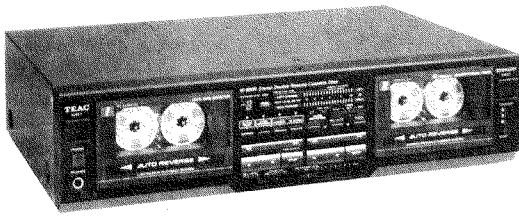


TEAC®



SERVICE MANUAL

W-660R/W-460C

Stereo Double Cassette Deck

* Dolby noise reduction manufactured under license from Dolby Laboratories Licensing Corporation. "DOLBY" and the double-D symbol  are trademarks of Dolby Laboratories Licensing Corporation.

- ドルビーノイズリダクションはドルビーラボラトリーズライセンシングコーポレーションからの実施権に基づき製造されています。
- ドルビー、DOLBY及びダブルD記号  はドルビーラボラトリーズライセンシングコーポレーションの登録商標です。

注 意

△印は安全重要部品です。交換する時は必ずティアック指定の部品を使用してください。

1 SPECIFICATIONS AND SERVICE DATA

仕様及びサービス・データ

SPECIFICATIONS

Track System	4-track, 2-channel stereo
Heads	<W-660R> 3: 1 Playback (Rotary, Deck I) 1 Erase and 1 Record/Playback (Rotary, Deck II) <W-460C> 3: 1 Playback (Deck I) 1 Erase and 1 Record/Playback (Deck II)
Type of Tape	Cassette tape, C-60 and C-90
Tape Speed	4.8 cm/s (1-7/8 ips), 9.5 cm/s (3-3/4 ips); Hi speed Dubbing)
Input (level and impedance)	
LINE IN:	Specified input level: -9 dB (275 mV)/50 kohms Min. input level: -19 dB (86.9 mV)
Output (level and load impedance)	
OUTPUT:	Spec. output level: -5 dB (436 mV)/50 kohms
PHONES:	Spec. output level: -18 dB (97.5 mV)/8 ohms
Equalization	
METAL:	3180 μ s + 70 μ s
CrO₂:	3180 μ s + 70 μ s
NORMAL:	3180 μ s + 120 μ s
Head Configuration	
1/2-track, 1-channel erase head	
1/4-track, 2-channel record/playback head	
Motors	6: 1 DC servo capstan motor 1 DC reel motor 1 DC mechanism motor (Deck I/II)
Bias Frequency	100 kHz
Operation position	Horizontal
Power Requirements	
100/120/220/240 V AC, 50/60 Hz	(General Export Model)
120 V AC, 60 Hz	(U.S.A./Canada)
220 V AC, 50 Hz	(Europe)
240 V AC, 50 Hz	(U.K./Australia)
Power Consumption	18W
Weight	5.7 kg (12-9/16 lbs) net (W-660R) 5.5 kg (12-1/8 lbs) net (W-460C)
Dimensions	(W x H x D) 435 x 111 x 290 mm (17-1/8" x 4-3/8" x 11-7/16")

SERVICE DATA

MECHANICAL

Tape Speed Diviation	3,000 Hz +90, -90 Hz, 6000 Hz +180, -180 Hz
Tape Speed Drift	45 Hz (LOW SPEED), 90 Hz (HIGH SPEED)
Wow and Flutter	Playback: 0.10% (WRMS)
Pinch Roller Pressure	250 g to 470 g (8.8 oz to 16.5 oz)
Reel Torque	
Take-up:	25 to 65 g-cm (0.88 to 2.29 oz-inch)
Supply:	2 to 6 g-cm (0.071 to 0.212 oz-inch)
F.F.:	100 to 180 g-cm (3.53 to 6.35 oz-inch)
REW:	100 to 180 g-cm (3.53 to 6.35 oz-inch)

Fast Wind Time

120 sec. or less for MTT-5511 (C-60)

Auto End-stop Time 5 sec. or less

ELECTRICAL

Frequency Response

See Figs. 5-8 to 5-11.

Signal-to-noise Ratio

Playback NORMAL: 45 dB min.

Record/playback

METAL, CrO₂: 45 dB min.

NORMAL: 44 dB min.

Erase Efficiency

65 dB min. at 1 kHz (measured with input 10 dB higher than the specified input (level)).

Channel Separation 30 dB min. at 1 kHz**Adjacent Track Crosstalk** 40 dB min. at 125 Hz**Total Harmonic Distortion** 2.0% or less with CrO₂, METAL

NOTES:

Improvements may result in SPECIFICATIONS AND SERVICE DATA changes.

Value of "dB" in the data refers to 0 dB (0.775 V), except where Specified.

注

1. 仕様およびサービス・データは改善のため、予告なく変更することがあります。

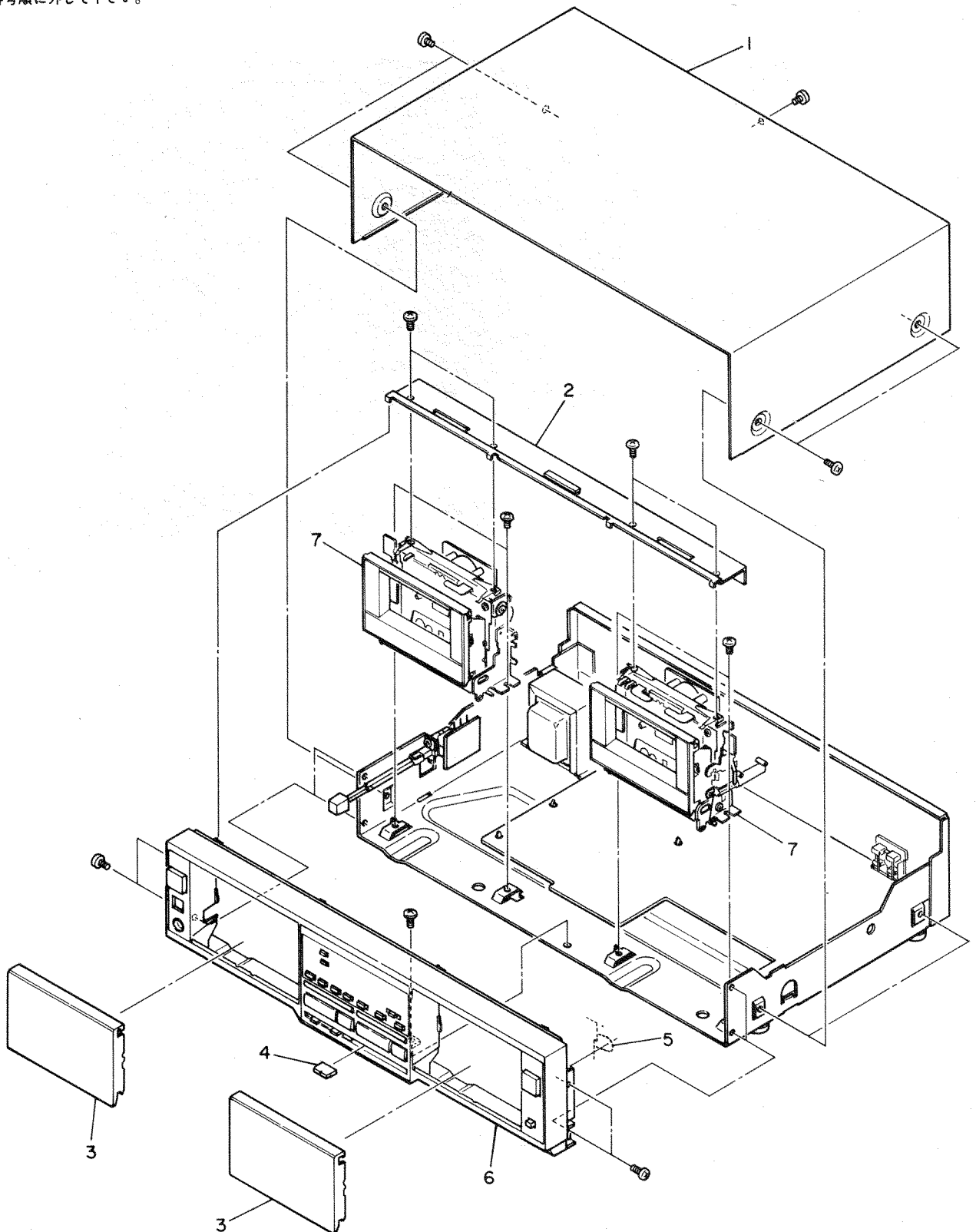
2. 本マニュアルの 0 dB は 0.775 V を基準としています。

2 CASE AND FRONT PANEL REMOVAL

外装部品の外し方

Disassemble in number-order

番号順に外して下さい。



3 PARTS LOCATION

部品配置図

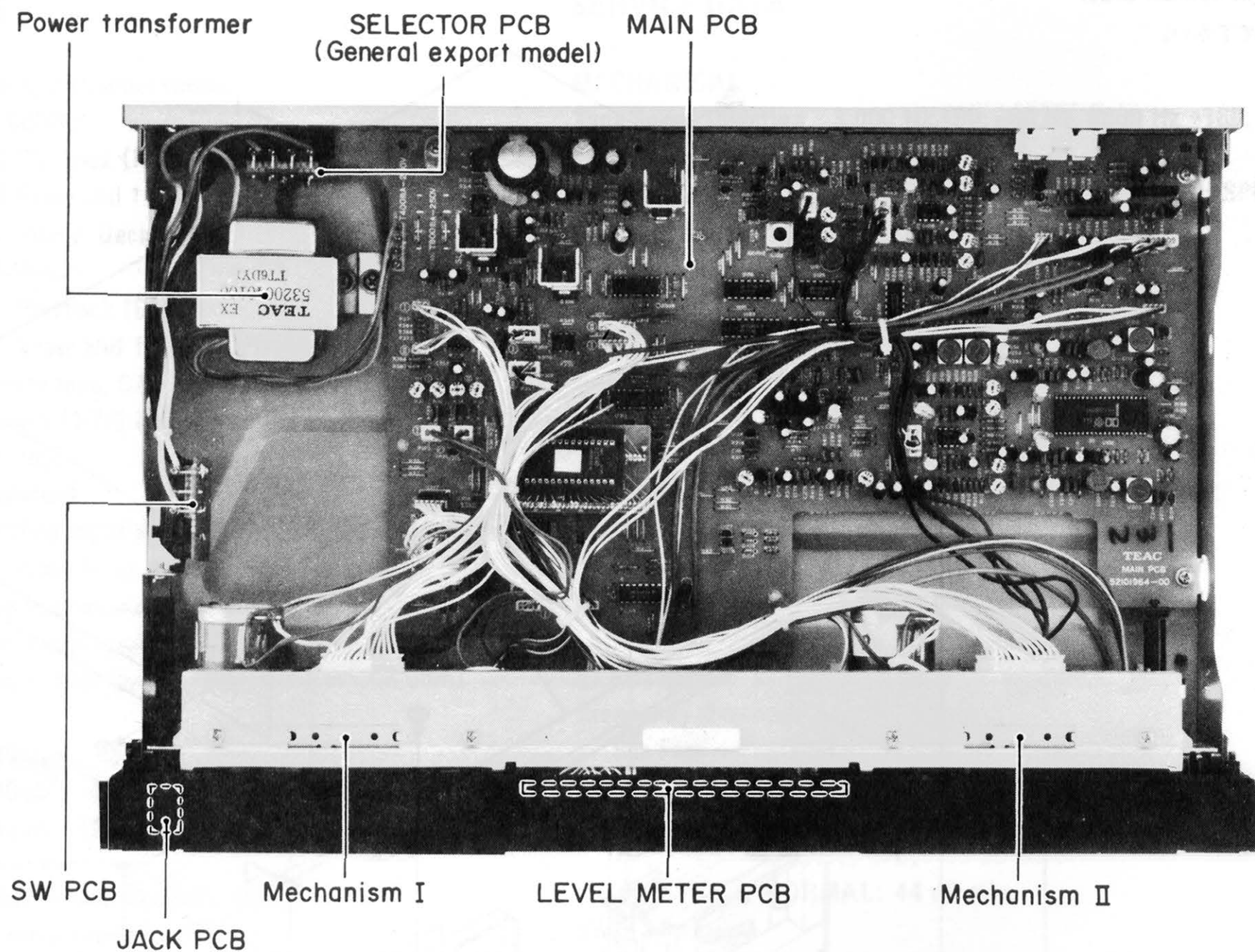


Fig. 3-1 Top view

W-660R

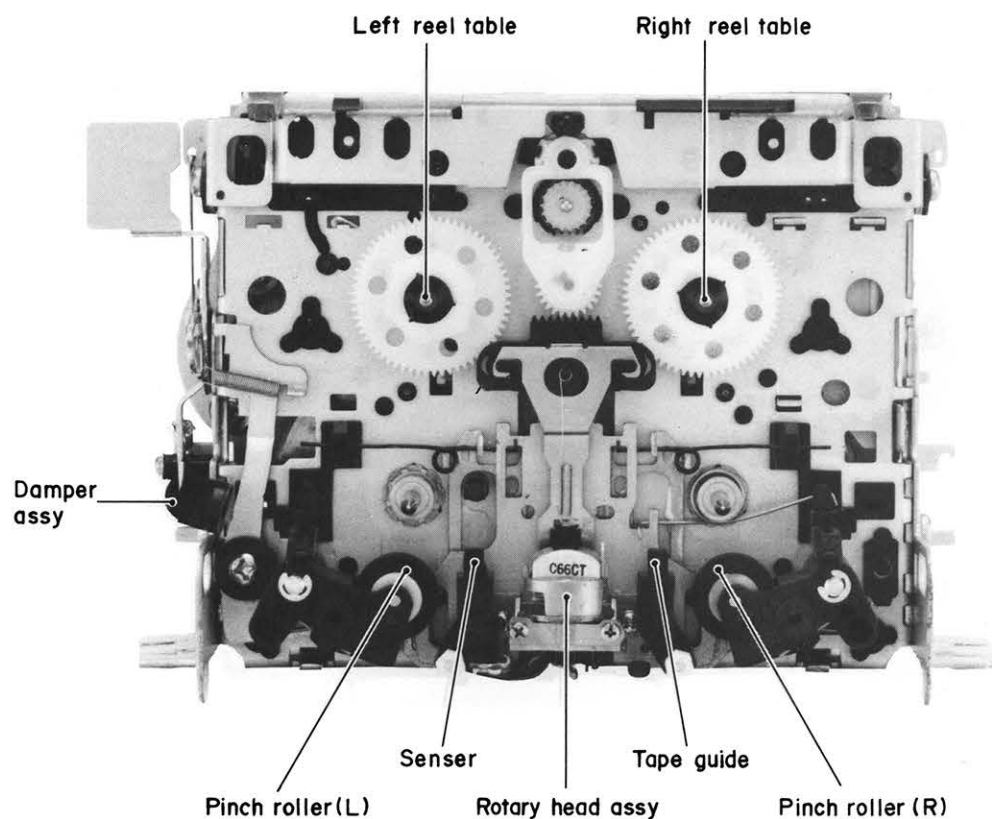


Fig. 3-2 Transport front view (Deck I)

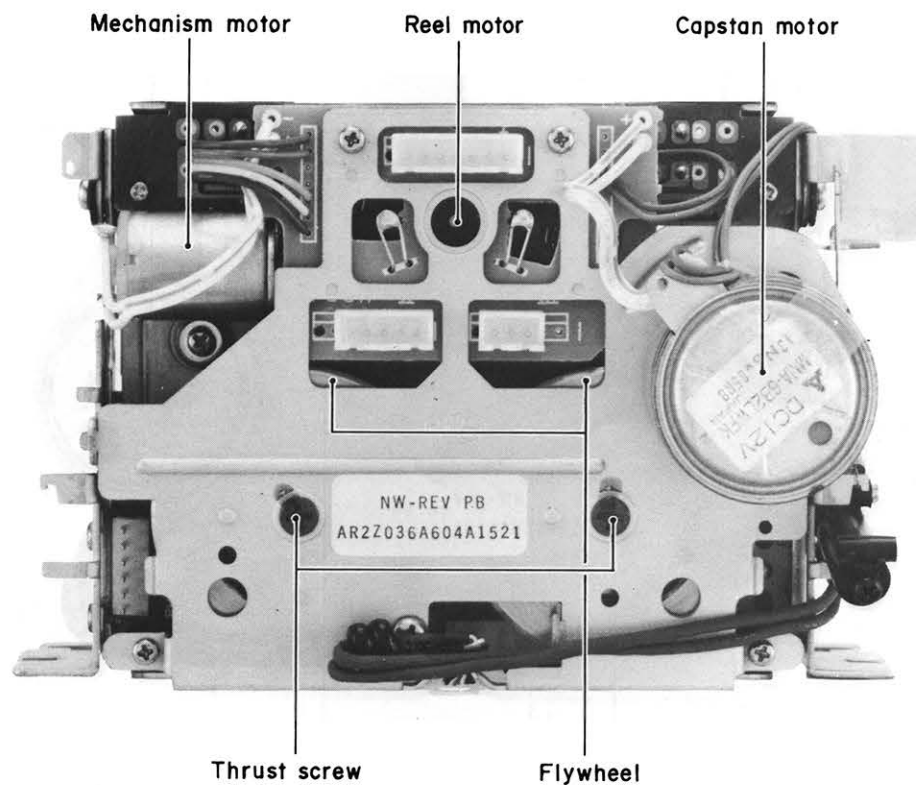


Fig. 3-3 Transport rear view (Deck I)

W-660R

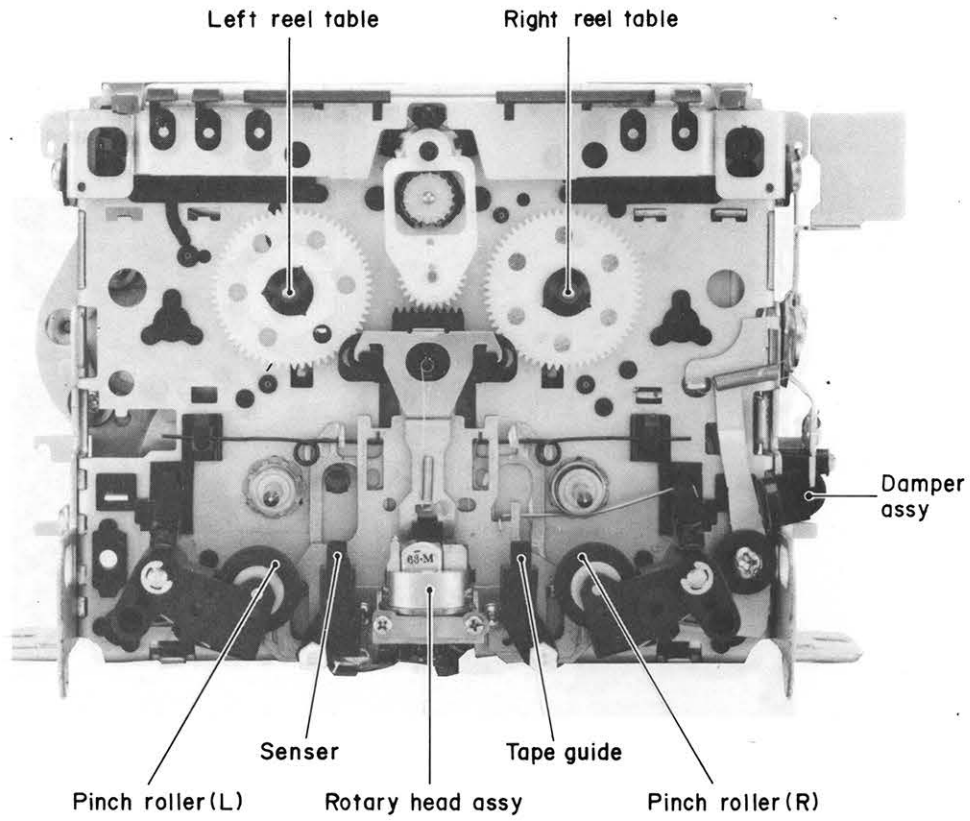


Fig. 3-4 Transport front view (Deck II)

