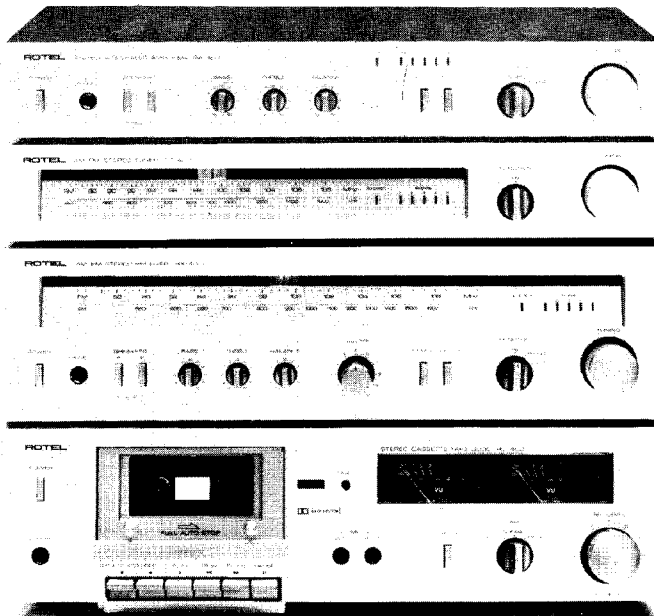


Quality Uncompromised

ROTEL®

Technical Manual



STEREO CASSETTE DECK RD-400

TABLE OF CONTENTS

Chassis Layout	2	Repair Parts List	8
Playback System Adjustments	3	Schematic Diagram	9
Recording System Adjustments	5	Wiring Diagram	11
REC/PB System Adjustments	6	Disassembly Diagram (1/2)	13
Block Diagram	7	Disassembly Diagram (2/2)	15

INHALTSVERZICHMIS

Chassis-Anordnung	2	Reparaturteilliste	8
Wiedergabepegels-Einstellung	3	Schaltungsschema	9
Aufnahmesystems-Einstellung	5	Drahtleitung Diagramm	11
Aufnahmesystems und Wiedergabepegels-Einstellung	6	Illustration des Auseinanderbaus (1/2)	13
Blockschaltbild	7	Illustration des Auseinanderbaus (2/2)	15

TABLE DES MATIERES

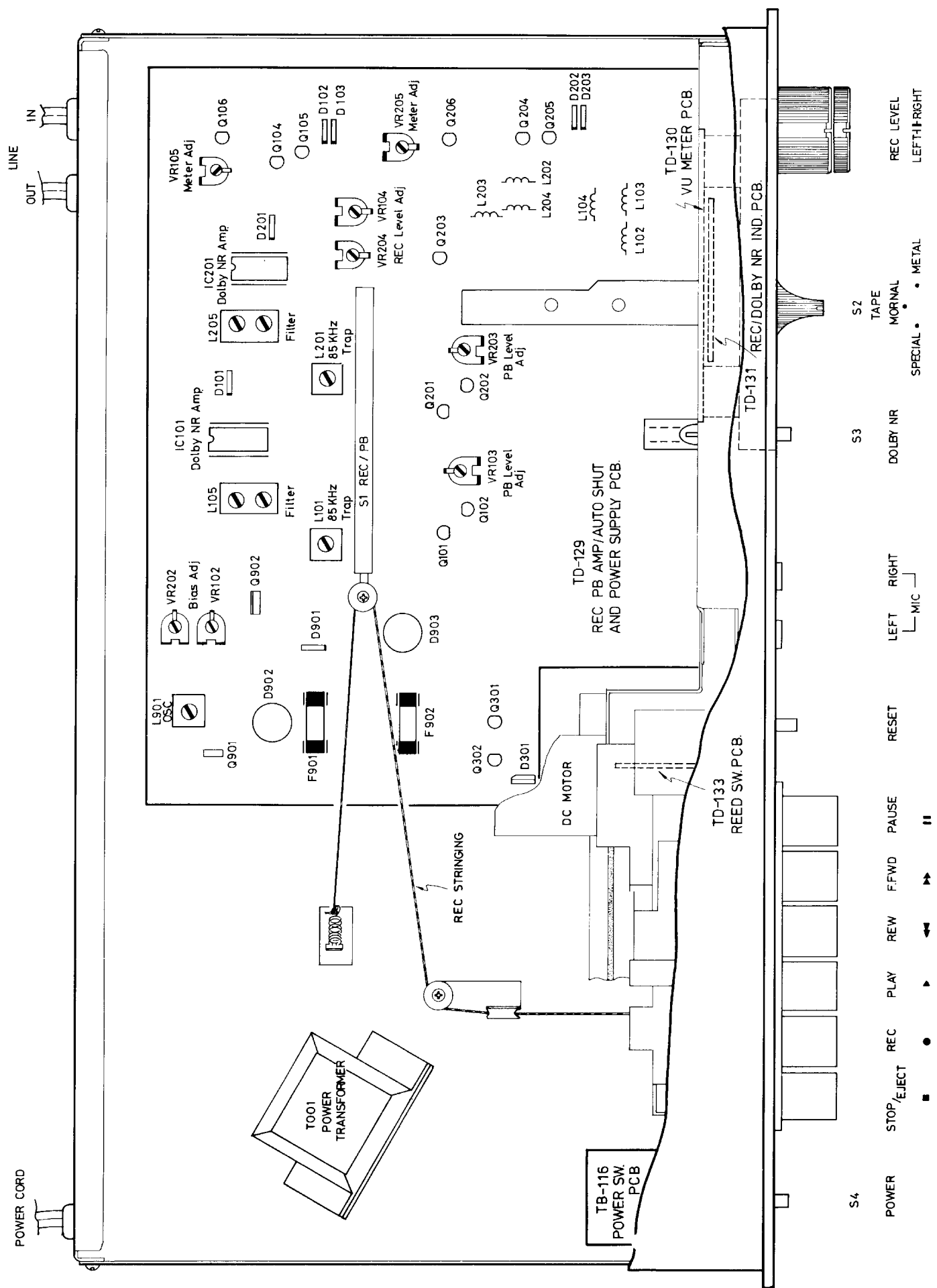
Installation du châssis	2	Liste des pièces de rechange	8
Réglages de système de la reproduction	4	Diagramme de schématique	9
Réglages de système de l'enregistrement	5	Diagramme de connexion	11
Réglages de système de L'enregistrement/reproduction	7	Schéma de démontage (1/2)	13
Schéma symoptique	7	Schéma de démontage (2/2)	15

THE ROTEL CO., LTD.
ROTEL ELECTRONICS CO., LTD.
ROTEL OF AMERICA, INC.
ROTEL HI FI LIMITED.

1-36-8 OHOKAYAMA, MEGURO-KU, TOKYO 152, JAPAN
2ND FLOOR, EVERGLORY BLDG., NO. 305, SECTION 3,
NANKING E. ROAD, TAIPEI, TAIWAN, REPUBLIC OF CHINA
13518 SO. NORMANDIE, GARDENA, CALIF. 90249, U.S.A.
2-4 ERICA ROAD, STACEY BUSHES, MILTON KEYNES,
BUCKINGHAMSHIRE, ENGLAND

Printed in Taiwan '81 Jan. 835201370

Chassis Layout / Chassis - Anordnung / Installation de Châssis



- S2 TAPE MORNAL • METAL
- S3 DOLBY NR SPECIAL •
- REC LEVEL LEFT → RIGHT
- LEFT MIC → RIGHT
- RESET
- PAUSE ||
- FFWD →
- REW ←
- PLAY ▶
- STOP/EJECT ■
- POWER
- S4

Playback System Adjustments

Instruments: Oscilloscope, AC VTVM, Frequency Counter and Test Tape

Conditions: Oscilloscope, AC VTVM and Frequency Counter . . . LINE OUT Tape Selector . . . NORMAL Dolby NR . . . OFF

Adjustment Item	Test Tape	Adjust	Adjust for
Azimuth	LCT-3004-C	REC/PB head screw	Obtain largest wave form on Oscilloscope for both channels (Fig. 1)
Dolby Level	LCT-7001	VR103 (L-ch) VR203 (R-ch)	AC VTVM reads 580mV
Meter Calibration		VR105 (L-ch) VR205 (R-ch)	The needle on the Meter corresponds with the Dolby mark (Fig. 2)
Playback EQ Check	LCT-3009-C	Output Level difference between 40Hz, 1KHz and 10KHz signal is within $\pm 2.0\text{dB}$	
Tape Speed Deflection Check/Tape Speed Adjust	LCT-3001	Check that allowable margin of deflection at middle of or at the end of winding is in the range of $+2\% - 1\%$ (at 3000Hz allowable margin of deflection of speed is 3060-2970) If Tape Speed deflection surpasses the above range adjust speed of Motor (Fig. 3)	

Wiedergabepegels-Einstellung

Instrumente: Oszillograph, Wechselspannungsvoltmeter, Frequenz-Zähler und Test-cassette

Bedienung: Oszillograph, Wechselspannungsvoltmeter und Frequenz-Zähler . . . LINE OUT, Bank-Wahler . . . NORMAL

Dolby NR Taste . . . OFF

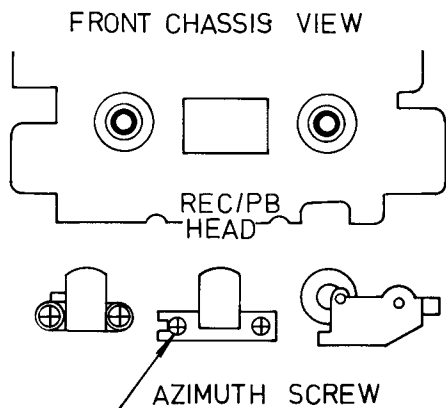
Einstellungsteil	Test-Cassette	Einstellung	Einstellungszweck
Azimuth	LCT-3004-C	REC/PB Tonkopfschraube	Maximum-Wellenform auf Oszillograph für beiden Kanäle (Abb. 1) erhalten.
Dolby-Regel	LCT-7001	VR103 (L-K) VR203 (R-K)	Wechselspannungsvoltmeter auf 580mV einstellen.
Zähler-Meters		VR105 (L-K) VR205 (R-K)	Die Nadel des VU-Meters auf dem Dolby-Zeichen steht. (Abb. 2)
Prüfung der Wiedergabe "EQ"	LCT-3009-C	Ausgangspegelunterschied zwischen 40Hz, 1KHz und 10KHz darf innerhalb $+ 2.0\text{dB}$ betragen.	
Überprüfung der Bandgeschwindigkeit /Einstellung der Bandgeschwindigkeitabweichung	LCT-3001	Prüfen, ob Abweichung von der Sollgeschwindigkeit im Bereich $+ 2\% - 1\%$ liegt (bei 3000 Hz zwischen 3060-2970 Hz). Bei grösser Abweichung Motorgeschwindigkeit nachstellen (Abb. 3)	

. Réglages de système de la reproduction

Instruments: Oscilloscope, Voltmètre électronique à courant alternatif, Analyseur de fréquence et bande d'essai.

