Jan.'94-A05

MITSUBISHI

SERVICE MANUAL

COMPACT DISC PLAYER

Model : **CD-305AL**

ID NO. W021 PARTNo. AW336480

This manual includes the changing part information of these models compared with the service manual of **CD-305L-2**.
Therehore please use both this manual and service manual of **CD-305L-2** for repair.

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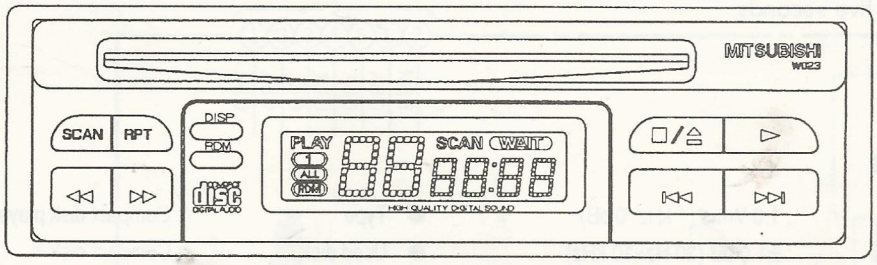
Model : **CD-9151AL**

ID No. W023 PARTNo. AW337870



For the mecha part, please refer to the service manual of **CD-4 MECHA**.(Model: 171)

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CD-305AL

PARTS LIST

Mechanical Parts List

Ref	Part No.	Description	index
M006	289P049O3	LCD	D-2
M024	963L638O8	ASSY-PANEL	B-2

Note: The symbol No., are shown in page 9 of the manual.

CD-9151AL

FEATURES / SPECIFICATIONS

FEATURES

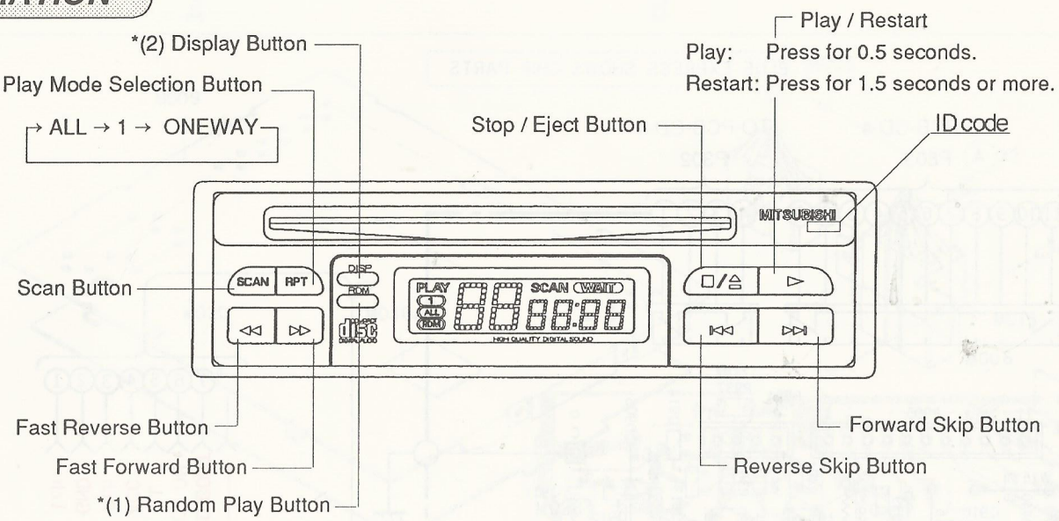
- 3" disc direct insertion (3" disc is available directly without adapter.)
- 5" disc ejects about half from the panel.
- Play start
  Inserting disc, pushing disc or pushing play button.
- FS/RS (Forward Skip / Reverse Skip) for finding a program quickly, and FF / FR (Fast Forward / Fast Reverse) for moving at high speed.
- Scan function to play initial 10 seconds of each program.
- Repeat mode
  1 program / all programs / Oneway
  (Non-repeat)
- Random play function to play different from recorded order.
- Display button to indicate final program number and total recording time for five seconds.
- Re-start
  Quick finding the first program by a long push of the play button.
- Any-time eject
  The disc can be ejected even with ACC "OFF"
- Sequential play
  The previous playback position and operation mode are continued even with ACC "OFF" and ejecting a disc.
- Sound skip reset function
  The unit is reset automatically to previous playback position when sound skip.
- High temperature protection of laser
  The playback is inhibited automatically if approx., 140°F is exceeded around the unit.

