SECTION 4: CIRCUIT ADJUSTMENTS

ELECTRICAL ADJUSTMENTS BY REMOTE COMMANDER

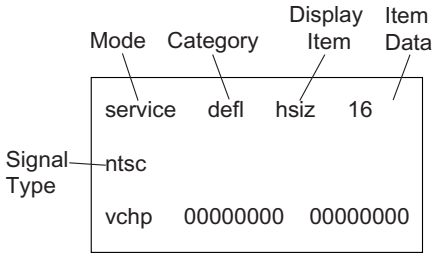
Use the Remote Commander (RM-Y180, RM-Y181) to perform the circuit adjustments in this section.
Test Equipment Required: 1. Pattern generator 2. Frequency counter 3. Digital multimeter 4. Audio oscillator

4-1. SETTING THE SERVICE ADJUSTMENT MODE

1. Standby mode (Power off).
2. Press the following buttons on the remote commander within a second of each other:
   [Display] → Channel [5] → Sound Volumne [+] → Power

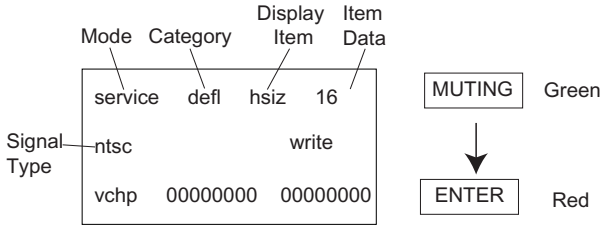
SERVICE ADJUSTMENT MODE ON

1. The CRT displays the item being adjusted.

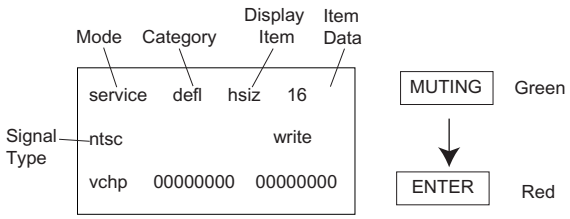


2. Press [1] or [4] on the Remote Commander to select the item.
3. Press [3] or [6] on the Remote Commander to change the data.
4. Press [MUTING] then [ENTER] to write into memory.

SERVICE ADJUSTMENT MODE MEMORY



1. Press [8] then [ENTER] on the Remote Commander to initialize.



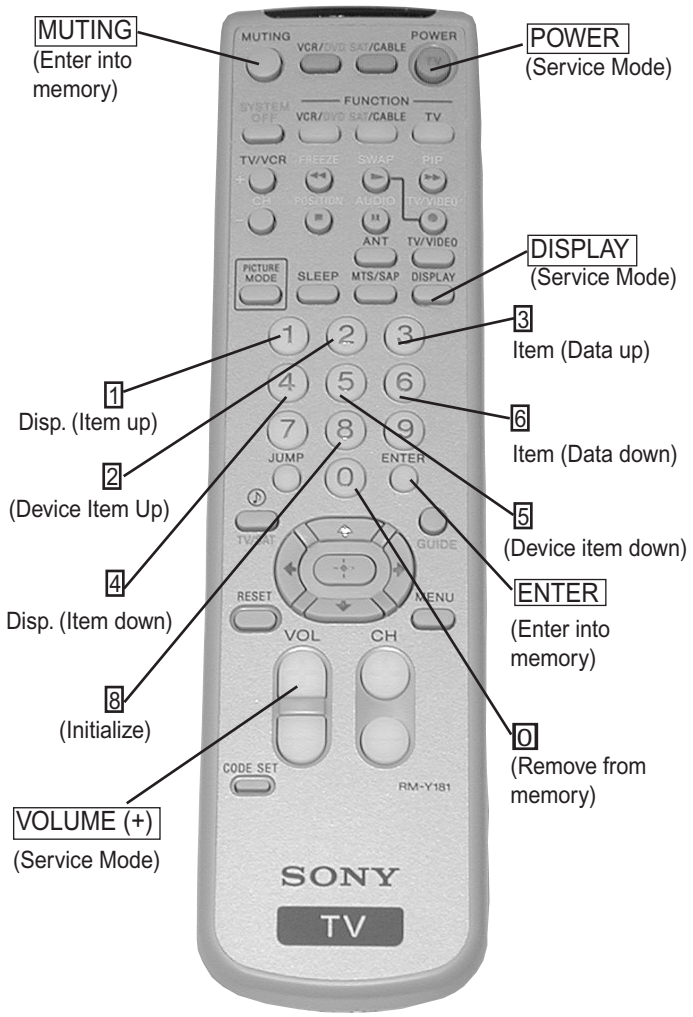
Carry out Step 1 when adjusting IDs 0-6 and when replacing and adjusting IC003

2. Turn set off then on to exit service adjustment mode.

4-2. MEMORY WRITE CONFIRMATION METHOD

1. After adjustment, pull out the plug from the AC outlet, then replace the plug in the AC outlet again.
2. Turn the power switch ON and set to Service Mode.
3. Call the adjusted items again to confirm they were adjusted.

4-3. REMOTE ADJUSTMENT BUTTONS AND INDICATORS



RM-Y181

ADJUSTMENT ITEMS (1 OF 4)

