

MEKANISK STYKLISTE/ MECHANICAL PARTS

NEDERSTE CHASSIS/BOTTOM CHASSIS

13Modul	3302318	Skærm f. sikringsholder	Screen f. fuse holder
	3172085	Isolationsstykke f. sikringsholder	Insulation for fuse holder
	2938143	Bøsning f. sikringsholder	Bushing for fuse holder
13C1	4200421	1000 µF -10+50% 6.3V	1000 µF -10+50% 6.3V

Øvrige dele se side 4-1/Other parts, see page 4-1

ØVERSTE CHASSIS/TOP CHASSIS

2046	3168160	Betjeningspanel	Operating panel
2047	2775791	Knapsæt	Set of buttons

29Modul	8002482	PC, sekundær betjening	PC, secondary operation
---------	---------	------------------------	-------------------------

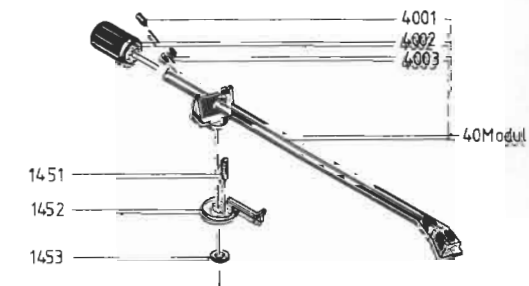
34Modul	8002447	HP-Tape indikator	HP-Tape Indicator
---------	---------	-------------------	-------------------

Øvrige dele se side 4-4/Other parts, see page 4-4

GRAMMOFONCHASSIS/CHASSIS, RECORD PLAYER

1408	3164412	Støvlåg	Dust cover
1435	8954660	Pick-up MMC 20 EN (replacement)	Pick-up MMC 20 EN (replacement)
1438	3458245	Topplade	Top plate
1451	2072101	Løfteskruer	Lifting screw
1452	2854076	Løftearm	Lifting arm
1453	2622271	Skive	Washer

PICK-UP ARM 2850101

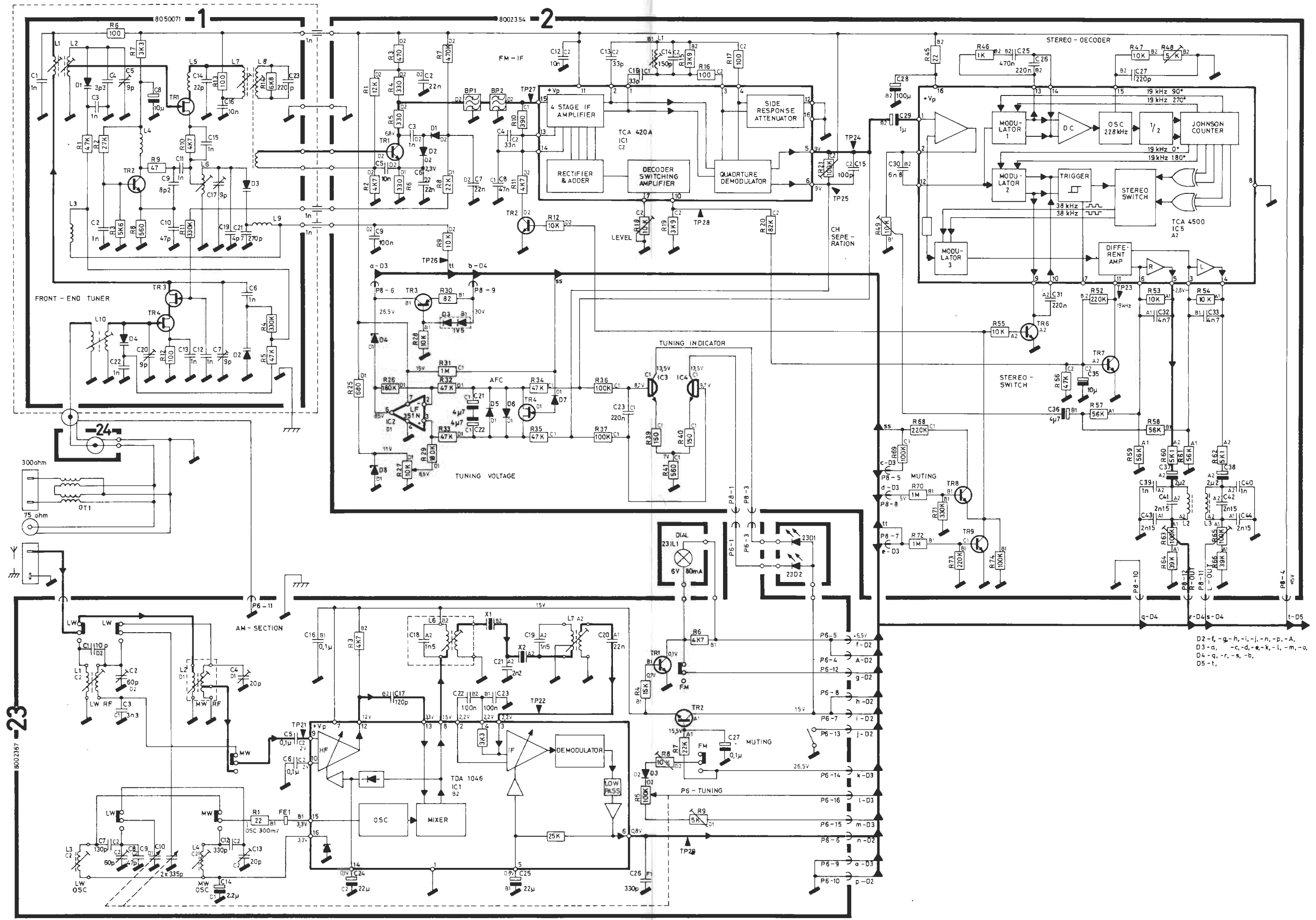


4001	2070035	Gevindstift M3 x 6	Threaded pin M3 x 6
4002	3342076	Kontravægt	Counterweight
4003	2576114	Justerbøsning	Adjustment bushing

