KENWOOD

STEREO DECK AMPLI-TUNER

SYNTHE (X05-2060-10) (B/7)

TUNER (X05-2060-10) (A/7)

LOGIC (X05-2060-10) (D/7)

REC AMP (X28-1410-10) (A/4)

DISPLAY (X05-2060-10) (C/7)

MPX/SELECTOR (X09-1750-10) (D/9)

MAIN AMP (X09-1750-10) (E/9)

POWER SW (X09-1750-10) (I/9)

STBY LED (X09-1750-10) (G/9)

50/70μS SW (X09-1750-10) (H/9)

PRE AMP (X09-1750-10) (B/9)

MIC AMP (X09-1750-10)

*IC4 : KB4424A

	R86
Except for 2-71, 2-72	4.7K
For 2-71, 2-72	15K

Q8,9,12,13,15,16,18,19,20,21,24 : 2SC945 (A) (Q,P) or 2SC1685 (R,S)
Q10,11 : 2SC1685 (R,S)
Q14,17 : 2SA733 (A) (Q,P) or 2SA1127NC (R,S)

D3,13,14: IS2076
D12 : XZ-051

IC1 AN6551

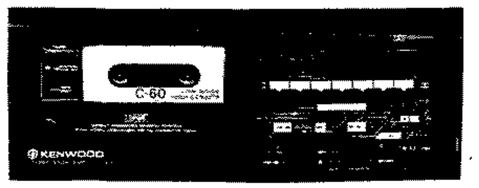
IC2 : AN6551

	PLAY			PHONO, AUX, AM		
	B	C	E	B	C	E
Q12	0	2.6V	0.4V	0.1V	0.1V	0
Q13	1V	0.4V	0.4V	0.1V	8.9V	0
Q14	8.9V	9V	9V	8.9V	-8.7V	8.9V
Q15	1	0.3V	0.4V	0.1V	5V	0.4V
Q16	0.2V	8.9V	0.4V	1	0.5V	0.4V
Q17	8.9V	-8.6V	9V	8.4V	9V	9V
Q18	0.1V	2.6V	0	0.1V	0	0

2SC2668 · 2SD313T-AL (E) 2SD330 (E,F) · 2SK105 (H,J) · KB4424A · μPD4035 · NE646N HA1137W · μPD1703C-016 · MB74LS42M · μPD651C-23 · 2SA1127NC PR,S) 2SA733 (A) (Q,P) 2SA992 (F,E) 2SC2378 (Q,P,K) 2SC945 (A) 2SC1685 (R,S) 2SC1384 (Q,R) · 2SC1845 (F,E) 2SD592NC (Q,R,S) · 2SK55 (E) · 2SK61 (Y) · 3SK85

STEREO DECK AMPLI-TUNER

DC-20X



SPECIFICATIONS

AUDIO SECTION	
Monitor Power Output	
into 8 ohms at 1,000 Hz, 1% THD	1.7W + 1.7W
Input Sensitivity/Impedance	
PHONO (MM)	2.5 mV/50 kohms
AUX	150 mV/30 kohms
MIC	2 mV/5 kohms
Signal-to-Noise Ratio (A weighted)	
PHONO (MM)	70 dB for 2.5 mV input
AUX	88 dB
MIC	65 dB
Maximum PHONO Input Level at 1,000 Hz	55 mV (RMS) THD 0.3%
Frequency Response	
PHONO RIAA Standard Curve	30 Hz to 15 kHz ±0.2 dB
AUX	20 Hz to 60 kHz +0 dB −3 dB
Tone Control	
BASS	±10 dB at 100 Hz
TREBLE	±10 dB at 10 kHz
Loudness Control (VOL. −30 dB)	+8 dB at 100 Hz
Output Level/Impedance	
REC OUT	150 mV/10 kohms
PRE OUT	150 mV/10 kohms

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Kenwood strebt stand de Weiterentwicklungen in der Entwicklung an. Dahin bleiben Änderungen der technischen Daten jederzeit vorbehalten.