Reg #	ITEM	FUNCTION	RANGE	FIX DATA	NTSC 27	VIDEO	NTSC 32	RF	AVERAGE DATA 27	AVERAGE DATA 32
1	HSIZ	Horizontal Size Adjustment	0-63		0		18		11	22
2	HPOS	Horizontal Position Adjustment	0-63		13		13		20	22
3	VBOW	Vertical Line Bowing Adj.	0-15		9		9		7	9
4	VANG	Vertical Line Bowing Slant Adj.	0-15		8		3		9	7
5	VTRP	TRAPEZIUM	0-31		19		18		21	17
6	HTRP	Horiz. Trapezoid	0-15		6		6		0	2
7	TROT	Tilt Correction	0-63		31		31		31	31
8	PAMP	Horizontal PIN distortion Adj.	0-63		19		27		20	27
9	UPIN	Upper PIN Distortion Adj.	0-63		34		41		37	38
10	LPIN	Lower PIN Distortion Adj.	0-63		32		39		33	35
11	VSIZ	Vertical Size Adjustment	0-63		32		51		33	51
12	VPOS	Vertical Position Adj.	0-63		30		42		36	39
13	VLIN	Vertical Lineality Adj.	0-15		3		5		3	4
14	SCOR	Vertical "S" Correction Adjustment	0-15		6		8		8	8
15	VZOM	16:9 CRT Z Mode on/off	0-1	0					0	0
16	EHT	Vertical High-Voltage Compensation	0-15	5					5	5
17	ASP	Aspect Ratio Control	0-63	47					47	47
18	SCRL	16:9 CRT Z Mode Trans. Scroll	0-63	31					31	31
19	HBLK	Horizontal Blanking on/off	0-1	1					1	1
20	LBLK	Left Blanking Adjustment	0-15	****					13	13
21	RBLK	Rigth Blanking Adjustment	0-15	*****					7	8
22	HDW	Horizontal Drive Pulse Width	0-1	1					1	1
23	EWDC	"Parabola" EW, D.C. Adjustment	0-1	0					0	0
24	LVLN	Lower Screen BTM Vertical Line Adj.	0-15	0					0	0
25	UVLN	Uppe Screen BTM Vertical Line Adj.	0-15	0					0	0
26	INTL	INTERLACE	0-3	0					0	0
27	G2SW		0-1	0					0	0
28	G2LV		0-7	0					0	0
29	HOSC	Horizontal VCO Oscillation Freq.	0-15	12					7	7
30	VSS	Vertical Sync Slice Level	0-3	0					0	0
31	HSS	Horizontal Sync Slice Level	0-1	0					0	0
32	HMSK	For Macro Vision	0-1	0					0	0
33	VTMS	Select Signal VTIM Pin	0-3	0					0	0
34	CDMD	Vertical Count Down Mode Switching	0-3			3		*	3	3
35	AFC	AFC Loop Gain Switching	0-3	0					0	0
36	FIFR	Field Frequency	0-3	3					3	3
37	VBLK	VBLKW	0-3	0					0	0
38	REFP	REFP	0-1	0					0	0
39	JPSW	JUMPSW	0-1	MENU					0	0
40	RDRV	R Output Drive control	0-63	***					31	40
41	GDRV	G Output Drive control	0-63	25					22	42
42	BDRV	B Output Drive control	0-63	25					21	31
43	RCUT	R Output Cutoff control	0-63	31					31	31
44	GCUT	G Output Cutoff control	0-63	15					13	12
45	BCUT	B Output Cutoff control	0-63	12					14	15
46	SCON	SUB CONT	0-15	8					11	11
47	SHUE	Sub HUE adjustment	0-15	16					17	16
48	SCOL	Sub COLOR adjustment	0-15		18				17	18
49	SBRT	Sub BRIGHTNESS adjustment	0-31	16					15	16
50	CHUE	SUB COLOR (RF)	0-31	7					6	6
51	CCOL	SUB COLOR (RF)	0-31		7				7	4
52	UOFS	YUV U OFFSET	0-15	7					7	7
53	VOFS	YUV V OFFSET	0-15	7					7	7
54	RON	R Output on/off	0-1	1					1	1

* CDMD = 3 for US & CND, CDMD = 0 for Other

*** RDRV = 41 for 27FS/32FS families, 31 for 27FV family

****LBLK = 0 for 27FV/29FV/32FS/34FS family, 5 FOR 27FS family

***** RBLK = 3 for 27FV/29FV/32FS/34FS family, 2 for 27FS family

ADJUSTMENT ITEMS (2 OF 4)

Reg #	ITEM	FUNCTION	RANGE	FIX DATA	NTSC 27	VIDEO	NTSC 32	RF	AVERAGE DATA 27	AVERAGE DATA 32
55	GON	G Output on/off	0-1	1					1	1
56	BON	B Output on/off	0-1	1					1	1
57	AXPL	Axis PAL	0-1	0					0	0
58	AXNT	Axis NTSC	0-1	1					1	1
59	CBPF	Chroma BPF on/off	0-1	1					1	1
60	CTRP	Y TRAP FILTER on/off	0-1	1					1	1
61	COFF	Color On/off	0-1	0					0	0
62	KOFF	Set Color Killer	0-1	0					0	0
63	SSHP	Sub SHARPNESS	0-15	5					5	5
64	SHPF	SHARPNESS Circuit Fo	0-3	Palette Mode Controls This Register					2	2
65	PREL	Pre-Shoot/ Over-Shoot	0-1	1					0	0
66	Y-DC	DC transmission Ratio Switching	0-3	Palette Mode Controls This Register					2	2
67	GAMM	Gamma Correction	0-3	Palette Mode Controls This Register					2	2
68	ABLM	ABL Mode Switch	0-1	1					1	1
69	VTH	ABL CD VHT Switching	0-1	1					1	1
70	YDEL	Y Delay Time Control	0-15	7					7	7
71	NCOL	No Color ID	0-1	1					1	1
72	FSC	FSC Out on/off	0-1	1					1	1
73	K-ID	Killer ID Control on/off	0-1	0					0	0
74	GDOF		0-31	3					3	3
75	BDOF		0-31	16					16	16
76	GCOF		0-31	16					16	16
77	BCOF		0-31	7					7	7
78	SYSC	Color System	0-7	4					4	4
79	VENH	Vertical Enhancement	0-7	Palette Mode Controls This Register					5	3
80	PDSO	PDS OFF	0-1	0					0	0
81	CK	CK	0-1	0					0	0
82	VNL	VNL	0-15	3					3	3
83	HPK	HPK	0-1	0					0	0
84	HPKO	HPK OFF	0-1	Palette Mode Controls This Register					0	0
85	CORE	CORE	0-3	2					1	1
86	TRAP	TRAP	0-1	1					1	1
87	CHTR	CH TRAP	0-1	0					0	0
88	CBPF	CBPF	0-1	1					1	1
89	ENHO	ENH OFF	0-1	0					0	0
90	NMRD	NMRD	0-3	0					0	0
91	YAPS	YAPS	0-3	3					3	3
92	CLKS	CLKS	0-3	0					0	0
93	NSTD	NSTDS	0-3	0					0	0
94	MSS	MSS	0-3	0					0	0
95	KILS	KILS	0-3	1					1	1
96	ADIN	ADIN	0-1	0					0	0
97	EXCS	EXCSS	0-3	1					1	1
98	CPP	CPP	0-3	2					2	2
99	HDP	HDP	0-7	4					4	4
100	CDL	CDL	0-7	4					4	4
101	DYCR	DYCOR	0-15	2					2	2
102	DYGN	DYGAIN	0-15	10					10	10
103	DCCR	DCCOR	0-15	3					3	3
104	DCGN	DCGAIN	0-15	6					6	6
105	YNRL	YNRLIM	0-3	1					1	1
106	CNRL	CNRLIM	0-3	1					1	1
107	WSC	WSC	0-3	1					1	1
108	VTRH	VTRH	0-3	1					1	1

ADJUSTMENT ITEMS (3 OF 4)

