

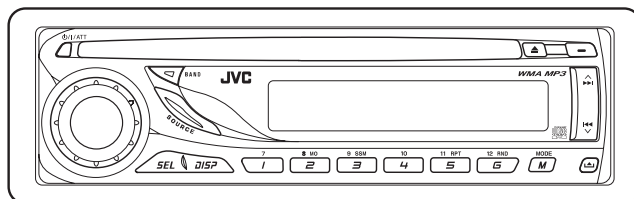
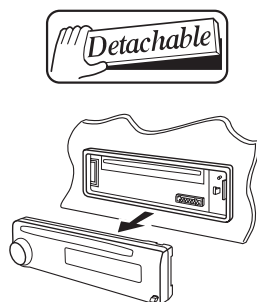
# JVC

## SCHEMATIC DIAGRAMS

### CD RECEIVER

# KD-AR270, KD-G220, KD-G227 KD-G321, KD-G322, KD-G323 KD-G324, KD-G325, KD-G326 KD-G327

CD-ROM No.SML200512



WMA MP3



Lead free solder used in the board (material : Sn-Ag-Cu, melting point : 219 Centigrade)

KD-AR270, KD-G220

Area suffix

J ----- Northern America

KD-G227, KD-G327

Area suffix

EE ----- Russian Federation

KD-G321, KD-G322

Area suffix

E ----- Southern Europe

EX ----- Northern Europe

EY ----- Eastern Europe

EU ----- Turkey

KD-G323, KD-G324

Area suffix

UI ----- India

KD-G325, KD-G326

Area suffix

UT ----- Taiwan

UH ----- Thailand

UN ----- Indonesia

U ----- Other Areas

### Contents

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# Safety precaution

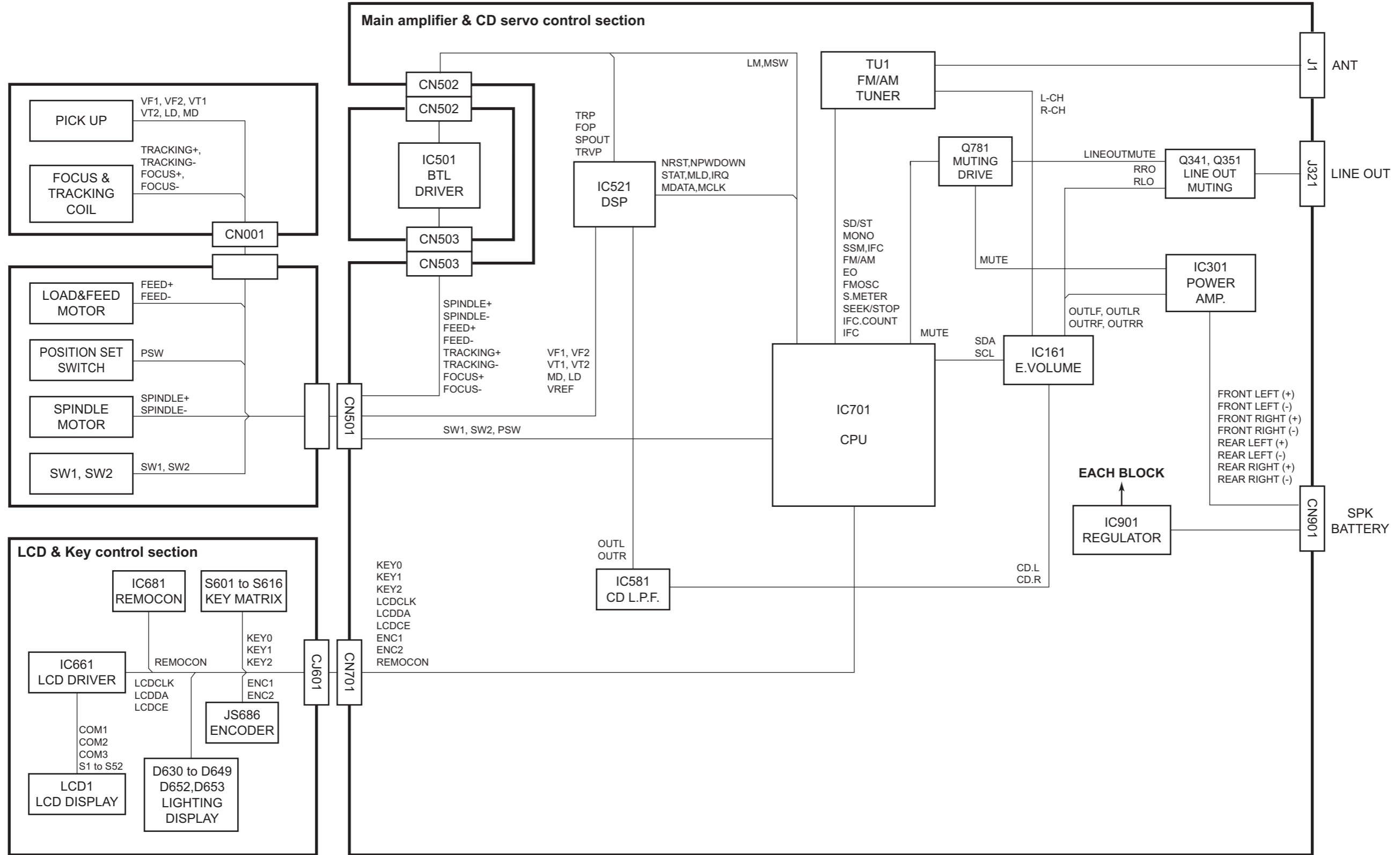
 **CAUTION** Burrs formed during molding may be left over on some parts of the chassis. Therefore, pay attention to such burrs in the case of performing repair of this system.

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

## Difference point

	KD-AR270 KD-G220,KD-G227	KD-G321 KD-G322	KD-G323,KD-G324 KD-G325,KD-G326	KD-G327
Remote ready	YES	NO	YES	YES
Steering remote ready	NO	YES	NO	NO
Power antenna	NO	NO	YES	NO
Telephone Muting	NO	YES	NO	YES

# Block diagram (For KD-AR270,KD-G220,KD-G227,KD-G323,KD-G324,KD-G325,KD-G326)



# Standard schematic diagrams (For KD-AR270, KD-G220, KD-G323, KD-G324, KD-G325, KD-G326)

## Main amplifier section

1. VERSION SETTING

MODEL	KD-AR270J KD-G220J	KD-G323UJ KD-G324UJ KD-G325UJ KD-G326UJ	KD-G323UJ SERIES KD-G324UJ SERIES KD-G325UJ SERIES KD-G326UJ SERIES
D701	USE	USE	USE
D702	USE	NO USE	NO USE
D703	USE	USE	NO USE
D704	USE	NO USE	NO USE

2. TUNER

MODEL	KD-AR270J KD-G220J	KD-G323UJ KD-G324UJ KD-G325UJ KD-G326UJ	KD-G323UJ SERIES KD-G324UJ SERIES KD-G325UJ SERIES KD-G326UJ SERIES
C81-C91	0.022	0.012	
C92-C96	0.1000	0.0500	
R81-R91	3.3k	2.7k	
R82-R92	3.3k	9.1k	
D6	NOT USED	USED	
R16	0 OHM	100k	
C11	0.01	330p	

3. POWER ANTENNA

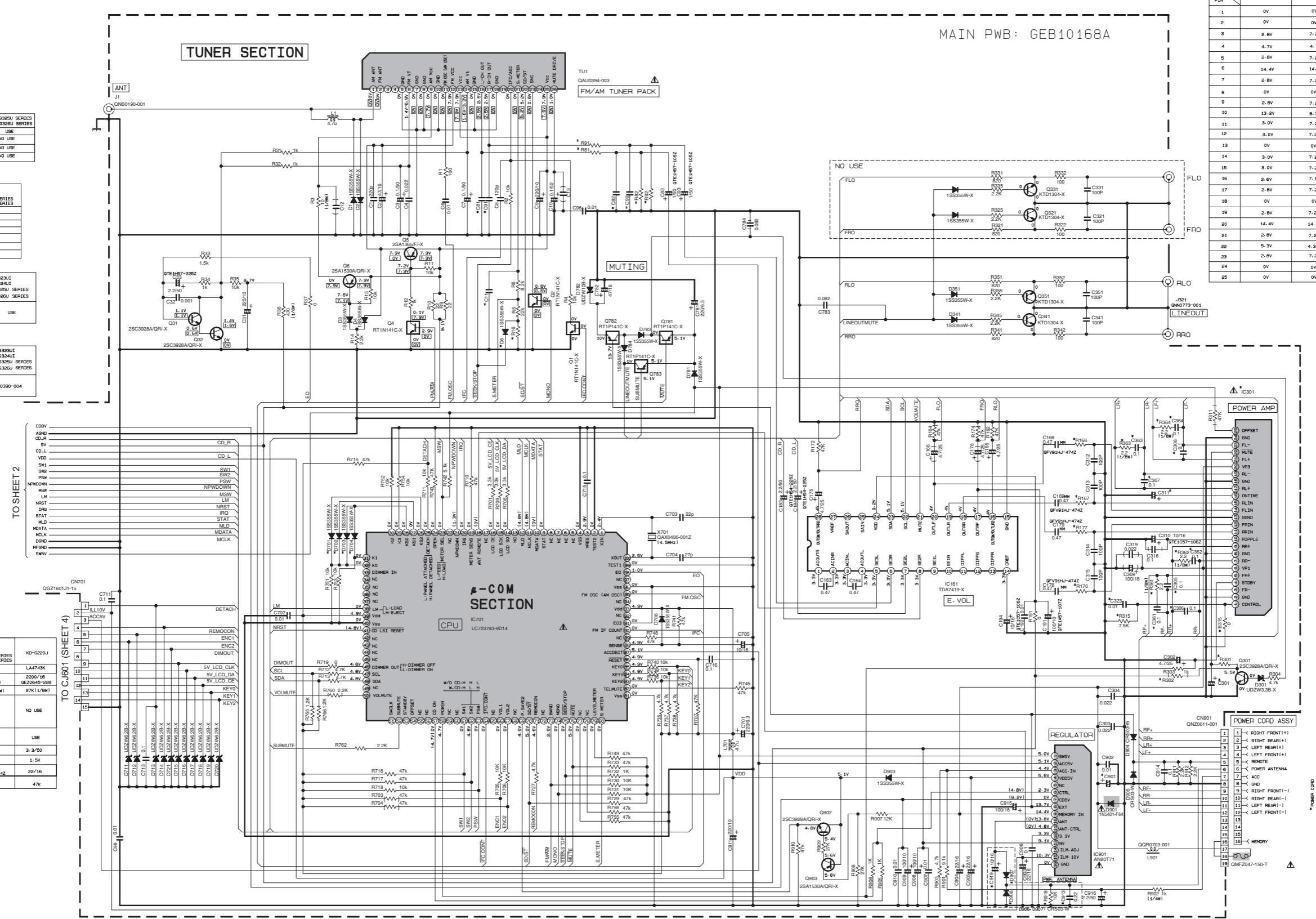
MODEL	KD-AR270J KD-G220J	KD-G323UJ KD-G324UJ KD-G325UJ KD-G326UJ	KD-G323UJ SERIES KD-G324UJ SERIES KD-G325UJ SERIES KD-G326UJ SERIES
C913-C919			
D906-D907	NO USE	USE	
R918			

4. POWER CORD

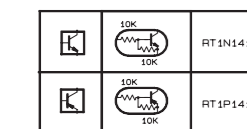
MODEL	KD-AR270J KD-G220J	KD-G323UJ KD-G324UJ KD-G325UJ KD-G326UJ	KD-G323UJ SERIES KD-G324UJ SERIES KD-G325UJ SERIES KD-G326UJ SERIES
PART NO.	QAM013-008	QAM030-004	

5. POWER IC

MODEL	KD-AR270J KD-G220J	KD-G323UJ KD-G324UJ KD-G325UJ KD-G326UJ	KD-G323UJ SERIES KD-G324UJ SERIES KD-G325UJ SERIES KD-G326UJ SERIES
IC301	L44743K	LA4720150M	
C901	2700/16	2000/16	
R166-R167, R176-R177	0 OHM (1/8W)	27k (1/8W)	
C361, C362, C363, C364			
R361, R362, R363, R364	USE	NO USE	
C323, R315			
C306, C306, C307, C308	NO USE	USE	
B315			
C301	0.22/50	3.3/50	
R301	1.0k	1.5k	
C311	0.211TF1	22/16	
R302	10k	47k	



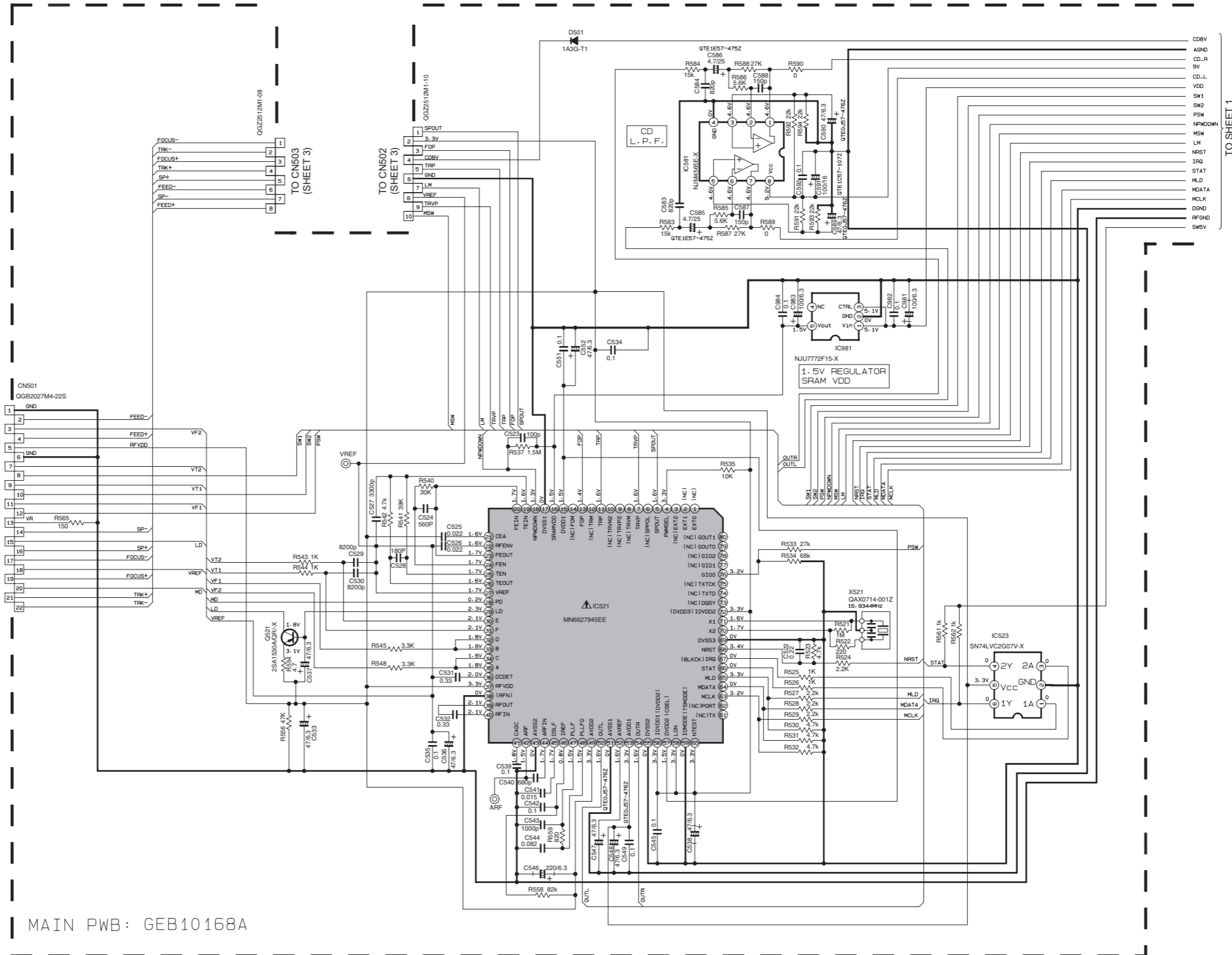
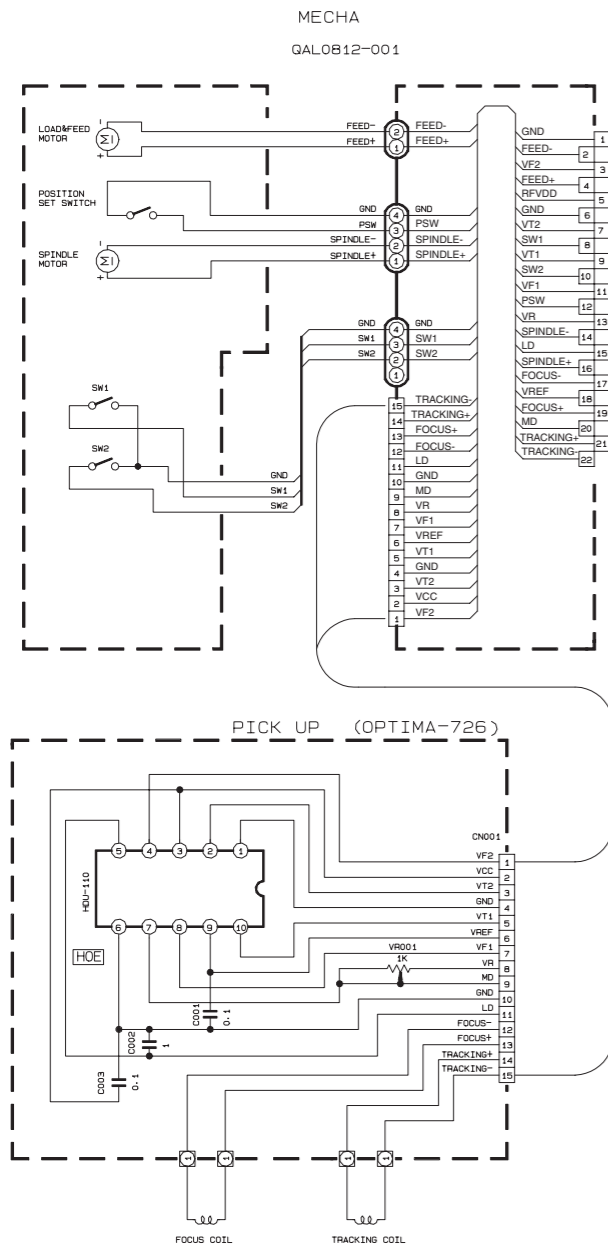
IC301	LA4743K(45K)	LA4720150M
1	0V	0V
2	0V	0V
3	2.5V	7.2V
4	4.7V	4.7V
5	2.5V	7.2V
6	14.4V	14.4V
7	2.5V	7.2V
8	0V	0V
9	2.5V	7.2V
10	13.2V	8.7V
11	3.0V	7.2V
12	3.0V	7.2V
13	0V	0V
14	3.0V	7.2V
15	3.0V	7.2V
16	2.6V	7.1V
17	2.5V	7.2V
18	0V	0V
19	2.5V	7.2V
20	14.4V	14.4V
21	2.5V	7.2V
22	5.3V	4.3V
23	2.5V	7.2V
24	0V	0V
25	0V	0V



NOTES:  
 1. VOLTAGE ARE DC-MEASURED WITH A DIGITAL VOLTMETER WITHOUT INPUT SIGNAL CONDITION.  
 2. UNLESS OTHERWISE SPECIFIED:  
 ALL RESISTOR ARE 1/16W ±5%METAL GLAZE RESISTOR.  
 ALL CAPACITOR ARE 50V OR 25V CERAMIC CAPACITOR.  
 ALL RESISTANCE VALUES ARE IN OHM.  
 ALL CAPACITANCE VALUES ARE IN μF(ppf).  
 ALL INDUCTANCE VALUES ARE IN μH.  
 ALL E. CAPACITORS ARE SHOWN IN THE FORM OF CAPACITANCE(μF)/RATED VOLTAGE(V).

Parts are safety assurance parts.  
 When replacing those parts make sure to use the specified one.

