-964-11	ELECT 10MF 20% 50V	
C6402	1-107-714-11	ELECT 10MF 20% 50V	
C6407	1-136-161-00	FILM 0.047MF 5% 50V	
C6408	1-136-161-00	FILM 0.047MF 5% 50V	
C6409	1-126-964-11	ELECT 10MF 20% 50V	
		< CONNECTOR >	
CN6502*	1-568-881-51	PIN, CONNECTOR 6P	
CN6601	1-695-302-11	CONNECTOR, BOARD TO BOARD 50P	
CN6622*	1-568-878-51	PIN, CONNECTOR 3P	
CN6633*	1-568-878-51	PIN, CONNECTOR 3P	
		< DIODE >	
D6100	8-719-914-43	DIODE DAN202K-T-146	(KV-32FS60A/32FS60B/32FS60D/32FS60E)
D6101	8-719-921-40	DIODE MTZJ-T-77-4-7B	(KV-32FS60A/32FS60B/32FS60D/32FS60E)
D6102	8-719-914-43	DIODE DAN202K	
D6104	8-719-914-43	DIODE DAN202K	
D6105	8-719-914-43	DIODE DAN202K	
D6106	8-719-914-43	DIODE DAN202K	
D6108	8-719-921-40	DIODE MTZJ-4.7C	
D6127	8-719-914-43	DIODE DAN202K	
D6128	8-719-914-43	DIODE DAN202K	
D6129	8-719-914-43	DIODE DAN202K	
D6198	1-535-303-00	LEAD, JUMPER (5.0MM)	
D6253	8-719-911-19	DIODE 1SS119-25	
D6254	1-535-303-00	LEAD, JUMPER (5.0MM)	
D6350	8-719-914-43	DIODE DAN202K	
D6351	8-719-914-43	DIODE DAN202K	
D6352	8-719-914-43	DIODE DAN202K	
D6353	8-719-987-87	DIODE ERA85-009	
D6354	8-719-914-43	DIODE DAN202K	

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

D1

REF. NO.	PART.NO	DESCRIPTION	REMARK
D6355	8-719-914-43	DIODE DAN202K	
		(KV-32FS60A/32FS60B/32FS60D/32FS60E)	
	1-216-667-11	METAL CHIP 4.7K 0.50% 1/10W	
D6358	8-719-914-43	DIODE DAN202K	
D6359	8-719-302-43	DIODE EL1Z	
D6401	8-719-914-43	DIODE DAN202K	
D6402	8-719-982-03	DIODE MTZJ-3.6A	
D6403	8-719-921-63	DIODE MTZJ-7.5B	
D6404	8-719-914-43	DIODE DAN202K	
D6405	8-719-921-63	DIODE MTZJ-7.5B	
		< IC >	
IC6100	8-759-450-95	IC LM393N	
IC6101	8-759-450-95	IC LM393N	
IC6102	8-759-701-50	IC NJM3404AD	
IC6103	8-759-450-95	IC LM393N	
IC6250	8-759-478-66	IC CXA8070P	
IC6251	8-759-903-16	IC LM318P	
IC6302	8-752-072-94	IC CXA1875AM-T4	
IC6350	8-759-008-70	IC LM358N	
IC6351	8-759-450-95	IC LM393N	
IC6352	8-759-450-95	IC LM393N	
IC6353	8-759-231-53	IC TA7805S	
IC6354	8-759-325-48	IC CA0005AD	
IC6355	8-759-008-70	IC LM358N	
IC6356	8-759-822-38	IC LA6510	
		< FILTER >	
LF6350	1-406-989-21	INDUCTOR 0UH	
LF6351	1-406-989-21	INDUCTOR 0UH	
		< IC LINK >	
PS6376 ⚠	1-532-637-00	LINK, IC 1A (ICP-N25)	
		< TRANSISTOR >	
Q6100	8-729-620-06	TRANSISTOR 2SC3052-EF	
Q6101	8-729-620-06	TRANSISTOR 2SC3052-EF	
Q6102	8-729-620-06	TRANSISTOR 2SC3052-EF	
Q6103	8-729-620-06	TRANSISTOR 2SC3052-EF	
Q6104	8-729-620-06	TRANSISTOR 2SC3052-EF	
Q6105	8-729-620-06	TRANSISTOR 2SC3052-EF	
Q6106	8-729-620-06	TRANSISTOR 2SC3052-EF	
Q6107	8-729-620-06	TRANSISTOR 2SC3052-EF	
Q6108	8-729-216-22	TRANSISTOR 2SA1162-G	
Q6110	8-729-216-22	TRANSISTOR 2SA1162-G	
Q6112	8-729-620-06	TRANSISTOR 2SC3052-EF	
Q6113	8-729-620-06	TRANSISTOR 2SC3052-EF	
Q6118	8-729-620-06	TRANSISTOR 2SC3052-EF	
Q6119	8-729-216-22	TRANSISTOR 2SA1162-G	
Q6120	8-729-216-22	TRANSISTOR 2SA1162-G	
Q6122	8-729-216-22	TRANSISTOR 2SA1162-G	
Q6123	8-729-216-22	TRANSISTOR 2SA1162-G	
Q6125	8-729-620-06	TRANSISTOR 2SC3052-EF	
Q6126	8-729-216-22	TRANSISTOR 2SA1162-G	
Q6127	8-729-216-22	TRANSISTOR 2SA1162-G	
Q6128	8-729-620-06	TRANSISTOR 2SC3052-EF	
Q6129	8-729-216-22	TRANSISTOR 2SA1162-G	
Q6130	8-729-216-22	TRANSISTOR 2SA1162-G	
Q6131	8-729-620-06	TRANSISTOR 2SC3052-EF	
Q6201	8-729-620-06	TRANSISTOR 2SC3052-EF	
Q6202	8-729-620-06	TRANSISTOR 2SC3052-EF	
Q6250	8-729-620-06	TRANSISTOR 2SC3052-EF	
Q6251	8-729-620-06	TRANSISTOR 2SC3052-EF	
Q6252	8-729-216-22	TRANSISTOR 2SA1162-G	
Q6253	8-729-017-06	TRANSISTOR 2SC4793	
Q6254	8-729-017-05	TRANSISTOR 2SA1837	
Q6350	8-729-620-06	TRANSISTOR 2SC3052-EF	
Q6351	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q6352	8-729-140-97	TRANSISTOR 2SB734-34	
Q6353	8-729-140-97	TRANSISTOR 2SB734-34	
Q6354	8-729-620-06	TRANSISTOR 2SC3052-EF	
Q6356	8-729-620-06	TRANSISTOR 2SC3052-EF	
Q6358	8-729-038-83	TRANSISTOR 2SK2251-01-F19	
Q6401	1-801-806-11	TRANSISTOR DTC144EKA-T146	
Q6402	1-801-806-11	TRANSISTOR DTC144EKA-T146	
Q6403	8-729-620-06	TRANSISTOR 2SC3052-EF	
Q6404	8-729-216-22	TRANSISTOR 2SA1162-G	
Q6405	8-729-216-22	TRANSISTOR 2SA1162-G	
Q6455	8-729-620-06	TRANSISTOR 2SC3052-EF	
Q6465	8-729-620-06	TRANSISTOR 2SC3052-EF	
		< RESISTOR >	
R6100	1-216-033-00	RES,CHIP 220 5% 1/10W	
R6101	1-216-033-00	RES,CHIP 220 5% 1/10W	
R6102	1-216-057-00	RES,CHIP 2.2K 5% 1/10W	
R6103	1-216-057-00	RES,CHIP 2.2K 5% 1/10W	
R6104	1-216-057-00	RES,CHIP 2.2K 5% 1/10W	
R6105	1-216-049-91	RES,CHIP 1K 5% 1/10W	
R6106	1-216-057-00	RES,CHIP 2.2K 5% 1/10W	
R6107	1-216-659-11	METAL CHIP 2.2K 0.50% 1/10W	
		(KV-29FS60A/29FS60B/29FS60D/29FS60E/ 29FS60K/29FS60R/29FS60U)	
	1-216-657-11	METAL CHIP 1.8K 0.50% 1/10W	
		(KV-32FS60A/32FS60B/32FS60D/32FS60E)	
R6108	1-216-659-11	METAL CHIP 2.2K 0.50% 1/10W	
		(KV-29FS60A/29FS60B/29FS60D/29FS60E/ 29FS60K/29FS60R/29FS60U)	
	1-216-657-11	METAL CHIP 1.8K 0.50% 1/10W	
		(KV-32FS60A/32FS60B/32FS60D/32FS60E)	
R6109	1-216-683-11	METAL CHIP 22K 0.50% 1/10W	

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REF. NO.	PART.NO	DESCRIPTION	REMARK
R6110	1-216-679-11	METAL CHIP 15K 0.50% 1/10W	
			(KV-29FS60A/29FS60B/29FS60D/29FS60E/ 29FS60K/29FS60R/29FS60U)
	1-216-683-11	METAL CHIP 22K 0.50% 1/10W	
			(KV-32FS60A/32FS60B/32FS60D/32FS60E)
R6111	1-216-057-00	RES,CHIP 2.2K 5% 1/10W	
R6112	1-216-057-00	RES,CHIP 2.2K 5% 1/10W	
R6113	1-216-073-00	RES,CHIP 10K 5% 1/10W	
R6114	1-216-073-00	RES,CHIP 10K 5% 1/10W	
R6115	1-216-089-91	RES,CHIP 47K 5% 1/10W	
R6116	1-216-089-91	RES,CHIP 47K 5% 1/10W	
R6117	1-216-073-00	RES,CHIP 10K 5% 1/10W	
R6118	1-216-073-00	RES,CHIP 10K 5% 1/10W	
R6119	1-216-073-00	RES,CHIP 10K 5% 1/10W	
R6120	1-216-057-00	RES,CHIP 2.2K 5% 1/10W	
R6121	1-216-057-00	RES,CHIP 2.2K 5% 1/10W	
R6122	1-216-057-00	RES,CHIP 2.2K 5% 1/10W	
R6123	1-216-089-91	RES,CHIP 47K 5% 1/10W	
R6124	1-216-089-91	RES,CHIP 47K 5% 1/10W	
R6125	1-216-057-00	RES,CHIP 2.2K 5% 1/10W	
R6126	1-216-037-00	RES,CHIP 330 5% 1/10W	
R6127	1-216-663-11	RES,CHIP 3.3K 0.50% 1/10W	
			(KV-29FS60A/29FS60B/29FS60D/29FS60E/ 29FS60K/29FS60R/29FS60U)
	1-216-659-11	METAL CHIP 2.2K 0.50% 1/10W	
			(KV-32FS60A/32FS60B/32FS60D/32FS60E)
R6128	1-216-691-11	METAL CHIP 47K 0.50% 1/10W	
R6129	1-216-691-11	METAL CHIP 47K 0.50% 1/10W	
			(KV-32FS60A/32FS60B/32FS60D/32FS60E)
R6130	1-218-768-11	METAL CHIP 470K 0.50% 1/10W	
R6131	1-216-037-00	RES,CHIP 330 5% 1/10W	
R6132	1-216-037-00	RES,CHIP 330 5% 1/10W	
R6133	1-216-037-00	RES,CHIP 330 5% 1/10W	
R6134	1-216-057-00	RES,CHIP 2.2K 5% 1/10W	
			(KV-32FS60A/32FS60B/32FS60D/32FS60E)
R6135	1-163-021-91	CERAMIC CHIP 0.01MF 10% 50V	
			(KV-29FS60A/29FS60B/29FS60D/29FS60E/ 29FS60K/29FS60R/29FS60U)
	1-216-057-00	RES,CHIP 2.2K 5% 1/10W	
			(KV-32FS60A/32FS60B/32FS60D/32FS60E)
R6136	1-216-691-11	METAL CHIP 47K 0.50% 1/10W	
R6137	1-216-691-11	METAL CHIP 47K 0.50% 1/10W	
R6138	1-216-691-11	METAL CHIP 47K 0.50% 1/10W	
R6139	1-216-691-11	METAL CHIP 47K 0.50% 1/10W	
R6140	1-216-057-00	RES,CHIP 2.2K 5% 1/10W	
R6141	1-216-683-11	METAL CHIP 22K 0.50% 1/10W	
			(KV-29FS60A/29FS60B/29FS60D/29FS60E/ 29FS60K/29FS60R/29FS60U)
	1-216-671-11	METAL CHIP 6.8K 0.50% 1/10W	
			(KV-32FS60A/32FS60B/32FS60D/32FS60E)
R6142	1-216-672-11	METAL CHIP 7.5K 0.50% 1/10W	
			(KV-29FS60A/29FS60B/29FS60D/29FS60E/ 29FS60K/29FS60R/29FS60U)
	1-216-659-11	METAL CHIP 2.2K 0.50% 1/10W	
			(KV-32FS60A/32FS60B/32FS60D/32FS60E)
R6143	1-216-057-00	RES,CHIP 2.2K 5% 1/10W	
R6145	1-216-045-00	RES,CHIP 680 5% 1/10W	
R6146	1-216-667-11	METAL CHIP 4.7K 0.50% 1/10W	
			(KV-29FS60A/29FS60B/29FS60D/29FS60E/ 29FS60K/29FS60R/29FS60U)
	1-216-065-91	RES,CHIP 4.7K 5% 1/10W	
			(KV-32FS60A/32FS60B/32FS60D/32FS60E)
R6147	1-216-057-00	RES,CHIP 2.2K 5% 1/10W	
R6148	1-216-057-00	RES,CHIP 2.2K 5% 1/10W	
R6149	1-216-025-91	RES,CHIP 100 5% 1/10W	
R6154	1-216-651-11	METAL CHIP 1K 0.50% 1/10W	
R6155	1-216-699-11	METAL CHIP 100K 0.50% 1/10W	
R6158	1-216-663-11	METAL CHIP 6.8K 0.50% 1/10W	
R6159	1-216-295-91	SHORT 0	
R6160	1-216-295-91	SHORT 0	
			(KV-29FS60A/29FS60B/29FS60D/29FS60E/ 29FS60K/29FS60R/29FS60U)
	1-216-655-11	METAL CHIP 1.5K 0.50% 1/10W	
			(KV-32FS60A/32FS60B/32FS60D/32FS60E)
R6161	1-216-673-11	METAL CHIP 8.2K 0.50% 1/10W	
			(KV-29FS60A/29FS60B/29FS60D/29FS60E/ 29FS60K/29FS60R/29FS60U)
	1-216-669-11	METAL CHIP 5.6K 0.50% 1/10W	
			(KV-32FS60A/32FS60B/32FS60D/32FS60E)
R6162	1-216-049-91	RES,CHIP 1K 5% 1/10W	
R6165	1-216-699-11	METAL CHIP 100K 0.50% 1/10W	
R6168	1-216-065-91	RES,CHIP 4.7K 5% 1/10W	
R6169	1-216-699-11	METAL CHIP 100K 0.50% 1/10W	
R6170	1-216-037-00	RES,CHIP 330 5% 1/10W	
R6171	1-216-057-00	RES,CHIP 2.2K 5% 1/10W	
R6174	1-216-075-00	RES,CHIP 12K 5% 1/10W	
			(KV-29FS60A/29FS60B/29FS60D/29FS60E/ 29FS60K/29FS60R/29FS60U)
	1-216-081-00	RES,CHIP 22K 5% 1/10W	
			(KV-32FS60A/32FS60B/32FS60D/32FS60E)
R6175	1-216-075-00	RES,CHIP 12K 5% 1/10W	
R6176	1-216-683-11	METAL CHIP 22K 0.50% 1/10W	
			(KV-29FS60A/29FS60B/29FS60D/29FS60E/ 29FS60K/29FS60R/29FS60U)
	1-216-295-91	SHORT 0	
			(KV-32FS60A/32FS60B/32FS60D/32FS60E)
R6177	1-216-065-91	RES,CHIP 4.7K 5% 1/10W	
R6178	1-216-073-00	RES,CHIP 10K 5% 1/10W	
R6179	1-216-655-11	METAL CHIP 1.5K 0.50% 1/10W	
			(KV-29FS60A/29FS60B/29FS60D/29FS60E/ 29FS60K/29FS60R/29FS60U)
	1-216-061-00	METAL CHIP 3.3K 5% 1/10W	
			(KV-32FS60A/32FS60B/32FS60D/32FS60E)

