

COMPACT DISC PLAYER

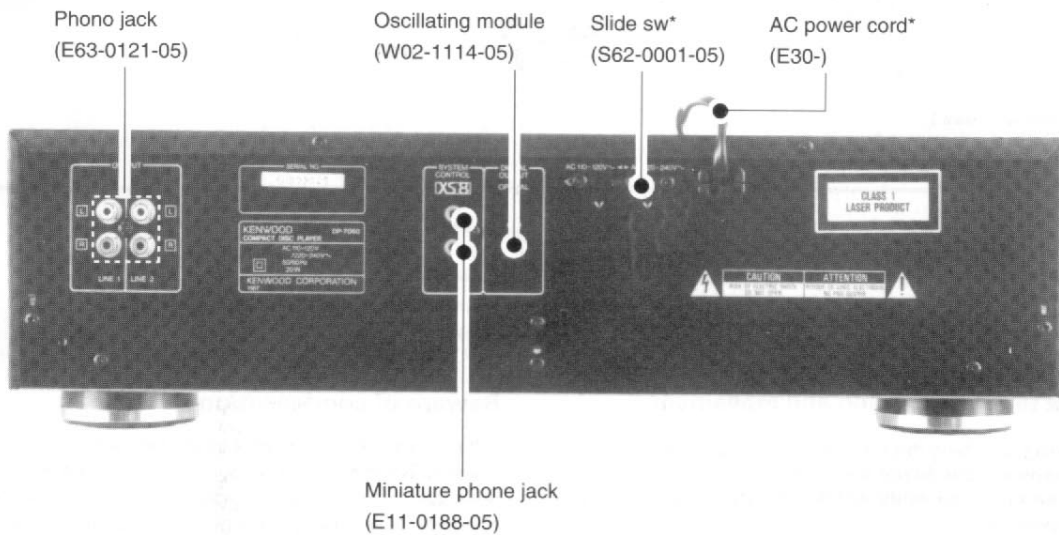
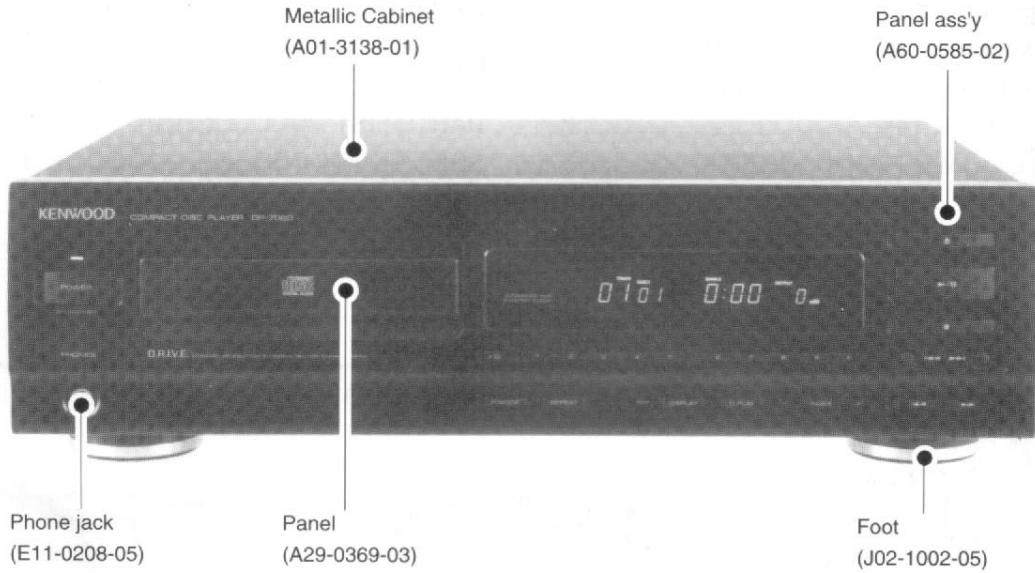
DP-7060

SERVICE MANUAL

KENWOOD

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B51-4938-00 (K) 2155



In compliance with Federal Regulations, following are reproductions of labels on, or inside the product relating to laser product safety.

KENWOOD -Corp. certifies this equipment conforms to DHHS Regulations No. 21 CFR 1040. 10, Chapter 1, Subchapter J.

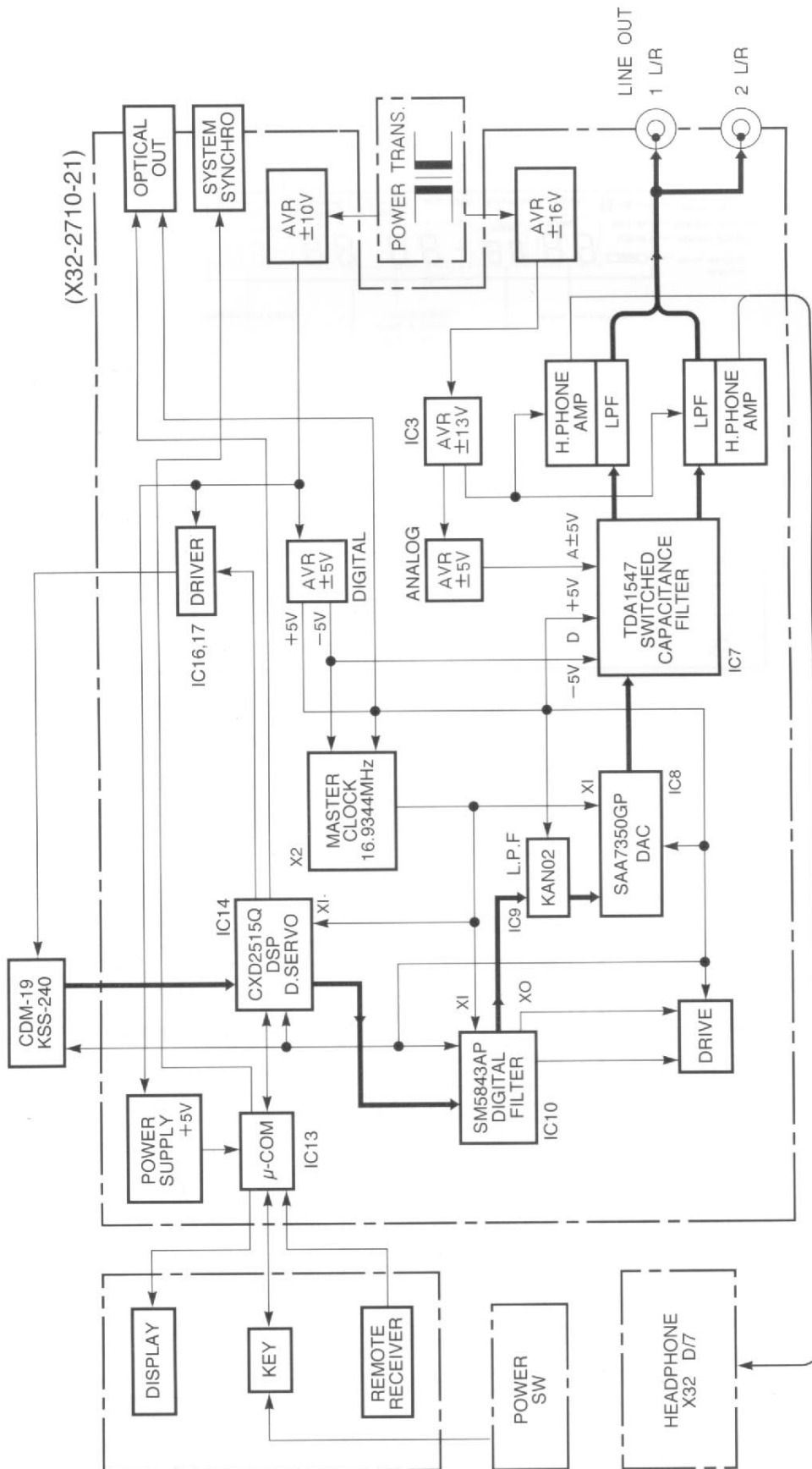
DANGER : Laser radiation when open and interlock defeated. AVOID DIRECT EXPOSURE TO BEAM

*Refer to parts list on page 28



DP-7060

BLOCK DIAGRAM



DP-7060

ADJUSTMENT

Test Mode

Setting the test mode

This microprocessor built this unit can be put to TEST MODE by just short-circuiting the test pins (#1 and #1) of main unit.

1-2. Key and functions valid in test mode

NO.	Input key	Function	Track No. display
1	PLAY/PAUSE (▶/)	(1) Focusing servoON (2) Tracking servoON (3) Feed servoON	TRACK NO. 05 ↓ Displayed for a few seconds after completion (1), (2) and (3). ↓ Time. (Play mark), and Disc Track No. are displayed.
2	STOP (■)	(1) Focusing servoOFF (2) Tracking servoOFF (3) Feed servoOFF	*See below
3	UP (▶▶)	Turns all FL display lamps ON.	TRACK NO. 88
4	DOWN (◀◀)	Turns all FL display lamps OFF.	TRACK NO. 88 TRACK NO. is lighted.

*TRACK NO.



ADJUSTMENT-FREE

This device(CXD2515) has AVERAGE and AUTO GAIN CONTROL circuitry in its as DP-7060 is adjustment-free.

Please confirm the self-check value on display as follows and dc voltage in schematic diagram before replacing pickup.

