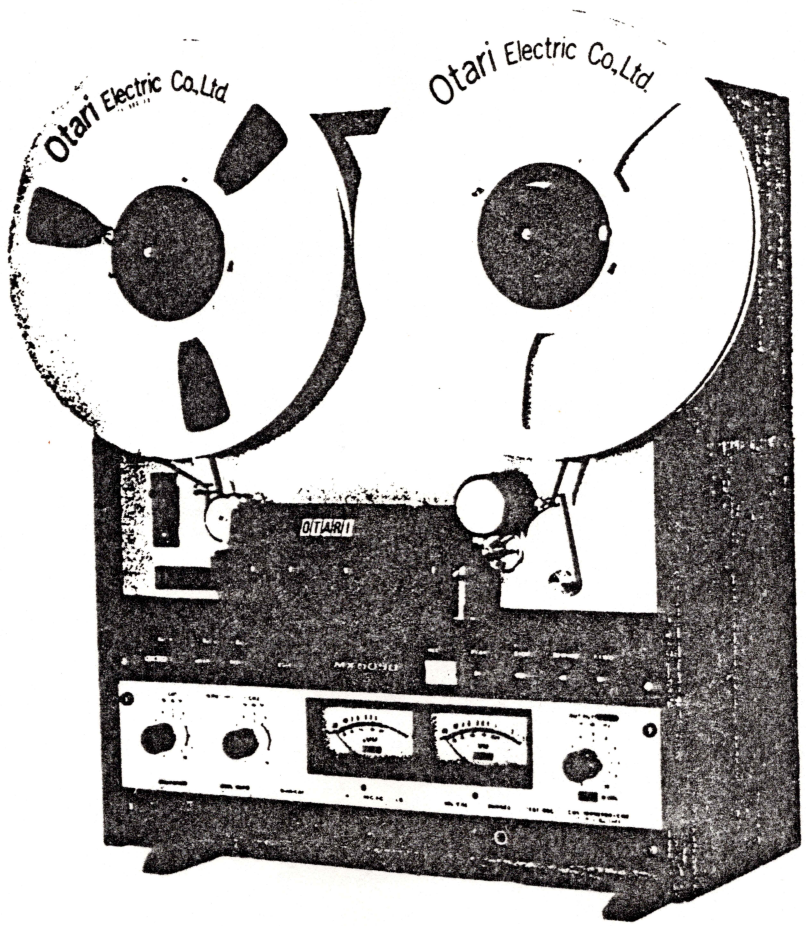
OTARI®

MX-5050
PROFESSIONAL RECORDER

MODELS MX-5050 2S, 4S, 2SD AND 4SD

PARTS LIST AND SCHEMATICS

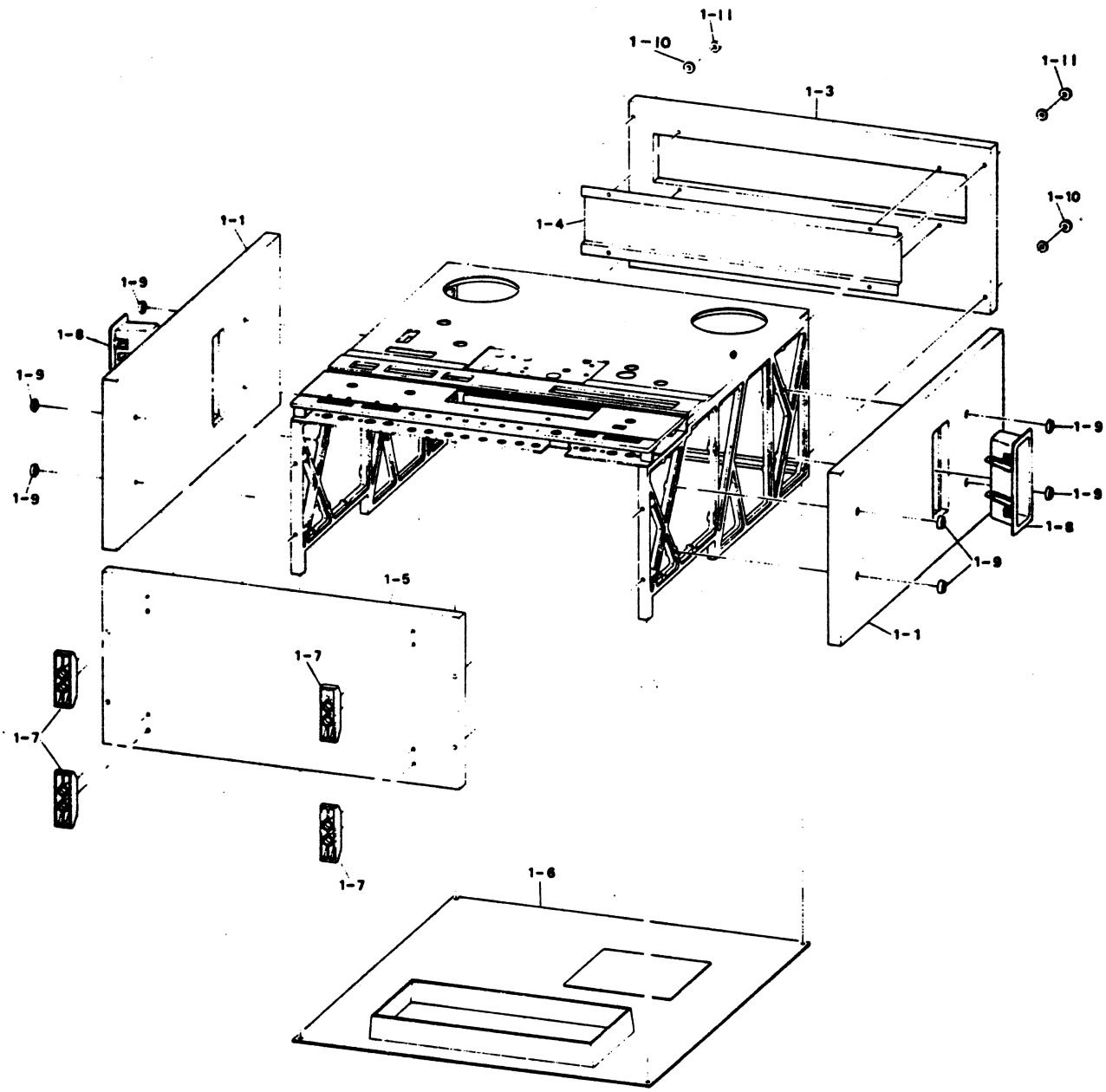


SECTION 6
PARTS LISTS AND SCHEMATICS

PARTS LIST 1

Ref. No.	Description	Parts No. (old)	New No.
1-1	Left Side Board	CS-245-004	K100603
1-1	Right Side Board	CS-245-004	K100603
1-3	Case Top Board	CS-245-002	K100601
1-4	Cooling Cover	CS-232-007	K100602
1-5	Case Bottom Board	CS-245-007	K100604
1-6	Case Rear Board	CS-245-009	K1006-D
1-7	Rubber Pad	NB-91-032	CY4006
1-8	Catcher	CS-245-005	CY1004
1-9	Display Washer	TY-800-014	KZ6C016
1-10	Sheet	TY-800-017	K6C011
1-11	Display Washer	TY-800-021	KZ6C010

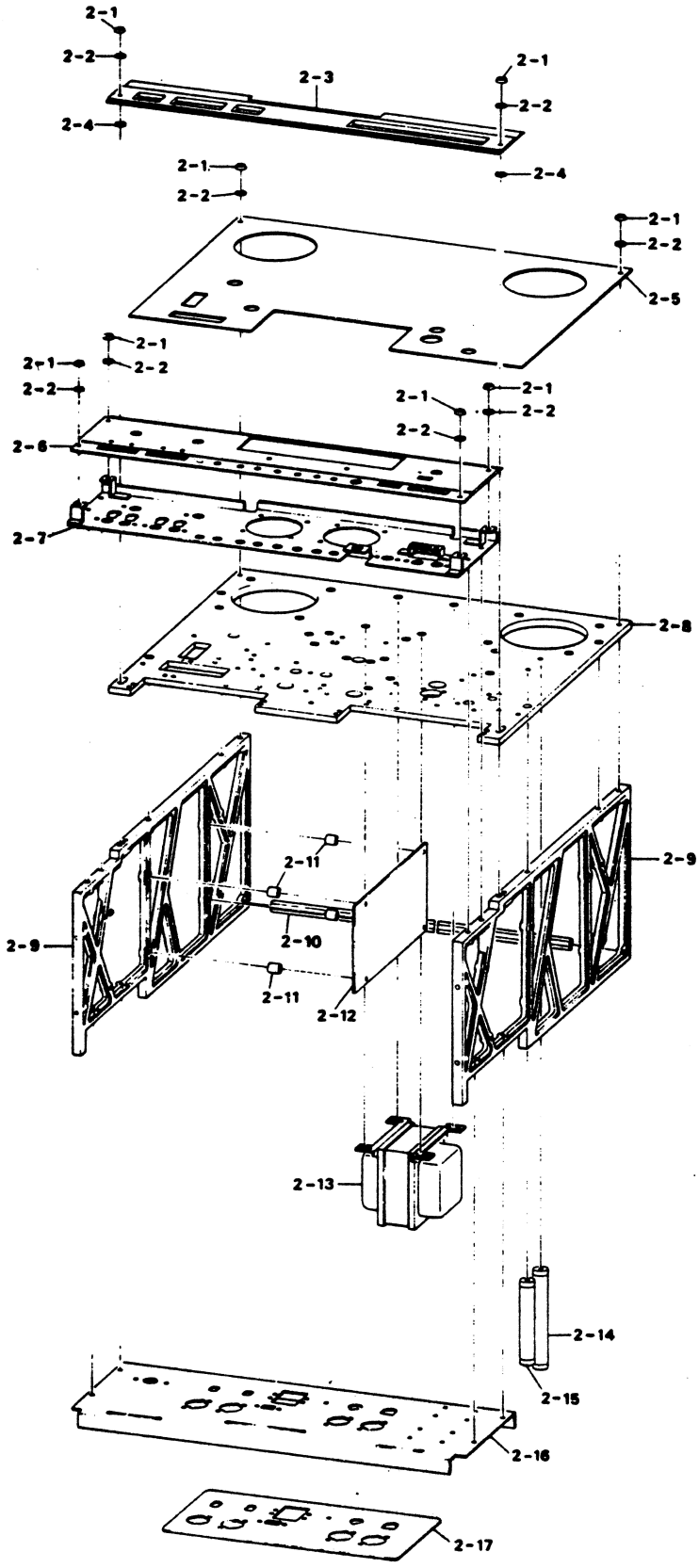
EXPLODED VIEW 1



PARTS LIST 2

Ref. No.	Description	Parts No. (old)	New No.
2-1	Display washer	TY-800-021	KZ6C010
2-2	Sheet	TY-800-017	KZ6C011
2-3	Control Display Panel	TD-5050-004	T505003
2-4	Plain Washer	TY-800-024	KZ6C009
2-5	Display Panel	TD-5050D-001(2SD,4SD)	T506006
		TD-5050-001(2S,4S)	T505002
2-6	Amplifier Display Panel	AF-230-003	A101601
2-7	Amplifier Mounting Base	AF-230-004	A101602
2-8	Mounting Base	TD-5010-001	T505001
2-9	Frame	TD-5010-006	T505004
2-10	Frame Stud	TD-5010-008	KZ7B202
2-11	Stud	ST-107	KZ7A217
2-12	Control PCB Assembly	PA-284	PB-41D
2-13	Power Transfomer	ET-11-194	TF11012
2-14	W-W Resistor	RS-39-40HAAC-600ohm	RV5J6011
2-15	W-W Resistor	RS-39-30HAAC-200ohm	R55J2011
2-16	Rear Panel	AF-230-007	A101609
2-17	Rear Name Plate	AF-230-009	A101610

