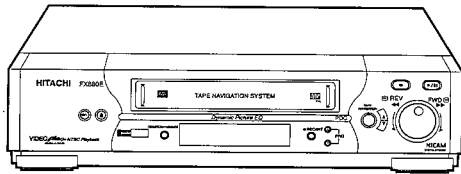
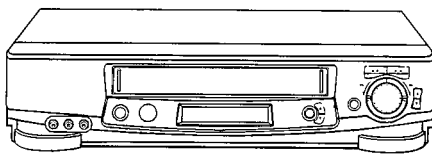


HITACHI

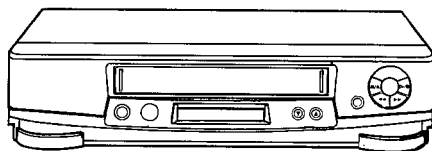
SERVICE MANUAL



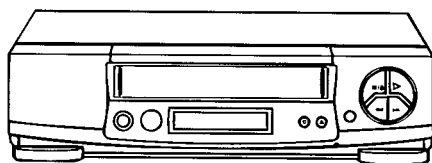
VT-FX880E



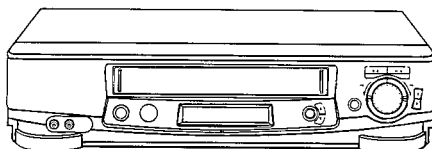
VT-FX860E



VT-FX850E



VT-FX840E



VT-MX835E

VHS

This video deck is a VHS type video recorder. For proper operation, only the VHS type cassette must be used.

VHS

Dieser Video-Recorder entspricht dem VHS-Format. Für richtigen Betrieb müssen daher VHS-Magnetband-Cassetten verwendet werden.

VIDEO *Plus+*

VIDEO *Plus+*
DELUXE

SHOWVIEW

SHOWVIEW
DELUXE

TK

No.4907E,G

VT-FX880E(NAV)(UKN)
VT-FX860E(NA)(UKN)
VT-FX860E(UKN)C (VPS)
VT-FX850E(NA)(UKN)(VPS)
VT-FX840E(NA)(VPS)
VT-MX835E(UK)(VPS)

US MECHANISM

This service manual does not include information on the US Mechanism used in this model. Use this manual together with the following manual.

**Manual related to the
VT-FX880E/860E/FX850E/FX840E/MX835E**

Name of manual	Manual No.	Chapters Included
US Mechanism	4527E	-----

Diese Wartungsanleitung enthält keine Informationen über das in diesem Modell verwendete US-Bandlaufwerk. Diese Anleitung gemeinsam mit der folgenden Anleitung verwenden.

**Die Modelle VT-FX880E/FX860E/FX850E/
FX840E/MX835E betreffende Anleitung**

Name der Anleitung	Anleitung-Nr.	Enthaltene Kapitel
US-Bandlaufwerk	4527G	-----

SPECIFICATIONS AND PARTS ARE SUBJECT TO CHANGE FOR IMPROVEMENT
Änderungen der Technischen Daten und Teile im Sinne ständiger Verbesserung vorbehalten.


VIDEO CASSETTE RECORDER
Video-Cassettenrecorder

May

1999

Digital Media Products Division, Tokai

PRODUCT SAFETY NOTICE

Many electrical and mechanical parts have special safety-related characteristics. These are often not evident from visual inspection nor can the protection afforded by them necessarily be obtained by using replacement components rated for a higher voltage, wattage, etc. Replacement parts which have these special safety characteristics are identified in this Service Manual. Electrical components having such features are identified by marking with a  on the schematics and the parts list in this Service Manual. The use of a substitute replacement component which does not have the same safety characteristics as the HITACHI recommended replacement one, shown in the parts list in this Service Manual, may create shock, fire, or other hazards. Product safety is continuously under review and new instructions are issued from time to time. For the latest information, always consult the current HITACHI Service Manual. A subscription to, or additional copies for, HITACHI Service Manual may be obtained at a nominal charge from HITACHI SALES CORPORATION.

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SCHEMATIC DIAGRAM	CIRCUIT BOARD DIAGRAM		
LCD DISPLAY (LCD)			
[EXCEPT FOR FX880E]	6-3 / 6-38		
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CHAPTER 1

GENERAL INFORMATION

SPECIFICATIONS

Format:	VHS PAL Standard	
Recording:	Rotary Two-Head Helical Scan Azimuth Recording	
Tape Speed:	23.39 mm/sec.--SP, 11.7 mm/sec.--LP	
Tape Width:	12.7 mm	
Operation Temperature:	5 °C TO 40 °C	
Video:	PAL colour (system I) & CCIR monochrome signals 625 lines [For (UKN),(UK)] PAL colour (system B & G) & CCIR monochrome signals 625 lines [Except for (UKN),(UK)]	
Recording Time:	240 min. with E-240 cassette--SP 480 min. with E-240 cassette--LP	
Aerial input:	VHF channels 2--12 CATV channels S1--S41 CATV channels X--Z+2 UHF channels 21--69] [Except for (UKN),(UK)]	
RF Output:	UHF channels 35 (22--69 adjustable) (System I) [For (UKN),(UK)] UHF channels 37 (22--69 adjustable) (System G) [Except for (UKN),(UK)]	
Video Input:	0.5 to 1.5 Vp-p 75 ohm Unbalanced	
Video Output:	1 Vp-p 75 ohm Unbalanced	
S/N Ratio (Video):	More than 43 dB	
Horizontal Resolution:	Colour 260 lines	
Audio (Linear)		
Input:	PERI: -3.8 dBm 10 Kohm, LINE: -7.8 dBm 50 Kohm	
Output:	PERI: -3.8 dBm 1 Kohm, LINE: -7.8 dBm 1 Kohm	
S/N Ratio:	43 dB	
Frequency Range:	70 Hz to 12 kHz	
Hi-Fi Audio [Except for MX835E]		
Frequency Range:	20 Hz to 20 kHz	
Dynamic Range:	More than 90 dB	
Wow and Flutter:	Less than 0.005% WRMS	
RF Audio Reception:	NICAM Digital stereo (I-PAL) [For (UKN)] NICAM Digital stereo (B/G), IGR (A2) Stereo (B/G) [For (NA),(NAV),(VPS)]	
Fast Forward/Rewind Time:	90secs. on S.FF or S.REW.	
Fast Forward/Rewind Time:	90secs. on S.FF or S.REW. [For MX835E]	
Power:	AC230V, 50 Hz	
Power Consumption:	18 W (including timer) 3.0 W (standby mode) 19 W (including timer) 3.0 W (standby mode) 21 W (including timer) 3.0 W (standby mode) 22 W (including timer) 3.4 W (standby mode)] [For (VPS)]] [For FX850E(UKN),FX850E/ FX840E(NA), MX835E(UK)]] [For FX860E]] [For FX880E]	
Timer:	24-hour digital indication	
Cabinet Size:	380 mm (W) × 93 mm (H) × 275 mm (D) [For FX850E/FX840E] 380 mm (W) × 93 mm (H) × 279 mm (D) [For FX860E/MX835E] 435 mm (W) × 99 mm (H) × 278 mm (D) [For FX880E]	
Weight:	Approx.. 3.5 kg [Except for FX880E] Approx.. 4.0 kg [For FX880E]	
Accessories Included:	1--Aerial cable 1--Infrared remote control handset 2--Batteries	

* Design and specifications are subject to change without notice.

COMPARISON OF FEATURES

ITEM		VT-FX880E/FX860E/FX850E//FX840E/MX835E	VT-FX770E/FX76xE/FX750E
GENERAL	VIDEO HEADS	DA4 Heads + Hi-Fi (Except for MX835E) DA4 Heads (For MX835E) SP : 48 µm LP : 24 µm Hi-Fi : 28 µm	DA4 Heads + Hi-Fi (Except for MX730E) DA4 Heads (For MX730E) SP . 48 µm LP : 24 µm Hi-Fi : 28 µm
	BASIC CHASSIS TYPE	US	US
	CAPSTAN DRIVE	DIRECT DRIVE	DIRECT DRIVE
	CYLINDER MOTOR	THREE-PHASE OUTER ROTOR : 360Hz	THREE-PHASE OUTER ROTOR : 360Hz
VIDEO	PAL COLOUR	B/G (Except for UKN,UK) I (For UKN,UK)	B/G (Except for UKN) I (For UKN)
	MESECAM COLOUR	YES (For FX880E)	YES (For FX770E)
TUNER	TUNING SYSTEM	F.S TUNING	F.S TUNING
	CATV	YES (Except for UKN,UK)	YES (Except for UKN,UK)
	CHANNEL PRESET No.	49CH	49CH
	RF CONVERTER	B/G (Except for UKN,UK) I (For UKN,UK)	B/G (Except for UKN,UK) I (For UKN,UK)
	RF CONV. CHANNEL (32-42)	37 (Except for UKN,UK) 35 (For UKN,UK)	37 (Except for UKN,UK) 35 (For UKN,UK)
	A2	YES (Except for UKN,UK)	YES (Except for UKN,UK)
	UK NICAM	YES (For UKN)	YES (For UKN)
	CT NICAM	YES (For NA.NAV)	YES (For NA.NAV)
TIMER	REC. PROGRAMME	8 PROG./1 YEAR	8 PROG./1 YEAR
	DIMMER	YES (AUTO)	YES (AUTO)
	IRT	LENGTH ONLY (For FX880E)	LENGTH ONLY (For FX770E)
	BACK-UP TIME	ABOUT 30 MIN.	ABOUT 30 MIN.
	PDC	YES (Except for VPS)	YES (Except for VPS)
	VPS	YES (For VPS.NAV)	YES (For VPS.NAV)
OTHER FEATURES	AUTO HEAD CLEANING	YES	YES
	POWER SAVE	YES	YES
	EDIT IN/OUT JACK	NO	NO
	TAPE SPEED	SP/LP	SP/LP
	VIDEO DUB	NO	NO
	AUDIO DUB	NO	NO
	X2 PLAY	NO	NO
	SLOW/REV.SLOW PLAY	YES	YES
	F.ADV PLAY	YES	YES
	SATELLITE CONTROL	YES (For FX880E)	YES (For FX770E/FX76xE)
	SHUTTLE RING	YES (For FX880E/FX860E/MX835E)	YES (For FX770E/FX760E)
	JOG DIAL	YES (For FX880E)	YES (For FX770E)
	NTSC PLAYBACK	YES	YES (For FX770E)
	FRONT A/V INPUT JACK	YES (For FX880E/FX860E/MX835E)	YES (Except for FX75xE)
	COUNTER GO-TO	NO	NO
	TITLE INDEX	NO	NO
	TROUBLE MODE	YES	YES
	TAPE NAVIGATION	YES (For FX880E/FX860E/MX835E)	YES (For FX770E)
CLOSED CAPTION	YES (For FX880E/FX860E/MX835E)	YES (For FX770E)	
CM ADVANCE	YES (For FX880E(UKN))	NO	
AUTO FEATURES	AUTO TRACKING	YES	YES
	AUTO OPERATE ON	YES	YES
	AUTO PLAY	YES	YES
	AUTO REWIND	YES	YES
	AUTO REW.SHUT OFF	YES	YES
	AUTO INSTALL	YES (For UKN,UK)	YES (For UKN,UK)
	AUTO SEEK	YES (For UKN,UK)	YES (For UKN,UK)
	AUTO TAPE CANCELLER	YES	YES
REMOTE CONTROL	PROGRAMME SETTING	LCD (For FX880E)	LCD (For FX770E)
	CLOCK SETTING	LCD (For FX880E)	LCD (For FX770E)
	VCR1/VCR2/TV	YES (For FX880E)	YES (For FX770E)
	SHOW VIEW	YES (Except for UKN,UK)	YES (Except for UKN,UK)
	VIDEO PLUS+	YES (For UKN,UK)	YES (For UKN,UK)

COMPARISON OF MAIN CONTROL ICs

ITEM	VT-FX880EFX860E/FX850E//FX840E/MX835E	VT-FX770E/FX76xE/FX75xE/MX730E
VIDEO SYSTEM		
Y/CHROMA PROCESS	JCP8016MSB (IC0201)	HA118211F (IC0201)
CCD DELAY	Included in IC201	Included in IC201
PRE/REC AMP		
AUDIO HEAD AMP	AN3329S[Except for MX835E] (IC1102)	AN3329S[Except for MX730E] (IC1102)
VIDEO HEAD AMP	Included in IC201	Included in IC201 (IC1101)
AUDIO		
FM AUDIO PROCESS	AN3964FB (IC0501)	AN3964FB (IC0501)
MAIN CONTROL		
MAIN μ P (system control μ P)	HD6433977SC46F[FX860E] HD6433977SC52F[FX880E] HD6433977SC39F [FX850E/FX840E/MX835E(VPS)] HD6433977SC50F[MX835E(UK)] (IC0901)	HD6433977SC10F or 14F [FX75xE/FX760E(UKN)] HD6433977SC11F[VPS,NA] HD6433977SC13F[FX770E] HD6433977SC14F[MX730E] (IC0901)
EEPROM	ST24C02 6[FX880E] ST24C04[Except for FX880E] (IC0903)	ST24C02 6[FX770E] ST24C04[Except for FX770E] (IC0903)
TAPE LOADING DRIVE	BA6209 (IC0904)	BA6209 (IC0904)
SERVO CONTROL	Included in Main μ p	Included in Main μ p
NICAM (Except for VPS)		
NICAM DECORDER	TDA9874H (IC1801)	TDA9874H (IC1801)
DUAL OPE. AMP	NJM4558M (IC1802)	NJM4558M (IC1802)
A2 (For VPS)		
ST/DUAL SOUND PROCESSOR	TDA9840T (IC1871)	TDA9840T (IC1851)
FM DEMODULATOR	TDA9821 (IC1872)	TDA9821 (IC1852)
PDC/VPS		
PDC/VPS DECODER	SDA5650 or SDA5649 (IC4581)	SDA5649 or SDA5649 (IC4581)
POWER SUPPLY		
SWITCHING DRIVER	STR-F6653 (IC0851)	STR-F6653 (Q0851)
REAR JACK		
AUDIO SW	-----	LA7151 (IC4551)
VIDEO SW	-----	BH7633AS (IC4501)
AUDIO/VIDEO SELECT SW	LA7147M[Except for MX835E] LA7148M[MX835E] (IC4501)	-----
TAPE NAVIGATION (For FX880E/FX860E/MX835E)		
CCD μ P (NAVI control)	M37272M8-143SP [FX880E] M37272M8-140SP [FX860E] M37272M8-117SP [MX835E] (IC4301)	M37272M8-117SP [FX770E] (IC4301)
OSD	MB90089-214FP (IC4101)	MB90089-214FP [FX770E] (IC4101)
E ² P ROM	AT24C16N-10SC [Except for FX880E(UKN)] AT24C64N-10SC [FX880E(UKN)] (IC4302)	AT24C16N-10SC [FX770E] (IC4302)
RESET	RN5VS45AA (IC4303)	RN5V545AA [FX770E] (IC4303)
SYNC SEPARATER	MM1108XFFE (IC4304)	MM1108XFFE [FX770E] (IC4304)
VIDEO SW	NJM2249M (IC4103)	NJM2249M [FX770E] (IC4103)
VIDEO SW	NJM2535M (IC4102)	NJM2535M [FX770E] (IC4102)
CM ADVANCE (For FX880E)		
CM ADVANCE	M34510M2-305SP (IC4401)	-----
RESET	RN5VS45AA (IC4402)	-----
AUDIO AMP	NJM2082M (IC4404)	-----
VIDEO GATE & RESET	TC4066BF (IC4405)	-----

TIPS FOR SERVICING

How to Remove the Cassette when a Malfunction Has Occurred in the Mechanism

If a cassette is caught in the mechanism because of a malfunction in the mechanism, remove it by the following procedure.

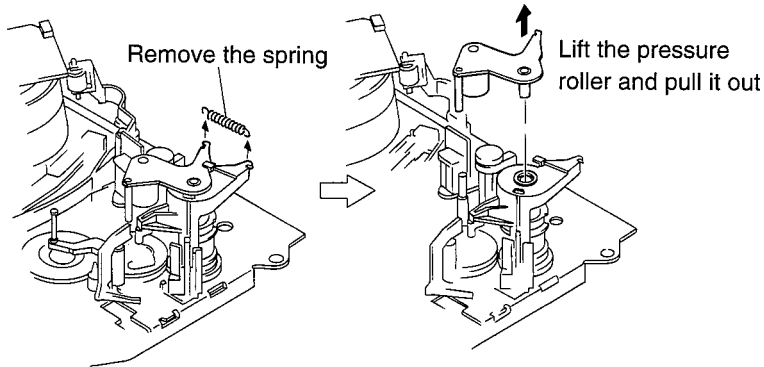
[Work Procedure]

1. Remove the top cover.
2. Remove the front panel.

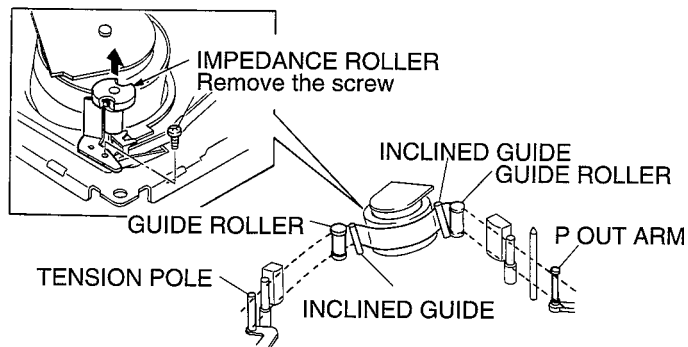
If the tape is wound round the cylinder in the loading state

If the cassette does not come out from the FL mechanism in the unloading state.

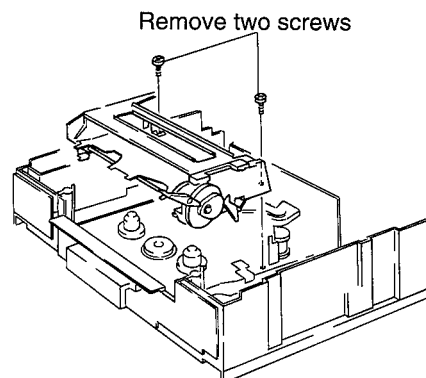
Remove the spring and lift the pressure roller to pull it out.



Slacken the tape and release it from the tension pole, guide rollers, inclined guides and P out arm.



- 1) Remove two screws holding the FL mechanism.
- 2) Hold the cassette lid with your fingers so the tape is not damaged and remove the FL mechanism.
- 3) Remove the slack tape and eject the cassette.



TROUBLE DISPLAY FUNCTION

This VCR has a function which displays mechanism malfunctions, etc. in the LCD display. Use this function to analyze the cause when the power is shut off due to a malfunction, etc. in the mechanism.

Two types of information are displayed, 1) The operation mode when the malfunction occurred, 2)Malfunction Codes.

The details of the malfunction are displayed as follows.

PROCEDURE TO DISPLAY A MALFUNCTION

Press the (CH ▼) button on the VCR when the power is turned off and hold it; the malfunction code is displayed while the button is held depressed.

PROCEDURE TO CLEAR THE MALFUNCTION DISPLAY

Press the "PLAY" button on the VCR and hold it, then press the microprocessor "RESET" button to initialize the trouble display.

LCD DISPLAY

Operation mode Malfunction Codes Operation mode

【Display of details of malfunction】

Displayed No.	Item	Details
" 0 0 "	No malfunction	
" 0 1 "	FL mechanism lock	Malfunction in insertion/ejection of cassette
" 0 2 "	Capstan lock unloading	Malfunction of capstan motor drive during tape
" 0 4 "	Reel lock	Reel rotation trouble when tape is running
" 0 6 "	Cylinder lock	Cylinder rotation malfunction
" 0 7 "	Loading mechanism lock	Malfunction in shifting mechanism mode
" 1 6 "	Servo lock	Shorting of 5V detected

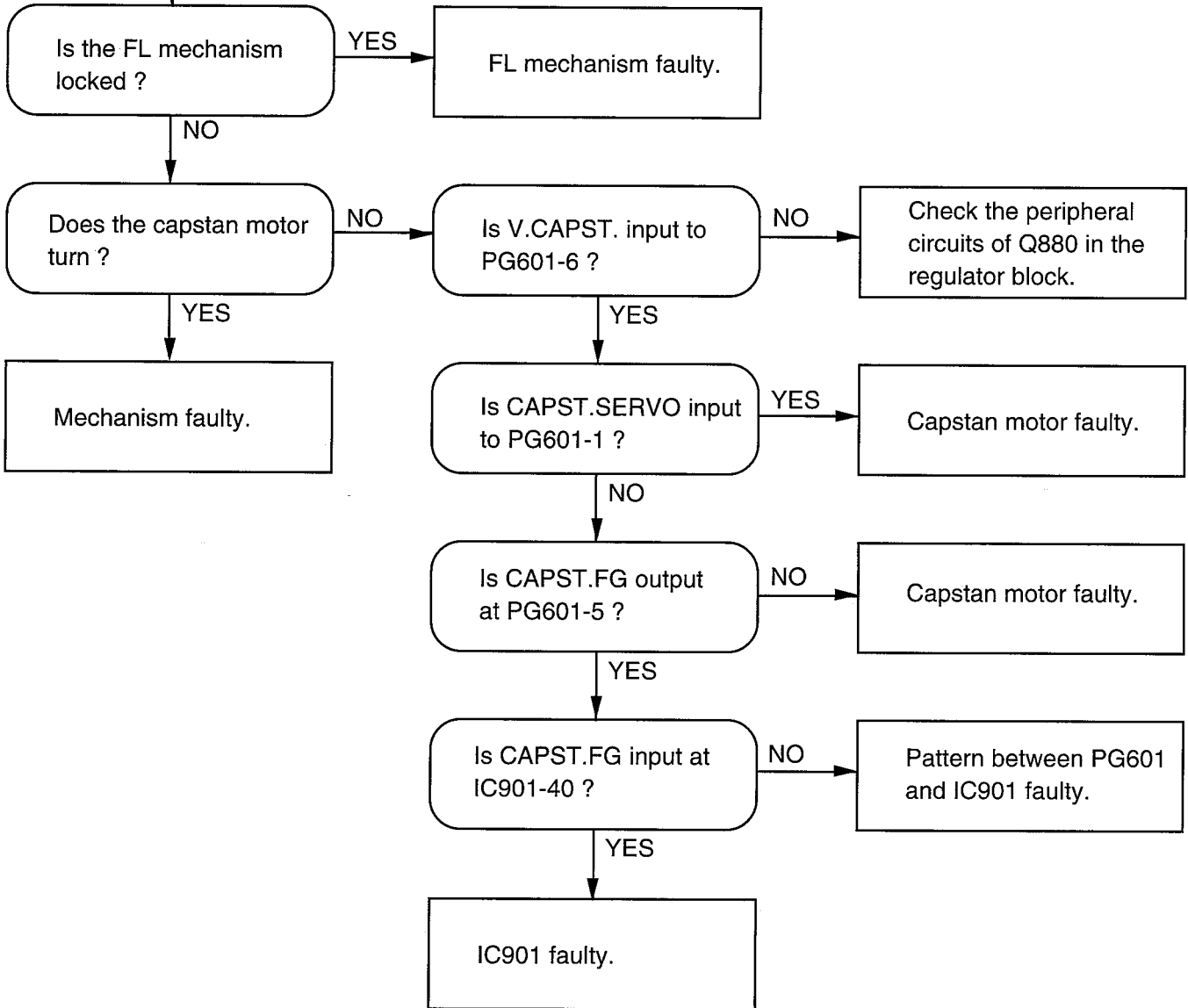
【Mode Display when Malfunction Has Occurred】

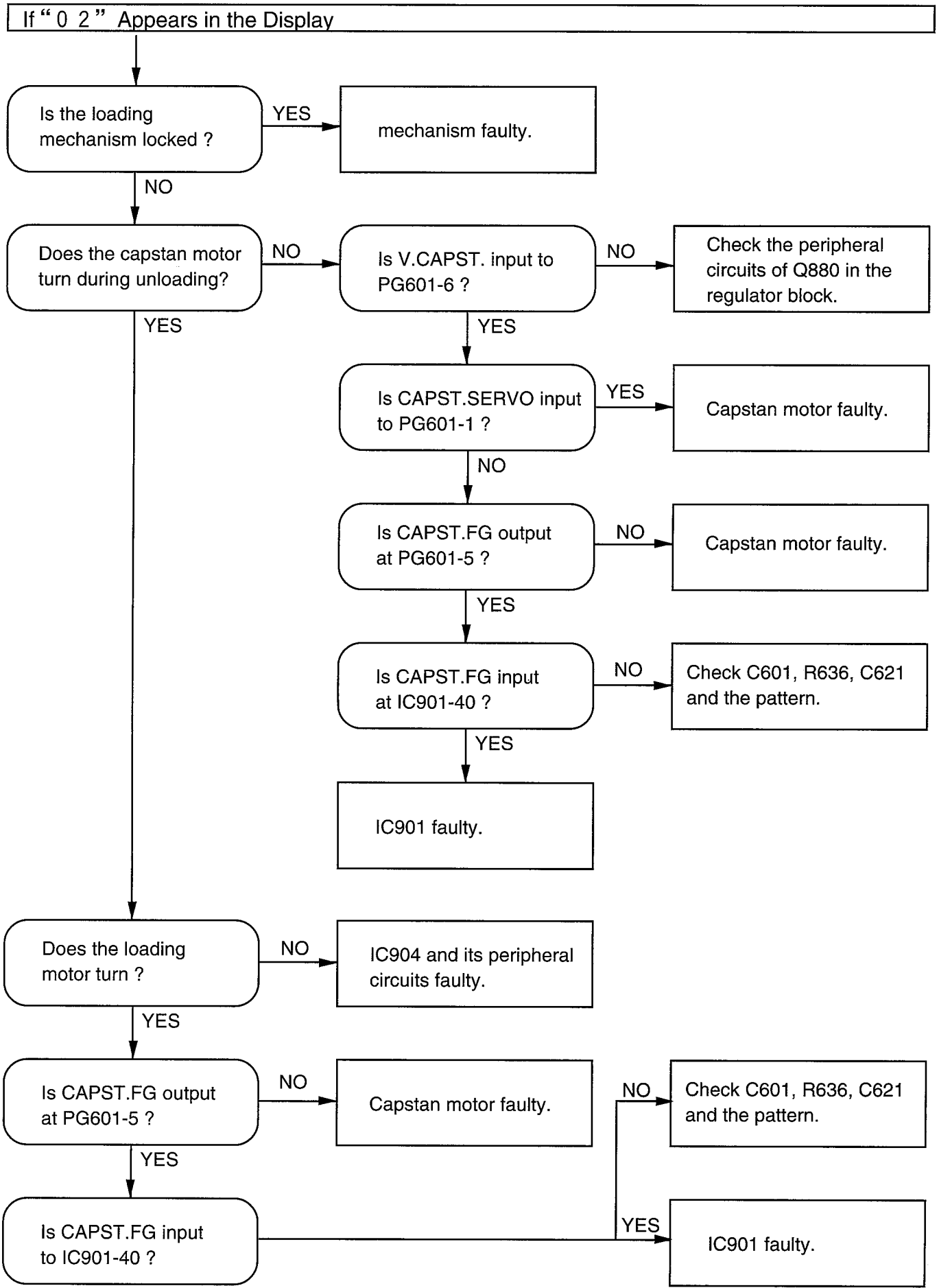
Mode	Display	Mode	Display
Stop	No Display	Playback	P L A Y
Fast forward	F F	Reverse playback	- P L A Y
Rewind	R E W	Forward search	S R C H
High speed fast forward	F F	Reverse search	- S R C H
High speed rewind	R E W	Slow motion play	S L O W
Recording	R E C	Reverse motion slow play	- S L O W
Recording pause	R E C (flashes)	Still motion play	S T I L L

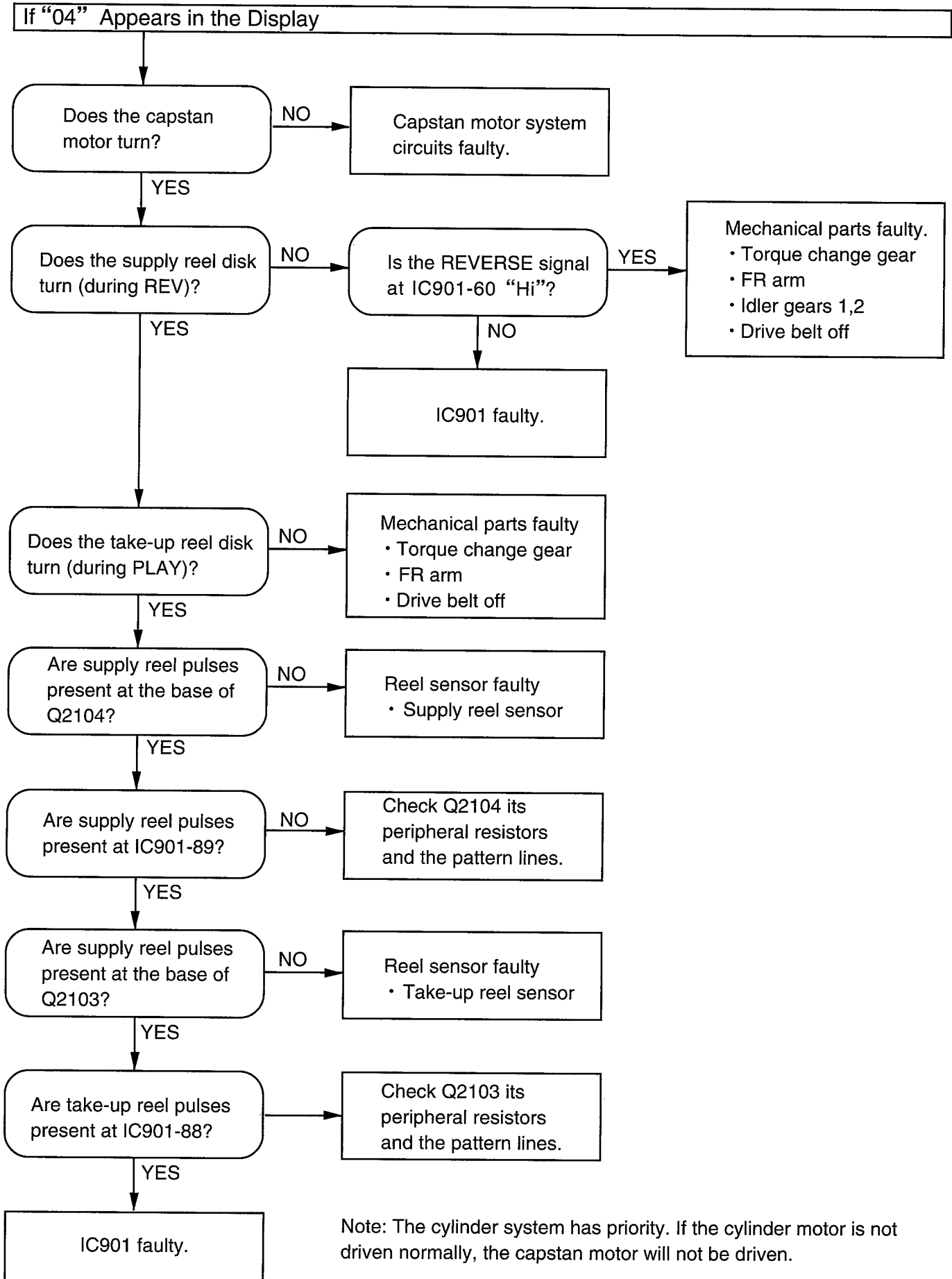
No symbols are displayed if the malfunction occurred when a cassette was inserted or ejected, or the power was switched on from off, and off from on.

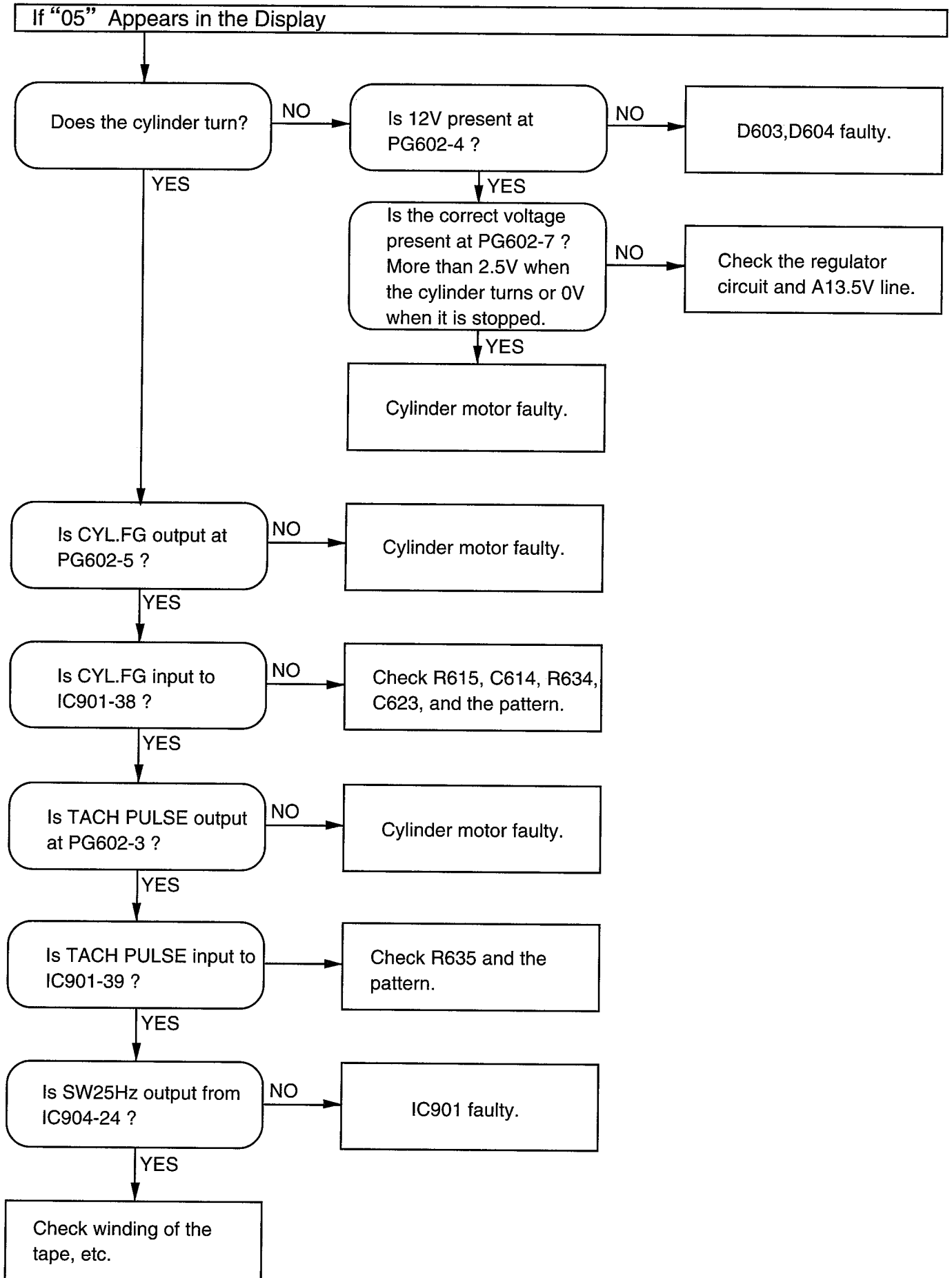
Troubleshooting According to Malfunction Display

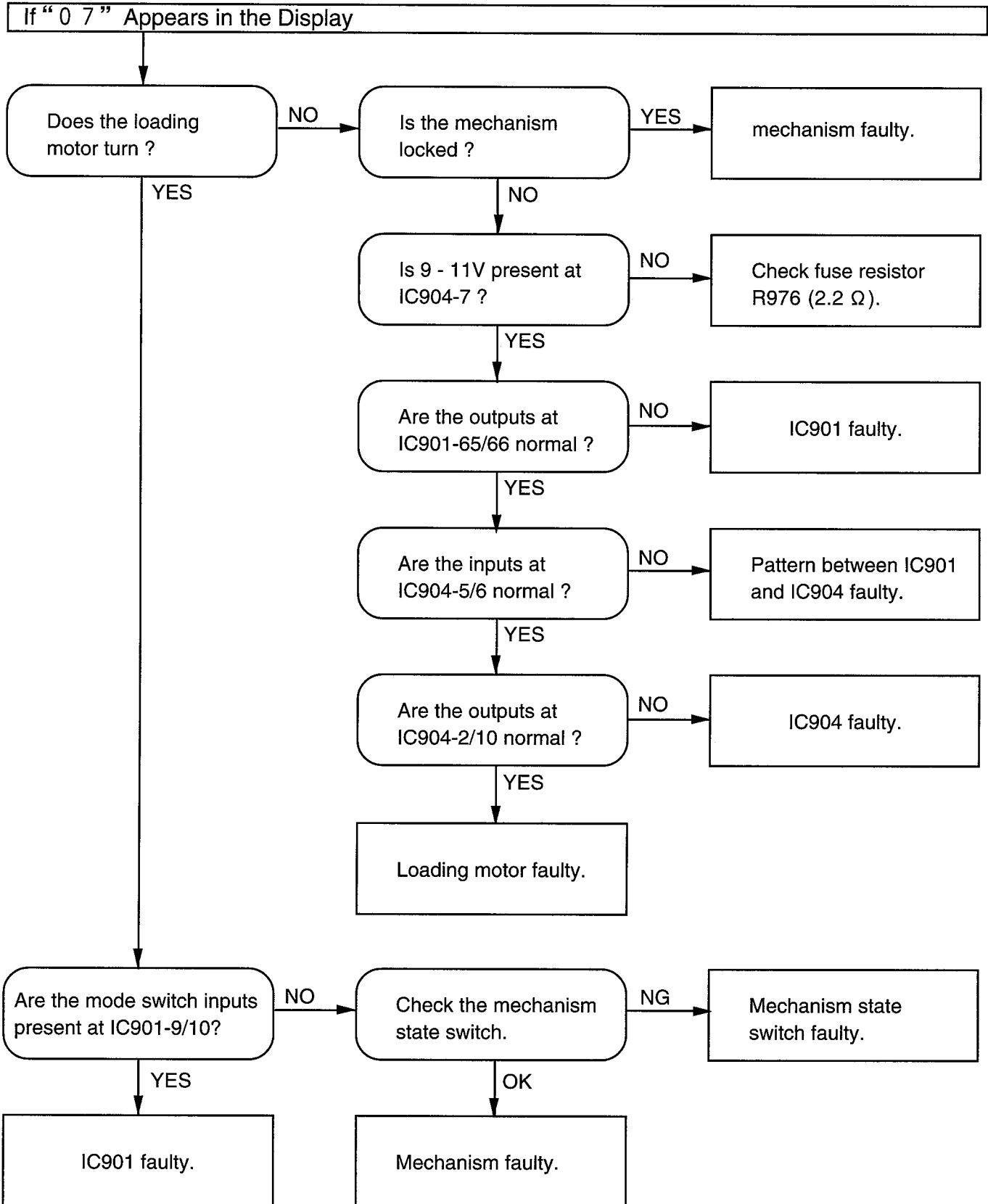
If "0 1" Appears in the Display

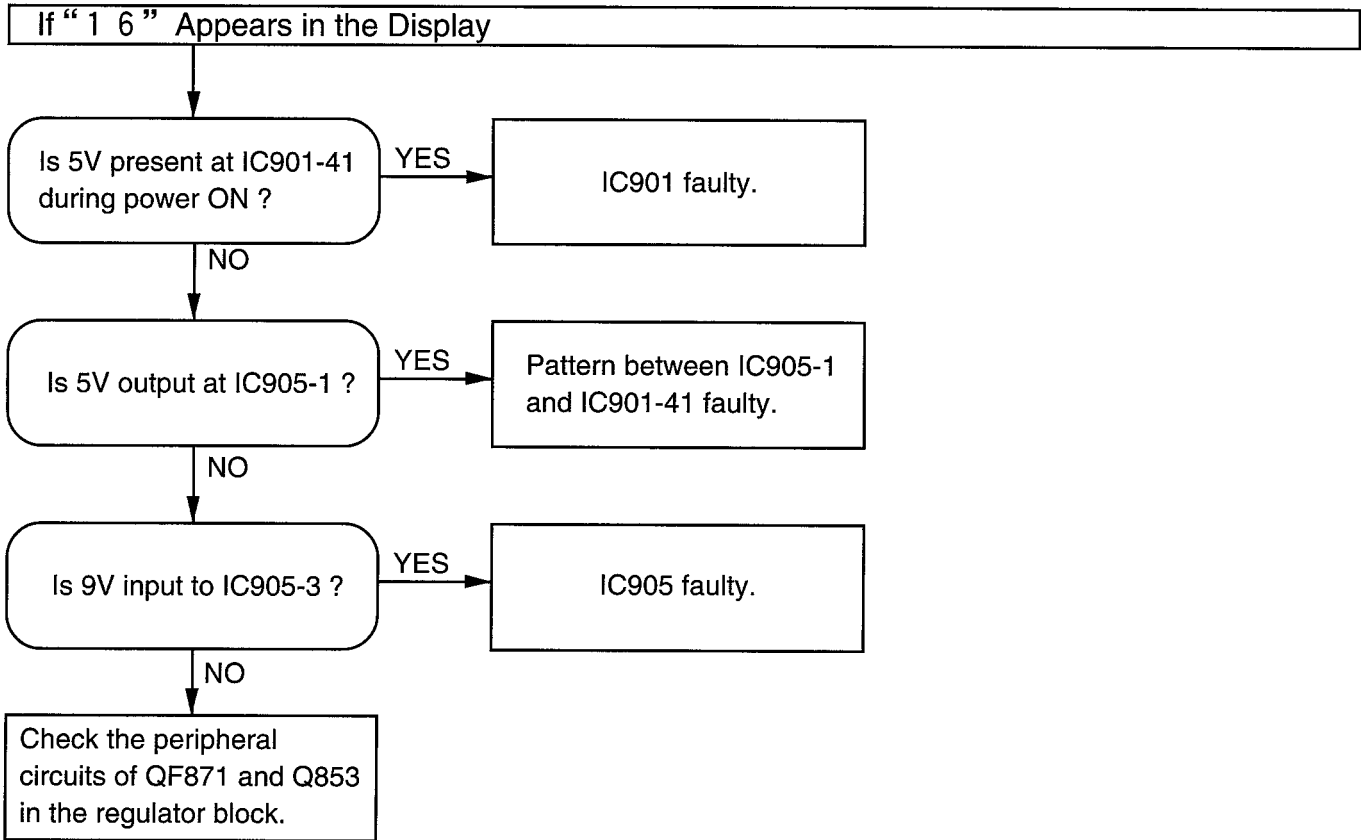












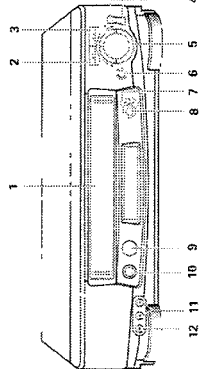
Instructions on Use and Description of New Functions

The following are extracts from the instruction manual.

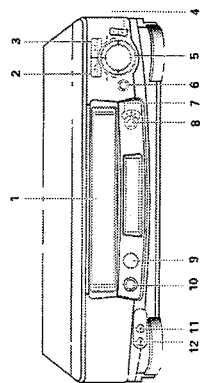
- VT-MX835E(UK)/FX860E(UKN) -

CUSTOMER CONTROLS

VCR Customer Controls

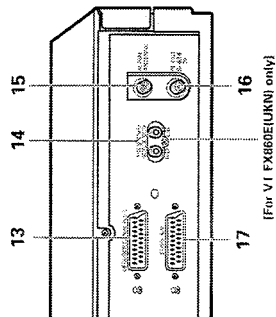


[VT-FX860E(UKN)]

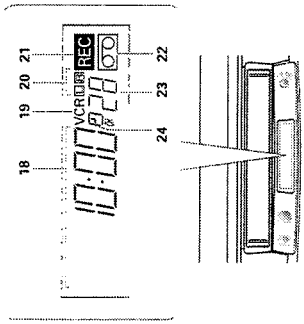


[VT-MX835E(UK)]

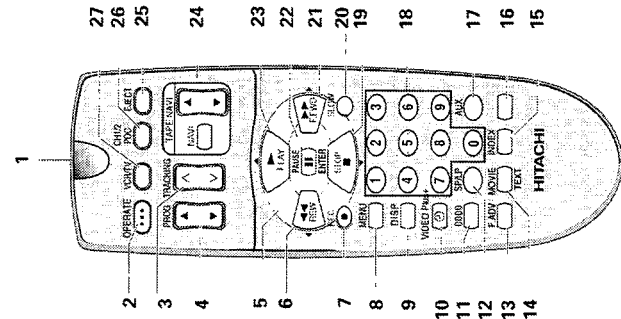
Item No.	Function	Page
1	Cassette compartment	20
2	STOP/EJECT button	23
3	PLAY/STILL button	22
4	PROG (programme up/down) buttons	11
5	Shuttle ring	25
6	REC button	26
7	Tape navigation programme select up/down buttons	42
8	TAPE NAVIGATION button	39
9	Remote control receiving window	9
10	OPERATE (Operate/Standby) button	2
11	AUDIO IN (L-mono)(R) sockets [For VT-FX860E(UKN) only]	53
12	AUDIO IN [For VT-MX835E(UK) only]	53
13	Decoder socket	53
14	AUDIO OUT (L) (R) sockets for stereo system connection [For VT-FX860E(UKN) only]	55
15	AERIAL signal input	6
16	RF OUT signal out to TV	6
17	Scart socket	7
18	VCR Display	19
19	Time counter or VCR mode indicator	47
20	PLAY — playback	22
21	SRCH — visual search	22
22	SLOW — slow play	23
23	REW — rewind	23
24	S:REW — high speed rewind	23
25	FF — fast forward	23
26	S:FF — high speed fast forward	23
27	STILL — play pause and frame advance	23
28	VCR, operate mode	22
29	Audio indicators [For VT-FX860E(UKN) only]	24
30	REC — record (flashes during record pause)	26
31	Tape-in indicator	20
32	TV programme number or Auxiliary (L1/L2/L3)	26
33	Timer indicator	53
34		29



[For VT-FX860E(UKN) only]



Remote Control Handset Customer Controls

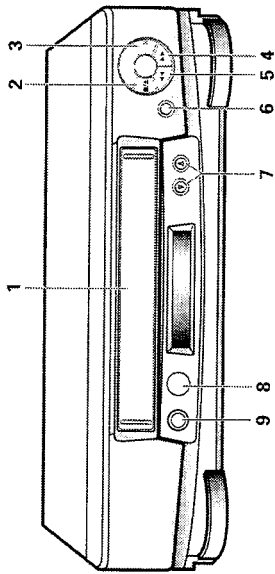


Item No.	Function	Page
1	Transmission window	9
2	OPERATE — switch between operate and standby mode	29
3	TRACKING button	24
4	PROG (programme up/down) buttons	12
5	Cursor buttons	12
6	REW — rewind or search	23
7	REC — record button	26
8	MENU — to recall OSD menu	50
9	DISP — to recall on screen display, change VCR's display	47
10	VIDEO Plus+ programming	30
11	0000 — to correct an incorrect digit, reset the time counter when it appears in the VCR's display	19
12	SP/LP — changes tape speed during record	47
13	F ADV button — advance the picture by one frame during still playback	22
14	MOVIE TEXT button	46
15	INDEX button — INDEX feature	49
16	This button is not used	
17	AUX button — select L1, L2 or L3 input	53
18	Number buttons	19
19	STOP — stops play/record function	23
20	SLOW button — press during playback to view slow motion picture	22
21	F FWD — fast forward or search	23
22	PAUSE/ENTER button	22
23	PLAY — play/back	22
24	TAPE NAVI buttons to use for the TAPE NAVIGATION function	40
25	EJECT button — press to eject a cassette	20
26	CH1/2 button — for audio channel selection in playback [For VT-FX860E(UKN) only]	24
27	PDC button — for PDC setting during recording	63
28	VCR/TV select button	22

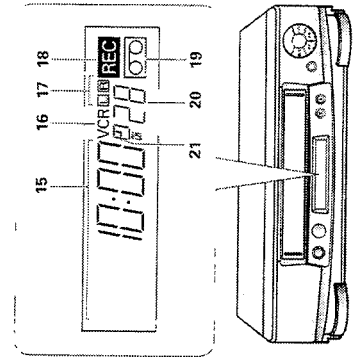
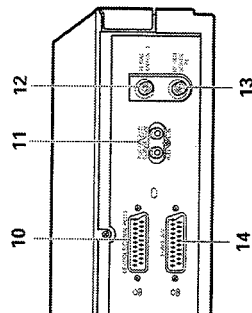
- VT-FX850E(UKN) -

CUSTOMER CONTROLS

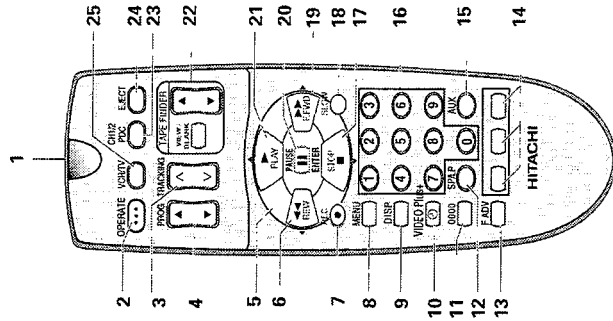
VCR Customer Controls



Item No.	Function	Page
1	Cassette compartment	20
2	STOP/EJECT button	24
3	PLAY/STILL button	22
4	FAST FORWARD button	23
5	REWIND button	23
6	REC button	26
7	PROG (programme up/down) buttons	11
8	Remote control receiving window	9
9	OPERATE (Operate/Standby) button	2
10	Decoder socket	47
11	AUDIO OUT (L), (R) sockets for stereo system connection	6
12	AERIAL — signal input	6
13	RF OUT — signal out to TV	6
14	Scart socket	7
15	VCR Display	
	Time, counter or VCR mode indicator	19
	PLAY — playback	39
	SRCH — visual search	22
	SLOW — slow play	22
	REW — rewind	23
	S-REW — high speed rewind	23
	FF — fast forward	23
	S-FF — high speed fast forward	23
	STILL — play pause and flame advance	22
	VCR, operate mode	22
	Audio indicators	25
	REC — record (flashes during record pause)	26
16	Tape-in indicator	20
17	TV programme number or Auxiliary (L/L2)	26
18	Timer indicator	45
19		25



Remote Control Handset Customer Controls



Item No.	Function	Page
1	Transmission window	9
2	OPERATE — switch between operate and standby mode	29
3	TRACKING button	25
4	PROG (programme up/down) button	12
5	These cursor buttons not used	23
6	REW — rewind or search	26
7	REC — record button	42
8	MENU — to recall OSD menu	43
9	DISP — to recall on-screen display, change VCR's display	30
10	VIDEO Plus+ — VIDEO Plus+ programming	19
11	0000 — to correct an incorrect digit, reset the time counter when it appears in the VCR's display	39
12	SP/LP — changes tape speed during record	20
13	F ADV button — advance the picture by one frame during still playback. These buttons not used	22
14	AUX button — select L1 or L2 input	45
15	Number buttons	19
16	STOP — stops play/record function	24
17	SLOW button — press during playback	22
18	F FWD — fast forward or search	22
19	PAUSE — pause or still	22
20	PLAY — playback	22
21	TAPE FINDER button used for Index Search, Easy View and Blank search function	40
22	CH1/2 button — for audio channel selection in playback	25
23	PDC button — for PDC setting during recording	55
24	EJECT button — press to eject a cassette	20
25	VCR/TV select button	22

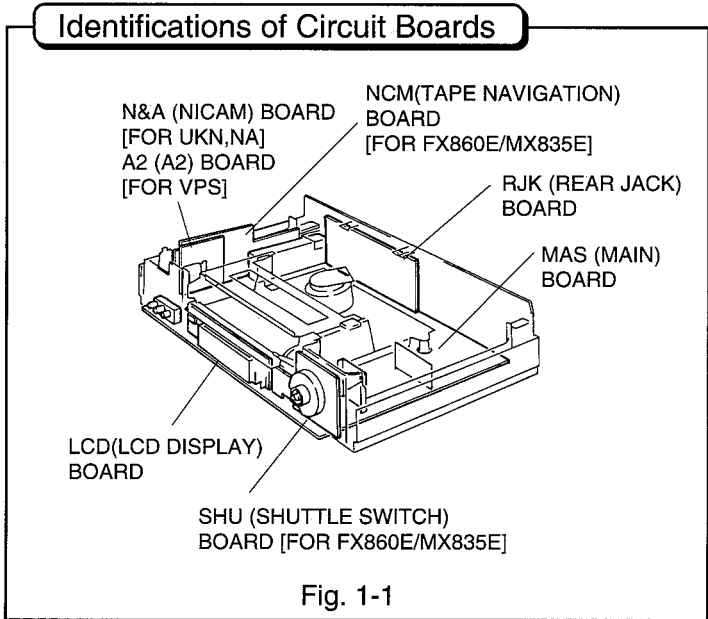
MEMO

CHAPTER 2 DISASSEMBLY

- VT-FX860E/FX850E/FX840E/MX835E -

1. Before Starting Disassembly

- 1) Unplug the power cord from the AC outlet.
- 2) [Removal procedure]
If a special procedure is required when dismantling any component, it is indicated using numbers. Follow the numbers ((1),(2),(3) ...) shown in the illustrations.
[Reinstallation procedure]
Reinstall each component in the reverse order to removal when otherwise not specified.
- 3) Insert card connectors securely all the way as they are of the direct insertion type.



2. Disassembly Method

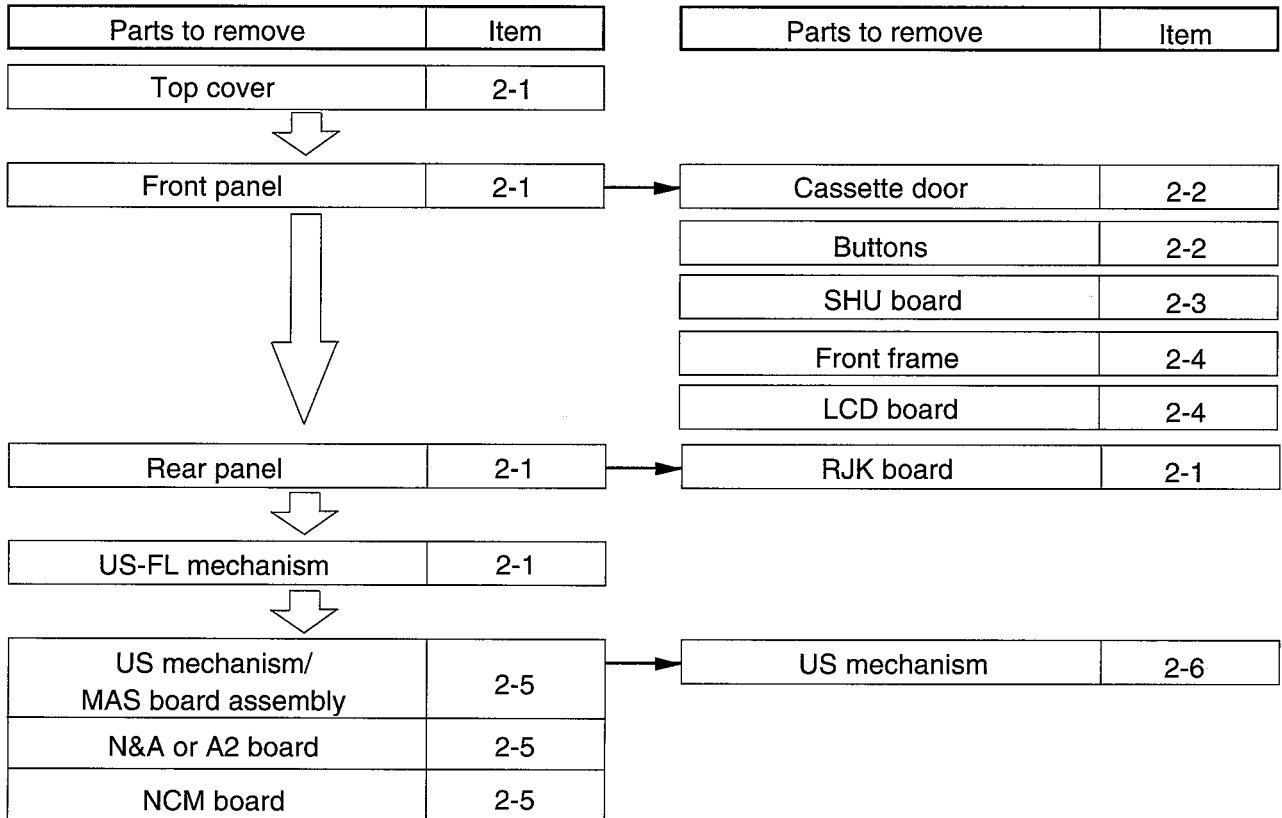
When replacing defective parts, first refer to the "Parts hierarchy chart" shown below. This chart shows the procedure for parts removal when replacing defective parts.