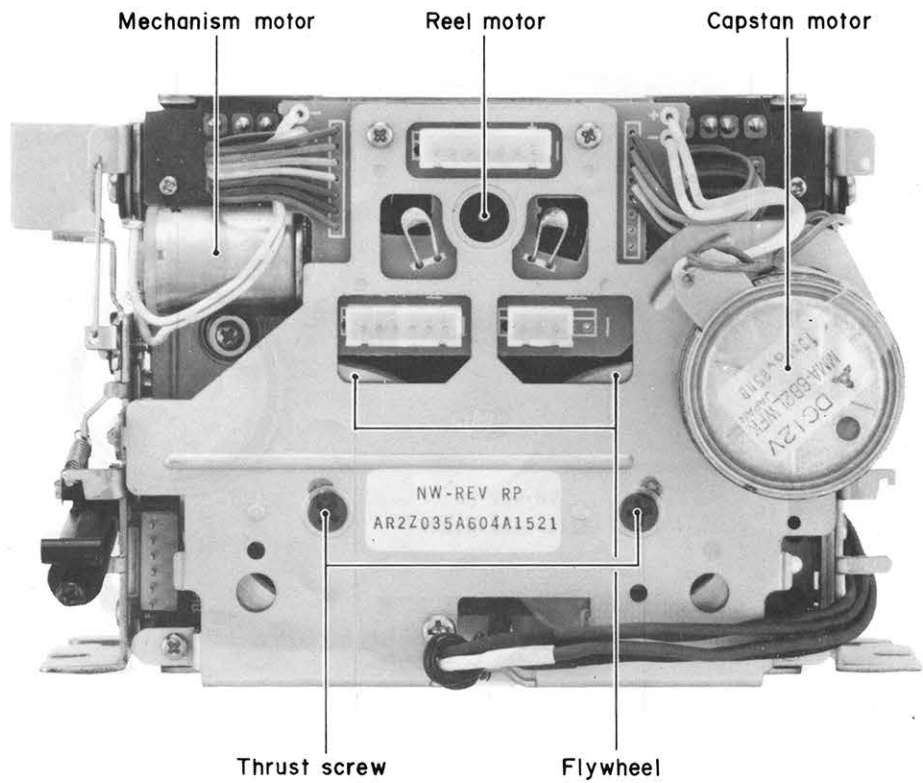


Fig. 3-5 Transport rear view (Deck II)

W-460C

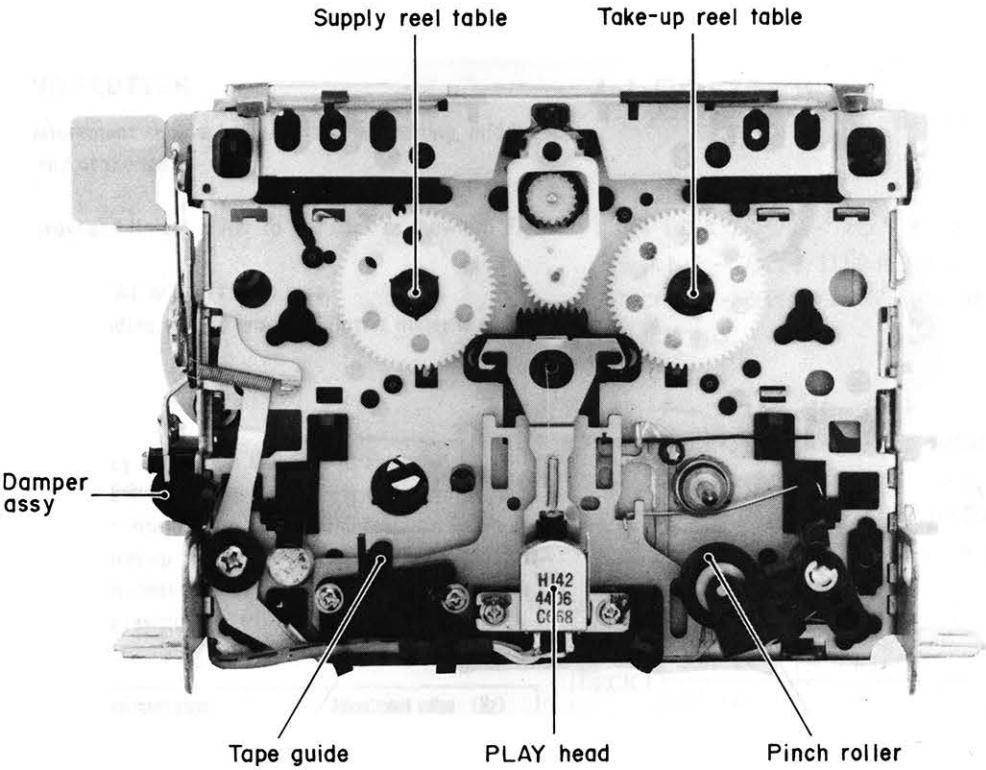


Fig. 3-6 Transport front view (Deck I)

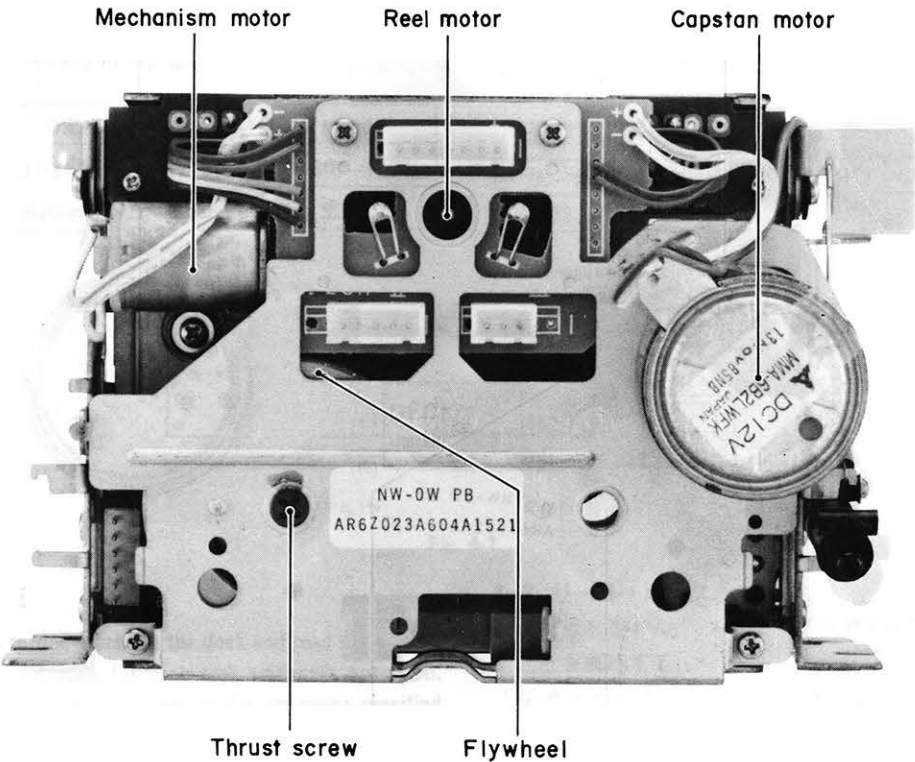


Fig. 3-7 Transport rear view (Deck I)

W-460C

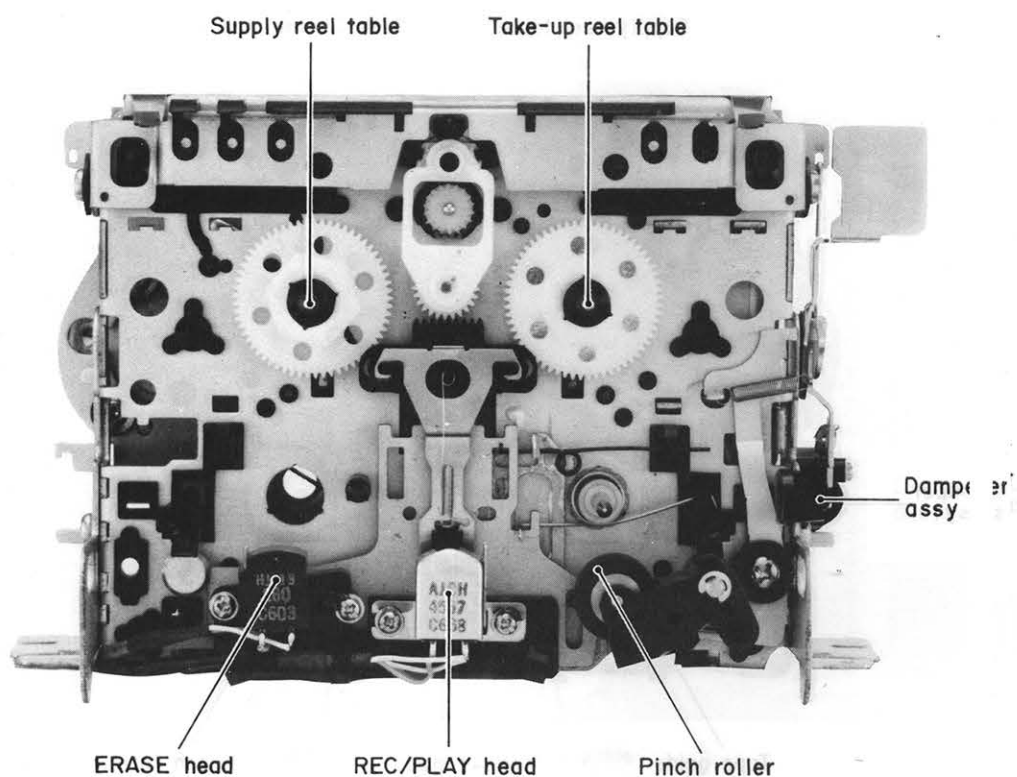


Fig. 3-8 Transport front view (Deck II)

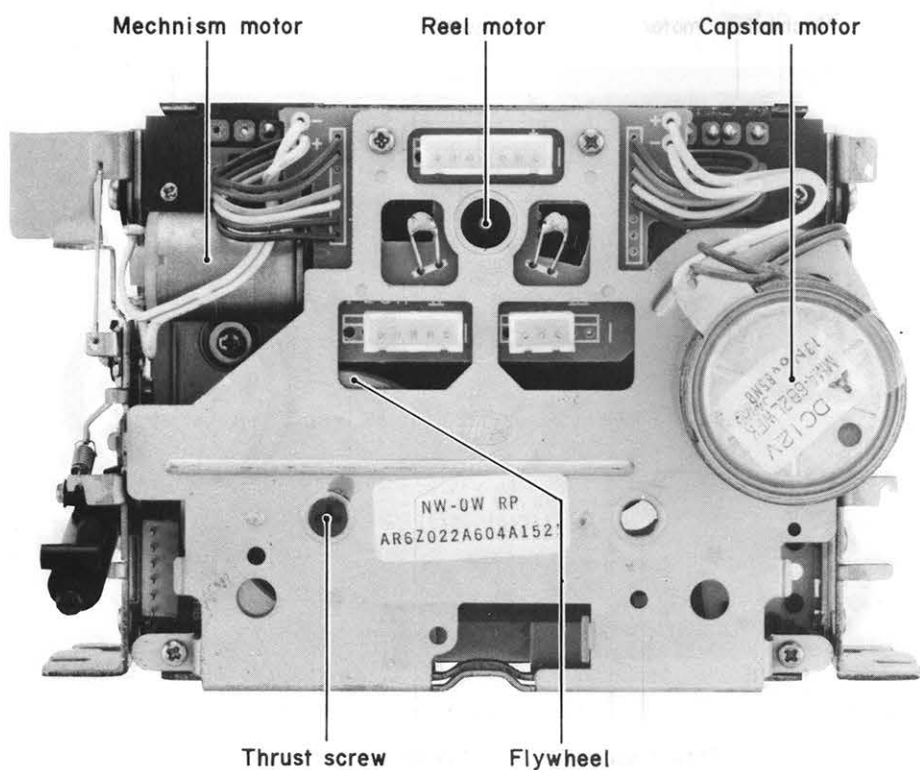


Fig. 3-9 Transport rear view (Deck II)

4 MECHANICAL ADJUSTMENT AND CHECKS

機構部の調整と確認

4-1 WOW AND FLUTTER

Note: This measurement should be made at the begining, middle, and the end of the tape.

PLAYBACK

1. Connect a wow-and-flutter meter to the deck as shown in Fig. 4-1.
2. Load and play a TEAC MTT-111 test tape.
3. Check that the reading on the wow-and-flutter meter is within 0.1% (WRMS).

4-2 TAPE SPEED

1. Connect a frequency counter to the deck as shown in Fig. 4-1.
2. Simply press POWER switch to ON to rotate the motor, then continue the motor rotation for approx. 1 minute for warm-up.
3. As soon as the warm-up finishes, load a TEAC MTT-111 test tape with a 3,000 Hz test tone and play the end of the test tape.
4. Adjust each variable resistor to get the following figures.

	Adjustment point		Adjustment value (Hz)
DECK I	HIGH speed	R31	6.020 ~ 6.040
	LOW speed	R32	3.010 ~ 3.020
DECK II	HIGH speed	R33	6.000 ~ 6.020
	LOW speed	R34	3.000 ~ 3.010

5. In play mode, check that the following figures are obtained at the beginning and at the end of the tape.

	LOW speed	HIGH speed
Speed deviation	3000 Hz +90, -90 Hz	6000 Hz +180, -180 Hz
Speed drifting	Within 45 Hz	Within 90 Hz

4-1 ワウ・フラッタ

注：テープの巻始め、中間、巻終りで測定する。

1) 再生

1. 図4-1のようにワウ・フラッタ・メータを接続し、
2. テストテープMTT-111を再生する。
3. ワウ・フラッタ値：0.1%WRMS（聴感補正）以内であることを確認する。

4-2 テープスピード

1. 図4-1のように周波数カウンタを接続する。
2. 電源を入れ、約1分間ウォーミング・アップしたのち
3. テストテープMTT-111(3KHZ)の巻終り部を再生する。
4. 周波数値が下記特性となるよう、各調整VRを調整する。

	調整箇所		調整値(Hz)
DECK I	ハイスピード	R31	6,020 ~ 6,040
	ロースピード	R32	3,010 ~ 3,020
DECK II	ハイスピード	R33	6,000 ~ 6,020
	ロースピード	R34	3,000 ~ 3,010

- 5 巻始めから巻終りまで再生し、速度偏差および変動巾を確認する。

	ロースピード	ハイスピード
速度偏差	3,000Hz +90, -90Hz	6,000Hz +180, -180Hz
変動幅	45Hz以内	90Hz以内

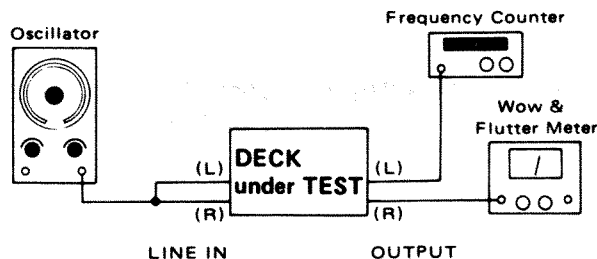


Fig. 4-1

4-3 REEL TORQUE

1. Load the cassette torque meter on the deck and read the pointer indication on the dial scale for each tape transport operation. The measured torque should be within the following specified values:

Specifications:

Take-up: 25 ~ 65 g·cm (0.88 ~ 2.29 oz·inch)

Supply: 2 ~ 6 g·cm (0.071 ~ 0.212 oz·inch)

F.F./REW: 100 ~ 180 g·cm (3.53 ~ 6.35 oz·inch)

4-3 リール・トルク

1. カセット型トルク・メータによる測定値が下表の範囲内であることを確認する。

テイクアップ・トルク： 25～65g・cm

バックテンション・トルク： 2～6g・cm

早送り/巻戻しトルク： 100～180g・cm

4-4 PINCH ROLLER PRESSURE

Hook a spring scale to the pinch roller arm, and read the scale, by pulling down words, when the pinch roller just stops in the play mode, the reading should be 250 g ~ 350 g (8.8 oz ~ 12.4 oz).

4-5 CAPSTAN ASS'Y THRUST CHECK

Check that the capstan fly wheel is pressed to the capstan housing side by the capstan holder.

4-6 LUBRICATION

Lubrication is only required when parts are replaced, For this purpose, use the oil specified below.

Oil: TEAC spindle oil (from TEAC TZ-255 oil kit),
Mobil D.T.E. Oil Light, or equivalent

Apply a drop of oil with an oil applicator to a point about 1/3 the way down the shaft (from the free end) of the flywheel, then insert the shaft into the capstan housing.

4-7 VOLTAGE CONVERSION (General Export Models only)

1. ALWAYS DISCONNECT THE POWER LINE CORD BEFORE MAKING THESE ADJUSTMENTS!
2. Locate the voltage selector on the rear panel.
3. Using a regular screwdriver, turn the selector until the numerals corresponding to the voltage requirements of your area appear.

4-4 ピンチ・ローラ圧着力

1. ピンチ・ローラアームにバネ秤を掛け、再生モードにする。
秤を下方に引いて、ピンチ・ローラの回転が停止する時の値を読む：250g～350g以内であること。

4-5 キャプスタン・シャフト・スラスト

1. キャプスタン・フライホイールがキャプスタン・ホルダによって手前側に押されていることを確認する。

4-6 注油

注油は部品が交換される時のみ必要です。下記指定のオイルを使用すること。

オイル：TEACスピンドルオイル(TEACTZ-255オイルキットより)

モービルD・T・Eオイル・ライト又は相当品

1. フライホイール軸の先端から約1/3下った軸面へ、注油器にてオイル1滴を注油後、フライホイール軸をキャプスタン・ハウジングへそう入する。

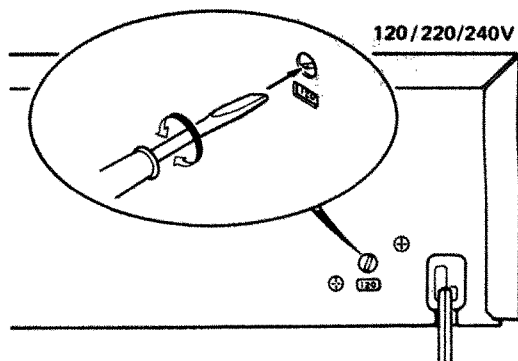


Fig. 4-2

ADJUSTMENT OF ELECTRIC PRESSURE FOR QUICK REVERSE (W-660R only)

1. Load the TEST TAPE "MTT-905", in the DECK I.
2. Playing the leader tape, adjust R35 for setting TP.32 to $4.1 \pm 0.05V$.
3. Do same way for the DECK II.

クイック・リバース電圧調整(W-660Rのみ)

1. DECK I にテストテープ"MTT-905"を装着してリーダーテープ部を FWD PLAY し、TP.32 が $4.1 \pm 0.05V$ になる様 R35 を調整する。
2. DECK II も同様に TP.33 が $4.1 \pm 0.05V$ になる様 R36 を調整する。

5 ELECTRICAL ADJUSTMENT AND CHECKS

アンプ部の調整と確認

PRECAUTIONS

1. Before performing adjustments and checks clean and demagnetize the entire tape path.
2. Make sure the deck is properly set for the voltage in your locality.
3. In general, adjustments and checks are made in the order of L-ch then R-ch. Double REF. Nos. and test point designations indicate L-ch/R-ch. (Example: R11/R21)
4. 0 dB is referenced to 0.775 V. If an AC voltmeter that references 0 dB to 1 V is used, appropriate compensation should be made.
5. The AC voltmeter used in the procedures must have an input impedance of 1 M-ohms or more.
6. Note the "Deck settings" at the top of each chart. The settings apply to all check for a specific chart unless explicitly stated otherwise.
7. Since this deck has an automatic tape selector, be sure to use test tapes that have tape position detecting holes.