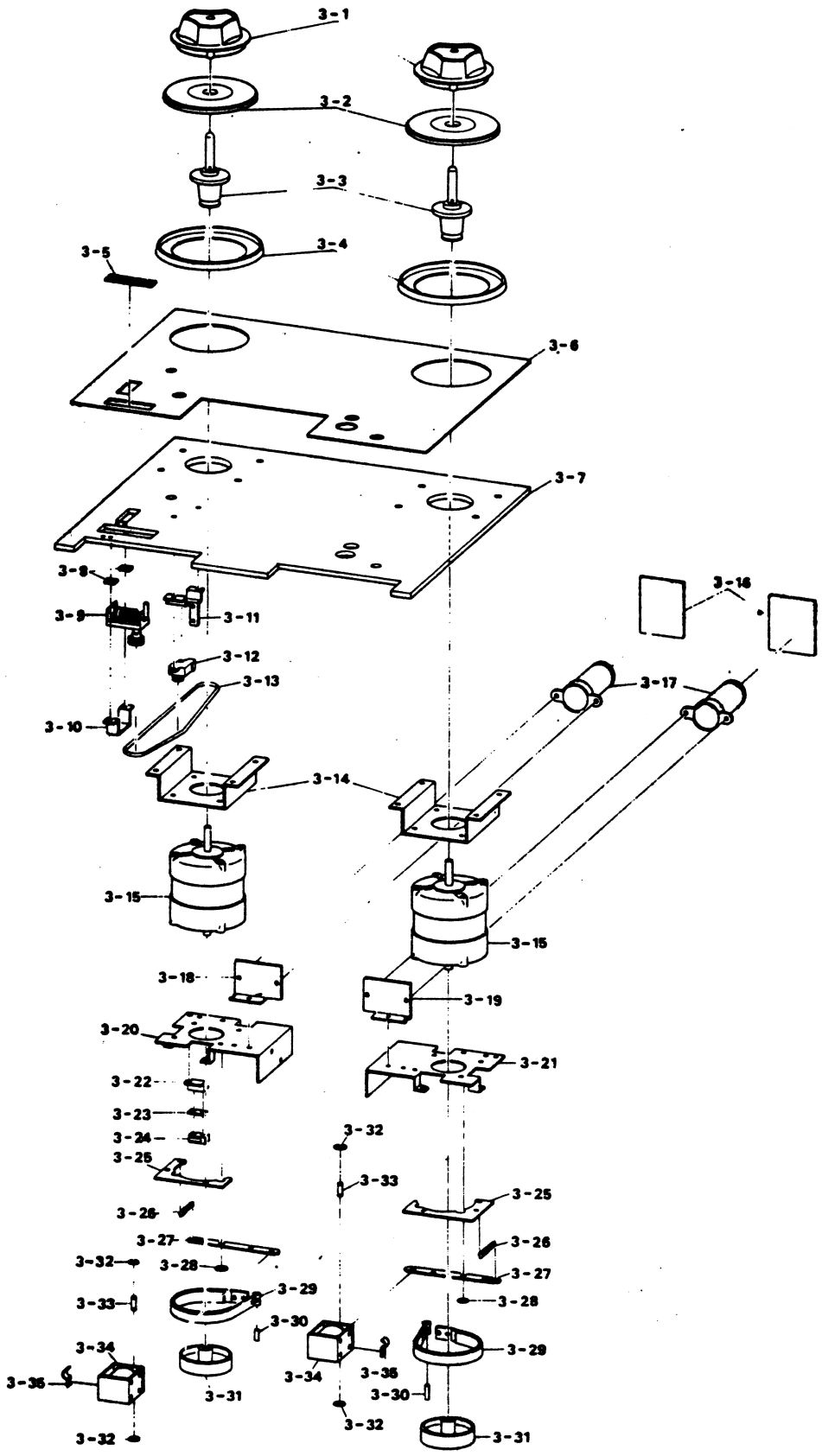
EXPLODED VIEW 2



PARTS LIST 3

Ref. NO.	Description	Parts No. (old)	New No.
3-1	Reel Clamper	TW-661	TW-670
3-2	Reel Table	TW-424-001/KW4J002	Assy.#
3-3	Reel Shaft Holder	TW-424-002/KWOB017S	KW4J001
3-4	Reel Protector	TW-424-009	KWOH007
3-5	Counter Grille	TD-5500-005	SR8B003
3-6	Display Panel	TD-5050D-001(2sD,4SD)	T505006
		TD-5050-001(2S,4S)	T505003
3-7	Mounting Base	TD-5010-001	T505001
3-8	Spacer	TZ-131-001	SR8B002
3-9	Tape Counter	CT-09-T4A SPEC	SR-8B
3-10	Counter Supporter	TZ-126-001	SR8B001
3-11	Switch Bracket	PA-282-003	T505005
3-12	Rotary Switch(With Pulley)	SW-99-HZR0036-01-010/WH91005	
3-13	Endless Belt	TB-5147-20	BE1B147
3-14	Reel Motor Supporter	TW-421-018	KWOG016
3-15	Reel Motor	EW-506-019	MR1C005
3-16	Relaying PCB	PM-678	PB9A027
3-17	Electrolytic Capacitor	CD-99-MPL-5.5μ	CZ10014W
3-18	Capacitor Holder	TW-421-017L	KW4B003
3-19	Capacitor Holder	TW-421-017R	KW4B004
3-20	Brake Base	TW-421-009	KWOG013
3-21	Brake Base	TW-421-007	KWOG012
3-22	Switch Supporter	TW-421-006	KW4B002
3-23	Spacer	TW-421-019	KW4B005
3-24	Micro Switch	SW-59-SS5GL	WH51002
3-25	Brake Guide	TW-421-004	KW4B001
3-26	Spring	SG-100-052	GS1024
3-27	Brake Arm	TW-424-008	KWOD014
3-28	Retaining Ring	EZ-09-E-15	F74TE15
3-29	Brake Band Assembly(With	Sheet).....	KW-4E-A
3-30	Pin	EZ-09-316	F63316
3-31	Brake Drum	TH-424-007	KWOA012
3-32	Retaning Ring	EZ-09-E-9	F74TE09
3-33	Solenoid Pin	TY-400-015	MR5A003
3-34	Solenoid	SO-334 DC24V	GP1F01
3-35	Cord Clamper	.....	KZ3A047

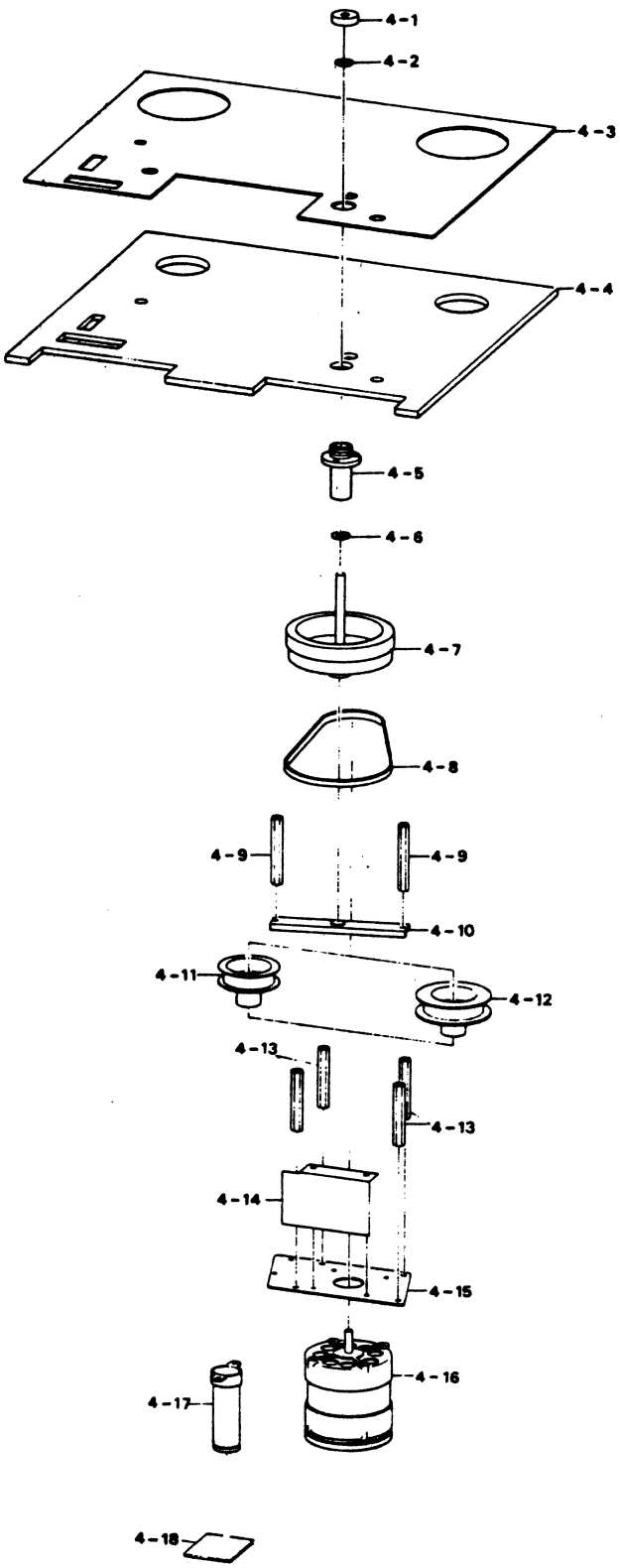
EXPLODED VIEW 3



PARTS LIST 4-1

Ref. No.	Description	Parts No. (old)	New No.
4-1	Dust Cap	TC-423-007	KCOB008
4-2	Felt Collar	TC-419-004	PZ1B007
4-3	Display Panel	TD-5050-001	T505002
4-4	Mounting Base	TD-5010-001	T505001
4-5	Metal Holder Assembly	TC-423-004	KC4B001
4-6	Slide Washer	TY-800-026C	KZ6C014
4-7	Capstan-Flywheel	TC-423-001	KCOA020
4-8	Endless Belt	TB-9140-10-High speed	BE2M140
		TB-9137-10-Low speed	BE2M137
4-9	Stud	ST-076	KZ9I755A
4-10	Flywheel Holder	TC-419-007	KC4B004
4-11	Motor Pulley A	TC-423-008A 50HZ High	KCOD010
		TC-426-001A 50HZ Low	KCOD016
4-12	Motor Pulley B	TC-423-008B 60HZ High	KCOD011
		TC-426-001B 60HZ Low	KCOD017
4-13	Motor Stud	ST-054	KZ9I570A
4-14	Shielding Plate	TC-419-012	KC4B006
4-15	Motor Suppoter	TC-423-009	KC4B005
4-16	Motor	EM-408-011	MR2F010
4-17	Electrolytic Capacitor	CD-99-MPL-2.0+0.5	CZ10011W
4-18	Relaying PCB	PM-669	PB9A026