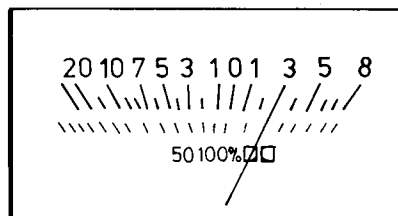
Conditions: Oscilloscope, Voltmètre électronique à courant alternatif et analyseur de fréquence LINE OUT
selecteur de bande NORMAL Dolby NR OFF

Item de réglage	Bande d'essai	Régler	Régler pour
Azimuth	LCT-3004-C	Vis de tête de Enregistrement/reproduction	Obtenir forme d'onde la plus grande sur l'oscilloscope pour les deux canaux (fig. 1)
Niveau de Dolby	LCT-7001	VR 103 (canal gauche) VR 203 (canal droit)	Le voltmètre électronique à courant alternatif lit 580 mV.
Calibrage de mètre		VR 105 (canal gauche) VR 205 (canal droit)	L'aiguille sur le mètre correspond à la marque Dolby (fig. 2)
Contrôle de l'égalisation de reproduction	LCT-3009-C	Différence de niveau de sortie entre les signaux 40 Hz, 1 KHz et 10KHz est dans ± 2.0 dB.	
Contrôle de la Variation de la vitesse de bande/réglage de la vitesse	LCT-3001	Vérifier que la marge admissible de variation au milieu ou à la fin de bobinage est dans la plage donnée de +2%–1%(à 3000 Hz marge admissible de variation de la vitesse est 3060-2970). Si la variation de vitesse de bande surpasse la plage donnée ci-dessus, régler la vitesse de moteur. (fig. 3)	



ADJUST AZIMUTH SCREW TO OBTAIN MAXIMUM DEFLECTION ON SCOPE

Fig. 1 Azimuth Adjustment
Abb. 1 Azimuteinstellung
Fig. 1 Réglage de l'azimut



ADJUST POTENTIOMETER VR105 (VR205 FOR R-CH) SO THAT VU METER NEEDLE INDICATES DOLBY MARK.

Fig.2 Dolby Level Adjustment
Abb. 2 Einstellung der Dolby-Regel.
Fig. 2 Réglage du niveau Dolby

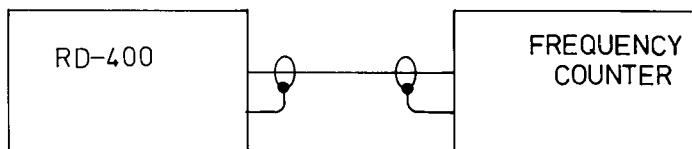
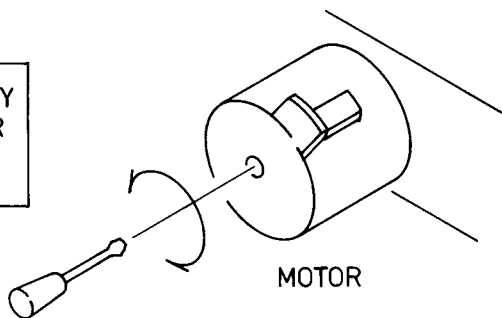


Fig. 3 Tape speed Adjustment
Abb. 3 Einstellung der Bandgeschwindigkeitabweichung
Fig. 3 Réglage de la vitesse de défilement de la bande



Recording System Adjustments

Instruments: Oscilloscope, Signal Generator, AC VTVM and Blank Tape

Conditions: Dolby NR ... OFF REC Level ... Maximum

Adjustment Item	Coupling	Tape Selector	Adjust	Adjust for
Bias Carrier	Oscilloscope ... Point TP 1 (TP 2 R-ch)	METAL	L101 (L-ch) L 201 (R-ch)	Obtain Min. deflection on the Oscilloscope
19KHz Filter	S.G. (400Hz 0dB) ... LINE IN/LINE OUT ... 410mV Changed S.G. to 19KHz Dolby NR ... ON	NORMAL	L 105 (L-ch) L 205 (R-ch)	AC VTVM reads -30dB (Minimum)
Bias Voltage	Oscilloscope ... Point 1 (2 R-ch)	METAL	VR 102 (L-ch) VR 202 (R-ch)	AC VTVM reads 6mV

Aufnahmesystems-Einstellung

Instrumente: Oszillograph, NF-Generator, Wechselspannungsvoltmeter und Leercassette.

Bedienungen: Dolby NR Taste ... OFF Aufnahmepegelregler ... Maximum

Einstellungsteil	Kupplung	Band-Wähler	Einstellung	Einstellungszweck
Bias-Trägerstrom	Oszillograph ... Punkt TP 1 (TP 2 R-K)	METAL	L101 (L-K) L201 (R-K)	Min. Abweichung auf Oszillograph erhalten.
19KHz Filter	NF-Generator (400Hz 0dB) ... an "LINE IN/LINE OUT ... 410mV NF-Generator auf 19 KHz. Dolby NR ... ON	NORMAL	L 105 (L-K) L 205 (R-K)	Wechselspannungsvoltmeter auf -30dB einstellen, (Minimum)
Vorspannung	Oszillograph ... Punkt 1 (2 R-K)	METAL	VR 102 (L-K) VR 202 (R-K)	Wechselspannungsvoltmeter auf 6mV einstellen.

Reglages de système de l'enregistrement

Instruments: Oscilloscope, Générateur de signal, voltmètre électronique à courant alternatif et bande vierge

Conditions: Dolgy NR ... OFF Niveau de l'enregistrement ... maximum

Item de réglage	Accouplement	Selecteur de bande	Régler	Régler pour
Porte-Polarisation	Oscilloscope ... Point TP 1 (TP 2 canal droit)	METAL	L-101 (canal gauche) L 201 (canal droit)	Obtenir la variation min. sur l'oscilloscope
Filtre 19KHz	Générateur de signal (400Hz 0dB) ... LINE IN/LINE OUT ... 410mV Changé le générateur de signal à 19KHz Dolby NR ... ON	NORMAL	L 105 (canal gauche) L 205 (canal droit)	Voltmètre électronique à courant alternatif lit -30dB (minimum)
Voltage de polarisation	Oscilloscope ... Point 1 (2 Canal droit)	METAL	VR 102 (canal gauche) VR 202 (canal droit)	Voltmètre électronique à courant alternatif lit 6mV

REC/PB System Adjustments

Instruments: Signal Generator, H.D. Analyzer and Blank Tape

Conditions: Dolby NR . . . OFF REC Level . . . Maximum PLAY, REC, PAUSE . . . ON

Adjustment	Conditions	Adjust	Adjust for
REC/PB Output Level	S.G. (400Hz 0dB) . . . LINE IN/LINE OUT . . . 410mV Release Pause Button and playback it again.	VR 104 (L-ch) VR 204 (R-ch)	Recording and Playback level difference must be within ± 1 dB
Distortion Check	S.G. (400Hz 0dB) . . . LINE IN/LINE OUT . . . 410mV H.D. Analyzer . . . LINE OUT Release Pause Button and playback it again.	Check that distortion is within following range. a. METAL Tape under 1.5% b. CrO2 Tape under 3% c. NORMAL Tape. under 1.5%	
	If the distortion factor exceeds the above, recheck Bias Current Adjustment.		
Frequency Response Check	METAL Tape insert it	VR 102 (L-ch) VR 202 (R-ch)	40Hz–125Hz . . . 5dB 125Hz–10KHz . . . 3dB 10KHz–15KHz . . . 5dB
	CrO2 Tape insert it		
	NORMAL Tape insert it		40Hz–125Hz . . . 5dB 125Hz–10KHz . . . 3dB 10KHz–14KHz . . . 5dB