注意

1. アンプ部の調整・確認の前に、テープ走行系の消磁と清掃を行ってください。
2. 特に指定の無い限り、調整はLch, Rchの順序で行なって下さい。
- 尚R11/R21のように記されている回路番号はLch/Rchを示します。
3. 0dB=0.775V
4. 測定に使用するレベル計の入力インピーダンスは1MΩ以上のものを使用してください。
5. 本機はテープ・セレクト自動検出機構になっていますので、テスト・テープは必ずテープ・ポジション検出孔のあるものを使用して下さい

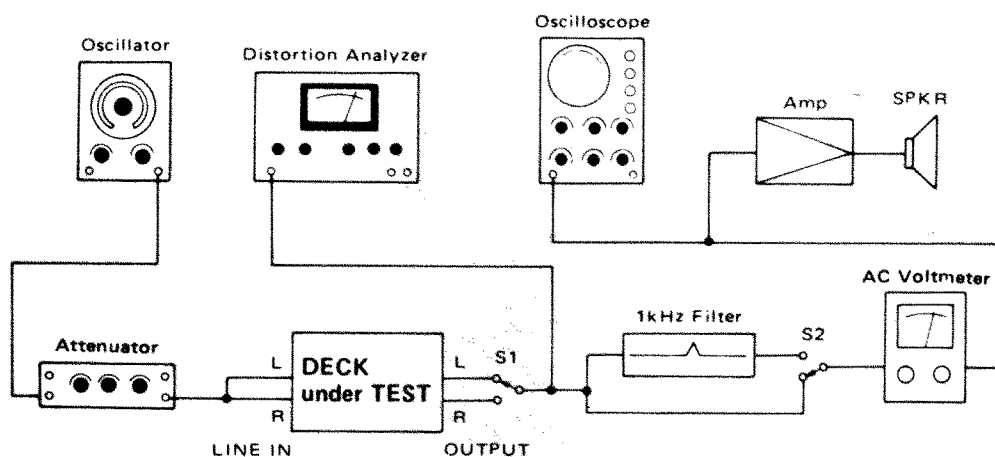


Fig. 5-1 Basic test setup

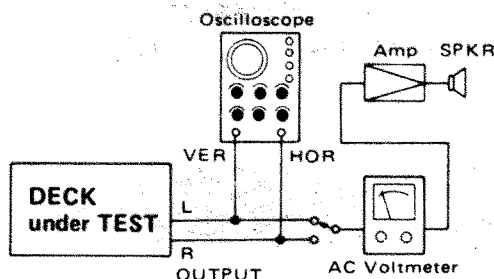
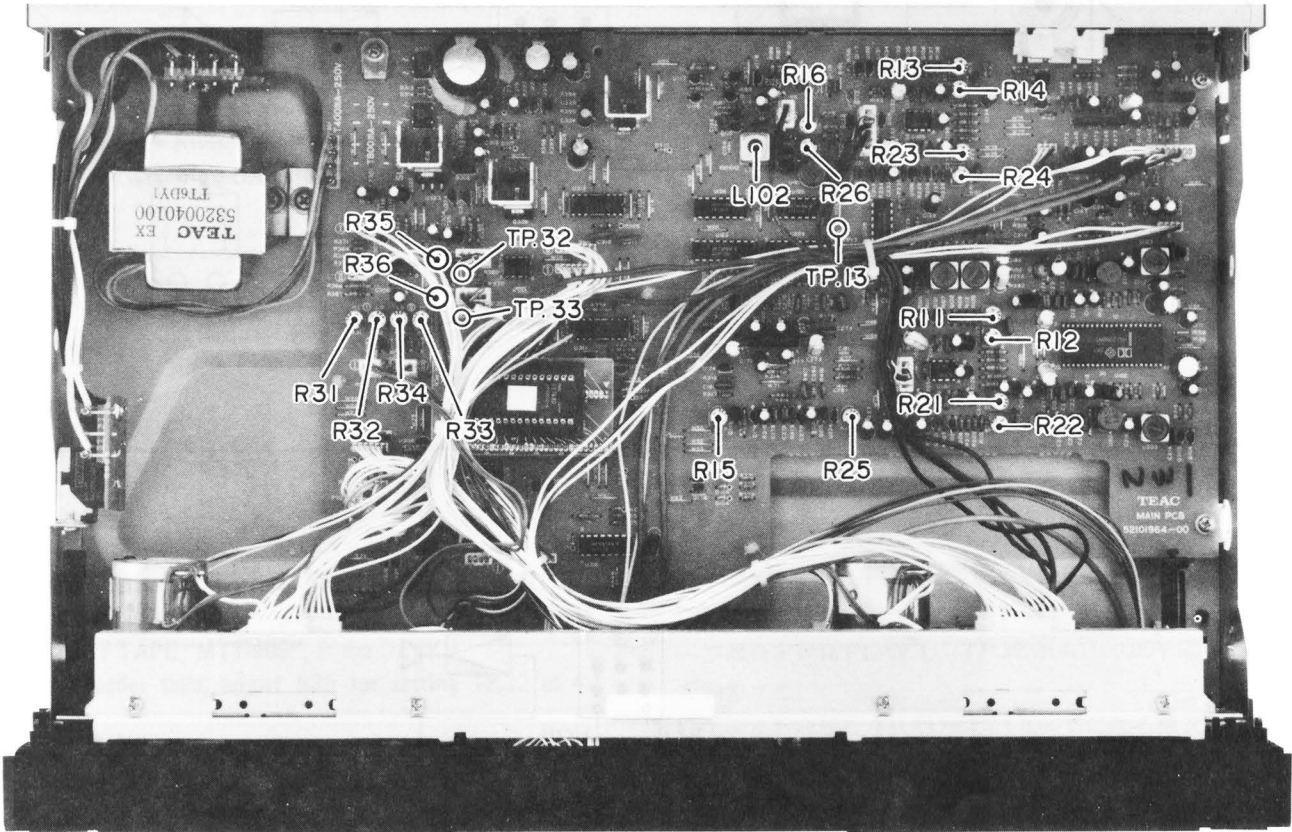


Fig. 5-2 Test setup for azimuth check

5-1 ADJUSTMENTS AND TEST POINT LOCATIONS
調整及び測定箇所

Function 調整機能	Adjustments 調整箇所	Test points (Measuring point) 測定箇所
Specified output level 規定出力レベル	R11/R21 (Deck I) R13/R23 (Deck II)	OUTPUT terminals
PB Frequency Response 再生周波数特性	R12/R22 (Deck I) R14/R24 (Deck II)	OUTPUT terminals
Bias OSC バイアス発振周波数	L102 (Deck II)	TP13 (Deck II)
Record bias 録音バイアス	R16/R26 (Deck II)	OUTPUT terminals
Record level 録音レベル	R15/R25 (Deck II)	OUTPUT terminals



Deck settings:
NR SYSTEM sw: OUT

TEAC test tapes:
MTT-150: For Dolby level calibration
MTT-256: For playback frequency response
check for NORMAL
MTT-356: For METAL and CrO₂
MTT-5511: For S/N check with NORMAL

5.2 PLAYBACK PERFORMANCE
再生系

ITEM 調整項目	SETTING 設定	INPUT SIGNAL 入力信号	ADJUST (or CHECK) 調整箇所	MEASURING POINT RESULT 測定箇所 調整値	REMARKS 備考
1. REC/PLAY head azimuth 録再ヘッド・アジマス (Deck II) 再生ヘッド・アジマス (Deck I)	Connection: Fig. 5-2 接続	MTT-150	Check チェック	OUTPUT: Phase: within 45° 位相 45°以内	Refer to Fig. 5-5
		MTT-256 (10 kHz)	Azimuth screw of R/P head (Fig. 5-4) アジマス調整ネジ	OUTPUT: Max. output at L-& R-ch's (on VTVM) L, R 共 最大出力	
2. Specified output level 規定出力レベル	—	MTT-150	R11/R21 (Deck I) R13/R23 (Deck II)	OUTPUT: −5 dB ± 1.5 dB (367 to 518mV)	Spec. output level 規定出力レベル
3. Frequency response 周波数特性	NORMAL	MTT-256	R12/R22 (Deck II)	OUTPUT: Fig. 5-8	
	CrO ₂	MTT-356	Check チェック	OUTPUT: Fig. 5-8	
4. Signal-to-noise ratio S/N S/N比	Tape: MTT-5511 Play mode	Fully erased MTT-5511 tape (Use bulk tape eraser) バルク・イレーサーで充分消磁された MTT-5511	Check チェック	OUTPUT: 45 dB min.	Ratio of spec. output of −5 dB to noise 基準信号レベルは規定出力(−5dB)レベル

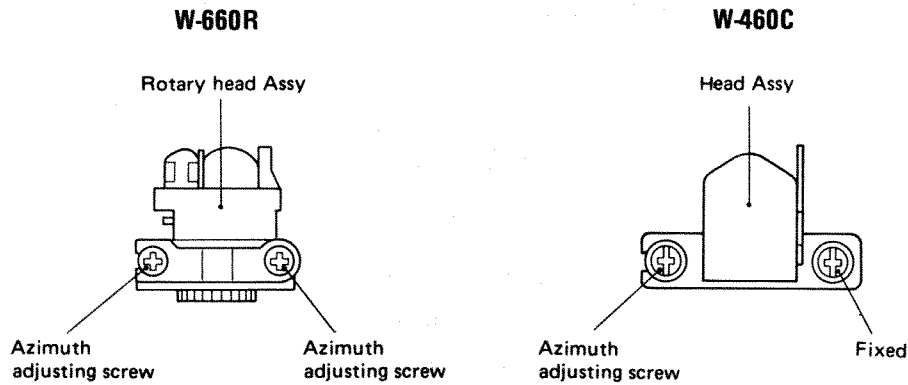


Fig. 5-4

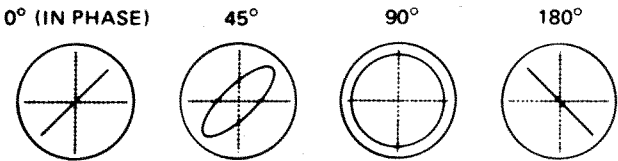


Fig. 5-5

5-3 MONITOR PERFORMANCE
モニタ系

Deck settings:
RECORD-PAUSE mode
NR SYSTEM sw: OUT

ITEM 調整項目	SETTING 設定	INPUT SIGNAL 入力信号	ADJUST (or CHECK) 調整箇所	MEASURING POINT RESULT 測定箇所 調整値	REMARKS 備考
5. Specified LINE input level LINE規定入力レベル	—	LINE IN: 400Hz/−9 dB (275mV)	RECORDING LEVEL cont. (L/R)	OUTPUT: −5 dB (436mV)	Refer to Fig. 5-1
IMPORTANT: Do not change the setting of the RECORDING LEVEL controls after establishing their setting as above. 注意：以降の調整において RECORDING LEVELつまみを動かさないこと。					
6. Peak level display ピークレベル指示	—	LINE IN: 400Hz/−9 dB (275mV)	Check チェック	PEAK LEVEL DISPLAY: 0 dB (775mV)	
7. Headphone output level ヘッドホン出力レベル	Connection: Fig. 5-6 接続	LINE IN: 400Hz/−9 dB (275mV)	Check チェック	PHONES: −15 dB ± 3 dB (69mV to 138mV)	8 ohm load 8Ω負荷

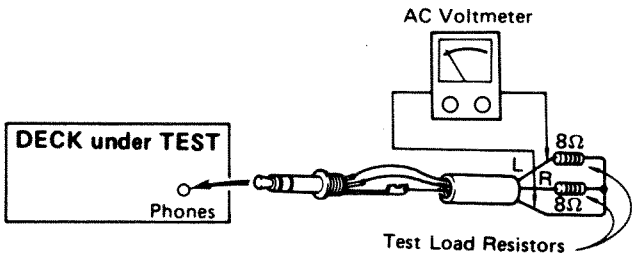


Fig. 5-6 Test setup for headphone check

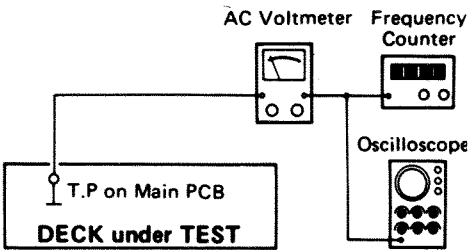


Fig. 5-7 Test setup for bias adjustment

5-4 RECORDING PERFORMANCE

録音系 (Deck II)

Deck settings:

NR SYSTEM sw: OUT

REC LEVEL cont. (L/R): Specified position (item 5)
5項の規定位置

TEAC recording test tapes:

MTT-5571: For METAL

MTT-5561: For CrO₂

MTT-5511: For NORMAL

ITEM 調整項目	SETTING 設定	INPUT SIGNAL 入力信号	ADJUST (or CHECK) 調整箇所	MEASURING POINT 測定箇所	RESULT 調整値	REMARKS 備考
8. Bias osc バイアス周波数の調整	Connection: Fig. 5-7 接続 Record-pause mode	LINE IN: No signal 無信号	L102	TP13 100kHz on frequency counter		Specified bias frequency 規定バイアス周波数
9. Record bias 録音バイアス	Tape: MTT-5511 Rec/play mode	LINE IN: 400Hz & 10kHz alternately/-42 dB (6.15mV) Record and reproduce them. 両信号を交互に録音し、 再生する。	R16/R26	OUTPUT: Nearly equal level at both frequencies 両周波数の録再出力差 が同程度になるよう調 整		Repeat if the result is un- satisfactory 不十分なら録再を 繰返し調整
10. Record level 録音レベル	Tape: MTT-5511	LINE IN: 400Hz/-12 dB (195mV) Record and reproduce them. 信号を録音し、再生する	R15/R25	OUTPUT: -8dB (308mV)		FWD
11. Total harmonic distortion 総合歪率	Tape: MTT-5571 Tape: MTT-5561 Tape: MTT-5511 Rec/Play mode	LINE IN: 400Hz/-12 dB (195mV)	Check チェック	OUTPUT: 2.0% or less with CrO ₂ , METAL 2.5% or less with NORMAL		
12. Frequency response 周波数特性	Tape: MTT-5571 Tape: MTT-5561 Tape: MTT-5511	LINE IN: Required signal/ -42 dB (6.15mV)	Check チェック	OUTPUT: Fig. 5-9 to 5-11		If out of spec., recheck # 10
13. Signal-to-noise ratio S/N比	Tape: MTT-5571 Tape: MTT-5561 Tape: MTT-5511	LINE IN: 1kHz/-9 dB (275mV) ↓ no signal	Check チェック	OUTPUT: 45 dB min. [METAL, CrO ₂] 45dB min. [NORMAL]		Ratio of specified output of -5dB to noise 基準信号レベルは規 定出力(-5dB)レベル
14. Erase efficiency 消去効果	Connection is same as in Fig. 5-1, but engage 1-kHz filter. Record a 1-kHz signal. Rewind tape to midpoint of recorded portion. Erase the recorded portion with no input signal. Find the difference between the 1-kHz portion and the "no-signal" portion. 接続Fig. 5-1.1kHz B.P.F.使用、1kHz信号を録音後中間まで巻戻し一部を消去、未消去部分と消去部分の1kHz出力レベル差を測定。					
	Tape: MTT-5571	LINE IN: 1kHz/+1 dB (0.869V) ↓ no signal	Check チェック	OUTPUT: 65 dB min. ratio		Ref. output level: +5dB (1.38V) 基準レベル+5dB
15. Channel separation チャンネル・ セパレーション	● Connection: Fig. 5-1, but do not connect LINE IN (R), and engage 1-kHz filter. ● Set the deck to record mode. Find the difference between the 1-kHz recorded portion (L-ch) and the "no signal" portion (R-ch). R-ch無接続、1kHz B.P.F.使用、1kHz録音部分(L-ch)と無信号録音(R-ch)の1kHz再生出力レベルの差を測定。					
	Tape: MTT-5571 (METAL)	LINE IN: L-ch 1kHz/-9 dB (275mV) R-ch No signal 無信号	Check チェック	OUTPUT: 30 dB min. ratio		

ITEM 調整項目	SETTING 設定	INPUT SIGNAL 入力信号	ADJUST (or CHECK) 調整箇所	MEASURING POINT RESULT 測定箇所 調整値	REMARKS 備考
16. Adjacent track crosstalk トラック間クロストーク	● Connection: Fig. 5-1, but do not connect LINE IN (L) and OUTPUT (L). ● Record a 125-Hz signal on R-ch and note output level. Invert tape and play R-ch track. Check leakage level against the output reference of previously recorded portion. L-ch無接続. R-chに125Hzを録音し、その再生出力を基準レベルとする。次にテープを反転し、再生したときのR-ch出力レベルとの差を測定。				
	Tape: MTT-5571	LINE IN: L-ch No signal 無信号 R-ch 125Hz/-9 dB (275mV)	Check チェック	OUTPUT: 40dB min. ratio	
17. REC MUTE function REC MUTE効果	Connection: Fig. 5-1, but engage 1-kHz filter. Record a 1-kHz signal. Push REC MUTE button for several seconds. (At this time, make sure LED lights). Rewind and play the tape. Find the difference between the 1-kHz portion and the "no-signal" portion. 1kHz B.P.F.使用. 1kHz信号を録音し、途中REC MUTE鈕を押し無信号部を作る。そのテープを再生し、録音部と無信号部の出力レベル差を測定。				
	Tape: MTT-5571	LINE IN: 1kHz/+1dB (0.869mV) ↓ no signal	Check チェック	OUTPUT: 65 dB min. ratio	Ref. output level: +5dB (1.38V)

5-5 FREQUENCY RESPONSE
周波数特性

5-5-1 PLAYBACK

Tape : MTT-256 (NORMAL)
Tape : MTT-356 (CrO₂/METAL)

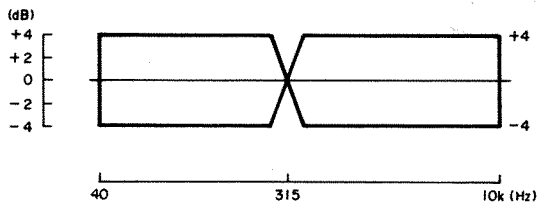


Fig. 5-8 Playback frequency response

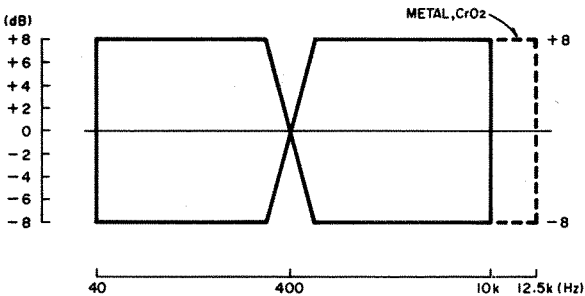


Fig. 5-10 Overall frequency response MTT-5561: ☐ B
MTT-5571: ☐ C

5-5-2 OVERALL

Tape : MTT-5511 (NORMAL)
Tape : MTT-5561 (CrO₂)
Tape : MTT-5571 (METAL)

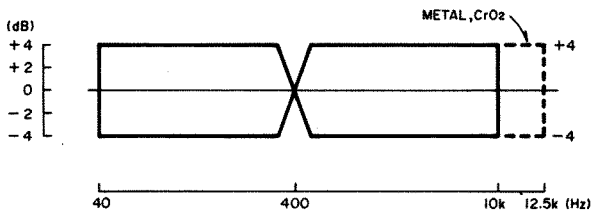


Fig. 5-9 Overall frequency response (Dolby NR: OUT)

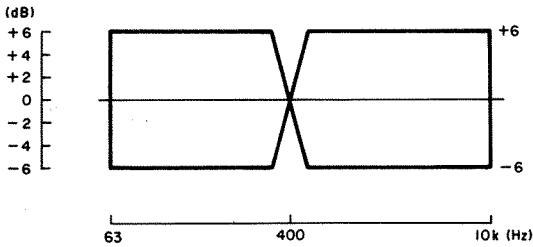


Fig. 5-11 Overall frequency response (Dubbing: Low/High speed)

PARTS LIST SECTION

CAUTION

△ Parts marked with this sign are safety critical components.
They must always be replaced with identical components—
refer to the appropriate parts list and ensure exact replacement.