EXPLODED VIEW 4-1 (For Models 2S and 4S)

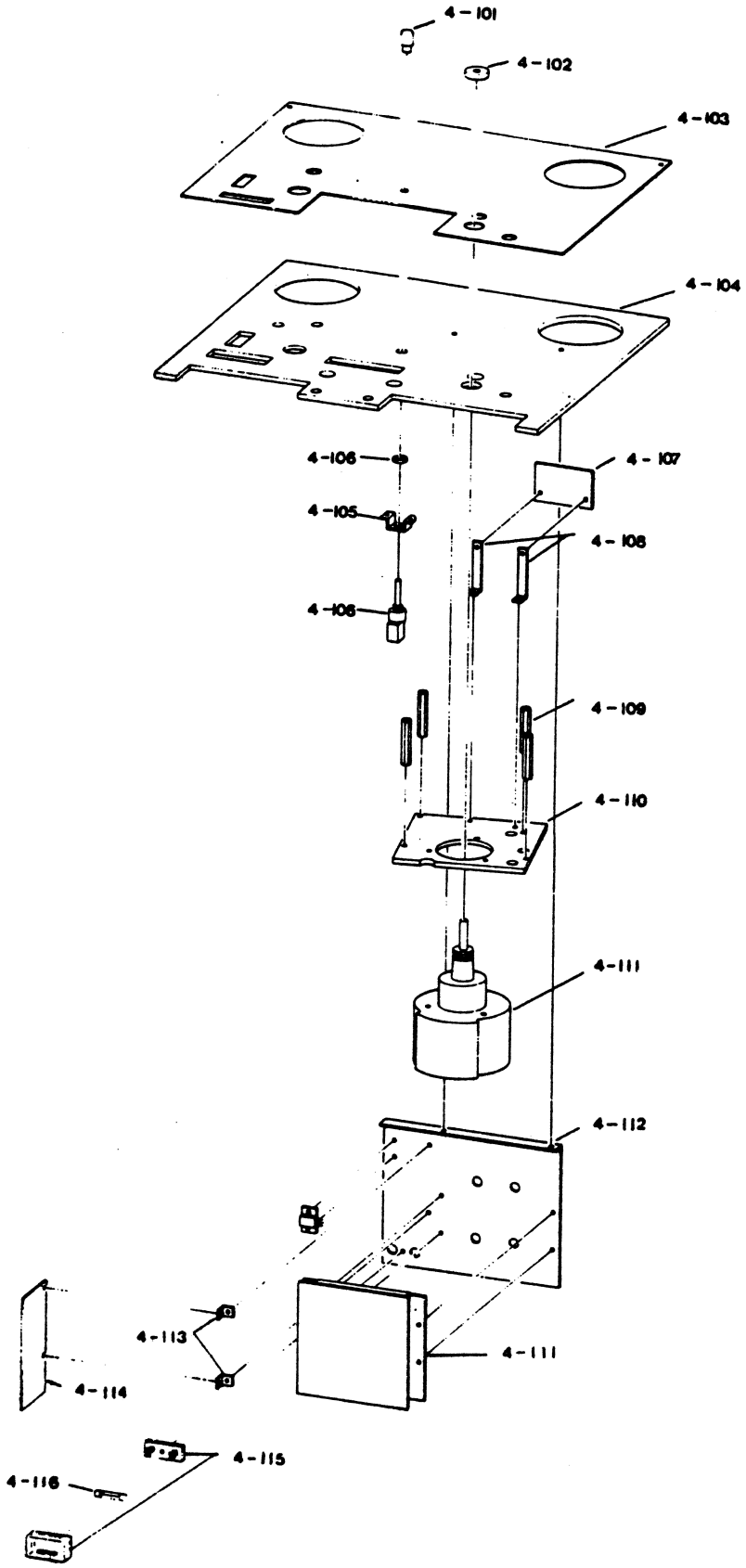


PARTS LIST 4-2

Ref. No.	Description	Parts No. (old)	New No.
4-101	Knob	NB-31-037	KN1013
4-102	Dust Cap	TC-423-007	KCOB008
4-103	Display Panel	TD-5050D-001	T505006
4-104	Mounting Base	TD-5010-001	T505001
4-105	Variable Resistor Supporter	TC-427-003	KZ2A030
4-106	Variable Resistor	VR-29-EVH-Y03R25B52	RV252009
4-107	+5Volt Dc Power Supply PCB Assembly	PA-426	PB-61D
4-108	PCB Supporter	TY-200-082	KZ3A027
4-109	Stud	ST-086	KZ7B220
4-110	Motor Supporter	TC-212-001	KC2B001
4-111	Capstan Drive Motor	EM-710-007A	MR5A001
4-112	Radiator	TC-212-002	KZ1A012
4-113	PCB Supporter	TC-427-004	KZ3A028
4-114	Power Supply PCB Assembly	PA-377	PB-61E
4-115	Fuse Holder	FS-89-F-3294	FH1-022
4-116	Fuse	FS-19-2A	FH7A020

THERE ARE VERY FEW OF THIS VERSION IN THE U.S. PLEASE CONFIRM THESE PART NUMBERS WITH THE CUSTOMER OF THEY ARE ORDERED.

EXPLODED VIEW 4-2 (For Models 2SD and 4SD)

