

CarAudio Service Manual

1. Ergänzung / Supplement 1

MCD 36
(G.HF 2800)

MCD 40
(G.HF 2900)



Zusätzlich erforderliche Unterlagen für den Komplettservice
Additionally required Service Documents for the Complete Service

**Service
Manual**

**MCD 36
MCD 40**

Materialnr./Part No.
72010 748 3000

**Service
Manual**

**Sicherheit
Safety**

Materialnr./Part No.
72010 800 0000

Grundig Service

Hotline Deutschland...
...Mo.-Fr. 8.00-18.00 Uhr

Technik:

| | |
|----------------------------|---------------|
| TV | 0180/52318-41 |
| TV | 0180/52318-49 |
| SAT | 0180/52318-48 |
| VCR/LiveCam | 0180/52318-42 |
| HiFi/Audio | 0180/52318-43 |
| Car Audio | 0180/52318-44 |
| Telekommunikation | 0180/52318-45 |
| Fax: | 0180/52318-51 |
| Planatron (8.00-22.00 Uhr) | 0180/52318-99 |

Ersatzteil-Verkauf:

Mo.-Fr. 8.00-19.00 Uhr

Telefon: 0180/52318-40
Fax: 0180/52318-50

Materialnummer/Part Number 72010 748 3100

Änderungen vorbehalten/Subject to alteration • Printed in Germany

E-BS 36 0400 • 9033

<http://www.grundig.com>

Es gelten die Vorschriften und Sicherheitshinweise gemäß dem Service Manual "Sicherheit", Materialnummer 72010 800 0000, sowie zusätzlich die eventuell abweichenden, landesspezifischen Vorschriften!



The regulations and safety instructions shall be valid as provided by the "Safety" Service Manual, part number 72010 800 0000, as well as the respective national deviations.

Dieses Service Manual gilt für die Geräte MCD 36 und MCD 40 ab folgenden Seriennummern:

MCD 36: 01 00995 0 521 284501

MCD 40: 01 00996 0 521 119801

Für Geräte mit niedrigeren Seriennummern verwenden Sie bitte das Service Manual mit der Materialnummer 72010 748 3000.

This Service Manual is valid for MCD 36 and MCD 40 from the following serial numbers on:

MCD 36: 01 00995 0 521 284501

MCD 40: 01 00996 0 521 119801

For sets with lower serial numbers please use the Service Manual with the part number 72010 748 3000.

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Allgemeiner Teil

Messgeräte / Messmittel

Beachten Sie bitte das GRUNDIG Messtechnik-Programm, das Sie unter folgender Adresse erhalten:

GRUNDIG Instruments Test- und Messsysteme GmbH
 Würzburger Str. 150, D-90766 Fürth/Bay
 Tel. 0911/703-4118, Fax 0911/703-4130
 eMail: instruments@grundig.de; Internet: <http://www.grundig.instruments.de>

Technische Daten

| | |
|--------------------------------|-----------------|
| D/A-Wandler | 1 Bit |
| Oversampling-Rate | 8 fach |
| Frequenzbereich | 20Hz...20kHz |
| Geräuschspannungsabstand | 95dB |
| Gleichlaufschwankung | unter Meßgrenze |
| Klirrfaktor (1kHz) | 0,008% |
| Nenn-Ausgangspegel | 0,68V |
| Nenn-Ausgangsimpedanz | 1kΩ |
| Stromaufnahme | 400mA |
| Betriebstemperatur | -10°C ... +50°C |
| Gewicht ca. | 2kg |
| Abmessungen | |
| (MCD 36) | 25 x 6,4 x 16cm |
| (MCD 40) | 25 x 8,1 x 16cm |

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General Section

Test Equipment / Aids

Please note the Grundig Catalog "Test and Measuring Equipment" obtainable from:

Technical Data

| | |
|--------------------------------|------------------|
| D/A Converter | 1Bit |
| Oversampling Rate | 8 times |
| Frequency Range | 20Hz...20kHz |
| Signal/Noise Ratio | 95dB |
| Wow and Flutter | immeasurably low |
| Distortion Factor (1kHz) | 0.008% |
| Nominal Output Level | 0.68V |
| Nominal Output Impedance | 1kΩ |
| Current Consumption | 400mA |
| Operating Temperature | -10°C ... +50°C |
| Weigth approx. | 2kg |
| Dimensions | |
| (MCD 36) | 25 x 6.4 x 16cm |
| (MCD 40) | 25 x 8.1 x 16cm |

Ausbauhinweise

1a. Zerlegen des Gehäuses (MCD 36)

Gehäuseoberteil abnehmen (Fig. 1a)

- Die 9 Schrauben (A) herausschrauben.
- Die 4 Rastnasen (1) ausrasten und die Frontblende (2) nach vorne abziehen.
- Gehäuseoberteil an der rechten Seite ausrasten, nach links hochklappen und abnehmen.

Gehäuseunterteil abnehmen (Fig. 1a)

- Die 2 Schrauben (B) herausschrauben und Anschluss-Platte (C) abnehmen.
- Die 4 Klebstreifen (8) abziehen und die 4 Dämpfer (7) nach aussen herausziehen.
- Die Federn (5) und (6) aushängen.
- Gehäuseunterteil abnehmen.

Hebel (4) ausbauen (Fig. 1a)

- Die 2 Schrauben (E) herausschrauben.
- Die Hebel (4) bis zur Aussparung drehen und nach aussen herausnehmen.

1b. Zerlegen des Gehäuses (MCD 40)

Gehäuseoberteil abnehmen (Fig. 1b)

- Die 6 Schrauben (A) herausschrauben.
- Die 10 Rastnasen (1) ausrasten und die Frontblende (2) nach vorne abziehen.
- Gehäuseoberteil an der rechten Seite ausrasten, nach links hochklappen und abnehmen.

Gehäuseunterteil abnehmen (Fig. 1b)

- Die 2 Schrauben (B) herausschrauben und Anschluss-Platte (C) abnehmen.
- Die 4 Klebstreifen (8) abziehen und die 4 Dämpfer (7) nach aussen herausziehen.
- Die Federn (5) und (6) aushängen.
- Gehäuseunterteil abnehmen.

Disassembly Instructions

1a. Disassembling of the Cabinet (MCD 36)

Removing the upper part of the cabinet (Fig. 1a)

- Undo 9 screws (A).
- Disengage 4 catches (1) and pull the front panel (2) towards the front.
- Detach the top of the cabinet on the right side and raise it towards the left to remove it.

Removing the bottom part of the cabinet (Fig. 1a)

- Undo 2 screws (B) and remove the Connection Board (C).
- Remove the 4 pieces of adhesive tape (8) and pull out the 4 dampers (7).
- Unhook the springs (5) and (6).
- Remove the bottom part of the cabinet.

Removing the levers (4) (Fig. 1a)

- Undo 2 screws (E).
- Turn the levers (4) to the outcut and take them out.

1b. Disassembling of the Cabinet (MCD 40)

Removing the upper part of the cabinet (Fig. 1b)

- Undo 6 screws (A).
- Disengage 10 catches (1) and pull the front panel (2) towards the front.
- Detach the top of the cabinet on the right side and raise it towards the left to remove it.

Removing the bottom part of the cabinet (Fig. 1b)

- Undo 2 screws (B) and remove the Connection Board (C).
- Remove the 4 pieces of adhesive tape (8) and pull out the 4 dampers (7).
- Unhook the springs (5) and (6).
- Remove the bottom part of the cabinet.

MCD 36

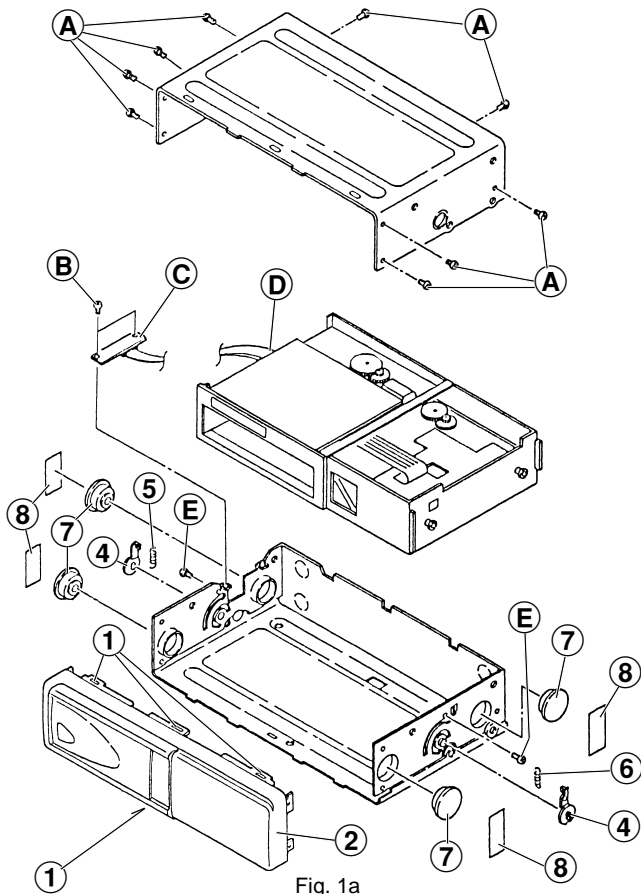


Fig. 1a

MCD 40

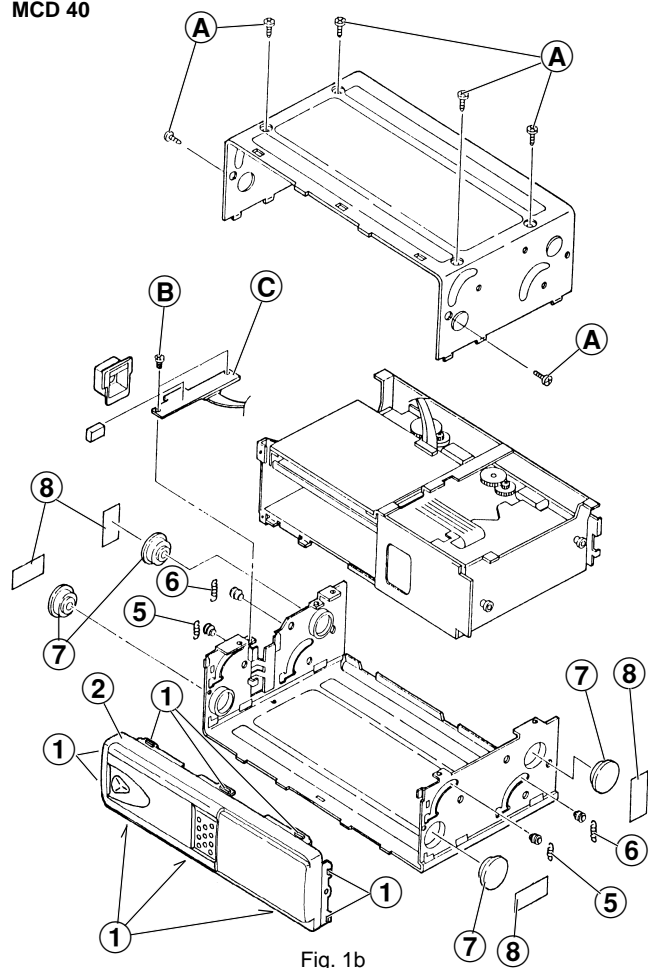


Fig. 1b

2. Hauptplatte "MAIN PCB" ausbauen (Fig. 2)

- Gehäuseoberteil abnehmen (Pkt. 1).
- 3 Schrauben **C11** herauserschrauben.
- Steckverbindungen lösen.
- Leiterplatte herausnehmen.

3. Ausbau des Lift-Motors C7 (Fig. 2)

- Hauptplatte "MAIN PCB" ausbauen (Pkt 2).
- Kunststoffscheiben **C5** abziehen.
- Zahnräder **C2** und **C3** abnehmen.
- 2 Schrauben **C8** herauserschrauben.
- Lift-Motor **C7** ablöten und herausnehmen.

4. Ausbau des Loading-Motors C48

- Hauptplatte "MAIN PCB" ausbauen (Pkt 2).
- 4 Schrauben **C10** herauserschrauben und Magazinschacht-Oberteil **C1** herausnehmen (Fig. 2).
- Kunststoffscheiben **C53** abziehen (Fig. 3).
- Zahnräder **C50** und **C51** herausnehmen (Fig. 3).
- 2 Schrauben **C49** herauserschrauben (Fig. 3).
- Loading-Motor **C48** ablöten und herausnehmen (Fig. 3).

5. Ausbau des Optokopplers J

- Hauptplatte "MAIN PCB" ausbauen (Pkt 2).
- 4 Schrauben **C10** herauserschrauben und Magazinschacht-Oberteil **C1** herausnehmen (Fig. 2).
- 2 Schrauben **I** herauserschrauben (Fig. 3).
- Optokoppler **J** ablöten und herausnehmen.

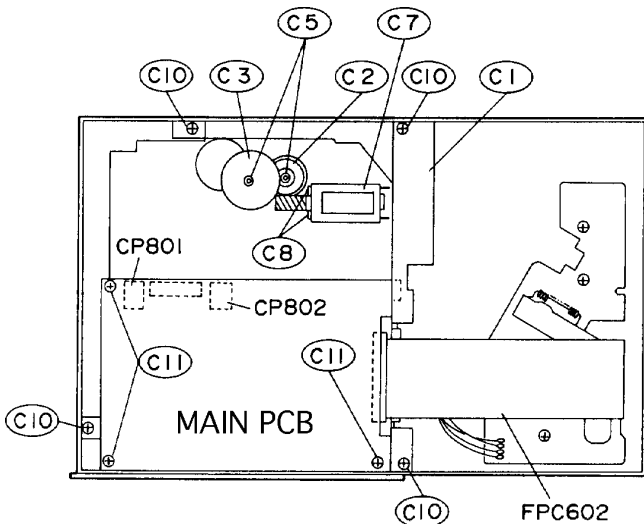


Fig. 2

2. Removing the Main Board (Fig. 2)

- Remove the upper part of the cabinet (para 1).
- Undo 3 screws **C11**.
- Unplug all connectors.
- Take out the PCB.

3. Removing the Lift Motor C7

- Remove the Main Board (para 2).
- Loosen and remove the plastic washers **C5**.
- Pull off the gear wheels **C2** and **C3**.
- Undo 2 screws **C8**.
- Unsolder the Lift Motor **C7** and take it out.

4. Removing the Loading Motor C48

- Remove the Main Board (para 2).
- Undo 4 screws **C10** and remove the cover plate of the CD magazine compartment **C1** (Fig. 2).
- Loosen and remove the plastic washers **C53** (Fig. 3).
- Pull off the gear wheels **C50** and **C51** (Fig. 3).
- Undo 2 screws **C49** (Fig. 3).
- Unsolder the Lift Motor **C48** and take it out (Fig. 3).

5. Removing the Opto Coupler J

- Remove the Main Board (para 2).
- Undo 4 screws **C10** and remove the cover plate of the CD magazine compartment **C1** (Fig. 2).
- Undo 2 screws **I** (Fig. 3).
- Unsolder the Opto Coupler **J** and take it out.

