JVC

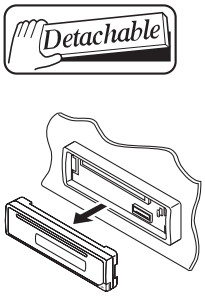
SERVICE MANUAL

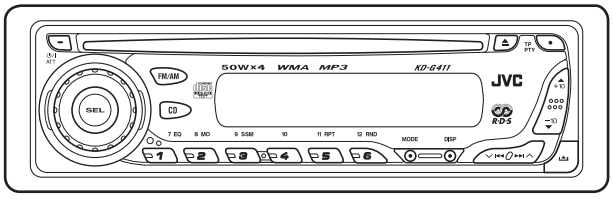
CD RECEIVER

KD-G411

Area suffix

E ---------- Southern Europe
EX ---------- Northern Europe
EY ---------- Eastern Europe
EU ---------- Turkey





WMA MP3 COMPACT disc DIGITAL AUDIO TEXT R·D·S

TABLE OF CONTENTS

No.MA135
2004/12

SPECIFICATION

AUDIO AMPLIFIER SECTION		
Maximum Power Output	Front	50 W per channel
	Rear	50 W per channel
Continuous Power Output (RMS)	Front	19 W per channel into 4 Ω, 40 Hz to 20 000 Hz at no more than 0.8% total harmonic distortion.
	Rear	19 W per channel into 4 Ω, 40 Hz to 20 000 Hz at no more than 0.8% total harmonic distortion.
Load Impedance		4 Ω (4 Ω to 8 Ω allowance)
Tone Control Range	Bass	±10 dB at 100 Hz
	Treble	±10 dB at 10 kHz
Frequency Response		40 Hz to 20 000 Hz
Signal-to-Noise Ratio		70 dB
Line-Out Level/Impedance		2.5 V/20 kΩ load (full scale)
Output Impedance		1 kΩ
TUNER SECTION		
Frequency Range	FM	87.5 MHz to 108.0 MHz
	AM	(MW) 522 kHz to 1 620 kHz (LW) 144 kHz to 279 kHz
[FM Tuner]	Usable Sensitivity	11.3 dBf (1.0 μV/75 Ω)
	50 dB Quieting Sensitivity	16.3 dBf (1.8 μV/75 Ω)
	Alternate Channel Selectivity (400 kHz)	65 dB
	Frequency Response	40 Hz to 15 000 Hz
	Stereo Separation	30 dB
	Capture Ratio	1.5 dB
[MW Tuner]	Sensitivity	20 μV
	Selectivity	35 dB
[LW Tuner]	Selectivity	50 μV
CD PLAYER SECTION		
Type		Compact disc player
Signal Detection System		Non-contact optical pickup (semiconductor laser)
Number of channels		2 channels (stereo)
Frequency Response		5 Hz to 20 000 Hz
Dynamic Range		96 dB
Signal-to-Noise Ratio		98 dB
Wow and Flutter		Less than measurable limit
MP3 decoding format		MPEG1/2 Audio Layer 3 Max. Bit Rate:320 Kbps
WMA (Windows Media Audio) decodingformat		Max. Bit Rate:192 Kbps
GENERAL		
Power Requirement	Operating Voltage	DC 14.4 V (11 V to 16 V allowance)
Grounding System		Negative ground
Allowable Operating Temperature		0°C to +40°C
Dimensions (W × H × D)	Installation Size (approx.)	182 mm × 52 mm × 150 mm
	Panel Size (approx.)	188 mm × 58 mm × 11 mm
Mass (approx.)		1.3 kg (excluding accessories)

Design and specifications are subject to change without notice.

SECTION 1
PRECAUTIONS

1.1 Safety Precautions

> ⚠ ***CAUTION*** **Burrs formed during molding may be left over on some parts of the chassis. Therefore, pay attention to such burrs in the case of preforming repair of this system.**

> ⚠ ***CAUTION*** **Please use enough caution not to see the beam directly or touch it in case of an adjustment or operation check.**

1.2 Preventing static electricity

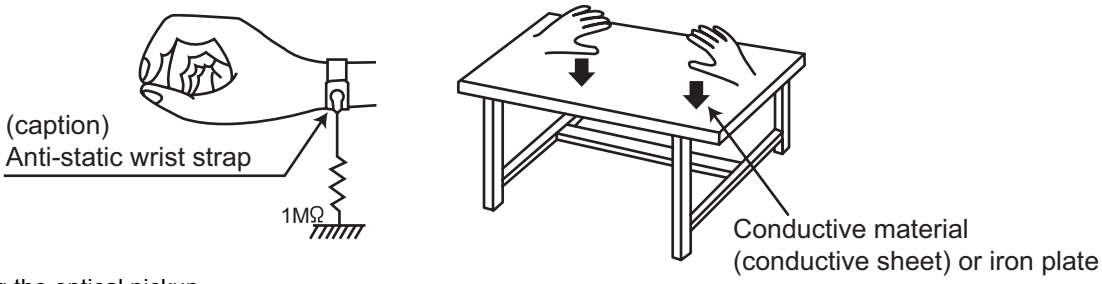
Electrostatic discharge (ESD), which occurs when static electricity stored in the body, fabric, etc. is discharged, can destroy the laser diode in the traverse unit (optical pickup). Take care to prevent this when performing repairs.

1.2.1 Grounding to prevent damage by static electricity

Static electricity in the work area can destroy the optical pickup (laser diode) in devices such as CD players.
Be careful to use proper grounding in the area where repairs are being performed.

(1) Ground the workbench
Ground the workbench by laying conductive material (such as a conductive sheet) or an iron plate over it before placing the traverse unit (optical pickup) on it.

(2) Ground yourself
Use an anti-static wrist strap to release any static electricity built up in your body.



(3) Handling the optical pickup
- In order to maintain quality during transport and before installation, both sides of the laser diode on the replacement optical pickup are shorted. After replacement, return the shorted parts to their original condition. (Refer to the text.)
- Do not use a tester to check the condition of the laser diode in the optical pickup. The tester's internal power source can easily destroy the laser diode.

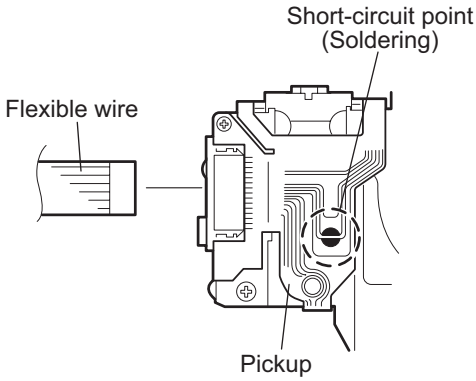
1.3 Handling the traverse unit (optical pickup)

(1) Do not subject the traverse unit (optical pickup) to strong shocks, as it is a sensitive, complex unit.
(2) Cut off the shorted part of the flexible cable using nippers, etc. after replacing the optical pickup. For specific details, refer to the replacement procedure in the text. Remove the anti-static pin when replacing the traverse unit. Be careful not to take too long a time when attaching it to the connector.
(3) Handle the flexible cable carefully as it may break when subjected to strong force.
(4) It is not possible to adjust the semi-fixed resistor that adjusts the laser power. Do not turn it.

1.4 Attention when traverse unit is decomposed

***Please refer to "Disassembly method" in the text for the CD pickup unit.**

- Apply solder to the short land before the flexible wire is disconnected from the connector on the CD pickup unit. (If the flexible wire is disconnected without applying solder, the CD pickup may be destroyed by static electricity.)
- In the assembly, be sure to remove solder from the short land after connecting the flexible wire.



1.5 Important for laser products

1.CLASS 1 LASER PRODUCT

2.DANGER : Invisible laser radiation when open and inter lock failed or defeated. Avoid direct exposure to beam.

3.CAUTION : There are no serviceable parts inside the Laser Unit. Do not disassemble the Laser Unit. Replace the complete Laser Unit if it malfunctions.

4.CAUTION : The CD,MD and DVD player uses invisible laser radiation and is equipped with safety switches which prevent emission of radiation when the drawer is open and the safety interlocks have failed or are defeated. It is dangerous to defeat the safety switches.

5.CAUTION : If safety switches malfunction, the laser is able to function.

6.CAUTION : Use of controls, adjustments or performance of procedures other than those specified here in may result in hazardous radiation exposure.

⚠ ***CAUTION*** **Please use enough caution not to see the beam directly or touch it in case of an adjustment or operation check.**

CAUTION : Visible and invisible laser radiation when open and interlock failed or defeated. AVOID DIRECT EXPOSUREBTO BEAM.	**VARNING :** Synlig och osynlig laserstråling när den öppnas och spärren är urkopplad. Betrakta ej strålen.
ADVARSEL : Synlig og usynlig laserstråling når maskinen er åben eller interlocken fejler. Undgå direkte eksponering til stråling.	**VARO :** Avattaessa ja suojalukitus ohitettuna tai viallisena olet alttiina näkyvälle ja näkymätttömälle lasersäteilylle. Vältä säteen kohdistumista suoraan itseesi.

REPRODUCTION AND POSITION OF LABELS

WARNING LABEL

CLASS 1
LASER PRODUCT

CAUTION : Visible and Invisible laser radiation when open and interlock failed or defeated. AVOID DIRECT EXPOSURE TO BEAM. (e)	**ADVARSEL** : Synlig og usynlig laserstråling når maskinen er åben eller interlocken fejeler. Undgå direkte eksponering til stråling. (d)	**VARNING** : Synlig och osynling laserstrålning när den öppnas och spärren är urkopplad. Betrakta ej strålen. (s)	**VARO**: Avattaessa ja suojalukitus ohitettuna tai viallisena olet alttiina näkyvälle ja näkymättömälle lasersäteilylle. Vältä säteen kohdistumista suoraan itseesi. (f)

SECTION 2
SPECIFIC SERVICE INSTRUCTIONS

This service manual does not describe SPECIFIC SERVICE INSTRUCTIONS.

SECTION 3
DISASSEMBLY

3.1 Main body section

3.1.1 Removing the front panel assembly (See Fig.1)

(1) Push the detach button in the lower right part of the front panel assembly and remove the front panel assembly.

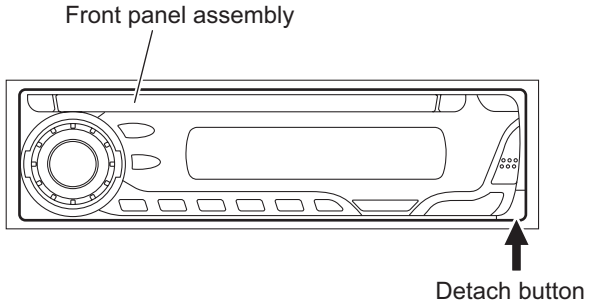


Fig.1

3.1.2 Removing the bottom cover (See Fig.2)

(1) Turn the main body up side down.

(2) Insert a screwdriver under the joints to release the two joints **a** on the left side, two joints **b** on the right side and joint **c** on the back side of the main body, then remove the bottom cover from the main body.

Note:

When releasing the joints using a screwdriver, do not damage the main board.

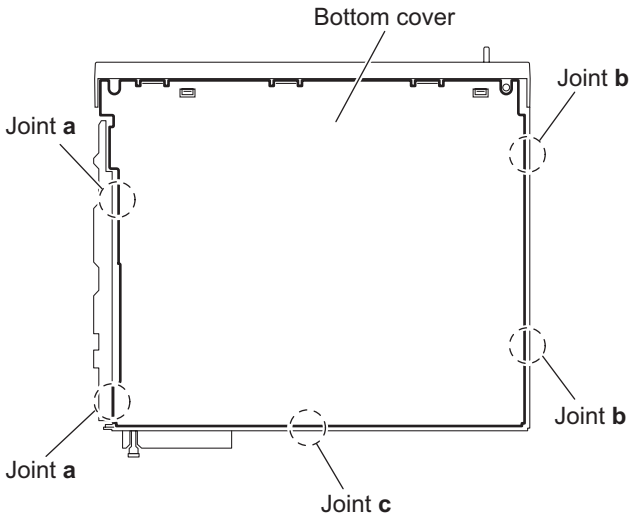


Fig.2

3.1.3 Removing the front chassis assembly (See Fig.3)

- Prior to performing the following procedures, remove the front panel assembly and bottom cover.

(1) Remove the two screws **A** on the both sides of the main body.

(2) Release the two joints **d** and two joints **e** on the both sides of the main body, then remove the front chassis assembly toward the front.

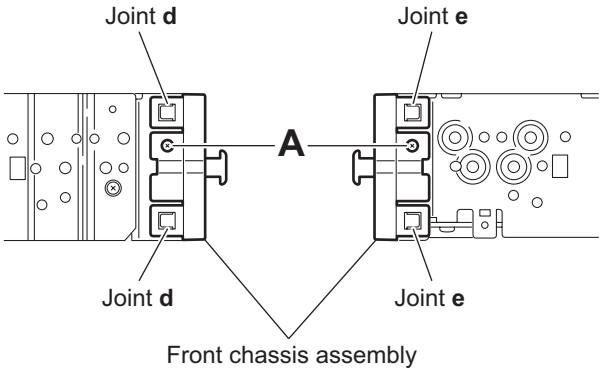


Fig.3

3.1.4 Removing the side panel (See Fig.4)

- Prior to performing the following procedure, remove the front panel assembly as required.
  (1) Remove the screw **B** and two screws **C** attaching the side panel on the left side of the main body, and take out the side panel.

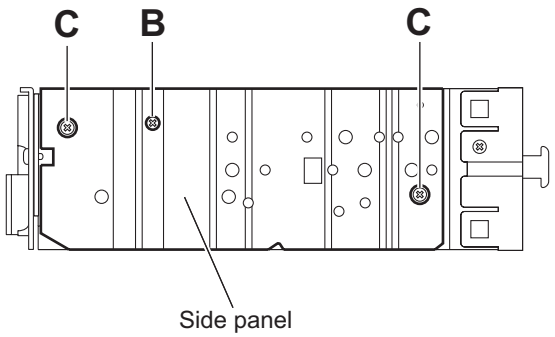


Fig.4

3.1.5 Removing the rear bracket (See Fig.5)

- Prior to performing the following procedure, remove the bottom cover.
  (1) Remove the three screws **D**, screws **E** and two screws **F** attaching the rear bracket on the back side of the main body.
  (2) Take out the rear bracket.

Reference:

Insert the STEERING cable into the slot before attaching the rear bracket to the main body.

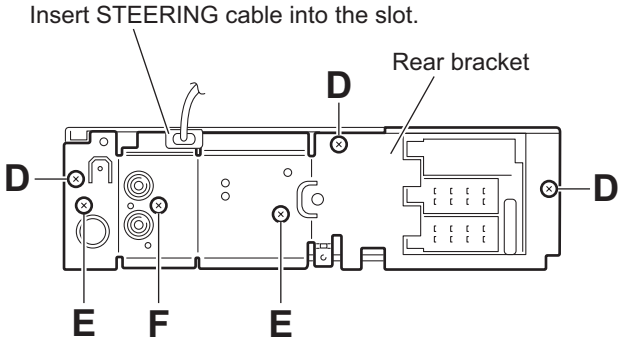


Fig.5

3.1.6 Removing the main board (See Fig.6)

- Prior to performing the following procedures, remove the front panel assembly, bottom cover, front chassis assembly, side panel and rear bracket.
  (1) Remove the two screws **G** attaching the main board.
  (2) Disconnect the connector CN501 on the main board from the main body and take out the main board.

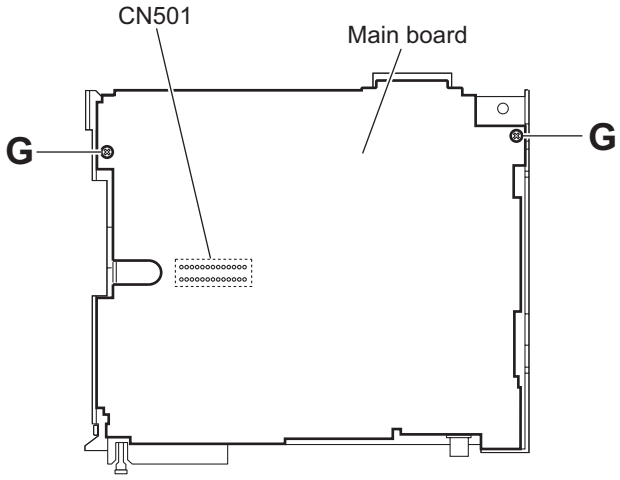


Fig.6

3.1.7 Removing the CD mechanism assembly (See Fig.7)

- Prior to performing the following procedure, remove the front panel assembly, bottom cover, side panel, rear bracket and main board.
- Remove the front chassis assembly as required.
  (1) Remove the three screws **H** attaching the CD mechanism assembly on the top chassis.
  (2) Take out the CD mechanism assembly.

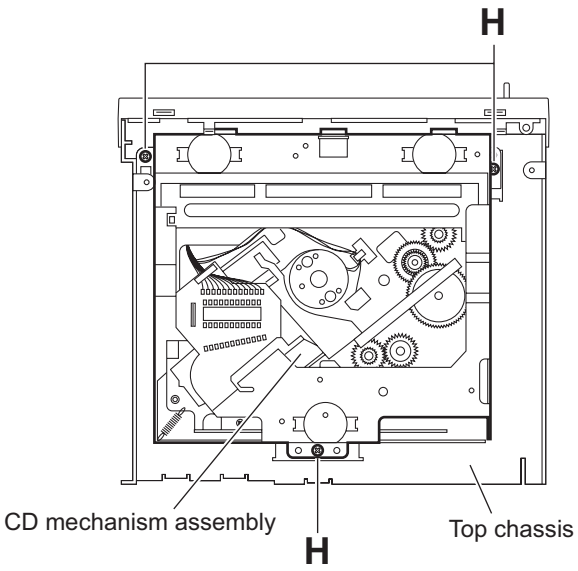


Fig.7

3.1.8 Removing the front board (See Figs.8 to 10)

- Prior to performing the following procedures, remove the front panel assembly.
  (1) Remove the four screws **J** on the back side of the front panel assembly. (See Fig.8)
  (2) Release the ten joints **f** and remove the rear cover. (See Fig.9)
  (3) Release the joint **g** and take out the front board from the front panel assembly. (See Fig.10)

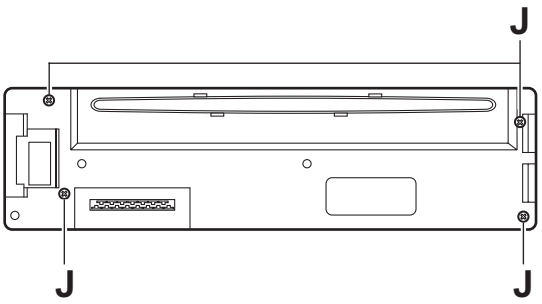


Fig.8

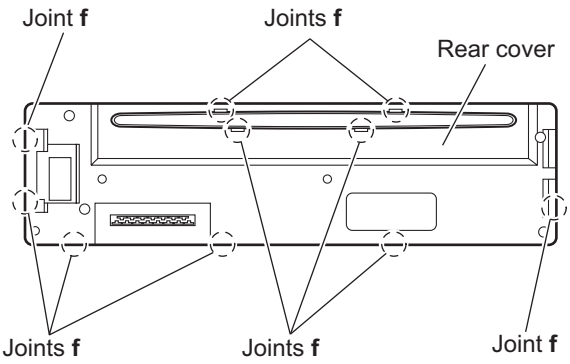


Fig.9

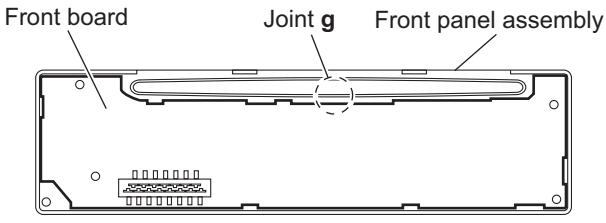


Fig.10

3.2 CD Mechanism Assembly

3.2.1 Removing the top cover (See Figs.1 and 2)

(1) Remove the two screws **A** on the both side of the body.
(2) Lift the front side of the top cover and move the top cover backward to release the two joints **a**.

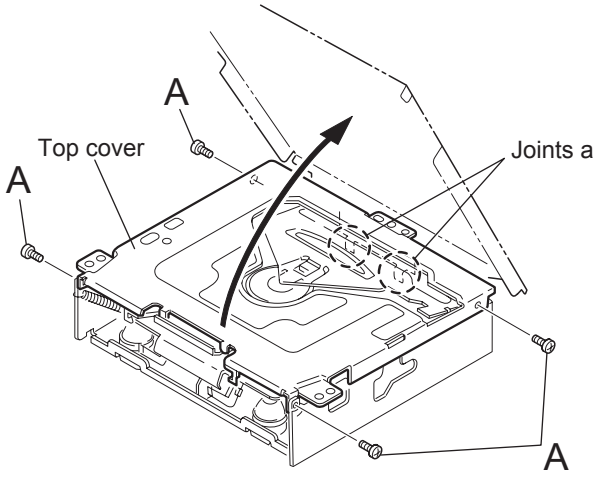


Fig.1

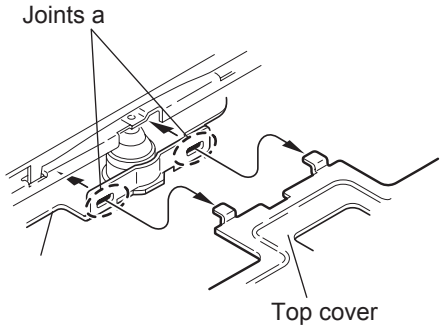


Fig.2

3.2.2 Removing the connector board (See Figs.3 to 5)

CAUTION:

Before disconnecting the flexible wire from the pickup, solder the short-circuit point on the pickup. No observance of this instruction may cause damage of the pickup.

(1) Remove the screw **B** fixing the connector board.
(2) Solder the short-circuit point on the connector board.
(3) Disconnect the flexible wire from the pickup.
(4) Move the connector board in the direction of the arrow to release the two joints **b**.
(5) Unsolder the wire on the connector board if necessary.

CAUTION:

Unsolder the short-circuit point after reassembling.