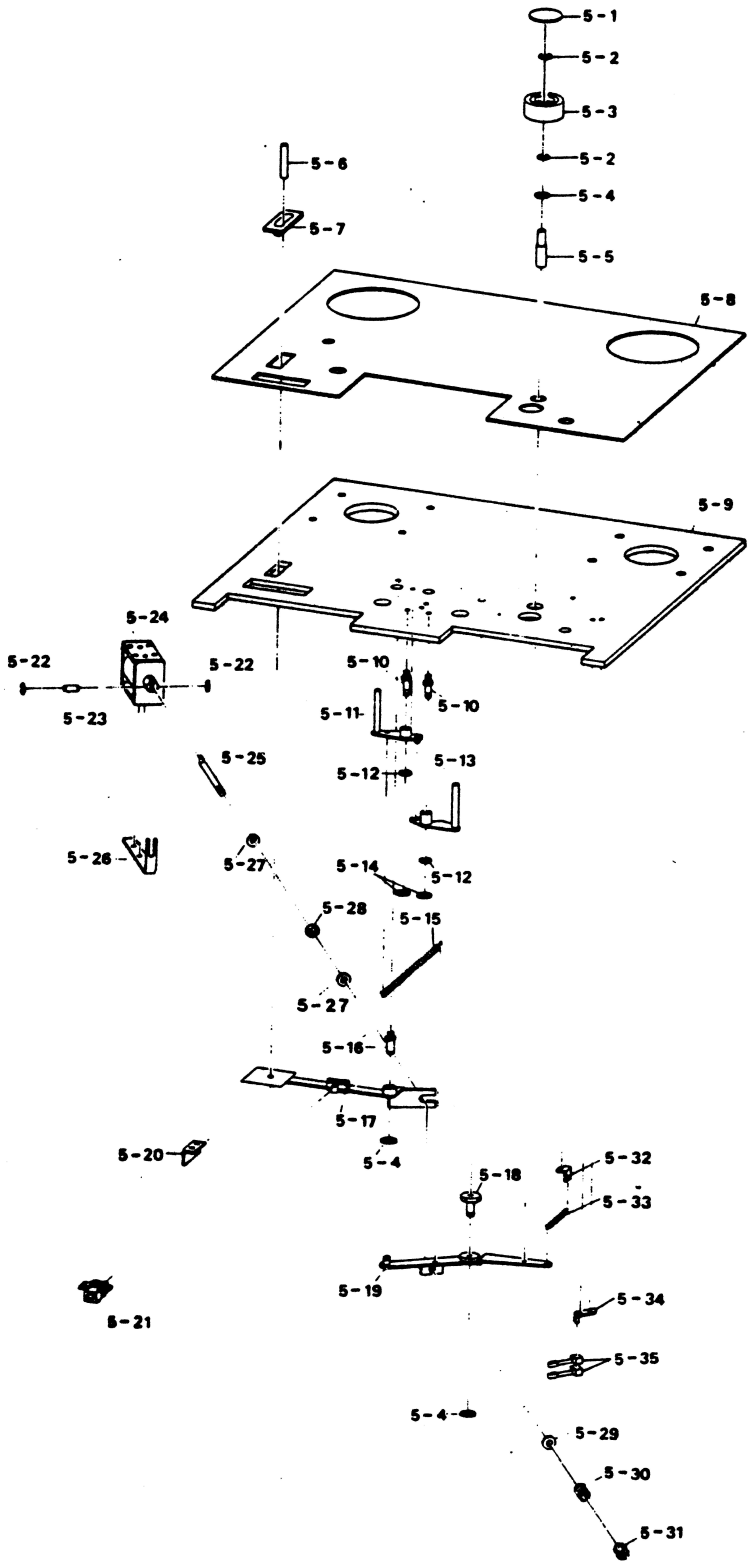


PARTS LIST 5

Ref. No.	Description	Parts No. (old)	New No.
5-1	Pinch Roller Cap	TP-416-001	KPOC005
5-2	Polyslider Washer	EZ-09-5TW-FT-6 0.25	6x0.25 polyslide washer
5-3	Pinch Roller	TP-416-001	KPOA007
5-4	Retaining Ring	EZ-09-E-20	F74TE20
5-5	Pinch Roller Shaft	TP-416-002	KPOB010
5-6	Cue Lever	TR-416-001	KPOC005
*5-7	CUE Lever Escutcheon	TR-416-002	KR4B006
5-8	Display Panel	TD-5050D-001(2SD,4SD)	T505006
		TD-5050-001(2S,4S)	T505002
5-9	Mounting Base	TD-5010-001	T505001
5-10	Arm Shaft	TR-413-002	KR4B001
5-11	Shifter Arm A	TR-413-003	KROB005
5-12	Polyslider Washer	EZ-09-STW-FT-4 0.25	4x0.25 polyslide washer
5-13	Shifter Arm B	TR-413-007	KROB006
5-14	Retaining Ring	EZ-09-E-15	F74TE15
5-15	Spring	SG-100-050	GS1028-A
5-16	Arm Shaft	TR-414-003	KR4B007
5-17	Cue Arm	TR-416-003	KR4B008
5-18	Arm Shaft	TE-416-002	KR4B006
5-19	Pinch Roller Arm	TP-420-002	KR4E001
5-20	Arm Guide	TR-414-007	KR4B011
5-21	Roller Catch	EZ-09-C-51-2	CY3001
5-22	Retaining Ring	EZ-09-E-9	F74TE09
5-23	Solenoid Pin	TY-400-015	KZ5A003
5-24	Solenoid	SO-317	GP1B02
5-25	Adjusting Rod	TP-416-009	KZ6A022
5-26	Stopper	TY-200-013	KZ2A015
5-27	Plain Washer	EZ-09-M4	M4 Washer
5-28	Retaining Ring	EZ-09-E-15	F74TE15
5-29	Spherical Washer	TP-401-007	KPOG004
5-30	Pressure Spring	SG-500-031	GS2003
5-31	Double Nuts	EZ-09-M4	M4 Double Nut
5-32	Spring Holder	TY-900-019	KZ3A023
5-33	Spring	SG-100-048	GS1011
5-34	Switch Braket	TD-500-095	KZ3A026
5-35	Leaf Spring Switch	SW-09-PU-3024	WH91004

* Old Part Number is incorrect, new number is correct.

EXPLODED VIEW 5



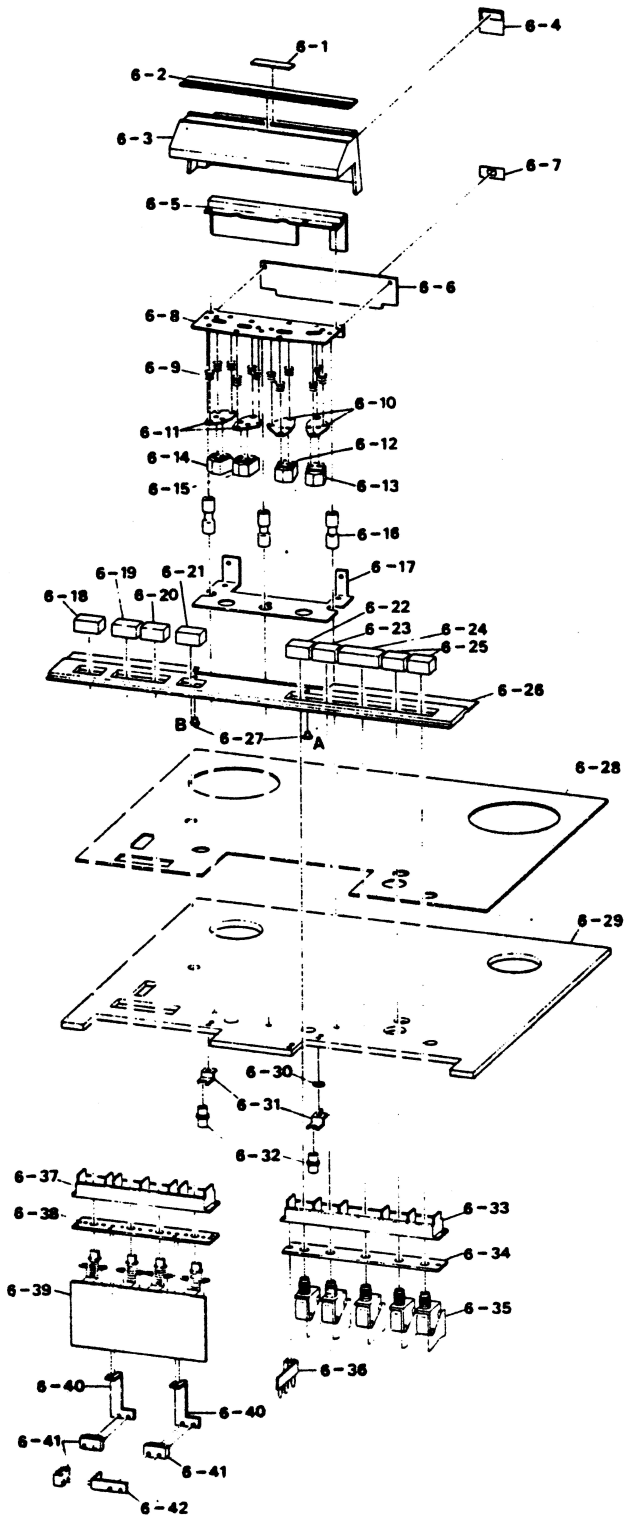
PARTS LIST 6.

Ref. No.	Description	Parts No. (old)	New No.
6-1	Name Plate	TH-446-005	PT1004
6-2	Splicing Block	TH-446-004	KH4C003
6-3	Head Housing Assy	TH-446-00B	KH-4C-A
6-4	Switch Name Plate	TH-446-006	PT4124
6-5	Protector Sheet	TH-438-009	KH4C002
6-6	Head Cord PCB Assembly	PA-274	PB-71B
6-7	Blind	TY-900-009	PZ1B010
6-8	Head Base	TH-446-001	KHOC011
6-9	Head Adjusting Spring	SG-500-063	GS2007
6-10	Head Supporter B	TH-422-002	KHOD005
6-11	Head Supporter A	TH-422-001	KHOD004
6-12	Record Head(2T 2C)	SH-6202-11-001 (2s)	GH4R005
	Record Head(4T 2C)	SH-6204-11-001 (4s)	GH4R003
6-13	Reproduce Head(2T 2C)	SH-7202-11-001 (2s)	GH4P006
	Reproduce Head(4T 2C)	SH-7204-11-002 (4s)	GH4P069
6-14	Erase Head(2T 2C)	SH-5202-11-001 (2s)	GH4E004
	Erase Head(4T 2C)	SH-5204-11-001 (4s)	GH4E009
6-15	Reproduce Head(4T 2C)	SH-7204-11-001 (2s)	GH4P069
	Reproduce Head(2S 2C)	SH-7204-11-001 (4s)	GH4P006
6-16	Tape Guide	TH-438-004	KG4C002
6-17	Housing Base	TH-438-005	KH4C001
6-18	Push Button A	CR-824-001A	KN2020
6-19	Push Button C	CR-824-001C	KN2022
6-20	Push Button B	CR-824-001B	KN2021
6-21	Push Button E	CR-824-001E	KN2024
6-22	Push Button C	CR-823-001C	KN2018
6-23	Push Button B	CR-823-001B	KN2017
6-24	Push Button D	CR-823-001D	KN2019
6-25	Push Button A	CR-823-001A	KN2016
6-26	Control Display Panel	TD-5050-004	T505003
* 6-27	Lamp Cover	TY-900-024 A:Red	LU9002
6-28	Display Panel	TD-5050D-001(2SD,4SD)	T505006
		TD-5050-001(2S,4S)	T505002
6-29	Mounting Base	TD-5010-001	T505001
6-30	Plain Washer	EZ-09-M4	M4 Washer
6-31	Lamp Supporter	TY-900-025	KZ2A029
6-32	Lamp Assembly	PL-19-005	LU2003
6-33	Guide	CR-823-010	CB20602
6-34	Switch Base	CR-823-008	CB20601
6-35	Micro Switch	SW-59-V-1A	WH11007
6-36	2P Terminal	LP-09-1L2P	CN902002
6-37	Guide	CR-824-006	CB20701
6-38	Switch Base	CR-824-005	PB41E01
6-39	POwer Switch PCB Assembly	PA-288	PB-41E
6-40	Micro Switch Supporter	CR-824-007R	PB41E02
6-41	Micro Switch	SW-59-SS5GL	WH51002
6-42	Switch Supporter	CR-824-008	PB41E04