Reg #	ITEM	FUNCTION	RANGE	FIX DATA	NTSC 27	VIDEO	NTSC 32	RF	AVERAGE DATA 27	AVERAGE DATA 32
109	VTRR	VTRR	0-3	1					1	1
110	LDSR	LDSR	0-3	2					2	2
111	VAPG	VAPGAIN	0-7	3					3	3
112	VAPI	VAPINV	0-31	6					6	6
113	TEST	TEST	0-1	0					0	0
114	YPFT	YPFT	0-3	3					3	3
115	YPFG	YPFG	0-15	7					7	7
116	CC3N	CC3N	0-1	0					0	0
117	SELD		0-1	1					1	1
118	D2GN	D2GAIN	0-7	4					5	5
119	YHCR	YHCOR	0-3	0					0	0
120	YPFC	YPFCOR	0-1	0					0	0
121	SHT	SHT	0-3	0					0	0
122	MVT	MVT	0-1	0					0	0
123	OTT	OTT	0-1	0					0	0
124	CL2D	CL2D	0-1	1					1	1
125	CLKG	CLKGGT	0-1	0					0	0
126	HPLL	HPLLFS	0-1	1					1	1
127	BPLL	BPLLFS	0-1	0					0	0
128	FSCF	FSCFG	0-1	0					0	0
129	PLLS	PLLS	0-1	1					1	1
130	KILR	KILR	0-15	3					3	3
131	HSSL	HSSL	0-15	12					12	12
132	VSSL	VSSL	0-15	8					8	8
133	BGPS	BGPS	0-15	4					4	4
134	BGPW	BGPW	0-15	10					10	10
135	ADCK	ADCLKS	0-3	3					3	3
136	NDSW	NSDSW	0-1	1					1	1
137	PFRN	FREE_RUN	0-1	0					0	0
138	PRVS	RVS	0-1	0					0	0
139	PCON	CONTRAST	0-127	97					45	45
140	PUCO	U-DAC	0-127	5					16	16
141	PVCO	V-DAC	0-127	5					24	24
142	PHUE		0-31	12					15	15
143	PKIL	KILLER	1	0					0	0
144	PSEP	EXT_SC_SEL	0-3	1					2	2
145	PHIM		0-1	0					0	0
146	PSUB		0-1	0					0	0
147	PBGS	BG_START	0-63	14					14	14
148	PDL0		0-15	10					6	6
149	PDL1		0-15	13					13	13
150	PBRT	Y_OFFSET	0-31	25					25	25
151	PVP1			0					0	0
152	PUP1			0					0	0
153	PVP2			0					0	0
154	PUP2			0					0	0
155	PVP3			0					0	0
156	PUP3			0					0	0
157	PACS	SET_ACC	0-1	1					1	1
158	PSDL	YUV_Color (More Significant)	0-3	2					0	0
159	PDCO	YUV_Color (Less Significant)	0-3	2					0	0

ADJUSTMENT ITEMS (4 OF 4)

Reg #	ITEM	FUNCTION	RANGE	FIX DATA	NTSC 27	VIDEO	NTSC 32	RF	AVERAGE DATA 27	AVERAGE DATA 32
160	PCGA	C_GAIN	0-1	1					1	1
161	PAAF		0-1	0					0	0
162	PSU2		0-1	0					0	0
163	PCVF		0-1	0					0	0
164	PBIT	BITSEL	0-1	0					0	0
165	PAFC	AFCBITSEL	0-1	0					0	0
166	PACC	ACC_LEVEL	0-63	21					22	22
167	PBUR	BURST_CLK	0-1	0					0	0
168	PEVE	EVENUPRA	0-1	0					0	0
169	PINW	INV_WFF	0-1	0					0	0
170	PINR	INV_REF	0-1	0					0	0
171	PREF	RFF_FIX	0-1	0					0	0
172	PARE	AUTO_REF	0-1	1					1	1
173	PAVE	AVERAGE	0-1	0					0	0
174	PFRA	FREE_RUN_ADJ	0-15	0					0	0
175	PPAL	SUB_PALM_JUDGE	0-255	0					0	0
176	PHPO		0-31	9					7	6
177	PVPO		0-31	22					22	22
178	PHTI	HT	0-15	5					9	9
179	PHAJ	ADJ	0-15	1					1	1
180	PBGY	BGY	0-15	0					0	0
181	PCRO	CROSS_SEL	0-1	0					0	0
182	PPAR	PALRY	0-63	2					2	2
183	PHPF	HPFOFF	0-1	0					0	0
184	PFSC	FSC_OUTPUT	0-1	0					0	0
185	PVCH	SET_VCHIP	0-1	0					0	0
186	PVON	VCHIP_ONLY	0-1	1					1	1
187	PVLN	LINE_NUM	0-31	17					17	17
188	PVSB	STB_DLY	0-255	64					64	64
189	PVLV	L_LEVEL	0-255	130					130	130
190	SBAL	Sub Balance	0-7	5					5	5
191	SBAS	Sub Bass	0-7		****				0	0
192	STRE	Sub Treble	0-7		*****				3	3
193	BBEL	BBE Low	0-15	******					0	0
194	BBEH	BBE High	0-15	*******					0	0
195	BBE	BBE	0-1	********					0	0
196	AUX	SRS, Simulated	0-3	0					0	0
197	DISP	O.S.D Display position	0-127	20					32	34
198	HCLW	Horizontal Count Lower limit	0-255	16		16			16	16
199	HCHG	Horizontal Count High limit	0-255	64		64			64	64
200	ID0		0-255	25					See ID Map	
201	ID1		0-255	3					See ID Map	
202	ID2		0-255	91					See ID Map	
203	ID3		0-255	2					See ID Map	
204	ID4		0-255	233					See ID Map	
205	ID5		0-255	17					See ID Map	
206	ID6		0-255	0					See ID Map	

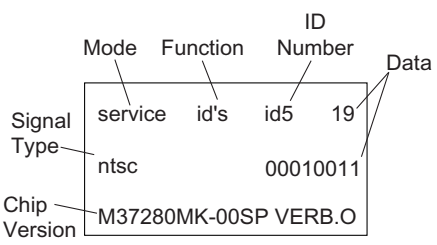
****SBAS = 0 for 27FV/29FV/32FS/34FS family, 5 for 27FS family

***** STRE = 3 for 27FV/29FV/32FS/34FS family, 2 for 27FS family

****** BBEL = 5 for 27FV family; 6 for 29FV family and 0 for 27FS/29FS/32FS family

******* BBEH = 5 for 27FV family; 7 for 29FV family and 0 for 27FS/29FS/32FS family

******** BBE = 1 for 27FV/29FV families and 0 for 27FS/29FS/32FS family



Notes:

No. 1-206 show the order that each adjustment mode may be selected while in Service Mode.

Data Range shows the range of possible settings for each Adjustment Mode.

Initial Data shows the standard settings for each Adjustment Mode.

FEATURE ID MAP

Model	Destination	ID-0	ID-1	ID-2	ID-3	ID-4	ID-5	ID-6
KV-27FS13	US	89	31	79	146	137	19	0
KV-27FS13	CND	89	31	79	178	137	19	0
KV-27FS17	US	89	31	79	146	137	19	7
KV-27FV17	US	89	63	239	146	133	19	7
KV-27FV17	CND	89	63	239	178	133	19	7
KV-29FV17	E	17	63	255	130	229	19	7
KV-29FV17C	E	17	63	255	130	229	19	7
KV-32FS13	US	89	31	79	146	137	19	0
KV-32FS13	CND	89	31	79	178	137	19	0
KV-32FS17	US	89	31	79	146	137	19	7
KV-34FS13C	E	17	31	223	130	233	19	0
KV-34FS17	E	17	31	223	130	233	19	7

4-4. MA BOARD ADJUSTMENTS

H. FREQUENCY (FREE RUN) CHECK

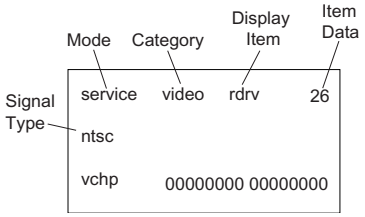
1. Input a TV mode (RF) with no signal.
2. Connect a frequency counter to base of Q501 (TP-500 H. DRIVE) on the A Board.
3. Check H. Frequency for 15735 ± 200 Hz.