SELF-CHECK VALUE TABLE

	DISPLAY VALUE
FOCUS GAIN (FG)	18<FG<57
TRACKING GAIN (TG)	19<TG<68
CENTER VOLTAGE (VC)	25<VC<75
FOCUS ERROR BALANCE (FE)	25<FE<75
RATIO FREQUENCY (RF)	57<RF<66

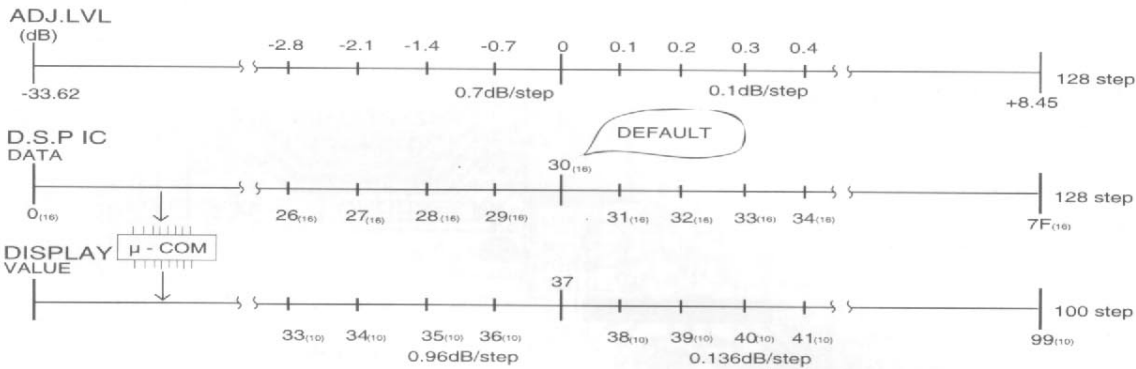
These value is by test disk KTD-02, YEDS-18, and TCD781.

PGM in the display is blink if not adjust. Please check circuit.