* B:Green

LU9003

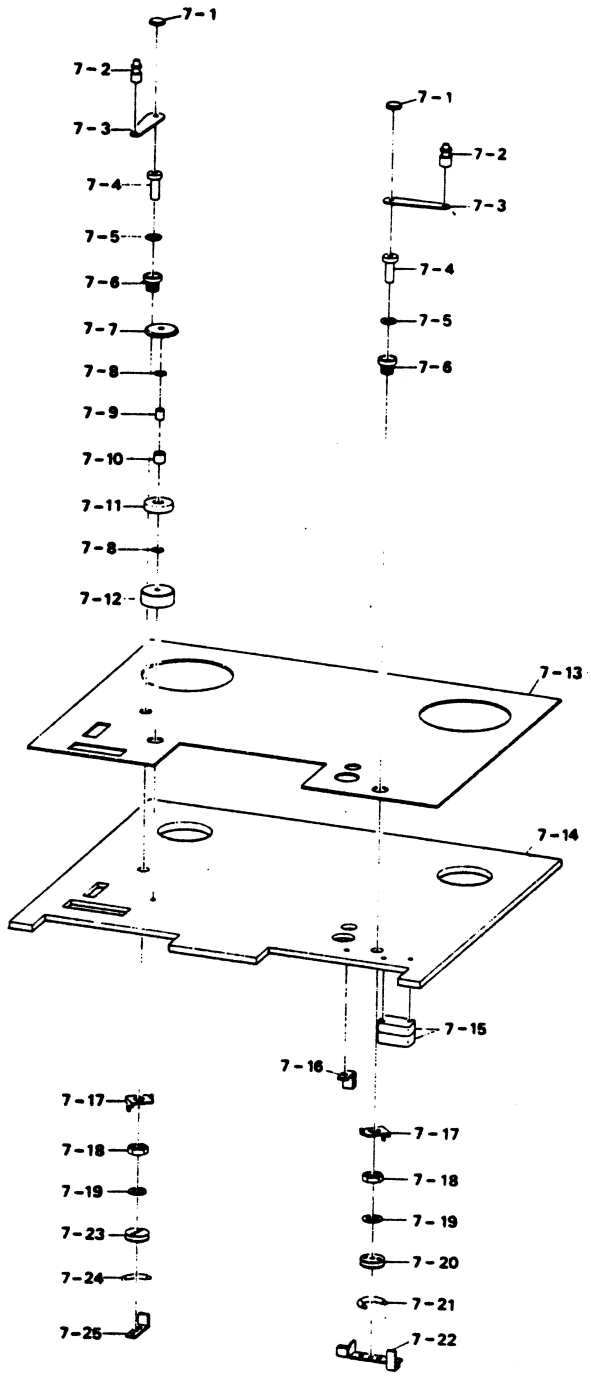
EXPLODED VIEW 6



PARTS LIST 7

Ref. No.	Description	Parts No. (old)	New No.
7-1	Display Screw	TA-420-005	KAOC002
7-2	Tape Guide	TA-420-004	KG4D006
7-3	Tension Arm	TA-420003	KAOA005
7-4	Arm Shaft	TA-429-001	KAOA004
7-5	Polyslider Washer	EZ-09-STW-FT-5 0.5t	5x.5t polyslide washer
7-6	Arm Holder	TA-420-002	KAOB003
7-7	Roller Cap	TG-424-01	GROA005
7-8	Polyslider Washer	EZ-09-STW-FT-8 0.25t	8x.25t polyslide washer
7-9	Roller Shaft	TG-424-02	GR4H001
7-10	Sleeve	TG-424-03 ——┐	Assy. #
7-11	Roller	TG-424-04 ——┘	GR4H002
7-12	Roller Base	TG-424-05	GR4B004
7-13	Display Panel	TD-5050D-001(2SD, 4SD)	T505006
		TD-5050-001(2S,4S)	T505002
7-14	Mounting Base	TD-5010-001	T505001
7-15	Micro Switch	SW-59-1V-3H-2A	WH51004
7-16	Magnetic Supporter	TY-900-023	KZ3A025
7-17	Spring Holder	TY-900-020	KZ3A024
7-18	Nut	TA-420-007	KZ6D004
7-19	Polyslider Washer	EZ-09-STW-FT-5 0.5t	5x.5t polyslide washer
7-20	Arm Boss B	TA-427-001	KAOE005
7-21	Spring	SG-100-047B	GS1027
7-22	Switch Arm	TA-423-002	KA4B001
7-23	Arm Boss A	TA-429-002	KAOE004
7-24	Spring	SG-100-046	GS1025
7-25	Stopper Arm	TA-420-010	KAOH004

EXPLODED VIEW 7

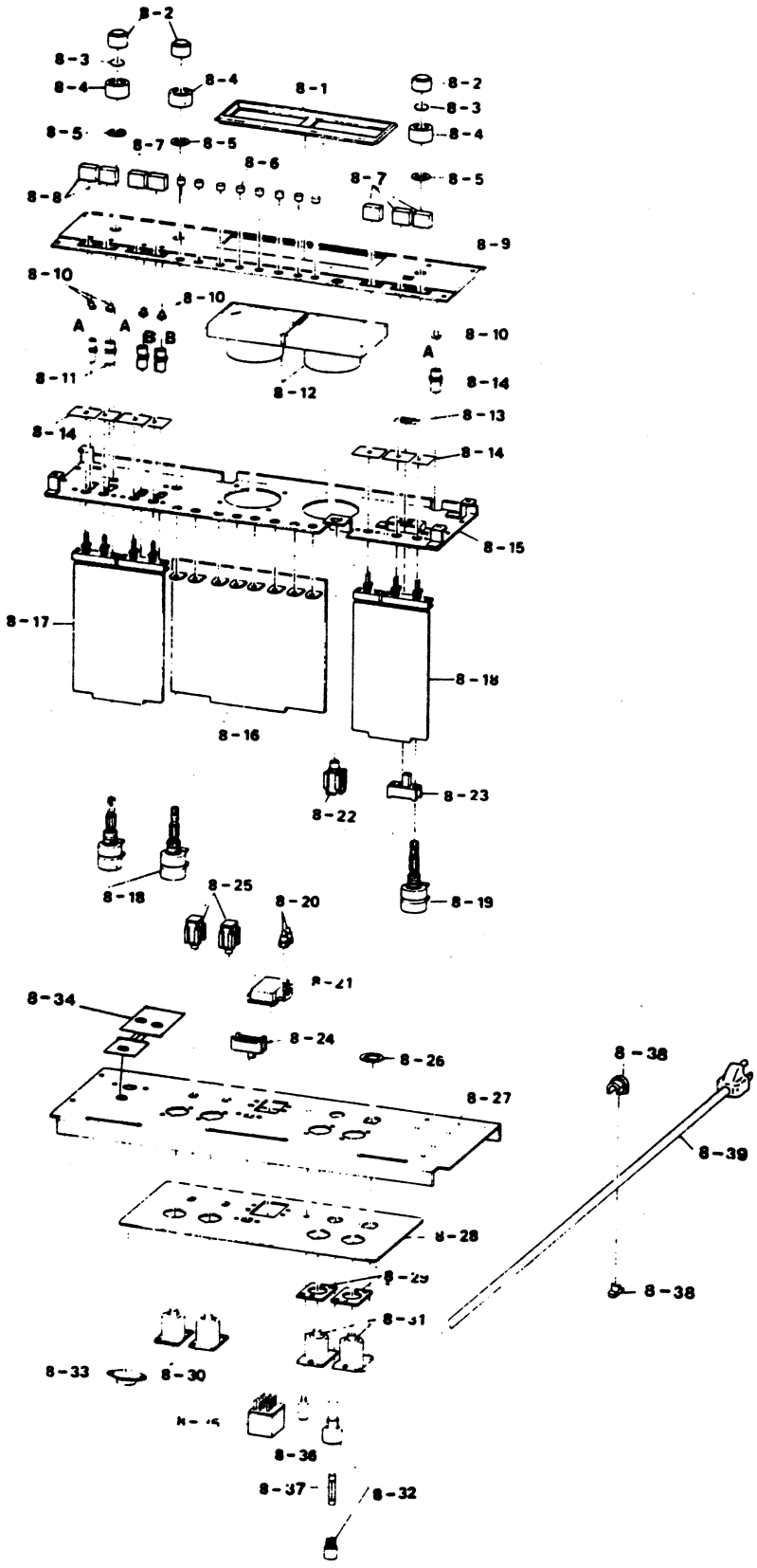


PARTS LIST 8

Ref. No.	Description	Parts No. (old)	New No.
8-1	Meter Grille	AF-207-005	PZ4A007
8-2	Knob B	NB-31-014	KN1012
8-3	Spacer	TY-100-038	PZ1B011
8-4	Knob A	NB-31-013	KN1011
8-5	Spacer	TY-100-013	KZ6C015
8-6	Variable Resistor Escutcheon	TY-100-010	PZ4A006
8-7	Push Button B	NB-19-4094B	KN2026
8-8	Push Button A	NB-19-4094A	KN2025
8-9	Amplifier Display Panel	AF-230-003	A101601
* 8-10	Lamp Cover	TY-900-024 A:Red	LU9002
8-11	Lamp Assembly	PL-19-005	LU2003
8-12	VU Meter	MT-11-023	ME11003
8-14	Blind	TY-900-029	PZ1B010
8-15	Blind	TY-900-031	PZ1B012
8-16	Amplifier Mounting Base	AF-230-004	A101602
8-17	Record out & Playback Equalizer Amplifier Assembly	PA-286A	PB-110
8-18	MIC Amplifier Assembly	PA-287A	PB-11P
	Test Oscillator & Line out Amplifier Assembly	PA-285	PB-11N
8-19	Variable Resistor	VR-19-EWF-AOAM25A24	RV224001
8-20	Terminal	LP-09-STT-1L5NR	CN901011
8-21	Remort Connector	CN-09-OSAB12F N/N	CN212050
8-22	Stereo Jack	CN-09-LJ-109	CN603009
8-23	Slide Switch C	SW-39-SL242B4	WH340013
8-24	Slide Switch A	SW-39-SL242B4	WH340011
8-25	Stereo Jack	CN-09-LJ-110-1-2	CN602010
8-26	Spacer	TO-230-009	KZ6C023
8-27	Rear Panel	AF-230-007	A101609
8-28	Rear Hame Plate	AF-230-009	A101610
8-29	Connector Supporter	AF-204-11	A101610
8-30	Connector	CN-09-XLR-3-31	CN103046
8-31	Connector	CN-09-XLR-3-32	CN103045
8-32	Fuse Holder	FS-89-SN-2052	FH1-022
8-33	IC Power Supply	IC-09-SI-3250E	ISI3240E
8-34	SUB Power Supply PCB Assembly	PA-307	PB-61C
8-35	Dummy Plug	CN-01-QS-SP12M N/N	CN212049
8-36	Earth Terminal	LP-09-T-10	CN901040
8-37	Fuse	FS-19-2A	FH7A020
8-38	Cord Stopper	RB-19-BU-3270	PZ1G002
8-39	Power Cord	TY-559	PZ9D017