[How to use the parts hierarchy chart]

- (1) Locate the part to be replaced.
- (2) Check the parts in the ranks above the part to be replaced and start dismantling.
- (3) Replace the defective part and reinstall the parts in the reverse order to that shown in the parts hierarchy chart.

Parts Hierarchy Chart

Note: Dismantle parts in the eject state.



Disassembly Procedure Diagrams

Item	Parts to remove
2-1	Top cover, front panel, rear panel, RJK board and US-FL mechanism

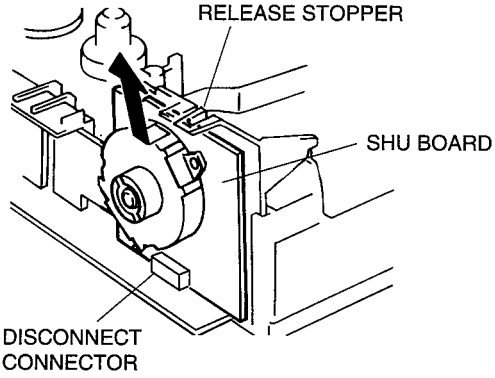
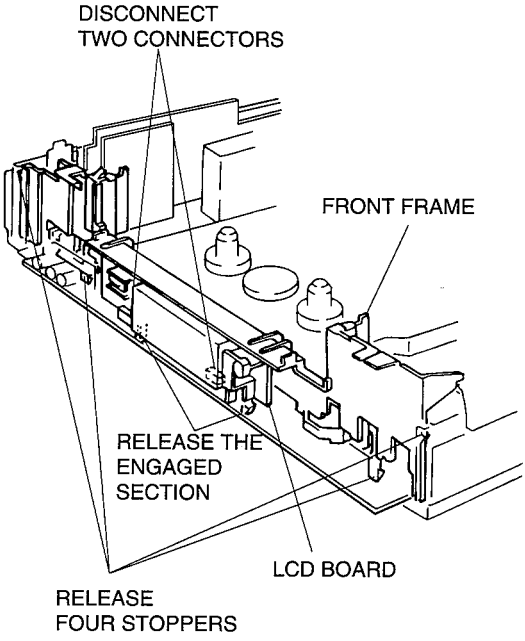
◆ **Caution when reinstalling the US-FL mechanism**
 Reinstall the US-FL mechanism in the state that the cassette holder is pulled forward.
 (Otherwise, the switch arm could damage the FL switch on the MAS board.)

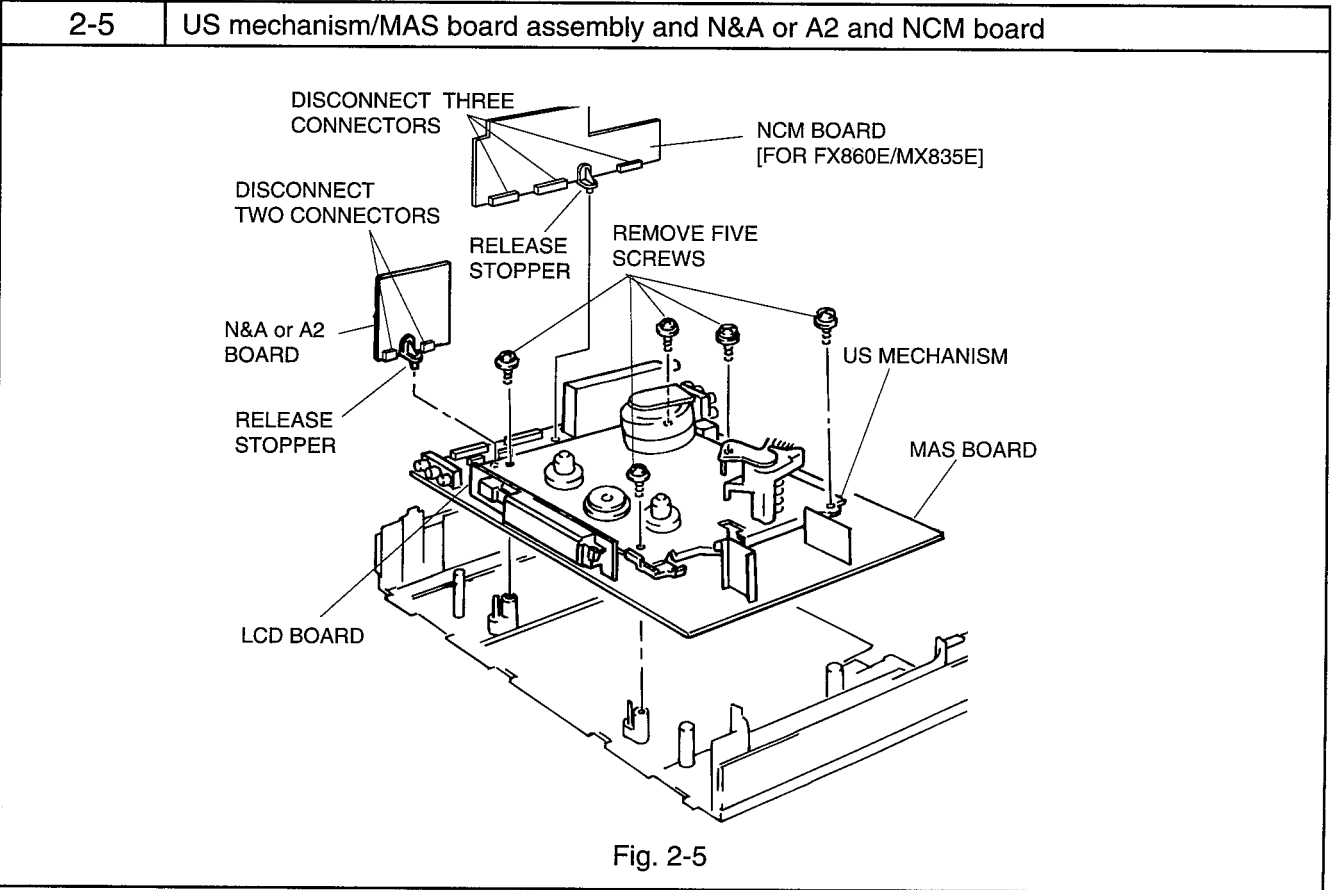
Fig. 2-1

2-2	Cassette door and buttons
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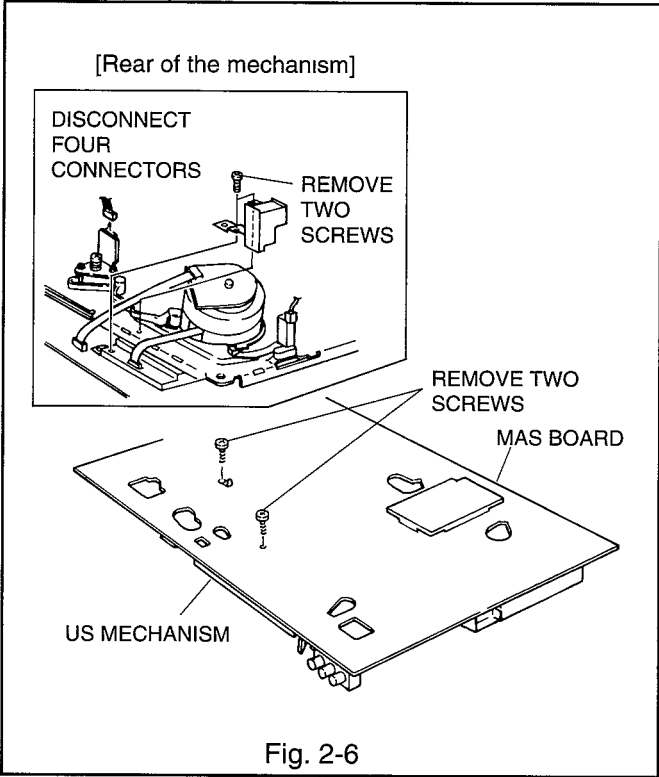
◆ **Caution when reinstalling the front panel**
 Reinstall the front panel in the state the cassette door is pushed so the boss of the door arm comes to the front of the boss support of the cassette door.

Fig. 2-2

Item	Parts to remove	
2-3	SHU board [FOR FX860E/MX835E]	2-4 Front frame and LCD board
 <p data-bbox="470 1030 571 1064">Fig. 2-3</p>		 <p data-bbox="1157 1030 1257 1064">Fig. 2-4</p>



Item	Parts to remove
2-6	Separation of MAS board from US mechanism

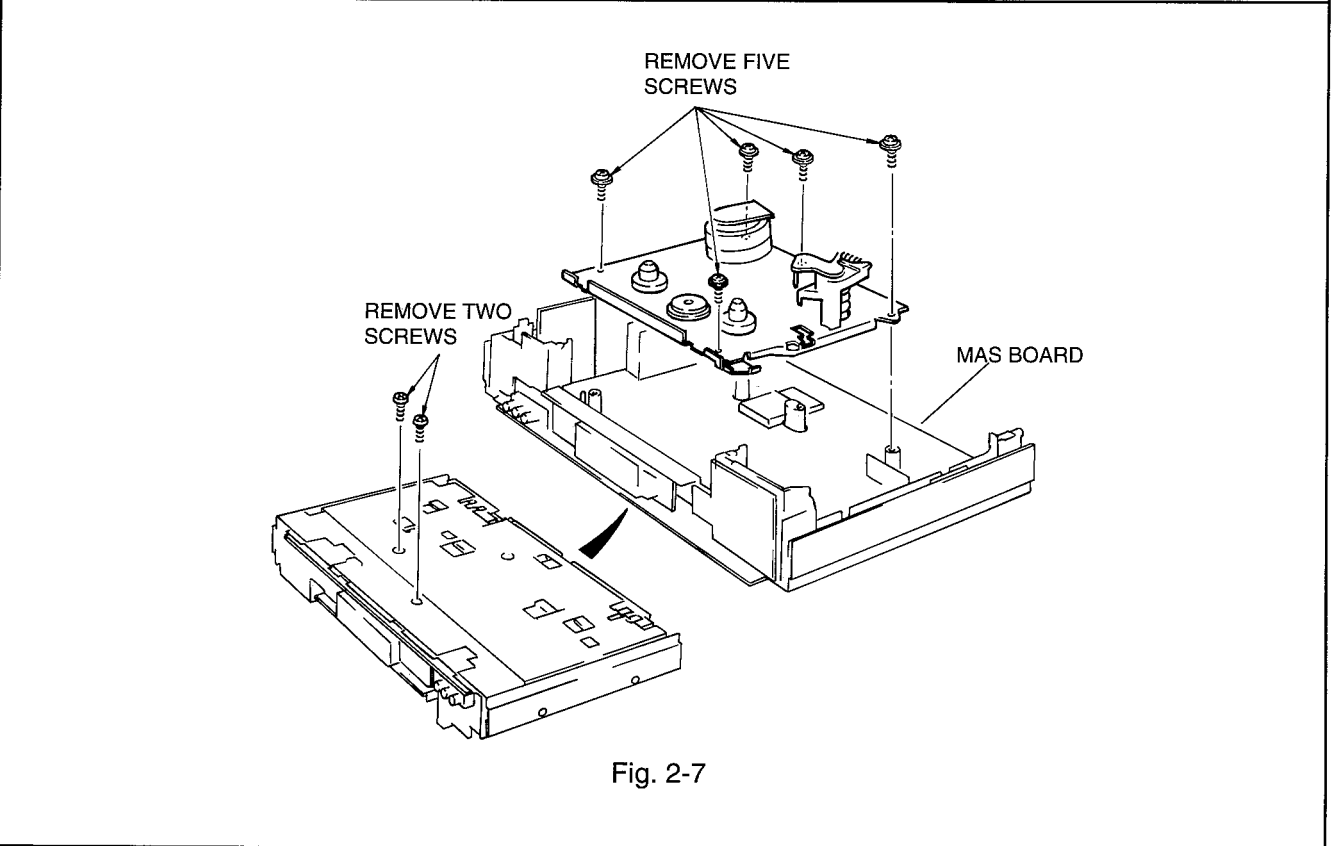


Procedure to remove only the US mechanism

With this VCR the US mechanism can be removed without removing the MAS board. This is done by a different method from the normal disassembly method.

Parts to remove	Item
Top cover	2-1
↓	
Front Panel	2-1
↓	
US-FL mechanism	2-1
↓	
Remove two screws on the bottom of the VCR.	2-7
↓	
Remove five screws holding the US mechanism.	2-7

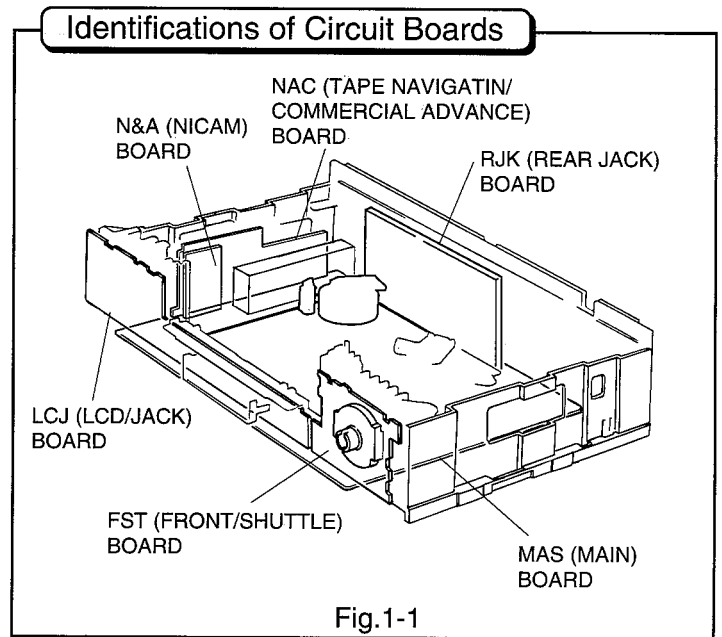
2-7	Procedure to remove only the US mechanism
-----	---



- VT-FX880E -

1. Before Starting Disassembly

- 1) Unplug the power cord from the AC outlet.
- 2) [Removal procedure]
If a special procedure is required when dismantling any component, it is indicated using numbers. Follow the numbers ((1),(2),(3) ...) shown in the illustrations.
[Reinstallation procedure]
Reinstall each component in the reverse order to removal when otherwise not specified.
- 3) Insert card connectors securely all the way as they are of the direct insertion type.



2. Disassembly Method

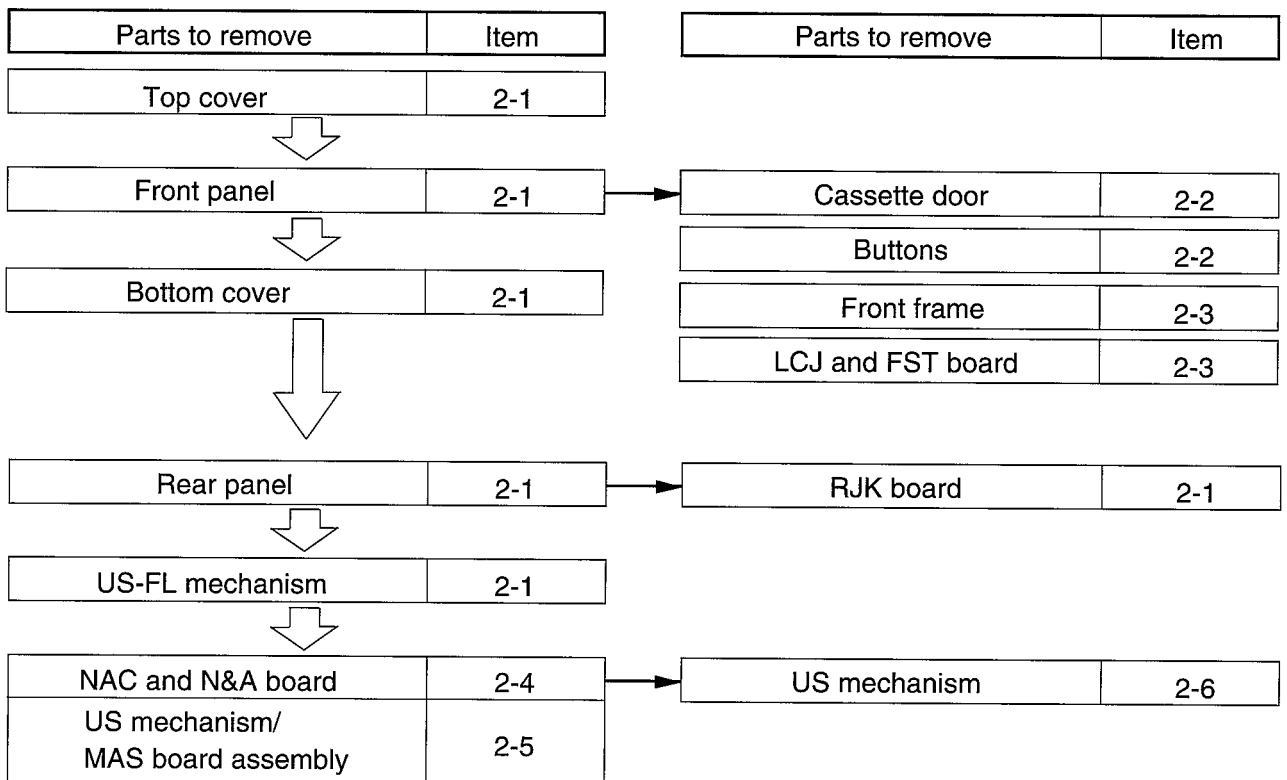
When replacing defective parts, first refer to the "Parts hierarchy chart" shown below. This chart shows the procedure for parts removal when replacing defective parts.

[How to use the parts hierarchy chart]

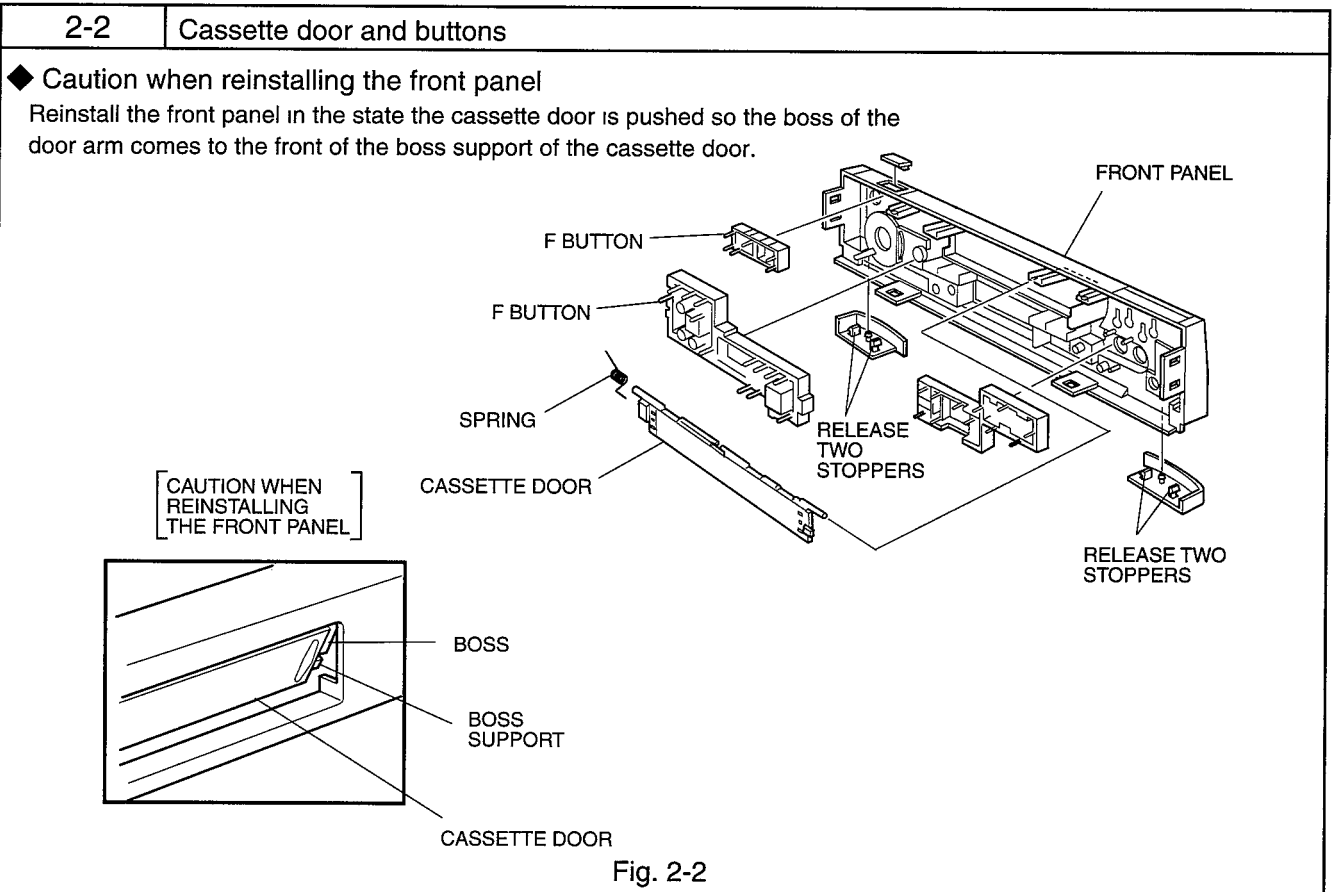
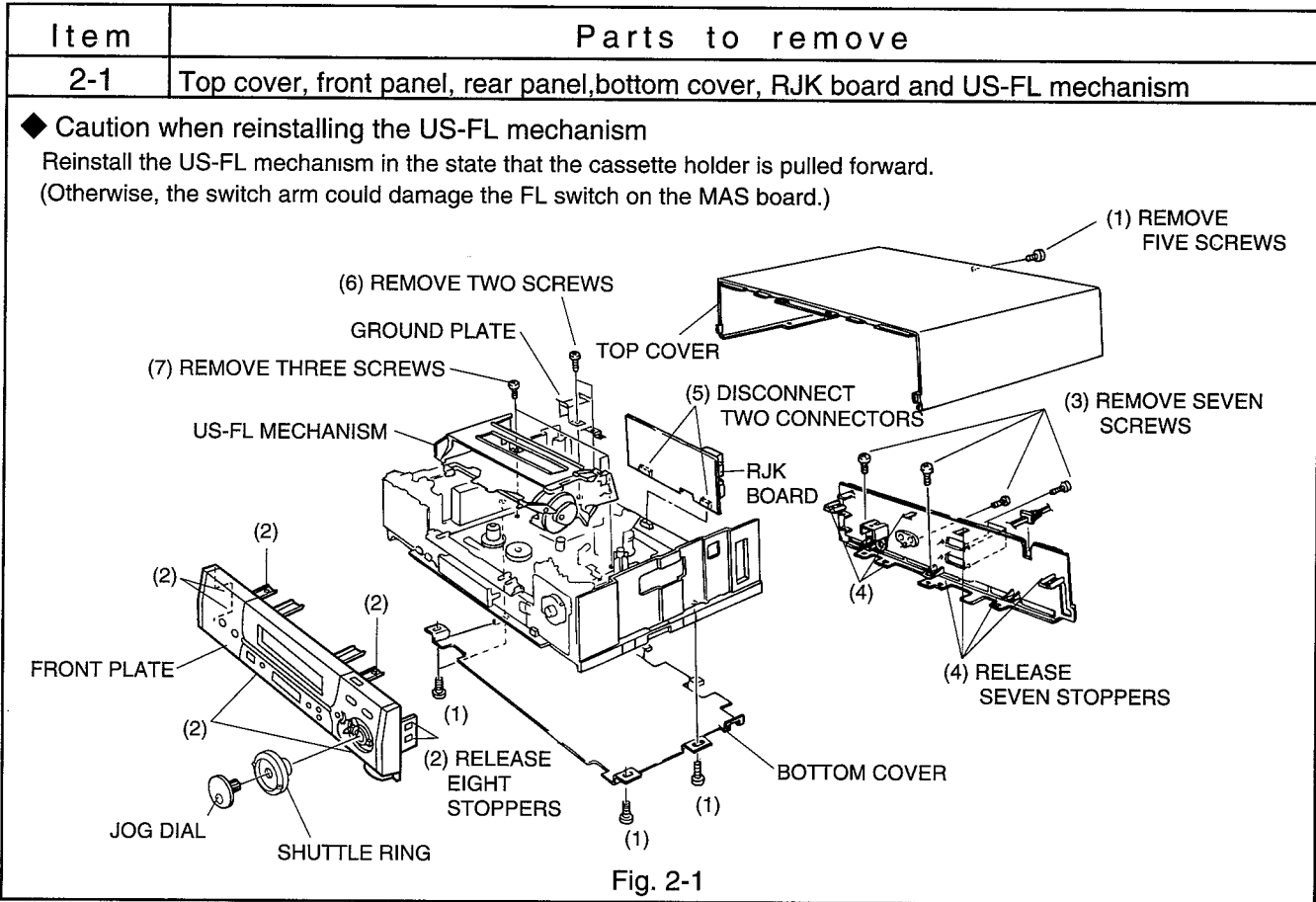
- (1) Locate the part to be replaced.
- (2) Check the parts in the ranks above the part to be replaced and start dismantling.
- (3) Replace the defective part and reinstall the parts in the reverse order to that shown in the parts hierarchy chart.

Parts Hierarchy Chart

Note: Dismantle parts in the eject state.



Disassembly Procedure Diagrams



Item	Parts to remove
2-3	Front frame, LCJ and FST board

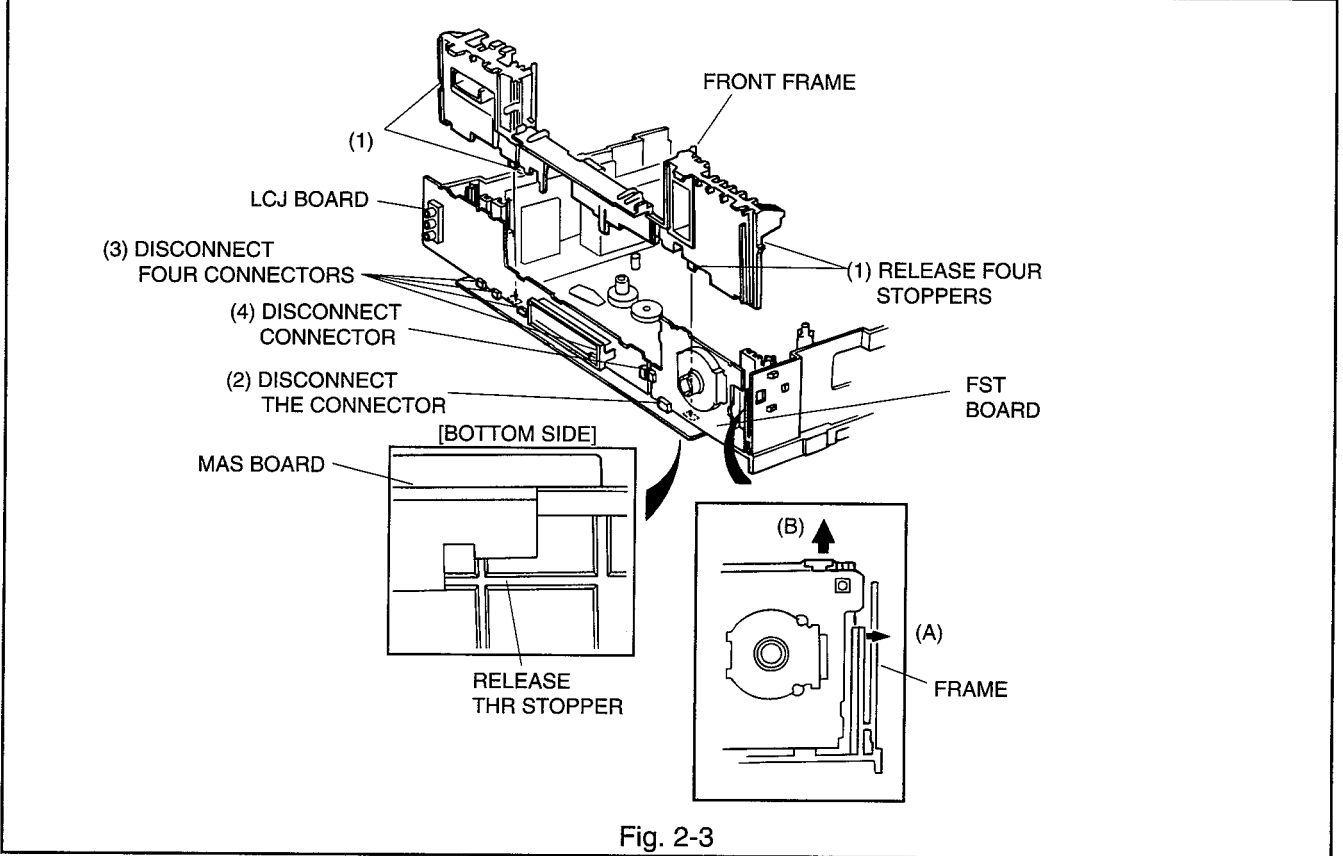


Fig. 2-3

2-4	NAC and N&A board
-----	-------------------

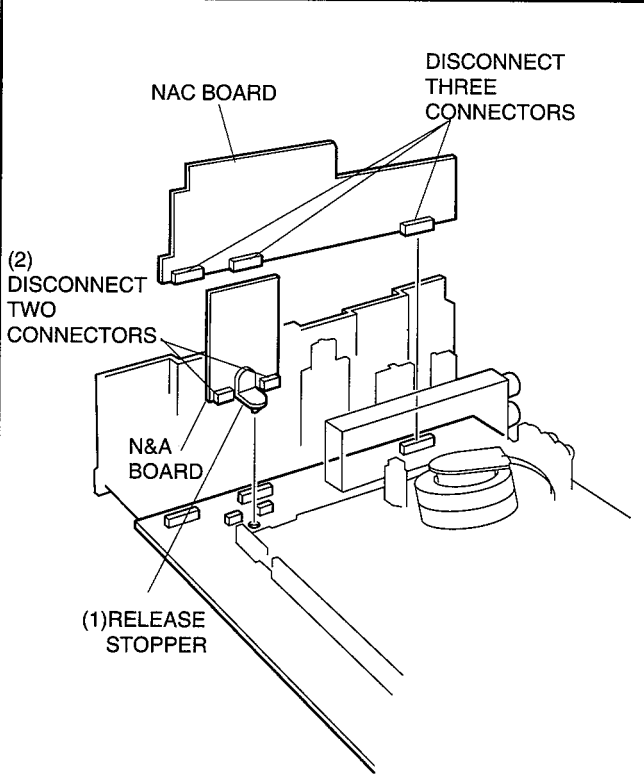


Fig. 2-4

2-5	US machanism and MAS board assembly
-----	-------------------------------------

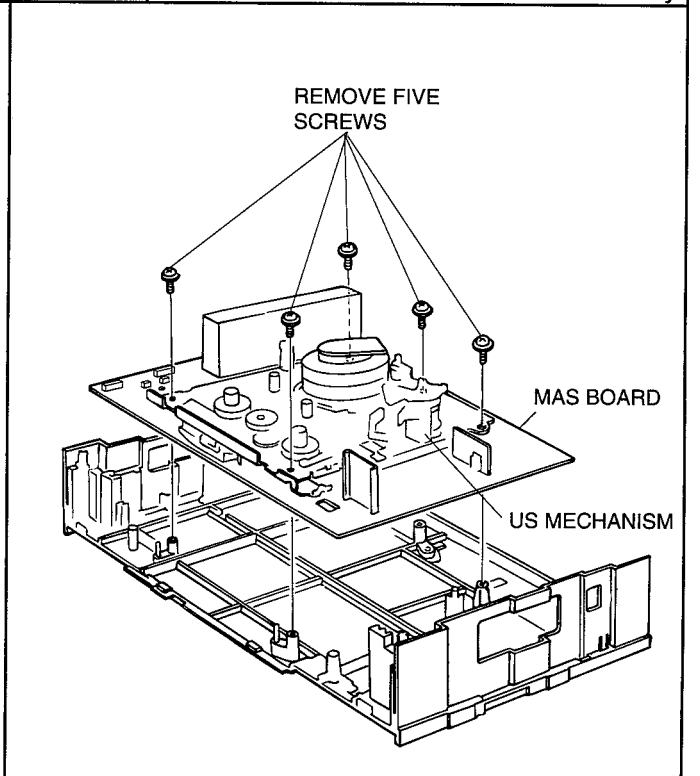


Fig. 2-5

Item	Parts to remove
2-6	Separation of MAS board from US mechanism

[Rear of the mechanism]

Fig. 2-6

Procedure to remove only the US mechanism

With this VCR the US mechanism can be removed without removing the MAS board. This is done by a different method from the normal disassembly method.


Parts to remove	Item
Top cover	2-1
↓	
Front Panel	2-1
↓	
US-FL mechanism	2-1
↓	
Remove two screws on the bottom of the VCR.	2-7
↓	
Remove five screws holding the US mechanism.	2-7

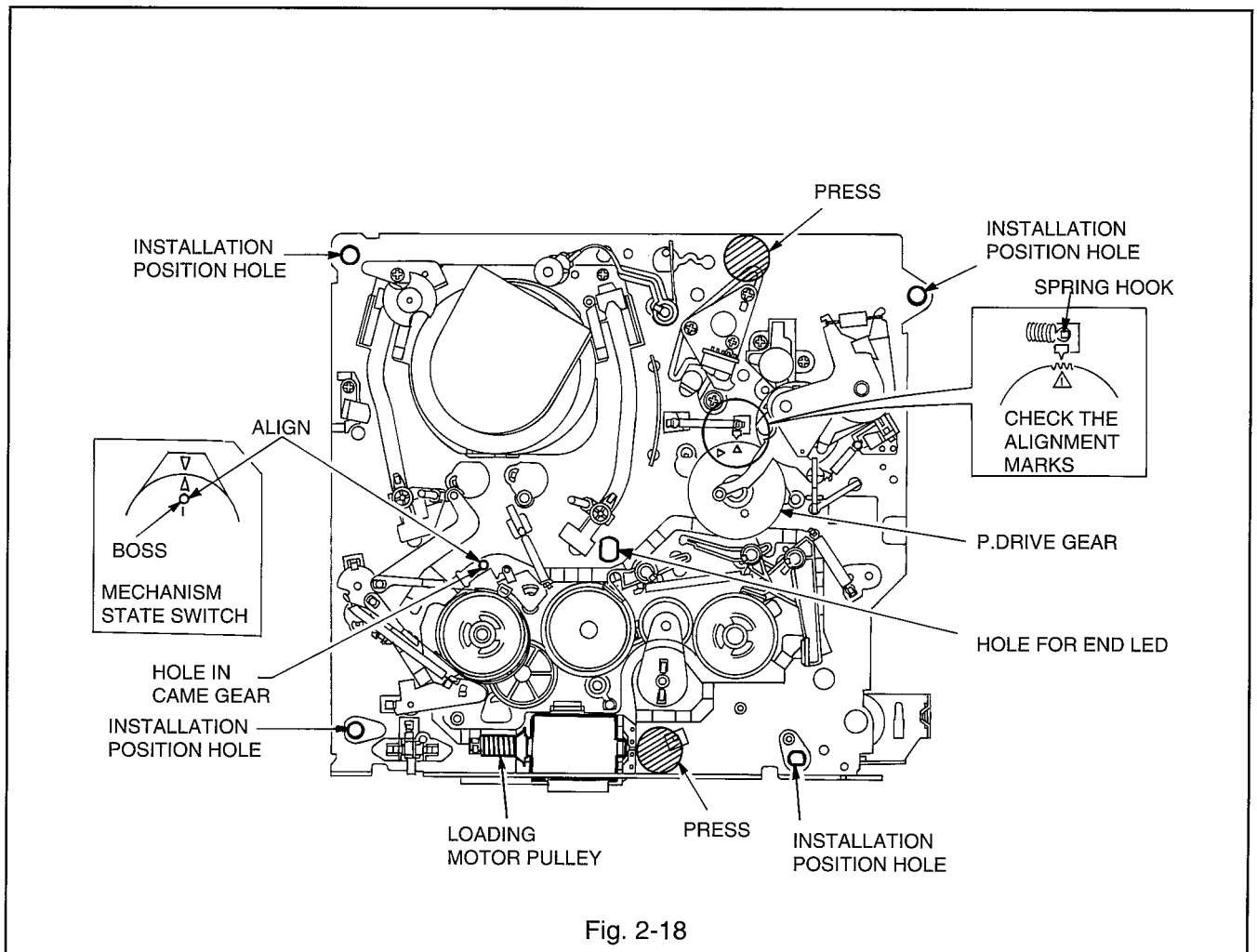
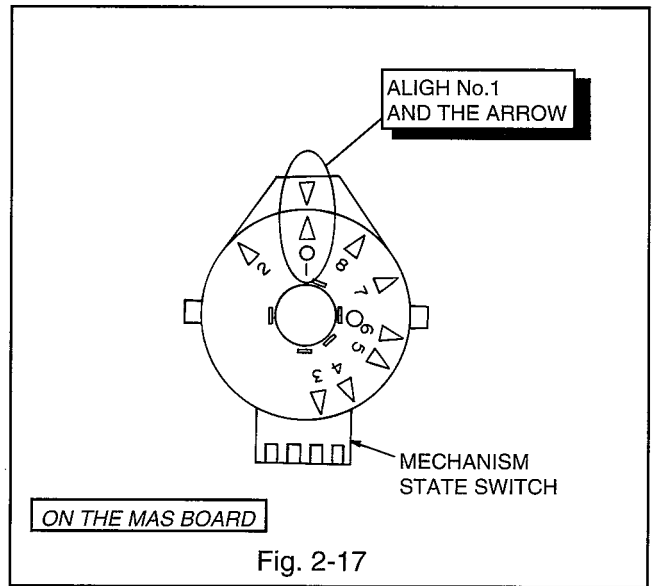
2-7	Procedure to remove only the US mechanism
-----	---

Fig. 2-7

Cautions When Reinstalling the US Mechanism

This VCR has mechanism sensors on the MAS board and the capstan and loading motors are connected via direct connectors. Therefore, when reinstalling the US mechanism, observe the following cautions.

- 1) Align the ▽ mark and mode no. 1 of the mechanism state switch on the MAS board. (Mode no. 1 of the mechanism state switch has a click position.)
- 2) Check that mode no. 1 on the P drive gear in the mechanism and the ▽ mark of the spring hook are aligned. If they are not aligned, turn the loading motor pulley to align them.
- 3) Pass the end LED through the hole in the mechanism and install the mechanism from immediately above using the installation position holes as reference. Check that the boss of the mechanism state switch and the hole in the cam gear are aligned.
- 4) Push the terminal sections (shaded sections ) of the capstan and loading motors and check that they are inserted securely.



MEMO

CHAPTER 3

ELECTRIC CIRCUIT ADJUSTMENT

Service Positions

- VT-FX860E/FX850E/FX840E/MX835E -

1. Servicing position during electrical adjustment

Perform adjustment after removing the top cover, front panel and rear panel.

When the shield cover of the connector between the cylinder motor and MAS circuit boards is removed, noise appears in the played back picture. Attach the shield cover when checking the picture on the screen.

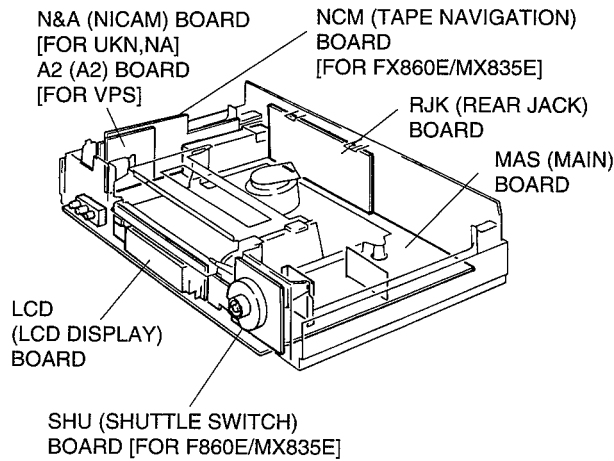


Fig. 1

2. Servicing positions when repairing and checking circuits

2-1. Procedure to set the LCD, SHU, NCM and N&A or A2 boards to the servicing positions (Fig. 2)

- 1) Remove the top cover and front panel.
- 2) Remove the US-FL mechanism.
- 3) Remove the LCD and SHU boards and front frame, then reattach the LCD and SHU board.
- 4) Check all boards from the pattern side, shown by the arrow.

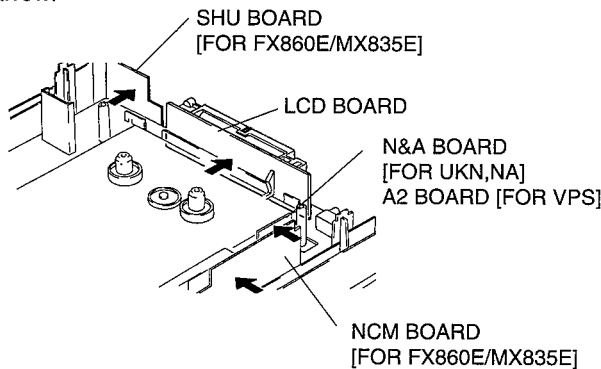


Fig. 2

2-2. Procedure to set the MAS and RJK boards to the servicing position (Fig. 3)

- 1) Remove the top cover, front panel and rear panel.
- 2) Remove the US-FL mechanism and front frame.
- 3) Remove the MAS and RJK boards, with the each board and the US mechanism assembled, from the frame.
- 4) Turn over the MAS board and perform checks from the pattern side indicated by the arrow.

Be careful of the following at this time.

- Lay out an insulation sheet under the boards.
 - Attach the shield cover at the rear of the cylinder.
- Attach the US-FL mechanism when loading the tape.

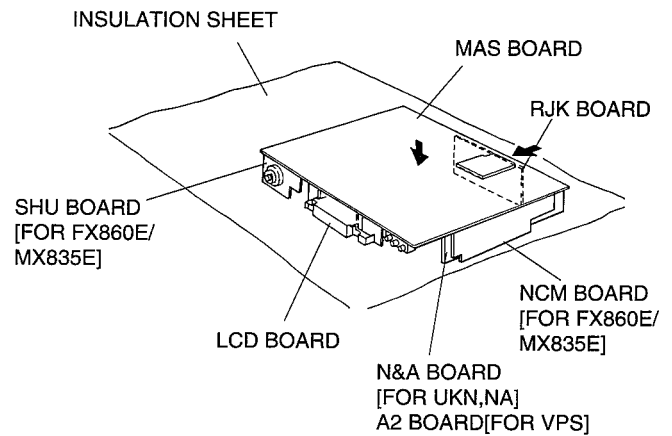


Fig. 3

3. Be careful of electric shocks

The power supply block on the right of the VCR has a heat sink which generates a high voltage. "HIGH VOLTAGE" is printed on the heat sink. Take great care when handling this heat sink when the power is turned on during servicing.

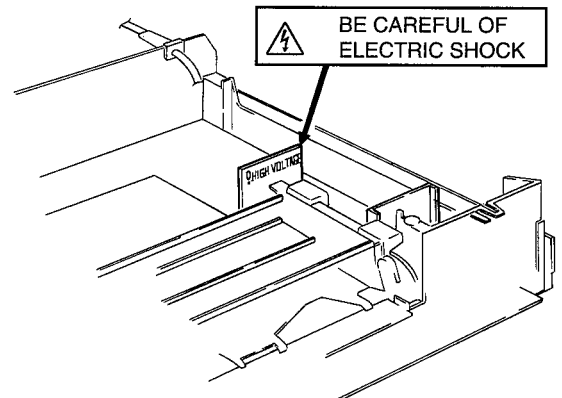


Fig. 4

- VT-FX880E -

1. Servicing position during electrical adjustment

Perform adjustment after removing the top cover, front panel and rear panel.

When the shield cover of the connector between the cylinder motor and MAS circuit boards is removed, noise appears in the played back picture. Attach the shield cover when checking the picture on the screen.

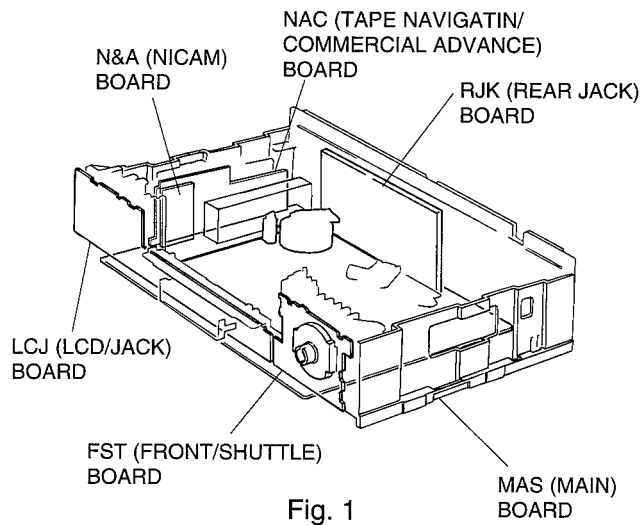


Fig. 1

2-2. Procedure to set the MAS board to the servicing position (Fig. 3)

- 1) Remove the top cover, front panel and rear panel.
- 2) Remove the US-FL mechanism and front frame.
- 3) Remove the MAS board, with each board and the US mechanism assembled on it, from the frame.
- 4) Turn over the MAS board and perform checks from the pattern side (indicated by the arrow).
Take care of the following at this time.
 - Lay the insulation sheet under the boards.
 - Attach the US-FL mechanism when loading a tape.

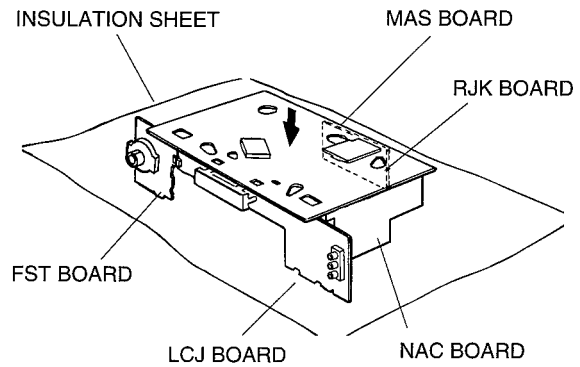


Fig. 3

2. Servicing positions when repairing and checking circuits

2-1. Procedure to set the LCJ, FST, NAC, RJK and N&A boards to the servicing positions (Fig. 2)

- 1) Remove the top cover, front panel and rear panel.
- 2) Remove the US-FL mechanism.
- 3) Remove the front frame and open each board as shown in the diagram below and perform check from the pattern side (indicated by the arrow).

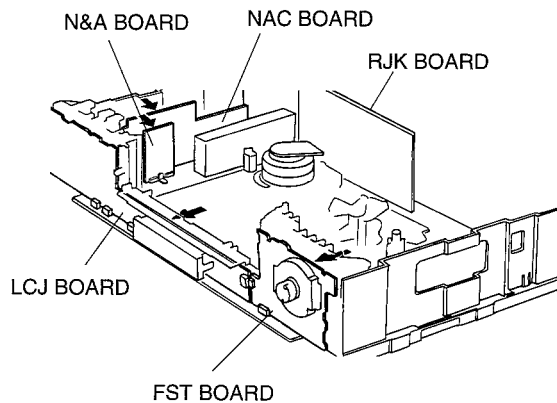


Fig. 2

3. Be careful of electric shocks

The power supply block on the right of the VCR has a heat sink which generates a high voltage. "HIGH VOLTAGE" is printed on the heat sink. Take great care when handling this heat sink when the power is turned on during servicing.

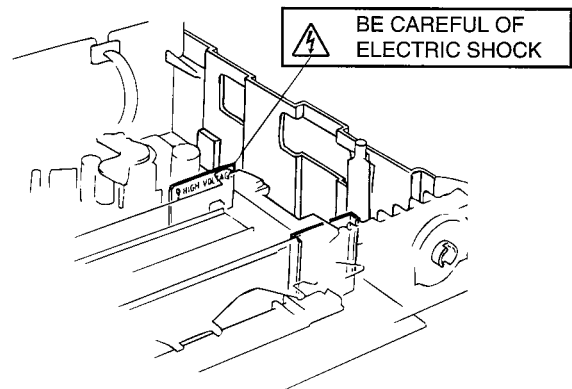
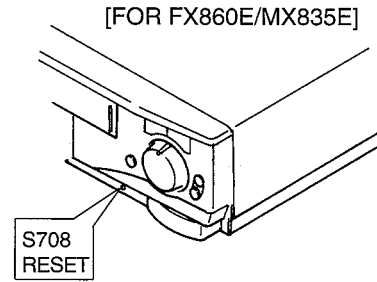


Fig. 4

Electrical Circuit Adjustment

1. Test equipment/jigs necessary for adjustment

- 1) Dual-trace oscilloscope
- 2) Colour bar generator
- 3) Voltmeter
- 4) Monitor TV (with A/V jacks)
- 5) Alignment tapes:
 MH-2: Part No. 7099052
 24HMAF-2: Part No. 7099175
 (Hi-Fi alignment tape)
- 6) Blank tape
- 7) C/R oscillator



2. Cautions on adjustment

- 1) The following conditions apply when otherwise not specified.
 Probe of oscilloscope: 10:1
 Synchronization of oscilloscope: Internal sync
 Ground of test equipment: PG2508 pin 6
 (on MAS board)
- 2) When performing more than one adjustment, follow the specified order.

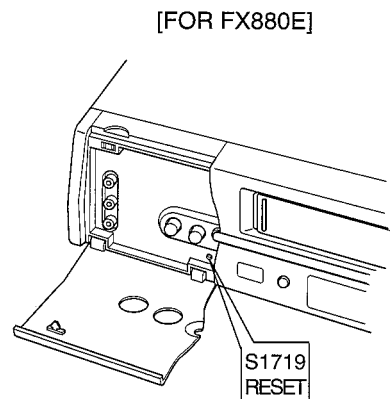


Fig. 5

3. Tips for adjustment

3-1. Procedure to reset the main microprocessor
 The main microprocessor is not reset even when the power cord is unplugged from the AC outlet because its power is backed up by a backup circuit. Press S708 on the MAS board to reset the entire microprocessor. Do not press the reset switch with the power cord unplugged from the AC outlet as the slow tracking preset value could drift. If the preset value drifts, plug the power cord into an AC outlet and press the reset switch again with the power turned on. It is recommended that you press the reset switch after reinstalling the front panel.

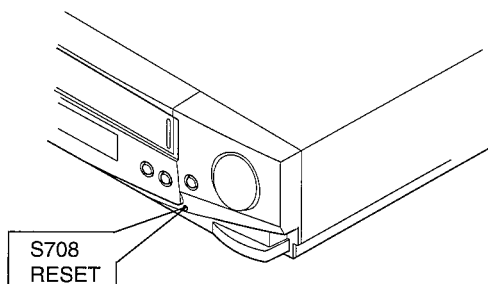
3-2. Procedure to switch off the blue background function

- 1) Press the "GUIDE" button of the remote control to display the menu on the monitor TV screen.
- 2) Press 2 to select the VCR setup screen.
- 3) Press 1 to specify blue background off.

3-3. Procedure to obtain the LP head playback mode (X-value adjustment test mode)

Press the TRACKING UP(▲) and DOWN(▼) buttons of the remote control provided simultaneously when an alignment tape is being played and hold them, then press the "CHANNEL ▽" button on the VCR; The VCR enters the LP head playback mode (X-value adjustment test mode).

[FOR FX840E/FX850E]



4. Connections of test equipment

Connect the test equipment as follows when otherwise not specified.

- 1) Connect a colour bar generator to the video input jack of the VCR.
- 2) Connect a monitor TV to the Euro Socket of the VCR.
- 3) Connect an antenna to the antenna jack and receive a TV broadcast (only for sound multiplex adjustment).

5. Test Points and Adjustment Points

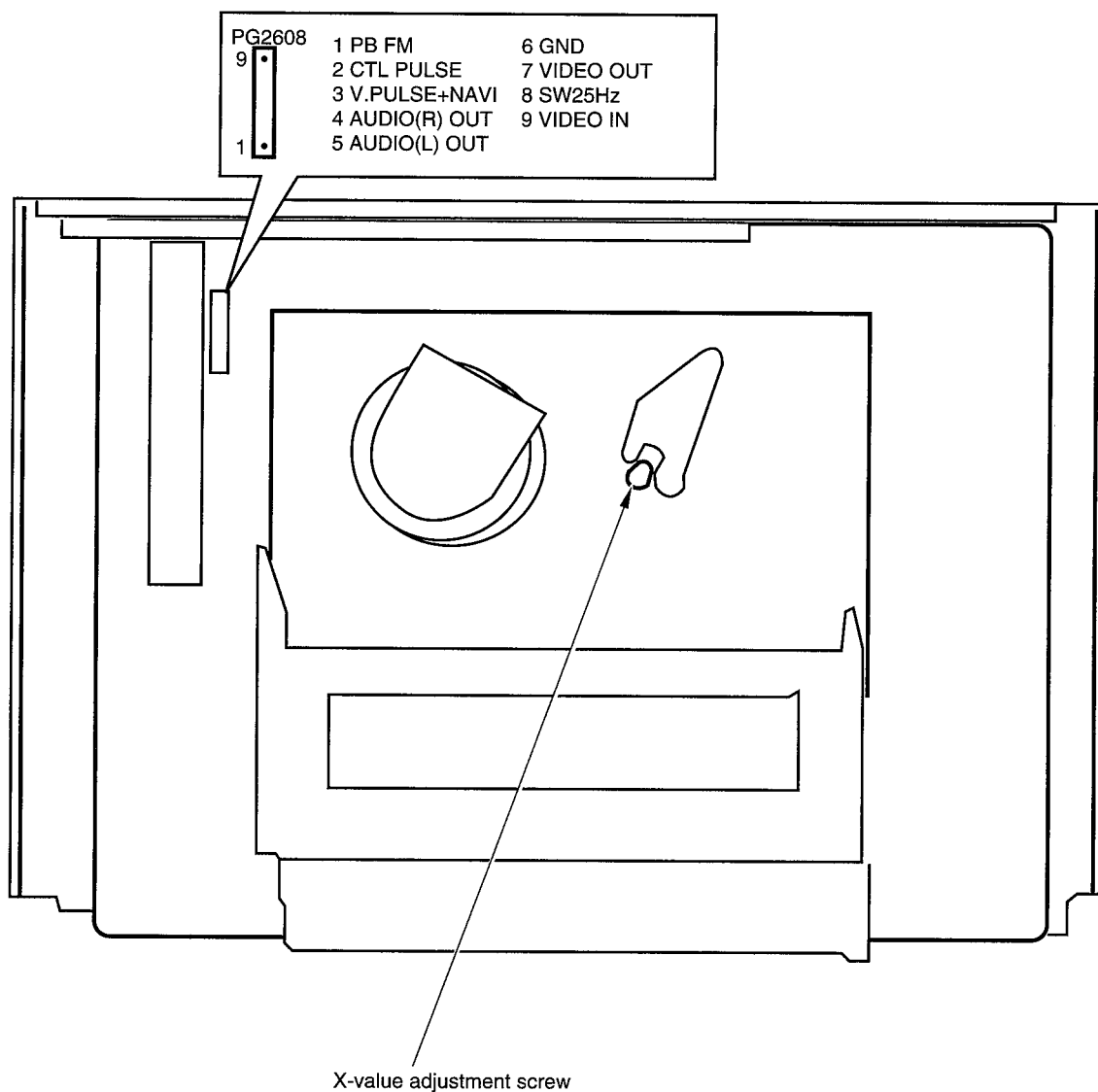


Fig. 6 MAS (Main) Circuit Board [Components Side]

6. Servo Circuit Adjustments

6-1. Switching point adjustment (Fig. 6)

Purpose:

To set the switching point of the video heads during playback to the center where the CH-1 and CH-2 envelopes overlap each other.

Fault due to incomplete adjustment:

Vertical sync signal is degraded and vertical jitter occurs.

Switching noise appears across the bottom of the screen.

Test Equipment/Jigs and Connection Points

Oscilloscope CH-1: PG2508-7(VIDEO OUT)
CH-2: PG2508-8(SW25Hz)

Alignment tape (MH-2)

State of VCR

- 1) Play the alignment tape
- 2) Set to the X-value adjustment test mode.