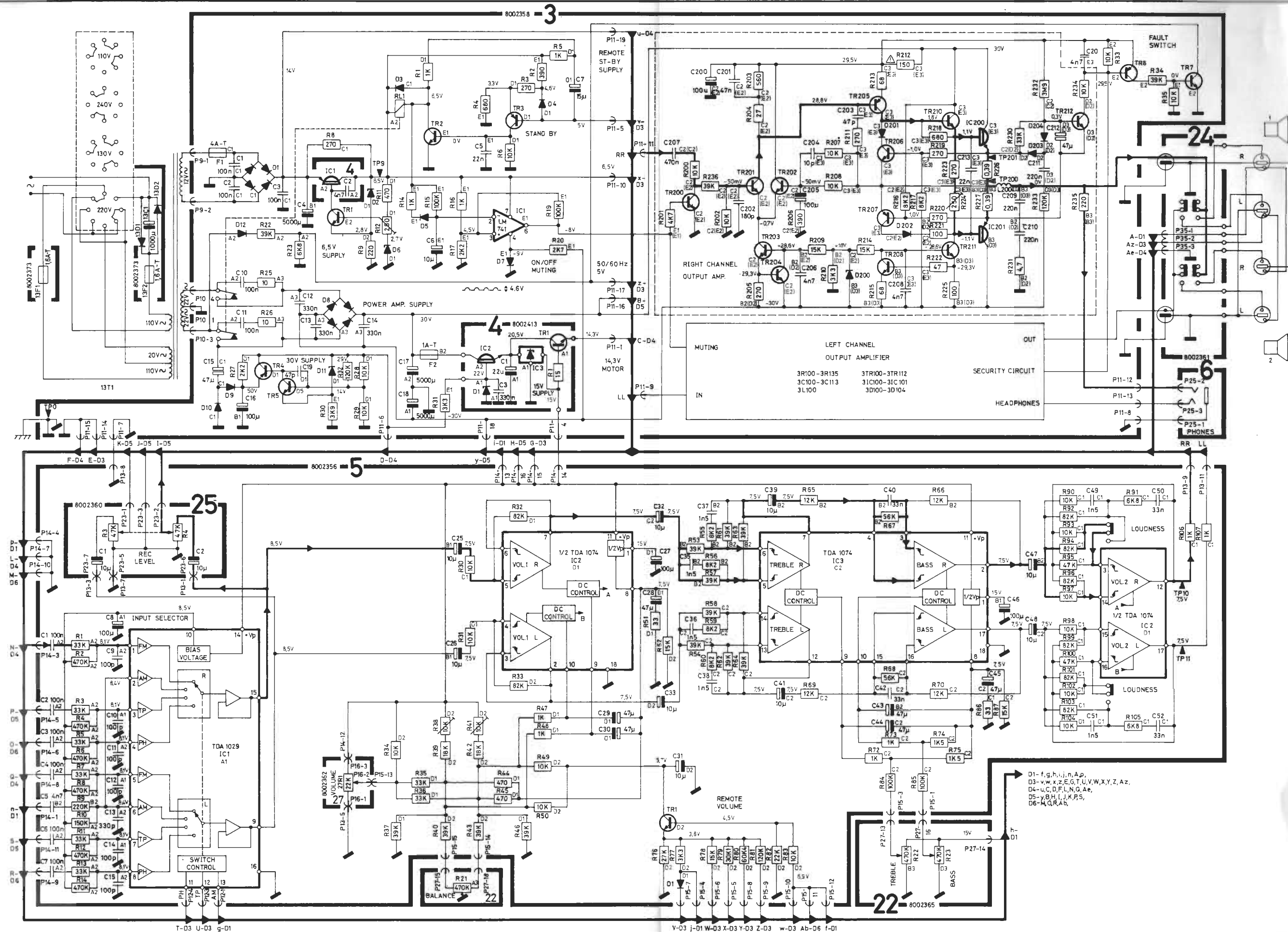
Øvrige dele se side 4-5/Other parts, see page 4-5