REF. NO.	PART.NO	DESCRIPTION	REMARK
R6180	1-216-057-00	RES,CHIP 2.2K 5% 1/10W	
R6182	1-216-089-91	RES,CHIP 47K 5% 1/10W	
R6183	1-216-057-00	RES,CHIP 2.2K 5% 1/10W	
R6186	1-216-663-11	METAL CHIP 3.3K 0.50% 1/10W	
		(KV-29FS60A/29FS60B/29FS60D/29FS60E/ 29FS60K/29FS60R/29FS60U)	
	1-216-049-91	METAL CHIP 1K 5% 1/10W	
		(KV-32FS60A/32FS60B/32FS60D/32FS60E)	
R6187	1-216-065-91	RES,CHIP 4.7K 5% 1/10W	
R6189	1-216-295-91	SHORT 0	
		(KV-29FS60A/29FS60B/29FS60D/29FS60E/ 29FS60K/29FS60R/29FS60U)	
	1-216-049-91	RES,CHIP 1K 5% 1/10W	
		(KV-32FS60A/32FS60B/32FS60D/32FS60E)	
R6190	1-216-057-00	RES,CHIP 2.2K 5% 1/10W	
R6191	1-215-925-11	METAL OXIDE 22K 5% 3W F	
R6192	1-216-665-11	METAL CHIP 3.9K 0.50% 1/10W	
		(KV-29FS60A/29FS60B/29FS60D/29FS60E/ 29FS60K/29FS60R/29FS60U)	
	1-216-683-11	METAL CHIP 22K 0.50% 1/10W	
		(KV-32FS60A/32FS60B/32FS60D/32FS60E)	
R6194	1-216-065-91	RES,CHIP 4.7K 5% 1/10W	
R6195	1-216-683-11	METAL CHIP 22K 0.50% 1/10W	
		(KV-29FS60A/29FS60B/29FS60D/29FS60E/ 29FS60K/29FS60R/29FS60U)	
	1-216-695-11	METAL CHIP 68K 0.50% 1/10W	
		(KV-32FS60A/32FS60B/32FS60D/32FS60E)	
R6196	1-249-377-11	CARBON 0.47 5% 1/4W F	
R6198	1-216-081-00	RES,CHIP 22K 5% 1/10W	
		(KV-29FS60A/29FS60B/29FS60D/29FS60E/ 29FS60K/29FS60R/29FS60U)	
	1-216-089-00	RES,CHIP 47K 5% 1/10W	
		(KV-32FS60A/32FS60B/32FS60D/32FS60E)	
R6199	1-216-081-00	RES,CHIP 22K 5% 1/10W	
		(KV-29FS60A/29FS60B/29FS60D/29FS60E/ 29FS60K/29FS60R/29FS60U)	
	1-216-089-00	RES,CHIP 47K 5% 1/10W	
		(KV-32FS60A/32FS60B/32FS60D/32FS60E)	
R6200	1-218-762-11	METAL CHIP 270K 0.50% 1/10W	
		(KV-32FS60A/32FS60B/32FS60D/32FS60E)	
R6205	1-216-025-91	RES,CHIP 100 5% 1/10W	
R6206	1-216-105-91	RES,CHIP 220K 5% 1/10W	
R6207	1-216-101-00	RES,CHIP 150K 5% 1/10W	
		(KV-29FS60A/29FS60B/29FS60D/29FS60E/ 29FS60K/29FS60R/29FS60U)	
	1-216-109-00	RES,CHIP 330K 5% 1/10W	
		(KV-32FS60A/32FS60B/32FS60D/32FS60E)	
R6208	1-216-089-91	RES,CHIP 47K 5% 1/10W	
R6210	1-216-057-00	RES,CHIP 2.2K 5% 1/10W	
R6211	1-216-073-00	RES,CHIP 10K 5% 1/10W	
R6212	1-216-057-00	RES,CHIP 2.2K 5% 1/10W	
R6215	1-216-683-11	METAL CHIP 22K 0.50% 1/10W	
		(KV-29FS60A/29FS60B/29FS60D/29FS60E/ 29FS60K/29FS60R/29FS60U)	
	1-216-089-91	RES,CHIP 47K 5% 1/10W	
		(KV-32FS60A/32FS60B/32FS60D/32FS60E)	
R6216	1-216-089-91	RES,CHIP 47K 5% 1/10W	
		(KV-29FS60A/29FS60B/29FS60D/29FS60E/ 29FS60K/29FS60R/29FS60U)	
	1-216-065-00	RES,CHIP 4.7K 5% 1/10W	
		(KV-32FS60A/32FS60B/32FS60D/32FS60E)	
R6217	1-216-073-00	RES,CHIP 10K 5% 1/10W	
R6254	1-216-049-91	RES,CHIP 1K 5% 1/10W	
R6255	1-216-061-00	RES,CHIP 3.3K 5% 1/10W	
R6256	1-216-057-00	RES,CHIP 2.2K 5% 1/10W	
R6257	1-216-061-00	RES,CHIP 3.3K 5% 1/10W	
R6258	1-216-057-00	RES,CHIP 2.2K 5% 1/10W	
R6259	1-216-097-91	RES,CHIP 100K 5% 1/10W	
R6260	1-216-049-91	RES,CHIP 1K 5% 1/10W	
R6261	1-216-097-91	RES,CHIP 100K 5% 1/10W	
R6262	1-260-321-71	CARBON 270 5% 1/2W	
R6263	1-216-025-91	RES,CHIP 100 5% 1/10W	
R6264	1-216-025-91	RES,CHIP 100 5% 1/10W	
R6265	1-216-097-91	RES,CHIP 100K 5% 1/10W	
		(KV-29FS60A/29FS60B/29FS60D/29FS60E/ 29FS60K/29FS60R/29FS60U)	
	1-216-103-00	RES,CHIP 180K 5% 1/10W	
		(KV-32FS60A/32FS60B/32FS60D/32FS60E)	
R6267	1-216-049-91	RES,CHIP 1K 5% 1/10W	
R6268	1-216-085-00	RES,CHIP 33K 5% 1/10W	
		(KV-32FS60A/32FS60B/32FS60D/32FS60E)	
R6269	1-216-667-11	METAL CHIP 4.7K 0.50% 1/10W	
R6270	1-216-667-11	METAL CHIP 4.7K 0.50% 1/10W	
R6271	1-216-683-11	METAL CHIP 22K 0.50% 1/10W	
R6272	1-216-081-00	RES,CHIP 22K 5% 1/10W	
R6273	1-216-081-00	RES,CHIP 22K 5% 1/10W	
		(KV-29FS60A/29FS60B/29FS60D/29FS60E/ 29FS60K/29FS60R/29FS60U)	
R6276	1-216-689-11	METAL CHIP 39K 0.50% 1/10W	
		(KV-29FS60A/29FS60B/29FS60D/29FS60E/ 29FS60K/29FS60R/29FS60U)	
	1-216-686-11	METAL CHIP 30K 0.50% 1/10W	
		(KV-32FS60A/32FS60B/32FS60D/32FS60E)	
R6277	1-216-686-11	METAL CHIP 30K 0.50% 1/10W	
R6278	1-216-057-00	RES,CHIP 2.2K 5% 1/10W	
R6279	1-216-057-00	RES,CHIP 2.2K 5% 1/10W	
R6280	1-249-377-11	CARBON 0.47 5% 1/4W F	
R6281	1-249-377-11	CARBON 0.47 5% 1/4W F	
R6282	1-215-886-11	METAL OXIDE 100 5% 2W F	
R6283	1-216-393-00	METAL OXIDE 2.2 5% 3W F	

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REF. NO.	PART.NO	DESCRIPTION	REMARK
R6284	1-216-113-00	RES,CHIP 470K 5% 1/10W	
		(KV-29FS60A/29FS60B/29FS60D/29FS60E/	
		29FS60K/29FS60R/29FS60U)	
	1-216-109-00	RES,CHIP 330K 5% 1/10W	
		(KV-32FS60A/32FS60B/32FS60D/32FS60E)	
R6285	1-216-057-00	RES,CHIP 2.2K 5% 1/10W	
R6286	1-216-073-00	RES,CHIP 10K 5% 1/10W	
		(KV-29FS60A/29FS60B/29FS60D/29FS60E/	
		29FS60K/29FS60R/29FS60U)	
	1-216-069-00	RES,CHIP 6.8K 5% 1/10W	
		(KV-32FS60A/32FS60B/32FS60D/32FS60E)	
R6287	1-216-073-00	RES,CHIP 10K 5% 1/10W	
R6313	1-216-295-91	SHORT 0	
R6322	1-216-049-91	RES,CHIP 1K 5% 1/10W	
R6323	1-216-049-91	RES,CHIP 1K 5% 1/10W	
R6324	1-216-025-91	RES,CHIP 100 5% 1/10W	
R6325	1-216-025-91	RES,CHIP 100 5% 1/10W	
R6350	1-216-089-91	RES,CHIP 47K 5% 1/10W	
R6351	1-218-762-11	METAL CHIP 270K 0.50% 1/10W	
R6353	1-216-668-11	METAL CHIP 5.1K 0.50% 1/10W	
		(KV-29FS60A/29FS60B/29FS60D/29FS60E/	
		29FS60K/29FS60R/29FS60U)	
	1-216-671-11	METAL CHIP 6.8K 0.50% 1/10W	
		(KV-32FS60A/32FS60B/32FS60D/32FS60E)	
R6355	1-218-774-11	METAL CHIP 820K 0.50% 1/10W	
R6356	1-216-675-11	METAL CHIP 10K 0.50% 1/10W	
R6357	1-216-057-00	RES,CHIP 2.2K 5% 1/10W	
R6358	1-216-047-91	RES,CHIP 820 5% 1/10W	
R6359	1-216-097-91	RES,CHIP 100K 5% 1/10W	
R6360	1-216-073-00	RES,CHIP 10K 5% 1/10W	
R6361	1-216-097-91	RES,CHIP 100K 5% 1/10W	
R6362	1-216-687-11	METAL CHIP 33K 0.50% 1/10W	
R6363	1-216-675-11	METAL CHIP 10K 0.50% 1/10W	
R6364	1-216-057-00	RES,CHIP 2.2K 5% 1/10W	
R6365	1-216-033-00	RES,CHIP 220 5% 1/10W	
R6366	1-216-057-00	RES,CHIP 2.2K 5% 1/10W	
R6367	1-216-679-11	METAL CHIP 15K 0.50% 1/10W	
R6368	1-218-758-11	METAL CHIP 180K 0.50% 1/10W	
		(KV-29FS60A/29FS60B/29FS60D/29FS60E/	
		29FS60K/29FS60R/29FS60U)	
	1-218-760-11	METAL CHIP 220K 0.50% 1/10W	
		(KV-32FS60A/32FS60B/32FS60D/32FS60E)	
R6369	1-218-762-11	METAL CHIP 270K 0.50% 1/10W	
R6370	1-216-675-11	METAL CHIP 10K 0.50% 1/10W	
		(KV-29FS60A/29FS60B/29FS60D/29FS60E/	
		29FS60K/29FS60R/29FS60U)	
	1-216-677-11	METAL CHIP 12K 0.50% 1/10W	
		(KV-32FS60A/32FS60B/32FS60D/32FS60E)	
R6371	1-216-473-11	METAL OXIDE 56 5% 3W	
		(KV-29FS60A/29FS60B/29FS60D/29FS60E/	
		29FS60K/29FS60R/29FS60U)	
	1-216-474-11	METAL OXIDE 82 5% 3W F	
		(KV-32FS60A/32FS60B/32FS60D/32FS60E)	
R6372	1-216-033-00	RES,CHIP 220 5% 1/10W	
R6373	1-216-681-11	METAL CHIP 18K 0.50% 1/10W	
R6374	1-216-689-11	METAL CHIP 39K 0.50% 1/10W	
R6375	1-216-041-00	RES,CHIP 470 5% 1/10W	
R6377	1-216-689-11	METAL CHIP 39K 0.50% 1/10W	
R6378	1-216-675-11	METAL CHIP 10K 0.50% 1/10W	
R6379	1-216-295-91	SHORT 0	
R6380	1-218-754-11	METAL CHIP 120K 0.50% 1/10W	
R6381	1-216-045-00	RES,CHIP 680 5% 1/10W	
R6382	1-218-754-11	METAL CHIP 120K 0.50% 1/10W	
R6383	1-216-687-11	METAL CHIP 33K 0.50% 1/10W	
R6384	1-216-043-91	RES,CHIP 560 5% 1/10W	
R6385	1-216-295-91	SHORT 0	
R6386	1-216-699-11	METAL CHIP 100K 0.50% 1/10W	
R6387	1-216-677-11	METAL CHIP 12K 0.50% 1/10W	
R6391	1-249-417-11	CARBON 1K 5% 1/4W	
R6394	1-216-069-00	RES,CHIP 6.8K 5% 1/10W	
R6395	1-216-081-00	RES,CHIP 22K 5% 1/10W	
R6397	1-216-675-11	METAL CHIP 10K 0.50% 1/10W	
R6398	1-216-065-91	RES,CHIP 4.7K 5% 1/10W	
R6399	1-218-758-11	METAL CHIP 180K 0.50% 1/10W	
		(KV-29FS60A/29FS60B/29FS60D/29FS60E/	
		29FS60K/29FS60R/29FS60U)	
	1-218-756-11	METAL CHIP 150K 0.50% 1/10W	
		(KV-32FS60A/32FS60B/32FS60D/32FS60E)	
R6400	1-216-675-11	METAL CHIP 10K 0.50% 1/10W	
R6401	1-216-295-91	SHORT 0	
R6402	1-216-295-91	SHORT 0	
R6403	1-216-661-11	METAL CHIP 2.7K 0.50% 1/10W	
R6404	1-216-683-11	METAL CHIP 22K 0.50% 1/10W	
R6405	1-216-683-11	METAL CHIP 22K 0.50% 1/10W	
R6409	1-216-025-91	RES,CHIP 100 5% 1/10W	
R6410	1-216-073-00	RES,CHIP 10K 5% 1/10W	
R6411	1-216-073-00	RES,CHIP 10K 5% 1/10W	
R6412	1-216-073-00	RES,CHIP 10K 5% 1/10W	
R6413	1-216-679-11	METAL CHIP 15K 0.50% 1/10W	
R6414	1-216-679-11	METAL CHIP 15K 0.50% 1/10W	
R6415	1-216-683-11	METAL CHIP 22K 0.50% 1/10W	
R6416	1-216-683-11	METAL CHIP 22K 0.50% 1/10W	
R6418	1-216-093-00	RES,CHIP 33K 5% 1/10W	
R6419	1-216-073-00	RES,CHIP 10K 5% 1/10W	
R6420	1-216-091-00	RES,CHIP 22K 5% 1/10W	
R6421	1-216-637-11	METAL CHIP 270 0.50% 1/10W	
R6422	1-216-639-11	METAL CHIP 330 0.50% 1/10W	
R6423	1-216-657-11	METAL CHIP 1.8K 0.50% 1/10W	
R6426	1-216-081-00	RES,CHIP 22K 5% 1/10W	
R6427	1-216-081-00	RES,CHIP 22K 5% 1/10W	
R6428	1-216-107-00	RES,CHIP 150K 5% 1/10W	
R6429	1-216-065-91	RES,CHIP 4.7K 5% 1/10W	
R6430	1-216-065-91	RES,CHIP 4.7K 5% 1/10W	