CD servo control section (1/2)

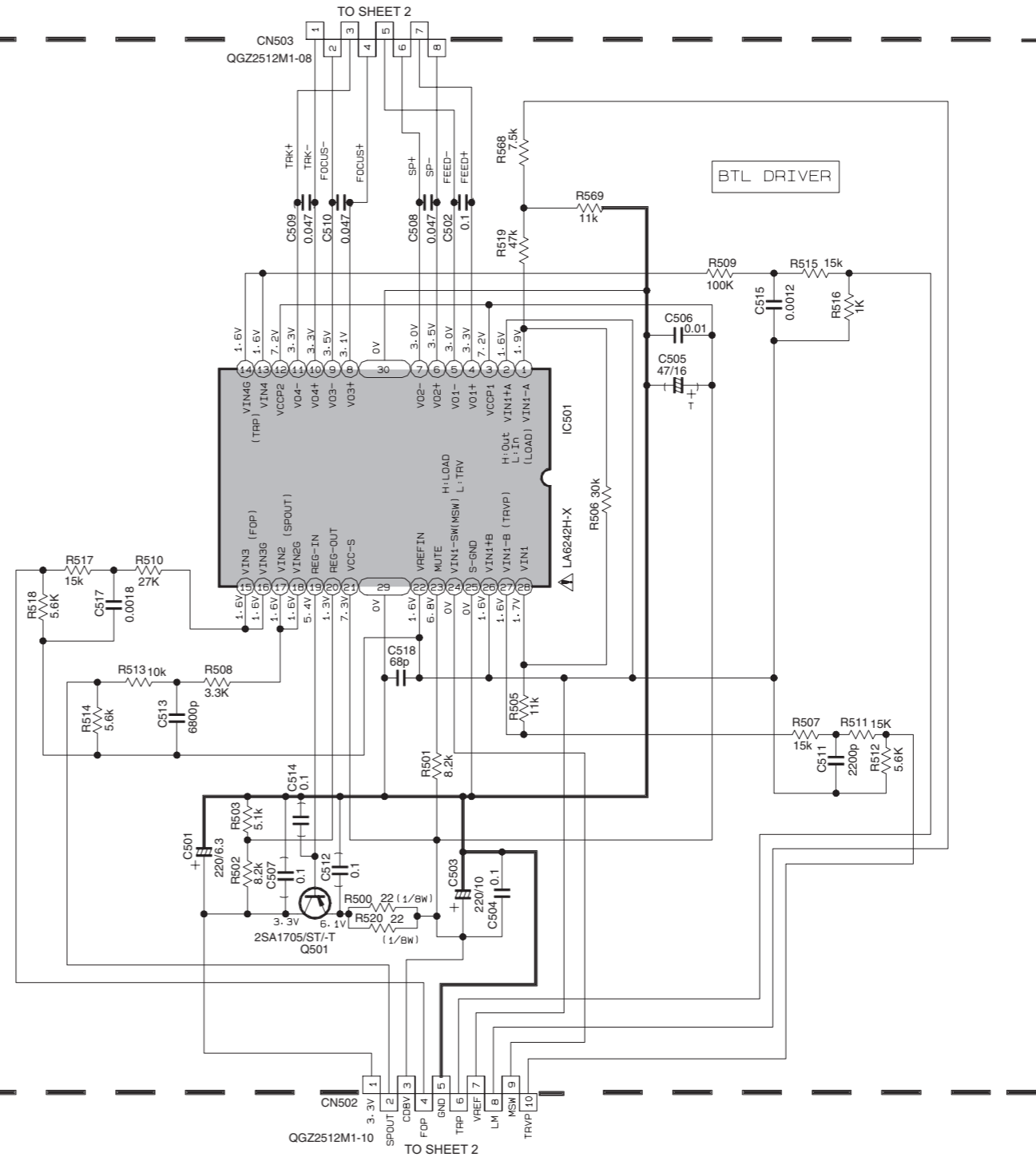


NOTES:

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--- CD MODE.
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ALL CAPACITOR ARE 50V OR 25V CERAMIC CAPACITOR.  
ALL RESISTANCE VALUES ARE IN OHM  
ALL CAPACITANCE VALUES ARE IN (UF/P/PF).  
ALL INDUCTANCE VALUES ARE IN UH  
ALL E. CAPACITORS ARE SHOWN IN THE FORM OF CAPACITANCE(UF)/RATED VOLTAGE(V)

▲ Parts are safety assurance parts.  
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FUNCTION PWB: GEB10180A




NOTES:

1. VOLTAGE ARE DC-MEASURED WITH A DIGITAL VOLTMETER WITHOUT INPUT SIGNAL CONDITION --- CD MODE.

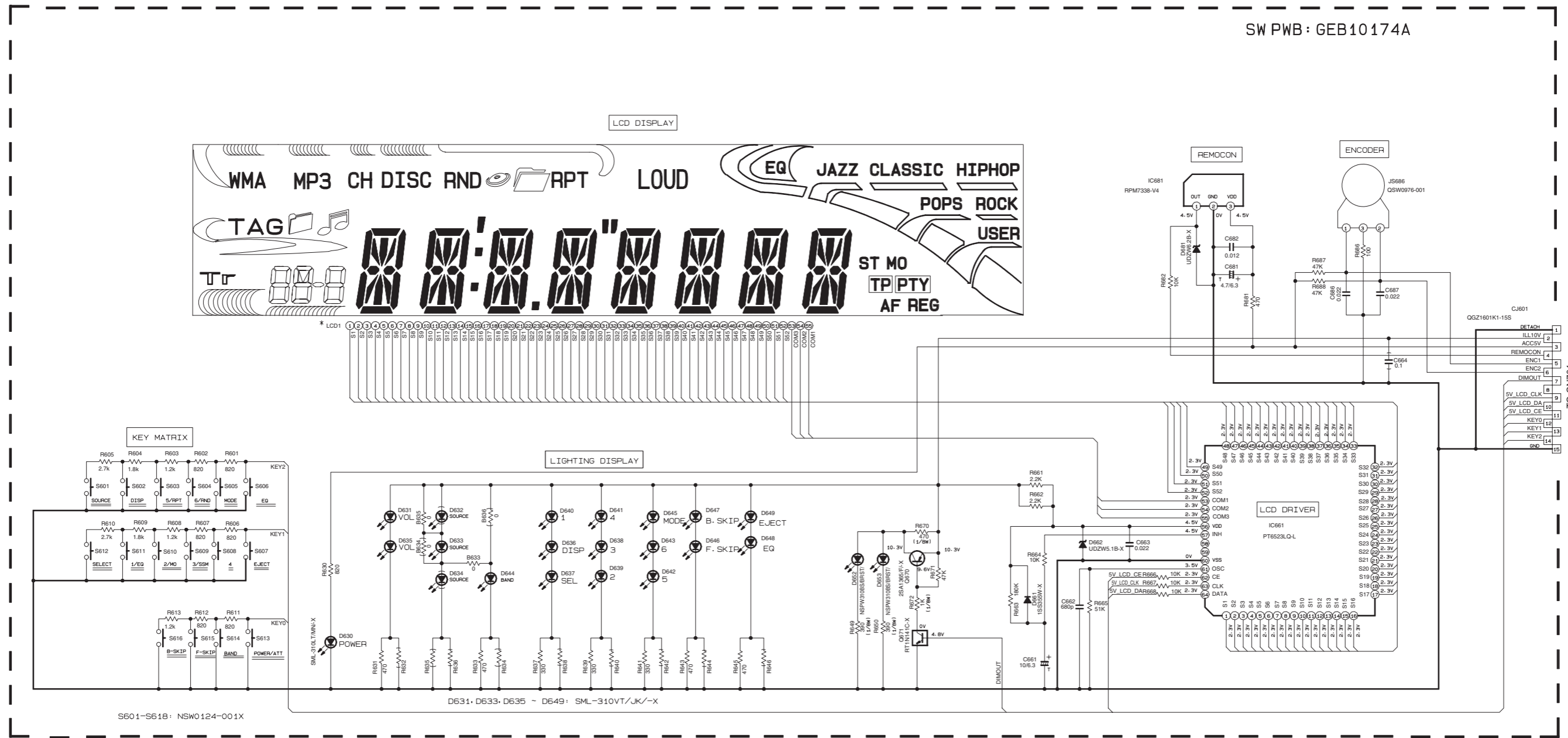
2. UNLESS OTHERWISE SPECIFIED.

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 ALL CAPACITOR ARE 50V OR 25V CERAMIC CAPACITOR.  
 ALL RESISTANCE VALUES ARE IN OHM  
 ALL CAPACITANCE VALUES ARE IN uF (p=pF).  
 ALL INDUCTANCE VALUES ARE IN uH  
 ALL E. CAPACITORS ARE SHOWN IN THE FORM OF CAPACITANCE(uF)/RATED VOLTAGE(V)

 Parts are safety assurance parts. When replacing those parts make sure to use the specified one.

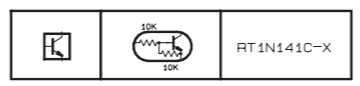
■ LCD & Key control section

SW PWB : GEB10174A



S601-S618: NSW0124-001X

D631, D633, D635 ~ D649: SML-310VT/UK/-X

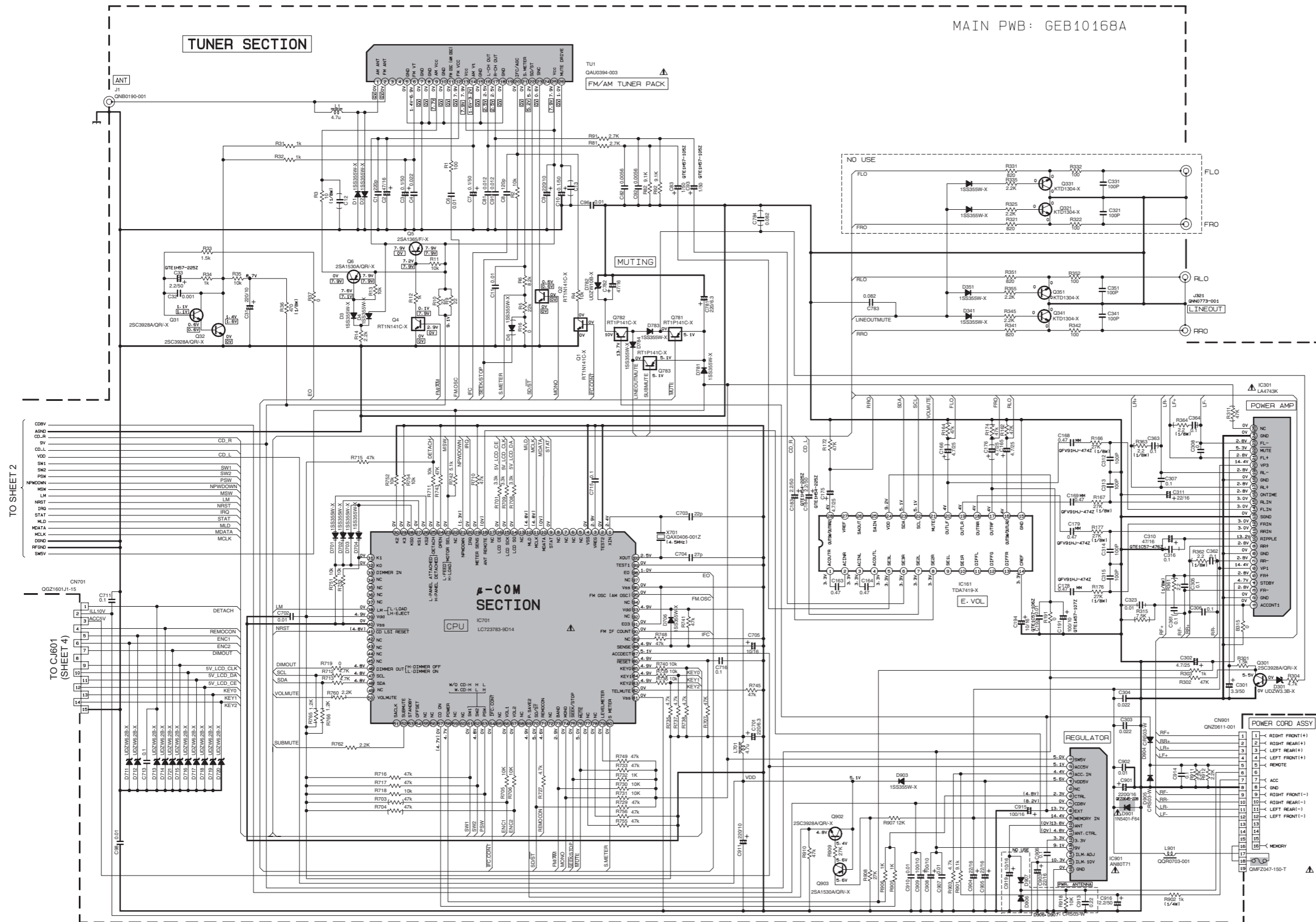


- NOTES
- VOLTAGES ARE DC-MEASURED WITH A DIGITAL VOLT METER WITHOUT INPUT SIGNAL.
  - UNLESS OTHERWISE SPECIFIED, ALL RESISTORS ARE 1/16W ±5% METAL GLAZE RESISTOR. ALL CAPACITORS ARE 50V OR 25V CERAMIC CAPACITOR. ALL RESISTANCE VALUES ARE IN OHM. ALL CAPACITANCE VALUES ARE IN uF(P=pF) ALL E. CAPACITORS ARE SHOWN IN THE FORM OF CAPACITANCE(uF)/RATED VOLTAGE(V) T --- TANTALUM CAPACITOR.
  - COMPONENTS IN ( ) INDICATE NOT USE.

MODEL	KD-AR270J KD-G220J	KD-G323UI KD-G324UI KD-G325U SERIES KD-G326U SERIES
LCD1	QLD0419-001	QLD0390-001

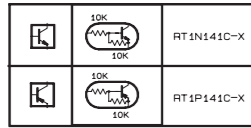
# Standard schematic diagrams (For KD-G227)

## ■ Main amplifier section



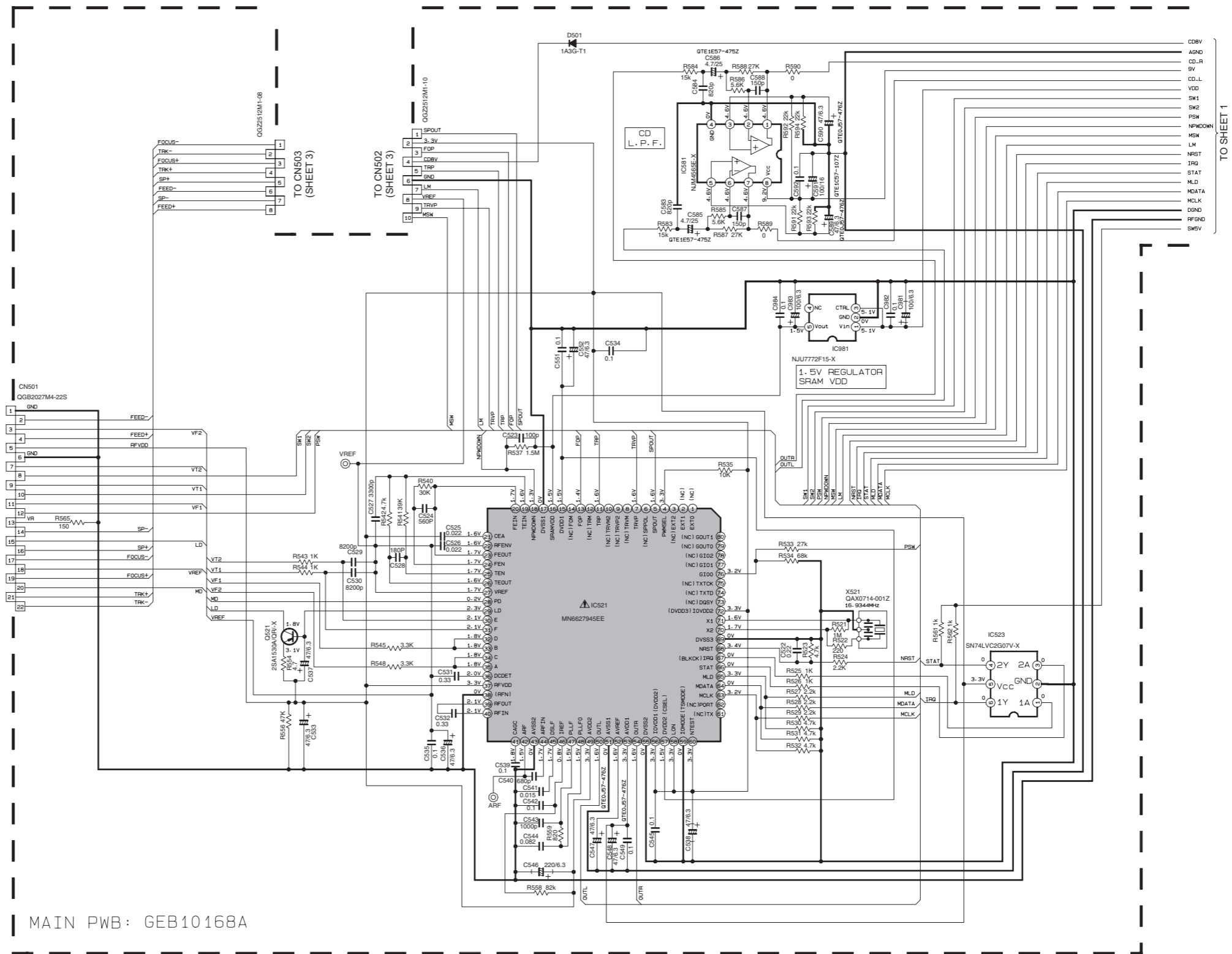
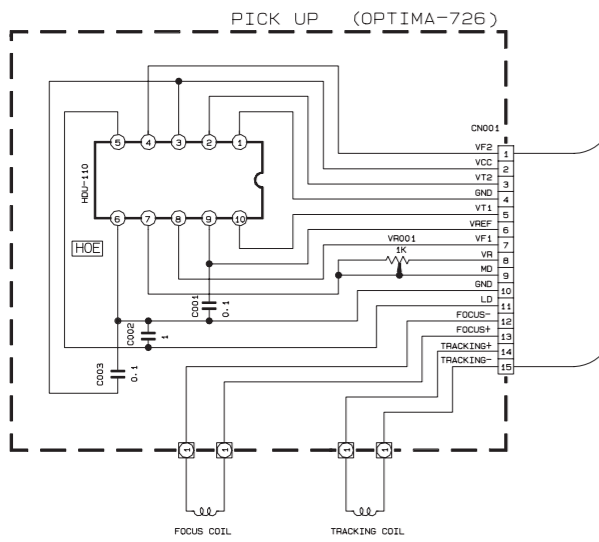
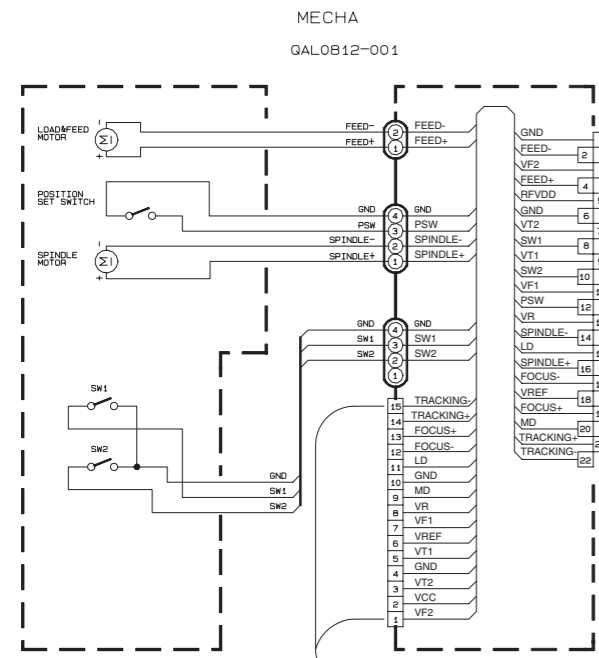
NOTES:  
 1. VOLTAGE ARE DC-MEASURED WITH A DIGITAL VOLT-METER WITHOUT INPUT SIGNAL CONDITION (—FM) (—AM MODE, 1) (CD MODE)  
 2. UNLESS OTHERWISE SPECIFIED:  
 ALL RESISTOR ARE 1/16W ±5% TOLERANCE GLAZE RESISTOR.  
 ALL CAPACITOR ARE 50V OR 25V CERAMIC CAPACITOR.  
 ALL RESISTANCE VALUES ARE IN OHM  
 ALL CAPACITANCE VALUES ARE IN μF (μ=10<sup>-6</sup>)  
 ALL INDUCTANCE VALUES ARE IN μH  
 ALL E. CAPACITORS ARE SHOWN IN THE FORM OF CAPACITANCE(μF)/RATED VOLTAGE(V)

▲ Parts are safety assurance parts.  
 When replacing those parts make sure to use the specified one.





