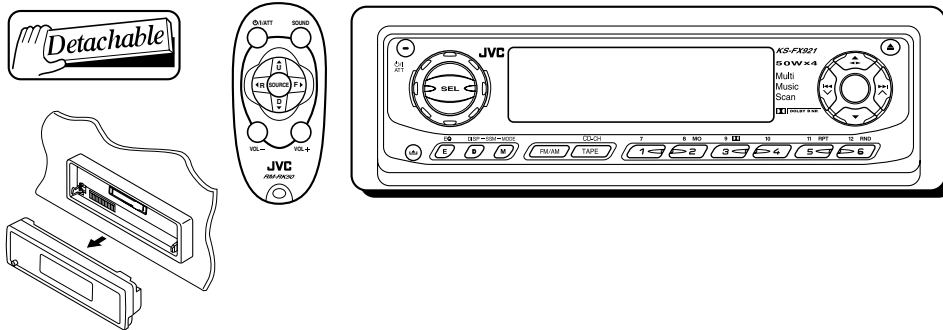


# JVC

## SERVICE MANUAL

### CASSETTE RECEIVER

# KS-FX921



**Area Suffix**  
U ----- Other Areas

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## 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 $\Omega$ 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		$\pm 9$ 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 (250 nWb/m)		
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 $\Omega$ V/75 $\Omega$ )	
		50 dB Quieting Sensitivity	16.3 dBf (1.8 $\Omega$ V/75 $\Omega$ )	
		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 $\Omega$ V	
		Selectivity	35 dB	
CASSETTE DECK SECTION	Wow & Flutter	0.11% (WRMS)		
	Fast-Wind Time	100 sec. (C-60)		
	Frequency Response (Dolby B NR OFF)	30 Hz to 16 000 Hz (Normal tape)		
	Signal-to-Noise Ratio (Dolby B NR ON)	65 dB		
	(Dolby B NR OFF)	56 dB		
	Stereo Separation	40 dB		
	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 $\times$ H $\times$ D)		Installation Size (approx.)	182 mm $\times$ 52 mm $\times$ 150 mm	
		Panel Size (approx.)	188 mm $\times$ 58 mm $\times$ 12 mm	
Mass (approx.)		1.5 kg (excluding accessories)		

Design and specifications are subject to change without notice.

# SECTION 1

## Precaution

### 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.

## SECTION 2

### Disassembly method

#### 2.1 Main body

##### 2.1.1 Removing the front panel assembly (See Fig.1)

- (1) Press the release button and remove the front panel assembly.

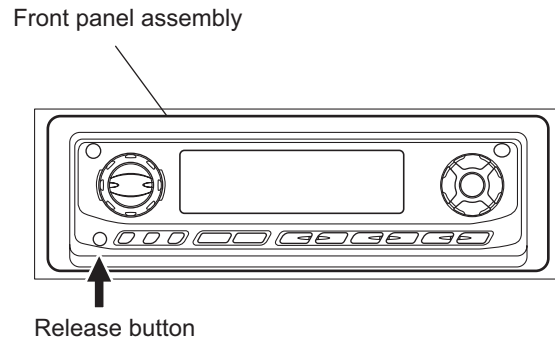


Fig.1

##### 2.1.2 Removing the bottom cover (See Fig.2)

- Prior to performing the following procedures, remove the front panel assembly.
  - (1) Turn the main body upside 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.

#### CAUTION:

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

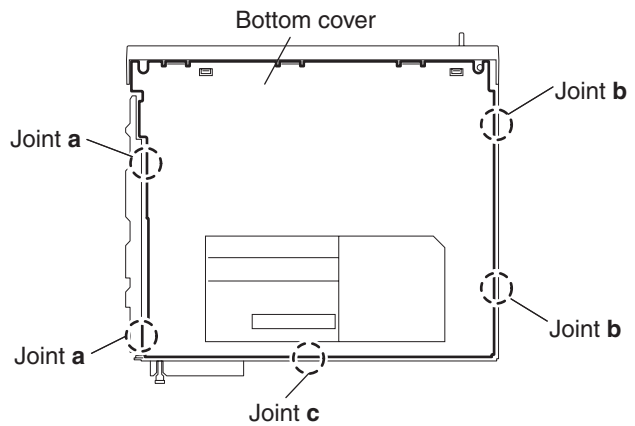


Fig.2

##### 2.1.3 Removing the front chassis assembly (See Figs.3 and 4)

- 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. (See Fig.3.)
  - (2) Remove the two screws **B** on the front side of the main body. (See Fig.4.)
  - (3) 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. (See Fig.3.)

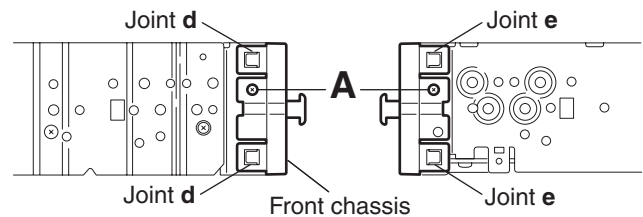


Fig.3

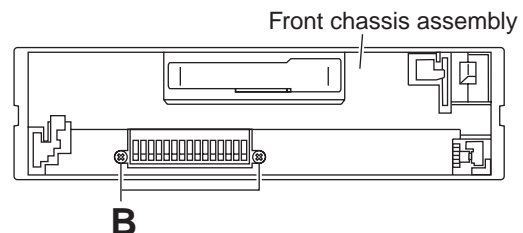


Fig.4

#### 2.1.4 Removing the heat sink (See Fig.5)

- Prior to performing the following procedure, remove the front panel assembly.
  - (1) Remove the two screws **C** and screw **D** attaching the heat sink on the left side of the main body, and remove the heat sink.

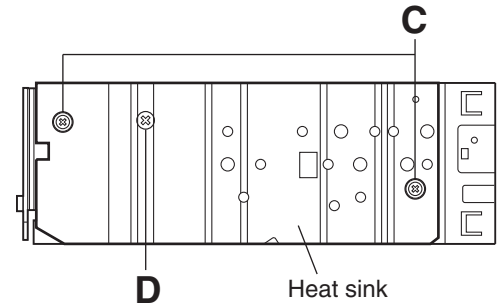


Fig.5

#### 2.1.5 Removing the rear panel (See Fig.6)

- Prior to performing the following procedure, remove the front panel assembly and bottom cover.
  - (1) Remove the two screws **E**, three screws **F** and three screws **G** attaching the rear panel on the back side of the main body.

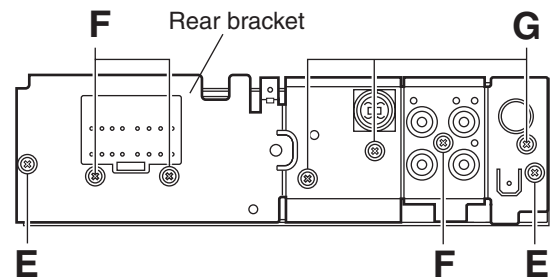


Fig.6

#### 2.1.6 Removing the main board (See Fig.7)

- Prior to performing the following procedures, remove the front panel assembly, bottom cover, front chassis assembly, heat sink and rear panel.
  - (1) Remove the two screws **H** attaching the main board on the top chassis.
  - (2) Disconnect the connector CP701 on the main board from the cassette mechanism assembly.

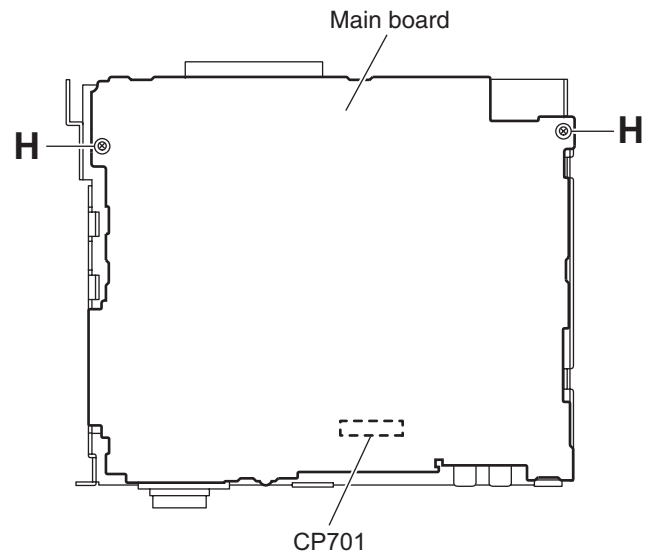


Fig.7

### 2.1.7 Removing the cassette mechanism assembly (See Fig.8)

- Prior to performing the following procedures, remove the front panel assembly, bottom cover, front chassis assembly, heat sink, rear panel and main board.
  - (1) Disconnect the wire from the connector CN402 on the mecha board.
  - (2) Disconnect the card wire from the connector CN403 on the mecha board.
  - (3) Remove the four screws **J** attaching the cassette mechanism assembly to the top chassis, take out the cassette mechanism assembly.

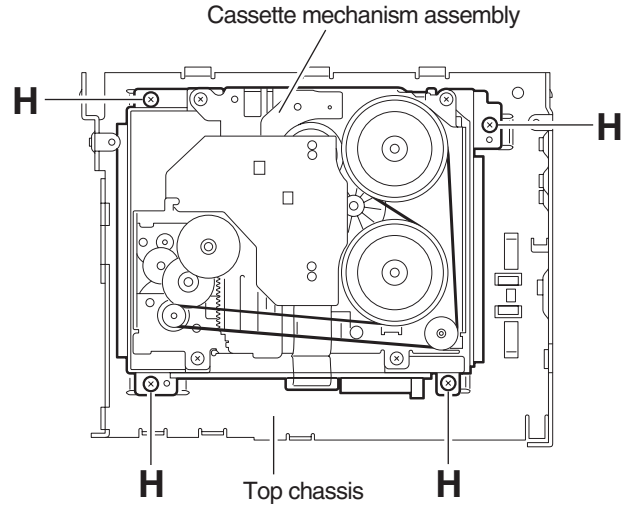


Fig.8

### 2.1.8 Removing the mecha board (See Fig.9)

- Prior to performing the following procedures, remove the front panel assembly, bottom cover, front chassis assembly, heat sink, rear panel and main board.
  - (1) Disconnect the wire from the connector CN402 on the mecha board.
  - (2) Disconnect the card wire from the connector CN403 on the mecha board.
  - (3) Remove the screw **K** attaching the mecha board.
  - (4) Bend the hook **f** in the direction of the arrow **1** and move the mecha board in the direction of the arrow **2**.
  - (5) Remove the mecha board from the mecha bracket (**L**) of the top chassis.

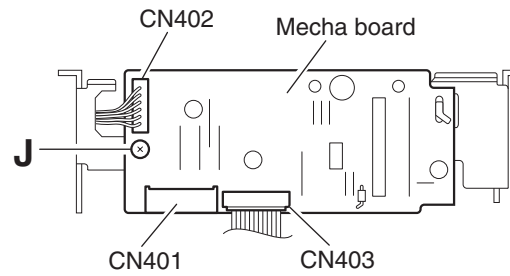


Fig.9

### 2.1.9 Removing the front board (See Figs.10 to 12)

- Prior to performing the following procedures, remove the front panel assembly.
  - (1) Remove the four screws **L** attaching the rear cover on the back side of the front panel assembly. (See Fig.10.)
  - (2) Release the nine joints **g**, the front panel assembly and rear cover become separate. (See Fig.11.)
  - (3) Remove the front board from the front panel assembly. (See Fig.12.)

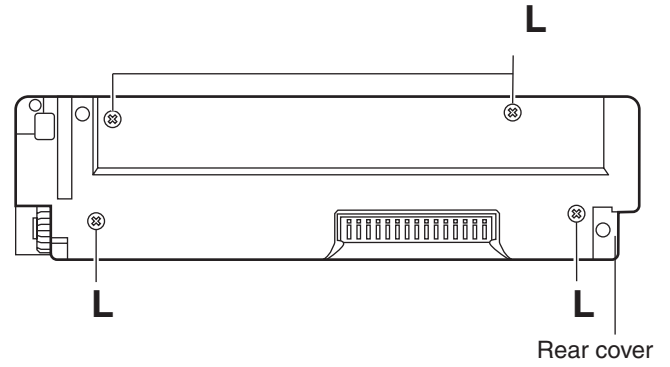


Fig.10

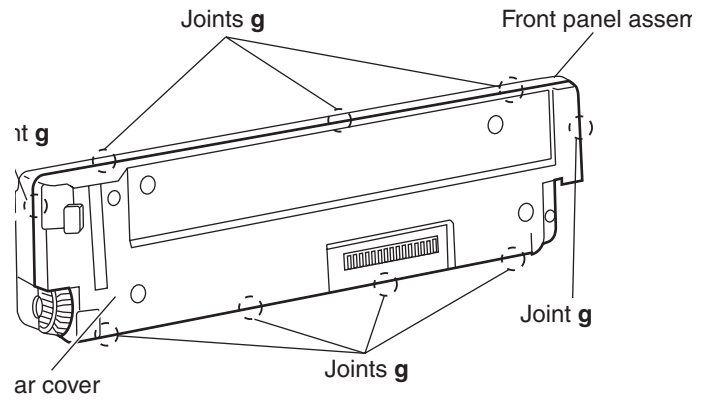


Fig.11

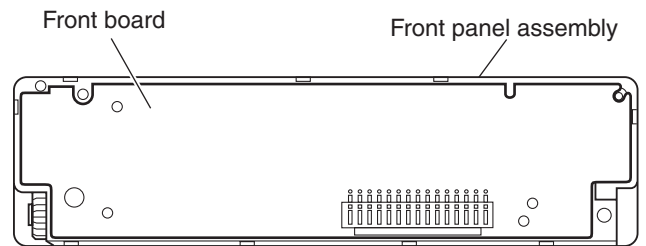
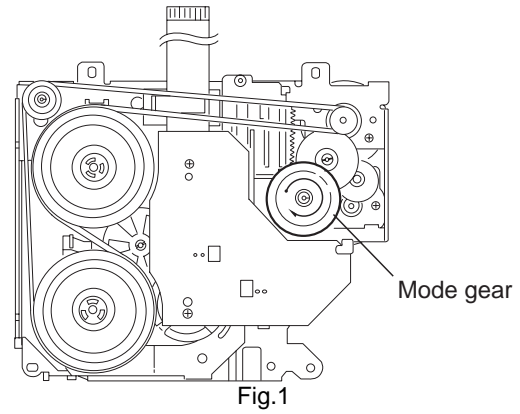


Fig.12

## 2.2 Cassette mechanism assembly

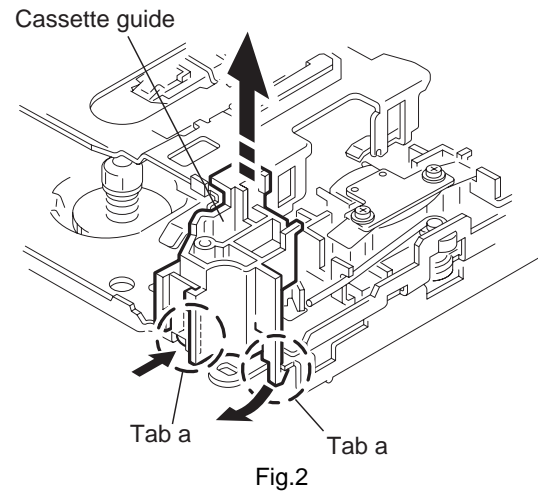
### REFERENCE:

Prior to performing the following procedures, turn the mode gear on the bottom of the body until the respective part comes to the EJECT position (Refer to Fig.1).



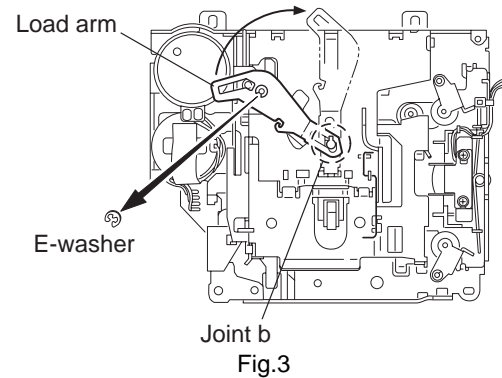
### 2.2.1 Removing the cassette guide (See Fig.2)

- (1) Turn the mode gear to set to RVS play or subsequent mode.
- (2) Remove the cassette guide from the main chassis while releasing each two joint tabs **a** in the direction of the arrow.



### 2.2.2 Removing the load arm (See Fig.3)

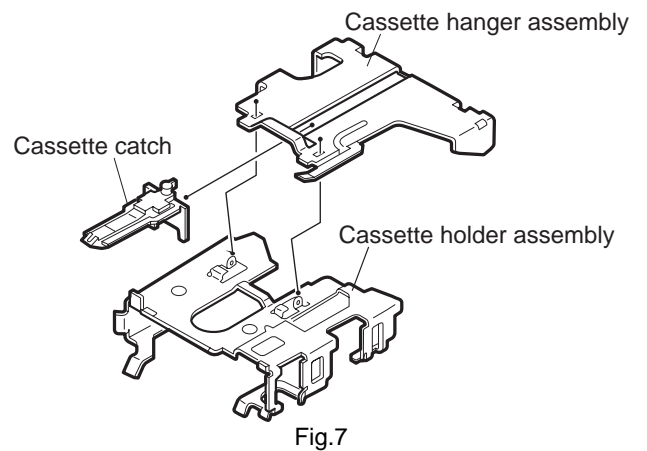
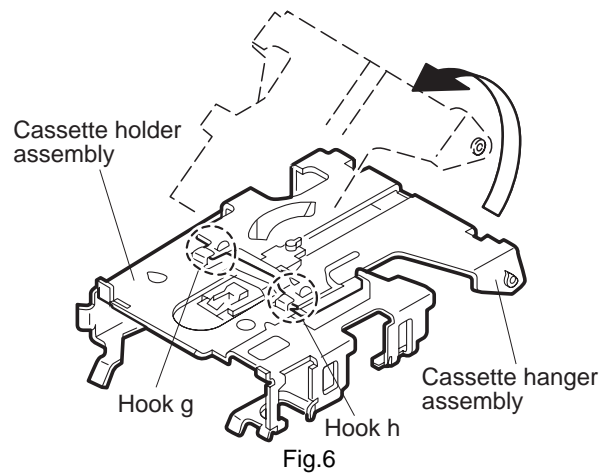
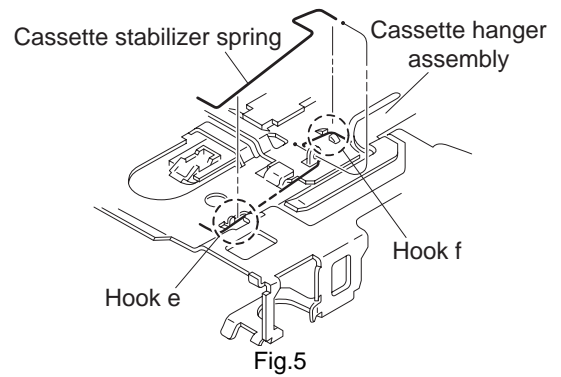
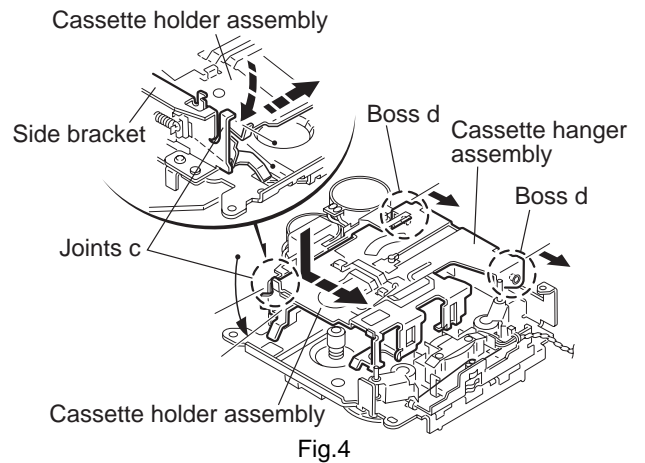
- (1) Remove the E-washer attaching the load arm.
- (2) Move the load arm in the direction of the arrow and release the joint **b** on the cassette catch.