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

D1 **D**

REF. NO.	PART.NO	DESCRIPTION			REMARK
R6431	1-216-113-00	RES,CHIP	470K	5%	1/10W
		(KV-32FS60A/32FS60B/32FS60D/32FS60E)			
R6432	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R6433	1-216-073-00	RES,CHIP	10K	5%	1/10W
R6437	1-249-422-11	CARBON	2.7K	5%	1/4W
R6438	1-249-421-11	CARBON	2.2K	5%	1/4W
R6439	1-216-683-11	METAL CHIP	22K	0.50%	1/10W
R6440	1-216-683-11	METAL CHIP	22K	0.50%	1/10W
R6441	1-216-673-11	METAL CHIP	8.2K	0.50%	1/10W
R6442	1-216-039-00	RES,CHIP	390	5%	1/10W
R6455	1-216-295-91	SHORT	0		
R6456	1-216-097-91	RES,CHIP	100K	5%	1/10W
R6457	1-216-075-00	RES,CHIP	12K	5%	1/10W
R6458	1-216-089-91	RES,CHIP	47K	5%	1/10W
R6459	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R6460	1-249-393-11	CARBON	10	5%	1/4W
R6461	1-249-411-11	CARBON	330	5%	1/4W
R6462	1-249-406-11	CARBON	120	5%	1/4W
R6463	1-216-095-00	RES,CHIP	82K	5%	1/10W
R6464	1-216-079-00	RES,CHIP	18K	5%	1/10W

****

*A-1640-342-A D BOARD, COMPLETE (KV-29FS60)
****
*A-1640-326-A D BOARD, COMPLETE (KV-32FS60)
****

4-201-023-01 SPACER, INSULATING
4-202-373-01 SPRING, IC
4-382-854-11 SCREW (M3X10), P, SW (+)
*4-931-401-01 HEAT SINK, V.OUT

< CAPACITOR >

C6600	⚠	1-161-744-00	CERAMIC	0.01MF		400V
C6603		1-126-933-11	ELECT	100MF	20%	16V
C6604		1-126-767-11	ELECT	1000MF	20%	16V
C6605	⚠	1-119-888-51	CERAMIC	2200PF	20%	250V
C6606	⚠	1-119-888-51	CERAMIC	2200PF	20%	250V
C6607	⚠	1-107-565-11	FILM	0.33MF	20%	300V
C6608	⚠	1-162-599-12	CERAMIC	0.0047MF		250V
C6609	⚠	1-162-599-12	CERAMIC	0.0047MF		250V
C6610		1-162-599-12	CERAMIC	0.0047MF		250V
C6611		1-162-599-12	CERAMIC	0.0047MF		250V
C6612		1-161-744-00	CERAMIC	0.01MF		400V
C6616		1-164-625-11	CERAMIC	680PF	10%	500V
C6617		1-164-625-11	CERAMIC	680PF	10%	500V
C6618		1-136-175-00	FILM	0.68MF	5%	50V
C6619		1-137-194-91	FILM	0.47MF	5%	50V
C6620		1-136-618-11	FILM	0.047MF	5%	1.25KV
C6621		1-136-175-00	FILM	0.68MF	5%	50V
C6622		1-164-625-11	CERAMIC	680PF	10%	500V
C6623		1-137-194-91	FILM	0.47MF	5%	50V
C6624		1-126-968-11	ELECT	100MF	20%	50V
C6626		1-164-625-11	CERAMIC	680PF	10%	500V
C6627		1-164-625-11	CERAMIC	680PF	10%	500V
C6628		1-126-936-11	ELECT	3300MF	20%	16V
C6629		1-128-548-11	ELECT	4700MF	20%	25V
C6630		1-110-626-11	ELECT	330MF	20%	160V
C6631		1-126-955-11	ELECT	4700MF	20%	35V
C6632		1-126-955-11	ELECT	4700MF	20%	35V
C6633		1-126-935-11	ELECT	470MF	20%	16V
C6634		1-136-165-00	FILM	0.1MF	5%	50V
C6635		1-104-664-11	ELECT	47MF	20%	25V
C6636		1-102-129-00	CERAMIC	0.01MF	10%	50V
C6637		1-102-129-00	CERAMIC	0.01MF	10%	50V
C6638		1-137-368-11	FILM	0.0047MF	5%	50V
C6639		1-102-228-00	CERAMIC	470PF	10%	500V
C6641		1-126-967-11	ELECT	47MF	20%	50V
C6642		1-126-964-11	ELECT	10MF	20%	50V
C6647		1-104-664-11	ELECT	47MF	20%	25V
C6649		1-126-965-11	ELECT	22MF	20%	50V
C6651		1-162-599-12	CERAMIC	0.0047MF		250V
C6652		1-107-679-91	ELECT	10MF	20%	450V
C6653		1-126-968-11	ELECT	100MF	20%	50V
C6654		1-162-117-00	CERAMIC	100PF	10%	500V
C6655		1-109-879-11	CERAMIC	22PF	5%	2KV
C6656		1-126-967-11	ELECT	47MF	20%	50V
C6657		1-126-941-11	ELECT	470MF	20%	25V
C6658		1-104-665-11	ELECT	100MF	20%	25V
C6659		1-104-665-11	ELECT	100MF	20%	25V
C6661		1-117-753-11	ELECT(BLOCK)	470MF	20%	450V
C6662		1-136-165-00	FILM	0.1MF	5%	50V
C6664		1-136-153-00	FILM	0.01MF	5%	50V
C6665		1-136-165-00	FILM	0.1MF	5%	50V
C6666		1-136-165-00	FILM	0.1MF	5%	50V
C6667		1-126-933-11	ELECT	100MF	20%	16V
C6668		1-126-933-11	ELECT	100MF	20%	16V
C6669		1-136-165-00	FILM	0.1MF	5%	50V
C6670		1-136-165-00	FILM	0.1MF	5%	50V
C6671		1-104-664-11	ELECT	47MF	20%	16V
C6672		1-104-664-11	ELECT	47MF	20%	16V
C6673		1-104-664-11	ELECT	47MF	20%	16V
C6677		1-136-165-00	FILM	0.1MF	5%	50V
C6679		1-130-495-00	FILM	0.1MF	5%	50V
C6680		1-137-370-11	FILM	0.01MF	5%	50V
C6681		1-126-964-11	ELECT	10MF	20%	50V
C6682		1-107-680-91	ELECT	22MF	20%	450V
		(KV-29FS60A/29FS60B/29FS60D/29FS60E/29FS60K/29FS60R/29FS60U)				
C6700		1-102-129-00	CERAMIC	0.01MF	10%	50V
C6703		1-128-527-11	ELECT	330MF	20%	25V
C6704		1-126-968-11	ELECT	100MF	20%	50V
C6705		1-128-527-11	ELECT	330MF	20%	25V
C6706		1-106-228-00	MYLAR	0.22MF	10%	100V

The components identified by shading and marked ⚠ are critical for safety
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D

REF. NO.	PART.NO	DESCRIPTION			REMARK
C6707	1-129-702-00	FILM	0.001MF	10%	400V
C6708	1-106-220-00	MYLAR	0.1MF	10%	100V
C6709	1-102-129-00	CERAMIC	0.01MF	10%	50V
C6710	1-130-785-11	MYLAR	0.47MF	10%	100V
C6727	1-102-228-00	CERAMIC	470PF	10%	500V
C6801	1-104-664-11	ELECT	47MF	20%	25V
C6802	1-126-960-11	ELECT	1MF	20%	50V
C6803	1-126-960-11	ELECT	1MF	20%	50V
C6804	1-102-114-00	CERAMIC	470PF	10%	50V
C6805	1-102-114-00	CERAMIC	470PF	10%	50V
C6808	1-102-030-00	CERAMIC	330PF	10%	500V
C6809	1-102-030-00	CERAMIC	330PF	10%	500V
C6810	1-107-368-11	FILM	0.047MF	10%	200V
C6811	1-107-368-11	FILM	0.047MF	10%	200V
C6812	1-162-131-11	CERAMIC	220PF	10%	2KV
C6813	1-162-558-11	CERAMIC	100PF	10%	2KV
		(KV-29FS60A/29FS60B/29FS60D/29FS60E/ 29FS60K/29FS60R/29FS60U)			
	1-162-134-11	CERAMIC	470PF	10%	2KV
		(KV-32FS60A/32FS60B/32FS60D/32FS60E)			
C6814	1-117-640-11	FILM	6800PF	3%	1.2KV
C6815	1-117-835-11	FILM	6200PF	3%	2KV
C6816	1-137-364-11	FILM	0.001MF	5%	50V
C6817	1-125-893-11	FILM	680PF	3%	2KV
C6818	1-125-893-11	FILM	680PF	3%	2KV
C6819	1-125-893-11	FILM	680PF	3%	2KV
C6820	1-125-893-11	FILM	680PF	3%	2KV
C6824	1-107-846-11	FILM	0.1MF	5%	200V
C6825	1-107-846-11	FILM	0.1MF	5%	250V
C6826	1-115-518-11	FILM	0.47MF	5%	250V
		(KV-29FS60A/29FS60B/29FS60D/29FS60E/ 29FS60K/29FS60R/29FS60U)			
	1-115-519-11	FILM	0.56MF	5%	250V
		(KV-32FS60A/32FS60B/32FS60D/32FS60E)			
C6827	1-115-511-11	FILM	0.12MF	5%	250V
		(KV-29FS60A/29FS60B/29FS60D/29FS60E/ 29FS60K/29FS60R/29FS60U)			
	1-107-846-11	FILM	0.1MF	5%	250V
		(KV-32FS60A/32FS60B/32FS60D/32FS60E)			
C6828	1-127-681-11	CAPACITOR	10000PF	2%	100V
C6829	1-127-680-11	CAPACITOR	4700PF	2%	100V
C6830	1-107-655-11	ELECT	47MF	20%	250V
C6831	1-102-228-00	CERAMIC	470PF	10%	500V
C6832	1-126-941-11	ELECT	470MF	20%	25V
C6833	1-126-941-11	ELECT	470MF	20%	25V
C6834	1-102-228-00	CERAMIC	470PF	10%	500V
C6835	1-102-228-00	CERAMIC	470PF	10%	500V
C6836	1-123-024-21	ELECT	33MF		160V
C6837	1-106-375-12	MYLAR	0.022MF	10%	250V
C6840	1-137-370-11	FILM	0.01MF	5%	50V
C6841	1-104-664-11	ELECT	47MF	20%	16V
C6842	1-136-207-11	FILM	0.047MF	10%	400V
C6843	1-136-177-00	FILM	1MF	5%	50V
C6851	1-162-131-11	CERAMIC	220PF	10%	2KV
C6852	1-162-129-00	CERAMIC	150PF	10%	2KV
C6853	1-137-536-11	FILM	0.0022MF	5%	630V
C6855	1-136-205-11	FILM	0.022MF	10%	400V
C6856	1-102-030-00	CERAMIC	330PF	10%	500V
C6857	1-130-785-11	FILM	0.47MF	10%	100V
C6861	1-137-364-11	FILM	0.001MF	5%	50V
C6862	1-137-364-11	FILM	0.001MF	5%	50V

< CONNECTOR >

CN6100	1-785-802-11	20PIN CONNECTOR	
CN6101	1-785-802-11	20PIN CONNECTOR	
CN6102	1-785-802-11	20PIN CONNECTOR	
CN6500	1-508-766-00	PIN, CONNECTOR (5MM PITCH) 4P	
CN6600	1-695-299-11	CONNECTOR, BOARD TO BOARD 50P	
CN6611	*1-785-270-11	PIN, DY CONNECTOR (PC BOARD)	
CN6620	⚠ 1-508-765-00	PIN, CONNECTOR (5MM PITCH) 3P	
CN6655	1-695-915-11	TAB (CONTACT)	
CN6666	⚠ 1-508-786-00	PIN, CONNECTOR (5MM PITCH) 2P	
CN6677	1-695-915-11	TAB (CONTACT)	
CN6688	1-695-915-11	TAB (CONTACT)	
CN6700	⚠ *1-691-291-11	PIN, CONNECTOR (PC BOARD) 5P	

< DIODE >

D6600	8-719-911-19	DIODE 1SS119-25	
D6601	8-719-510-64	DIODE S2LA20F	
D6602	8-719-109-89	DIODE RD5.6ESB2	
D6603	8-719-911-19	DIODE 1SS119-25	
D6604	8-719-510-53	DIODE D4SB60L	
D6610	8-719-510-64	DIODE S2LA20F	
D6613	8-719-911-19	DIODE 1SS119-25	
D6615	8-719-911-19	DIODE 1SS119-25	
D6616	8-719-510-12	DIODE D10SC4M	
D6617	8-719-500-71	DIODED8LC40	
D6618	8-719-047-31	DIODE RBA-402L	
D6619	8-719-510-12	DIODE D10SC4M	
D6620	8-719-510-09	DIODE D10SC6M	
D6621	8-719-991-33	DIODE 1SS133T-77	
D6622	8-719-991-33	DIODE 1SS133T-77	
D6623	8-719-911-19	DIODE 1SS119-25	
D6624	8-719-991-33	DIODE 1SS133T-77	
D6625	8-719-991-33	DIODE 1SS133T-77	
D6627	8-719-982-27	DIODE MTZJ-33C	
D6628	8-719-109-97	DIODE RD6.8ESB2	
D6629	8-719-991-33	DIODE 1SS133T-77	
D6630	8-719-991-33	DIODE 1SS133T-77	
D6651	8-719-068-00	DIODE ERC04-06SE	
D6652	8-719-923-78	DIODE MTZJ-T-77-12	
D6653	8-719-510-64	DIODE S2LA20F	
D6654	8-719-059-23	DIODE P6KE200AG23	

