

Sankyo

STEREO CASSETTE DECK

MODEL

STD-1800

STD-1700

Service Manual-Parts List



STD-1800



STD-1700



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1. SPECIFICATIONS

	STD-1800	STD-1700
Type	: Philips cassette tape 2-channel stereo	Philips cassette 2-channel stereo
Power requirement	: USA, CND AC 120 V, 60 Hz AEP AC 220 V, 50 Hz ENG AC 240 V, 50 Hz MVD AC 110 – 120/220 – 240 V, 50/60 Hz	USA, CND AC 120 V, 60 Hz AEP AC 220 V, 50 Hz ENG AC 240V, 50 Hz MVD AC 110 – 120/220 – 240 V, 50/60 Hz
Power consumption	: AC 15 W	AC 15 W
Dimensions	: 400(W) x 150(H) x 250(D) mm	360(W) x 150(H) x 250(D) mm
Weight	: 6.2 kg	6.2 kg
Cassette	: C-30, C-60, C-90, C-120	C-30, C-60, C-90, C-120
Tape speed	: 4.76 cm/sec	4.76 cm/sec
Fast forward time	: Less than 90 sec (with C-60)	Less than 90 sec (with C-60)
Rewind time	: Less than 90 sec (with C-60)	Less than 90 sec (with C-60)
Recording time	: 120 min. (with C-120)	120 min. (with C-120)
Recording system	: AC bias, 80 kHz	AC bias, 80 kHz
Erasing system	: AC erasing	AC erasing
Terminals	: LINE IN 50 mV (50 k Ω) L–MIC–R/PB/REC (DIN) 0.5 mV (5 k Ω) LINE OUT 1.25 V with PHONES 2 mW } Dolby (8 Ω or 600 Ω) } tape PB/REC (DIN) 580 mV } MTT-150	: LINE IN 50 mV (50 k Ω) L–MIC–R/PB/REC (DIN) 0.5 mV (5 k Ω) LINE OUT 900 mV with PHONES 1 mW } Dolby (8 Ω or 600 Ω) } tape PB/REC (DIN) 580 mV } MTT-150
Wow and flutter	: Less than 0.095 % WRMS	Less than 0.22 % WRMS
Signal-to-noise ratio	: 52 dB (Normal) } Dolby 55 dB (CrO ₂) } OFF 60 dB (Normal) } Dolby 63 dB (CrO ₂) } ON	: 52 dB (Normal) } Dolby 55 dB (CrO ₂) } OFF 60 dB (Normal) } Dolby 63 dB (CrO ₂) } ON
Frequency response	: 40 – 12 500 Hz (Normal) 40 – 15 000 Hz (CrO ₂)	: 40 – 12 000 Hz (Normal) 40 – 15 000 (CrO ₂)
Distortion	: 2.0 % (Normal) 2.5 % (CrO ₂)	: 2.0 % (Normal) 2.5 % (CrO ₂)
Subfunctions	: Tape select switches BIAS (NORM/FeCr/CrO ₂) EQ (NORM/FeCr/CrO ₂) Dolby NR switch DOLBY NR (OFF/ON) Limiter switch LIMITER (OFF/ON) Green LED Dolby NR indicator Red LED recording indicator 3-Digit tape counter	: Tape select switch TAPE (NORM/CrO ₂) Dolby NR DOLBY NR (OFF/ON) Red LED recording indicator 3-Digit tape counter
Semiconductors	: Transistors 18 ICs 2 Diodes 19 LEDs 2	: Transistors 14 ICs 2 Diodes 17 LED 1
Standard accessories	: Head cleaning kit 1 Stereo connecting cord (USA, CND, MVD) DIN type connecting cord (AEP, ENG)	: Head cleaning kit 1 Stereo connecting cords (USA, CND, MVD) DIN type connecting cord (AEP, ENG)
Operation manual	: 1	1
Warranty card	: 1	1

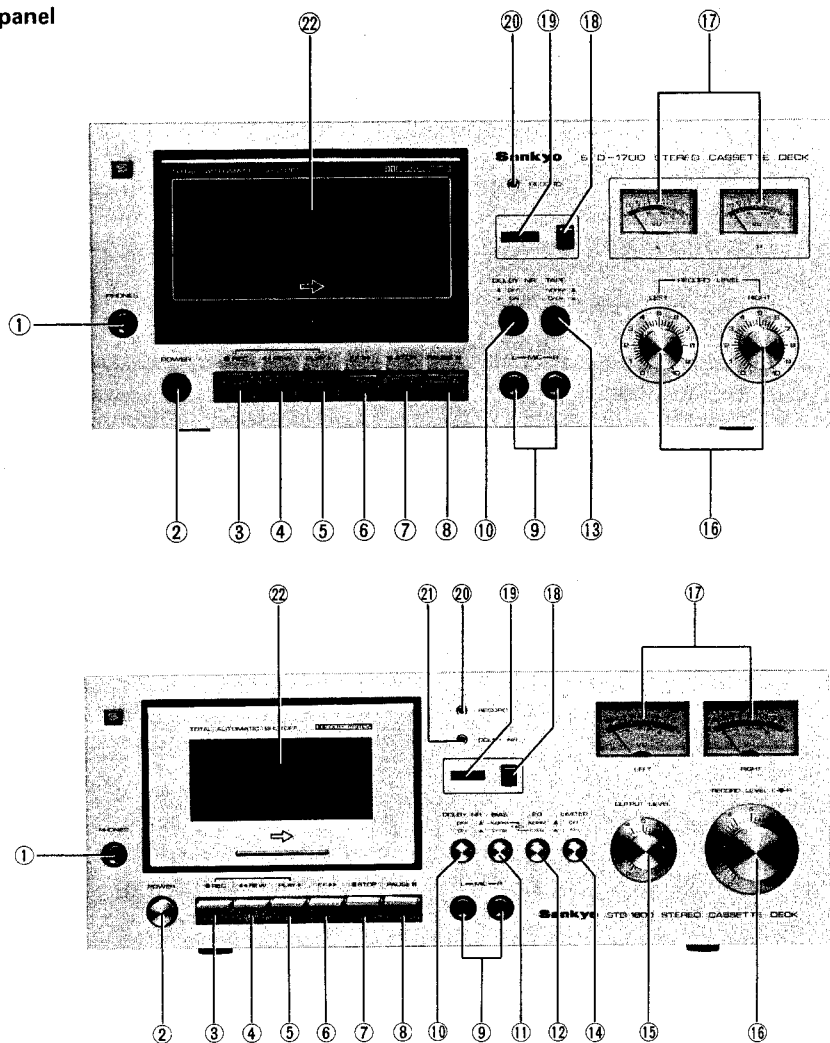
Note: For improvement, design and specifications subject to change without notice.

Note:

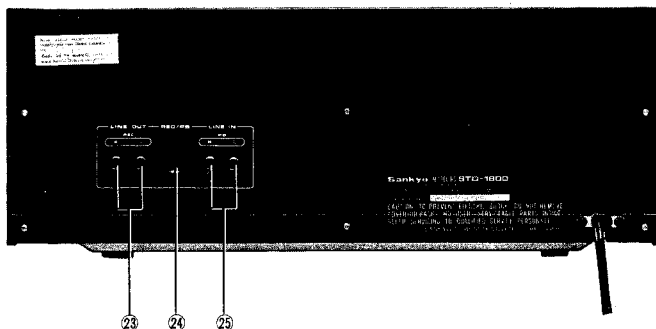
This service manual has been prepared for two models – the STD-1800 and STD-1700. Servicing is almost identical for both models. Some differences are clearly described followed by their model numbers. Please check the necessary information relevant to the model you are servicing.

2. PARTS IDENTIFICATION

2.1 Control panel



2.2 Connection panel

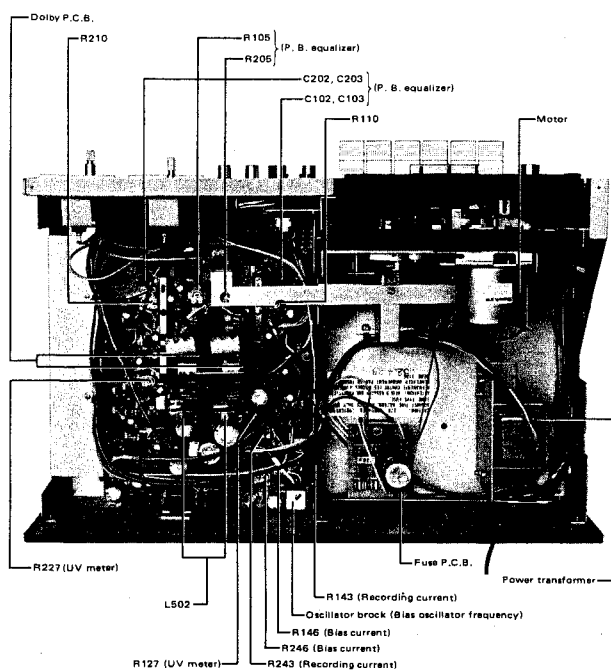


1. Headphone jack
2. Power switch
3. Record lever
4. Rewind lever
5. Play lever
6. Fast forward lever
7. Stop lever
8. Pause lever
9. Microphone jacks
10. Dolby* noise reduction switch
11. Tape bias select switch (STD-1800 only)
12. Tape equalization select switch (STD-1800 only)
13. Tape select switch (STD-1700 only)
14. Limiter switch (STD-1800 only)
15. Output level control (STD-1800 only)
16. Recording level control
17. VU meters
18. Counter reset button
19. Tape counter
20. Recording indicator
21. Dolby noise reduction indicator (STD-1800 only)
22. Cassette door
23. LINE OUT jacks
24. DIN jack
25. LINE IN jacks.

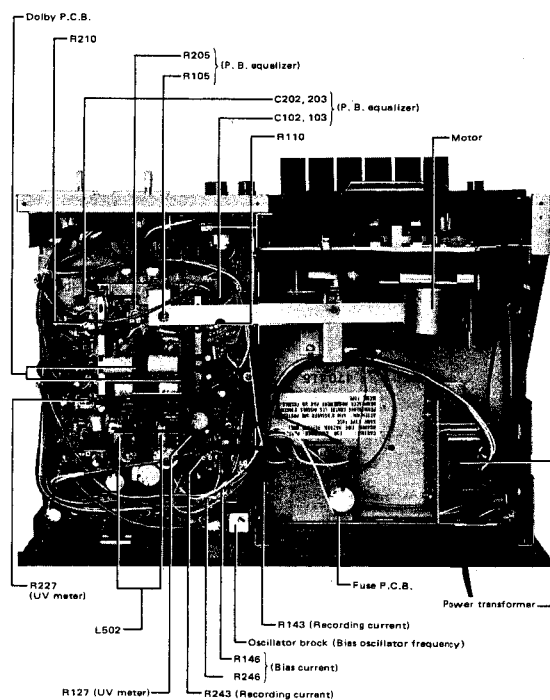
Note: A voltage selector is provided on the MVD version.
 * Dolby is a trademark of Dolby Laboratories Inc.

2.3 Inside top view

STD-1800

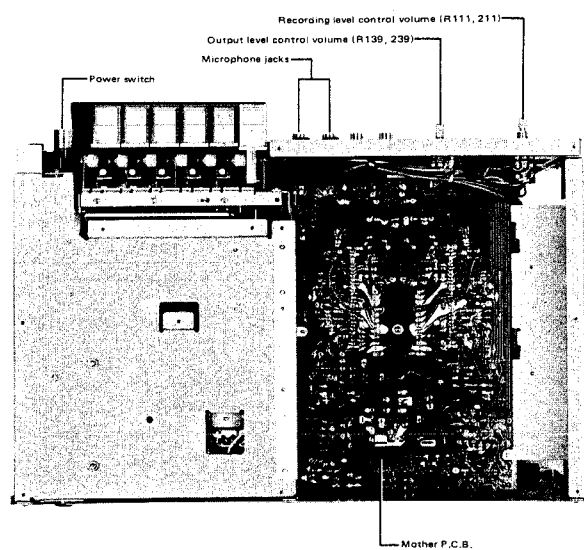


STD-1700

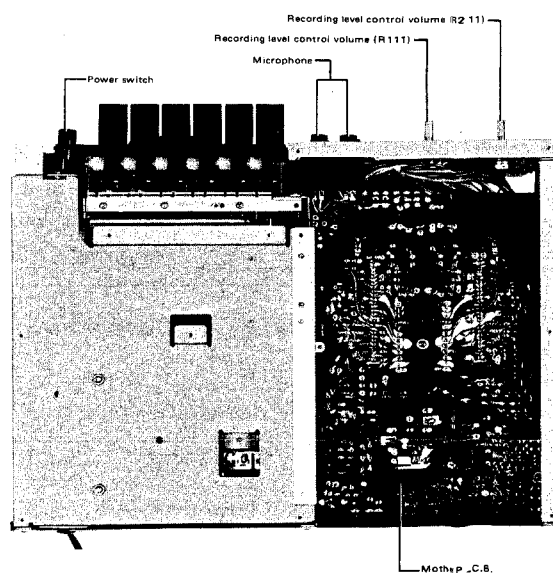


2.4 Inside bottom view

STD-1800



STD-1700



3. TECHNICAL DESCRIPTION

3.1 Power supply circuit

A voltage regulator circuit is provided to supply constant voltage to the bias oscillator in the amplifier block so that the bias oscillator is not affected by voltage supply fluctuations. Power supply to the motor is independent of the voltage regulator circuit.

3.2 Amplifier section

The Dolby NR circuit employs IC element and does not require adjustment. The emitter-follower used in the headphone amplifier circuit ensures sufficient volume even if the headphone impedance is high. During recording and playback the OUTPUT LEVEL control functions for only the outputs from the LINE OUT and headphone jacks and has no effect on the meter. During recording, no output appears at the DIN output terminal, but during playback an output independent of the OUTPUT LEVEL control is provided.

3.3 Cassette loading and unloading

Loading

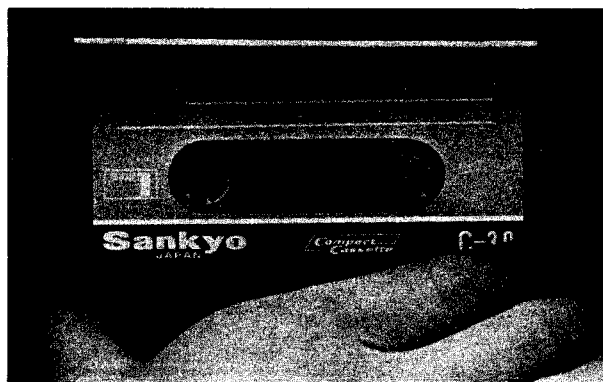
1. Open the cassette door by gently lifting the door tab.
2. Hold the cassette vertical with the side you wish to play or record facing toward you and the edge of exposed tape pointing downward.
3. Install the cassette by pressing lightly upward until it snaps in.
4. Close the door.

Note:

To prevent dust from entering the mechanism, always keep the door closed.

Unloading

1. Remove the cassette with a slight upward and outward movement.



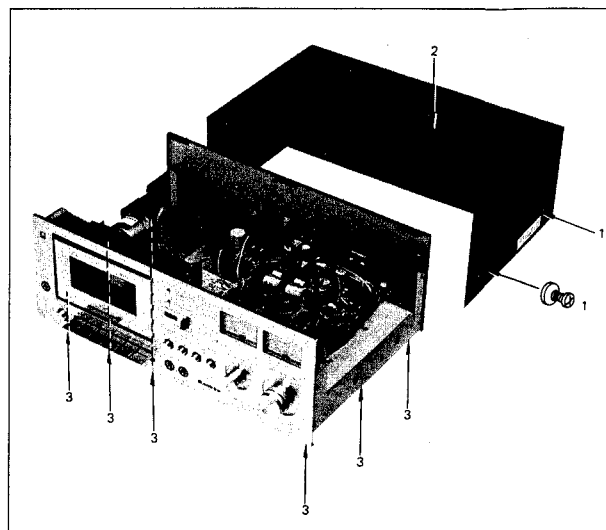
4. DISASSEMBLY

4.1 Removal of the bonnet

Remove four screws (1) on either side and pull the bonnet (2) backward with a slight outward pressure onto both side panels.