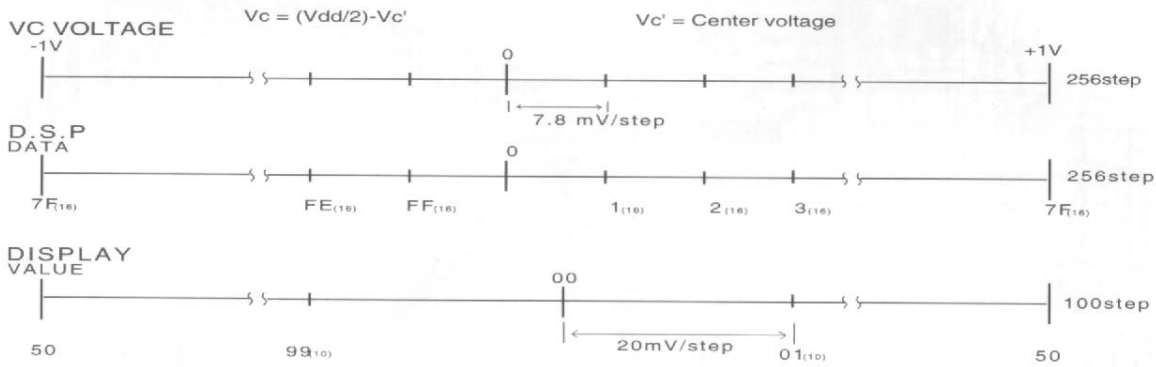
ADJUSTMENT

SELF-CHECK VALUE DISPLAY PROCESS

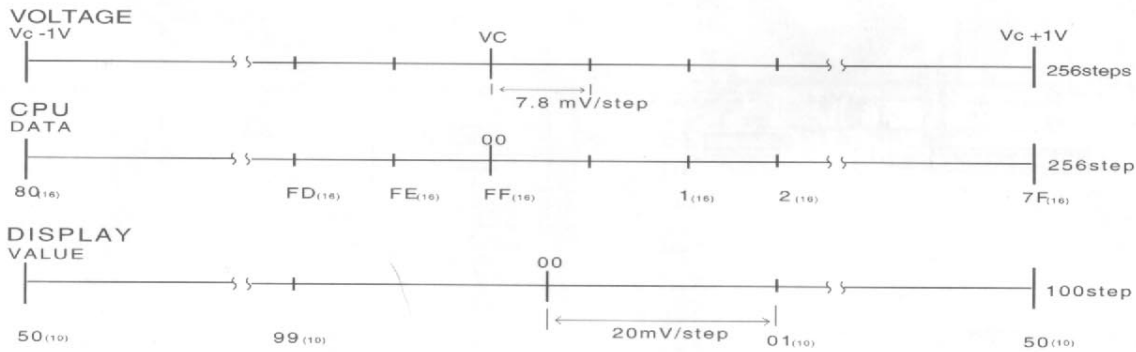
① FG/TG



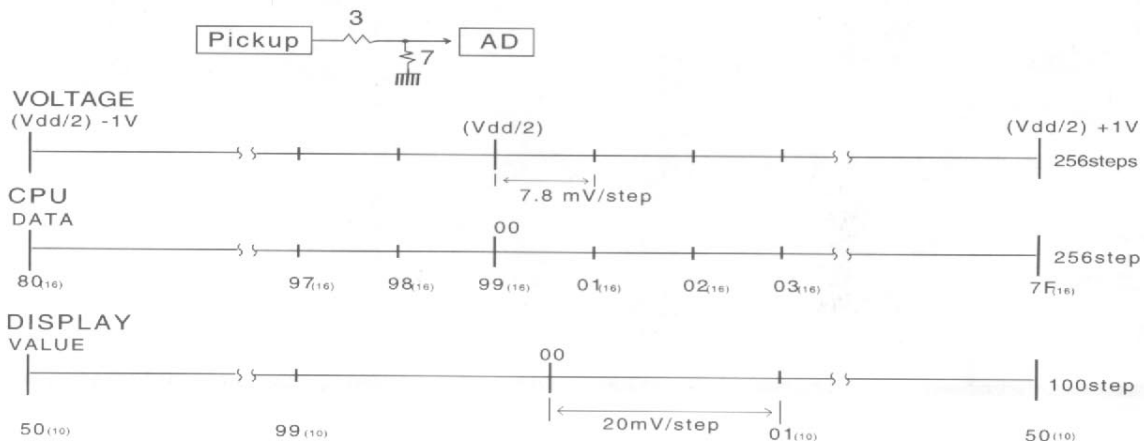
② VC



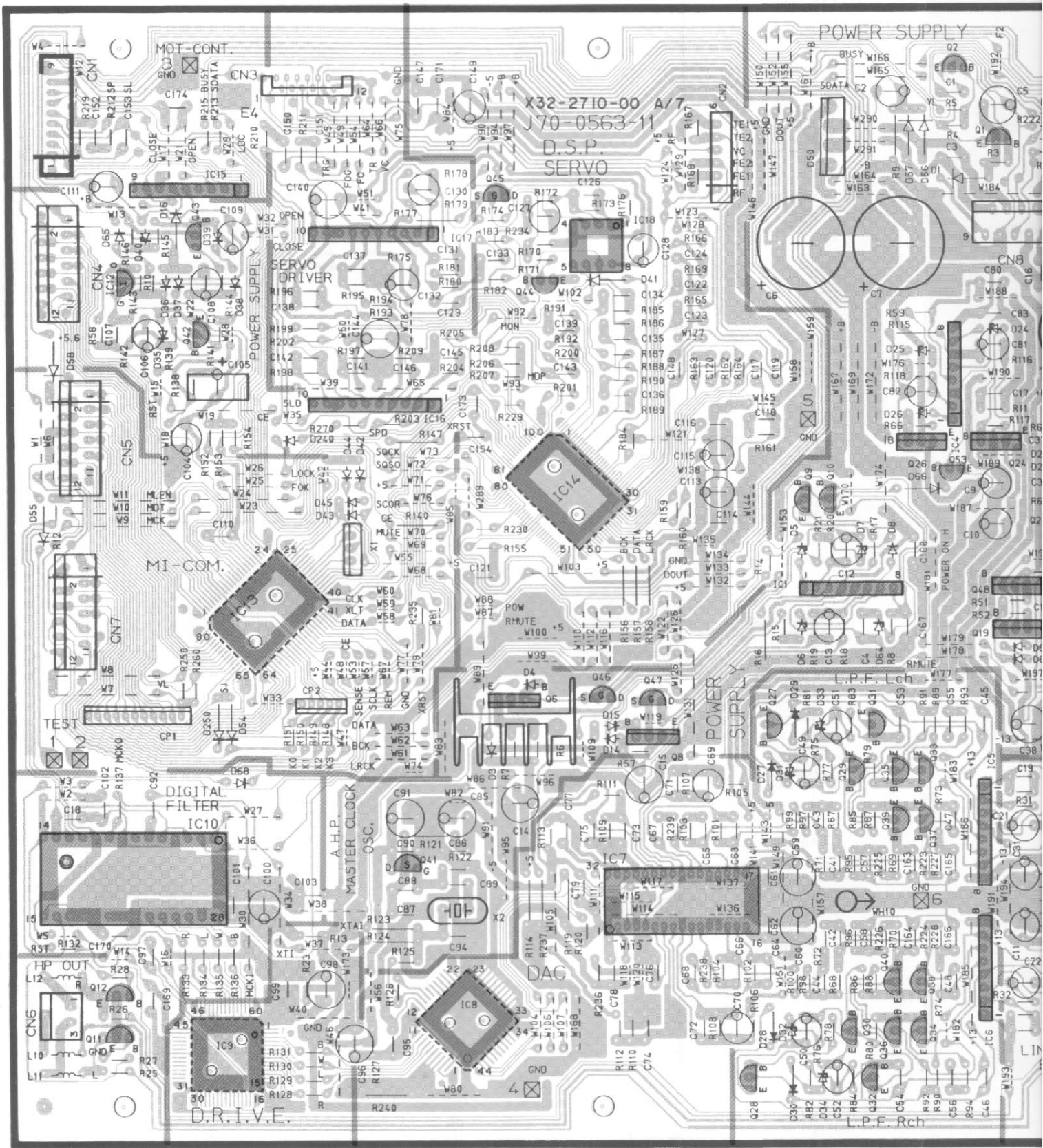
③ FE



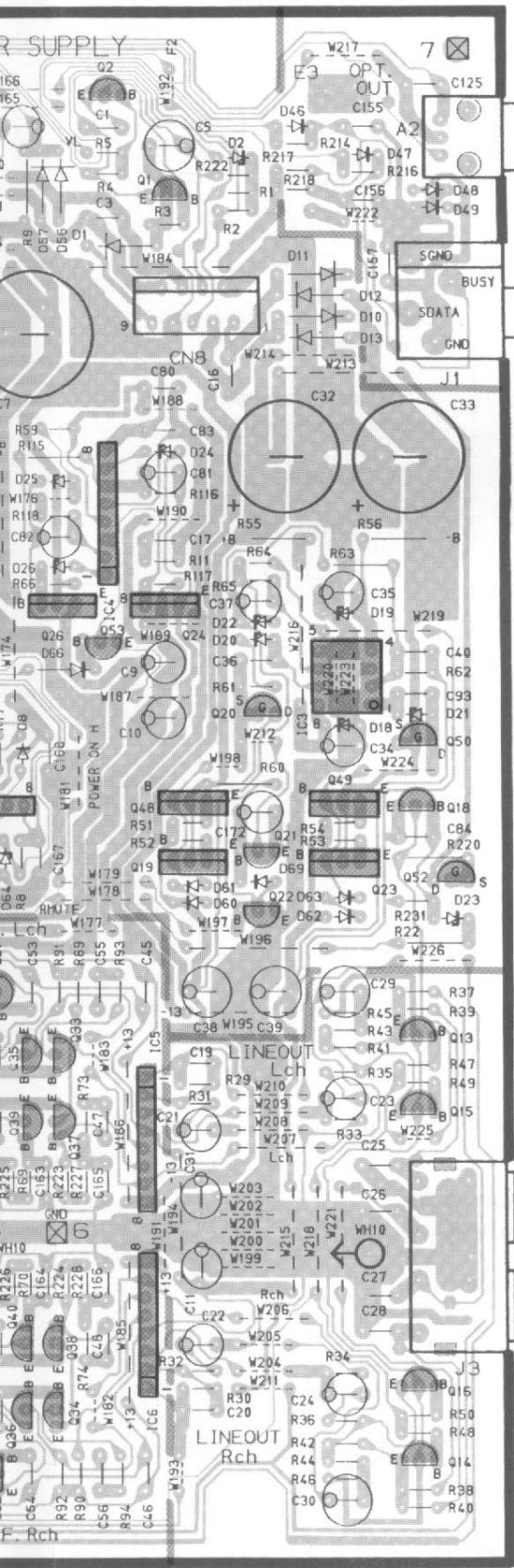
④ RF



PC BOARD (COMPONENT SIDE VIEW)



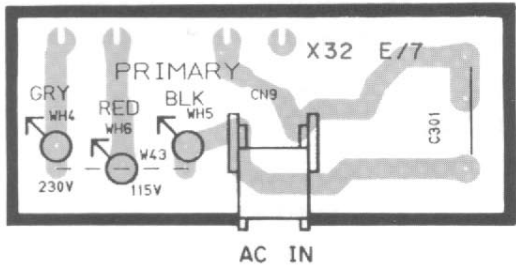
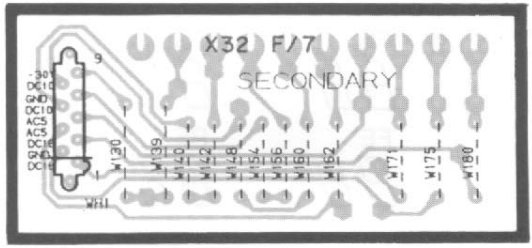
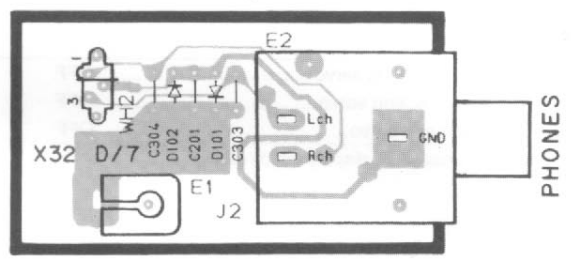
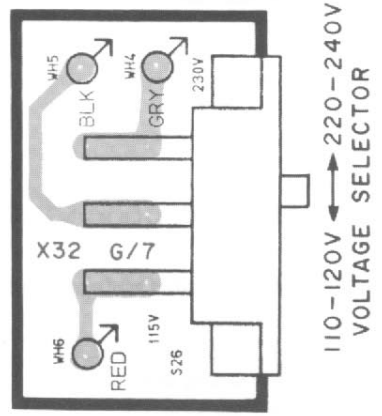
Refer to the schematic diagram for the value of resistors and capacitors.