### 2.2.3 Removing the cassette hanger assembly / cassette holder (See Fig.4 to 7)

- (1) Check the mode is set to EJECT. Push down the front part of the cassette holder and move in the direction of the arrow to release the joint **c**.
- (2) Move the rear part of the cassette hanger assembly in the direction of the arrow to release it from the two joint bosses **d**.
- (3) Release the holder stabilizer spring from the hooks **e** and **f**, then pull out from the cassette hanger assembly.
- (4) Bring up the rear side of the cassette hanger assembly to release the joint **g** and **h**.
- (5) Pull out the cassette catch from the cassette hanger assembly.



## 2.2.4 Removing the side bracket assembly (See Fig.8 to 10)

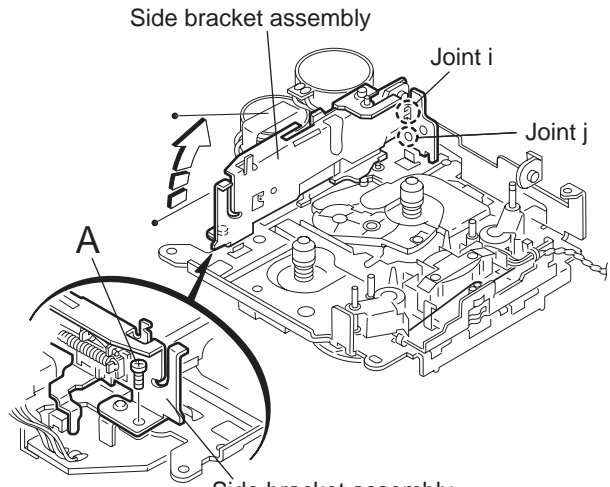
- (1) Remove the screw **A** attaching the side bracket assembly.
- (2) Detach the front side of the side bracket assembly upward and pull out forward to release the joint **i** and **j** in the rear.

### CAUTION:

When reassembling, make sure that the boss **k** of the main chassis is set in the notch of the load rack under the side bracket assembly. Do not reattach the load rack on the boss **k**.

### CAUTION:

After reattaching the side bracket assembly, confirm operation.



Side bracket assembly  
Fig.8

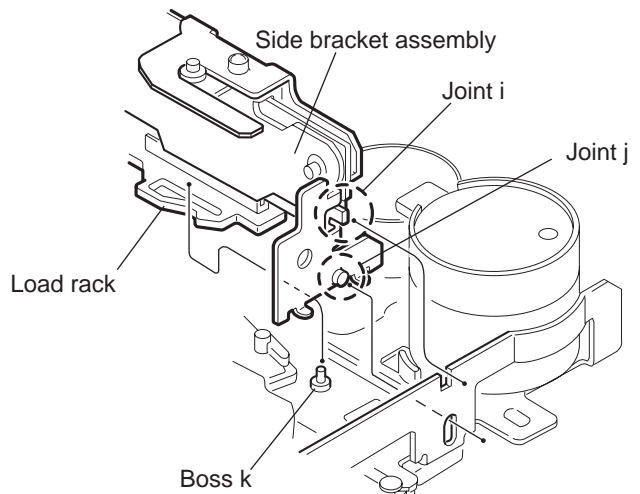


Fig.9

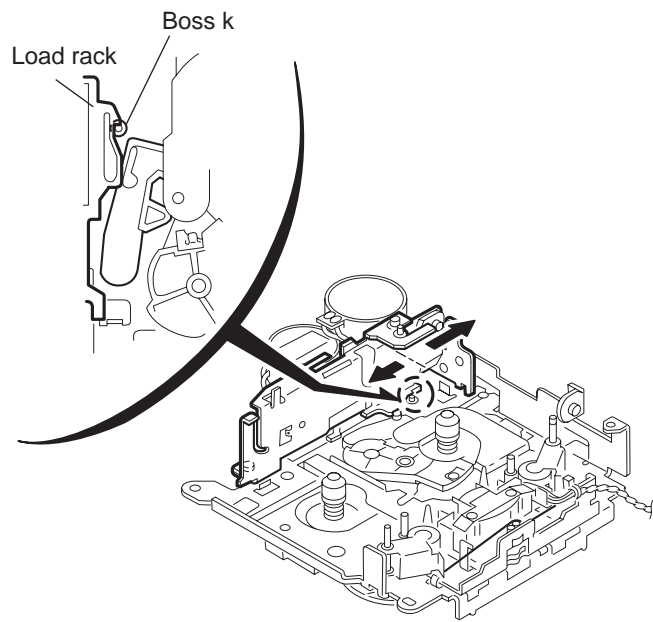


Fig.10

**2.2.5 Removing the pinch arm (F) assembly  
(See Fig.11 and 12)**

- (1) Remove the polywasher and pull out the pinch arm (F) assembly.
- (2) Remove the compulsion spring.

**2.2.6 Removing the pinch arm (R) assembly  
(See Fig.11 and 12)**

- (1) Remove the polywasher and pull out the pinch arm (R) assembly.

**2.2.7 Removing the slide chassis assembly  
(See Fig.13 and 14)**

**REFERENCE:**

It is not necessary to remove the head and the tape guide.

- (1) Move the slide chassis assembly in the direction of the arrow to release the two joints I and remove from the main chassis.
- (2) Remove the rack link.

**CAUTION:**

When reassembling, first reattach the rack link, and next fit the boss **m** and hook **n** of the slide chassis assembly to the hole of the main chassis, and engage the two joints **I**.

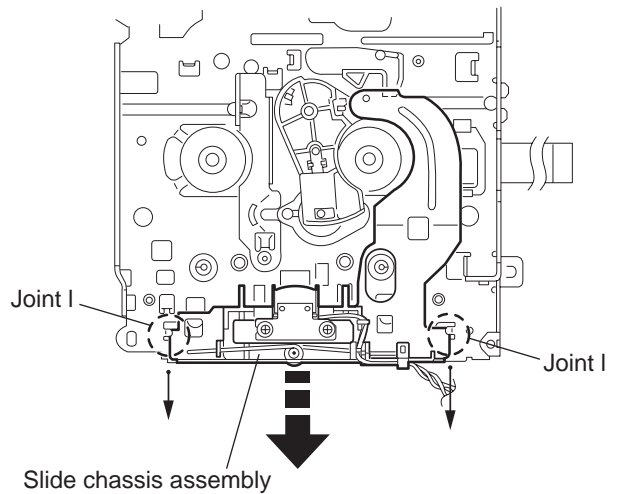


Fig.13

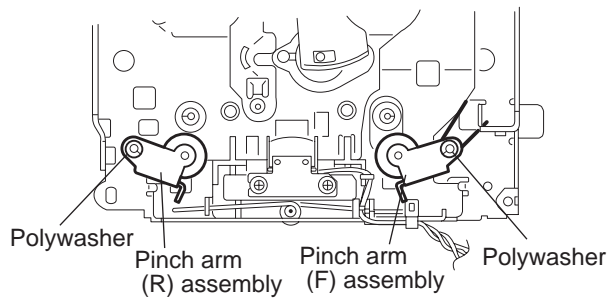


Fig.11

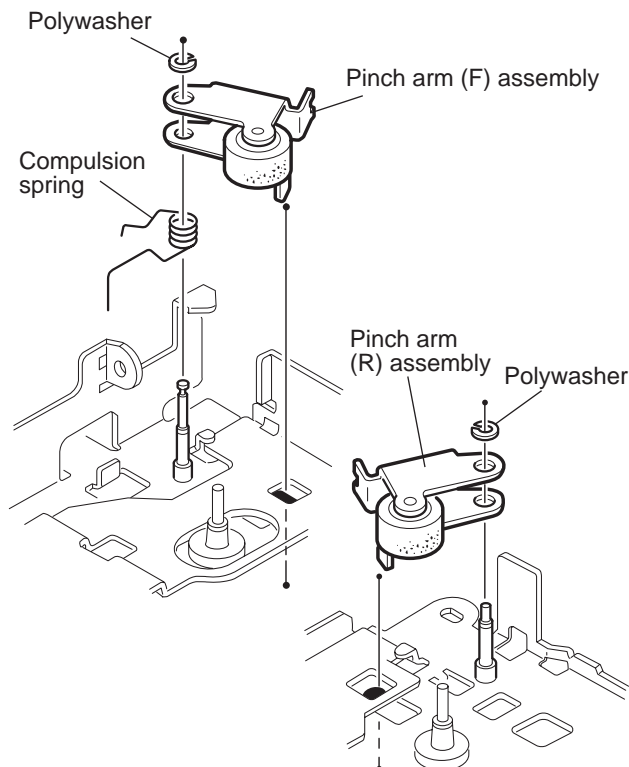


Fig.12

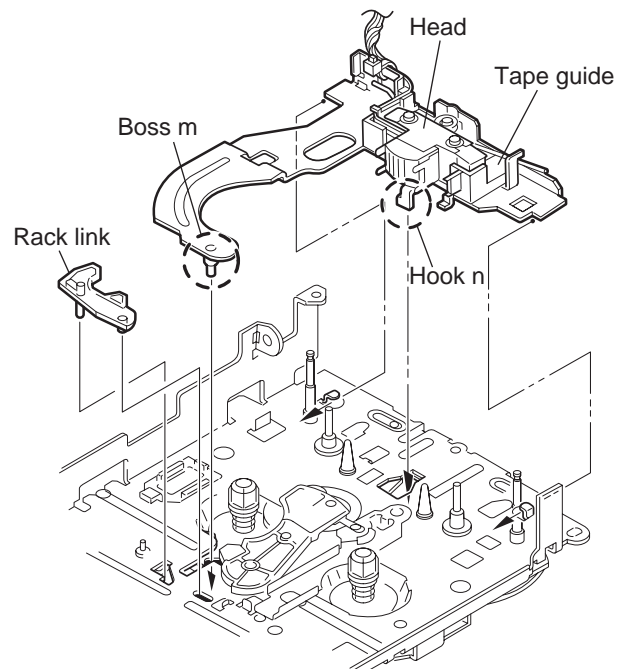


Fig.14

## 2.2.8 Removing the head / tape guide (See Fig.16 and 17)

### REFERENCE:

- It is not necessary to remove the slide chassis assembly.
- (1) Remove the band attaching the wire to the head.
  - (2) Remove the two screws **B**, the head and the head support spring.
  - (3) Remove the pinch arm spring from the tape guide.
  - (4) Remove the tape guide and the pinch spring arm.

### CAUTION:

When reattaching the pinch arm spring, set both end of it to the pinch spring arm (remarked **o**).

### CAUTION:

When reattaching the head, set the wires into the groove of the tape guide (Fig.16).

## 2.2.9 Removing the flywheel assembly (F) & (R) (See Fig.18 and 19)

### REFERENCE:

- It is not necessary to remove the slide chassis assembly.
- (1) Remove the belt at the bottom.
  - (2) Remove the two polywashers on the upper side.
  - (3) Pull out each flywheel assembly downward.

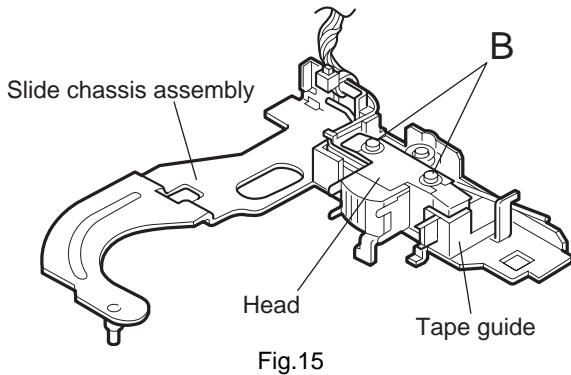


Fig.15

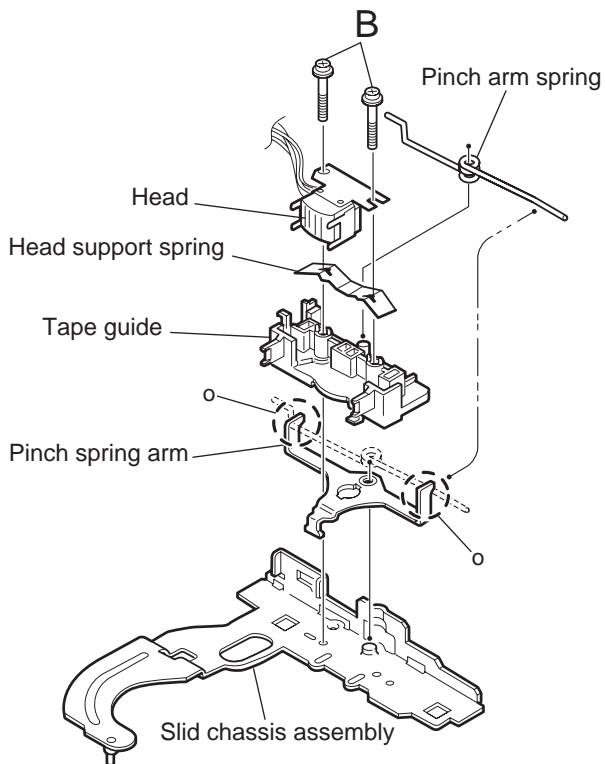


Fig.16

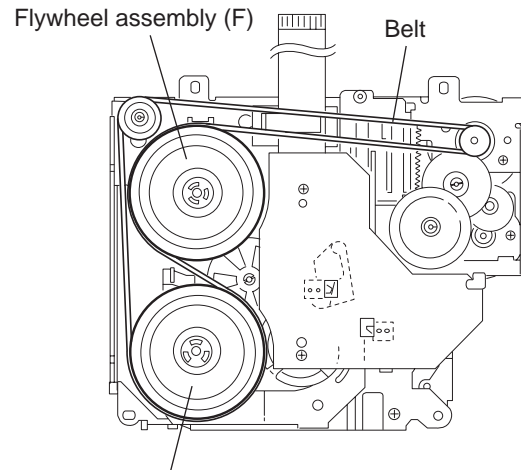


Fig.17

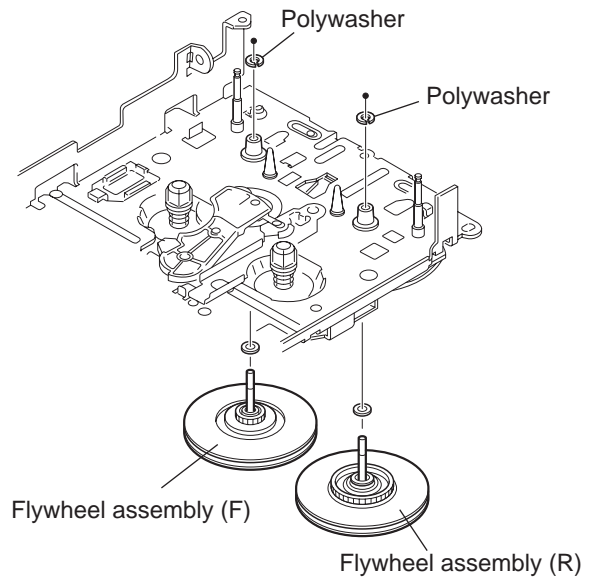


Fig.18

### 2.2.10 Disassembling the flywheel assembly (F)

(See Fig.19 and 20)

- (1) Push and turn counterclockwise the spring holder (F) to release the three joints p on the bottom of the flywheel.
- (2) The spring holder (F), the TU spring and the friction gear play come off.
- (3) Remove the polywasher and felt.

### 2.2.11 Disassembling the flywheel assembly (R)

(See Fig.19 and 20)

- (1) Push and turn clockwise the spring holder (R) to release the three joints q on the bottom of the flywheel.
- (2) The spring holder (R), the FF spring and the friction gear FF come off.
- (3) Remove the polywasher and the felt.

### 2.2.12 Removing the reel board

(See Fig.21 and 22)

- (1) Remove the two screws C attaching the reel board.
- (2) Move the reel board in the direction of the arrow to release the joint r.
- (3) Unsolder the wires if necessary.

#### CAUTION:

When reattaching, confirm operation of the MODE switch and the ST-BY switch. The mode position between EJECT and ST-BY is optimum for reattaching. Connect the card wire extending from the reel board to the FFC pad before reattaching the reel board.

