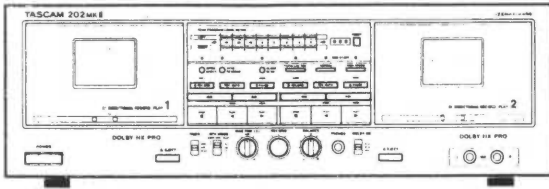


# TASCAM

TEAC Professional Division



## SERVICE MANUAL

---

# 202MK II

Double Auto Reverse Cassette Deck

---

## 1. SPECIFICATIONS

## 仕 様

**Track System** : 4-Track, 2-Channel Stereo

**Heads** : 4 ;

Deck I : 1 Erase and 1 Record/ Playback  
(Rotating)

Deck II : 1 Erase and 1 Record/ Playback  
(Rotating)

**Type of Tape** :

Cassette tape C-60 and C-90 (Philips type)

**Tape Speed** :

4.76 cm/sec (1-7/8 ips),

9.5 cm/sec (3-3/4 ips) (High speed Dub)

**Motors** : 4 ; 2 DC servo motors and 2 DC motors

(2 ea. deck)

**Wow and Flutter (WRMS)** : 0.06 %

**Frequency response (Overall, -20dB)** :

25-19,000 Hz, Metal tape

25-18,000 Hz, CrO<sub>2</sub> tape

25-17,000 Hz, Normal tape

**Signal - to - Noise Ratio (Overall)** :

59 dB (NR off, 3% THD level, Weighted)

69 dB (Dolby B NR on, over 5 kHz)

79 dB (Dolby C NR on, over 1 kHz)

**Fast Winding Time** :

Approximately 110 seconds for C-60

**Inputs** : Line : 87 mV, 50k ohms

Mic : 0.35 mV, 200 ohms

**Outputs** : Line ; 0.46 V for load impedance of 50k ohms  
or more

Headphones ; 8 ohms

**Power Requirements** :

120 V-AC, 60 Hz, 24 W

(U.S.A. Model)

**Dimensions (W × H × D)** :

435 × 140 × 275 mm

(17-1/8" × 5-1/2" × 10-13/16" )

**Weight (net)** : 4.9 kg (10-13/16 lbs.)

**Standard Accessories** :

Input-output connection cords

トラック形式 : 4トラック2チャンネル・ステレオホニク方式

ヘッド構成 : 4 ;

Deck I : 録音/再生ヘッド × 1, 消去ヘッド × 1  
(ロータリー式)

Deck II : 録音/再生ヘッド × 1, 消去ヘッド × 1  
(ロータリー式)

使用テープ :

C-60, C-90タイプ カセット・テープ

テープ速度 :

4.8 cm/sec, 9.5 cm/sec (倍速ダビング時)

モーター : 4 (Deck I, Deck II)

キャプスタン : DCサーボモーター × 1

リール : DCモーター × 1

ワウ・フラッター : 0.06 % (WRMS), ± 0.1 % (W.Peak EIAJ)

周波数特性 (総合) :

25 Hz~20,000 Hz

(30 Hz~19,000 Hz ± 3 dB, EIAJ) : メタル

25 Hz~19,000 Hz

(30 Hz~18,000 Hz ± 3 dB, EIAJ) : クローム

25 Hz~18,000 Hz

(30 Hz~17,000 Hz ± 3 dB, EIAJ) : ノーマル

総合S/N比 :

59 dB (NR OUT, 3% THD レベル, WTD)

69 dB (ドルビー B NR IN, 5 kHz 以上)

79 dB (ドルビー C NR IN, 1 kHz 以上)

早巻き時間 : C-60テープで約110秒

入 力 : ライン : -19dBm (87 mV, 入力インピーダンス  
50 kΩ)

マイク : -67dBm (0.35 mV, 入力インピーダンス  
200 Ω)

出 力 : ライン : -4.5dBm (0.46 V, 負荷インピーダンス  
50 kΩ以上)

ヘッドホン : 8 Ω

電 源 : 100 V AC, 50/60 Hz


消費電力 : 24 W

外形寸法 : 435 (幅) × 140 (高さ) × 275 (奥行き) mm  
(突起部含む)


重 量 : 4.9 kg

付属品 : 入出力コード 2本 (1組)

Dolby noise reduction and HX Pro headroom extension  
manufactured under license from Dolby Laboratories Licensing  
Corporation. HX Pro originated by Bang & Olufsen.

"DOLBY", the double-D symbol  and "HX PRO" are  
trademarks of Dolby Laboratories Licensing Corporation.

ドルビーノイズリダクション及びHXプロヘッドルームエクステ  
ン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。HXプロはバン  
グアンドオルフセンの考案です。

ドルビー、DOLBY、ダブルD記号  及びHXプロはドルビー  
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。

● Specifications were determined using metal tape except  
as noted.

● Improvements may result in specification or feature  
changing without notice.

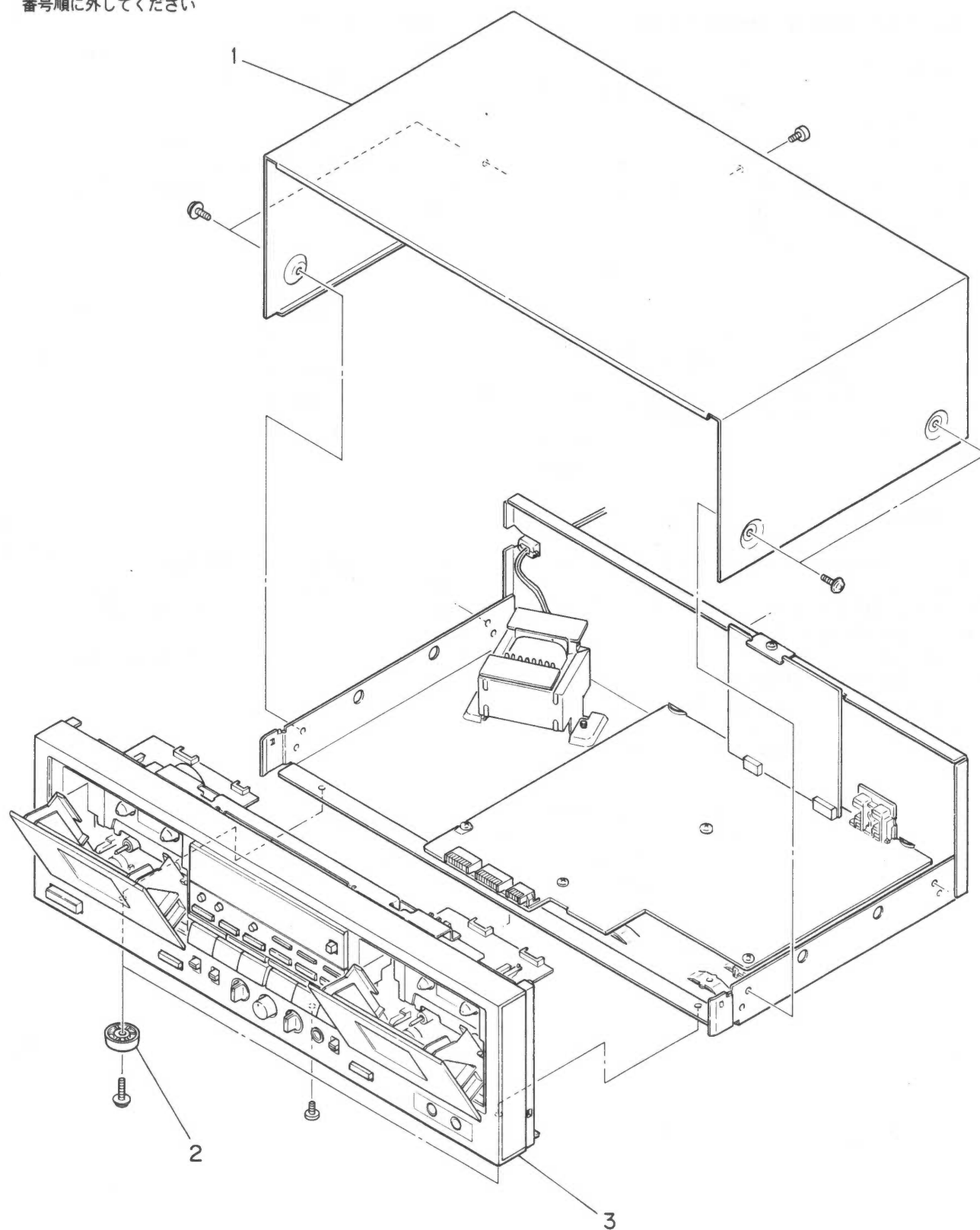
● この仕様は特に表示した項目を除き、当社基準テープを使用して  
測定したものです。

● 仕様及び外観は、改善のため予告なく変更することがあります。

## 2. CASE AND FRONT PANEL REMOVAL

外装部品の外し方

Disassemble in number-order  
番号順に外してください



### 3. ADJUSTMENT AND CHECKS

#### 調整と確認

#### 3-1 MECHANICAL ADJUSTMENT AND CHECKS

#### 3-1 機構部の調整と確認

##### 3-1-1 Wow and flutter (playback method)

##### 3-1-1 ワウ・フラッタ (再生法)

Note: In both FWD and REV play modes, these measurements should be made at the beginning, middle, and the end of the tape.

注. テープの巻始め, 中間, 巻終りで測定する.

- 1) Connect a wow-and-flutter meter to the deck as shown in Fig. 3-1.
- 2) Load and play a TEAC MTT-111 test tape.
- 3) Check that the readings on the wow-and-flutter meter is within 0.15% (JIS WRMS).

- 1) Fig. 3-1のようにワウ・フラッタ・メータを接続する.
- 2) テスト・テープ MTT-111を再生する.
- 3) ワウ・フラッタ値が 0.15% (JIS WRMS) 以内であることを確認する.



Fig. 3-1

##### 3-1-2 Tape speed

##### 3-1-2 テープ速度

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

- 1) Fig. 3-1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・アップする.
- 3) テスト・テープ MTT-111 (3000 Hz) の巻終り部をFWD方向で再生する.
- 4) 周波数値が下表の範囲内になるよう, 各調整 VR を調整する.

	Adjustment point		Adjustment value (Hz)
DECK I	HIGH speed	R03	6,020 ~ 6,040 ( 6030 ± 10 )
	LOW speed	R01	3,010 ~ 3,020 ( 3015 ± 5 )
DECK II	HIGH speed	R04	6,000 ~ 6,020 ( 6010 ± 10 )
	LOW speed	R02	3,000 ~ 3,010 ( 3005 ± 5 )

Notes :

注意

- 1) High speed adjustment should be done first for both decks.
- 2) High speed of both decks is obtained by shorting test pin 4.
- 3) See Fig. 3-2 for adjustment component location.

- 1) 両デッキ共, High Speedを先に調整すること.
- 2) Test Pin 4をショートすると, 両デッキ共, High Speedになります.
- 3) 調整箇所: Fig. 3-2参照

### 3-1-3 Tape Speed Drift

- 1) After doing 3-1-2, in play mode, check that the following figures are obtained at the beginning and at the end of the tape.

	Speed drifting
HIGH speed	Within 90 Hz
LOW speed	Within 45 Hz

### 3-1-4 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.

Take-up :

35 to 75 g·cm (0.55 to 1.04 oz·inch)

Supply :

2.0 to 6.0 g·cm (0.028 to 0.083 oz·inch)

F.F./REW :

70 to 160 g·cm (0.97 to 2.22 oz·inch)

### 3-1-5 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

- 1) 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 flywheel, then insert the shaft into the capstan housing.