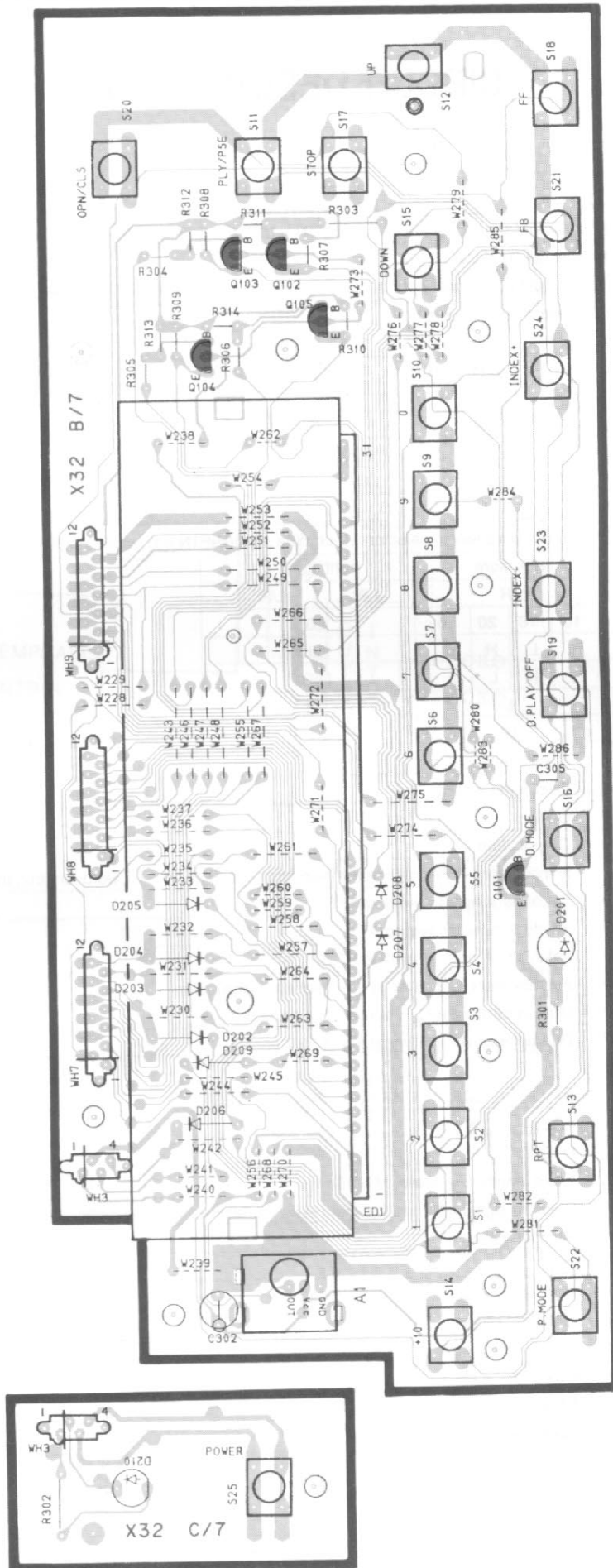


DIGITAL OUTPUT
OPTICAL

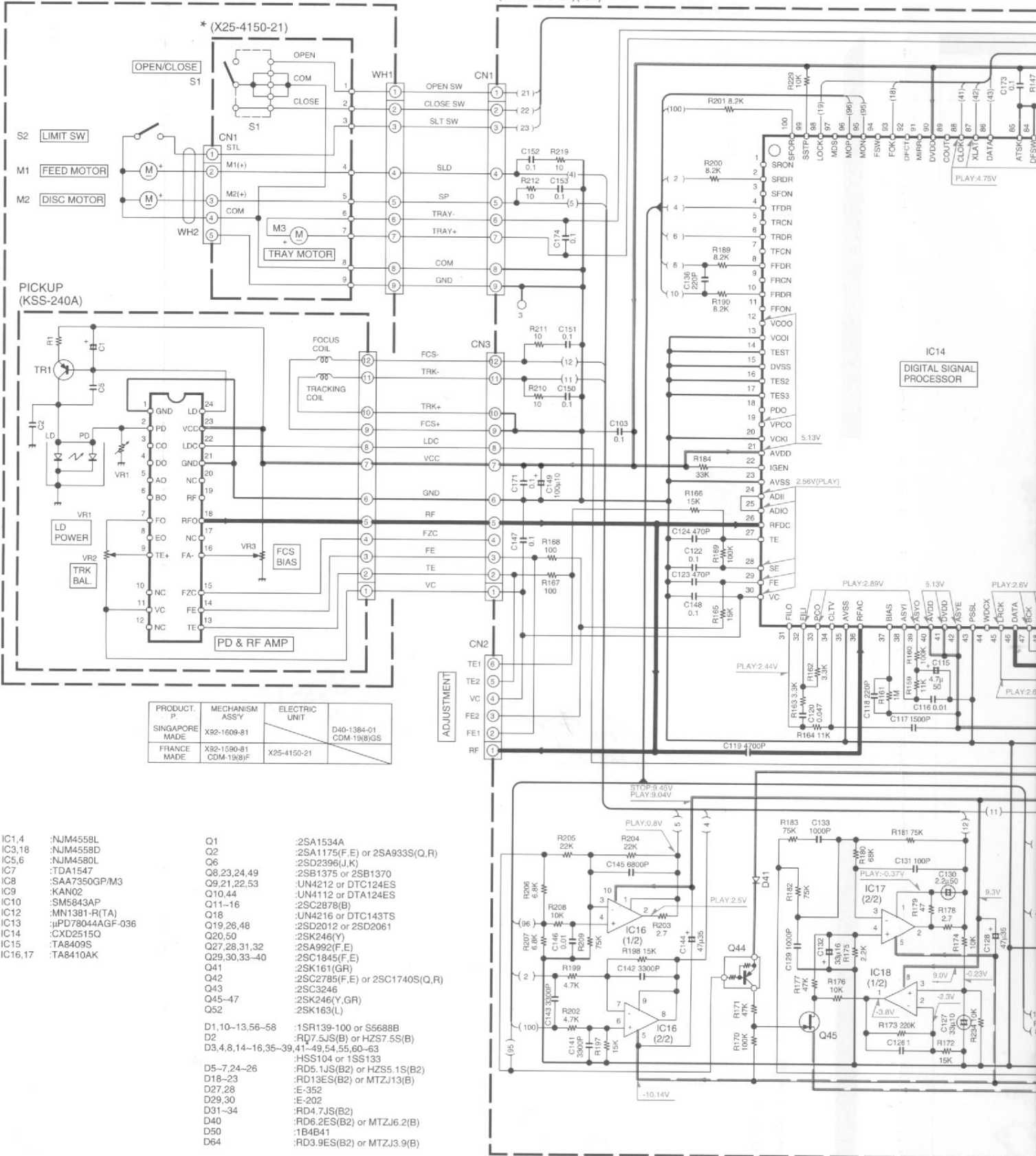
SYSTEM CONTROL

2
OUTPUT





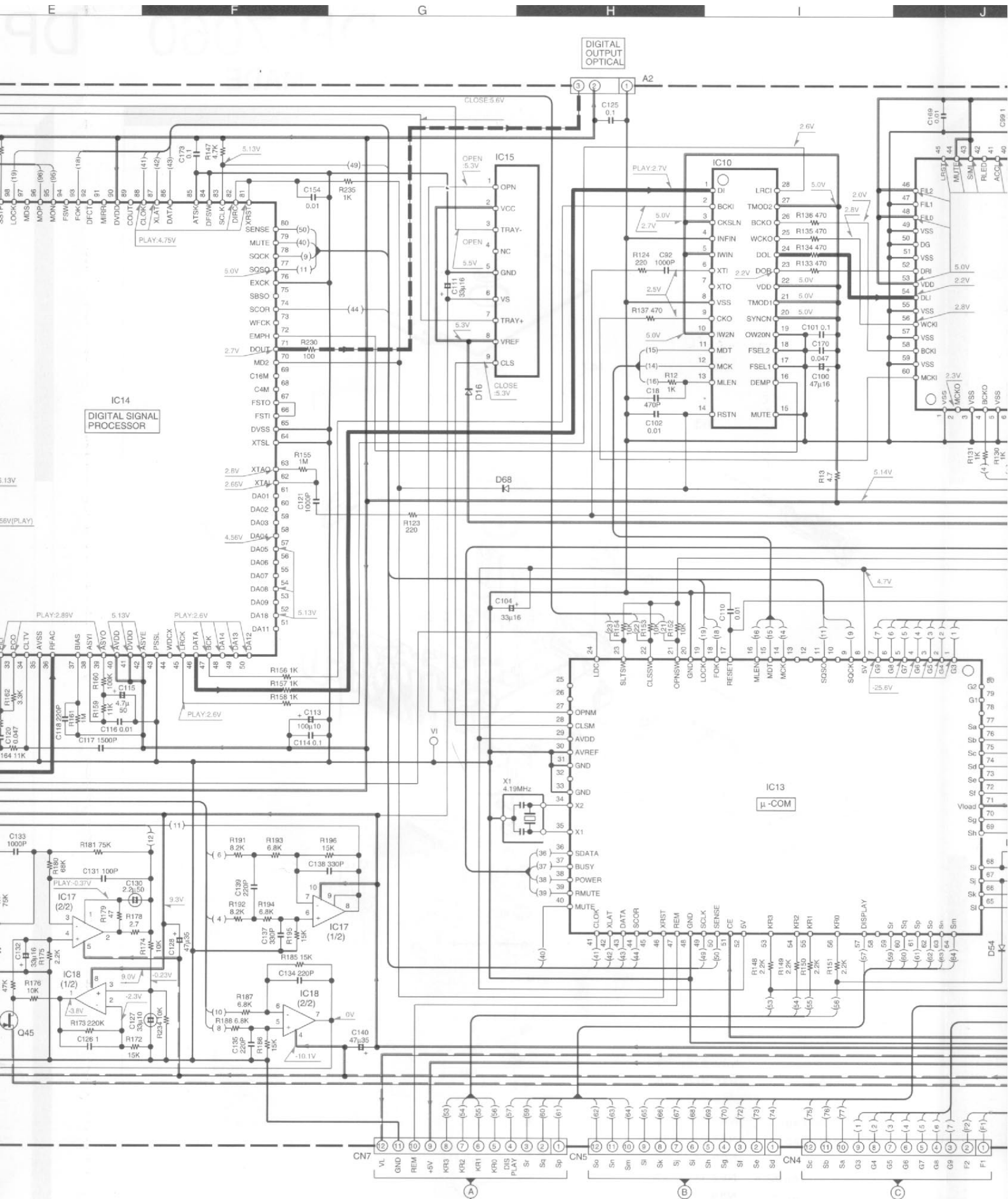
MECHA. ASS'Y (CDM-19)
 (X92-1609-81) :SINGAPORE MADE
 (X92-1590-81) :FRANCE MADE



PRODUCT. P	MECHANISM ASSY	ELECTRIC UNIT
SINGAPORE MADE	X92-1609-81	D40-1384-01 CDM-19(8)GS
FRANCE MADE	X92-1590-81 CDM-19(8)F	X25-4150-21

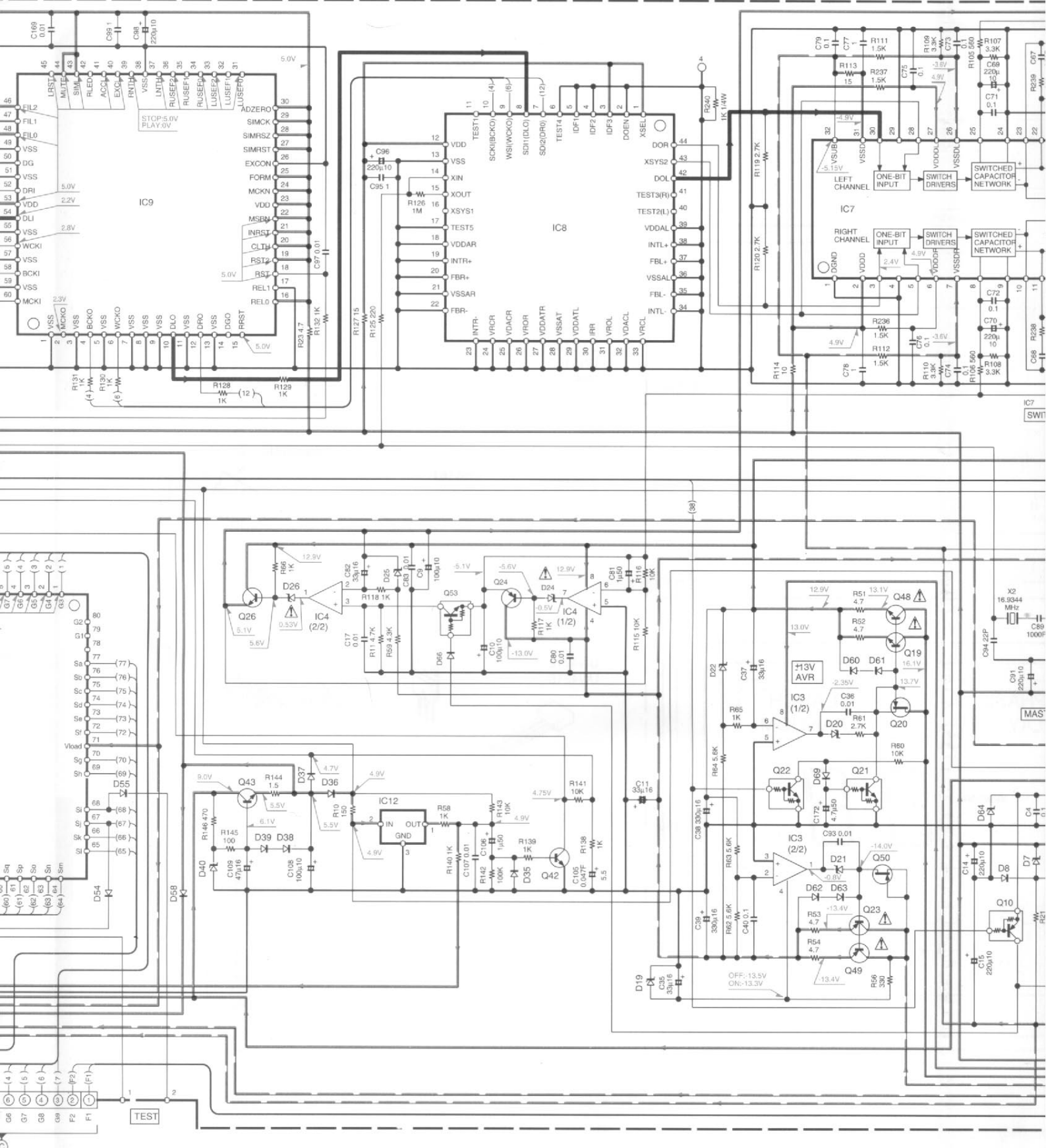
IC1,4	:NJM4558L	Q1	:2SA1534A
IC3,18	:NJM4558D	Q2	:2SA1175(F,E) or 2SA933S(Q,R)
IC5,6	:NJM4580L	O6	:2SD2396(J,K)
IC7	:TDA1547	Q8,23,24,49	:2SB1375 or 2SB1370
IC8	:SAA7350GP/M3	Q9,21,22,53	:UN4212 or DTC124ES
IC9	:KAN02	Q10,44	:UN4112 or DTA124ES
IC10	:SM5643AP	Q11-16	:2SC2878(B)
IC12	:MN1381-R(TA)	Q18	:UN4216 or DTC143TS
IC13	:MPD78044AGF-036	Q19,26,48	:2SD2012 or 2SD2061
IC14	:CXD25150	Q20,50	:2SK246(Y)
IC15	:TA8409S	Q27,28,31,32	:2SA992(F,E)
IC16,17	:TA8410AK	Q29,30,33-40	:2SK161(GR)
		Q41	:2SC1845(F,E)
		Q42	:2SC2785(F,E) or 2SC1740S(Q,R)
		Q43	:2SC3246
		Q45-47	:2SK246(Y,GR)
		Q52	:2SK163(L)
		D1,10-13,56-58	:1SR139-100 or S5688B
		D2	:RD7.5JS(B) or HZS7.5S(B)
		D3,4,8,14-16,35-39,41-49,54,55,60-63	:HSS104 or 1SS133
		D5-7,24-26	:RD5.1JS(B2) or HZS5.1S(B2)
		D18-23	:RD13ES(B2) or MTZJ13(B)
		D27,28	:E-352
		D29,30	:E-202
		D31-34	:RD4.7JS(B2)
		D40	:RD8.2ES(B2) or MTZJ6.2(B)
		D50	:1B4B1
		D64	:RD3.9ES(B2) or MTZJ3.9(B)

CAUTION: For continued safety, replace safety critical components only with manufacturer's recommended parts (refer to parts list). Safety critical components. To reduce the risk of electric shock, leakage-current or resistance measurements shall be taken (exposed parts are acceptably insulated from the supply circuit) before the appliance is returned to the customer.