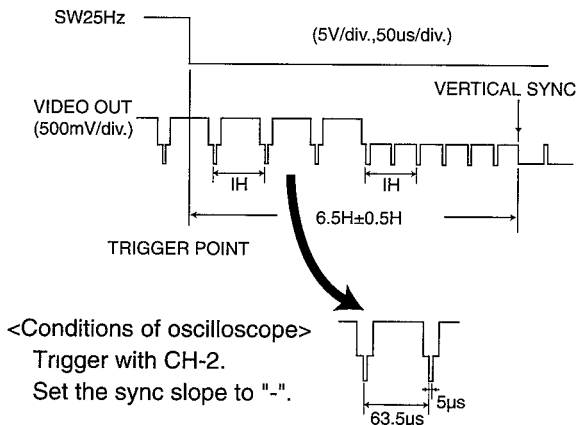
Adjustment Point

- VT-FX880E/FX860E/MX835E -
F.FWD button(Remote control)
REW button(Remote control)
- VT-FX850E/FX840E -
F.FWD button(S702)
REW button(S703)

Adjustment Procedure

- 1) Play the alignment tape.
- 2) Press the "TRACKING ▲" and "TRACKING ▼" buttons of the remote control provided simultaneously and hold them, then press the "CHANNEL ▽" button of the VCR to set the VCR to the test mode. (SP is switched to LP in the display.)
- 3) - VT-F880E/FX860E/MX835E -
Press the "F.FWD" and "REW" buttons of the remote control so the phase from the vertical sync to the trailing edge (trigger position) of the SW25Hz pulse is set to $6.5H \pm 0.5H$.
- VT-FX850E/FX840E -
Press the "F.FWD" and "REW" buttons of the VCR to set so the phase from the vertical sync to the trailing edge (trigger position) of the SW25Hz pulse is set to $6.5H \pm 0.5H$
- 4) Press the "STOP" button to release the test mode.

Waveforms



6-2. X-value adjustment (Fig. 6)

Purpose:

To ensure compatibility with other VCRs.

Fault due to incomplete adjustment:

When a tape recorded by another VCR is played back, the tracking is not optimized and noise appears on the screen.

Test Equipment/Jigs and Connection Points

Oscilloscope CH-1: PG2508-1 (PB FM)
CH-2: PG2508-8 (SW25Hz)

Alignment tape (MH-2)

State of VCR

- 1) Play the alignment tape.
- 2) Set to the X-value adjustment test mode.

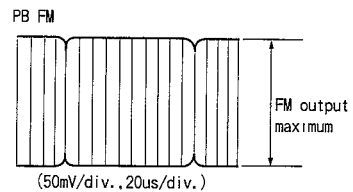
Adjustment Point

Groove for the adjustment X-value

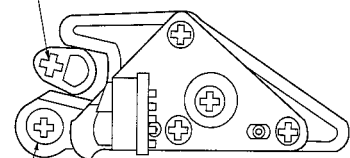
Adjustment Procedure

- 1) Play the alignment tape.
- 2) Press the "TRACKING ▲" and "TRACKING ▼" buttons of the remote control provided simultaneously and hold them, then press the "CHANNEL ▽" button of the VCR to set the VCR to the test mode. (SP is switched to LP in the display.)
- 3) Loosen the screw holding the A/C head base (do not loosen it excessively).
- 4) Insert a screwdriver into the groove for adjusting the X-value and adjust so the FM output is maximum. There are two maximum FM output points when the groove for adjusting the X-value is turned. Adjust the FM output to a maximum when the groove is at the correct position as shown in the figure below.
- 5) Press the "STOP" button to release the test mode.

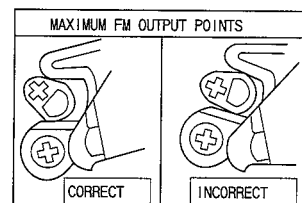
Waveforms



GROOVE FOR ADJUSTMENT THE X-VALUE



A/C HEAD BASE RETAINING SCREW



Servo Circuit Adjustments

6-3. Vertical jitter adjustment

Purpose:

To suppress vertical jitter during slow and still play.

Fault due to incomplete adjustment:

Vertical jitter appears in the picture during slow and still play.

Test Equipment/Jigs and Connection Points

Monitor TV : PG2508-7(VIDEO OUT)

Color bar generator: PG2508-9(VIDEO IN)

Blank tape

State of VCR

Record a color bar signal and play it using the same VCR.

Adjustment Point

TRACKING ▲ (Remote control)

TRACKING ▼ (Remote control)

Adjustment Procedure

<LP vertical jitter correction>: Record in the LP mode and play it back using the same VCR.

- 1) Press the "PAUSE" button to set the VCR to the still play mode.
- 2) Use the "TRACKING ▲" or "TRACKING ▼" buttons of the remote control to suppress vertical jitter of the picture.

<SP vertical jitter correction>: Record in the SP mode and play it back using the same VCR.

- 1) Press the "PAUSE" button to set the VCR to the still play mode.
- 2) Use the "TRACKING ▲" or "TRACKING ▼" buttons of the remote control to suppress vertical jitter in the picture.

6-4. Forward slow tracking preset adjustment

Purpose:

To adjust the timing with which the brake pulse of the capstan motor is generated during slow play so that noise is minimum.

Fault due to incomplete adjustment:

Noise appears during slow play and the picture is not clear.

Test Equipment/Jigs and Connection Points

Monitor TV : PG2508-7(VIDEO OUT)

Color bar generator: PG2508-9(VIDEO IN)

Blank tape (E-180)

State of VCR

Slow tracking: Unplug the power cord to set the slow tracking to the center.

Adjustment Point

TRACKING ▲ (Remote control)

TRACKING ▼ (Remote control)

Adjustment Procedure

- 1) Record a signal on the middle of a E-180 blank tape in the LP mode and play it back using the same VCR.
- 2) Press the "TRACKING ▲" and "TRACKING ▼" buttons of the remote control (provided) simultaneously during playback and hold them, then press the "PLAY" button to set the VCR to the forward

forward test slow mode.

- 3) Use the "TRACKING ▲" or "TRACKING ▼" buttons so the slow feed noise appears across the bottom of the monitor screen and then it is driven out from the bottom of the screen.
- 4) Check that no noise appears on the monitor screen.
- 5) Press the "PLAY" button to return the VCR to the playback mode (the preset data is written to the EEPROM).
- 6) Perform the same procedure to perform slow tracking preset adjustment in the SP mode.
Do not press the reset switch after adjustment when the power is not turned on as the preset value could drift. If the preset value drifts, turn the power on and press the reset switch again for recovery.

6-5. Reverse slow tracking preset adjustment

Purpose:

To adjust the timing with which the brake pulse of the capstan motor is generated during reverse slow play so that noise is minimum.

Fault due to incomplete adjustment:

Noise appears during reverse slow play and the picture is not clear.

Test Equipment/Jigs and Connection Points

Monitor TV PG2508-7(VIDEO OUT)

Color bar generator: PG2508-9(VIDEO IN)

Blank tape (E-180)

State of VCR

Slow tracking: Unplug the power cord to set the slow tracking to the center.

Adjustment Point

TRACKING ▲ (Remote control)

TRACKING ▼ (Remote control)

Adjustment Procedure

- 1) Record a signal on the middle of a E-180 blank tape in the LP mode and play it back using the same VCR.
- 2) Press the "TRACKING ▲" and "TRACKING ▼" buttons of the remote control (provided) simultaneously during still play and hold them, then press the "PLAY" button to set the VCR to the reverse test slow mode.
- 3) Use the "TRACKING ▲" or "TRACKING ▼" buttons so the slow feed noise appears across the bottom of the monitor screen and then it is driven out from the bottom of the screen.
- 4) Check that no noise appears on the monitor screen.
- 5) Press the "PLAY" button to return the VCR to the playback mode (the preset data is written to the EEPROM).
- 6) Perform the same procedure to perform reverse slow tracking preset adjustment in the SP mode.
Do not press the reset switch after adjustment when the power is not turned on as the preset value could drift. If the preset value drifts, turn the power on and press the reset switch again for recovery.

7. Audio Circuit Adjustments [Except for VT-MX835E]

7-1. Hi-Fi audio playback level check

Purpose:

To set the playback level of the Hi-Fi audio signal to the specified value.

Fault due to incomplete adjustment:

The appropriate volume cannot be obtained during playback.

Test Equipment/Jigs and Connection Points

Voltmeter

When checking L-CH:PG2508-5

When checking R-CH:PG2508-4

Hi-Fi alignment tape (24HMAF-2)

State of VCR

Play Hi-Fi alignment tape.

Adjustment procedure

Use the same checking procedure for both the L and R channels.

Check that the voltmeter reads $-7.8\text{dBs} \pm 3.0\text{dBs}$.

If it cannot be confirmed, check the playback signal system.

7-2. E-E audio level check

Purpose:

To check the audio level in the E-E mode.

Fault due to incomplete adjustment:

To sound is abnormal in the E-E mode.

Test Equipment/Jigs

1) C/R oscillator: Audio in jack(L-CH)

Audio in jack(R-CH)

2) Voltmeter: Audio out jack(L-CH)

Audio out jack(R-CH)

State of VCR

E-E mode

Adjustment procedure

1) Apply a 1kHz, -7.8dBs sinewave signal to the audio input 1 (L-CH and R-CH).

2) Check that the voltmeter reads $-6.8\text{dBs} \pm 2.0\text{dBs}$.

3) If the above cannot be confirmed, check the E-E audio line.

8. Cylinder Rotation Accumulated Hours of Usage Display

Display

This VCR has a function which displays the accumulated hours of cylinder rotation as a reference for replacing the cylinder.

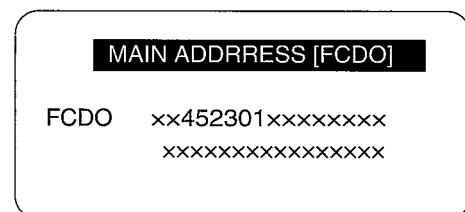
1. Method for display

simultaneously holding down the "VCR channel ▲" and "VCR channel ▼" buttons on the provided remote control, with power ON and without a cassette inserted, press the "channel up" button on the VCR. When power is turned off, the display will disappear.

2. Clearing the accumulated hours

Same as for shipment mode initial setting.

3. Example of display [In case of 12,345 hours]



VCR DISPLAY

9. List of Data in EEPROM and Initial Settings

The table below lists the data stored in ROM. It also shows the data set by shipment mode initialization, when the trouble display is cleared.

Information	Data memory ROM		List of initial data			Remarks
	IC903 VCR EEPROM	IC4302 NAVI EEPROM	Shipment mode initial data	Tape navi, map initial data	Clearing of trouble display	
Channel memory	Yes	No	Yes	No	No	
VCR mode select data	Yes	No	Yes	No	No	
Trouble display data	Yes	No	Yes	No	Yes	
Slow tracking data	Yes	No	No (set by adj.)	No	No	
Artificial V sync data	Yes	No	No (set by adj.)	No	No	
Switching point data	Yes	No	No (set by adj.)	No	No	
SAT data	Yes	No	Yes	No	No	
Tape navigation map data	No	Yes	No	Yes	No	

10. List of Hidden Commands

The following tables list the mode setting commands during adjustment and EEPROM initial setting commands.

10-1. Mode setting commands during adjustment

Item	Mode in which command is accepted	Operation	Remarks
Tracking center	Play	Press the tracking up(▲) and down(▼) buttons of the remote control simultaneously.	
X-value adjustment test mode	Play	Press the tracking up(▲) and down(▼) buttons of the remote control simultaneously and press the "CHANNEL ▽" button on the VCR.	
Forward test slow mode	Play	Press the tracking up(▲) and down(▼) buttons of the remote control simultaneously and press the "PLAY" button on the VCR.	
Reverse test slow mode	Still play	Press the tracking up(▲) and down(▼) buttons of the remote control simultaneously and press the "PLAY" button on the VCR.	

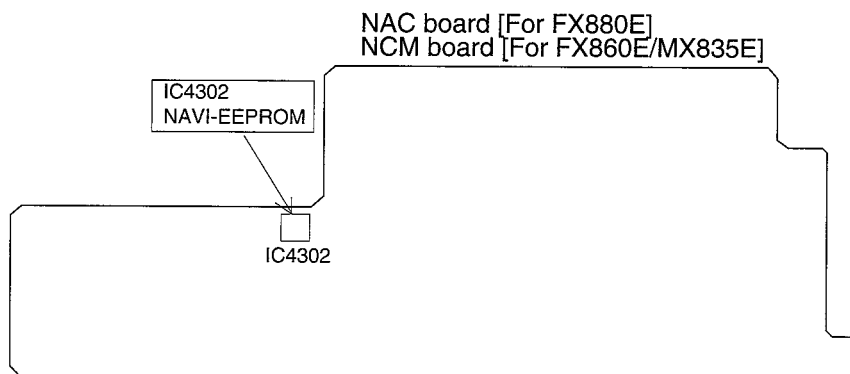
10-2. EEPROM initialization commands

Item	Mode in which command is accepted	Operation	Remarks
Shipment mode initial setting	EJECT	Press the "REC" buttons on the VCR and hold it, then press the "RESET" button used to initialize the microprocessor.	Hold the "REC" button depressed and release it after the display lights.
Clearing of trouble display	_____	Press the "PLAY" button on the VCR and hold it, then press the "RESET" button used to initialize the microprocessor.	Hold the "PLAY" button depressed and release it after the display lights.

11. Caution When Handling IC4302 (NAVI EEPROM) [For VT-FX880E/FX860E/MX835E]

The navigation map data of the tapes on which the customer has made recordings is stored in IC4302 (NAVI EEPROM). When the CFN board is replaced, etc. during servicing, remove the ROM from the new board and install the ROM from the repaired product. Do not initialize the tape map information at this time.

Caution: Do not initialize the tape map data except when replacing IC4302 (NAVI EEPROM) due to a defect, etc. in this memory IC. Otherwise the tape navigation data stored by the customer will be erased.



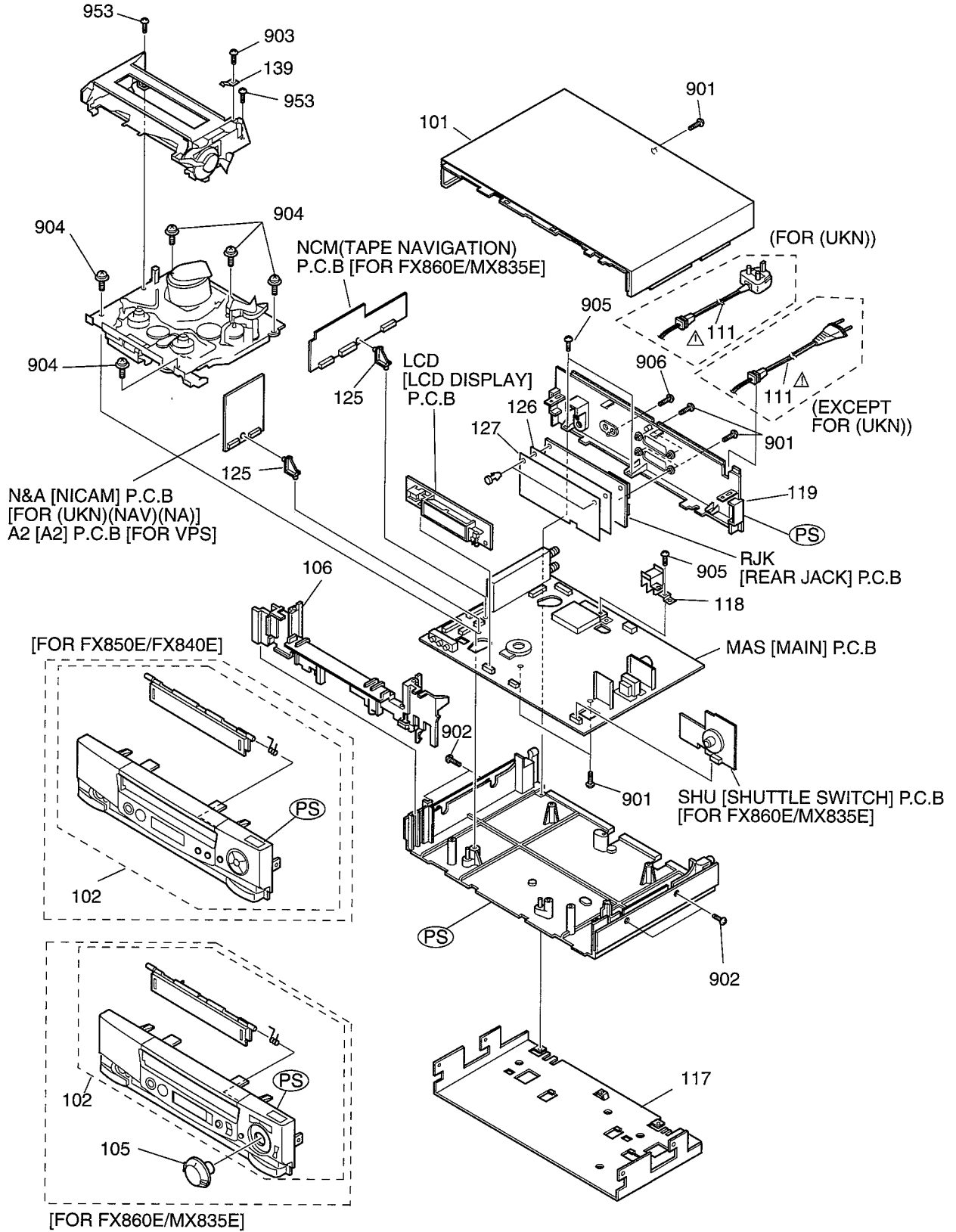
12. Caution When Replacing IC903 (EEPROM)

After replacing IC903 (EEPROM), execute the VCR initial settings and then perform the following adjustments.

	Adjustment	Page
1	Switching point adjustment	P3-5
2	Vertical jitter adjustment	P3-6
3	Forward slow tracking adjustment	P3-6
4	Reverse slow tracking adjustment	P3-6

1. CABINET SECTION
[FOR VT-FX860E/FX850E/
FX840E/MX835E]

NOTE: The synthetic resin members that can be dismantled are shown by abbreviations using letters.



1

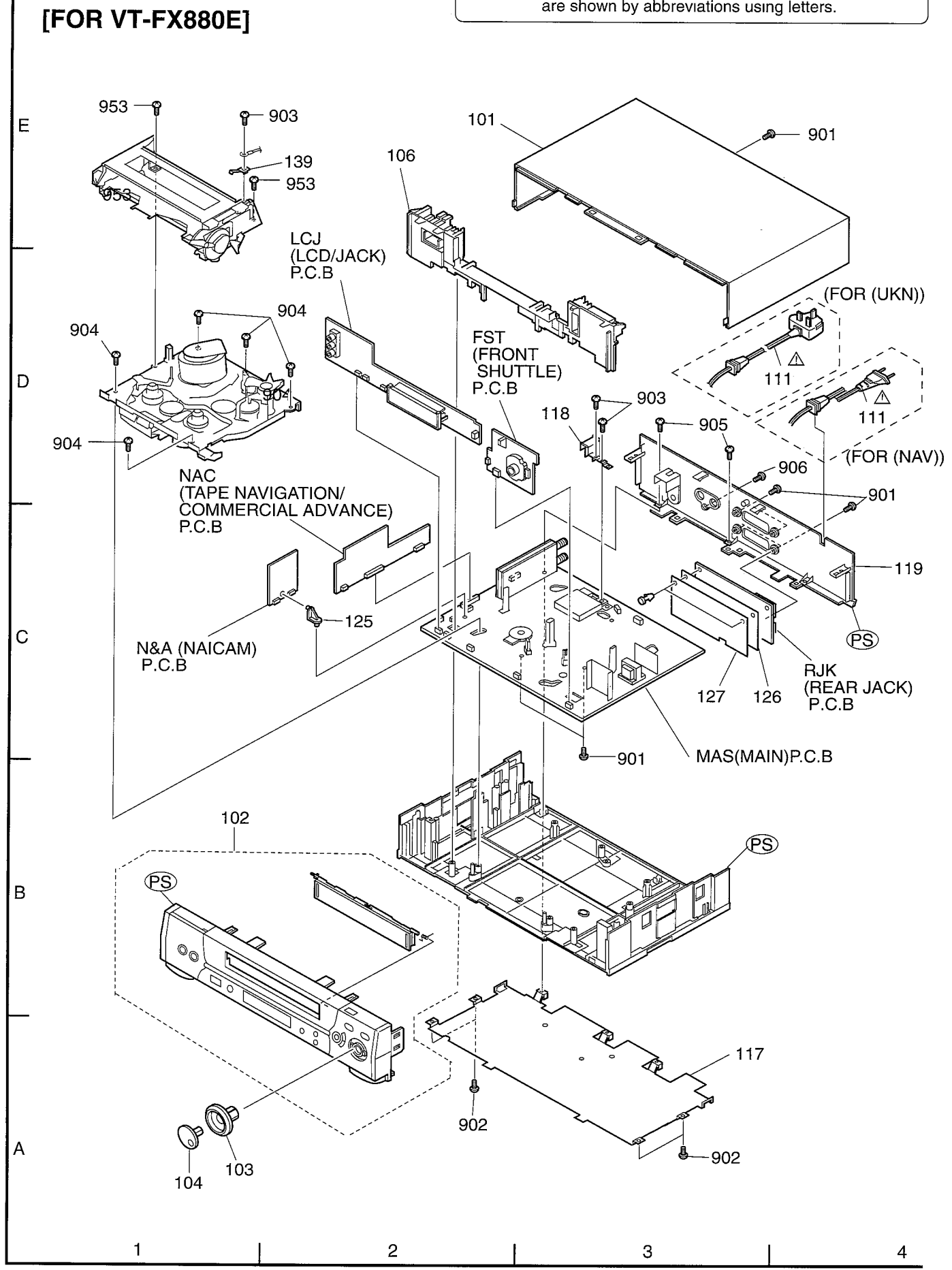
2

3

4

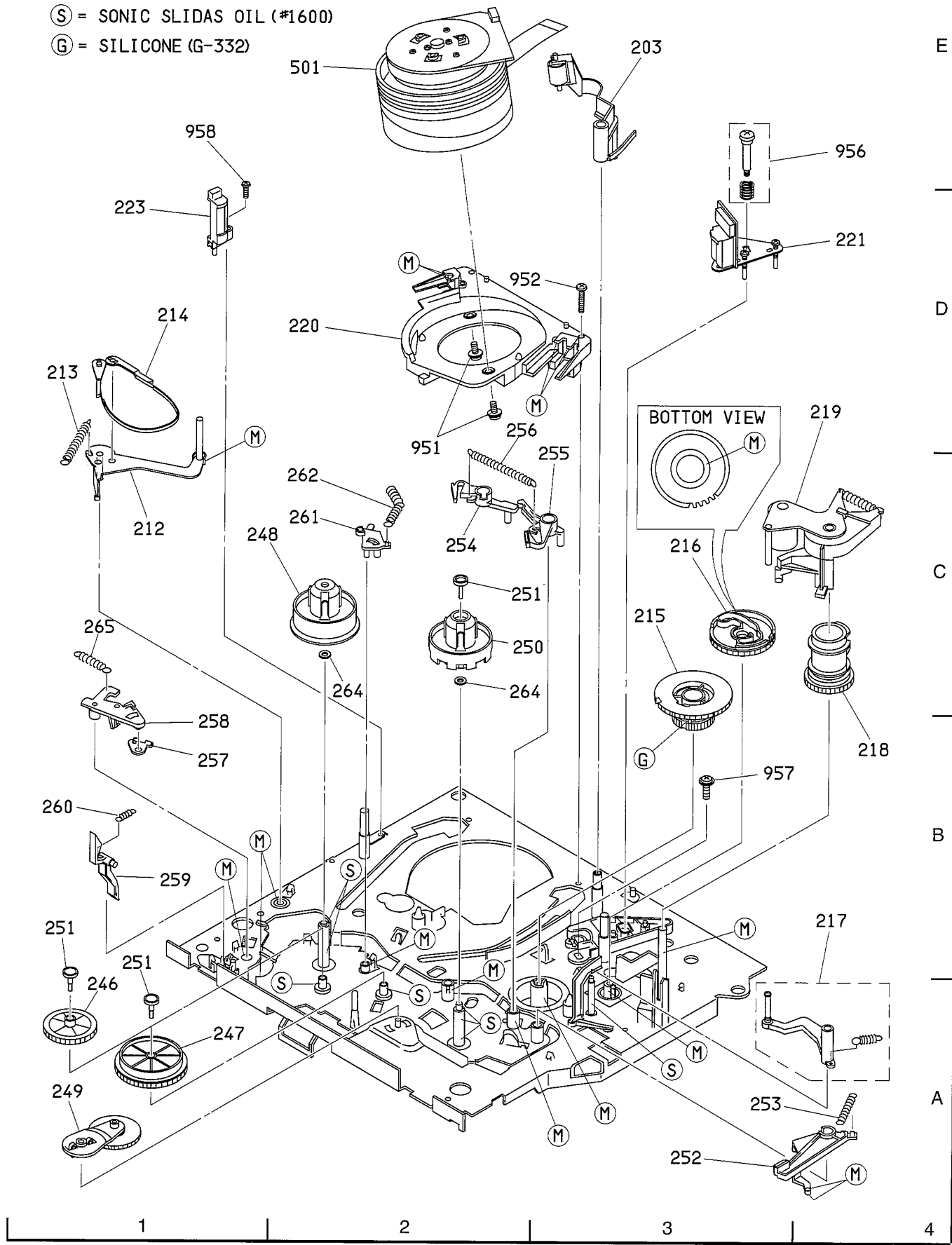
2. CABINET SECTION [FOR VT-FX880E]

NOTE: The synthetic resin members that can be dismantled are shown by abbreviations using letters.



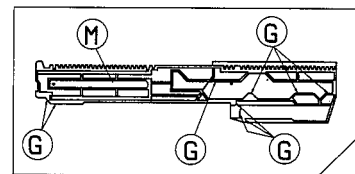
3. US-MECHANISM (TOP VIEW)SECTION

- Ⓜ = MOLICOAT (PG-641)
- Ⓢ = SONIC SLIDAS OIL (#1600)
- ⓖ = SILICONE (G-332)

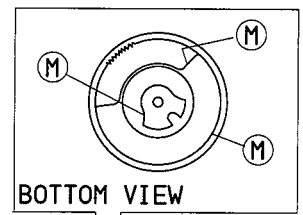


4. US-MECHANISM (BOTTOM VIEW)SECTION

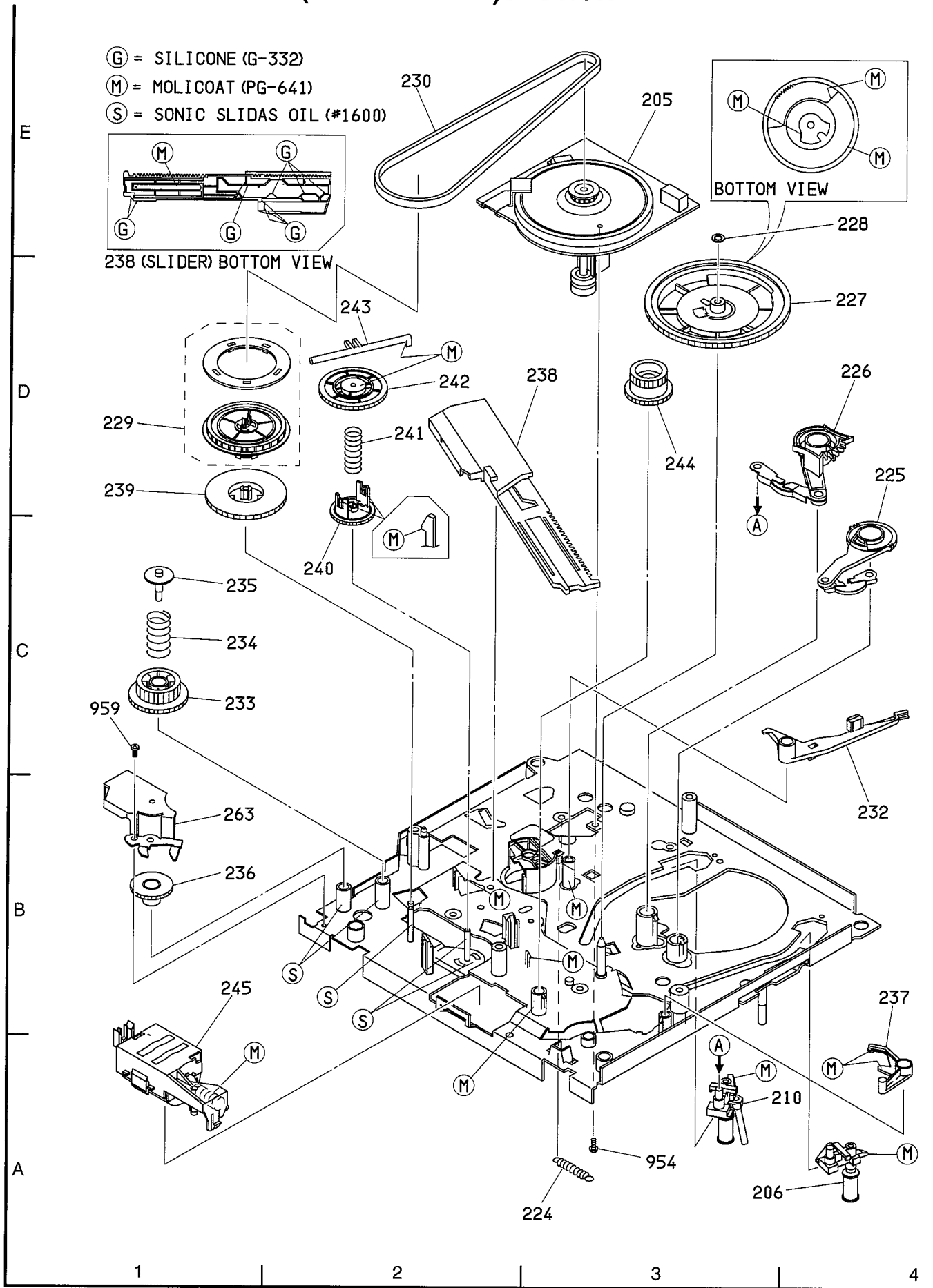
- (G) = SILICONE (G-332)
- (M) = MOLICOAT (PG-641)
- (S) = SONIC SLIDAS OIL (#1600)



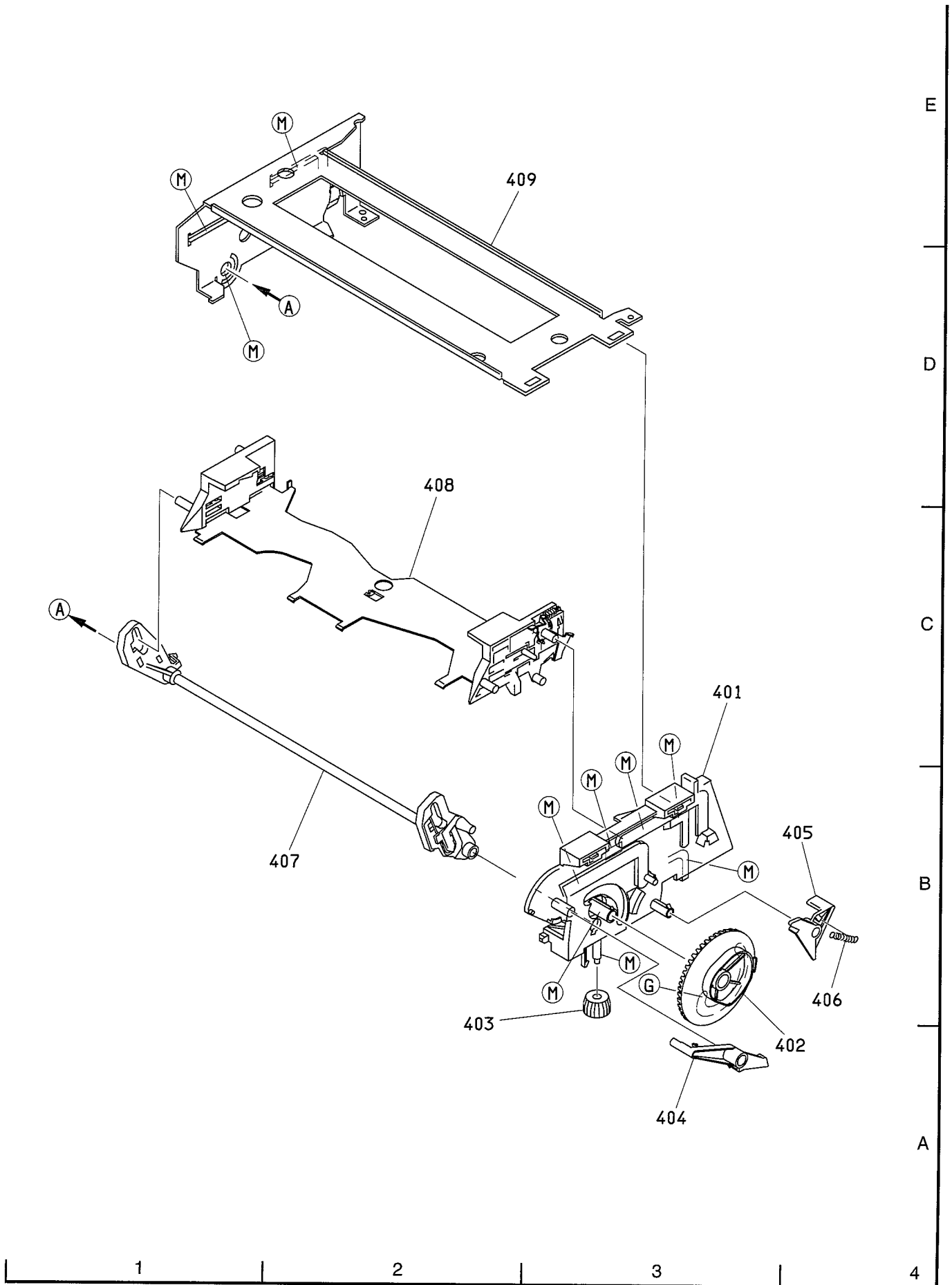
238 (SLIDER) BOTTOM VIEW



BOTTOM VIEW



5. US-FL MECHANISM SECTION



CHAPTER 5

REPLACEMENT PARTS LIST

NOTE 1. The model names shown in the parts list are abbreviated as follows in this supplement.

8U:VT-FX880E(UKN) 8N:VT-FX880E(NAV) 6U:VT-FX860E(UKN) 6C:VT-FX860E(UKN)C
 6N:VT-FX860E(NAV) 5U:VT-FX850E(UKN) 5NV:VT-FX850E(NAV)/(VPS)
 4:VT-FX840E(NAV)/(VPS) 3U:VT-MX835E(UK) 3V:VT-MX835E(VPS)

1. MECHANICAL PARTS LIST

SYMBOL NO	P-NO	DESCRIPTION	SYMBOL NO	P-NO	DESCRIPTION
MECHANISM SECTION			239	KF10551	GEAR, TRANS
101	QA13535	COVER, TOP (HEPM) [8U, 8N]	240	KF10501	GEAR, DRIVE
101	QA13213	COVER, TOP (HEPM) [5U, 5NV, 3U, 3V, 4]	241	KL10773	SPRING
101	QA13214	COVER, TOP (HEPM) [6U, 6NV, 6C]	242	KF10513	GEAR, CHANGE
102	PH18871	PANEL, FRONT (HEPM) [8U]	243	KX11411	ARM, CHANGE
102	PH18872	PANEL, FRONT (HEPM) [8N]	244	KX11371	GEAR
102	PH18851	PANEL, FRONT (HEPM) [6U]	245	KX11892	MOTOR, LOADING
102	PH18853	PANEL, FRONT (HEPM) [6NV]	246	KF10521	GEAR, IDLER 1
102	PH18854	PANEL, FRONT (HEPM) [6C]	247	KF10532	GEAR, IDLER 2
102	PH18891	PANEL, FRONT (HEPM) [5U]	248	KH10152	REEL, TABLE(S)
102	PH18892	PANEL, FRONT (HEPM) [5NV]	249	KX11423	ARM
102	PH18896	PANEL, FRONT (HEPM) [4]	250	KH10161	REEL, TABLE(T)
102	PH18894	PANEL, FRONT (HEPM) [3U]	251	KX11991	STOPPER
102	PH18895	PANEL, FRONT (HEPM) [3V]	252	KX11861	BRAKE
102	PH18896	PANEL, FRONT (HEPM) [4]	253	KL10782	SPRING, BRAKE
103	PC16081	RING, SHUTTLE [8U, 8N]	254	KX11875	BRAKE, L
104	PC16091	DIAL, JOG [8U, 8N]	255	KX11883	BRAKE, R
105	PC16113	KNOB, SHUTTLE (HEPM) [6U, 6NV]	256	KL10792	SPRING, BRAKE
105	PC16114	KNOB, SHUTTLE (HEPM) [6C]	257	KF10542	GEAR, JOG
105	PC16112	KNOB, SHUTTLE (HEPM) [3U, 3V]	258	KX13132	ARM, JOG
106	NT10733	PIECE, FRONT (HEPM) [8U, 8N]	259	KX11841	ARM, REC
106	NT10486	PIECE, FRONT (HEPM) [EXCEPT 8U, 8N]	260	6542485	SPRING
△ 111	EV10541	AC CORD (HEPM) [8N, 6NV, 5NV, 3V, 4]	261	KX11811	BRAKE, SUB
△ 111	EV10551	CORD, POWER (HEPM) [8U, 6U, 6C, 5U, 3U]	262	KL10903	SPRING, SUB
117	QA11911	COVER, BOTTOM (HEPM) [8U, 8N]	263	KX12461	BRACKET, BASE
117	QA11154	COVER, BOTTOM (HEPM) [EXCEPT 8U, 8N]	264	MN11571	WASHER
118	MD11281	COVER, CBA	265	KL11062	SPRING, JOG
119	PH15362	PANEL, REAR (HEPM) [8U, 8N]	401	KX11773	BRACKET (R)
119	PH13723	PANEL, REAR (HEPM) [EXCEPT 8U, 8N, 3U, 3V]	402	KF10682	GEAR 1
119	PH13724	PANEL, REAR (HEPM) [3U, 3V]	403	KF10691	GEAR 2
125	6810651	HOLDER, CBA	404	KX11752	ARM, DOOR
126	MN12251	SHEET, INSULATE (HEPM)	405	KX11761	ARM, SWITCH
127	MD11661	SHEET, SIELD (HEPM)	406	6323723	SPRING
139	4826834	SPRING, EARTH	407	KX11931	ARM, DRIVE
203	KX11661	HEAD CLEANING MECHA	408	KX11922	HOLDER, CASSETTE
205	GP10255	MOTOR, CAPSTAN	409	KX11741	BRACKET(L)
206	KX12294	BASE, GUIDE ROLLER (1)	501	HX10292	CYLINDER ASSY (CY-U6S1)
210	KX12302	BASE, GUIDE ROLLER(0)	901	8699412	SCREW (3X12) BLACK
212	KX11531	ARM, TENSION	902	MK10271	SCREW (3X12DT) [8U, 8N]
213	KL10662	SPRING	902	8679408	SCREW (3.0X8) [EXCEPT 8U, 8N]
214	KX11631	BAND, TENSION	903	8671306	SCREW(2.6X6)
215	KF10641	GEAR, DRIVE	904	7781132	BT SCREW
216	KF12281	GEAR, IDLER	905	7784323	SCREW(3X8)
217	KX12662	ARM, OUT	906	8699410	SCREW(3X10)
218	KX11581	GEAR, SPIRAL	951	8652408	SCREW (PSW3X8)
219	KX11602	ARM, PINCH ROLLER	952	0671310	DT SCREW-2.6MMDX10MM
220	KX11451	BASE, CYLINDER	953	8671306	SCREW(2.6X6)
221	KX11944	AC HEAD	954	8691306	BT SCREW 2.6MM
223	5423082	FE HEAD	956	KX12443	SCREW
224	KL10711	SPRING	957	MJ10341	SCREW(M2.6)
225	KX17881	GEAR, LOADING(L)	958	0671308	DT SCREW-2.6MMDX8MM
226	KX17891	GEAR, LOADING(R)	959	0671305	DT SCREW-2.6MMDX5MM
227	KF10673	GEAR, CAM	ACCESSARIES		
228	4344643	WASHER	802	HL11065	REMOTE HAND SET (VT-RM885E) (HEPM) [8U]
229	KX17581	PULLEY	802	HL11066	REMOTE HAND SET (VT-RM886E) (HEPM) [8N]
230	KX18201	BELT	802	HL11171	REMOTE HAND SET (VT-RM800EV) (HEPM) [6U, 6C, 3U]
232	KX12031	BRAKE	802	HL11172	REMOTE HAND SET (VT-RM800ES) (HEPM) [6NV, 3V]
233	KF10571	GEAR, CHANGE	802	HL11173	REMOTE HAND SET (VT-RM801EV) (HEPM) [5U]
234	KL10771	SPRING	802	HL11174	REMOTE HAND SET (VT-RM801ES) (HEPM) [5NV, 4]
235	KX12001	STOPPER, SPRING	803	5858315	CABLE (HEPM)
236	KF10561	GEAR, IDLER			
237	KX11831	ARM, OPERATION			
238	KX11362	SLIDER			

NOTE 1. The model names shown in the parts list are abbreviated as follows in this supplement.
 8U:VT-FX880E(UKN) 8N:VT-FX880E(NAV) 6U:VT-FX860E(UKN)/(UKN)C 6N:VT-FX860E(NAV)
 5U:VT-FX850E(UKN) 5NV:VT-FX850E(NAV)/(VPS) 4:VT-FX840E(NAV)/(VPS) 3U:VT-MX835E(UK)
 3V:VT-MX835E(VPS)

2. For example, [EX 8U,8N] may be used in place of [EXCEPT 8U,8N]

3. Where different value components used for different models have the same symbol no., the model names are shown by abbreviations. However, the model names are not shown for components with a single symbol no. For these components, refer to the difference tables in the schematic and circuit board diagrams.

2. ELECTRICAL PARTS LIST

SYMBOL NO	P-NO	DESCRIPTION	SYMBOL NO	P-NO	DESCRIPTION
MAS, RJK BOARD			C0407	0800122	ELECTROLYTIC 10UF 16V
CAPACITORS			C0408	0800122	ELECTROLYTIC 10UF 16V
C0201	0893008	CERAMIC CHIP 0.1UF+-10% 16V	C0409	0893031	CERAMIC CHIP 1000PF+-10% 50V
C0202	0893044	CERAMIC CHIP 0.01UF+-10% 50V	C0410	0893044	CERAMIC CHIP 0.01UF+-10% 50V
C0203	0890046	CERAMIC DISC 0.1UF+80-20% 50V	C0411	0800175	ELECTROLYTIC 1.0UF 50V
C0206	0800178	ELECTROLYTIC 4.7UF 35V	C0412	0893008	CERAMIC CHIP 0.1UF+-10% 16V
C0207	0893091	CERAMIC CHIP 0.022UF+-10% 16V	C0413	0893008	CERAMIC CHIP 0.1UF+-10% 16V
C0208	0893044	CERAMIC CHIP 0.01UF+-10% 50V	C0414	0800127	ELECTROLYTIC 22UF 10V
C0209	0893044	CERAMIC CHIP 0.01UF+-10% 50V	C0419	0800117	ELECTROLYTIC 4.7UF 25V
C0211	0800138	ELECTROLYTIC 47UF 6.3V	C0420	AN10332R	CAPACITOR 0.027UF+-5% 100V
C0213	0254458	ELECTROLYTIC 3.3UF+-20% 50V	C0421	0209946	CERAMIC CHIP 220PF+-5% 50V
C0214	0893008	CERAMIC CHIP 0.1UF+-10% 16V	C0422	0800145	ELECTROLYTIC 100UF 16V
C0215	0800138	ELECTROLYTIC 47UF 6.3V	C0424	0893044	CERAMIC CHIP 0.01UF+-10% 50V
C0216	0209948	CERAMIC CHIP 330PF+-5% 50V	C0427	0893037	CERAMIC CHIP 3300PF+-10% 50V
C0218	0800179	ELECTROLYTIC 10UF 16V	C0429	0893091	CERAMIC CHIP 0.022UF+-10% 16V
C0219	0893044	CERAMIC CHIP 0.01UF+-10% 50V	C0434	0209945	CERAMIC DISC 180PF+-5% 50V
C0220	0890043	CERAMIC DISC 0.01UF+-20% 16V	C0435	0209939	CERAMIC CHIP 56PF+-5% 50V
C0221	0800112	ELECTROLYTIC 2.2UF 50V	C0436	0893008	CERAMIC CHIP 0.1UF+-10% 16V
C0222	0893039	CERAMIC CHIP 4700PF+-10% 50V	C0437	0800011	ELECTROLYTIC 4.7UF 35V [5U, 5NV, 4]
C0223	0800118	ELECTROLYTIC 4.7UF 35V	C0437	0800287	ELECTROLYTIC 4.7UF 35V [EXCEPT 5U, 5NV, 4]
C0224	0800122	ELECTROLYTIC 10UF 16V	C0501	0800127	ELECTROLYTIC 22UF 10V
C0226	0893091	CERAMIC CHIP 0.022UF+-10% 16V	C0502	0800118	ELECTROLYTIC 4.7UF 35V
C0227	0800107	ELECTROLYTIC 0.47UF 50V	C0503	0800118	ELECTROLYTIC 4.7UF 35V
C0228	0893008	CERAMIC CHIP 0.1UF+-10% 16V	C0504	0800118	ELECTROLYTIC 4.7UF 35V
C0230	0893002	CERAMIC CHIP 0.033UF+-10% 16V	C0505	0800118	ELECTROLYTIC 4.7UF 35V
C0233	0800179	ELECTROLYTIC 10UF 16V	C0506	0800135	ELECTROLYTIC 33UF 16V
C0234	0800185	ELECTROLYTIC 47UF 6.3V	C0507	0893053	CERAMIC CHIP 0.047UF+-10% 50V
C0235	0893008	CERAMIC CHIP 0.1UF+-10% 16V	C0508	0800112	ELECTROLYTIC 2.2UF 50V
C0236	0893044	CERAMIC CHIP 0.01UF+-10% 50V	C0509	0800143	ELECTROLYTIC 100UF 6.3V
C0237	0893008	CERAMIC CHIP 0.1UF+-10% 16V	C0510	0893046	CERAMIC CHIP 0.015UF+-10% 50V
C0238	0800176	ELECTROLYTIC 2.2UF 50V	C0511	0893044	CERAMIC CHIP 0.01UF+-10% 50V
C0239	0800175	ELECTROLYTIC 1.0UF 50V	C0512	0893044	CERAMIC CHIP 0.01UF+-10% 50V
C0241	0207444	ELECTROLYTIC 1.0UF 50V	C0513	0800185	ELECTROLYTIC 47UF 6.3V
C0242	0800179	ELECTROLYTIC 10UF 16V	C0514	0893013	CERAMIC CHIP 0.22UF+-10% 16V
C0243	0893008	CERAMIC CHIP 0.1UF+-10% 16V	C0517	0893044	CERAMIC CHIP 0.01UF+-10% 50V
C0244	0893008	CERAMIC CHIP 0.1UF+-10% 16V	C0518	0893046	CERAMIC CHIP 0.015UF+-10% 50V
C0245	0800115	ELECTROLYTIC 3.3UF 50V	C0519	0800143	ELECTROLYTIC 100UF 6.3V
C0246	0893008	CERAMIC CHIP 0.1UF+-10% 16V	C0520	0800112	ELECTROLYTIC 2.2UF 50V
C0247	0893008	CERAMIC CHIP 0.1UF+-10% 16V	C0521	0893044	CERAMIC CHIP 0.01UF+-10% 50V
C0249	0893008	CERAMIC CHIP 0.1UF+-10% 16V	C0522	0893053	CERAMIC CHIP 0.047UF+-10% 50V
C0250	0209937	CERAMIC CHIP 39PF+-5% 50V	C0523	0800118	ELECTROLYTIC 4.7UF 35V
C0251	0893008	CERAMIC CHIP 0.1UF+-10% 16V	C0524	0800118	ELECTROLYTIC 4.7UF 35V
C0255	0209943	CERAMIC DISC 120PF+-5% 50V	C0525	0800178	ELECTROLYTIC 4.7UF 35V
C0256	0209930	CERAMIC CHIP 10PF+-0.5% 50V	C0526	0800118	ELECTROLYTIC 4.7UF 35V
C0257	0209925	CERAMIC DISC 5PF+-0.25% 50V	C0527	0800118	ELECTROLYTIC 4.7UF 35V
C0259	0893008	CERAMIC CHIP 0.1UF+-10% 16V	C0528	AN00629R	CAPACITOR 0.027UF+-10% 50V
C0262	0893008	CERAMIC CHIP 0.1UF+-10% 16V	C0529	0800122	ELECTROLYTIC 10UF 16V
C0263	0209931	CERAMIC CHIP 12PF+-5% 50V	C0530	0800122	ELECTROLYTIC 10UF 16V
C0270	0893008	CERAMIC CHIP 0.1UF+-10% 16V	C0531	0800122	ELECTROLYTIC 10UF 16V
C0273	0209935	CERAMIC CHIP 27PF+-5% 50V	C0532	0800141	ELECTROLYTIC 47UF 16V
C0277	0209949	CERAMIC CHIP 390PF+-5% 50V	C0533	0893044	CERAMIC CHIP 0.01UF+-10% 50V
C0278	0209936	CERAMIC CHIP 33PF+-5% 50V	C0534	0800135	ELECTROLYTIC 33UF 16V
C0291	0893031	CERAMIC CHIP 1000PF+-10% 50V	C0535	0893046	CERAMIC CHIP 0.015UF+-10% 50V
C0292	0893044	CERAMIC CHIP 0.01UF+-10% 50V	C0536	0893062	CERAMIC CHIP 1UF+80-20% 16V
C0293	0893044	CERAMIC CHIP 0.01UF+-10% 50V	C0601	0207441	ELECTROLYTIC 2.2UF 35V
C0296	0893044	CERAMIC CHIP 0.01UF+-10% 50V	C0604	0893091	CERAMIC CHIP 0.022UF+-10% 16V
C0297	0893044	CERAMIC CHIP 0.01UF+-10% 50V	C0606	0893031	CERAMIC CHIP 1000PF+-10% 50V
C0402	0800117	ELECTROLYTIC 4.7UF 25V	C0607	0209938	CERAMIC CHIP 47PF+-5% 50V
C0403	0800185	ELECTROLYTIC 47UF 6.3V	C0608	0209942	CERAMIC CHIP 100PF+-5% 50V
C0404	0893044	CERAMIC CHIP 0.01UF+-10% 50V	C0609	0800179	ELECTROLYTIC 10UF 16V
C0405	0800117	ELECTROLYTIC 4.7UF 25V	C0611	0893091	CERAMIC CHIP 0.022UF+-10% 16V
C0406	0893035	CERAMIC CHIP 2200PF+-10% 50V	C0612	0800182	ELECTROLYTIC 22UF 16V
			C0614	0893031	CERAMIC CHIP 1000PF+-10% 50V
			C0615	0800042	ELECTROLYTIC 47UF 25V [5U, 5NV, 4]
			C0615	0800318	ELECTROLYTIC 47UF 25V [EXCEPT 5U, 5NV, 4]

SYMBOL NO	P-NO	DESCRIPTION	SYMBOL NO	P-NO	DESCRIPTION
C0621	0890038	CERAMIC DISC 3300PF+20% 16V	C1108	0893044	CERAMIC CHIP 0.01UF+10% 50V
C0623	0893044	CERAMIC CHIP 0.01UF+10% 50V	C1111	0893044	CERAMIC CHIP 0.01UF+10% 50V
C0624	0893091	CERAMIC CHIP 0.022UF+10% 16V	C1112	0800177	ELECTROLYTIC 3.3UF 50V
C0701	0893053	CERAMIC CHIP 0.047UF+10% 50V	C1114	0893008	CERAMIC CHIP 0.1UF+10% 16V
△C0851	AN10201S	FILM CAPACITOR 0.1UF+20% 250V	C1115	0890046	CERAMIC DISC 0.1UF+80-20% 50V
△C0852	AN10201S	FILM CAPACITOR 0.1UF+20% 250V	C1116	0893008	CERAMIC CHIP 0.1UF+10% 16V
△C0857	AJ00584F	CERAMIC CAPACITOR 3300PF+20% 125V	C1117	0890046	CERAMIC DISC 0.1UF+80-20% 50V
△C0858	AJ00584F	CERAMIC CAPACITOR 3300PF+20% 125V	C1119	0893008	CERAMIC CHIP 0.1UF+10% 16V
C0859	0800206	ELECTROLYTIC 47UF 35V	C1120	0893008	CERAMIC CHIP 0.1UF+10% 16V
C0860	AN10401R	CAPACITOR 0.047UF+10% 250V	C1121	0893008	CERAMIC CHIP 0.1UF+10% 16V
C0862	AL10191	ELECTROLYTIC 82UF 400V (HEPM)	C1122	0893008	CERAMIC CHIP 0.1UF+10% 16V
C0863	AJ10245R	CERAMIC CHIP 2200PF+10% 50V	C1124	0893031	CERAMIC CHIP 1000PF+10% 50V
C0865	1143005	CERAMIC CAPACITOR 220PF+5% 1KV	C1125	0800185	ELECTROLYTIC 47UF 6.3V
C0866	0209950	CERAMIC CHIP 470PF+5% 50V	C1126	0890046	CERAMIC DISC 0.1UF+80-20% 50V
C0871	0254403	CAPACITOR 22UF+20% 50V	C1138	0209942	CERAMIC CHIP 100PF+5% 50V
C0872	0254405	CAPACITOR 1000UF+20% 25V	C1139	0209934	CERAMIC CHIP 22PF+5% 50V
C0873	0800354	ELECTROLYTIC 470UF 25V	C1140	0893044	CERAMIC CHIP 0.01UF+10% 50V
C0874	AL10481S	ELECTROLYTIC 3300UF 16V	C1141	0209950	CERAMIC CHIP 470PF+5% 50V
C0875	0800352	ELECTROLYTIC 470UF 10V	C1403	0800178	ELECTROLYTIC 4.7UF 35V
C0876	0893044	CERAMIC CHIP 0.01UF+10% 50V	C1404	0893044	CERAMIC CHIP 0.01UF+10% 50V
C0877	1143001	CERAMIC CAPACITOR 56PF+5% 1KV	C1409	0209937	CERAMIC CHIP 39PF+5% 50V
C0881	0800135	ELECTROLYTIC 33UF 16V	C1410	0209937	CERAMIC CHIP 39PF+5% 50V
C0882	0893053	CERAMIC CHIP 0.047UF+10% 50V	C1411	0209945	CERAMIC DISC 180PF+5% 50V
C0883	0800009	ELECTROLYTIC 4.7UF 25V	C1412	0800185	ELECTROLYTIC 47UF 6.3V
C0884	0800015	ELECTROLYTIC 10UF 16V [5U, 5NV, 4]	C1413	0893053	CERAMIC CHIP 0.047UF+10% 50V
C0884	0800291	ELECTROLYTIC 10UF 16V [EXCEPT 5U, 5NV, 4]	C1414	0800179	ELECTROLYTIC 10UF 16V
C0885	0893062	CERAMIC CHIP 1UF+80-20% 16V	C1415	0800178	ELECTROLYTIC 4.7UF 35V
C0886	0893062	CERAMIC CHIP 1UF+80-20% 16V	C1419	0209931	CERAMIC CHIP 12PF+5% 50V
C0887	0890045	CERAMIC DISC 0.047UF+80-20% 50V	C1422	0209938	CERAMIC CHIP 47PF+5% 50V
C0896	0800122	ELECTROLYTIC 10UF 16V	C1423	0800141	ELECTROLYTIC 47UF 16V
C0902	0893044	CERAMIC CHIP 0.01UF+10% 50V	C1424	0893053	CERAMIC CHIP 0.047UF+10% 50V
C0903	0893053	CERAMIC CHIP 0.047UF+10% 50V	C1425	0209931	CERAMIC CHIP 12PF+5% 50V
C0904	0217516	CAPACITOR 0.047UF+80-20% 5.5V	C1444	0209927	CERAMIC CHIP 7.0PF+0.5% 50V
C0905	0893008	CERAMIC CHIP 0.1UF+10% 16V	C2101	0893031	CERAMIC CHIP 1000PF+10% 50V
C0906	0893062	CERAMIC CHIP 1UF+80-20% 16V	C2102	0893031	CERAMIC CHIP 1000PF+10% 50V
C0907	0209927	CERAMIC CHIP 7.0PF+0.5% 50V	C2503	0800351	ELECTROLYTIC 470UF 6.3V
C0908	0209927	CERAMIC CHIP 7.0PF+0.5% 50V	C2504	0893044	CERAMIC CHIP 0.01UF+10% 50V
C0909	0209932	CERAMIC CHIP 15PF+5% 50V	C2507	0800011	ELECTROLYTIC 4.7UF 35V
C0910	0209932	CERAMIC CHIP 15PF+5% 50V	C2508	0893037	CERAMIC CHIP 3300PF+10% 50V
C0912	0893008	CERAMIC CHIP 0.1UF+10% 16V	C2509	0800041	ELECTROLYTIC 47UF 16V
C0913	0893044	CERAMIC CHIP 0.01UF+10% 50V	C2513	0800352	ELECTROLYTIC 470UF 10V [8U, 8N]
C0914	0800033	ELECTROLYTIC 33UF 25V	C2513	0800325	ELECTROLYTIC 100UF 10V [EXCEPT 8U, 8N]
C0914M	0800033	ELECTROLYTIC 33UF 25V	C2514	0893044	CERAMIC CHIP 0.01UF+10% 50V
C0915	0893044	CERAMIC CHIP 0.01UF+10% 50V	C2515	0800139	ELECTROLYTIC 47UF 10V
C0916	0893044	CERAMIC CHIP 0.01UF+10% 50V	C2517	0893044	CERAMIC CHIP 0.01UF+10% 50V
C0919	0893053	CERAMIC CHIP 0.047UF+10% 50V	C2518	0800044	ELECTROLYTIC 47UF 50V
C0922	0893008	CERAMIC CHIP 0.1UF+10% 16V	C2519	0893044	CERAMIC CHIP 0.01UF+10% 50V
C0923	0893091	CERAMIC CHIP 0.022UF+10% 16V	C2520	0800353	ELECTROLYTIC 470UF 16V [8U, 8N]
C0924	0209938	CERAMIC CHIP 47PF+5% 50V	C2520	0800326	ELECTROLYTIC 100UF 16V [EXCEPT 8U, 8N]
C0925	0209938	CERAMIC CHIP 47PF+5% 50V	C2521	0800041	ELECTROLYTIC 47UF 16V [5U, 5NV, 4]
C0926	0209930	CERAMIC CHIP 10PF+0.5% 50V	C2521	0800317	ELECTROLYTIC 47UF 16V [EXCEPT 5U, 5NV, 4]
C0927	0893062	CERAMIC CHIP 1UF+80-20% 16V	C2522	0893044	CERAMIC CHIP 0.01UF+10% 50V
C0940	0209938	CERAMIC CHIP 47PF+5% 50V	C2523	0893008	CERAMIC CHIP 0.1UF+10% 16V
C0941	0893062	CERAMIC CHIP 1UF+80-20% 16V	C2524	0893044	CERAMIC CHIP 0.01UF+10% 50V
C0945	0893008	CERAMIC CHIP 0.1UF+10% 16V	C2525	0893008	CERAMIC CHIP 0.1UF+10% 16V
C0946	0893008	CERAMIC CHIP 0.1UF+10% 16V	C2532	0893031	CERAMIC CHIP 1000PF+10% 50V
C0950	0893013	CERAMIC CHIP 0.22UF+10% 16V	C2533	0893031	CERAMIC CHIP 1000PF+10% 50V
C0951	0893004	CERAMIC CHIP 0.047UF+10% 16V	C2534	0207458	ELECTROLYTIC 10UF 25V
C0982	0893044	CERAMIC CHIP 0.01UF+10% 50V [EX 3U, 3V]	C2540	0893091	CERAMIC CHIP 0.022UF+10% 16V
C0982	0103855	CHIP RESISTOR 10KOHM+5% 0.1W [3U, 3V]	C2541	0893044	CERAMIC CHIP 0.01UF+10% 50V
C1103	0893044	CERAMIC CHIP 0.01UF+10% 50V	C2542	0893044	CERAMIC CHIP 0.01UF+10% 50V
C1104	0893044	CERAMIC CHIP 0.01UF+10% 50V	C2543	0800122	ELECTROLYTIC 10UF 16V
C1105	0893044	CERAMIC CHIP 0.01UF+10% 50V	C2544	0893053	CERAMIC CHIP 0.047UF+10% 50V
C1106	0800185	ELECTROLYTIC 47UF 6.3V	C2545	0800179	ELECTROLYTIC 10UF 16V
C1107	0893044	CERAMIC CHIP 0.01UF+10% 50V	C2546	0207446	CERAMIC CHIP 10UF+20% 16V