V. FREQUENCY (FREE RUN) CHECK

1. Select video 1 with no signal input.
2. Set the conditions for a standard setting.
3. Connect the frequency counter to TP-508 (V OUT) or CN501 pin ⑥ (V DY+) and ground on the A Board .
4. Check that V. Frequency shows 60 ± 4 Hz.

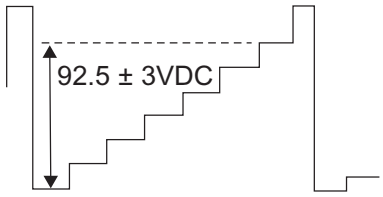
DRIVE (RDRV)

1. Input a color-bar signal and set the level to 75%.
2. Set in Standard Mode.
3. Activate the Service Adjustment Mode.
4. Set both GON and BON items. Using 3 and 6 set each to the following values. Leave RON set to "1".



R ON: ON (1)
G ON: OFF (0)
B ON: OFF (0)

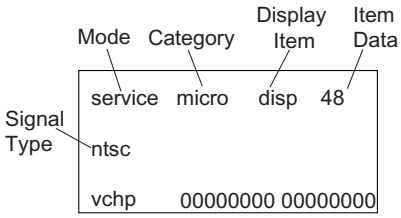
5. Connect an oscilloscope probe to CB Board, J701 Pin 12 (KR) (Red Out) .
6. Select RDRV with 1 and 4 .
7. Adjust the value of RDRV with 3 and 6 for 92.5 ± 3 VDC.



8. Reset GON and BON values to "1".
   R ON: ON (1)
   G ON: ON (1)
   B ON: ON (1)
9. Press MUTING then ENTER to save into the memory.

Display Position Adjustment (DISP)

1. Input a color-bar signal.
2. Set to Service Adjustment Mode.
3. Select DISP with 1 and 4 .
4. Adjust values of DISP with 3 and 6 to adjust characters to the center.
5. Write to memory by pressing MUTING then ENTER .
6. Check to see if the text is displayed on the screen.

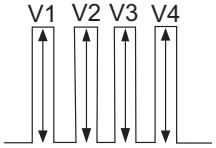


SUB BRIGHT ADJUSTMENT (SBRT)

1. Input a monoscope signal.
2. Activate the Service Adjustment Mode.
3. Set the PICTURE and BRIGHTNESS to minimum.
4. Select the SBRT item with 1 and 4 .
5. Adjust the values of SBRT with 3 and 6 to obtain a faintly visible crosshatch.
6. Press MUTING then ENTER to save into the memory.

SUB HUE, SUB COLOR ADJUSTMENT (SHUE, SCOL)

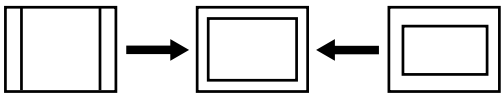
1. Input a color-bar signal.
2. Activate the Service Adjustment Mode.
3. Connect an oscilloscope probe to CB Board, CN705 Pin ④ Blue Out.
4. Select the SHUE and SCOL item with 1 and 4 .
5. While showing the SHUE item, adjust the waveform with 1 and 4 until the second and third bars show the same level (V2 = V3 < 0.1 Vp-p).
6. While showing the SCOL item, adjust the waveform with 3 and 6 until the first and fourth bars show the same level (V1 = V4 < 0.1 Vp-p).



7. Press MUTING then ENTER to save into the memory.

V. SIZE ADJUSTMENT (VSIZ)

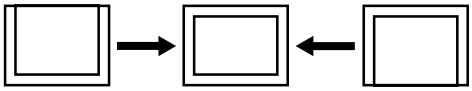
1. Input a crosshatch signal.
2. Activate the Service Adjustment Mode.
3. Select the VSIZ item with 1 and 4 .
4. Adjust value of VPOS with 1 and 4 for the best vertical center.
5. Press MUTING then ENTER to save into the memory.



V. CENTER ADJUSTMENT (VPOS)

Perform this adjustment after performing H. Frequency (Free Run) Check.

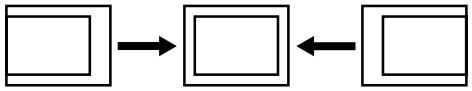
1. Input a crosshatch signal.
2. Activate the Service Adjustment Mode.
3. Select the VPOS item with 1 and 4 .
4. Adjust value of VPOS with 3 and 6 for the best vertical center.
5. Press MUTING then ENTER to save into the memory.



H. CENTER ADJUSTMENT (HPOS)

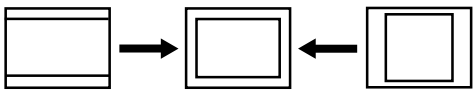
Perform this adjustment after performing H. Frequency (Free Run) Check.

1. Input a crosshatch signal.
2. Activate the Service Adjustment Mode.
3. Select the HPOS item with 1 and 4 .
4. Adjust the value of HPOS with 3 and 6 for the best horizontal center.
5. Press MUTING then ENTER to save into the memory.



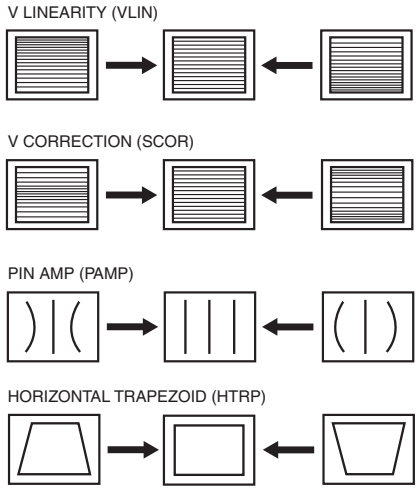
H. SIZE ADJUSTMENT (HSIZ)

1. Input a monoscope signal.
2. Activate the Service Adjustment Mode.
3. Select HSIZ with 1 and 4 .
4. Adjust with 3 and 6 for the best horizontal size.
5. Press MUTING then ENTER to save into the memory.



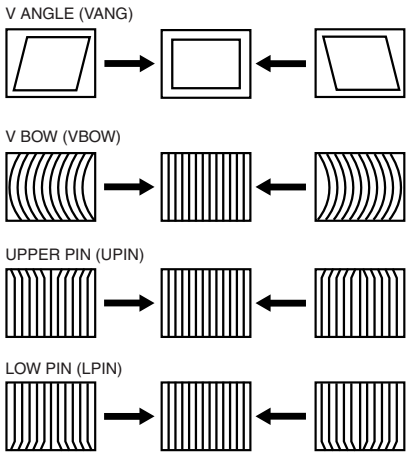
V. LINEARITY (VLIN), V. CORRECTION (SCOR), PIN AMP (PAMP), AND HORIZONTAL TRAPEZOID (HTRP) ADJUSTMENTS

1. Input a crosshatch signal.
2. Activate the Service Adjustment Mode.
3. Select VLIN, SCOR, PAMP, and HTRP with with 1 and 4.
4. Adjust with 3 and 6 for the best horizontal size.
5. Press MUTING then ENTER to save into the memory.