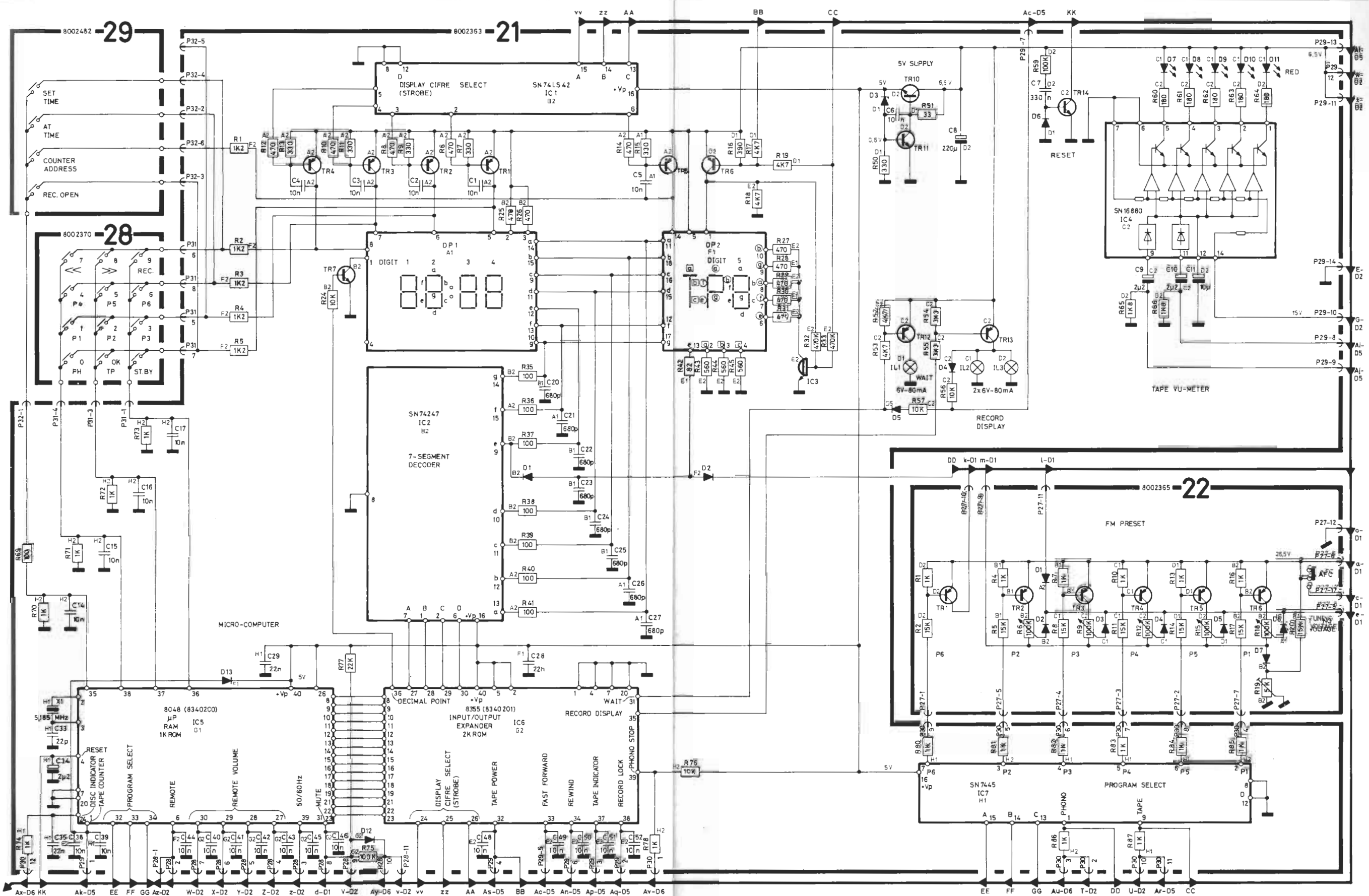
SERVICE MANUAL





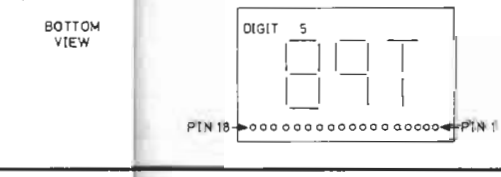
D2-f, -g, -h, -i, -j, -n, -p, -A,
 D3-a, -c, -d, -e, -k, -l, -m, -o,
 D4-q, -r, -s, -b,
 D5-t,



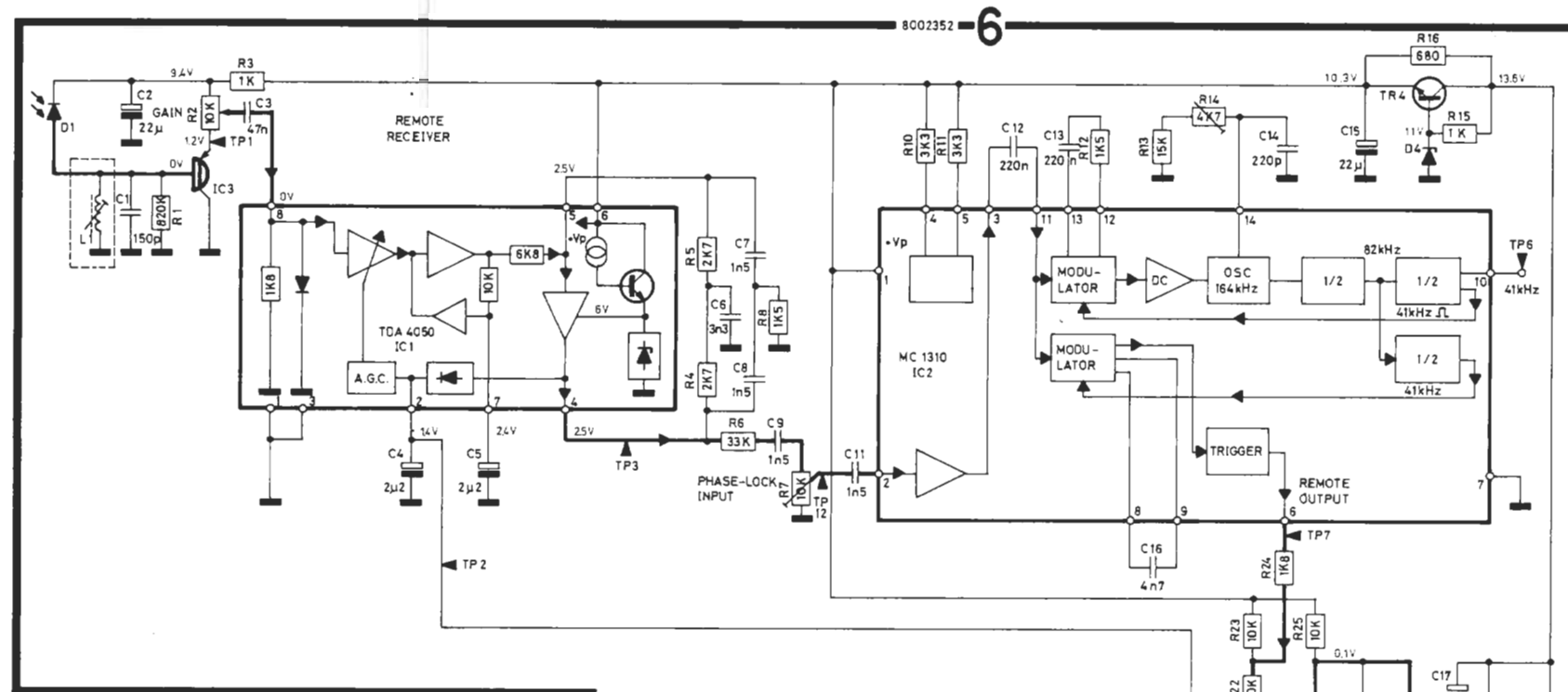
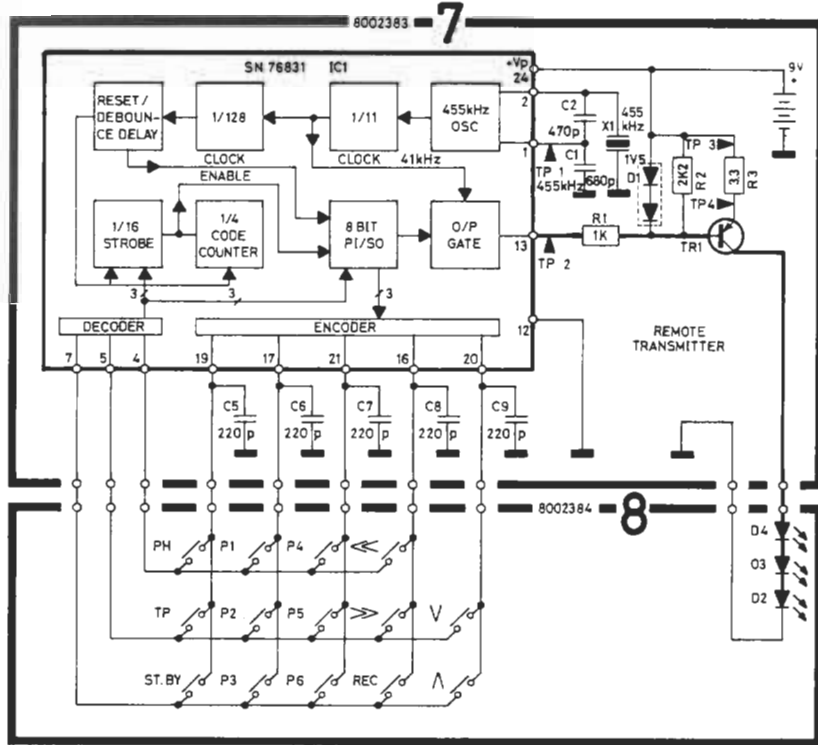