### 3-1-3 テープ速度変動

- 1) テスト・テープMTT-111を再生し、巻始めと巻終りの速度差を測定する。

	テープ速度変動
HIGH speed	90 Hz 以内
LOW speed	45 Hz 以内

### 3-1-4 リール・トルク

- 1) カセット形トルク・メータによる測定値が、下記の範囲内であることを確認する。

テイクアップ・トルク : 35 ~ 75 g·cm

バックテンション・トルク : 2.0 ~ 6.0 g·cm

早送り/巻戻しトルク : 70 ~ 160 g·cm

### 3-1-5 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してください。

オイル : TEACスピンドル・オイル (TEAC TZ-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下が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軸へ挿入する。

### 3-2 ELECTRICAL ADJUSTMENT AND CHECKS

#### 3-2-1 Precautions

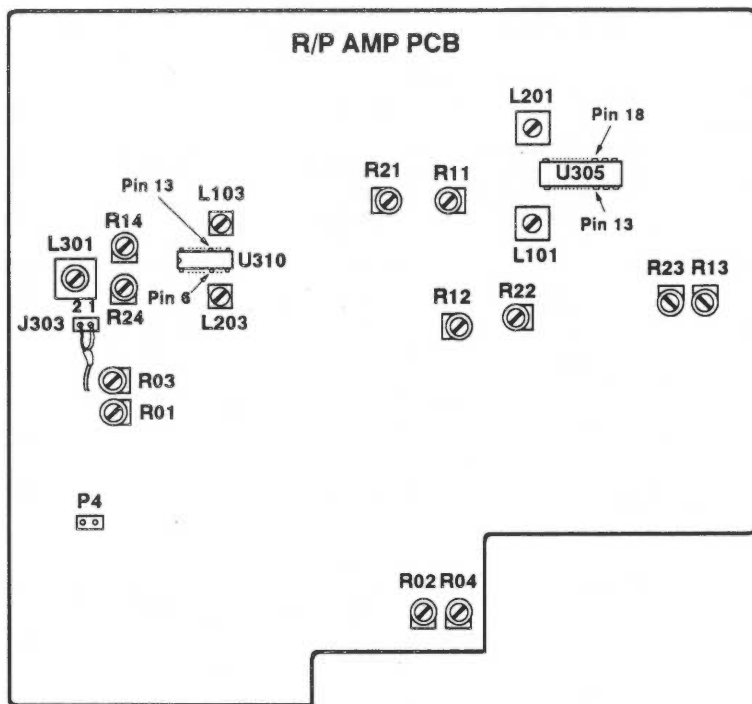
- 1) Before performing adjustments and checks clean and demagnetize the entire tape path.
- 2) In general, adjustments and checks are made in the order of Lch then Rch. Double REF. Nos. indicate Lch /Rch. (Example ; R11/R21)
- 3) 0 dB is referenced to 0.775V. If an AC voltmeter that references 0dB to 1V is used, appropriate compensation should be made.
- 4) The AC voltmeter used in the procedures must have an input impedance of  $1M\Omega$  or more.
- 5) Note the "Deck settings" at the top of each chart. The settings apply to all check for a specific chart unless explicitly stated otherwise.
- 6) Unless specified otherwise, adjustments and checks are made in FWD direction.
- 7) Input terminals and measuring points at each step are the same as previous step, otherwise specified.
- 8) Since this deck has an automatic tape selector, be sure to use test tapes that have tape position detecting holes.

### 3-2 アンプ部の調整と確認

#### 3-2-1 注意

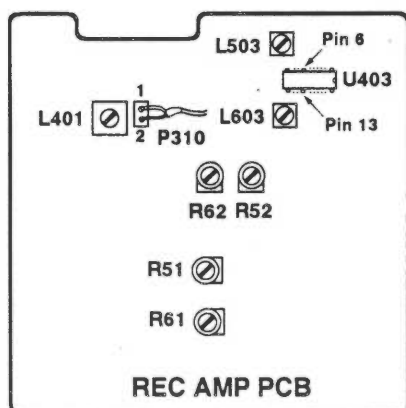
- 1) アンプ部の調整・確認の前に、テープ走行系の消磁と清掃を行ってください。
- 2) 特に指定のない限り、調整・確認はL ch, R chの順序で行ってください。尚R11/R21のように記されている回路番号はL ch/R chを示します。
- 3) 0 dB = 0.775 V.
- 4) 測定に使用するレベル計の入力インピーダンスは  $1 M\Omega$  以上のもを使用してください。
- 5) 各チャート上部の“デッキ・セッティング”は、特に指定のない限りチャート内で共通です。
- 6) 特に指定する以外は、FWD方向で調整・確認を行ってください。
- 7) 特に指定のない場合、入力端子及び測定箇所は直前のステップと同じです。
- 8) 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ください。

3-2-2 Adjustment and check locations  
調整・チェック箇所



R01	[DECK I] Tape speed : LOW
R02	[DECK II] Tape speed : LOW
R03	[DECK I] Tape speed : HIGH
R04	[DECK II] Tape speed : HIGH
R11/R21	Playback level [DECK I]
R12/R22	Playback level [DECK II]
R13/R23	Record level [DECK II]
R14/R24	Record bias [DECK II]
L101/L201	MPX filter
L103/L203	Step up coil [DECK II]
L301	Bias OSC frequency [DECK II]

Fig. 3-2 R/P AMP PCB



R51/R61	Record level [DECK I]
R52/R62	Record bias [DECK I]
L401	Bias OSC frequency [DECK I]
L503/L603	Step up coil [DECK I]

Fig. 3-3 REC AMP PCB

## 3-2-3 PLAYBACK PERFORMANCE 再生系

Deck settings :  
DOLBY NR Switch : OFF

TEAC test tapes :  
MTT-150 : For Dolby level calibration  
MTT-25702 : For playback frequency response  
check for NORMAL

ITEM	SETTING	INPUT SIGNAL	ADJUST (or CHECK)	MEASURING POINT, RESULT	REMARKS
1. REC/PLAY head azimuth 録・再ヘッド アジマス	Connection : Fig. 3-5 Check/adjust in FWD, REV respectively FWD, REVそれぞれ実施	MTT-150	Check	OUTPUT : Phase : within 45°	Fig. 3-7
		MTT-25702 (12.5kHz)	Azimuth screws of R/P head 録・再ヘッドのア ジマス調整ネジ (Fig. 3-6)	Max. output at L & Rch L & Rch 最大出力	
2. Specified output level 規定出力レベル	Connection : Fig. 3-4 FWD PLAY	MTT-150	R11/R21 [DECK I] R12/R22 [DECK II]	DOLBY T.P U305 Pin18/Pin13 : 338mV (-6dB)	Reference output level
	FWD/REV PLAY	MTT-150	Check	OUTPUT : - 4.5dB ± 1dB (411mV~518mV)	規定出力レベル
3. Meter level メータ・レベル		MTT-150	Check	PEAK LEVEL METER: 0dB ± 1	
4. PHONES output level PHONES出力	Connection : Fig. 3-8	MTT-150	Check	PHONES : - 19dB ± 3dB (61.5mV~123mV)	8 Ω load 8 Ω 負荷
5. Playback frequency response 再生周波数特性	Connection : Fig. 3-4	MTT-25702	Check	OUTPUT : Fig. 3-9	
6. Playback S/N ratio 再生S/N比	Connection : Fig. 3-4	Leader tape with 120 μ (NORMAL) type case ノーマル・テープの リーダー部を再生	Check	46dB min.	Ratio of -4.5dB reference level to noise 規定出力レベルと の比

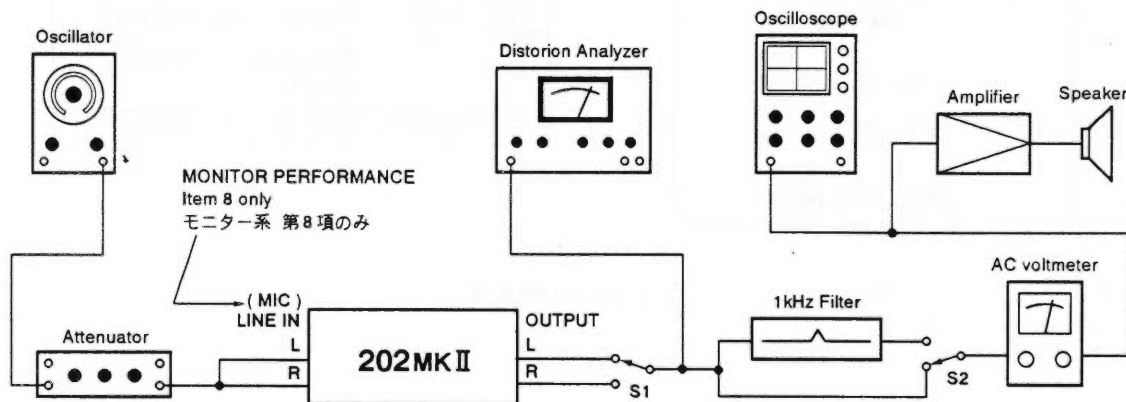


Fig. 3-4 Basic test setup

3-2-4 MONITOR PERFORMANCE モニタ系

Deck settings :  
DOLBY NR Switch : OFF

ITEM	SETTING	INPUT SIGNAL	ADJUST (or CHECK)	MEASURING POINT, RESULT	REMARKS
7. Min. LINE input level 最小ライン入力レベル	Connection : Fig. 3-4 REC LEVEL Control : MAX	LINE IN : 400Hz/- 19dB (87mV)	Check	OUTPUT : - 4.5dB ± 3dB (327mV~652mV)	
8. Min. MIC input level 最小マイク入力レベル	Connection : Fig. 3-4 REC LEVEL Control : MAX	MIC : 400Hz/- 67dB (346 μV)	Check	OUTPUT : - 4.5dB ± 3dB (327mV~652mV)	
9. Specified LINE input level 規定ライン入力レベル	Connection : Fig. 3-4	LINE IN : 400Hz/- 9dB (275mV)	REC LEVEL Control	OUTPUT : - 4.5dB (462mV)	After adjusting, do not move (Specific position) 調整後はREC LEVEL Cont.を動かさないこ (規定位置)
10. Monitor S/N ratio モニタ SN 比	Connection : Fig. 3-4	LINE IN : No signal	Check	60dB min.	Ratio of -4.5dB reference level to noise 規定出力 -4.5dB との比