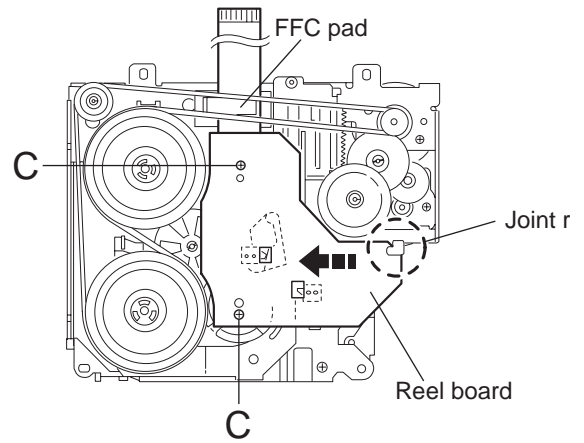


Fig.21

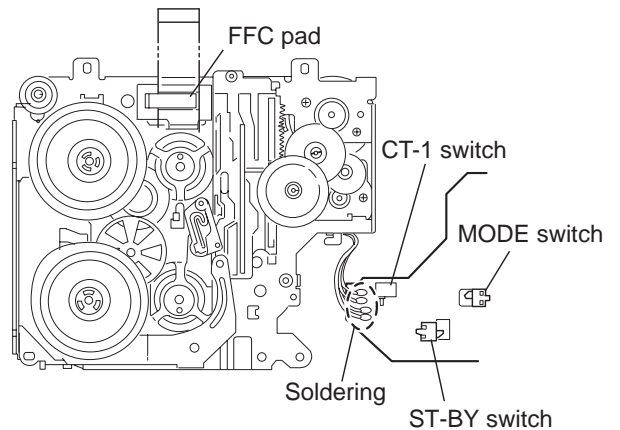


Fig.22

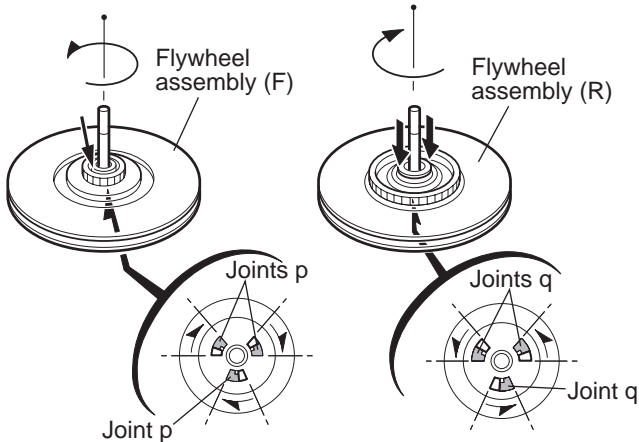


Fig.19

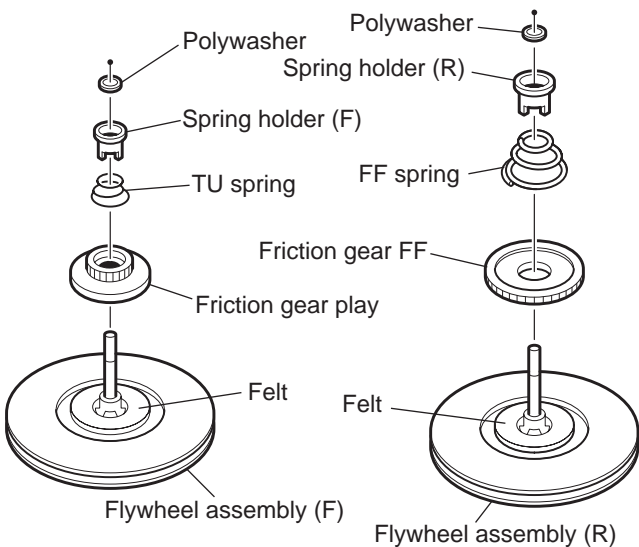


Fig.20

**2.2.13 Removing the gear base arm / gear base link assembly  
(See Fig.23 to 25)**

- (1) Move the gear base arm in the direction of the arrow.
- (2) Insert a slotted screwdriver to the gear base spring under the gear base arm, and release the gear base arm upward from the boss on the gear base assembly.
- (3) Remove the gear base arm from the main chassis while releasing the two joints **s**.
- (4) Move the gear base link assembly in the direction of the arrow to release the two joints **t**.

**REFERENCE:**

When reattaching the gear base arm, make sure that the boss on the gear base assembly is inside the gear base spring.

**2.2.14 Removing the FFC pad  
(See Fig.25 and 27)**

- (1) Push each joint hook **u** of the FFC pad and remove toward the bottom.

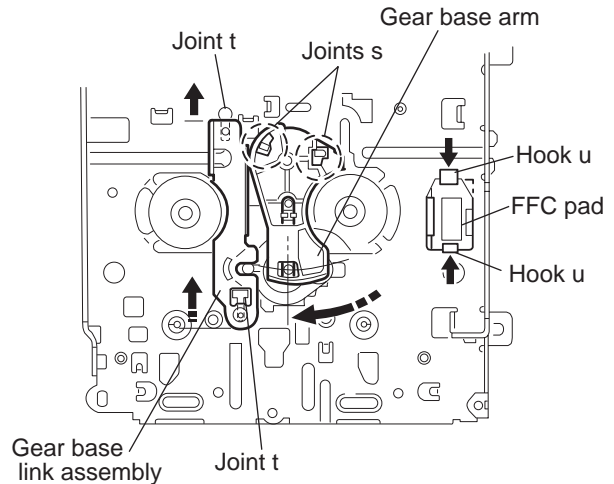


Fig.23

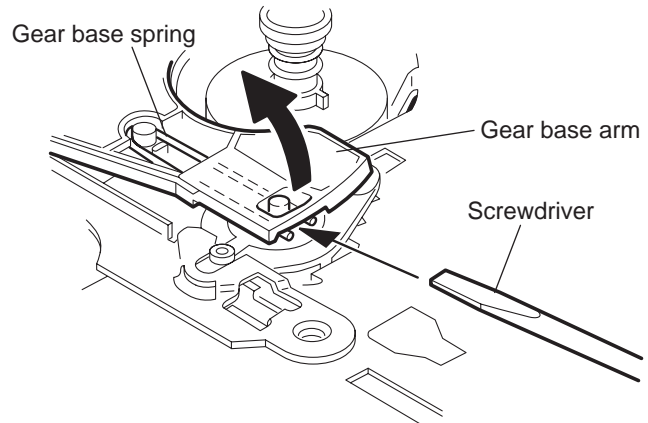


Fig.24

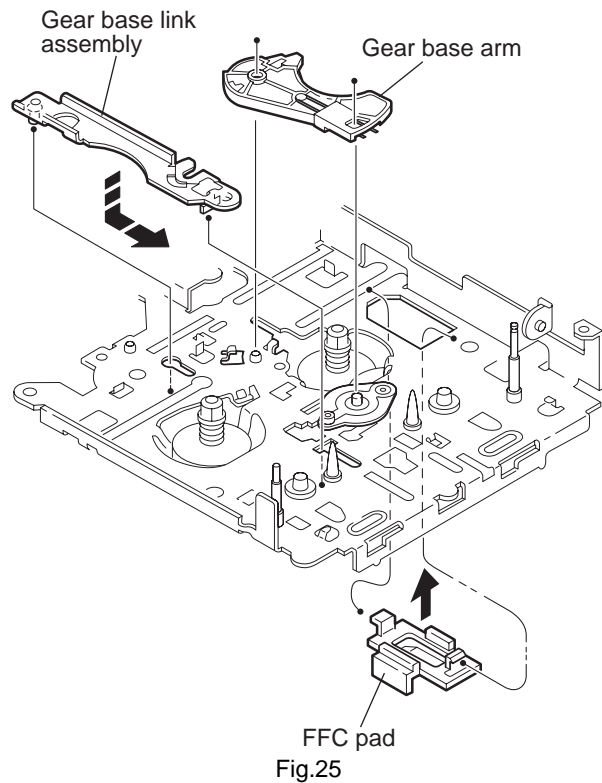


Fig.25



**2.2.15 Removing the mode gear**  
(See Fig.26 and 29)

- (1) Remove the polywasher on the bottom and pull out the mode gear.

**2.2.16 Removing the mode switch actuator**  
(See Fig.26, 27 and 29)

- (1) Pull out the mode switch actuator at the bottom.

**REFERENCE:**

When reattaching the mode switch actuator to the main chassis, make sure to set on the shaft and insert **v** into the slot **w**.

**2.2.17 Removing the direction link / direction plate**  
(See Fig.27 to 29)

- (1) Remove the polywasher attaching the direction link.
- (2) Bring up the direction link to release the three joints **x**, **y** and **z** at a time.
- (3) Move the direction plate in the direction of the arrow to release the two joints **a'**.

**REFERENCE:**

When reattaching the direction plate, engage the two joints **a'** and move in the direction of the arrow (Refer to Fig.28).

**REFERENCE:**

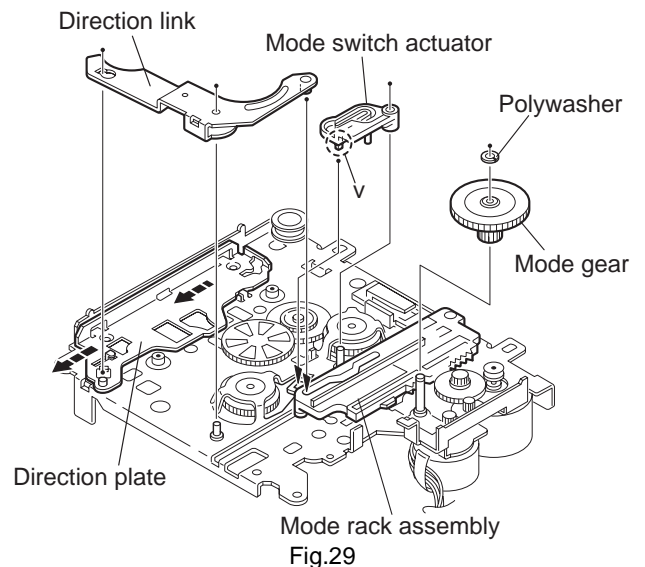
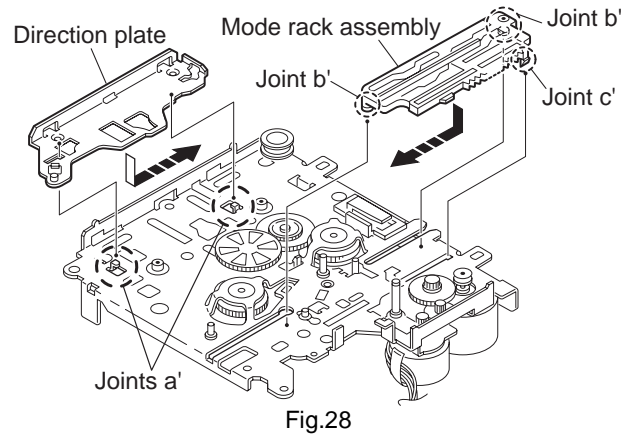
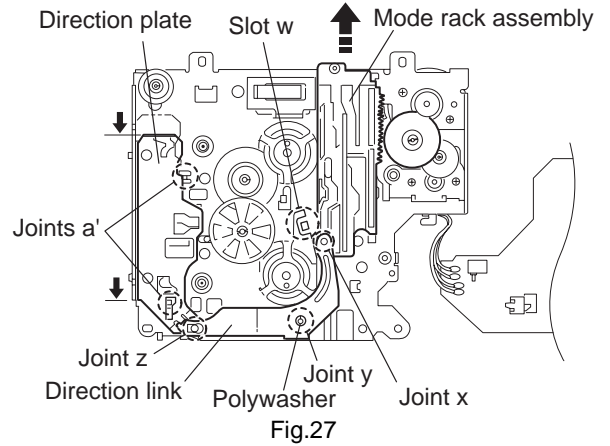
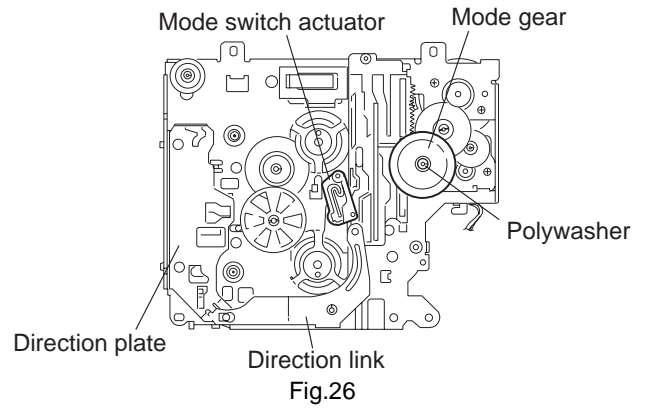
When reattaching the direction link, move the direction plate in the direction of the arrow and engage the three joint **x**, **y** and **z** at a time (Refer to Fig.29).

**2.2.18 Removing the mode rack assembly**  
(See Fig.27 and 28)

- (1) Move the mode rack assembly in the direction of the arrow to release the two joints **b'** and the joint **c'**.

**REFERENCE:**

When reattaching, set the two **b'** on the bottom of the mode rack assembly into the slots of the main chassis and move in the direction of the arrow (See Fig.28).



**2.2.19 Removing the gear base assembly / take up gear / reflector gear  
(See Fig.30 to 32)**

- (1) Push in the pin **d'** of the gear base assembly on the upper side of the body and move the reflector gear toward the bottom, then pull out.
- (2) Remove the polywasher on the bottom and pull out the take up gear.
- (3) Move the gear base assembly in the direction of the arrow to release it from the two slots **e'** of the main chassis.

**REFERENCE:**

The parts are damaged when removed. Please replace with new ones.

**2.2.20 Removing the reel driver / reel spindle  
(See Fig.32)**

- (1) Draw out the reel driver from the shaft on the main chassis and remove the reel driver spring and the reel spindle respectively.

**CAUTION:**

The reel driver is damaged when removed. Please replace with a new one.

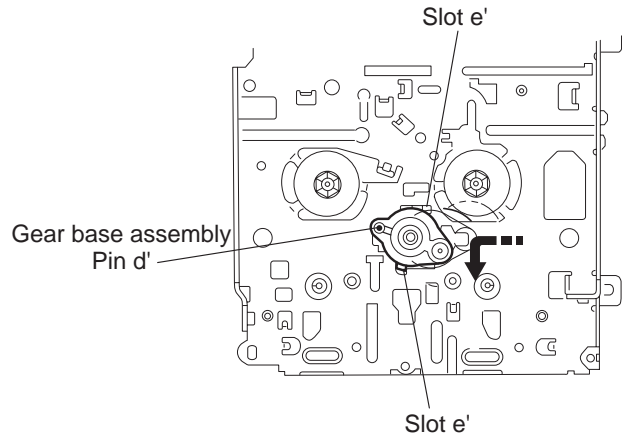


Fig.30

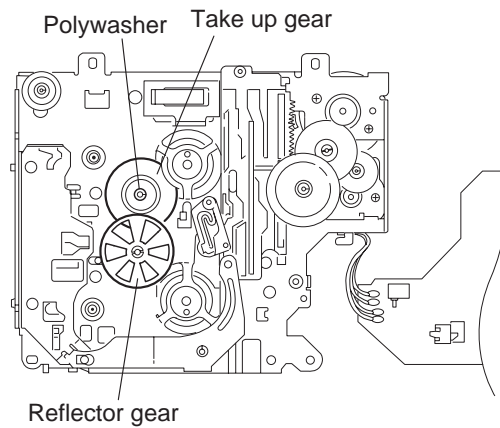


Fig.31

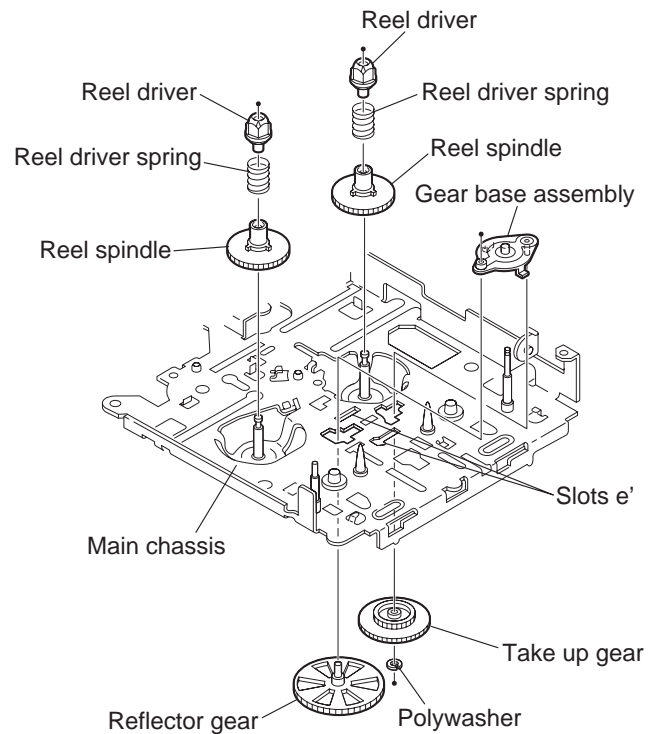


Fig.32



**2.2.21 Removing the side bracket assembly**  
**(See Fig.33 to 37)**

- (1) Remove the eject cam plate spring.
- (2) Push the joint f' through the slot to remove the load rack downward.
- (3) Move the eject cam limiter in the direction of the arrow to release it from the boss g' of the side bracket assembly and from the two joints h'.
- (4) Move the eject cam plate in the direction of the arrow to release the joint i'.

**CAUTION:**

When reassembling, confirm operation of each part before reattaching the eject cam plate spring.