- DC voltages are measured by a VOM of 20 kΩ/V input impedance
- Les tensions de courant continu sont mesurées par un multimétre d'une impédance d'entrée de 20 kΩ/V
- Die Gleichstrom-Spannungen werden durch ein Vielfachmeßgerät von 20 kΩ/V Eingangs-Impedanz gemessen

μPD651C-23

2SA1127NC PR,S) 2SC1845 (F,E)
2SA733 (A) (Q,P) 2SD592NC (Q,R,S)
2SA992 (F,E)
2SC2378 (Q,P,K)
2SC945 (A)
2SC1685 (R,S)
2SC1384 (Q,R)

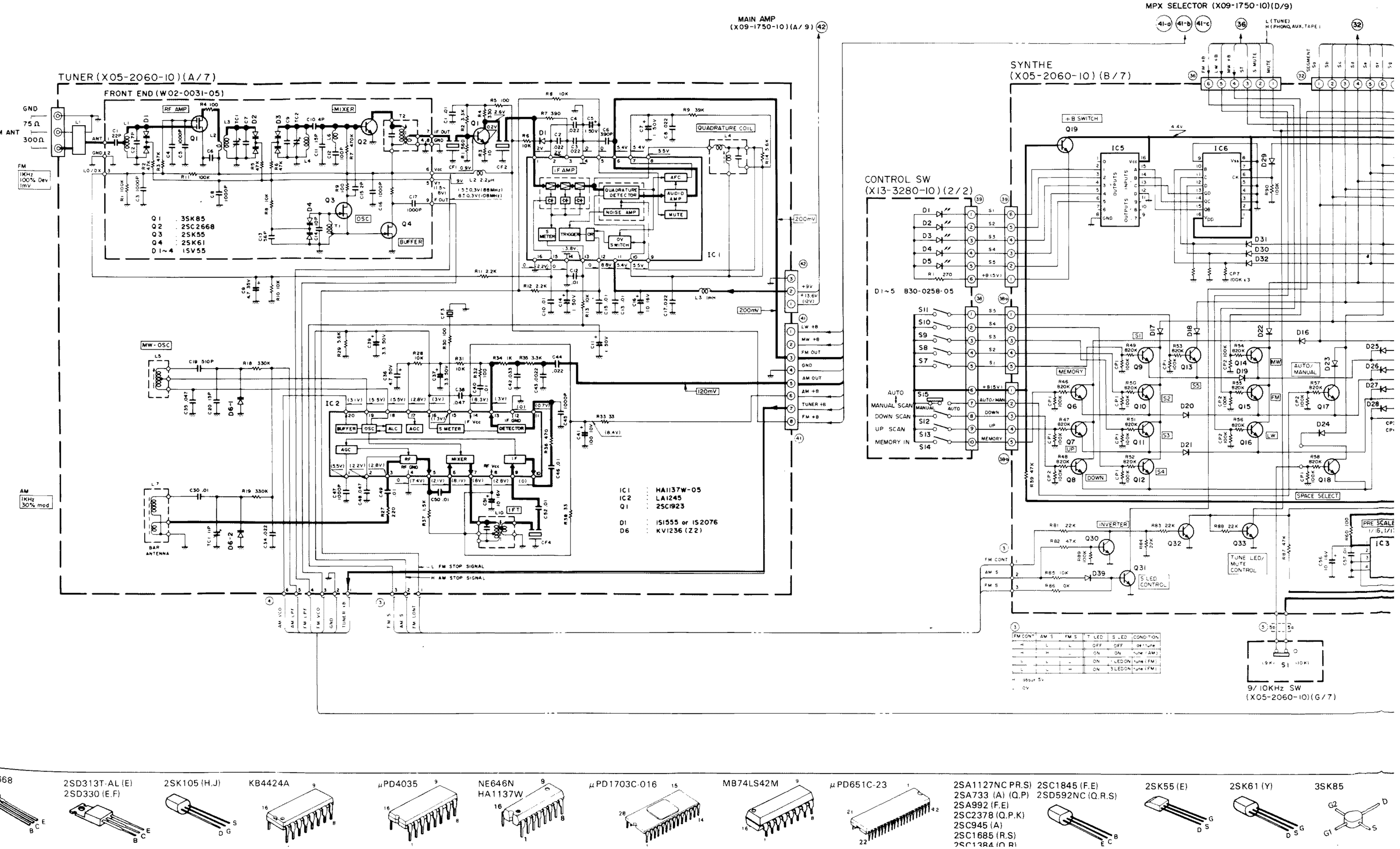
2SK55 (E) 2SK61 (Y) 3SK85 μPB553AC AN6551 LA1245 MB84066B DN6838 μPC78L05