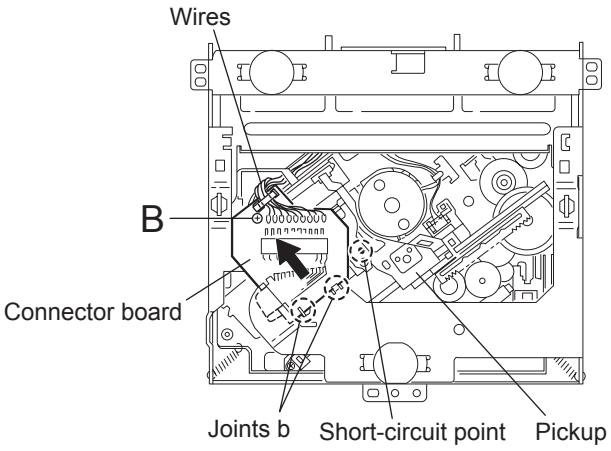


Fig.3

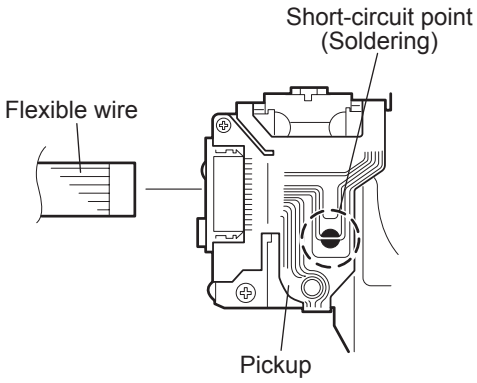


Fig.4

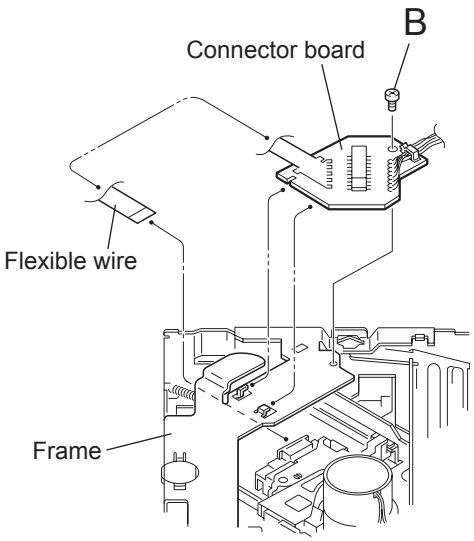


Fig.5

3.2.3 Removing the DET switch (See Figs.6 and 7)

(1) Extend the two tabs **c** of the feed sw. holder and pull out the switch.
(2) Unsolder the DET switch wire if necessary.

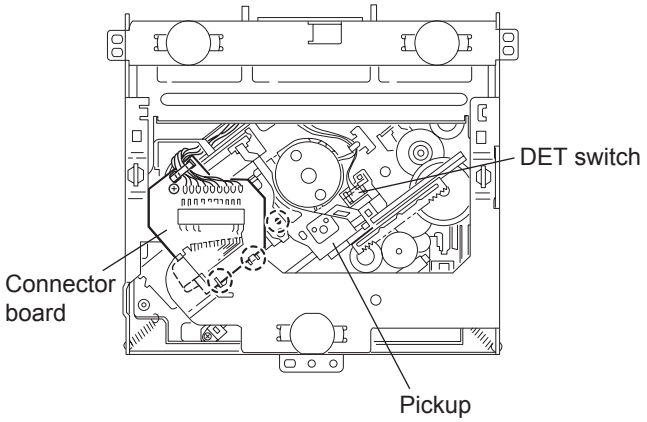


Fig.6

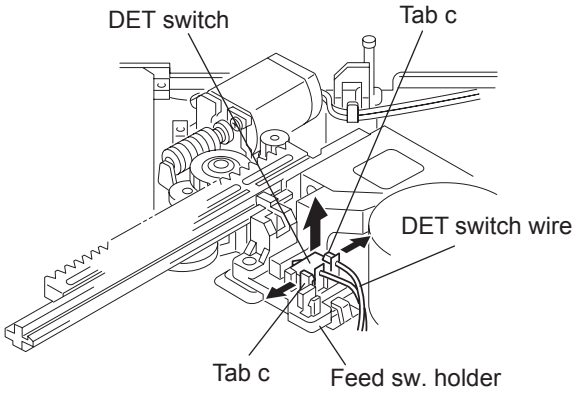


Fig.7

3.2.4 Removing the chassis unit (See Figs.8 and 9)

- Prior to performing the following procedure, remove the top cover and connector board.
  (1) Remove the two suspension springs (L) and (R) attaching the chassis unit to the frame.

  CAUTION:
  - The shape of the suspension spring (L) and (R) are different. Handle them with care.
  - When reassembling, make sure that the three shafts on the underside of the chassis unit are inserted to the dampers certainly.

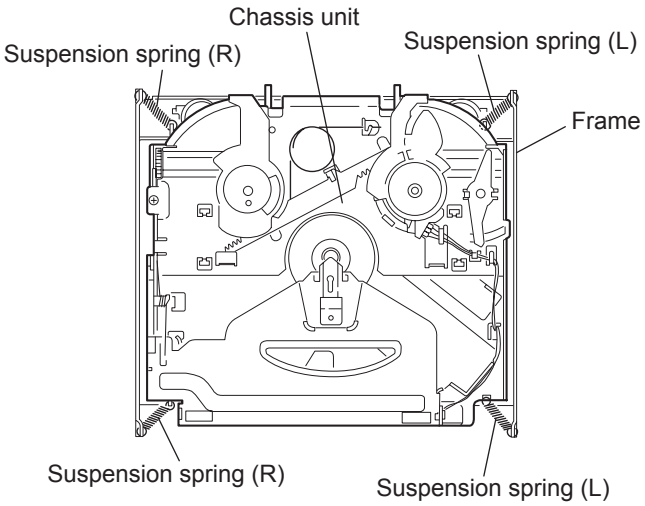


Fig.8

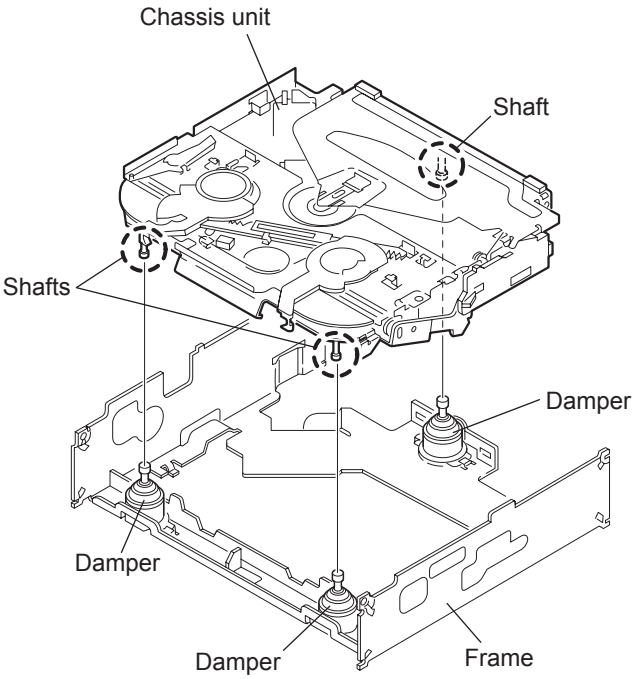


Fig.9

3.2.5 Removing the clamper assembly (See Figs.10 and 11)

- Prior to performing the following procedure, remove the top cover.
  (1) Remove the clamper arm spring.
  (2) Move the clamper assembly in the direction of the arrow to release the two joints **d**.

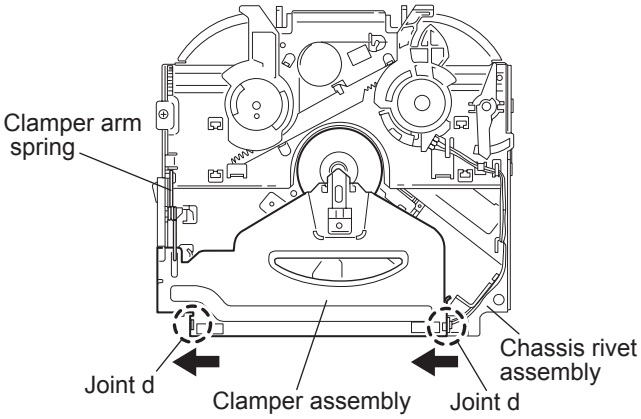


Fig.10

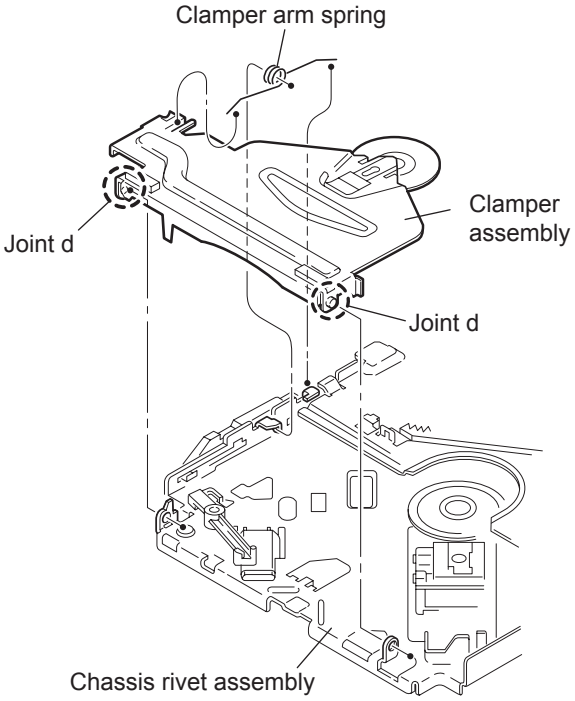


Fig.11

3.2.6 Removing the loading / feed motor assembly (See Figs.12 and 13)

- Prior to performing the following procedure, remove the top cover, connector board and chassis unit.
  (1) Remove the screw **C** and move the loading / feed motor assembly in the direction of the arrow to remove it from the chassis rivet assembly.
  (2) Disconnect the wire from the loading / feed motor assembly if necessary.

  CAUTION:
  When reassembling, connect the wire from the loading / feed motor assembly to the flame as shown in Fig.12.

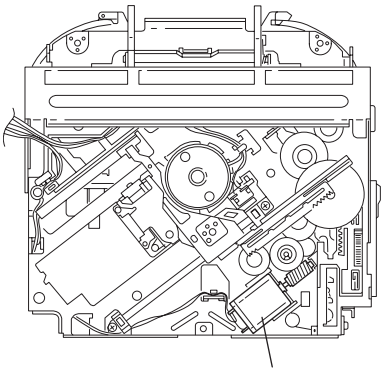


Fig.12

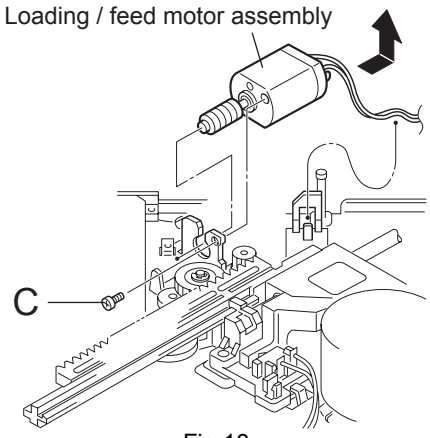


Fig.13

3.2.7 Removing the pickup unit (See Figs.14 to 18)

- Prior to performing the following procedure, remove the top cover, connector board and chassis unit.
  (1) Remove the screw **D** and pull out the pu. shaft holder from the pu. shaft.
  (2) Remove the screw **E** attaching the feed sw. holder.
  (3) Move the part **e** of the pickup unit upward with the pu. shaft and the feed sw. holder, then release the joint f of the feed sw. holder in the direction of the arrow. The joint **g** of the pickup unit and the feed rack is released, and the feed sw. holder comes off.
  (4) Remove the pu. shaft from the pickup unit.
  (5) Remove the screw **F** attaching the feed rack to the pickup unit.

3.2.8 Reattaching the pickup unit (See Figs.14 to 17)

(1) Reattach the feed rack to the pickup unit using the screw **F**.
(2) Reattach the feed sw. holder to the feed rack while setting the joint g to the slot of the feed rack and setting the part f of the feed rack to the switch of the feed sw. holder correctly.
(3) As the feed sw. holder is temporarily attached to the pickup unit, set to the gear of the joint g and to the bending part of the chassis (joint **h**) at a time.

CAUTION:

Make sure that the part i on the underside of the feed rack is certainly inserted to the slot j of the change lock lever.

(4) Reattach the feed sw. holder using the screw **E**.
(5) Reattach the pu. shaft to the pickup unit. Reattach the pu. shaft holder to the pu. shaft using the screw **D**.

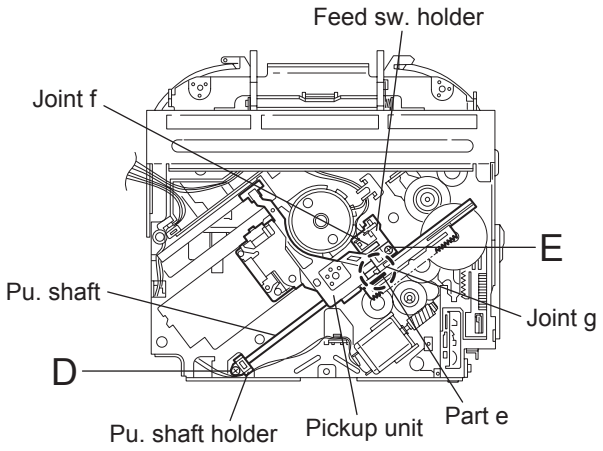


Fig.14

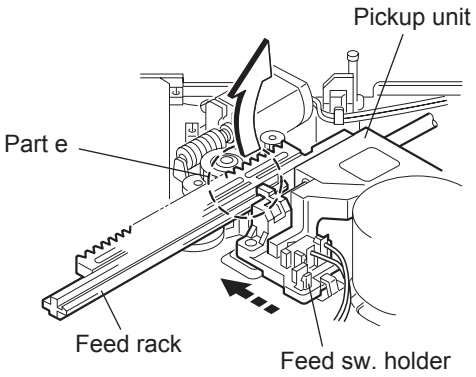


Fig.15

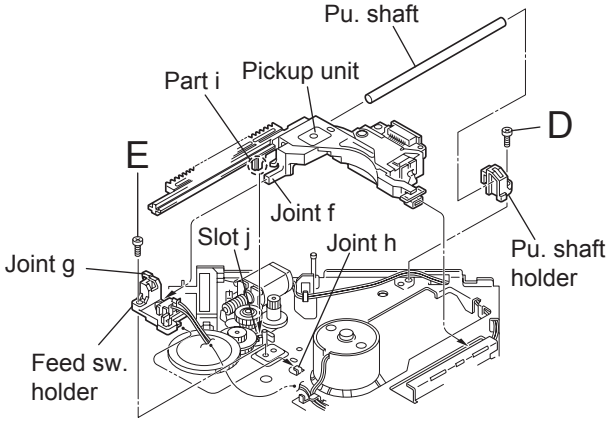


Fig.16

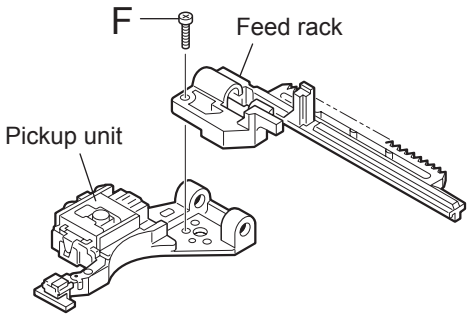


Fig.17

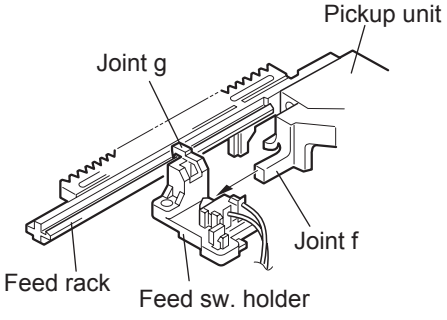


Fig.18

3.2.9 Removing the trigger arm (See Figs.19 and 20)

- Prior to performing the following procedure, remove the top cover, connector board and clamper unit.
  (1) Turn the trigger arm in the direction of the arrow to release the joint **k** and pull out upward.

  CAUTION:

  When reassembling, insert the part m and n of the trigger arm into the part **p** and **q** at the slot of the chassis rivet assembly respectively and join the joint k at a time.

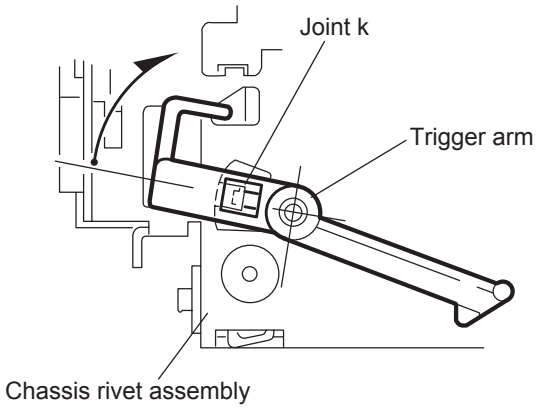


Fig.19

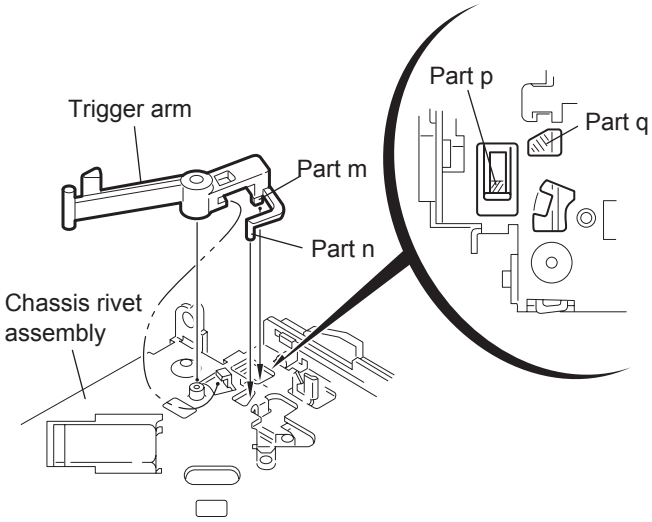


Fig.20

3.2.10 Removing the top plate assembly (See Fig.21)

- Prior to performing the following procedure, remove the top cover, connector board, chassis unit, and clamper assembly.
  (1) Remove the screw **H**.
  (2) Move the top plate assembly in the direction of the arrow to release the two joints r.
  (3) Unsolder the wire marked s if necessary.

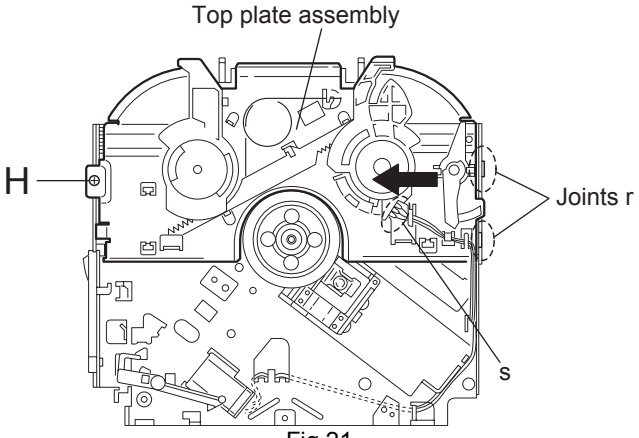


Fig.21

3.2.11 Removing the mode sw. / select lock arm (See Figs.22 and 23)

- Prior to performing the following procedure, remove the top plate assembly.
  (1) Bring up the mode sw. to release from the link plate (joint **t**) and turn in the direction of the arrow to release the joint **u**.
  (2) Unsolder the wire of the mode sw. marked s if necessary.
  (3) Turn the select lock arm in the direction of the arrow to release the two joints **v**.
  (4) The select lock arm spring comes off the select lock arm at the same time.

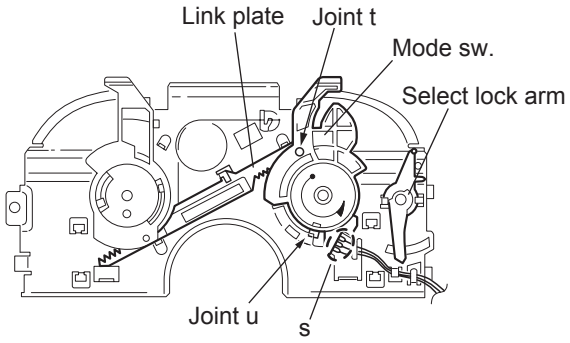


Fig.22

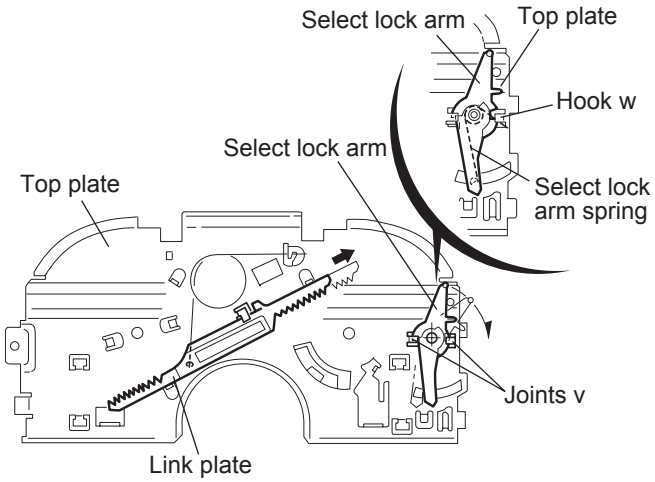


Fig.23

3.2.12 Reassembling the mode sw. / select lock arm (See Figs.24 to 26)

REFERENCE:

Reverse the above removing procedure.

(1) Reattach the select lock arm spring to the top plate and set the shorter end of the select lock arm spring to the hook w on the top plate.

(2) Set the other longer end of the select lock arm spring to the boss x on the underside of the select lock arm, and join the select lock arm to the slots (joint **v**). Turn the select lock arm as shown in the figure.

(3) Reattach the mode sw. while setting the part t to the first peak of the link plate gear, and join the joint **u**.

CAUTION:

When reattaching the mode sw., check if the points y and z are correctly fitted and if each part operates properly.