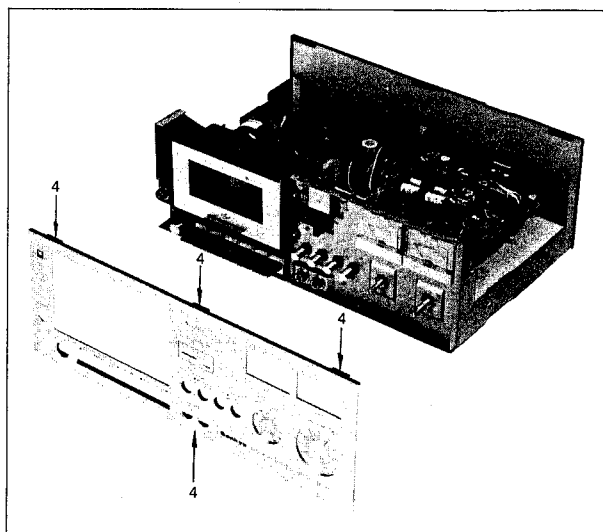
4.2 Removal of the bottom plate

Remove ten screws (3).



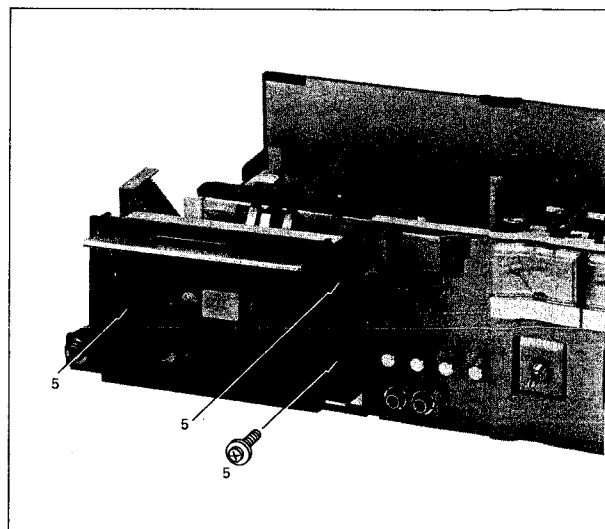
4.3 Removal of the front panel

First pull away the VOLUME and LEVEL control knobs. Remove four screws (4). Then pull the front panel forward.



4.4 Removal of the cassette compartment

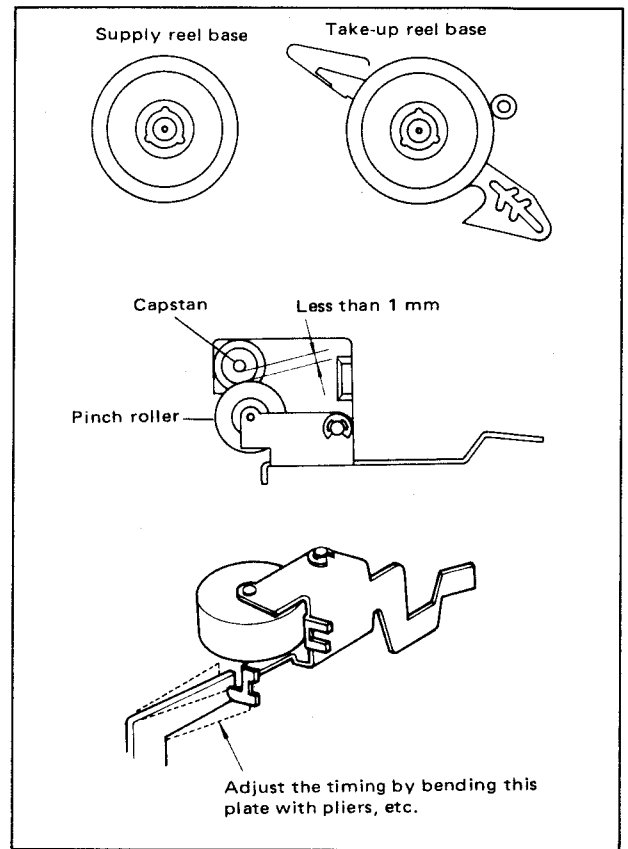
Remove three screws (5).



5. MECHANICAL ADJUSTMENT

5.1 Forward timing

1. Slowly depress the forward button. When the reel base contacts the tension pulley and begins to turn, the space between the capstan and pinch roller should be within 1 mm. However, the pinch roller should not start turning before the reel base.

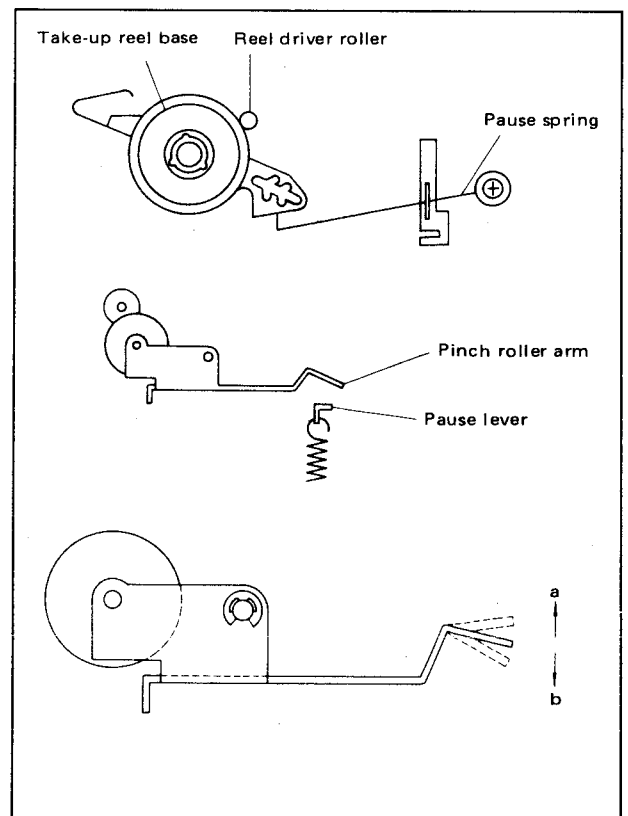


5.2 Pause timing

Load the tape and adjust the timing.

1. Bend the pinch roller arm in the direction of either a or b so that the reel base and pinch simultaneously when the pause switch is slowly depressed.

Note: Load the tape, slowly depress the pause switch and confirm that there is no tape friction noise when the tape begins to run.



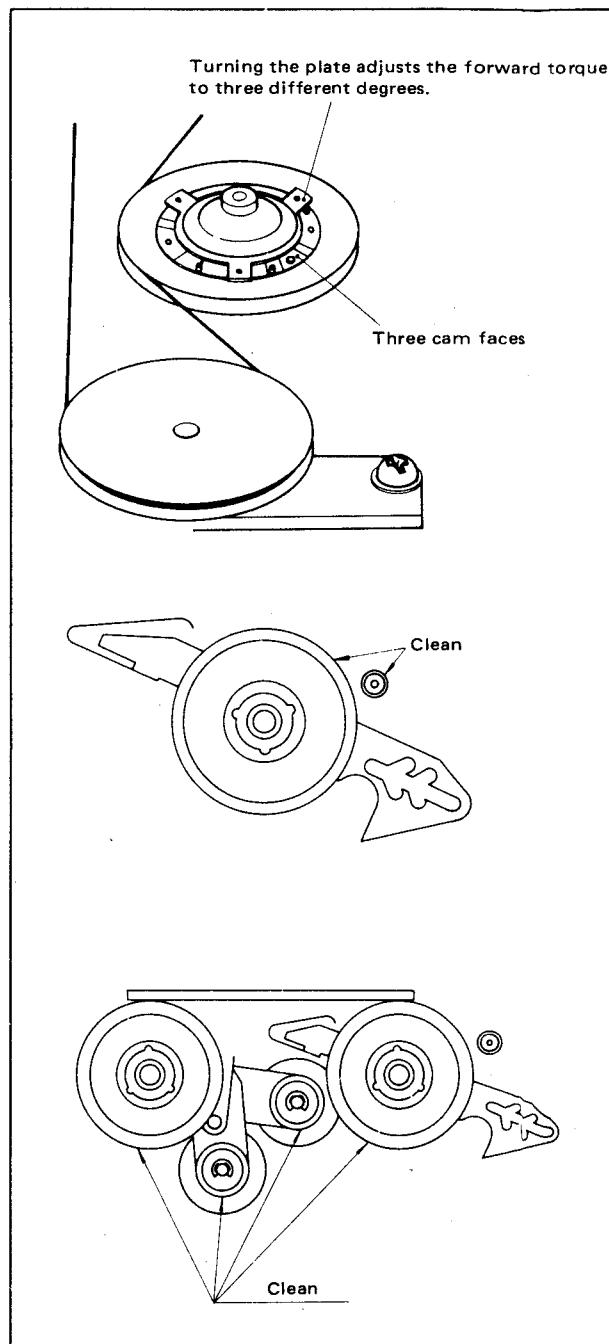
5.3 Reel torque

Forward torque

1. Clean the tension pulley and reel base wheel.
2. Read the reel torque on the cassette torque meter and make sure the torque is within 40 – 70 g.cm.
3. If the torque is not correct, turn the plate shown in the figure with a screwdriver or tweezers until it is positioned at the center of the most suitable of the three cam surfaces.
4. If the torque is still incorrect, replace the tension pulley assembly.

Fast forward, rewind torque

1. Clean the idler pulleys and reel base wheels.
2. Read the reel torque on the cassette torque meter and make sure the torque is within 70 – 150 g.cm.
3. If the torque is not correct, replace the idler assembly.



5.4 Shut-off mechanism

(1) Adjusting the link allowance

1. Turn and position the shut-off pulley so that the gear wheel pin (C) moves the shut-off lever to its farthest position in the direction of the arrow (a). (Fig. A)

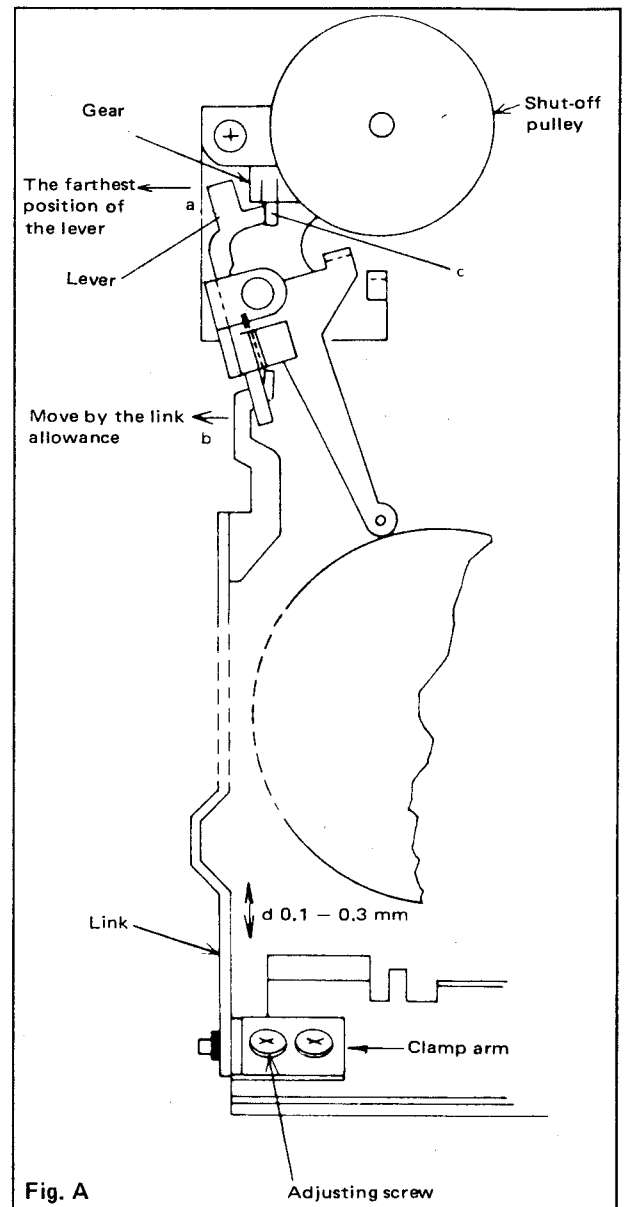


Fig. A

2. Loosen the screws and move the clamp arm until the link allowance in the direction of the arrow $\updownarrow$ (d) is 0.1 - 0.3 mm, with the link held positioned in the direction of the arrow $\leftarrow$ (b) by the link allowance. (Fig. A)

Note: After adjusting the link allowance, apply screw lock paint to the clamp arm adjusting screws.

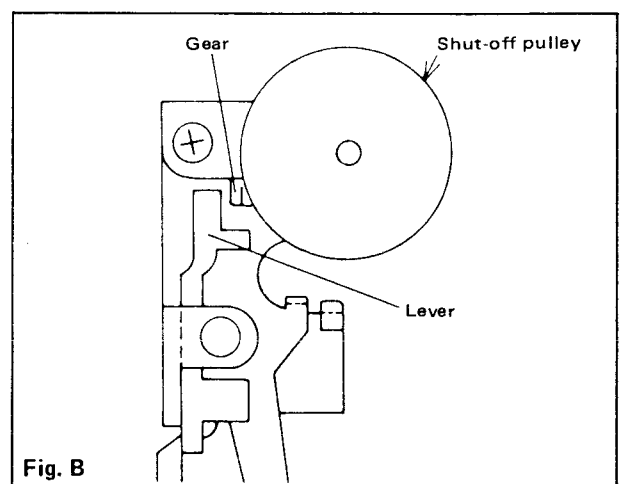
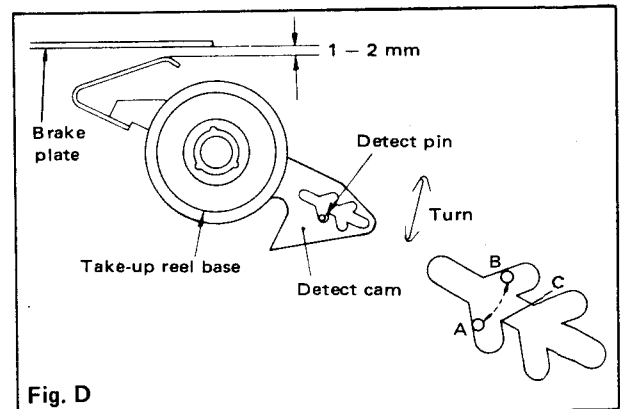
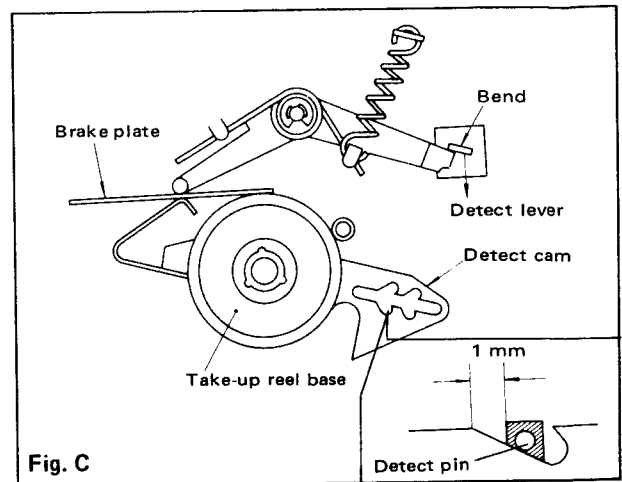


Fig. B

(2) Adjusting the detect pin position

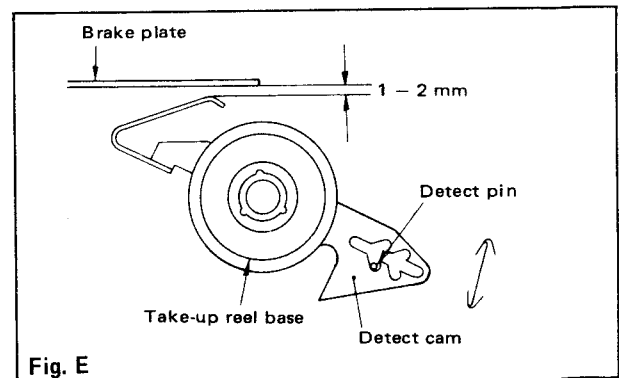
1. Turn and position the shut-off pulley so that the shut-off lever does not make contact with the gear wheel pin. (Fig. B)
2. Adjust the detect cam and pin to the positions shown in Fig. C by bending the detect lever. (The detect pin should be within the  part.)
3. Turn the detect cam in the direction of the arrow  (Fig. D) and confirm that the detect pin returns to the former position smoothly (without making any contact at C); from A to B and vice-versa. (Fig. D)
4. Changing from the forward mode to the stop mode should not change the detect pin position.