KENWOOD

STEREO DECK AMPLI-TUNER

A | B | C | D | E | F | G | H | I | J | K | L

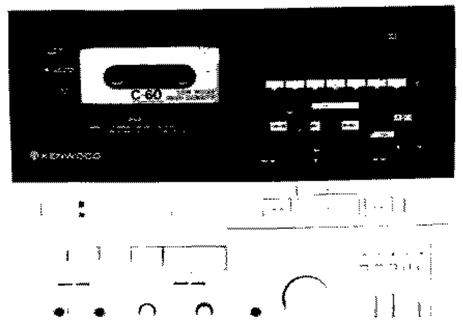
1 | 2 | 3 | 4 | 5 | 6



2SC2668 | 2SD313T-AL (E) 2SD330 (E,F) | 2SK105 (H,J) | KB4424A | μPD4035 | NE646N HA1137W | μPD1703C-016 | M74LS42M | μPD651C-23 | 2SA1127NC PR,S) 2SA733 (A) (Q,P) 2SA992 (F,E) 2SC2378 (Q,P,K) 2SC945 (A) 2SC1685 (R,S) | 2SC1845 (F,E) 2SD592NC (Q,R,S) | 2SK55 (E) | 2SK61 (Y) | 3SK85

STEREO DECK AMPLI-TUNER

DC-20X



SPECIFICATIONS

FM TUNER SECTION	
Usable Sensitivity (300Ω)	13.2 dBf (2.5 µV)
50 dB Quieting Sensitivity	
Mono	17.7 dBf (4.2 µV)
Stereo	40 dBf (55 µV)
Signal-to-Noise Ratio at 65 dBf	
Mono	67 dB
Stereo	62 dB
Total Harmonic Distortion at 1,000 Hz	
Mono	0.4%
Stereo	0.5%
Frequency Response	30 Hz to 15 kHz +0.5 dB −1.5 dB
Capture Ratio	1 dB
Image Rejection Ratio	78 dB
IF Response Ratio	90 dB
Alternate Channel Selectivity	55 dB at 400 kHz
Stereo Separation Ratio	36 dB at 1,000 Hz 30 dB at 50 Hz to 10 kHz
Antenne Impedance	300 ohms balanced
FM Frequency Range	87.5 MHz to 108 MHz
AM TUNER SECTION	
Usable Sensitivity	700 µV/m
Signal-to-Noise Ratio	45 dB
Image Rejection	40 dB
Selectivity	35 dB
AM Frequency Range	530 kHz ~ 1620 kHz

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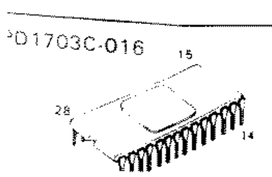
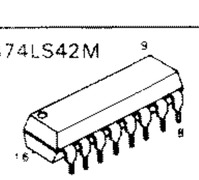
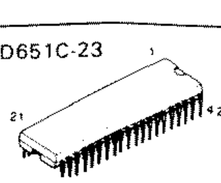
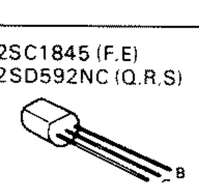
- Die Gleichstrom-Spannungen werden durch ein Vielfachmeßgerät von 20 kΩ/V Eingangs-Impedanz gemessen

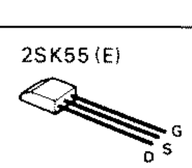


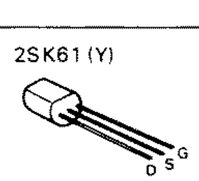


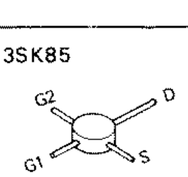


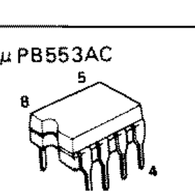
2SA1127NC PR,S)
2SA733 (A) (Q,P)
2SA992 (F,E)
2SC2378 (Q,P,K)
2SC945 (A)
2SC1685 (R,S)