SPECIFICATIONS

- Output Voltage : 1.0 Vrms (1 kHz 0 dB)
- Frequency Response : ±1.0 dB (30 Hz~10 kHz)
  0±1.5 dB (20 Hz), −1±1.5 dB (20 kHz)
- Signal to Noise Ratio : 90 dB (1 kHz)
- Dynamic Range : 90 dB (1 kHz)
- Channel Separation : 80 dB (1 kHz)
- Total Harmonic Distortion : Less than 0.01% (1 kHz, 0 dB)
- Wow and Flutter : Immeasurable
- Intermodulation Distortion : 0.05%

- Type : Compact disk player used for a car
- Used dick : Compact disk
- Laser : Semi-conductor laser λ=780nm
- Power supply : DC 13.2V(11~16V) MAIN not needed
- Current : 0.6A Invariable, during PLAY
  Consumption : 1.0mA When NO-PLAY is not displayed
  : 0.14A will be added to each, with the ILL ON.
- Size : 7-13/64"(W)x 2-3/64"(H)x6-27/64"(D)
  (183mmx52mmx163mm)
  Weight : 3 lbs. 5 oz. (1.5 kg)
- Operating temperature : −10°C ~ +60°C
  (Dew should not be produced.
  The maximum operating temperature is determined by the laser protector.)

OPERATION



*(1) **Random play**

The button sets a mode in which the pieces of music recorded on the desk are played back in a sequence different from that recorded.
Other function is the same as that of ALL.
ALL the pieces of music are repeated in the repeat mode.

*(2) **Display**

The identifcation No. of the final piece of music and the total recording time are indicated for a 5 seconds.

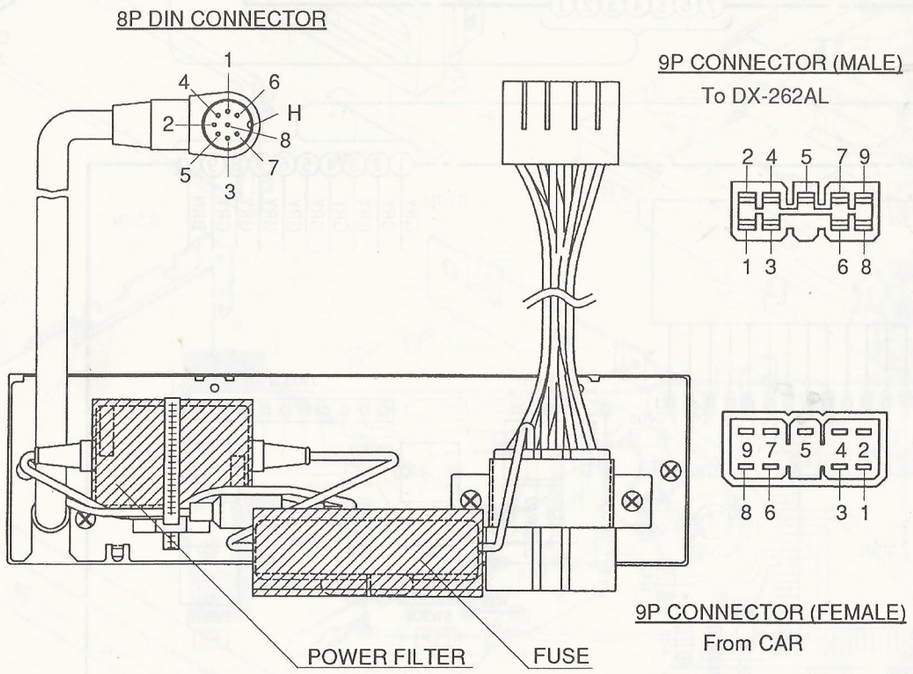
REAR VIEW AND CONNECTOR

8P DIN CONNECTOR

1. CD Control Signal Input
2. AF Signal GND
3. Illumination
4. ACC
5. Battery
6. AF Lch Output
7. AF Rch Output
8. CD ON Signal Output