CD servo control section (1/2)

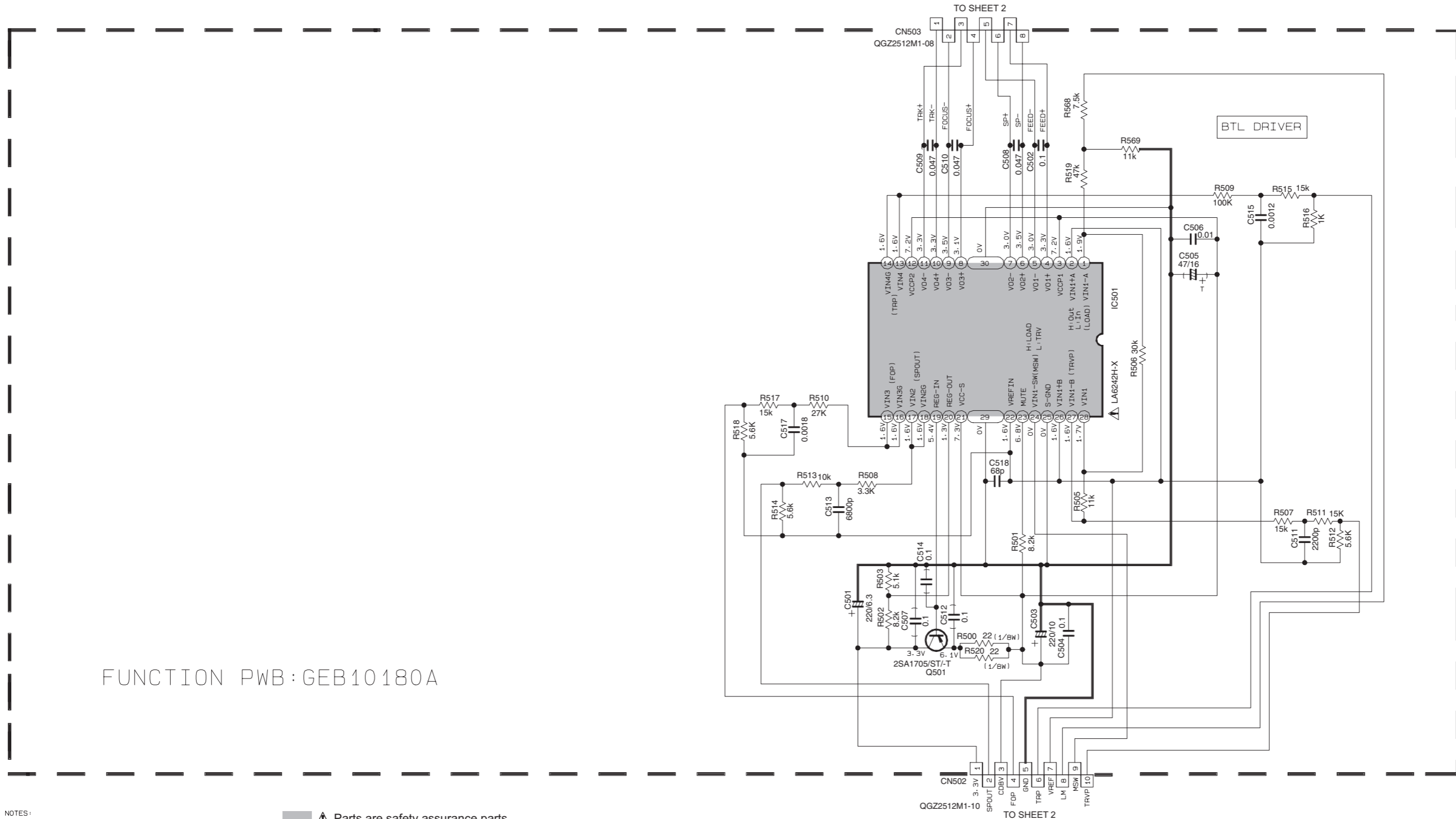


NOTES:

- VOLTAGE ARE DC-MEASURED WITH A DIGITAL VOLTMETER WITHOUT INPUT SIGNAL CONDITION --- CD MODE.
- UNLESS OTHERWISE SPECIFIED, ALL RESISTOR ARE 1/16W ±5%METAL GLAZE RESISTOR. ALL CAPACITOR ARE 50V OR 25V CERAMIC CAPACITOR. ALL RESISTANCE VALUES ARE IN OHM. ALL CAPACITANCE VALUES ARE IN uF(p+pF). ALL INDUCTANCE VALUES ARE IN uH. ALL E. CAPACITORS ARE SHOWN IN THE FORM OF CAPACITANCE(uF)/RATED VOLTAGE(V)

▲ Parts are safety assurance parts. When replacing those parts make sure to use the specified one.

CD servo control section (2/2)




FUNCTION PWB: GEB10180A

NOTES:

1. VOLTAGE ARE DC-MEASURED WITH A DIGITAL VOLTMETER WITHOUT INPUT SIGNAL CONDITION --- CD MODE.

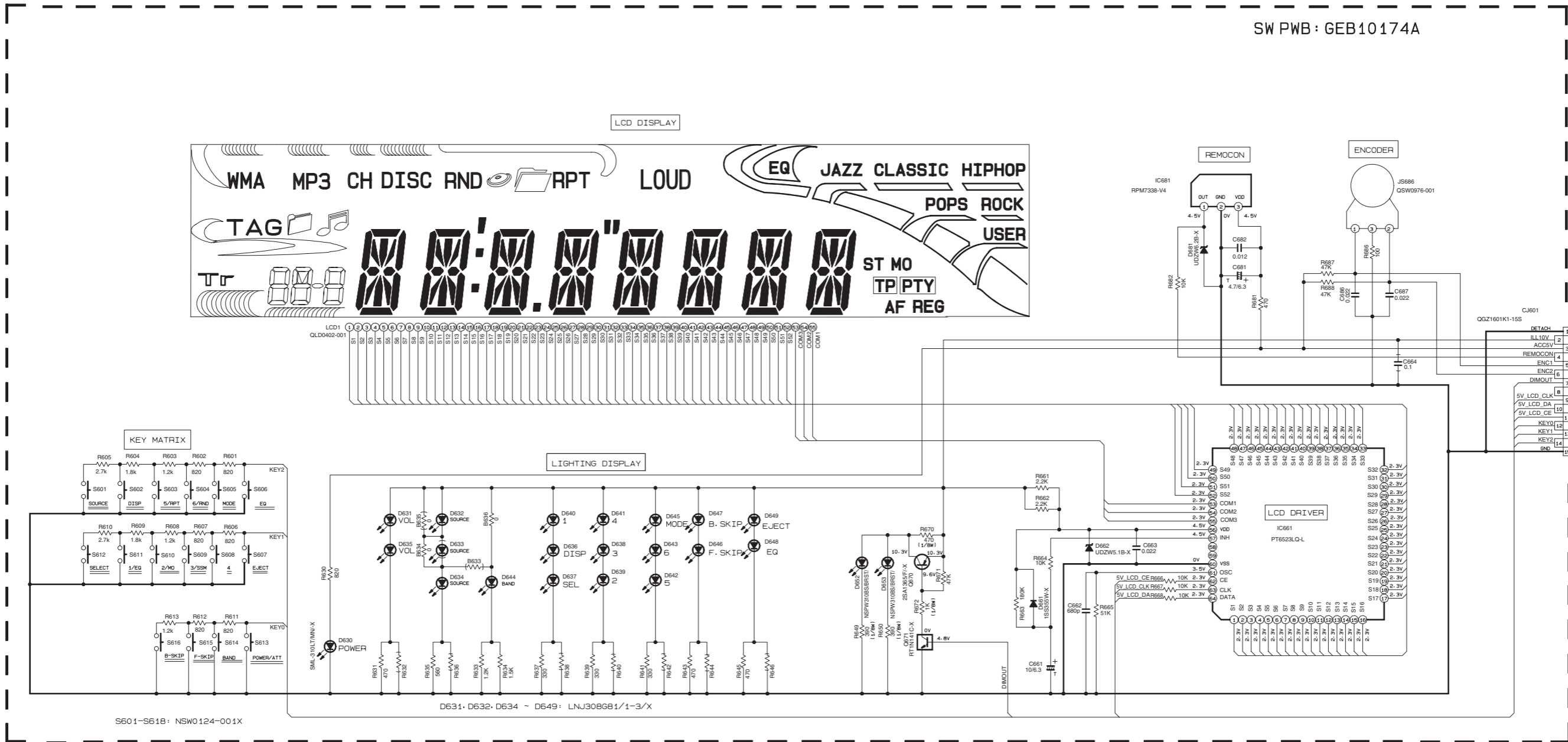
2. UNLESS OTHERWISE SPECIFIED.

ALL RESISTOR ARE 1/16W ±5%METAL GLAZE RESISTOR.  
 ALL CAPACITOR ARE 50V OR 25V CERAMIC CAPACITOR.  
 ALL RESISTANCE VALUES ARE IN OHM  
 ALL CAPACITANCE VALUES ARE IN uF(p=pF).  
 ALL INDUCTANCE VALUES ARE IN uH  
 ALL E. CAPACITORS ARE SHOWN IN THE FORM OF CAPACITANCE(uF)/RATED VOLTAGE(V)

 Parts are safety assurance parts.  
 When replacing those parts make sure to use the specified one.

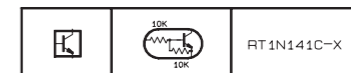
■ LCD & Key control section

SW PWB : GEB10174A



S601-S618 : NSW0124-001X

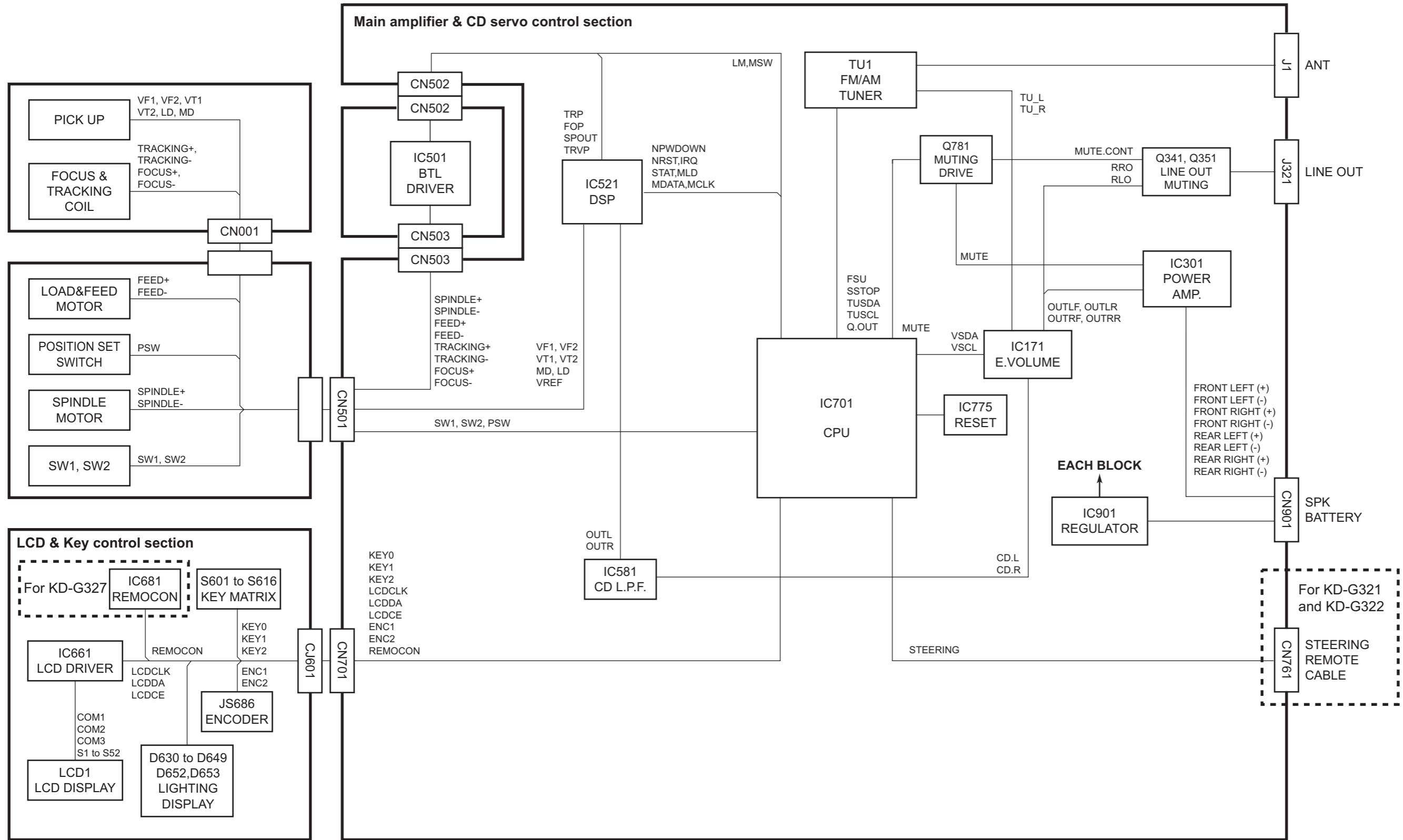
D631-D632-D634 - D649 : LNJ308G81/1-3/X



NOTES

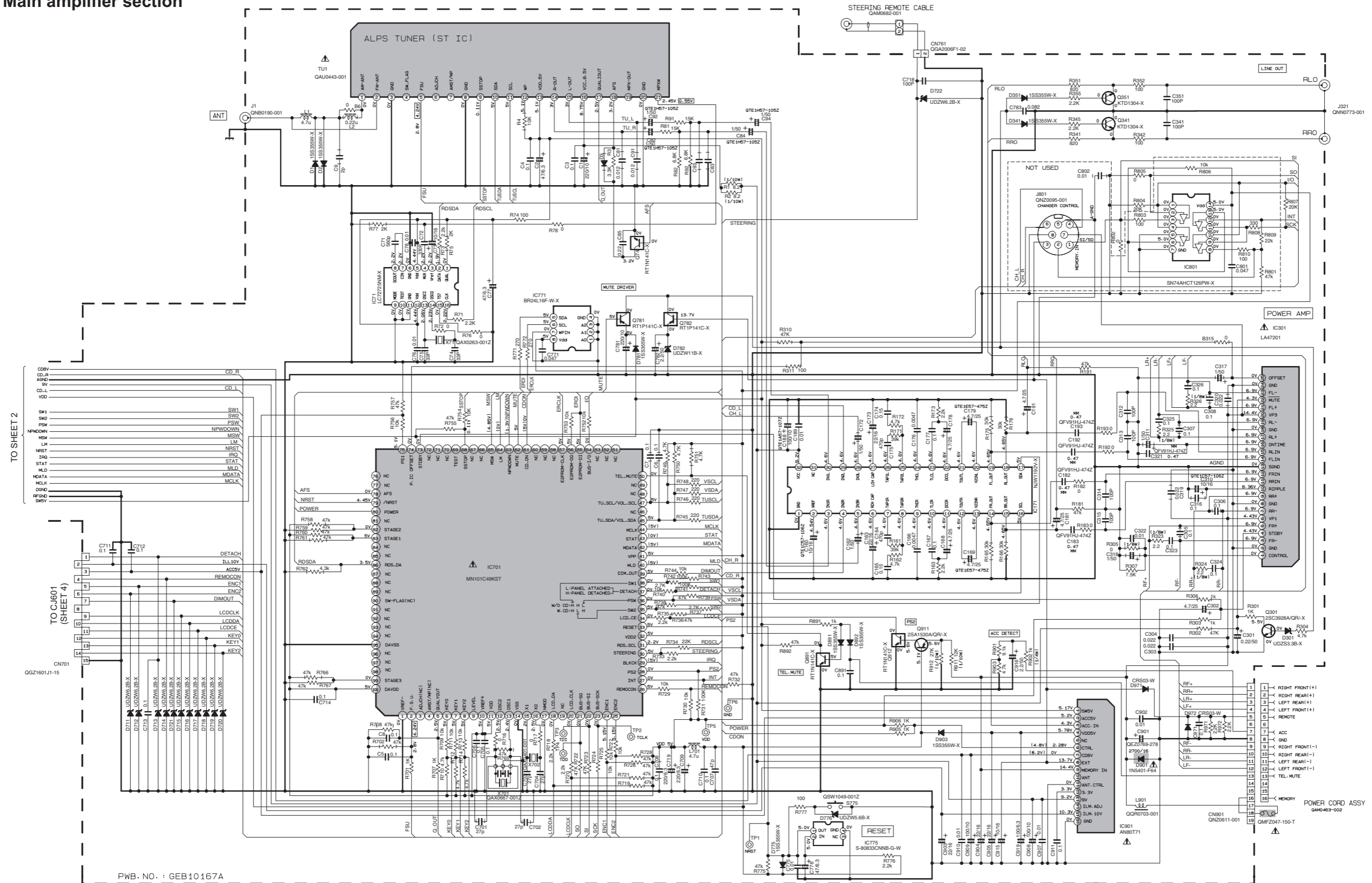
- VOLTAGES ARE DC-MEASURED WITH A DIGITAL VOLT METER WITHOUT INPUT SIGNAL.
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ALL RESISTORS ARE 1/16W ±5% METAL GLAZE RESISTOR.  
ALL CAPACITORS ARE 50V OR 25V CERAMIC CAPACITOR.  
ALL RESISTANCE VALUES ARE IN OHM.  
ALL CAPACITANCE VALUES ARE IN uF(P=pF)  
ALL E-CAPACITORS ARE SHOWN IN THE FORM OF CAPACITANCE(uF)/RATED VOLTAGE(V)  
T --- TANTALUM CAPACITOR.
- COMPONENTS IN ( ) INDICATE NOT USE.

# Block diagram (For KD-G321,KD-G322,KD-G327)



# Standard schematic diagrams (For KD-G321, KD-G322)

## ■ Main amplifier section



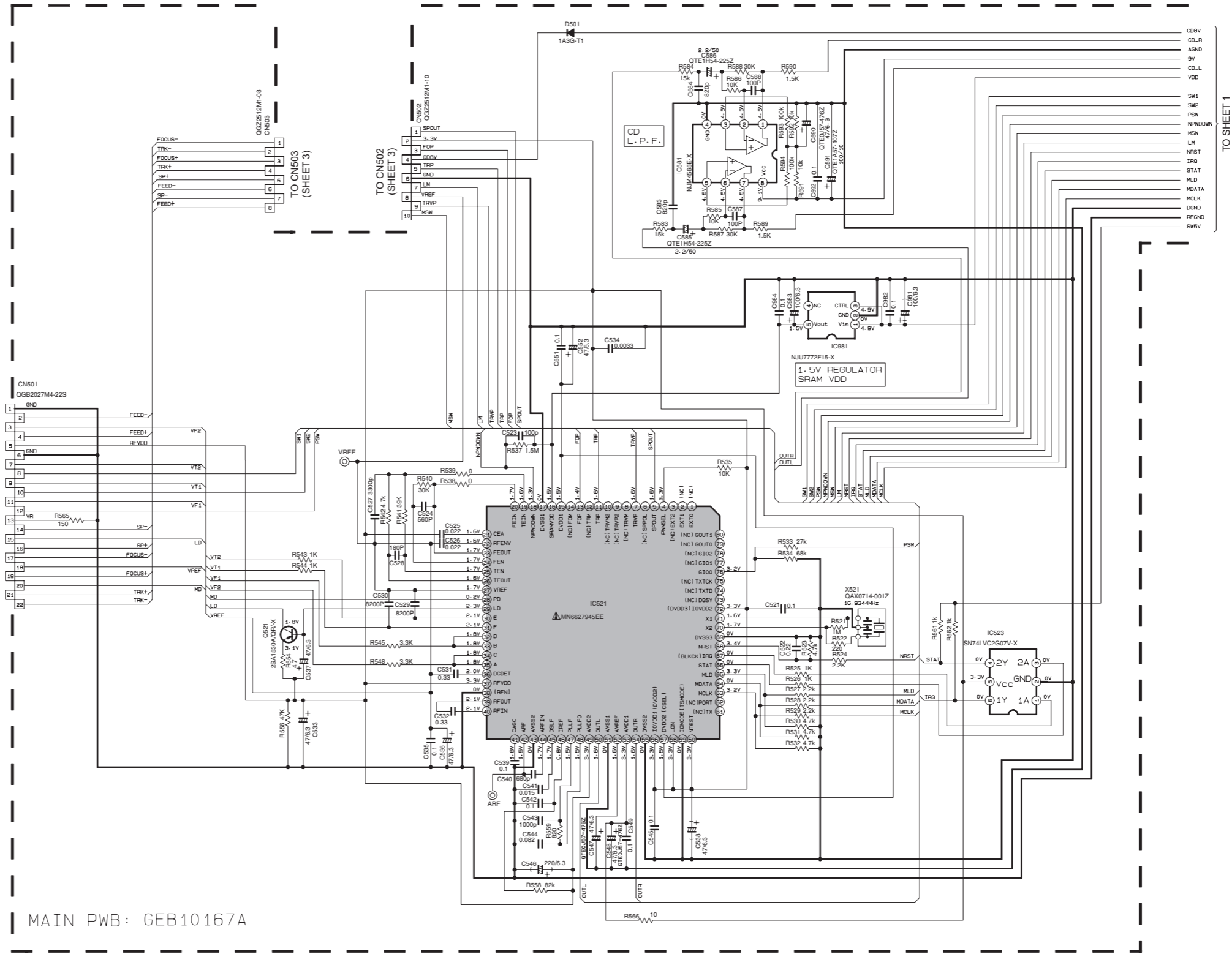
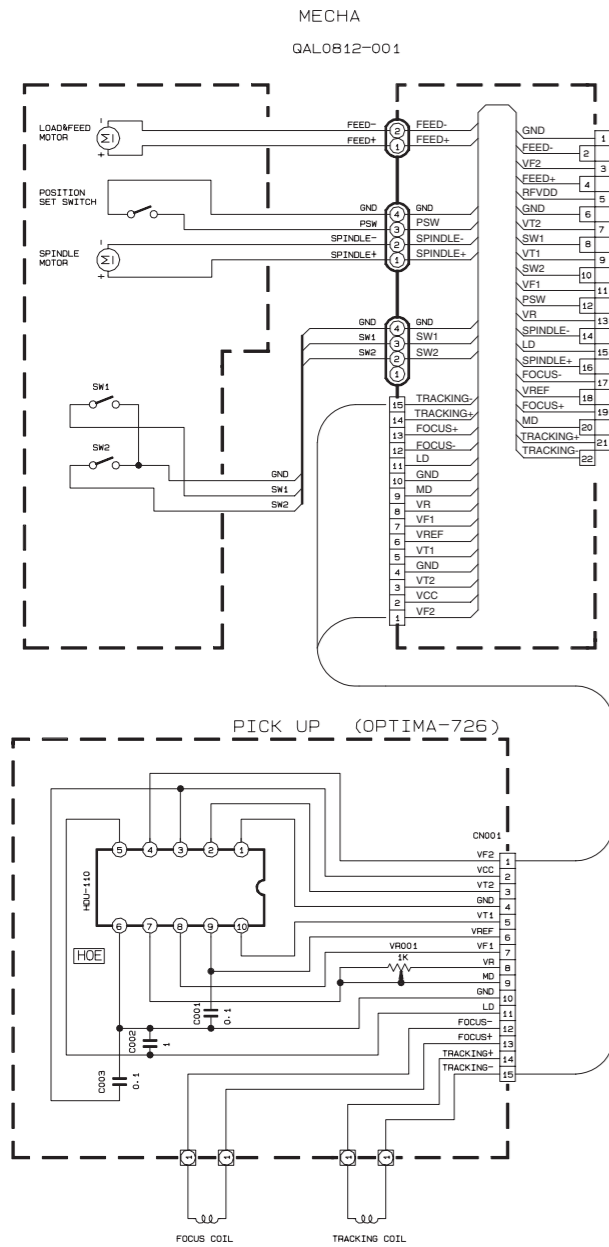
PWB. NO. : GEB10167A

	10K		RT1N141C-X
	10K		RT1P141C-X

▲ Parts are safety assurance parts. When replacing those parts make sure to use the specified one.