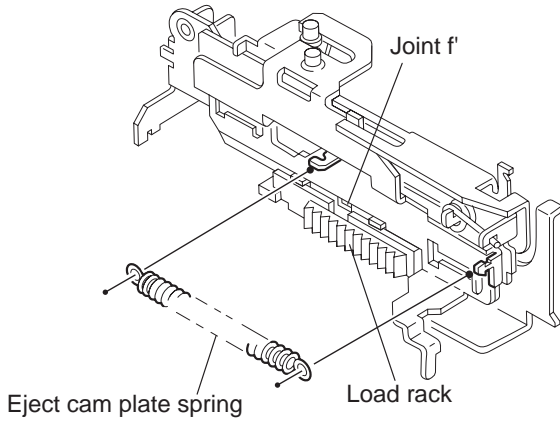


Fig.33

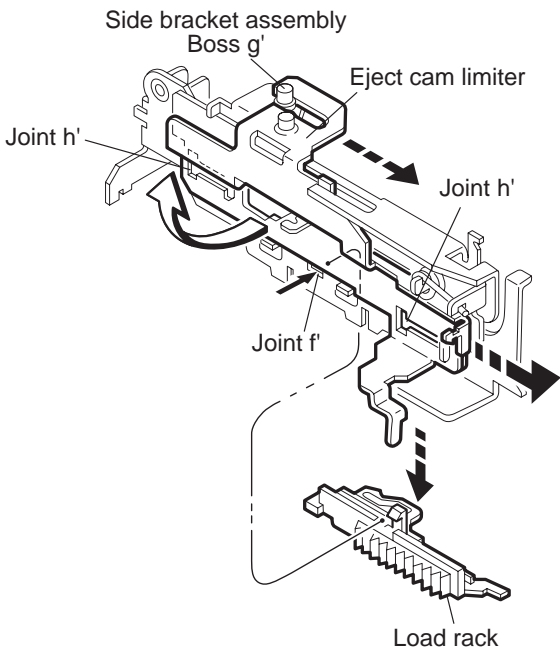


Fig.34

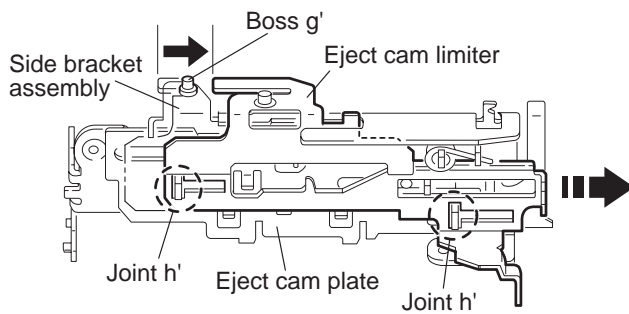


Fig.35

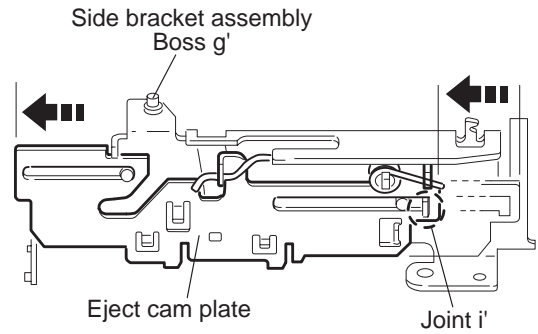


Fig.36

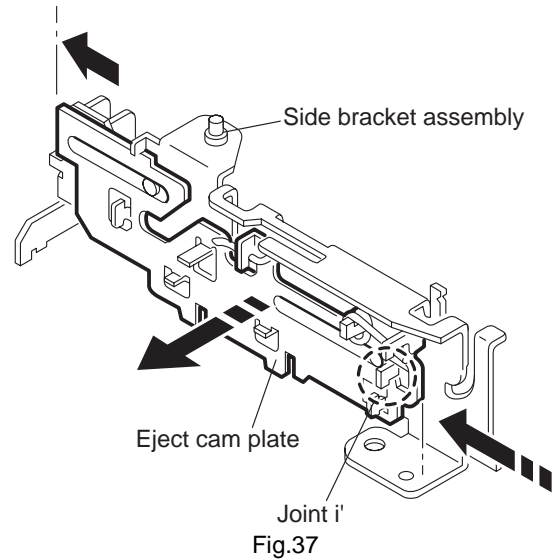


Fig.37

**2.2.22 Removing the main motor assembly / sub motor assembly**  
**(See Fig.38 to 40)**

- (1) Remove the belt at the bottom.
- (2) Remove the polywasher and pull out the mode gear.
- (3) Pull out the reduction gear **(B)**.
- (4) Remove the polywasher and pull out the reduction gear **(A)**.
- (5) Remove the two screws attaching the main motor assembly.
- (6) Remove the two screws **E** attaching the sub motor assembly.
- (7) Unsolder the wires on the reel board if necessary.

**CAUTION:**

When reassembling, adjust the length of the wires extending from the sub motor assembly by attaching them to the side of the sub motor assembly with the wires extending from the main motor assembly using a spacer.

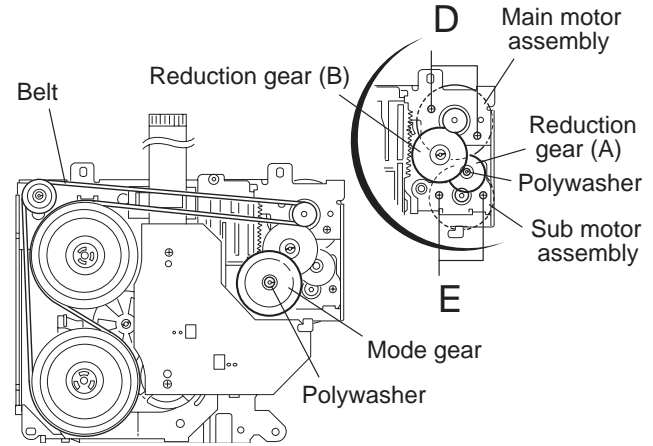


Fig.38

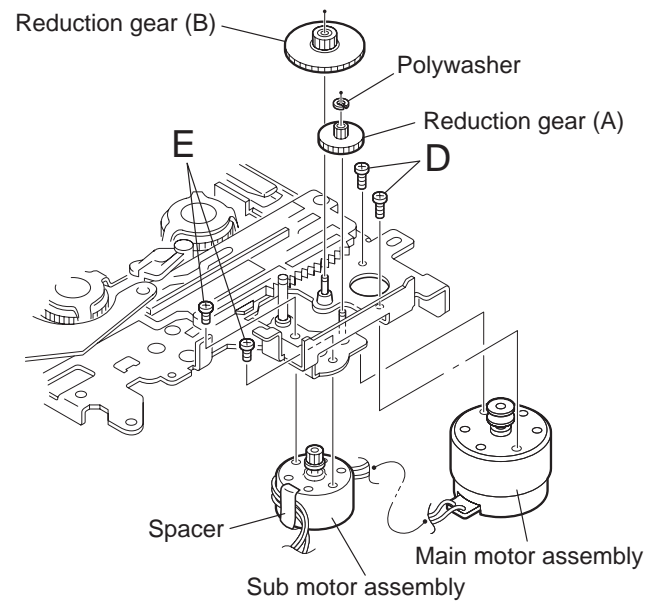


Fig.39

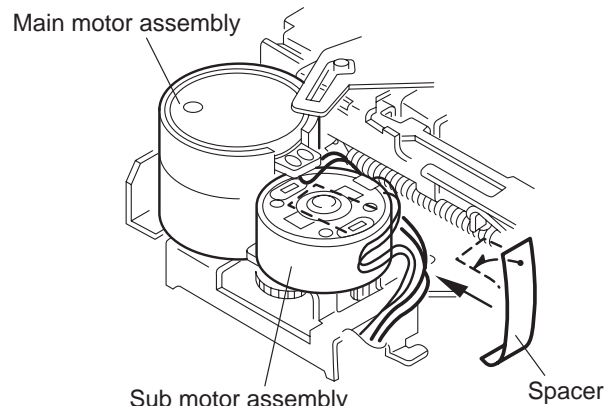


Fig.40

PARTS LIST

[ KS-FX921 ]

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

Area suffix

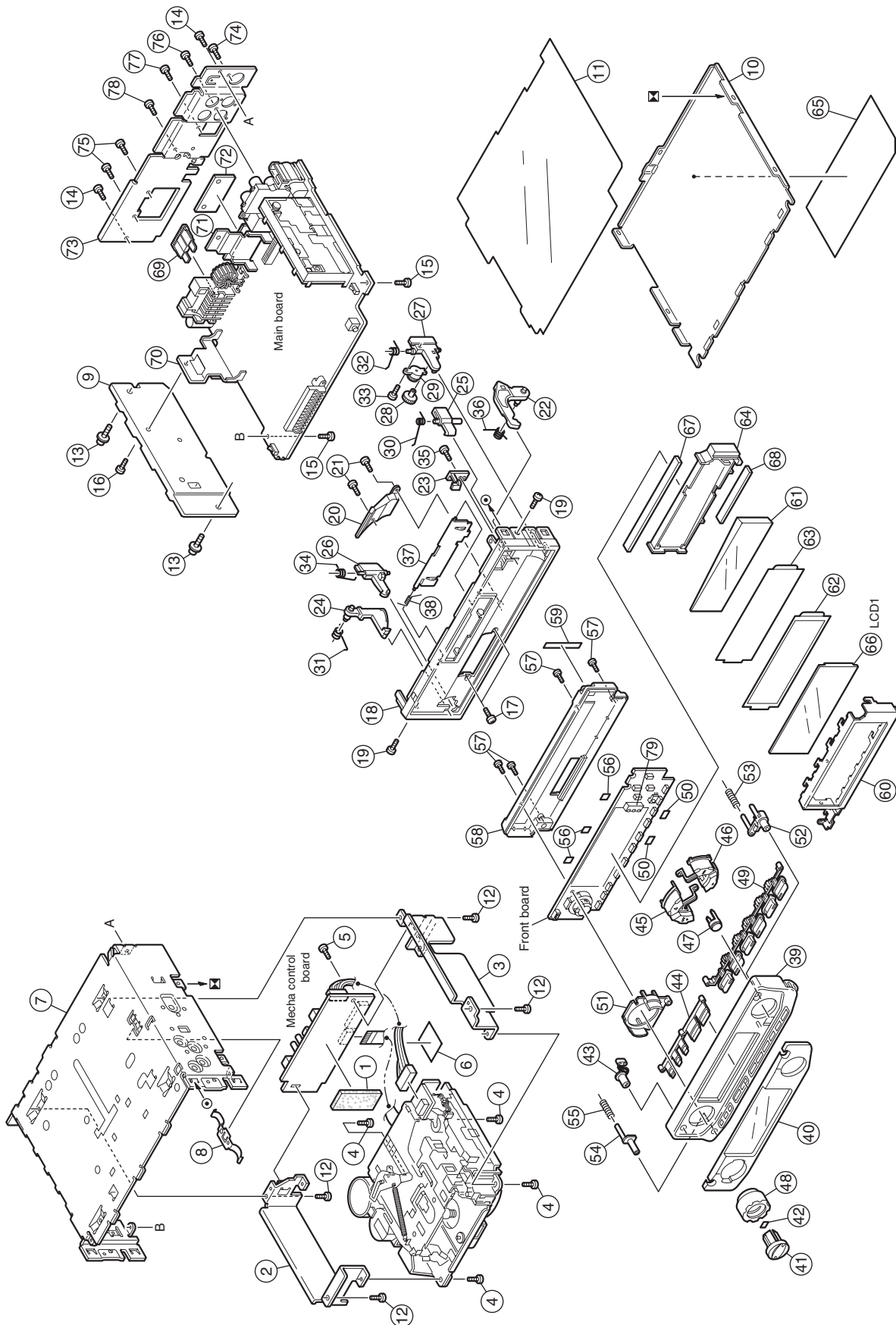
U ----- Other Areas

- Contents -

Exploded view of general assembly and parts list (Block No.M1) .....	3- 2
Cassette mechanism assembly and parts list (Block No.MP) .....	3- 4
Electrical parts list (Block No.01~03) .....	3- 8
Packing materials and accessories parts list (Block No.M3) .....	3-12

# Exploded view of general assembly and parts list

Block No. M 1 M M

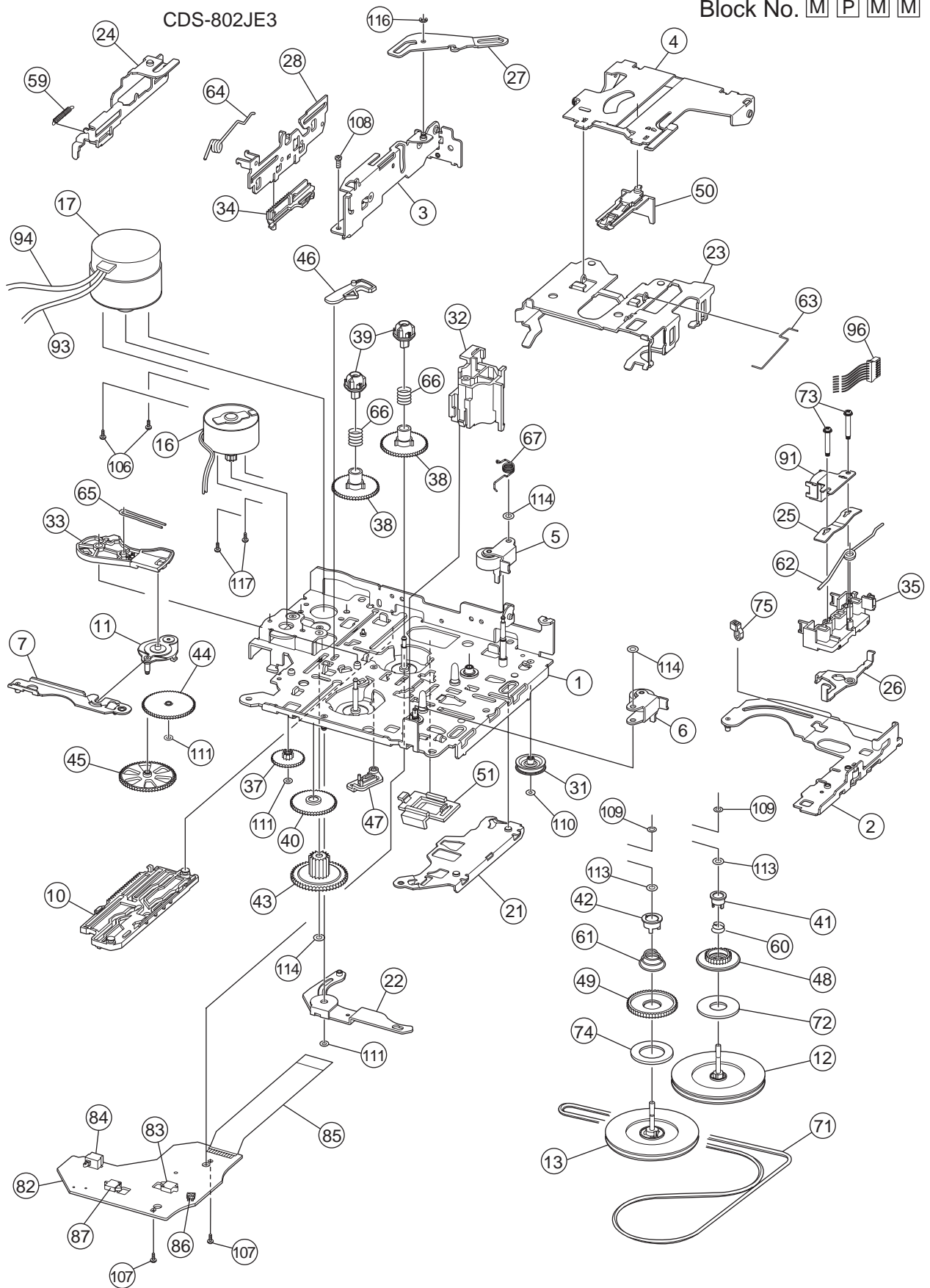


# General assembly

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

△ Symbol No.	Part No.	Part Name	Description	Local	△ Symbol No.	Part No.	Part Name	Description	Local
					73	GE30912-002A	REAR BRACKET		
					74	QYSDST2606Z	SCREW	2.6mm x 6mm	
					75	QYSDSF2606Z	SCREW	2.6mm x 6mm(x2)	
					76	QYSDSF2606Z	SCREW	2.6mm x 6mm	
					77	QYSDST2606Z	SCREW	2.6mm x 6mm	
					78	QYSDST2606Z	SCREW	2.6mm x 6mm	
					79	FSKS3017-002	LED HOLDER		
1	FSYH4036-050	SHEET							
2	GE20136-001A	MECHA BKT(L)							
3	FSKL2002-002	MECHA BKT(R)							
4	QYSDST2606Z	SCREW	2.6mm x 6mm(x4)						
5	QYSDST2606Z	SCREW	2.6mm x 6mm						
6	LV40847-002A	SPACER							
7	GE10043-011A	TOP CHASIS							
8	GE40135-001A	EARTH PLATE							
9	GE30938-003A	HEAT SINK							
10	GE30393-001A	BOTTOM COVER							
11	FSMA3005-001	INSULATOR							
12	QYSDST2604Z	SCREW	2.6mm x 4mm(x4)						
13	FSKZ4005-001	SCREW	(x2)						
14	QYSDST2604Z	SCREW	2.6mm x 4mm(x2)						
15	QYSDST2606Z	SCREW	2.6mm x 6mm(x2)						
16	QYSDST2610Z	SCREW	2.6mm x 10mm						
17	QYSDSF2006M	SCREW	2mm x 6mm(x2)						
18	GE10064-002A	FRONT CHASSIS							
19	QYSDST2004M	MINI SCREW	2mm x 4mm(x2)						
20	VJK3707-001	LIGHT LENS							
21	QYSPSGU1745N	MINI SCREW	1.7mm x 4.5mm(x2)						
22	GE30378-002A	OPEN LEVER							
23	FSKS3015-001	LOCK LEVER(O.L)							
24	VKS3798-002	RELEASE LEVER							
25	GE30379-001A	LOCK LEVER(TOP)							
26	VKS3794-003	LOCK LEVER(L)							
27	VKS3795-002	LOCK LEVER(R)							
28	VKS5563-001	GEAR							
29	VKZ4786-002	OIL DAMPER							
30	FSKW4012-001	T.SPRING							
31	GE40144-003A	T.SPRING							
32	VKW5262-001	T.SPRING							
33	QYSDSF2006M	SCREW	2mm x 6mm						
34	VKW5263-002	T.SPRING							
35	VKZ4777-001	MINI SCREW							
36	GE40164-001A	T.SPRING							
37	FSJC3014-001	CASS LID							
38	VKW4947-002	DOOR SPRING							
39	GE10044-014A	FRONT PANEL							
40	GE30855-003A	FINDER ASSY							
41	GE30840-002A	SEL BTN							
42	FSYH4036-032	SHEET							
43	GE30537-001A	POWER BUTTON							
44	GE20124-007A	D.FUNC BUTTON							
45	GE30581-006A	NAV UP BTN							
46	GE30582-001A	NAV DN BTN							
47	GE40148-002A	NAV CAP							
48	GE40132-001A	VOL KNOB							
49	GE20129-001A	PRESET BUTTON							
50	FSYH4036-069	SHEET	(x2)						
51	GE30387-002A	RIM LENS							
52	GE30538-003A	EJECT BUTTON							
53	VKW3001-330	COMP.SPRING							
54	GE30547-001A	DETACH BUTTON							
55	VKW3001-330	COMP.SPRING							
56	FSYH4036-081	SPACER	(x3)						
57	VKZ4777-001	MINI SCREW	(x4)						
58	GE10045-001A	REAR COVER							
59	FSYH4036-035	SHEET							
60	GE30389-001A	LCD CASE							
61	FSJK3028-001	LCD LENS							
62	GE40146-001A	LIGHTING SHEET							
63	FSYH4061-002	LIGHTING SHEET							
64	FSKS3013-001	LENS CASE							
65	GE30708-001A	NAME PLATE							
66	QLD0257-001	LCD MODULE							
67	QNZ0449-001	RUBBER CONNE							
68	QNZ0450-001	RUBBER CONNE							
△ 69	QMFZ047-150-T	FUSE	15A						
70	GE40172-002A	IC BRACKET							
71	GE40103-002A	REG BRACKET							
72	GE40107-002A	HEAT SINK							