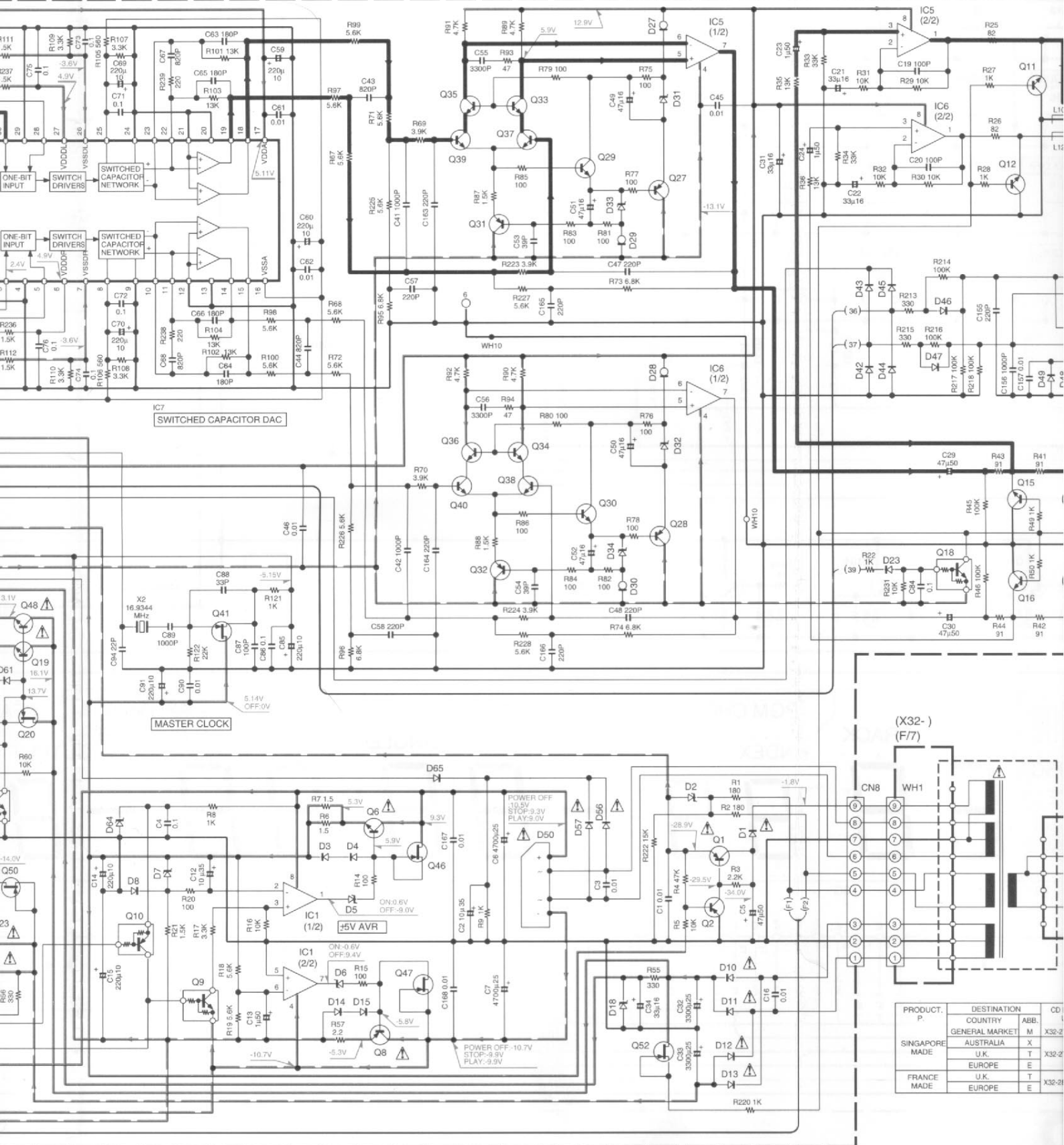
Recommended parts (refer to parts list). Δ indi-
 resistance measurements shall be carried out
 to the customer.

• DC voltages are as measured with a high impedance voltmeter. Values may vary slightly due to variations between
 individual instruments or/and units.



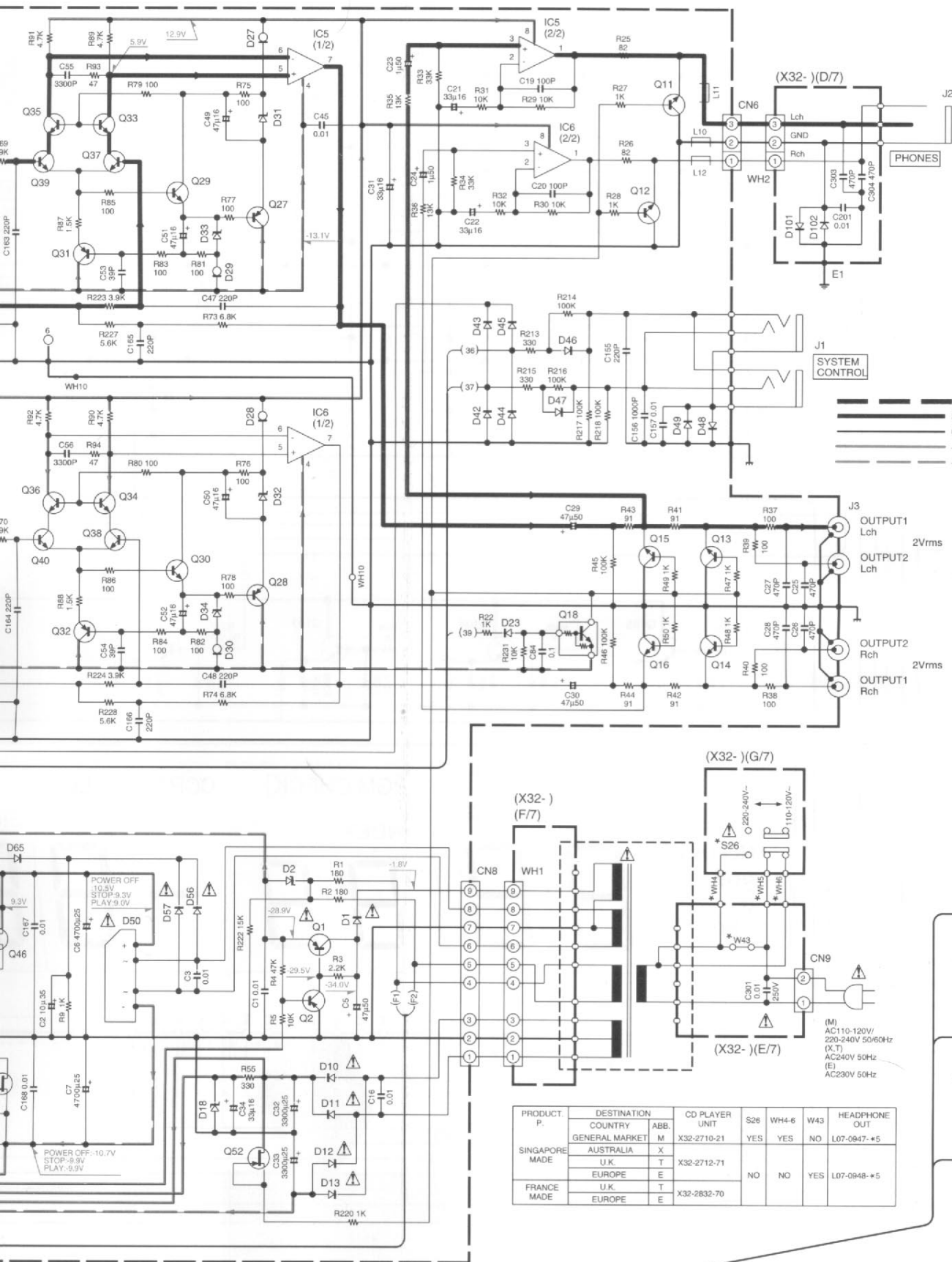
variations between

- Les tensions c.c. doivent être mesurées avec un voltmètre à haute impédance. Les valeurs peuvent différer légèrement du fait des variations inhérentes aux appareils et aux instruments de mesure individuels.
- Die angegebenen Gleich- die Meßwerte aufgrund v



PRODUCT P	DESTINATION		CD
	COUNTRY	ABB.	
SINGAPORE MADE	GENERAL MARKET	M	X32-2
	AUSTRALIA	X	X32-2
	U.K.	T	X32-2
FRANCE MADE	EUROPE	F	X32-2
	U.K.	T	X32-2
	EUROPE	E	X32-2

• Die angegebenen Gleichspannungswerte wurden mit einem hochohmigen Voltmeter gemessen. Dabei schwanken die Meßwerte aufgrund von Unterschieden zwischen einzelnen Instrumenten oder Geräten u.U. geringfügig.