(3) Adjusting the detect cam clearance (in the rewind mode)

1. In the rewind mode, move the detect cam so that the detect pin takes the position as shown Fig. E.
2. Adjust the clearance between the brake plate and detect cam to 1 – 2 mm.

Note: The detect cam must be engaged with the upper side of the brake.

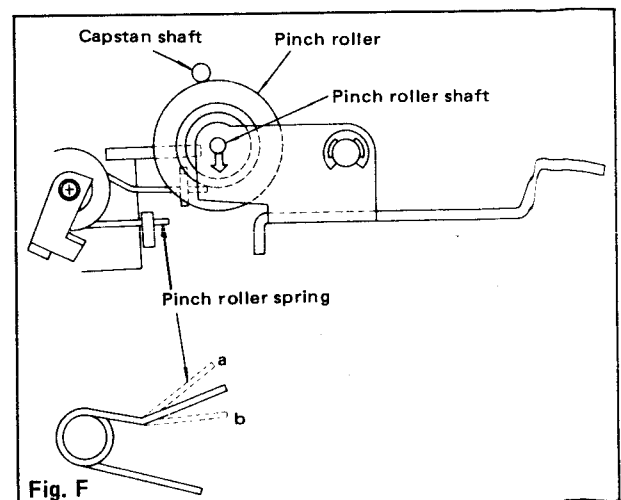


5.5 Pinch roller pressure

Specified pinch roller pressure: 300 – 400 g

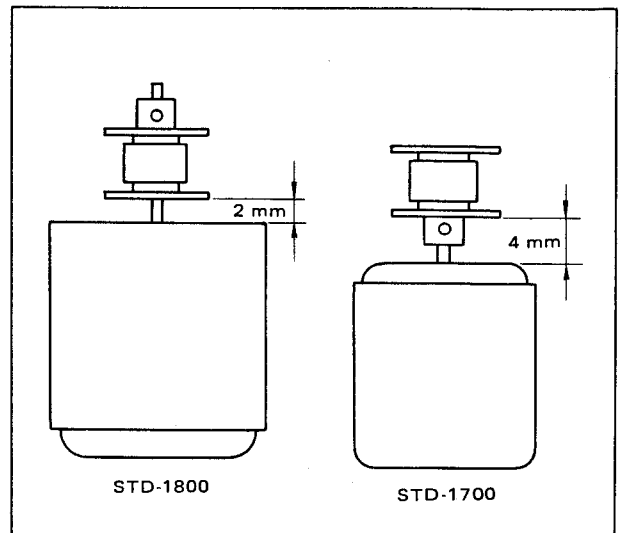
1. If pinch roller pressure is insufficient, adjust by bending the pinch roller spring toward a.
2. If the pinch roller pressure is excessive, adjust by bending the pinch roller spring toward b.

Note: When bending the pinch roller spring exercise care to prevent damage to the surface of the pinch roller arm.



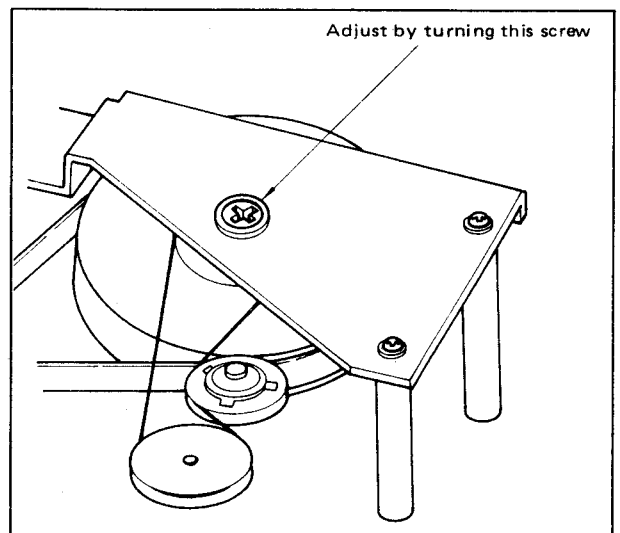
5.6 Motor pulley

Position the motor pulley so that the clearance between the motor and motor pulley is 2 mm, as shown. Then, tighten the screw securely. Apply screw lock paint to the screw head after tightening the screw.



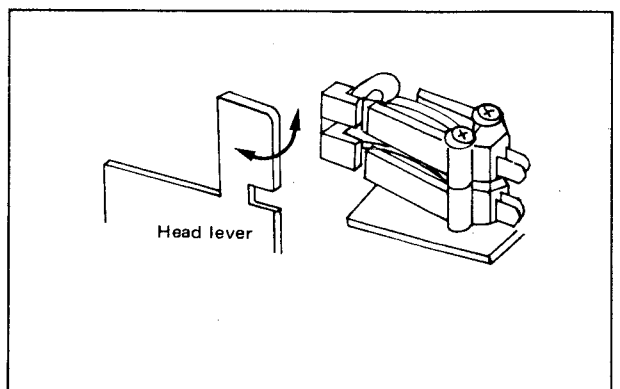
5.7 Flywheel thrust

1. Adjust the thrust clearance to 0.1 – 0.3 mm by turning the thrust adjusting screw.
2. Turn the screw clockwise to decrease the allowance, and counterclockwise to increase it.
3. After the adjustment, apply screw lock paint to the screw head.



5.8 Muting switch timing

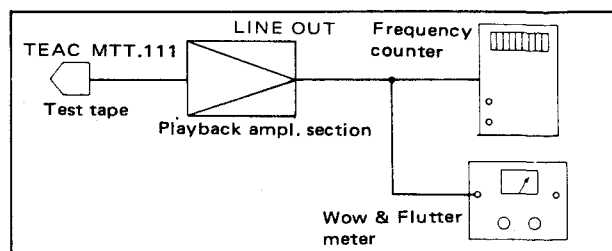
When the play lever is slowly depressed, the muting switch should be switched over, just before or at the same time as the play lever is locked. (Do not depress the play lever with an excessive force.) The upper and lower units of the muting switch should function simultaneously (although a slight time lag is permissible). To adjust to the correct timing, bend the head lever in the direction of the arrow.



5.9 Wow and flutter and tape speed

Wow and flutter check

1. Play back the test tape (TEAC MTT.111).
Read the wow and flutter meter. (within 0.095 % (WRMS) (STD-1800) $\bar{x}$ = 0.040 % within 0.22 % (WRMS) (STD-1700) $\bar{x}$ = 0.12 % (see the figure)

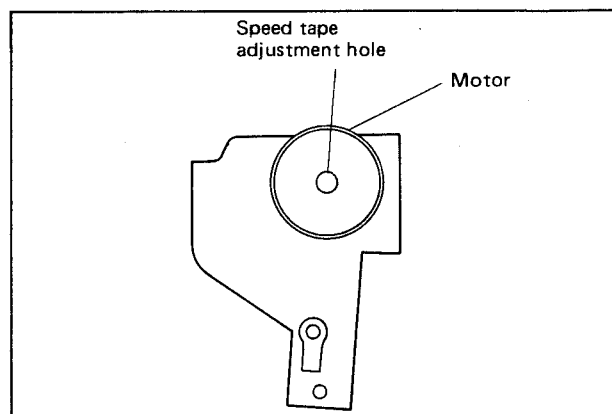


Tape speed

1. Turn the power switch ON. Allow the motor to idle for 20 seconds.
Using a screwdriver inserted in the adjustment hole, adjust until the frequency is between 3 000 Hz and $\pm$ 45 Hz (STD-1800).

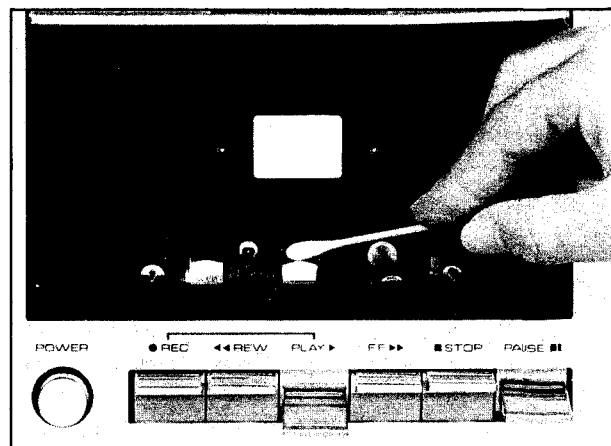
STD-1700

In the case of the STD-1700, confirm that the frequency is between 3 000 Hz and $\pm$ 60 Hz. If the frequency is not such, replace the motor.

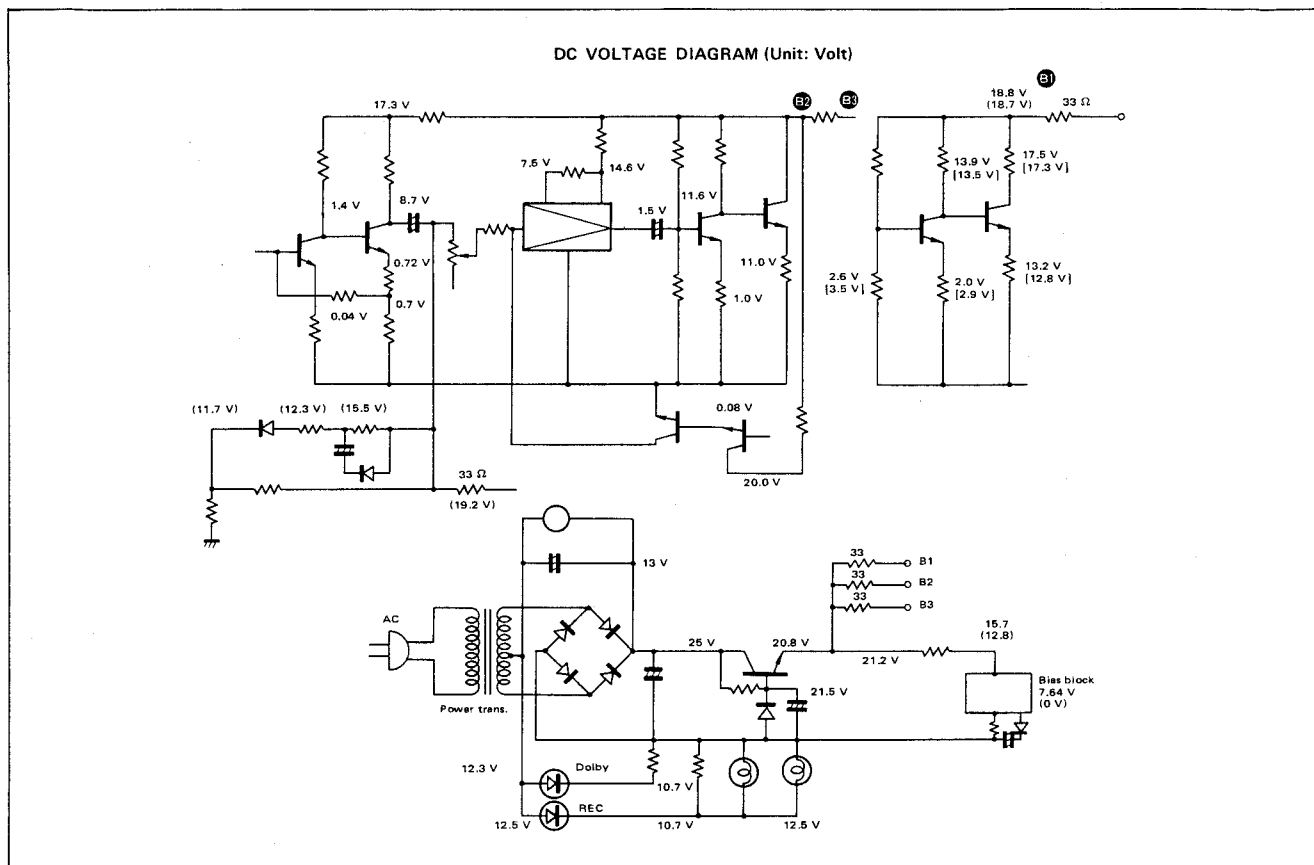


5.10 Cleaning

Clean the heads, capstan and pinch roller with a cotton swab (Q tip). When excessively dirty, soak the swab in some alcohol.

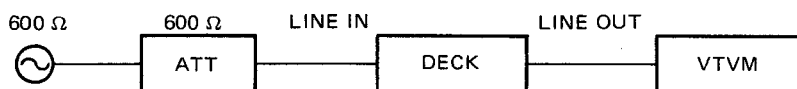


6.3 DC voltage block diagram



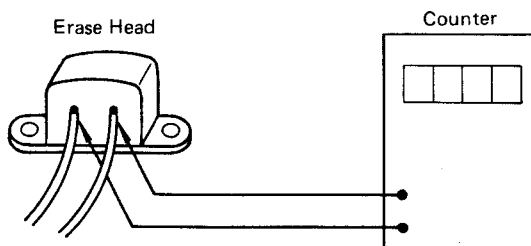
6.4 MPX filter

Apply a signal of 400 Hz -20 dB to the LINE IN terminals and adjust the RECORD LEVEL control until an output of -2.5 dB is obtained from the LINE OUT terminals (with the OUTPUT LEVEL control at maximum). Then apply a signal of 19 kHz -20 dB to the LINE IN terminals and adjust L502 for minimum output.



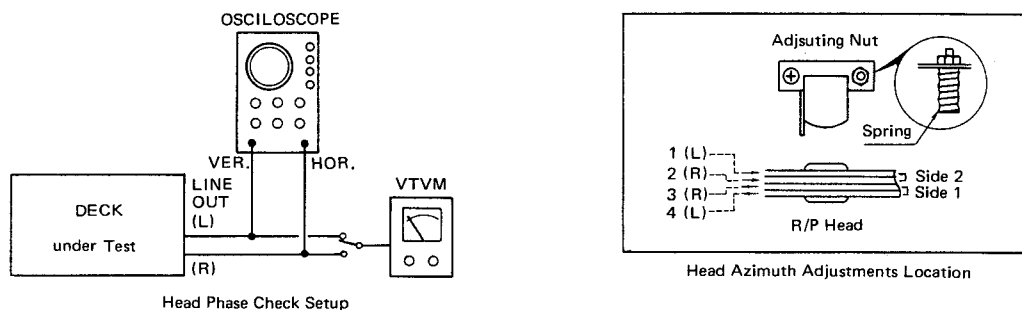
6.5 Bias oscillator frequency

Connect a frequency counter to the terminals of the erase head and adjust the oscillator block to an oscillating frequency of 80 kHz $\pm$ 5 kHz.