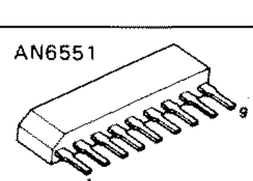


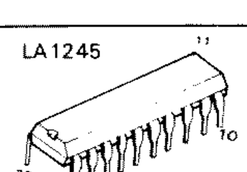


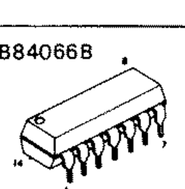


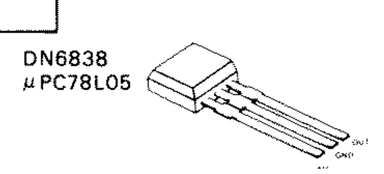












STEREO DECK AMPLI-TUNER

DC-20X

F G H I J K L M N P Q

MPX SELECTOR (X09-1750-10)(D/9)

MAIN AMP (X09-1750-10)(A/9)

TAPE END DETECT (X05-2060-10)(F/7)

CONTROL SW (X13-3280-10)(1/2)

LOGIC(X05-2060-10)(D/7)

DISPLAY(X05-2060-10)(C/7)

SYNTHE (X05-2060-10)(B/7)

MAIN AMP (X09-1750-10)(A/9)

TIMER PLAY/REC (X05-2060-10)(E/7)

CASSETTE MECHANISM ASS'Y

Q57~62,65~67 : 2SC945(A)(Q,P) 2SC1685(R,S)
Q63,64,68 : 2SD368 or 2SD592NC(Q,R,S)
IC8 : 78L05C
IC9 : μPD651C-23
D71~81,83,89,91 : 1S2076 or 1S1555
D88,94 : XZ-041
D90 : V03C
D92,93,101 : W06B
D97,98 : IN60
D99,100 : V06B

Q41~46,48~56 : 2SC945(A)(Q,P) or 2SC1685(R,S)
Q47 : 2SA733(A)(Q,P) or 2SA1127NC(R,S)

Erase current / Test tape
60mA : AC-221
80mA : AC-512
40mA : AC-71

SPECIFICATIONS

TAPE DECK SECTION

Type	Front Loading Stereo Casse… Deck with Dolby* NR Syste…
Track System	4 Track 2 Channel Stereo/M… Recording/Playback
Recording System	AC Bias System (Bias Freque… 85 kHz)
Erasing System	AC System
Tape Speed	4.76 cm/sec (1 7/8 ips)
Heads	Record and Playback Hea… (Permlic Hi-B Ferrite) Erase Head × 1 (Sendust … Ferrite)
Motor	Electronically Controlled … Motor
Fast Winding Time	Approx. 105 seconds with … tape
Frequency Response	
Normal Tape	25 Hz to 15000 Hz (30 Hz… 14000 Hz ±3 dB)
Chrome Tape	25 Hz to 15000 Hz (30 Hz… 14000 Hz ±3 dB)
Metal Tape	25 Hz to 16000 Hz (30 Hz… 15000 Hz ±3 dB)
Signal to Noise Ratio	
Dolby NR ON (Over 5 kHz)	60 dB (Normal Tape) 61 d… (Chrome Tape) 61 dB (… Tape)
Dolby NR OFF	51 dB (Normal Tape) 52… (Chrome Tape) 52 dB (… Tape)
Harmonic Distortion	Less than 1% at 1 kHz 0 VU… Metal Tape)
Wow and Flutter	0.05% (W.R.M.S.)
Built-in Features	Dolby Noise Reduction Syst… Direct Program Search Syste… Music Computer Fa… Auto Shut Off Mechanis… e Modes Timer Standby Mechanism… Automatic Level Control

• DOLBY and the double D symbo… are trade marks of D… Laboratories Licensing Corporation. Noise reduction circuit made under license from Dolby Laborat… Licensing Corporation.

