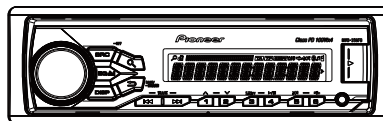


Pioneer

Service Manual



MVH-280FD/XNEW5

ORDER NO.
CRT5787

RDS MEDIA CENTER RECEIVER

MVH-280FD /XNEW5

MVH-X285FD /XNES



SAFETY INFORMATION

CAUTION

A

This service manual is intended for qualified service technicians; it is not meant for the casual do-it-yourselfer. Qualified technicians have the necessary test equipment and tools, and have been trained to properly and safely repair complex products such as those covered by this manual. Improperly performed repairs can adversely affect the safety and reliability of the product and may void the warranty. If you are not qualified to perform the repair of this product properly and safely, you should not risk trying to do so and refer the repair to a qualified service technician.

■

Where in a manufacturer’s service documentation, for example in circuit diagrams or lists of components, a symbol is used to indicate that a specific component shall be replaced only by the component specified in that documentation for safety reasons, the following symbol shall be used:



B

■

C

CAUTION

Danger of explosion if battery is incorrectly replaced.
Replaced only with the same or equivalent type recommended by the manufacturer.
Discord used batteries according to the manufacturer's instructions.

■

D

■

E

■

F

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1. SERVICE PRECAUTIONS

1.1 SAFETY PRECAUTIONS



- You should conform to the regulations governing the product (safety, radio and noise, and other regulations), and should keep the safety during servicing by following the safety instructions described in this manual.
- Please keep the distance of more than 13 cm from focus lens for safety when you check pickup and make adjustment, and do not look straight at Laser Beam for more than 10 seconds.

1.2 NOTES ON DISASSEMBLY / ASSEMBLY

- Before disassembling the unit, be sure to turn off the power. Unplugging and plugging the connectors during power-on mode may damage the ICs inside the unit.
- Please be sure to conduct line process to original status if you make assembling after repair.

1.3 NOTES ON REPLACING PARTS

- Be careful in handling ICs. Some ICs such as MOS type are so fragile that they can be damaged by electrostatic induction.
- Please be careful of not to apply static charge onto integrated circuits, etc, when you conduct repair work. Especially, please use soldering iron with its tip grounded. Also, please use a pair of tweezers with static charge protection capability if there is the possibility of contacting to device terminals, and avoid the use of metal-made tweezers.

1.4 NOTES ON ADJUSTMENT

- Some of the adjustment is required when the part is replaced. Please refer to "8. EACH SETTING AND ADJUSTMENT".

1.5 OTHERS

● Notes on soldring

For environmental protection, lead-free solder is used on the printed circuit boards mounted in this unit. Be sure to use lead-free solder and a soldering iron that can meet specifications for use with lead-free solders for repairs accompanied by reworking of soldering.

2. SPECIFICATIONS

2.1 SPECIFICATIONS

For all items except the backup current, refer to the Owner's Manual.

Backup current..... 5.0 mA or less

2.2 DISC/CONTENT FORMAT



3. BASIC ITEMS FOR SERVICE

3.1 CHECK POINTS AFTER SERVICING

To keep the product quality after servicing, please confirm following check points.

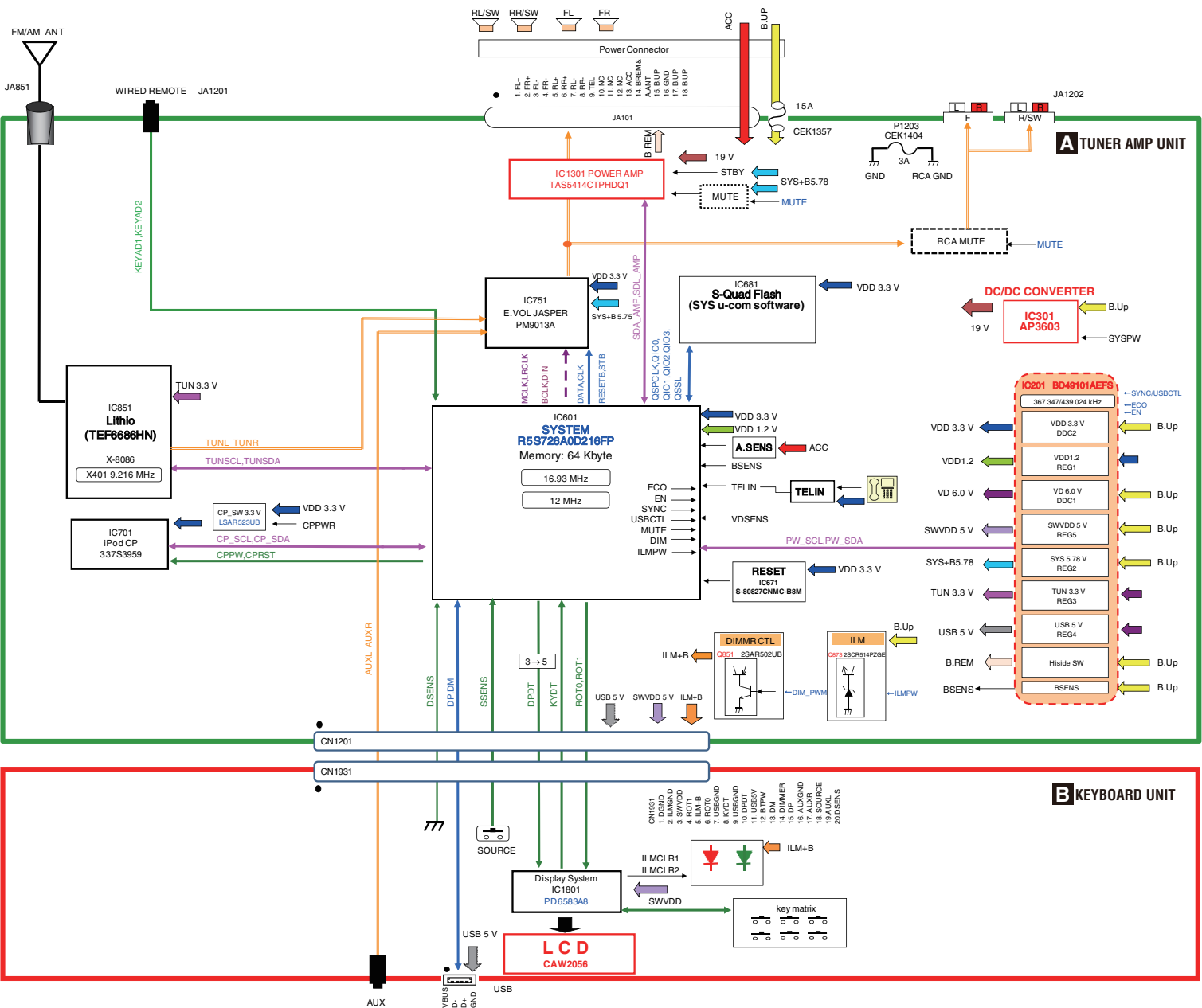
No.		Procedures	Item to be confirmed
1		Confirm whether the customer complain has been solved. If the customer complain occurs with the specific media, use it for the operation check.	The customer complain must not be reappeared. Display, audio and operations must be normal.
2	FM/AM tuner	Check FM/AM tuner action. (Seek, Preset) Switch band to check both FM and AM.	Display, audio and operations must be normal.
3		Appearance check	No scratches or dirt on its appearance after receiving it for service.

See the table below for the items to be checked regarding audio:

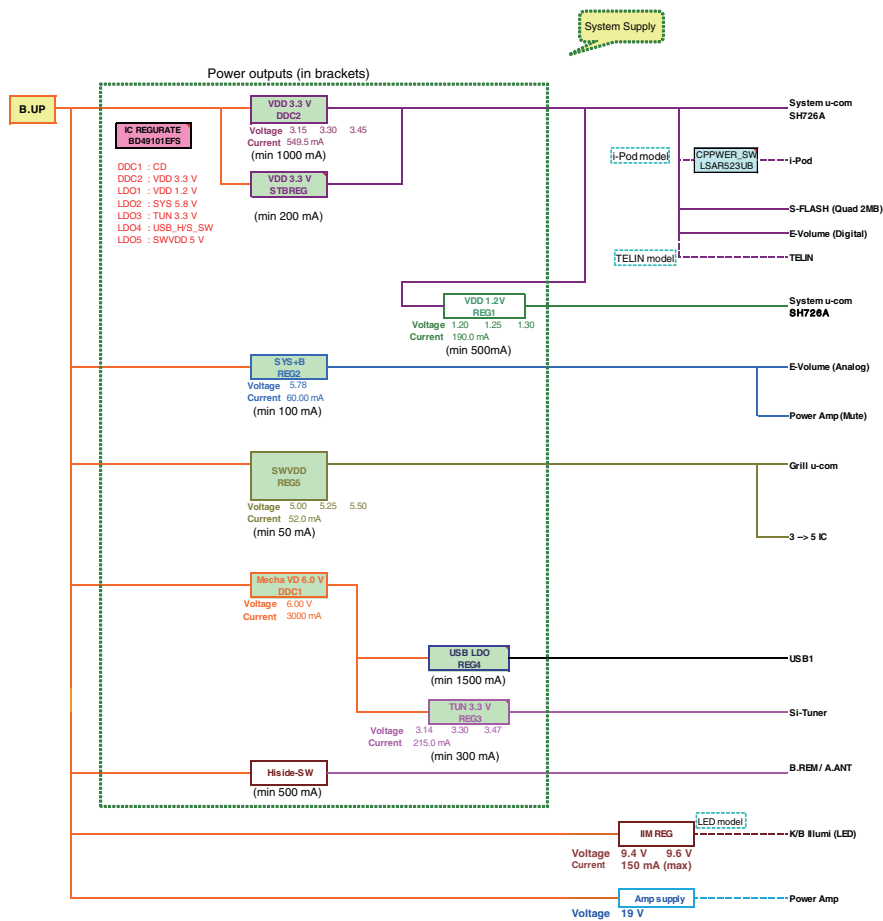
Item to be checked regarding audio
Distortion
Noise
Volume too low
Volume too high
Volume fluctuating
Sound interrupted

4. BLOCK DIAGRAM

4.1 BLOCK DIAGRAM



4.2 POWER BLOCK DIAGRAM



MAX	TYP	Measure	PART NO.	APPLICATION	
150.0 mA		U-com+Rom 11 mA	SH726A		RENESAS
7.5 mA	6.0 mA	5.5 mA	337S3959	iPod model	
25.0 mA		-	MX2SL1633E		Macronix
25.0 mA	10.0 mA	7.25 mA	PM9013A		ROHM
3/8.5 mA		135.9 mA			
171.0 mA		50.16 mA	SH726A		RENESAS
549.5 mA		185.9 mA			
55.0 mA	38.0 mA	36 mA	PM9013A		ROHM
18.0 mA		0.5 mA			
50.0 mA	30.0 mA	Glib3>5 = 3.81 mA	PDC205A		SANYO
2.0 mA		-	TC7SET08FUS1		
1500.0 mA	1000.0 mA	841 mA [phone 4	USB		
215.0 mA	150.0 mA	173 mA	Lithio		
#REF!	1450.0 mA				
			TAS5414CTPHDRQ1		

5. DIAGNOSIS

5.1 OPERATIONAL FLOWCHART

A

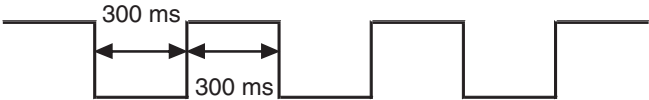
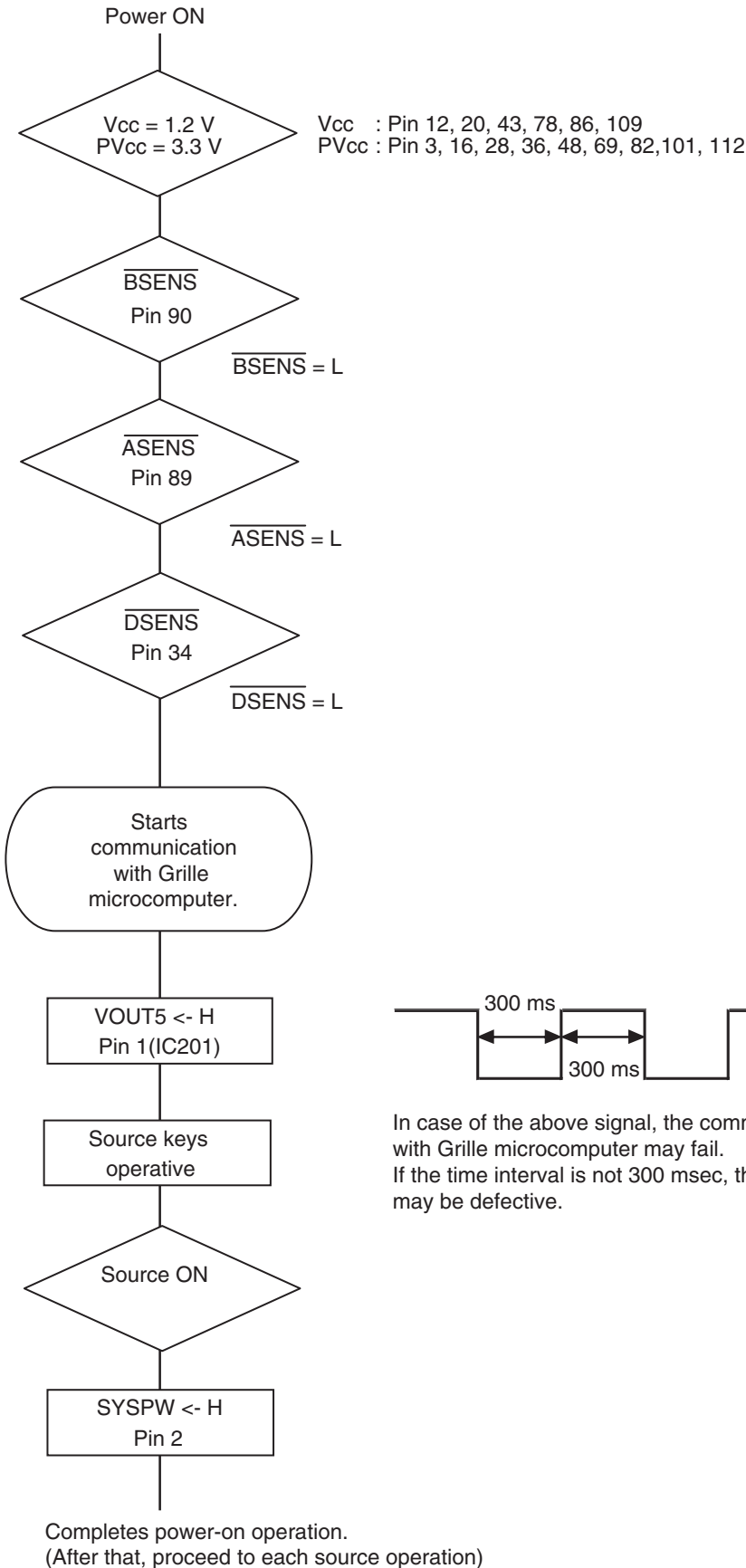
B

C

D

E

F



In case of the above signal, the communication with Grille microcomputer may fail.
If the time interval is not 300 msec, the oscillator may be defective.

5.2 ERROR CODE LIST

Common

AMP ERROR

- This unit fails to operate or the speaker connection is incorrect; the protection circuit is activated.
 - Check the speaker connection.
 - Check the power IC and its peripheral circuit.

NO XXXX (NO TITLE, for example)

- There is no embedded text information.
 - Switch the display or play another track/file.

USB device/iPod

FORMAT READ

- Sometimes there is a delay between the start of playback and when you start to hear any sound.
 - Wait until the message disappears and you hear sound.

NO AUDIO

- There are no songs.
 - Transfer the audio files to the USB device and connect.
- The connected USB device has security enabled.
 - Follow the USB device instructions to disable the security.

SKIPPED

- The connected USB device contains DRM protected files.
 - The protected files are skipped.

PROTECT

- All the files on the connected USB device are embedded with DRM.
 - Replace the USB device.

N/A USB

- The connected USB device is not supported by this unit.
 - Disconnect your device and replace it with a compatible USB device.