- NOTES
- VOLTAGES ARE DC-MEASURED WITH A DIGITAL VOLT METER WITHOUT INPUT SIGNAL CONDITION—FM MODE. □ AM MODE. ( ) CD MODE.
  - 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 (PpF) ALL E. CAPACITORS ARE SHOWN IN THE FORM OF CAPACITANCE(UF)/RATED VOLTAGE(V) TF --- T.F. CAPACITOR
  - COMPONENTS IN ( ) INDICATE NOT USE.

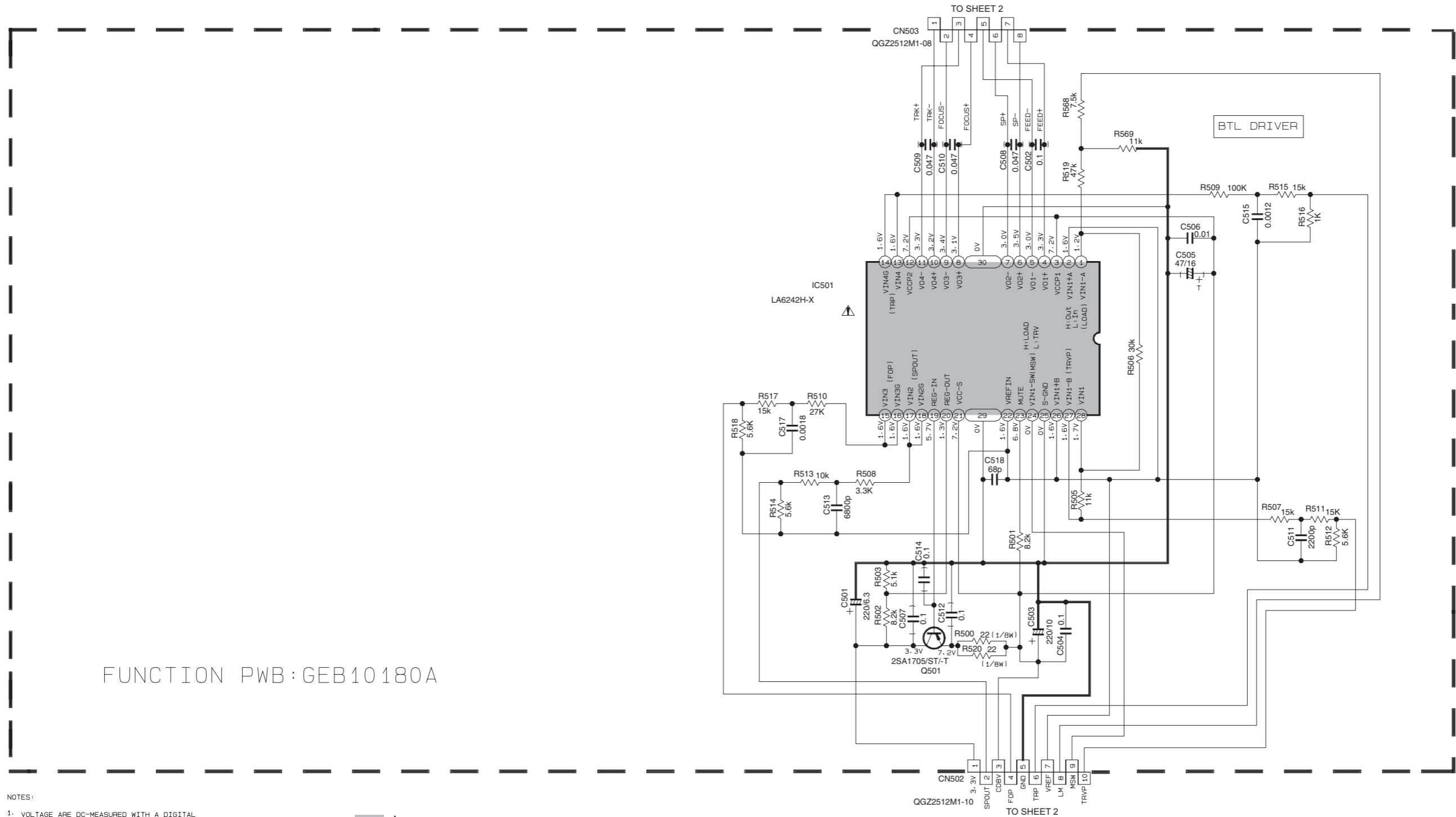
■ CD servo control section (1/2)



NOTES:  
 1. VOLTAGE ARE DC-MEASURED WITH A DIGITAL VOLTMETER WITHOUT INPUT SIGNAL CONDITION --- CD MODE.  
 2. UNLESS OTHERWISE SPECIFIED.  
 ALL RESISTOR ARE 1/16W ±5%METAL GLAZE RESISTOR.  
 ALL CAPACITOR ARE 50V OR 25V CERAMIC CAPACITOR.  
 ALL RESISTANCE VALUES ARE IN OHM.  
 ALL CAPACITANCE VALUES ARE IN uF(μF).  
 ALL INDUCTANCE VALUES ARE IN uH.  
 ALL E. CAPACITORS ARE SHOWN IN THE FORM OF CAPACITANCE(uF)/RATED VOLTAGE(V)

⚠ Parts are safety assurance parts. When replacing those parts make sure to use the specified one.

■ CD servo control section (2/2)

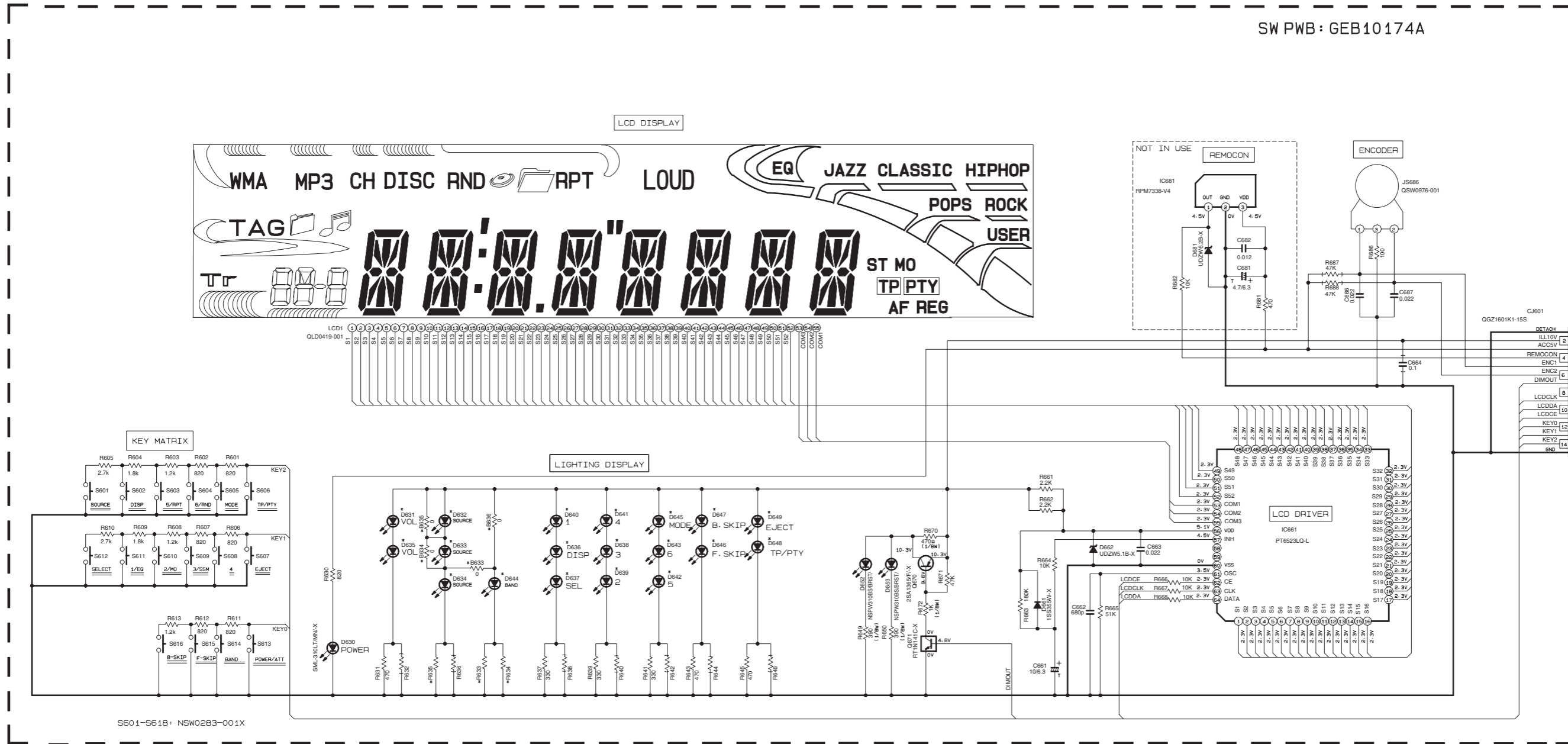


FUNCTION PWB:GEB10180A

- NOTES:
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--- CD MODE.
  - UNLESS OTHERWISE SPECIFIED.  
ALL RESISTOR ARE 1/16W ± 5% METAL GLAZE RESISTOR.  
ALL CAPACITOR ARE 50V OR 25V CERAMIC CAPACITOR.  
ALL RESISTANCE VALUES ARE IN OHM  
ALL CAPACITANCE VALUES ARE IN uF (p=pF).  
ALL INDUCTANCE VALUES ARE IN uH  
ALL E. CAPACITORS ARE SHOWN IN THE FORM OF CAPACITANCE(uF)/RATED VOLTAGE(V)

⚠ Parts are safety assurance parts.  
When replacing those parts make  
sure to use the specified one.

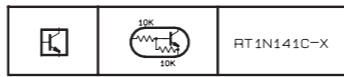
■ LCD & Key control section



SW PWB : GEB10174A

TO CNT01  
(SHEET 1)

REF. NAME	KD-G321E	KD-G322E
D632	LNJ308G81/1-3/X	NO USE
D633	NO USE	SML-310VT/JK/-X
D634	LNJ308G81/1-3/X	NO USE
D631, D635 D636 ~ D649	LNJ308G81/1-3/X	SML-310VT/JK/-X
B633, B635	NO USE	USE
B634, B636	USE	NO USE
R633	1.2k	470
R634	1.5k	NO USE
R635	560	NO USE

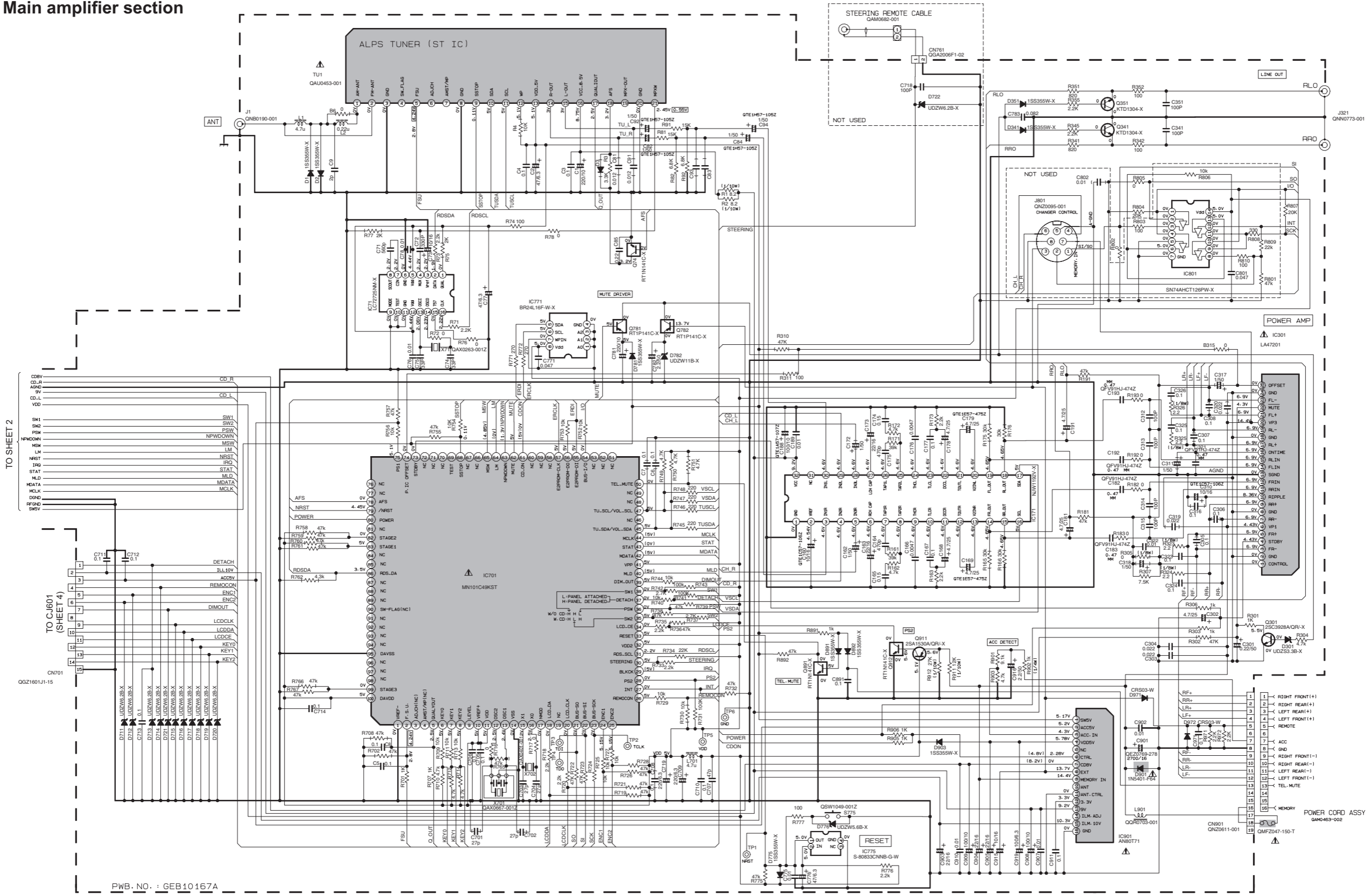


- NOTES
- VOLTAGES ARE DC-MEASURED WITH A DIGITAL VOLT METER WITHOUT INPUT SIGNAL.
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  - COMPONENTS IN ( ) INDICATE NOT USE.



# Standard schematic diagrams (For KD-G327)

## ■ Main amplifier section



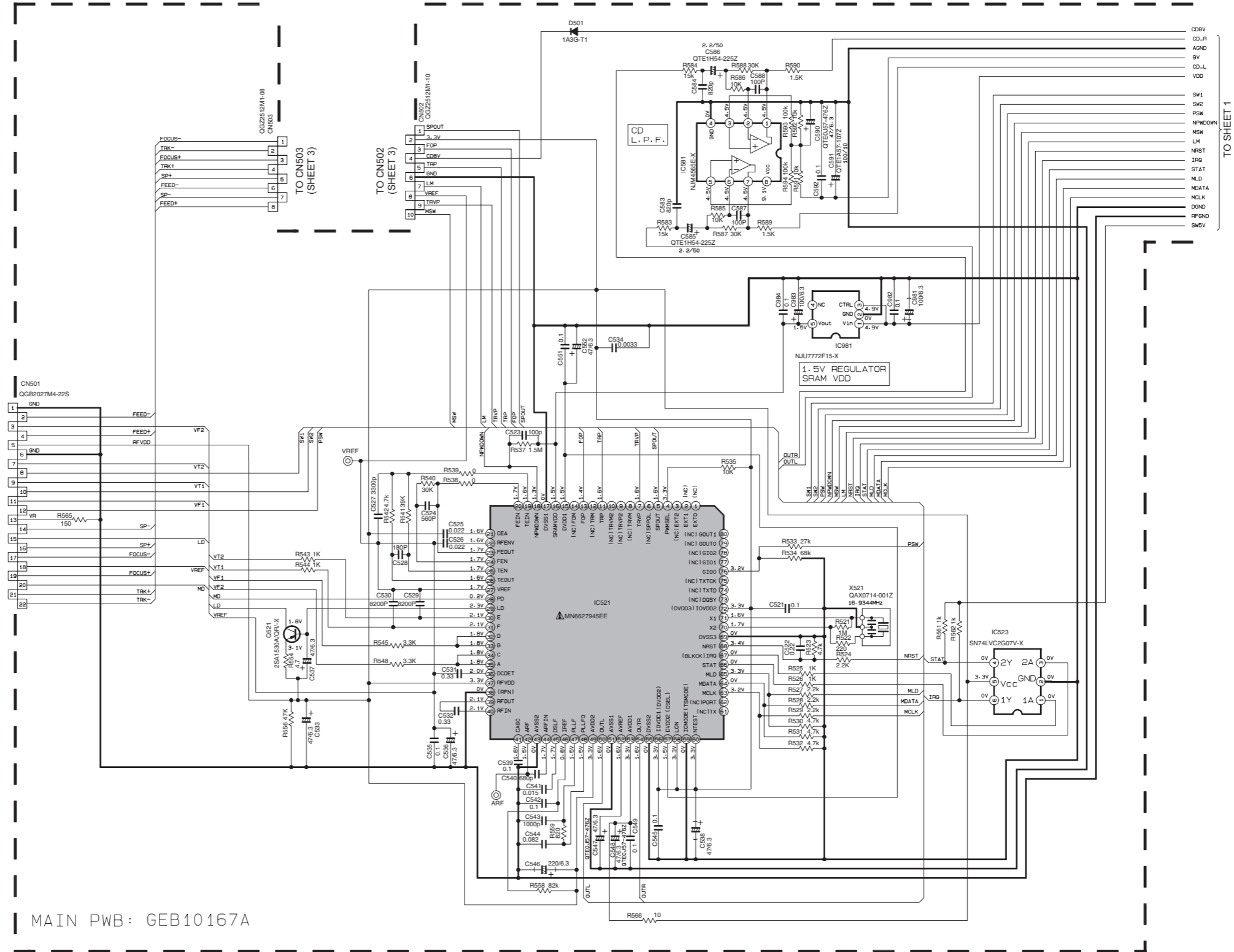
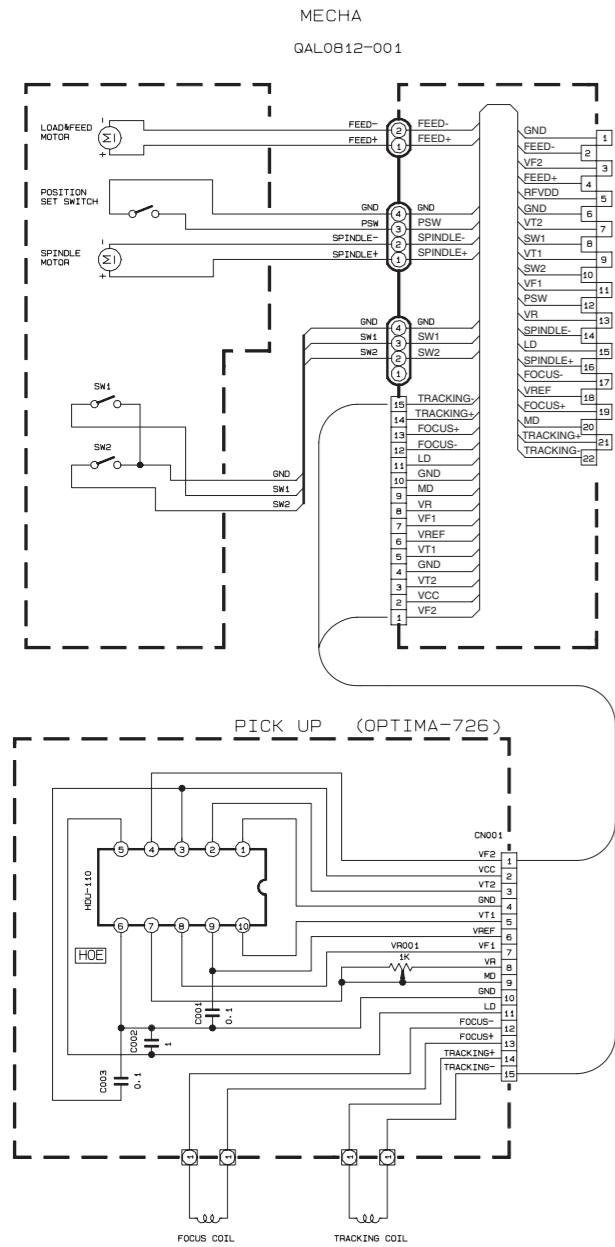
PWB. NO. : GEB10167A

	10k	RT1N141C-X
	10k	RT1P141C-X

▲ Parts are safety assurance parts.  
When replacing those parts make sure to use the specified one.