——— DIGITAL LINE
 ——— SIGNAL LINE
 ——— GND LINE
 - - - - - +B LINE
 - - - - - -B LINE

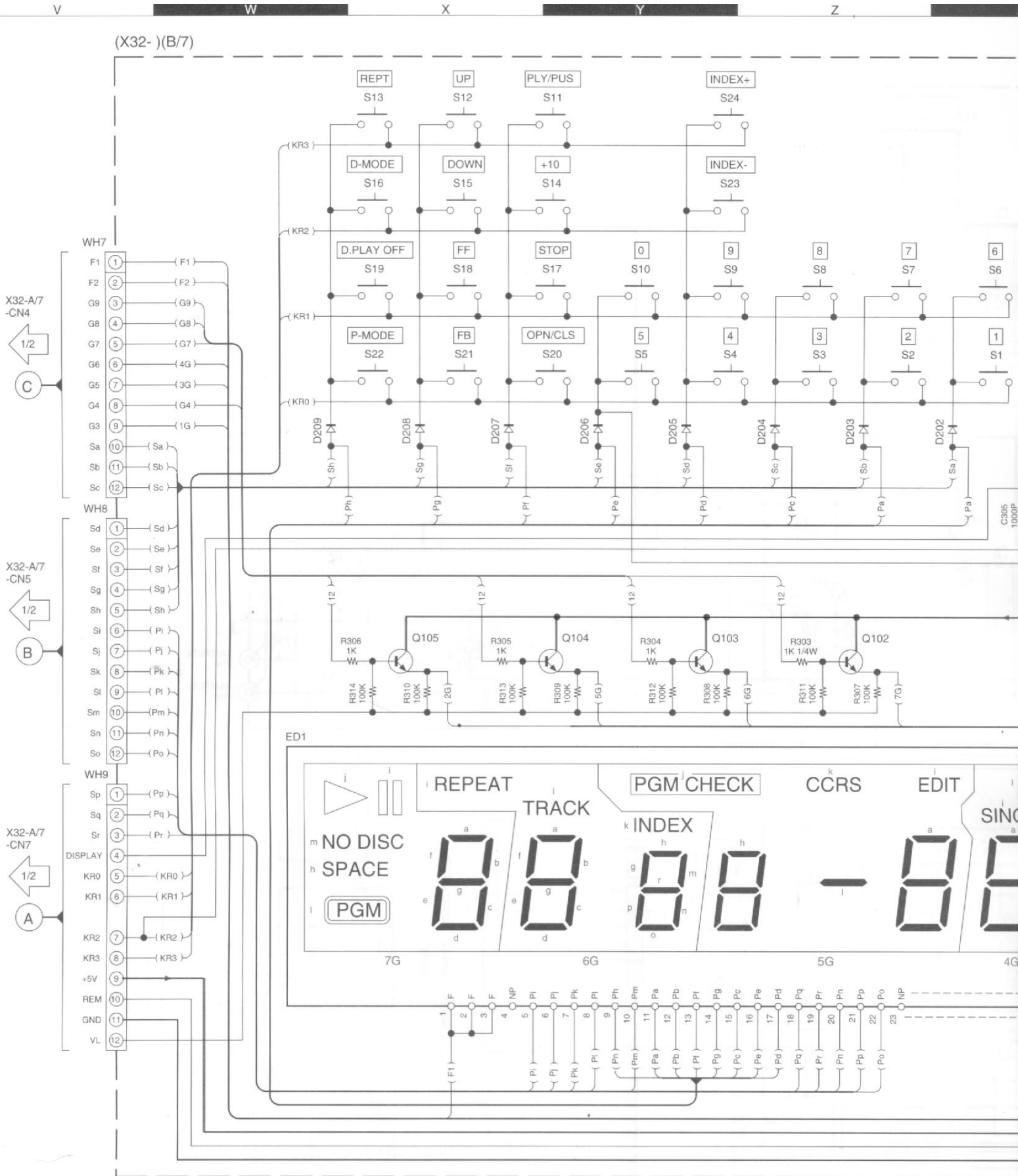
PRODUCT P.	DESTINATION	CD PLAYER UNIT	S26	WH4-6	W43	HEADPHONE OUT
SINGAPORE MADE	COUNTRY	X32-2710-21	YES	YES	NO	L07-0947-+5
	GENERAL MARKET					
	AUSTRALIA	X				
FRANCE MADE	COUNTRY	X32-2712-71	NO	NO	YES	L07-0948-+5
	GENERAL MARKET					
	EUROPE	E				
FRANCE MADE	U.K.	T				
	EUROPE	E				



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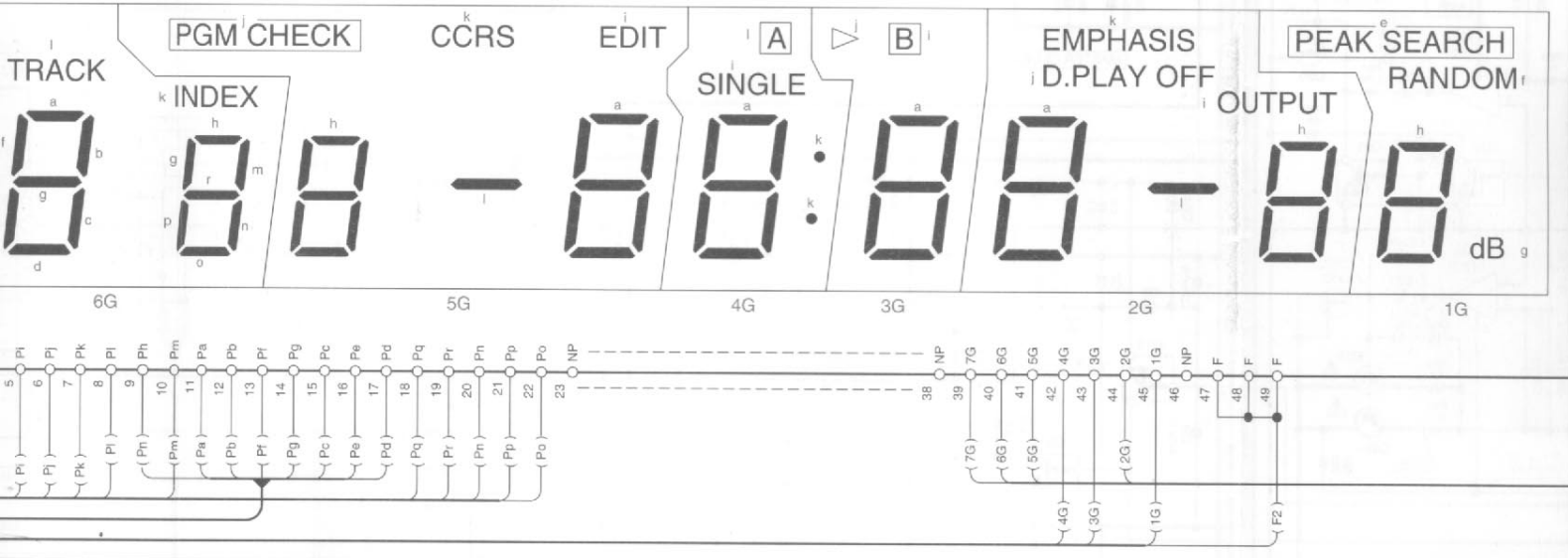
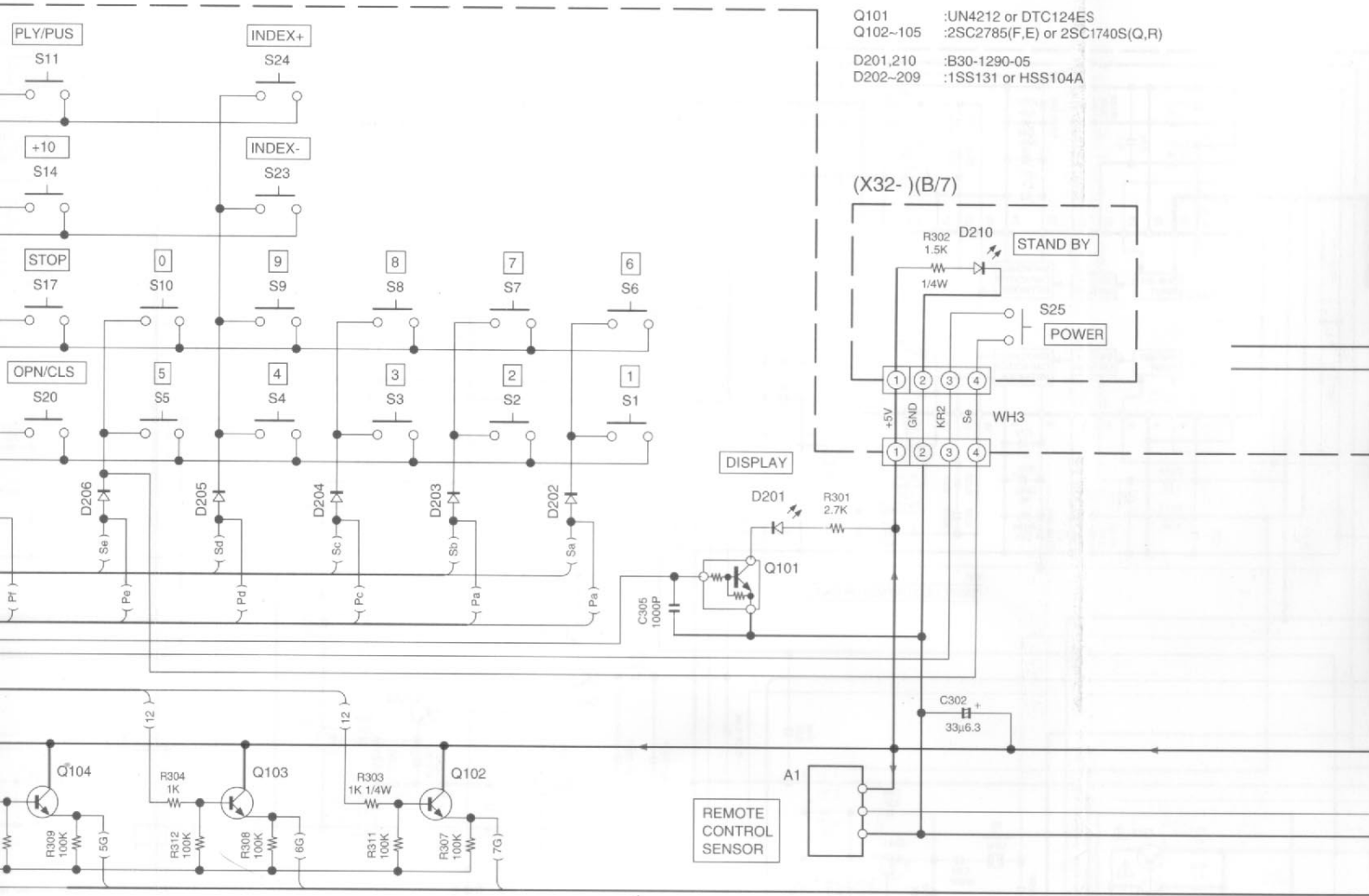
Y22-3730-10

DP-7060
KENWOOD



CAUTION: For continued safety, replace safety critical components only with manufacturer's recommended parts (refer to parts list). Δ indicates safety critical components. To reduce the risk of electric shock, leakage-current or resistance measurements shall be carried out (exposed parts are acceptably insulated from the supply circuit) before the appliance is returned to the customer.