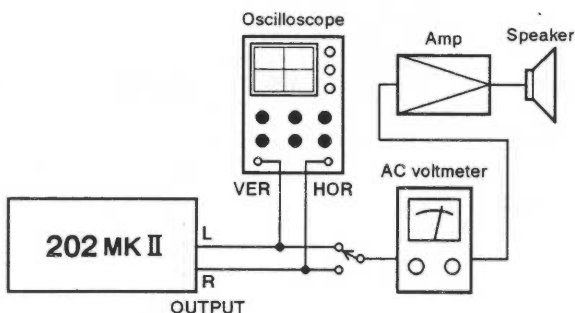


Fig. 3-5 Test setup for azimuth check

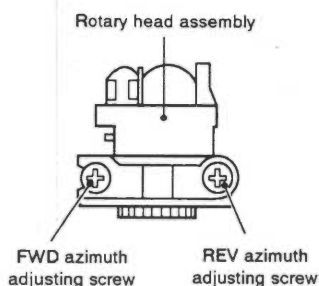


Fig. 3-6 Azimuth screw location

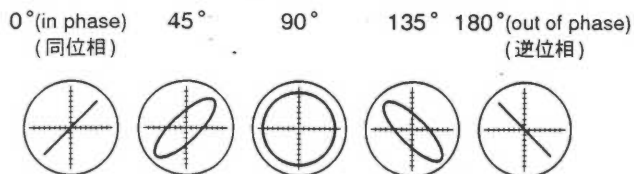


Fig. 3-7 Confirming phase relationship

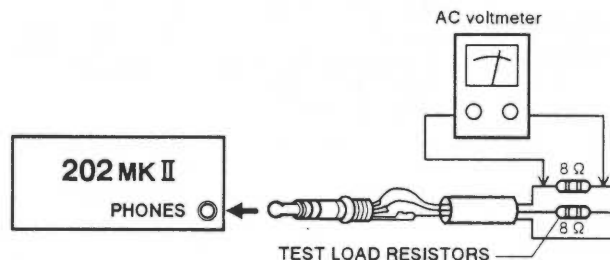


Fig. 3-8 Test setup for PHONES check

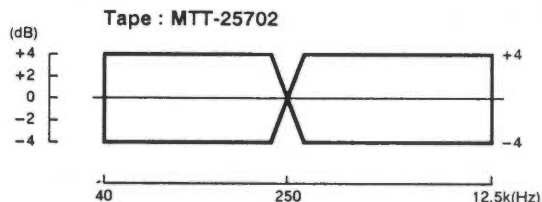


Fig. 3-9 Playback frequency response

## 3-2-5 RECORDING PERFORMANCE 録音系

Deck settings :

DOLBY NR Switch : OFF

REC LEVEL Control : Specified position (item 9)

BIAS FINE Control : Center position

TEAC recording test tapes :

MTT-5511 : For NORMAL

MTT-5561 : For CrO<sub>2</sub>

MTT-5571 : For METAL

ITEM	SETTING	INPUT SIGNAL	ADJUST (or CHECK)	MEASURING POINT, RESULT	REMARKS
11. Bias OSC バイアス発振器	Connection : Fig. 3-10 TAPE : MTT-5511 Mode : RECORD	LINE IN : No signal 無信号	L401	P310-1 : 100kHz	DECK I
	Connection : Fig. 3-11 TAPE : MTT-5511 Mode : RECORD		L301	J303-1 : 100kHz	DECK II
12. Step up coil ステップ・アップ・コイル	Connection : Fig. 3-12 TAPE : MTT-5571 Mode : RECORD	LINE IN : No signal 無信号	L503/L603	U403 Pin6/Pin13 : Min. DC voltage DC電圧最小	DECK I
	Connection : Fig. 3-13 TAPE : MTT-5571 Mode : RECORD		L103/L203	U310 Pin6/Pin13 : Min. DC voltage DC電圧最小	DECK II
13. Record bias 録音バイアス	Connection : Fig. 3-4 TAPE : MTT-5511 Mode : REC/PLAY	LINE IN : 250Hz/-34dB 10kHz/-34dB (15.5mV)	R52/R62	OUTPUT : Nearly equal level at both frequencies 両出力レベルがほぼ等 しくなるよう調整	DECK I
	Connection : Fig. 3-4 TAPE : MTT-5511 Mode : REC/PLAY		R14/R24		DECK II
14. MPX filter MPXフィルタ	Connection : Fig. 3-4 Mode : REC-PAUSE	LINE IN : 19kHz ± 10Hz/ -12dB (195mV)	L101/L201	30dB min.	Ratio of -4.5dB ref. level to signal 規定出力レベル -4.5dBとの比
15. Record level 録音レベル	Connection : Fig. 3-4 TAPE : MTT-5511 Mode : REC/PLAY	LINE IN : 400Hz/-12dB (195mV)	R51/R61	OUTPUT : -7.5dB ± 1dB (291mV~367mV)	DECK I
	Connection : Fig. 3-4 TAPE : MTT-5511 Mode : REC/PLAY		R13/R23		DECK II
16. Total harmonic distortion 総合歪率	Connection : Fig. 3-4 TAPE : MTT-5511 TAPE : MTT-5561 TAPE : MTT-5571	LINE IN : 400Hz/-12dB (195mV)	Check	NORMAL : 2.0 % CrO <sub>2</sub> : 2.5 % METAL : 2.5 %	
17. Overall frequency response 総合周波数特性	Connection : Fig. 3-4 TAPE : MTT-5511 TAPE : MTT-5561 TAPE : MTT-5571	LINE IN : 60Hz~12.5kHz/ -34dB (15.5mV)	Check	OUTPUT : Fig. 3-14	
18. BIAS FINE range BIAS FINE可変 幅	Connection : Fig. 3-4 TAPE : MTT-5511	LINE IN : 10kHz/-34dB (15.5mV)	BIAS FINE control (+ ↔ -)	3dB min.	Recorded signal level variation 録再出力レベル の変化
19. Overall S/N ratio 総合S/N比	Connection : Fig. 3-4 TAPE : MTT-5511 TAPE : MTT-5561 TAPE : MTT-5571	LINE IN : No signal 無信号	Check	NORMAL : 45dB min. CrO <sub>2</sub> : 46dB min. METAL : 46dB min.	Ratio of -4.5dB ref. level to noise 規定出力レベル -4.5dBとの比

ITEM	SETTING	INPUT SIGNAL	ADJUST (or CHECK)	MEASURING POINT, RESULT	REMARKS
20. Erase efficiency 消去効果	Connection : Fig. 3-4 1kHz B.P.F. in TAPE : MTT-5571	LINE IN : 1kHz/+1dB (870mV)	Check	65dB min.	Find the difference between the 1kHz recorded portion and the erased portion. 1kHz 録音部分とそれを消去した部分との出力レベルの差.
21. REC MUTE function REC MUTE 効果	Connection : Fig. 3-4 1kHz B.P.F. in TAPE : MTT-5571	LINE IN : 1kHz/+1dB (870mV)	Check	55dB min.	Find the difference between the 1kHz portion and the "REC MUTE" portion. 1kHz 録音部分と REC MUTE 部分との出力レベルの差.
22. Channel separation チャンネル・セパレーション	Connection : Fig. 3-4 1kHz B.P.F. in TAPE : MTT-5561	LINE IN : Lch 1kHz/-9dB (275mV) Rch No signal	Check	35dB min.	Find the difference between the 1kHz recorded portion (L ch) and the no signal portion (R ch). 1kHz 録音部分 (Lch) と無信号録音部分 (Rch) との出力レベルの差.
23. Adjacent track crosstalk トラック間クロストーク	Connection : Fig. 3-4 TAPE : MTT-5571	LINE IN : Lch No signal Rch 125Hz/-9dB (275mV)	Check	40dB min.	Invert tape and play Rch track. Check leakage level against the output reference of previously recorded portion. 1kHz 録音部分 (R ch) の再生出力レベルを基準レベルとし、テープを反転して再生した時の R ch 出力レベルとの差.

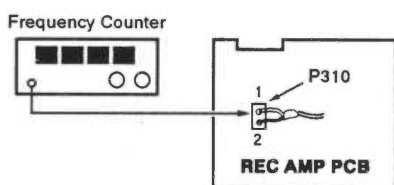


Fig. 3-10 Test setup for bias OSC adjustment

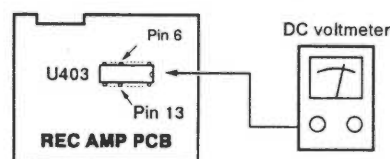


Fig. 3-12 Test setup for step up coil adjustment

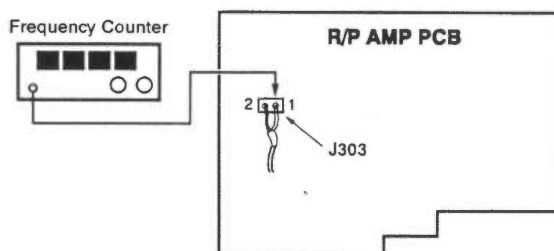


Fig. 3-11 Test setup for bias OSC adjustment

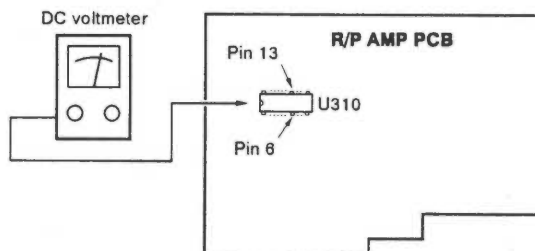


Fig. 3-13 Test setup for step up coil adjustment

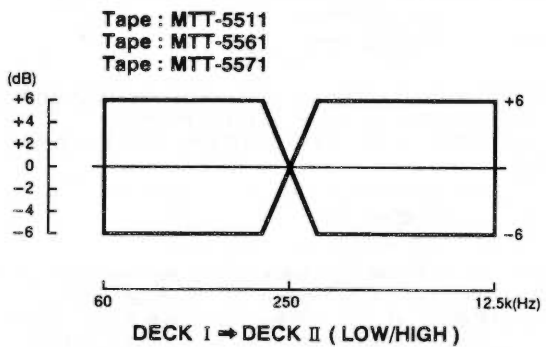
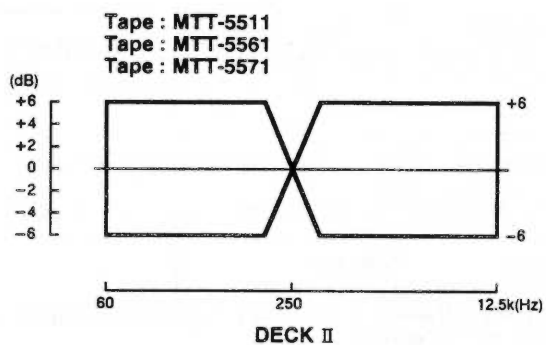



Fig. 3-14 Overall frequency response


## PARTS LIST SECTION

### パーツ・リスト部

#### NOTES

- PC boards shown are viewed from parts side.
- Parts marked with \* require longer delivery time.
- The parts with no reference number or no parts number in the exploded views are not supplied.
- As regards the resistors and capacitors, refer to the circuit diagrams contained in this manual.
-  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.
- Parts of [ ] mark can be used only with the version designated.  
[J]: JAPAN [US]: U.S.A.

