TCM-453V/454VK

SERVICE MANUAL

Ver 1.1 1998. 3

Photo: TCM-454VK

US Model
Canadian Model
AEP Model
(TCM-453V/454VK)
E Model
East European Model
Chinese Model
(TCM-453V)

Model Name Using Similar Mechanism	NEW
Tape Transport Mechanism Type	MT-453V-118

SPECIFICATIONS

Recording system
2-track 1 channel monaural
Frequency range
250-6,300Hz
Speaker
Approx. 3.6 cm (1⅞ in.) dia.
Power output
300mW (at 10 % harmonic distortion)
Input
Microphone input jack (minijack) sensitivity 0.14 mV for 3 kilohms or lower impedance microphone
Output
Earphone jack (minijack) for 8 - 300 ohms earphone
Variable range of the tape speed
from +30% to –15%
Power requirements
- Two size R6 (AA) batteries (not supplied): 3V DC
- Two NC-AA rechargeable batteries (1.2 V) (supplied to TCM-454VK)

DC IN 3 V jack accepts:
- Sony AC power adaptor (supplied to TCM-454VK) or AC-E30HG AC power adaptor (not supplied) suitable in the country where the unit is to be used.

Dimensions (w/h/d) (incl. projecting parts and controls)
113 × 91 × 37 mm (4½ × 3 ⅝ × 1½ in.)
Mass (not incl. batteries)
170g (6.0 oz.)
Supplied accessories
Hand strap (1) (attached to the unit)
AC power adaptor (1) (TCM-454VK)
Battery charger adaptor (1) (TCM-454VK)
Rechargeable batteries (TCM-454VK) (2)
(Models for U.S.A. and Canada: NC-AA, 1.2V, 600mAh, Ni-Cd)
(Model for Europe: NC-AA, 1.2V, 700mAh, Ni-Cd)

Design and specifications are subject to change without notice.

CASSETTE-CORDER

MICROFILM

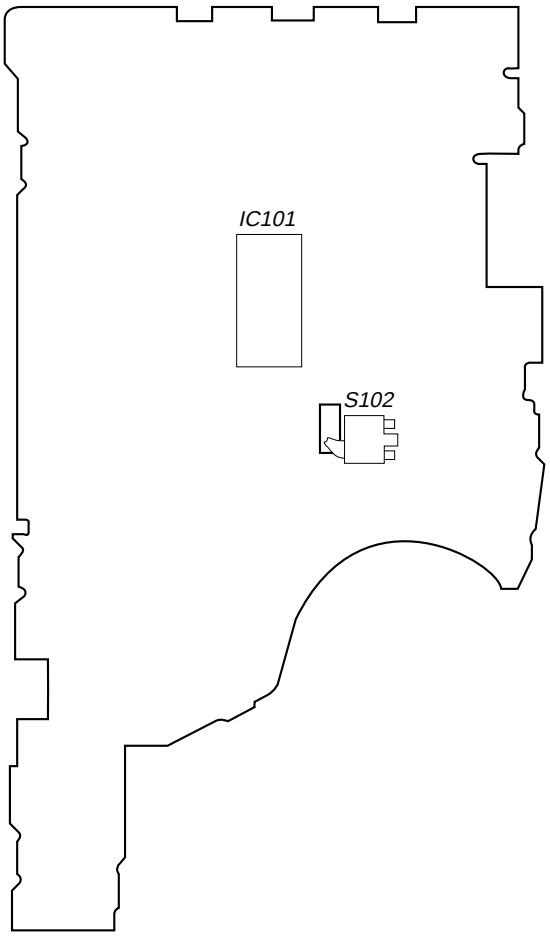
SONY®

TABLE OF CONTENTS

SECTION 1
SERVICING NOTES

In this set, the S102 (power) detects REC/PLAYBACK on.
It is mounted on the MAIN board, and therefore the REC/PLAYBACK on cannot be detected with the MAIN board removed.
When making an operation check and voltage check of mechanical deck with the MAIN board removed, fix the S102 at turn on.

[MAIN BOARD] (Conductor Side)



Notes on chip component replacement

- Never reuse a disconnected chip component.
- Notice that the minus side of a tantalum capacitor may be damaged by heat.

SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY MARK ⚠ OR DOTTED LINE WITH MARK ⚠ ON THE SCHEMATIC DIAGRAMS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

ATTENTION AU COMPOSANT AYANT RAPPORT À LA SÉCURITÉ!

LES COMPOSANTS IDENTIFIÉS PAR UNE MARQUE ⚠ SUR LES DIAGRAMMES SCHÉMATIQUES ET LA LISTE DES PIÈCES SONT CRITIQUES POUR LA SÉCURITÉ DE FONCTIONNEMENT. NE REMPLACER CES COMPOSANTS QUE PAR DES PIÈCES SONY DONT LES NUMÉROS SONT DONNÉS DANS CE MANUEL OU DANS LES SUPPLÉMENTS PUBLIÉS PAR SONY.

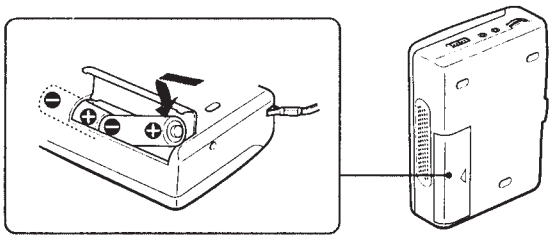
This section is extracted from instruction manual.

Preparing a Power Source

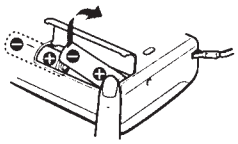
Choose one of the following power sources.

Dry Batteries

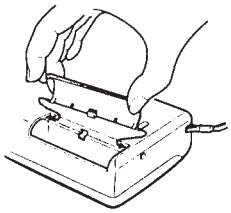
Make sure that nothing is connected to the DC IN 3V jack.



To take out the batteries

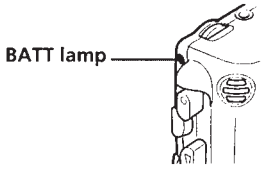


To attach the battery compartment lid if it is accidentally detached

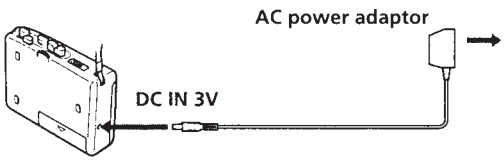


When to replace the batteries

Replace the batteries with new ones or charge the batteries (TCM-454VK only) when the BATT lamp dims.

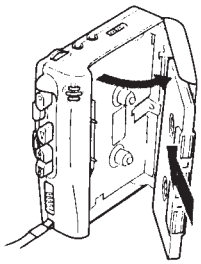


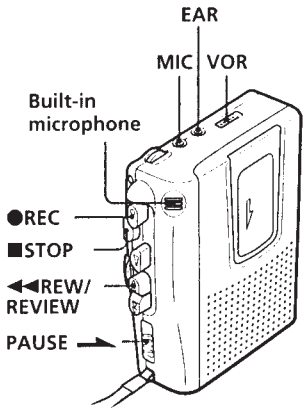
House Current



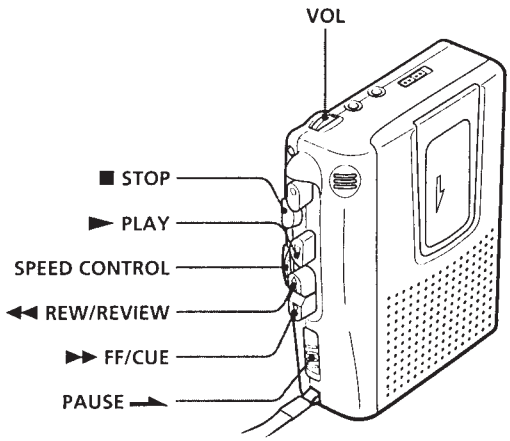
Recording

You can record right away with the built-in microphone. Make sure that nothing is connected to the MIC jack.