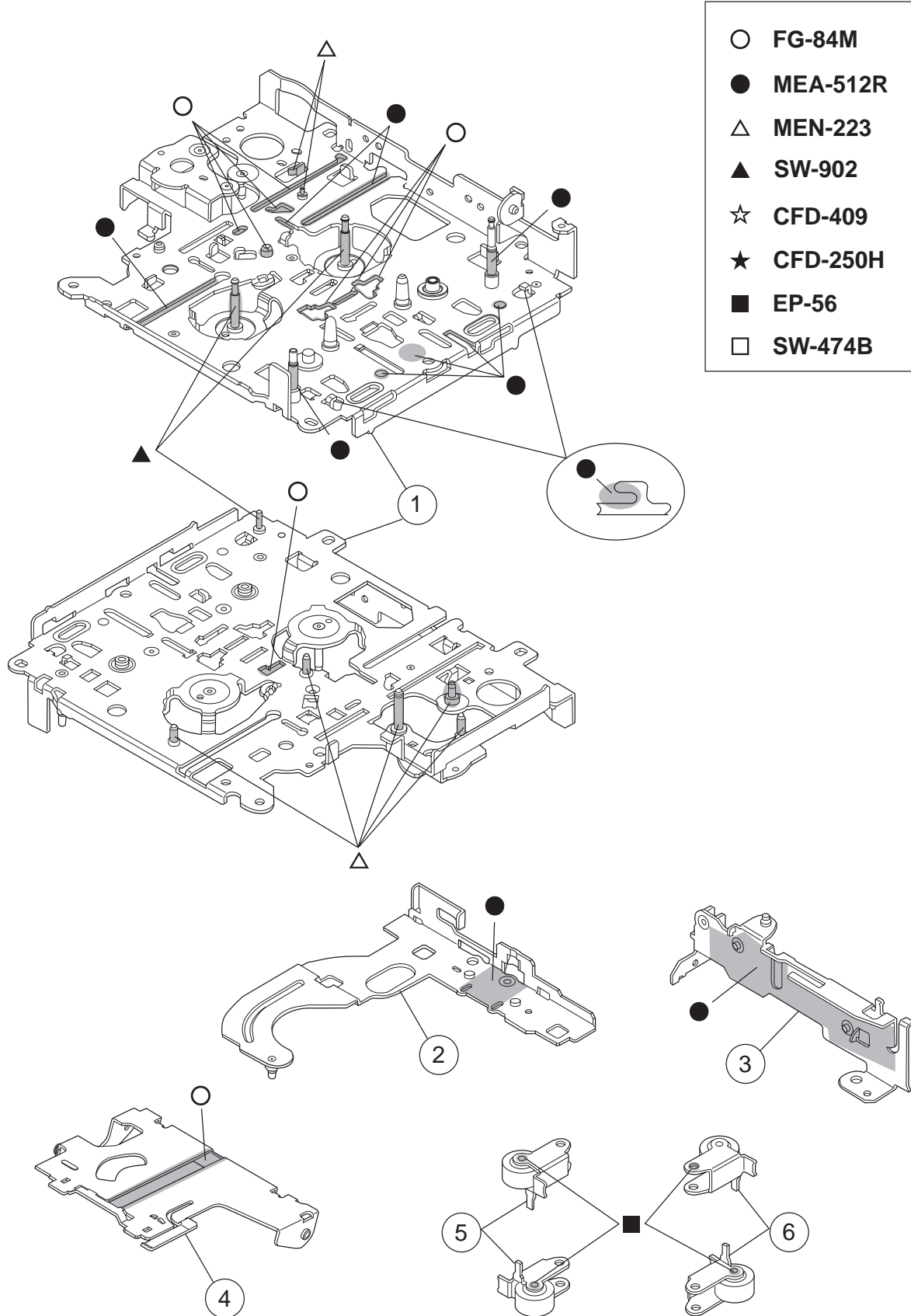
# Cassette mechanism assembly and parts list



# Cassette mechanism

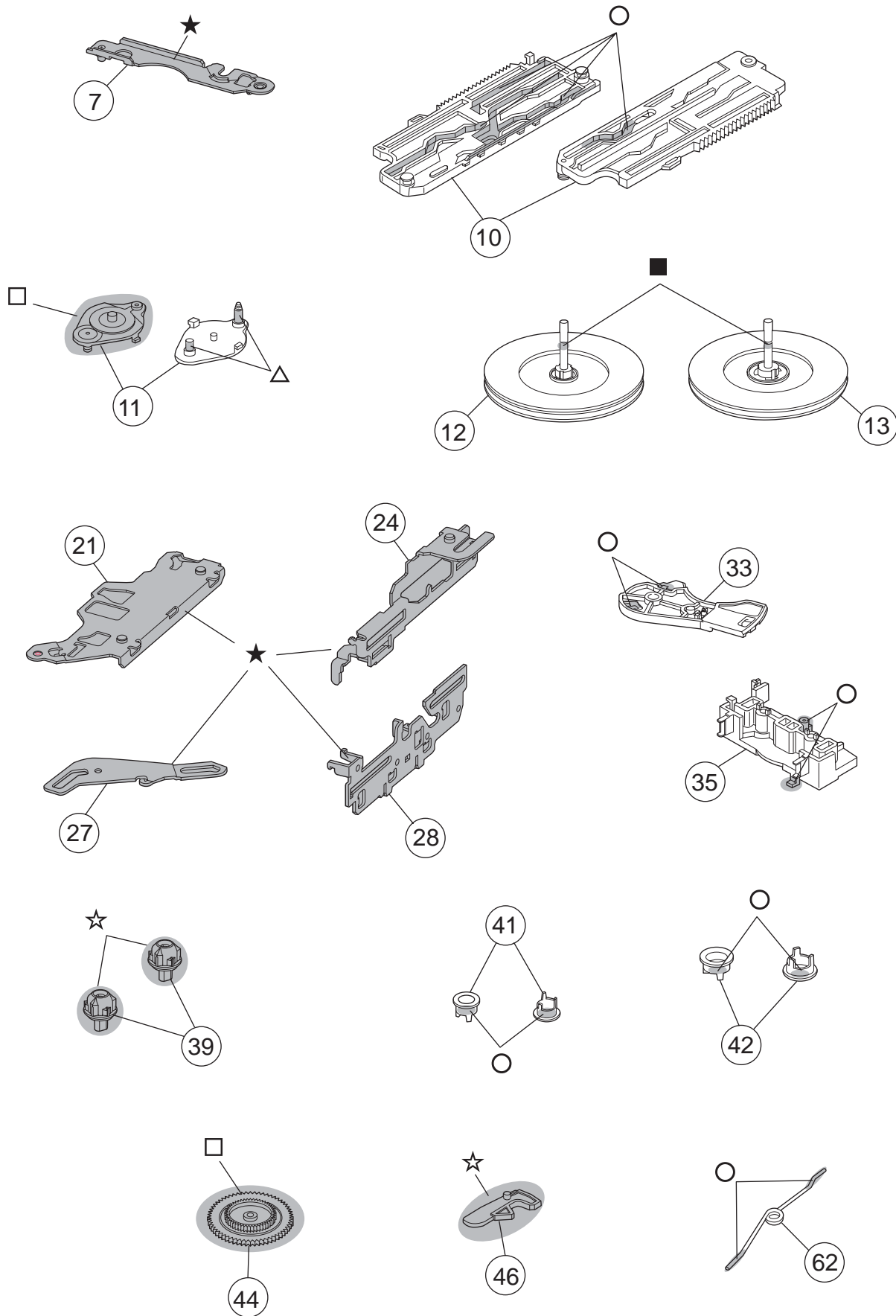
Block No. [M][P][M][M]					△ Symbol No.	Part No.	Part Name	Description	Local
△ Symbol No.	Part No.	Part Name	Description	Local					
					117	2-1031-7030-C2S	SCREW		(x2)
1	X-0802-1009S	MAIN CHASSIS AS							
2	X-0802-1002S	SLIDE CHASSIS A							
3	X-0802-1003S	SIDE BKT ASSY							
4	X-0802-1004S	CASSETTE HANGER							
5	X-0802-1005S	PINCH ARM F ASS							
6	X-0802-1006S	PINCH ARM R ASS							
7	X-0802-1007S	GEARBASE LINK A							
10	X-0802-2001S	MODE RACK ASSY							
11	X-0802-2002S	GEAR BASE ASSY							
12	1-0802-6001S	FLYWHEEL ASSY F							
13	1-0802-6002S	FLYWHEEL ASSY R							
16	X-0802-7002S	SUB MOTOR ASSY							
17	X-0802-7004S	MAIN MOTOR ASSY							
21	1-0802-1002S	DIRECTION PLATE							
22	1-0802-1005S	DIRECTION LINK							
23	1-0802-1006S	CASSETTE HOLDER							
24	1-0802-1011S	EJECT CAM LIMIT							
25	1-0802-1012S	HEAD SUPT SPG							
26	1-0802-1013S	PINCH SPG ARM							
27	1-0802-1014S	LOAD ARM							
28	1-0802-1015S	EJECT CAM PLATE							
31	1-0101-2056S	IDLE PULLEY(A1)							
32	1-0802-2001S	CASSETTE GUIDE							
33	1-0802-2004S	GEAR BASE ARM							
34	1-0802-2006S	LOAD RACK							
35	1-0802-2007S	TAPE GUIDE							
37	1-0802-2009S	REDUCTION GEARA							
38	1-0802-2010S	REEL SPINDLE		(x2)					
39	1-0802-2011S	REEL DRIVER		(x2)					
40	1-0802-2012S	REDUCTION GEARB							
41	1-0802-2013S	SPG HOLDER F							
42	1-0802-2014S	SPG HOLDER R							
43	1-0802-2015S	MODE GEAR							
44	1-0802-2016S	TAKE UP GEAR							
45	1-0802-2017S	REFLECTOR GEAR							
46	1-0802-2018S	RACK LINK							
47	1-0802-2019S	MODE SW ACTUATR							
48	1-0802-2020S	FRICITION GEARPL							
49	1-0802-2021S	FRICITION GEARFF							
50	1-0802-2022S	CASSETTE CATCH							
51	1-0802-2026S	FFC PAD							
59	1-0802-4001S	EJECT CAM PL SP							
60	1-0802-4002S	TU SPG							
61	1-0802-4003S	FF SPG							
62	1-0802-4004S	PINCH ARM SPG							
63	1-0802-4005S	HOLDER STAB SPG							
64	1-0802-4006S	HOLDER CUSH SPG							
65	1-0802-4007S	GEAR BASE SPG							
66	1-0802-4008S	REEL DRIVER SPG		(x2)					
67	1-0802-4013S	COMPULSION SPG							
71	1-0802-5001S	BELT							
72	1-0802-5002S	FELT 7.5*18.5*1							
73	1-0802-5003S	AZIMUTH SCREW		(x2)					
74	1-0802-5004S	FELT 11*18.5*1							
75	1-0050-5023S	WTRE CLAMPER							
82	1-0802-7001S	REEL PCB DL							
83	1-0802-7010S	SW(MATSUCHITA ESE22)							
84	1-0802-7003S	SW(MICMPU11750)							
85	1-0802-7016S	FLAT CABLE 10P							
86	1-0801-7024S	PHOTO SENSOR							
87	1-0802-7009S	SW(MICMPU12370)							
91	1-0802-7007S	HEAD(MITSUMI P-5344)							
93	1-0801-7009-0S	M.MOTOR WIRE B							
94	1-0801-7009-1S	M.MOTOR WIRE R							
96	1-0802-7017S	JOINT WIRE ASSY							
106	2-1032-0025-C2S	SCREW		(x2)					
107	2-13S2-0025-P2S	+PLAIN SCR M2		(x2)					
108	2-1112-6035-C2S	+PLAIN SCR M2.6							
109	2-1816-0032-E8S	MYLAR WASHER(S)		(x2)					
110	2-1812-0032-D2S	PSW-S 1.2							
111	1-0036-5024S	PSW(REEL)		(x3)					
113	2-1821-0040-D1S	POLY WASHER		(x2)					
114	2-1821-0040-D2S	PSW-S 2.1		(x3)					
116	2-1711-5040-16S	E RING							

# Grease point 1/2





# Grease point 2/2



# Electrical parts list

## Main board

Block No. [0][1][0][0]

△ Symbol No.	Part No.	Part Name	Description	Local
IC161	TEA6320T-X	IC		
IC301	LA47505	IC		
IC701	UPD178078GF-618	IC		
IC801	HD74HC126FP-X	IC		
IC901	AN80T05	IC		
IC902	KIA7810PI	IC		
Q1	2SB709A/R/-X	TRANSISTOR		
Q2	2SB624/4/-X	TRANSISTOR		
Q3	UN2211-X	TRANSISTOR		
Q4	UN2211-X	TRANSISTOR		
Q5	UN2211-X	TRANSISTOR		
Q31	2SC2412K/R/-X	TRANSISTOR		
Q32	2SC2412K/R/-X	TRANSISTOR		
Q241	2SD601A/R/-X	TRANSISTOR		
Q301	UN2211-X	TRANSISTOR		
Q321	2SD1781K/QR/-X	TRANSISTOR		
Q331	2SD1781K/QR/-X	TRANSISTOR		
Q341	2SD1781K/QR/-X	TRANSISTOR		
Q351	2SD1781K/QR/-X	TRANSISTOR		
Q701	2SC2412K/R/-X	TRANSISTOR		
Q781	UN2111-X	TRANSISTOR		
Q782	UN2111-X	TRANSISTOR		
Q881	UN2211-X	TRANSISTOR		
Q891	UN2211-X	TRANSISTOR		
Q901	2SA1037AK/RS/-X	TRANSISTOR		
Q902	UN2211-X	TRANSISTOR		
Q903	UN2111-X	TRANSISTOR		
Q904	UN2211-X	TRANSISTOR		
Q905	2SA1855/RST/-T	TRANSISTOR		
Q906	UN2211-X	TRANSISTOR		
Q907	2SA1037AK/RS/-X	TRANSISTOR		
Q976	2SA1037AK/RS/-X	TRANSISTOR		
Q977	UN2211-X	TRANSISTOR		
D1	1SS355-X	SI DIODE		
D2	1SS355-X	SI DIODE		
D3	1SS355-X	SI DIODE		
D4	1SS355-X	SI DIODE		
D31	UDZS9.1B-X	Z DIODE		
D32	1SS355-X	SI DIODE		
D241	1SS355-X	SI DIODE		
D242	RB160M-30-X	SB DIODE		
D243	UDZS5.1B-X	Z DIODE		
D310	1SS355-X	SI DIODE		
D321	1SS355-X	SI DIODE		
D331	1SS355-X	SI DIODE		
D341	1SS355-X	SI DIODE		
D351	1SS355-X	SI DIODE		
D701	UDZS6.2B-X	Z DIODE		
D705	UDZS6.2B-X	Z DIODE		
D706	UDZS6.2B-X	Z DIODE		
D707	UDZS6.2B-X	Z DIODE		
D708	UDZS6.2B-X	Z DIODE		
D709	UDZS6.2B-X	Z DIODE		
D710	UDZS6.2B-X	Z DIODE		
D711	UDZS6.2B-X	Z DIODE		
D712	UDZS6.2B-X	Z DIODE		
D713	UDZS6.2B-X	Z DIODE		
D715	UDZS6.2B-X	Z DIODE		
D753	SLR-56MC3F	LED		
D781	1SS355-X	SI DIODE		
D782	UDZS11B-X	Z DIODE		
D891	1SS355-X	SI DIODE		
D892	1SS355-X	SI DIODE		
D901	1N5401-F64	DIODE		
D903	RB160M-30-X	SB DIODE		
D904	RB160M-30-X	SB DIODE		
D906	RB160M-30-X	SB DIODE		
D907	RB160M-30-X	SB DIODE		
D908	1SS355-X	SI DIODE		
D909	1SS355-X	SI DIODE		

△ Symbol No.	Part No.	Part Name	Description	Local
C1	QERF1CM-106Z	E CAPACITOR	10uF 16V M	
C2	QERF1CM-106Z	E CAPACITOR	10uF 16V M	
C4	NCB31EK-223X	C CAPACITOR	0.022uF 25V K	
C6	NCB31CK-103X	C CAPACITOR	0.01uF 16V K	
C8	NCS31HJ-121X	C CAPACITOR	120pF 50V J	
C9	QERF1HM-104Z	E CAPACITOR	0.1uF 50V M	
C10	NCS31HJ-102X	C CAPACITOR	1000pF 50V J	
C13	QERF1AM-227Z	E CAPACITOR	220uF 10V M	
C31	QERF1HM-104Z	E CAPACITOR	0.1uF 50V M	
C32	QERF1HM-104Z	E CAPACITOR	0.1uF 50V M	
C33	QERF1HM-225Z	E CAPACITOR	2.2uF 50V M	
C34	NCS31HJ-102X	C CAPACITOR	1000pF 50V J	
C35	QERF1AM-227Z	E CAPACITOR	220uF 10V M	
C81	NCB31EK-223X	C CAPACITOR	0.022uF 25V K	
C82	QERF1HM-105Z	E CAPACITOR	1uF 50V M	
C91	NCB31EK-223X	C CAPACITOR	0.022uF 25V K	
C92	QERF1HM-105Z	E CAPACITOR	1uF 50V M	
C162	QERF1HM-105Z	E CAPACITOR	1uF 50V M	
C163	QERF1HM-105Z	E CAPACITOR	1uF 50V M	
C164	NCB31HK-822X	C CAPACITOR	8200pF 50V K	
C165	NCB21CK-184X	C CAPACITOR	0.18uF 16V K	
C166	NCB31AK-224X	C CAPACITOR	0.22uF 10V K	
C167	NCB31CK-333X	C CAPACITOR	0.033uF 16V K	
C168	NCB31HK-562X	C CAPACITOR	5600pF 50V K	
C172	QERF1HM-105Z	E CAPACITOR	1uF 50V M	
C173	QERF1HM-105Z	E CAPACITOR	1uF 50V M	
C174	NCB31HK-822X	C CAPACITOR	8200pF 50V K	
C175	NCB21CK-184X	C CAPACITOR	0.18uF 16V K	
C176	NCB31AK-224X	C CAPACITOR	0.22uF 10V K	
C177	NCB31CK-333X	C CAPACITOR	0.033uF 16V K	
C178	NCB31HK-562X	C CAPACITOR	5600pF 50V K	
C181	QERF1HM-225Z	E CAPACITOR	2.2uF 50V M	
C182	QERF1HM-225Z	E CAPACITOR	2.2uF 50V M	
C191	QERF1HM-225Z	E CAPACITOR	2.2uF 50V M	
C192	QERF1HM-225Z	E CAPACITOR	2.2uF 50V M	
C195	QERF1CM-476Z	E CAPACITOR	47uF 16V M	
C196	QERF1AM-107Z	E CAPACITOR	100uF 10V M	
C197	QERF1AM-107Z	E CAPACITOR	100uF 10V M	
C198	NCB31CK-103X	C CAPACITOR	0.01uF 16V K	
C241	QERF1HM-105Z	E CAPACITOR	1uF 50V M	
C242	QERF1CM-226Z	E CAPACITOR	22uF 16V M	
C243	NCB31EK-473X	C CAPACITOR	0.047uF 25V K	
C244	QERF1HM-224Z	E CAPACITOR	0.22uF 50V M	
C301	QERF1CM-476Z	E CAPACITOR	47uF 16V M	
C302	QERF1HM-105Z	E CAPACITOR	1uF 50V M	
C303	QERF1EM-475Z	E CAPACITOR	4.7uF 25V M	
C304	NCB31HK-223X	C CAPACITOR	0.022uF 50V K	
C305	QCS31HJ-471Z	C CAPACITOR	470pF 50V J	
C313	QERF1HM-474Z	E CAPACITOR	0.47uF 50V M	
C314	QERF1HM-474Z	E CAPACITOR	0.47uF 50V M	
C315	QERF1CM-226Z	E CAPACITOR	22uF 16V M	
C316	NCB31EK-104X	C CAPACITOR	0.1uF 25V K	
C317	NCB31EK-104X	C CAPACITOR	0.1uF 25V K	
C318	NCB31EK-104X	C CAPACITOR	0.1uF 25V K	
C319	NCB31EK-104X	C CAPACITOR	0.1uF 25V K	
C321	NCS31HJ-471X	C CAPACITOR	470pF 50V J	
C322	QFVD1HJ-224Z	MF CAPACITOR	0.22uF 50V J	
C331	NCS31HJ-471X	C CAPACITOR	470pF 50V J	
C332	QFVD1HJ-224Z	MF CAPACITOR	0.22uF 50V J	
C341	NCS31HJ-471X	C CAPACITOR	470pF 50V J	
C342	QFVD1HJ-224Z	MF CAPACITOR	0.22uF 50V J	
C351	NCS31HJ-471X	C CAPACITOR	470pF 50V J	
C352	QFVD1HJ-224Z	MF CAPACITOR	0.22uF 50V J	
C361	NCB31HK-223X	C CAPACITOR	0.022uF 50V K	
C362	NCB31HK-223X	C CAPACITOR	0.022uF 50V K	
C701	NCB31EK-104X	C CAPACITOR	0.1uF 25V K	
C703	NDC31HJ-220X	C CAPACITOR	22pF 50V J	
C704	NDC31HJ-270X	C CAPACITOR	27pF 50V J	
C706	NCB31EK-104X	C CAPACITOR	0.1uF 25V K	
C707	NCB31EK-104X	C CAPACITOR	0.1uF 25V K	
C708	NCB31AK-224X	C CAPACITOR	0.22uF 10V K	
C710	QERF1AM-107Z	E CAPACITOR	100uF 10V M	
C712	NCB31EK-104X	C CAPACITOR	0.1uF 25V K	
C713	NCB21EK-224X	C CAPACITOR	0.22uF 25V K	
C714	NCB31EK-104X	C CAPACITOR	0.1uF 25V K	