HUB ERROR

- The USB device connected via a USB hub is not supported by this unit.
 - Connect the USB device directly to this unit using a USB cable.

CHECK USB

- The USB connector or USB cable has short-circuited.
 - Check that the USB connector or USB cable is not caught in something or damaged.
- The connected USB device consumes more than maximum allowable current.
 - Disconnect the USB device and do not use it. Turn the ignition switch OFF and back to ACC or ON. Connect only compliant USB devices.
- The iPod operates correctly but does not charge.
 - Make sure the connection cable for the iPod has not shorted out (e.g., not caught in metal objects). After checking, turn the ignition switch OFF and back to ON, or disconnect the iPod and reconnect.

ERROR-19

- Communication failed.
 - Perform one of the following operations, then return to the USB source.
 - Turn the ignition switch OFF and back to ON.
 - Disconnect the USB device.
 - Change to a different source.
- iPod failure.
 - Disconnect the cable from the iPod. Once the iPod's main menu is displayed, reconnect the iPod and reset it.

ERROR-23

- USB device was not formatted properly.
 - Format the USB device with FAT12, FAT16 or FAT32.

ERROR-16

- The iPod firmware version is old.
 - Update the iPod version.
- iPod failure.
 - Disconnect the cable from the iPod. Once the iPod's main menu is displayed, reconnect the iPod and reset it.

STOP

- There are no songs in the current list.
 - Select a list that contains songs.

NOT FOUND

- No related songs.
 - Transfer songs to the iPod.

A

Pandora

ERROR-19

- Communication failed.
 - Disconnect the cable from the device.
 Once the device's main menu is displayed, reconnect the device and reset it.

START UP APP

- The Pandora application has not started running yet.
 - Start up the Pandora application.

B

INOPERABLE

- The operation was disabled.
 - Run the same command for another track.

TRY LATER

- Unable to save thumb rating.
- Unable to save BookMark.
- Unable to add station.
 - Try again later.

C

MAINTENANCE

- Pandora system is undergoing maintenance.
 - Try again later.

SKIP LIMIT

- Due to music licensing restrictions, Pandora limits the total number of skips per hour.
 - Wait until Pandora allows you to skip again.

D

UPDATE APP

- This version of the Pandora application is not supported.
 - Connect a device that has a compatible version of the Pandora application installed.

LOGIN ERROR

- Your Pandora account is not logged in.
 - Disconnect the cable from the device, and log in to your Pandora account. Then reconnect the device.

E

CHECK DEVICE

- Device error message displayed in the Pandora application.
 - Check the connected device.

PLEASE CREATE A STATION ON THE PHONE

- No station found.
 - Create a station in the Pandora application on your connected device.

F

SELECT STN

- No station selected.
 - Select a station.

STATION FULL

- A new station cannot be added.
 - Delete an old station to open a spot for a new one.

CAN.T DELETE

- The station could not be deleted.
 - Run the same command for another station.

NO NETWORK

- The connected device is out of area.
 - Connect the device to a network.

NO SERVICE IN THIS COUNTRY

- The connected device is out of area.
 - Connect the device to a network.

STN DELETED

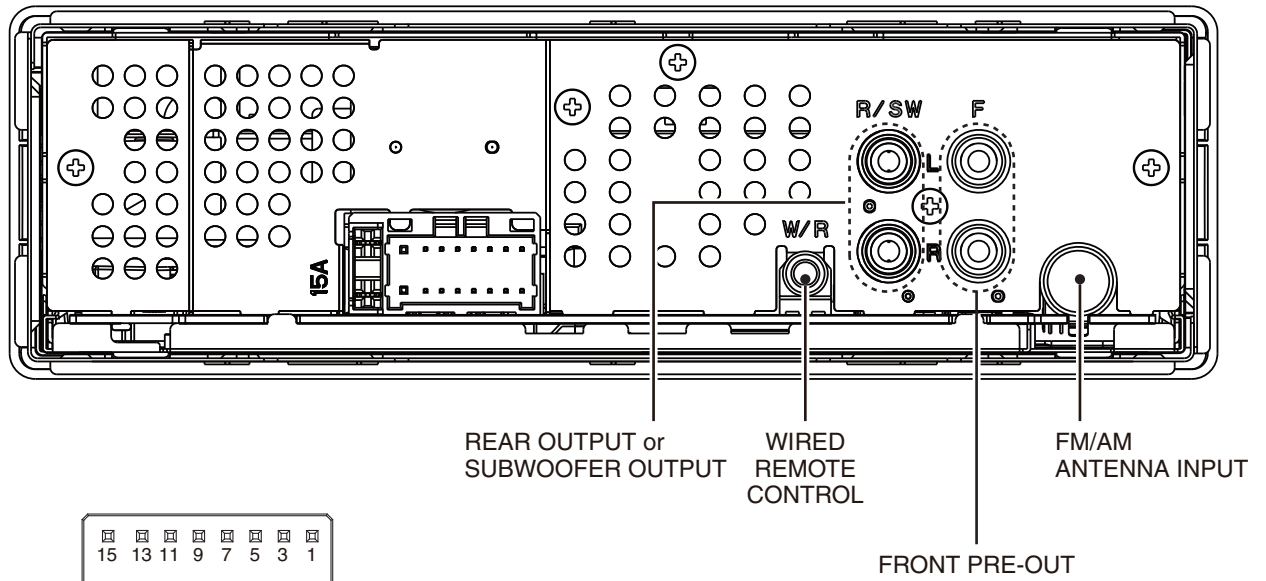
- The operation was disabled.
 - Run the same command for another station.

Apps

START UP APP

- The application has not started running yet.
 - Operate the mobile device to start up the application.

5.3 CONNECTOR FUNCTION DESCRIPTION



1 FL+	9 TEL (MVH-280FD/XNEW5 Only)
2 FR+	10 NC
3 FL-	11 NC
4 FR-	12 NC
5 RL+	13 ACC
6 RR+	14 B.REM
7 RL-	15 B.UP
8 RR-	16 GND

5.4 FUSE CHECK

■ No sounds and display output of external unit (the condition when the fuse is blown)

This product may receive excessive current if the power line connection of the external product is incorrect, such as Ground connection failure.

The fuse P1203 on TUNER AMP UNIT is used to protect this product from this excessive current.

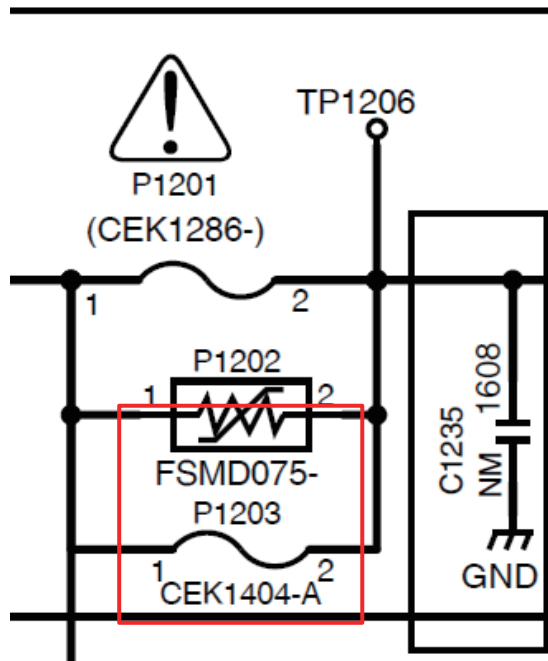
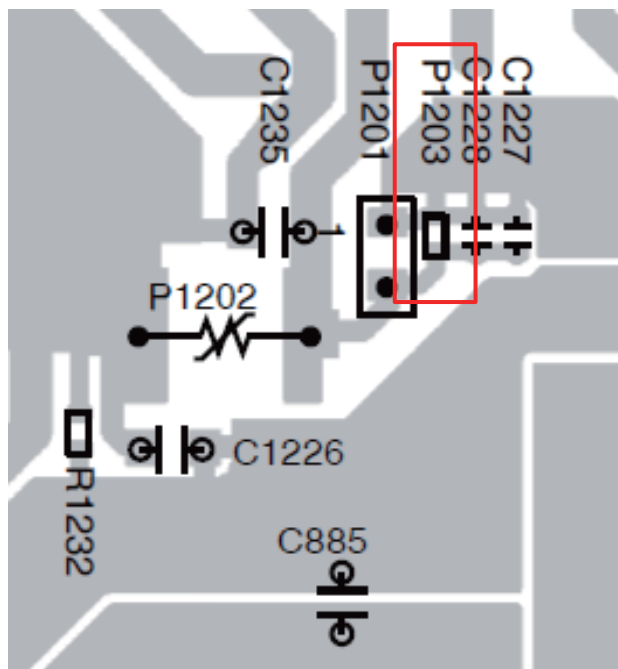
Even though fuse is blown, the sounds of Pre-out output and AUX input are output properly and also other functions work correctly.

However, you cannot turn on the external product connected to this product as the power is not supplied if the fuse is blown.

(The symptom in this case is the sounds of external product are not output on this product when the external product is connected on a vehicle.)

If you find the symptoms above, check if the fuse is not blown.

If you replace to a new fuse and the fuse is blown again (you cannot turn on the power of external product), check the power connection (Ground) of external product.

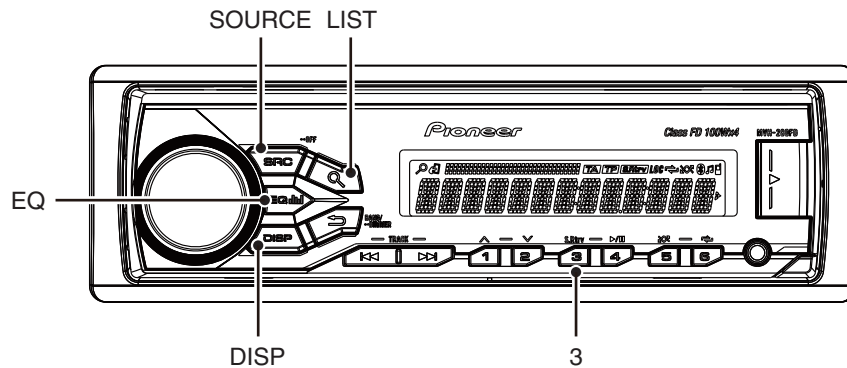


6. SERVICE MODE

6.1 DISPLAY TEST MODE 1

[How to enter Test mode]

Press and hold "EQ" and "LIST" buttons together, and turn BUP and ACC on.



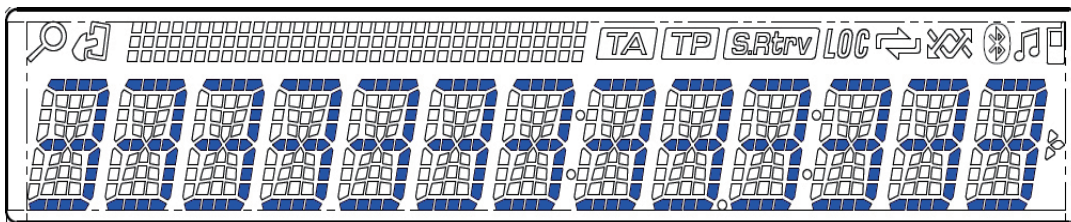
		Grille condition	
Confirmation item	Operate	LCD	ILM
All light up	EQ + LIST	States 1	Light on
All light off	SOURCE	States 2 (No light)	No light
Button feeling (and ILM light)	Button 3	States 3	Light on

LCD States

Status 1: All light up

Status 2: All light off

Status 3: Refer to below draw.



6.3 SOFTWARE VERSION UP METHOD

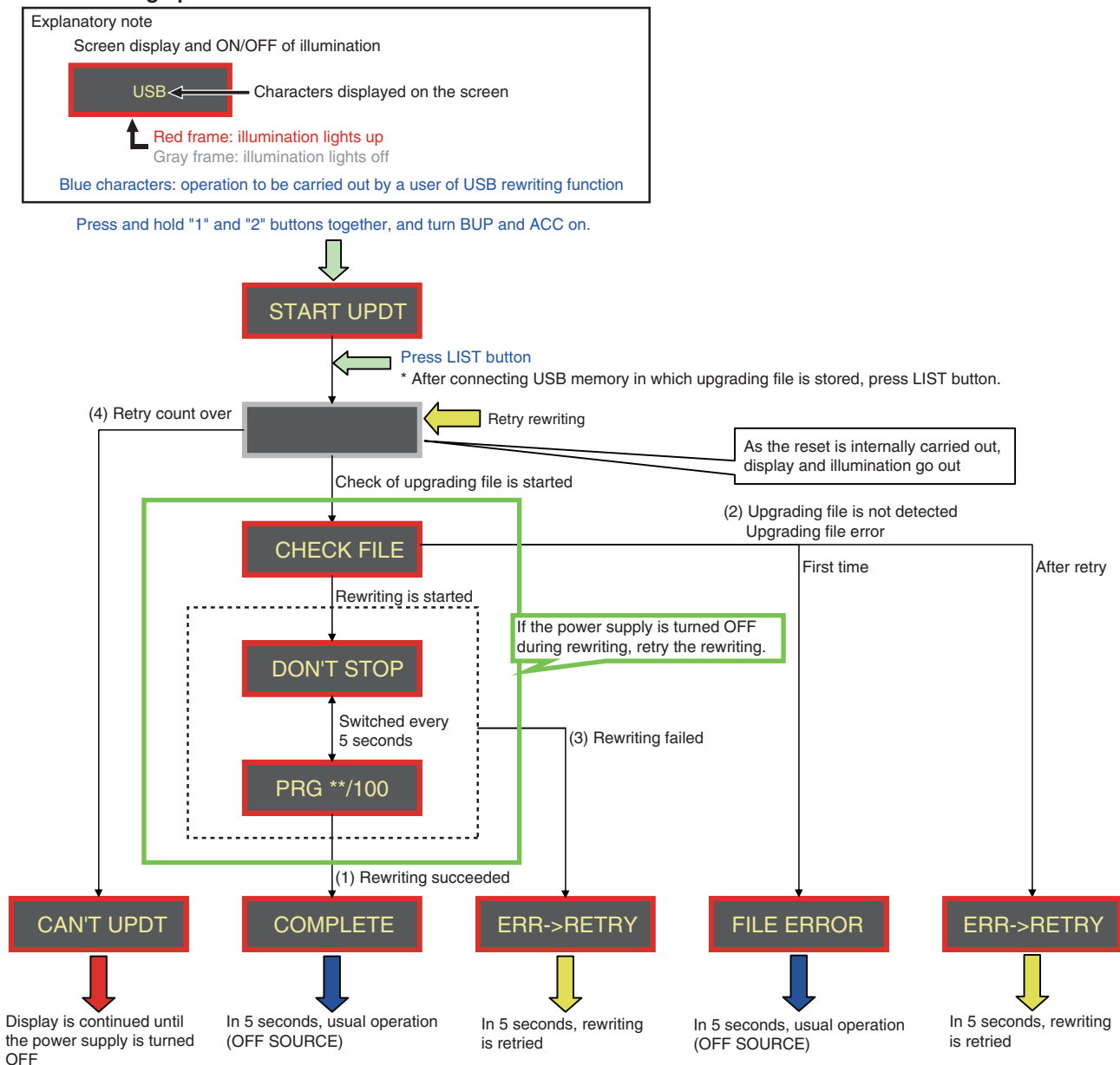
Overview

This mode is used for upgrading the MCU software of system using USB memory.

How to enter in USB rewriting mode

Press and hold "1" and "2" buttons together, and turn BUP and ACC on.

USB rewriting operation flow



Result of rewriting

(1) Rewriting succeeded	Displayed when USB rewriting is normally terminated. In 5 seconds, usual operation (OFF SOURCE) is started.
(2) Upgrading file error Upgrading file is not detected	Displayed when there is no upgrading file in USB memory or the data of upgrading file is different. In 5 seconds, usual operation (OFF SOURCE) is started. If the upgrading file error is detected or the upgrading file is not detected after the rewriting is retried, the rewriting is failed. In 5 seconds, rewriting is retried.
(3) Rewriting failed	Displayed when the writing of upgrading file in serial Flash is not normally terminated. Or, displayed if the upgrading file error is detected or the upgrading file is not detected after the rewriting is retried. In 5 seconds, rewriting is retried.
(4) Retry count over	Displayed when the retry becomes unavailable because the retry count is exceeded. The display is continued until the power supply is turned OFF. If the power supply is turned ON again, the display is not changed. Since USB Updating is disabled, it is necessary to replace Tuner Amp Unit.

