ά EXPLANATION OF IC

052-1170-01 ⇂ PD784216BYGC-103-8E CD & Radio Controller

1.Terminal Description

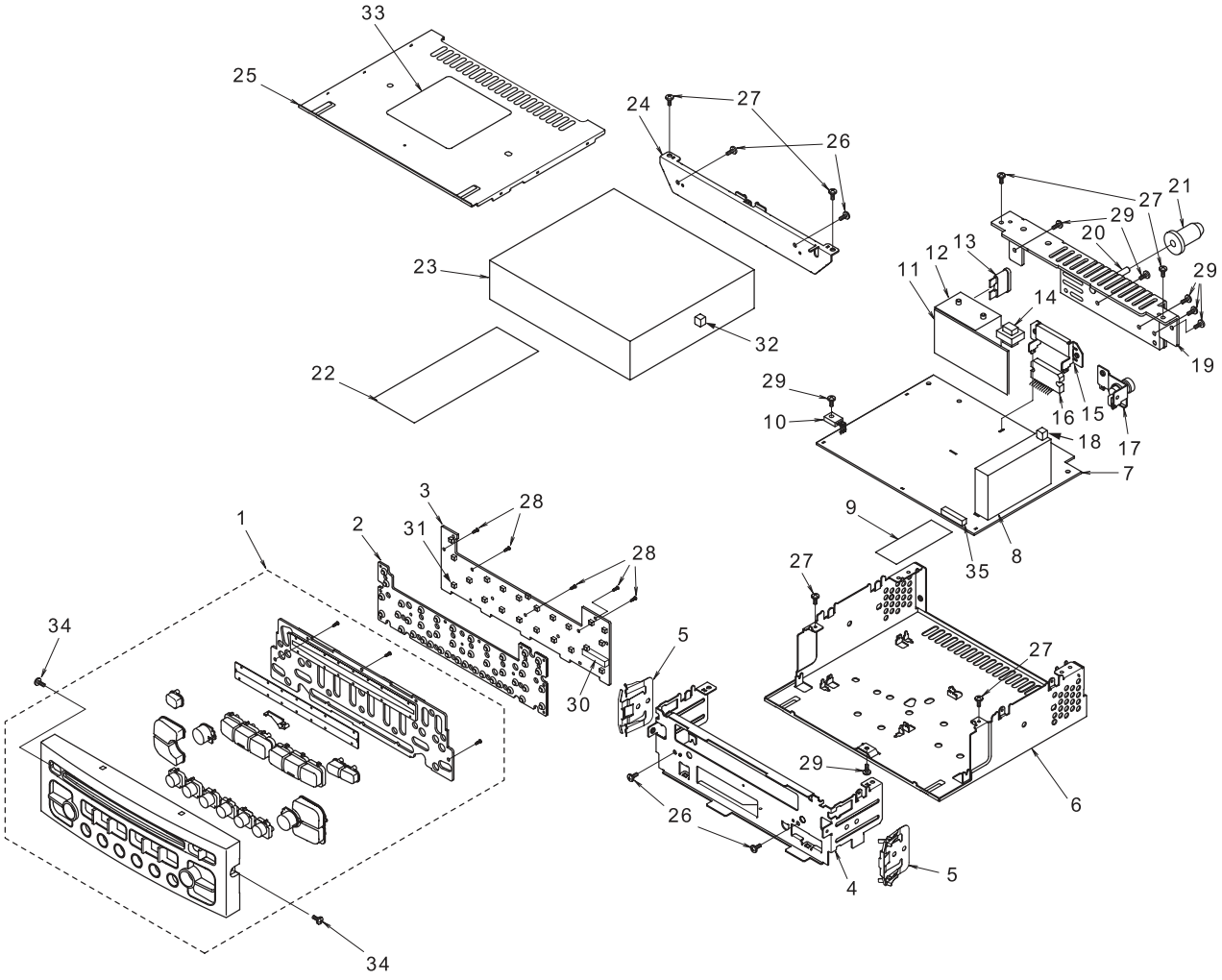
pin 1: KI 1 : IN : Key scan signal input. Refer Table 1.
pin 2: KI 2 : IN : Key scan signal input. Refer Table 1.
pin 3: KI 3 : IN : Key scan signal input. Refer Table 1.
pin 4: KI 4 : IN : Key scan signal input. Refer Table 1.
pin 5: KI 5 : IN : Key scan signal input. Refer Table 1.
pin 6: NU : - : Not in use.
pin 7: NU : - : Not in use.
pin 8: NU : - : Not in use.
pin 9: VDD : - : Positive supply voltage.
pin 10: X 2 : - : Crystal connection.
pin 11: X 1 : - : Crystal connection.
pin 12: VSS : - : Negative supply voltage.
pin 13: XT 2 : - : Not in use.
pin 14: XT 1 : - : Not in use.
pin 15: RESET_ : IN : Reset signal input.
pin 16: SBSY : IN : CD IC Sub Q data request signal input.
pin 17: VAN INT_ : IN : VAN interrupt signal input.
pin 18: KI 0 : IN : Key scan signal input. Refer Table 1.
pin 19: RDS CLK : IN : Clock pulse input from RDS decoder.
pin 20: RDS DATA : IN : RDS serial data input.
pin 21: B/U DET : IN : Backup voltage ON signal input.
pin 22: +VAN DET_ : IN : VAN-power-supply-ON detection.
pin 23: A VDD : - : Positive supply voltage for the Analog section.
pin 24: A Vref 0 : - : Reference voltage for the internal ADC.
pin 25: NU : - : Not in use.
pin 26: S METER : IN : Input terminal of Internal A/D converter to detect the Voltage of FM S meter.
pin 27: DIAG PHANT : IN : Diagnosis of the phantom circuit.
pin 28: NU : - : Not in use.
pin 29: IF BAND W : IN : FM-IF-band-width-voltage input.
pin 30: NU : - : Not in use.
pin 31: NU : - : Not in use.
pin 32: MUTE DET : IN : When this terminal is low, this IC outputs low from "A MUTE".
pin 33: A VSS : - : Analog ground.
pin 34: NU : - : Not in use.
pin 35: NU : - : Not in use.
pin 36: A Vref 1 : - : Reference voltage for the internal ADC.
pin 37: MISO : IN : The serial data input from VAN-control-IC.
pin 38: MOSI : O : The serial data output to VAN-control-IC.
pin 39: S CLK : O : Clock pulse output to VAN-control-IC.
pin 40: NU : - : Not in use.
pin 41: NU : - : Not in use.
pin 42: A MUTE_ : O : Mute signal output to Audio power amplifier IC. "L"= Mute ON.
pin 43: SS_ : O : The slave chip selection signal output to VAN-control-IC.
pin 44: BEEP : O : Beep out.
pin 45: S DA 1 : O : The serial data output to the tuner pack.
pin 46: VAN RESET : O : Reset signal output to VAN IC.
pin 47: S CL 1 : O : The clock pulse output to the tuner pack.
pin 48: 12V SW : O : Power supply control signal output.
