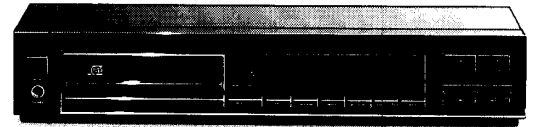


Compact disc player CD582

Service
Service
Service

00B/00R/05R
CD584/00R

Remote control is available under
code number 4822 218 20782



Service Manual

COMPACT
disc
DIGITAL AUDIO

CONTENTS

1. Contents and control buttons
1. Technical specifications
2. Servicing hints, loading and cabinet parts
3. Electrical measurements and adjustments
4. Blockdiagram, panel data and parts list of the main panel
5. Control and display, wiring diagram and electrical parts list
6. Changes

GB

Safety regulations require that the set be restored to its original condition and that parts which are identical with those specified be used.

NL

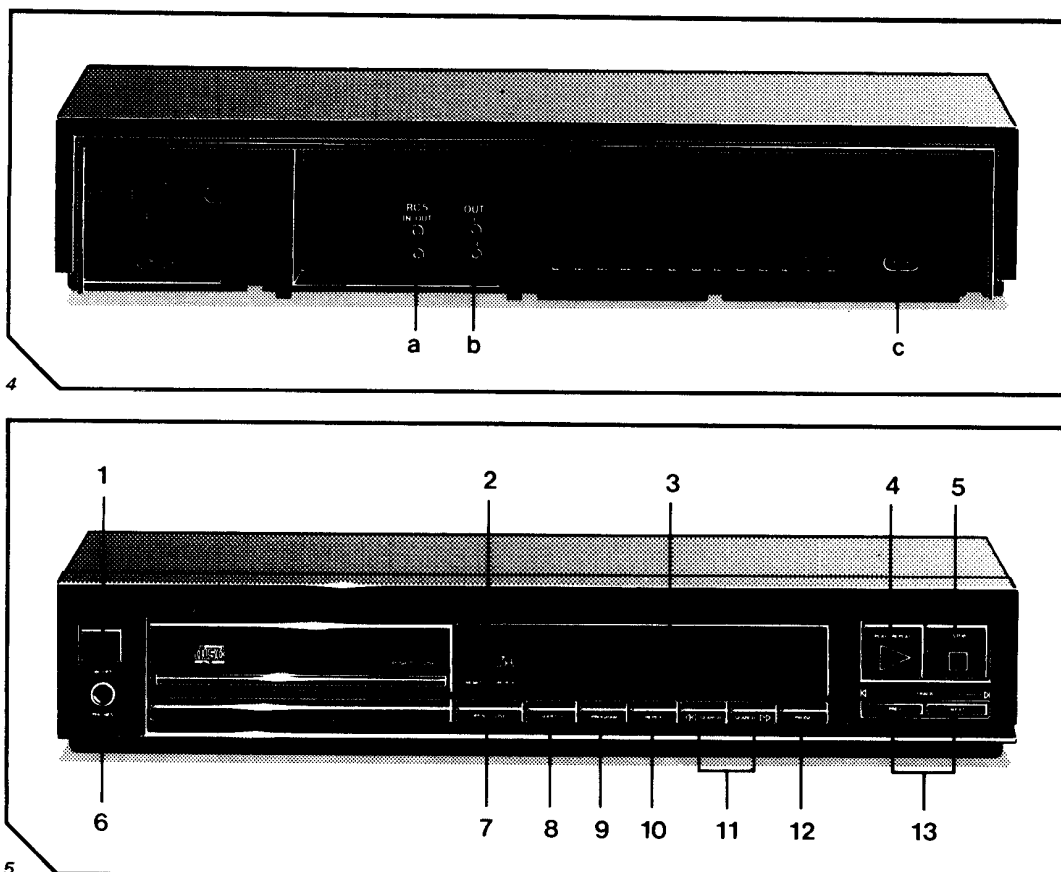
Veiligheidsbepalingen vereisen, dat het apparaat in zijn oorspronkelijke toestand wordt teruggebracht en dat onderdelen, identiek aan de gespecificeerde worden toegepast.

D

Bei jeder Reparatur sind die geltenden Sicherheitsvorschriften zu beachten. Der Originalzustand des Geräts darf nicht verändert werden für Reparaturen sind Original-Ersatzteile zu verwenden.

I

Le norme di sicurezza esigono che l'apparecchio venga rimesso nelle condizioni originali e che siano utilizzati pezzi di ricambio identici a quelli specificati.



43 781 B11

- 1 ON/OFF KEY** key
For switching on and off.
- 2 REMOTE CONTROL** eye
Receives the signals from the remote control.
- 3 DISPLAY**
Informs you about the functioning of the player.
Displays details from the disc contents list.
- 4 PLAY/REPLAY** key
For starting play (PLAY).
For returning to the beginning of a track (REPLAY).
- 5 STOP** key
For stopping play.
For erasing a program.
- 6 PHONES** socket
For connection of headphones.
- 7 OPEN/CLOSE** key
For opening and closing the disc tray.
- 8 SHUFFLE** key
For playing all tracks on a disc in random order.
- 9 PROGRAM** key
For storing track numbers in a program.
For erasing track numbers from a program.
For checking the program.
- 10 REPEAT** key
For repeating a disc or a program.
- 11 << SEARCH** and **SEARCH >>** keys
For fast search to a particular passage during play.
('<<' backwards, '>>' forwards.)
- 12 PAUSE** key
For briefly interrupting play.
For holding play at the start of a disc, track or passage.
- 13 PREV TRACK NEXT** keys
for selecting a previous or a later track during play.
For selecting the track number you want play to begin with.
For selecting track numbers when compiling a program.
('PREV' from high to low, 'NEXT' from low to high.)
- a RC/ IN/OUT:** for a remote control system.
Use this connection for:
- Connecting up the equipment when you are incorporating the player in a HiFi system with its own remote control system.
 - Connecting the remote control receiver EM 2200, available as an accessory, if the siting of the player prevents its REMOTE CONTROL-eye from receiving the signals from the remote control directly.
- b OUT L R:** for the connecting cable to the amplifier.

TECHNICAL DATA**General**

1. Mains voltage : 110, 127, 220, 240 Volt (+/- 10%)
2. Mains frequency : 50-60 Hz
3. Mains voltage selection : By soldering (220/240 Volt-version)
By changing transformer (110/127 Volt-version)
4. Power consumption mains, operated : 15 W

External

The apparatus is prepared for remote control by means of a 2 cinch connector.

Specification: V-in Low: from -2,0 V to +1,6 V
V-in High: from +3 V to +7,5 V
R-in: from 47 k to 68 k

Line output

1. Number of channels : 2
2. Output voltage : 2 Vrms +/- 0,2 dB
3. Unbalance Left-Right : max. +/- 0,2 dB
4. Output resistance : 200 Ohm
5. Nominal load impedance : 100 kOhm // 100 pF
6. Amplitude linearity : max. +/- 0,1 dB from 20 Hz to 20 kHz into nominal load
7. Phase non-linearity : max. +/- 1,0° from 20 Hz to 20 kHz into nominal load
8. Signal to noise ratio : min 96 dB from 20 Hz to 20 kHz into nominal load
9. Dynamic range : min 90 dB from 20 Hz to 20 kHz into nominal load
10. Total harmonic distortion + noise : min -90 dB from 20 Hz to 20 kHz into nominal load
11. Intermodulation distortion : max. 0.003% (min -90 dB) from 20 Hz to 20 kHz into nominal load
12. Out-band attenuation : min 60 dB above 24,1 kHz from 20 Hz to 20 kHz into nominal load
13. Channel separation : min 93 dB from 20 Hz to 20 kHz into nominal load
14. Muting during random access : min 90 dB from 20 Hz to 20 kHz into nominal load
15. Automatic switched de-emphasis with time constants 15/50 us

Headphone (fixed)

1. Output voltage : Max. 2 Vrms +/- 1 dB
2. Unbalance Left-right : Max. +/- 0,5 dB
3. Output resistance : 150 Ohm
4. Load impedance range : 32 Ohm tp 600 kOhm
5. Output power : Max. 30 mW into 32 Ohm load
Max. 50 mW into 150 Ohm load
Max. 30 mW into 600 Ohm load
6. Amplitude linearity : Max. +/- 0,1 dB from 20 Hz to 20 kHz into 600 Ohm
7. Phase non-linearity : Max. +/-° from 20 Hz to 20 kHz into 600 Ohm
8. Signal to noise ratio : Min 90 dB from 20 Hz to 20 kHz into 600 Ohm
9. Dynamic range : Min 90 dB from 20 Hz to 20 kHz into 600 Ohm
10. Total harmonic distortion + noise : Max 0,005% (min-86 dB) from 20 Hz to kHz
11. Intermodulation distortion : max 0,005% (min-86 dB) from 20 Hz to 20 kHz
12. Channel separation : min 65 dB from 20 Hz to 20 kHz into 600 Ohm

Dimensions and weight

1. Place and height of feet acc. to Philips specification
2. Apparatus tray closed WxDxM : 420 x 288 x 85 mm
3. Apparatus tray open WxDxM : 420 x 423 x 85 mm
4. Weight 3,5 kg

GB WARNING

All ICs and many other semi-conductors are susceptible to electrostatic discharges (ESD). Careless handling during repair can reduce life drastically.