Notes: Flash ROM in which software is written is NSP.

7. DISASSEMBLY

While the photograph shown is slightly different from this model in shape, the disassembly procedure is the same.

●Removing the Panel Assy (Fig.1)

- ➡1 Release the two latches.
- ➡2 Release the two latches and then remove the Panel Assy.

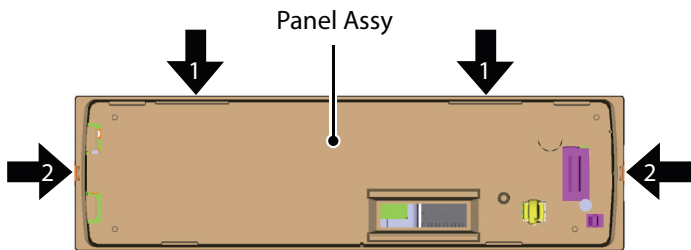
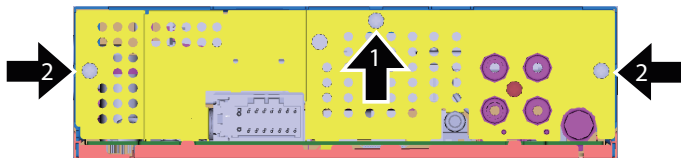


Fig.1

●Removing the Tuner Amp Assy (Fig.2)

- ➡1 Remove the screw.
- ➡2 Remove the two screws.



The Chassis side is made a bottom.

- ➡3 Push the area and remove the two hooks.

- ➡4 Slide the Tuner Amp Assy in the direction of the arrow and then remove the Tuner Amp Assy.

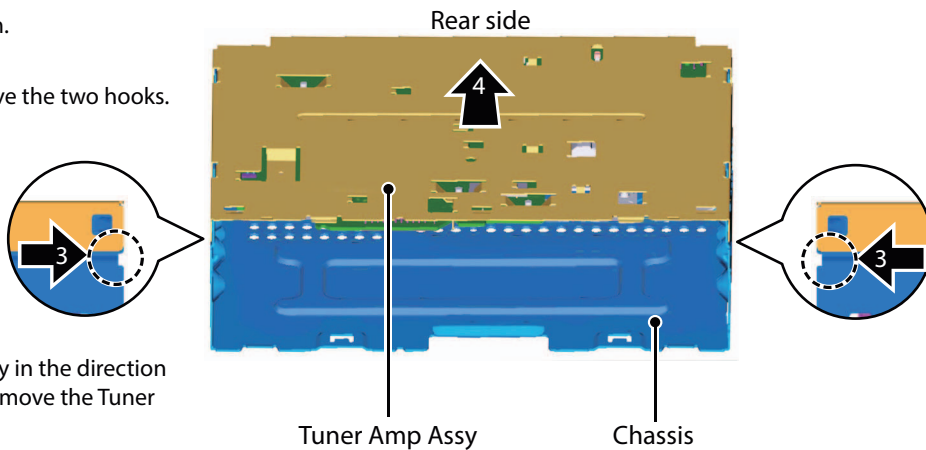


Fig.2

●Removing the Tuner Amp Unit (Fig.3)

- ➡1 Remove the three screws and then remove the Tuner Amp Unit.

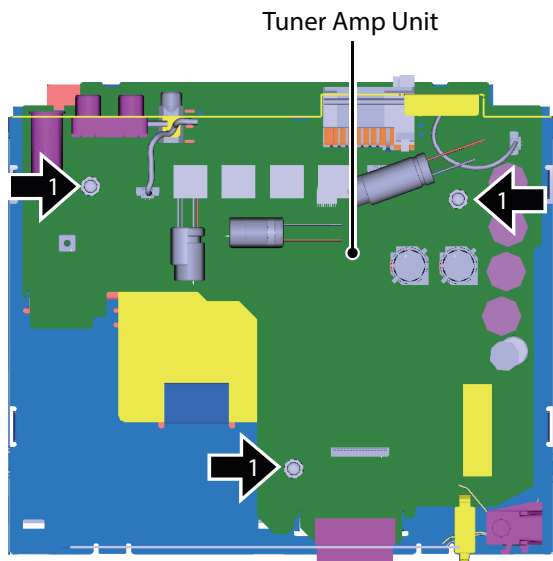


Fig.3

● Disassembling the Panel Part (Fig.4, 5)

1. Remove the arm while bending the rib of the panel upward.

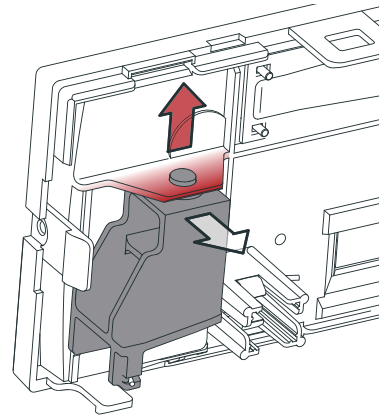


Fig.4

2. Press the upside hook and the bottom side hook of the button at the same time, and pull out the button.

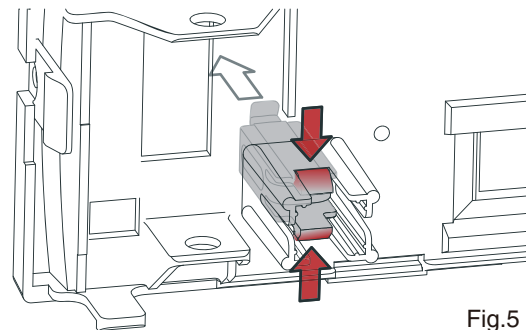


Fig.5

● Assembling the Panel Part (Fig.6, 7, 8)

1. Attach the button from the front side of the panel.

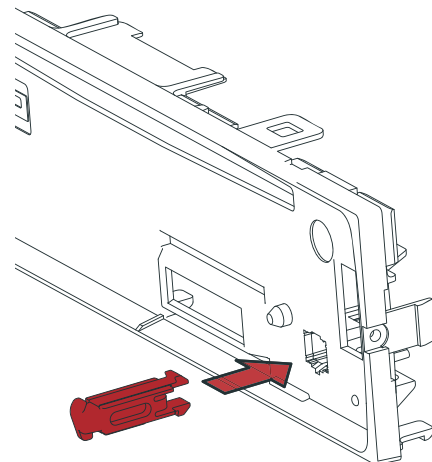


Fig.6

2. Attach the spring to the arm as shown in the figure.

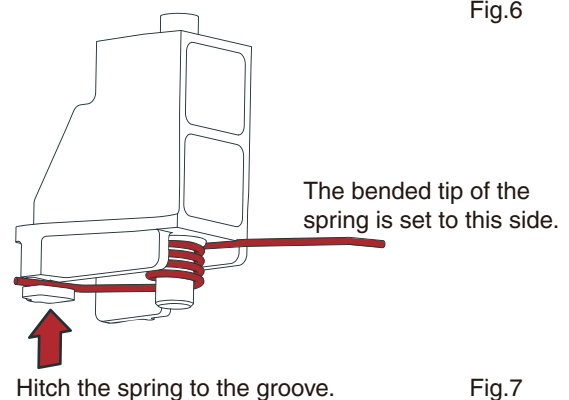


Fig.7

3. Fit the spring in the groove at the position shown in the figure.

4. Fit the boss on the lower side of the arm in the lower hole of the panel, and then warp the rib on the panel in the direction shown in the figure and fit the boss of the arm in the panel.

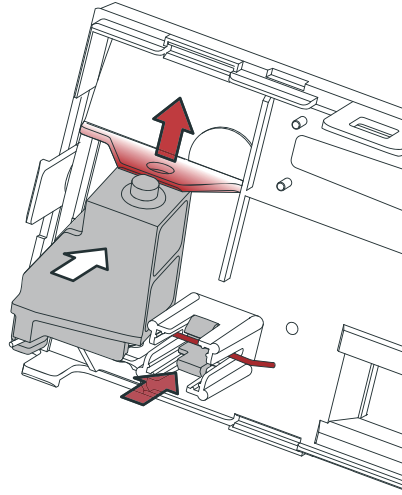


Fig.8

8. EACH SETTING AND ADJUSTMENT

8.1 PCL OUTPUT CONFIRMATION



● PCL Output

In the normal operation mode (with the detachable panel installed, the ACC switched ON, the standby mode cancelled), shift the TESTIN IC601(Pin 99) terminal to H.

The clock signal is output from the PCL_RAM_MON terminal IC601(Pin116).

The frequency of the clock signal is 600 kHz that is divided by 20th of the oscillation frequency of X601 (12 MHz).

The clock signal should be 600 kHz(- 25 Hz, + 25 Hz).

If the clock signal is out of the range, the X'tal (X601) should be replaced with new one.

9. EXPLODED VIEWS AND PARTS LIST

NOTES : • Parts marked by " * " are generally unavailable because they are not in our Master Spare Parts List.

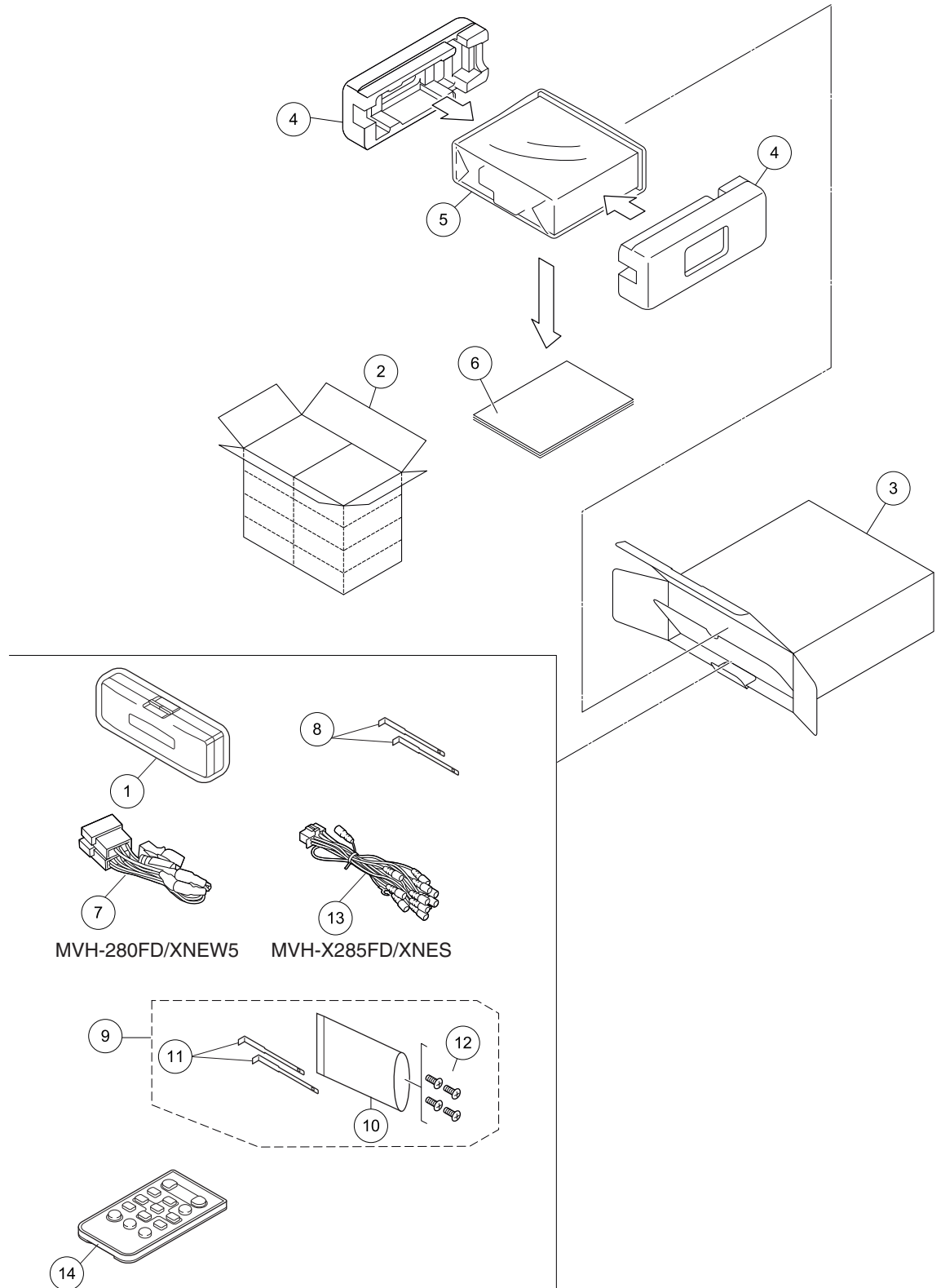
• The $\triangle$ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.

• Screw adjacent to ∇ mark on the product are used for disassembly.

• For the applying amount of lubricants or glue, follow the instructions in this manual.

(In the case of no amount instructions, apply as you think it appropriate.)

9.1 PACKING



(1) PACKING SECTION PARTS LIST

Mark No.	Description	Part No.	Mark No.	Description	Part No.
1	Case Assy	QXA3129	* 6-1	Warranty Card	See Contrast table (2)
2	Contain Box	See Contrast table (2)	6-2	Owner's Manual	See Contrast table (2)
3	Unit Box	See Contrast table (2)	7	MBL CMPX CONN-CORD	See Contrast table (2)
4	Protector	QHP3046	8	Handle	See Contrast table (2)
5	Polyethylene Bag	QEG3001	9	Accessory Assy	See Contrast table (2)

	1		2		3		4	
	Mark No.	Description	Part No.					
	10	Polyethylene Bag	See Contrast table (2)					
	11	Handle	See Contrast table (2)					
	12	Screw	See Contrast table (2)					
A	13	MBL CMPX CONN-CORD	See Contrast table (2)					
	14	Card Remote Control Unit	QXE1047					

(2) CONTRAST TABLE

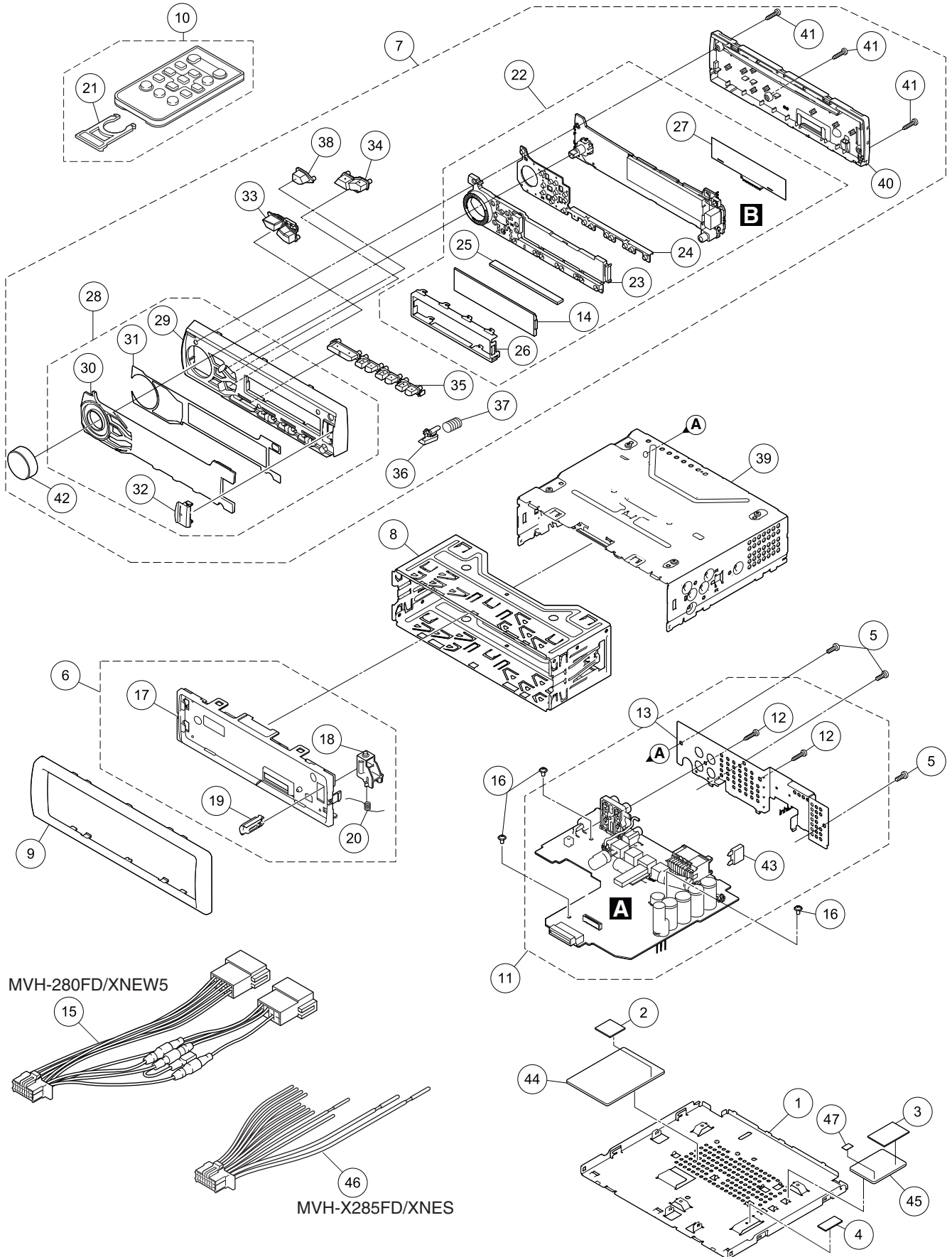
MVH-280FD/XNEW5 and MVH-X285FD/XNES are constructed the same except for the following:

Mark	No.	Description	MVH-280FD/XNEW5	MVH-X285FD/XNES
*	2	Contain Box	QHL3821	QHL3822
	3	Unit Box	QHG3821	QHG3822
	6-1	Warranty Card	CRY1376	Not used
	6-2	Owner's Manual	QRD3338	QRD3339
	7	MBL CMPX CONN-CORD	QDP3091	Not used
B	8	Handle	QNC3021	Not used
	9	Accessory Assy	Not used	QEA3338
	10	Polyethylene Bag	Not used	QEG3001
	11	Handle	Not used	QNC3021
	12	Screw	Not used	CBA2384
	13	MBL CMPX CONN-CORD	Not used	QDP3092

Owner's Manual

Part No.	Language
QRD3338	English, French, Italian, Spanish(Espanol), German, Dutch, Russian
QRD3339	English, Spanish(Espanol), Portuguese(B), Traditional Chinese, Arabic, Persian

9.2 EXTERIOR



(1) EXTERIOR SECTION PARTS LIST

	<u>Mark</u>	<u>No.</u>	<u>Description</u>	<u>Part No.</u>		<u>Mark</u>	<u>No.</u>	<u>Description</u>	<u>Part No.</u>
A		1	Case	QNB3031		25	Rubber Connector	QNV3071	
		2	Sheet	QNM3136					
		3	Sheet	QNM3137		26	Holder	QNC3108	
		4	Sheet	QNM3135		27	Sheet	QNM3138	
		5	Screw	BSZ26P060FTC		28	Grille Unit	See Contrast table (2)	
						29	Grille	QNS3891	
		6	Panel Assy	QXA3537		30	Plate	QNS3930	
		7	Detach Grille Assy	See Contrast table (2)					
		8	Holder	QNC3020		31	Double Side Tape	QNM3133	
		9	Panel	QNS3568		32	Door	QAT3018	
B		10	Card Remote Control Unit	QXE1047		33	Button(SRC, LIST)	QAC3208	
						34	Button(DISP, BACK)	QAC3209	
		11	Tuner Amp Unit	See Contrast table (2)		35	Button(TRACK, 1-6)	QAC3210	
		12	Screw	BPZ26P080FTC					
		13	Holder	See Contrast table (2)		36	Button(DETACH)	QAC3211	
		14	Segment LCD	CAW2056		37	Sprint	CBH2210	
		15	MBL CMPX CONN-CORD	See Contrast table (2)		38	Button(EQ)	QAC3213	
						39	Chassis	CNA3373	
		16	Screw	ASZ26P050FTC		40	Cover	QNS3945	
		17	Panel	QNS3289					
C		18	Arm	QNV3025		41	Screw	BPZ20P100FTC	
		19	Button	QNV3026		42	Knob Unit	QXA4414	
		20	Spring	QBH3001	⚠	43	Fuse(15 A)	CEK1357	
					*	44	Heat Sink	QNR3013	
		21	Cover	CNS7068	*	45	Heat Sink	QNR3014	
		22	Keyboard Unit	QWM4176					
		23	Light Conductor	QNV3114		46	MBL CMPX CONN-CORD	See Contrast table (2)	
		24	Contact Rubber	QNV3115		47	Sheet	QNM3157	

(2) CONTRAST TABLE

MVH-280FD/XNEW5 and MVH-X285FD/XNES are constructed the same except for the following:

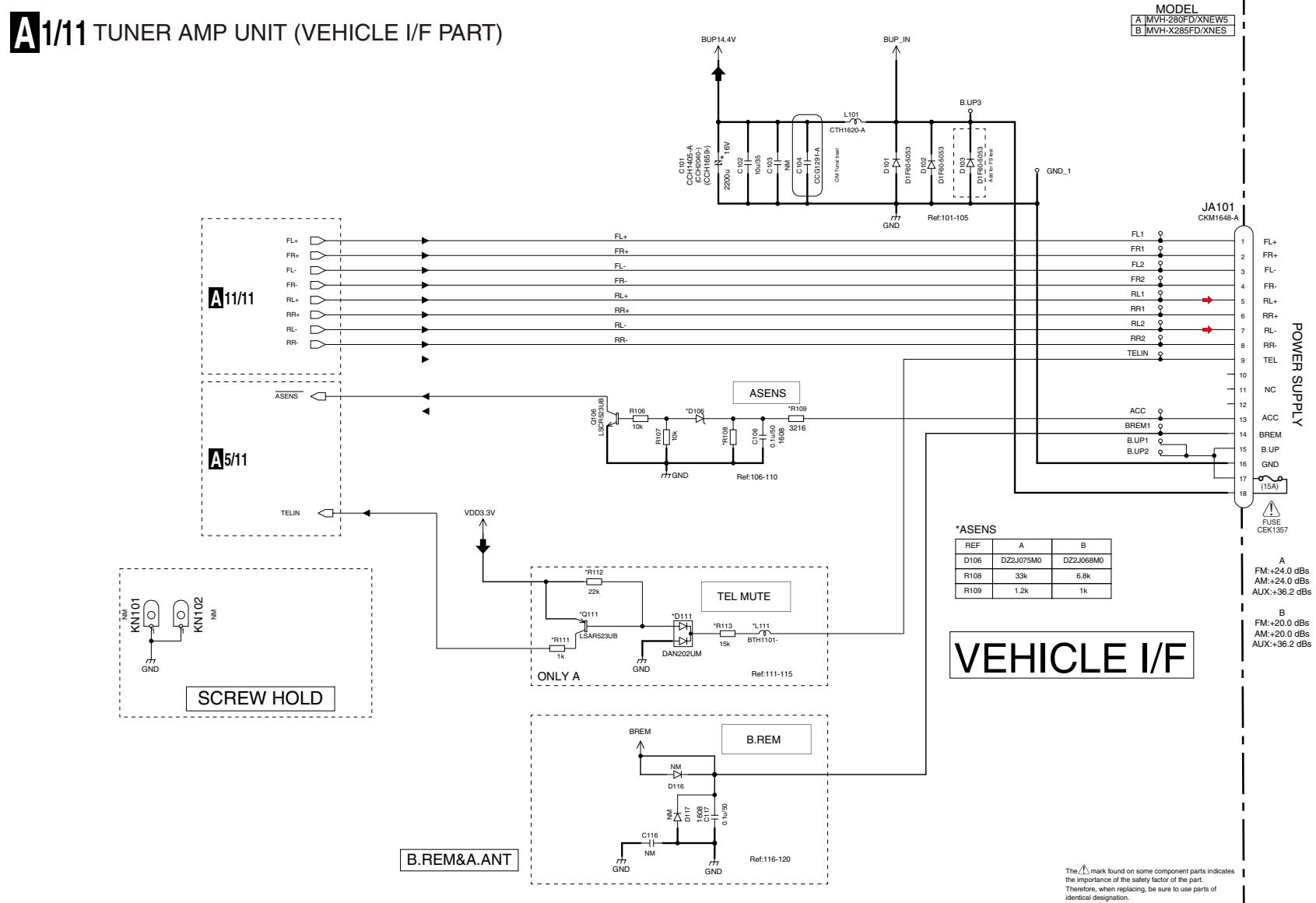
Mark	No.	Description	MVH-280FD/XNEW5	MVH-X285FD/XNES
D	7	Detach Grille Assy	QXA4538	QXA4539
	11	Tuner Amp Unit	QWM4077	QWM4078
	13	Holder	QNC3128	QNC3109
	15	MBL CMPX CONN-CORD	QDP3091	Not used
	28	Grille Unit	QXA4468	QXA4469
	46	MBL CMPX CONN-CORD	Not used	QDP3092

10. SCHEMATIC DIAGRAM

10.1 TUNER AMP UNIT (VEHICLE I/F PART)

10. SCHEMATIC DIAGRAM

Note: When ordering service parts, be sure to refer to "EXPLODED VIEWS AND PARTS LIST" or "ELECTRICAL PARTS LIST".



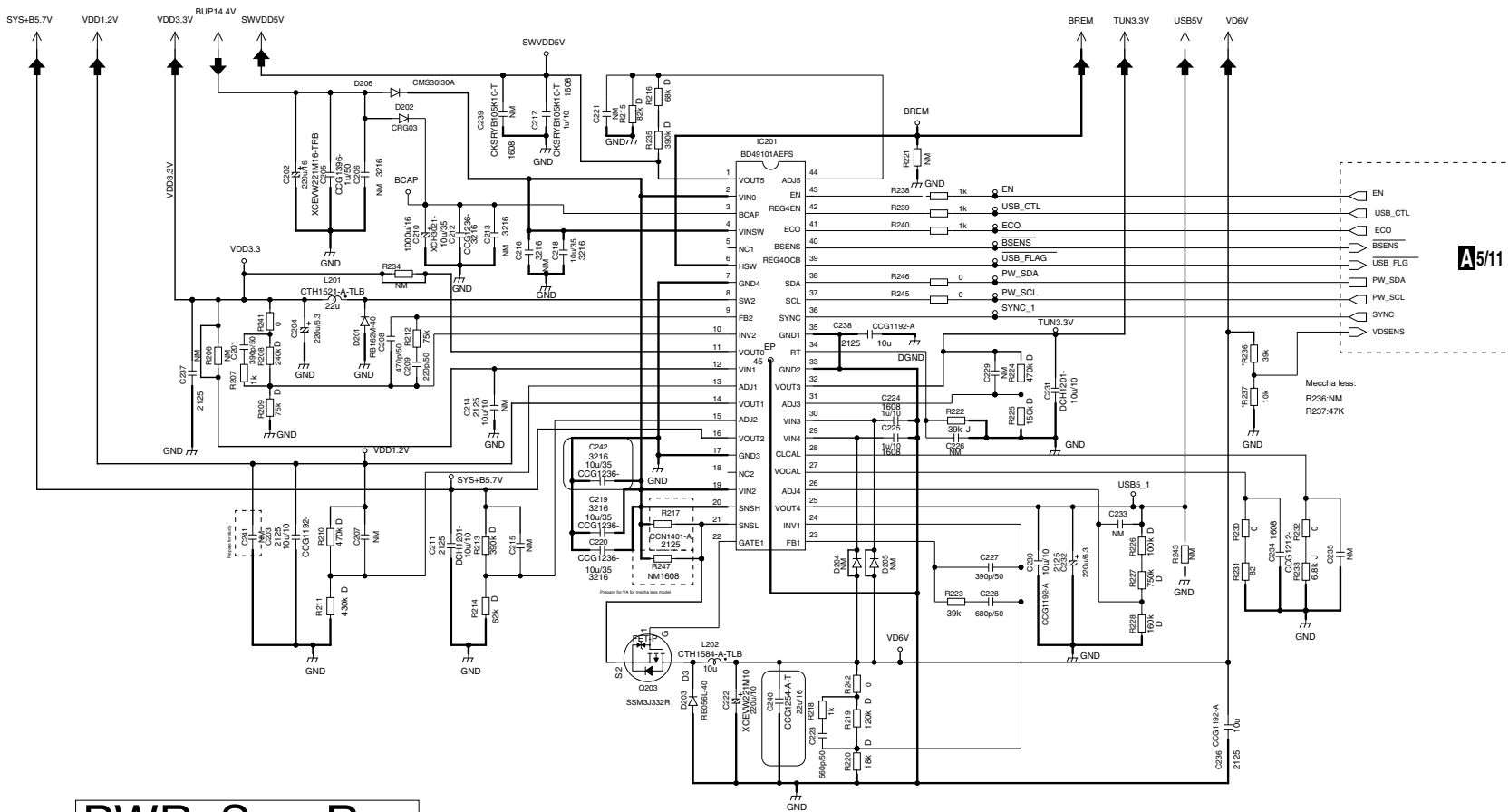
IMVH-280FD/XNEWS

A1/11

A1/11

MODEL
A MVH-280FD/XNEW5
B MVH-X285FD/XNES

A2/11 TUNER AMP UNIT (SYS REGULATOR PART)



PWR_Sys_Reg

A5/11

Meccha less:
R236:10K
R237:47K

Prepared for VA for mecha less model



C/M tuner be

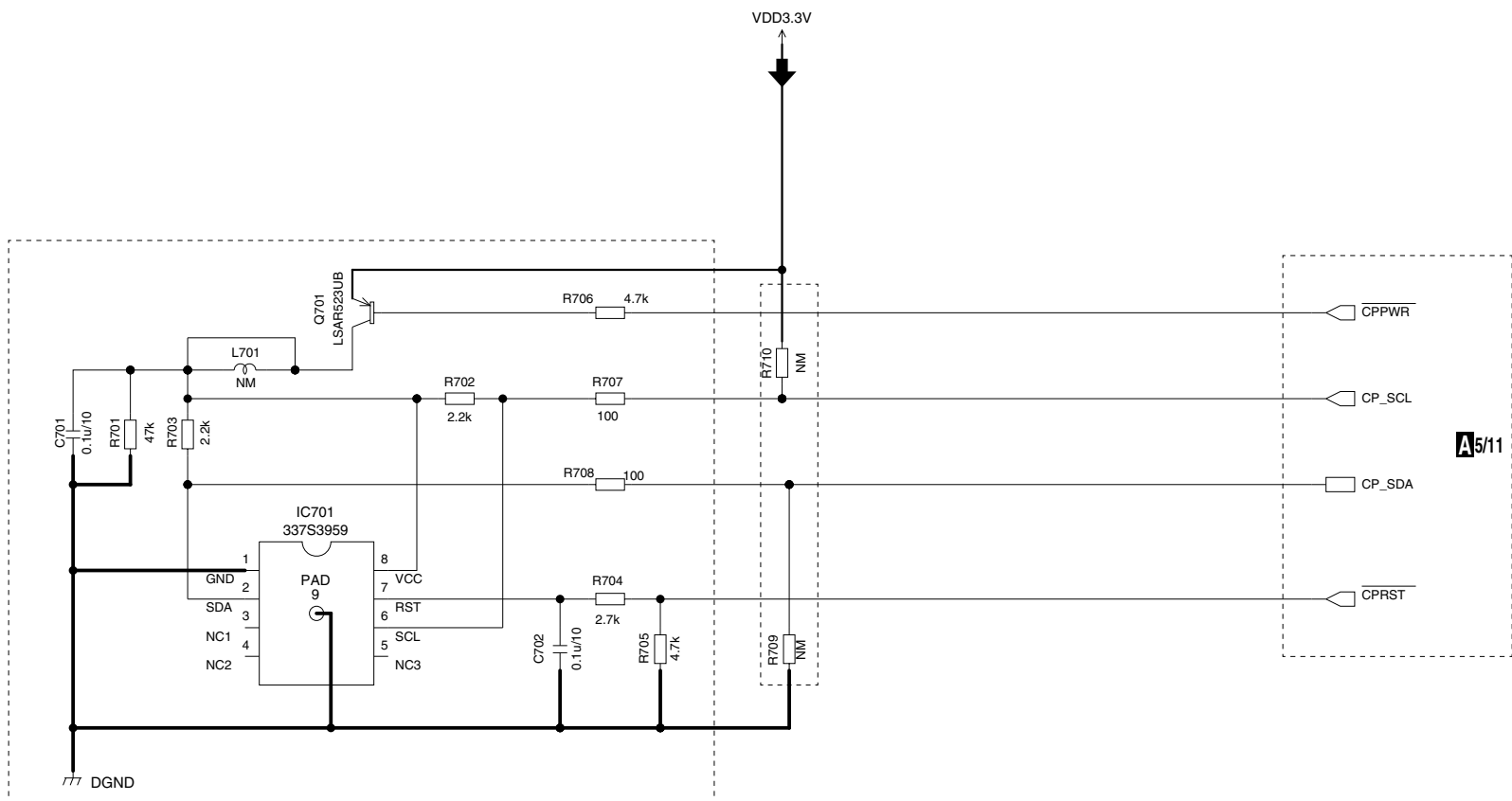
4





MODEL
A MVH-280FD/XNEWS
B MVH-X285FD/XNES

A6/11 TUNER AMP UNIT (I/F I-POD PART)