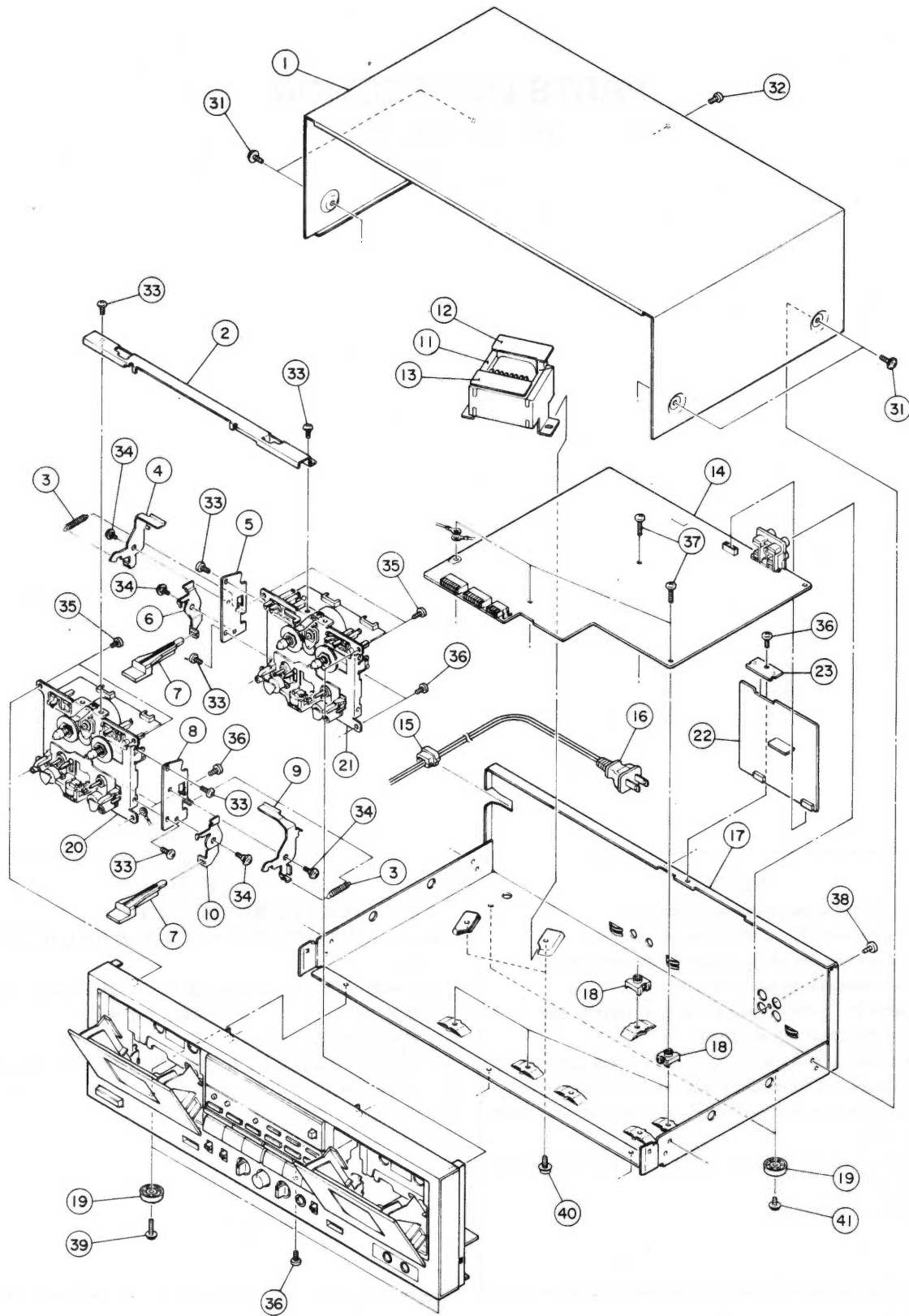
#### 注意

- プリント基板は部品面が示されています。
- \* 印の部品は納期が若干かかります。あらかじめご了承ください。
- 分解図に部番のない部品及び品番のない部品は供給しません。
- 標準の抵抗、コンデンサーは省略してあります。回路図を参照してください。
-  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。
- 仕向先。  
[J]: JAPAN [US]: U.S.A.

# 4. EXPLODED VIEWS AND PARTS LIST

分解図とパーツ・リスト

EXPLODED VIEW-1



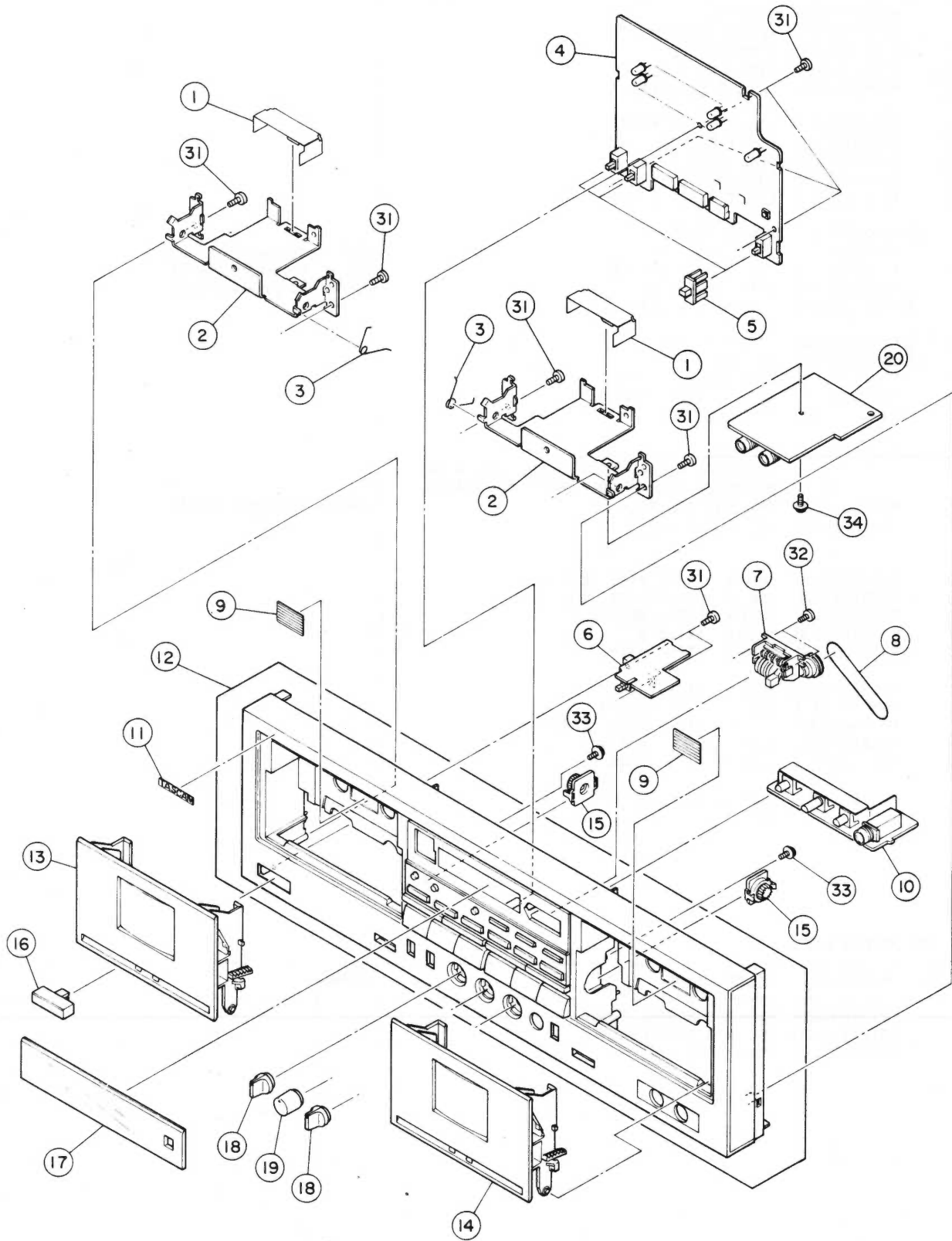
## EXPLODED VIEW-I

REF.NO.	PARTS NO.	DESCRIPTION	REMARKS
1- 1	*9260155900	BONNET	
1- 2	*9260150501	MECHA. HOLDER	
1- 3	*9260151400	EJECT SPRING	
1- 4	*9260152201	LID HOOK R (2)	
1- 5	*9260152400	HOOK BASE R (2)	
1- 6	*9260152601	EJECT PLATE R (2)	
1- 7	*9260151201	EJECT BUTTON	
1- 8	*9260152300	HOOK BASE L (1)	
1- 9	*9260152101	LID HOOK L (1)	
1-10	*9260152501	EJECT PLATE L (1)	
1-11	△ *9125087400	POWER TRANS.	
1-12	*9155096500	TRANS PCB (1)	Refer to page 20
1-13	*9145096601	TRANS PCB (2) ASSY	Refer to pages 20&22
1-14	*9145096135	R/P AMP PCB ASSY	Refer to pages 21&22
1-15	△ *9121000100	BUSHING, #2271	
1-16	△ *9109025800	AC CORD [US]	
	△ *9109026100	AC CORD [J]	
1-17	*9260169701	MAIN CHASSIS [US]	
	*9260169801	MAIN CHASSIS [GE]	
1-18	*9260151300	PCB SUPPORT	
1-19	*9260127100	FOOT 21	
1-20		CASSETTE MECHA. ASSY 1R/P CMAY2Z416A	
1-21		CASSETTE MECHA. ASSY 2R/P CMAY2Z415A	
1-22	*9145097100	REC AMP PCB ASSY	Refer to pages 22&23
1-23	*9260151700	REC PCB PLATE	
1-31	*9783053006	SCREW, CAP-S M3X6 (BLK)	
1-32	*9783593008	SCREW, C-TITE M3X8 (NI-BLK)	
1-33	*9783202605	SCREW, BTT-S M2.6X5	
1-34	*9260152700	SCREW, 4X1.3 S	
1-35	*9783603010	SCREW, BTT-P M3X10	
1-36	*9783203006	SCREW, BTT-S M3X6	
1-37	*9783203014	SCREW, BTT-S M3X14	
1-38	*9783613008	SCREW, BTT-P M3X8 (BLK)	
1-39	*9783103014	SCREW, CAP-S M3X14	
1-40	*9783294008	SCREW, BTB-S M4X8	
1-41	*9783103008	SCREW, CAP-S M3X8	

## INCLUDED ACCESSORIES

REF.NO.	PARTS NO.	DESCRIPTION	REMARKS
	*9101391400	OWNER'S MANUAL [US]	
	*9101391600	OWNER'S MANUAL [J]	
	*9109027110	CORD, IN-OUT	