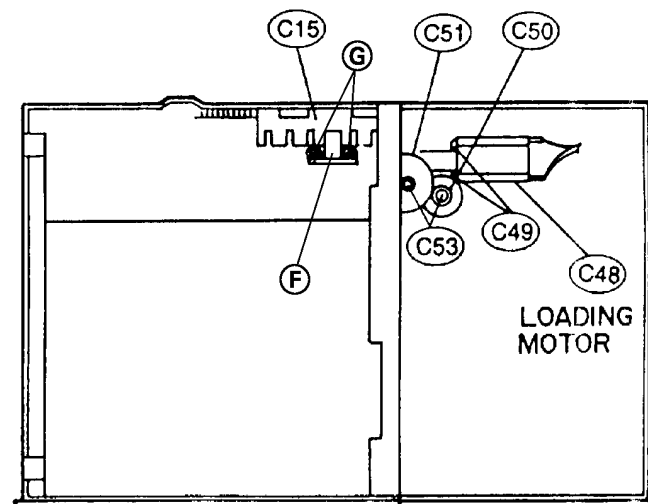


Fig. 3

6. CD-Leiterplatte PCB3 und Pick-Up-Einheit C87 ausbauen

- **Wichtig:** Vor dem Ausbau der Pick-Up-Einheit müssen die beiden Lötstellen auf der Pick-Up-Einheit kurzgeschlossen werden! (Fig. 4)
- Gehäuse zerlegen (Pkt. 1).
- Steckverbindungen **FPC602**, **CS901**, **CP904** und **CP906** lösen (Fig. 5).
- 3 Schrauben **C73** herauserschrauben (Fig. 5).
- Schraube **C97** und Schraube **C96** herauserschrauben (Fig. 6).
- Achse **C90** herausziehen (Fig. 6).
- Pick-Up-Einheit herausnehmen.
- Steckverbindung **FPC601** lösen (Fig. 4) und CD-Leiterplatte **PCB3** herausnehmen.

7. Disc-Motor C72 ausbauen (Fig. 6)

- Pick-Up-Einheit ausbauen (Pkt. 6).
- 2 Schrauben **C77** herauserschrauben und Disc-Motor herausnehmen.

6. Removing the CD Board PCB3 and the Pick Up Unit C87

- **Important:** Before removing the Pick Up Unit the two solder tags on the Pick Up Unit must be connected (Fig. 4).
- Disassemble the cabinet (para 1).
- Unplug the connectors **FPC602**, **CS901**, **CP904** and **CP906** (Fig. 5).
- Undo 3 screws **C73** (Fig. 5).
- Undo screws **C97** and **C96** (Fig. 6).
- Pull out the shaft **C90**.
- Take out the Pick Up Unit.
- Unplug the connector **FPC601** (Fig. 4) and take out the CD Board **PCB3**.

7. Removing the Disc Motor C72 (Fig. 6)

- Remove the Pick Up Unit (para 6).
- Undo 2 screws **C77** and remove the Disc Motor.

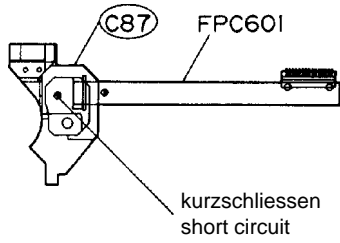


Fig. 4

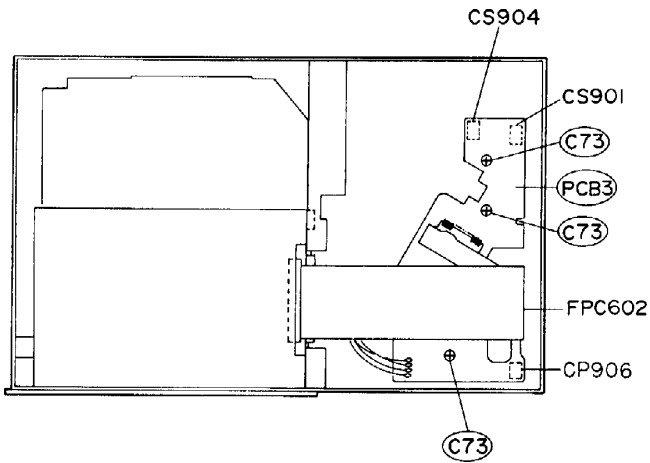


Fig. 5

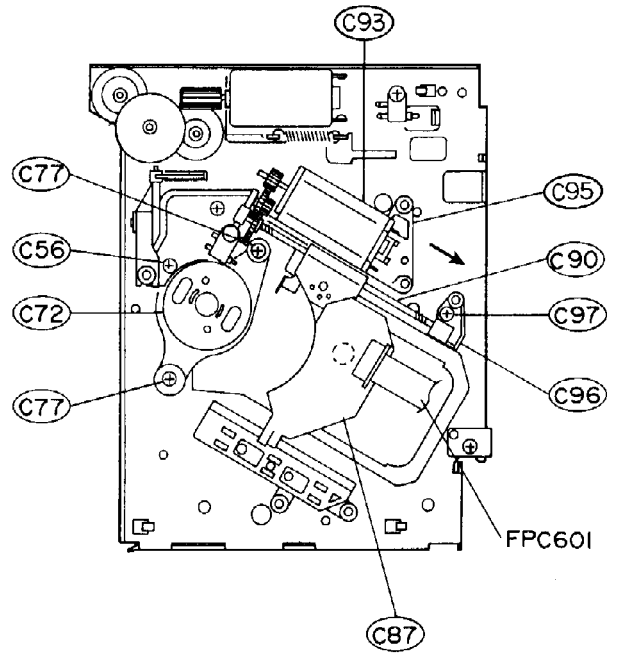
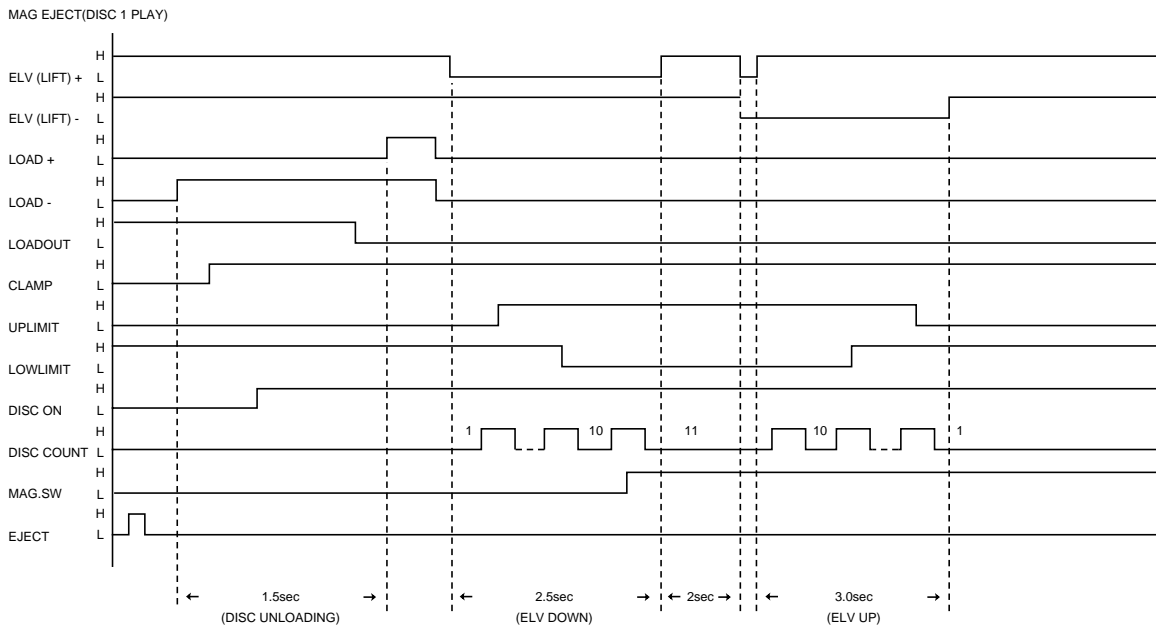
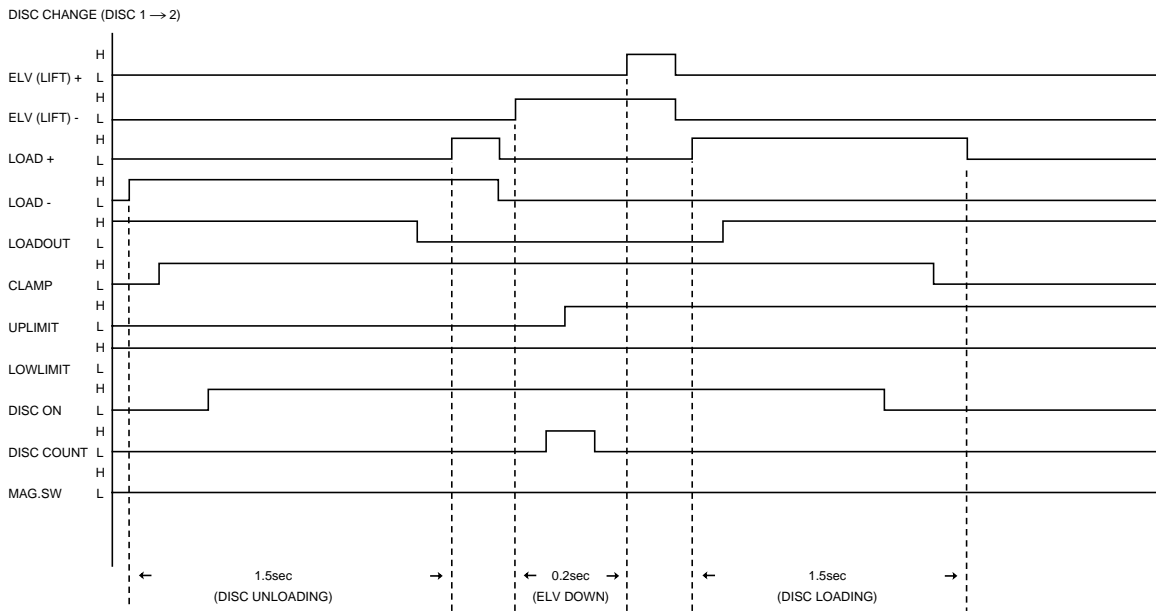
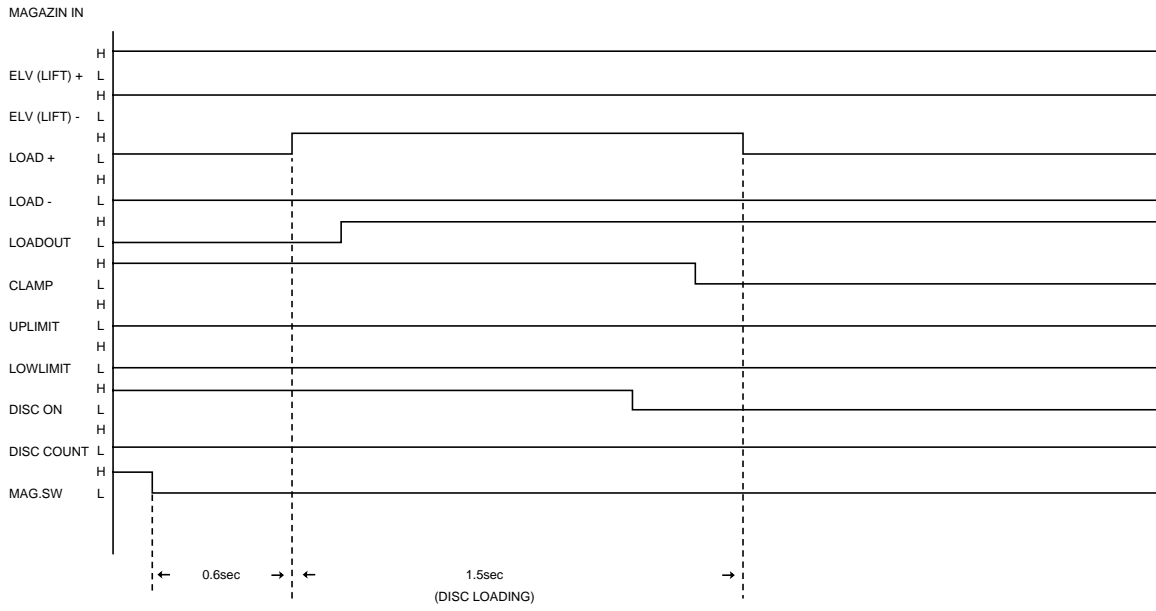


Fig. 6

Steuerungsablauf der Mechanik

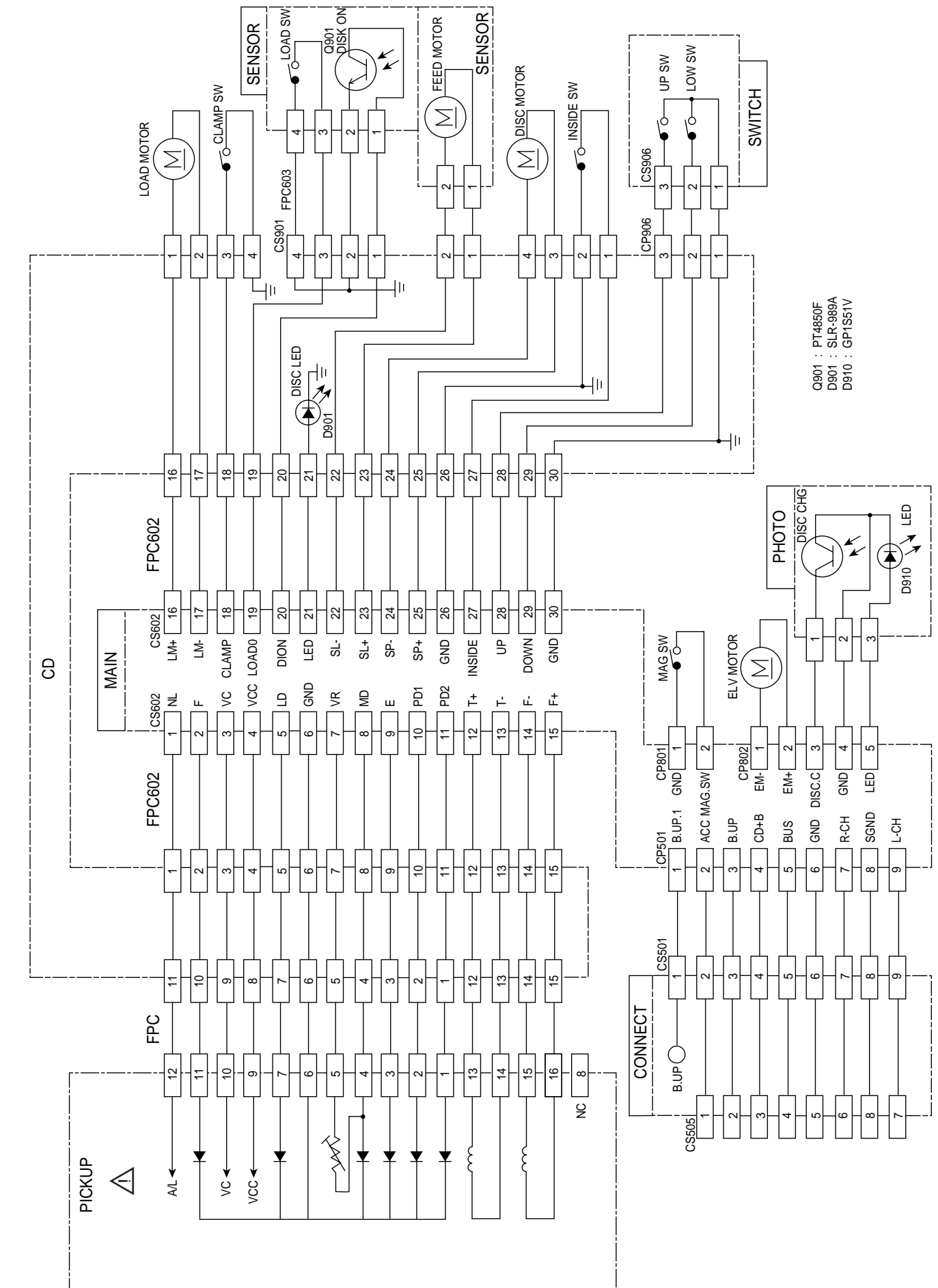
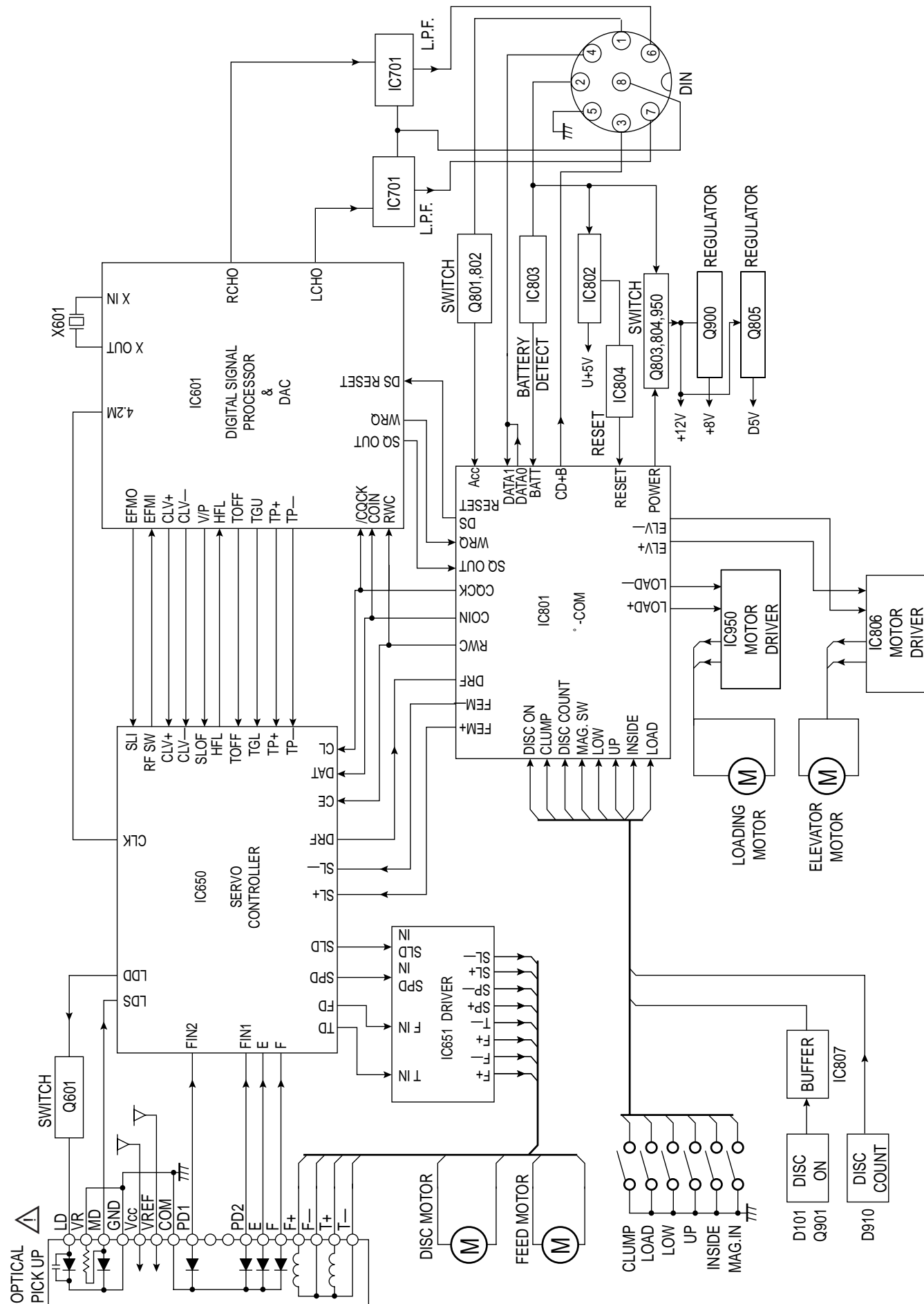
Flowchart of Control Operation of Mechanism