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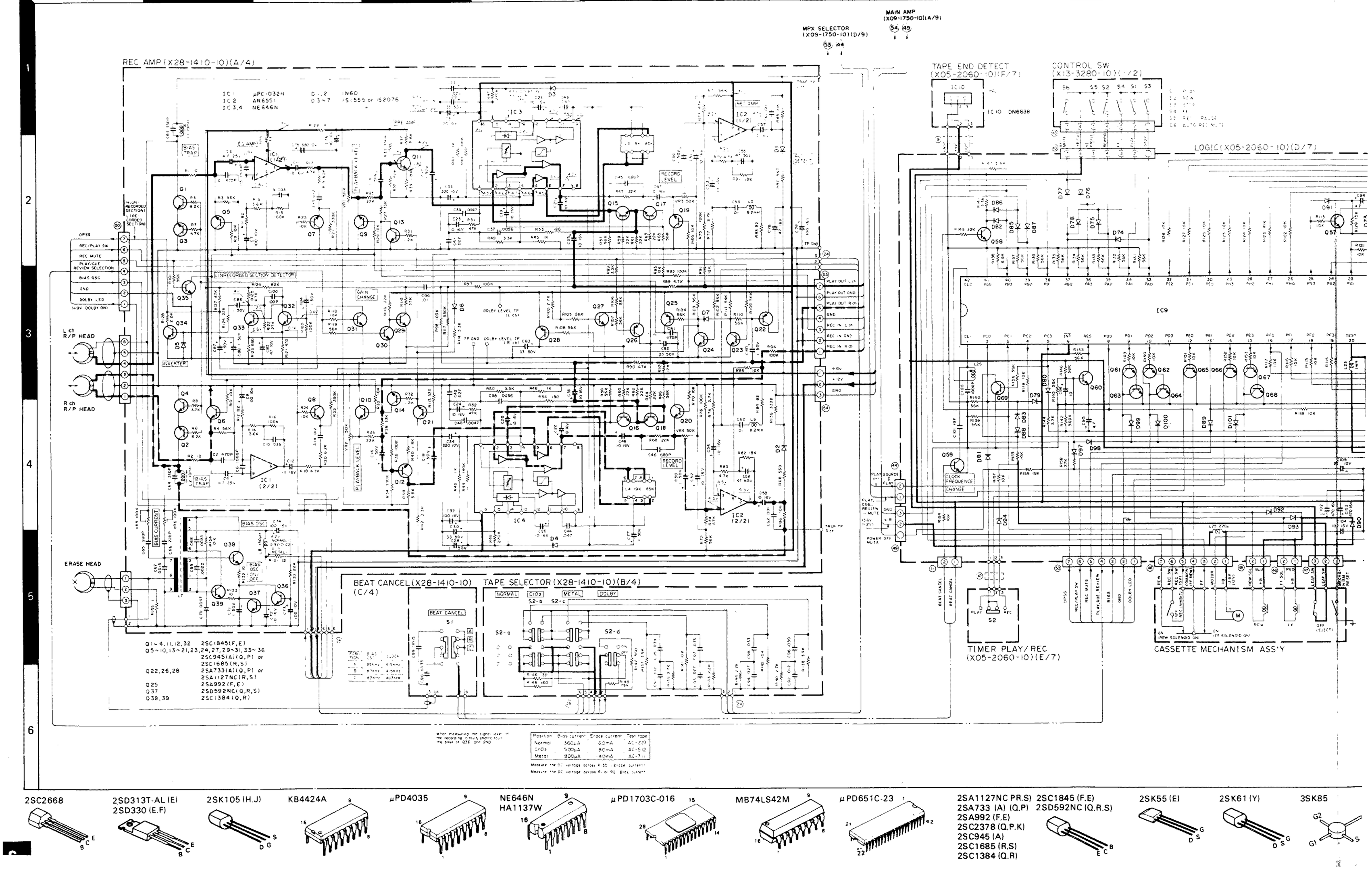
- Die Gleichstrom-Spannungen werden durch … Vielfachmeßgerat von 20kΩ/V Eingangs-Impeda… gemessen