6.6 Head azimuth

Play back the test tape (MTT-114) and adjust for maximum output.

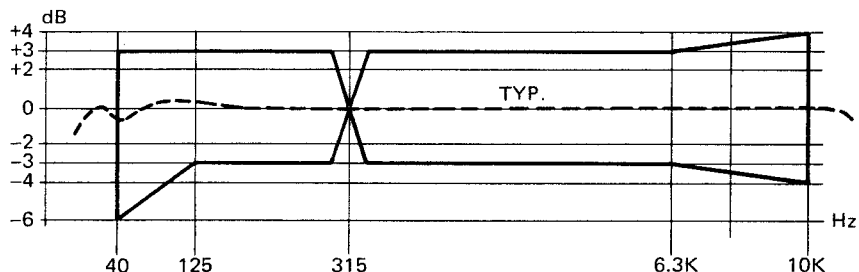


6.7 Playback level and VU meters

Playback the test tape (MTT-150) and adjust R110 (left channel) and R210 (right channel) until an output of -2.5 dB is obtained from pins 3 and 5 of the DIN jack. Then adjust R127 (left channel) and R227 (right channel) until the meter indicator deflects to +3 VU.

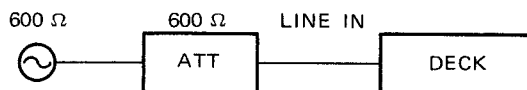
6.8 Playback equalizer

Set the EQ switch to CrO₂, play the test tape (MTT-116K) and adjust R105 (left channel) and R205 (right channel) until the frequency response from the LINE OUT terminals is of the same level at 500 Hz and 2 kHz. Then adjust the parts marked with $\triangle$ in the mounting diagram C102, C103 (left channel), C202, C203 (right channel) until the frequency response from the LINE OUT terminals is of the same level at 2 kHz and 10 kHz (see Note No. 3 of the mounting diagram).



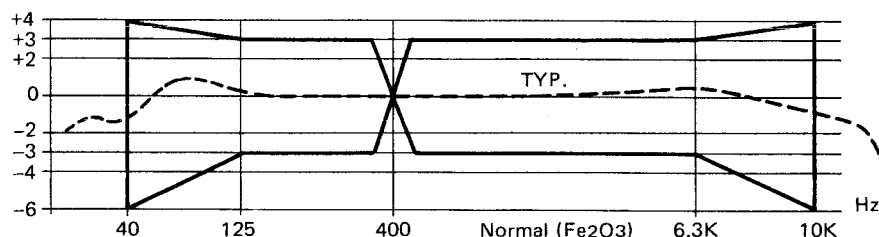
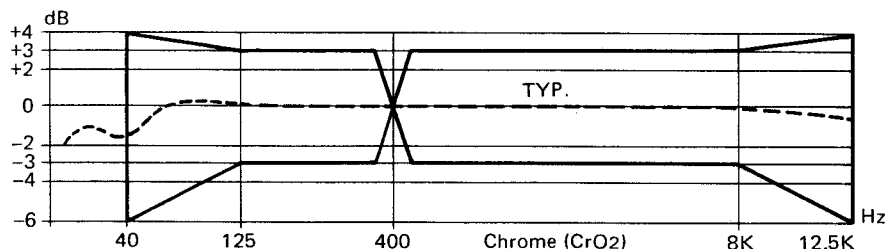
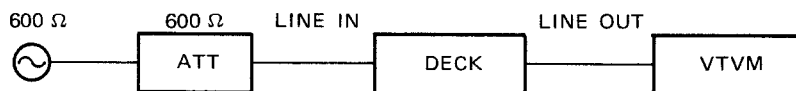
6.9 Recording current

Load the MTT-502 tape. Set the EQ and bias switches to NORM and apply an input of -20 dB, 400 Hz to the LINE IN terminals. In the record mode adjust the RECORD LEVEL control until the meter indicator deflects to +3 VU. Play the tape back and adjust R143 (left channel) and R243 (right channel) until the output is +3 VU (at this time the semi-fixed resistor for bias current adjustment should be at the mechanical mid-position.)

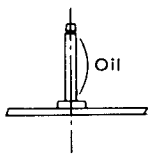
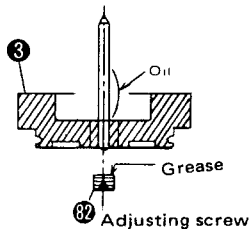
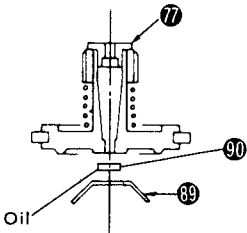
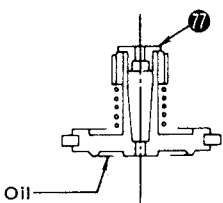
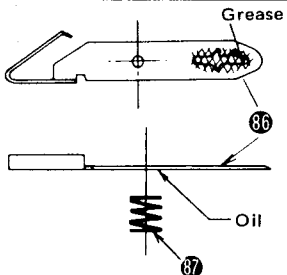
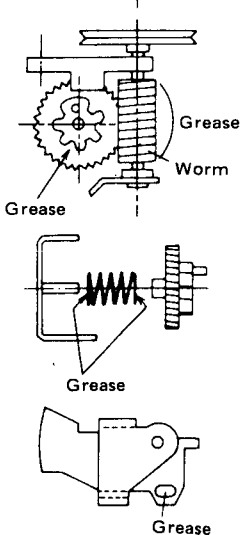


6.10 Bias current

Load the MTT-502 tape. Set the EQ and bias switches to NORM and the DOLBY NR switch to ON. Apply an input of -20 dB to the LINE IN terminals and adjust the RECORD LEVEL control until the meter indicator deflects to +3 VU at 1 kHz. Then, apply an input of -50 dB (1 kHz or 10 kHz) to the LINE IN terminals and record. Play the tape back and adjust R146 (left channel) and R246 (right channel) until the playback outputs of the LINE OUT terminals of 1 kHz and 10 kHz are of the same level (at this time, the OUTPUT LEVEL control is at maximum).



7.LUBRICATION

Part	Oil	Details	
Reel shaft	Mitsubishi	Apply oil to contact surface between reel shaft and reel disc.	
Flywheel-capstan shaft/Adjusting screw hollow	Mitsubishi SG101	(1) Apply oil to contact surface between capstan shaft (3) and metal bearing. (2) Apply grease to end of capstan shaft and hollow of thrust adjusting screw (82).	
Supply reel disc	Mitsubishi	Apply oil to contact surface between felt (90) and reel disc (77).	
Take-up reel disc	Mitsubishi	Apply oil to take-up reel disc where detect cam (86) contacts.	
Detect cam	SG 101 Mitsubishi	(1) Apply grease to the detect pin guide slot in detect cam (86). (2) Apply oil to detect cam where compression spring (87) contacts.	
Shut-off assembly	SG 101	(1) Apply grease to the worm and gear surfaces. (2) Apply grease to both ends of compression spring. (3) Apply grease in the slot through which lever and link are linked.	

8.TROUBLESHOOTING

8.1 Mechanical parts

Sympton		Cause	Countermeasure
Motor does not turn.		1. Switch defective. 2. Motor defective.	Replace. Replace.
Tape does not run		1. Tension belt, motor pulley or pinch roller slipping due to oil or dirt. 2. Tension belt disengaged. 3. Motor pulley screws loose. 4. Pinch roller pressure insufficient.	Clean. Engage. Tighten. Adjust.
Tape winds onto capstan shaft.		1. Defective pinch roller 2. Defective take-up reel table a'ssy 3. Tape path wrong (improper tape guide position and bad head mounting).	Clean or replace. Replace. Adjust.
Capstan does not rotate.		1. Capstan belt off 2. Defective motor	Engage. Replace.
Index counter will not count.		1. Counter reset button not fully depressed. 2. Counter belt off.	Replace. Engage.
Shut-off failure	Shut-off does not work or works intermittently.	1. Link allowance insufficient. 2. Coil spring badly positioned against detect cam.	Adjust stopper plate arm. Rearrange wires. Adjust leaf switch clearance. Adjust spring position.
	Shut-off works during FF or REW.	1. Top spring of detect cam making contact with brake plate. 2. Detect cam not following the reel disc rotation. 3. Coil spring badly positioned against detect cam.	Adjust clearance. Clean and oil detect cam. Increase compression spring force.
	Shut-off works at PAUSE	Detect cam spring incorrectly shaped.	Adjust and reshape.
Wow and flutter excessive.		1. Tape speed unstable due to oil or dirt on pinch roller or capstan. 2. Oil or dirt on tension belt. 3. Pinch roller pressure insufficient. 4. Motor defective. 5. Bad tape. 6. Forward torque improper. 7. Flat belt defective.	Clean. Clean. Adjust. Replace. Use good tapes. Adjust. Replace
Rewind and/or fast forward impossible.		1. Reel disc tire, idler and/or flywheel slipping due to oil or dirt. 2. Friction of idler lever assembly insufficient. 3. Motor defective.	Clean. Adjust. Replace.

8.2 Electrical parts

1. No playback sound.

- 1-1. Touching the head terminals produces sound.
 - Head out of alignment.
 - Head terminals incorrectly soldered.
- 1-2. Recording sound can be heard (LINE IN input)
 - Q501, 502 defective.
 - R110/210 contact failure.
- 1-3. Sound heard from headphones, but no sound at LINE OUT.
 - LINE OUT terminals defective.
- 1-4. Sound at LINE OUT terminals, but no sound from headphones.
 - Headphones jack defective.
 - Headphones jack disconnected or lead wires broken.
- 1-5. During playback, sound at pins 3 and 5 of the DIN jack, but no sound from LINE OUT terminals and headphones.
 - Q103/203, Q104/204 defective.
- 1-6. No sound.
 - S5-1/5-2 contact failure.
 - Lead wires to S5-1/5-2 broken or disconnected.
 - Dolby-NR IC (NE545B) defective.
 - Q103/203, Q104/204 defective.
- 1-7. Only noise is produced.
 - Open in the Dolby circuit board.
 - Lead wires of OUTPUT VOLUME broken (only STD-1800).
 - Lead wires of OUTPUT VOLUME defective (only STD-1800).

2 Recording impossible.

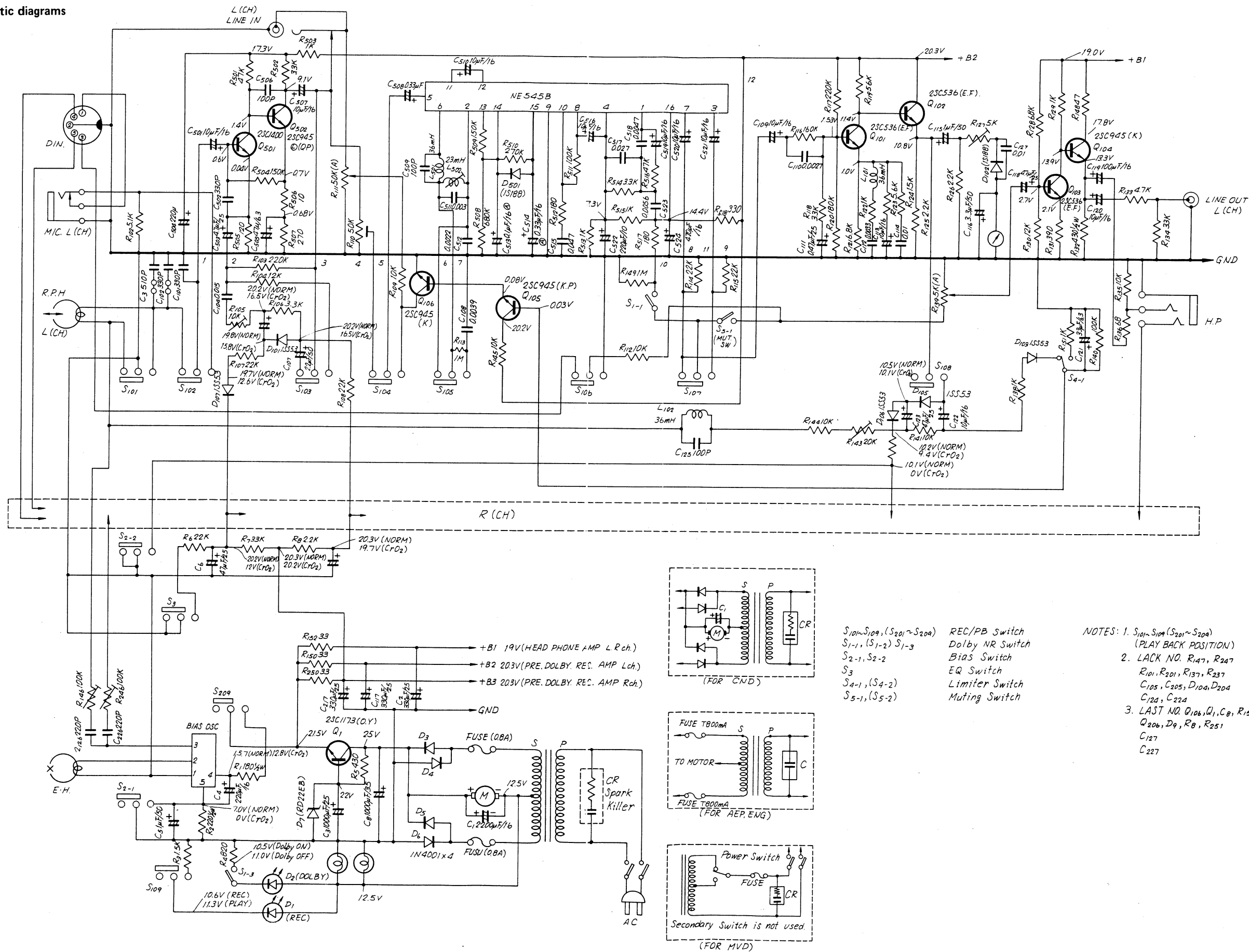
- 2-1. Erasure impossible.
 - Bias oscillator inoperative.
 - Erase head out of alignment.
 - Lead wires of erase head broken or disconnected.
- 2-2. Erasure possible.
 - Q101/201, Q102/202 defective.
 - R143/243 contact failure.
 - Lead wires to LINE IN terminals broken.
 - LINE IN terminals defective.
 - Lead wires to R111/211 broken.
- 2-3. Recording impossible from MIC jacks.
 - MIC jacks defective.
 - Lead wires to MIC jacks broken.
 - LINE IN terminals defective.
- 2-4. Recording impossible from DIN jack.
 - Lead wires to DIN jack broken.
 - DIN jack defective.
 - MIC jacks defective.
 - Lead wires to MIC jacks broken.
 - LINE IN terminals defective.