pin 49: 5V REM_ : O : 5V power supply circuit control signal output. "L"= ON.
pin 50: 14V REM : O : 14V power supply control signal output. "H"= ON.
pin 51: +VAN ON : O : "H"= ACC(+VAN)ON.
pin 52: VAN WU : O : Wake up signal output to VAN IC.
pin 53: TEL MUTE : IN : Telephone mute signal output.
pin 54: CD 8V ON : O : Power supply control signal output for the CD mechanism.
pin 55: NU : - : Not in use.
pin 56: S DA 2 : O : The serial data output to the CASP-IC.
pin 57: S CL 2 : O : The clock pulse output to the CASP-IC.
pin 58: NU : - : Not in use.
pin 59: NU : - : Not in use.
pin 60: NU : - : Not in use.
pin 61: NU : - : Not in use.
pin 62: NU : - : Not in use.
pin 63: NU : - : Not in use.
pin 64: NU : - : Not in use.
pin 65: NU : - : Not in use.
pin 66: NU : - : Not in use.
pin 67: NU : - : Not in use.
pin 68: NU : - : Not in use.
pin 69: NU : - : Not in use.
pin 70: NU : - : Not in use.
pin 71: NU : - : Not in use.
pin 72: VSS : - : Negative supply voltage.
pin 73: NU : - : Not in use.
pin 74: NU : - : Not in use.
pin 75: CD DET : O : Not in use.
pin 76: 0 OUT : IN : 0 flag input from the digital servo processor.
pin 77: BUS 0 : I/O : CD IC Data input / output.
pin 78: BUS 1 : I/O : CD IC Data input / output.
pin 79: BUS 2 : I/O : CD IC Data input / output.
pin 80: BUS 3 : I/O : CD IC Data input / output.
pin 81: VDD : - : Positive supply voltage.
pin 82: DIMMER CNT : O : Dimmer control signal output.
pin 83: BUC CLOCK : O : CD IC clock pulse output.
pin 84: CCE_ : O : Chip enable signal output to CD IC.
pin 85: CD RESET_ : O : Reset signal output to the CD mechanism controller.
pin 86: CHU SW : IN : CD disc chucking signal input.
pin 87: TR A : IN : Photo sensor signal input from the CD mechanism.
pin 88: TR B : IN : Photo sensor signal input from the CD mechanism.
pin 89: TR C : IN : Photo sensor signal input from the CD mechanism.
pin 90: CCW : O : Loading motor control output.
pin 91: CW : O : Loading motor control output.
pin 92: VOL A : IN : Volume control pulse input from Volume switch.
pin 93: VOL B : IN : Volume control pulse input from Volume switch.
pin 94: VPP : - : Connect to ground.
pin 95: CD 5V ON_ : O : Power supply control signal output for the 5V power supply of the CD mechanism.
pin 96: AM ON_ : O : AM-ON signal output.
pin 97: KO 0 : O : Key scan output terminal. Refer Table 1.
pin 98: KO 1 : O : Key scan output terminal. Refer Table 1.
pin 99: KO 2 : O : Key scan output terminal. Refer Table 1.
pin100: KO 3 : O : Key scan output terminal. Refer Table 1.

