CD MECHANISM ASSY

X92-4460-0x

SERVICE MANUAL

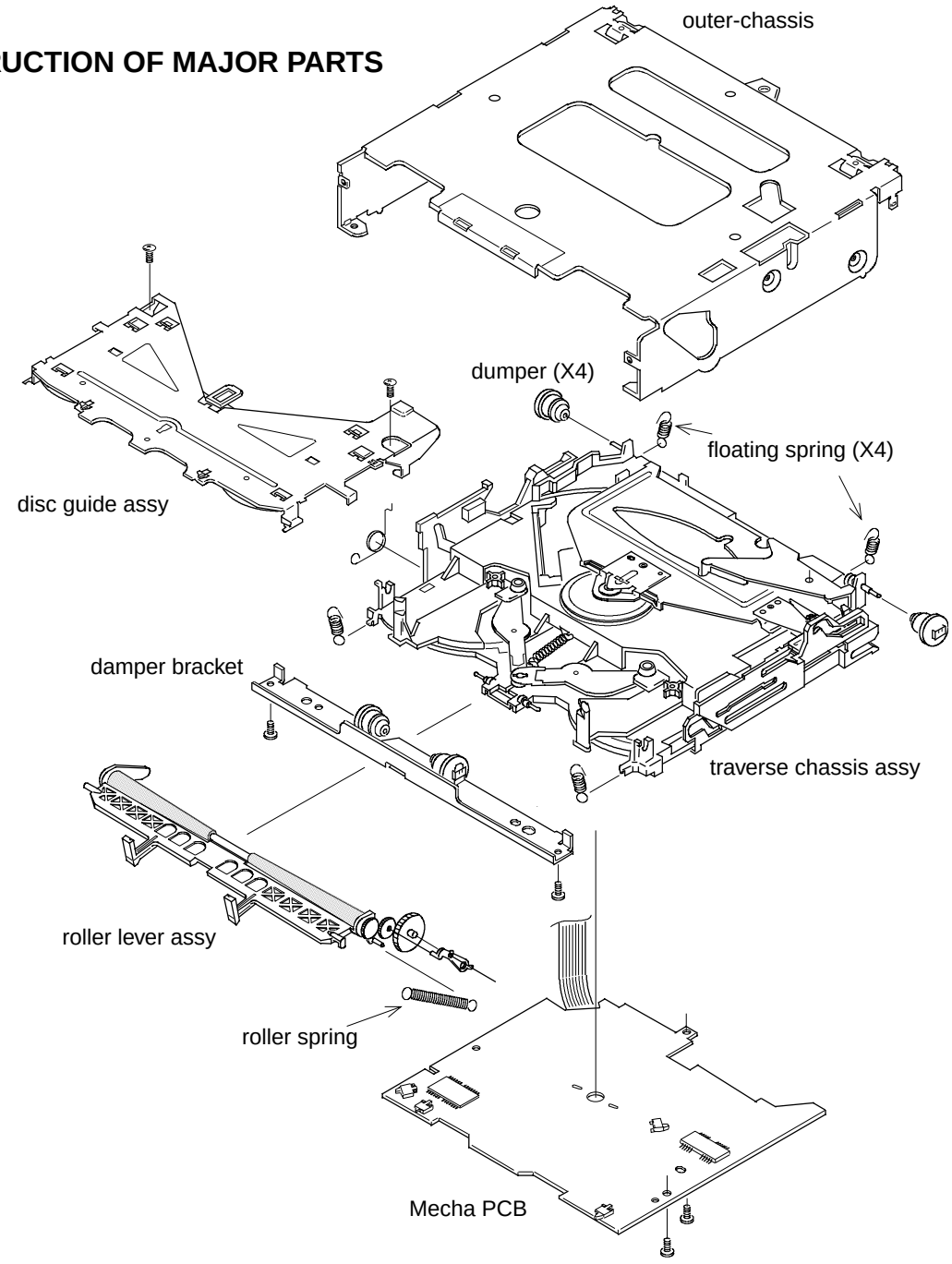
KENWOOD

B51-7891-00 (N) 3415

DESCRIPTION MECHANISM

X92-4460-00 (DXM-6400W)
X92-4460-01 (DXM-6401W)
X92-4460-02 (DXM-6402W)
X92-4460-03 (DXM-6403W)

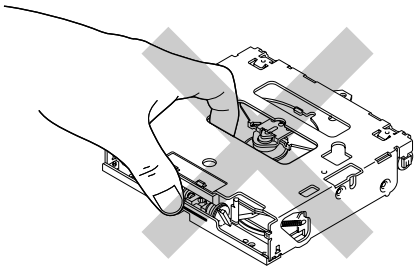
CONSTRUCTION OF MAJOR PARTS



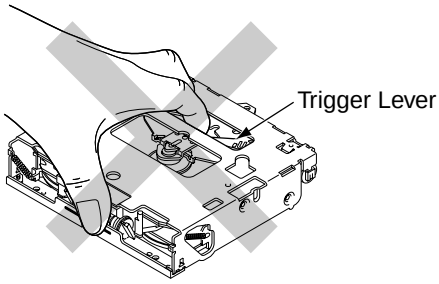
40%

X92-4460-0x

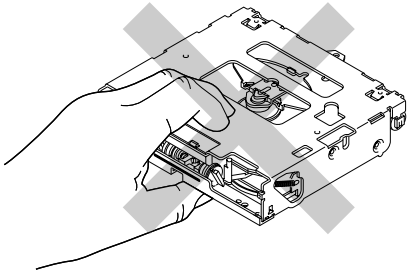
NOTE FOR HANDLING MECHANISM ASSY



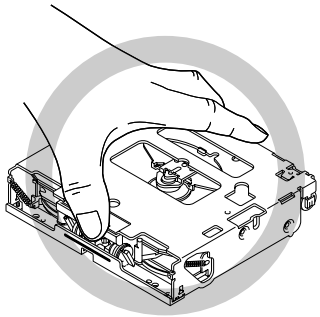
NG Pick is under the finger, it may touch.



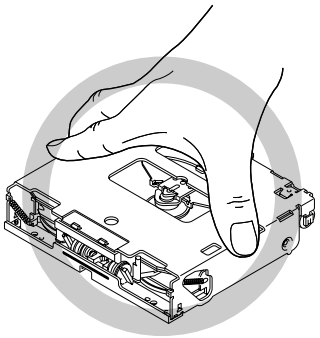
NG Don't touch the lever because the trigger lever comes off.



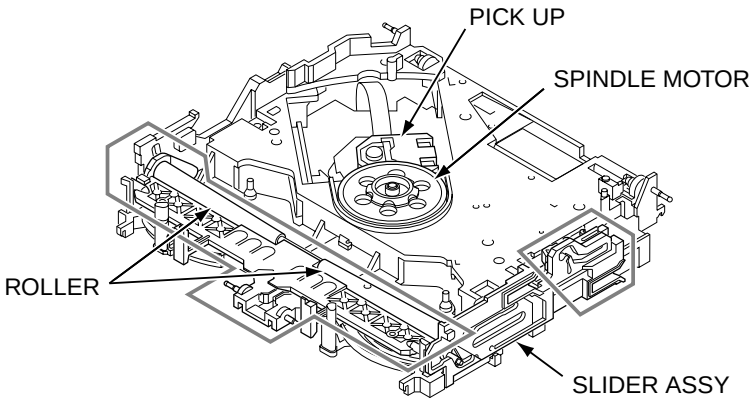
NG Don't have the center of entrance because the disc insertion mouth is transformed.



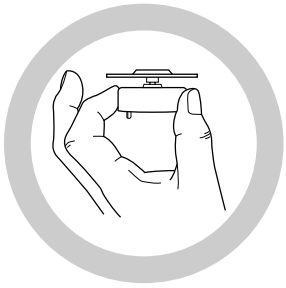
OK



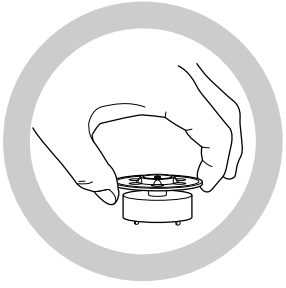
OK



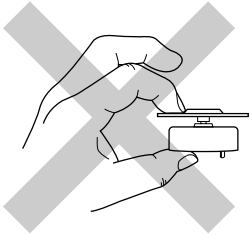
- Don't touch in the frame, since grease is applied to the parts.
- Don't applied grease to the roller.
- Don't touched PICK and SPINDLE MOTOR.



OK

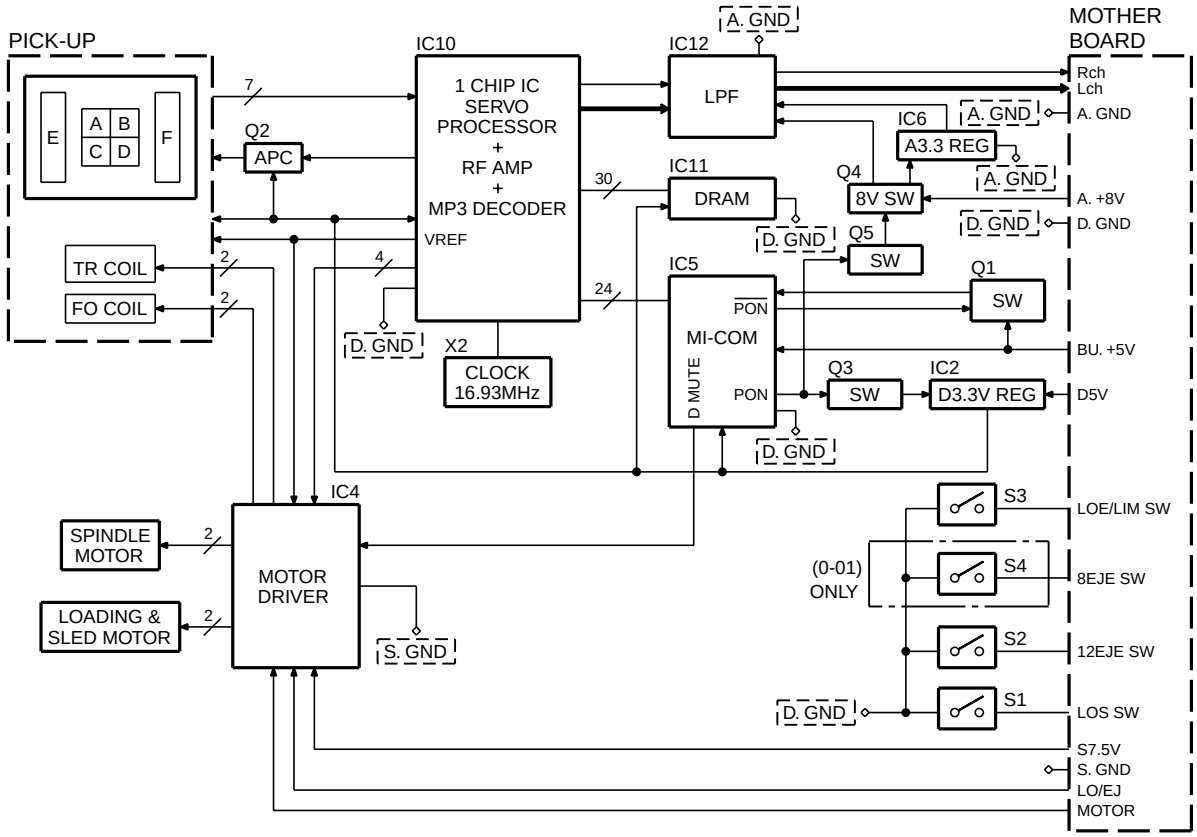


OK



NG

BLOCK DIAGRAM



COMPONENTS DESCRIPTION

●CD PLAYER UNIT(X32-5210-0x)