The components identified by shading and marked ⚠ are critical for safety
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REF. NO.	PART.NO	DESCRIPTION	REMARK
D6655	8-719-979-64	DIODE UF4005PKG23	
D6656	8-719-510-64	DIODE S2LA20F	
D6658	8-719-068-00	DIODE ERC04-06SE	
D6659	8-719-510-64	DIODE S2LA20F	
D6676	8-719-991-33	DIODE 1SS133T-77	
D6677	8-719-921-40	DIODE MTZJ-4.7C	
D6678	8-719-921-40	DIODE MTZJ-4.7C	
D6679	8-719-991-33	DIODE 1SS133T-77	
D6700	8-719-908-03	DIODE GP08D	
D6701	8-719-110-41	DIODE RD15ESB2	
D6803	8-719-908-03	DIODE GP08D	
D6804	1-535-143-11	LEAD, JUMPER (10.0MM)	
D6805	8-719-302-43	DIODE EL1Z	
D6806	8-719-979-85	DIODE EGP20G	
D6807	8-719-510-73	DIODE S3L20UF4	
D6808	8-719-510-73	DIODE S3L20UF4	
D6809	8-719-991-33	DIODE 1SS133T-77	
D6810	8-719-110-41	DIODE RD15ESB2	
D6811	8-719-110-41	DIODE RD15ESB2	
D6812	8-719-991-33	DIODE 1SS133T-77	
D6813	8-719-110-41	DIODE RD15ESB2	
D6851	8-719-970-87	DIODE ERA38-06	
D6852	8-719-970-87	DIODE ERA38-06	
		< FERRITE BEAD >	
FB6602	1-410-396-41	FERRITE 0.45UH	
FB6603	1-410-396-41	FERRITE 0.45UH	
		< IC >	
IC6600	1-810-051-11	POWER MODULE DM-48	
IC6604	8-729-045-40	TRANSISTOR MX0842A-F	
IC6651	8-759-468-89	IC TOP209P	
IC6652	8-759-604-39	IC M5F78M12L	
IC6653	8-759-544-13	IC KA78R09TU	
IC6654	8-759-457-44	IC KA78R05TU	
IC6667	8-759-908-15	IC TL431CLP	
IC6676	8-759-908-15	IC TL431CLP	
IC6700	8-759-192-71	IC STV9379	
IC6801	8-759-103-93	IC UPC393C	
		< COIL >	
L6601	1-408-947-00	INDUCTOR 2.2MMH (KV-29FS60A/29FS60B/29FS60D/29FS60E/ 29FS60K/29FS60R/29FS60U)	
	1-535-303-00	LEAD, JUMPER (5.0MM) (KV-32FS60A/32FS60B/32FS60D/32FS60E)	
L6602	1-412-529-11	INDUCTOR 22UH	
L6603	1-412-529-11	INDUCTOR 22UH	
L6604	1-412-525-31	INDUCTOR 10UH	
L6605	1-412-525-31	INDUCTOR 10UH	
L6606	1-412-525-31	INDUCTOR 10UH	
L6607	1-412-525-31	INDUCTOR 10UH	
L6651	1-414-183-41	INDUCTOR 10UH	
L6700	1-412-524-11	INDUCTOR 8.2UH	
L6801	1-412-519-11	INDUCTOR 3.3UH	
L6802	1-412-519-11	INDUCTOR 3.3UH	
L6803	1-412-519-11	INDUCTOR 3.3UH	
L6805	1-408-947-00	INDUCTOR 2.2MMH	
L6806	1-410-397-21	FERRITE 1.1UH	
L6807	1-410-397-21	FERRITE 1.1UH	
L6808	1-406-675-11	INDUCTOR 0UH	
L6851	1-535-303-00	LEAD, JUMPER (5.0MM)	
		< FILTER >	
LF6603	1-406-660-41	INDUCTOR 0UH	
LF6604	1-406-660-41	INDUCTOR 0UH	
LF6801	1-406-985-11	INDUCTOR 0UH	
LF6851	1-406-674-11	INDUCTOR 0UH	
		< IC LINK >	
PS6601	⚠ 1-801-550-21	PROTECTOR MODULE 2.5A MP250	
PS6602	⚠ 1-801-550-21	PROTECTOR MODULE 2.5A MP250	
PS6603	⚠ 1-801-549-21	PROTECTOR MODULE 4.0A MP250	
PS6604	⚠ 1-801-550-21	PROTECTOR MODULE 2.5A MP250	
PS6605	⚠ 1-801-550-21	PROTECTOR MODULE 2.5A MP250	
		< TRANSISTOR >	
Q6600	8-729-046-47	TRANSISTOR KSC2500-BTA	
Q6602	8-729-026-41	TRANSISTOR 2SA933AS-QRT	
Q6603	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q6605	8-729-046-47	TRANSISTOR KSC2500-BTA	
Q6606	8-729-029-56	TRANSISTOR DTA144ESA	
Q6607	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q6608	8-729-029-66	TRANSISTOR DTC114ESA	
Q6651	8-729-026-41	TRANSISTOR 2SA933AS-QRT	
Q6652	8-729-029-86	TRANSISTOR DTC124ESA	
Q6667	8-729-026-41	TRANSISTOR 2SA933AS-QRT	
Q6676	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q6677	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q6678	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q6679	8-729-026-41	TRANSISTOR 2SA933AS-QRT	
Q6680	8-729-029-66	TRANSISTOR DTC114ESA	
Q6681	8-729-029-66	TRANSISTOR DTC114ESA	
Q6700	8-729-039-68	TRANSISTOR IRF620	
Q6801	8-729-119-80	TRANSISTOR 2SC2688-LK	
Q6802	8-729-119-80	TRANSISTOR 2SC2688-LK	
Q6803	8-729-046-18	TRANSISTOR 2SC5480-01	
Q6804	8-729-046-18	TRANSISTOR 2SC5480-01	
Q6805	8-729-038-83	TRANSISTOR 2SK2251-01-F19	
Q6806	8-729-930-91	TRANSISTOR IRF740	
Q6807	8-729-030-02	TRANSISTOR DTC144ESA	
Q6809	8-729-119-78	TRANSISTOR 2SC2785-HFE	

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

D

REF. NO.		PART.NO	DESCRIPTION			REMARK
Q6810		8-729-026-41	TRANSISTOR 2SA933AS-QRT			
Q6851		8-729-043-95	TRANSISTOR 2SC3840(3)			
			< RESISTOR >			
R6601	⚠	1-202-968-11	CEMENTED	1.2	5%	10W
R6603		1-249-430-11	CARBON	12K	5%	1/4W
R6604		1-249-421-11	CARBON	2.2K	5%	1/4W
R6605		1-249-417-11	CARBON	1K	5%	1/4W F
R6606	⚠	1-202-968-11	CEMENTED	1.2	5%	10W
R6608	⚠	1-220-797-11	CEMENTED	0.47	5%	10W F
R6611		1-260-125-11	CARBON	150K	5%	1/2W
R6612		1-260-125-11	CARBON	150K	5%	1/2W
R6613		1-216-369-00	METAL OXIDE	1	5%	2W F
R6614		1-260-125-11	CARBON	150K	5%	1/2W
R6615		1-260-125-11	CARBON	150K	5%	1/2W
R6616		1-216-369-00	METAL OXIDE	1	5%	2W F
R6619		1-249-425-11	CARBON	4.7K	5%	1/4W
R6620		1-249-443-11	CARBON	0.47	5%	1/4W F
R6624		1-249-425-11	CARBON	4.7K	5%	1/4W
R6625		1-249-429-11	CARBON	10K	5%	1/4W
R6626		1-247-807-31	CARBON	100	5%	1/4W
R6627		1-249-429-11	CARBON	10K	5%	1/4W
R6628		1-260-129-11	CARBON	330K	5%	1/2W
R6629		1-260-129-11	CARBON	330K	5%	1/2W
R6630		1-249-417-11	CARBON	1K	5%	1/4W
R6631		1-249-425-11	CARBON	4.7K	5%	1/4W
R6632		1-207-905-00	WIREWOUND	0.27	10%	2W F
R6633		1-249-429-11	CARBON	10K	5%	1/4W
R6635		1-249-443-11	CARBON	0.47	5%	1/4W
			(KV-29FS60A/29FS60B/29FS60D/29FS60E/ 29FS60K/29FS60R/29FS60U)			
		1-535-303-00	LEAD, JUMPER (5.0MM) (KV-32FS60A/32FS60B/32FS60D/32FS60E)			
R6637		1-249-421-11	CARBON	2.2K	5%	1/4W
R6638		1-247-895-91	CARBON	470K	5%	1/4W
R6639		1-249-416-11	CARBON	820	5%	1/4W
R6640		1-249-417-11	CARBON	1K	5%	1/4W
R6641		1-260-127-11	CARBON	220K	5%	1/2W
R6642		1-249-389-11	CARBON	4.7	5%	1/4W F
R6643		1-249-417-11	CARBON	1K	5%	1/4W F
R6644		1-249-429-11	CARBON	10K	5%	1/4W
R6645		1-260-131-11	CARBON	470K	5%	1/2W
R6646		1-249-429-11	CARBON	10K	5%	1/4W
R6647		1-249-410-11	CARBON	270	5%	1/4W
R6648		1-247-863-91	CARBON	22K	5%	1/4W
R6649		1-215-926-00	METAL OXIDE	33K	5%	3W F
R6651		1-247-791-91	CARBON	22	5%	1/4W
R6652		1-249-389-11	CARBON	4.7	5%	1/4W F
R6653		1-249-421-11	CARBON	2.2K	5%	1/4W
R6655		1-249-429-11	CARBON	10K	5%	1/4W
R6656	⚠	1-218-265-11	METAL	8.2M	5%	1W
R6657		1-215-425-00	METAL	1.5K	1%	1/4W
R6666		1-202-933-61	FUSIBLE	0.1	10%	1/2W F
R6667		1-215-441-00	METAL	6.8K	1%	1/4W
R6668		1-249-429-11	CARBON	10K	5%	1/4W
R6669		1-249-413-11	CARBON	470	5%	1/4W
R6670		1-249-429-11	CARBON	10K	5%	1/4W
R6676		1-249-417-11	CARBON	1K	5%	1/4W
R6677		1-249-417-11	CARBON	1K	5%	1/4W
R6678		1-249-417-11	CARBON	1K	5%	1/4W
R6679		1-215-479-00	METAL	270K	1%	1/4W
R6681		1-215-467-00	METAL	82K	1%	1/4W
R6682		1-215-447-00	METAL	12K	1%	1/4W
R6683		1-215-429-00	METAL	2.2K	1%	1/4W
R6684		1-247-807-31	CARBON	100	5%	1/4W
R6685		1-249-417-11	CARBON	1K	5%	1/4W
R6686		1-215-449-00	METAL	15K	1%	1/4W
R6687		1-249-431-11	CARBON	15K	5%	1/4W
R6688		1-249-417-11	CARBON	1K	5%	1/4W
R6700		1-215-441-00	METAL	6.8K	1%	1/4W
R6701		1-215-437-00	METAL	4.7K	1%	1/4W
R6702		1-215-441-00	METAL	6.8K	1%	1/4W
R6703		1-215-437-00	METAL	4.7K	1%	1/4W
R6704		1-249-383-11	CARBON	1.5	5%	1/4W F
R6705		1-247-791-91	CARBON	22	5%	1/4W
R6707		1-215-888-00	METAL OXIDE	220	5%	2W F
R6708		1-214-798-21	METAL	1.8	1%	1/2W
R6709		1-214-798-21	METAL	1.8	1%	1/2W
R6710		1-247-843-11	CARBON	3.3K	5%	1/4W
R6711		1-249-418-11	CARBON	1.2K	5%	1/4W
R6801		1-215-440-00	METAL	6.2K	1%	1/4W
R6802		1-214-915-00	METAL	120K	1%	1/2W
R6803		1-249-421-11	CARBON	2.2K	5%	1/4W
R6804		1-247-807-31	CARBON	100	5%	1/4W
R6805		1-247-807-31	CARBON	100	5%	1/4W
R6806		1-249-411-11	CARBON	680	5%	1/4W
R6807		1-249-411-11	CARBON	330	5%	1/4W
R6808		1-260-340-11	CARBON	10K	5%	1/2W
R6809		1-260-340-11	CARBON	10K	5%	1/2W
R6810		1-215-920-11	METAL OXIDE	3.3K	5%	3W
			(KV-29FS60A/29FS60B/29FS60D/29FS60E/ 29FS60K/29FS60R/29FS60U)			
		1-216-460-11	METAL OXIDE	3.9K	5%	3W F
			(KV-32FS60A/32FS60B/32FS60D/32FS60E)			
R6811		1-216-461-00	METAL OXIDE	5.6K	5%	2W F
R6812		1-215-895-11	METAL OXIDE	3.3K	5%	2W F
R6813		1-215-920-11	METAL OXIDE	3.3K	5%	3W F
			(KV-29FS60A/29FS60B/29FS60D/29FS60E/ 29FS60K/29FS60R/29FS60U)			
		1-215-895-11	METAL OXIDE	3.3K	5%	2W
			(KV-32FS60A/32FS60B/32FS60D/32FS60E)			
R6814		1-215-880-00	METAL OXIDE	10	5%	2W F
R6815		1-215-880-00	METAL OXIDE	10	5%	2W F
R6816		1-216-361-00	METAL OXIDE	0.22	5%	2W F

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

D **VM**

REF. NO.	PART.NO	DESCRIPTION				REMARK
R6817	1-216-361-00	METAL OXIDE	0.22	5%	2W	F
R6818	1-247-807-31	CARBON	100	5%	1/4W	
R6819	1-247-807-31	CARBON	100	5%	1/4W	
R6831	1-260-124-11	CARBON	120K	5%	1/2W	
R6832	1-216-434-11	METAL OXIDE	1.8K	5%	1W	F
R6833	1-202-972-61	FUSIBLE	1	5%	1/4W	F
R6834	1-249-377-11	CARBON	0.47	5%	1/4W	F
R6835	1-249-377-11	CARBON	0.47	5%	1/4W	F
R6836	1-249-431-11	CARBON	15K	5%	1/4W	
R6837	1-215-919-11	METAL OXIDE	2.2K	5%	3W	F
		(KV-29FS60A/29FS60B/29FS60D/29FS60E/ 29FS60K/29FS60R/29FS60U)				
	1-215-894-11	METAL OXIDE	2.2K	5%	2W	
		(KV-32FS60A/32FS60B/32FS60D/32FS60E)				
R6838	1-214-905-11	METAL	47K	1%	1/2W	
R6839	1-215-919-11	METAL OXIDE	2.2K	5%	3W	F
		(KV-29FS60A/29FS60B/29FS60D/29FS60E/ 29FS60K/29FS60R/29FS60U)				
	1-215-894-11	METAL OXIDE	2.2K	5%	2W	
		(KV-32FS60A/32FS60B/32FS60D/32FS60E)				
R6840	1-247-843-11	CARBON	3.3K	5%	1/4W	
R6842	1-260-123-11	CARBON	100K	5%	1/2W	
R6843	1-249-429-11	CARBON	10K	5%	1/4W	
R6844	1-249-441-11	CARBON	100K	5%	1/4W	
R6845	1-247-863-91	CARBON	22K	5%	1/4W	
R6851	1-260-123-11	CARBON	100K	5%	1/2W	
R6852	1-260-123-11	CARBON	100K	5%	1/2W	
R6853	1-260-123-11	CARBON	100K	5%	1/2W	
R6854	1-249-417-11	CARBON	1K	5%	1/4W	
R6856	1-216-485-11	METAL OXIDE	5.6K	5%	3W	
		(KV-29FS60A/29FS60B/29FS60D/29FS60E/ 29FS60K/29FS60R/29FS60U)				
	1-215-922-11	METAL OXIDE	6.8K	5%	3W	F
		(KV-32FS60A/32FS60B/32FS60D/32FS60E)				
R6857	1-216-485-11	METAL OXIDE	5.6K	5%	3W	
		(KV-29FS60A/29FS60B/29FS60D/29FS60E/ 29FS60K/29FS60R/29FS60U)				
	1-215-922-11	METAL OXIDE	6.8K	5%	3W	F
		(KV-32FS60A/32FS60B/32FS60D/32FS60E)				
R6858	1-215-922-11	METAL OXIDE	6.8K	5%	3W	F
R6859	1-215-922-11	METAL OXIDE	6.8K	5%	3W	F
R6880	1-215-436-00	METAL	4.3K	1%	1/4W	
R6885	1-215-493-00	METAL	1M	1%	1/4W	
R6886	1-215-477-00	METAL	220K	1%	1/4W	
R6887	1-215-461-00	METAL	47K	1%	1/4W	
R6888	1-249-441-11	CARBON	100K	5%	1/4W	
R6889	1-249-421-11	CARBON	2.2K	5%	1/4W	
R6890	1-247-887-00	CARBON	220K	5%	1/4W	
R6891	1-247-895-91	CARBON	470K	5%	1/4W	
R6892	1-249-437-11	CARBON	47K	5%	1/4W	
R6893	1-249-429-11	CARBON	10K	5%	1/4W	
R6894	1-535-303-00	LEAD, JUMPER (5.0MM)				
R6895	1-249-443-11	CARBON	0.47	5%	1/4W	F
R6896	1-249-443-11	CARBON	0.47	5%	1/4W	F
R6897	1-215-485-00	METAL	470K	1%	1/4W	
R6898	1-215-493-00	METAL	1M	1%	1/4W	
R6899	1-215-493-00	METAL	1M	1%	1/4W	