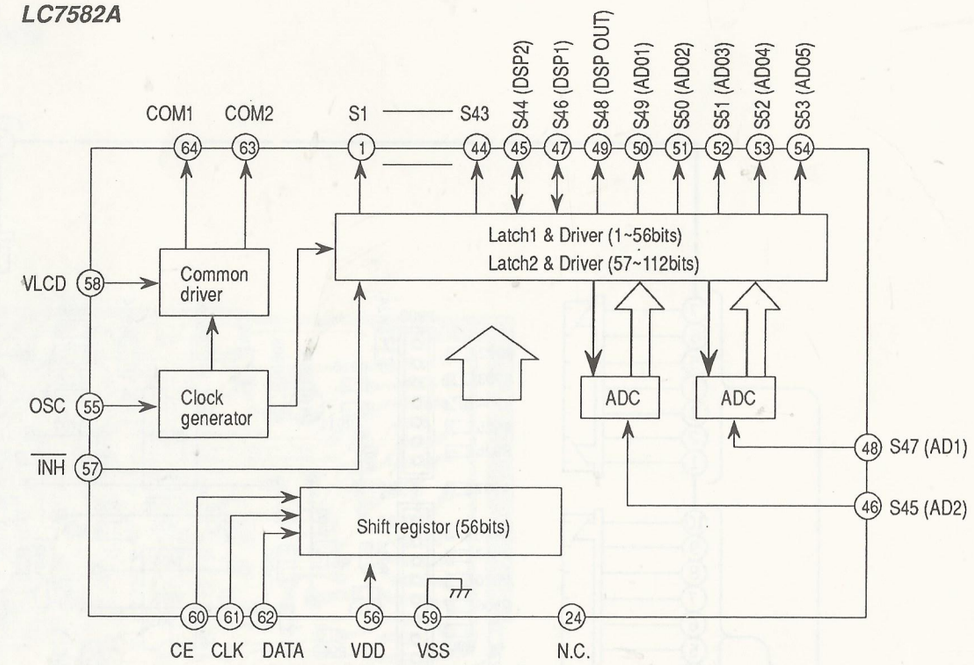
9P DIN CONNECTOR

1. Illumination
2. ACC
3. N.C
4. Battery
5. Lch Rear Speaker
6. Rch Rear Speaker
7. Lch Front Speaker
8. Rch Front Speaker
9. N.C