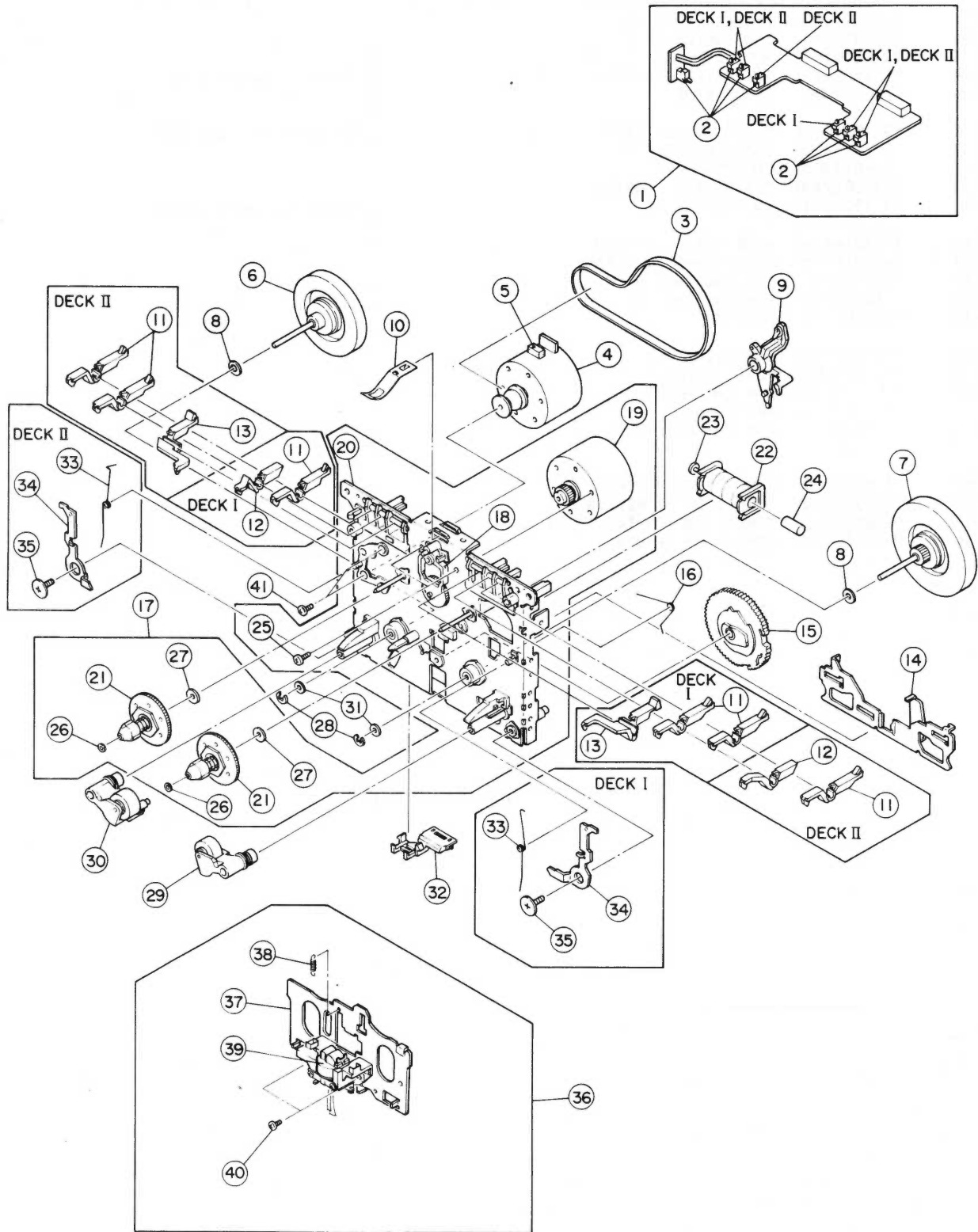
EXPLODED VIEW-2



## EXPLODED VIEW-2

REF.NO.	PARTS NO.	DESCRIPTION	REMARKS
2- 1	*9260151800	SHEALD PLATE (C)	
2- 2	*9260150401	LID HOLDER	
2- 3	*9260151500	HOLDE SPRING	
2- 4	*9145096231	KEY/METER PCB ASSY	Refer to pages 20&22
2- 5	*9260170000	SLIDE KNOB	
2- 6	*9145096400	POWER SW PCB ASSY	Refer to pages 20&22
2- 7	9260153700	TAPE COUNTER	
2- 8	9260152000	COUNTER BELT	
2- 9	*5800822400	PLATE, TAPE INDICA.	
2-10	*9145096331	VR PCB ASSY	Refer to pages 20&22
2-11	*5720244300	NAME PLATE, TASCAM	
2-12	*9260170100	FRONT PANEL SUB ASSY	
2-13	*9260168600	LOADING CASE A	
2-14	*9260168700	LOADING CASE B	
2-15	*9260077301	DAMPER	
2-16	*9260132900	BUTTON, POWER	
2-17	*9260168800	METER COVER 3	
2-18	*9260151000	PAN CAP KNOB	
2-19	*9260170600	REC KNOB	
2-20	*9145096901	MIC AMP PCB ASSY	Refer to pages 21&23
2-31	*9783603008	SCREW, BTT-P M3X8	
2-32	*9783602608	SCREW, BTT-P M2.6X8	
2-33	*9783413008	SCREW, CAP-P M3X8 (BLK)	
2-34	*9783103006	SCREW, CAP-S M3x6	

EXPLODED VIEW-3



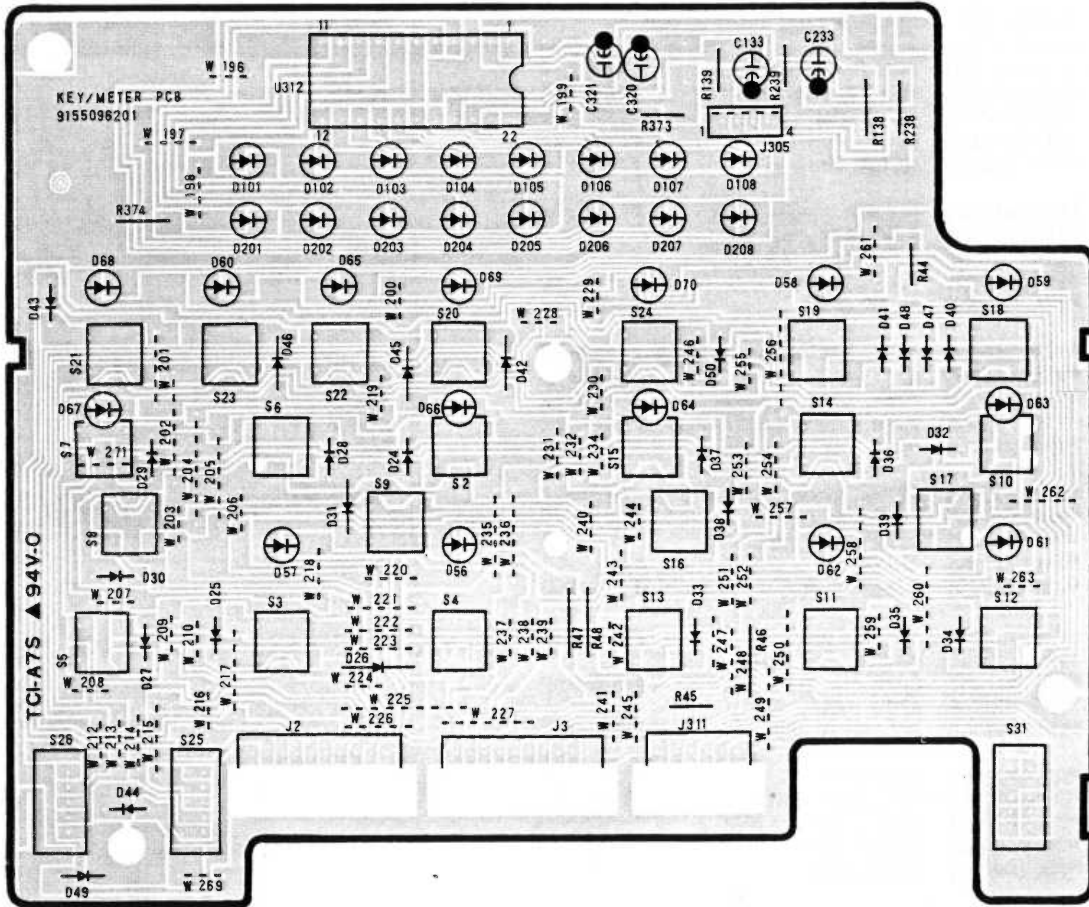
## EXPLODED VIEW-3

REF.NO.	PARTS NO.	DESCRIPTION		REMARKS
3- 1	*5761848800	PCB CONTROL BLK	F567-437	(DECK 1)
	*5761848700	PCB CONTROL BLK	F567-436	(DECK 2)
3- 2	5761748700	SW, PUSH		
3- 3	5761790900	BELT, MAIN	FF17G-21	
3- 4	5761794400	MOTOR MAIN BLK	F525-256	
3- 5	*5761841000	HOLDER CUSHION (L)	FF17C-12	
3- 6	5761791400	F/W ASSY, (2.0)		
3- 7	5761791300	F/W ASSY, (2.2)		
3- 8	*5761689200	POLYSLIDER	FJ111-30	
3- 9	*5761849800	PLAY ARM	FD45G-13	
3-10	*5761849600	CASSETTE HOLD. SPRING	FC52H-13	
3-11	*5761840500	REC SENS. LEVER	FD44T-14	
3-12	*5761849900	PACK SENS. LEVER	FD44W-12	(DECK 1)
	*5761790700	PACK SENS. LEVER (L)	FD44Y-12	(DECK 2)
3-13	*5761794800	METAL SENS. LEVER	FD44U-12	(DECK 1)
	*5761790800	METAL SENS. LEVER	FD44V-12	(DECK 2)
3-14	*5761849700	SLIDE PLATE	FC52F-15	
3-15	5761840400	GEAR, CAM 3R		
3-16	*5761791200	SLIDE SP	FK28R-11	
3-17	*5761847100	CHASSIS BLK	F511-506	
3-18	5761792200	IDLER, BLK	F517-049	
3-19	5761792300	MOTOR, REEL BLK		
3-20	*5761847200	CHASSIS BASE BLK	F612-145	
3-21	5761792600	REEL BASE, BLK		
3-22	*5761792700	SOLENOID BLK	F765-263	
3-23	*5761792900	SOLENOID	FL39K-12	
3-24	*5761793100	PIN, SOLENOID	FL39H-12A	
3-25	*5761838900	SCREW, PAN 2.6X6.4	FG156-11A	
3-26	*5761745600	POLYSLIDER		
3-27	*5761745500	POLYSLIDER		
3-28	*5761791900	E-RING	UG13U-15	
3-29	5761791500	P.ROLLER ASSY, R		
3-30	5761850200	PINCH ROLLER ASSY (L)	FR20M-22	
3-31	*5761791000	POLYSLIDER, 2.6X0.5	FJ111-14	
3-32	*5761790300	LEAD HOLDER	FD45H-15	
3-33	*5761850100	EJECT PREVENT. SP (R)	FK28L-16	(DECK 1)
	*5761791100	EJECT PREVENT. SP (L)	FK28M-15	(DECK 2)
3-34	*5761849500	EJECT PREVENT.ARM (R)	FC39M-68	(DECK 1)
	*5761849400	EJECT PREVENT.ARM (L)	FC39L-70	(DECK 2)
3-35	*5761837000	SCREW, STEP	UG15S-11A	
3-36	*5761847300	PLATE HD BLK	F513-493	
3-37	*5761852200	HEAD BASE	FC52E-36	
3-38	*5761793300	HB SP	FK26N-14	
3-39	5761848000	HADKH5557B	FUI7N-61A	
3-40	*5761848200	SCREW,PAN TT 2.0X5	UG190-11	
3-41	*5761791800	SCREW, PAN SW 2.6X5	FG114-14	