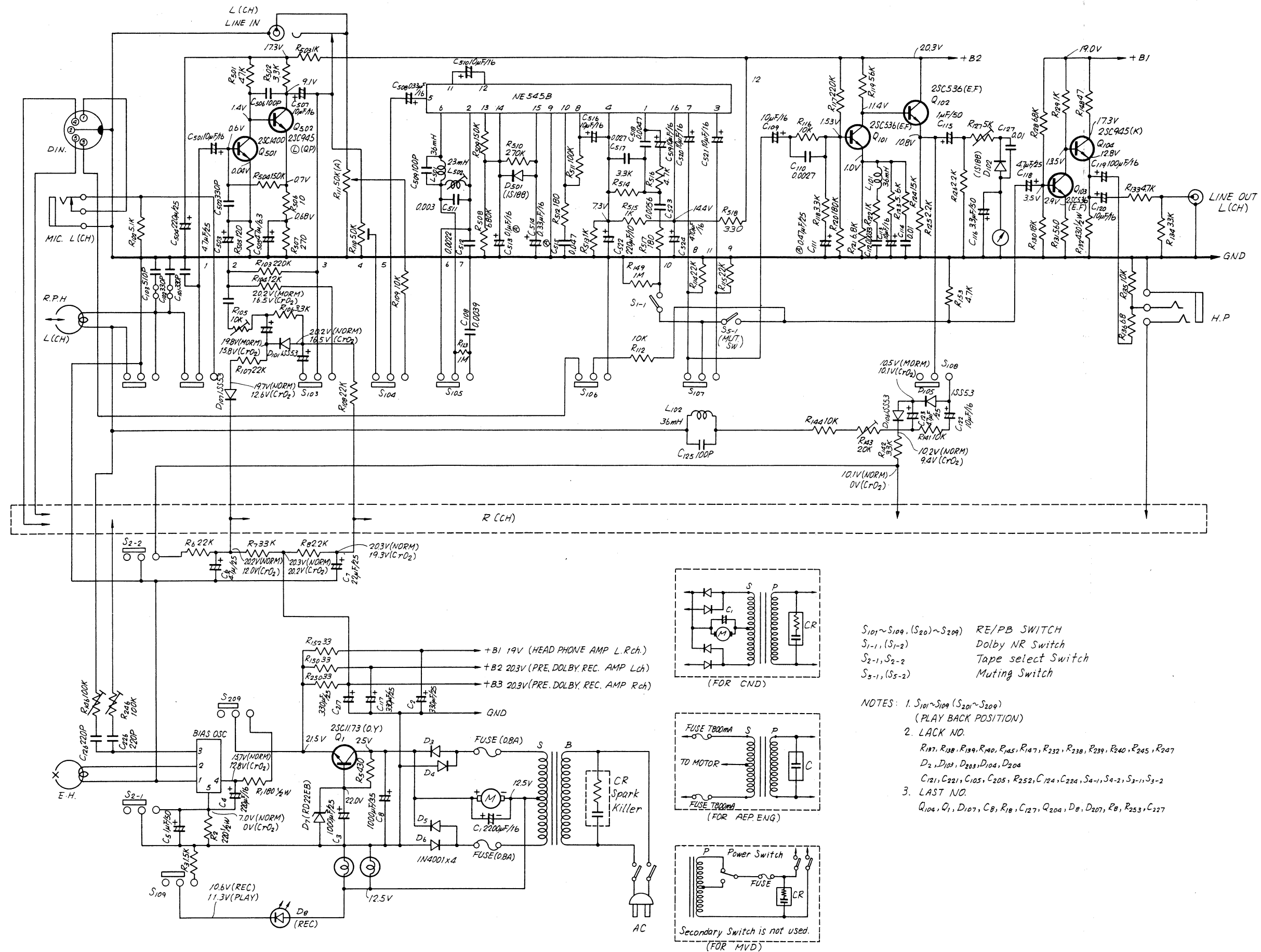
3. Playback sound weak.

- 3-1. Abnormal signal noise ratio.
 - Dirty head.
- 3-2. Both sound and signal are weak.
 - R110/210 improperly adjusted.
 - R139/239 defective, lead wires broken (only STD-1800).
 - Q1 defective.
 - D7 defective.
- 4. Meter lamp does not light.
 - Lamp burnt out.
 - Lead wires to lamp broken or disconnected.
- 5. Recording indicator does not light.
 - D1 defective.
 - Lead wires to D1 broken or disconnected.
- 6. Dolby indicator does not light (only STD-1800).
 - D2 defective.
 - Lead wires to D2 broken or disconnected.
- 7. Abnormal signal noise ratio.
 - Q1 defective.
- 8. No power.
 - Power switch defective.
 - Blown fuse.
 - Q1, D3-D6, D7 defective.

9.DRAWINGS AND ELECTRICAL PARTS LIST

9.1 Schematic diagrams STD-1800





S101~S109, (S20)~S209 RE/PB SWITCH
 S1-1, (S1-2) DOLBY NR SWITCH
 S2-1, S2-2 TAPE SELECT SWITCH
 S3-1, (S3-2) Muting SWITCH

NOTES: 1. S101~S109 (S20)~S209
 (PLAY BACK POSITION)
 2. LACK NO.
 R137, R138, R139, R140, R145, R147, R232, R238, R239, R240, R245, R247
 D2, D103, D203, D104, D204
 C121, C221, C105, C205, R252, C124, C224, S4-1, S4-2, S3-1, S3-2
 3. LAST NO.
 Q104, Q1, D107, C8, R18, C127, Q204, D8, D207, R8, R253, C227

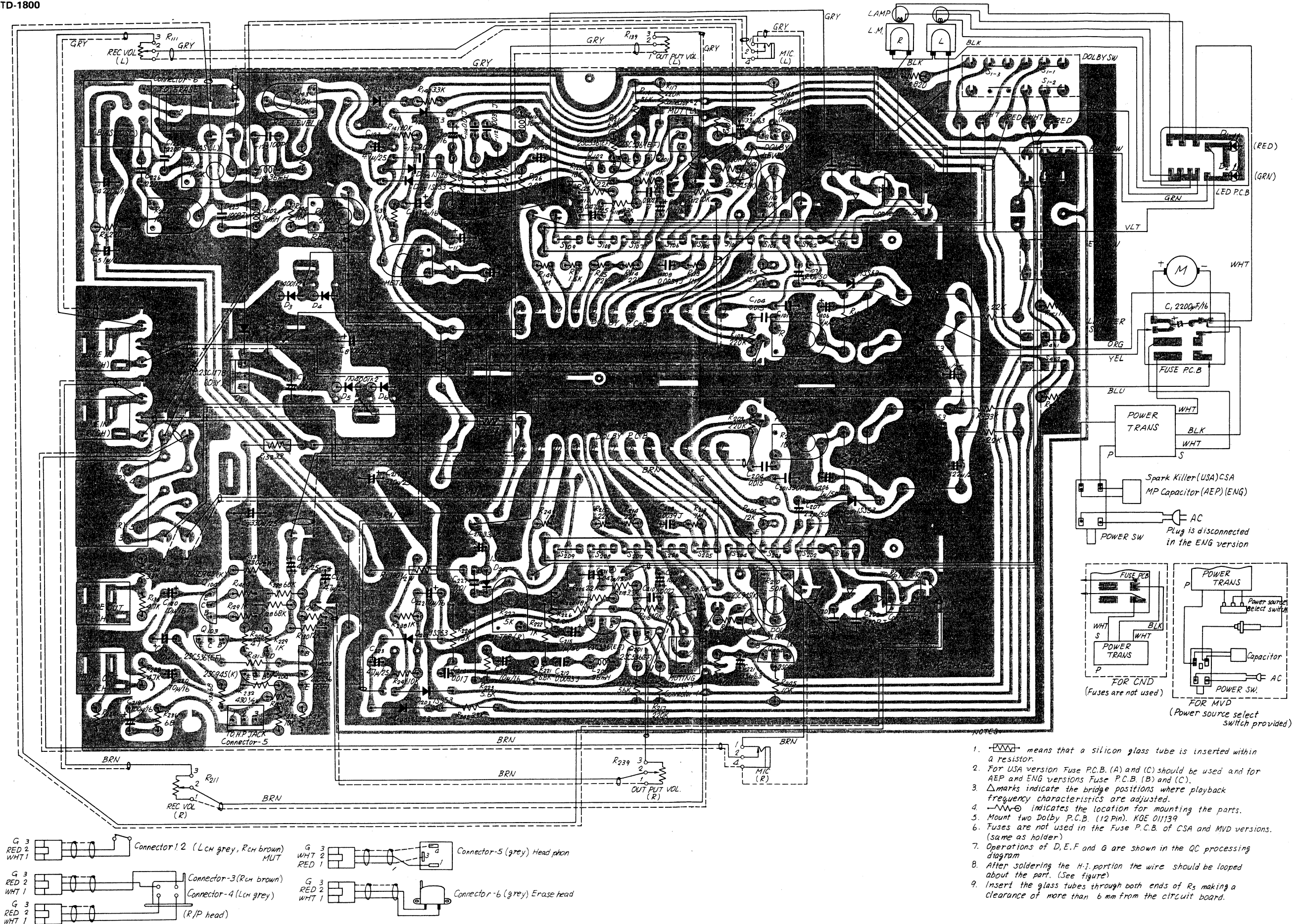
9.2 Electrical parts list

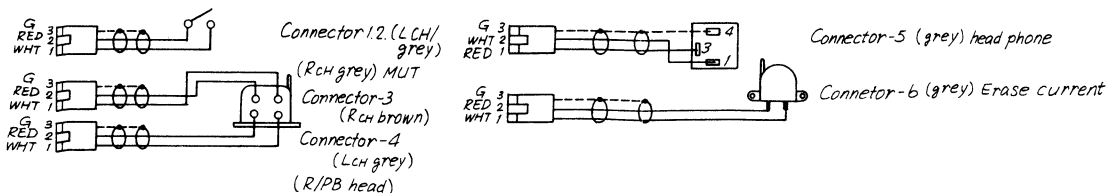
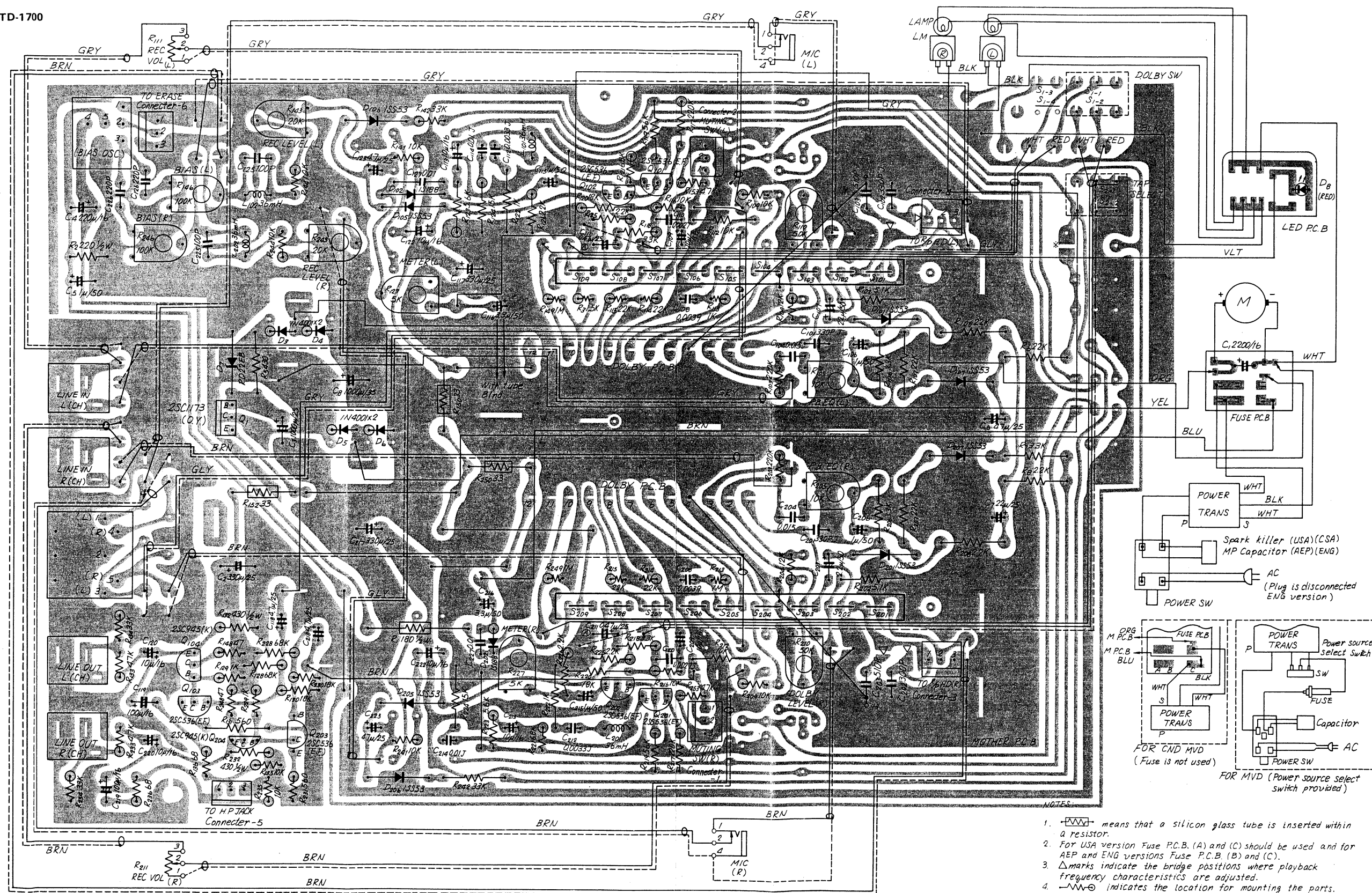
Ref. No.	Part No.	Description	Remarks	Q'ty	
				STD-1800	STD-1700
Tr1	KGE 46452	Transistor	2SC1173 (O.Y)	1	1
Tr101, 102, 103, 201, 202, 203	KGE 46354	"	2SC536(E.F)	6	6
Tr104, 106, 204, 206	KGE 46147	"	2SC945 (K)	4	—
Tr105, 205	KGE 46151	"	2SC945 (K.P)	2	—
Tr501	KGE 46396	"	2SC1400 (E)	2	2
Tr502	KGE 46150	"	2SC945 (QP)	2	2
IC	KGE 46329	IC	NE545B	2	2
D1	KGE 46482	L.E.D.		1	—
D2	KGE 46483	"		1	—
D3, 4, 5, 6	KGE 46096	Diode	IN4001	4	4
D7	KGE 46313	"	RD22EB	1	1
D8	KGE 46406	L.E.D.		—	1
D101, 103, 105, 106, 107, 201, 203, 205, 206, 207	KGE 46465	Diode	ISS53	10	—
D101, 105, 106, 107, 201, 205, 206, 207	KGE 46465	"	ISS53	—	8
D102, 202	KGE 41959	"	1S188FM1	2	2
D501	KGE 41959	"	"	2	2
L101, 102, 201, 202	KGE 49868	Micro inductor	36 mH	4	4
L501	KGE 47111	"	"	2	2
L502	KGE 49867	"	23 mH	2	2
	KGE 47023	O.S.C. block			
	KGE 42379	Power switch	CND, USA	1	1
	KGE 42467	"	ENG, AEP	1	1
	KGE 42474	"	MV	1	1
S101~109, 201~209	KGE 42470	Push switch		2	2
S1-1~1-3	KGE 42433	"		1	—
S1-1~1-2, 2-1~2-2	KGE 42435	"		—	1
S2-1~2-2	KGE 42434	"		1	—
S3	KGE 42434	"		1	—
S4-1~4-2	KGE 42434	"		1	—
S5-1~5-2	KGE 42347	Skelton switch		1	1
C1	KGE 34778	Electrolytic	220 μ F/16	1	1
C2, 117, 217	KGE 34786	"	330 μ F/25	3	3
C3	KGE 34788	"	1000 μ F/25	1	1
C4	KGE 34774	"	220 μ F/16	1	1
C5, 106, 115, 206, 215	KGE 34800	"	1 μ F/50	5	5
C6	KGE 34783	"	47 μ F/25	1	1
C7	KGE 34781	"	22 μ F/25	1	1
C8	KGE 34799	"	1000 μ F/35	1	1
C101, 102, 201, 202	KGE 33413	Ceramic	330 pF/50	4	4
C103, 203	KGE 33418	"	510 pF/50	2	2
C104, 204	KGE 3223	Mylar	0.015 μ F/50	2	2
C107, 207	KGE 34801	Electrolytic	2.2 μ F/50	2	2
C108, 208	KGE 35506	Mylar	0.0039 μ F/50	2	2
C109, 113, 120, 122, 209, 213, 220, 222	KGE 34769	Electrolytic	10 μ F/16	8	8