SYMBOL NO	P-NO	DESCRIPTION	SYMBOL NO	P-NO	DESCRIPTION
C2548	0893091	CERAMIC CHIP 0.022UF+-10% 16V	R0256	0103855	CHIP RESISTOR 10KOHM+-5% 0.1W
C4501	0800109	ELECTROLYTIC 1.0UF 50V	R0258	0103835	CHIP RESISTOR 220 OHM+-5% 0.1W
C4502	0800109	ELECTROLYTIC 1.0UF 50V	R0261	0103851	CHIP RESISTOR 4.7KOHM+-5% 0.1W
C4503	0890044	CERAMIC DISC 0.022UF+80-20% 25V	R0264	0105515	CHIP RESISTOR 4.7MOHM+-5% 0.1W
C4504	0800153	ELECTROLYTIC 470UF 6.3V	R0269	0103834	CHIP RESISTOR 180 OHM+-5% 0.1W
C4505	0800109	ELECTROLYTIC 1.0UF 50V	R0284	0103879	CHIP RESISTOR 1MOHM+-5% 0.1W
C4506	0800122	ELECTROLYTIC 10UF 16V	R0402	0103860	CHIP RESISTOR 27KOHM+-5% 0.1W
C4507	0800122	ELECTROLYTIC 10UF 16V	R0403	0103863	CHIP RESISTOR 47KOHM+-5% 0.1W
C4508	0800122	ELECTROLYTIC 10UF 16V	R0404	0103857	CHIP RESISTOR 15KOHM+-5% 0.1W
C4509	0800122	ELECTROLYTIC 10UF 16V	R0407	0103834	CHIP RESISTOR 180 OHM+-5% 0.1W
C4510	0800122	ELECTROLYTIC 10UF 16V	R0408	0103861	CHIP RESISTOR 33KOHM+-5% 0.1W
C4511	0800122	ELECTROLYTIC 10UF 16V	R0409	0103873	CHIP RESISTOR 330KOHM+-5% 0.1W
C4512	0800122	ELECTROLYTIC 10UF 16V	R0410	0103855	CHIP RESISTOR 10KOHM+-5% 0.1W
C4513	0800122	ELECTROLYTIC 10UF 16V	R0413	0103861	CHIP RESISTOR 33KOHM+-5% 0.1W
C4514	0800145	ELECTROLYTIC 100UF 16V	R0414	0103855	CHIP RESISTOR 10KOHM+-5% 0.1W
C4515	0800122	ELECTROLYTIC 10UF 16V	R0418	0103851	CHIP RESISTOR 4.7KOHM+-5% 0.1W
C4516	0800122	ELECTROLYTIC 10UF 16V	R0419	0103861	CHIP RESISTOR 33KOHM+-5% 0.1W
C4517	0800122	ELECTROLYTIC 10UF 16V	R0420	0103860	CHIP RESISTOR 27KOHM+-5% 0.1W
C4518	0800122	ELECTROLYTIC 10UF 16V	R0421	0103859	CHIP RESISTOR 22KOHM+-5% 0.1W
C4519	0800122	ELECTROLYTIC 10UF 16V	R0422	0103812	CHIP RESISTOR 2.7 OHM+-10% 0.1W
C4520	0800153	ELECTROLYTIC 470UF 6.3V	R0423	0700058	CARBON FILM 22KOHM+-5% 1/8W
C4522L	0890035	CERAMIC DISC 1000PF+-10% 50V [EX 3U, 3V]	R0424	0103857	CHIP RESISTOR 15KOHM+-5% 0.1W
C4522L	0890043	CERAMIC DISC 0.01UF+-20% 16V [3U, 3V]	R0425	0103857	CHIP RESISTOR 15KOHM+-5% 0.1W
C4522R	0890035	CERAMIC DISC 1000PF+-10% 50V [EX 3U, 3V]	R0429	0103855	CHIP RESISTOR 10KOHM+-5% 0.1W
C4522R	0890043	CERAMIC DISC 0.01UF+-20% 16V [3U, 3V]	R0430	0103859	CHIP RESISTOR 22KOHM+-5% 0.1W
C4524L	0890032	CERAMIC DISC 560PF+-10% 50V	R0431	0103851	CHIP RESISTOR 4.7KOHM+-5% 0.1W
C4524R	0890032	CERAMIC DISC 560PF+-10% 50V	R0432	0103851	CHIP RESISTOR 4.7KOHM+-5% 0.1W
C4526L	0890035	CERAMIC DISC 1000PF+-10% 50V	R0434	0103853	CHIP RESISTOR 6.8KOHM+-5% 0.1W
C4526R	0890035	CERAMIC DISC 1000PF+-10% 50V	R0435	0103857	CHIP RESISTOR 15KOHM+-5% 0.1W
C4528L	0890032	CERAMIC DISC 560PF+-10% 50V	R0436	0103863	CHIP RESISTOR 47KOHM+-5% 0.1W
C4528R	0890032	CERAMIC DISC 560PF+-10% 50V	R0450	0103879	CHIP RESISTOR 1MOHM+-5% 0.1W
C4530	0890008	CERAMIC DISC 10PF+-5% 50V	R0501	0103863	CHIP RESISTOR 47KOHM+-5% 0.1W
C4531	0890018	CERAMIC DISC 56PF+-50% 50V	R0502	0103857	CHIP RESISTOR 15KOHM+-5% 0.1W
C4532	0890018	CERAMIC DISC 56PF+-50% 50V	R0503	0103863	CHIP RESISTOR 47KOHM+-5% 0.1W
C4533	0800153	ELECTROLYTIC 470UF 6.3V	R0504	0103857	CHIP RESISTOR 15KOHM+-5% 0.1W
C4534	0800122	ELECTROLYTIC 10UF 16V	R0505	0103863	CHIP RESISTOR 47KOHM+-5% 0.1W
C4536	0800109	ELECTROLYTIC 1UF 50V	R0506	0103857	CHIP RESISTOR 15KOHM+-5% 0.1W
C4537	0800141	ELECTROLYTIC 47UF 16V	R0507	0103863	CHIP RESISTOR 47KOHM+-5% 0.1W
C4538	0890044	CERAMIC DISC 0.022UF+80-20% 25V	R0508	0103857	CHIP RESISTOR 15KOHM+-5% 0.1W
C4565	0800122	ELECTROLYTIC 10UF 16V	R0509	0103851	CHIP RESISTOR 4.7KOHM+-5% 0.1W
C4571L	AN00622R	CAPACITOR 0.0068UF+-10% 50V	R0510	0104252	CHIP RESISTOR 510 OHM+-5% 0.1W
C4571R	AN00622R	CAPACITOR 0.0068UF+-10% 50V	R0511	AQ10296R	CHIP RESISTOR 15KOHM+-0.1% 0.1W
C4572L	0800122	ELECTROLYTIC 10UF 16V	R0512	AQ10295R	CHIP RESISTOR 11KOHM+-0.1% 0.1W
C4572R	0800122	ELECTROLYTIC 10UF 16V	R0516	0103851	CHIP RESISTOR 4.7KOHM+-5% 0.1W
C4581	0890018	CERAMIC DISC 56PF+-50% 50V	R0517	0104252	CHIP RESISTOR 510 OHM+-5% 0.1W
C4582	0880016	POLYESTER FILM 0.1UF+-10% 50V	R0518	0700063	CARBON FILM 47KOHM+-5% 1/8W
C4583	0800122	ELECTROLYTIC 10UF 16V	R0519	0103857	CHIP RESISTOR 15KOHM+-5% 0.1W
C4584	AN00615R	CAPACITOR 0.0022UF+-10% 50V	R0520	0700063	CARBON FILM 47KOHM+-5% 1/8W
C4585	0880187	CAPACITOR 0.033UF+-5% 50V	R0521	0103857	CHIP RESISTOR 15KOHM+-5% 0.1W
		RESISTORS	R0522	0700063	CARBON FILM 47KOHM+-5% 1/8W
R0212	0103851	CHIP RESISTOR 4.7KOHM+-5% 0.1W	R0523	0103857	CHIP RESISTOR 15KOHM+-5% 0.1W
R0213	0103851	CHIP RESISTOR 4.7KOHM+-5% 0.1W	R0524	0700063	CARBON FILM 47KOHM+-5% 1/8W
R0215	0103843	CHIP RESISTOR 1KOHM+-5% 0.1W	R0525	0700056	CARBON FILM 15KOHM+-5% 1/8W
R0216	0103851	CHIP RESISTOR 4.7KOHM+-5% 0.1W	R0526	0103839	CHIP RESISTOR 470 OHM+-5% 0.1W
R0217	0103860	CHIP RESISTOR 27KOHM+-5% 0.1W	R0527	0103839	CHIP RESISTOR 470 OHM+-5% 0.1W
R0229	0103835	CHIP RESISTOR 220 OHM+-5% 0.1W	R0528	0103857	CHIP RESISTOR 15KOHM+-5% 0.1W
R0230	0103855	CHIP RESISTOR 10KOHM+-5% 0.1W	R0529	0700063	CARBON FILM 47KOHM+-5% 1/8W
R0236	0103855	CHIP RESISTOR 10KOHM+-5% 0.1W	R0530	0700047	CARBON FILM 3.3KOHM+-5% 1/8W
R0238	0103847	CHIP RESISTOR 2.2KOHM+-5% 0.1W	R0531	0103844	CHIP RESISTOR 1.2KOHM+-5% 0.1W
R0239	0103852	CHIP RESISTOR 5.6KOHM+-5% 0.1W	R0532	0700052	CARBON FILM 6.8KOHM+-5% 1/8W
R0241	0103853	CHIP RESISTOR 6.8KOHM+-5% 0.1W	R0533	0103866	CHIP RESISTOR 82KOHM+-5% 0.1W
R0247	0103861	CHIP RESISTOR 33KOHM+-5% 0.1W	R0534	0700049	CARBON FILM 4.7KOHM+-5% 1/8W
R0253	0103841	CHIP RESISTOR 680 OHM+-5% 0.1W	R0602	0103843	CHIP RESISTOR 1KOHM+-5% 0.1W
			R0605	0103851	CHIP RESISTOR 4.7KOHM+-5% 0.1W
			R0615	0103843	CHIP RESISTOR 1KOHM+-5% 0.1W

SYMBOL NO	P-NO	DESCRIPTION	SYMBOL NO	P-NO	DESCRIPTION
R0616	0700072	CARBON FILM 220KOHM+-5% 1/8W	R0878	0103859	CHIP RESISTOR 22KOHM+-5% 0.1W
R0621	0103843	CHIP RESISTOR 1KOHM+-5% 0.1W	R0879	0103855	CHIP RESISTOR 10KOHM+-5% 0.1W
R0622	0103843	CHIP RESISTOR 1KOHM+-5% 0.1W	R0880	0103859	CHIP RESISTOR 22KOHM+-5% 0.1W
R0623	0103859	CHIP RESISTOR 22KOHM+-5% 0.1W	R0881	0103841	CHIP RESISTOR 680 OHM+-5% 0.1W
R0624	0103855	CHIP RESISTOR 10KOHM+-5% 0.1W	R0885	0700056	CARBON FILM 15KOHM+-5% 1/8W
R0625	0103843	CHIP RESISTOR 1KOHM+-5% 0.1W[5U, 5NV, 4, 3V]	R0886	0700056	CARBON FILM 15KOHM+-5% 1/8W
R0625	0103848	CHIP RESISTOR 2.7KOHM+-5% 0.1W [8U, 8N, 6U, 6NV, 3U]	R0887	0700046	CARBON FILM 2.7KOHM+-5% 1/8W
R0629	0103837	CHIP RESISTOR 330 OHM+-5% 0.1W	R0888	AT10245S	RESISTOR 68 OHM+-5% 2W
R0630	0103837	CHIP RESISTOR 330 OHM+-5% 0.1W	R0889	0103859	CHIP RESISTOR 22KOHM+-5% 0.1W
R0631	0103870	CHIP RESISTOR 180KOHM+-5% 0.1W	R0890	0103859	CHIP RESISTOR 22KOHM+-5% 0.1W
R0632	0103843	CHIP RESISTOR 1KOHM+-5% 0.1W	R0891	0103859	CHIP RESISTOR 22KOHM+-5% 0.1W
R0633	0103879	CHIP RESISTOR 1MOHM+-5% 0.1W	R0892	0103867	CHIP RESISTOR 100KOHM+-5% 0.1W
R0634	0103843	CHIP RESISTOR 1KOHM+-5% 0.1W	R0893	0103859	CHIP RESISTOR 22KOHM+-5% 0.1W
R0635	0103843	CHIP RESISTOR 1KOHM+-5% 0.1W	R0894	0103859	CHIP RESISTOR 22KOHM+-5% 0.1W
R0636	0103849	CHIP RESISTOR 3.3KOHM+-5% 0.1W	R0895	0103859	CHIP RESISTOR 22KOHM+-5% 0.1W
R0637	0103850	CHIP RESISTOR 3.9KOHM+-5% 0.1W	R0896	0700058	CARBON FILM 22KOHM+-5% 1/8W
R0701	0700029	CARBON FILM 150 OHM+-5% 1/8W	R0897	0103859	CHIP RESISTOR 22KOHM+-5% 0.1W
R0702	0700029	CARBON FILM 150 OHM+-5% 1/8W	R0906	0103843	CHIP RESISTOR 1KOHM+-5% 0.1W
R0703	0103843	CHIP RESISTOR 1KOHM+-5% 0.1W	R0907	0700051	CARBON FILM 5.6KOHM+-5% 1/8W[6U, 5U]
R0705	0103842	CHIP RESISTOR 820 OHM+-5% 0.1W	R0907	0700063	CARBON FILM 47KOHM+-5% 1/8W[8N, 6NV, 5NV, 4]
R0706	0103843	CHIP RESISTOR 1KOHM+-5% 0.1W	R0907	0700062	CARBON FILM 39KOHM+-5% 1/8W [3V]
R0707	0700041	CARBON FILM 1.0KOHM+-5% 1/8W	R0908	CC10712R	DIODE SDC-UDZ2.0B
R0708	0103843	CHIP RESISTOR 1KOHM+-5% 0.1W	R0909	0103840	CHIP RESISTOR 560 OHM+-5% 0.1W
R0709	0103835	CHIP RESISTOR 220 OHM+-5% 0.1W	R0910	0103855	CHIP RESISTOR 10KOHM+-5% 0.1W
R0710	0103855	CHIP RESISTOR 10KOHM+-5% 0.1W	R0911	0103867	CHIP RESISTOR 100KOHM+-5% 0.1W
R0711	0103863	CHIP RESISTOR 47KOHM+-5% 0.1W	R0913	0103843	CHIP RESISTOR 1KOHM+-5% 0.1W
R0712	0103839	CHIP RESISTOR 470 OHM+-5% 0.1W	R0914	0103843	CHIP RESISTOR 1KOHM+-5% 0.1W
R0713	0103863	CHIP RESISTOR 47KOHM+-5% 0.1W	R0915	0103843	CHIP RESISTOR 1KOHM+-5% 0.1W
R0714	0700029	CARBON FILM 150 OHM+-5% 1/8W	R0916	0103843	CHIP RESISTOR 1KOHM+-5% 0.1W
R0715	0103845	CHIP RESISTOR 1.5KOHM+-5% 0.1W	R0917	0103843	CHIP RESISTOR 1KOHM+-5% 0.1W
R0716	0103846	CHIP RESISTOR 1.8KOHM+-5% 0.1W	R0918	0103843	CHIP RESISTOR 1KOHM+-5% 0.1W
R0717	0103833	CHIP RESISTOR 150 OHM+-5% 0.1W	R0919	0103843	CHIP RESISTOR 1KOHM+-5% 0.1W
R0718	0103831	CHIP RESISTOR 100 OHM+-5% 0.1W	R0920	0700054	CARBON FILM 10KOHM+-5% 1/8W
R0719	0103840	CHIP RESISTOR 560 OHM+-5% 0.1W[6U, 6NV, 3U]	R0921	0103843	CHIP RESISTOR 1KOHM+-5% 0.1W
R0719	0103845	CHIP RESISTOR 1.5KOHM+-5% 0.1W [3V, 5U, 5NV, 4]	R0922	0103843	CHIP RESISTOR 1KOHM+-5% 0.1W
R0720	0103852	CHIP RESISTOR 5.6KOHM+-5% 0.1W[6U, 6NV, 3U]	R0923	0700041	CARBON FILM 1.0KOHM+-5% 1/8W
R0720	0103857	CHIP RESISTOR 15KOHM+-5% 0.1W [3V, 5U, 5NV, 4]	R0924	0103840	CHIP RESISTOR 560 OHM+-5% 0.1W
R0721	0103843	CHIP RESISTOR 1KOHM+-5% 0.1W	R0925	0103840	CHIP RESISTOR 560 OHM+-5% 0.1W
R0852	AT10211M	CHIP RESISTOR 1MOHM+-5% 1/2W	R0926	0103840	CHIP RESISTOR 560 OHM+-5% 0.1W
R0854	0116671	RESISTOR 100KOHM+-5% 3w	R0928	0103851	CHIP RESISTOR 4.7KOHM+-5% 0.1W
R0855	0116671	RESISTOR 100KOHM+-5% 3w	R0929	0103851	CHIP RESISTOR 4.7KOHM+-5% 0.1W
R0856	AT10261S	RESISTOR 220KOHM+-5% 2W	R0934	0103843	CHIP RESISTOR 1KOHM+-5% 0.1W
R0859	0103847	CHIP RESISTOR 2.2KOHM+-5% 0.1W	R0935	0103835	CHIP RESISTOR 220 OHM+-5% 0.1W
R0860	0103849	CHIP RESISTOR 3.3KOHM+-5% 0.1W	R0936	0103855	CHIP RESISTOR 10KOHM+-5% 0.1W
R0861	0700038	CARBON FILM 680 OHM+-5% 1/8W	R0937	0103845	CHIP RESISTOR 1.5KOHM+-5% 0.1W
R0862	AT10246S	RESISTOR 0.33 OHM+-5% 1W	R0938	0103839	CHIP RESISTOR 470 OHM+-5% 0.1W
R0863	0700019	CARBON FILM 27 OHM+-5% 1/8W [3U, 3V]	R0939	0103843	CHIP RESISTOR 1KOHM+-5% 0.1W
R0863	0700021	CARBON FILM 33 OHM+-5% 1/8W [5U, 5NV, 4]	R0940	0103839	CHIP RESISTOR 470 OHM+-5% 0.1W
R0863	0700022	CARBON FILM 39 OHM+-5% 1/8W[8U, 8N, 6U, 6NV]	R0943	0103843	CHIP RESISTOR 1KOHM+-5% 0.1W
R0864	0103859	CHIP RESISTOR 22KOHM+-5% 0.1W	R0944	0103843	CHIP RESISTOR 1KOHM+-5% 0.1W
R0866	0700038	CARBON FILM 680 OHM+-5% 1/8W	R0945	0103843	CHIP RESISTOR 1KOHM+-5% 0.1W
R0867	0700032	CARBON FILM 220 OHM+-5% 1/8W	R0946	0103843	CHIP RESISTOR 1KOHM+-5% 0.1W
R0868	0103843	CHIP RESISTOR 1KOHM+-5% 0.1W	R0947	0103843	CHIP RESISTOR 1KOHM+-5% 0.1W
R0869	0104114	CHIP RESISTOR 3.3KOHM+-1% 0.1W	R0948	0103851	CHIP RESISTOR 4.7KOHM+-5% 0.1W
R0870	0105572	METAL FILM RESISTOR 2.7KOHM+-1% 0.1W	R0949	0103843	CHIP RESISTOR 1KOHM+-5% 0.1W
R0871	0103843	CHIP RESISTOR 1KOHM+-5% 0.1W	R0957	0103879	CHIP RESISTOR 1MOHM+-5% 0.1W
R0872	0103847	CHIP RESISTOR 2.2KOHM+-5% 0.1W	R0960	0700063	CARBON FILM 47KOHM+-5% 1/8W
R0873	0103847	CHIP RESISTOR 2.2KOHM+-5% 0.1W	R0964	0103843	CHIP RESISTOR 1KOHM+-5% 0.1W
R0874	0700058	CARBON FILM 22KOHM+-5% 1/8W	R0965	0103867	CHIP RESISTOR 100KOHM+-5% 0.1W
R0875	0700035	CARBON FILM 390 OHM+-5% 1/8W	R0967	0700041	CARBON FILM 1.0KOHM+-5% 1/8W
R0876	0103859	CHIP RESISTOR 22KOHM+-5% 0.1W	R0968	0103843	CHIP RESISTOR 1KOHM+-5% 0.1W
R0877	0103846	CHIP RESISTOR 1.8KOHM+-5% 0.1W	R0976	0101725	CHIP RESISTOR 2.2 OHM+-5% 1/4W
			R0977	0700067	CARBON FILM 100KOHM+-5% 1/8W
			R0978	0101765	RESISTOR 10KOHM+-1% 1/8W
			R0983	0103855	CHIP RESISTOR 10KOHM+-5% 0.1W

SYMBOL NO	P-NO	DESCRIPTION	SYMBOL NO	P-NO	DESCRIPTION
R0984	0103855	CHIP RESISTOR 10KOHM+-5% 0.1W	R4503	1109023	METAL FILM 75 OHM+-50% 1/8W
R0985	0103851	CHIP RESISTOR 4.7KOHM+-5% 0.1W	R4504	1109023	METAL FILM 75 OHM+-50% 1/8W
R0989	0103855	CHIP RESISTOR 10KOHM+-5% 0.1W	R4505	0700049	CARBON FILM 4.7KOHM+-5% 1/8W
R0991	0103851	CHIP RESISTOR 4.7KOHM+-5% 0.1W	R4506	0700045	CARBON FILM 2.2KOHM+-5% 1/8W
R0993	0103854	CHIP RESISTOR 8.2KOHM+-5% 0.1W	R4507	1109023	METAL FILM 75 OHM+-50% 1/8W
R0996	0103854	CHIP RESISTOR 8.2KOHM+-5% 0.1W	R4508	1109023	METAL FILM 75 OHM+-50% 1/8W
R0997	0103840	CHIP RESISTOR 560 OHM+-5% 0.1W	R4510	0700063	CARBON FILM 47KOHM+-5% 1/8W
R0998	0103840	CHIP RESISTOR 560 OHM+-5% 0.1W	R4511	0700061	CARBON FILM 33KOHM+-5% 1/8W
R0999	0103855	CHIP RESISTOR 10KOHM+-5% 0.1W	R4512L	0700036	CARBON FILM 470 OHM+-5% 1/8W
R1103	0103820	CHIP RESISTOR 12 OHM+-5% 0.1W	R4512R	0700036	CARBON FILM 470 OHM+-5% 1/8W
R1104	0103831	CHIP RESISTOR 100 OHM+-5% 0.1W	R4514L	0700036	CARBON FILM 470 OHM+-5% 1/8W
R1120	0103839	CHIP RESISTOR 470 OHM+-5% 0.1W	R4514R	0700036	CARBON FILM 470 OHM+-5% 1/8W
R1121	0103850	CHIP RESISTOR 3.9KOHM+-5% 0.1W	R4516	0700054	CARBON FILM 10KOHM+-5% 1/8W
R1409	0103843	CHIP RESISTOR 1KOHM+-5% 0.1W	R4517	0700054	CARBON FILM 10KOHM+-5% 1/8W
R1410	0103846	CHIP RESISTOR 1.8KOHM+-5% 0.1W	R4518	0700042	CARBON FILM 1.2KOHM+-5% 1/8W
R1412	0103875	CHIP RESISTOR 470KOHM+-5% 0.1W	R4519	0700027	CARBON FILM 100 OHM+-5% 1/8W
R1414	0103859	CHIP RESISTOR 22KOHM+-5% 0.1W	R4571L	0700032	CARBON FILM 220 OHM+-5% 1/8W
R1416	0103847	CHIP RESISTOR 2.2KOHM+-5% 0.1W	R4571R	0700032	CARBON FILM 220 OHM+-5% 1/8W
R1418	0103831	CHIP RESISTOR 100 OHM+-5% 0.1W	R4572L	0700063	CARBON FILM 47KOHM+-5% 1/8W
R1421	0103835	CHIP RESISTOR 220 OHM+-5% 0.1W	R4572R	0700063	CARBON FILM 47KOHM+-5% 1/8W
R1423	0700038	CARBON FILM 680 OHM+-5% 1/8W	R4573L	0700032	CARBON FILM 220 OHM+-5% 1/8W
R1424	0103840	CHIP RESISTOR 560 OHM+-5% 0.1W	R4573R	0700032	CARBON FILM 220 OHM+-5% 1/8W
R1429	0103847	CHIP RESISTOR 2.2KOHM+-5% 0.1W	R4584	0700081	CARBON FILM 1.0MOHM+-5% 1/8W
R1430	0103847	CHIP RESISTOR 2.2KOHM+-5% 0.1W	R4585	0101970	CARBON FILM 1.2MOHM+-5% 1/8W
R1431	0103839	CHIP RESISTOR 470 OHM+-5% 0.1W	R4587	0700067	CARBON FILM 100KOHM+-5% 1/8W
R1432	0103879	CHIP RESISTOR 1MOHM+-5% 0.1W	R4588	0101970	CARBON FILM 1.2MOHM+-5% 1/8W
R1446	0209925	CERAMIC DISC 5PF+-0.25% 50V	R4589	0700052	CARBON FILM 6.8KOHM+-5% 1/8W
R2101	0700059	CARBON FILM 27KOHM+-5% 1/8W	R4590	0700052	CARBON FILM 6.8KOHM+-5% 1/8W
R2102	0103867	CHIP RESISTOR 100KOHM+-5% 0.1W			
R2103	0103863	CHIP RESISTOR 47KOHM+-5% 0.1W			SEMI-CONDUCTORS
R2104	0103835	CHIP RESISTOR 220 OHM+-5% 0.1W	D0206	5339071	DIODE 1SS119
R2105	0103863	CHIP RESISTOR 47KOHM+-5% 0.1W	D0207	5339071	DIODE 1SS119
R2106	0103837	CHIP RESISTOR 330 OHM+-5% 0.1W	D0401	5339071	DIODE 1SS119
R2107	0103847	CHIP RESISTOR 2.2KOHM+-5% 0.1W	△D0851	5336552	DIODE S1WBA60
R2108	0103850	CHIP RESISTOR 3.9KOHM+-5% 0.1W	D0852	CH10191M	DIODE EG01C-T
R2109	0103847	CHIP RESISTOR 2.2KOHM+-5% 0.1W	D0853	CH10481M	DIODE AG01Z
R2110	0103850	CHIP RESISTOR 3.9KOHM+-5% 0.1W	D0854	CH10481M	DIODE AG01Z
R2111	0103847	CHIP RESISTOR 2.2KOHM+-5% 0.1W	D0855	CH10481M	DIODE AG01Z
R2112	0103847	CHIP RESISTOR 2.2KOHM+-5% 0.1W	D0871	5339592	DIODE D1NL40
R2113	0103837	CHIP RESISTOR 330 OHM+-5% 0.1W	D0872	CH10462S	DIODE S3L20U
R2114	0103835	CHIP RESISTOR 220 OHM+-5% 0.1W	D0873	CH10641S	DIODE D3S6M
R2115	0103855	CHIP RESISTOR 10KOHM+-5% 0.1W	D0876	5339551	DIODE S31J4
R2116	0103855	CHIP RESISTOR 10KOHM+-5% 0.1W	D0877	5339551	DIODE S31J4
R2117	0103859	CHIP RESISTOR 22KOHM+-5% 0.1W	D0878	5339071	DIODE 1SS119
R2506	0700036	CARBON FILM 470 OHM+-5% 1/8W	D0896	CH10871M	DIODE 1N4001
R2507	0103844	CHIP RESISTOR 1.2KOHM+-5% 0.1W [3U, 3V]	D0897	CH10871M	DIODE 1N4001
R2507	0103849	CHIP RESISTOR 3.3KOHM+-5% 0.1W [EX 3U, 3V]	D0898	CH10871M	DIODE 1N4001
R2508	0103863	CHIP RESISTOR 47KOHM+-5% 0.1W	D0901	5339551	DIODE S31J4
R2509	0103844	CHIP RESISTOR 1.2KOHM+-5% 0.1W [3U, 3V]	D0906	5339071	DIODE 1SS119
R2509	0103849	CHIP RESISTOR 3.3KOHM+-5% 0.1W [EX 3U, 3N]	D0907	5339071	DIODE 1SS119
R2510	0103863	CHIP RESISTOR 47KOHM+-5% 0.1W	D0908	5339071	DIODE 1SS119
R2511	0103849	CHIP RESISTOR 3.3KOHM+-5% 0.1W	D0909	5339071	DIODE 1SS119
R2512	0103849	CHIP RESISTOR 3.3KOHM+-5% 0.1W	D0912	CH10871M	DIODE 1N4001
R2514	0101836	CARBON FILM 1.8KOHM+-5% 1/4W	D0913	CH10871M	DIODE 1N4001
R2518	0103867	CHIP RESISTOR 100KOHM+-5% 0.1W	D1103	5339071	DIODE 1SS119
R2529	0103833	CHIP RESISTOR 150 OHM+-5% 0.1W	D1403	5339071	DIODE 1SS119
R2530	0103833	CHIP RESISTOR 150 OHM+-5% 0.1W	D2501	5339071	DIODE 1SS119
R2531	0103855	CHIP RESISTOR 10KOHM+-5% 0.1W	D2502	5339071	DIODE 1SS119
R2532	0103855	CHIP RESISTOR 10KOHM+-5% 0.1W	D2503	5339071	DIODE 1SS119
R2534	0103847	CHIP RESISTOR 2.2KOHM+-5% 0.1W [3U, 3V]	D2505	5339071	DIODE 1SS119
R2534	0103850	CHIP RESISTOR 3.9KOHM+-5% 0.1W [EX 3U, 3V]	D4501	5339071	DIODE 1SS119
R2535	0103843	CHIP RESISTOR 1KOHM+-5% 0.1W	LD2101	CH10542	DIODE GL451L1
R2542	0103831	CHIP RESISTOR 100 OHM+-5% 0.1W	IC0201	CK22053	IC JCP8016MSB (HEPM)
R2543	0103855	CHIP RESISTOR 10KOHM+-5% 0.1W	IC0501	CK14421	IC AN3964FB
R4502	0700037	CARBON FILM 560 OHM+-5% 1/8W			

SYMBOL NO	P-NO	DESCRIPTION	SYMBOL NO	P-NO	DESCRIPTION
IC0851	CP12461F	IC STR-F6653 (HEPM)	Q2506	5327021	TRANSISTOR 2SA844CD
IC0871	CP11961R	IC HA17431PA	Q2508	CA10672R	TRANSISTOR 2SD601A
IC0901	CK23511	IC HD6433977SC52F (HEPM) [8U, 8N]	Q2511	5326904	TRANSISTOR UN2113
IC0901	CK23157	IC HD6433977SC46F (HEPM) [6U, 6NV]	Q4501	5327031	TRANSISTOR 2SA673(C)
IC0901	CK23151	IC HD6433977SC39F (HEPM) [5U, 5NV, 4, 3V]	Q4502	CF10852R	TRANSISTOR DTC144ESA
IC0901	CK23153	IC HD6433977SC50F (HEPM) [3U]	Q4503	5327141	TRANSISTOR 2SD468C
IC0902	CP10312R	IC PST9129	△ QF0871	5721946	IC PROTECTOR, ICP-N15
IC0903	CP10915	IC ST24C02FB6 [8U, 8N]	△ QF0872	5721944	IC PROTECTOR, ICP-N25
IC0903	CP11013	IC AT24C04-10PC (HEPM) [EXCEPT 8U, 8N]	△ QF0873	5721943	IC PROTECTOR, ICP-N10
IC0904	CP10291	IC BA6209	△ QF4501	5721941	IC PROTECTOR, ICP-N5
IC0905	CP11361R	IC M5278L05	ZD0871	5339468	DIODE HZS11B3
IC1102	CK20671R	IC AN3329S-E1	ZD0872	5339482	DIODE HZS15-2
IC2101	CJ10391	SENSOR SG-HT10(T)	ZD0896	5339464	DIODE HZS12A3
IC2102	CJ10401	SENSOR SG-HT11(S)	ZD0901	5339275	DIODE HZS7-B2
IC2501	CP12231	IC NJM2534D (HEPM)	ZD0903	5339297	DIODE HZS5C3
IC4501	CK22741R	IC LA7147M (HEPM) [EXCEPT 3U, 3V]	ZD2501	5339288	DIODE HZS30-3
IC4501	CK22751R	IC LA7148M (HEPM) [3U, 3V]	ZD4501	5339277	DIODE HZS6A2
IC4581	CP10642	IC SDA5650 (HEPM)	ZD4502	5339293	DIODE HZS12B2
△ PC0851	CF10431G	PHOTO COUPLER PC123FY	TRANSFORMER		
△ PC0852	CF10431G	PHOTO COUPLER PC123FY	T0401	BT10251	TRANSFORMER, POWER
Q0202	5326903	TRANSISTOR UN2213	△ T0851	BT10481	TRANSFORMER, POWER
Q0219	5326903	TRANSISTOR UN2213	COILS		
Q0222	5326903	TRANSISTOR UN2213	L0201	5159142	CHOKE COIL 12UH
Q0229	5326903	TRANSISTOR UN2213	L0202	0770057	CHOKE COIL 100UH+-5%
Q0232	5326903	TRANSISTOR UN2213	L0205	0770057	CHOKE COIL 100UH+-5%
Q0234	5326904	TRANSISTOR UN2113	L0207	5159153	CHOKE COIL 82UH
Q0403	CA10672R	TRANSISTOR 2SD601A	L0208	0770057	CHOKE COIL 100UH+-5%
Q0405	CA10582R	TRANSISTOR 2SB709A	L0209	5159156	CHOKE COIL 150UH
Q0406	5323172	TRANSISTOR 2SC1214CD	L0210	5159146	CHOKE COIL 27UH
Q0411	CA10582R	TRANSISTOR 2SB709A	L0211	5159142	CHOKE COIL 12UH
Q0412	CA10672R	TRANSISTOR 2SD601A	L0401	0770057	CHOKE COIL 100UH+-5%
Q0413	CA10672R	TRANSISTOR 2SD601A	L0403	0770057	CHOKE COIL 100UH+-5%
Q0701	1323082	TRANSISTOR 2SA1036K	L0501	0770048	CHOKE COIL 22UH+-5%
Q0702	CA10672R	TRANSISTOR 2SD601A	△ L0851	BJ10251	FILTER, LC
Q0853	1321341	TRANSISTOR 2SD1765	△ L0852	BJ10251	FILTER, LC
Q0859	CA10672R	TRANSISTOR 2SD601A	L0871	BH00201R	COIL 10UH
Q0871	5326903	TRANSISTOR UN2213	L0872	BH00205R	COIL 22UH
Q0873	5327063	TRANSISTOR 2SC1740S	L0901	0770057	CHOKE COIL 100UH+-5%
Q0874	5327262	TRANSISTOR 2SB1326	L1101	5121611	COIL 100UH
Q0875	CA10672R	TRANSISTOR 2SD601A	L1102	0770057	CHOKE COIL 100UH+-5%
Q0876	5327262	TRANSISTOR 2SB1326	L1105	5121296	COIL 220UH
Q0877	CA10672R	TRANSISTOR 2SD601A	L1402	5121288	COIL 15UH
Q0878	5327262	TRANSISTOR 2SB1326	L2501	0770053	CHOKE COIL 47UH+-5%
Q0879	5327021	TRANSISTOR 2SA844CD	L2502	0770057	CHOKE COIL 100UH+-5%
Q0880	1321341	TRANSISTOR 2SD1765	L2504	0770052	CHOKE COIL 39UH+-5%
Q0896	CF10451R	TRANSISTOR 2SC3246	L2505	0770057	CHOKE COIL 100UH+-5%
Q0901	5327261	TRANSISTOR 2SB1326(Q)	L2507	0770053	CHOKE COIL 47UH+-5%
Q0902	5326903	TRANSISTOR UN2213	L4501	0770057	CHOKE COIL 100UH+-5%
Q0909	5326903	TRANSISTOR UN2213	L4502	0770057	CHOKE COIL 100UH+-5%
Q0913	5326903	TRANSISTOR UN2213	L4581	0770057	CHOKE COIL 100UH+-5%
Q0914	5326903	TRANSISTOR UN2213	CRYSTALS		
Q1104	5326903	TRANSISTOR UN2213	X0202	BP10541	CRYSTAL (HEPM)
Q1404	CA10582R	TRANSISTOR 2SB709A	X0901	BP10571	CRYSTAL
Q1407	CA10582R	TRANSISTOR 2SB709A	X0902	BP10251	CRYSTAL
Q1408	CA10582R	TRANSISTOR 2SB709A	X1401	BP10573	CRYSTAL (HEPM)
Q1409	5326903	TRANSISTOR UN2213	MISCELLANEOUS		
Q1410	CA10582R	TRANSISTOR 2SB709A	BL0601	BZ10471R	CORE
Q2101	CF10372	TRANSISTOR PT493FL1			
Q2102	CF10372	TRANSISTOR PT493FL1			
Q2103	5326903	TRANSISTOR UN2213			
Q2104	5326903	TRANSISTOR UN2213			
Q2501	CA10672R	TRANSISTOR 2SD601A			
Q2502	CA10672R	TRANSISTOR 2SD601A			
Q2503	CA10672R	TRANSISTOR 2SD601A			
Q2505	5326903	TRANSISTOR UN2213			

SYMBOL NO	P-NO	DESCRIPTION	SYMBOL NO	P-NO	DESCRIPTION
BL0602	BZ10471R	CORE	C1824	0893079	CERAMIC DISC 0.01UF+80-20% 50V
BL0603	BZ10471R	CORE	C1825	0800316	ELECTROLYTIC 47UF 10V
BL0604	5272376	FILTER	C1826	0893004	CERAMIC CHIP 0.047UF+-10% 16V
BL0851	BZ10471R	CORE	C1827	0800316	ELECTROLYTIC 47UF 10V
BL0852	BZ10471R	CORE	C1828	0893004	CERAMIC CHIP 0.047UF+-10% 16V
BL0853	BZ10471R	CORE	C1851L	0800291	ELECTROLYTIC 10UF 16V
BL0854	BZ10471R	CORE	C1851R	0800291	ELECTROLYTIC 10UF 16V
BL0871	BZ10471R	CORE	C1852L	0209853	CERAMIC DISC 68PF+-5% 50V
BL0872	BZ10471R	CORE	C1852R	0209853	CERAMIC DISC 68PF+-5% 50V
BL0873	BZ10471R	CORE	C1853L	0800291	ELECTROLYTIC 10UF 16V
BL0874	5274522	CORE	C1853R	0800291	ELECTROLYTIC 10UF 16V
BL2501	BZ10471R	CORE	C1854L	0800291	ELECTROLYTIC 10UF 16V
BL2502	BZ10471R	CORE	C1854R	0800291	ELECTROLYTIC 10UF 16V
BL4501L	BZ10471R	CORE	C1855L	0893037	CERAMIC CHIP 3300PF+-10% 50V
BL4501R	BZ10471R	CORE	C1855R	0893037	CERAMIC CHIP 3300PF+-10% 50V
BL4502L	BZ10471R	CORE	C1861	0893004	CERAMIC CHIP 0.047UF+-10% 16V
BL4502R	BZ10471R	CORE	C1862	0893008	CERAMIC CHIP 0.1UF+-10% 16V
BL4503L	BZ10471R	CORE			RESISTORS
BL4503R	BZ10471R	CORE			
BL4503L	BZ10471R	CORE	R1802	0103862	CHIP RESISTOR 39KOHM+-5% 0.1W
BL4503R	BZ10471R	CORE	R1803	0103855	CHIP RESISTOR 10KOHM+-5% 0.1W
BL4504L	BZ10471R	CORE	R1804	0103862	CHIP RESISTOR 39KOHM+-5% 0.1W
BL4504R	BZ10471R	CORE	R1805	0103854	CHIP RESISTOR 8.2KOHM+-5% 0.1W
BL4571R	BZ10471R	CORE	R1806	0103831	CHIP RESISTOR 100 OHM+-5% 0.1W
△F0851	5721061	FUSE 1.6A	R1807	0103831	CHIP RESISTOR 100 OHM+-5% 0.1W
FE2501	HC10351	TUNER IF UNIT (HEPM) [8U, 6U, 5U, 3U]	R1813	0103860	CHIP RESISTOR 27KOHM+-5% 0.1W
FE2501	HC10352	TUNER IF UNIT (HEPM) [8N, 6NV, 5NV, 4, 3V]	R1816	0103867	CHIP RESISTOR 100KOHM+-5% 0.1W
△FH0851	5722413	HOLDER, FUSE (HEPM)	R1817	0700053	CARBON FILM 8.2KOHM+-5% 1/8W
△FH0852	5722413	HOLDER, FUSE (HEPM)	R1851L	0103855	CHIP RESISTOR 10KOHM+-5% 0.1W
J4501	EQ10261	JACK	R1851R	0103855	CHIP RESISTOR 10KOHM+-5% 0.1W
J4502	EQ10262	JACK	R1852L	0103879	CHIP RESISTOR 1MOHM+-5% 0.1W
J4571	ES10391	JACK (HEPM)	R1852R	0103879	CHIP RESISTOR 1MOHM+-5% 0.1W
JK2503	ES10371	JACK (HEPM) [3U, 3V]	R1853L	0103867	CHIP RESISTOR 100KOHM+-5% 0.1W
JK2503	ES10373	JACK (HEPM) [6U, 6NV]	R1853R	0103867	CHIP RESISTOR 100KOHM+-5% 0.1W
S0704	FE10141R	SWITCH	R1854L	0103868	CHIP RESISTOR 120KOHM+-5% 0.1W
S0706	FE10141R	SWITCH	R1854R	0103868	CHIP RESISTOR 120KOHM+-5% 0.1W
S0707	FE10141R	SWITCH	R1855L	0103862	CHIP RESISTOR 39KOHM+-5% 0.1W
S0708	5636101	SWITCH	R1855R	0103862	CHIP RESISTOR 39KOHM+-5% 0.1W
S0709	FE10141R	SWITCH	R1856L	0103861	CHIP RESISTOR 33KOHM+-5% 0.1W
S0710	FE10141R	SWITCH	R1856R	0103861	CHIP RESISTOR 33KOHM+-5% 0.1W
S0711	FE10141R	SWITCH	R1857L	0103832	CHIP RESISTOR 120 OHM+-5% 0.1W
S0712	FE10141R	SWITCH [5U, 5NV]	R1857R	0103832	CHIP RESISTOR 120 OHM+-5% 0.1W
S0712	FE10142R	SWITCH [4]			SEMI-CONDUCTORS
S2101	FD10211	SWITCH, MODE	D1801	CC11071R	DIODE HVU202A
S2102	5635631	SWITCH	IC1801	CK21161	IC TDA9874H (HEPM)
S2103	5635631	SWITCH	IC1802	5352714	IC NJM4558M
		N&A BOARD (FOR UKN, NA, NAV)			COILS
		CAPACITORS			
C1801	0893079	CERAMIC DISC 0.01UF+80-20% 50V	L1802	0770048	CHOKE COIL 22UH+-5%
C1803	0893079	CERAMIC DISC 0.01UF+80-20% 50V	L1803	0770057	CHOKE COIL 100UH+-5%
C1805	0893079	CERAMIC DISC 0.01UF+80-20% 50V	L1805	5121284	COIL 3.3UH
C1807	0880019	POLYESTER FILM 0.33UF+-10% 50V	L1851L	5159113	COIL, CHOKE 8.2MH
C1808	0893083	CHIP CERAMIC 0.033UF 50V	L1851R	5159113	COIL, CHOKE 8.2MH
C1809	0209932	CERAMIC CHIP 15PF+-5% 50V			CRYSTAL
C1810	0209933	CERAMIC CHIP 18PF+-5% 50V			
C1812	0893079	CERAMIC DISC 0.01UF+80-20% 50V			
C1814	0893027	CERAMIC CHIP 0.1UF+-10% 25V			
C1815	0209896	CERAMIC CHIP 47PF+-5% 50V			
C1816	0800279	CAPACITOR 1.0UF+-20% 50V			
C1817	0893079	CERAMIC DISC 0.01UF+80-20% 50V	X1801	BP10821	CRYSTAL
C1819	0893079	CERAMIC DISC 0.01UF+80-20% 50V			MISCELLANEOUS
C1821	0800291	ELECTROLYTIC 10UF 16V			
C1822	0800316	ELECTROLYTIC 47UF 10V	BL1801	BM00154R	COIL

SYMBOL NO	P-NO	DESCRIPTION	SYMBOL NO	P-NO	DESCRIPTION
BL1802	BM00154R	COIL			
		A2 BOARD (FOR VPS)			
		CAPACITORS			CAPACITORS
C1857	0800185	ELECTROLYTIC 47UF 6.3V	C1701	0800185	ELECTROLYTIC 47UF 6.3V
C1858	0890043	CERAMIC DISC 0.01UF+-20% 16V	C1702	0890045	CERAMIC DISC 0.047UF+80-20% 50V
C1860	0800176	ELECTROLYTIC 2.2UF 50V	C1703	0890045	CERAMIC DISC 0.047UF+80-20% 50V
C1861	0800176	ELECTROLYTIC 2.2UF 50V	C1704	0890045	CERAMIC DISC 0.047UF+80-20% 50V
C1862	0800178	ELECTROLYTIC 4.7UF 35V	C1705	0890035	CERAMIC DISC 1000PF+-10% 50V
C1863	0800178	ELECTROLYTIC 4.7UF 35V	C1706	0800185	ELECTROLYTIC 47UF 6.3V
C1864	0800015	ELECTROLYTIC 10UF 16V	C1707	0800112	ELECTROLYTIC 2.2UF 50V
C1865	0800179	ELECTROLYTIC 10UF 16V			
C1871	0800176	ELECTROLYTIC 2.2UF 50V			RESISTORS
C1872	0800176	ELECTROLYTIC 2.2UF 50V	R1701	0700036	CARBON FILM 470 OHM+-5% 1/8W
C1873	AJ10176R	CERAMIC CAPACITOR 5.0PF+-0.25% 50V	R1702	0700036	CARBON FILM 470 OHM+-5% 1/8W
C1874	0890043	CERAMIC DISC 0.01UF+-20% 16V	R1703	0700038	CARBON FILM 680 OHM+-5% 1/8W
C1876	0890043	CERAMIC DISC 0.01UF+-20% 16V	R1704	0700049	CARBON FILM 4.7KOHM+-5% 1/8W
C1879	0800176	ELECTROLYTIC 2.2UF 50V	R1705	0700067	CARBON FILM 100KOHM+-5% 1/8W
C1881	0890045	CERAMIC DISC 0.047UF+80-20% 50V	R1719	0700054	CARBON FILM 10KOHM+-5% 1/8W
C1882	0890046	CERAMIC DISC 0.1UF+80-20% 50V	R1720	0700051	CARBON FILM 5.6KOHM+-5% 1/8W
C1890	0890043	CERAMIC DISC 0.01UF+-20% 16V	R1721	0700039	CARBON FILM 820 OHM+-5% 1/8W
C1891	0890043	CERAMIC DISC 0.01UF+-20% 16V	R1722	0700048	CARBON FILM 3.9KOHM+-5% 1/8W
C1895	0890025	CERAMIC DISC 180PF+-10% 50V	R1723	0700037	CARBON FILM 560 OHM+-5% 1/8W
C1896	0800187	ELECTROLYTIC 100UF 6.3V	R1724	0700047	CARBON FILM 3.3KOHM+-5% 1/8W
C1897	0890036	CERAMIC DISC 1500PF+-20% 16V	R1725	0700045	CARBON FILM 2.2KOHM+-5% 1/8W
C1898	0800179	ELECTROLYTIC 10UF 16V	R1726	0700035	CARBON FILM 390 OHM+-5% 1/8W
C1899	0890046	CERAMIC DISC 0.1UF+80-20% 50V	R1727	0700044	CARBON FILM 1.8KOHM+-5% 1/8W
		RESISTORS	R1728	0700054	CARBON FILM 10KOHM+-5% 1/8W
R1864	0700034	CARBON FILM 330 OHM+-5% 1/8W	R1729	0700049	CARBON FILM 4.7KOHM+-5% 1/8W
R1865	0700034	CARBON FILM 330 OHM+-5% 1/8W	R1730	0700049	CARBON FILM 4.7KOHM+-5% 1/8W
R1870	0700038	CARBON FILM 680 OHM+-5% 1/8W	R1731	0700049	CARBON FILM 4.7KOHM+-5% 1/8W
R1871	0700037	CARBON FILM 560 OHM+-5% 1/8W	R1732	0700063	CARBON FILM 47KOHM+-5% 1/8W
R1872	0700031	CARBON FILM 180 OHM+-5% 1/8W	R1733	0700033	CARBON FILM 270 OHM+-5% 1/8W
R1873	0700049	CARBON FILM 4.7KOHM+-5% 1/8W	R1735	0700033	CARBON FILM 270 OHM+-5% 1/8W
R1874	0700037	CARBON FILM 560 OHM+-5% 1/8W			
R1875	0700028	CARBON FILM 120 OHM+-5% 1/8W			SEMI-CONDUCTORS
R1876	0700028	CARBON FILM 120 OHM+-5% 1/8W	D1701	5339071	DIODE 1SS119
R1877	0700049	CARBON FILM 4.7KOHM+-5% 1/8W	D1702	CH11171M	DIODE AK04
R1878	0700059	CARBON FILM 27KOHM+-5% 1/8W	IC1701	CZ10182	IC BU9716AK (HEPM)
R1899	0700059	CARBON FILM 27KOHM+-5% 1/8W	LD1701	CH11141R	DIODE SEL6414E (HEPM)
		SEMI-CONDUCTORS	LD1702	CH11141R	DIODE SEL6414E (HEPM)
IC1871	CK14551	IC TDA9840T	LD1703	CH11141R	DIODE SEL6414E (HEPM)
IC1872	1346191	IC TDA9821	LD1704	CH11141R	DIODE SEL6414E (HEPM)
		COILS	LD1705	CH11141R	DIODE SEL6414E (HEPM)
L1871	0770057	CHOKE COIL 100UH+-5%	LD1707A	CH11143R	DIODE SEL6914A (HEPM)
L1872	5159111	CHOKE COIL 5600UH	LD1708A	CH11142R	DIODE SEL6214S
		CRYSTAL	Q1702	5327063	TRANSISTOR 2SC1740S
X1871	BP10571	CRYSTAL	Q1703	CF10851R	TRANSISTOR DTC124ESA (HEPM)
		MISCELLANEOUS	Q1704	CF10851R	TRANSISTOR DTC124ESA (HEPM)
CF1871	5160561	FILTER	Q1706	CF10851R	TRANSISTOR DTC124ESA (HEPM)
CF1872	5160562	FILTER			
		LCJ BOARD (FOR FX880E)			
					COIL
			L1701	0770057	CHOKE COIL 100UH+-5%
					MISCELLANEOUS
			IR1701	CJ10412	MODULE TSOP1738TB1 (HEPM)
			JK2501	EQ10163	JACK
			LCD1701	DB10371	DISPLAY, LIQUID CRYSTAL (HEPM)
			LMP1701	DP10223	LIGHT, BACK
			LMP1702	DP10223	LIGHT, BACK
			LMP1703	DP10223	LIGHT, BACK
			LMP1704	DP10223	LIGHT, BACK