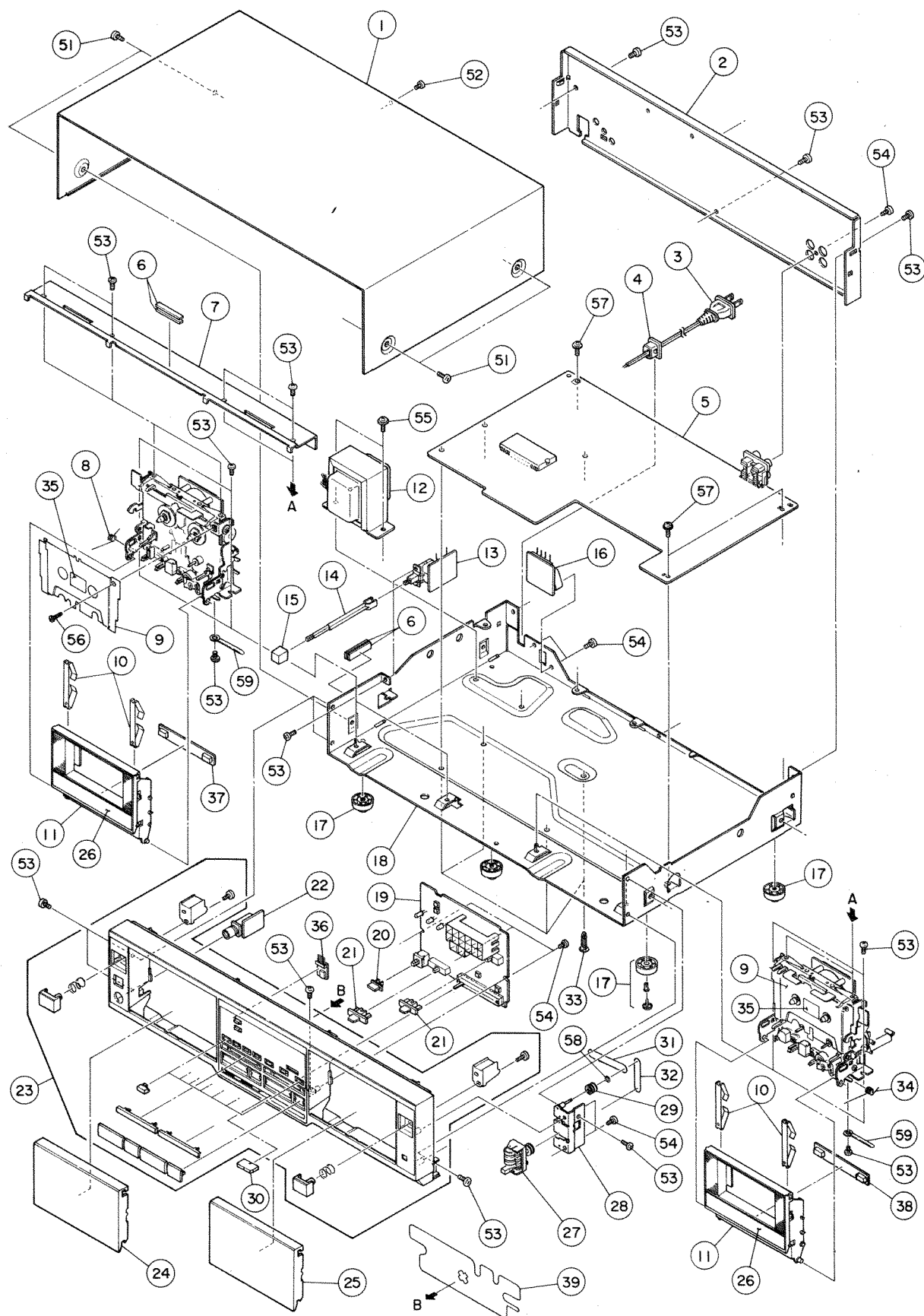
注 意

△印は安全重要部品です。交換する時は必ずティアック指定の部品を使用してください。

6 EXPLODED VIEWS AND PARTS LIST

分解図とパーツ・リスト

EXPLODED VIEW-1



EXPLODED VIEW-1

REF.NO.	PARTS NO.	DESCRIPTION	REMARKS
1- 1	*5800840000	BONNET	
1- 2	*5800839800	PANEL, REAR	
1- 3	△*5128027000	CORD, AC [J]	
	△*5350010700	CORD, AC [US, C]	
	△*5350010800	CORD, AC [GE]	
	△*5350011700	CORD, AC [E]	
	△*5128047000	CORD, AC [UK]	
	△*5350008300	CORD, AC [A]	
1- 4	△*5317003400	BUSHING 2271	
1- 5	*5200196400	MAIN PCB ASSY [J, US, C, GE] (W-660R)	Ref. Page 33 & 39
	*5200196410	MAIN PCB ASSY [E, UK, A] (W-660R)	Ref. Page 33 & 39
	*5200196420	MAIN PCB ASSY [J, US, C, GE] (W-460C)	Ref. Page 35 & 40
	*5200196430	MAIN PCB ASSY [E, UK, A] (W-460C)	Ref. Page 35 & 40
1- 6	*5800349800	CUSHION (A)	
1- 7	*5800839900	PLATE, MECHANISM MOUNT.	
1- 8	*5800838300	SPRING, DOOR (R)	
1- 9	*5800839402	BOTTOM PLATE	
1-10	*5800603801	SPRING, CASS. PRESS.	
1-11	*5800839700	CASSETTE HOLDER	
1-12	△ 5320039900	TRANSFORMER, POWER [J]	
	△ 5320040000	TRANSFORMER, POWER [US, C]	
	△ 5320040100	TRANSFORMER, POWER [GE]	
	△ 5320040200	TRANSFORMER, POWER [E, UK, A]	
1-13	*5200196700	SW PCB ASSY [J, US, C, GE]	Ref. Page 38 & 42
	*5200196710	SW PCB ASSY [E, UK, A]	Ref. Page 38 & 42
1-14	*5800253701	ROD, POWER SW.	
1-15	5800838900	BUTTON, POWER	
1-16	*5200196800	SELECTOR PCB ASSY [GE]	Ref. Page 38 & 42
1-17	*5800838500	FOOT FFO09(P4X7)	
1-18	*5800840200	CHASSIS, MAIN	
1-19	*5200196500	LEVEL METER PCB ASSY (W-660R)	Ref. Page 37 & 41
	*5200196510	LEVEL METER PCB ASSY (W-460C)	Ref. Page 37 & 42
1-20	5800783400	BUTTON, E	
1-21	5800783100	BUTTON, B	
1-22	*5200196600	JACK PCB ASSY	Ref. Page 38 & 42
1-23	*5800837702	PANEL ASS'Y(1), FRONT (W-660R)	
	*5800837802	PANEL ASS'Y(2), FRONT (W-460C)	
1-24	*5800839600	COVER, CASSETTE	
1-25	*5800838700	COVER, CASSETTE B (W-660R)	
	*5800838800	COVER(C), CASSETTE (W-460C)	
1-26	*5800838401	SHEET(C)	
1-27	*5800834500	COUNTER	
1-28	*5800839100	COUNTER BRACKET ASSY	
1-29	5800837900	PULLEY	
1-30	5800838601	BUTTON, F	
1-31	5800838000	BELT, COUNTER (1)	
1-32	5800838100	BELT(2), COUNTER	
1-33	*5787033400	SUPPORT PCB KGLS-14R	
1-34	5800838200	SPRING, DOOR (L)	
1-35	*5800822400	PLATE, TAPE INDICA.	
1-36	*5200196900	LED PCB ASSY(A)	Ref. Page 38 & 42
1-37	*5200197000	LED PCB ASSY(B) (W-660R)	Ref. Page 38 & 42
1-38	*5200197100	LED PCB ASSY(C) (W-660R)	Ref. Page 38 & 42
1-39	5800918100	SHEET, SW	

[US]:U.S.A. [E]:EUROPE [UK]:U.K. [C]:CANADA
[A]:AUSTRALIA [GE]:GENERAL EXPORT [J]:JAPAN

Parts marked with *require longer delivery time.

W-660R/W-460C

EXPLODED VIEW-1

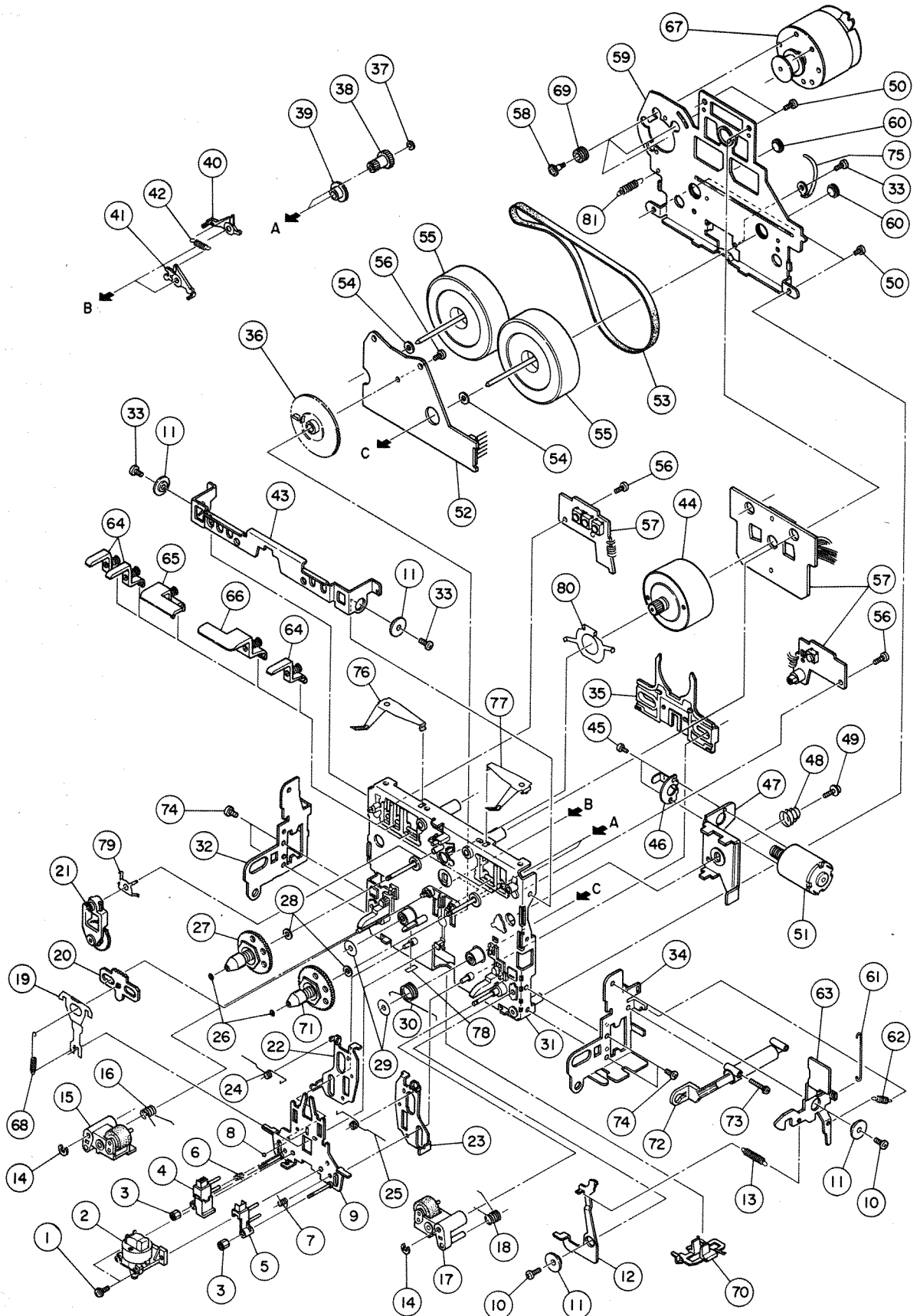
REF.NO.	PARTS NO.	DESCRIPTION	REMARKS
1-51	*5800612400	SCREW,M3X8 BLK	
1-52	*5783613008	SCREW, C TITE M3X8 NI-BK	
1-53	*5783033006	SCREW,BIND S TITE M3X6	
1-54	*5783603008	SCREW,BIND P TITE M3X8	
1-55	*5783074006	SCREW,PAN S TITE	
1-56	*5783542612	SCREW,BIND M2.6X12(BLK NI)	
1-57	*5783073006	SCREW,PAN S TITE	
1-58	*5785331500	WASHER,POLIS. 1.5X4X0.5T	
1-59	*5786113300	CLIP,HARNES (W-660R)	

INCLUDED ACCESORIES

REF.NO.	PARTS NO.	DESCRIPTION	REMARKS
	*5700085500	OWNER'S MANUAL [J]	
	*5700085600	OWNER'S MANUAL [EXCEPT J]	
	*5350011600	CORD,IN-OUT 1.0M	

[US]:U.S.A. [E]:EUROPE [UK]:U.K. [C]:CANADA
[A]:AUSTRALIA [GE]:GENERAL EXPORT [J]:JAPAN
Parts marked with *require longer delivery time.

EXPLODED VIEW-2 (W-660R, Deck II)



EXPLODED VIEW-2 (W-660R)

REF.NO.	PARTS NO.	DESCRIPTION	REMARKS
2- 1	*5761687900	SCREW M2X5	
2- 2	5761692800	ROTARY HEAD ASSY	
2- 3	*5761687700	NUT, ADJ.	
2- 4	*5761692700	SENER	
2- 5	5761687500	GUIDE, TAPE	
2- 6	*5761687300	SPRING (L) FK20A-13	
2- 7	*5761687400	SPRING (R) FK20B-13	
2- 8	*5761687200	BALL 1/16" MM113-11	
2- 9	*5761687100	HEAD CHASSIS F012-084	
2-10	*5761685200	SCREW, M3X6	
2-11	*5761685100	SPACER	
2-12	*5761692600	ARM(R), EJECT PREVENTION	
2-13	*5761685000	SPRING,EJECT	
2-14	*5761686100	E-RING KG111-19	
2-15	5761686000	P ROLLER ASSY F014-86	
2-16	5761685700	SPRING,P ROLLER (L)	
2-17	5761685900	P ROLLER ASSY F014-85	
2-18	5761685800	SPRING,P ROLLER(R) FK20Y-11	
2-19	*5761686900	LEAF SPRING FC33F-21	
2-20	*5761686800	PLATE,SLIDE ED28C-22	
2-21	5761686700	IDLER ASSY F017-043	
2-22	*5761685300	BASE(L), SLIDE	
2-23	*5761685400	BASE(R), SLIDE	
2-24	*5761685500	SPRING(L), SB	
2-25	*5761685600	SPRING(R) FK20G-14	
2-26	*5761686500	WASHER	
2-27	5761686300	REEL TABLE F105-027	
2-28	*5761686200	POLYSLIDER UJ12P-11	
2-29	*5761689700	SHEET, WASHER OIL	
2-30	*5761689600	SPRING, H.B	
2-31	*5761684700	CHASSIS	
2-32	*5761692100	BRACKET, DAMPER (L) FC33L-14	
2-33	*5761690800	SCREW,PAN M3X5 KG189-11	
2-34	*5761692200	BRACKET,DAMPER (R) FC33K-14	
2-35	*5761688000	PLATE,SLIDE	
2-36	5761688200	GEAR	
2-37	*5761688400	WASHER	
2-38	5761688300	GEAR, WORM	
2-39	5761688100	GEAR, IDLER	
2-40	*5761691000	BRAKE LEVER (L) FD29N-22	
2-41	*5761691100	BRAKE LEVER (R) FD29P-22	
2-42	*5761691200	BRAKE SPRING FK20R-12	
2-43	*5761691500	DETECTOR ARM FC33N-21	
2-44	5761689900	MOTOR ASSY F064-200	
2-45	*5761688800	SCREW, M2X3.5	
2-46	*5761688600	BRACKET,THRUST FC33M-22	
2-47	*5761688500	BRACKET, ASSISTANT MOTOR	
2-48	*5761688900	SPRING,BRACKET	
2-49	*5761689000	SCREW TP	
2-50	*5761690900	SCREW,WAVE 2.6X8 UG12H-14	
2-51	5761688700	MOTOR ASSY	
2-52	*5761689100	SEARCH PLATE ASSY	
2-53	5761689400	BELT, MAIN	
2-54	*5761689200	POLYSLIDER	
2-55	*5761689300	F/W FHR ASSY	

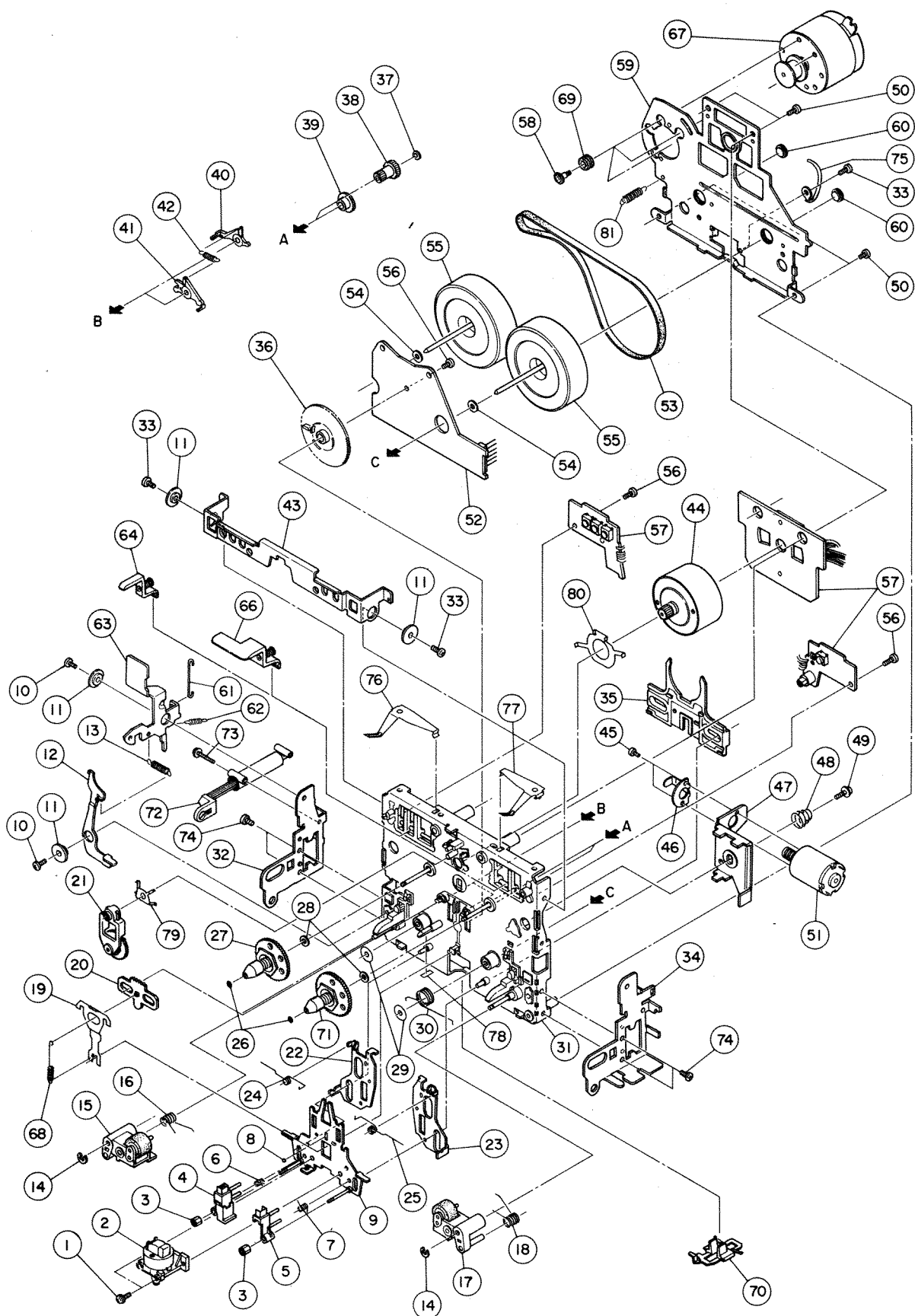
Parts marked with *require longer delivery time.

EXPLODED VIEW-2 (W-660R)

REF.NO.	PARTS NO.	DESCRIPTION	REMARKS
2-56	*5761689500	SCREW WAVE 2X6	
2-57	*5761692900	CONNECTOR ASSY F067-074	
2-58	*5761690500	SCREW,MOTOR UG12W-12	
2-59	*5761690200	BRACKET,MOTOR FC35K-21	
2-60	*5761690600	SCREW,WHEEL BRACKET FM177-22	
2-61	*5761691700	CONNECT ROD FK20N-11	
2-62	*5761692500	SPRING,EJECT ARM FK20C-13	
2-63	*5761693200	EJECT ARM (R) FC34L-13	
2-64	*5761691300	REC DETECT F244-014	
2-65	*5761693100	METAL DETECT F246-017	
2-66	*5761691400	CASSETTE DETECT F245-021	
2-67	5761693000	MOTOR ASSY F064-232	
2-68	*5761687000	SPRING,SLIDE FK20T-15	
2-69	*5761690300	CUSHION,MOTOR FJ115-12	
2-70	*5761692000	LEAD HOLDER FD29V-21	
2-71	5761686400	REEL ASSY,T-UP F123-037	
2-72	5761691600	DAMPER ASSY FP472-11	
2-73	*5761690100	SCREW,TAP.TITE UG12R-11	
2-75	*5761690700	LUG UH11T-11	
2-76	*5761691800	SPRING,CASSETTE(L) FC35F-21	
2-77	*5761691900	SPRING,CASSETTE(R) FC35E-21	
2-78	*5761684800	PLATE, REFRECTION	
2-79	*5761686600	LEAF SPRING FC39P-22	
2-80	*5761689800	PLATE,EARTH FC35U-21	
2-81	*5761717100	SPRING,EAETH FT21T-11	

Parts marked with *require longer delivery time.