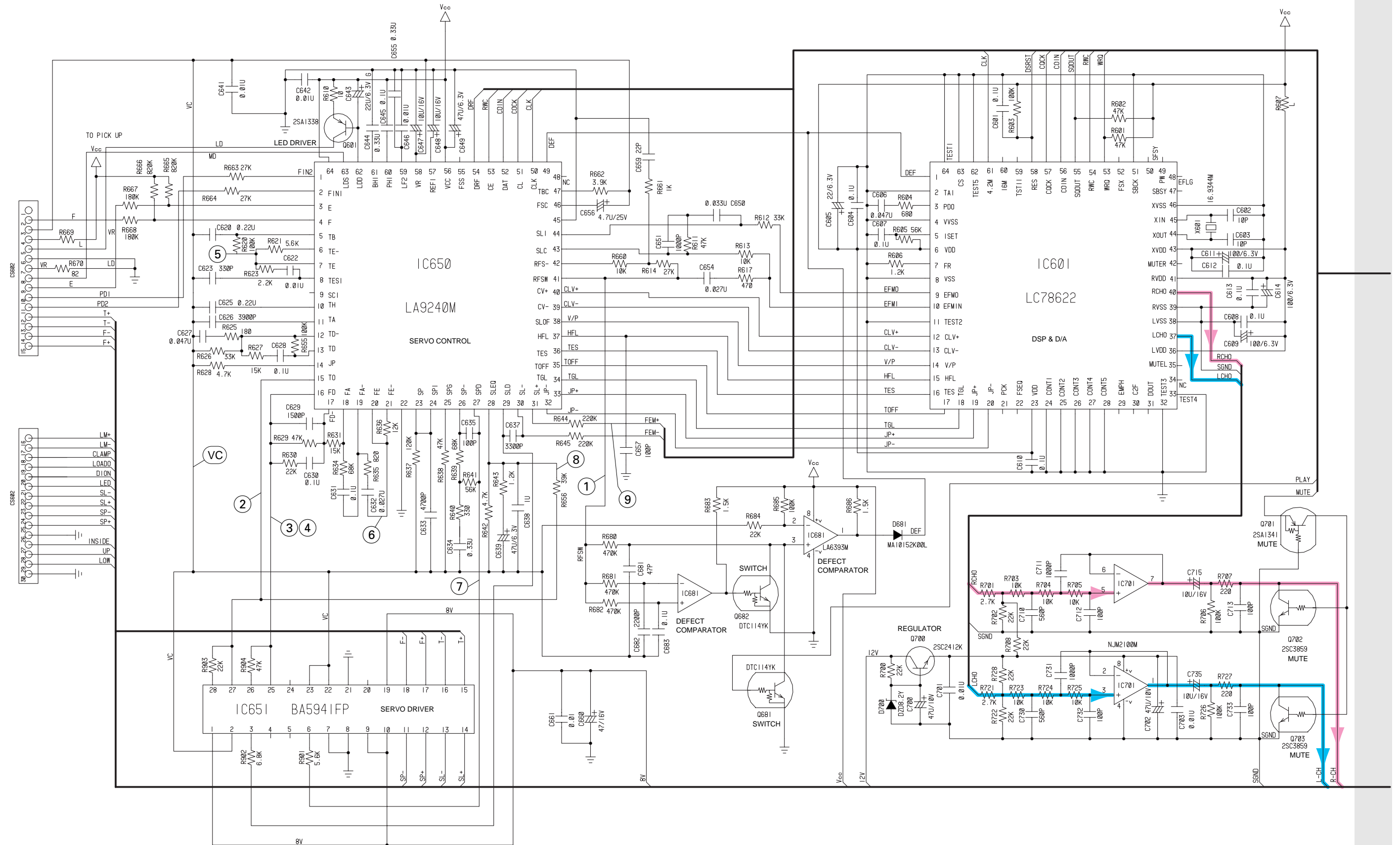
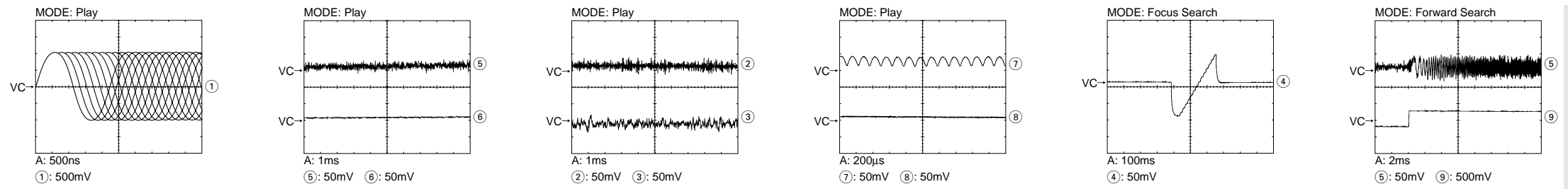
Schaltpläne und Druckplatten-Abbildungen / Circuit Diagrams and Layout of PCBs