When repairing, make sure that you are connected with the same potential as the mass of the set via a wrist wrap with resistance. Keep components and tools also at this potential.

F ATTENTION

Tous les IC et beaucoup d'autres semi-conducteurs sont sensibles aux décharges statiques (ESD). Leur longévité pourrait être considérablement écourtée par le fait qu'aucune précaution n'est prise à leur manipulation. Lors de réparations, s'assurer de bien être relié au même potentiel que la masse de l'appareil et enfilez le bracelet muni d'une résistance de sécurité. Veiller à ce que les composants ainsi que les outils que l'on utilise soient également à ce potentiel.

D WARNUNG

Alle ICs und viele andere Halbleiter sind empfindlich gegenüber elektrostatischen Entladungen (ESD). Unsorgfältige Behandlung im Reparaturfall kann die Lebensdauer drastisch reduzieren. Veranlassen Sie, dass Sie im Reparaturfall über ein Pulsarmband mit Widerstand verbunden sind mit dem gleichen Potential wie die Masse des Gerätes. Bauteile und Hilfsmittel auch auf dieses gleiche Potential halten.

**NL WAARSCHUWING**

Alle IC's en vele andere halfgeleiders zijn gevoelig voor electrostatische ontladingen (ESD). Onzorgvuldig behandelen tijdens reparatie kan de levensduur drastisch doen verminderen. Zorg ervoor dat u tijdens reparatie via een polsband met weerstand verbonden bent met hetzelfde potentiaal als de massa van het apparaat. Houd componenten en hulpmiddelen ook op ditzelfde potentiaal.

I AVVERTIMENTO

Tutti IC e parecchi semi-conduttori sono sensibili alle scariche statiche (ESD). La loro longevità potrebbe essere fortemente ridotta in caso di non osservazione della più grande cauzione alla loro manipolazione. Durante le riparazioni occorre quindi essere collegato allo stesso potenziale che quello della massa dell'apparecchio tramite un braccialetto a resistenza. Assicurarsi che i componenti e anche gli utensili con quali si lavora siano anche a questo potenziale.

SERVICING HINTS

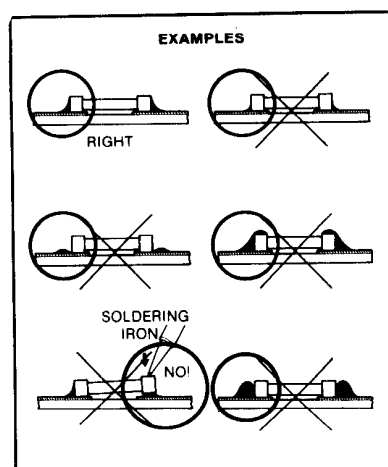
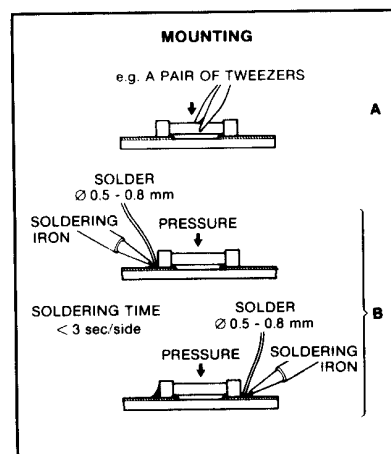
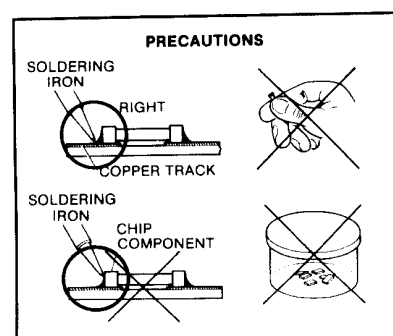
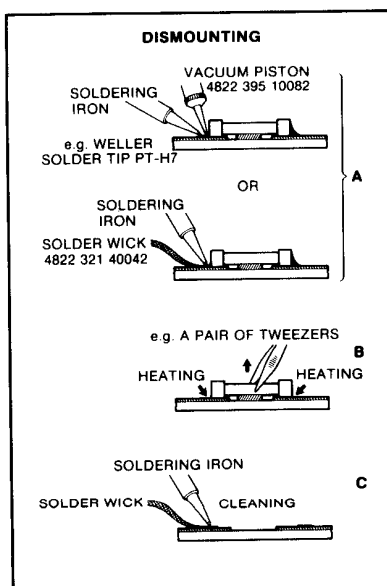
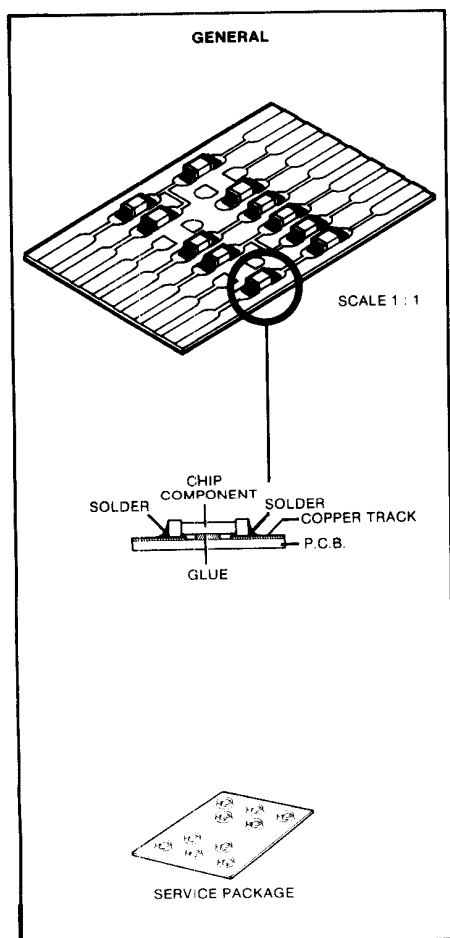
In the set chip components have been applied.
For disassembly and assembly of chip components see the figure below.

The disc should always rest properly on the turntable.
To achieve this a disc hold-down has been mounted in a bracket of the tray mechanism.
If the tray mechanism has to be disassembled for servicing, one or more than one separate disc hold-downs should be used.
The set can function normally then.
Code number of the disc hold-down is 4822 462 50383.