< RELAY >

RY6601	⚠	1-755-266-11	RELAY, AC POWER
RY6602	⚠	1-755-167-11	RELAY, AC POWER

< TRANSFORMER >

T6600	⚠	1-431-616-11	TRANSFORMER, CONVERTER
T6601	⚠	1-433-516-11	TRANSFORMER, CONVERTER
T6651		1-431-732-11	TRANSFORMER, CONVERTER (SRT)
T6801		1-433-489-11	TRANSFORMER, FERRITE (HDT)
T6802		1-433-489-11	TRANSFORMER, FERRITE (HDT)
T6804	⚠	1-453-272-11	TRANSFORMER FLYBACK ASSEMBLY NX-4512/U2B4
T6805		1-429-741-11	TRANSFORMER, DRIVE
T6852		1-426-896-11	TRANSFORMER, FERRITE (DFT)

< THERMISTOR >

TH6600	⚠	1-809-827-11	THERMISTOR, POSITIVE
TH6700		1-800-193-00	THERMISTOR

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*A-1644-094-A VM BOARD, COMPLETE (KV-29FS60)
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*A-1644-095-A VM BOARD, COMPLETE (KV-32FS60)
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4-382-854-11 SCREW (M3X10), P, SW (+)

< CAPACITOR >

C5400	1-107-883-11	ELECT	330MF	20%	16V
C5401	1-126-935-11	ELECT	470MF	20%	16V
C5402	1-137-370-11	FILM	0.01MF	5%	50V
C5403	1-126-935-11	ELECT	470MF	20%	6.3V
C5405	1-126-933-11	ELECT	100MF	20%	16V
C5406	1-126-935-11	ELECT	470MF	20%	6.3V
C5407	1-104-989-91	FILM	0.0022MF	5%	200V
C5408	1-104-989-91	FILM	0.0022MF	5%	200V
C5409	1-107-649-11	ELECT	2.2MF	20%	250V
C5410	1-137-364-11	FILM	0.001MF	5%	50V
C5411	1-137-364-11	FILM	0.001MF	5%	50V
C5412	1-126-933-11	ELECT	100MF	20%	16V
C5413	1-126-933-11	ELECT	100MF	20%	16V
C5414	1-107-638-11	ELECT	33MF	20%	160V
C5415	1-107-363-91	FILM	0.0068MF	10%	200V
C5416	1-102-106-00	CERAMIC	100PF	10%	50V
C5419	1-101-880-00	CERAMIC	47PF	5%	50V
C5430	1-162-117-00	CERAMIC	100PF	10%	500V

VM H1 U

REF. NO.	PART.NO	DESCRIPTION				REMARK
		< CONNECTOR >				
CN5402	*1-568-878-51	PIN, CONNECTOR 3P				
CN5444	*1-770-723-11	CONNECTOR, BOARD TO BOARD 8P				
CN5555	1-695-915-11	TAB (CONTACT)				
CN5602	*1-568-881-51	PIN, CONNECTOR 6P				
		< DIODE >				
D5400	8-719-991-33	DIODE 1SS133T-77				
D5401	8-719-510-02	DIODE D1NS4				
D5402	8-719-991-33	DIODE 1SS133T-77				
D5403	8-719-991-33	DIODE 1SS133T-77				
D5404	8-719-991-33	DIODE 1SS133T-77				
D5405	8-719-924-11	DIODE MTZJ-T-77-22				
D5406	8-719-924-11	DIODE MTZJ-T-77-22				
		< FERRITE BEAD >				
FB5400	1-410-397-21	FERRITE	1.1UH			
FB5401	1-410-396-41	FERRITE	0.45UH			
		< COIL >				
L5400	1-410-784-41	INDUCTOR	0.18UH			
		< TRANSISTOR >				
Q5400	8-729-119-78	TRANSISTOR 2SC2785-HFE				
Q5401	8-729-119-78	TRANSISTOR 2SC2785-HFE				
Q5402	8-729-119-78	TRANSISTOR 2SC2785-HFE				
Q5403	8-729-119-78	TRANSISTOR 2SC2785-HFE				
Q5404	8-729-026-41	TRANSISTOR 2SA933AS-QRT				
Q5405	8-729-026-41	TRANSISTOR 2SA933AS-QRT				
Q5406	8-729-017-05	TRANSISTOR 2SA1837				
Q5407	8-729-017-06	TRANSISTOR 2SC4793				
		< RESISTOR >				
R5400	1-249-401-11	CARBON	47	5%	1/4W	
R5401	1-249-421-11	CARBON	2.2K	5%	1/4W	
R5402	1-249-413-11	CARBON	470	5%	1/4W	
R5403	1-249-393-11	CARBON	10	5%	1/4W	F
R5404	1-249-417-11	CARBON	1K	5%	1/4W	
R5405	1-249-425-11	CARBON	4.7K	5%	1/4W	
R5406	1-249-425-11	CARBON	4.7K	5%	1/4W	
R5407	1-249-399-11	CARBON	33	5%	1/4W	
R5408	1-247-807-31	CARBON	100	5%	1/4W	
R5409	1-247-815-91	CARBON	220	5%	1/4W	
R5410	1-249-401-11	CARBON	47	5%	1/4W	
R5411	1-249-401-11	CARBON	47	5%	1/4W	
R5412	1-249-429-11	CARBON	10K	5%	1/4W	
R5413	1-249-414-11	CARBON	560	5%	1/4W	F
R5414	1-249-432-11	CARBON	18K	5%	1/4W	
R5415	1-260-311-11	CARBON	39	5%	1/2W	
R5416	1-249-383-11	CARBON	1.5	5%	1/4W	F
R5417	1-249-432-11	CARBON	18K	5%	1/4W	
R5418	1-249-414-11	CARBON	560	5%	1/4W	
R5419	1-249-421-11	CARBON	2.2K	5%	1/4W	
R5420	1-249-421-11	CARBON	2.2K	5%	1/4W	
R5421	1-249-383-11	CARBON	1.5	5%	1/4W	F
R5422	1-249-400-11	CARBON	39	5%	1/4W	F
R5423	1-215-914-11	METAL OXIDE	330	5%	3W	F
R5425	1-249-419-11	CARBON	1.5K	5%	1/4W	

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*A-1646-170-A H1 BOARD, COMPLETE (KV-29FS60)
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*A-1646-174-A H1 BOARD, COMPLETE (KV-32FS60)
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		< CAPACITOR >				
C7900	1-101-810-00	CERAMIC	100PF	5%	500V	
C7901	1-101-810-00	CERAMIC	100PF	5%	500V	
C7925	1-137-372-11	FILM	0.022MF	5%	50V	
C7926	1-137-372-11	FILM	0.022MF	5%	50V	
		< CONNECTOR >				
CN7103*	1-564-514-11	PLUG, CONNECTOR 11P				
		< JACK >				
J7900	1-779-947-21	TERMINAL BLOCK, S				
J7925	1-764-606-11	JACK				
		< COIL >				
L7925	1-414-183-41	INDUCTOR	10UH			
L7926	1-414-183-41	INDUCTOR	10UH			
		< RESISTOR >				
R7900	1-535-303-00	LEAD, JUMPER (5.0MM)				
R7901	1-249-417-11	CARBON	1K	5%	1/4W	
R7902	1-247-895-91	CARBON	470K	5%	1/4W	
R7903	1-247-895-91	CARBON	470K	5%	1/4W	
R7904	1-535-303-00	LEAD, JUMPER (5.0MM)				
R7905	1-249-417-11	CARBON	1K	5%	1/4W	
R7906	1-535-303-00	LEAD, JUMPER (5.0MM)				

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*A-1648-018-A U BOARD, COMPLETE (KV-29FS60)
****
*A-1648-017-A U BOARD, COMPLETE (KV-32FS60)
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		< CAPACITOR >			
C7952	1-101-005-00	CERAMIC	0.022MF		50V
C7953	1-101-005-00	CERAMIC	0.022MF		50V

(KV-32FS60A/32FS60B/32FS60D/32FS60E)

REF. NO.	PART.NO	DESCRIPTION	REMARK
C7961	1-101-005-00	CERAMIC 0.022MF	50V
C7962	1-101-005-00	CERAMIC 0.022MF	50V
		< CONNECTOR >	
CN7101	1-573-299-21	CONNECTOR, BOARD TO BOARD 10P	
CN7977*	1-564-519-11	PLUG, CONNECTOR 4P	
CN7988*	1-564-519-11	PLUG, CONNECTOR 4P	
CN7990*	1-564-518-11	PLUG, CONNECTOR 3P	
CN7999*	1-564-519-11	PLUG, CONNECTOR 4P	
		< JACK >	
J7951	1-694-470-11	TERMINAL BOARD	
J7952	1-537-339-11	TERMINAL BOARD	
		< COIL >	
L7950	1-402-711-11	INDUCTOR 0UH	
L7952	1-402-711-11	INDUCTOR 0UH	
L7954	1-402-711-11	INDUCTOR 0UH	
L7956	1-402-711-11	INDUCTOR 0UH	
**********			
		*A-1651-102-A J BOARD, COMPLETE (KV-29FS60A/29FS60D/29FS60E/	
		********** 29FS60K/29FS60R/29FS60U)	
		*A-1651-106-A J BOARD, COMPLETE (KV-29FS60B)	
		**********	
		*A-1651-101-A J BOARD, COMPLETE (KV-32FS60A/32FS60D/32FS60E)	
		**********	
		*A-1651-107-A J BOARD, COMPLETE (KV-32FS60B)	
		**********	
		< CAPACITOR >	
C8100	1-107-823-11	CERAMIC CHIP 0.47MF 10%	16V
C8101	1-107-823-11	CERAMIC CHIP 0.47MF 10%	16V
C8102	1-104-760-11	CERAMIC CHIP 0.047MF 10%	50V
C8103	1-104-664-11	ELECT 47MF 20%	16V
C8104	1-126-934-11	ELECT 220MF 20%	16V
C8105	1-126-933-11	ELECT 100MF 20%	16V
C8106	1-126-933-11	ELECT 100MF 20%	16V
C8107	1-126-933-11	ELECT 100MF 20%	16V
C8108	1-126-933-11	ELECT 100MF 20%	16V
C8109	1-164-004-11	CERAMIC CHIP 0.1MF 10%	25V
C8110	1-164-004-11	CERAMIC CHIP 0.1MF 10%	25V
C8111	1-126-933-11	ELECT 100MF 20%	16V
C8125	1-107-823-11	CERAMIC CHIP 0.47MF 10%	16V
C8126	1-107-823-11	CERAMIC CHIP 0.47MF 10%	16V
C8127	1-164-004-11	CERAMIC CHIP 0.1MF 10%	25V
C8128	1-104-664-11	ELECT 47MF 20%	16V
C8129	1-107-823-11	CERAMIC CHIP 0.47MF 10%	16V
C8130	1-107-823-11	CERAMIC CHIP 0.47MF 10%	16V
C8131	1-107-823-11	CERAMIC CHIP 0.47MF 10%	16V
C8132	1-107-823-11	CERAMIC CHIP 0.47MF 10%	16V
C8133	1-104-664-11	ELECT 47MF 20%	16V
C8134	1-104-664-11	ELECT 47MF 20%	16V
C8135	1-164-505-11	CERAMIC CHIP 2.2MF	16V
C8136	1-163-251-11	CERAMIC CHIP 100PF 5%	50V
C8137	1-164-505-11	CERAMIC CHIP 2.2MF	16V
C8138	1-107-823-11	CERAMIC CHIP 0.47MF 10%	16V
C8139	1-107-823-11	CERAMIC CHIP 0.47MF 10%	16V
C8140	1-107-823-11	CERAMIC CHIP 0.47MF 10%	16V
C8141	1-107-823-11	CERAMIC CHIP 0.47MF 10%	16V
C8142	1-107-823-11	CERAMIC CHIP 0.47MF 10%	16V
C8143	1-107-823-11	CERAMIC CHIP 0.47MF 10%	16V
C8144	1-107-823-11	CERAMIC CHIP 0.47MF 10%	16V
C8145	1-107-823-11	CERAMIC CHIP 0.47MF 10%	16V
C8146	1-163-251-11	CERAMIC CHIP 100PF 5%	50V
C8150	1-163-251-11	CERAMIC CHIP 100PF 5%	50V
C8151	1-163-017-00	CERAMIC CHIP 0.0047MF 10%	50V
C8152	1-164-346-11	CERAMIC CHIP 1MF	16V
C8153	1-107-682-11	CERAMIC CHIP 1MF 10%	16V
C8154	1-163-021-91	CERAMIC CHIP 0.01MF 10%	50V
C8155	1-107-682-11	CERAMIC CHIP 1MF 10%	16V
C8156	1-164-505-11	CERAMIC CHIP 2.2MF	16V
C8157	1-163-021-91	CERAMIC CHIP 0.01MF 10%	50V
C8159	1-104-664-11	ELECT 47MF 20%	16V
C8161	1-164-505-11	CERAMIC CHIP 2.2MF	16V
C8200	1-104-664-11	ELECT 47MF 20%	16V
C8201	1-163-241-11	CERAMIC CHIP 39PF 5%	50V
C8202	1-164-004-11	CERAMIC CHIP 0.1MF 10%	25V
C8203	1-164-004-11	CERAMIC CHIP 0.1MF 10%	25V
C8204	1-164-506-11	CERAMIC CHIP 4.7MF	16V
C8205	1-165-319-11	CERAMIC CHIP 0.1MF	50V
C8208	1-164-506-11	CERAMIC CHIP 4.7MF	16V
C8209	1-163-251-11	CERAMIC CHIP 100PF 5%	50V
C8210	1-164-004-11	CERAMIC CHIP 0.1MF 10%	25V
C8211	1-163-243-11	CERAMIC CHIP 47PF 5%	50V
C8212	1-163-243-11	CERAMIC CHIP 47PF 5%	50V
C8213	1-163-087-00	CERAMIC CHIP 4PF	0.25PF 50V
C8214	1-163-087-00	CERAMIC CHIP 4PF	0.25PF 50V
C8215	1-163-243-11	CERAMIC CHIP 47PF 5%	50V
C8216	1-126-933-11	ELECT 100MF 20%	16V
C8217	1-164-004-11	CERAMIC CHIP 0.1MF 10%	25V
C8218	1-126-964-11	ELECT 10MF 20%	50V
C8219	1-164-004-11	CERAMIC CHIP 0.1MF 10%	25V
C8220	1-126-964-11	ELECT 10MF 20%	50V
C8221	1-104-664-11	ELECT 47MF 20%	16V
C8222	1-104-664-11	ELECT 47MF 20%	16V
C8223	1-104-664-11	ELECT 47MF 20%	16V
C8224	1-164-004-11	CERAMIC CHIP 0.1MF 10%	25V
C8225	1-104-664-11	ELECT 47MF 20%	16V
C8228	1-163-009-11	CERAMIC CHIP 0.001MF 10%	50V
C8229	1-163-009-11	CERAMIC CHIP 0.001MF 10%	50V
C8230	1-163-009-11	CERAMIC CHIP 0.001MF 10%	50V
C8231	1-163-009-11	CERAMIC CHIP 0.001MF 10%	50V