D1 - 400pF, 50V
 D2 - V, W, X, Z, E, S, T, U, V, W, X, Y, Z, Az,
 D4 - A1
 D5 - Ac, Al, A1, Av, Am, Ap, Aq, Ar, As, At,
 D6 - Au, Av, Az, Ay

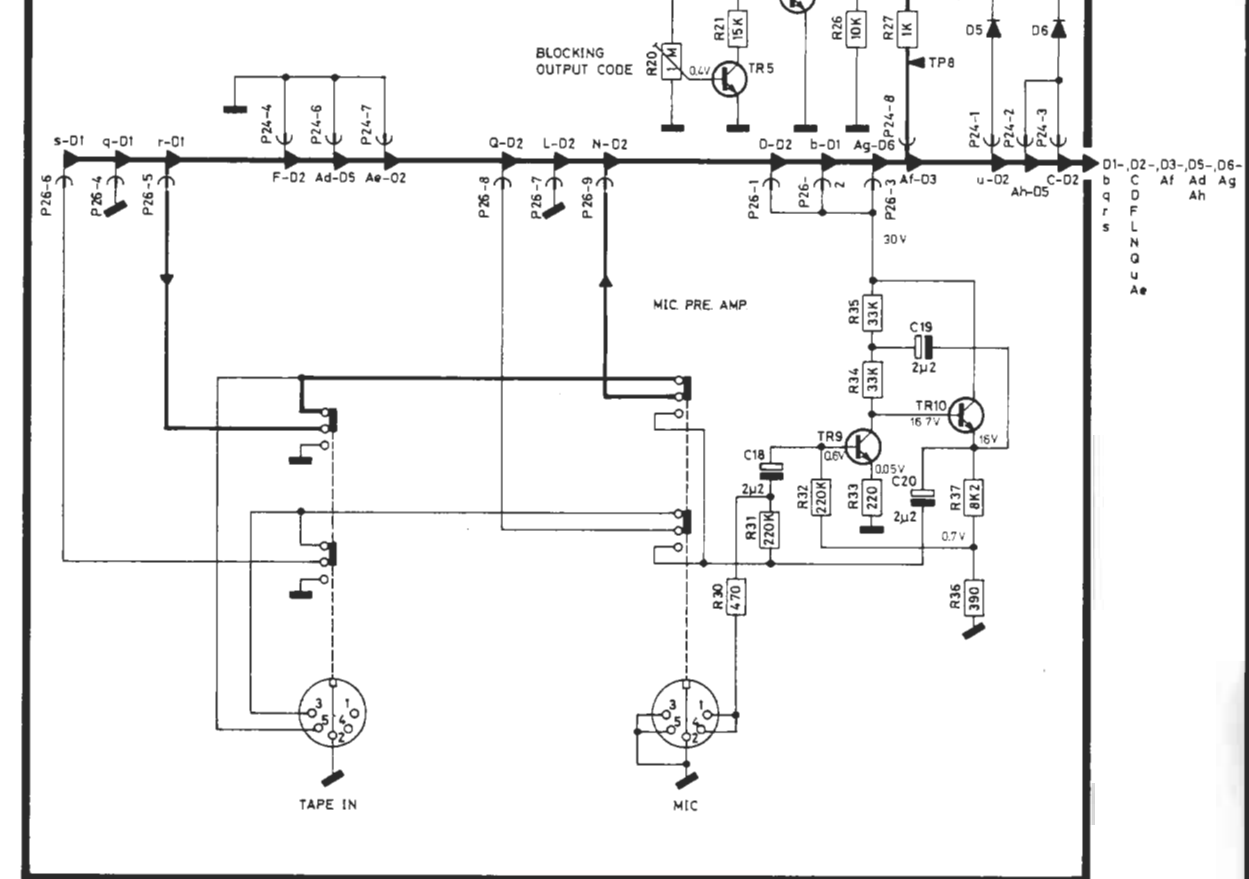
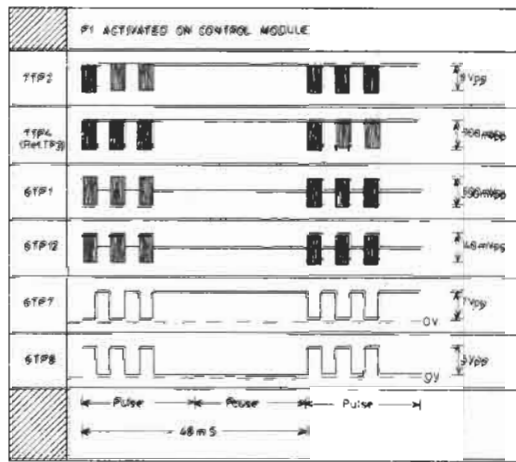
PIN ASSIGNMENT
 21FP
 1 COMMON
 2 ANODE
 3 COLON LOWER
 4 COLON UPPER
 5 ANODE
 6 40 CONNECTION
 7 DIGIT 4 ANODE
 8 DIGIT 3 ANODE
 9 DIGIT 2 ANODE
 10 DIGIT 1 ANODE
 11 SEG C CATHODE
 12 SEG D
 13 SEG E
 14 SEG F
 15 SEG G
 16 SEG H
 17 SEG I
 18 SEG J
 19 SEG K
 20 SEG L



PIN ASSIGNMENT
 21 DP2
 1 COMMON
 2 ANODE
 3 SEG A CATHODE
 4 SEG B CATHODE
 5 COMMON ANODE
 6 DIGIT T
 7 SEG F CATHODE
 8 SEG G CATHODE
 9 SEG H CATHODE
 10 SEG I CATHODE
 11 SEG J CATHODE
 12 SEG K CATHODE
 13 SEG L CATHODE
 14 COMMON ANODE
 15 SEG D CATHODE
 16 SEG E CATHODE
 17 SEG F CATHODE
 18 SEG G CATHODE
 19 SEG H CATHODE
 20 SEG I CATHODE
 21 SEG J CATHODE