- NOTES
- VOLTAGES ARE DC-MEASURED WITH A DIGITAL VOLT METER WITHOUT INPUT SIGNAL. CONDITION ---FM MODE. ( ) IC0 MODE.
  - UNLESS OTHERWISE SPECIFIED.  
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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)  
TF --- T. F. CAPACITOR
  - COMPONENTS IN ( ) INDICATE NOT USE.

CD servo control section (1/2)

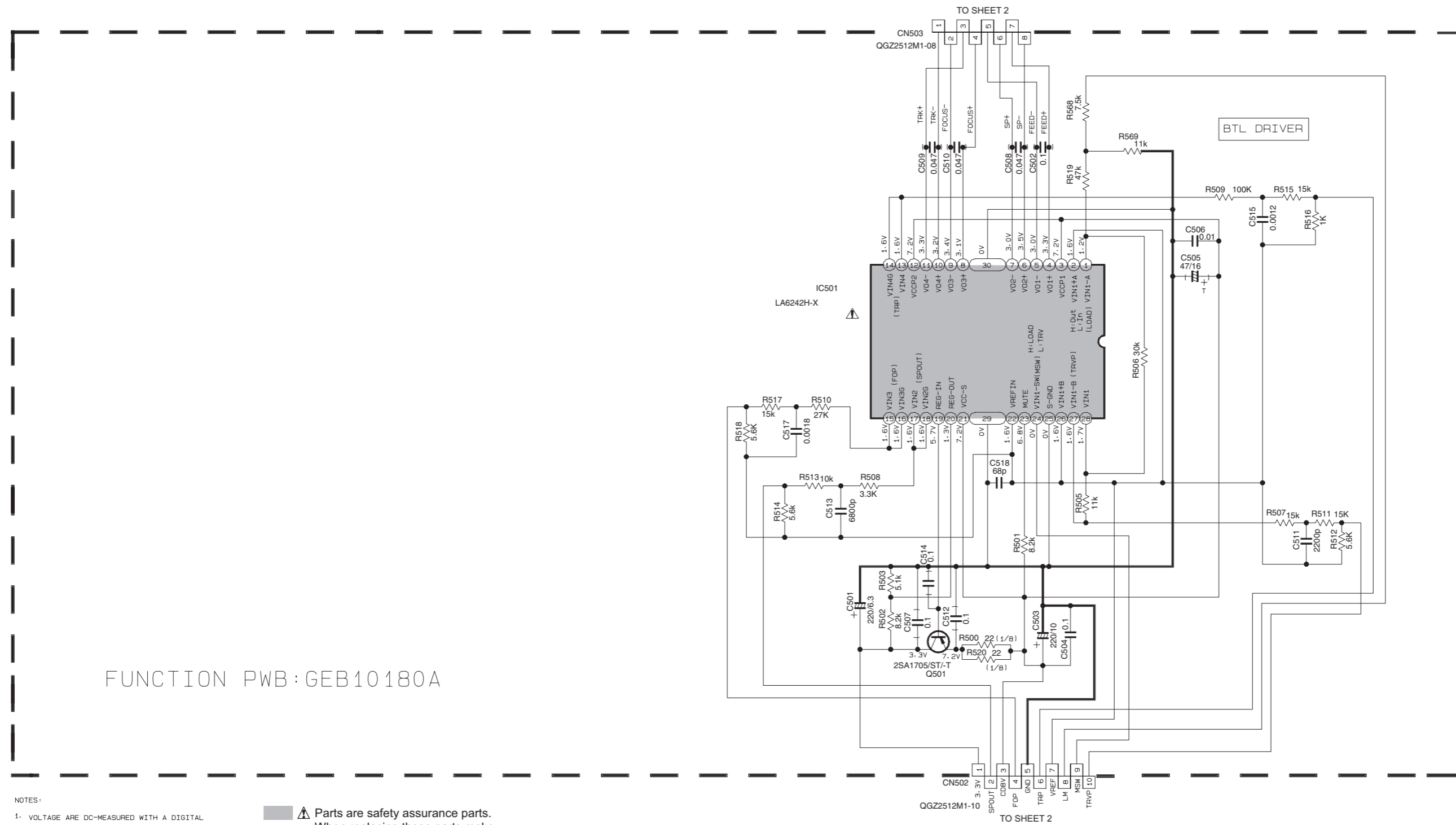


- NOTES:
- VOLTAGE ARE DC-MEASURED WITH A DIGITAL VOLTMETER WITHOUT INPUT SIGNAL CONDITION --- CD MODE.
  - UNLESS OTHERWISE SPECIFIED:  
ALL RESISTOR ARE 1/16W ± 5% METAL GLAZE RESISTOR.  
ALL CAPACITOR ARE 50V OR 25V CERAMIC CAPACITOR.  
ALL RESISTANCE VALUES ARE IN OHM  
ALL CAPACITANCE VALUES ARE IN uF (10=PF).  
ALL INDUCTANCE VALUES ARE IN uH  
ALL CAPACITORS ARE SHOWN IN THE FORM OF CAPACITANCE(uF)/RATED VOLTAGE(V)

Parts are safety assurance parts. When replacing those parts make sure to use the specified one.

TO SHEET 1

■ CD servo control section (2/2)



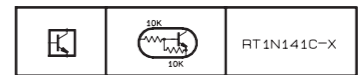
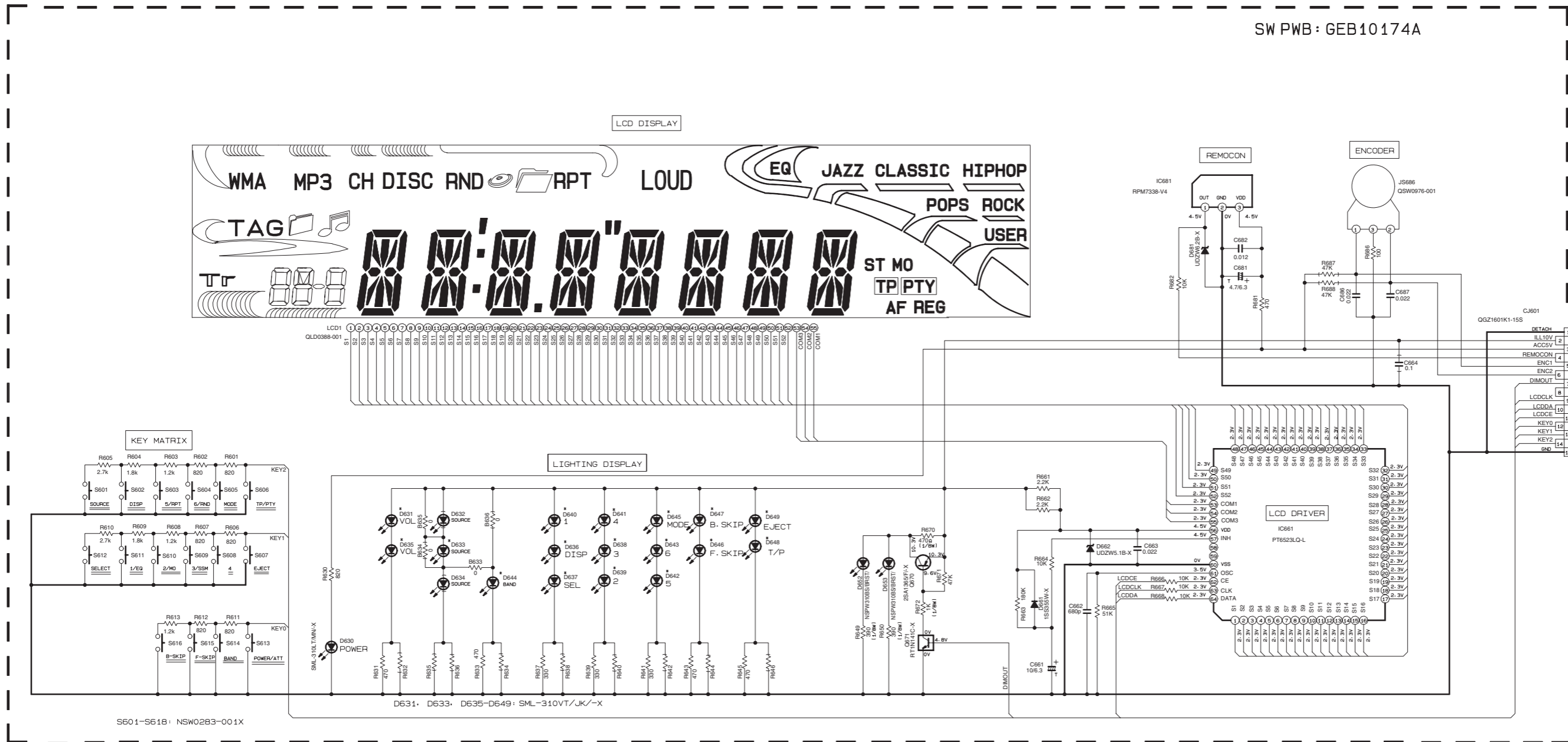
FUNCTION PWB: GEB10180A

NOTES:

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--- CD MODE.
2. UNLESS OTHERWISE SPECIFIED.  
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ALL RESISTANCE VALUES ARE IN OHM  
ALL CAPACITANCE VALUES ARE IN uF(p=pF).  
ALL INDUCTANCE VALUES ARE IN uH  
ALL E. CAPACITORS ARE SHOWN IN THE FORM OF CAPACITANCE(uF)/RATED VOLTAGE(V)

▲ Parts are safety assurance parts.  
When replacing those parts make sure to use the specified one.

■ LCD & Key control section



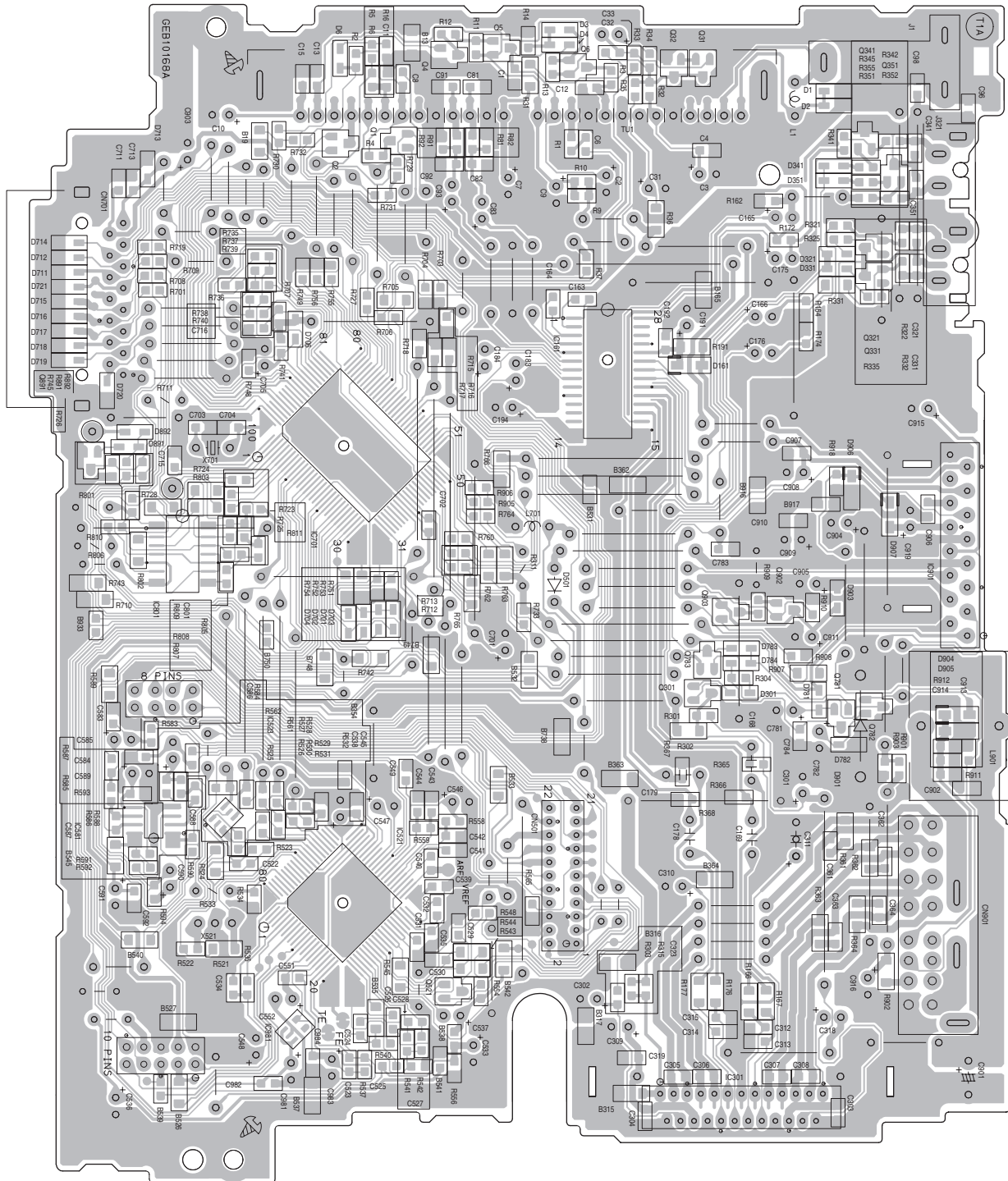
- NOTES
- VOLTAGES ARE DC-MEASURED WITH A DIGITAL VOLT METER WITHOUT INPUT SIGNAL.
  - UNLESS OTHERWISE SPECIFIED.  
ALL RESISTORS ARE 1/16W ±5% METAL GLAZE RESISTOR.  
ALL CAPACITORS ARE 50V OR 25V CERAMIC CAPACITOR.  
ALL RESISTANCE VALUES ARE IN OHM.  
ALL CAPACITANCE VALUES ARE IN uF (p=pF)  
ALL E-CAPACITORS ARE SHOWN IN THE FORM OF CAPACITANCE(uF)/RATED VOLTAGE(V)  
T --- TANTALUM CAPACITOR.
  - COMPONENTS IN ( ) INDICATE NOT USE.

TO CN701  
(SHEET 1)

# Printed circuit boards

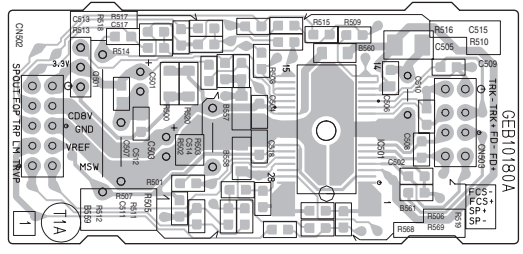
## ■ Main board (For KD-AR270, KD-G220, KD-G227, KD-G323, KD-G324, KD-G325, KD-G326)

Lead free solder used in the board (material : Sn-Ag-Cu, melting point : 219 Centigrade)



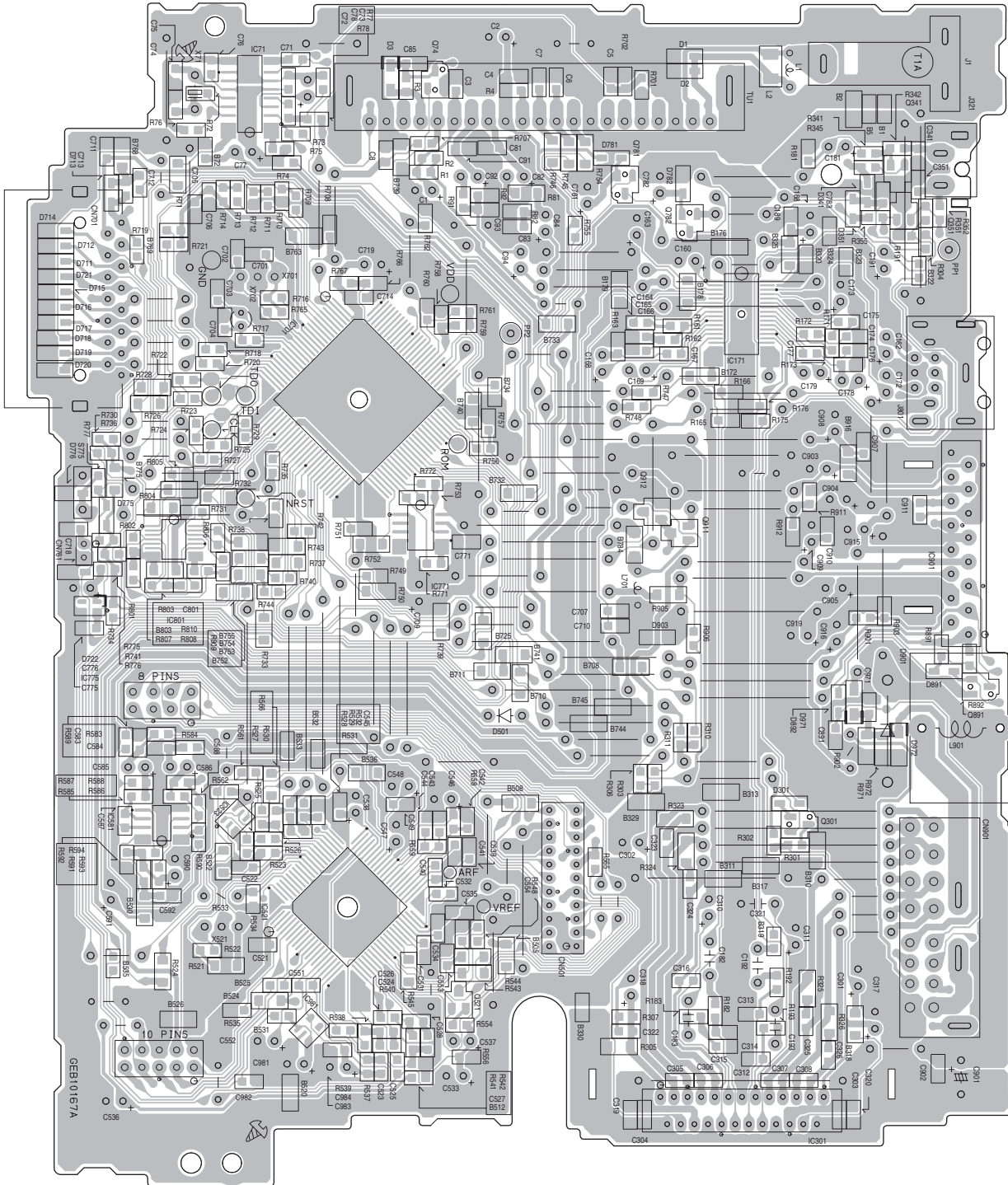
## ■ Function board

Lead free solder used in the board (material : Sn-Ag-Cu, melting point : 219 Centigrade)