△ Symbol No.	Part No.	Part Name	Description	Local	△ Symbol No.	Part No.	Part Name	Description	Local
C781	QERF1AM-227Z	E CAPACITOR	220uF 10V M		R351	NRSA63J-273X	MG RESISTOR	27kΩ 1/16W J	
C782	QERF1CM-476Z	E CAPACITOR	47uF 16V M		R353	NRSA02J-102X	MG RESISTOR	1kΩ 1/10W J	
C801	NCB31EK-473X	C CAPACITOR	0.047uF 25V K		R354	NRSA02J-101X	MG RESISTOR	100Ω 1/10W J	
C881	QERF1CM-226Z	E CAPACITOR	22uF 16V M		R355	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	
C891	NCB31EK-104X	C CAPACITOR	0.1uF 25V K		R702	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
C901	QEZO622-338	E CAPACITOR	3300uF		R703	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
C902	QERF1CM-106Z	E CAPACITOR	10uF 16V M		R704	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
C903	QERF1AM-227Z	E CAPACITOR	220uF 10V M		R705	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
C904	QERF1AM-227Z	E CAPACITOR	220uF 10V M		R706	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
C905	QERF1CM-106Z	E CAPACITOR	10uF 16V M		R707	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
C906	QERF1CM-106Z	E CAPACITOR	10uF 16V M		R708	NRSA63J-332X	MG RESISTOR	3.3kΩ 1/16W J	
C907	QERF1CM-106Z	E CAPACITOR	10uF 16V M		R709	NRSA63J-332X	MG RESISTOR	3.3kΩ 1/16W J	
C908	NCS31HJ-471X	C CAPACITOR	470pF 50V J		R710	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
C909	NCB31EK-104X	C CAPACITOR	0.1uF 25V K		R711	NRSA63J-563X	MG RESISTOR	56kΩ 1/16W J	
C910	NCB21CK-334X	C CAPACITOR	0.33uF 16V K		R712	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
C911	NCB31EK-104X	C CAPACITOR	0.1uF 25V K		R713	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
C912	QERF1AM-227Z	E CAPACITOR	220uF 10V M		R714	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
C913	NCB31EK-104X	C CAPACITOR	0.1uF 25V K		R717	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
C914	QERF1CM-106Z	E CAPACITOR	10uF 16V M		R718	NRSA63J-683X	MG RESISTOR	68kΩ 1/16W J	
C917	QERF1CM-106Z	E CAPACITOR	10uF 16V M		R719	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R1	NRSA63J-100X	MG RESISTOR	10Ω 1/16W J		R720	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R2	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J		R721	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R3	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J		R723	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R4	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J		R724	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R5	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J		R725	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R6	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J		R726	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R7	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J		R727	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R8	NRSA63J-822X	MG RESISTOR	8.2kΩ 1/16W J		R731	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R9	NRSA63J-223X	MG RESISTOR	22kΩ 1/16W J		R732	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R13	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J		R733	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R22	NRS181J-0R0X	MG RESISTOR	0Ω 1/8W J		R734	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R24	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J		R735	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R25	NRS181J-6R8X	MG RESISTOR	6.8Ω 1/8W J		R736	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R26	NRS181J-0R0X	MG RESISTOR	0Ω 1/8W J		R739	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R31	NRSA02J-102X	MG RESISTOR	1kΩ 1/10W J		R741	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R32	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J		R742	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R33	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J		R743	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R34	NRSA02J-103X	MG RESISTOR	10kΩ 1/10W J		R744	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R35	NRSA63J-152X	MG RESISTOR	1.5kΩ 1/16W J		R746	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R36	NRSA02J-471X	MG RESISTOR	470Ω 1/10W J		R752	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R81	NRSA63J-122X	MG RESISTOR	1.2kΩ 1/16W J		R753	NRS181J-511X	MG RESISTOR	510Ω 1/8W J	
R82	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J		R755	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R91	NRSA63J-122X	MG RESISTOR	1.2kΩ 1/16W J		R756	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R92	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J		R757	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R161	NRSA63J-223X	MG RESISTOR	22kΩ 1/16W J		R758	NRSA63J-104X	MG RESISTOR	100kΩ 1/16W J	
R162	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J		R801	NRSA63J-104X	MG RESISTOR	100kΩ 1/16W J	
R165	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J		R802	NRSA63J-104X	MG RESISTOR	100kΩ 1/16W J	
R166	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J		R803	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R171	NRSA63J-223X	MG RESISTOR	22kΩ 1/16W J		R804	NRSA63J-334X	MG RESISTOR	330kΩ 1/16W J	
R172	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J		R805	NRSA63J-334X	MG RESISTOR	330kΩ 1/16W J	
R175	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J		R806	NRSA63J-104X	MG RESISTOR	100kΩ 1/16W J	
R176	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J		R807	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R177	NRS181J-100X	MG RESISTOR	10Ω 1/8W J		R808	NRSA63J-223X	MG RESISTOR	22kΩ 1/16W J	
R241	NRSA63J-154X	MG RESISTOR	150kΩ 1/16W J		R809	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R242	NRSA63J-154X	MG RESISTOR	150kΩ 1/16W J		R810	NRSA63J-104X	MG RESISTOR	100kΩ 1/16W J	
R243	NRSA63J-184X	MG RESISTOR	180kΩ 1/16W J		R881	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R244	NRSA63J-183X	MG RESISTOR	18kΩ 1/16W J		R882	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R245	NRSA63J-123X	MG RESISTOR	12kΩ 1/16W J		R891	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R246	NRSA63J-470X	MG RESISTOR	47Ω 1/16W J		R892	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R247	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J		R901	QRE142J-470X	C RESISTOR	47Ω 1/4W J	
R248	NRSA63J-683X	MG RESISTOR	68kΩ 1/16W J		R902	NRSA02J-682X	MG RESISTOR	6.8kΩ 1/10W J	
R249	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J		R903	NRSA02J-113X	MG RESISTOR	11kΩ 1/10W J	
R250	NRSA63J-221X	MG RESISTOR	220Ω 1/16W J		R904	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R303	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J		R905	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R305	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J		R906	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R321	NRSA63J-273X	MG RESISTOR	27kΩ 1/16W J		R907	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R323	NRSA02J-102X	MG RESISTOR	1kΩ 1/10W J		R908	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R324	NRSA02J-101X	MG RESISTOR	100Ω 1/10W J		R909	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R325	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J		R910	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R331	NRSA63J-273X	MG RESISTOR	27kΩ 1/16W J		R911	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R333	NRSA02J-102X	MG RESISTOR	1kΩ 1/10W J		R912	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R334	NRSA02J-101X	MG RESISTOR	100Ω 1/10W J		R913	NRS181J-222X	MG RESISTOR	2.2kΩ 1/8W J	
R335	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J		R914	NRS181J-222X	MG RESISTOR	2.2kΩ 1/8W J	
R341	NRSA63J-273X	MG RESISTOR	27kΩ 1/16W J		R976	NRSA02J-123X	MG RESISTOR	12kΩ 1/10W J	
R343	NRSA02J-102X	MG RESISTOR	1kΩ 1/10W J		R977	NRSA02J-273X	MG RESISTOR	27kΩ 1/10W J	
R344	NRSA02J-101X	MG RESISTOR	100Ω 1/10W J		L1	QQL244J-4R7Z	INDUCTOR	4.7uH J	
R345	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J		L901	QQR0703-001	CHOKE COIL		

△ Symbol No.	Part No.	Part Name	Description	Local
L902	QQL244J-470Z	COIL	47uH J	
CJ321	QNN0490-001	PIN JACK		
CN701	QNZ0007-002	CAR CONNECTOR		
CN901	QNZ0611-001	16P CONNECTOR		
CP401	QGB1214J1-18S	CONNECTOR	B-B (1-18)	
J1	QNB0100-002	CAR ANT JACK		
J801	QNZ0095-001	CONNECTOR		
S701	QSQ1A11-V06Z	TACT SW I/M		
S702	QSW0451-001	DETECT SW		
S703	QSW0451-001	DETECT SW		
TU1	QAU0281-001	TUNER PACK		
X701	QAX0406-001Z	CRYSTAL	4.500MHz	

## Front board

Block No. [0][2][0][0]

△ Symbol No.	Part No.	Part Name	Description	Local
IC601	LC75873NW	IC		
IC602	GP1UM261XK	IR DETECT UNIT	38kHz	
Q641	2SB624/4/-X	TRANSISTOR		
Q642	UN2211-X	TRANSISTOR		
D601	SML-310LT/MN/-X	LED		
D602	LNJ308G81/1-3/X	LED		
D603	LNJ308G81/1-3/X	LED		
D604	LNJ308G81/1-3/X	LED		
D605	LNJ308G81/1-3/X	LED		
D606	LNJ308G81/1-3/X	LED		
D607	LNJ308G81/1-3/X	LED		
D608	LNJ308G81/1-3/X	LED		
D609	LNJ308G81/1-3/X	LED		
D610	CL-190UB-X-X	BLUE LED		
D611	CL-190UB-X-X	BLUE LED		
D612	LNJ308G81/1-3/X	LED		
D613	LNJ308G81/1-3/X	LED		
D614	LNJ308G81/1-3/X	LED		
D615	LNJ308G81/1-3/X	LED		
D616	LNJ308G81/1-3/X	LED		
D617	LNJ308G81/1-3/X	LED		
D618	LNJ308G81/1-3/X	LED		
D619	LNJ308G81/1-3/X	LED		
D620	LNJ308G81/1-3/X	LED		
D621	LNJ308G81/1-3/X	LED		
D622	LNJ308G81/1-3/X	LED		
D623	LNJ308G81/1-3/X	LED		
D624	LNJ308G81/1-3/X	LED		
D625	LNJ308G81/1-3/X	LED		
D641	NSPW310BS/BR/S/	LED		
D642	NSPW310BS/BR/S/	LED		
D643	NSPW310BS/BR/S/	LED		
D651	UDZS5.1B-X	Z DIODE		
D652	1SS355-X	SI DIODE		
D653	1SS355-X	SI DIODE		
D654	1SS355-X	SI DIODE		
D655	1SS355-X	SI DIODE		
D656	1SS355-X	SI DIODE		
D657	1SS355-X	SI DIODE		
D658	1SS355-X	SI DIODE		
D659	UDZS5.6B-X	Z DIODE	1.5kΩ 1/10W J	
C601	NBE20JM-475X	TA E CAPACITOR	4.7uF 6.3V M	
C602	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C603	NCS31HJ-221X	C CAPACITOR	220pF 50V J	
C604	NCB31AK-224X	C CAPACITOR	0.22uF 10V K	
C605	NCB31AK-224X	C CAPACITOR	0.22uF 10V K	
C606	NCB31EK-104X	C CAPACITOR	0.1uF 25V 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	

△ Symbol No.	Part No.	Part Name	Description	Local
R605	NRSA63J-272X	MG RESISTOR	2.7kΩ 1/16W J	
R606	NRSA63J-392X	MG RESISTOR	3.9kΩ 1/16W J	
R607	NRSA63J-821X	MG RESISTOR	820Ω 1/16W J	
R608	NRSA63J-821X	MG RESISTOR	820Ω 1/16W J	
R609	NRSA63J-122X	MG RESISTOR	1.2kΩ 1/16W J	
R610	NRSA63J-182X	MG RESISTOR	1.8kΩ 1/16W J	
R611	NRSA63J-272X	MG RESISTOR	2.7kΩ 1/16W J	
R612	NRSA63J-821X	MG RESISTOR	820Ω 1/16W J	
R613	NRSA63J-821X	MG RESISTOR	820Ω 1/16W J	
R614	NRSA63J-122X	MG RESISTOR	1.2kΩ 1/16W J	
R620	NRS181J-821X	MG RESISTOR	820Ω 1/8W J	
R621	NRSA02J-122X	MG RESISTOR	1.2kΩ 1/10W J	
R622	NRSA02J-122X	MG RESISTOR	1.2kΩ 1/10W J	
R623	NRSA02J-122X	MG RESISTOR	1.2kΩ 1/10W J	
R624	NRSA02J-122X	MG RESISTOR	1.2kΩ 1/10W J	
R625	NRSA02J-561X	MG RESISTOR	560Ω 1/10W J	
R626	NRSA02J-561X	MG RESISTOR	560Ω 1/10W J	
R627	NRSA02J-511X	MG RESISTOR	510Ω 1/10W J	
R628	NRSA02J-511X	MG RESISTOR	510Ω 1/10W J	
R629	NRSA02J-561X	MG RESISTOR	560Ω 1/10W J	
R630	NRSA02J-561X	MG RESISTOR	560Ω 1/10W J	
R631	NRSA02J-561X	MG RESISTOR	560Ω 1/10W J	
R632	NRSA02J-561X	MG RESISTOR	560Ω 1/10W J	
R633	NRSA02J-122X	MG RESISTOR	1.2kΩ 1/10W J	
R634	NRSA02J-122X	MG RESISTOR	1.2kΩ 1/10W J	
R635	NRSA02J-122X	MG RESISTOR	1.2kΩ 1/10W J	
R636	NRSA02J-122X	MG RESISTOR	1.2kΩ 1/10W J	
R637	NRSA02J-561X	MG RESISTOR	560Ω 1/10W J	
R638	NRSA02J-561X	MG RESISTOR	560Ω 1/10W J	
R639	NRSA02J-182X	MG RESISTOR	1.8kΩ 1/10W J	
R640	NRSA02J-182X	MG RESISTOR	1.8kΩ 1/10W J	
R641	NRS181J-431X	MG RESISTOR	430Ω 1/8W J	
R642	NRS181J-431X	MG RESISTOR	430Ω 1/8W J	
R643	NRS181J-431X	MG RESISTOR	430Ω 1/8W J	
R644	NRS181J-471X	MG RESISTOR	470Ω 1/8W J	
R645	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R646	NRS181J-102X	MG RESISTOR	1kΩ 1/8W J	
R650	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R651	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R652	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R653	NRS181J-102X	MG RESISTOR	1kΩ 1/8W J	
R654	NRSA63J-221X	MG RESISTOR	220Ω 1/16W J	
R655	NRSA63J-394X	MG RESISTOR	390kΩ 1/16W J	
R656	NRSA63J-334X	MG RESISTOR	330kΩ 1/16W J	
R657	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R658	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R659	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R660	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R661	NRSA63J-470X	MG RESISTOR	47Ω 1/16W J	
R662	NRSA63J-332X	MG RESISTOR	3.3kΩ 1/16W J	
R663	NRSA63J-332X	MG RESISTOR	3.3kΩ 1/16W J	
R664	NRSA63J-332X	MG RESISTOR	3.3kΩ 1/16W J	

CN601	QNZ0006-001	CAR CONNECTOR		
EN601	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		
S609	NSW0124-001X	TACT SW		
S610	NSW0124-001X	TACT SW		
S611	NSW0124-001X	TACT SW		
S612	NSW0124-001X	TACT SW		
S613	NSW0124-001X	TACT SW		
S614	NSW0124-001X	TACT SW		
S615	NSW0124-001X	TACT SW		
S616	NSW0124-001X	TACT SW		
S617	NSW0124-001X	TACT SW		