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REF. NO.	PART.NO	DESCRIPTION	REMARK
C8232	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C8233	1-104-664-11	ELECT 47MF	20% 16V
C8234	1-107-823-11	CERAMIC CHIP 0.47MF	10% 16V
C8235	1-107-823-11	CERAMIC CHIP 0.47MF	10% 16V
C8236	1-126-933-11	ELECT 100MF	20% 16V
C8237	1-163-021-91	CERAMIC CHIP 0.01MF	10% 50V
C8238	1-164-505-11	CERAMIC CHIP 2.2MF	16V
C8239	1-107-823-11	CERAMIC CHIP 0.47MF	10% 16V
C8240	1-107-823-11	CERAMIC CHIP 0.47MF	10% 16V
C8241	1-126-964-11	ELECT 10MF	20% 50V
C8242	1-104-664-11	ELECT 47MF	20% 16V
C8243	1-110-501-11	CERAMIC CHIP 0.33MF	10% 16V (KV-29FS60B/32FS60B)
C8250	1-164-506-11	CERAMIC CHIP 4.7MF	16V
C8251	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C8252	1-164-506-11	CERAMIC CHIP 4.7MF	16V
C8253	1-163-263-11	CERAMIC CHIP 330PF	5% 50V
C8254	1-163-021-91	CERAMIC CHIP 0.01MF	10% 50V
C8255	1-107-823-11	CERAMIC CHIP 0.47MF	10% 16V
C8256	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C8258	1-126-933-11	ELECT 100MF	20% 16V
C8260	1-126-933-11	ELECT 100MF	20% 16V
C8263	1-126-933-11	ELECT 100MF	20% 16V
C8300	1-115-340-11	CERAMIC CHIP 0.22MF	10% 25V
C8301	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C8302	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C8303	1-115-340-11	CERAMIC CHIP 0.22MF	10% 25V
C8304	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C8305	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C8306	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C8307	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C8308	1-126-933-11	ELECT 100MF	20% 16V
C8310	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C8311	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C8312	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C8313	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C8314	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C8315	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C8316	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C8317	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C8318	1-126-933-11	ELECT 100MF	20% 16V
C8319	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C8320	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C8321	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C8322	1-126-933-11	ELECT 100MF	20% 16V
C8323	1-164-182-11	CERAMIC CHIP 0.0033MF	10% 50V
C8324	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C8325	1-115-340-11	CERAMIC CHIP 0.22MF	10% 25V
C8326	1-163-231-11	CERAMIC CHIP 15PF	5% 50V
C8327	1-115-340-11	CERAMIC CHIP 0.22MF	10% 25V
C8328	1-115-340-11	CERAMIC CHIP 0.22MF	10% 25V
C8329	1-115-340-11	CERAMIC CHIP 0.22MF	10% 25V
C8330	1-163-231-11	CERAMIC CHIP 15PF	5% 50V
C8331	1-126-960-11	ELECT 1MF	20% 50V
C8332	1-163-017-00	CERAMIC CHIP 0.0047MF	10% 50V
C8343	1-163-251-11	CERAMIC CHIP 100PF	5% 50V (KV-29FS60B/32FS60B)
C8344	1-163-173-00	CERAMIC CHIP 47PF	5% 50V (KV-29FS60B/32FS60B)
C8345	1-126-933-11	ELECT 100MF	20% 16V (KV-29FS60B/32FS60B)
C8401	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C8402	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C8403	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C8404	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C8405	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C8406	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C8407	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C8408	1-164-182-11	CERAMIC CHIP 0.0033MF	10% 50V
C8409	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C8410	1-115-340-11	CERAMIC CHIP 0.22MF	10% 25V
C8411	1-115-340-11	CERAMIC CHIP 0.22MF	10% 25V
C8412	1-115-340-11	CERAMIC CHIP 0.22MF	10% 25V
C8413	1-115-340-11	CERAMIC CHIP 0.22MF	10% 25V
C8414	1-163-231-11	CERAMIC CHIP 15PF	5% 50V
C8415	1-163-231-11	CERAMIC CHIP 15PF	5% 50V
C8416	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C8417	1-163-017-00	CERAMIC CHIP 0.0047MF	10% 50V
C8418	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C8419	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C8420	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C8421	1-126-933-11	ELECT 100MF	20% 16V
C8422	1-126-960-11	ELECT 1MF	20% 50V
C8423	1-126-933-11	ELECT 100MF	20% 16V
C8424	1-115-340-11	CERAMIC CHIP 0.22MF	10% 25V
C8425	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C8426	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C8427	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C8450	1-104-664-11	ELECT 47MF	20% 16V
C8451	1-104-664-11	ELECT 47MF	20% 16V
C8455	1-115-340-11	CERAMIC CHIP 0.22MF	10% 25V (KV-29FS60A/29FS60B/29FS60D/29FS60E/ 29FS60K/29FS60R/29FS60U/ 32FS60A/32FS60D/32FS60E)
C8456	1-115-340-11	CERAMIC CHIP 0.22MF	10% 25V
C8500	1-115-340-11	CERAMIC CHIP 0.22MF	10% 25V
C8501	1-163-021-91	CERAMIC CHIP 0.01MF	10% 50V
C8502	1-163-021-91	CERAMIC CHIP 0.01MF	10% 50V
C8503	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C8504	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C8505	1-126-933-11	ELECT 100MF	20% 16V
C8506	1-163-037-11	CERAMIC CHIP 0.022MF	10% 50V
C8507	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V

REF. NO.	PART.NO	DESCRIPTION	REMARK
C8508	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C8509	1-126-933-11	ELECT 100MF 20% 16V	
C8510	1-104-664-11	ELECT 47MF 20% 16V	
C8511	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C8512	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C8513	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C8514	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C8515	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C8516	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C8517	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C8518	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C8519	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C8520	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C8521	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C8601	1-115-340-11	CERAMIC CHIP 0.22MF 10% 25V	
C8602	1-115-340-11	CERAMIC CHIP 0.22MF 10% 25V	
C8605	1-115-340-11	CERAMIC CHIP 0.22MF 10% 25V	
C8606	1-115-340-11	CERAMIC CHIP 0.22MF 10% 25V	
C8607	1-104-664-11	ELECT 47MF 20% 16V	
C8608	1-104-664-11	ELECT 47MF 20% 16V	
C8609	1-115-340-11	CERAMIC CHIP 0.22MF 10% 25V	
C8610	1-115-340-11	CERAMIC CHIP 0.22MF 10% 25V	
C8611	1-115-340-11	CERAMIC CHIP 0.22MF 10% 25V	
C8612	1-115-340-11	CERAMIC CHIP 0.22MF 10% 25V	
C8613	1-104-664-11	ELECT 47MF 20% 16V	
C8614	1-104-664-11	ELECT 47MF 20% 16V	
C8700	1-126-964-11	ELECT 10MF 20% 50V	
C8701	1-104-664-11	ELECT 47MF 20% 16V	
C8702	1-163-133-00	CERAMIC CHIP 470PF 5% 50V	
C8703	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C8704	1-163-021-91	CERAMIC CHIP 0.01MF 10% 50V	
C8705	1-163-021-91	CERAMIC CHIP 0.01MF 10% 50V	
C8706	1-163-235-11	CERAMIC CHIP 22PF 5% 50V	
C8707	1-163-235-11	CERAMIC CHIP 22PF 5% 50V	
C8708	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C8709	1-126-964-11	ELECT 10MF 20% 50V	
C8710	1-126-933-11	ELECT 100MF 20% 16V	
C8900	1-163-251-11	CERAMIC CHIP 100PF 5% 50V	
C8901	1-163-017-00	CERAMIC CHIP 0.0047MF 10% 50V	
C8902	1-163-017-00	CERAMIC CHIP 0.0047MF 10% 50V	
C8903	1-163-251-11	CERAMIC CHIP 100PF 5% 50V	
C8904	1-163-251-11	CERAMIC CHIP 100PF 5% 50V	
C8905	1-163-251-11	CERAMIC CHIP 100PF 5% 50V	
C8906	1-163-017-00	CERAMIC CHIP 0.0047MF 10% 50V	
C8907	1-163-017-00	CERAMIC CHIP 0.0047MF 10% 50V	
C8908	1-163-251-11	CERAMIC CHIP 100PF 5% 50V	
C8909	1-163-017-00	CERAMIC CHIP 0.0047MF 10% 50V	
C8910	1-163-251-11	CERAMIC CHIP 100PF 5% 50V	
C8911	1-163-017-00	CERAMIC CHIP 0.0047MF 10% 50V	
C8916	1-126-933-11	ELECT 100MF 20% 16V	
C8977	1-163-009-11	CERAMIC CHIP 0.001MF 10% 50V	
C8978	1-163-009-11	CERAMIC CHIP 0.001MF 10% 50V	
		< FILTER >	
CF8150	1-760-106-11	FILTER, CERAMIC	
CF8151	1-567-100-00	FILTER, CERAMIC	
CF8152	1-760-450-21	FILTER, CERAMIC	
CF8200	1-409-327-00	TRAP, CERAMIC (6.5MHZ)	
		< CONNECTOR >	
CN1402	1-573-296-11	CONNECTOR, BOARD TO BOARD 10P	(KV-29FS60B/32FS60B)
CN8101	1-695-302-11	CONNECTOR, BOARD TO BOARD 50P	
CN8102*	1-564-518-11	PLUG, CONNECTOR 3P	
CN8900	1-561-534-41	SOCKET, PIN 21P	
CN8901	1-695-293-11	SOCKET 21P	
CN8902	1-695-293-11	SOCKET 21P	
		< DIODE >	
D8125	8-719-158-49	DIODE RD12SB2	
D8126	8-719-158-49	DIODE RD12SB2	
D8127	8-719-158-49	DIODE RD12SB2	
D8128	8-719-158-49	DIODE RD12SB2	
D8129	8-719-158-49	DIODE RD12SB2	
D8130	8-719-158-49	DIODE RD12SB2	
D8131	8-719-158-49	DIODE RD12SB2	
D8132	8-719-158-49	DIODE RD12SB2	
D8150	8-719-421-57	DIODE MA73-TX	
D8151	8-719-421-57	DIODE MA73-TX	
D8152	8-719-421-57	DIODE MA73-TX	
D8200	8-719-158-49	DIODE RD12SB2	
D8201	8-719-158-49	DIODE RD12SB2	
D8202	8-719-158-49	DIODE RD12SB2	
D8203	8-719-158-49	DIODE RD12SB2	
D8349	8-719-914-42	DIODE DA204K-T-146	(KV-29FS60B/32FS60B)
D8432	8-719-914-42	DOIDE DA204K-T-146	(KV-29FS60B/32FS60B)
D8450	8-719-158-49	DIODE RD12SB2	
D8451	8-719-158-49	DIODE RD12SB2	
D8900	8-719-056-85	DIODE UDZ-TE-17-8.2B	
D8901	8-719-056-85	DIODE UDZ-TE-17-8.2B	
D8902	8-719-056-85	DIODE UDZ-TE-17-8.2B	
D8903	8-719-056-85	DIODE UDZ-TE-17-8.2B	
D8904	8-719-056-85	DIODE UDZ-TE-17-8.2B	
D8905	8-719-056-85	DIODE UDZ-TE-17-8.2B	
D8906	8-719-056-85	DIODE UDZ-TE-17-8.2B	
D8907	8-719-056-85	DIODE UDZ-TE-17-8.2B	
D8908	8-719-056-85	DIODE UDZ-TE-17-8.2B	
D8909	8-719-056-85	DIODE UDZ-TE-17-8.2B	
D8910	8-719-056-85	DIODE UDZ-TE-17-8.2B	
D8911	8-719-056-85	DIODE UDZ-TE-17-8.2B	
D8912	8-719-158-49	DIODE RD12SB2	
D8913	8-719-158-49	DIODE RD12SB2	

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D8914	8-719-158-49	DIODE RD12SB2	
D8915	8-719-158-49	DIODE RD12SB2	
D8922	8-719-056-84	DIODE UDZ-TE-17-7.5B	
D8923	8-719-978-04	DIODE DTZ-TT11-3.3B	
		< FILTER >	
FL8200	1-236-071-11	ENCAPSULATED COMPONENT	
FL8201	1-233-764-21	FILTER	
FL8203	1-236-071-11	ENCAPSULATED COMPONENT	
FL8250	1-236-071-11	ENCAPSULATED COMPONENT	
FL8251	1-236-071-11	ENCAPSULATED COMPONENT	
FL8252	1-236-071-11	ENCAPSULATED COMPONENT	
FL8300	1-236-071-11	ENCAPSULATED COMPONENT	
FL8301	1-236-071-11	ENCAPSULATED COMPONENT	
FL8400	1-236-071-11	ENCAPSULATED COMPONENT	
FL8401	1-236-071-11	ENCAPSULATED COMPONENT	
FL8500	1-236-071-11	ENCAPSULATED COMPONENT	
FL8501	1-236-071-11	ENCAPSULATED COMPONENT	
FL8502	1-233-765-21	FILTER	
FL8503	1-233-768-21	FILTER (SMD)	
FL8504	1-233-766-21	FILTER	
FL8700	1-236-071-11	ENCAPSULATED COMPONENT	
FL8701	1-236-071-11	ENCAPSULATED COMPONENT	
		< IC >	
IC8100	8-759-352-94	IC TDA7309D013TR	
IC8101	8-759-085-34	IC TDA2822D	
IC8125	8-759-351-01	IC TEA6422DT	
IC8150	8-759-478-90	IC U2861B-MFP-G3	
IC8151	8-752-072-94	IC CXA1875AM-T4	
IC8200	8-759-544-10	IC MSP3410D-QA-B4	
IC8201	8-759-701-36	IC NJM3403AM	
IC8202	8-759-908-15	IC TL431CLP	
IC8250	8-759-567-38	IC TC9337F-034	
IC8300	8-759-546-01	IC TDA9320H-N1-518	
IC8400	8-759-546-01	IC TDA9320H-N1-518	
IC8451	8-759-385-76	IC MC14052BDR2	
IC8500	8-752-390-37	IC CXD2064Q-T6	
IC8601	8-759-544-24	IC LF90CDT	
IC8602	8-759-544-23	IC LF80CDT	
IC8603	8-759-544-22	IC LF50CDT	
IC8604	8-759-544-22	IC LF50CDT	
IC8700	8-752-390-35	IC CXD2057M-T6	
		< JACK >	
J8901	1-774-747-11	JACK BLOCK, PIN	
		< COIL >	
L8150	1-414-757-11	INDUCTOR 100UH	
L8200	1-412-006-31	INDUCTOR CHIP 10UH	
L8201	1-412-064-11	INDUCTOR CHIP 100UH	
L8343	1-410-421-11	INDUCTOR 15UH	(KV-29FS60B/32FS60B)
		< TRANSISTOR >	
Q8100	8-729-620-06	TRANSISTOR 2SC3052-EF	
Q8101	8-729-620-06	TRANSISTOR 2SC3052-EF	
Q8150	8-729-620-06	TRANSISTOR 2SC3052-EF	
Q8151	1-801-806-11	TRANSISTOR DTC144EKA-T146	
Q8152	1-801-806-11	TRANSISTOR DTC144EKA-T146	
Q8153	1-801-806-11	TRANSISTOR DTC144EKA-T146	
Q8154	1-801-806-11	TRANSISTOR DTC144EKA-T146	
Q8155	8-729-038-96	TRANSISTOR IMZ1A-T109	
Q8156	8-729-620-06	TRANSISTOR 2SC3052-EF	
Q8157	8-729-620-06	TRANSISTOR 2SC3052-EF	
Q8200	8-729-620-06	TRANSISTOR 2SC3052-EF	
Q8201	8-729-620-06	TRANSISTOR 2SC3052-EF	
Q8202	8-729-620-06	TRANSISTOR 2SC3052-EF	
Q8300	8-729-216-22	TRANSISTOR 2SA1162-G	
Q8301	8-729-038-96	TRANSISTOR IMZ1A-T109	
Q8302	8-729-620-06	TRANSISTOR 2SC3052-EF	
Q8303	8-729-620-06	TRANSISTOR 2SC3052-EF	
Q8304	8-729-620-06	TRANSISTOR 2SC3052-EF	
Q8305	8-729-620-06	TRANSISTOR 2SC3052-EF	
Q8306	8-729-620-06	TRANSISTOR 2SC3052-EF	
Q8307	8-729-620-06	TRANSISTOR 2SC3052-EF	
Q8308	8-729-038-96	TRANSISTOR IMZ1A-T109	
Q8309	8-729-038-96	TRANSISTOR IMZ1A-T109	
Q8310	8-729-038-96	TRANSISTOR IMZ1A-T109	
Q8311	8-729-620-06	TRANSISTOR 2SC2412K-T-146-R	(KV-29FS60B/32FS60B)
Q8343	8-729-620-06	TRANSISTOR 2SC2412K-T-146-R	(KV-29FS60B/32FS60B)
Q8400	8-729-620-06	TRANSISTOR 2SC3052-EF	
Q8401	8-729-216-22	TRANSISTOR 2SA1162-G	
Q8403	8-729-620-06	TRANSISTOR 2SC3052-EF	
Q8404	8-729-620-06	TRANSISTOR 2SC3052-EF	
Q8405	8-729-038-96	TRANSISTOR IMZ1A-T109	
Q8406	8-729-038-96	TRANSISTOR IMZ1A-T109	
Q8407	8-729-038-96	TRANSISTOR IMZ1A-T109	
Q8425	8-729-620-06	TRANSISTOR 2SC3052-EF	
Q8450	8-729-216-22	TRANSISTOR 2SA1162-G	
Q8453	8-729-216-22	TRANSISTOR 2SA1162-G	
Q8456	8-729-620-06	TRANSISTOR 2SC3052-EF	
Q8459	8-729-216-22	TRANSISTOR 2SA1162-G	
Q8461	8-729-216-22	TRANSISTOR 2SA1162-G	
Q8500	8-729-038-96	TRANSISTOR IMZ1A-T109	
Q8501	8-729-620-06	TRANSISTOR 2SC3052-EF	
Q8503	8-729-216-22	TRANSISTOR 2SA1162-G	
Q8504	8-729-216-22	TRANSISTOR 2SA1162-G	
Q8700	8-729-620-06	TRANSISTOR 2SC3052-EF	
Q8900	8-729-620-06	TRANSISTOR 2SC3052-EF	