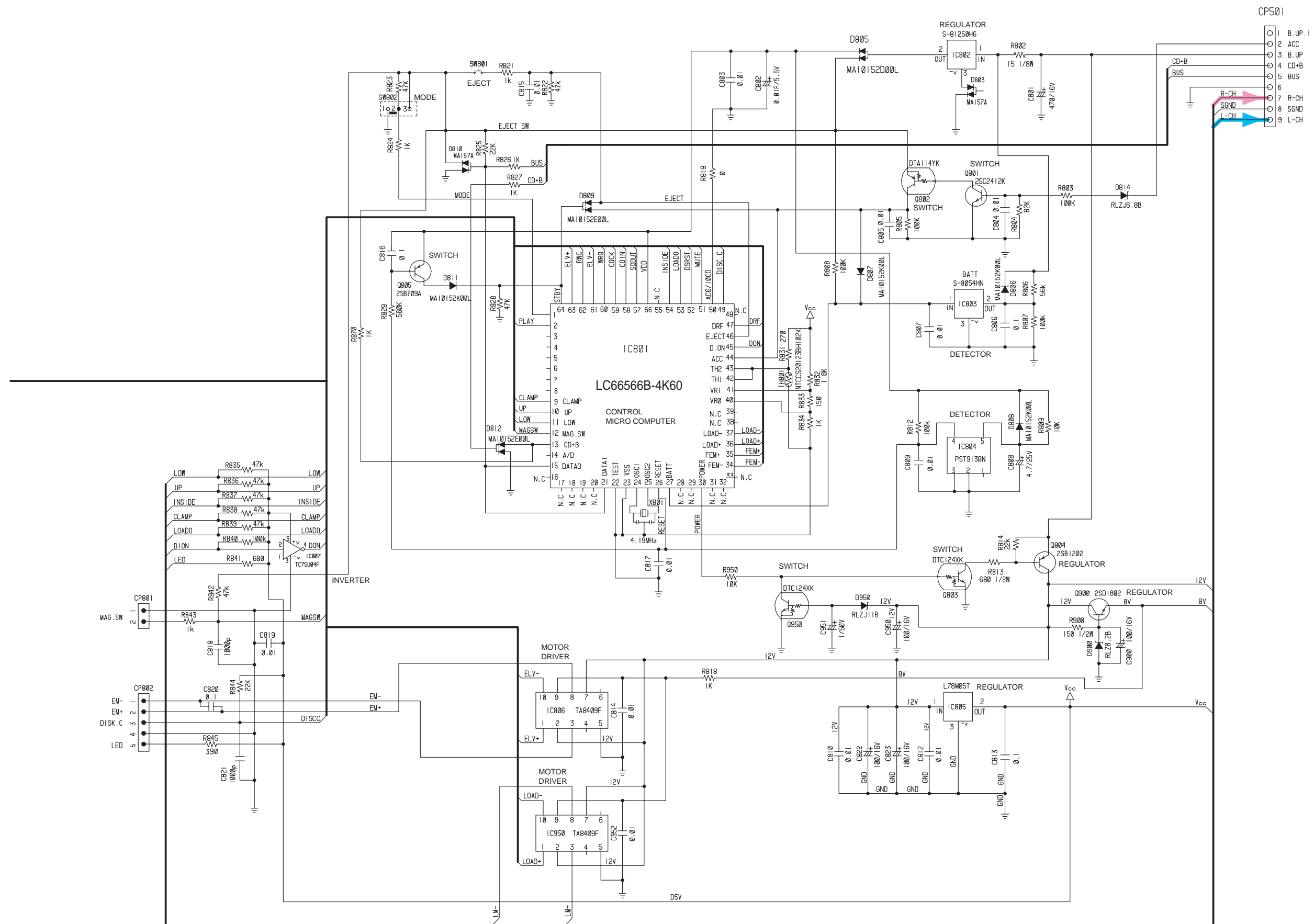
Blattschaltplan / Block Diagram

Verdrahtungsplan / Wiring Diagram

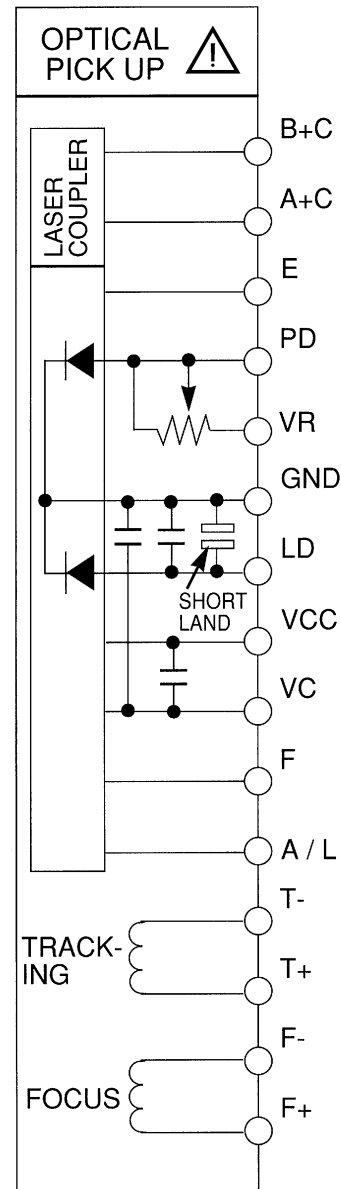


Schaltplan / Circuit Diagram





Schaltplan Pick-Up-Einheit / Circuit Diagram Pick Up Unit



CONNECTOR

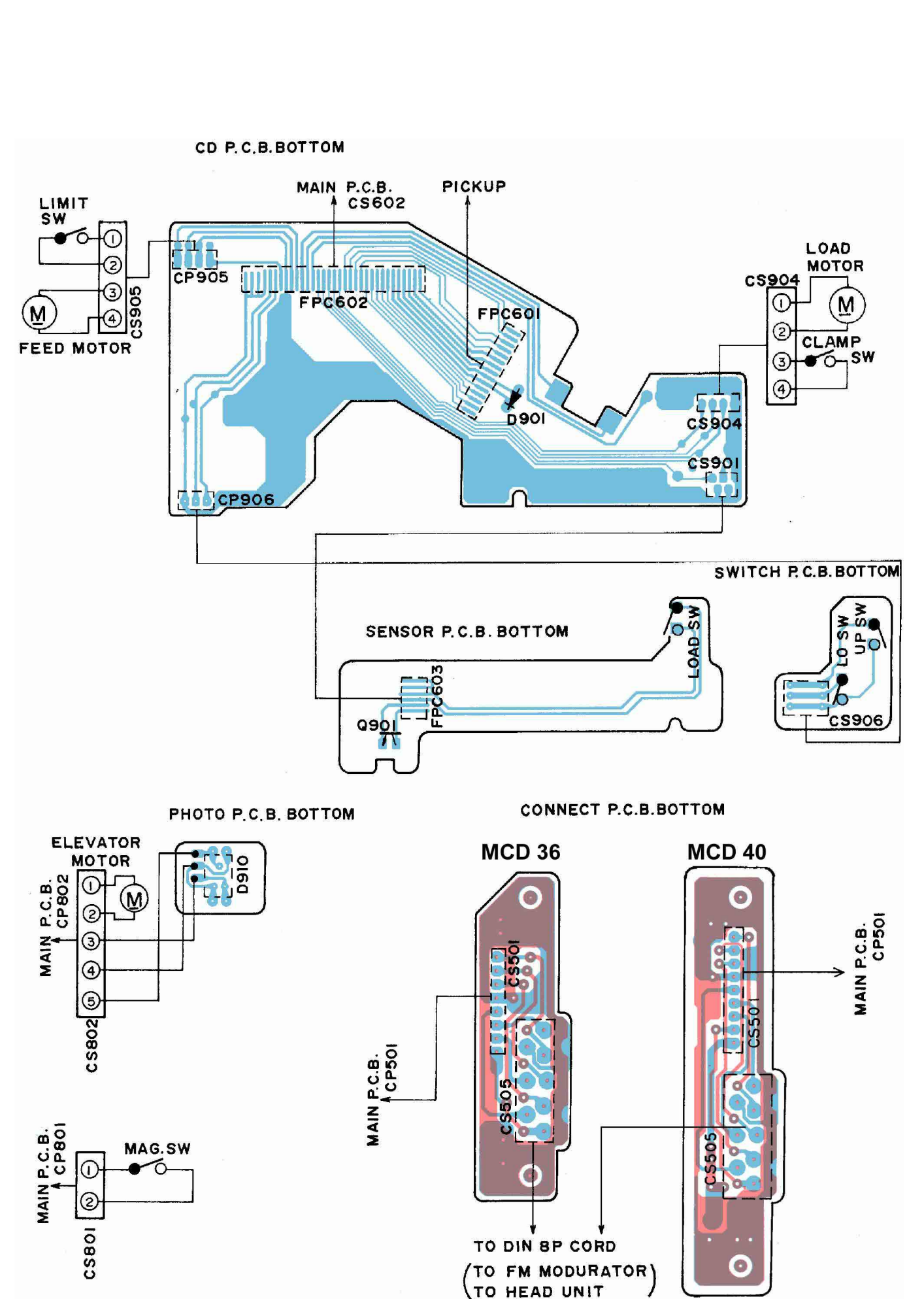
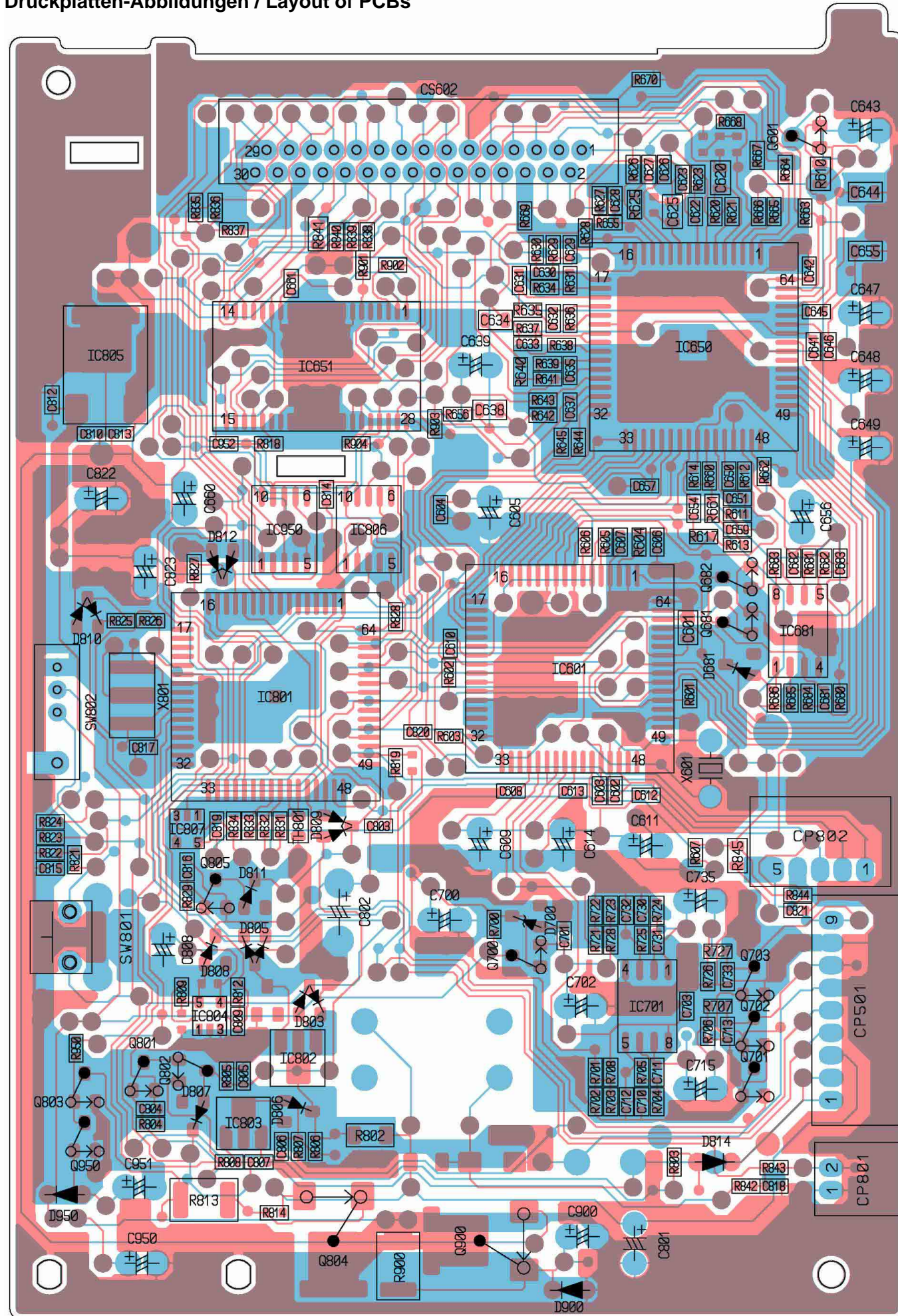
| PIN | TERMINAL | SYMBOL |
|-----|----------|--------|
| 1 | PDIC | PD2 |
| 2 | PDIC | PD1 |
| 3 | PDIC | E |
| 4 | LD | PD |
| 5 | LD | VR |
| 6 | PDIC/LD | GND |
| 7 | LD | LD |
| 9 | PDIC | VCC |
| 10 | PDIC | VC |
| 11 | PDIC | F |
| 12 | PDIC | A/L |
| 13 | TRK(-) | |
| 14 | TRK(+) | |
| 15 | FCS(-) | |
| 16 | FCS(+) | |

Spannungen / Voltages (gemessen bei UB = 14V bei PLAY / measured with UB = 14V at PLAY)

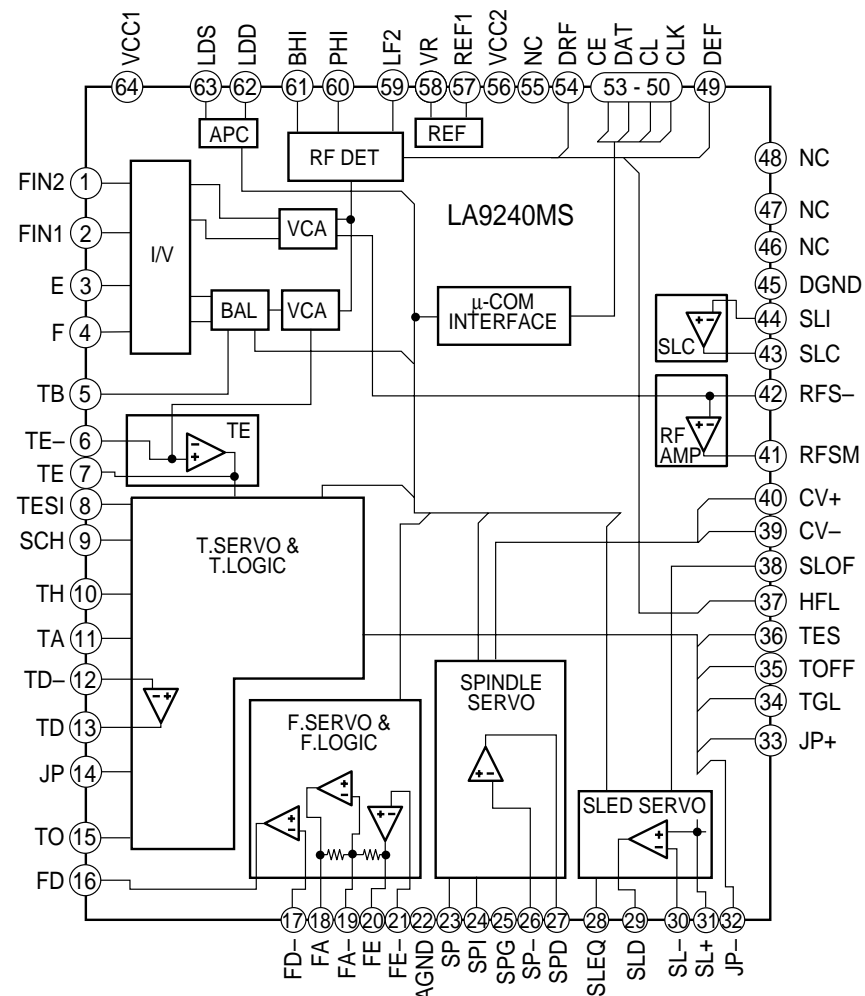
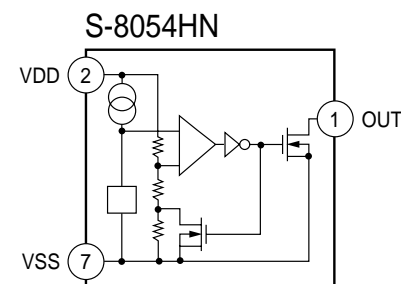
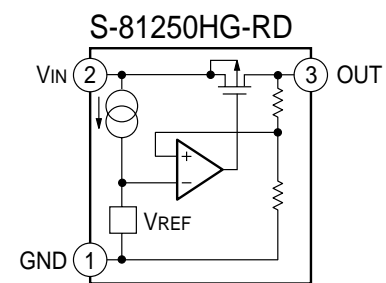
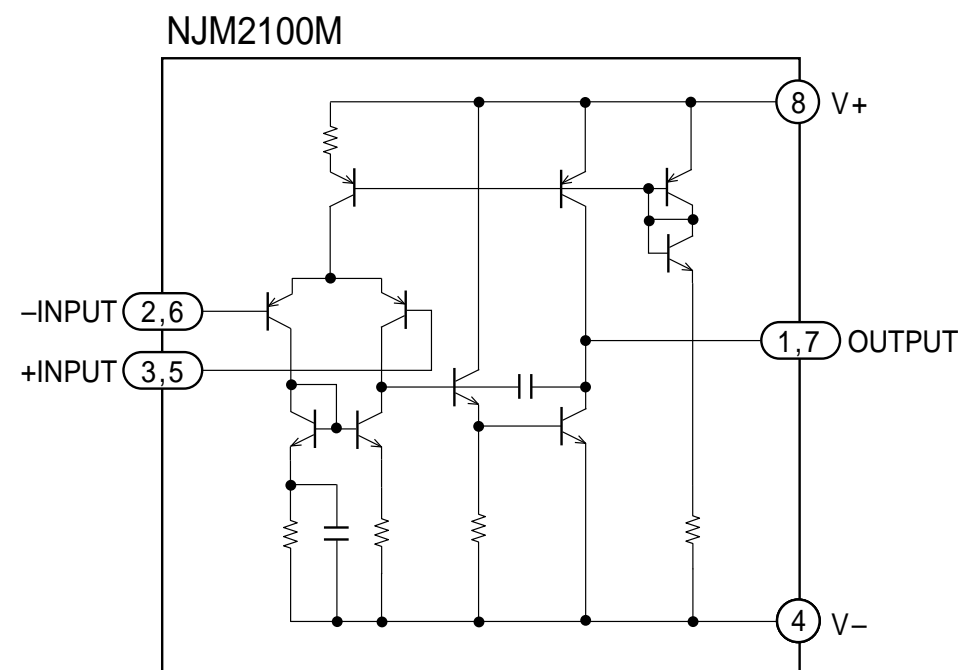
| IC | PIN | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | |
|-------|-----|----------|------|-----|-----|-------|-----|------|-----|---------|---------|----------|----------|-----|-------|-----|-----|---|
| IC601 | | 0 | 0 | 1.5 | 0 | 1.6 | 5 | 0.3 | 0 | 0/5 | 1.4/3.3 | 0 | 0/5 | 0 | 0 | 0 | 0/5 | |
| | | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | |
| | | 0 | 5 | 0 | 0 | 0/5 | 0/5 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0/5 | 0 |
| | | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | |
| | | 0 | HiZ | 0 | 5 | 2.2 | 0 | 0 | 2.2 | 5 | 0 | 5 | -1/5 | 0/5 | 0 | 0/5 | 0/5 | |
| | | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 | 61 | 62 | 63 | 64 | |
| | 0/5 | 0/5 | 0 | 0/5 | 0/5 | 0/5 | 0/5 | 4.8 | 0/5 | 4.8 | 0 | -1.5/6.5 | -0.6/5.4 | 0 | 0 | 0 | | |
| IC650 | | 2.5 | 2.5 | 2.5 | 2.5 | 2.5 | 2.5 | 2.5 | 2.5 | 2.5 | 2.5 | 2.5 | 2.5 | 2.5 | 2.5 | 2.5 | 2.3 | |
| | | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | |
| | | 2.5 | 2.6 | 2.5 | 2.5 | 2.5 | 0 | 2.4 | 2.4 | 2.4 | 2.5 | 2.9 | 2.5 | 2.6 | 2.3 | 2.3 | 0 | |
| | | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | |
| | | 0 | 5 | 0 | 0/5 | 0 | 0 | 0 | 0/5 | 1.4/3.5 | 2.4 | 2.7 | 2.5 | 0 | 2.5 | 2.5 | HiZ | |
| | | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 | 61 | 62 | 63 | 64 | |
| | 0 | -0.6/5.4 | 0/5 | 4.8 | 0/5 | 4.9 | HiZ | 5 | 2.5 | 2.5 | 2.6 | 2.7 | 2.2 | 3.8 | 0.2 | 5 | | |
| IC801 | | 4.8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 0.1 | 4.8 | 0 | 0/4.5 | HiZ | | |
| | | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | |
| | | 0 | 0 | 0 | 0 | 0/4.5 | 0 | 0 | 1.9 | 1.2/3.6 | 4.7 | 4.8 | 0 | 0 | 3.6 | 0 | 0 | |
| | | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | |
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1.7 | 1.9 | 3.7 | 3.7 | 4.8 | 0 | 0 | 4.9 | 0 | |
| | | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 | 61 | 62 | 63 | 64 | |
| | 5 | 4.8 | 0 | 4.8 | 4.8 | 4.8 | 0 | 4.8 | 0/5 | 4.8 | 0/5 | 0/5 | 0 | 0/5 | 0 | 4.4 | | |
| IC651 | | 7.8 | 2.5 | 2.5 | 2.5 | 2.5 | 2.8 | 0 | 0 | 7.8 | 7.8 | 3.4 | 4.1 | 3.5 | 3.9 | 3.7 | 3.7 | |
| | | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | | | | | |
| | 3.3 | 4 | 7.8 | HiZ | 0 | 2.5 | 2.5 | 0.8 | 2.3 | 2.5 | 2.6 | 2.5 | | | | | | |
| IC681 | | 0.1 | 3 | 2.2 | 0 | 2.2 | 2.2 | 0.1 | 5 | | | | | | | | | |
| IC701 | | 2.5 | 2.5 | 2.5 | 0 | 2.5 | 2.5 | 2.5 | 7.5 | | | | | | | | | |
| IC806 | | 0 | 11.5 | HiZ | HiZ | 0 | HiZ | 11.5 | HiZ | 7.8 | 0 | | | | | | | |
| IC950 | | 0 | 11.5 | HiZ | HiZ | 0 | HiZ | 11.5 | HiZ | 7.8 | 0 | | | | | | | |
| IC802 | | 13.2 | 5.4 | 0.4 | | | | | | | | | | | | | | |
| IC803 | | 4.8 | 8.2 | 0 | | | | | | | | | | | | | | |
| IC804 | | HiZ | 0 | 0 | 4.7 | 4.7 | | | | | | | | | | | | |
| IC805 | | 11.5 | 5 | 0 | | | | | | | | | | | | | | |
| IC807 | | HiZ | 4.6 | 0 | 0 | 5 | | | | | | | | | | | | |

| PIN | B | C | E |
|------|------|------|------|
| Q601 | 3.8 | 2 | 4.5 |
| Q681 | 0 | 2.2 | 0 |
| Q682 | 0.1 | 2.2 | 0 |
| Q700 | 8.2 | 11.5 | 7.5 |
| Q701 | 0 | 0 | 0 |
| Q702 | 0 | 0 | 0 |
| Q703 | 0 | 0 | 0 |
| Q801 | 0.6 | 0 | 0 |
| Q802 | 0 | 4.8 | 4.8 |
| Q803 | 0.9 | 11.8 | 0 |
| Q804 | 12.6 | 11.5 | 13.2 |
| Q805 | 4.3 | HiZ | 4.8 |
| Q900 | 8.4 | 11.5 | 7.8 |
| Q950 | 0.8 | 0.9 | 0 |