* B:Green LU9003

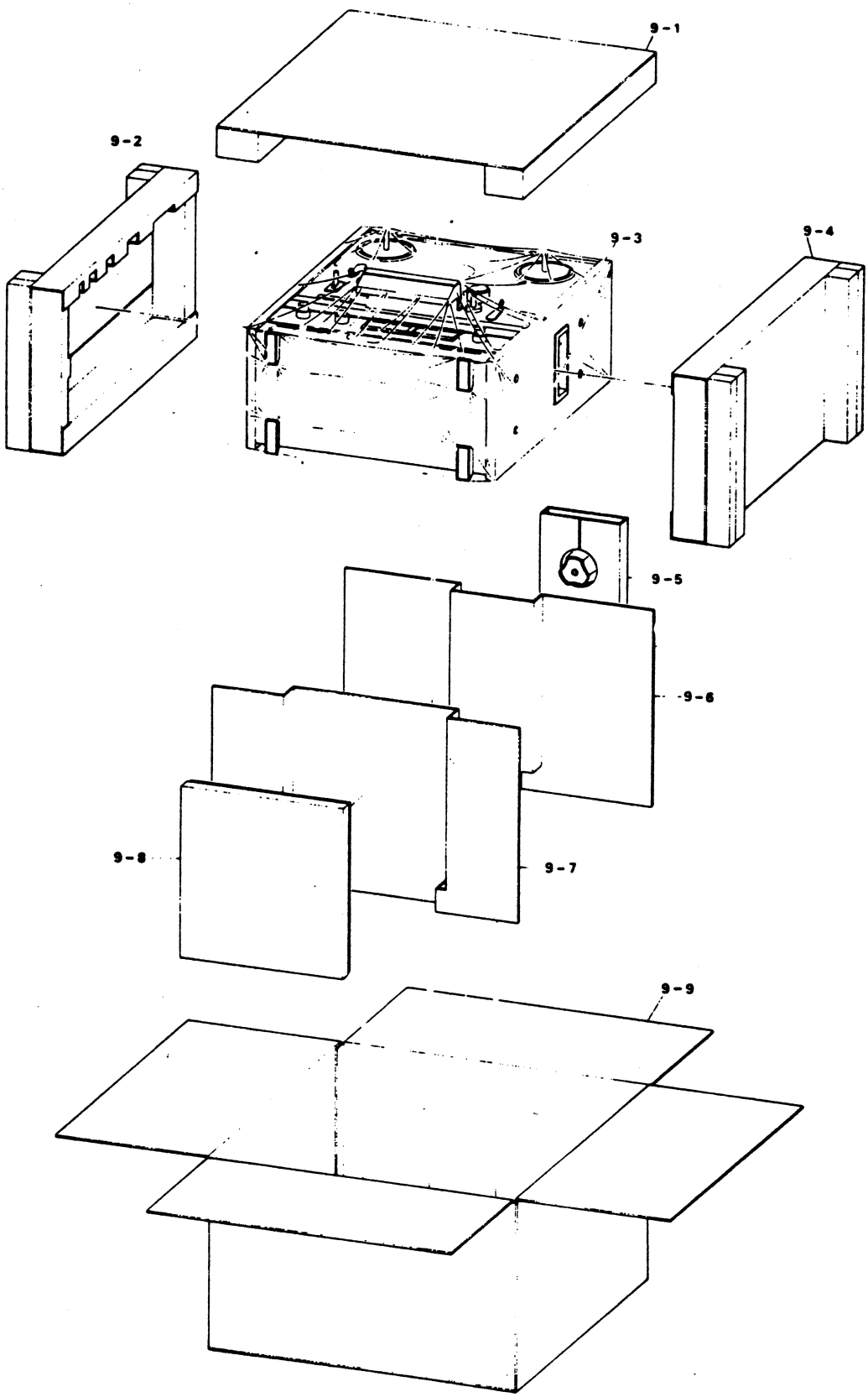
EXPLODED VIEW 8



PARTS LIST 9

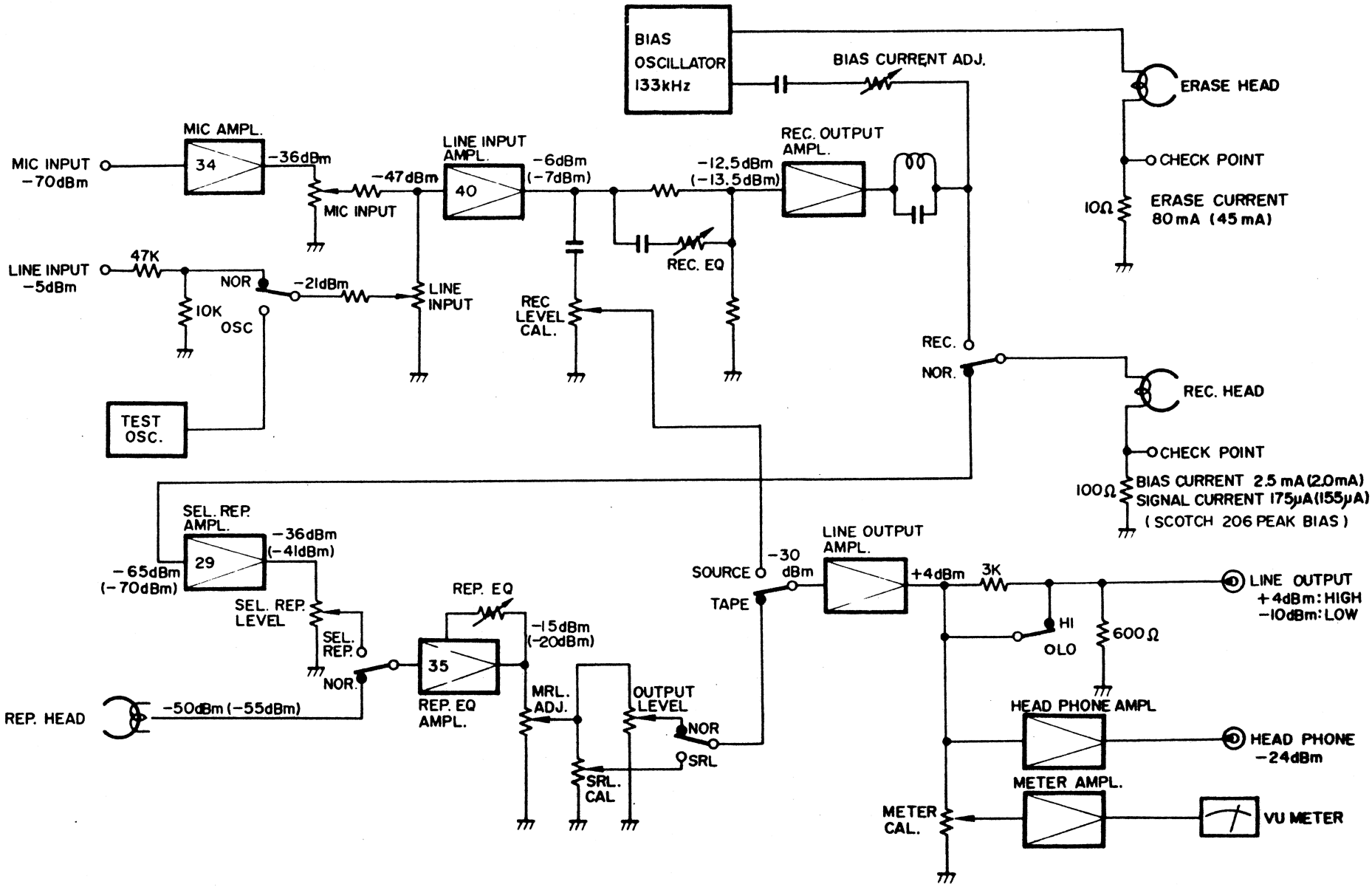
Ref. No.	Description	Parts No. (old)	New No.
9-1	Top Packing	PC-133-002	K700502
9-2	Left Side Packing	PC-133-007	K7005-A
9-3	MX-5050 Profetional Assembly-------		
9-4	Right Side Packing	PC-133-008	K7005-B
9-5	Reel Clamper Packing Assembly-------		
9-6	Packing B	PC-133-003	K700503
9-7	Packing C	PC-133-004	K700504
9-8	Open Reel Box	----------	
9-9	Packing Box	PC-133-001	K700501

EXPLODED VIEW 9



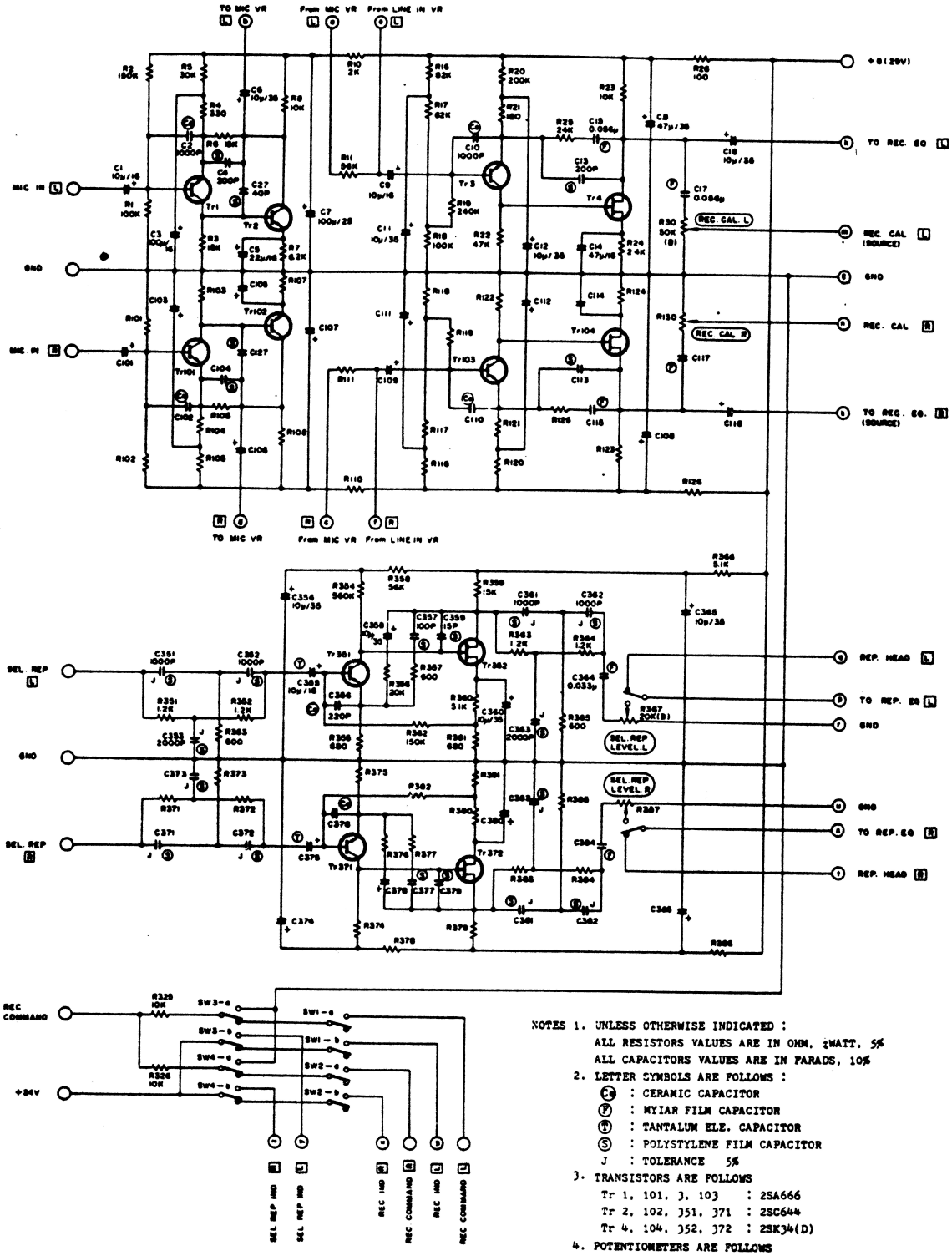
SIMPLIFIED DIAGRAM for Models 2S and 4S (at 1kHz)

Values in the parentheses is on models 4S(D)



old # new #

MIC. LINE INPUT & SEL. REP. AMPLIFIER P.C. BOARD ASSY (PA-287A) PB-11P



NOTES 1. UNLESS OTHERWISE INDICATED :
ALL RESISTORS VALUES ARE IN OHM, ¼WATT, 5%
ALL CAPACITORS VALUES ARE IN FARADS, 10%