Aufnahmesystems-und Wiedergabepiegels-Einstellung

Instrumente: NF-Generator, Klirrfaktormessbrücke und Leer-cassette

Bedienungen: Dolby NR OFF Aufnahmespegel . . . Maximum
PLAY, REC, PAUSE Taste ON

Einstellung	Bedienungen	Einstellen	Einstellungszweck
Aufnahme/Wiedergabe Ausgangspegel	NF-Generator (400 Hz 0dB) . . . LINE IN/LINE OUT . . . 410mV. Pause-Taste freigeben und spielen es rück noch einmal.	VR 104 (L-K) VR 204 (R-K)	Die Differenz der Aufnahme und Wiedergabe-Ausgangspegel innerhalb einer Toleranz von ± 1 dB liegen müssen.
Prüfen des Klirrfaktors	NF-Generator (400 Hz 0dB) . . . LINE IN/LINE OUT . . . 410mV. Klirrfaktormessbrücke . . . LINE OUT Pause-Taste freigeben und spielen es rück noch einmal.	Prüfen, ob Klirrfaktor den folgenden Werten entspricht: a. METAL Band unter 1.5% b. CrO2 Band unter 3% c. NORMAL Band. unter 1.5%	
	Wenn der Klirrfaktor die angegebenen Werte übersteigt, dann Vormagnetisierungstrom prüfen.		
Prüfen des Frequenzgangs	METAL Band einschieben	VR 102 (L-K) VR 202 (R-K)	40Hz–125Hz . . . 5dB 125Hz–10KHz . . . 3dB 10KHz–15KHz . . . 5dB
	CrO2 Band einschieben		
	Normal Band einschieben		40Hz–125Hz . . . 5dB 125Hz–10KHz . . . 3dB 10KHz–14KHz . . . 5dB

Réglages de système de l'enregistrement/reproduction

Instruments: Générateur de signal, analyseur H.D., et bande vierge

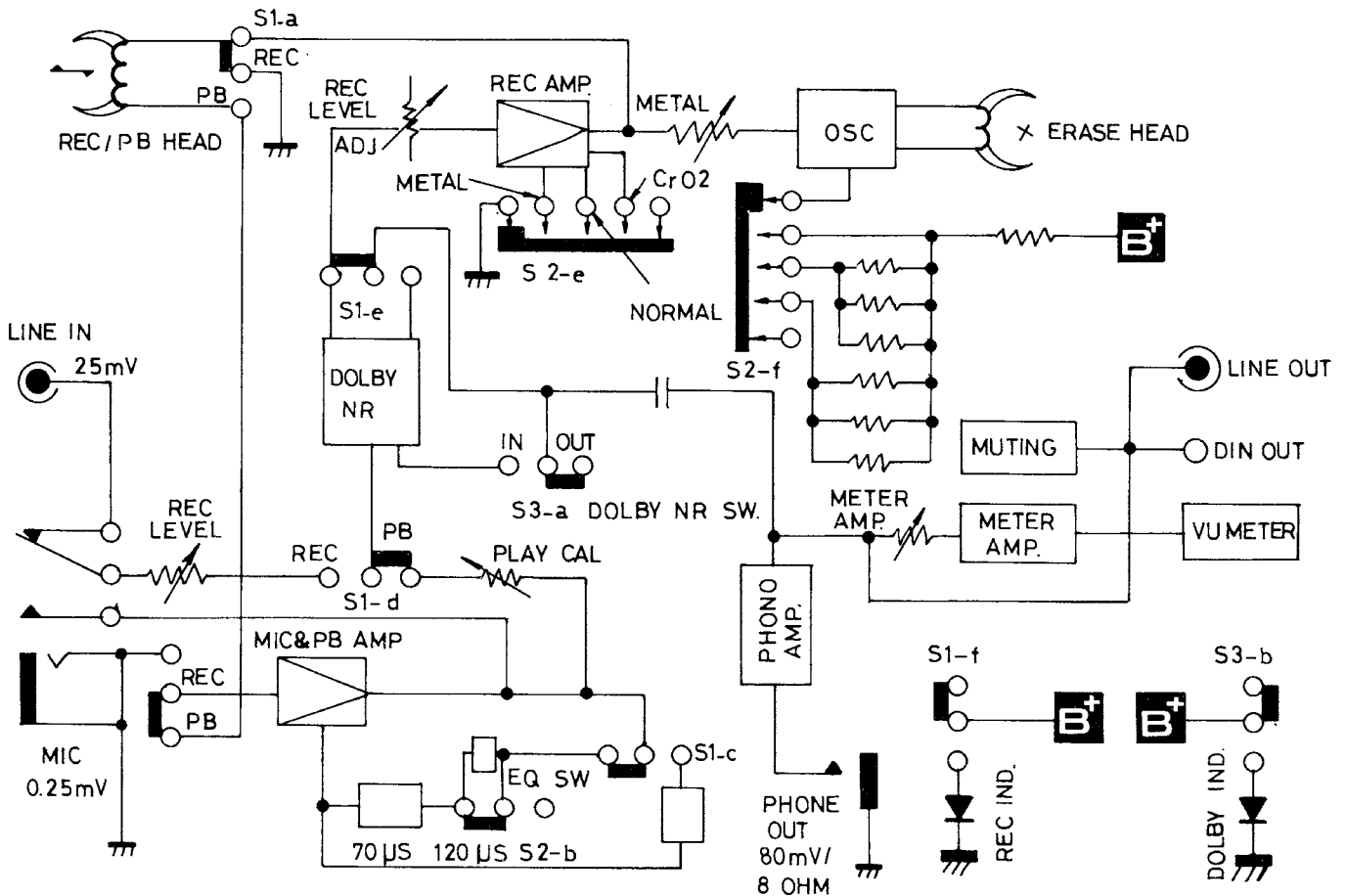
Conditions: Dolby NR . . . OFF

Niveau de l'enregistrement . . . maximum

Reproduction, enregistrement, pause . . . ON

Réglage	Conditions	Régler	Régler pour
Niveau de la sortie de l'enregistrement/reproduction	Générateur de signal (400 Hz 0dB) ... LINE IN/LINE OUT ... 410 mV Relâcher le bouton de pause et reproduire encore.	VR 104 (canal gauche) VR 204 (canal droit)	Différence de niveau de l'enregistrement et reproduction doit être dans ± 1 dB.
Contrôle de la déformations	Générateur de signal (400 Hz 0dB) ... LINE IN/LINE OUT ... 410 mV Analyseur H.D. ... LINE OUT Relâcher le bouton de pause et reproduire encore.	Vérifier que la déformation est dans la plage donnée suivante. a. Bande métal sous 1.5% b. Bande CrO2 sous 3% c. Bande normale sous 1.5%	
	Si le facteur de la déformation excède les valeurs ci-dessus, vérifier le réglage du courant de la polarisation.		
Contrôle de réponse de fréquence	Insérer la bande METAL	VR 102 (canal gauche) VR 202 (canal droit)	40Hz-125Hz . . . 5dB 125Hz-10Hz . . . 3dB 10KHz-15KHz . . . 5dB.
	Insérer la bande CrO2		
	Insérer la bande NORMAL		40Hz-125Hz . . . 5dB 125Hz-10KHz . . . 3dB 10KHz-14KHz . . . 5dB.

Block Diagram/Blockschaltbild/ Schéma synoptique



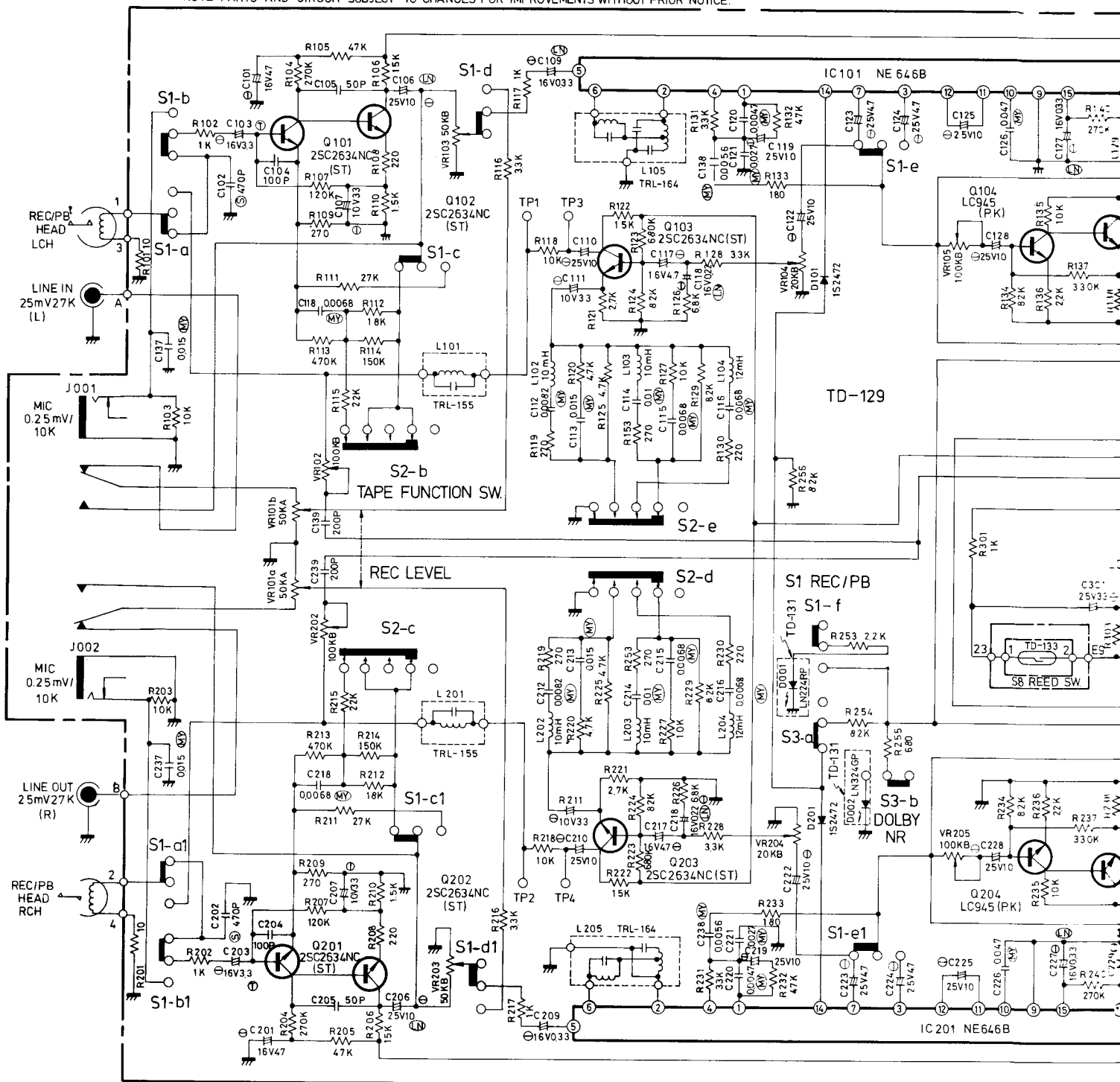
Repair Parts List / Reparaturteilliste / -Liste des pièces de rechange