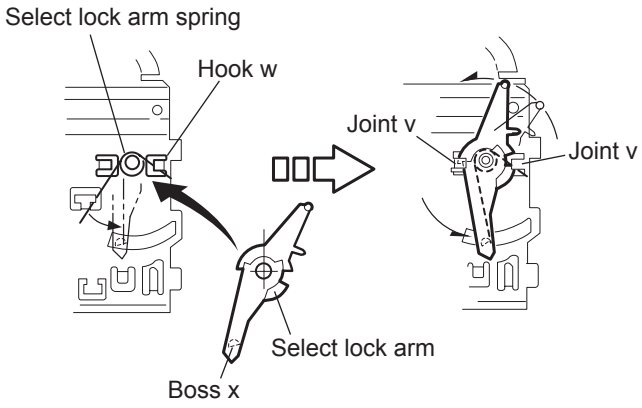


Fig.24

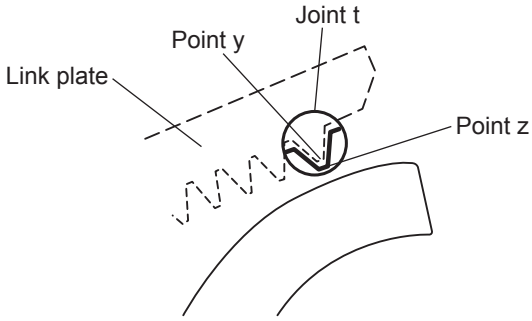


Fig.25

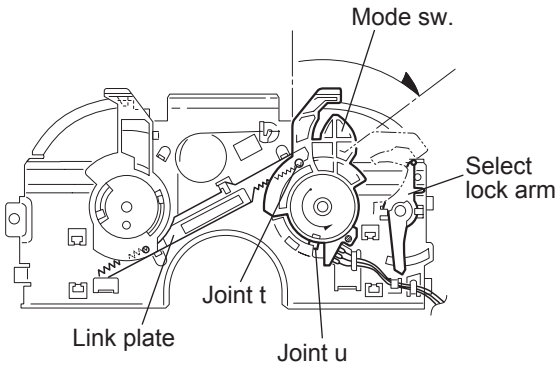


Fig.26

3.2.13 Removing the select arm R / link plate (See Figs.27 and 28)

- Prior to performing the following procedure, remove the top plate assembly.
  (1) Bring up the select arm R to release from the link plate (joint a') and turn as shown in the figure to release the two joints **b'** and joint **c'**.
  (2) Move the link plate in the direction of the arrow to release the joint d'. Remove the link plate spring at the same time.

REFERENCE:

Before removing the link plate, remove the mode sw..

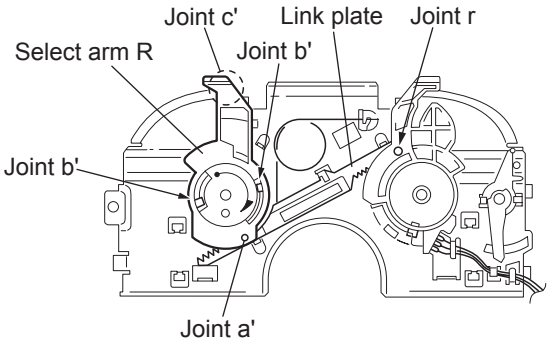


Fig.27

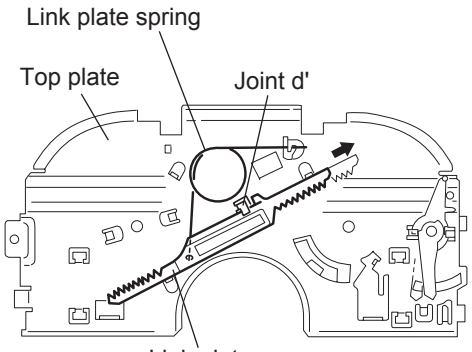


Fig.28

3.2.14 Reattaching the Select arm R / link plate (See Figs.29 and 30)

REFERENCE:

Reverse the above removing procedure.

(1) Reattach the link plate spring.
(2) Reattach the link plate to the link plate spring while joining them at joint **d'**.
(3) Reattach the joint a' of the select arm **R** to the first peak of the link plate while joining the two joints **b'** with the slots. Then turn the select arm R as shown in the figure. The top plate is joined to the joint **c'**.

CAUTION:

When reattaching the select arm **R**, check if the points **e'** and **f'** are correctly fitted and if each part operates properly.

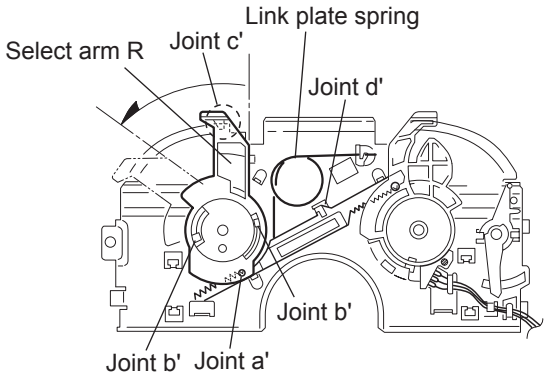


Fig.29

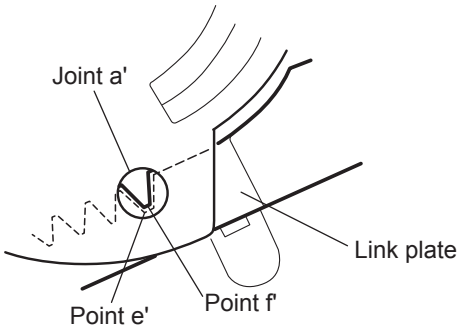


Fig.30

3.2.15 Removing the loading roller assembly (See Figs.31 to 33)

- Prior to performing the following procedure, remove the clamper assembly and top plate assembly.
  (1) Push inward the loading roller assembly on the gear side and detach it upward from the slot of the joint **g'** of the lock arm rivet assembly.
  (2) Detach the loading roller assembly from the slot of the joint **h'** of the lock arm rivet assembly.

      The roller guide comes off the gear section of the loading roller assembly.

      Remove the roller guide and the HL washer from the shaft of the loading roller assembly.
  (3) Remove the screw **J** attaching the lock arm rivet assembly.
  (4) Push the shaft at the joint **i'** of the lock arm rivet assembly inward to release the lock arm rivet assembly from the slot of the **L** side plate.
  (5) Extend the lock arm rivet assembly outward and release the joint **j'** from the boss of the chassis rivet assembly. The roller guide springs on both sides come off at the same time.

      CAUTION:

      When reassembling, reattach the left and right roller guide springs to the lock arm rivet assembly before reattaching the lock arm rivet assembly to the chassis rivet assembly. Make sure to fit the part **k'** of the roller guide spring inside of the roller guide. (Refer to Fig.34.)

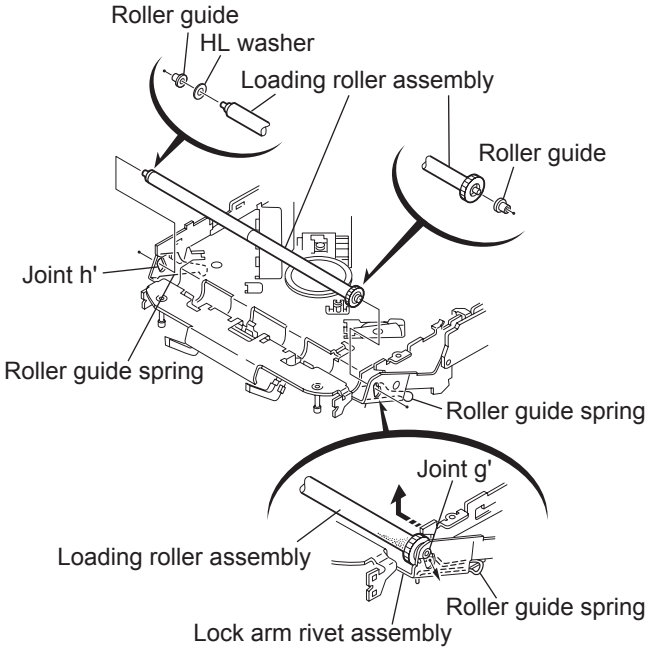


Fig.31

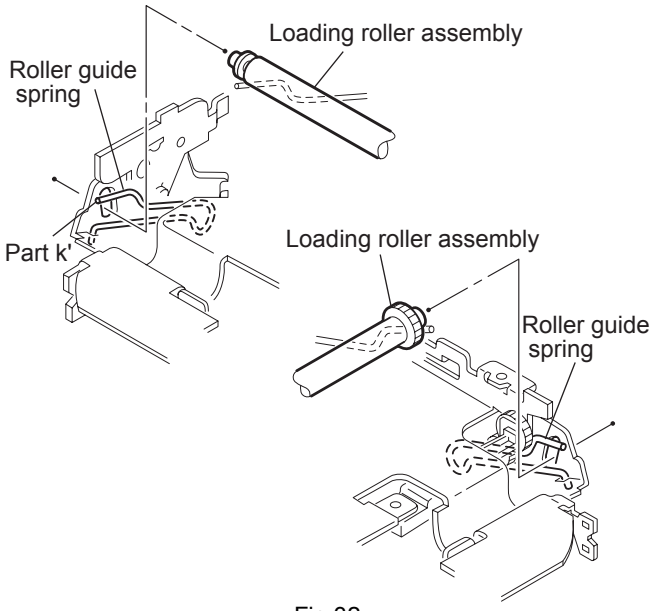


Fig.32

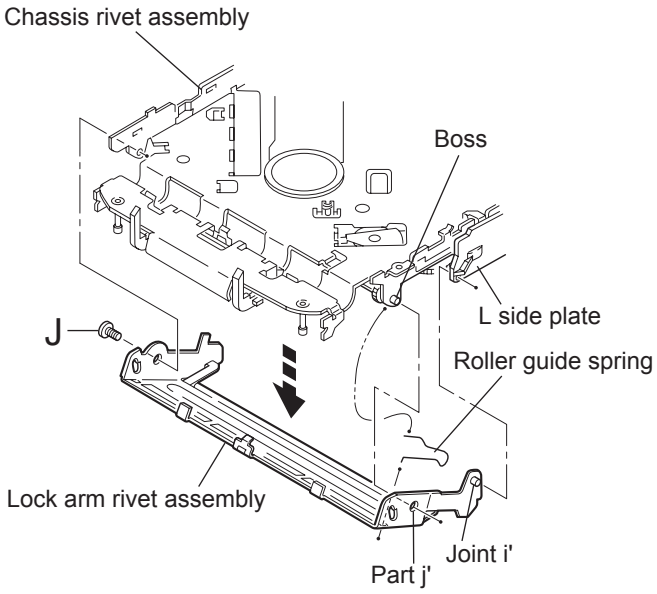


Fig.33

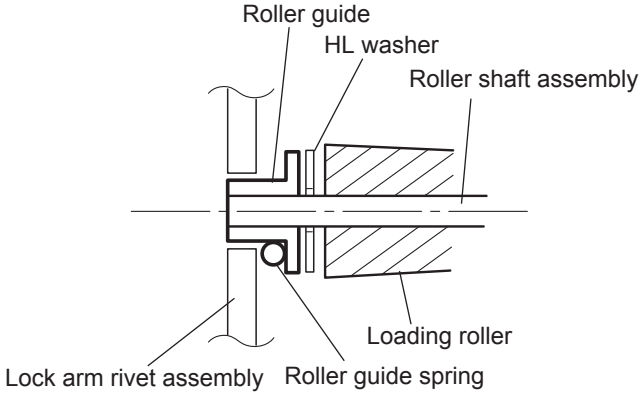


Fig.34

3.2.16 Removing the loading gear 5, 6 and 7 (See Figs.35 and 36)

- Prior to performing the following procedure, remove the top cover, chassis unit, pickup unit and top plate assembly.
  (1) Remove the screw **K** attaching the loading gear bracket. The loading gear 6 and 7 come off the loading gear bracket.
  (2) Pull out the loading gear 5.

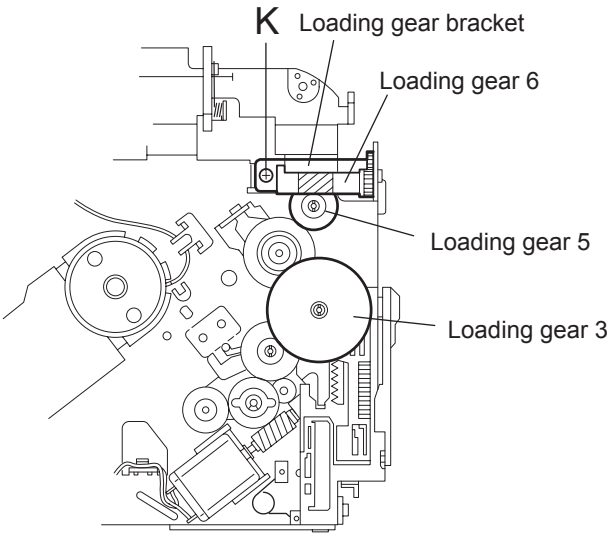


Fig.35

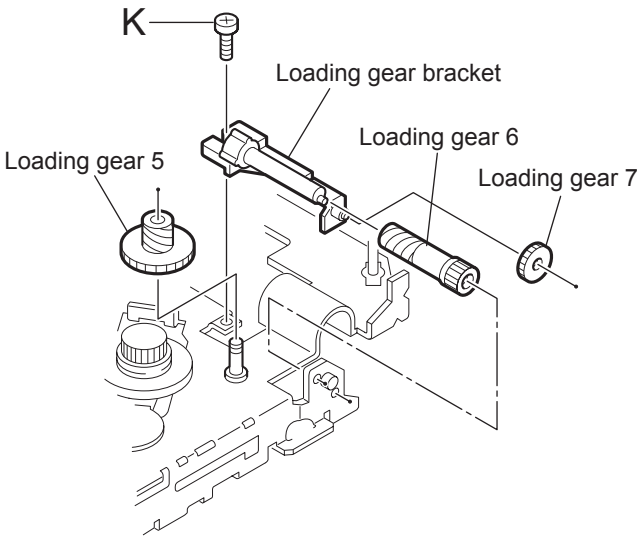


Fig.36

3.2.17 Removing the gears
(See Figs.37 to 40)

- Prior to performing the following procedure, remove the top cover, chassis unit, top plate assembly and pickup unit.
- Pull out the loading gear 3. (See Fig.35.)
  (1) Pull out the feed gear.
  (2) Move the loading plate assembly in the direction of the arrow to release the L side plate from the two slots m' of the chassis rivet assembly. (See Fig.37.)
  (3) Detach the loading plate assembly upward from the chassis rivet assembly while releasing the joint **n'**. Remove the slide hook and loading plate spring from the loading plate assembly.
  (4) Pull out the loading gear 2 and remove the change lock lever.
  (5) Remove the E ring and washer attaching the changer gear 2.
  (6) The changer gear 2, change gear spring and adjusting washer come off.
  (7) Remove the loading gear 1.
  (8) Move the change plate rivet assembly in the direction of the arrow to release from the three shafts of the chassis rivet assembly upward. (See Fig.38.)
  (9) Detach the loading gear plate rivet assembly from the shaft of the chassis rivet assembly upward while releasing the joint p'. (See Figs.38 and 40.)
  (10) Pull out the loading gear 4.

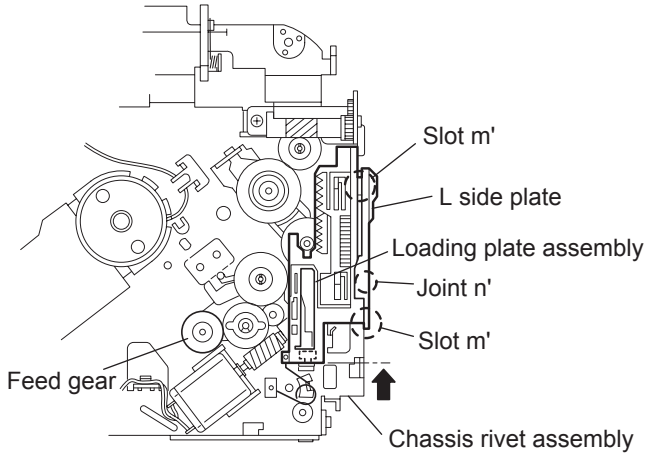


Fig.37

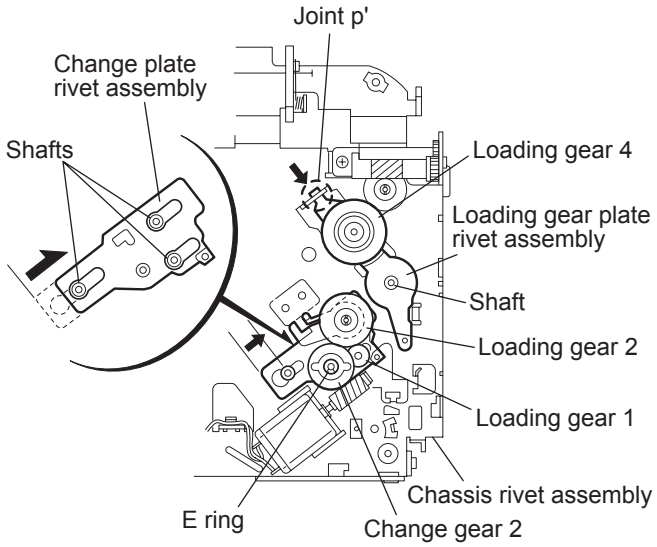


Fig.38

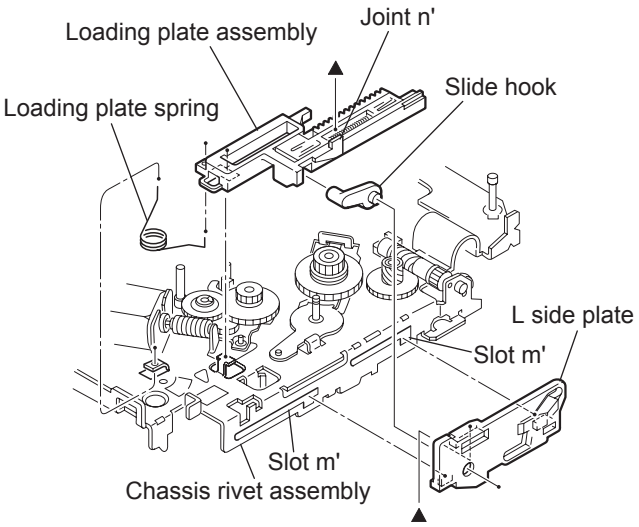


Fig.39

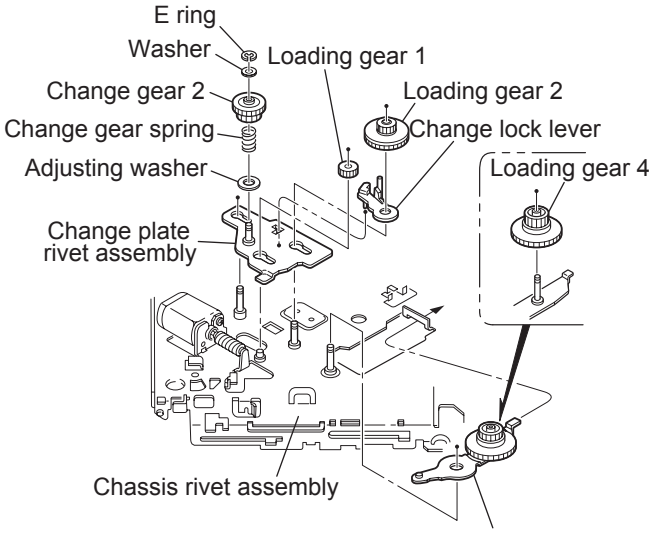


Fig.40

3.2.18 Removing the turn table / spindle motor (See Figs.41 and 42)

- Prior to performing the following procedure, remove the top cover, connector board, chassis unit and clamper assembly.
  (1) Remove the two screws **L** attaching the spindle motor assembly through the slot of the turn table on top of the body.
  (2) Unsolder the wire on the connector board if necessary.