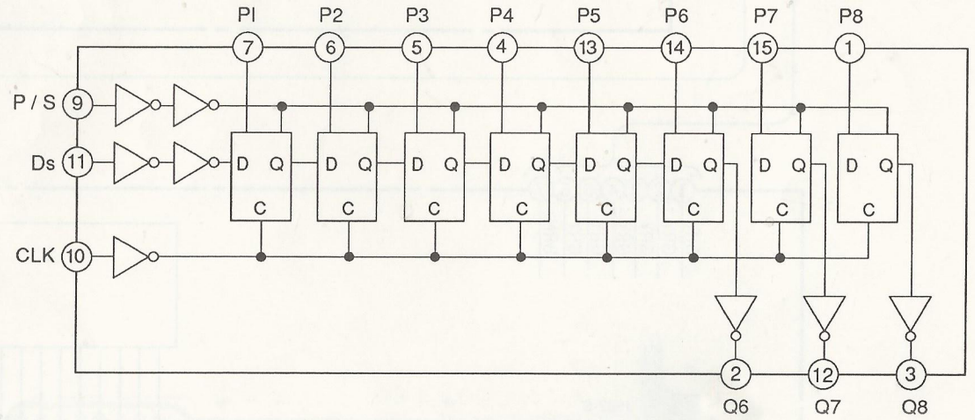


IC EXPLANATION

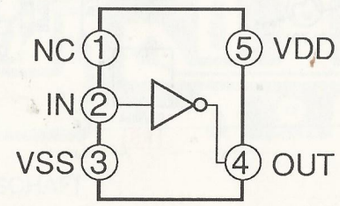
IC901 ***LC7582A***



IC903,904 ***XRU4021BF***



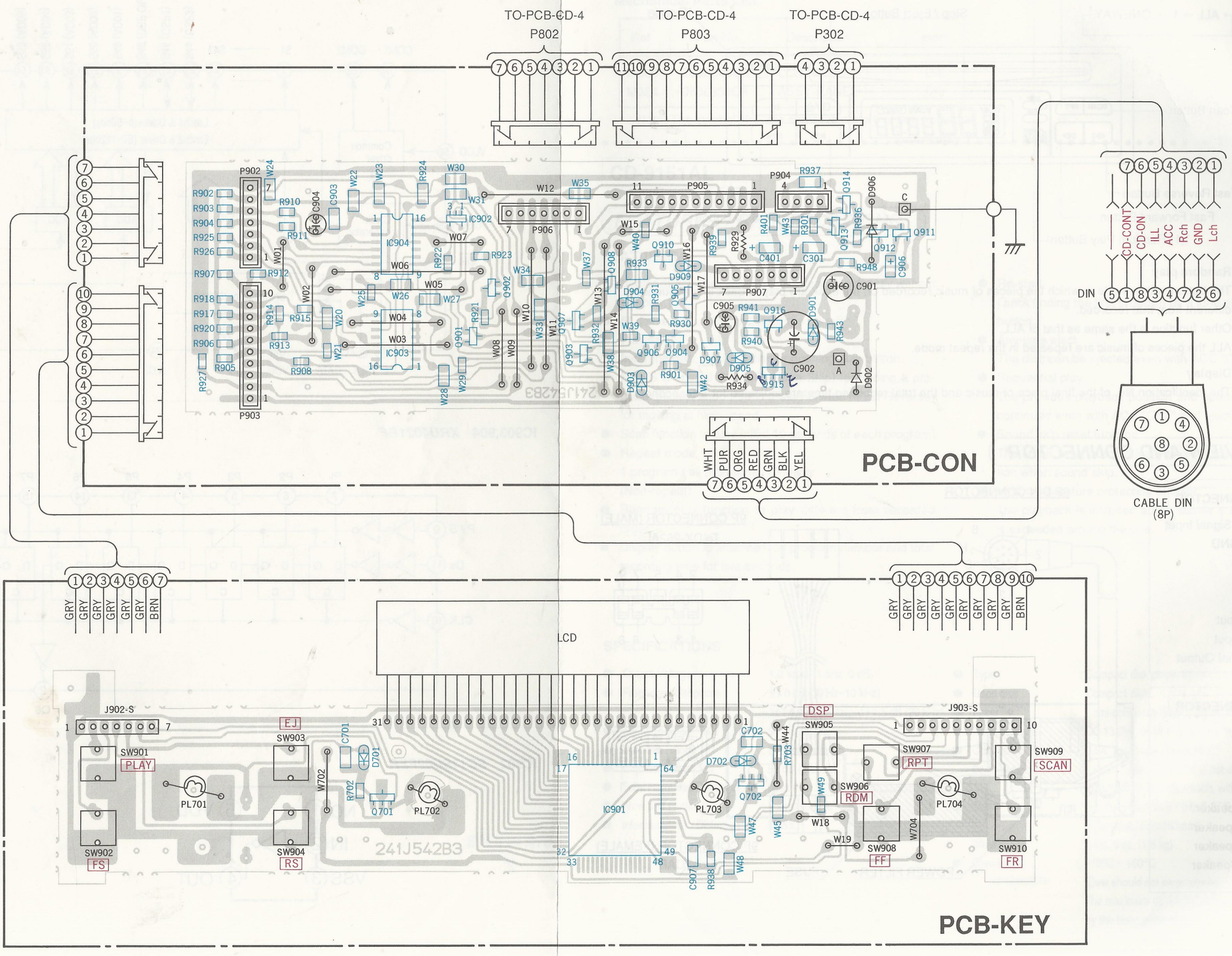
IC902 ***SC14SU69FER***



PRINTED CIRCUIT BOARD PCB-CON, KEY

Model : CD-9151AL

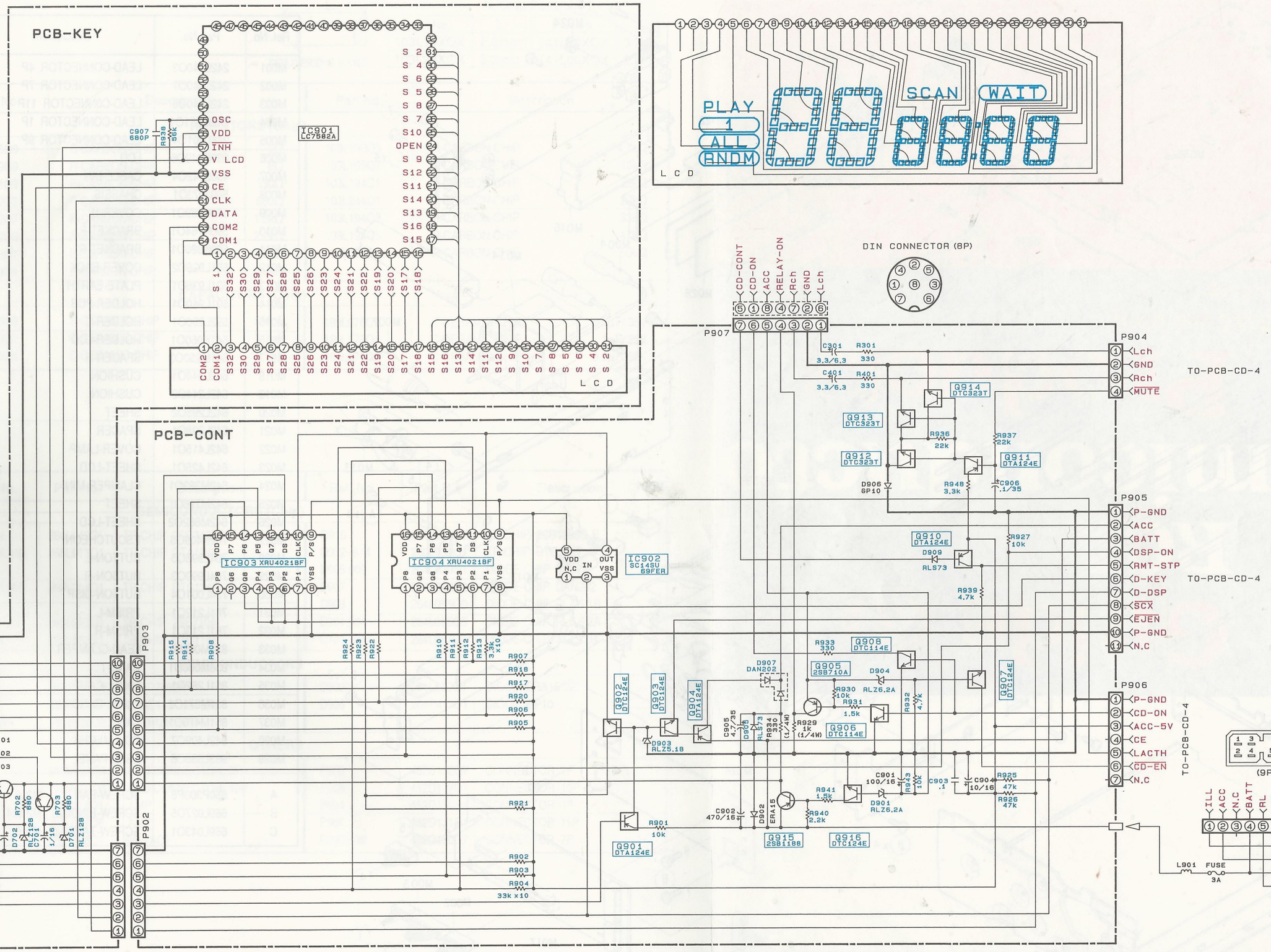
BLUE EXPRESS SHOWS CHIP PARTS



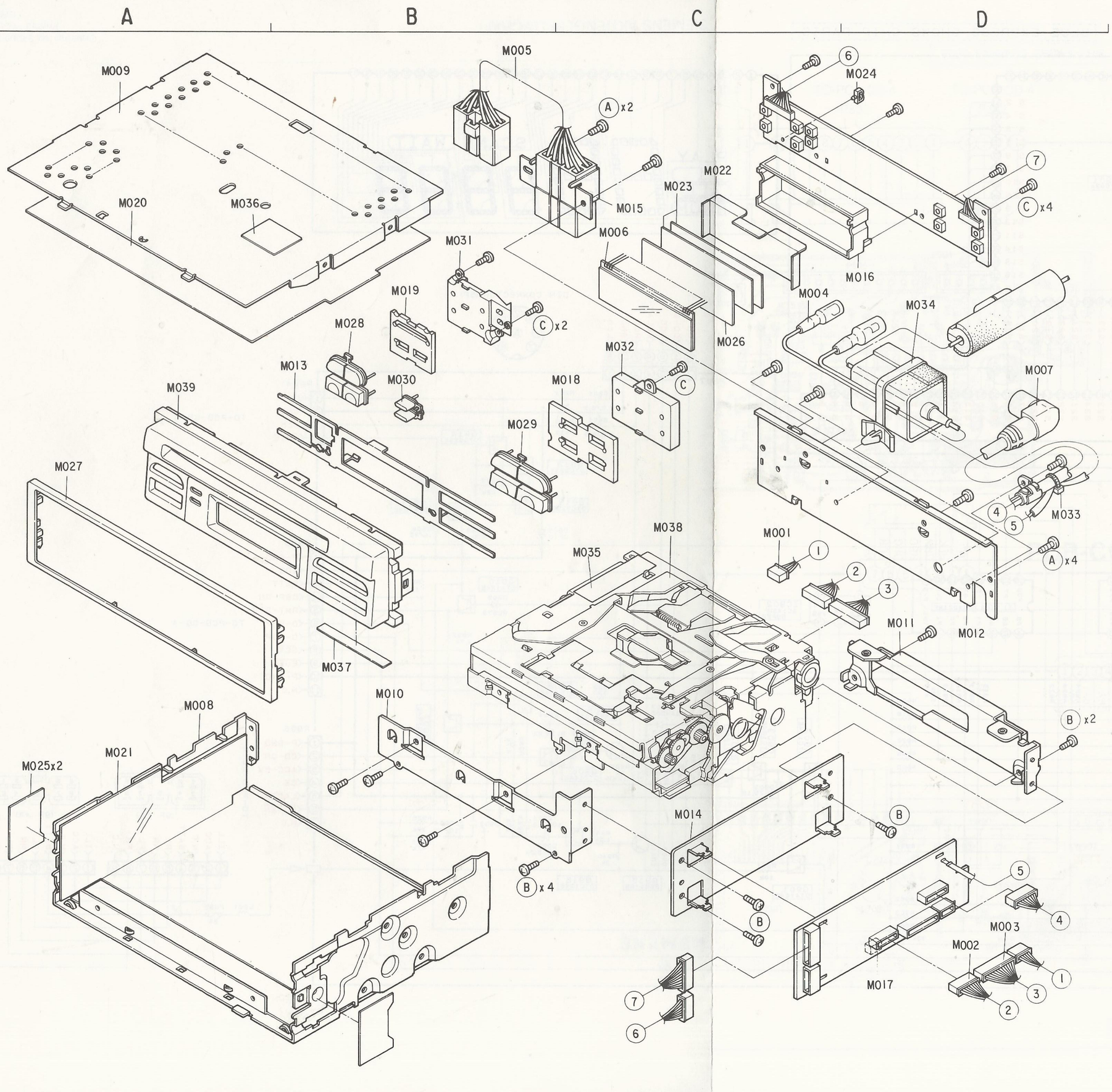
SCHEMATIC DIAGRAM — PCB-CON, KEY

Model : CD-9151AL

BLUE EXPRESS SHOWS CHIP PARTS.



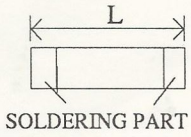
EXPLODED VIEW, UNIT AND PARTS LIST



Model: CD-9151AL

Ref. No.	Part No.	Description	Index