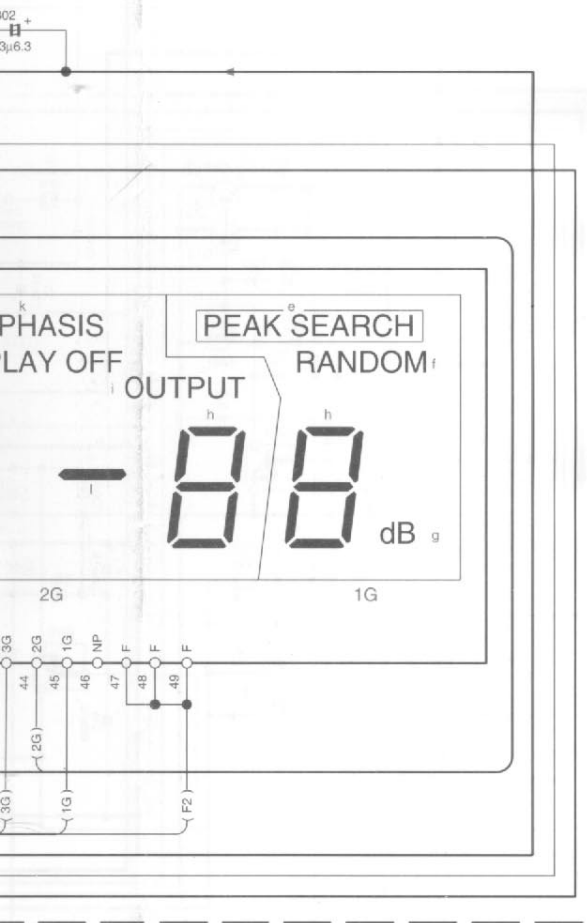
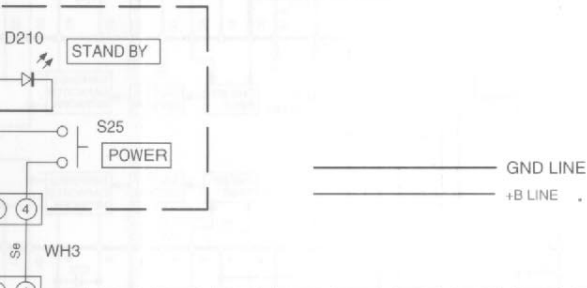
- DC voltages are as measured with a high individual instruments or/and units.
- Les tensions c.c. doivent être mesurées légèrement du fait des variations inhérentes.
- Die angegebenen Gleichspannungswerte sind die Meßwerte aufgrund von Unterschieden



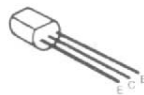
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 are acceptably insulated
 to the customer.

- DC voltages are as measured with a high impedance voltmeter. Values may vary slightly due to variations between individual instruments or/and units.
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- Die angegebenen Gleichspannungswerte wurden mit einem hochohmigen Voltmeter gemessen. Dabei schwanken die Meßwerte aufgrund von Unterschieden zwischen einzelnen instrumenten oder Geräten u.U. geringfügig.

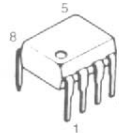
UN4212 or DTC124ES
 SC2785(F,E) or 2SC1740S(Q,R)
 30-1290-05
 SS131 or HSS104A



2SA1534A
 2SA992
 2SC1845
 2SC2878
 2SC3246



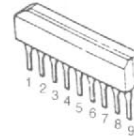
NJM4558D



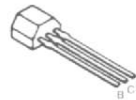
2SA1175
 2SC2785



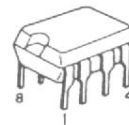
NJM4558L
 TA8409S



DTA124ES
 DTC124ES
 DTC143TS
 UN4112
 2SA933S
 2SC1740



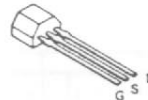
NJM4580L



2SB1370
 2SD2061



2SK161



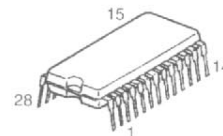
TA8410AK



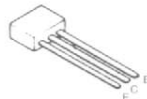
2SB1375
 2SD2012



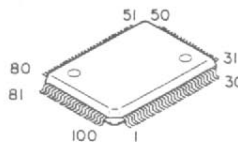
SM5843AP



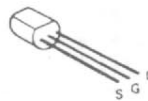
UN4212
 UN4216



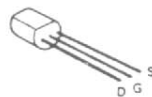
CXD2515Q



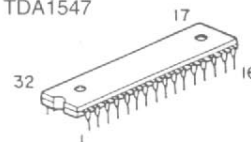
2SK246



2SK163



TDA1547

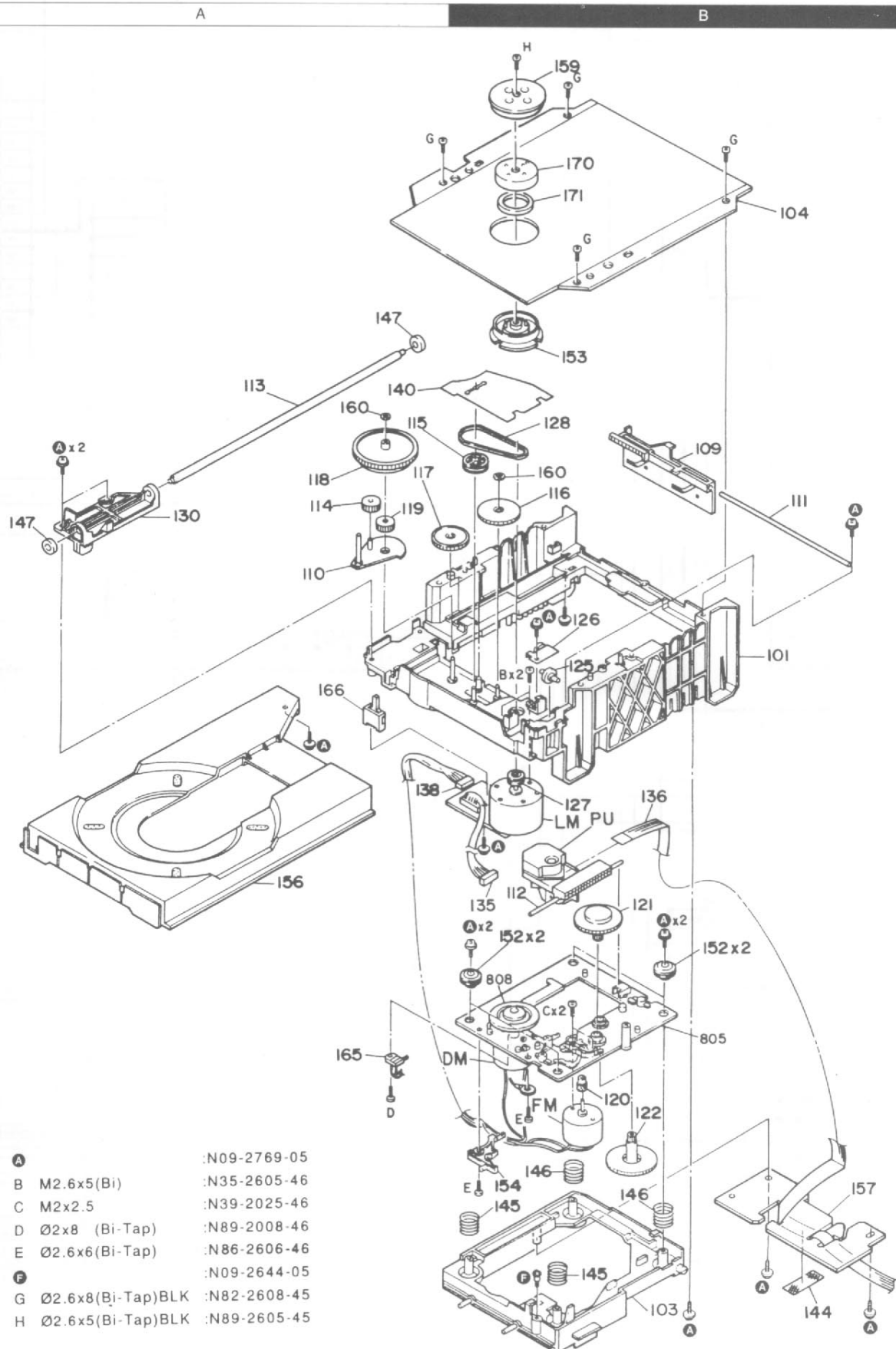


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 e mesure individuels.