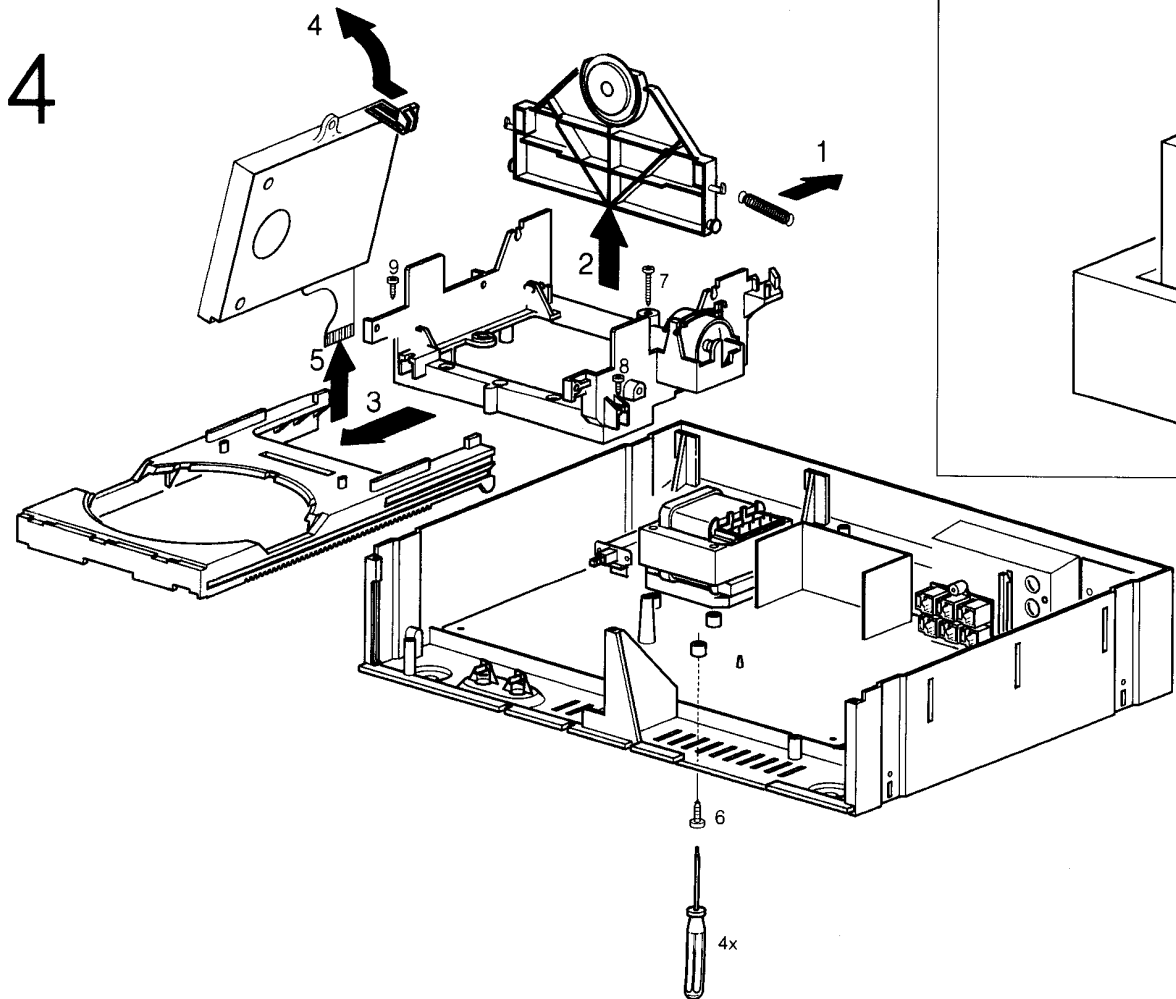
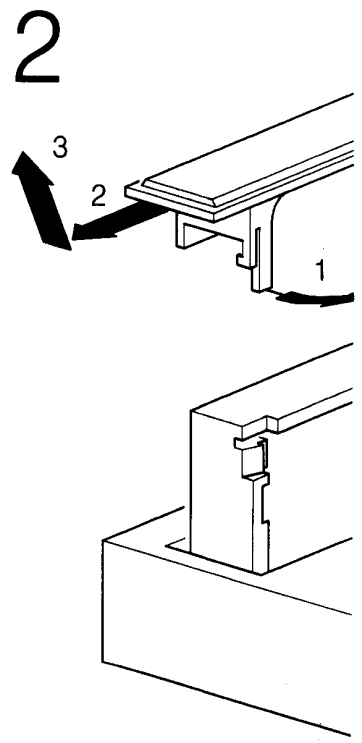
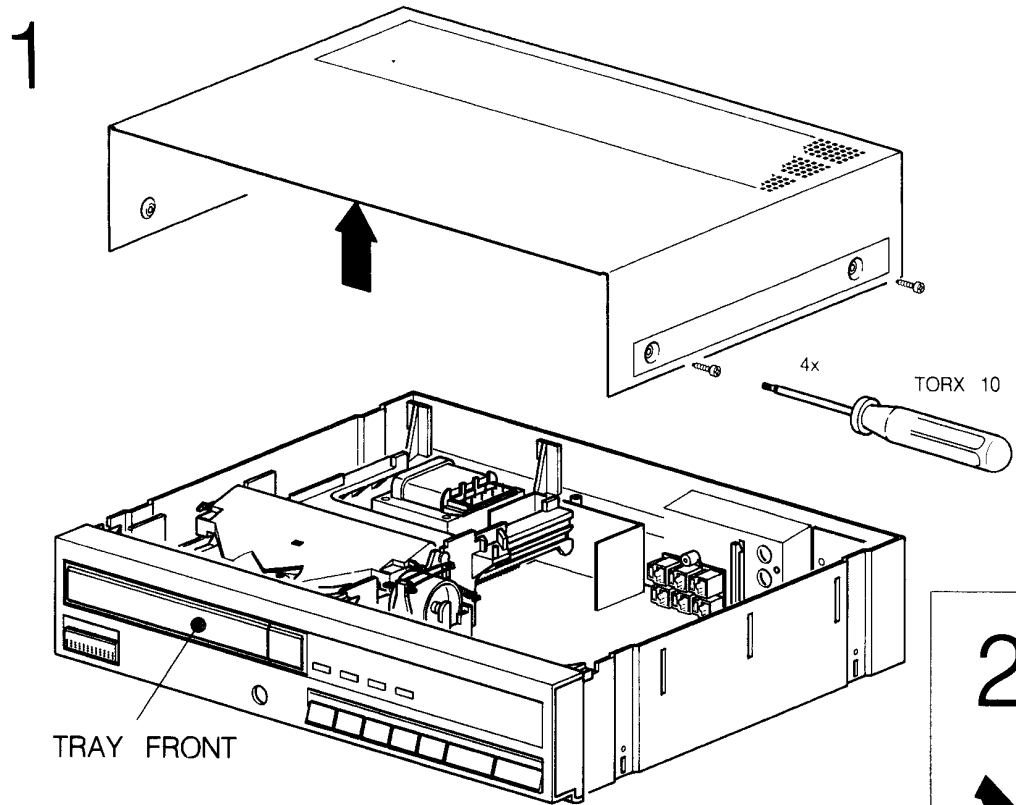
When the tray mechanism has been disassembled the tray switch must be activated in order to ensure normal operation.

SERVICE TOOLS

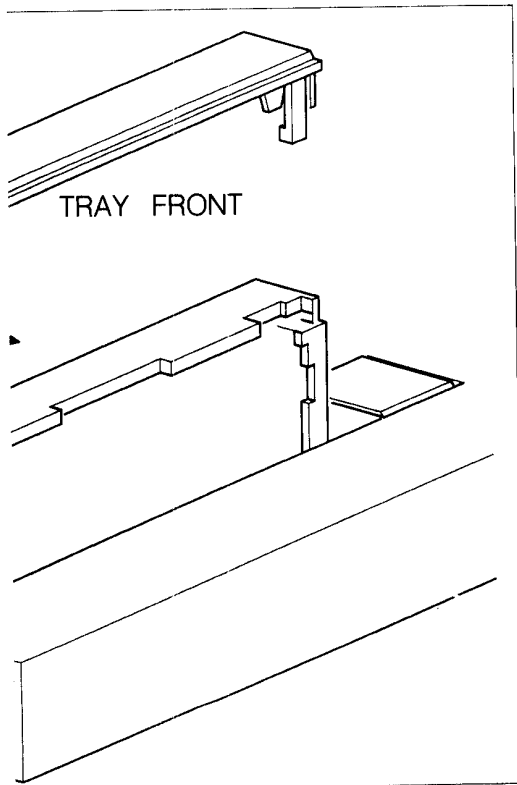
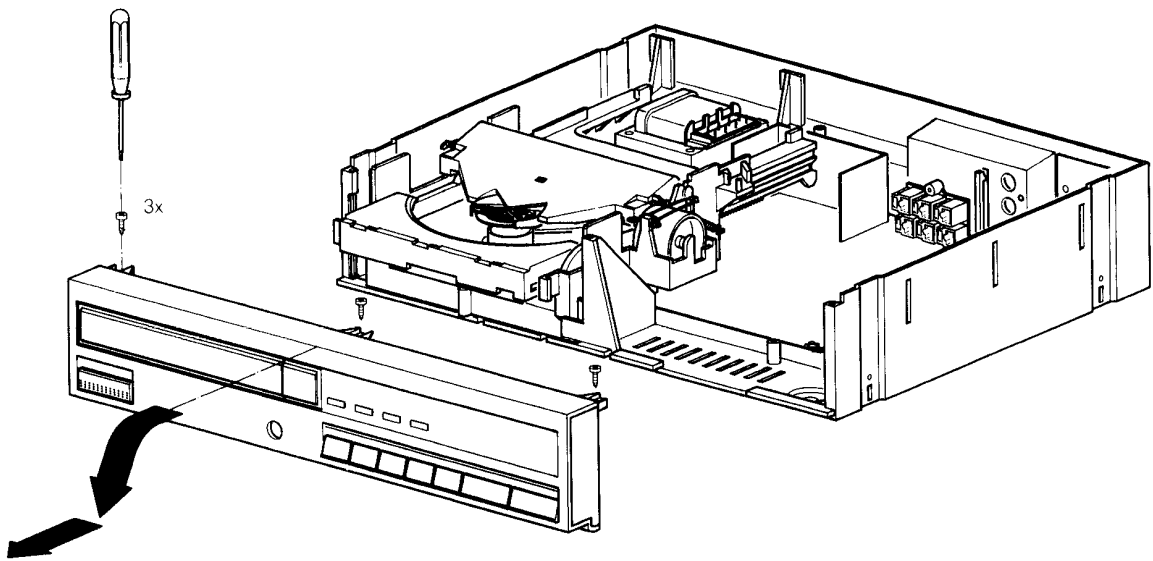
Audio signals disc 1	4822 397 30185
Disc without errors (test disc 5) + disc with DO errors, black spots and fingerprints (test disc 5A)	4822 397 30096
Disc 65 min 1 kHz without pause	4822 397 30155
Torx screwdrivers	
Set (straight)	4822 395 50145
Set (square)	4822 395 50132
13th order filter	4822 395 30204
Service cable (14p)	4822 321 21598
Service flexfoil (14p)	4822 322 40066
Service connector (14p)	4822 267 50676