μPD1703C-016 · MB74LS42M · μPD651C-23 · 2SA1127NC PR,S) 2SA733 (A) (Q,P) 2SA992 (F,E) 2SC2378 (Q,P,K) 2SC945 (A) 2SC1685 (R,S) 2SC1384 (Q,R) · 2SC1845 (F,E) 2SD592NC (Q,R,S) · 2SK55 (E) · 2SK61 (Y) · 3SK85 · μPB553AC · AN6551 · LA1245 · MB84066B · DN6838 μPC78L05



2SC2668

2SD313T-AL (E)
2SD330 (E.F)

2SK105 (H.J)

KB4424A

µPD4035

NE646N
HA1137W

µPD1703C-016

MB74LS42M

µPD651C-23

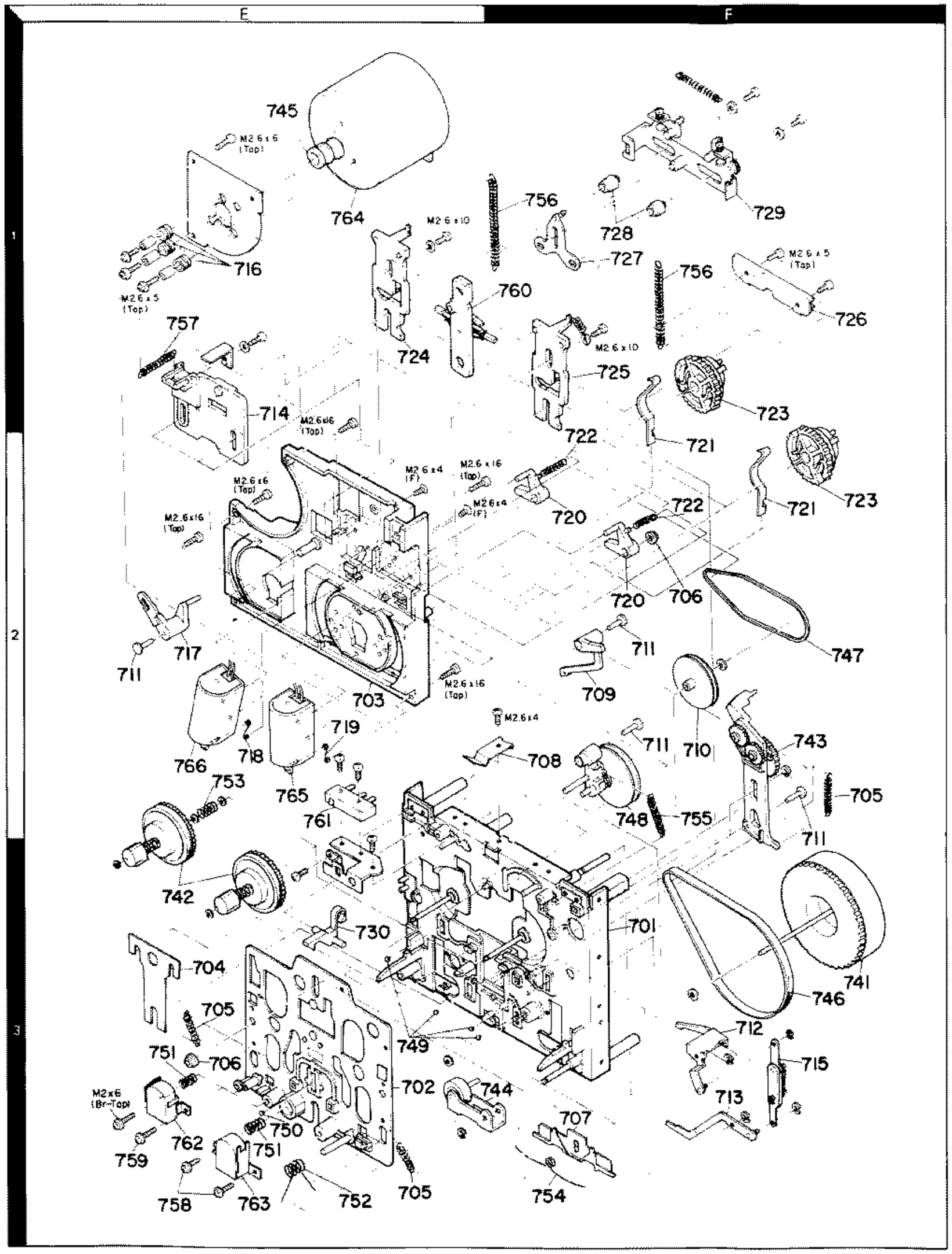
2SA1127NC PR.S) 2SC1845 (F.E)
2SA733 (A) (Q.P) 2SD592NC (Q.R.S)
2SA992 (F.E)
2SC2378 (Q.P.K)
2SC945 (A)
2SC1685 (R.S)
2SC1384 (Q.R)