Ref.No.	Component Name	Application/Function	Operation/Condition/Compatibility
IC2	L88MS33T	D3.3V AVR	Power supply for the pickup, IC5, IC10 and IC11
IC4	BA5824FP	4CH BTL driver	Focusing coil, tracking coil, spindle motor and sled motor driver, disc loading and eject operation.
IC5	703033AYGC-J01	Mecha. control MI-COM.	
IC6	TAR5S33	A3.3V AVR	Power supply for DAC, LPF operational reference voltage
IC7	TC74HCT7007AF	Level shifting(3.3V→ 5V)	Buffer and logic level conversion from IC10 to IC5
IC10	UPD63760GJ	RF amplifier+CD DSP+MP3 decoder	
IC11	IS41LV16257 or MSM51V4265EP70	4M bit DRAM	For data buffer
IC12	NJM4580M1	Low pass filter	2nd low pass filter for audio signals
Q1	DTA143EUA	D.5V SW	When PON(11pin) goes Lo, Q1 is turned on, and SW5V is supplied to IC7 and AVREF(73PIN).
Q2	MCH6101	APC	LD power control
Q3	DTC124EUA	D3.3V SW	When PON(10pin) goes Hi, Q3 is turned on, and IC2 is working.
Q4	DTA143XUA	A.8V SW	When PON(10pin) goes Hi, Q4 and Q5 are turned on, and A.8V is supplied to IC6 and IC12.
Q5	DTC124EUA		

MICROCOMPUTER'S TERMINAL DESCRIPTION

●IC2 (CD PLAYER UNIT : X32-5210-0x)

Pin No.	Name.	I/O	Description	Processing Operation
1-5	NC	O		Not used(N.C.)
6	EVDD	-	Positive power supply connection terminal	Connected to BU 5V lines.
7	EVSS	-	Ground connection terminal	Connected to GND lines.
8,9	NC	O		Not used(N.C.)
10	PON	O	Power ON/OFF control terminal	Lo : Power OFF, Hi : Power ON
11	$\overline{\text{PON}}$	O	Power ON/OFF control terminal	Lo : Power ON, Hi : Power OFF
12	LOE/LIM SW	I	Down limit SW detection terminal	Hi→Lo : Pickup most inner position detected
13	8EJE SW	I	8cm disc detection SW input	Not used(connected to GND lines)
14	LOS SW	I	Loading start detection SW input	Not used(connected to GND lines)
15	12EJE SW	I	12cm disc detection SW input	Not used(connected to GND lines)
16,17	NC	O		Not used(N.C.)
18	VPP	-	FLUSH write terminal	Not used(connected to GND lines)
19	$\overline{\text{MUTE L}}$	O	Lch. Audio muting control output	Lo : Muting ON requested, Hi : Muting OFF requested
20	$\overline{\text{MUTE R}}$	O	Rch. Audio muting control output	Lo : Muting ON requested, Hi : Muting OFF requested
21-25	NC	O		Not used(N.C.)
26	EFLG	I	WMA error detection input (Lo: No ERROR)	Not used(pull down to GND lines)
27	$\overline{\text{WAIT}}$	I	Wait control signal detection input	
28	FOK	I	Focusing condition detection input	Lo : Focusing NG, Hi : Focusing OK
29,30	NC	O		Not used(N.C.)
31	$\overline{\text{RESET}}$	I	Reset terminal	Lo : Reset, Hi : Normal operation
32	XT1	I	Sub clock resonator connection terminal	Not used(pull down to GND lines)
33	XT2	-	Sub clock resonator connection terminal	Not used(N.C.)
34	REGC	-	Capacitor connection terminal for regulator inside microprocessor	
35	X2	-	Main clock resonator connection terminal	
36	X1	I	Main clock resonator connection terminal	
37	VSS	-	Ground connection terminal	Connected to GND lines.
38	VDD	-	Positive power supply connection terminal	Connected to BU 5V lines.
39	NC	O		Not used(N.C.)
40	$\overline{\text{WRL}}$	O	Multiplex WRITE signal output	Lo : Write
41	NC	O		Not used(N.C.)
42	$\overline{\text{R/W}}$	O	Multiplex $\overline{\text{R/W}}$ signal output	Not used(N.C.)
43	$\overline{\text{DSTB}}$,$\overline{\text{RD}}$	O	Multiplex RD siganal output	Lo : Read
44	ASTB	O	Multiplex ASTB siganal output	
45,46	NC	O		Not used(N.C.)
47	AD0	I/O	Multiplex Address/Data Bus	
48	AD1	I/O	Multiplex Address/Data Bus	
49	AD2	I/O	Multiplex Address/Data Bus	
50	AD3	I/O	Multiplex Address/Data Bus	
51	AD4	I/O	Multiplex Address/Data Bus	
52	AD5	I/O	Multiplex Address/Data Bus	
53	AD6	I/O	Multiplex Address/Data Bus	
54	AD7	I/O	Multiplex Address/Data Bus	
55	BVDD	-	Bus interface positive power supply connection terminal	Connected to D3.3V lines.

MICROCOMPUTER'S TERMINAL DESCRIPTION

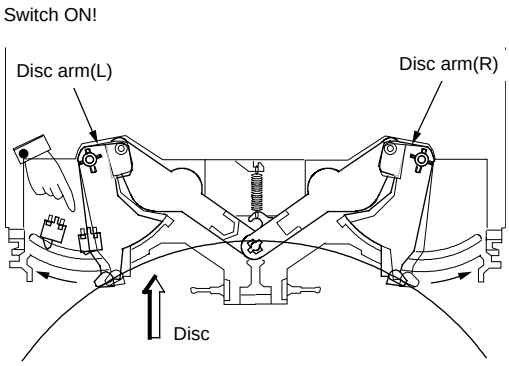
Pin No.	Name.	I/O	Description	Processing Operation
56	BVSS	-	Bus interface ground connection terminal	Connected to GND lines.
57	AD8	I/O	Multiplex Address/Data Bus	
58	AD9	I/O	Multiplex Address/Data Bus	
59	AD10	I/O	Multiplex Address/Data Bus	
60	AD11	I/O	Multiplex Address/Data Bus	
61	AD12	I/O	Multiplex Address/Data Bus	
62	AD13	I/O	Multiplex Address/Data Bus	
63	AD14	I/O	Multiplex Address/Data Bus	
64	AD15	I/O	Multiplex Address/Data Bus	
65	$\overline{\text{HCSB}}$	O	Chip select control output	Not used(N.C.)
66	$\overline{\text{CS}}$	O	Chip select control output	Lo : ON, Hi : OFF
67	$\overline{\text{DSP RESET}}$	O	DSP reset control output	Lo : Reset, Hi : Normal operation
68	REQ	I	Data transfer request input	Not used(pull down to GND lines)
69	DBBWRDY0	I	DBB00 register write permission input	Not used(pull down to GND lines)
70	DBBRRDY0	I	DBB00 register read permission input	Not used(pull down to GND lines)
71	AVDD	-	A/D converter positive power supply connection terminal	Connected to BU 5V lines.
72	AVSS	-	A/D converter ground connection terminal	Connected to GND lines.
73	AVREF	I	A/D converter reference voltage input terminal	Connected to D5V lines.
74-77	NC	I		Not used(connected to GND lines)
78	HOT	I	Temperature change detection input	Not used(pull down to GND lines)
79	M-CONT	I		Not used(connected to GND lines)
80	WMA	I	WMA adaptation selection input	Lo : WMA not adapted, Hi : WMA adapted
81	NC	I		Not used(connected to GND lines)
82	ASEL	I	Audio output polarity selection input	Lo : Non-inverted output, Hi : Inverted output
83	DASC	I	Shock proof method selection input	Lo : Shock proof OFF, Hi : Shock proof ON
84	TEST2	I	test terminal 2	Not used(pull down to GND lines)
85	TEST3	I	test terminal 3	Not used(pull down to GND lines)
86	NC	O		Not used(N.C.)
87	$\overline{\text{MSTOP}}$	I	MECHA. Stop interrupt input	Lo : Stop, Hi : Normal operation
88	INTSV	I	Interrupt input from servo IC	Hi : Interrupt
89	FOGUP	I	Focusing gain up interrupt input	Lo : Normal operation, Hi : Focusing gain up
90	ZMUTE R	I	Rch. 0 bit muting detection input	Lo : Muting OFF, Hi : Muting ON
91	ZMUTE L	I	Lch. 0 bit muting detection input	Lo : Muting OFF, Hi : Muting ON
92	NC	O		Not used(N.C.)
93	D-MUTE	O	Driver muting output	Lo : Spindle motor, focusing actuator and tracking actuator outputs OFF
94	SYS SDA	I/O	I2C bus data line (communication line with System microprocessor)	
95	NC	O		Not used(N.C.)
96	SYS SCL	I/O	I2C bus clock line (communication line with System microprocessor)	
97-100	NC	O		Not used(N.C.)

OPERATION DESCRIPTION

[1] Disc Loading

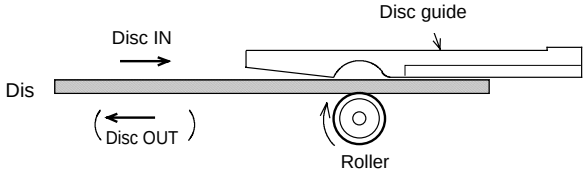
(1) Turning the loading switch ON

1) When a disc is inserted, the disc arms open to the left and right and the claw below disc arm (L) sets the loading switch ON.
2) The above starts the motor rotation.