REF. NO.	PART.NO	DESCRIPTION			REMARK
Q8901	8-729-620-06	TRANSISTOR 2SC3052-EF			
Q8903	8-729-620-06	TRANSISTOR 2SC3052-EF			
		< RESISTOR >			
R8100	1-216-025-91	RES,CHIP	100	5%	1/10W
R8101	1-216-025-91	RES,CHIP	100	5%	1/10W
R8102	1-216-295-91	SHORT	0		
R8103	1-216-089-91	RES,CHIP	47K	5%	1/10W
R8104	1-216-089-91	RES,CHIP	47K	5%	1/10W
R8105	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R8106	1-216-081-00	RES,CHIP	22K	5%	1/10W
R8107	1-216-081-00	RES,CHIP	22K	5%	1/10W
R8108	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R8109	1-249-389-11	CARBON	4.7	5%	1/4W F
R8110	1-249-389-11	CARBON	4.7	5%	1/4W F
R8111	1-216-033-00	RES,CHIP	220	5%	1/10W
R8112	1-216-033-00	RES,CHIP	220	5%	1/10W
R8113	1-216-095-00	RES,CHIP	82K	5%	1/10W
R8114	1-216-081-00	RES,CHIP	22K	5%	1/10W
R8115	1-216-033-00	RES,CHIP	150	5%	1/10W
R8116	1-216-033-00	RES,CHIP	150	5%	1/10W
R8117	1-216-033-00	RES,CHIP	150	5%	1/10W
R8118	1-216-033-00	RES,CHIP	150	5%	1/10W
R8125	1-216-295-91	SHORT	0		
R8126	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R8127	1-216-113-00	RES,CHIP	470K	5%	1/10W
R8128	1-216-049-91	RES,CHIP	1K	5%	1/10W
R8129	1-216-025-91	RES,CHIP	100	5%	1/10W
R8130	1-216-025-91	RES,CHIP	100	5%	1/10W
R8131	1-216-049-91	RES,CHIP	1K	5%	1/10W
R8132	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R8133	1-216-113-00	RES,CHIP	470K	5%	1/10W
R8150	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R8151	1-216-069-00	RES,CHIP	6.8K	5%	1/10W
R8152	1-216-035-00	RES,CHIP	270	5%	1/10W
R8153	1-216-081-00	RES,CHIP	22K	5%	1/10W
R8154	1-216-067-00	RES,CHIP	5.6K	5%	1/10W
R8155	1-216-043-91	RES,CHIP	560	5%	1/10W
R8156	1-216-081-00	RES,CHIP	22K	5%	1/10W
R8157	1-216-067-00	RES,CHIP	5.6K	5%	1/10W
R8158	1-216-043-91	RES,CHIP	560	5%	1/10W
R8159	1-216-081-00	RES,CHIP	22K	5%	1/10W
R8160	1-216-067-00	RES,CHIP	5.6K	5%	1/10W
R8161	1-216-043-91	RES,CHIP	560	5%	1/10W
R8162	1-216-049-91	RES,CHIP	1K	5%	1/10W
R8163	1-216-295-91	SHORT	0		
R8164	1-216-295-91	SHORT	0		
R8165	1-216-295-91	SHORT	0		
R8167	1-216-025-91	RES,CHIP	100	5%	1/10W
R8168	1-216-025-91	RES,CHIP	100	5%	1/10W
R8169	1-216-049-91	RES,CHIP	1K	5%	1/10W
R8170	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R8171	1-216-061-00	RES,CHIP	3.3K	5%	1/10W
R8172	1-216-061-00	RES,CHIP	3.3K	5%	1/10W
R8173	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R8174	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R8175	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R8200	1-216-049-91	RES,CHIP	1K	5%	1/10W
R8201	1-216-295-91	SHORT	0		
R8202	1-216-021-00	RES,CHIP	68	5%	1/10W
R8203	1-216-069-00	RES,CHIP	6.8K	5%	1/10W
R8204	1-216-049-91	RES,CHIP	1K	5%	1/10W
R8205	1-216-069-00	RES,CHIP	6.8K	5%	1/10W
R8206	1-216-049-91	RES,CHIP	1K	5%	1/10W
R8208	1-216-037-00	RES,CHIP	330	5%	1/10W
R8209	1-216-659-11	METAL CHIP	2.2K	0.50%	1/10W
R8210	1-216-025-91	RES,CHIP	100	5%	1/10W
R8212	1-216-295-91	SHORT	0		
R8213	1-216-295-91	SHORT	0		
R8214	1-216-295-91	SHORT	0		
R8215	1-216-295-91	SHORT	0		
R8216	1-216-025-91	RES,CHIP	100	5%	1/10W
R8217	1-216-025-91	RES,CHIP	100	5%	1/10W
R8218	1-216-049-91	RES,CHIP	1K	5%	1/10W
R8219	1-216-025-91	RES,CHIP	100	5%	1/10W
R8220	1-216-025-91	RES,CHIP	100	5%	1/10W
R8221	1-216-025-91	RES,CHIP	100	5%	1/10W
R8222	1-216-295-91	SHORT	0		
R8223	1-216-089-91	RES,CHIP	47K	5%	1/10W
R8224	1-216-089-91	RES,CHIP	47K	5%	1/10W
R8225	1-216-089-91	RES,CHIP	47K	5%	1/10W
R8226	1-216-089-91	RES,CHIP	47K	5%	1/10W
R8227	1-216-089-91	RES,CHIP	47K	5%	1/10W
R8228	1-216-089-91	RES,CHIP	47K	5%	1/10W
R8229	1-216-295-91	SHORT	0		
R8230	1-216-081-00	RES,CHIP	22K	5%	1/10W
R8231	1-216-089-91	RES,CHIP	47K	5%	1/10W
R8232	1-216-089-91	RES,CHIP	47K	5%	1/10W
R8233	1-216-089-91	RES,CHIP	47K	5%	1/10W
R8234	1-216-089-91	RES,CHIP	47K	5%	1/10W
R8235	1-216-089-91	RES,CHIP	47K	5%	1/10W
R8236	1-216-089-91	RES,CHIP	47K	5%	1/10W
R8237	1-216-043-91	RES,CHIP	560	5%	1/10W
R8238	1-216-063-91	RES,CHIP	3.9K	5%	1/10W
R8239	1-216-069-00	RES,CHIP	6.8K	5%	1/10W
R8240	1-216-651-11	METAL CHIP	1K	0.50%	1/10W
R8243	1-216-021-00	RES,CHIP	68	5%	1/10W
R8250	1-216-295-91	SHORT	0		
R8251	1-216-295-91	SHORT	0		
R8252	1-216-295-91	SHORT	0		
R8253	1-216-067-00	RES,CHIP	5.6K	5%	1/10W
R8254	1-216-097-91	RES,CHIP	100K	5%	1/10W

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REF. NO.	PART.NO	DESCRIPTION			REMARK
R8255	1-216-025-91	RES,CHIP	100	5%	1/10W
R8256	1-216-295-91	SHORT	0		
R8257	1-216-025-91	RES,CHIP	100	5%	1/10W
R8258	1-216-025-91	RES,CHIP	100	5%	1/10W
R8259	1-216-081-00	RES,CHIP	22K	5%	1/10W
R8300	1-216-041-00	RES,CHIP	470	5%	1/10W
R8302	1-216-017-91	RES,CHIP	47	5%	1/10W
R8303	1-216-041-00	RES,CHIP	470	5%	1/10W
R8304	1-216-041-00	RES,CHIP	470	5%	1/10W
R8305	1-216-049-91	RES,CHIP	1K	5%	1/10W (KV-29FS60B/32FS60B)
R8306	1-216-295-91	SHORT	0		
R8307	1-216-049-91	RES,CHIP	1K	5%	1/10W
R8308	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R8309	1-216-049-91	RES,CHIP	1K	5%	1/10W
R8310	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R8311	1-216-085-00	RES,CHIP	33K	5%	1/10W
R8312	1-216-077-00	RES,CHIP	15K	5%	1/10W
R8313	1-216-041-00	RES,CHIP	470	5%	1/10W
R8314	1-216-043-91	RES,CHIP	560	5%	1/10W
R8316	1-216-295-91	SHORT	0		
R8317	1-216-025-91	RES,CHIP	100	5%	1/10W
R8318	1-216-025-91	RES,CHIP	100	5%	1/10W
R8319	1-216-295-91	SHORT	0		
R8320	1-216-295-91	SHORT	0		
R8321	1-216-049-91	RES,CHIP	1K	5%	1/10W
R8322	1-216-049-91	RES,CHIP	1K	5%	1/10W
R8323	1-216-097-91	RES,CHIP	100K	5%	1/10W
R8325	1-216-041-00	RES,CHIP	470	5%	1/10W
R8326	1-216-041-00	RES,CHIP	470	5%	1/10W
R8327	1-216-041-00	RES,CHIP	470	5%	1/10W
R8328	1-216-041-00	RES,CHIP	470	5%	1/10W
R8329	1-216-041-00	RES,CHIP	470	5%	1/10W
R8330	1-216-041-00	RES,CHIP	470	5%	1/10W
R8331	1-216-041-00	RES,CHIP	470	5%	1/10W
R8332	1-216-041-00	RES,CHIP	470	5%	1/10W
R8333	1-216-041-00	RES,CHIP	470	5%	1/10W
R8334	1-216-017-91	RES,CHIP	47	5%	1/10W
R8335	1-216-017-91	RES,CHIP	47	5%	1/10W
R8337	1-216-077-00	RES,CHIP	15K	5%	1/10W
R8338	1-216-017-91	RES,CHIP	47	5%	1/10W
R8339	1-216-017-91	RES,CHIP	47	5%	1/10W
R8340	1-216-049-91	RES,CHIP	1K	5%	1/10W
R8343	1-216-045-00	RES,CHIP	680	5%	1/10W (KV-29FS60B/32FS60B)
R8344	1-216-033-00	RES,CHIP	220	5%	1/10W (KV-29FS60B/32FS60B)
R8345	1-216-033-00	RES,CHIP	220	5%	1/10W (KV-29FS60B/32FS60B)
R8346	1-216-295-91	SHORT	0		(KV-29FS60A/29FS60D/29FS60E/ 29FS60K/29FS60R/29FS60U/ 32FS60A/32FS60D/32FS60E)
R8347	1-216-025-91	RES,CHIP	100	5%	1/10W (KV-29FS60B/32FS60B)
R8348	1-216-295-91	SHORT	0		(KV-29FS60B/32FS60B)
R8349	1-216-121-91	RES,CHIP	1M	5%	1/10W (KV-29FS60B/32FS60B)
R8350	1-216-073-00	RES,CHIP	10K	5%	1/10W
R8351	1-216-073-00	RES,CHIP	10K	5%	1/10W
R8352	1-216-089-91	RES,CHIP	47K	5%	1/10W (KV-29FS60B/32FS60B)
R8353	1-216-081-00	RES,CHIP	22K	5%	1/10W (KV-29FS60B/32FS60B)
R8354	1-216-067-00	RES,CHIP	5.6K	5%	1/10W
R8355	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R8356	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R8400	1-216-041-00	RES,CHIP	470	5%	1/10W
R8402	1-216-295-91	SHORT	0		
R8403	1-216-041-00	RES,CHIP	470	5%	1/10W
R8404	1-216-295-91	SHORT	0		
R8405	1-216-025-91	RES,CHIP	100	5%	1/10W
R8406	1-216-025-91	RES,CHIP	100	5%	1/10W
R8407	1-216-295-91	SHORT	0		
R8408	1-216-295-91	SHORT	0		
R8409	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R8410	1-216-049-91	RES,CHIP	1K	5%	1/10W
R8411	1-216-097-91	RES,CHIP	100K	5%	1/10W
R8412	1-216-041-00	RES,CHIP	470	5%	1/10W
R8413	1-216-041-00	RES,CHIP	470	5%	1/10W
R8414	1-216-041-00	RES,CHIP	470	5%	1/10W
R8416	1-216-041-00	RES,CHIP	470	5%	1/10W
R8417	1-216-041-00	RES,CHIP	470	5%	1/10W
R8418	1-216-041-00	RES,CHIP	470	5%	1/10W
R8419	1-216-041-00	RES,CHIP	470	5%	1/10W
R8420	1-216-041-00	RES,CHIP	470	5%	1/10W
R8421	1-216-049-91	RES,CHIP	1K	5%	1/10W
R8422	1-216-017-91	RES,CHIP	47	5%	1/10W
R8423	1-216-017-91	RES,CHIP	47	5%	1/10W
R8424	1-216-025-91	RES,CHIP	100	5%	1/10W
R8425	1-216-077-00	RES,CHIP	15K	5%	1/10W
R8426	1-216-017-91	RES,CHIP	47	5%	1/10W
R8427	1-216-017-91	RES,CHIP	47	5%	1/10W
R8428	1-216-017-91	RES,CHIP	47	5%	1/10W
R8429	1-216-041-00	RES,CHIP	470	5%	1/10W
R8430	1-216-041-00	RES,CHIP	470	5%	1/10W
R8431	1-216-017-91	RES,CHIP	47	5%	1/10W
R8432	1-216-121-91	RES,CHIP	1M	5%	1/10W (KV-29FS60B/32FS60B)