SYMBOL NO	P-NO	DESCRIPTION	SYMBOL NO	P-NO	DESCRIPTION
S1710	5634884	SWITCH	S2703	FE10431	SWITCH
S1711	5634884	SWITCH	S2708	FE10431	SWITCH
S1712	5634884	SWITCH	S2709	FE10431	SWITCH
S1713	5634884	SWITCH	S2721	FH10231	SWITCH
S1714	5634884	SWITCH			
S1715	5634884	SWITCH			LCD BOARD(EXCEPT FOR FX880E)
S1719	5634884	SWITCH			CAPACITORS
		FST BOARD(FOR FX880E)			
		CAPACITORS			
C2701	AJ10241R	CERAMIC CAPACITOR 100PF+-10% 50V	C1701	0800185	ELECTROLYTIC 47UF 6.3V
C2702	AJ10241R	CERAMIC CAPACITOR 100PF+-10% 50V	C1702	0890103	CERAMIC DISC 47000PF+80-20% 12V
C2703	0890046	CERAMIC DISC 0.1UF+80-20% 50V	C1703	0890103	CERAMIC DISC 47000PF+80-20% 12V
			C1704	0890103	CERAMIC DISC 47000PF+80-20% 12V
C2704	0890044	CERAMIC DISC 0.022UF+80-20% 25V	C1705	0890035	CERAMIC DISC 1000PF+-10% 50V
			C1706	0800185	ELECTROLYTIC 47UF 6.3V
		RESISTORS			RESISTORS
R2701	0700057	CARBON FILM 18KOHM+-5% 1/8W	R1701	0700054	CARBON FILM 10KOHM+-5% 1/8W
R2702	0700054	CARBON FILM 10KOHM+-5% 1/8W	R1702	0700063	CARBON FILM 47KOHM+-5% 1/8W
R2703	0700057	CARBON FILM 18KOHM+-5% 1/8W	R1703	0700032	CARBON FILM 220 OHM+-5% 1/8W[5U, 5NV, 4]
R2704	0700054	CARBON FILM 10KOHM+-5% 1/8W	R1703	0700039	CARBON FILM 820 OHM+-5% 1/8W[6U, 6N, 3U, 3V]
R2705	0700029	CARBON FILM 150 OHM+-5% 1/8W	R1704	0700032	CARBON FILM 220 OHM+-5% 1/8W[5U, 5NV, 4]
R2706	0700043	CARBON FILM 1.5KOHM+-5% 1/8W	R1704	0700039	CARBON FILM 820 OHM+-5% 1/8W[6U, 6N, 3U, 3V]
R2707	0700032	CARBON FILM 220 OHM+-5% 1/8W	R1708	0700049	CARBON FILM 4.7KOHM+-5% 1/8W
R2708	0700041	CARBON FILM 1.0KOHM+-5% 1/8W	R1709	0700038	CARBON FILM 680 OHM+-5% 1/8W
R2710	0700041	CARBON FILM 1.0KOHM+-5% 1/8W	R1710	0700038	CARBON FILM 680 OHM+-5% 1/8W
R2712	0700041	CARBON FILM 1.0KOHM+-5% 1/8W	R1711	0700049	CARBON FILM 4.7KOHM+-5% 1/8W
R2713	0700039	CARBON FILM 820 OHM+-5% 1/8W	R1712	0700049	CARBON FILM 4.7KOHM+-5% 1/8W
R2715	0700041	CARBON FILM 1.0KOHM+-5% 1/8W	R1713	0700049	CARBON FILM 4.7KOHM+-5% 1/8W
R2717	0700067	CARBON FILM 100KOHM+-5% 1/8W	R1714	0700033	CARBON FILM 270 OHM+-5% 1/8W
R2718	0700067	CARBON FILM 100KOHM+-5% 1/8W			SEMI-CONDUCTORS
R2719	0700041	CARBON FILM 1.0KOHM+-5% 1/8W	D1701	5339071	DIODE 1SS119
R2720	0700041	CARBON FILM 1.0KOHM+-5% 1/8W	LD1701	CH11144	DIODE SEL6414E (HEPM)
R2721	0700067	CARBON FILM 100KOHM+-5% 1/8W	LD1702	CH11144	DIODE SEL6414E (HEPM)
R2722	0700054	CARBON FILM 10KOHM+-5% 1/8W	LD1703	CH11144	DIODE SEL6414E (HEPM)
R2723	0700063	CARBON FILM 47KOHM+-5% 1/8W	LD1704	CH11144	DIODE SEL6414E (HEPM)
R2724	0700049	CARBON FILM 4.7KOHM+-5% 1/8W	IC1701	CZ10182	IC BU9716AK (HEPM)
R2725	0700049	CARBON FILM 4.7KOHM+-5% 1/8W	Q1701	5327071	TRANSISTOR DTC124ES
R2727	0700063	CARBON FILM 47KOHM+-5% 1/8W	Q1702	5327071	TRANSISTOR DTC124ES
R2728	0700063	CARBON FILM 47KOHM+-5% 1/8W			MISCELLANEOUS
R2729	0700052	CARBON FILM 6.8KOHM+-5% 1/8W	IR1701	CJ10411	MODULE TSOP1738SB1
R2730	0700067	CARBON FILM 100KOHM+-5% 1/8W	LCD1701	DB10341	FLOURESENT DISPLAY
R2731	0700033	CARBON FILM 270 OHM+-5% 1/8W	LMP1701	DP10221	LIGHT, BACK
		SEMI-CONDUCTORS	LMP1702	DP10221	LIGHT, BACK
IC2701	CK12311	IC UPD17103GS-752	LMP1703	DP10221	LIGHT, BACK
LD2701	CH11131	DIODE SID2K10C LF60 (HEPM)	S1701	5634884	SWITCH
LD2702	CH10472R	DIODE SEL6410E			SHU BOARD(FOR FX860E/MX835E)
Q2701	CF10852R	TRANSISTOR DTC144ESA			RESISTORS
Q2702	CF10852R	TRANSISTOR DTC144ESA			
Q2703	CF10851R	TRANSISTOR DTC124ESA (HEPM)	R2701	0700057	CARBON FILM 18KOHM+-5% 1/8W
		CRYSTAL	R2702	0700054	CARBON FILM 10KOHM+-5% 1/8W
X2701	BP10451G	CRYSTAL	R2703	0700057	CARBON FILM 18KOHM+-5% 1/8W
		MISCELLANEOUS	R2704	0700054	CARBON FILM 10KOHM+-5% 1/8W
S2701	FE10431	SWITCH	R2705	0700041	CARBON FILM 1.0KOHM+-5% 1/8W
S2702	FE10431	SWITCH	R2706	0700039	CARBON FILM 820 OHM+-5% 1/8W
			R2707	0700041	CARBON FILM 1.0KOHM+-5% 1/8W
			R2708	0700041	CARBON FILM 1.0KOHM+-5% 1/8W
			R2709	0700027	CARBON FILM 100 OHM+-5% 1/8W

SYMBOL NO	P-NO	DESCRIPTION	SYMBOL NO	P-NO	DESCRIPTION
R2710	0700041	CARBON FILM 1.0KOHM+-5% 1/8W	C4314	0202163	CERAMIC CAPACITOR 560PF+-5% 50V
R2711	0700032	CARBON FILM 220 OHM+-5% 1/8W	C4315	0202163	CERAMIC CAPACITOR 560PF+-5% 50V
R2712	0700043	CARBON FILM 1.5KOHM+-5% 1/8W	C4316	0893062	CERAMIC CHIP 1UF+80-20% 16V
R2713	0700029	CARBON FILM 150 OHM+-5% 1/8W	C4317	0209942	CERAMIC CHIP 100PF+-5% 50V
R2714	0700044	CARBON FILM 1.8KOHM+-5% 1/8W	C4318	0800153	ELECTROLYTIC 470UF 6.3V [8U, 8N]
R2715	0700045	CARBON FILM 2.2KOHM+-5% 1/8W	C4318	0800351	ELECTROLYTIC 470UF 6.3V [EXCEPT 8U, 8N]
R2716	0700035	CARBON FILM 390 OHM+-5% 1/8W	C4319	0893079	CERAMIC DISC 0.01UF+80-20% 50V
R2717	0700047	CARBON FILM 3.3KOHM+-5% 1/8W	C4320	0800135	ELECTROLYTIC 33UF 16V
R2718	0700048	CARBON FILM 3.9KOHM+-5% 1/8W	C4321	0890043	CERAMIC DISC 0.01UF+-20% 16V
R2719	0700037	CARBON FILM 560 OHM+-5% 1/8W	C4322	0800365	ELECTROLYTIC 2200UF 6.3V
R2720	0700034	CARBON FILM 330 OHM+-5% 1/8W	C4323	0893048	CERAMIC CHIP 0.022UF+-10% 50V
SEMI-CONDUCTOR			C4324	0893086	CERAMIC CHIP 0.1UF+80-20% 50V
LD2703	CH10472	DIODE SEL6410E	C4329	0890043	CERAMIC DISC 0.01UF+-20% 16V [8U, 8N]
Q2701	5327071	TRANSISTOR DTC124ES	C4329	0893014	CERAMIC CHIP 0.01UF+-10% 25V [EX 8U, 8N]
MISCELLANEOUS			C4401	0800184	ELECTROLYTIC 33UF 25V
S2701	FH10271	SWITCH	C4402	0893079	CERAMIC DISC 0.01UF+80-20% 50V
S2702	5634884	SWITCH	C4403	0893031	CERAMIC CHIP 1000PF+-10% 50V
S2703	5634884	SWITCH	C4404	0893031	CERAMIC CHIP 1000PF+-10% 50V
S2704	5634884	SWITCH	C4405	0893079	CERAMIC DISC 0.01UF+80-20% 50V
S2705	5634884	SWITCH	C4406	0893079	CERAMIC DISC 0.01UF+80-20% 50V
S2706	5634884	SWITCH	C4407	0893048	CERAMIC CHIP 0.022UF+-10% 50V
S2707	5634884	SWITCH	C4409	0893048	CERAMIC CHIP 0.022UF+-10% 50V
S2708	5634884	SWITCH	C4410	0893004	CERAMIC CHIP 0.047UF+-10% 16V
S2709	5634884	SWITCH	C4411	0800109	ELECTROLYTIC 1.0UF 50V
NAC BOARD (FOR FX880E), NCM BOARD (FOR FX860E/MX835E)			C4412	0209947	CERAMIC DISC 270PF+-5% 50V
CAPACITORS			C4413	0893062	CERAMIC CHIP 1UF+80-20% 16V
C4103	0800109	ELECTROLYTIC 1.0UF 50V	C4414	0209949	CERAMIC DISC 390PF+-5% 50V
C4104	0209927	CERAMIC CHIP 7.0PF+-0.5% 50V	C4415	0893027	CERAMIC CHIP 0.1UF+-10% 25V
C4105	0209933	CERAMIC CHIP 18PF+-5% 50V	C4417	0209937	CERAMIC CHIP 39PF+-5% 50V
C4106	0209936	CERAMIC CHIP 33PF+-5% 50V	C4418	0800138	ELECTROLYTIC 47UF 6.3V
C4107	0209935	CERAMIC CHIP 27PF+-5% 50V	C4419	0893027	CERAMIC CHIP 0.1UF+-10% 25V
C4110	0800122	ELECTROLYTIC 10UF 16V	C4420	0209946	CERAMIC CHIP 220PF+-5% 50V
C4111	0893093	CERAMIC CHIP 2.2UF+80-20% 16V	C4421	0893062	CERAMIC CHIP 1UF+80-20% 16V
C4112	0893093	CERAMIC CHIP 2.2UF+80-20% 16V	C4422	0209944	CERAMIC CHIP 150PF+-5% 50V
C4120	0209897	CERAMIC CHIP 56PF+-5% 50V	C4423	0800139	ELECTROLYTIC 47UF 10V
C4121	0893014	CERAMIC CHIP 0.01UF+-10% 25V	C4424	0800138	ELECTROLYTIC 47UF 6.3V
C4123	0800135	ELECTROLYTIC 33UF 16V	C4425	0893048	CERAMIC CHIP 0.022UF+-10% 50V
C4124	0893014	CERAMIC CHIP 0.01UF+-10% 25V	RESISTORS		
C4128	0800122	ELECTROLYTIC 10UF 16V	R4101	0103836	CHIP RESISTOR 270 OHM+-5% 0.1W
C4129	0800109	ELECTROLYTIC 1.0UF 50V	R4105	0103853	CHIP RESISTOR 6.8KOHM+-5% 0.1W
C4130	0893086	CERAMIC CHIP 0.1UF+80-20% 50V	R4106	0103846	CHIP RESISTOR 1.8KOHM+-5% 0.1W
C4131	0800128	ELECTROLYTIC 22UF 16V	R4108	0103875	CHIP RESISTOR 470KOHM+-5% 0.1W
C4132	0207446	ELECTROLYTIC 10UF 16V	R4113	0103831	CHIP RESISTOR 100 OHM+-5% 0.1W
C4216	0893079	CERAMIC DISC 0.01UF+80-20% 50V	R4114	0103855	CHIP RESISTOR 10KOHM+-5% 0.1W
C4217	0800122	ELECTROLYTIC 10UF 16V	R4123	0103847	CHIP RESISTOR 2.2KOHM+-5% 0.1W
C4301	0893048	CERAMIC CHIP 0.022UF+-10% 50V	R4129	0103831	CHIP RESISTOR 100 OHM+-5% 0.1W
C4302	0893062	CERAMIC CHIP 1UF+80-20% 16V	R4130	0103842	CHIP RESISTOR 820 OHM+-5% 0.1W
C4303	0893031	CERAMIC CHIP 1000PF+-10% 50V	R4132	0103841	CHIP RESISTOR 680 OHM+-5% 0.1W
C4304	0209945	CERAMIC DISC 180PF+-5% 50V	R4133	0103841	CHIP RESISTOR 680 OHM+-5% 0.1W
C4305	0893062	CERAMIC CHIP 1UF+80-20% 16V [8U, 8N]	R4134	0103847	CHIP RESISTOR 2.2KOHM+-5% 0.1W
C4305	0893086	CERAMIC CHIP 0.1UF+80-20% 50V [EX 8U, 8N]	R4137	0104124	CHIP RESISTOR 12KOHM+-1% 0.1W
C4307	0893079	CERAMIC DISC 0.01UF+80-20% 50V	R4138	0104112	CHIP RESISTOR 47KOHM+-1% 0.1W
C4308	0202163	CERAMIC CAPACITOR 560PF+-5% 50V	R4140	0103859	CHIP RESISTOR 22KOHM+-5% 0.1W
C4309	0800115	ELECTROLYTIC 3.3UF 50V	R4141	0103857	CHIP RESISTOR 15KOHM+-5% 0.1W
C4310	0893037	CERAMIC CHIP 3300PF+-10% 50V	R4148	0103851	CHIP RESISTOR 4.7KOHM+-5% 0.1W
C4311	0893062	CERAMIC CHIP 1UF+80-20% 16V	R4149	0103851	CHIP RESISTOR 4.7KOHM+-5% 0.1W
C4312	0800122	ELECTROLYTIC 10UF 16V	R4215	0103831	CHIP RESISTOR 100 OHM+-5% 0.1W
C4313	0893086	CERAMIC CHIP 0.1UF+80-20% 50V	R4216	0103867	CHIP RESISTOR 100KOHM+-5% 0.1W
			R4301	0103847	CHIP RESISTOR 2.2KOHM+-5% 0.1W
			R4303	0103855	CHIP RESISTOR 10KOHM+-5% 0.1W
			R4304	0103843	CHIP RESISTOR 1KOHM+-5% 0.1W
			R4305	0103847	CHIP RESISTOR 2.2KOHM+-5% 0.1W
			R4306	0103847	CHIP RESISTOR 2.2KOHM+-5% 0.1W

SYMBOL NO	P-NO	DESCRIPTION	SYMBOL NO	P-NO	DESCRIPTION
R4307	0103847	CHIP RESISTOR 2.2KOHM+-5% 0.1W	R4456	0103849	CHIP RESISTOR 3.3KOHM+-5% 0.1W
R4308	0103855	CHIP RESISTOR 10KOHM+-5% 0.1W	R4457	0103847	CHIP RESISTOR 2.2KOHM+-5% 0.1W
R4309	0103847	CHIP RESISTOR 2.2KOHM+-5% 0.1W	R4458	0103850	CHIP RESISTOR 3.9KOHM+-5% 0.1W
R4310	0700046	CARBON FILM 2.7KOHM+-5% 1/8W [8U, 8N]	R4459	0103847	CHIP RESISTOR 2.2KOHM+-5% 0.1W
R4310	0103848	CHIP RESISTOR 2.7KOHM+-5% 0.1W[EX 8U, 8N]	R4460	0103847	CHIP RESISTOR 2.2KOHM+-5% 0.1W
R4316	0103843	CHIP RESISTOR 1KOHM+-5% 0.1W	R4461	0103847	CHIP RESISTOR 2.2KOHM+-5% 0.1W
R4317	0103839	CHIP RESISTOR 470 OHM+-5% 0.1W	R4462	0103847	CHIP RESISTOR 2.2KOHM+-5% 0.1W
R4318	0103855	CHIP RESISTOR 10KOHM+-5% 0.1W	R4463	0103871	CHIP RESISTOR 220KOHM+-5% 0.1W
R4322	0103838	CHIP RESISTOR 390 OHM+-5% 0.1W	R4464	0103871	CHIP RESISTOR 220KOHM+-5% 0.1W
R4323	0103843	CHIP RESISTOR 1KOHM+-5% 0.1W	R4465	0103867	CHIP RESISTOR 100KOHM+-5% 0.1W
R4324	0103855	CHIP RESISTOR 10KOHM+-5% 0.1W	R4466	0103855	CHIP RESISTOR 10KOHM+-5% 0.1W
R4328	0103843	CHIP RESISTOR 1KOHM+-5% 0.1W	R4467	0103861	CHIP RESISTOR 33KOHM+-5% 0.1W
R4329	0103843	CHIP RESISTOR 1KOHM+-5% 0.1W			
R4330	0103843	CHIP RESISTOR 1KOHM+-5% 0.1W	SEMI-CONDUCTORS		
R4331	0103831	CHIP RESISTOR 100 OHM+-5% 0.1W	D4101	5339071	DIODE 1SS119
R4335	0103851	CHIP RESISTOR 4.7KOHM+-5% 0.1W	D4102	5339071	DIODE 1SS119
R4336	0103851	CHIP RESISTOR 4.7KOHM+-5% 0.1W	D4301	CH11171M	DIODE AK04
R4337	0103861	CHIP RESISTOR 33KOHM+-5% 0.1W	D4302	5339071	DIODE 1SS119
R4338	0105147	CHIP RESISTOR 100KOHM+-1% 0.1W	D4303	5339071	DIODE 1SS119
R4339	0103866	CHIP RESISTOR 82KOHM+-5% 0.1W	D4401	CH11171M	DIODE AK04
R4340	0103843	CHIP RESISTOR 1KOHM+-5% 0.1W	D4402	5339551	DIODE SS1J4
R4341	0103869	CHIP RESISTOR 150KOHM+-5% 0.1W	D4403	5339071	DIODE 1SS119
R4342	0700027	CARBON FILM 100 OHM+-5% 1/8W	IC4101	CK15468R	IC MB90089-214FP (HEPM)
R4344	0103843	CHIP RESISTOR 1KOHM+-5% 0.1W	IC4102	CK13503R	IC NJM2535M
R4345	0103859	CHIP RESISTOR 22KOHM+-5% 0.1W	IC4103	1352032	IC NJM2249M
R4346	0103859	CHIP RESISTOR 22KOHM+-5% 0.1W	IC4301	CP12216	IC M37272M8-143SP (HEPM) [8U, 8N]
R4347	0103838	RESISTOR CHIP 390 OHM+-5% 0.1W	IC4301	CP12711	IC M37272M8-140SP (HEPM) [6U, 6NV]
R4348	0103840	CHIP RESISTOR 560 OHM+-5% 0.1W	IC4301	CP12218	IC M37272M8-117SP (HEPM) [3U, 3V]
R4349	0103834	CHIP RESISTOR 180 OHM+-5% 0.1W	IC4302	CK14883	IC AT24C16N-10SC [8N, 6U, 6NV, 3U, 3V]
R4350	0103840	CHIP RESISTOR 560 OHM+-5% 0.1W	IC4302	CK14886	IC AT24C64N-10SC [8U]
R4351	0103879	CHIP RESISTOR 1MOHM+-5% 0.1W	IC4303	CK19602R	IC RN5VS45AA
R4352	0103839	CHIP RESISTOR 470 OHM+-5% 0.1W	IC4304	CK11252	IC MM1108XFFE
R4353	0103847	CHIP RESISTOR 2.2KOHM+-5% 0.1W	IC4401	CP12223	IC M34510M2-305SP
R4354	0103852	CHIP RESISTOR 5.6KOHM+-5% 0.1W	IC4402	CK19602R	IC RN5VS45AA
R4355	0103871	CHIP RESISTOR 220KOHM+-5% 0.1W	IC4404	CK15392R	IC NJM2082M
R4363	0103845	CHIP RESISTOR 1.5KOHM+-5% 0.1W	IC4405	CK23021R	IC TC4066BF
R4364	0103847	CHIP RESISTOR 2.2KOHM+-5% 0.1W	Q4104	CA10672R	TRANSISTOR 2SD601A
R4365	0103851	CHIP RESISTOR 4.7KOHM+-5% 0.1W	Q4107	CA10582R	TRANSISTOR 2SB709A
R4368	0103843	CHIP RESISTOR 1KOHM+-5% 0.1W	Q4108	CA10672R	TRANSISTOR 2SD601A
R4369	0103855	CHIP RESISTOR 10KOHM+-5% 0.1W	Q4109	CA10582R	TRANSISTOR 2SB709A
R4370	0700041	CARBON FILM 1.0KOHM+-5% 1/8W	Q4110	CA10672R	TRANSISTOR 2SD601A
R4401	0700041	CARBON FILM 1.0KOHM+-5% 1/8W	Q4111	5326903	TRANSISTOR UN2213
R4403	0103859	CHIP RESISTOR 22KOHM+-5% 0.1W	Q4115	CA10672R	TRANSISTOR 2SD601A
R4408	0103831	CHIP RESISTOR 100 OHM+-5% 0.1W	Q4116	5326903	TRANSISTOR UN2213
R4409	0103831	CHIP RESISTOR 100 OHM+-5% 0.1W	Q4303	CA10672R	TRANSISTOR 2SD601A
R4416	0103843	CHIP RESISTOR 1KOHM+-5% 0.1W	Q4304	CA10672R	TRANSISTOR 2SD601A
R4417	0103851	CHIP RESISTOR 4.7KOHM+-5% 0.1W	Q4305	CA10672R	TRANSISTOR 2SD601A
R4431	0103855	CHIP RESISTOR 10KOHM+-5% 0.1W	Q4306	CA10672R	TRANSISTOR 2SD601A
R4439	0700049	CARBON FILM 4.7KOHM+-5% 1/8W	Q4310	5326903	TRANSISTOR UN2213
R4440	0103851	CHIP RESISTOR 4.7KOHM+-5% 0.1W	Q4313	CA10672R	TRANSISTOR 2SD601A
R4441	0103874	CHIP RESISTOR 390KOHM+-5% 0.1W	Q4314	CA10672R	TRANSISTOR 2SD601A
R4442	0105122	CHIP RESISTOR 56KOHM+-1% 0.1W	Q4410	CA10672R	TRANSISTOR 2SD601A
R4443	0104122	CHIP RESISTOR 33KOHM+-1% 0.1W	Q4411	CA10672R	TRANSISTOR 2SD601A
R4444	0103841	CHIP RESISTOR 680 OHM+-5% 0.1W	Q4412	CA10672R	TRANSISTOR 2SD601A
R4445	0103859	CHIP RESISTOR 22KOHM+-5% 0.1W	Q4413	CA10582R	TRANSISTOR 2SB709A
R4446	0103843	CHIP RESISTOR 1KOHM+-5% 0.1W	Q4414	CA10582R	TRANSISTOR 2SB709A
R4447	0103843	CHIP RESISTOR 1KOHM+-5% 0.1W	Q4415	CA10672R	TRANSISTOR 2SD601A
R4448	0105122	CHIP RESISTOR 56KOHM+-1% 0.1W	Q4416	CA10672R	TRANSISTOR 2SD601A
R4449	0103879	CHIP RESISTOR 1MOHM+-5% 0.1W	Q4417	CA10582R	TRANSISTOR 2SB709A
R4450	0103843	CHIP RESISTOR 1KOHM+-5% 0.1W	Q4418	CA10672R	TRANSISTOR 2SD601A
R4451	0103843	CHIP RESISTOR 1KOHM+-5% 0.1W	Q4419	CA10582R	TRANSISTOR 2SB709A
R4452	0700061	CARBON FILM 33KOHM+-5% 1/8W	ZD4301	5339297	DIODE HZS5C3
R4453	0103863	CHIP RESISTOR 47KOHM+-5% 0.1W			
R4454	0103859	CHIP RESISTOR 22KOHM+-5% 0.1W			
R4455	0103849	CHIP RESISTOR 3.3KOHM+-5% 0.1W			
					COILS


SYMBOL NO	P-NO	DESCRIPTION	SYMBOL NO	P-NO	DESCRIPTION
L4101	5159145	CHOKE COIL 22UH			
L4102	5121289	COIL 22UH			
L4301	0770057	CHOKE COIL 100UH+-5%			
L4302	0770057	CHOKE COIL 100UH+-5%			
L4401	0770057	CHOKE COIL 100UH+-5%			
L4402	5159147	CHOKE COIL 33UH			
CRYSTALS					
X4101	BP10832R	CRYSTAL (HEPM)			
X4301	BP10381R	CRYSTAL			
X4401	BP10731R	CRYSTAL			
MISCELLANEOUS					
BL4301	BZ10471R	CORE			

CHAPTER 6

SCHEMATIC, CIRCUIT BOARD AND BLOCK DIAGRAMS/ MICROPROCESSOR PIN FUNCTION TABLE

Cautions when using schematic diagrams

Caution for safety

The parts marked  are critical for safety. Be sure to use the specified parts to ensure safety when replacing them.

1. Values in schematic diagrams

The values, dielectric strength (power capacitance) and tolerances of the resistors (excluding variable resistors) and capacitors are indicated in the schematic diagrams using abbreviations.

[Resistors]

Item	Indication
Value	No indication ohm K k ohm M M ohm
Tolerance	No indication $\pm 5\%$ (All tolerances other than $\pm 5\%$ are indicated in the schematic diagrams)
Power capacitance	No indication 1/8W (1/16W for leadless resistors without indication) All capacitances other than the above are indicated in the schematic diagrams.

[Capacitors]

Item	Indication
Value	No indication μF P pF
Dielectric strength	No indication 50V (All dielectric strengths other than 50V are indicated in the schematic diagrams.)

[Coils]

Item	Indication
Value	μ μH m mH

Cautions when using circuit board diagrams

1. Identifications of sides A/B in circuit board diagrams

1) Board having a pattern on one side and parts on both sides.

Side A: Shows discrete parts, viewed from the pattern side.

Side B: Shows leadless parts, viewed from the pattern side.

2) Board having patterns on both sides and parts on both sides.

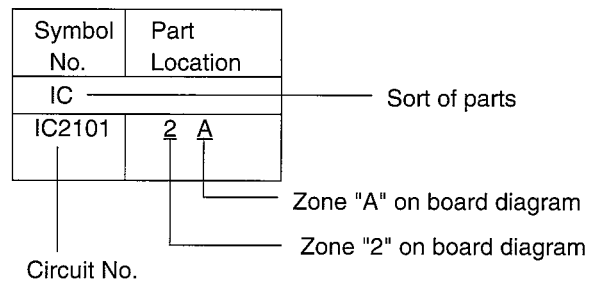
Side A: Shows parts and patterns which can be seen when the case is opened.

Side B: Shows parts and the pattern on the back of side A.

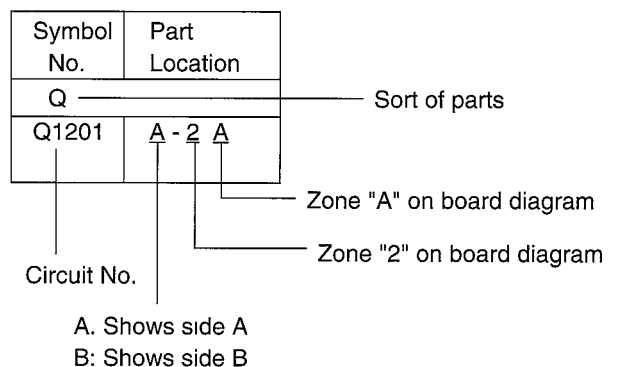
2. Table for indexing locations of parts

This table shows locations of each part on the circuit board diagrams. The locations are indicated using the guide scales on the external lines of diagrams.

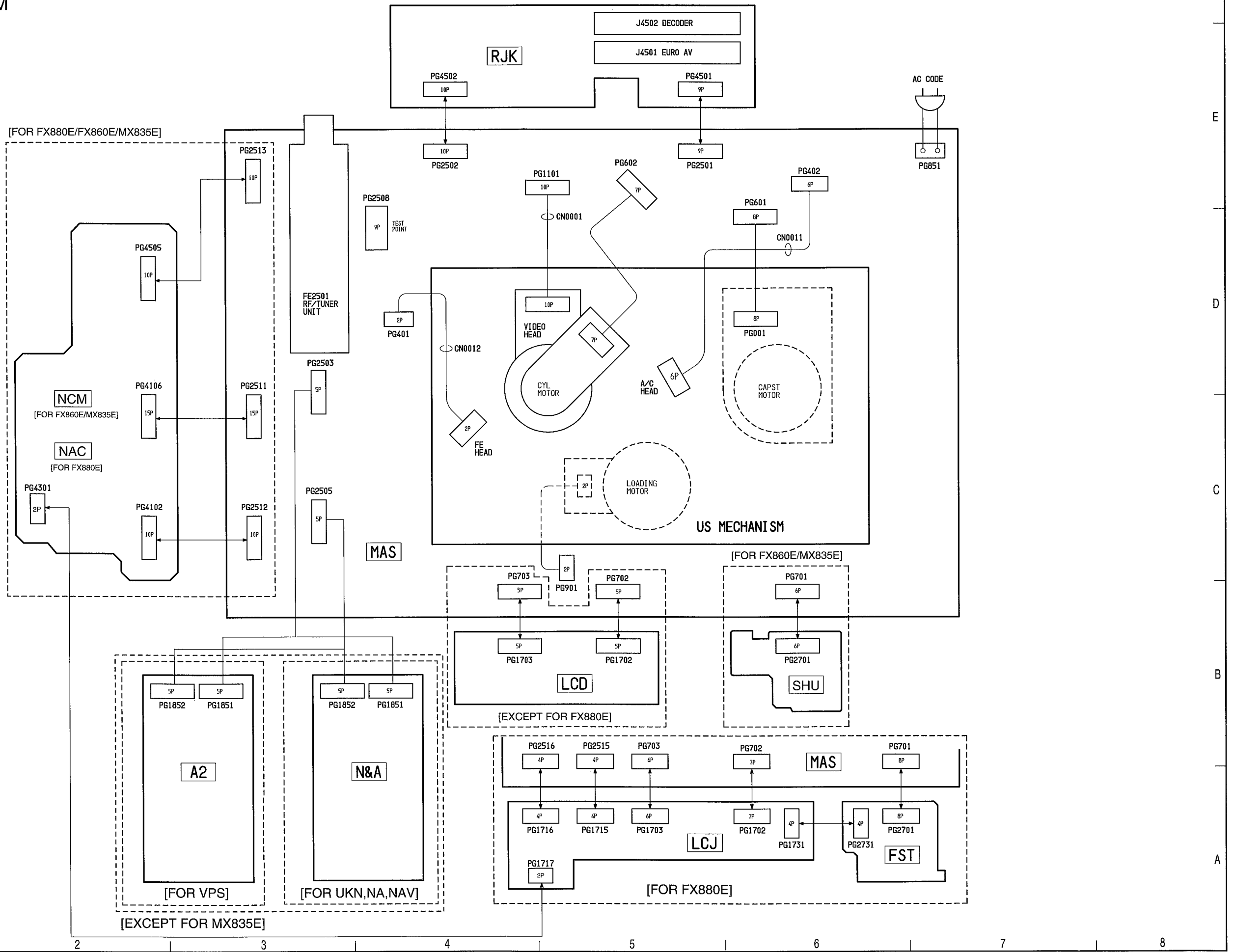
1) In case of one-layer board



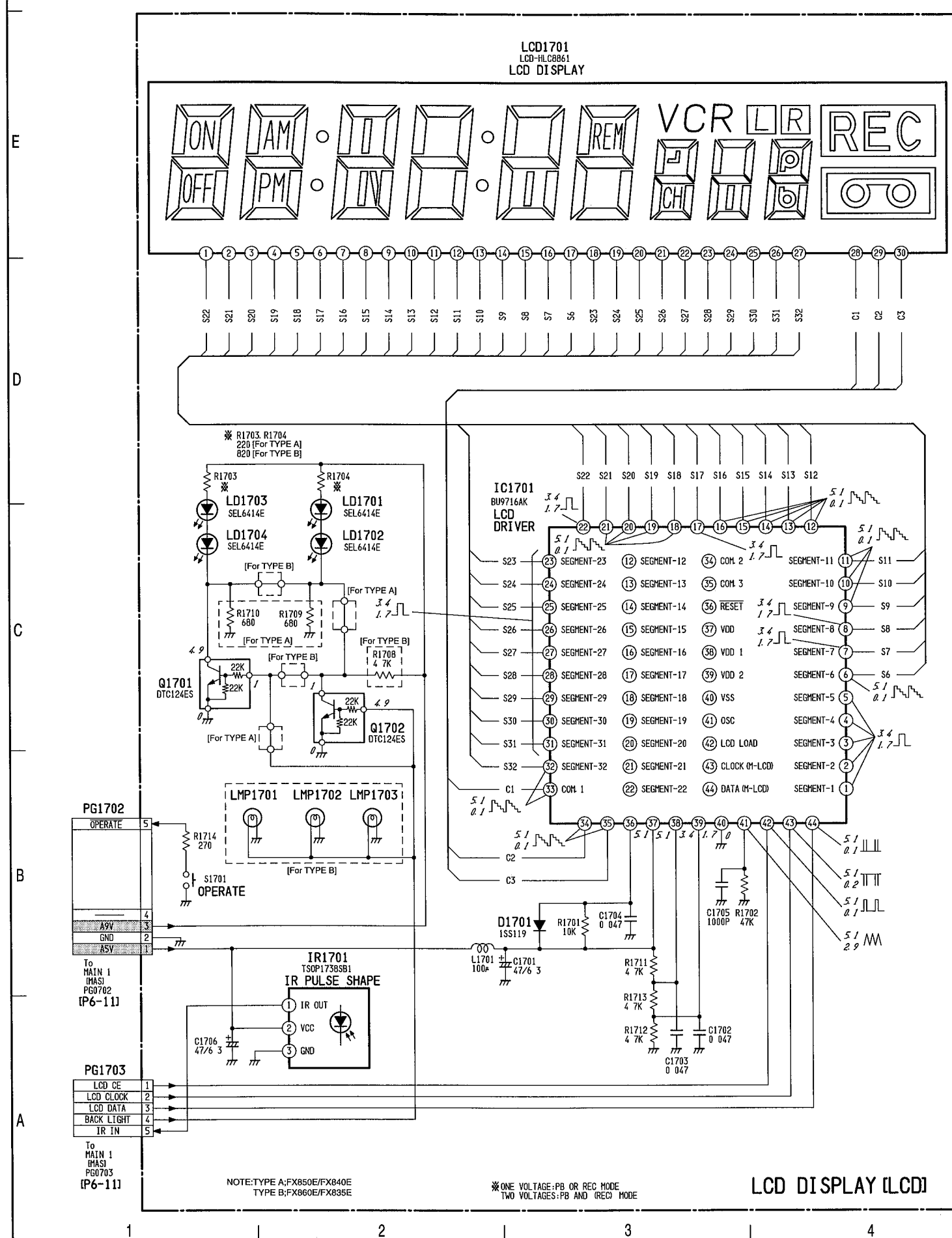
2) In case of side A/B indication board



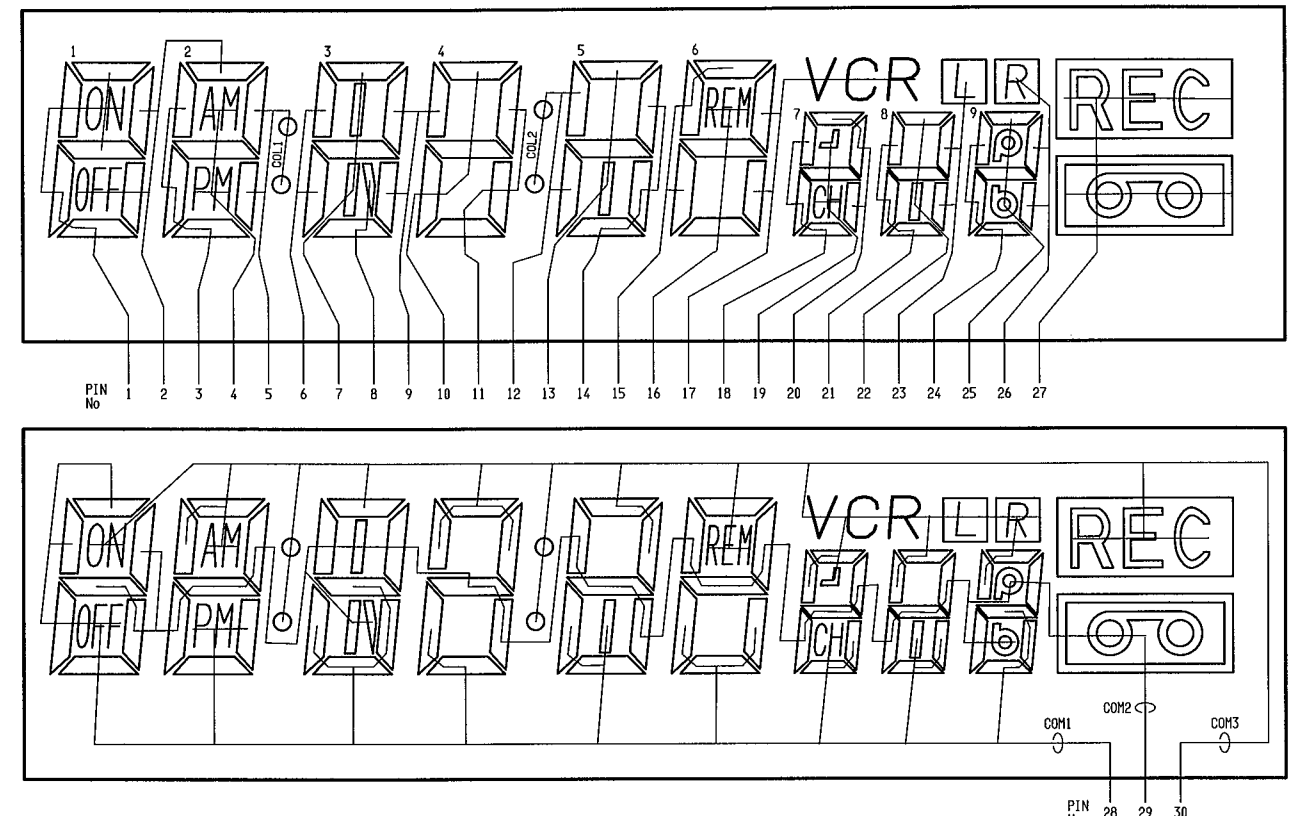
CONNECTION DIAGRAM



LCD DISPLAY [LCD] SCHEMATIC DIAGRAM [EXCEPT FOR VT-FX880E]

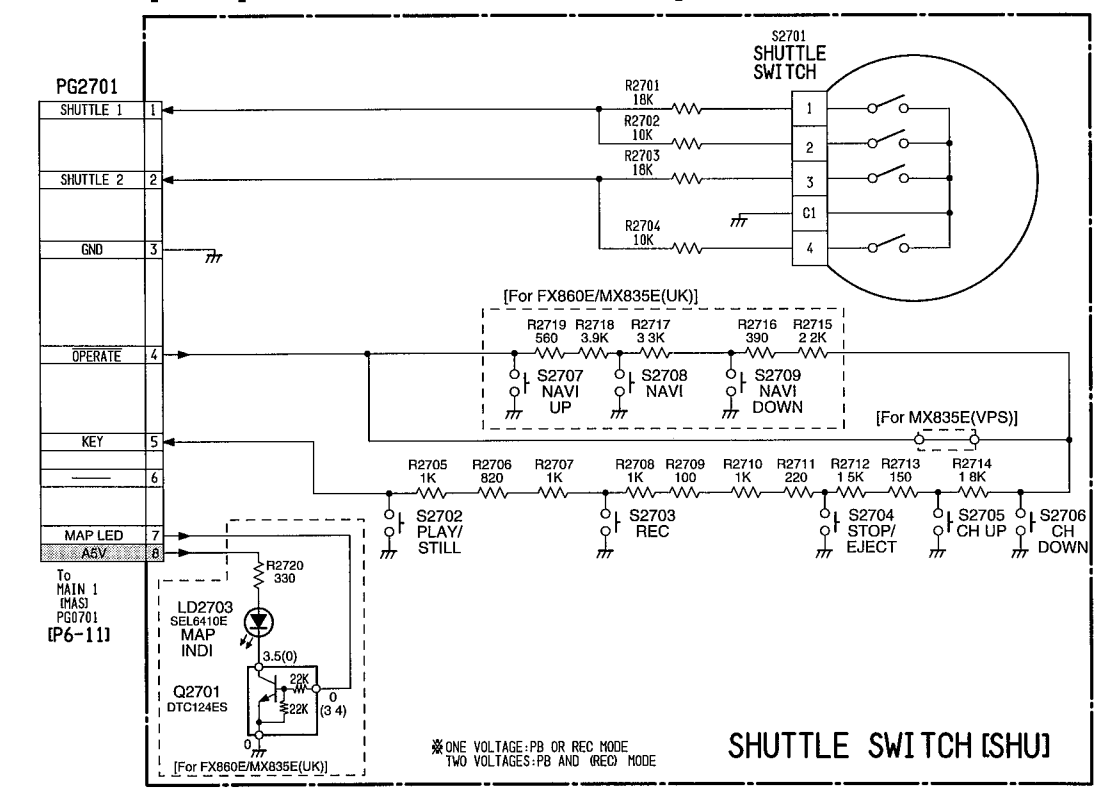


LCD GRID TABLE



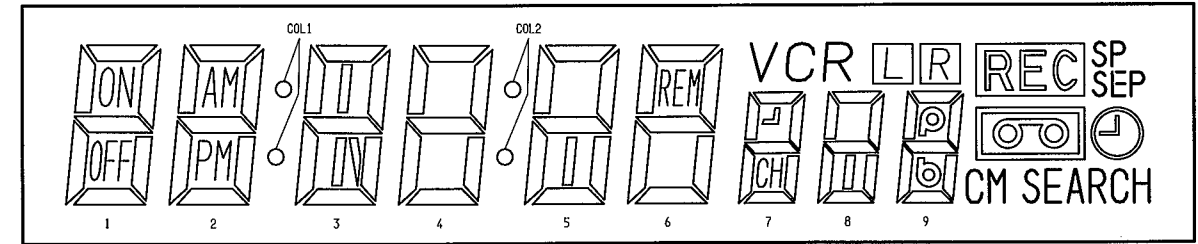
PIN No	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
COM1	1a	2d	PM	2c	3e	3g	3d	3c	4e	4d	5e	5j	5d	6a	6d	6c	7d	CH	7c	8d	8j	8c	9d	9a	9c		COM			
COM2	1s	1bc	2e	2s	2b	3f	3hj	3k	3b	4s	4c	5f	5s	5c	6f	6s	7e	7j	7b	8e	8s	8b	9e	9b			COM			
COM3	ON	2a	2f	AM	COL1		3a		4f	4a	4b	COL2	5a	5b	6a	REM	VCR	7f	7a	8f	8a	L	9f	9a			COM			

SHUTTLE SWITCH [SHU] SCHEMATIC DIAGRAM [FOR VT-FX860E/MX835E]

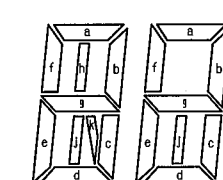


LCD/JACK [LCJ] SCHEMATIC DIAGRAM [FOR VT-FX880E]

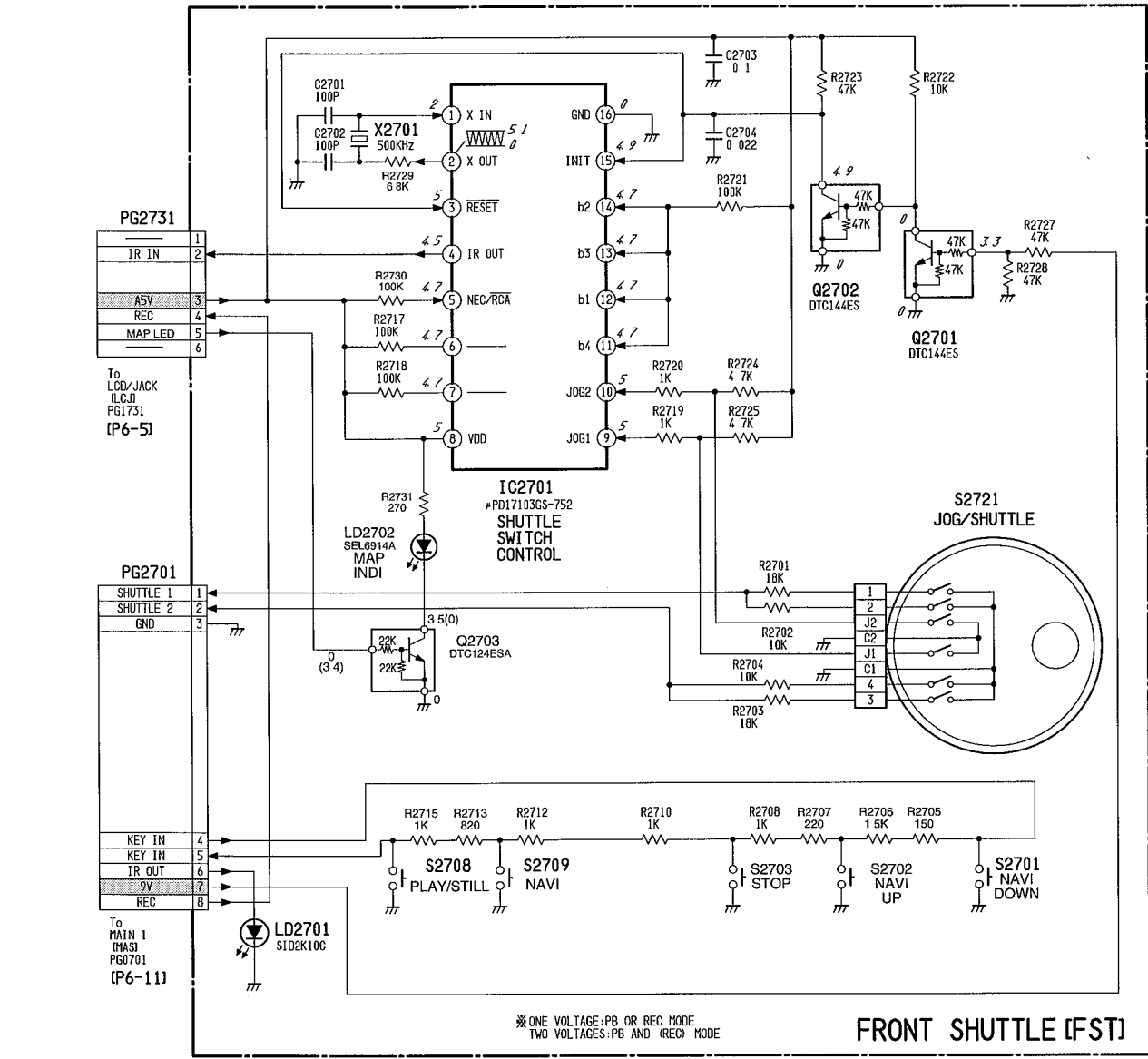
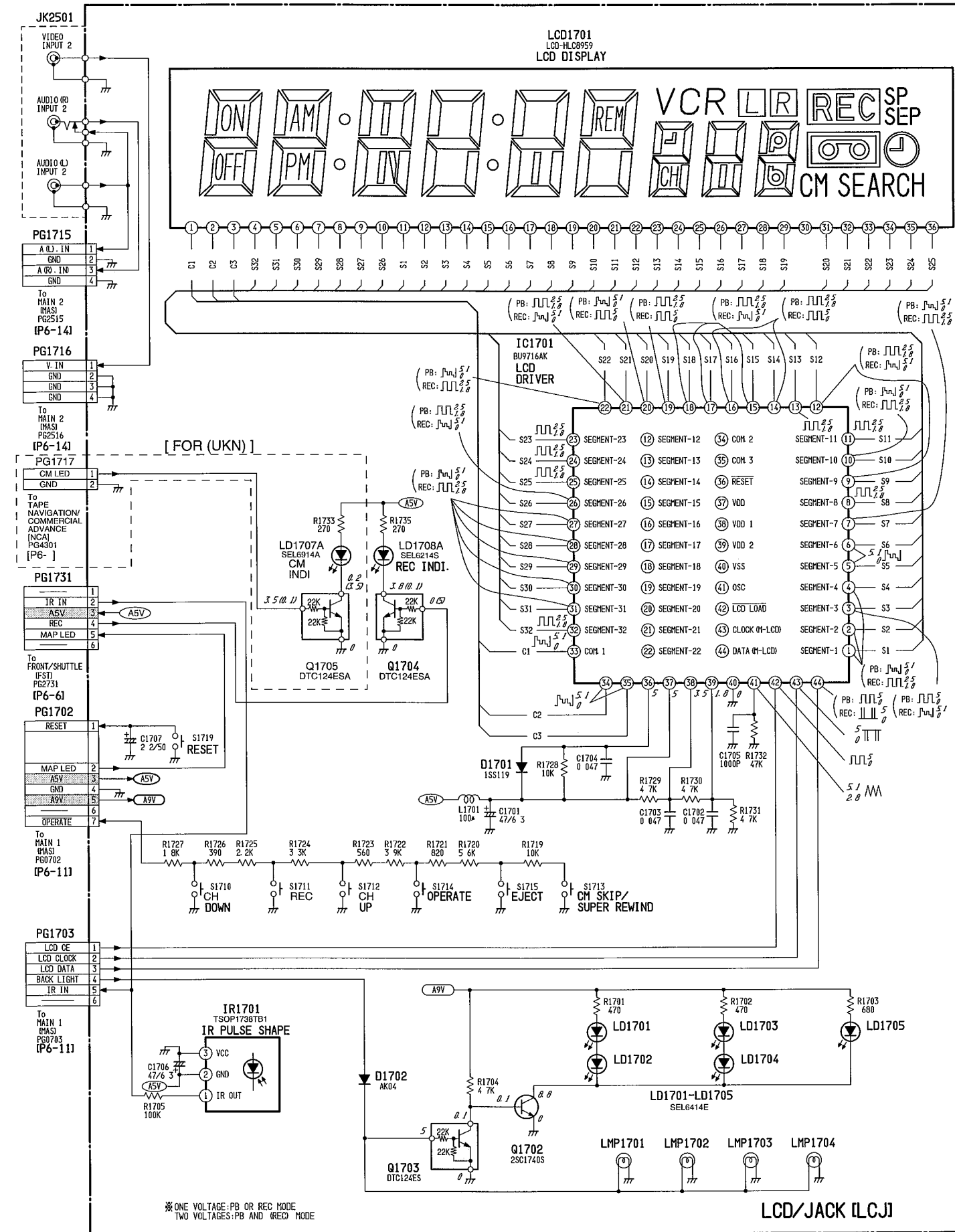
LCD GRID TABLE



PIN No	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
COM1	COM1	—	1adef	OFF	2d	PM	2c	3e	3g	3d	3c	4e	4d	5e	5i	5d	6e	
COM2	—	COM2	1g	1bc	2e	2g	2b	3f	3h	3k	3b	4g	4c	5f	5g	5c	6f	
COM3	—	—	COM3	ON	2a	2f	AM	COL1	—	3a	—	4f	4a	COL2	5a	5b	6a	
PIN No	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36
COM1	6d	6c	7d	CH	7c	8d	8i	8c	9d	9g	9c	—	—	SP	S	—	—	
COM2	6g	6b	7e	7g	7b	8e	8g	8b	9e	9b	N C	—	—	LP	—	CM SEARCH	N C	
COM3	REM	VCR	7f	—	7a	8f	8a	L	9f	9a	R	—	—	—	—	—	—	



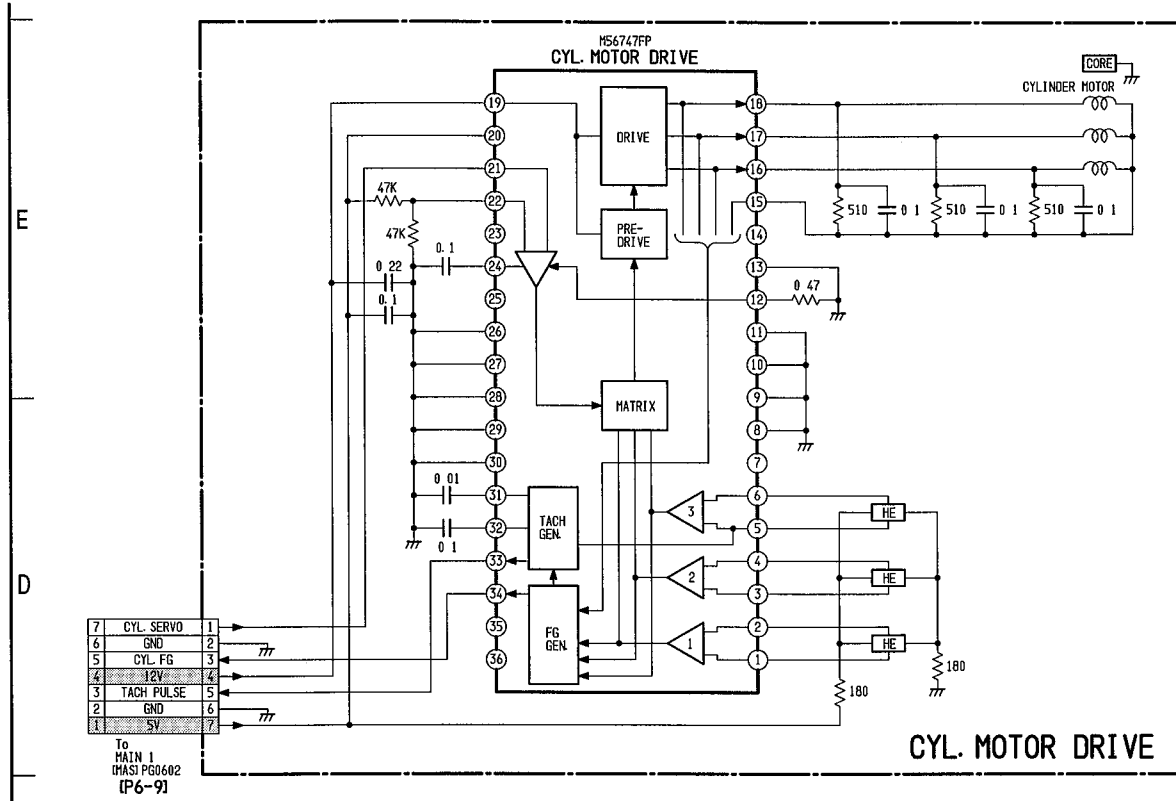
FRONT SHUTTLE [FST] SCHEMATIC DIAGRAM [FOR VT-FX880E]