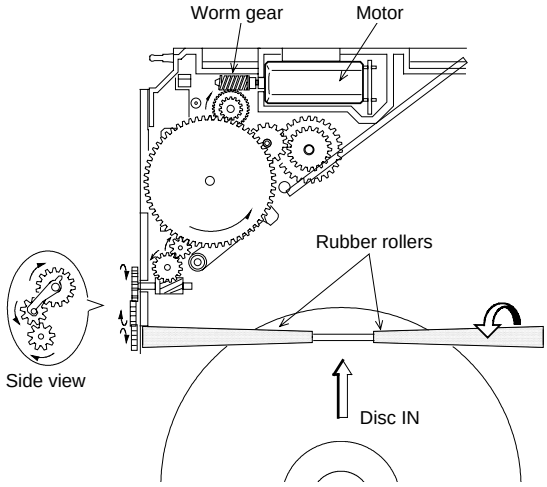


(2) Loading the disc

1) When the motor starts rotation, the worm gear also starts to turn as shown in the figure.
2) The rotation force is transmitted to the gear train.
3) When the force is transmitted to the final gear, the rollers rotate to pull in the disc.



The disc is pulled in or out when the rollers are pushed against the disc guide.



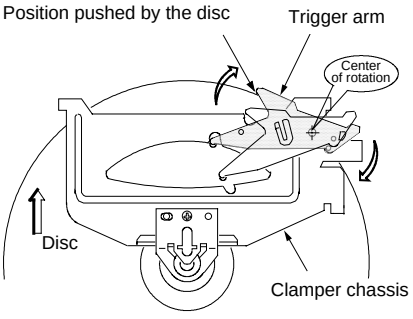
[2] Operation of Slider (R)

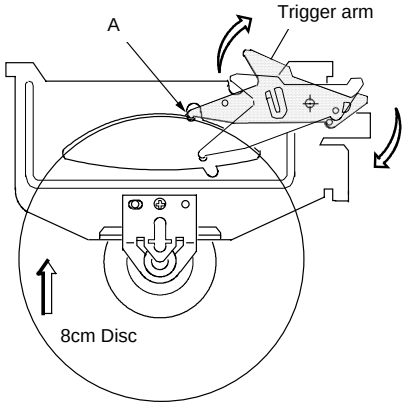
(1) Activating the trigger arm

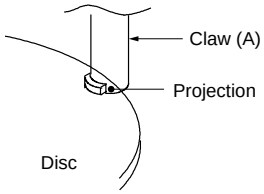
1) When the disc is pulled in by the rollers, the disc edge pushes the trigger arm and rotates it.

2) When the disc is an 8cm disc, it is pulled upwards by the tapering on the disc guide. The trigger arm is rotated when the disc pushes the claw (section A) located before the trigger arm.

When the 8cm disc reaches the loading end position, the roller areas supporting the disc decreases. To prevent the disc from dropping in this case, the claw is provided with a projection for supporting the disc.

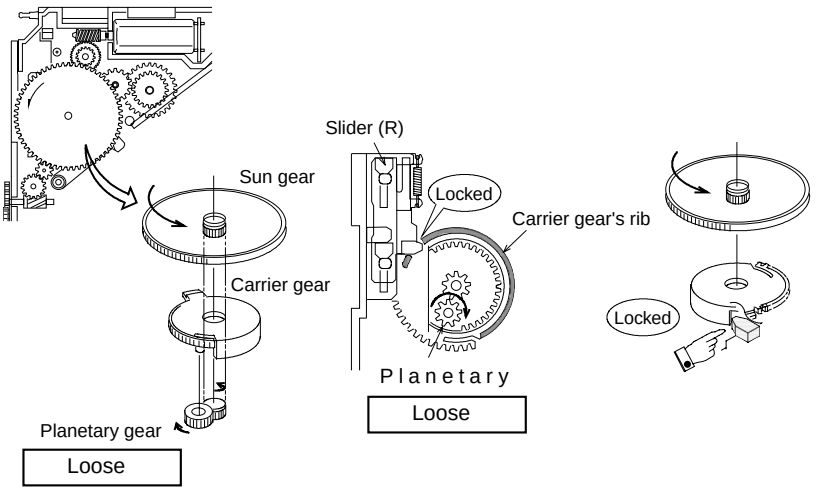






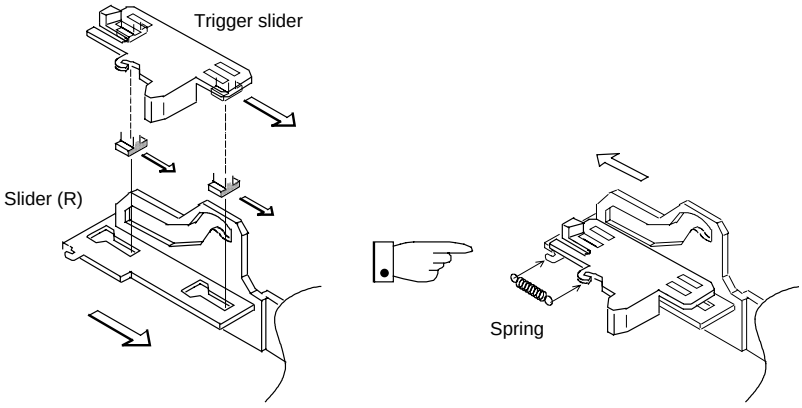
(2) Basic construction (Initial position of the planetary gear mechanism)

1) Even after the disc has been inserted, the motor rotated and the gear train also rotated, slider (R) does not start operation yet.This is because the planetary gear mechanism is used and the carrier gear is locked by the slider mechanism. In this period, the planetary gear is in the loose condition.
2) When the sun gear is rotating and the carrier gear is locked, the planetary gear is running idle.



(3) Basic construction (Construction of the trigger slider and slider (R))

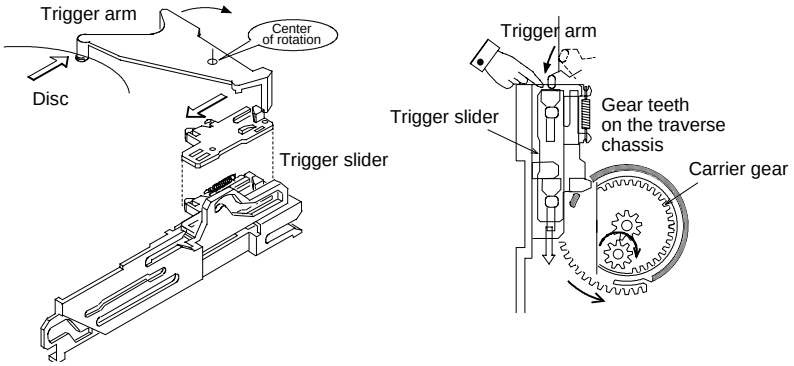
The trigger slider is assembled with slider (R) and pushed in the direction of the arrow by the force of a spring.



(4) Operation of slider (R)

1) Activating the trigger slider

When the trigger arm is rotated by the pressure of the disc, the trigger arm pushes the trigger slider.

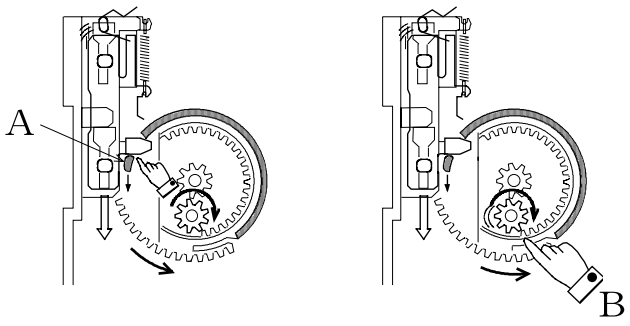


2) Rotating (engaging) the planetary gear

When the trigger slider is moved, it pushes down the wall (section A) of the carrier gear. (Initial rotation of the carrier gear)

This causes the planetary gear, which is attached on a pin of the carrier gear, to move according to the rotation of the carrier gear. When the planetary gear is meshed with a gear tooth (section B) of the traverse chassis, the planetary gear starts rotation.

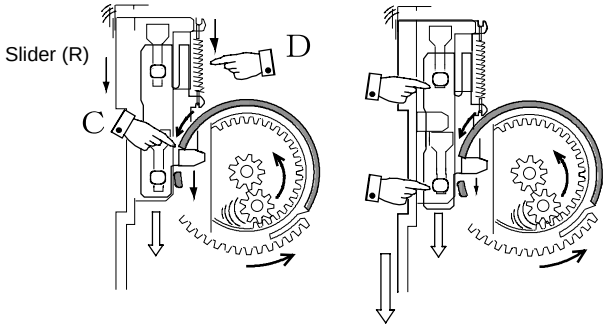
The rotation of the planetary gears causes the carrier gear to rotate.



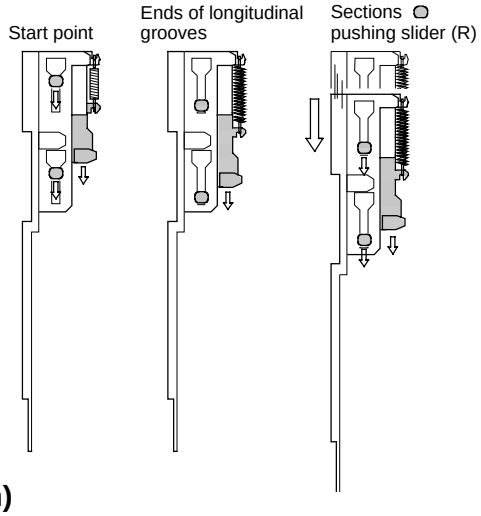
3) Activating slider (R)

When the carrier gear rotates, its wall (section C) pushes and moves the trigger slider.

When the trigger slider is moved, slider (R) is pulled by the force of spring (section D).



When the trigger slider moves along the longitudinal grooves on slider (R) till the ends of grooves, the trigger slider itself begins to push and move slider (R).



[3] Flow Until Disc Chucking (Playback Standby Condition)

(1) Functions activated by slider (R)

1) Operation modes

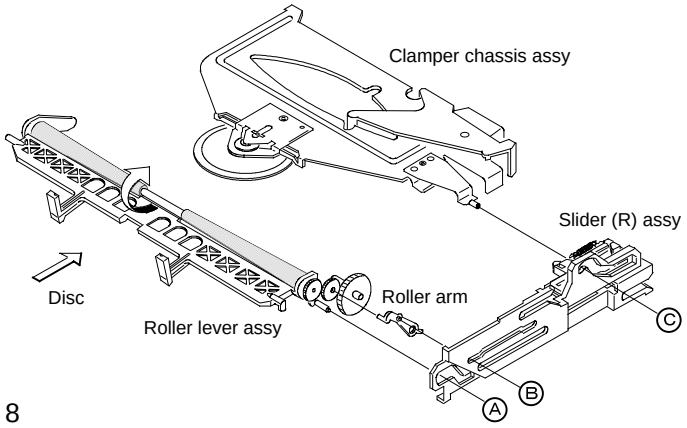
To play back a CD, it is required to perform a flow of operations as shown below.