Table 1. Key Matrix

	KO 0(pin 97)	KO 1(pin 98)	KO 2(pin 99)	KO 3(pin100)
KI 0 (pin18)	Power	Eject	-	-
KI 1 (pin 1)	MAN	T down	T up	Vol up
KI 2 (pin 2)	M 2	M 4	M 6	Vol down
KI 3 (pin 3)	M 1	M 3	M 5	-
KI 4 (pin 4)	Radio	CDC	CDS	RDS
KI 5 (pin 5)	Audio	A down	A up	TA

ά EXPLODED VIEW PARTS LIST

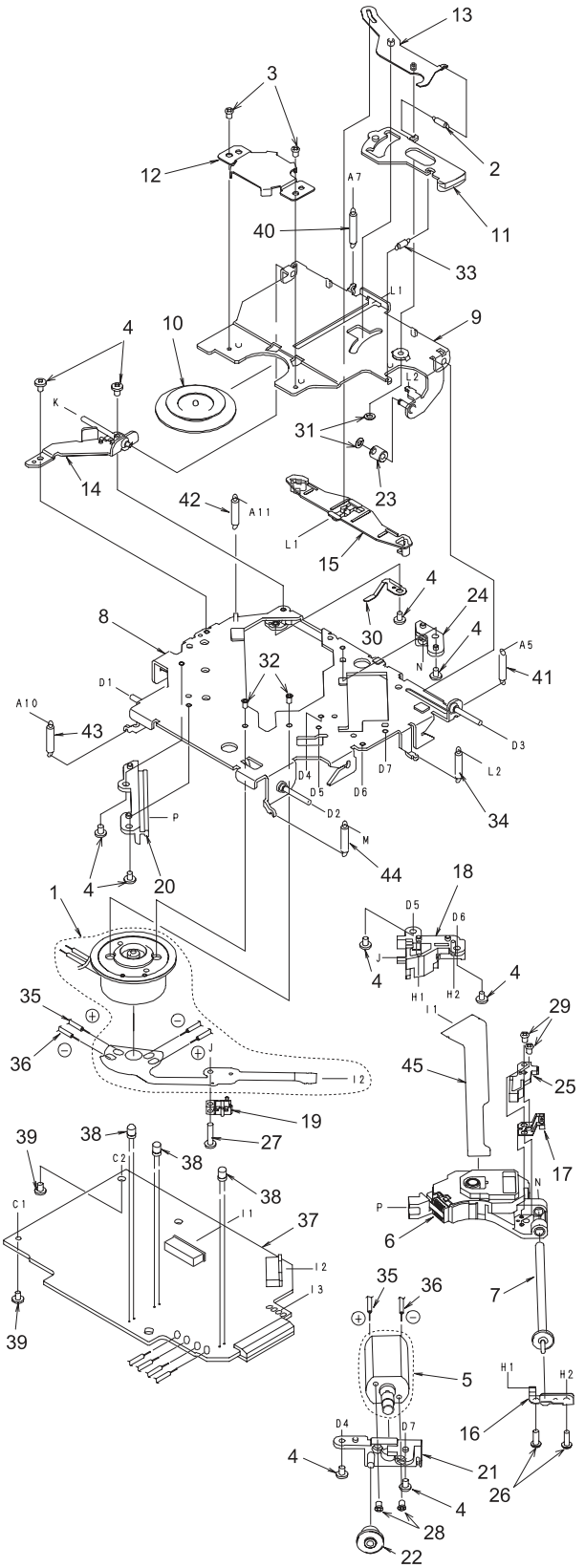
Main section



NO.	PART NO.	DESCRIPTION	Q'TY
1	940-7915-61	ESCUTCHEON ASSY	1
2	345-8532-00	RUBBER SWITCH	1
3	039-0806-00	Switch PWB (WITHOUT COMPONENT)	1
4	309-0759-01	FRONT PLATE	1
5	750-3413-00	SIDE SPRING	2
6	311-1808-01	LOWER CASE	1
7	039-1804-01	Main PWB (WITHOUT COMPONENT)	1
8	880-2088A	TUNER PACK	1
9	816-2525-00	FLAT WIRE	1
10	102-3420-00	TRANSISTOR	1
11	039-1805-00	ISO PWB (WITHOUT COMPONENT)	1
12	074-1159-01	OUTLET SOCKET	1
13	060-0057-56	AUTO FUSE (10A)	1
14	009-9006-60	CHOKE COIL	1
15	331-2574-00	IC HOLDER	1
16	051-2013-00	POWER IC	1
17	331-2989-00	ANTENNA HOLDER	1

NO.	PART NO.	DESCRIPTION	Q'TY
18	345-8581-02	GASKET	1
19	313-1796-00	HEAT SINK	1
20	716-1882-00	REAR BOLT	1
21	345-4847-21	STOPPER	1
22	816-2526-01	FLAT WIRE	1
23	929-0092-81	CD MECHANISM	1
24	331-2987-00	MECHANISM BRKT	1
25	310-1713-00	UPPER COVER	1
26	714-2303-81	MACHINE SCREW	4
27	731-2606-80	TAP TIGHT	6
28	716-0778-10	SCREW(M2· 6)	5
29	714-2606-81	MACHINE SCREW	7
30	074-1228-68	OUTLET SOCKET	1
31	001-7053-90	DIODE	22
32	345-8581-00	GASKET	1
33	286-9487-00	SET PLATE	1
34	780-2605-00	IT IB SCREW	2
35	074-1237-68	OUTLET SOCKET	1