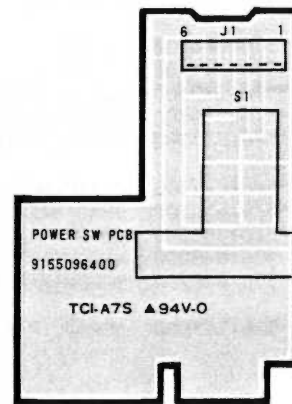
# 5. PC BOARDS AND PARTS LIST

基板図とパーツ・リスト

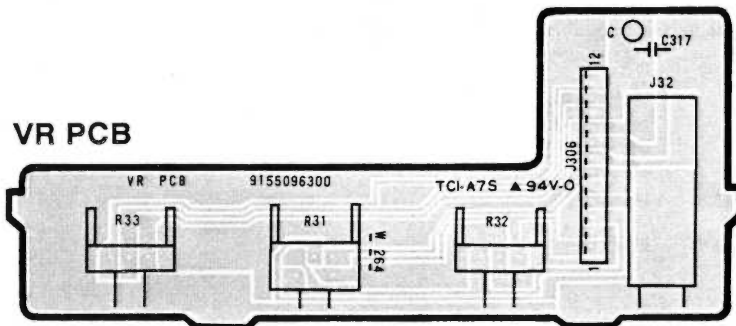
## KEY/METER PCB



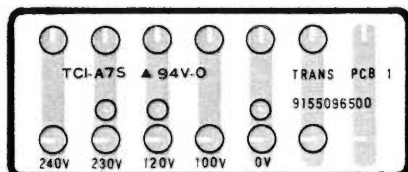
## POWER SW PCB



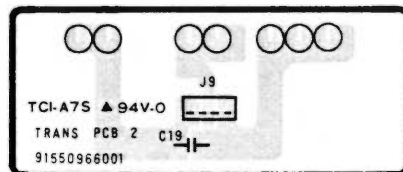
## VR PCB



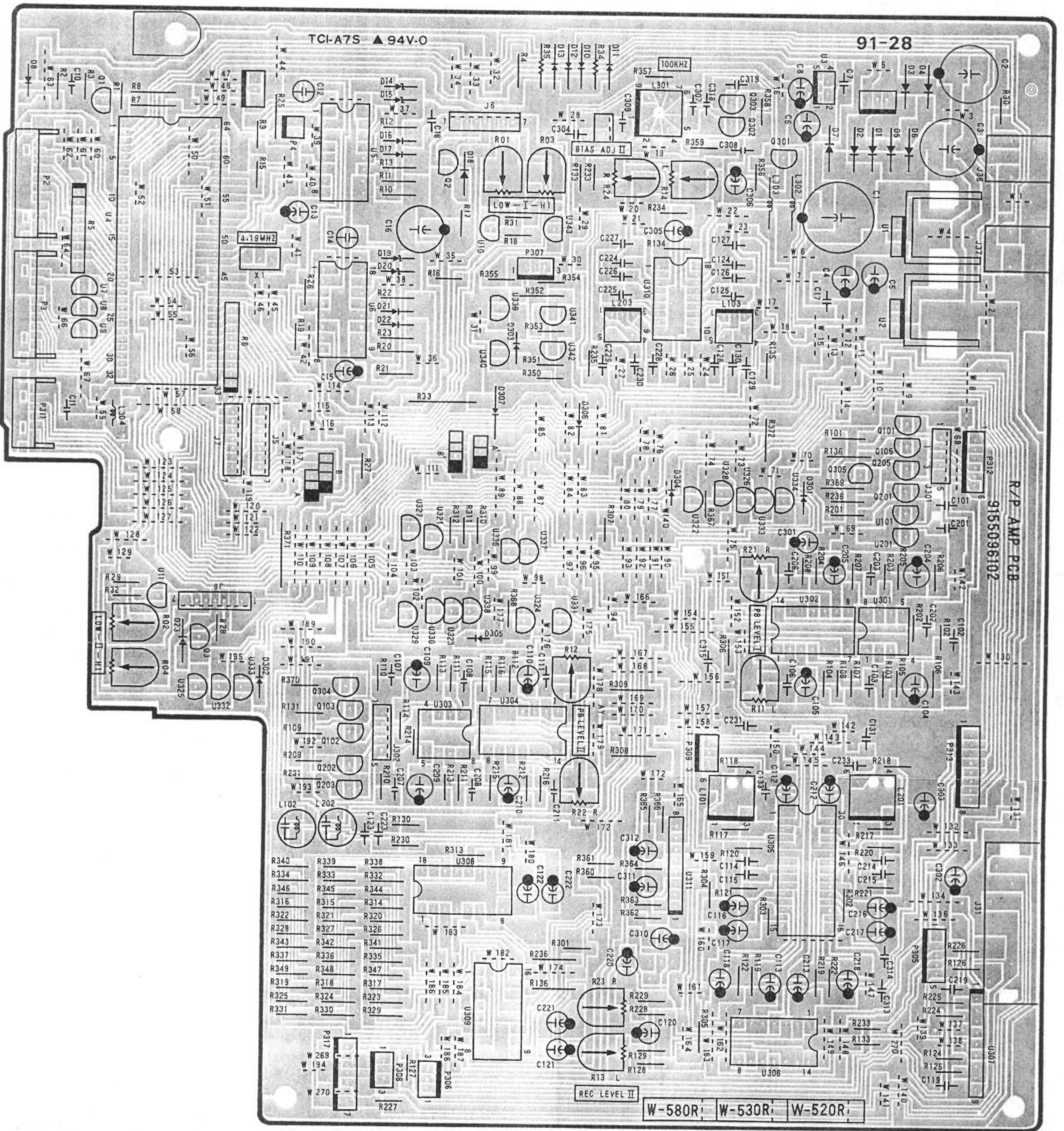
## TRANS PCB 1



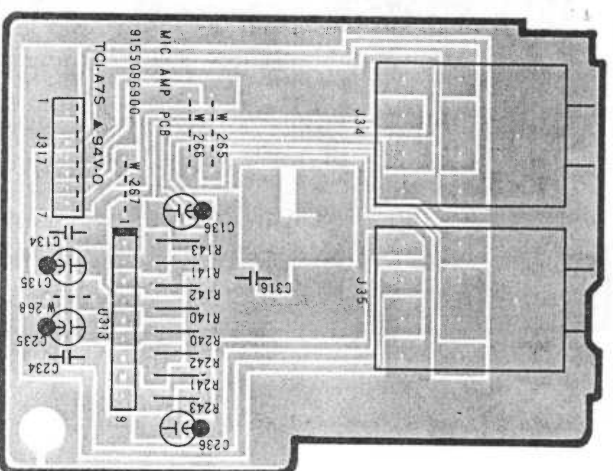
## TRANS PCB 2



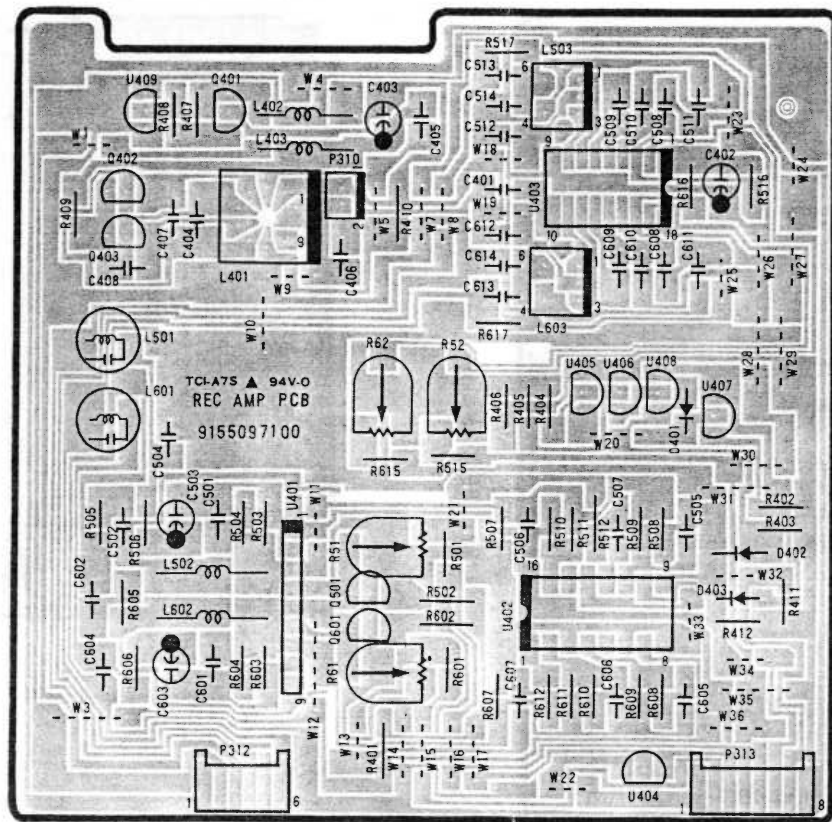
R/P AMP PCB



MIC AMP PCB



REC AMP PCB



KEY/METER PCB ASSY

REF. NO.	PARTS NO.	DESCRIPTION
	*9145096231	KEY/METER PCB ASSY
	*9155096201	KEY/METER PCB
D 24- 44	9165022150	DIODE, ISS133T
D 46- 50	9165022150	DIODE, ISS133T
D 56- 63	9174014220	LED(YEL) 5 SLR54YC-R
D 64	9174014320	LED(RED) 5 SLR-54VC-P
D 66	9174014220	LED(YEL) 5 SLR54YC-R
D 67	9174014320	LED(RED) 5 SLR-54VC-P
D 68, 69	9174014220	LED(YEL) 5 SLR54YC-R
D 70	9174014320	LED(RED) 5 SLR-54VC-P
D101,201	9174014220	LED(YEL) 5 SLR54YC-R
D102,202	9174014220	LED(YEL) 5 SLR54YC-R
D103,203	9174014220	LED(YEL) 5 SLR54YC-R
D104,204	9174014220	LED(YEL) 5 SLR54YC-R
D105,205	9174014220	LED(YEL) 5 SLR54YC-R
D106,206	9174014320	LED(RED) 5 SLR-54VC-P
D107,207	9174014320	LED(RED) 5 SLR-54VC-P
D108,208	9174014320	LED(RED) 5 SLR-54VC-P
J 2, 3	*5334076800	PLUG, CONNECTOR 10P
J311	*5334076500	PLUG, CONNECTOR 6P
SW 2- 21	9136000502	SW, TACT
SW23, 24	9136000502	SW, TACT
SW25, 26	9134010400	SW, SLIDE 1-3
SW31	9135031700	SW, SLIDE 2-3
U312	5220446800	IC, IR2E28

VR PCB ASSY

REF. NO.	PARTS NO.	DESCRIPTION
	*9145096331	VR PCB ASSY
	*9155096300	VR PCB
	*9260151900	SHIELD PLATE
J 32	*9143190010	PHONE JACK
R 31	9172019300	VR, 50KX2
R 32	9172019400	VR, 100KX1
R 33	9172019500	VR, 5KBX1

POWER SW PCB ASSY

REF. NO.	PARTS NO.	DESCRIPTION
	*9145096400	POWER SW PCB ASSY
	*9155096400	POWER SW PCB
S 1	Δ 9135031000	SW, POWER

TRANS PCB (2) ASSY

REF. NO.	PARTS NO.	DESCRIPTION
	*9145096601	TRANS PCB (2) ASSY
	*9155096601	TRANS PCB (2)