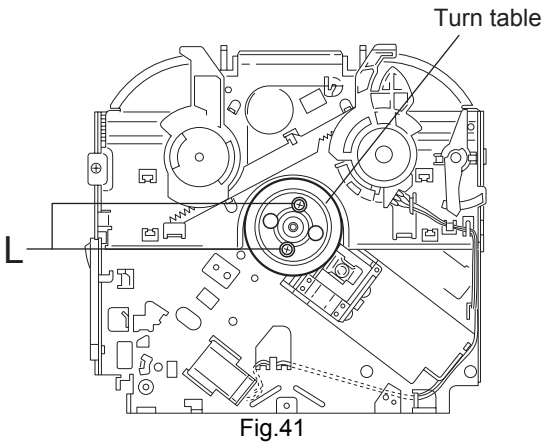


Fig.41

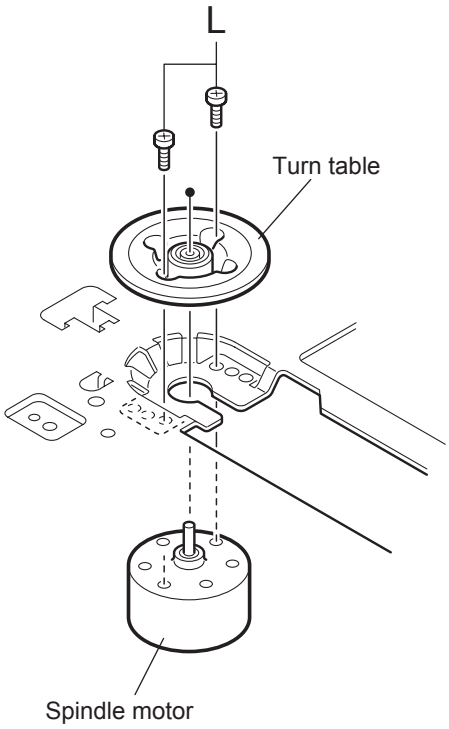


Fig.42

SECTION 4
ADJUSTMENT

4.1 Adjustment method

■ **Test instruments required for adjustment**

(1) Digital oscilloscope (100MHz)
(2) Electric voltmeter
(3) Digital tester
(4) Tracking offset meter
(5) Test Disc JVC :CTS-1000
(6) Extension cable for check
EXTSH002-22P × 1

■ **Standard volume position**

Balance and Bass &Treble volume : Indication"0"
Loudness : OFF

■ **Standard measuring conditions**

Power supply voltage	DC14.4V(11 to 16V)
Load impedance	20KΩ(2 Speakers connection)
Output Level	Line out 2.5V (Vol. MAX)

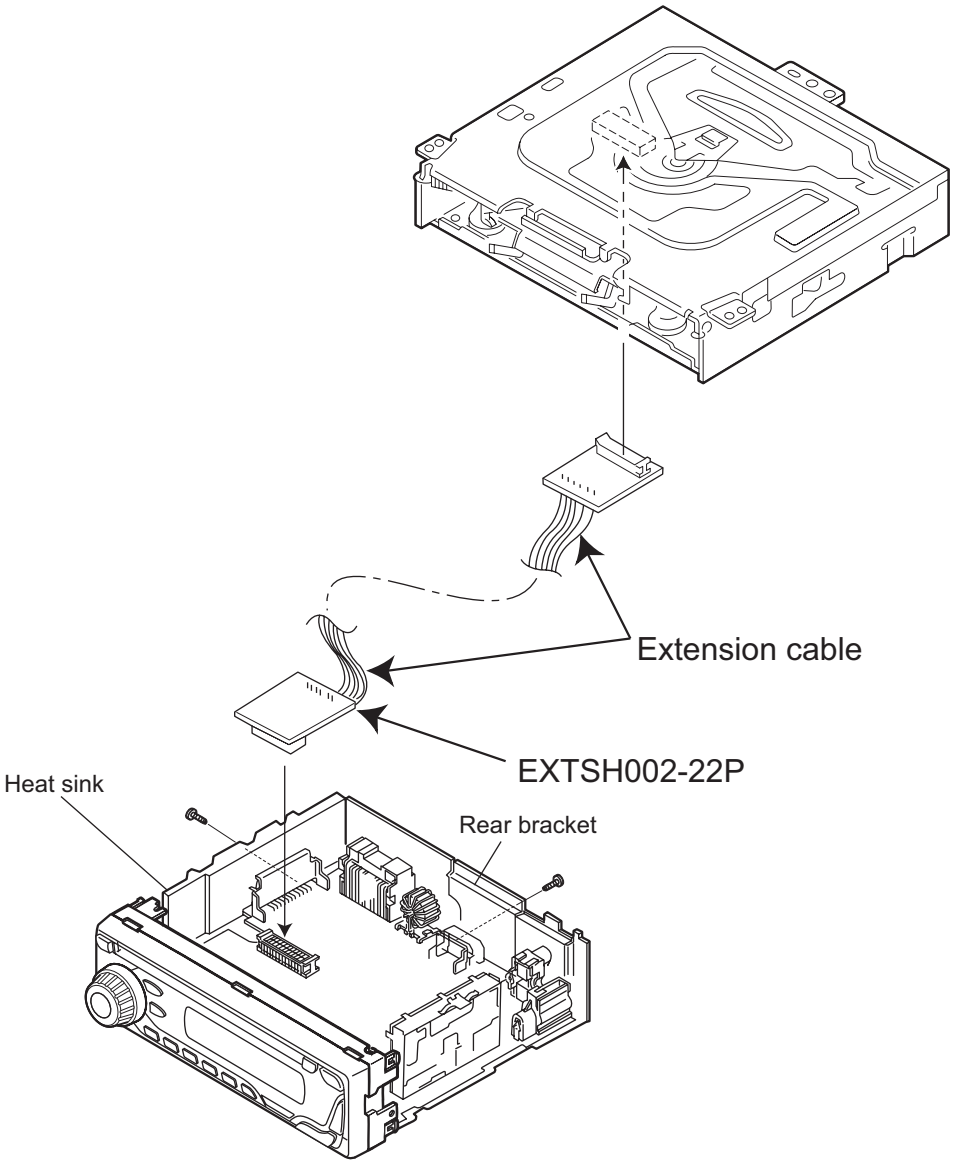
■ **Dummy load**

Exclusive dummy load should be used for AM,and FM. For FM dummy load,there is a loss of 6dB between SSG output and antenna input.The loss of 6dB need not be considered since direct reading of figures are applied in this working standard.

■ **How to connect the extension cable for adjusting**

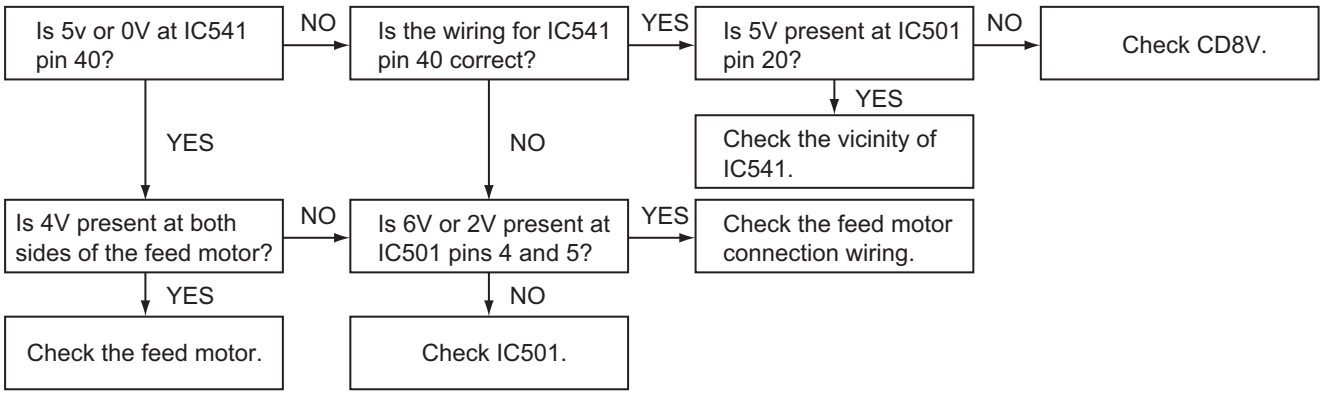
Caution:

Be sure to attach the heat sink and rear bracket onto the power amplifier IC and regulator IC respectively, before supply the power. If voltage is applied without attaching these parts, the power amplifier IC and regulator IC will be destroyed by heat.

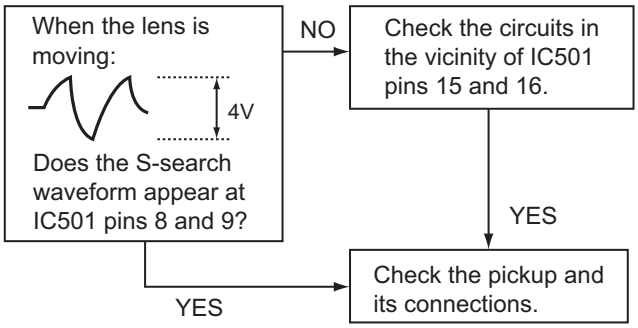


SECTION 5
TROUBLESHOOTING

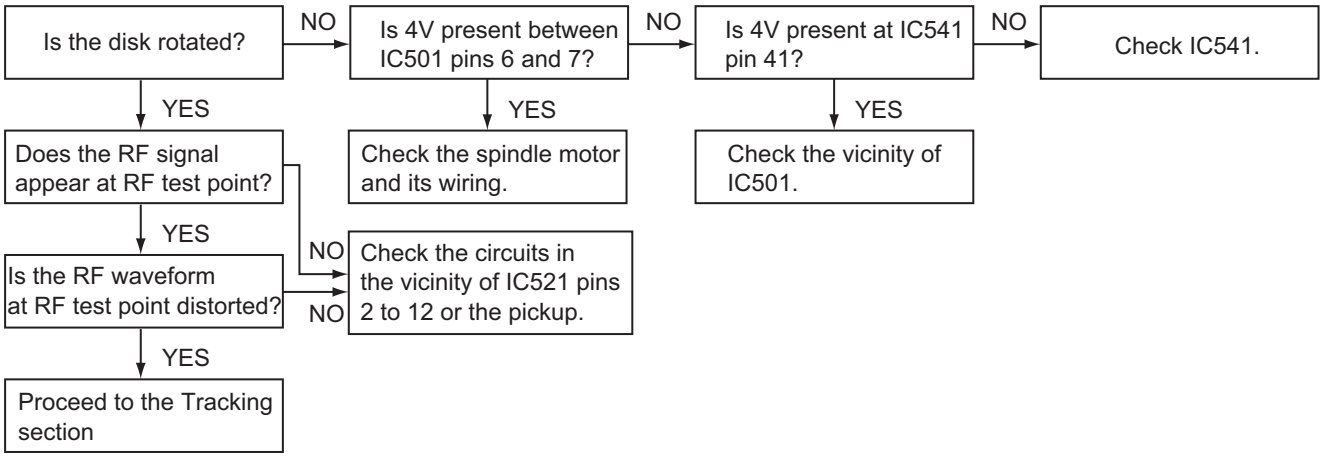
5.1 Feed section



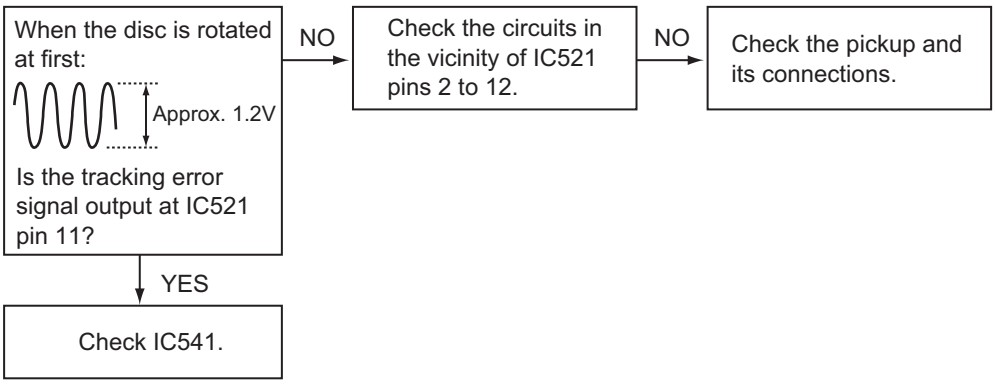
5.2 Focus section



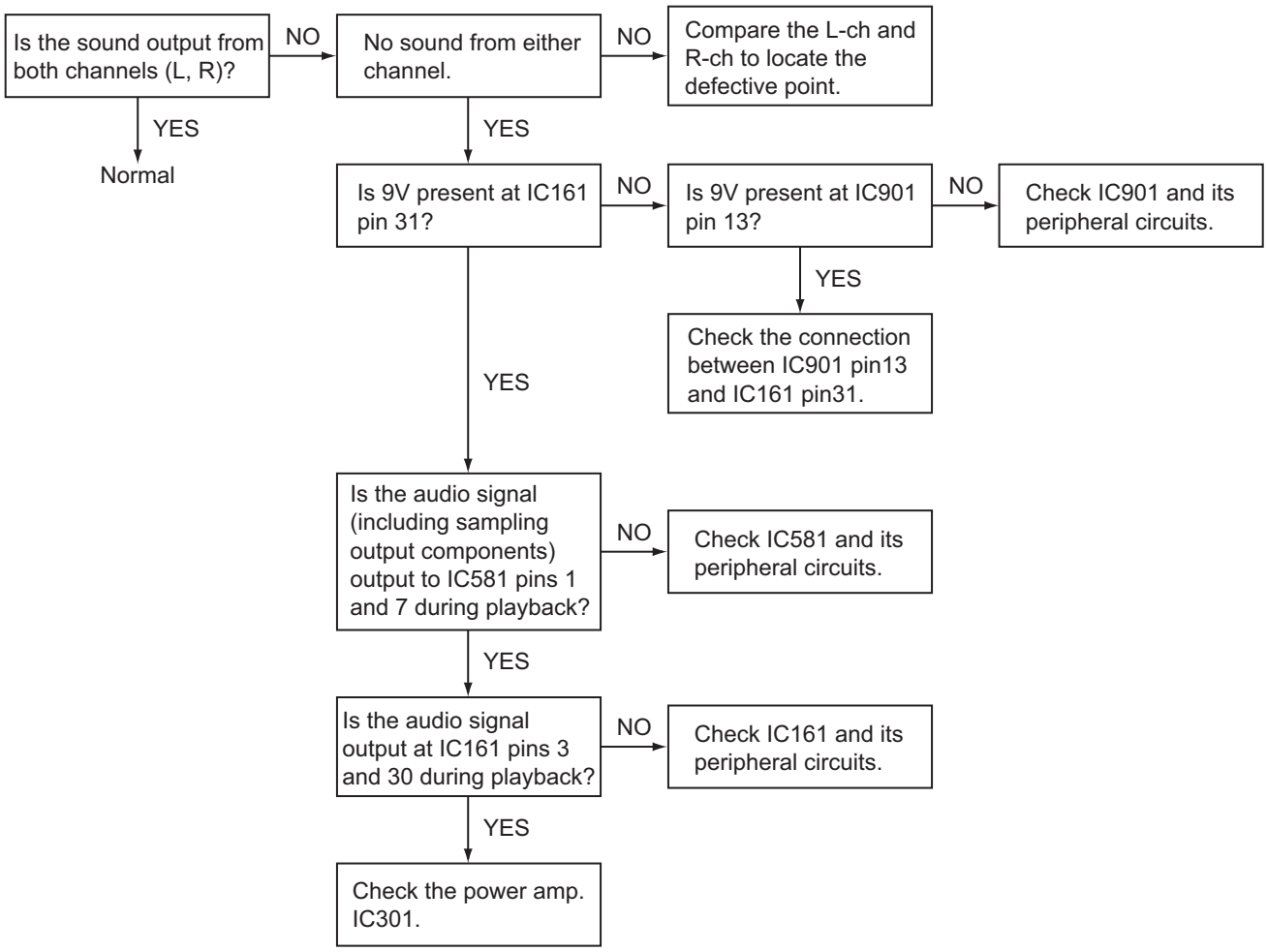
5.3 Spindle section



5.4 Tracking section



5.5 Signal processing section

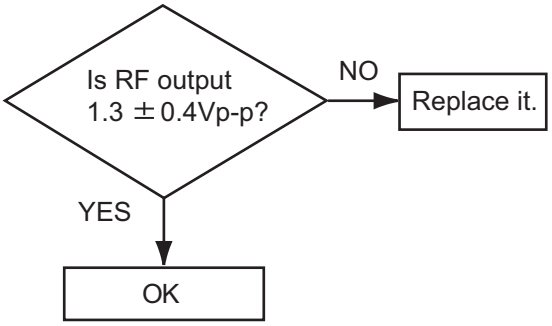


5.6 Maintenance of laser pickup

(1) Cleaning the pick up lens
Before you replace the pick up, please try to clean the lens with a alcohol soaked cotton swab.

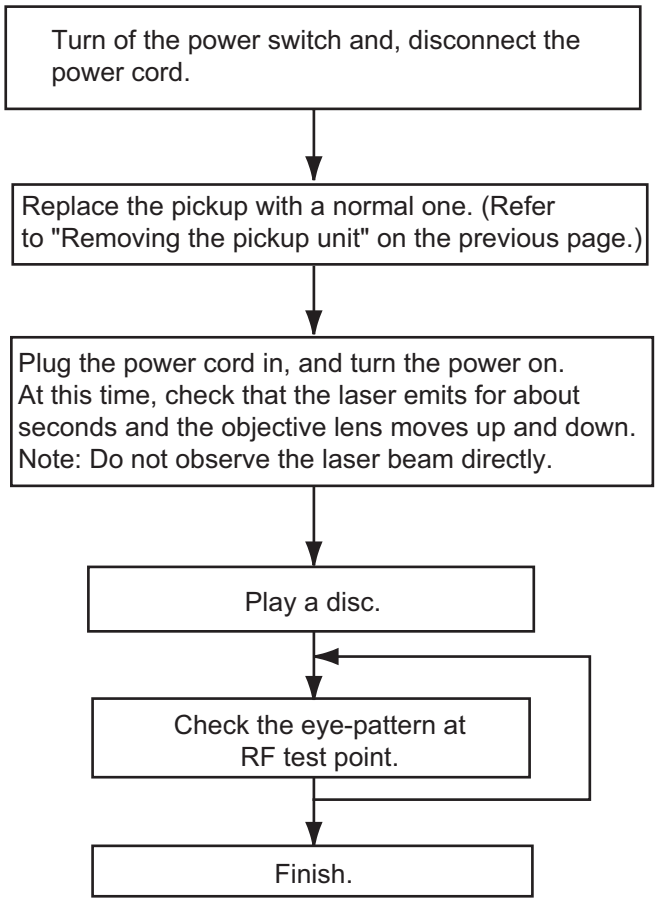
(2) Life of the laser diode
When the life of the laser diode has expired, the following symptoms will appear.

- The level of RF output (EFM output: amplitude of eye pattern) will be low.

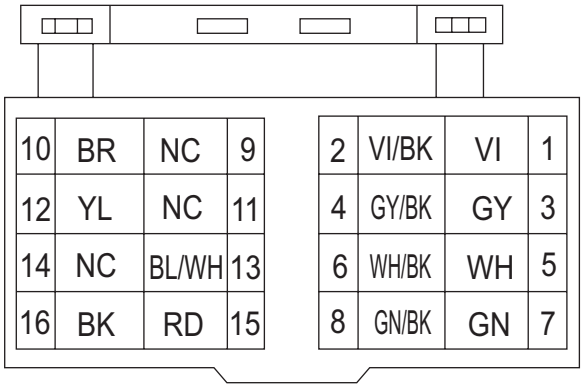


(3) Semi-fixed resistor on the APC PC board
The semi-fixed resistor on the APC printed circuit board which is attached to the pickup is used to adjust the laser power.Since this adjustment should be performed to match the characteristics of the whole optical block, do not touch the semi-fixed resistor.
If the laser power is lower than the specified value, the laser diode is almost worn out, and the laser pickup should be replaced. If the semi-fixed resistor is adjusted while the pickup is functioning normally, the laser pickup may be damaged due to excessive current.

5.7 Replacement of laser pickup



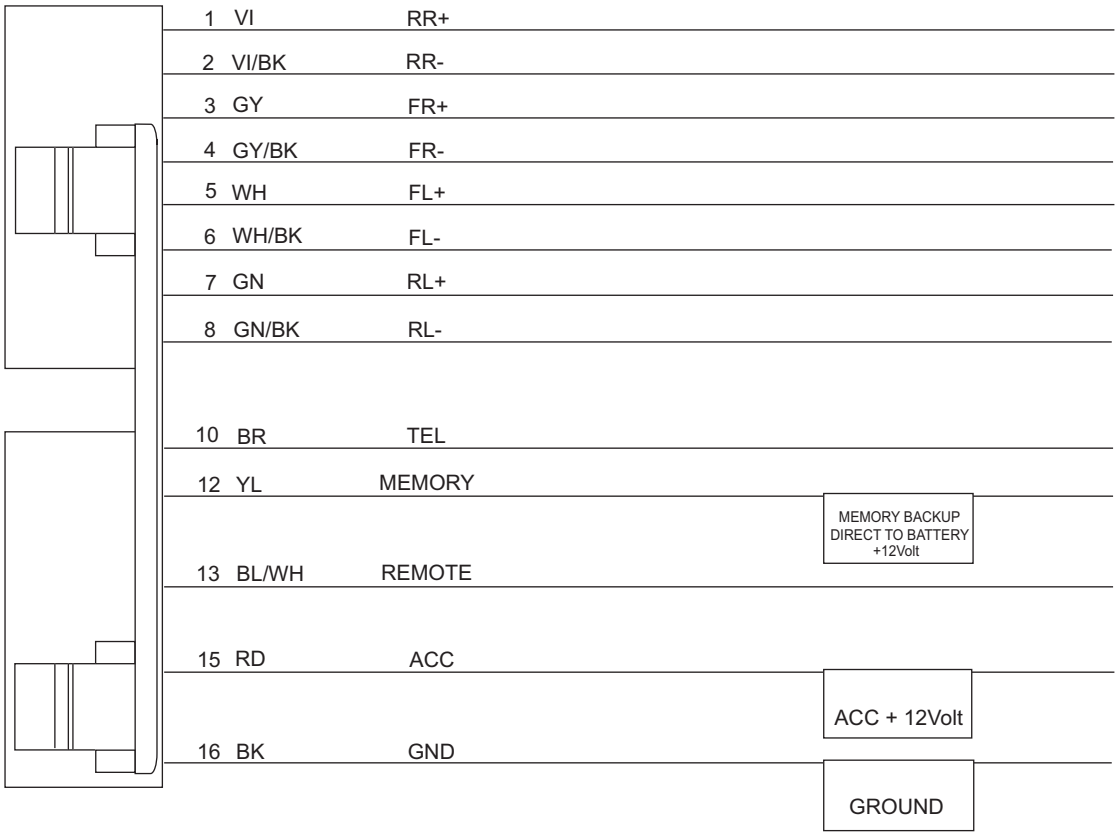
5.8 16 PIN CORD DIAGRAM



10	BR	NC	9
12	YL	NC	11
14	NC	BL/WH	13
16	BK	RD	15

2	VI/BK	VI	1
4	GY/BK	GY	3
6	WH/BK	WH	5
8	GN/BK	GN	7

BK	Black	GN	Green
RD	Red	VI	Violet
BL	Blue	GY	Gray
WH	White	YL	Yellow
BR	Brown		



RR	Rear Right	ANT	Auto Antenna
FR	Front Right	ACC	ACC Line
FL	Front Left	TEL	Telephone Muting
RL	Rear Left	GND	Ground
REMOTE	Remote out	MEMORY	Memory Backup Battery+

JVC
Victor Company of Japan, Limited
AV & MULTIMEDIA COMPANY CAR ELECTRONICS CATEGORY 10-1,1chome,Ohwatari-machi,Maebashi-city,371-8543,Japan

(No.MA135)

Printed in Japan
VPT

PARTS LIST

[KD-G411]

* All printed circuit boards and its assemblies are not available as service parts.