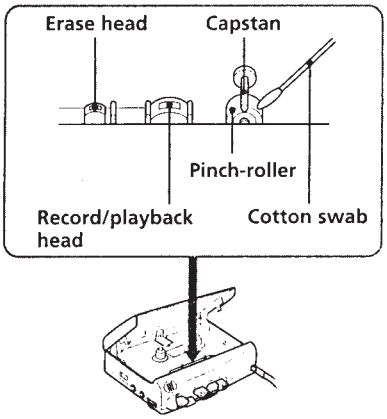




Playing a Tape

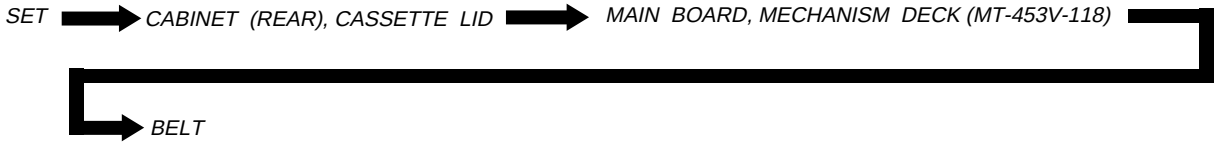


Maintenance



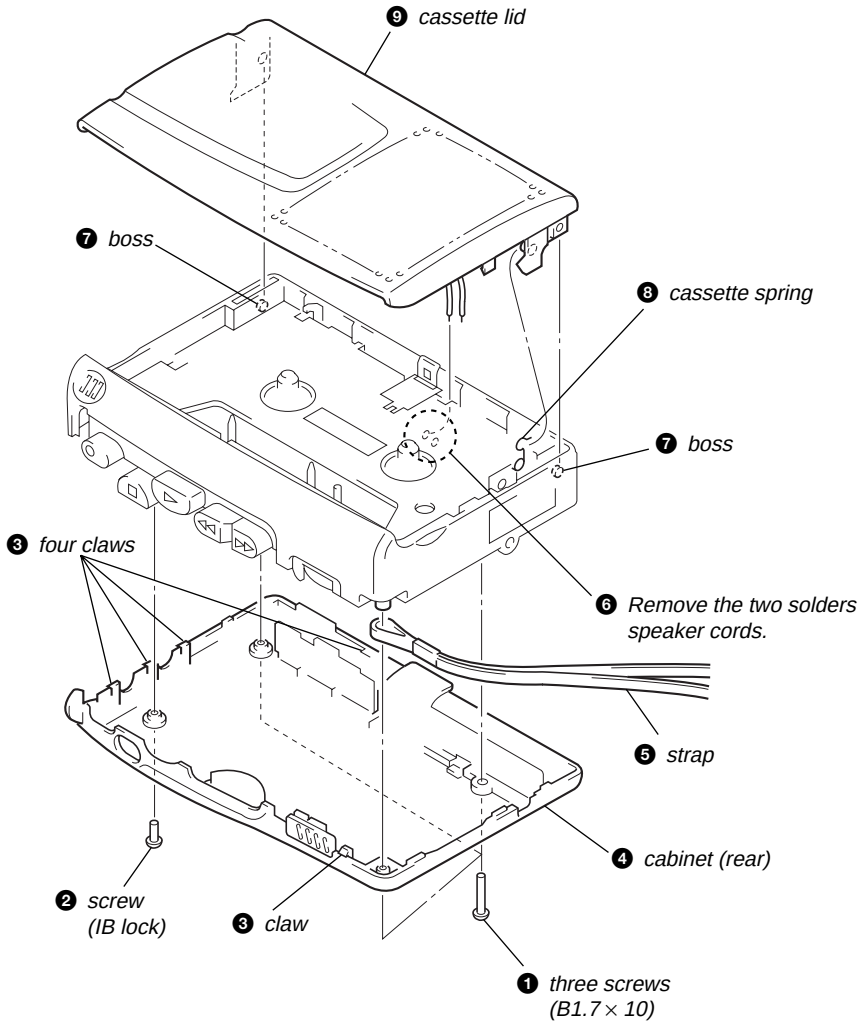
SECTION 3
DISASSEMBLY

• This set can be disassembled in the order shown below.

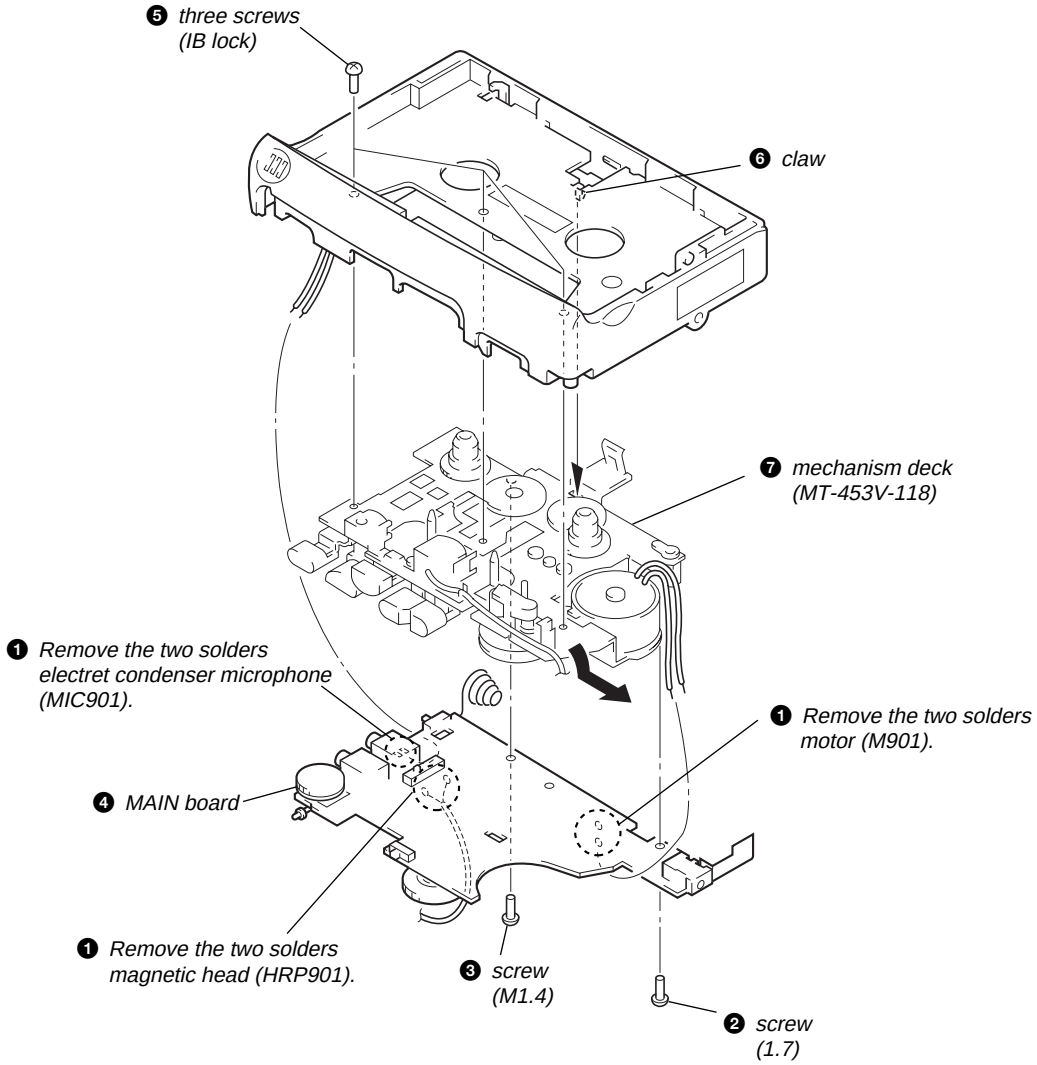


Note: Follow the disassembly procedure in the numerical order given.

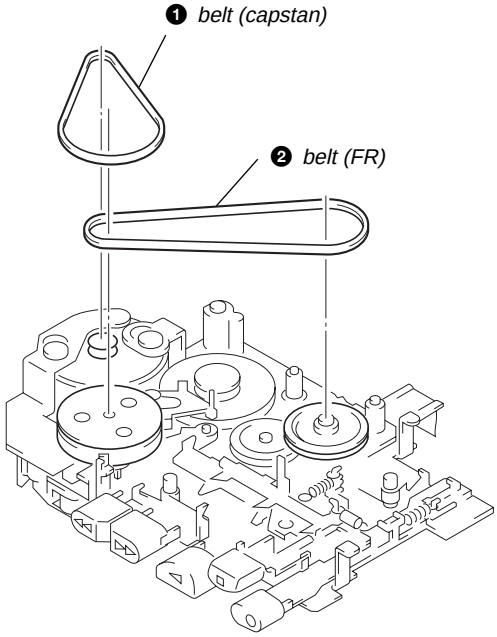
CABINET (REAR), CASSETTE LID



MAIN BOARD, MECHANISM DECK (MT-453V-118)

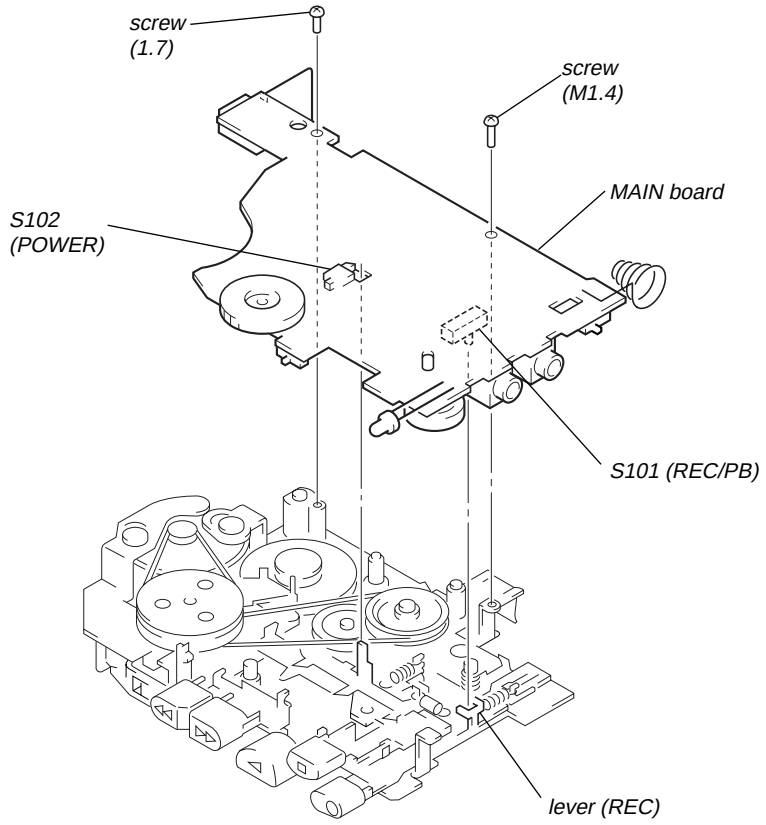


BELT



INSTALLATION MAIN BOARD

On installation MAIN board, adjust to the S101 and the S102.