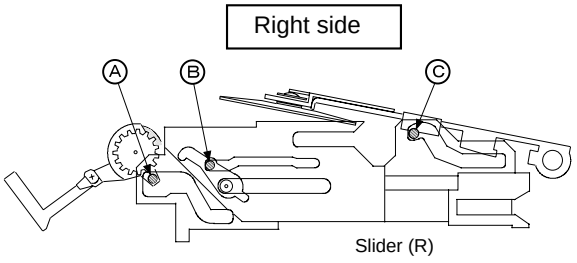
- Pulling the disc in and stopping the roller rotations after it.
- Moving the clamper downwards so that it can clamp the disc during playback. (Disc chucking)
- Moving the rollers that are in contact with the disc. (Lowering the roller lever)
- Float (suspend) the mechanism in order to protect it from vehicle vibrations during disc playback.
- Moving the pickup (optical ass'y) so that it can reads the disc signals.

These series of operations are activated by the movement of slider (R).

2) Coupling conditions

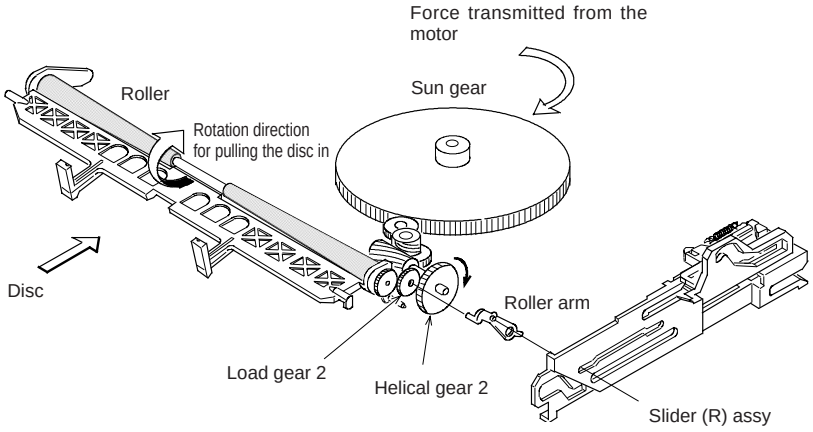
The parts used for performing the above functions are coupled with slider (R) as shown below.





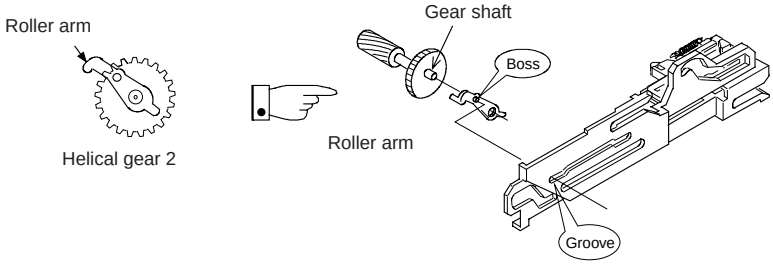
3) Rotation of rollers during disc loading

As shown in the following figure, the motor rotation force is transmitted through sun gear → helical gear 2 → load gear 2 to the gear that is coupled directly with the roller shaft to rotate the rollers and pull in the disc.

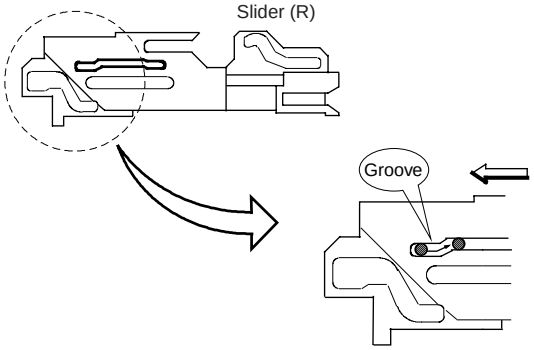


(2) How to stop the roller rotation

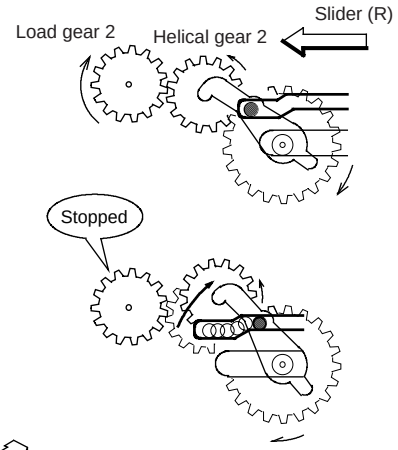
The boss of the roller arm is engaged with a groove on slider (R).



When slider (R) moves, the boss of the roller arm moves along the groove of slider (R), thereby separating the helical gear 2 coupled with it from load gear 2.



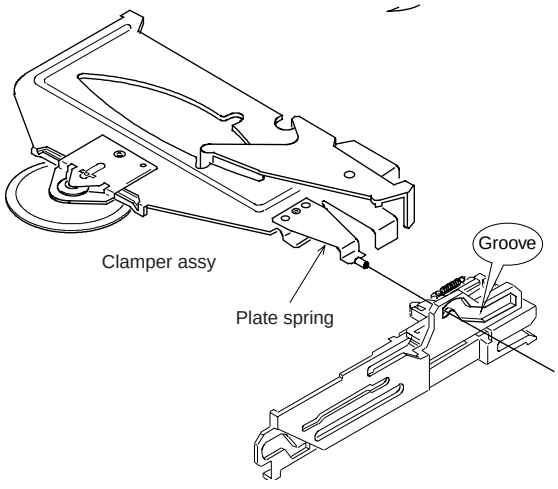
This stops transmission of the force to the rollers so the rollers stop.



(3) Operation of the clamper (Disc chucking)

1) Engaged condition

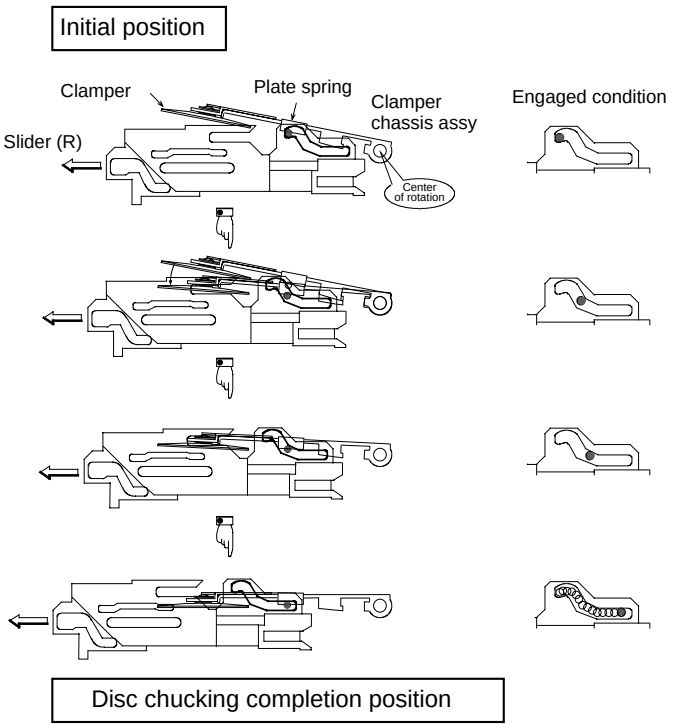
The plate spring attached to the clamper chassis is originally engaged with a groove on slider (R).



2) Lowering the clamper (for disc chucking)

As slider (R) moves, the plate spring section engaged with it moves along its groove and lowers the clamper chassis assembly.

The following figure shows the flow of operation.

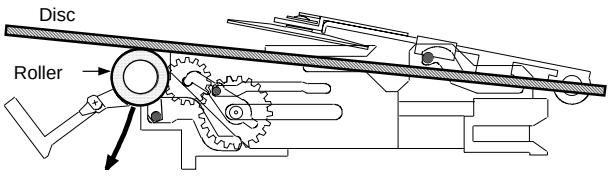


(4) How to lower the rollers

1) Disc chucking completion position

When the disc in this position, the rollers are located below the disc and in contact with it.

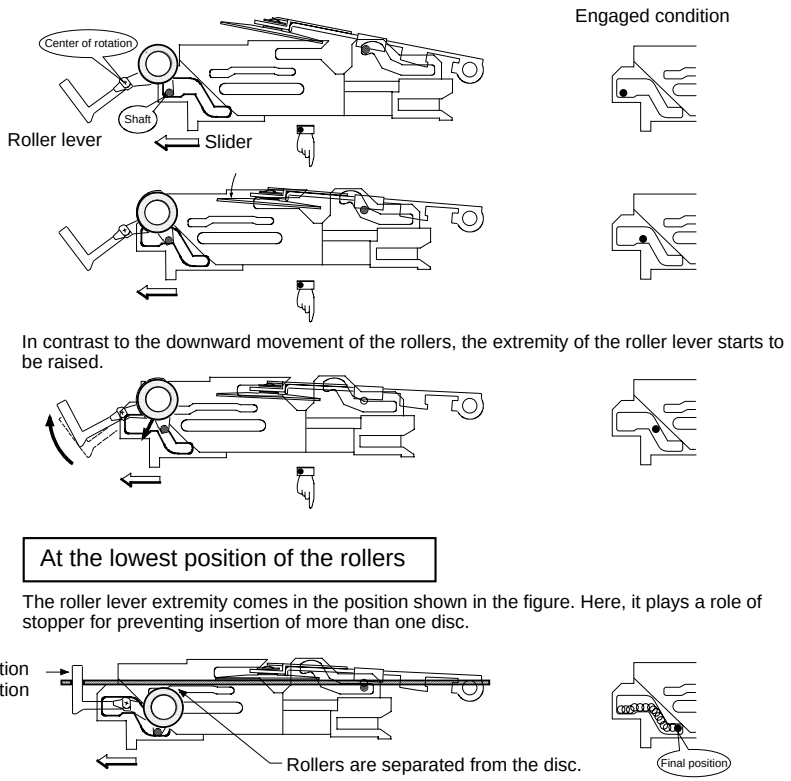
To rotate the disc for playback, it is required to separate the rollers from the disc.



2) Lowering the rollers (Disc playback position)

As slider (R) moves, the roller lever shaft engaged with a groove on slider (R) moves along the groove and lowers the rollers.