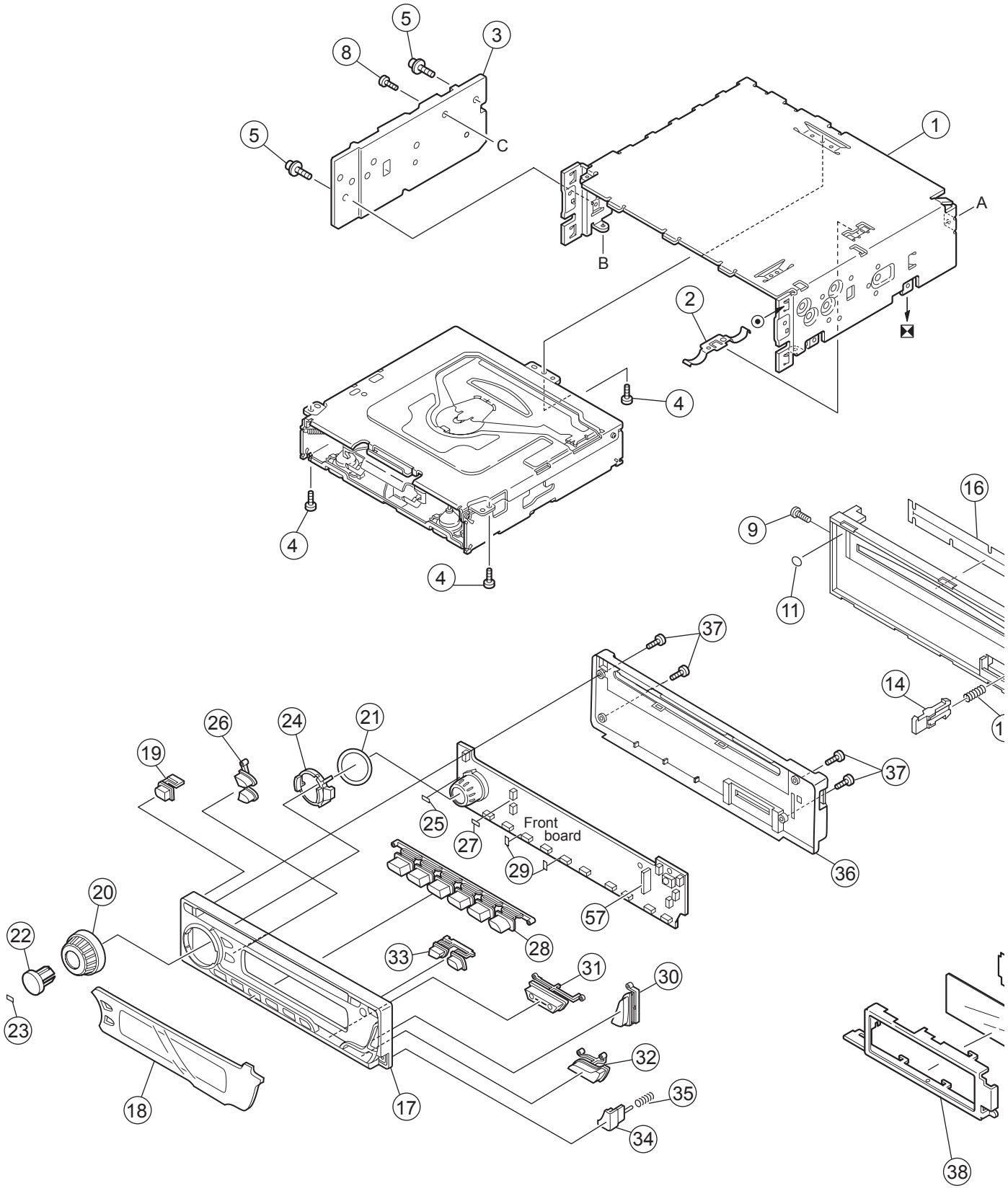
Area suffix

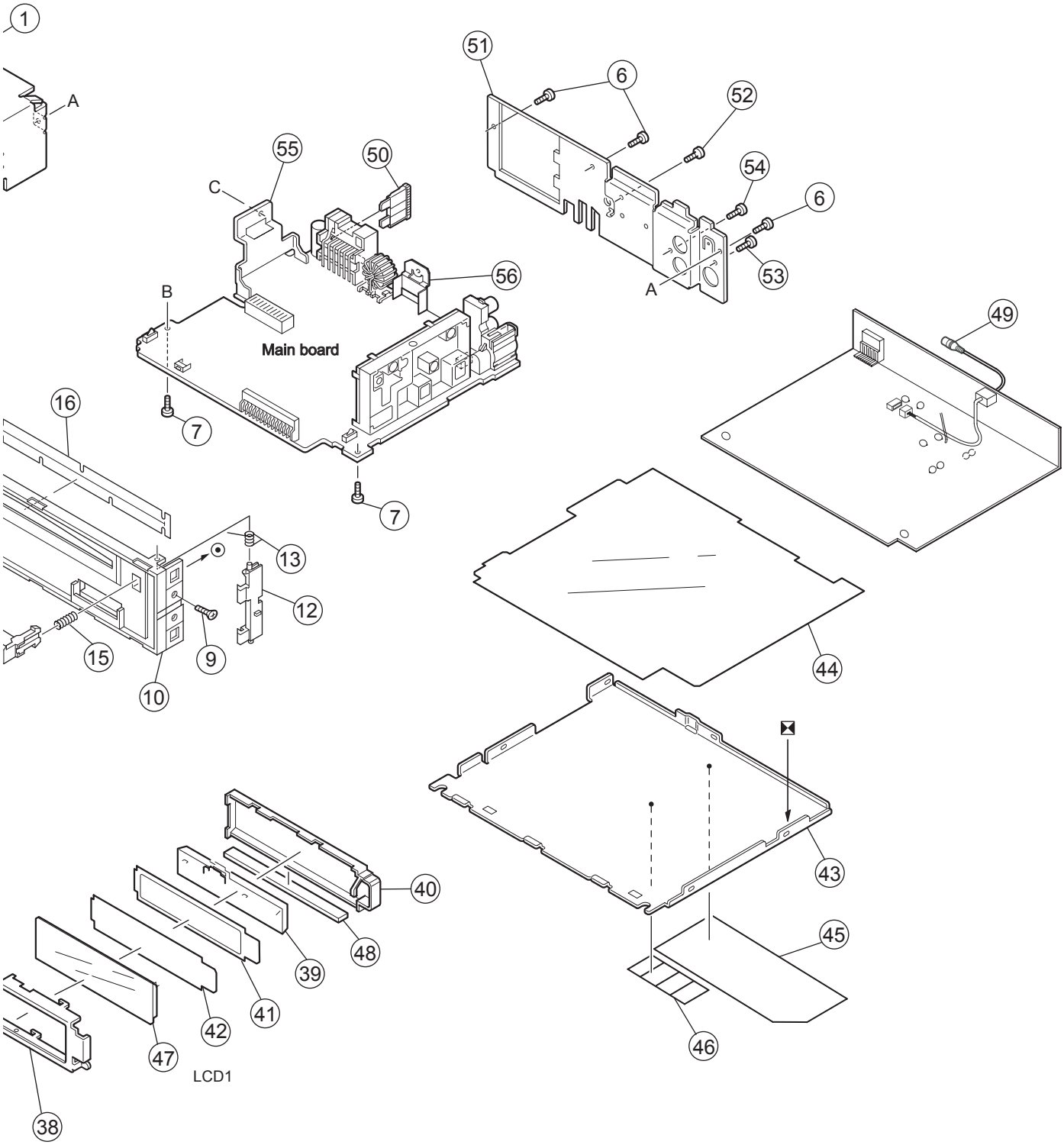
E ---------- Southern Europe
EX ---------- Northern Europe
EY ---------- Eastern Europe
EU ---------- Turkey

- Contents -

Exploded view of general assembly and parts list

Block No. M 1 M M




1
A
51
6
52
54
6
53
A
55
50
C
56
B
Main board
7
7
49
16
13
12
15
9
10
44
43
40
48
39
41
42
47
LCD1
38
45
46

General Assembly

Block No. [M][1][M][M]

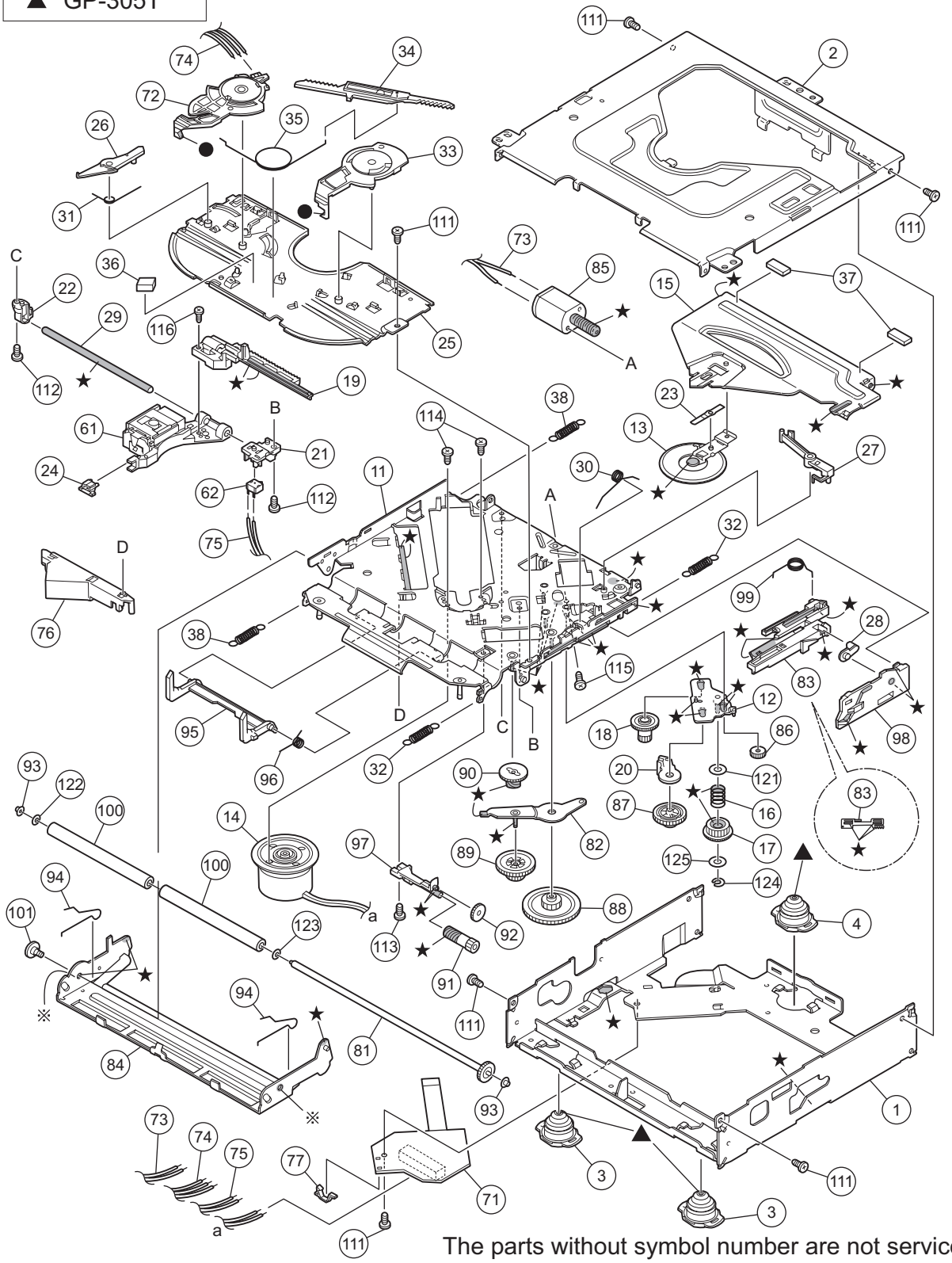
⚠	Symbol No.	Part No.	Part Name	Description	Local
	1	GE10043-210A	TOP CHASSIS		
	2	GE40135-001A	EARTH PLATE		
	3	GE30938-003A	SIDE PANEL		
	4	QYSDST2604ZA	TAP SCREW	M2.6 x 4mm(x3)	
	5	GE40235-001A	SCREW	(x2)	
	6	QYSDST2604ZA	TAP SCREW	M2.6 x 4mm(x3)	
	7	GE40235-004A	SCREW	(x2)	
	8	QYSDST2610ZA	TAP SCREW	M2.6 x 10mm	
	9	QYSDST2004ZA	TAP SCREW	M2 x 4mm(x2)	
	10	GE10079-007A	FRONT CHASSIS		
	11	FSYH4036-098	SHEET		
	12	GE31033-001A	LOCK LEVER		
	13	FSKW4005-003	TORSION SPRING		
	14	GE31034-001A	RLS KNOB		
	15	GE40202-005A	COMPRESSION SPRING		
	16	GE40156-001A	BLIND		
	17	GE10077-007A	FRONT PANEL		
	18	GE31031-046A	FINDER ASSY		
	19	GE31027-001A	POWER BUTTON		
	20	GE31038-003A	VOLUME KNOB		
	21	GE40218-002A	SHEET		
	22	GE31039-003A	SEL BUTTON		
	23	FSYH4036-053	SHEET		
	24	GE31040-001A	RIM LENS		
	25	FSYH4036-069	SHEET		
	26	GE31181-001A	D.FUNC BTN		
	27	FSYH4036-069	SHEET		
	28	GE20161-001A	PRESET BUTTON		
	29	FSYH4036-069	SHEET	(x2)	
	30	GE31024-001A	UP/DOWN BTN		
	31	GE31028-003A	SSM BTN		
	32	GE31025-001A	SEARCH BTN		
	33	GE31026-001A	EJECT BUTTON		
	34	GE31032-008A	DETACH BTN		
	35	GE40202-003A	COMPRESSION SPRING		
	36	GE10078-007A	REAR COVER		
	37	VKZ4777-010	MINI SCREW	(x4)	
	38	GE31021-001A	LCD CASE		
	39	GE31022-002A	LCD LENS		
	40	GE31023-001A	LENS CASE		
	41	GE40199-001A	LIGHTING SHEET		
	42	GE40199-002A	LIGHTING SHEET		
	43	GE30393-002A	BOTTOM COVER		
	44	FSMA3004-203	INSULATOR		
	45	GE31428-001A	NAME PLATE		
	46	LV41843-002A	LASER CAUTION		
	47	QLD0299-001	LCD MODULE		
	48	QNZ0443-001	LCD CONNECTOR		
	49	QAM0544-002	STEERING CABLE		
⚠	50	QMFZ047-150-T	FUSE	15A	
	51	GE30912-020A	REAR BRACKET		
	52	QYSDST2606ZA	TAP SCREW	M2.6 x 6mm	
	53	QYSDST2606ZA	TAP SCREW	M2.6 x 6mm	
	54	QYSDSF2606ZA	TAP SCREW	M2.6 x 6mm	
	55	GE40172-004A	IC BRACKET		
	56	GE40124-002A	REG BRACKET		
	57	GE30854-001A	LED HOLDER		

CD mechanism assembly and parts list

Block No. M B M M

Grease
- ★ TNG-87
- ※ GP-501MK
- ● CFD-005Z
- ▲ GP-305T

TN-2001-1011



The parts without symbol number are not service.

CD mechanism

Block No. [M][B][M][M]

⚠	Symbol No.	Part No.	Part Name	Description	Local
	1	30320101T	FRAME		
	2	30320102T	TOP COVER		
	3	30320115T	DANPER F		
	4	30320116T	DANPER R		
	11	303205505T	CHASSIS RIVET		
	12	303205503T	CHANGE P. RVT A		
	13	303205301T	CLAMPER ASS'Y		
	14	303205302T	SPINDLE MOTOR A		
	15	30320502T	CLAMPER ARM		
	16	30320503T	CHANGE GEAR SPG		
	17	30320505T	CHANGE GEAR 2		
	18	30320506T	FEED GEAR		
	19	30320507T	FEED RACK		
	20	30320509T	CHANGE LOCK RAR		
	21	30320510T	FEED SW HOLDER		
	22	30320511T	PU SHAFT HOLDER		
	23	30320513T	CLAMPER SUB SPG		
	24	30320514T	FD SUB HOLDER		
	25	30320518T	TOP PLATE		
	26	30320519T	SELECT LOCK ARM		
	27	30320520T	TRIGGER ARM		
	28	30320521T	SLIDE HOOK		
	29	30320522T	PU SHAFT		
	30	30320525T	CLAMPER ARM SPG		
	31	30320526T	SELECT L ARM SP		
	32	30320538T	SUSPENSION SP R		
	33	30320529T	SELECT ARM R		
	34	30320530T	LINK PLATE		
	35	30320531T	LINK PLATE SPG		
	36	30320523T	CUSHION F		
	37	30320524T	CUSHION R		
	38	30320539T	SUSPENSION SP L		
	61	69011614T	PICKUP OPT-725		
	62	64180406T	DET SW ESE22		
	71	303210301T	CONN PWB ASS'Y		
	72	30321002T	MODE SW		
	73	30321003T	LOAD MOTOR WIRE		
	74	30321005T	MODE SW WIRE		
	75	30321009T	SL WIRE		
	76	30321011T	WIRE HOLDER		
	77	19501403T	WIRE CLUMPER		
	81	303211301T	ROLLER SHAFT AS		
	82	303211501T	L GEAR PLATE RV		
	83	303211302T	LOADING PLATE A		
	84	303211502T	LOCK ARM RV ASS		
	85	303211303T	L/F MOTOR ASS'Y		
	86	30321101T	LOADING GEAR 1		
	87	30321102T	LOADING GEAR 2		
	88	30321103T	LOADING GEAR 3		
	89	30321104T	LOADING GEAR 4		
	90	30321105T	LOADING GEAR 5		
	91	30321106T	LOADING GEAR 6		
	92	30321107T	LOADING GEAR 7		
	93	30321149T	ROLLER GUIDE		
	94	30321114T	ROLLER GUIDE SP		
	95	30321116T	DISC STOPPER AR		
	96	30321117T	DISC ST ARM SPG		
	97	30321118T	LD GEAR BRACKET		
	98	30321125T	L SIDE PLATE		
	99	30321131T	LOAD PLATE SPG		
	100	30321133T	LDG ROLLER		
	101	18211223T	COLLAR SCREW		
	111	9P0420031T	SCREW		
	112	9P0420041T	TAP.SCREW		
	113	9B0320041T	SCREW		
	114	9C0117183T	SCREW		
	115	9C0120203T	SCREW		
	116	9C0317503T	SCREW		
	121	9W0130170T	PW 3.5X8X0.3		
	122	9W0513060T	HL WASHER		
	123	9W0710070T	L WASHER		
	124	9E0100152T	E RING		
	125	9W0113020T	PW 2.1X4X0.13		

Electrical parts list

Main board

Block No. [0][1]

⚠ Symbol No.	Part No.	Part Name	Description	Local
IC31	TB2118F-X	PLL IC		
IC71	SAA6579T-X	IC		
IC161	TEA6320T-X	IC		
IC301	LA47515	IC		
IC401	TC94A34FG-002	IC		
IC461	NJU7772F15-X	IC		
IC481	AK4385ET-X	IC		
IC501	LA6242H-X	IC		
IC521	TA2157FN-X	RF AMP IC		
IC541	TC94A14FA	CD LSI IC		
IC581	NJM4565M-WE	IC		
IC701	UPD784217AGC297	IC		
IC702	IC-PST3433U-X	IC		
IC771	BR24L16F-W-X	IC		
IC901	HA13164A	IC		
Q1	2SD601A/QR/-X	TRANSISTOR		
Q2	2SD601A/QR/-X	TRANSISTOR		
Q3	UN2111-X	TRANSISTOR		
Q5	2SB709A/R/-X	TRANSISTOR		
Q6	2SB624/4/-X	TRANSISTOR		
Q7	UN2211-X	TRANSISTOR		
Q10	UN2211-X	TRANSISTOR		
Q31	UN2211-X	TRANSISTOR		
Q51	2SD601A/QR/-X	TRANSISTOR		
Q52	2SD601A/QR/-X	TRANSISTOR		
Q53	UN2211-X	TRANSISTOR		
Q81	2SD601A/QR/-X	TRANSISTOR		
Q84	UN2111-X	TRANSISTOR		
Q91	2SD601A/QR/-X	TRANSISTOR		
Q341	KTD1304-X	TRANSISTOR		
Q351	KTD1304-X	TRANSISTOR		
Q430	2SD601A/QR/-X	TRANSISTOR		
Q440	UN2211-X	TRANSISTOR		
Q501	2SB1322/RS/-T	TRANSISTOR		
Q502	2SB1132/QR/-W	TRANSISTOR		
Q521	2SB1241/QR/-T	TRANSISTOR		
Q541	UN2111-X	TRANSISTOR		
Q542	UN2211-X	TRANSISTOR		
Q543	UN2111-X	TRANSISTOR		
Q544	2SB624/4/-X	TRANSISTOR		
Q545	UN2211-X	TRANSISTOR		
Q781	UN2111-X	TRANSISTOR		
Q782	UN2211-X	TRANSISTOR		
Q784	UN2111-X	TRANSISTOR		
Q891	UN2211-X	TRANSISTOR		
Q976	UN2211-X	TRANSISTOR		
Q977	2SB709A/QR/-X	TRANSISTOR		
D1	MA111-X	SI DIODE		
D2	MA111-X	SI DIODE		
D4	MA111-X	SI DIODE		
D5	MA111-X	SI DIODE		
D84	MA111-X	SI DIODE		
D341	MA111-X	SI DIODE		
D351	MA111-X	SI DIODE		
D481	UDZS5.1B-X	Z DIODE		
D701	MA8062/M/-X	Z DIODE		
D702	MA8062/M/-X	Z DIODE		
D703	MA8062/M/-X	Z DIODE		
D704	MA8062/M/-X	Z DIODE		
D705	MA8062/M/-X	Z DIODE		
D706	MA8062/M/-X	Z DIODE		
D707	MA8062/M/-X	Z DIODE		
D708	MA8062/M/-X	Z DIODE		
D709	MA8062/M/-X	Z DIODE		
D710	MA8062/M/-X	Z DIODE		
D711	MA8062/M/-X	Z DIODE		
D712	MA8062/M/-X	Z DIODE		
D713	MA111-X	SI DIODE		
D781	MA111-X	SI DIODE		
D782	MA111-X	SI DIODE		
D784	UDZS11B-X	Z DIODE		
D891	MA111-X	SI DIODE		
D892	MA111-X	SI DIODE		
D901	1N5401-F64	DIODE		
D902	MA111-X	SI DIODE		
D971	RB160M-30-X	SB DIODE		
D972	RB160M-30-X	SB DIODE		
C1	QEKJ1CM-226Z	E CAPACITOR	22uF 16V M	
C2	NCB31EK-473X	C CAPACITOR	0.047uF 25V K	
C3	QEKJ1CM-226Z	E CAPACITOR	22uF 16V M	
C4	QEKJ1AM-227Z	E CAPACITOR	220uF 10V M	
C5	QEKJ1HM-105Z	E CAPACITOR	1uF 50V M	
C6	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C9	QEKJ1AM-227Z	E CAPACITOR	220uF 10V M	
C31	QEKJ1AM-107Z	E CAPACITOR	100uF 10V M	
C32	NDC31HJ-470X	C CAPACITOR	47pF 50V J	
C33	QEKJ0JM-476Z	E CAPACITOR	47uF 6.3V M	
C34	NCB31EK-473X	C CAPACITOR	0.047uF 25V K	
C35	NDC31HJ-100X	C CAPACITOR	10pF 50V J	
C36	NDC31HJ-7R0X	C CAPACITOR	7pF 50V J	
C37	NDC31HJ-100X	C CAPACITOR	10pF 50V J	
C38	NCB31HK-102X	C CAPACITOR	1000pF 50V K	
C39	NCB31HK-102X	C CAPACITOR	1000pF 50V K	
C40	QEKJ1CM-106Z	E CAPACITOR	10uF 16V M	
C41	NCB31EK-473X	C CAPACITOR	0.047uF 25V K	
C42	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C43	QFV61HJ-473Z	MF CAPACITOR	0.047uF 50V J	
C44	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C45	NCB31HK-272X	C CAPACITOR	2700pF 50V K	
C46	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C47	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C48	NCB31EK-473X	C CAPACITOR	0.047uF 25V K	
C49	NCB31HK-102X	C CAPACITOR	1000pF 50V K	
C50	NDC31HJ-101X	C CAPACITOR	100pF 50V J	
C51	NDC31HJ-331X	C CAPACITOR	330pF 50V J	
C52	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C53	NCB31EK-472X	C CAPACITOR	4700pF 25V K	
C54	NCB31EK-104X	C CAPACITOR	0.1uF 25V K	
C55	QEKJ1HM-474Z	E CAPACITOR	0.47uF 50V M	
C71	NDC31HJ-561X	C CAPACITOR	560pF 50V J	
C72	NCB31EK-223X	C CAPACITOR	0.022uF 25V K	
C73	QEKJ1HM-225Z	E CAPACITOR	2.2uF 50V M	
C74	NDC31HJ-820X	C CAPACITOR	82pF 50V J	
C75	NDC31HJ-470X	C CAPACITOR	47pF 50V J	
C76	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C77	QEKJ0JM-476Z	E CAPACITOR	47uF 6.3V M	
C78	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C81	QEKJ1HM-105Z	E CAPACITOR	1uF 50V M	
C82	NCB31HK-152X	C CAPACITOR	1500pF 50V K	
C83	NCB31EK-104X	C CAPACITOR	0.1uF 25V K	
C84	NCB31HK-123X	C CAPACITOR	0.012uF 50V K	
C85	NCB31HK-222X	C CAPACITOR	2200pF 50V K	
C91	QEKJ1HM-105Z	E CAPACITOR	1uF 50V M	
C92	NCB31HK-152X	C CAPACITOR	1500pF 50V K	
C94	NCB31HK-123X	C CAPACITOR	0.012uF 50V K	
C95	NCB31HK-222X	C CAPACITOR	2200pF 50V K	
C161	QTE1H54-225Z	E CAPACITOR	2.2uF 50V	
C162	QEKJ1HM-105Z	E CAPACITOR	1uF 50V M	
C164	NCB31HK-822X	C CAPACITOR	8200pF 50V K	
C165	NCB31CK-224X	C CAPACITOR	0.22uF 16V K	
C166	NCB31CK-224X	C CAPACITOR	0.22uF 16V K	
C167	NCB31EK-333X	C CAPACITOR	0.033uF 25V K	
C168	NCB31HK-562X	C CAPACITOR	5600pF 50V K	
C169	QEKJ1EM-475Z	E CAPACITOR	4.7uF 25V M	
C170	QEKJ1EM-475Z	E CAPACITOR	4.7uF 25V M	
C171	QTE1H54-225Z	E CAPACITOR	2.2uF 50V	
C172	QEKJ1HM-105Z	E CAPACITOR	1uF 50V M	
C174	NCB31HK-822X	C CAPACITOR	8200pF 50V K	
C175	NCB31CK-224X	C CAPACITOR	0.22uF 16V K	
C176	NCB31CK-224X	C CAPACITOR	0.22uF 16V K	
C177	NCB31EK-333X	C CAPACITOR	0.033uF 25V K	
C178	NCB31HK-562X	C CAPACITOR	5600pF 50V K	
C179	QEKJ1EM-475Z	E CAPACITOR	4.7uF 25V M	