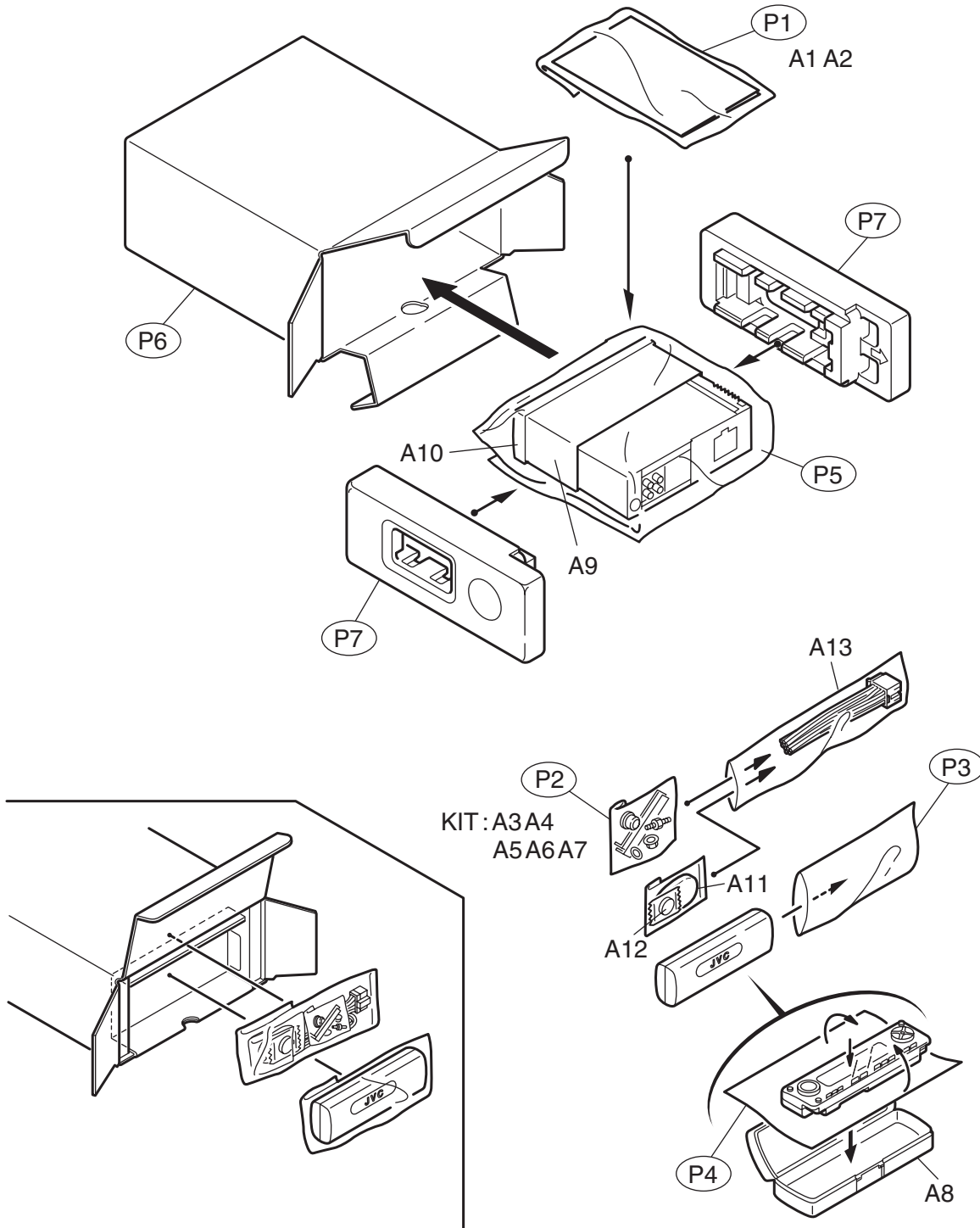
## Mecha control board

Block No. [0][3][0][0]

△ Symbol No.	Part No.	Part Name	Description	Local
IC401	CXA2560Q	IC		
IC402	LB1641	IC		
Q402	UN2211-X	TRANSISTOR		
Q403	2SB1322/RS/-T	TRANSISTOR		
D401	MA3047/H/-X	Z DIODE		
D402	1A3G-T1	SI DIODE		
C401	NDC31HJ-101X	C CAPACITOR	100pF 50V J	
C402	NDC31HJ-101X	C CAPACITOR	100pF 50V J	
C403	NDC31HJ-101X	C CAPACITOR	100pF 50V J	
C404	NDC31HJ-101X	C CAPACITOR	100pF 50V J	
C405	NDC31HJ-101X	C CAPACITOR	100pF 50V J	
C406	NDC31HJ-101X	C CAPACITOR	100pF 50V J	
C407	NDC31HJ-101X	C CAPACITOR	100pF 50V J	
C408	NDC31HJ-101X	C CAPACITOR	100pF 50V J	
C409	QEKJ1CM-226Z	E CAPACITOR	22uF 16V M	
C410	QFV61HJ-153Z	MF CAPACITOR	0.015uF 50V J	
C411	QFV61HJ-153Z	MF CAPACITOR	0.015uF 50V J	
C412	NCB31EK-104X	C CAPACITOR	0.1uF 25V K	
C413	NCB31EK-104X	C CAPACITOR	0.1uF 25V K	
C414	QEKJ1CM-226Z	E CAPACITOR	22uF 16V M	
C415	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
C416	QFVD1HJ-104Z	MF CAPACITOR	0.1uF 50V J	
C417	QFVD1HJ-104Z	MF CAPACITOR	0.1uF 50V J	
C418	NDC31HJ-221X	C CAPACITOR	220pF 50V J	
C419	QEKJ1HM-474Z	E CAPACITOR	0.47uF 50V M	
C421	NCB31HK-183X	C CAPACITOR	0.018uF 50V K	
C422	NCB31EK-104X	C CAPACITOR	0.1uF 25V K	
C423	QERF1CM-106Z	E CAPACITOR	10uF 16V M	
C424	NCB31EK-104X	C CAPACITOR	0.1uF 25V K	
C425	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
R401	NRS181J-681X	MG RESISTOR	680Ω 1/8W J	
R402	NRSA63J-104X	MG RESISTOR	100kΩ 1/16W J	
R403	NRSA63J-104X	MG RESISTOR	100kΩ 1/16W J	
R404	NRSA63J-104X	MG RESISTOR	100kΩ 1/16W J	
R405	NRSA63J-104X	MG RESISTOR	100kΩ 1/16W J	
R406	NRSA63J-181X	MG RESISTOR	180Ω 1/16W J	
R407	NRSA63J-181X	MG RESISTOR	180Ω 1/16W J	
R412	NRSA02J-101X	MG RESISTOR	100Ω 1/10W J	
R413	NRSA63J-183X	MG RESISTOR	18kΩ 1/16W J	
R414	NRSA63J-392X	MG RESISTOR	3.9kΩ 1/16W J	
R415	NRSA63J-223X	MG RESISTOR	22kΩ 1/16W J	
R416	NRSA63J-155X	MG RESISTOR	1.5MΩ 1/16W J	
R417	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R418	NRSA63J-153X	MG RESISTOR	15kΩ 1/16W J	
R422	NRSA02J-332X	MG RESISTOR	3.3kΩ 1/10W J	
R423	NRS181J-473X	MG RESISTOR	47kΩ 1/8W J	
R424	NRSA02J-332X	MG RESISTOR	3.3kΩ 1/10W J	
R425	NRS181J-330X	MG RESISTOR	33Ω 1/8W J	
VR401	QVP0009-333Z	TRIM RESISTOR	33kΩ	
VR402	QVP0009-333Z	TRIM RESISTOR	33kΩ	
CN401	QGB1214K1-18S	CONNECTOR	B-B (1-18)	
CN402	QGA2001C1-06	CONNECTOR	W-B (1-6)	
CN403	QGF1219F1-10S	CONNECTOR	FFC/FPC (1-10)	

# Packing materials and accessories parts list

Block No. M 3 M M



## Packing and accessories

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

△ Symbd No.	Part No.	Part Name	Description	Local
A 1	GET0128-001A	INST BOOK	ENG ARA CHI THA	
A 2	GET0128-002A	INSTALL MANUAL	ENG ARA CHI THA	
A 3	VKZ4027-202	PLUG NUT		
A 4	VKH4871-001SS	MOUNT BOLT		
A 5	VKZ4328-001	LOCK NUT		
A 6	WNS5000Z	WASHER		
A 7	GE40130-001A	HOOK	(x2)	
A 8	FSJB3001-30C	HARD CASE		
A 9	GE20137-003A	MOUNTING SLEEVE		
A 10	GE20149-007A	TRIM PLATE		
A 11	RM-RK50	REMOCON UNIT		
A 12	-----	BATTERY		
A 13	QAM0308-001	16 CORD ASSY		
KIT	KSFx480K-SCREW1	SCREW PARTS KIT A3 to A7		
P 1	FSPG4002-001	POLY BAG		
P 2	QPA00801205	POLY BAG	8cm x 12cm	
P 3	QPA01003003	POLY BAG	10cm x 30cm	
P 4	FSYH4036-068	SHEET		
P 5	QPC03004315P	POLY BAG	30cm x 43cm	
P 6	GE30709-001A	CARTON		
P 7	GE10070-001A	EPS CUSHION		

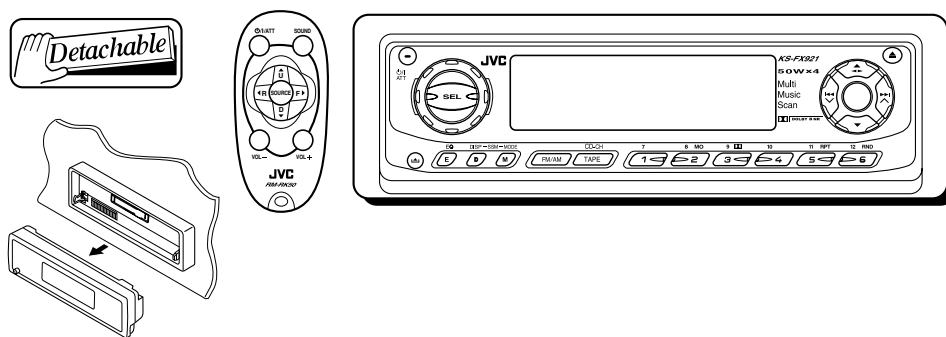
# JVC

# SCHEMATIC DIAGRAMS

## CASSETTE RECEIVER

# KS-FX921

CD-ROM No.SML200305




**Area Suffix**  
U ----- Other Areas

### Contents

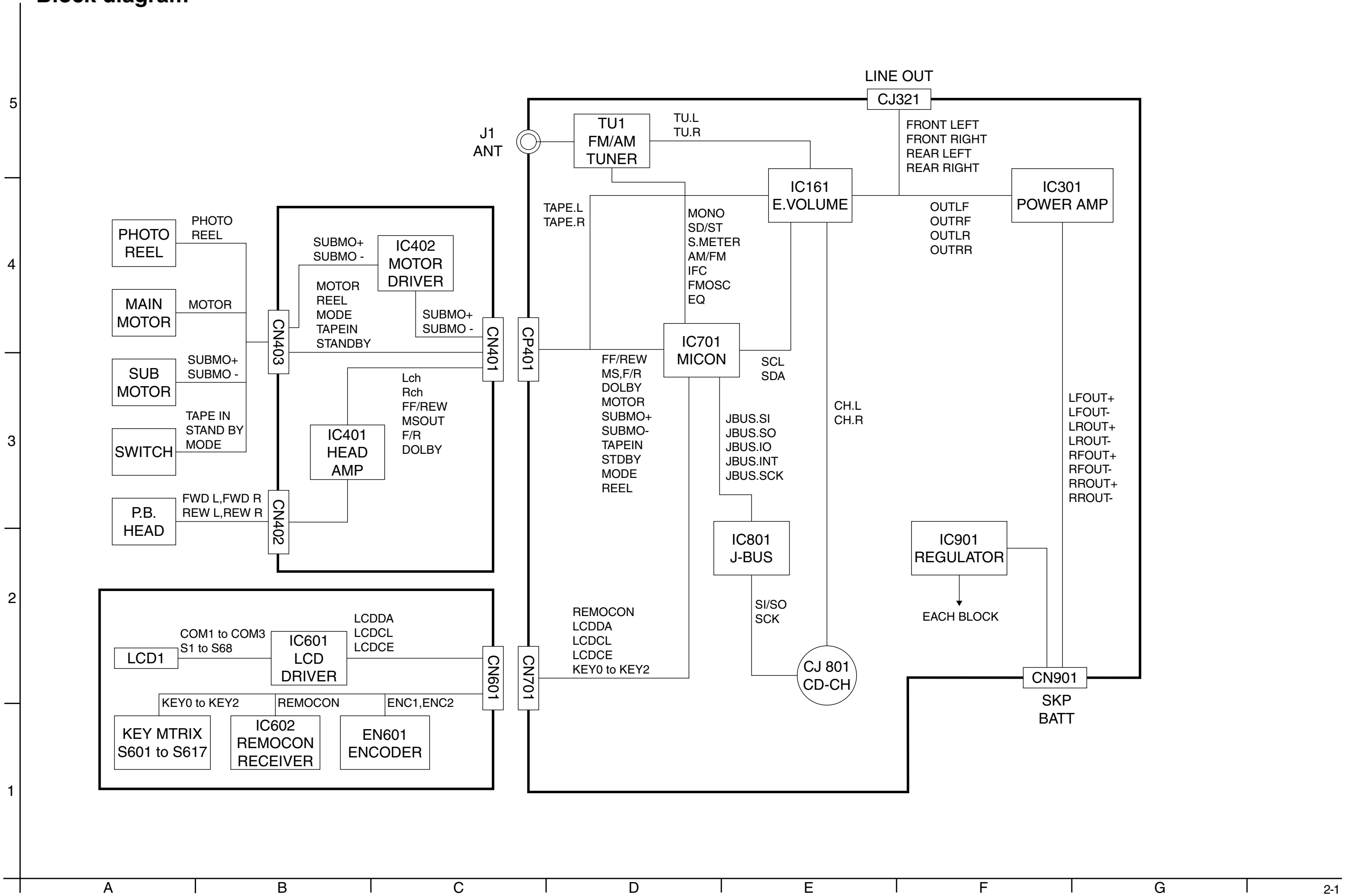
Block diagram .....	2-1
Standard schematic diagrams .....	2-2
Printed circuit boards .....	2-5 to 7



## 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.

# Block diagram



# Standard schematic diagrams

## Main amp section

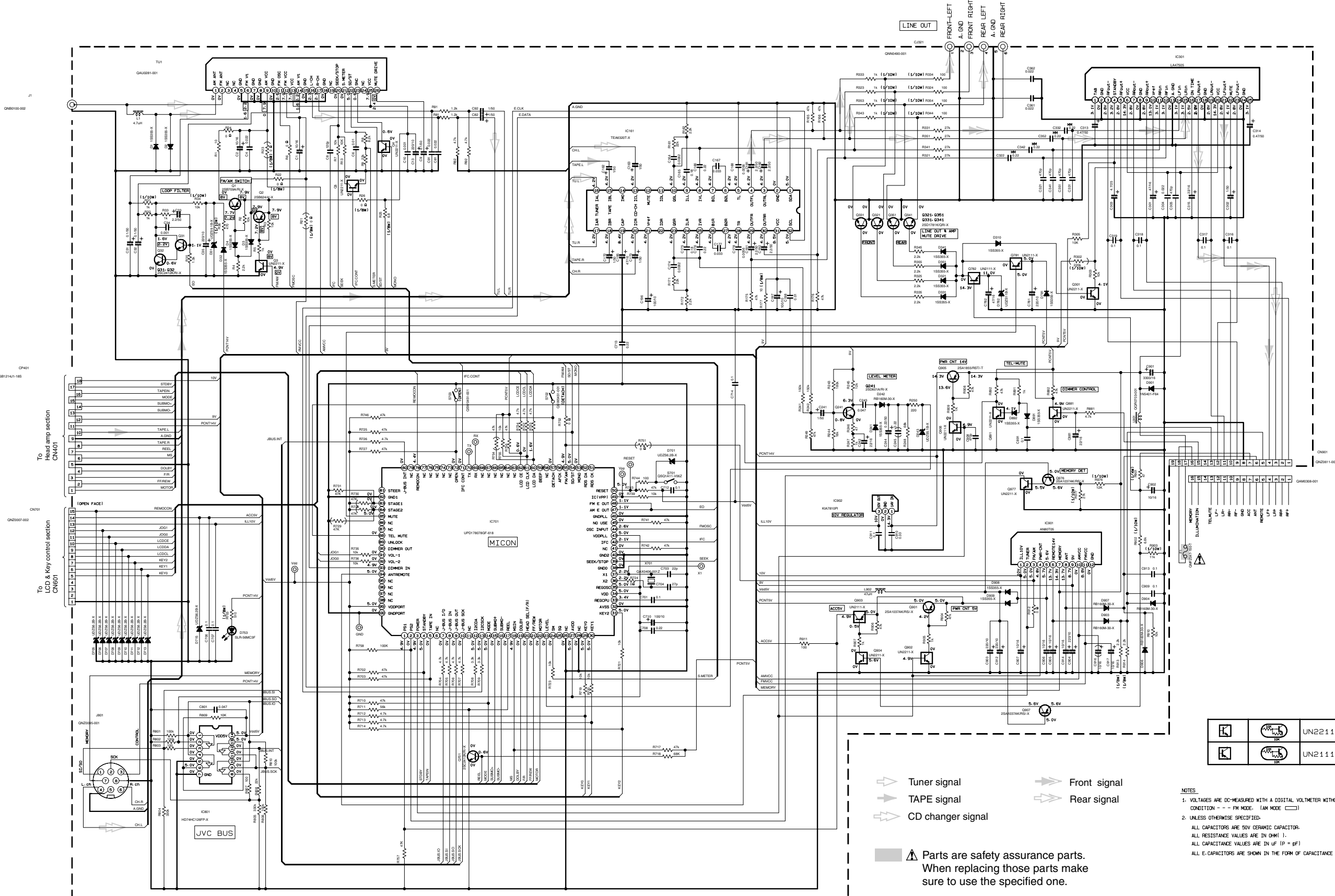
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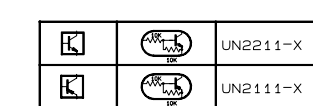
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1



⚠ 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 (□) FM MODE (○)
  - UNLESS OTHERWISE SPECIFIED: ALL CAPACITORS ARE 50V CERAMIC CAPACITOR. ALL RESISTANCE VALUES ARE IN OHM (Ω). ALL CAPACITANCE VALUES ARE IN UF (P = pF). ALL E-CAPACITORS ARE SHOWN IN THE FORM OF CAPACITANCE (UF) / RATED VOLTAGE.