CONTROL MODULE	PINS SHORTED ON TIC1						OUTPUT CODE FROM TIC1 START						
FUNCTION	4	5	7	16	17	19	20	21	1	0	1	0	0
V	X						X		1	1	0	1	0
A		X					X		1	1	0	1	0
<<	X			X					1	1	0	0	1
>>		X			X				1	1	0	0	1
REC.			X	X					1	1	0	0	1
P4	X						X		1	0	1	1	0
P5		X					X		1	0	1	1	0
P6			X				X		1	0	1	1	0
P1	X			X					1	0	1	0	0
P2		X			X				1	0	1	0	0
P3			X		X				1	0	1	0	0
PH	X				X				1	0	0	1	0
TP		X				X			1	0	0	1	0
ST-BY			X			X			1	0	0	1	0



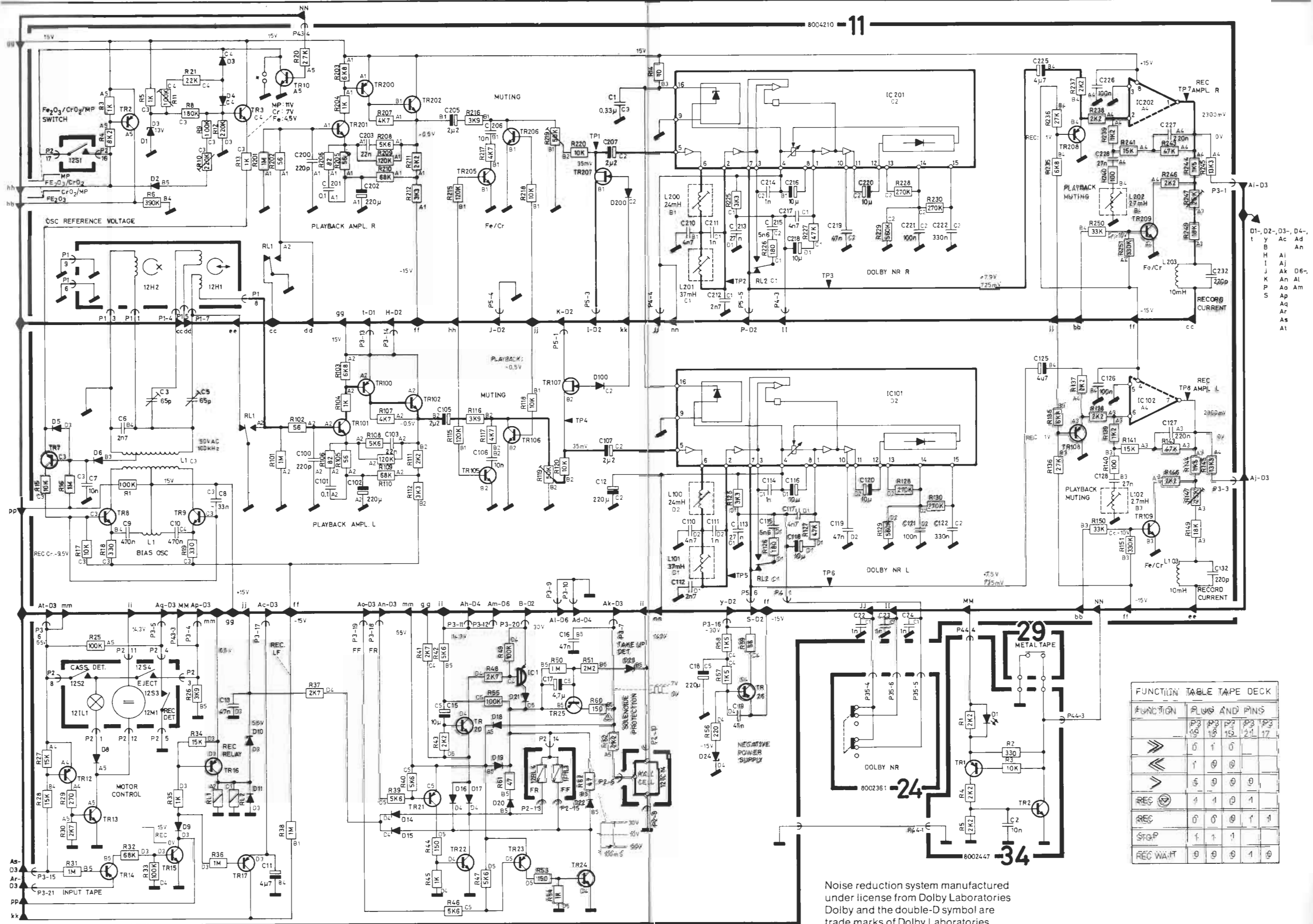
FUNCTION TABLE FOR DIAGRAM 3

CONDITIONS		FUNCTION	RESULTS											
PIN	21C6	21C6	21C5						21C6					
24	37	38	27	28	29	30	31	32	33	34	35	36	39	
			PHONO	0	0	0	0	1	1	1	1	1	1	
			P1	1	1	1	1	0	0	0	0	0	0	
			P2	1	1	1	1	0	0	0	0	0	0	
			P3	1	1	1	1	0	0	0	0	0	0	
			P4	1	1	1	1	0	0	0	0	0	0	
			P5	1	1	1	1	0	0	0	0	0	0	
			P6	1	1	1	1	0	0	0	0	0	0	
1			TAPE	0	0	0	0	1	1	1	1	1	1	
			STAND BY	0	0	0	0	1	1	1	1	1	1	
			REC. OPEN	0	0	0	0	1	1	1	1	1	1	
			COUNTER ADDR.	0	0	0	0	1	1	1	1	1	1	
			P1-REC. PAUSE	0	0	0	0	1	1	1	1	1	1	
			P1-REC.	0	0	0	0	1	1	1	1	1	1	
			>>	0	0	0	0	1	1	1	1	1	1	
			<<	0	0	0	0	1	1	1	1	1	1	
			MIN. VOL. (Remote)	0	0	0	0	1	1	1	1	1	1	
			MAX. VOL. (Remote)	1	1	1	1	0	0	0	0	0	0	