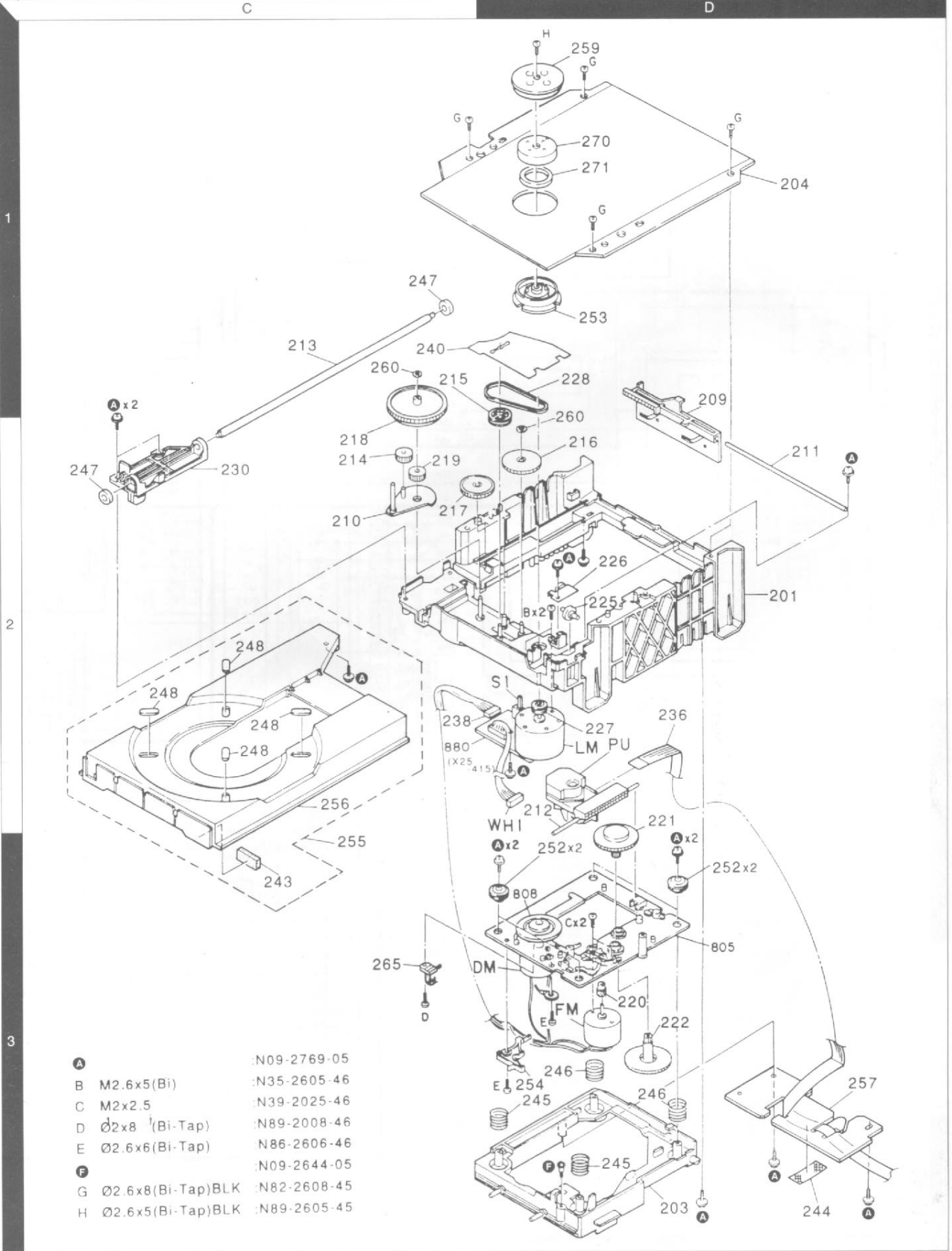
ultmeter gemessen. Dabei schwanken
 der Geräten u.U. geringfügig.

EXPLODED VIEW (MECHANISM) SINGAPORE MADE



DP-7060

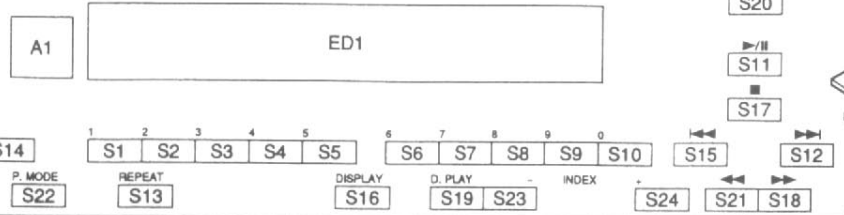
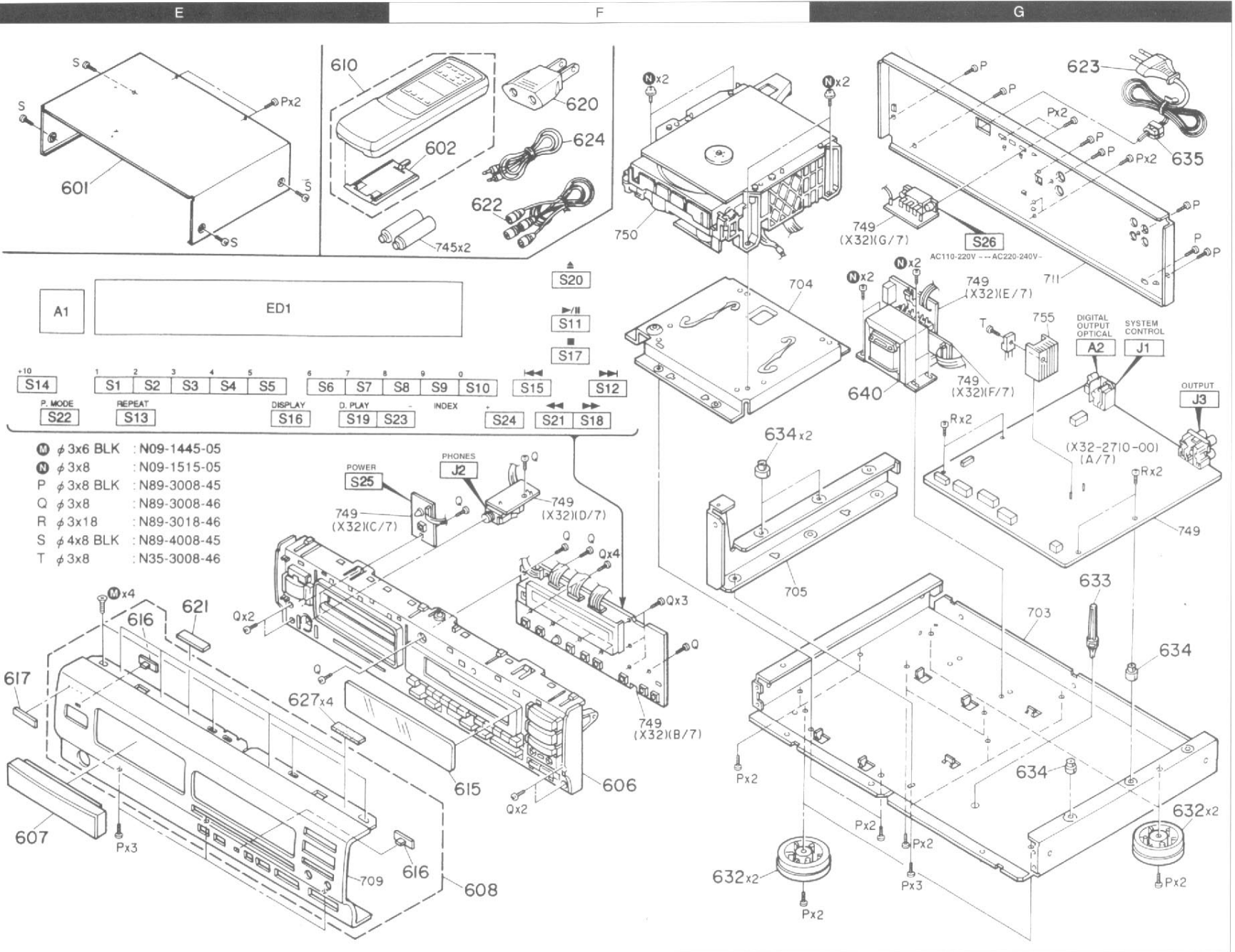
EXPLODED VIEW (MECHANISM) FRANCE MADE



A		:N09-2769-05
B	M2.6x5(Bi)	:N35-2605-46
C	M2x2.5	:N39-2025-46
D	Ø2x8 1/2(Bi-Tap)	:N89-2008-46
E	Ø2.6x6(Bi-Tap)	:N86-2606-46
F		:N09-2644-05
G	Ø2.6x8(Bi-Tap)BLK	:N82-2608-45
H	Ø2.6x5(Bi-Tap)BLK	:N89-2605-45

Parts with the exploded numbers larger than 700 are not supplied

Parts with the exploded numbers larger than 700 are not supplied



- M ϕ 3x6 BLK : N09-1445-05
- N ϕ 3x8 : N09-1515-05
- P ϕ 3x8 BLK : N89-3008-45
- Q ϕ 3x8 : N89-3008-46
- R ϕ 3x18 : N89-3018-46
- S ϕ 4x8 BLK : N89-4008-45
- T ϕ 3x8 : N35-3008-46

EXPLODED VIEW(UNIT)

DP-7060

DP-7060

SPECIFICATIONS

[Format]

System	Compact disc digital audio system
Laser	Semiconductor laser
Number of channels	2 channels
Playing rotation	200 rpm ~ 500 rpm (CLV)

[D/A Convertors]

D/A conversion	Twin 1 Bit
Oversampling	8 fs (352.8 kHz)

[Audio]

Frequency response	4 Hz ~ 20 kHz, ± 0.5 dB
Signal to noise ratio	More than 105 dB
Dynamic range	More than 100 dB
Total harmonic distortion	Less than 0.007 % (1 kHz)
Channel separation	More than 100 dB (1 kHz)
Wow & flutter	Unmeasurable Limit
Output level/impedance	
Variable	0 ~ 2 V/0.3k Ω
Digital output	
Optical	-15 dBm ~ -21 dBm (Wave length 660 nm)
Headphone output	20 mW (32 Ω)

[General]

Power consumption	20 W
Dimensions	W: 440 mm (17-5/16")
	H : 127 mm (5")
	D : 319mm (12-1/2")
Weight (Net)	6.5kg

Note : KENWOOD follows a policy of continuous advancements in development. For this reason specifications may be changed without notice.

Note :

Component and circuitry are subject to modification to insure best operation under differing local conditions. This manual is based on, the U.S.A.(K) standard, and provides information on regional circuit modification through use of alternate schematic diagrams, and information on regional component variations through use of parts list.

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