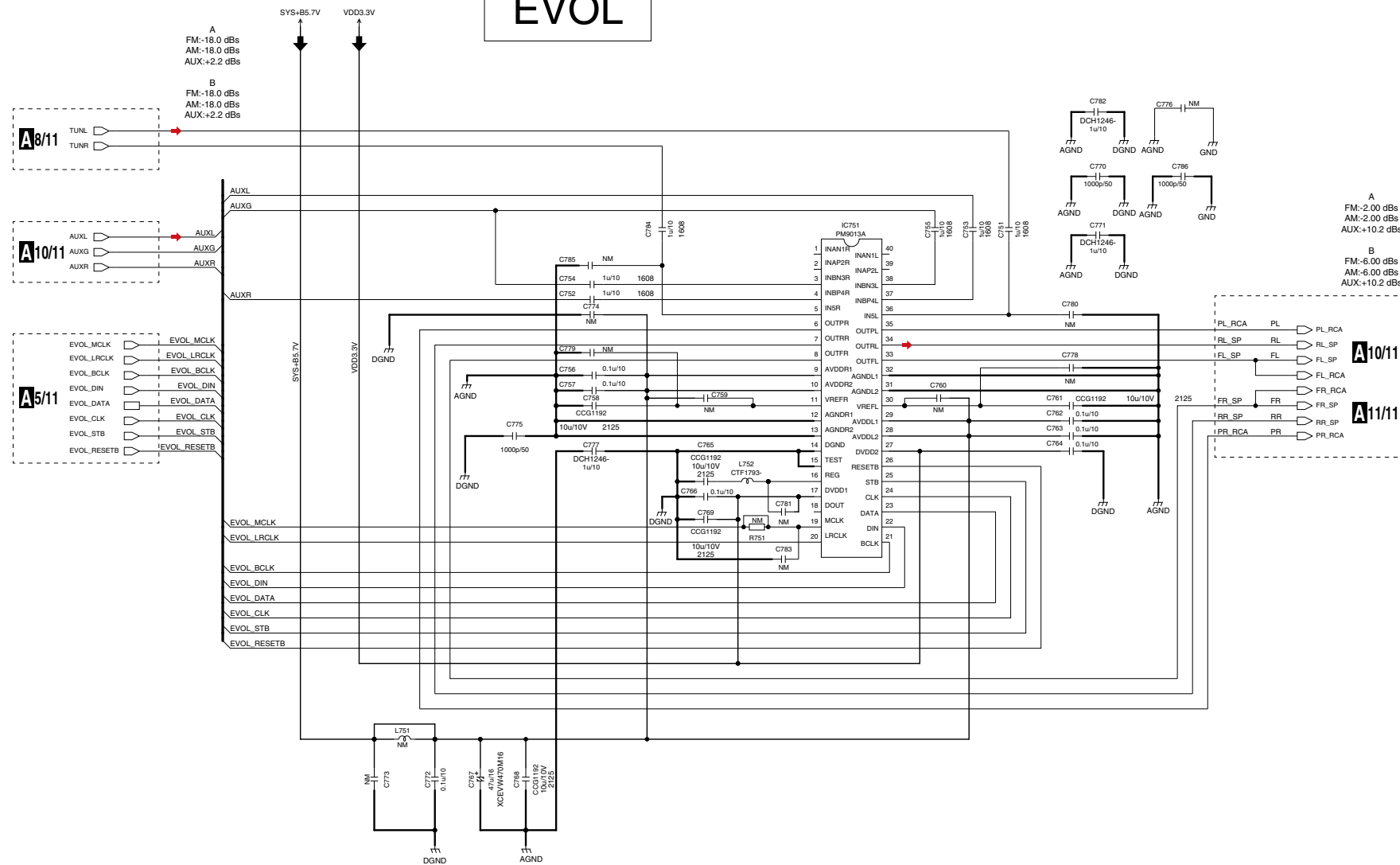


iPod CP @ (2.0C)

A7/11 TUNER AMP UNIT (EVOL PART)

EVOL

MODEL
A MVH-280FD/XNEWS
B MVH-X285FD/XNES



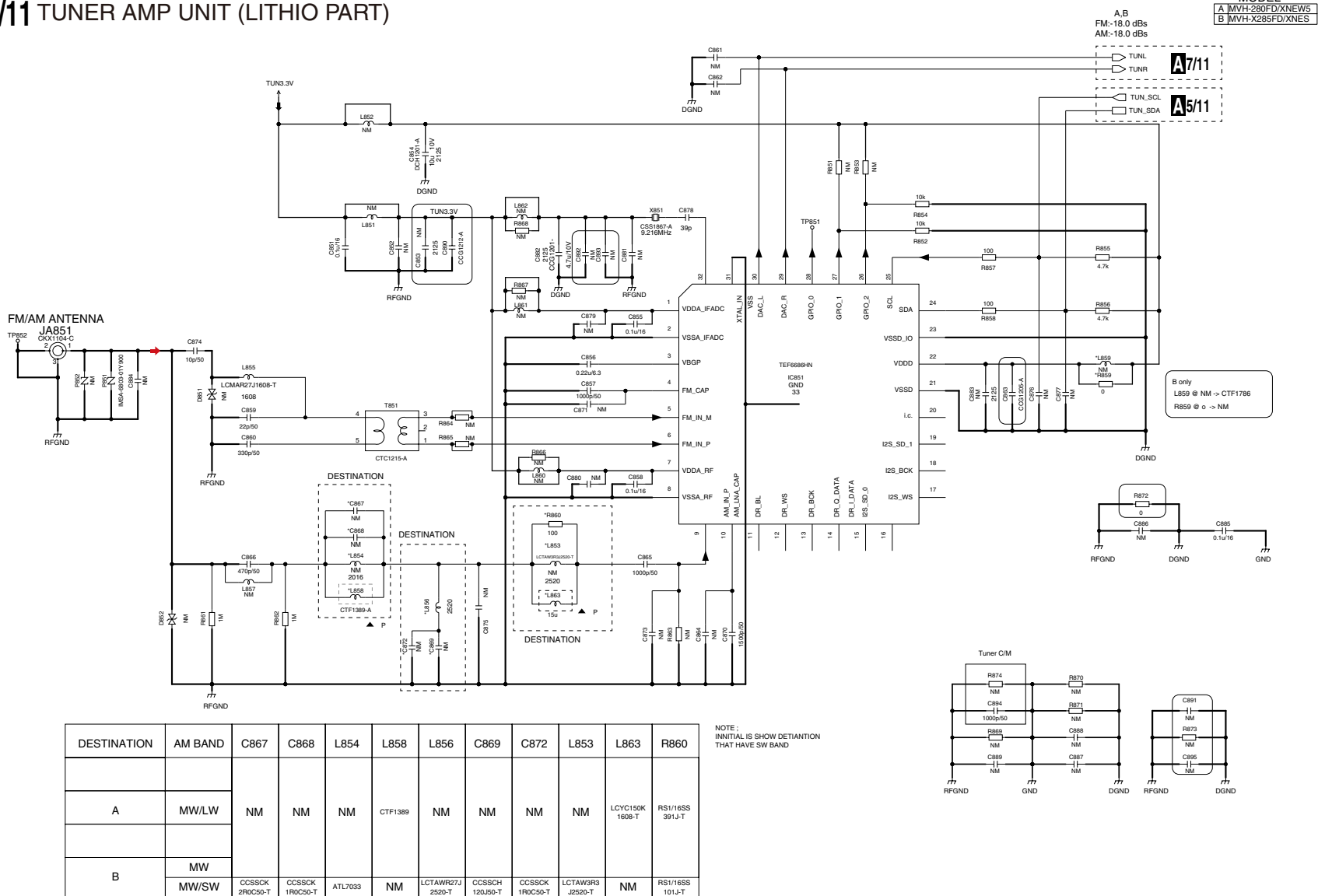
A
FM:-2.00 dBs
AM:-2.00 dBs
AUX:+10.2 dBs

B
FM:-6.00 dBs
AM:-6.00 dBs
AUX:+10.2 dBs

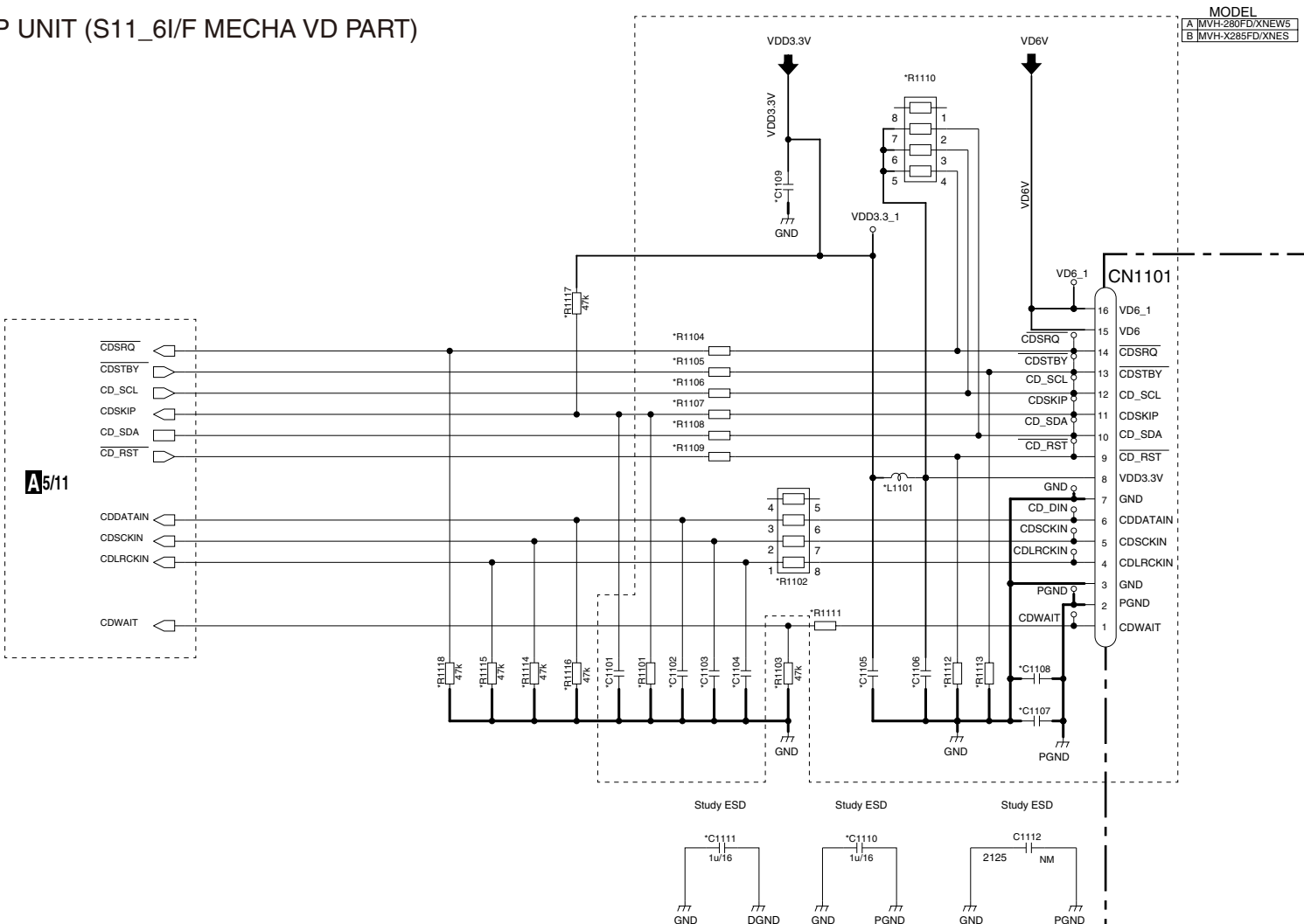
A10/11

A11/11

A8/11 TUNER AMP UNIT (LITHIO PART)

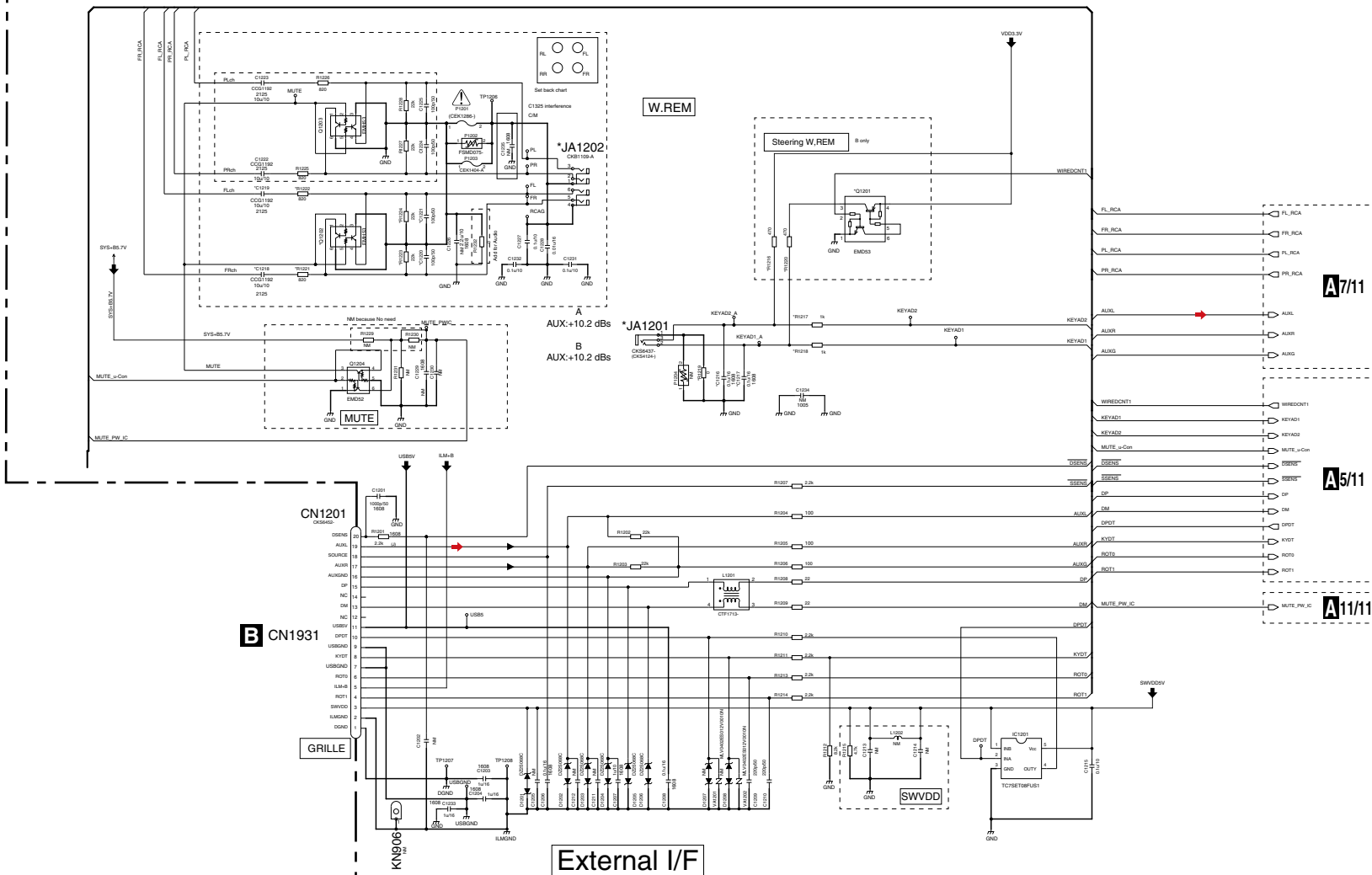


A9/11 TUNER AMP UNIT (S11_6I/F MECHA VD PART)