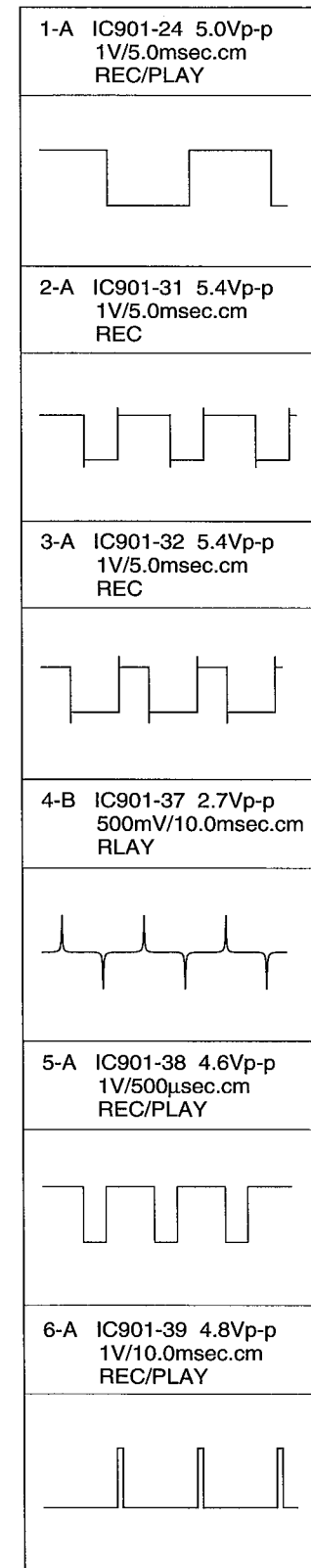
※ ONE VOLTAGE: PB OR REC MODE
TWO VOLTAGES: PB AND (REC) MODE

※ ONE VOLTAGE: PB OR REC MODE
TWO VOLTAGES: PB AND (REC) MODE

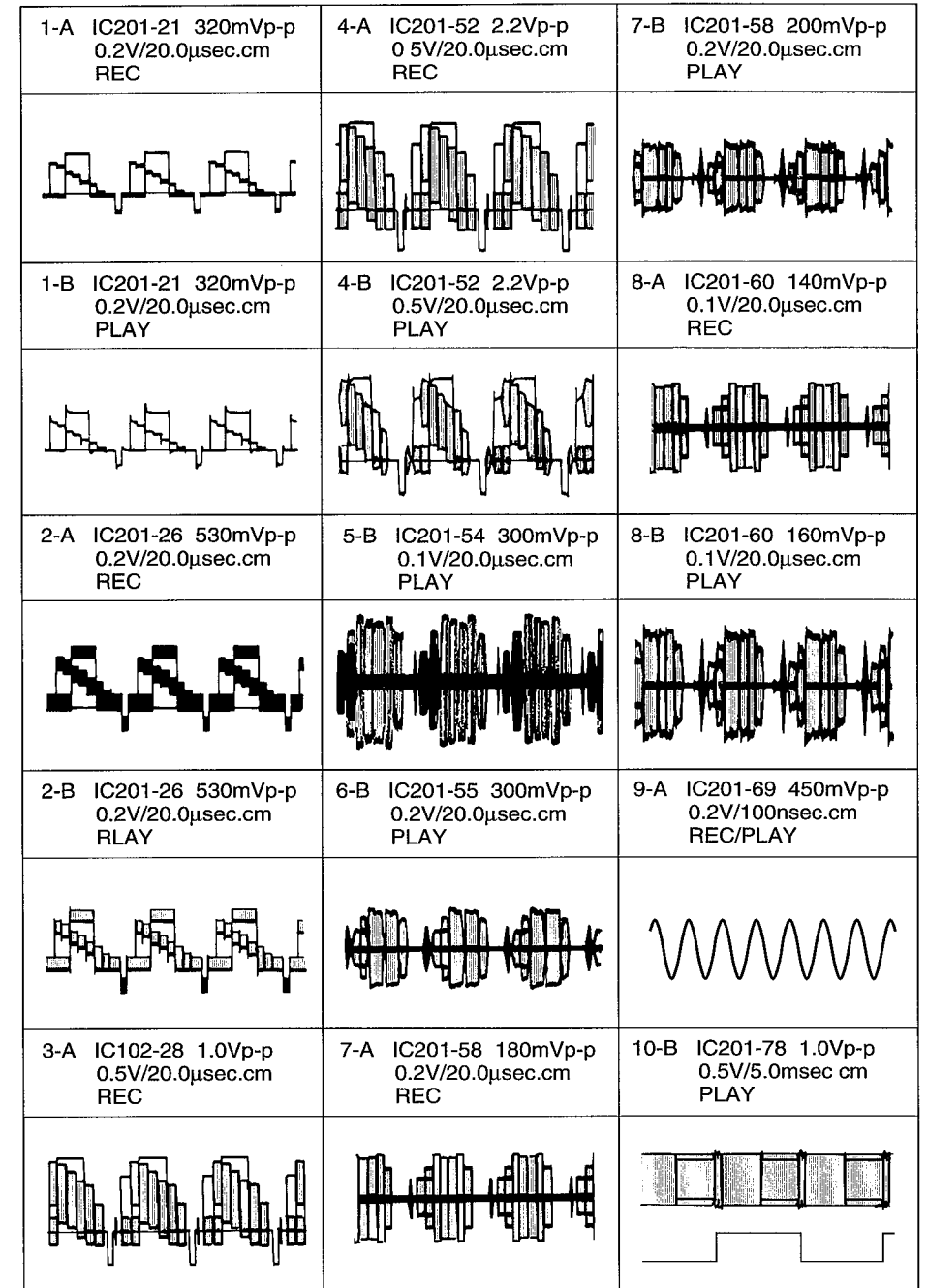
CYL. MOTOR DRIVE SCHEMATIC DIAGRAM



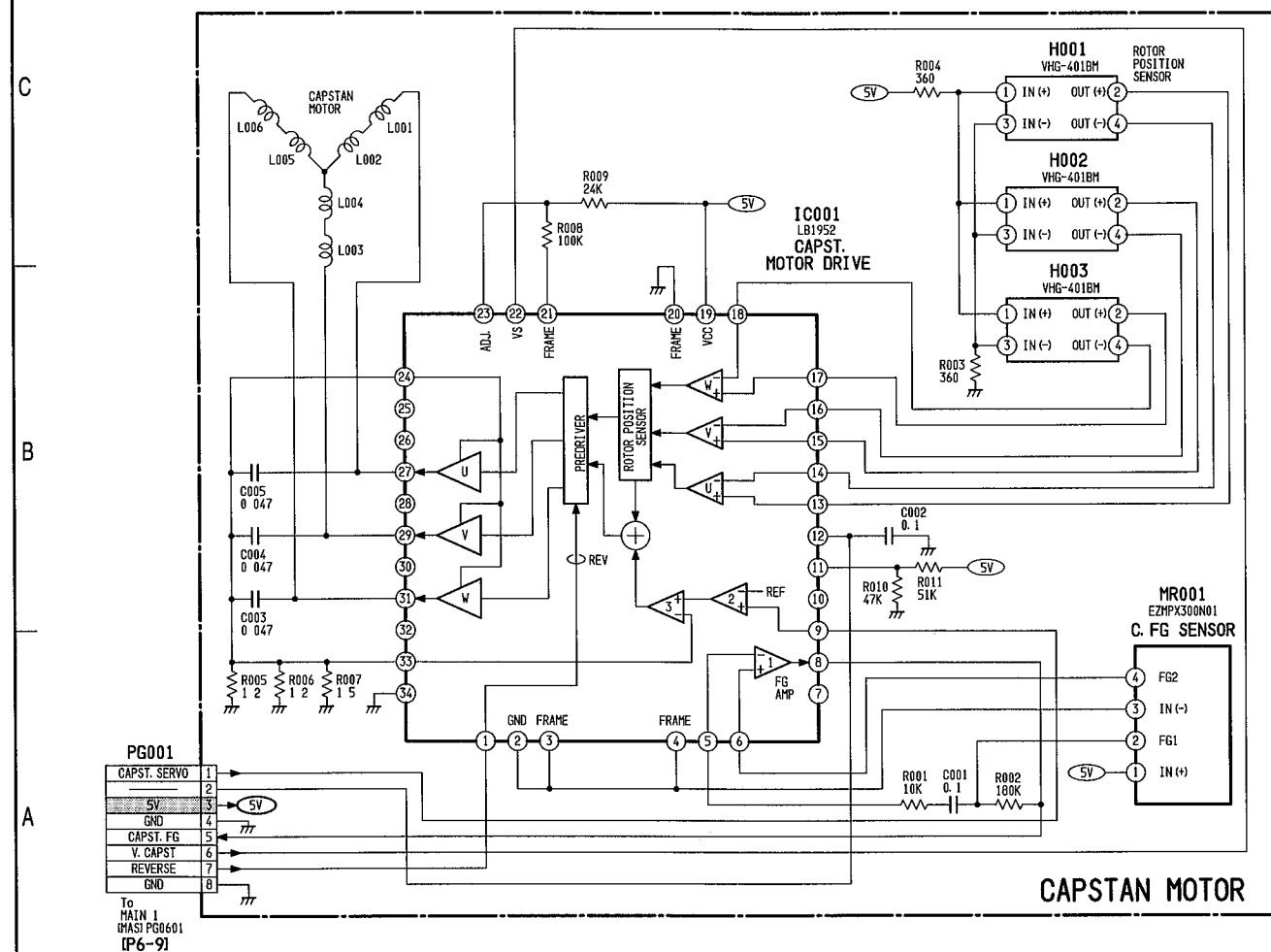
SERVO WAVEFORMS

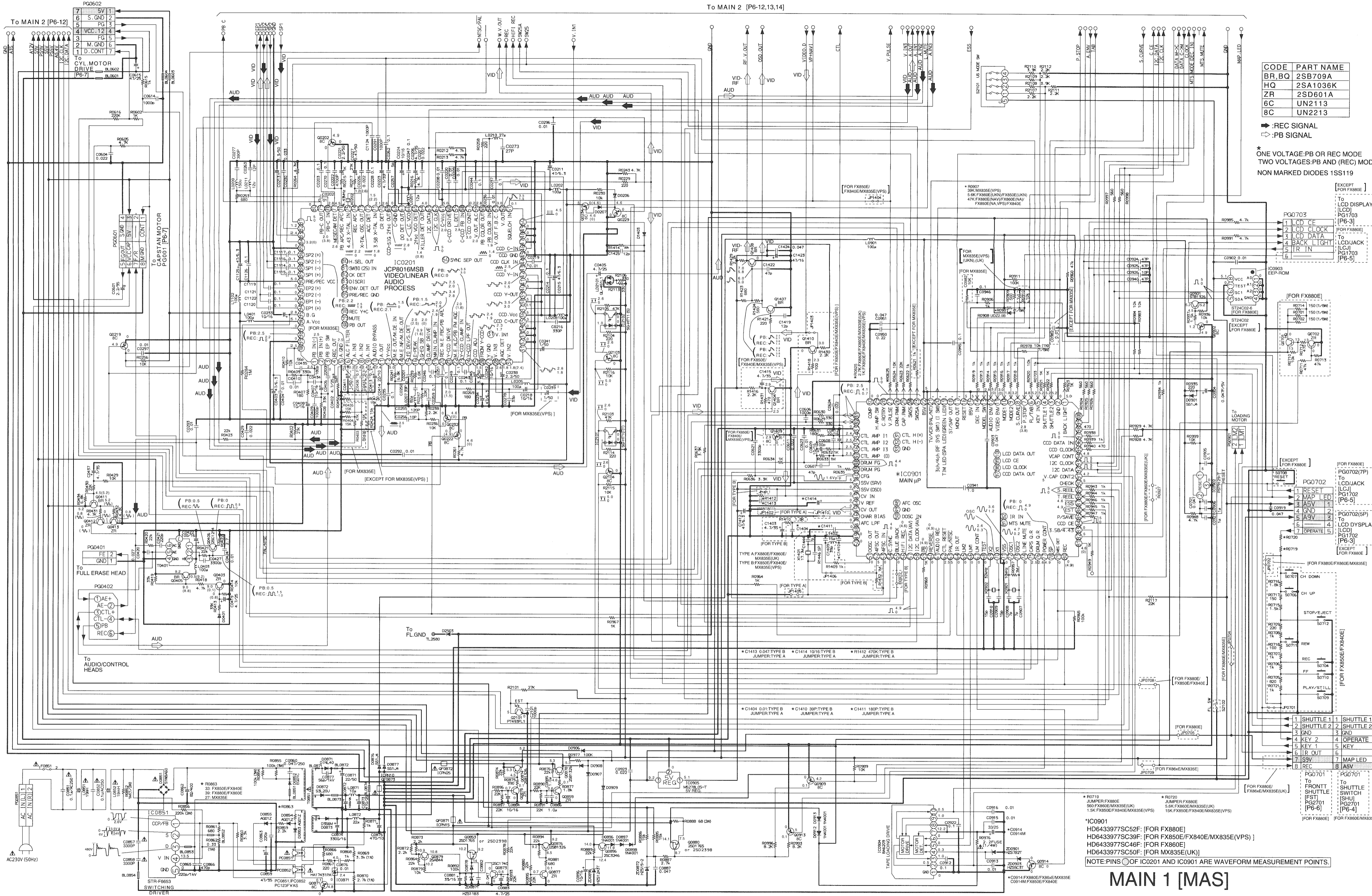


Y/CHROMA WAVEFORMS



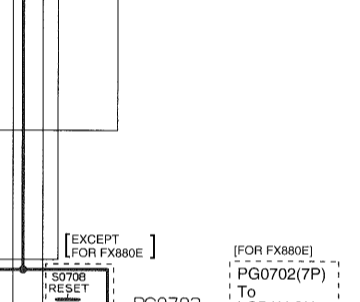
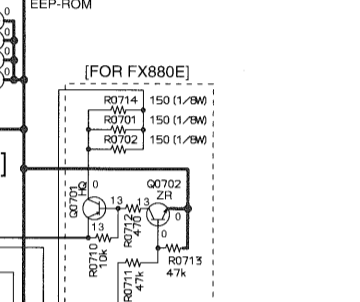
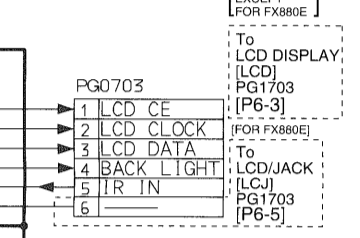
CAPSTAN MOTOR SCHEMATIC DIAGRAM





CODE	PART NAME
BR, BQ	2SB709A
HQ	2SA1036K
ZR	2SD601A
6C	UN2113
8C	UN2213

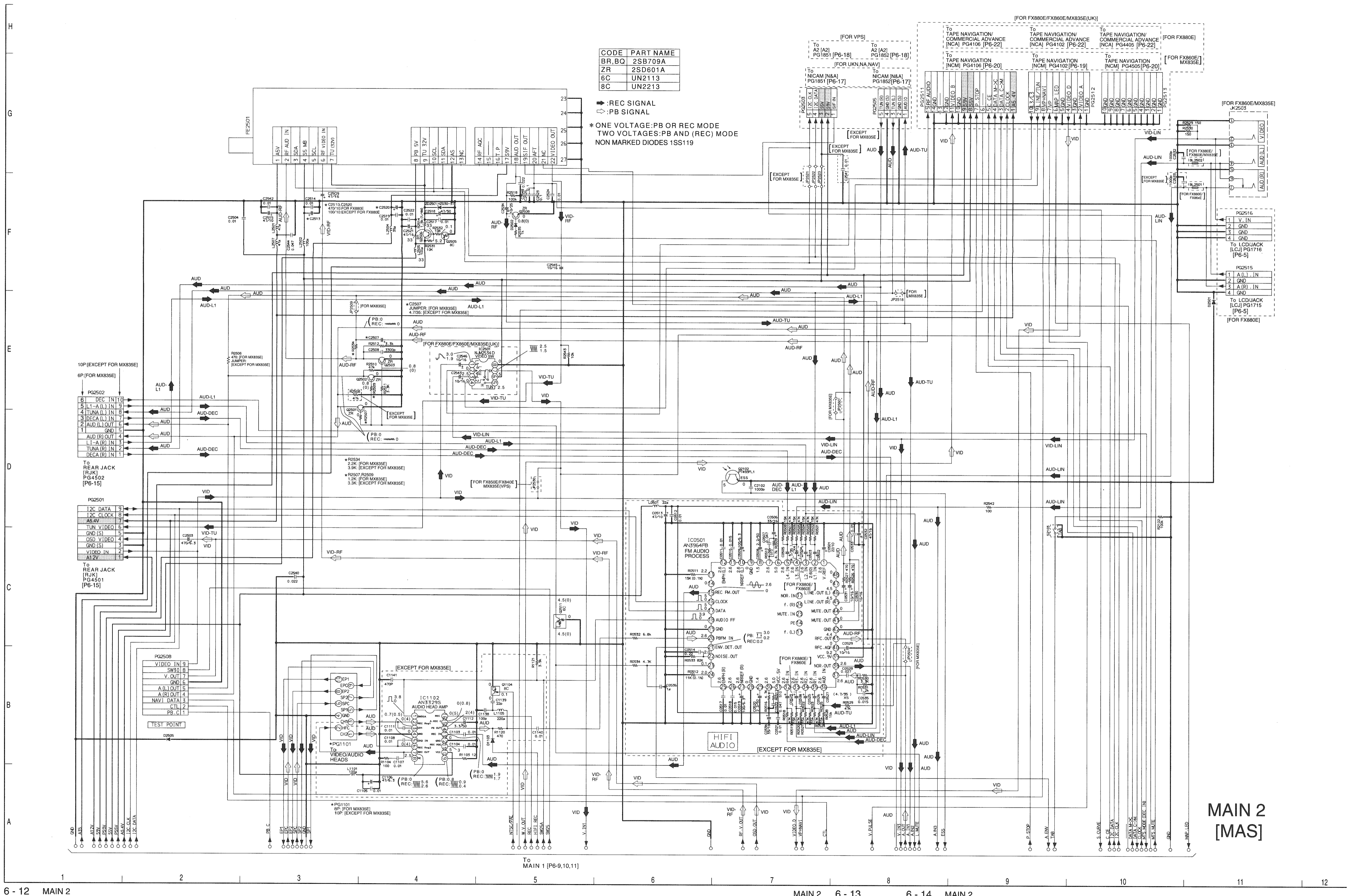
→ :REC SIGNAL
 ⇨ :PB SIGNAL
 * ONE VOLTAGE:PB OR REC MODE
 TWO VOLTAGES:PB AND (REC) MODE
 NON MARKED DIODES 1SS119



*IC0901
 HD643397SC2F: [FOR FX880E]
 HD643397SC3F: [FOR FX850E/FX840E/MX835E(VPS)]
 HD643397SC4F: [FOR FX860E]
 HD643397SC5F: [FOR MX835E(UK)]
 NOTE:PINS ○ OF IC0201 AND IC0901 ARE WAVEFORM MEASUREMENT POINTS.

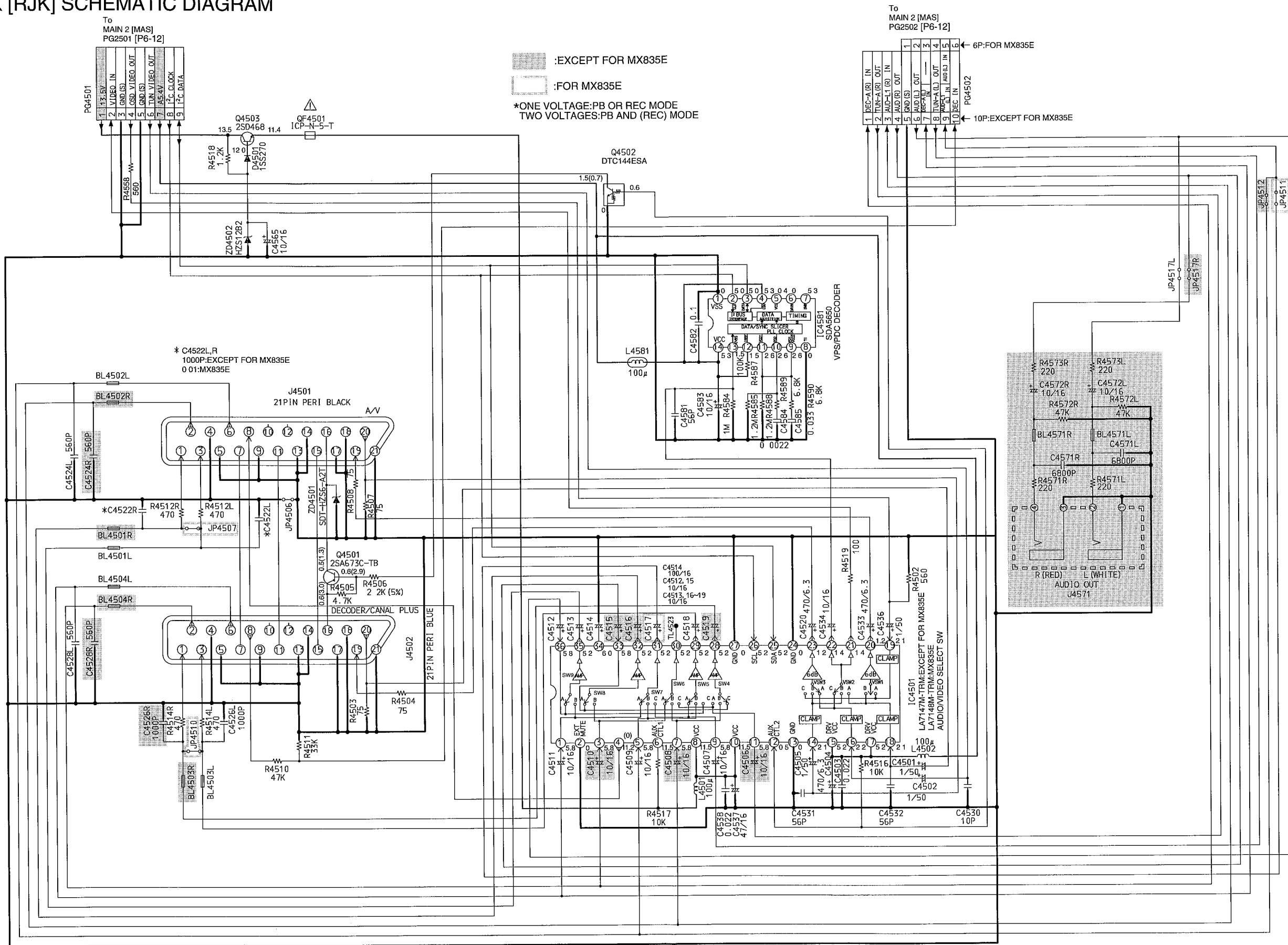
MAIN 1 [MAS]

MAIN 2 [MAS] SCHEMATIC DIAGRAM



MAIN 2 [MAS]

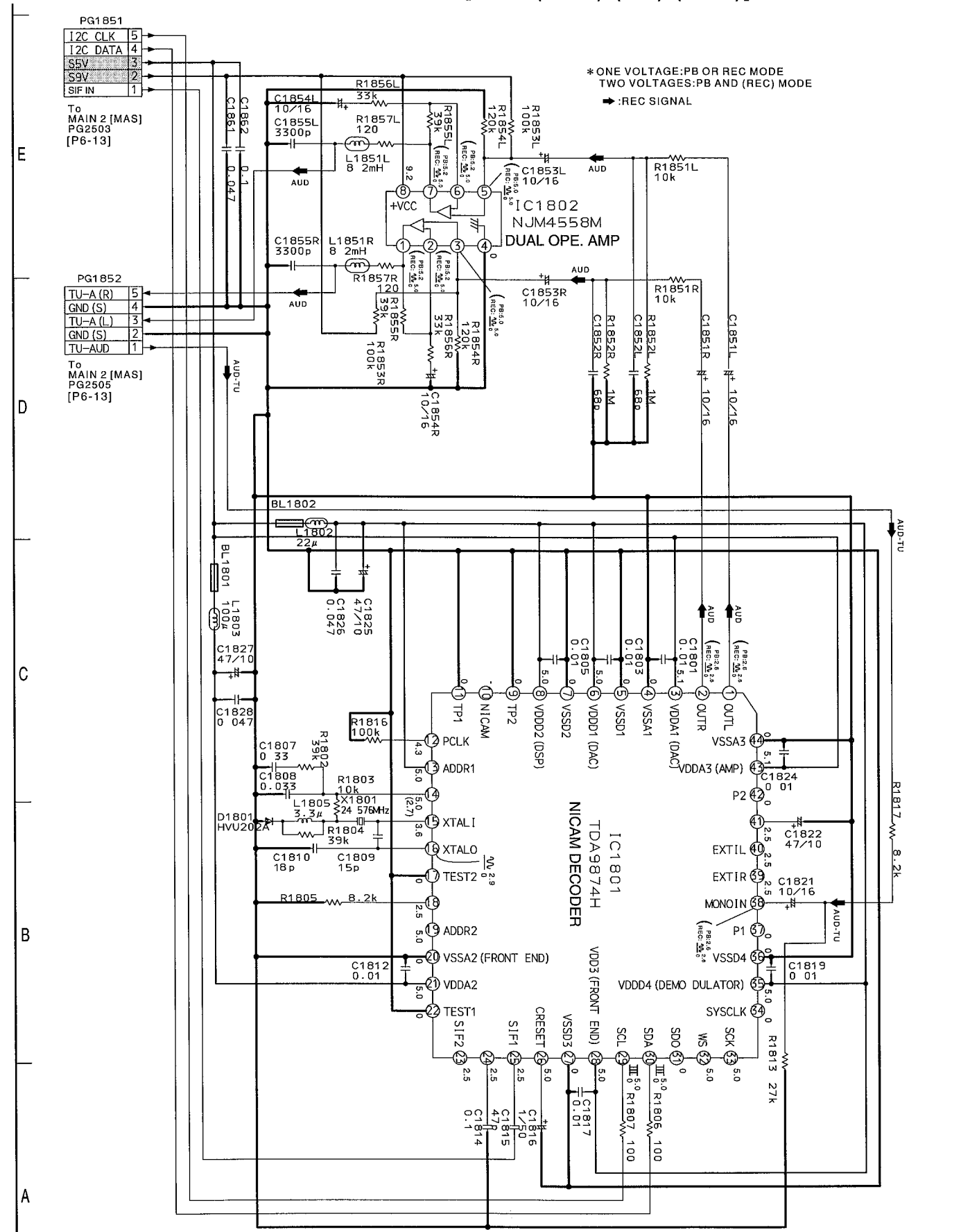
REAR JACK [RJK] SCHEMATIC DIAGRAM



REAR JACK [RJK]

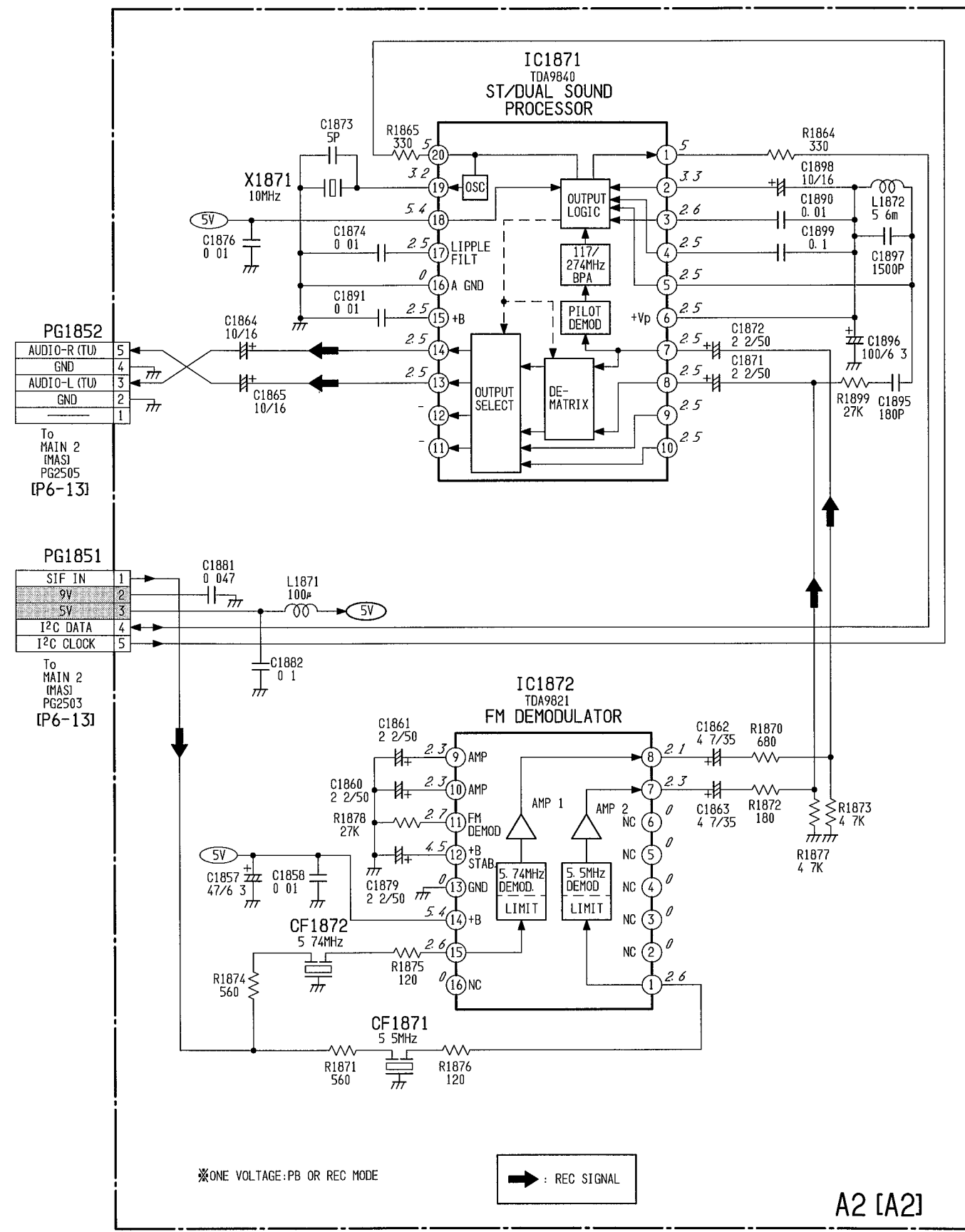
E
D
C
B
A

NICAM [N&A] SCHEMATIC DIAGRAM [FOR (UKN) (NA) (NAV)]



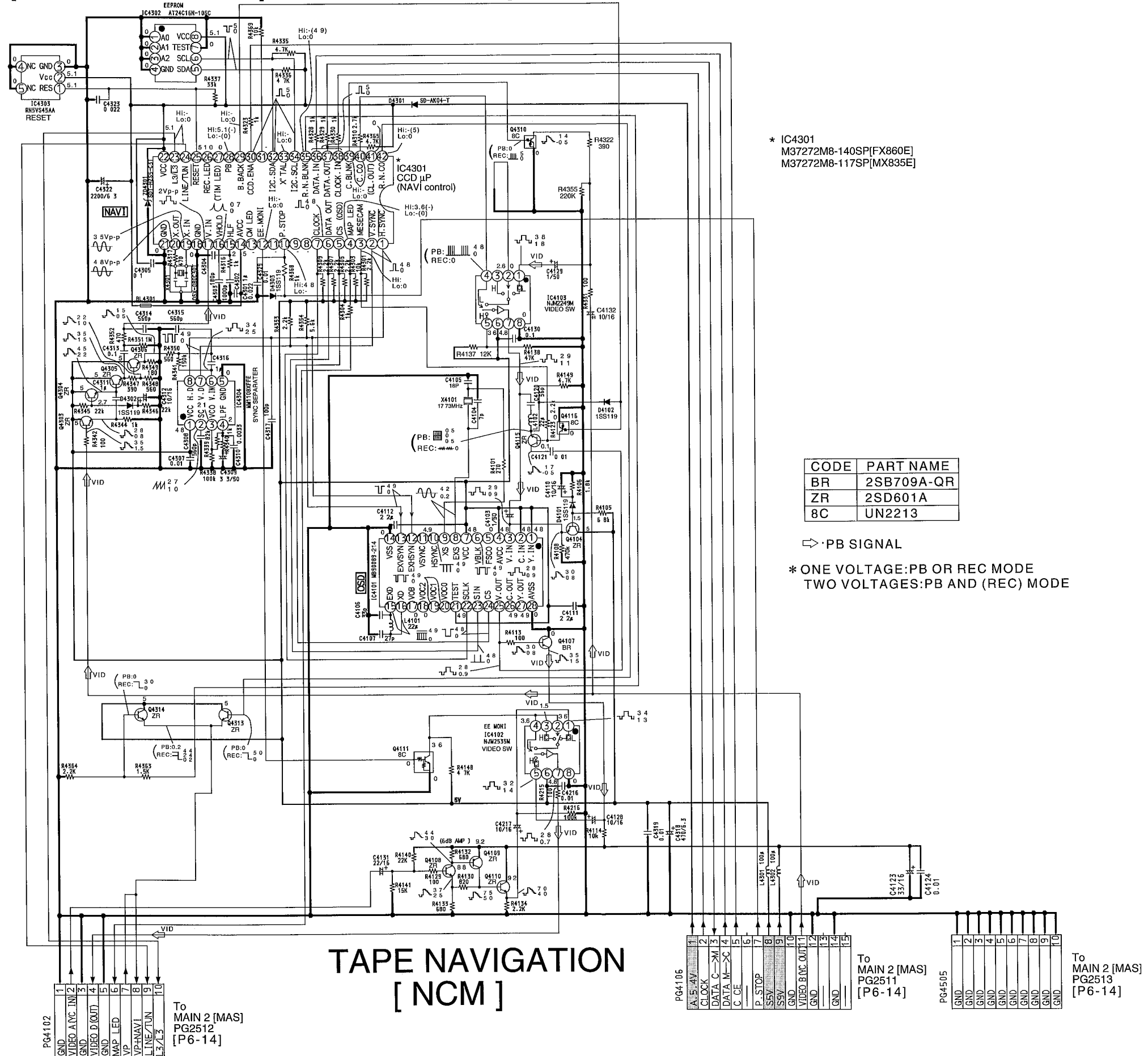
NICAM [N&A]

A2 [A2] SCHEMATIC DIAGRAM [FOR (VPS)]



A2 [A2]

TAPE NAVIGATION [NCM] SCHEMATIC DIAGRAM [FOR VT-FX860E/FX835E]



* IC4301
M37272M8-140SP[FX860E]
M37272M8-117SP[MX835E]

CODE	PART NAME
BR	2SB709A-QR
ZR	2SD601A
8C	UN2213

↔ ·PB SIGNAL
* ONE VOLTAGE:PB OR REC MODE
TWO VOLTAGES:PB AND (REC) MODE

TAPE NAVIGATION [NCM]

PG4102
1 GND
2 VIDEO A IN
3 GND
4 VIDEO D (OUT)
5 GND
6 MAP LED
7 VP
8 VP+NAVI
9 LINE/TUN
10 L3/L3
To MAIN 2 [MAS]
PG2512
[P6-14]

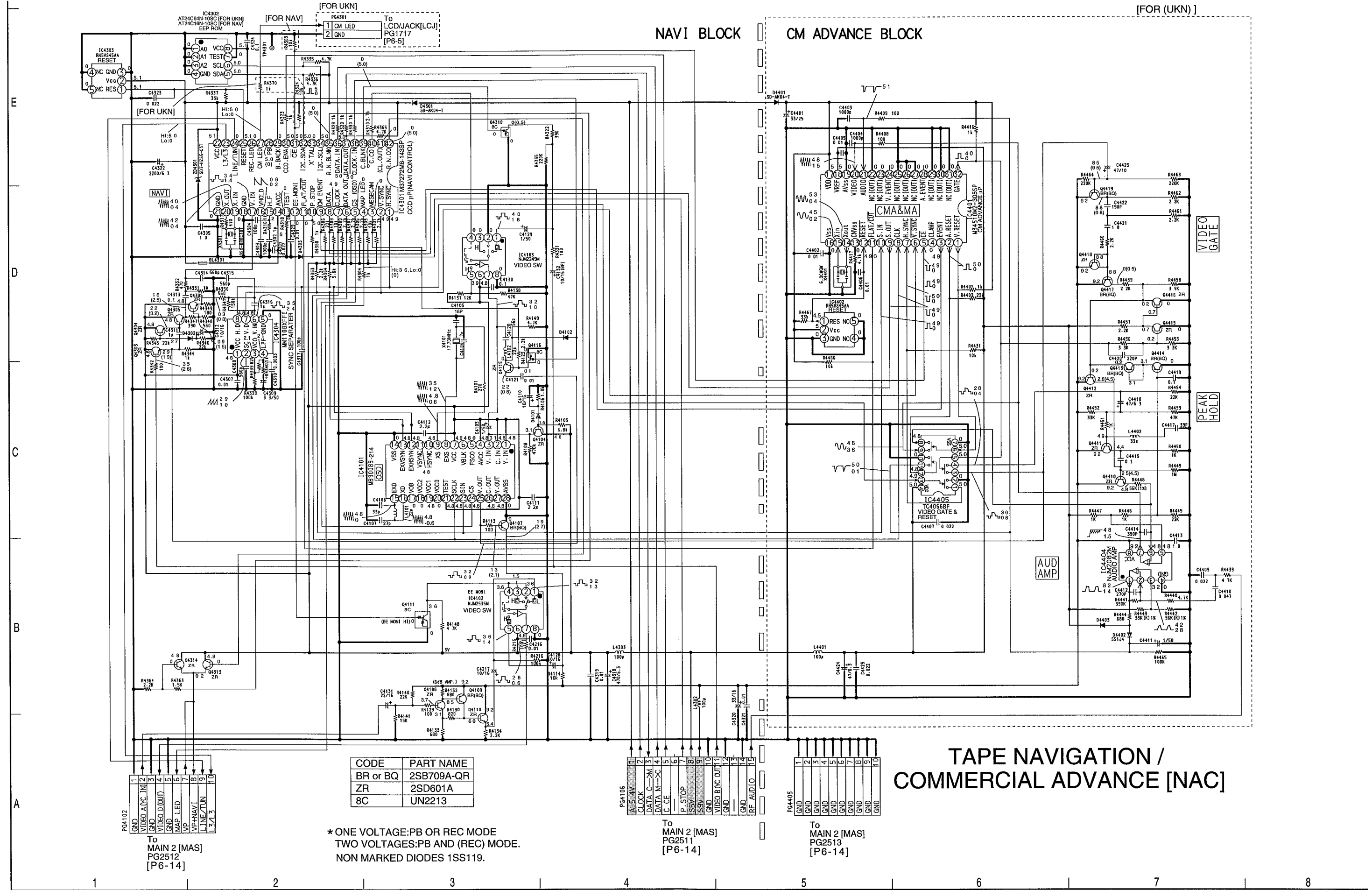
PG4106
1 A.S. AV
2 CLOCK
3 DATA C-M
4 DATA M-C
5 C CE
6 P-STOP
7 S5V
8 S5V
9 GND
10 VIDEO B IN
11 GND
12 GND
13 GND
14 GND

To MAIN 2 [MAS]
PG2511
[P6-14]

PG4505
1 GND
2 GND
3 GND
4 GND
5 GND
6 GND
7 GND
8 GND
9 GND
10 GND

To MAIN 2 [MAS]
PG2513
[P6-14]

TAPE NAVIGATION/COMMERCIAL ADVANCE [NAC] SCHEMATIC DIAGRAM [FOR VT-FX880E]



PG4102
 1 GND
 2 VIDEO A.V.C. (IN)
 3 VIDEO D.(OUT)
 4 VIDEO D.(OUT)
 5 GND
 6 MAP LED
 7 VP-NAV1
 8 LINE/TUN
 9 L3/L5
 10

To
 MAIN 2 [MAS]
 PG2512
 [P6-14]

CODE	PART NAME
BR or BQ	2SB709A-QR
ZR	2SD601A
8C	UN2213

* ONE VOLTAGE:PB OR REC MODE
 TWO VOLTAGES:PB AND (REC) MODE.
 NON MARKED DIODES 1SS119.

PG4105
 1 A.S.4V
 2 CLOCK
 3 DATA C->M
 4 DATA M->C
 5 C.CE
 6 P.STOP
 7 SSV
 8 SSV
 9 GND
 10 VIDEO B.(V.C. OUT)
 11 GND
 12 GND
 13 GND
 14 GND
 15 RF AUDIO

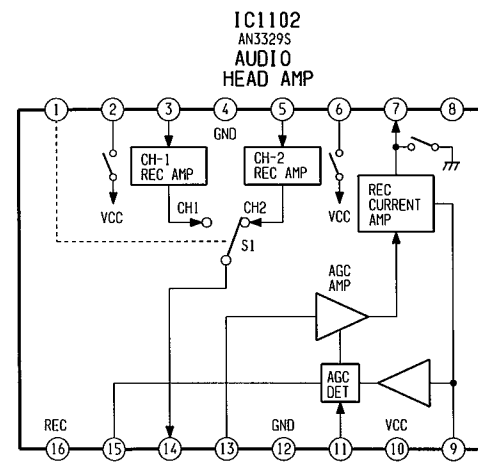
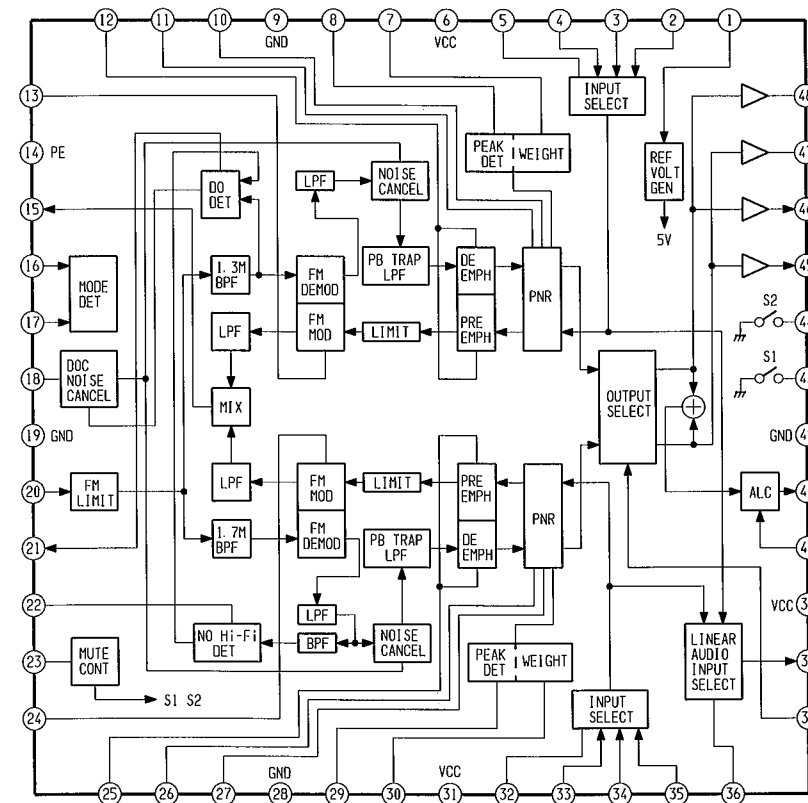
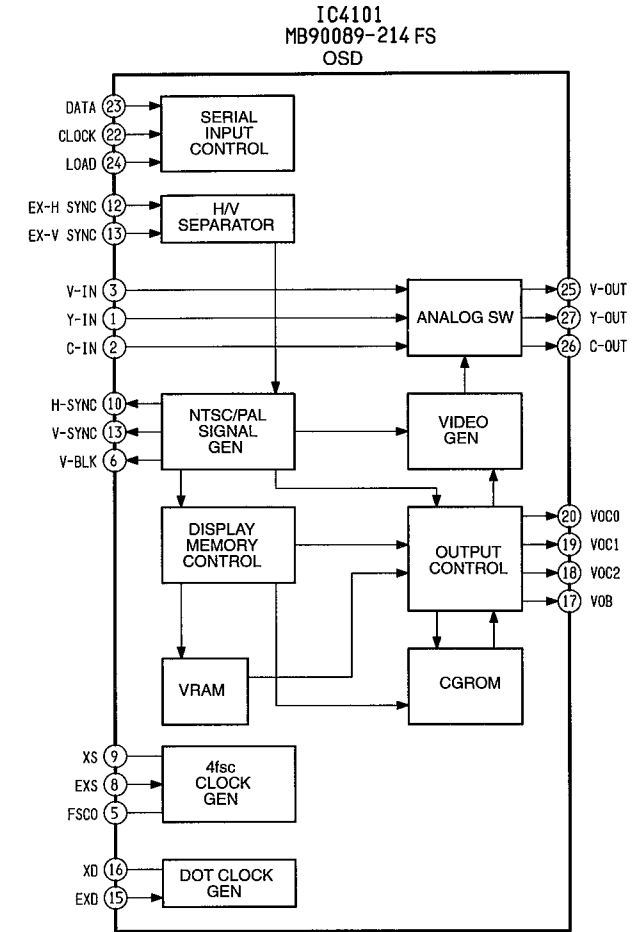
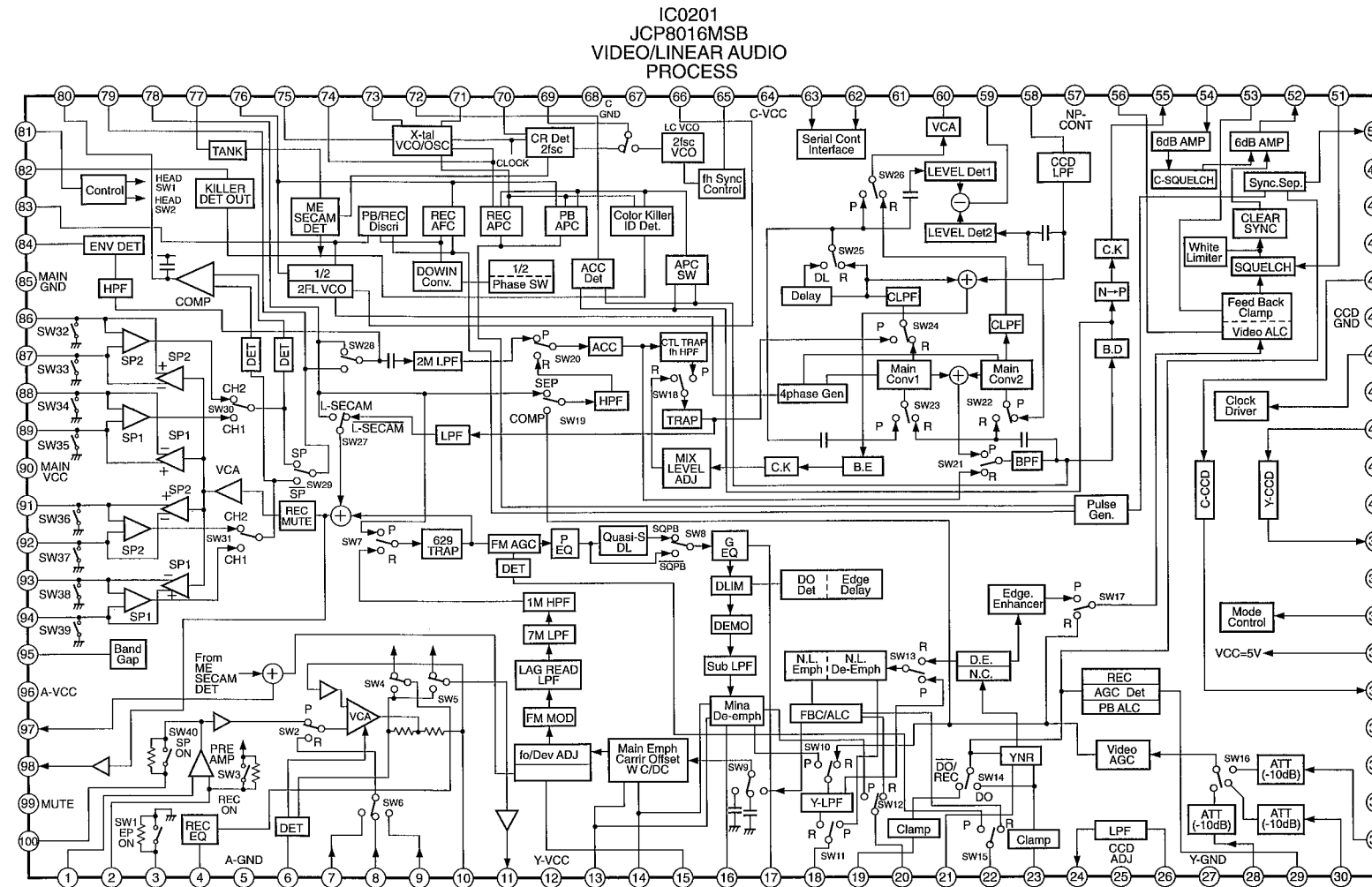
To
 MAIN 2 [MAS]
 PG2511
 [P6-14]

PG4405
 1 GND
 2 GND
 3 GND
 4 GND
 5 GND
 6 GND
 7 GND
 8 GND
 9 GND
 10 GND

To
 MAIN 2 [MAS]
 PG2513
 [P6-14]

TAPE NAVIGATION / COMMERCIAL ADVANCE [NAC]

IC BLOCK DIAGRAM



IDENTIFICATION OF PARTS LOCATION

MAS

Table with columns: Symbol No, Parts Location. Rows: C0257 B-2C, C0524 A-3E, C0908 B-5F, C1424 B-5C, D1103 A-1D, L0403 A-1F, Q0859 B-5G, R0402 B-2D, R0615 B-1E, R0877 B-5H, R0965 B-2G, R2512 B-1A, C0259 B-3C, C0525 A-3E, C0909 B-4F, C1425 B-3C, D1403 A-3B, L0501 A-3E, Q0871 B-5H, R0403 B-2D, R0616 A-1E, R0878 B-5H, R0967 A-2G, R2514 A-2A, C0262 B-1C, C0526 A-3E, C0910 B-4F, C1444 B-4F, D2501 A-6B, L0851 A-1H, Q0873 A-5H, R0404 B-2D, R0621 B-4F, R0879 B-5H, R0968 B-4D, R2518 B-3A, C0263 B-1C, C0527 A-3E, C0912 B-6H, C2101 B-4G, D2502 A-4A, L0852 A-1H, Q0874 A-5H, R0407 B-2D, R0622 B-5E, R0880 B-5F, R0972 A-5C, R2529 B-6A, C0270 B-1C, C0528 A-3D, C0913 B-6H, C2102 B-4B, D2503 A-5H, L0871 A-4G, Q0875 B-5H, R0408 B-2D, R0623 B-5E, R0881 B-5F, R0976 A-6H, R2530 B-6A, C0273 B-2B, C0529 A-3D, C0914 A-6H, C2503 A-2B, D2505 A-1D, L0872 A-4H, Q0876 A-5G, R0409 B-2D, R0624 B-5E, R0885 A-5G, R0977 A-5G, R2531 B-2A, C0277 B-1C, C0530 A-3D, C0914M A-6H, C2504 B-5B, F, L0901 A-5G, Q0877 B-5F, R0410 B-2D, R0625 B-5D, R0886 A-5G, R0978 A-6E, R2532 B-2A, C0278 B-2B, C0531 A-3D, C0915 B-6H, C2507 A-1B, FE, L1101 A-2D, Q0878 A-5H, R0413 B-1F, R0629 B-5E, R0887 A-5G, R0983 B-6E, R2534 B-1B, C0291 B-2C, C0532 A-3D, C0916 B-6H, C2508 B-1A, FE, L1102 A-2D, Q0879 A-5H, R0414 B-1F, R0630 B-5E, R0888 A-5H, R0984 B-6E, R2535 B-4B, C0292 B-3G, C0533 B-3D, C0919 B-6E, C2509 A-2A, FE2501 A-2A, L1105 A-2D, Q0880 A-5H, R0418 B-1F, R0631 B-5D, R0889 B-5H, R0985 B-6C, R2542 B-4A, C0293 B-1C, C0534 A-3E, C0922 B-6H, C2513 A-1A, IC, L1402 A-4E, Q0896 A-5H, R0419 B-2F, R0632 B-5D, R0890 B-5H, R0989 B-5F, R2543 B-5B, C0296 B-2E, C0535 B-3D, C0923 B-5D, C2514 B-1A, IC0201 B-2C, L2501 A-1A, Q0901 A-6B, R0420 B-1F, R0633 B-5D, R0891 B-5G, R0991 B-6D, C0297 B-2C, C0536 B-3E, C0924 B-6D, C2515 A-1A, IC0501 B-3E, L2502 A-3B, Q0902 B-6B, R0421 B-1F, R0634 B-2F, R0892 B-5H, R0993 B-5F, S, S0704 A-6G, C0402 A-2D, C0601 A-1E, C0925 B-6D, C2517 B-2A, IC0851 A-3H, L2504 A-3A, Q0909 B-5F, R0422 B-1F, R0635 B-3F, R0893 B-5H, R0996 B-5F, S0706 A-6G, C0403 A-2D, 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A-5F, Q1410 B-5C, R0434 B-1F, R0706 B-6H, R0909 B-5G, R1409 B-4E, S2102 A-4G, C0411 A-2D, C0615 A-1E, C0982 B-6D, C2532 B-6A, IC2102 A-5D, PG0401 A-2B, Q2101 A-4G, R0435 B-2D, R0707 A-6H, R0910 B-5E, R1410 B-4E, S2103 A-6C, C0412 B-2D, C0621 A-4D, C1103 B-1D, C2533 B-6A, IC2501 A-5B, PG0402 A-1F, Q2102 A-4B, R0436 B-2D, R0708 B-6H, R0911 B-6C, R1412 B-4E, T, C0413 B-2D, C0623 B-5D, C1104 B-1D, C2534 A-3A, PG0601 A-2E, Q2103 B-5D, R0450 B-2D, R0709 B-6H, R0913 B-5E, R1414 B-3C, T0401 A-1F, C0414 A-3D, C0624 B-5D, C1105 B-1D, C2540 B-3B, PG0602 A-1E, Q2104 B-5F, R0501 B-3D, R0710 B-6H, R0914 B-6D, R1416 B-5C, T0851 A-3H, C0419 A-1F, C0701 B-6G, C1106 A-1D, C2541 B-5A, PG0701 A-6H, Q2501 B-1C, R0502 B-3D, R0711 B-6H, R0915 B-6D, R1418 B-5C, X, C0420 A-1F, C0851 A-1H, C1107 B-1D, C2542 B-1A, PG0702 A-6E, Q2502 B-1B, R0503 B-2D, R0712 B-6H, R0916 B-6D, R1421 B-5B, X0202 A-2C, C0421 B-1F, C0852 A-1H, C1108 B-1D, C2543 A-6A, PG0703 A-6C, Q2503 B-1A, R0504 B-2D, R0713 B-6H, R0917 B-6D, R1423 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L0209 A-1C, Q0413 B-1F, R0533 B-3E, R0873 B-5H, R0949 B-5F, R2508 B-1C, C0521 B-3E, C0905 B-6G, C1419 B-5B, D0909 A-5G, L0210 A-2B, Q0701 B-6H, R0534 A-3E, R0874 A-5H, R0957 B-5F, R2509 B-1B, C0522 B-3E, C0906 B-6G, C1422 B-5B, D0912 A-6G, L0211 A-1C, Q0702 B-6H, R0602 B-1E, R0875 A-5H, R0960 A-5E, R2510 B-1B, C0523 A-3E, C0907 B-5F, C1423 A-5B, D0913 A-6G, L0401 A-2D, Q0853 A-5H, R0605 B-1E, R0876 B-5H, R0964 B-6D, R2511 B-1A

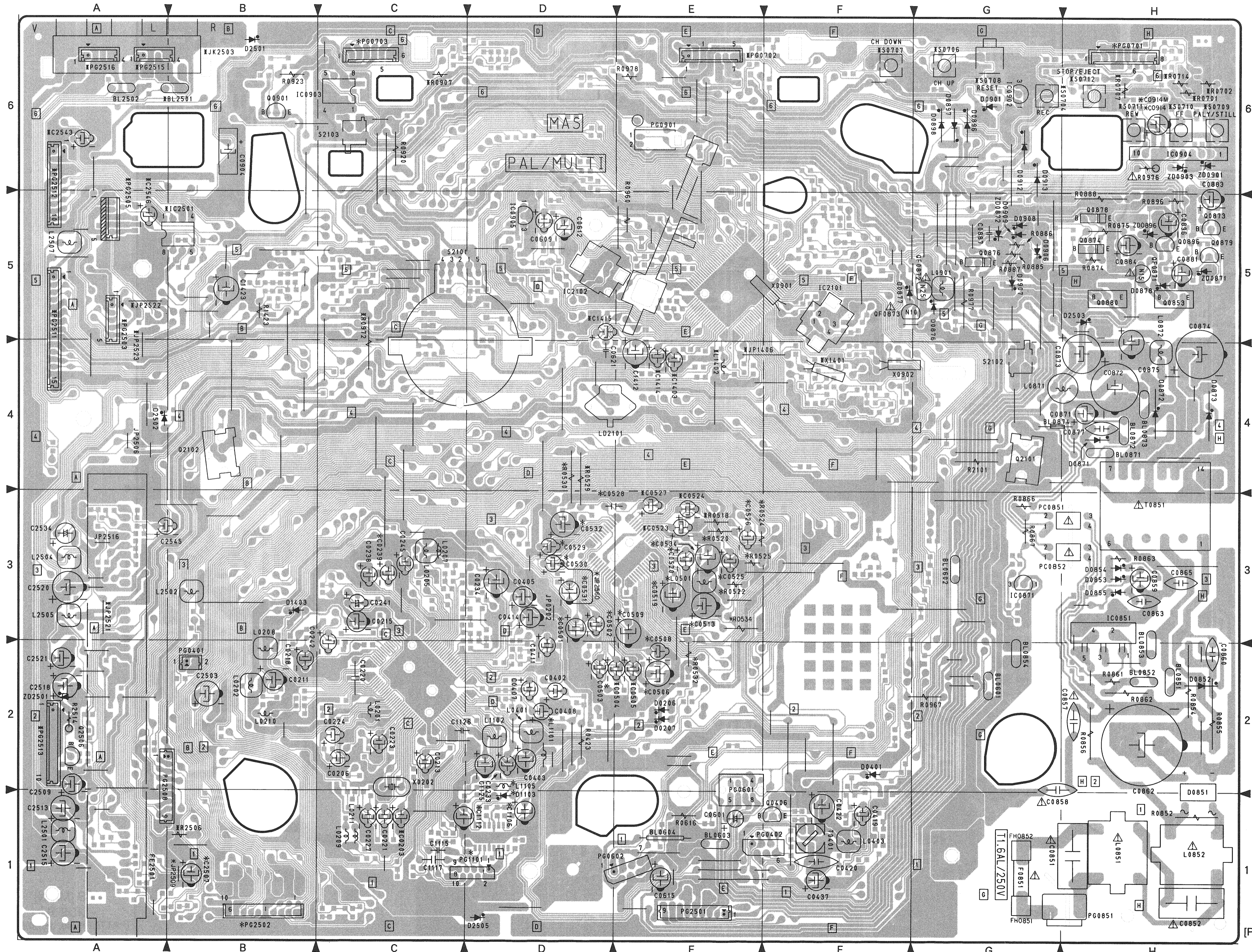
DIFFERENCE TABLE

NOTE: This table lists the different components marked with asterisks (*) in the circuit board diagrams