EXPLODED VIEW-3 (W-660R, Deck I)



EXPLODED VIEW-3 (W-660R)

REF.NO.	PARTS NO.	DESCRIPTION	REMARKS
3- 1	*5761687900	SCREW,PAN M2X5 FG114-23	
3- 2	5761687800	ROTARY HEAD ASSY F257-078	
3- 3	*5761687700	NUT, ADJUSTING FD30C-21	
3- 4	*5761687600	SENER	
3- 5	5761687500	TAPE GUIDE	
3- 6	*5761687300	SPRING ADJ. (L)	
3- 7	*5761687400	SPRING ADJ. (R)	
3- 8	*5761687200	BALL 1/16"	
3- 9	*5761687100	HEAD CHASSIS ASSY	
3-10	*5761685200	SCREW, M3X6	
3-11	*5761685100	SPACER	
3-12	*5761684900	ARM(L), EJECT PROTECTION	
3-13	*5761685000	SPRING, EJECT PROTECTION	
3-14	*5761686100	E-RING	
3-15	5761686000	PINCH ROLLER F014-86	
3-16	5761685700	SPRING(L),PINCH	
3-17	5761685900	PINCH ROLLER F014-85	
3-18	5761685800	SPRING(R),PINCH	
3-19	*5761686900	SPRING, HOLDING	
3-20	*5761686800	PLATE,SLIDE;C/R ED28C-22	
3-21	5761686700	IDLER	
3-22	*5761685300	BASE(L), SLIDE	
3-23	*5761685400	BASE(R), SLIDE	
3-24	*5761685500	SPLING(L), SB	
3-25	*5761685600	SPRING(R) SB	
3-26	*5761686500	WASHER	
3-27	5761686300	REEL TABLE	
3-28	*5761686200	POLYSLIDER	
3-29	*5761689700	SHEET, WASSHA OIL	
3-30	*5761689600	SPRING, H.B	
3-31	*5761684700	CHASSIS	
3-32	*5761692100	BRACKET(L), DAMPER	
3-33	*5761690800	SCREW M3X5	
3-34	*5761692200	BRACKET(R), DAMPER	
3-35	*5761688000	PLATE,SLIDE FD27K-21	
3-36	5761688200	GEAR	
3-37	*5761686400	WASHER	
3-38	5761688300	GEAR, WORM	
3-39	5761688100	GEAR, IDLER	
3-40	*5761691000	LEVER(L),BRAKE	
3-41	*5761691100	LEVER(R),BRAKE	
3-42	*5761691200	SPRING, BRACK	
3-43	*5761691500	PLATE SEARCH	
3-44	5761689900	MOTOR ASSY	
3-45	*5761688800	SCREW, M2X3.5	
3-46	*5761688600	BRACKET THRUST FC33M-22	
3-47	*5761688500	BRACKET, ASSISTANT MOTOR	
3-48	*5761688900	SPRING, BRACKET	
3-49	*5761689000	SCREW TP	
3-50	*5761690900	SCREW 2.6X8	
3-51	5761688700	MOTOR ASSY	
3-52	*5761689100	PLATE ASSY,SEARCHF062-091	
3-53	5761689400	BELT, MAIN	
3-54	*5761689200	POLYSLIDER	
3-55	*5761689300	F/W FHR ASSY	

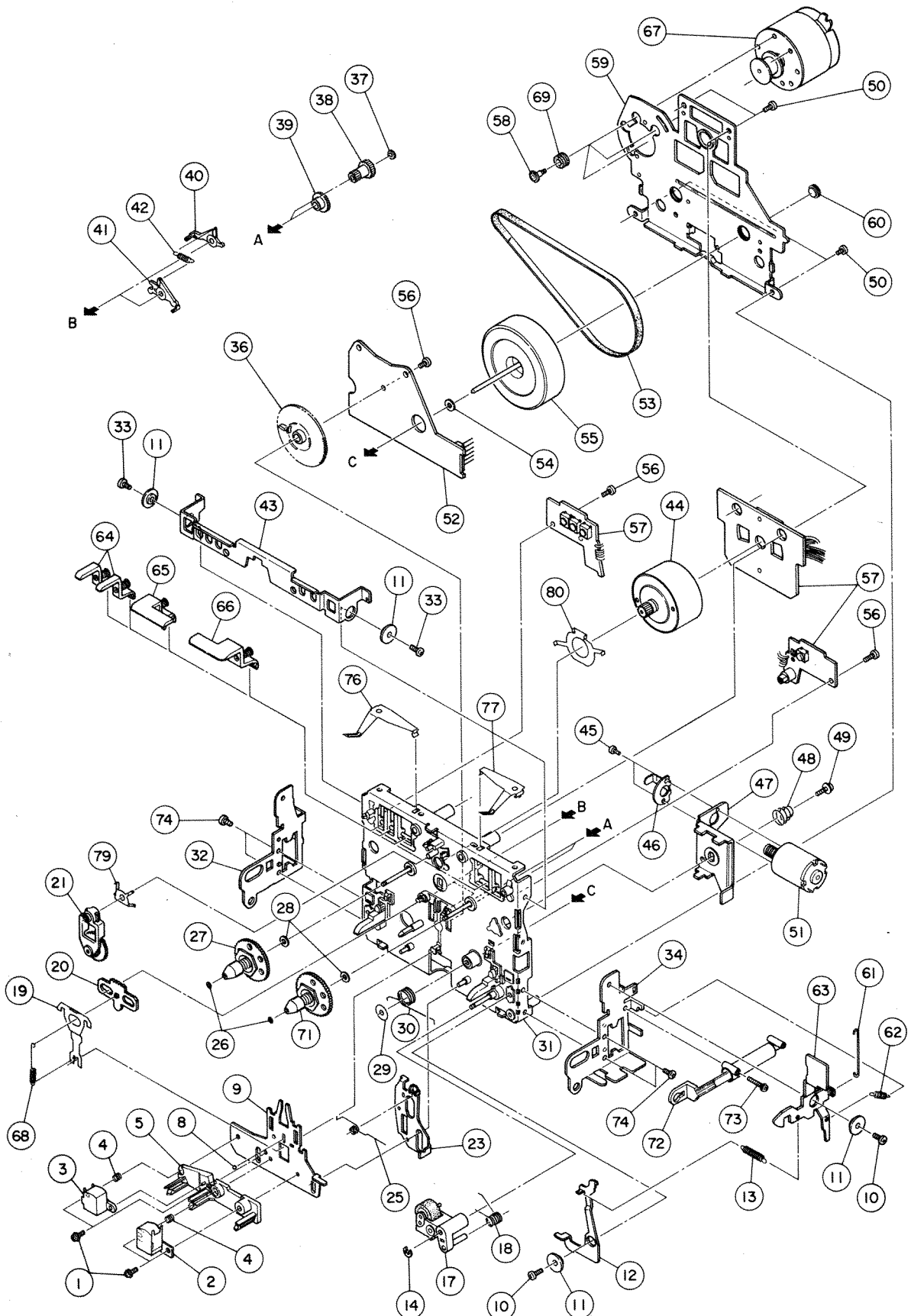
Parts marked with *require longer delivery time.

EXPLODED VIEW-3 (W-660R)

REF.NO.	PARTS NO.	DESCRIPTION	REMARKS
3-56	*5761689500	SCREW, WAVE	
3-57	*5761690000	CONNECTOR ASSY	
3-58	*5761690500	SCREW, MOTOR	
3-59	*5761690200	BRACKET, MOTOR	
3-60	*5761690600	SCREW, WHEEL BRACKET	
3-61	*5761691700	ROD, CONNECT	
3-62	*5761692500	ARM SPRING, EJECT	
3-63	*5761692400	ARM(L), EJECT	
3-64	*5761691300	REC PLATE SEARCH	
3-66	*5761691400	CASSETTE PLATE SEARCH	
3-67	5761690400	MOTOR ASSY	
3-68	*5761687000	SLIDE SPRING, CR	
3-69	*5761690300	CUSHION, MOTOR	
3-70	*5761692000	HOLDER, LEAD	
3-71	5761686400	REEL TABLE, TAKE UP	
3-72	5761691600	DAMPER ASSY	
3-73	*5761690100	SCREW, TAPPING UG12R-11	
3-74	*5761692300	SCREW, TAPPING	
3-75	*5761690700	LUG	
3-76	*5761691800	PLATE, CASSETTE (L)	
3-77	*5761691900	PLATE, CASSETTE (R)	
3-78	*5761684800	PLATE, REFLECTION	
3-79	*5761686600	SPRING, CONTROL	
3-80	*5761689800	PLATE, EARTH	
3-81	*5761717100	SPRING, EARTH FK21T-11	

Parts marked with *require longer delivery time.

EXPLODED VIEW-4 (W-460C, Deck II)



EXPLODED VIEW-4 (W-460C)

REF.NO.	PARTS NO.	DESCRIPTION	REMARKS
4- 1	*5761694000	SCREW, F LOCK	
4- 2	5761694400	HEAD ASSY, REC/PLAY	
4- 3	5761694300	HEAD ASSY, ERASE	
4- 4	*5761693700	SPRING AZIMUTH	
4- 5	*5761693600	HEAD SPACER	
4- 8	*5761687200	BALL, STEEL, 1/16	
4- 9	*5761693500	BASE, HEAD	
4-10	*5761685200	SCREW M3X6	
4-11	*5761685100	SPACER	
4-12	*5761692600	ARM(R), EJECT R	
4-13	*5761685000	SPRING, EJECT BUTTON	
4-14	*5761686100	E-RING	
4-15	5761685900	PINCH ROLLER ASSY	
4-16	5761685800	SPRING(R), PINCH	
4-19	*5761686900	SPRING, HOLDING	
4-20	*5761686800	SLIDE PLATE, C/R	
4-21	5761686700	IDLER	
4-23	*5761685400	BASE(R), SLIDE	
4-25	*5761685600	SPRING, SB(R)	
4-26	*5761686500	WASHER	
4-27	5761686300	REEL TABLE	
4-28	*5761686200	POLYSLIDER	
4-29	*5761689700	SHEEL, WASHER OIL	
4-30	*5761689600	SPRING, H.B	
4-31	*5761693300	CHASSIS	
4-32	*5761692100	BRACKET(L), DAMPER	
4-33	*5761690800	SCREW M3X5	
4-34	*5761692200	BRACKET(R), DAMPER	
4-36	5761688200	GEAR	
4-38	5761688300	GEAR, WORM	
4-39	5761688100	IDLER GEAR	
4-40	*5761691000	LEVER(L), BRACK	
4-41	*5761691100	LEVER(R), BRACK	
4-42	*5761691200	SPRING BRAKE	
4-43	*5761691500	SENER ARM	
4-44	5761689900	MOTOR ASSY	
4-45	*5761688800	SCREW, W/WASHER M2X3.5	
4-46	*5761688600	SPRING, THRUST	
4-47	*5761688500	BRACKET, ASSISTANT MOTOR	
4-48	*5761688900	SPRING, BRACKET	
4-49	*5761689000	SCREW, TP	
4-50	*5761690900	SCREW, WAVE 2.6X8	
4-51	5761688700	MOTOR ASSY	
4-52	*5761689100	SENER PCB ASSY	
4-53	5761694100	BELT, MAIN	
4-54	*5761689200	POLYSLIDER	
4-55	*5761689300	F/W FHR ASSY	
4-56	*5761689500	SCREW, WAVE 2X6	
4-57	*5761694500	CONNECTOR ASSY	
4-58	*5761690500	SCREW, FIXING MOTOR	
4-59	*5761690200	MOTOR, BRACKET	
4-60	*5761690600	SCREW, WHEEL	
4-61	*5761691700	ROD, CONECT	
4-62	*5761692500	EJECT ARM SP	
4-63	*5761693200	ARM(R), EJECT	

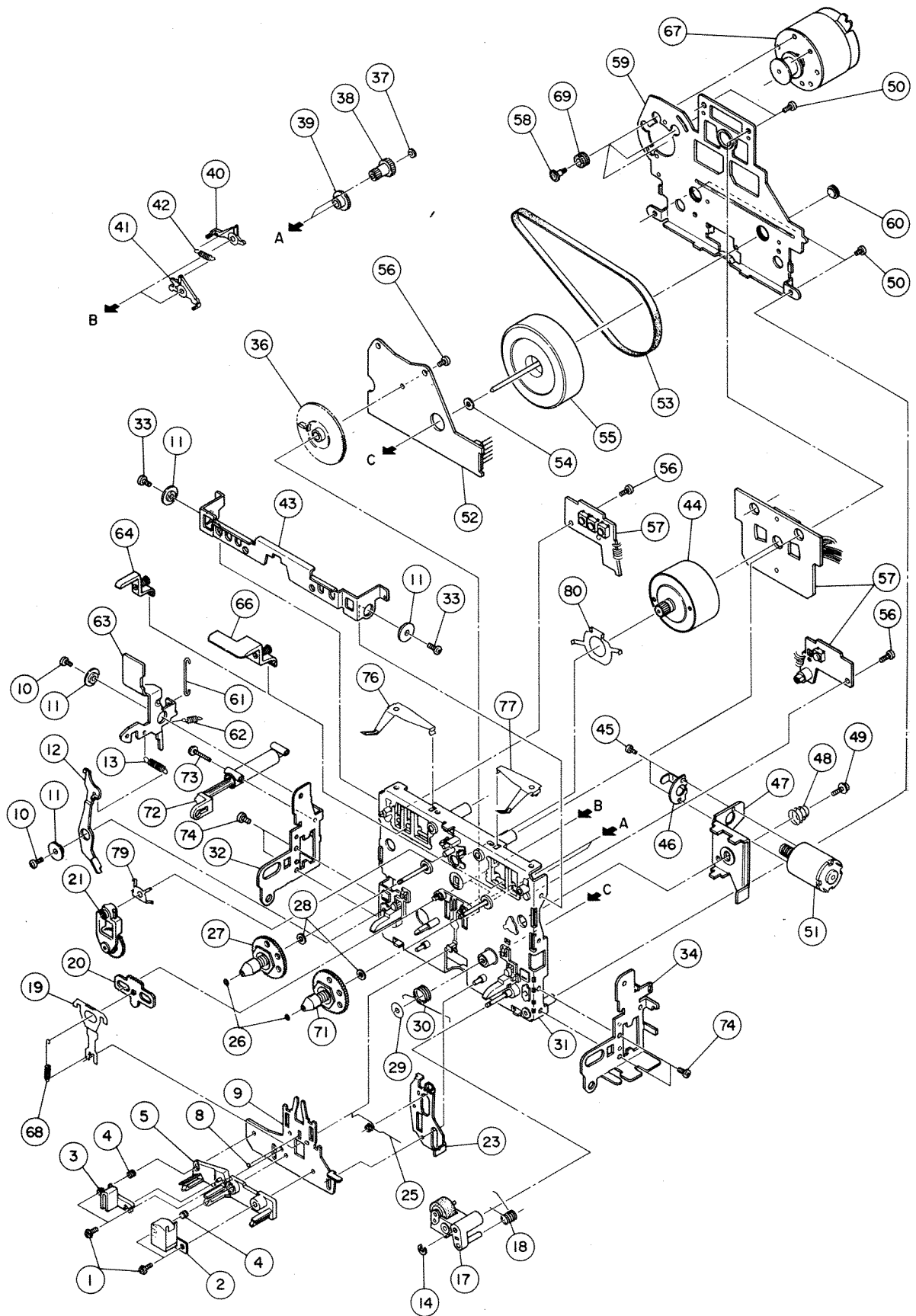
Parts marked with *require longer delivery time.

EXPLODED VIEW-4 (W-460C)

REF.NO.	PARTS NO.	DESCRIPTION	REMARKS
4-64	*5761691300	REC SENSER ASSY	
4-65	*5761693100	METAL	
4-66	*5761691400	CASSETTE SENSER ASSY	
4-67	5761693000	MOTOR ASSY	
4-68	*5761687000	SPRING, CR SLIDE	
4-69	*5761690300	CUSHION, MOTOR	
4-71	5761686400	REEL TABLE, TAKE UP	
4-72	5761691600	DAMPER ASSY	
4-73	*5761690100	SCREW, TAP	
4-74	*5761692300	SCREW, TAPPINT TITE	
4-76	*5761691800	SPRING(L), CASSET.HOLDING	
4-77	*5761691900	SPRING(R), CASSET.HOLDING	
4-79	*5761686600	SPRING, CONTROL	
4-80	*5761689800	PLATE, EARTH	

Parts marked with *require longer delivery time.

EXPLODED VIEW-5 (W-460C, Deck I)



EXPLODED VIEW-5 (W-460C)

REF.NO.	PARTS NO.	DESCRIPTION	REMARKS
5- 1	*5761694000	SCREW, F LOCK	
5- 2	5761693900	HEAD ASSY,PLAY	
5- 3	5761693800	GUIDE, TAPE	
5- 4	*5761693700	SPRING AZIMUTH	
5- 5	*5761693600	SPACER HEAD	
5- 8	*5761687200	BALL,STEEL;1/16	
5- 9	*5761693500	BASE, HEAD	
5-10	*5761685200	SCREW, M3X6	
5-11	*5761685100	SPACER	
5-12	*5761693400	ARM(L),EJECT PRIVENTION	
5-13	*5761685000	SPRING,EJECT PRIVENTION	
5-14	*5761686100	E-RING	
5-15	5761685900	PINCH ROLLER ASSY	
5-16	5761685800	SPRING PINCH.(R)	
5-19	*5761686900	SPRING, HOLDING	
5-20	*5761686800	SLIDE PLATE,C/R	
5-21	5761686700	IDLER	
5-23	*5761685400	SLIDE BASE(R)	
5-25	*5761685600	SPRING SB(R)	
5-26	*5761686500	WASHER	
5-27	5761686300	REEL ASSY	
5-28	*5761686200	POLYSLIDER	
5-29	*5761689700	SHEET, WASHER	
5-30	*5761689600	SPRING H.B	
5-31	*5761693300	CHASSIS ASSY	
5-32	*5761692100	BRACKET(L), DAMPER	
5-33	*5761690800	SCREW M3X5	
5-34	*5761692200	BRACKET(R), DAMPER	
5-36	5761688200	GEAR ASSY	
5-37	*5761688400	WASHER	
5-38	5761688300	GEAR, WARM	
5-39	5761688100	GEAR, IDLER	
5-40	*5761691000	LEVER(L), BRAKE	
5-41	*5761691100	LEVER(R), BRAKE	
5-42	*5761691200	SPRING, BRAKE	
5-43	*5761691500	ARM, SENSER	
5-44	5761689900	MOTOR ASSY	
5-45	*5761688800	SCREW WITH WASHER M2X3.5	
5-46	*5761688600	SPRING,THRUST	
5-47	*5761688500	ASSISTANT MOTOR BRACKET	
5-48	*5761688900	SPRING BRACKET	
5-49	*5761689000	SCREW TP	
5-50	*5761690900	SCREW, WAVE 2.6X8	
5-51	5761688700	MOTOR ASSY	
5-52	*5761689100	SENER PCB ASSY	
5-53	5761694100	BELT,MAIN	
5-54	*5761689200	POLYSLIDER	
5-55	*5761689300	F/W FHR ASSY	
5-56	*5761689500	SCREW WAVE 2X6	
5-57	*5761694200	CONNECTOR ASSY	
5-58	*5761690500	SCREW, FIXING MOTOR	
5-59	*5761690200	MOTOR BRACKET	
5-60	*5761690600	SCREW, FIXING	
5-61	*5761691700	BAR, CONNECTOR	
5-62	*5761692500	SPRING, EJECT ARM	

Parts marked with *require longer delivery time.

EXPLODED VIEW-5 (W-460C)

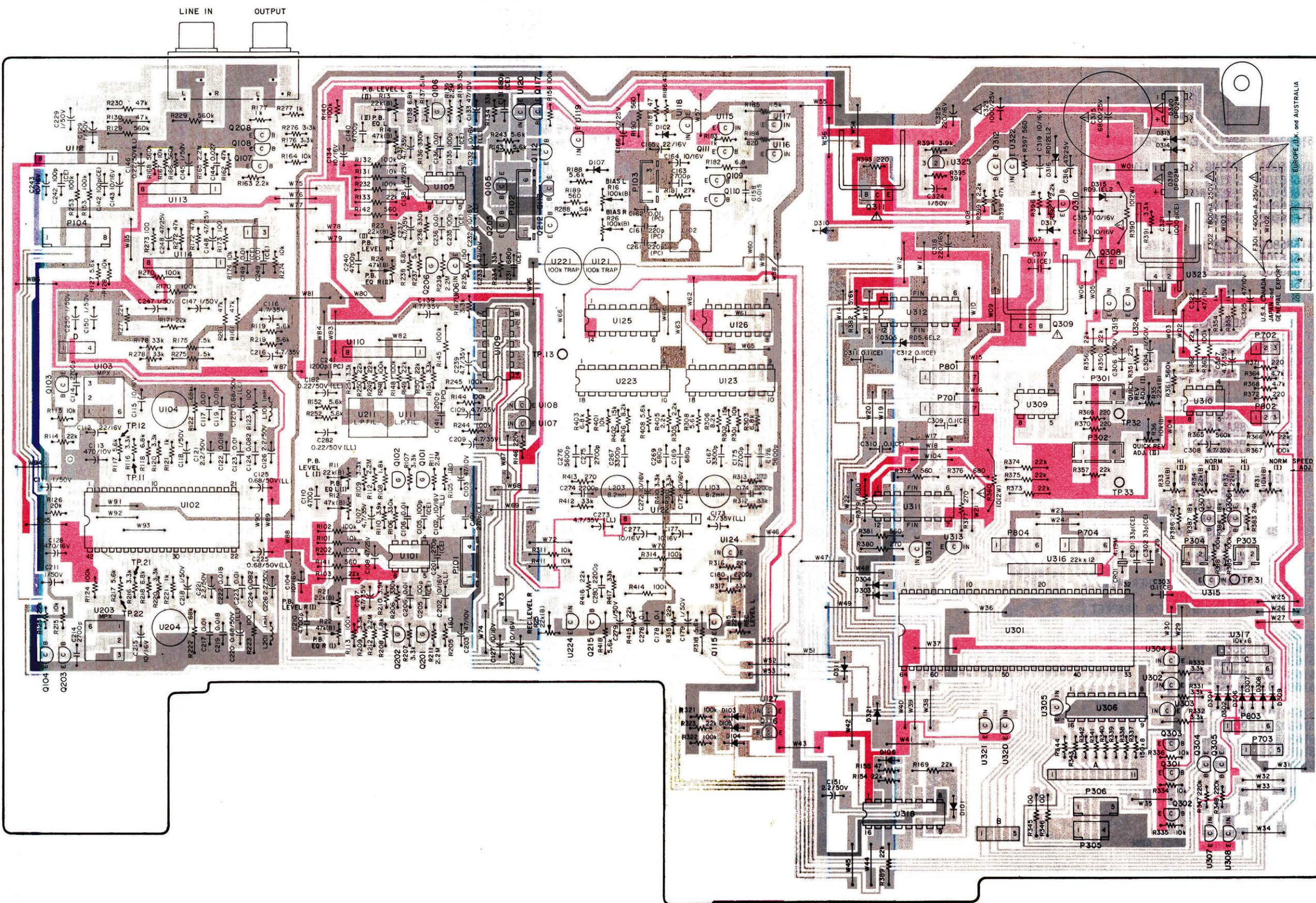
REF.NO.	PARTS NO.	DESCRIPTION	REMARKS
5-63	*5761692400	ARM(L), EJECT	
5-64	*5761691300	REC SENSER ASSY	
5-66	*5761691400	CASSETTE SENSER ASSY	
5-67	5761690400	MOTOR ASSY	
5-68	*5761687000	SPRING, CR SLIDE	
5-69	*5761690300	MOTOR CUSHION	
5-71	5761686400	REEL TABLE, TAKE UP	
5-72	5761691600	DAMPER ASSY	
5-73	*5761690100	SCREW, TAP TITE	
5-74	*5761692300	SCREW, TAP TITE	
5-76	*5761691800	SPRING(L), CASSE.HOLDING	
5-77	*5761691900	SPRING(R), CASSE.HOLDING	
5-79	*5761686600	SPRING, CONTROL	
5-80	*5761689800	PLATE, GROUND	

Parts marked with *require longer delivery time.