SECTION 4
MECHANICAL ADJUSTMENTS

1. Clean the following parts with a denatured-alcohol-moistened swab:
   record/playback head pinch roller
   erase head rubber belt
   capstan idlers
2. Demagnetize the record/playback head with a head demagnetizer. (Do not bring the head demagnetizer close to the erase head.)
3. Do not use a magnetized screwdriver for the adjustments.
4. After the adjustments, apply suitable locking compound to the parts adjusted.
5. The adjustments should be performed with the rated power supply voltage (2.5 V) unless otherwise noted.

Torque Measurement

Mode	Torque Meter	Meter Reading
FWD	CQ-102C	more than 20 g•cm (more than 0.28 oz•inch)
Forward Back Tension		0.5 - 3 g•cm (0.007 - 0.04 oz•inch)
FF	CQ-201B	more than 50 g•cm (more than 0.69 oz•inch)
REW		

Tape Tension Measurement

Mode	Tension Meter	Meter Reading
FWD	CQ-403C	more than 50 g (more than 1.76 oz)

SECTION 5
ELECTRICAL ADJUSTMENTS

Precaution

- Supplied voltage: 2.5 V
- Switch and control position
  VOR switch (S104): OFF
  PAUSE switch (S105): OFF
  VOL (RV101): mechanical mid
  SPEED CONTROL (RV602): mechanical center

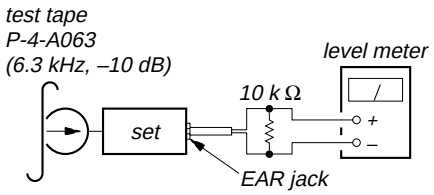
Test Tape

Type	Signal	Used for
P-4-A063	6.3 kHz, –10 dB	head azimuth adjustment
WS-48A	3 kHz, 0 dB	tape speed adjustment

0 dB=0.775 V

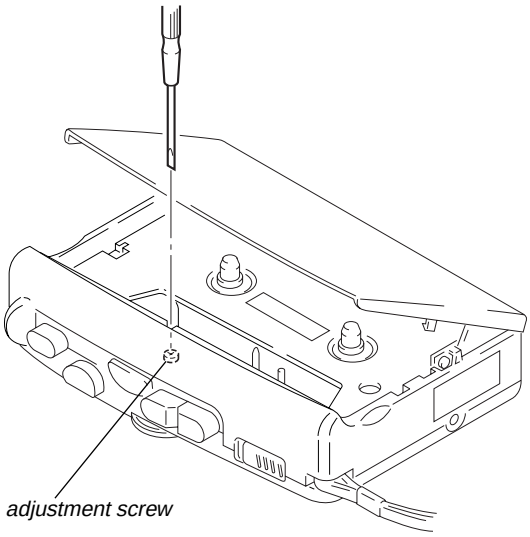
Record/Playback Head Azimuth Adjustment

Procedure:
Mode: playback



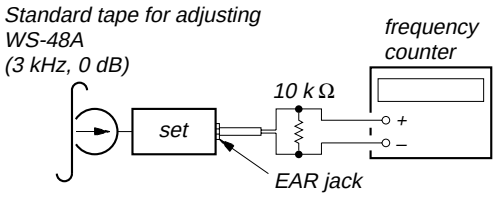
1. Turn the adjustment screw to obtain the maximum reading on level meter.
   Note: Several peaks may appear, but take the maximum.
2. After the adjustment, lock the adjustment screw with suitable locking compound.

Adjustment Location:



Tape Speed Adjustment

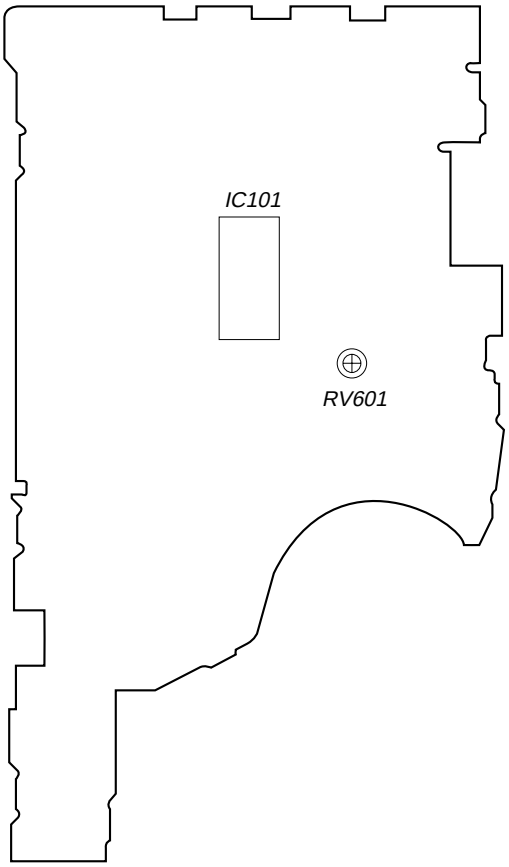
Procedure:
Mode: playback



1. Play back WS-48A (tape end part) and adjust RV601 so that the frequency counter reading becomes 3,000 ± 15 Hz.
2. Play back WS-48A tape the beginning and the end part, check that the frequency counter reading is within same standard of step1.

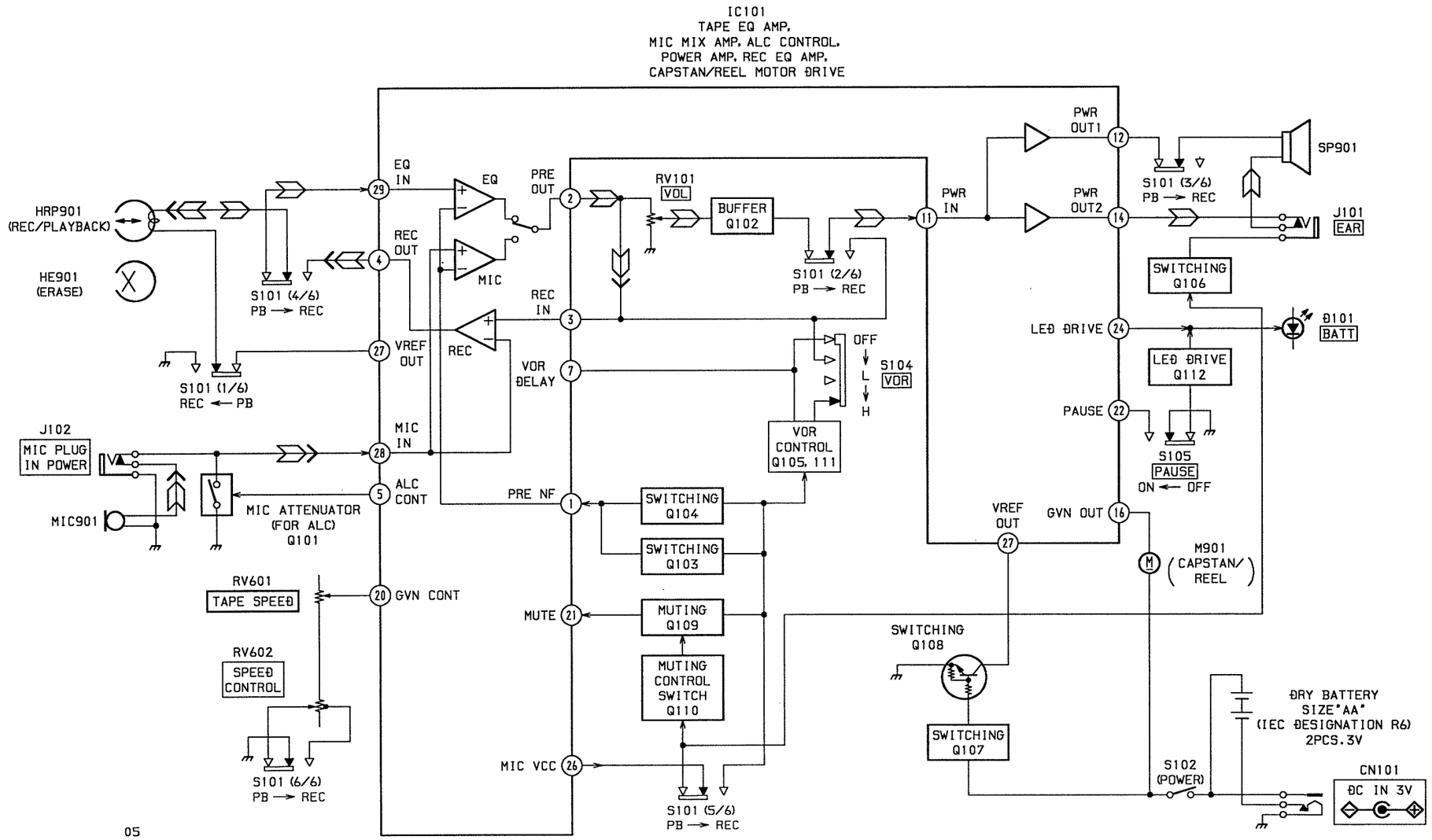
Adjustment Location:

[MAIN BOARD] (Conductor side)



SECTION 6
DIAGRAMS

6-1. BLOCK DIAGRAM

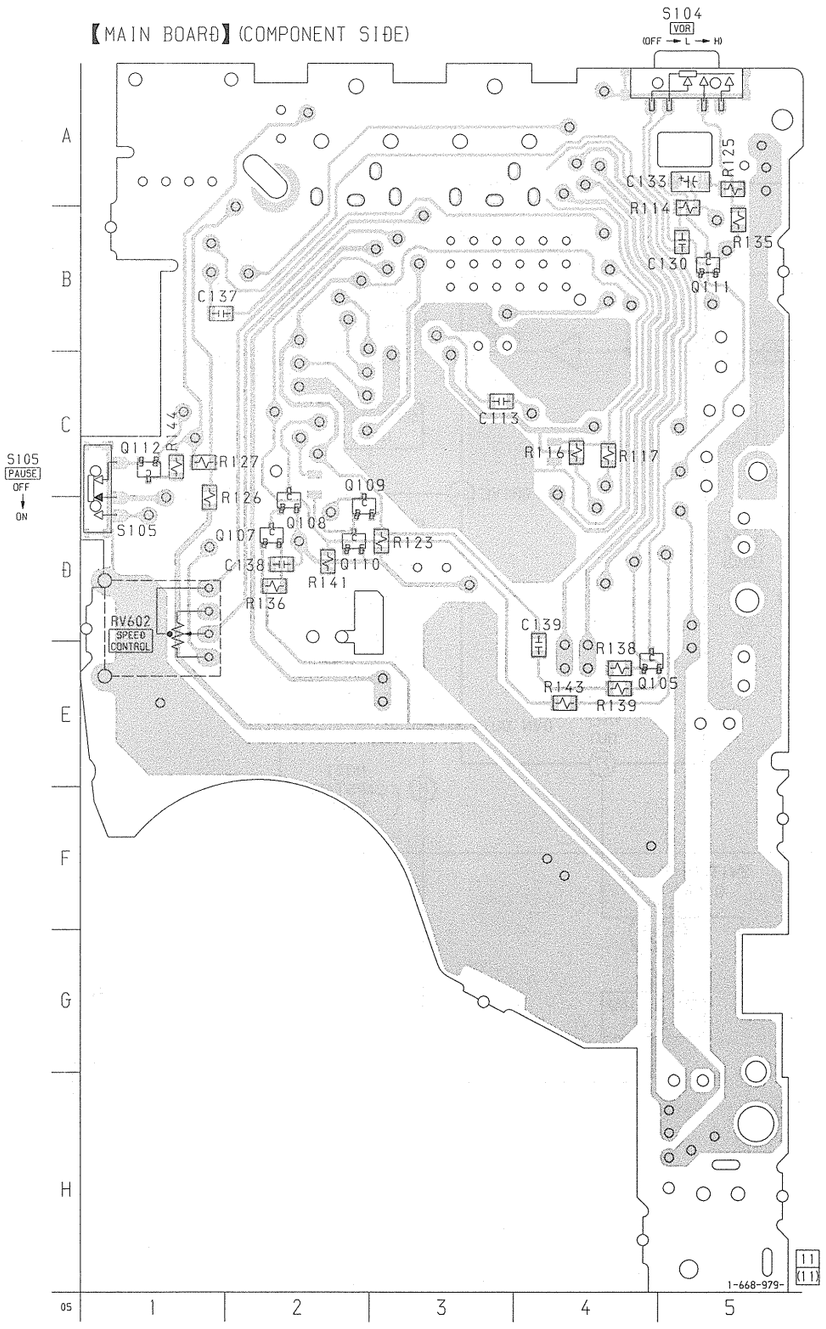


• Signal path.
Σ : PB
Σ» : REC

6-2. PRINTED WIRING BOARD

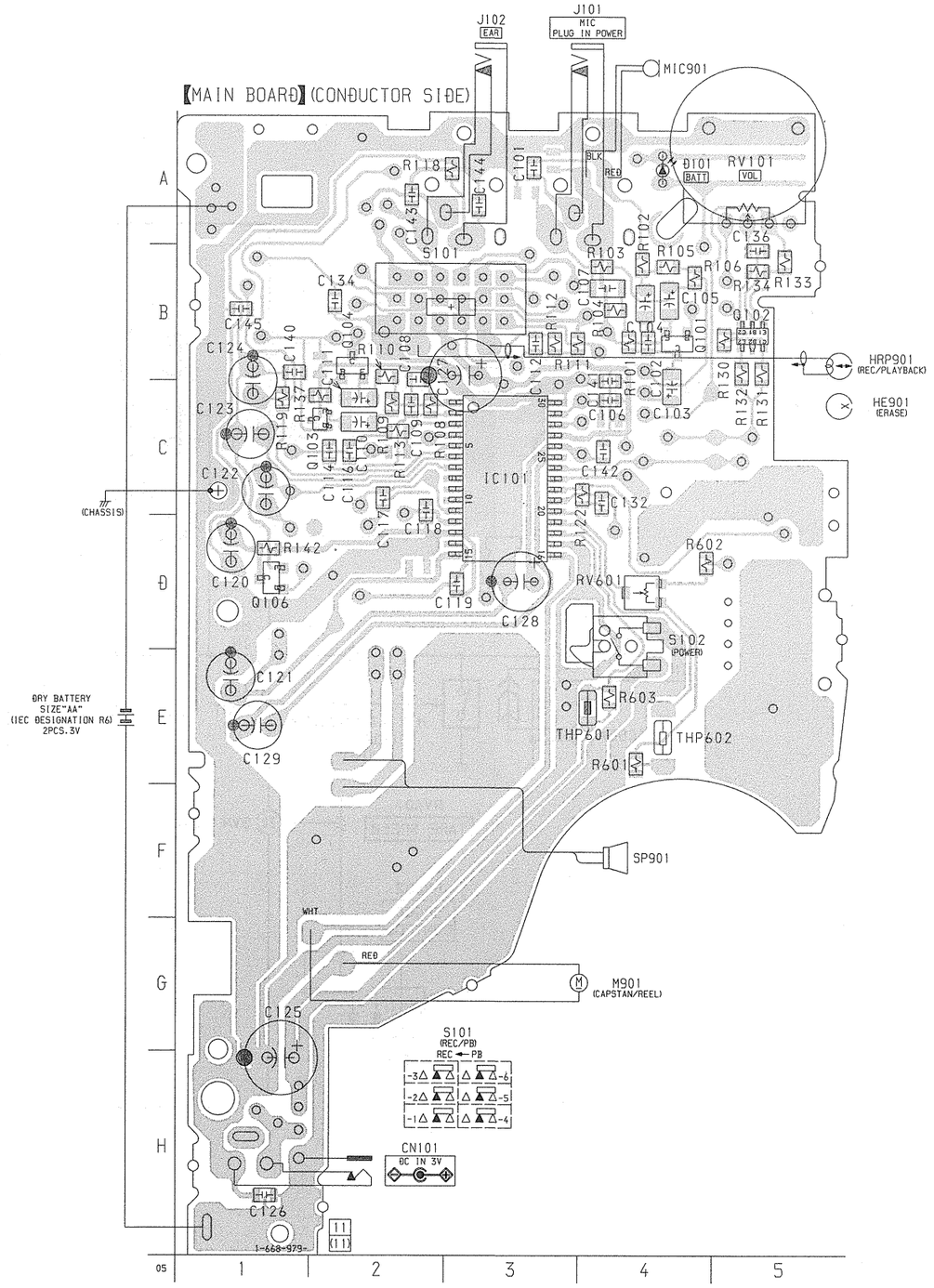
• **Semiconductor Location**

Ref. No.	Location
Q105	E-4
Q107	D-2
Q108	D-2
Q109	D-2
Q110	D-2
Q111	B-5
Q112	C-1



• **Semiconductor Location**

Ref. No.	Location
D101	A-4
IC101	C-3
Q101	B-4
Q102	B-5
Q103	C-2
Q104	B-2
Q106	D-1