2SK55 (E)

2SK61 (Y)

3SK85

EXPLODED VIEW (MECHANISM)



PARTS LIST

Ref. No. 参照番号	Parts No. 部品番号	Description 部品名／規格	Remarks 備考
Q11 ,12	V03-1845-10	2SC1845(F,E)	
Q13 -21	V03-0945-51	2SC945(A)(Q,P)	
Q13 -21	V03-1685-20	2SC1685(R,S)	
Q22	V01-0733-40	2SA733(A)(Q,P)	
Q22	V01-1127-30	2SA1127NC(R,S)	
Q23 ,24	V03-0945-51	2SC945(A)(Q,P)	
Q23 ,24	V03-1685-20	2SC1685(R,S)	
Q25	V01-0992-10	2SA992(F,E)	
Q26	V01-0733-40	2SA733(A)(Q,P)	
Q26	V01-1127-30	2SA1127NC(R,S)	
Q27	V03-0945-51	2SC945(A)(Q,P)	
Q27	V03-1685-20	2SC1685(R,S)	
Q28	V01-0733-40	2SA733(A)(Q,P)	
Q28	V01-1127-30	2SA1127NC(R,S)	
Q29 -31	V03-0945-51	2SC945(A)(Q,P)	
Q29 -31	V03-1685-20	2SC1685(R,S)	
Q32	V03-1845-10	2SC1845(F,E)	
Q33 -36	V03-0945-51	2SC945(A)(Q,P)	
Q33 -36	V03-1685-20	2SC1685(R,S)	
Q37	V04-0592-30	2SD592NC(Q,R,S)	
Q38 ,39	V03-0373-05	2SC1384(Q,R)	
Q40 ,41	V04-0592-30	2SD592NC(Q,R,S)	
AD-12			
501 38	NO STOCK	METALLIC CABINET	
502 38	NO STOCK	MAIN CHASSIS	
503 38	E03-0047-05	AC INLET	
504 38	L01-2461-05	POWER TRANSFORMER *	KP
504 38	L01-2462-05	POWER TRANSFORMER	*T
504 38	L01-2465-05	POWER TRANSFORMER	*U
504 38	L01-2466-05	POWER TRANSFORMER	*E
-	S31-2053-05	SLIDE SWITCH(POWER SEL)	UE
505 38	X00-2180-10	POWER SUPPLY PCB ASSY	*K
505 38	X00-2180-81	POWER SUPPLY PCB ASSY	*U
505 38	X00-2181-01	POWER SUPPLY PCB ASSY	*P
505 38	X00-2182-71	POWER SUPPLY PCB ASSY	*E
POWER SUPPLY	K:X00-2180-10 P:X00-2181-01 U:X00-2180-81 E:X00-2182-71		
C1	C91-0023-05	CERAMIC 0.01UF AC250V	U
C1	C91-0079-05	CERAMIC 0.01UF AC125V	KPE
C2	C55-1710-38	CERAMIC 0.01UF Z	
C3 ,4	C90-0562-05	ELECTRO 2200UF 25WV	*
C5	C24-1410-79	ELECTRO 100UF 25WV	
C6	C24-1010-79	ELECTRO 100UF 25WV	K
C7	C24-1210-79	ELECTRO 100UF 25WV	
C8	C55-1710-38	CERAMIC 0.01UF Z	
C9	C55-1710-38	CERAMIC 0.01UF Z	E
*	F05-2521-05	FUSE 250V 2.5A	U
*	F05-2525-05	FUSE 250V T2.5A	E
*	F06-5014-05	FUSE 250V 0.5A	KP
*	J13-0041-05	FUSE CLIP K	UP
*	J13-0054-05	FUSE CLIP	E
D1	V11-2400-20	W02	
D2	V11-4109-90	EZ-056	
Q1 ,2	V04-0330-20	2SD330(E,F)	
Q3 ,4	V03-0945-90	2SC945(A)	
Q5	V03-0945-90	2SC945(A)	K
FM FRONT END (W02-0031-05)			
D1 -4	V11-2103-50	1SV55	
Q1	V09-0150-10	3SK85	
Q2	V03-2668-16	2SC2668	