FUNCTION TABLE 21C7 (SN 7665)		
FUNCTION	INPUTS	OUTPUT AT PINS
	D C B A	1 2 3 4 5 6 7 9
PHONO	0 0 0 0	0 1 1 1 1 1 1 1
P1	0 0 0 0	0 0 1 1 1 1 1 1
P2	0 0 1 0	0 1 0 1 1 1 1 1
P3	0 0 1 1	0 1 0 0 1 1 1 1
P4	0 1 0 0	0 1 1 0 1 1 1 1
P5	0 1 0 1	0 1 1 0 0 1 1 1
P6	0 1 1 0	0 1 1 0 0 0 1 1
TAPE	0 1 1 1	0 1 1 0 0 0 0 1
ST-BY	0 1 1 1	0 1 1 0 0 0 0 0

FUNCTION TABLE 21C2 (SN 7247)		
FUNCTION	INPUTS	OUTPUTS
	D C B A	0 1 2 3 4 5 6 7 9
PHONO	0 0 0 0	0 0 0 0 0 0 0 0 1
P1	0 0 0 0	0 0 0 1 0 0 0 1 1
P2	0 0 0 1	0 0 0 1 0 0 0 1 0
P3	0 0 1 0	0 0 0 1 0 0 0 1 0
P4	0 0 1 1	0 0 0 1 0 0 0 1 0
P5	0 1 0 0	0 0 1 0 0 1 0 0 0
P6	0 1 0 1	0 0 1 0 0 1 0 0 0
P7	0 1 1 0	0 0 1 0 0 1 0 0 0
P8	0 1 1 1	0 0 1 0 0 1 0 0 0
P9	1 0 0 0	0 1 0 0 1 0 0 0 0
OFF	1 1 1 1	1 1 1 1 1 1 1 1 1

FUNCTION TABLE 21C1 (SN 7662)		
FUNCTION	INPUTS	OUTPUT AT PINS
	D C B A	2 3 4 5 6
PHONO	0 0 0 0	0 1 1 1 1
P1	0 0 0 0	0 0 1 1 1
P2	0 0 0 1	0 0 1 1 1
P3	0 0 1 0	0 0 1 1 1
P4	0 0 1 1	0 0 1 1 1
P5	0 1 0 0	0 1 0 1 1
P6	0 1 0 1	0 1 0 1 1
P7	0 1 1 0	0 1 0 1 1
P8	0 1 1 1	0 1 0 1 1
P9	1 0 0 0	0 1 0 1 1
OFF	1 1 1 1	1 1 1 1 1