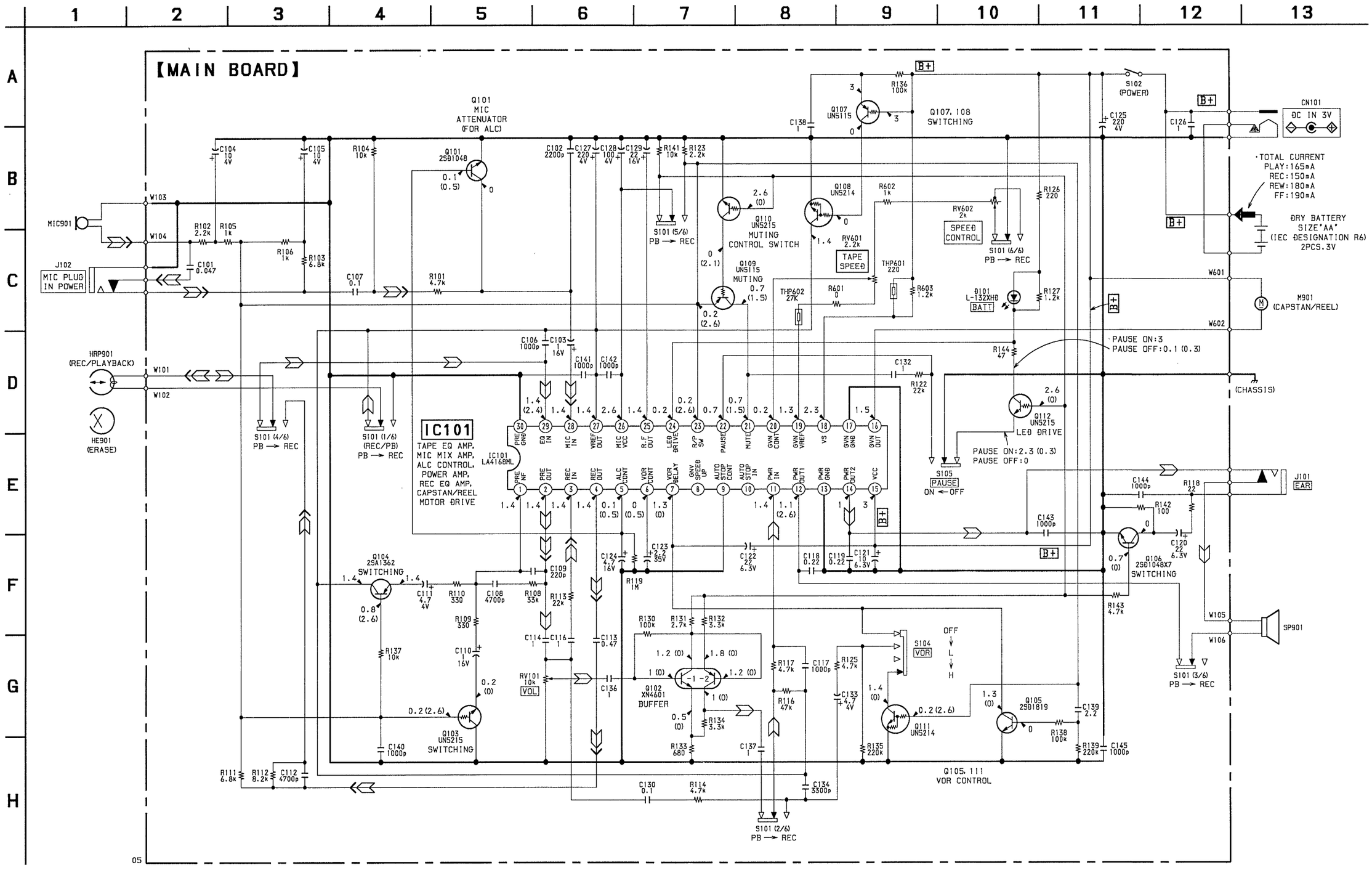


Note on Printed Wiring Board:

- ○——— : parts extracted from the component side.
- ——— : parts extracted from the conductor side.
- ▒▒▒ : Pattern from the side which enables seeing.

(The other layers' patterns are not indicated.)

Caution:	
Pattern face side: (Conductor Side)	Parts on the pattern face side seen from the pattern face are indicated.
Parts face side: (Component Side)	Parts on the parts face side seen from the parts face are indicated.



Note on Schematic Diagram:

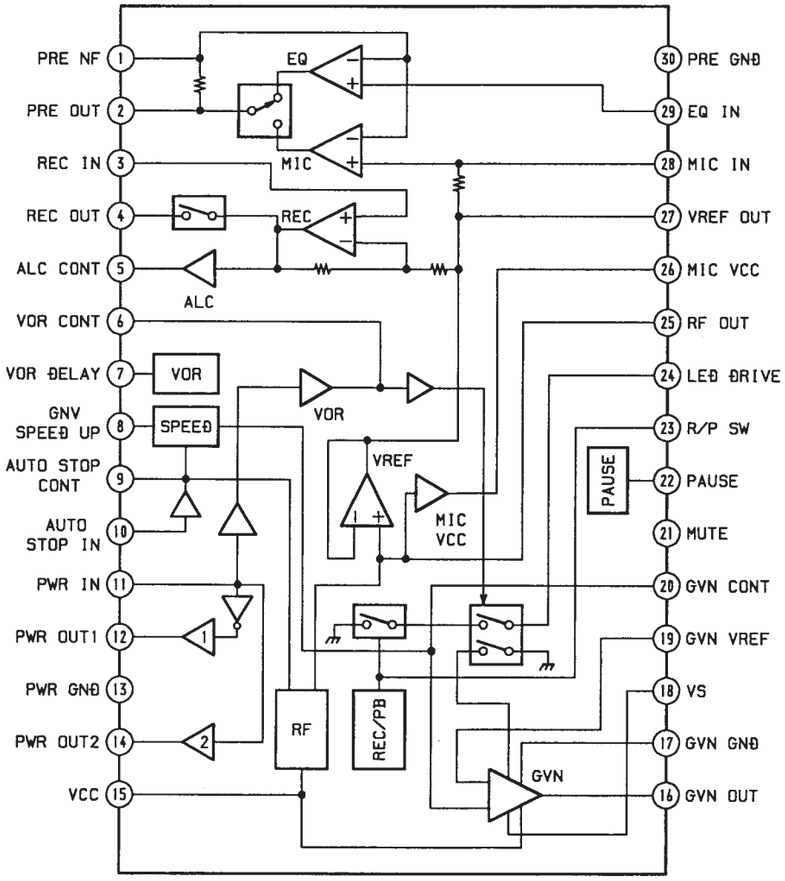
- All capacitors are in µF unless otherwise noted. pF: µµF 50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4 W or less unless otherwise specified.
- ▭ : panel designation.
- B+ : B+ Line.
- ▭ : adjustment for repair.
- Power voltage is dc 3 V and fed with regulated dc power supply from battery terminal.
- Voltages are dc with respect to ground under no-signal conditions.

no mark : PB
( ) : REC

- Voltages are taken with a VOM (Input impedance 10 MΩ). Voltage variations may be noted due to normal production tolerances.
- Signal path.
  ≫ : PB
  ≫ : REC