R/P AMP PCB ASSY

REF. NO.	PARTS NO.	DESCRIPTION
	*9145096135	R/P AMP PCB ASSY
	*9155096102	R/P AMP PCB
	*9229021000	EARTH PLATE (A) P.C.B.
	*9260069800	HEAT SINK
C 1	Δ 9117302100	C, ELEC 3300UF/16V
C 2, 3	Δ 9117273510	C, ELEC 2200UF/16V
C 6	Δ 9117213020	C, ELEC 220UF/16V
C 17	Δ 9115827120	C, CERAMIC 0.1UF/50V
C 19	Δ 9115818820	C, CERAMIC 0.01UF/50V
D 1- 7	Δ 9165020508	DIODE, 1N4003
D 8	9165022150	DIODE, ISS133T
D 14	9166030752	DIODE, ZENER MTJ7.5C
D 15	9166030952	DIODE, ZENER MTJ4.7C
D 16, 17	9165022150	DIODE, ISS133T
D 18	9165020508	DIODE, 1N4003
D 19	9166030752	DIODE, ZENER MTJ7.5C
D 20	9166030952	DIODE, ZENER MTJ4.7C
D 21, 22	9165022150	DIODE, ISS133T
D 23	9165020508	DIODE, 1N4003
D301-307	9165022150	DIODE, ISS133T
J 31	*5330506600	JACK, PIN 4P
L101,201	9173007000	LOW PASS FILTER MPX
L102,202	9122017600	COIL, BIAS TRAP 100KHZ
L103,203	9173007700	COIL, STEP UP
L301	9173007200	COIL, OSC, 100KHZ
L302,303	9173006350	COIL, 220UH
L304	9173006300	COIL, 220UH
P 1	*9143231000	PLUG, CONNECTOR 3P (WHT)
P 2, 3	*5334076400	SOCKET, CONNECTOR 10P
P 4	*9160013000	TP PIN JST, 2P
P305	*9143233000	PLUG, CONNECTOR 5P (WHT)
P306,307	*9143231000	PLUG, CONNECTOR 3P (WHT)
P308	*9143231020	PLUG, CONNECTOR 3P (RED)
P309	*9143231000	PLUG, CONNECTOR 3P (WHT)
P311	*5334076100	SOCKET, CONNECTOR 6P
P312	*9140098006	BASE PIN, 6P
P313	*9140098008	BASE PIN, 8P
P317	*9143235000	PLUG, CONNECTOR 7P
Q 1	9163309420	TR, 2SC1815GR
Q 2, 3	9163309820	TR, 2SC2120Y
Q101,201	9163309420	TR, 2SC1815GR
Q102,202	9163309420	TR, 2SC1815GR
Q103,203	9163308821	TR, 2SC1845F
Q105,205	9163308821	TR, 2SC1845F
Q301	9163011320	TR, 2SA933LN-S
Q302,303	9163309420	TR, 2SC1815GR
Q304,305	9163308821	TR, 2SC1845F
R 5, 6	9111244000	R, ARRAY 22KX8 (8R1M)
R 01, 02	9112017000	VR, SEMI-FIXED 20K (B)
R 03, 04	9112003000	VR, SEMI-FIXED 10K (B)
R 11, 21	9112003000	VR, SEMI-FIXED 10K (B)
R 12, 22	9112003000	VR, SEMI-FIXED 10K (B)
R 13, 23	9112017000	VR, SEMI-FIXED 20K (B)
R 14, 24	9112003000	VR, SEMI-FIXED 10K (B)
R 33	Δ 9114101510	R, METAL OXIDE 2W 2.2

## R/P AMP PCB ASSY

REF. NO.	PARTS NO.	DESCRIPTION
U 1	△ 5220432200	IC, M5F78M07L
U 2	△ 5220432900	IC, M5F79M07L
U 3	△ 9167018500	IC, L78LR05D-MA
U 4	5220826900	LSI, UPD75108CW-C70
U 5, 6	9167020000	IC, TB6501P
U 7- 11	9163011220	TR, DTA124ES
U101,201	9163310420	TR, DTC124ES
U301	9167014000	IC, UPC4570C
U302	9167009800	IC, TC4066BP
U303	9167014000	IC, UPC4570C
U304	9167009800	IC, TC4066BP
U305	9167019200	IC, CXA1331S
U306	9167009800	IC, TC4066BP
U307	9167012100	IC, NJM4558S
U308	9167019600	IC, CXA1198AP
U309	9167018900	IC, BU4051B
U310	9167012800	IC, UPC1297CA
U311	5220426200	IC, M51143AL
U321-326	9163310420	TR, DTC124ES
U327-337	9163011220	TR, DTA124ES
U338-340	9163310420	TR, DTC124ES
U341,342	9163011220	TR, DTA124ES
U343	9163310420	TR, DTC124ES
X 1	5347017700	OSC, EFO-GC4194A4

## MIC AMP PCB ASSY

REF. NO.	PARTS NO.	DESCRIPTION
	*9145096901	MIC AMP PCB ASSY
	*9155096900	MIC AMP PCB
J 33, 34	*9143281001	MIC JACK
U313	9167012100	IC, NJM4558S

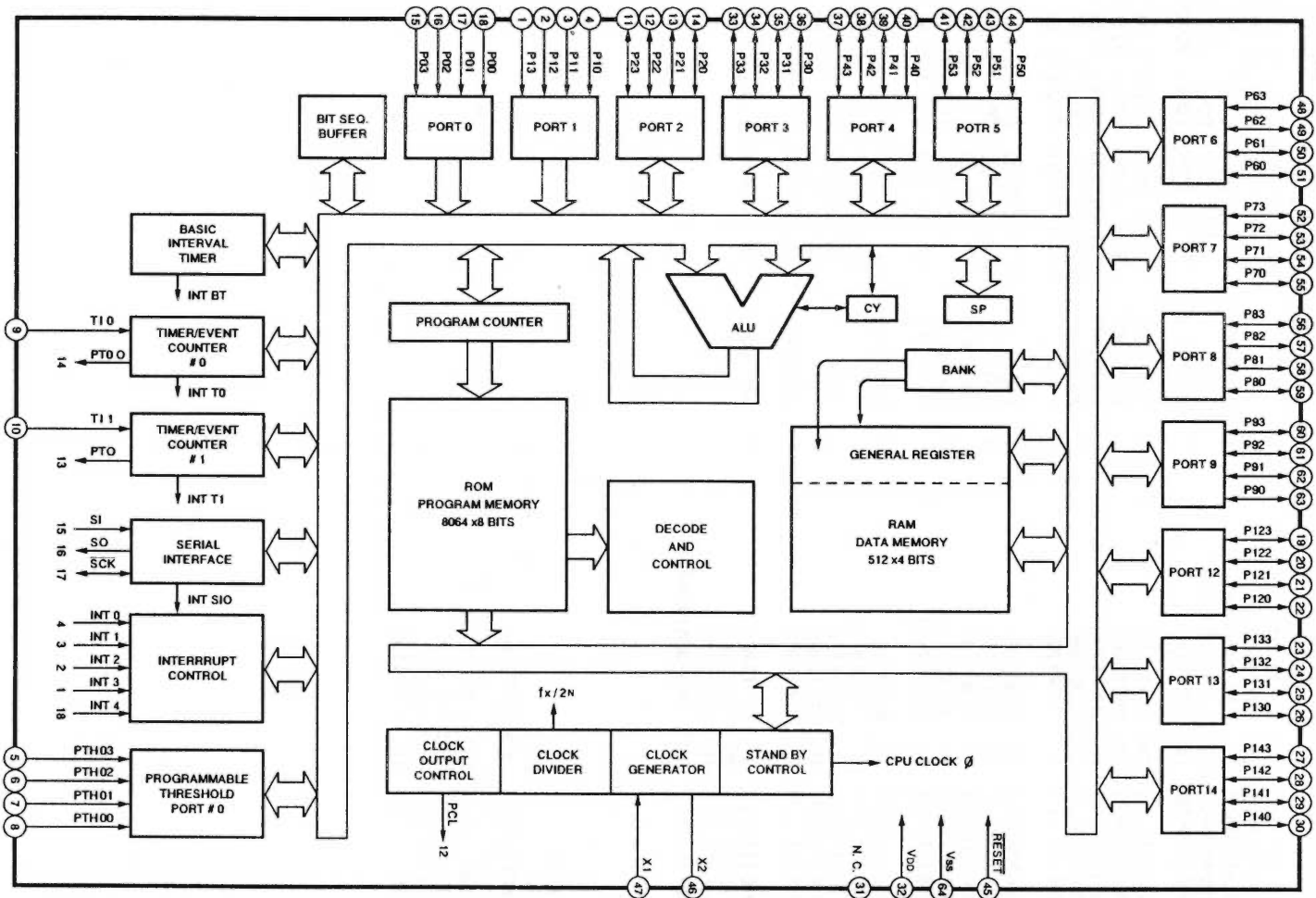
## REC AMP PCB ASSY

REF. NO.	PARTS NO.	DESCRIPTION
	*9145097100	REC AMP PCB ASSY
	*9155097100	REC AMP PCB
D401-403	9165022150	DIODE, 1SS133T
L401	9173007200	COIL, OSC 100KHZ
L402,403	9173006350	COIL, 220UH
L501,601	9122017600	COIL, BIAS TRAP 100KHZ
L502,602	9122018900	COIL, 8.2MH
L503,603	9173007700	COIL, STEP UP
P312	*9140097006	SOCKET, 6P
P313	*9140097008	SOCKET, 8P
P401	*9143230000	CONNECTOR PLUG, 2P (WHT)
Q401	9163011320	TR, 2SA933LN-S
Q402,403	9163309420	TR, 2SC1815GR
Q501,601	9163310620	TR, 2SC2878A
R 51, 61	9112017000	VR, SEMI-FIXED 20K (B)
R 52, 62	9112003000	VR, SEMI-FIXED 10K (B)
U401	9167012100	IC, NJM4558S
U402	9167019800	IC, BU4052B
U403	9167012800	IC, UPC1297CA
U404-406	9163011220	TR, DTA124ES
U407-409	9163310420	TR, DTC124ES