Ref. No. 参照番号	Parts No. 部品番号	Description 部品名／規格	Remarks 備考
Q3	V09-0121-10	2SK55(E)	
Q4	V09-0124-20	2SK61(Y)	
MECHANISM ASSY (D40-0236-05)			
701 3F	NO STOCK	CHASSIS	
702 3E	NO STOCK	HEAD BASE	
703 2E	NO STOCK	SUB CHASSIS	
704 3E	NO STOCK	BASE STOPPER PLATE	
705 3E	NO STOCK	STOPPER(A)SPRING	
706 3E	NO STOCK	STOPPER(B)	
707 3F	NO STOCK	BRAKE PLATE	
708 2F	NO STOCK	SPRING PLATE	
709 2F	NO STOCK	BRAKE RELEASE LEVER	
710 9F	NO STOCK	PULLEY	
711 2E,2F	NO STOCK	CAP	
712 3F	NO STOCK	PLAY LEVER(1)	
713 3F	NO STOCK	PLAY LEVER(2)	
714 2F	NO STOCK	PLAY LEVER(3)	
715 3F	NO STOCK	LEVER ASSY	
716 1E	NO STOCK	CUSHION	
717 2E	NO STOCK	FF/REW LINK	
718 2E	NO STOCK	SOLENOID SPRING(A)	
719 2E	NO STOCK	SOLENOID SPRING(B)	
720 2F	NO STOCK	STOPPER(A)	
721 2F	NO STOCK	PLATE SPRING	
722 2F	NO STOCK	STOPPER SPRING(B)	
723 1F,2F	NO STOCK	CAM GEAR	
724 1E	NO STOCK	FF LEVER	
725 1B	NO STOCK	REW LEVER	
726 1F	NO STOCK	LEVER HOLDER	
727 1F	NO STOCK	CAM ASSY	
728 1F	NO STOCK	COLLAR	
729 1F	NO STOCK	FF/REW LEVER ASSY	
730 3E	NO STOCK	ANTI-ERASE LEVER	
741 3F	D01-0040-08	FLYWHEEL	*
742 3E	D03-0206-08	REEL DISK ASSY	*
743 2F	D13-0073-08	FF/REW GEAR ASSY	*
744 3F	D14-0070-08	PINCH ROLLER	*
745 2F	D15-0189-08	PULLEY	*
746 3F	D16-0069-08	MAIN BELT	*
747 2F	D16-0070-08	REEL BELT	*
748 2F	D19-0059-08	PLAY CLUTCH ASSY	*
749 3E	D90-0022-08	STEAL BALL	*
750 3E	D90-0023-08	STEAL BALL	*
751 3E	G01-0395-08	AZIMUTH SPRING	*
752 3E	G01-0454-08	PINCH ROLLER SPRING	*
753 3E	G01-0455-08	BACK TENTION SPRING	*
754 3F	G01-0456-08	BRAKE SPRING	*
755 2F	G01-0457-08	PLAY CLUTCH SPRING	*
756 1E,1F	G01-0458-08	LEVER SPRING	*
757 1E	G01-0459-08	PLAY LEVER SPRING	
758 3E	N09-0391-08	HEAD SCREW	*
759 1E	N09-0392-08	F LOCK SCREW	*
760 1F	S46-1014-08	SW OPERATIONAL PLATE	*
761 3E	S50-1023-08	SENSITIVE SWITCH	*
762 3E	T32-0302-08	ERASE HEAD	*
763 3E	T34-0302-08	REC/PLAY HEAD	*
764 1E	T42-0012-08	DC MOTOR	*
765 2E	T94-0021-08	SOLENOID(BLUE)	*
766 2E	T94-0022-08	SOLENOID(RED)	*