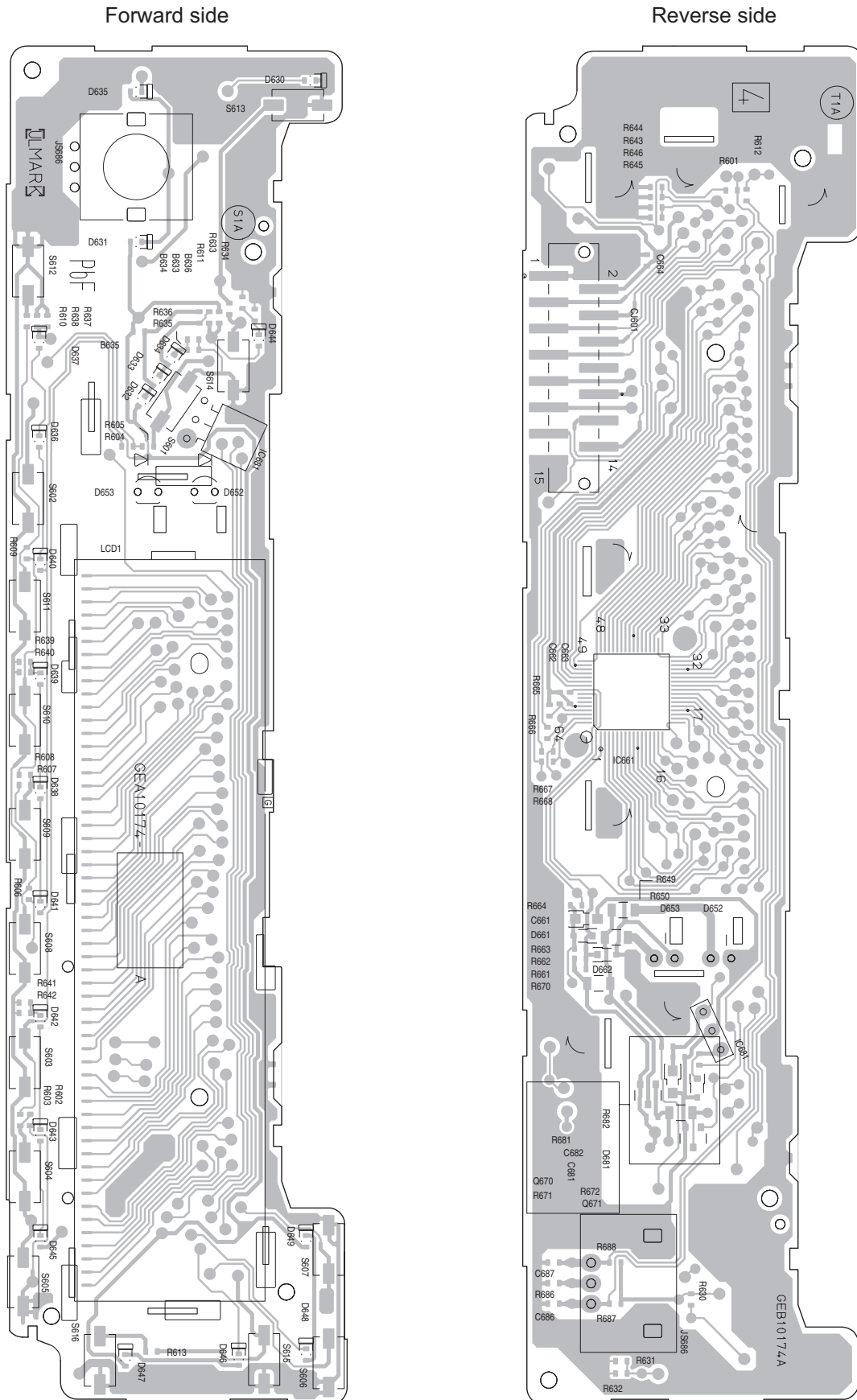
# ■ Main board (For KD-G321, KD-G322, KD-G327)

Lead free solder used in the board (material : Sn-Ag-Cu, melting point : 219 Centigrade)



## Switch board

Lead free solder used in the board (material : Sn-Ag-Cu, melting point : 219 Centigrade)



**JVC**

Victor Company of Japan, Limited

Mobile Entertainment Business Group Mobile Entertainment Category 10-1,1chome,Ohwatari-machi,Maebashi-city,371-8543,Japan

(No.MA236SCH)



Printed in Japan  
VPT

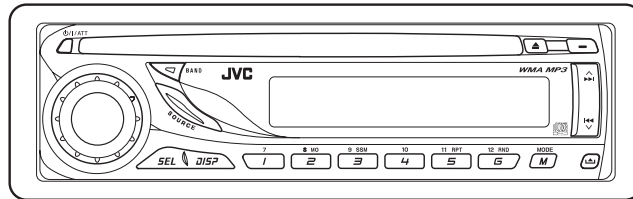
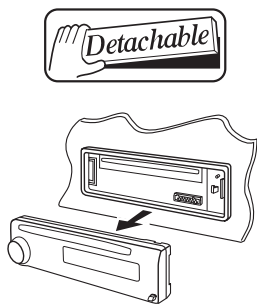


# JVC

## SERVICE MANUAL

### CD RECEIVER

# KD-AR270, KD-G220, KD-G227, KD-G321, KD-G322, KD-G323, KD-G324, KD-G325, KD-G326, KD-G327



<b>KD-AR270, KD-G220</b>
<b>Area suffix</b>
J ----- Northern America
<b>KD-G227, KD-G327</b>
<b>Area suffix</b>
EE ----- Russian Federation

<b>KD-G321, KD-G322</b>
<b>Area suffix</b>
E ----- Southern Europe
EX ----- Northern Europe
EY ----- Eastern Europe
EU ----- Turkey

<b>KD-G323, KD-G324</b>
<b>Area suffix</b>
UI ----- India

<b>KD-G325, KD-G326</b>
<b>Area suffix</b>
UT ----- Taiwan
UH ----- Thailand
UN ----- Indonesia
U ----- Other Areas

**WMA MP3**



Lead free solder used in the board (material : Sn-Ag-Cu, melting point : 219 Centigrade)

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# SPECIFICATION

**KD-AR270/KD-G220**

<b>AUDIO AMPLIFIER SECTION</b>		
Power Output	18 W RMS × 4 Channels at 4 Ω and [ $<$ or $=$ ] 1% THD+N	
Signal to Noise Ratio	80 dBA (reference: 1 W into 4 Ω)	
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	
Line-Out Level/Impedance	2.5 V/20 kΩ load (full scale)	
Output Impedance	1 kΩ	
<b>TUNER SECTION</b>		
Frequency Range	FM	87.5 MHz to 107.9 MHz (with channel interval set to 100 kHz or 200 kHz) 87.5 MHz to 108.0 MHz (with channel interval set to 50 kHz)
	AM	530 kHz to 1 710 kHz (with channel interval set to 10 kHz) 531 kHz to 1 602 kHz (with channel interval set to 9 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	35 dB
	Capture Ratio	1.5 dB
AM Tuner	Sensitivity	20 μV
	Selectivity	35 dB
<b>CD PLAYER SECTION</b>		
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) Decoding Format	Max. Bit Rate: 192 kbps	
<b>GENERAL</b>		
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 (32°F to 104°F)	
Dimensions (W × H × D)	Installation Size (approx.)	182 mm × 52 mm × 150 mm (7-3/16" × 2-1/16" × 5-15/16")
	Panel Size (approx.)	188 mm × 58 mm × 11 mm (7-7/16" × 2-5/16" × 7/16")
Mass (approx.)	1.2 kg (2.6 lbs) (excluding accessories)	

Design and specifications are subject to change without notice.

**KD-G227**

<b>AUDIO AMPLIFIER SECTION</b>		
Maximum Power Output	Front	45 W per channel
	Rear	45 W per channel
Continuous Power Output (RMS)	Front	17 W per channel into 4 $\Omega$ , 40 Hz to 20 000 Hz at no more than 0.8% total harmonic distortion.
	Rear	17 W per channel into 4 $\Omega$ , 40 Hz to 20 000 Hz at no more than 0.8% total harmonic distortion.
Load Impedance		4 $\Omega$ (4 $\Omega$ to 8 $\Omega$ allowance)
Tone Control Range	Bass	$\pm 10$ dB at 100 Hz
	Treble	$\pm 10$ dB at 10 kHz
Frequency Response		40 Hz to 20 000 Hz
Signal-to-Noise Ratio		70 dB
Line-Out Level/Impedance		2.0 V/20 k $\Omega$ load (full scale)
Output Impedance		1 k $\Omega$
Frequency Range	FM	87.5 MHz to 108.0 MHz
	AM	522 kHz to 1 620 kHz
FM Tuner	Usable Sensitivity	11.3 dBf (1.0 $\mu$ V/75 $\Omega$ )
	50 dB Quieting Sensitivity	16.3 dBf (1.8 $\mu$ V/75 $\Omega$ )
	Alternate Channel Selectivity (400 kHz)	65 dB
	Frequency Response	40 Hz to 15 000 Hz
	Stereo Separation	30 dB
	Capture Ratio	1.5 dB
AM Tuner	Sensitivity	20 $\mu$ V
	Selectivity	35 dB
<b>CD PLAYER SECTION</b>		
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) Decoding Format		Max. Bit Rate: 192 kbps
<b>GENERAL</b>		
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 $\times$ H $\times$ D)	Installation Size (approx.)	182 mm $\times$ 52 mm $\times$ 150 mm
	Panel Size (approx.)	188 mm $\times$ 58 mm $\times$ 11 mm
Mass (approx.)		1.2 kg (excluding accessories)

Design and specifications are subject to change without notice.

**KD-G321/KD-G322**

<b>AUDIO AMPLIFIER SECTION</b>		
Maximum Power Output	Front	50 W per channel
	Rear	50 W per channel
Continuous Power Output (RMS)	Front	19 W per channel into 4 $\Omega$ , 40 Hz to 20 000 Hz at no more than 0.8% total harmonic distortion.
	Rear	19 W per channel into 4 $\Omega$ , 40 Hz to 20 000 Hz at no more than 0.8% total harmonic distortion.
Load Impedance		4 $\Omega$ (4 $\Omega$ to 8 $\Omega$ allowance)
Tone Control Range	Bass	$\pm 10$ dB at 100 Hz
	Treble	$\pm 10$ 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 k $\Omega$ load (full scale)
Output Impedance		1 k $\Omega$
Other terminals		Steering wheel remote input
<b>TUNER SECTION</b>		
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 $\mu$ V/75 $\Omega$ )
	50 dB Quieting Sensitivity	16.3 dBf (1.8 $\mu$ V/75 $\Omega$ )
	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 $\mu$ V
	Selectivity	35 dB
LW Tuner	Sensitivity	50 $\mu$ V
<b>CD PLAYER SECTION</b>		
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) Decoding Format		Max. Bit Rate: 192 kbps
<b>GENERAL</b>		
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 $\times$ H $\times$ D)	Installation Size (approx.)	182 mm $\times$ 52 mm $\times$ 150 mm
	Panel Size (approx.)	188 mm $\times$ 58 mm $\times$ 11 mm
Mass (approx.)		1.2 kg (excluding accessories)

Design and specifications are subject to change without notice.

**KD-G323/KD-G324**

<b>AUDIO AMPLIFIER SECTION</b>		
Maximum Power Output	Front	50 W per channel
	Rear	50 W per channel
Continuous Power Output (RMS)	Front	19 W per channel into 4 $\Omega$ , 40 Hz to 20 000 Hz at no more than 0.8% total harmonic distortion.
	Rear	19 W per channel into 4 $\Omega$ , 40 Hz to 20 000 Hz at no more than 0.8% total harmonic distortion.
Load Impedance		4 $\Omega$ (4 $\Omega$ to 8 $\Omega$ allowance)
Tone Control Range	Bass	$\pm$ 10 dB at 100 Hz
	Treble	$\pm$ 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 k $\Omega$ load (full scale)
Output Impedance		1 k $\Omega$
<b>TUNER SECTION</b>		
Frequency Range	FM	87.5 MHz to 108.0 MHz
	AM	531 kHz to 1 602 kHz
FM Tuner	Usable Sensitivity	11.3 dBf (1.0 $\mu$ V/75 $\Omega$ )
	50 dB Quieting Sensitivity	16.3 dBf (1.8 $\mu$ V/75 $\Omega$ )
	Alternate Channel Selectivity (400 kHz)	65 dB
	Frequency Response	40 Hz to 15 000 Hz
	Stereo Separation	30 dB
	Capture Ratio	1.5 dB
AM Tuner	Sensitivity	20 $\mu$ V
	Selectivity	35 dB
<b>CD PLAYER SECTION</b>		
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) Decoding Format		Max. Bit Rate: 192 kbps
<b>GENERAL</b>		
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 $\times$ H $\times$ D)	Installation Size (approx.)	182 mm $\times$ 52 mm $\times$ 150 mm
	Panel Size (approx.)	188 mm $\times$ 58 mm $\times$ 11 mm
Mass (approx.)		1.2 kg (excluding accessories)

Design and specifications are subject to change without notice.

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	531 kHz to 1 602 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
AM Tuner	Sensitivity	20 μV
	Selectivity	35 dB
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) Decoding Format		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.)		1.2 kg (excluding accessories)


Design and specifications are subject to change without notice.

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	FM1/FM2	87.5 MHz to 108.0 MHz
	FM3	65.00 MHz to 74.00 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	Sensitivity	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) Decoding Format		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.)		1.2 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 performing 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.

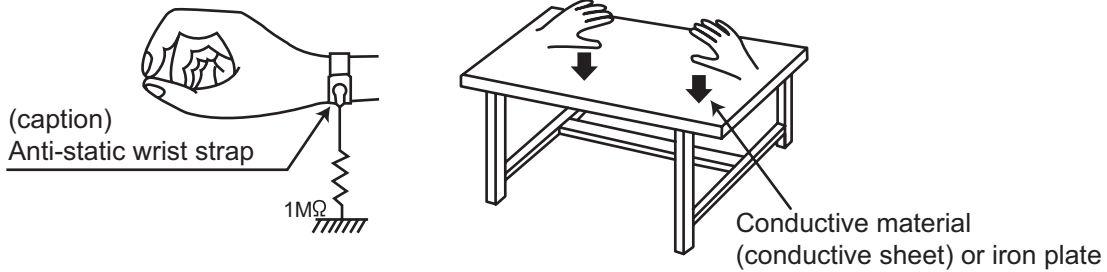
Be careful to use proper grounding in the area where repairs are being performed.

(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.

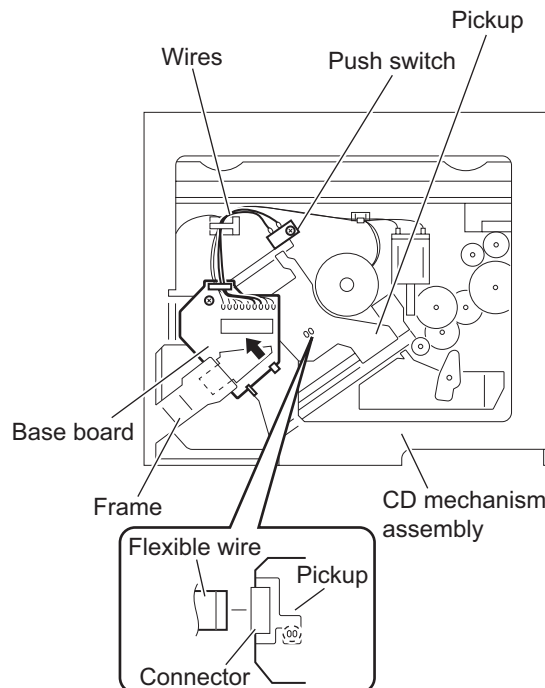
## 1.3 Handling the traverse unit (optical pickup)

- (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 interlock 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 EXPOSURE TO BEAM.

**ADVARSEL** : Synlig og usynlig laserstråling når maskinen er åben eller interlocken fejler. Undgå direkte eksponering til stråling.

**VARNING** : Synlig och osynlig laserstråling när den öppnas och spärren är urkopplad. Betrakta ej strålen.

**VARO** : Avattaessa ja suojalukitus ohitettuna tai viallisena olet alttiina näkyvälle ja näkymättömälle lasersäteilylle. Vältä säteen kohdistumista suoraan itseesi.

## REPRODUCTION AND POSITION OF LABELS

### WARNING LABEL



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

## SECTION 2 SPECIFIC SERVICE INSTRUCTIONS

### 2.1 Difference point

	<b>KD-AR270 KD-G220,KD-G227</b>	<b>KD-G322 KD-G321</b>	<b>KD-G323,KD-G324 KD-G325,KD-G326</b>	<b>KD-G327</b>
Remote ready	YES	NO	YES	YES
Steering remote ready	NO	YES	NO	NO
Power antenna	NO	NO	YES	NO
Telephone Muting	NO	YES	NO	YES

### 2.2 CD mechanism assembly

For CD mechanism, please refer mechanism annual No. MY003.

## SECTION 3 DISASSEMBLY

### 3.1 Main body section

#### 3.1.1 Removing the front panel assembly (See Fig.11)

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

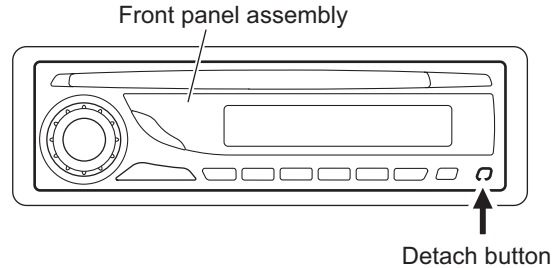


Fig.1

#### 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.

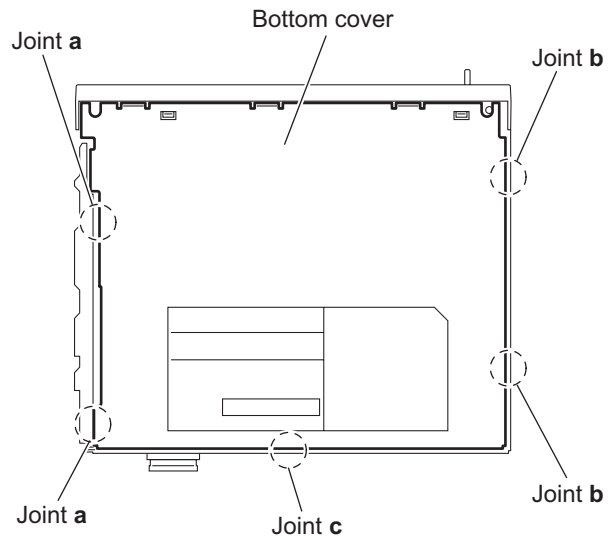


Fig.2

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

- 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 joint **d** and joint **e** on the both sides of the main body, then remove the front chassis assembly toward the front.

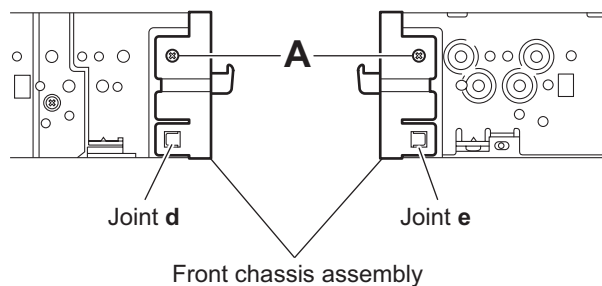


Fig.3

**3.1.4 Removing the side panel**  
(See Fig.4)

**Reference:**

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.
- (2) Remove the side panel from the main body.

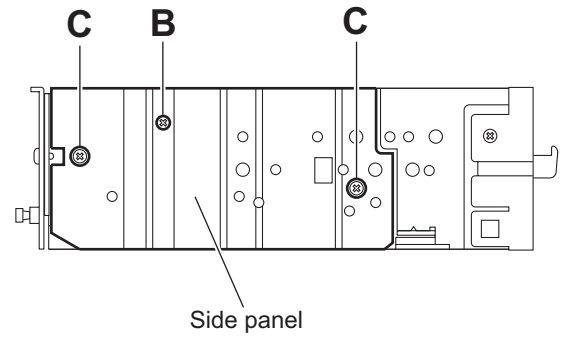


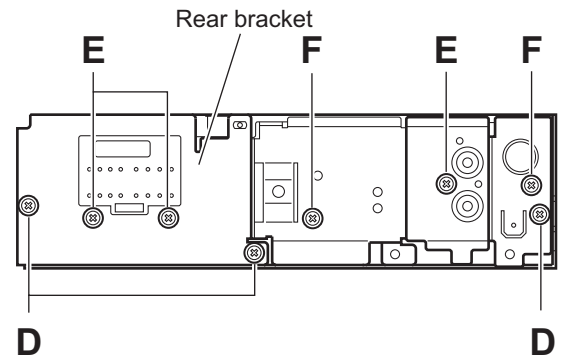
Fig.4

**3.1.5 Removing the rear bracket**  
(See Fig.5)

- Remove the bottom cover.

- (1) Remove the three screws **D**, three screws **E** and two screws **F** attaching the rear bracket on the back side of the main body. (For KD-AR270, KD-G220, KD-G227, KD-G323, KD-G324, KD-G325, KD-G326, KD-G327)
- (2) Remove the four screws **D**, three screws **E** and two screws **F** attaching the rear bracket on the back side of the main body. (For KD-G321, KD-G322)
- (3) Remove the rear bracket.

(For KD-AR270, KD-G220, KD-G227, KD-G323, KD-G324, KD-G325, KD-G326, KD-G327)



(For KD-G321, KD-G322)

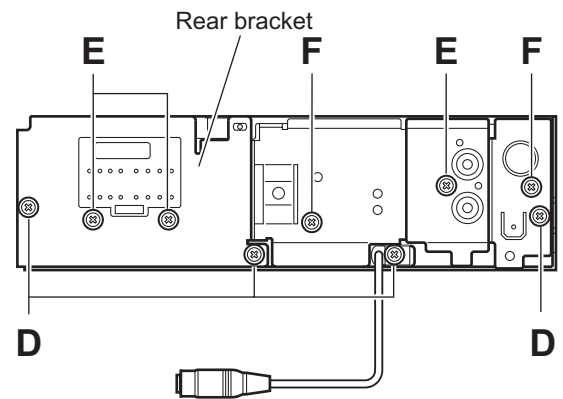


Fig.5

### 3.1.6 Removing the main board (See Figs.5 and 6)

- Remove the front panel assembly, bottom cover and side panel.

#### Reference:

Remove the front chassis assembly as required.

- Remove the three screws **D** attaching the rear bracket on the back side of the main body. (See Fig.5.)
- Remove the two screws **G** attaching the main board. (See Fig.6.)
- Disconnect the connector [CN501](#) on the main board from the main body and take out the main board with the rear bracket. (See Fig.6.)