V. ANGLE (VANG), V. BOW (VBOW), UPPER PIN (UPIN) AND LOW PIN (LPIN) ADJUSTMENTS

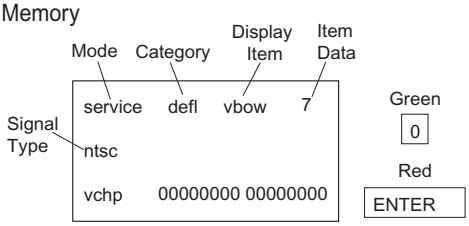
1. Input a crosshatch signal.
2. Activate the Service Adjustment Mode.
3. Select VANG, VBOW, UPIN, and LPIN with 1 and 4.
4. Adjust with 3 and 6 for the best picture.
5. Press MUTING then ENTER to save into the memory.



SERVICE ADJUSTMENT MODE MEMORY

1. After completing all adjustments, press 0 then ENTER .

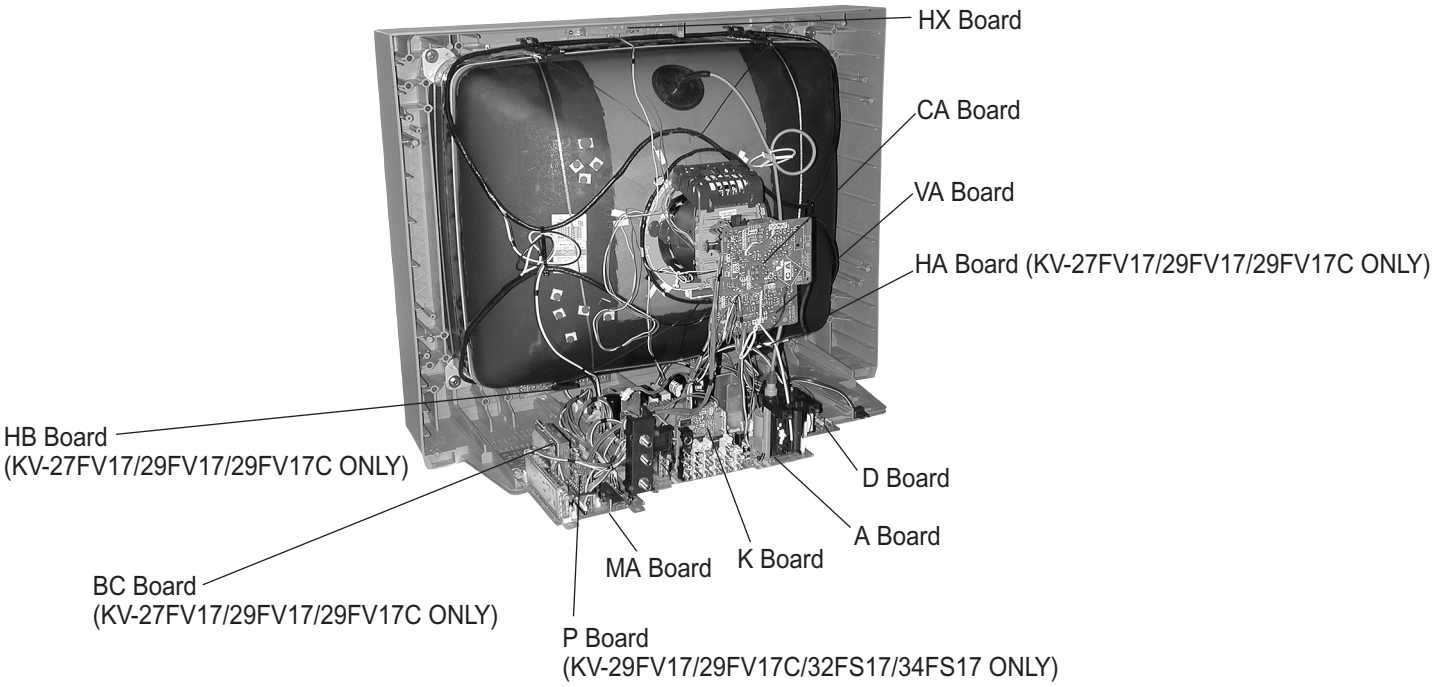
Read From Memory



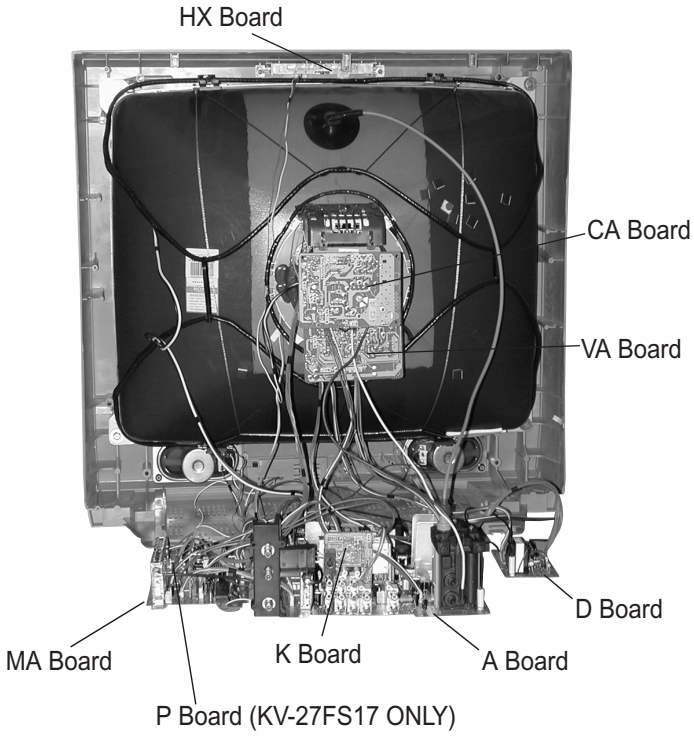
SECTION 5: DIAGRAMS

5-1. CIRCUIT BOARDS LOCATION

(KV-27FV17/29FV17/29FV17C/32FS13/32FS17/34FS13C/34FS17 ONLY)



(KV-27FS13/27FS17 ONLY)



5-2. PRINTED WIRING BOARD AND SCHEMATIC DIAGRAM INFORMATION

All capacitors are in µF unless otherwise noted. pF : µµF 50WV or less are not indicated except for electrolytics and tantalums.

All electrolytics are in 50V unless otherwise specified.

All resistors are in ohms. K=1000, M=1000k

Indication of resistance, which does not have one for rating electrical power, is as follows:

Pitch : 5mm

Rating electrical power : $^1/_4$ W

$^1/_4$ W in resistance, $^1/_{10}$ W and $^1/_8$ W in chip resistance.

: nonflammable resistor.

: fusible resistor.

△ : internal component.

▭ : panel designation and adjustment for repair.

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

Readings are taken with a color-bar signal input.

Readings are taken with a 10M digital multimeter.

Voltages are DC with respect to ground unless otherwise noted.

Voltage variations may be noted due to normal production tolerances.

All voltages are in V.

S : Measurement impossibillity.

: B+line.

: B-line. (Actual measured value may be different).

: signal path. (RF)

Circled numbers are waveform references.