MODEL
A MVH-280FD/XNEWS
B MVH-X285FD/XNES

A10/11 TUNER AMP UNIT (EXTERNAL I/F PART)

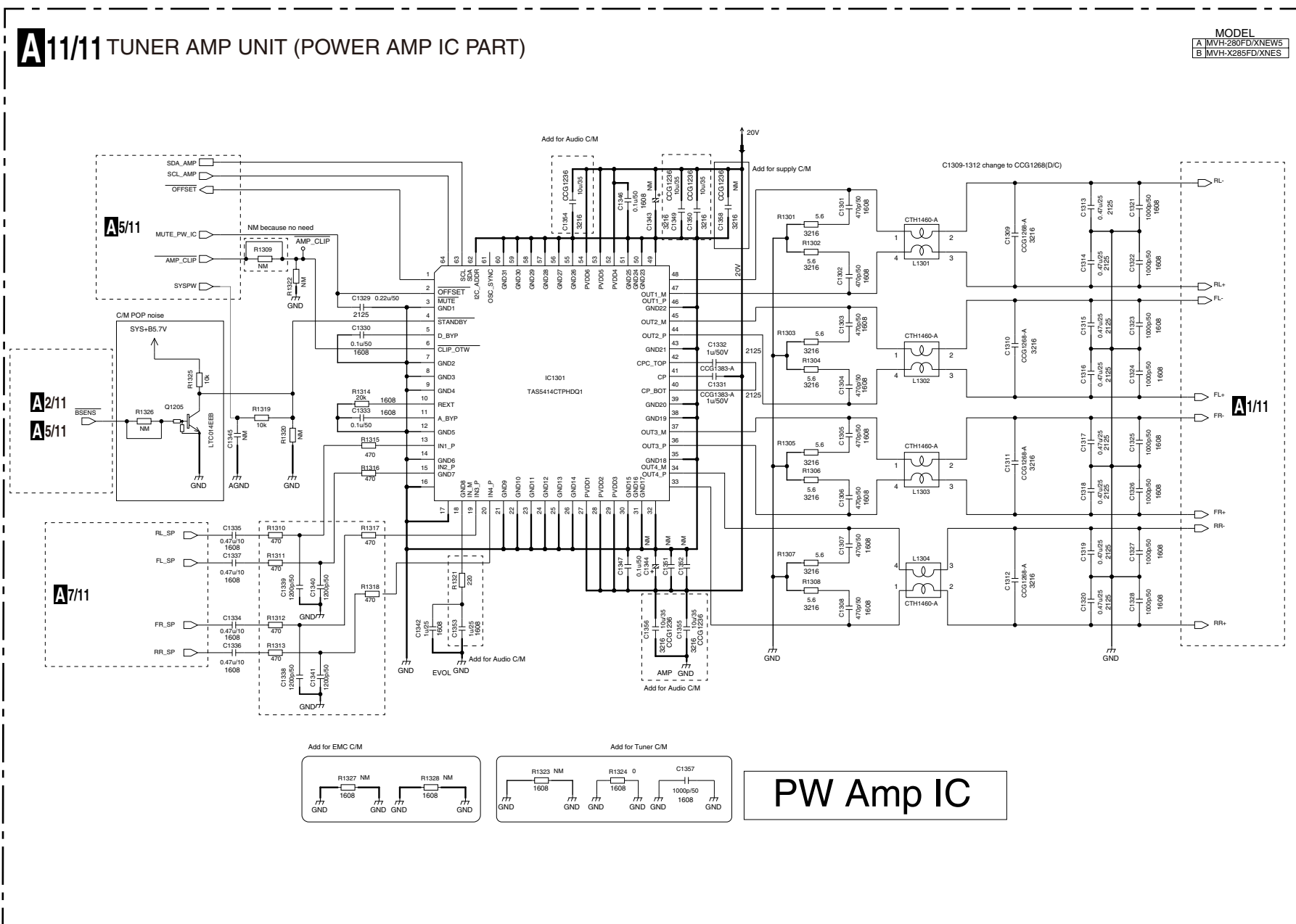


The (Δ) mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.

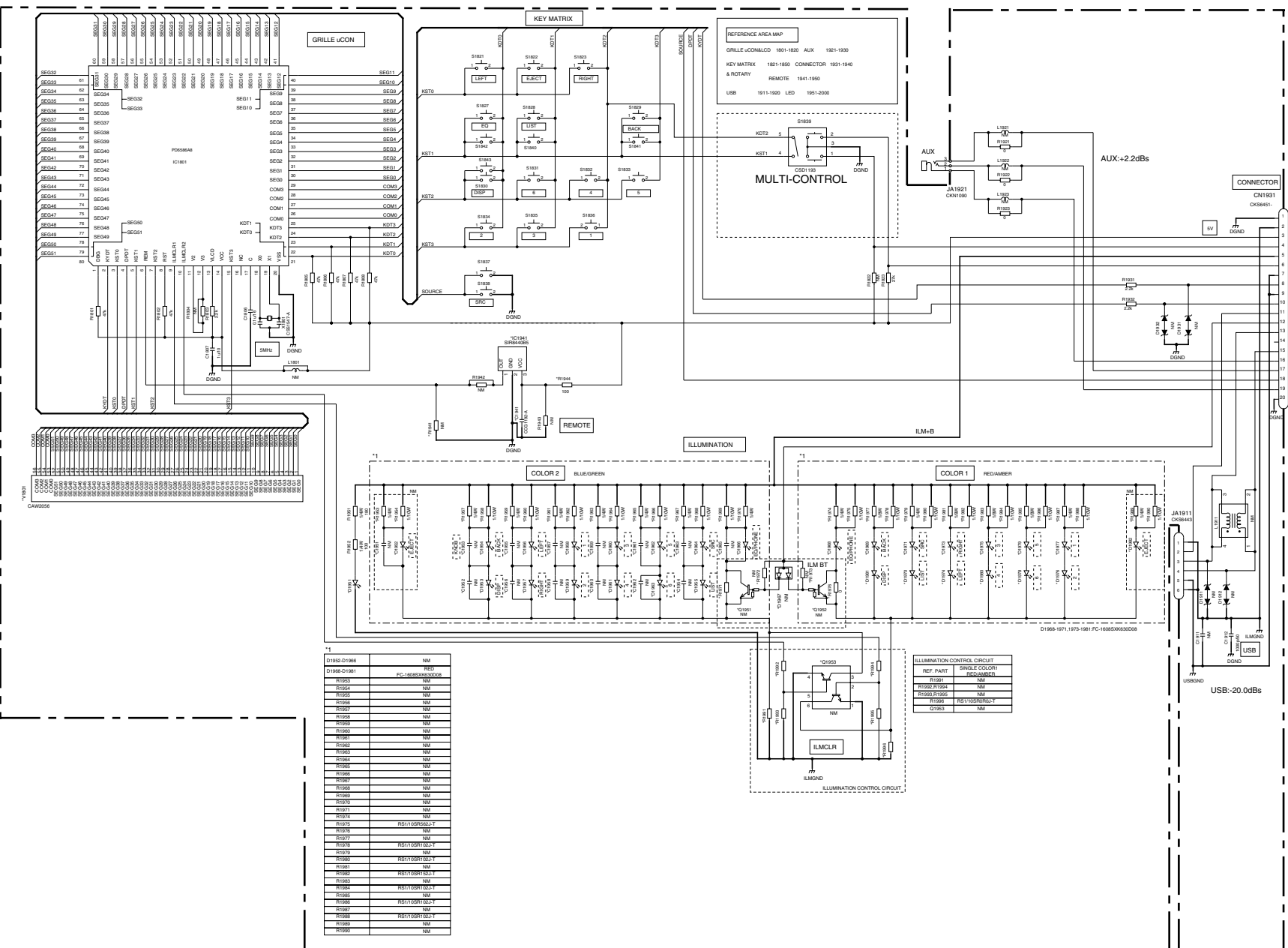
A10/11

A10/11

10.1.1 TUNER AMP UNIT (POWER AMP IC PART)



PW Amp IC

A
CN1201

11. PCB CONNECTION DIAGRAM

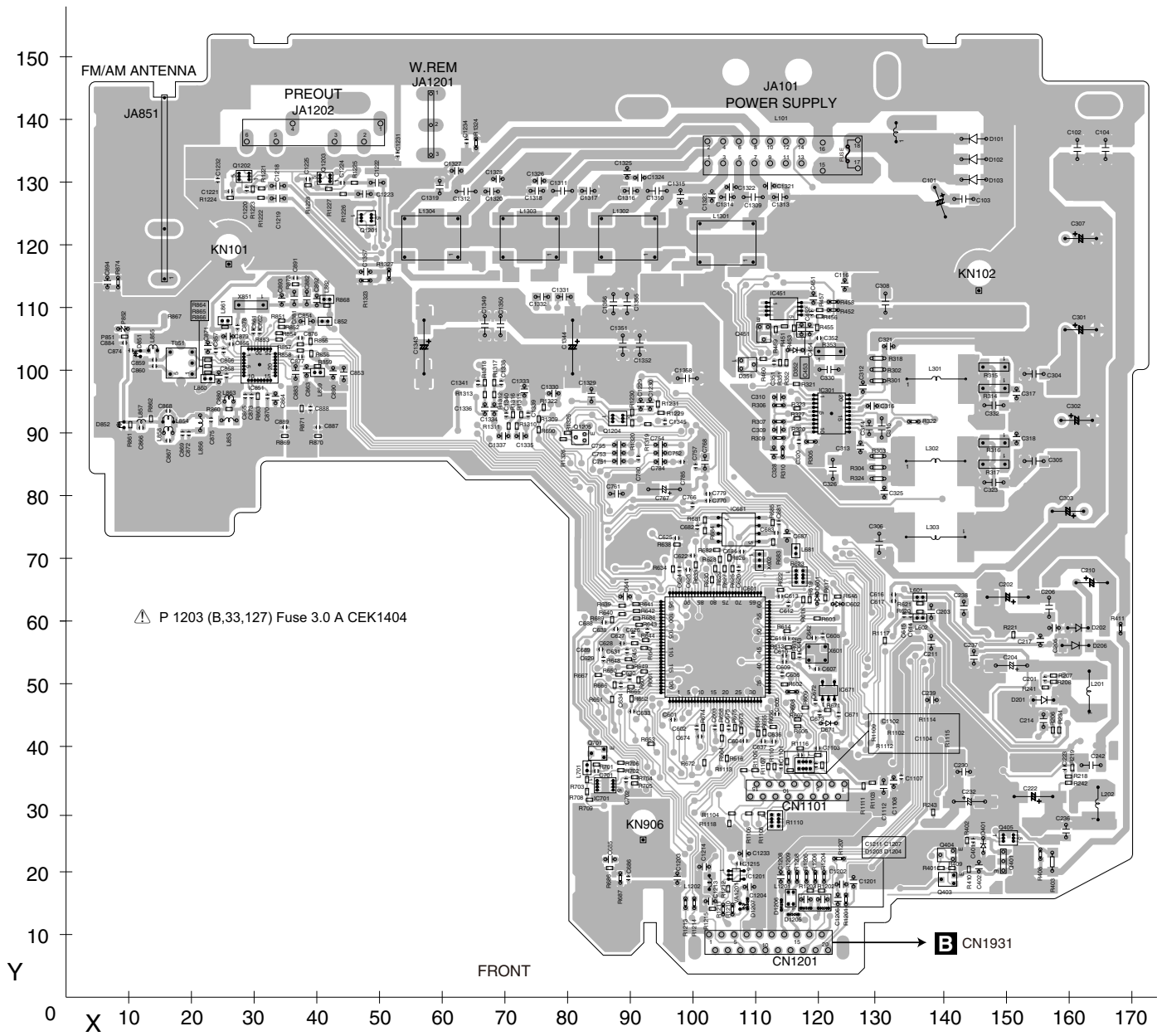
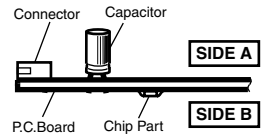
11.1 TUNER AMP UNIT

SIDE A

11. PCB CONNECTION DIAGRAM

A TUNER AMP UNIT

NOTE FOR PCB DIAGRAMS
 1. The parts mounted on this PCB include all necessary parts for several destination.
 For further information for respective destinations, be sure to check with the schematic diagram.
 2. Viewpoint of PCB diagrams



A

A

MVH-280FD/XNEWS

B

3

KEYBOARD UNIT



12. ELECTRICAL PARTS LIST

NOTE:

- Parts whose parts numbers are omitted are subject to being not supplied.
- The part numbers shown below indicate chip components.

Chip Resistor

RS1/○S○○○○J, RS1/○○S○○○○J

Chip Capacitor (except for CQS.....)

CKS....., CCS....., CSZS.....

- The $\triangle$ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.
- Meaning of the figures and others in the parentheses in the parts list.

Example) IC 301 is on the point (face A, 91 of x-axis, and 111 of y-axis) of the corresponding PC board.

IC 301 (A, 91, 111) IC NJM2068V

- The expression of the unit in this manual is shown by μ instead of m . Please do not make a mistake.

Circuit Symbol and No.

Part No.

A: MVH-280FD/XNEW5

B: MVH-X285FD/XNES

Unit Number : QWM4077(A)

Unit Number : QWM4078(B)

Unit Name : Tuner Amp Unit

Unit Number : QWM4176

Unit Name : Keyboard Unit

A

Unit Number : QWM4077(A)

Unit Number : QWM4078(B)

Unit Name : Tuner Amp Unit

MISCELLANEOUS

IC 201	(B,153,47) PO Supply IC	BD49101AEFS
IC 301	(A,122,93) DC/DC CONV IC	AP3603
IC 451	(A,115,110) IC	NJM2904V
IC 601	(A,104,56) IC	R5S726A0D216FP
IC 671	(A,122,49) IC	S-80827CNMC-B8M
IC 681(NSP)	(A,107,75) FlashROM Unit(A)	QWW3792
	(A,107,75) FlashROM Unit(B)	QWW3795
IC 701	(A,86,34) IC	337S3959
IC 751	(B,97,82) E-VOL SYS LSI	PM9013A
IC 851	(A,31,101) Tuner IC	TEF6686HN
IC 1201	(A,107,20) L-MOS And Gate	TC7SET08FUS1
IC 1301	(B,75,104) Power AMP IC	TAS5414CTPHDQ1
Q 106	(B,111,115) Bipolar TR	LSCR523UB
Q 111	(B,107,119) Bipolar TR(A)	LSAR523UB
Q 203	(B,157,33) FET	SSM3J332R
Q 301	(B,141,96) FET	NVMFS5834NL
Q 302	(B,141,84) FET	NVMFS5834NL
Q 401	(A,151,22) Transistor	2SCR514PGZE
Q 403	(A,141,19) Transistor	2SAR502UB
Q 404	(A,140,23) Transistor	LTC143EUB
Q 405	(A,150,25) Transistor	EMD52

Circuit Symbol and No.

Part No.