The following figure shows the flow of operation.



(5) Floating position and lock position of the mechanism

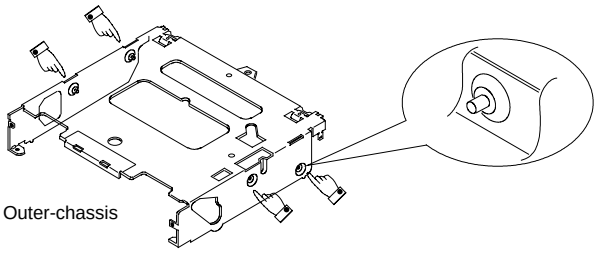
The disc is loaded and ejected by rotation of the rollers that come in close contact with the disc.

After the disc has been pulled in by the rollers, its position should be adjusted so that it can be placed precisely on the turntable of the traverse chassis. To make this possible, the traverse chassis and outer chassis should be in the locked condition.

Since the outer chassis is originally locked on the main unit, if the traverse chassis is also locked during playback, the disc would be subjected directly to vibrations of vehicle during driving and the disc signal would be hindered, making the audio intermittent or impossible to be played.

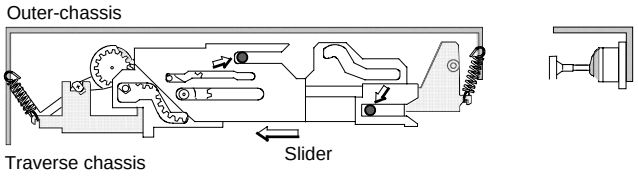
To prevent such a problem, the traverse chassis is suspended from the outer case using springs or rubber dampers during driving. This positioning protects the disc playback operations and is referred to as the floating position.

Shafts for locking the traverse chassis (Outer case-integrated design)
(4 shafts)

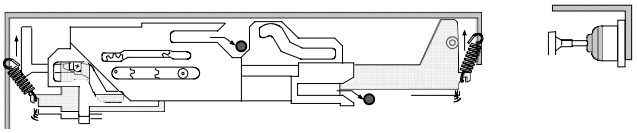


Mechanism lock position

The shafts of the outer chassis are inserted into the grooves on the sliders.



Mechanism floating position



(6) Function of slider (L)

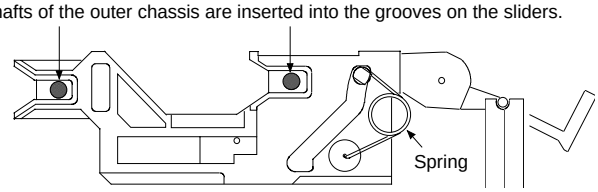
Slider (L) ensures the mechanism lock position because the shafts of the outer chassis are inserted into its grooves in the same way as they are inserted into the grooves on slider (R).

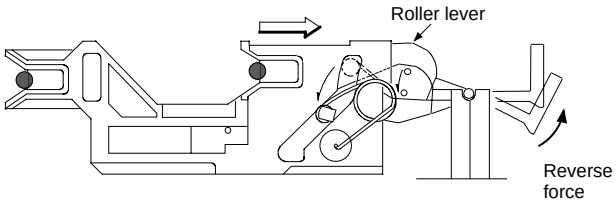
As slider (R) moves, the force moving the roller lever is transmitted to slider (L), which also starts the sliding movement.

When the spring is compressed gradually to a certain point, the force changes to a reverse force, which supports the jump-up operation of the roller lever.

Mechanism lock position

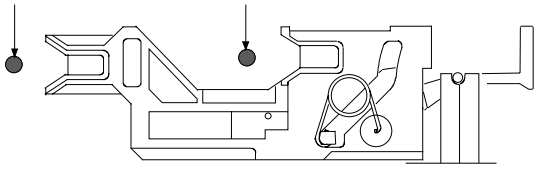
The shafts of the outer chassis are inserted into the grooves on the sliders.





Mechanism floating position

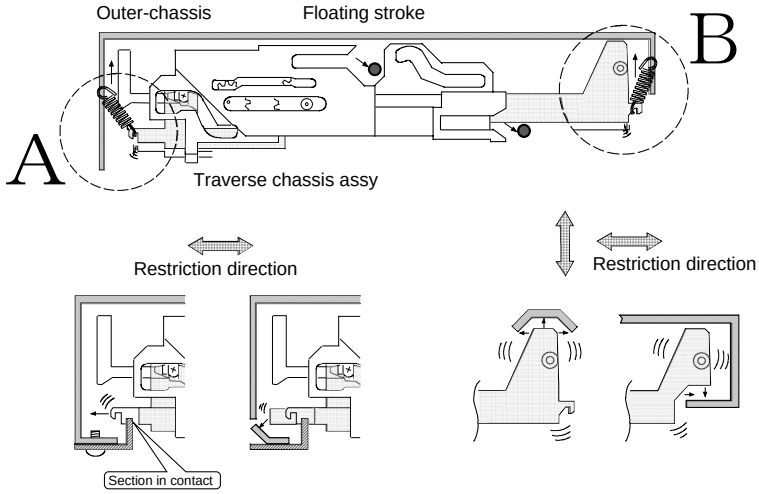
The shafts on the outer chassis are disengaged from the grooves on the slider.



(7) Floating stroke

When the traverse chassis assembly is in the mechanism floating position, stoppers should be provided between the outer case and traverse chassis assembly in order to prevent the mechanism from being damaged by vibrations and shocked of the vehicle.

The distance between the traverse chassis assembly and stoppers, that is, the range in which the traverse chassis assembly can move freely, is referred to as the floating stroke.

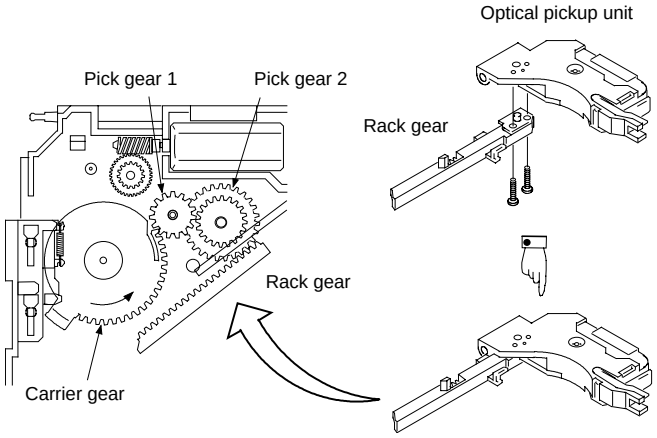


(8) Operation of the pickup

1) Construction

The optical pickup unit is attached on the rack gear.

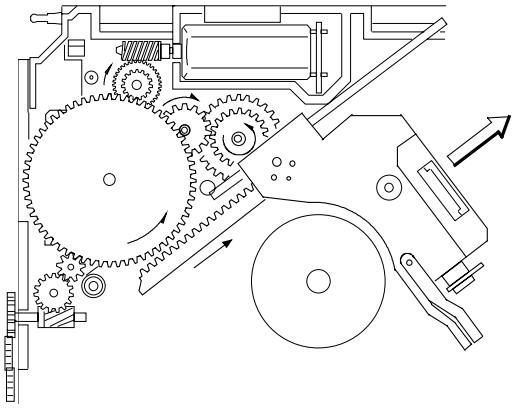
The following figure shows the positioning of the gears.

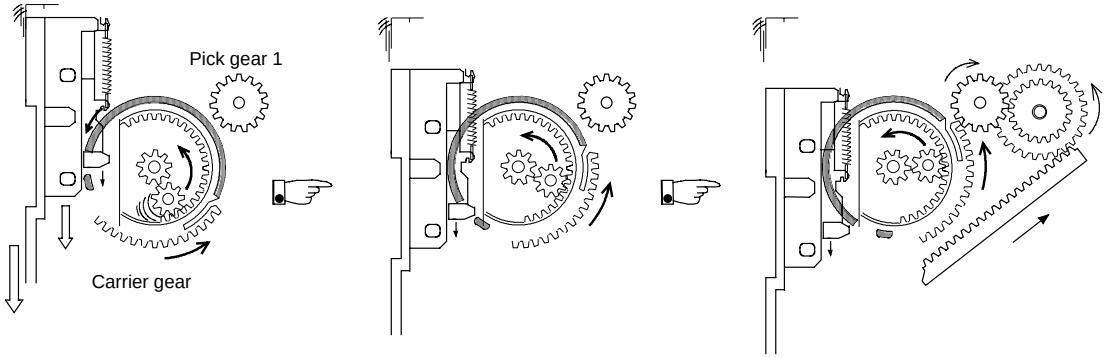


2) Activating the pickup

After the above series of operations have completed and the disc is put in the playback condition, the carrier gear rotates further and is meshed with pick gear 1. The force is then transmitted through pick gear 2 to the rack gear, causing the optical pickup unit to move.

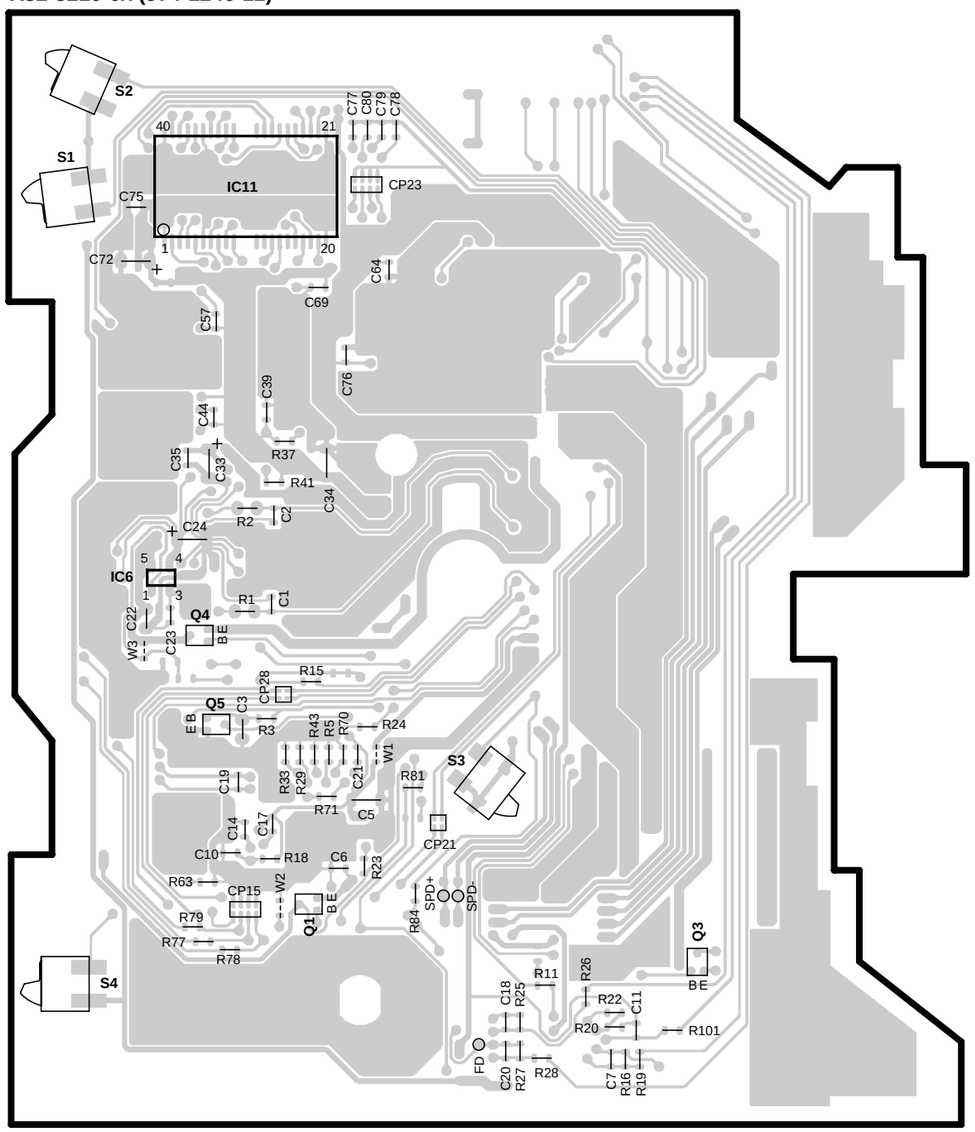
The operation of the optical pickup unit is controlled by the servo circuitry.