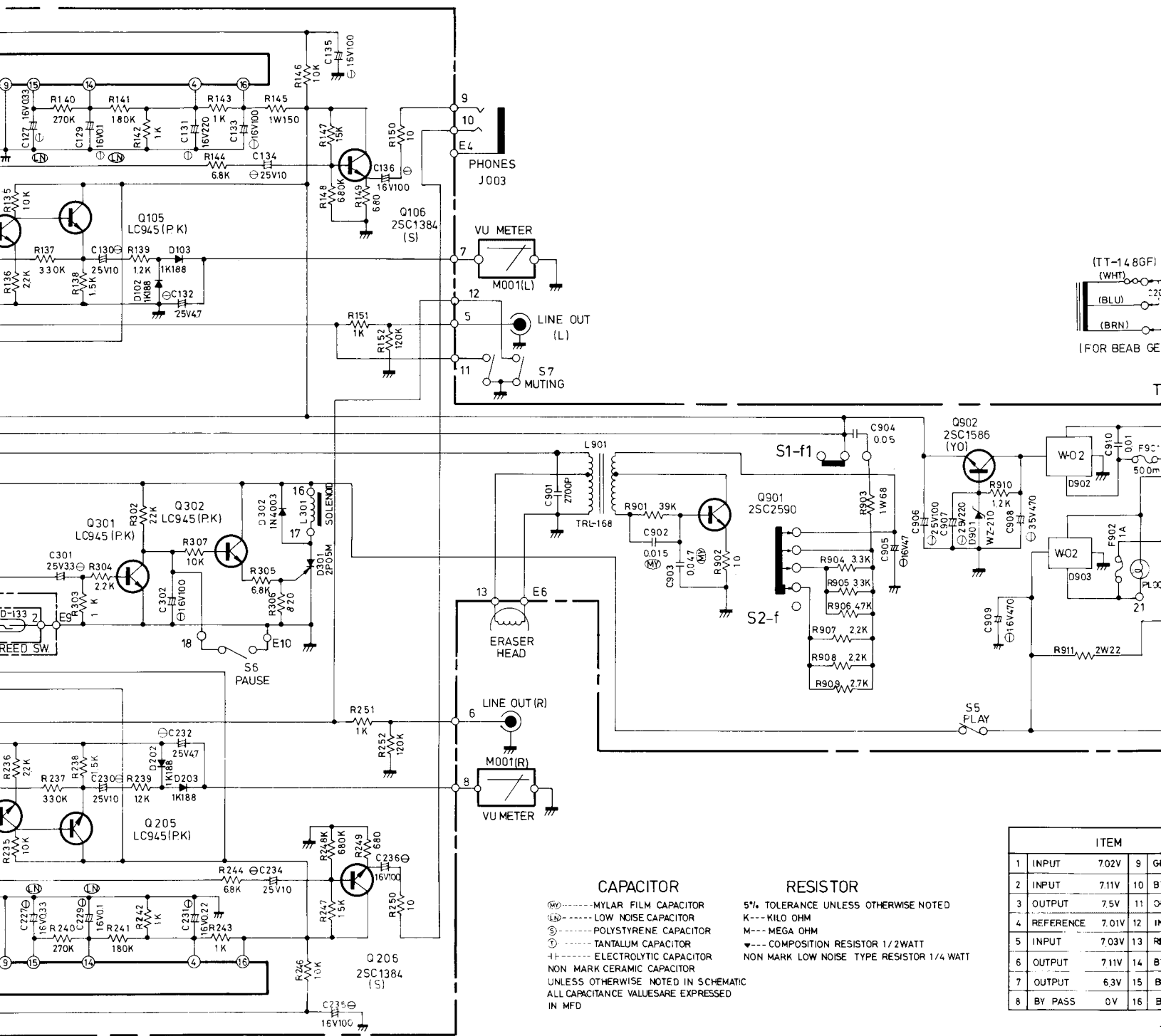
Schematic Location	Parts No.	Description
TRANSISTORS, DIODES AND IC'S		
Q101-103	301201222	2SC2634NC (S,T), MIC/REC Amp.
Q201-203	301901132	LC945 (P,K), Meter Amp.
Q104,105 204,205	301201132	2SC1384 (S), Phone Amp.
Q301,302	301901132	LC945 (P,K), for Auto-Stop
Q901	301201223	2SC2590, OSC
Q902	301201169	2SC1826 (O,Y), Stabilizer
D101,201	300111010	1S2472
D102,103 202,203	300111008	1K188, Meter Rectifier
D301	300515003	2P05M, Auto-Stop Control
D302	300919026	1N4003, Rectifier
D901	300313016	WZ-210, Zener Regulator 21V 1/2W
D902,903	300919011	W02, Regulator
D001	300414042	LN224RP, REC Ind.
D002	300414043	LN324GP, Dolby NR Ind.
IC101,201	303450218	NE646B, REC/PB Amp.
COILS AND VARIABLE RESISTORS		
L101,201	228641174	85KHz, Trap Coil
L102,103 202,203	228641173	10mH, Peaking Coil
L104,204	228641187	12mH, Peaking Coil
L105,205	228641189	Filter
L901	228641190	OSC
VR101	525101174	50KAx2, REC Level Control
VR102,202	510502196	100KB, Bias Adj.
VR103,203	510502200	50KB, PB Level Adj.
VR104,204	510502199	20KB, REC Level Adj.
VR105,205	510502196	100KB, Meter Level Adj.

Schematic Location	Parts No.	Description
SWITCHES AND FUSES		
S1	613000041	Switch, Slide, REC/PB
S2	601011332	Switch, Tape Selector
S3	614010155	Switch, Push 1-Key, Dolby NR
S4	614010138	Switch, Power Supply (for BEAB . . .)
	614010139	Switch, Power Supply (for UL, CSA)
F901	341221050	Fuse, 0.5A, AC Circuit Protector (Long Size)
	345222050	Fuse, 500mA, AC Circuit Protector (Mini Size)
	345252050	Fuse, 500mA, AC Circuit Protector (Mini Size "S" "D" mark)
F902	341221100	Fuse, 1A, Lamp Protector (Long Size)
	345222100	Fuse, 1A, Lamp Protector (Mini Size)
	345252100	Fuse, 1A, Lamp Protector (Mini Size "S" "D" mark)

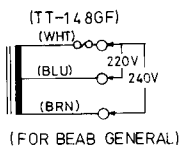
Schematic Diagram/Schaltungsschema/Diagramme de

NOTE: PARTS AND CIRCUIT SUBJECT TO CHANGES FOR IMPROVEMENTS WITHOUT PRIOR NOTICE.

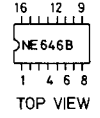
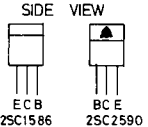
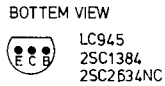
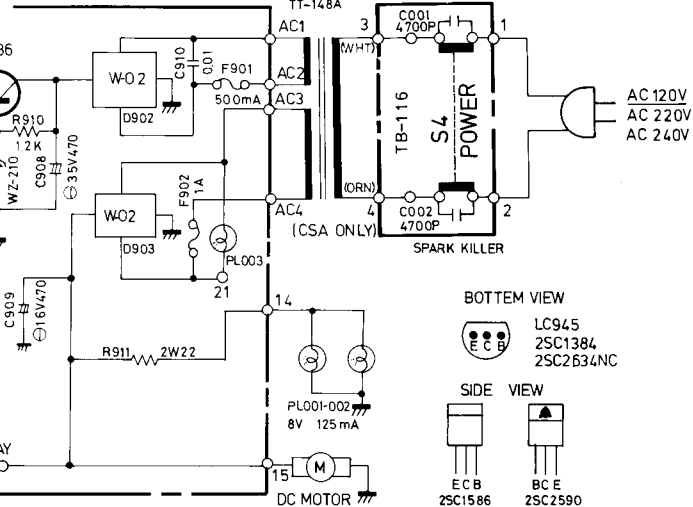