Druckplatten-Abbildungen / Layout of PCBs



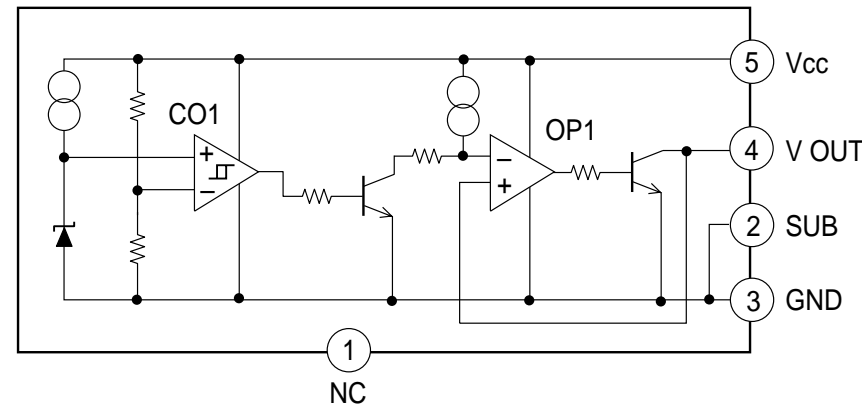
IC-Innen-Beschaltungen / IC Block Diagrams



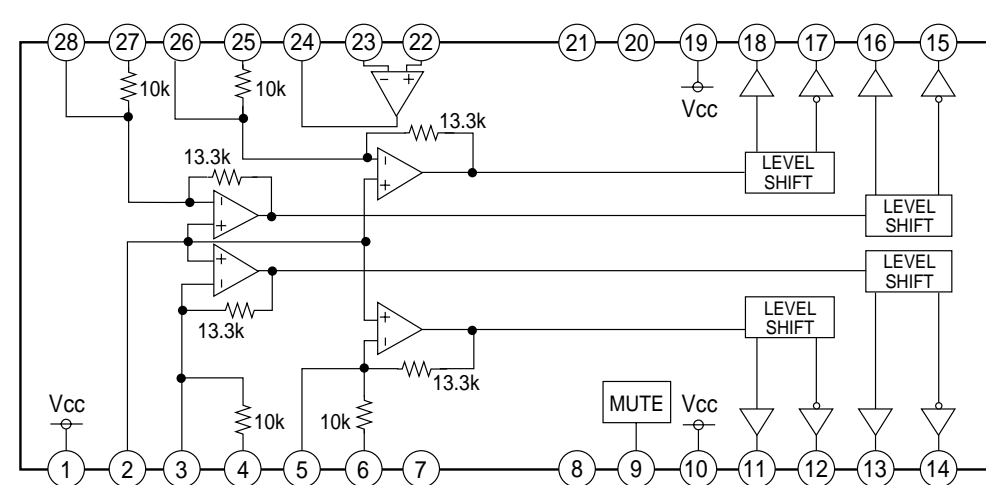
LA 9240 MS

| PIN | PORT NAME | DESCRIPTION |
|-----|-----------|---|
| 1 | FIN2 | Pickup photo-diode connecting pin. Forms RF signal by addition to FIN1 pin, and FE signal by subtraction. |
| 2 | FIN1 | Pickup photo-diode connecting pin. |
| 3 | E | Pickup photo-diode connecting pin. Forms TE signal by subtraction from F pin. |
| 4 | F | Pickup photo-diode connecting pin. |
| 5 | TB | Pin for inputting DC constituent of TE signal. |
| 6 | TE- | Pin for connecting gain setting resistance of TE signal to TE pin. |
| 7 | TE | TE signal output pin. |
| 8 | TESI | TES (TRACK ERROR SENCE) comparator input pin. Band pass TE signal, and input. |
| 9 | SCI | Input pin for shock detection. |
| 10 | TH | Constant setting pin at the time of tracking gain. |
| 11 | TA | Pin for connecting high pass elimination condensor of servo. |
| 12 | TD- | Pin for constituting tracking phase compensation constant between TD and VR pin. |
| 13 | TD | Pin for setting tracking phase compensation. |
| 14 | JP | Pin for setting tracking jump signal (kick pulse) amplitude. |
| 15 | TO | Tracking control signal output pin. |
| 16 | FD | Focusing control signal output pin. |
| 17 | FD- | Pin for constituting focussing phase compensation constant between FD and FA pin. |
| 18 | FA | Pin for constituting focussing phase compensation constant between FA- and FE- pin. |
| 19 | FA- | Pin for constituting focussing phase compensation constant between FA and FE pin. |
| 20 | FE | FE signal output pin. |
| 21 | FE- | Pin for connecting FE signal gain setting resistance to TE pin. |
| 22 | AGND | GND for analog signal. |
| 23 | SP | Signal end output of CV+ and CV- pin input signal |
| 24 | SPI | Spindle amplifier input. |
| 25 | SPG | Connecting pin for gain setting resistance at the time of spindle 12cm mode. |
| 26 | SP- | Connecting pin for spindle phase compensation constant together with SPD pin. |
| 27 | SPD | Spindle control signal output pin. |
| 28 | SLEQ | Connecting pin for sled phase compensation constant. |
| 29 | SLD | Sled control signal output pin. |
| 30 | SL- | Input pin for sled delivery signal from micro computer. |
| 31 | SL+ | Input pin for sled delivery signal from micro computer. |
| 32 | JP- | Input pin for tracking jump signal from DSP. |
| 33 | JO+ | Input pin for tracking jump signal from DSP. |
| 34 | TGL | Input pin for tracking gain control signal from DSP. Gain low in case of TGL="H". |
| 35 | TOFF | Input pin for tracking off control signal from DSP. Off in case of TOFF="H". |
| 36 | TES | Output pin of TES signal to DSP. |
| 37 | HFL | (HIGH FREQUENCY LEVEL) is used to judge whether main beam is located above pit or above mirror. |
| 38 | SLOF | Sled servo off control input pin. |
| 39 | CV- | Input pin for CLV error signal from DSP. |
| 40 | CV+ | Input pin for CLV error signal from DSP. |
| 41 | RFSM | RF output pin. |
| 42 | RFS- | Pin for setting RF gain and EFM signal 3T compensation constant together with RFSM pin. |
| 43 | SLC | (SLICE LEVEL CONTROL) is output pin for controlling data slice level by RF waveshape DSP. |
| 44 | SLI | Input pin for controlling data slice level by DSP. |
| 45 | DGND | GND pin digital system. |
| 46 | FSC | For Focs Smoothing capacita output pin. |
| 47 | TBC | Tracking Balance control pin. |
| 48 | NC | NO CONNECT. |
| 49 | DEF | Output pin for detecting disc defect. |
| 50 | CLK | Standard clock input pin. DSP 4.23MHz is input. |
| 51 | CL | Micro computer command clock input pin. |
| 52 | DAT | Micro computer command data input pin. |
| 53 | CE | Micro computer command chip enable input pin. |
| 54 | DRF | (DEFECT RF) RF level detecting output. |
| 55 | FSS | Focs serch select pin. |
| 56 | VCC2 | VCC pin for servo system and digital system. |
| 57 | REF1 | Connection pin for standard voltage capacitor. |
| 58 | VR | Standard voltage output pin. |
| 59 | LF2 | Pin for setting constant at the time of detecting disc defect. |
| 60 | PH1 | Pin for connecting condensor for RF signal peak hold. |
| 61 | BH1 | Pin for connecting condensor for RF signal bottom hold. |
| 62 | LDD | APC circuit output pin. |
| 63 | LDS | APC circuit input pin. |
| 64 | VCC1 | RF system VCC pin. |

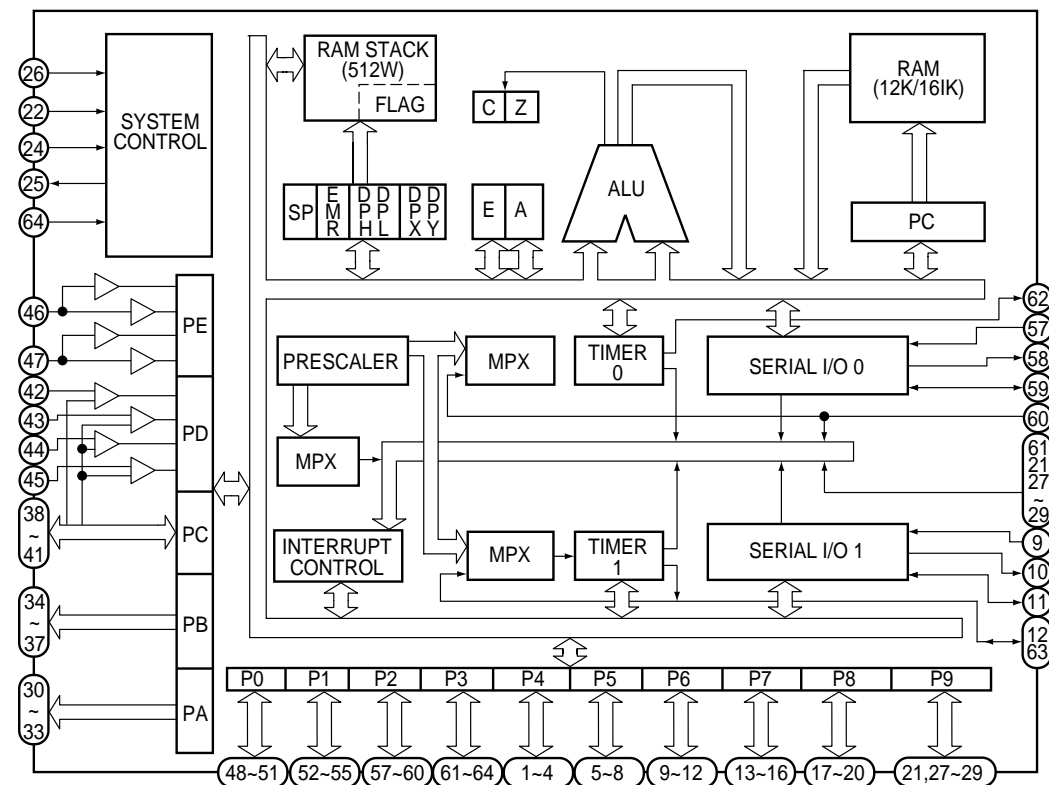
IC-PST9138N



BA5941FP

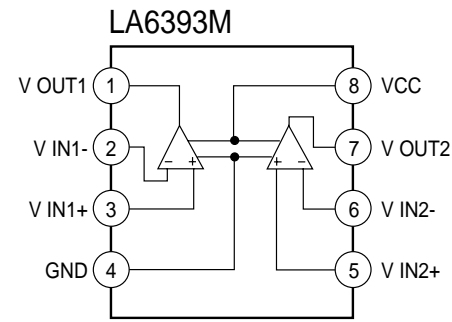
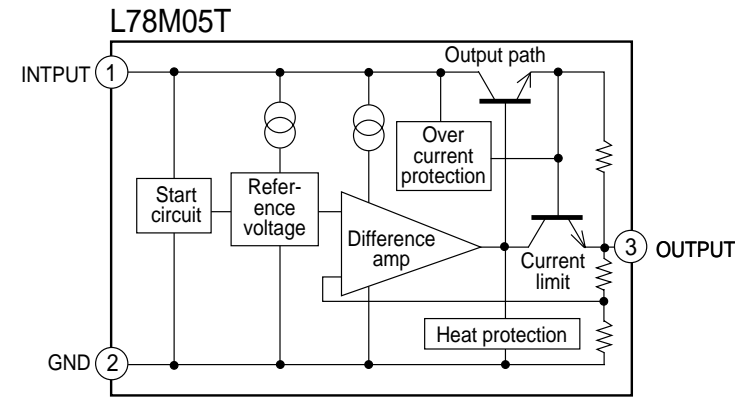


LC66566B-4K60



LC 66566 B-4K60

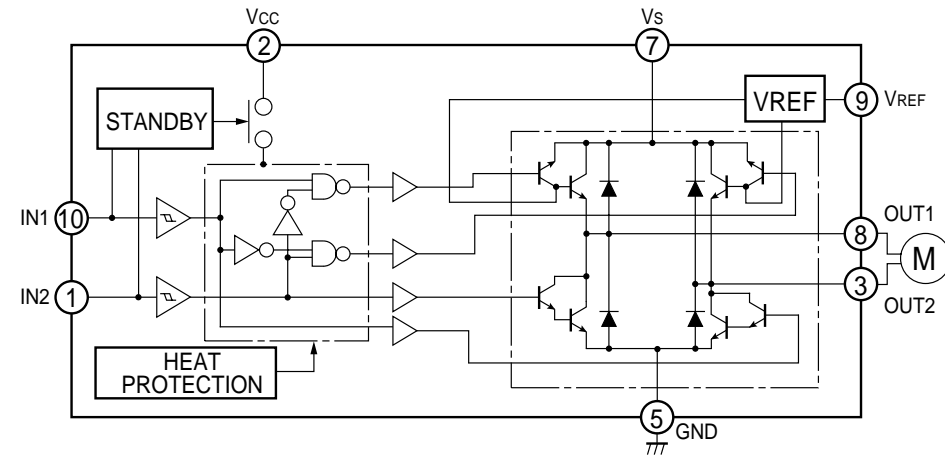
| PIN | PORT NAME | I/O | DESCRIPTION |
|-----|-----------|-----|---|
| 1 | MODE | I | Initial setting input terminal for changer 1 or 2 switching |
| 2 | PLAY | O | Play mode output H:play mode |
| 3 | LD/SP | O | Load/spindle motor switching signal output |
| 4 | NC | O | No connection |
| 5 | NC | O | No connection |
| 6 | NC | O | No connection |
| 7 | NC | O | No connection |
| 8 | NC | O | No connection |
| 9 | CLAMPSW | I | Disc clamp finish SW input |
| 10 | UPLIMIT | I | Elevator upper limit SW input |
| 11 | LOWLIMIT | I | Elevator lower limit SW input |
| 12 | MAGZSW | I | Magazine detection SW input |
| 13 | CD+B | O | CD mode signal output |
| 14 | NC | O | No connection |
| 15 | DATAOUT | O | Status data output |
| 16 | NC | O | No connection |
| 17 | NC | O | No connection |
| 18 | NC | O | No connection |
| 19 | NC | O | No connection |
| 20 | NC | O | No connection |
| 21 | DATAIN | I | Command data input |
| 22 | TEST | I | Connection to ground |
| 23 | VSS | | Ground |
| 24 | OSC1 | | Ceramic oscillator connection terminal for system clock |
| 25 | OSC2 | | Ceramic oscillator connection terminal for system clock |
| 26 | RESET | I | Reset signal input |
| 27 | BATT | I | Battery LOW detection input |
| 28 | NC | O | No connection |
| 29 | NC | O | No connection |
| 30 | POWER | O | Main & servo system power supply ON/OFF output |
| 31 | NC | O | No connection |
| 32 | NC | O | No connection |
| 33 | NC | O | No connection |
| 34 | FEM- | O | Pickup moving-inside signal output |
| 35 | FEM+ | O | Pickup moving-outside signal output |
| 36 | LOAD+ | O | Output to move a tray in the direction out of magazine with loading motor |
| 37 | LOAD- | O | Output to move a tray in the direction into magazine with loading motor |
| 38 | NC | O | No connection |
| 39 | NC | O | No connection |
| 40 | VREF0 | I | Reference voltage for TH1 |
| 41 | VREF1 | I | Reference voltage for TH2 |
| 42 | TH1 | I | Temperature sensor ON signal input |
| 43 | TH2 | I | Temperature sensor OFF signal input |
| 44 | ACC | I | Acc ON/OFF detection signal input |
| 45 | DISCON | I | Disc detection photo transistor signal input |
| 46 | EJECT | I | Magazine eject key signal input |
| 47 | DRF | I | Focus OK signal input |
| 48 | NC | O | No connection |
| 49 | DISCCOUNT | I | Elevator position detection pulse input |
| 50 | 6/10CD | I | Initial setting input terminal for 6 discs changer or 10 discs changer |
| 51 | MUTE | O | Mute signal output |
| 52 | DSPRST | O | Reset signal for DSP(LC78622E) |
| 53 | LOADOUT | I | Magazine tray detection SW input |
| 54 | INSIDESW | I | Inner circle limit detection SW input |
| 55 | NC | O | No connection |
| 56 | VDD | | Power supply (+5V) |
| 57 | SQOUT | I | Interface with DSP(LC78622E) |
| 58 | COIN | O | Interface with DSP(LC78622E) |
| 59 | CQCK | O | Interface with DSP(LC78622E) |
| 60 | WRQ | I | Interface with DSP(LC78622E) |
| 61 | ELV- | O | Elevator moving-down signal output |
| 62 | RWC | O | Interface with DSP(LC78622E) |
| 63 | ELV+ | O | Elevator moving-up signal output |
| 64 | STBY | I | Stand by position cancellation signal input |