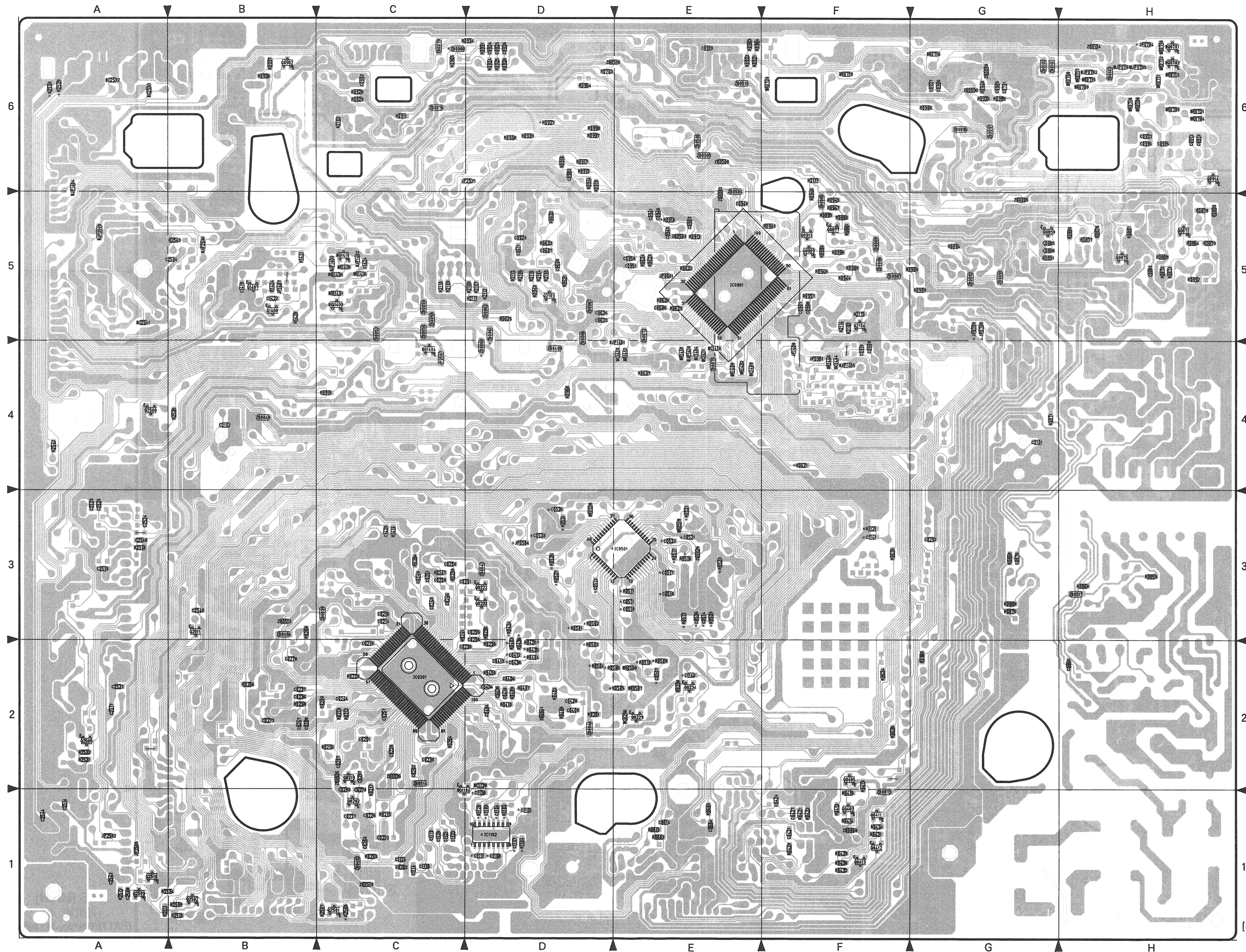
MAS -SIDE A-

Table with columns: SYMBOL No., FX880E (UKN), FX880E (NAV), FX860E (UKN), FX860E (NA), FX850E (UKN), FX850E (NAV/PS), FX840E (NAV/PS), MX835E (UK), MX835E (VPS). Rows: BL2501, C0239, C0501, C0502, C0503, C0504, C0505, C0506, C0508, C0509, C0513, C0519, C0520, C0523, C0524, C0525, C0526, C0527, C0528, C0529, C0530, C0531, C0532, C0533, C0914, C0914M, C0915, C0916, C0919, C0922, C0923, C0924, C0925, C0926, C0927, C0940, C0941, C0945, C0946, C0950, C0951, C0982, C1103, C1106, C1107, C1108, C1109, C1110, C1111, C1112, C1113, C1114, C1115, C1116, C1117, C1118, C1119, C1120, C1121, C1122, C1123, C1124, C1125, C1126, C1138, C1139, C1140, C1141, C1403, C1404, C1409, C1410, C1411, C1412, C1413, C1414, C1415, C2507, C2543, C2546, D1103, IC2501, JP1406, JP2509, JP2521, JP2522, JP2523, JP2560, L0501, L1101, L1105, L1402, PG0701, PG0702, PG0703, PG0851, PG0901, PG1101, PG2501, PG2502, PG2503, PG2505, PG2508, PG2511, PG2512, PG2513, PG2515, PG2516, R0518, R0520, R0521, R0522, R0523, R0524, R0525, R0526, R0527, R0528, R0529, R0530, R0531, R0532, R0533, R0602, R0605, R0615, R0616, R0621, R0622, R0623, R0624, R0625, R0629, R0630, R0631, R0632, R0633, R0634, R0635, R0636, R0637, R0701, R0702, R0703, R0704, R0705, R0706, R0707, R0708, R0709, R0710, R0711, R0712, R0713, R0714, R0715, R0716, R0717, R0718, R0719, R0720, R0721, R0751, R0812, R0813, R0814, R0815, R0816, R0817, R0818, R0819, R0820, R0821, R0822, R0823, R0824, R0825, R0826, R0827, R0828, R0829, R0830, R0831, R0832, R0833, R0834, R0835, R0836, R0837, R0838, R0839, R0840, R0841, R0842, R0843, R0844, R0845, R0846, R0847, R0848, R0849, R0850, R0851, R0852, R0853, R0854, R0855, R0856, R0857, R0858, R0859, R0860, R0861, R0862, R0863, R0864, R0865, R0866, R0867, R0868, R0869, R0870, R0871, R0872, R0873, R0874, R0875, R0876, R0877, R0878, R0879, R0880, R0881, R0885, R0886, R0887, R0888, R0889, R0890, R0891, R0893, R0894, R0895, R0896, R0897, R0898, R0899, R0909, R0910, R0911, R0913, R0914, R0915, R0916, R0917, R0918, R0919, R0920, R0921, R0922, R0923, R0924, R0925, R0926, R0927, R0928, R0929, R0934, R0935, R0936, R0937, R0938, R0939, R0940, R0943, R0944, R0945, R0946, R0947, R0948, R0949, R0957, R0960, R0964, R0965, R0967, R0968, R0972, R0976, R0977, R0978, R0983, R0984, R0985, R0989, R0991, R0993, R0996, R0997, R0998, R0999, R1103, R1104, R1120, R1121, R1409, R1410, R1412, R1414, R1416, R1418, R1421, R1423, R1424, R1429, R1430, R1431, R1432, R1446, R2101, R2102, R2103, R2104, R2105, R2106, R2107, R2108, R2109, R2110, R2111, R2112, R2113, R2114, R2115, R2116, R2117, R2506, R2507, R2508, R2509, R2510, R2511, R2512, R2514, R2518, R2529, R2530, R2531, R2532, R2534, R2535, R2542, R2543, S0704, S0706, S0707, S0708, S0709, S0710, S0711, S0712, S2101, S2102, S2103, T0401, T0851, X0202, X0901, X0902, X1401, ZB0060, ZB0061, ZB0080, ZD0871, ZD0872, ZD0896, ZD0901, ZD0903, ZD2501

MAS CIRCUIT BOARD -SIDE A-



MAS [MAIN]
-SIDE A-
[PATTERN No. JK1365-9]



MAS [MAIN]
-SIDE B-
[PATTERN No. JK1365-9]

DIFFERENCE TABLE

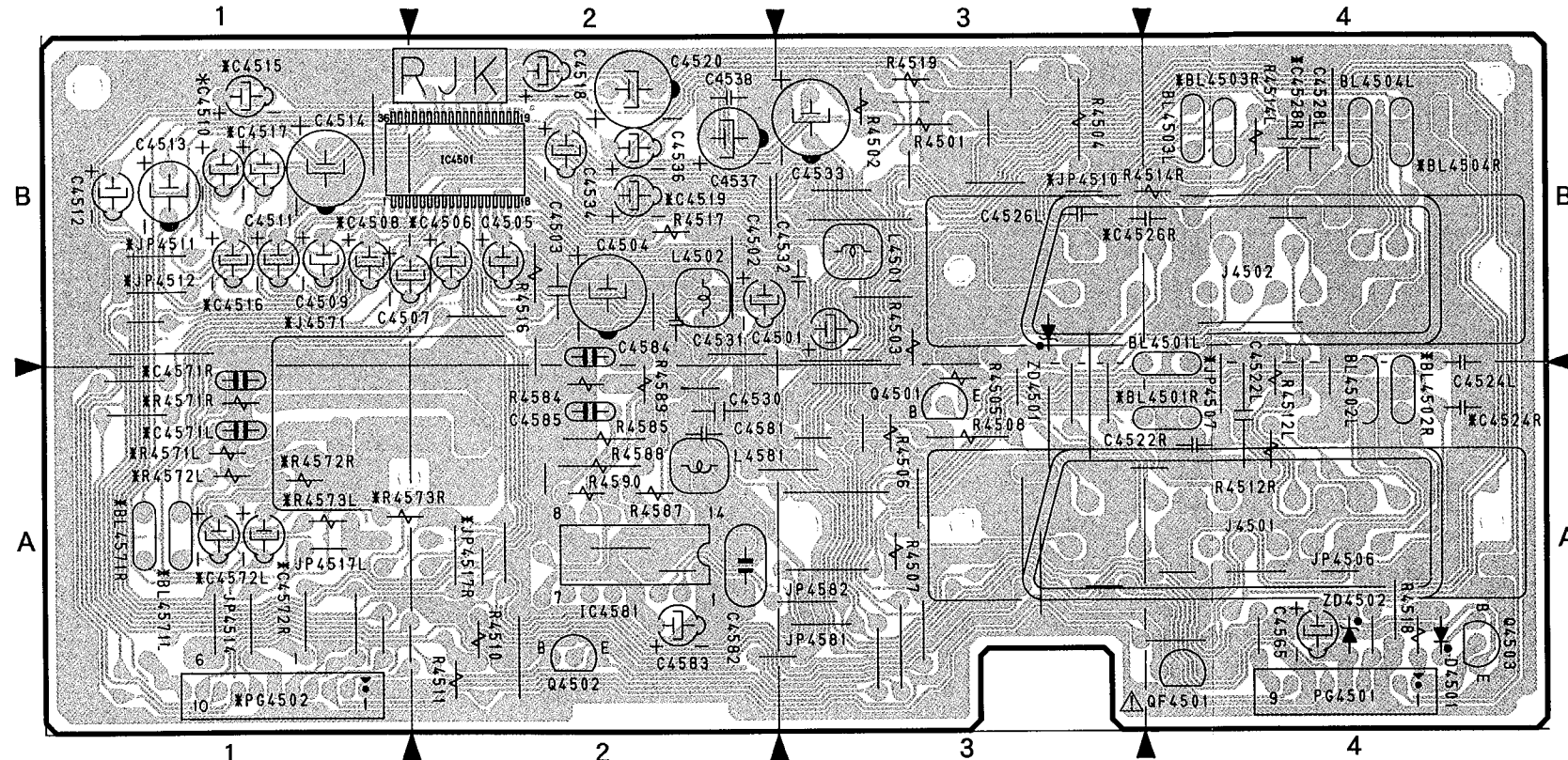
NOTE: This table lists the different components marked with asterisks (*) in the circuit board diagrams

MAS -SIDE B-

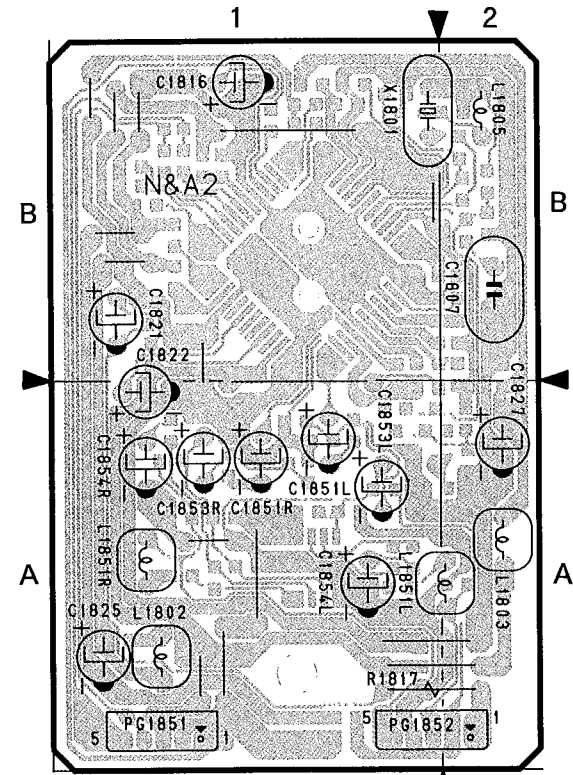
SYMBOL No.	FX880E (UKN)	FX880E (NAV)	FX860E (UKN)	FX860E (NA)	FX850E (UKN)	FX850E (NAVPS)	FX840E (NAVPS)	MX835E (UK)	MX835E (VPS)
C0412	x	x	x	x	x	x	x	x	x
C0413	o	o	o	o	o	o	o	o	x
C0436	x	x	x	x	x	x	x	x	o
C0507	o	o	o	o	o	o	o	x	x
C0510	o	o	o	o	o	o	o	x	x
C0511	o	o	o	o	o	o	o	x	x
C0512	o	o	o	o	o	o	o	x	x
C0514	o	o	o	o	o	o	o	x	x
C0517	o	o	o	o	o	o	o	x	x
C0518	o	o	o	o	o	o	o	x	x
C0521	o	o	o	o	o	o	o	x	x
C0522	o	o	o	o	o	o	o	x	x
C0533	o	o	o	o	o	o	o	x	x
C0535	o	o	o	o	o	o	o	x	x
C0536	o	o	o	o	o	o	o	x	x
C1103	o	o	o	o	o	o	o	x	x
C1104	o	o	o	o	o	o	o	x	x
C1105	o	o	o	o	o	o	o	x	x
C1107	o	o	o	o	o	o	o	x	x
C1108	o	o	o	o	o	o	o	x	x
C1111	o	o	o	o	o	o	o	x	x
C1138	o	o	o	o	o	o	o	x	x
C1139	o	o	o	o	o	o	o	x	x
C1140	o	o	o	o	o	o	o	x	x
C1141	o	o	o	o	o	o	o	x	x
C1404	JUMPER	JUMPER	JUMPER	JUMPER	o	o	o	JUMPER	o
C1409	x	x	x	x	o	o	o	x	o
C1410	JUMPER	JUMPER	JUMPER	JUMPER	o	o	o	JUMPER	o
C1411	JUMPER	JUMPER	JUMPER	JUMPER	o	o	o	JUMPER	o
C1413	JUMPER	JUMPER	JUMPER	JUMPER	o	o	o	JUMPER	o
C1444	x	x	x	x	o	o	o	x	o
C2532	o	o	o	o	x	x	x	x	x
C2533	o	o	o	o	o	o	o	x	x
C2541	o	o	o	o	o	o	o	x	x
IC0501	o	o	o	o	o	o	o	x	x
IC1102	o	o	o	o	o	o	o	x	x
JP0504	x	x	x	x	x	x	x	o	o
JP0701	x	x	x	x	o	o	o	x	x
JP0702	o	o	o	o	x	x	x	o	o
JP0704	x	x	o	o	x	x	x	o	o
JP0705	o	o	x	x	x	x	x	x	x
JP0708	o	o	x	x	o	o	o	x	x
JP0709	x	x	o	o	x	x	x	o	o
JP1401	x	x	x	x	o	o	o	x	o
JP1402	o	o	o	o	x	x	x	o	x
JP1403	x	x	x	x	o	o	o	x	o
JP1404	x	x	x	x	o	o	o	x	o
JP1405	o	o	o	o	x	x	x	o	x
JP1410	o	o	o	o	x	x	x	o	x
JP2518	x	x	x	x	x	x	x	o	o
JP2530	x	x	x	x	o	o	o	x	o
Q0701	o	o	x	x	x	x	x	x	x
Q0702	o	o	x	x	x	x	x	x	x
Q1104	o	o	o	o	o	o	o	x	x
Q1404	x	x	x	x	o	o	o	x	o
Q1409	x	x	x	x	o	o	o	x	o
Q1410	x	x	x	x	o	o	o	x	o
R0403	x	x	x	x	x	x	x	o	o
R0404	x	x	x	x	x	x	x	o	o
R0424	o	o	o	o	o	o	o	o	x
R0425	o	o	o	o	o	o	o	o	x
R0435	x	x	x	x	x	x	x	o	o

SYMBOL No.	FX880E (UKN)	FX880E (NAV)	FX860E (UKN)	FX860E (NA)	FX850E (UKN)	FX850E (NAVPS)	FX840E (NAVPS)	MX835E (UK)	MX835E (VPS)
R0436	x	x	x	x	x	x	x	x	o
R0501	o	o	o	o	o	o	o	x	x
R0502	o	o	o	o	o	o	o	x	x
R0503	o	o	o	o	o	o	o	x	x
R0504	o	o	o	o	o	o	o	x	x
R0505	o	o	o	o	o	o	o	x	x
R0506	o	o	o	o	o	o	o	x	x
R0507	o	o	o	o	o	o	o	x	x
R0508	o	o	o	o	o	o	o	x	x
R0509	o	o	o	o	o	o	o	x	x
R0510	o	o	o	o	o	o	o	x	x
R0511	o	o	o	o	o	o	o	x	x
R0512	o	o	o	o	o	o	o	x	x
R0516	o	o	o	o	o	o	o	x	x
R0517	o	o	o	o	o	o	o	x	x
R0519	o	o	o	o	o	o	o	x	x
R0521	o	o	o	o	o	o	o	x	x
R0523	o	o	o	o	o	o	o	x	x
R0526	o	o	o	o	o	o	o	JUMPER	JUMPER
R0527	o	o	o	o	o	o	o	JUMPER	JUMPER
R0528	o	o	o	o	o	o	o	x	x
R0531	o	o	o	o	o	o	o	x	x
R0533	o	o	o	o	o	o	o	x	x
R0621	o	o	o	o	o	o	o	x	x
R0704	x	x	x	x	JUMPER	JUMPER	JUMPER	x	x
R0705	x	x	x	x	o	o	o	x	x
R0706	x	x	x	x	o	o	o	x	x
R0708	x	x	x	x	o	o	o	x	x
R0709	x	x	x	x	o	o	o	x	x
R0710	o	o	x	x	x	x	x	x	x
R0711	o	o	x	x	x	x	x	x	x
R0712	o	o	x	x	x	x	x	x	x
R0713	o	o	x	x	x	x	x	x	x
R0715	x	x	x	x	o	o	o	x	x
R0716	x	x	x	x	o	o	o	x	x
R0717	x	x	x	x	o	o	o	x	x
R0718	x	x	x	x	o	o	o	x	x
R0719	JUMPER	JUMPER	o	o	o	o	o	o	o
R0720	JUMPER	JUMPER	o	o	o	o	o	o	o
R0721	x	x	x	x	o	o	o	x	x
R0910	o	x	o	x	o	x	x	o	o
R0927	JUMPER	JUMPER	JUMPER	JUMPER	x	x	x	JUMPER	x
R1103	o	o	o	o	o	o	o	x	x
R1104	o	o	o	o	o	o	o	x	x
R1120	o	o	o	o	o	o	o	x	x
R1121	o	o	o	o	o	o	o	x	x
R1409	x	x	x	x	o	o	o	x	o
R1410	x	x	x	x	o	o	o	x	o
R1412	JUMPER	JUMPER	JUMPER	JUMPER	o	o	o	JUMPER	o
R1416	x	x	x	x	o	o	o	x	o
R1418	x	x	x	x	o	o	o	x	o
R1430	x	x	x	x	o	o	o	x	o
R1431	x	x	x	x	o	o	o	x	o
R1432	x	x	x	x	o	o	o	x	o
R1446	x	x	x	x	o	o	o	x	o
R2508	o	o	o	o	o	x	x	o	o
R2529	o	o	o	o	x	x	x	o	o
R2530	o	o	o	o	x	x	x	o	o
ZB0060	x	x	x	x	o	o	o	x	o
ZB0061	x	x	x	x	o	o	o	x	o
ZB0080	o	o	o	o	x	x	x	o	x

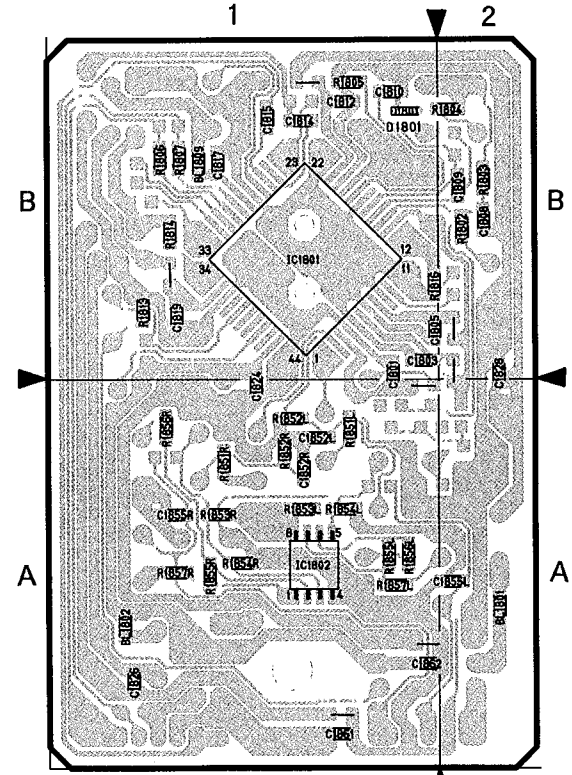
RJK, N&A CIRCUIT BOARDS



RJK [REAR JACK]
[PATTERN No. JK1433-3]



N&A [NICAM] -SIDE A-



N&A [NICAM] -SIDE B-
[PATTERN No. JK1360-3]
[FOR UKN,NA,NAV]

DIFFERENCE TABLE

NOTE: This table lists the different component marked with asterisks (*) in the circuit board diagrams

SYMBOL No	FX860E FX850E FX840E	MX835E
BL4501R	○	×
BL4502R	○	×
BL4503R	○	×
BL4504R	○	×
BL4571L	○	×
BL4571R	○	×
C4506	○	×
C4508	○	×
C4510	○	×
C4515	○	×
C4516	○	×
C4517	×	○
C4519	○	×
C4524R	○	×
C4526R	○	×
C4528R	○	×
C4571L	○	×
C4571R	○	×
C4572L	○	×
C4572R	○	×
J4571	○	×
JP4507	×	○
JP4510	×	○
JP4511	×	○
JP4512	○	×
JP4517R	○	×
PG4502	10P	6P
R4571L	○	×
R4571R	○	×
R4572L	○	×
R4572R	○	×
R4573L	○	×
R4573R	○	×

IDENTIFICATION OF PARTS LOCATION

RJK

Symbol No	Parts Location
BL	
BL4501L	4A
BL4501R	4A
BL4502L	4A
BL4502R	4A
BL4503L	4B
BL4503R	4B
BL4504L	4B
BL4504R	4B
BL4571L	1A
BL4571R	1A
C	
C4501	3B
C4502	2B
C4503	2B
C4504	2B
C4505	2B
C4506	2B
C4507	2B
C4508	1B
C4509	1B
C4510	1B
C4511	1B
C4512	1B
C4513	1B
C4514	1B
C4515	1B
C4516	1B
C4517	1B
C4518	2B
C4519	2B
C4520	2B
C4522L	4A
C4522R	4A
C4524L	4A
C4524R	4A
C4526L	3B
C4526R	4B
C4528L	4B
C4528R	4B
C4530	2A
C4531	2B
C4532	3B
C4533	3B
C4534	2B
C4536	2B
C4537	2B
C4538	2B
C4565	4A
C4571L	1A
C4571R	1A
C4572L	1A
C4572R	1A
C4573L	1A
C4573R	1A
C4581	2A
C4582	2A
C4583	2A
C4584	2B
C4585	2A

Symbol No	Parts Location
D	
D4501	4A
IC	
IC4501	2B
IC4581	2A
J	
J4501	4A
J4502	4B
J4571	1B
JP	
JP4507	4A
JP4510	3B
JP4511	1B
JP4512	1B
JP4517R	2A
L	
L4501	3B
L4502	2B
L4581	2A
PG	
PG4501	4A
PG4502	1A
Q	
Q4501	3A
Q4502	2A
Q4503	4A
QF	
QF4501	4A
R	
R4501	3B
R4502	3B
R4503	3B
R4504	3B
R4505	3A
R4506	3A
R4507	3A
R4508	3A
R4510	2A
R4511	2A
R4512L	4A
R4512R	4A
R4514L	4B
R4514R	4B
R4516	2B
R4517	2B
R4518	4A
R4519	3B
R4571L	1A
R4571R	1A
R4572L	1A
R4572R	1A
R4573L	1A
R4573R	1A
R4584	2A
R4585	2A
R4587	2A
R4588	2A
R4589	2A

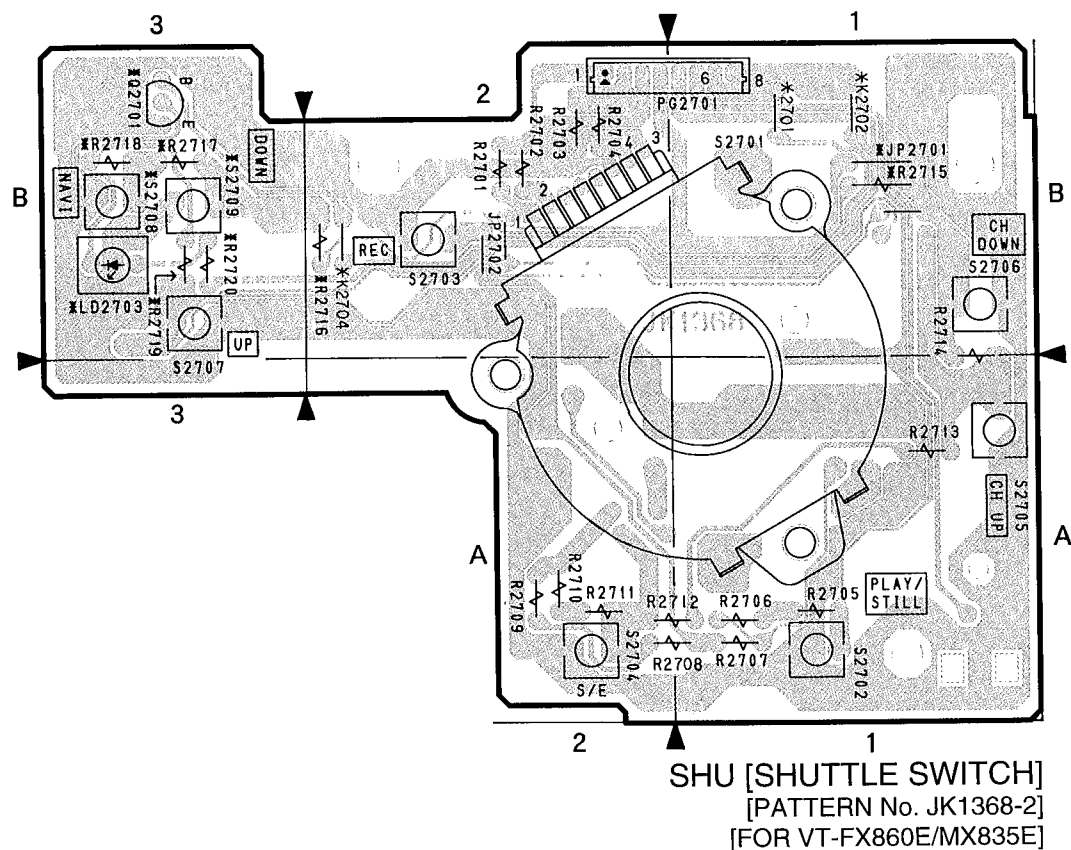
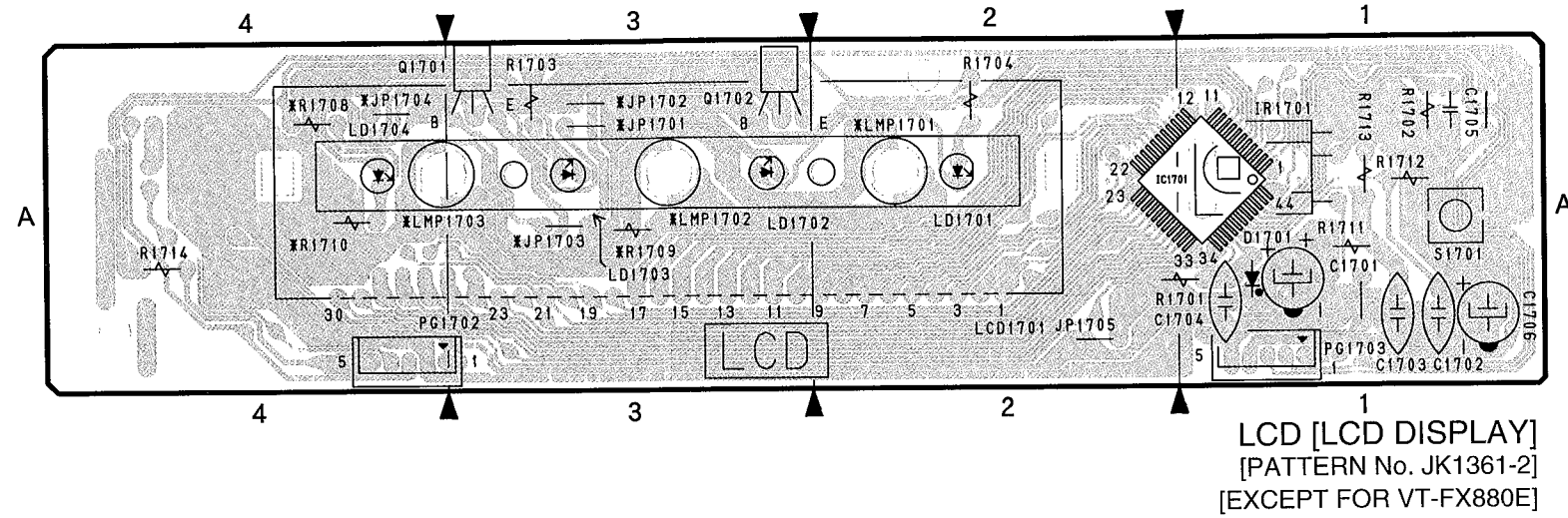
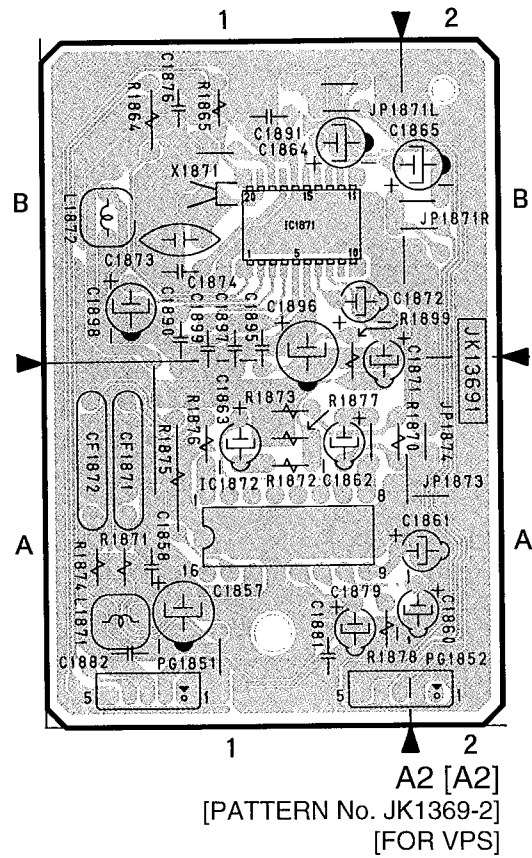
Symbol No	Parts Location
R4590	2A
ZD	
ZD4501	3B
ZD4502	4A

N&A

Symbol No	Parts Location
BL	
BL1801	B-2A
BL1802	B-1A
BL1809	B-1B
C	
C1801	B-1B
C1803	B-1B
C1805	B-1B
C1807	A-2B
C1808	B-2B
C1809	B-2B
C1810	B-1B
C1812	B-1B
C1814	B-1B
C1815	B-1B
C1816	A-1B
C1817	B-1B
C1819	B-1B
C1821	A-1B
C1822	A-1A
C1824	B-1A
C1825	A-1A
C1826	B-1A
C1827	A-2A
C1828	B-2B
C1851L	A-1A
C1851R	A-1A
C1852L	B-1A
C1852R	B-1A
C1853L	A-1A
C1853R	A-1A
C1854L	A-1A
C1854R	A-1A
C1855L	B-2A
C1855R	B-1A
C1861	B-1A
C1862	B-1A
D	
D1801	B-1B
IC	
IC1801	B-1B
IC1802	B-1A
L	
L1802	A-1A
L1803	A-2A
L1805	A-2B
L1851L	A-2A
L1851R	A-1A
PG	
PG1851	A-1A
PG1852	A-1A
R	
R1802	B-2B
R1803	B-2B
R1804	B-2B
R1805	B-1B
R1806	B-1B
R1807	B-1B

Symbol No	Parts Location
R1813	B-1B
R1814	B-1B
R1816	B-1B
R1817	A-1A
R1851L	B-1A
R1851R	B-1A
R1852L	B-1A
R1852R	B-1A
R1853L	B-1A
R1853R	B-1A
R1854L	B-1A
R1855L	B-1A
R1856L	B-1A
R1856R	B-1A
R1857L	B-1A
R1857R	B-1A
X	
X1801	A-1B

A2, SHU, LCD CIRCUIT BOARDS



DIFFERENCE TABLE

NOTE: This table lists the different components marked with asterisks (*) in the circuit board diagrams

LCD		
SYMBOL No.	FX850E/ FX840E	FX860E/ MX835E
JP1701	×	○
JP1702	○	×
JP1703	○	×
JP1704	×	○
LMP1701	×	○
LMP1702	×	○
LMP1703	×	○
R1708	×	○
R1709	○	×
R1710	○	×

SHU		
SYMBOL No.	FX860E/ MX835E(UK)	MX835E (VPS)
JP2701	×	○
JP2702	○	×
K2701	○	×
K2702	○	×
K2704	○	×
LD2703	○	×
PG2701	8P	6P
Q2701	○	×
R2715	○	×
R2716	○	×
R2717	○	×
R2718	○	×
R2719	○	×
R2720	○	×
S2707	○	×
S2708	○	×
S2709	○	×

IDENTIFICATION OF PARTS LOCATION

A2

Symbol No	Parts Location	Symbol No	Parts Location
C		R	
C1857	1A	R1864	1B
C1858	1A	R1865	1B
C1860	2A	R1870	1A
C1861	2A	R1871	1A
C1862	1A	R1872	1A
C1863	1A	R1873	1A
C1864	1B	R1874	1A
C1865	2B	R1875	1A
C1871	1A	R1876	1A
C1872	1B	R1877	1A
C1873	1B	R1878	1A
C1874	1B	R1899	1A
C1876	1B	X	
C1879	1A	X1871	1B
C1881	1A		
C1882	1A		
C1890	1B		
C1891	1B		
C1895	1B		
C1896	1B		
C1897	1B		
C1898	1B		
C1899	1B		
CF			
CF1871	1A		
CF1872	1A		
IC			
IC1871	1B		
IC1872	1A		
L			
L1871	1A		
L1872	1B		
PG			
PG1851	1A		
PG1852	1A		

SHU

Symbol No	Parts Location	Symbol No	Parts Location
JP		S2703	2B
JP2701	1B	S2704	2A
K		S2705	1A
K2701	1B	S2706	1B
K2702	1B	S2707	3B
K2704	2B	S2708	3B
LD		S2709	3B
LD2703	3B		
PG			
PG2701	1B		
Q			
Q2701	3B		
R			
R2701	2B		
R2702	2B		
R2703	2B		
R2704	2B		
R2705	1A		
R2706	1A		
R2707	1A		
R2708	2A		
R2709	2A		
R2710	2A		
R2711	2A		
R2712	2A		
R2713	1A		
R2714	1B		
R2715	1B		
R2716	2B		
R2717	3B		
R2718	3B		
R2719	3B		
R2720	3B		
S			
S2701	1B		
S2702	1A		

LCD

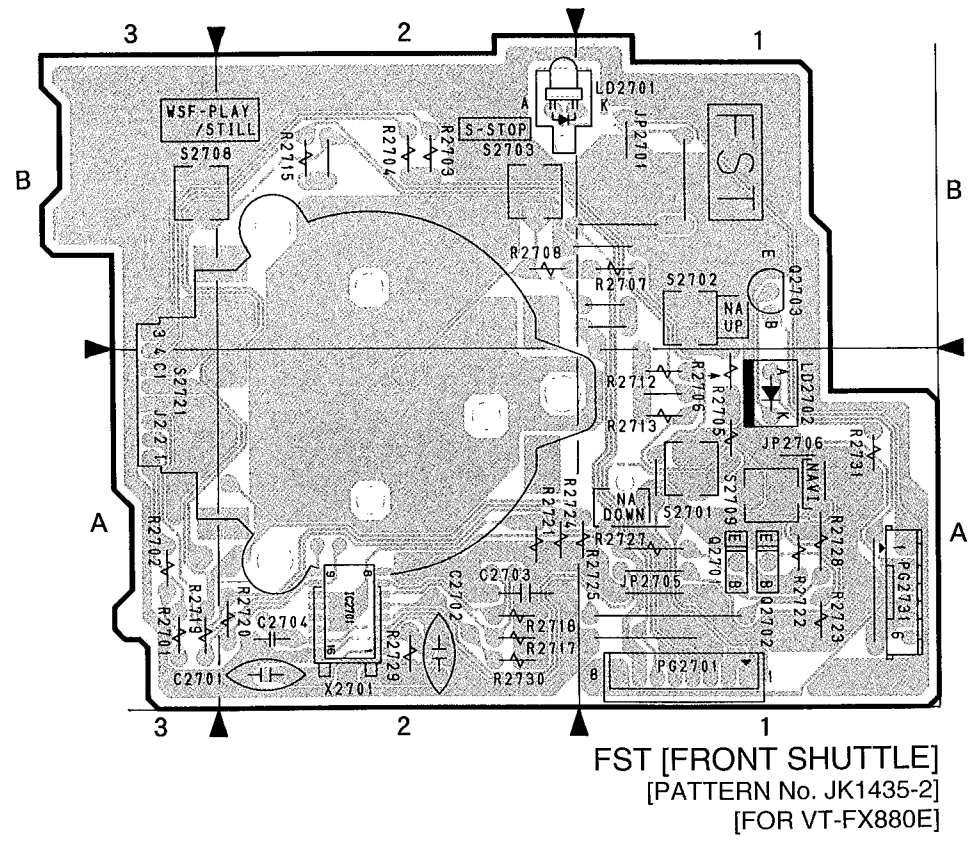
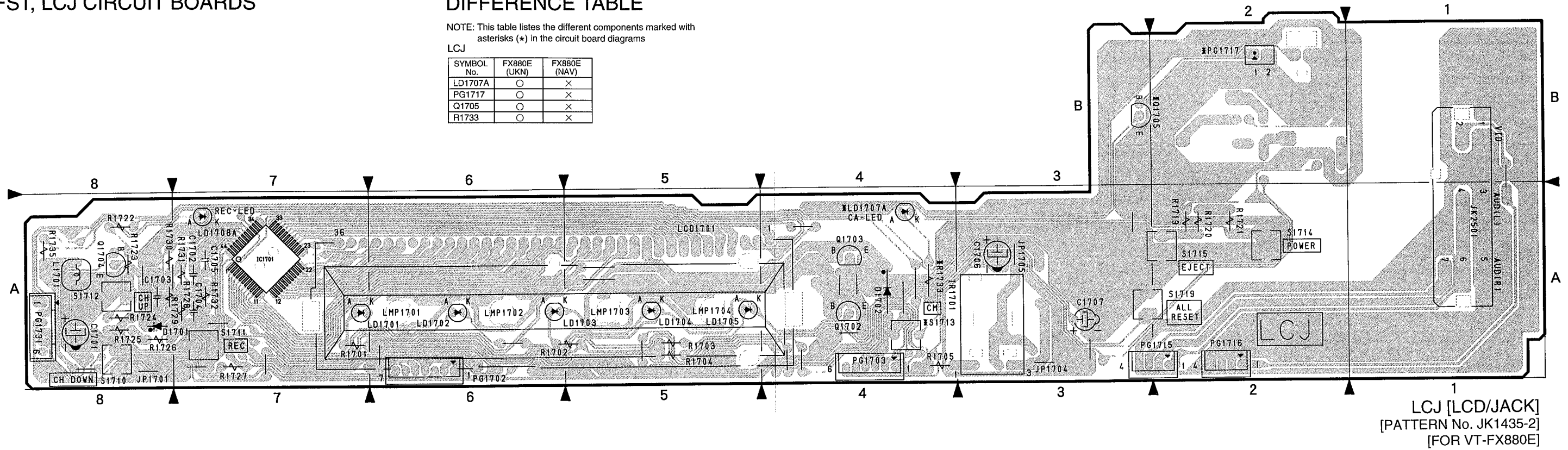
Symbol No	Parts Location	Symbol No	Parts Location
C		R1703	2A
C1701	4A	R1704	3A
C1702	4A	R1708	1A
C1703	4A	R1709	2A
C1704	4A	R1710	1A
C1705	4A	R1711	4A
C1706	4A	R1712	4A
D		R1713	4A
D1701	4A	R1714	1A
IC		S	
IC1701	4A	S1701	4A
IR			
IR1701	4A		
JP			
JP1701	2A		
JP1702	2A		
LCD			
LCD1701	2A		
LD			
LD1701	3A		
LD1702	2A		
LD1703	2A		
LD1704	1A		
LMP			
LMP1701	3A		
LMP1702	2A		
LMP1703	2A		
PG			
PG1702	1A		
PG1703	4A		
Q			
Q1701	2A		
Q1702	3A		
R			
R1701	4A		
R1702	4A		

FST, LCJ CIRCUIT BOARDS

DIFFERENCE TABLE

NOTE: This table lists the different components marked with asterisks (*) in the circuit board diagrams

SYMBOL No.	FX880E (UKN)	FX880E (NAV)
LD1707A	○	×
PG1717	○	×
Q1705	○	×
R1733	○	×



IDENTIFICATION OF PARTS LOCATION

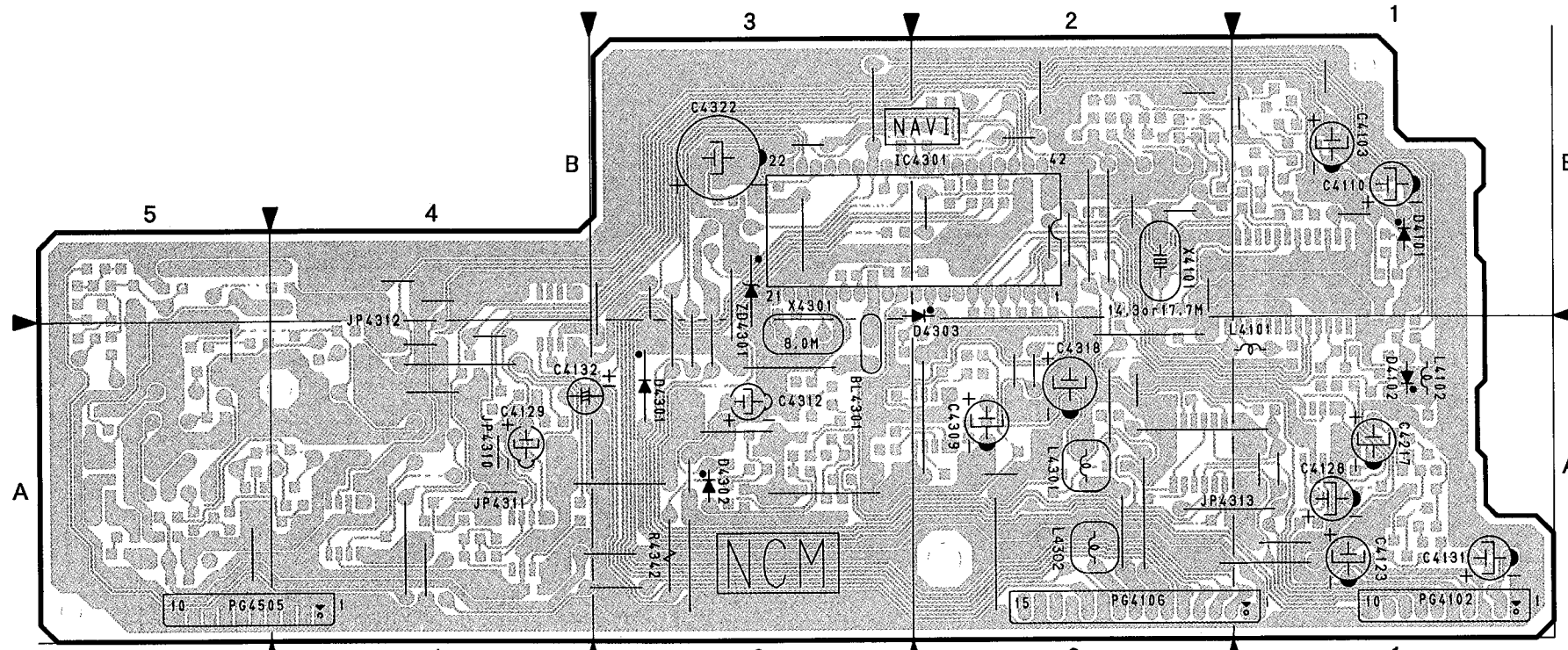
FST

Symbol No	Parts Location	Symbol No	Parts Location	Symbol No	Parts Location
C		R2707	1B	S2709	1A
C2701	2A	R2708	2B	S2721	3A
C2702	2A	R2712	1A	X	
C2703	2A	R2713	1A	X2701	2A
C2704	2A	R2715	2B		
IC		R2717	2A		
IC2701	2A	R2718	2A		
LD		R2719	3A		
LD2701	2B	R2720	2A		
LD2702	1A	R2721	2A		
PG		R2722	1A		
PG2701	1A	R2723	1A		
PG2731	1A	R2724	2A		
Q		R2725	1A		
Q2701	1A	R2727	1A		
Q2702	1A	R2728	1A		
Q2703	1B	R2729	2A		
R		R2730	2A		
R2701	3A	R2731	1A		
R2702	3A	S			
R2703	2B	S2701	1A		
R2704	2B	S2702	1B		
R2705	1A	S2703	2B		
R2706	1A	S2708	3B		

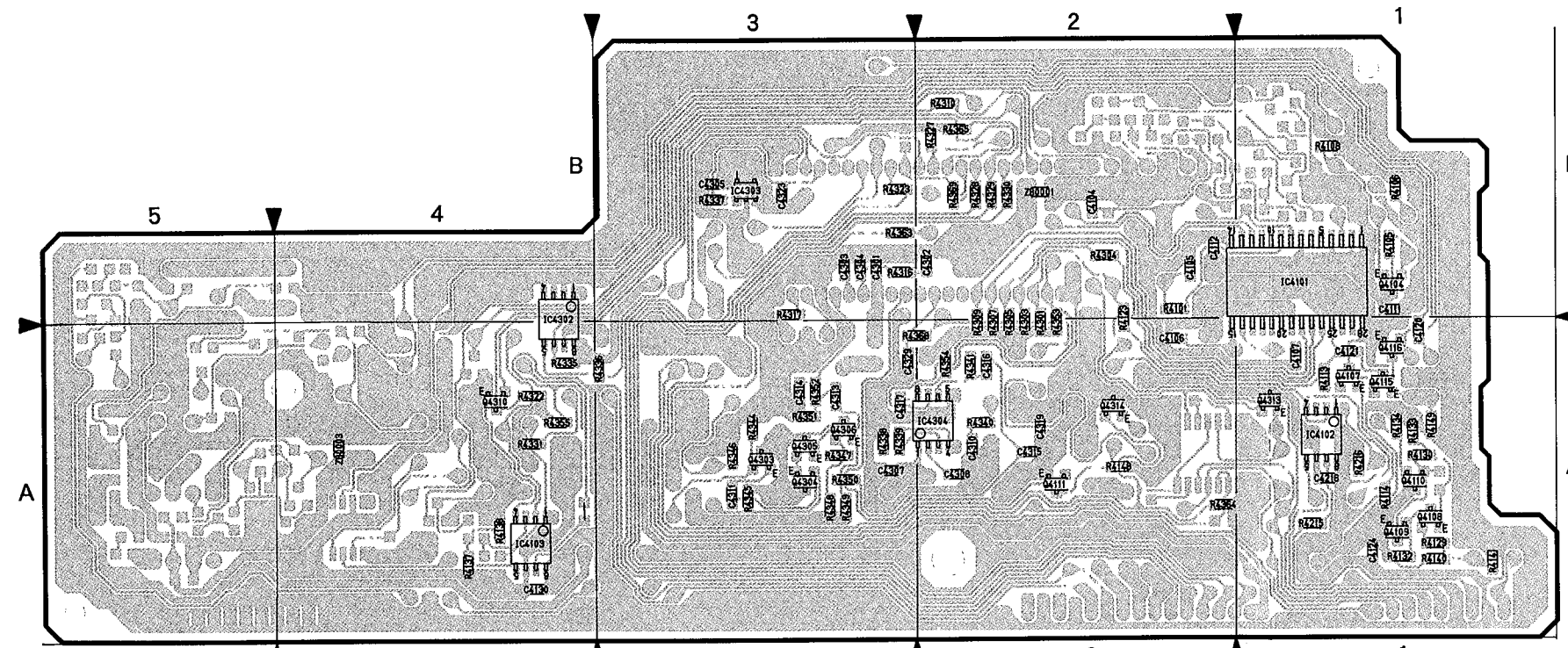
LCJ

Symbol No	Parts Location	Symbol No	Parts Location	Symbol No	Parts Location	Symbol No	Parts Location
C		LD1703	6A	R1702	5A	S1713	4A
C1701	8A	LD1704	5A	R1703	5A	S1714	2A
C1702	7A	LD1705	5A	R1704	5A	S1715	2A
C1703	8A	LD1707A	4A	R1705	4A	S1719	3A
C1704	7A	LD1708A	7A	R1719	2A		
C1705	7A	LMP		R1720	2A		
C1706	3A	LMP1701	6A	R1721	2A		
C1707	3A	LMP1702	6A	R1722	8A		
D		LMP1703	5A	R1723	8A		
D1701	8A	LMP1704	5A	R1724	8A		
D1702	4A	PG		R1725	8A		
IC		PG1702	6A	R1726	8A		
IC1701	7A	PG1703	4A	R1727	7A		
IR		PG1715	3A	R1728	7A		
IR1701	3A	PG1716	2A	R1729	8A		
JK		PG1717	2B	R1730	8A		
JK2501	1A	PG1731	8A	R1731	7A		
L		Q		R1732	7A		
L1701	8A	Q1702	4A	R1733	4A		
LCD		Q1703	4A	R1735	8A		
LCD1701	5A	Q1704	8A	S			
LD		Q1705	3B	S1710	8A		
LD1701	7A	R		S1711	7A		
LD1702	6A	R1701	7A	S1712	8A		

NCM CIRCUIT BOARD



NCM [TAPE NAVIGATION] -SIDE A-



NCM [TAPE NAVIGATION] -SIDE B-
[PATTERN No. JK1359-5]
[FOR VT-FX860E/MX835E]

IDENTIFICATION OF PARTS LOCATION

NCM

Symbol No	Parts Location	Symbol No	Parts Location	Symbol No	Parts Location
BL		L4101	A-1A	R4329	B-2B
BL4301	A-3A	L4102	A-1A	R4330	B-2B
C		L4301	A-2A	R4331	B-4A
C4103	A-1B	L4302	A-2A	R4335	B-4A
C4104	B-2B	PG		R4336	B-3A
C4105	B-2B	PG4102	A-1A	R4337	B-3B
C4106	B-2A	PG4106	A-2A	R4338	B-3A
C4107	B-1A	PG4505	A-5A	R4339	B-3A
C4110	A-1B	Q		R4340	B-2A
C4111	B-1B	Q4104	B-1B	R4341	B-2A
C4112	B-2B	Q4107	B-1A	R4342	A-3A
C4120	B-1A	Q4108	B-1A	R4344	B-3A
C4121	B-1A	Q4109	B-1A	R4345	B-3A
C4123	A-1A	Q4110	B-1A	R4346	B-3A
C4124	B-1A	Q4111	B-2A	R4347	B-3A
C4128	A-1A	Q4115	B-1A	R4348	B-3A
C4129	A-4A	Q4116	B-1A	R4349	B-3A
C4130	B-4A	Q4303	B-3A	R4350	B-3A
C4131	A-1A	Q4304	B-3A	R4351	B-3A
C4132	A-4A	Q4305	B-3A	R4352	B-3A
C4216	B-1A	Q4306	B-3A	R4353	B-2A
C4217	A-1A	Q4310	B-4A	R4354	B-2A
C4301	B-3B	Q4313	B-1A	R4355	B-4A
C4302	B-2B	Q4314	B-2A	R4363	B-3B
C4303	B-3B	R		R4364	B-2A
C4304	B-3B	R4101	B-2B	R4365	B-2B
C4305	B-3B	R4105	B-1B	R4368	B-2A
C4307	B-3A	R4106	B-1B	R4369	B-2B
C4308	B-2A	R4108	B-1B	X	
C4309	A-2A	R4113	B-1A	X4101	A-2B
C4310	B-2A	R4114	B-1A	X4301	A-3A
C4311	B-3A	R4123	B-2B	ZD	
C4312	A-3A	R4129	B-1A	ZD4301	A-3B
C4313	B-3A	R4130	B-1A		
C4314	B-3A	R4132	B-1A		
C4315	B-2A	R4133	B-1A		
C4316	B-2A	R4134	B-1A		
C4317	B-3A	R4137	B-4A		
C4318	A-2A	R4138	B-4A		
C4319	B-2A	R4140	B-1A		
C4322	A-3B	R4141	B-1A		
C4323	B-3B	R4148	B-2A		
C4329	B-3A	R4149	B-1A		
D		R4215	B-1A		
D4101	A-1B	R4216	B-1A		
D4102	A-1A	R4301	B-2A		
D4301	A-3A	R4303	B-2A		
D4302	A-3A	R4304	B-2B		
D4303	A-2B	R4305	B-2A		
IC		R4307	B-2A		
IC4101	B-1B	R4309	B-2A		
IC4102	B-1A	R4310	B-2B		
IC4103	B-4A	R4316	B-3B		
IC4301	A-2B	R4317	B-3B		
IC4302	B-4B	R4322	B-4A		
IC4303	B-3B	R4323	B-3B		
IC4304	B-2A	R4327	B-2B		
L		R4328	B-2B		

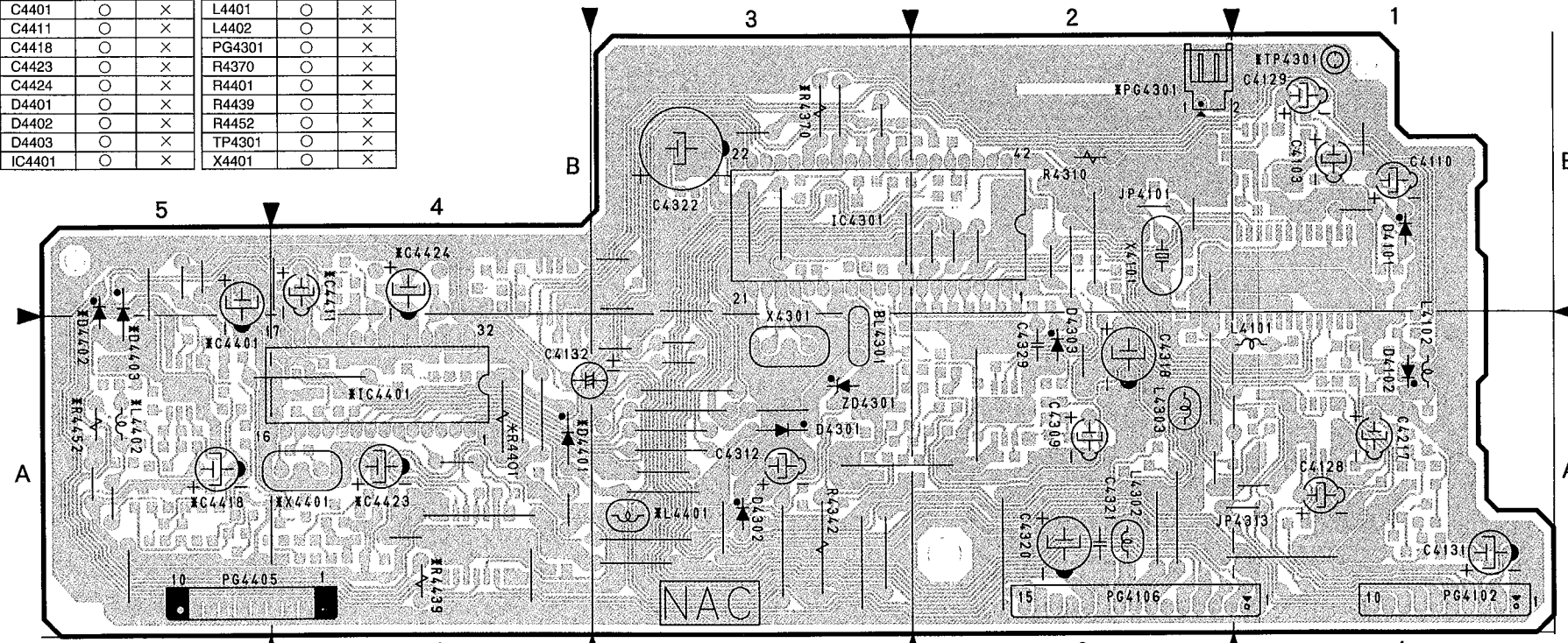
NAC CIRCUIT BOARD

DIFFERENCE TABLE

NOTE: This table lists the different components marked with asterisks (*) in the circuit board diagrams