#### Reference:

Remove the rear bracket from the main body as required. (See "3.1.5 Removing the rear bracket".)

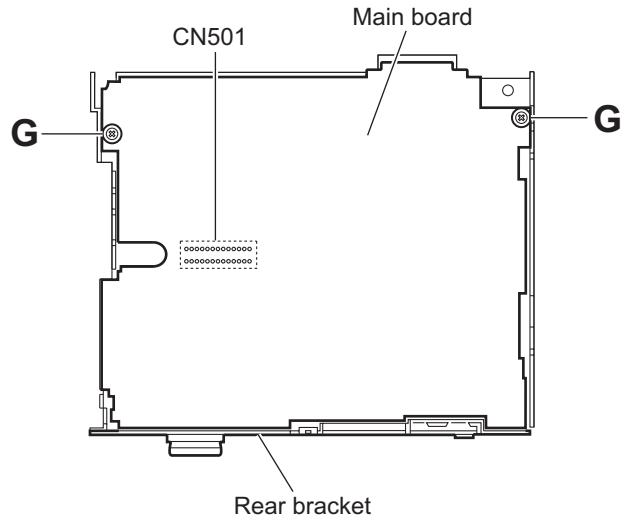


Fig.6

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

- Remove the front panel assembly, bottom cover, side panel, rear bracket and main board.

#### Reference:

Remove the front chassis assembly as required.

- Remove the three screws **H** attaching the CD mechanism assembly on the top chassis.
- Take out the CD mechanism assembly.

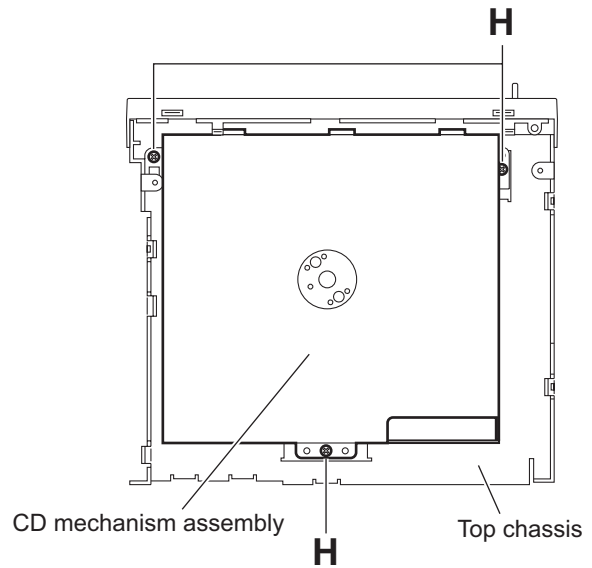


Fig.7

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

- Remove the front panel assembly.
  - Remove the four screws **J** on the back side of the front panel assembly. (See Fig.8.)
  - Release the joints **f** and remove the rear cover. (See Fig.9.)
  - Release the joint **g** and take out the switch board from the front panel assembly. (See Fig.10.)

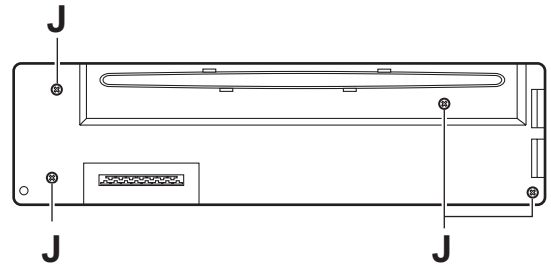


Fig.8

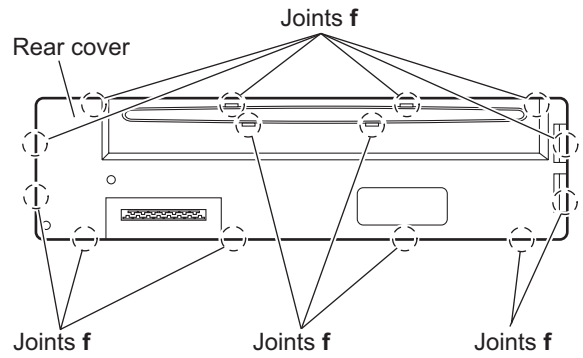


Fig.9

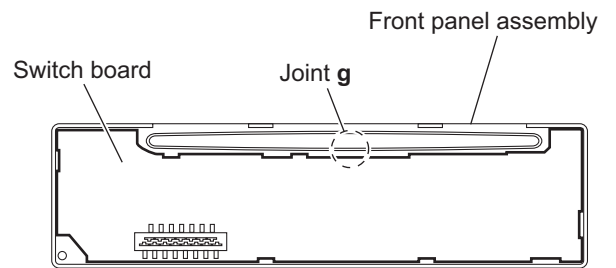


Fig.10

## 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

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

##### Caution:

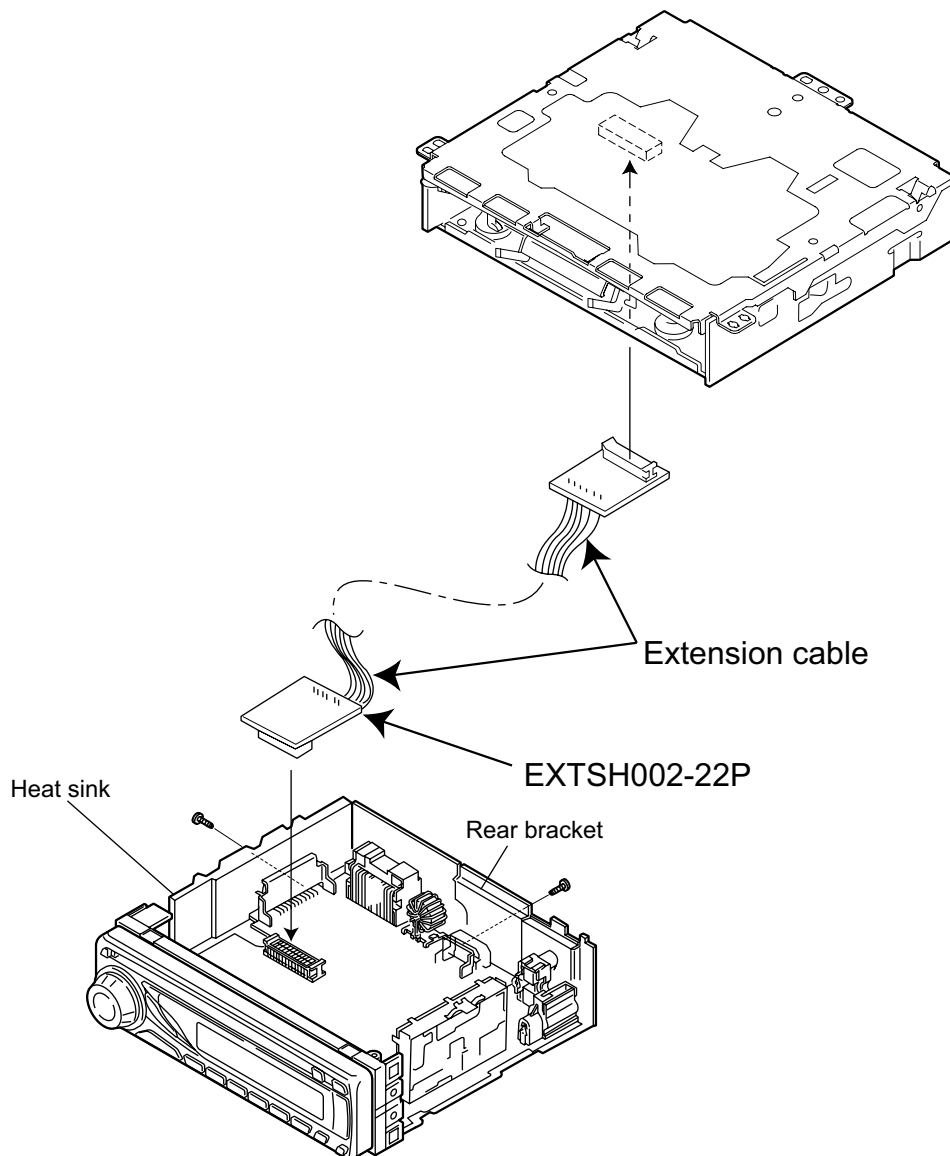
Be sure to attach the heat sink and rear bracket onto the power amplifier IC and regulator IC respectively, before supply the power. If voltage is applied without attaching these parts, the power amplifier IC and regulator IC will be destroyed by heat.

#### ■ Standard measuring conditions

Power supply voltage	DC14.4V(10.5 to 16V)
Load impedance	20K $\Omega$ (2 Speakers connection)
Output Level	Line out 2.0V (Vol. MAX)

#### ■ Dummy load

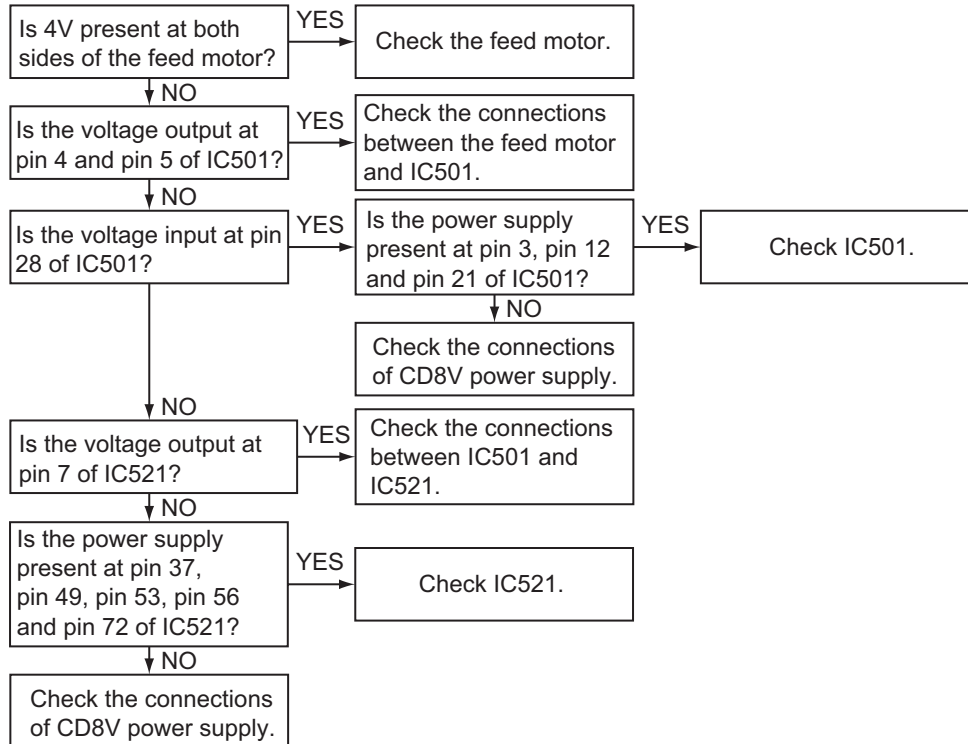
Exclusive dummy load should be used for AM, and FM. For FM dummy load, there is a loss of 6dB between SSG output and antenna input. The loss of 6dB need not be considered since direct reading of figures are applied in this working standard.