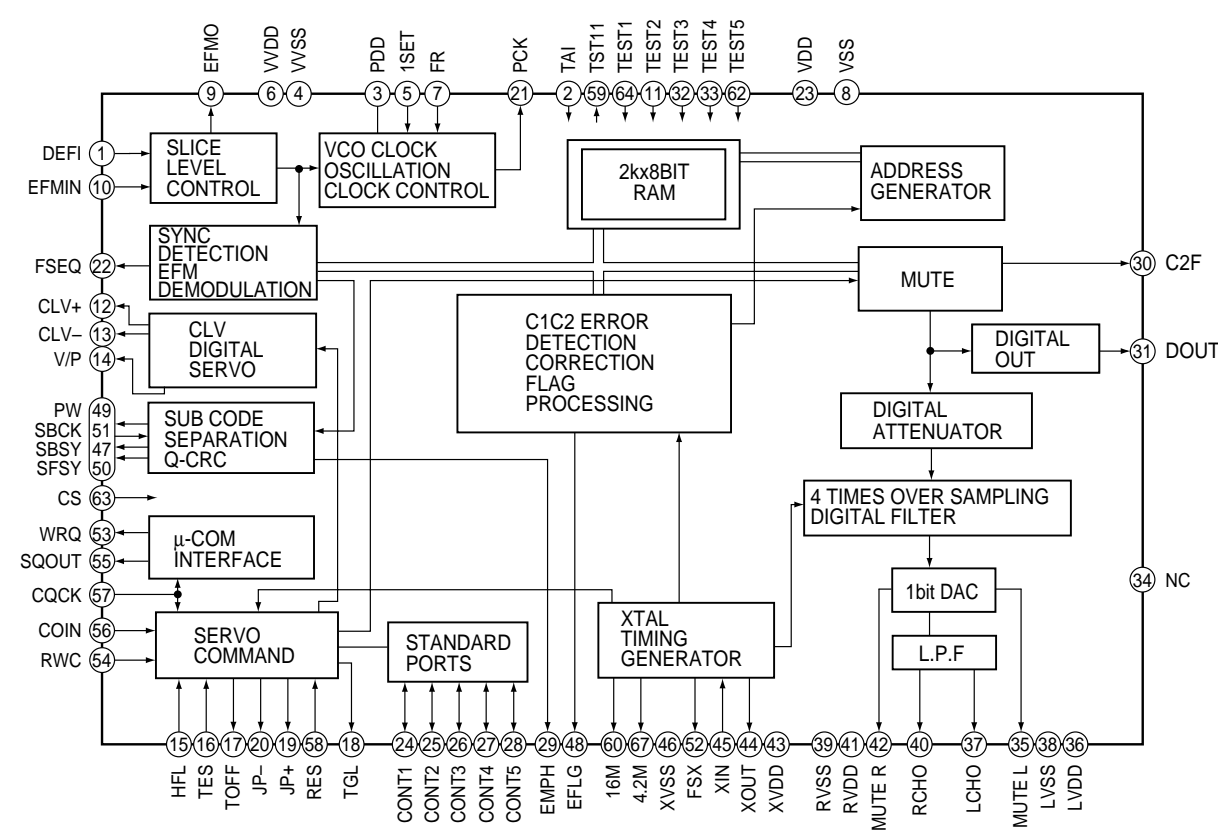
LC 78622 ED

| PIN | PORT NAME | I/O | DESCRIPTION |
|-----|-----------|-----|--|
| 1 | DEFI | I | Defect detect signal (DEF) input terminal. |
| 2 | TAI | I | PLL Input terminal for testing . Pulldown resistance is self-contained. |
| 3 | PDO | O | Phase comparison output terminal for outer VCO control. |
| 4 | VVSS | - | Power supply terminal for self-contained VCO. Normally 0V. |
| 5 | ISET | AI | Resistance connecting terminal for PDO output current adjustment. |
| 6 | VVDD | - | Earthing terminal for self-contained VCO. Normally 5V. |
| 7 | FR | AI | For VCO range frequency adjustment. |
| 8 | VSS | - | Earthing terminal for digital system. Normally 0V. |
| 9 | EFMO | O | For slice EFM signal reverse output terminal. |
| 10 | EFMIN | I | level control EFM signal input terminal. |
| 11 | TEST2 | I | Input terminal for testing. Pulldown resistance is self-contained. |
| 12 | CLV+ | O | Output terminal for spindle servo control. Accelerates when CLV+ is "H", slows down when CLV- "H". |
| 13 | CLV- | O | |
| 14 | V/P | O | Output terminal for automatic switchover monitor by rough servo/phase control. "H" causes rough servo, "L" phases control mode. |
| 15 | HFL | I | Input terminal for track detecting signal. Schmidt input. |
| 16 | TES | I | Input terminal for tracking error signal. Schmidt input. |
| 17 | TOFF | O | Output terminal for tracking OFF. |
| 18 | TGL | O | Output terminal for tracking gain switchover, "L" raises gain. |
| 19 | JP+ | O | Output terminal for track jump. When JP+ is "H", accelerates at the time of outer track direction jump, or slows down at the time of inner track direction jump. |
| 20 | JP- | O | |
| 21 | PCK | O | Clock monitoring terminal for EFM data playback. At the time of phase lock, 4.3218MHz. |
| 22 | FSEQ | O | Output terminal for synchronous signal detection. When synchronous signal detected from EFM signal and synchronous signal occurring inside correspond "H". |
| 23 | VDD | - | Earthing terminal for digital system. |
| 24 | CONT1 | I/O | Input / output terminal. |
| 25 | CONT2 | I/O | |
| 26 | CONT3 | I/O | |
| 27 | CONT4 | I/O | |
| 28 | CONT5 | I/O | |
| 29 | EMPH | O | Output terminal for deemphasis monitor. At the time of "H", deemphasis disc is in playback. |
| 30 | C2F | O | C2 Frag output. |
| 31 | DOUT | O | Digital Out output terminal. |
| 32 | TEST3 | I | Input terminal for testing. Pulldown resistance is self-contained. |
| 33 | TEST4 | I | Input terminal for testing. Pulldown resistance is self-contained. |
| 34 | NC | - | Not connected |
| 35 | MUTEL | O | For 1 bit DAC Mute output terminal. |
| 36 | LVDD | - | |
| 37 | LCHO | O | L channel output terminal. |
| 38 | LVSS | - | Earthing terminal for L channel. Normally 0V. |
| 39 | RVSS | - | Earthing terminal for R channel. Normally 0V. |
| 40 | RCHO | O | R channel output terminal. |
| 41 | RVDD | - | Earthing terminal for R channel. Normally 0V. |
| 42 | MUTER | O | Mute output terminal. |
| 43 | XVDD | - | Power supply terminal for crystal oscillation. Normally 5V. |
| 44 | XOUT | O | Connecting terminal for 16.9344MHz crystal oscillator. |
| 45 | XIN | I | |
| 46 | XVSS | - | Earthing terminal for crystal oscillation. Normally 0V. |
| 47 | SBSY | O | Output terminal for synchronous signal of sub-code block. |
| 48 | EFLG | O | Terminal for monitoring C1,C2, single, double correction. |
| 49 | PW | O | Output terminal for sub-code P,Q,R,S,T,U,W. |
| 50 | SFSY | O | Output terminal for synchronous signal of sub-code frame. When sub-code is in standby, "= L". |
| 51 | SBCK | I | Input terminal for sub-code readout clock. Schmidt input. |
| 52 | FSX | O | Output terminal for 7.35kHz synchronous signal which is divided frequency from crystal oscillation. |
| 53 | WRQ | O | Output terminal for sub-code Q output standby. |
| 54 | RWC | I | Input terminal for read/write control. |
| 55 | SQOUT | O | Sub-code Q output terminal. |
| 56 | COIN | I | Input terminal for command from micro computer. |
| 57 | CQCK | I | Input terminal for command input intake clock, or sub-code offtake clock from SQOUT. Schmidt input. |
| 58 | RES | I | Chip reset input terminal. When power is supplied, changeover to "L" once. |
| 59 | TST11 | O | Input terminal for testing. Open (Normally "L" output). |
| 60 | 16M | O | 16.9344MHz output terminal. But outputs 33.8688MHz, only in case of quadruple speed playback mode. |
| 61 | 4.2M | O | 4.2336MHz output terminal. |
| 62 | TEST5 | I | Input terminal for testing. Pulldown resistance is self-contained. |
| 63 | CS | I | Chip select input terminal. Pulldown resistance is self-contained. |
| 64 | TEST1 | I | Input terminal for testing. Pulldown resistance is self-contained. |

TA8409F



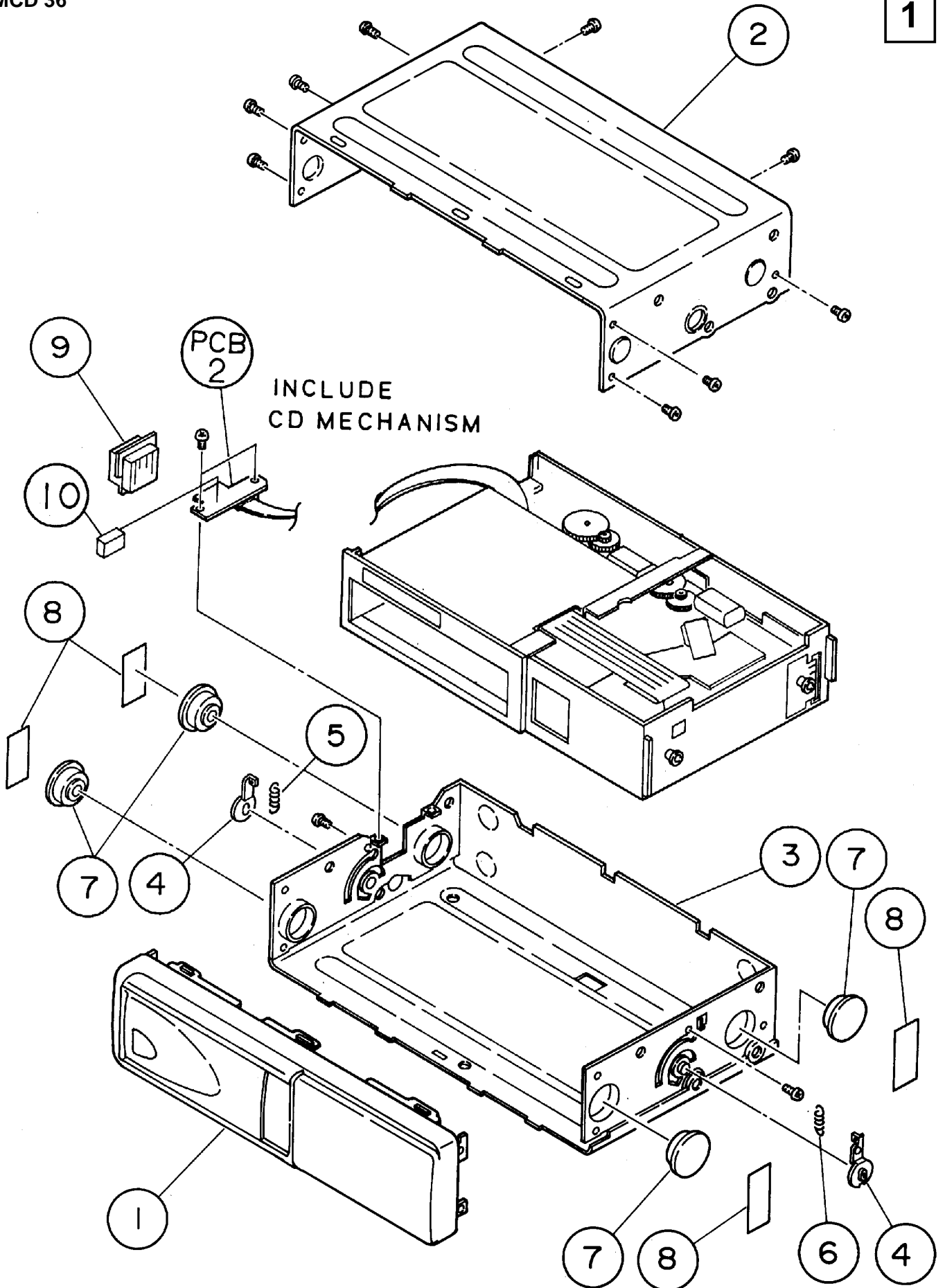
LC78622ED



Explosionszeichnungen und Ersatzteillisten / Exploded Views and Spare Parts Lists