PC BOARD (COMPONENT SIDE VIEW)

X32-5210-0x (J74-1246-12)

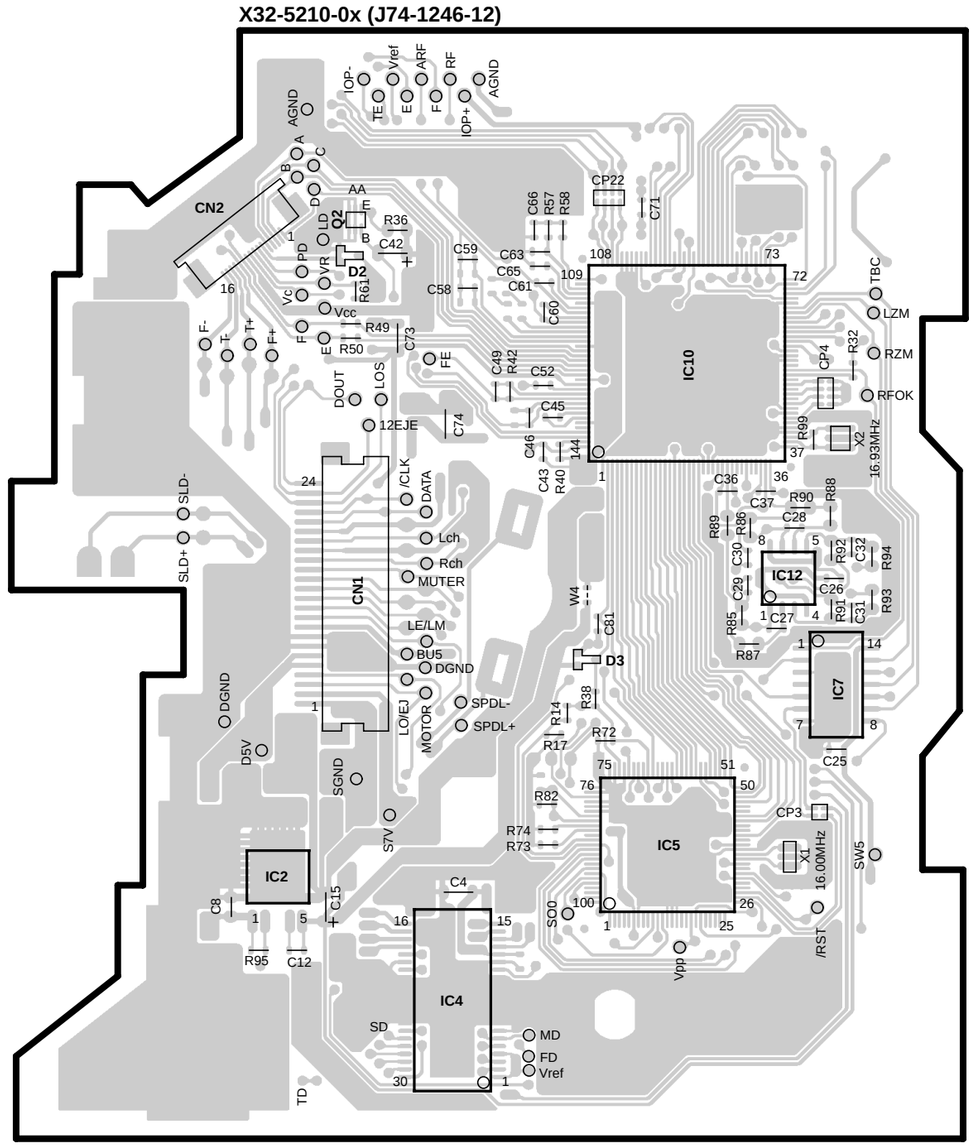


X32-5210-0x

IC	6	11				
Q			1	3	4	5
addres	4B	2B	5B	6D	4B	5B

PC BOARD (FOIL SIDE VIEW)

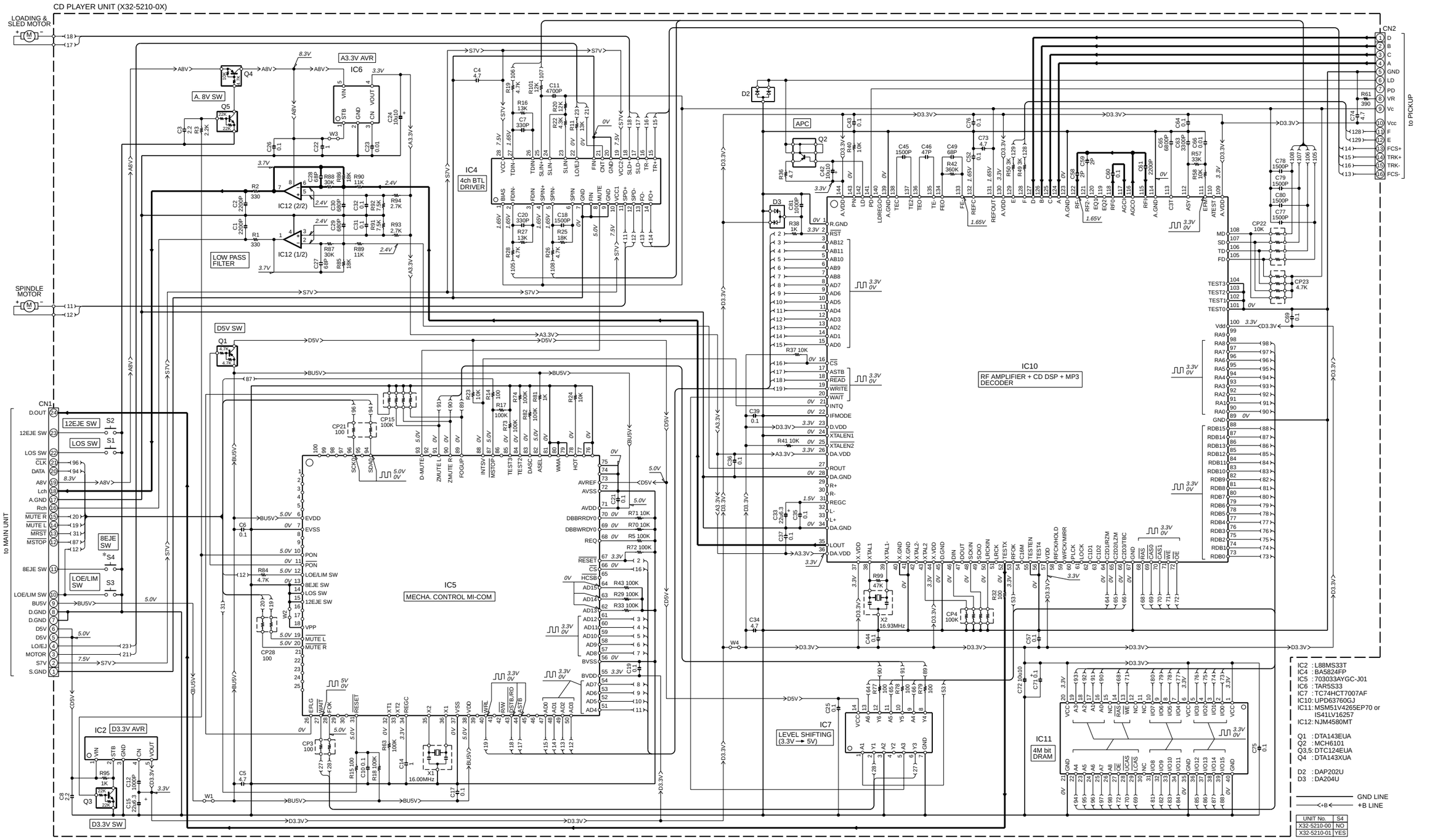
X32-5210-0x (J74-1246-12)



X32-5210-0x

IC	2	4	5	7	10	12	
Q							2
addres	5G	6H	5I	4I	3I	4I	3G

Refer to the schematic diagram for the values of resistors and capacitors.

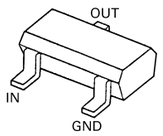


CAUTION : For continued safety, replace safety critical components only with manufacturer's recommended parts (refer to parts list).

⚠ Indicates safety critical components. To reduce the risk of electric shock, leakage-current or resistance measurements shall be carried out (exposed parts are acceptably insulated from the supply circuit) before the appliance is returned to the customer.

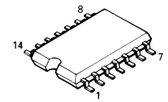
• DC voltages are as measured with a high impedance voltmeter. Values may vary slightly due to variations between individual instruments or/and units.