M001	242L840O3	LEAD-CONNECTOR 4P	C-2
M002	242L840O7	LEAD-CONNECTOR 7P	D-4
M003	242L840O8	LEAD-CONNECTOR 11P	D-4
M004	242M661O1	LEAD-CONNECTOR 1P	C-2
M005	246L201O4	LEAD-CONNECTOR 9P	B-1
M006	289P049O6	LCD	C-1
M007	450L142O4	CABLE-DIN	D-2
M008	560J073O1	CHASSIS	A-3
M009	590K689O1	COVER-U	A-1
M010	590K764O1	BRACKET-F	B-3
M011	590K886O1	BRACKET-R	D-3
M012	591L926O2	COVER-BACK	D-3
M013	591L936O1	PLATE-EARTH	B-2
M014	591L940O1	HOLDER-PCB	C-4
M015	592L280O1	HOLDER-C	C-1
M016	641K060O1	HOLDER-LCD	D-1
M017	641M250O3	SPACER-R	D-4
M018	642L244O1	CUSHION	C-2
M019	642L244O2	CUSHION	B-2
M020	642L295O2	SHEET	A-1
M021	642L298O1	SPACER	A-3
M022	642L415O1	COVER-LAMP	C-1
M023	642L425O1	SHEET-LCD	C-1
M024	642M383O1	CLAMPER-MINI	D-1
M025	642M796O1	SHEET	A-3
M026	642M862O2	SHEET-LCD	C-2
M027	702K409O3	ESCUTCHEON	A-1
M028	704L998O3	BUTTON-L	B-2
M029	704L999O3	BUTTON-R	B-2
M030	734L001O4	BUTTON-DISP	B-2
M031	761L212O1	PRISM-L	B-1
M032	761L213O1	PRISM-R	C-2
M033	838M002O1	LEAD-CLAMPER	D-2
M034	838M008O1	BAND-T	D-2
M035	851L262O1	LABEL-CAUT	C-3
M036	851M371O1	LABEL-DANG	A-2
M037	851M470O1	LABEL	B-3
M038	942L409O7	CD-4 MECHA	C-2
M039	963L536O6	ASSY-PANEL	A-2
A	650P300P6	SCREW-PAN M3x6	—
B	669L027O5	SCREW-BINDING M2.6x4	—
C	669L043O1	SCREW-TAPPING M2x6	—