REC/PB AMP / AUTO SHUT OFF

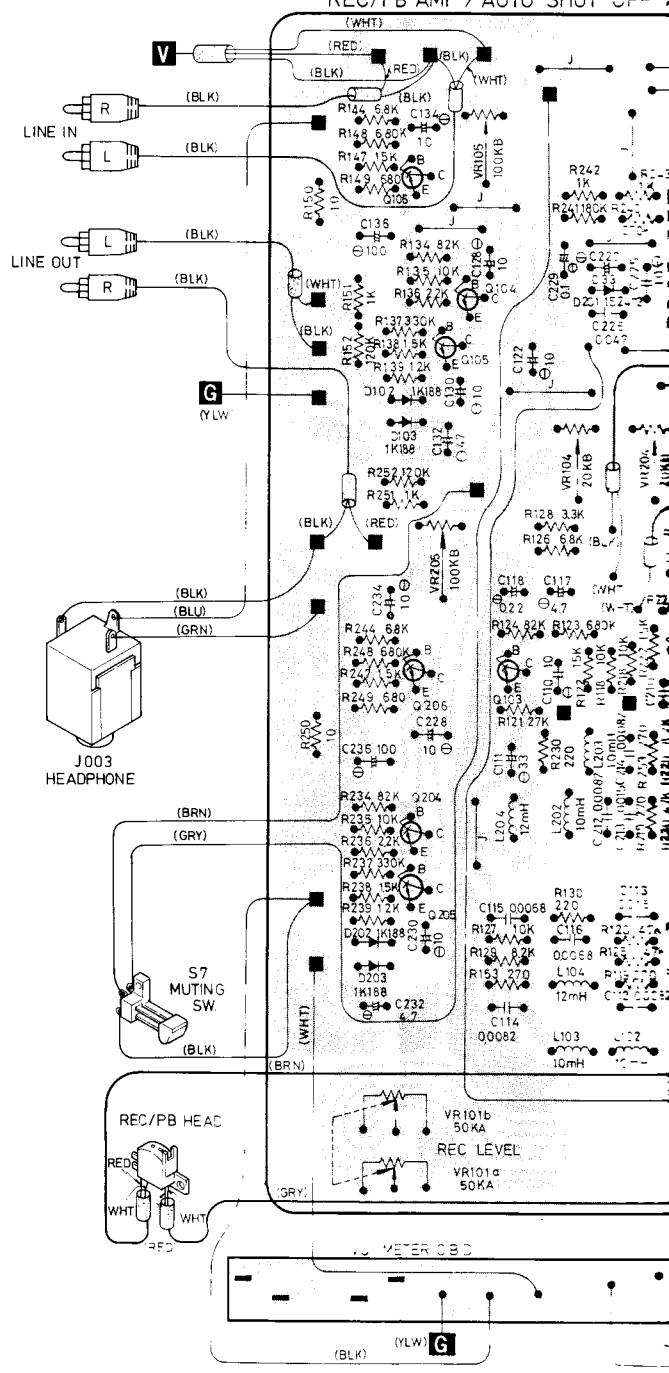


POWER TRANSFORMER



ITEM	1	2	3	4	5	6	7	8
INPUT	7.02V	7.11V	7.5V	7.01V	7.03V	7.11V	6.3V	0V
GROUND	0.42V	7.01V	7.12V	7.01V	REFERENCE	7.11V	7.10V	13.6V
BY PASS								
OUTPUT								

ITEM	SCHEMATIC LOCATION (LAST)	
REC PB AMP	R152	C138
REC PB AMP	R256	C138
AUTO SHUT OFF	R307	C302
POWER SUPPLY	R911	C910
CHASSIS		C002



/Drahtleitung Diagramm/Diagramme de connexion

AMP / AUTO SHUT OFF AND POWER SUPPLY C.B.D.

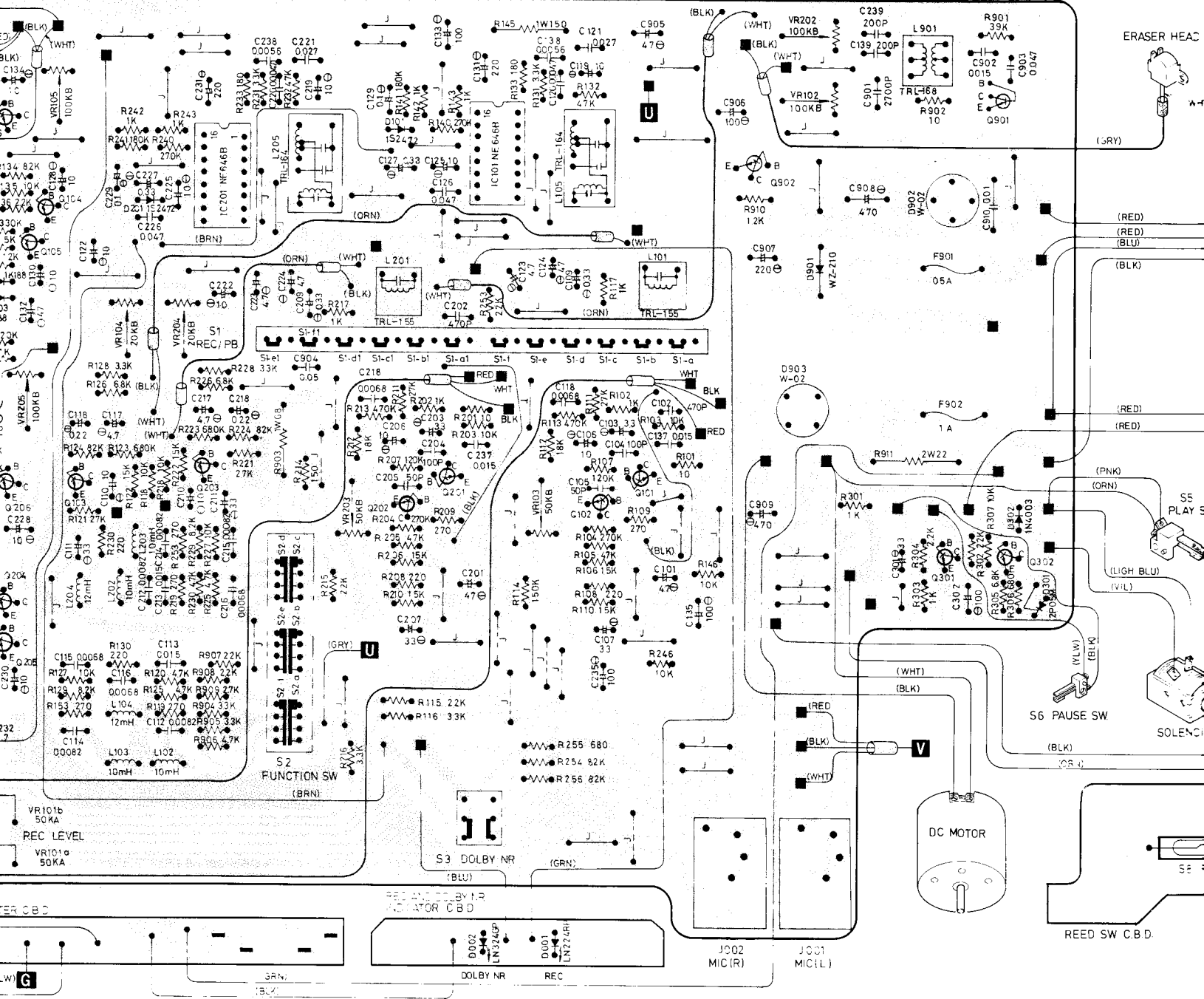
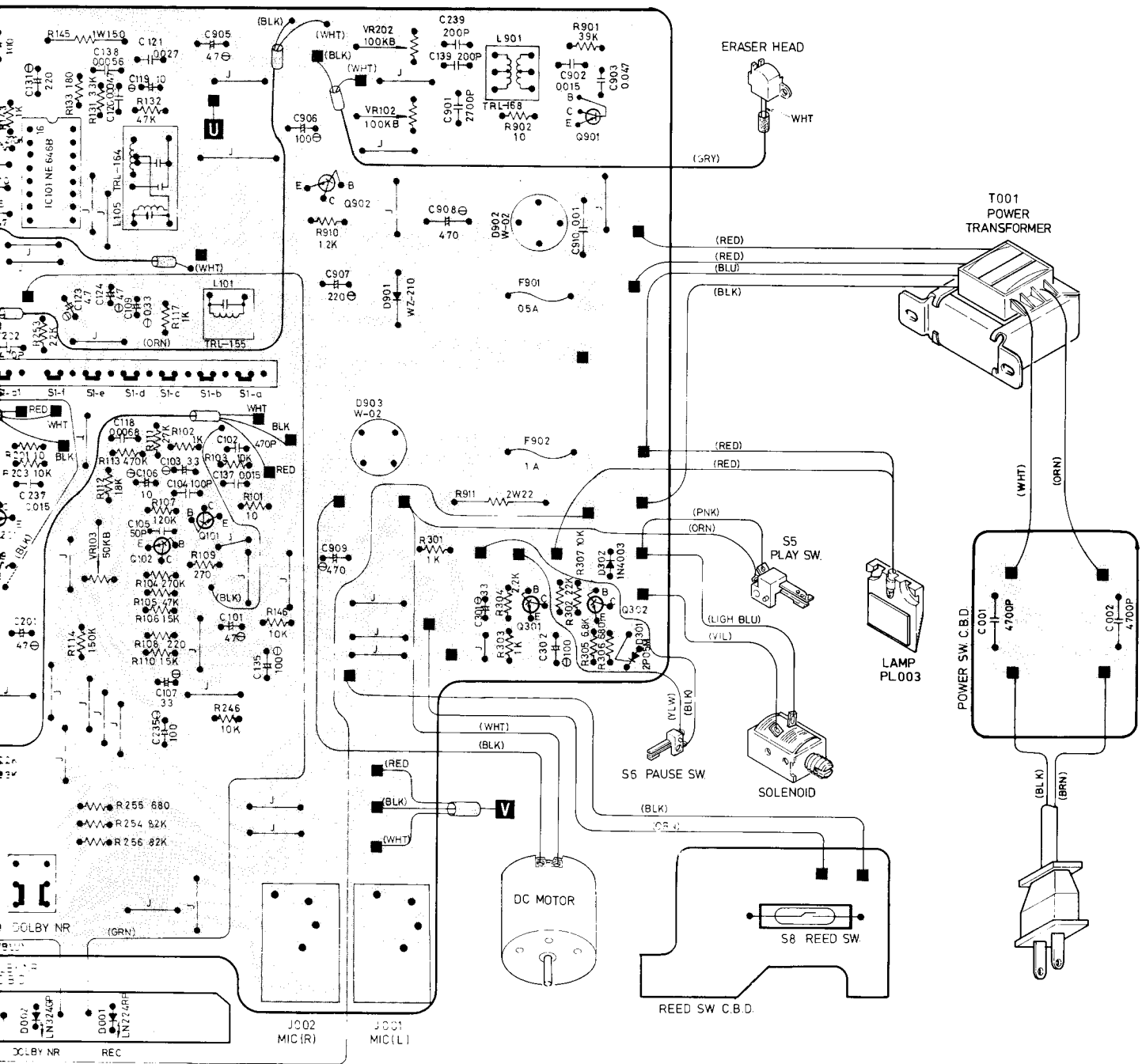
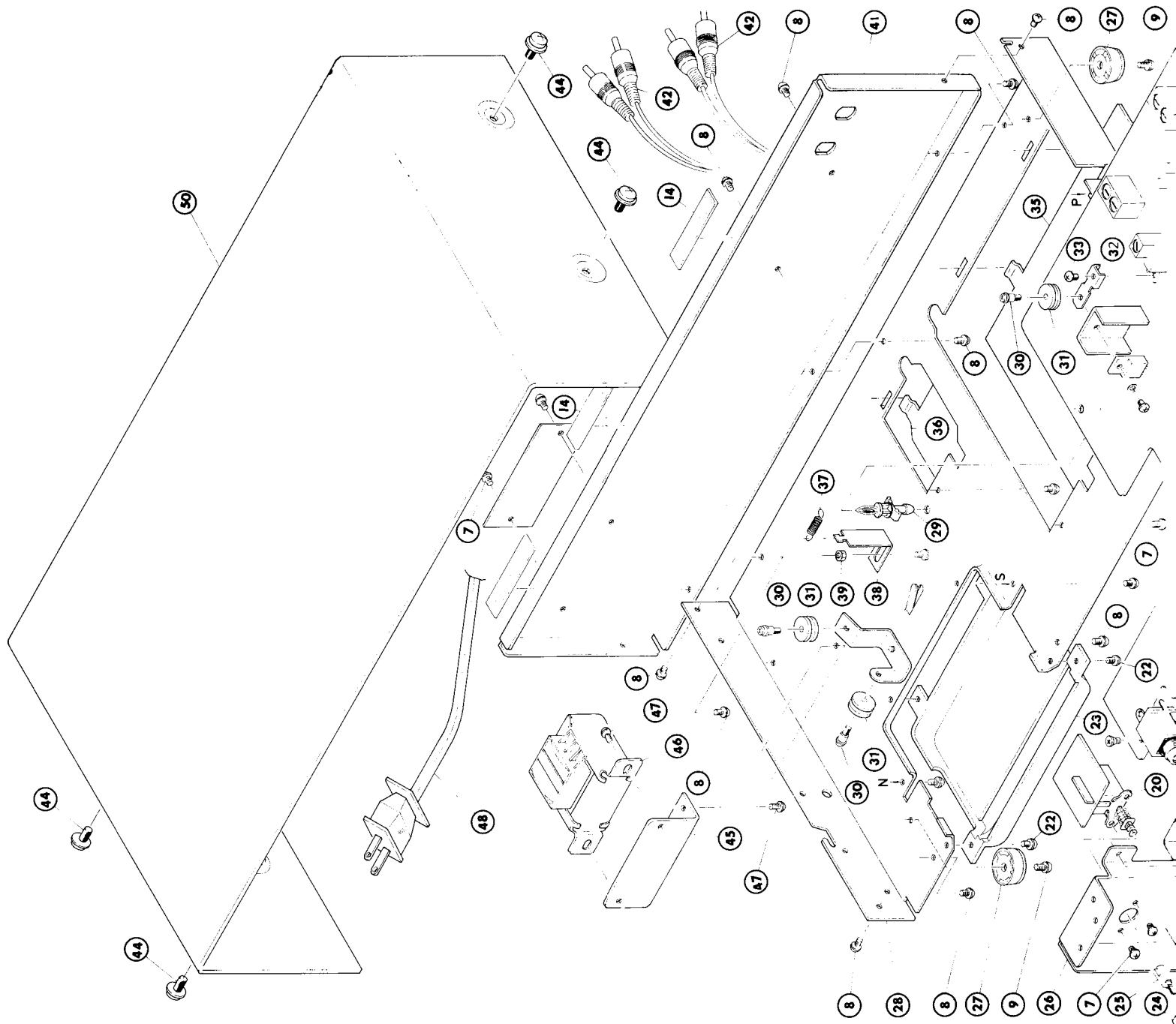