DTA143EUA



DAP202U
DA204U

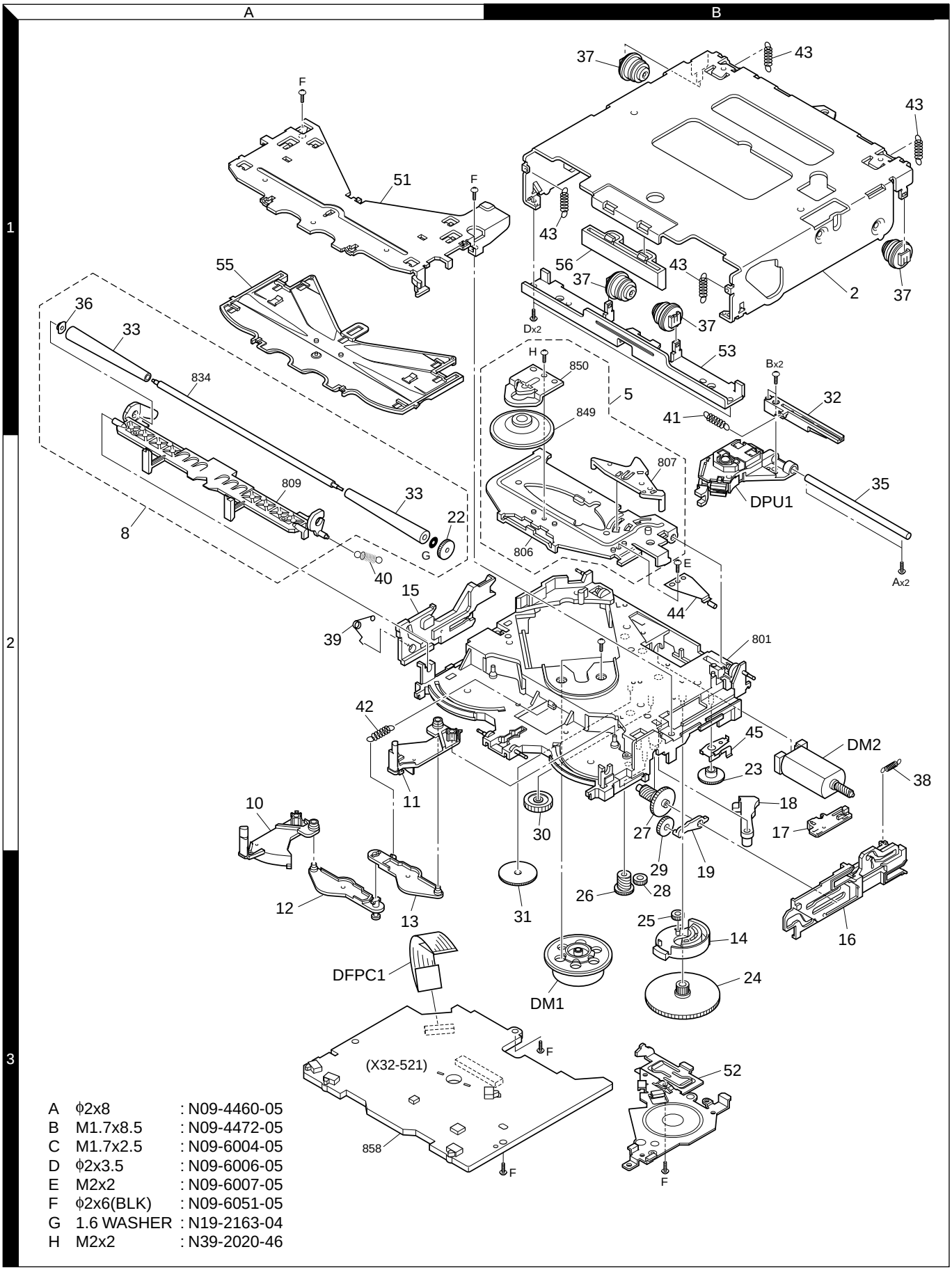
TC74HCT7007A



X92-4460-0x

KENWOOD

EXPLODED VIEW



A	ϕ2x8	: N09-4460-05
B	M1.7x8.5	: N09-4472-05
C	M1.7x2.5	: N09-6004-05
D	ϕ2x3.5	: N09-6006-05
E	M2x2	: N09-6007-05
F	ϕ2x6(BLK)	: N09-6051-05
G	1.6 WASHER	: N19-2163-04
H	M2x2	: N39-2020-46

Parts with the exploded numbers larger than 700 are not supplied.

X92-4460-0x

PARTS LIST

* New Parts
Parts without **Parts No.** are not supplied.
Les articles non mentionnes dans le **Parts No.** ne sont pas fournis.
Teile ohne **Parts No.** werden nicht geliefert.

Ref. No.	Add	New	Parts No.	Description	Destination
CD PLAYER UNIT (X32-5210-0X)					
C1 ,2			CK73GB1H222K	CHIP C 2200PF K	
C3			CK73FB1A225K	CHIP C 2.2UF K	
C4 ,5			CK73EB1A475K	CHIP C 4.7UF K	
C6			CK73GB1C104K	CHIP C 0.10UF K	
C7			CC73GCH1H331J	CHIP C 330PF J	
C8			CK73FB1A225K	CHIP C 2.2UF K	
C10			CK73GB1C104K	CHIP C 0.10UF K	
C11			CK73GB1H472K	CHIP C 4700PF K	
C12			CK73GB1H102K	CHIP C 1000PF K	
C14			CK73GB0J105K	CHIP C 1.0UF K	
C15			C92-0712-05	CHIP-TAN 22UF 6.3WV	
C17			CK73GB1C104K	CHIP C 0.10UF K	
C18			CK73GB1H152K	CHIP C 1500PF K	
C19			CK73GB1C104K	CHIP C 0.10UF K	
C20			CC73GCH1H331J	CHIP C 330PF J	
C21			CK73GB1C104K	CHIP C 0.10UF K	
C22			CK73FB1A105K	CHIP C 1.0UF K	
C23			CK73GB1H103K	CHIP C 0.010UF K	
C24			C92-0628-05	CHIP-TAN 10UF 10WV	
C25 ,26			CK73GB1C104K	CHIP C 0.10UF K	
C27 ,28			CC73GCH1H680J	CHIP C 68PF J	
C29 ,30			CC73GCH1H681J	CHIP C 680PF J	
C31 ,32			CK73GB1C104K	CHIP C 0.10UF K	
C33			C92-0712-05	CHIP-TAN 22UF 6.3WV	
C34			CK73EB1A475K	CHIP C 4.7UF K	
C35 -37			CK73GB1C104K	CHIP C 0.10UF K	
C39			CK73GB1C104K	CHIP C 0.10UF K	
C42			C92-0628-05	CHIP-TAN 10UF 10WV	
C43 ,44			CK73GB1C104K	CHIP C 0.10UF K	
C45			CK73GB1H152K	CHIP C 1500PF K	
C46			CC73GCH1H470J	CHIP C 47PF J	
C49			CC73GCH1H680J	CHIP C 68PF J	
C52			CK73GB1C104K	CHIP C 0.10UF K	
C57			CK73GB1C104K	CHIP C 0.10UF K	
C58 ,59			CC73GCH1H020C	CHIP C 2.0PF C	
C60			CK73GB1C104K	CHIP C 0.10UF K	
C61			CK73GB1H222K	CHIP C 2200PF K	
C63			CK73GB1H332K	CHIP C 3300PF K	
C64			CK73GB1C104K	CHIP C 0.10UF K	
C65			CK73GB1H682K	CHIP C 6800PF K	
C66			CK73GB1H103K	CHIP C 0.010UF K	
C69			CK73GB1C104K	CHIP C 0.10UF K	
C71			CK73GB1C104K	CHIP C 0.10UF K	
C72			C92-0628-05	CHIP-TAN 10UF 10WV	
C73 ,74			CK73EB1A475K	CHIP C 4.7UF K	
C75 ,76			CK73GB1C104K	CHIP C 0.10UF K	
C77 -80			CK73GB1H152K	CHIP C 1500PF K	
C81			CK73GB1H102K	CHIP C 1000PF K	
CN1			E40-9527-05	FLAT CABLE CONNECTOR (24P)	
CN1		*	E41-0213-05	FLAT CABLE CONNECTOR (24P)	
CN2			E40-9536-05	FLAT CABLE CONNECTOR (16P)	
CN2			E41-0193-05	FLAT CABLE CONNECTOR (16P)	

Ref. No.	Add	New	Parts No.	Description	Destination
X1		*	L78-0862-05	RESONATOR (16.00MHZ)	
X2		*	L78-0860-05	RESONATOR (16.93MHZ)	
CP3			R90-1019-05	MULTI-COMP 100 X2	
CP4			R90-0720-05	MULTI-COMP 100K X4	
CP15			R90-0720-05	MULTI-COMP 100K X4	
CP21			R90-1019-05	MULTI-COMP 100 X2	
CP22			R90-0714-05	MULTI-COMP 10K X4	
CP23			R90-0718-05	MULTI-COMP 4.7K X4	
CP28			R90-1019-05	MULTI-COMP 100 X2	
R1 ,2			RK73FB2B331J	CHIP R 330 J 1/8W	
R3			RK73GB2A222J	CHIP R 2.2K J 1/10W	
R5			RK73GB2A104J	CHIP R 100K J 1/10W	
R11			RK73GB2A133J	CHIP R 13K J 1/10W	
R14 ,15			RK73GB2A101J	CHIP R 100 J 1/10W	
R16			RK73GB2A133J	CHIP R 13K J 1/10W	
R17 ,18			RK73GB2A104J	CHIP R 100K J 1/10W	
R19			RK73GB2A472J	CHIP R 4.7K J 1/10W	
R20			RK73GB2A123J	CHIP R 12K J 1/10W	
R22			RK73GB2A432J	CHIP R 4.3K J 1/10W	
R23 ,24			RK73GB2A103J	CHIP R 10K J 1/10W	
R25			RK73GB2A183J	CHIP R 18K J 1/10W	
R26			RK73GB2A472J	CHIP R 4.7K J 1/10W	
R27			RK73GB2A133J	CHIP R 13K J 1/10W	
R28			RK73GB2A472J	CHIP R 4.7K J 1/10W	
R29			RK73GB2A104J	CHIP R 100K J 1/10W	
R32			RK73GB2A101J	CHIP R 100 J 1/10W	
R33			RK73GB2A104J	CHIP R 100K J 1/10W	
R36			RK73FB2B4R7J	CHIP R 4.7 J 1/8W	
R37			RK73GB2A103J	CHIP R 10K J 1/10W	
R38			RK73GB2A102J	CHIP R 1.0K J 1/10W	
R40 ,41			RK73GB2A103J	CHIP R 10K J 1/10W	
R42		*	RK73GB2A364J	CHIP R 360K J 1/10W	
R43			RK73GB2A104J	CHIP R 100K J 1/10W	
R49 ,50		*	RK73GB2A302J	CHIP R 3.0K J 1/10W	
R57			RK73GB2A333J	CHIP R 33K J 1/10W	
R58			RK73GB2A103J	CHIP R 10K J 1/10W	
R61			RK73GB2A391J	CHIP R 390 J 1/10W	
R63			RK73GB2A104J	CHIP R 100K J 1/10W	
R70 ,71			RK73GB2A103J	CHIP R 10K J 1/10W	
R72 -74			RK73GB2A104J	CHIP R 100K J 1/10W	
R77 -79			RK73GB2A101J	CHIP R 100 J 1/10W	
R81			RK73GB2A102J	CHIP R 1.0K J 1/10W	
R82			RK73GB2A104J	CHIP R 100K J 1/10W	
R84			RK73GB2A472J	CHIP R 4.7K J 1/10W	
R85 ,86		*	R92-3044-05	CHIP R 18K D 1/10W	
R87 ,88			RK73FB2B303J	CHIP R 30K J 1/8W	
R89 ,90			R92-3041-05	CHIP R 11K D 1/10W	
R91 ,92			RK73FB2B752J	CHIP R 7.5K J 1/8W	
R93 ,94		*	RK73FB2B272J	CHIP R 2.7K J 1/8W	
R95			RK73GB2A102J	CHIP R 1.0K J 1/10W	
R99			RK73GB2A473J	CHIP R 47K J 1/10W	
R101			RK73GB2A123J	CHIP R 12K J 1/10W	
W1 -4			R92-1252-05	CHIP R 0 OHM J 1/16W	