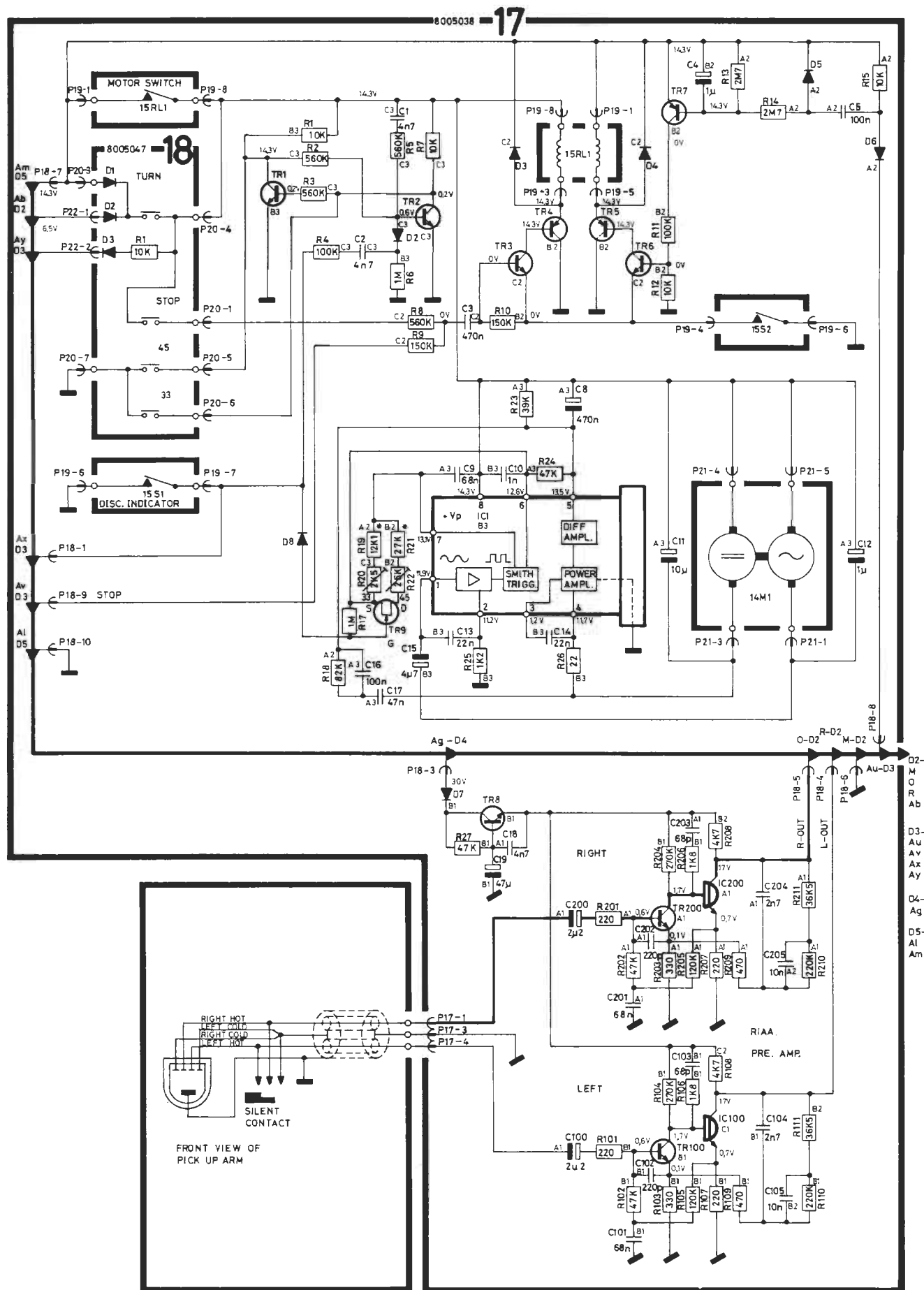
FUNCTION TABLE TAPE DECK

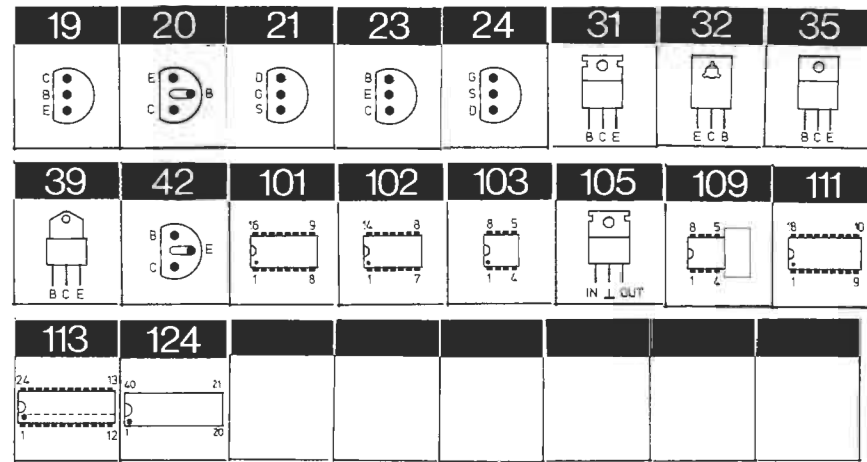
FUNCTION	P3-1	P3-2	P3-3	P3-4	P3-5
REC	0	1	0	1	1
STOP	1	1	1	0	0
REC WAIT	0	0	0	1	0

Noise reduction system manufactured under license from Dolby Laboratories. Dolby and the double-D symbol are trade marks of Dolby Laboratories.

* TO BE SHORTED, WHEN P.C. ARE USED IN SETS, WITHOUT METAL TAPE SWITCH.

DIAGRAM 6



LIST OF TRANSISTORS
AND IC'S

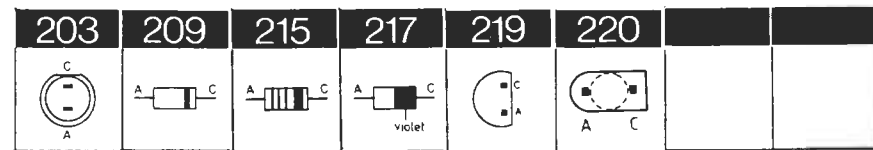
1TR1	8320136	21	TIS88/3C2 green 21 SPF 2060	3TR5	8320237	20	BC 546B
1TR2	8320112	23	BF 495 23 BF 255	3TR7	8320097	20	BC 547B
1TR3	8320119	21	TIS88A	3TR8	8320152	20	BC 557B
1TR4				3TR100/200	8320366	19	MPS A16
2TR1	8320311	42	BF 240	3TR101/201	8320377	20	BC 547C
2TR2	8320097	20	BC 547B	3TR102/202			
2TR3	8320152	20	BC 557B	3TR103/203	8320097	20	BC 547B
2TR4	8320396	24	2N 5639 24 MPF 4392	3TR104/204			
2TR6	8320097	20	BC 547B	3TR105/205	8320365	19	MPS H54
2TR7				3TR106/206	8320097	20	BC 547B
2TR8				3TR107/207	8320152	20	BC 557B
2TR9	8320377	20	BC 547C	3TR108/208	8320097	20	BC 547B
2IC1	8340033	101	TCA 420A	3TR110/210	8320321	19	MPS A06
2IC2	8340168	103	LF 351N	3TR111/211			
2IC3	8340054	19	MPS A13	3TR112/212	8320237	20	BC 546B
2IC4				3IC1	8340141	103	LM 741CN
2IC5	8340134	101	TCA 4500	3IC100/200	8340132	39	BDV 65A
3TR1	8320097	20	BC 547B	3IC101/201	8340133	39	BDV 64A
3TR2	8320295	20	BC 337 -25/18	4TR1	8320429	32	BD 435
3TR3	8320152	20	BC 557B	4IC1	8340118	31	BDX 34A 35 TEO 1089 35 FJ 2501
3TR4	8320241	32	BD 138/W	4IC2	8340117	31	BDX 33A 35 TEO 1088 35 FJ 3001

4IC3	8340064	105	LM 340T-15 105 µA 7815CU 105 µA 7815UC 105 MC 7815CT 105 µA 7815CKG
5TR1	8320097	20	BC 547B
5IC1	8340188	101	TDA 1029
5IC2	8340187	111	TDA 1074
5IC3			
6TR4	8320329	20	BC 338/25
6TR5	8320097	20	BC 547B
6TR6			
6TR9			
6TR10			
6IC1	8340193	103	TDA 4050
6IC2	8340103	102	CA 1310E 102 LM 1310N
6IC3	8340025	20	BC 516 19 MPS A65 19 SPS 5431
7TR1	8320331	20	BC 328- 25/18
7IC1	8340191	113	SN76831 M-24
11TR2	8320152	20	BC 557B
11TR3	8320097	20	BC 547B
11TR7	8320152	20	BC 557B
11TR8	8320237	20	BC 546B
11TR9			
11TR10	8320097	20	BC 547B
11TR12	8320152	20	BC 557B
11TR13	8320429	32	BD 435
11TR14	8320152	20	BC 557B
11TR15	8320097	20	BC 547B
11TR16	8320331	20	BC 328- 25/18

11TR17	8320152	20	BC 557B
11TR20	8320097	20	BC 547B
11TR21	8320152	20	BC 557B
11TR22	8320427	32	BD 437
11TR23	8320152	20	BC 557B
11TR24	8320427	32	BD 437
11TR25	8320152	20	BC 557B
11TR26	8320428	32	BD 438
11TR100/200	8320152	20	BC 557B
11TR101/201	8320344	20	BC 550B
11TR102/202	8320097	20	BC 547B
11TR105/205			
11TR106/206			
11TR107/207	8320396	24	2N 5639 24 MPF 4392
11TR108/208	8320152	20	BC 557B
11TR109/209	8320366	19	MPS A16
11IC1	8340184	32	BD 676
11IC101/201	8340183	101	LM 1011AN
11IC102/202	8340195	103	LF 363BN
12IC14	8004216		Hall-element
17TR1	8320108	20	BC 548B
17TR2			
17TR3			
17TR4	8320331	20	BC 328- 25/18
17TR5			
17TR6	8320108	20	BC 548B
17TR7	8320104	20	BC 558B
17TR8	8320097	20	BC 547B
17TR9	8320396	24	2N 5639 24 4PF 4392
17TR100/200	8320344	20	BC 550B