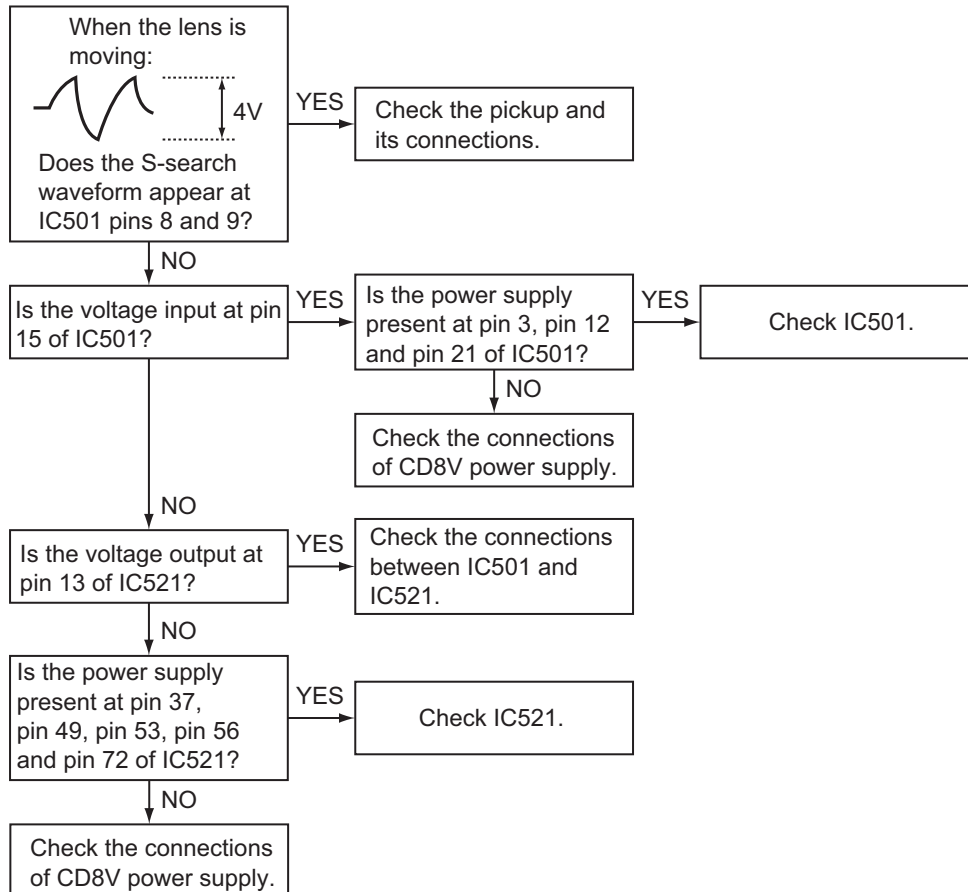


## SECTION 5 TROUBLESHOOTING

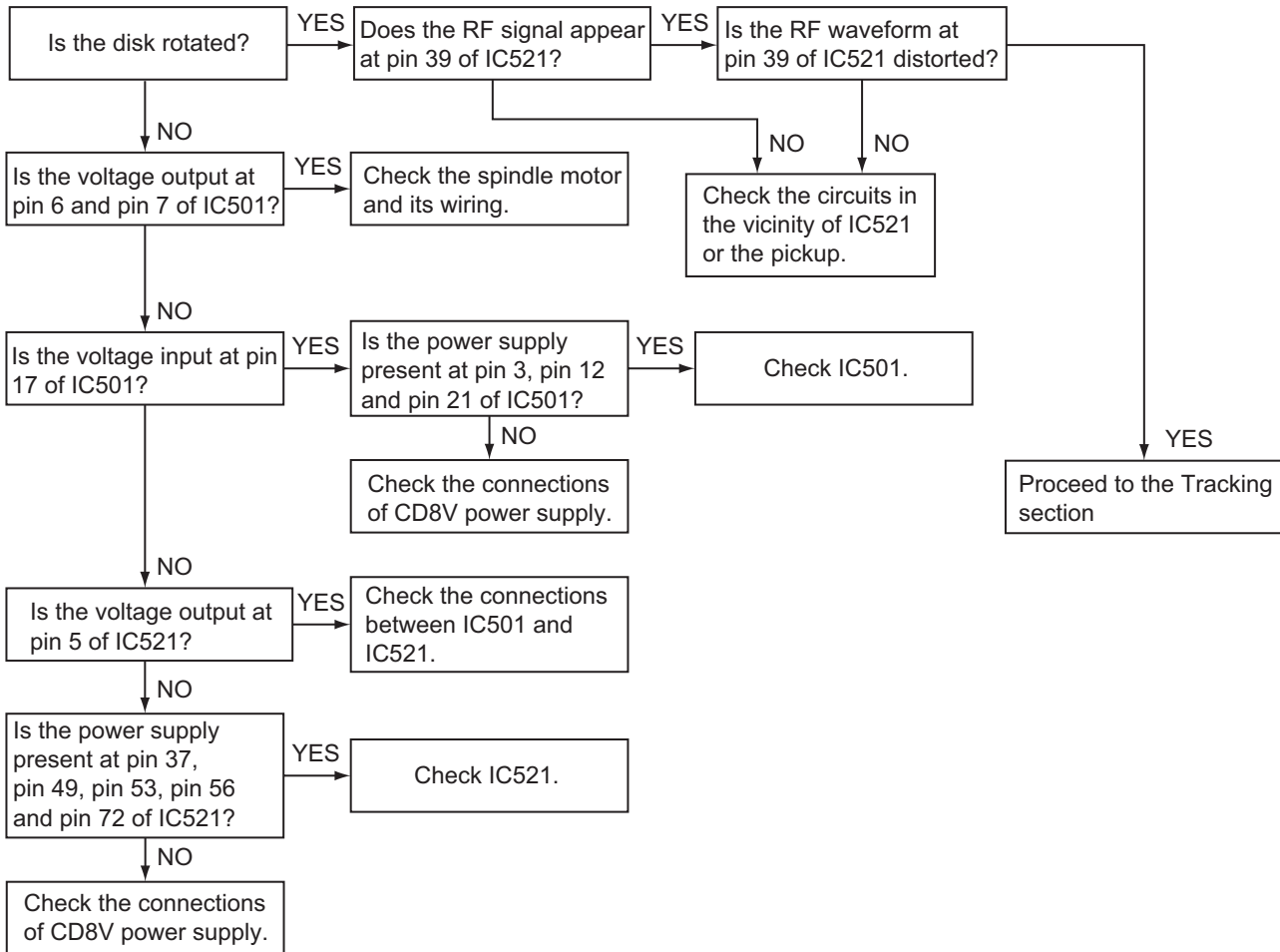
### 5.1 Feed section



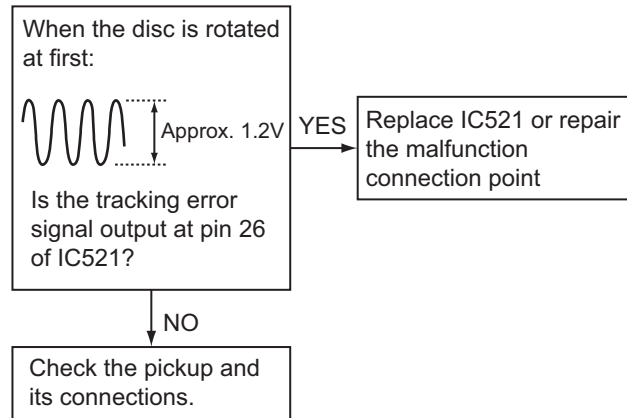
### 5.2 Focus section



### 5.3 Spindle section



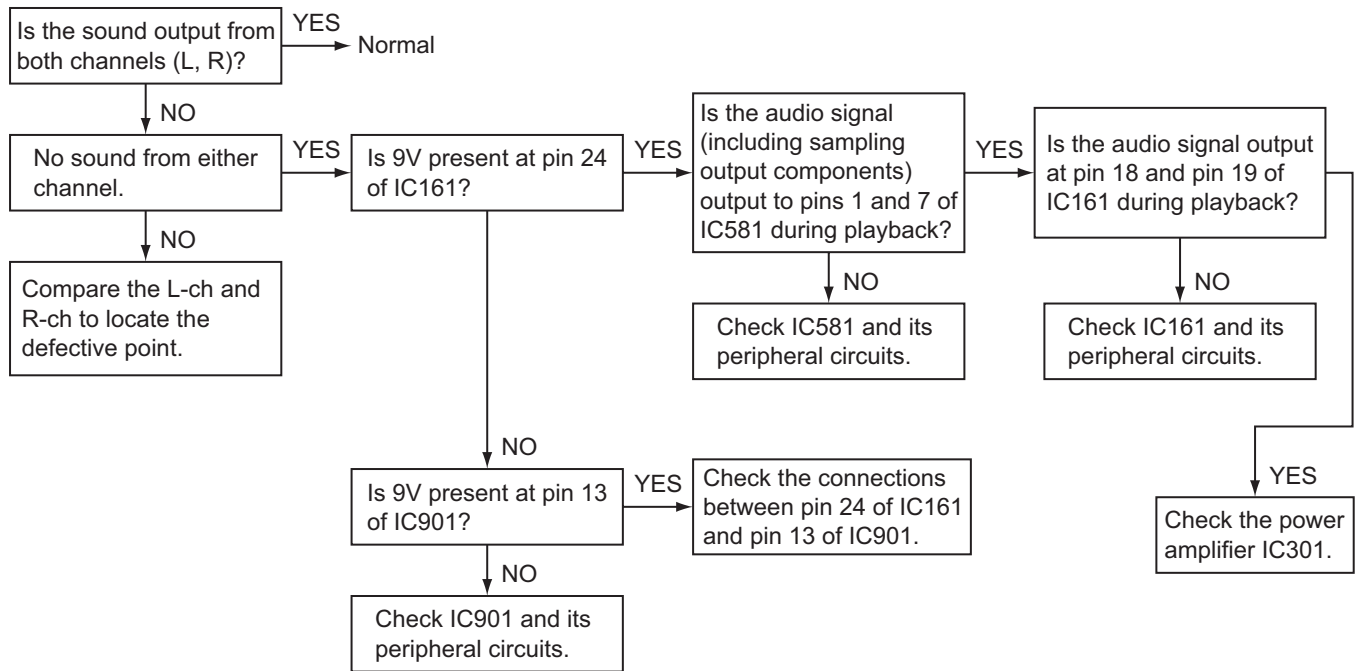
### 5.4 Tracking section



## 5.5 Signal processing section

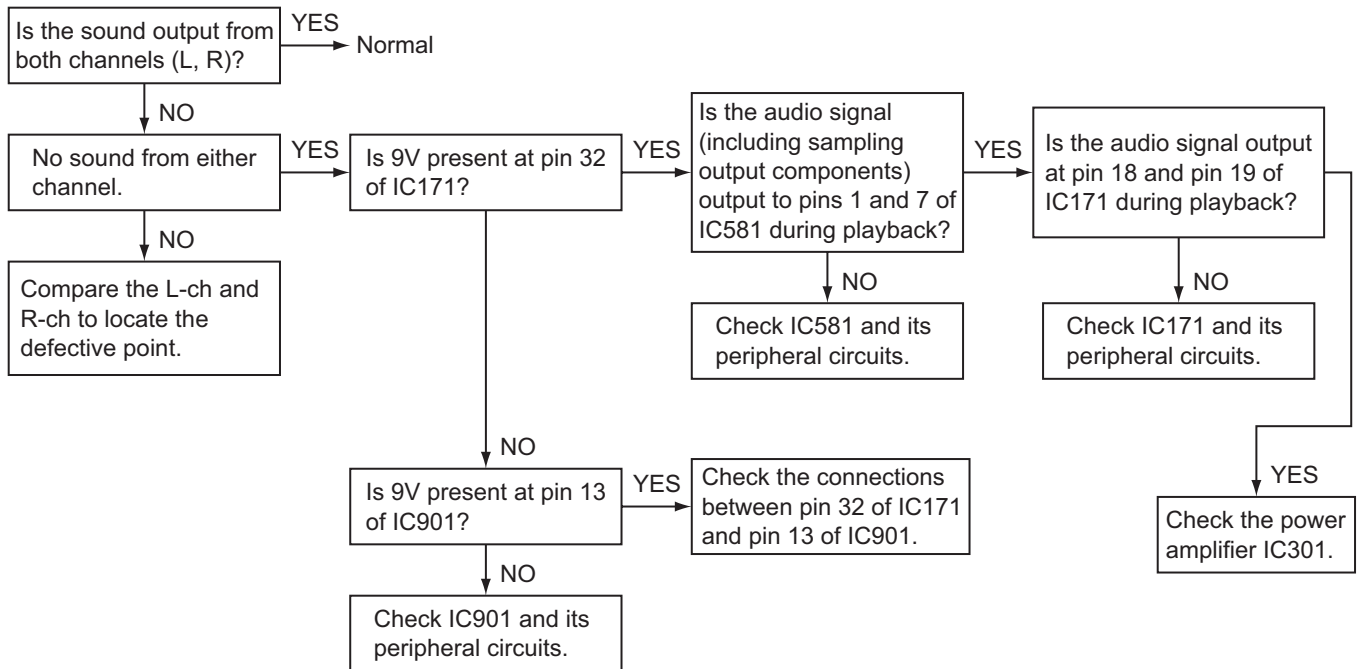
### 5.5.1 Signal processing section

(For KD-AR270, KD-G220, KD-G227, KD-G323, KD-G324, KD-G325 and KD-G326)



### 5.5.2 Signal processing section

(For KD-G321, KD-G322 and KD-G327)



## 5.6 Maintenance of laser pickup

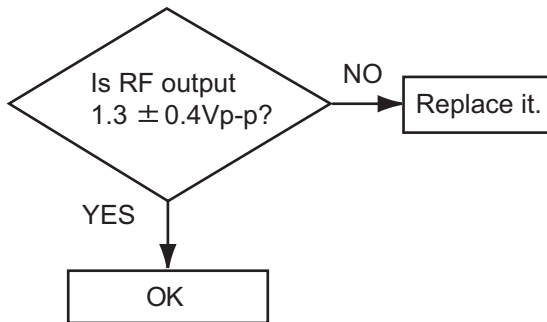
### (1) Cleaning the pick up lens

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.

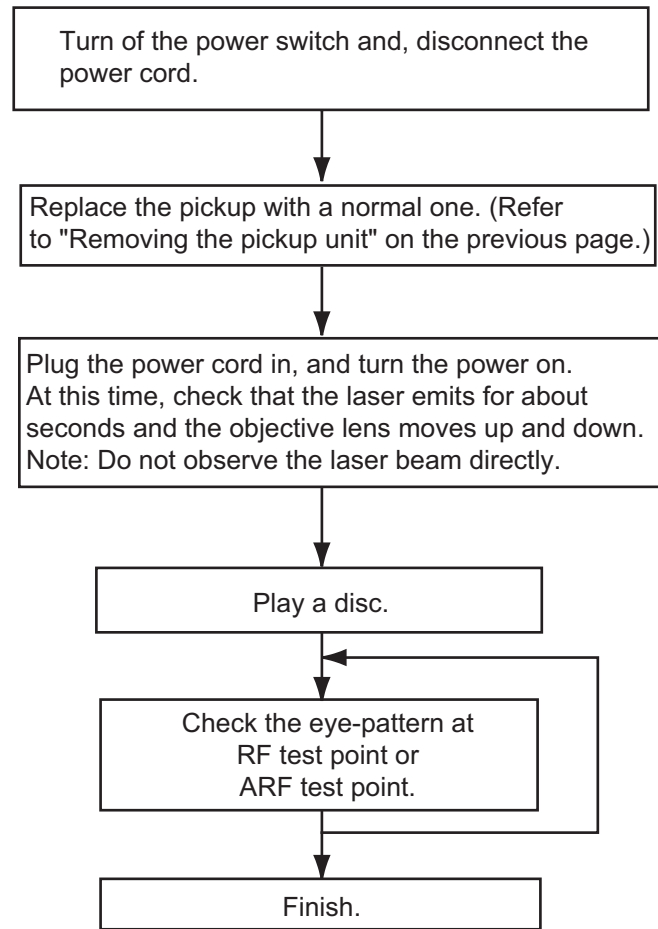


### (3) Semi-fixed resistor on the APC PC board

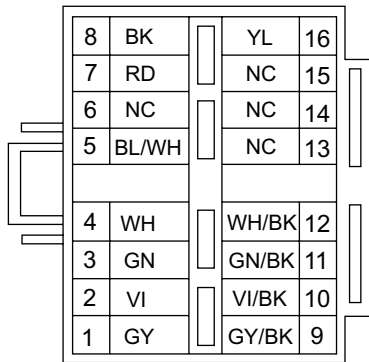
The semi-fixed resistor on the APC printed circuit board which is attached to the pickup is used to adjust the laser power. Since this adjustment should be performed to match the characteristics of the whole optical block, do not touch the semi-fixed resistor.

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.

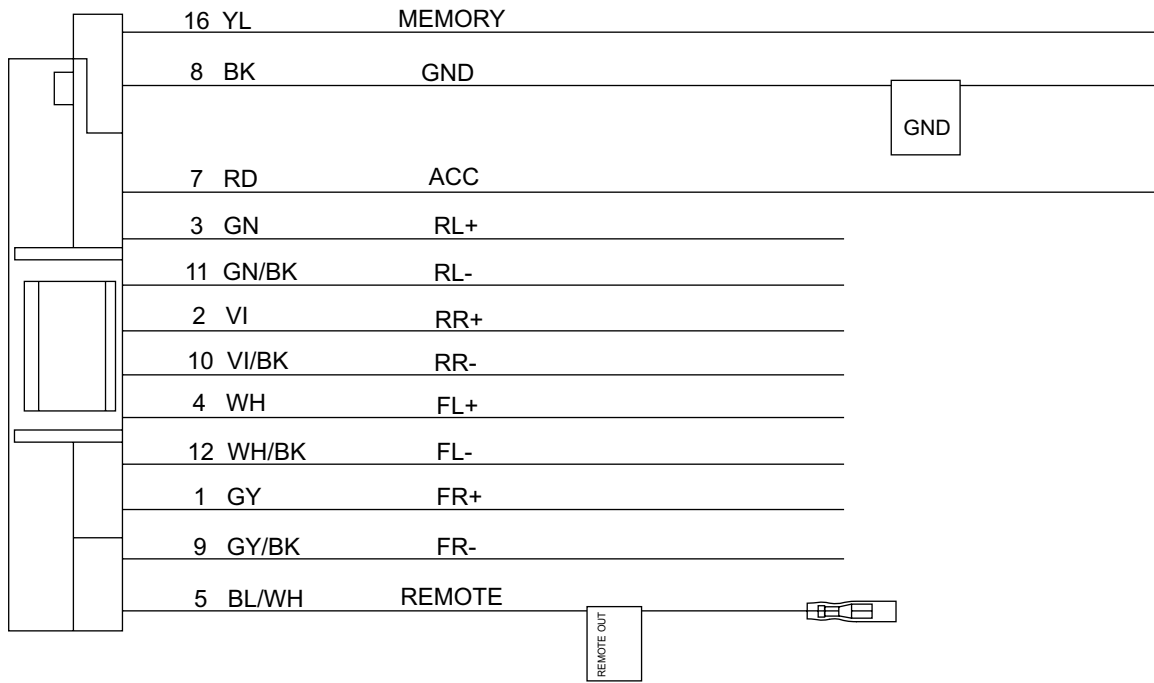
## 5.7 Replacement of laser pickup



**5.8 16 PIN CORD DIAGRAM (for AR270,G220)**

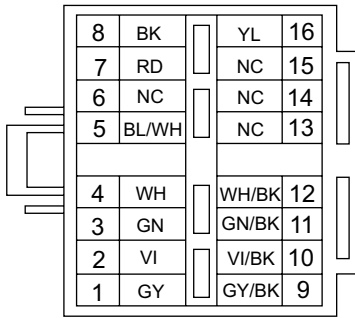


BK	Black	GN	Green
RD	Red	VI	Violet
BL	Blue	GY	Gray
WH	White	YL	Yellow

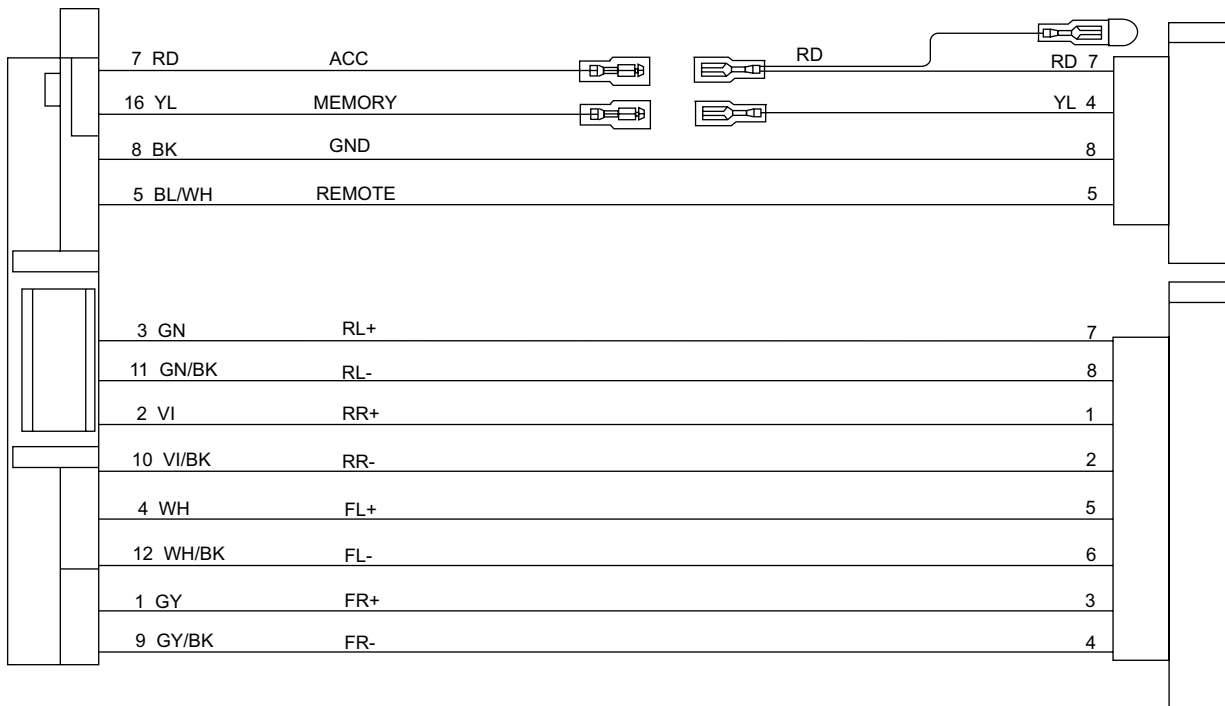
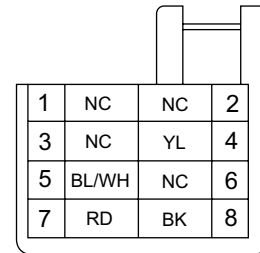


RR	Rear Right	REMOTE	Remote out
FR	Front Right	ACC	ACC Line
FL	Front Left	MEMORY	Memory Backup Battery+
RL	Rear Left	GND	Ground

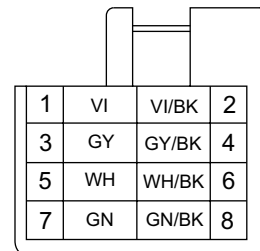
### 5.9 16 PIN CORD DIAGRAM (for G227)



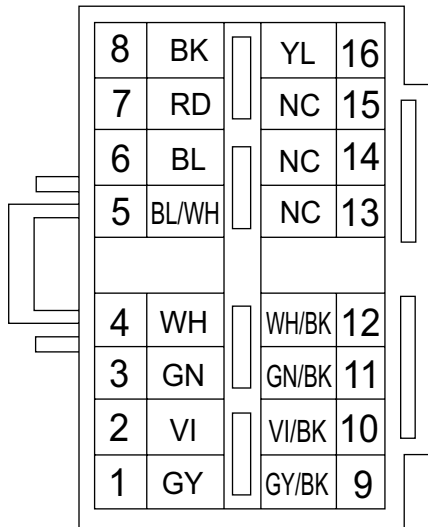
BK	Black	GN	Green
RD	Red	VI	Violet
BL	Blue	GY	Gray
WH	White	YL	Yellow



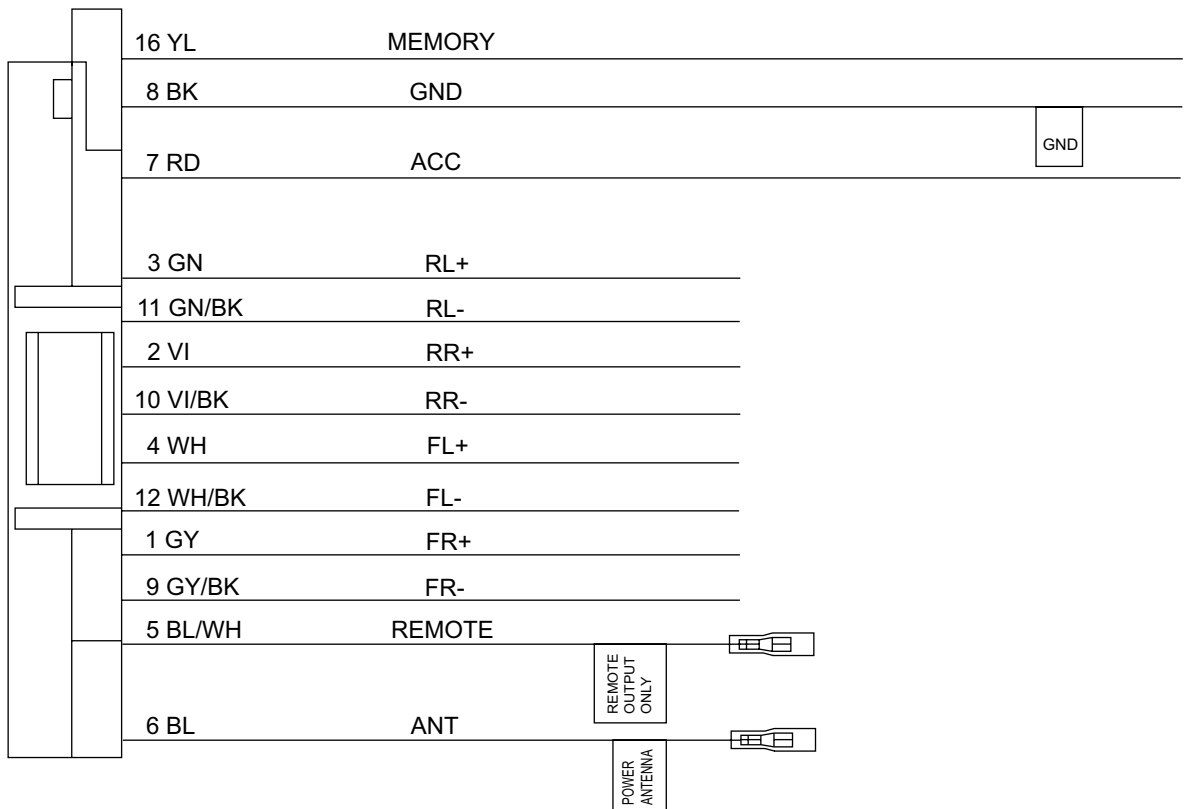
RR	Rear Right	REMOTE	Remote out
FR	Front Right	ACC	ACC Line
FL	Front Left	MEMORY	Memory Backup Battery+
RL	Rear Left	GND	Ground



5.10 16 PIN CORD DIAGRAM (for G323,G324,G325,G326)

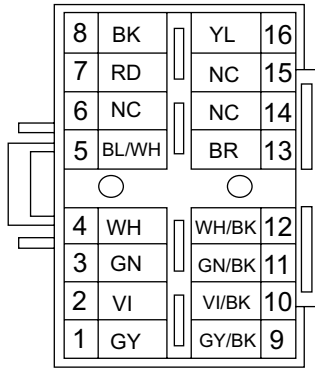


BK	Black	GN	Green
RD	Red	VI	Violet
BL	Blue	GY	Gray
WH	White	YL	Yellow

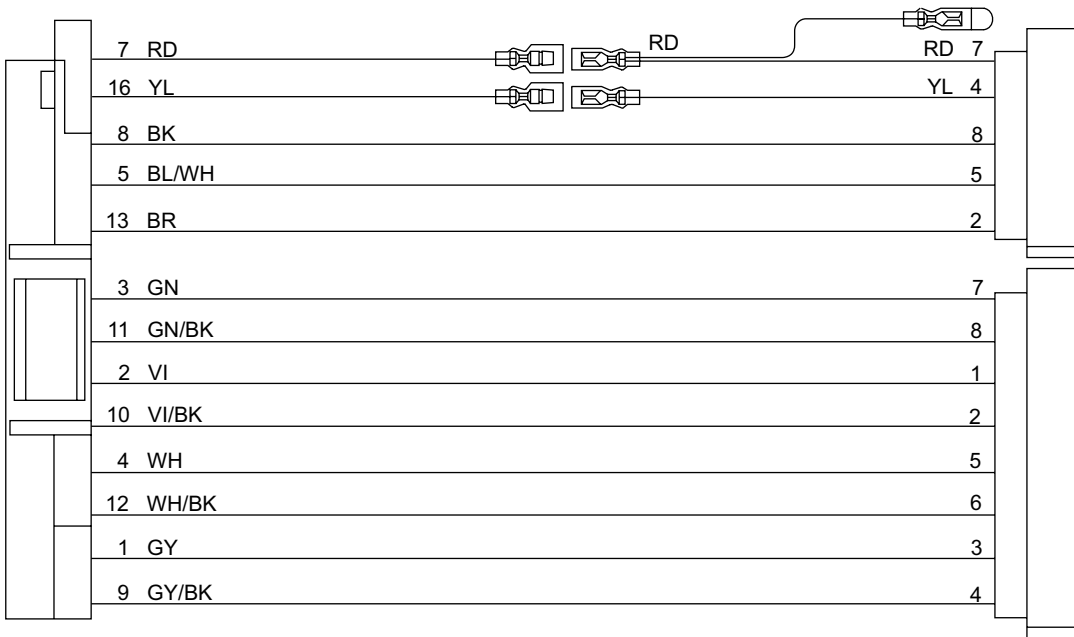
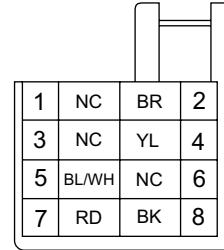


RR	Rear Right	ANT	Auto Antenna
FR	Front Right	ACC	ACC Line
FL	Front Left	GND	Ground
RL	Rear Left	MEMORY	Memory Backup Battery+
REMOTE	Remote		

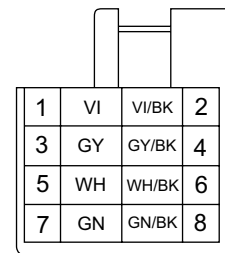
5.11 16PIN CORD DIAGRAM (for G321,G322,G327)



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



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









**JVC**

Victor Company of Japan, Limited  
Mobile Entertainment Business Group Mobile Entertainment Category 10-1,1chome,Ohwatari-machi,Maebashi-city,371-8543,Japan

(No.MA236)