Ref. No.	Part No.	Description	Remarks	Q'ty	
				STD-1800	STD-1700
C110, 210	KGE 35502	Mylar	0.0027 μ F/50	2	2
C111, 211	KGE 33710	Aluminium fixed	0.47 μ F/25	2	2
C112, 212	KGE 35504	Mylar	0.0033 μ F/50	2	2
C114, 214	KGE 35517	"	0.01 μ F/50	2	2
C116, 216	KGE 34802	Electrolytic	3.3 μ F/50	2	2
C118, 123, 218, 223	KGE 34779	"	4.7 μ F/25	4	4
C119, 219	KGE 34773	"	100 μ F/16	2	2
C121, 221	KGE 34752	"	33 μ F/6.3	2	—
C125, 225	KGE 33401	Ceramic	100 pF/50	2	2
C126, 226	KGE 33409	"	220 pF/50	2	2
C127, 227	KGE 1181	Mylar	0.01 μ F/50	2	2
C501, 507, 510, 516, 519, 520, 521	KGE 34769	Electrolytic	10 μ F/16	14	14
C502	KGE 33478	Ceramic	330 pF/50	2	2
C503	KGE 34779	Electrolytic	4.7 μ F/25	2	2
C504	KGE 34785	"	220 μ F/25	2	2
C505	KGE 34753	"	47 μ F/6.3	2	2
C506	KGE 33466	Ceramic	100 pF/50	2	2
C508, 514	KGE 33709	Aluminium fixed	0.33 μ F/16	4	4
C509	KGE 33401	Ceramic	100 pF/50	2	2
C511	KGE 33503	Mylar	0.003 μ F/50	2	2
C512	KGE 35500	"	0.0022 μ F/50	2	2
C513	KGE 33717	Aluminium fixed	0.1 μ F/16	2	2
C515	KGE 10577	Mylar	0.047 μ F/50	2	2
C517	KGE 31134	"	0.027 μ F/50	2	2
C518	KGE 35508	"	0.0047 μ F/50	2	2
C522	KGE 34764	Electrolytic	220 μ F/10	2	2
C523	KGE 35511	Mylar	0.0056 μ F/50	2	2
C524	KGE 34776	Electrolytic	470 μ F/16	2	2
R1	KGE 26178	Carbon	180 Ω RD1/2SD	1	1
R2	KGE 26180	"	220 Ω "	1	1
R3	KGE 11260	"	1.5 k Ω RD1/4UR	1	1
R4	KGE 21071	"	820 Ω "	1	—
R5	KGE 21744	"	430 Ω RD1/4SR	1	1
R6, 107, 108, 207, 208	KGE 21785	"	22 k Ω "	5	5
R7, 242	KGE 21789	"	33 k Ω "	2	2
R8, 125, 225	KGE 21761	"	2.2 k Ω "	3	3
R102, 202	KGE 21770	"	5.1 k Ω "	2	2
R103, 117, 203, 217	KGE 3229	"	220 k Ω RD1/4UR	4	4
R104, 130, 204, 230	KGE 2531	"	12 k Ω "	4	—
R104, 204	KGE 2531	"	12 k Ω "	—	2
R106, 206, 502	KGE 11291	"	3.3 k Ω RD1/4SR	4	4
R109, 135, 141, 144, 145, 209, 235, 241, 244, 245	KGE 6259	"	10 k Ω RD1/4UR	10	—
R109, 135, 141, 144, 209, 235, 241, 244	KGE 6259	"	10 k Ω "	—	8
R110, 210	KGE 20559	Semi variable resistor	50 k Ω (B)	2	2
R111, 211	KGE 20611	Variable resistor	50 k Ω (A)	2	—
R111, 211	KGE 20612	"	"	2	—
R112, 116, 212, 216	KGE 10161	Carbon	10 k Ω RD1/4SR	4	4

Ref. No.	Part No.	Description	Remarks	Q'ty	
				STD-1800	STD-1700
R113, 149, 213, 249	KGE 21145	Carbon	1 M Ω RD1/4UR	4	4
R114, 115, 214, 215	KGE 5068	"	22 k Ω "	4	4
R118, 218, 514	KGE 10575	"	3.3 k Ω "	4	4
R119	KGE 10166	"	56 k Ω RD1/4SR	1	1
R219	KGE 10149	"	" RD1/4UR	1	1
R120	KGE 2533	"	18 k Ω "	1	—
R120, 130, 230	KGE 2533	"	" "	—	3
R220	KGE 21783	"	" RD1/4SR	1	1
R121, 221	KGE 11261	"	6.8 k Ω RD1/4UR	2	2
R122, 222	KGE 21753	"	1 k Ω RD1/4SR	2	2
R123, 223	KGE 6209	"	5.6 k Ω RD1/4UR	2	2
R124	KGE 2532	"	15 k Ω "	1	1
R224	KGE 10162	"	" RD1/4SR	1	1
R126, 226	KGE 5066	"	2.2 k Ω RD1/4UR	2	2
R127, 227	KGE 20556	Semi variable resistor	5 k Ω (B)	2	2
R128, 228	KGE 10598	Carbon	68 k Ω "	2	2
R129, 138, 151, 229, 238, 251, 503, 513, 515	KGE 11258	"	1 k Ω RD1/4UR	10	—
R129, 229, 503, 513, 515	KGE 11258	"	" "	—	6
R131	KGE 21743	"	390 Ω RD1/4SR	1	—
R131	KGE 21747	"	560 Ω "	—	1
R231	KGE 21063	"	390 Ω RD1/4UR	1	—
R231	KGE 21067	"	560 Ω "	—	1
R132, 232	KGE 26187	"	430 Ω RD1/2SD	2	2
R133, 233	KGE 10146	"	4.7 k Ω RD1/4UR	2	—
R133, 153, 233, 253	KGE 10146	"	" "	—	4
R134, 142, 234	KGE 6265	"	33 k Ω "	3	3
R136, 236	KGE 21045	"	68 Ω "	2	2
R139, 239	KGE 20613	Variable resistor	5 k Ω (A)	2	—
R140, 240, 511	KGE 5070	Carbon	100 k Ω RD1/4UR	4	—
R511	KGE 5070	"	" "	—	2
R143, 243	KGE 20558	Semi variable resistor	20 k Ω (B)	2	2
R146, 246	KGE 20560	"	100 k Ω (B)	2	2
R148, 248	KGE 6267	Carbon	47 k Ω RD1/4UR	2	2
R150, 152, 250	KGE 21717	"	33 k Ω RD1/4SR	3	3
R501	KGE 21793	"	47 k Ω "	2	2
R504, 509	KGE 10352	"	150 k Ω RD1/4UR	3	3
R505	KGE 5064	"	120 Ω "	2	2
R506	KGE 10339	"	10 Ω "	2	2
R507	KGE 10142	"	270 Ω "	2	2
R508	KGE 21141	"	680 k Ω "	2	2
R510	KGE 21131	"	270 k Ω "	2	2
R512	KGE 10338	"	180 Ω "	2	2
R516	KGE 10574	"	47 k Ω "	2	2
R517	KGE 21735	"	180 Ω RD1/4SR	2	2
R518	KGE 3226	"	330 Ω RD1/4UR	2	2

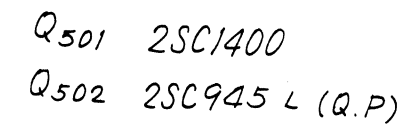
9.3 Mounting and wiring diagrams
STD-1800





1. $\text{---}\square\text{---}$ means that a silicon glass tube is inserted within a resistor.
2. For USA version Fuse P.C.B. (A) and (C) should be used and for AEP and ENG versions Fuse P.C.B. (B) and (C).
3. Δ marks indicate the bridge positions where playback frequency characteristics are adjusted.
4. $\text{---}\text{---}\text{---}$ indicates the location for mounting the parts.
5. Mount two Dolby P.C.B. (12 Pin), KGE 011139.
6. Fuses are not used in the Fuse P.C.B. of CSA and MVD versions. (same as holder)
7. Operations of D, E, F and G are shown in the QC processing diagram.
8. After soldering the H-I portion the wire should be looped about the part. (See figure)
9. Insert the glass tubes through both ends of R_5 making a clearance of more than 6 mm from the circuit board.

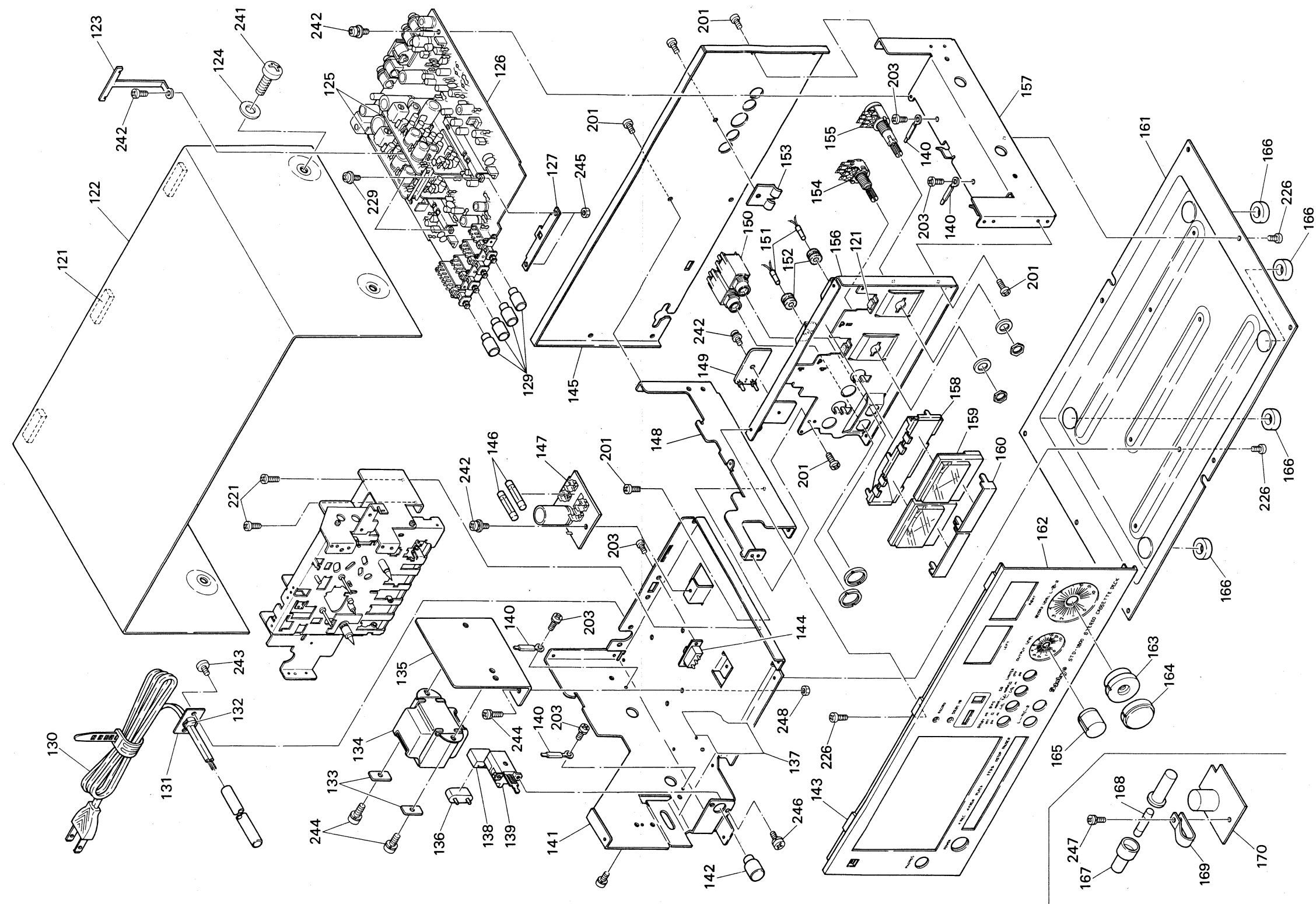
Q501 2SC1400
Q502 2SC945 L (Q.P)



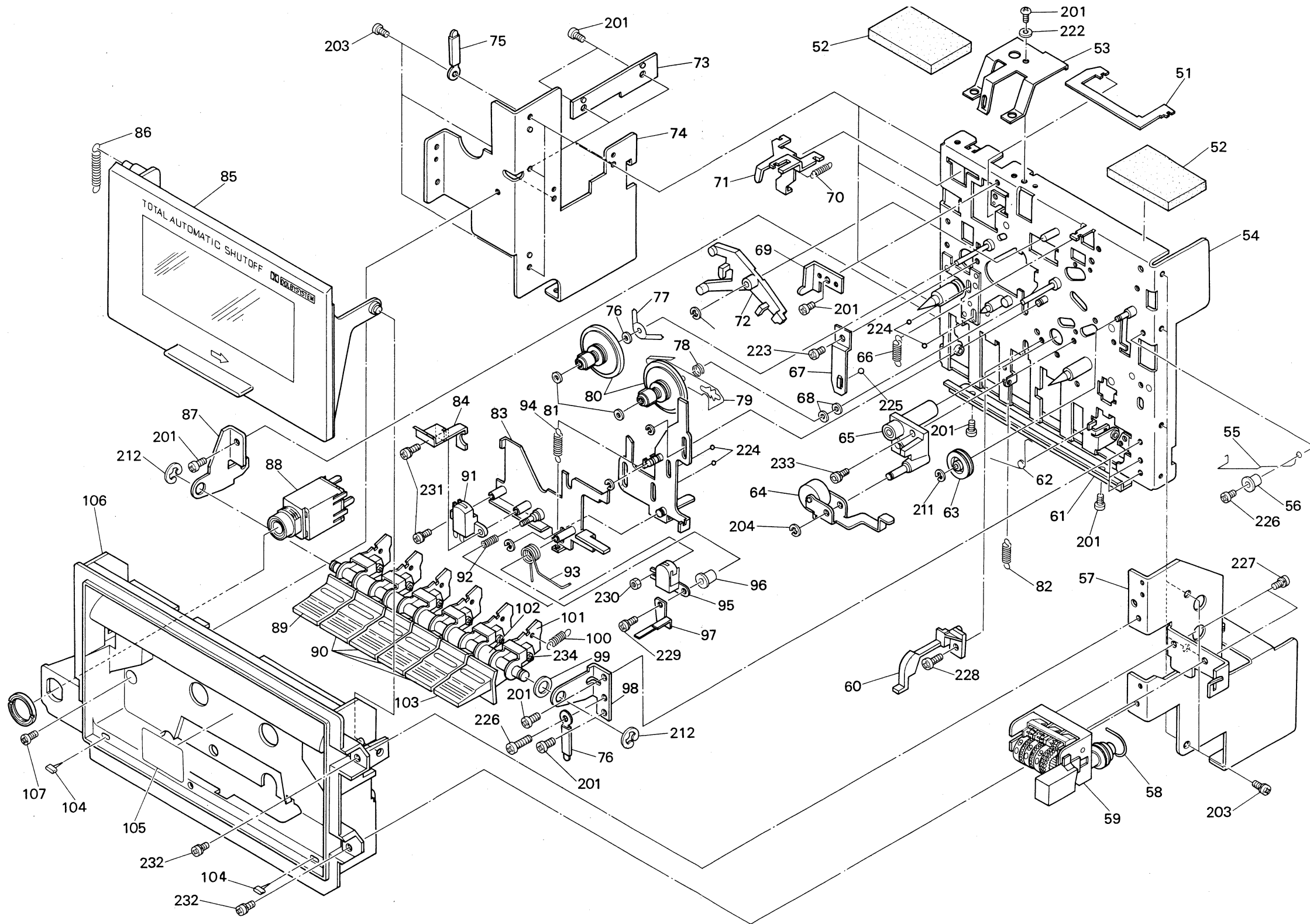
1. © indicates the location for mounting parts.
2. Capacitor indication.
 - (M) Mylar capacitor
 - (C) Ceramic capacitor
 - (A) Aluminium solid capacitor
3. Coil L501 with the mark * should be mounted with its marked side facing toward the mark * of the circuit board.