Diagramme de connexion

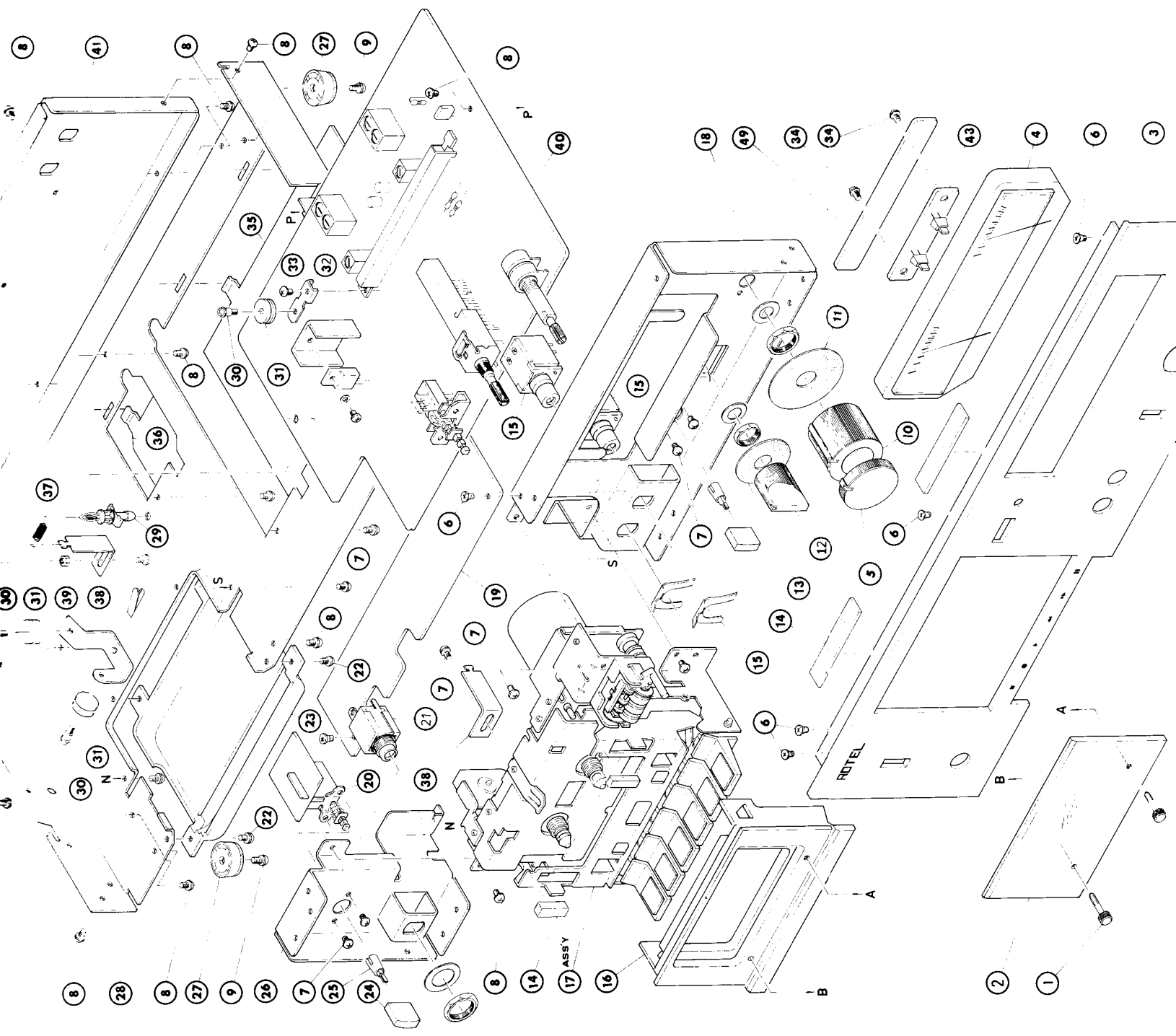


Disassembly Diagram/Illustration des Auseinanderbaus/Sc



Key No.	Parts No.	Description
1	770911233	Screw, Ornamental Board
2	114902326	Ornamental Board, Cassette Door
3	111911552	Front Panel Ass'y
4	231310114	Level Meter
5	116310309	Knob, 33φ REC Level (L)
6	701203006	Screw, 1M3x6 SMF
7	703213006	Screw, +M3x6 Pan Head
8	766203006	Screw, +M3x6 STV MC
9	726203012	Screw, +M3x12 BTV MC
10	116310308	Knob, 33φ REC Level (R)
11	990201330	Felt, Knob (33φ)
12	116310335	Knob, 20φ Tape Selector
13	990201329	Felt, Knob (20φ)
14	990201334	Felt, Front Panel
15	627117828	Jack, MIC
16	114902325	Frame, Cassette Door
17	900111040	Cassette Deck Ass'y
18	122011427	Front Chassis (L)
19	119011374	Cover, Deck
20	141811067	Power Switch PCB Ass'y (for BEAB ...)
	141811068	Power Switch PCB Ass'y (for U/L, CSA)
21	626110035	Jack, Headphones
22	726203006	Screw, +M3x6 BTV MC
23	114902324	Bottom, Cassette Beck
24	116210073	Push Button
25	114902356	Connector, Push Button
26	120013012	Front Chassis (L)
27	673402021	Plastic Foot
28	121011364	Chassis Body
29	672200831	Plastic Support, PCB
30	770911264	Screw, Pulley
31	651110019	Pulley
32	120013014	Support (A) REC
33	766203006	Screw, +M3x6 STV MC
34	726203008	Screw, +M3x8 BTV MC
35	120013015	Bottom Cover
36	120013017	Bottom Cover
37	658601133	Spring, REC
38	120013013	Adj. Support (B), REC
39	770402201	Nut, M3
40	141811146	REC/PB and Shut off PCB Ass'y (Long Size)
	141811147	REC/PB and Shut off PCB Ass'y (Mini Size)
	141811148	REC/PB and Shut off PCB Ass'y (Mini Size "S" "D" Mark)
41	123011558	Rear Panel Ass'y
	123011559	Rear Panel Ass'y
42	791001152	Signal Connector