Q 451	(A,111,106) Transistor	LTC143EUB
Q 701	(A,85,39) Bipolar TR	LSAR523UB
Q 1201	(A,48,124) Transistor(B)	EMD53
Q 1202	(A,28,131) Transistor	EMH53
Q 1203	(A,41,131) Transistor	EMH53
Q 1204	(A,88,92) Transistor	EMD52
Q 1205	(A,82,89) Transistor	LTC014EEB
D 101	(A,145,137) Diode	D1F60-5053
D 102	(A,145,134) Diode	D1F60-5053
D 103	(A,145,130) Diode	D1F60-5053
D 106	(B,113,118) Diode(A)	DZ2J075M0
	(B,113,118) Diode(B)	DZ2J068M0
D 111	(B,104,119) Diode(A)	DAN202UM
D 201	(A,156,47) Diode	RB162M-40
D 202	(A,161,59) Diode	CRG03
D 203	(B,156,30) Diode	RB056L-40
D 206	(A,161,56) Diode	CMS30I30A
D 301	(B,149,96) Diode	NRVB2045EMFS
D 302	(B,149,84) Diode	NRVB2045EMFS
D 351	(A,109,101) Diode	DAN217UM
D 352	(A,116,103) Diode	DZ2J075M0
D 401	(A,146,24) Diode	DZ2J100M0
D 601	(A,120,64) Diode(A)	RB751SM-40
D 602	(A,123,63) Diode(A)	RB751SM-40
D 1201	(B,102,18) Diode	DZ2S068C
D 1202	(B,121,18) Diode	DZ2S068C
D 1203	(A,118,14) Diode	DZ2S068C
D 1204	(A,121,14) Diode	DZ2S068C
D 1205	(A,116,13) Diode	DZ2S068C
D 1206	(A,114,15) Diode	DZ2S068C
L 101	(A,113,142) Choke Coil	CTH1620
L 111	(B,106,123) Chip Coil(A)	BTH1101
L 201	(A,163,49) Inductor	CTH1521
L 202	(A,165,31) Inductor	CTH1584
L 301	(A,139,99) Choke Coil	CTH1616
L 302	(A,139,86) Choke Coil	CTH1616
L 303	(A,139,73) Choke Coil	CTH1616
L 752	(B,104,78) Inductor	CTF1793
L 853	(A,26,92) Chip Coil(B)	LCTAW3R3J2520
L 854	(A,16,92) Inductor(B)	ATL7033
L 855	(A,14,103) Inductor	LCMAR27J1608

1			2			3			4		
<u>Circuit Symbol and No.</u>			<u>Part No.</u>			<u>Circuit Symbol and No.</u>			<u>Part No.</u>		
A	L 856	(A,21,92) Chip Coil(B)	LCTAWR27J2520			R 237	(B,133,33)		RS1/16SS473J		
	L 858	(A,16,90) Inductor(A)	CTF1389			R 238	(B,138,52)		RS1/16SS102J		
	L 859	(A,40,100) Inductor	CTF1786			R 239	(B,134,51)		RS1/16SS102J		
	L 863	(A,26,95) Inductor(A)	LCYC150K1608			R 240	(B,142,52)		RS1/16SS102J		
	L 1201	(A,116,16) Inductor	CTF1713			R 241	(A,156,49)		RS1/16SS0R0J		
■	L 1301	(A,105,120) Choke Coil	CTH1460			R 242	(A,160,34)		RS1/16SS0R0J		
	L 1302	(A,90,121) Choke Coil	CTH1460			R 245	(B,145,51)		RS1/16SS0R0J		
	L 1303	(A,74,121) Choke Coil	CTH1460			R 246	(B,141,50)		RS1/16SS0R0J		
	L 1304	(A,58,121) Choke Coil	CTH1460			R 301	(A,130,98) 10 mohm		CCN1187		
	T 851	(A,18,101) Variable Coil	CTC1215			R 302	(A,130,100) 10 mohm		CCN1187		
B	X 601	(A,120,55) Crystal Resonator 12 MHz	CSS1876			R 303	(A,130,86) 10 mohm		CCN1187		
	X 602	(A,111,70) Ceramic Resonator 16.934 MHz	CSS1603			R 304	(A,130,85) 10 mohm		CCN1187		
	X 851	(A,30,110) Crystal Resonator 9.216 MHz	CSS1867			R 305	(A,119,89)		RS1/10SR273J		
	P 851	(A,9,105) Surge Absorber	IMSA-6803-01Y900			R 306	(A,114,94)		RS1/10SR223J		
	△P1203	(B,33,127) Fuse 3.0 A	CEK1404			R 307	(A,114,92)		RS1/10SR223J		
■	VA1201	(A,108,15) SMD Varistor	MLV0402ES012V0010N			R 308	(B,117,98)		RS1/10SR124J		
	VA1202	(B,106,19) SMD Varistor	MLV0402ES012V0010N			R 309	(A,114,89)		RS1/10SR103J		
	CN1201	(A,112,4) Connector	CKS6452			R 310	(A,114,87)		RS1/10SR4302D		
	JA101	(A,114,142) Connector	CKM1648			R 311	(B,144,77)		RS1/10SR272J		
	JA851	(A,16,129) Antenna Jack	CKX1104			R 313	(B,137,89)		RS1/4S0R0J		
C	JA1201	(A,58,139) 3.5 DIA Jack	CKS6437			R 314	(A,148,97)		RS1/4S820J		
	JA1202	(A,38,139) Jack	CKB1109			R 315	(A,148,101)		RS1/4S820J		
	RESISTORS					R 316	(A,148,88)		RS1/4S820J		
	R 106	(B,112,117)	RS1/16SS103J			R 317	(A,148,85)		RS1/4S820J		
	R 107	(B,110,118)	RS1/16SS103J			R 318	(A,130,102) 10 mohm		CCN1187		
■	R 108	(B,110,119) (A)	RS1/16SS333J			R 319	(B,139,91)		RS1/10SR100J		
		(B,110,119) (B)	RS1/16SS682J			R 320	(A,117,90)		RS1/16SS0R0J		
	R 109	(B,112,122) (A)	RS1/4SA122J			R 322	(A,135,92)		RS1/10SR100J		
		(B,112,122) (B)	RS1/4SA102J			R 323	(A,117,94)		RS1/16SS0R0J		
	R 111	(B,108,119) (A)	RS1/16SS102J			R 324	(A,130,83) 10 mohm		CCN1187		
D			RS1/16SS102J			R 327	(A,117,92)		RS1/16SS0R0J		
	R 112	(B,105,117) (A)	RS1/16SS223J			R 351	(A,114,101)		RS1/16SS103J		
	R 113	(B,103,122) (A)	RS1/16SS153J			R 352	(A,115,101)		RS1/16SS103J		
	R 207	(A,158,51)	RS1/16SS102J			R 353	(A,122,103)		RS1/4S472J		
	R 208	(A,158,50)	RS1/16SS2403D			R 401	(A,140,21)		RS1/16SS272J		
■	R 209	(B,162,46)	RS1/16SS7502D			R 407	(B,132,19)		RS1/10SR473J		
	R 210	(B,162,44)	RS1/16SS4703D			R 408	(A,155,23)		RS1/10SR102J		
	R 211	(B,163,45)	RS1/16SS4303D			R 409	(A,141,21)		RS1/16SS103J		
	R 212	(B,160,48)	RS1/16SS753J			R 410	(A,144,20)		RS1/16SS473J		
	R 213	(B,161,42)	RS1/16SS3903D			R 411	(A,168,59)		RS1/10SR1R0J		
E	R 214	(B,163,43)	RS1/16SS6202D			R 452	(A,122,110)		RS1/10SR1003D		
			RS1/16SS6202D			R 453	(A,116,107)		RS1/16SS1002D		
	R 215	(B,148,56)	RS1/16SS8202D			R 454	(B,129,123)		RS1/8SQ1003D		
	R 216	(B,146,54)	RS1/16SS6802D			R 455	(A,120,107)		RS1/16SS1002D		
	R 217	(B,160,36)	CCN1401			R 456	(A,120,109)		RS1/16SS472J		
F	R 218	(A,160,35)	RS1/16SS102J			R 457	(A,120,110)		RS1/16SS0R0J		
	R 219	(A,161,37)	RS1/16SS1203D			R 458	(A,122,111)		RS1/10SR820J		
	R 220	(B,149,35)	RS1/16SS1802D			R 460	(A,111,102)		RS1/16SS103J		
	R 222	(B,145,47)	RS1/16SS393J			R 602	(A,115,50)		RS1/16SS102J		
	R 223	(B,148,37)	RS1/16SS393J			R 603	(A,120,60)		RS1/16SS0R0J		
■	R 224	(B,145,45)	RS1/16SS4703D			R 604	(B,107,49) (A)		RS1/16SS473J		
	R 225	(B,143,44)	RS1/16SS1503D			R 609	(A,118,46)		RS1/16SS473J		
	R 226	(B,143,36)	RS1/16SS1003D			R 610	(B,114,52)		RS1/16SS473J		
	R 227	(B,143,37)	RS1/16SS7503D			R 611	(B,108,52)		RS1/16SS473J		
	R 228	(B,141,36)	RS1/16SS1603D			R 613	(A,115,56)		RS1/16SS152J		
F	R 230	(B,139,38)	RS1/16SS0R0J			R 614	(A,115,58)		RS1/16SS473J		
	R 231	(B,139,36)	RS1/16SS820J			R 616	(A,105,38)		RS1/16SS473J		
	R 232	(B,136,40)	RS1/16SS0R0J			R 617	(A,121,64)		RS1/16SS103J		
	R 233	(B,135,37)	RS1/16SS682J			R 619	(A,119,63)		RS1/16SS473J		
	R 235	(B,144,54)	RS1/16SS3903D			R 622	(A,114,65)		RS1/16SS473J		

5		6		7		8		
<u>Circuit Symbol and No.</u>		<u>Part No.</u>		<u>Circuit Symbol and No.</u>		<u>Part No.</u>		
R 623	(A,117,67)	RAB4CQ473J		R 861	(A,10,91)	RS1/16SS105J		
R 625	(A,106,68)	RS1/16SS221J		R 862	(A,14,92)	RS1/16SS105J		
				R 872	(B,31,104)	RS1/10SR0R0J		
R 626	(A,106,70)	RS1/16SS221J						A
R 627	(A,105,68)	RS1/16SS221J		R 874	(A,8,114)	RS1/10SR0R0J		
R 628	(A,104,70)	RS1/16SS221J		R 1103	(A,129,34)	RS1/16SS473J		
R 629	(A,104,68)	RS1/16SS221J		R 1114	(A,120,39)	RS1/16SS473J		
R 630	(A,103,67)	RS1/16SS221J		R 1115	(A,121,37)	RS1/16SS473J		
				R 1116	(A,117,40)	RS1/16SS473J		
R 631	(B,104,67)	RS1/16SS473J						
R 632	(B,101,69)	RS1/16SS473J		R 1117	(A,131,57)	RS1/16SS473J		
R 633	(A,100,69)	RS1/16SS101J		R 1118	(A,106,28)	RS1/16SS473J		
R 634	(A,97,68)	RS1/16SS102J		R 1201	(A,124,16)	RS1/10SR222J		
R 636	(B,96,64)	RS1/16SS473J		R 1202	(A,121,17)	RS1/16SS223J		
				R 1203	(A,119,17)	RS1/16SS223J		
R 637	(B,95,64)	RS1/16SS473J						
R 638	(A,97,72)	RS1/16SS473J		R 1204	(A,121,19)	RS1/10SR101J		B
R 643	(A,91,59)	RS1/16SS104J		R 1205	(A,118,19)	RS1/10SR101J		
R 644	(A,92,57)	RS1/16SS101J		R 1206	(A,120,19)	RS1/10SR101J		
R 645	(A,91,56)	RS1/16SS101J		R 1207	(A,123,22)	RS1/10SR222J		
				R 1208	(A,117,19)	RS1/10SR220J		
R 646	(A,123,64)	RS1/16SS103J						
R 647	(A,92,56)	RS1/16SS101J		R 1209	(A,115,19)	RS1/10SR220J		
R 648	(A,90,54)	RS1/16SS102J		R 1210	(A,106,14)	RS1/10SR222J		
R 649	(A,90,53)	RS1/16SS102J		R 1211	(A,105,14)	RS1/10SR222J		
R 650	(A,88,51)	RS1/16SS102J		R 1212	(A,106,17)	RS1/16SS822J		
				R 1213	(A,99,15)	RS1/10SR222J		
R 651	(A,87,48)	RS1/16SS473J						
R 652	(A,90,48)	RS1/16SS222J		R 1214	(A,100,15)	RS1/10SR222J		
R 653	(A,93,40)	RS1/16SS103J		R 1215	(A,103,14)	RS1/16SS472J		C
R 655	(A,111,42)	RS1/16SS0R0J		R 1216	(B,54,125) (B)	RS1/16SS471J		
R 656	(A,113,43)	RS1/16SS0R0J		R 1217	(B,54,126)	RS1/16SS102J		
				R 1218	(B,51,126)	RS1/16SS102J		
R 659	(B,109,57)	RS1/16SS153J		R 1219	(B,44,126)	RS1/16SS0R0J		
R 660	(B,109,58)	RS1/16SS153J						
R 662	(B,102,46)	RS1/16SS102J		R 1220	(B,51,124) (B)	RS1/16SS471J		
R 664	(A,105,41)	RS1/16SS473J		R 1221	(A,31,129)	RS1/16SS821J		
R 665	(A,90,50)	RS1/16SS222J		R 1222	(A,31,128)	RS1/16SS821J		
				R 1223	(A,30,129)	RS1/16SS223J		
R 667	(A,85,51)	RS1/16SS472J		R 1224	(A,26,128)	RS1/16SS223J		
R 668	(B,102,48)	RS1/16SS102J		R 1225	(A,46,130)	RS1/16SS821J		
R 671	(A,122,46)	RS1/16SS104J						
R 672	(A,102,37)	RS1/16SS472J		R 1226	(A,44,128)	RS1/16SS821J		D
R 673	(A,108,43)	RS1/16SS472J		R 1227	(A,42,129)	RS1/16SS223J		
				R 1228	(A,39,130)	RS1/16SS223J		
R 681	(A,102,76)	RS1/16SS473J		R 1232	(B,42,122)	RS1/16SS0R0J		
R 682	(A,104,71)	RS1/16SS473J		R 1301	(B,99,113)	RS1/4SA5R6J		
R 683	(A,113,73)	RS1/16SS473J						
R 684	(A,102,74)	RS1/16SS473J		R 1302	(B,90,115)	RS1/4SA5R6J		
R 685	(A,113,76)	RS1/16SS473J		R 1303	(B,82,121)	RS1/4SA5R6J		
				R 1304	(B,76,120)	RS1/4SA5R6J		
R 689	(A,87,60)	RS1/16SS472J		R 1305	(B,74,120)	RS1/4SA5R6J		
R 690	(A,75,91)	RS1/16SS473J		R 1306	(B,69,121)	RS1/4SA5R6J		
R 701	(A,85,37)	RS1/16SS473J						
R 702	(A,89,36)	RS1/16SS222J		R 1307	(B,64,119)	RS1/4SA5R6J		E
R 703	(A,83,35)	RS1/16SS222J		R 1308	(B,63,117)	RS1/4SA5R6J		
				R 1310	(A,72,91)	RS1/16SS471J		
R 704	(A,91,35)	RS1/16SS272J		R 1311	(A,71,91)	RS1/16SS471J		
R 705	(A,91,34)	RS1/16SS472J		R 1312	(A,68,96)	RS1/16SS471J		
R 706	(A,89,37)	RS1/16SS472J						
R 707	(B,88,37)	RS1/16SS101J		R 1313	(A,67,96)	RS1/16SS471J		
R 708	(A,83,33)	RS1/16SS101J		R 1314	(B,75,95)	RS1/10SR2002F		
				R 1315	(A,73,93)	RS1/16SS471J		
R 852	(A,34,107)	RS1/16SS103J		R 1316	(A,71,93)	RS1/16SS471J		
R 854	(A,34,106)	RS1/16SS103J		R 1317	(A,68,98)	RS1/16SS471J		
R 855	(A,39,105)	RS1/16SS472J						
R 856	(A,39,103)	RS1/16SS472J		R 1318	(A,67,98)	RS1/16SS471J		
R 857	(A,37,104)	RS1/16SS101J		R 1319	(A,93,91)	RS1/16SS103J		F
				R 1321	(B,66,99)	RS1/16SS221J		
R 858	(A,37,103)	RS1/16SS101J		R 1325	(A,80,90)	RS1/16SS103J		
R 860	(A,26,94) (A)	RS1/16SS391J		R 1327	(A,52,115)	RS1/10SR0R0J		
	(A,26,94) (B)	RS1/16SS101J						