The components identified by ⧓ in this basic schematic diagram have been carefully factory-selected for each set in order to satisfy regulations regarding X-ray radiation. Should replacement be necessary, replace only with the value originally used.

When replacing components identified by ◪, make the necessary adjustments as indicated. If the results do not meet the specified value, change the component identified by ⧓ and repeat the adjustment until the specified value is achieved. (Refer to Safety Related Adjustments on Page 14.)

When replacing the parts listed in the table below, it is important to perform the related adjustments.

Part Replaced (◪)	Adjustment (⧓)
DY, T505, CRT, IC501 C507, C520, C505, C509, C515, T504, T503, C551, L510, C546, C537, C547, D517, D518, D519, R560, R561, R562, R563, R565, R566, R567, R525.....A Board IC301.....MA Board	HV HOLD-DOWN R564

REFERENCE INFORMATION

RESISTOR
: RN METAL FILM
: RC SOLID
: FPRD NONFLAMMABLE CARBON
: FUSE NONFLAMMABLE FUSIBLE
: RW NONFLAMMABLE WIREWOUND
: RS NONFLAMMABLE METAL OXIDE
: RB NONFLAMMABLE CEMENT
: ※ 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

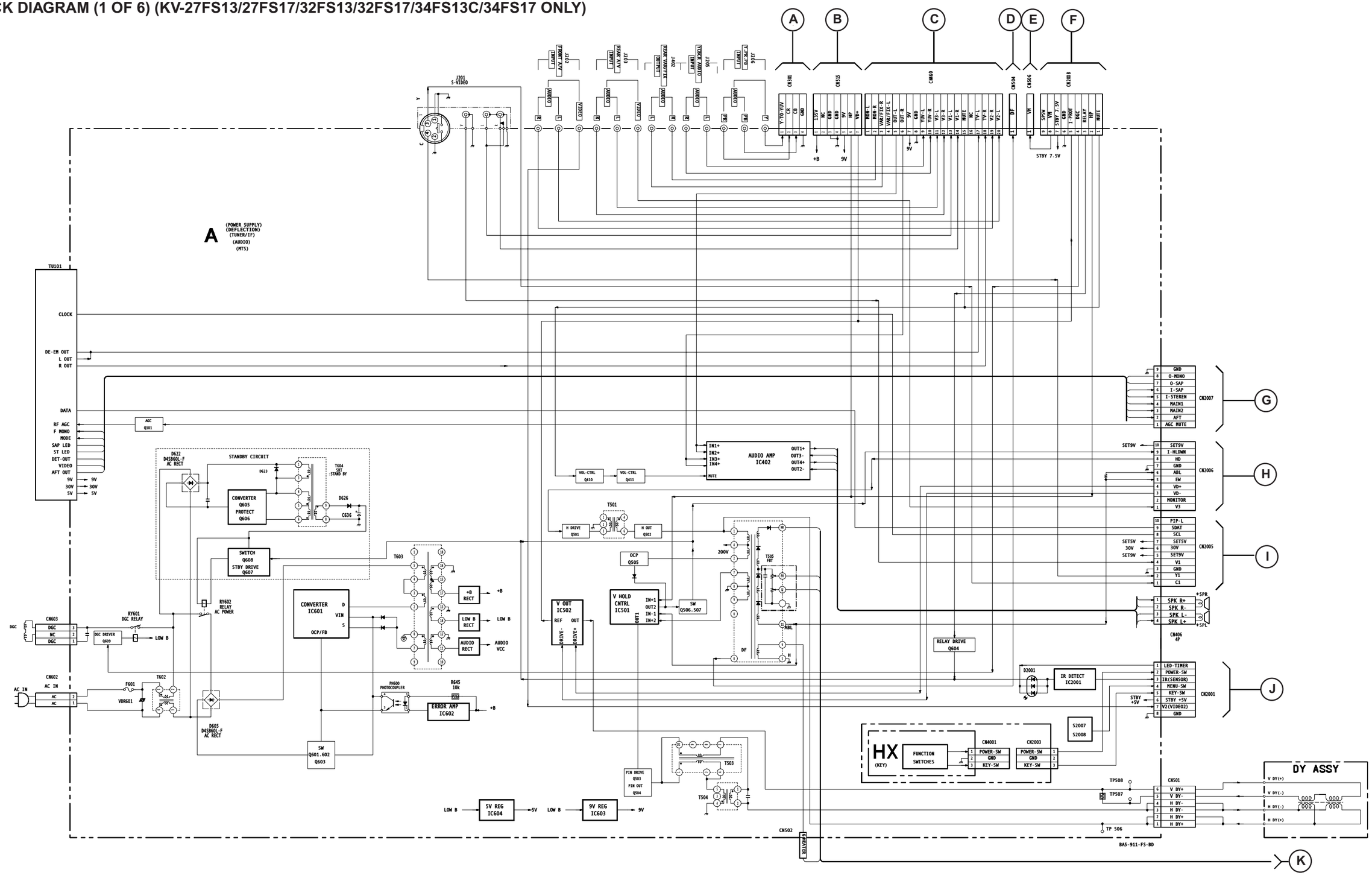
The components identified by shading and ⚠ symbol are critical for safety. Replace only with part number specified.

The symbol indicates a fast operating fuse and is displayed on the component side of the board. Replace only with fuse of the same rating as marked.

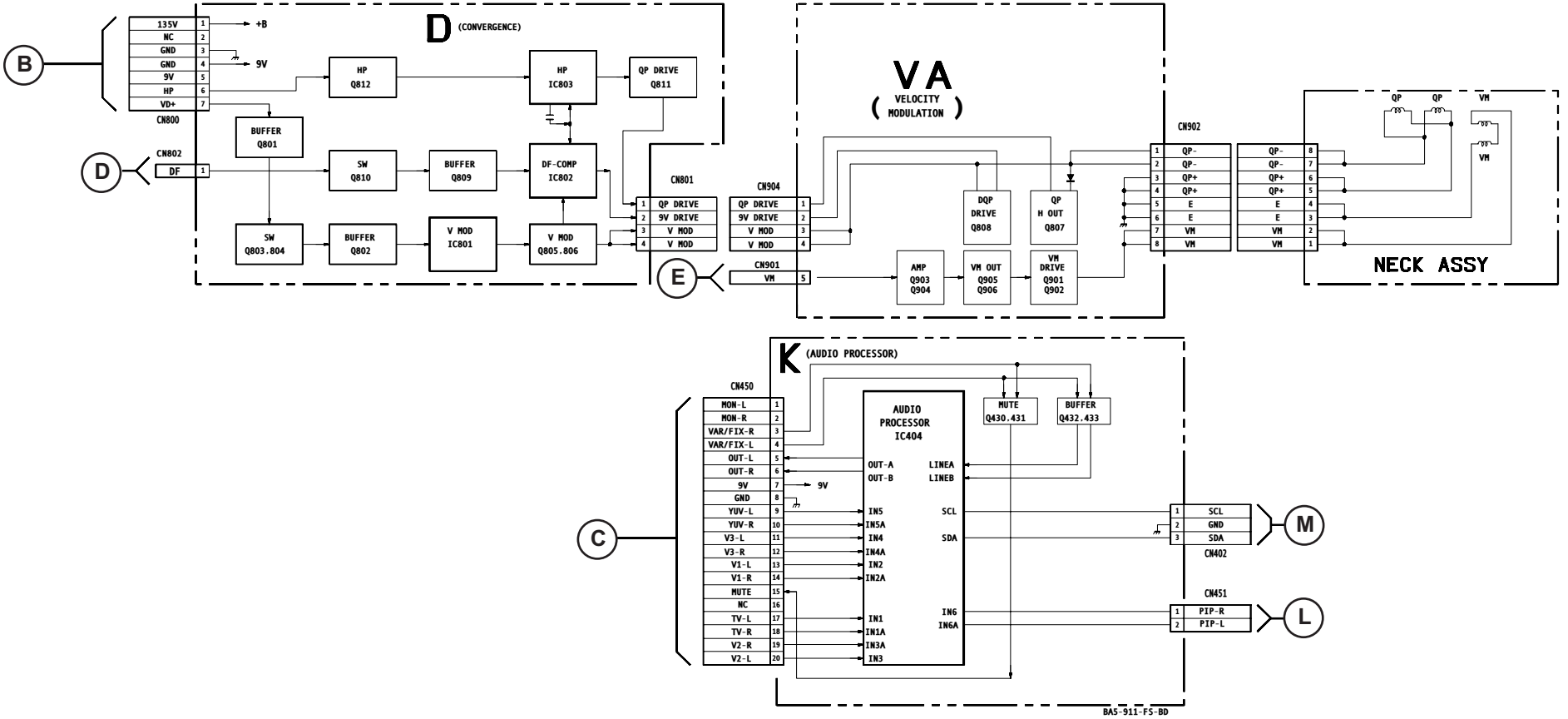
Les composants identifies per un trame et une marque ⚠ sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.