• IC Block Diagram

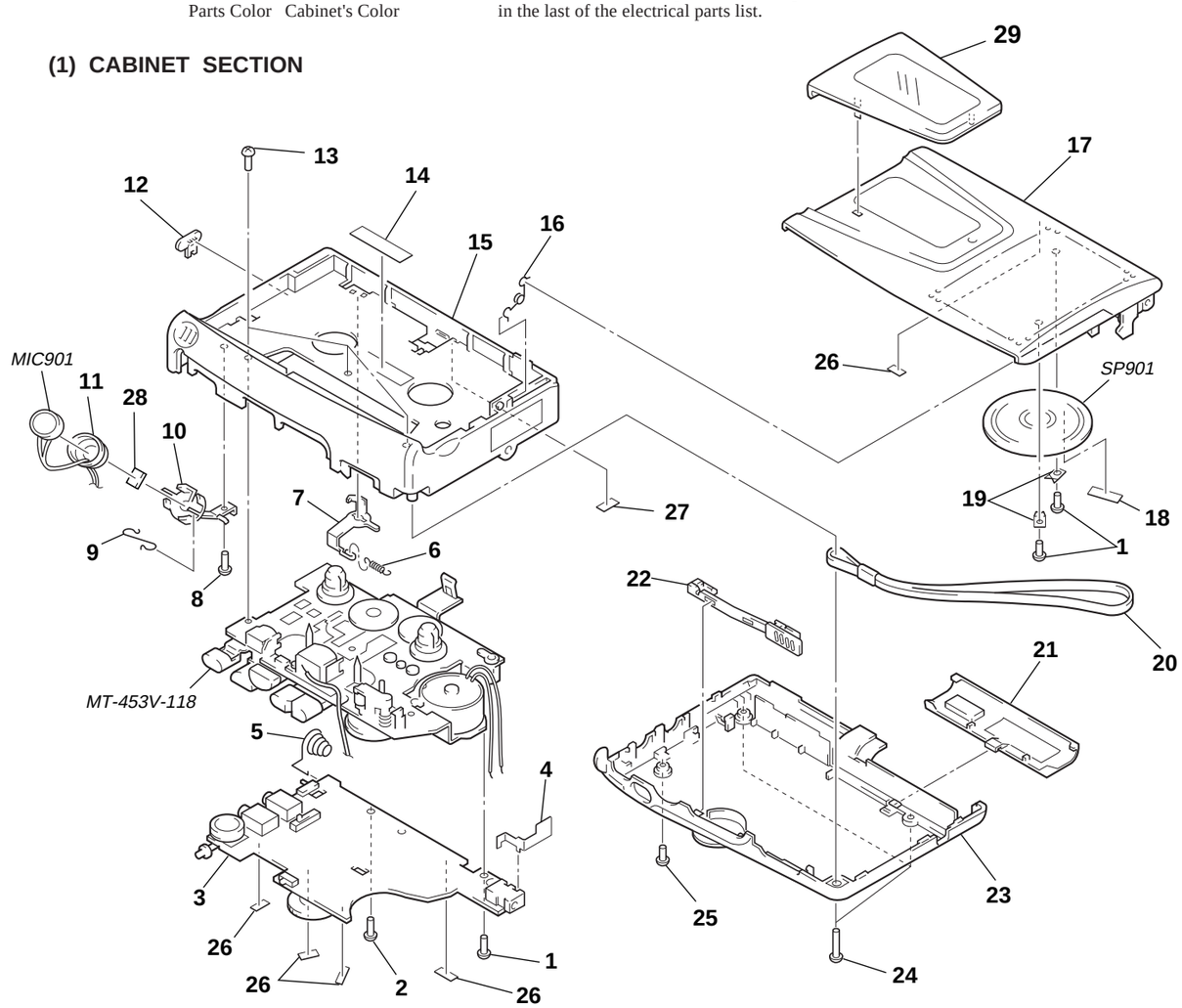
IC101 LA4168ML-TE-L



SECTION 7
EXPLODED VIEWS

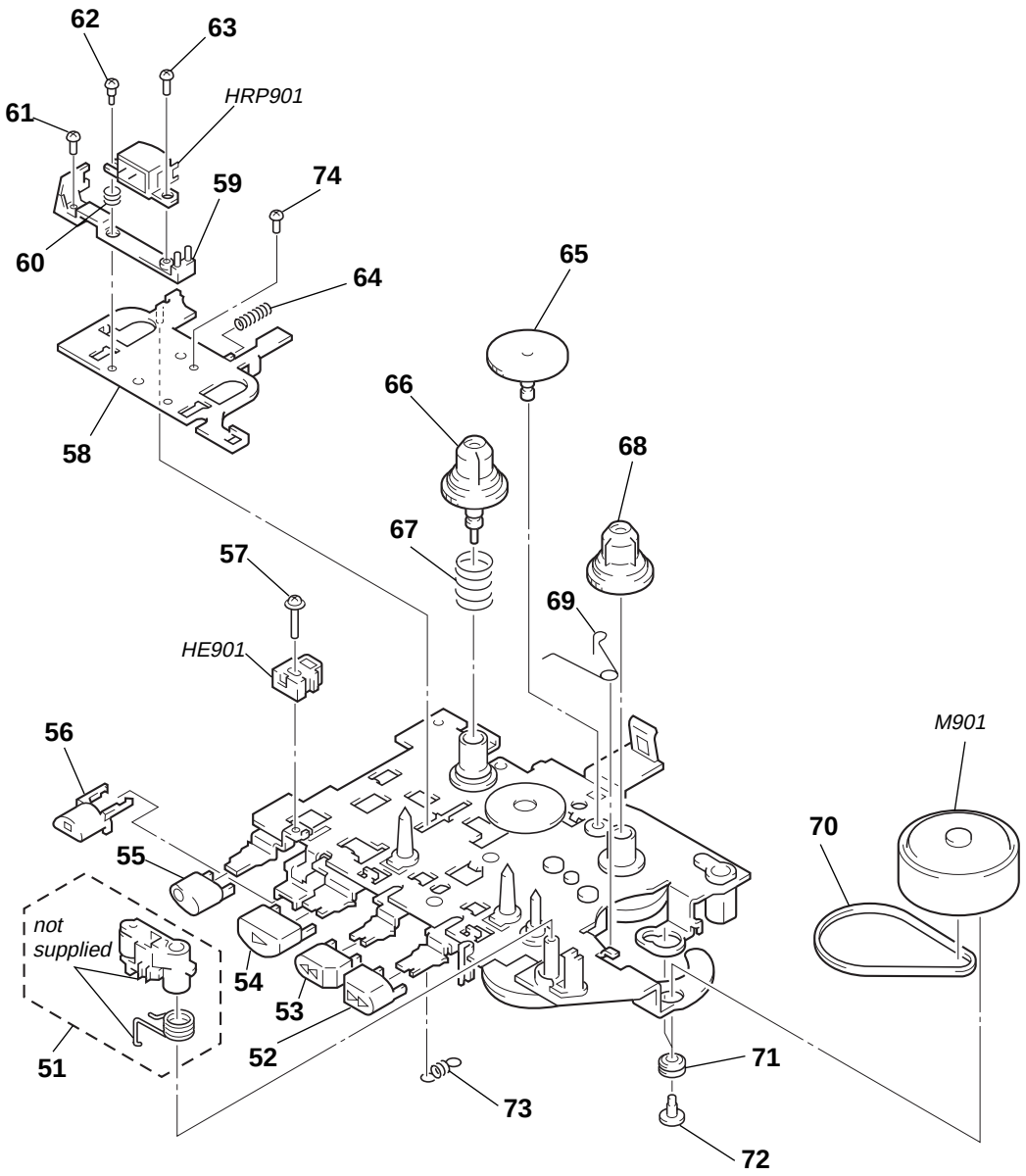
NOTE:
- -XX and -X mean standardized parts, so they may have some difference from the original one.
- Color Indication of Appearance Parts
  Example:
  KNOB, BALANCE (WHITE) . . . (RED)
  ↑ ↑
  Parts Color Cabinet's Color
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- The mechanical parts with no reference number in the exploded views are not supplied.
- Accessories and packing materials are given in the last of the electrical parts list.

(1) CABINET SECTION



Ref. No.	Part No.	Description	Remark
1	3-318-382-31	SCREW (1.7), TAPPING	
2	3-345-648-51	SCREW (M1.4), TOOTHED LOCK	
* 3	A-3021-013-A	MAIN BOARD, COMPLETE	
4	3-924-741-01	TERMINAL, PLUS	
5	3-924-750-01	TERMINAL, MINUS	
6	3-924-744-01	SPRING(CLAW DETECTION),TENSION	
7	3-924-743-01	CLAW, ERASING PROTECTION	
8	3-334-565-41	SCREW (B1.7), TAPPING	
9	3-924-745-01	BAR, GROUND	
10	3-924-740-01	HOLDER, MICROPHONE	
11	3-924-763-01	CUSHION (MICROPHONE)	
12	3-924-742-01	KNOB (VOR)	
13	4-969-980-21	SCREW (IB LOCK)	
14	3-578-101-41	PLATE, ORNAMENTAL	
15	3-019-364-01	CABINET (FRONT) (453V)	
15	3-019-364-11	CABINET (FRONT) (454VK)	
16	3-924-739-01	SPRING, CASSETTE	
17	3-018-520-01	LID, CASSETTE	
18	4-017-441-01	CUSHION (B)	
* 19	3-924-757-01	BRACKET (SPEAKER)	
20	3-924-761-01	STRAP	
21	X-3375-808-1	LID ASSY, BATTERY CASE	
22	3-924-747-11	KNOB (PAUSE)	
23	3-019-597-01	CABINET (REAR)	
24	3-334-565-11	SCREW (B1.7X10), TAPPING	
25	3-939-590-44	SCREW (IB LOCK)	
26	3-831-441-99	SPACER, KNOB	
* 27	3-592-351-01	PAPER, VIBRATION PROOF (B)	
28	3-831-441-11	CUSHION, CABINET UPPER 10X7X0.5	
29	3-018-521-01	WINDOW (CASSETTE)	
MIC901	1-542-136-11	MICROPHONE, ELECTRET CONDEDSER (MIC)	
SP901	1-505-838-11	SPEAKER (3.6CM)	