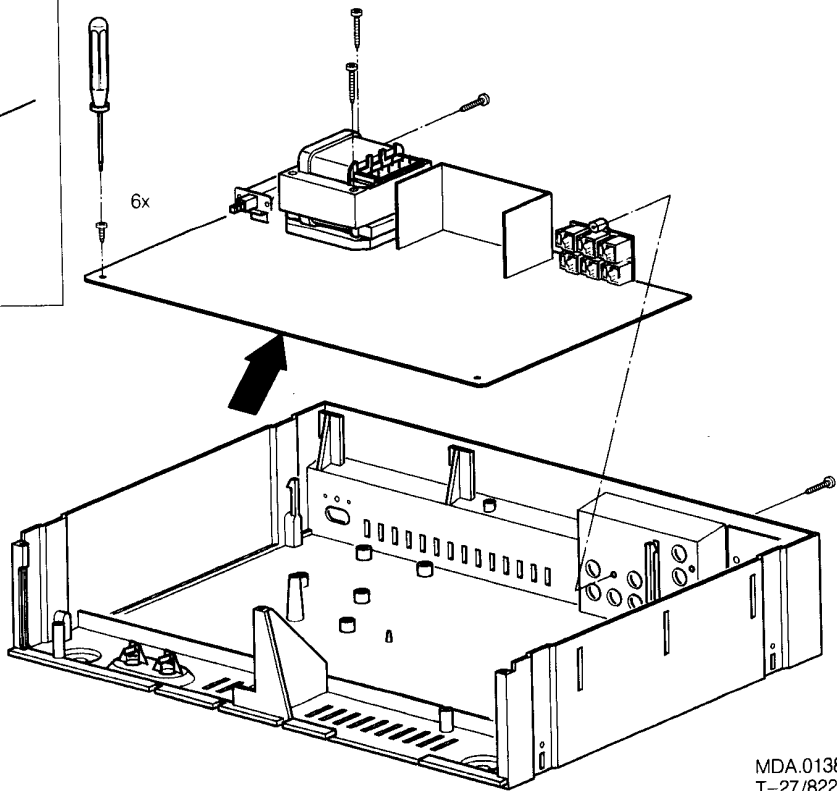
DISASSEMBLY OF THE CABINET AND LOADING



3



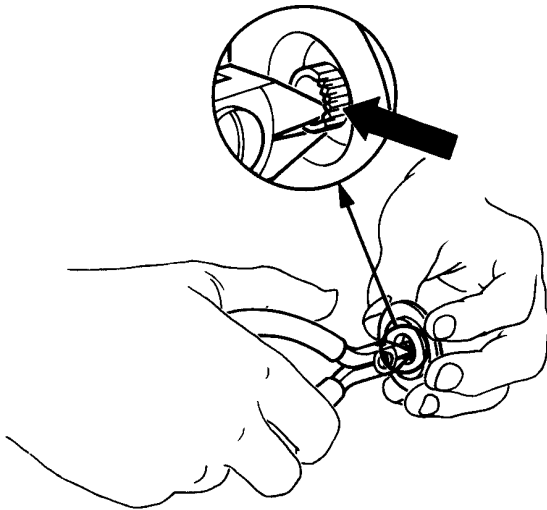
5



MDA.01382
T-27/822

2-3-a

SERVICE DISC-HOLDDOWN

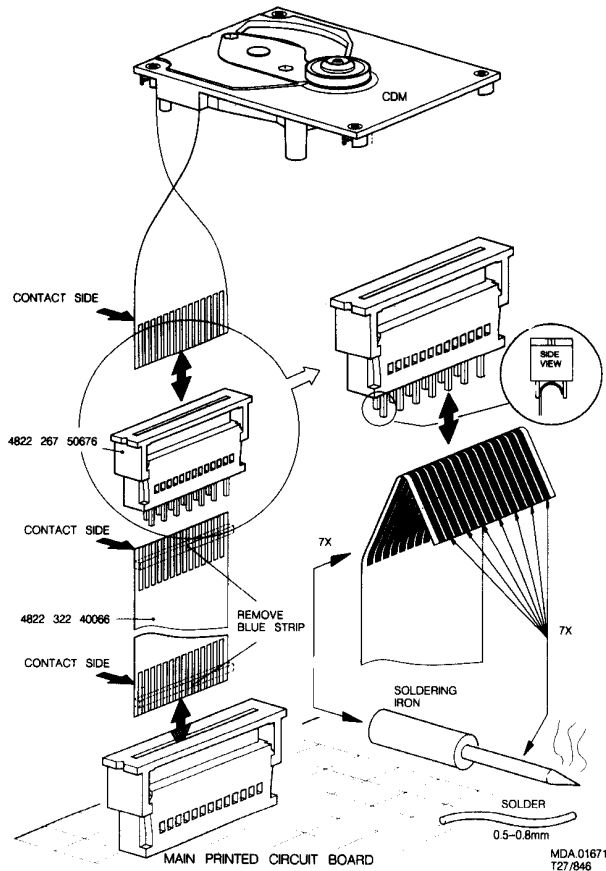


42 565 A12

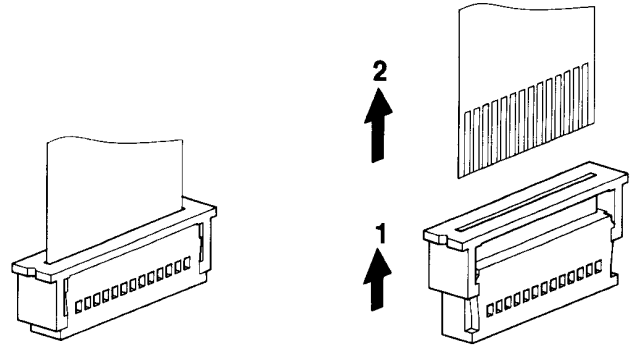
Compose a service disc hold-down in the following way

- Cut in the most inner ring of a disc hold-down (4822 462 50383) with small and sharp nippers, See fig. above.
- Enlarge the diameter of the innermost ring slightly with the hind part of a pencil or ballpoint, so that it jams onto the turntable with sufficient force.
- If the jamming force decreases after certain time of use, the diameter has to be enlarged with a pencil or ballpoint again.