Le symbole indique une fusible a action rapide. Doit etre remplace par une fusible de meme yaleur, comme maque.

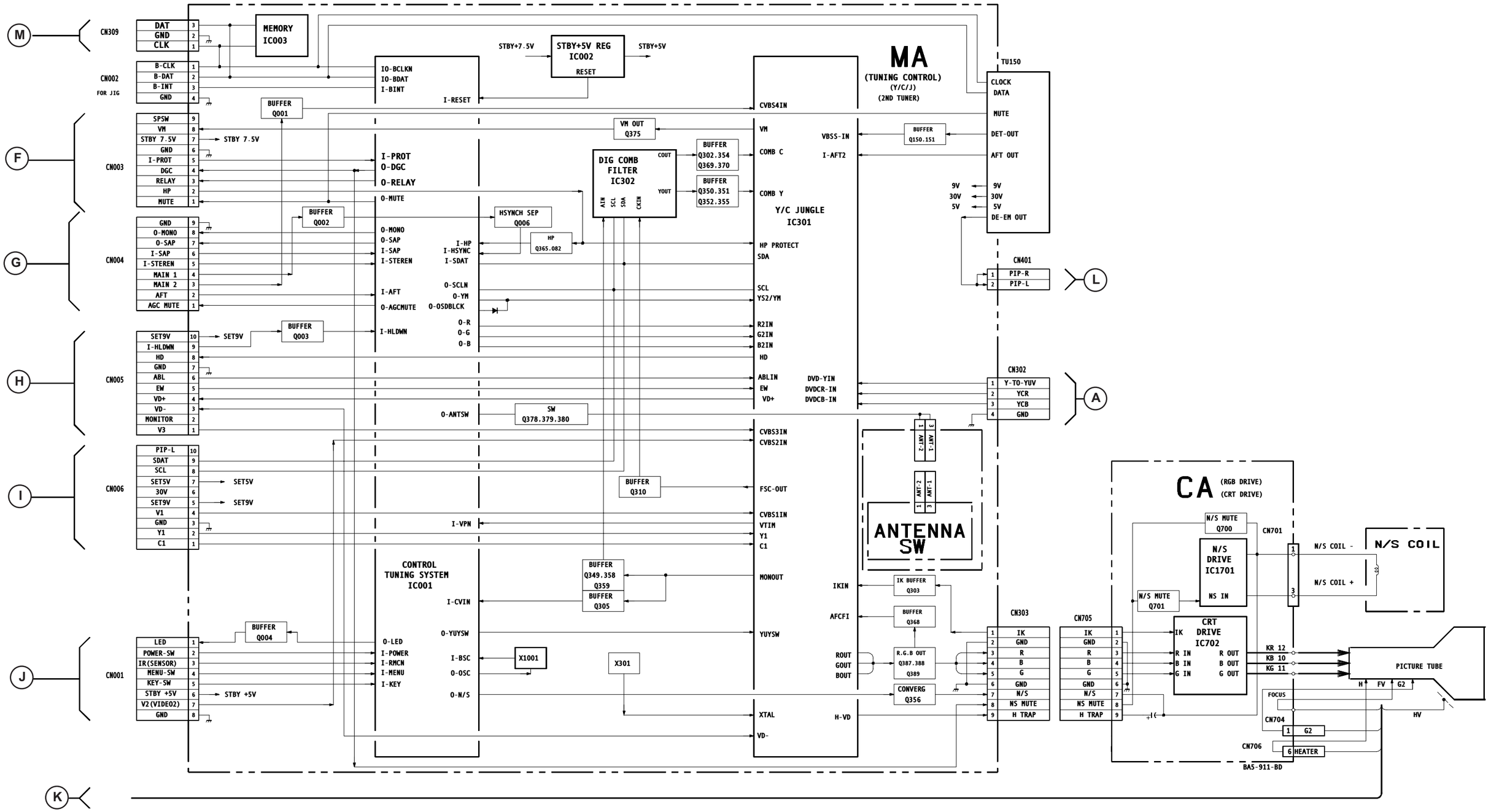
BLOCK DIAGRAM (1 OF 6) (KV-27FS13/27FS17/32FS13/32FS17/34FS13C/34FS17 ONLY)