ELECTRICAL PARTS LIST



< Chip Parts >

Part No.	L	Part No.	L
103L19XOX	2.0mm	141L04XOX	3.2mm
103L24XOX	3.2mm	141L06XOX	2.0mm

Part No.	Description		Part No.	Description	
RESISTORS (Chip)					
103L199O9	R-CARBON-CHIP	0Ω	103L193O3	R-CARBON-CHIP	4.7kΩ
103L249O9	R-CARBON-CHIP	0Ω	103L193O7	R-CARBON-CHIP	10kΩ
103L241O9	R-CARBON-CHIP	330Ω	103L194O1	R-CARBON-CHIP	22kΩ
103L192O3	R-CARBON-CHIP	680Ω	103L244O1	R-CARBON-CHIP	22kΩ
103L192O7	R-CARBON-CHIP	1.5kΩ	103L194O3	R-CARBON-CHIP	33kΩ
103L192O9	R-CARBON-CHIP	2.2kΩ	103L194O5	R-CARBON-CHIP	47kΩ
103L193O1	R-CARBON-CHIP	3.3kΩ	103L194O6	R-CARBON-CHIP	56kΩ
103L243O1	R-CARBON-CHIP	3.3kΩ			
CAPACITORS (Chip)					
141L075O5	C-CERAMIC-CHIP	680pF	189L076O9	C-CERAMIC-CHIP	0.1μF/ 35V
141L048O2	C-CERAMIC-CHIP	0.1μF	189L073O1	C-CERAMIC-CHIP	1μF/ 35V
141L065O8	C-CERAMIC-CHIP	0.1μF	189L070O3	C-CERAMIC-CHIP	3.3μF/ 35V

Ref. No.	Part No.	Description	Ref. No.	Part No.	Description
SEMICONDUCTORS (Chip)					
Q701,702	260L049O!	TR-CHIP 2SC3439G	Q915	260L018O2	TR-CHIP 2SB1188Q,R
Q901,904,910, 911	260L013O1	TR-CHIP DTA124E	Q912~914	260L033O1	TR-CHIP DTC323T
			D905,909	264L029O1	DIODE-CHIP RLS73
Q902,903,907, 917	260L014O1	TR-CHIP DTC124E	D907	264L030O2	DIODE-CHIP DAN202
			D903	264L055O0	DIODE-CHIP RLZ 5.1B
Q905	260L012O1	TR-CHIP 2SB710A	D901,904	264L055O5	DIODE-CHIP RLZ 6.2A
Q906,908	260L030O1	TR-CHIP DTC114E	D701,704	264L057O7	DIODE-CHIP RLZ 12B
SEMICONDUCTORS					
IC901	263P659O1	IC LC7582A	D902	264L032O1	DIODE ERA15-02
IC902	263P632O1	IC SC14SU69FER	D906	264P411O1	DIODE GP10 .....
IC903,904	263L000O9	IC XRU4021BF			
OTHERS					
J902S	242M623O1	LEAD CONNECTOR 7P	P902	452D132O7	CONNECTOR 7P
J903S	242M623O1	LEAD CONNECTOR 10P	P903	452D132O1	CONNECTOR 10P
PL701,702	253L118O1	LAMP	P904	452D130O4	CONNECTOR 4P
PL702,703	253L074O6	LAMP	P905	452D131O1	CONNECTOR 11P
S901~910	432L088O1	SW-TACT	P905,906	452D130O7	CONNECTOR 7P