CDM EXTENSION CABLE

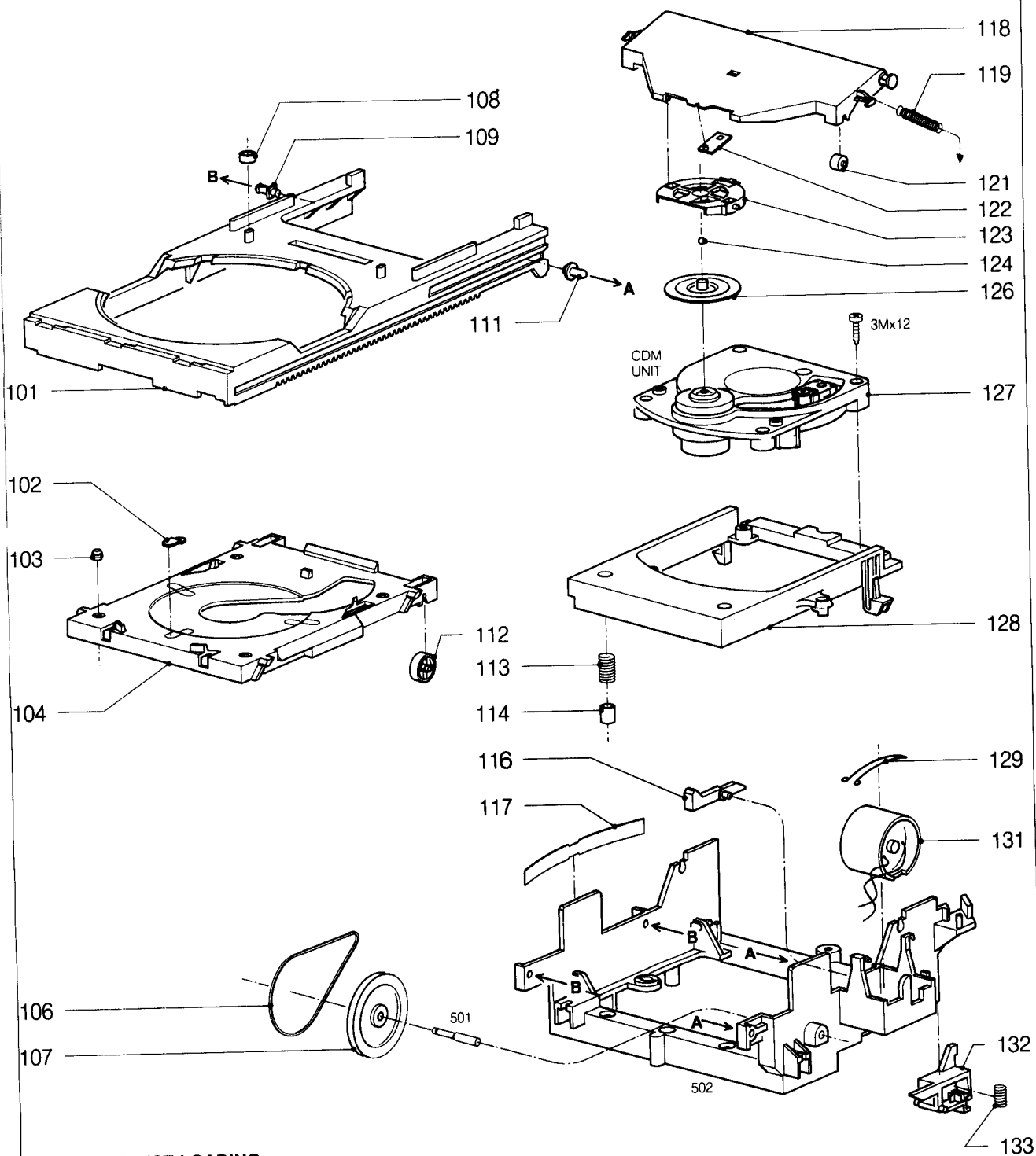


DEMOUNTING FOIL CDM



MDA 01408
T28/822

LOADING



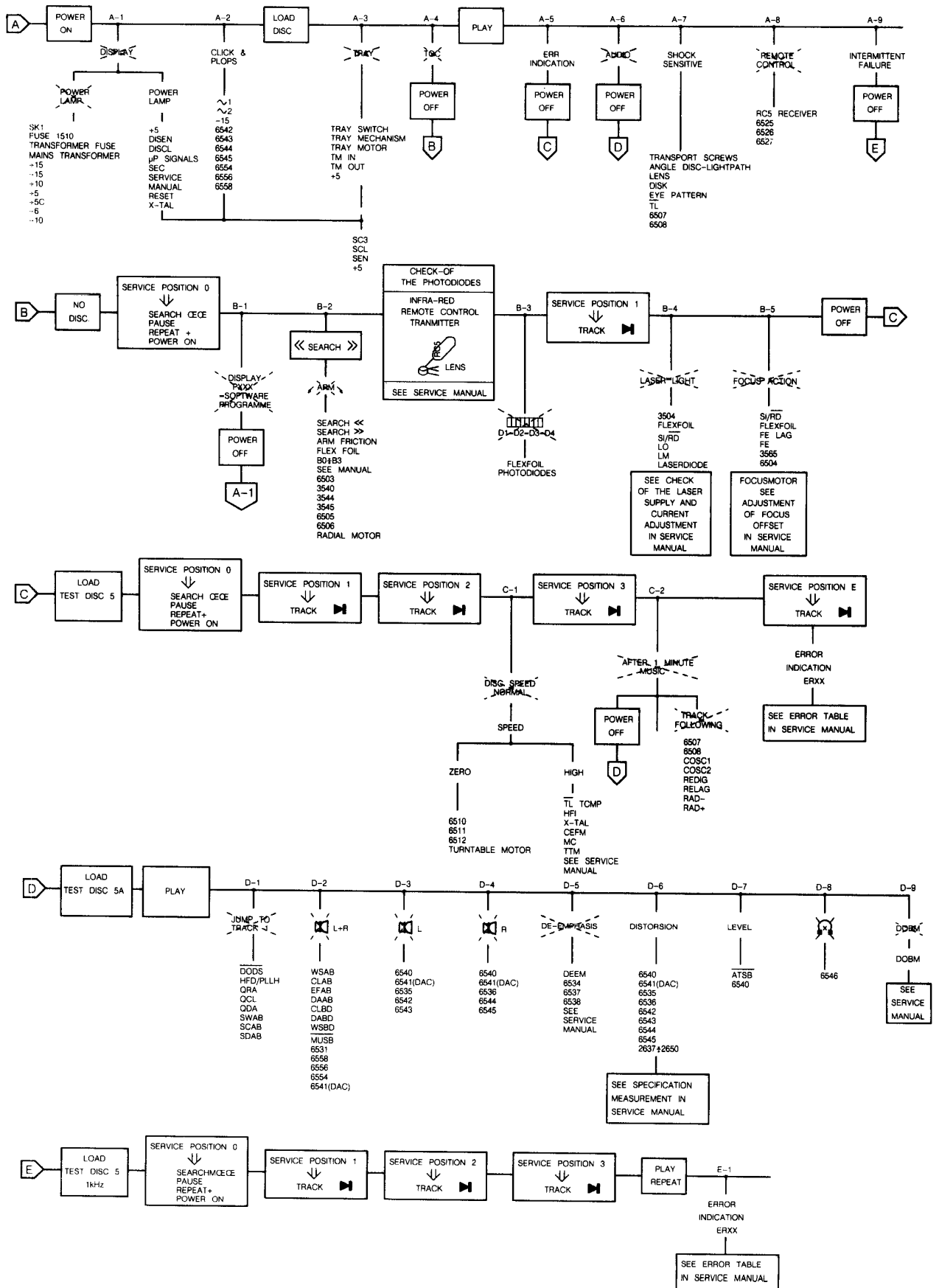
PARTS LIST LOADING

101	4822 444 50603	113	4822 492 51902	126	4822 530 80503
102	4822 325 50176	114	4822 466 61587	127	4822 691 30209
103	4822 325 50177	116	4822 402 61107	128	4822 402 61196
104	4822 466 92251	117	4822 492 63659	129	4822 492 63746
106	4822 358 10115	118	4822 444 60568	131	4822 361 20998
107	4822 522 32359	119	4822 492 32883	132	4822 402 50244
108	4822 532 51518	121	4822 528 90639	133	4822 492 51935
109	4822 402 61081	122	4822 466 92257		
111	4822 402 61132	123	4822 402 61207		
112	4822 528 90638	124	4822 520 40177		

EVA.00594
821/T19

3-1-a

ELECTRICAL MEASUREMENTS AND ADJUSTMENTS



PRS 00316
T-04 835

A1
uP-SIGNALS

SIGNAL	MODE				REMARKS
RESET	POWER ON	100		PULS "HIGH"	
X-TAL	STAND BY	101		4MHz	
TRAY IN	OPEN/CLOSE	83			HIGH WHEN TRAY IS CLOSING
TRAY OUT	OPEN/CLOSE	83A			LOW WHEN TRAY IS OPENING
ATSB	DISC SEARCH	89		"LOW"	
MUTE	STAND BY PLAY	67		"HIGH"	

MDA 01389
T-08 823

B2
B0,B1,B2,B3 SIGNALS

SIGNAL	MODE				REMARKS
B0	SERVICE POSITION 0 OR 1; SEARCH	36		"LOW"	
	SERVICE POSITION 0 OR 1; SEARCH	36		"LOW"	
B1	SERVICE POSITION 0 OR 1; SEARCH	34		"HIGH"	
	SERVICE POSITION 0 OR 1; SEARCH	34		"HIGH"	
B2	SERVICE POSITION 0 OR 1; SEARCH	33		"LOW"	
	SERVICE POSITION 0 OR 1; SEARCH	33		"HIGH"	
B3	SERVICE POSITION 0 OR 1; SEARCH	32		"HIGH"	
	SERVICE POSITION 0 OR 1; SEARCH	32		"HIGH"	

MDA 01386
T-08 823

B3
CHECK OF THE PHOTODIODES

STEP	SIGNAL	MODE					REMARKS
1	—	POWER ON		—	—	SEE DRAWING 38314A12	SIGNAL DEPENDS ON DISTANCE LENS REMOTE CONTROL




MDA 01378
T-08 824

B4
CHECK OF LASER SUPPLY (WITH DEMOUNTED CDM AND ADDITIONAL CIRCUIT)

STEP	SIGNAL	MODE					REMARKS
1	LO	SERV. POS. 2		—	$1.8 < V < 3$	—	
	LM			—	$170 < mV < 220$	—	
2	LO	SERV. POS. 2		—	$1.8 < V < 3$	—	
	LM			—	$170 < mV < 220$	—	
3	LO	POWER ON		—	$0V \pm 0.2V$	—	NO LIGHT




MDA 01379
T-08 824

D5
DEEM CIRCUIT

SIGNAL	MODE				REMARKS
DEEM	TEST DISC 5A TRACK 14: PLAY TRACK 15: PLAY	84		"LOW" "HIGH"	SEE TESTPOINT 92 AND 91 ON DEEM CIRCUIT
TESTPOINT 92	TEST DISC 5A TRACK 14	92		LF SIGNAL	
TESTPOINT 92	TEST DISC 5A TRACK 15	92		NO SIGNAL	
TESTPOINT 91	TEST DISC 5A TRACK 14	91		LF SIGNAL	
TESTPOINT 91	TEST DISC 5A TRACK 15	91		NO SIGNAL	




MDA 01363
T-08 825

D6
SPECIFICATIONS MEASUREMENT

SIGNAL	MODE				REMARKS
BU2-L	TEST DISC 3, PLAY, TOTAL HARMONIC DISTORSION	FILTER OUTPUT	0.003%		SEE DRAWING: 30459A12
BU2-R	TEST DISC 3, PLAY, TOTAL HARMONIC DISTORSION	FILTER OUTPUT	0.003%		SEE DRAWING: 30459A12
BU2-L	TEST DISC 3, PLAY, SIGNAL-TO-NOISE RATIO	FILTER OUTPUT	96dB		SEE DRAWING: 30459A12
BU2-R	TEST DISC 3, PLAY, SIGNAL-TO-NOISE RATIO	FILTER OUTPUT	96dB		SEE DRAWING: 30459A12