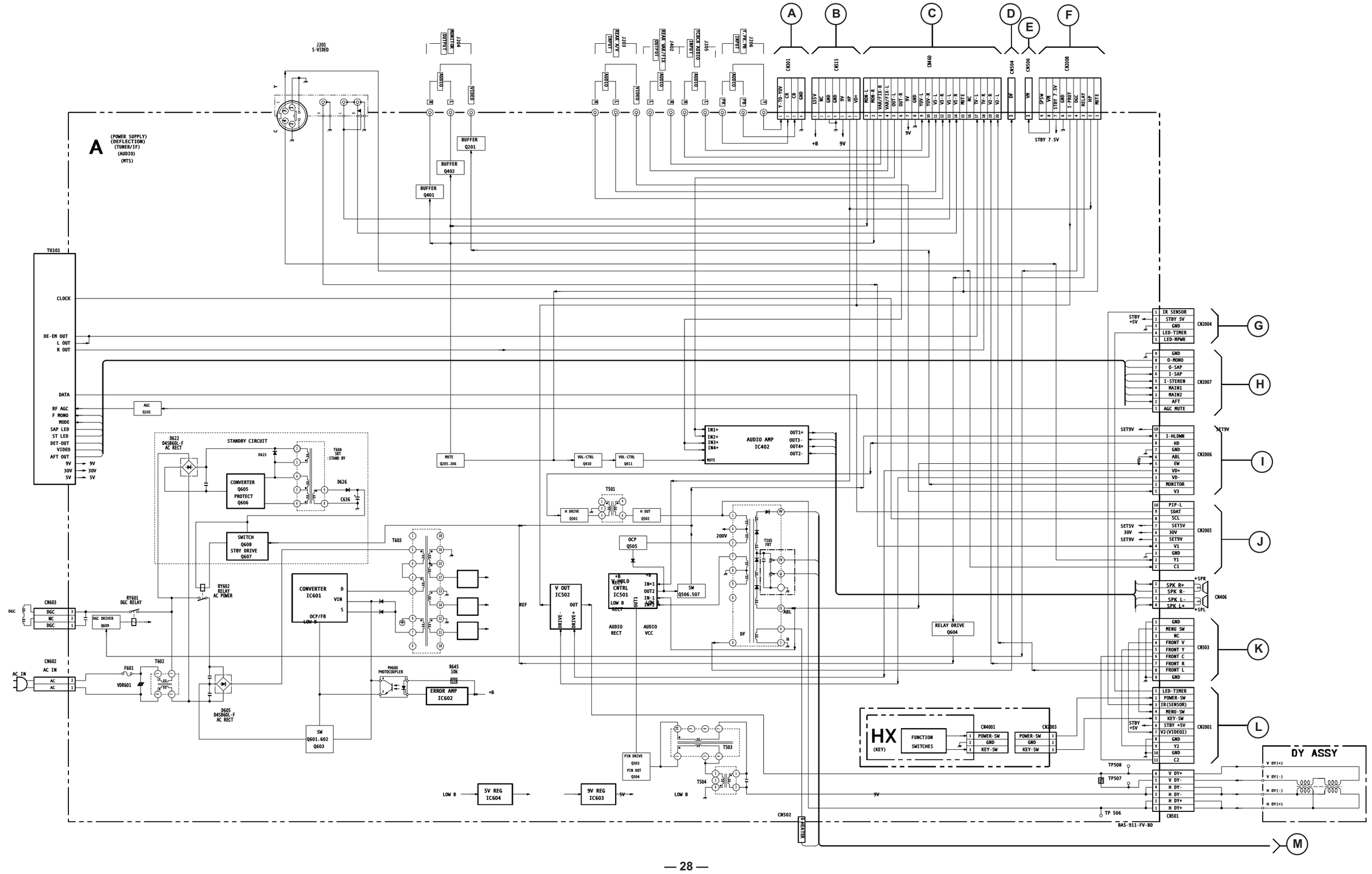
BLOCK DIAGRAM (2 OF 6) (KV-27FS13/27FS17/32FS13/32FS17/34FS13C/34FS17 ONLY)



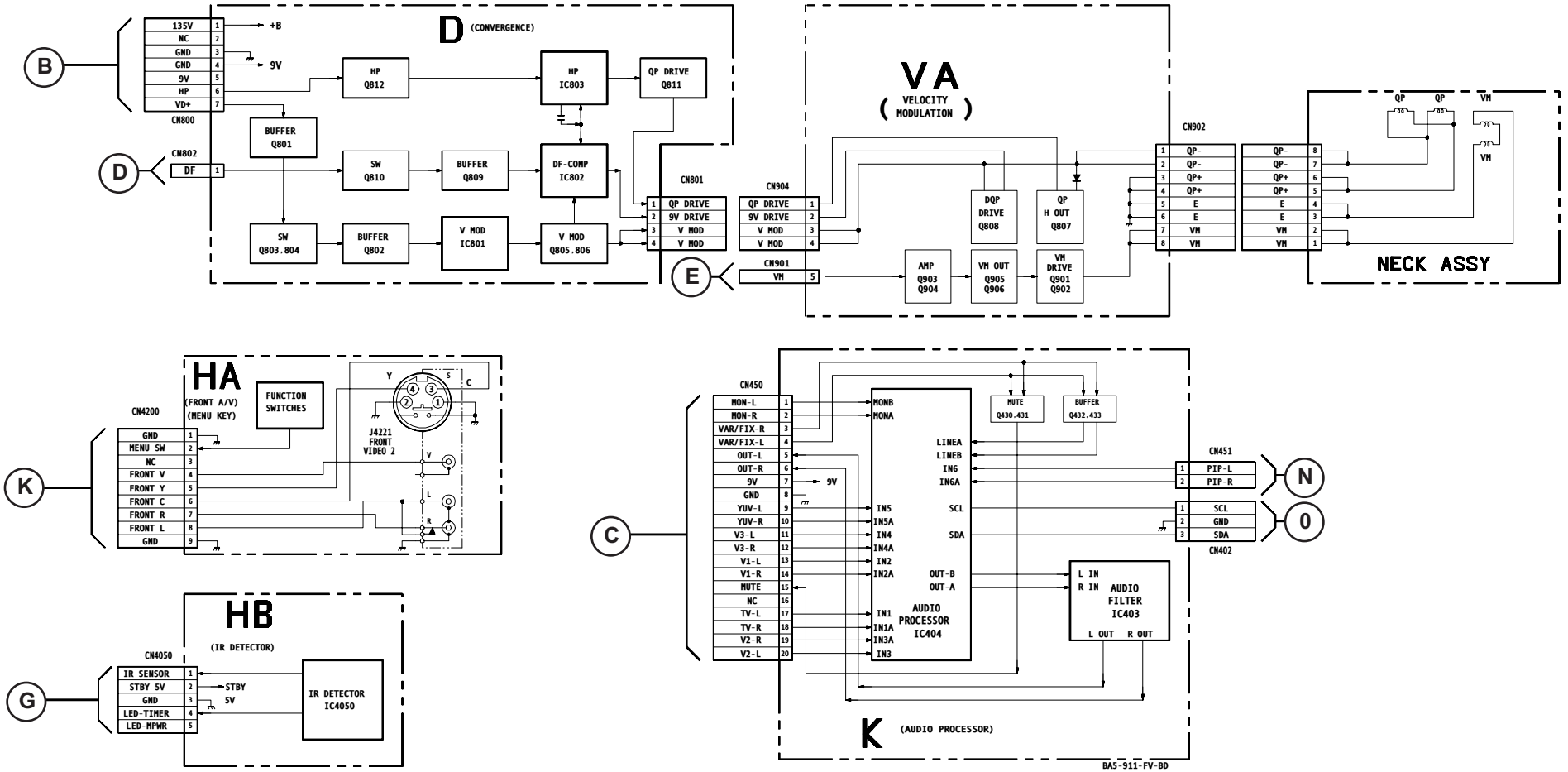
BLOCK DIAGRAM (3 OF 6) (KV-27FS13/27FS17/32FS13/32FS17/34FS13C/34FS17 ONLY)



BLOCK DIAGRAM (4 OF 6) (KV-27FV17/29FV17/29FV17C ONLY)



BLOCK DIAGRAM (5 OF 6) (KV-27FV17/29FV17/29FV17C ONLY)



BLOCK DIAGRAM (6 OF 6) (KV-27FV17/29FV17/29FV17C ONLY)