7 PC BOARDS AND PARTS LIST

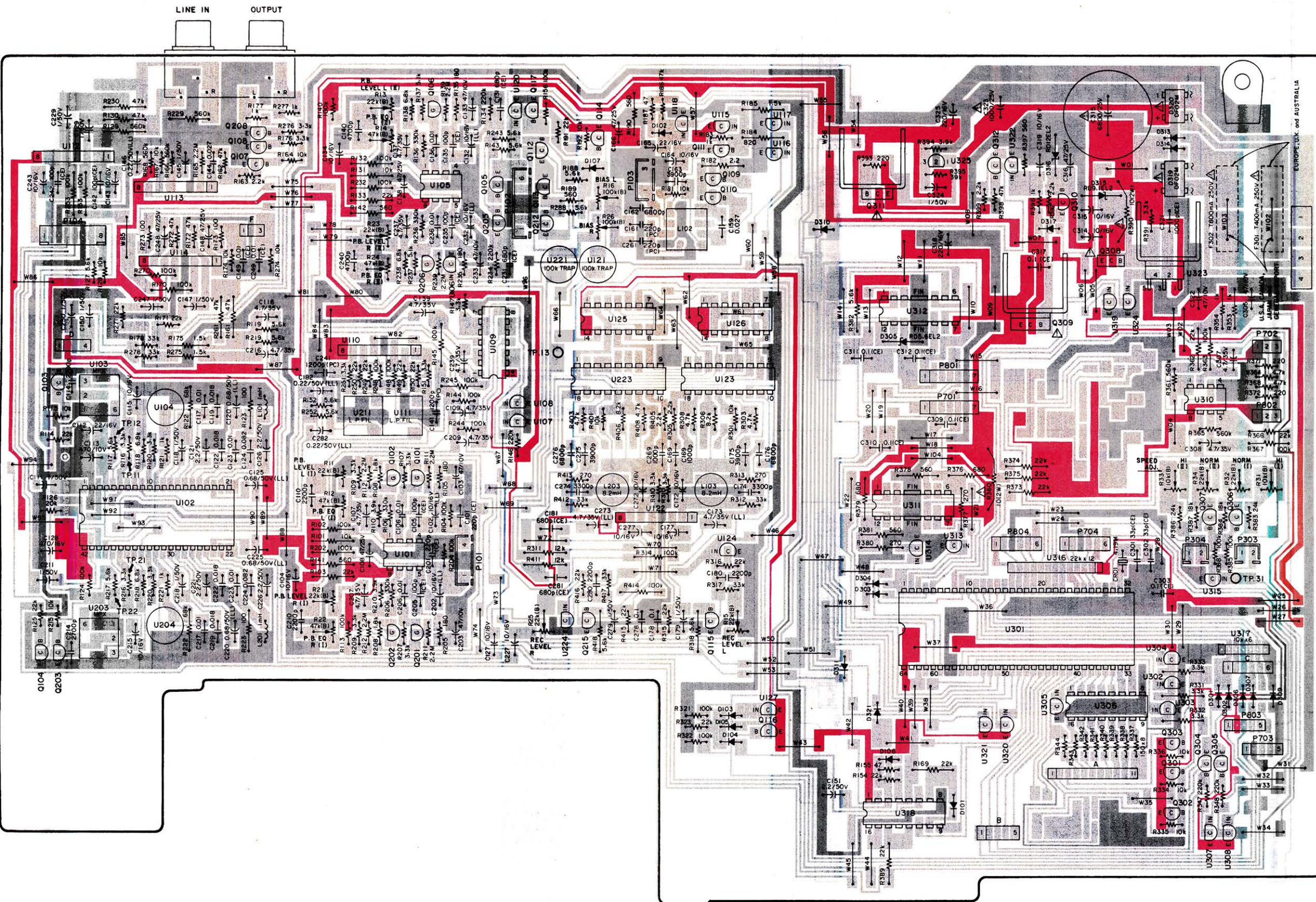
基板図とパーツ・リスト

MAIN PCB ASSY (W-660R)

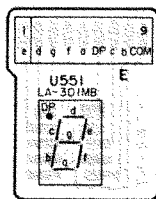


MAIN PCB ASSY (W-460C)

LINE IN OUTPUT



LED PCB A ASSY



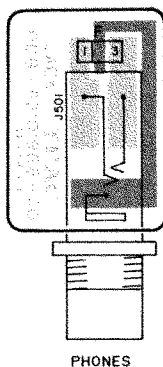
LED PCB B ASSY (W-660R)



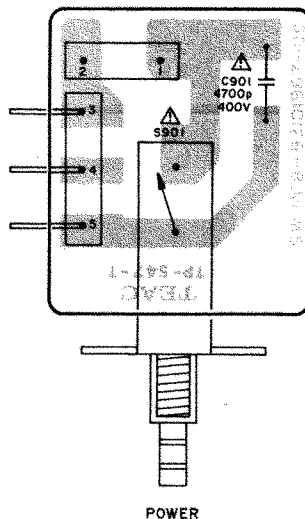
LED PCB C ASSY (W-660R)



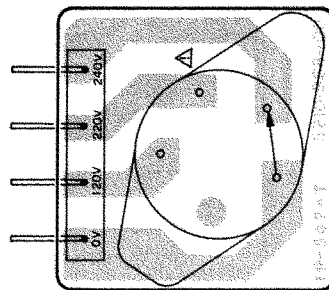
JACK PCB ASSY



SW PCB ASSY



SELECTOR PCB ASSY



NOTES

1. PC boards are shown viewed from foil side.
2. The colors on the PC board illustrations have the following significance:
 - : +B power supply circuit
 - : GND
 - : other
3. Resistor values are in ohms (k=kilo-ohms M=megohms).
4. All capacitor values are in microfarads (p=picofarads).

注

1. 基板図はパターン面が示されています。
2. プリント・パターンは次のように色別されています。
 - : +B電源回路
 - : GND
 - : その他の回路
3. 抵抗の単位はΩ (k=kΩ, M=MΩ) です。
4. コンデンサの単位はμF (p=pF) です。

MAIN PCB ASSY (W-660R)

REF.NO.	PARTS NO.	DESCRIPTION
	*5200196400	MAIN PCB ASSY [J,US,C,GE]
	*5200196410	MAIN PCB ASSY [E,UK,A]
	*5210196401	MAIN PCB
	*5330509600	JACK,4P
	*5555590000	PLATE.PCB EARTH;A
	*5544750000	PIN,COMBINATION
	*5122426000	PLUG,CONN. 4P
	*5800752900	HEAT SINK
	*5783033008	SCREW,BIND S TITE M3X8
	*5332015800	FUSE HOLDER [E,UK,A]
	△5142184000	FUSE,250V/0.4A SLOW [E,UK,A]
	△5142186000	FUSE,MINI.800MA (T) [E,UK,A]
555	5544750000	PIN,COMBINATION
CR01	5292806100	FILTER,CERAMIC 4.19M
D101	5224015020	DIODE,1SS133T-77
D102	5224015020	DIODE,1SS133T-77
D103	5224015020	DIODE,1SS133T-77
D104	5224015020	DIODE,1SS133T-77
D105	5224015020	DIODE,1SS133T-77
D106	5224015020	DIODE,1SS133T-77
D107	5224015020	DIODE,1SS133T-77
D301D302	5224015020	DIODE,1SS133T-77
D303	5224015020	DIODE,1SS133T-77
D304	5224015020	DIODE,1SS133T-77
D305	5224573501	DIODE,ZENER RD5.6EL2 FR
D306D307	5224015020	DIODE,1SS133T-77
D308	5224015020	DIODE,1SS133T-77
D309	5224015020	DIODE,1SS133T-77
D310	5224015020	DIODE,1SS133T-77
D311	5224015020	DIODE,1SS133T-77
D312	5224015020	DIODE,1SS133T-77
D313D314	5224015020	DIODE,1SS133T-77
D315	5224575001	DIODE,ZENER RD9.1EL2 FR
D316	5224576001	DIODE,ZENER RD12EL2 FR
D317	5224015020	DIODE,1SS133T-77
D319D320	△5228010300	SILICON STACK,DF02M
L101L201	5286021020	COIL,CHOKE 1000UH M VT
L102	5286025400	OSC COIL
L103L203	5286008700	COIL,CHOKE 8.2MH
P101	5336245400	PLUG,CONNECTOR B04B-XH-A
P102	5336245600	PLUG,CONNECTOR B06B-XH-A
P103	5336245300	PLUG,CONNECTOR B03B-XH-A
P104	5336249800	PLUG,CONN. B08B-PH-K-S
P301	5336245400	PLUG,CONN. B04B-XH-A
P302	5336245400	PLUG,CONN. B04B-XH-A
P303	5336245200	PLUG,CONN. B02B-XH-A
P304	5336245200	PLUG,CONN. B02B-XH-A
P305	5336249400	PLUG,CONN. B04B-PH-K-S
P306	5336249500	PLUG,CONN. B05B-PH-K-S
Q101Q201	5232008400	FET.,2SK381D
Q102Q202	5232008400	FET.,2SK381D
Q103Q203	5230780920	SI.TR.2SC2603F
Q104	5230780920	SI.TR.2SC2603F
Q105Q205	5230780920	SI.TR.2SC2603F
Q106Q206	5232008400	FET.,2SK381D

MAIN PCB ASSY (W-660R)

REF.NO.	PARTS NO.	DESCRIPTION
Q107	5230780920	SI.TR.2SC2603F
Q108Q208	5231761400	SI.TR.2SD1302S
Q109Q110	5230780920	SI.TR.2SC2603F
Q111	5230780920	SI.TR.2SC2603F
Q112Q113	5230780920	SI.TR.2SC2603F
Q115Q215	5231761400	SI.TR.2SD1302S
Q116	5230018920	SI.TR.2SA1115F
Q117	5230780920	SI.TR.2SC2603F
Q212	5230780920	SI.TR.2SC2603F
Q301Q302	5230508400	SI.TR.2SB698F
Q303	5230508400	SI.TR.2SB698F
Q304Q305	5230780920	SI.TR.2SC2603F
Q306Q307	5230018920	SI.TR.2SA1115F
Q308	△5231761100	SI.TR.2SD1348S
Q309	△5145087000	SI.TR.2SD-313E
Q310	5230780920	SI.TR.2SC2603F
Q311	△5230508700	SI.TR.2SB986S
Q312	5230018920	SI.TR.2SA1115F
R012R022	5280021704	R.,TRIMMER 47KB H.
R013R023	5280021504	R.,TRIMMER 22KB H.
R014R024	5280021704	R.,TRIMMER 47KB H.
R015R025	5280021504	R.,TRIMMER 22KB H.
R016R026	5280021904	R.,TRIMMER 100KB H.
R031R033	5280021304	R.,TRIMMER 6MM 10KB
R032R034	5280021504	R.,TRIMMER 22KB H.
R035R036	5280021304	R.,TRIMMER 6MM 10KB
U101	5220426900	IC.,M5220P
U102	5220429800	IC.,HA12088
U103U203	5292805600	FILTER,LOWPASS MPX
U104U204	5292805200	FILTER,LOWPASS 19.8KHZ
U105	5220426900	IC.,M5220P
U106	5232252520	TR.,DIGITAL RT1N241S
U107	5232252520	TR.,DIGITAL RT1N241S
U108	5232252520	TR.,DIGITAL RT1N241S
U109	5220021600	IC.,M4066BP
U110	5220416200	IC.,M5218L
U111U211	5292806200	FILTER,L.P. 100KHZ
U112	5220416200	IC.,M5218L
U113	5220426200	IC.,M51143AL
U114	5220416200	IC.,M5218L
U115	5232253020	TR.,DIGITAL DTA143ES
U116	5232252520	TR.,DIGITAL RT1N241S
U117	5232252520	TR.,DIGITAL RT1N241S
U118	5232252520	TR.,DIGITAL RT1N241S
U119	5232252620	TR.,DIGITAL RT1P241S
U120	5232252520	TR.,DIGITAL RT1N241S
U121U221	5292805900	FILTER,LOWPASS 100KHZ
U122	5220416200	IC.,M5218L
U123U223	5232253100	TR.ARRAY M54513P
U124U224	5232252520	TR.,DIGITAL RT1N241S
U125	5220036600	IC.,M4081BP
U126	5220040200	IC.,M4001BP
U127	5232252620	TR.,DIGITAL RT1P241S
U301	5220807200	TR. UPD7519-HCW224
U302	5232252520	TR.,DIGITAL RT1N241S

[US]:U.S.A. [E]:EUROPE [UK]:U.K. [C]:CANADA
[A]:AUSTRALIA [GE]:GENERAL EXPORT [J]:JAPAN

Parts marked with *require longer delivery time.

MAIN PCB ASSY (W-660R)

REF.NO.	PARTS NO.	DESCRIPTION
U303	5232252520	TR.,DIGITAL RT1N241S
U304	5232252520	TR.,DIGITAL RT1N241S
U305	5232252520	TR.,DIGITAL RT1N241S
U306	6048661000	IC.,M54517P
U307U308	5232252620	TR.,DIGITAL RT1P241S
U309	5220426300	IC.,BA6993
U310	5220426300	IC.,BA6993
U311U312	5220430200	IC.,LB1649
U313U314	5232252520	TR.,DIGITAL RT1N241S
U315	5232252520	TR.,DIGITAL RT1N241S
U316	5242117600	R.ARRAY RYLS12J223
U317	5242117700	R.ARRAY RYLS6J103
U318	5220040100	IC.,M4049UBP
U319	5232252520	TR.,DIGITAL RT1N241S
U320U321	5232252620	TR.,DIGITAL RT1P241S
U322	5232252520	TR.,DIGITAL RT1N241S
U323	5220430300	IC L78MR05
U324	5232252520	TR.,DIGITAL RT1N241S
U325	5220428400	IC.,M5236L

MAIN PCB ASSY (W-460C)

REF.NO.	PARTS NO.	DESCRIPTION
	*5200196420	MAIN PCB ASSY [J,US,C,GE]
	*5200196430	MAIN PCB ASSY [E,UK,A]
	*5210196401	MAIN PCB
	*5330509600	JACK,4P
	*5555900000	PLATE,PCB EARTH;A
	*5544750000	PIN,CONBINATION
	*5122426000	PLUG,CONN. 4P
	*5800752900	HEAT SINK
	*5783033008	SCREW, S TITE M3X8
	*5332015800	HOLDER, FUSE [E,UK,A]
	△5142184000	FUSE,250V/0.4A SLOW [E,UK,A]
	△5142186000	FUSE,MINI.800MA (T) [E,UK,A]
CRO1	5292806100	FILTER,CERAMIC 4.19M
D101	5224015020	DIODE,1SS133T-77
D102	5224015020	DIODE,1SS133T-77
D103	5224015020	DIODE,1SS133T-77
D104	5224015020	DIODE,1SS133T-77
D105	5224015020	DIODE,1SS133T-77
D106	5224015020	DIODE,1SS133T-77
D107	5224015020	DIODE,1SS133T-77
D301D302	5224015020	DIODE,1SS133T-77
D303	5224015020	DIODE,1SS133T-77
D304	5224015020	DIODE,1SS133T-77
D305	5224573501	DIODE,ZENER RD5.6EL2 FR
D306D307	5224015020	DIODE,1SS133T-77
D309	5224015020	DIODE,1SS133T-77
D310	5224015020	DIODE,1SS133T-77
D311	5224015020	DIODE,1SS133T-77
D312	5224015020	DIODE,1SS133T-77
D313D314	5224015020	DIODE,1SS133T-77

MAIN PCB ASSY (W-460C)

REF.NO.	PARTS NO.	DESCRIPTION
D315	5224575001	DIODE,ZENER RD9.1EL2 FR
D316	5224576001	DIODE,ZENER RD12EL2 FR
D317	5224015020	DIODE,1SS133T-77
D319D320	△5228010300	SILICON STACK,DF02M
L101L201	5286021020	COIL, CHARK 1000UH M VT
L102	5286025500	COIL, OSC
L103L203	5286008700	COIL,CHOKE 8.2MH
P101	5336245400	PLUG,CONN. B04B-XH-A
P102	5336245600	PLUG,CONN. B06B-XH-A
P103	5336245300	PLUG,CONN. B03B-XH-A
P104	5336249800	PLUG,CONN. B08B-PH-K-S
P303	5336245200	PLUG,CONN. B02B-XH-A
P304	5336245200	PLUG,CONN. B02B-XH-A
Q101Q201	5232008400	FET.,2SK381D
Q102Q202	5232008400	FET.,2SK381D
Q103Q203	5230780920	SI.TR.2SC2603F
Q104	5230780920	SI.TR.2SC2603F
Q105Q205	5230780920	SI.TR.2SC2603F
Q106Q206	5232008400	FET.,2SK381D
Q107	5230780920	SI.TR.2SC2603F
Q108Q208	5231761400	SI.TR.2SD1302S
Q109Q110	5230781000	SI.TR.2SC1741S
Q111	5042625000	SI.TR.2SC-1318S
Q112Q113	5230774400	SI.TR.2SC1845
Q114	5230016200	SI.TR.2SA992-E
Q115Q215	5231761400	SI.TR.2SD1302S
Q116	5230018920	SI.TR.2SA1115F
Q117	5230780920	SI.TR.2SC2603F
Q212	5230774400	SI.TR.2SC1845
Q301Q302	5230508400	SI.TR.2SB698F
Q303	5230508400	SI.TR.2SB698F
Q304Q305	5230780920	SI.TR.2SC2603F
Q306Q307	5230018920	SI.TR.2SA1115F
Q308	△5231761100	SI.TR.2SD1348S
Q309	△5145087000	SI.TR.2SD-313E
Q310	5230780920	SI.TR.2SC2603F
Q311	△5230508700	SI.TR.2SB986S
Q312	5230018920	SI.TR.2SA1115F
R011R021	5280021504	R.,TRIMMER 22KB H.
R012R022	5280021704	R.,TRIMMER 47KB H.
R013R023	5280021504	R.,TRIMMER 22KB H.
R014R024	5280021704	R.,TRIMMER 47KB H.
R015R025	5280021504	R.,TRIMMER 22KB H.
R016R026	5280021904	R.,TRIMMER 100KB H.
R031R033	5280021304	R.,TRIMMER 6MM 10KB
R032R034	5280021504	R.,TRIMMER 22KB H.
R390	5241282910	R.,INCOMBUSTBLE 2W 10 J
U101	5220426900	IC.,M5220P
U102	5220429800	IC.,HA12088
U103U203	5292805600	FILTER,LOWPASS MPX
U104U204	5292805200	FILTER,LOWPASS 19.8KHZ
U105	5220426900	IC.,M5220P
U106	5232252520	TR.,DIGITAL RT1N241S
U107	5232252520	TR.,DIGITAL RT1N241S
U108	5232252520	TR.,DIGITAL RT1N241S

[US]:U.S.A. [E]:EUROPE [UK]:U.K. [C]:CANADA
[A]:AUSTRALIA [GE]:GENERAL EXPORT [J]:JAPAN

Parts marked with *require longer delivery time.