17IC1	8340108	109	MHN-3P2- RDS
17IC100/200	8340054	19	MPS A13 19 TPS A13
21TR1	8320331	20	BC 328- 25/18
21TR2			
21TR3			
21TR4			
21TR5			
21TR6	8320104	20	BC 558B
21TR7	8320108	20	BC 548B
21TR10	8320368	31	BD 533
21TR11	8320329	20	BC 338/25
21TR12	8320331	20	BC 328- 25/18
21TR13			
21TR14	8320108	20	BC 548B
21IC1	8340199	101	SN74LS42
21IC2	8340156	101	SN74247N
21IC3	8340054	19	MPS A13 19 TPS A13
21IC4	8340104	102	SN 16880N
21IC5	8340200	124	µC 8048
21IC6	8340201	124	Exp. 8355
21IC7	8340192	101	SN 7445N
22TR1	8320152	20	BC 557B
22TR2			
22TR3			
22TR4			
22TR5			
22TR6			
23TR1	8320329	20	BC 338/25
23TR2	8320237	20	BC 546B
23IC1	8340196	101	TDA 1046
34TR1	8320152	20	BC 557B
34TR2	8320097	20	BC 547B

LIST OF DIODES, ETC.



1D1	8300041	209	BB103green	3D12	8300058	217	SFD 184
1D2						215	1N 4148
						209	1N 4148
1D3	8300050	209	BB 103blue	3D100/200	8300029	209	ZPD 12 V 5%
1D4						209	BZX 79 12V
						209	BZX 83 12V
2D1	8300058	217	SFD 184	3D101/201	8300058	217	SFD 184
2D2		215	1N 4148	3D102/202		215	1N 4148
		209	1N 4148	3D103/202		209	1N 4148
2D3	8300056	209	ZTE 1.5 10%	3D104/204			
2D4	8340190	209	ZTK 18	4D1	8300033	209	ZPD 22V 5%
2D5	8300058	217	SFD 184			209	BZX 79 22V
2D6		215	1N 4148			209	BZX 83 22V
2D7		209	1N 4148	5D1	8300058	217	SFD 184
2D8	8340189	209	ZTK 11			215	1N 4148
						209	1N 4148
3D1	8300297		B80C3700/ 2200	6D1	8330004	219	SFH 205
3D2	8300135	209	ZPD3.3V 5%	6D4	8300326	209	ZPD 11V 5%
		209	BZX 79 3.3V			209	BZX 83 C11
		209	BZX 83 3.3V			209	Bzx 79 C11
3D3	8300058	217	SFD 184	6D5	8300023	209	1N 4002RL
3D4		215	1N 4148	6D6			
3D5		209	1N 4148	7D1	8300056	209	ZTE 1.5 10%
3D6	8300222	209	ZPD2.7V 5%	8D2	8330022	203	LD 271
		209	BZX 83 2.7V	8D3			V-290-P
3D7	8300028	209	ZPD9.1V 5%	8D4			
		209	BZX 79 9.1V	11D1	8300029	209	ZPD 12V 5%
		209	BZX 83 9.1V			209	BZX 79 12 V
3D8	8300275		B80C5000/ 3300			209	BZX 83 12 V
3D9	8300023	209	1N 4002RL	11D2	8300058	217	SFD 184
3D10				11D3		215	1N 4148
				11D4		209	1N 4148
3D11	8300313	209	ZPD 15V 2%	11D5			
		209	BZX 79 15V	11D6			
			2%	11D8	8300023	209	1N 4002RL
		209	BZX 83 15V	11D9	8300058	217	SFD 184
			2%			215	1N 4148
						209	1N 4148

11D10	8300128	209	ZPD5.6V 5%	21D3	8300309	209	ZPD 4.7 2%
		209	BZX 79 5.6V			209	BZX 83 4.7V
		209	BZX 83 5.6V				2%
						209	BZX 79 4.7V
11D11	8300023	209	1N 4002RL				2%
11D14	8300058	217	SFD 184	21D4	8300058	217	SFD 184
11D15		215	1N 4148	21D5		215	1N 4148
11D16		209	1N 4148	21D6		209	1N 4148
11D17				21D7	8330010	220	CQY 73 N/K
11D18				21D8			
11D19	8300023	209	1N 4002RL	21D9			
11D20				21D10	8330009	220	CQY 41 N/N
11D21				21D11			
11D22				21D12	8300058	217	SFD 184
11D23	8300058	217	SFD 184	21D13		215	1N 4148
		215	1N 4148			209	1N 4148
		209	1N 4148	21DP1	8330028		FCS 8499
11D24	8300053	209	ZPD 15 5%	21DP2	8330029		FNA 8399
		209	BZX 79 15V				
		209	BZX 83 15V	22D1	8300058	217	SFD 184
11D100/200	8300058	217	SFD 184	22D2		215	1N 4148
		215	1N 4148	22D3		209	1N 4148
		209	1N 4148	22D4			
13D1	8300023	209	1N 4002RL	22D5			
13D2				22D6			
				22D7			
17D1	8300058	217	SFD 184	23D1	8330009	220	CQY 41 N/N
17D2		215	1N 4148	23D2			
17D3		209	1N 4148	23D3	8300058	217	SFD 184
17D4						215	1N 4148
17D5						209	1N 4148
17D6				34D1	8330001		5075B
17D7							
17D8							
18D1	8300023	209	1N 4002RL				
18D2							
18D3	8300058	217	SFD 184				
21D1		215	1N 4148				
21D2		209	1N 4148				

AM, 8002367, PC23

MP-Tape indicator
8002447 PC34

R8	5370074	10 kohms $\pm 20\%$	R9	5370058	5 kohms $\pm 20\%$
R1	5010064	2.2 kohms $\pm 5\%$ 1/8W	R4	5010064	2.2 kohms $\pm 5\%$ 1/8W
R2	5010044	330 ohms $\pm 5\%$ 1/8W	R5	5010064	2.2 kohms $\pm 5\%$ 1/8W
R3	5010059	10 kohms $\pm 5\%$ 1/8W			
C1	4010041	10 nF -20+80% 40V	C2	4010041	10 nF -20+80% 40V
P44	7220131	Plug 4/3 pins			

Øvrige dele se side 3-8/Other parts, see page 3-8