CD mechanism section(929-0092-81) : Drive unit



NO.	PART NO.	DESCRIPTION	Q'TY
1	SMA-151-100	MOTOR ASSY(SPINDLE)	1
2	750-3098-00	L-LINK SPRING	1
3	716-1468-00	SCREW(M2· 2.5)	2
4	716-2003-81	SCREW(M2· 3)	10
5	SMA-146-100	MOTOR ASSY(SLED)	1
6	969-0008-00	PICK UP UNIT	1
7	HBS-432-100	LS-GEAR ASSY	1
8	966-0447-07	DR-PLATE-ASSY	1
9	966-0449-04	CLAMP-LINK-ASSY	1
10	621-0205-02	CLAMPER RING	1
11	621-0251-03	LOCK LINK	1
12	620-0198-03	CLAMPER PLATE	1
13	966-0314-01	STOP LINK-ASSY	1
14	966-0448-01	SIDE PLATE-ASSY	1
15	621-0252-03	DISC STOPPER	1
16	620-0491-03	SPRING PLATE	1
17	966-0454-00	SCREW H-RACK-ASSY	1
18	621-0358-02	LS-HOLDER-F	1
19	013-7100-00	SWITCH(LIMIT)	1
20	621-0357-03	PICK UP GUIDE	1
21	621-0253-02	MOTOR HOLDER	1
22	621-0255-02	SECOND GEAR	1
23	622-1073-02	CLAMPER ROLLER	1
24	621-0359-02	LS-HOLDER-R	1
25	621-0375-00	SH-BASE	1
26	716-0675-00	SCREW(M2· 5.5)	2
27	716-1555-00	WAVE SCREW(M2· 8)	1
28	732-2004-11	SEMS SCREW(M2· 4)	2
29	739-1735-17	PRECISION SCREW (M1.7· 3.5)	2
30	620-0690-01	RATTLE PLATE	1
31	746-0761-00	WASHER	2
32	716-1733-00	SCREW(M1.7· 2.3)	2
33	750-3099-00	ES-SPRING	1
34	750-3097-03	CLAMPER SPRING	1
35	816-2373-00	LEAD WIRE(WHT)	1
36	816-2372-00	LEAD WIRE(BLU)	1
37	039-1576-01	CD MAIN PWB (WITHOUT COMPONENT)	1
38	001-0563-00	LED	3
39	716-1670-00	SCREW(M2· 4)	2
40	750-3202-00	CENTER SPRING-B	1
41	750-3096-01	DR-SPRING R	1
42	750-3164-00	DR-SPRING LR	1
43	750-3188-00	DR-SPRING F-B	1
44	750-3201-00	DR-SPRING F-R	1
45	039-1768-00	FPC (WITHOUT COMPONENT)	1