LAST NO. R518, C524, L502, Q502, D501

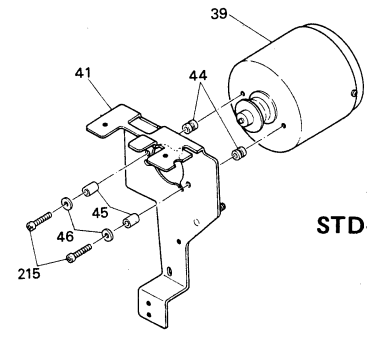
10.EXPLODED VIEWS



Drawing No.	Part No.
1	KGE 0356
2	KGE 011264
3	KGE 011265
4	KGE 09495
5	KGE 97774
6	KGE 97738
7	KGE 14112
8	KGE 011266
9	KGE 99056
10	KGE 010749
11	KGE 97868
12	KGE 18630
13	KGE 97860
14	KGE 011265
15	KGE 99052
16	KGE 98636
17	KGE 98833
18	KGE 010748
19	KGE 010774
20	KGE 98636
21	KGE 010775
22	KGE 97797
23	KGE 96716
24	KGE 99050
25	KGE 99051
26	KGE 98632
27	KGE 97735
28	KGE 97734
29	KGE 97736
30	KGD 97736
31	KGE 011220
32	KGE 011221
33	KGE 011222
34	KGE 7448
35	KGE 97838
36	KGE 13754
37	KGE 011211
38	KGE 011147
39	KGE 011212
40	KGE 97731
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217	KGE 10715

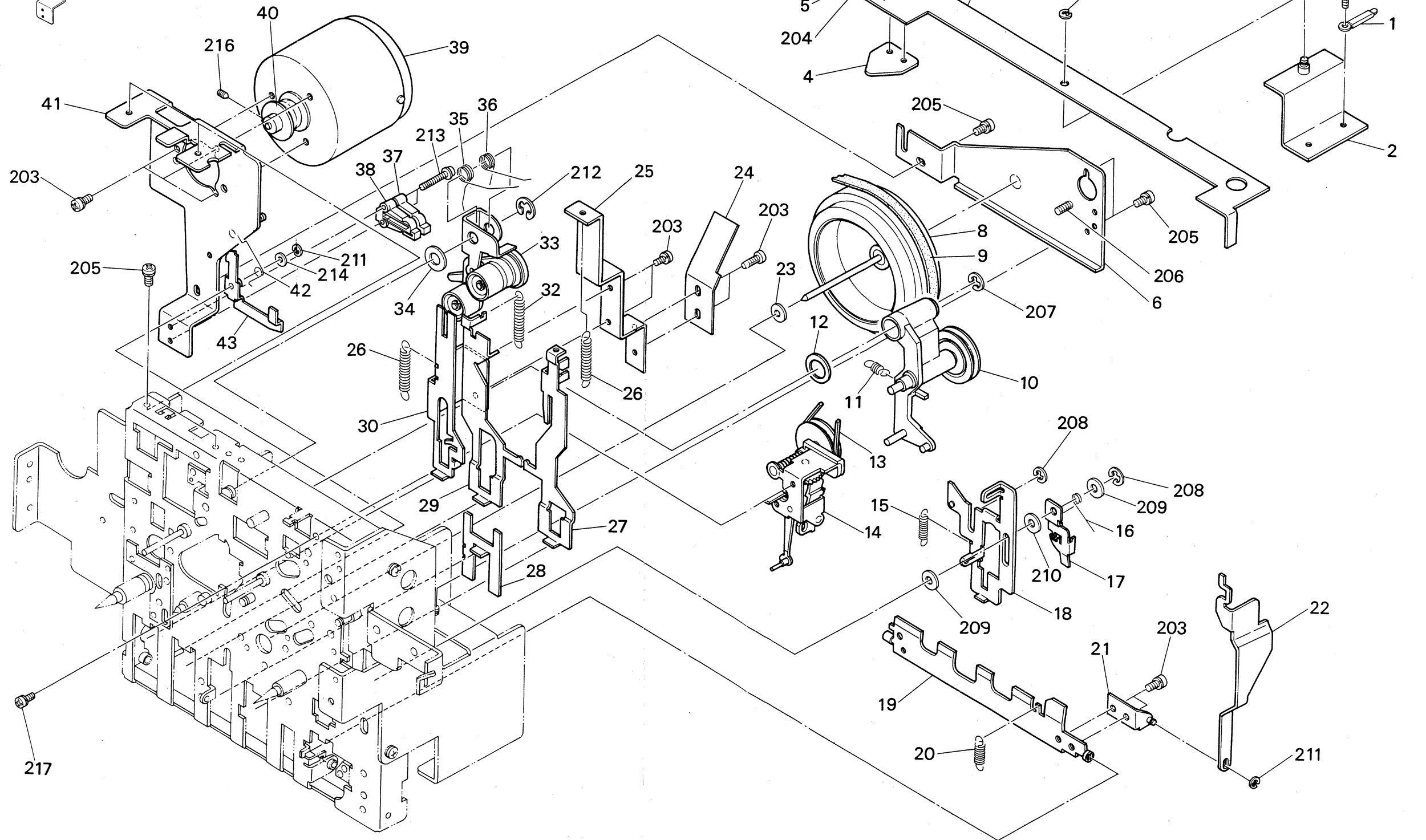


Drawing No.	Part No.	Part Description
52	KGE 8414	STD-1800 (AEP, ENG)
53	KGE 8415	STD-1800 (AEP, ENG)
54	KGE 8416	STD-1800 (AEP, ENG)
55	KGE 8417	STD-1800 (AEP, ENG)
56	KGE 8418	STD-1800 (AEP, ENG)
57	KGE 8419	STD-1800 (AEP, ENG)
58	KGE 8420	STD-1800 (AEP, ENG)
59	KGE 8421	STD-1800 (AEP, ENG)
60	KGE 8422	STD-1800 (AEP, ENG)
61	KGE 8423	STD-1800 (AEP, ENG)
62	KGE 8424	STD-1800 (AEP, ENG)
63	KGE 8425	STD-1800 (AEP, ENG)
64	KGE 8426	STD-1800 (AEP, ENG)
65	KGE 8427	STD-1800 (AEP, ENG)
66	KGE 8428	STD-1800 (AEP, ENG)
67	KGE 8429	STD-1800 (AEP, ENG)
68	KGE 8430	STD-1800 (AEP, ENG)
69	KGE 8431	STD-1800 (AEP, ENG)
70	KGE 8432	STD-1800 (AEP, ENG)
71	KGE 8433	STD-1800 (AEP, ENG)
72	KGE 8434	STD-1800 (AEP, ENG)
73	KGE 8435	STD-1800 (AEP, ENG)
74	KGE 8436	STD-1800 (AEP, ENG)
75	KGE 8437	STD-1800 (AEP, ENG)
76	KGE 8438	STD-1800 (AEP, ENG)
77	KGE 8439	STD-1800 (AEP, ENG)
78	KGE 8440	STD-1800 (AEP, ENG)
79	KGE 8441	STD-1800 (AEP, ENG)
80	KGE 8442	STD-1800 (AEP, ENG)
81	KGE 8443	STD-1800 (AEP, ENG)
82	KGE 8444	STD-1800 (AEP, ENG)
83	KGE 8445	STD-1800 (AEP, ENG)
84	KGE 8446	STD-1800 (AEP, ENG)
85	KGE 8447	STD-1800 (AEP, ENG)
86	KGE 8448	STD-1800 (AEP, ENG)
87	KGE 8449	STD-1800 (AEP, ENG)
88	KGE 8450	STD-1800 (AEP, ENG)
89	KGE 8451	STD-1800 (AEP, ENG)
90	KGE 8452	STD-1800 (AEP, ENG)
91	KGE 8453	STD-1800 (AEP, ENG)
92	KGE 8454	STD-1800 (AEP, ENG)
93	KGE 8455	STD-1800 (AEP, ENG)
94	KGE 8456	STD-1800 (AEP, ENG)
95	KGE 8457	STD-1800 (AEP, ENG)
96	KGE 8458	STD-1800 (AEP, ENG)
97	KGE 8459	STD-1800 (AEP, ENG)
98	KGE 8460	STD-1800 (AEP, ENG)
99	KGE 8461	STD-1800 (AEP, ENG)
100	KGE 8462	STD-1800 (AEP, ENG)
101	KGE 8463	STD-1800 (AEP, ENG)
102	KGE 8464	STD-1800 (AEP, ENG)
103	KGE 8465	STD-1800 (AEP, ENG)
104	KGE 8466	STD-1800 (AEP, ENG)
105	KGE 8467	STD-1800 (AEP, ENG)
106	KGE 8468	STD-1800 (AEP, ENG)
107	KGE 8469	STD-1800 (AEP, ENG)
108	KGE 8470	STD-1800 (AEP, ENG)
109	KGE 8471	STD-1800 (AEP, ENG)
110	KGE 8472	STD-1800 (AEP, ENG)
111	KGE 8473	STD-1800 (AEP, ENG)
112	KGE 8474	STD-1800 (AEP, ENG)
113	KGE 8475	STD-1800 (AEP, ENG)
114	KGE 8476	STD-1800 (AEP, ENG)
115	KGE 8477	STD-1800 (AEP, ENG)
116	KGE 8478	STD-1800 (AEP, ENG)
117	KGE 8479	STD-1800 (AEP, ENG)
118	KGE 8480	STD-1800 (AEP, ENG)
119	KGE 8481	STD-1800 (AEP, ENG)
120	KGE 8482	STD-1800 (AEP, ENG)
121	KGE 8483	STD-1800 (AEP, ENG)
122	KGE 8484	STD-1800 (AEP, ENG)
123	KGE 8485	STD-1800 (AEP, ENG)
124	KGE 8486	STD-1800 (AEP, ENG)
125	KGE 8487	STD-1800 (AEP, ENG)
126	KGE 8488	STD-1800 (AEP, ENG)
127	KGE 8489	STD-1800 (AEP, ENG)
128	KGE 8490	STD-1800 (AEP, ENG)
129	KGE 8491	STD-1800 (AEP, ENG)
130	KGE 8492	STD-1800 (AEP, ENG)
131	KGE 8493	STD-1800 (AEP, ENG)
132	KGE 8494	STD-1800 (AEP, ENG)
133	KGE 8495	STD-1800 (AEP, ENG)
134	KGE 8496	STD-1800 (AEP, ENG)
135	KGE 8497	STD-1800 (AEP, ENG)
136	KGE 8498	STD-1800 (AEP, ENG)
137	KGE 8499	STD-1800 (AEP, ENG)
138	KGE 8500	STD-1800 (AEP, ENG)
139	KGE 8501	STD-1800 (AEP, ENG)
140	KGE 8502	STD-1800 (AEP, ENG)
141	KGE 8503	STD-1800 (AEP, ENG)
142	KGE 8504	STD-1800 (AEP, ENG)
143	KGE 8505	STD-1800 (AEP, ENG)
144	KGE 8506	STD-1800 (AEP, ENG)
145	KGE 8507	STD-1800 (AEP, ENG)
146	KGE 8508	STD-1800 (AEP, ENG)
147	KGE 8509	STD-1800 (AEP, ENG)
148	KGE 8510	STD-1800 (AEP, ENG)
149	KGE 8511	STD-1800 (AEP, ENG)
150	KGE 8512	STD-1800 (AEP, ENG)
151	KGE 8513	STD-1800 (AEP, ENG)
152	KGE 8514	STD-1800 (AEP, ENG)
153	KGE 8515	STD-1800 (AEP, ENG)
154	KGE 8516	STD-1800 (AEP, ENG)
155	KGE 8517	STD-1800 (AEP, ENG)
156	KGE 8518	STD-1800 (AEP, ENG)
157	KGE 8519	STD-1800 (AEP, ENG)
158	KGE 8520	STD-1800 (AEP, ENG)
159	KGE 8521	STD-1800 (AEP, ENG)
160	KGE 8522	STD-1800 (AEP, ENG)
161	KGE 8523	STD-1800 (AEP, ENG)
162	KGE 8524	STD-1800 (AEP, ENG)
163	KGE 8525	STD-1800 (AEP, ENG)
164	KGE 8526	STD-1800 (AEP, ENG)
165	KGE 8527	STD-1800 (AEP, ENG)
166	KGE 8528	STD-1800 (AEP, ENG)
167	KGE 8529	STD-1800 (AEP, ENG)
168	KGE 8530	STD-1800 (AEP, ENG)
169	KGE 8531	STD-1800 (AEP, ENG)
170	KGE 8532	STD-1800 (AEP, ENG)
171	KGE 8533	STD-1800 (AEP, ENG)
172	KGE 8534	STD-1800 (AEP, ENG)
173	KGE 8535	STD-1800 (AEP, ENG)
174	KGE 8536	STD-1800 (AEP, ENG)
175	KGE 8537	STD-1800 (AEP, ENG)
176	KGE 8538	STD-1800 (AEP, ENG)
177	KGE 8539	STD-1800 (AEP, ENG)
178	KGE 8540	STD-1800 (AEP, ENG)
179	KGE 8541	STD-1800 (AEP, ENG)
180	KGE 8542	STD-1800 (AEP, ENG)
181	KGE 8543	STD-1800 (AEP, ENG)
182	KGE 8544	STD-1800 (AEP, ENG)
183	KGE 8545	STD-1800 (AEP, ENG)
184	KGE 8546	STD-1800 (AEP, ENG)
185	KGE 8547	STD-1800 (AEP, ENG)
186	KGE 8548	STD-1800 (AEP, ENG)
187	KGE 8549	STD-1800 (AEP, ENG)
188	KGE 8550	STD-1800 (AEP, ENG)
189	KGE 8551	STD-1800 (AEP, ENG)
190	KGE 8552	STD-1800 (AEP, ENG)
191	KGE 8553	STD-1800 (AEP, ENG)
192	KGE 8554	STD-1800 (AEP, ENG)
193	KGE 8555	STD-1800 (AEP, ENG)
194	KGE 8556	STD-1800 (AEP, ENG)
195	KGE 8557	STD-1800 (AEP, ENG)
196	KGE 8558	STD-1800 (AEP, ENG)
197	KGE 8559	STD-1800 (AEP, ENG)
198	KGE 8560	STD-1800 (AEP, ENG)
199	KGE 8561	STD-1800 (AEP, ENG)
200	KGE 8562	STD-1800 (AEP, ENG)
201	KGE 8563	STD-1800 (AEP, ENG)
202	KGE 8564	STD-1800 (AEP, ENG)
203	KGE 8565	STD-1800 (AEP, ENG)
204	KGE 8566	STD-1800 (AEP, ENG)
205	KGE 8567	STD-1800 (AEP, ENG)
206	KGE 8568	STD-1800 (AEP, ENG)
207	KGE 8569	STD-1800 (AEP, ENG)
208	KGE 8570	STD-1800 (AEP, ENG)
209	KGE 8571	STD-1800 (AEP, ENG)
210	KGE 8572	STD-1800 (AEP, ENG)
211	KGE 8573	STD-1800 (AEP, ENG)
212	KGE 8574	STD-1800 (AEP, ENG)
213	KGE 8575	STD-1800 (AEP, ENG)
214	KGE 8576	STD-1800 (AEP, ENG)
215	KGE 8577	STD-1800 (AEP, ENG)
216	KGE 8578	STD-1800 (AEP, ENG)
217	KGE 8579	STD-1800 (AEP, ENG)
218	KGE 8580	STD-1800 (AEP, ENG)
219	KGE 8581	STD-1800 (AEP, ENG)
220	KGE 8582	STD-1800 (AEP, ENG)
221	KGE 8583	STD-1800 (AEP, ENG)
222	KGE 8584	STD-1800 (AEP, ENG)
223	KGE 8585	STD-1800 (AEP, ENG)
224	KGE 8586	STD-1800 (AEP, ENG)
225	KGE 8587	STD-1800 (AEP, ENG)
226	KGE 8588	STD-1800 (AEP, ENG)
227	KGE 8589	STD-1800 (AEP, ENG)
228	KGE 8590	STD-1800 (AEP, ENG)
229	KGE 8591	STD-1800 (AEP, ENG)
230	KGE 8592	STD-1800 (AEP, ENG)
231	KGE 8593	STD-1800 (AEP, ENG)
232	KGE 8594	STD-1800 (AEP, ENG)
233	KGE 8595	STD-1800 (AEP, ENG)
234	KGE 8596	STD-1800 (AEP, ENG)