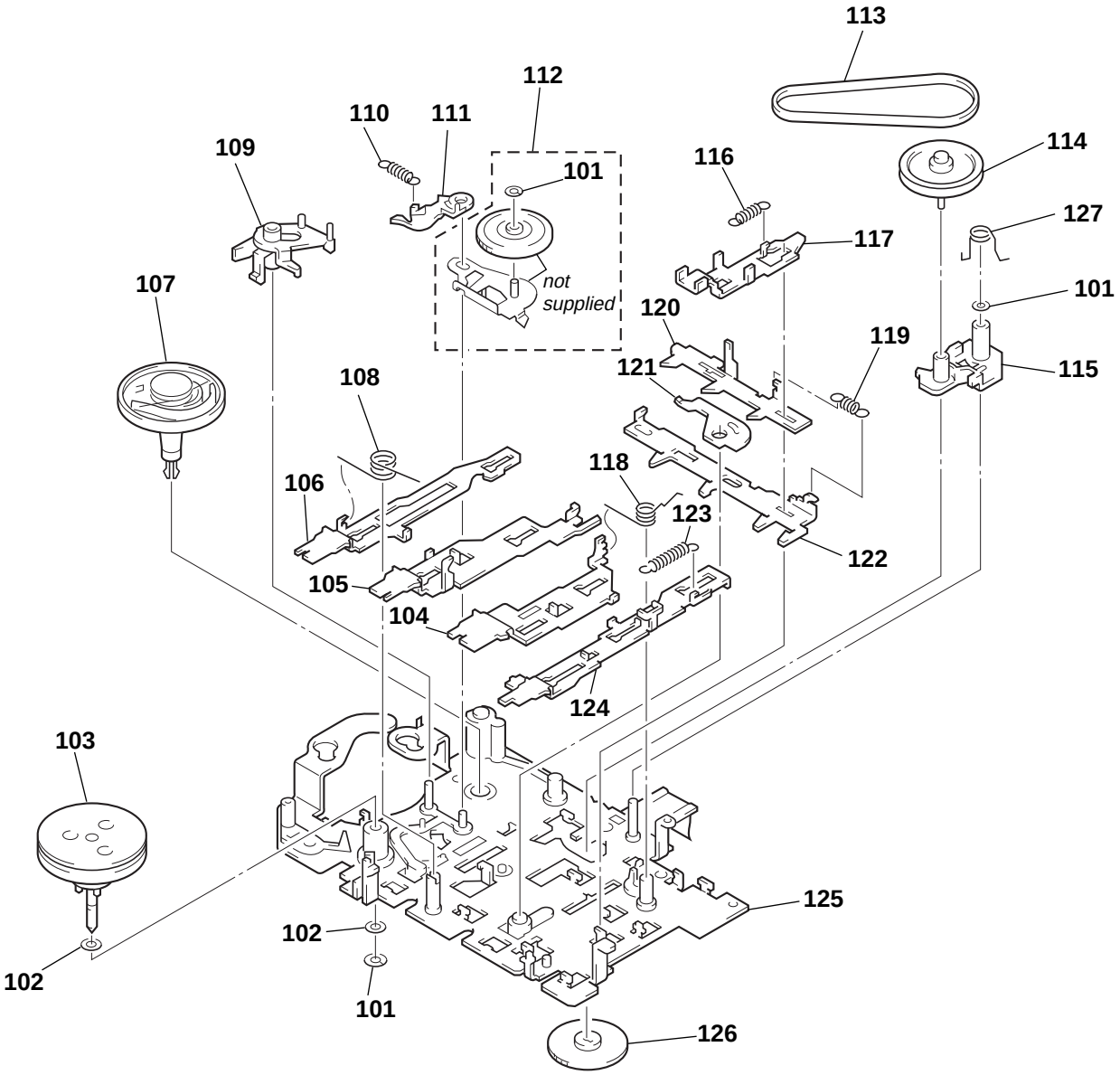
(2) MECHANISM DECK SECTION-1 (MT-453V-118)



Ref. No.	Part No.	Description	Remark
51	X-3370-386-1	PINCH ROLLER ASSY	
52	3-925-146-01	BUTTON (FF) (▶▶)	
53	3-925-147-01	BUTTON (REW) (◀◀)	
54	3-925-148-01	BUTTON (PLAY) (▶)	
55	3-925-145-01	BUTTON (REC) (●)	
56	3-924-738-01	BUTTON (STOP) (■)	
57	3-703-925-21	SCREW (M1.4)	
58	3-924-625-01	LEVER (HEAD)	
59	3-924-645-01	BRACKET (HEAD)	
60	3-924-685-01	SPRING (AZIMUTH), COMPRESSION	
61	3-704-197-91	SCREW (M1.4X1.8), LOCKING	
62	3-375-135-01	SCREW (1.4), SPECIAL	
63	3-376-177-01	SCREW (M1.4X3.8)	
64	3-925-107-01	SPRING (IDLER), COMPRESSION	

Ref. No.	Part No.	Description	Remark
65	3-924-637-01	GEAR (FF)	
66	3-924-673-01	GEAR (S REEL)	
67	3-924-674-01	SPRING (B. T), COMPRESSION	
68	3-924-641-01	GEAR (T REEL)	
69	3-924-726-01	SPRING (M GROUND), TORSION	
70	3-924-681-01	BELT (CAPSTAN)	
71	3-925-109-01	CUSHION (MOTOR)	
72	3-925-108-01	SCREW (MOTOR)	
73	3-924-644-01	SPRING (POWER TENSION), TENSION	
74	3-348-160-11	SCREW (M1.4X1.6), PRECISION PAN	
HE901	1-500-515-11	HEAD, MAGNETIC (ERASE)	
HRP901	1-500-073-11	HEAD, MAGNETIC (RECORD/PLAYBACK)	
M901	1-698-588-11	MOTOR, DC (CAPSTAN/REEL)	

(3) MECHANISM DECK SECTION-2 (MT-453V-118)



Ref. No.	Part No.	Description	Remark
101	3-321-483-11	RING, RETAINING (0.25)	
102	3-315-495-31	WASHER	
103	X-3370-384-1	FLYWHEEL ASSY	
104	3-924-623-01	LEVER (PLAY)	
105	3-924-621-01	LEVER (REW)	
106	3-924-620-01	LEVER (FF)	
107	X-3370-388-1	TABLE ASSY, FELT	
108	3-924-642-01	SPRING (FR), TORSION	
109	3-924-629-01	LEVER (DETECTION)	
110	3-925-207-01	SPRING (S. OFF), TENSION	
111	3-924-630-01	LEVER (S.OFF)	
112	X-3370-387-1	LEVER ASSY, IDLER	
113	3-924-682-01	BELT (FR)	
114	X-3370-385-1	PULLEY (FR) ASSY	

Ref. No.	Part No.	Description	Remark
115	3-924-628-01	LEVER (FR)	
116	3-924-633-01	SPRING (STOP), TENSION	
117	3-924-622-01	LEVER (STOP)	
118	3-924-643-01	SPRING (PR), TORSION	
119	3-924-684-01	SPRING (LOCK PLATE), TENSION	
120	3-924-619-01	LEVER (SW)	
121	3-924-639-01	LEVER (CR)	
122	3-924-618-01	LEVER (LOCK)	
123	3-925-208-01	SPRING (REC), TENSION	
124	3-924-624-01	LEVER (REC)	
125	X-3370-227-1	CHASSIS ASSY	
126	3-924-613-01	GEAR (FR)	
127	3-024-378-01	SPRING (FR LEVER), TORSION	

SECTION 8
ELECTRICAL PARTS LIST

MAIN

NOTE:

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- -XX and -X mean standardized parts, so they may have some difference from the original one.
- RESISTORS
  All resistors are in ohms.
  METAL: Metal-film resistor.
  METAL OXIDE: Metal oxide-film resistor.
  F: nonflammable
- Abbreviation
  CH: Chinese
  CND: Canadian
  EE: East European
- Items marked "*" are not stocked since they are seldom required for routine service.
  Some delay should be anticipated when ordering these items.
- SEMICONDUCTORS
  In each case, u: µ, for example:
  uA. . : µA. . uPA. . : µPA. .
  uPB. . : µPB. . uPC. . : µPC. .
  uPD. . : µPD. .
- CAPACITORS
  uF: µF
- COILS
  uH: µH

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

Les composants identifiés par une marque ⚠ sont critiquens pour la sécurité.
Ne les remplacer que par une pièce portant le neméro spécifié.

When indicating parts by reference number, please include the board.