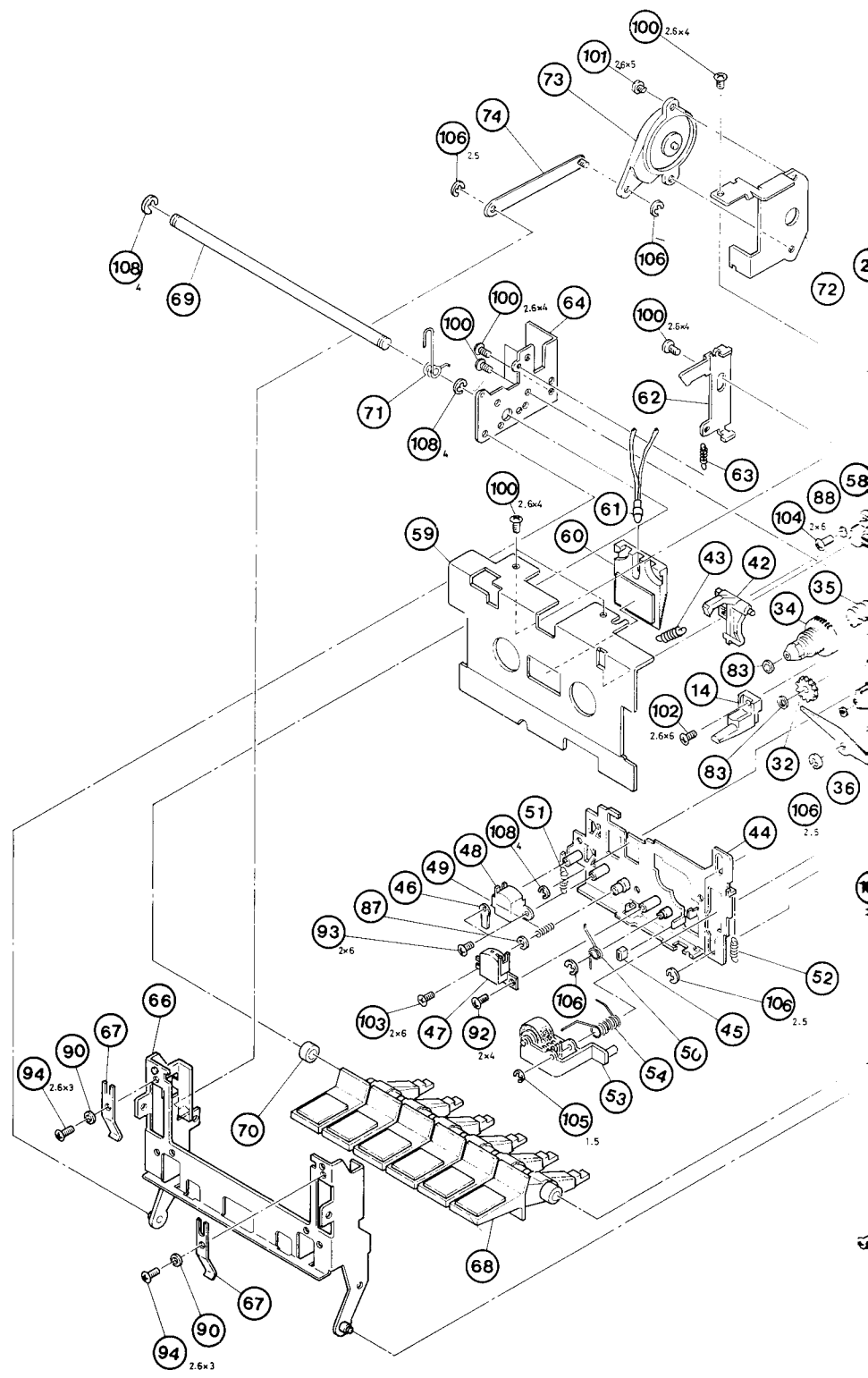
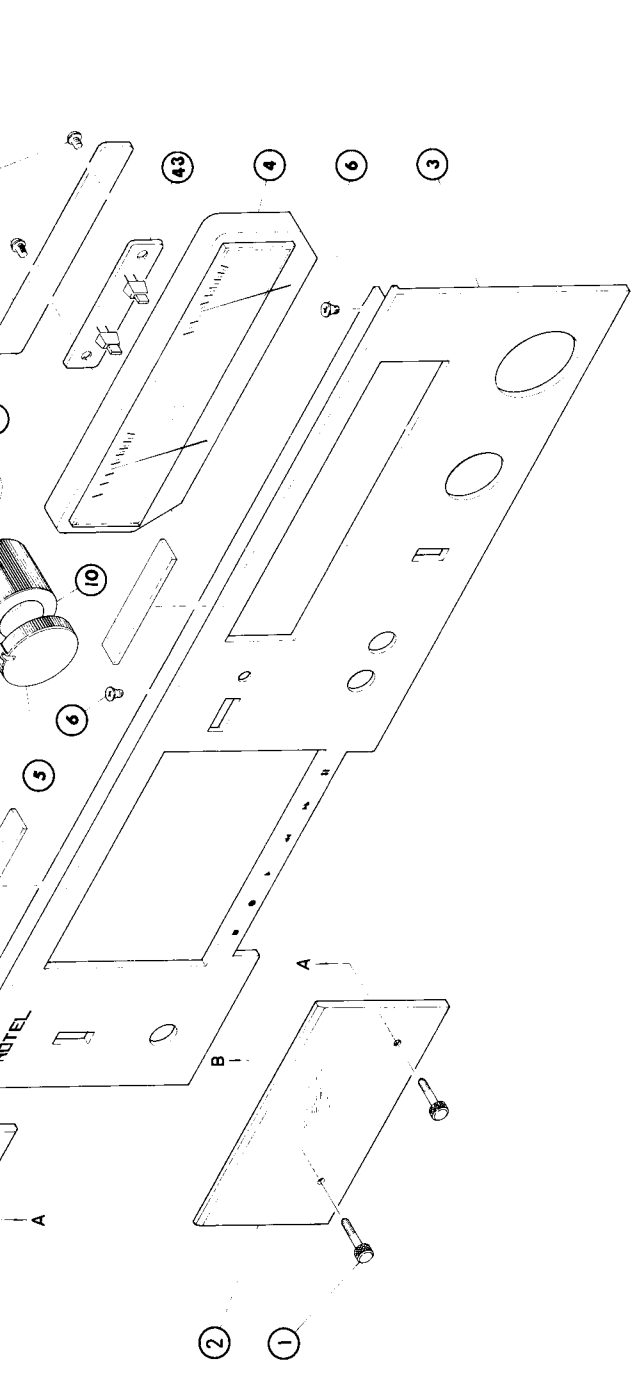
Auseinanderbaus/Schema de démontage (1/2)



- Plastic Support, PCB
- Screw, Pulley
- Pulley
- Support (A) REC
- Screw, +M3x6 STV MC
- Screw, +M3x8 BTV MC
- Bottom Cover
- Bottom Cover
- Spring, REC
- Adj. Support (B), REC
- Nut, M3
- REC/PB and Shut off PCB
- REC/PB and Shut off PCB
- Ass'y (Long Size)
- REC/PB and Shut off PCB
- Ass'y (Mini Size)
- REC/PB and Shut off PCB
- Ass'y (Mini Size "S" "D" Mark)
- Rear Panel Ass'y
- Rear Panel Ass'y
- Signal Connector
- REC/Dolby NR Ind. PCB
- Ass'y
- Screw, +M4x8 W/SP BK
- Support, Power
- Transformer
- Transformer, Power Supply
- Screw, +M4x10 MC
- Line Cord (UL, CSA)
- Line Cord (for Europe)
- Line Cord (for BEAB)
- Line Cord (for Austria)
- Level Meter PCB Ass'y
- Upper Cover