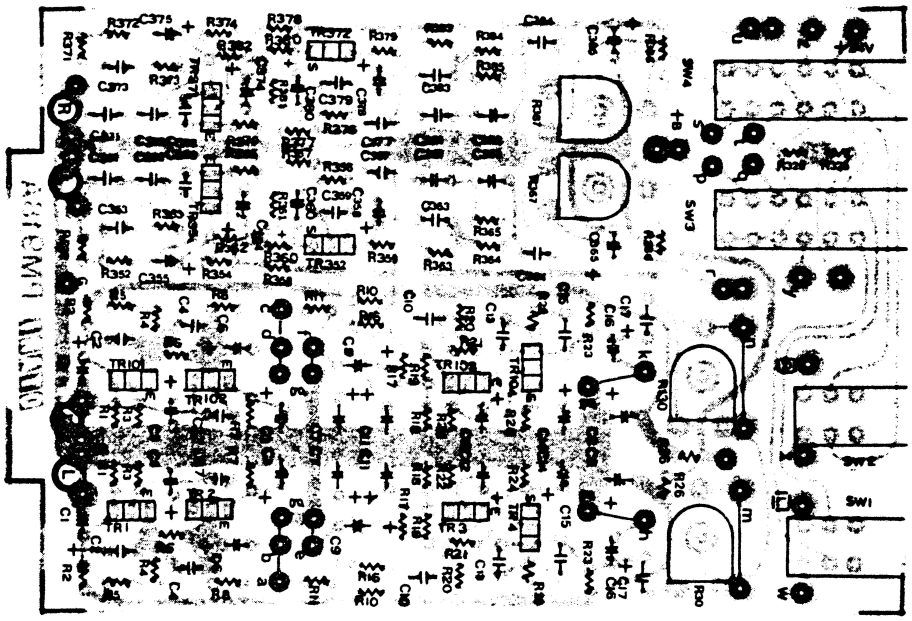
2. LETTER SYMBOLS ARE FOLLOWS :
(Ce) : CERAMIC CAPACITOR
(P) : MYIAR FILM CAPACITOR
(T) : TANTALUM ELE. CAPACITOR
(S) : POLYSTYLENE FILM CAPACITOR
J : TOLERANCE 5%

3. TRANSISTORS ARE FOLLOWS
Tr 1, 101, 3, 103 : 2SA666
Tr 2, 102, 351, 371 : 2SC644
Tr 4, 104, 352, 372 : 2SK34(D)

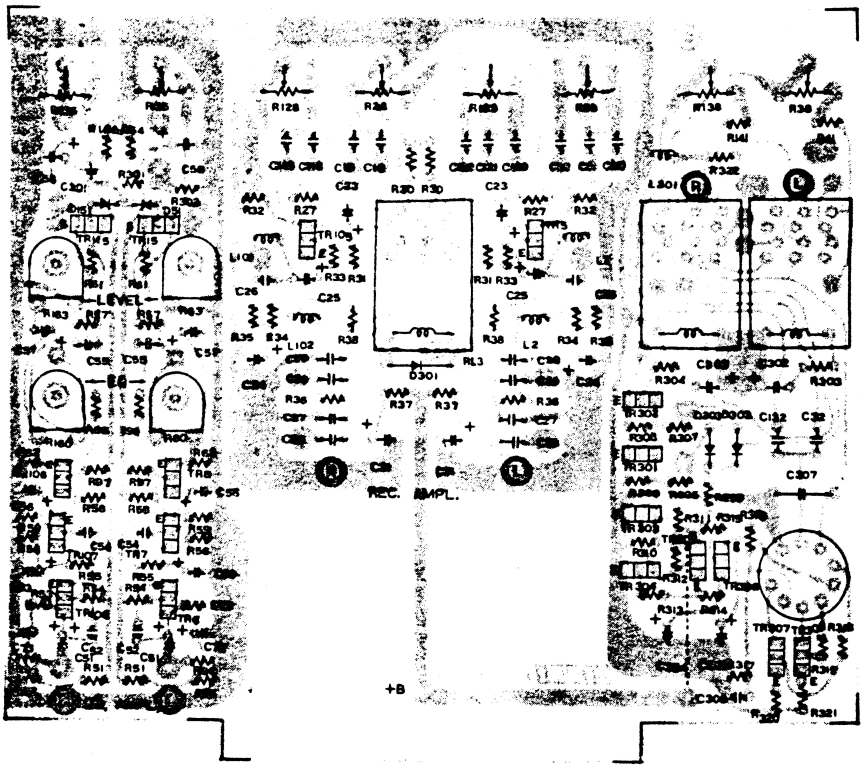
4. POTENTIOMETERS ARE FOLLOWS
R30,130 : RECORD LEVEL CAL.
R367,387: SEL/REP LEVEL ADJ.

5. SWITCHES ARE FOLLOWS
SW 1, 2 : RECORD SW
SW 3, 4 : SEL. REP. SW.

MIC,LINE INPUT & SEL.REP AMPLIFIER P.C.BOARD ASSY PA287A(PM918A)

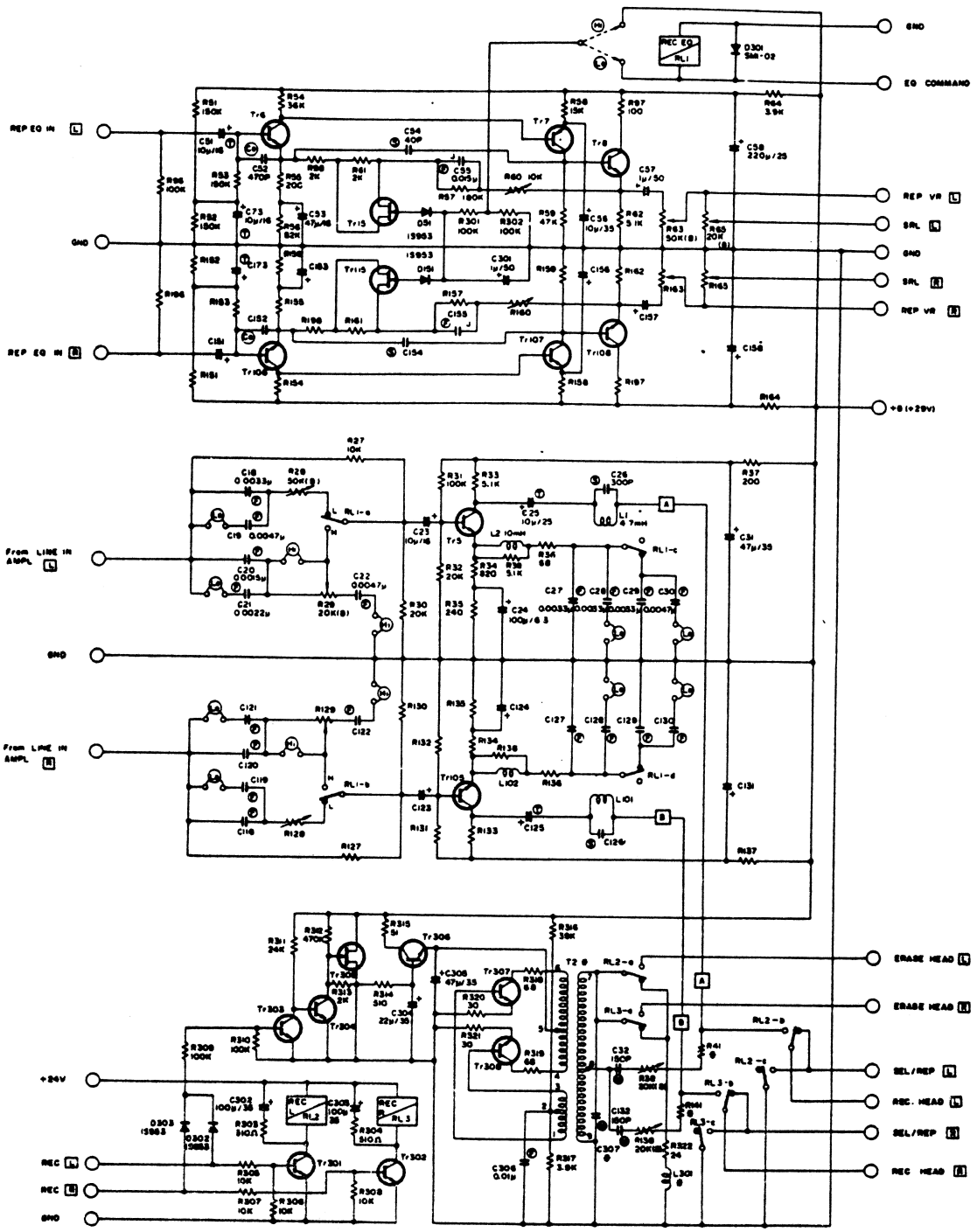


REC OUTPUT & REP.EQUALIZER AMPLIFIER P.C.BOARD ASSY PA286A(PM917A)



REC. OUTPUT & REP. EQUALIZER AMPLIFIER P.C. BOARD ASSY (PA-286A)

old# new #
PB-110



NOTES 1. UNLESS OTHERWISE INDICATED :
ALL RESISTORS VALUES ARE IN OHM, ¼WATT, 5%
ALL CAPACITORS VALUES ARE IN FARADS, 10%

2. LETTER SYMBOLS ARE FOLLOWS :
(M) : MICA FILM CAPACITOR
(T) : TANTALUM ELE. CAPACITOR
(S) : POLYSTYLENE CAPACITOR
(P) : MYLAR FILM CAPACITOR
(Ce) : CERAMIC CAPACITOR
J : TOLELIANCE 5%
(H) : Jumped on High Speed Models
(L) : Jumped on Low Speed Models

3. TRANSISTORS ARE FOLLOWS

Tr 307, 308	: 2SC1211
Tr 6, 106, 8, 108	: 2SC644
Tr 7, 107	: 2SA666
Tr 306	: 2SC1384
Tr 301, 302	: 2SC373
Tr 303, 304, 5, 105	: 2SC828A
Tr 305	: 2SK34(C)
Tr 15, 115	: 2SK34(D)