1 <u>Circuit Symbol and No.</u>			2 <u>Part No.</u>	3 <u>Circuit Symbol and No.</u>			4 <u>Part No.</u>
<u>CAPACITORS</u>				C 451	(A,119,112)		CKSRYB104K25
				C 452	(A,119,109)		CKSSYB104K10
A	C 101	(A,139,127) 2 200 uF/16 V	CCH1405	C 453	(A,117,107)		CKSRYB105K10
	C 102	(A,161,135) 10 uF	CCG1236	C 454	(A,119,107)		CKSRYB105K10
	C 104	(A,166,135)	CCG1291	C 601	(A,97,44)		CKSSYB104K10
	C 106	(B,110,120)	CKSRYB104K50	C 602	(A,101,43)		CKSSYB104K10
	C 117	(B,119,122)	CKSRYB104K50	C 603	(A,104,43)		CKSSYB104K10
	C 201	(A,156,51)	CCSSCH391J50	C 604	(A,108,41)		CKSSYB104K10
	C 202	(A,150,64)	XCEVW221M16	C 605	(A,113,45)		CKSSYB104K10
	C 203	(A,138,62) 10 uF	CCG1192	C 606	(A,114,52)		CKSSYB104K10
	C 204	(A,151,53)	CEVQW221M6R3	C 607	(A,120,52)		CCSSCH120J50
	C 205	(A,158,59)	CCG1396	C 608	(A,121,58)		CCSSCH120J50
B	C 208	(B,161,47)	CCSSCH471J50	C 609	(A,115,54)		CKSSYB104K10
	C 209	(B,161,48)	CCSSCH221J50	C 610	(A,115,55)		CKSSYB104K10
	C 210	(A,164,66)	XCEAT102M16	C 611	(A,115,57)		CKSSYB102K50
	C 211	(A,138,57) 10 uF	CCG1192	C 612	(A,115,63)		CKSSYB104K10
	C 212	(B,153,60) 10 uF	CCG1236	C 613	(A,114,64)		CKSSYB104K10
	C 217	(A,155,57)	CKSRYB105K10	C 620	(A,107,68)		CKSSYB104K10
	C 218	(B,160,55) 10 uF	CCG1236	C 621	(B,104,68)		CKSSYB104K10
	C 219	(B,165,35) 10 uF	CCG1236	C 622	(A,100,70)		CCSSCH220J50
	C 220	(B,163,35) 10 uF	CCG1236	C 623	(A,99,68)		CKSSYB104K10
	C 222	(A,154,32)	XCEVW221M10	C 624	(A,98,68)		CKSSYB104K10
C	C 223	(A,159,37)	CCSSCH561J50	C 625	(A,97,73)		CKSSYB104K10
	C 224	(B,140,43)	CKSRYB105K10	C 626	(A,93,58)		CKSSYB104K10
	C 225	(B,135,42)	CKSRYB105K10	C 627	(A,90,58)		CCSSCH220J50
	C 227	(B,147,35)	CCSSCH391J50	C 628	(A,89,56)		CCSSCH220J50
	C 228	(B,148,35)	CCSSCH681J50	C 629	(A,86,54)		CKSSYB104K10
	C 230	(A,143,36) 10 uF	CCG1192	C 630	(A,90,51)		CKSSYB103K16
	C 231	(B,140,46) 10 uF	CCG1192	C 631	(A,89,55)		CCSSCH220J50
	C 232	(A,144,31)	CEVQW221M6R3	C 635	(B,100,63)		CKSSYB104K10
	C 234	(B,138,37) 4.7 uF	CCG1212	C 641	(A,89,64)		CCSRCH330J50
	C 236	(A,160,27) 10 uF	CCG1192	C 672	(A,120,47) 1 uF		DCH1246
	C 238	(A,143,62) 10 uF	CCG1192	C 683	(A,113,74)		CCSSCJ3R0C50
	C 240	(B,149,30) 22 uF	CCG1254	C 687	(A,115,74)		CKSRYB105K16
	C 242	(A,164,37) 10 uF	CCG1236	C 688	(A,86,60)		CCSSCH100D50
	C 301	(A,162,106)	CEHAZL102M25	C 689	(A,85,56)		CCSSCH100D50
	C 302	(A,161,92)	CEHAZL102M25	C 701	(A,85,36)		CKSSYB104K10
D	C 303	(A,160,78)	CEHAZL102M25	C 702	(A,89,35)		CKSSYB104K10
	C 306	(A,130,72) 10 uF	CCG1236	C 751	(A,88,86)		CKSRYB105K10
	C 307	(A,162,121)	CEHAZL102M25	C 752	(A,95,87)		CKSRYB105K10
	C 309	(A,114,91)	CCSRCH471J50	C 753	(A,88,87)		CKSRYB105K10
	C 310	(A,114,96)	CCSRCH471J50	C 754	(A,95,88)		CKSRYB105K10
	C 311	(B,115,91)	CCG1383	C 755	(A,88,88)		CKSRYB105K10
	C 312	(A,127,97)	CKSRYB103K50	C 756	(B,103,83)		CKSSYB104K10
	C 313	(A,127,88)	CKSRYB103K50	C 757	(A,100,85)		CKSSYB104K10
	C 314	(A,128,91)	CCG1383	C 758	(B,104,81) 10 uF		CCG1192
	C 315	(A,130,91) 10 uF	CCG1236	C 761	(A,88,80) 10 uF		CCG1192
E	C 316	(A,129,94)	CKSRYB104K50	C 762	(B,89,79)		CKSSYB104K10
	C 317	(A,152,96)	CKSRYB103K50	C 763	(B,89,80)		CKSSYB104K10
	C 318	(A,152,89)	CKSRYB103K50	C 764	(B,89,78)		CKSSYB104K10
	C 321	(A,131,104)	CKSRYB104K50	C 765	(B,105,76) 10 uF		CCG1192
	C 322	(B,150,88)	CKSRYB104K50	C 766	(A,100,79)		CKSSYB104K10
	C 326	(A,122,84) 10 uF	CCG1236	C 767	(A,95,81)		XCEVW470M16
	C 327	(B,151,100)	CKSRYB104K50	C 768	(A,102,85) 10 uF		CCG1192
	C 351	(A,113,101)	CKSSYB104K10	C 769	(B,103,76) 10 uF		CCG1192
	C 352	(A,120,105)	CKSSYB104K16	C 770	(A,102,79)		CKSSYB102K50
	C 353	(B,121,61) 1 uF	DCH1246	C 771	(B,88,78) 1 uF		DCH1246
F	C 401	(A,145,25)	CKSSYB104K16	C 772	(B,106,84)		CKSSYB104K10
	C 402	(A,146,21)	CCG1393	C 775	(B,107,79)		CKSSYB102K50
	C 403	(B,130,19)	CCSRCH101J50	C 777	(B,102,80) 1 uF		DCH1246

5			6			7			8		
<u>Circuit Symbol and No.</u>			<u>Part No.</u>			<u>Circuit Symbol and No.</u>			<u>Part No.</u>		
C 782	(B,104,90)	1 uF	DCH1246			C 1310	(A,94,129)	0.47 uF	CCG1268		
C 784	(A,95,85)		CKSRYB105K10			C 1311	(A,79,129)	0.47 uF	CCG1268		
C 786	(B,104,92)		CKSRYB102K50			C 1312	(A,64,129)	0.47 uF	CCG1268		A
C 851	(B,42,96)		CKSSYB104K16			C 1313	(A,114,128)		CKSQYB474K25		
C 854	(A,38,108)	10 uF	CCG1192			C 1314	(A,106,128)		CKSQYB474K25		
C 855	(A,26,104)		CKSSYB104K16			C 1315	(A,98,128)		CKSQYB474K25		
C 856	(A,25,103)		CKSSYB224K6R3			C 1316	(A,90,129)		CKSQYB474K25		
C 857	(A,24,103)		CKSSYB102K50			C 1317	(A,83,129)		CKSQYB474K25		
C 858	(A,26,99)		CKSSYB104K16			C 1318	(A,75,129)		CKSQYB474K25		
C 859	(A,14,102)		CCSSCH220J50			C 1319	(A,60,129)		CKSQYB474K25		
C 860	(A,14,101)		CCSSCH331J50			C 1320	(A,68,129)		CKSQYB474K25		
C 863	(A,38,100)	2.2 uF	CCG1205			C 1321	(A,112,129)		CCSRCH102J50		
C 865	(A,29,96)		CCSSCH102J50			C 1322	(A,106,129)		CCSRCH102J50		
C 866	(A,12,91)		CCSSCH471J50			C 1323	(A,103,128)		CCSRCH102J50		B
C 867	(A,16,89) (B)		CCSSCK2R0C50			C 1324	(A,92,131)		CCSRCH102J50		
C 868	(A,16,94) (B)		CCSSCK1R0C50			C 1325	(A,90,132)		CCSRCH102J50		
C 869	(A,19,90) (B)		CCSSCH120J50			C 1326	(A,76,130)		CCSRCH102J50		
C 870	(A,32,96)		CKSSYB152K50			C 1327	(A,62,132)		CCSRCH102J50		
C 872	(A,20,90) (B)		CCSSCK1R0C50			C 1328	(A,69,131)		CCSRCH102J50		
C 874	(A,10,103)		CCSSCH100D50			C 1329	(A,84,96)		CKSQYB224K50		
C 878	(A,27,107)		CCSSCH390J50			C 1330	(A,78,96)		CKSRYB104K50		
C 885	(B,35,117)		CKSRYB104K16			C 1331	(A,80,112)		CCG1383		
C 890	(A,43,100)	4.7 uF	CCG1212			C 1332	(A,76,112)		CCG1383		
C 892	(A,40,111)	2.2 uF	CCG1205			C 1333	(A,73,97)		CKSRYB104K50		
C 1110	(B,142,61)		CKSRYB105K16			C 1334	(A,68,94)		CKSRYB474K10		C
C 1111	(B,139,61)		CKSRYB105K16			C 1335	(A,73,90)		CKSRYB474K10		
C 1201	(A,126,18)		CCSRCH102J50			C 1336	(A,67,94)		CKSRYB474K10		
C 1203	(A,98,19)		CKSRYB105K16			C 1337	(A,70,90)		CKSRYB474K10		
C 1204	(A,109,18)		CKSRYB105K16			C 1338	(A,69,98)		CKSSYB122K50		
C 1206	(A,123,16)		CKSRYB104K16			C 1339	(A,74,93)		CKSSYB122K50		
C 1207	(A,121,16)		CKSRYB105K10			C 1340	(A,70,93)		CKSSYB122K50		
C 1208	(A,114,19)		CKSRYB104K16			C 1341	(A,66,98)		CKSSYB122K50		
C 1209	(B,100,19)		CCSRCH221J50			C 1342	(B,64,99)		CCG1393		
C 1210	(B,99,19)		CCSRCH221J50			C 1346	(B,86,109)		CKSRYB104K50		
C 1215	(A,107,21)		CKSSYB104K10			C 1347	(B,65,106)		CKSRYB104K50		
C 1216	(B,57,126)		CKSRYB104K16			C 1349	(A,67,107)	10 uF	CCG1236		D
C 1217	(B,49,125)		CKSRYB104K16			C 1350	(A,69,107)	10 uF	CCG1236		
C 1218	(A,34,129)	10 uF	CCG1192			C 1353	(B,63,99)		CCG1393		
C 1219	(A,34,127)	10 uF	CCG1192			C 1354	(B,89,110)	10 uF	CCG1236		
C 1220	(A,29,129)		CCSSCH101J50			C 1355	(A,90,111)	10 uF	CCG1236		
C 1221	(A,26,129)		CCSSCH101J50			C 1356	(A,87,111)	10 uF	CCG1236		
C 1222	(A,50,130)	10 uF	CCG1192			B Unit Number : QWM4176 Unit Name : Keyboard Unit					
C 1223	(A,48,128)	10 uF	CCG1192								
C 1224	(A,44,130)		CCSSCH101J50								
C 1225	(A,39,131)		CCSSCH101J50								
C 1227	(B,31,127)		CKSSYB104K10			<u>MISCELLANEOUS</u>					
C 1228	(B,32,127)		CKSSYB103K16			IC 1801	(B,84,21)	Flash Written UC IC	PD6586A8		
C 1231	(A,53,134)		CKSSYB104K10			IC 1941	(A,158,37)	IR RC REC Module	SIR8440B5		
C 1232	(A,24,130)		CKSSYB104K10			D 1951	(A,60,21)	White LED	SWBA05(FI231719)		
C 1233	(A,108,23)		CKSRYB105K16			D 1968	(A,38,18)	RED LED	FC-1608SXX630D08		
C 1235	(B,37,127)		CKSRYB103K50			D 1969	(A,49,11)	RED LED	FC-1608SXX630D08		
C 1301	(B,96,114)		CCSRCH471J50			D 1970	(A,49,25)	RED LED	FC-1608SXX630D08		
C 1302	(B,85,115)		CCSRCH471J50			D 1971	(A,34,29)	RED LED	FC-1608SXX630D08		
C 1303	(B,84,118)		CCSRCH471J50			D 1973	(A,71,4)	RED LED	FC-1608SXX630D08		
C 1304	(B,79,118)		CCSRCH471J50			D 1974	(A,57,3)	RED LED	FC-1608SXX630D08		
C 1305	(B,74,116)		CCSRCH471J50			D 1975	(A,111,4)	RED LED	FC-1608SXX630D08		F
C 1306	(B,71,118)		CCSRCH471J50			D 1976	(A,93,4)	RED LED	FC-1608SXX630D08		
C 1307	(B,69,118)		CCSRCH471J50			D 1977	(A,89,4)	RED LED	FC-1608SXX630D08		
C 1308	(B,65,115)		CCSRCH471J50								
C 1309	(A,110,128)	0.47 uF	CCG1268								

Circuit Symbol and No.**Part No.**

D 1978	(A,137,4)	RED LED	FC-1608SXX630D08
D 1979	(A,133,4)	RED LED	FC-1608SXX630D08
D 1980	(A,115,4)	RED LED	FC-1608SXX630D08

A

D 1981	(A,35,7)	RED LED	FC-1608SXX630D08
L 1921	(B,136,8)	Inductor	CTF1389
L 1922	(B,138,11)	Inductor	CTF1389
L 1923	(B,138,5)	Inductor	CTF1389
X 1801	(B,68,23)	Ceramic Resonator 5.00 MHz	CSS1547

S 1839	(A,15,18)	Encoder (MULTI-CONTROL)	CSD1193
CN1931	(B,107,8)	Connector	CKS6451
JA1911	(A,157,23)	Connector	CKS6443
JA1921	(A,152,6)	Jack	CKN1090
V 1801	(A,137,31)	Segment LCD	CAW2056

B

RESISTORS

R 1801	(B,85,13)	RS1/10SR473J
R 1802	(B,63,20)	RS1/10SR473J
R 1803	(B,73,22)	RS1/10SR222J
R 1805	(B,62,21)	RS1/10SR473J
R 1806	(B,54,26)	RS1/10SR473J

R 1807	(B,55,26)	RS1/10SR473J
R 1808	(B,52,26)	RS1/10SR473J
R 1823	(B,51,26)	RS1/10SR273J
R 1931	(B,35,8)	RS1/10SR222J
R 1932	(B,37,7)	RS1/10SR222J

C

R 1944	(B,131,26)	RS1/10SR101J
R 1951	(B,51,21)	RS1/4SA181J
R 1952	(B,55,23)	RS1/4SA101J
R 1975	(B,31,19)	RS1/10SR562J
R 1976	(B,41,20)	RS1/10SR0R0J

R 1978	(B,35,13)	RS1/10SR102J
R 1980	(B,31,28)	RS1/10SR102J
R 1982	(B,86,10)	RS1/10SR152J
R 1984	(B,63,14)	RS1/10SR102J
R 1986	(B,137,18)	RS1/10SR102J

D

R 1988	(B,49,23)	RS1/10SR102J
R 1996	(B,59,7)	RS1/10SR0R0J

CAPACITORS

C 1806	(B,66,22)	CKSRYB104K16
C 1807	(B,64,22)	CKSRYB105K10
C 1912	(B,143,21)	CKSRYB102K50
C 1941	(B,135,26) 10 uF	CCG1192

E

F