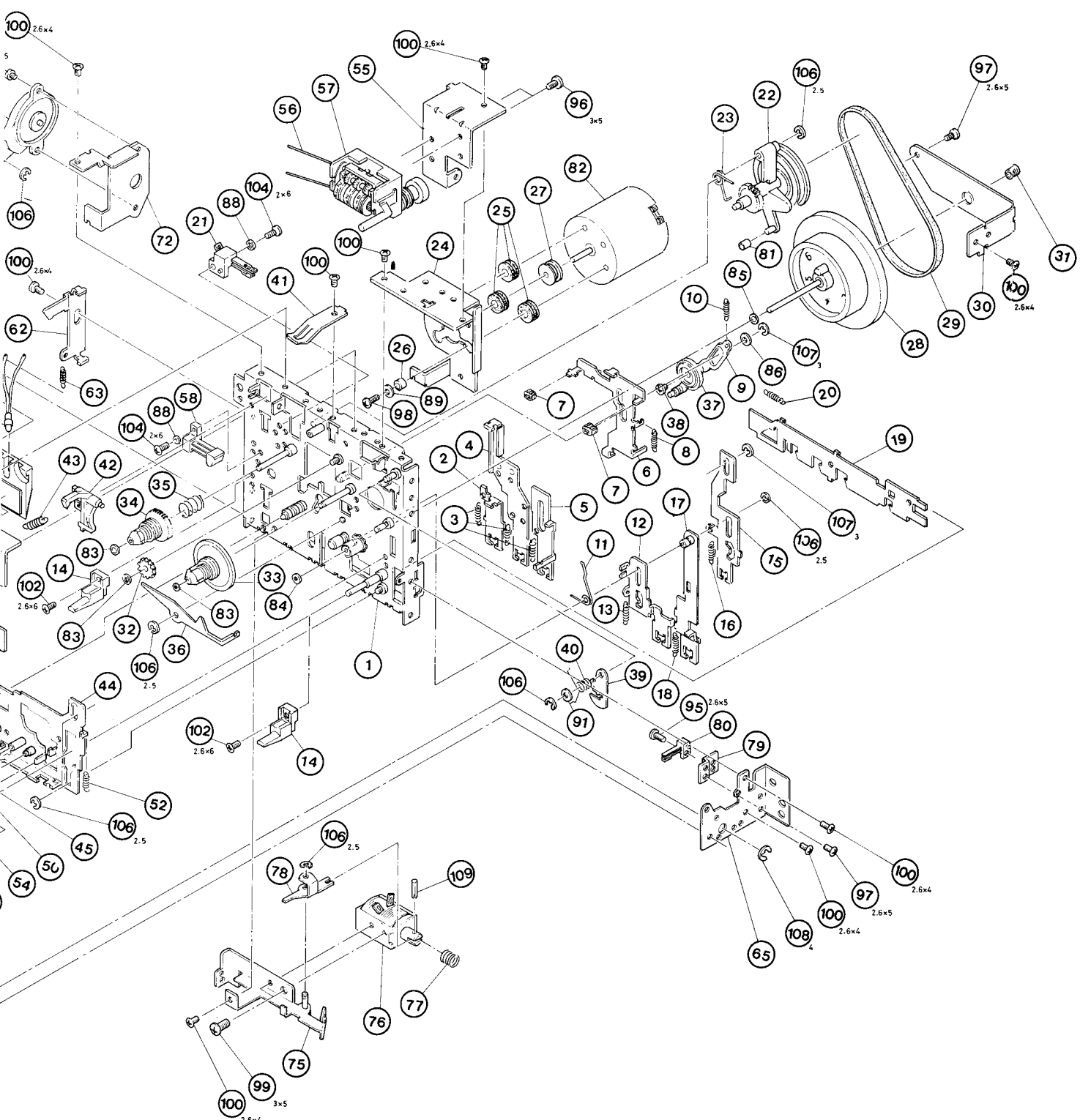
- 072200631
- 770911264
- 651110019
- 120013014
- 766203006
- 726203008
- 120013015
- 120013017
- 658601133
- 120013013
- 770402201
- 141811146
- 141811147
- 141811148
- 123011558
- 123011559
- 791001152
- 141811151
- 756224008
- 120013016
- 207001520
- 765204010
- 796301115
- 796301149
- 796301138
- 796301125
- 141811150
- 138011318

- 29
- 30
- 31
- 32
- 33
- 34
- 35
- 36
- 37
- 38
- 39
- 40
- 41
- 42
- 43
- 44
- 45
- 46
- 47
- 48
- 49
- 50



stration des Auseinanderbaus/Schema de demontage (2/2)

Key List



- Key List
- 1
 - 2
 - 3
 - 4
 - 5
 - 6
 - 7
 - 8
 - 9
 - 10
 - 11
 - 12
 - 13
 - 14
 - 15
 - 16
 - 17
 - 18
 - 19
 - 20
 - 21
 - 22
 - 23
 - 24
 - 25
 - 26
 - 27
 - 28
 - 29
 - 30
 - 31
 - 32
 - 33
 - 34
 - 35
 - 36
 - 37
 - 38
 - 39
 - 40
 - 41
 - 42
 - 43
 - 44
 - 45
 - 46
 - 47
 - 48
 - 49
 - 50
 - 51
 - 52
 - 53
 - 54
 - 55
 - 56
 - 57
 - 58
 - 59
 - 60
 - 61
 - 62
 - 63
 - 64
 - 65
 - 66
 - 67
 - 68
 - 69
 - 70
 - 71
 - 72
 - 73
 - 74
 - 75
 - 76
 - 77
 - 78
 - 79
 - 80
 - 81
 - 82
 - 83
 - 84
 - 85
 - 86
 - 87
 - 88
 - 89
 - 90
 - 91
 - 92
 - 93
 - 94
 - 95
 - 96
 - 97
 - 98
 - 99
 - 100
 - 101
 - 102
 - 103
 - 104
 - 105
 - 106
 - 107
 - 108
 - 109

Key No.	Parts No.	Description	Key No.	Parts No.	Description
1	090221101	Ass'y, Chassis	58	615212287	Switch, Leaf
2	090221102	Ass'y, Eject Lever	59	090221121	Cover, Dust
3	090226151	Spring, Lever (B)	60	090221122	Light Body, Pilot Lamp
4	090221103	Lever, REC	61	350120006	Pilot Lamp
5	090221104	Lever, Play	62	090221123	Lever (C), Eject
6	090221105	Lever, Brake	63	090226182	Spring (B), Eject Lever
7	090226152	Pad, Brake	64	090221124	Bracket (L), Push Button
8	090226153	Spring, Brake	65	090221125	Bracket (R), Push Button
9	090221106	Arm, Play Idler	66	090221126	Ass'y Cassette Door
10	090226154	Spring, Idler Arm	67	090226182	Spring, Cassette Door
11	090226155	Spring, FF. Tension	68	116210075	Lever, Button
12	090221107	Lever, FF.	69	090226183	Shaft (B), Button
13	090226156	Spring, FF. Lever	70	090227204	Bush, Button
14	090221108	Guide, Cassette	71	090226184	Spring, Cassette Door Up
15	090221109	Lever, REW	72	090221127	Bracket, Damper
16	090226157	Spring, REW Lever	73	090221128	Ass'y, Damper
17	090221110	Ass'y, Pause Lever	74	090221129	Ass'y, Link Door
18	090226158	Spring, Pause Lever	75	090221130	Bracket, Solenoid
19	090221111	Cam Plate (C)	76	240111249	Ass'y, Coil Solenoid
20	090226159	Spring, Cam Plate	77	090226185	Spring, Solenoid
21	615212286	Switch, Leaf	78	090221131	Lever, Auto Stop
22	090221112	Ass'y, Arm Pulley	79	090221132	Bracket, Leaf Switch
23	090226160	Spring, Arm Pulley	80	615212288	Switch, Leaf
24	090221113	Holder (B), Motor	81	090227205	Pad, Brake
25	090226161	Cushion, Motor	82	260101130	Ass'y, DC Motor
26	090227201	Ring, Motor	83	770500079	Washer, PS 1.6 ^φ x3.5 ^φ x0.25 ^t
27	090226162	Pulley, Motor	84	090227206	Washer, Oil Shield
28	090226163	Flywheel (B)	85	770500080	Washer PS 2.1 ^φ x4 ^φ x0.25 ^t
29	090226164	Belt, Drive	86	090227207	Washer, 4.1 ^φ x8 ^φ x0.25 ^t
30	090221114	Bracket, Flywheel	87	090227208	Washer (L), 2 ^φ
31	090227202	Screw, Flywheel and Capstan	88	090227209	Washer (S), 2 ^φ
32	090226165	Idler, FF.	89	090227210	Washer (L), 2.6 ^φ
33	090226166	Ass'y, Reel Take Up	90	090227211	Washer (S), 2.6 ^φ
34	090226167	Ass'y, Reel Supply	91	090227212	Washer (L), 3 ^φ
35	090226168	Spring, Back Tension	92	703202004	Screw, +M2x4 Pan Head
36	090221115	Arm, Pause	93	703202006	Screw, +M2x6 Pan Head
37	090226169	Idler, Play	94	703222603	Screw, +M2.6x3 Pan Head BLK
38	090226170	Bush, Idler	95	703202605	Screw, +M2.6x5 Pan Head
39	090221116	Cam, Pause	96	703203005	Screw, +M3x5 Pan Head
40	090226171	Spring, Pause Cam	97	713202605	Screw, +M2.6x5 W/SP W
41	090226172	Spring, Pack Clamp	98	713202608	Screw, +M2.6x8 W/SP W
42	090221117	Arm, REC Sensor	99	713203005	Screw, +M3x5 W/SP W
43	090226173	Spring, REC Sensor Arm	100	763202604	Screw, +M2.6x4 Tap Tite
44	090221118	Ass'y, Sub Chassis and Studs	101	763202606	Screw, +M2.6x6 Tap Tite
45	090226174	Spacer, Sub Chassis	102	763202608	Screw, +M2.6x8 Tap Tite
46	090227203	Clamp, Cord	103	705002006	Screw, -M2x6 Bind
47	241001124	REC/PB Head	104	723202006	Screw, +M2x6 Tpg
48	241001123	Erase Head	105	770500026	E Ring, 1.5 ^φ
49	090226175	Spring, Azimuth	106	770500027	E Ring, 2.5 ^φ
50	090226176	Spring, Panel Tension	107	770500039	E Ring, 3 ^φ
51	090226177	Spring (L), Panel	108	770500040	E Ring, 4 ^φ
52	090226178	Spring (R), Panel	109	090227215	Spring Pin, 2 ^φ x10
53	090221119	Ass'y, Arm Pinch Roller			
54	090226179	Spring, Pinch Roller			
55	090221120	Bracket, Counter			
56	090226180	Belt, Counter			
57	650901118	Tape Counter			