MDA 01365
T-08 823

D9
DOBM DIGITAL OUTPUT

SIGNAL	MODE				REMARKS
DOBM	TEST DISC 5A, PLAY	88			SEE DRAWING: MDA 00238

MDA 01391
T-08 823

ERROR TABLE

System errors

Indi- cation	Cause	Check
Er 01	No RD	Si, Sc, RD, Photodiode signal processor
Er 02	No TL pulse at start-up	TL, HF, Photodiode signal processor, CD disc present
Er 03	No lead-in track found	CD disc, radial arm position, REdig, Radial error processor
Er 04	Too many TL pulses in PLAY	CD disc, HFD
Er 05	TL pulse > 50 msec. in PLAY	CD disc, HF in, photodiodes
Er 06	No TL pulse within 0.5 sec. during track jumping	RE-lag circuit
Er 07	Subcoding error during PLAY	HF
Er 08	TOC error	CD disc, turntable motor control, radial arm position

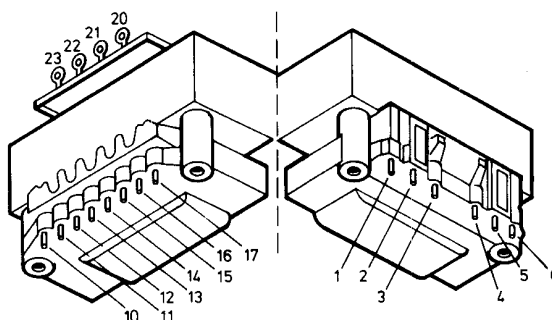
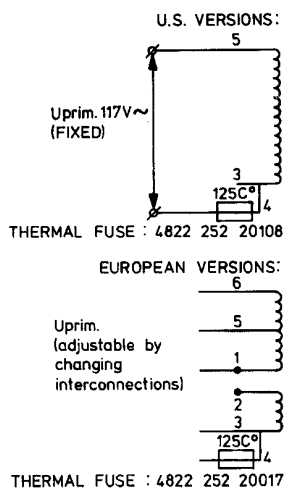
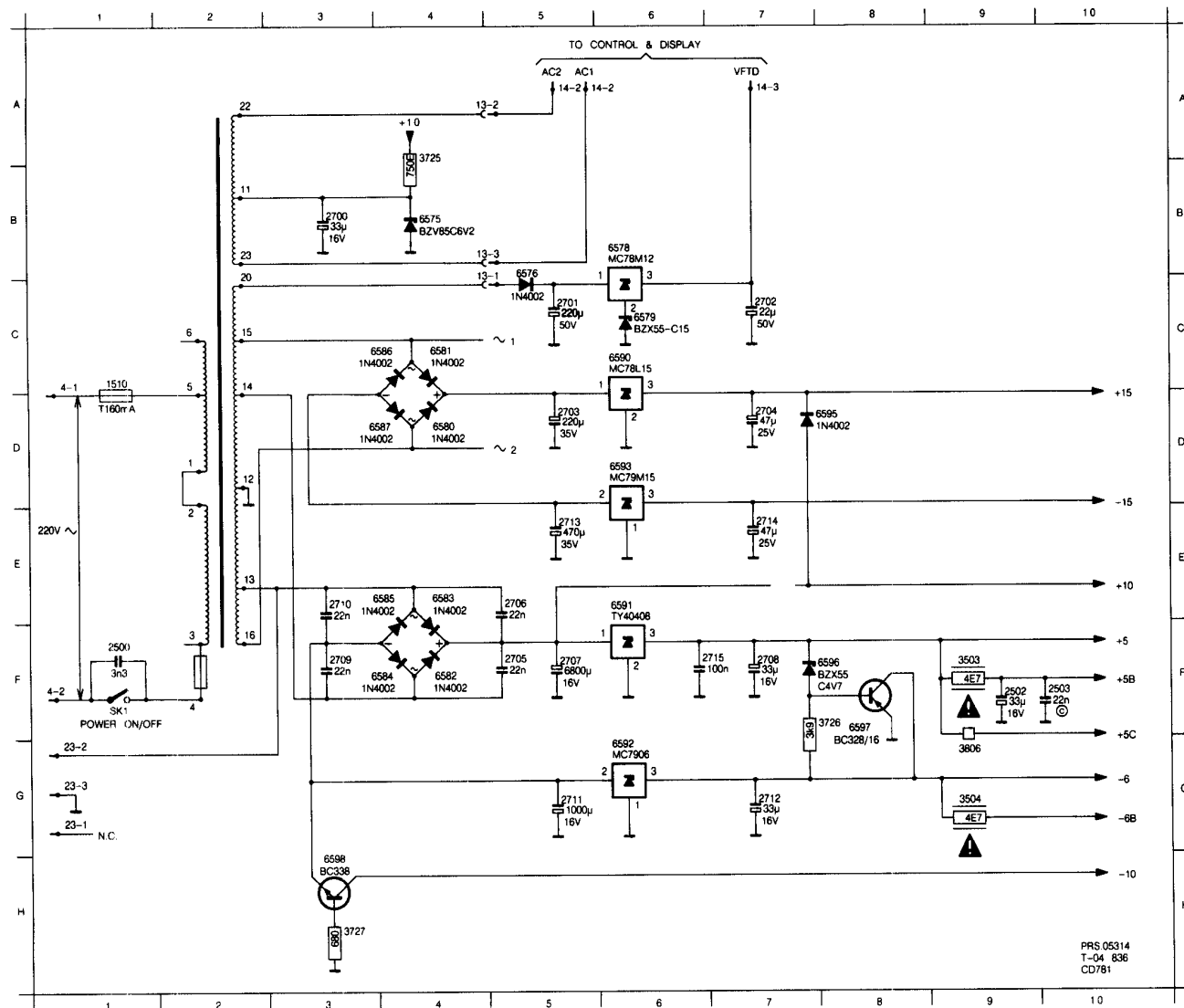
Operating errors

- Er 30 "NEXT" key operated during the last track, with "REPEAT" turned off.
- Er 31 "PREVIOUS" key operated during the first track, with "REPEAT" turned off.
- Er 32 Index selected before a track has been selected.
- Er 33 The selected index number does not exist on this disc.
- Er 34 Programme survey requested; no programme present.
- Er 35 The programme memory is full.
- Er 36 The programmed track is not present on this CD disc.
- Er 37 The selected track is not present on this CD disc.
- Er 60 End of the "FAST FORWARD" search motion.
- Er 61 End of the "FAST REVERSE" search motion.