STD-1700

Part No.	Part Name
121	KGE 21351 STD-1800 (USA)
122	KGC 88447 STD-1800 (AEP, ENG, MV, CHD)
123	KGC 88446 STD-1700
124	KGE 88449
125	KGE 88450
126	KGE 88451
127	KGE 88452
128	KGE 88453
129	KGE 88454
130	KGE 88455
131	KGE 88456
132	KGE 88457
133	KGE 88458
134	KGE 88459
135	KGE 88460
136	KGE 88461
137	KGE 88462
138	KGE 88463
139	KGE 88464
140	KGE 88465
141	KGE 88466
142	KGE 88467
143	KGE 88468
144	KGE 88469
145	KGE 88470
146	KGE 88471
147	KGE 88472
148	KGE 88473
149	KGE 88474
150	KGE 88475
151	KGE 88476
152	KGE 88477
153	KGE 88478
154	KGE 88479
155	KGE 88480
156	KGE 88481
157	KGE 88482
158	KGE 88483
159	KGE 88484
160	KGE 88485
161	KGE 88486
162	KGE 88487
163	KGE 88488
164	KGE 88489
165	KGE 88490
166	KGE 88491
167	KGE 88492
168	KGE 88493
169	KGE 88494
170	KGE 88495
171	KGE 88496
172	KGE 88497
173	KGE 88498
174	KGE 88499
175	KGE 88500
176	KGE 88501
177	KGE 88502
178	KGE 88503
179	KGE 88504
180	KGE 88505
181	KGE 88506
182	KGE 88507
183	KGE 88508
184	KGE 88509
185	KGE 88510
186	KGE 88511
187	KGE 88512
188	KGE 88513
189	KGE 88514
190	KGE 88515
191	KGE 88516
192	KGE 88517
193	KGE 88518
194	KGE 88519
195	KGE 88520
196	KGE 88521
197	KGE 88522
198	KGE 88523
199	KGE 88524
200	KGE 88525
201	KGE 88526
202	KGE 88527
203	KGE 88528
204	KGE 88529
205	KGE 88530
206	KGE 88531
207	KGE 88532
208	KGE 88533
209	KGE 88534
210	KGE 88535
211	KGE 88536
212	KGE 88537
213	KGE 88538
214	KGE 88539
215	KGE 88540



11.MECHANICAL PARTS LIST

Drawing No.	Part No.	Part Name	Q'ty	Remarks
1, 75, 140	KGE 0356	Wire clamp	7	
8	KGE 010656	Flywheel ass'y	1	
65	KGE 010717	Capstan base ass'y	1	
54	KGC 010747	Mechanism base plate ass'y	1	
18	KGE 010748	Pause lever ass'y	1	
10	KGE 010749	Tension arm ass'y	1	
14	KGD 010755	Auto shut-off mechanism ass'y	1	
83	KGD 010772	Head base ass'y	1	
19	KGE 010774	Button lock plate pressure ass'y	1	
21	KGE 010775	Stop arm ass'y	1	
64	KGE 010779	Pinch roller arm ass'y	1	
126	KGE 011138	AU P.C.B. ass'y	1	STD-1800
125	KGE 011139	Dolby P.C.B. ass'y	1	
88	KGE 011141	Headphone jack ass'y	1	
38	KGE 011147	Skelton switch ass'y	1	
147	KGE 011149	Power supply P.C.B. ass'y	1	USA
149	KGE 011150	Intermediate circuit board ass'y	1	STD-1800
147	KGE 011186	Power supply P.C.B. ass'y	1	AEP. ENG
126	KGE 011187	AU P.C.B. ass'y	1	STD-1700
149	KGE 011188	Intermediate circuit board ass'y	1	STD-1700
37	KGE 011211	Skelton switch ass'y	1	
32	KGE 011220	Tension coil spring ass'y	1	
82	KGE 011222	"	1	
162	KGE 011250	Front panel ass'y	1	STD-1800 (USA, MV, CND)
3	KGE 011261	Lever ass'y	1	
2	KGE 011264	Plate ass'y	1	
85	KGE 011267	Cassette door ass'y	1	STD-1800 (USA, MV, CND)
162	KGE 011345	Front panel ass'y	1	STD-1800 (AEP, ENG)
85	KGE 011346	Cassette door ass'y	1	STD-1800 (AEP, ENG)
80	KGE 011614	Reel plate ass'y	2	
33	KGE 011627	Idler ass'y	1	
147	KGE 011680	Power supply P.C.B. ass'y	1	CND
43	KGE 011890	Lock plate ass'y	1	
68	KGE 3111	Washer 1.6φ x 4φ x 0.2t	2	
121	KGE 3135	Cushion	3	
92	KGE 3354	Compression coil spring	1	
99	KGE 7484	Washer	2	
15	KGE 9992	Tension coil spring	1	
143	KGE 10052	Cushion	3	
45	KGE 10542	Collar	3	
44, 152	KGE 10637	Cushion	2	
20	KGE 13446	Tension coil spring	1	
36	KGE 13754	Idler spring	1	
70	KGE 13757	Tension coil spring	1	
7	KGE 14112	Thrust adjusting screw	1	
79	KGE 14426	Detect cam	1	
42	KGE 14760	Tension coil spring	1	
12	KGE 18630	Washer	1	
155	KGE 20611	Variable resistor	1	
154	KGE 20613	"	1	
138	KGE 30085	Spark killer	1	CND
138	KGE 30089	"	1	MV
138	KGE 35033	"	1	AEP, ENG
138	KGE 35357	"	1	USA
91	KGE 40825	Erase head	1	
144	KGE 42269	Slide switch	1	MV

Drawing No.	Part No.	Part Name	Q'ty	Remarks
139	KGE 42379	Power switch	1	USA, CND
150	KGE 42471	Mic jack	2	
159	KGE 43124	Meter	2	STD-1700
159	KGE 43125	"	2	STD-1800 (USA, MV, CND)
159	KGE 43128	"	2	STD-1800 (AEP, ENG)
130	KGE 44000	Power cord	1	USA, CND
130	KGE 44428	"	1	AEP, MV
130	KGE 44472	"	1	ENG
39	KGE 47022	Motor	1	
95	KGE 47028	Record head	1	
134	KGE 47054	Power transformer	1	USA
134	KGE 47055	"	1	AEP
134	KGE 47056	"	1	ENG
134	KGE 47057	"	1	MV
134	KGE 47058	"	1	CND
39	KGE 47059	Motor	1	
146	KGE 49051	Fuse	2	AEP, ENG
146	KGE 49257	"	2	USA
151	KGE 49278	Lamp	2	
56	KGE 55072	Collar	1	USA, MV
136	KGE 92705	Cover	1	
51	KGE 95134	Brake plate	1	
105	KGE 95288	Reflecting plate	1	
63	KGE 95378	Counter pulley	1	
132	KGE 95476	Cord bush	1	
131	KGE 95499	Mounting plate	1	
23	KGE 96716	Washer	1	
97	KGE 96998	Wire clamp	1	
78	KGE 97189	Compression coil spring	1	
72	KGE 97710	Brake arm	1	
66	KGE 97712	Tension coil spring	1	
94	KGE 97715	"	1	
93	KGE 97726	"	1	
67	KGE 97727	Head base plate clamp	1	
40	KGE 97731	Motor pulley	1	
76	KGE 97732	Felt	1	
28	KGE 97733	PLAY plate	1	
29	KGE 97734	REW plate	1	
27	KGE 97735	FF plate	1	
30	KGD 97736	REC plate	1	
6	KGE 97738	Flywheel bracket	1	
41	KGE 97740	Motor mounting plate	1	
5	KGE 97774	Roller	1	
22	KGE 97797	Link	1	
101	KGD 97799	Button lever	6	
61	KGE 97800	Button stopper	1	
102	KGE 97801	Button shaft collar	6	
87	KGE 97802	Button shaft bearing C	1	
98	KGE 97804	" A	1	
71	KGE 97805	REC prevention plate	1	
55	KGE 97826	Pause spring	1	
13	KGE 97860	Square belt	1	
11	KGE 97868	Tension coil spring	1	
100	KGE 97932	"	1	
35	KGE 97938	Idler spring B	1	
62	KGE 97939	Stop spring	1	
107	KGE 98043	+ B.H.M.S.	7	M3 x 5
77	KGE 98054	Back tension spring	1	

Drawing No.	Part No.	Part Name	Q'ty	Remarks
133	KGE 98288	Square washer	2	STD-1800 STD-1700, STD-1800 (USA, MV, CND)
81	KGE 98310	Washer	2	
96	KGE 98406	Collar	1	
158	KGD 98426	Mirror	1	
165	KGE 98427	Knob	1	
58	KGE 98431	Belt	1	STD-1800 (USA, MV, CND) STD-1800 (USA, MV, CND)
69	KGE 98432	Cassette rest	1	
129	KGE 98435	Push button	4	
142	KGE 98436	"	1	
164	KGE 98437	Knob	1	STD-1800 (USA, MV, CND) STD-1800 (USA, MV, CND)
163	KGE 98438	"	1	
166	KGE 98439	Foot	4	
161	KGC 98440	Bottom cover	1	STD-1700
161	KGC 98441	"	1	STD-1800
106	KGB 98442	Cassette holder	1	STD-1700 STD-1700
85	KGD 98443	Cassette door	1	
122	KGC 98446	Cover	1	
122	KGC 98447	"	1	STD-1800
145	KGC 98448	Rear panel	1	STD-1800
145	KGC 98449	"	1	STD-1700
157	KGC 98450	Chassis (light)	1	STD-1800
157	KGC 98451	"	1	STD-1700
162	KGC 98452	Flont panel	1	STD-1700
156	KGC 98454	Chassis (front)	1	STD-1800
156	KGC 98455	"	1	STD-1700
74	KGD 98456	Stay (left)	1	STD-1800 STD-1700, STD-1800 (AEP, ENG)
53	KGE 98458	Cassette holder spring	1	
90	KGE 98459	Button	4	
89	KGE 98460	"	1	STD-1700, STD-1800 (AEP, ENG) STD-1700, STD-1800 (AEP, ENG)
103	KGE 98461	PAUSE button	1	
90	KGD 98462	Button	4	
89	KGE 98463	REC button	1	
103	KGE 98464	PAUSE button	1	STD-1700, STD-1800 (AEP, ENG)
148	KGC 98465	Chassis	1	
57	KGD 98466	Stay (right)	1	
73	KGE 98469	Guide plate	1	STD-1700 STD-1700
127	KGE 98473	Slide plate	1	
141	KGB 98474	Chassis (left)	1	
160	KGE 98475	Meter holder	2	
129, 142	KGE 98478	Push button	1	
160	KGE 98500	Meter holder	2	STD-1800
59	KGE 98517	Counter	1	
86	KGE 98520	Tension coil spring	1	
135	KGD 98521	Transformer mounting plate	1	
40	KGE 98524	Motor pulley	1	
60	KGD 98535	Spring	1	AEP, ENG STD-1800 STD-1800 (AEP, ENG) STD-1800 (AEP, ENG)
136	KGE 98565	Cover	1	
126	KGE 98595	Push button	4	
142	KGE 98596	"	1	
165	KGE 98597	Knob	1	
164	KGE 98598	"	1	STD-1800 (AEP, ENG)
163	KGE 98599	"	1	STD-1800 (AEP, ENG)
124	KGE 98674	Washer	4	

Drawing No.	Part No.	Part Name	Q'ty	Remarks
104	KGE 98727	Stopper	1	STD-1700
123	KGE 98769	Printed board holder	1	
153	KGE 98772	Jack holder	1	
17	KGE 98833	Lock plate	1	
41	KGE 98835	Motor mounting plate	1	
16	KGE 98836	Tension coil spring	1	CND AEP, ENG STD-1800 (USA)
136	KGE 98847	Cover	1	
137	KGE 98882	Shield plate	1	
122	KGC 98971	Cover	1	
84	KGE 98975	Head protect plate	1	
4	KGE 99049	Holder	1	
24	KGE 99050	Spring	1	
25	KGE 99051	Switch lever	1	
26	KGE 99052	Tension coil spring	2	
46	KGE 99083	Washer	3	
9	KGE 99135	Flat belt	1	M2.6 x 5 M2.5 x 8 M2.6 x 3
52	KGE 99414	Cusion	2	
201	KGE 13599	+ F.H.M.S.	25	
226	KGE 13600	"	13	
223	14536	"	1	
243	KGE 98043	+ B.H.M.S.	2	M3 x 5 M2 x 14 M2.6 x 8 M5 x 8
213	KGE 98053	+ P.H.M.S with knurled flange	2	
230	KGE 98357	Nut	1	
206	14252	+ P.H.M.S.	1	
241	14706	+ B.H.M.S.	4	
228	14806	FT screw	1	M2 M4 M2.6 x 6
216	17019	Set screw	1	
245	18057	Nut	2	
248	18092	"	1	
205	19014	+ P.H.N.S. with spring washer	5	
246	19015	"	3	M3 x 5 M3 x 6 M2.6 x 4 M2 x 4
227	19016	"	2	
203	19030	"	15	
217	19034	"	1	
242	19045	"	6	
232	19046	+ P.H.N.S. with spring wahser	2	M2 x 6 M2 x 8
244	19063	"	2	
229	19077	+ P.H.M.S. with knurled flange	3	
247	19085	+ P.H.M.S. with spring washer	1	
231	19086	"	2	
233	19091	+ P.H.M.S. with spring washer	2	M2.6 x 6 $\phi 3.3 \times \phi 8 \times t0.5$ E-1.5
234	19112	+ F.H.M.S.	6	
215	19117	"	3	
209	22030	Flat washer	1	
211	22134	E-ring	3	
204	22135	E-ring	4	E-2 E-2.5 E-3
208	22136	"	2	
222	22137	Washer	1	
214	22138	Flat washer	1	
202	22140	E-ring	1	
210	22146	Flat washer	1	$\phi 3.3 \times \phi 8 \times t1$ E-4 E-3
212	22147	E-ring	3	
207	22177	"	1	
224	54004	Steel ball	4	
225	54012	"	1	

CORRECTION

1. P. 20 – 9.2 Electrical parts list
The prefix of the transistors Ref. Nos. should be changed from **Tr** to **Q**.
2. P. 26, 28 – 10. EXPLODED VIEWS
The parts list on page 26 should be replaced with the parts list on page 28.
3. P. 29 – 11. MECHANICAL PARTS LIST
An added part is listed following Drawing No. 14.

Drawing No.	Part No.	Part Name	Q'ty	Remarks
109	KGE010767	Head lever retainer	1	

4. P. 30
An added part is listed following Drawing No. 22.

Drawing No.	Part No.	Part Name	Q'ty	Remarks
108	KGE97798	Button shaft	1	