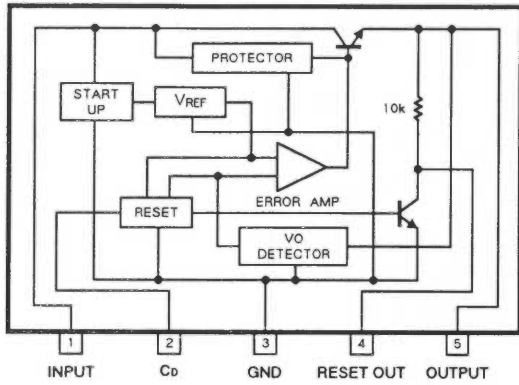
# 6. IC BLOCK DIAGRAMS

IC フロット・ダイグラム

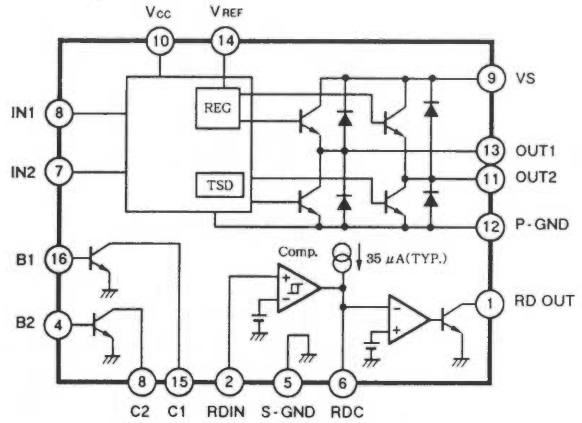
U4  $\mu$ PPD75108CW



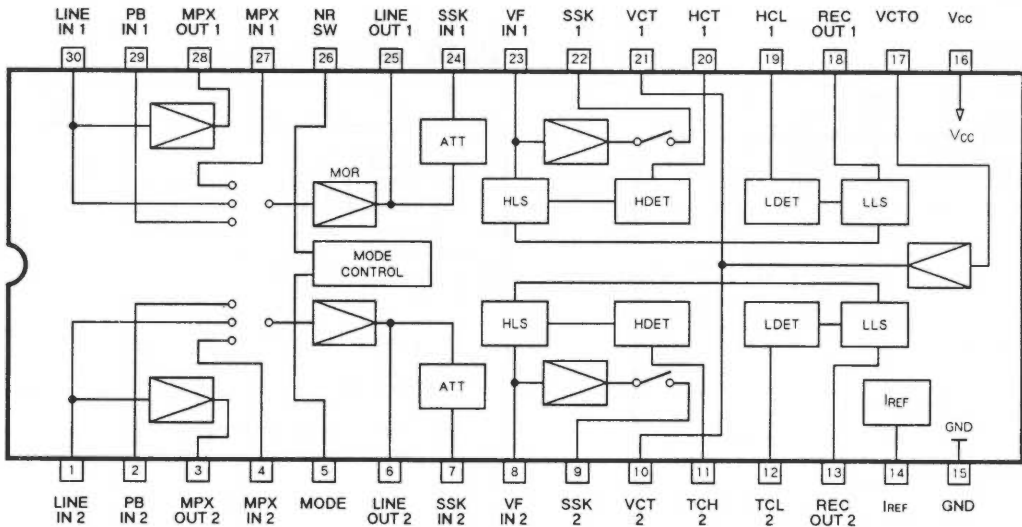
U3 L78LR05D-MA



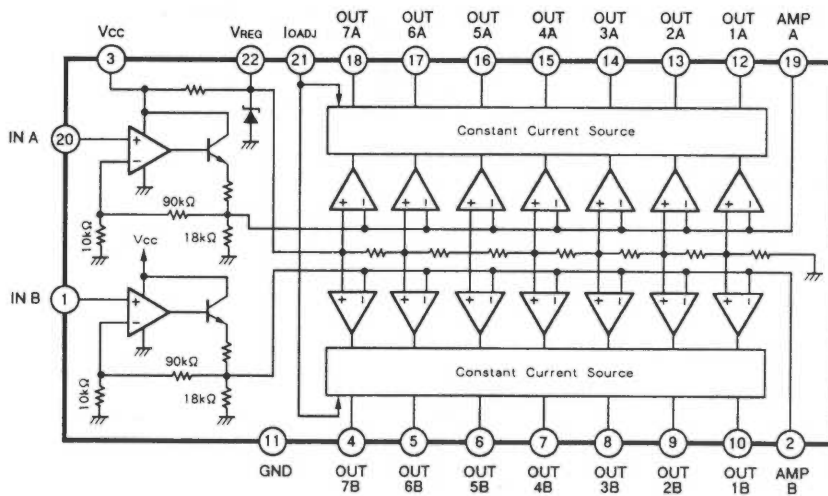
U5, U6 TB6501P



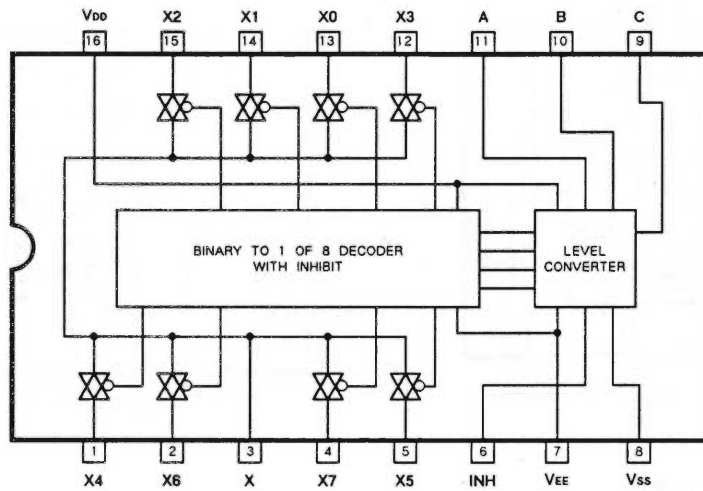
U305 CXA1331S



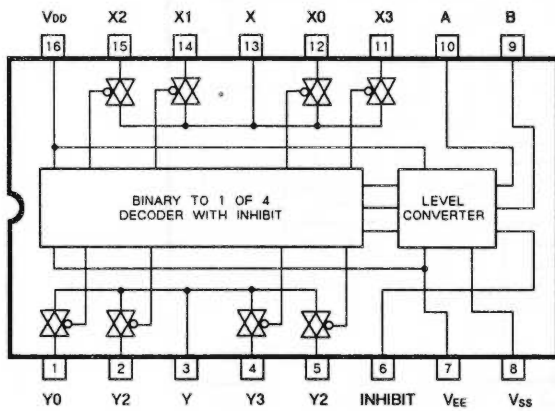
U312 IR2E28



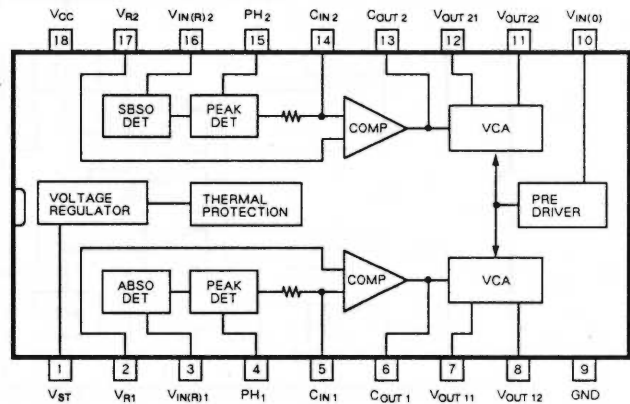
U309 BU4051B



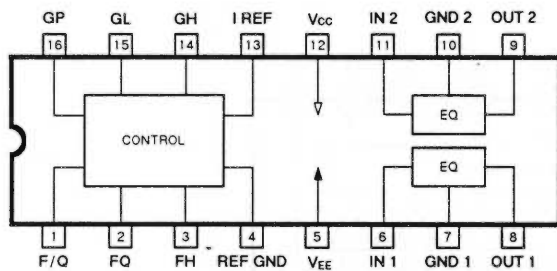
U402 BU4052B



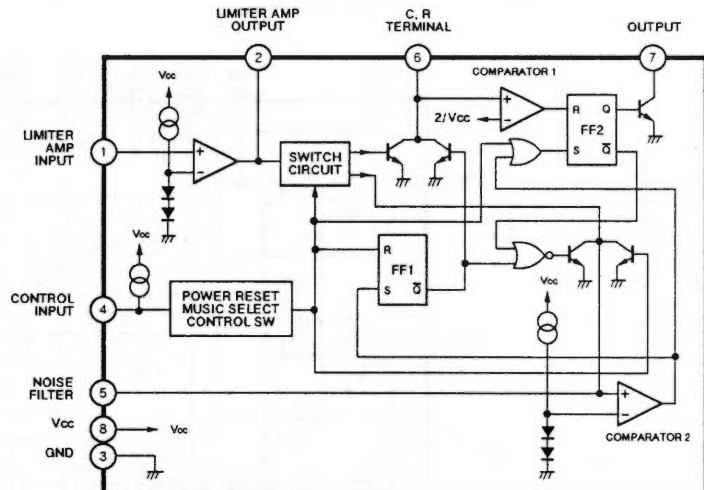
U310  $\mu$ PC1297CA



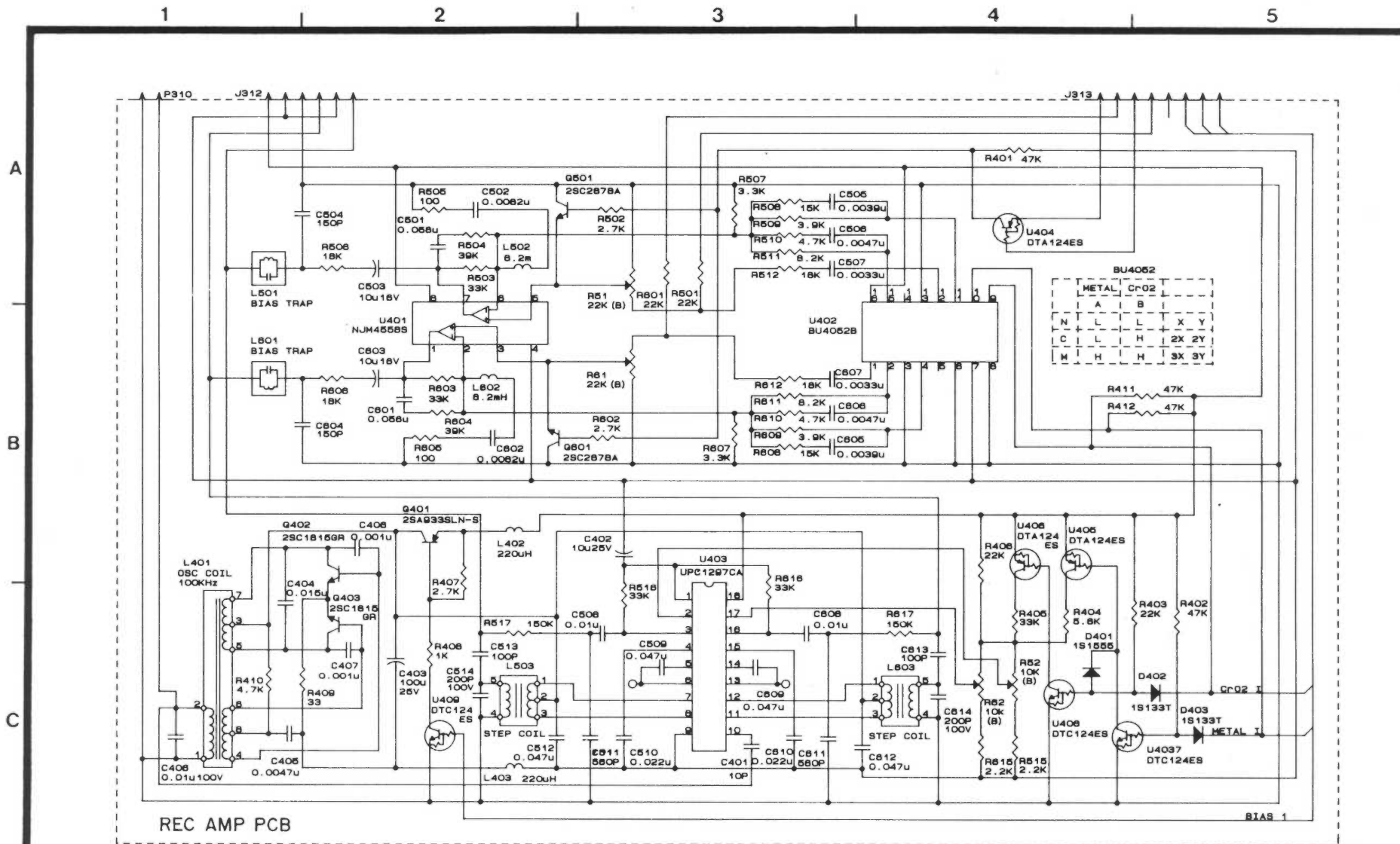
U308 CXA1198AP



U311 M51143AL



# TASCAM SCHEMATIC DIAGRAM 202MKII REC AMP SECTION



Double Auto Reverse Cassette Deck

# 202MKII

1st Issue, March 1992

# TASCAM SCHEMATIC DIAGRAM 202MKII CONTROL SECTION

1 2 3 4 5 6 7 8

A  
B  
C  
D  
E