⚠ Symbol No.	Part No.	Part Name	Description	Local
C180	QEKJ1EM-475Z	E CAPACITOR	4.7uF 25V M	
C191	QEKJ1CM-476Z	E CAPACITOR	47uF 16V M	
C192	QEKJ1CM-107Z	E CAPACITOR	100uF 16V M	
C193	QEKJ1CM-107Z	E CAPACITOR	100uF 16V M	
C194	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
C301	QFV91HJ-474Z	MF CAPACITOR	0.47uF 50V J	
C302	QFV91HJ-474Z	MF CAPACITOR	0.47uF 50V J	
C303	NDC31HJ-101X	C CAPACITOR	100pF 50V J	
C304	NDC31HJ-101X	C CAPACITOR	100pF 50V J	
C307	QEKJ1HM-105Z	E CAPACITOR	1uF 50V M	
C308	QEKJ1HM-105Z	E CAPACITOR	1uF 50V M	
C311	QFV91HJ-474Z	MF CAPACITOR	0.47uF 50V J	
C312	QFV91HJ-474Z	MF CAPACITOR	0.47uF 50V J	
C313	NDC31HJ-101X	C CAPACITOR	100pF 50V J	
C314	NDC31HJ-101X	C CAPACITOR	100pF 50V J	
C315	QEKJ1HM-474Z	E CAPACITOR	0.47uF 50V M	
C316	QEKJ1EM-475Z	E CAPACITOR	4.7uF 25V M	
C317	QEKJ1CM-476Z	E CAPACITOR	47uF 16V M	
C318	QEDJ1CM-226Z	E CAPACITOR	22uF 16V M	
C319	NCB31EK-223X	C CAPACITOR	0.022uF 25V K	
C320	NCB31EK-223X	C CAPACITOR	0.022uF 25V K	
C321	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C322	NCB31EK-104X	C CAPACITOR	0.1uF 25V K	
C323	NCB31EK-104X	C CAPACITOR	0.1uF 25V K	
C324	NCB31EK-104X	C CAPACITOR	0.1uF 25V K	
C325	NCB31EK-104X	C CAPACITOR	0.1uF 25V K	
C341	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C402	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C403	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C404	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C405	QEKJ1HM-105Z	E CAPACITOR	1uF 50V M	
C408	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C409	QEKJ0JM-107Z	E CAPACITOR	100uF 6.3V M	
C411	QEKJ0JM-107Z	E CAPACITOR	100uF 6.3V M	
C412	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C413	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C414	NCB31HK-222X	C CAPACITOR	2200pF 50V K	
C415	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C416	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C419	NDC31HJ-120X	C CAPACITOR	12pF 50V J	
C420	NDC31HJ-120X	C CAPACITOR	12pF 50V J	
C421	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C422	QEKJ0JM-107Z	E CAPACITOR	100uF 6.3V M	
C430	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C431	NDC31HJ-101X	C CAPACITOR	100pF 50V J	
C440	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C461	NCB31EK-104X	C CAPACITOR	0.1uF 25V K	
C462	QEKJ0JM-107Z	E CAPACITOR	100uF 6.3V M	
C463	QEKJ0JM-107Z	E CAPACITOR	100uF 6.3V M	
C464	NCB31EK-104X	C CAPACITOR	0.1uF 25V K	
C481	QEKJ0JM-476Z	E CAPACITOR	47uF 6.3V M	
C482	NCB31EK-104X	C CAPACITOR	0.1uF 25V K	
C483	NCB31EK-104X	C CAPACITOR	0.1uF 25V K	
C501	QEDJ1AM-476Z	E CAPACITOR	47uF 10V M	
C502	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C503	QEKJ1AM-107Z	E CAPACITOR	100uF 10V M	
C504	NCB31EK-473X	C CAPACITOR	0.047uF 25V K	
C505	NCB31EK-473X	C CAPACITOR	0.047uF 25V K	
C506	NCB31EK-473X	C CAPACITOR	0.047uF 25V K	
C507	NCB31EK-473X	C CAPACITOR	0.047uF 25V K	
C508	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C509	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
C510	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
C511	NCB31EK-104X	C CAPACITOR	0.1uF 25V K	
C512	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C521	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C522	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C523	QEKJ0JM-107Z	E CAPACITOR	100uF 6.3V M	
C524	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C525	QEKJ0JM-107Z	E CAPACITOR	100uF 6.3V M	
C527	NCB31HK-682X	C CAPACITOR	6800pF 50V K	
C528	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C529	QEKJ0JM-107Z	E CAPACITOR	100uF 6.3V M	
C530	NCB31EK-104X	C CAPACITOR	0.1uF 25V K	
C531	NCB31EK-104X	C CAPACITOR	0.1uF 25V K	
C532	NDC31HJ-680X	C CAPACITOR	68pF 50V J	
C533	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	

⚠ Symbol No.	Part No.	Part Name	Description	Local
C534	NDC31HJ-5R0X	C CAPACITOR	5pF 50V J	
C541	QEKJ0JM-107Z	E CAPACITOR	100uF 6.3V M	
C542	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C543	QEKJ1HM-105Z	E CAPACITOR	1uF 50V M	
C544	QEKJ0JM-107Z	E CAPACITOR	100uF 6.3V M	
C545	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C546	NDC31HJ-470X	C CAPACITOR	47pF 50V J	
C547	NCB31HK-153X	C CAPACITOR	0.015uF 50V K	
C548	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C549	NCB31HK-272X	C CAPACITOR	2700pF 50V K	
C550	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C551	NCB31EK-333X	C CAPACITOR	0.033uF 25V K	
C552	NCB31EK-333X	C CAPACITOR	0.033uF 25V K	
C553	NCB31EK-473X	C CAPACITOR	0.047uF 25V K	
C554	NCB31EK-473X	C CAPACITOR	0.047uF 25V K	
C555	NCB31EK-473X	C CAPACITOR	0.047uF 25V K	
C556	NCB31HK-471X	C CAPACITOR	470pF 50V K	
C557	NCB31HK-471X	C CAPACITOR	470pF 50V K	
C558	NCB31EK-473X	C CAPACITOR	0.047uF 25V K	
C559	NCB31EK-473X	C CAPACITOR	0.047uF 25V K	
C560	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C561	QEKJ0JM-107Z	E CAPACITOR	100uF 6.3V M	
C562	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C565	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C566	QEKJ0JM-107Z	E CAPACITOR	100uF 6.3V M	
C568	NCB31EK-104X	C CAPACITOR	0.1uF 25V K	
C569	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C570	QEKJ0JM-107Z	E CAPACITOR	100uF 6.3V M	
C571	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C572	QEKJ0JM-107Z	E CAPACITOR	100uF 6.3V M	
C580	QEKJ1EM-475Z	E CAPACITOR	4.7uF 25V M	
C581	NCB31HK-332X	C CAPACITOR	3300pF 50V K	
C582	NDC31HJ-271X	C CAPACITOR	270pF 50V J	
C583	NDC31HJ-271X	C CAPACITOR	270pF 50V J	
C584	NCB31EK-104X	C CAPACITOR	0.1uF 25V K	
C585	QEKJ0JM-476Z	E CAPACITOR	47uF 6.3V M	
C589	QEKJ1EM-475Z	E CAPACITOR	4.7uF 25V M	
C590	QEKJ1EM-475Z	E CAPACITOR	4.7uF 25V M	
C591	NCB31HK-332X	C CAPACITOR	3300pF 50V K	
C592	NDC31HJ-271X	C CAPACITOR	270pF 50V J	
C593	NDC31HJ-271X	C CAPACITOR	270pF 50V J	
C594	NCB31EK-104X	C CAPACITOR	0.1uF 25V K	
C595	QEKJ0JM-476Z	E CAPACITOR	47uF 6.3V M	
C596	QEKJ1AM-107Z	E CAPACITOR	100uF 10V M	
C597	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C599	QEKJ1EM-475Z	E CAPACITOR	4.7uF 25V M	
C701	NDC31HJ-220X	C CAPACITOR	22pF 50V J	
C702	NDC31HJ-270X	C CAPACITOR	27pF 50V J	
C703	NDC31HJ-270X	C CAPACITOR	27pF 50V J	
C704	NDC31HJ-8R0X	C CAPACITOR	8pF 50V J	
C705	NCB31EK-473X	C CAPACITOR	0.047uF 25V K	
C706	NCB31EK-473X	C CAPACITOR	0.047uF 25V K	
C707	NCB31EK-473X	C CAPACITOR	0.047uF 25V K	
C708	NCB31EK-473X	C CAPACITOR	0.047uF 25V K	
C709	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C710	QEKJ0JM-476Z	E CAPACITOR	47uF 6.3V M	
C711	QEKJ0JM-227Z	E CAPACITOR	220uF 6.3V M	
C712	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C713	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
C716	NCB31EK-104X	C CAPACITOR	0.1uF 25V K	
C717	NCB31EK-104X	C CAPACITOR	0.1uF 25V K	
C718	NDC31HJ-101X	C CAPACITOR	100pF 50V J	
C719	NCB31HK-102X	C CAPACITOR	1000pF 50V K	
C771	NCB31EK-473X	C CAPACITOR	0.047uF 25V K	
C781	QEKJ0JM-107Z	E CAPACITOR	100uF 6.3V M	
C782	NCB31EK-823X	C CAPACITOR	0.082uF 25V K	
C783	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
C784	QEKJ1CM-107Z	E CAPACITOR	100uF 16V M	
C891	NCB31EK-104X	C CAPACITOR	0.1uF 25V K	
C901	QEZ0675-338	E CAPACITOR	3300uF	
C902	QEKJ1HM-225Z	E CAPACITOR	2.2uF 50V M	
C903	QEKJ1CM-476Z	E CAPACITOR	47uF 16V M	
C904	QEDJ1CM-106Z	E CAPACITOR	10uF 16V M	
C905	QEKJ1CM-476Z	E CAPACITOR	47uF 16V M	
C906	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C907	QEKJ1AM-227Z	E CAPACITOR	220uF 10V M	
C908	QEKJ0JM-227Z	E CAPACITOR	220uF 6.3V M	

⚠ Symbol No.	Part No.	Part Name	Description	Local
C909	QEKJ0JM-227Z	E CAPACITOR	220uF 6.3V M	
C910	QEKJ1CM-106Z	E CAPACITOR	10uF 16V M	
C911	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C912	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C913	QEKJ1CM-106Z	E CAPACITOR	10uF 16V M	
C914	QEKJ1CM-107Z	E CAPACITOR	100uF 16V M	
C915	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C919	QEKJ1CM-106Z	E CAPACITOR	10uF 16V M	
C961	NDC31HJ-101X	C CAPACITOR	100pF 50V J	
C962	NDC31HJ-101X	C CAPACITOR	100pF 50V J	
C963	NDC31HJ-101X	C CAPACITOR	100pF 50V J	
C964	NDC31HJ-101X	C CAPACITOR	100pF 50V J	
C965	NDC31HJ-101X	C CAPACITOR	100pF 50V J	
C966	NDC31HJ-101X	C CAPACITOR	100pF 50V J	
C967	NDC31HJ-101X	C CAPACITOR	100pF 50V J	
C968	NDC31HJ-101X	C CAPACITOR	100pF 50V J	
C971	NCB31EK-104X	C CAPACITOR	0.1uF 25V K	
C990	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
C993	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
C995	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
R1	NRS181J-100X	MG RESISTOR	10Ω 1/8W J	
R2	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R3	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R4	NRSA63J-332X	MG RESISTOR	3.3kΩ 1/16W J	
R5	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R6	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R7	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R9	NRSA63J-470X	MG RESISTOR	47Ω 1/16W J	
R10	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R11	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R31	NRS181J-100X	MG RESISTOR	10Ω 1/8W J	
R32	NRSA63J-622X	MG RESISTOR	6.2kΩ 1/16W J	
R33	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R38	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R39	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R40	NRSA63J-393X	MG RESISTOR	39kΩ 1/16W J	
R41	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R42	NRS181J-100X	MG RESISTOR	10Ω 1/8W J	
R43	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J	
R44	NRSA63J-221X	MG RESISTOR	220Ω 1/16W J	
R51	NRSA63J-273X	MG RESISTOR	27kΩ 1/16W J	
R52	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R53	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R54	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R55	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	
R56	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R57	NRSA63J-153X	MG RESISTOR	15kΩ 1/16W J	
R58	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J	
R59	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R71	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	
R72	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	
R73	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	
R74	NRSA02J-101X	MG RESISTOR	100Ω 1/10W J	
R81	NRSA63J-822X	MG RESISTOR	8.2kΩ 1/16W J	
R82	NRSA63J-183X	MG RESISTOR	18kΩ 1/16W J	
R83	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R84	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R91	NRSA63J-822X	MG RESISTOR	8.2kΩ 1/16W J	
R92	NRSA63J-183X	MG RESISTOR	18kΩ 1/16W J	
R93	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R162	NRSA63J-223X	MG RESISTOR	22kΩ 1/16W J	
R163	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	
R164	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R165	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R172	NRSA63J-223X	MG RESISTOR	22kΩ 1/16W J	
R173	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	
R174	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R175	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R181	NRSA63J-271X	MG RESISTOR	270Ω 1/16W J	
R182	NRSA63J-271X	MG RESISTOR	270Ω 1/16W J	
R301	NRSA63J-273X	MG RESISTOR	27kΩ 1/16W J	
R302	NRSA63J-273X	MG RESISTOR	27kΩ 1/16W J	
R311	NRSA63J-273X	MG RESISTOR	27kΩ 1/16W J	
R312	NRSA63J-273X	MG RESISTOR	27kΩ 1/16W J	
R341	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	
R342	NRSA63J-821X	MG RESISTOR	820Ω 1/16W J	
R343	NRSA02J-101X	MG RESISTOR	100Ω 1/10W J	
R351	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	
R352	NRSA63J-821X	MG RESISTOR	820Ω 1/16W J	
R353	NRSA02J-101X	MG RESISTOR	100Ω 1/10W J	
R402	NRSA63J-470X	MG RESISTOR	47Ω 1/16W J	
R403	NRSA63J-105X	MG RESISTOR	1MΩ 1/16W J	
R404	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R405	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	
R406	NRSA63J-470X	MG RESISTOR	47Ω 1/16W J	
R407	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	
R408	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	
R409	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	
R412	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R413	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R414	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R415	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	
R416	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R417	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R423	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R424	NRSA63J-221X	MG RESISTOR	220Ω 1/16W J	
R430	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R431	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R432	NRSA63J-682X	MG RESISTOR	6.8kΩ 1/16W J	
R433	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R440	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R451	NRSA63J-223X	MG RESISTOR	22kΩ 1/16W J	
R452	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R453	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	
R454	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R455	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	
R456	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R457	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	
R458	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R459	NRSA02J-101X	MG RESISTOR	100Ω 1/10W J	
R460	NRSA02J-101X	MG RESISTOR	100Ω 1/10W J	
R481	NRSA02J-181X	MG RESISTOR	180Ω 1/10W J	
R501	NRSA63J-333X	MG RESISTOR	33kΩ 1/16W J	
R502	NRSA63J-822X	MG RESISTOR	8.2kΩ 1/16W J	
R503	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R504	NRSA63J-153X	MG RESISTOR	15kΩ 1/16W J	
R507	NRSA63J-682X	MG RESISTOR	6.8kΩ 1/16W J	
R508	NRSA63J-302X	MG RESISTOR	3kΩ 1/16W J	
R509	NRSA63J-123X	MG RESISTOR	12kΩ 1/16W J	
R510	NRSA63J-822X	MG RESISTOR	8.2kΩ 1/16W J	
R511	NRSA63J-152X	MG RESISTOR	1.5kΩ 1/16W J	
R512	NRSA63J-152X	MG RESISTOR	1.5kΩ 1/16W J	
R513	NRSA63J-152X	MG RESISTOR	1.5kΩ 1/16W J	
R514	NRSA02J-220X	MG RESISTOR	22Ω 1/10W J	
R515	NRSA02J-220X	MG RESISTOR	22Ω 1/10W J	
R516	NRSA02J-331X	MG RESISTOR	330Ω 1/10W J	
R517	NRSA63J-822X	MG RESISTOR	8.2kΩ 1/16W J	
R518	NRSA63J-512X	MG RESISTOR	5.1kΩ 1/16W J	
R523	NRSA63J-823X	MG RESISTOR	82kΩ 1/16W J	
R524	NRSA63J-823X	MG RESISTOR	82kΩ 1/16W J	
R525	NRSA63J-334X	MG RESISTOR	330kΩ 1/16W J	
R526	NRSA63J-334X	MG RESISTOR	330kΩ 1/16W J	
R527	NRSA02J-220X	MG RESISTOR	22Ω 1/10W J	
R528	NRSA02J-220X	MG RESISTOR	22Ω 1/10W J	
R529	NRSA63J-823X	MG RESISTOR	82kΩ 1/16W J	
R530	NRSA63J-563X	MG RESISTOR	56kΩ 1/16W J	
R531	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R532	NRSA63J-202X	MG RESISTOR	2kΩ 1/16W J	
R533	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R534	NRSA63J-153X	MG RESISTOR	15kΩ 1/16W J	
R535	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R536	NRSA63J-821X	MG RESISTOR	820Ω 1/16W J	
R537	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R539	NRSA02J-151X	MG RESISTOR	150Ω 1/10W J	
R541	NRSA63J-562X	MG RESISTOR	5.6kΩ 1/16W J	
R542	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R543	NRSA63J-474X	MG RESISTOR	470kΩ 1/16W J	
R544	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R545	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R546	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R547	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R548	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R549	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	