Ref. No.	Part No.	Description			Remark
*	A-3021-013-A	MAIN BOARD, COMPLETE			
		**********			
	3-924-741-01	TERMINAL, PLUS			
		< CAPACITOR >			
C101	1-163-809-11	CERAMIC CHIP	0.047uF	10%	25V
C102	1-164-161-11	CERAMIC CHIP	0.0022uF	10%	100V
C103	1-135-091-00	TANTALUM CHIP	1uF	20%	16V
C104	1-135-201-11	TANTALUM CHIP	10uF	20%	4V
C105	1-135-201-11	TANTALUM CHIP	10uF	20%	4V
C106	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C107	1-163-077-00	CERAMIC CHIP	0.1uF	10%	25V
C108	1-163-017-00	CERAMIC CHIP	0.0047uF	5%	50V
C109	1-163-001-11	CERAMIC CHIP	220PF	10%	50V
C110	1-135-099-11	TANTALUM CHIP	1uF	20%	16V
C111	1-135-151-21	TANTALUM CHIP	4.7uF	20%	4V
C112	1-163-017-00	CERAMIC CHIP	0.0047uF	5%	50V
C113	1-164-005-11	CERAMIC CHIP	0.47uF		25V
C114	1-164-346-11	CERAMIC CHIP	1uF		16V
C116	1-164-346-11	CERAMIC CHIP	1uF		16V
C117	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C118	1-164-489-11	CERAMIC CHIP	0.22uF	10%	16V
C119	1-164-489-11	CERAMIC CHIP	0.22uF	10%	16V
C120	1-126-153-11	ELECT	22uF	20%	6.3V
C121	1-126-157-11	ELECT	10uF	20%	16V
C122	1-126-153-11	ELECT	22uF	20%	6.3V
C123	1-124-257-00	ELECT	2.2uF	20%	35V
C124	1-126-163-11	ELECT	4.7uF	20%	16V
C125	1-124-434-00	ELECT	220uF	20%	4V
C126	1-164-346-11	CERAMIC CHIP	1uF		16V
C127	1-124-434-00	ELECT	220uF	20%	4V
C128	1-124-433-00	ELECT	100uF	20%	4V
C129	1-126-153-11	ELECT	22uF	20%	16V
C130	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C132	1-164-346-11	CERAMIC CHIP	1uF		16V
C133	1-135-151-21	TANTALUM CHIP	4.7uF	20%	4V
C134	1-164-182-11	CERAMIC CHIP	0.0033uF	10%	50V
C136	1-164-346-11	CERAMIC CHIP	1uF		16V
C137	1-164-346-11	CERAMIC CHIP	1uF		16V
C138	1-164-346-11	CERAMIC CHIP	1uF		16V
C139	1-164-505-11	CERAMIC CHIP	2.2uF		16V
C140	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C141	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C142	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C143	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C144	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C145	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
		< JACK >			
CN101	1-580-919-11	JACK,DC(POLARITY UNIFIED TYPE)			(DC IN 3V)
		< DIODE >			
D101	8-719-057-27	DIODE L-132XHD (BATT)			
		< IC >			
IC101	8-759-492-49	IC LA4168ML-TE-L			
		< JACK >			
J101	1-766-847-11	JACK (EAR)			
J102	1-766-847-11	JACK (MIC PULG IN POWER)			
		< TRANSISTOR >			
Q101	8-729-800-37	TRANSISTOR 2SD1048-X7			
Q102	8-729-402-84	TRANSISTOR XN4601			
Q103	8-729-420-50	TRANSISTOR UN5215			
Q104	8-729-230-72	TRANSISTOR 2SA1362YG			
Q105	8-729-230-63	TRANSISTOR 2SC4116-YG			
Q106	8-729-800-37	TRANSISTOR 2SD1048-X7			
Q107	8-729-420-53	TRANSISTOR UN5115			
Q108	8-729-402-93	TRANSISTOR UN5214-TX			
Q109	8-729-420-53	TRANSISTOR UN5115			
Q110	8-729-420-50	TRANSISTOR UN5215			
Q111	8-729-402-93	TRANSISTOR UN5214-TX			
Q112	8-729-420-51	TRANSISTOR UN5215-(TX)			
		< RESISTOR >			
R101	1-216-065-00	RES,CHIP	4.7K	5%	1/10W
R102	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R103	1-216-069-00	METAL CHIP	6.8K	5%	1/10W
R104	1-216-073-00	METAL CHIP	10K	5%	1/10W
R105	1-216-049-11	RES,CHIP	1K	5%	1/10W

MAIN

Ref. No.	Part No.	Description			Remark
R106	1-216-049-11	RES,CHIP	1K	5%	1/10W
R108	1-216-085-00	METAL CHIP	33K	5%	1/10W
R109	1-216-037-11	METAL CHIP	330	5%	1/10W
R110	1-216-037-11	METAL CHIP	330	5%	1/10W
R111	1-216-069-00	METAL CHIP	6.8K	5%	1/10W
R112	1-216-071-00	METAL CHIP	8.2K	5%	1/10W
R113	1-216-081-00	METAL CHIP	22K	5%	1/10W
R114	1-216-065-00	RES,CHIP	4.7K	5%	1/10W
R116	1-216-089-00	RES,CHIP	47K	5%	1/10W
R117	1-216-065-00	RES,CHIP	4.7K	5%	1/10W
R118	1-216-009-00	METAL CHIP	22	5%	1/10W
R119	1-216-121-00	RES,CHIP	1M	5%	1/10W
R122	1-216-081-00	METAL CHIP	22K	5%	1/10W
R123	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R125	1-216-065-00	RES,CHIP	4.7K	5%	1/10W
R126	1-216-033-00	METAL CHIP	220	5%	1/10W
R127	1-216-051-11	METAL CHIP	1.2K	5%	1/10W
R130	1-216-097-00	RES,CHIP	100K	5%	1/10W
R131	1-216-059-00	METAL CHIP	2.7K	5%	1/10W
R132	1-216-061-00	METAL CHIP	3.3K	5%	1/10W
R133	1-216-045-00	METAL CHIP	680	5%	1/10W
R134	1-216-061-00	METAL CHIP	3.3K	5%	1/10W
R135	1-216-105-00	RES,CHIP	220K	5%	1/10W
R136	1-216-097-00	RES,CHIP	100K	5%	1/10W
R137	1-216-073-00	METAL CHIP	10K	5%	1/10W
R138	1-216-097-00	RES,CHIP	100K	5%	1/10W
R139	1-216-105-00	RES,CHIP	220K	5%	1/10W
R141	1-216-073-00	METAL CHIP	10K	5%	1/10W
R142	1-216-025-00	RES,CHIP	100	5%	1/10W
R143	1-216-065-00	RES,CHIP	4.7K	5%	1/10W
R144	1-216-017-11	RES,CHIP	47	5%	1/10W
R601	1-216-295-00	SHORT	0		
R602	1-216-049-11	RES,CHIP	1K	5%	1/10W
R603	1-216-051-11	METAL CHIP	1.2K	5%	1/10W
		< VARIABLE RESISTOR >			
RV101	1-225-597-11	RES, VAR, CARBON 10K (VOL)			
RV601	1-223-584-11	RES, ADJ, CARBON 2.2K			
RV602	1-225-598-11	RES, VAR, CARBON 2K (SPEED CONTROL)			
		< SWITCH >			
S101	1-771-321-11	SWITCH, SLIDE (REC/PB)			
S102	1-771-092-21	SWITCH, PUSH (1 KEY) (POWER)			
S104	1-692-605-31	SWITCH, SLIDE (VOR)			
S105	1-572-922-11	SWITCH, SLIDE (PAUSE)			
		< THERMISTOR(POSITIVE) >			
THP601	1-810-007-11	THERMISTOR, POSITIVE			
THP602	1-803-117-21	THERMISTOR, POSITIVE			

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Ref. No.	Part No.	Description	Remark
		MISCELLANEOUS	
		**********	
HE901	1-500-515-11	HEAD, MAGNETIC (ERASE)	
HRP901	1-500-073-11	HEAD, MAGNETIC (RECORD/PLAYBACK)	
M901	1-698-588-11	MOTOR, DC (CAPSTAN/REEL)	
MIC901	1-542-136-11	MICROPHONE, ELECTRET CONDEDSER (MIC)	
SP901	1-505-838-11	SPEAKER (3.6CM)	

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		ACCESSORIES & PACKING MATERIALS	
		**********	
⚠	1-475-070-11	ADAPTOR, AC (AC-E351) (454VK: AEP)	
⚠	1-528-405-31	ADAPTOR, BATTERY CHARGE	(454VK: US, CND, AEP)
⚠	1-693-073-21	ADAPTOR, AC (AC-E351) (454VK: US, CND)	
	3-862-202-11	MANUAL, INSTRUCTION (ENGLISH)	(453V: US, CND, E, CH/454VK: US, CND)
	3-862-202-21	MANUAL, INSTRUCTION (FRENCH)	(453V: CND, AEP, E/454VK: CND, AEP)
	3-862-202-31	MANUAL, INSTRUCTION (ENGLISH, SPANISH, PORTUGUESE, GERMAN)	(453V: AEP, E, EE)
	3-862-202-41	MANUAL, INSTRUCTION (ITALIAN, DUTCH, SWEDISH, FINNISH)	(453V: AEP, E/454VK: AEP)
	3-862-202-51	MANUAL, INSTRUCTION (SPANISH, PORTUGUESE, KOREAN, CHINESE)	(453V: E)
	3-862-202-61	MANUAL, INSTRUCTION (CHINESE)	(453V: CH)
	3-862-202-71	MANUAL, INSTRUCTION (POLISH, KOREAN, HUNGARIAN, CZECH)	(453V: EE)

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