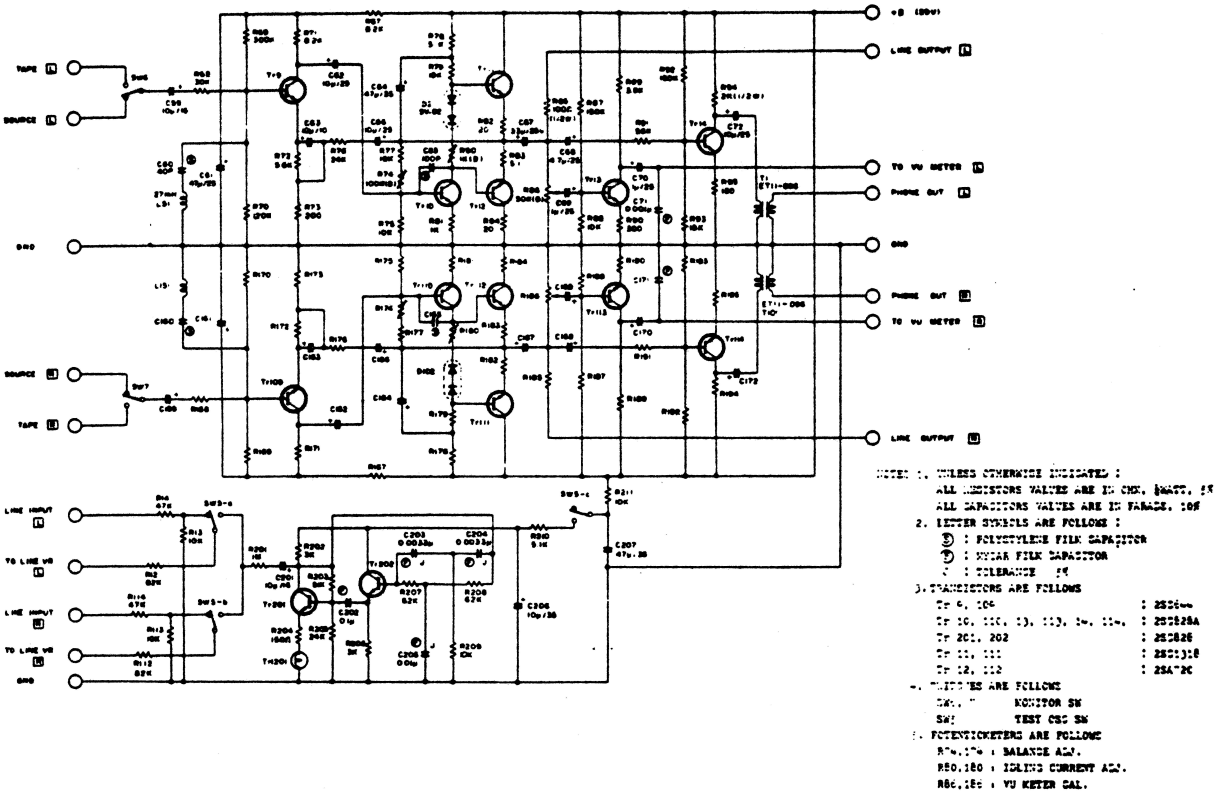
4. POTENTIOMETERS ARE FOLLOWS
R60, 160 : REP. EQ. ADJ.
R63, 163 : MAX. REP. LEVEL ADJ.
R65, 165 : SRL ADJ.
R28, 128 : REC. EQ. (Low speed) ADJ.
R29, 129 : REC. EQ. (High speed) ADJ.
R38, 138 : REC BIAS CURRENT ADJ.

5. DIFFERENCE ON BOTH MODELS

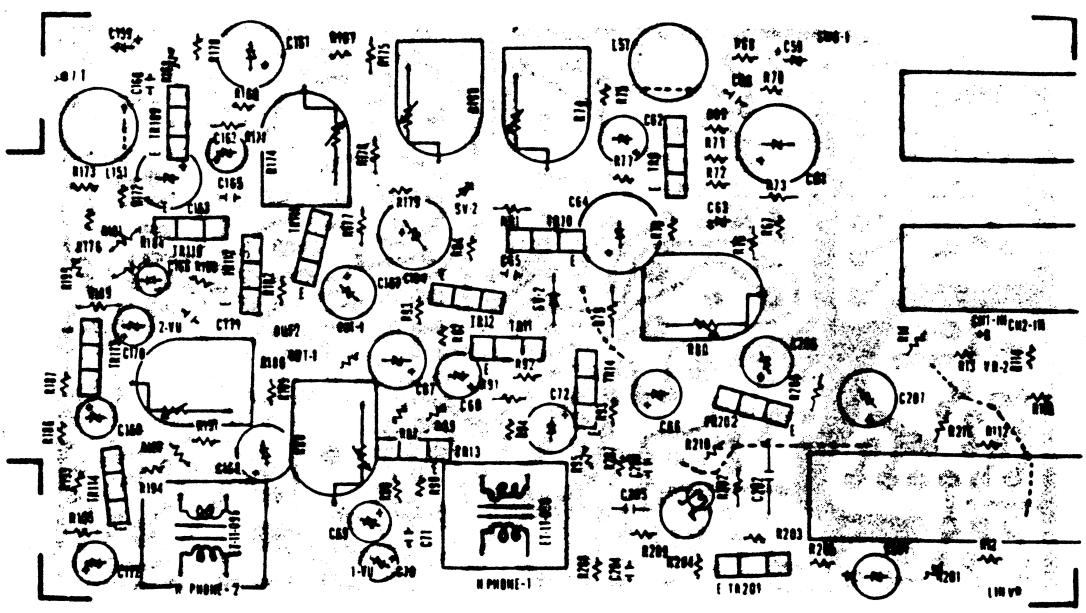
#	2S, 2SD	4S, 4SD
T2	ET-51-177	ET-51-112
C307	0.01μ/500	0.003μ/500
L301	0.58mH	1.8mH
R41,141	0Ω(short)	10kΩ

old # new #

TEST OSC. & LINE OUTPUT AMPLIFIER P.C. BOARD ASSY (PA-285) PB-11N



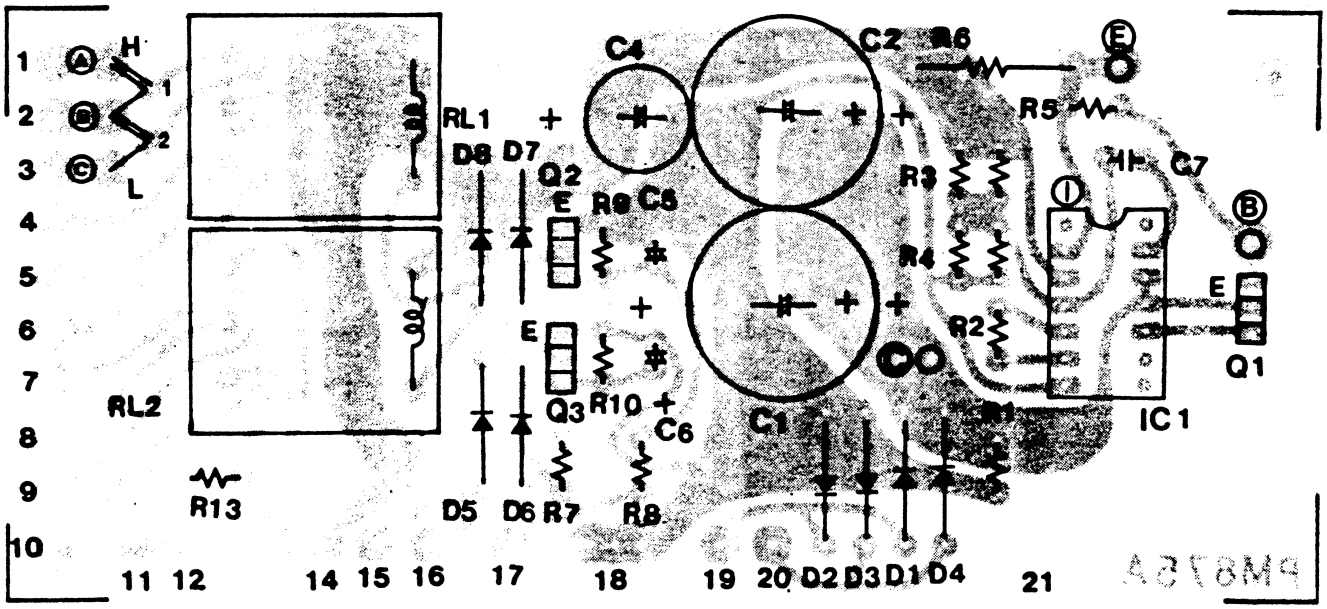
TEST OSC & LINE OUTPUT AMPLIFIER P.C.BOARD ASSY PA285(PM680-1)



old # new #

CAPSTAN SERVO MOTER POWER SUPPLY P.C. BOARD ASSY PA-377 (PM-875A) PB-61E

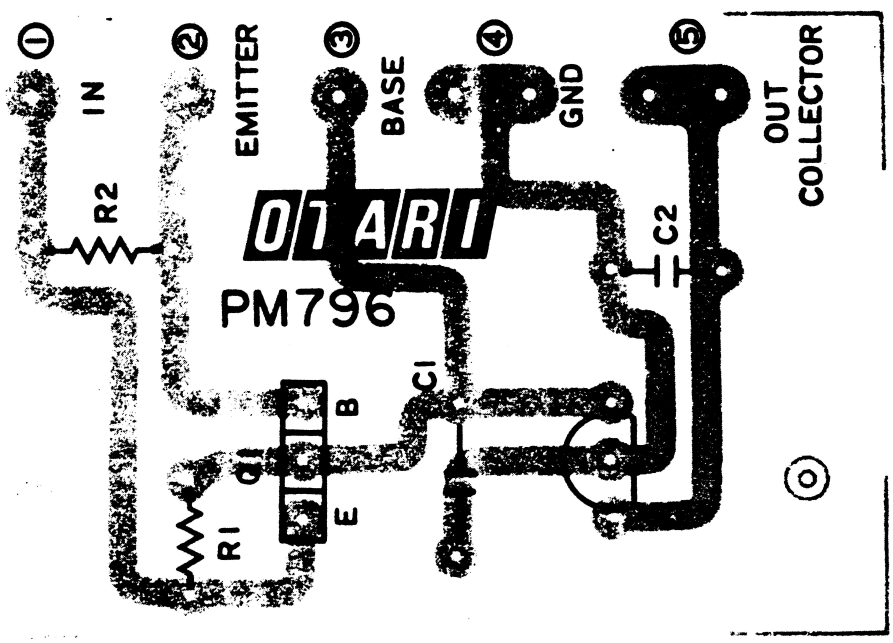
Refer to TAPE TRANSPORT ELECTRONICS(TD5050DA) WIRING DIAGRAM



old# new #

+5 VOLT DC POWER SUPPLY P.C.BOARD ASSY PA426(PM796) PB-61D

Refer to TAPE TRANSPORT ELECTRONICS(TD5050DA) WIRING DIAGRAM



old # new #

CONTROL P.C.BOARD ASSY PA284(PM679-2) PB-41D

Refer to TAPE TRANSPORT ELECTRONICS WIRING DIAGRAM