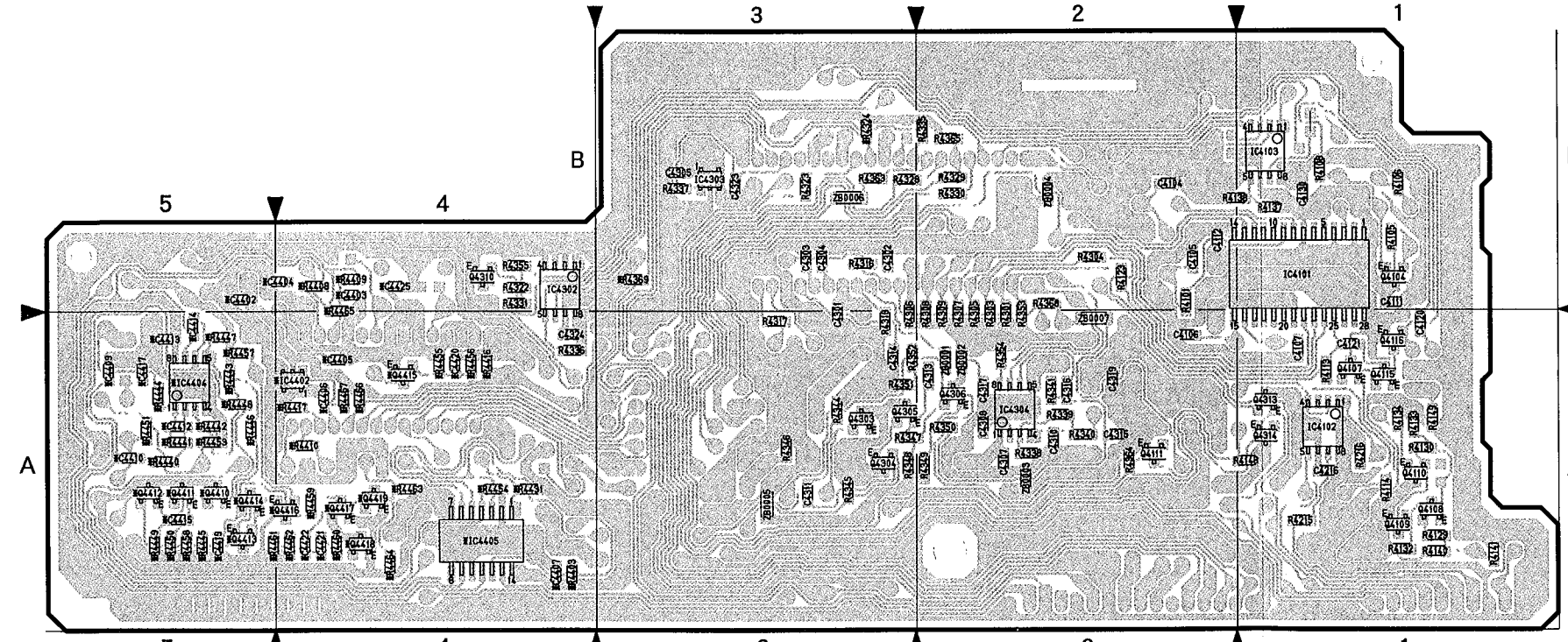
NAC -SIDE A-

SYMBOL No.	FX880E (UKN)	FX880E (NAV)	SYMBOL No.	FX880E (UKN)	FX880E (NAV)
C4401	○	×	L4401	○	×
C4411	○	×	L4402	○	×
C4418	○	×	PG4301	○	×
C4423	○	×	R4370	○	×
C4424	○	×	R4401	○	×
D4401	○	×	R4439	○	×
D4402	○	×	R4452	○	×
D4403	○	×	TP4301	○	×
IC4401	○	×	X4401	○	×



NAC [TAPE NAVIGATION/COMMERCIAL ADVANCE]

-SIDE A-



NAC [TAPE NAVIGATION/COMMERCIAL ADVANCE]

-SIDE B-

[PATTERN No. JK1436-2]
[FOR VT-FX880E]

IDENTIFICATION OF PARTS LOCATION

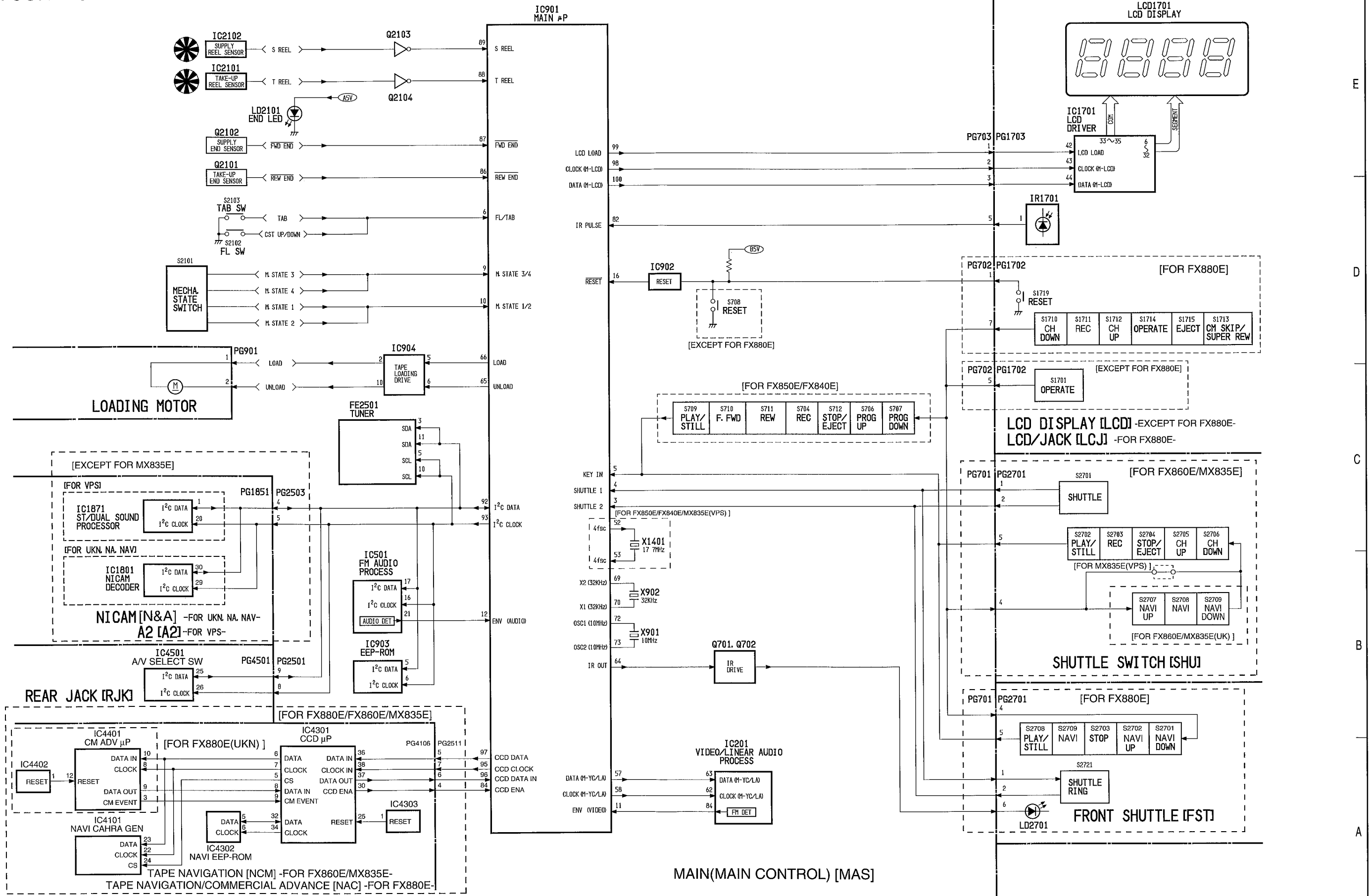
NAC

NAC -SIDE B-

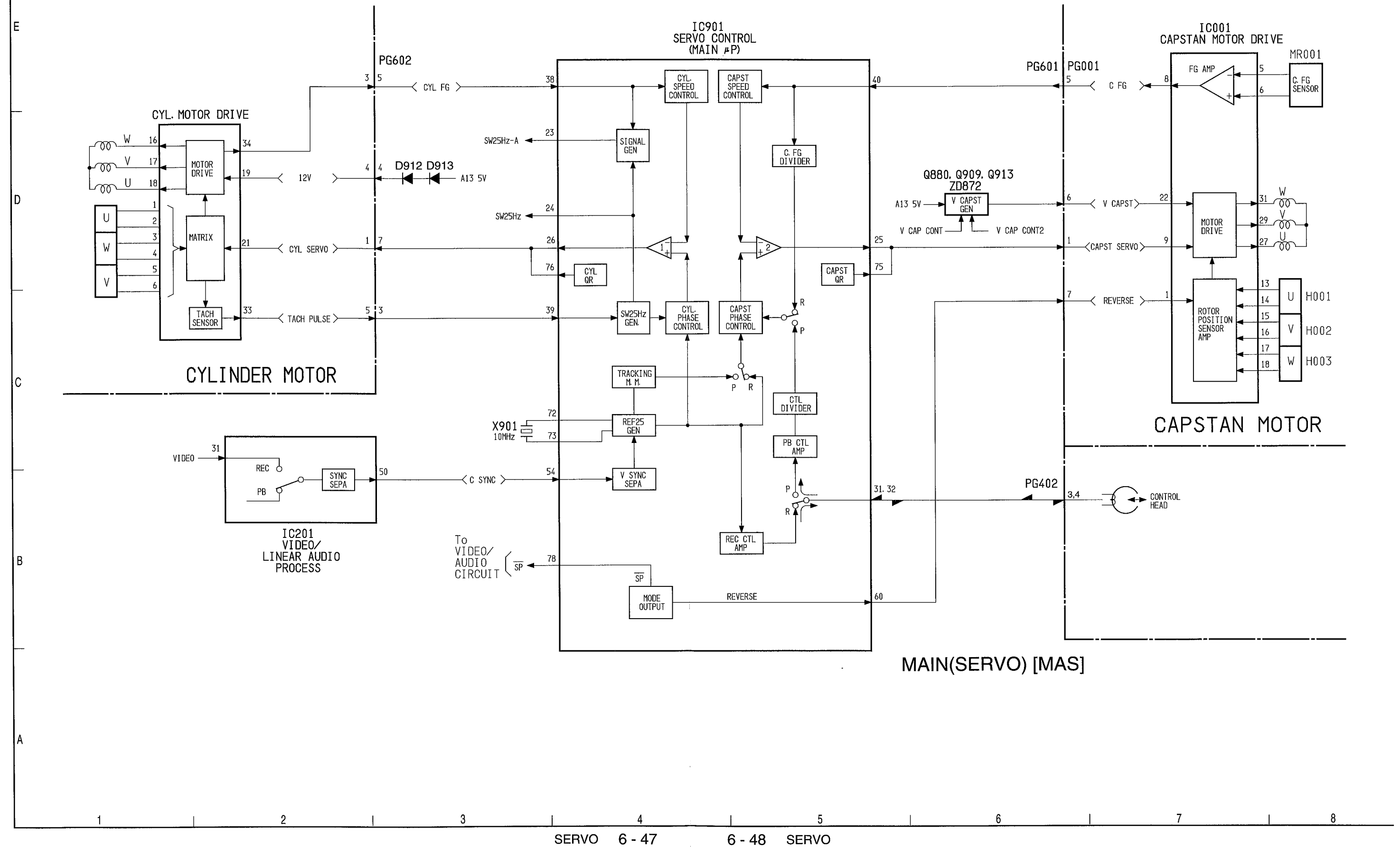
SYMBOL No.	FX880E (UKN)	FX880E (NAV)
C4402	○	×
C4403	○	×
C4404	○	×
C4405	○	×
C4406	○	×
C4407	○	×
C4409	○	×
C4410	○	×
C4412	○	×
C4413	○	×
C4414	○	×
C4415	○	×
C4417	○	×
C4419	○	×
C4420	○	×
C4421	○	×
C4422	○	×
C4425	○	×
IC4402	○	×
IC4404	○	×
IC4405	○	×
Q4410	○	×
Q4411	○	×
Q4412	○	×
Q4413	○	×
Q4414	○	×
Q4415	○	×
Q4416	○	×
Q4417	○	×
Q4418	○	×
Q4419	○	×
R4324	○	×
R4369	○	×
R4403	○	×
R4408	○	×
R4409	○	×
R4410	○	×
R4416	○	×
R4417	○	×
R4431	○	×
R4440	○	×
R4441	○	×
R4442	○	×
R4443	○	×
R4444	○	×
R4445	○	×
R4446	○	×
R4447	○	×
R4448	○	×
R4449	○	×
R4450	○	×
R4451	○	×
R4453	○	×
R4454	○	×
R4455	○	×
R4456	○	×
R4457	○	×
R4458	○	×
R4459	○	×
R4460	○	×
R4461	○	×
R4462	○	×
R4463	○	×
R4464	○	×
R4465	○	×
R4466	○	×
R4467	○	×

Symbol No	Parts Location	Symbol No	Parts Location	Symbol No	Parts Location	Symbol No	Parts Location	Symbol No	Parts Location
BL		C4417	B-5A	Q4410	B-5A	R4344	B-3A	X4101	A-2B
BL4301	A-3A	C4418	A-5A	Q4411	B-5A	R4345	B-3A	X4301	A-3A
C		C4419	B-5A	Q4412	B-5A	R4346	B-3A	X4401	A-4A
C4103	A-1B	C4420	B-4A	Q4413	B-5A	R4347	B-3A	ZD	
C4104	B-2B	C4421	B-4A	Q4414	B-5A	R4348	B-3A	ZD4301	A-3A
C4105	B-2B	C4422	B-4A	Q4415	B-4A	R4349	B-2A		
C4106	B-2A	C4423	A-4A	Q4416	B-4A	R4350	B-2A		
C4107	B-1A	C4424	A-4B	Q4417	B-4A	R4351	B-3A		
C4110	A-1B	C4425	B-4B	Q4418	B-4A	R4352	B-3A		
C4111	B-1B	D		Q4419	B-4A	R4353	B-2A		
C4112	B-2B	D4101	A-1B	R		R4354	B-2A		
C4120	B-1A	D4102	A-1A	R4101	B-2B	R4355	B-4B		
C4121	B-1A	D4301	A-3A	R4105	B-1B	R4363	B-3B		
C4128	A-1A	D4302	A-3A	R4106	B-1B	R4364	B-2A		
C4129	A-1B	D4303	A-2A	R4108	B-1B	R4365	B-2B		
C4130	B-1B	D4401	A-4A	R4113	B-1A	R4368	B-2B		
C4131	A-1A	D4402	A-5B	R4114	B-1A	R4369	B-3B		
C4132	A-4A	D4403	A-5B	R4123	B-2B	R4370	A-3B		
C4216	B-1A	IC		R4129	B-1A	R4401	A-4A		
C4217	A-1A	IC4101	B-1B	R4130	B-1A	R4403	B-4A		
C4301	B-3A	IC4102	B-1A	R4132	B-1A	R4408	B-4B		
C4302	B-3B	IC4103	B-1B	R4133	B-1A	R4409	B-4B		
C4303	B-3B	IC4301	A-3B	R4134	B-1A	R4410	B-4A		
C4304	B-3B	IC4302	B-4B	R4137	B-1B	R4416	B-4A		
C4305	B-3B	IC4303	B-3B	R4138	B-2B	R4417	B-4A		
C4307	B-2A	IC4304	B-2A	R4140	B-1A	R4431	B-4A		
C4308	B-2A	IC4401	A-4A	R4141	B-1A	R4439	A-4A		
C4309	A-2A	IC4402	B-4A	R4148	B-1A	R4440	B-5A		
C4310	B-2A	IC4404	B-5A	R4149	B-1A	R4441	B-5A		
C4311	B-3A	IC4405	B-4A	R4215	B-1A	R4442	B-5A		
C4312	A-3A	L		R4216	B-1A	R4443	B-5A		
C4313	B-2A	L4101	A-1A	R4301	B-2A	R4444	B-5A		
C4314	B-3A	L4102	A-1A	R4303	B-2A	R4445	B-5A		
C4315	B-2A	L4302	A-2A	R4304	B-2B	R4446	B-5A		
C4316	B-2A	L4303	A-2A	R4305	B-2A	R4447	B-5A		
C4317	B-2A	L4401	A-3A	R4306	B-3A	R4448	B-5A		
C4318	A-2A	L4402	A-5A	R4307	B-2A	R4449	B-5A		
C4319	B-2A	PG		R4308	B-2A	R4450	B-5A		
C4320	A-2A	PG4102	A-1A	R4309	B-2A	R4451	B-5A		
C4321	A-2A	PG4106	A-2A	R4310	A-2B	R4452	A-5A		
C4322	A-3B	PG4301	A-2B	R4316	B-3B	R4453	B-5A		
C4323	B-3B	PG4405	A-5A	R4317	B-3A	R4454	B-4A		
C4324	B-4A	Q		R4318	B-3A	R4455	B-4A		
C4329	A-2A	Q4104	B-1B	R4322	B-4B	R4456	B-4A		
C4401	A-5B	Q4107	B-1A	R4323	B-3B	R4457	B-5A		
C4402	B-5B	Q4108	B-1A	R4324	B-3B	R4458	B-5A		
C4403	B-4B	Q4109	B-1A	R4328	B-3B	R4459	B-4A		
C4404	B-4B	Q4110	B-1A	R4329	B-2B	R4460	B-4A		
C4405	B-4A	Q4111	B-2A	R4330	B-2B	R4461	B-5A		
C4406	B-4A	Q4115	B-1A	R4331	B-4B	R4462	B-4A		
C4407	B-4A	Q4116	B-1A	R4335	B-2B	R4463	B-4A		
C4409	B-5A	Q4303	B-3A	R4336	B-4A	R4464	B-4A		
C4410	B-5A	Q4304	B-3A	R4337	B-3B	R4465	B-4B		
C4411	A-4B	Q4305	B-3A	R4338	B-2A	R4466	B-4A		
C4412	B-5A	Q4306	B-2A	R4339	B-2A	R4467	B-4A		
C4413	B-5A	Q4310	B-4B	R4340	B-2A	TP			
C4414	B-5A	Q4313	B-1A	R4341	B-2A	TP4301	A-1B		
C4415	B-5A	Q4314	B-1A	R4342	A-3A	X			

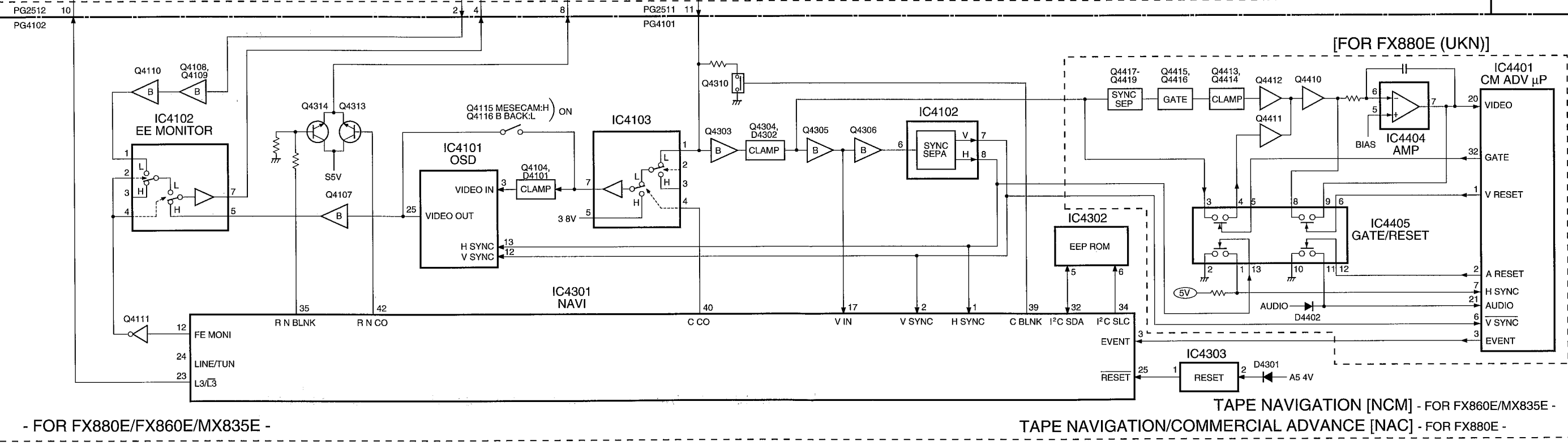
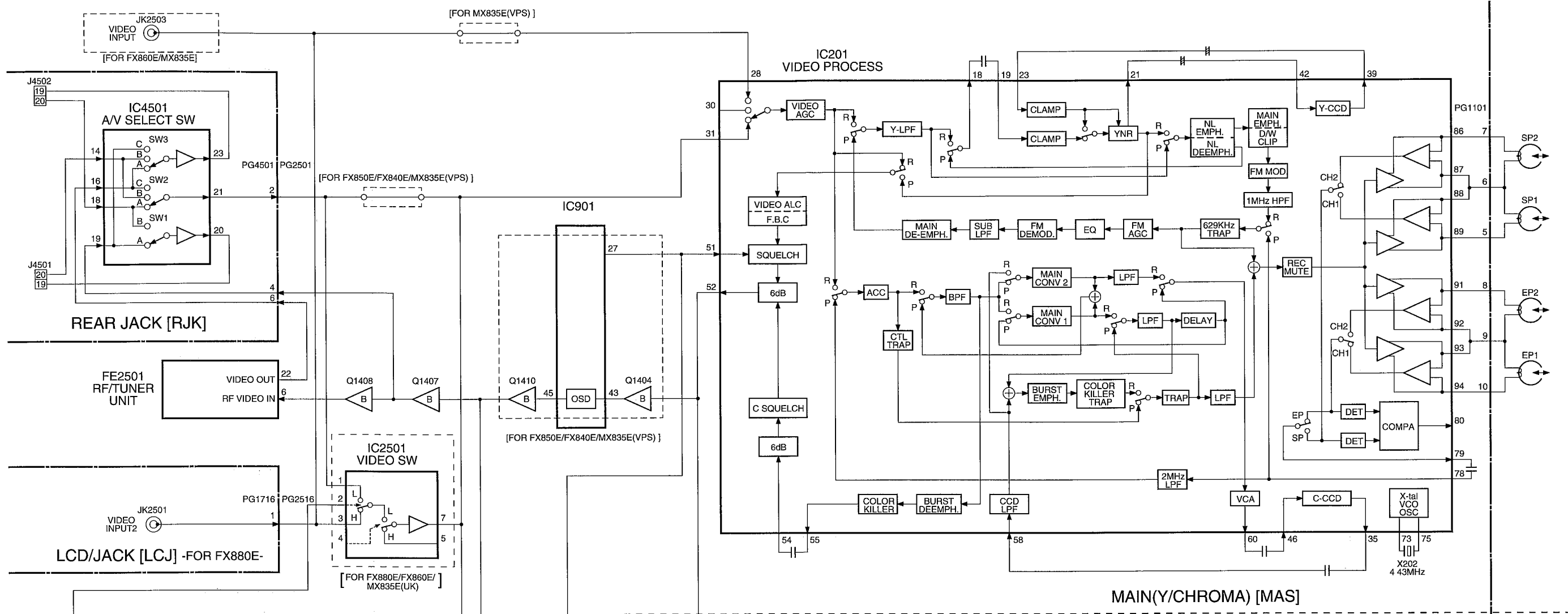
BLOCK DIAGRAMS
SYSTEM CONTROL



SERVO



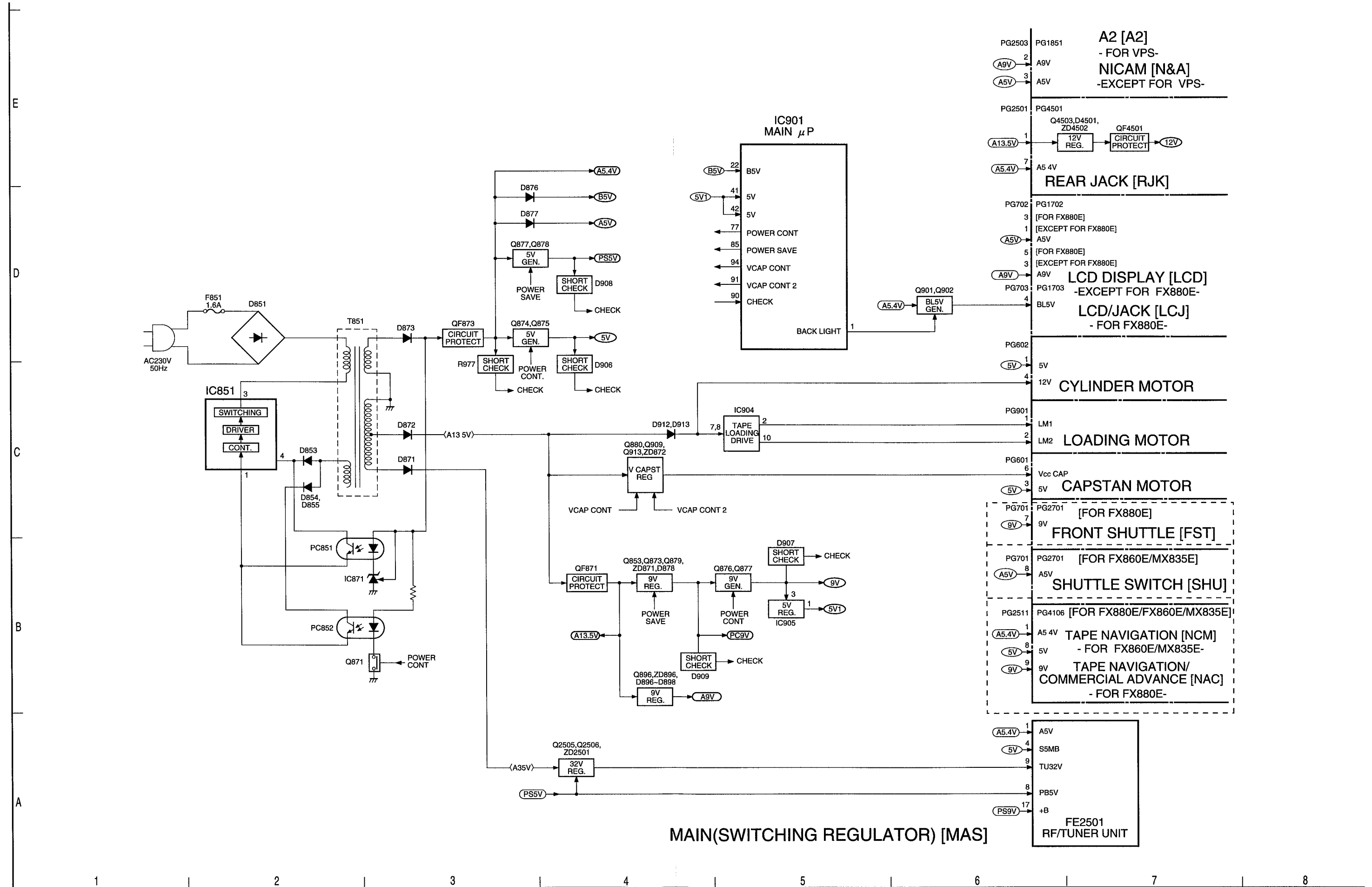
VIDEO



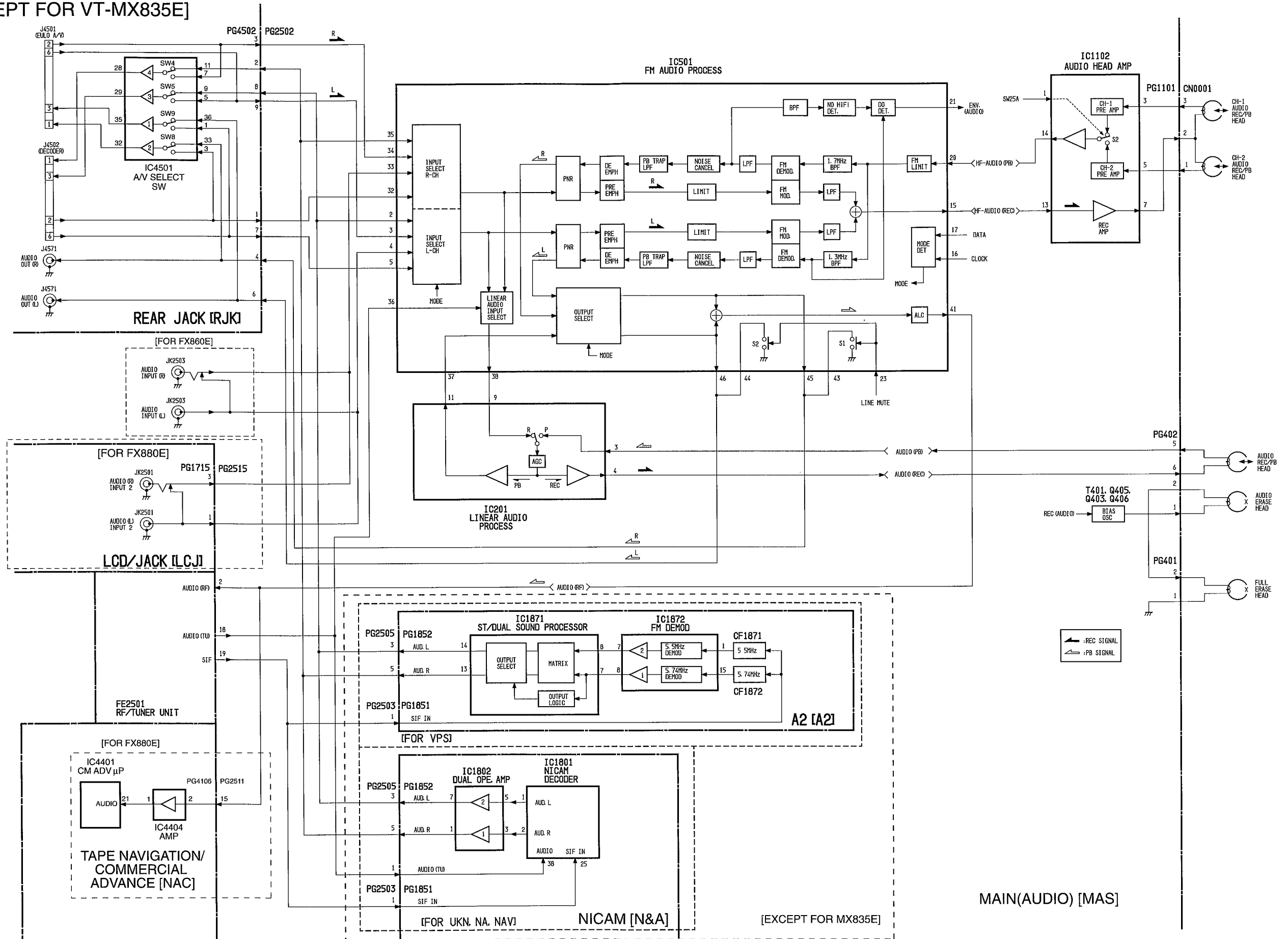
- FOR FX880E/FX860E/MX835E -

TAPE NAVIGATION [NCM] - FOR FX860E/MX835E -
 TAPE NAVIGATION/COMMERCIAL ADVANCE [NAC] - FOR FX880E -

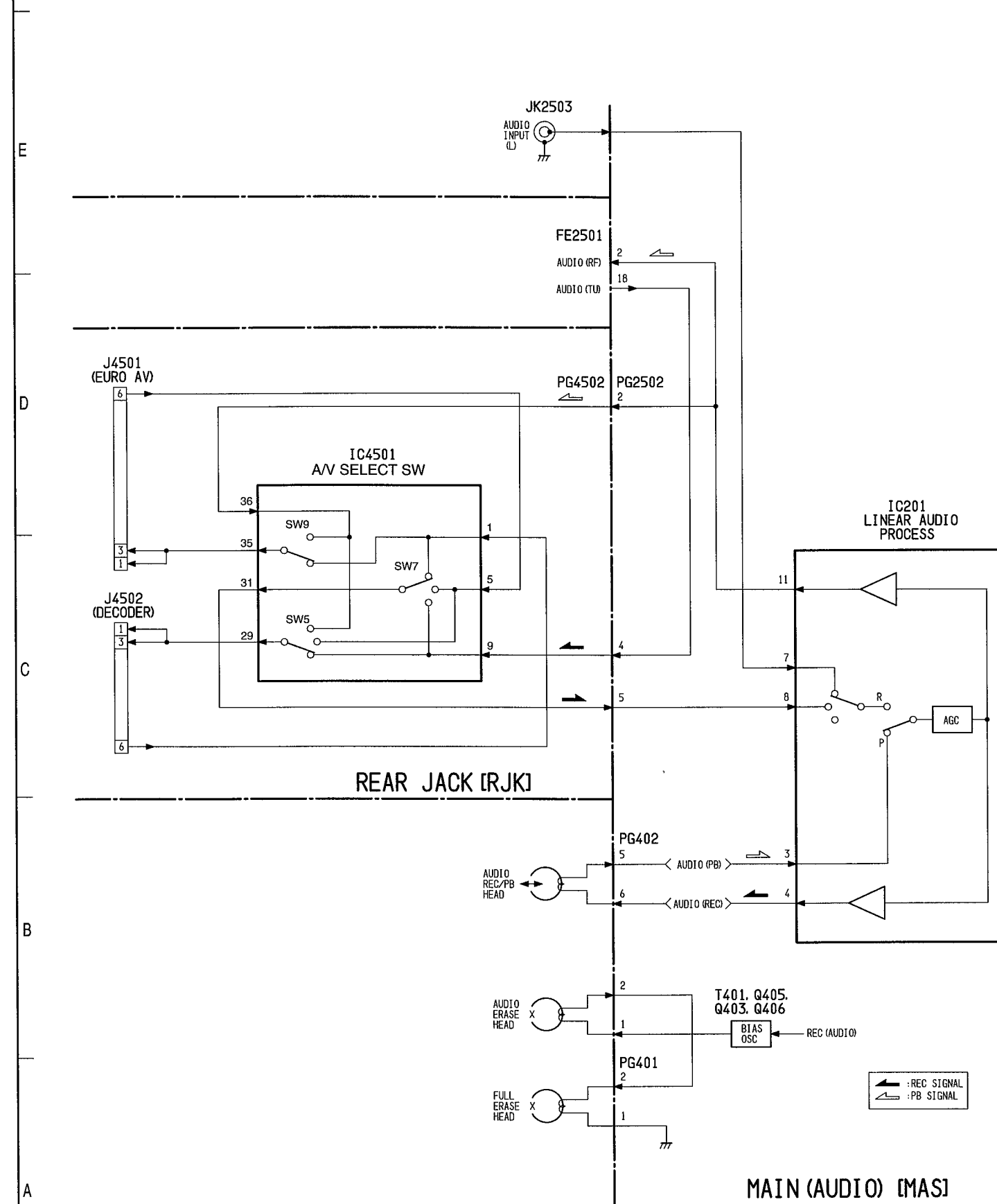
POWER SUPPLY



AUDIO [EXCEPT FOR VT-MX835E]



AUDIO [FOR VT-MX835E]



MICROPROCESSOR PIN FUNCTION TABLES

1. LCD DRIVER μ P (IC1701)

Pin No.	I/O	Active Level	Abbreviation	Function
1	-	-	SEGMENT (1)	Not used.
2	-	-	SEGMENT (2)	
5	-	-	SEGMENT (5)	
6	O	Pulse	SEGMENT (6)	
7	O	Pulse	SEGMENT (7)	
31	O	Pulse	SEGMENT (31)	LCD segment control outputs.
32	O	Pulse	SEGMENT (32)	
33	O	Pulse	COM1	
34	O	Pulse	COM2	LCD common (COM) control outputs.
35	O	Pulse	COM3	
36	I	Lo	RESET (L)	
37	I	Hi	VDD	A5V power input.
38	I	-	VDD 1	LCD drive bias.
39	I	-	VDD 2	LCD drive bias.
40	I	Lo	VSS	Ground.
41	I/O	-	OSC	Generates a 32kHz signal for key scanning.
42	I	Lo	LCD LOAD	LOAD signal between the LCD- μ P and M- μ P. "Lo" input enables chip select.
43	I	Pulse	CLOCK (M-LCD)	The data is transferred from the M- μ P, synchronized with the clock signal.
44	I	Pulse	DATA (M-LCD)	

2. MAIN μ P (IC901)

Pin No.	I/O	Active Level	Abbreviation	Function																																				
1	O	Hi	BACK LIGHT	LCD backlight control signal. When LED lights: "L"; When LAMP lights: "H".																																				
2	-	-	GND	Ground																																				
3	I	A/D	SHUTTLE 2 (CLOCK FAST)	SHUTTLE A/D input signals <table border="1"> <thead> <tr> <th></th> <th>-X11</th> <th>-X5</th> <th>-X1</th> <th>-X1/7</th> <th>0</th> <th>X1/7</th> <th>X1</th> <th>X5</th> <th>X11</th> </tr> </thead> <tbody> <tr> <td>SHU 1</td> <td>2.5/1.9</td> <td>1.9/2.5</td> <td>2.5</td> <td>1.9</td> <td>5.0</td> <td>3.2</td> <td>5.0</td> <td>5.0/3.2</td> <td>5.0/3.2</td> </tr> <tr> <td>SHU 2</td> <td>2.5</td> <td>1.9</td> <td>3.2</td> <td>3.2/5.0</td> <td>5.0</td> <td>5.0/3.2</td> <td>3.2</td> <td>1.9</td> <td>2.5</td> </tr> </tbody> </table>		-X11	-X5	-X1	-X1/7	0	X1/7	X1	X5	X11	SHU 1	2.5/1.9	1.9/2.5	2.5	1.9	5.0	3.2	5.0	5.0/3.2	5.0/3.2	SHU 2	2.5	1.9	3.2	3.2/5.0	5.0	5.0/3.2	3.2	1.9	2.5						
	-X11	-X5	-X1		-X1/7	0	X1/7	X1	X5	X11																														
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SHU 2	2.5	1.9	3.2	3.2/5.0	5.0	5.0/3.2	3.2	1.9	2.5																															
4	I	A/D	SHUTTLE 1	* CLOCK FAST when SHUTTLE 2 is 5 V or less																																				
5	I	A/D	KEY IN	Front key voltage data input																																				
6	I	A/D	FL/TAB	FL mechanism loading/unloading detection, and TAB detection. Loading/unloading completed: 1.24 V or more; In transition state: less than 1.24 V / TAB present: 3.75 V or more																																				
7	I	Lo	P. STOP	Power failure detection signal. "L" is input when power failure is detected ("L" when microprocessor voltage is 4.7 V or less).																																				
8	I	Hi	S. CURVE	Fine tuning detection signal																																				
9	I	A/D	MODE 2	Mechanism mode switching signals <table border="1"> <thead> <tr> <th>Position</th> <th>2</th> <th>8</th> <th>7</th> <th>6</th> <th>1</th> <th>5</th> <th>4</th> <th>3</th> </tr> <tr> <td></td> <td>UL</td> <td>FF/REW</td> <td>STP2</td> <td>R/P</td> <td>FL</td> <td>FS</td> <td>RFS</td> <td>REV</td> </tr> </thead> <tbody> <tr> <td>MODE 1</td> <td>3.05</td> <td>3.0</td> <td>2.50</td> <td>1.80</td> <td>1.80</td> <td>0.00</td> <td>0.00</td> <td>0.00V</td> </tr> <tr> <td>MODE 2</td> <td>2.50</td> <td>0.00</td> <td>2.50</td> <td>3.05</td> <td>0.00</td> <td>3.05</td> <td>2.50</td> <td>1.80V</td> </tr> </tbody> </table>	Position	2	8	7	6	1	5	4	3		UL	FF/REW	STP2	R/P	FL	FS	RFS	REV	MODE 1	3.05	3.0	2.50	1.80	1.80	0.00	0.00	0.00V	MODE 2	2.50	0.00	2.50	3.05	0.00	3.05	2.50	1.80V
Position	2	8	7		6	1	5	4	3																															
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MODE 2	2.50	0.00	2.50	3.05	0.00	3.05	2.50	1.80V																																
10	I	A/D	MODE 1																																					
11	I	A/D	VIDEO ENV	Signals are A/D converted and input for autotracking																																				
12	I	A/D	AUDIO ENV																																					
13	I	A/D	MDOEL SW	Switches models according to the input signal.																																				
14	I	A/D	DEC IN	DECODER detection signal																																				
15	I	-	VREF	A/D converter reference voltage																																				
16	I	Lo	RESET	"L" input resets the microprocessor.																																				
17	O	-	NC																																					
18	O	Hi	ST/SAP OUT	Not used.																																				
19	O	Hi	GREEN MODE	Not used.																																				
20	O	-	NC																																					
21	O	-	NC																																					
22	I	-	VCC	Connected to backup power supply.																																				
23	O	Pulse	SW25A	SW25 pulse for switching Hi-Fi heads																																				
24	O	Pulse	SW25	SW25 pulse for switching WYC heads																																				
25	O	PWM	CAP PWM	Capstan motor control PWM output																																				
26	O	PWM	DRUM PWM	Drum motor control PWM output																																				
27	O	Hi	V. PULSE	Artificial V sync pulse output																																				
28	O	Pulse	C. ROTARY	Not used.																																				
29	O	Hi/Lo	H. AMP SW	Not used.																																				
30	I	Hi/Lo	COMP	Compares outputs from SP and LP heads: when the LP head output is higher, "H" is input.																																				
31	I/O	Pulse	CTL H (+)	CTL pulse input/output																																				
32	I/O	Pulse	CTL H (-)	CTL pulse input/output																																				
33	-	-	Vss (SRV)	GND																																				
34	I	Pulse	CTL AMP I1	CTL amp gain switching input																																				
35	I	Pulse	CTL AMP I2	CTL amp negative feedback input																																				
36	I	Pulse	CTL AMP I3	CTL amp input																																				
37	O	Pulse	CTL AMP (0)	CTL amp output																																				
38	I	Pulse	DRUM FG	Drum FG input																																				
39	I	Pulse	DRUM PG	Drum PG input																																				
40	I	Pulse	CFG	CFG input signal																																				
41	I	-	Vcc (SRV)	S5V power supply for SRV																																				

Pin No.	I/O	Active Level	Abbreviation	Function															
42	I	–	Vcc (OSD)	S5V power supply for OSD															
43	I	–	CV IN	Video signal input (2 Vp-p, with sync tip clamp circuit)															
44	I	–	Vref	Reference bias, clamp bias monitor pin															
45	O	–	CV OUT	Composite video signal output (2 Vp-p)															
46	I	–	CHAR Bias	For externally adjusting character luminance level															
47	I	–	AFC LPF	An LPF for AFC is externally attached.															
48	I	–	AFC OSC	Oscillator for AFC															
49	I	–	GND (OSD)	Ground															
50	I	Pulse	DOSC IN	LC or RC oscillator for generating dot clock															
51	O	Pulse	DOSC OUT	LC or RC oscillator for generating dot clock															
52	O	–	4fsc OUT	4fsc or 2fsc oscillator															
53	I	–	4fsc IN	4fsc or 2fsc oscillator															
54	I	Pulse	C. SYNC	C.SYNC input for video output															
55	O	Hi	BLUE BACK	"H" during OSD blue background															
56	O	Hi	HiFi REC	Hi-Fi audio recording signal. REC and V.DUB: "H" REC PAUSE and V.DUB PAUSE: "L".															
57	I/O	Pulse	12C DATA (AV)	I2C communication data signal															
58	O	Pulse	12C CLK (AV)	I2C communication clock signal															
59	O	Lo	PB	Sets the video system to the playback mode. During playback: "L".															
60	O	Hi	REVERSE	Capstan motor reverse control output ("H" for reverse drive)															
61	O	Hi	A. REC	Linear audio recording signal. REC, A.DUB and A.DUB PAUSE: "H". REC PAUSE: "L".															
62	O	Hi	CTL RESET	Adds reset pulse to CTL during REVERSE SLOW.															
63	O	Hi/Lo	PAL/NTSC	Video switching. NTSC playback: "L", PAL playback: "H". The output is fixed at "L" for models without PAL or NTSC playback.															
64	O	Pulse	IR OUT	IR output that controls cable box (satellite decoder). The output is fixed at "L" for models without SAT.															
65	O	Hi	LM2 (UNLOAD)	Loading motor control outputs.															
66	O	Hi	LM1 (LOAD)																
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	Stop	Loading	Unloading	Brake															
LM1 (LOAD)	L	H	L	H															
LM2 (UNLOAD)	L	L	H	H															
67	O	Hi/Lo	LM CONT	Loading motor voltage control output															
68	–	–	TEST	Ground															
69	I	–	XCIN	For the connection of 32.768kHz crystal oscillator (tolerance: within ±5 ppm)															
70	O	–	XCOUT																
71	I	–	GND	Ground															
72	I	–	XIN	For the connection of 10MHz ceramic oscillator (tolerance: within ±0.50 ppm)															
73	O	–	XOUT																
74	O	Hi	L. MUTE	Audio output system muting control. "H": Muting ON (used in common with FTZ muting)															
75	I/O	Hi/Lo	CAPS Q. R	Capstan control signal. "H": Voltage control, "OPEN": Servo control, "L": Braking															
76	I/O	Hi/Lo	DRUM Q. R	Cylinder control signal. Horizontal jitter correction.															
77	O	Hi	POWER CONT	Switches S power supply on and off. "H": Power ON, "L": Power OFF (or "OPEN". When microprocessor is initialized)															
78	O	Lo	SP	Not used.															
79	I	Hi/Lo	MESECAM DET	MESECAM signal detection input. When MESECAM signal detected: "H". Not connected and fixed at "L" for PAL models, not handling MESECAM signal.															
80	O	Hi	REC	Video signal recording control. REC LED control signal. During REC, REC PAUSE, V.DUB, V.DUB PAUSE: "H".															
81	O	Hi	MTS MUTE	Tuner audio muting signal. During playback, line input: "H" During MPX muting for channel switching: "H"															

Pin No.	I/O	Active Level	Abbreviation	Function																																																
82	I	Pulse	IR. IN	Remote control receiving signal																																																
83	O	–	NC																																																	
84	I	Hi	CCD CE	CCD microprocessor chip enable																																																
85	O	Hi	P SAVE	Detects VPS/PDC programming status and switches S power on and off. Power ON: "H", Power OFF: "L", Standby with VPS/PDC programming: "H"																																																
86	I	Lo	EST	End sensor inputs.																																																
87	I	Lo	ESS	1. Used to detect whether or not a cassette is loaded into the US mechanism. With cassette: ESS or EST is "H". Without cassette: Both ESS and EST are "L". 2. Used to detect the start and end of tape. Tape start: EST "L" and ESS "H". Tape end: EST "H" and ESS "L"																																																
88	I	Pulse	T. REEL	Reel pulses for detecting rotation of take-up reel disk																																																
89	I	Pulse	S. REEL	Reel pulses for detecting rotation of supply reel disk																																																
90	I	Lo	CHECK	Signal to detect short-circuit in S5V, S9V, PS5V and PS9V.																																																
91	O	Hi/Mid/Lo	V. CAP. CONT 2	Sets capstan motor voltage during playback, fast forward/rewind and slow.																																																
94	O	Hi/Mid/Lo	V. CAP. CONT	<table border="1" style="display: inline-table; margin-right: 20px;"> <thead> <tr> <th colspan="3">FF/REW</th> </tr> <tr> <th>FF/REW</th> <th>91, 94</th> <th>V</th> </tr> </thead> <tbody> <tr> <td>During S.L acceleration</td> <td>L L</td> <td>13.5</td> </tr> <tr> <td>Less than EPX1</td> <td>L L</td> <td>13.5</td> </tr> <tr> <td>EPX1-SPX6</td> <td>L H</td> <td>9.5</td> </tr> <tr> <td>More than SPX6</td> <td>L L</td> <td>13.5</td> </tr> <tr> <td>Low-speed FF/REW</td> <td>L L</td> <td>13.5</td> </tr> </tbody> </table> <table border="1" style="display: inline-table; margin-right: 20px;"> <thead> <tr> <th colspan="3">PB/REC/SR</th> </tr> <tr> <th></th> <th>91, 94</th> <th>V</th> </tr> </thead> <tbody> <tr> <td>X1</td> <td>H H</td> <td>7.5</td> </tr> <tr> <td>X3-X5</td> <td>L H</td> <td>9.5</td> </tr> <tr> <td>X7</td> <td>L L</td> <td>13.5</td> </tr> </tbody> </table> <table border="1" style="display: inline-table;"> <thead> <tr> <th colspan="3">SLOW</th> </tr> <tr> <th></th> <th>91, 94</th> <th>V</th> </tr> </thead> <tbody> <tr> <td>BRAKE</td> <td>L H</td> <td>9.5</td> </tr> <tr> <td>SP ACCEL</td> <td>L L</td> <td>13.5</td> </tr> </tbody> </table> <p>* 13.5 V in modes other than above (pins 91 and 94 are "L")</p>	FF/REW			FF/REW	91, 94	V	During S.L acceleration	L L	13.5	Less than EPX1	L L	13.5	EPX1-SPX6	L H	9.5	More than SPX6	L L	13.5	Low-speed FF/REW	L L	13.5	PB/REC/SR				91, 94	V	X1	H H	7.5	X3-X5	L H	9.5	X7	L L	13.5	SLOW				91, 94	V	BRAKE	L H	9.5	SP ACCEL	L L	13.5
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92	I/O	Pulse	I2C DATA	I2C communication data signal																																																
93	O	Pulse	I2C CLOCK	I2C communication clock signal																																																
95	O	Pulse	CCD CLOCK	Clock signal for CCD communications																																																
96	I	Pulse	CCD DATA IN	CCD data input																																																
97	O	Pulse	CCD DATA OUT	CCD data output																																																
98	O	Pulse	LCD CLOCK	Clock for serial data output to LCD																																																
99	O	Hi	LCD CE	Data load signal to LCD																																																
100	O	Pulse	CCD DATA	Serial data to LCD																																																

3. CCD μ P (IC4301) [For VT-FX880E/FX860E/MX835E]

Pin No.	I/O	Active Level	Abbreviation	Function
1	I	Pulse	H. SYNC	H.SYNC inversion input
2	I	Pulse	V. SYNC	V.SYNC inversion input
3	O	Hi/Lo	MESECAM DET	OSD chroma addition, Closed Caption through mode. Expansion output of MAIN μ P MESECAM DET input. MESECAM: "H"
4	O	Hi/Lo	MAP LED	Lights when NAVI data retrieval and registration are completed: "H" During retrieval: Blinks
5	O	Pulse	OSD CS	OSD IC chip selection
6	O	Pulse	OSD/CM DATA OUT	Data output to OSD IC and CM microprocessor
7	O	Pulse	OSD/CM CLOCK	Clock used to transfer data to OSD IC and CM microprocessor
8	I	Pulse	CM DATA IN	Data input from CM microprocessor
9	I	Hi/Lo	CM EVENT	CM EVENT input
10	I	Hi/Lo	P. STOP	Power failure detection input
11	O	Hi/Lo	FLAT/CUT	Not used.
12	O	Hi/Lo	EE MONI	EE monitor: "H"
13	-	-	TEST	Ground
14	I	-	AVCC	Power supply of analog circuits
15	O	-	HLF	For the connection of filter
16	I	-	VHOLD	For the connection of capacitor
17	I	-	CVIN	Video signal input
18	I	-	CNVSS	Ground
19	I	-	XIN	8MHz oscillator input/output
20	O	-	XOUT	
21	-	-	GND	Ground
22	A5V	-	VCC	Power supply (A5V)
23	O	Hi/Lo	L3/L3	Video switching output for EE monitor. L1/L2/TUN: "L", L3: "H"
24	O	Hi/Lo	LINE/TUN	Video switching output for EE monitor: "H", L1/L2/TUN: "L"
25	I	Lo	RESET	Reset input. RESET: "L"
26	O	Hi/Lo	REC LED	Lights during REC, REC PAUSE, TIMER REC, IRT: "H" Off during V.DUB, V.DUB PAUSE, A.DUB, A.DUB PAUSE: "L".
27	O	Hi/Lo	CM LED	CM LED output (unused)
28	O	Hi/Lo	PB	VP Plus/NAVI DATA switching output. During PLAY (VP Plus through): "H"
29	O	Hi/Lo	BLUE BACK	VP Plus/NAVI DATA switching output: Expansion output of MAIN μ P BLUE BACK output. During no signal (VP Plus through): "H"
30	I	Pulse	CCD. ENABLE	CCD microprocessor enable input from MAIN μ P
31	I/O	-	CE ENABLE	Not used.
32	O	Pulse	I ² CCLK	Communications with EEPROM
33	O	Hi/Lo	X'TAL CHANGE	Not used.
34	I/O	Pulse	I ² C DATA	Communications with EEPROM
35	O	Pulse	R.N. BLANK	Blank output for NAVI data
36	I	Pulse	DATA IN (M \rightarrow C)	Data input from MAIN μ P
37	O	Pulse	DATA OUT (C \rightarrow M)	Data output to MAIN μ P
38	I	Pulse	CLOCK IN	Clock for communications with MAIN μ P
39	O	Pulse	C. BLANK	Blank output for Closed Caption
40	O	Pulse	C. CO	Closed Caption output
41	O	-	NC	
42	O	Pulse	R.N. CO	NAVI data output

4. CM ADVANCE μ P (IC4401) [For VT-FX880E (UKN)]

Pin No.	I/O	Active Level	Abbreviation	Function
1	O	Hi/Lo	V. RESET	Video reset signal. Outputs "Hi" for 20 μ s after the video A/D signal is input, resetting the integrated value of video (luma) level in 1H video signal.
2	O	Hi/Lo	A. RESET	Audio reset signal. Outputs "Hi" for 20 μ s after the audio A/D signal is input, resetting the maximum value of audio level in one field.
3	O	Hi/Lo	EVENT	Event detection signal. Informs the CCD- μ P that a CM detection event has occurred: When such an event has occurred, this pin outputs "Hi" and maintains it until a subsequent V.sync interruption occurs.
4	-	Hi/Lo	CLAMP	Not used.
5	I	Lo	CE(L)	Not used.
6	I	Pulse	V. SYNC(L)	Vertical sync signal input.
7	I	Pulse	H. SYNC	Horizontal sync signal input.
8	I	Pulse	CLK	Clock input from CCD- μ P for serial data.
9	O	Pulse	S. OUT	Serial data output.
10	I	Pulse	S. IN	Serial data input.
11	O	Hi/Lo	FLAT/CUT	Not used.
12	I	Lo	RESET(L)	Reset input (reset at "Lo").
13	-	-	CNVss	Ground.
14	O	Pulse	X OUT	For generating system clock.
15	I	Pulse	X IN	
16	-	-	V ss	Ground.
17	I	-	VDD	Power supply.
18	I	-	VREF	Reference bias, clamp bias voltage.
19	-	-	AVss	Ground.
20	I	A/D	VIDEO	Inputs integrated value of luma level in 1H video signal.
21	I	A/D	AUDIO	Inputs maximum value of audio level in 1H field.
22	O	-	NC	Not used.
23	O	-	NC	Not used.
24	O	-	V. EVENT	Video event signal output. When a video event has occurred, this pin outputs "Hi" and maintains it until a subsequent V.sync interruption occurs. (Test pin)
25	O	-	NC	Not used.
26	O	-	NC	Not used.
27	O	-	NC	Not used.
28	O	-	A. EVENT	Audio event signal output. When an audio event has occurred, this pin outputs "Hi" and maintains it until a subsequent V.sync interruption occurs. (Test pin)
29	O	-	NC	Not used.
30	O	-	NC	Not used.
31	O	-	NC	Not used.
32	O	Hi/Lo	GATE	Video gate signal output. The video signal will be input to the integrating circuit only when this is "Hi".

HITACHI

VT-FX880E(NAV)(UKN)
VT-FX860E(NA)(UKN)(UKN)C(VPS)
VT-FX850E(NA)(UKN)(VPS)
VT-FX840E(NA)(VPS)
VT-MX835E(UK)(VPS)

TK No.4907E,G Digital Media Products Division, Tokai

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