⚠ Symbol No.	Part No.	Part Name	Description	Local
R550	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R551	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R552	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R553	NRSA63J-105X	MG RESISTOR	1MΩ 1/16W J	
R558	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R559	NRSA63J-155X	MG RESISTOR	1.5MΩ 1/16W J	
R581	NRSA63J-822X	MG RESISTOR	8.2kΩ 1/16W J	
R582	NRSA63J-822X	MG RESISTOR	8.2kΩ 1/16W J	
R583	NRSA63J-822X	MG RESISTOR	8.2kΩ 1/16W J	
R584	NRSA63J-181X	MG RESISTOR	180Ω 1/16W J	
R585	NRSA63J-181X	MG RESISTOR	180Ω 1/16W J	
R586	NRSA63J-682X	MG RESISTOR	6.8kΩ 1/16W J	
R587	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R588	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R591	NRSA63J-822X	MG RESISTOR	8.2kΩ 1/16W J	
R592	NRSA63J-822X	MG RESISTOR	8.2kΩ 1/16W J	
R593	NRSA63J-822X	MG RESISTOR	8.2kΩ 1/16W J	
R594	NRSA63J-181X	MG RESISTOR	180Ω 1/16W J	
R595	NRSA63J-181X	MG RESISTOR	180Ω 1/16W J	
R596	NRSA63J-682X	MG RESISTOR	6.8kΩ 1/16W J	
R597	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R598	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R701	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R702	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R703	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R704	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R705	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R707	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R708	NRSA63J-332X	MG RESISTOR	3.3kΩ 1/16W J	
R714	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R715	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R716	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R717	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R718	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R719	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R720	NRSA63J-122X	MG RESISTOR	1.2kΩ 1/16W J	
R721	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R722	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R723	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R725	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R726	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R728	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R729	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R730	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R732	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R734	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	
R735	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	
R736	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	
R741	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R742	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R743	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R744	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R745	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R746	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R747	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R748	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R749	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R750	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R751	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R752	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R753	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R754	NRSA63J-821X	MG RESISTOR	820Ω 1/16W J	
R755	NRSA63J-106X	MG RESISTOR	10MΩ 1/16W J	
R756	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R757	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	
R758	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R760	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R762	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R763	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R766	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	
R767	NRSA63J-223X	MG RESISTOR	22kΩ 1/16W J	
R771	NRSA63J-271X	MG RESISTOR	270Ω 1/16W J	
R772	NRSA63J-271X	MG RESISTOR	270Ω 1/16W J	
R783	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R793	NRS181J-0R0X	MG RESISTOR	0Ω 1/8W J	
R891	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R892	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	

⚠ Symbol No.	Part No.	Part Name	Description	Local
R901	QRE142J-102X	C RESISTOR	1kΩ 1/4W J	
R902	NRSA02J-912X	MG RESISTOR	9.1kΩ 1/10W J	
R903	NRSA02J-472X	MG RESISTOR	4.7kΩ 1/10W J	
R971	NRS181J-222X	MG RESISTOR	2.2kΩ 1/8W J	
R972	NRS181J-222X	MG RESISTOR	2.2kΩ 1/8W J	
R976	NRSA02J-273X	MG RESISTOR	27kΩ 1/10W J	
R977	NRSA02J-123X	MG RESISTOR	12kΩ 1/10W J	
R998	NRSA63J-100X	MG RESISTOR	10Ω 1/16W J	
RA30	NRZ0065-222X	NET RESISTOR	2.2kΩ	
RA550	NRZ0065-103X	NET RESISTOR	10kΩ	
RA701	NRZ0065-102X	MG RESISTOR	1kΩ	
L1	QQL244J-4R7Z	COIL	4.7uH J	
L401	NQL114K-470X	INDUCITOR	47uH K	
L402	NQL114K-470X	INDUCITOR	47uH K	
L404	NQL114K-470X	INDUCITOR	47uH K	
L541	QQL244J-470Z	COIL	47uH J	
L543	QQL244J-470Z	COIL	47uH J	
L544	QQL244J-470Z	COIL	47uH J	
L701	NQL114M-4R7X	COIL	4.7uH M	
L702	NQL114M-4R7X	COIL	4.7uH M	
L901	QQR0703-001	CHOKE COIL		
CN501	QGB2027M4-22S	CONNECTOR	B-B (1-22)	
CN701	QGZ1601J1-15	CONNECTOR	(1-15)	
CN702	QGA2006F1-02	CONNECTOR	W-B (1-2)	
CN901	QNZ0650-001	CAR CONNECTOR		
J1	QNB0100-002	CAR ANT JACK		
J321	QNN0519-001	PIN JACK		
PP2	QZW0010-001	STYLE PIN		
TU1	QAU0313-001	TUNER		
X31	QAX0616-001Z	CRYSTAL	10.250MHz	
X71	QAX0263-001Z	CRYSTAL	4.332MHz	
X401	QAX0760-001Z	CRYSTAL		
X701	QAX0617-001Z	CRYSTAL	12.500MHz	
X702	QAX0401-001	CRYSTAL	32.768KHz	

Front board

Block No. [0][2]

⚠ Symbol No.	Part No.	Part Name	Description	Local
IC661	PT6523LQ-L	LCD DRIVER		
IC681	RPM7338-V4	RM.RECEIVER		
Q670	2SB624/4/-X	TRANSISTOR		
Q671	UN2211-X	TRANSISTOR		
D630	SML-310LT/MN/-X	LED		
D631	SML-310VT/JK/-X	LED		
D632	SML-310VT/JK/-X	LED		
D633	SML-310VT/JK/-X	LED		
D634	SML-310VT/JK/-X	LED		
D635	SML-310VT/JK/-X	LED		
D636	SML-310VT/JK/-X	LED		
D637	SML-310VT/JK/-X	LED		
D638	SML-310VT/JK/-X	LED		
D639	SML-310VT/JK/-X	LED		
D640	SML-310VT/JK/-X	LED		
D641	SML-310VT/JK/-X	LED		
D642	SML-310VT/JK/-X	LED		
D643	SML-310VT/JK/-X	LED		
D644	SML-310VT/JK/-X	LED		
D645	SML-310VT/JK/-X	LED		
D646	SML-310VT/JK/-X	LED		
D647	SML-310VT/JK/-X	LED		
D648	SML-310VT/JK/-X	LED		
D649	SML-310VT/JK/-X	LED		
D650	SML-310VT/JK/-X	LED		
D651	SML-310VT/JK/-X	LED		
D652	NSPW310BS/BRS/	LED		
D653	NSPW310BS/BRS/	LED		
D661	MA111-X	SI DIODE		
D662	UDZS5.1B-X	Z DIODE		

⚠ Symbol No.	Part No.	Part Name	Description	Local
D681	MA8062/M/-X	Z DIODE		
C661	NBE20JM-106X	TA E CAPACITOR	10uF 6.3V M	
C662	NCS31HJ-681X	C CAPACITOR	680pF 50V J	
C663	NCB31HK-223X	C CAPACITOR	0.022uF 50V K	
C681	NBE20JM-475X	TA E CAPACITOR	4.7uF 6.3V M	
C682	NCB31HK-123X	C CAPACITOR	0.012uF 50V K	
C686	NCB31HK-223X	C CAPACITOR	0.022uF 50V K	
C687	NCB31HK-223X	C CAPACITOR	0.022uF 50V K	
R601	NRSA63J-821X	MG RESISTOR	820Ω 1/16W J	
R602	NRSA63J-821X	MG RESISTOR	820Ω 1/16W J	
R603	NRSA63J-122X	MG RESISTOR	1.2kΩ 1/16W J	
R604	NRSA63J-182X	MG RESISTOR	1.8kΩ 1/16W J	
R605	NRSA63J-272X	MG RESISTOR	2.7kΩ 1/16W J	
R606	NRSA63J-821X	MG RESISTOR	820Ω 1/16W J	
R607	NRSA63J-821X	MG RESISTOR	820Ω 1/16W J	
R608	NRSA63J-122X	MG RESISTOR	1.2kΩ 1/16W J	
R609	NRSA63J-182X	MG RESISTOR	1.8kΩ 1/16W J	
R610	NRSA63J-821X	MG RESISTOR	820Ω 1/16W J	
R611	NRSA63J-821X	MG RESISTOR	820Ω 1/16W J	
R612	NRSA63J-122X	MG RESISTOR	1.2kΩ 1/16W J	
R613	NRSA63J-182X	MG RESISTOR	1.8kΩ 1/16W J	
R614	NRSA63J-272X	MG RESISTOR	2.7kΩ 1/16W J	
R615	NRSA63J-392X	MG RESISTOR	3.9kΩ 1/16W J	
R630	NRSA02J-821X	MG RESISTOR	820Ω 1/10W J	
R631	NRSA02J-471X	MG RESISTOR	470Ω 1/10W J	
R633	NRSA02J-681X	MG RESISTOR	680Ω 1/10W J	
R637	NRSA02J-821X	MG RESISTOR	820Ω 1/10W J	
R639	NRSA02J-331X	MG RESISTOR	330Ω 1/10W J	
R641	NRSA02J-331X	MG RESISTOR	330Ω 1/10W J	
R643	NRSA02J-471X	MG RESISTOR	470Ω 1/10W J	
R645	NRSA02J-471X	MG RESISTOR	470Ω 1/10W J	
R647	NRSA02J-471X	MG RESISTOR	470Ω 1/10W J	
R649	NRS181J-391X	MG RESISTOR	390Ω 1/8W J	
R650	NRS181J-391X	MG RESISTOR	390Ω 1/8W J	
R651	NRSA02J-471X	MG RESISTOR	470Ω 1/10W J	
R661	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	
R662	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	
R663	NRSA63J-184X	MG RESISTOR	180kΩ 1/16W J	
R664	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R665	NRSA63J-513X	MG RESISTOR	51kΩ 1/16W J	
R666	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R667	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R668	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R670	NRS181J-471X	MG RESISTOR	470Ω 1/8W J	
R671	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R672	NRS181J-102X	MG RESISTOR	1kΩ 1/8W J	
R681	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J	
R682	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R686	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R687	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R688	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
CJ601	QGZ1601K1-15S	CONNECTOR	(1-15)	
JS686	QSW0793-001	ROTARY ENCODER		
S601	NSW0124-001X	TACT SW		
S602	NSW0124-001X	TACT SW		
S603	NSW0124-001X	TACT SW		
S604	NSW0124-001X	TACT SW		
S605	NSW0124-001X	TACT SW		
S606	NSW0124-001X	TACT SW		
S607	NSW0124-001X	TACT SW		
S608	NSW0124-001X	TACT SW		
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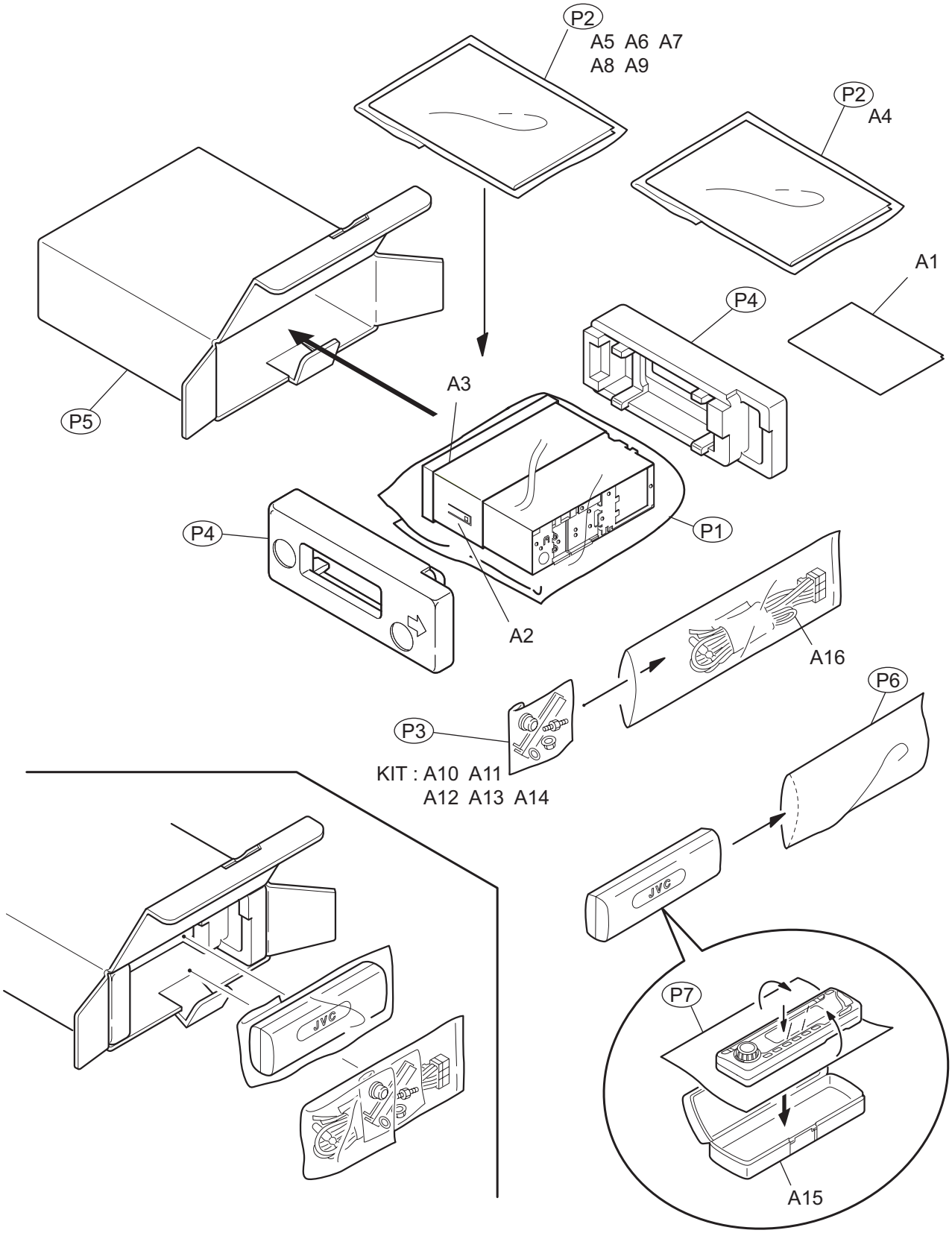
S614	NSW0124-001X	TACT SW		
S615	NSW0124-001X	TACT SW		
S616	NSW0124-001X	TACT SW		
S617	NSW0124-001X	TACT SW		
S618	NSW0124-001X	TACT SW		

Packing materials and accessories parts list

Block No. M 3 M M

No additional / supplemental order of WARRANTY CARDs are available.



Packing and Accessories

Block No. [M][3][M][M]

⚠	Symbol No.	Part No.	Part Name	Description	Local
	A 1	VND3050-002	IDENTITY CARD	(x0)	G411EU
	A 1	VND3050-002	IDENTITY CARD		G411E,G411EX,G411EY
	A 2	GE20137-003A	MOUNTING SLEEVE		
	A 3	GE20135-010A	TRIM PLATE		
	A 4	GET0257-001A	INST BOOK	GER FRE ITA	G411E
	A 4	GET0257-003A	INST BOOK	ENG FRE	G411EU,G411EX
	A 4	GET0257-006A	INST BOOK	ENG GRE RUS	G411EY
	A 5	GET0257-002A	INST BOOK	SPA GRE POR	G411E
	A 5	GET0257-005A	INST BOOK	SPA TUR PER	G411EU
	A 5	GET0257-004A	INST BOOK	DUT SWE DAN FIN	G411EX
	A 5	GET0257-007A	INST BOOK	POL CZE HUN	G411EY
	A 6	GET0257-008A	INSTALL MANUAL		G411E
	A 6	GET0257-010A	INSTALL MANUAL		G411EU,G411EX
	A 6	GET0257-013A	INSTALL MANUAL		G411EY
	A 7	GET0257-009A	INSTALL MANUAL		G411E
	A 7	GET0257-012A	INSTALL MANUAL		G411EU
	A 7	GET0257-011A	INSTALL MANUAL		G411EX
	A 7	GET0257-014A	INSTALL MANUAL		G411EY
	A 8	----------	WARRANTY CARD	BT-54023-1(x0)	G411EU
	A 8	----------	WARRANTY CARD	BT-54023-1	G411E,G411EX,G411EY
	A 9	VND3046-001	SERIAL TICKET	(x0)	G411EU
	A 9	VND3046-001	SERIAL TICKET		G411E,G411EX,G411EY
	A 10	VKZ4027-202	PLUG NUT		
	A 11	VKH4871-003	MOUNT BOLT		
	A 12	VKZ4328-003	LOCK NUT		
	A 13	QYWWS53A008ZA	WASHER	0mm/5.3mm x	
	A 14	GE40130-002A	HOOK	(x2)	
	A 15	FSJB3002-00C	HARD CASE		
	A 16	QAM0175-002	POWER CORD		
	KIT	SRW-385U	SCREW PART KIT		
	P 1	QPC03004315P	POLY BAG	30cm x 43cm	
	P 2	FSPG4002-001	POLY BAG	(x2)	
	P 3	QPA00801205	POLY BAG	8cm x 12cm	
	P 4	GE10070-003A	EPS CUSHION		
	P 5	GE31429-001A	CARTON		
	P 6	QPA01003003	POLY BAG	10cm x 30cm	
	P 7	FSYH4036-068	SHEET		

JVC

SCHEMATIC DIAGRAMS

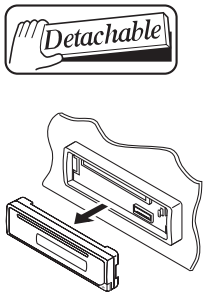
CD RECEIVER

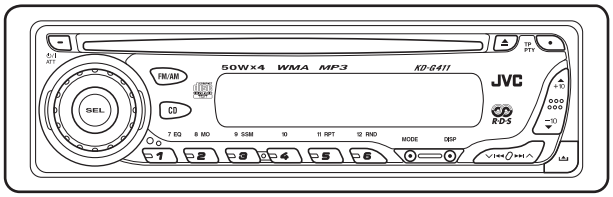
KD-G411

CD-ROM No.SML200412

Area suffix

E ---------- Southern Europe
EX ---------- Northern Europe
EY ---------- Eastern Europe
EU ---------- Turkey





WMA MP3 COMPACT disc DIGITAL AUDIO TEXT R·D·S

Contents

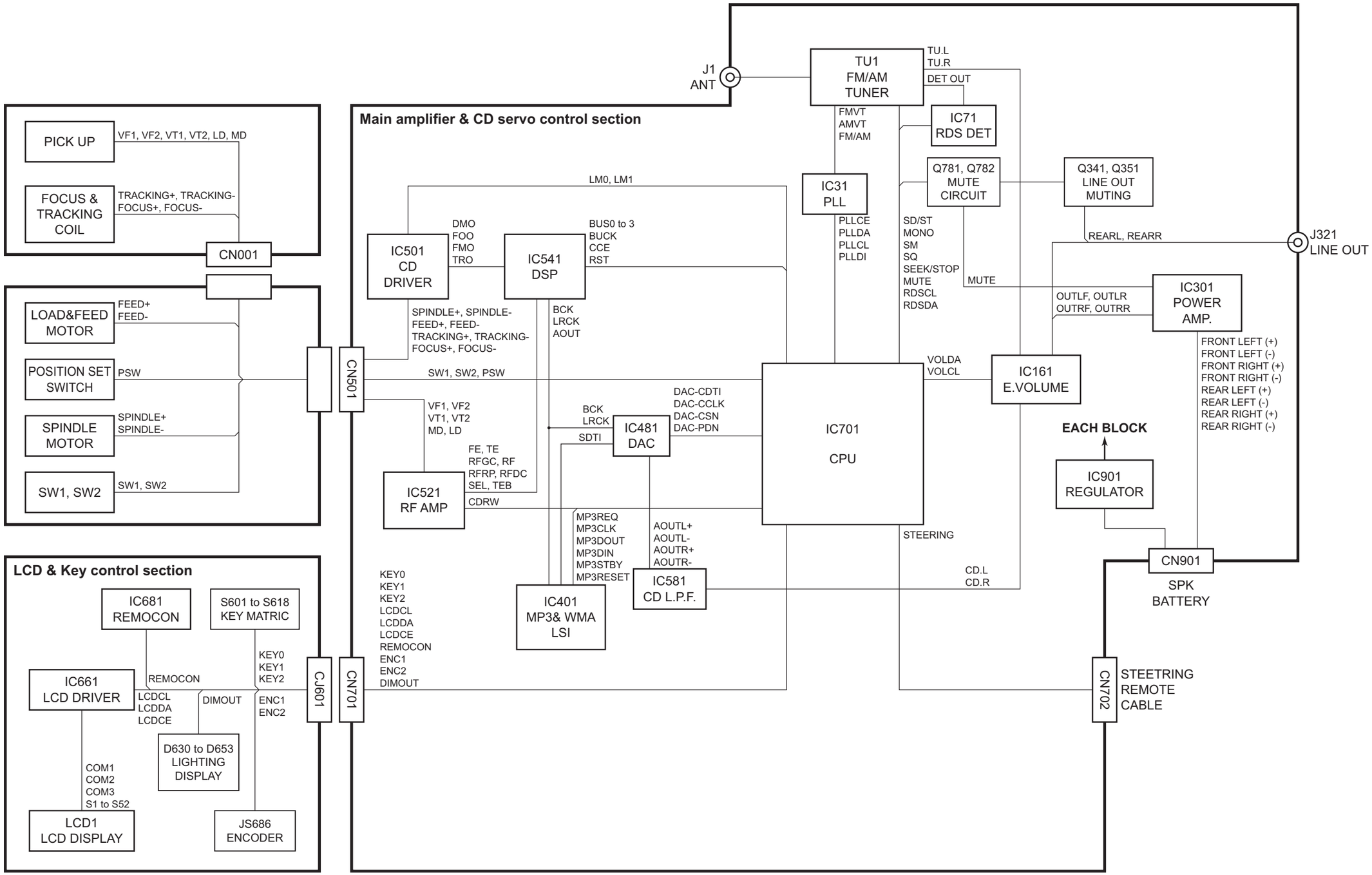
No.MA135SCH
2004/12

Safety precaution

⚠ ***CAUTION*** **Burrs formed during molding may be left over on some parts of the chassis. Therefore, pay attention to such burrs in the case of preforming repair of this system.**