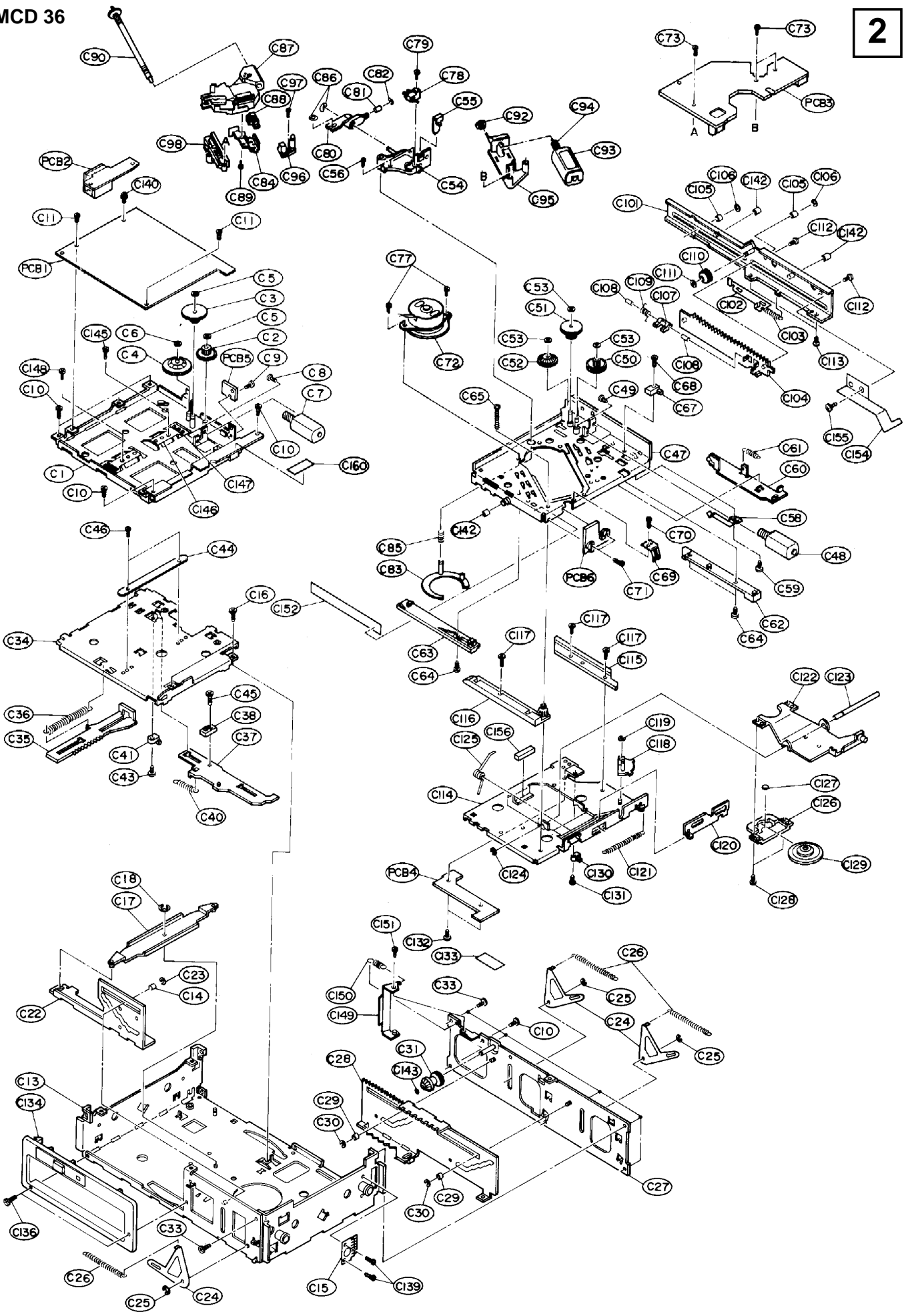
MCD 36

1



MCD 36

2



Ersatzteilliste
Spare Parts List

1 / 2000

GRUNDIG

CAR AUDIO

MCD 36

MATERIAL-NR. / PART NO.: 91833 581 5100
BESTELL-NR. / ORDER NO.: G.HF 28-00 SCHWARZ/BLACK

| POS. NR. POS. NO. | ABB. FIG. | MATERIAL-NR. PART NUMBER | ANZ. QTY. | BEZEICHNUNG D | DESCRIPTION GB |
|----------------------|--------------|-----------------------------|--------------|----------------------------|----------------------------|
| | | 72008 848 9900 | | MCD 36 TAUSCHGERAET | MCD 36 EXCHANGE SET |
| 0001.000 | 1 | 75954 033 2900 | | GEH-VORDERTEIL | CABINET FRONT |
| 0002.000 | 1 | 75952 038 0200 | | GEH-OBERTEIL | CABINET TOP |
| 0003.000 | 1 | 75954 033 3100 | | GEHAEUSE BODEN | HOUSING BOTTOM |
| 0004.000 | 1 | 75952 038 0400 | 2 | HEBEL | LEVER |
| 0005.000 | 1 | 75952 038 0500 | | FEDER, LINKS | SPRING LEFT |
| 0006.000 | 1 | 75952 038 0600 | | FEDER, RECHTS | SPRING RIGHT |
| 0007.000 | 1 | 75952 038 0700 | 4 | DAEMPfung | DAMPING |
| 0008.000 | 1 | 75952 038 0800 | 4 | ABDECKUNG | COVER |
| 0009.000 | 1 | 75952 038 0900 | | KAPPE | CAP |
| 0012.000 | | 19772 196 0000 | | CD-WECHSLERKABEL | CD CHANGER CABLE |
| 0015.000 | | 75952 038 6500 | | MAGAZIN KPL. MCD30 | MAGAZINE CPL. |
| 0050.000 | | 75953 506 0100 | | HALTERUNG LINKS UND RECHTS | HOLDER LEFT AND RIGHT |
| C002.000 | 2 | 75952 038 1600 | | ZAHNRAD A | GEAR WHEEL A |
| C003.000 | 2 | 75952 038 1700 | | ZAHNRAD B | GEAR WHEEL B |
| C004.000 | 2 | 75952 038 1800 | | ZAHNRAD C | GEAR WHEEL C |
| C005.000 | 2 | 75952 038 7600 | 2 | SCHEIBE | WASHER |
| C006.000 | 2 | 75952 038 7700 | | SCHEIBE | WASHER |
| C007.000 | 2 | 75954 033 0200 | | MOTOR KPL./DC | MOTOR CPL./DC |
| C023.000 | 2 | 75955 019 0600 | | SPEZIAL SCHEIBE | SPECIAL WASHER |
| C030.000 | 2 | 75955 019 0600 | | SPEZIAL SCHEIBE | SPECIAL WASHER |
| C031.000 | 2 | 75954 033 3000 | | ZAHNRAD, D | GEAR WHEEL D |
| C048.000 | 2 | 75952 038 1900 | | MOTOR KPL./DC | MOTOR CPL./DC |
| C050.000 | 2 | 75954 033 0400 | | ZAHNRAD, LA | GEAR LA |
| C051.000 | 2 | 75954 033 0500 | | ZAHNRAD, LB | GEAR WHEEL LB |
| C052.000 | 2 | 75952 038 2300 | | ZAHNRAD G | GEAR WHEEL G |
| C053.000 | 2 | 75954 033 0900 | 3 | SPEZIAL SCHEIBE | SPECIAL SCREW |
| C067.000 | 2 | 75953 506 0600 | | SCHALTER | SWITCH |
| C072.000 | 2 | 75955 019 0800 | | MOTOR MONTIERT KPL | MOTOR ASSY |
| C078.000 | 2 | 75953 506 0600 | | SCHALTER | SWITCH |
| C080.000 | 2 | 75954 033 4200 | | HEBEL, DISC | LEVER, DISC |
| C087.000 | △ 2 | 75955 019 0900 | | LASEREINHEIT | LASER UNIT |
| C092.000 | 2 | 75955 019 1000 | | ZAHNRAD | GEAR WHEEL |
| C093.000 | 2 | 75955 019 1100 | | MOTOR DC | MOTOR DC |
| C094.000 | 2 | 75955 019 1200 | | GETRIEBE MOTOR | GEAR MOTOR |
| C110.000 | 2 | 75952 038 1300 | | ZAHNRAD H | GEAR WHEEL H |
| C130.000 | 2 | 75953 506 0600 | | SCHALTER | SWITCH |
| C134.000 | 2 | 75954 033 3400 | | BLENDE KPL | PANEL CPL |
| C147.000 | 2 | 75955 019 0500 | | ROLLE | ROLLER |
| C150.000 | 2 | 75955 019 0700 | | FEDER STOPPER | SPRING STOPPER |
| | | 72010 744 7500 | | BEDIENUNGSANLEITUNG | OPERATING INSTRUCTIONS |
| | | 72010 748 3000 | | D/GB/F/I/P/E/NL/DK/S/FIN | D/GB/F/I/P/E/NL/DK/S/FIN |
| | | 72010 748 3100 | | SERVICE MANUAL MCD 36 D/GB | SERVICE MANUAL MCD 36 D/GB |
| | | | | SERVICE MANUAL MCD 36 D/GB | SERVICE MANUAL MCD 36 D/GB |
| | | | | 1. ERGAENZUNG | SUPPLEMENT 1 |

ÄNDERUNGEN VORBEHALTEN / SUBJECT TO ALTERATION

| POS. NR. POS. NO. | MATERIAL-NR. PART NUMBER | BEZEICHNUNG DESCRIPTION |
|----------------------|-----------------------------|----------------------------|
| D 00681 | 75981 299 9600 | SMD DIODE MA 152 K |
| D 00700 | 75952 041 5400 | Z DIODE DZD 8.2 Y |
| D 00803 | 75952 022 0600 | DIODE DCC 010 |
| D 00805 | 75987 356 2200 | SMD DIODE MA 152 WA |
| D 00806 | 75981 299 9600 | SMD DIODE MA 152 K |
| D 00807 | 75981 299 9600 | SMD DIODE MA 152 K |
| D 00808 | 75981 299 9600 | SMD DIODE MA 152 K |
| D 00809 | 75955 019 2400 | DIODE DAN202K |
| D 00810 | 75955 019 1900 | DIODE DAN217 |
| D 00811 | 75981 299 9600 | SMD DIODE MA 152 K |
| D 00812 | 75955 019 2400 | DIODE DAN202K |
| D 00814 | 75955 019 1700 | Z DIODE MELF RLZ6,8B |
| D 00900 | 75955 019 1400 | Z DIODE MELF RLZ8,2B |
| D 00901 | 75952 041 7500 | LE DIODE SLR 989 A |
| D 00910 | 75952 041 8500 | OPTOKOPPLER GP 1S 5V |
| D 00950 | 75955 019 1500 | Z DIODE MELF RLZJ11B |
| IC 00601 | 75955 019 2100 | IC LC78622ED |
| IC 00650 | 75954 505 1900 | IC LA9240ML |
| IC 00651 | 75954 062 2800 | IC BA 5941FP |
| IC 00681 | 75950 022 1900 | SMD IC LA 6393 M MFP 8 |
| IC 00701 | 75955 019 2200 | IC NJM2100M |
| IC 00801 | 75955 019 2000 | IC LC66566B-4K60 |
| IC 00802 | 75952 041 4500 | IC S 81250 HG-RD-T2 |
| IC 00803 | 75952 041 5700 | IC S 8054 HN-CB |
| IC 00804 | 75954 033 1500 | IC PST9138N |
| IC 00805 | 75955 019 1300 | IC L78M05TL |
| IC 00806 | 75955 019 1600 | IC TA8409F |
| IC 00807 | 75952 041 7900 | SMD IC TC 7 S 04 F |
| IC 00950 | 75955 019 1600 | IC TA8409F |
| PCB 00002 | 75954 033 3200 | BUCHSE KPL M.LP |
| PCB 00006 | 75955 019 2300 | SCHALTER MONTIERT KPL |
| Q 00601 | 75954 033 2100 | SMD-TRANS. 2 SA 1338-5 |
| Q 00681 | 75987 433 8800 | TRANS.DTC 114 YK DTC114YK |
| Q 00682 | 75987 433 8800 | TRANS.DTC 114 YK DTC114YK |
| Q 00700 | 75952 023 0900 | SMD TRANS. 2 SC 2412 K-R |
| Q 00701 | 75952 041 4200 | SMD TRANS. 2 SA 1341 |
| Q 00702 | 75952 023 1000 | SMD TRANS. DTC 114 TK |
| Q 00703 | 75952 023 1000 | SMD TRANS. DTC 114 TK |
| Q 00801 | 75952 041 9300 | SMD TRANS. 2 SC 2812-6 |
| Q 00802 | 75987 459 6100 | TRANS.-WIDERST.UN 2114 UN |
| Q 00803 | 75952 041 6300 | SMD TRANS. DTC 124 XK |
| Q 00804 | 75952 041 6400 | TRANS. 2 SB 1202 S |
| Q 00805 | 75953 501 4600 | SMD-TRANS. 2 SA 1179 M6 |
| Q 00900 | 75952 041 6400 | TRANS. 2 SB 1202 S |
| Q 00901 | 75952 041 8000 | FOTO-DIODE PT 4850 F |
| Q 00950 | 75952 041 6300 | SMD TRANS. DTC 124 XK |
| SW 00801 | 75955 019 1800 | TAKTSCHALTER 1P-1T/EJECT |
| SW 00802 | 75954 033 1600 | SCHIEBESCHALTER/MODE |
| TH 00801 | 75952 041 8200 | NTC CS 20123 BH 102 KCTH1 |
| X 00601 | 75953 506 2900 | QUARZ 16,9344 MHZ |
| X 00801 | 75952 041 7900 | SMD IC TC 7 S 04 F |

Es gelten die Vorschriften und Sicherheitshinweise gemäß dem Service Manual "Sicherheit", Mat.-Nummer 72010 800 0000, sowie zusätzlich die eventuell abweichenden, landesspezifischen Vorschriften!

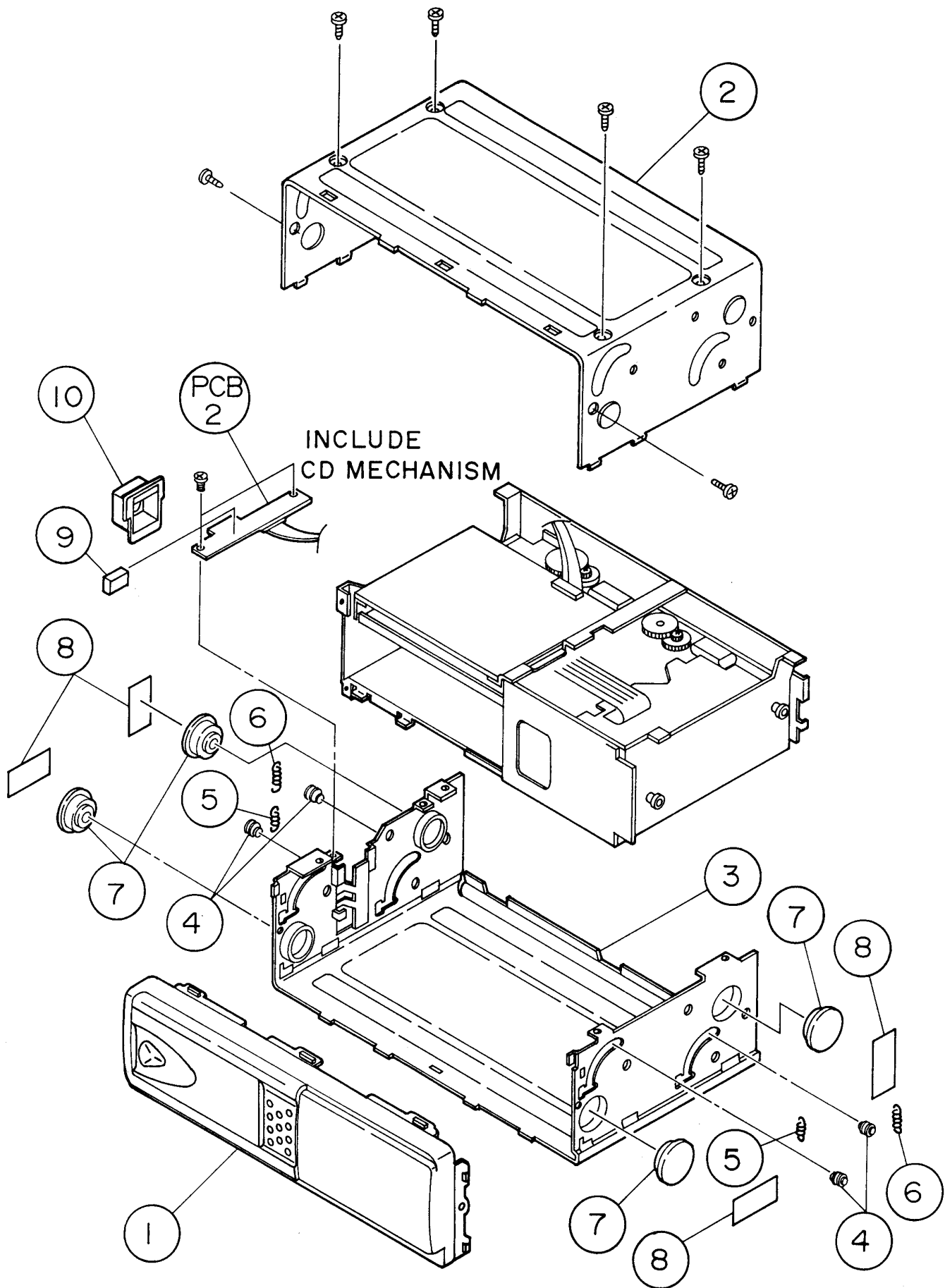


The regulations and safety instructions shall be valid as provided by the "Safety" Service Manual, part number 72010 800 0000, as well as the respective national deviations.