REF. NO.	PART.NO	DESCRIPTION			REMARK
R8433	1-216-073-00	RES,CHIP	10K	5%	1/10W
R8434	1-216-073-00	RES,CHIP	10K	5%	1/10W
R8450	1-216-089-91	RES,CHIP	47K	5%	1/10W
R8451	1-216-073-00	RES,CHIP	10K	5%	1/10W
R8453	1-216-089-91	RES,CHIP	47K	5%	1/10W
R8454	1-216-073-00	RES,CHIP	10K	5%	1/10W
R8455	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R8460	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R8462	1-216-073-00	RES,CHIP	10K	5%	1/10W
R8467	1-216-089-91	RES,CHIP	47K	5%	1/10W
R8468	1-216-073-00	RES,CHIP	10K	5%	1/10W
R8469	1-216-033-00	RES,CHIP	220	5%	1/10W
R8470	1-216-022-00	RES,CHIP	75	5%	1/10W
R8472	1-216-089-91	RES,CHIP	47K	5%	1/10W
R8473	1-216-073-00	RES,CHIP	10K	5%	1/10W
R8474	1-216-033-00	RES,CHIP	220	5%	1/10W
R8475	1-216-022-00	RES,CHIP	75	5%	1/10W
R8500	1-216-017-91	RES,CHIP	47	5%	1/10W
R8501	1-216-075-00	RES,CHIP	12K	5%	1/10W
R8502	1-216-041-00	RES,CHIP	470	5%	1/10W
R8503	1-216-069-00	RES,CHIP	6.8K	5%	1/10W
R8504	1-216-041-00	RES,CHIP	470	5%	1/10W
R8505	1-216-047-91	RES,CHIP	820	5%	1/10W
R8506	1-216-091-00	RES,CHIP	56K	5%	1/10W
R8507	1-216-295-91	SHORT	0		
R8508	1-216-043-91	RES,CHIP	560	5%	1/10W
R8509	1-216-045-00	RES,CHIP	680	5%	1/10W
R8510	1-216-067-00	RES,CHIP	5.6K	5%	1/10W
R8511	1-216-049-91	RES,CHIP	1K	5%	1/10W
R8513	1-216-295-91	SHORT	0		
R8514	1-216-017-91	RES,CHIP	47	5%	1/10W
R8517	1-216-295-91	SHORT	0		
R8519	1-216-037-00	RES,CHIP	330	5%	1/10W
R8520	1-216-041-00	RES,CHIP	470	5%	1/10W
R8521	1-216-061-00	RES,CHIP	3.3K	5%	1/10W
R8522	1-216-041-00	RES,CHIP	470	5%	1/10W
R8523	1-216-033-00	RES,CHIP	220	5%	1/10W
R8525	1-216-295-91	SHORT	0		
R8526	1-216-061-00	RES,CHIP	3.3K	5%	1/10W
R8527	1-216-047-91	RES,CHIP	820	5%	1/10W
R8528	1-216-047-91	RES,CHIP	820	5%	1/10W
R8529	1-216-055-00	RES,CHIP	1.8K	5%	1/10W
R8530	1-216-051-00	RES,CHIP	1.2K	5%	1/10W
R8531	1-216-053-00	RES,CHIP	1.5K	5%	1/10W
R8532	1-216-049-91	RES,CHIP	1K	5%	1/10W
R8700	1-216-049-91	RES,CHIP	1K	5%	1/10W
R8701	1-216-073-00	RES,CHIP	10K	5%	1/10W
R8702	1-216-025-91	RES,CHIP	100	5%	1/10W
R8703	1-216-025-91	RES,CHIP	100	5%	1/10W
R8704	1-216-025-91	RES,CHIP	100	5%	1/10W
R8705	1-216-295-91	SHORT	0		
R8706	1-216-049-91	RES,CHIP	1K	5%	1/10W
R8707	1-216-089-91	RES,CHIP	47K	5%	1/10W
R8708	1-216-089-91	RES,CHIP	47K	5%	1/10W
R8900	1-216-039-00	RES,CHIP	390	5%	1/10W
R8901	1-216-049-91	RES,CHIP	1K	5%	1/10W
R8902	1-216-039-00	RES,CHIP	390	5%	1/10W
R8903	1-216-089-91	RES,CHIP	47K	5%	1/10W
R8904	1-216-089-91	RES,CHIP	47K	5%	1/10W
R8905	1-216-113-00	RES,CHIP	470K	5%	1/10W
R8906	1-216-039-00	RES,CHIP	390	5%	1/10W
R8907	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R8908	1-216-039-00	RES,CHIP	390	5%	1/10W
R8909	1-216-049-91	RES,CHIP	1K	5%	1/10W
R8911	1-216-063-91	RES,CHIP	3.9K	5%	1/10W
R8913	1-216-022-00	RES,CHIP	75	5%	1/10W
R8914	1-216-071-00	RES,CHIP	8.2K	5%	1/10W
R8915	1-216-022-00	RES,CHIP	75	5%	1/10W
R8916	1-216-033-00	RES,CHIP	220	5%	1/10W
R8917	1-216-033-00	RES,CHIP	220	5%	1/10W
R8918	1-216-113-00	RES,CHIP	470K	5%	1/10W
R8919	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R8922	1-216-022-00	RES,CHIP	75	5%	1/10W
R8923	1-216-022-00	RES,CHIP	75	5%	1/10W
R8924	1-216-022-00	RES,CHIP	75	5%	1/10W
R8925	1-216-022-00	RES,CHIP	75	5%	1/10W
R8926	1-216-033-00	RES,CHIP	220	5%	1/10W
R8927	1-216-033-00	RES,CHIP	220	5%	1/10W
R8928	1-216-033-00	RES,CHIP	220	5%	1/10W
R8929	1-216-039-00	RES,CHIP	390	5%	1/10W
R8930	1-216-049-91	RES,CHIP	1K	5%	1/10W
R8931	1-216-039-00	RES,CHIP	390	5%	1/10W
R8932	1-216-049-91	RES,CHIP	1K	5%	1/10W
R8933	1-216-089-91	RES,CHIP	47K	5%	1/10W
R8934	1-216-089-91	RES,CHIP	47K	5%	1/10W
R8935	1-216-113-00	RES,CHIP	470K	5%	1/10W
R8936	1-216-113-00	RES,CHIP	470K	5%	1/10W
R8937	1-216-039-00	RES,CHIP	390	5%	1/10W
R8938	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R8939	1-216-039-00	RES,CHIP	390	5%	1/10W
R8940	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R8941	1-216-063-91	RES,CHIP	3.9K	5%	1/10W
R8942	1-216-009-00	RES,CHIP	22	5%	1/10W
R8943	1-216-022-00	RES,CHIP	75	5%	1/10W
R8944	1-216-071-00	RES,CHIP	8.2K	5%	1/10W
R8945	1-216-022-00	RES,CHIP	75	5%	1/10W
R8946	1-216-033-00	RES,CHIP	220	5%	1/10W
R8947	1-216-039-00	RES,CHIP	390	5%	1/10W
R8948	1-216-049-91	RES,CHIP	1K	5%	1/10W
R8949	1-216-022-00	RES,CHIP	75	5%	1/10W
R8950	1-216-089-91	RES,CHIP	47K	5%	1/10W

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

REF. NO.	PART.NO	DESCRIPTION			REMARK
R8951	1-216-033-00	RES,CHIP	220	5%	1/10W
R8952	1-216-113-00	RES,CHIP	470K	5%	1/10W
R8953	1-216-039-00	RES,CHIP	390	5%	1/10W
R8954	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R8955	1-216-039-00	RES,CHIP	390	5%	1/10W
R8956	1-216-049-91	RES,CHIP	1K	5%	1/10W
R8957	1-216-049-91	RES,CHIP	1K	5%	1/10W
R8958	1-216-089-91	RES,CHIP	47K	5%	1/10W
R8959	1-216-022-00	RES,CHIP	75	5%	1/10W
R8960	1-216-033-00	RES,CHIP	220	5%	1/10W
R8961	1-216-022-00	RES,CHIP	75	5%	1/10W
R8963	1-216-113-00	RES,CHIP	470K	5%	1/10W
R8964	1-216-039-00	RES,CHIP	390	5%	1/10W
R8965	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R8968	1-216-022-00	RES,CHIP	75	5%	1/10W
R8969	1-216-033-00	RES,CHIP	220	5%	1/10W
R8977	1-216-037-00	RES,CHIP	330	5%	1/10W
R8978	1-216-037-00	RES,CHIP	330	5%	1/10W
R8979	1-216-045-00	RES,CHIP	680	5%	1/10W
R8980	1-216-045-00	RES,CHIP	680	5%	1/10W
R8981	1-216-085-00	RES,CHIP	33K	5%	1/10W
R8982	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R8983	1-216-077-00	RES,CHIP	15K	5%	1/10W
R8990	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R8991	1-216-097-91	RES,CHIP	100K	5%	1/10W
R8992	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R8993	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R8994	1-216-073-00	RES,CHIP	10K	5%	1/10W
R8995	1-216-089-91	RES,CHIP	47K	5%	1/10W

< CRYSTAL >

X8200	1-781-148-21	VIBRATOR, CRYSTAL	
X8300	1-567-504-11	OSCILLATOR, CRYSTAL	
X8301	1-567-505-11	OSCILLATOR, CRYSTAL	
X8400	1-567-504-11	OSCILLATOR, CRYSTAL	
X8401	1-567-505-11	OSCILLATOR, CRYSTAL	
X8700	1-767-342-21	VIBRATOR, CRYSTAL	

REF. NO.	PART.NO	DESCRIPTION	REMARK
		MISCELLANEOUS	
		*************	
⚠	1-416-654-11	COIL DEMAGNETIC (KV-29FS60)	
⚠	1-416-769-11	COIL DEMAGNETIC (KV-32FS60)	
	1-425-032-00	MAGNET, DISK: 10MM	
	1-452-094-00	MAGNET, ROTATABLE DISK; 15MM	
⚠	1-453-272-11	TRANSFORMER ASSY, FLYBACK (NX-4512/U2B4)	
	1-529-153-11	SPEAKER (4.8X20CM)	
	1-529-144-11	SPEAKER (13CM)	
	1-452-896-11	COIL, NA ROTATION (RT200)	
⚠	1-571-433-21	SWITCH, PUSH (AC POWER)	
⚠	1-574-062-61	CORD POWER (WITH CONNECTOR)	(KV-29FS60A/29FS60B/29FS60D/ 29FS60E/29FS60K/29FS60R/ 32FS60A/32FS60B/32FS60D/ 32FS60E)
⚠	1-590-762-21	CORD POWER (WITH UK PLUG) (KV-29FS60U)	
	1-693-338-11	TUNER/VIF (AEP)	(KV-29FS60A/29FS60D/29FS60E/ 29FS60K/29FS60R/ 32FS60A/32FS60D/32FS60E)
	1-693-340-11	TUNER/VIF (FR) (KV-29FS60B/32FS60B)	
	1-693-339-11	TUNER/VIF (UK) (KV-29FS60U)	
⚠	8-735-053-05	PICTURE TUBE (M68LNH060X) (KV-29FS60)	
⚠	8-735-054-05	PICTURE TUBE (W76LLZ060X) (SD-302) (KV-32FS60)	
⚠	8-451-504-11	DEFLECTION YOKE (KV-29FS60)	
⚠	1-451-480-11	DEFLECTION YOKE (KV-32FS60)	
⚠	8-453-011-11	NECK ASSY, NA299-M	
⚠	1-251-317-31	CAP ASSY, HIGH VOLTAGE	
	*1-204-549-01	BRACKET, MAIN	
	1-790-082-11	CABLE, RF	
	1-771-599-11	SWITCH ARRAY	

****

REF. NO.	PART.NO	DESCRIPTION	REMARK
		ACCESSORIES AND PACKAGING MATERIALS (KV-29FS60)	
		**********	
	1-765-654-11	CABLE,SPEAKER	
	4-204-589-41	MANUAL, INSTRUCTION (KV-29FS60A) (ITALIAN)	
	4-204-589-51	MANUAL, INSTRUCTION (KV-29FS60B) (FRENCH/GERMAN/ITALIAN/DUTCH)	
	4-204-589-11	MANUAL, INSTRUCTION (KV-29FS60D) (GREEK/ENGLISH/DUTCH/TURKISH)	
	4-204-589-71	MANUAL, INSTRUCTION (KV-29FS60E) (SPANISH)	
	4-204-589-81	MANUAL, INSTRUCTION (KV-29FS60E) (PORTUGUESE/FINNISH/DANISH/NORWEGIAN/SWEDISH)	
	4-204-589-91	MANUAL, INSTRUCTION (KV-29FS60K/29FS60R) (RUSSIAN/BULGARIAN/ENGLISH/POLISH/HUNGARIAN)	
	4-204-589-61	MANUAL, INSTRUCTION (KV-29FS60U) (ENGLISH)	
	*4-204-476-01	BAG PROTECTION	
	*4-204-475-01	INDIVIDUAL CARTON	
	*4-204-553-01	CUSHION (UPPER) (ASSY)	
	*4-204-556-01	CUSHION (LOWER) (ASSY)	
		ACCESSORIES AND PACKAGING MATERIALS (KV-32FS60)	
		**********	
	1-765-654-11	CABLE, SPEAKER	
	4-204-562-41	MANUAL, INSTRUCTION (KV-32FS60A) (ITALIAN)	
	4-204-562-51	MANUAL, INSTRUCTION (KV-32FS60B) (FRENCH/GERMAN/ITALIAN/DUTCH)	
	4-204-562-11	MANUAL, INSTRUCTION (KV-32FS60D) (ENGLISH/GERMAN)	
	4-204-562-71	MANUAL, INSTRUCTION (KV-32FS60E) (SPANISH/PORTUGUESE/FINNISH/ DANISH/NORWEGIAN/SWEDISH)	
	*4-060-976-01	BAG PROTECTION	
	*4-204-475-01	INDIVIDUAL CARTON	
	*4-204-380-01	CUSHION (UPPER) (ASSY)	
	*4-204-381-01	CUSHION (LOWER) (ASSY)	
		REMOTE COMMANDER	
		**********	
	1-418-047-11	REMOTE COMMANDER (RM-891)	

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SERVICE MANUAL

AE-5 CHASSIS

MODEL	COMMANDER	DEST	CHASSIS NO.
KV-29FS60A	RM-891	Italian	SCC-Q12E-A
KV-29FS60B	RM-891	French	SCC-Q13E-A
KV-29FS60D	RM-891	AEP	SCC-Q11E-A
KV-29FS60E	RM-891	Spanish	SCC-Q14E-A
KV-29FS60K	RM-891	OIRT	SCC-Q16G-A
KV-29FS60R	RM-891	OIRT	SCC-Q16H-A
KV-29FS60U	RM-891	UK	SCC-Q15D-A

MODEL	COMMANDER	DEST	CHASSIS NO.
KV-32FS60A	RM-891	Italian	SCC-Q12F-A
KV-32FS60B	RM-891	French	SCC-Q13F-A
KV-32FS60D	RM-891	AEP	SCC-Q11F-A
KV-32FS60E	RM-891	Spanish	SCC-Q14F-A

CORRECTION - 1

SUBJECT : D BOARD PWB ERROR

File this correction with the service manual

INTRODUCTION : Due to a printing error the D Board PWB layout is incorrect. Refer to the layout indicated in this correction bulletin.

- **D Board [Power Supply and Deflection]**.....See page 119

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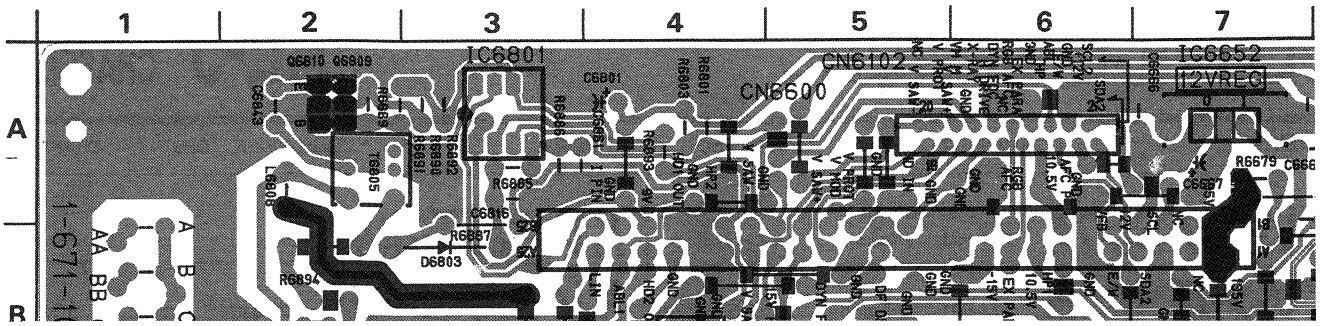
D [POWER SUPPLY AND DEFLECTION]