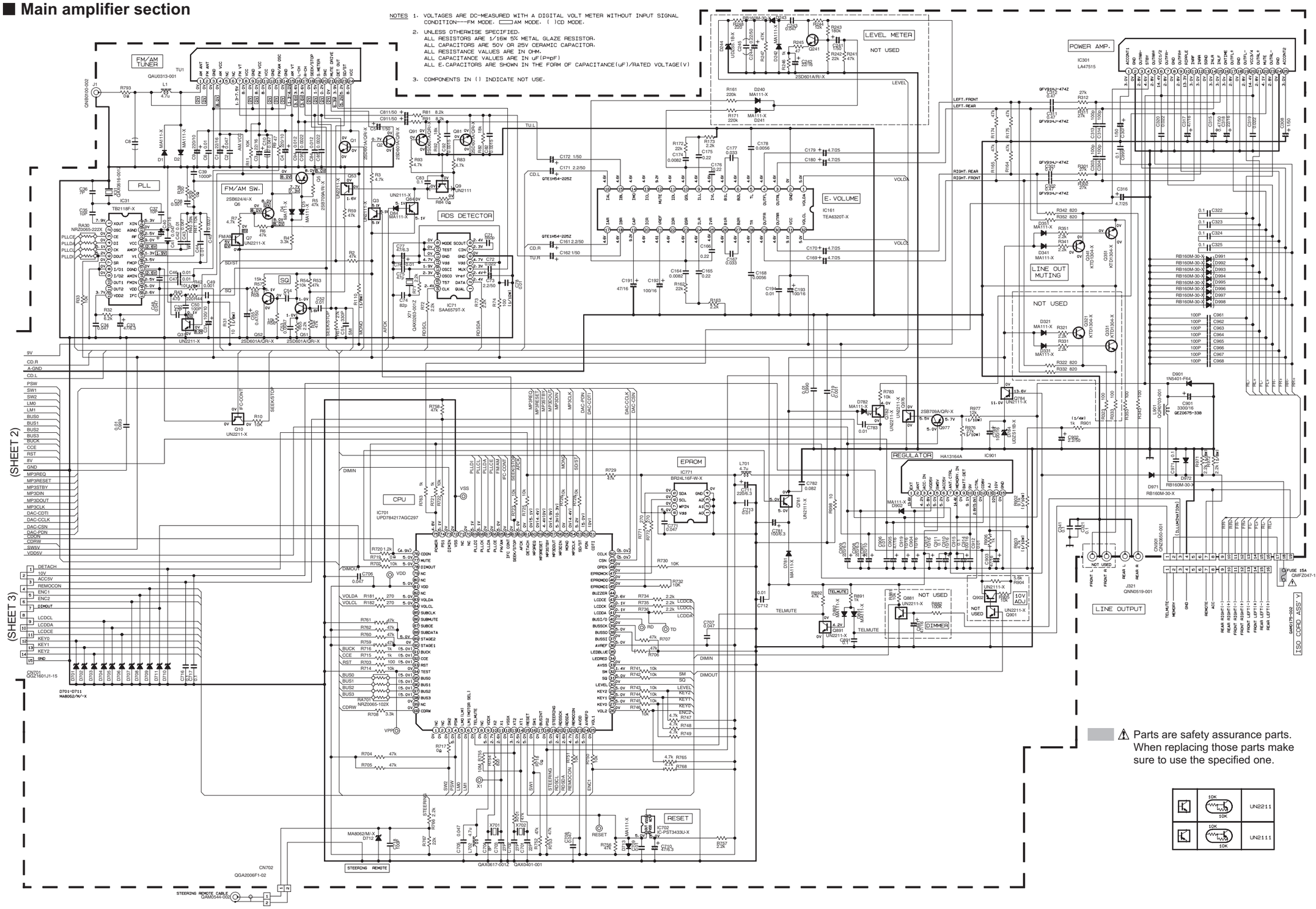
⚠ ***CAUTION*** **Please use enough caution not to see the beam directly or touch it in case of an adjustment or operation check.**

Block diagram

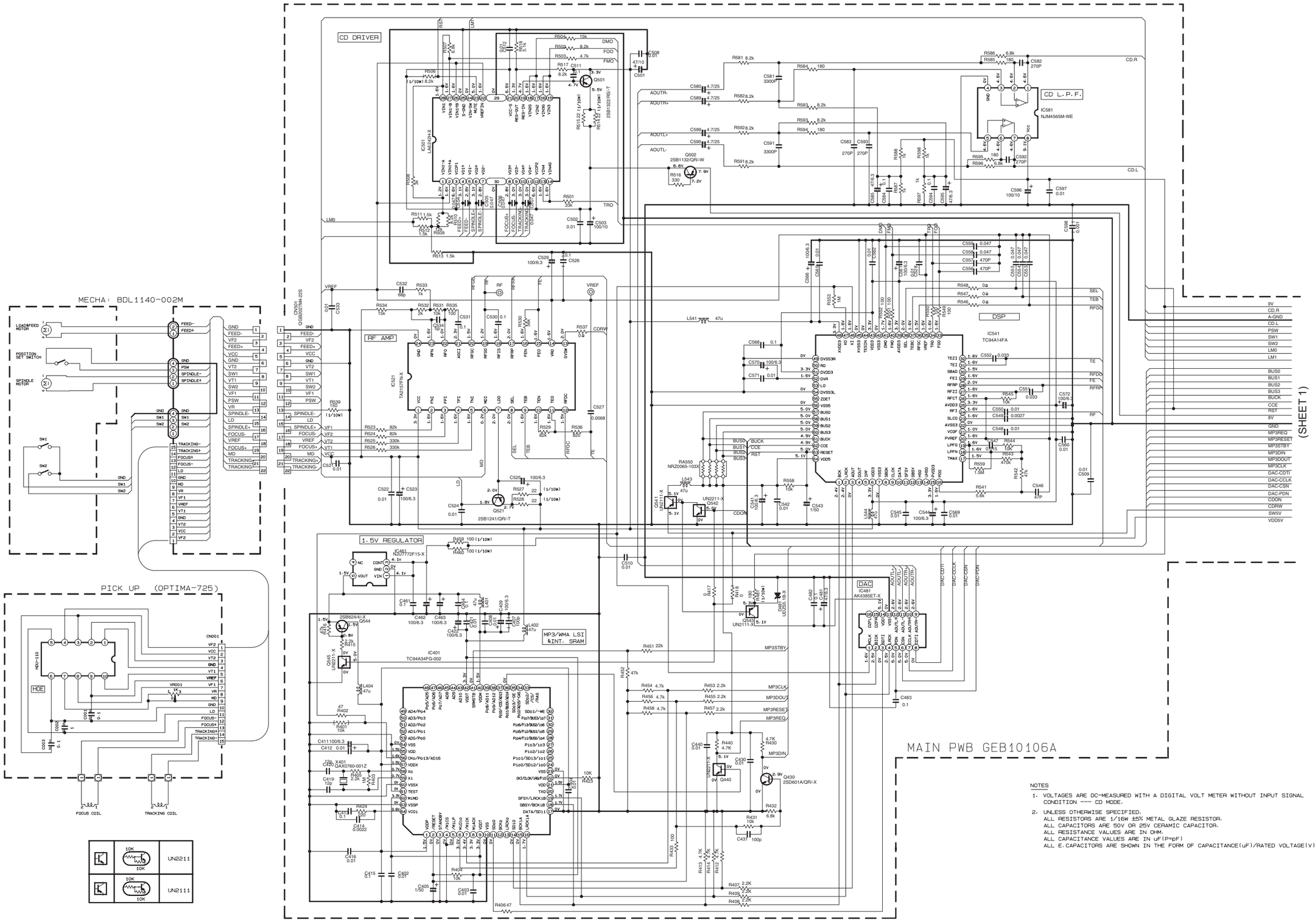


Standard schematic diagrams

■ Main amplifier section



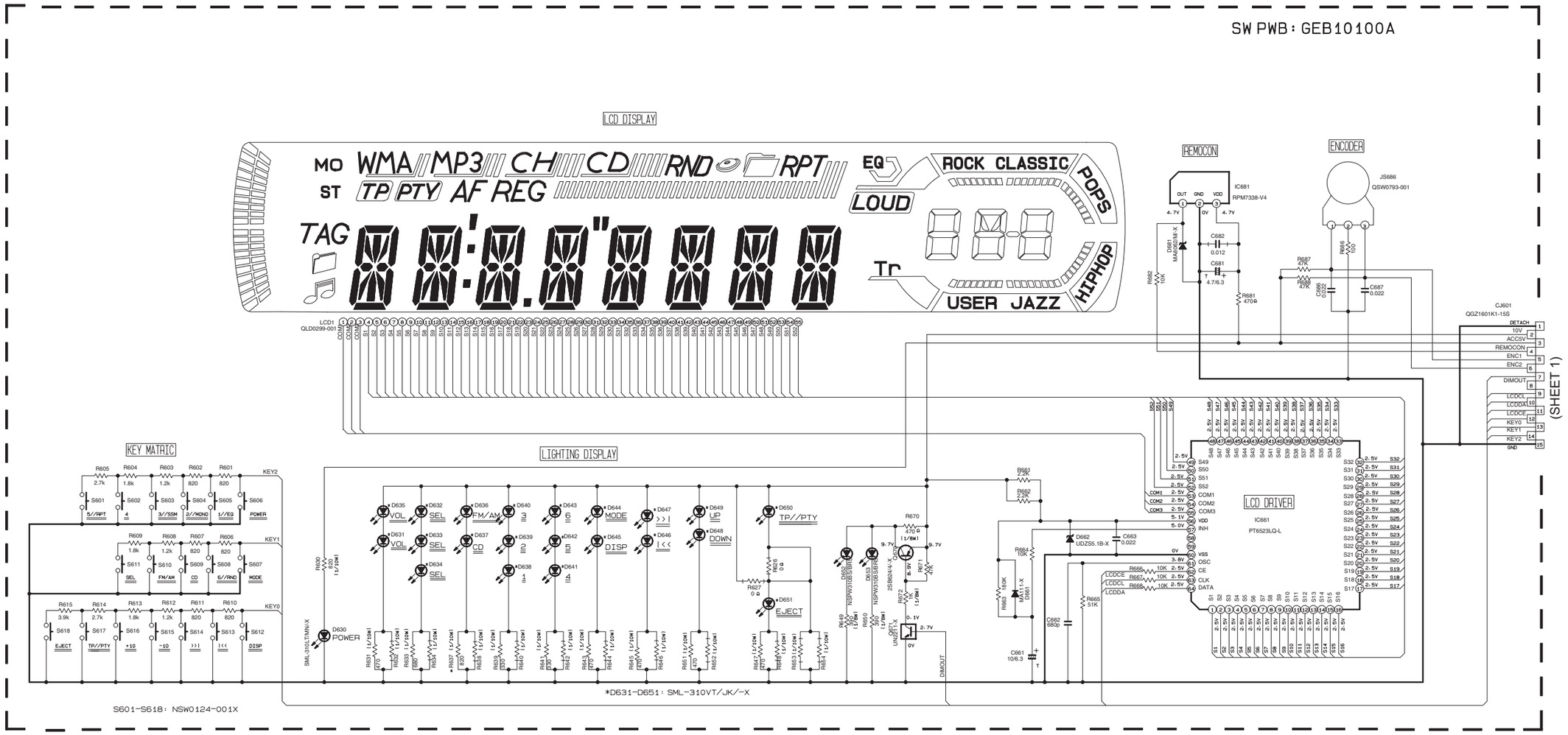
■ CD servo section



NOTES

1. VOLTAGES ARE DC-MEASURED WITH A DIGITAL VOLT METER WITHOUT INPUT SIGNAL CONDITION --- CD MODE.
2. UNLESS OTHERWISE SPECIFIED.
   ALL RESISTORS ARE 1/16W ±5% METAL GLAZE RESISTOR.
   ALL CAPACITORS ARE 50V OR 25V CERAMIC CAPACITOR.
   ALL RESISTANCE VALUES ARE IN OHM.
   ALL CAPACITANCE VALUES ARE IN uF(P=pF)
   ALL E.CAPACITORS ARE SHOWN IN THE FORM OF CAPACITANCE(uF)/RATED VOLTAGE(V)

■ LCD & key control section



	10K / 10K	UN2211-X

NOTES

1. VOLTAGES ARE DC-MEASURED WITH A DIGITAL VOLT METER WITHOUT INPUT SIGNAL.

2. UNLESS OTHERWISE SPECIFIED.
   ALL RESISTORS ARE 1/16W ±5% METAL GLAZE RESISTOR.
   ALL CAPACITORS ARE 50V OR 25V CERAMIC CAPACITOR.
   ALL RESISTANCE VALUES ARE IN OHM.
   ALL CAPACITANCE VALUES ARE IN uF(P=pF)
   ALL E.CAPACITORS ARE SHOWN IN THE FORM OF CAPACITANCE(uF)/RATED VOLTAGE(V)
   T --- TANTAL CAPACITOR.

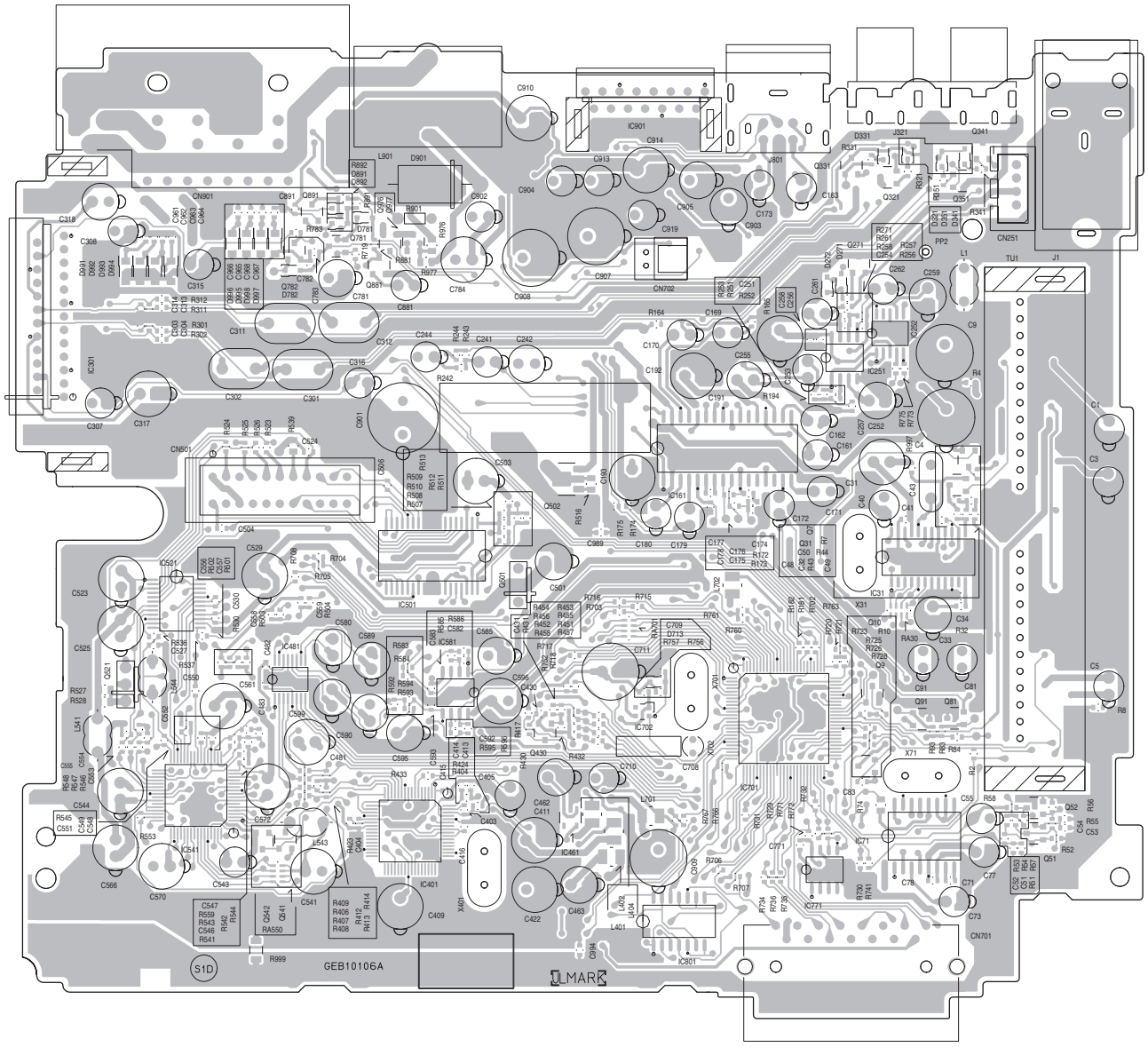
3. COMPONENTS IN ( ) INDICATE NOT USE.

SHEET 3

Printed circuit boards

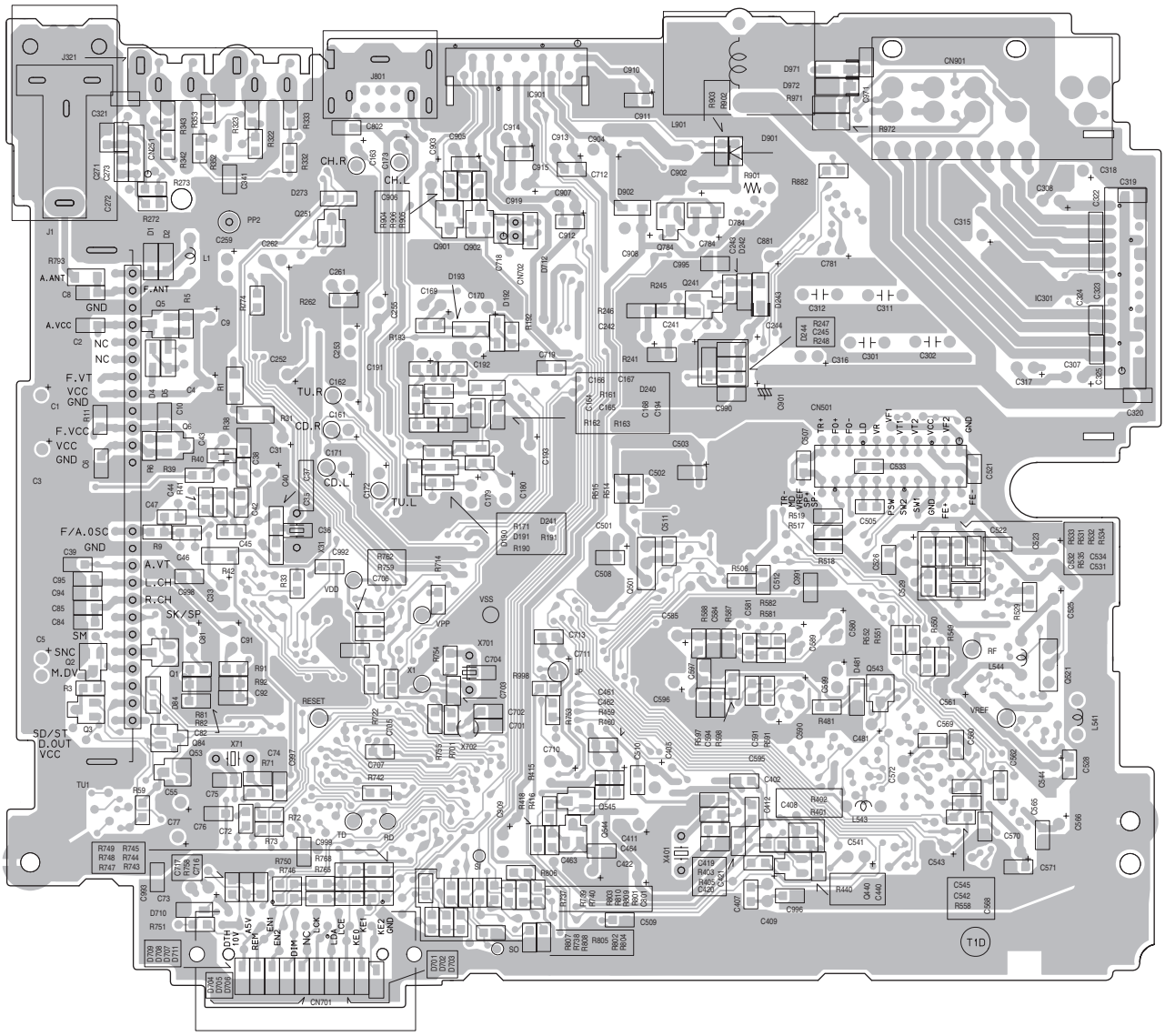
■ Main board

Forward side

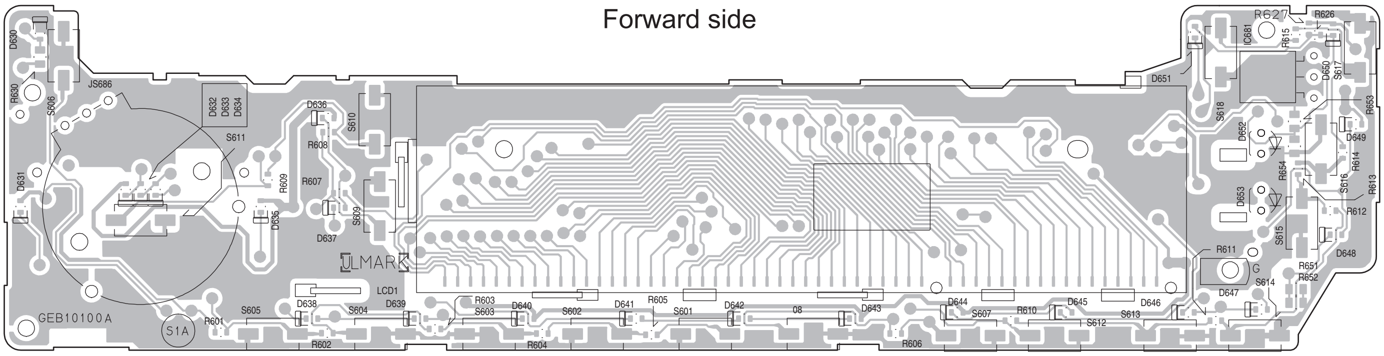


■ Main board

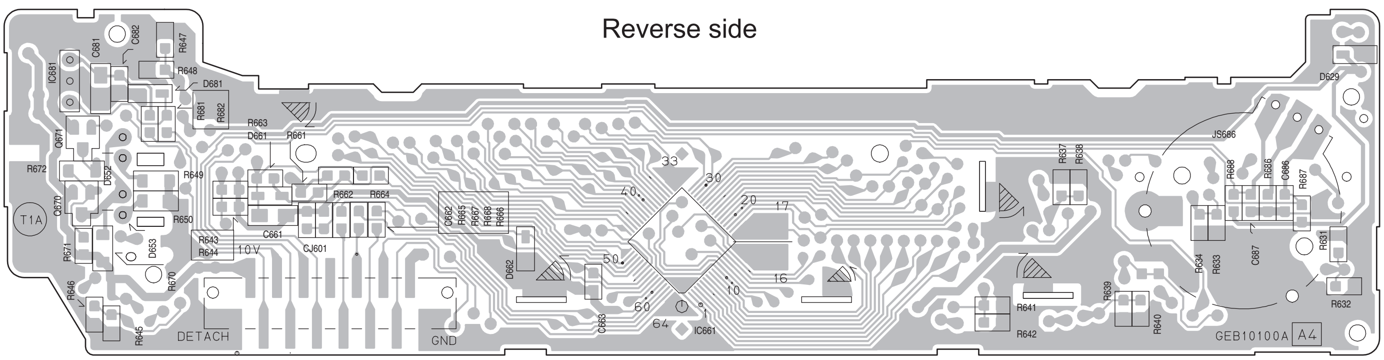
Reverse side



■ Front board



Forward side



Reverse side

JVC

Victor Company of Japan, Limited
AV & MULTIMEDIA COMPANY CAR ELECTRONICS CATEGORY 10-1,1chome,Ohwatari-machi,Maebashi-city,371-8543,Japan

(No.MA135SCH)

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