■ LCD & Key control section

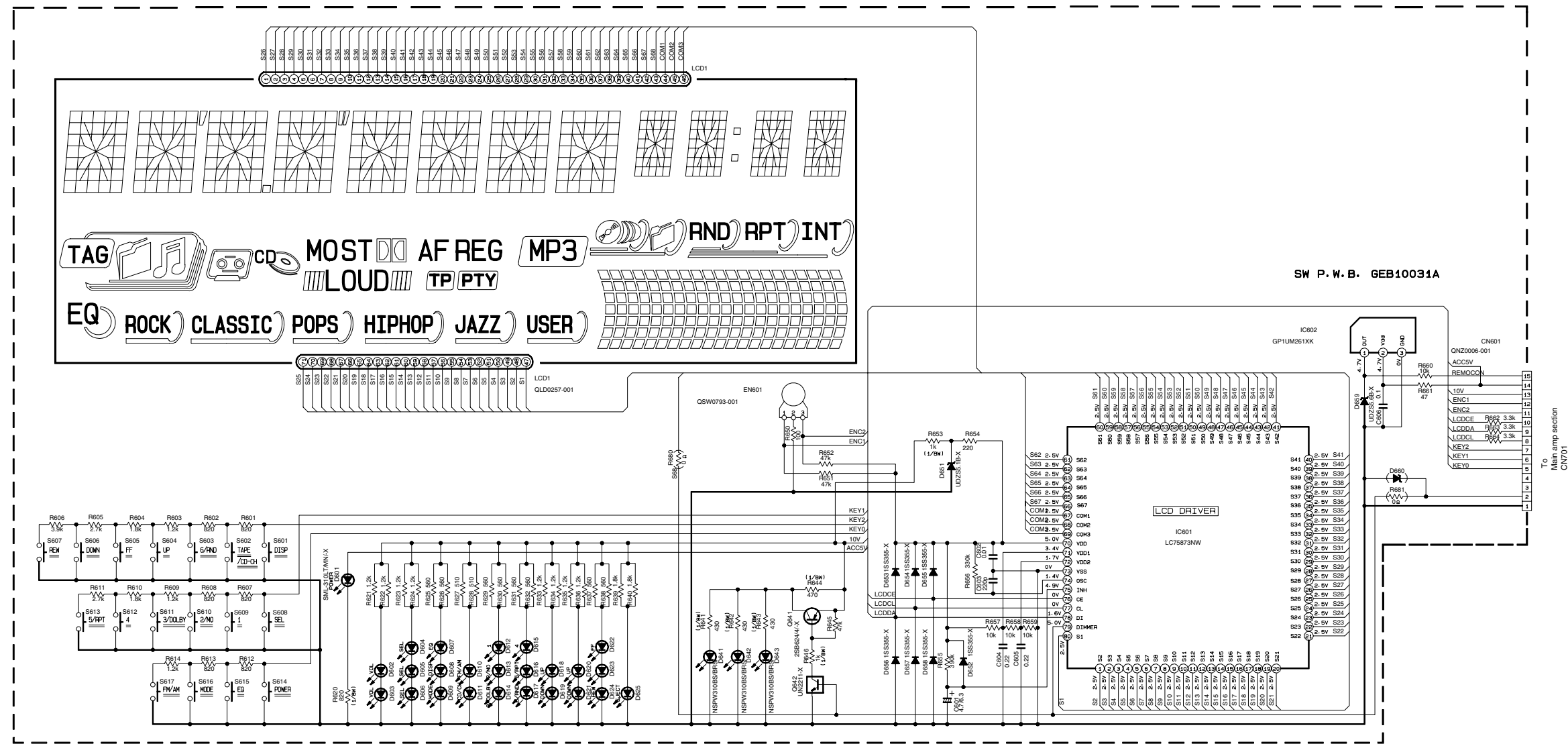
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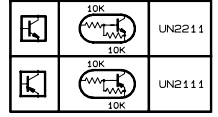
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2

1



D602-D609-D612-D625	LN309681/1-3/X
D610-D611	CL-190UB-X-X
S601-S617	NSW0124-001X



- 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).
  3. COMPONENTS IN ( ) INDICATE NOT USE.

A

B

C

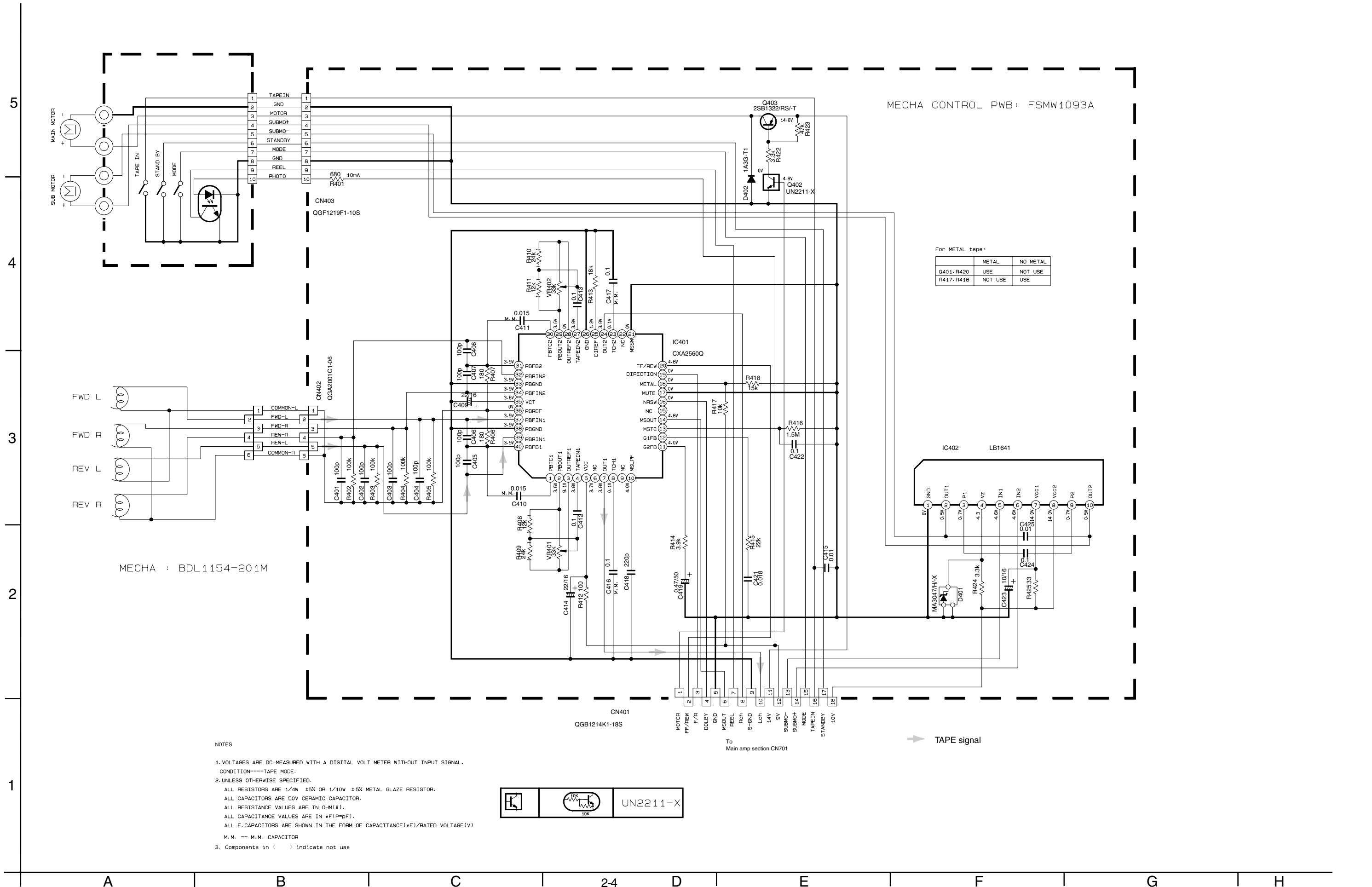
D

E

F

G

Head amp section

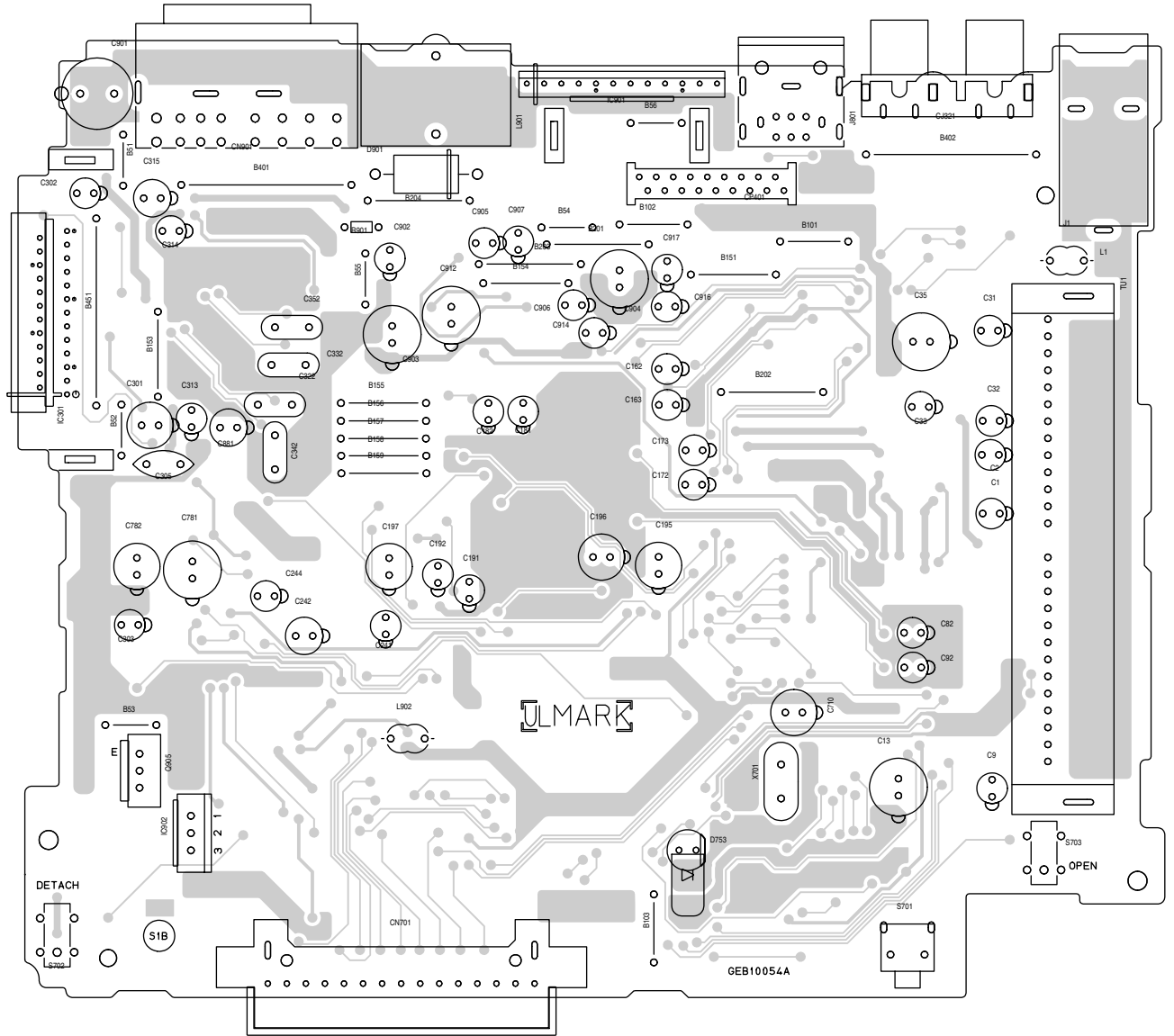


# Printed circuit boards

## ■ Main board

Forward side

5  
4  
3  
2  
1



A

B

C

■ Main board

Reverse side

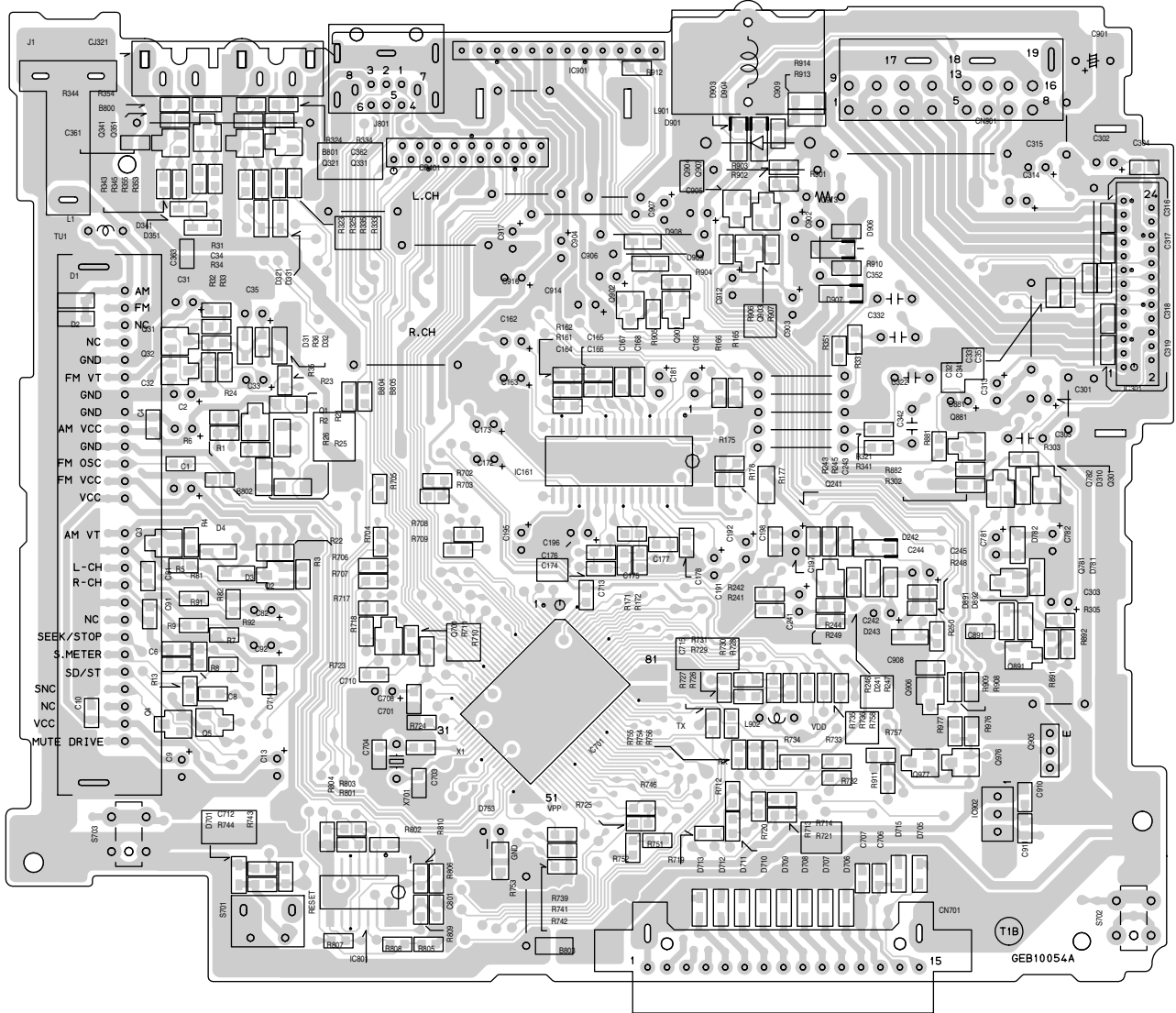
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4

3

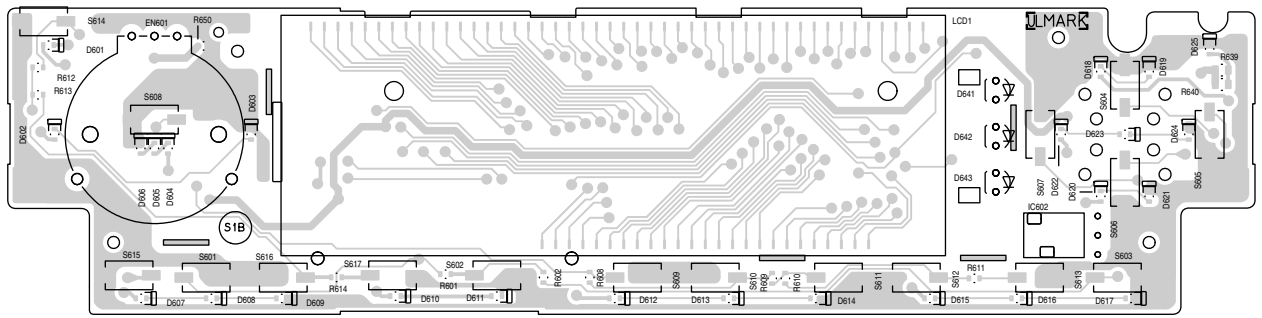
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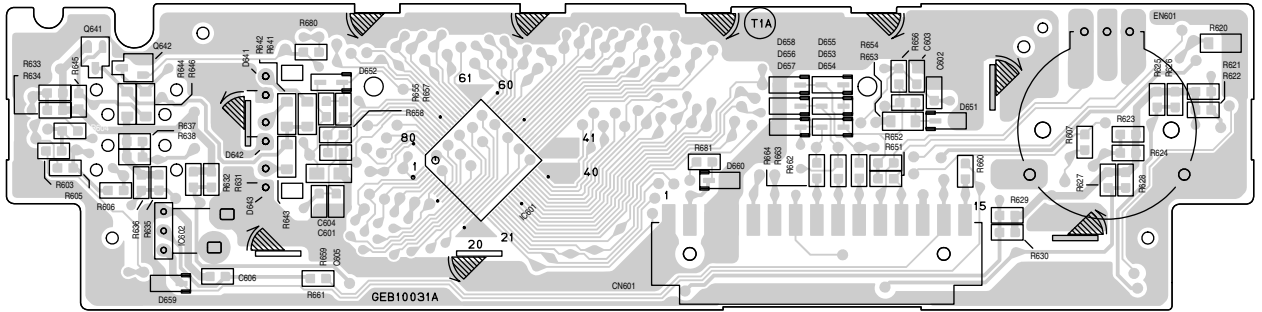


■ Front board

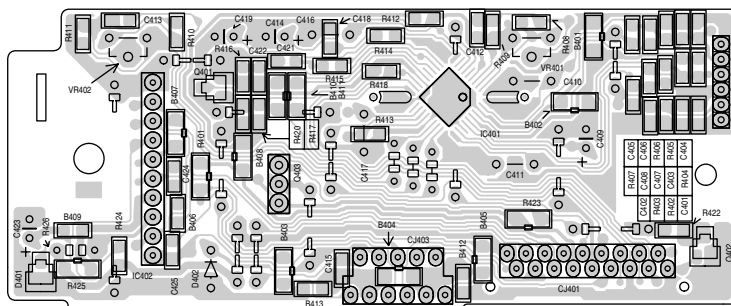
Forward side



Reverse side



■ Mecha board



5

4

3

2

1

A

B

C



**JVC**

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