MAIN PCB ASSY (W-460C)

REF.NO.	PARTS NO.	DESCRIPTION
U109	5220021600	IC.,M4066BP
U110	5220416200	IC.,M5218L
U111U211	5292806200	FILTER,L.P. 100KHZ
U112	5220416200	IC.,M5218L
U113	5220426200	IC.,M51143AL
U114	5220416200	IC.,M5218L
U115	5232253020	TR.,DIGITAL DTA143ES
U116	5232252520	TR.,DIGITAL RT1N241S
U117	5232252520	TR.,DIGITAL RT1N241S
U118	5232252520	TR.,DIGITAL RT1N241S
U120	5232252520	TR.,DIGITAL RT1N241S
U121U221	5292805900	FILTER,LOWPASS 100KHZ
U122	5220416200	IC.,M5218L
U123U223	5232253100	TRANSISTER ARRAY,M54513P
U124U224	5232252520	TR.,DIGITAL RT1N241S
U125	5220036600	IC.,M4081BP
U126	5220040200	IC.,M4001BP
U127	5232252620	TR.,DIGITAL RT1P241S
U301	5220807200	IC. UPD7519-HCW224
U302	5232252520	TR.,DIGITAL RT1N241S
U303	5232252520	TR.,DIGITAL RT1N241S
U304	5232252520	TR.,DIGITAL RT1N241S
U305	5232252520	TR.,DIGITAL RT1N241S
U306	6048661000	IC,M54517P
U307U308	5232252620	TR.,DIGITAL RT1P241S
U310	5220426300	IC.,BA6993
U311U312	5220430200	IC.,LB1649
U313U314	5232252520	TR.,DIGITAL RT1N241S
U315	5232252520	TR.,DIGITAL RT1N241S
U316	5242117600	R.,ARREY RYLS12J223
U317	5242117700	R.,ARREY RYLS6J103
U318	5220040100	IC.,M4049UBP
U319	5232252520	TR.,DIGITAL RT1N241S
U320U321	5232252620	TR.,DIGITAL RT1P241S
U322	5232252520	TR.,DIGITAL RT1N241S
U323	5220430300	IC.,L78MR05
U324	5232252520	TR.,DIGITAL RT1N241S
U325	5220428400	IC.,M5236L

LEVEL METER PCB ASSY (W-660R)

REF.NO.	PARTS NO.	DESCRIPTION
	*5200196500	LEVEL METER PCB ASSY
	*5210196500	LEVEL METER PCB
	*5800839500	LED HOLDER
D501D601	5225014620	LED,LT5N31A GREEN T.
D502D602	5225014620	LED,LT5N31A GREEN T.
D503D603	5225014620	LED,LT5N31A GREEN T.
D504D604	5225014520	LED,LT5P31A RED TAPING
D505D605	5225014520	LED,LT5P31A RED TAPING
D506D606	5225014520	LED,LT5P31A RED TAPING
D511	5225014520	LED,LT5P31A RED TAPING
D512	5225014520	LED,LT5P31A RED TAPING
D513	5225014520	LED,LT5P31A RED TAPING
D514	5225014520	LED,LT5P31A RED TAPING
D515	5225014520	LED,LT5P31A RED TAPING
D516	5225014520	LED,LT5P31A RED TAPING
D517	5225014620	LED,LT5N31A GREEN T.
D518	5225014620	LED,LT5N31A GREEN T.
D521D526	5224015020	DIODE,1SS133T-77
D522D527	5224015020	DIODE,1SS133T-77
D523D528	5224015020	DIODE,1SS133T-77
D524D529	5224015020	DIODE,1SS133T-77
D525D530	5224015020	DIODE,1SS133T-77
D532	5224015020	DIODE,1SS133T-77
D533	5224015020	DIODE,1SS133T-77
D534	5224015020	DIODE,1SS133T-77
D535	5224015020	DIODE,1SS133T-77
D536	5224015020	DIODE,1SS133T-77
D537	5224015020	DIODE,1SS133T-77
D538	5224015020	DIODE,1SS133T-77
D539	5224015020	DIODE,1SS133T-77
D540	5224015020	DIODE,1SS133T-77
D541	5224015020	DIODE,1SS133T-77
D542	5224015020	DIODE,1SS133T-77
D543	5224015020	DIODE,1SS133T-77
R051	5284011600	SLIDE VR 5KAX2
S501	5300909600	SW.,SLIDE 2-3
S521S526	5302103200	SW.,TACT KHH10910
S522S527	5302103200	SW.,TACT KHH10910
S523S528	5302103200	SW.,TACT KHH10910
S524S529	5302103200	SW.,TACT KHH10910
S525S530	5302103200	SW.,TACT KHH10910
S532	5300043500	SW.,PUSH 2-2 N SPUZ12
S533	5302103200	SW.,TACT KHH10910
S534	5302103200	SW.,TACT KHH10910
S535	5302103200	SW.,TACT KHH10910
S536	5302103200	SW.,TACT KHH10910
S537	5302103200	SW.,TACT KHH10910
S538	5302103200	SW.,TACT KHH10910
S539	5302103200	SW.,TACT KHH10910
S540	5302103200	SW.,TACT KHH10910
S541	5302103200	SW.,TACT KHH10910
S542	5300909600	SW.,SLIDE 2-3
U501	5220036300	IC.,IR-2E27A

[US]:U.S.A. [E]:EUROPE [UK]:U.K. [C]:CANADA
[A]:AUSTRALIA [GE]:GENERAL EXPORT [J]:JAPAN

Parts marked with *require longer delivery time.

LEVEL METER PCB ASSY (W-460C)

REF.NO.	PARTS NO.	DESCRIPTION
D501D601	*5200196510	LEVEL METER PCB ASSY
	*5210196500	LEVEL METER PCB
	*5800839500	LED HOLDER
D502D602	5225014620	LED,LT5N31A GREEN T.
	5225014620	LED,LT5N31A GREEN T.
D503D603	5225014620	LED,LT5N31A GREEN T.
D504D604	5225014520	LED,LT5P31A RED TAPING
D505D605	5225014520	LED,LT5P31A RED TAPING
D506D606	5225014520	LED,LT5P31A RED TAPING
D511	5225014520	LED,LT5P31A RED TAPING
D512	5225014520	LED,LT5P31A RED TAPING
D513	5225014520	LED,LT5P31A RED TAPING
D514	5225014520	LED,LT5P31A RED TAPING
D515	5225014520	LED,LT5P31A RED TAPING
D516	5225014520	LED,LT5P31A RED TAPING
D521D526	5224015020	DIODE,1SS133T-77
D522D527	5224015020	DIODE,1SS133T-77
D524D529	5224015020	DIODE,1SS133T-77
D525D530	5224015020	DIODE,1SS133T-77
D531	5224015020	DIODE,1SS133T-77
D532	5224015020	DIODE,1SS133T-77
D533	5224015020	DIODE,1SS133T-77
D534	5224015020	DIODE,1SS133T-77
D535	5224015020	DIODE,1SS133T-77
D536	5224015020	DIODE,1SS133T-77
D537	5224015020	DIODE,1SS133T-77
D538	5224015020	DIODE,1SS133T-77
D539	5224015020	DIODE,1SS133T-77
D541	5224015020	DIODE,1SS133T-77
D542	5224015020	DIODE,1SS133T-77
D543	5224015020	DIODE,1SS133T-77
R051	5284011600	SLIDE VR 5KAX2
S501	5300909600	SW.,SLIDE 2-3
S521S526	5302103200	SW.,TACT KHH10910
S522S527	5302103200	SW.,TACT KHH10910
S524S529	5302103200	SW.,TACT KHH10910
S525S530	5302103200	SW.,TACT KHH10910
S532	5300043500	SWITCH,PUSH 2-2 N SPUZ12
S533	5302103200	SW.,TACT KHH10910
S534	5302103200	SW.,TACT KHH10910
S535	5302103200	SW.,TACT KHH10910
S536	5302103200	SW.,TACT KHH10910
S537	5302103200	SW.,TACT KHH10910
S538	5302103200	SW.,TACT KHH10910
S539	5302103200	SW.,TACT KHH10910
S541	5302103200	SW.,TACT KHH10910
S542	5300909600	SW.,SLIDE 2-3
U501	5220036300	IC.,IR-2E27A

LED PCB ASSY(A)

REF.NO.	PARTS NO.	DESCRIPTION
U551	*5200196900	LED PCB ASSY(A)
	*5210196900	LED PCB(A)
	5225015400	LED,DISPLAY LA-301MB

LED PCB ASSY(B) (W-660R)

REF.NO.	PARTS NO.	DESCRIPTION
D571D572	*5200197000	LED PCB ASSY(B)
	*5210197100	LED PCB(C)
	*5225016100	LED,LD-001MG GREEN

LED PCB ASSY(C) (W-660R)

REF.NO.	PARTS NO.	DESCRIPTION
D581D582	*5200197100	LED PCB ASSY(C)
	*5210197000	LED PCB(B)
	*5225016100	LED,LD-001MG GREEN

JACK PCB ASSY

REF.NO.	PARTS NO.	DESCRIPTION
	*5200196600	JACK PCB ASSY
	*5210196600	JACK PCB
	5330012900	3P JACK FJ332DB

SW PCB ASSY

REF.NO.	PARTS NO.	DESCRIPTION
C901 S901	*5200196700	SW PCB ASSY [J,US,C,GE]
	*5200196710	SW PCB ASSY [E,UK,A]
	*5210196700	SW PCB
	*5730007500	COVER, CONDENCER [E,UK,A]
	*5327008700	TERMINAL 3P (P=7.5)
	*5327009200	TERMINAL 2P (P=10) [E,UK,A]
	△5267703800	SPARK KILLER,4700PF400V M
	△5300031900	SW.,PUSH 1-1

SELECTOR PCB ASSY [GE]

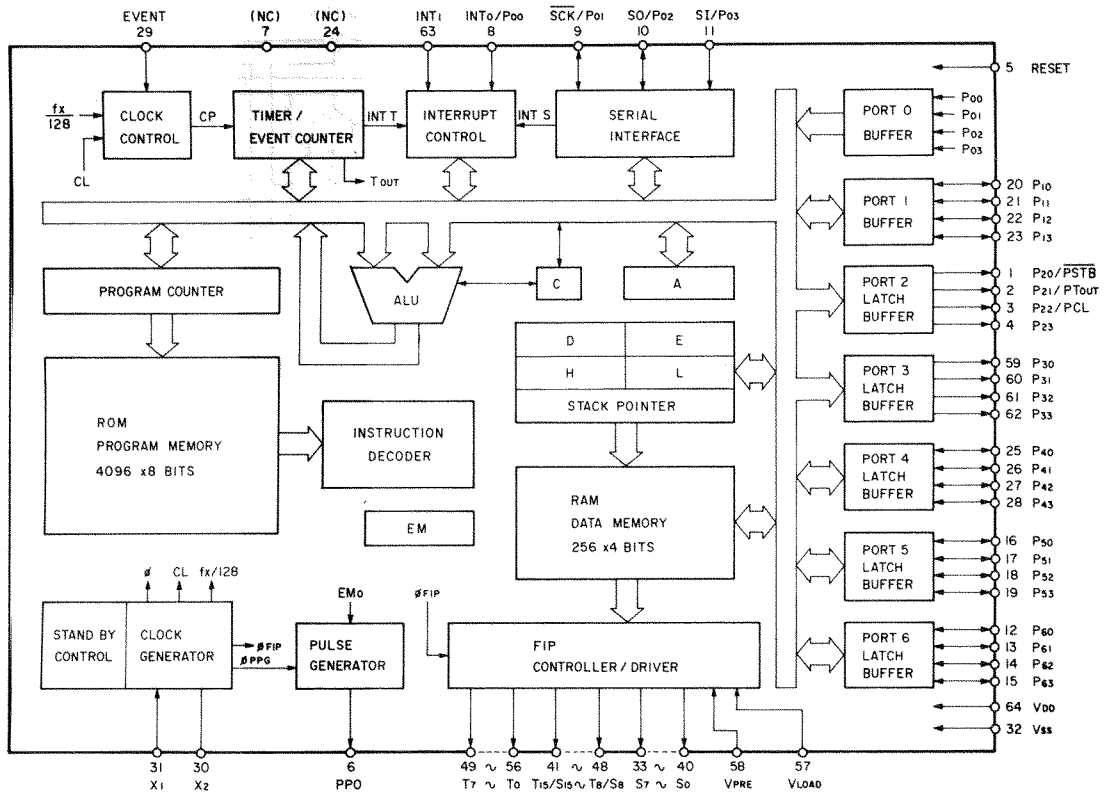
REF.NO.	PARTS NO.	DESCRIPTION
	*5200196800	SELECTOR PCB ASSY
	*5210196800	SELECTOR PCB
	△5332016300	SELECTOR,VOLTAGE
	5327008800	TERMINAL 4P (P=7.5)

[US]:U.S.A. [E]:EUROPE [UK]:U.K. [C]:CANADA
[A]:AUSTRALIA [GE]:GENERAL EXPORT [J]:JAPAN

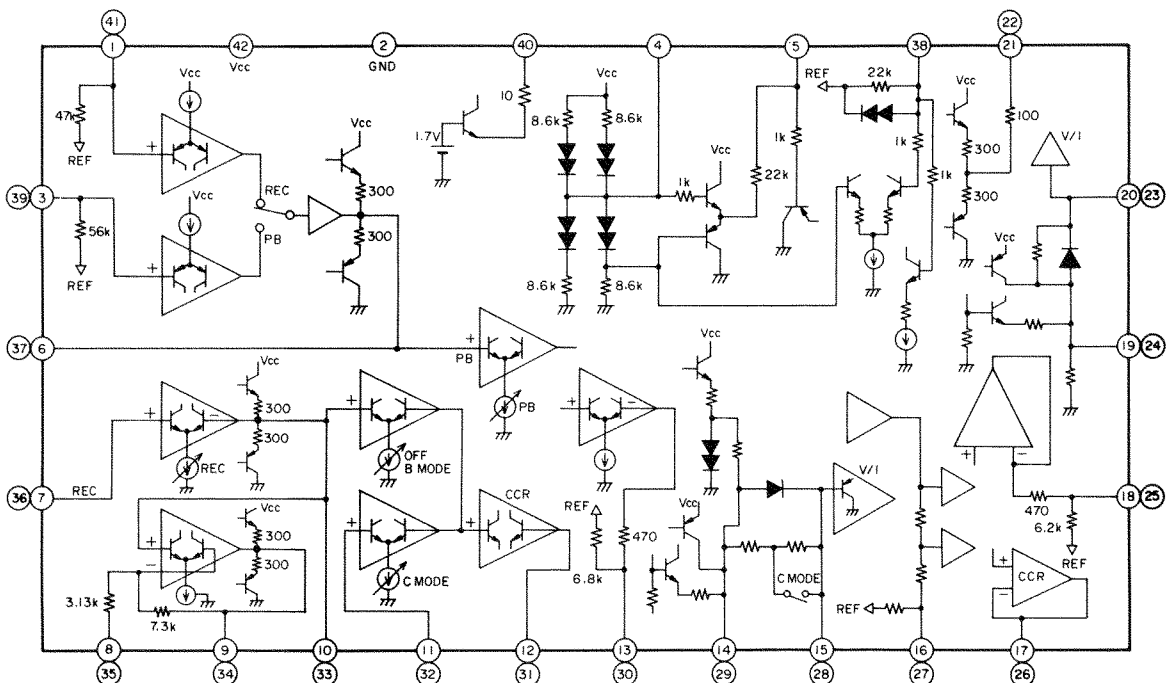
Parts marked with *require longer delivery time.