4-1-a

POWER SUPPLY

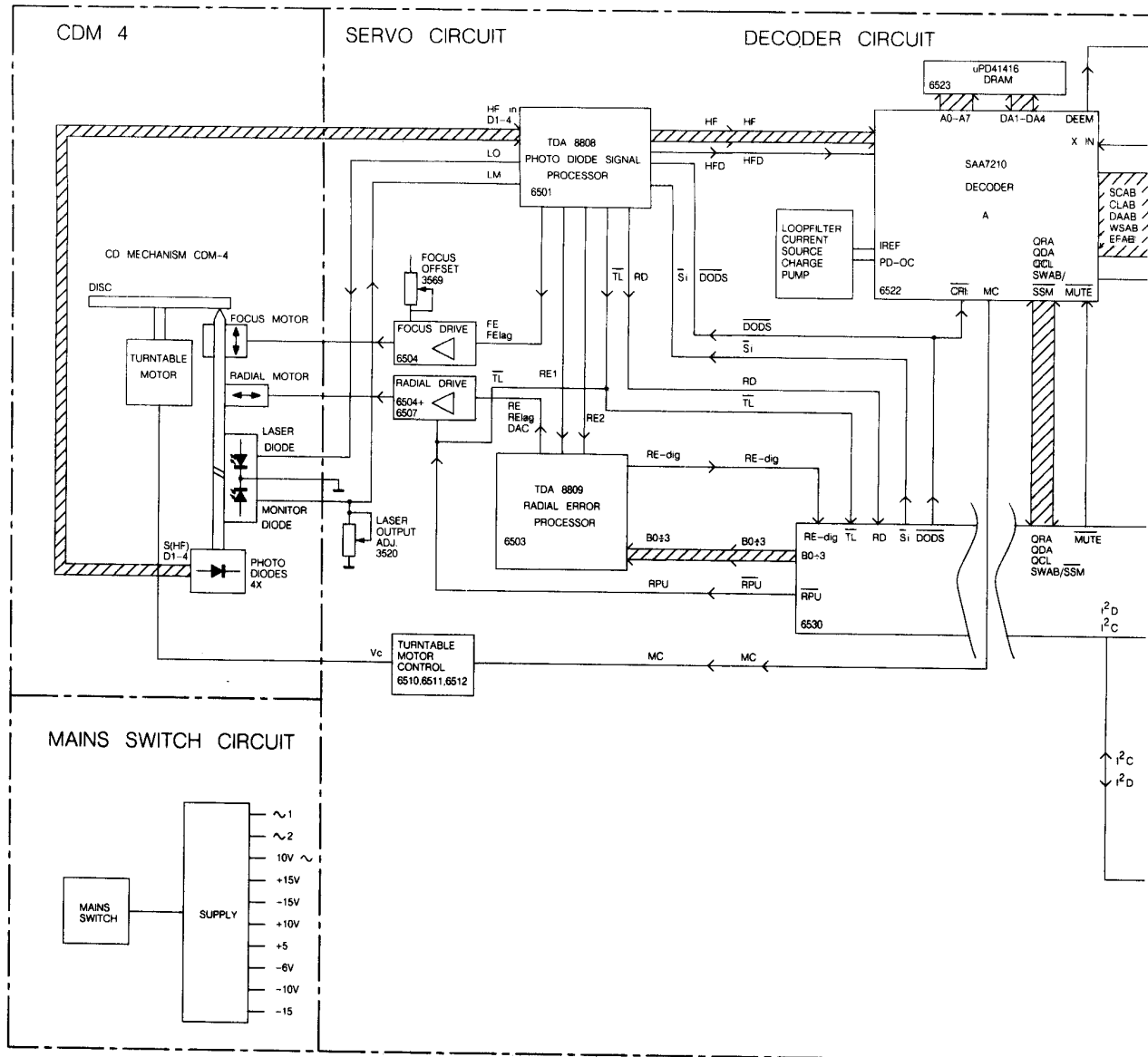
1510	C 1	2700	B 3	2704	D 7	2708	F 7	2712	G 7	3503	F 9	3727	H 3	6578	B 6	6582	F 4	6586	C 4	6592	G 6	6597	F 8
2500	F 1	2701	C 5	2705	F 5	2709	F 3	2713	E 5	3504	G 9	3806	G 9	6579	C 6	6583	E 4	6587	D 4	6593	D 6	6598	H 3
2502	F 9	2702	C 7	2706	E 5	2710	E 3	2714	E 7	3725	A 4	6575	B 4	6580	D 4	6584	F 4	6588	C 6	6595	D 8	SK1	F 1
2503	F 10	2703	D 5	2707	F 5	2711	G 5	2715	F 7	3726	F 8	6576	B 5	6581	C 4	6585	E 4	6591	E 6	6596	F 8		



Uprim. (V) ~	Winding	Inter-connect
110	4-1	3-1/5-2
127	4-6	3-1/5-2
220	4-5	1-2
240	4-6	1-2

44 241 A11

BLOCK DIAGRAM

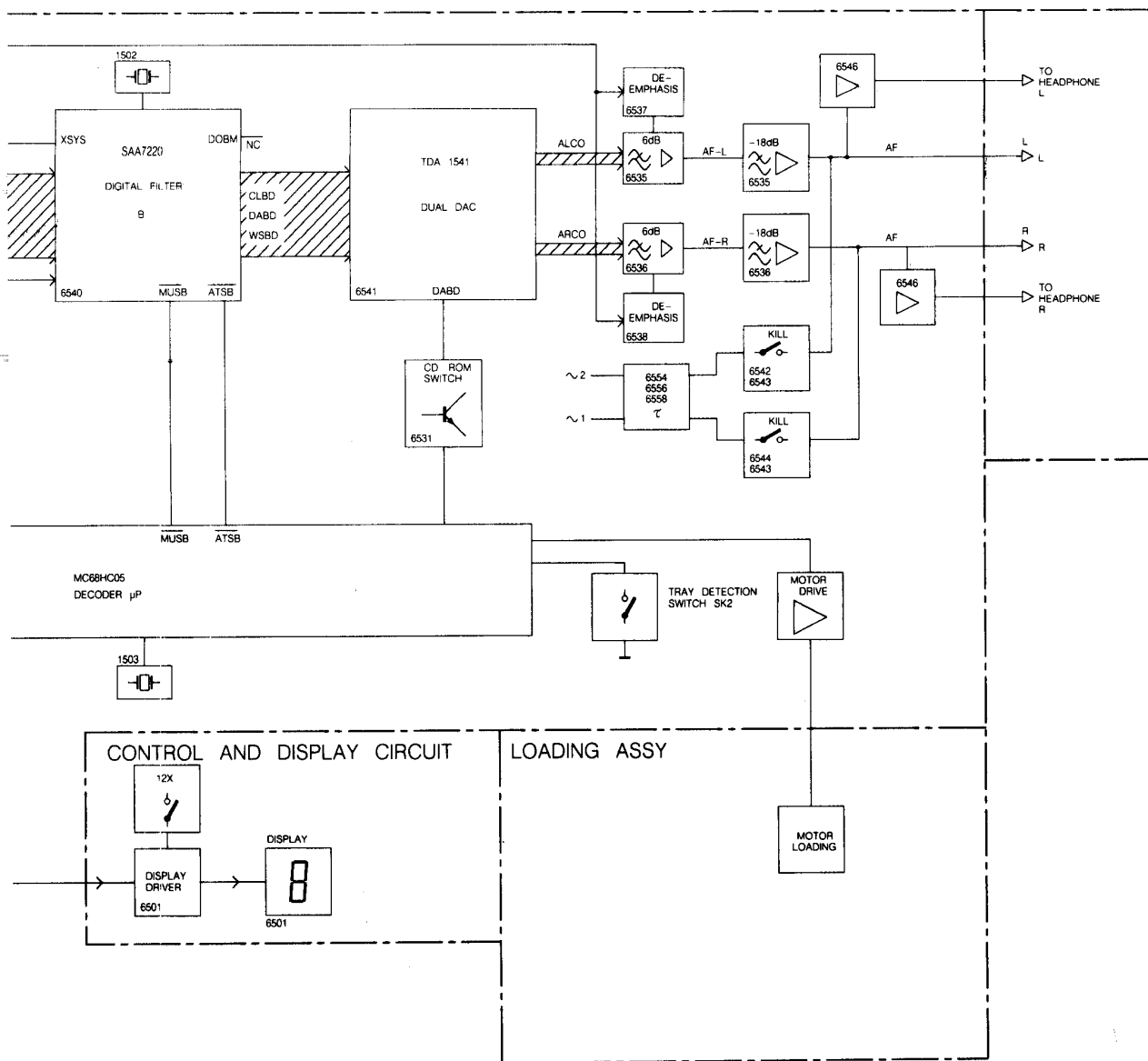


AGC
 B0-B3
 BEQ
 BGC
 Cosc1
 Cosc2
 DEC
 DET
 DIV4
 DODS
 D1+4
 FE
 FE lag
 HF
 HFD
 HF-in
 HF-out
 LM
 LO
 MC
 offset IN
 offset OUT
 PLLH
 RADout
 RE

- Automatic Gain Control
- Control bits for radial circuit
- Equalizer reference current input
- DC and LF gain control reference input
- Capacitor wobble oscillator
- Capacitor wobble oscillator
- Decoupling input of inkruat bypass
- HF detector voltage input
- Divide by 4 input
- Drop out detector suppression
- Photodiode currents
- Focus error signal
- Focus error signal for LAG network
- HF output for DEMOD
- HF detector output for DEMOD
- HF current input to HF amplifier
- HF amplifier and equalizer voltage output
- Laser monitor diode input
- Laser amplifier current output
- Motor control signal
- Offset control input
- Offset control output
- PLL on hold output
- output of RE2-RE1 input
- Radial error signal (Amplified RE₂-RE₁ currents)