ÄNDERUNGEN VORBEHALTEN / SUBJECT TO ALTERATION

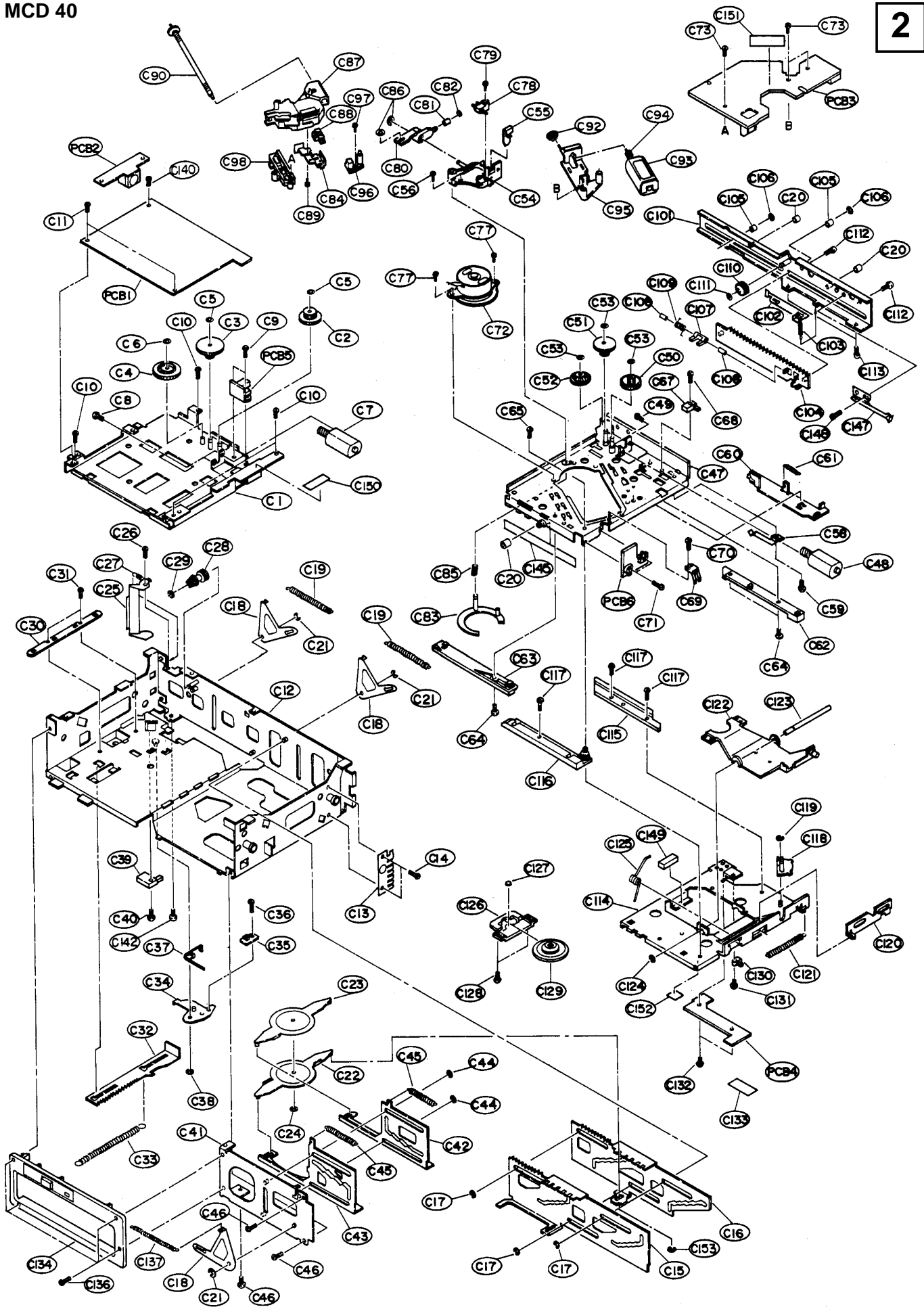
MCD 40

1



MCD 40

2



Ersatzteilliste Spare Parts List

4 / 2000

GRUNDIG

CAR AUDIO

MCD 40

MATERIAL-NR. / PART NO.: 91833 781 5100
BESTELL-NR. / ORDER NO.: G.HF 29-00

| POS. NR. POS. NO. | ABB. FIG. | MATERIAL-NR. PART NUMBER | ANZ. QTY. | BEZEICHNUNG (D) | DESCRIPTION (GB) |
|----------------------|--------------|-----------------------------|--------------|---|--|
| | | 72008 849 9900 | | MCD 40 TAUSCHGERAET | MCD 40 EXCHANGE SET |
| 0001.000 | 1 | 75954 033 2200 | | GEH-VORDERTEIL | HOUSING FRONT |
| 0002.000 | 1 | 75954 033 2300 | | GEH-OBERTEIL | CABINET TOP |
| 0003.000 | 1 | 75954 033 2400 | | GEHAEUSE BODEN | HOUSING BOTTOM |
| 0004.000 | 1 | 75954 033 2500 | | HEBEL | LEVER |
| 0005.000 | 1 | 75954 033 2600 | | FEDER LINKS | SPRING LEFT |
| 0006.000 | 1 | 75954 033 2700 | | ZUGFEDER RECHTS | ZUG-SPRING RIGHT |
| 0008.000 | 1 | 75952 038 0800 | | ABDECKUNG | COVER |
| 0009.000 | 1 | 75954 033 2200 | | GEH-VORDERTEIL | HOUSING FRONT |
| 0010.000 | 1 | 75952 038 0900 | | KAPPE | COP |
| 0012.000 | | 19772 196 0000 | | CD-WECHSLERKABEL | CD CHANGER CABLE |
| 0015.000 | | 75954 033 0100 | | MAGAZIN KPL. | MAGAZINE CPL. |
| 0050.000 | | 75954 033 3600 | | HALTERUNG LINKS U. RECHTS | HOLDER LEFT AND RIGHT |
| C002.000 | 2 | 75952 038 1600 | | ZAHNRAD A | GEAR WHEEL A |
| C003.000 | 2 | 75952 038 1700 | | ZAHNRAD B | GEAR WHEEL B |
| C004.000 | 2 | 75952 038 1800 | 2 | ZAHNRAD C | GEAR WHEEL C |
| C005.000 | 2 | 75952 038 7600 | | SCHEIBE | WASHER |
| C006.000 | 2 | 75952 038 7700 | | SCHEIBE | WASHER |
| C007.000 | 2 | 75954 033 0200 | | MOTOR KPL. | MOTOR CPL. |
| C017.000 | 2 | 75955 019 0600 | | SPEZIAL SCHEIBE | SPECIAL WASHER |
| C028.000 | 2 | 75954 033 0300 | | ZAHNRAD, PLATTE | GEAR BOARD |
| C039.000 | 2 | 75953 506 0600 | | SCHALTER | SWITCH |
| C044.000 | 2 | 75955 019 0600 | 2 | SPEZIAL SCHEIBE | SPECIAL WASHER |
| C048.000 | 2 | 75952 038 1900 | | MOTOR KPL. | MOTOR CPL. |
| C050.000 | 2 | 75954 033 0400 | | ZAHNRAD, LA | GEAR LA |
| C051.000 | 2 | 75954 033 0500 | | ZAHNRAD, LB | GEAR WHEEL LB |
| C052.000 | 2 | 75952 038 2300 | | ZAHNRAD G | GEAR WHEEL G |
| C053.000 | 2 | 75954 033 0900 | | SPEZIAL SCHEIBE | SPECIAL SCREW |
| C067.000 | 2 | 75953 506 0600 | | SCHALTER | SWITCH |
| C072.000 | 2 | 75955 019 0800 | | MOTOR MONTIERT KPL | MOTOR ASSY |
| C078.000 | 2 | 75953 506 0600 | | SCHALTER | SWITCH |
| C080.000 | 2 | 75954 033 4200 | | HEBEL, DISC | LEVER, DISC |
| C087.000 | △ 2 | 75955 019 0900 | | LASEREINHEIT | LASER UNIT |
| C092.000 | 2 | 75955 019 1000 | | ZAHNRAD | GEAR WHEEL |
| C093.000 | 2 | 75955 019 1100 | | MOTOR DC | MOTOR DC |
| C094.000 | 2 | 75955 019 1200 | | GETRIEBE MOTOR | GEAR MOTOR |
| C096.000 | 2 | 75954 033 3700 | | MITNEHMER | DRIVER/CARRIER |
| C106.000 | 2 | 75955 019 0600 | 2 | SPEZIAL SCHEIBE | SPECIAL WASHER |
| C110.000 | 2 | 75952 038 1300 | | ZAHNRAD H | GEAR WHEEL H |
| C130.000 | 2 | 75955 019 0600 | | SPEZIAL SCHEIBE | SPECIAL WASHER |
| C134.000 | 2 | 75954 033 3900 | | BLLENDE KPL. | MASK CPL |
| | | 72010 744 8000 | | BEDIENUNGSANLEITUNG D/GB/F/I/P/E/NL/DK/S/FIN | OPERATING INSTRUCTIONS D/GB/F/I/P/E/NL/DK/S/FIN |
| | | 72010 748 3000 | | SERVICE MANUAL MCD 36 D/GB | SERVICE MANUAL MCD 36 D/GB |
| | | 72010 748 3100 | | SERVICE MANUAL MCD 36 D/GB 1. ERGAENZUNG | SERVICE MANUAL MCD 36 D/GB SUPPLEMENT 1 |

ÄNDERUNGEN VORBEHALTEN / SUBJECT TO ALTERATION

| POS. NR. POS. NO. | MATERIAL-NR. PART NUMBER | BEZEICHNUNG DESCRIPTION | POS. NR. POS. NO. | MATERIAL-NR. PART NUMBER | BEZEICHNUNG DESCRIPTION |
|----------------------|-----------------------------|----------------------------|----------------------|-----------------------------|----------------------------|
| CS 00505 | 75954 033 4000 | DIN BUCHSE KPL. | | | |
| D 00681 | 75955 019 2500 | DIODE MA152K | | | |
| D 00700 | 75952 041 5400 | Z DIODE DZD 8.2 Y | | | |
| D 00803 | 75952 022 0600 | DIODE DCC 010 | | | |
| D 00805 | 75987 356 2200 | SMD DIODE MA 152 WA | | | |
| D 00806 | 75981 299 9600 | SMD DIODE MA 152 K | | | |
| D 00807 | 75981 299 9600 | SMD DIODE MA 152 K | | | |
| D 00808 | 75981 299 9600 | SMD DIODE MA 152 K | | | |
| D 00809 | 75955 019 2400 | DIODE DAN202K | | | |
| D 00810 | 75955 019 1900 | DIODE DAN217 | | | |
| D 00811 | 75981 299 9600 | SMD DIODE MA 152 K | | | |
| D 00812 | 75955 019 2400 | DIODE DAN202K | | | |
| D 00814 | 75955 019 1700 | Z DIODE MELF RLZ6,8B | | | |
| D 00900 | 75955 019 1400 | Z DIODE MELF RLZ8,2B | | | |
| D 00901 | 75952 041 7500 | LE DIODE SLR 989 A | | | |
| D 00910 | 75952 041 8500 | OPTOKOPPLER GP 1S 5V | | | |
| D 00950 | 75955 019 1500 | Z DIODE MELF RLZ11B | | | |
| FPC 00602 | 75954 033 3800 | FLEXPRINTLEITUNG FBC602 | | | |
| IC 00601 | 75955 019 2800 | IC LC78622ED-U | | | |
| IC 00650 | 75954 505 1900 | IC LA9240ML | | | |
| IC 00651 | 75954 062 2800 | IC BA 5941FP | | | |
| IC 00681 | 75955 019 2900 | IC LA6393ML | | | |
| IC 00701 | 75955 019 2200 | IC NJM2100M | | | |
| IC 00801 | 75955 019 2700 | IC LC66566B-4L33 | | | |
| IC 00802 | 75952 041 4500 | IC S 81250 HG-RD-T2 | | | |
| IC 00803 | 75952 041 5700 | IC S 8054 HN-CB | | | |
| IC 00804 | 75954 033 1500 | IC PST9138N | | | |
| IC 00805 | 75955 019 1300 | IC L78M05TL | | | |
| IC 00806 | 75955 019 1600 | IC TA8409F | | | |
| IC 00807 | 75952 041 7900 | SMD IC TC 7 S 04 F | | | |
| IC 00950 | 75955 019 1600 | IC TA8409F | | | |
| PCB 00002 | 75954 033 3500 | ANSCHLUSSBUCHSE KPL | | | |
| PCB 00006 | 75954 033 1400 | SCHALTER | | | |
| Q 00601 | 75954 033 2100 | SMD-TRANS. 2 SA 1338-5 | | | |
| Q 00681 | 75987 433 8800 | TRANS.DTC 114 YK DTC114YK | | | |
| Q 00700 | 75952 023 0900 | SMD TRANS. 2 SC 2412 K-R | | | |
| Q 00701 | 75952 041 4200 | SMD TRANS. 2 SA 1341 | | | |
| Q 00702 | 75952 023 1000 | SMD TRANS. DTC 114 TK | | | |
| Q 00703 | 75952 023 1000 | SMD TRANS. DTC 114 TK | | | |
| Q 00801 | 75952 041 9300 | SMD TRANS. 2 SC 2812-6 | | | |
| Q 00802 | 75987 459 6100 | TRANS.-WIDERST.UN 2114 UN | | | |
| Q 00803 | 75952 041 6300 | SMD TRANS. DTC 124 XK | | | |
| Q 00804 | 75952 041 6400 | TRANS. 2 SB 1202 S | | | |
| Q 00805 | 75953 501 4600 | SMD-TRANS. 2 SA 1179 | | | |
| Q 00900 | 75955 019 2600 | TRANS 2SD1802-S | | | |
| Q 00901 | 75952 041 8000 | FOTO-DIODE PT 4850 F | | | |
| Q 00950 | 75952 041 6300 | SMD TRANS. DTC 124 XK | | | |
| SW 00801 | 75955 019 1800 | TAKTSCHALTER 1P-1T | | | |
| SW 00802 | 75954 033 1600 | SCHIEBESCHALTER | | | |
| TH 00801 | 75952 041 8200 | NTC CS 20123 BH 102 KCTH1 | | | |
| X 00601 | 75953 506 2900 | QUARZ 16,9344 MHZ | | | |
| X 00801 | 75952 041 7900 | SMD IC TC 7 S 04 F | | | |

Es gelten die Vorschriften und Sicherheitshinweise gemäß dem Service Manual "Sicherheit", Mat.-Nummer 72010 800 0000, sowie zusätzlich die eventuell abweichenden, landesspezifischen Vorschriften!



The regulations and safety instructions shall be valid as provided by the "Safety" Service Manual, part number 72010 800 0000, as well as the respective national deviations.

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