IC BLOCK DIAGRAM

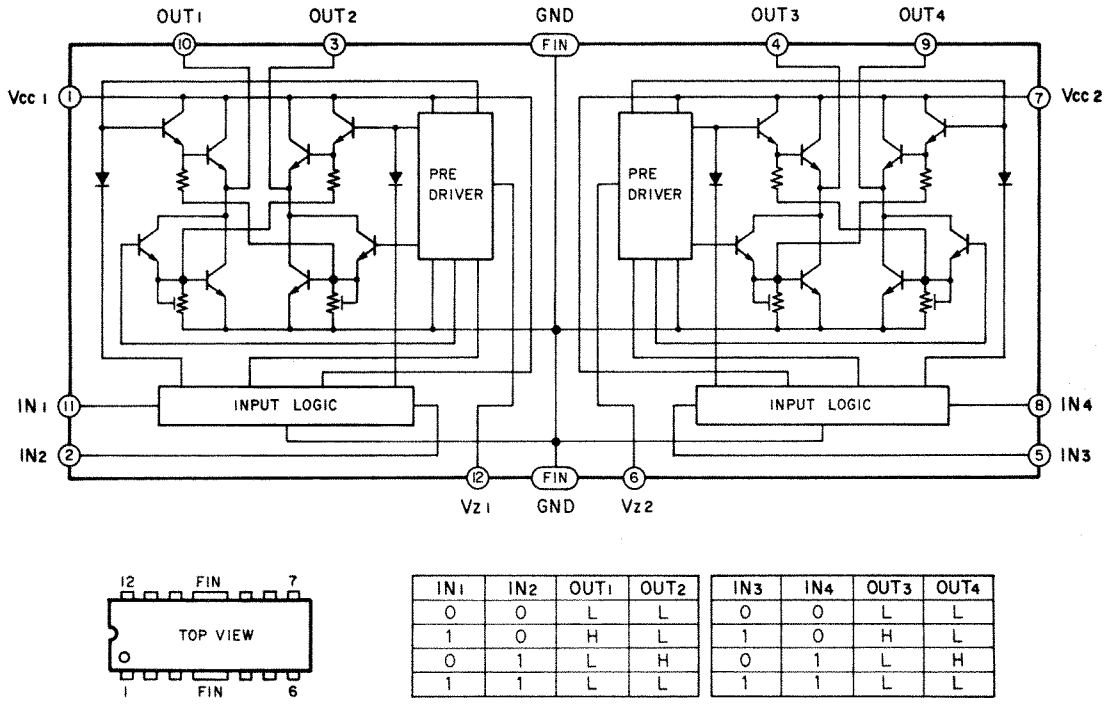
μPD7519-HCW224



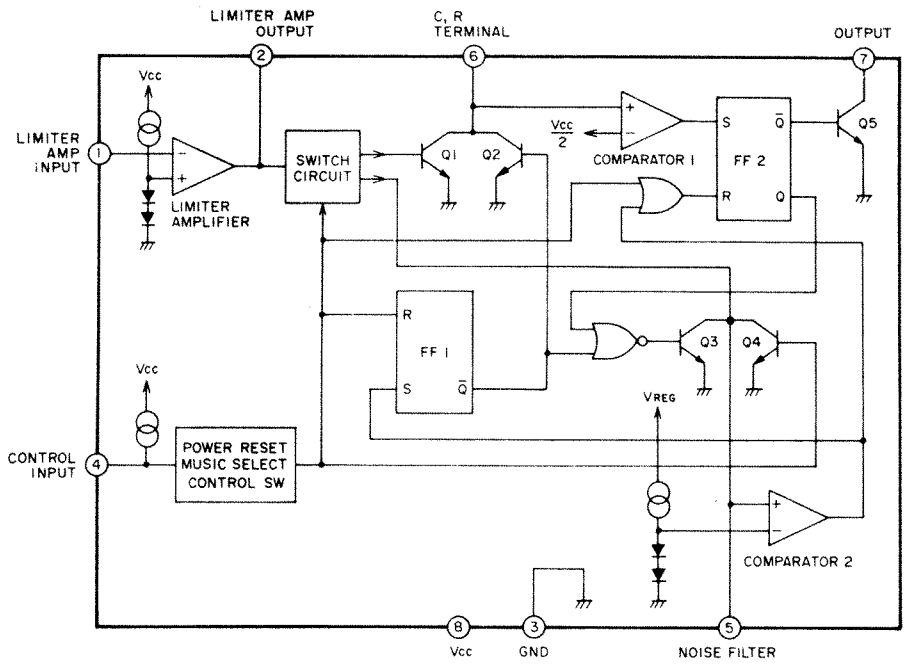
HA12088



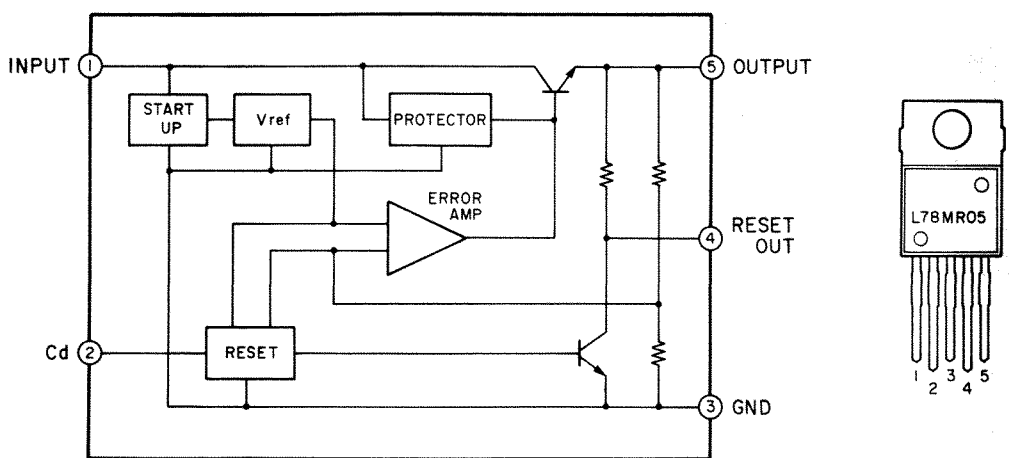
LB1649



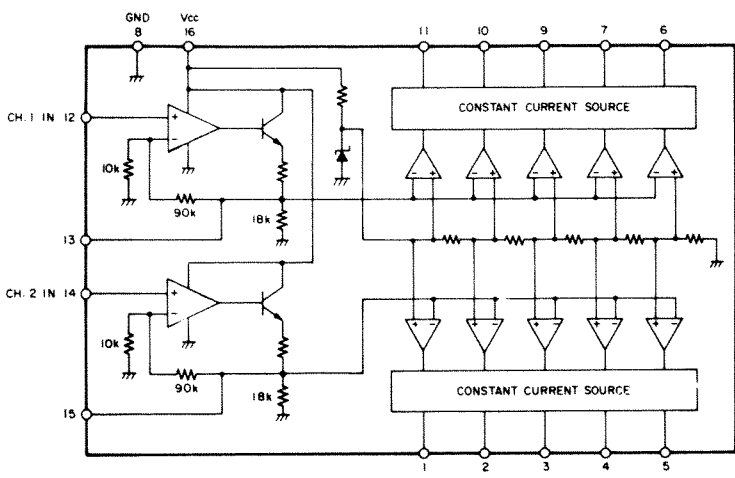
M51143AL



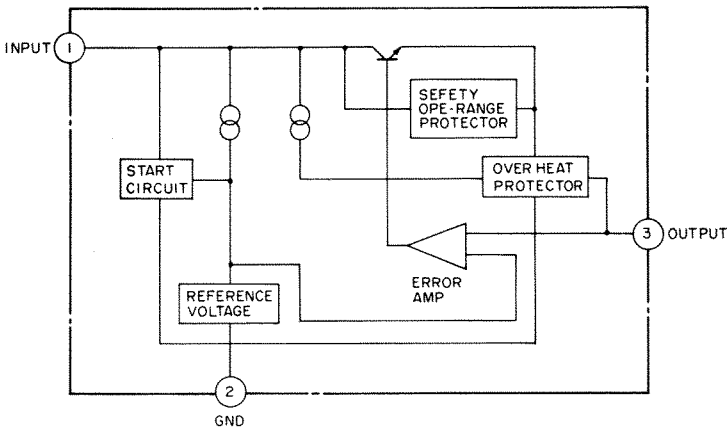
L78MR05



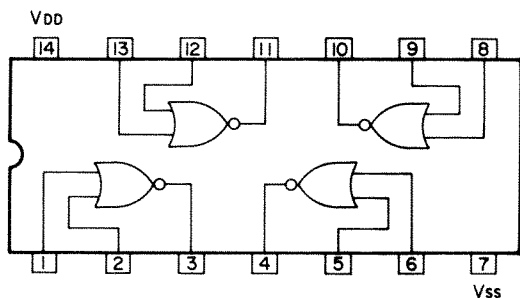
M5236L



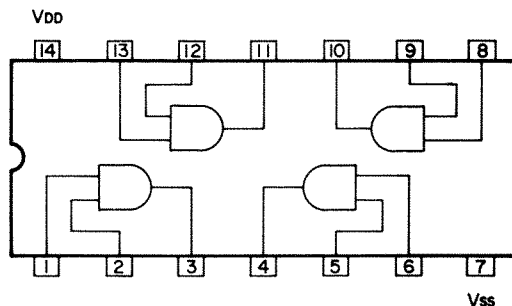
IR2E27A



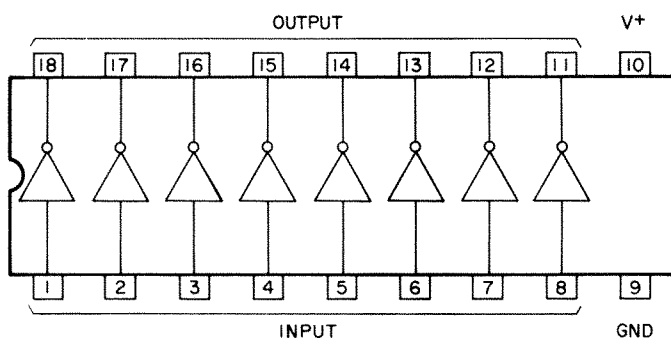
M4001BP



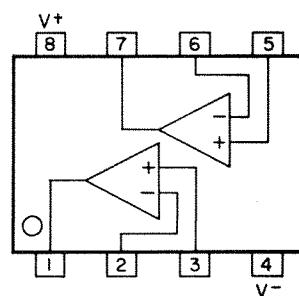
M4081BP



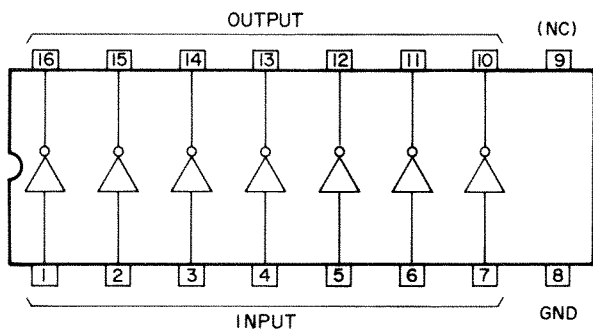
M54513P



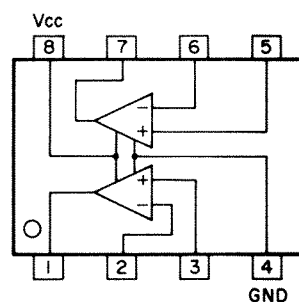
M5220P



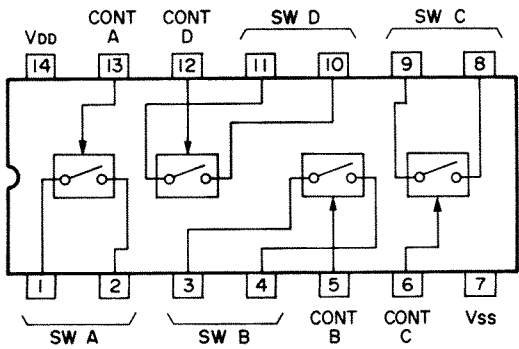
M54517P



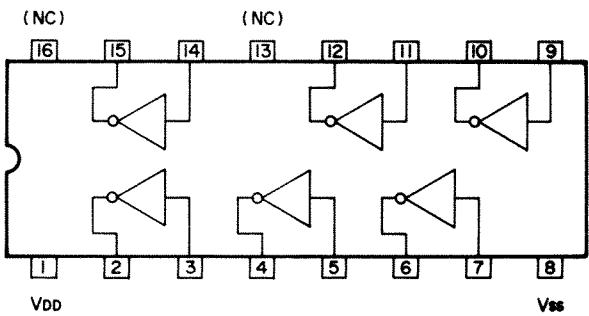
BA6993



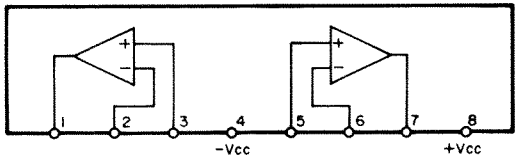
M4066BP

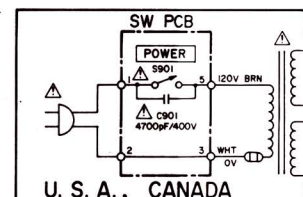


M4049UBP

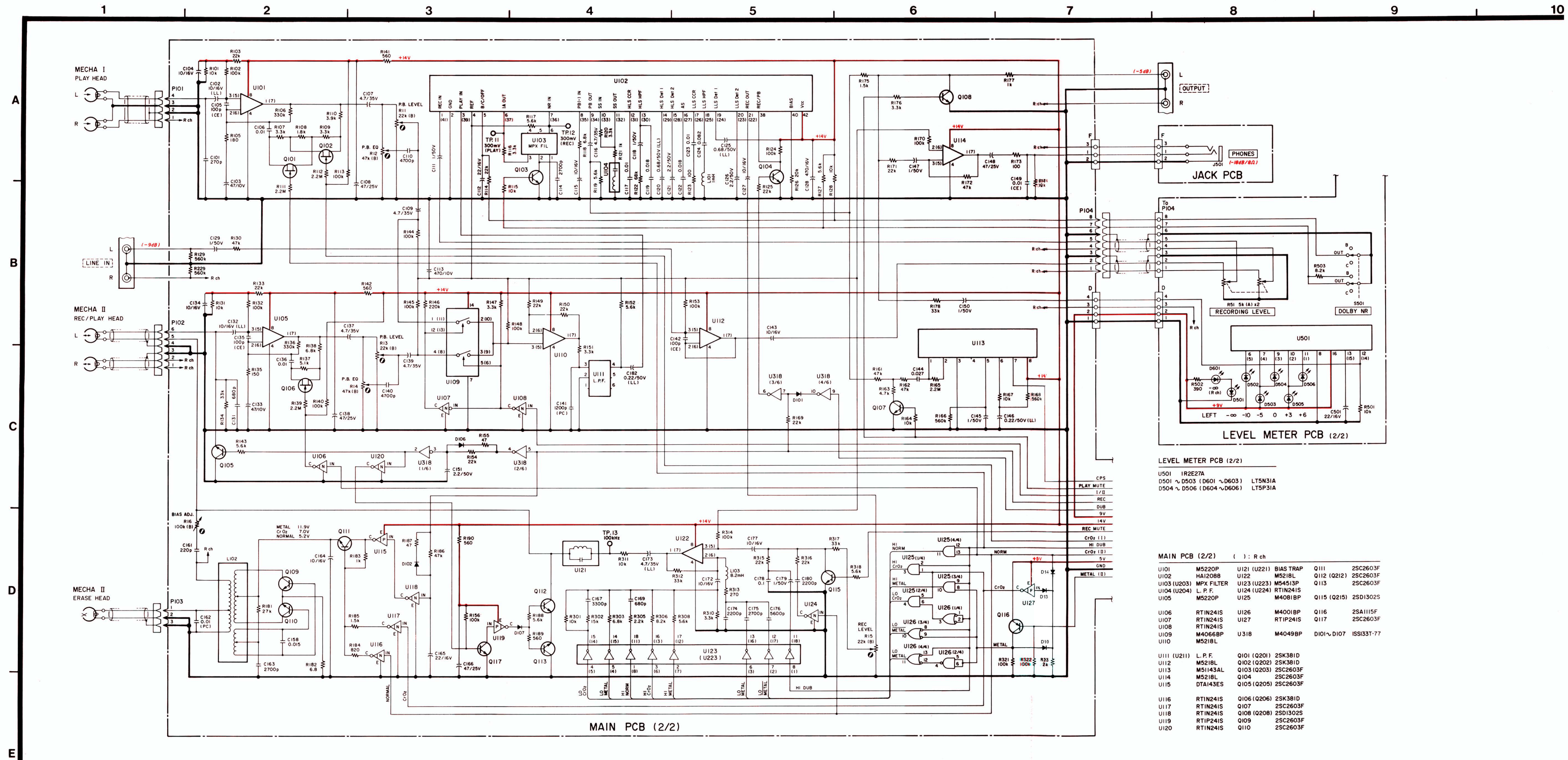


M5218L





2nd Issue: August , 1986



INSTRUCTIONS FOR SERVICE PERSONNEL

BEFORE RETURNING APPLIANCE TO THE CUSTOMER, MAKE LEAKAGE-CURRENT OR RESISTANCE MEASUREMENTS TO DETERMINE THAT EXPOSED PARTS ARE ACCEPTABLY INSULATED FROM THE SUPPLY CIRCUIT.

NOTES

1. Resistor values are in ohms (k=kilo-ohms, M=megohms).
2. Capacitor values are in microfarads (p=picofarads).
3. Δ Parts marked with this sign are safety critical components. They must always be replaced with identical components-refer to the appropriate parts list and ensure exact replacement.
4. — : +B power supply circuit

注意

1. 抵抗の単位はΩ (k=kΩ, M=MΩ) です。
2. コンデンサの単位はμF (p=pF) です。
3. Δマークのある部品は安全重要部品です。交換するときは必ずティラック指定の部品を使用してください。
4. — : +B電源回路

W-660R
Stereo Double Cassette Deck
2nd Issue; August, 1986

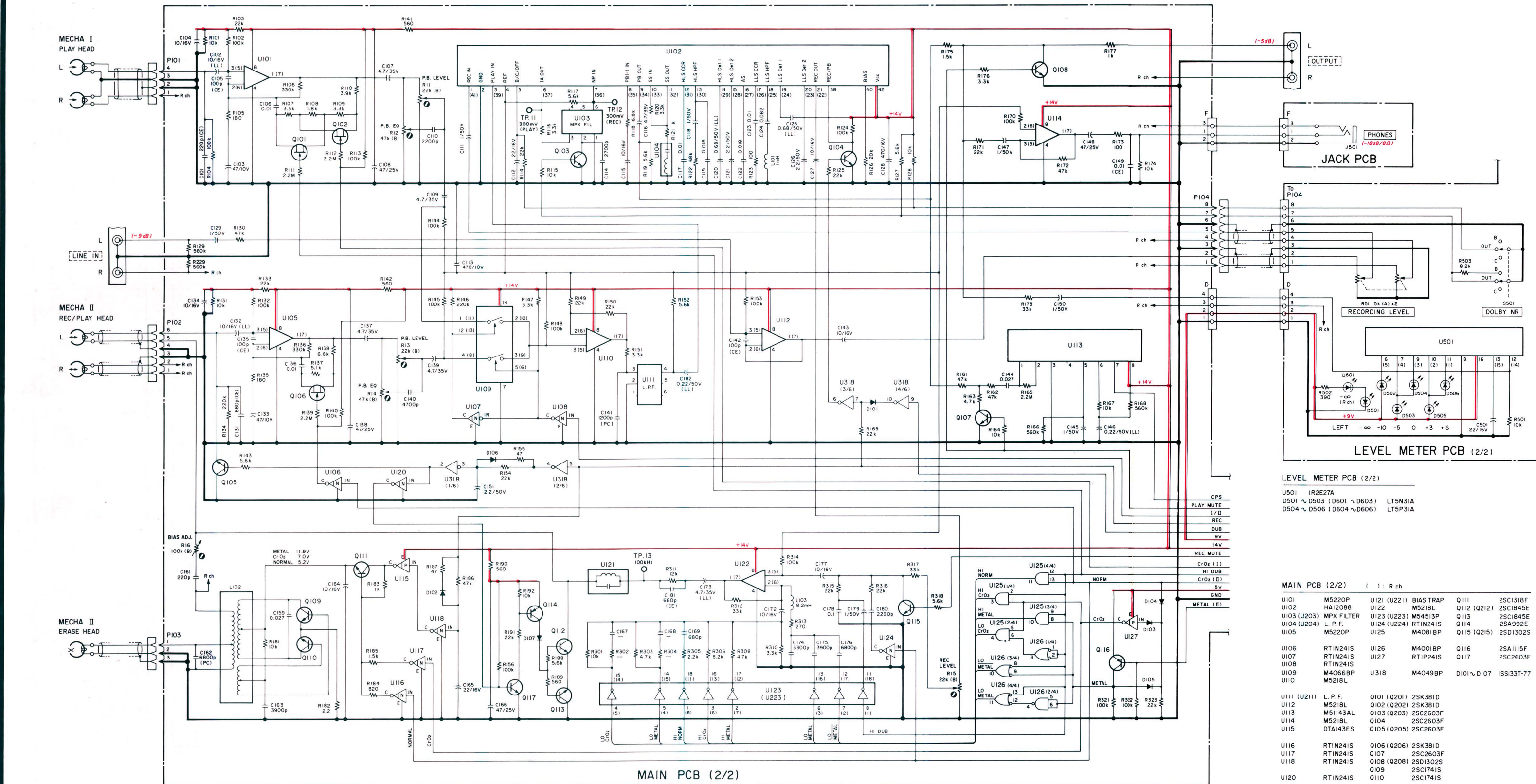


注意

- 抵抗の単位は Ω ($k=k\Omega$, $M=M\Omega$) です。
- コンデンサの単位は μF ($p=pF$) です。
- Δ マークのある部品は安全重要部品です。
交換するときは必ずティアック指定の部品を使用してください。
- : +B 電源回路

W-460C

Stereo Double Cassette Deck



INSTRUCTIONS FOR SERVICE PERSONNEL
BEFORE RETURNING APPLIANCE TO THE CUSTOMER, MAKE LEAKAGE-CURRENT OR RESISTANCE MEASUREMENTS TO DETERMINE THAT EXPOSED PARTS ARE ACCEPTABLY INSULATED FROM THE SUPPLY CIRCUIT.

- NOTES
1. Resistor values are in ohms (k=kilo-ohms, M=megohms).
 2. Capacitor values are in microfarads (p=picofarads).
 3. Δ Parts marked with this sign are safety critical components. They must always be replaced with identical components-refer to the appropriate parts list and ensure exact replacement.
 4. — : +B power supply circuit

- 注意
1. 抵抗の単位はΩ (k=kΩ, M=MΩ) です。
 2. コンデンサの単位はμF (p=pF) です。
 3. Δマークのある部品は安全重要部品です。交換するときは必ずティアック指定の部品を使用してください。
 4. — : +B電源回路

LEVEL METER PCB (2/2)
U501 IR2E27A
D501 ~ D503 (D601 ~ D603) LT5N31A
D504 ~ D506 (D604 ~ D606) LT5P31A

MAIN PCB (2/2) () : R ch

U101	M5220P	U121 (U221)	BIAS TRAP	Q111	2SC1318F
U102	HA1208B	U122	M5218L	Q112 (Q212)	2SC1845E
U103 (U203)	MPX FILTER	U123 (U223)	M54513P	Q113	2SC1845E
U104 (U204)	L.P.F.	U124 (U224)	RT1N241S	Q114	2SA992E
U105	M5220P	U125	M4081BP	Q115 (Q215)	2SD1302S
U106	RT1N241S	U126	M4001BP	Q116	2SA1115F
U107	RT1N241S	U127	RT1P241S	Q117	2SC2603F
U108	RT1N241S	U128	M4049BP	D101 ~ D107	ISS133T-77
U109	M4066BP	U129	M4049BP		
U110	M5218L				
U111 (U211)	L.P.F.	Q101 (Q201)	2SK381D		
U112	M5218L	Q102 (Q202)	2SK381D		
U113	M51143AL	Q103 (Q203)	2SC2603F		
U114	M5218L	Q104	2SC2603F		
U115	DTA143ES	Q105 (Q205)	2SC2603F		
U116	RT1N241S	Q106 (Q206)	2SK381D		
U117	RT1N241S	Q107	2SC2603F		
U118	RT1N241S	Q108 (Q208)	2SD1302S		
U119	RT1N241S	Q109	2SC1741S		
U120	RT1N241S	Q110	2SC1741S		

W-660R/W-460C

TEAC®

ティアック株式会社

本社 180 東京都武蔵野市中町3-7-3
営業部 181 東京都三鷹市下連雀4-15-30

電話 (0422)53-1111代
電話 (0422)45-7731代

製品についてのお問合わせ サービスに関するお問合わせ

札幌営業所	064	札幌市中央区南7条西2-2-2	くぼたビル	電話 (011)521-4101代
仙台営業所	980	仙台市1番町2-5-5	中央ビル	電話 (022)227-1501代
東京営業所	100	東京都千代田区永田町2-10-7	星ガ岡会館	電話 (03)592-1831代
三鷹出張所	180	東京都三鷹市下連雀4-15-30		電話 (0422)45-7721代
千葉出張所	280	千葉市松波1-11-3	石橋松波ビル	電話 (0472)55-1281代
横浜営業所	221	横浜市神奈川区沢渡1-1-1	高島台第一ビル	電話 (045)312-3270代
名古屋営業所	464	名古屋市千種区東山通り3-2-3		電話 (052)782-4581代
静岡出張所	420	静岡市中島大割2861-1		電話 (0542)81-6561代
大阪営業所	564	大阪府吹田市垂水町3-34-10		電話 (06)384-5201代
京都出張所	600	京都市下京区大宮通四条下ル四条大宮町21	新三虎ビル	電話 (075)842-0751代
岡山出張所	700	岡山市青江512番1号		電話 (0862)25-8601代
広島営業所	733	広島市中区中島町10-24		電話 (082)243-3581代
福岡営業所	812	福岡市博多区東光2-2-24		電話 (092)431-5781代

サービスに関するお問合わせ

本社サービス課	180	東京都武蔵野市中町3-7-3		電話 (0422)53-3242代
松本サービスセンター	399 07	塩尻市広丘吉田1007-7		電話 (0263)58-6849代
新潟サービスセンター	950	新潟市東明7-4-1		電話 (0252)86-7640代
大宮サービスセンター	330	大宮市三橋2-846		電話 (0486)42-4551代
沖縄サービスセンター	901 22	沖縄県宜野湾市字嘉友名229		電話 (09889)2-2020代

技術的なお問合わせ

テープデッキ相談室	180	東京都武蔵野市中町3-7-3		電話 (0422)53-9213代
-----------	-----	----------------	--	-------------------

TEAC CORPORATION

MAIN OFFICE: 3-7-3 NAKACHO MUSASHINO TOKYO PHONE (0422) 53-1111
SALES OFFICE: 4-15-30 SHIMORENJAKU MITAKA TOKYO PHONE (0422) 45-7741

TEAC CORPORATION OF AMERICA

7733 TELEGRAPH ROAD MONTEBELLO CALIFORNIA 90640 PHONE (213) 726-0303

TEAC CANADA LTD.

3610 NASHUA DRIVE UNIT 1 & 2 MISSISSAUGA ONTARIO L4V 1L2 PHONE 416-673-3303

TEAC AUSTRALIA PTY., LTD.

115 WHITEMAN STREET SOUTH MELBOURNE VICTORIA 3205 PHONE 699-6000