A : X92-4460-00 (DMX-6400W) **A1** : X92-4460-01 (DXM-6401W)
A2 : X92-4460-02 (DMX-6402W) **A3** : X92-4460-03 (DXM-6403W)

⚠ indicates safety critical components.

PARTS LIST

* New Parts
Parts without **Parts No.** are not supplied.
Les articles non mentionnes dans le **Parts No.** ne sont pas fournis.
Teile ohne **Parts No.** werden nicht geliefert.

CD PLAYER UNIT (X32-5210-0X)

Ref. No.	Add	New	Parts No.	Description	Destination
S1 ,2			S68-0863-05	PUSH SWITCH	
S3			S68-0862-05	PUSH SWITCH	
S4			S68-0864-05	PUSH SWITCH	A2A3
D2			DAP202U	DIODE	
D3			DA204U	DIODE	
IC2			L88MS33T	ANALOGUE IC	
IC4			BA5824FP	ANALOGUE IC	
IC5		*	703033AYGC-J01	MI-COM IC	
IC6		*	TAR5S33	ANALOGUE IC	
IC7			TC74HCT7007AF	MOS-IC	
IC10		*	UPD63760GJ	MOS-IC	
IC11		*	IS41LV16257	MEMORY IC	
IC11		*	MSM51V4265EP70	MOS-IC	
IC12			NJM4580M1	ANALOGUE IC	
Q1			DTA143EUA	DIGITAL TRANSISTOR	
Q2			MCH6101	TRANSISTOR	
Q3			DTC124EUA	DIGITAL TRANSISTOR	
Q4			DTA143XUA	DIGITAL TRANSISTOR	
Q5			DTC124EUA	DIGITAL TRANSISTOR	
CD MECHANISM ASSY (X92-4460-0X)					
2	1B		A10-4827-12	CHASSIS (OUTER)	
5	1B		D10-4576-23	ARM ASSY (CLAMPER ASSY)	
8	2A		D10-4579-03	LEVER ASSY (ROLLER ASSY)	
10	3A		D10-4581-13	ARM (DISC L)	
11	2A		D10-4582-13	ARM (DISC L)	
12	3A		D10-4583-03	ARM (JOINT L)	
13	3A		D10-4584-03	ARM (JOINT R)	
14	3B		D10-4585-03	ARM (CARRIER)	
15	2A		D10-4586-03	SLIDER (L)	
16	3B	*	D10-4587-12	SLIDER (R)	
17	3B		D10-4588-03	SLIDER (TRIG)	
18	3B		D10-4595-04	ARM (LOCK)	
19	3B		D10-4596-04	ARM (ROLLER)	
22	2A		D13-2151-04	GEAR (ROLLER)	
23	2B		D13-2152-04	GEAR (HELICAL 1)	
24	3B		D13-2153-04	GEAR (SUN)	
25	3B		D13-2154-04	GEAR (PLANET)	
26	3B		D13-2155-04	WORM (2)	
27	3B		D13-2156-04	GEAR (HELICAL 2)	
28	3B		D13-2157-04	GEAR (LOAD 1)	
29	3B		D13-2158-04	GEAR (LOAD 2)	
30	3B		D13-2168-04	GEAR (PICK 1)	
31	3B		D13-2171-04	GEAR (PICK 2)	
32	2B		D13-2172-03	RACK (GEAR)	
33	2A		D14-0759-04	ROLLER (N100X3DIES)	
35	2B		D21-2382-04	SHAFT (PICK)	
36	1A		D23-0954-04	RETAINER	
37	1B		D39-0246-05	DAMPER	
38	2B		G01-3072-04	EXTENSION SPRING (TRIGGER)	
39	2A		G01-3073-04	TORSION COIL SPRING (ROLLER L)	
40	2A		G01-3074-04	EXTENSION SPRING (ROLLER R)	
41	2B		G01-3075-04	EXTENSION SPRING (PICKUP)	
42	2A		G01-3076-04	EXTENSION SPRING (JOINT SP)	
43	1B		G01-3077-04	EXTENSION SPRING (FLOATTING)	
44	2B		G02-1399-04	FLAT SPRING (CLAMP)	
45	2B		G02-1408-04	FLAT SPRING (WORM)	
51	1A		J21-9676-12	MOUNTING HARDWARE (GUIDE BKT)	
52	3B		J21-9677-02	MOUNTING HARDWARE (GEAR BKT)	
53	1B		J21-9678-03	MOUNTING HARDWARE (DAMPER BKT)	
55	1A		J90-1001-11	GUIDE (1)	
56	1B		J90-1023-03	GUIDE (2)	
DFPC1	2B		J84-0128-15	FLEXIBLE P. W. B. (PICKUP FPC)	
A	2B		N09-4460-05	TAPTITE SCREW (OVAL P TAPTIT)	
B	1B		N09-4472-05	MACHINE SCREW (M1.7X8.5)	
C	2B		N09-6004-05	MACHINE SCREW (M1.7X2.5 IB-L)	
D	1B		N09-6006-05	TAPTITE SCREW (PAN ST 2X3.5T)	
E	2B		N09-6007-05	MACHINE SCREW (PAN M2X2)	
F	1A		N09-6051-05	TAPTITE SCREW (BIND P 2X5)	
G	2A		N19-2163-04	FLAT WASHER (1.6X0.25X6)	
H	1B		N39-2020-46	PAN HEAD MACHIN SCREW (M2X2)	
DM1	3B		T42-1066-04	DC MOTOR ASSY (SP)	
DM2	2B		T42-1067-04	DC MOTOR ASSY (LO)	
DPU1	2B		T25-0223-05	OPTICAL PICKUP HEAD	

A : X92-4460-00 (DMX-6400W) **A1** : X92-4460-01 (DXM-6401W)
A2 : X92-4460-02 (DMX-6402W) **A3** : X92-4460-03 (DXM-6403W)

⚠ indicates safety critical components.

X92-4460-0x

SPECIFICATIONS

Laser Diode	GaAlAs (λ=780nm)
Digital Filter (D/A)	8 Times Over Sampling
D/A Converter	1 Bit
Spindle Speed	1000~400rpm (CLV 2times)
Wow & Flutter	Below Measurable Limit
Frequency Response	10Hz-20kHz (±1dB)
Total Harmonic Distortion	0.01% (1kHz)
S/N Ratio	105dB (1kHz)
Dynamic Range	93dB
Channel Separation	85dB
MP3 Decode	Compliant with MPEG-1.0/2.0/2.5 AudioLayer-3

KENWOOD follows a policy of continuous advancements in development. For this reason specifications may be changed without notice.

KENWOOD CORPORATION
14-6, Dogenzaka 1-chome, Shibuya-ku, Tokyo 150-8501 Japan

KENWOOD SERVICE CORPORATION
P.O. BOX 22745, 2201 East Dominguez Street, Long Beach, CA90801-5745, U.S.A.

KENWOOD ELECTRONICS CANADA INC.
6070 Kestrel Road, Mississauga, Ontario, Canada L5T 1S8

KENWOOD ELECTRONICS LATIN AMERICA S.A.
P.O. Box 55-2791 Paitilla, Plaza Credicorp Bank Panama,
Piso 9, Oficina 901, Calle 50, Panama, Rep. de Panama

KENWOOD ELECTRONICS BRASIL LTDA.
Alameda Ministro Rocha Azevedo No. 456,
Edificio Jaú, 10o Andar, Cerqueira César, Cep 0140-001,
São Paulo-SP-Brasil

KENWOOD ELECTRONICS UK LIMITED
Kenwood House, Dwight Road, Watford, Herts, WD1 8EB, United Kingdom

KENWOOD ELECTRONICS DEUTSCHLAND GMBH
Rembrücker-Str. 15, 63150 Heusenstamm, Germany

KENWOOD ELECTRONICS FRANCE S.A.
13, Boulevard Ney, 75018 Paris, France

KENWOOD ELECTRONICS BELGIUM N.V.
Leuvensesteenweg 248 J, 1800 Vilvoorde, Belgium

KENWOOD ELECTRONICS ITALIA S.p.A.
Via G. Sirtori 7/9, 20129 Milano, Italy

KENWOOD IBÉRICA S.A.
Bolivia, 239-08020 Barcelona, Spain

KENWOOD ELECTRONICS AUSTRALIA PTY. LTD. (A.C.N. 001 499 074)
16 Giffnock Avenue, Centrecourt Estate, North Ryde,
N.S.W. 2113, Australia

KENWOOD ELECTRONICS (HONG KONG) LTD.
Unit 3712-3724, Level 37, Tower 1, Metroplaza, 223 Hing Fong Road, Kwai Fong, N.T.,
Hong Kong

KENWOOD ELECTRONICS GULF FZE
P.O. Box 61318, Jebel Ali, Dubai, U.A.E.

KENWOOD ELECTRONICS (THAILAND) CO., LTD.
2019 New Pechburi Road, Bangkapi, Huaykwang, Bangkok, 10320 Thailand

KENWOOD ELECTRONICS SINGAPORE PTE. LTD.
1 Genting Lane, #07-00, Kenwood Building, Singapore, 349544

KENWOOD ELECTRONICS (MALAYSIA) SDN BHD
#4.01 Level 4, Wisma Academy Lot 4A, Jalan 19/1, 46300 Petaling Jaya, Selangor Darul Ehsan,
Malaysia