Rosc
 Rwob
 RE1
 RE2
 RE dig
 RE lag
 Sc
 Si/RD
 TL
 TTM-
 TTM+
 Vext-
 Vext+

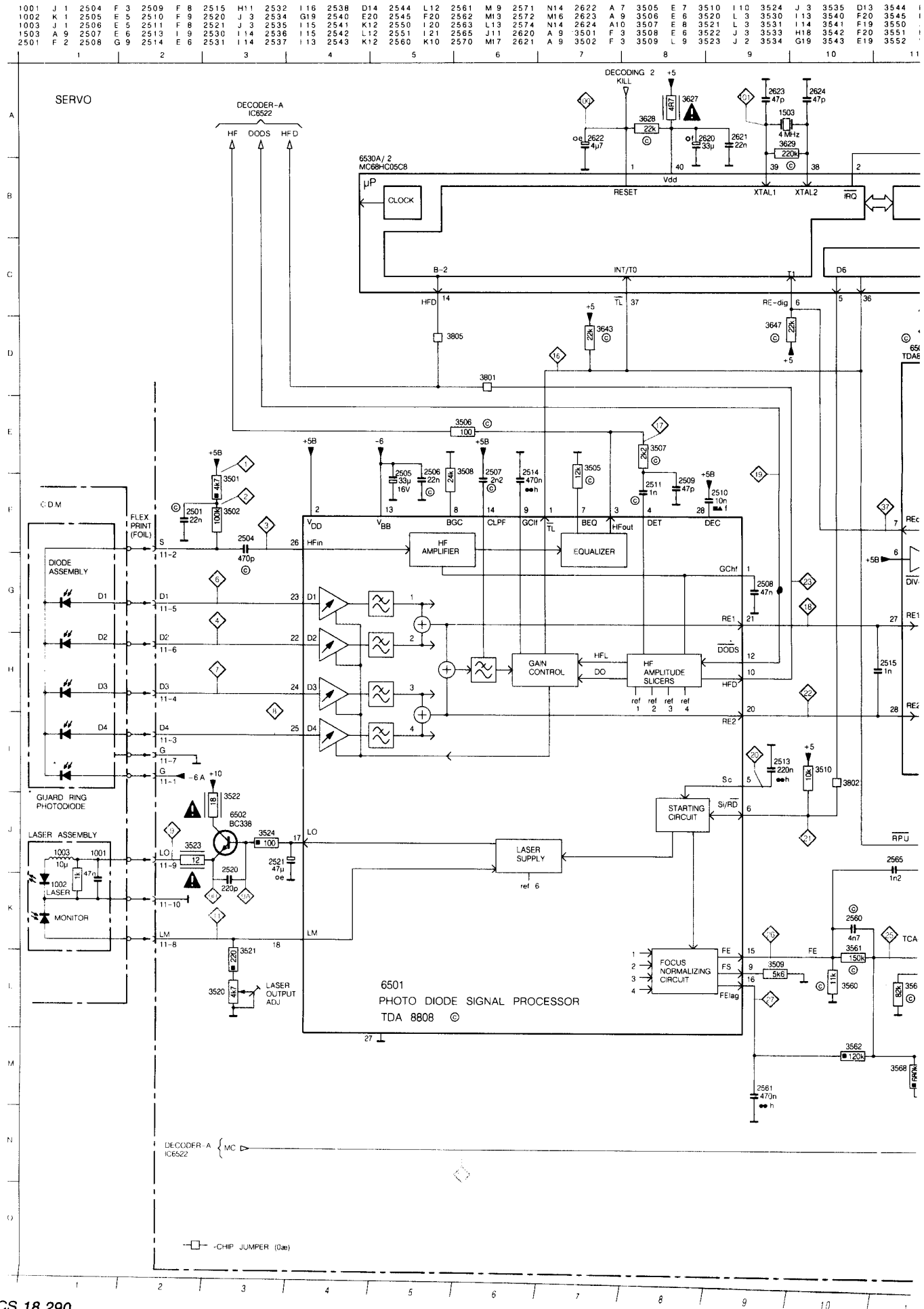
- Resistor wobble oscillator
- Wobble generator input
- Radial error signal 1 (summation of amplified currents D₃ and D₄)
- Radial error signal 2 (summation of amplified currents D₁ and D₂)
- Radial error digital
- Radial error signal for LAG network
- Starting up capacitor input
- On/off control for laser supply and focus circuit. Ready signal, Starting up procedure succesful.
- Track loss output signal
- Control voltage for turntable motor
- Control voltage for turntable motor
- Supply connection
- Supply connection



PRS 05151
102-823

<u>ATSB</u>	- Attenuation of Audio level in Search position (Cueing)
<u>CD ROM Switch</u>	- Digital Data information on disc signal
<u>CEFM</u>	- Clock Eight-to-Fourteen Modulator
<u>CLAB</u>	- Clock signal Decoder-A to Filter-B
<u>CLBD</u>	- Clock signal Filter-B to DAC
<u>CREF</u>	- Reference Current
<u>CRI</u>	- Counter Reset Inhibit
<u>DAAB</u>	- Data signal Decoder-A to Filter-B
<u>DABD</u>	- Data signal Filter-B to DAC
<u>DEEM</u>	- Deemphasis
<u>DOBM</u>	- Digital out signal
<u>EFAB</u>	- Error flag Decoder-A to Filter-B
<u>MUTE</u>	- Mute signal

<u>MUSB</u>	- Soft Mute signal
<u>PD/OC</u>	- Phase detector - oscillator control
<u>QCL</u>	- Q-channel Clock signal
<u>QDA</u>	- Q-channel Data signal
<u>QRA</u>	- Q-channel Request Acknowledge
<u>SCAB</u>	- Subcode clock Decoder-A to Filter-B
<u>SDAB</u>	- Subcode data Decoder-A to Filter-B
<u>SWAB/SSM</u>	- Subcode Word/Start-stop motor signal
<u>WSAB</u>	- Word select Decoder-A to Filter-B
<u>WSBD</u>	- Word Select Filter-B to DAC
<u>XIN</u>	- Oscillator signal in Decoder-A
<u>XSYS</u>	- Oscillator signal out Filter-B



	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	110	111	112	113	114	115	116	117	118	119	120	121	122	123	124	125	126	127	128	129	130	131	132	133	134	135	136	137	138	139	140	141	142	143	144	145	146	147	148	149	150	151	152	153	154	155	156	157	158	159	160	161	162	163	164	165	166	167	168	169	170	171	172	173	174	175	176	177	178	179	180	181	182	183	184	185	186	187	188	189	190	191	192	193	194	195	196	197	198	199	200	201	202	203	204	205	206	207	208	209	210	211	212	213	214	215	216	217	218	219	220	221	222	223	224	225	226	227	228	229	230	231	232	233	234	235	236	237	238	239	240	241	242	243	244	245	246	247	248	249	250	251	252	253	254	255	256	257	258	259	260	261	262	263	264	265	266	267	268	269	270	271	272	273	274	275	276	277	278	279	280	281	282	283	284	285	286	287	288	289	290	291	292	293	294	295	296	297	298	299	300	301	302	303	304	305	306	307	308	309	310	311	312	313	314	315	316	317	318	319	320	321	322	323	324	325	326	327	328	329	330	331	332	333	334	335	336	337	338	339	340	341	342	343	344	345	346	347	348	349	350	351	352	353	354	355	356	357	358	359	360	361	362	363	364	365	366	367	368	369	370	371	372	373	374	375	376	377	378	379	380	381	382	383	384	385	386	387	388	389	390	391	392	393	394	395	396	397	398	399	400	401	402	403	404	405	406	407	408	409	410	411	412	413	414	415	416	417	418	419	420	421	422	423	424	425	426	427	428	429	430	431	432	433	434	435	436	437	438	439	440	441	442	443	444	445	446	447	448	449	450	451	452	453	454	455	456	457	458	459	460	461	462	463	464	465	466	467	468	469	470	471	472	473	474	475	476	477	478	479	480	481	482	483	484	485	486	487	488	489	490	491	492	493	494	495	496	497	498	499	500	501	502	503	504	505	506	507	508	509	510	511	512	513	514	515	516	517	518	519	520	521	522	523	524	525	526	527	528	529	530	531	532	533	534	535	536	537	538	539	540	541	542	543	544	545	546	547	548	549	550	551	552	553	554	555	556	557	558	559	560	561	562	563	564	565	566	567	568	569	570	571	572	573	574	575	576	577	578	579	580	581	582	583	584	585	586	587	588	589	590	591	592	593	594	595	596	597	598	599	600	601	602	603	604	605	606	607	608	609	610	611	612	613	614	615	616	617	618	619	620	621	622	623	624	625	626	627	628	629	630	631	632	633	634	635	636	637	638	639	640	641	642	643	644	645	646	647	648	649	650	651	652	653	654	655	656	657	658	659	660	661	662	663	664	665	666	667	668	669	670	671	672	673	674	675	676	677	678	679	680	681	682	683	684	685	686	687	688	689	690	691	692	693	694	695	696	697	698	699	700	701	702	703	704	705	706	707	708	709	710	711	712	713	714	715	716	717	718	719	720	721	722	723	724	725	726	727	728	729	730	731	732	733	734	735	736	737	738	739	740	741	742	743	744	745	746	747	748	749	750	751	752	753	754	755	756	757	758	759	760	761	762	763	764	765	766	767	768	769	770	771	772	773	774	775	776	777	778	779	780	781	782	783	784	785	786	787	788	789	790	791	792	793	794	795	796	797	798	799	800	801	802	803	804	805	806	807	808	809	810	811	812	813	814	815	816	817	818	819	820	821	822	823	824	825	826	827	828	829	830	831	832	833	834	835	836	837	838	839	840	841	842	843	844	845	846	847	848	849	850	851	852	853	854	855	856	857	858	859	860	861	862	863	864	865	866	867	868	869	870	871	872	873	874	875	876	877	878	879	880	881	882	883	884	885	886	887	888	889	890	891	892	893	894	895	896	897	898	899	900	901	902	903	904	905	906	907	908	909	910	911	912	913	914	915	916	917	918	919	920	921	922	923	924	925	926	927	928	929	930	931	932	933	934	935	936	937	938	939	940	941	942	943	944	945	946	947	948	949	950	951	952	953	954	955	956	957	958	959	960	961	962	963	964	965	966	967	968	969	970	971	972	973	974	975	976	977	978	979	980	981	982	983	984	985	986	987	988	989	990	991	992	993	994	995	996	997	998	999	1000
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